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LETTER REPORT SITE ASSESSMENT ADDENDUM 2 FOR UNDERGROUND STORAGE TANK 19 NAS PENSACOLA FL
5/8/2003
TETRA TECH

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TTNUS/TAL-03-15/2640-5.3

May 8, 2003

Project Number N2640

Ms. Tracie Vaught, P.G.
Remedial Project Manager
Florida Department of Environmental Protection
2600 Blair Stone Road, Office 471F
Mail Station 4535
Tallahassee, Florida 32301

Reference: Clean Contract No. N62467-94-D-0888
Contract Task Order No. 0273

Subject: **Site Assessment Report Addendum II for Underground Storage Tank Site 19 Naval Air Station, Pensacola Pensacola, Florida FDEP #179203973**

Dear Ms. Vaught:

Tetra Tech NUS, Inc. (TtNUS) is pleased to submit the Site Assessment Report Addendum II (SARA) for the referenced Contract Task Order (CTO). This report has been prepared for the U.S. Navy Southern Division Naval Facilities Engineering Command under CTO 273, for the Comprehensive Long-term Environmental Action Navy (CLEAN) Contract Number N62467-94-D-0888.

Site Assessment Report Addendum Objectives. The objective of this SARA is to address comments on the first SARA for Underground Storage Tank (UST) Site 19 from the Florida Department of Environmental Protection (FDEP) in a technical review letter dated May 2, 2001 (Attachment A). The SARA was prepared by TtNUS and submitted in April 2001. The FDEP technical review letter requested the installation and sampling of a deep monitoring well located adjacent to MW-17 because the monitoring well was dry during the SARA sampling event. This letter report summarizes the work performed to address FDEP's comments, and provides the investigation results, including conclusions and recommendations for UST Site 19 located at the U.S. Naval Air Station, Pensacola (NASP), Florida. The SARA-related sampling activities were conducted in accordance with the FDEP Standard Operating Procedures for Field Activities DEP-SOP-001/01.

Previous Investigations. Previous site investigations include an Initial Assessment Study (IAS), a Verification Study (VS), a Characterization Study (CS), the initial Site Assessment Report (SAR) investigation, and the first SARA. The IAS was performed by the Naval Energy and Environmental Support Activity (NEESA) in 1983. The study included a review of historical records, field inspections, and interviews with associated personnel. The Fuel Farm Pipeline Leak is reported to have occurred in 1958 when JP-4 fuel was supplied in lieu of JP-5 fuel. NEESA estimated 360,000 gallons of JP-4 fuel was released to the ground and concluded that further investigation was warranted.

In 1984, Geraghty & Miller, Inc. (G&M) conducted a VS at the Site to determine if a free product layer was present due to the release. Work performed included the installation of four shallow groundwater monitoring wells and the completion of 11 soil borings at the site. Free product was not detected in the wells or borings, but a fuel odor was noted in soil samples collected in an area of dead vegetation. No laboratory analyses were performed on groundwater or soil samples during the 1984 study. In response

to FDEP recommendations, G&M returned to the site in 1986 to conduct a CS. This study involved the collection and laboratory analysis of groundwater samples from the four monitoring wells installed during the VS. Volatile Organic Compound (VOC) analysis detected elevated concentrations of benzene and xylenes above current Groundwater Cleanup Target Levels (GCTLs) and Natural Attenuation Default Criteria (NADC) in samples from three of the four wells.

The UST Site 19 SAR fieldwork was conducted between January and September 1997. SAR field activities included the advancement of 30 hand auger soil borings, a head space gas survey to identify areas of soil contamination, and the installation and sampling of 20 groundwater monitoring wells.

Fieldwork was conducted at UST Site 19 between May and July 2000 in support of the SARA. The SARA field activities included the collection of 54 soil head space screening samples from the northwest and southwest sides of the pipeline, sampling of 15 existing monitoring wells, installation and sampling of three new monitoring wells (MW-21, MW-22, and DMW-23), and site-specific aquifer tests.

The FDEP technical review letter dated May 2, 2001 requested that a deep monitoring well be installed adjacent to MW-17 because it was dry during the SARA field activities. The replacement well MW-17R was installed and was sampled in August 2001. Analytical results from the groundwater sample collected from monitoring well MW-17R indicated that additional monitoring wells would be required to further characterize the extent of groundwater contamination at the site. This fieldwork was to be completed with the preparation of a Remedial Action Plan (RAP).

In October and November 2001, TtNUS installed and sampled 6 monitoring wells (MW-24S, MW-24S, MW-26S, MW-27S, MW-28S, and MW-28I) to further delineate the extent of contamination. This letter report summarizes the analytical results.

Attachment B, Figure 1 depicts monitoring well locations at the site. Analytical data from the October and November 2001 field events is provided in Attachment C, Table 1.

Investigation Methods. To address FDEP comments, additional fieldwork including Direct Push Technology (DPT) groundwater sampling and mobile laboratory analysis, monitoring well installation, and groundwater sampling were completed. Each of these activities are discussed below.

DPT Investigation. The groundwater assessment was conducted at UST Site 19 to determine the horizontal and vertical extent of groundwater contamination. Groundwater samples were collected from selected depths at each temporary well location during the DPT investigation and analyzed at an on-site laboratory. Following the DPT investigation, additional permanent monitoring wells were installed at the site. The locations for the additional monitoring wells were based on the data collected during the DPT investigation.

Groundwater samples were submitted for mobile laboratory analysis from 16 DPT temporary well locations. Groundwater samples were collected at 10 feet, 25 feet, and 50 feet below land surface (bls) from each of the temporary well locations using a retractable screen groundwater sampler. The groundwater sampler was pushed to the desired depth bls and the retractable screen was deployed. Groundwater samples were collected from the sampler with a peristaltic pump and submitted to the mobile laboratory and analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX). Attachment B, Figure 1 is a map of UST Site 19. Attachment B, Figure 2 depicts the DPT temporary well locations. The mobile laboratory groundwater sample analytical results are summarized in Attachment C, Table 2. The mobile laboratory analytical report is included in Attachment D. Four confirmation samples were submitted to an off site laboratory to verify the results of the on site analyses. Following the DPT investigation, groundwater samples were collected from twelve existing monitoring wells and ten new monitoring wells.

DPT Groundwater Sampling Results. Benzene was detected at concentrations exceeding the GCTL of 1 microgram per liter (μg/L) in twenty-two of the groundwater samples analyzed by the mobile laboratory

(Attachment C, Table 1). The detected concentrations ranged from 1.3 µg/L to 1,300 µg/L. Ethylbenzene was detected at concentrations exceeding the GCTL of 30 µg/L in 3 groundwater samples analyzed by the mobile laboratory. Ethylbenzene was detected at concentrations ranging from 1.0 µg/L to 990 µg/L. Toluene was detected at concentrations exceeding the GCTL of 40 µg/L in 4 groundwater samples analyzed by the mobile laboratory. Detected concentrations ranged from 1.0 µg/L to 8,500 µg/L. Total Xylenes were detected at concentrations exceeding the GCTL of 20 µg/L in 10 groundwater samples at concentrations ranging from 1.6 µg/L to 7,900 µg/L. Attachment B, Figure 4 summarizes analytes detected during the DPT groundwater investigation.

Four confirmation samples, PEN20TW0410, PEN200725, PEN2001050, and PEN201110 were sent to an off site laboratory for analysis. The confirmation samples were analyzed for BTEX. The results of the groundwater laboratory analyses are summarized in Attachment C, Table 2. Attachment C, Table 3 presents results for the DPT confirmation samples analyzed by the fixed-base laboratory. The validated laboratory analytical data is included in Attachment D.

Confirmation results reported by the fixed-laboratory were compared to results reported by the DPT mobile laboratory. The results from both laboratories correlated adequately, with only minor discrepancies. Attachment C, Table 4 compares fixed-base laboratory sample results to the DPT mobile laboratory results.

Monitoring Well Installation. In response to FDEP's technical letter dated May 2, 2001 addressing the SARA submitted April 20, 2001, monitoring well MW-17R was installed. MW-17R is located approximately 100 ft. east of monitoring well MW-17 and 200 ft. southeast of monitoring well MW-10. Monitoring well completion details are provided in Attachment C, Table 5. The monitoring well completion diagram is provided in Attachment E. Following monitoring well installation, a single groundwater sample was collected on Aust 25, 2001 from the well.

Groundwater results from the newly installed replacement monitoring well MW-17R indicated exceedances of FDEP standards (Attachment C, Table 1). In order to further delineate contamination at UST Site 19, TtNUS installed six additional monitoring wells (MW-24S, MW-25S, MW-26S, MW-27S, MW-28S, and MW-28I).

Each well installed in October and November 2001 was constructed of 1-inch inner diameter (ID), flush threaded, schedule 40 polyvinyl chloride (PVC) riser and 0.010-inch slot well screen. The shallow wells were installed to approximately 12 feet bls with a 10-foot screen section that bracketed the water table. The intermediate monitoring well was installed to approximately 27 feet bls with a 5-foot screen section. Monitoring well construction details are provided in Attachment C, Table 4 and monitoring well completion diagrams are provided in Attachment E.

Groundwater results from the monitoring wells installed and sampled in October and November 2001 still indicated exceedances of FDEP standards. In November of 2002, twelve additional monitoring wells (MW-29S, MW-29I, MW-29D, MW-30S, MW-30I, MW-31S, MW-31I, MW-32S, MW-32I, MW-33S, MW-33I, and MW-33D) were installed to further investigate the horizontal and vertical extent of contamination. Attachment B, Figure 1 depicts monitoring well locations.

Each well installed in November 2002 was constructed of 1.25-inch ID, flush threaded, schedule 40 PVC riser and 0.010-inch slot well screen. The shallow wells were installed to approximately 15 feet below land surface (bls) with a 10-foot screen section that bracketed the water table. The intermediate monitoring wells were installed to approximately 27 feet bls with a 5-foot screen section. The deep monitoring wells were installed to approximately 40 feet bls with a 5-foot screen section. Attachment C, Table 3 contains a summary of monitoring well completion data and monitoring well construction diagrams are provided in Attachment E.

Replacement Well Groundwater Sampling and Results. MW-17R was purged prior to collecting the groundwater sample. Purging and sampling were performed with a peristaltic pump using the low flow quiescent method. Following collection of the groundwater sample, the sample bottles were packed on ice and shipped via overnight transport to an approved fixed-base laboratory. The groundwater samples were analyzed for compounds specified in the Gasoline and Kerosene Analytical Groups. The analytical results are summarized in Attachment C, Table 5. Groundwater sampling field forms are provided in Attachment E, and a copy of the laboratory report is provided in Attachment D. Shallow zone analytical detections are summarized in Attachment B, Figure 5. Intermediate and deep zone analytical detections are summarized in Attachment B, Figure 10.

On August 25, 2001, TtNUS personnel collected a groundwater sample from monitoring well MW-17R located at UST Site 19. The monitoring well location is shown on Attachment B, Figure 1. Groundwater sampling activities were conducted in accordance with FDEP Field Activities Standard Operating Procedures [(SOPs); DEP-SOP-001/01].

Four VOCs; benzene, ethylbenzene, toluene, and total xylenes, and four polycyclic aromatic hydrocarbons (PAHs) 1-methylnaphthalene, 2-methylnaphthalene, flourene, and naphthalene were detected in the groundwater sample collected from monitoring well MW-17R. None of the detected PAHs were reported at concentrations above GCTLs. The detected concentration of benzene in monitoring well MW-17R at a concentration of 69.7 µg/L exceeded the GCTL of 1 µg/L. The detected concentration of ethylbenzene (50.2 µg/L) and total xylenes (816 µg/L) were reported at concentrations exceeding their respective GCTLs of 30 µg/L and 20 µg/L. The detected concentration of toluene in monitoring well MW-17R did not exceed the GCTL of 40 µg/L.

The sample from monitoring well MW-17R was also analyzed for Total Recoverable Petroleum Hydrocarbons (TRPH). The detected concentration of TRPH did not exceed the GCTL of 5 milligrams per liter (mg/L).

November 2001 Groundwater Sampling and Results. On November 9, 2001, TtNUS personnel collected groundwater samples from seven monitoring wells (MW-17R, MW-24S, MW-25S, MW-26S, MW-27S, MW28S, and MW-28I) located at UST Site 19. The monitoring well locations are shown on Attachment B, Figure 1. Groundwater sampling activities were conducted in accordance with FDEP Field Activities SOPs (DEP-SOP-001/01).

Depth-to-water measurements, along with the top-of-casing (TOC) elevations, were used to calculate groundwater elevations. Historical depth-to-water measurements, TOC elevations and groundwater elevation data are provided in Attachment C, Table 6.

Six VOCs; benzene, ethylbenzene, methylene chloride, toluene, trichloroethene, and total xylenes, and three PAHs; 1-methylnaphthalene, 2-methylnaphthalene, and naphthalene were detected in the groundwater samples collected from monitoring wells at UST Site 19. All detected PAH concentrations were below GCTLs.

Benzene was detected at concentrations exceeding GCTLs in four monitoring wells: MW-17R (110 µg/L), MW-25S (19 µg/L), MW-28S (120 µg/L), and MW-28I (520 µg/L). Ethylbenzene was detected at concentrations exceeding GCTLs in two monitoring wells: MW-17R (130 µg/L) and MW-28I (82 µg/L). Methylene chloride was detected at concentrations exceeding GCTLs in two monitoring wells: MW-17R (83 µg/L) and MW-28I (60 µg/L). Toluene was detected at concentrations exceeding GCTLs in monitoring well MW-17R (74 µg/L). Trichloroethene was detected at concentrations exceeding GCTLs in monitoring well MW-28I (66 µg/L). Total Xylenes were detected at concentrations exceeding GCTLs in three monitoring wells: MW-17R (2740 µg/L), MW-25S (30.8 µg/L), and MW-28I (620 µg/L).

The groundwater samples were also analyzed for TRPH and lead. The reported concentrations of TRPH and lead were less than the GCTLs of 5 mg/L and 15 µg/L, respectively.

December 2002 Groundwater Sampling and Results. On December 17-19, 2002, TtNUS personnel collected groundwater samples from twenty-two monitoring wells (MW-4, MW-6, MW-8, MW-11, MW-22, MW-24S, MW-25S, MW-26S, MW-28S, MW-28I, MW-29S, MW-29I, MW-29D, MW-30S, MW-30I, MW-31S, MW-31I, MW-32S, MW-32I, MW-33S, MW-33I, and MW-33D) located at UST Site 19. The monitoring well locations are shown on Figure 1, Attachment B. Groundwater sampling activities were conducted in accordance with FDEP Field Activities SOPs (DEP-SOP-001/01).

Five VOCs; benzene, chloroform, ethylbenzene, toluene, and total xylenes, and four PAHs 1-methylnaphthalene, 2-methylnaphthalene, fluorene, and naphthalene were detected in the groundwater samples collected from monitoring wells at UST Site 19.

Benzene was detected at concentrations exceeding GCTLs in ten monitoring wells: MW-4 (79 µg/L), MW-6 (4.0 µg/L), MW-8 (190 µg/L), MW-11 (430 µg/L), MW-26S (2.7 µg/L), MW-28S (1.1 µg/L), MW-28I (590 µg/L), MW-29I (57 µg/L), MW-33S (190 µg/L), and MW-33I (50 µg/L). Chloroform was detected at concentrations exceeding GCTLs in monitoring well MW-32S (7.1 µg/L). Ethylbenzene was detected at concentrations exceeding GCTLs in three monitoring wells: MW-4 (360 µg/L), MW-11 (520 µg/L), and MW-28I (91 µg/L). Toluene was detected at concentrations exceeding GCTLs in three monitoring wells: MW-4 (2400 µg/L), MW-8 (130 µg/L), and MW-11 (5800 µg/L). Total Xylenes were detected at concentrations exceeding GCTLs in six monitoring wells: MW-4 (3500 µg/L), MW-8 (100 µg/L), MW-11 (5500 µg/L), MW-28I (730 µg/L), MW-29I (220 µg/L), and MW-33S (130 µg/L). Benzene, toluene, ethylbenzene, and total xylenes isocontour maps are provided in Attachment B, Figures 6, 7, 8, and 9.

1- and 2-methylnaphthalene, naphthalene, and TRPH were detected at concentrations exceeding their respective GCTLs in monitoring wells MW-4 and MW-11.

The groundwater samples were also analyzed for total lead. The reported concentrations of total lead were less than the GCTL of 15 µg/L.

Conclusions.

- Groundwater flow is to the southeast in both the shallow and intermediate/deep zones, across the site.

- The contaminant distribution documented in the temporary wells and during groundwater sampling indicate GCTL exceedances are limited to the area west of the Jeep Trail and North of the dirt road.

- Detected concentrations of BTEX compounds in temporary wells TW-06, TW-07, TW-09, TW-10, and TW-16 were below GCTLs. High concentrations of BTEX compounds exceeding their respective GCTLs were detected in temporary wells TW-01, TW-08, TW-11, TW-13, and TW-15. The high concentrations of BTEX compounds correlate with permanent monitoring well results and groundwater flow direction. Results from the DPT groundwater investigation were utilized for the placement of permanent monitoring wells.

- Areas of the site had limited access due to standing water. The limited accessibility to certain areas such as the area to the southeast of MW-21 and MW-22 restricted DPT investigation and monitoring well installation. Contamination boundaries in these areas have been inferred.

- GCTL exceedances for PAH compounds and TRPH were limited to permanent monitoring wells MW-4, and MW-11. These wells also had high concentrations of BTEX compounds which all exceeded their respective GCTLs.

- High concentrations of BTEX compounds were detected in permanent monitoring wells MW-6, MW-8, MW-17R, MW-25S, MW-28S, MW-28I, MW-29I, MW-33S, and MW-33I with one or more analytes exceeding their respective GCTLs.

- Trichloroethene was detected in monitoring well MW-28S sampled November 9, 2001 at a concentration exceeding its GCTL. Trichloroethene was not later confirmed in the sample collected from monitoring well MW-28S on December 18, 2002.

- Methylene chloride was detected in monitoring well MW-17R sampled November 9, 2001 at a concentration exceeding its GCTL. Monitoring well MW-17R was not sampled during the December 2002 field event, therefore the presence or absence of methylene chloride has not been confirmed.

- Chloroform was detected in monitoring well MW-32S sampled December 17, 2002 at a concentration exceeding its GCTL. Chloroform has not been previously identified at the Site and based on site history it is not a contaminant of concern.

- The absence of GCTL exceedances in shallow permanent monitoring wells MW-24S, MW-27S, MW-29S, MW-30S, MW-31S, and the absence of GCTL exceedances in intermediate/deep permanent monitoring wells MW-29D, MW-30I, MW-31I, MW-32I, and MW-33D adequately delineate contamination for the purpose of preparing a Remedial Action Plan (RAP).

Recommendations. The analytical results indicate that multiple VOCs, PAHs, and TRPH exceeded GCTLs. Analytical results also indicate that BTEX compounds are present at concentrations exceeding NADC. Therefore, based on the results of the DPT investigation and groundwater sampling, TtNUS recommends resuming preparation of a RAP incorporating the additional data.

If you have any questions with regard to this submittal, please contact me at (850) 385 -9899.

Sincerely,

Gerald Walker

Gerald A. Walker, P.G.
Task Order Manager
Florida License No. PG-0001180

GW/ls

Enclosures

c: B. Glover, Southern Division
Greg Campbell, NAS Pensacola PWC
D. Wroblewski (cover letter only)
M. Perry, file
TtNUS Tallahassee file

ATTACHMENT A

FDEP SARA Letter of Review

04010324

Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

May 2, 2001

CTO 112

Mr. Byas Glover
Code 18410
Southern Division
Naval Facilities Engineering Command
Post Office Box 190010
North Charleston, South Carolina 29419-9010

RE: Site Assessment Report Addendum, Underground Storage Tank (UST) Site 19, Naval Air Station Pensacola, Florida, DEP Facility #179203973

Dear Mr. Glover:

I have completed the technical review of the Site Assessment Report Addendum for UST Site 19, NAS Pensacola dated April 10, 2001 (received April 10, 2001). The document is adequate to meet the contamination assessment requirements of Chapter 62-770, Florida Administrative Code (F.A.C.). Therefore, you must now submit a Remedial Action Plan (RAP) in accordance with Rule 62-770.700, F.A.C.

Since monitoring well MW-17 was dry during the last sampling event, I recommend that remedial activities include the installation and sampling of a deep monitoring well located adjacent to MW-17.

Please submit the RAP in accordance with the approved Management Action Plan for NAS Pensacola. If I can be of any further assistance with this matter, please contact me at (850) 921-9989.

Sincerely,

Joseph F. Fugitt

Joseph F. Fugitt, P.G.
Remedial Project Manager

cc: Greg Campbell, NAS Pensacola
Gerry Walker, Tetra Tech NUS, Inc., Tallahassee
Charlie Goddard, FDEP Northwest District

Reviewed by:

Timothy J. Bahr, P.G.
Professional Geologist Supervisor
Bureau of Waste Cleanup

5/2/01
Date

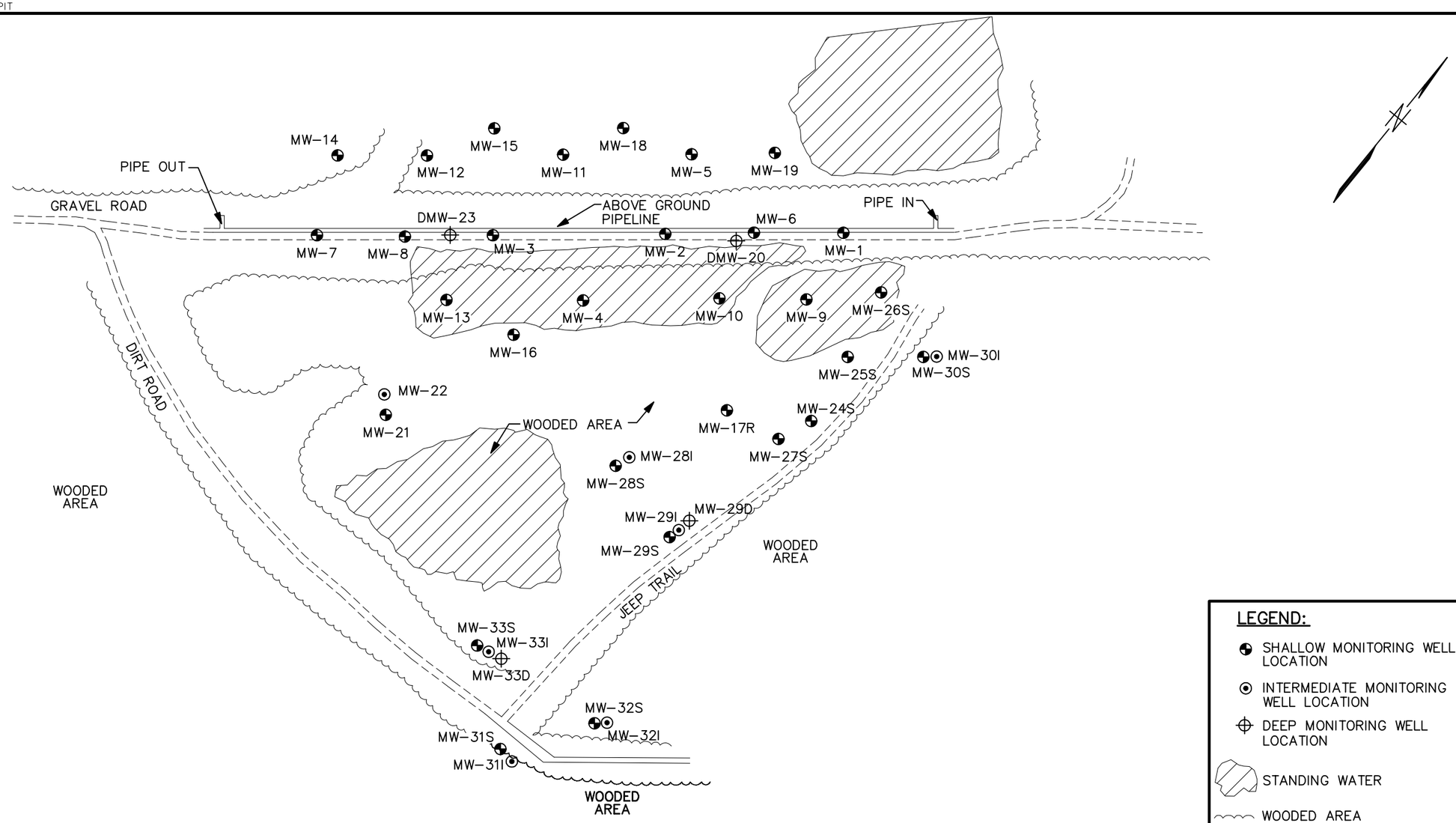
JJC ESN

TIMOTHY J. BAHR
LICENSE
NO. 1209
STATE OF
FLORIDA
PROFESSIONAL GEOLOGIST

ATTACHMENT B

Figures

ACAD: 2640CP01.dwg 04/21/03 HJB PIT



SOURCE: LOCATIONS OF ROADS AND PIPELINE ARE TAKEN FROM SITE ASSESSMENT REPORT, NAS PENSACOLA PUBLIC WORKS ENVIRONMENTAL OFFICE, FEBRUARY 1998 AND FROM FIELD OBSERVATIONS. WELL AND BORING LOCATIONS ARE APPROXIMATE.

LEGEND:

- SHALLOW MONITORING WELL LOCATION
- INTERMEDIATE MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- STANDING WATER
- WOODED AREA

0 150 300
APPROXIMATE SCALE IN FEET

NO.	DATE	REVISIONS	BY	CHKD	APPD	REFERENCES

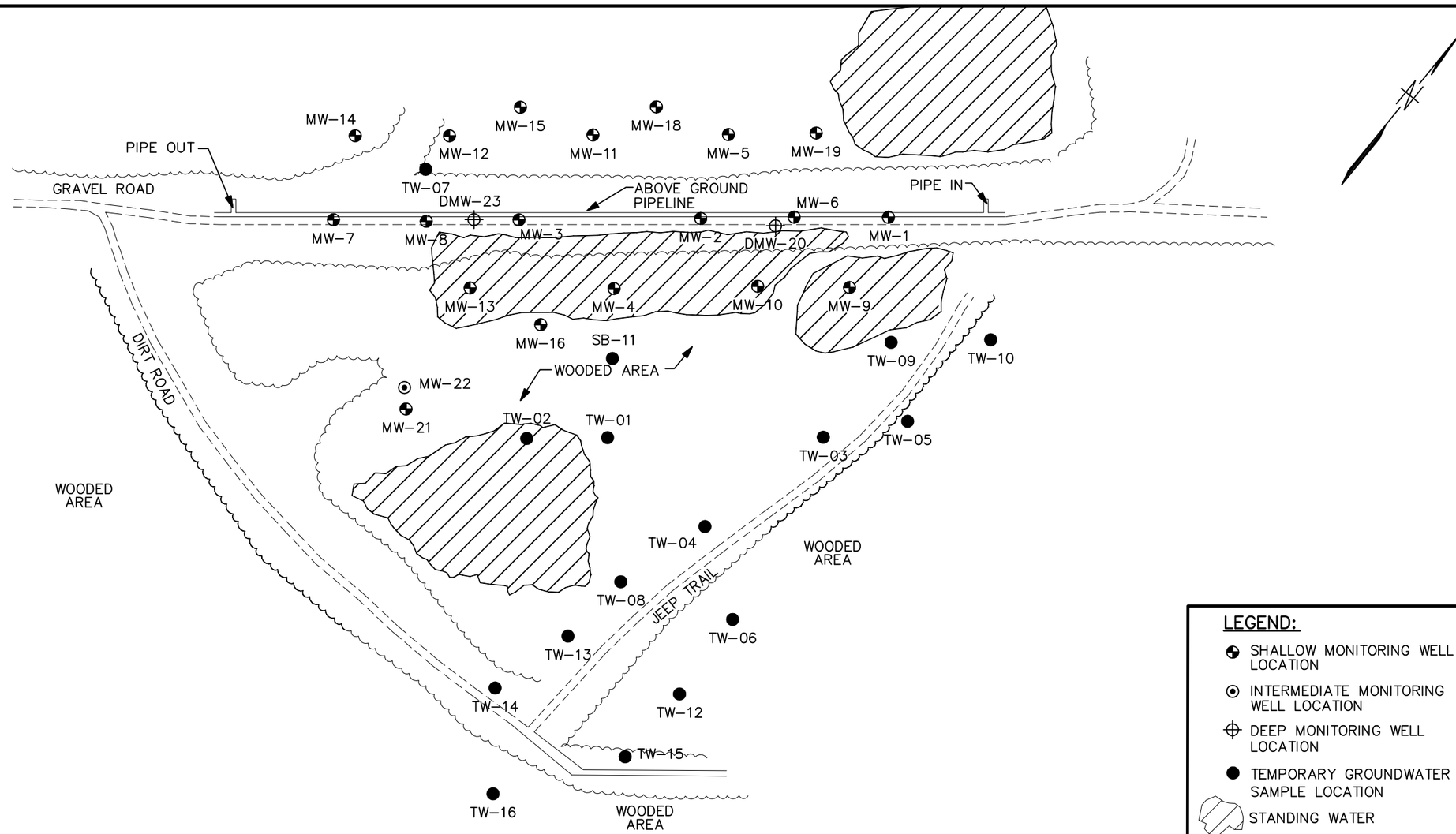
DRAWN BY HJB DATE 2/20/03
CHECKED BY DATE
COST/SCHED-AREA
SCALE AS NOTED

SITE PLAN
UST SITE 0020/IR SITE 19
SITE ASSESSMENT REPORT ADDENDUM #2
NAS PENSACOLA
PENSACOLA, FLORIDA

CONTRACT NO. 2640
APPROVED BY DATE
APPROVED BY DATE
DRAWING NO. FIGURE 1
REV. 0

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

ACAD: 2640CP02.dwg 04/21/03 HJB PIT



SOURCE: LOCATIONS OF ROADS AND PIPELINE ARE TAKEN FROM SITE ASSESSMENT REPORT, NAS PENSACOLA PUBLIC WORKS ENVIRONMENTAL OFFICE, FEBRUARY 1998 AND FROM FIELD OBSERVATIONS. WELL AND BORING LOCATIONS ARE APPROXIMATE.

LEGEND:

- SHALLOW MONITORING WELL LOCATION
- INTERMEDIATE MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- TEMPORARY GROUNDWATER SAMPLE LOCATION
- STANDING WATER
- WOODED AREA

0 150 300
APPROXIMATE SCALE IN FEET

NO.	DATE	REVISIONS	BY	CHKD	APPD	REFERENCES

DRAWN BY HJB DATE 2/24/03
CHECKED BY DATE
COST/SCHED-AREA
SCALE AS NOTED

DEPARTMENT OF THE NAVY · SOUTHERN DIV FACILITIES ENGINEERING COMD

DPT TEMPORARY GROUNDWATER SAMPLING LOCATIONS
UST SITE 0020/IR SITE 19
SITE ASSESSMENT REPORT ADDENDUM #2
NAS PENSACOLA
PENSACOLA, FLORIDA

CONTRACT NO. 2640
APPROVED BY DATE
APPROVED BY DATE
DRAWING NO. FIGURE 2
REV. 0

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

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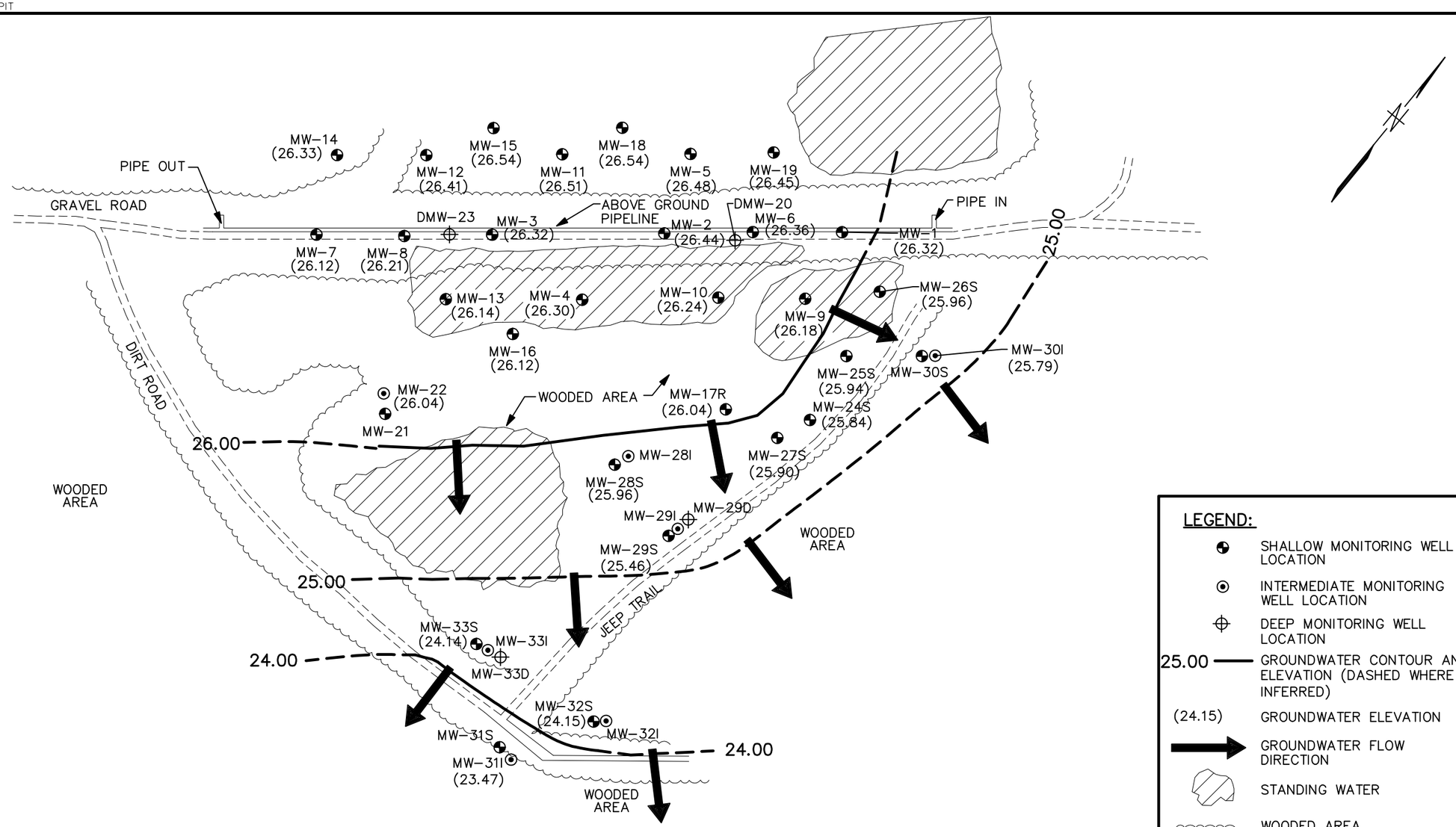


SOURCE: LOCATIONS OF ROADS AND PIPELINE ARE TAKEN FROM SITE ASSESSMENT REPORT, NAS PENSACOLA PUBLIC WORKS ENVIRONMENTAL OFFICE, FEBRUARY 1998 AND FROM FIELD OBSERVATIONS. WELL AND BORING LOCATIONS ARE APPROXIMATE.

LEGEND:

- SHALLOW MONITORING WELL LOCATION
- INTERMEDIATE MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- 25.00 — GROUNDWATER CONTOUR AND ELEVATION (DASHED WHERE INFERRED)
- (24.15) GROUNDWATER ELEVATION
- GROUNDWATER FLOW DIRECTION
- STANDING WATER
- WOODED AREA

0 150 300
APPROXIMATE SCALE IN FEET

NO.	DATE	REVISIONS	BY	CHKD	APPD	REFERENCES

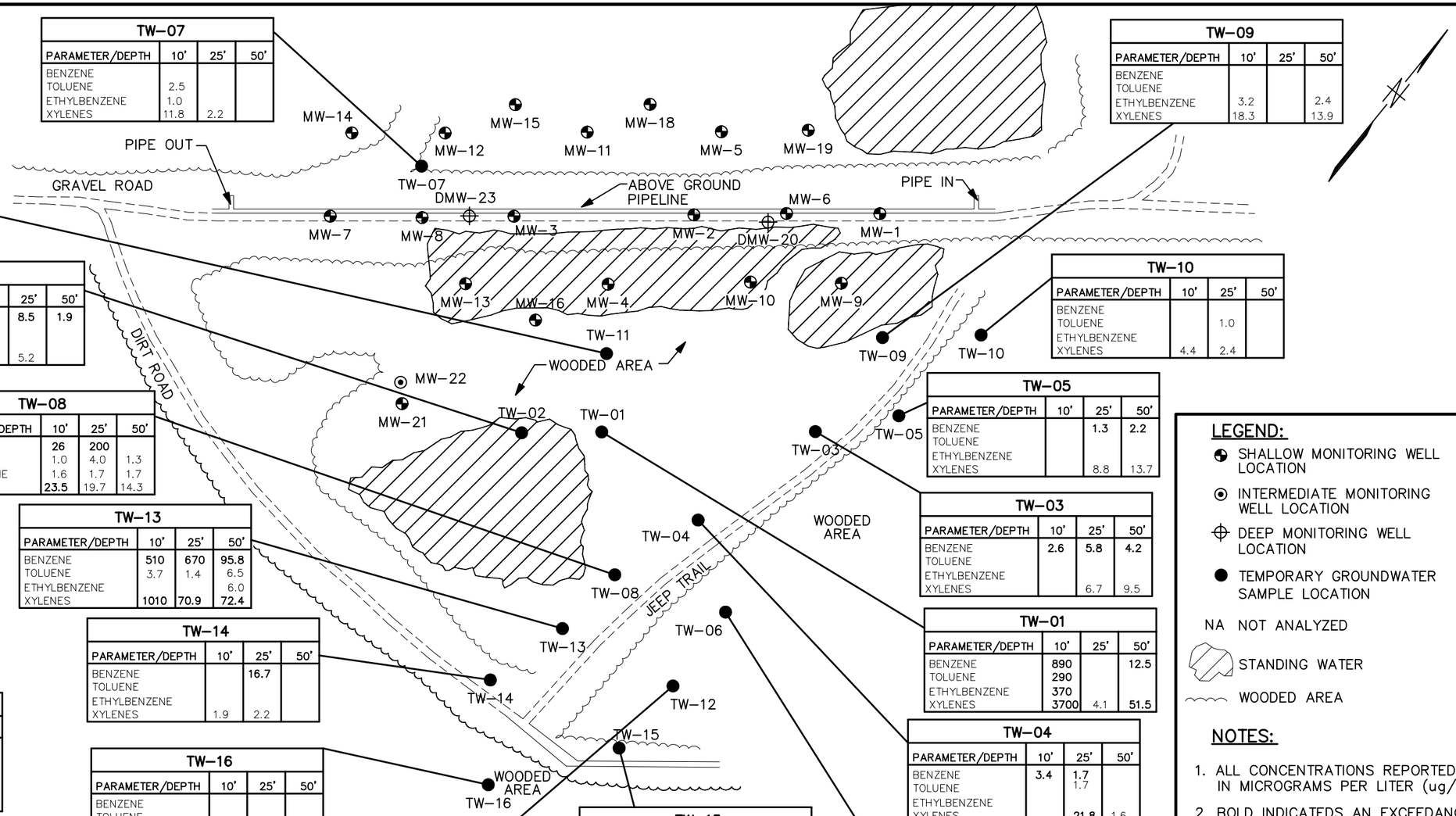
DRAWN BY HJB DATE 4/11/03
CHECKED BY DATE
COST/SCHED-AREA
SCALE AS NOTED

SHALLOW ZONE POTENTIOMETRIC SURFACE CONTOURS
JANUARY 29, 2003
UST SITE 0020/IR SITE 19
SITE ASSESSMENT REPORT ADDENDUM #2
NAS PENSACOLA
PENSACOLA, FLORIDA

CONTRACT NO. 2640
APPROVED BY DATE
APPROVED BY DATE
DRAWING NO. FIGURE 3
REV. 0

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

ACAD: 2640GT01.dwg 04/21/03 HJB PIT



TW-07			
PARAMETER/DEPTH	10'	25'	50'
BENZENE			
TOLUENE	2.5		
ETHYLBENZENE	1.0		
XYLENES	11.8	2.2	

TW-09			
PARAMETER/DEPTH	10'	25'	50'
BENZENE			
TOLUENE			
ETHYLBENZENE	3.2		2.4
XYLENES	18.3		13.9

TW-11			
PARAMETER/DEPTH	10'	25'	50'
BENZENE	1300	43	8.6
TOLUENE	8500	670	42.3
ETHYLBENZENE	990	68	7.6
XYLENES	7900	690	65.1

TW-02			
PARAMETER/DEPTH	10'	25'	50'
BENZENE		8.5	1.9
TOLUENE			
ETHYLBENZENE			
XYLENES		5.2	

TW-10			
PARAMETER/DEPTH	10'	25'	50'
BENZENE			
TOLUENE		1.0	
ETHYLBENZENE			
XYLENES	4.4	2.4	

TW-08			
PARAMETER/DEPTH	10'	25'	50'
BENZENE	26	200	
TOLUENE	1.0	4.0	1.3
ETHYLBENZENE	1.6	1.7	1.7
XYLENES	23.5	19.7	14.3

TW-05			
PARAMETER/DEPTH	10'	25'	50'
BENZENE		1.3	2.2
TOLUENE			
ETHYLBENZENE			
XYLENES		8.8	13.7

TW-13			
PARAMETER/DEPTH	10'	25'	50'
BENZENE	510	670	95.8
TOLUENE	3.7	1.4	6.5
ETHYLBENZENE			6.0
XYLENES	1010	70.9	72.4

TW-03			
PARAMETER/DEPTH	10'	25'	50'
BENZENE	2.6	5.8	4.2
TOLUENE			
ETHYLBENZENE			
XYLENES		6.7	9.5

TW-14			
PARAMETER/DEPTH	10'	25'	50'
BENZENE		16.7	
TOLUENE			
ETHYLBENZENE			
XYLENES	1.9	2.2	

TW-01			
PARAMETER/DEPTH	10'	25'	50'
BENZENE	890		12.5
TOLUENE	290		
ETHYLBENZENE	370		
XYLENES	3700	4.1	51.5

ANALYTICAL TARGET LEVELS	
ANALYTE	GCTL
BENZENE	1
TOLUENE	30
ETHYLBENZENE	40
TOTAL XYLENES	20

TW-16			
PARAMETER/DEPTH	10'	25'	50'
BENZENE			
TOLUENE			
ETHYLBENZENE			
XYLENES			1.6

TW-04			
PARAMETER/DEPTH	10'	25'	50'
BENZENE	3.4	1.7	
TOLUENE		1.7	
ETHYLBENZENE			
XYLENES		21.8	1.6

TW-12			
PARAMETER/DEPTH	10'	25'	50'
BENZENE		3.9	
TOLUENE	4.2		3.9
ETHYLBENZENE			1.1
XYLENES	4.6		8.8

TW-15			
PARAMETER/DEPTH	10'	25'	50'
BENZENE		183	
TOLUENE			
ETHYLBENZENE			
XYLENES			

TW-06			
PARAMETER/DEPTH	10'	25'	50'
BENZENE			NA
TOLUENE			NA
ETHYLBENZENE			NA
XYLENES			NA

SOURCE: LOCATIONS OF ROADS AND PIPELINE ARE TAKEN FROM SITE ASSESSMENT REPORT, NAS PENSACOLA PUBLIC WORKS ENVIRONMENTAL OFFICE, FEBRUARY 1998 AND FROM FIELD OBSERVATIONS. WELL AND BORING LOCATIONS ARE APPROXIMATE.

LEGEND:

- SHALLOW MONITORING WELL LOCATION
- INTERMEDIATE MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- TEMPORARY GROUNDWATER SAMPLE LOCATION
- NA NOT ANALYZED
- STANDING WATER
- WOODED AREA

NOTES:

1. ALL CONCENTRATIONS REPORTED IN MICROGRAMS PER LITER (ug/L).
2. BOLD INDICATEDS AN EXCEEDANCE.
3. BLANK SPACE INDICATES NON-DETECTS.

0 150 300
APPROXIMATE SCALE IN FEET

NO.	DATE	REVISIONS	BY	CHKD	APPD	REFERENCES

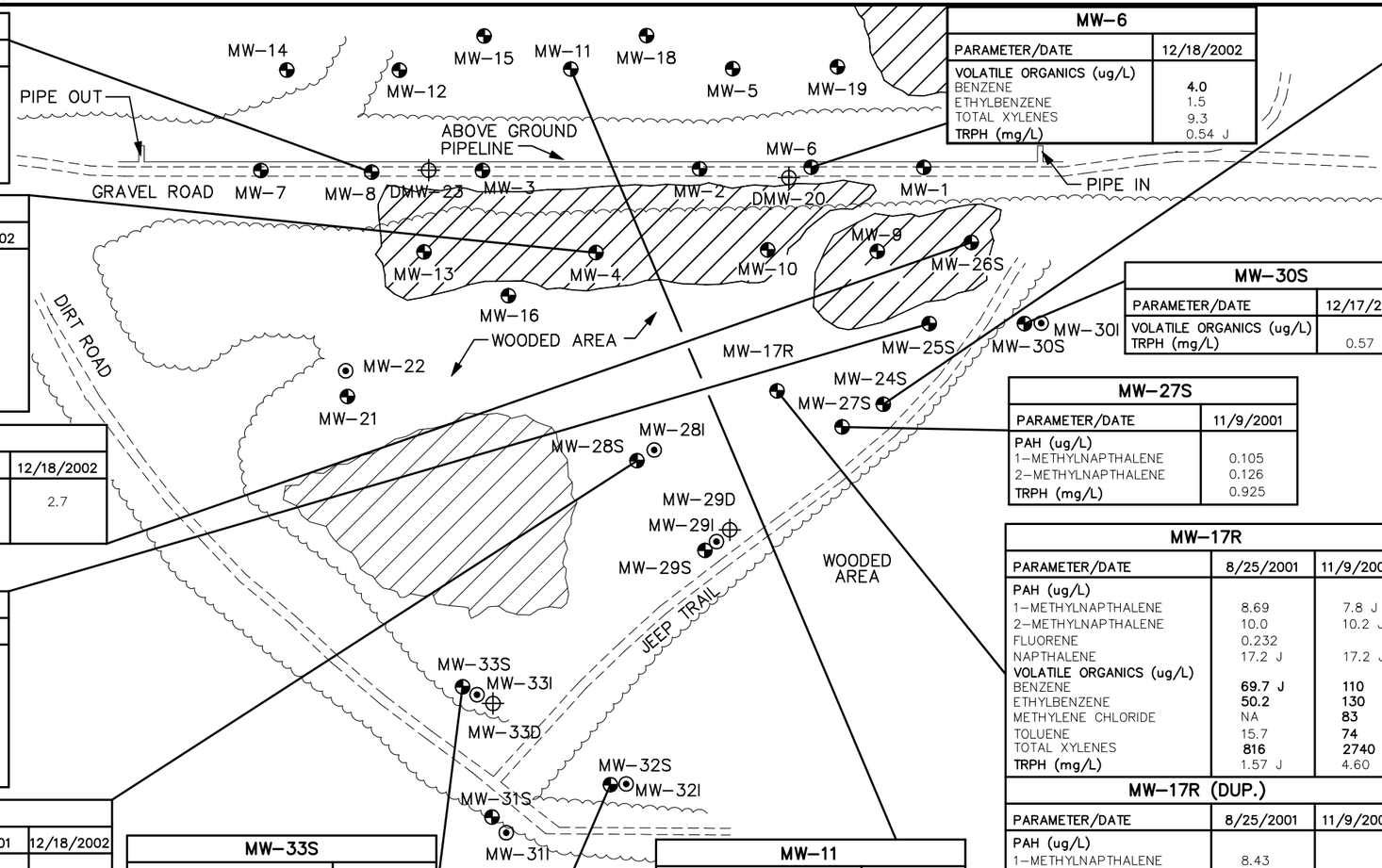
DRAWN BY HJB DATE 2/25/03
CHECKED BY DATE
COST/SCHED-AREA
SCALE AS NOTED

DISTRIBUTION OF DPT GROUNDWATER ANALYTE DETECTIONS
NOVEMBER 5 – NOVEMBER 14, 2002
UST SITE 0020/IR SITE 19
SITE ASSESSMENT REPORT ADDENDUM #2
NAS PENSACOLA
PENSACOLA, FLORIDA

CONTRACT NO. 2640
APPROVED BY DATE
APPROVED BY DATE
DRAWING NO. FIGURE 4
REV. 0

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

ACAD: 2640GT02.dwg 04/21/03 HJB PIT



MW-8	
PARAMETER/DATE	12/18/2002
VOLATILE ORGANICS (ug/L)	
BENZENE	**190**
ETHYLBENZENE	25
TOLUENE	**130**
TOTAL XYLENES	**100**
TRPH (mg/L)	0.62 J
INORGANICS (ug/L)	
LEAD	10.7

MW-6	
PARAMETER/DATE	12/18/2002
VOLATILE ORGANICS (ug/L)	
BENZENE	**4.0**
ETHYLBENZENE	1.5
TOTAL XYLENES	9.3
TRPH (mg/L)	0.54 J

MW-24S	
PARAMETER/DATE	11/9/2001
PAH (ug/L)	
1-METHYLNAPTHALENE	7.63
2-METHYLNAPTHALENE	9.92
NAPTHALENE	16 J
TRPH (mg/L)	0.83

MW-4	
PARAMETER/DATE	12/18/2002
PAH (ug/L)	
1-METHYLNAPTHALENE	**20**
2-METHYLNAPTHALENE	**32**
NAPTHALENE	**59**
VOLATILE ORGANICS (ug/L)	
BENZENE	**79**
ETHYLBENZENE	**360**
TOLUENE	**2400**
TOTAL XYLENES	**3500**
TRPH (mg/L)	**20**

MW-30S	
PARAMETER/DATE	12/17/2002
VOLATILE ORGANICS (ug/L)	
TRPH (mg/L)	0.57 J

MW-27S	
PARAMETER/DATE	11/9/2001
PAH (ug/L)	
1-METHYLNAPTHALENE	0.105
2-METHYLNAPTHALENE	0.126
TRPH (mg/L)	0.925

MW-26S		
PARAMETER/DATE	11/9/2001	12/18/2002
VOLATILE ORGANICS (ug/L)		
BENZENE		2.7
TRICHLOROETHENE	0.99 J	
TRPH (mg/L)	0.929	

MW-17R		
PARAMETER/DATE	8/25/2001	11/9/2001
PAH (ug/L)		
1-METHYLNAPTHALENE	8.69	7.8 J
2-METHYLNAPTHALENE	10.0	10.2 J
FLUORENE	0.232	
NAPTHALENE	17.2 J	17.2 J
VOLATILE ORGANICS (ug/L)		
BENZENE	**69.7 J**	**110**
ETHYLBENZENE	**50.2**	**130**
METHYLENE CHLORIDE	NA	**83**
TOLUENE	15.7	**74**
TOTAL XYLENES	**816**	**2740**
TRPH (mg/L)	1.57 J	4.60

MW-17R (DUP.)		
PARAMETER/DATE	8/25/2001	11/9/2001
PAH (ug/L)		
1-METHYLNAPTHALENE	8.43	
2-METHYLNAPTHALENE	9.41	
BENZO(a)PYRENE	0.137	
BENZO(b)FLUORANTHENE	0.158	
BENZO(k)FLUORANTHENE	0.158	
CHRYSENE	0.116	
FLUORENE	0.221	
NAPTHALENE	17.1 J	
VOLATILE ORGANICS (ug/L)		
BENZENE	**39.5 J**	**110**
ETHYLBENZENE	**51.0**	**120**
METHYLENE CHLORIDE	NA	**68**
TOLUENE	11.9	**75**
TOTAL XYLENES	**707**	**2600**
TRPH (mg/L)	1.69J	4.18

MW-25S	
PARAMETER/DATE	11/9/2001
PAH (ug/L)	
1-METHYLNAPTHALENE	0.26 J
VOLATILE ORGANICS (ug/L)	
BENZENE	**19**
ETHYLBENZENE	1.0
TOLUENE	1.0
TOTAL XYLENES	**30.8**
TRICHLOROETHENE	0.7 J
TRPH (mg/L)	1.22

MW-28S		
PARAMETER/DATE	11/9/2001	12/18/2002
PAH (ug/L)		
1-METHYLNAPTHALENE	0.24	
2-METHYLNAPTHALENE	0.3	
NAPTHALENE	0.126 J	
VOLATILE ORGANICS (ug/L)		
BENZENE	**120 J**	**1.1**
ETHYLBENZENE	0.53 J	
TOLUENE	0.94 J	0.53 J
TOTAL XYLENES	17	
TRICHLOROETHENE	**4.7**	
TRPH (mg/L)	1.21	0.47 J

MW-33S	
PARAMETER/DATE	12/17/2002
PAH (ug/L)	
NAPTHALENE	0.77 J
VOLATILE ORGANICS (ug/L)	
BENZENE	**190**
ETHYLBENZENE	12
TOLUENE	16
TOTAL XYLENES	**130**

MW-32S	
PARAMETER/DATE	12/17/2002
VOLATILE ORGANICS (ug/L)	
CHLOROFORM	**7.1**

MW-11	
PARAMETER/DATE	12/18/2002
PAH (ug/L)	
1-METHYLNAPTHALENE	**22**
2-METHYLNAPTHALENE	**31**
FLUORENE	0.78 J
NAPTHALENE	**58**
VOLATILE ORGANICS (ug/L)	
BENZENE	**430 J**
ETHYLBENZENE	**520**
TOLUENE	**5800**
TOTAL XYLENES	**5500**
TRPH (mg/L)	**26**

SOURCE: LOCATIONS OF ROADS AND PIPELINE ARE TAKEN FROM SITE ASSESSMENT REPORT, NAS PENSACOLA PUBLIC WORKS ENVIRONMENTAL OFFICE, FEBRUARY 1998 AND FROM FIELD OBSERVATIONS. WELL AND BORING LOCATIONS ARE APPROXIMATE.

ANALYTICAL TARGET LEVELS

ANALYTE	GCTL	NADC
1-METHYLNAPTHALENE	20	200
2-METHYLNAPTHALENE	20	200
BENZENE	1	100
BENZO(a)PYRENE	0.20	20
BENZO(b)FLUORANTHENE	0.20	20
BENZO(k)FLUORANTHENE	0.20	20
CHLOROFORM	5.7	NA
CHRYSENE	4.80	480
ETHYLBENZENE	30	300
FLUORENE	280	2800
LEAD	15	150
METHYLENE CHLORIDE	5	NA
NAPTHALENE	20	200
PHENANTHRENE	210	2100
TOLUENE	40	400
TOTAL XYLENES	20	200
TRICHLOROETHENE	3	NA
TRPH	5	50

LEGEND:

- SHALLOW MONITORING WELL LOCATION
- INTERMEDIATE MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- J ESTIMATED
- mg/L MILLIGRAMS PER LITER
- NA NOT ANALYZED
- ug/L MICROGRAMS PER LITER
- STANDING WATER
- WOODED AREA

NOTES:

1. BOLD INDICATES AN EXCEEDANCE
2. BLANK SPACE INDICATES NON-DETECTS.

0 150 300
APPROXIMATE SCALE IN FEET

NO.	DATE	REVISIONS	BY	CHKD	APPD	REFERENCES

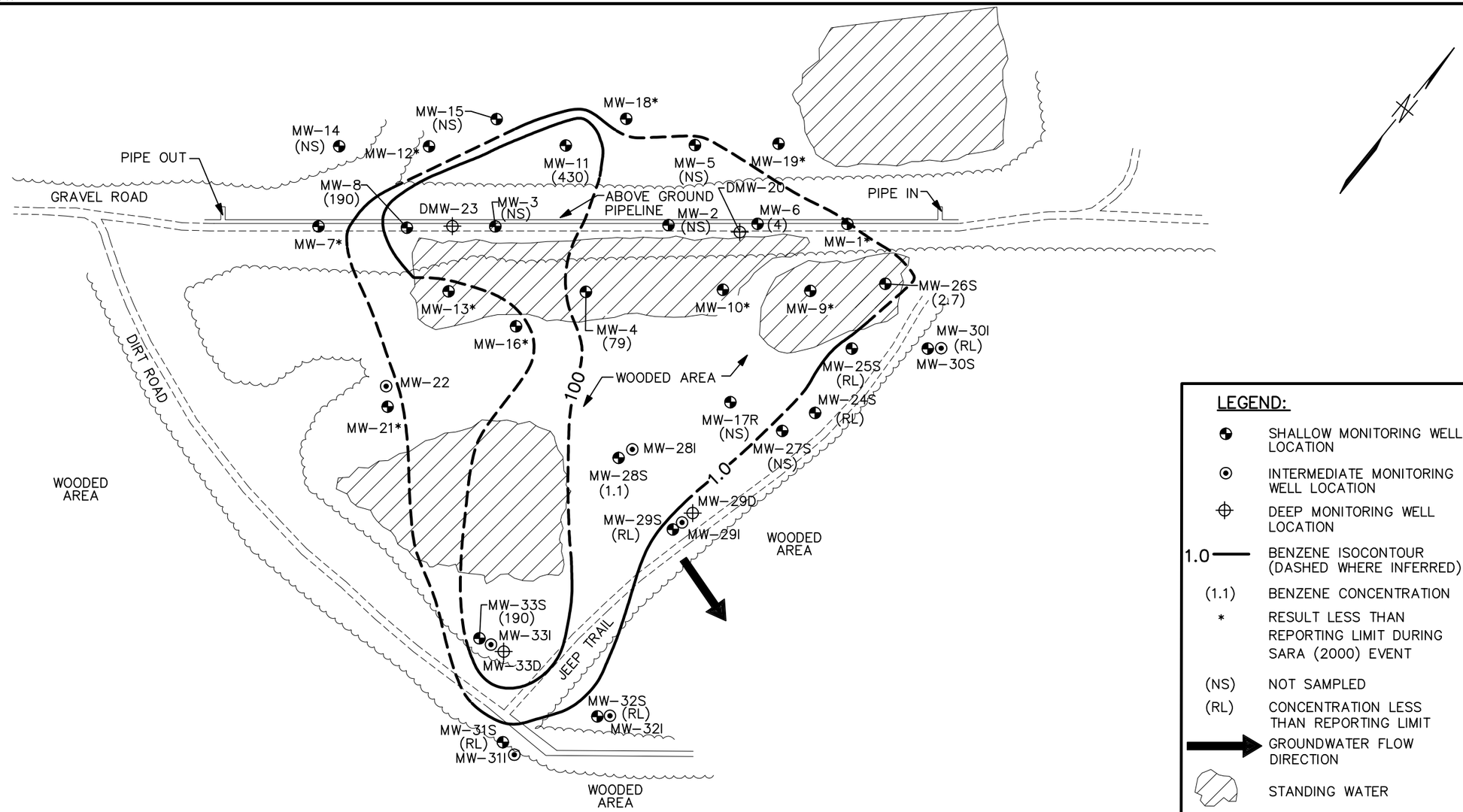
DRAWN BY DM DATE 2/28/03
CHECKED BY DATE
COST/SCHED-AREA
SCALE AS NOTED

DISTRIBUTION OF GROUNDWATER
SHALLOW ANALYTE DETECTIONS
AUGUST 25, 2001 – DECEMBER 19, 2002
UST SITE 0020/IR SITE 19
SITE ASSESSMENT REPORT ADDENDUM #2
NAS PENSACOLA
PENSACOLA, FLORIDA

CONTRACT NO. 2640
APPROVED BY DATE
APPROVED BY DATE
DRAWING NO. FIGURE 5
REV. 0

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

ACAD: 2640GM02.dwg 04/21/03 HJB PIT



SOURCE: LOCATIONS OF ROADS AND PIPELINE ARE TAKEN FROM SITE ASSESSMENT REPORT, NAS PENSACOLA PUBLIC WORKS ENVIRONMENTAL OFFICE, FEBRUARY 1998 AND FROM FIELD OBSERVATIONS. WELL AND BORING LOCATIONS ARE APPROXIMATE.

LEGEND:

- SHALLOW MONITORING WELL LOCATION
- INTERMEDIATE MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- 1.0 — BENZENE ISOCONTOUR (DASHED WHERE INFERRED)
- (1.1) BENZENE CONCENTRATION
- * RESULT LESS THAN REPORTING LIMIT DURING SARA (2000) EVENT
- (NS) NOT SAMPLED
- (RL) CONCENTRATION LESS THAN REPORTING LIMIT
- GROUNDWATER FLOW DIRECTION
- STANDING WATER
- WOODED AREA

0 150 300
APPROXIMATE SCALE IN FEET

NO.	DATE	REVISIONS	BY	CHKD	APPD	REFERENCES

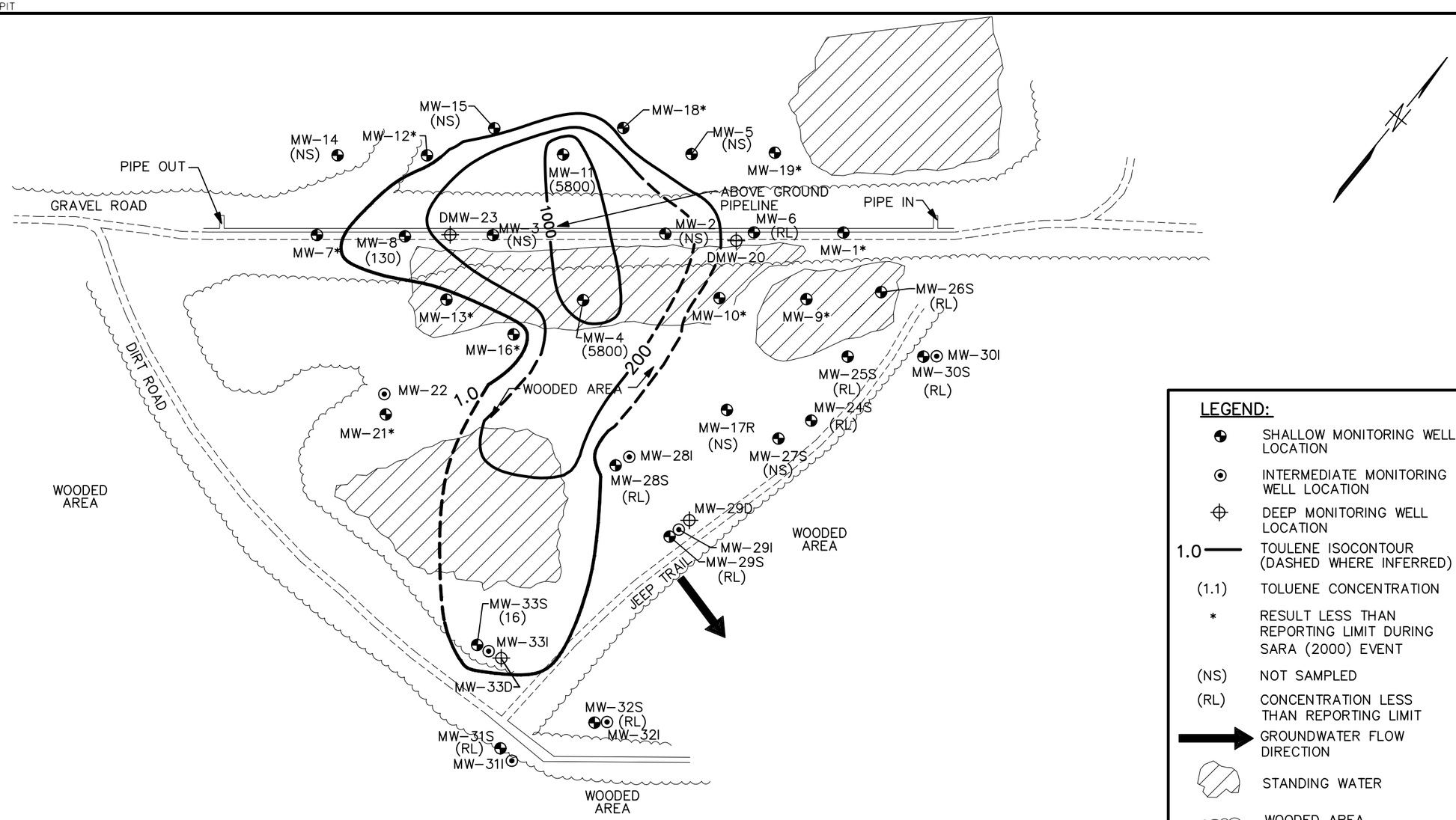
DRAWN BY HJB DATE 4/11/03
CHECKED BY DATE
COST/SCHED-AREA
SCALE AS NOTED

BENZENE CONCENTRATION DETECTED IN GROUNDWATER DECEMBER 17–19, 2002 UST SITE 0020/IR SITE 19 SITE ASSESSMENT REPORT ADDENDUM #2 NAS PENSACOLA PENSACOLA, FLORIDA

CONTRACT NO. 2640
APPROVED BY DATE
APPROVED BY DATE
DRAWING NO. FIGURE 6
REV. 0

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

ACAD: 2640GM03.dwg 04/21/03 HJB PIT



SOURCE: LOCATIONS OF ROADS AND PIPELINE ARE TAKEN FROM SITE ASSESSMENT REPORT, NAS PENSACOLA PUBLIC WORKS ENVIRONMENTAL OFFICE, FEBRUARY 1998 AND FROM FIELD OBSERVATIONS. WELL AND BORING LOCATIONS ARE APPROXIMATE.

LEGEND:

- SHALLOW MONITORING WELL LOCATION
- INTERMEDIATE MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- 1.0 — TOULENE ISOCONTOUR (DASHED WHERE INFERRED)
- (1.1) TOLUENE CONCENTRATION
- * RESULT LESS THAN REPORTING LIMIT DURING SARA (2000) EVENT
- (NS) NOT SAMPLED
- (RL) CONCENTRATION LESS THAN REPORTING LIMIT
- GROUNDWATER FLOW DIRECTION
- STANDING WATER
- WOODED AREA

0 150 300
APPROXIMATE SCALE IN FEET

NO.	DATE	REVISIONS	BY	CHKD	APPD	REFERENCES

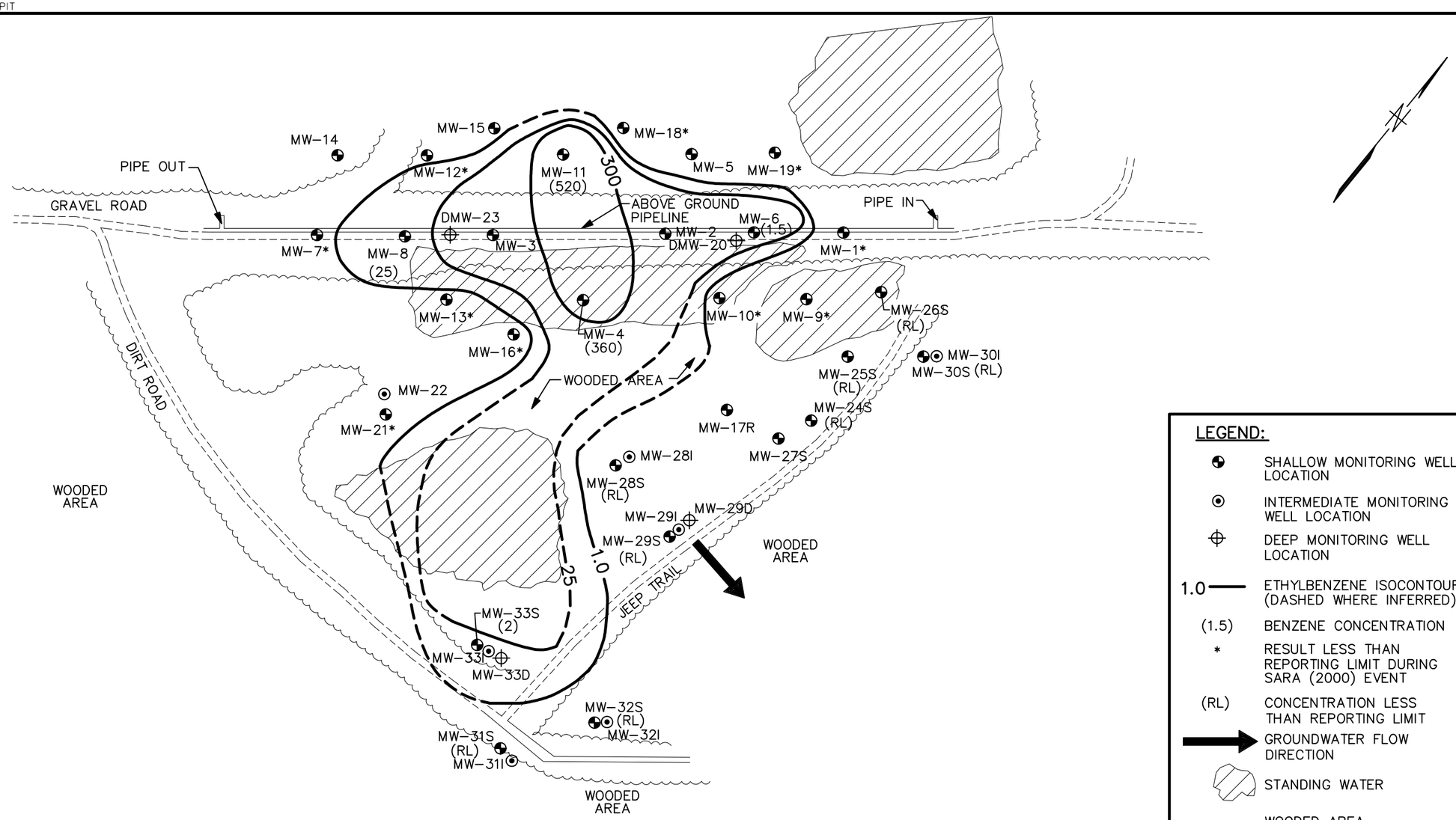
DRAWN BY HJB DATE 4/11/03
CHECKED BY DATE
COST/SCHED-AREA
SCALE AS NOTED

TOLUENE CONCENTRATION DETECTED IN GROUNDWATER DECEMBER 17–19, 2002 UST SITE 0020/IR SITE 19 SITE ASSESSMENT REPORT ADDENDUM #2 NAS PENSACOLA PENSACOLA, FLORIDA

CONTRACT NO. 2640
APPROVED BY DATE
APPROVED BY DATE
DRAWING NO. FIGURE 7
REV. 0

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

ACAD: 2640GM04.dwg 04/21/03 HJB PIT



SOURCE: LOCATIONS OF ROADS AND PIPELINE ARE TAKEN FROM SITE ASSESSMENT REPORT, NAS PENSACOLA PUBLIC WORKS ENVIRONMENTAL OFFICE, FEBRUARY 1998 AND FROM FIELD OBSERVATIONS. WELL AND BORING LOCATIONS ARE APPROXIMATE.

LEGEND:

- SHALLOW MONITORING WELL LOCATION
- INTERMEDIATE MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- 1.0 — ETHYLBENZENE ISOCONTOUR (DASHED WHERE INFERRED)
- (1.5) BENZENE CONCENTRATION
- * RESULT LESS THAN REPORTING LIMIT DURING SARA (2000) EVENT
- (RL) CONCENTRATION LESS THAN REPORTING LIMIT
- GROUNDWATER FLOW DIRECTION
- STANDING WATER
- WOODED AREA

0 150 300
APPROXIMATE SCALE IN FEET

NO.	DATE	REVISIONS	BY	CHKD	APPD	REFERENCES

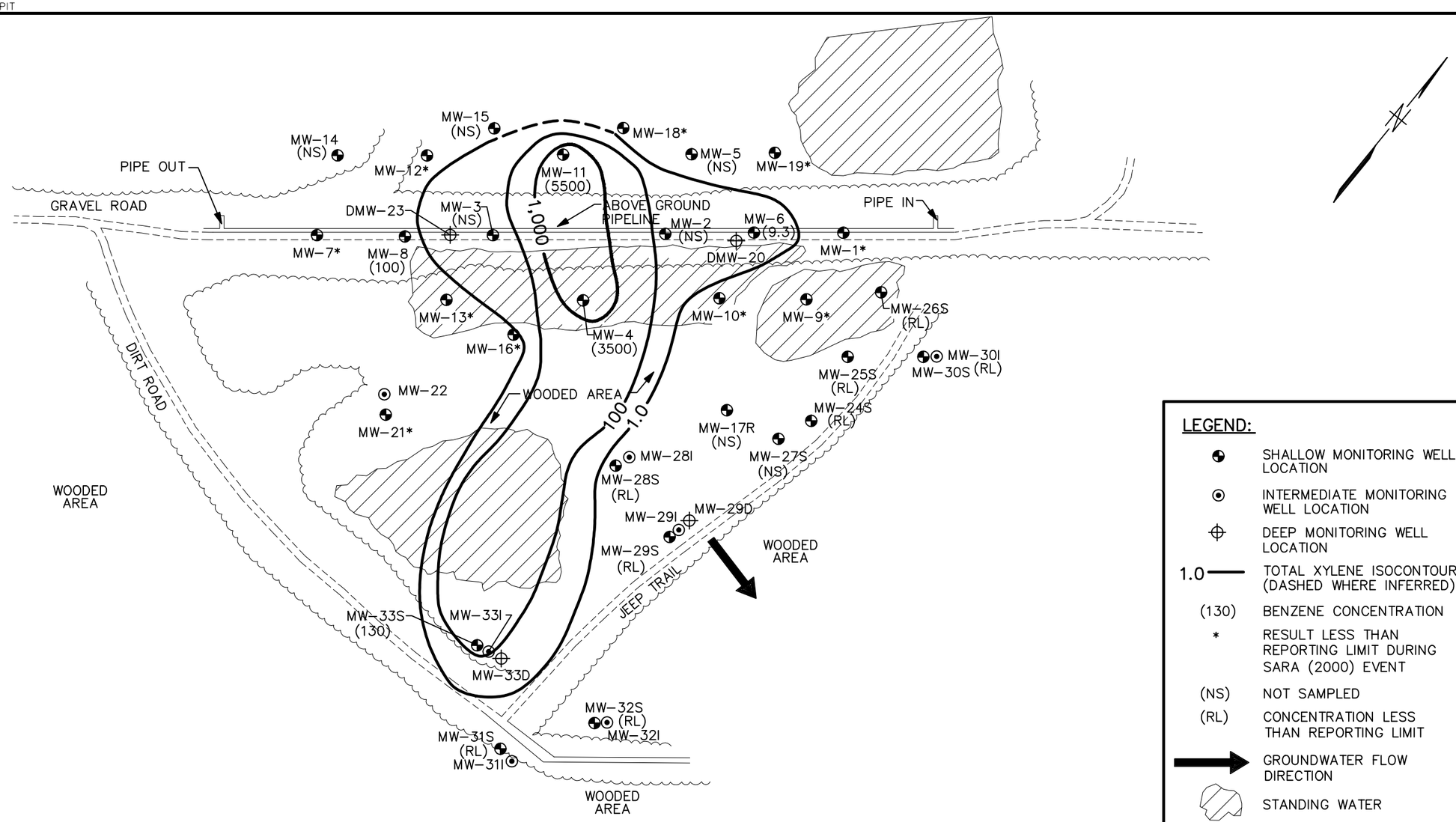
DRAWN BY HJB DATE 4/11/03
CHECKED BY DATE
COST/SCHED-AREA
SCALE AS NOTED

ETHYLBENZENE CONCENTRATIONS DETECTED IN GROUNDWATER DECEMBER 17–19, 2002 UST SITE 0020/IR SITE 19 SITE ASSESSMENT REPORT ADDENDUM #2 NAS PENSACOLA PENSACOLA, FLORIDA

CONTRACT NO. 2640
APPROVED BY DATE
APPROVED BY DATE
DRAWING NO. FIGURE 8
REV. 0

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

ACAD: 2640GM05.dwg 04/21/03 HJB PIT



SOURCE: LOCATIONS OF ROADS AND PIPELINE ARE TAKEN FROM SITE ASSESSMENT REPORT, NAS PENSACOLA PUBLIC WORKS ENVIRONMENTAL OFFICE, FEBRUARY 1998 AND FROM FIELD OBSERVATIONS. WELL AND BORING LOCATIONS ARE APPROXIMATE.

LEGEND:

- SHALLOW MONITORING WELL LOCATION
- INTERMEDIATE MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- 1.0 — TOTAL XYLENE ISOCONTOUR (DASHED WHERE INFERRED)
- (130) BENZENE CONCENTRATION
- * RESULT LESS THAN REPORTING LIMIT DURING SARA (2000) EVENT
- (NS) NOT SAMPLED
- (RL) CONCENTRATION LESS THAN REPORTING LIMIT
- GROUNDWATER FLOW DIRECTION
- STANDING WATER
- WOODED AREA

0 150 300
APPROXIMATE SCALE IN FEET

NO.	DATE	REVISIONS	BY	CHKD	APPD	REFERENCES

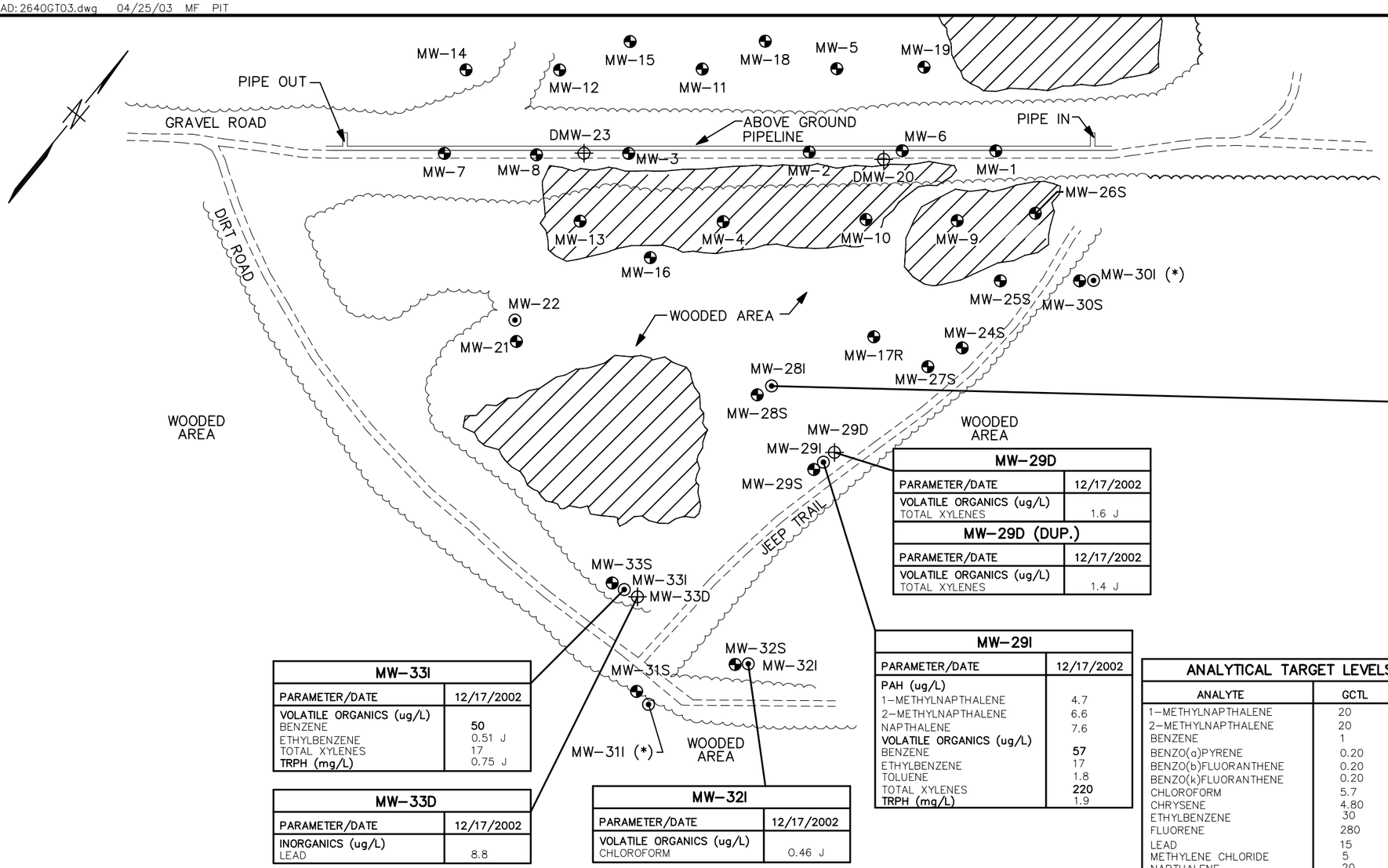
DRAWN BY HJB DATE 4/14/03
CHECKED BY DATE
COST/SCHED-AREA
SCALE AS NOTED

TOTAL XYLENE CONCENTRATION DETECTED IN GROUNDWATER DECEMBER 17–19, 2002
UST SITE 0020/IR SITE 19
SITE ASSESSMENT REPORT ADDENDUM #2
NAS PENSACOLA
PENSACOLA, FLORIDA

CONTRACT NO. 2640
APPROVED BY DATE
APPROVED BY DATE
DRAWING NO. FIGURE 9
REV. 0

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

ACAD: 2640GT03.dwg 04/25/03 MF PIT



MW-281		
PARAMETER/DATE	11/9/2001	12/18/2002
PAH (ug/L)		
1-METHYLNAPTHALENE	1.59	2.3
2-METHYLNAPTHALENE	2.6	3.0
NAPTHALENE	4.68 J	9.6
VOLATILE ORGANICS (ug/L)		
BENZENE	**520**	**590**
ETHYLBENZENE	**82**	**91**
METHYLENE CHLORIDE	**60**	
TOLUENE	17 J	
TOTAL XYLENES	**620**	**730**
TRICHLOROETHENE	**66**	
TRPH (mg/L)	2.13	2.4

MW-29D	
PARAMETER/DATE	12/17/2002
VOLATILE ORGANICS (ug/L)	
TOTAL XYLENES	1.6 J

MW-29D (DUP.)	
PARAMETER/DATE	12/17/2002
VOLATILE ORGANICS (ug/L)	
TOTAL XYLENES	1.4 J

MW-331	
PARAMETER/DATE	12/17/2002
VOLATILE ORGANICS (ug/L)	
BENZENE	**50**
ETHYLBENZENE	0.51 J
TOTAL XYLENES	17
TRPH (mg/L)	0.75 J

MW-33D	
PARAMETER/DATE	12/17/2002
INORGANICS (ug/L)	
LEAD	8.8

MW-321	
PARAMETER/DATE	12/17/2002
VOLATILE ORGANICS (ug/L)	
CHLOROFORM	0.46 J

MW-291	
PARAMETER/DATE	12/17/2002
PAH (ug/L)	
1-METHYLNAPTHALENE	4.7
2-METHYLNAPTHALENE	6.6
NAPTHALENE	7.6
VOLATILE ORGANICS (ug/L)	
BENZENE	**57**
ETHYLBENZENE	17
TOLUENE	1.8
TOTAL XYLENES	**220**
TRPH (mg/L)	1.9

ANALYTICAL TARGET LEVELS

ANALYTE	GCTL	NADC
1-METHYLNAPTHALENE	20	200
2-METHYLNAPTHALENE	20	200
BENZENE	1	100
BENZO(a)PYRENE	0.20	20
BENZO(b)FLUORANTHENE	0.20	20
BENZO(k)FLUORANTHENE	0.20	20
CHLOROFORM	5.7	NA
CHRYSENE	4.80	480
ETHYLBENZENE	30	300
FLUORENE	280	2800
LEAD	15	150
METHYLENE CHLORIDE	5	NA
NAPTHALENE	20	200
PHENANTHRENE	210	2100
TOLUENE	40	400
TOTAL XYLENES	20	200
TRICHLOROETHENE	3	NA
TRPH	5	50

LEGEND:

- SHALLOW MONITORING WELL LOCATION
- INTERMEDIATE MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- J — ESTIMATED
- mg/kg — MILLIGRAMS PER LITER
- NA — NOT ANALYZED
- µg/L — MICROGRAMS PER LITER
- STANDING WATER
- WOODED AREA
- (*) — NO COMPOUNDS WERE DETECTED ABOVE REPORTING LIMIT

NOTES:

1. BOLD INDICATES AN EXCEEDANCE
2. BLANK SPACE INDICATES NON-DETECTS.

0 150 300
APPROXIMATE SCALE IN FEET

SOURCE: LOCATIONS OF ROADS AND PIPELINE ARE TAKEN FROM SITE ASSESSMENT REPORT, NAS PENSACOLA PUBLIC WORKS ENVIRONMENTAL OFFICE, FEBRUARY 1998 AND FROM FIELD OBSERVATIONS. WELL AND BORING LOCATIONS ARE APPROXIMATE.

NO.	DATE	REVISIONS	BY	CHKD	APPD	REFERENCES

DRAWN BY DM DATE 2/28/03
CHECKED BY DATE
COST/SCHED-AREA
SCALE AS NOTED

DISTRIBUTION OF GROUNDWATER INTERMEDIATE AND DEEP ANALYTE DETECTIONS
AUGUST 25, 2001 – DECEMBER 19, 2002
UST SITE 0020/IR SITE 19
SITE ASSESSMENT REPORT ADDENDUM #2
NAS PENSACOLA
PENSACOLA, FLORIDA

CONTRACT NO. 2640
APPROVED BY DATE
APPROVED BY DATE
DRAWING NO. FIGURE 10
REV. 0

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

ATTACHMENT C

Tables

TABLE 1
SUMMARY OF DETECTED CONTAMINANTS IN GROUNDWATER-UST SITE 0020 / IR SITE 19
NAS PENSACOLA, PENSACOLA, FLORIDA

Sample No.		NASP-19-MW17	NASP-19-MW17-D	NASP19MW17R	NASP19MW17R-D	PEN-19-MW4	PEN-19-MW6
Sample Location		MW-17R	MW-17R	MW-17R	MW-17R	MW-4	MW-6
Collect Date		8/25/2001	8/25/2001	11/9/2001	11/9/2001	12/18/2002	12/18/2002
	GCTL[1] (µg/L)						
VOCs [2] (µg/L)							
Benzene	**1**	**69.7 J**	**39.5 J**	**110**	**110**	**79**	**4.0**
Chloroform	5.7	NA	NA	--	--	--	--
Ethylbenzene	**30**	**50.2**	**51**	**130**	**120**	**360**	1.5
Methylene Chloride	**5**	NA	NA	**83**	**68**	--	--
Trichloroethene	3	NA	NA	--	--	--	--
Toluene	**40**	15.7	11.9	**74**	**75**	**2400**	--
Xylenes, Total	**20**	**816**	**707**	**2740**	**2600**	**3500**	9.3
PAHs [3] (µg/L)							
1-Methylnaphthalene	**20**	8.69	8.43	7.8 J	--	**20**	--
2-Methylnaphthalene	**20**	10	9.41	10.2 J	--	**32**	--
Benzo(a)Pyrene	0.20	--	0.137	--	--	--	--
Benzo(b)Fluoranthene	0.20	--	0.158	--	--	--	--
Benzo(k)Fluoranthene	0.50	--	0.158	--	--	--	--
Chrysene	4.80	--	0.116	--	--	--	--
Fluorene	280	0.232	0.221	--	--	--	--
Naphthalene	**20**	17.2 J	17.1 J	17.2 J	--	**59**	--
TRPH [4] (mg/L)	**5**	1.57 J	1.69 J	4.60	4.18	**20**	0.54 J
Metals [5] (µg/L)							
Lead	15	NA	NA	--	--	--	--

[1] Grounwater Cleanup Target Level as provided in Chapter 62-777, F.A.C.
[2] VOCs = Volatile Organic Compounds (SW-846 8260B)
[3] PAHs = Polycylic aromatic hydrocarbons (SW-846 8310)
[4] TRPH = Total Recoverable Petroleum Hydrocarbons (FDEP-FLPRO)
[5] SW-846 6010B

Notes:

Bold indicates an exceedance of limits.
Bold indicates which regulatory limit has been exceeded.
µg/L = micrograms per liter
NA = Not analyzed
J = Compound was detected at an estimated concentration
-- = Analyte not detected above the instrument detection limit
mg/L = milligrams per liter
F.A.C. = Florida Administrative Code
MOP = Monitoring Only Plan
FDEP = Florida Department of Environmental Protection
FLPRO = Florida Petroleum Range Organics

TABLE 1
SUMMARY OF DETECTED CONTAMINANTS IN GROUNDWATER-UST SITE 0020 / IR SITE 19
NAS PENSACOLA, PENSACOLA, FLORIDA

Sample No.		PEN-19-MW8	PEN-19-MW11	PEN-19-MW22	PEN-19-MW22-D	PEN-19-MW24S	PEN-19-MW24S
Sample Location		MW-8	MW-11	MW-22	MW-22	MW-24S	MW-24S
Collect Date		12/18/2002	12/18/2002	12/19/2002	12/19/2002	11/9/2001	12/18/2002
	GCTL[1] (µg/L)						
VOCs [2] (µg/L)							
Benzene	**1**	**190**	**430 J**	--	--	--	--
Chloroform	5.7	--	--	--	--	--	--
Ethylbenzene	**30**	25	**520**	--	--	--	--
Methylene Chloride	5	--	--	--	--	--	--
Trichloroethene	3	--	--	--	--	--	--
Toluene	40	**130**	**5800**	--	--	--	--
Xylenes, Total	**20**	**100**	**5500**	--	--	--	--
PAHs [3] (µg/L)							
1-Methylnaphthalene	**20**	--	**22**	--	--	7.63	--
2-Methylnaphthalene	**20**	--	**31**	--	--	9.92	--
Fluorene	280	--	0.78 J	--	--	--	--
Naphthalene	**20**	--	**58**	--	--	16 J	--
TRPH [4] (mg/L)	**5**	0.62 J	**26**	--	--	0.83	--
Metals [5] (µg/L)							
Lead	15	10.7	--	--	--	--	--

[1] Grounwater Cleanup Target Level as provided in Chapter 62-777, F.A.C.
[2] VOCs = Volatile Organic Compounds (SW-846 8260B)
[3] PAHs = Polycylic aromatic hydrocarbons (SW-846 8310)
[4] TRPH = Total Recoverable Petroleum Hydrocarbons (FDEP-FLPRO)
[5] SW-846 6010B

Notes:

Bold indicates an exceedance of limits.
Bold indicates which regulatory limit has been exceeded.
µg/L = micrograms per liter
J = Compound was detected at an estimated concentration
-- = Analyte not detected above the instrument detection limit
mg/L = milligrams per liter
F.A.C. = Florida Administrative Code
MOP = Monitoring Only Plan
FDEP = Florida Department of Environmental Protection
FLPRO = Florida Petroleum Range Organics

TABLE 1
SUMMARY OF DETECTED CONTAMINANTS IN GROUNDWATER-UST SITE 0020 / IR SITE 19
NAS PENSACOLA, PENSACOLA, FLORIDA

Sample No.		PEN-19-MW25S	PEN-19-MW25S	PEN-19-MW26S	PEN-19-MW26S	PEN-19-MW27S	PEN-19-MW28I
Sample Location		MW-25S	MW-25S	MW-26S	MW-26S	MW-27S	MW-28I
Collect Date		11/9/2001	12/18/2002	11/9/2001	12/18/2002	11/9/2001	11/9/2001
	GCTL[1] (µg/L)						
VOCs [2] (µg/L)							
Benzene	**1**	**19**	--	--	**2.7**	--	**520**
Chloroform	5.7	--	--	--	--	--	--
Ethylbenzene	**30**	1.0	--	--	--	--	**82**
Methylene Chloride	**5**	--	--	--	--	--	**60**
Trichloroethene	**3**	0.7 J	--	0.99 J	--	--	**66**
Toluene	40	1.0	--	--	--	--	17 J
Xylenes, Total	**20**	**30.8**	--	--	--	--	**620**
PAHs [3] (µg/L)							
1-Methylnaphthalene	20	0.26 J	--	--	--	0.105	1.59
2-Methylnaphthalene	20	--	--	--	--	0.126	2.6
Fluorene	280	--	--	--	--	--	--
Naphthalene	20	--	--	--	--	--	4.68 J
TRPH [4] (mg/L)	5	1.22	--	0.929	--	0.925	2.13
Metals [5] (µg/L)							
Lead	15	--	--	--	--	--	--

[1] Grounwater Cleanup Target Level as provided in Chapter 62-777, F.A.C.
[2] VOCs = Volatile Organic Compounds (SW-846 8260B)
[3] PAHs = Polycylic aromatic hydrocarbons (SW-846 8310)
[4] TRPH = Total Recoverable Petroleum Hydrocarbons (FDEP-FLPRO)
[5] SW-846 6010B

Notes:

Bold indicates an exceedance of limits.
Bold indicates which regulatory limit has been exceeded.
µg/L = micrograms per liter
J = Compound was detected at an estimated concentration
-- = Analyte not detected above the instrument detection limit
mg/L = milligrams per liter
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TABLE 1
SUMMARY OF DETECTED CONTAMINANTS IN GROUNDWATER-UST SITE 0020 / IR SITE 19
NAS PENSACOLA, PENSACOLA, FLORIDA

Sample No.		PEN-19-MW28I	PEN-19-MW28S	PEN-19-MW28S	PEN-19-MW29S	PEN-19-MW29I	PEN-19-MW29D
Sample Location		MW-28I	MW-28S	MW-28S	MW-29S	MW-29I	MW-29D
Collect Date		12/18/2002	11/9/2001	12/18/2002	12/17/2002	12/17/2002	12/17/2002
	GCTL[1] (µg/L)						
VOCs [2] (µg/L)							
Benzene	**1**	**590**	**120 J**	**1.1**	--	**57**	--
Chloroform	5.7	--	--	--	--	--	--
Ethylbenzene	**30**	**91**	0.53 J	--	--	17	--
Methylene Chloride	5	--	--	--	--	--	--
Trichloroethene	**3**	--	**4.7**	--	--	--	--
Toluene	40	--	0.94 J	0.53 J	--	1.8	--
Xylenes, Total	**20**	**730**	17	--	--	**220**	1.6 J
PAHs [3] (µg/L)							
1-Methylnaphthalene	20	2.3	0.24	--	--	4.7	--
2-Methylnaphthalene	20	3.0	0.3	--	--	6.6	--
Fluorene	280	--	--	--	--	--	--
Naphthalene	20	9.6	0.126 J	--	--	7.6	--
TRPH [4] (mg/L)	5	2.4	1.21	0.47 J	--	1.9	--
Metals [5] (µg/L)							
Lead	15	--	--	--	--	--	--

[1] Grounwater Cleanup Target Level as provided in Chapter 62-777, F.A.C.
[2] VOCs = Volatile Organic Compounds (SW-846 8260B)
[3] PAHs = Polycylic aromatic hydrocarbons (SW-846 8310)
[4] TRPH = Total Recoverable Petroleum Hydrocarbons (FDEP-FLPRO)
[5] SW-846 6010B

Notes:

Bold indicates an exceedance of limits.
Bold indicates which regulatory limit has been exceeded.
µg/L = micrograms per liter
J = Compound was detected at an estimated concentration
-- = Analyte not detected above the instrument detection limit
mg/L = milligrams per liter
F.A.C. = Florida Administrative Code
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TABLE 1
SUMMARY OF DETECTED CONTAMINANTS IN GROUNDWATER-UST SITE 0020 / IR SITE 19
NAS PENSACOLA, PENSACOLA, FLORIDA

Sample No.		PEN-19-MW29D-D	PEN-19-MW30S	PEN-19-MW30I	PEN-19-MW31S	PEN-19-MW31I	PEN-19-MW32I
Sample Location		MW-29D	MW-30S	MW-30I	MW-31S	MW-31I	MW-32I
Collect Date		12/17/2002	12/18/2002	12/18/2002	12/17/2002	12/17/2002	12/17/2002
	GCTL[1] (µg/L)						
VOCs [2] (µg/L)							
Benzene	1	**--**	**--**	**--**	**--**	**--**	**--**
Chloroform	5.7	**--**	**--**	**--**	**--**	**--**	0.46 J
Ethylbenzene	30	**--**	**--**	**--**	**--**	**--**	--
Methylene Chloride	5	--	--	**--**	**--**	**--**	--
Trichloroethene	3	--	--	**--**	**--**	**--**	--
Toluene	40	**--**	**--**	**--**	**--**	**--**	**--**
Xylenes, Total	20	1.4 J	**--**	**--**	**--**	**--**	**--**
PAHs [3] (µg/L)							
1-Methylnaphthalene	20	**--**	**--**	**--**	**--**	**--**	**--**
2-Methylnaphthalene	20	**--**	**--**	**--**	**--**	**--**	**--**
Fluorene	280	**--**	**--**	**--**	**--**	**--**	**--**
Naphthalene	20	**--**	**--**	**--**	**--**	**--**	**--**
TRPH [4] (mg/L)	5	--	0.57 J	--	--	--	--
Metals [5] (µg/L)							
Lead	15	--	--	--	--	--	--

[1] Grounwater Cleanup Target Level as provided in Chapter 62-777, F.A.C.
[2] VOCs = Volatile Organic Compounds (SW-846 8260B)
[3] PAHs = Polycylic aromatic hydrocarbons (SW-846 8310)
[4] TRPH = Total Recoverable Petroleum Hydrocarbons (FDEP-FLPRO)
[5] SW-846 6010B

Notes:

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Bold indicates which regulatory limit has been exceeded.
µg/L = micrograms per liter
J = Compound was detected at an estimated concentration
-- = Analyte not detected above the instrument detection limit
mg/L = milligrams per liter
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TABLE 1
SUMMARY OF DETECTED CONTAMINANTS IN GROUNDWATER-UST SITE 0020 / IR SITE 19
NAS PENSACOLA, PENSACOLA, FLORIDA

Sample No.		PEN-19-MW32S	PEN-19-MW33S	PEN-19-MW33I	PEN-19-MW33D	NASP19RB01-110901	PEN-19-RB121902
Sample Location		MW-32S	MW-33S	MW-33I	MW-33D		
Collect Date		12/17/2002	12/17/2002	12/17/2002	12/17/2002	11/9/2001	12/18/2002
	GCTL[1] (µg/L)						
VOCs [3] (µg/L)							
Benzene	**1**	**--**	**190**	**50**	**--**	**--**	**--**
Chloroform	**5.7**	**7.1**	**--**	**--**	**--**	**--**	
Ethylbenzene	30	--	12	0.51 J	**--**	**--**	**--**
Methylene Chloride	5	--	--	--	--	1.6	--
Trichloroethene	3	--	--	--	--	--	--
Toluene	40	**--**	16	**--**	**--**	--	**--**
Xylenes, Total	**20**	**--**	**130**	17	**--**	--	**--**
PAHs [4] (µg/L)							
1-Methylnaphthalene	20	**--**	**--**	**--**	**--**	**--**	**--**
2-Methylnaphthalene	20	**--**	**--**	**--**	**--**	**--**	**--**
Fluorene	280	**--**	**--**	**--**	**--**	**--**	**--**
Naphthalene	20	**--**	0.77 J	**--**	--	--	**--**
TRPH [5] (mg/L)	5	--	1.1 J	0.75 J	--	0.879	**--**
Metals [7] (µg/L)							
Lead	15	--	--	--	8.8	--	--

[1] Grounwater Cleanup Target Level as provided in Chapter 62-777, F.A.C.
[2] VOCs = Volatile Organic Compounds (SW-846 8260B)
[3] PAHs = Polycylic aromatic hydrocarbons (SW-846 8310)
[4] TRPH = Total Recoverable Petroleum Hydrocarbons (FDEP-FLPRO)
[5] SW-846 6010B

Notes:

Bold indicates an exceedance of limits.
Bold indicates which regulatory limit has been exceeded.
µg/L = micrograms per liter
J = Compound was detected at an estimated concentration
-- = Analyte not detected above the instrument detection limit
mg/L = milligrams per liter
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TABLE 2
SUMMARY OF DETECTED CONTAMINANTS IN GROUNDWATER-SITE 19
MOBILE LABORATORY RESULTS
NAS PENSACOLA, PENSACOLA, FLORIDA

Sample No.		PEN20 TW0110	PEN20 TW0125	PEN20 TW0150	PEN20 TW0210	PEN20 TW0225	PEN20 TW0250
Sample Location		TW-01	TW-01	TW-01	TW-02	TW-02	TW-02
Sample Depth (ft)		10	25	50	10	25	50
Analysis Date		11/5/2002	11/6/2002	11/5/2002	11/5/2002	11/5/2002	11/5/2002
	GCTL[1] (µg/L)						
VOCs [2] (µg/L)							
Benzene	**1**	**890**	--	**12.5**	--	**8.5**	**1.9**
Ethylbenzene	**30**	**370**	--	--	--	--	--
Toluene	**40**	**290**	--	--	--	--	--
Total Xylenes	**20**	**3700**	4.1	**51.5**	--	5.2	--

Sample No.		PEN20 TW0310	PEN20 TW0325	PEN20 TW0350	PEN20 TW0410	PEN20 TW0425	PEN20 TW0450
Sample Location		TW-03	TW-03	TW-03	TW-04	TW-04	TW-04
Sample Depth (ft)		10	25	50	10	25	50
Analysis Date		11/5/2002	11/5/2002	11/5/2002	11/6/2002	11/6/2002	11/6/2002
	GCTL[1] (µg/L)						
VOCs [2] (µg/L)							
Benzene	**1**	**2.6**	**5.8**	**4.2**	**3.4**	**1.7**	**--**
Ethylbenzene	30	**--**	**--**	**--**	**--**	1.7	**--**
Toluene	40	**--**	**--**	**--**	**--**	**--**	**--**
Total Xylenes	**20**	**--**	6.7	9.5	**--**	**21.8**	1.6

Sample No.		PEN20 TW0510	PEN20 TW0525	PEN20 TW0550	PEN20 TW0610	PEN20 TW0625	PEN20 RB1107
Sample Location		TW-05	TW-05	TW-05	TW-06	TW-06	--
Sample Depth (ft)		10	25	50	10	25	--
Analysis Date		11/7/2002	11/7/2002	11/7/2002	11/7/2002	11/7/2002	11/7/2002
	GCTL[1] (µg/L)						
VOCs [2] (µg/L)							
Benzene	**1**	**--**	**1.3**	**2.2**	**--**	**--**	**--**
Ethylbenzene	30	**--**	**--**	**--**	**--**	**--**	**--**
Toluene	40	**--**	**--**	**--**	**--**	**--**	**--**
Total Xylenes	20	**--**	8.8	13.7	**--**	**--**	**--**

[1] Grounwater Cleanup Target Level as provided in Chapter 62-777, F.A.C.
[2] VOCs = Volatile Organic Compounds (SW-846 8021B)

Notes:

µg/L = micrograms per liter
-- = Analyte not detected above the instrument detection limit
F.A.C. = Florida Administrative Code

TABLE 2
SUMMARY OF DETECTED CONTAMINANTS IN GROUNDWATER-SITE 19
MOBILE LABORATORY RESULTS
NAS PENSACOLA, PENSACOLA, FLORIDA

Sample No.		PEN20 TW0710	PEN20 TW0725	PEN20 TW0750	PEN20 TW0810	PEN20 TW0825	PEN20 TW0850
Sample Location		TW-07	TW-07	TW-07	TW-08	TW-08	TW-08
Sample Depth (ft)		10	25	50	10	25	50
Analysis Date		11/12/2002	11/12/2002	11/12/2002	11/12/2002	11/12/2002	11/12/2002
	GCTL[1] (µg/L)						
VOCs [2] (µg/L)							
Benzene	**1**	**--**	**--**	**--**	**26**	**200**	**--**
Ethylbenzene	**30**	1.0	**--**	**--**	1.6	1.7	1.7
Toluene	40	2.5	**--**	**--**	1.0	4.0	1.3
Total Xylenes	**20**	11.8	2.2	**--**	**23.5**	19.7	14.3

Sample No.		PEN20 TW0910	PEN20 TW0925	PEN20 TW0950	PEN20 TW1010	PEN20 TW1025	PEN20 TW1050
Sample Location		TW-09	TW-09	TW-09	TW-10	TW-10	TW-10
Sample Depth (ft)		10	25	50	10	25	50
Analysis Date		11/12/2002	11/12/2002	11/13/2002	11/13/2002	11/13/2002	11/13/2002
	GCTL[1] (µg/L)						
VOCs [2] (µg/L)							
Benzene	1	**--**	**--**	**--**	**--**	**--**	**--**
Ethylbenzene	30	3.2	--	2.4	**--**	--	**--**
Toluene	40	**--**	**--**	**--**	**--**	1.0	**--**
Total Xylenes	20	18.3	--	13.9	4.4	2.4	--

Sample No.		PEN20 TW1110	PEN20 TW1125	PEN20 TW1150	PEN20 TW1210	PEN20 TW1225	PEN20 TW1250
Sample Location		TW-11	TW-11	TW-11	TW-12	TW-12	TW-12
Sample Depth (ft)		10	25	50	10	25	50
Analysis Date		11/13/2002	11/13/2002	11/13/2002	11/13/2002	11/13/2002	11/13/2002
	GCTL[1] (µg/L)						
VOCs [2] (µg/L)							
Benzene	**1**	**1300**	**43**	**8.6**	**--**	**3.9**	**--**
Ethylbenzene	**30**	**990**	**68**	7.6	**--**	**--**	1.1
Toluene	**40**	**8500**	**670**	**42.3**	4.2	**--**	3.9
Total Xylenes	**20**	**7900**	**690**	**65.1**	4.6	**--**	8.8

[1] Grounwater Cleanup Target Level as provided in Chapter 62-777, F.A.C.
[2] VOCs = Volatile Organic Compounds (SW-846 8021B)

Notes:

µg/L = micrograms per liter
-- = Analyte not detected above the instrument detection limit
F.A.C. = Florida Administrative Code

TABLE 2
SUMMARY OF DETECTED CONTAMINANTS IN GROUNDWATER-SITE 19
MOBILE LABORATORY RESULTS
NAS PENSACOLA, PENSACOLA, FLORIDA

Sample No.		PEN20 TW1310	PEN20 TW1325	PEN20 TW1350	PEN20 TW1410	PEN20 TW1425	PEN20 TW1450
Sample Location		TW-13	TW-13	TW-13	TW-14	TW-14	TW-14
Sample Depth (ft)		10	25	50	10	25	50
Analysis Date		11/13/2002	11/13/2002	11/13/2002	11/13/2002	11/14/2002	11/14/2002
	GCTL[1] (µg/L)						
VOCs [2] (µg/L)							
Benzene	**1**	**510**	**670**	**95.8**	**--**	**16.7**	**--**
Ethylbenzene	30	--	--	6.0	**--**	**--**	--
Toluene	40	3.7	1.4	6.5	**--**	**--**	--
Total Xylenes	**20**	**1010**	**70.9**	**72.4**	1.9	2.2	--

Sample No.		PEN20 TW1510	PEN20 TW1525	PEN20 TW1550	PEN20 TW1625	PEN20 TW1650
Sample Location		TW-15	TW-15	TW-15	TW-16	TW-16
Sample Depth (ft)		10	25	50	25	50
Analysis Date		11/14/2002	11/14/2002	11/14/2002	11/14/2002	11/14/2002
	GCTL[1] (µg/L)					
VOCs [2] (µg/L)						
Benzene	**1**	**--**	**183**	**--**	**--**	**--**
Ethylbenzene	30	**--**	**--**	**--**	**--**	**--**
Toluene	40	**--**	**--**	**--**	**--**	**--**
Total Xylenes	20	**--**	**--**	**--**	**--**	1.6

[1] Grounwater Cleanup Target Level as provided in Chapter 62-777, F.A.C.
[2] VOCs = Volatile Organic Compounds (SW-846 8021B)

Notes:

µg/L = micrograms per liter
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TABLE 3
SUMMARY OF DETECTED CONTAMINANTS IN GROUNDWATER-SITE 19
FIXED BASE LABORATORY CONFIRMATION RESULTS
NAS PENSACOLA, PENSACOLA, FLORIDA

Sample No.		PEN20TW0410	PEN200725	PEN201050	PEN201110
Sample Location		TW-04	TW-07	TW-10	TW-11
Sample Depth (ft)		10	25	50	10
Collect Date		11/6/2002	11/11/2002	11/11/2002	11/11/2002
	GCTL[1] (µg/L)				
VOCs [2] (µg/L)					
Benzene	**1**	**3.3**	--	**--**	**1400**
Ethylbenzene	**30**	--	--	--	**1300**
Toluene	**40**	0.38 J	0.78 J	1.8	**9300**
Total Xylenes	**20**	--	--	1.8 J	**9200**

[1] Grounwater Cleanup Target Level as provided in Chapter 62-777, F.A.C.
[2] VOCs = Volatile Organic Compounds (SW-846 8021B)

Notes:

µg/L = micrograms per liter
-- = Analyte not detected above the instrument detection limit
J = Analyte detected at an estimated concentration
F.A.C. = Florida Administrative Code

TABLE 4
SUMMARY OF DETECTED CONTAMINANTS IN GROUNDWATER-SITE 19
MOBILE AND FIXED BASE LABORATORY CONFIRMATION RESULTS COMPARISON
NAS PENSACOLA, PENSACOLA, FLORIDA

		MOBILE LAB RESULTS	FIXED BASE LAB RESULTS	MOBILE LAB RESULTS	FIXED BASE LAB RESULTS	MOBILE LAB RESULTS	FIXED BASE LAB RESULTS	MOBILE LAB RESULTS	FIXED BASE LAB RESULTS
Sample No.		PEN20TW0410	PEN20TW0410	PEN200725	PEN200725	PEN201050	PEN201050	PEN201110	PEN201110
Sample Location		TW-04	TW-04	TW-07	TW-07	TW-10	TW-10	TW-11	TW-11
Sample Depth (ft)		10	10	25	25	50	50	10	10
Collect Date		11/6/2002	11/6/2002	11/11/2002	11/11/2002	11/11/2002	11/11/2002	11/11/2002	11/11/2002
	GCTL[1] (µg/L)								
VOCs [2] (µg/L)									
Benzene	**1**	**3.4**	**3.3**	--	--	**--**	**--**	**1300**	**1400**
Ethylbenzene	**30**	--	--	--	--	**--**	--	**990**	**1300**
Toluene	**40**	--	0.38 J	--	0.78 J	**--**	1.8	**8500**	**9300**
Total Xylenes	**20**	--	--	2.2	--	**--**	1.8 J	**7900**	**9200**

[1] Grounwater Cleanup Target Level as provided in Chapter 62-777, F.A.C.
[2] VOCs = Volatile Organic Compounds (SW-846 8021B)

Notes:

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-- = Analyte not detected above the instrument detection limit
J = Analyte detected at an estimated concentration
F.A.C. = Florida Administrative Code

TABLE 5
MONITORING WELL CONSTRUCTION DETAILS
UST SITE 0020 / IR SITE 19
SITE ASSESSMENT REPORT ADDENDUM #2
NAVAL AIR STATION PENSACOLA, PENSACOLA, FLORIDA

Well No.	Date Installed	Drilling Method	Top of Casing Elevation	A/G Riser Length, If Applicable	Total Well Depth (FBTOC)	Screened Interval (FBTOC)	Well Diameter (Inches)
MW-17R	8/23/2001	DPT	31.01	2.5	19.5	1.5 - 19.5	2
MW-24S	10/27/2001	DPT	32.35	3.5	14.7	2.5 - 12.5	1
MW-25S	10/27/2001	DPT	31.55	3.4	14.3	2 - 12	1
MW-26S	10/27/2001	DPT	31.27	3.4	15.1	2 - 12	1
MW-27S	10/27/2001	DPT	31.69	3.0	14.3	2.5 - 12.5	1
MW-28S	10/27/2001	DPT	31.44	2.6	14.4	2.5 - 12.5	1
MW-28I	10/27/2001	DPT	31.15	3.0	26.8	20 - 25	1
MW-29S	11/17/2002	DPT	31.87	4.0	15.8	5.8 - 15.8	1.25
MW-29I	11/17/2002	DPT	31.77	4.0	25.0	20 - 25	1.25
MW-29D	11/12/2002	DPT	31.83	4.0	38.6	33.6 - 38.6	1.25
MW-30S	11/17/2002	DPT	31.91	4.0	15.4	5.4 - 15.4	1.25
MW-30I	11/17/2002	DPT	31.73	4.0	25.0	20 - 25	1.25
MW-31S	11/17/2002	DPT	33.33	4.0	14.7	4.7 - 14.7	1.25
MW-31I	11/17/2002	DPT	33.21	4.0	27.7	22.7 - 27.7	1.25
MW-32S	11/17/2002	DPT	34.39	4.0	15.1	5.1 - 15.1	1.25
MW-32I	11/17/2002	DPT	34.77	4.0	27.8	22.8 - 27.8	1.25
MW-33S	11/17/2002	DPT	31.70	4.0	15.0	5 - 15	1.25
MW-33I	11/18/2002	DPT	31.93	4.0	30.0	25 - 30	1.25
MW-33D	11/18/2002	DPT	31.84	4.0	41.6	36.6 - 41.6	1.25

NOTES:
* Existing well previously installed by Navy
TOC = Top Of Casing
HSA = Hollow Stem Auger
Arbitrary datum of 30 feet assigned to MW-1S TOC.
A/G = Above Ground
FM = Flush mount well completion
NA = Not Applicable
FBTOC = Feet Below Top of Casing

TABLE 6
GROUNDWATER LEVEL DATA - UST SITE 0020 / IR SITE 19
SITE ASSESSMENT REPORT ADDENDUM #2
U.S. NAVAL STATION PENSACOLA, PENSACOLA, FLORIDA

			June 21, 2000		November 21, 2001		January 29, 2003	
Well Number	Current Well Depth (ft)	Top of Casing Elevation (ft)	Depth to Water BTOC (ft)	Groundwater Elevation (ft)	Depth to Water BTOC (ft)	Groundwater Elevation (ft)	Depth to Water BTOC (ft)	Groundwater Elevation (ft)
MW-1	11.42	29.39	6.18	23.21	6.69	22.70	3.07	26.32
MW-2	11.37	30.00	6.66	23.34	7.15	22.85	3.56	26.44
MW-3	11.71	30.38	7.02	23.36	7.52	22.86	4.06	26.32
MW-4	9.40	31.03	7.76	23.27	7.25	23.78	4.73	26.30
MW-5	7.66	31.02	7.64	23.38	8.14	22.88	4.54	26.48
MW-6	11.60	29.75	6.44	23.31	6.94	22.81	3.39	26.36
MW-7	12.45	30.18	6.84	23.34	7.36	22.82	4.06	26.12
MW-8	11.90	30.13	6.80	23.33	7.29	22.84	3.92	26.21
MW-9	8.15	31.13	8.04	23.09	8.54	22.59	4.95	26.18
MW-10	8.83	31.79	8.61	23.18	9.13	22.66	5.55	26.24
MW-11	9.37	31.00	7.60	23.40	8.16	22.84	4.49	26.51
MW-12	9.50	31.64	8.22	23.42	8.73	22.91	5.23	26.41
MW-13	7.91	30.56	7.32	23.24	7.81	22.75	4.42	26.14
MW-14	8.19	30.34	6.93	23.41	7.43	22.91	4.01	26.33
MW-15	7.39	30.49	7.00	23.49	7.49	23.00	3.95	26.54
MW-16	8.38	31.55	8.40	23.15	8.91	22.64	5.43	26.12
MW-17R	12.15	31.01	NA	NA	7.24	23.77	4.96	26.05
MW-18	7.24	31.05	7.31	23.74	8.82	22.23	4.51	26.54
MW-19	7.79	31.21	7.48	23.73	7.98	23.23	4.76	26.45
MW-20	23.75	29.73	10.09	19.64	10.59	19.14	8.25	21.48
MW-21	17.72	32.45	9.11	23.34	9.60	22.85	6.41	26.04
MW-22	28.57	32.44	11.66	20.78	12.18	20.26	8.71	23.73
DMW-23	39.59	30.36	10.98	19.38	11.46	18.90	8.85	21.51
MW-24S	14.92	32.35	NA	NA	8.64	23.71	6.51	25.84
MW-25S	14.56	31.55	NA	NA	7.75	23.80	5.61	25.94
MW-26S	15.33	31.27	NA	NA	7.47	23.80	5.31	25.96
MW-27S	14.54	31.69	NA	NA	8.00	23.69	5.79	25.90
MW-28S	14.86	31.44	NA	NA	7.71	23.73	5.48	25.96
MW-28I	27.75	31.15	NA	NA	10.45	20.70	9.73	21.42
MW-29S	15.79	31.87	NA	NA	NA	NA	6.41	25.46
MW-29I	27.73	31.77	NA	NA	NA	NA	9.56	22.21
MW-29D	41.00	31.83	NA	NA	NA	NA	10.32	21.51
MW-30S	15.40	30.29	NA	NA	NA	NA	6.12	24.17
MW-30I	24.02	30.10	NA	NA	NA	NA	9.80	20.30
MW-31S	14.75	33.33	NA	NA	NA	NA	9.86	23.47
MW-31I	27.65	33.21	NA	NA	NA	NA	11.32	21.89
MW-32S	15.20	34.39	NA	NA	NA	NA	10.80	23.59
MW-32I	27.85	34.77	NA	NA	NA	NA	10.62	24.15
MW-33S	14.85	31.70	NA	NA	NA	NA	7.56	24.14
MW-33I	28.06	31.93	NA	NA	NA	NA	10.06	21.87
MW-33D	41.75	31.84	NA	NA	NA	NA	10.08	21.76

Notes:
ft = feet
BTOC = Below top of casing
NA = Denotes new wells which did not exist during specified field event.

ATTACHMENT D

Mobile Laboratory Analytical Reports

Fixed Base Laboratory Analytical Reports

KB LABS, INC.

Final Data Report

Project Number 02-103-1

CTO273 NAS Pensacola

Pensacola, FL

Prepared for: Tetra Tech NUS

Well ID	Analysis Date	Matrix	Dilution Factor	Benzene	Toluene	Ethylbenzene	M- and P-Xylene	O-Xylene
PEN20 TW0110	11/5/02	Water	10	**890**	**290**	**370**	**2500**	**1200**
PEN20 TW0125	11/6/02	Water	1	<1	<1	<1	**2.6**	**1.5**
PEN20 TW0150	11/5/02	Water	1	**12.5**	<1	<1	**34.8**	**16.7**
PEN20 TW0210	11/5/02	Water	1	<1	<1	<1	<1	<1
PEN20 TW0225	11/5/02	Water	1	**8.5**	<1	<1	**3.9**	**1.3**
PEN20 TW0250	11/5/02	Water	1	**1.9**	<1	<1	<1	<1
PEN20 TW0310	11/5/02	Water	1	**2.6**	<1	<1	<1	<1
PEN20 TW0325	11/5/02	Water	1	**5.8**	<1	<1	**4.6**	**2.1**
PEN20 TW0350	11/5/02	Water	1	**4.2**	<1	<1	**5.8**	**3.7**
PEN20 TW0410	11/6/02	Water	1	**3.4**	<1	<1	<1	<1
PEN20 TW0425	11/6/02	Water	1	**1.7**	<1	**1.7**	**14.6**	**7.2**
PEN20 TW0450	11/6/02	Water	1	<1	<1	<1	**1.6**	<1
PEN20 TW0510	11/7/02	Water	1	<1	<1	<1	<1	<1
PEN20 TW0525	11/7/02	Water	1	**1.3**	<1	<1	**5.5**	**3.3**
PEN20 TW0550	11/7/02	Water	1	**2.2**	<1	<1	**8.5**	**5.2**
PEN20 TW0610	11/7/02	Water	1	<1	<1	<1	<1	<1
PEN20 TW0625	11/7/02	Water	1	<1	<1	<1	<1	<1
PEN20 RB1107	11/7/02	Water	1	<1	<1	<1	<1	<1
PEN20 TW0710	11/12/02	Water	1	<1	**2.5**	**1.0**	**9.8**	**2.0**
PEN20 TW0725	11/12/02	Water	1	<1	<1	<1	**2.2**	<1
PEN20 TW0750	11/12/02	Water	1	<1	<1	<1	<1	<1
PEN20 TW0810	11/12/02	Water	1	**26.0**	**1.0**	**1.6**	**14.9**	**8.6**
PEN20 TW0825	11/12/02	Water	1	**200**	**4.0**	**1.7**	**13.3**	**6.4**
PEN20 TW0850	11/12/02	Water	1	<1	**1.3**	**1.7**	**11.1**	**3.2**
PEN20 TW0910	11/12/02	Water	1	<1	<1	**3.2**	**14.5**	**3.8**
PEN20 TW0925	11/12/02	Water	1	<1	<1	<1	<1	<1
PEN20 TW0950	11/13/02	Water	1	<1	<1	**2.4**	**11.4**	**2.5**
PEN20 TW1010	11/13/02	Water	1	<1	<1	<1	**4.4**	<1
PEN20 TW1025	11/13/02	Water	1	<1	**1.0**	<1	**2.4**	<1
PEN20 TW1050	11/13/02	Water	1	<1	<1	<1	<1	<1
PEN20 TW1110	11/13/02	Water	10, 100	**1300**	**8500**	**990**	**5400**	**2500**
PEN20 TW1125	11/13/02	Water	10	**43**	**670**	**68**	**460**	**230**

Reporting units for waters are ug/L and for soils are mg/kg.

KB LABS, INC.

Final Data Report

Project Number 02-103-1

CTO273 NAS Pensacola

Pensacola, FL

Prepared for: Tetra Tech NUS

Well ID	Analysis Date	Matrix	Dilution Factor	Benzene	Toluene	Ethylbenzene	M- and P-Xylene	O-Xylene
PEN20 TW1150	11/13/02	Water	1	**8.6**	**42.3**	**7.6**	**44.1**	**21.0**
PEN20 TW1210	11/13/02	Water	1	<1	**4.2**	<1	**3.3**	**1.3**
PEN20 TW1225	11/13/02	Water	1	**3.9**	<1	<1	<1	<1
PEN20 TW1250	11/13/02	Water	1	<1	**3.9**	**1.1**	**6.7**	**2.1**
PEN20 TW1310	11/13/02	Water	1, 10	**510**	**3.7**	<10	**660**	**350**
PEN20 TW1325	11/13/02	Water	1, 50	**670**	**1.4**	<50	**45.8**	**25.1**
PEN20 TW1350	11/13/02	Water	1	**95.8**	**6.5**	**6.0**	**47.5**	**24.9**
PEN20 TW1410	11/13/02	Water	1	<1	<1	<1	**1.9**	<1
PEN20 TW1425	11/14/02	Water	1	**16.7**	<1	<1	**2.2**	<1
PEN20 TW1450	11/14/02	Water	1	**<1**	<1	<1	<1	<1
PEN20 TW1510	11/14/02	Water	1	<1	<1	<1	<1	<1
PEN20 TW1525	11/14/02	Water	1	**183**	<1	<1	<1	<1
PEN20 TW1550	11/14/02	Water	1	<1	<1	<1	<1	<1
PEN20 TW1625	11/14/02	Water	1	<1	<1	<1	<1	<1
PEN20 TW1650	11/14/02	Water	1	<1	<1	<1	**1.6**	<1

Reporting units for waters are ug/L and for soils are mg/kg.

26401107

Tetra Tech NUS, Inc. **Internal Correspondence**

TO:	**Mr. Gerald Walker**	**DATE:**	**January 13, 2003**
FROM:	**Michael T. Akers**	**cc:**	**File**
SUBJECT:	**Organic and Inorganic Data Validation – VOC CTO273 – NAS Pensacola SDG 2957**		
SAMPLES:	**1/Aqueous**		

PEN20TW0410

OVERVIEW

The sample set for CTO273, SDG 2957; Naval Air Station Pensacola, Pensacola, Florida consists of one (1) aqueous environmental sample. The environmental sample was analyzed for Volatile Organic Compounds (VOCs) only.

The sample was collected by Tetra Tech NUS on November 6\th, 2002 and analyzed by Accura Analytical Laboratories. All analyses were performed in accordance with Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria and analyzed according to SW-846 Method 8260B (VOCs) analytical and reporting protocol. The data in this SDG was validated with regard to the following parameters:

* • Data Completeness
* • Holding Times
* • Laboratory method/field quality control blank results
* • Detection Limits

The symbol (*) indicates that all quality control criteria were met for this parameter.

Volatile Fraction

All quality control criteria were met for this fraction.

Executive Summary

Laboratory performance: The Laboratory reported additional analytes other than the BTEXM list requested. In addition, all analytes were reported with incorrect detection limits, which were corrected during the validation process.

Other factors affecting data quality: None.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (February, 1996), and the NFESC guidelines "Navy Installation Restoration Chemical Data Quality Manual" (September, 1999). The text of the report has been formulated to address only those problems affecting data quality.

"I attest that the data referenced herein was validated according to the agreed upon validation criteria as specified in the NFESC Guidelines and the Quality Assurance Project Plan (QAPP)."

Michael T. Akers

Project Chemist
Tetra Tech NUS, Inc.

PROJ_NO: 2640

SDG: 2957 MEDIA: WATER DATA FRACTION: OV

nsample	PEN20TW0410
samp_date	11/6/2002
lab_id	2957-001
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
BENZENE	3.3		
ETHYLBENZENE	1	U	
TOLUENE	0.38	J	P
TOTAL XYLENES	3	U	

2957

HOLDI IME

12/13/02

Units	Nsample	Lab Id	Qc Type	Sdg	Sort	Samp Date	Extr Date	Anal Date	SAMP_DATE TO EXTR_DATE	EXTR_DATE TO ANAL_DATE	SAMP_DATE TO ANAL_DATE
UG/L	13590 BKS	13590 BKS	LCS	2957	OV	/ /	11/14/02	11/14/02	0	0	0
UG/L	13590 BLK	13590 BLK	M_BLANK	2957	OV	/ /	11/14/02	11/14/02	0	0	0
UG/L	PEN201050 MS	2993-002 MS	MS	2957	OV	/ /	11/14/02	11/14/02	0	0	0
UG/L	PEN201050 MSD	2993-002 MSD	MSD	2957	OV	/ /	11/14/02	11/14/02	0	0	0
UG/L	PEN20TW0410	2957-001	NORMAL	2957	OV	/ /	11/14/02	11/14/02	0	0	0

'DEP/2'L AAL WOW 2957

RA TECH NUS, INC.

CHAIN OF CUSTODY | NUMBER 4206

PAGE 1 OF 1

PROJECT NO: N2640	FACILITY: NAS Pensacola	PROJECT MANAGER: Gerry Walker	PHONE NUMBER: 850 385 9899	LABORATORY NAME AND CONTACT: Accura Bosa Trenova
SAMPLERS (SIGNATURE): TR		FIELD OPERATIONS LEADER: Bill Olson	PHONE NUMBER: 850 385 9899	ADDRESS: 6017 Financial Drive
		CARRIER/WAYBILL NUMBER: 8311 5252 9232 - FedEx		CITY, STATE: Norcross, GA 30071

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G
PRESERVATIVE USED: HCL

DATE YEAR 2002	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAP (G) COMP (C)	No. OF CONTAINERS	TYPE OF ANALYSIS: BTEXM 8260B								COMMENTS
11/6	14:40	PEN20TW0410	TW04	/	/	GW	G	3	3		2957	-001					Benzene, Toluene, Ethylbenzene, Xylenes, and Methyl-tert butyl ether
																	WR N2640-WR777

1. RELINQUISHED BY: TR	DATE 11/6/02	TIME 17:00	1. RECEIVED BY: FEDEX		DATE	TIME
2. RELINQUISHED BY: FEDEX	DATE 110702	TIME 0926	2. RECEIVED BY: [signature]		DATE 110702	TIME 0926
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY		DATE	TIME

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

CT0273
SDG

EPA SAMPLE NO.

PEN20TW0410

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 2957

Matrix (soil/water): WATER

Lab Sample Id: 2957-001

Sample wt/vol: 25.00 (g/mL) ML

Lab File ID: 1J111402\J06002

Level (low/med): LOW

Date Received: 11/07/02

% Moisture: not dec.

Date Analyzed: 11/14/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-43-2	Benzene	3.3	
100-41-4	Ethylbenzene	1.0	U
1634-04-4	MTBE	1.0	U
108-88-3	Toluene	0.38	J
1330-20-7	Xylenes, Total	3.0	U

2C9401108

Tetra Tech NUS, Inc. **Internal Correspondence**

TO:	**Mr. Gerald Walker**	**DATE:**	**January 13, 2003**
FROM:	**Michael T. Akers**	**cc:**	**File**
SUBJECT:	**Organic and Inorganic Data Validation – VOC CTO273 – NAS Pensacola SDG 2993**		
SAMPLES:	**3/Aqueous**		
	PEN200725 **PEN201050**	**PEN201110**	

OVERVIEW

The sample set for CTO273, SDG 2993; Naval Air Station Pensacola, Pensacola, Florida consists of three (3) aqueous environmental samples. The environmental samples were analyzed for Volatile Organic Compounds (VOCs) only.

The samples were collected by Tetra Tech NUS on November 11th, 2002 and analyzed by Accura Analytical Laboratories. All analyses were performed in accordance with Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria and analyzed according to SW-846 Method 8260B (VOCs) analytical and reporting protocol. The data in this SDG was validated with regard to the following parameters:

* • Data Completeness
* • Holding Times
* • Laboratory method/field quality control blank results
* • Detection Limits

The symbol (*) indicates that all quality control criteria were met for this parameter.

Volatile Fraction

All quality control criteria were met for this fraction.

- Sample PEN201110 was analyzed at 250X dilution factor due to target analyte abundance.

Executive Summary

Laboratory performance: The Laboratory reported additional analytes other than the BTEXM list requested. In addition, all analytes were reported with incorrect detection limits, which were corrected during the validation process.

Other factors affecting data quality: The Laboratory noted that all three VOC vials for sample PEN200725 were received with headspace and recommended that the results be reviewed as "estimated."

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (February, 1996), and the NFESC guidelines "Navy Installation Restoration Chemical Data Quality Manual" (September, 1999). The text of the report has been formulated to address only those problems affecting data quality.

"I attest that the data referenced herein was validated according to the agreed upon validation criteria as specified in the NFESC Guidelines and the Quality Assurance Project Plan (QAPP)."

Michael T. Akers

Project Chemist
Tetra Tech NUS, Inc.

PROJ_NO: 2640

SDG: 2993 MEDIA: WATER DATA FRACTION: OV

nsample	PEN200725
samp_date	11/11/2002
lab_id	2993-001
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
BENZENE	1	U	
ETHYLBENZENE	1	U	
TOLUENE	0.78	J	P
TOTAL XYLENES	3	U	

nsample	PEN201050
samp_date	11/12/2002
lab_id	2993-002
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
BENZENE	1	U	
ETHYLBENZENE	1	U	
TOLUENE	1.8		
TOTAL XYLENES	1.8	J	P

nsample	PEN201110
samp_date	11/12/2002
lab_id	2993-003
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
BENZENE	1400		
ETHYLBENZENE	1300		
TOLUENE	9300		
TOTAL XYLENES	9200		

2993

HOLDING TIME
12/13/02

Units	Nsample	Lab Id	Qc Type	Sdg	Sort	Samp Date	Extr Date	Anal Date	SAMP_DATE TO EXTR_DATE	EXTR_DATE TO ANAL_DATE	SAMP_DATE TO ANAL_DATE
UG/L	13590 BKS	13590 BKS	LCS	2993	OV	/ /	11/14/02	11/14/02	0	0	0
UG/L	13590 BLK	13590 BLK	M_BLANK	2993	OV	/ /	11/14/02	11/14/02	0	0	0
UG/L	PEN200725	2993-001	NORMAL	2993	OV	11/11/02	11/14/02	11/14/02	3	0	3
UG/L	PEN201050	2993-002	NORMAL	2993	OV	11/12/02	11/14/02	11/14/02	2	0	2
UG/L	PEN201050 MS	2993-002 MS	MS	2993	OV	11/12/02	11/14/02	11/14/02	2	0	2
UG/L	PEN201050 MSD	2993-002 MSD	MSD	2993	OV	11/12/02	11/14/02	11/14/02	2	0	2
UG/L	PEN201110	2993-003	NORMAL	2993	OV	11/12/02	11/14/02	11/14/02	2	0	2
UG/L	PEN201110 DL	2993-003 DL	DIL	2993	OV	11/12/02	/ /	11/14/02	0	0	2

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

34[illegible]8

6017 Financial Drive, Norcross, GA 30071
Phone # (770) 449-8800 Fax # (770) 449-5477

CHAIN OF CUSTODY

Company Name: Tetra Tech
Address: 1401 Oven Park Dr. Tall FL
Report Sent to: (Client Contact): Mike Akers
Contact Phone # 850-385-9899 Fax # 850-385-9866
Project Name: NAS Pensacola site 20 UST
Project Number: N2640

Billing address:
Client P.O. # N2640-WR77

For Laboratory Use Only
AAL LIMS SYS ID: 2994
Custody Seal(s): Y N TAPE Page 1 OF 1
QC Level: 1 2 3 4 CLP Init/Temp: 280
Sample Condition: AAL Work Order: 2993

Samplers: (signature)
Samplers: (printed)

Line No.	Sample ID #	Sample Date / Time	Comp	Grab	Matrix	Preserved	Sample Location:	No. of Containers	ANALYSIS: VOCs per WR								Remarks	AAL SampleID: 2993
1	PEN20072 5	11/11/02 1040		X	GW	✓		3	3									001
2	PEN201050	11/12/02 0930		X	GW	✓		3	3									2
3	PEN201110	11/12/02 1040		X	GW	✓		3	3									3
4																		
5																		
6																		
7																		
8																		
9																		
10																		

1) Relinquished By: [signature] Date / Time 11/12/02 1800
2) Received By: [signature] Date / Time
3) Relinquished By: [signature] Date / Time 11/13/02 0915
4) Received By: [signature] Date / Time 11/13/02 0915

Delivered by: (Circle One) FedEX UPS Hand Other

Turnaround Time Requested:

Matrix Guide: (W=Water) (DW = Drinking Water) (GW = Groundwater) (SW = Surface Water) (L = Liquid) (O = Oil) (S = Soil) (SD = Solid) (SL = Sludge) (A = Air Sample) (C = Cartridge)

COC-2002.xls Revised 8/9/02

CT0273
SDG 2993
OV

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN200725

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 2993

Matrix (soil/water): WATER

Lab Sample Id: 2993-001

Sample wt/vol: 25.00 (g/mL) ML

Lab File ID: 1J111402\J06003

Level (low/med): LOW

Date Received: 11/13/02

% Moisture: not dec.

Date Analyzed: 11/14/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl Vinyl Ether	1.0	U
71-43-2	Benzene	1.0	U
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.1	
156-59-2	cis-1,2-Dichloroethene	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-09-2	Methylene Chloride	1.3	
127-18-4	Tetrachloroethylene	1.0	U
108-88-3	Toluene	0.78	J
156-60-5	trans-1,2-dichloroethene	1.0	U
10061-02-6	trans-1,3-dichloropropene	1.0	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN200725

Lab Name:	ACCURA ANALYTICAL LABORAT	Contract:	N2640-WR77
Lab Code:	ACCURA	SAS NO. :	
Case No. :		SDG NO. :	2993
Matrix (soil/water):	WATER	Lab Sample Id:	2993-001
Sample wt/vol:	25.00 (g/mL) ML	Lab File ID:	1J111402\J06003
Level (low/med):	LOW	Date Received:	11/13/02
% Moisture: not dec.		Date Analyzed:	11/14/02
GC Column:	ZB-624 ID: .25 (mm)	Dilution Factor:	1.0
Soil Extract Volume	(μ L)	Soil Aliquot Volume:	(μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	1.0	U
75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (total)	3.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN201050

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 2993

Matrix (soil/water): WATER

Lab Sample Id: 2993-002

Sample wt/vol: 25.00 (g/mL) ML

Lab File ID: 1J111402\J06004

Level (low/med): LOW

Date Received: 11/13/02

% Moisture: not dec.

Date Analyzed: 11/14/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl Vinyl Ether	1.0	U
71-43-2	Benzene	1.0	U
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	2.6	
156-59-2	cis-1,2-Dichloroethene	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-09-2	Methylene Chloride	1.8	
127-18-4	Tetrachloroethylene	1.0	U
108-88-3	Toluene	1.8	
156-60-5	trans-1,2-dichloroethene	1.0	U
10061-02-6	trans-1,3-dichloropropene	1.0	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN201050

Lab Name:	ACCURA ANALYTICAL LABORAT	Contract:	N2640-WR77
Lab Code:	ACCURA	SAS NO. :	
Case No. :		SDG NO. :	2993
Matrix (soil/water):	WATER	Lab Sample Id:	2993-002
Sample wt/vol:	25.00 (g/mL) ML	Lab File ID:	1J111402\J06004
Level (low/med):	LOW	Date Received:	11/13/02
% Moisture: not dec.		Date Analyzed:	11/14/02
GC Column:	ZB-624 ID: .25 (mm)	Dilution Factor:	1.0
Soil Extract Volume	(μ L)	Soil Aliquot Volume:	(μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	1.0	U
75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (total)	1.8	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN201110

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 2993

Matrix (soil/water): WATER

Lab Sample Id: 2993-003

Sample wt/vol: 25.00 (g/mL) ML

Lab File ID: 1J111402\J06005

Level (low/med): LOW

Date Received: 11/13/02

% Moisture: not dec.

Date Analyzed: 11/14/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 5.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
110-75-8	2-Chloroethyl Vinyl Ether	5.0	U
71-43-2	Benzene	740	E
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	5.0	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
124-48-1	Dibromochloromethane	5.0	U
100-41-4	Ethylbenzene	660	E
1634-04-4	Methyl tert-butyl ether	5.0	U
75-09-2	Methylene Chloride	2.6	J
127-18-4	Tetrachloroethylene	5.0	U
108-88-3	Toluene	2400	E
156-60-5	trans-1,2-dichloroethene	5.0	U
10061-02-6	trans-1,3-dichloropropene	5.0	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN201110

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 2993

Matrix (soil/water): WATER

Lab Sample Id: 2993-003

Sample wt/vol: 25.00 (g/mL) ML

Lab File ID: 1J111402\J06005

Level (low/med): LOW

Date Received: 11/13/02

% Moisture: not dec.

Date Analyzed: 11/14/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 5.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	5.0	U
75-01-4	Vinyl Chloride	5.0	U
1330-20-7	Xylenes (total)	3400	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN201110 DL

Lab Name:	ACCURA ANALYTICAL LABORAT	Contract:	N2640-WR77
Lab Code:	ACCURA	SAS NO. :	
Case No. :		SDG NO. :	2993
Matrix (soil/water):	WATER	Lab Sample Id:	2993-003 DL
Sample wt/vol:	25.00 (g/mL) ML	Lab File ID:	1J111402\J06007
Level (low/med):	LOW	Date Received:	11/13/02
% Moisture: not dec.		Date Analyzed:	11/14/02
GC Column:	ZB-624 ID: .25 (mm)	Dilution Factor:	250.0
Soil Extract Volume	(μ L)	Soil Aliquot Volume:	(μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	250	U
79-34-5	1,1,2,2-Tetrachloroethane	250	U
79-00-5	1,1,2-Trichloroethane	250	U
75-34-3	1,1-Dichloroethane	250	U
75-35-4	1,1-Dichloroethene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
107-06-2	1,2-Dichloroethane	250	U
78-87-5	1,2-Dichloropropane	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
110-75-8	2-Chloroethyl Vinyl Ether	250	U
71-43-2	Benzene	1400	D
75-27-4	Bromodichloromethane	250	U
75-25-2	Bromoform	250	U
74-83-9	Bromomethane	250	U
56-23-5	Carbon Tetrachloride	250	U
108-90-7	Chlorobenzene	250	U
75-00-3	Chloroethane	250	U
67-66-3	Chloroform	250	U
74-87-3	Chloromethane	250	U
156-59-2	cis-1,2-Dichloroethene	250	U
10061-01-5	cis-1,3-Dichloropropene	250	U
124-48-1	Dibromochloromethane	250	U
100-41-4	Ethylbenzene	1300	D
1634-04-4	Methyl tert-butyl ether	250	U
75-09-2	Methylene Chloride	250	U
127-18-4	Tetrachloroethylene	250	U
108-88-3	Toluene	9300	D
156-60-5	trans-1,2-dichloroethene	250	U
10061-02-6	trans-1,3-dichloropropene	250	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN201110 DL

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 2993

Matrix (soil/water): WATER

Lab Sample Id: 2993-003 DL

Sample wt/vol: 25.00 (g/mL) ML

Lab File ID: 1J111402\J06007

Level (low/med): LOW

Date Received: 11/13/02

% Moisture: not dec.

Date Analyzed: 11/14/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 250.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	250	U
75-01-4	Vinyl Chloride	250	U
1330-20-7	Xylenes (total)	9200	D

Tetra Tech NUS, Inc.

Internal Correspondence

TO: Mr. Gerald Walker

DATE: January 27, 2003

FROM: Michael T. Akers

cc: File

SUBJECT: Organic and Inorganic Data Validation – VOCs, PAHs, TRPH, Total Lead
CTO273 – NAS Pensacola
SDG 3202

SAMPLES: 11/Aqueous

PEN-19-DUP01	PEN-19-MW 29D	PEN-19-MW 29I	PEN-19-MW 29S
PEN-19-MW 31I	PEN-19-MW 31S	PEN-19-MW 32I	PEN-19-MW 32S
PEN-19-MW 33D	PEN-19-MW 33I	PEN-19 MW 33S	

OVERVIEW

The sample set for CTO273, SDG 3202; Naval Air Station Pensacola, Pensacola, Florida consists of eleven (11) aqueous environmental samples. The environmental samples were analyzed for Volatile Organic Compounds (VOCs), Polycylic Aromatic Hydrocarbons (PAHs), Total Recoverable Petroleum Hydrocarbons (TRPH), and Total Lead. One duplicate pair was collected and analyzed with this SDG: PEN-19-DUP01 / PEN-19-MW 29D.

The samples were collected by Tetra Tech NUS on December 17th, 2002 and analyzed by Accura Analytical Laboratories. All analyses were performed in accordance with Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria and analyzed according to SW-846 Method 8260B (VOCs), SW-846 8270C SIM (PAHs), SW-846 6010B (Total Pb), and FDEP FL-PRO (TRPH) analytical and reporting protocol. The data in this SDG was validated with regard to the following parameters:

* • Data Completeness
* • Holding Times
  • Laboratory method/field quality control blank results
* • Detection Limits

The symbol (*) indicates that all quality control criteria were met for this parameter.

VOC Fraction

All quality control criteria were met for this fraction.

PAH Fraction

All quality control criteria were met for this fraction.

TRPH Fraction

All quality control criteria were met for this fraction.

Metals Fraction

All quality control criteria were met for this fraction.

Field Duplicate Analysis

Parameter	PEN-19-MW 29D	PEN-19-DUP01	%RSD
Total Xylenes	1.6 J	1.4 J	13 %

- No qualifications were made based on field duplicate comparison.

Executive Summary

Laboratory performance: All analytes were reported with incorrect detection limits, which were corrected during the validation process.

Other factors affecting data quality: None.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (February, 1996), and the NFESC guidelines "Navy Installation Restoration Chemical Data Quality Manual" (September, 1999). The text of the report has been formulated to address only those problems affecting data quality.

"I attest that the data referenced herein was validated according to the agreed upon validation criteria as specified in the NFESC Guidelines and the Quality Assurance Project Plan (QAPP)."

Michael T. Akers

Project Chemist
Tetra Tech NUS, Inc.

PROJ_NO: 2640

SDG: 3202 MEDIA: WATER DATA FRACTION: OV

nsample	PEN-19-DUP01
samp_date	12/17/2002
lab_id	3202-011
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	PEN-19-MW29D

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1.0	U	
1,1,2,2-TETRACHLOROETHANE	1.0	U	
1,1,2-TRICHLOROETHANE	1.0	U	
1,1-DICHLOROETHANE	1.0	U	
1,1-DICHLOROETHENE	1.0	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROBENZENE	1.0	U	
1,2-DICHLOROETHANE	1.0	U	
1,2-DICHLOROPROPANE	1.0	U	
1,3-DICHLOROBENZENE	1.0	U	
1,4-DICHLOROBENZENE	1.0	U	
2-CHLOROETHYL VINYL ETHER	1.0	U	
BENZENE	1.0	U	
BROMODICHLOROMETHANE	1.0	U	
BROMOFORM	1.0	U	
BROMOMETHANE	1.0	U	
CARBON TETRACHLORIDE	1.0	U	
CHLOROBENZENE	1.0	U	
CHLORODIBROMOMETHANE	1.0	U	
CHLOROETHANE	1.0	U	
CHLOROFORM	1.0	U	
CHLOROMETHANE	1.0	U	
CIS-1,2-DICHLOROETHENE	1.0	U	
CIS-1,3-DICHLOROPROPENE	1.0	U	
ETHYLBENZENE	1.0	U	
METHYL TERT-BUTYL ETHER	1.0	U	
METHYLENE CHLORIDE	1.0	U	
TETRACHLOROETHENE	1.0	U	
TOLUENE	1.0	U	
TOTAL XYLENES	1.4	J	P

nsample	PEN-19-DUP01
samp_date	12/17/2002
lab_id	3202-011
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	PEN-19-MW29D

Parameter	Result	Val Qual	Qual Code
TRANS-1,2-DICHLOROETHENE	1.0	U	
TRANS-1,3-DICHLOROPROPENE	1.0	U	
TRICHLOROETHENE	1.0	U	
VINYL CHLORIDE	1.0	U	

nsample	PEN-19-MW 29D
samp_date	12/17/2002
lab_id	3202-010
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1.0	U	
1,1,2,2-TETRACHLOROETHANE	1.0	U	
1,1,2-TRICHLOROETHANE	1.0	U	
1,1-DICHLOROETHANE	1.0	U	
1,1-DICHLOROETHENE	1.0	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROBENZENE	1.0	U	
1,2-DICHLOROETHANE	1.0	U	
1,2-DICHLOROPROPANE	1.0	U	
1,3-DICHLOROBENZENE	1.0	U	
1,4-DICHLOROBENZENE	1.0	U	
2-CHLOROETHYL VINYL ETHER	1.0	U	
BENZENE	1.0	U	
BROMODICHLOROMETHANE	1.0	U	
BROMOFORM	1.0	U	
BROMOMETHANE	1.0	U	
CARBON TETRACHLORIDE	1.0	U	
CHLOROBENZENE	1.0	U	
CHLORODIBROMOMETHANE	1.0	U	
CHLOROETHANE	1.0	U	
CHLOROFORM	1.0	U	
CHLOROMETHANE	1.0	U	
CIS-1,2-DICHLOROETHENE	1.0	U	
CIS-1,3-DICHLOROPROPENE	1.0	U	
ETHYLBENZENE	1.0	U	
METHYL TERT-BUTYL ETHER	1.0	U	
METHYLENE CHLORIDE	1.0	U	
TETRACHLOROETHENE	1.0	U	
TOLUENE	1.0	U	
TOTAL XYLENES	1.6	J	P

PROJ_NO: 2640

SDG: 3202 MEDIA: WATER DATA FRACTION: OV

nsample	PEN-19-MW 29D
samp_date	12/17/2002
lab_id	3202-010
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TRANS-1,2-DICHLOROETHENE	1.0	U	
TRANS-1,3-DICHLOROPROPENE	1.0	U	
TRICHLOROETHENE	1.0	U	
VINYL CHLORIDE	1.0	U	

nsample	PEN-19-MW 29I
samp_date	12/17/2002
lab_id	3202-009
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1.0	U	
1,1,2,2-TETRACHLOROETHANE	1.0	U	
1,1,2-TRICHLOROETHANE	1.0	U	
1,1-DICHLOROETHANE	1.0	U	
1,1-DICHLOROETHENE	1.0	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROBENZENE	1.0	U	
1,2-DICHLOROETHANE	1.0	U	
1,2-DICHLOROPROPANE	1.0	U	
1,3-DICHLOROBENZENE	1.0	U	
1,4-DICHLOROBENZENE	1.0	U	
2-CHLOROETHYL VINYL ETHER	1.0	U	
BENZENE	57		
BROMODICHLOROMETHANE	1.0	U	
BROMOFORM	1.0	U	
BROMOMETHANE	1.0	U	
CARBON TETRACHLORIDE	1.0	U	
CHLOROBENZENE	1.0	U	
CHLORODIBROMOMETHANE	1.0	U	
CHLOROETHANE	1.0	U	
CHLOROFORM	1.0	U	
CHLOROMETHANE	1.0	U	
CIS-1,2-DICHLOROETHENE	1.0	U	
CIS-1,3-DICHLOROPROPENE	1.0	U	
ETHYLBENZENE	17		
METHYL TERT-BUTYL ETHER	1.0	U	
METHYLENE CHLORIDE	1.0	U	
TETRACHLOROETHENE	1.0	U	
TOLUENE	1.8		
TOTAL XYLENES	220		

nsample	PEN-19-MW 29I
samp_date	12/17/2002
lab_id	3202-009
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TRANS-1,2-DICHLOROETHENE	1.0	U	
TRANS-1,3-DICHLOROPROPENE	1.0	U	
TRICHLOROETHENE	1.0	U	
VINYL CHLORIDE	1.0	U	

PROJ_NO: 2640

SDG: 3202 MEDIA: WATER DATA FRACTION: OV

nsample	PEN-19-MW 29S
samp_date	12/17/2002
lab_id	3202-008
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1.0	U	
1,1,2,2-TETRACHLOROETHANE	1.0	U	
1,1,2-TRICHLOROETHANE	1.0	U	
1,1-DICHLOROETHANE	1.0	U	
1,1-DICHLOROETHENE	1.0	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROBENZENE	1.0	U	
1,2-DICHLOROETHANE	1.0	U	
1,2-DICHLOROPROPANE	1.0	U	
1,3-DICHLOROBENZENE	1.0	U	
1,4-DICHLOROBENZENE	1.0	U	
2-CHLOROETHYL VINYL ETHER	1.0	U	
BENZENE	1.0	U	
BROMODICHLOROMETHANE	1.0	U	
BROMOFORM	1.0	U	
BROMOMETHANE	1.0	U	
CARBON TETRACHLORIDE	1.0	U	
CHLOROBENZENE	1.0	U	
CHLORODIBROMOMETHANE	1.0	U	
CHLOROETHANE	1.0	U	
CHLOROFORM	1.0	U	
CHLOROMETHANE	1.0	U	
CIS-1,2-DICHLOROETHENE	1.0	U	
CIS-1,3-DICHLOROPROPENE	1.0	U	
ETHYLBENZENE	1.0	U	
METHYL TERT-BUTYL ETHER	1.0	U	
METHYLENE CHLORIDE	1.0	U	
TETRACHLOROETHENE	1.0	U	
TOLUENE	1.0	U	
TOTAL XYLENES	3.0	U	

nsample	PEN-19-MW 29S
samp_date	12/17/2002
lab_id	3202-008
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TRANS-1,2-DICHLOROETHENE	1.0	U	
TRANS-1,3-DICHLOROPROPENE	1.0	U	
TRICHLOROETHENE	1.0	U	
VINYL CHLORIDE	1.0	U	

nsample	PEN-19-MW 31I
samp_date	12/17/2002
lab_id	3202-005
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1.0	U	
1,1,2,2-TETRACHLOROETHANE	1.0	U	
1,1,2-TRICHLOROETHANE	1.0	U	
1,1-DICHLOROETHANE	1.0	U	
1,1-DICHLOROETHENE	1.0	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROBENZENE	1.0	U	
1,2-DICHLOROETHANE	1.0	U	
1,2-DICHLOROPROPANE	1.0	U	
1,3-DICHLOROBENZENE	1.0	U	
1,4-DICHLOROBENZENE	1.0	U	
2-CHLOROETHYL VINYL ETHER	1.0	U	
BENZENE	1.0	U	
BROMODICHLOROMETHANE	1.0	U	
BROMOFORM	1.0	U	
BROMOMETHANE	1.0	U	
CARBON TETRACHLORIDE	1.0	U	
CHLOROBENZENE	1.0	U	
CHLORODIBROMOMETHANE	1.0	U	
CHLOROETHANE	1.0	U	
CHLOROFORM	1.0	U	
CHLOROMETHANE	1.0	U	
CIS-1,2-DICHLOROETHENE	1.0	U	
CIS-1,3-DICHLOROPROPENE	1.0	U	
ETHYLBENZENE	1.0	U	
METHYL TERT-BUTYL ETHER	1.0	U	
METHYLENE CHLORIDE	1.0	U	
TETRACHLOROETHENE	1.0	U	
TOLUENE	1.0	U	
TOTAL XYLENES	3.0	U	

PROJ_NO: 2640

SDG: 3202 MEDIA: WATER DATA FRACTION: OV

nsample	PEN-19-MW 31I
samp_date	12/17/2002
lab_id	3202-005
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TRANS-1,2-DICHLOROETHENE	1.0	U	
TRANS-1,3-DICHLOROPROPENE	1.0	U	
TRICHLOROETHENE	1.0	U	
VINYL CHLORIDE	1.0	U	

nsample	PEN-19-MW 31S
samp_date	12/17/2002
lab_id	3202-004
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1.0	U	
1,1,2,2-TETRACHLOROETHANE	1.0	U	
1,1,2-TRICHLOROETHANE	1.0	U	
1,1-DICHLOROETHANE	1.0	U	
1,1-DICHLOROETHENE	1.0	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROBENZENE	1.0	U	
1,2-DICHLOROETHANE	1.0	U	
1,2-DICHLOROPROPANE	1.0	U	
1,3-DICHLOROBENZENE	1.0	U	
1,4-DICHLOROBENZENE	1.0	U	
2-CHLOROETHYL VINYL ETHER	1.0	U	
BENZENE	1.0	U	
BROMODICHLOROMETHANE	1.0	U	
BROMOFORM	1.0	U	
BROMOMETHANE	1.0	U	
CARBON TETRACHLORIDE	1.0	U	
CHLOROBENZENE	1.0	U	
CHLORODIBROMOMETHANE	1.0	U	
CHLOROETHANE	1.0	U	
CHLOROFORM	1.0	U	
CHLOROMETHANE	1.0	U	
CIS-1,2-DICHLOROETHENE	1.0	U	
CIS-1,3-DICHLOROPROPENE	1.0	U	
ETHYLBENZENE	1.0	U	
METHYL TERT-BUTYL ETHER	1.0	U	
METHYLENE CHLORIDE	1.0	U	
TETRACHLOROETHENE	1.0	U	
TOLUENE	1.0	U	
TOTAL XYLENES	3.0	U	

nsample	PEN-19-MW 31S
samp_date	12/17/2002
lab_id	3202-004
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TRANS-1,2-DICHLOROETHENE	1.0	U	
TRANS-1,3-DICHLOROPROPENE	1.0	U	
TRICHLOROETHENE	1.0	U	
VINYL CHLORIDE	1.0	U	

PROJ_NO: 2640

SDG: 3202 MEDIA: WATER DATA FRACTION: OV

nsample	PEN-19-MW 32I
samp_date	12/17/2002
lab_id	3202-007
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1.0	U	
1,1,2,2-TETRACHLOROETHANE	1.0	U	
1,1,2-TRICHLOROETHANE	1.0	U	
1,1-DICHLOROETHANE	1.0	U	
1,1-DICHLOROETHENE	1.0	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROBENZENE	1.0	U	
1,2-DICHLOROETHANE	1.0	U	
1,2-DICHLOROPROPANE	1.0	U	
1,3-DICHLOROBENZENE	1.0	U	
1,4-DICHLOROBENZENE	1.0	U	
2-CHLOROETHYL VINYL ETHER	1.0	U	
BENZENE	1.0	U	
BROMODICHLOROMETHANE	1.0	U	
BROMOFORM	1.0	U	
BROMOMETHANE	1.0	U	
CARBON TETRACHLORIDE	1.0	U	
CHLOROBENZENE	1.0	U	
CHLORODIBROMOMETHANE	1.0	U	
CHLOROETHANE	1.0	U	
CHLOROFORM	0.46	J	P
CHLOROMETHANE	1.0	U	
CIS-1,2-DICHLOROETHENE	1.0	U	
CIS-1,3-DICHLOROPROPENE	1.0	U	
ETHYLBENZENE	1.0	U	
METHYL TERT-BUTYL ETHER	1.0	U	
METHYLENE CHLORIDE	1.0	U	
TETRACHLOROETHENE	1.0	U	
TOLUENE	1.0	U	
TOTAL XYLENES	3.0	U	

nsample	PEN-19-MW 32I
samp_date	12/17/2002
lab_id	3202-007
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TRANS-1,2-DICHLOROETHENE	1.0	U	
TRANS-1,3-DICHLOROPROPENE	1.0	U	
TRICHLOROETHENE	1.0	U	
VINYL CHLORIDE	1.0	U	

nsample	PEN-19-MW 32S
samp_date	12/17/2002
lab_id	3202-006
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1.0	U	
1,1,2,2-TETRACHLOROETHANE	1.0	U	
1,1,2-TRICHLOROETHANE	1.0	U	
1,1-DICHLOROETHANE	1.0	U	
1,1-DICHLOROETHENE	1.0	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROBENZENE	1.0	U	
1,2-DICHLOROETHANE	1.0	U	
1,2-DICHLOROPROPANE	1.0	U	
1,3-DICHLOROBENZENE	1.0	U	
1,4-DICHLOROBENZENE	1.0	U	
2-CHLOROETHYL VINYL ETHER	1.0	U	
BENZENE	1.0	U	
BROMODICHLOROMETHANE	1.0	U	
BROMOFORM	1.0	U	
BROMOMETHANE	1.0	U	
CARBON TETRACHLORIDE	1.0	U	
CHLOROBENZENE	1.0	U	
CHLORODIBROMOMETHANE	1.0	U	
CHLOROETHANE	1.0	U	
CHLOROFORM	7.1		
CHLOROMETHANE	1.0	U	
CIS-1,2-DICHLOROETHENE	1.0	U	
CIS-1,3-DICHLOROPROPENE	1.0	U	
ETHYLBENZENE	1.0	U	
METHYL TERT-BUTYL ETHER	1.0	U	
METHYLENE CHLORIDE	1.0	U	
TETRACHLOROETHENE	1.0	U	
TOLUENE	1.0	U	
TOTAL XYLENES	3.0	U	

PROJ_NO: 2640

SDG: 3202 MEDIA: WATER DATA FRACTION: OV

nsample	PEN-19-MW 32S
samp_date	12/17/2002
lab_id	3202-006
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TRANS-1,2-DICHLOROETHENE	1.0	U	
TRANS-1,3-DICHLOROPROPENE	1.0	U	
TRICHLOROETHENE	1.0	U	
VINYL CHLORIDE	1.0	U	

nsample	PEN-19-MW 33D
samp_date	12/17/2002
lab_id	3202-003
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1.0	U	
1,1,2,2-TETRACHLOROETHANE	1.0	U	
1,1,2-TRICHLOROETHANE	1.0	U	
1,1-DICHLOROETHANE	1.0	U	
1,1-DICHLOROETHENE	1.0	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROBENZENE	1.0	U	
1,2-DICHLOROETHANE	1.0	U	
1,2-DICHLOROPROPANE	1.0	U	
1,3-DICHLOROBENZENE	1.0	U	
1,4-DICHLOROBENZENE	1.0	U	
2-CHLOROETHYL VINYL ETHER	1.0	U	
BENZENE	1.0	U	
BROMODICHLOROMETHANE	1.0	U	
BROMOFORM	1.0	U	
BROMOMETHANE	1.0	U	
CARBON TETRACHLORIDE	1.0	U	
CHLOROBENZENE	1.0	U	
CHLORODIBROMOMETHANE	1.0	U	
CHLOROETHANE	1.0	U	
CHLOROFORM	1.0	U	
CHLOROMETHANE	1.0	U	
CIS-1,2-DICHLOROETHENE	1.0	U	
CIS-1,3-DICHLOROPROPENE	1.0	U	
ETHYLBENZENE	1.0	U	
METHYL TERT-BUTYL ETHER	1.0	U	
METHYLENE CHLORIDE	1.0	U	
TETRACHLOROETHENE	1.0	U	
TOLUENE	1.0	U	
TOTAL XYLENES	3.0	U	

nsample	PEN-19-MW 33D
samp_date	12/17/2002
lab_id	3202-003
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TRANS-1,2-DICHLOROETHENE	1.0	U	
TRANS-1,3-DICHLOROPROPENE	1.0	U	
TRICHLOROETHENE	1.0	U	
VINYL CHLORIDE	1.0	U	

PROJ_NO: 2640

SDG: 3202 MEDIA: WATER DATA FRACTION: OV

nsample	PEN-19-MW 33I
samp_date	12/17/2002
lab_id	3202-002
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1.0	U	
1,1,2,2-TETRACHLOROETHANE	1.0	U	
1,1,2-TRICHLOROETHANE	1.0	U	
1,1-DICHLOROETHANE	1.0	U	
1,1-DICHLOROETHENE	1.0	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROBENZENE	1.0	U	
1,2-DICHLOROETHANE	1.0	U	
1,2-DICHLOROPROPANE	1.0	U	
1,3-DICHLOROBENZENE	1.0	U	
1,4-DICHLOROBENZENE	1.0	U	
2-CHLOROETHYL VINYL ETHER	1.0	U	
BENZENE	50		
BROMODICHLOROMETHANE	1.0	U	
BROMOFORM	1.0	U	
BROMOMETHANE	1.0	U	
CARBON TETRACHLORIDE	1.0	U	
CHLOROBENZENE	1.0	U	
CHLORODIBROMOMETHANE	1.0	U	
CHLOROETHANE	1.0	U	
CHLOROFORM	1.0	U	
CHLOROMETHANE	1.0	U	
CIS-1,2-DICHLOROETHENE	1.0	U	
CIS-1,3-DICHLOROPROPENE	1.0	U	
ETHYLBENZENE	0.51	J	P
METHYL TERT-BUTYL ETHER	1.0	U	
METHYLENE CHLORIDE	1.0	U	
TETRACHLOROETHENE	1.0	U	
TOLUENE	1.0	U	
TOTAL XYLENES	17		

nsample	PEN-19-MW 33I
samp_date	12/17/2002
lab_id	3202-002
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TRANS-1,2-DICHLOROETHENE	1.0	U	
TRANS-1,3-DICHLOROPROPENE	1.0	U	
TRICHLOROETHENE	1.0	U	
VINYL CHLORIDE	1.0	U	

nsample	PEN-19-MW 33S
samp_date	12/17/2002
lab_id	3202-001
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1.0	U	
1,1,2,2-TETRACHLOROETHANE	1.0	U	
1,1,2-TRICHLOROETHANE	1.0	U	
1,1-DICHLOROETHANE	1.0	U	
1,1-DICHLOROETHENE	1.0	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROBENZENE	1.0	U	
1,2-DICHLOROETHANE	1.0	U	
1,2-DICHLOROPROPANE	1.0	U	
1,3-DICHLOROBENZENE	1.0	U	
1,4-DICHLOROBENZENE	1.0	U	
2-CHLOROETHYL VINYL ETHER	1.0	U	
BENZENE	190		
BROMODICHLOROMETHANE	1.0	U	
BROMOFORM	1.0	U	
BROMOMETHANE	1.0	U	
CARBON TETRACHLORIDE	1.0	U	
CHLOROBENZENE	1.0	U	
CHLORODIBROMOMETHANE	1.0	U	
CHLOROETHANE	1.0	U	
CHLOROFORM	1.0	U	
CHLOROMETHANE	1.0	U	
CIS-1,2-DICHLOROETHENE	1.0	U	
CIS-1,3-DICHLOROPROPENE	1.0	U	
ETHYLBENZENE	12		
METHYL TERT-BUTYL ETHER	1.0	U	
METHYLENE CHLORIDE	1.0	U	
TETRACHLOROETHENE	1.0	U	
TOLUENE	16		
TOTAL XYLENES	130		

PROJ_NO: 2640

SDG: 3202 MEDIA: WATER DATA FRACTION: OV

nsample	PEN-19-MW 33S
samp_date	12/17/2002
lab_id	3202-001
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TRANS-1,2-DICHLOROETHENE	1.0	U	
TRANS-1,3-DICHLOROPROPENE	1.0	U	
TRICHLOROETHENE	1.0	U	
VINYL CHLORIDE	1.0	U	

PROJ_NO: 2640

SDG: 3202 MEDIA: WATER DATA FRACTION: PAH

nsample	PEN-19-MW 29S
samp_date	12/17/2002
lab_id	3202-008
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	1.0	U	
2-METHYLNAPHTHALENE	1.0	U	
ACENAPHTHENE	1.0	U	
ACENAPHTHYLENE	1.0	U	
ANTHRACENE	1.0	U	
BENZO(A)ANTHRACENE	1.0	U	
BENZO(A)PYRENE	1.0	U	
BENZO(B)FLUORANTHENE	1.0	U	
BENZO(G,H,I)PERYLENE	1.0	U	
BENZO(K)FLUORANTHENE	1.0	U	
CHRYSENE	1.0	U	
DIBENZO(A,H)ANTHRACENE	1.0	U	
FLUORANTHENE	1.0	U	
FLUORENE	1.0	U	
INDENO(1,2,3-CD)PYRENE	1.0	U	
NAPHTHALENE	1.0	U	
PHENANTHRENE	1.0	U	
PYRENE	1.0	U	

nsample	PEN-19-MW 31I
samp_date	12/17/2002
lab_id	3202-005
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	1.0	U	
2-METHYLNAPHTHALENE	1.0	U	
ACENAPHTHENE	1.0	U	
ACENAPHTHYLENE	1.0	U	
ANTHRACENE	1.0	U	
BENZO(A)ANTHRACENE	1.0	U	
BENZO(A)PYRENE	1.0	U	
BENZO(B)FLUORANTHENE	1.0	U	
BENZO(G,H,I)PERYLENE	1.0	U	
BENZO(K)FLUORANTHENE	1.0	U	
CHRYSENE	1.0	U	
DIBENZO(A,H)ANTHRACENE	1.0	U	
FLUORANTHENE	1.0	U	
FLUORENE	1.0	U	
INDENO(1,2,3-CD)PYRENE	1.0	U	
NAPHTHALENE	1.0	U	
PHENANTHRENE	1.0	U	
PYRENE	1.0	U	

nsample	PEN-19-MW 31S
samp_date	12/17/2002
lab_id	3202-004
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	1.0	U	
2-METHYLNAPHTHALENE	1.0	U	
ACENAPHTHENE	1.0	U	
ACENAPHTHYLENE	1.0	U	
ANTHRACENE	1.0	U	
BENZO(A)ANTHRACENE	1.0	U	
BENZO(A)PYRENE	1.0	U	
BENZO(B)FLUORANTHENE	1.0	U	
BENZO(G,H,I)PERYLENE	1.0	U	
BENZO(K)FLUORANTHENE	1.0	U	
CHRYSENE	1.0	U	
DIBENZO(A,H)ANTHRACENE	1.0	U	
FLUORANTHENE	1.0	U	
FLUORENE	1.0	U	
INDENO(1,2,3-CD)PYRENE	1.0	U	
NAPHTHALENE	1.0	U	
PHENANTHRENE	1.0	U	
PYRENE	1.0	U	

PROJ_NO: 2640

SDG: 3202 MEDIA: WATER DATA FRACTION: PAH

nsample	PEN-19-MW 32I
samp_date	12/17/2002
lab_id	3202-007
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	1.0	U	
2-METHYLNAPHTHALENE	1.0	U	
ACENAPHTHENE	1.0	U	
ACENAPHTHYLENE	1.0	U	
ANTHRACENE	1.0	U	
BENZO(A)ANTHRACENE	1.0	U	
BENZO(A)PYRENE	1.0	U	
BENZO(B)FLUORANTHENE	1.0	U	
BENZO(G,H,I)PERYLENE	1.0	U	
BENZO(K)FLUORANTHENE	1.0	U	
CHRYSENE	1.0	U	
DIBENZO(A,H)ANTHRACENE	1.0	U	
FLUORANTHENE	1.0	U	
FLUORENE	1.0	U	
INDENO(1,2,3-CD)PYRENE	1.0	U	
NAPHTHALENE	1.0	U	
PHENANTHRENE	1.0	U	
PYRENE	1.0	U	

nsample	PEN-19-MW 32S
samp_date	12/17/2002
lab_id	3202-006
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	1.0	U	
2-METHYLNAPHTHALENE	1.0	U	
ACENAPHTHENE	1.0	U	
ACENAPHTHYLENE	1.0	U	
ANTHRACENE	1.0	U	
BENZO(A)ANTHRACENE	1.0	U	
BENZO(A)PYRENE	1.0	U	
BENZO(B)FLUORANTHENE	1.0	U	
BENZO(G,H,I)PERYLENE	1.0	U	
BENZO(K)FLUORANTHENE	1.0	U	
CHRYSENE	1.0	U	
DIBENZO(A,H)ANTHRACENE	1.0	U	
FLUORANTHENE	1.0	U	
FLUORENE	1.0	U	
INDENO(1,2,3-CD)PYRENE	1.0	U	
NAPHTHALENE	1.0	U	
PHENANTHRENE	1.0	U	
PYRENE	1.0	U	

nsample	PEN-19-MW 33D
samp_date	12/17/2002
lab_id	3202-003
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	1.0	U	
2-METHYLNAPHTHALENE	1.0	U	
ACENAPHTHENE	1.0	U	
ACENAPHTHYLENE	1.0	U	
ANTHRACENE	1.0	U	
BENZO(A)ANTHRACENE	1.0	U	
BENZO(A)PYRENE	1.0	U	
BENZO(B)FLUORANTHENE	1.0	U	
BENZO(G,H,I)PERYLENE	1.0	U	
BENZO(K)FLUORANTHENE	1.0	U	
CHRYSENE	1.0	U	
DIBENZO(A,H)ANTHRACENE	1.0	U	
FLUORANTHENE	1.0	U	
FLUORENE	1.0	U	
INDENO(1,2,3-CD)PYRENE	1.0	U	
NAPHTHALENE	1.0	U	
PHENANTHRENE	1.0	U	
PYRENE	1.0	U	

PROJ_NO: 2640

SDG: 3202 MEDIA: WATER DATA FRACTION: PAH

nsample	PEN-19-MW 33I
samp_date	12/17/2002
lab_id	3202-002
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	1.0	U	
2-METHYLNAPHTHALENE	1.0	U	
ACENAPHTHENE	1.0	U	
ACENAPHTHYLENE	1.0	U	
ANTHRACENE	1.0	U	
BENZO(A)ANTHRACENE	1.0	U	
BENZO(A)PYRENE	1.0	U	
BENZO(B)FLUORANTHENE	1.0	U	
BENZO(G,H,I)PERYLENE	1.0	U	
BENZO(K)FLUORANTHENE	1.0	U	
CHRYSENE	1.0	U	
DIBENZO(A,H)ANTHRACENE	1.0	U	
FLUORANTHENE	1.0	U	
FLUORENE	1.0	U	
INDENO(1,2,3-CD)PYRENE	1.0	U	
NAPHTHALENE	1.0	U	
PHENANTHRENE	1.0	U	
PYRENE	1.0	U	

nsample	PEN-19-MW 33S
samp_date	12/17/2002
lab_id	3202-001
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	1.0	U	
2-METHYLNAPHTHALENE	1.0	U	
ACENAPHTHENE	1.0	U	
ACENAPHTHYLENE	1.0	U	
ANTHRACENE	1.0	U	
BENZO(A)ANTHRACENE	1.0	U	
BENZO(A)PYRENE	1.0	U	
BENZO(B)FLUORANTHENE	1.0	U	
BENZO(G,H,I)PERYLENE	1.0	U	
BENZO(K)FLUORANTHENE	1.0	U	
CHRYSENE	1.0	U	
DIBENZO(A,H)ANTHRACENE	1.0	U	
FLUORANTHENE	1.0	U	
FLUORENE	1.0	U	
INDENO(1,2,3-CD)PYRENE	1.0	U	
NAPHTHALENE	0.8	J	P
PHENANTHRENE	1.0	U	
PYRENE	1.0	U	

PROJ_NO: 2640

SDG: 3202 MEDIA: WATER DATA FRACTION: M

nsample	PEN-19-DUP01
samp_date	12/17/2002
lab_id	3202-011
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	PEN-19-MW29D

Parameter	Result	Val Qual	Qual Code
LEAD	10	U	

nsample	PEN-19-MW 29D
samp_date	12/17/2002
lab_id	3202-010
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	10	U	

nsample	PEN-19-MW 29I
samp_date	12/17/2002
lab_id	3202-009
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	10	U	

PROJ_NO: 2640

SDG: 3202 MEDIA: WATER DATA FRACTION: M

nsample	PEN-19-MW 29S
samp_date	12/17/2002
lab_id	3202-008
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	10	U	

nsample	PEN-19-MW 31I
samp_date	12/17/2002
lab_id	3202-005
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	10	U	

nsample	PEN-19-MW 31S
samp_date	12/17/2002
lab_id	3202-004
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	10	U	

PROJ_NO: 2640

SDG: 3202 MEDIA: WATER DATA FRACTION: M

nsample	PEN-19-MW 32I
samp_date	12/17/2002
lab_id	3202-007
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	10	U	

nsample	PEN-19-MW 32S
samp_date	12/17/2002
lab_id	3202-006
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	10	U	

nsample	PEN-19-MW 33D
samp_date	12/17/2002
lab_id	3202-003
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	8.8		

PROJ_NO: 2640

SDG: 3202 MEDIA: WATER DATA FRACTION: M

nsample	PEN-19-MW 33I
samp_date	12/17/2002
lab_id	3202-002
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	10	U	

nsample	PEN-19-MW 33S
samp_date	12/17/2002
lab_id	3202-001
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	10	U	

PROJ_NO: 2640

SDG: 3202 MEDIA: WATER DATA FRACTION: PET

nsample	PEN-19-DUP01
samp_date	12/17/2002
lab_id	3202-011
qc_type	NM
units	MG/L
Pct_Solids	0.0
DUP_OF:	PEN-19-MW29D

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	1.7	U	

nsample	PEN-19-MW 29D
samp_date	12/17/2002
lab_id	3202-010
qc_type	NM
units	MG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	1.7	U	

nsample	PEN-19-MW 29I
samp_date	12/17/2002
lab_id	3202-009
qc_type	NM
units	MG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	1.9		

PROJ_NO: 2640

SDG: 3202 MEDIA: WATER DATA FRACTION: PET

nsample	PEN-19-MW 29S
samp_date	12/17/2002
lab_id	3202-008
qc_type	NM
units	MG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	1.7	U	

nsample	PEN-19-MW 31I
samp_date	12/17/2002
lab_id	3202-005
qc_type	NM
units	MG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	1.7	U	

nsample	PEN-19-MW 31S
samp_date	12/17/2002
lab_id	3202-004
qc_type	NM
units	MG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	1.7	U	

PROJ_NO: 2640

SDG: 3202 MEDIA: WATER DATA FRACTION: PET

nsample	PEN-19-MW 32I
samp_date	12/17/2002
lab_id	3202-007
qc_type	NM
units	MG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	1.7	U	

nsample	PEN-19-MW 32S
samp_date	12/17/2002
lab_id	3202-006
qc_type	NM
units	MG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	1.7	U	

nsample	PEN-19-MW 33D
samp_date	12/17/2002
lab_id	3202-003
qc_type	NM
units	MG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	1.7	U	

PROJ_NO: 2640

SDG: 3202 MEDIA: WATER DATA FRACTION: PET

nsample	PEN-19-MW 33I
samp_date	12/17/2002
lab_id	3202-002
qc_type	NM
units	MG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	0.75	J	P

nsample	PEN-19-MW 33S
samp_date	12/17/2002
lab_id	3202-001
qc_type	NM
units	MG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	1.1	J	P

TETRA TECH NUS, INC.

BKB/2C NAL WO# 3202

CHAIN OF CUSTODY | NUMBER 4248

PAGE 1 OF 1

PROJECT NO: N2640/CTO 273	FACILITY: Nas Pensacola	PROJECT MANAGER: Gerry Walker	PHONE NUMBER: 850.385.9899
SAMPLERS (SIGNATURE): TAR		FIELD OPERATIONS LEADER: Larry Smith	PHONE NUMBER: 850.385.9899
		CARRIER/WAYBILL NUMBER: Fed-Ex	

LABORATORY NAME AND CONTACT: Accura Analytical - Besa Trenova
ADDRESS: 6017 Financial Drive
CITY, STATE: Norcross, GA 30071

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

CONTAINER TYPE PLASTIC (P) or GLASS (G): G G G P G
PRESERVATIVE USED: HCL NA HCL HNO3 HCL

TYPE OF ANALYSIS: PPL VOHs, BTEXM, and 1,2-DCA; PAH's 8260B; EDB 8270C SIM; Total Lead 6010B 504.1; TRPH FDEP FL-PRO

DATE YEAR 2002	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	PPL VOHs, BTEXM, and 1,2-DCA	PAH's	EDB	Total Lead	TRPH			COMMENTS
12/17	08:30	PEN-19-MW 33S	MW-33S			GW	G	11	3	2	3	1	2	3202-001		
	08:35	PEN-19-MW 33I	MW 33I			GW	G	11	3	2	3	1	2		2	
	09:15	PEN-19-MW 33D	MW 33D			GW	G	11	3	2	3	1	2		3	
	09:50	PEN-19-MW 31S	MW 31S			GW	G	11	3	2	3	1	2		4	
	10:00	PEN-19-MW 31I	MW 31I			GW	G	11	3	2	3	1	2		5	
	13:00	PEN-19-MW 32S	MW 32S			GW	G	11	3	2	3	1	2		6	See WR N2640-WR77
	13:00	PEN-19-MW 32I	MW 32I			GW	G	11	3	2	3	1	2		7	for compound lists
12/17	14:25	PEN-19-MW 29S	MW29S			GW	G	11	3	2	3	1	2		8	and required Dis.
	14:22	PEN-19-MW 29I	MW29I			GW	G	11	3	2	3	1	2		9	
	14:20	PEN-19-MW 29D	MW29D			GW	G	11	3	2	3	1	2	3202-010		
	—	PEN-19-DUP01	—			3202-011										

12/19/02 BKB 1 of 5 coolers rec'vd 12/18/02 0915
remaining 4 rec'vd 12/19/02 0948

1. RELINQUISHED BY: TAR	DATE 12/17/02	TIME 17:00	1. RECEIVED BY: FedEx	DATE	TIME
2. RELINQUISHED BY: FedEx	DATE	TIME	2. RECEIVED BY: [signature]	DATE 12/19/02	TIME 9:48
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME
COMMENTS					

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CTO 273
SDG 3202
OV
PAH
PET
M

EPA SAMPLE NO.
PEN-19-MW 33S

Lab Name: ACCURA ANALYTICAL LABORAT
Lab Code: ACCURA
Case No. :
Matrix (soil/water): WATER
Sample wt/vol: 25.00 (g/mL) ML
Level (low/med): LOW
% Moisture: not dec.
GC Column: ZB-624 ID: .25 (mm)
Soil Extract Volume (μ L)

Contract: N2640-WR77
SAS NO. :
SDG NO. : 3202
Lab Sample Id: 3202-001
Lab File ID: 1J122002\J06426
Date Received: 12/18/02
Date Analyzed: 12/20/02
Dilution Factor: 1.0
Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl Vinyl Ether	1.0	U
71-43-2	Benzene	150	E
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
100-41-4	Ethylbenzene	12	
1634-04-4	Methyl tert-butyl ether	1.0	U
75-09-2	Methylene Chloride	1.0	U
127-18-4	Tetrachloroethylene	1.0	U
108-88-3	Toluene	16	
156-60-5	trans-1,2-dichloroethene	1.0	U
10061-02-6	trans-1,3-dichloropropene	1.0	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 33S

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3202

Matrix (soil/water): WATER

Lab Sample Id: 3202-001

Sample wt/vol: 25.00 (g/mL) ML

Lab File ID: 1J122002\J06426

Level (low/med): LOW

Date Received: 12/18/02

% Moisture: not dec.

Date Analyzed: 12/20/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	1.0	U
75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (total)	130	E

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW-33S DL

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3202

Matrix (soil/water): WATER

Lab Sample Id: 3202-001 DL

Sample wt/vol: 1.00 (g/mL) ML

Lab File ID: 1J122302\J06450

Level (low/med): LOW

Date Received: 12/18/02

% Moisture: not dec.

Date Analyzed: 12/23/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 10.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
75-34-3	1,1-Dichloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
107-06-2	1,2-Dichloroethane	10	U
78-87-5	1,2-Dichloropropane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
110-75-8	2-Chloroethyl Vinyl Ether	10	U
71-43-2	Benzene	190	
75-27-4	Bromodichloromethane	10	U
75-25-2	Bromoform	10	U
74-83-9	Bromomethane	10	U
56-23-5	Carbon Tetrachloride	10	U
108-90-7	Chlorobenzene	10	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	10	U
74-87-3	Chloromethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
124-48-1	Dibromochloromethane	10	U
100-41-4	Ethylbenzene	11	
1634-04-4	Methyl tert-butyl ether	10	U
75-09-2	Methylene Chloride	10	U
127-18-4	Tetrachloroethylene	10	U
108-88-3	Toluene	16	
156-60-5	trans-1,2-dichloroethene	10	U
10061-02-6	trans-1,3-dichloropropene	10	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW-33S DL

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3202

Matrix (soil/water): WATER

Lab Sample Id: 3202-001 DL

Sample wt/vol: 1.00 (g/mL) ML

Lab File ID: 1J122302\J06450

Level (low/med): LOW

Date Received: 12/18/02

% Moisture: not dec.

Date Analyzed: 12/23/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 10.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	10	U
75-01-4	Vinyl Chloride	10	U
1330-20-7	Xylenes (total)	130	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
PEN-19-MW 33I

Lab Name: ACCURA ANALYTICAL LABORAT
Contract: N2640-WR77
Lab Code: ACCURA
SAS NO. :
Case No. :
SDG NO. : 3202
Matrix (soil/water): WATER
Lab Sample Id: 3202-002
Sample wt/vol: 25.00 (g/mL) ML
Lab File ID: 1J122002\J06427
Level (low/med): LOW
Date Received: 12/18/02
% Moisture: not dec.
Date Analyzed: 12/20/02
GC Column: ZB-624 ID: .25 (mm)
Dilution Factor: 1.0
Soil Extract Volume (μ L)
Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl Vinyl Ether	1.0	U
71-43-2	Benzene	47	E
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
100-41-4	Ethylbenzene	0.51	J
1634-04-4	Methyl tert-butyl ether	1.0	U
75-09-2	Methylene Chloride	1.0	U
127-18-4	Tetrachloroethylene	1.0	U
108-88-3	Toluene	1.0	U
156-60-5	trans-1,2-dichloroethene	1.0	U
10061-02-6	trans-1,3-dichloropropene	1.0	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 33I

Lab Name:	ACCURA ANALYTICAL LABORAT	Contract:	N2640-WR77
Lab Code:	ACCURA	SAS NO. :	
Case No. :		SDG NO. :	3202
Matrix (soil/water):	WATER	Lab Sample Id:	3202-002
Sample wt/vol:	25.00 (g/mL) ML	Lab File ID:	1J122002\J06427
Level (low/med):	LOW	Date Received:	12/18/02
% Moisture: not dec.		Date Analyzed:	12/20/02
GC Column:	ZB-624 ID: .25 (mm)	Dilution Factor:	1.0
Soil Extract Volume	(μ L)	Soil Aliquot Volume:	(μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	1.0	U
75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (total)	17	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 33I DL

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3202

Matrix (soil/water): WATER

Lab Sample Id: 3202-002 DL

Sample wt/vol: 1.00 (g/mL) ML

Lab File ID: 1J122002\J06444

Level (low/med): LOW

Date Received: 12/18/02

% Moisture: not dec.

Date Analyzed: 12/20/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 5.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
110-75-8	2-Chloroethyl Vinyl Ether	5.0	U
71-43-2	Benzene	50	D
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
75-00-3	Chloroethane	5.0	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
124-48-1	Dibromochloromethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-09-2	Methylene Chloride	5.0	U
127-18-4	Tetrachloroethylene	5.0	U
108-88-3	Toluene	5.0	U
156-60-5	trans-1,2-dichloroethene	5.0	U
10061-02-6	trans-1,3-dichloropropene	5.0	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 331 DL

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3202

Matrix (soil/water): WATER

Lab Sample Id: 3202-002 DL

Sample wt/vol: 1.00 (g/mL) ML

Lab File ID: 1J122002\J06444

Level (low/med): LOW

Date Received: 12/18/02

% Moisture: not dec.

Date Analyzed: 12/20/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 5.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	5.0	U
75-01-4	Vinyl Chloride	5.0	U
1330-20-7	Xylenes (total)	13	JD

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 33D

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3202

Matrix (soil/water): WATER

Lab Sample Id: 3202-003

Sample wt/vol: 25.00 (g/mL) ML

Lab File ID: 1J122002\J06428

Level (low/med): LOW

Date Received: 12/18/02

% Moisture: not dec.

Date Analyzed: 12/20/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl Vinyl Ether	1.0	U
71-43-2	Benzene	1.0	U
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-09-2	Methylene Chloride	1.0	U
127-18-4	Tetrachloroethylene	1.0	U
108-88-3	Toluene	1.0	U
156-60-5	trans-1,2-dichloroethene	1.0	U
10061-02-6	trans-1,3-dichloropropene	1.0	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 33D

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3202

Matrix (soil/water): WATER

Lab Sample Id: 3202-003

Sample wt/vol: 25.00 (g/mL) ML

Lab File ID: 1J122002\J06428

Level (low/med): LOW

Date Received: 12/18/02

% Moisture: not dec.

Date Analyzed: 12/20/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	1.0	U
75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (total)	3.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 31S

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3202

Matrix (soil/water): WATER

Lab Sample Id: 3202-004

Sample wt/vol: 25.00 (g/mL) ML

Lab File ID: 1J122002\J06430

Level (low/med): LOW

Date Received: 12/18/02

% Moisture: not dec.

Date Analyzed: 12/20/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl Vinyl Ether	1.0	U
71-43-2	Benzene	1.0	U
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-09-2	Methylene Chloride	1.0	U
127-18-4	Tetrachloroethylene	1.0	U
108-88-3	Toluene	1.0	U
156-60-5	trans-1,2-dichloroethene	1.0	U
10061-02-6	trans-1,3-dichloropropene	1.0	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 31S

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3202

Matrix (soil/water): WATER

Lab Sample Id: 3202-004

Sample wt/vol: 25.00 (g/mL) ML

Lab File ID: 1J122002\J06430

Level (low/med): LOW

Date Received: 12/18/02

% Moisture: not dec.

Date Analyzed: 12/20/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	1.0	U
75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (total)	3.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 31I

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3202

Matrix (soil/water): WATER

Lab Sample Id: 3202-005

Sample wt/vol: 25.00 (g/mL) ML

Lab File ID: 1J122002\J06431

Level (low/med): LOW

Date Received: 12/18/02

% Moisture: not dec.

Date Analyzed: 12/20/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl Vinyl Ether	1.0	U
71-43-2	Benzene	1.0	U
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-09-2	Methylene Chloride	1.0	U
127-18-4	Tetrachloroethylene	1.0	U
108-88-3	Toluene	1.0	U
156-60-5	trans-1,2-dichloroethene	1.0	U
10061-02-6	trans-1,3-dichloropropene	1.0	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 31I

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3202

Matrix (soil/water): WATER

Lab Sample Id: 3202-005

Sample wt/vol: 25.00 (g/mL) ML

Lab File ID: 1J122002\J06431

Level (low/med): LOW

Date Received: 12/18/02

% Moisture: not dec.

Date Analyzed: 12/20/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	1.0	U
75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (total)	3.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 32S

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3202

Matrix (soil/water): WATER

Lab Sample Id: 3202-006

Sample wt/vol: 25.00 (g/mL) ML

Lab File ID: 1J122002\J06432

Level (low/med): LOW

Date Received: 12/18/02

% Moisture: not dec.

Date Analyzed: 12/20/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl Vinyl Ether	1.0	U
71-43-2	Benzene	1.0	U
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
67-66-3	Chloroform	7.1	
74-87-3	Chloromethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-09-2	Methylene Chloride	1.0	U
127-18-4	Tetrachloroethylene	1.0	U
108-88-3	Toluene	1.0	U
156-60-5	trans-1,2-dichloroethene	1.0	U
10061-02-6	trans-1,3-dichloropropene	1.0	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 32S

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3202

Matrix (soil/water): WATER

Lab Sample Id: 3202-006

Sample wt/vol: 25.00 (g/mL) ML

Lab File ID: 1J122002\J06432

Level (low/med): LOW

Date Received: 12/18/02

% Moisture: not dec.

Date Analyzed: 12/20/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	1.0	U
75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (total)	3.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 32I

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3202

Matrix (soil/water): WATER

Lab Sample Id: 3202-007

Sample wt/vol: 25.00 (g/mL) ML

Lab File ID: 1J122002\J06433

Level (low/med): LOW

Date Received: 12/18/02

% Moisture: not dec.

Date Analyzed: 12/20/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl Vinyl Ether	1.0	U
71-43-2	Benzene	1.0	U
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
67-66-3	Chloroform	0.46	J
74-87-3	Chloromethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-09-2	Methylene Chloride	1.0	U
127-18-4	Tetrachloroethylene	1.0	U
108-88-3	Toluene	1.0	U
156-60-5	trans-1,2-dichloroethene	1.0	U
10061-02-6	trans-1,3-dichloropropene	1.0	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 32I

Lab Name:	ACCURA ANALYTICAL LABORAT	Contract:	N2640-WR77
Lab Code:	ACCURA	SAS NO. :	
Case No. :		SDG NO. :	3202
Matrix (soil/water):	WATER	Lab Sample Id:	3202-007
Sample wt/vol:	25.00 (g/mL) ML	Lab File ID:	1J122002\J06433
Level (low/med):	LOW	Date Received:	12/18/02
% Moisture: not dec.		Date Analyzed:	12/20/02
GC Column:	ZB-624 ID: .25 (mm)	Dilution Factor:	1.0
Soil Extract Volume	(μ L)	Soil Aliquot Volume:	(μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	1.0	U
75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (total)	3.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 29S

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3202

Matrix (soil/water): WATER

Lab Sample Id: 3202-008

Sample wt/vol: 25.00 (g/mL) ML

Lab File ID: 1J122002\J06440

Level (low/med): LOW

Date Received: 12/18/02

% Moisture: not dec.

Date Analyzed: 12/20/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl Vinyl Ether	1.0	U
71-43-2	Benzene	1.0	U
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-09-2	Methylene Chloride	1.0	U
127-18-4	Tetrachloroethylene	1.0	U
108-88-3	Toluene	1.0	U
156-60-5	trans-1,2-dichloroethene	1.0	U
10061-02-6	trans-1,3-dichloropropene	1.0	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 29S

Lab Name:	ACCURA ANALYTICAL LABORAT	Contract:	N2640-WR77
Lab Code:	ACCURA	SAS NO. :	
Case No. :		SDG NO. :	3202
Matrix (soil/water):	WATER	Lab Sample Id:	3202-008
Sample wt/vol:	25.00 (g/mL) ML	Lab File ID:	1J122002\J06440
Level (low/med):	LOW	Date Received:	12/18/02
% Moisture: not dec.		Date Analyzed:	12/20/02
GC Column:	ZB-624 ID: .25 (mm)	Dilution Factor:	1.0
Soil Extract Volume	(µ L)	Soil Aliquot Volume:	(µ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	1.0	U
75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (total)	3.0	U

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 33S

Lab Name : ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code : ACCURA

Case No.:

SAS No.

SDG No.: 3202

Matrix : (soil/water) WATER

Lab Sample Id: 3202-001

Sample wt/vol: 1000 (g/ml): ML

Lab File ID: 1B122702\B41123

Level : (low/med) LOW

Date Received: 12/18/02

% Moisture:

Decanted: (Y/N) N

Date Extracted: 12/20/02

Concentrated Extract Volume: 1000 (µ L)

Date Analyzed: 12/27/02

Injection Volume: 1.0 (µ L)

Dilution Factor: 1.0

GPC Cleanup (Y/N): N

pH: N/A

Extraction : (Type) SW3520C

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
90-12-0	1-Methylnaphthalene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U
83-32-9	Acenaphthene	1.0	U
208-96-8	Acenaphthylene	1.0	U
120-12-7	Anthracene	1.0	U
56-55-3	Benzo(a)anthracene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U
191-24-2	Benzo(g,h,i)perylene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U
218-01-9	Chrysene	1.0	U
53-70-3	Dibenz(a,h)Anthracene	1.0	U
206-44-0	Fluoranthene	1.0	U
86-73-7	Fluorene	1.0	U
193-39-5	Indeno(1,2,3-c,d)Pyrene	1.0	U
91-20-3	Naphthalene	0.77	J
85-01-8	Phenanthrene	1.0	U
129-00-0	Pyrene	1.0	U

1D
SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW 33I

Lab Name : ACCURA ANALYTICAL LABORAT
Contract: N2640-WR77
Lab Code : ACCURA
Case No.:
SAS No.
SDG No.: 3202
Matrix : (soil/water) WATER
Lab Sample Id: 3202-002
Sample wt/vol: 1000 (g/ml): ML
Lab File ID: 1B122702\B41124
Level : (low/med) LOW
Date Received: 12/18/02
% Moisture:
Decanted: (Y/N) N
Date Extracted: 12/20/02
Concentrated Extract Volume: 1000 (μ L)
Date Analyzed: 12/27/02
Injection Volume: 1.0 (μ L)
Dilution Factor: 1.0
GPC Cleanup (Y/N): N
pH: N/A
Extraction : (Type) SW3520C

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
90-12-0	1-Methylnaphthalene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U
83-32-9	Acenaphthene	1.0	U
208-96-8	Acenaphthylene	1.0	U
120-12-7	Anthracene	1.0	U
56-55-3	Benzo(a)anthracene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U
191-24-2	Benzo(g,h,i)perylene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U
218-01-9	Chrysene	1.0	U
53-70-3	Dibenz(a,h)Anthracene	1.0	U
206-44-0	Fluoranthene	1.0	U
86-73-7	Fluorene	1.0	U
193-39-5	Indeno(1,2,3-c,d)Pyrene	1.0	U
91-20-3	Naphthalene	1.0	U
85-01-8	Phenanthrene	1.0	U
129-00-0	Pyrene	1.0	U

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 33D

Lab Name : ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code : ACCURA

Case No.:

SAS No.

SDG No.: 3202

Matrix : (soil/water) WATER

Lab Sample Id: 3202-003

Sample wt/vol: 1000 (g/ml): ML

Lab File ID: 1B122702\B41125

Level : (low/med) LOW

Date Received: 12/18/02

% Moisture:

Decanted: (Y/N) N

Date Extracted: 12/20/02

Concentrated Extract Volume: 1000 (µ L)

Date Analyzed: 12/27/02

Injection Volume: 1.0 (µ L)

Dilution Factor: 1.0

GPC Cleanup (Y/N): N

pH: N/A

Extraction : (Type) SW3520C

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
90-12-0	1-Methylnaphthalene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U
83-32-9	Acenaphthene	1.0	U
208-96-8	Acenaphthylene	1.0	U
120-12-7	Anthracene	1.0	U
56-55-3	Benzo(a)anthracene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U
191-24-2	Benzo(g,h,i)perylene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U
218-01-9	Chrysene	1.0	U
53-70-3	Dibenz(a,h)Anthracene	1.0	U
206-44-0	Fluoranthene	1.0	U
86-73-7	Fluorene	1.0	U
193-39-5	Indeno(1,2,3-c,d)Pyrene	1.0	U
91-20-3	Naphthalene	1.0	U
85-01-8	Phenanthrene	1.0	U
129-00-0	Pyrene	1.0	U

1D
SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW 31S

Lab Name : ACCURA ANALYTICAL LABORAT
Contract: N2640-WR77
Lab Code : ACCURA Case No.:
SAS No. SDG No.: 3202
Matrix : (soil/water) WATER
Lab Sample Id: 3202-004
Sample wt/vol: 1000 (g/ml): ML
Lab File ID: 1B122702\B41120
Level : (low/med) LOW
Date Received: 12/18/02
% Moisture: Decanted: (Y/N) N
Date Extracted: 12/20/02
Concentrated Extract Volume: 1000 (μ L)
Date Analyzed: 12/27/02
Injection Volume: 1.0 (μ L)
Dilution Factor: 1.0
GPC Cleanup (Y/N): N pH: N/A
Extraction : (Type) SW3520C

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
90-12-0	1-Methylnaphthalene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U
83-32-9	Acenaphthene	1.0	U
208-96-8	Acenaphthylene	1.0	U
120-12-7	Anthracene	1.0	U
56-55-3	Benzo(a)anthracene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U
191-24-2	Benzo(g,h,i)perylene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U
218-01-9	Chrysene	1.0	U
53-70-3	Dibenz(a,h)Anthracene	1.0	U
206-44-0	Fluoranthene	1.0	U
86-73-7	Fluorene	1.0	U
193-39-5	Indeno(1,2,3-c,d)Pyrene	1.0	U
91-20-3	Naphthalene	1.0	U
85-01-8	Phenanthrene	1.0	U
129-00-0	Pyrene	1.0	U

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 31S MS

Lab Name : ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code : ACCURA Case No.:

SAS No. SDG No.: 3202

Matrix : (soil/water) WATER

Lab Sample Id: 3202-004 MS

Sample wt/vol: 500 (g/ml): ML

Lab File ID: 1B122702\B41121

Level : (low/med) LOW

Date Received: 12/18/02

% Moisture: Decanted: (Y/N) N

Date Extracted: 12/20/02

Concentrated Extract Volume: 500 (µ L)

Date Analyzed: 12/27/02

Injection Volume: 1.0 (µ L)

Dilution Factor: 1.0

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

Extraction : (Type) SW3520C

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
90-12-0	1-Methylnaphthalene	28	
91-57-6	2-Methylnaphthalene	27	
83-32-9	Acenaphthene	34	
208-96-8	Acenaphthylene	34	
120-12-7	Anthracene	38	
56-55-3	Benzo(a)anthracene	41	
50-32-8	Benzo(a)pyrene	38	
205-99-2	Benzo(b)fluoranthene	39	
191-24-2	Benzo(g,h,i)perylene	42	
207-08-9	Benzo(k)fluoranthene	46	
218-01-9	Chrysene	43	
53-70-3	Dibenz(a,h)Anthracene	38	
206-44-0	Fluoranthene	42	
86-73-7	Fluorene	38	
193-39-5	Indeno(1,2,3-c,d)Pyrene	39	
91-20-3	Naphthalene	25	
85-01-8	Phenanthrene	39	
129-00-0	Pyrene	42	

1D
SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW 31S MSD

Lab Name : ACCURA ANALYTICAL LABORAT
Contract: N2640-WR77
Lab Code : ACCURA Case No.:
SAS No. SDG No.: 3202
Matrix : (soil/water) WATER
Lab Sample Id: 3202-004 MSD
Sample wt/vol: 500 (g/ml): ML
Lab File ID: 1B122702\B41122
Level : (low/med) LOW
Date Received: 12/18/02
% Moisture: Decanted: (Y/N) N
Date Extracted: 12/20/02
Concentrated Extract Volume: 500 (µ L)
Date Analyzed: 12/27/02
Injection Volume: 1.0 (µ L)
Dilution Factor: 1.0
GPC Cleanup (Y/N): N pH: N/A
Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
90-12-0	1-Methylnaphthalene	40	
91-57-6	2-Methylnaphthalene	39	
83-32-9	Acenaphthene	42	
208-96-8	Acenaphthylene	42	
120-12-7	Anthracene	42	
56-55-3	Benzo(a)anthracene	42	
50-32-8	Benzo(a)pyrene	40	
205-99-2	Benzo(b)fluoranthene	42	
191-24-2	Benzo(g,h,i)perylene	39	
207-08-9	Benzo(k)fluoranthene	47	
218-01-9	Chrysene	43	
53-70-3	Dibenz(a,h)Anthracene	36	
206-44-0	Fluoranthene	44	
86-73-7	Fluorene	44	
193-39-5	Indeno(1,2,3-c,d)Pyrene	38	
91-20-3	Naphthalene	37	
85-01-8	Phenanthrene	43	
129-00-0	Pyrene	45	

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 31I

Lab Name : ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code : ACCURA Case No.:

SAS No. SDG No.: 3202

Matrix : (soil/water) WATER

Lab Sample Id: 3202-005

Sample wt/vol: 1000 (g/ml): ML

Lab File ID: 1B122702\B41126

Level : (low/med) LOW

Date Received: 12/18/02

% Moisture: Decanted: (Y/N) BLACK

Date Extracted: 12/20/02

Concentrated Extract Volume: 1000 (µ L)

Date Analyzed: 12/27/02

Injection Volume: 1.0 (µ L)

Dilution Factor: 1.0

GPC Cleanup (Y/N): CLEAR pH: N/A

Extraction : (Type) SW3520C

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
90-12-0	1-Methylnaphthalene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U
83-32-9	Acenaphthene	1.0	U
208-96-8	Acenaphthylene	1.0	U
120-12-7	Anthracene	1.0	U
56-55-3	Benzo(a)anthracene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U
191-24-2	Benzo(g,h,i)perylene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U
218-01-9	Chrysene	1.0	U
53-70-3	Dibenz(a,h)Anthracene	1.0	U
206-44-0	Fluoranthene	1.0	U
86-73-7	Fluorene	1.0	U
193-39-5	Indeno(1,2,3-c,d)Pyrene	1.0	U
91-20-3	Naphthalene	1.0	U
85-01-8	Phenanthrene	1.0	U
129-00-0	Pyrene	1.0	U

1D
SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW 32S

Lab Name : ACCURA ANALYTICAL LABORAT
Contract: N2640-WR77
Lab Code : ACCURA Case No.:
SAS No. SDG No.: 3202
Matrix : (soil/water) WATER
Lab Sample Id: 3202-006
Sample wt/vol: 1000 (g/ml): ML
Lab File ID: 1B122702\B41127
Level : (low/med) LOW
Date Received: 12/18/02
% Moisture: Decanted: (Y/N) BLACK
Date Extracted: 12/20/02
Concentrated Extract Volume: 1000 (µ L)
Date Analyzed: 12/27/02
Injection Volume: 1.0 (µ L)
Dilution Factor: 1.0
GPC Cleanup (Y/N): CLEAR pH: N/A
Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
90-12-0	1-Methylnaphthalene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U
83-32-9	Acenaphthene	1.0	U
208-96-8	Acenaphthylene	1.0	U
120-12-7	Anthracene	1.0	U
56-55-3	Benzo(a)anthracene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U
191-24-2	Benzo(g,h,i)perylene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U
218-01-9	Chrysene	1.0	U
53-70-3	Dibenz(a,h)Anthracene	1.0	U
206-44-0	Fluoranthene	1.0	U
86-73-7	Fluorene	1.0	U
193-39-5	Indeno(1,2,3-c,d)Pyrene	1.0	U
91-20-3	Naphthalene	1.0	U
85-01-8	Phenanthrene	1.0	U
129-00-0	Pyrene	1.0	U

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 32I

Lab Name : ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code : ACCURA Case No.:

SAS No. SDG No.: 3202

Matrix : (soil/water) WATER

Lab Sample Id: 3202-007

Sample wt/vol: 1000 (g/ml): ML

Lab File ID: 1B122702\B41128

Level : (low/med) LOW

Date Received: 12/18/02

% Moisture: Decanted: (Y/N) BLACK

Date Extracted: 12/20/02

Concentrated Extract Volume: 1000 (μ L)

Date Analyzed: 12/27/02

Injection Volume: 1.0 (μ L)

Dilution Factor: 1.0

GPC Cleanup (Y/N): CLEAR pH: N/A

Extraction : (Type) SW3520C

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
90-12-0	1-Methylnaphthalene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U
83-32-9	Acenaphthene	1.0	U
208-96-8	Acenaphthylene	1.0	U
120-12-7	Anthracene	1.0	U
56-55-3	Benzo(a)anthracene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U
191-24-2	Benzo(g,h,i)perylene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U
218-01-9	Chrysene	1.0	U
53-70-3	Dibenz(a,h)Anthracene	1.0	U
206-44-0	Fluoranthene	1.0	U
86-73-7	Fluorene	1.0	U
193-39-5	Indeno(1,2,3-c,d)Pyrene	1.0	U
91-20-3	Naphthalene	1.0	U
85-01-8	Phenanthrene	1.0	U
129-00-0	Pyrene	1.0	U

1D
SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW 29S

Lab Name : ACCURA ANALYTICAL LABORAT
Contract: N2640-WR77
Lab Code : ACCURA
Case No.:
SAS No.
SDG No.: 3202
Matrix : (soil/water) WATER
Lab Sample Id: 3202-008
Sample wt/vol: 1000 (g/ml): ML
Lab File ID: 1B122702\B41129
Level : (low/med) LOW
Date Received: 12/18/02
% Moisture:
Decanted: (Y/N) BLACK
Date Extracted: 12/20/02
Concentrated Extract Volume: 1000 (μ L)
Date Analyzed: 12/27/02
Injection Volume: 1.0 (μ L)
Dilution Factor: 1.0
GPC Cleanup (Y/N): CLEAR
pH: N/A
Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
90-12-0	1-Methylnaphthalene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U
83-32-9	Acenaphthene	1.0	U
208-96-8	Acenaphthylene	1.0	U
120-12-7	Anthracene	1.0	U
56-55-3	Benzo(a)anthracene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U
191-24-2	Benzo(g,h,i)perylene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U
218-01-9	Chrysene	1.0	U
53-70-3	Dibenz(a,h)Anthracene	1.0	U
206-44-0	Fluoranthene	1.0	U
86-73-7	Fluorene	1.0	U
193-39-5	Indeno(1,2,3-c,d)Pyrene	1.0	U
91-20-3	Naphthalene	1.0	U
85-01-8	Phenanthrene	1.0	U
129-00-0	Pyrene	1.0	U

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 29I

Lab Name : ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code : ACCURA

Case No.:

SAS No.

SDG No.: 3202

Matrix : (soil/water) WATER

Lab Sample Id: 3202-009

Sample wt/vol: 1000 (g/ml): ML

Lab File ID: 1B122702\B41130

Level : (low/med) LOW

Date Received: 12/18/02

% Moisture:

Decanted: (Y/N) BLACK

Date Extracted: 12/20/02

Concentrated Extract Volume: 1000 (μ L)

Date Analyzed: 12/27/02

Injection Volume: 1.0 (μ L)

Dilution Factor: 1.0

GPC Cleanup (Y/N): CLEAR

pH: N/A

Extraction : (Type) SW3520C

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
90-12-0	1-Methylnaphthalene	4.7	
91-57-6	2-Methylnaphthalene	6.6	
83-32-9	Acenaphthene	1.0	U
208-96-8	Acenaphthylene	1.0	U
120-12-7	Anthracene	1.0	U
56-55-3	Benzo(a)anthracene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U
191-24-2	Benzo(g,h,i)perylene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U
218-01-9	Chrysene	1.0	U
53-70-3	Dibenz(a,h)Anthracene	1.0	U
206-44-0	Fluoranthene	1.0	U
86-73-7	Fluorene	1.0	U
193-39-5	Indeno(1,2,3-c,d)Pyrene	1.0	U
91-20-3	Naphthalene	7.6	
85-01-8	Phenanthrene	1.0	U
129-00-0	Pyrene	1.0	U

1D

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 29D

Lab Name : ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code : ACCURA Case No.:

SAS No. SDG No.: 3202

Matrix : (soil/water) WATER

Lab Sample Id: 3202-010

Sample wt/vol: 1000 (g/ml): ML

Lab File ID: 1B122702\B41131

Level : (low/med) LOW

Date Received: 12/18/02

% Moisture: Decanted: (Y/N) BLACK

Date Extracted: 12/20/02

Concentrated Extract Volume: 1000 (µ L)

Date Analyzed: 12/27/02

Injection Volume: 1.0 (µ L)

Dilution Factor: 1.0

GPC Cleanup (Y/N): CLEAR pH: N/A

Extraction : (Type) SW3520C

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
90-12-0	1-Methylnaphthalene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U
83-32-9	Acenaphthene	1.0	U
208-96-8	Acenaphthylene	1.0	U
120-12-7	Anthracene	1.0	U
56-55-3	Benzo(a)anthracene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U
191-24-2	Benzo(g,h,i)perylene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U
218-01-9	Chrysene	1.0	U
53-70-3	Dibenz(a,h)Anthracene	1.0	U
206-44-0	Fluoranthene	1.0	U
86-73-7	Fluorene	1.0	U
193-39-5	Indeno(1,2,3-c,d)Pyrene	1.0	U
91-20-3	Naphthalene	1.0	U
85-01-8	Phenanthrene	1.0	U
129-00-0	Pyrene	1.0	U

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-DUP01

Lab Name : ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code : ACCURA Case No.:

SAS No. SDG No.: 3202

Matrix : (soil/water) WATER

Lab Sample Id: 3202-011

Sample wt/vol: 1000 (g/ml): ML

Lab File ID: 1B122702\B41132

Level : (low/med) LOW

Date Received: 12/18/02

% Moisture: Decanted: (Y/N) BLACK

Date Extracted: 12/20/02

Concentrated Extract Volume: 1000 (µ L)

Date Analyzed: 12/27/02

Injection Volume: 1.0 (µ L)

Dilution Factor: 1.0

GPC Cleanup (Y/N): CLEAR pH: N/A

Extraction : (Type) SW3520C

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
90-12-0	1-Methylnaphthalene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U
83-32-9	Acenaphthene	1.0	U
208-96-8	Acenaphthylene	1.0	U
120-12-7	Anthracene	1.0	U
56-55-3	Benzo(a)anthracene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U
191-24-2	Benzo(g,h,i)perylene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U
218-01-9	Chrysene	1.0	U
53-70-3	Dibenz(a,h)Anthracene	1.0	U
206-44-0	Fluoranthene	1.0	U
86-73-7	Fluorene	1.0	U
193-39-5	Indeno(1,2,3-c,d)Pyrene	1.0	U
91-20-3	Naphthalene	1.0	U
85-01-8	Phenanthrene	1.0	U
129-00-0	Pyrene	1.0	U

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 33S

Lab Name : ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code : ACCURA

Case No.:

SAS No.

SDG No.: 3202

Matrix : (soil/water) WATER

Lab Sample Id: 3202-001

Sample wt/vol: 1000 (g/ml): ML

Lab File ID: 1O010303\O000962

Level : (low/med) LOW

Date Received: 12/18/02

% Moisture:

Decanted: (Y/N) N

Date Extracted: 12/21/02

Concentrated Extract Volume: 2000 (µ L)

Date Analyzed: 01/03/03

Injection Volume: 1.0 (µ L)

Dilution Factor: 1.0

GPC Cleanup (Y/N): N

pH: N/A

Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	1.1	J

1D
SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW 33I

Lab Name : ACCURA ANALYTICAL LABORAT
Contract: N2640-WR77
Lab Code : ACCURA
Case No.:
SAS No.
SDG No.: 3202
Matrix : (soil/water) WATER
Lab Sample Id: 3202-002
Sample wt/vol: 1000 (g/ml): ML
Lab File ID: 1O010303\O000963
Level : (low/med) LOW
Date Received: 12/18/02
% Moisture:
Decanted: (Y/N) N
Date Extracted: 12/21/02
Concentrated Extract Volume: 2000 (μ L)
Date Analyzed: 01/03/03
Injection Volume: 1.0 (μ L)
Dilution Factor: 1.0
GPC Cleanup (Y/N): N
pH: N/A
Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	0.75	J

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 33D

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code : ACCURA Case No.: SAS No. SDG No.: 3202

Matrix : (soil/water) WATER Lab Sample Id: 3202-003

Sample wt/vol: 1000 (g/ml): ML Lab File ID: 1O010303\O000964

Level : (low/med) LOW Date Received: 12/18/02

% Moisture: Decanted: (Y/N) N Date Extracted: 12/21/02

Concentrated Extract Volume: 2000 (µ L) Date Analyzed: 01/03/03

Injection Volume: 1.0 (µ L) Dilution Factor: 1.0

GPC Cleanup (Y/N): N pH: N/A Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	1.7	U

1D
SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW 31S

Lab Name : ACCURA ANALYTICAL LABORAT
Contract: N2640-WR77
Lab Code : ACCURA
Case No.:
SAS No.
SDG No.: 3202
Matrix : (soil/water) WATER
Lab Sample Id: 3202-004
Sample wt/vol: 1000 (g/ml): ML
Lab File ID: 1O010303\O000965
Level : (low/med) LOW
Date Received: 12/18/02
% Moisture:
Decanted: (Y/N) N
Date Extracted: 12/21/02
Concentrated Extract Volume: 2000 (μ L)
Date Analyzed: 01/03/03
Injection Volume: 1.0 (μ L)
Dilution Factor: 1.0
GPC Cleanup (Y/N): N
pH: N/A
Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	1.7	U

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 31S MS

Lab Name : ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code : ACCURA

Case No.:

SAS No.

SDG No.: 3202

Matrix : (soil/water) WATER

Lab Sample Id: 3202-004 MS

Sample wt/vol: 500 (g/ml): ML

Lab File ID: 1O010303\O000966

Level : (low/med) LOW

Date Received: 12/18/02

% Moisture: Decanted: (Y/N) N

Date Extracted: 12/21/02

Concentrated Extract Volume: 1000 (µ L)

Date Analyzed: 01/03/03

Injection Volume: 1.0 (µ L)

Dilution Factor: 1.0

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

Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	2.9	

1D
SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW 31S MSD

Lab Name : ACCURA ANALYTICAL LABORAT
Contract: N2640-WR77
Lab Code : ACCURA
Case No.:
SAS No.
SDG No.: 3202
Matrix : (soil/water) WATER
Lab Sample Id: 3202-004 MSD
Sample wt/vol: 500 (g/ml): ML
Lab File ID: 1O010303\O000967
Level : (low/med) LOW
Date Received: 12/18/02
% Moisture:
Decanted: (Y/N) N
Date Extracted: 12/21/02
Concentrated Extract Volume: 1000 (μ L)
Date Analyzed: 01/03/03
Injection Volume: 1.0 (μ L)
Dilution Factor: 1.0
GPC Cleanup (Y/N): N
pH: N/A
Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	3.4	

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 31I

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code : ACCURA Case No.: SAS No. SDG No.: 3202

Matrix : (soil/water) WATER Lab Sample Id: 3202-005

Sample wt/vol: 1000 (g/ml): ML Lab File ID: 1O010303\O000968

Level : (low/med) LOW Date Received: 12/18/02

% Moisture: Decanted: (Y/N) N Date Extracted: 12/21/02

Concentrated Extract Volume: 2000 (μ L) Date Analyzed: 01/03/03

Injection Volume: 1.0 (μ L) Dilution Factor: 1.0

GPC Cleanup (Y/N): N pH: N/A Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	1.7	U

1D

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 32S

Lab Name : ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code : ACCURA

Case No.:

SAS No.

SDG No.: 3202

Matrix : (soil/water) WATER

Lab Sample Id: 3202-006

Sample wt/vol: 1000 (g/ml): ML

Lab File ID: 1O010303\O000969

Level : (low/med) LOW

Date Received: 12/18/02

% Moisture:

Decanted: (Y/N) N

Date Extracted: 12/21/02

Concentrated Extract Volume: 2000 (μ L)

Date Analyzed: 01/03/03

Injection Volume: 1.0 (μ L)

Dilution Factor: 1.0

GPC Cleanup (Y/N): N

pH: N/A

Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	1.7	U

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 32I

Lab Name : ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code : ACCURA

Case No.:

SAS No.

SDG No.: 3202

Matrix : (soil/water) WATER

Lab Sample Id: 3202-007

Sample wt/vol: 1000 (g/ml): ML

Lab File ID: 1O010303\O000971

Level : (low/med) LOW

Date Received: 12/18/02

% Moisture:

Decanted: (Y/N) N

Date Extracted: 12/21/02

Concentrated Extract Volume: 2000 (μ L)

Date Analyzed: 01/03/03

Injection Volume: 1.0 (μ L)

Dilution Factor: 1.0

GPC Cleanup (Y/N): N

pH: N/A

Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	1.7	U

1D

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 29S

Lab Name : ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code : ACCURA

Case No.:

SAS No.

SDG No.: 3202

Matrix : (soil/water) WATER

Lab Sample Id: 3202-008

Sample wt/vol: 1000 (g/ml): ML

Lab File ID: 1O010303\O000972

Level : (low/med) LOW

Date Received: 12/18/02

% Moisture: Decanted: (Y/N) N

Date Extracted: 12/21/02

Concentrated Extract Volume: 2000 (μ L)

Date Analyzed: 01/03/03

Injection Volume: 1.0 (μ L)

Dilution Factor: 1.0

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

Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	1.7	U

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 29I

Lab Name : ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code : ACCURA

Case No.:

SAS No.

SDG No.: 3202

Matrix : (soil/water) WATER

Lab Sample Id: 3202-009

Sample wt/vol: 1000 (g/ml): ML

Lab File ID: 1O010303\O000973

Level : (low/med) LOW

Date Received: 12/18/02

% Moisture:

Decanted: (Y/N) N

Date Extracted: 12/21/02

Concentrated Extract Volume: 2000 (μ L)

Date Analyzed: 01/03/03

Injection Volume: 1.0 (μ L)

Dilution Factor: 1.0

GPC Cleanup (Y/N): N

pH: N/A

Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	1.9	

1D
SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW 29D

Lab Name : ACCURA ANALYTICAL LABORAT
Contract: N2640-WR77
Lab Code : ACCURA
Case No.:
SAS No.
SDG No.: 3202
Matrix : (soil/water) WATER
Lab Sample Id: 3202-010
Sample wt/vol: 1000 (g/ml): ML
Lab File ID: 1O010303\O000974
Level : (low/med) LOW
Date Received: 12/18/02
% Moisture:
Decanted: (Y/N) N
Date Extracted: 12/21/02
Concentrated Extract Volume: 2000 (μ L)
Date Analyzed: 01/03/03
Injection Volume: 1.0 (μ L)
Dilution Factor: 1.0
GPC Cleanup (Y/N): N
pH: N/A
Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	1.7	U

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-DUP01

Lab Name : ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code : ACCURA

Case No.:

SAS No.

SDG No.: 3202

Matrix : (soil/water) WATER

Lab Sample Id: 3202-011

Sample wt/vol: 1000 (g/ml): ML

Lab File ID: 1O010303\O000975

Level : (low/med) LOW

Date Received: 12/18/02

% Moisture:

Decanted: (Y/N) N

Date Extracted: 12/21/02

Concentrated Extract Volume: 2000 (μ L)

Date Analyzed: 01/03/03

Injection Volume: 1.0 (μ L)

Dilution Factor: 1.0

GPC Cleanup (Y/N): N

pH: N/A

Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	1.7	U

1 E
PESTICIDE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW 33S

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code : ACCURA Case No.: _____ SAS No. _____ SDG No.: 3202

Matrix : WATER Lab Sample Id: 3202-001

Sample wt/vol: 35 (g/ml): ML Lab File ID: _____

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 12/18/02

Extraction : (Type) EXT_SW8011 Date Extracted: 12/23/02

Concentrated Extract Volume: 2000 (µ L) Date Analyzed: 12/23/02

Injection Volume: _____ (µ L) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

106-93-4	Ethylene Dibromide	0.020	U

1 E
PESTICIDE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW 33I

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77
Lab Code : ACCURA Case No.: _____ SAS No. _____ SDG No.: 3202
Matrix : WATER Lab Sample Id: 3202-002
Sample wt/vol: 35 (g/ml): ML Lab File ID: _____
% Moisture: _____ Decanted: (Y/N) _____ Date Received: 12/18/02
Extraction : (Type) EXT_SW8011 Date Extracted: 12/23/02
Concentrated Extract Volume: 2000 (µ L) Date Analyzed: 12/23/02
Injection Volume: _____ (µ L) Dilution Factor: 1.0
GPC Cleanup (Y/N): _____ pH: _____ Sulfur Cleanup (Y/N): _____

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

106-93-4	Ethylene Dibromide	0.020	U

1 E
PESTICIDE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW 33D

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77
Lab Code : ACCURA Case No.: _____ SAS No. _____ SDG No.: 3202
Matrix : WATER Lab Sample Id: 3202-003
Sample wt/vol: 35 (g/ml): ML Lab File ID: _____
% Moisture: _____ Decanted: (Y/N) _____ Date Received: 12/18/02
Extraction : (Type) EXT_SW8011 Date Extracted: 12/23/02
Concentrated Extract Volume: 2000 (µ L) Date Analyzed: 12/24/02
Injection Volume: _____ (µ L) Dilution Factor: 1.0
GPC Cleanup (Y/N): _____ pH: _____ Sulfur Cleanup (Y/N): _____

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

106-93-4	Ethylene Dibromide	0.020	U

1 E
PESTICIDE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW 31S

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77
Lab Code : ACCURA Case No.: _____ SAS No. _____ SDG No.: 3202
Matrix : WATER Lab Sample Id: 3202-004
Sample wt/vol: 35 (g/ml): ML Lab File ID: _____
% Moisture: _____ Decanted: (Y/N) _____ Date Received: 12/18/02
Extraction : (Type) EXT_SW8011 Date Extracted: 12/23/02
Concentrated Extract Volume: 2000 (µ L) Date Analyzed: 12/24/02
Injection Volume: _____ (µ L) Dilution Factor: 1.0
GPC Cleanup (Y/N): _____ pH: _____ Sulfur Cleanup (Y/N): _____

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

106-93-4	Ethylene Dibromide	0.020	U

1 E
PESTICIDE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW 31I

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77
Lab Code : ACCURA Case No.: _____ SAS No. _____ SDG No.: 3202
Matrix : WATER Lab Sample Id: 3202-005
Sample wt/vol: 35 (g/ml): ML Lab File ID: _____
% Moisture: _____ Decanted: (Y/N) _____ Date Received: 12/18/02
Extraction : (Type) EXT_SW8011 Date Extracted: 12/23/02
Concentrated Extract Volume: 2000 (µ L) Date Analyzed: 12/24/02
Injection Volume: _____ (µ L) Dilution Factor: 1.0
GPC Cleanup (Y/N): _____ pH: _____ Sulfur Cleanup (Y/N): _____

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

106-93-4	Ethylene Dibromide	0.020	U

1 E
PESTICIDE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW 32S

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77
Lab Code : ACCURA Case No.: _____ SAS No. _____ SDG No.: 3202
Matrix : WATER Lab Sample Id: 3202-006
Sample wt/vol: 35 (g/ml): ML Lab File ID: _____
% Moisture: _____ Decanted: (Y/N) _____ Date Received: 12/18/02
Extraction : (Type) EXT_SW8011 Date Extracted: 12/23/02
Concentrated Extract Volume: 2000 (µ L) Date Analyzed: 12/24/02
Injection Volume: _____ (µ L) Dilution Factor: 1.0
GPC Cleanup (Y/N): _____ pH: _____ Sulfur Cleanup (Y/N): _____

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

106-93-4	Ethylene Dibromide	0.020	U

1 E
PESTICIDE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW 32I

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code : ACCURA Case No.: _____ SAS No. _____ SDG No.: 3202

Matrix : WATER Lab Sample Id: 3202-007

Sample wt/vol: 35 (g/ml): ML Lab File ID: _____

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 12/18/02

Extraction : (Type) EXT_SW8011 Date Extracted: 12/23/02

Concentrated Extract Volume: 2000 (µ L) Date Analyzed: 12/24/02

Injection Volume: _____ (µ L) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

106-93-4	Ethylene Dibromide	0.020	U

1 E
PESTICIDE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW 29S

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code : ACCURA Case No.: _____ SAS No. _____ SDG No.: 3202

Matrix : WATER Lab Sample Id: 3202-008

Sample wt/vol: 35 (g/ml): ML Lab File ID: _____

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 12/18/02

Extraction : (Type) EXT_SW8011 Date Extracted: 12/23/02

Concentrated Extract Volume: 2000 (µ L) Date Analyzed: 12/24/02

Injection Volume: _____ (µ L) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

106-93-4	Ethylene Dibromide	0.020	U

1 E
PESTICIDE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW 29I

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77
Lab Code : ACCURA Case No.: _____ SAS No. _____ SDG No.: 3202
Matrix : WATER Lab Sample Id: 3202-009
Sample wt/vol: 35 (g/ml): ML Lab File ID: _____
% Moisture: _____ Decanted: (Y/N) _____ Date Received: 12/18/02
Extraction : (Type) EXT_SW8011 Date Extracted: 12/23/02
Concentrated Extract Volume: 2000 (µ L) Date Analyzed: 12/24/02
Injection Volume: _____ (µ L) Dilution Factor: 1.0
GPC Cleanup (Y/N): _____ pH: _____ Sulfur Cleanup (Y/N): _____

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

106-93-4	Ethylene Dibromide	0.020	U

1 E

PESTICIDE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 29D

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code : ACCURA Case No.: _____ SAS No. _____ SDG No.: 3202

Matrix : WATER Lab Sample Id: 3202-010

Sample wt/vol: 35 (g/ml): ML Lab File ID: _____

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 12/18/02

Extraction : (Type) EXT_SW8011 Date Extracted: 12/23/02

Concentrated Extract Volume: 2000 (µ L) Date Analyzed: 12/24/02

Injection Volume: _____ (µ L) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

106-93-4	Ethylene Dibromide	0.020	U

1 E
PESTICIDE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-DUP01

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77
Lab Code : ACCURA Case No.: _____ SAS No. _____ SDG No.: 3202
Matrix : WATER Lab Sample Id: 3202-011
Sample wt/vol: 35 (g/ml): ML Lab File ID: _____
% Moisture: _____ Decanted: (Y/N) _____ Date Received: 12/18/02
Extraction : (Type) EXT_SW8011 Date Extracted: 12/23/02
Concentrated Extract Volume: 2000 (µ L) Date Analyzed: 12/24/02
Injection Volume: _____ (µ L) Dilution Factor: 1.0
GPC Cleanup (Y/N): _____ pH: _____ Sulfur Cleanup (Y/N): _____

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

106-93-4	Ethylene Dibromide	0.020	U

USEPA - CLP

1A- IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 33S

Lab Name: ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code: ACCURA Case No.: _____ NRAS No. _____ SDG No.: 3202

Matrix (soil/water): WATER Lab Sample ID: 3202-001

Level (low/med): LOW Date Received: 12/18/2002

% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	10	U		P

Color Before _____ Clarity Before _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

1A- IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
PEN-19-MW 33I

Lab Name: ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code: ACCURA Case No.: _____ NRAS No. _____ SDG No.: 3202

Matrix (soil/water): WATER Lab Sample ID: 3202-002

Level (low/med): LOW Date Received: 12/18/2002

% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	10	U		P

Color Before _____ Clarity Before _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

1A- IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 33D

Lab Name: ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code: ACCURA Case No.: _____ NRAS No. _____ SDG No.: 3202

Matrix (soil/water): WATER Lab Sample ID: 3202-003

Level (low/med): LOW Date Received: 12/18/2002

% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	8.8	B		P

Color Before _____ Clarity Before _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

1A- IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
PEN-19-MW 31S

Lab Name: ACCURA ANALYTICAL LABORAT
Contract: N2640-WR77
Lab Code: ACCURA
Case No.: _____
NRAS No. _____
SDG No.: 3202
Matrix (soil/water): WATER
Lab Sample ID: 3202-004
Level (low/med): LOW
Date Received: 12/18/2002
% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	10	U		P

Color Before _____ Clarity Before _____ Texture: _____
Color After: _____ Clarity After: _____ Artifacts: _____
Comments: _____

USEPA - CLP

1A- IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 31I

Lab Name: ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code: ACCURA Case No.: _____ NRAS No. _____ SDG No.: 3202

Matrix (soil/water): WATER Lab Sample ID: 3202-005

Level (low/med): LOW Date Received: 12/18/2002

% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	10	U		P

Color Before _____ Clarity Before _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

1A- IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 32S

Lab Name: ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code: ACCURA Case No.: _____ NRAS No. _____ SDG No.: 3202

Matrix (soil/water): WATER Lab Sample ID: 3202-006

Level (low/med): LOW Date Received: 12/18/2002

% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	10	U		P

Color Before _____ Clarity Before _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

1A- IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 32I

Lab Name: ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code: ACCURA Case No.: _____ NRAS No. _____ SDG No.: 3202

Matrix (soil/water): WATER Lab Sample ID: 3202-007

Level (low/med): LOW Date Received: 12/18/2002

% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	10	U		P

Color Before _____ Clarity Before _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

1A- IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 29S

Lab Name: ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code: ACCURA Case No.: _____ NRAS No. _____ SDG No.: 3202

Matrix (soil/water): WATER Lab Sample ID: 3202-008

Level (low/med): LOW Date Received: 12/18/2002

% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	10	U		P

Color Before _____ Clarity Before _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

1A- IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 29I

Lab Name: ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code: ACCURA Case No.: _____ NRAS No. _____ SDG No.: 3202

Matrix (soil/water): WATER Lab Sample ID: 3202-009

Level (low/med): LOW Date Received: 12/18/2002

% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	10	U		P

Color Before _____ Clarity Before _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

1A- IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW 29D

Lab Name: ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code: ACCURA Case No.: _____ NRAS No. _____ SDG No.: 3202

Matrix (soil/water): WATER Lab Sample ID: 3202-010

Level (low/med): LOW Date Received: 12/18/2002

% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	10	U		P

Color Before _____ Clarity Before _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

1A- IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-DUP01

Lab Name: ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code: ACCURA Case No.: _____ NRAS No. _____ SDG No.: 3202

Matrix (soil/water): WATER Lab Sample ID: 3202-011

Level (low/med): LOW Date Received: 12/18/2002

% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	10	U		P

Color Before _____ Clarity Before _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

Tetra Tech NUS, Inc. **Internal Correspondence**

TO: **Mr. Gerald Walker** **DATE:** **January 27, 2003**

FROM: **Michael T. Akers** **cc:** **File**

SUBJECT: **Organic and Inorganic Data Validation – VOCs, PAHs, TRPH, Total Lead**
CTO273 – NAS Pensacola
SDG 3216

SAMPLES: **14/Aqueous**

PEN-19-DUP02	**PEN-19-MW11**	**PEN-19-MW22**	**PEN-19-MW24S**
PEN-19-MW25S	**PEN-19-MW26S**	**PEN-19-MW28I**	**PEN-19-MW28S**
PEN-19-MW30I	**PEN-19-MW30S**	**PEN-19MW4**	**PEN-19-MW6**
PEN-19-MW8	**PEN-19-RB121902**		

OVERVIEW

The sample set for CTO273, SDG 3216; Naval Air Station Pensacola, Pensacola, Florida consists of fourteen (14) aqueous environmental samples. The environmental samples were analyzed for Volatile Organic Compounds (VOCs), Polycylic Aromatic Hydrocarbons (PAHs), Total Recoverable Petroleum Hydrocarbons (TRPH), and Total Lead. One duplicate pair was collected and analyzed with this SDG: PEN-19-DUP02 / PEN-19-MW22.

The samples were collected by Tetra Tech NUS on December 18th and 19th, 2002 and analyzed by Accura Analytical Laboratories. All analyses were performed in accordance with Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria and analyzed according to SW-846 Method 8260B (VOCs), SW-846 8270C SIM (PAHs), SW-846 6010B (Total Pb), and FDEP FL-PRO (TRPH) analytical and reporting protocol. The data in this SDG was validated with regard to the following parameters:

* • Data Completeness
* • Holding Times
  • Laboratory method/field quality control blank results
* • Detection Limits

The symbol (*) indicates that all quality control criteria were met for this parameter.

VOC Fraction

Laboratory Blank Analysis

Affected samples: PEN-19-MW30S and PEN-19-RB121902

Analyte	Maximum Concentration (ug/L)	Action Level (ug/L)
Methylene Chloride	0.32 J	1.60

The action level is set at 5x the maximum concentration found in the associated blanks. Any detections between the IDL and the AL are qualified "U" due to blank contamination.

All other quality control criteria were met for this fraction.

PAH Fraction

All quality control criteria were met for this fraction.

TRPH Fraction

All quality control criteria were met for this fraction.

Metals Fraction

All quality control criteria were met for this fraction.

Field Duplicate Analysis

No analytes were detected in the field duplicate pair PEN-19-DUP02 / PEN-19-MW22.

Executive Summary

Laboratory performance: Methylene Chloride was qualified as non-detected in sample PEN-19-RB121902 and PEN-19-MW30S due to laboratory method blank contamination. In addition, all analytes were reported with incorrect detection limits, which were corrected during the validation process.

Other factors affecting data quality: None.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (February, 1996), and the NFESC guidelines "Navy Installation Restoration Chemical Data Quality Manual" (September, 1999). The text of the report has been formulated to address only those problems affecting data quality.

"I attest that the data referenced herein was validated according to the agreed upon validation criteria as specified in the NFESC Guidelines and the Quality Assurance Project Plan (QAPP)."

Michael T. Akers

Project Chemist
Tetra Tech NUS, Inc.

PROJ_NO: 2640

SDG: 3216 MEDIA: WATER DATA FRACTION: OV

nsample	PEN-19-DUP02
samp_date	12/19/2002
lab_id	3216-015
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	PEN-19-MW22

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1.0	U	
1,1,2,2-TETRACHLOROETHANE	1.0	U	
1,1,2-TRICHLOROETHANE	1.0	U	
1,1-DICHLOROETHANE	1.0	U	
1,1-DICHLOROETHENE	1.0	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROBENZENE	1.0	U	
1,2-DICHLOROETHANE	1.0	U	
1,2-DICHLOROPROPANE	1.0	U	
1,3-DICHLOROBENZENE	1.0	U	
1,4-DICHLOROBENZENE	1.0	U	
2-CHLOROETHYL VINYL ETHER	1.0	U	
BENZENE	1.0	U	
BROMODICHLOROMETHANE	1.0	U	
BROMOFORM	1.0	U	
BROMOMETHANE	1.0	U	
CARBON TETRACHLORIDE	1.0	U	
CHLOROBENZENE	1.0	U	
CHLORODIBROMOMETHANE	1.0	U	
CHLOROETHANE	1.0	U	
CHLOROFORM	1.0	U	
CHLOROMETHANE	1.0	U	
CIS-1,2-DICHLOROETHENE	1.0	U	
CIS-1,3-DICHLOROPROPENE	1.0	U	
ETHYLBENZENE	1.0	U	
METHYL TERT-BUTYL ETHER	1.0	U	
METHYLENE CHLORIDE	1.0	U	
TETRACHLOROETHENE	1.0	U	
TOLUENE	1.0	U	
TOTAL XYLENES	3.0	U	

nsample	PEN-19-DUP02
samp_date	12/19/2002
lab_id	3216-015
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	PEN-19-MW22

Parameter	Result	Val Qual	Qual Code
TRANS-1,2-DICHLOROETHENE	1.0	U	
TRANS-1,3-DICHLOROPROPENE	1.0	U	
TRICHLOROETHENE	1.0	U	
VINYL CHLORIDE	1.0	U	

nsample	PEN-19-MW11
samp_date	12/18/2002
lab_id	3216-010
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	500	U	
1,1,2,2-TETRACHLOROETHANE	500	U	
1,1,2-TRICHLOROETHANE	500	U	
1,1-DICHLOROETHANE	500	U	
1,1-DICHLOROETHENE	500	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROBENZENE	500	U	
1,2-DICHLOROETHANE	500	U	
1,2-DICHLOROPROPANE	500	U	
1,3-DICHLOROBENZENE	500	U	
1,4-DICHLOROBENZENE	500	U	
2-CHLOROETHYL VINYL ETHER	500	U	
BENZENE	430	J	P
BROMODICHLOROMETHANE	500	U	
BROMOFORM	500	U	
BROMOMETHANE	500	U	
CARBON TETRACHLORIDE	500	U	
CHLOROBENZENE	500	U	
CHLORODIBROMOMETHANE	500	U	
CHLOROETHANE	500	U	
CHLOROFORM	500	U	
CHLOROMETHANE	500	U	
CIS-1,2-DICHLOROETHENE	500	U	
CIS-1,3-DICHLOROPROPENE	500	U	
ETHYLBENZENE	520		
METHYL TERT-BUTYL ETHER	500	U	
METHYLENE CHLORIDE	500	U	
TETRACHLOROETHENE	500	U	
TOLUENE	5800		
TOTAL XYLENES	5500		

PROJ_NO: 2640

SDG: 3216 MEDIA: WATER DATA FRACTION: OV

nsample	PEN-19-MW11
samp_date	12/18/2002
lab_id	3216-010
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TRANS-1,2-DICHLOROETHENE	500	U	
TRANS-1,3-DICHLOROPROPENE	500	U	
TRICHLOROETHENE	500	U	
VINYL CHLORIDE	500	U	

nsample	PEN-19-MW22
samp_date	12/18/2002
lab_id	3216-014
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1.0	U	
1,1,2,2-TETRACHLOROETHANE	1.0	U	
1,1,2-TRICHLOROETHANE	1.0	U	
1,1-DICHLOROETHANE	1.0	U	
1,1-DICHLOROETHENE	1.0	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROBENZENE	1.0	U	
1,2-DICHLOROETHANE	1.0	U	
1,2-DICHLOROPROPANE	1.0	U	
1,3-DICHLOROBENZENE	1.0	U	
1,4-DICHLOROBENZENE	1.0	U	
2-CHLOROETHYL VINYL ETHER	1.0	U	
BENZENE	1.0	U	
BROMODICHLOROMETHANE	1.0	U	
BROMOFORM	1.0	U	
BROMOMETHANE	1.0	U	
CARBON TETRACHLORIDE	1.0	U	
CHLOROBENZENE	1.0	U	
CHLORODIBROMOMETHANE	1.0	U	
CHLOROETHANE	1.0	U	
CHLOROFORM	1.0	U	
CHLOROMETHANE	1.0	U	
CIS-1,2-DICHLOROETHENE	1.0	U	
CIS-1,3-DICHLOROPROPENE	1.0	U	
ETHYLBENZENE	1.0	U	
METHYL TERT-BUTYL ETHER	1.0	U	
METHYLENE CHLORIDE	1.0	U	
TETRACHLOROETHENE	1.0	U	
TOLUENE	1.0	U	
TOTAL XYLENES	3.0	U	

nsample	PEN-19-MW22
samp_date	12/18/2002
lab_id	3216-014
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TRANS-1,2-DICHLOROETHENE	1.0	U	
TRANS-1,3-DICHLOROPROPENE	1.0	U	
TRICHLOROETHENE	1.0	U	
VINYL CHLORIDE	1.0	U	

PROJ_NO: 2640

SDG: 3216 MEDIA: WATER DATA FRACTION: OV

nsample	PEN-19-MW24S
samp_date	12/18/2002
lab_id	3216-007
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1.0	U	
1,1,2,2-TETRACHLOROETHANE	1.0	U	
1,1,2-TRICHLOROETHANE	1.0	U	
1,1-DICHLOROETHANE	1.0	U	
1,1-DICHLOROETHENE	1.0	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROBENZENE	1.0	U	
1,2-DICHLOROETHANE	1.0	U	
1,2-DICHLOROPROPANE	1.0	U	
1,3-DICHLOROBENZENE	1.0	U	
1,4-DICHLOROBENZENE	1.0	U	
2-CHLOROETHYL VINYL ETHER	1.0	U	
BENZENE	1.0	U	
BROMODICHLOROMETHANE	1.0	U	
BROMOFORM	1.0	U	
BROMOMETHANE	1.0	U	
CARBON TETRACHLORIDE	1.0	U	
CHLOROBENZENE	1.0	U	
CHLORODIBROMOMETHANE	1.0	U	
CHLOROETHANE	1.0	U	
CHLOROFORM	1.0	U	
CHLOROMETHANE	1.0	U	
CIS-1,2-DICHLOROETHENE	1.0	U	
CIS-1,3-DICHLOROPROPENE	1.0	U	
ETHYLBENZENE	1.0	U	
METHYL TERT-BUTYL ETHER	1.0	U	
METHYLENE CHLORIDE	1.0	U	
TETRACHLOROETHENE	1.0	U	
TOLUENE	1.0	U	
TOTAL XYLENES	3.0	U	

nsample	PEN-19-MW24S
samp_date	12/18/2002
lab_id	3216-007
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TRANS-1,2-DICHLOROETHENE	1.0	U	
TRANS-1,3-DICHLOROPROPENE	1.0	U	
TRICHLOROETHENE	1.0	U	
VINYL CHLORIDE	1.0	U	

nsample	PEN-19-MW25S
samp_date	12/18/2002
lab_id	3216-008
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1.0	U	
1,1,2,2-TETRACHLOROETHANE	1.0	U	
1,1,2-TRICHLOROETHANE	1.0	U	
1,1-DICHLOROETHANE	1.0	U	
1,1-DICHLOROETHENE	1.0	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROBENZENE	1.0	U	
1,2-DICHLOROETHANE	1.0	U	
1,2-DICHLOROPROPANE	1.0	U	
1,3-DICHLOROBENZENE	1.0	U	
1,4-DICHLOROBENZENE	1.0	U	
2-CHLOROETHYL VINYL ETHER	1.0	U	
BENZENE	1.0	U	
BROMODICHLOROMETHANE	1.0	U	
BROMOFORM	1.0	U	
BROMOMETHANE	1.0	U	
CARBON TETRACHLORIDE	1.0	U	
CHLOROBENZENE	1.0	U	
CHLORODIBROMOMETHANE	1.0	U	
CHLOROETHANE	1.0	U	
CHLOROFORM	1.0	U	
CHLOROMETHANE	1.0	U	
CIS-1,2-DICHLOROETHENE	1.0	U	
CIS-1,3-DICHLOROPROPENE	1.0	U	
ETHYLBENZENE	1.0	U	
METHYL TERT-BUTYL ETHER	1.0	U	
METHYLENE CHLORIDE	1.0	U	
TETRACHLOROETHENE	1.0	U	
TOLUENE	1.0	U	
TOTAL XYLENES	3.0	U	

PROJ_NO: 2640

SDG: 3216 MEDIA: WATER DATA FRACTION: OV

nsample	PEN-19-MW25S
samp_date	12/18/2002
lab_id	3216-008
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TRANS-1,2-DICHLOROETHENE	1.0	U	
TRANS-1,3-DICHLOROPROPENE	1.0	U	
TRICHLOROETHENE	1.0	U	
VINYL CHLORIDE	1.0	U	

nsample	PEN-19-MW26S
samp_date	12/18/2002
lab_id	3216-009
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1.0	U	
1,1,2,2-TETRACHLOROETHANE	1.0	U	
1,1,2-TRICHLOROETHANE	1.0	U	
1,1-DICHLOROETHANE	1.0	U	
1,1-DICHLOROETHENE	1.0	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROBENZENE	1.0	U	
1,2-DICHLOROETHANE	1.0	U	
1,2-DICHLOROPROPANE	1.0	U	
1,3-DICHLOROBENZENE	1.0	U	
1,4-DICHLOROBENZENE	1.0	U	
2-CHLOROETHYL VINYL ETHER	1.0	U	
BENZENE	2.7		
BROMODICHLOROMETHANE	1.0	U	
BROMOFORM	1.0	U	
BROMOMETHANE	1.0	U	
CARBON TETRACHLORIDE	1.0	U	
CHLOROBENZENE	1.0	U	
CHLORODIBROMOMETHANE	1.0	U	
CHLOROETHANE	1.0	U	
CHLOROFORM	1.0	U	
CHLOROMETHANE	1.0	U	
CIS-1,2-DICHLOROETHENE	1.0	U	
CIS-1,3-DICHLOROPROPENE	1.0	U	
ETHYLBENZENE	1.0	U	
METHYL TERT-BUTYL ETHER	1.0	U	
METHYLENE CHLORIDE	1.0	U	
TETRACHLOROETHENE	1.0	U	
TOLUENE	1.0	U	
TOTAL XYLENES	3.0	U	

nsample	PEN-19-MW26S
samp_date	12/18/2002
lab_id	3216-009
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TRANS-1,2-DICHLOROETHENE	1.0	U	
TRANS-1,3-DICHLOROPROPENE	1.0	U	
TRICHLOROETHENE	1.0	U	
VINYL CHLORIDE	1.0	U	

PROJ_NO: 2640

SDG: 3216 MEDIA: WATER DATA FRACTION: OV

nsample	PEN-19-MW28I
samp_date	12/18/2002
lab_id	3216-002 DL
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	50	U	
1,1,2,2-TETRACHLOROETHANE	50	U	
1,1,2-TRICHLOROETHANE	50	U	
1,1-DICHLOROETHANE	50	U	
1,1-DICHLOROETHENE	50	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROBENZENE	50	U	
1,2-DICHLOROETHANE	50	U	
1,2-DICHLOROPROPANE	50	U	
1,3-DICHLOROBENZENE	50	U	
1,4-DICHLOROBENZENE	50	U	
2-CHLOROETHYL VINYL ETHER	50	U	
BENZENE	590		
BROMODICHLOROMETHANE	50	U	
BROMOFORM	50	U	
BROMOMETHANE	50	U	
CARBON TETRACHLORIDE	50	U	
CHLOROBENZENE	50	U	
CHLORODIBROMOMETHANE	50	U	
CHLOROETHANE	50	U	
CHLOROFORM	50	U	
CHLOROMETHANE	50	U	
CIS-1,2-DICHLOROETHENE	50	U	
CIS-1,3-DICHLOROPROPENE	50	U	
ETHYLBENZENE	91		
METHYL TERT-BUTYL ETHER	50	U	
METHYLENE CHLORIDE	50	U	
TETRACHLOROETHENE	50	U	
TOLUENE	50	U	
TOTAL XYLENES	730		

nsample	PEN-19-MW28I
samp_date	12/18/2002
lab_id	3216-002 DL
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TRANS-1,2-DICHLOROETHENE	50	U	
TRANS-1,3-DICHLOROPROPENE	50	U	
TRICHLOROETHENE	50	U	
VINYL CHLORIDE	50	U	

nsample	PEN-19-MW28S
samp_date	12/18/2002
lab_id	3216-001
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1.0	U	
1,1,2,2-TETRACHLOROETHANE	1.0	U	
1,1,2-TRICHLOROETHANE	1.0	U	
1,1-DICHLOROETHANE	1.0	U	
1,1-DICHLOROETHENE	1.0	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROBENZENE	1.0	U	
1,2-DICHLOROETHANE	1.0	U	
1,2-DICHLOROPROPANE	1.0	U	
1,3-DICHLOROBENZENE	1.0	U	
1,4-DICHLOROBENZENE	1.0	U	
2-CHLOROETHYL VINYL ETHER	1.0	U	
BENZENE	1.1		
BROMODICHLOROMETHANE	1.0	U	
BROMOFORM	1.0	U	
BROMOMETHANE	1.0	U	
CARBON TETRACHLORIDE	1.0	U	
CHLOROBENZENE	1.0	U	
CHLORODIBROMOMETHANE	1.0	U	
CHLOROETHANE	1.0	U	
CHLOROFORM	1.0	U	
CHLOROMETHANE	1.0	U	
CIS-1,2-DICHLOROETHENE	1.0	U	
CIS-1,3-DICHLOROPROPENE	1.0	U	
ETHYLBENZENE	1.0	U	
METHYL TERT-BUTYL ETHER	1.0	U	
METHYLENE CHLORIDE	1.0	U	
TETRACHLOROETHENE	1.0	U	
TOLUENE	0.53	J	P
TOTAL XYLENES	3.0	U	

PROJ_NO: 2640

SDG: 3216 MEDIA: WATER DATA FRACTION: OV

nsample	PEN-19-MW28S
samp_date	12/18/2002
lab_id	3216-001
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TRANS-1,2-DICHLOROETHENE	1.0	U	
TRANS-1,3-DICHLOROPROPENE	1.0	U	
TRICHLOROETHENE	1.0	U	
VINYL CHLORIDE	1.0	U	

nsample	PEN-19-MW30I
samp_date	12/18/2002
lab_id	3216-006
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1.0	U	
1,1,2,2-TETRACHLOROETHANE	1.0	U	
1,1,2-TRICHLOROETHANE	1.0	U	
1,1-DICHLOROETHANE	1.0	U	
1,1-DICHLOROETHENE	1.0	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROBENZENE	1.0	U	
1,2-DICHLOROETHANE	1.0	U	
1,2-DICHLOROPROPANE	1.0	U	
1,3-DICHLOROBENZENE	1.0	U	
1,4-DICHLOROBENZENE	1.0	U	
2-CHLOROETHYL VINYL ETHER	1.0	U	
BENZENE	1.0	U	
BROMODICHLOROMETHANE	1.0	U	
BROMOFORM	1.0	U	
BROMOMETHANE	1.0	U	
CARBON TETRACHLORIDE	1.0	U	
CHLOROBENZENE	1.0	U	
CHLORODIBROMOMETHANE	1.0	U	
CHLOROETHANE	1.0	U	
CHLOROFORM	1.0	U	
CHLOROMETHANE	1.0	U	
CIS-1,2-DICHLOROETHENE	1.0	U	
CIS-1,3-DICHLOROPROPENE	1.0	U	
ETHYLBENZENE	1.0	U	
METHYL TERT-BUTYL ETHER	1.0	U	
METHYLENE CHLORIDE	1.0	U	
TETRACHLOROETHENE	1.0	U	
TOLUENE	1.0	U	
TOTAL XYLENES	3.0	U	

nsample	PEN-19-MW30I
samp_date	12/18/2002
lab_id	3216-006
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TRANS-1,2-DICHLOROETHENE	1.0	U	
TRANS-1,3-DICHLOROPROPENE	1.0	U	
TRICHLOROETHENE	1.0	U	
VINYL CHLORIDE	1.0	U	

PROJ_NO: 2640

SDG: 3216 MEDIA: WATER DATA FRACTION: OV

nsample	PEN-19-MW30S
samp_date	12/18/2002
lab_id	3216-005
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1.0	U	
1,1,2,2-TETRACHLOROETHANE	1.0	U	
1,1,2-TRICHLOROETHANE	1.0	U	
1,1-DICHLOROETHANE	1.0	U	
1,1-DICHLOROETHENE	1.0	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROBENZENE	1.0	U	
1,2-DICHLOROETHANE	1.0	U	
1,2-DICHLOROPROPANE	1.0	U	
1,3-DICHLOROBENZENE	1.0	U	
1,4-DICHLOROBENZENE	1.0	U	
2-CHLOROETHYL VINYL ETHER	1.0	U	
BENZENE	1.0	U	
BROMODICHLOROMETHANE	1.0	U	
BROMOFORM	1.0	U	
BROMOMETHANE	1.0	U	
CARBON TETRACHLORIDE	1.0	U	
CHLOROBENZENE	1.0	U	
CHLORODIBROMOMETHANE	1.0	U	
CHLOROETHANE	1.0	U	
CHLOROFORM	1.0	U	
CHLOROMETHANE	1.0	U	
CIS-1,2-DICHLOROETHENE	1.0	U	
CIS-1,3-DICHLOROPROPENE	1.0	U	
ETHYLBENZENE	1.0	U	
METHYL TERT-BUTYL ETHER	1.0	U	
METHYLENE CHLORIDE	0.42	U	A
TETRACHLOROETHENE	1.0	U	
TOLUENE	1.0	U	
TOTAL XYLENES	3.0	U	

nsample	PEN-19-MW30S
samp_date	12/18/2002
lab_id	3216-005
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TRANS-1,2-DICHLOROETHENE	1.0	U	
TRANS-1,3-DICHLOROPROPENE	1.0	U	
TRICHLOROETHENE	1.0	U	
VINYL CHLORIDE	1.0	U	

nsample	PEN-19-MW4
samp_date	12/18/2002
lab_id	3216-011 DL
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	50	U	
1,1,2,2-TETRACHLOROETHANE	50	U	
1,1,2-TRICHLOROETHANE	50	U	
1,1-DICHLOROETHANE	50	U	
1,1-DICHLOROETHENE	50	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROBENZENE	50	U	
1,2-DICHLOROETHANE	50	U	
1,2-DICHLOROPROPANE	50	U	
1,3-DICHLOROBENZENE	50	U	
1,4-DICHLOROBENZENE	50	U	
2-CHLOROETHYL VINYL ETHER	50	U	
BENZENE	79		
BROMODICHLOROMETHANE	50	U	
BROMOFORM	50	U	
BROMOMETHANE	50	U	
CARBON TETRACHLORIDE	50	U	
CHLOROBENZENE	50	U	
CHLORODIBROMOMETHANE	50	U	
CHLOROETHANE	50	U	
CHLOROFORM	50	U	
CHLOROMETHANE	50	U	
CIS-1,2-DICHLOROETHENE	50	U	
CIS-1,3-DICHLOROPROPENE	50	U	
ETHYLBENZENE	360		
METHYL TERT-BUTYL ETHER	50	U	
METHYLENE CHLORIDE	50	U	
TETRACHLOROETHENE	50	U	
TOLUENE	2400		
TOTAL XYLENES	3500		

PROJ_NO: 2640

SDG: 3216 MEDIA: WATER DATA FRACTION: OV

nsample	PEN-19-MW4
samp_date	12/18/2002
lab_id	3216-011 DL
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TRANS-1,2-DICHLOROETHENE	50	U	
TRANS-1,3-DICHLOROPROPENE	50	U	
TRICHLOROETHENE	50	U	
VINYL CHLORIDE	50	U	

nsample	PEN-19-MW6
samp_date	12/18/2002
lab_id	3216-012
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1.0	U	
1,1,2,2-TETRACHLOROETHANE	1.0	U	
1,1,2-TRICHLOROETHANE	1.0	U	
1,1-DICHLOROETHANE	1.0	U	
1,1-DICHLOROETHENE	1.0	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROBENZENE	1.0	U	
1,2-DICHLOROETHANE	1.0	U	
1,2-DICHLOROPROPANE	1.0	U	
1,3-DICHLOROBENZENE	1.0	U	
1,4-DICHLOROBENZENE	1.0	U	
2-CHLOROETHYL VINYL ETHER	1.0	U	
BENZENE	4		
BROMODICHLOROMETHANE	1.0	U	
BROMOFORM	1.0	U	
BROMOMETHANE	1.0	U	
CARBON TETRACHLORIDE	1.0	U	
CHLOROBENZENE	1.0	U	
CHLORODIBROMOMETHANE	1.0	U	
CHLOROETHANE	1.0	U	
CHLOROFORM	1.0	U	
CHLOROMETHANE	1.0	U	
CIS-1,2-DICHLOROETHENE	1.0	U	
CIS-1,3-DICHLOROPROPENE	1.0	U	
ETHYLBENZENE	1.5		
METHYL TERT-BUTYL ETHER	1.0	U	
METHYLENE CHLORIDE	1.0	U	
TETRACHLOROETHENE	1.0	U	
TOLUENE	1.0	U	
TOTAL XYLENES	9.3		

nsample	PEN-19-MW6
samp_date	12/18/2002
lab_id	3216-012
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TRANS-1,2-DICHLOROETHENE	1.0	U	
TRANS-1,3-DICHLOROPROPENE	1.0	U	
TRICHLOROETHENE	1.0	U	
VINYL CHLORIDE	1.0	U	

PROJ_NO: 2640

SDG: 3216 MEDIA: WATER DATA FRACTION: OV

nsample	PEN-19-MW8
samp_date	12/18/2002
lab_id	3216-013 DL
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	10	U	
1,1,2,2-TETRACHLOROETHANE	10	U	
1,1,2-TRICHLOROETHANE	10	U	
1,1-DICHLOROETHANE	10	U	
1,1-DICHLOROETHENE	10	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROBENZENE	10	U	
1,2-DICHLOROETHANE	10	U	
1,2-DICHLOROPROPANE	10	U	
1,3-DICHLOROBENZENE	10	U	
1,4-DICHLOROBENZENE	10	U	
2-CHLOROETHYL VINYL ETHER	10	U	
BENZENE	190		
BROMODICHLOROMETHANE	10	U	
BROMOFORM	10	U	
BROMOMETHANE	10	U	
CARBON TETRACHLORIDE	10	U	
CHLOROBENZENE	10	U	
CHLORODIBROMOMETHANE	10	U	
CHLOROETHANE	10	U	
CHLOROFORM	10	U	
CHLOROMETHANE	10	U	
CIS-1,2-DICHLOROETHENE	10	U	
CIS-1,3-DICHLOROPROPENE	10	U	
ETHYLBENZENE	25		
METHYL TERT-BUTYL ETHER	10	U	
METHYLENE CHLORIDE	10	U	
TETRACHLOROETHENE	10	U	
TOLUENE	130		
TOTAL XYLENES	100		

nsample	PEN-19-MW8
samp_date	12/18/2002
lab_id	3216-013 DL
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TRANS-1,2-DICHLOROETHENE	10	U	
TRANS-1,3-DICHLOROPROPENE	10	U	
TRICHLOROETHENE	10	U	
VINYL CHLORIDE	10	U	

nsample	PEN-19-RB121902
samp_date	12/19/2002
lab_id	3216-016
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1.0	U	
1,1,2,2-TETRACHLOROETHANE	1.0	U	
1,1,2-TRICHLOROETHANE	1.0	U	
1,1-DICHLOROETHANE	1.0	U	
1,1-DICHLOROETHENE	1.0	U	
1,2-DIBROMOETHANE	0.02	U	
1,2-DICHLOROBENZENE	1.0	U	
1,2-DICHLOROETHANE	1.0	U	
1,2-DICHLOROPROPANE	1.0	U	
1,3-DICHLOROBENZENE	1.0	U	
1,4-DICHLOROBENZENE	1.0	U	
2-CHLOROETHYL VINYL ETHER	1.0	U	
BENZENE	1.0	U	
BROMODICHLOROMETHANE	1.0	U	
BROMOFORM	1.0	U	
BROMOMETHANE	1.0	U	
CARBON TETRACHLORIDE	1.0	U	
CHLOROBENZENE	1.0	U	
CHLORODIBROMOMETHANE	1.0	U	
CHLOROETHANE	1.0	U	
CHLOROFORM	1.0	U	
CHLOROMETHANE	1.0	U	
CIS-1,2-DICHLOROETHENE	1.0	U	
CIS-1,3-DICHLOROPROPENE	1.0	U	
ETHYLBENZENE	1.0	U	
METHYL TERT-BUTYL ETHER	1.0	U	
METHYLENE CHLORIDE	0.56	U	A
TETRACHLOROETHENE	1.0	U	
TOLUENE	1.0	U	
TOTAL XYLENES	3.0	U	

PROJ_NO: 2640

SDG: 3216 MEDIA: WATER DATA FRACTION: OV

nsample	PEN-19-RB121902
samp_date	12/19/2002
lab_id	3216-016
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TRANS-1,2-DICHLOROETHENE	1.0	U	
TRANS-1,3-DICHLOROPROPENE	1.0	U	
TRICHLOROETHENE	1.0	U	
VINYL CHLORIDE	1.0	U	

PROJ_NO: 2640

SDG: 3216 MEDIA: WATER DATA FRACTION: PAH

nsample	PEN-19-DUP02
samp_date	12/19/2002
lab_id	3216-015
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	PEN-19-MW22

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	1.0	U	
2-METHYLNAPHTHALENE	1.0	U	
ACENAPHTHENE	1.0	U	
ACENAPHTHYLENE	1.0	U	
ANTHRACENE	1.0	U	
BENZO(A)ANTHRACENE	1.0	U	
BENZO(A)PYRENE	1.0	U	
BENZO(B)FLUORANTHENE	1.0	U	
BENZO(G,H,I)PERYLENE	1.0	U	
BENZO(K)FLUORANTHENE	1.0	U	
CHRYSENE	1.0	U	
DIBENZO(A,H)ANTHRACENE	1.0	U	
FLUORANTHENE	1.0	U	
FLUORENE	1.0	U	
INDENO(1,2,3-CD)PYRENE	1.0	U	
NAPHTHALENE	1.0	U	
PHENANTHRENE	1.0	U	
PYRENE	1.0	U	

nsample	PEN-19-MW11
samp_date	12/18/2002
lab_id	3216-010
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	22.0		
2-METHYLNAPHTHALENE	31.0		
ACENAPHTHENE	1.0	U	
ACENAPHTHYLENE	1.0	U	
ANTHRACENE	1.0	U	
BENZO(A)ANTHRACENE	1.0	U	
BENZO(A)PYRENE	1.0	U	
BENZO(B)FLUORANTHENE	1.0	U	
BENZO(G,H,I)PERYLENE	1.0	U	
BENZO(K)FLUORANTHENE	1.0	U	
CHRYSENE	1.0	U	
DIBENZO(A,H)ANTHRACENE	1.0	U	
FLUORANTHENE	1.0	U	
FLUORENE	0.8	J	P
INDENO(1,2,3-CD)PYRENE	1.0	U	
NAPHTHALENE	58.0		
PHENANTHRENE	1.0	U	
PYRENE	1.0	U	

nsample	PEN-19-MW22
samp_date	12/18/2002
lab_id	3216-014
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	1.0	U	
2-METHYLNAPHTHALENE	1.0	U	
ACENAPHTHENE	1.0	U	
ACENAPHTHYLENE	1.0	U	
ANTHRACENE	1.0	U	
BENZO(A)ANTHRACENE	1.0	U	
BENZO(A)PYRENE	1.0	U	
BENZO(B)FLUORANTHENE	1.0	U	
BENZO(G,H,I)PERYLENE	1.0	U	
BENZO(K)FLUORANTHENE	1.0	U	
CHRYSENE	1.0	U	
DIBENZO(A,H)ANTHRACENE	1.0	U	
FLUORANTHENE	1.0	U	
FLUORENE	1.0	U	
INDENO(1,2,3-CD)PYRENE	1.0	U	
NAPHTHALENE	1.0	U	
PHENANTHRENE	1.0	U	
PYRENE	1.0	U	

PROJ_NO: 2640

SDG: 3216 MEDIA: WATER DATA FRACTION: PAH

nsample	PEN-19-MW24S
samp_date	12/18/2002
lab_id	3216-007
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	1.0	U	
2-METHYLNAPHTHALENE	1.0	U	
ACENAPHTHENE	1.0	U	
ACENAPHTHYLENE	1.0	U	
ANTHRACENE	1.0	U	
BENZO(A)ANTHRACENE	1.0	U	
BENZO(A)PYRENE	1.0	U	
BENZO(B)FLUORANTHENE	1.0	U	
BENZO(G,H,I)PERYLENE	1.0	U	
BENZO(K)FLUORANTHENE	1.0	U	
CHRYSENE	1.0	U	
DIBENZO(A,H)ANTHRACENE	1.0	U	
FLUORANTHENE	1.0	U	
FLUORENE	1.0	U	
INDENO(1,2,3-CD)PYRENE	1.0	U	
NAPHTHALENE	1.0	U	
PHENANTHRENE	1.0	U	
PYRENE	1.0	U	

nsample	PEN-19-MW25S
samp_date	12/18/2002
lab_id	3216-008
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	1.0	U	
2-METHYLNAPHTHALENE	1.0	U	
ACENAPHTHENE	1.0	U	
ACENAPHTHYLENE	1.0	U	
ANTHRACENE	1.0	U	
BENZO(A)ANTHRACENE	1.0	U	
BENZO(A)PYRENE	1.0	U	
BENZO(B)FLUORANTHENE	1.0	U	
BENZO(G,H,I)PERYLENE	1.0	U	
BENZO(K)FLUORANTHENE	1.0	U	
CHRYSENE	1.0	U	
DIBENZO(A,H)ANTHRACENE	1.0	U	
FLUORANTHENE	1.0	U	
FLUORENE	1.0	U	
INDENO(1,2,3-CD)PYRENE	1.0	U	
NAPHTHALENE	1.0	U	
PHENANTHRENE	1.0	U	
PYRENE	1.0	U	

nsample	PEN-19-MW26S
samp_date	12/18/2002
lab_id	3216-009
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	1.0	U	
2-METHYLNAPHTHALENE	1.0	U	
ACENAPHTHENE	1.0	U	
ACENAPHTHYLENE	1.0	U	
ANTHRACENE	1.0	U	
BENZO(A)ANTHRACENE	1.0	U	
BENZO(A)PYRENE	1.0	U	
BENZO(B)FLUORANTHENE	1.0	U	
BENZO(G,H,I)PERYLENE	1.0	U	
BENZO(K)FLUORANTHENE	1.0	U	
CHRYSENE	1.0	U	
DIBENZO(A,H)ANTHRACENE	1.0	U	
FLUORANTHENE	1.0	U	
FLUORENE	1.0	U	
INDENO(1,2,3-CD)PYRENE	1.0	U	
NAPHTHALENE	1.0	U	
PHENANTHRENE	1.0	U	
PYRENE	1.0	U	

PROJ_NO: 2640

SDG: 3216 MEDIA: WATER DATA FRACTION: PAH

nsample	PEN-19-MW28I
samp_date	12/18/2002
lab_id	3216-002
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	2.3		
2-METHYLNAPHTHALENE	3.0		
ACENAPHTHENE	1.0	U	
ACENAPHTHYLENE	1.0	U	
ANTHRACENE	1.0	U	
BENZO(A)ANTHRACENE	1.0	U	
BENZO(A)PYRENE	1.0	U	
BENZO(B)FLUORANTHENE	1.0	U	
BENZO(G,H,I)PERYLENE	1.0	U	
BENZO(K)FLUORANTHENE	1.0	U	
CHRYSENE	1.0	U	
DIBENZO(A,H)ANTHRACENE	1.0	U	
FLUORANTHENE	1.0	U	
FLUORENE	1.0	U	
INDENO(1,2,3-CD)PYRENE	1.0	U	
NAPHTHALENE	9.6		
PHENANTHRENE	1.0	U	
PYRENE	1.0	U	

nsample	PEN-19-MW28S
samp_date	12/18/2002
lab_id	3216-001
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	1.0	U	
2-METHYLNAPHTHALENE	1.0	U	
ACENAPHTHENE	1.0	U	
ACENAPHTHYLENE	1.0	U	
ANTHRACENE	1.0	U	
BENZO(A)ANTHRACENE	1.0	U	
BENZO(A)PYRENE	1.0	U	
BENZO(B)FLUORANTHENE	1.0	U	
BENZO(G,H,I)PERYLENE	1.0	U	
BENZO(K)FLUORANTHENE	1.0	U	
CHRYSENE	1.0	U	
DIBENZO(A,H)ANTHRACENE	1.0	U	
FLUORANTHENE	1.0	U	
FLUORENE	1.0	U	
INDENO(1,2,3-CD)PYRENE	1.0	U	
NAPHTHALENE	1.0	U	
PHENANTHRENE	1.0	U	
PYRENE	1.0	U	

nsample	PEN-19-MW30I
samp_date	12/18/2002
lab_id	3216-006
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	1.0	U	
2-METHYLNAPHTHALENE	1.0	U	
ACENAPHTHENE	1.0	U	
ACENAPHTHYLENE	1.0	U	
ANTHRACENE	1.0	U	
BENZO(A)ANTHRACENE	1.0	U	
BENZO(A)PYRENE	1.0	U	
BENZO(B)FLUORANTHENE	1.0	U	
BENZO(G,H,I)PERYLENE	1.0	U	
BENZO(K)FLUORANTHENE	1.0	U	
CHRYSENE	1.0	U	
DIBENZO(A,H)ANTHRACENE	1.0	U	
FLUORANTHENE	1.0	U	
FLUORENE	1.0	U	
INDENO(1,2,3-CD)PYRENE	1.0	U	
NAPHTHALENE	1.0	U	
PHENANTHRENE	1.0	U	
PYRENE	1.0	U	

PROJ_NO: 2640

SDG: 3216 MEDIA: WATER DATA FRACTION: PAH

nsample	PEN-19-MW30S
samp_date	12/18/2002
lab_id	3216-005
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	1.0	U	
2-METHYLNAPHTHALENE	1.0	U	
ACENAPHTHENE	1.0	U	
ACENAPHTHYLENE	1.0	U	
ANTHRACENE	1.0	U	
BENZO(A)ANTHRACENE	1.0	U	
BENZO(A)PYRENE	1.0	U	
BENZO(B)FLUORANTHENE	1.0	U	
BENZO(G,H,I)PERYLENE	1.0	U	
BENZO(K)FLUORANTHENE	1.0	U	
CHRYSENE	1.0	U	
DIBENZO(A,H)ANTHRACENE	1.0	U	
FLUORANTHENE	1.0	U	
FLUORENE	1.0	U	
INDENO(1,2,3-CD)PYRENE	1.0	U	
NAPHTHALENE	1.0	U	
PHENANTHRENE	1.0	U	
PYRENE	1.0	U	

nsample	PEN-19-MW4
samp_date	12/18/2002
lab_id	3216-011
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	20.0		
2-METHYLNAPHTHALENE	32.0		
ACENAPHTHENE	1.0	U	
ACENAPHTHYLENE	1.0	U	
ANTHRACENE	1.0	U	
BENZO(A)ANTHRACENE	1.0	U	
BENZO(A)PYRENE	1.0	U	
BENZO(B)FLUORANTHENE	1.0	U	
BENZO(G,H,I)PERYLENE	1.0	U	
BENZO(K)FLUORANTHENE	1.0	U	
CHRYSENE	1.0	U	
DIBENZO(A,H)ANTHRACENE	1.0	U	
FLUORANTHENE	1.0	U	
FLUORENE	1.0	U	
INDENO(1,2,3-CD)PYRENE	1.0	U	
NAPHTHALENE	59.0		
PHENANTHRENE	1.0	U	
PYRENE	1.0	U	

nsample	PEN-19-MW6
samp_date	12/18/2002
lab_id	3216-012
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	1.0	U	
2-METHYLNAPHTHALENE	1.0	U	
ACENAPHTHENE	1.0	U	
ACENAPHTHYLENE	1.0	U	
ANTHRACENE	1.0	U	
BENZO(A)ANTHRACENE	1.0	U	
BENZO(A)PYRENE	1.0	U	
BENZO(B)FLUORANTHENE	1.0	U	
BENZO(G,H,I)PERYLENE	1.0	U	
BENZO(K)FLUORANTHENE	1.0	U	
CHRYSENE	1.0	U	
DIBENZO(A,H)ANTHRACENE	1.0	U	
FLUORANTHENE	1.0	U	
FLUORENE	1.0	U	
INDENO(1,2,3-CD)PYRENE	1.0	U	
NAPHTHALENE	1.0	U	
PHENANTHRENE	1.0	U	
PYRENE	1.0	U	

PROJ_NO: 2640

SDG: 3216 MEDIA: WATER DATA FRACTION: PAH

nsample	PEN-19-MW8
samp_date	12/18/2002
lab_id	3216-013
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	1.0	U	
2-METHYLNAPHTHALENE	1.0	U	
ACENAPHTHENE	1.0	U	
ACENAPHTHYLENE	1.0	U	
ANTHRACENE	1.0	U	
BENZO(A)ANTHRACENE	1.0	U	
BENZO(A)PYRENE	1.0	U	
BENZO(B)FLUORANTHENE	1.0	U	
BENZO(G,H,I)PERYLENE	1.0	U	
BENZO(K)FLUORANTHENE	1.0	U	
CHRYSENE	1.0	U	
DIBENZO(A,H)ANTHRACENE	1.0	U	
FLUORANTHENE	1.0	U	
FLUORENE	1.0	U	
INDENO(1,2,3-CD)PYRENE	1.0	U	
NAPHTHALENE	1.0	U	
PHENANTHRENE	1.0	U	
PYRENE	1.0	U	

nsample	PEN-19-RB121902
samp_date	12/19/2002
lab_id	3216-016
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1-METHYLNAPHTHALENE	1.0	U	
2-METHYLNAPHTHALENE	1.0	U	
ACENAPHTHENE	1.0	U	
ACENAPHTHYLENE	1.0	U	
ANTHRACENE	1.0	U	
BENZO(A)ANTHRACENE	1.0	U	
BENZO(A)PYRENE	1.0	U	
BENZO(B)FLUORANTHENE	1.0	U	
BENZO(G,H,I)PERYLENE	1.0	U	
BENZO(K)FLUORANTHENE	1.0	U	
CHRYSENE	1.0	U	
DIBENZO(A,H)ANTHRACENE	1.0	U	
FLUORANTHENE	1.0	U	
FLUORENE	1.0	U	
INDENO(1,2,3-CD)PYRENE	1.0	U	
NAPHTHALENE	1.0	U	
PHENANTHRENE	1.0	U	
PYRENE	1.0	U	

PROJ_NO: 2640

SDG: 3216 MEDIA: WATER DATA FRACTION: PET

nsample	PEN-19-DUP02
samp_date	12/19/2002
lab_id	3216-015
qc_type	NM
units	MG/L
Pct_Solids	0.0
DUP_OF:	PEN-19-MW22

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	1.7	U	

nsample	PEN-19-MW11
samp_date	12/18/2002
lab_id	3216-010
qc_type	NM
units	MG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	26		

nsample	PEN-19-MW22
samp_date	12/18/2002
lab_id	3216-014
qc_type	NM
units	MG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	1.7	U	

PROJ_NO: 2640

SDG: 3216 MEDIA: WATER DATA FRACTION: PET

nsample	PEN-19-MW24S
samp_date	12/18/2002
lab_id	3216-007
qc_type	NM
units	MG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	1.7	U	

nsample	PEN-19-MW25S
samp_date	12/18/2002
lab_id	3216-008
qc_type	NM
units	MG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	1.7	U	

nsample	PEN-19-MW26S
samp_date	12/18/2002
lab_id	3216-009
qc_type	NM
units	MG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	1.7	U	

PROJ_NO: 2640

SDG: 3216 MEDIA: WATER DATA FRACTION: PET

nsample	PEN-19-MW28I
samp_date	12/18/2002
lab_id	3216-002
qc_type	NM
units	MG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	2.4		

nsample	PEN-19-MW28S
samp_date	12/18/2002
lab_id	3216-001
qc_type	NM
units	MG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	0.47	J	P

nsample	PEN-19-MW30I
samp_date	12/18/2002
lab_id	3216-006
qc_type	NM
units	MG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	1.7	U	

PROJ_NO: 2640

SDG: 3216 MEDIA: WATER DATA FRACTION: PET

nsample	PEN-19-MW30S
samp_date	12/18/2002
lab_id	3216-005
qc_type	NM
units	MG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	0.57	J	P

nsample	PEN-19-MW4
samp_date	12/18/2002
lab_id	3216-011
qc_type	NM
units	MG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	20		

nsample	PEN-19-MW6
samp_date	12/18/2002
lab_id	3216-012
qc_type	NM
units	MG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	0.54	J	P

PROJ_NO: 2640

SDG: 3216 MEDIA: WATER DATA FRACTION: PET

nsample	PEN-19-MW8
samp_date	12/18/2002
lab_id	3216-013
qc_type	NM
units	MG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	0.62	J	P

nsample	PEN-19-RB121902
samp_date	12/19/2002
lab_id	3216-016
qc_type	NM
units	MG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	1.7	U	

PROJ_NO: 2640

SDG: 3216 MEDIA: WATER DATA FRACTION: M

nsample	PEN-19-DUP02
samp_date	12/19/2002
lab_id	3216-015
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	PEN-19-MW22

Parameter	Result	Val Qual	Qual Code
LEAD	10	U	

nsample	PEN-19-MW11
samp_date	12/18/2002
lab_id	3216-010
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	10	U	

nsample	PEN-19-MW22
samp_date	12/18/2002
lab_id	3216-014
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	10	U	

PROJ_NO: 2640

SDG: 3216 MEDIA: WATER DATA FRACTION: M

nsample	PEN-19-MW24S
samp_date	12/18/2002
lab_id	3216-007
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	10	U	

nsample	PEN-19-MW25S
samp_date	12/18/2002
lab_id	3216-008
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	10	U	

nsample	PEN-19-MW26S
samp_date	12/18/2002
lab_id	3216-009
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	10	U	

PROJ_NO: 2640

SDG: 3216 MEDIA: WATER DATA FRACTION: M

nsample	PEN-19-MW28I
samp_date	12/18/2002
lab_id	3216-002
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	10	U	

nsample	PEN-19-MW28S
samp_date	12/18/2002
lab_id	3216-001
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	10	U	

nsample	PEN-19-MW30I
samp_date	12/18/2002
lab_id	3216-006
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	10	U	

PROJ_NO: 2640

SDG: 3216 MEDIA: WATER DATA FRACTION: M

nsample	PEN-19-MW30S
samp_date	12/18/2002
lab_id	3216-005
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	10	U	

nsample	PEN-19-MW4
samp_date	12/18/2002
lab_id	3216-011
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	10	U	

nsample	PEN-19-MW6
samp_date	12/18/2002
lab_id	3216-012
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	10	U	

PROJ_NO: 2640

SDG: 3216 MEDIA: WATER DATA FRACTION: M

nsample	PEN-19-MW8
samp_date	12/18/2002
lab_id	3216-013
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	10.7		

nsample	PEN-19-RB121902
samp_date	12/19/2002
lab_id	3216-016
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
LEAD	10	U	

TETRA TECH NUS, INC.

CHAIN OF CUSTODY

NUMBER 4249

HAL WO# 3416

PAGE 1 OF 1

PROJECT NO:	N2640 / CTO 273
FACILITY:	NAS Pensacola
SAMPLERS (SIGNATURE)	
PROJECT MANAGER	Gerry Walker
PHONE NUMBER	850.385.9899
FIELD OPERATIONS LEADER	Larry Smith
PHONE NUMBER	850.385.9899
CARRIER/WAYBILL NUMBER	FED-Ex
LABORATORY NAME AND CONTACT:	Accura Analytical - Beca Trenova
ADDRESS	6017 Financial Dr.
CITY, STATE	Norcross, GA 30071

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE YEAR 2002	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	PPL VOAs, BTEXM, 42 PCB (G)	PAHs (G)	82608 (G)	8270C SIM (G)	504.1 (G)	Total Lead 6010B (P)	TRPH FDEP-FLPRO (G)	COMMENTS
									CONTAINER TYPE PLASTIC (P) or GLASS (G)							
									PRESERVATIVE USED			HCL	NA	HCL	HNO3	HCL
12/18	0810	PEN-19-MW28S	MW28S			GW	G	11	3	2	3	1	2			3216-001
	0830	PEN-19-MW28I	MW28I			GW	G	11	3	2	3	1	2			3216-002
	0830	PEN-19-MW28IMS	MW28I			GW	G	11	3	2	3	1	2			
	0830	PEN-19-MW28IMSD	MW28I			GW	G	11	3	2	3	1	2			
	1015	PEN-19-MW30S	MW30S													3216-0035
	1020	PEN-19-MW30I	MW30I													46
	1026	PEN-19-MW24S	MW24S													57
	1140	PEN-19-MW25S	MW-25S													68
	1145	PEN-19-MW26S	MW-26S													79
	1410	PEN-19-MW11	MW-11													3216-0810
	1420	PEN-19-MW4	MW-4													9
	1336	PEN-19-MW6	MW-6													3216-0162
	1535	PEN-19-MW8	MW-8													3

TYPE OF ANALYSIS

12/18/2002

see WRN2640-WR77 for compound lists and required RLs.

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY	12/18/02	1800	1. RECEIVED BY FedEx		
2. RELINQUISHED BY FedEx	12/20/02	9:46	2. RECEIVED BY	12/20/02	9:46
3. RELINQUISHED BY			3. RECEIVED BY		

COMMENTS

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4/02R
FORM NO. TtNUS-001

TETRA TECH NUS, INC.

CHAIN OF CUSTODY

NUMBER 4250 4-4C

AAL WO# 3216

PAGE 1 OF 1

PROJECT NO:	N2640 / CTO 273
FACILITY:	NAS Pensacola
SAMPLERS (SIGNATURE)	TK
PROJECT MANAGER	Gerry Walker
PHONE NUMBER	850.385.9899
FIELD OPERATIONS LEADER	Larry Smith
PHONE NUMBER	850.385.9899
CARRIER/WAYBILL NUMBER	Fed-Ex
LABORATORY NAME AND CONTACT:	Accura Analytical - Bea Trenova
ADDRESS	6017 Financial Dr.
CITY, STATE	Norcross, GA 30071

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

DATE YEAR 2002	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAP (G) COMP (C)	No. OF CONTAINERS	PPL VOHs, BTEXN, 1,2-DCA (8260B)	PAH's (8270 C SIM)	EPB (NONE)	Total Lead (6010B)	TPPH (FDEP FL-PRO)				COMMENTS
									G	G	G	P	G				
									PRESERVATIVE USED								
											NA	HCL	HNO3	HCL			
12/19	0935	PEN-19-MW22	MW22			GW	G	11	3	2	3	1	2	3216-01	24		*VOA'S
↓	—	PEN-19-DUP02	—			GW	G	11	3	2	3	1	2		35		are un-preserved
↓	1015	PEN-19-RB121902	—			GW	G	11	3	2	3	1	2	↓	46		

See WR N2640-WR77 for compound lists and required RLs.

1. RELINQUISHED BY TK	DATE 12/19/02	TIME 1200	1. RECEIVED BY Fed Ex	DATE	TIME
2. RELINQUISHED BY Fed Ex	DATE 12/20/02	TIME 9:46	2. RECEIVED BY [signature]	DATE 12/20/02	TIME 945
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
FORM NO. TtNUS-001

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VOLATILE ORGANICS ANALYSIS DATA SHEET

CT0273
SDG3216
OV
PAH
PET
M

EPA SAMPLE NO.

PEN-19-MW28S

Lab Name:	ACCURA ANALYTICAL LABORAT	Contract:	N2640-WR77
Lab Code:	ACCURA	SAS NO. :	
Case No. :		SDG NO. :	3216
Matrix (soil/water):	WATER	Lab Sample Id:	3216-001
Sample wt/vol	25.00 (g/mL) ML	Lab File ID:	1J122702\J06505
Level (low/med):	LOW	Date Received:	12/20/02
% Moisture: not dec.		Date Analyzed:	12/27/02
GC Column:	ZB-624 ID: .25 (mm)	Dilution Factor:	1.0
Soil Extract Volume	(µ L)	Soil Aliquot Volume:	(µ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl Vinyl Ether	1.0	U
71-43-2	Benzene	1.1	
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-09-2	Methylene Chloride	1.0	U
127-18-4	Tetrachloroethylene	1.0	U
108-88-3	Toluene	0.53	J
156-60-5	trans-1,2-dichloroethene	1.0	U
10061-02-6	trans-1,3-dichloropropene	1.0	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW28S

Lab Name:	ACCURA ANALYTICAL LABORAT	Contract:	N2640-WR77
Lab Code:	ACCURA	SAS NO. :	
Case No. :		SDG NO. :	3216
Matrix (soil/water):	WATER	Lab Sample Id:	3216-001
Sample wt/vol	25.00 (g/mL) ML	Lab File ID:	1J122702\J06505
Level (low/med):	LOW	Date Received:	12/20/02
% Moisture: not dec.		Date Analyzed:	12/27/02
GC Column:	ZB-624 ID: .25 (mm)	Dilution Factor:	1.0
Soil Extract Volume	(µ L)	Soil Aliquot Volume:	(µ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	1.0	U
75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (total)	3.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW28I

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3216

Matrix (soil/water): WATER

Lab Sample Id: 3216-002

Sample wt/vol 25.00 (g/mL) ML

Lab File ID: 1J122702\J06506

Level (low/med): LOW

Date Received: 12/20/02

% Moisture: not dec.

Date Analyzed: 12/27/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl Vinyl Ether	1.0	U
71-43-2	Benzene	330	E
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
100-41-4	Ethylbenzene	88	E
1634-04-4	Methyl tert-butyl ether	1.0	U
75-09-2	Methylene Chloride	1.0	U
127-18-4	Tetrachloroethylene	1.0	U
108-88-3	Toluene	11	
156-60-5	trans-1,2-dichloroethene	1.0	U
10061-02-6	trans-1,3-dichloropropene	1.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW28I

Lab Name:	ACCURA ANALYTICAL LABORAT	Contract:	N2640-WR77
Lab Code:	ACCURA	SAS NO. :	
Case No. :		SDG NO. :	3216
Matrix (soil/water):	WATER	Lab Sample Id:	3216-002
Sample wt/vol	25.00 (g/mL) ML	Lab File ID:	1J122702\J06506
Level (low/med):	LOW	Date Received:	12/20/02
% Moisture: not dec.		Date Analyzed:	12/27/02
GC Column:	ZB-624 ID: .25 (mm)	Dilution Factor:	1.0
Soil Extract Volume	(μ L)	Soil Aliquot Volume:	(μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	1.0	U
75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (total)	430	E

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW28I DL

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3216

Matrix (soil/water): WATER

Lab Sample Id: 3216-002 DL

Sample wt/vol 1.00 (g/mL) ML

Lab File ID: 1J122702\J06524

Level (low/med): LOW

Date Received: 12/20/02

% Moisture: not dec.

Date Analyzed: 12/27/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 50.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	50	U
79-34-5	1,1,2,2-Tetrachloroethane	50	U
79-00-5	1,1,2-Trichloroethane	50	U
75-34-3	1,1-Dichloroethane	50	U
75-35-4	1,1-Dichloroethene	50	U
95-50-1	1,2-Dichlorobenzene	50	U
107-06-2	1,2-Dichloroethane	50	U
78-87-5	1,2-Dichloropropane	50	U
541-73-1	1,3-Dichlorobenzene	50	U
106-46-7	1,4-Dichlorobenzene	50	U
110-75-8	2-Chloroethyl Vinyl Ether	50	U
71-43-2	Benzene	590	D
75-27-4	Bromodichloromethane	50	U
75-25-2	Bromoform	50	U
74-83-9	Bromomethane	50	U
56-23-5	Carbon Tetrachloride	50	U
108-90-7	Chlorobenzene	50	U
75-00-3	Chloroethane	50	U
67-66-3	Chloroform	50	U
74-87-3	Chloromethane	50	U
156-59-2	cis-1,2-Dichloroethene	50	U
10061-01-5	cis-1,3-Dichloropropene	50	U
124-48-1	Dibromochloromethane	50	U
100-41-4	Ethylbenzene	91	D
1634-04-4	Methyl tert-butyl ether	50	U
75-09-2	Methylene Chloride	50	U
127-18-4	Tetrachloroethylene	50	U
108-88-3	Toluene	50	U
156-60-5	trans-1,2-dichloroethene	50	U
10061-02-6	trans-1,3-dichloropropene	50	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW28I DL

Lab Name:	ACCURA ANALYTICAL LABORAT	Contract:	N2640-WR77
Lab Code:	ACCURA	SAS NO. :	
Case No. :		SDG NO. :	3216
Matrix (soil/water):	WATER	Lab Sample Id:	3216-002 DL
Sample wt/vol	1.00 (g/mL) ML	Lab File ID:	1J122702\J06524
Level (low/med):	LOW	Date Received:	12/20/02
% Moisture: not dec.		Date Analyzed:	12/27/02
GC Column:	ZB-624 ID: .25 (mm)	Dilution Factor:	50.0
Soil Extract Volume	(µ L)	Soil Aliquot Volume:	(µ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	50	U
75-01-4	Vinyl Chloride	50	U
1330-20-7	Xylenes (total)	730	D

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW30S

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3216

Matrix (soil/water): WATER

Lab Sample Id: 3216-005

Sample wt/vol 25.00 (g/mL) ML

Lab File ID: 1J122702\J06508

Level (low/med): LOW

Date Received: 12/20/02

% Moisture: not dec.

Date Analyzed: 12/27/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl Vinyl Ether	1.0	U
71-43-2	Benzene	1.0	U
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-09-2	Methylene Chloride	0.42	JB
127-18-4	Tetrachloroethylene	1.0	U
108-88-3	Toluene	1.0	U
156-60-5	trans-1,2-dichloroethene	1.0	U
10061-02-6	trans-1,3-dichloropropene	1.0	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW30S

Lab Name:	ACCURA ANALYTICAL LABORAT	Contract:	N2640-WR77
Lab Code:	ACCURA	SAS NO. :	
Case No. :		SDG NO. :	3216
Matrix (soil/water):	WATER	Lab Sample Id:	3216-005
Sample wt/vol	25.00 (g/mL) ML	Lab File ID:	1J122702\J06508
Level (low/med):	LOW	Date Received:	12/20/02
% Moisture: not dec.		Date Analyzed:	12/27/02
GC Column:	ZB-624 ID: .25 (mm)	Dilution Factor:	1.0
Soil Extract Volume	(µ L)	Soil Aliquot Volume:	(µ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	1.0	U
75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (total)	3.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW30I

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3216

Matrix (soil/water): WATER

Lab Sample Id: 3216-006

Sample wt/vol 25.00 (g/mL) ML

Lab File ID: 1J122702\J06509

Level (low/med): LOW

Date Received: 12/20/02

% Moisture: not dec.

Date Analyzed: 12/27/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl Vinyl Ether	1.0	U
71-43-2	Benzene	1.0	U
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-09-2	Methylene Chloride	1.0	U
127-18-4	Tetrachloroethylene	1.0	U
108-88-3	Toluene	1.0	U
156-60-5	trans-1,2-dichloroethene	1.0	U
10061-02-6	trans-1,3-dichloropropene	1.0	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW30I

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3216

Matrix (soil/water): WATER

Lab Sample Id: 3216-006

Sample wt/vol 25.00 (g/mL) ML

Lab File ID: 1J122702\J06509

Level (low/med): LOW

Date Received: 12/20/02

% Moisture: not dec.

Date Analyzed: 12/27/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	1.0	U
75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (total)	3.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW24S

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3216

Matrix (soil/water): WATER

Lab Sample Id: 3216-007

Sample wt/vol 25.00 (g/mL) ML

Lab File ID: 1J123102\J06560

Level (low/med): LOW

Date Received: 12/20/02

% Moisture: not dec.

Date Analyzed: 12/31/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl Vinyl Ether	1.0	U
71-43-2	Benzene	1.0	U
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-09-2	Methylene Chloride	1.0	U
127-18-4	Tetrachloroethylene	1.0	U
108-88-3	Toluene	1.0	U
156-60-5	trans-1,2-dichloroethene	1.0	U
10061-02-6	trans-1,3-dichloropropene	1.0	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW24S

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3216

Matrix (soil/water): WATER

Lab Sample Id: 3216-007

Sample wt/vol 25.00 (g/mL) ML

Lab File ID: 1J123102\J06560

Level (low/med): LOW

Date Received: 12/20/02

% Moisture: not dec.

Date Analyzed: 12/31/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	1.0	U
75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (total)	3.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW24S MS

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3216

Matrix (soil/water): WATER

Lab Sample Id: 3216-007 MS

Sample wt/vol 25.00 (g/mL) ML

Lab File ID: 1J123102\J06561

Level (low/med): LOW

Date Received: 12/20/02

% Moisture: not dec.

Date Analyzed: 12/31/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	9.5	
79-34-5	1,1,2,2-Tetrachloroethane	8.7	
79-00-5	1,1,2-Trichloroethane	8.4	
75-34-3	1,1-Dichloroethane	9.3	
75-35-4	1,1-Dichloroethene	9.0	
95-50-1	1,2-Dichlorobenzene	9.3	
107-06-2	1,2-Dichloroethane	9.2	
78-87-5	1,2-Dichloropropane	9.8	
541-73-1	1,3-Dichlorobenzene	9.4	
106-46-7	1,4-Dichlorobenzene	9.2	
110-75-8	2-Chloroethyl Vinyl Ether	4.0	
71-43-2	Benzene	9.7	
75-27-4	Bromodichloromethane	9.1	
75-25-2	Bromoform	7.8	
74-83-9	Bromomethane	8.0	
56-23-5	Carbon Tetrachloride	9.0	
108-90-7	Chlorobenzene	9.3	
75-00-3	Chloroethane	9.3	
67-66-3	Chloroform	9.2	
74-87-3	Chloromethane	11	
156-59-2	cis-1,2-Dichloroethene	9.2	
10061-01-5	cis-1,3-Dichloropropene	9.5	
124-48-1	Dibromochloromethane	8.2	
100-41-4	Ethylbenzene	9.7	
1634-04-4	Methyl tert-butyl ether	9.1	
75-09-2	Methylene Chloride	11	
127-18-4	Tetrachloroethylene	9.2	
108-88-3	Toluene	9.4	
156-60-5	trans-1,2-dichloroethene	8.8	
10061-02-6	trans-1,3-dichloropropene	8.5	

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW24S MS

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3216

Matrix (soil/water): WATER

Lab Sample Id: 3216-007 MS

Sample wt/vol 25.00 (g/mL) ML

Lab File ID: 1J123102\J06561

Level (low/med): LOW

Date Received: 12/20/02

% Moisture: not dec.

Date Analyzed: 12/31/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	9.6	
75-01-4	Vinyl Chloride	9.1	
1330-20-7	Xylenes (total)	29	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW24S MSD

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3216

Matrix (soil/water): WATER

Lab Sample Id: 3216-007 MSD

Sample wt/vol 25.00 (g/mL) ML

Lab File ID: 1J123102\J06562

Level (low/med): LOW

Date Received: 12/20/02

% Moisture: not dec.

Date Analyzed: 12/31/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	8.9	
79-34-5	1,1,2,2-Tetrachloroethane	8.9	
79-00-5	1,1,2-Trichloroethane	8.7	
75-34-3	1,1-Dichloroethane	9.2	
75-35-4	1,1-Dichloroethene	8.7	
95-50-1	1,2-Dichlorobenzene	9.2	
107-06-2	1,2-Dichloroethane	8.7	
78-87-5	1,2-Dichloropropane	9.4	
541-73-1	1,3-Dichlorobenzene	9.4	
106-46-7	1,4-Dichlorobenzene	9.4	
110-75-8	2-Chloroethyl Vinyl Ether	2.0	
71-43-2	Benzene	9.3	
75-27-4	Bromodichloromethane	8.6	
75-25-2	Bromoform	8.1	
74-83-9	Bromomethane	6.8	
56-23-5	Carbon Tetrachloride	8.7	
108-90-7	Chlorobenzene	9.2	
75-00-3	Chloroethane	9.9	
67-66-3	Chloroform	9.0	
74-87-3	Chloromethane	11	
156-59-2	cis-1,2-Dichloroethene	9.2	
10061-01-5	cis-1,3-Dichloropropene	8.8	
124-48-1	Dibromochloromethane	8.2	
100-41-4	Ethylbenzene	9.6	
1634-04-4	Methyl tert-butyl ether	8.7	
75-09-2	Methylene Chloride	9.7	
127-18-4	Tetrachloroethylene	9.1	
108-88-3	Toluene	9.3	
156-60-5	trans-1,2-dichloroethene	9.0	
10061-02-6	trans-1,3-dichloropropene	8.2	

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW24S MSD

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3216

Matrix (soil/water): WATER

Lab Sample Id: 3216-007 MSD

Sample wt/vol 25.00 (g/mL) ML

Lab File ID: 1J123102\J06562

Level (low/med): LOW

Date Received: 12/20/02

% Moisture: not dec.

Date Analyzed: 12/31/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	9.5	
75-01-4	Vinyl Chloride	9.2	
1330-20-7	Xylenes (total)	28	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW25S

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3216

Matrix (soil/water): WATER

Lab Sample Id: 3216-008

Sample wt/vol 25.00 (g/mL) ML

Lab File ID: 1J122702\J06511

Level (low/med): LOW

Date Received: 12/20/02

% Moisture: not dec.

Date Analyzed: 12/27/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl Vinyl Ether	1.0	U
71-43-2	Benzene	1.0	U
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-09-2	Methylene Chloride	1.0	U
127-18-4	Tetrachloroethylene	1.0	U
108-88-3	Toluene	1.0	U
156-60-5	trans-1,2-dichloroethene	1.0	U
10061-02-6	trans-1,3-dichloropropene	1.0	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW25S

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3216

Matrix (soil/water): WATER

Lab Sample Id: 3216-008

Sample wt/vol 25.00 (g/mL) ML

Lab File ID: 1J122702\J06511

Level (low/med): LOW

Date Received: 12/20/02

% Moisture: not dec.

Date Analyzed: 12/27/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	1.0	U
75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (total)	3.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW26S

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3216

Matrix (soil/water): WATER

Lab Sample Id: 3216-009

Sample wt/vol 25.00 (g/mL) ML

Lab File ID: 1J122702\J06512

Level (low/med): LOW

Date Received: 12/20/02

% Moisture: not dec.

Date Analyzed: 12/27/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl Vinyl Ether	1.0	U
71-43-2	Benzene	2.7	
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-09-2	Methylene Chloride	1.0	U
127-18-4	Tetrachloroethylene	1.0	U
108-88-3	Toluene	1.0	U
156-60-5	trans-1,2-dichloroethene	1.0	U
10061-02-6	trans-1,3-dichloropropene	1.0	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW26S

Lab Name:	ACCURA ANALYTICAL LABORAT	Contract:	N2640-WR77
Lab Code:	ACCURA	SAS NO. :	
Case No. :		SDG NO. :	3216
Matrix (soil/water):	WATER	Lab Sample Id:	3216-009
Sample wt/vol	25.00 (g/mL) ML	Lab File ID:	1J122702\J06512
Level (low/med):	LOW	Date Received:	12/20/02
% Moisture: not dec.		Date Analyzed:	12/27/02
GC Column:	ZB-624 ID: .25 (mm)	Dilution Factor:	1.0
Soil Extract Volume	(μ L)	Soil Aliquot Volume:	(μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	1.0	U
75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (total)	3.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW11

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3216

Matrix (soil/water): WATER

Lab Sample Id: 3216-010

Sample wt/vol 25.00 (g/mL) ML

Lab File ID: 1J122702\J06513

Level (low/med): LOW

Date Received: 12/20/02

% Moisture: not dec.

Date Analyzed: 12/27/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 500.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	500	U
79-34-5	1,1,2,2-Tetrachloroethane	500	U
79-00-5	1,1,2-Trichloroethane	500	U
75-34-3	1,1-Dichloroethane	500	U
75-35-4	1,1-Dichloroethene	500	U
95-50-1	1,2-Dichlorobenzene	500	U
107-06-2	1,2-Dichloroethane	500	U
78-87-5	1,2-Dichloropropane	500	U
541-73-1	1,3-Dichlorobenzene	500	U
106-46-7	1,4-Dichlorobenzene	500	U
110-75-8	2-Chloroethyl Vinyl Ether	500	U
71-43-2	Benzene	430	J
75-27-4	Bromodichloromethane	500	U
75-25-2	Bromoform	500	U
74-83-9	Bromomethane	500	U
56-23-5	Carbon Tetrachloride	500	U
108-90-7	Chlorobenzene	500	U
75-00-3	Chloroethane	500	U
67-66-3	Chloroform	500	U
74-87-3	Chloromethane	500	U
156-59-2	cis-1,2-Dichloroethene	500	U
10061-01-5	cis-1,3-Dichloropropene	500	U
124-48-1	Dibromochloromethane	500	U
100-41-4	Ethylbenzene	520	
1634-04-4	Methyl tert-butyl ether	500	U
75-09-2	Methylene Chloride	500	U
127-18-4	Tetrachloroethylene	500	U
108-88-3	Toluene	5800	
156-60-5	trans-1,2-dichloroethene	500	U
10061-02-6	trans-1,3-dichloropropene	500	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW11

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3216

Matrix (soil/water): WATER

Lab Sample Id: 3216-010

Sample wt/vol 25.00 (g/mL) ML

Lab File ID: 1J122702\J06513

Level (low/med): LOW

Date Received: 12/20/02

% Moisture: not dec.

Date Analyzed: 12/27/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 500.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	500	U
75-01-4	Vinyl Chloride	500	U
1330-20-7	Xylenes (total)	5500	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW4

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3216

Matrix (soil/water): WATER

Lab Sample Id: 3216-011

Sample wt/vol 25.00 (g/mL) ML

Lab File ID: 1J122702\J06514

Level (low/med): LOW

Date Received: 12/20/02

% Moisture: not dec.

Date Analyzed: 12/27/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl Vinyl Ether	1.0	U
71-43-2	Benzene	77	E
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
100-41-4	Ethylbenzene	200	E
1634-04-4	Methyl tert-butyl ether	1.0	U
75-09-2	Methylene Chloride	1.0	U
127-18-4	Tetrachloroethylene	1.0	U
108-88-3	Toluene	460	E
156-60-5	trans-1,2-dichloroethene	1.0	U
10061-02-6	trans-1,3-dichloropropene	1.0	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW4

Lab Name:	ACCURA ANALYTICAL LABORAT	Contract:	N2640-WR77
Lab Code:	ACCURA	SAS NO. :	
Case No. :		SDG NO. :	3216
Matrix (soil/water):	WATER	Lab Sample Id:	3216-011
Sample wt/vol	25.00 (g/mL) ML	Lab File ID:	1J122702\J06514
Level (low/med):	LOW	Date Received:	12/20/02
% Moisture: not dec.		Date Analyzed:	12/27/02
GC Column:	ZB-624 ID: .25 (mm)	Dilution Factor:	1.0
Soil Extract Volume	(μ L)	Soil Aliquot Volume:	(μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	1.0	U
75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (total)	830	E

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW4 DL

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3216

Matrix (soil/water): WATER

Lab Sample Id: 3216-011 DL

Sample wt/vol 1.00 (g/mL) ML

Lab File ID: 1J122702\J06525

Level (low/med): LOW

Date Received: 12/20/02

% Moisture: not dec.

Date Analyzed: 12/27/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 50.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	50	U
79-34-5	1,1,2,2-Tetrachloroethane	50	U
79-00-5	1,1,2-Trichloroethane	50	U
75-34-3	1,1-Dichloroethane	50	U
75-35-4	1,1-Dichloroethene	50	U
95-50-1	1,2-Dichlorobenzene	50	U
107-06-2	1,2-Dichloroethane	50	U
78-87-5	1,2-Dichloropropane	50	U
541-73-1	1,3-Dichlorobenzene	50	U
106-46-7	1,4-Dichlorobenzene	50	U
110-75-8	2-Chloroethyl Vinyl Ether	50	U
71-43-2	Benzene	79	D
75-27-4	Bromodichloromethane	50	U
75-25-2	Bromoform	50	U
74-83-9	Bromomethane	50	U
56-23-5	Carbon Tetrachloride	50	U
108-90-7	Chlorobenzene	50	U
75-00-3	Chloroethane	50	U
67-66-3	Chloroform	50	U
74-87-3	Chloromethane	50	U
156-59-2	cis-1,2-Dichloroethene	50	U
10061-01-5	cis-1,3-Dichloropropene	50	U
124-48-1	Dibromochloromethane	50	U
100-41-4	Ethylbenzene	360	D
1634-04-4	Methyl tert-butyl ether	50	U
75-09-2	Methylene Chloride	50	U
127-18-4	Tetrachloroethylene	50	U
108-88-3	Toluene	2400	D
156-60-5	trans-1,2-dichloroethene	50	U
10061-02-6	trans-1,3-dichloropropene	50	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW4 DL

Lab Name:	ACCURA ANALYTICAL LABORAT	Contract:	N2640-WR77
Lab Code:	ACCURA	SAS NO. :	
Case No. :		SDG NO. :	3216
Matrix (soil/water):	WATER	Lab Sample Id:	3216-011 DL
Sample wt/vol	1.00 (g/mL) ML	Lab File ID:	1J122702\J06525
Level (low/med):	LOW	Date Received:	12/20/02
% Moisture: not dec.		Date Analyzed:	12/27/02
GC Column:	ZB-624 ID: .25 (mm)	Dilution Factor:	50.0
Soil Extract Volume	(μ L)	Soil Aliquot Volume:	(μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	50	U
75-01-4	Vinyl Chloride	50	U
1330-20-7	Xylenes (total)	3500	D

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW6

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3216

Matrix (soil/water): WATER

Lab Sample Id: 3216-012

Sample wt/vol 25.00 (g/mL) ML

Lab File ID: 1J122702\J06527

Level (low/med): LOW

Date Received: 12/20/02

% Moisture: not dec.

Date Analyzed: 12/27/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl Vinyl Ether	1.0	U
71-43-2	Benzene	4.0	
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
100-41-4	Ethylbenzene	1.5	
1634-04-4	Methyl tert-butyl ether	1.0	U
75-09-2	Methylene Chloride	1.0	U
127-18-4	Tetrachloroethylene	1.0	U
108-88-3	Toluene	1.0	U
156-60-5	trans-1,2-dichloroethene	1.0	U
10061-02-6	trans-1,3-dichloropropene	1.0	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW6

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3216

Matrix (soil/water): WATER

Lab Sample Id: 3216-012

Sample wt/vol 25.00 (g/mL) ML

Lab File ID: 1J122702\J06527

Level (low/med): LOW

Date Received: 12/20/02

% Moisture: not dec.

Date Analyzed: 12/27/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	1.0	U
75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (total)	9.3	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW8

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3216

Matrix (soil/water): WATER

Lab Sample Id: 3216-013

Sample wt/vol 25.00 (g/mL) ML

Lab File ID: 1J122702\J06518

Level (low/med): LOW

Date Received: 12/20/02

% Moisture: not dec.

Date Analyzed: 12/27/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl Vinyl Ether	1.0	U
71-43-2	Benzene	160	E
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
100-41-4	Ethylbenzene	31	
1634-04-4	Methyl tert-butyl ether	1.0	U
75-09-2	Methylene Chloride	1.0	U
127-18-4	Tetrachloroethylene	1.0	U
108-88-3	Toluene	100	E
156-60-5	trans-1,2-dichloroethene	1.0	U
10061-02-6	trans-1,3-dichloropropene	1.0	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW8

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3216

Matrix (soil/water): WATER

Lab Sample Id: 3216-013

Sample wt/vol 25.00 (g/mL) ML

Lab File ID: 1J122702\J06518

Level (low/med): LOW

Date Received: 12/20/02

% Moisture: not dec.

Date Analyzed: 12/27/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	1.0	U
75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (total)	110	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW8 DL

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3216

Matrix (soil/water): WATER

Lab Sample Id: 3216-013 DL

Sample wt/vol 1.00 (g/mL) ML

Lab File ID: 1J122702\J06526

Level (low/med): LOW

Date Received: 12/20/02

% Moisture: not dec.

Date Analyzed: 12/27/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 10.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
75-34-3	1,1-Dichloroethane	10	U
75-35-4	1,1-Dichloroethene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
107-06-2	1,2-Dichloroethane	10	U
78-87-5	1,2-Dichloropropane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
110-75-8	2-Chloroethyl Vinyl Ether	10	U
71-43-2	Benzene	190	D
75-27-4	Bromodichloromethane	10	U
75-25-2	Bromoform	10	U
74-83-9	Bromomethane	10	U
56-23-5	Carbon Tetrachloride	10	U
108-90-7	Chlorobenzene	10	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	10	U
74-87-3	Chloromethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
124-48-1	Dibromochloromethane	10	U
100-41-4	Ethylbenzene	25	D
1634-04-4	Methyl tert-butyl ether	10	U
75-09-2	Methylene Chloride	10	U
127-18-4	Tetrachloroethylene	10	U
108-88-3	Toluene	130	D
156-60-5	trans-1,2-dichloroethene	10	U
10061-02-6	trans-1,3-dichloropropene	10	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW8 DL

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3216

Matrix (soil/water): WATER

Lab Sample Id: 3216-013 DL

Sample wt/vol 1.00 (g/mL) ML

Lab File ID: 1J122702\J06526

Level (low/med): LOW

Date Received: 12/20/02

% Moisture: not dec.

Date Analyzed: 12/27/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 10.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	10	U
75-01-4	Vinyl Chloride	10	U
1330-20-7	Xylenes (total)	100	D

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW22

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3216

Matrix (soil/water): WATER

Lab Sample Id: 3216-014

Sample wt/vol 25.00 (g/mL) ML

Lab File ID: 1J122702\J06519

Level (low/med): LOW

Date Received: 12/20/02

% Moisture: not dec.

Date Analyzed: 12/27/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl Vinyl Ether	1.0	U
71-43-2	Benzene	1.0	U
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-09-2	Methylene Chloride	1.0	U
127-18-4	Tetrachloroethylene	1.0	U
108-88-3	Toluene	1.0	U
156-60-5	trans-1,2-dichloroethene	1.0	U
10061-02-6	trans-1,3-dichloropropene	1.0	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW22

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3216

Matrix (soil/water): WATER

Lab Sample Id: 3216-014

Sample wt/vol 25.00 (g/mL) ML

Lab File ID: 1J122702\J06519

Level (low/med): LOW

Date Received: 12/20/02

% Moisture: not dec.

Date Analyzed: 12/27/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	1.0	U
75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (total)	3.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-DUP02

Lab Name: ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code: ACCURA

SAS NO. :

Case No. :

SDG NO. : 3216

Matrix (soil/water): WATER

Lab Sample Id: 3216-015

Sample wt/vol 25.00 (g/mL) ML

Lab File ID: 1J122702\J06520

Level (low/med): LOW

Date Received: 12/20/02

% Moisture: not dec.

Date Analyzed: 12/27/02

GC Column: ZB-624 ID: .25 (mm)

Dilution Factor: 1.0

Soil Extract Volume (μ L)

Soil Aliquot Volume: (μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl Vinyl Ether	1.0	U
71-43-2	Benzene	1.0	U
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-09-2	Methylene Chloride	1.0	U
127-18-4	Tetrachloroethylene	1.0	U
108-88-3	Toluene	1.0	U
156-60-5	trans-1,2-dichloroethene	1.0	U
10061-02-6	trans-1,3-dichloropropene	1.0	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-DUP02

Lab Name:	ACCURA ANALYTICAL LABORAT	Contract:	N2640-WR77
Lab Code:	ACCURA	SAS NO. :	
Case No. :		SDG NO. :	3216
Matrix (soil/water):	WATER	Lab Sample Id:	3216-015
Sample wt/vol	25.00 (g/mL) ML	Lab File ID:	1J122702\J06520
Level (low/med):	LOW	Date Received:	12/20/02
% Moisture: not dec.		Date Analyzed:	12/27/02
GC Column:	ZB-624 ID: .25 (mm)	Dilution Factor:	1.0
Soil Extract Volume	(μ L)	Soil Aliquot Volume:	(μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	1.0	U
75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (total)	3.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-RB121902

Lab Name:	ACCURA ANALYTICAL LABORAT	Contract:	N2640-WR77
Lab Code:	ACCURA	SAS NO. :	
Case No. :		SDG NO. :	3216
Matrix (soil/water):	WATER	Lab Sample Id:	3216-016
Sample wt/vol	25.00 (g/mL) ML	Lab File ID:	1J122702\J06521
Level (low/med):	LOW	Date Received:	12/20/02
% Moisture: not dec.		Date Analyzed:	12/27/02
GC Column:	ZB-624 ID: .25 (mm)	Dilution Factor:	1.0
Soil Extract Volume	(μ L)	Soil Aliquot Volume:	(μ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
71-55-6	1,1,1-Trichloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
110-75-8	2-Chloroethyl Vinyl Ether	1.0	U
71-43-2	Benzene	1.0	U
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
75-00-3	Chloroethane	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-09-2	Methylene Chloride	0.56	JB
127-18-4	Tetrachloroethylene	1.0	U
108-88-3	Toluene	1.0	U
156-60-5	trans-1,2-dichloroethene	1.0	U
10061-02-6	trans-1,3-dichloropropene	1.0	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-RB121902

Lab Name:	ACCURA ANALYTICAL LABORAT	Contract:	N2640-WR77
Lab Code:	ACCURA	SAS NO. :	
Case No. :		SDG NO. :	3216
Matrix (soil/water):	WATER	Lab Sample Id:	3216-016
Sample wt/vol	25.00 (g/mL) ML	Lab File ID:	1J122702\J06521
Level (low/med):	LOW	Date Received:	12/20/02
% Moisture: not dec.		Date Analyzed:	12/27/02
GC Column:	ZB-624 ID: .25 (mm)	Dilution Factor:	1.0
Soil Extract Volume	(µ L)	Soil Aliquot Volume:	(µ L)

CONCENTRATION UNITS (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
79-01-6	Trichloroethene	1.0	U
75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (total)	3.0	U

1D
SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW28S

Lab Name : ACCURA ANALYTICAL LABORAT
Contract: N2640-WR77
Lab Code : ACCURA
Case No.:
SAS No.
SDG No.: 3216
Matrix : (soil/water) WATER
Lab Sample Id: 3216-001
Sample wt/vol: 1000 (g/ml): ML
Lab File ID: 1B122702\B41133
Level : (low/med) LOW
Date Received: 12/20/02
% Moisture:
Decanted: (Y/N) N
Date Extracted: 12/20/02
Concentrated Extract Volume: 1000 (µ L)
Date Analyzed: 12/27/02
Injection Volume: 1.0 (µ L)
Dilution Factor: 1.0
GPC Cleanup (Y/N): N
pH: N/A
Extraction : (Type) SW3520C

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
90-12-0	1-Methylnaphthalene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U
83-32-9	Acenaphthene	1.0	U
208-96-8	Acenaphthylene	1.0	U
120-12-7	Anthracene	1.0	U
56-55-3	Benzo(a)anthracene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U
191-24-2	Benzo(g,h,i)perylene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U
218-01-9	Chrysene	1.0	U
53-70-3	Dibenz(a,h)Anthracene	1.0	U
206-44-0	Fluoranthene	1.0	U
86-73-7	Fluorene	1.0	U
193-39-5	Indeno(1,2,3-c,d)Pyrene	1.0	U
91-20-3	Naphthalene	1.0	U
85-01-8	Phenanthrene	1.0	U
129-00-0	Pyrene	1.0	U

1C
SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW28I

Lab Name : ACCURA ANALYTICAL LABORAT
Contract: N2640-WR77
Lab Code : ACCURA
Case No.:
SAS No.
SDG No.: 3216
Matrix : (soil/water) WATER
Lab Sample Id: 3216-002
Sample wt/vol: 1000 (g/ml): ML
Lab File ID: 1B122702\B41144
Level : (low/med) LOW
Date Received: 12/20/02
% Moisture:
Decanted: (Y/N) N
Date Extracted: 12/23/02
Concentrated Extract Volume: 1000 (μ L)
Date Analyzed: 12/27/02
Injection Volume: 1.0 (μ L)
Dilution Factor: 1.0
GPC Cleanup (Y/N): N
pH: N/A
Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
90-12-0	1-Methylnaphthalene	2.3	
91-57-6	2-Methylnaphthalene	3.0	
83-32-9	Acenaphthene	1.0	U
208-96-8	Acenaphthylene	1.0	U
120-12-7	Anthracene	1.0	U
56-55-3	Benzo(a)anthracene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U
191-24-2	Benzo(g,h,i)perylene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U
218-01-9	Chrysene	1.0	U
53-70-3	Dibenz(a,h)Anthracene	1.0	U
206-44-0	Fluoranthene	1.0	U
86-73-7	Fluorene	1.0	U
193-39-5	Indeno(1,2,3-c,d)Pyrene	1.0	U
91-20-3	Naphthalene	9.6	
85-01-8	Phenanthrene	1.0	U
129-00-0	Pyrene	1.0	U

1D
SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW28I MS

Lab Name : ACCURA ANALYTICAL LABORAT
Contract: N2640-WR77
Lab Code : ACCURA
Case No.:
SAS No.
SDG No.: 3216
Matrix : (soil/water) WATER
Lab Sample Id: 3216-002 MS
Sample wt/vol: 1000 (g/ml): ML
Lab File ID: 1B122702\B41145
Level : (low/med) LOW
Date Received: 12/20/02
% Moisture:
Decanted: (Y/N) N
Date Extracted: 12/23/02
Concentrated Extract Volume: 1000 (µ L)
Date Analyzed: 12/27/02
Injection Volume: 1.0 (µ L)
Dilution Factor: 1.0
GPC Cleanup (Y/N): N
pH: N/A
Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
90-12-0	1-Methylnaphthalene	28	
91-57-6	2-Methylnaphthalene	28	
83-32-9	Acenaphthene	30	
208-96-8	Acenaphthylene	30	
120-12-7	Anthracene	32	
56-55-3	Benzo(a)anthracene	33	
50-32-8	Benzo(a)pyrene	31	
205-99-2	Benzo(b)fluoranthene	28	
191-24-2	Benzo(g,h,i)perylene	32	
207-08-9	Benzo(k)fluoranthene	32	
218-01-9	Chrysene	34	
53-70-3	Dibenz(a,h)Anthracene	30	
206-44-0	Fluoranthene	37	
86-73-7	Fluorene	32	
193-39-5	Indeno(1,2,3-c,d)Pyrene	31	
91-20-3	Naphthalene	32	
85-01-8	Phenanthrene	33	
129-00-0	Pyrene	34	

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW28I MSD

Lab Name : ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code : ACCURA

Case No.:

SAS No.

SDG No.: 3216

Matrix : (soil/water) WATER

Lab Sample Id: 3216-002 MSD

Sample wt/vol: 1000 (g/ml): ML

Lab File ID: 1B122702\B41146

Level : (low/med) LOW

Date Received: 12/20/02

% Moisture:

Decanted: (Y/N) N

Date Extracted: 12/23/02

Concentrated Extract Volume: 1000 (μ L)

Date Analyzed: 12/27/02

Injection Volume: 1.0 (μ L)

Dilution Factor: 1.0

GPC Cleanup (Y/N): N

pH: N/A

Extraction : (Type) SW3520C

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
90-12-0	1-Methylnaphthalene	42	
91-57-6	2-Methylnaphthalene	44	
83-32-9	Acenaphthene	43	
208-96-8	Acenaphthylene	44	
120-12-7	Anthracene	43	
56-55-3	Benzo(a)anthracene	39	
50-32-8	Benzo(a)pyrene	37	
205-99-2	Benzo(b)fluoranthene	33	
191-24-2	Benzo(g,h,i)perylene	38	
207-08-9	Benzo(k)fluoranthene	39	
218-01-9	Chrysene	40	
53-70-3	Dibenz(a,h)Anthracene	34	
206-44-0	Fluoranthene	45	
86-73-7	Fluorene	45	
193-39-5	Indeno(1,2,3-c,d)Pyrene	35	
91-20-3	Naphthalene	48	
85-01-8	Phenanthrene	44	
129-00-0	Pyrene	42	

1D
SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW30S

Lab Name : ACCURA ANALYTICAL LABORAT
Contract: N2640-WR77
Lab Code : ACCURA
Case No.:
SAS No.
SDG No.: 3216
Matrix : (soil/water) WATER
Lab Sample Id: 3216-005
Sample wt/vol: 1000 (g/ml): ML
Lab File ID: 1B122702\B41134
Level : (low/med) LOW
Date Received: 12/20/02
% Moisture:
Decanted: (Y/N) N
Date Extracted: 12/20/02
Concentrated Extract Volume: 1000 (µ L)
Date Analyzed: 12/27/02
Injection Volume: 1.0 (µ L)
Dilution Factor: 1.0
GPC Cleanup (Y/N): N
pH: N/A
Extraction : (Type) SW3520C

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
90-12-0	1-Methylnaphthalene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U
83-32-9	Acenaphthene	1.0	U
208-96-8	Acenaphthylene	1.0	U
120-12-7	Anthracene	1.0	U
56-55-3	Benzo(a)anthracene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U
191-24-2	Benzo(g,h,i)perylene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U
218-01-9	Chrysene	1.0	U
53-70-3	Dibenz(a,h)Anthracene	1.0	U
206-44-0	Fluoranthene	1.0	U
86-73-7	Fluorene	1.0	U
193-39-5	Indeno(1,2,3-c,d)Pyrene	1.0	U
91-20-3	Naphthalene	1.0	U
85-01-8	Phenanthrene	1.0	U
129-00-0	Pyrene	1.0	U

1C
SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW30I

Lab Name : ACCURA ANALYTICAL LABORAT
Contract: N2640-WR77
Lab Code : ACCURA
Case No.:
SAS No.
SDG No.: 3216
Matrix : (soil/water) WATER
Lab Sample Id: 3216-006
Sample wt/vol: 1000 (g/ml): ML
Lab File ID: 1B122702\B41135
Level : (low/med) LOW
Date Received: 12/20/02
% Moisture:
Decanted: (Y/N) N
Date Extracted: 12/20/02
Concentrated Extract Volume: 1000 (µ L)
Date Analyzed: 12/27/02
Injection Volume: 1.0 (µ L)
Dilution Factor: 1.0
GPC Cleanup (Y/N): N
pH: N/A
Extraction : (Type) SW3520C

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
90-12-0	1-Methylnaphthalene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U
83-32-9	Acenaphthene	1.0	U
208-96-8	Acenaphthylene	1.0	U
120-12-7	Anthracene	1.0	U
56-55-3	Benzo(a)anthracene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U
191-24-2	Benzo(g,h,i)perylene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U
218-01-9	Chrysene	1.0	U
53-70-3	Dibenz(a,h)Anthracene	1.0	U
206-44-0	Fluoranthene	1.0	U
86-73-7	Fluorene	1.0	U
193-39-5	Indeno(1,2,3-c,d)Pyrene	1.0	U
91-20-3	Naphthalene	1.0	U
85-01-8	Phenanthrene	1.0	U
129-00-0	Pyrene	1.0	U

1D
SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW24S

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77
Lab Code : ACCURA Case No.: SAS No. SDG No.: 3216
Matrix : (soil/water) WATER Lab Sample Id: 3216-007
Sample wt/vol: 1000 (g/ml): ML Lab File ID: 1B122702\B41136
Level : (low/med) LOW Date Received: 12/20/02
% Moisture: Decanted: (Y/N) N Date Extracted: 12/20/02
Concentrated Extract Volume: 1000 (µ L) Date Analyzed: 12/27/02
Injection Volume: 1.0 (µ L) Dilution Factor: 1.0
GPC Cleanup (Y/N): N pH: N/A Extraction : (Type) SW3520C

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
90-12-0	1-Methylnaphthalene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U
83-32-9	Acenaphthene	1.0	U
208-96-8	Acenaphthylene	1.0	U
120-12-7	Anthracene	1.0	U
56-55-3	Benzo(a)anthracene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U
191-24-2	Benzo(g,h,i)perylene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U
218-01-9	Chrysene	1.0	U
53-70-3	Dibenz(a,h)Anthracene	1.0	U
206-44-0	Fluoranthene	1.0	U
86-73-7	Fluorene	1.0	U
193-39-5	Indeno(1,2,3-c,d)Pyrene	1.0	U
91-20-3	Naphthalene	1.0	U
85-01-8	Phenanthrene	1.0	U
129-00-0	Pyrene	1.0	U

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW25S

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code : ACCURA Case No.: SAS No. SDG No.: 3216

Matrix : (soil/water) WATER Lab Sample Id: 3216-008

Sample wt/vol: 1000 (g/ml): ML Lab File ID: 1B122702\B41137

Level : (low/med) LOW Date Received: 12/20/02

% Moisture: Decanted: (Y/N) N Date Extracted: 12/20/02

Concentrated Extract Volume: 1000 (µ L) Date Analyzed: 12/27/02

Injection Volume: 1.0 (µ L) Dilution Factor: 1.0

GPC Cleanup (Y/N): N pH: N/A Extraction : (Type) SW3520C

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
90-12-0	1-Methylnaphthalene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U
83-32-9	Acenaphthene	1.0	U
208-96-8	Acenaphthylene	1.0	U
120-12-7	Anthracene	1.0	U
56-55-3	Benzo(a)anthracene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U
191-24-2	Benzo(g,h,i)perylene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U
218-01-9	Chrysene	1.0	U
53-70-3	Dibenz(a,h)Anthracene	1.0	U
206-44-0	Fluoranthene	1.0	U
86-73-7	Fluorene	1.0	U
193-39-5	Indeno(1,2,3-c,d)Pyrene	1.0	U
91-20-3	Naphthalene	1.0	U
85-01-8	Phenanthrene	1.0	U
129-00-0	Pyrene	1.0	U

1D

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW26S

Lab Name : ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code : ACCURA

Case No.:

SAS No.

SDG No.: 3216

Matrix : (soil/water) WATER

Lab Sample Id: 3216-009

Sample wt/vol: 1000 (g/ml): ML

Lab File ID: 1B122702\B41138

Level : (low/med) LOW

Date Received: 12/20/02

% Moisture:

Decanted: (Y/N) N

Date Extracted: 12/20/02

Concentrated Extract Volume: 1000 (μ L)

Date Analyzed: 12/27/02

Injection Volume: 1.0 (μ L)

Dilution Factor: 1.0

GPC Cleanup (Y/N): N

pH: N/A

Extraction : (Type) SW3520C

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
90-12-0	1-Methylnaphthalene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U
83-32-9	Acenaphthene	1.0	U
208-96-8	Acenaphthylene	1.0	U
120-12-7	Anthracene	1.0	U
56-55-3	Benzo(a)anthracene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U
191-24-2	Benzo(g,h,i)perylene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U
218-01-9	Chrysene	1.0	U
53-70-3	Dibenz(a,h)Anthracene	1.0	U
206-44-0	Fluoranthene	1.0	U
86-73-7	Fluorene	1.0	U
193-39-5	Indeno(1,2,3-c,d)Pyrene	1.0	U
91-20-3	Naphthalene	1.0	U
85-01-8	Phenanthrene	1.0	U
129-00-0	Pyrene	1.0	U

1D
SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW11

Lab Name : ACCURA ANALYTICAL LABORAT
Contract: N2640-WR77
Lab Code : ACCURA
Case No.:
SAS No.
SDG No.: 3216
Matrix : (soil/water) WATER
Lab Sample Id: 3216-010
Sample wt/vol: 1000 (g/ml): ML
Lab File ID: 1B122702\B41139
Level : (low/med) LOW
Date Received: 12/20/02
% Moisture:
Decanted: (Y/N) N
Date Extracted: 12/20/02
Concentrated Extract Volume: 1000 (μ L)
Date Analyzed: 12/27/02
Injection Volume: 1.0 (μ L)
Dilution Factor: 1.0
GPC Cleanup (Y/N): N
pH: N/A
Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
90-12-0	1-Methylnaphthalene	22	
91-57-6	2-Methylnaphthalene	31	
83-32-9	Acenaphthene	1.0	U
208-96-8	Acenaphthylene	1.0	U
120-12-7	Anthracene	1.0	U
56-55-3	Benzo(a)anthracene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U
191-24-2	Benzo(g,h,i)perylene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U
218-01-9	Chrysene	1.0	U
53-70-3	Dibenz(a,h)Anthracene	1.0	U
206-44-0	Fluoranthene	1.0	U
86-73-7	Fluorene	0.78	J
193-39-5	Indeno(1,2,3-c,d)Pyrene	1.0	U
91-20-3	Naphthalene	58	
85-01-8	Phenanthrene	1.0	U
129-00-0	Pyrene	1.0	U

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW4

Lab Name : ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code : ACCURA

Case No.:

SAS No.

SDG No.: 3216

Matrix : (soil/water) WATER

Lab Sample Id: 3216-011

Sample wt/vol: 1000 (g/ml): ML

Lab File ID: 1B122702\B41140

Level : (low/med) LOW

Date Received: 12/20/02

% Moisture:

Decanted: (Y/N) N

Date Extracted: 12/20/02

Concentrated Extract Volume: 1000 (μ L)

Date Analyzed: 12/27/02

Injection Volume: 1.0 (μ L)

Dilution Factor: 1.0

GPC Cleanup (Y/N): N

pH: N/A

Extraction : (Type) SW3520C

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
90-12-0	1-Methylnaphthalene	20	
91-57-6	2-Methylnaphthalene	32	
83-32-9	Acenaphthene	1.0	U
208-96-8	Acenaphthylene	1.0	U
120-12-7	Anthracene	1.0	U
56-55-3	Benzo(a)anthracene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U
191-24-2	Benzo(g,h,i)perylene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U
218-01-9	Chrysene	1.0	U
53-70-3	Dibenz(a,h)Anthracene	1.0	U
206-44-0	Fluoranthene	1.0	U
86-73-7	Fluorene	1.0	U
193-39-5	Indeno(1,2,3-c,d)Pyrene	1.0	U
91-20-3	Naphthalene	59	
85-01-8	Phenanthrene	1.0	U
129-00-0	Pyrene	1.0	U

1D
SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW6

Lab Name : ACCURA ANALYTICAL LABORAT
Contract: N2640-WR77
Lab Code : ACCURA
Case No.:
SAS No.
SDG No.: 3216
Matrix : (soil/water) WATER
Lab Sample Id: 3216-012
Sample wt/vol: 1000 (g/ml): ML
Lab File ID: 1B122702\B41141
Level : (low/med) LOW
Date Received: 12/20/02
% Moisture:
Decanted: (Y/N) N
Date Extracted: 12/20/02
Concentrated Extract Volume: 1000 (μ L)
Date Analyzed: 12/27/02
Injection Volume: 1.0 (μ L)
Dilution Factor: 1.0
GPC Cleanup (Y/N): N
pH: N/A
Extraction : (Type) SW3520C

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND		Q
90-12-0	1-Methylnaphthalene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U
83-32-9	Acenaphthene	1.0	U
208-96-8	Acenaphthylene	1.0	U
120-12-7	Anthracene	1.0	U
56-55-3	Benzo(a)anthracene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U
191-24-2	Benzo(g,h,i)perylene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U
218-01-9	Chrysene	1.0	U
53-70-3	Dibenz(a,h)Anthracene	1.0	U
206-44-0	Fluoranthene	1.0	U
86-73-7	Fluorene	1.0	U
193-39-5	Indeno(1,2,3-c,d)Pyrene	1.0	U
91-20-3	Naphthalene	1.0	U
85-01-8	Phenanthrene	1.0	U
129-00-0	Pyrene	1.0	U

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW8

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code : ACCURA Case No.: SAS No. SDG No.: 3216

Matrix : (soil/water) WATER Lab Sample Id: 3216-013

Sample wt/vol: 1000 (g/ml): ML Lab File ID: 1B122702\B41147

Level : (low/med) LOW Date Received: 12/20/02

% Moisture: Decanted: (Y/N) N Date Extracted: 12/23/02

Concentrated Extract Volume: 1000 (µ L) Date Analyzed: 12/27/02

Injection Volume: 1.0 (µ L) Dilution Factor: 1.0

GPC Cleanup (Y/N): N pH: N/A Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
90-12-0	1-Methylnaphthalene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U
83-32-9	Acenaphthene	1.0	U
208-96-8	Acenaphthylene	1.0	U
120-12-7	Anthracene	1.0	U
56-55-3	Benzo(a)anthracene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U
191-24-2	Benzo(g,h,i)perylene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U
218-01-9	Chrysene	1.0	U
53-70-3	Dibenz(a,h)Anthracene	1.0	U
206-44-0	Fluoranthene	1.0	U
86-73-7	Fluorene	1.0	U
193-39-5	Indeno(1,2,3-c,d)Pyrene	1.0	U
91-20-3	Naphthalene	1.0	U
85-01-8	Phenanthrene	1.0	U
129-00-0	Pyrene	1.0	U

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW22

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code : ACCURA Case No.: SAS No. SDG No.: 3216

Matrix : (soil/water) WATER Lab Sample Id: 3216-014

Sample wt/vol: 1000 (g/ml): ML Lab File ID: 1B122702\B41148

Level : (low/med) LOW Date Received: 12/20/02

% Moisture: Decanted: (Y/N) N Date Extracted: 12/23/02

Concentrated Extract Volume: 1000 (µ L) Date Analyzed: 12/27/02

Injection Volume: 1.0 (µ L) Dilution Factor: 1.0

GPC Cleanup (Y/N): N pH: N/A Extraction : (Type) SW3520C

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
90-12-0	1-Methylnaphthalene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U
83-32-9	Acenaphthene	1.0	U
208-96-8	Acenaphthylene	1.0	U
120-12-7	Anthracene	1.0	U
56-55-3	Benzo(a)anthracene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U
191-24-2	Benzo(g,h,i)perylene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U
218-01-9	Chrysene	1.0	U
53-70-3	Dibenz(a,h)Anthracene	1.0	U
206-44-0	Fluoranthene	1.0	U
86-73-7	Fluorene	1.0	U
193-39-5	Indeno(1,2,3-c,d)Pyrene	1.0	U
91-20-3	Naphthalene	1.0	U
85-01-8	Phenanthrene	1.0	U
129-00-0	Pyrene	1.0	U

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-DUP02

Lab Name : ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code : ACCURA

Case No.:

SAS No.

SDG No.: 3216

Matrix : (soil/water) WATER

Lab Sample Id: 3216-015

Sample wt/vol: 1000 (g/ml): ML

Lab File ID: 1B122702\B41149

Level : (low/med) LOW

Date Received: 12/20/02

% Moisture:

Decanted: (Y/N) N

Date Extracted: 12/23/02

Concentrated Extract Volume: 1000 (µ L)

Date Analyzed: 12/27/02

Injection Volume: 1.0 (µ L)

Dilution Factor: 1.0

GPC Cleanup (Y/N): N

pH: N/A

Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
90-12-0	1-Methylnaphthalene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U
83-32-9	Acenaphthene	1.0	U
208-96-8	Acenaphthylene	1.0	U
120-12-7	Anthracene	1.0	U
56-55-3	Benzo(a)anthracene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U
191-24-2	Benzo(g,h,i)perylene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U
218-01-9	Chrysene	1.0	U
53-70-3	Dibenz(a,h)Anthracene	1.0	U
206-44-0	Fluoranthene	1.0	U
86-73-7	Fluorene	1.0	U
193-39-5	Indeno(1,2,3-c,d)Pyrene	1.0	U
91-20-3	Naphthalene	1.0	U
85-01-8	Phenanthrene	1.0	U
129-00-0	Pyrene	1.0	U

1D
SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-RB121902

Lab Name : ACCURA ANALYTICAL LABORAT
Contract: N2640-WR77
Lab Code : ACCURA
Case No.:
SAS No.
SDG No.: 3216
Matrix : (soil/water) WATER
Lab Sample Id: 3216-016
Sample wt/vol: 1000 (g/ml): ML
Lab File ID: 1B122702\B41150
Level : (low/med) LOW
Date Received: 12/20/02
% Moisture:
Decanted: (Y/N) N
Date Extracted: 12/23/02
Concentrated Extract Volume: 1000 (µ L)
Date Analyzed: 12/28/02
Injection Volume: 1.0 (µ L)
Dilution Factor: 1.0
GPC Cleanup (Y/N): N
pH: N/A
Extraction : (Type) SW3520C

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
90-12-0	1-Methylnaphthalene	1.0	U
91-57-6	2-Methylnaphthalene	1.0	U
83-32-9	Acenaphthene	1.0	U
208-96-8	Acenaphthylene	1.0	U
120-12-7	Anthracene	1.0	U
56-55-3	Benzo(a)anthracene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U
191-24-2	Benzo(g,h,i)perylene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U
218-01-9	Chrysene	1.0	U
53-70-3	Dibenz(a,h)Anthracene	1.0	U
206-44-0	Fluoranthene	1.0	U
86-73-7	Fluorene	1.0	U
193-39-5	Indeno(1,2,3-c,d)Pyrene	1.0	U
91-20-3	Naphthalene	1.0	U
85-01-8	Phenanthrene	1.0	U
129-00-0	Pyrene	1.0	U

1 E
PESTICIDE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW28S

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77
Lab Code : ACCURA Case No.: _____ SAS No. _____ SDG No.: 3216
Matrix : WATER Lab Sample Id: 3216-001
Sample wt/vol: 35 (g/ml): ML Lab File ID: 010603\E01663
% Moisture: _____ Decanted: (Y/N) _____ Date Received: 12/20/02
Extraction : (Type) EXT_SW8011 Date Extracted: 01/02/03
Concentrated Extract Volume: 2000 (µ L) Date Analyzed: 01/06/03
Injection Volume: _____ (µ L) Dilution Factor: 1.0
GPC Cleanup (Y/N): _____ pH: _____ Sulfur Cleanup (Y/N): _____

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

106-93-4	Ethylene DiBromide	0.020	U

1 E
PESTICIDE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW28I

Lab Name : ACCURA ANALYTICAL LABORAT
Contract: N2640-WR77
Lab Code : ACCURA
Case No.: _____ SAS No. _____ SDG No.: 3216
Matrix : WATER
Lab Sample Id: 3216-002
Sample wt/vol: 35 (g/ml): ML
Lab File ID: 010603\E01664
% Moisture: _____ Decanted: (Y/N) _____
Date Received: 12/20/02
Extraction : (Type) EXT_SW8011
Date Extracted: 01/02/03
Concentrated Extract Volume: 2000 (µ L)
Date Analyzed: 01/06/03
Injection Volume: _____ (µ L)
Dilution Factor: 1.0
GPC Cleanup (Y/N): _____ pH: _____
Sulfur Cleanup (Y/N): _____

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

106-93-4	Ethylene DiBromide	0.020	U

1 E
PESTICIDE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW28I MS

Lab Name : ACCURA ANALYTICAL LABORAT
Contract: N2640-WR77
Lab Code : ACCURA
Case No.: _____ SAS No. _____ SDG No.: 3216
Matrix : WATER
Lab Sample Id: 3216-002 MS
Sample wt/vol: 35 (g/ml): ML
Lab File ID: 010603\E01665
% Moisture: _____ Decanted: (Y/N) _____
Date Received: 12/20/02
Extraction : (Type) EXT_SW8011
Date Extracted: 01/02/03
Concentrated Extract Volume: 2000 (µ L)
Date Analyzed: 01/06/03
Injection Volume: _____ (µ L)
Dilution Factor: 1.0
GPC Cleanup (Y/N): _____ pH: _____
Sulfur Cleanup (Y/N): _____

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

106-93-4	Ethylene DiBromide	0.19	

1 E
PESTICIDE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW28I MSD

Lab Name : ACCURA ANALYTICAL LABORAT
Contract: N2640-WR77
Lab Code : ACCURA
Case No.: _____ SAS No. _____ SDG No.: 3216
Matrix : WATER
Lab Sample Id: 3216-002 MSD
Sample wt/vol: 35 (g/ml): ML
Lab File ID: 010603\E01666
% Moisture: _____ Decanted: (Y/N) _____
Date Received: 12/20/02
Extraction : (Type) EXT_SW8011
Date Extracted: 01/02/03
Concentrated Extract Volume: 2000 (µ L)
Date Analyzed: 01/06/03
Injection Volume: _____ (µ L)
Dilution Factor: 1.0
GPC Cleanup (Y/N): _____ pH: _____
Sulfur Cleanup (Y/N): _____

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

106-93-4	Ethylene DiBromide	0.20	

1 E
PESTICIDE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW30S

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code : ACCURA Case No.: _____ SAS No. _____ SDG No.: 3216

Matrix : WATER Lab Sample Id: 3216-005

Sample wt/vol: 35 (g/ml): ML Lab File ID: 010603\E01667

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 12/20/02

Extraction : (Type) EXT_SW8011 Date Extracted: 01/02/03

Concentrated Extract Volume: 2000 (µ L) Date Analyzed: 01/06/03

Injection Volume: _____ (µ L) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

106-93-4	Ethylene DiBromide	0.020	U

1 E
PESTICIDE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW30I

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77
Lab Code : ACCURA Case No.: _____ SAS No. _____ SDG No.: 3216
Matrix : WATER Lab Sample Id: 3216-006
Sample wt/vol: 35 (g/ml): ML Lab File ID: 010603\E01668
% Moisture: _____ Decanted: (Y/N) _____ Date Received: 12/20/02
Extraction : (Type) EXT_SW8011 Date Extracted: 01/02/03
Concentrated Extract Volume: 2000 (µ L) Date Analyzed: 01/06/03
Injection Volume: _____ (µ L) Dilution Factor: 1.0
GPC Cleanup (Y/N): _____ pH: _____ Sulfur Cleanup (Y/N): _____

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

106-93-4	Ethylene DiBromide	0.020	U

1 E
PESTICIDE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW24S

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77
Lab Code : ACCURA Case No.: _____ SAS No. _____ SDG No.: 3216
Matrix : WATER Lab Sample Id: 3216-007
Sample wt/vol: 35 (g/ml): ML Lab File ID: 010603\E01669
% Moisture: _____ Decanted: (Y/N) _____ Date Received: 12/20/02
Extraction : (Type) EXT_SW8011 Date Extracted: 01/02/03
Concentrated Extract Volume: 2000 (µ L) Date Analyzed: 01/06/03
Injection Volume: _____ (µ L) Dilution Factor: 1.0
GPC Cleanup (Y/N): _____ pH: _____ Sulfur Cleanup (Y/N): _____

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

106-93-4	Ethylene DiBromide	0.020	U

1 E
PESTICIDE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW25S

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code : ACCURA Case No.: _____ SAS No. _____ SDG No.: 3216

Matrix : WATER Lab Sample Id: 3216-008

Sample wt/vol: 35 (g/ml): ML Lab File ID: 010603\E01670

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 12/20/02

Extraction : (Type) EXT_SW8011 Date Extracted: 01/02/03

Concentrated Extract Volume: 2000 (µ L) Date Analyzed: 01/07/03

Injection Volume: _____ (µ L) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

106-93-4	Ethylene DiBromide	0.020	U

1 E
PESTICIDE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW26S

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code : ACCURA Case No.: _____ SAS No. _____ SDG No.: 3216

Matrix : WATER Lab Sample Id: 3216-009

Sample wt/vol: 35 (g/ml): ML Lab File ID: 010603\E01671

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 12/20/02

Extraction : (Type) EXT_SW8011 Date Extracted: 01/02/03

Concentrated Extract Volume: 2000 (µ L) Date Analyzed: 01/07/03

Injection Volume: _____ (µ L) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

106-93-4	Ethylene DiBromide	0.020	U

1 E
PESTICIDE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW11

Lab Name : ACCURA ANALYTICAL LABORAT
Contract: N2640-WR77
Lab Code : ACCURA
Case No.: _____ SAS No. _____ SDG No.: 3216
Matrix : WATER
Lab Sample Id: 3216-010
Sample wt/vol: 35 (g/ml): ML
Lab File ID: 010603\E01672
% Moisture: _____ Decanted: (Y/N) _____
Date Received: 12/20/02
Extraction : (Type) EXT_SW8011
Date Extracted: 01/02/03
Concentrated Extract Volume: 2000 (µ L)
Date Analyzed: 01/07/03
Injection Volume: _____ (µ L)
Dilution Factor: 1.0
GPC Cleanup (Y/N): _____ pH: _____
Sulfur Cleanup (Y/N): _____

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

106-93-4	Ethylene DiBromide	0.020	U

1 E
PESTICIDE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW4

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code : ACCURA Case No.: _____ SAS No. _____ SDG No.: 3216

Matrix : WATER Lab Sample Id: 3216-011

Sample wt/vol: 35 (g/ml): ML Lab File ID: 010603\E01673

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 12/20/02

Extraction : (Type) EXT_SW8011 Date Extracted: 01/02/03

Concentrated Extract Volume: 2000 (μ L) Date Analyzed: 01/07/03

Injection Volume: _____ (μ L) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

106-93-4	Ethylene DiBromide	0.020	U

1 E
PESTICIDE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW6

Lab Name : ACCURA ANALYTICAL LABORAT
Contract: N2640-WR77
Lab Code : ACCURA
Case No.: _____ SAS No. _____ SDG No.: 3216
Matrix : WATER
Lab Sample Id: 3216-012
Sample wt/vol: 35 (g/ml): ML
Lab File ID: 010603\E01674
% Moisture: _____ Decanted: (Y/N) _____
Date Received: 12/20/02
Extraction : (Type) EXT_SW8011
Date Extracted: 01/02/03
Concentrated Extract Volume: 2000 (µ L)
Date Analyzed: 01/07/03
Injection Volume: _____ (µ L)
Dilution Factor: 1.0
GPC Cleanup (Y/N): _____ pH: _____
Sulfur Cleanup (Y/N): _____

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

106-93-4	Ethylene DiBromide	0.020	U

1 E
PESTICIDE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW8

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77
Lab Code : ACCURA Case No.: _____ SAS No. _____ SDG No.: 3216
Matrix : WATER Lab Sample Id: 3216-013
Sample wt/vol: 35 (g/ml): ML Lab File ID: 010603\E01675
% Moisture: _____ Decanted: (Y/N) _____ Date Received: 12/20/02
Extraction : (Type) EXT_SW8011 Date Extracted: 01/02/03
Concentrated Extract Volume: 2000 (µ L) Date Analyzed: 01/07/03
Injection Volume: _____ (µ L) Dilution Factor: 1.0
GPC Cleanup (Y/N): _____ pH: _____ Sulfur Cleanup (Y/N): _____

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

106-93-4	Ethylene DiBromide	0.020	U

1 E
PESTICIDE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW22

Lab Name : ACCURA ANALYTICAL LABORAT
Contract: N2640-WR77
Lab Code : ACCURA
Case No.: _____ SAS No. _____ SDG No.: 3216
Matrix : WATER
Lab Sample Id: 3216-014
Sample wt/vol: 35 (g/ml): ML
Lab File ID: 010603\E01676
% Moisture: _____ Decanted: (Y/N) _____
Date Received: 12/20/02
Extraction : (Type) EXT_SW8011
Date Extracted: 01/02/03
Concentrated Extract Volume: 2000 (μ L)
Date Analyzed: 01/07/03
Injection Volume: _____ (μ L)
Dilution Factor: 1.0
GPC Cleanup (Y/N): _____ pH: _____
Sulfur Cleanup (Y/N): _____

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

106-93-4	Ethylene DiBromide	0.020	U

1 E
PESTICIDE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-DUP02

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code : ACCURA Case No.: _____ SAS No. _____ SDG No.: 3216

Matrix : WATER Lab Sample Id: 3216-015

Sample wt/vol: 35 (g/ml): ML Lab File ID: 010603\E01677

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 12/20/02

Extraction : (Type) EXT_SW8011 Date Extracted: 01/02/03

Concentrated Extract Volume: 2000 (µ L) Date Analyzed: 01/07/03

Injection Volume: _____ (µ L) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

106-93-4	Ethylene DiBromide	0.020	U

1 E
PESTICIDE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-RB121902

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code : ACCURA Case No.: _____ SAS No. _____ SDG No.: 3216

Matrix : WATER Lab Sample Id: 3216-016

Sample wt/vol: 35 (g/ml): ML Lab File ID: 010603\E01678

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 12/20/02

Extraction : (Type) EXT_SW8011 Date Extracted: 01/02/03

Concentrated Extract Volume: 2000 (µ L) Date Analyzed: 01/07/03

Injection Volume: _____ (µ L) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

106-93-4	Ethylene DiBromide	0.020	U

1D

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW28S

Lab Name : ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code : ACCURA

Case No.:

SAS No.

SDG No.: 3216

Matrix : (soil/water) WATER

Lab Sample Id: 3216-001

Sample wt/vol: 1000 (g/ml): ML

Lab File ID: 1O010303\O000978

Level : (low/med) LOW

Date Received: 12/20/02

% Moisture:

Decanted: (Y/N) N

Date Extracted: 12/23/02

Concentrated Extract Volume: 2000 (μ L)

Date Analyzed: 01/03/03

Injection Volume: 1.0 (μ L)

Dilution Factor: 1.0

GPC Cleanup (Y/N): N

pH: N/A

Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	0.47	J

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW28I

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code : ACCURA Case No.: SAS No. SDG No.: 3216

Matrix : (soil/water) WATER Lab Sample Id: 3216-002

Sample wt/vol: 1000 (g/ml): ML Lab File ID: 1O010303\O000979

Level : (low/med) LOW Date Received: 12/20/02

% Moisture: Decanted: (Y/N) N Date Extracted: 12/23/02

Concentrated Extract Volume: 2000 (µ L) Date Analyzed: 01/03/03

Injection Volume: 1.0 (µ L) Dilution Factor: 1.0

GPC Cleanup (Y/N): N pH: N/A Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	2.4	

1D
SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.
PEN-19-MW28I MS

Lab Name : ACCURA ANALYTICAL LABORAT
Contract: N2640-WR77
Lab Code : ACCURA
Case No.:
SAS No.
SDG No.: 3216
Matrix : (soil/water) WATER
Lab Sample Id: 3216-002 MS
Sample wt/vol: 1000 (g/ml): ML
Lab File ID: 1O010303\O000980
Level : (low/med) LOW
Date Received: 12/20/02
% Moisture:
Decanted: (Y/N) N
Date Extracted: 12/23/02
Concentrated Extract Volume: 2000 (µ L)
Date Analyzed: 01/03/03
Injection Volume: 1.0 (µ L)
Dilution Factor: 1.0
GPC Cleanup (Y/N): N
pH: N/A
Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	6.1	

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW28I MSD

Lab Name : ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code : ACCURA

Case No.:

SAS No.

SDG No.: 3216

Matrix : (soil/water) WATER

Lab Sample Id: 3216-002 MSD

Sample wt/vol: 1000 (g/ml): ML

Lab File ID: 1O010303\O000982

Level : (low/med) LOW

Date Received: 12/20/02

% Moisture:

Decanted: (Y/N) N

Date Extracted: 12/23/02

Concentrated Extract Volume: 2000 (µ L)

Date Analyzed: 01/04/03

Injection Volume: 1.0 (µ L)

Dilution Factor: 1.0

GPC Cleanup (Y/N): N

pH: N/A

Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	5.3	

1D

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW30S

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code : ACCURA Case No.: SAS No. SDG No.: 3216

Matrix : (soil/water) WATER Lab Sample Id: 3216-005

Sample wt/vol: 1000 (g/ml): ML Lab File ID: 1O010303\O000983

Level : (low/med) LOW Date Received: 12/20/02

% Moisture: Decanted: (Y/N) N Date Extracted: 12/23/02

Concentrated Extract Volume: 2000 (µ L) Date Analyzed: 01/04/03

Injection Volume: 1.0 (µ L) Dilution Factor: 1.0

GPC Cleanup (Y/N): N pH: N/A Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	0.57	J

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW30I

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code : ACCURA Case No.: SAS No. SDG No.: 3216

Matrix : (soil/water) WATER Lab Sample Id: 3216-006

Sample wt/vol: 1000 (g/ml): ML Lab File ID: 1O010303\O000984

Level : (low/med) LOW Date Received: 12/20/02

% Moisture: Decanted: (Y/N) N Date Extracted: 12/23/02

Concentrated Extract Volume: 2000 (μ L) Date Analyzed: 01/04/03

Injection Volume: 1.0 (μ L) Dilution Factor: 1.0

GPC Cleanup (Y/N): N pH: N/A Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	1.7	U

1D

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW24S

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code : ACCURA Case No.: SAS No. SDG No.: 3216

Matrix : (soil/water) WATER Lab Sample Id: 3216-007

Sample wt/vol: 1000 (g/ml): ML Lab File ID: 1O010303\O000985

Level : (low/med) LOW Date Received: 12/20/02

% Moisture: Decanted: (Y/N) N Date Extracted: 12/23/02

Concentrated Extract Volume: 2000 (µ L) Date Analyzed: 01/04/03

Injection Volume: 1.0 (µ L) Dilution Factor: 1.0

GPC Cleanup (Y/N): N pH: N/A Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	1.7	U

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW25S

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code : ACCURA Case No.: SAS No. SDG No.: 3216

Matrix : (soil/water) WATER Lab Sample Id: 3216-008

Sample wt/vol: 1000 (g/ml): ML Lab File ID: 1O010303\O000986

Level : (low/med) LOW Date Received: 12/20/02

% Moisture: Decanted: (Y/N) N Date Extracted: 12/23/02

Concentrated Extract Volume: 2000 (μ L) Date Analyzed: 01/04/03

Injection Volume: 1.0 (μ L) Dilution Factor: 1.0

GPC Cleanup (Y/N): N pH: N/A Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	1.7	U

1D

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW26S

Lab Name : ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code : ACCURA

Case No.:

SAS No.

SDG No.: 3216

Matrix : (soil/water) WATER

Lab Sample Id: 3216-009

Sample wt/vol: 1000 (g/ml): ML

Lab File ID: 1O010303\O000987

Level : (low/med) LOW

Date Received: 12/20/02

% Moisture:

Decanted: (Y/N) N

Date Extracted: 12/23/02

Concentrated Extract Volume: 2000 (µ L)

Date Analyzed: 01/04/03

Injection Volume: 1.0 (µ L)

Dilution Factor: 1.0

GPC Cleanup (Y/N): N

pH: N/A

Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	1.7	U

1D

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW11

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code : ACCURA Case No.: SAS No. SDG No.: 3216

Matrix : (soil/water) WATER Lab Sample Id: 3216-010

Sample wt/vol: 1000 (g/ml): ML Lab File ID: 1O010303\O000996

Level : (low/med) LOW Date Received: 12/20/02

% Moisture: Decanted: (Y/N) N Date Extracted: 12/23/02

Concentrated Extract Volume: 2000 (µ L) Date Analyzed: 01/04/03

Injection Volume: 1.0 (µ L) Dilution Factor: 5.0

GPC Cleanup (Y/N): N pH: N/A Extraction : (Type) SW3520C

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	26	

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW4

Lab Name : ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code : ACCURA

Case No.:

SAS No.

SDG No.: 3216

Matrix : (soil/water) WATER

Lab Sample Id: 3216-011

Sample wt/vol: 1000 (g/ml): ML

Lab File ID: 1O010303\O000997

Level : (low/med) LOW

Date Received: 12/20/02

% Moisture: Decanted: (Y/N) N

Date Extracted: 12/23/02

Concentrated Extract Volume: 2000 (μ L)

Date Analyzed: 01/04/03

Injection Volume: 1.0 (μ L)

Dilution Factor: 5.0

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

Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	20	

1D

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW6

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code : ACCURA Case No.: SAS No. SDG No.: 3216

Matrix : (soil/water) WATER Lab Sample Id: 3216-012

Sample wt/vol: 1000 (g/ml): ML Lab File ID: 1O010303\O000990

Level : (low/med) LOW Date Received: 12/20/02

% Moisture: Decanted: (Y/N) N Date Extracted: 12/23/02

Concentrated Extract Volume: 2000 (μ L) Date Analyzed: 01/04/03

Injection Volume: 1.0 (μ L) Dilution Factor: 1.0

GPC Cleanup (Y/N): N pH: N/A Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	0.54	J

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW8

Lab Name : ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code : ACCURA Case No.: SAS No. SDG No.: 3216

Matrix : (soil/water) WATER Lab Sample Id: 3216-013

Sample wt/vol: 1000 (g/ml): ML Lab File ID: 1O010303\O000991

Level : (low/med) LOW Date Received: 12/20/02

% Moisture: Decanted: (Y/N) N Date Extracted: 12/23/02

Concentrated Extract Volume: 2000 (μ L) Date Analyzed: 01/04/03

Injection Volume: 1.0 (μ L) Dilution Factor: 1.0

GPC Cleanup (Y/N): N pH: N/A Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	0.62	J

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-MW22

Lab Name : ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code : ACCURA

Case No.:

SAS No.

SDG No.: 3216

Matrix : (soil/water) WATER

Lab Sample Id: 3216-014

Sample wt/vol: 1000 (g/ml): ML

Lab File ID: 1O010303\O000993

Level : (low/med) LOW

Date Received: 12/20/02

% Moisture:

Decanted: (Y/N) N

Date Extracted: 12/23/02

Concentrated Extract Volume: 2000 (µ L)

Date Analyzed: 01/04/03

Injection Volume: 1.0 (µ L)

Dilution Factor: 1.0

GPC Cleanup (Y/N): N

pH: N/A

Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	1.7	U

1C

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-DUP02

Lab Name : ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code : ACCURA

Case No.:

SAS No.

SDG No.: 3216

Matrix : (soil/water) WATER

Lab Sample Id: 3216-015

Sample wt/vol: 1000 (g/ml): ML

Lab File ID: 1O010303\O000994

Level : (low/med) LOW

Date Received: 12/20/02

% Moisture:

Decanted: (Y/N) N

Date Extracted: 12/23/02

Concentrated Extract Volume: 2000 (µ L)

Date Analyzed: 01/04/03

Injection Volume: 1.0 (µ L)

Dilution Factor: 1.0

GPC Cleanup (Y/N): N

pH: N/A

Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	1.7	U

1D

SEMIVOLATILE ORGANICS ANALYSES DATA SHEET

EPA SAMPLE NO.

PEN-19-RB121902

Lab Name : ACCURA ANALYTICAL LABORAT

Contract: N2640-WR77

Lab Code : ACCURA

Case No.:

SAS No.

SDG No.: 3216

Matrix : (soil/water) WATER

Lab Sample Id: 3216-016

Sample wt/vol: 1000 (g/ml): ML

Lab File ID: 1O010303\O000995

Level : (low/med) LOW

Date Received: 12/20/02

% Moisture:

Decanted: (Y/N) N

Date Extracted: 12/23/02

Concentrated Extract Volume: 2000 (µ L)

Date Analyzed: 01/04/03

Injection Volume: 1.0 (µ L)

Dilution Factor: 1.0

GPC Cleanup (Y/N): N

pH: N/A

Extraction : (Type) SW3520C

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) mg/L	Q
	Petroleum Range Organics	1.7	U

USEPA - CLP

1A- IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW28S

Lab Name: ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code: ACCURA Case No.: _____ NRAS No. _____ SDG No.: 3216

Matrix (soil/water): WATER Lab Sample ID: 3216-001

Level (low/med): LOW Date Received: 12/20/2002

% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	10	U		P

Color Before _____ Clarity Before _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

1A- IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW28I

Lab Name: ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code: ACCURA Case No.: _____ NRAS No. _____ SDG No.: 3216

Matrix (soil/water): WATER Lab Sample ID: 3216-002

Level (low/med): LOW Date Received: 12/20/2002

% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	10	U		P

Color Before _____ Clarity Before _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

1A- IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW30S

Lab Name: ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code: ACCURA Case No.: _____ NRAS No. _____ SDG No.: 3216

Matrix (soil/water): WATER Lab Sample ID: 3216-005

Level (low/med): LOW Date Received: 12/20/2002

% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	10	U		P

Color Before _____ Clarity Before _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

1A- IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW30I

Lab Name: ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code: ACCURA Case No.: _____ NRAS No. _____ SDG No.: 3216

Matrix (soil/water): WATER Lab Sample ID: 3216-006

Level (low/med): LOW Date Received: 12/20/2002

% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	10	U		P

Color Before _____ Clarity Before _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

1A- IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW24S

Lab Name: ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code: ACCURA Case No.: _____ NRAS No. _____ SDG No.: 3216

Matrix (soil/water): WATER Lab Sample ID: 3216-007

Level (low/med): LOW Date Received: 12/20/2002

% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	10	U		P

Color Before _____ Clarity Before _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

1A- IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW25S

Lab Name: ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code: ACCURA Case No.: _____ NRAS No. _____ SDG No.: 3216

Matrix (soil/water): WATER Lab Sample ID: 3216-008

Level (low/med): LOW Date Received: 12/20/2002

% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	10	U		P

Color Before _____ Clarity Before _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

1A- IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW26S

Lab Name: ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code: ACCURA Case No.: _____ NRAS No. _____ SDG No.: 3216

Matrix (soil/water): WATER Lab Sample ID: 3216-009

Level (low/med): LOW Date Received: 12/20/2002

% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	10	U		P

Color Before _____ Clarity Before _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

1A- IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW11

Lab Name: ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code: ACCURA Case No.: _____ NRAS No. _____ SDG No.: 3216

Matrix (soil/water): WATER Lab Sample ID: 3216-010

Level (low/med): LOW Date Received: 12/20/2002

% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	10	U		P

Color Before _____ Clarity Before _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

1A- IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW4

Lab Name: ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code: ACCURA Case No.: _____ NRAS No. _____ SDG No.: 3216

Matrix (soil/water): WATER Lab Sample ID: 3216-011

Level (low/med): LOW Date Received: 12/20/2002

% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	10	U		P

Color Before _____ Clarity Before _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

1A- IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW6

Lab Name: ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code: ACCURA Case No.: _____ NRAS No. _____ SDG No.: 3216

Matrix (soil/water): WATER Lab Sample ID: 3216-012

Level (low/med): LOW Date Received: 12/20/2002

% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	10	U		P

Color Before _____ Clarity Before _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

1A- IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW8

Lab Name: ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code: ACCURA Case No.: _____ NRAS No. _____ SDG No.: 3216

Matrix (soil/water): WATER Lab Sample ID: 3216-013

Level (low/med): LOW Date Received: 12/20/2002

% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	10.7			P

Color Before _____ Clarity Before _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

1A- IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-MW22

Lab Name: ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code: ACCURA Case No.: _____ NRAS No. _____ SDG No.: 3216

Matrix (soil/water): WATER Lab Sample ID: 3216-014

Level (low/med): LOW Date Received: 12/20/2002

% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	10	U		P

Color Before _____ Clarity Before _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

1A- IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-DUP02

Lab Name: ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code: ACCURA Case No.: _____ NRAS No. _____ SDG No.: 3216

Matrix (soil/water): WATER Lab Sample ID: 3216-015

Level (low/med): LOW Date Received: 12/20/2002

% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	10	U		P

Color Before _____ Clarity Before _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

1A- IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-19-RB121902

Lab Name: ACCURA ANALYTICAL LABORAT Contract: N2640-WR77

Lab Code: ACCURA Case No.: _____ NRAS No. _____ SDG No.: 3216

Matrix (soil/water): WATER Lab Sample ID: 3216-016

Level (low/med): LOW Date Received: 12/20/2002

% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	10	U		P

Color Before _____ Clarity Before _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

ATTACHMENT E

Monitoring Well Installation Logs

Equipment Calibration Logs

Groundwater Measurement Forms

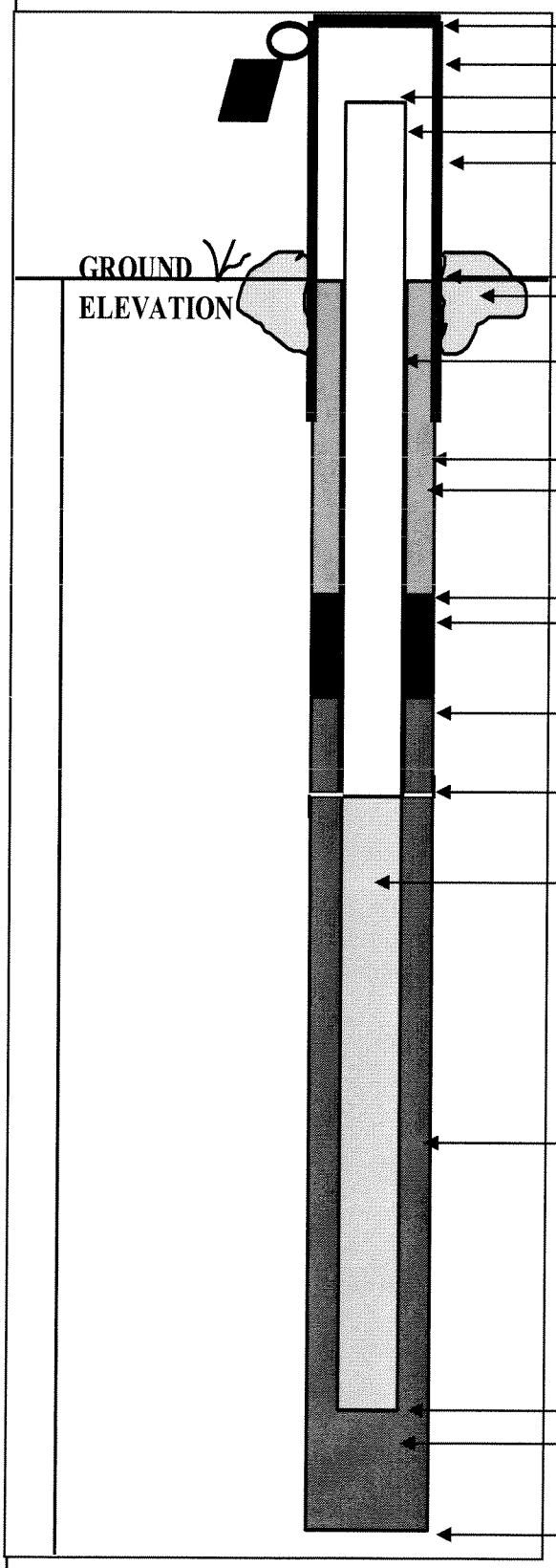
Groundwater Sampling Logs

Field Survey Forms

BORING NO.: MW-17R

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

PROJECT:	NASP-Site 19	DRILLING Co.:	ATI	BORING No.:	MW-17R
PROJECT No.:	N0401	DRILLER:	Jason Wiley	DATE COMPLETED:	8/23/2001
SITE:	Site 19	DRILLING METHOD:	DPT	NORTHING:	
GEOLOGIST:	Gary Davis	DEV. METHOD:	Pump & Surge	EASTING:	



ELEVATION OF TOP OF SURFACE CASING:

STICK -UP TOP OF SURFACE CASING:

ELEVATION OF TOP OF RISER PIPE: 31.14

RISER STICK-UP ABOVE GROUND SURFACE: 2.5

I.D. OF SURFACE CASING:

TYPE OF SURFACE CASING: 4" X 4" Steel

GROUND ELEVATION:

TYPE OF SURFACE SEAL: Concrete Pad

RISER PIPE I.D.: 2"

TYPE OF RISER PIPE: Sch. 40 PVC

BOREHOLE DIAMETER: 2"

TYPE OF SEAL: Fine Sand to top of screen, 0.5' bentonite on top of sand seal.

ELEVATION / DEPTH OF SEAL: /

TYPE OF SEAL: Fine Sand 45/55 Standard sand and silica.

ELEVATION / DEPTH TOP OF FILTER PACK: /

ELEVATION / DEPTH TOP OF SCREEN: / +0.5

TYPE OF SCREEN: Sch. 40 PVC Pre-Pack

SLOT SIZE X LENGTH: 0.01 x 10'

I.D. OF SCREEN: 2"

TYPE OF FILTER PACK: Pre-Pack

Stainless steel mesh over filter media, wrapping continuous slot along sides of PVC.

ELEVATION / DEPTH BOTTOM OF SCREEN: / 19.5

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

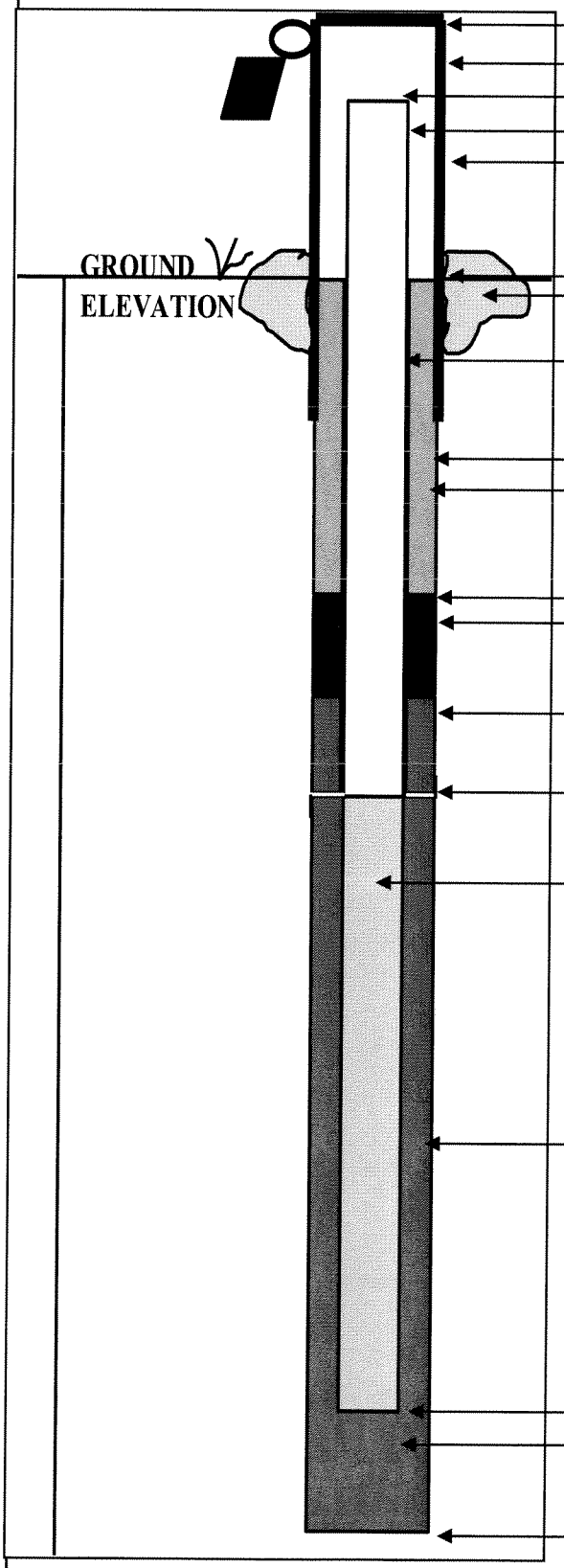
TYPE OF BACKFILL BELOW WELL:

ELEVATION / DEPTH OF BOREHOLE: / 19.5

BORING NO.: MW-24S

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

PROJECT:	NASP-Site 19	DRILLING Co.:	ATI	BORING No.:	MW-24S
PROJECT No.:	N0401	DRILLER:	Jason Wiley	DATE COMPLETED:	10/27/2001
SITE:	Site 19	DRILLING METHOD:	DPT	NORTHING:	
GEOLOGIST:	Gary Davis	DEV. METHOD:	Pump & Surge	EASTING:	



ELEVATION OF TOP OF SURFACE CASING:

STICK -UP TOP OF SURFACE CASING:

ELEVATION OF TOP OF RISER PIPE: 28.62

RISER STICK-UP ABOVE GROUND SURFACE: 3.45

I.D. OF SURFACE CASING:

TYPE OF SURFACE CASING: 4" X 4" Steel

GROUND ELEVATION:

TYPE OF SURFACE SEAL: Concrete Pad

RISER PIPE I.D.: 3/4"

TYPE OF RISER PIPE: Sch. 40 PVC

BOREHOLE DIAMETER: 2"

TYPE OF SEAL: Fine Sand to Surface

ELEVATION / DEPTH OF SEAL: /

TYPE OF SEAL: Fine Sand 45/55

Standard sand and silica.

ELEVATION / DEPTH TOP OF FILTER PACK: / 2.5

ELEVATION / DEPTH TOP OF SCREEN: / 2.5

TYPE OF SCREEN: Sch. 40 PVC Pre-Pack

SLOT SIZE X LENGTH: 0.01 x 10'

I.D. OF SCREEN: 3/4"

TYPE OF FILTER PACK: Pre-Pack

Stainless steel mesh over filter media, wrapping continuous slot along sides of PVC.

ELEVATION / DEPTH BOTTOM OF SCREEN: / 12.5

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

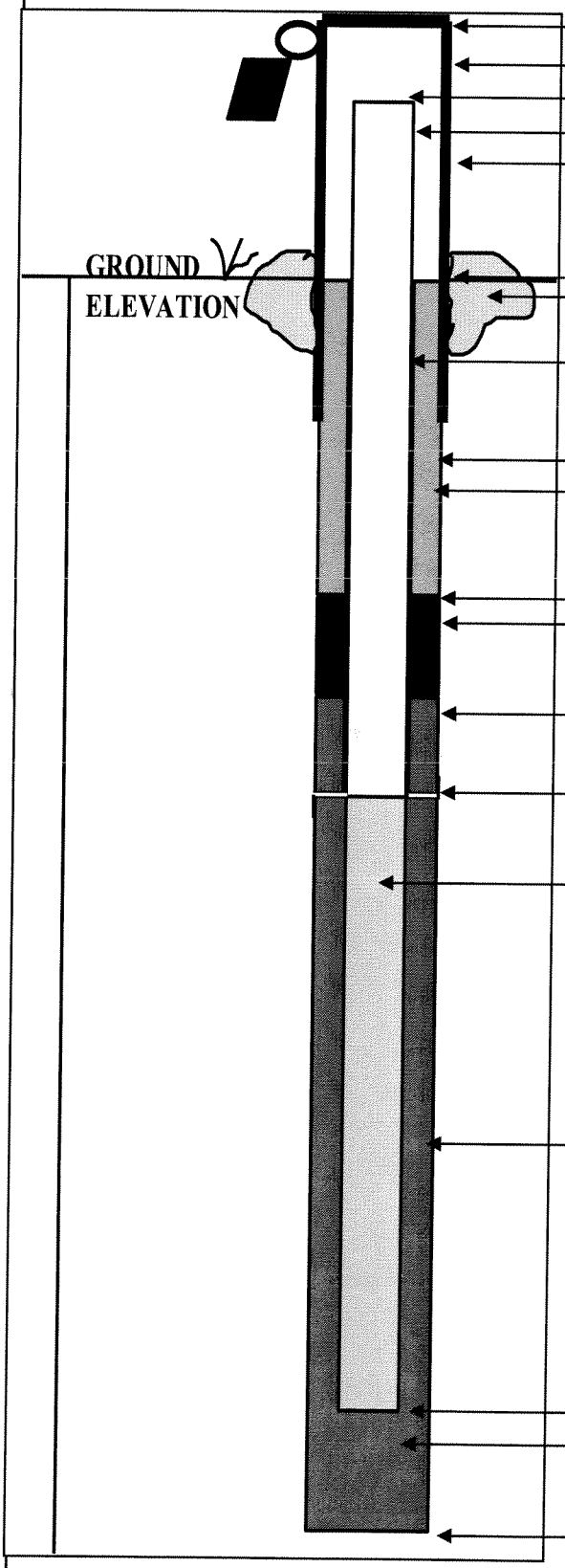
TYPE OF BACKFILL BELOW WELL:

ELEVATION / DEPTH OF BOREHOLE: / 14.7

BORING NO.: MW-25S

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

PROJECT:	NASP-Site 19	DRILLING Co.:	ATI	BORING No.:	MW-25S
PROJECT No.:	N0401	DRILLER:	Jason Wiley	DATE COMPLETED:	10/27/2001
SITE:	Site 19	DRILLING METHOD:	DPT	NORTHING:	
GEOLOGIST:	Gary Davis	DEV. METHOD:	Pump & Surge	EASTING:	



ELEVATION OF TOP OF SURFACE CASING:

STICK -UP TOP OF SURFACE CASING:

ELEVATION OF TOP OF RISER PIPE: 27.84

RISER STICK-UP ABOVE GROUND SURFACE: 3.37

I.D. OF SURFACE CASING:

TYPE OF SURFACE CASING: 4" X 4" Steel

GROUND ELEVATION:

TYPE OF SURFACE SEAL: Concrete Pad

RISER PIPE I.D.: 3/4"

TYPE OF RISER PIPE: Sch. 40 PVC

BOREHOLE DIAMETER: 2"

TYPE OF SEAL: Fine Sand to Surface

ELEVATION / DEPTH OF SEAL: /

TYPE OF SEAL: Fine Sand 45/55

Standard sand and silica.

ELEVATION / DEPTH TOP OF FILTER PACK: / 2.0

ELEVATION / DEPTH TOP OF SCREEN: / 2.0

TYPE OF SCREEN: Sch. 40 PVC Pre-Pack

SLOT SIZE X LENGTH: 0.01 x 10'

I.D. OF SCREEN: 3/4"

TYPE OF FILTER PACK: Pre-Pack

Stainless steel mesh over filter media, wrapping continuous slot along sides of PVC.

ELEVATION / DEPTH BOTTOM OF SCREEN: / 12.0

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

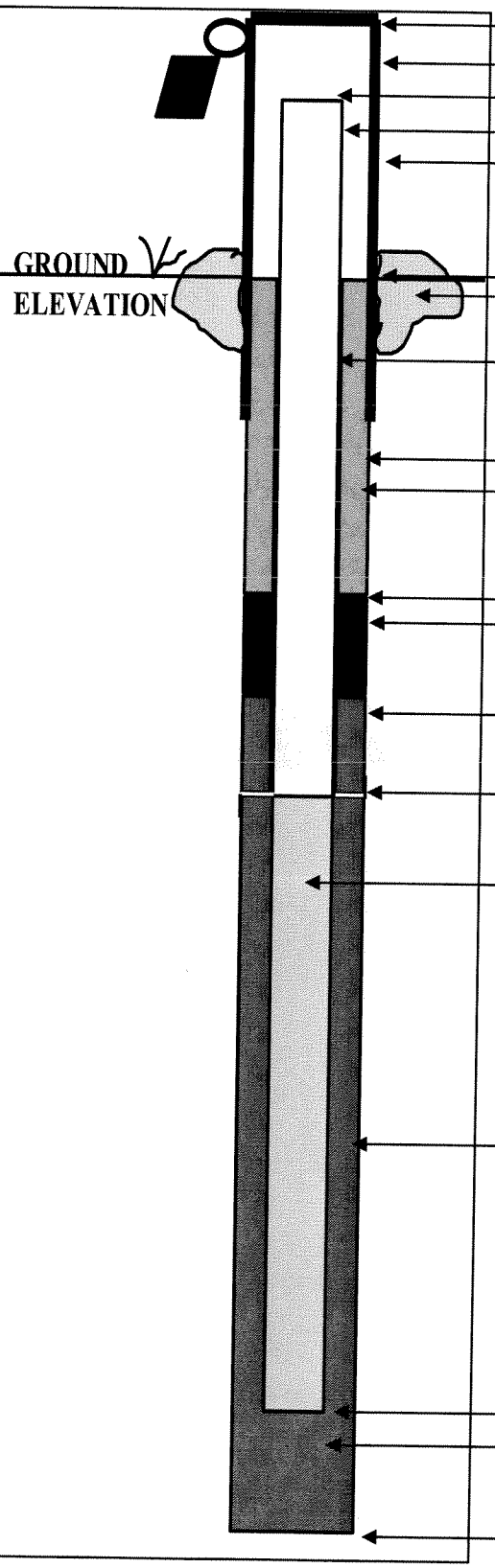
TYPE OF BACKFILL BELOW WELL:

ELEVATION / DEPTH OF BOREHOLE: / 14.3

BORING NO.: MW-26S

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

PROJECT:	NASP-Site 19	DRILLING Co.:	ATI	BORING No.:	MW-26S
PROJECT No.:	N0401	DRILLER:	Jason Wiley	DATE COMPLETED:	10/27/2001
SITE:	Site 19	DRILLING METHOD:	DPT	NORTHING:	
GEOLOGIST:	Gary Davis	DEV. METHOD:	Pump & Surge	EASTING:	



ELEVATION OF TOP OF SURFACE CASING:

STICK -UP TOP OF SURFACE CASING:

ELEVATION OF TOP OF RISER PIPE: 27.64

RISER STICK-UP ABOVE GROUND SURFACE: 3.43

I.D. OF SURFACE CASING:

TYPE OF SURFACE CASING: 4" X 4" Steel

GROUND ELEVATION:

TYPE OF SURFACE SEAL: Concrete Pad

RISER PIPE I.D.: 3/4"

TYPE OF RISER PIPE: Sch. 40 PVC

BOREHOLE DIAMETER: 2"

TYPE OF SEAL: Fine Sand to Surface

ELEVATION / DEPTH OF SEAL: /

TYPE OF SEAL: Fine Sand 45/55

Standard sand and silica.

ELEVATION / DEPTH TOP OF FILTER PACK: / 2.0

ELEVATION / DEPTH TOP OF SCREEN: / 2.0

TYPE OF SCREEN: Sch. 40 PVC Pre-Pack

SLOT SIZE X LENGTH: 0.01 x 10'

I.D. OF SCREEN: 3/4"

TYPE OF FILTER PACK: Pre-Pack

Stainless steel mesh over filter media, wrapping continuous slot along sides of PVC.

ELEVATION / DEPTH BOTTOM OF SCREEN: / 12.0

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

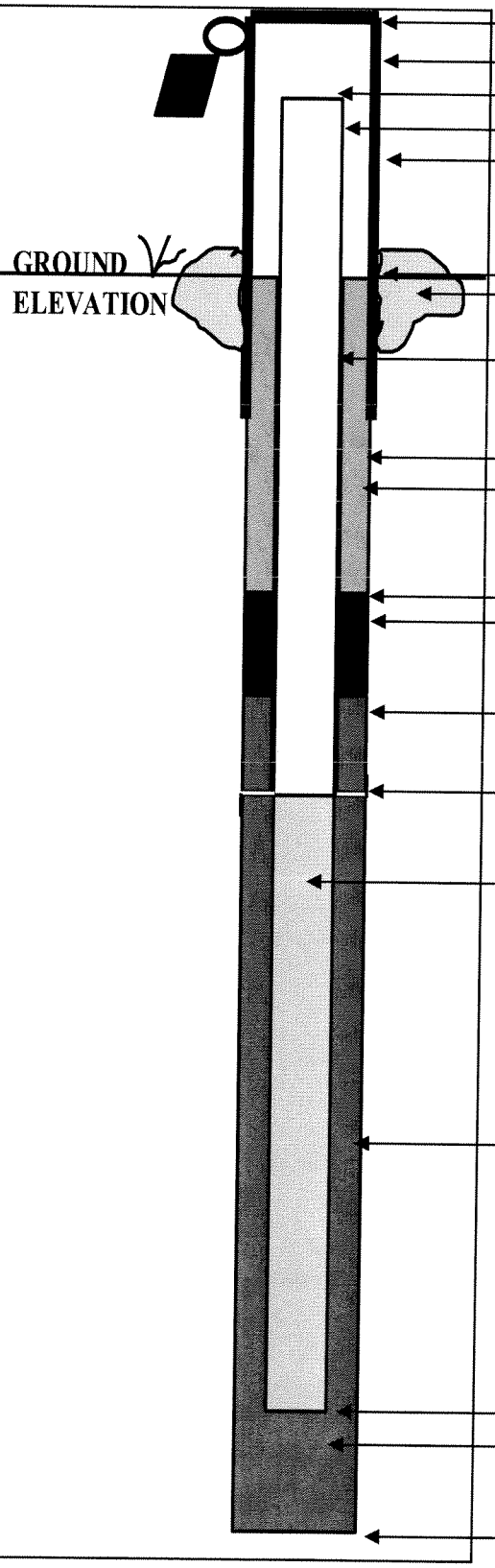
TYPE OF BACKFILL BELOW WELL:

ELEVATION / DEPTH OF BOREHOLE: / 15.1

BORING NO.: MW-27S

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

PROJECT:	NASP-Site 19	DRILLING Co.:	ATI	BORING No.:	MW-27S
PROJECT No.:	N0401	DRILLER:	Jason Wiley	DATE COMPLETED:	10/27/2001
SITE:	Site 19	DRILLING METHOD:	DPT	NORTHING:	
GEOLOGIST:	Gary Davis	DEV. METHOD:	Pump & Surge	EASTING:	



ELEVATION OF TOP OF SURFACE CASING:

STICK -UP TOP OF SURFACE CASING:

ELEVATION OF TOP OF RISER PIPE: 27.95

RISER STICK-UP ABOVE GROUND SURFACE: 3.01

I.D. OF SURFACE CASING:

TYPE OF SURFACE CASING: 4" X 4" Steel

GROUND ELEVATION:

TYPE OF SURFACE SEAL: Concrete Pad

RISER PIPE I.D.: 3/4"

TYPE OF RISER PIPE: Sch. 40 PVC

BOREHOLE DIAMETER: 2"

TYPE OF SEAL: Fine Sand to Surface

ELEVATION / DEPTH OF SEAL: /

TYPE OF SEAL: Fine Sand 45/55

Standard sand and silica.

ELEVATION / DEPTH TOP OF FILTER PACK: / 2.5

ELEVATION / DEPTH TOP OF SCREEN: / 2.5

TYPE OF SCREEN: Sch. 40 PVC Pre-Pack

SLOT SIZE X LENGTH: 0.01 x 10'

I.D. OF SCREEN: 3/4"

TYPE OF FILTER PACK: Pre-Pack

Stainless steel mesh over filter media, wrapping continuous slot along sides of PVC.

ELEVATION / DEPTH BOTTOM OF SCREEN: / 12.5

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

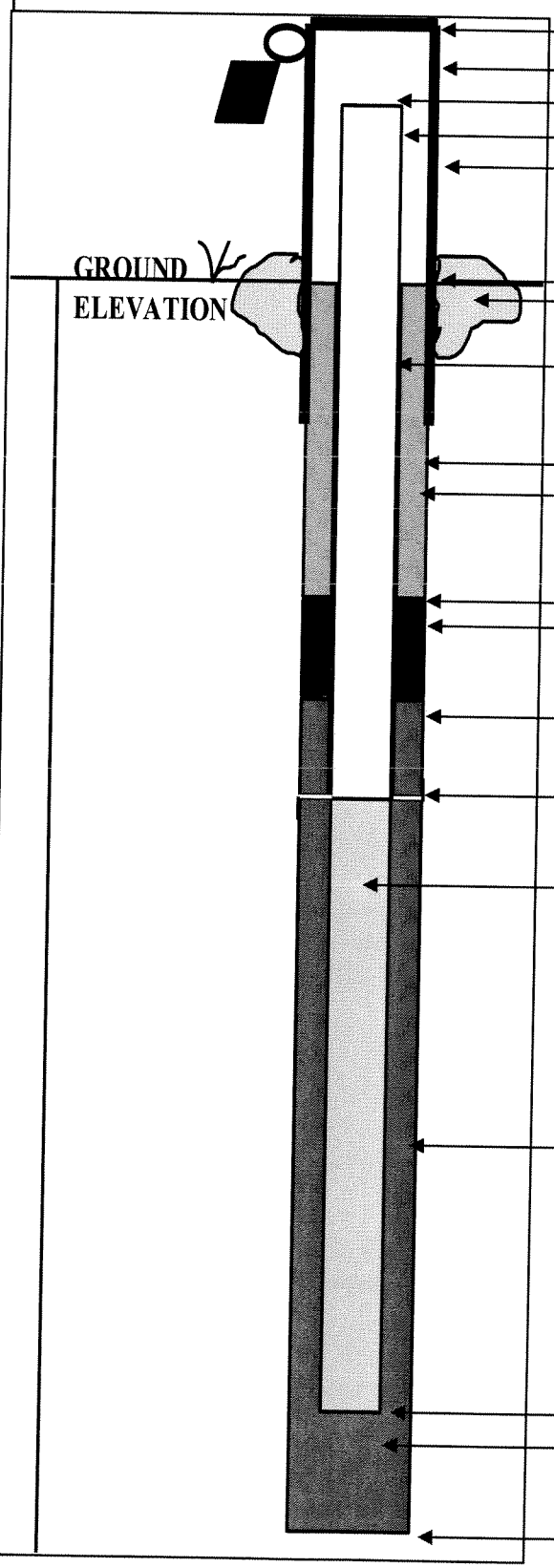
TYPE OF BACKFILL BELOW WELL:

ELEVATION / DEPTH OF BOREHOLE: / 14.3

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

BORING NO.: MW-28 S

PROJECT:	NASP-Site 19	DRILLING Co.:	ATI	BORING No.:	MW-28S
PROJECT No.:	N0401	DRILLER:	Jason Wiley	DATE COMPLETED:	10/27/2001
SITE:	Site 19	DRILLING METHOD:	DPT	NORTHING:	
GEOLOGIST:	Gary Davis	DEV. METHOD:	Pump & Surge	EASTING:	



ELEVATION OF TOP OF SURFACE CASING:

STICK -UP TOP OF SURFACE CASING:

ELEVATION OF TOP OF RISER PIPE: 31.01

RISER STICK-UP ABOVE GROUND SURFACE: 2.61

I.D. OF SURFACE CASING:

TYPE OF SURFACE CASING: 4" X 4" Steel

GROUND ELEVATION:

TYPE OF SURFACE SEAL: Concrete Pad

RISER PIPE I.D.: 3/4"

TYPE OF RISER PIPE: Sch. 40 PVC

BOREHOLE DIAMETER: 2"

TYPE OF SEAL: Fine Sand to Surface

ELEVATION / DEPTH OF SEAL: /

TYPE OF SEAL: Fine Sand 45/55

Standard sand and silica.

ELEVATION / DEPTH TOP OF FILTER PACK: / 2.5

ELEVATION / DEPTH TOP OF SCREEN: / 2.5

TYPE OF SCREEN: Sch. 40 PVC Pre-Pack

SLOT SIZE X LENGTH: 0.01 x 10'

I.D. OF SCREEN: 3/4"

TYPE OF FILTER PACK: Pre-Pack

Stainless steel mesh over filter media, wrapping continuous slot along sides of PVC.

ELEVATION / DEPTH BOTTOM OF SCREEN: / 12.5

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

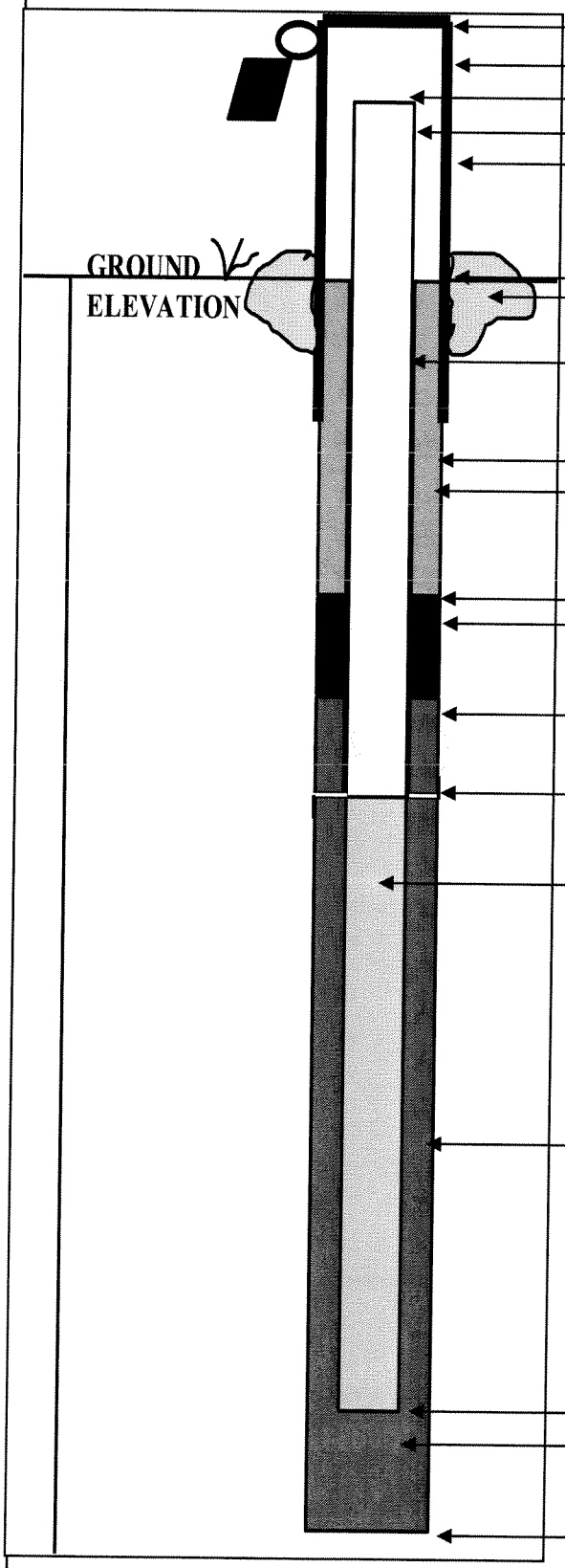
TYPE OF BACKFILL BELOW WELL:

ELEVATION / DEPTH OF BOREHOLE: / 14.4

BORING NO.: MW-28I

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

PROJECT:	NASP-Site 19	DRILLING Co.:	ATI	BORING No.:	MW-28I
PROJECT No.:	N0401	DRILLER:	Jason Wiley	DATE COMPLETED:	10/27/2001
SITE:	Site 19	DRILLING METHOD:	DPT	NORTHING:	
GEOLOGIST:	Gary Davis	DEV. METHOD:	Pump & Surge	EASTING:	



ELEVATION OF TOP OF SURFACE CASING:

STICK -UP TOP OF SURFACE CASING:

ELEVATION OF TOP OF RISER PIPE: 31.13

RISER STICK-UP ABOVE GROUND SURFACE: 3.02

I.D. OF SURFACE CASING:

TYPE OF SURFACE CASING: 4" X 4" Steel

GROUND ELEVATION:

TYPE OF SURFACE SEAL: Concrete Pad

RISER PIPE I.D.: 3/4"

TYPE OF RISER PIPE: Sch. 40 PVC

BOREHOLE DIAMETER: 2"

TYPE OF SEAL: Fine Sand to Surface

ELEVATION / DEPTH OF SEAL: /

TYPE OF SEAL: Fine Sand 45/55

Standard sand and silica.

ELEVATION / DEPTH TOP OF FILTER PACK: / 20.0

ELEVATION / DEPTH TOP OF SCREEN: / 20.0

TYPE OF SCREEN: Sch. 40 PVC Pre-Pack

SLOT SIZE X LENGTH: 0.01 x 10'

I.D. OF SCREEN: 3/4"

TYPE OF FILTER PACK: Pre-Pack

Stainless steel mesh over filter media, wrapping continuous slot along sides of PVC.

ELEVATION / DEPTH BOTTOM OF SCREEN: / 25.0

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

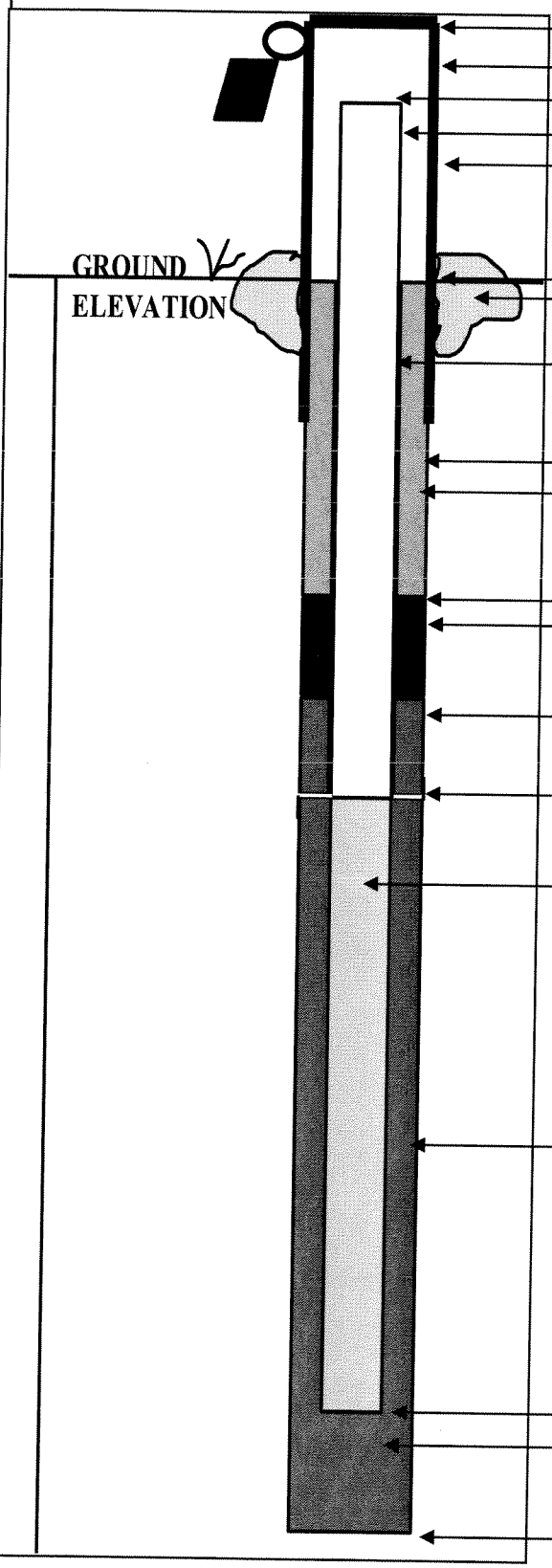
TYPE OF BACKFILL BELOW WELL:

ELEVATION / DEPTH OF BOREHOLE: / 26.8

BORING NO.: MW-29S

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

PROJECT:	NASP-Site 19	DRILLING Co.:	Columbia	BORING No.:	MW-29S
PROJECT No.:	N2640	DRILLER:	Randy Brand	DATE COMPLETED:	11/17/2002
SITE:	Site 19	DRILLING METHOD:	DPT	NORTHING:	
GEOLOGIST:	Bill Olson	DEV. METHOD:	Peristaltic	EASTING:	



ELEVATION OF TOP OF SURFACE CASING:

STICK -UP TOP OF SURFACE CASING:

ELEVATION OF TOP OF RISER PIPE:

RISER STICK-UP ABOVE GROUND SURFACE:

I.D. OF SURFACE CASING: 4"

TYPE OF SURFACE CASING: 4" Diameter Round Steel Casing

GROUND ELEVATION:

TYPE OF SURFACE SEAL: Concrete Pad

RISER PIPE I.D.: 1.25"

TYPE OF RISER PIPE: Sch. 40 PVC

BOREHOLE DIAMETER: 2"

TYPE OF SEAL: Bentonite

ELEVATION / DEPTH OF SEAL: /

TYPE OF SEAL: Sand Pack

ELEVATION / DEPTH TOP OF FILTER PACK: /

ELEVATION / DEPTH TOP OF SCREEN: / 5.8

TYPE OF SCREEN: Sch. 40 PVC Pre-Pack

SLOT SIZE X LENGTH: 0.01 x 10'

I.D. OF SCREEN: 1.25"

TYPE OF FILTER PACK: 30/65 Fine Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: / 15.8

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

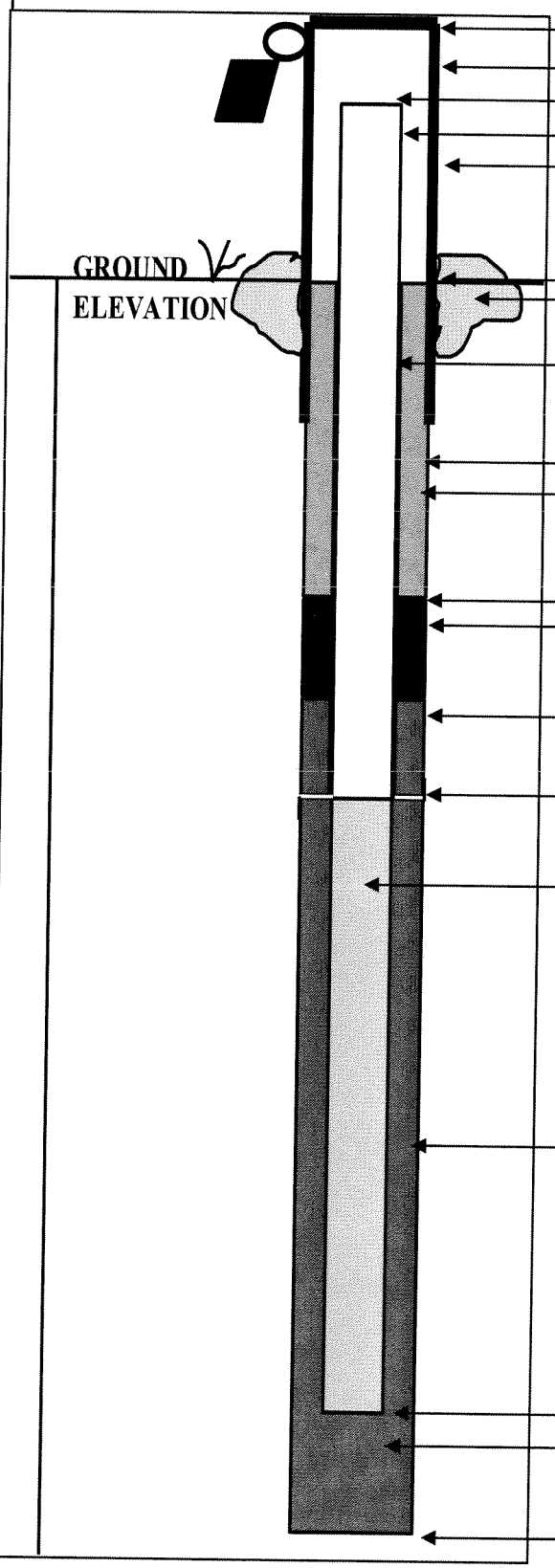
TYPE OF BACKFILL BELOW WELL:

ELEVATION / DEPTH OF BOREHOLE: /

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

BORING NO.: MW-29I

PROJECT:	NASP-Site 19	DRILLING Co.:	Columbia	BORING No.:	MW-29I
PROJECT No.:	N2640	DRILLER:	Randy Brand	DATE COMPLETED:	11/17/2002
SITE:	Site 19	DRILLING METHOD:	DPT	NORTHING:	
GEOLOGIST:	Bill Olson	DEV. METHOD:	Peristaltic	EASTING:	



ELEVATION OF TOP OF SURFACE CASING:

STICK -UP TOP OF SURFACE CASING:

ELEVATION OF TOP OF RISER PIPE:

RISER STICK-UP ABOVE GROUND SURFACE:

I.D. OF SURFACE CASING: 4"

TYPE OF SURFACE CASING: 4" Diameter Round Steel Casing

GROUND ELEVATION:

TYPE OF SURFACE SEAL: Concrete Pad

RISER PIPE I.D.: 1.25"

TYPE OF RISER PIPE: Sch. 40 PVC

BOREHOLE DIAMETER: 2"

TYPE OF SEAL: Bentonite

ELEVATION / DEPTH OF SEAL: /

TYPE OF SEAL: Sand Pack

ELEVATION / DEPTH TOP OF FILTER PACK: /

ELEVATION / DEPTH TOP OF SCREEN: / 20

TYPE OF SCREEN: Sch. 40 PVC Pre-Pack

SLOT SIZE X LENGTH: 0.01 x 5'

I.D. OF SCREEN: 1.25"

TYPE OF FILTER PACK: 30/65 Fine Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: / 25

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

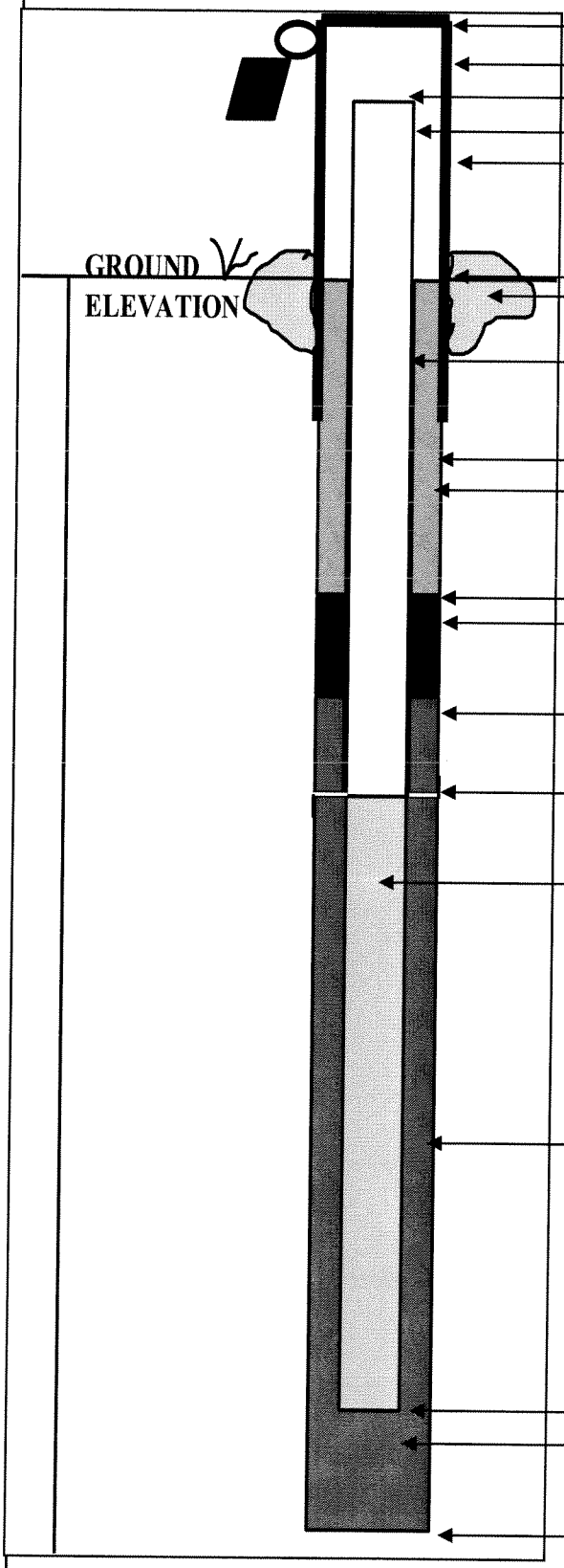
TYPE OF BACKFILL BELOW WELL:

ELEVATION / DEPTH OF BOREHOLE: /

BORING NO.: MW-29D

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

PROJECT:	NASP-Site 19	DRILLING Co.:	Columbia	BORING No.:	MW-29D
PROJECT No.:	N2640	DRILLER:	Randy Brand	DATE COMPLETED:	11/12/2002
SITE:	Site 19	DRILLING METHOD:	DPT	NORTHING:	
GEOLOGIST:	Bill Olson	DEV. METHOD:	Peristaltic	EASTING:	



ELEVATION OF TOP OF SURFACE CASING:

STICK -UP TOP OF SURFACE CASING:

ELEVATION OF TOP OF RISER PIPE:

RISER STICK-UP ABOVE GROUND SURFACE:

I.D. OF SURFACE CASING: 4"

TYPE OF SURFACE CASING: 4" Diameter Round Steel Casing

GROUND ELEVATION:

TYPE OF SURFACE SEAL: Concrete Pad

RISER PIPE I.D.: 1.25"

TYPE OF RISER PIPE: Sch. 40 PVC

BOREHOLE DIAMETER: 2"

TYPE OF SEAL: Bentonite

ELEVATION / DEPTH OF SEAL: /

TYPE OF SEAL: Sand Pack

ELEVATION / DEPTH TOP OF FILTER PACK: /

ELEVATION / DEPTH TOP OF SCREEN: / 33.6

TYPE OF SCREEN: Sch. 40 PVC Pre-Pack

SLOT SIZE X LENGTH: 0.01 x 5'

I.D. OF SCREEN: 1.25"

TYPE OF FILTER PACK: 30/65 Fine Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: / 38.6

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

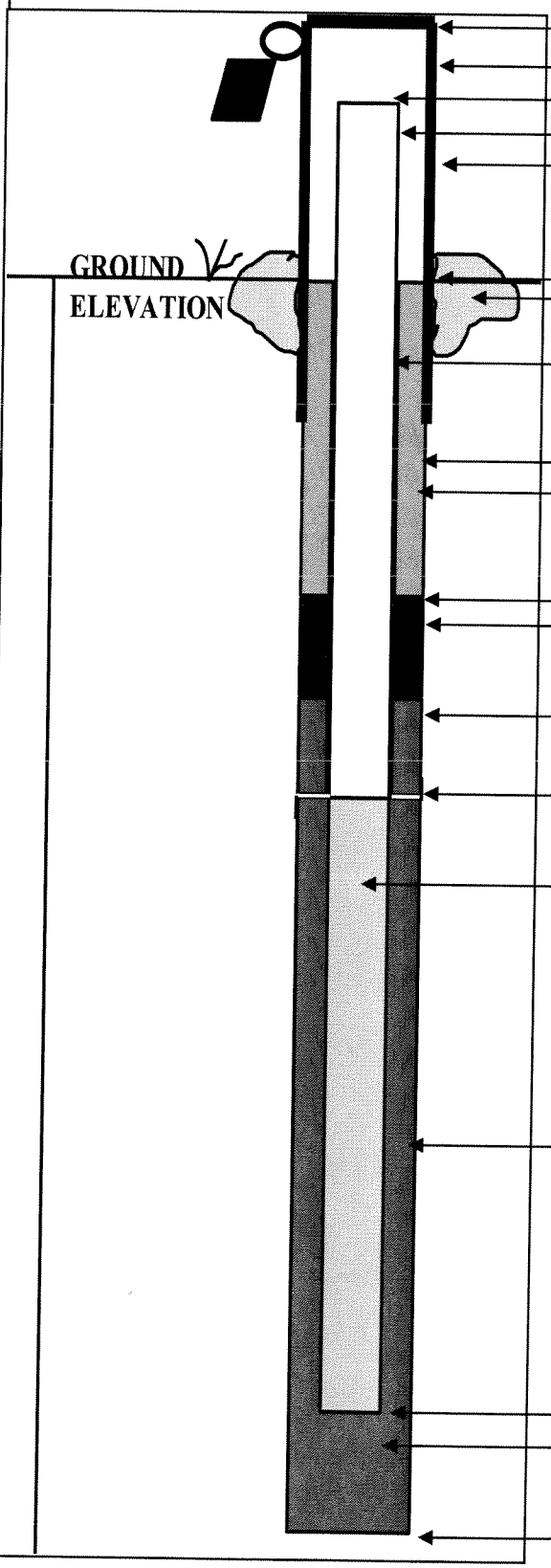
TYPE OF BACKFILL BELOW WELL:

ELEVATION / DEPTH OF BOREHOLE: /

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

BORING NO.: MW-30S

PROJECT:	NASP-Site 19	DRILLING Co.:	Columbia	BORING No.:	MW-30S
PROJECT No.:	N2640	DRILLER:	Randy Brand	DATE COMPLETED:	11/17/2002
SITE:	Site 19	DRILLING METHOD:	DPT	NORTHING:	
GEOLOGIST:	Bill Olson	DEV. METHOD:	Peristaltic	EASTING:	



ELEVATION OF TOP OF SURFACE CASING:

STICK -UP TOP OF SURFACE CASING:

ELEVATION OF TOP OF RISER PIPE:

RISER STICK-UP ABOVE GROUND SURFACE:

I.D. OF SURFACE CASING: 4"

TYPE OF SURFACE CASING: 4" Diameter Round Steel Casing

GROUND ELEVATION:

TYPE OF SURFACE SEAL: Concrete Pad

RISER PIPE I.D.: 1.25"

TYPE OF RISER PIPE: Sch. 40 PVC

BOREHOLE DIAMETER: 2"

TYPE OF SEAL: Bentonite

ELEVATION / DEPTH OF SEAL: /

TYPE OF SEAL: Sand Pack

ELEVATION / DEPTH TOP OF FILTER PACK: /

ELEVATION / DEPTH TOP OF SCREEN: / 5.4

TYPE OF SCREEN: Sch. 40 PVC Pre-Pack

SLOT SIZE X LENGTH: 0.01 x 10'

I.D. OF SCREEN: 1.25"

TYPE OF FILTER PACK: 30/65 Fine Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: / 15.35

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

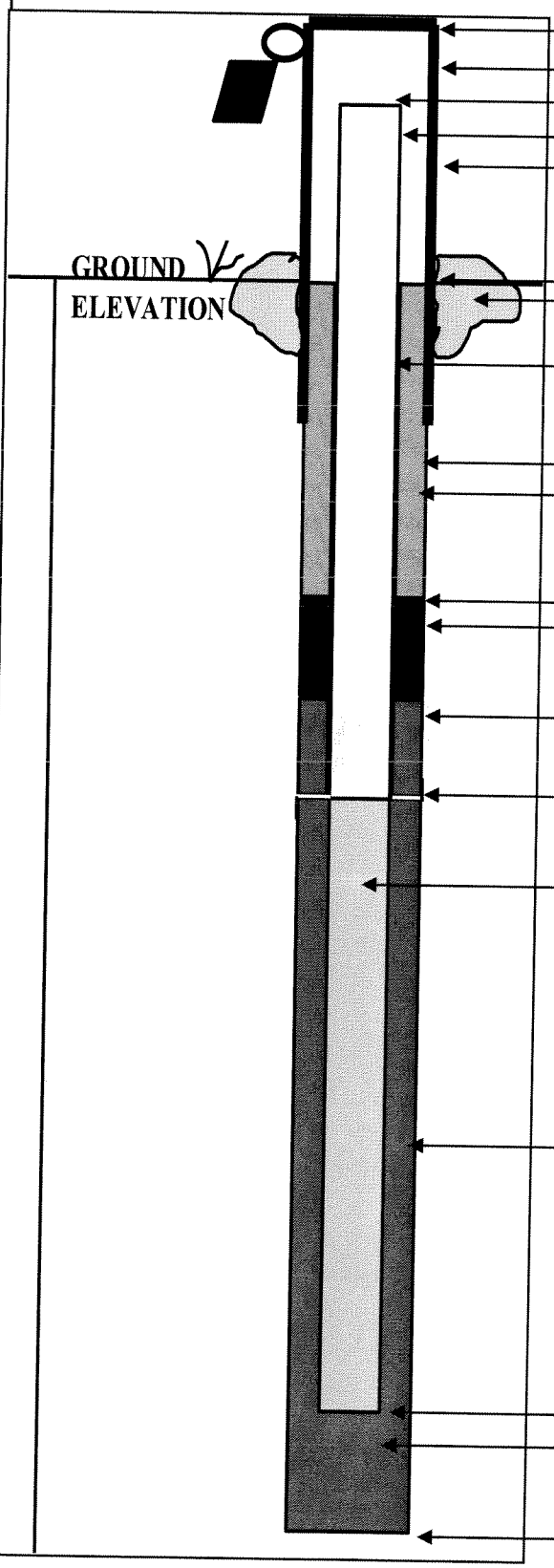
TYPE OF BACKFILL BELOW WELL:

ELEVATION / DEPTH OF BOREHOLE: /

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

BORING NO.: MW-30I

PROJECT:	NASP-Site 19	DRILLING Co.:	Columbia	BORING No.:	MW-30I
PROJECT No.:	N2640	DRILLER:	Randy Brand	DATE COMPLETED:	11/17/2002
SITE:	Site 19	DRILLING METHOD:	DPT	NORTHING:	
GEOLOGIST:	Bill Olson	DEV. METHOD:	Peristaltic	EASTING:	



ELEVATION OF TOP OF SURFACE CASING:

STICK -UP TOP OF SURFACE CASING:

ELEVATION OF TOP OF RISER PIPE:

RISER STICK-UP ABOVE GROUND SURFACE:

I.D. OF SURFACE CASING: 4"

TYPE OF SURFACE CASING: 4" Diameter Round Steel Casing

GROUND ELEVATION:

TYPE OF SURFACE SEAL: Concrete Pad

RISER PIPE I.D.: 1.25"

TYPE OF RISER PIPE: Sch. 40 PVC

BOREHOLE DIAMETER: 2"

TYPE OF SEAL: Bentonite

ELEVATION / DEPTH OF SEAL: /

TYPE OF SEAL: Sand Pack

ELEVATION / DEPTH TOP OF FILTER PACK: /

ELEVATION / DEPTH TOP OF SCREEN: / 20

TYPE OF SCREEN: Sch. 40 PVC Pre-Pack

SLOT SIZE X LENGTH: 0.01 x 5'

I.D. OF SCREEN: 1.25"

TYPE OF FILTER PACK: 30/65 Fine Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: / 25

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

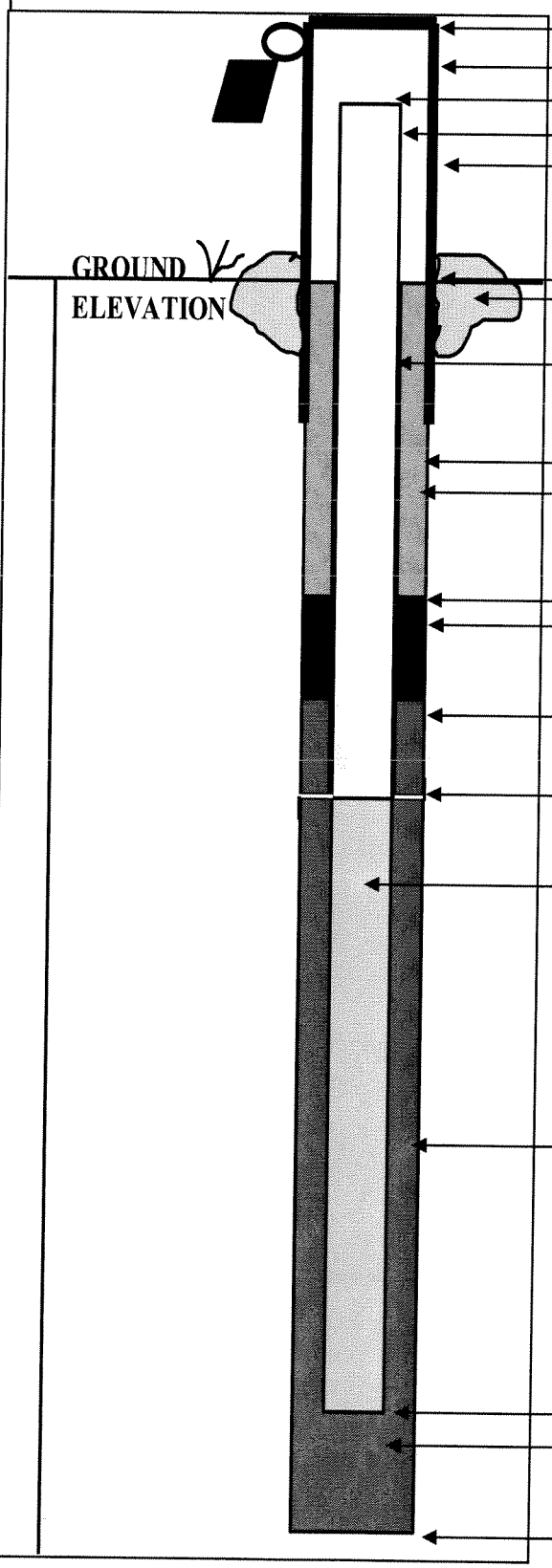
TYPE OF BACKFILL BELOW WELL:

ELEVATION / DEPTH OF BOREHOLE: /

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

BORING NO.: MW-31S

PROJECT:	NASP-Site 19	DRILLING Co.:	Columbia	BORING No.:	MW-31S
PROJECT No.:	N2640	DRILLER:	Randy Brand	DATE COMPLETED:	11/17/2002
SITE:	Site 19	DRILLING METHOD:	DPT	NORTHING:	
GEOLOGIST:	Bill Olson	DEV. METHOD:	Peristaltic	EASTING:	



ELEVATION OF TOP OF SURFACE CASING:

STICK -UP TOP OF SURFACE CASING:

ELEVATION OF TOP OF RISER PIPE:

RISER STICK-UP ABOVE GROUND SURFACE:

I.D. OF SURFACE CASING: 4"

TYPE OF SURFACE CASING: 4" Diameter Round Steel Casing

GROUND ELEVATION:

TYPE OF SURFACE SEAL: Concrete Pad

RISER PIPE I.D.: 1.25"

TYPE OF RISER PIPE: Sch. 40 PVC

BOREHOLE DIAMETER: 2"

TYPE OF SEAL: Bentonite

ELEVATION / DEPTH OF SEAL: /

TYPE OF SEAL: Sand Pack

ELEVATION / DEPTH TOP OF FILTER PACK: /

ELEVATION / DEPTH TOP OF SCREEN: / 4.7

TYPE OF SCREEN: Sch. 40 PVC Pre-Pack

SLOT SIZE X LENGTH: 0.01 x 10'

I.D. OF SCREEN: 1.25"

TYPE OF FILTER PACK: 30/65 Fine Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: / 14.7

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

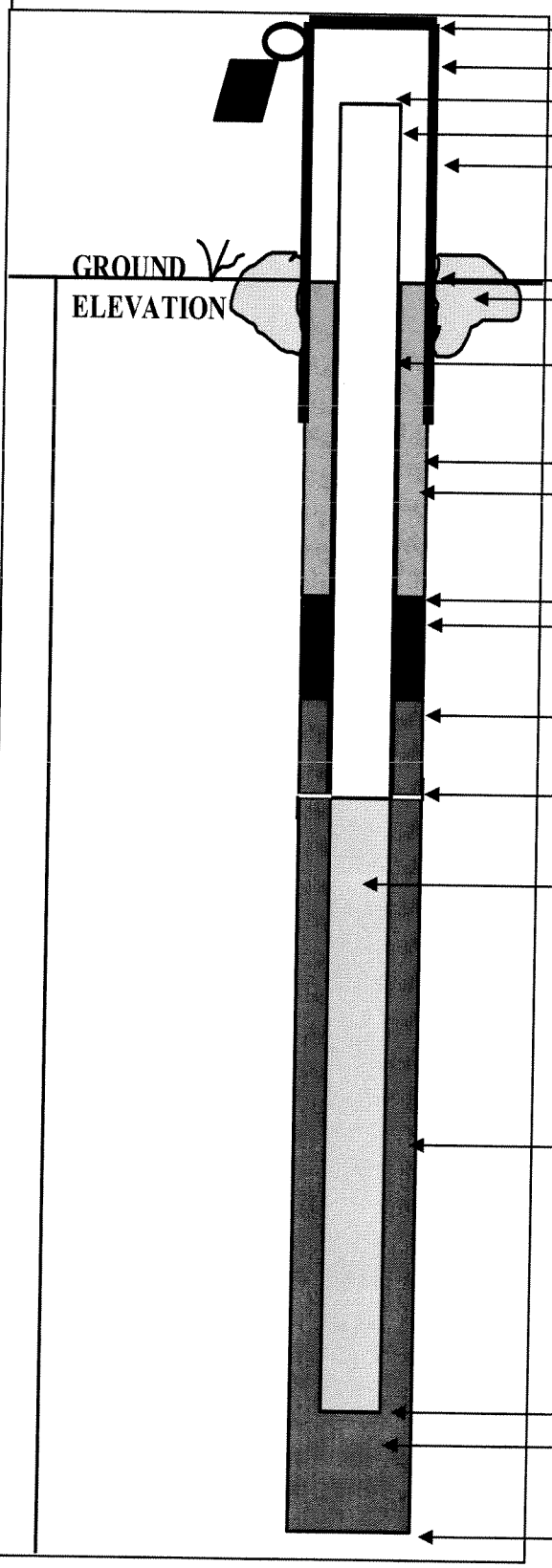
TYPE OF BACKFILL BELOW WELL:

ELEVATION / DEPTH OF BOREHOLE: /

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

BORING NO.: MW-31I

PROJECT:	NASP-Site 19	DRILLING Co.:	Columbia	BORING No.:	MW-31I
PROJECT No.:	N2640	DRILLER:	Randy Brand	DATE COMPLETED:	11/17/2002
SITE:	Site 19	DRILLING METHOD:	DPT	NORTHING:	
GEOLOGIST:	Bill Olson	DEV. METHOD:	Peristaltic	EASTING:	



ELEVATION OF TOP OF SURFACE CASING:

STICK -UP TOP OF SURFACE CASING:

ELEVATION OF TOP OF RISER PIPE:

RISER STICK-UP ABOVE GROUND SURFACE:

I.D. OF SURFACE CASING: 4"

TYPE OF SURFACE CASING: 4" Diameter Round Steel Casing

GROUND ELEVATION:

TYPE OF SURFACE SEAL: Concrete Pad

RISER PIPE I.D.: 1.25"

TYPE OF RISER PIPE: Sch. 40 PVC

BOREHOLE DIAMETER: 2"

TYPE OF SEAL: Bentonite

ELEVATION / DEPTH OF SEAL: /

TYPE OF SEAL: Sand Pack

ELEVATION / DEPTH TOP OF FILTER PACK: /

ELEVATION / DEPTH TOP OF SCREEN: / 22.7

TYPE OF SCREEN: Sch. 40 PVC Pre-Pack

SLOT SIZE X LENGTH: 0.01 x 5'

I.D. OF SCREEN: 1.25"

TYPE OF FILTER PACK: 30/65 Fine Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: / 27.7

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

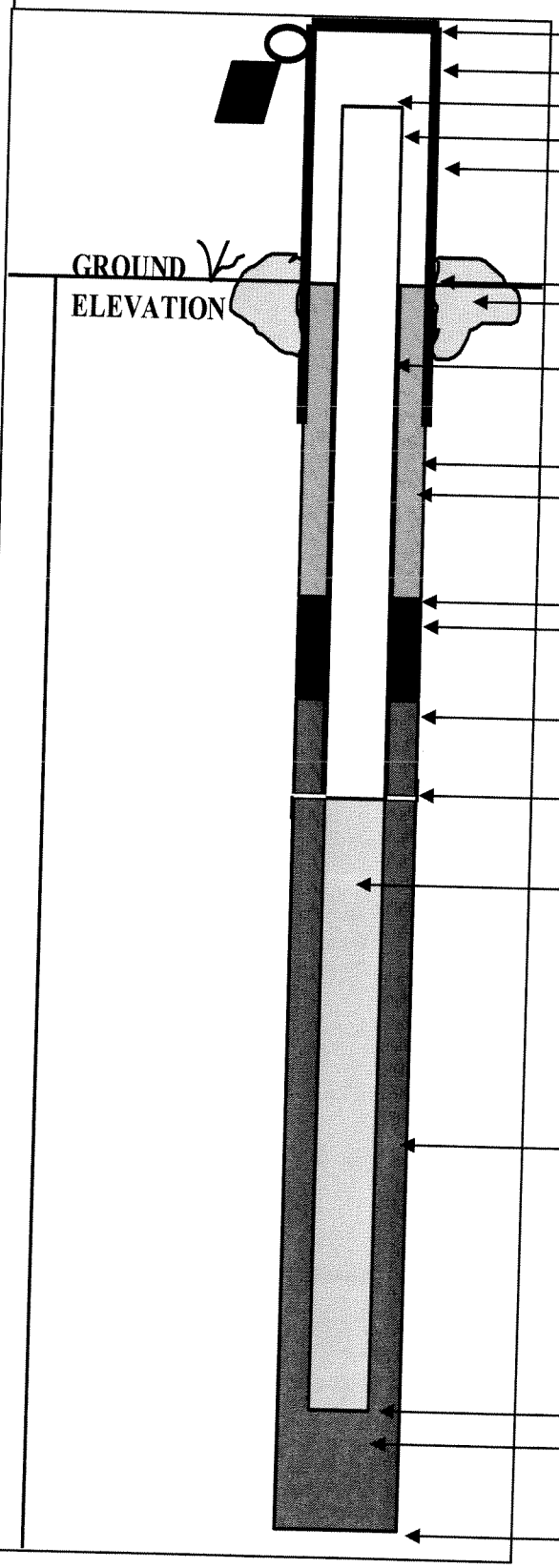
TYPE OF BACKFILL BELOW WELL:

ELEVATION / DEPTH OF BOREHOLE: /

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

BORING NO.: MW-32S

PROJECT:	NASP-Site 19	DRILLING Co.:	Columbia	BORING No.:	MW-32S
PROJECT No.:	N2640	DRILLER:	Randy Brand	DATE COMPLETED:	11/17/2002
SITE:	Site 19	DRILLING METHOD:	DPT	NORTHING:	
GEOLOGIST:	Bill Olson	DEV. METHOD:	Peristaltic	EASTING:	



ELEVATION OF TOP OF SURFACE CASING:

STICK -UP TOP OF SURFACE CASING:

ELEVATION OF TOP OF RISER PIPE:

RISER STICK-UP ABOVE GROUND SURFACE:

I.D. OF SURFACE CASING: 4"

TYPE OF SURFACE CASING: 4" Diameter Round Steel Casing

GROUND ELEVATION:

TYPE OF SURFACE SEAL: Concrete Pad

RISER PIPE I.D.: 1.25"

TYPE OF RISER PIPE: Sch. 40 PVC

BOREHOLE DIAMETER: 2"

TYPE OF SEAL: Bentonite

ELEVATION / DEPTH OF SEAL: /

TYPE OF SEAL: Sand Pack

ELEVATION / DEPTH TOP OF FILTER PACK: /

ELEVATION / DEPTH TOP OF SCREEN: / 5.1

TYPE OF SCREEN: Sch. 40 PVC Pre-Pack

SLOT SIZE X LENGTH: 0.01 x 10'

I.D. OF SCREEN: 1.25"

TYPE OF FILTER PACK: 30/65 Fine Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: / 15.1

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

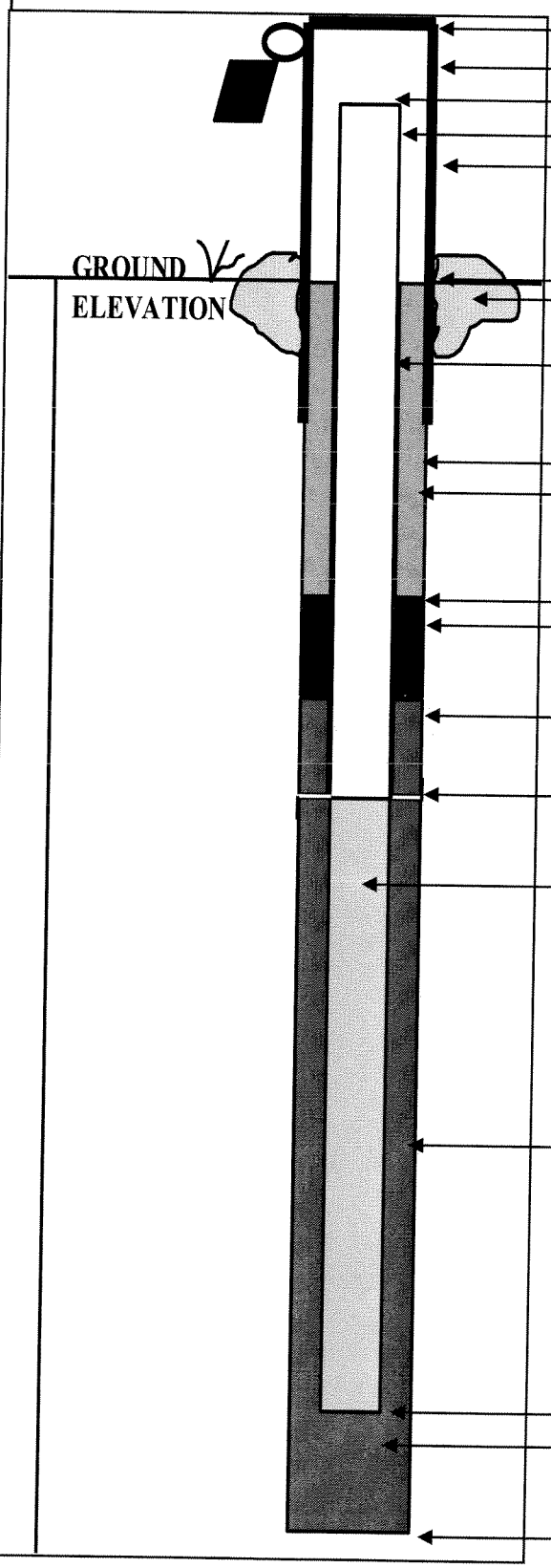
TYPE OF BACKFILL BELOW WELL:

ELEVATION / DEPTH OF BOREHOLE: /

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

BORING NO.: MW-32I

PROJECT:	NASP-Site 19	DRILLING Co.:	Columbia	BORING No.:	MW-32I
PROJECT No.:	N2640	DRILLER:	Randy Brand	DATE COMPLETED:	11/17/2002
SITE:	Site 19	DRILLING METHOD:	DPT	NORTHING:	
GEOLOGIST:	Bill Olson	DEV. METHOD:	Peristaltic	EASTING:	



ELEVATION OF TOP OF SURFACE CASING:

STICK -UP TOP OF SURFACE CASING:

ELEVATION OF TOP OF RISER PIPE:

RISER STICK-UP ABOVE GROUND SURFACE:

I.D. OF SURFACE CASING: 4"

TYPE OF SURFACE CASING: 4" Diameter Round Steel Casing

GROUND ELEVATION:

TYPE OF SURFACE SEAL: Concrete Pad

RISER PIPE I.D.: 1.25"

TYPE OF RISER PIPE: Sch. 40 PVC

BOREHOLE DIAMETER: 2"

TYPE OF SEAL: Bentonite

ELEVATION / DEPTH OF SEAL: /

TYPE OF SEAL: Sand Pack

ELEVATION / DEPTH TOP OF FILTER PACK: /

ELEVATION / DEPTH TOP OF SCREEN: / 22.8

TYPE OF SCREEN: Sch. 40 PVC Pre-Pack

SLOT SIZE X LENGTH: 0.01 x 5'

I.D. OF SCREEN: 1.25"

TYPE OF FILTER PACK: 30/65 Fine Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: / 27.8

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

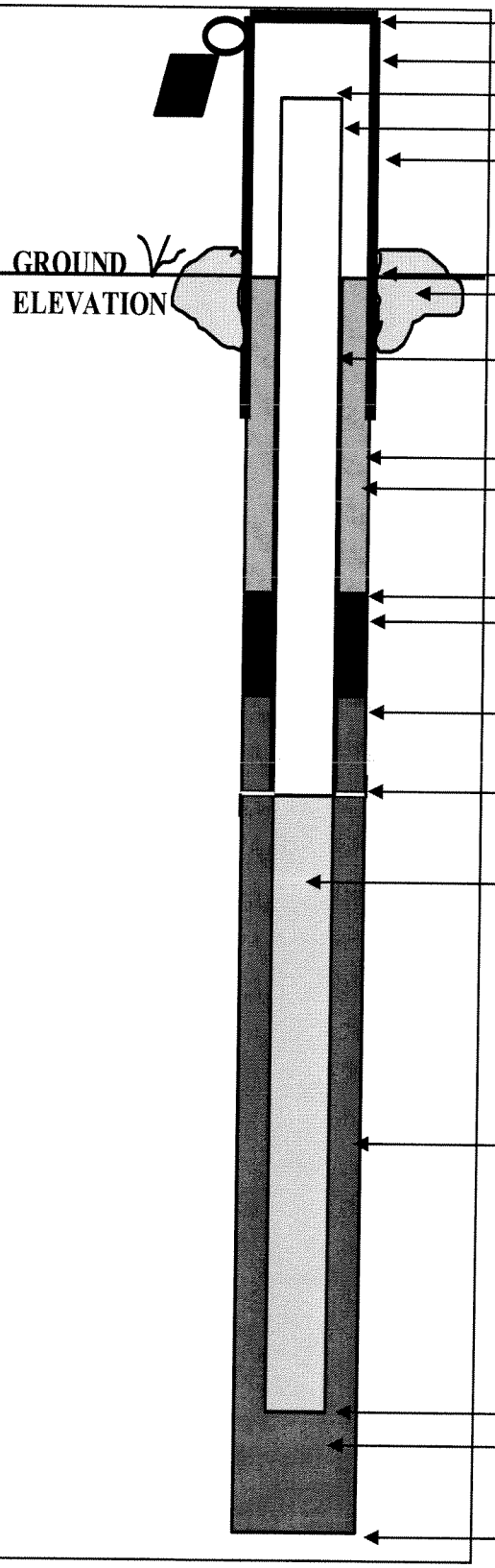
TYPE OF BACKFILL BELOW WELL:

ELEVATION / DEPTH OF BOREHOLE: /

BORING NO.: MW-33S

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

PROJECT:	NASP-Site 19	DRILLING Co.:	Columbia	BORING No.:	MW-33S
PROJECT No.:	N2640	DRILLER:	Randy Brand	DATE COMPLETED:	11/17/2002
SITE:	Site 19	DRILLING METHOD:	DPT	NORTHING:	
GEOLOGIST:	Bill Olson	DEV. METHOD:	Peristaltic	EASTING:	



ELEVATION OF TOP OF SURFACE CASING:

STICK -UP TOP OF SURFACE CASING:

ELEVATION OF TOP OF RISER PIPE:

RISER STICK-UP ABOVE GROUND SURFACE:

I.D. OF SURFACE CASING: 4"

TYPE OF SURFACE CASING: 4" Diameter Round Steel Casing

GROUND ELEVATION:

TYPE OF SURFACE SEAL: Concrete Pad

RISER PIPE I.D.: 1.25"

TYPE OF RISER PIPE: Sch. 40 PVC

BOREHOLE DIAMETER: 2"

TYPE OF SEAL: Bentonite

ELEVATION / DEPTH OF SEAL: /

TYPE OF SEAL: Sand Pack

ELEVATION / DEPTH TOP OF FILTER PACK: /

ELEVATION / DEPTH TOP OF SCREEN: / 5

TYPE OF SCREEN: Sch. 40 PVC Pre-Pack

SLOT SIZE X LENGTH: 0.01 x 10'

I.D. OF SCREEN: 1.25"

TYPE OF FILTER PACK: 30/65 Fine Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: / 15

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

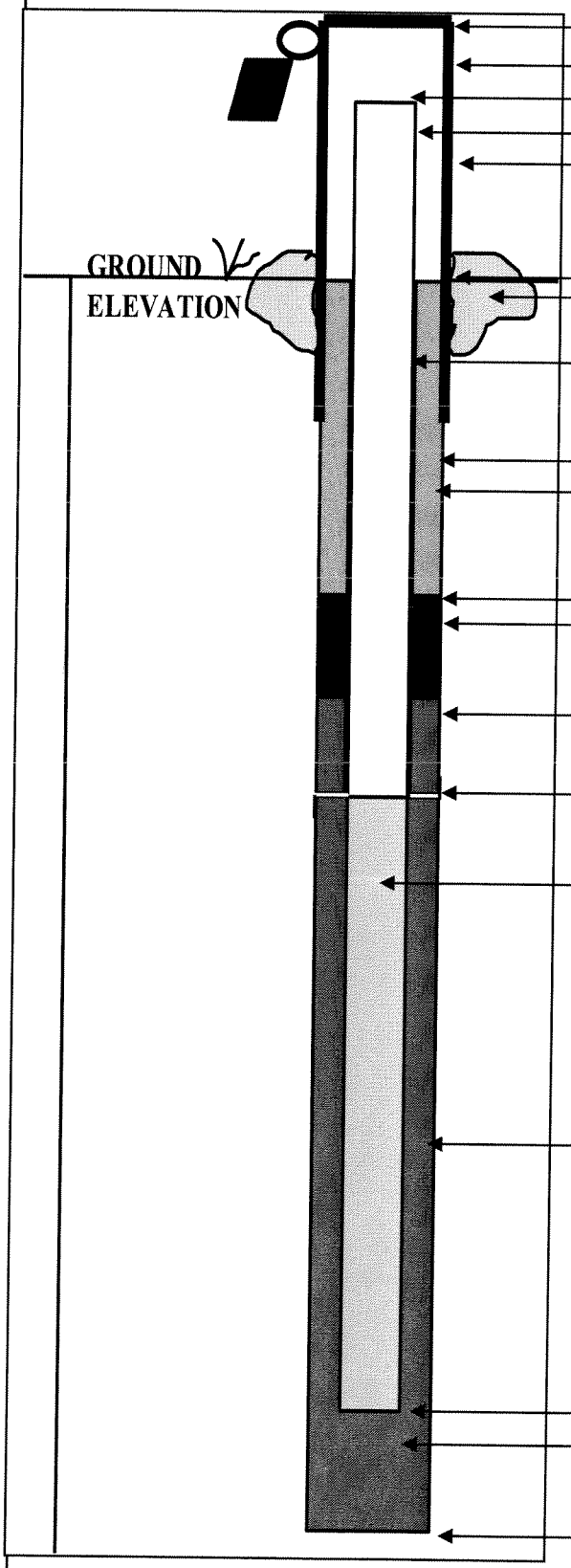
TYPE OF BACKFILL BELOW WELL:

ELEVATION / DEPTH OF BOREHOLE: /

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

BORING NO.: MW-33I

PROJECT:	NASP-Site 19	DRILLING Co.:	Columbia	BORING No.:	MW-33I
PROJECT No.:	N2640	DRILLER:	Randy Brand	DATE COMPLETED:	11/18/2002
SITE:	Site 19	DRILLING METHOD:	DPT	NORTHING:	
GEOLOGIST:	Bill Olson	DEV. METHOD:	Peristaltic	EASTING:	



ELEVATION OF TOP OF SURFACE CASING:

STICK -UP TOP OF SURFACE CASING:

ELEVATION OF TOP OF RISER PIPE:

RISER STICK-UP ABOVE GROUND SURFACE:

I.D. OF SURFACE CASING: 4"

TYPE OF SURFACE CASING: 4" Diameter Round Steel Casing

GROUND ELEVATION:

TYPE OF SURFACE SEAL: Concrete Pad

RISER PIPE I.D.: 1.25"

TYPE OF RISER PIPE: Sch. 40 PVC

BOREHOLE DIAMETER: 2"

TYPE OF SEAL: Bentonite

ELEVATION / DEPTH OF SEAL: /

TYPE OF SEAL: Sand Pack

ELEVATION / DEPTH TOP OF FILTER PACK: /

ELEVATION / DEPTH TOP OF SCREEN: / 25

TYPE OF SCREEN: Sch. 40 PVC Pre-Pack

SLOT SIZE X LENGTH: 0.01 x 5'

I.D. OF SCREEN: 1.25"

TYPE OF FILTER PACK: 30/65 Fine Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: / 30

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

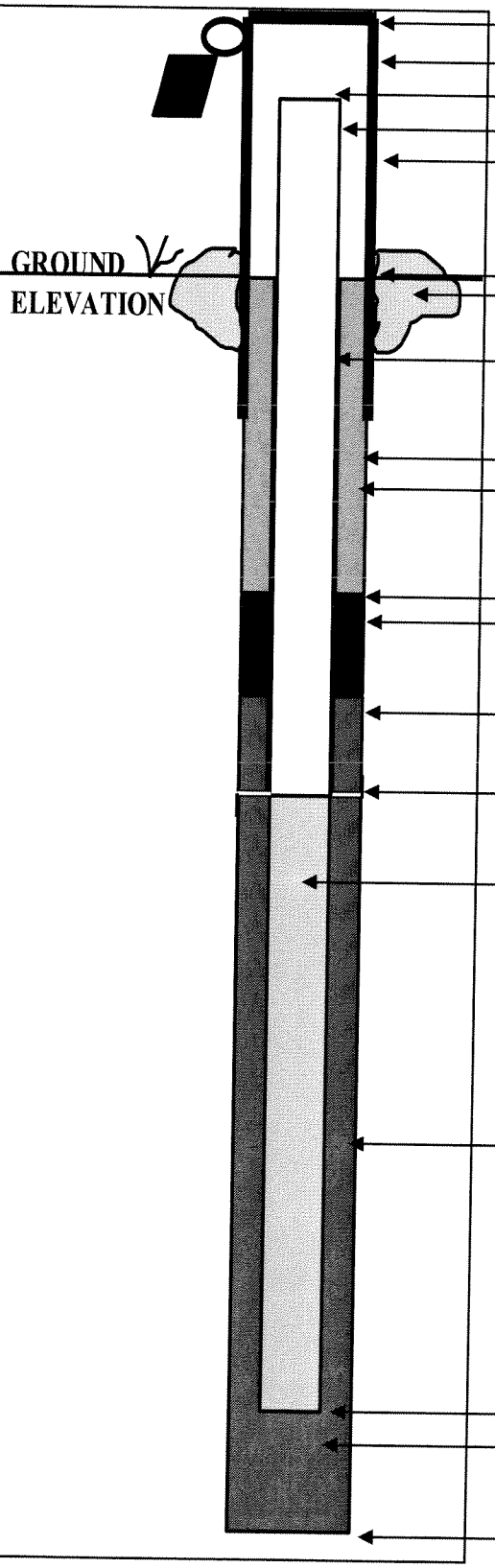
TYPE OF BACKFILL BELOW WELL:

ELEVATION / DEPTH OF BOREHOLE: /

Tetra Tech NUS, Inc. **OVERBURDEN MONITORING WELL SHEET**

BORING NO.: MW-33D

PROJECT:	NASP-Site 19	DRILLING Co.:	Columbia	BORING No.:	MW-33D
PROJECT No.:	N2640	DRILLER:	Randy Brand	DATE COMPLETED:	11/18/2002
SITE:	Site 19	DRILLING METHOD:	DPT	NORTHING:	
GEOLOGIST:	Bill Olson	DEV. METHOD:	Peristaltic	EASTING:	



ELEVATION OF TOP OF SURFACE CASING:

STICK -UP TOP OF SURFACE CASING:

ELEVATION OF TOP OF RISER PIPE:

RISER STICK-UP ABOVE GROUND SURFACE:

I.D. OF SURFACE CASING: 4"

TYPE OF SURFACE CASING: 4" Diameter Round Steel Casing

GROUND ELEVATION:

TYPE OF SURFACE SEAL: Concrete Pad

RISER PIPE I.D.: 1.25"

TYPE OF RISER PIPE: Sch. 40 PVC

BOREHOLE DIAMETER: 2"

TYPE OF SEAL: Bentonite

ELEVATION / DEPTH OF SEAL: /

TYPE OF SEAL: Sand Pack

ELEVATION / DEPTH TOP OF FILTER PACK: /

ELEVATION / DEPTH TOP OF SCREEN: / 36.6

TYPE OF SCREEN: Sch. 40 PVC Pre-Pack

SLOT SIZE X LENGTH: 0.01 x 5'

I.D. OF SCREEN: 1.25"

TYPE OF FILTER PACK: 30/65 Fine Sand

ELEVATION / DEPTH BOTTOM OF SCREEN: / 41.6

ELEVATION / DEPTH BOTTOM OF FILTER PACK: /

TYPE OF BACKFILL BELOW WELL:

ELEVATION / DEPTH OF BOREHOLE: /

Tetra Tech NUS, Inc.

EQUIPMENT CALIBRATION LOG

PROJECT NAME : Site Assessment Report Addendum

INSTRUMENT NAME/MODEL: U-10

SITE NAME: NAS Pensacola, UST Site 0020, IR Site 19

MANUFACTURER: Horiba

PROJECT No.: N2640

SERIAL NUMBER: 709079

Date of Calibration	Instrument I.D. Number	Person Performing Calibration	Instrument Settings		Instrument Readings		Calibration Standard (Lot No.)	Remarks and Comments
			Pre-calibration	Post-calibration	Pre-calibration	Post-calibration		
12/17/2002	709079	M. Akers	---	---	3.97	3.98	3148	pH
12/17/2002	709079	M. Akers	---	---	4.74	4.49	3148	mS/cm
12/17/2002	709079	M. Akers	---	---	0	0	3148	NTU
12/18/2002	709079	M. Akers	---	---	3.97	3.96	3148	pH
12/18/2002	709079	M. Akers	---	---	4.59	4.35	3148	mS/cm
12/18/2002	709079	M. Akers	---	---	0	0	3148	NTU
12/19/2002	709079	M. Akers	---	---	4.09	3.99	3148	pH
12/19/2002	709079	M. Akers	---	---	4.64	4.48	3148	mS/cm
12/19/2002	709079	M. Akers	---	---	-10	0	3148	NTU

Tetra Tech NUS, Inc.

EQUIPMENT CALIBRATION LOG

PROJECT NAME : Site Assessment Report Addendum

INSTRUMENT NAME/MODEL: U-10

SITE NAME: NAS Pensacola, UST Site 0020, IR Site 19

MANUFACTURER: Horiba

PROJECT No.: N2640

SERIAL NUMBER: 804011

Date of Calibration	Instrument I.D. Number	Person Performing Calibration	Instrument Settings		Instrument Readings		Calibration Standard (Lot No.)	Remarks and Comments
			Pre-calibration	Post-calibration	Pre-calibration	Post-calibration		
12/17/2002	804011	M. Akers	---	---	3.97	4.07	3148	pH
12/17/2002	804011	M. Akers	---	---	6.18	3.78	3148	mS/cm
12/17/2002	804011	M. Akers	---	---	0	0	3148	NTU
12/18/2002	804011	M. Akers	---	---	3.97	3.98	3148	pH
12/18/2002	804011	M. Akers	---	---	5.9	4.5	3148	mS/cm
12/18/2002	804011	M. Akers	---	---	0	0	3148	NTU

Tetra Tech NUS, Inc.

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name: NASP, Site 19 SAR Addendum
Project No.: N2640
Location: NAS Pensacola, UST Site 0020, IR Site 19
Personnel: L. Smith and M. Akers
Weather Conditions: 70 degrees Farenheit, Clear Skies
Measuring Device: Slope Indicatior
Tidally Influenced: Yes ____ No _XX_
Remarks:

Well or Piezometer Number	Date	Time	Elevation of Reference Point (feet)*	Total Well Depth (feet)*	Water Level Indicator Reading (feet)*	Thickness of Free Product (feet)*	Groundwater Elevation (feet)*	Comments
MW-33S	1/29/2003	12:18	31.70	14.85	7.56	NA	24.14	
MW-33I	1/29/2003	12:28	31.93	28.06	10.06	NA	21.87	
MW-33D	1/29/2003	12:32	31.84	41.75	10.08	NA	21.76	
MW-31S	1/29/2003	12:35	33.33	14.75	9.86	NA	23.47	
MW-31I	1/29/2003	12:40	33.21	27.65	11.32	NA	21.89	
MW-32I	1/29/2003	12:42	34.77	27.85	10.62	NA	24.15	
MW-32S	1/29/2003	12:45	34.39	15.20	10.80	NA	23.59	
MW-29D	1/29/2003	13:00	31.83	41.00	10.32	NA	21.51	
MW-29I	1/29/2003	12:59	31.77	27.73	9.56	NA	22.21	
MW-29S	1/29/2003	12:57	31.87	15.79	6.41	NA	25.46	
MW-28S	1/29/2003	13:10	31.44	14.86	5.48	NA	25.96	
MW-28I	1/29/2003	13:20	31.15	27.75	9.73	NA	21.42	
MW-24S	1/29/2003	13:23	32.35	14.92	6.51	NA	25.84	
MW-30S	1/29/2003	13:28	31.91	15.4	6.12	NA	25.79	
MW-30I	1/29/2003	13:31	31.73	24.02	9.80	NA	21.93	
MW-25S	1/29/2003	13:30	31.55	14.56	5.61	NA	25.94	
MW-26S	1/29/2003	13:33	31.27	15.33	5.31	NA	25.96	
MW-11	1/29/2003	14:52	31.00	9.37	4.49	NA	26.51	
MW-4	1/29/2003	13:46	31.03	9.40	4.73	NA	26.30	
MW-8	1/29/2003	14:40	30.13	11.9	3.92	NA	26.21	
MW-6	1/29/2003	14:24	29.75	11.6	3.39	NA	26.36	
MW-22	1/29/2003	14:02	32.44	28.57	8.71	NA	23.73	
MW-9	1/29/2003	13:35	31.13	8.15	4.95	NA	26.18	
MW-10	1/29/2003	13:50	31.79	8.83	5.55	NA	26.24	
MW-13	1/29/2003	13:52	30.56	7.91	4.42	NA	26.14	

* All measurements to the nearest 0.01 foot

Tetra Tech NUS, Inc.

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name: NASP, Site 19 SAR Addendum
Project No.: N2640
Location: NAS Pensacola, UST Site 0020, IR Site 19
Personnel: L. Smith and M. Akers
Weather Conditions: 70 degrees Farenheit, Clear Skies
Measuring Device: Slope Indicatior
Tidally Influenced: Yes ____ No _XX_
Remarks:

Well or Piezometer Number	Date	Time	Elevation of Reference Point (feet)*	Total Well Depth (feet)*	Water Level Indicator Reading (feet)*	Thickness of Free Product (feet)*	Groundwater Elevation (feet)*	Comments
MW-16	1/29/2003	13:56	31.55	8.38	5.43	NA	26.12	
MW-21	1/29/2003	14:04	32.45	17.72	6.41	NA	26.04	
MW-7	1/29/2003	14:44	30.18	12.45	4.06	NA	26.12	
MW-14	1/29/2003	14:45	30.34	8.19	4.01	NA	26.33	
MW-12	1/29/2003	14:48	31.64	9.50	5.23	NA	26.41	
MW-15	1/29/2003	14:50	30.49	7.39	3.95	NA	26.54	
MW-20	1/29/2003	14:26	29.73	23.75	8.25	NA	21.48	
MW-3	1/29/2003	14:30	30.38	11.71	4.06	NA	26.32	
MW-18	1/29/2003	14:55	31.05	7.24	4.51	NA	26.54	
MW-5	1/29/2003	15:00	31.02	7.66	4.54	NA	26.48	
MW-2	1/29/2003	14:28	30.00	11.37	3.56	NA	26.44	
MW-19	1/29/2003	15:03	31.21	7.79	4.76	NA	26.45	
MW-23	1/29/2003	14:33	30.36	39.59	8.85	NA	21.51	
MW-1	1/29/2003	14:22	29.39	11.42	3.07	NA	26.32	
MW-17R	1/29/2003	13:45	31.01	12.15	4.96	NA	26.05	
MW-27S	1/29/2003	13:40	31.69	14.54	5.79	NA	25.90	

* All measurements to the nearest 0.01 foot

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N0401

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

Sample ID No.: NASP19MW17R
Sample Location: MW-17R
Sampled By: JB
C.O.C. No.:
Type of Sample:
[] Low Concentration
[X] High Concentration

SAMPLING DATA:

	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	Sal %
Date: 11/09/01							
Time: 13:50							
Method: Peristaltic (low flow)	Clear	4.00	0.148	16.6	0	1.81	0

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Sal
Date: 11/09/01							
Method: Peristaltic (low flow)	Init	4.51	0.190	16.0	999	2.22	0
Monitor Reading (ppm):		See Low Flow Purge Data Sheet					
Well Casing Diameter & Material	1	4.03	0.138	16.7	10	1.06	0
Type: 1" PVC	2	4.01	0.136	16.7	10	1.21	0
Total Well Depth (TD): 22.09	3	4.00	0.148	16.6	0	1.81	0
Static Water Level (WL): 7.24							
One Casing Volume(gal/L): 0.6 gal							
Start Purge (hrs): 13:30							
End Purge (hrs): 13:50							
Total Purge Time (min): 20 min							
Total Vol. Purged (gal/L): 3.3 gal							

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

MS/MSD	Duplicate ID No.: NASP19MW17RD

Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N0401

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

Sample ID No.: NASP19MW24S
Sample Location: MW-24S
Sampled By: JB
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color Visual	pH Standard	S.C. mS/cm	Temp. ^{0}C	Turbidity NTU	DO mg/l	Sal %
Date: 11/09/01							
Time: 13:20							
Method: Peristaltic (low flow)	Clear	4.00	0.129	19.7	10	2.28	0

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Sal
Date: 11/09/01							
Method: Peristaltic (low flow)	Init	4.31	0.071	19.3	379	1.83	0
Monitor Reading (ppm):		See Low Flow Purge Data Sheet					
Well Casing Diameter & Material	0.5	4.29	0.125	20.3	26	1.57	0
Type: 1" PVC	1.0	4.23	0.127	19.6	11	1.95	0
Total Well Depth (TD): 14.70	1.5	4.00	0.129	19.7	10	2.28	0
Static Water Level (WL): 8.64							
One Casing Volume(gal/L): 0.24 gal							
Start Purge (hrs): 13:00							
End Purge (hrs): 13:20							
Total Purge Time (min): 20 min							
Total Vol. Purged (gal/L): 1.5 gal							

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

MS/MSD	Duplicate ID No.:	Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N0401

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

Sample ID No.: NASP19MW25S
Sample Location: MW-25S
Sampled By: JB
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	Sal %	
Date: 11/09/01								
Time: 12:55								
Method: Peristaltic (low flow)	Clear	5.36	0.127	22.0	205	0.55	0	

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Sal	
Date: 11/09/01								
Method: Peristaltic (low flow)	Init	5.43	0.143	22.2	952	1.15	0	
Monitor Reading (ppm):		See Low Flow Purge Data Sheet						
Well Casing Diameter & Material	1	5.34	0.137	22.1	377	1.24	0	
Type: 1" PVC	2	5.37	0.138	22.1	303	3.84	0	
Total Well Depth (TD): 14.33	3	5.37	0.133	22.1	285	1.72	0	
Static Water Level (WL): 7.75	4	5.37	0.128	22.0	236	1.02	0	
One Casing Volume(gal/L): 0.30 gal	5	5.36	0.127	22.0	205	0.55	0	
Start Purge (hrs): 12:20								
End Purge (hrs): 12:55								
Total Purge Time (min): 35 min								
Total Vol. Purged (gal/L): 1.5 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

MS/MSD	Duplicate ID No.:	Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N0401

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

Sample ID No.: NASP19MW26S
Sample Location: MW-26S
Sampled By: JB
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	Sal %	
Date: 11/09/01								
Time: 12:30								
Method: Peristaltic (low flow)	Clear	4.62	0.164	19.9	34	1.02	0	

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Sal	
Date: 11/09/01								
Method: Peristaltic (low flow)	Init	4.81	0.180	23.3	425	0.51	0	
Monitor Reading (ppm):		See Low Flow Purge Data Sheet						
Well Casing Diameter & Material	0.5	4.74	0.165	20.5	86	0.90	0	
Type: 1" PVC	1.0	4.66	0.163	19.9	36	0.83	0	
Total Well Depth (TD): 15.10	1.5	4.62	0.164	19.9	34	1.02	0	
Static Water Level (WL): 7.47								
One Casing Volume(gal/L): 0.32 gal								
Start Purge (hrs): 12:15								
End Purge (hrs): 12:30								
Total Purge Time (min): 15 min								
Total Vol. Purged (gal/L): 1.5 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

MS/MSD	Duplicate ID No.:	Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N0401

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

Sample ID No.: NASP19MW27S
Sample Location: MW-27S
Sampled By: JB
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	Sal %	
Date: 11/09/01								
Time: 14:37								
Method: Peristaltic (low flow)	Clear	5.43	0.100	21.8	159	1.10	0	

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Sal	
Date: 11/09/01								
Method: Peristaltic (low flow)	Init	5.52	0.092	22.1	356	1.63	0	
Monitor Reading (ppm):		See Low Flow Purge Data Sheet						
Well Casing Diameter & Material	0.5	5.52	0.097	21.9	253	1.48	0	
Type: 1" PVC	1.0	5.46	0.100	21.8	184	1.08	0	
Total Well Depth (TD): 14.31	1.5	5.43	0.100	21.8	159	1.10	0	
Static Water Level (WL): 8.00								
One Casing Volume(gal/L): 0.24 gal								
Start Purge (hrs): 14:17								
End Purge (hrs): 14:37								
Total Purge Time (min): 20 min								
Total Vol. Purged (gal/L): 1.5 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N0401

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

Sample ID No.: NASP19MW28S
Sample Location: MW-28S
Sampled By: JB
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	Sal %	
Date: 11/09/01								
Time: 15:53								
Method: Peristaltic (low flow)	Clear	4.07	0.179	21.6	0	1.14	0	

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Sal	
Date: 11/09/01								
Method: Peristaltic (low flow)	Init	--	--	--	--	--	--	
Monitor Reading (ppm):		See Low Flow Purge Data Sheet						
Well Casing Diameter & Material	0.5	4.07	0.175	21.6	83	1.86	0	
Type: 1" PVC	1.0	4.06	0.180	21.7	0	0.81	0	
Total Well Depth (TD): 14.42	1.5	4.07	0.179	21.6	0	1.14	0	
Static Water Level (WL): 7.71								
One Casing Volume(gal/L): 0.28 gal								
Start Purge (hrs): 15:38								
End Purge (hrs): 15:53								
Total Purge Time (min): 15 min								
Total Vol. Purged (gal/L): 1.5 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

MS/MSD	Duplicate ID No.:	Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N0401

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

Sample ID No.: NASP19MW28I
Sample Location: MW-28I
Sampled By: JB
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 11/09/01	Color Visual	pH Standard	S.C. mS/cm	Temp. ^{0}C	Turbidity NTU	DO mg/l	Sal %	
Time: 15:20								
Method: Peristaltic (low flow)	Cloudy	4.20	0.081	21.1	177	0.89	0	

PURGE DATA:

Date: 11/09/01	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Sal	
Method: Peristaltic (low flow)	Init	4.45	0.086	21.7	13	1.29	0	
Monitor Reading (ppm):		See Low Flow Purge Data Sheet						
Well Casing Diameter & Material	1	4.49	0.080	21.3	117	0.88	0	
Type: 1" PVC	2	4.16	0.080	21.3	44	0.98	0	
Total Well Depth (TD): 26.81	3	4.20	0.081	21.1	177	0.89	0	
Static Water Level (WL): 10.45								
One Casing Volume(gal/L): 0.64 gal								
Start Purge (hrs): 14:54								
End Purge (hrs): 15:20								
Total Purge Time (min): 26 min								
Total Vol. Purged (gal/L): 2.2 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

MS/MSD	Duplicate ID No.:	Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N2640

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

Sample ID No.: PEN-19-MW4
Sample Location: PEN-19-4
Sampled By: LWS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12/18/02	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	Time	Sal %
Time: 14:20								
Method: Peristaltic (low flow)	Yellow	3.98	0.11	17.5	61	0.26	14:15	0

PURGE DATA:

Date: 12/18/02	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Time	Sal
Method: Peristaltic (low flow)	1.0 gal	3.80	0.11	18.2	570	1.1	13:58	0
Monitor Reading (ppm):		See Low Flow Purge Data Sheet						
Well Casing Diameter & Material	2.0 gal	4.09	0.11	17.9	441	0.25	14:05	0
Type: 2" PVC	3.0 gal	3.99	0.11	17.6	306	0.28	14:10	0
Total Well Depth (TD): 9.40	4.0 gal	3.98	0.11	17.5	61	0.26	14:15	0
Static Water Level (WL): 3.75								
One Casing Volume(gal/L): 0.75 gal								
Start Purge (hrs): 13:50								
End Purge (hrs): 14:18								
Total Purge Time (min): 28 min								
Total Vol. Purged (gal/L): 4.0 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
EDB - 504.1	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

MS/MSD	Duplicate ID No.:	Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N2640

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

Sample ID No.: PEN-19-MW6
Sample Location: PEN-19-6
Sampled By: LWS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12/18/02	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	Time	Sal %
Time: 15:36								
Method: Peristaltic (low flow)	Clear	6.20	0.295	19.9	0	0.33	13:30	0.01

PURGE DATA:

Date: 12/18/02	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Time	Sal
Method: Peristaltic (low flow)	1.0 gal	6.22	0.301	19.9	0	0.42	13:15	0.01
Monitor Reading (ppm):		See Low Flow Purge Data Sheet						
Well Casing Diameter & Material	2.0 gal	6.22	0.299	19.9	0	0.39	13:20	0.01
Type: 2" PVC	3.0 gal	6.20	0.297	19.9	0	0.33	13:25	0.01
Total Well Depth (TD): 11.51	4.0 gal	6.20	0.295	19.9	0	0.33	13:30	0.01
Static Water Level (WL): 2.43								
One Casing Volume(gal/L): 1.4 gal								
Start Purge (hrs): 15:08								
End Purge (hrs): 15:32								
Total Purge Time (min): 26 min								
Total Vol. Purged (gal/L): 4.0 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
EDB - 504.1	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

****13:00 TIMES ON CHAIN OF CUSTODY**

Circle if Applicable:

MS/MSD	Duplicate ID No.:	Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N2640

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

Sample ID No.: PEN-19-MW8
Sample Location: PEN-19-8
Sampled By: MTA
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12/18/02	Color Visual	pH Standard	S.C. mS/cm	Temp. ^{0}C	Turbidity NTU	DO mg/l	Time	Sal %
Time: 15:35								
Method: Peristaltic (low flow)	Clear	5.85	0.227	19.4	0	0.26	15:26	0

PURGE DATA:

Date: 12/18/02	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Time	Sal
Method: Peristaltic (low flow)	1.5 gal	6.02	0.26	19	0	0.69	15:17	0
Monitor Reading (ppm):		See Low Flow Purge Data Sheet						
Well Casing Diameter & Material	2.1 gal	5.94	0.236	19.2	0	0.39	15:20	0
Type: 2" PVC	2.6 gal	5.84	0.228	19.4	0	0.28	15:23	0
Total Well Depth (TD): 11.61	3.0 gal	5.85	0.227	19.4	0	0.26	15:26	0
Static Water Level (WL): 2.93								
One Casing Volume(gal/L): 1.4 gal								
Start Purge (hrs): 15:10								
End Purge (hrs): 15:30								
Total Purge Time (min): 20 ,om								
Total Vol. Purged (gal/L): 3.0 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
EDB - 504.1	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

MS/MSD	Duplicate ID No.:	Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N2640

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

Sample ID No.: PEN-19-MW11
Sample Location: PEN-19-11
Sampled By: MTA / LS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12/18/02	Color Visual	pH Standard	S.C. mS/cm	Temp. ^{0}C	Turbidity NTU	DO mg/l	Time	Sal %
Time: 14:10								
Method: Peristaltic (low flow)	Clear	3.91	0.094	18.9	0	0.41	14:04	0

PURGE DATA:

Date: 12/18/02	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Time	Sal
Method: Peristaltic (low flow)	1.0 gal	3.68	0.101	19.0	0	0.90	13:55	0
Monitor Reading (ppm):		See Low Flow Purge Data Sheet						
Well Casing Diameter & Material	1.8 gal	3.89	0.097	18.9	0	0.49	13:58	0
Type: 2" PVC	2.5 gal	3.91	0.095	18.9	0	0.42	14:01	0
Total Well Depth (TD): 9.35	3.5 gal	3.91	0.094	18.9	0	0.41	14:04	0
Static Water Level (WL): 3.61								
One Casing Volume(gal/L): 0.91 gal								
Start Purge (hrs): 13:50								
End Purge (hrs): 14:05								
Total Purge Time (min): 15 min								
Total Vol. Purged (gal/L): 3.6 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
EDB - 504.1	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

MS/MSD	Duplicate ID No.:	Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N2640

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

Sample ID No.: PEN-19-MW22
Sample Location: PEN-19-22
Sampled By: MTA / LS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12/19/02	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	Time	Sal %
Time: 09:30								
Method: Peristaltic (low flow)	Clear	5.20	0.131	21.4	8	8.51	9:24	0

PURGE DATA:

Date: 12/19/02	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Time	Sal
Method: Peristaltic (low flow)	4.0 gal	5.20	0.132	21.4	8	8.55	9:15	0
Monitor Reading (ppm):		See Low Flow Purge Data Sheet						
Well Casing Diameter & Material	4.5 gal	5.20	0.132	21.4	7	8.51	9:18	0
Type: 2" PVC	4.75 gal	5.20	0.131	21.4	9	8.51	9:21	0
Total Well Depth (TD): 28.50	5.0 gal	5.20	0.131	21.4	8	8.51	9:24	0
Static Water Level (WL): 7.65								
One Casing Volume(gal/L): 3.4 gal								
Start Purge (hrs): 8:50								
End Purge (hrs): 9:25								
Total Purge Time (min): 35 min								
Total Vol. Purged (gal/L): 5.0 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
EDB - 504.1	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

MS/MSD	Duplicate ID No.: PEN-19-DUP02	Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N2640

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

Sample ID No.: PEN-19-MW24S
Sample Location: PEN-19-24S
Sampled By: MTA / LS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12/18/02	Color	pH	S.C.	Temp.	Turbidity	DO		Sal
Time: 10:26	Visual	Standard	mS/cm	^{0}C	NTU	mg/l	Time	%
Method: Peristaltic (low flow)	Clear	4.1	0.090	20.7	0	1.50	10:24	0

PURGE DATA:

Date: 12/18/02	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Time	Sal
Method: Peristaltic (low flow)	1.0 gal	4.16	0.090	20.5	0	3.02	9:50	0
Monitor Reading (ppm):		See Low Flow Purge Data Sheet						
Well Casing Diameter & Material	2.0 gal	4.12	0.090	20.6	0	2.05	10:00	0
Type:	3.2 gal	4.11	0.089	20.7	0	1.56	10:10	0
Total Well Depth (TD): 14.70	4.0 gal	4.1	0.090	20.7	0	1.50	10:24	0
Static Water Level (WL): 8.50								
One Casing Volume(gal/L): 0.50 gal								
Start Purge (hrs): 9:45								
End Purge (hrs): 10:25								
Total Purge Time (min): 40 min								
Total Vol. Purged (gal/L): 4.0 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
EDB - 504.1	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

MS/MSD	Duplicate ID No.:	Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N2640

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

Sample ID No.: PEN-19-MW25S
Sample Location: PEN-19-25S
Sampled By: MTA / LS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	Time	Sal %
Date: 12/18/02								
Time: 11:40								
Method: Peristaltic (low flow)	Clear	4.24	0.152	19.5	0	1.17	11:30	0

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Time	Sal
Date: 12/18/02								
Method: Peristaltic (low flow)	1.0 gal	4.22	0.150	19.1	0	1.30	11:13	0
Monitor Reading (ppm):		See Low Flow Purge Data Sheet						
Well Casing Diameter & Material	1.0 gal	4.27	0.152	19.3	0	1.15	11:20	0
Type: 1.25" PVC	1.0 gal	4.25	0.150	19.8	0	1.08	11:27	0
Total Well Depth (TD): 14.50	1.0 gal	4.24	0.152	19.5	0	1.17	11:30	0
Static Water Level (WL): 4.60								
One Casing Volume(gal/L): 0.80 gal								
Start Purge (hrs): 11:04								
End Purge (hrs): 11:32								
Total Purge Time (min): 28 min								
Total Vol. Purged (gal/L): 3.6 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
EDB - 504.1	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

MS/MSD	Duplicate ID No.:	Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N2640

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

Sample ID No.: PEN-19-MW26S
Sample Location: PEN-19-26S
Sampled By: MTA/ LS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12/18/02	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	Time	Sal %
Time: 11:45								
Method: Peristaltic (low flow)	Yellow	4.29	0.106	19.4	0	0.94	11:31	0

PURGE DATA:

Date: 12/18/02	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Time	Sal
Method: Peristaltic (low flow)	1.0 gal	4.35	0.105	19.5	0	0.82	11:14	0
Monitor Reading (ppm):	See Low Flow Purge Data Sheet							
Well Casing Diameter & Material	2.0 gal	4.32	0.106	19.4	0	0.94	11:20	0
Type: 1.25" PVC	3.0 gal	4.29	0.106	19.4	0	0.83	11:25	0
Total Well Depth (TD): 15.27	4.0 gal	4.29	0.106	19.4	0	0.94	11:31	0
Static Water Level (WL): 4.32								
One Casing Volume(gal/L): 1.7 gal								
Start Purge (hrs): 11:08								
End Purge (hrs): 11:35								
Total Purge Time (min): 27 min								
Total Vol. Purged (gal/L): 4.0 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
EDB - 504.1	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

MS/MSD	Duplicate ID No.:	Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N2640

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

Sample ID No.: PEN-19-MW28S
Sample Location: PEN-19-28S
Sampled By: MTA / LS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12/18/02	Color	pH	S.C.	Temp.	Turbidity	DO		Sal
Time: 8:15	Visual	Standard	mS/cm	^{0}C	NTU	mg/l	Time	%
Method: Peristaltic (low flow)	Clear	4.42	0.097	18.3	0	1.00	8:10	0

PURGE DATA:

Date: 12/18/02	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Time	Sal
Method: Peristaltic (low flow)	1.0 gal	4.48	0.114	17.6	0	1.55	7:45	0
Monitor Reading (ppm):		See Low Flow Purge Data Sheet						
Well Casing Diameter & Material	2.0 gal	4.50	0.098	18.1	0	0.94	7:53	0
Type: 1.25" PVC	2.5 gal	4.47	0.097	18.3	0	1.07	8:01	0
Total Well Depth (TD): 14.94	3.3 gal	4.42	0.097	18.3	0	1.00	8:10	0
Static Water Level (WL): 4.53								
One Casing Volume(gal/L): 0.83 gal								
Start Purge (hrs): 7:40								
End Purge (hrs): 8:10								
Total Purge Time (min): 30 min								
Total Vol. Purged (gal/L): 3.25 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	
EDB - 504.1	HCL	Three 40mL VOA vials	
PAH - 8270 SIM	N/A	Two 1L amber jars	
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	
total lead - 6010	HNO3	One 500mL plastic	

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

MS/MSD	Duplicate ID No.:	Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N2640

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

Sample ID No.: PEN-19-MW28I
Sample Location: PEN-19-28I
Sampled By: MTA / LS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12/18/02	Color Visual	pH Standard	S.C. mS/cm	Temp. ^{0}C	Turbidity NTU	DO mg/l	Time	Sal %
Time: 8:30								
Method: Peristaltic (low flow)	Clear	4.62	0.074	21.20	0	0.18	8:11	0

PURGE DATA:

Date: 12/18/02	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Time	Sal
Method: Peristaltic (low flow)	1.5 gal	4.43	0.09	20.08	0	0.95	7:50	0
Monitor Reading (ppm):		See Low Flow Purge Data Sheet						
Well Casing Diameter & Material	2.0 gal	4.52	0.076	21.30	0	0.22	7:55	0
Type: 1.25" PVC	2.5 gal	4.55	0.075	21.30	0	0.20	8:03	0
Total Well Depth (TD): 25.75	3.3 gal	4.62	0.074	21.20	0	0.18	8:11	0
Static Water Level (WL): 8.01								
One Casing Volume(gal/L): 1.42 gal								
Start Purge (hrs): 7:40								
End Purge (hrs): 8:15								
Total Purge Time (min): 35 min								
Total Vol. Purged (gal/L): 3.5 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
EDB - 504.1	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

MS/MSD	Duplicate ID No.:
PEN-19-MW28IMS(D)	

Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N2640

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

Sample ID No.: PEN-19-MW29S
Sample Location: PEN-19-29S
Sampled By: MTA / LS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12/17/02
Time: 14:25
Method: Peristaltic (low flow)

Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	Time	Sal %
Clear	4.00	0.094	18.40	9	0.89	14:18	0

PURGE DATA:

Date: 12/17/02
Method: Peristaltic (low flow)
Monitor Reading (ppm):
Well Casing Diameter & Material
Type: 1.25" PVC
Total Well Depth (TD): 15.75
Static Water Level (WL): 5.38
One Casing Volume(gal/L): 0.83 gal
Start Purge (hrs): 13:50
End Purge (hrs): 14:20
Total Purge Time (min): 30 min
Total Vol. Purged (gal/L): 4.5 gal

Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Time	Sal
1.5 gal	3.72	0.094	18.90	19	2.55	14:02	0
	See Low Flow Purge Data Sheet						
2.5 gal	3.83	0.098	18.40	5	1.32	14:06	0
4.0 gal	3.99	0.094	18.50	2	2.54	14:15	0
4.5 gal	4.00	0.094	18.40	9	0.89	14:18	0

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
EDB - 504.1	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N2640

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

Sample ID No.: PEN-19-MW29I
Sample Location: PEN-19-29I
Sampled By: MTA / LS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	Time	Sal %
Date: 12/17/02								
Time: 14:22								
Method: Peristaltic (low flow)	Clear	4.07	0.100	21.6	4	0.54	14:15	0

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Time	Sal
Date: 12/17/02								
Method: Peristaltic (low flow)	2.0 gal	3.84	0.112	21.8	0	0.42	14:00	0
Monitor Reading (ppm):		See Low Flow Purge Data Sheet						
Well Casing Diameter & Material	2.8 gal	3.88	0.101	21.5	2	0.66	14:04	0
Type: 1.25" PVC	4.5 gal	4.00	0.101	21.4	0	1.07	14:10	0
Total Well Depth (TD): 27.70	5.0 gal	4.07	0.100	21.6	4	0.54	14:15	0
Static Water Level (WL): 8.98								
One Casing Volume(gal/L): 1.50 gal								
Start Purge (hrs): 13:50								
End Purge (hrs): 14:15								
Total Purge Time (min): 25 min								
Total Vol. Purged (gal/L): 5.0 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
EDB - 504.1	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

MS/MSD	Duplicate ID No.:	Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N2640

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

Sample ID No.: PEN-19-MW29D
Sample Location: PEN-19-29D
Sampled By: MTA / LS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12/17/02	Color	pH	S.C.	Temp.	Turbidity	DO		Sal
Time: 14:20	Visual	Standard	mS/cm	°C	NTU	mg/l	Time	%
Method: Peristaltic (low flow)	Clear	6.35	0.194	21.2	200	8.78	14:10	0

PURGE DATA:

Date: 12/17/02	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Time	Sal
Method: Peristaltic (low flow)	2.5 gal	6.40	0.208	21.5	239	0.09	14:00	0
Monitor Reading (ppm):		See Low Flow Purge Data Sheet						
Well Casing Diameter & Material	3.5 gal	6.37	0.210	21.4	237	0.09	14:03	0
Type: 1.25" PVC	4.3 gal	6.37	0.198	21.3	236	0.10	14:07	0
Total Well Depth (TD): 40.90	4.8 gal	6.35	0.194	21.2	200	8.78	14:10	0
Static Water Level (WL): 9.65								
One Casing Volume(gal/L): 2.50 gal								
Start Purge (hrs): 13:50								
End Purge (hrs): 14:15								
Total Purge Time (min): 25 min								
Total Vol. Purged (gal/L): 5.0 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
EDB - 504.1	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

****Liquid turns from clear to dark brown upon exposure to air.**

Circle if Applicable:

MS/MSD	Duplicate ID No.: PEN-19-DUP-01	Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N2640

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

Sample ID No.: PEN-19-MW30S
Sample Location: PEN-19-30S
Sampled By: MTA/ LS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12/18/02	Color Visual	pH Standard	S.C. mS/cm	Temp. ^{0}C	Turbidity NTU	DO mg/l	Time	Sal %
Time: 10:15								
Method: Peristaltic (low flow)	Clear	4.25	0.17	20.2	0	0.46	10:10	0

PURGE DATA:

Date: 12/18/02	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Time	Sal
Method: Peristaltic (low flow)	0.80 gal	4.37	0.181	20.1	0	0.63	9:45	0
Monitor Reading (ppm):		See Low Flow Purge Data Sheet						
Well Casing Diameter & Material	1.3 gal	4.4	0.163	20.2	0	0.23	9:50	0
Type: 1.25" PVC	2.3 gal	4.22	0.175	20.2	0	0.23	9:57	0
Total Well Depth (TD):15.35	3.5 gal	4.32	0.170	20.2	0	0.30	10:05	0
Static Water Level (WL): 5.11	4.0 gal	4.25	0.170	20.2	0	0.46	10:10	0
One Casing Volume(gal/L): 0.82 gal								
Start Purge (hrs): 9:42								
End Purge (hrs): 10:10								
Total Purge Time (min): 28 min								
Total Vol. Purged (gal/L): 4.0 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
EDB - 504.1	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

MS/MSD	Duplicate ID No.:	Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N2640

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

Sample ID No.: PEN-19-MW30I
Sample Location: PEN-19-30I
Sampled By: MTA / LS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	Time	Sal %
Date: 12/18/02								
Time: 10:20								
Method: Peristaltic (low flow)	Clear	4.12	0.147	21.3	0	0.37	10:17	0

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Time	Sal
Date: 12/18/02								
Method: Peristaltic (low flow)	1.2 gal	4.23	0.147	21.6	0	0.24	9:52	0
Monitor Reading (ppm):		See Low Flow Purge Data Sheet						
Well Casing Diameter & Material	2.0 gal	4.23	0.147	21.6	0	0.24	9:55	0
Type: 1.25" PVC	3.0 gal	4.17	0.140	21.3	0	0.35	10:07	0
Total Well Depth (TD): 24.00	4.0 gal	4.12	0.147	21.3	0	0.37	10:17	0
Static Water Level (WL): 8.72								
One Casing Volume(gal/L): 1.22 gal								
Start Purge (hrs): 9:45								
End Purge (hrs): 10:20								
Total Purge Time (min): 35 min								
Total Vol. Purged (gal/L): 4.25 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
EDB - 504.1	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

MS/MSD	Duplicate ID No.:	Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N2640

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

Sample ID No.: PEN-19-MW31S
Sample Location: PEN-19-31S
Sampled By: MTA / LS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12/17/02	Color Visual	pH Standard	S.C. mS/cm	Temp. ^{0}C	Turbidity NTU	DO mg/l	Time	Sal %
Time: 09:50								
Method: Peristaltic (low flow)	Clear	5.20	0.085	19.1	7	4.05	9:50	0

PURGE DATA:

Date: 12/17/02	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Time	Sal
Method: Peristaltic (low flow)	0.5 gal	5.20	0.087	18.9	31	4.33	9:35	0
Monitor Reading (ppm):		See Low Flow Purge Data Sheet						
Well Casing Diameter & Material	1.5 gal	4.96	0.084	19.2	8	3.86	9:42	0
Type: 1.25" PVC	2.0 gal	5.07	0.085	19.1	10	4.07	9:45	0
Total Well Depth (TD): 14.68	2.5 gal	5.20	0.085	19.1	7	4.05	9:50	0
Static Water Level (WL): 8.86								
One Casing Volume(gal/L): 0.47 gal								
Start Purge (hrs): 9:25								
End Purge (hrs): 9:50								
Total Purge Time (min): 25 min								
Total Vol. Purged (gal/L): 2.5 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
EDB - 504.1	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

MS/MSD	Duplicate ID No.:	Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N2640

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

Sample ID No.: PEN-19-MW31I
Sample Location: PEN-19-31I
Sampled By: MTA / LS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12/17/02
Time: 10:00
Method: Peristaltic (low flow)

Color Visual	pH Standard	S.C. mS/cm	Temp. ^{0}C	Turbidity NTU	DO mg/l	Time	Sal %
Clear	4.85	0.064	21.4	0	0.63	9:53	0

PURGE DATA:

Date: 12/17/02
Method: Peristaltic (low flow)
Monitor Reading (ppm):
Well Casing Diameter & Material Type: 1.25" PVC
Total Well Depth (TD): 27.75
Static Water Level (WL): 10.35
One Casing Volume(gal/L): 1.4 gal
Start Purge (hrs): 09:25
End Purge (hrs): 09:55
Total Purge Time (min): 30 min
Total Vol. Purged (gal/L): 3.0 gal

Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Time	Sal
1.4 gal	4.70	0.064	21.2	1	0.58	9:35	0
	See Low Flow Purge Data Sheet						
2.1 gal	4.80	0.064	21.3	9	0.64	9:47	0
2.5 gal	4.91	0.064	21.3	8	0.60	9:50	0
3.0 gal	4.85	0.064	21.4	0	0.63	9:53	0

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
EDB - 504.1	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N2640

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

Sample ID No.: PEN-19-MW32S
Sample Location: PEN-19-32S
Sampled By: MTA / LS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12/17/02
Time: 13:00
Method: Peristaltic (low flow)

Color Visual	pH Standard	S.C. mS/cm	Temp. ^{0}C	Turbidity NTU	DO mg/l	Time	Sal %
Clear	4.58	0.055	18.6	3	9.87	12:53	0

PURGE DATA:

Date: 12/17/02
Method: Peristaltic (low flow)
Monitor Reading (ppm):
Well Casing Diameter & Material
Type: 1.25" PVC
Total Well Depth (TD): 19.14
Static Water Level (WL): 9.80
One Casing Volume(gal/L): 0.75 gal
Start Purge (hrs): 12:35
End Purge (hrs): 13:00
Total Purge Time (min): 25 min
Total Vol. Purged (gal/L): 2.5 gal

Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Time	Sal
1.0 gal	4.58	0.056	19.5	16	8.41	12:44	0
	See Low Flow Purge Data Sheet						
1.4 gal	4.58	0.056	19.9	10	6.85	12:47	0
2.0 gal	4.57	0.055	19.9	2	7.17	12:50	0
2.5 gal	4.58	0.055	18.6	3	9.87	12:53	0

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
EDB - 504.1	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N2640

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

Sample ID No.: PEN-19-MW32I
Sample Location: PEN-19-32I
Sampled By: MTA / LS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12/17/02
Time: 13:00
Method: Peristaltic (low flow)

Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	Time	Sal %
Clear	4.61	0.053	21	0	1.33	12:51	0

PURGE DATA:

Date: 12/17/02
Method: Peristaltic (low flow)
Monitor Reading (ppm):
Well Casing Diameter & Material
Type: 1.25" PVC
Total Well Depth (TD): 27.85
Static Water Level (WL): 9.61
One Casing Volume(gal/L): 1.45 gal
Start Purge (hrs): 12:35
End Purge (hrs): 13:00
Total Purge Time (min): 25 min
Total Vol. Purged (gal/L): 3.5 gal

Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Time	Sal
1.8 gal	4.62	0.054	21.1	8	0.70	12:42	0
	See Low Flow Purge Data Sheet						
2.0 gal	4.60	0.054	20.6	0	1.54	12:45	0
2.4 gal	4.62	0.053	21.1	0	1.76	12:48	0
3.0 gal	4.61	0.053	21.0	0	1.33	12:51	0

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
EDB - 504.1	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N2640

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

Sample ID No.: PEN-19-MW33S
Sample Location: PEN-19-33S
Sampled By: MTA / LS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12/17/02
Time: 08:30
Method: Peristaltic (low flow)

Color Visual	pH Standard	S.C. mS/cm	Temp. ^{0}C	Turbidity NTU	DO mg/l	Time	Sal %
Clear	3.64	0.086	19.9	9	0.89	7:40	0

PURGE DATA:

Date: 12/17/02
Method: Peristaltic (low flow)
Monitor Reading (ppm):
Well Casing Diameter & Material
Type: 1.25" PVC
Total Well Depth (TD): 14.80
Static Water Level (WL): 6.38
One Casing Volume(gal/L): 0.70 gal
Start Purge (hrs): 07:20
End Purge (hrs): 07:40
Total Purge Time (min): 20 min
Total Vol. Purged (gal/L): 4.1 gal

Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Time	Sal
0.70 gal	3.40	0.086	19.9	29	1.53	7:25	0
	See Low Flow Purge Data Sheet						
2.0 gal	3.53	0.088	19.9	4	0.52	7:30	0
3.0 gal	3.65	0.087	19.9	10	1.54	7:35	0
4.0 gal	3.64	0.086	19.9	9	0.89	7:40	0

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
EDB - 504.1	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N2640

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

Sample ID No.: PEN-19-MW33I
Sample Location: PEN-19-33I
Sampled By: MTA / LS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 12/17/2002
Time: 08:35
Method: Peristaltic (low flow)

Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	Time	Sal %
Clear	4.11	0.097	21.2	6	1.16	7:48	0

PURGE DATA:

Date: 12/17/2002
Method: Peristaltic (low flow)
Monitor Reading (ppm):
Well Casing Diameter & Material Type: 1.25" PVC
Total Well Depth (TD): 28.05
Static Water Level (WL): 9.07
One Casing Volume(gal/L):1.52 gal
Start Purge (hrs): 07:20
End Purge (hrs): 07:50
Total Purge Time (min): 30 min
Total Vol. Purged (gal/L): 4.4 gal

Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Time	Sal
2 gal	3.94	0.098	21.4	10	0.34	7:35	0
	See Low Flow Purge Data Sheet						
3.5 gal	3.98	0.098	21.5	18	0.95	7:41	0
4.0 gal	4.09	0.097	21.3	12	1.02	7:45	0
4.5 gal	4.11	0.097	21.2	6	1.16	7:48	0

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
EDB - 504.1	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, UST Site 0020 / IR Site 19
Project No.: N2640

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

Sample ID No.: PEN-19-MW33D
Sample Location: PEN-19-33D
Sampled By: MTA / LS
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color Visual	pH Standard	S.C. mS/cm	Temp. ^{0}C	Turbidity NTU	DO mg/l		
Date: 12/17/02								
Time: 09:15								
Method: Peristaltic (low flow)	Brown	**	**	**	**	**		

PURGE DATA:

	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Time	
Date: 12/17/02								
Method: Peristaltic (low flow)	**	**	**	**	**	**	**	
Monitor Reading (ppm):		See Low Flow Purge Data Sheet						
Well Casing Diameter & Material								
Type: 1.25" PVC								
Total Well Depth (TD): 41.75								
Static Water Level (WL): 8.99								
One Casing Volume(gal/L): 2.62 gal								
Start Purge (hrs): 7:20								
End Purge (hrs): 9:10								
Total Purge Time (min): 110 min								
Total Vol. Purged (gal/L): 2 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC - 8260	HCL	Three 40mL VOA vials	YES
EDB - 504.1	HCL	Three 40mL VOA vials	YES
PAH - 8270 SIM	N/A	Two 1L amber jars	YES
TRPH - FDEP FL-PRO	HCL	Two 1L amber jars	YES
total lead - 6010	HNO3	One 500mL plastic	YES

OBSERVATIONS / NOTES:

See Field Analytical Log Sheets for Geochemical Parameters (i.e. natural attenuation).

****Well purged dry twice, allowed to recover to 80% of static water level, then well was sampled.**
****No horiba measurements were taken at well due to lack of water**

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

SURVEYING DATA SHEET

Project Name: Site Assessment Report Addendum #2, UST Site 0020, IR Site 19, NAS Pensacola

Project No.: N2640 **Date:** 03.06.03

Personnel: Howard Engle and Larry Smith

Station ID	Backsight (BS)	Height of Instrument (HI)	Foresight (FS)	Elevation	Comments
MW9	2.34	33.47		31.13	Datum
MW26S		33.47	2.20	31.27	
MW30S		33.47	1.56	31.91	
MW30I		33.47	1.74	31.73	
MW25S		33.47	1.92	31.55	
MW24S		33.47	1.12	32.35	
MW27S		33.47	1.78	31.69	
MW17R		33.47	2.46	31.01	
TP1		33.47	1.12	32.35	
TP1	1.20	33.55		32.25	from MW24S
MW29D		33.55	1.72	31.83	
MW29I		33.55	1.78	31.77	
MW29S		33.55	1.68	31.87	
MW28S		33.55	2.11	31.44	
MW28I		33.55	2.40	31.15	
TP2		33.55	1.72	31.83	
TP2	2.60	34.43		31.83	from MW29D
MW33S		34.43	2.73	31.70	
MW33I		34.43	2.50	31.93	
MW33D		34.43	2.59	31.84	
MW31S		34.43	1.10	33.33	
MW31I		34.43	1.22	33.21	
MW32S		34.43	0.04	34.39	
MW32I		34.43	-0.34	34.77	

HI = BM Elevation + BM Backsight