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# CONTAMINATION ASSESSMENT REPORT ADDENDUM FOR SITE 1159 OUTLYING LANDING FIELD BRONSON NAS PENSACOLA FL

05/22/2001

TETRA TECH INC

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May 22, 2001

Project Number 0401

Joe Fugitt, P.G.
Remedial Project Manager
Technical Review/Federal Facilities
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

**Reference:** **Clean Contract No. N62467-94-D0888**
**Contract Task Order No. 0112**

**Subject:** **Contamination Assessment Report Addendum**
**For Site 1159, Outlying Landing Field (OLF) Bronson**
**Pensacola, Florida**

Tetra Tech NUS, Inc. (TtNUS) is pleased to submit the Contamination Assessment Report Addendum (CARA) 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-0112, for the Comprehensive Long-term Environmental Action Navy (CLEAN) Contract Number N62467-94-D-0888.

**Contamination Assessment Report Addendum Objectives.** The objective of the CARA is to address concerns expressed about the Contamination Assessment Report (CAR) by the Florida Department of Environmental Protection (FDEP) in a technical review letter dated January 6, 1998.

**Previous Investigations.** A Closure Assessment (CA) was performed by the Naval Air Station Pensacola (NASP) Navy Public Works Center (NPWC) in conjunction with the removal of the 500-gallon fuel oil UST adjacent to Building 1159. Five soil samples were collected from the UST excavation on August 15, 1994. The samples were analyzed for volatile organic compounds (VOCs) using EPA Method 8260 by the NASP NPWC Environmental Laboratory. All soil analyte concentrations were below the laboratory minimum detection limits.

One shallow groundwater monitoring well was installed by FGS, Inc. on May 25, 1995. The well, located next to the UST basin, was sampled on May 30, 1995. The sample was analyzed by the NPWC Environmental Laboratory for VOCs using EPA Method 8260, and polycyclic aromatic hydrocarbons (PAHs) using EPA Method 8270. Laboratory analysis detected benzene ethylbenzene, toluene, and xylenes at concentrations above the laboratory minimum detection limits. The total VOC concentration of 126.4 micrograms/liter (µg/L) exceeded the 50 µg/L allowable limit at that time; therefore, a Contamination Assessment Report (CAR) investigation was initiated by the NPWC.

The CAR field work at UST Site 1159 was conducted from March 1996 through February 1997. These field activities included the drilling and sampling of 57 soil borings, and the installation and sampling of 61 groundwater monitoring wells by Water Equipment Services, Inc. The CAR was prepared by the NPWC and was submitted to the FDEP for review in November 1997.

Upon review of the CAR, FDEP issued a letter providing comments on the CAR and requiring the preparation of a CARA for the site. The letter detailed seven (7) comments to be addressed in

order to meet the requirements of Chapter 62-770, Florida Administrative Code (F.A.C.). A copy of the letter is provided in Attachment A. This letter report addresses these comments and, in so doing, provides a summary of the work performed by TtNUS and the resulting data.

**Response To Comments.**

*Comment 1. More information is necessary concerning the former six 25,000 gallon gasoline tanks located northeast of site 1159. The purpose for these tanks should be provided as well as a site drawing showing the exact location of the tanks, piping, fill ports and dispensers. Also, any information that can be discovered documenting any release from the tanks should be provided.*

The locations of the six 25,000-gallon gasoline tanks and piping are depicted in Figure 1, Attachment B. The purpose of the tanks was the storage of aviation gasoline (AVGAS) for refueling. These tanks were apparently removed in the 1980's by E. C. Jordan according to the CAR. No further information is currently available.

*Comment 2. While a great deal of work has been conducted at this site to delineate the extent of soil and groundwater contamination, further work is necessary to fill in data gaps in preparation for remedial activities at the site. The following work is recommended:*

*(a) Piezometers should be installed around monitoring wells MW-45 and MW-47 to determine the horizontal extent of free product and to estimate the total mass of free product present.*

In May 1998, Water Equipment Services, Inc. installed piezometers P-1, P-2, and P-3 around monitoring well MW-45 and piezometers P-4, P-5, and P-6 around monitoring well MW-47. On February 15, 2001, free product thickness measurements were completed from monitoring wells MW-45 and MW-47 as well as their associated piezometers at Site 1159 using an oil/water interface probe. Piezometer P-2 was not located. The free product encountered was a very fluid liquid similar to AVGAS. Free product measurements recorded during the survey indicated that the monitoring wells MW-45 and MW-47 contained thicknesses of 1.49 feet (ft) and 1.74 ft, respectively, whereas free product in the piezometers ranged in thickness from 0.95 to 1.78 ft. The free product and water level measurements from February 15, 2001 are summarized in Table 1, Attachment D. An estimate of the extent of free product present at the site on July 25, 2000 is shown in Figure 2, Attachment B. This estimate of extent takes into account the presence of free product in the piezometers measured on February 15, 2001.

A determination of free product mass was completed at Site 1159. The free product mass is estimated at 1,650,000 pounds (lbs). The calculations for the estimated free product mass are provided in Attachment C.

*(b) A water table monitoring well should be installed immediately adjacent to the location of soil boring SB32.*

In May 1998, monitoring well MW-62 was installed by Water Equipment Services, Inc. for the NPWC. Figure 1, Attachment B depicts the monitoring well locations.

*(c) A water table monitoring well should be installed in the vicinity of soil boring location SB3 or SB4.*

In May 1998, monitoring well MW-63 was installed by Water Equipment Services, Inc. for the NPWC. Figure 1, Attachment B depicts the monitoring well locations.

(d) *A water table monitoring well should be installed between the locations of soil borings SB12 and SB13.*

In May 1998, monitoring well MW-64 was installed by Water Equipment Services, Inc. for the NPWC. Figure 1, Attachment B depicts the monitoring well locations.

(e) *A water table monitoring well should be installed approximately 150 feet east of monitoring well MW-43, adjacent to the existing roadway.*

In May 1998, monitoring well MW-66 was installed by Water Equipment Services, Inc. for the NPWC. Figure 1, Attachment B depicts the monitoring well locations.

(f) *A water table monitoring well should be installed approximately 70 feet west of monitoring well MW-24.*

In May 1998, monitoring well MW-67 was installed by Water Equipment Services, Inc. for the NPWC. Figure 1, Attachment B depicts the monitoring well locations.

(g) *A water table monitoring well should be installed approximately 70 feet northwest of monitoring well MW-32.*

In May 1998, monitoring well MW-68 was installed by Water Equipment Services, Inc. for the NPWC. Figure 1, Attachment B depicts the monitoring well locations.

(h) *A deep monitoring well should be installed approximately 40 feet southeast of monitoring well MW-28.*

In May 1998, deep monitoring well DMW-69 was installed by Water Equipment Services, Inc. for the NPWC. Figure 1, Attachment B depicts the monitoring well locations.

(i) *A water table monitoring well should be installed approximately halfway between monitoring wells MW-37 and MW-35.*

In May 1998, monitoring well MW-65 was installed by Water Equipment Services, Inc. for the NPWC. Figure 1, Attachment B depicts the monitoring well locations.

(j) *During well drilling, soil samples should be collected immediately above the water table at the depth of highest OVA reading. Soil samples should be analyzed in the laboratory for volatile organic aromatics, PAHs, TRPH and lead.*

During well drilling by Water Equipment Services, Inc. for the NPWC, soil samples were not collected. Instead, on June 1, 2000, TtNUS personnel completed two soil borings (SB-1 and SB-2) to depths of 24 and 12 ft below land surface (bls), respectively, at Site 1159 using Direct Push Technology (DPT). During soil boring operations, an onsite geologist recorded lithologic descriptions of the soil and performed headspace organic vapor analysis (OVA) screenings with a flame ionization detector (FID). The OVA screening results ranged from 0 parts per million (ppm) to 150ppm corrected. However, the elevated OVA readings were recorded immediately above the water table and may be a result of free product smear due to groundwater level fluctuations. Soil boring locations are shown on Figure 1, Attachment B. Soil boring logs containing the OVA data are located in Attachment D. All sampling activities were conducted in accordance with TtNUS, FDEP approved, Comp QAP #980038.

Two soil samples were collected from each of the two soil borings. A duplicate sample was collected from soil boring SB-1. Following collection of the soil boring samples, the sample bottles were packed on ice and shipped via overnight transport to Accutest Southeast Laboratories in Orlando, Florida. The soil samples were analyzed for compounds specified in the Gasoline and Kerosene Analytical Groups. Soil sampling field forms and soil boring log sheets are provided in Attachment D. The analytical results for the soil samples are summarized in Table 1, Attachment E. A copy of the validated laboratory reports is provided in Attachment F.

Three VOCs (ethylbenzene, toluene, and total xylenes) were detected in the soil samples collected from Site 1159. None of the VOCs was detected at concentrations exceeding direct exposure or leachability limits from Chapter 62-777, F.A.C.

Ten polycyclic aromatic hydrocarbons (PAHs) were detected in the soil sample from soil boring SB-2 (5 to 7 ft) collected from Site 1159. None of the PAHs was detected at concentrations exceeding the direct exposure or leachability limits from Chapter 62-777, F.A.C.

The soil samples were also analyzed for total petroleum hydrocarbons (TPH). TPH was detected in the soil sample from soil boring SB-2 (5 to 7 ft), but not at a concentration exceeding either the direct exposure or leachability limit from Chapter 62-777, F.A.C.

*Comment 3. Tests should be conducted to calculate aquifer properties specific to the site. These aquifer properties may be calculated from results of slug tests performed on a minimum of three monitoring wells or from a pump test. (please note that averaging groundwater flow velocities from three sites in the vicinity is not a scientifically valid method to estimate flow velocities at this site.)*

On July 21 and 22, 2000, TtNUS conducted aquifer slug tests in monitoring wells MW-4, MW-63, and DMW-60. Falling head (slug introduced to the well or slug-in) and rising head (slug removed from the well or slug-out) tests were performed. Only falling head tests were conducted on deep monitoring well DMW-60 because the screened section was completely submerged. Slug test data was recorded using an InSitu Hermit 1000® data logger and down-well pressure transducer. In each case, successive tests were initiated once the water level in the well returned to 90% (minimum) of equilibrium conditions. Slug test data is provided in Attachment G.

A total of eleven slug tests were performed in the three wells. Of the eleven tests, four (three from MW-4, one from MW-63, and none from DMW-60) are considered to be representative and are used in estimating the groundwater seepage velocity. Slug test data, seepage velocity calculations, average hydraulic conductivity calculations, and hydraulic gradient calculations are provided in Attachment G. The horizontal hydraulic gradient calculations, which estimate the gradient to be 0.00096 ft/ft, support the observation that there is a negligible horizontal gradient at this site. Using this hydraulic gradient, an average hydraulic conductivity of $3.86 \times 10^{-4}$ ft/second, and an effective porosity for sand of 0.30, the estimated groundwater seepage velocity is 39 ft/year.

The velocity estimation above does not take into consideration natural processes that effect groundwater movement such as advection, dispersion, and retardation. When retardation is taken into account, by introducing a retardation factor into the velocity equation (Attachment G), the estimated groundwater seepage velocity decreases to 22 ft/year.

*Comment 4. All of the groundwater analytical data is greater than 270 days old. Representative monitoring wells should be resampled and analyzed to provide current contamination levels.*

On July 9 through 11, 2000, TtNUS personnel collected groundwater samples from 23 representative monitoring wells and 6 of the 8 newly installed monitoring wells located on Site 1159. Newly installed monitoring wells MW-62 and MW-65 were not sampled due to free product. The monitoring well locations are shown on Figure 1, Attachment B. All sampling activities were conducted in accordance with Tetra Tech NUS, Inc., FDEP approved, Comp QAP #980038.

All monitoring wells were purged prior to collecting groundwater samples. Purging and sampling were performed with a peristaltic pump using the low-flow quiescent method. Following collection of the groundwater samples, the sample bottles were packed on ice and shipped via overnight transport to Accutest Laboratories in Orlando, Florida. The groundwater samples were analyzed for VOCs by method 8260B, TPH by FL-PRO, and total lead by method 6010B. Groundwater sampling field forms are provided in Attachment H. The analytical results for the monitoring wells are summarized in Table 3, Attachment E. A copy of the validated laboratory report is provided in Attachment F.

Five VOCs, including benzene, ethylbenzene, methyl tert-butyl ether, toluene, and total xylenes, were detected in the groundwater samples collected from Site 1159 monitoring wells. All five compounds were detected at concentrations exceeding the FDEP Groundwater Cleanup Target Levels (GCTLs) from Chapter 62-777, F.A.C. in at least one groundwater sample. Seventeen monitoring wells contained analytes at concentrations exceeding FDEP GCTLs.

TPH was detected in groundwater samples from 14 monitoring wells. Detected concentrations of TPH exceeded the GCTL of 5,000 µg/L in the groundwater samples from monitoring wells MW-27 (7,070 µg/L) and MW-28 (5,430 µg/L). Lead was detected in 12 groundwater samples. Detected concentrations of lead in 11 of the samples exceeded the FDEP GCTL (15 µg/L).

Figure 3, Attachment B depicts the locations of GCTL exceedances.

*Comment 5. Groundwater should be sampled and analyzed for volatile organic aromatics, TRPH and total lead. Monitoring wells MW-23 and MW-38 should be analyzed for ethylene dibromide to confirm earlier detections.*

On July 10 and 11, 2000, groundwater samples were collected from monitoring wells MW-23 and MW-38 and analyzed for ethylene dibromide (EDB). EDB was not detected in the groundwater samples collected from these wells. The groundwater sampling results are discussed above and summarized in Table 3, Attachment E.

*Comment 6. Water table elevations of all wells should be taken prior to groundwater sampling to determine groundwater flow direction and gradient. Water table elevations of deep wells should be used to determine if there are vertical hydraulic gradients at this site.*

On July 25, 2000, water level measurements were recorded for all onsite monitoring wells using an oil/water interface probe. The depth-to-water measurements, along with top of casing elevations and equations to account for free product, were used to calculate groundwater elevations. Figure 4, Attachment B depicts the groundwater elevations recorded on July 25, 2000. Based on the groundwater level measurements, the groundwater flows to the west towards Perdido Bay.

Two pairs of nested wells were utilized to determine the vertical gradient at Site 1159, monitoring wells MW-2 and DMW-61 and monitoring wells MW-47 and DMW-60. Both nested pairs resulted in a vertical gradient of 0.015 ft/ft. However, the vertical gradient for monitoring well pair MW-2/DMW-61 is downwards whereas the vertical gradient for monitoring well pair MW-47/DMW-60 is upwards. Depth to water measurements, top of casing elevations and groundwater elevation data

are provided in Table 4, Attachment E. Vertical gradient calculations are provided in Attachment G.

*Comment 7. A cross-section illustrating the stratigraphy of the site with applicable contaminant concentrations should be provided.*

Figure 5, Attachment B depicts the location of the cross-section. The cross-section illustrating the stratigraphy of the site is provided in Figure 6, Attachment B. Figure 3, Attachment B depicts the locations of GCTL exceedances.

**Conclusions.**

- An "AVGAS"-type free product plume is present at the site over an approximately 107,158 square ft area with a thickness up to 2.74 ft. The free product mass is estimated at 1,650,000 lbs.

- Soil samples collected from Site 1159 did not contain any analytes at concentrations exceeding FDEP's direct exposure or leachability limits.

- Seventeen monitoring well groundwater samples contained VOC analytes at concentrations exceeding FDEP GCTLs. The concentration of TPH exceeded the GCTL (5,000 mg/L) in the groundwater samples from monitoring wells MW-27 (7,070 mg/L) and MW-28 (5,430 mg/L). Lead was detected in eleven monitoring well groundwater samples at a concentration exceeding the FDEP GCTL (15 mg/L).

- Both nested well pairs resulted in a vertical gradient of 0.015 ft/ft. However, the vertical gradient for monitoring well pair MW-2/DMW-61 is downwards while the vertical gradient for monitoring well pair MW-47/DMW-60 is upwards. Therefore, the current vertical gradient investigation is inconclusive.

- The groundwater flows to the west towards the Perdido Bay.

- The horizontal hydraulic gradient calculations, which estimate the gradient to be 0.00096 ft/ft, support the observation that there is a negligible horizontal gradient at this site. Using this hydraulic gradient, a hydraulic conductivity of $3.86 \times 10^{-4}$ ft/second, and an effective porosity of 0.30, the estimated groundwater seepage velocity is 39 ft/year. When retardation is taken into account, the estimated groundwater seepage velocity decreases to 22 ft/year.

**Recommendations.** Based upon the findings of the current CARA and historical data, TtNUS recommends that a Remedial Action Plan for free product and groundwater be prepared for Site 1159 at OLF Bronson. In addition, TtNUS recommends the immediate recovery of free product at this site.

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

Sincerely,

Gerald A Walker

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

GW/sis

Enclosures

CC: B. Glover, SOUTHNAVFACENGCOM
G. Campbell, NASP PWC
D. Wroblewski (cover letter only), TtNUS
M. Perry/file, TtNUS
Tallahassee file, TtNUS

ATTACHMENT A

FDEP Technical Review Letter

# Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

January 6, 1998

Mr. Byas Glover
Code 18410
Southern Division
Naval Facilities Engineering Command
2155 Eagle Drive
P.O. Box 190010
North Charleston, South Carolina 29419-9010

RE: U.S. Navy Outlying Field (OLF) Bronson, Site 1159
Pensacola, Florida
FDEP #179300938

Dear Mr. Glover:

I have completed the technical review of the Contamination Assessment Report (CAR) and Monitoring Only Proposal (MOP) dated November 1997 (received November 25, 1997), submitted for this site 1159 OLF Bronson. Please submit a Site Assessment Report Addendum as per the September 23, 1997 revision to Chapter 62-770, F.A.C. which addresses the comments in the attached memorandum from David Grabka.

If I can be of any further assistance with this matter, please contact me at (904) 921-9989.

Sincerely,

John W. Mitchell
Remedial Project Manager

cc: Dean Spencer, NAS Pensacola
Greg Campbell, NAS Pensacola
Tom Moody, FDEP Northwest District

TJB _____ JJC _____ ESN _____

Florida Department of

# Memorandum

# Environmental Protection

**TO:** John Mitchell, E.S. III, Remedial Project Manager

**THROUGH:** Tim Bahr, P.G. Supervisor, Technical Review Section JRC for TB

**FROM:** David P. Grabka, E.S. I, Technical Review Section

**DATE:** December 19, 1997

**SUBJECT:** Contamination Assessment Report, Site 1159, U.S. Navy Outlying Landing Field (OLF) Bronson, Pensacola, FL, November 17, 1997

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I have completed my review of the Contamination Assessment Report (CAR) and Monitoring Only Plan (MOP) proposal submitted by Navy Public Works Center for the above-referenced site. The report cannot be approved based on the information provided. A Site Assessment Report Addendum should be prepared and should address the following comments:

**Specific comments:**

(1) More information is necessary concerning the former six 25,000 gallon gasoline tanks located northeast of site 1159. The purpose for these tanks should be provided as well as a site drawing showing the exact location of the tanks, piping, fill ports and dispensors. Also, any information that can be discovered documenting any release from the tanks should be provided.

(2) While a great deal of work has been conducted at this site to delineate the extent of soil and groundwater contamination, further work is necessary to fill in data gaps in preparation for remedial activities at the site. The following work is recommended:

(a) Piezometers should be installed around monitoring wells MW-45 and MW-47 to determine the horizontal extent of free product and to estimate the total mass of free product present.

(b) A water table monitoring well should be installed immediately adjacent to the location of soil boring SB32.

(c) A water table monitoring well should be installed in the vicinity of soil boring location SB3 or SB 4.

(d) A water table monitoring well should be installed between the locations of soil borings SB12 and SB13.

(e) A water table monitoring well should be installed approximately 150 feet east of monitoring well MW-43, adjacent to the existing roadway.

(f) A water table monitoring well should be installed approximately 70 feet west of monitoring well MW-24.

(g) A water table monitoring well should be installed approximately 70 feet northwest of monitoring well MW-32.

(h) A deep monitoring well should be installed approximately 40 feet southeast of monitoring well MW-28.

(i) A water table monitoring well should be installed approximately halfway between monitoring wells MW-37 and MW-45.

(j) During well drilling, soil samples should be collected immediately above the water table at the depth of highest OVA reading. Soil samples should be analyzed in the laboratory for volatile organic aromatics, PAHs, TRPH and lead.

(3) Tests should be conducted to calculate aquifer properties specific to the site. These aquifer properties may be calculated from results of slug tests performed on a minimum of three monitoring wells or from a pump test. (Please note that averaging groundwater flow velocities from three sites in the vicinity is not a scientifically valid method to estimate flow velocities at this site.)

(4) All of the groundwater analytical data is greater than 270 days old. Representative monitoring wells should be resampled and analyzed to provide current contaminant levels.

(5) Groundwater should be sampled and analyzed for volatile organic aromatics, TRPH and total lead. Monitoring wells MW-23 and MW-38 should be analyzed for ethylene dibromide to confirm earlier detections.

(6) Water table elevations of all wells should be taken prior to groundwater sampling to determine groundwater flow direction and gradient. Water table elevations of deep wells should be used to determine if there are vertical hydraulic gradients at the site.

(7) A cross-section illustrating the stratigraphy of the site with applicable contaminant concentrations should be provided.

**General comments:**

(1) The report has demonstrated that contamination at the site is from the gasoline analytical group. Therefore, a concentration of 500 ppm as detected by an organic vapor analyzer should be considered excessively contaminated.

(2) The Department no longer uses 50 ppb total BTEX as a target level for groundwater. There are specific target levels for each individual constituent.

(3) The groundwater target level for lead is 15 μg/l.

(4) Analytical methods should be those required by Chapter 62-770, Florida Administrative Code, Table I.

ATTACHMENT B

Figures

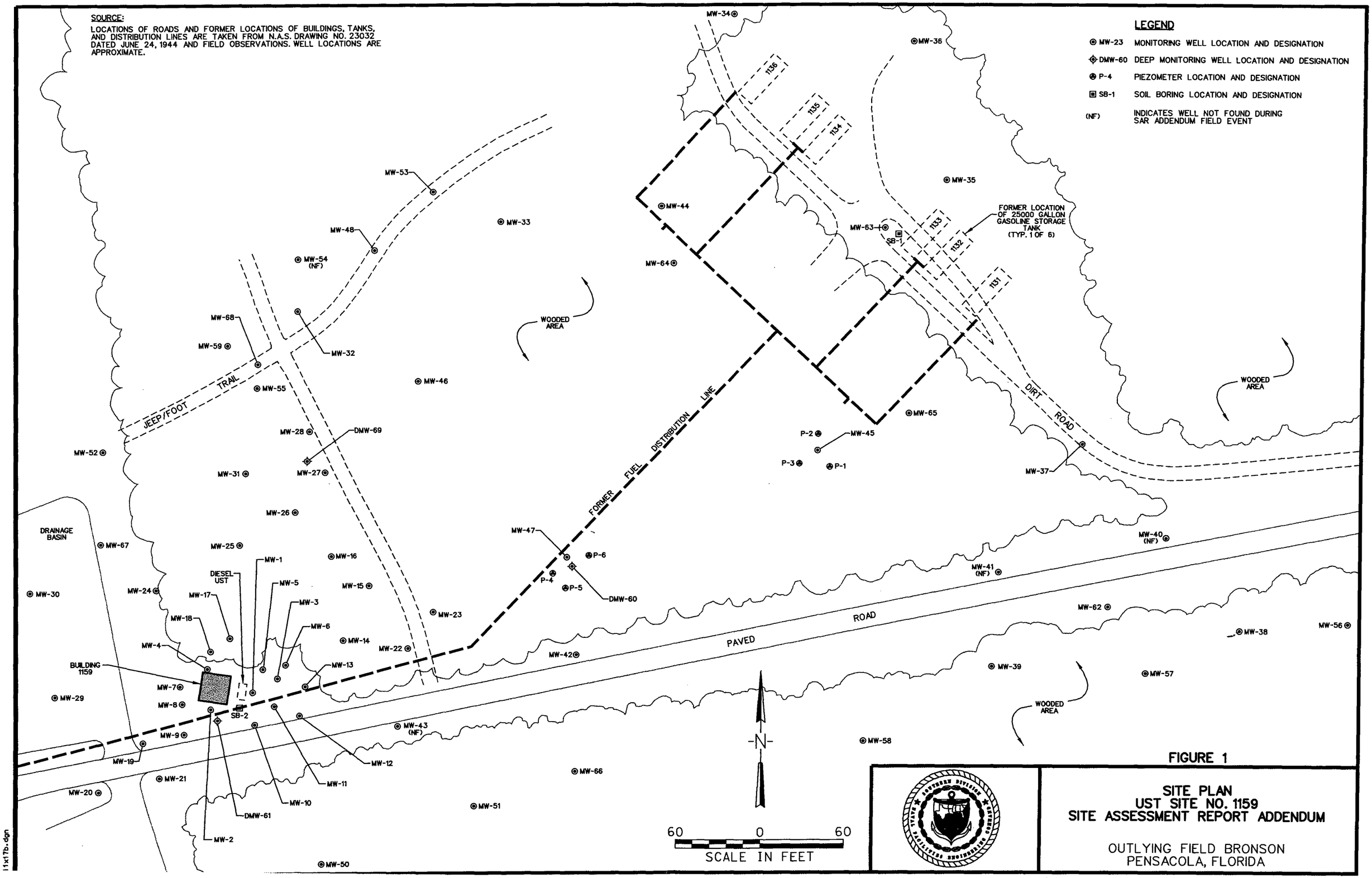



FIGURE 1

SITE PLAN
UST SITE NO. 1159
SITE ASSESSMENT REPORT ADDENDUM

OUTLYING FIELD BRONSON
PENSACOLA, FLORIDA

11x17b.dgn

SOURCE:

LOCATIONS OF ROADS AND FORMER LOCATIONS OF BUILDINGS, TANKS, AND DISTRIBUTION LINES ARE TAKEN FROM N.A.S. DRAWING NO. 23032 DATED JUNE 24, 1944 AND FIELD OBSERVATIONS. WELL LOCATIONS ARE APPROXIMATE.

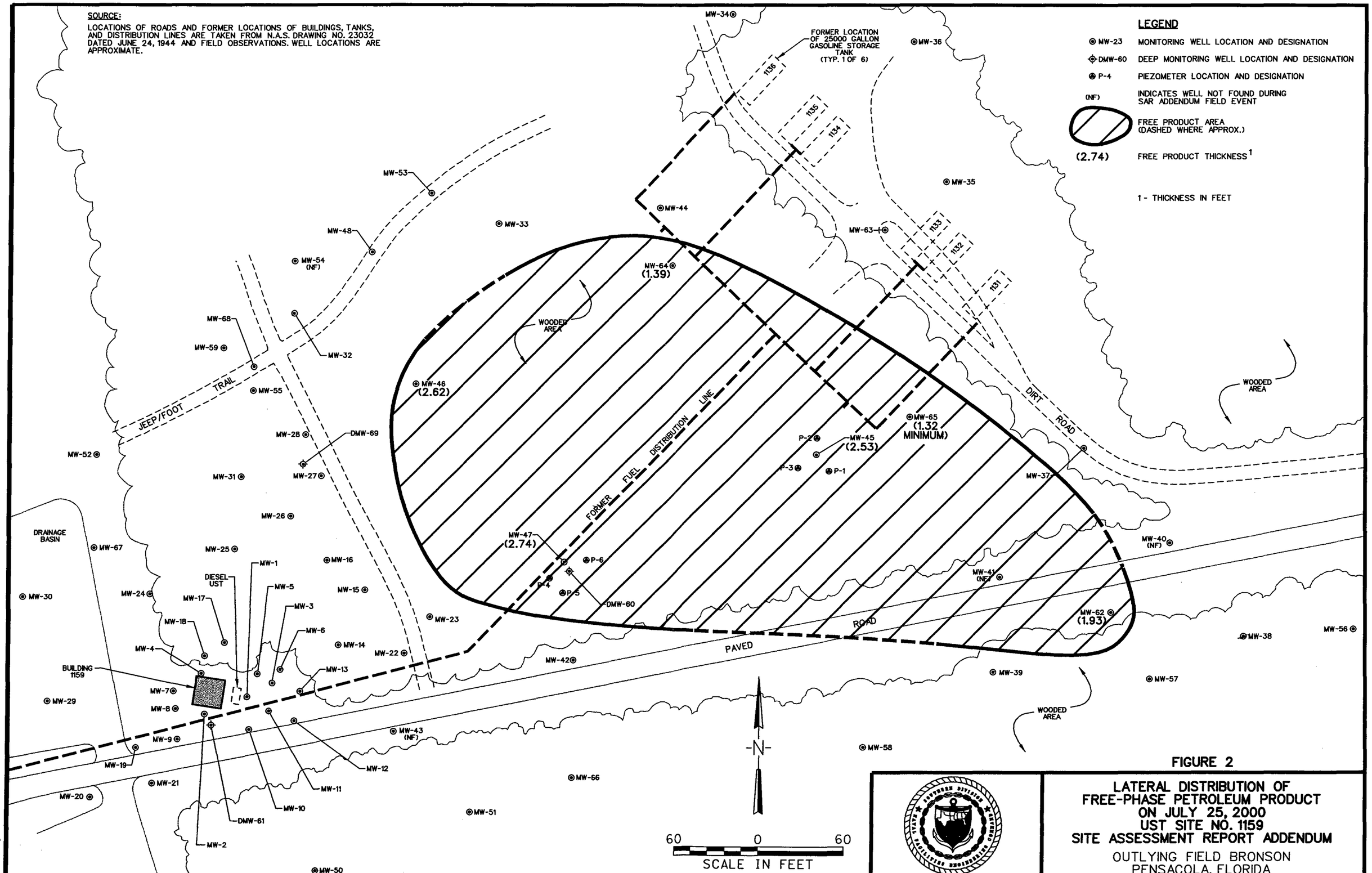



FIGURE 2

LATERAL DISTRIBUTION OF FREE-PHASE PETROLEUM PRODUCT ON JULY 25, 2000 UST SITE NO. 1159 SITE ASSESSMENT REPORT ADDENDUM

OUTLYING FIELD BRONSON PENSACOLA, FLORIDA

n11x17b.dgn

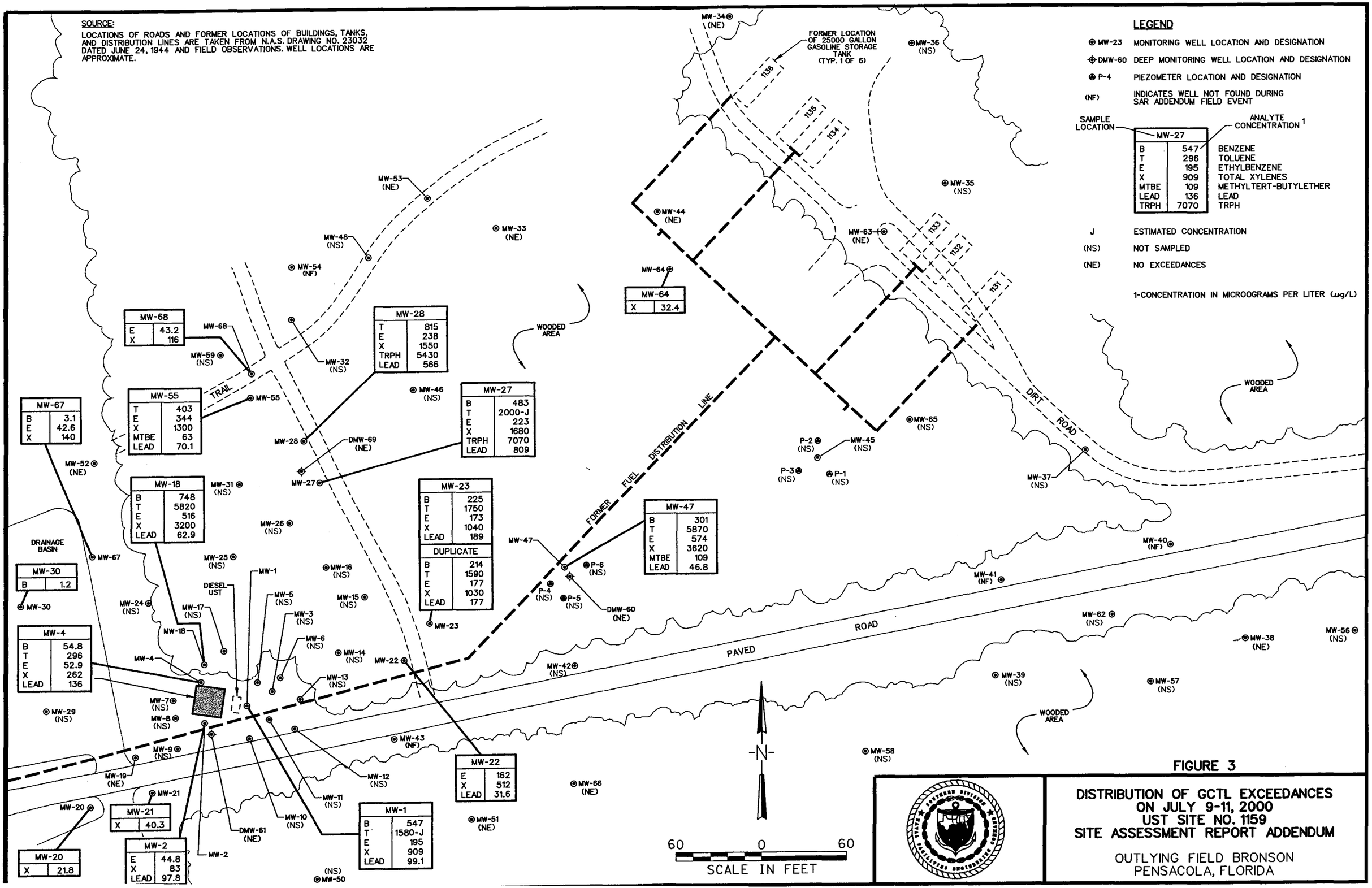



FIGURE 3

DISTRIBUTION OF GCTL EXCEEDANCES
ON JULY 9-11, 2000
UST SITE NO. 1159
SITE ASSESSMENT REPORT ADDENDUM

OUTLYING FIELD BRONSON
PENSACOLA, FLORIDA

SOURCE:
LOCATIONS OF ROADS AND FORMER LOCATIONS OF BUILDINGS, TANKS, AND DISTRIBUTION LINES ARE TAKEN FROM N.A.S. DRAWING NO. 23032 DATED JUNE 24, 1944 AND FIELD OBSERVATIONS. WELL LOCATIONS ARE APPROXIMATE.

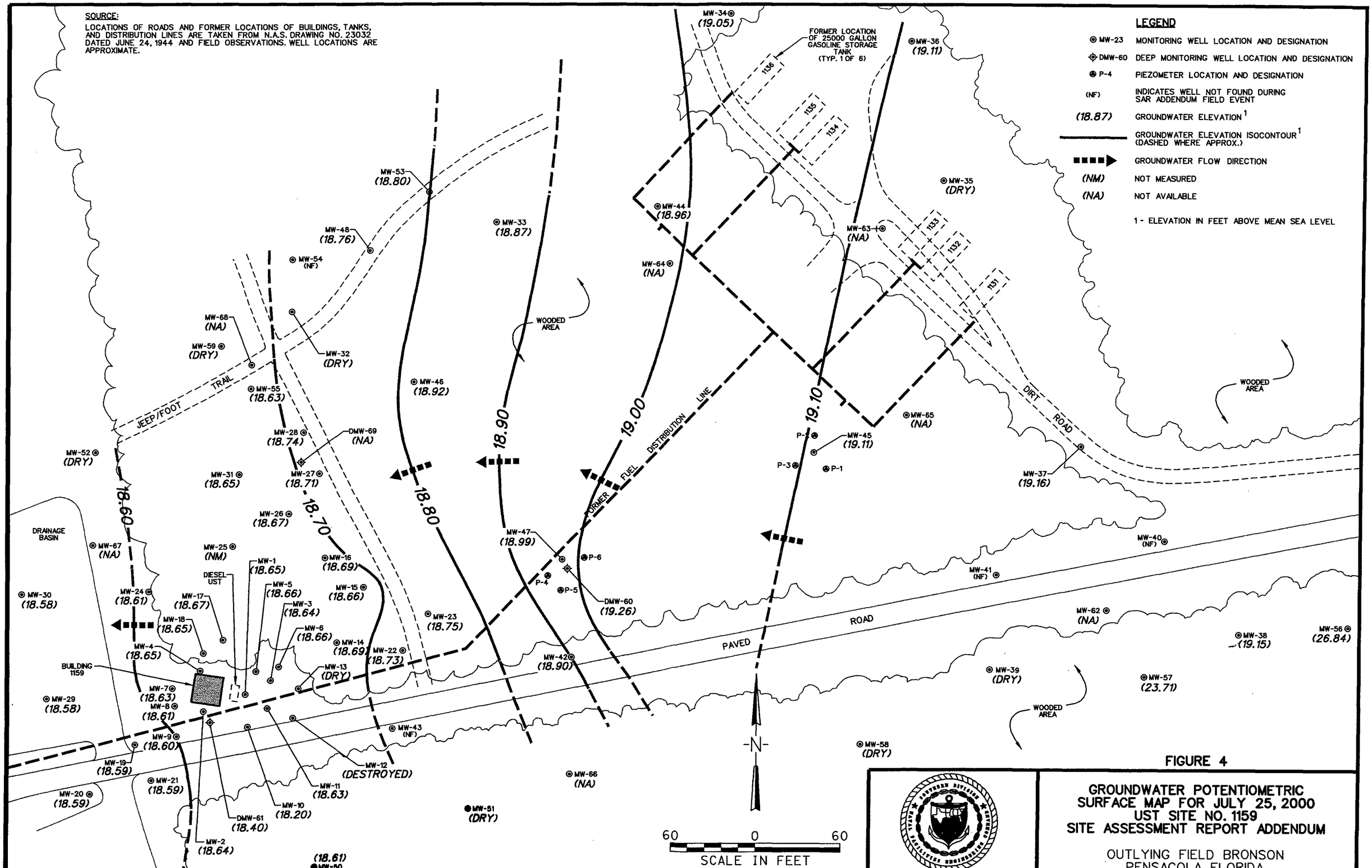



FIGURE 4

GROUNDWATER POTENTIOMETRIC SURFACE MAP FOR JULY 25, 2000
UST SITE NO. 1159
SITE ASSESSMENT REPORT ADDENDUM

OUTLYING FIELD BRONSON
PENSACOLA, FLORIDA

n11x17b.dgn

CAD FILE NO./DATE: 0401A024.dgn/4-5-01

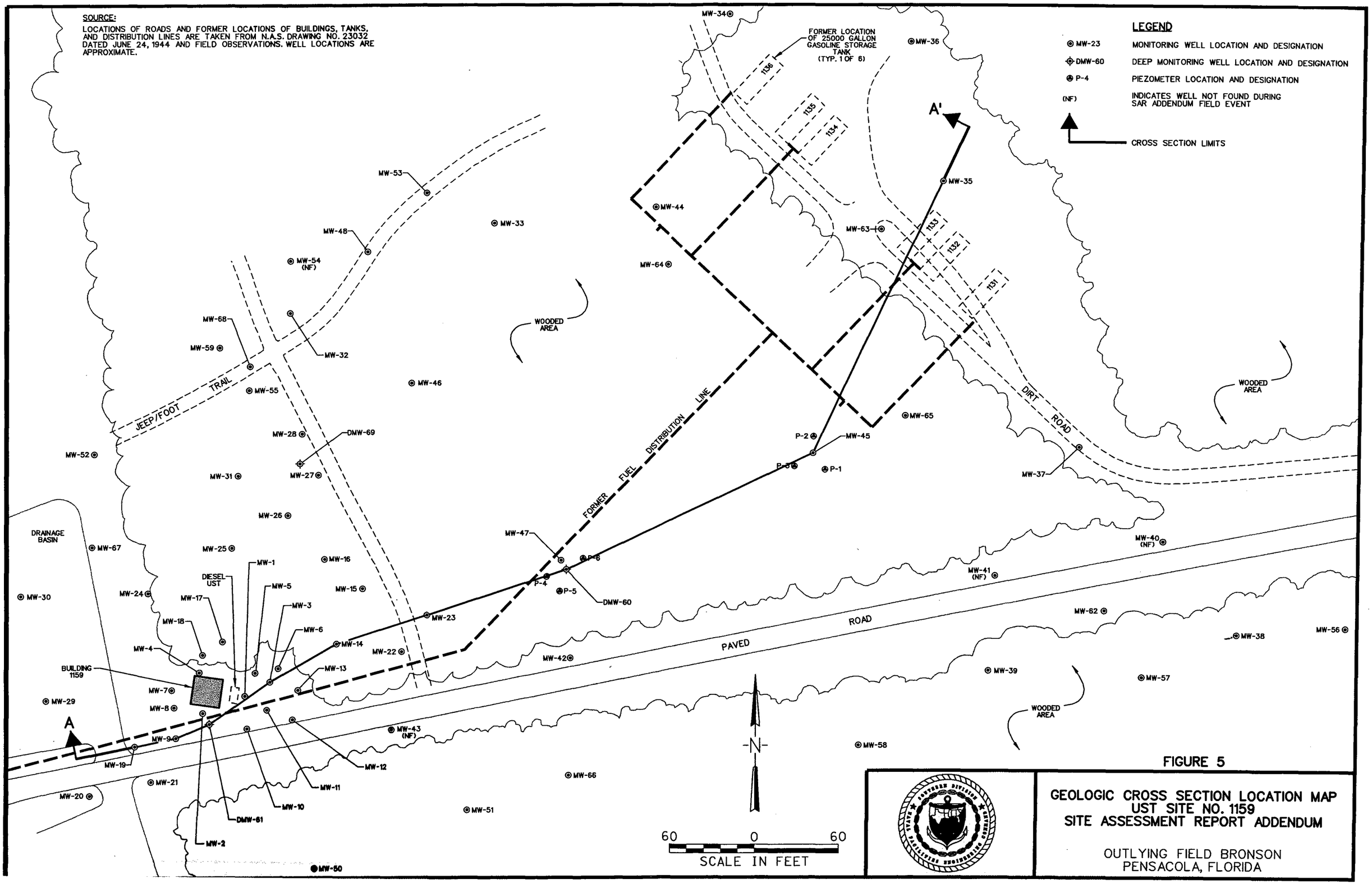
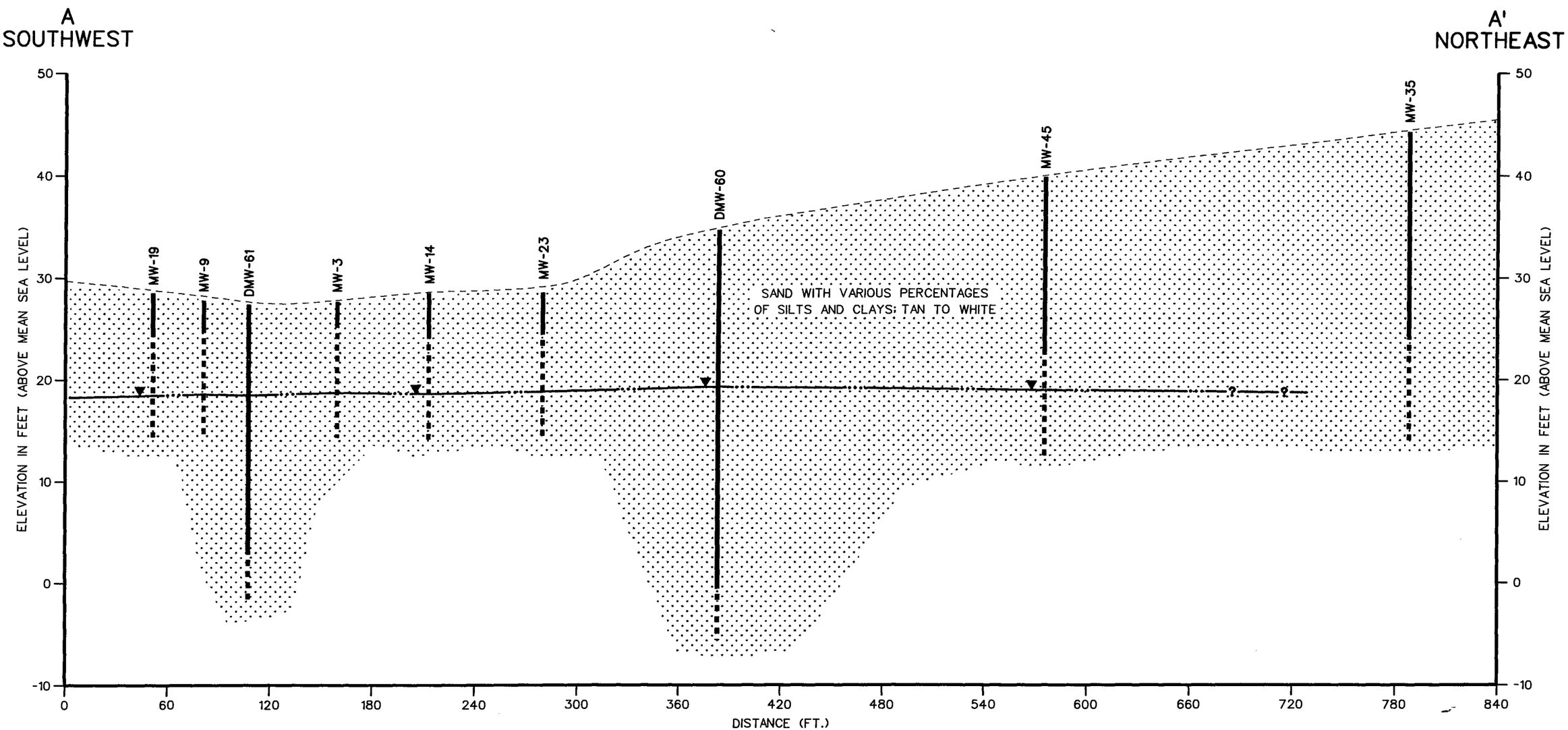



FIGURE 5

GEOLOGIC CROSS SECTION LOCATION MAP
UST SITE NO. 1159
SITE ASSESSMENT REPORT ADDENDUM

OUTLYING FIELD BRONSON
PENSACOLA, FLORIDA

11x17b.dgn




## CROSS SECTION A-A'

VERTICAL EXAGGERATION - 6 X HORIZONTAL

**LEGEND**

MONITORING WELL

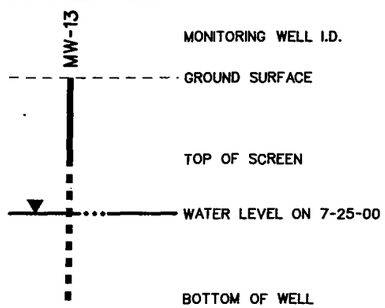



**FIGURE 6**

**GEOLOGIC CROSS SECTION**
**UST SITE NO. 1159**
**SITE ASSESSMENT REPORT ADDENDUM**

OUTLYING FIELD BRONSON
PENSACOLA, FLORIDA

n11x17b.dgn

# ATTACHMENT C

## Free Product Mass Calculations

## ESTIMATION OF FREE PRODUCT MASS

**Total Free Product Mass = A*T*n*Cf*49.12lb/ft$^3$**

**Where:** **A = total area of the plume in ft$^2$**
**T = average observed thickness of free product in feet**
**n = porosity for sand**
**Cf = correction factor**

**Total Free Product Mass = 107,158 ft$^2$*2.09 ft.*0.30*0.50*49.12 lb/ft$^3$**
**= 1,650,139 lb**
**≈ 1,650,000 lb**

ATTACHMENT D

Soil Sampling and Boring Logs

Tetra Tech NUS, Inc.

# BORING LOG



PROJECT NAME: OLFB-Site 1159
PROJECT NUMBER: N0401
DRILLING COMPANY: Groundwater Protection Inc.
DRILLING RIG:

BORING No.: SB01
DATE: 6/1/00
GEOLOGIST: S. Barton
DRILLER: J. Ziegler

| Sample No. and Type or RQD | Depth (Ft.) or Run No. | Blows / 6" or RQD (%) | Sample Recovery / Sample Length | Lithology Change (Depth/Ft.) or Screened Interval | MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness | Color | Material Classification | USCS * | Remarks | PID/FID Reading (ppm): Sample | Sampler BZ | Borehole** | Driller BZ** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 SS | ↓ | 7/5 | 6/6 | | loose | brn | fine-grained sand | | dry, no odor | Ø | | | |
| ↓ | 2 | 8/12 | 2 | | | | | | | | | | |
| 5 SS | 5 | 4/4 | 6/6 | | | | | | | | | | |
| ↓ | ↓ | | | | loose | yl/wt white | fine tomed grain sand | | damp, no odor | Ø | | | |
| ↓ | 7 | 7/5 | 3 | | | | | | | | | | |
| 10 SS | 10 | 3/5 | 6/6 | | loose | white | fine grain sand | | damp, no odor sample+dup collected | 6 | | | |
| ↓ | ↓ | | | | | | | | | | | | |
| ↓ | 12 | 9/9 | 4 | | | | | | | | | | |
| 15 SS | 15 | 4/10 | 6/6 | | | brn | 0-4": fine tomed sand | | | 6 | | | |
| ↓ | ↓ | | | | | white | 4-14": " | | | | | | |
| ↓ | 17 | 15/17 | 6/2 | | | yl/wt | 14-20": " | | | | | | |
| 20 SS | 20 | 2/4 | 6/6 | | | red | 0-4": sandy clay | | filtered | 10 | | | |
| ↓ | ↓ | 8/10 | 4 | | mod. dense | white | 4-16': silty sand | | unfiltered | 80 | | | |
| ↓ | 22 | 11/14 | 6/6 | | mod dense | white | silty sand w/ trace clay | | collect sample very moist petroleum odor | 70 | corrected | | |
| ↓ | ↓ | | | | | | | | | | | | |
| ↓ | 24 | 16/12 | 6/2 | | | | End of boring | | wet odor U: as above F: | 160 15 | | | |
| 25 | | | | | | | | | | 145 corrected | | | |

* When rock coring, enter rock brokeness.

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

Drilling Area Background (ppm): 5

Remarks:

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

Tetra Tech NUS, Inc.

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: OLFB-Site 1159
Project No.: CTO 112-N0401

Sample ID No.: OLFB59SB01101 2
Sample Location: SB01
Sampled By: S. Barton
C.O.C. No.:

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

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

**GRAB SAMPLE DATA:**

| | Depth Interval | Color | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| Date: 6/1/00<br>Time: 1409<br>Method: DPT<br>Monitor Reading (ppm): 6 | 10'-12' | white | fine sand<br>damp, no odor |

**COMPOSITE SAMPLE DATA:**

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

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| VOC | | ✓ | |
| PAH | | ✓ | |
| TRPH | | ✓ | |

**OBSERVATIONS / NOTES:**

**MAP:**

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | OLFB59D001 |

**Signature(s):**

# ATTACHMENT E

## Tables

**TABLE 1**
**FREE PRODUCT THICKNESS FOR FEBRUARY 15, 2001-SITE 1159**
**OUTLYING FIELD BRONSON, PENSACOLA, FLORIDA**

| Well Number | Depth to Product BTOC (ft) | Depth to Water BTOC (ft) | Product Thickness (ft) |
|---|---|---|---|
| **MW-45** | 19.95 | 21.44 | 1.49 |
| **P-1** | 21.04 | 22.05 | 1.01 |
| **P-2** | NL | NL | NL |
| **P-3** | 18.90 | 20.60 | 1.7 |
| **MW-47** | 14.90 | 16.64 | 1.74 |
| **P-4** | 15.54 | 16.49 | 0.95 |
| **P-5** | 15.91 | 17.69 | 1.78 |
| **P-6** | 16.98 | 48.64 | 1.66 |

**Notes:**
BTOC - Below Top of Casing
NL - Not located.

**TABLE 2**
**SUMMARY OF DETECTED ANALYTES IN SOILS-SITE 1159**
**OUTLYING LANDING FIELD BRONSON, PENSACOLA, FLORIDA**

| Sample No. | | OLFB59SB011012 | OLFB59D001 | OLFB59SB012022 | OLFB59SB020507 | OLFB59SB020709 |
|---|---|---|---|---|---|---|
| Sample Location | | SB01 | Duplicate of SB011012 | SB01 | SB02 | SB02 |
| Collect Date | | 6/1/00 | 6/1/00 | 6/1/00 | 6/1/00 | 6/1/00 |
| Sample Depth (bls) | | 10' to 12' | 10' to 12' | 20' to 22' | 5' to 7' | 7' to 9' |
| | DE1[1]/DE2[2]/LE[3] (mg/kg) | | | | | |
| **Volatile[4] (mg/kg)** | | | | | | |
| Ethylbenzene | 1100/8400/0.6 | -- | -- | -- | -- | 0.0029 |
| Toluene | 380/2600/0.5 | -- | 0.001[J] | -- | -- | 0.0013[J] |
| Xylenes, total | 5900/40000/0.2 | -- | -- | -- | -- | 0.0065[J] |
| **Polycyclic Aromatic Hydrocarbons[5] (mg/kg)** | | | | | | |
| Benzo(a)anthracene | 1.4/5.0/3.2 | -- | -- | -- | 0.0614[J] | -- |
| Benzo(a)pyrene | 0.1/0.5/8 | -- | -- | -- | 0.0806 | -- |
| Benzo(b)fluoranthene | 1.4/4.8/10 | -- | -- | -- | 0.0869 | -- |
| Benzo(g,h,i)perylene | 2300/41000/32000 | -- | -- | -- | 0.106 | -- |
| Benzo(k)fluoranthene | 15/52/25 | -- | -- | -- | 0.0492[J] | -- |
| Chrysene | 140/450/77 | -- | -- | -- | 0.0606[J] | -- |
| Fluoranthene | 2900/48000/1200 | -- | -- | -- | 0.0787[J] | -- |
| Indeno(1,2,3-cd)pyrene | 1.5/5.3/28 | -- | -- | -- | 0.112 | -- |
| Phenanthrene | 2000/30000/250 | -- | -- | -- | -- | -- |
| Pyrene | 2200/37000/880 | -- | -- | -- | 0.0968[J] | -- |
| **Total Petroleum Hydrocarbons[6] (mg/kg)** | 340/2500/340 | -- | -- | -- | 6.99[J] | -- |

[1] DE1= Direct Exposure limit for residential area from Chapter 62-777, F.A.C.
[2] DE2= Direct Exposure limit for industrial area from Chapter 62-777, F.A.C.
[3] LE= Leachability for groundwater limit from Chapter 62-777, F.A.C.
[4] SW-846 8260B, [5] SW-846 8310, [6] FL-PRO
[J] Indicates the presence of a chemical at an estimated concentration.
-- = not detected.
**Bold** indicates an exceedance of regulatory limits.

**TABLE 3**
**SUMMARY OF DETECTED ANALYTES IN GROUNDWATER-SITE 1159**
**OUTLYING LANDING FIELD BRONSON, PENSACOLA, FLORIDA**


| Sample No. | | OLFB59MW01GW | OLFB59MW02GW | OLFB59MW04GW | OLFB59MW18GW | OLFB59MW19GW |
|---|---|---|---|---|---|---|
| Sample Location | | MW-1 | MW-2 | MW-4 | MW-18 | MW-19 |
| Collect Date | | 7/10/00 | 7/10/00 | 7/10/00 | 7/11/00 | 7/11/00 |
| | Groundwater Clean-up Criteria[1] (µg/L) | | | | | |
| **Volatile[2] (µg/L)** | | | | | | |
| Benzene | 1 | **547** | -- | **54.8** | **748** | -- |
| Ethylbenzene | 30 | **195** | **44.8** | **52.9** | **516** | -- |
| Ethylene Dibromide | 0.02 | NA | NA | NA | NA | NA |
| Methyl Tert-Butyl Ether | 50 | 12.2 | -- | 24.1 | 30.2 | -- |
| Toluene | 40 | **1580[J]** | -- | **296** | **5820** | -- |
| Xylenes, Total | 20 | **909** | **83** | **262** | **3200** | -- |
| **Total Residual Petroleum Hydrocarbons[3] (µg/L)** | 5000 | 1750 | 1210 | 3210 | 3720 | -- |
| **Metals[4] (µg/L)** | | | | | | |
| Lead | 15 | **99.1** | **97.8** | **136** | **62.9** | -- |

[1] Groundwater Clean-up Criteria as provided in Chapter 62-777, F.A.C.
[2] SW-846 8260B, [3] FDEP FL-PRO, [4] SW-846 6010B
[J] indicates the presence of a chemical at an estimated concentration.
**Bold** indicates an exceedance of limits.
-- = not detected
NA = not applicable

**TABLE 3**
**SUMMARY OF DETECTED ANALYTES IN GROUNDWATER-SITE 1159**
**OUTLYING LANDING FIELD BRONSON, PENSACOLA, FLORIDA**


| Sample No. | | OLFB59MW20GW | OLFB59MW21GW | OLFB59MW22GW | OLFB59MW23GW | OLFB59D002 |
|---|---|---|---|---|---|---|
| Sample Location | | MW-20 | MW-21 | MW-22 | MW-23 | Duplicate of MW-23 |
| Collect Date | | 7/10/00 | 7/10/00 | 7/10/00 | 7/10/00 | 7/10/00 |
| | Groundwater Clean-up Criteria[1] (µg/L) | | | | | |
| **Volatile[2] (µg/L)** | | | | | | |
| Benzene | 1 | 0.61[J] | -- | -- | **225** | **214** |
| Ethylbenzene | 30 | 1.2 | 1 | **162** | **173** | **177** |
| Ethylene Dibromide | 0.02 | NA | NA | NA | -- | NA |
| Methyl Tert-Butyl Ether | 50 | -- | -- | 38.6 | -- | 9.2[J] |
| Toluene | 40 | 4.6 | 0.94[J] | 5.3 | **1750** | **1590** |
| Xylenes, Total | 20 | **21.8** | **40.3** | **512** | **1040** | **1030** |
| **Total Residual Petroleum Hydrocarbons[3] (µg/L)** | 5000 | 204[J] | -- | 1180 | 4240 | 3340 |
| **Metals[4] (µg/L)** | | | | | | |
| Lead | 15 | -- | -- | **31.6** | **189** | **177** |

[1] Groundwater Clean-up Criteria as provided in Chapter 62-777, F.A.C.
[2] SW-846 8260B, [3] FDEP FL-PRO, [4] SW-846 6010B
[J] indicates the presence of a chemical at an estimated concentration.
**Bold** indicates an exceedance of limits.
-- = not detected
NA = not applicable

**TABLE 3**
**SUMMARY OF DETECTED ANALYTES IN GROUNDWATER-SITE 1159**
**OUTLYING LANDING FIELD BRONSON, PENSACOLA, FLORIDA**


| Sample No. | | OLFB59MW27GW | OLFB59MW28GW | OLFB59MW30GW | OLFB59MW33GW | OLFB59MW34GW |
|---|---|---|---|---|---|---|
| Sample Location | | MW-27 | MW-28 | MW-30 | MW-33 | MW-34 |
| Collect Date | | 7/9/00 | 7/9/00 | 7/11/00 | 7/11/00 | 7/10/00 |
| | Groundwater Clean-up Criteria[1] (µg/L) | | | | | |
| **Volatile[2] (µg/L)** | | | | | | |
| Benzene | 1 | **483** | -- | **1.2** | -- | -- |
| Ethylbenzene | 30 | **223** | **238** | 1.9 | -- | -- |
| Ethylene Dibromide | 0.02 | NA | NA | NA | NA | NA |
| Methyl Tert-Butyl Ether | 50 | -- | 17.5 | -- | -- | -- |
| Toluene | 40 | **2000[J]** | **815** | -- | -- | -- |
| Xylenes, Total | 20 | **1680** | **1550** | 4.8 | -- | -- |
| **Total Residual Petroleum Hydrocarbons[3] (µg/L)** | 5000 | **7070** | **5430** | -- | -- | -- |
| **Metals[4] (µg/L)** | | | | | | |
| Lead | 15 | **809** | **566** | -- | -- | -- |

[1] Groundwater Clean-up Criteria as provided in Chapter 62-777, F.A.C.
[2] SW-846 8260B, [3] FDEP FL-PRO, [4] SW-846 6010B
[J] Indicates the presence of a chemical at an estimated concentration.
**Bold** indicates an exceedance of limits.
-- = not detected
NA = not applicable

**TABLE 3**
**SUMMARY OF DETECTED ANALYTES IN GROUNDWATER-SITE 1159**
**OUTLYING LANDING FIELD BRONSON, PENSACOLA, FLORIDA**


| Sample No. | | OLFB59MW38GW | OLFB59MW44GW | OLFB59MW47GW | OLFB59MW51GW | OLFB59MW52GW |
|---|---|---|---|---|---|---|
| Sample Location | | MW-38 | MW-44 | MW-47 | MW-51 | MW-52 |
| Collect Date | | 7/11/00 | 7/11/00 | 7/9/00 | 7/10/00 | 7/10/00 |
| | Groundwater Clean-up Criteria[1] (µg/L) | | | | | |
| **Volatile[2] (µg/L)** | | | | | | |
| Benzene | 1 | NA | -- | **301** | -- | -- |
| Ethylbenzene | 30 | NA | 0.77[J] | **574** | -- | -- |
| Ethylene Dibromide | 0.02 | -- | NA | NA | NA | NA |
| Methyl Tert-Butyl Ether | 50 | NA | 5.4 | **109** | -- | -- |
| Toluene | 40 | NA | -- | **5870** | -- | -- |
| Xylenes, Total | 20 | NA | -- | **3620** | -- | -- |
| **Total Residual Petroleum Hydrocarbons[3] (µg/L)** | 5000 | NA | -- | 1670 | -- | -- |
| **Metals[4] (µg/L)** | | | | | | |
| Lead | 15 | NA | -- | **46.8** | -- | -- |

[1] Groundwater Clean-up Criteria as provided in Chapter 62-777, F.A.C.
[2] SW-846 8260B, [3] FDEP FL-PRO, [4] SW-846 6010B
[J] indicates the presence of a chemical at an estimated concentration.
**Bold** indicates an exceedance of limits.
-- = not detected
NA = not applicable

**TABLE 3**
**SUMMARY OF DETECTED ANALYTES IN GROUNDWATER-SITE 1159**
**OUTLYING LANDING FIELD BRONSON, PENSACOLA, FLORIDA**


| Sample No. | | OLFB59MW53GW | OLFB59MW55GW | OLFB59MW60GW | OLFB59D001 | OLFB59MW61GW |
|---|---|---|---|---|---|---|
| Sample Location | | MW-53 | MW-55 | DMW-60 | Duplicate of DMW-60 | DMW-61 |
| Collect Date | | 7/11/00 | 7/11/00 | 7/9/00 | 7/9/00 | 7/11/00 |
| | Groundwater Clean-up Criteria[1] (µg/L) | | | | | |
| **Volatile[2] (µg/L)** | | | | | | |
| Benzene | 1 | -- | -- | -- | -- | -- |
| Ethylbenzene | 30 | -- | **344** | -- | -- | -- |
| Ethylene Dibromide | 0.02 | NA | NA | NA | NA | NA |
| Methyl Tert-Butyl Ether | 50 | -- | **63** | -- | -- | -- |
| Toluene | 40 | -- | **403** | -- | -- | -- |
| Xylenes, Total | 20 | -- | **1300** | -- | -- | -- |
| **Total Residual Petroleum Hydrocarbons[3] (µg/L)** | 5000 | -- | 1540 | -- | -- | -- |
| **Metals[4] (µg/L)** | | | | | | |
| Lead | 15 | -- | **70.1** | -- | -- | -- |

[1] Groundwater Clean-up Criteria as provided in Chapter 62-777, F.A.C.
[2] SW-846 8260B, [3] FDEP FL-PRO, [4] SW-846 6010B
[J] Indicates the presence of a chemical at an estimated concentration.
**Bold** indicates an exceedance of limits.
-- = not detected
NA = not applicable

**TABLE 3**
**SUMMARY OF DETECTED ANALYTES IN GROUNDWATER-SITE 1159**
**OUTLYING LANDING FIELD BRONSON, PENSACOLA, FLORIDA**


| Sample No. | | OLFB59D003 | OLFB59MW63GW | OLFB59MW64GW | OLFB59MW66GW | OLFB59MW67GW |
|---|---|---|---|---|---|---|
| Sample Location | | Duplicate of DMW-61 | MW-63 | MW-64 | MW-66 | MW-67 |
| Collect Date | | 7/11/00 | 7/9/00 | 7/11/00 | 7/11/00 | 7/10/00 |
| | Groundwater Clean-up Criteria[1] (µg/L) | | | | | |
| **Volatile[2] (µg/L)** | | | | | | |
| Benzene | 1 | -- | -- | -- | -- | **3.1** |
| Ethylbenzene | 30 | -- | -- | 14.1 | -- | **42.6** |
| Ethylene Dibromide | 0.02 | NA | NA | NA | NA | NA |
| Methyl Tert-Butyl Ether | 50 | -- | -- | 31.1 | -- | 7.7 |
| Toluene | 40 | -- | -- | -- | -- | 4.8 |
| Xylenes, Total | 20 | -- | -- | **32.4** | -- | **140** |
| **Total Residual Petroleum Hydrocarbons[3] (µg/L)** | 5000 | -- | -- | -- | -- | 945 |
| **Metals[4] (µg/L)** | | | | | | |
| Lead | 15 | -- | -- | -- | -- | 9.6 |

[1] Groundwater Clean-up Criteria as provided in Chapter 62-777, F.A.C.
[2] SW-846 8260B, [3] FDEP FL-PRO, [4] SW-846 6010B
[J] indicates the presence of a chemical at an estimated concentration.
**Bold** indicates an exceedance of limits.
-- = not detected
NA = not applicable

**TABLE 3**
**SUMMARY OF DETECTED ANALYTES IN GROUNDWATER-SITE 1159**
**OUTLYING LANDING FIELD BRONSON, PENSACOLA, FLORIDA**


| Sample No. | | OLFB59MW68GW | OLFB59MW69GW |
|---|---|---|---|
| Sample Location | | MW-68 | DMW-69 |
| Collect Date | | 7/10/00 | 7/10/00 |
| | Groundwater Clean-up Criteria[1] (µg/L) | | |
| **Volatile[2] (µg/L)** | | | |
| Benzene | 1 | -- | -- |
| Ethylbenzene | 30 | **43.2** | -- |
| Ethylene Dibromide | 0.02 | NA | NA |
| Methyl Tert-Butyl Ether | 50 | 20.6 | -- |
| Toluene | 40 | -- | -- |
| Xylenes, Total | 20 | **116** | -- |
| **Total Residual Petroleum Hydrocarbons[3] (µg/L)** | 5000 | 361 | -- |
| **Metals[4] (µg/L)** | | | |
| Lead | 15 | -- | -- |

[1] Groundwater Clean-up Criteria as provided in Chapter 62-777, F.A.C.
[2] SW-846 8260B, [3] FDEP FL-PRO, [4] SW-846 6010B
[J] indicates the presence of a chemical at an estimated concentration.
**Bold** indicates an exceedance of limits.
-- = not detected
NA = not applicable

**TABLE 4**
**GROUNDWATER ELEVATION AND FREE PRODUCT THICKNESS FOR JULY 25, 2000-SITE 1159**
**OUTLYING FIELD BRONSON, PENSACOLA, FLORIDA**


| Well Number | Top of Casing Elevation [1] (ft) | Depth to Product BTOC (ft) | Depth to Water BTOC (ft) | Product Thickness (ft) | Groundwater Elevation [1] (ft) |
|---|---|---|---|---|---|
| MW-1 | 30.00 | NA | 11.35 | NA | 18.65 |
| MW-2 | 27.36 | NA | 8.72 | NA | 18.64 |
| MW-3 | 27.66 | NA | 9.02 | NA | 18.64 |
| MW-4 | 26.97 | NA | 8.32 | NA | 18.65 |
| MW-5 | 27.57 | NA | 8.91 | NA | 18.66 |
| MW-6 | 27.68 | NA | 9.02 | NA | 18.66 |
| MW-7 | 27.13 | NA | 8.50 | NA | 18.63 |
| MW-8 | 27.54 | NA | 8.93 | NA | 18.61 |
| MW-9 | 27.89 | NA | 9.29 | NA | 18.60 |
| MW-10 | 27.99 | NA | 9.79 | NA | 18.20 |
| MW-11 | 28.19 | NA | 9.56 | NA | 18.63 |
| MW-12 | 28.24 | NA | Destroyed | NA | NA |
| MW-13 | 28.39 | NA | Dry | NA | NA |
| MW-14 | 28.47 | NA | 9.78 | NA | 18.69 |
| MW-15 | 28.18 | NA | 9.52 | NA | 18.66 |
| MW-16 | 27.75 | NA | 9.06 | NA | 18.69 |
| MW-17 | 27.47 | NA | 8.80 | NA | 18.67 |
| MW-18 | 27.70 | NA | 9.05 | NA | 18.65 |
| MW-19 | 28.60 | NA | 10.01 | NA | 18.59 |
| MW-20 | 28.56 | NA | 9.97 | NA | 18.59 |
| MW-21 | 28.27 | NA | 9.68 | NA | 18.59 |
| MW-22 | 28.86 | NA | 10.13 | NA | 18.73 |
| MW-23 | 28.72 | NA | 9.97 | NA | 18.75 |
| MW-24 | 26.73 | NA | 8.12 | NA | 18.61 |
| MW-25 | 27.70 | NA | NM | NA | NM |
| MW-26 | 28.30 | NA | 9.63 | NA | 18.67 |
| MW-27 | 29.06 | NA | 10.35 | NA | 18.71 |
| MW-28 | 29.21 | NA | 10.47 | NA | 18.74 |
| MW-29 | 25.49 | NA | 6.91 | NA | 18.58 |
| MW-30 | 25.14 | NA | 6.56 | NA | 18.58 |
| MW-31 | 27.20 | NA | 8.55 | NA | 18.65 |

**Notes:**
BTOC - Below Top of Casing
MSL - Mean Sea Level Datum
NA - Not Applicable.
NF - Not Found.
NS - Not Surveyed.
NC - Not Calculatable without top of casing elevations.
[1] Elevations based upon arbitrary elevation of 30 ft. above MSL assigned to the top-of-casing of monitoring well MW-1
[2] A specific gravity of 0.8 (for gasoline) used in water level calculations to correct for free product : depth to water - (free product thickness*0.80) = corrected depth to water.
[3] Only product was detected in this well. No water was observed.

**TABLE 4**
**GROUNDWATER ELEVATION AND FREE PRODUCT THICKNESS FOR JULY 25, 2000-SITE 1159**
**OUTLYING FIELD BRONSON, PENSACOLA, FLORIDA**


| Well Number | Top of Casing Elevation [1] (ft) | Depth to Product BTOC (ft) | Depth to Water BTOC (ft) | Product Thickness (ft) | Groundwater Elevation [1] (ft) |
|---|---|---|---|---|---|
| MW-32 | 32.98 | NA | Dry | NA | NA |
| MW-33 | 41.49 | NA | 22.62 | NA | 18.87 |
| MW-34 | 44.93 | NA | 25.88 | NA | 19.05 |
| MW-35 | 44.31 | NA | Dry | NA | NA |
| MW-36 | 44.83 | NA | 25.72 | NA | 19.11 |
| MW-37 | 44.32 | NA | 25.16 | NA | 19.16 |
| MW-38 | 39.63 | NA | 20.48 | NA | 19.15 |
| MW-39 | 32.86 | NA | Dry | NA | NA |
| MW-40 | 35.61 | NA | NF | NA | NA |
| MW-41 | 33.36 | NA | NF | NA | NA |
| MW-42 | 30.88 | NA | 11.98 | NA | 18.90 |
| MW-43 | 28.88 | NA | NF | NA | NA |
| MW-44 | 42.70 | NA | 23.74 | NA | 18.96 |
| MW-45 | 39.97 | 20.35 | 22.88 | 2.53 | 19.11 |
| MW-46 | 34.41 | 14.97 | 17.59 | 2.62 | 18.92 |
| MW-47 | 34.74 | 15.20 | 17.94 | 2.74 | 18.99 |
| MW-48 | 37.05 | NA | 18.29 | NA | 18.76 |
| MW-49 | 37.99 | NA | NF | NA | NA |
| MW-50 | 27.10 | NA | 8.49 | NA | 18.61 |
| MW-51 | 27.67 | NA | Dry | NA | NA |
| MW-52 | 26.91 | NA | Dry | NA | NA |
| MW-53 | 41.00 | NA | 22.20 | NA | 18.80 |
| MW-54 | 35.76 | NA | NF | NA | NA |
| MW-55 | 29.94 | NA | 11.31 | NA | 18.63 |
| MW-56 | 43.24 | NA | 16.40 | NA | 26.84 |
| MW-57 | 39.90 | NA | 16.19 | NA | 23.71 |
| MW-58 | 29.10 | NA | Dry | NA | NA |
| MW-59 | 30.64 | NA | Dry | NA | NA |
| DMW-60 | 34.78 | NA | 15.52 | NA | 19.26 |
| DMW-61 | 27.39 | NA | 8.99 | NA | 18.40 |

**Notes:**
BTOC - Below Top of Casing
MSL - Mean Sea Level Datum
NA - Not Applicable.
NF - Not Found.
NS - Not Surveyed.
NC - Not Calculatable without top of casing elevations.
[1] Elevations based upon arbitrary elevation of 30 ft. above MSL assigned to the top-of-casing of monitoring well MW-1
[2] A specific gravity of 0.8 (for gasoline) used in water level calculations to correct for free product : depth to water - (free product thickness*0.80) = corrected depth to water.
[3] Only product was detected in this well. No water was observed.

**TABLE4**
**GROUNDWATER ELEVATION AND FREE PRODUCT THICKNESS FOR JULY 25, 2000-SITE 1159**
**OUTLYING FIELD BRONSON, PENSACOLA, FLORIDA**


| Well Number | Top of Casing Elevation [1] (ft) | Depth to Product BTOC (ft) | Depth to Water BTOC (ft) | Product Thickness (ft) | Groundwater Elevation [1] (ft) |
|---|---|---|---|---|---|
| **MW-62** | NS | 18.46 | 20.39 | 1.93 | NC |
| **MW-63** | NS | NA | 24.27 | NA | NC |
| **MW-64** | NS | 21.97 | 23.36 | 1.39 | NC |
| **MW-65** | NS | 22.04 | NA | 1.32 (min.)[3] | NC |
| **MW-66** | NS | NA | 9.23 | NA | NC |
| **MW-67** | NS | NA | 9.12 | NA | NC |
| **MW-68** | NS | NA | 13.68 | NA | NC |
| **DMW-69** | NS | NA | 11.20 | NA | NC |

**Notes:**
BTOC - Below Top of Casing
MSL - Mean Sea Level Datum
NA - Not Applicable.
NF - Not Found.
NS - Not Surveyed.
NC - Not Calculatable without top of casing elevations.
[1] Elevations based upon arbitrary elevation of 30 ft. above MSL assigned to the top-of-casing of monitoring well MW-1
[2] A specific gravity of 0.8 (for gasoline) used in water level calculations to correct for free product : depth to water - (free product thickness*0.80) = corrected depth to water.
[3] Only product was detected in this well. No water was observed.

# ATTACHMENT F

Laboratory Analytical Reports

Data Validation Reports

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

**TO:** [redacted]Walker **DATE:** July 11, 2000

**FROM:** William Howard Engle **CC:** File

**SUBJECT:** Organic Data Validation – VOC, TRPH, and PAH
CTO112 – NAS Pensacola
SDG F6675

**SAMPLES:** 12/Soil

| | |
|---|---|
| OLFB20SB010406 | OLFB20D001 |
| OLFB20SB011214 | OLFB59SB011012 |
| OLFB20SB020406 | OLFB59D001 |
| OLFB20SB021214 | OLFB59SB012022 |
| OLFB20SB030810 | OLFB59SB020507 |
| OLFB20SB031012 | OLFB59SB020709 |

3/Aqueous

OLFB20RB01
OLFB59RB01
Trip Blank

**OVERVIEW**

The sample set for CTO112, SDG F6675; Naval Air Station Pensacola, Pensacola, Florida consists of twelve (12) soil environmental samples, one (1) trip blank, and two (2) rinse blanks. Two duplicate pairs were analyzed for this SDG (OLFB20SB031012/OLFB20D001 and OLFB59SB011012/OLFB59D001). All environmental samples, rinsate blanks, and the trip blank were analyzed for volatile organics (VOC). All environmental samples and the rinsate blanks were analyzed for Total Recoverable Petroleum Hydrocarbons (TRPH), and Polycyclic Aromatic Hydrocarbons (PAH).

The samples were collected by Tetra Tech NUS on June 1, 2000 and analyzed by Accutest Southeast Laboratory. 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 (VOC), 8310 (PAH), and FL-PRO (TRPH) analytical and reporting protocols. The data in this SDG was validated with regard to the following parameters:

* • Data Completeness
* • Holding Times
* • Initial/continuing calibrations
* • Laboratory method/field quality control blank results

The symbol (*) indicates that all quality control criteria were met for this parameter. Supporting documentation is presented in Appendix C. Qualified analytical results are presented in Appendix A. The original laboratory data is contained in Appendix B.

Volatile Fraction

The MS/MSD analysis for the aqueous samples contained percent recoveries (%R) for chloromethane and dichlorodifluoromethane outside of the quality control limits. No action was taken.

The LCS analysis for the aqueous samples contained %R for 2-chloro-ethyl-vinyl ether outside the quality control limit. No action was taken.

%R for surrogate, Toluene-d8, was outside of the quality control limit in sample OLFB59SB020709. No action was taken due to matrix interference.

TRPH Fraction

The MS/MSD analysis for soils contained %R outside of the quality control limits. No action was taken due to matrix interference.

Polycyclic Aromatic Hydrocarbon Fraction

The MS/MSD analysis for aqueous samples contained %R for acenaphthylene outside of the quality control limits. No action was taken.

Sample OLFB20SB031012 contained a positive result for benzo(a)pyrene above the Soil Cleanup Target Level listed in Chapter 62-777, F.A.C.

| | Reported Concentration | Target Level |
|---|---|---|
| benzo(a)pyrene | 108 ug/kg | 100 ug/kg |

Executive Summary

**Laboratory performance:** Several MS/MSD analyses contained %R outside of the quality control limits. No action was taken.

**Other factors affecting data quality:** None.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (October, 1999), and the NFESC guidelines "Navy IRCDQM" (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)."

William Howard Engle

Project Chemist
Tetra Tech NUS, Inc.

Joseph A. Samchuck

Data Validation Quality Assurance Officer
Tetra Tech NUS, Inc.

Attachments:
1. Appendix A - Qualified Analytical Results
2. Appendix B – Results as reported by the laboratory
3. Appendix C – Supporting Documentation

**Qualifier Codes:**

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration (i.e., % RSDs, %Ds, ICVs, CCVs, RPDs, RRFs, etc.) Noncompliance
D = MS/MSD Noncompliance
E = LCS/LCSD Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS - GFAA MSA's r < 0.995
K = ICP Interference - include ICSAB % R's
L = Instrument Calibration Range Exceedance
M = Sample Preservation
N = Internal Standard Noncompliance
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = Pest/PCB D% between columns for positive results
V = Non-linear calibrations, tuning r < 0.995 (correlation coefficient)
W = EMPC result
X = Signal to noise response drop
Y = % Solid content is less than 30%

# APPENDIX A

## Qualified Analytical Results

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F6675



| | | | | |
|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB20RB01 | OLFB59RB01 | TRIP BLANK | |
| SAMPLE DATE: | 06/01/00 | 06/01/00 | 06/01/00 | / / |
| LABORATORY ID: | F6675-13 | F6675-14 | F6675-15 | |
| QC_TYPE: | NORMAL | NORMAL | NORMAL | |
| % SOLIDS: | 0.0 % | 0.0 % | 0.0 % | 100.0 % |
| UNITS: | UG/L | UG/L | UG/L | |
| FIELD DUPLICATE OF: | | | | |

| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES** | | | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 1 | U | | 1 | U | | 1 | U | | | | |
| 1,1,2,2-TETRACHLOROETHANE | 1 | U | | 1 | U | | 1 | U | | | | |
| 1,1,2-TRICHLOROETHANE | 1 | U | | 1 | U | | 1 | U | | | | |
| 1,1-DICHLOROETHANE | 1 | U | | 1 | U | | 1 | U | | | | |
| 1,1-DICHLOROETHENE | 1 | U | | 1 | U | | 1 | U | | | | |
| 1,2-DIBROMOETHANE | 1 | U | | 1 | U | | 1 | U | | | | |
| 1,2-DICHLOROBENZENE | 1 | U | | 1 | U | | 1 | U | | | | |
| 1,2-DICHLOROETHANE | 1 | U | | 1 | U | | 1 | U | | | | |
| 1,2-DICHLOROPROPANE | 1 | U | | 1 | U | | 1 | U | | | | |
| 1,3-DICHLOROBENZENE | 1 | U | | 1 | U | | 1 | U | | | | |
| 1,4-DICHLOROBENZENE | 1 | U | | 1 | U | | 1 | U | | | | |
| 2-CHLOROETHYL VINYL ETHER | 1 | U | | 1 | U | | 1 | U | | | | |
| BENZENE | 1 | U | | 1 | U | | 1 | U | | | | |
| BROMODICHLOROMETHANE | 1 | U | | 1 | U | | 1 | U | | | | |
| BROMOFORM | 1 | U | | 1 | U | | 1 | U | | | | |
| BROMOMETHANE | 1 | U | | 1 | U | | 1 | U | | | | |
| CARBON TETRACHLORIDE | 1 | U | | 1 | U | | 1 | U | | | | |
| CHLOROBENZENE | 1 | U | | 1 | U | | 1 | U | | | | |
| CHLOROETHANE | 1 | U | | 1 | U | | 1 | U | | | | |
| CHLOROFORM | 1 | U | | 1 | U | | 1 | U | | | | |
| CHLOROMETHANE | 1 | U | | 1 | U | | 1 | U | | | | |
| CIS-1,2-DICHLOROETHENE | 1 | U | | 1 | U | | 1 | U | | | | |
| CIS-1,3-DICHLOROPROPENE | 1 | U | | 1 | U | | 1 | U | | | | |
| DIBROMOCHLOROMETHANE | 1 | U | | 1 | U | | 1 | U | | | | |
| DICHLORODIFLUOROMETHANE | 1 | U | | 1 | U | | 1 | U | | | | |
| ETHYLBENZENE | 1 | U | | 1 | U | | 1 | U | | | | |
| METHYL TERT-BUTYL ETHER | 1 | U | | 1 | U | | 1 | U | | | | |
| METHYLENE CHLORIDE | 5 | U | | 5 | U | | 5 | U | | | | |
| TETRACHLOROETHENE | 1 | U | | 1 | U | | 1 | U | | | | |
| TOLUENE | 2 | | | 2 | | | 1 | U | | | | |
| TRANS-1,2-DICHLOROETHENE | 1 | U | | 1 | U | | 1 | U | | | | |
| TRANS-1,3-DICHLOROPROPENE | 1 | U | | 1 | U | | 1 | U | | | | |
| TRICHLOROETHENE | 1 | U | | 1 | U | | 1 | U | | | | |
| TRICHLOROFLUOROMETHANE | 1 | U | | 1 | U | | 1 | U | | | | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F6675



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB20RB01 | | | OLFB59RB01 | | | TRIP BLANK | | | | | |
| SAMPLE DATE: | 06/01/00 | | | 06/01/00 | | | 06/01/00 | | | / / | | |
| LABORATORY ID: | F6675-13 | | | F6675-14 | | | F6675-15 | | | | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 100.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **VOLATILES** | | | | | | | | | | | | |
| VINYL CHLORIDE | 1 | U | | 1 | U | | 1 | U | | | | |
| XYLENES, TOTAL | 3 | U | | 3 | U | | 3 | U | | | | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F6675



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB20RB01 | | | OLFB59RB01 | | | | | | | | |
| SAMPLE DATE: | 06/01/00 | | | 06/01/00 | | | / / | | | / / | | |
| LABORATORY ID: | F6675-13 | | | F6675-14 | | | | | | | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | | | | | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 100.0 % | | | 100.0 % | | |
| UNITS: | MG/L | | | MG/L | | | | | | | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **PETROLEUM HYDROCARBONS** | | | | | | | | | | | | |
| TOTAL PETROLEUM HYDROCARBONS | 0.25 | U | | 0.28 | U | | | | | | | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F6675



| | | | | |
|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB20RB01 | OLFB59RB01 | | |
| SAMPLE DATE: | 06/01/00 | 06/01/00 | / / | / / |
| LABORATORY ID: | F6675-13 | F6675-14 | | |
| QC_TYPE: | NORMAL | NORMAL | | |
| % SOLIDS: | 0.0 % | 0.0 % | 100.0 % | 100.0 % |
| UNITS: | UG/L | UG/L | | |
| FIELD DUPLICATE OF: | | | | |

| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **POLYNUCLEAR AROMATIC HYDROCARBONS** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 2.2 | U | | 2 | U | | | | | | | |
| 2-METHYLNAPHTHALENE | 2.2 | U | | 2 | U | | | | | | | |
| ACENAPHTHENE | 2.2 | U | | 2 | U | | | | | | | |
| ACENAPHTHYLENE | 2.2 | U | | 2 | U | | | | | | | |
| ANTHRACENE | 2.2 | U | | 2 | U | | | | | | | |
| BENZO(A)ANTHRACENE | 0.22 | U | | 0.2 | U | | | | | | | |
| BENZO(A)PYRENE | 0.22 | U | | 0.2 | U | | | | | | | |
| BENZO(B)FLUORANTHENE | 0.22 | U | | 0.2 | U | | | | | | | |
| BENZO(G,H,I)PERYLENE | 0.22 | U | | 0.2 | U | | | | | | | |
| BENZO(K)FLUORANTHENE | 0.22 | U | | 0.2 | U | | | | | | | |
| CHRYSENE | 2.2 | U | | 2 | U | | | | | | | |
| DIBENZO(A,H)ANTHRACENE | 0.22 | U | | 0.2 | U | | | | | | | |
| FLUORANTHENE | 2.2 | U | | 2 | U | | | | | | | |
| FLUORENE | 2.2 | U | | 2 | U | | | | | | | |
| INDENO(1,2,3-CD)PYRENE | 0.22 | U | | 0.2 | U | | | | | | | |
| NAPHTHALENE | 2.2 | U | | 2 | U | | | | | | | |
| PHENANTHRENE | 2.2 | U | | 2 | U | | | | | | | |
| PYRENE | 2.2 | U | | 2 | U | | | | | | | |

# CTO112-NAS PENSACOLA
## SOIL DATA
## Accutest, NJ
## SDG: F6675



| SAMPLE NUMBER: | OLFB20D001 | | | OLFB20SB010406 | | | OLFB20SB011214 | | | OLFB20SB020406 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 06/01/00 | | | 06/01/00 | | | 06/01/00 | | | 06/01/00 | | |
| LABORATORY ID: | F6675-7 | | | F6675-1 | | | F6675-2 | | | F6675-3 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 96.1 % | | | 98.6 % | | | 98.4 % | | | 95.7 % | | |
| UNITS: | UG/KG | | | UG/KG | | | UG/KG | | | UG/KG | | |
| FIELD DUPLICATE OF: | OLFB20SB031012 | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **VOLATILES** | | | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| 1,1,2-TRICHLOROETHANE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| 1,1-DICHLOROETHANE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| 1,1-DICHLOROETHENE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| 1,2-DIBROMOETHANE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| 1,2-DICHLOROBENZENE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| 1,2-DICHLOROETHANE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| 1,2-DICHLOROPROPANE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| 1,3-DICHLOROBENZENE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| 1,4-DICHLOROBENZENE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| 2-CHLOROETHYL VINYL ETHER | 12 | U | | 10 | U | | 11 | U | | 12 | U | |
| BENZENE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| BROMODICHLOROMETHANE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| BROMOFORM | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| BROMOMETHANE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| CARBON TETRACHLORIDE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| CHLOROBENZENE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| CHLOROETHANE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| CHLOROFORM | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| CHLOROMETHANE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| CIS-1,2-DICHLOROETHENE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| CIS-1,3-DICHLOROPROPENE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| DIBROMOCHLOROMETHANE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| DICHLORODIFLUOROMETHANE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| ETHYLBENZENE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| METHYL TERT-BUTYL ETHER | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| METHYLENE CHLORIDE | 12 | U | | 10 | U | | 11 | U | | 12 | U | |
| TETRACHLOROETHENE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| TOLUENE | 1.2 | J | P | 5.2 | U | | 1.4 | J | P | 1.5 | J | P |
| TRANS-1,2-DICHLOROETHENE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| TRANS-1,3-DICHLOROPROPENE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| TRICHLOROETHENE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| TRICHLOROFLUOROMETHANE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |

# CTO112-NAS PENSACOLA
## SOIL DATA
## Accutest, NJ
## SDG: F6675



| SAMPLE NUMBER: | OLFB20D001 | | | OLFB20SB010406 | | | OLFB20SB011214 | | | OLFB20SB020406 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 06/01/00 | | | 06/01/00 | | | 06/01/00 | | | 06/01/00 | | |
| LABORATORY ID: | F6675-7 | | | F6675-1 | | | F6675-2 | | | F6675-3 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 96.1 % | | | 98.6 % | | | 98.4 % | | | 95.7 % | | |
| UNITS: | UG/KG | | | UG/KG | | | UG/KG | | | UG/KG | | |
| FIELD DUPLICATE OF: | OLFB20SB031012 | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **VOLATILES** | | | | | | | | | | | | |
| VINYL CHLORIDE | 5.9 | U | | 5.2 | U | | 5.7 | U | | 5.9 | U | |
| XYLENES, TOTAL | 18 | U | | 16 | U | | 17 | U | | 18 | U | |

# CTO112-NAS PENSACOLA
## SOIL DATA
## Accutest, NJ
## SDG: F6675



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB20SB021214 | | | OLFB20SB030810 | | | OLFB20SB031012 | | | OLFB59D001 | | |
| SAMPLE DATE: | 06/01/00 | | | 06/01/00 | | | 06/01/00 | | | 06/01/00 | | |
| LABORATORY ID: | F6675-4 | | | F6675-5 | | | F6675-6 | | | F6675-9 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 95.0 % | | | 96.6 % | | | 95.6 % | | | 91.3 % | | |
| UNITS: | UG/KG | | | UG/KG | | | UG/KG | | | UG/KG | | |
| FIELD DUPLICATE OF: | | | | | | | | | | OLFB59SB011012 | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **VOLATILES** | | | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| 1,1,2-TRICHLOROETHANE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| 1,1-DICHLOROETHANE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| 1,1-DICHLOROETHENE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| 1,2-DIBROMOETHANE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| 1,2-DICHLOROBENZENE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| 1,2-DICHLOROETHANE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| 1,2-DICHLOROPROPANE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| 1,3-DICHLOROBENZENE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| 1,4-DICHLOROBENZENE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| 2-CHLOROETHYL VINYL ETHER | 12 | U | | 12 | U | | 11 | U | | 9.9 | U | |
| BENZENE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| BROMODICHLOROMETHANE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| BROMOFORM | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| BROMOMETHANE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| CARBON TETRACHLORIDE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| CHLOROBENZENE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| CHLOROETHANE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| CHLOROFORM | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| CHLOROMETHANE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| CIS-1,2-DICHLOROETHENE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| CIS-1,3-DICHLOROPROPENE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| DIBROMOCHLOROMETHANE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| DICHLORODIFLUOROMETHANE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| ETHYLBENZENE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| METHYL TERT-BUTYL ETHER | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| METHYLENE CHLORIDE | 12 | U | | 12 | U | | 11 | U | | 9.9 | U | |
| TETRACHLOROETHENE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| TOLUENE | 5.8 | U | | 1.2 | J | P | 5.7 | U | | 1 | J | P |
| TRANS-1,2-DICHLOROETHENE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| TRANS-1,3-DICHLOROPROPENE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| TRICHLOROETHENE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| TRICHLOROFLUOROMETHANE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |

# CTO112-NAS PENSACOLA
## SOIL DATA
## Accutest, NJ
## SDG: F6675



| SAMPLE NUMBER: | OLFB20SB021214 | | | OLFB20SB030810 | | | OLFB20SB031012 | | | OLFB59D001 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 06/01/00 | | | 06/01/00 | | | 06/01/00 | | | 06/01/00 | | |
| LABORATORY ID: | F6675-4 | | | F6675-5 | | | F6675-6 | | | F6675-9 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 95.0 % | | | 96.6 % | | | 95.6 % | | | 91.3 % | | |
| UNITS: | UG/KG | | | UG/KG | | | UG/KG | | | UG/KG | | |
| FIELD DUPLICATE OF: | | | | | | | | | | OLFB59SB011012 | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **VOLATILES** | | | | | | | | | | | | |
| VINYL CHLORIDE | 5.8 | U | | 6 | U | | 5.7 | U | | 5 | U | |
| XYLENES, TOTAL | 18 | U | | 18 | U | | 17 | U | | 15 | U | |

# CTO112-NAS PENSACOLA
## SOIL DATA
## Accutest, NJ
## SDG: F6675



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59SB011012 | | | OLFB59SB012022 | | | OLFB59SB020507 | | | OLFB59SB020709 | | |
| SAMPLE DATE: | 06/01/00 | | | 06/01/00 | | | 06/01/00 | | | 06/01/00 | | |
| LABORATORY ID: | F6675-8 | | | F6675-10 | | | F6675-11 | | | F6675-12 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 96.6 % | | | 83.5 % | | | 95.0 % | | | 76.5 % | | |
| UNITS: | UG/KG | | | UG/KG | | | UG/KG | | | UG/KG | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **VOLATILES** | | | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| 1,1,2,2-TETRACHLOROETHANE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| 1,1,2-TRICHLOROETHANE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| 1,1-DICHLOROETHANE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| 1,1-DICHLOROETHENE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| 1,2-DIBROMOETHANE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| 1,2-DICHLOROBENZENE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| 1,2-DICHLOROETHANE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| 1,2-DICHLOROPROPANE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| 1,3-DICHLOROBENZENE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| 1,4-DICHLOROBENZENE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| 2-CHLOROETHYL VINYL ETHER | 11 | U | | 10 | U | | 10 | U | | 12 | U | |
| BENZENE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| BROMODICHLOROMETHANE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| BROMOFORM | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| BROMOMETHANE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| CARBON TETRACHLORIDE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| CHLOROBENZENE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| CHLOROETHANE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| CHLOROFORM | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| CHLOROMETHANE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| CIS-1,2-DICHLOROETHENE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| CIS-1,3-DICHLOROPROPENE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| DIBROMOCHLOROMETHANE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| DICHLORODIFLUOROMETHANE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| ETHYLBENZENE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 2.9 | J | P |
| METHYL TERT-BUTYL ETHER | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| METHYLENE CHLORIDE | 11 | U | | 10 | U | | 10 | U | | 12 | U | |
| TETRACHLOROETHENE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| TOLUENE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 1.3 | J | P |
| TRANS-1,2-DICHLOROETHENE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| TRANS-1,3-DICHLOROPROPENE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| TRICHLOROETHENE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| TRICHLOROFLUOROMETHANE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |

# CTO112-NAS PENSACOLA
## SOIL DATA
## Accutest, NJ
## SDG: F6675



| SAMPLE NUMBER: | OLFB59SB011012 | | | OLFB59SB012022 | | | OLFB59SB020507 | | | OLFB59SB020709 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 06/01/00 | | | 06/01/00 | | | 06/01/00 | | | 06/01/00 | | |
| LABORATORY ID: | F6675-8 | | | F6675-10 | | | F6675-11 | | | F6675-12 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 96.6 % | | | 83.5 % | | | 95.0 % | | | 76.5 % | | |
| UNITS: | UG/KG | | | UG/KG | | | UG/KG | | | UG/KG | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **VOLATILES** | | | | | | | | | | | | |
| VINYL CHLORIDE | 5.6 | U | | 5.2 | U | | 5.2 | U | | 6.2 | U | |
| XYLENES, TOTAL | 17 | U | | 16 | U | | 15 | U | | 6.5 | J | P |

# CTO112-NAS PENSACOLA
## SOIL DATA
## Accutest, NJ
## SDG: F6675



| SAMPLE NUMBER: | OLFB20D001 | | | OLFB20SB010406 | | | OLFB20SB011214 | | | OLFB20SB020406 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 06/01/00 | | | 06/01/00 | | | 06/01/00 | | | 06/01/00 | | |
| LABORATORY ID: | F6675-7 | | | F6675-1 | | | F6675-2 | | | F6675-3 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 96.1 % | | | 98.6 % | | | 98.4 % | | | 95.7 % | | |
| UNITS: | UG/KG | | | UG/KG | | | UG/KG | | | UG/KG | | |
| FIELD DUPLICATE OF: | OLFB20SB031012 | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **POLYNUCLEAR AROMATIC HYDROCARBONS** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 350 | U | | 340 | U | | 340 | U | | 350 | U | |
| 2-METHYLNAPHTHALENE | 350 | U | | 340 | U | | 340 | U | | 350 | U | |
| ACENAPHTHENE | 350 | U | | 340 | U | | 340 | U | | 350 | U | |
| ACENAPHTHYLENE | 690 | U | | 680 | U | | 680 | U | | 700 | U | |
| ANTHRACENE | 350 | U | | 340 | U | | 340 | U | | 350 | U | |
| BENZO(A)ANTHRACENE | 69 | U | | 68 | U | | 68 | U | | 70 | U | |
| BENZO(A)PYRENE | 69 | U | | 68 | U | | 68 | U | | 70 | U | |
| BENZO(B)FLUORANTHENE | 69 | U | | 68 | U | | 68 | U | | 70 | U | |
| BENZO(G,H,I)PERYLENE | 69 | U | | 68 | U | | 68 | U | | 70 | U | |
| BENZO(K)FLUORANTHENE | 69 | U | | 68 | U | | 68 | U | | 70 | U | |
| CHRYSENE | 350 | U | | 340 | U | | 340 | U | | 350 | U | |
| DIBENZO(A,H)ANTHRACENE | 69 | U | | 68 | U | | 68 | U | | 70 | U | |
| FLUORANTHENE | 350 | U | | 340 | U | | 340 | U | | 350 | U | |
| FLUORENE | 350 | U | | 340 | U | | 340 | U | | 350 | U | |
| INDENO(1,2,3-CD)PYRENE | 69 | U | | 68 | U | | 68 | U | | 70 | U | |
| NAPHTHALENE | 350 | U | | 340 | U | | 340 | U | | 350 | U | |
| PHENANTHRENE | 350 | U | | 340 | U | | 340 | U | | 350 | U | |
| PYRENE | 350 | U | | 340 | U | | 340 | U | | 350 | U | |

# CTO112-NAS PENSACOLA
## SOIL DATA
## Accutest, NJ
## SDG: F6675



| SAMPLE NUMBER: | OLFB20SB021214 | | | OLFB20SB030810 | | | OLFB20SB031012 | | | OLFB59D001 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 06/01/00 | | | 06/01/00 | | | 06/01/00 | | | 06/01/00 | | |
| LABORATORY ID: | F6675-4 | | | F6675-5 | | | F6675-6 | | | F6675-9 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 95.0 % | | | 96.6 % | | | 95.6 % | | | 91.3 % | | |
| UNITS: | UG/KG | | | UG/KG | | | UG/KG | | | UG/KG | | |
| FIELD DUPLICATE OF: | | | | | | | | | | OLFB59SB011012 | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **POLYNUCLEAR AROMATIC HYDROCARBONS** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 350 | U | | 350 | U | | 350 | U | | 370 | U | |
| 2-METHYLNAPHTHALENE | 350 | U | | 350 | U | | 350 | U | | 370 | U | |
| ACENAPHTHENE | 350 | U | | 350 | U | | 350 | U | | 370 | U | |
| ACENAPHTHYLENE | 700 | U | | 690 | U | | 700 | U | | 730 | U | |
| ANTHRACENE | 350 | U | | 350 | U | | 350 | U | | 370 | U | |
| BENZO(A)ANTHRACENE | 70 | U | | 69 | U | | 123 | | | 73 | U | |
| BENZO(A)PYRENE | 70 | U | | 69 | U | | 108 | | | 73 | U | |
| BENZO(B)FLUORANTHENE | 70 | U | | 69 | U | | 136 | | | 73 | U | |
| BENZO(G,H,I)PERYLENE | 70 | U | | 69 | U | | 91 | | | 73 | U | |
| BENZO(K)FLUORANTHENE | 70 | U | | 69 | U | | 78.2 | | | 73 | U | |
| CHRYSENE | 350 | U | | 350 | U | | 136 | J | P | 370 | U | |
| DIBENZO(A,H)ANTHRACENE | 70 | U | | 69 | U | | 70 | U | | 73 | U | |
| FLUORANTHENE | 350 | U | | 350 | U | | 288 | J | P | 370 | U | |
| FLUORENE | 350 | U | | 350 | U | | 350 | U | | 370 | U | |
| INDENO(1,2,3-CD)PYRENE | 70 | U | | 69 | U | | 142 | | | 73 | U | |
| NAPHTHALENE | 350 | U | | 350 | U | | 350 | U | | 370 | U | |
| PHENANTHRENE | 350 | U | | 350 | U | | 120 | J | P | 370 | U | |
| PYRENE | 350 | U | | 350 | U | | 186 | J | P | 370 | U | |

# CTO112-NAS PENSACOLA
## SOIL DATA
## Accutest, NJ
## SDG: F6675



| SAMPLE NUMBER: | OLFB59SB011012 | | | OLFB59SB012022 | | | OLFB59SB020507 | | | OLFB59SB020709 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 06/01/00 | | | 06/01/00 | | | 06/01/00 | | | 06/01/00 | | |
| LABORATORY ID: | F6675-8 | | | F6675-10 | | | F6675-11 | | | F6675-12 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 96.6 % | | | 83.5 % | | | 95.0 % | | | 76.5 % | | |
| UNITS: | UG/KG | | | UG/KG | | | UG/KG | | | UG/KG | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **POLYNUCLEAR AROMATIC HYDROCARBONS** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 350 | U | | 400 | U | | 350 | U | | 440 | U | |
| 2-METHYLNAPHTHALENE | 350 | U | | 400 | U | | 350 | U | | 440 | U | |
| ACENAPHTHENE | 350 | U | | 400 | U | | 350 | U | | 440 | U | |
| ACENAPHTHYLENE | 690 | U | | 800 | U | | 700 | U | | 870 | U | |
| ANTHRACENE | 350 | U | | 400 | U | | 350 | U | | 440 | U | |
| BENZO(A)ANTHRACENE | 69 | U | | 80 | U | | 61.4 | J | P | 87 | U | |
| BENZO(A)PYRENE | 69 | U | | 80 | U | | 80.6 | | | 87 | U | |
| BENZO(B)FLUORANTHENE | 69 | U | | 80 | U | | 86.9 | | | 87 | U | |
| BENZO(G,H,I)PERYLENE | 69 | U | | 80 | U | | 106 | | | 87 | U | |
| BENZO(K)FLUORANTHENE | 69 | U | | 80 | U | | 49.2 | J | P | 87 | U | |
| CHRYSENE | 350 | U | | 400 | U | | 60.6 | J | P | 440 | U | |
| DIBENZO(A,H)ANTHRACENE | 69 | U | | 80 | U | | 70 | U | | 87 | U | |
| FLUORANTHENE | 350 | U | | 400 | U | | 78.7 | J | P | 440 | U | |
| FLUORENE | 350 | U | | 400 | U | | 350 | U | | 440 | U | |
| INDENO(1,2,3-CD)PYRENE | 69 | U | | 80 | U | | 112 | | | 87 | U | |
| NAPHTHALENE | 350 | U | | 400 | U | | 350 | U | | 440 | U | |
| PHENANTHRENE | 350 | U | | 400 | U | | 350 | U | | 440 | U | |
| PYRENE | 350 | U | | 400 | U | | 96.8 | J | P | 440 | U | |

# CTO112-NAS PENSACOLA
## SOIL DATA
## Accutest, NJ
## SDG: F6675



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB20D001 | | | OLFB20SB010406 | | | OLFB20SB011214 | | | OLFB20SB020406 | | |
| SAMPLE DATE: | 06/01/00 | | | 06/01/00 | | | 06/01/00 | | | 06/01/00 | | |
| LABORATORY ID: | F6675-7 | | | F6675-1 | | | F6675-2 | | | F6675-3 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 96.1 % | | | 98.6 % | | | 98.4 % | | | 95.7 % | | |
| UNITS: | MG/KG | | | MG/KG | | | MG/KG | | | MG/KG | | |
| FIELD DUPLICATE OF: | OLFB20SB031012 | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **PETROLEUM HYDROCARBONS** | | | | | | | | | | | | |
| TOTAL PETROLEUM HYDROCARBONS | 20.6 | | | 70.3 | | | 47.2 | | | 12.5 | | |

# CTO112-NAS PENSACOLA
## SOIL DATA
## Accutest, NJ
## SDG: F6675



| SAMPLE NUMBER: | OLFB20SB021214 | | | OLFB20SB030810 | | | OLFB20SB031012 | | | OLFB59D001 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 06/01/00 | | | 06/01/00 | | | 06/01/00 | | | 06/01/00 | | |
| LABORATORY ID: | F6675-4 | | | F6675-5 | | | F6675-6 | | | F6675-9 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 95.0 % | | | 96.6 % | | | 95.6 % | | | 91.3 % | | |
| UNITS: | MG/KG | | | MG/KG | | | MG/KG | | | MG/KG | | |
| FIELD DUPLICATE OF: | | | | | | | | | | OLFB59SB011012 | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **PETROLEUM HYDROCARBONS** | | | | | | | | | | | | |
| TOTAL PETROLEUM HYDROCARBONS | 8.8 | U | | 16.6 | | | 22 | | | 9.1 | U | |

# CTO112-NAS PENSACOLA
## SOIL DATA
## Accutest, NJ
## SDG: F6675



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59SB011012 | | | OLFB59SB012022 | | | OLFB59SB020507 | | | OLFB59SB020709 | | |
| SAMPLE DATE: | 06/01/00 | | | 06/01/00 | | | 06/01/00 | | | 06/01/00 | | |
| LABORATORY ID: | F6675-8 | | | F6675-10 | | | F6675-11 | | | F6675-12 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 96.6 % | | | 83.5 % | | | 95.0 % | | | 76.5 % | | |
| UNITS: | MG/KG | | | MG/KG | | | MG/KG | | | MG/KG | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **PETROLEUM HYDROCARBONS** | | | | | | | | | | | | |
| TOTAL PETROLEUM HYDROCARBONS | 8.6 | U | | 10 | U | | 6.99 | J | P | 11 | U | |

# APPENDIX B

## Results as Reported by the Laboratory

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59SB011012 | | |
| **Lab Sample ID:** | F6675-8 | **Date Sampled:** | 06/01/00 |
| **Matrix:** | SO - Soil | **Date Received:** | 06/02/00 |
| **Method:** | SW846 8260B | **Percent Solids:** | 96.6 |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | H007935.D | 1 | 06/13/00 | RAW | n/a | n/a | VH94 |
| Run #2 | | | | | | | |

**VOA 8021 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 5.6 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.6 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.6 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.6 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.6 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.6 | ug/kg | |
| 110-75-8 | 2-Chloroethyl vinyl ether | ND | 11 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.6 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.6 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 5.6 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 5.6 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 5.6 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.6 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.6 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.6 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 5.6 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.6 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 5.6 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 5.6 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 5.6 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 5.6 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.6 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 5.6 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 5.6 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 5.6 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 11 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 5.6 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.6 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.6 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.6 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 5.6 | ug/kg | |
| 108-88-3 | Toluene | ND | 5.6 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 5.6 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.6 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.6 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 17 | ug/kg | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59SB011012 | | |
| **Lab Sample ID:** | F6675-8 | **Date Sampled:** | 06/01/00 |
| **Matrix:** | SO - Soil | **Date Received:** | 06/02/00 |
| **Method:** | SW846 8260B | **Percent Solids:** | 96.6 |
| **Project:** | NAS Pensacola | | |

**VOA 8021 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 102% | | 71-122% |
| 2037-26-5 | Toluene-D8 | 102% | | 73-128% |
| 460-00-4 | 4-Bromofluorobenzene | 105% | | 53-158% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 112% | | 71-122% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59D001 | | |
| **Lab Sample ID:** | F6675-9 | **Date Sampled:** | 06/01/00 |
| **Matrix:** | SO - Soil | **Date Received:** | 06/02/00 |
| **Method:** | SW846 8260B | **Percent Solids:** | 91.3 |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | H007936.D | 1 | 06/13/00 | RAW | n/a | n/a | VH94 |
| Run #2 | | | | | | | |

**VOA 8021 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 5.0 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.0 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.0 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.0 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.0 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.0 | ug/kg | |
| 110-75-8 | 2-Chloroethyl vinyl ether | ND | 9.9 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.0 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.0 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 5.0 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 5.0 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 5.0 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.0 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.0 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.0 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 5.0 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.0 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 5.0 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 5.0 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 5.0 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 5.0 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.0 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 5.0 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 5.0 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 5.0 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 9.9 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 5.0 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.0 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.0 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.0 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 5.0 | ug/kg | |
| 108-88-3 | Toluene | 1.0 | 5.0 | ug/kg | J |
| 79-01-6 | Trichloroethylene | ND | 5.0 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.0 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.0 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 15 | ug/kg | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59D001 | | |
| **Lab Sample ID:** | F6675-9 | **Date Sampled:** | 06/01/00 |
| **Matrix:** | SO - Soil | **Date Received:** | 06/02/00 |
| **Method:** | SW846 8260B | **Percent Solids:** | 91.3 |
| **Project:** | NAS Pensacola | | |

**VOA 8021 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 100% | | 71-122% |
| 2037-26-5 | Toluene-D8 | 103% | | 73-128% |
| 460-00-4 | 4-Bromofluorobenzene | 98% | | 53-158% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 109% | | 71-122% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59SB012022 | | |
| **Lab Sample ID:** | F6675-10 | **Date Sampled:** | 06/01/00 |
| **Matrix:** | SO - Soil | **Date Received:** | 06/02/00 |
| **Method:** | SW846 8260B | **Percent Solids:** | 83.5 |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | H007937.D | 1 | 06/13/00 | RAW | n/a | n/a | VH94 |
| Run #2 | | | | | | | |

**VOA 8021 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 5.2 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.2 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.2 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.2 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.2 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.2 | ug/kg | |
| 110-75-8 | 2-Chloroethyl vinyl ether | ND | 10 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.2 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.2 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 5.2 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 5.2 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 5.2 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.2 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.2 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.2 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 5.2 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.2 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 5.2 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 5.2 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 5.2 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 5.2 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.2 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 5.2 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 5.2 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 5.2 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 10 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 5.2 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.2 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.2 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.2 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 5.2 | ug/kg | |
| 108-88-3 | Toluene | ND | 5.2 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 5.2 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.2 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.2 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 16 | ug/kg | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59SB012022 | | |
| **Lab Sample ID:** | F6675-10 | **Date Sampled:** | 06/01/00 |
| **Matrix:** | SO - Soil | **Date Received:** | 06/02/00 |
| **Method:** | SW846 8260B | **Percent Solids:** | 83.5 |
| **Project:** | NAS Pensacola | | |

**VOA 8021 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 102% | | 71-122% |
| 2037-26-5 | Toluene-D8 | 104% | | 73-128% |
| 460-00-4 | 4-Bromofluorobenzene | 108% | | 53-158% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 107% | | 71-122% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59SB020507 | | |
| **Lab Sample ID:** | F6675-11 | **Date Sampled:** | 06/01/00 |
| **Matrix:** | SO - Soil | **Date Received:** | 06/02/00 |
| **Method:** | SW846 8260B | **Percent Solids:** | 95.0 |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | H007938.D | 1 | 06/13/00 | RAW | n/a | n/a | VH94 |
| Run #2 | | | | | | | |

**VOA 8021 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 5.2 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.2 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.2 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.2 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.2 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.2 | ug/kg | |
| 110-75-8 | 2-Chloroethyl vinyl ether | ND | 10 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.2 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.2 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 5.2 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 5.2 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 5.2 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.2 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.2 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.2 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 5.2 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.2 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 5.2 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 5.2 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 5.2 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 5.2 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.2 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 5.2 | ug/kg | |
| 74-83-9 | Methyl bromide | ND | 5.2 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 5.2 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 10 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 5.2 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.2 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.2 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.2 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 5.2 | ug/kg | |
| 108-88-3 | Toluene | ND | 5.2 | ug/kg | |
| 79-01-6 | Trichloroethylene | ND | 5.2 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.2 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.2 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 15 | ug/kg | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59SB020507 | | |
| **Lab Sample ID:** | F6675-11 | **Date Sampled:** | 06/01/00 |
| **Matrix:** | SO - Soil | **Date Received:** | 06/02/00 |
| **Method:** | SW846 8260B | **Percent Solids:** | 95.0 |
| **Project:** | NAS Pensacola | | |

**VOA 8021 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 102% | | 71-122% |
| 2037-26-5 | Toluene-D8 | 107% | | 73-128% |
| 460-00-4 | 4-Bromofluorobenzene | 104% | | 53-158% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 112% | | 71-122% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59SB020709 | | |
| **Lab Sample ID:** | F6675-12 | **Date Sampled:** | 06/01/00 |
| **Matrix:** | SO - Soil | **Date Received:** | 06/02/00 |
| **Method:** | SW846 8260B | **Percent Solids:** | 76.5 |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | H007939.D | 1 | 06/13/00 | RAW | n/a | n/a | VH94 |
| Run #2 | | | | | | | |

**VOA 8021 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 6.2 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 6.2 | ug/kg | |
| 75-25-2 | Bromoform | ND | 6.2 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 6.2 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 6.2 | ug/kg | |
| 67-66-3 | Chloroform | ND | 6.2 | ug/kg | |
| 110-75-8 | 2-Chloroethyl vinyl ether | ND | 12 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 6.2 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 6.2 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 6.2 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 6.2 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 6.2 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 6.2 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 6.2 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 6.2 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 6.2 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 6.2 | ug/kg | |
| 541-73-1 | m-Dichlorobenzene | ND | 6.2 | ug/kg | |
| 95-50-1 | o-Dichlorobenzene | ND | 6.2 | ug/kg | |
| 106-46-7 | p-Dichlorobenzene | ND | 6.2 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 6.2 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 6.2 | ug/kg | |
| 100-41-4 | Ethylbenzene | 2.9 | 6.2 | ug/kg | J |
| 74-83-9 | Methyl bromide | ND | 6.2 | ug/kg | |
| 74-87-3 | Methyl chloride | ND | 6.2 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 12 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 6.2 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 6.2 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 6.2 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 6.2 | ug/kg | |
| 127-18-4 | Tetrachloroethylene | ND | 6.2 | ug/kg | |
| 108-88-3 | Toluene | 1.3 | 6.2 | ug/kg | J |
| 79-01-6 | Trichloroethylene | ND | 6.2 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 6.2 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 6.2 | ug/kg | |
| 1330-20-7 | Xylene (total) | 6.5 | 18 | ug/kg | J |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59SB020709 | | |
| **Lab Sample ID:** | F6675-12 | **Date Sampled:** | 06/01/00 |
| **Matrix:** | SO - Soil | **Date Received:** | 06/02/00 |
| **Method:** | SW846 8260B | **Percent Solids:** | 76.5 |
| **Project:** | NAS Pensacola | | |

**VOA 8021 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 91% | | 71-122% |
| 2037-26-5 | Toluene-D8 | 133% [a] | | 73-128% |
| 460-00-4 | 4-Bromofluorobenzene | 151% | | 53-158% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 102% | | 71-122% |

(a) Outside control limits due to matrix interference.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59RB01 | | |
| **Lab Sample ID:** | F6675-14 | **Date Sampled:** | 06/01/00 |
| **Matrix:** | AQ - Field Blank Water | **Date Received:** | 06/02/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | QR002984.D | 1 | 06/07/00 | JG | n/a | n/a | GQR79 |
| Run #2 | | | | | | | |

**VOA 8021 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 1.0 | ug/l | |
| 75-25-2 | Bromoform | ND | 1.0 | ug/l | |
| 74-83-9 | Bromomethane | ND | 1.0 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 1.0 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | ug/l | |
| 75-00-3 | Chloroethane | ND | 1.0 | ug/l | |
| 110-75-8 | 2-Chloroethylvinyl ether | ND | 1.0 | ug/l | |
| 67-66-3 | Chloroform | ND | 1.0 | ug/l | |
| 74-87-3 | Chloromethane | ND | 1.0 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | ug/l | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.0 | ug/l | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 1.0 | ug/l | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.0 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane | ND | 1.0 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.0 | ug/l | |
| 75-35-4 | 1,1-Dichloroethene | ND | 1.0 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 1.0 | ug/l | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 1.0 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 5.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | ug/l | |
| 127-18-4 | Tetrachloroethene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | 2.0 | 1.0 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | ug/l | |
| 79-01-6 | Trichloroethene | ND | 1.0 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 1.0 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59RB01 | | |
| **Lab Sample ID:** | F6675-14 | **Date Sampled:** | 06/01/00 |
| **Matrix:** | AQ - Field Blank Water | **Date Received:** | 06/02/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**VOA 8021 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 75-29-6 | 2-Chloropropane | 100% | | 75-125% |
| 352-33-0 | 1-Chloro-4-fluorobenzene | 98% | | 65-125% |
| 352-33-0 | 1-Chloro-4-fluorobenzene | 97% | | 65-125% |
| 98-08-8 | aaa-Trifluorotoluene | 97% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | TRIP BLANK | | |
| **Lab Sample ID:** | F6675-15 | **Date Sampled:** | 06/01/00 |
| **Matrix:** | AQ - Trip Blank Water | **Date Received:** | 06/02/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | QR002985.D | 1 | 06/07/00 | JG | n/a | n/a | GQR79 |
| Run #2 | | | | | | | |

**VOA 8021 List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 1.0 | ug/l | |
| 75-25-2 | Bromoform | ND | 1.0 | ug/l | |
| 74-83-9 | Bromomethane | ND | 1.0 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 1.0 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | ug/l | |
| 75-00-3 | Chloroethane | ND | 1.0 | ug/l | |
| 110-75-8 | 2-Chloroethylvinyl ether | ND | 1.0 | ug/l | |
| 67-66-3 | Chloroform | ND | 1.0 | ug/l | |
| 74-87-3 | Chloromethane | ND | 1.0 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | ug/l | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.0 | ug/l | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 1.0 | ug/l | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.0 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane | ND | 1.0 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.0 | ug/l | |
| 75-35-4 | 1,1-Dichloroethene | ND | 1.0 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 1.0 | ug/l | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 1.0 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 5.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | ug/l | |
| 127-18-4 | Tetrachloroethene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | ug/l | |
| 79-01-6 | Trichloroethene | ND | 1.0 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 1.0 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | TRIP BLANK | | |
| **Lab Sample ID:** | F6675-15 | **Date Sampled:** | 06/01/00 |
| **Matrix:** | AQ - Trip Blank Water | **Date Received:** | 06/02/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**VOA 8021 List**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 75-29-6 | 2-Chloropropane | 97% | | 75-125% |
| 352-33-0 | 1-Chloro-4-fluorobenzene | 99% | | 65-125% |
| 352-33-0 | 1-Chloro-4-fluorobenzene | 96% | | 65-125% |
| 98-08-8 | aaa-Trifluorotoluene | 96% | | 72-125% |

(a) Sample vial(s) contained significant headspace; reported results are considered minimum values.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59SB011012 | | |
| **Lab Sample ID:** | F6675-8 | **Date Sampled:** | 06/01/00 |
| **Matrix:** | SO - Soil | **Date Received:** | 06/02/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | 96.6 |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP08639.D | 1 | 06/13/00 | CCJ | 06/09/00 | OP1661 | GOP390 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 8.6 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 103% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59D001 | | |
| **Lab Sample ID:** | F6675-9 | **Date Sampled:** | 06/01/00 |
| **Matrix:** | SO - Soil | **Date Received:** | 06/02/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | 91.3 |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP08640.D | 1 | 06/13/00 | CCJ | 06/09/00 | OP1661 | GOP390 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 9.1 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 104% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59SB012022 | | |
| **Lab Sample ID:** | F6675-10 | **Date Sampled:** | 06/01/00 |
| **Matrix:** | SO - Soil | **Date Received:** | 06/02/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | 83.5 |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP08641.D | 1 | 06/13/00 | CCJ | 06/09/00 | OP1661 | GOP390 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 10 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 94% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59SB020507 | | |
| **Lab Sample ID:** | F6675-11 | **Date Sampled:** | 06/01/00 |
| **Matrix:** | SO - Soil | **Date Received:** | 06/02/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | 95.0 |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP08642.D | 1 | 06/13/00 | CCJ | 06/09/00 | OP1661 | GOP390 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | 6.99 | 8.8 | mg/kg | J |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 103% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59SB020709 | | |
| **Lab Sample ID:** | F6675-12 | **Date Sampled:** | 06/01/00 |
| **Matrix:** | SO - Soil | **Date Received:** | 06/02/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | 76.5 |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP08643.D | 1 | 06/13/00 | CCJ | 06/09/00 | OP1661 | GOP390 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 11 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 86% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59RB01 | | |
| **Lab Sample ID:** | F6675-14 | **Date Sampled:** | 06/01/00 |
| **Matrix:** | AQ - Field Blank Water | **Date Received:** | 06/02/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP08596.D | 1 | 06/08/00 | CCJ | 06/07/00 | OP1632 | GOP389 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.28 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 108% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59SB011012 | | |
| **Lab Sample ID:** | F6675-8 | **Date Sampled:** | 06/01/00 |
| **Matrix:** | SO - Soil | **Date Received:** | 06/02/00 |
| **Method:** | EPA 8310 | **Percent Solids:** | 96.6 |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | AA001882.D | 1 | 06/19/00 | NF | 06/15/00 | OP1686 | GAA77 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | ND | 350 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 690 | ug/kg | |
| 120-12-7 | Anthracene | ND | 350 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 69 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 69 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 69 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 69 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 69 | ug/kg | |
| 218-01-9 | Chrysene | ND | 350 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 69 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 350 | ug/kg | |
| 86-73-7 | Fluorene | ND | 350 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 69 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 350 | ug/kg | |
| 90-12-0 | 1-Methylnaphthalene | ND | 350 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 350 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 350 | ug/kg | |
| 129-00-0 | Pyrene | ND | 350 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 70% | | 35-135% |
| 92-94-4 | p-Terphenyl | 94% | | 50-150% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59D001 | | |
| **Lab Sample ID:** | F6675-9 | **Date Sampled:** | 06/01/00 |
| **Matrix:** | SO - Soil | **Date Received:** | 06/02/00 |
| **Method:** | EPA 8310 | **Percent Solids:** | 91.3 |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | AA001884.D | 1 | 06/19/00 | NF | 06/15/00 | OP1686 | GAA77 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | ND | 370 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 730 | ug/kg | |
| 120-12-7 | Anthracene | ND | 370 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 73 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 73 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 73 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 73 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 73 | ug/kg | |
| 218-01-9 | Chrysene | ND | 370 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 73 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 370 | ug/kg | |
| 86-73-7 | Fluorene | ND | 370 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 73 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 370 | ug/kg | |
| 90-12-0 | 1-Methylnaphthalene | ND | 370 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 370 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 370 | ug/kg | |
| 129-00-0 | Pyrene | ND | 370 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 71% | | 35-135% |
| 92-94-4 | p-Terphenyl | 95% | | 50-150% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59SB012022 | | |
| **Lab Sample ID:** | F6675-10 | **Date Sampled:** | 06/01/00 |
| **Matrix:** | SO - Soil | **Date Received:** | 06/02/00 |
| **Method:** | EPA 8310 | **Percent Solids:** | 83.5 |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | AA001885.D | 1 | 06/19/00 | NF | 06/15/00 | OP1686 | GAA77 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | ND | 400 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 800 | ug/kg | |
| 120-12-7 | Anthracene | ND | 400 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 80 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 80 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 80 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 80 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 80 | ug/kg | |
| 218-01-9 | Chrysene | ND | 400 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 80 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 400 | ug/kg | |
| 86-73-7 | Fluorene | ND | 400 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 80 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 400 | ug/kg | |
| 90-12-0 | 1-Methylnaphthalene | ND | 400 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 400 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 400 | ug/kg | |
| 129-00-0 | Pyrene | ND | 400 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 70% | | 35-135% |
| 92-94-4 | p-Terphenyl | 96% | | 50-150% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59SB020507 | | |
| **Lab Sample ID:** | F6675-11 | **Date Sampled:** | 06/01/00 |
| **Matrix:** | SO - Soil | **Date Received:** | 06/02/00 |
| **Method:** | EPA 8310 | **Percent Solids:** | 95.0 |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | AA001900.D | 1 | 06/20/00 | CCJ | 06/15/00 | OP1686 | GAA78 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | ND | 350 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 700 | ug/kg | |
| 120-12-7 | Anthracene | ND | 350 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | 61.4 | 70 | ug/kg | J |
| 50-32-8 | Benzo(a)pyrene | 80.6 | 70 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | 86.9 | 70 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | 106 | 70 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | 49.2 | 70 | ug/kg | J |
| 218-01-9 | Chrysene | 60.6 | 350 | ug/kg | J |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 70 | ug/kg | |
| 206-44-0 | Fluoranthene | 78.7 | 350 | ug/kg | J |
| 86-73-7 | Fluorene | ND | 350 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 112 | 70 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 350 | ug/kg | |
| 90-12-0 | 1-Methylnaphthalene | ND | 350 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 350 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 350 | ug/kg | |
| 129-00-0 | Pyrene | 96.8 | 350 | ug/kg | J |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 74% | | 35-135% |
| 92-94-4 | p-Terphenyl | 96% | | 50-150% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59SB020709 | | |
| **Lab Sample ID:** | F6675-12 | **Date Sampled:** | 06/01/00 |
| **Matrix:** | SO - Soil | **Date Received:** | 06/02/00 |
| **Method:** | EPA 8310 | **Percent Solids:** | 76.5 |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | AA001887.D | 1 | 06/19/00 | NF | 06/15/00 | OP1686 | GAA77 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | ND | 440 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 870 | ug/kg | |
| 120-12-7 | Anthracene | ND | 440 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 87 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 87 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 87 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 87 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 87 | ug/kg | |
| 218-01-9 | Chrysene | ND | 440 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 87 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 440 | ug/kg | |
| 86-73-7 | Fluorene | ND | 440 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 87 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 440 | ug/kg | |
| 90-12-0 | 1-Methylnaphthalene | ND | 440 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 440 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 440 | ug/kg | |
| 129-00-0 | Pyrene | ND | 440 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 72% | | 35-135% |
| 92-94-4 | p-Terphenyl | 95% | | 50-150% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59RB01 | | |
| **Lab Sample ID:** | F6675-14 | **Date Sampled:** | 06/01/00 |
| **Matrix:** | AQ - Field Blank Water | **Date Received:** | 06/02/00 |
| **Method:** | EPA 8310 | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | AA001775.D | 1 | 06/16/00 | NF | 06/08/00 | OP1657 | GAA75 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | ND | 2.0 | ug/l | |
| 208-96-8 | Acenaphthylene | ND | 2.0 | ug/l | |
| 120-12-7 | Anthracene | ND | 2.0 | ug/l | |
| 56-55-3 | Benzo(a)anthracene | ND | 0.20 | ug/l | |
| 50-32-8 | Benzo(a)pyrene | ND | 0.20 | ug/l | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 0.20 | ug/l | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 0.20 | ug/l | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 0.20 | ug/l | |
| 218-01-9 | Chrysene | ND | 2.0 | ug/l | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 0.20 | ug/l | |
| 206-44-0 | Fluoranthene | ND | 2.0 | ug/l | |
| 86-73-7 | Fluorene | ND | 2.0 | ug/l | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 0.20 | ug/l | |
| 91-20-3 | Naphthalene | ND | 2.0 | ug/l | |
| 90-12-0 | 1-Methylnaphthalene | ND | 2.0 | ug/l | |
| 91-57-6 | 2-Methylnaphthalene | ND | 2.0 | ug/l | |
| 85-01-8 | Phenanthrene | ND | 2.0 | ug/l | |
| 129-00-0 | Pyrene | ND | 2.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 80% | | 45-130% |
| 92-94-4 | p-Terphenyl | 106% | | 50-150% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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

**TO:** Mr. Gerald Walker **DATE:** August 24, 2000

**FROM:** William Howard Engle **CC:** File

**SUBJECT:** Inorganic Data Validation – Total Lead
CTO112 – NAS Pensacola
SDG F7009

**SAMPLES:** 20/Aqueous

| | | |
|---|---|---|
| OLFB59001 | OLFB59D001 | OLFB59D002 |
| OLFB59MW01GW | OLFB59MW02GW | OLFB59MW04GW |
| OLFB59MW20GW | OLFB59MW21GW | OLFB59MW22GW |
| OLFB59MW23GW | OLFB59MW27GW | OLFB59MW28GW |
| OLFB59MW34GW | OLFB59MW47GW | OLFB59MW52GW |
| OLFB59MW60GW | OLFB59MW63GW | OLFB59MW67GW |
| OLFB59MW68GW | OLFB59MW69GW | |

**OVERVIEW**

The sample set for CTO112, SDG F7009; Naval Air Station Pensacola, Pensacola, Florida consists of twenty (20) aqueous environmental samples. Two duplicate pairs, OLFB59MW60GW / OLFB59D001 and OLFB59MW23GW / OLFB59D002, were included in this SDG. The environmental samples were analyzed for Total Lead.

The samples were collected by Tetra Tech NUS on July 8-10, 2000 and analyzed by Accutest Southeast 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 6010A analytical and reporting protocols. The data in this SDG was validated with regard to the following parameters:

- * Data Completeness
- * Holding Times
- * Initial/continuing calibrations
- Laboratory method/field quality control blank results
- * Detection Limits

The symbol (*) indicates that all quality control criteria were met for this parameter. Supporting documentation is presented in Appendix C. Qualified analytical results are presented in Appendix A. The original laboratory data is contained in Appendix B.

Laboratory Blank Analysis

Lead was detected in the laboratory method / preparation blanks at the following maximum concentration:

Affected samples: OLFB59MW20GW
OLFB59MW34GW
OLFB59MW68GW

| Analyte | Maximum Concentration (ug/L) | Action Level (ug/L) |
|---|---|---|
| Lead | 2.7 | 13.5 |

An action level of 5x the maximum concentration has been used to evaluate the sample for contamination in continuing calibration blank. Dilution factors and sample aliquots were taken into consideration when evaluating for blank contamination. Positive results < the action level for lead were qualified as nondetects (U) as a result of blank contamination.

All other quality control criteria were met for this fraction.

Field Duplicate Summary

| Analyte | OLFB59MW60GW (ug/L) | OLFB59D001(ug/L) | %D |
|---|---|---|---|
| | No positive results | No positive results | N/A |
| | OLFB59MW23GW(ug/L) | OLFB59D002(ug/L) | %D |
| | 189 | 177 | 6.6 |

Executive Summary

**Laboratory performance:** Lead was detected in the calibration blanks. Three samples were qualified for blank contamination.

**Other factors affecting data quality:** None.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Inorganic Data Validation (February, 1994), 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)."

William Howard Engle

Project Chemist
Tetra Tech NUS, Inc.

Joseph A. Samchuck

Data Validation Quality Assurance Officer
Tetra Tech NUS, Inc.

Attachments:
1. Appendix A - Qualified Analytical Results
2. Appendix B – Results as reported by the laboratory
3. Appendix C – Supporting Documentation

**Qualifier Codes:**

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration (i.e., % RSDs, %Ds, ICVs, CCVs, RPDs, RRFs, etc.) Noncompliance
D = MS/MSD Noncompliance
E = LCS/LCSD Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS - GFAA MSA's $r < 0.995$
K = ICP Interference - Include ICSAB % R's
L = Instrument Calibration Range Exceedance
M = Sample Preservation
N = Internal Standard Noncompliance
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = Pest/PCB D% between columns for positive results
V = Non-linear calibrations, tuning $r < 0.995$ (correlation coefficient)
W = EMPC result
X = Signal to noise response drop
Y = % Solid content is less than 30%

**DATA QUALIFIER DEFINITIONS:**

U - Value is a nondetected result as reported by the laboratory and should not be considered present.

J - Positive result is estimated as a result of a value below the CRQL or a technical noncompliance.

UJ - Nondetected result is considered to be estimated as a result of technical noncompliances.

# APPENDIX A

## Qualified Analytical Results

F7009

HOLDING TIME

08/21/00

| 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 | OLFB59001 | F7009-34 | NORMAL | F7009 | M | 07/09/00 | 07/13/00 | 07/17/00 | 4 | 4 | 8 |
| UG/L | OLFB59D001 | F7009-29 | NORMAL | F7009 | M | 07/09/00 | 07/13/00 | 07/17/00 | 4 | 4 | 8 |
| UG/L | OLFB59D002 | F7009-30 | NORMAL | F7009 | M | 07/10/00 | 07/13/00 | 07/17/00 | 3 | 4 | 7 |
| UG/L | OLFB59MW01GW | F7009-24 | NORMAL | F7009 | M | 07/10/00 | 07/13/00 | 07/17/00 | 3 | 4 | 7 |
| UG/L | OLFB59MW02GW | F7009-23 | NORMAL | F7009 | M | 07/10/00 | 07/13/00 | 07/14/00 | 3 | 1 | 4 |
| UG/L | OLFB59MW04GW | F7009-25 | NORMAL | F7009 | M | 07/10/00 | 07/13/00 | 07/17/00 | 3 | 4 | 7 |
| UG/L | OLFB59MW20GW | F7009-21 | NORMAL | F7009 | M | 07/10/00 | 07/13/00 | 07/14/00 | 3 | 1 | 4 |
| UG/L | OLFB59MW21GW | F7009-22 | NORMAL | F7009 | M | 07/10/00 | 07/13/00 | 07/14/00 | 3 | 1 | 4 |
| UG/L | OLFB59MW22GW | F7009-17 | NORMAL | F7009 | M | 07/10/00 | 07/17/00 | 07/20/00 | 7 | 3 | 10 |
| UG/L | OLFB59MW23GW | F7009-18 | NORMAL | F7009 | M | 07/10/00 | 07/17/00 | 07/20/00 | 7 | 3 | 10 |
| UG/L | OLFB59MW27GW | F7009-14 | NORMAL | F7009 | M | 07/09/00 | 07/17/00 | 07/30/00 | 8 | 13 | 21 |
| UG/L | OLFB59MW28GW | F7009-11 | NORMAL | F7009 | M | 07/09/00 | 07/14/00 | 07/17/00 | 5 | 3 | 8 |
| UG/L | OLFB59MW34GW | F7009-16 | NORMAL | F7009 | M | 07/10/00 | 07/17/00 | 07/20/00 | 7 | 3 | 10 |
| UG/L | OLFB59MW47GW | F7009-12 | NORMAL | F7009 | M | 07/09/00 | 07/14/00 | 07/17/00 | 5 | 3 | 8 |
| UG/L | OLFB59MW52GW | F7009-28 | NORMAL | F7009 | M | 07/10/00 | 07/13/00 | 07/17/00 | 3 | 4 | 7 |
| UG/L | OLFB59MW60GW | F7009-15 | NORMAL | F7009 | M | 07/09/00 | 07/17/00 | 07/30/00 | 8 | 13 | 21 |
| UG/L | OLFB59MW63GW | F7009-13 | NORMAL | F7009 | M | 07/09/00 | 07/17/00 | 07/30/00 | 8 | 13 | 21 |
| UG/L | OLFB59MW67GW | F7009-26 | NORMAL | F7009 | M | 07/10/00 | 07/13/00 | 07/17/00 | 3 | 4 | 7 |
| UG/L | OLFB59MW68GW | F7009-27 | NORMAL | F7009 | M | 07/10/00 | 07/13/00 | 07/17/00 | 3 | 4 | 7 |
| UG/L | OLFB59MW69GW | F7009-19 | NORMAL | F7009 | M | 07/10/00 | 07/17/00 | 07/20/00 | 7 | 3 | 10 |
| UG/L | 16TB070900 | F7009-42 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/23/00 | 0 | 0 | 14 |
| UG/L | 20TB070800 | F7009-36 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | 59TB070900 | F7009-31 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB16001 | F7009-32 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |

| 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 | OLFB16MW03GW | F7009-40 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB16MW06GW | F7009-41 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB16MW08GW | F7009-39 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB16MW09GW | F7009-38 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB20001 | F7009-33 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB20D002 | F7009-35 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB20MW02GW | F7009-4 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB20MW11GW | F7009-7 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB20MW12GW | F7009-1 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/21/00 | 0 | 0 | 13 |
| UG/L | OLFB20MW17GW | F7009-3 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/21/00 | 0 | 0 | 13 |
| UG/L | OLFB20MW18GW | F7009-5 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB20MW19GW | F7009-37 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB20MW24GW | F7009-6 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB20MW25GW | F7009-9 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB20MW26GW | F7009-8 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB20MW30GW | F7009-10 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB20MW34GW | F7009-2 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/21/00 | 0 | 0 | 13 |
| UG/L | OLFB59001 | F7009-34 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB59D001 | F7009-29 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB59D002 | F7009-30 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW01GW | F7009-24 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW02GW | F7009-23 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW04GW | F7009-25 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW20GW | F7009-21 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW21GW | F7009-22 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW22GW | F7009-17 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW23GW | F7009-18 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/21/00 | 0 | 0 | 11 |

| 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 | OLFB59MW27GW | F7009-14 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW28GW | F7009-11 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW34GW | F7009-16 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW47GW | F7009-12 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW52GW | F7009-28 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW60GW | F7009-15 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW63GW | F7009-13 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW67GW | F7009-26 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/24/00 | 0 | 0 | 14 |
| UG/L | OLFB59MW68GW | F7009-27 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW69GW | F7009-19 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB16001 | F7009-32 | NORMAL | F7009 | PAH | 07/09/00 | 07/13/00 | 07/22/00 | 4 | 9 | 13 |
| UG/L | OLFB16MW03GW | F7009-40 | NORMAL | F7009 | PAH | 07/09/00 | 07/13/00 | 07/23/00 | 4 | 10 | 14 |
| UG/L | OLFB16MW06GW | F7009-41 | NORMAL | F7009 | PAH | 07/09/00 | 07/13/00 | 07/23/00 | 4 | 10 | 14 |
| UG/L | OLFB16MW08GW | F7009-39 | NORMAL | F7009 | PAH | 07/09/00 | 07/13/00 | 07/23/00 | 4 | 10 | 14 |
| UG/L | OLFB16MW09GW | F7009-38 | NORMAL | F7009 | PAH | 07/09/00 | 07/13/00 | 07/23/00 | 4 | 10 | 14 |
| UG/L | OLFB20001 | F7009-33 | NORMAL | F7009 | PAH | 07/09/00 | 07/13/00 | 07/22/00 | 4 | 9 | 13 |
| UG/L | OLFB20D002 | F7009-35 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/22/00 | 5 | 9 | 14 |
| UG/L | OLFB20MW02GW | F7009-4 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/24/00 | 5 | 11 | 16 |
| UG/L | OLFB20MW11GW | F7009-7 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/22/00 | 5 | 9 | 14 |
| UG/L | OLFB20MW12GW | F7009-1 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/24/00 | 5 | 11 | 16 |
| UG/L | OLFB20MW17GW | F7009-3 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/24/00 | 5 | 11 | 16 |
| UG/L | OLFB20MW18GW | F7009-5 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/24/00 | 5 | 11 | 16 |
| UG/L | OLFB20MW19GW | F7009-37 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/22/00 | 5 | 9 | 14 |
| UG/L | OLFB20MW24GW | F7009-6 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/24/00 | 5 | 11 | 16 |
| UG/L | OLFB20MW25GW | F7009-9 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/24/00 | 5 | 11 | 16 |
| UG/L | OLFB20MW28GW | F7009-8 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/22/00 | 5 | 9 | 14 |
| UG/L | OLFB20MW30GW | F7009-10 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/22/00 | 5 | 9 | 14 |

| 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 | OLFB20MW34GW | F7009-2 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/22/00 | 5 | 9 | 14 |
| MG/L | OLFB16001 | F7009-32 | NORMAL | F7009 | TPH | 07/09/00 | 07/14/00 | 07/20/00 | 5 | 6 | 11 |
| MG/L | OLFB16MW03GW | F7009-40 | NORMAL | F7009 | TPH | 07/09/00 | 07/14/00 | 07/21/00 | 5 | 7 | 12 |
| MG/L | OLFB16MW06GW | F7009-41 | NORMAL | F7009 | TPH | 07/09/00 | 07/14/00 | 07/21/00 | 5 | 7 | 12 |
| MG/L | OLFB16MW08GW | F7009-39 | NORMAL | F7009 | TPH | 07/09/00 | 07/14/00 | 07/21/00 | 5 | 7 | 12 |
| MG/L | OLFB16MW09GW | F7009-38 | NORMAL | F7009 | TPH | 07/09/00 | 07/14/00 | 07/21/00 | 5 | 7 | 12 |
| MG/L | OLFB20001 | F7009-33 | NORMAL | F7009 | TPH | 07/09/00 | 07/14/00 | 07/20/00 | 5 | 6 | 11 |
| MG/L | OLFB20D002 | F7009-35 | NORMAL | F7009 | TPH | 07/08/00 | 07/14/00 | 07/20/00 | 6 | 6 | 12 |
| MG/L | OLFB20MW02GW | F7009-4 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/17/00 | 5 | 4 | 9 |
| MG/L | OLFB20MW11GW | F7009-7 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/14/00 | 5 | 1 | 6 |
| MG/L | OLFB20MW12GW | F7009-1 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/14/00 | 5 | 1 | 6 |
| MG/L | OLFB20MW17GW | F7009-3 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/14/00 | 5 | 1 | 6 |
| MG/L | OLFB20MW18GW | F7009-5 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/17/00 | 5 | 4 | 9 |
| MG/L | OLFB20MW19GW | F7009-37 | NORMAL | F7009 | TPH | 07/08/00 | 07/14/00 | 07/20/00 | 6 | 6 | 12 |
| MG/L | OLFB20MW24GW | F7009-6 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/14/00 | 5 | 1 | 6 |
| MG/L | OLFB20MW25GW | F7009-9 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/17/00 | 5 | 4 | 9 |
| MG/L | OLFB20MW26GW | F7009-8 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/17/00 | 5 | 4 | 9 |
| MG/L | OLFB20MW30GW | F7009-10 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/17/00 | 5 | 4 | 9 |
| MG/L | OLFB20MW34GW | F7009-2 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/14/00 | 5 | 1 | 6 |
| MG/L | OLFB59001 | F7009-34 | NORMAL | F7009 | TPH | 07/09/00 | 07/14/00 | 07/21/00 | 5 | 7 | 12 |
| MG/L | OLFB59D001 | F7009-29 | NORMAL | F7009 | TPH | 07/09/00 | 07/14/00 | 07/20/00 | 5 | 6 | 11 |
| MG/L | OLFB59D002 | F7009-30 | NORMAL | F7009 | TPH | 07/10/00 | 07/14/00 | 07/21/00 | 4 | 7 | 11 |
| MG/L | OLFB59MW01GW | F7009-24 | NORMAL | F7009 | TPH | 07/10/00 | 07/14/00 | 07/20/00 | 4 | 6 | 10 |
| MG/L | OLFB59MW02GW | F7009-23 | NORMAL | F7009 | TPH | 07/10/00 | 07/14/00 | 07/20/00 | 4 | 6 | 10 |
| MG/L | OLFB59MW04GW | F7009-25 | NORMAL | F7009 | TPH | 07/10/00 | 07/14/00 | 07/21/00 | 4 | 7 | 11 |
| MG/L | OLFB59MW20GW | F7009-21 | NORMAL | F7009 | TPH | 07/10/00 | 07/13/00 | 07/17/00 | 3 | 4 | 7 |
| MG/L | OLFB59MW21GW | F7009-22 | NORMAL | F7009 | TPH | 07/10/00 | 07/14/00 | 07/20/00 | 4 | 6 | 10 |

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MG/L | OLFB59MW22GW | F7009-17 | NORMAL | F7009 | TPH | 07/10/00 | 07/13/00 | 07/17/00 | 3 | 4 | 7 |
| MG/L | OLFB59MW23GW | F7009-18 | NORMAL | F7009 | TPH | 07/10/00 | 07/13/00 | 07/15/00 | 3 | 2 | 5 |
| MG/L | OLFB59MW27GW | F7009-14 | NORMAL | F7009 | TPH | 07/09/00 | 07/13/00 | 07/14/00 | 4 | 1 | 5 |
| MG/L | OLFB59MW28GW | F7009-11 | NORMAL | F7009 | TPH | 07/09/00 | 07/13/00 | 07/14/00 | 4 | 1 | 5 |
| MG/L | OLFB59MW34GW | F7009-16 | NORMAL | F7009 | TPH | 07/10/00 | 07/13/00 | 07/15/00 | 3 | 2 | 5 |
| MG/L | OLFB59MW47GW | F7009-12 | NORMAL | F7009 | TPH | 07/09/00 | 07/13/00 | 07/17/00 | 4 | 4 | 8 |
| MG/L | OLFB59MW52GW | F7009-28 | NORMAL | F7009 | TPH | 07/10/00 | 07/14/00 | 07/20/00 | 4 | 6 | 10 |
| MG/L | OLFB59MW60GW | F7009-15 | NORMAL | F7009 | TPH | 07/09/00 | 07/13/00 | 07/15/00 | 4 | 2 | 6 |
| MG/L | OLFB59MW63GW | F7009-13 | NORMAL | F7009 | TPH | 07/09/00 | 07/13/00 | 07/14/00 | 4 | 1 | 5 |
| MG/L | OLFB59MW67GW | F7009-26 | NORMAL | F7009 | TPH | 07/10/00 | 07/14/00 | 07/20/00 | 4 | 6 | 10 |
| MG/L | OLFB59MW68GW | F7009-27 | NORMAL | F7009 | TPH | 07/10/00 | 07/14/00 | 07/20/00 | 4 | 6 | 10 |
| MG/L | OLFB59MW69GW | F7009-19 | NORMAL | F7009 | TPH | 07/10/00 | 07/13/00 | 07/15/00 | 3 | 2 | 5 |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59001 | | | OLFB59D001 | | | OLFB59D002 | | | OLFB59MW01GW | | |
| SAMPLE DATE: | 07/09/00 | | | 07/09/00 | | | 07/10/00 | | | 07/10/00 | | |
| LABORATORY ID: | F7009-34 | | | F7009-29 | | | F7009-30 | | | F7009-24 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| INORGANICS | | | | | | | | | | | | |
| LEAD | 1.6 | U | | 1.6 | U | | 177 | | | 99.1 | | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| SAMPLE NUMBER: | OLFB59MW02GW | | | OLFB59MW04GW | | | OLFB59MW20GW | | | OLFB59MW21GW | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 07/10/00 | | | 07/10/00 | | | 07/10/00 | | | 07/10/00 | | |
| LABORATORY ID: | F7009-23 | | | F7009-25 | | | F7009-21 | | | F7009-22 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **INORGANICS** | | | | | | | | | | | | |
| LEAD | 97.8 | | | 136 | | | 1.8 | B | | 1.6 | U | |

# CTO112-NAS PENSACOLA
## WATER DATA
**Accutest, NJ**
**SDG: F7009**



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59MW22GW | | | OLFB59MW23GW | | | OLFB59MW27GW | | | OLFB59MW28GW | | |
| SAMPLE DATE: | 07/10/00 | | | 07/10/00 | | | 07/09/00 | | | 07/09/00 | | |
| LABORATORY ID: | F7009-17 | | | F7009-18 | | | F7009-14 | | | F7009-11 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| INORGANICS | | | | | | | | | | | | |
| LEAD | 31.6 | | | 189 | | | 809 | | | 566 | | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59MW34GW | | | OLFB59MW47GW | | | OLFB59MW52GW | | | OLFB59MW60GW | | |
| SAMPLE DATE: | 07/10/00 | | | 07/09/00 | | | 07/10/00 | | | 07/09/00 | | |
| LABORATORY ID: | F7009-16 | | | F7009-12 | | | F7009-28 | | | F7009-15 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| INORGANICS | | | | | | | | | | | | |
| LEAD | 1.9 | B | | 46.8 | | | 1.6 | U | | 1.6 | U | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59MW63GW | | | OLFB59MW67GW | | | OLFB59MW68GW | | | OLFB59MW69GW | | |
| SAMPLE DATE: | 07/09/00 | | | 07/10/00 | | | 07/10/00 | | | 07/10/00 | | |
| LABORATORY ID: | F7009-13 | | | F7009-26 | | | F7009-27 | | | F7009-19 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| INORGANICS | | | | | | | | | | | | |
| LEAD | 1.6 | U | | 9.6 | | | 12.7 | | | 1.6 | U | |

# APPENDIX B

## Results as Reported by the Laboratory

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW69GW | | |
| Lab Sample ID: | F7009-19 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method |
|---|---|---|---|---|---|---|---|
| Lead | 1.6 U | 5.0 | ug/l | 1 | 07/17/00 | 07/20/00 JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW68GW | | |
| **Lab Sample ID:** | F7009-27 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 12.7 | 5.0 | ug/l | 1 | 07/13/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW67GW | | |
| Lab Sample ID: | F7009-26 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 9.6 | 5.0 | ug/l | 1 | 07/13/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW63GW | | |
| Lab Sample ID: | F7009-13 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 1.6 U | 5.0 | ug/l | 1 | 07/17/00 | 07/30/00 | SJL | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW60GW | | |
| Lab Sample ID: | F7009-15 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 1.6 U | 5.0 | ug/l | 1 | 07/17/00 | 07/30/00 | SJL | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW52GW | | |
| Lab Sample ID: | F7009-28 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 1.6 U | 5.0 | ug/l | 1 | 07/13/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW47GW | | |
| Lab Sample ID: | F7009-12 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 46.8 | 5.0 | ug/l | 1 | 07/14/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW34GW | | |
| Lab Sample ID: | F7009-16 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 1.9 B | 5.0 | ug/l | 1 | 07/17/00 | 07/20/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW28GW | | |
| Lab Sample ID: | F7009-11 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 566 | 5.0 | ug/l | 1 | 07/14/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW27GW | | |
| Lab Sample ID: | F7009-14 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 809 | 5.0 | ug/l | 1 | 07/17/00 | 07/30/00 | SJL | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW23GW | | |
| Lab Sample ID: | F7009-18 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 189 | 5.0 | ug/l | 1 | 07/17/00 | 07/20/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW22GW | | |
| Lab Sample ID: | F7009-17 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 31.6 | 5.0 | ug/l | 1 | 07/17/00 | 07/20/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW21GW | | |
| Lab Sample ID: | F7009-22 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 1.6 U | 5.0 | ug/l | 1 | 07/13/00 | 07/14/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW20GW | | |
| Lab Sample ID: | F7009-21 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 1.8 B | 5.0 | ug/l | 1 | 07/13/00 | 07/14/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW04GW | | |
| Lab Sample ID: | F7009-25 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 136 | 5.0 | ug/l | 1 | 07/13/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW02GW | | |
| Lab Sample ID: | F7009-23 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 97.8 | 5.0 | ug/l | 1 | 07/13/00 | 07/14/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW01GW | | |
| **Lab Sample ID:** | F7009-24 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 99.1 | 5.0 | ug/l | 1 | 07/13/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59D002 | | |
| Lab Sample ID: | F7009-30 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method |
|---|---|---|---|---|---|---|---|
| Lead | 177 | 5.0 | ug/l | 1 | 07/13/00 | 07/17/00 JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59D001 | | |
| Lab Sample ID: | F7009-29 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 1.6 U | 5.0 | ug/l | 1 | 07/13/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59001 | | |
| Lab Sample ID: | F7009-34 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 1.6 U | 5.0 | ug/l | 1 | 07/13/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

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

**TO:** Mr. Gerald Walker **DATE:** August 24, 2000

**FROM:** William Howard Engle **CC:** File

**SUBJECT:** Organic Data Validation – VOA, EDB, PAH, and TRPH
CTO112 – NAS Pensacola
SDG F7009

**SAMPLES:** 41/Aqueous

| | | |
|---|---|---|
| 16TB070900 | 20TB070800 | 59TB070900 |
| OLFB16001 * | OLFB16MW03GW * | OLFB16MW06GW * |
| OLFB16MW08GW * | OLFB16MW09GW * | OLFB20001 * |
| OLFB20D002 * | OLFB20MW02GW * | OLFB20MW11GW * |
| OLFB20MW12GW * | OLFB20MW17GW * | OLFB20MW18GW * |
| OLFB20MW19GW * | OLFB20MW24GW * | OLFB20MW25GW * |
| OLFB20MW26GW * | OLFB20MW30GW * | OLFB20MW34GW * |
| OLFB69001 | OLFB59D001 | OLFB59D002 |
| OLFB59MW01GW | OLFB59MW02GW | OLFB59MW04GW |
| OLFB59MW21GW | OLFB59MW22GW | OLFB59MW23GW |
| OLFB59MW27GW | OLFB59MW28GW | OLFB59MW34GW |
| OLFB59MW47GW | OLFB59MW52GW | OLFB59MW60GW |
| OLFB59MW63GW | OLFB59MW67GW | OLFB59MW68GW |
| OLFB59MW69GW | | |

**OVERVIEW**

The sample set for CTO112, SDG F7009; Naval Air Station Pensacola, Pensacola, Florida consists of thirty-eight (38) aqueous environmental samples, three (3) trip blanks. Three duplicate pairs; OLFB29MW25GW / OLFB20D002, OLFB59MW60GW / OLFB59D001, and OLFB59MW23GW / OLFB59D002, were included in this SDG. The environmental samples, with the exception of samples 16TB070900, 20TB070800, and 59TB070900, were analyzed for Benzene, Toluene, Ethylbenzene, Total Xylenes, and Methyl-tert-butyl ether (MTBE) (VOCs), and Total Residual Petroleum Hydrocarbons (TRPHs). Samples 16TB070900, 20TB070800, and 59TB070900 were analyzed for VOCs only. The samples with a "*" were also analyzed for Polycylic Aromatic Hydrocarbons (PAHs). Sample OLFB59MW23GW was also analyzed for ethylene dibromide (EDB).

The samples were collected by Tetra Tech NUS on July 8-10, 2000 and analyzed by Accutest Southeast Laboratory. 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 8021B (VOCs), EPA method 504.1 (EDB), SW-846 method 8310 (PAHs), and FL-PRO (TRPHs) analytical and reporting protocols.

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. Supporting documentation is presented in Appendix C. Qualified analytical results are presented in Appendix A. The original laboratory data is contained in Appendix B.

Volatile Fraction

All quality control criteria were met for this fraction.

EDB

All quality control criteria were met for this fraction.

Polycylcic Aromatic Hydrocarbon Fraction

All quality control criteria were met for this fraction.

Total Residual Petroleum Fraction

All quality control criteria were met for this fraction.

Field Duplicate Summary

| Analyte | OLFB20MW25GW (ug/L) | OLFB20D002 (ug/L) | %D |
|---|---|---|---|
| Ethylbenzene | 4.2 | 4.3 | 2.3 |
| Total xylenes | 17.5 | 17.2 | 1.7 |
| 1-methylnaphthalene | 94.6 | 86.1 | 9.4 |
| 2-methylnaphthalene | 127 | 115 | 9.9 |
| naphthalene | 42.9 | 40.5 | 5.8 |
| TRPH | 2.88 mg/L | 2.32 mg/L | 22 |
| | OLFB59MW60GW (ug/L) | OLFB59D001 (ug/L) | %D |
| | No positives reported | No positives reported | |
| | OLFB59MW23GW (ug/L) | OLFB59D002 (ug/L) | %D |
| Benzene | 225 | 214 | 5.0 |
| Ethylbenezene | 173 | 177 | 2.2 |
| MTBE | 10U | 9.2J | N/A |
| Toluene | 1750 | 1590 | 4.8 |
| Total xylenes | 1040 | 1030 | 1.0 |
| TRPH | 4.24 mg/L | 3.34 mg/L | 24 |

Notes

Samples –24 and –14 were reported with estimated "E" results for toluene due to the exceedence of the linear calibration range for the instrument. Sample –24 was analyzed twice, once at a dilution, but the result was still above the linear calibration range. No uncompromised vial was available so the lab did not perform another dilution. Sample –14 was analyzed twice at two dilutions, but the results did not match. Another dilution was not performed because no uncompromised vial was available. The higher concentration was reported. The lab has been asked to analyzed compromised vials when additional dilutions are needed to obtain results within the linear calibration range.

Executive Summary

**Laboratory performance:** All quality control criteria were met for this fraction.

**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)."

William Howard Engle

Project Chemist
Tetra Tech NUS, Inc.

Joseph A. Samchuck

Data Validation Quality Assurance Officer
Tetra Tech NUS, Inc.

Attachments:
1. Appendix A - Qualified Analytical Results
2. Appendix B – Results as reported by the laboratory
3. Appendix C – Supporting Documentation

**Qualifier Codes:**

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration (i.e., % RSDs, %Ds, ICVs, CCVs, RPDs, RRFs, etc.) Noncompliance
D = MS/MSD Noncompliance
E = LCS/LCSD Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS - GFAA MSA's r < 0.995
K = ICP Interference - Include ICSAB % R's
L = Instrument Calibration Range Exceedance
M = Sample Preservation
N = Internal Standard Noncompliance
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = Pest/PCB D% between columns for positive results
V = Non-linear calibrations, tuning r < 0.995 (correlation coefficient)
W = EMPC result
X = Signal to noise response drop
Y = % Solid content is less than 30%

**DATA QUALIFIER DEFINITIONS:**

U - Value is a nondetected result as reported by the laboratory and should not be considered present.

J - Positive result is estimated as a result of a value below the CRQL or a technical noncompliance.

UJ - Nondetected result is considered to be estimated as a result of technical noncompliances.

# APPENDIX A

## Qualified Analytical Results

**F7009**

HOLDING TIME

08/21/00

| 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 | OLFB59001 | F7009-34 | NORMAL | F7009 | M | 07/09/00 | 07/13/00 | 07/17/00 | 4 | 4 | 8 |
| UG/L | OLFB59D001 | F7009-29 | NORMAL | F7009 | M | 07/09/00 | 07/13/00 | 07/17/00 | 4 | 4 | 8 |
| UG/L | OLFB59D002 | F7009-30 | NORMAL | F7009 | M | 07/10/00 | 07/13/00 | 07/17/00 | 3 | 4 | 7 |
| UG/L | OLFB59MW01GW | F7009-24 | NORMAL | F7009 | M | 07/10/00 | 07/13/00 | 07/17/00 | 3 | 4 | 7 |
| UG/L | OLFB59MW02GW | F7009-23 | NORMAL | F7009 | M | 07/10/00 | 07/13/00 | 07/14/00 | 3 | 1 | 4 |
| UG/L | OLFB59MW04GW | F7009-25 | NORMAL | F7009 | M | 07/10/00 | 07/13/00 | 07/17/00 | 3 | 4 | 7 |
| UG/L | OLFB59MW20GW | F7009-21 | NORMAL | F7009 | M | 07/10/00 | 07/13/00 | 07/14/00 | 3 | 1 | 4 |
| UG/L | OLFB59MW21GW | F7009-22 | NORMAL | F7009 | M | 07/10/00 | 07/13/00 | 07/14/00 | 3 | 1 | 4 |
| UG/L | OLFB59MW22GW | F7009-17 | NORMAL | F7009 | M | 07/10/00 | 07/17/00 | 07/20/00 | 7 | 3 | 10 |
| UG/L | OLFB59MW23GW | F7009-18 | NORMAL | F7009 | M | 07/10/00 | 07/17/00 | 07/20/00 | 7 | 3 | 10 |
| UG/L | OLFB59MW27GW | F7009-14 | NORMAL | F7009 | M | 07/09/00 | 07/17/00 | 07/30/00 | 8 | 13 | 21 |
| UG/L | OLFB59MW28GW | F7009-11 | NORMAL | F7009 | M | 07/09/00 | 07/14/00 | 07/17/00 | 5 | 3 | 8 |
| UG/L | OLFB59MW34GW | F7009-16 | NORMAL | F7009 | M | 07/10/00 | 07/17/00 | 07/20/00 | 7 | 3 | 10 |
| UG/L | OLFB59MW47GW | F7009-12 | NORMAL | F7009 | M | 07/09/00 | 07/14/00 | 07/17/00 | 5 | 3 | 8 |
| UG/L | OLFB59MW52GW | F7009-28 | NORMAL | F7009 | M | 07/10/00 | 07/13/00 | 07/17/00 | 3 | 4 | 7 |
| UG/L | OLFB59MW60GW | F7009-15 | NORMAL | F7009 | M | 07/09/00 | 07/17/00 | 07/30/00 | 8 | 13 | 21 |
| UG/L | OLFB59MW63GW | F7009-13 | NORMAL | F7009 | M | 07/09/00 | 07/17/00 | 07/30/00 | 8 | 13 | 21 |
| UG/L | OLFB59MW67GW | F7009-26 | NORMAL | F7009 | M | 07/10/00 | 07/13/00 | 07/17/00 | 3 | 4 | 7 |
| UG/L | OLFB59MW68GW | F7009-27 | NORMAL | F7009 | M | 07/10/00 | 07/13/00 | 07/17/00 | 3 | 4 | 7 |
| UG/L | OLFB59MW69GW | F7009-19 | NORMAL | F7009 | M | 07/10/00 | 07/17/00 | 07/20/00 | 7 | 3 | 10 |
| UG/L | 16TB070900 | F7009-42 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/23/00 | 0 | 0 | 14 |
| UG/L | 20TB070800 | F7009-36 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | 59TB070900 | F7009-31 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB16001 | F7009-32 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |

| 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 | OLFB16MW03GW | F7009-40 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB16MW06GW | F7009-41 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB16MW08GW | F7009-39 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB16MW09GW | F7009-38 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB20001 | F7009-33 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB20D002 | F7009-35 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB20MW02GW | F7009-4 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB20MW11GW | F7009-7 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB20MW12GW | F7009-1 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/21/00 | 0 | 0 | 13 |
| UG/L | OLFB20MW17GW | F7009-3 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/21/00 | 0 | 0 | 13 |
| UG/L | OLFB20MW18GW | F7009-5 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB20MW19GW | F7009-37 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB20MW24GW | F7009-6 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB20MW25GW | F7009-9 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB20MW26GW | F7009-8 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB20MW30GW | F7009-10 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB20MW34GW | F7009-2 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/21/00 | 0 | 0 | 13 |
| UG/L | OLFB59001 | F7009-34 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB59D001 | F7009-29 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB59D002 | F7009-30 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW01GW | F7009-24 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW02GW | F7009-23 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW04GW | F7009-25 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW20GW | F7009-21 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW21GW | F7009-22 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW22GW | F7009-17 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW23GW | F7009-18 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/21/00 | 0 | 0 | 11 |

| 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 | OLFB59MW27GW | F7009-14 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW28GW | F7009-11 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW34GW | F7009-16 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW47GW | F7009-12 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW52GW | F7009-28 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW60GW | F7009-15 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW63GW | F7009-13 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW67GW | F7009-26 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/24/00 | 0 | 0 | 14 |
| UG/L | OLFB59MW68GW | F7009-27 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW69GW | F7009-19 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB16001 | F7009-32 | NORMAL | F7009 | PAH | 07/09/00 | 07/13/00 | 07/22/00 | 4 | 9 | 13 |
| UG/L | OLFB16MW03GW | F7009-40 | NORMAL | F7009 | PAH | 07/09/00 | 07/13/00 | 07/23/00 | 4 | 10 | 14 |
| UG/L | OLFB16MW06GW | F7009-41 | NORMAL | F7009 | PAH | 07/09/00 | 07/13/00 | 07/23/00 | 4 | 10 | 14 |
| UG/L | OLFB16MW08GW | F7009-39 | NORMAL | F7009 | PAH | 07/09/00 | 07/13/00 | 07/23/00 | 4 | 10 | 14 |
| UG/L | OLFB16MW09GW | F7009-38 | NORMAL | F7009 | PAH | 07/09/00 | 07/13/00 | 07/23/00 | 4 | 10 | 14 |
| UG/L | OLFB20001 | F7009-33 | NORMAL | F7009 | PAH | 07/09/00 | 07/13/00 | 07/22/00 | 4 | 9 | 13 |
| UG/L | OLFB20D002 | F7009-35 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/22/00 | 5 | 9 | 14 |
| UG/L | OLFB20MW02GW | F7009-4 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/24/00 | 5 | 11 | 16 |
| UG/L | OLFB20MW11GW | F7009-7 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/22/00 | 5 | 9 | 14 |
| UG/L | OLFB20MW12GW | F7009-1 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/24/00 | 5 | 11 | 16 |
| UG/L | OLFB20MW17GW | F7009-3 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/24/00 | 5 | 11 | 16 |
| UG/L | OLFB20MW18GW | F7009-5 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/24/00 | 5 | 11 | 16 |
| UG/L | OLFB20MW19GW | F7009-37 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/22/00 | 5 | 9 | 14 |
| UG/L | OLFB20MW24GW | F7009-6 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/24/00 | 5 | 11 | 16 |
| UG/L | OLFB20MW25GW | F7009-9 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/24/00 | 5 | 11 | 16 |
| UG/L | OLFB20MW26GW | F7009-8 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/22/00 | 5 | 9 | 14 |
| UG/L | OLFB20MW30GW | F7009-10 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/22/00 | 5 | 9 | 14 |

| 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 | OLFB20MW34GW | F7009-2 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/22/00 | 5 | 9 | 14 |
| MG/L | OLFB16001 | F7009-32 | NORMAL | F7009 | TPH | 07/09/00 | 07/14/00 | 07/20/00 | 5 | 6 | 11 |
| MG/L | OLFB16MW03GW | F7009-40 | NORMAL | F7009 | TPH | 07/09/00 | 07/14/00 | 07/21/00 | 5 | 7 | 12 |
| MG/L | OLFB16MW06GW | F7009-41 | NORMAL | F7009 | TPH | 07/09/00 | 07/14/00 | 07/21/00 | 5 | 7 | 12 |
| MG/L | OLFB16MW08GW | F7009-39 | NORMAL | F7009 | TPH | 07/09/00 | 07/14/00 | 07/21/00 | 5 | 7 | 12 |
| MG/L | OLFB16MW09GW | F7009-38 | NORMAL | F7009 | TPH | 07/09/00 | 07/14/00 | 07/21/00 | 5 | 7 | 12 |
| MG/L | OLFB20001 | F7009-33 | NORMAL | F7009 | TPH | 07/09/00 | 07/14/00 | 07/20/00 | 5 | 6 | 11 |
| MG/L | OLFB20D002 | F7009-35 | NORMAL | F7009 | TPH | 07/08/00 | 07/14/00 | 07/20/00 | 6 | 6 | 12 |
| MG/L | OLFB20MW02GW | F7009-4 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/17/00 | 5 | 4 | 9 |
| MG/L | OLFB20MW11GW | F7009-7 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/14/00 | 5 | 1 | 6 |
| MG/L | OLFB20MW12GW | F7009-1 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/14/00 | 5 | 1 | 6 |
| MG/L | OLFB20MW17GW | F7009-3 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/14/00 | 5 | 1 | 6 |
| MG/L | OLFB20MW18GW | F7009-5 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/17/00 | 5 | 4 | 9 |
| MG/L | OLFB20MW19GW | F7009-37 | NORMAL | F7009 | TPH | 07/08/00 | 07/14/00 | 07/20/00 | 6 | 6 | 12 |
| MG/L | OLFB20MW24GW | F7009-6 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/14/00 | 5 | 1 | 6 |
| MG/L | OLFB20MW25GW | F7009-9 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/17/00 | 5 | 4 | 9 |
| MG/L | OLFB20MW26GW | F7009-8 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/17/00 | 5 | 4 | 9 |
| MG/L | OLFB20MW30GW | F7009-10 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/17/00 | 5 | 4 | 9 |
| MG/L | OLFB20MW34GW | F7009-2 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/14/00 | 5 | 1 | 6 |
| MG/L | OLFB59001 | F7009-34 | NORMAL | F7009 | TPH | 07/09/00 | 07/14/00 | 07/21/00 | 5 | 7 | 12 |
| MG/L | OLFB59D001 | F7009-29 | NORMAL | F7009 | TPH | 07/09/00 | 07/14/00 | 07/20/00 | 5 | 6 | 11 |
| MG/L | OLFB59D002 | F7009-30 | NORMAL | F7009 | TPH | 07/10/00 | 07/14/00 | 07/21/00 | 4 | 7 | 11 |
| MG/L | OLFB59MW01GW | F7009-24 | NORMAL | F7009 | TPH | 07/10/00 | 07/14/00 | 07/20/00 | 4 | 6 | 10 |
| MG/L | OLFB59MW02GW | F7009-23 | NORMAL | F7009 | TPH | 07/10/00 | 07/14/00 | 07/20/00 | 4 | 6 | 10 |
| MG/L | OLFB59MW04GW | F7009-25 | NORMAL | F7009 | TPH | 07/10/00 | 07/14/00 | 07/21/00 | 4 | 7 | 11 |
| MG/L | OLFB59MW20GW | F7009-21 | NORMAL | F7009 | TPH | 07/10/00 | 07/13/00 | 07/17/00 | 3 | 4 | 7 |
| MG/L | OLFB59MW21GW | F7009-22 | NORMAL | F7009 | TPH | 07/10/00 | 07/14/00 | 07/20/00 | 4 | 6 | 10 |

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MG/L | OLFB59MW22GW | F7009-17 | NORMAL | F7009 | TPH | 07/10/00 | 07/13/00 | 07/17/00 | 3 | 4 | 7 |
| MG/L | OLFB59MW23GW | F7009-18 | NORMAL | F7009 | TPH | 07/10/00 | 07/13/00 | 07/15/00 | 3 | 2 | 5 |
| MG/L | OLFB59MW27GW | F7009-14 | NORMAL | F7009 | TPH | 07/09/00 | 07/13/00 | 07/14/00 | 4 | 1 | 5 |
| MG/L | OLFB59MW28GW | F7009-11 | NORMAL | F7009 | TPH | 07/09/00 | 07/13/00 | 07/14/00 | 4 | 1 | 5 |
| MG/L | OLFB59MW34GW | F7009-16 | NORMAL | F7009 | TPH | 07/10/00 | 07/13/00 | 07/15/00 | 3 | 2 | 5 |
| MG/L | OLFB59MW47GW | F7009-12 | NORMAL | F7009 | TPH | 07/09/00 | 07/13/00 | 07/17/00 | 4 | 4 | 8 |
| MG/L | OLFB59MW52GW | F7009-28 | NORMAL | F7009 | TPH | 07/10/00 | 07/14/00 | 07/20/00 | 4 | 6 | 10 |
| MG/L | OLFB59MW60GW | F7009-15 | NORMAL | F7009 | TPH | 07/09/00 | 07/13/00 | 07/15/00 | 4 | 2 | 6 |
| MG/L | OLFB59MW63GW | F7009-13 | NORMAL | F7009 | TPH | 07/09/00 | 07/13/00 | 07/14/00 | 4 | 1 | 5 |
| MG/L | OLFB59MW67GW | F7009-26 | NORMAL | F7009 | TPH | 07/10/00 | 07/14/00 | 07/20/00 | 4 | 6 | 10 |
| MG/L | OLFB59MW68GW | F7009-27 | NORMAL | F7009 | TPH | 07/10/00 | 07/14/00 | 07/20/00 | 4 | 6 | 10 |
| MG/L | OLFB59MW69GW | F7009-19 | NORMAL | F7009 | TPH | 07/10/00 | 07/13/00 | 07/15/00 | 3 | 2 | 5 |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | 16TB070900 | | | 20TB070800 | | | 59TB070900 | | | OLFB16001 | | |
| SAMPLE DATE: | 07/09/00 | | | 07/08/00 | | | 07/08/00 | | | 07/09/00 | | |
| LABORATORY ID: | F7009-42 | | | F7009-36 | | | F7009-31 | | | F7009-32 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **VOLATILES** | | | | | | | | | | | | |
| BENZENE | 1 | U | | 1 | U | | 1 | U | | 1 | U | |
| ETHYLBENZENE | 1 | U | | 1 | U | | 1 | U | | 1 | U | |
| METHYL TERT-BUTYL ETHER | 1 | U | | 1 | U | | 1 | U | | 1 | U | |
| TOLUENE | 1 | U | | 1 | U | | 1 | U | | 1 | U | |
| XYLENES, TOTAL | 3 | U | | 3 | U | | 3 | U | | 3 | U | |

# CTO112-NAS PENSACOLA
**WATER DATA**
**Accutest, NJ**
**SDG: F7009**



| SAMPLE NUMBER: | OLFB20MW34GW | | | OLFB59001 | | | OLFB59D001 | | | OLFB59D002 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 07/08/00 | | | 07/09/00 | | | 07/09/00 | | | 07/10/00 | | |
| LABORATORY ID: | F7009-2 | | | F7009-34 | | | F7009-29 | | | F7009-30 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **VOLATILES** | | | | | | | | | | | | |
| BENZENE | 1 | U | | 1 | U | | 1 | U | | 214 | | |
| ETHYLBENZENE | 1 | U | | 1 | U | | 1 | U | | 177 | | |
| METHYL TERT-BUTYL ETHER | 1 | U | | 1 | U | | 1 | U | | 9.2 | J | P |
| TOLUENE | 1 | U | | 1 | U | | 1 | U | | 1590 | | |
| XYLENES, TOTAL | 3 | U | | 3 | U | | 3 | U | | 1030 | | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| SAMPLE NUMBER: | OLFB59MW01GW | | | OLFB59MW02GW | | | OLFB59MW04GW | | | OLFB59MW20GW | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 07/10/00 | | | 07/10/00 | | | 07/10/00 | | | 07/10/00 | | |
| LABORATORY ID: | F7009-24 | | | F7009-23 | | | F7009-25 | | | F7009-21 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **VOLATILES** | | | | | | | | | | | | |
| BENZENE | 547 | | | 1 | U | | 54.8 | | | 0.61 | J | P |
| ETHYLBENZENE | 195 | | | 44.8 | | | 52.9 | | | 1.2 | | |
| METHYL TERT-BUTYL ETHER | 12.2 | | | 1 | U | | 24.1 | | | 1 | U | |
| TOLUENE | 1580 | E | | 1 | U | | 296 | | | 4.6 | | |
| XYLENES, TOTAL | 909 | | | 83 | | | 262 | | | 21.8 | | |

# CTO112-NAS PENSACOLA
**WATER DATA**
**Accutest, NJ**
**SDG: F7009**



| SAMPLE NUMBER: | OLFB59MW21GW | | | OLFB59MW22GW | | | OLFB59MW23GW | | | OLFB59MW27GW | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 07/10/00 | | | 07/10/00 | | | 07/10/00 | | | 07/09/00 | | |
| LABORATORY ID: | F7009-22 | | | F7009-17 | | | F7009-18 | | | F7009-14 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **VOLATILES** | | | | | | | | | | | | |
| 1,2-DIBROMOETHANE | | | | | | | 0.02 | U | | | | |
| BENZENE | 1 | U | | 5 | U | | 225 | | | 483 | | |
| ETHYLBENZENE | 1 | | | 162 | | | 173 | | | 223 | | |
| METHYL TERT-BUTYL ETHER | 1 | U | | 38.6 | | | 10 | U | | 10 | U | |
| TOLUENE | 0.94 | J | P | 5.3 | | | 1750 | | | 2000 | E | |
| XYLENES, TOTAL | 40.3 | | | 512 | | | 1040 | | | 1680 | | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| SAMPLE NUMBER: | OLFB59MW28GW | | | OLFB59MW34GW | | | OLFB59MW47GW | | | OLFB59MW52GW | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 07/09/00 | | | 07/10/00 | | | 07/09/00 | | | 07/10/00 | | |
| LABORATORY ID: | F7009-11 | | | F7009-16 | | | F7009-12 | | | F7009-28 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **VOLATILES** | | | | | | | | | | | | |
| BENZENE | 10 | U | | 1 | U | | 301 | | | 1 | U | |
| ETHYLBENZENE | 238 | | | 1 | U | | 574 | | | 1 | U | |
| METHYL TERT-BUTYL ETHER | 17.5 | | | 1 | U | | 109 | | | 1 | U | |
| TOLUENE | 815 | | | 1 | U | | 5870 | | | 1 | U | |
| XYLENES, TOTAL | 1550 | | | 3 | U | | 3620 | | | 3 | U | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| SAMPLE NUMBER: | OLFB59MW60GW | | | OLFB59MW63GW | | | OLFB59MW67GW | | | OLFB59MW68GW | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 07/09/00 | | | 07/09/00 | | | 07/10/00 | | | 07/10/00 | | |
| LABORATORY ID: | F7009-15 | | | F7009-13 | | | F7009-26 | | | F7009-27 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **VOLATILES** | | | | | | | | | | | | |
| BENZENE | 1 | U | | 1 | U | | 3.1 | | | 1 | U | |
| ETHYLBENZENE | 1 | U | | 1 | U | | 42.6 | | | 43.2 | | |
| METHYL TERT-BUTYL ETHER | 1 | U | | 1 | U | | 7.7 | | | 20.6 | | |
| TOLUENE | 1 | U | | 1 | U | | 4.8 | | | 1 | U | |
| XYLENES, TOTAL | 3 | U | | 3 | U | | 140 | | | 116 | | |

# CTO112-NAS PENSACOLA
**WATER DATA**
**Accutest, NJ**
**SDG: F7009**



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59MW69GW | | | | | | | | | | | |
| SAMPLE DATE: | 07/10/00 | | | / / | | | / / | | | / / | | |
| LABORATORY ID: | F7009-19 | | | | | | | | | | | |
| QC_TYPE: | NORMAL | | | | | | | | | | | |
| % SOLIDS: | 0.0 % | | | 100.0 % | | | 100.0 % | | | 100.0 % | | |
| UNITS: | UG/L | | | | | | | | | | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **VOLATILES** | | | | | | | | | | | | |
| BENZENE | 1 | U | | | | | | | | | | |
| ETHYLBENZENE | 1 | U | | | | | | | | | | |
| METHYL TERT-BUTYL ETHER | 1 | U | | | | | | | | | | |
| TOLUENE | 1 | U | | | | | | | | | | |
| XYLENES, TOTAL | 3 | U | | | | | | | | | | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB20MW30GW | | | OLFB20MW34GW | | | OLFB59001 | | | OLFB59D001 | | |
| SAMPLE DATE: | 07/08/00 | | | 07/08/00 | | | 07/09/00 | | | 07/09/00 | | |
| LABORATORY ID: | F7009-10 | | | F7009-2 | | | F7009-34 | | | F7009-29 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | MG/L | | | MG/L | | | MG/L | | | MG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **PETROLEUM HYDROCARBONS** | | | | | | | | | | | | |
| TOTAL PETROLEUM HYDROCARBONS | 0.51 | | | 0.28 | U | | 0.25 | U | | 0.28 | U | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59D002 | | | OLFB59MW01GW | | | OLFB59MW02GW | | | OLFB59MW04GW | | |
| SAMPLE DATE: | 07/10/00 | | | 07/10/00 | | | 07/10/00 | | | 07/10/00 | | |
| LABORATORY ID: | F7009-30 | | | F7009-24 | | | F7009-23 | | | F7009-25 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | MG/L | | | MG/L | | | MG/L | | | MG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **PETROLEUM HYDROCARBONS** | | | | | | | | | | | | |
| TOTAL PETROLEUM HYDROCARBONS | 3.34 | | | 1.75 | | | 1.21 | | | 3.21 | | |

# CTO112-NAS PENSACOLA
**WATER DATA**
**Accutest, NJ**
**SDG: F7009**



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59MW20GW | | | OLFB59MW21GW | | | OLFB59MW22GW | | | OLFB59MW23GW | | |
| SAMPLE DATE: | 07/10/00 | | | 07/10/00 | | | 07/10/00 | | | 07/10/00 | | |
| LABORATORY ID: | F7009-21 | | | F7009-22 | | | F7009-17 | | | F7009-18 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | MG/L | | | MG/L | | | MG/L | | | MG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **PETROLEUM HYDROCARBONS** | | | | | | | | | | | | |
| TOTAL PETROLEUM HYDROCARBONS | 0.204 | J | P | 0.25 | U | | 1.18 | | | 4.24 | | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59MW27GW | | | OLFB59MW28GW | | | OLFB59MW34GW | | | OLFB59MW47GW | | |
| SAMPLE DATE: | 07/09/00 | | | 07/09/00 | | | 07/10/00 | | | 07/09/00 | | |
| LABORATORY ID: | F7009-14 | | | F7009-11 | | | F7009-16 | | | F7009-12 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | MG/L | | | MG/L | | | MG/L | | | MG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **PETROLEUM HYDROCARBONS** | | | | | | | | | | | | |
| TOTAL PETROLEUM HYDROCARBONS | 7.07 | | | 5.43 | | | 0.28 | U | | 1.67 | | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| SAMPLE NUMBER: | OLFB59MW52GW | | | OLFB59MW60GW | | | OLFB59MW63GW | | | OLFB59MW67GW | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 07/10/00 | | | 07/09/00 | | | 07/09/00 | | | 07/10/00 | | |
| LABORATORY ID: | F7009-28 | | | F7009-15 | | | F7009-13 | | | F7009-26 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | MG/L | | | MG/L | | | MG/L | | | MG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **PETROLEUM HYDROCARBONS** | | | | | | | | | | | | |
| TOTAL PETROLEUM HYDROCARBONS | 0.28 | U | | 0.28 | U | | 0.28 | U | | 0.945 | | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59MW68GW | | | OLFB59MW69GW | | | | | | | | |
| SAMPLE DATE: | 07/10/00 | | | 07/10/00 | | | / / | | | / / | | |
| LABORATORY ID: | F7009-27 | | | F7009-19 | | | | | | | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | | | | | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 100.0 % | | | 100.0 % | | |
| UNITS: | MG/L | | | MG/L | | | | | | | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **PETROLEUM HYDROCARBONS** | | | | | | | | | | | | |
| TOTAL PETROLEUM HYDROCARBONS | 0.361 | | | 0.28 | U | | | | | | | |

# APPENDIX B

## Results as Reported by the Laboratory

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW28GW | | |
| Lab Sample ID: | F7009-11 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method |
|---|---|---|---|---|---|---|---|
| Lead | 566 | 5.0 | ug/l | 1 | 07/14/00 | 07/17/00 JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW27GW | | |
| Lab Sample ID: | F7009-14 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 809 | 5.0 | ug/l | 1 | 07/17/00 | 07/30/00 | SJL | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW23GW | | |
| Lab Sample ID: | F7009-18 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method |
|---|---|---|---|---|---|---|---|
| Lead | 189 | 5.0 | ug/l | 1 | 07/17/00 | 07/20/00 JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW22GW | | |
| Lab Sample ID: | F7009-17 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 31.6 | 5.0 | ug/l | 1 | 07/17/00 | 07/20/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW21GW | | |
| Lab Sample ID: | F7009-22 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 1.6 U | 5.0 | ug/l | 1 | 07/13/00 | 07/14/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW20GW | | |
| Lab Sample ID: | F7009-21 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 1.8 B | 5.0 | ug/l | 1 | 07/13/00 | 07/14/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW04GW | | |
| **Lab Sample ID:** | F7009-25 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 136 | 5.0 | ug/l | 1 | 07/13/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW02GW | | |
| **Lab Sample ID:** | F7009-23 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 97.8 | 5.0 | ug/l | 1 | 07/13/00 | 07/14/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW01GW | | |
| Lab Sample ID: | F7009-24 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 99.1 | 5.0 | ug/l | 1 | 07/13/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59D002 | | |
| Lab Sample ID: | F7009-30 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 177 | 5.0 | ug/l | 1 | 07/13/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59D001 | | |
| Lab Sample ID: | F7009-29 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 1.6 U | 5.0 | ug/l | 1 | 07/13/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59001 | | |
| Lab Sample ID: | F7009-34 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| | | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 1.6 U | 5.0 | ug/l | 1 | 07/13/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

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

**TO:** Mr. Gerald Walker **DATE:** August 24, 2000

**FROM:** William Howard Engle **CC:** File

**SUBJECT:** Organic Data Validation – VOA, EDB, PAH, and TRPH
CTO112 – NAS Pensacola
SDG F7009

**SAMPLES:** 41/Aqueous

| | | |
|---|---|---|
| 16TB070900 | 20TB070800 | 59TB070900 |
| OLFB16001 * | OLFB16MW03GW * | OLFB16MW06GW * |
| OLFB16MW08GW * | OLFB16MW09GW * | OLFB20001 * |
| OLFB20D002 * | OLFB20MW02GW * | OLFB20MW11GW * |
| OLFB20MW12GW * | OLFB20MW17GW * | OLFB20MW18GW * |
| OLFB20MW19GW * | OLFB20MW24GW * | OLFB20MW25GW * |
| OLFB20MW26GW * | OLFB20MW30GW * | OLFB20MW34GW * |
| OLFB69001 | OLFB59D001 | OLFB59D002 |
| OLFB59MW01GW | OLFB59MW02GW | OLFB59MW04GW |
| OLFB59MW21GW | OLFB59MW22GW | OLFB59MW23GW |
| OLFB59MW27GW | OLFB59MW28GW | OLFB59MW34GW |
| OLFB59MW47GW | OLFB59MW52GW | OLFB59MW60GW |
| OLFB59MW63GW | OLFB59MW67GW | OLFB59MW68GW |
| OLFB59MW69GW | | |

**OVERVIEW**

The sample set for CTO112, SDG F7009; Naval Air Station Pensacola, Pensacola, Florida consists of thirty-eight (38) aqueous environmental samples, three (3) trip blanks. Three duplicate pairs; OLFB29MW25GW / OLFB20D002, OLFB59MW60GW / OLFB59D001, and OLFB59MW23GW / OLFB59D002, were included in this SDG. The environmental samples, with the exception of samples 16TB070900, 20TB070800, and 59TB070900, were analyzed for Benzene, Toluene, Ethylbenzene, Total Xylenes, and Methyl-tert-butyl ether (MTBE) (VOCs), and Total Residual Petroleum Hydrocarbons (TRPHs). Samples 16TB070900, 20TB070800, and 59TB070900 were analyzed for VOCs only. The samples with a "*" were also analyzed for Polycylic Aromatic Hydrocarbons (PAHs). Sample OLFB59MW23GW was also analyzed for ethylene dibromide (EDB).

The samples were collected by Tetra Tech NUS on July 8-10, 2000 and analyzed by Accutest Southeast Laboratory. 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 8021B (VOCs), EPA method 504.1 (EDB), SW-846 method 8310 (PAHs), and FL-PRO (TRPHs) analytical and reporting protocols.

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. Supporting documentation is presented in Appendix C. Qualified analytical results are presented in Appendix A. The original laboratory data is contained in Appendix B.

Volatile Fraction

All quality control criteria were met for this fraction.

EDB

All quality control criteria were met for this fraction.

Polycylcic Aromatic Hydrocarbon Fraction

All quality control criteria were met for this fraction.

Total Residual Petroleum Fraction

All quality control criteria were met for this fraction.

Field Duplicate Summary

| Analyte | OLFB20MW25GW (ug/L) | OLFB20D002 (ug/L) | %D |
|---|---|---|---|
| Ethylbenzene | 4.2 | 4.3 | 2.3 |
| Total xylenes | 17.5 | 17.2 | 1.7 |
| 1-methylnaphthalene | 94.6 | 86.1 | 9.4 |
| 2-methylnaphthalene | 127 | 115 | 9.9 |
| naphthalene | 42.9 | 40.5 | 5.8 |
| TRPH | 2.88 mg/L | 2.32 mg/L | 22 |
| | OLFB59MW60GW (ug/L) | OLFB59D001 (ug/L) | %D |
| | No positives reported | No positives reported | |
| | OLFB59MW23GW (ug/L) | OLFB59D002 (ug/L) | %D |
| Benzene | 225 | 214 | 5.0 |
| Ethylbenezene | 173 | 177 | 2.2 |
| MTBE | 10U | 9.2J | N/A |
| Toluene | 1750 | 1590 | 4.8 |
| Total xylenes | 1040 | 1030 | 1.0 |
| TRPH | 4.24 mg/L | 3.34 mg/L | 24 |

Notes

Samples –24 and –14 were reported with estimated "E" results for toluene due to the exceedence of the linear calibration range for the instrument. Sample –24 was analyzed twice, once at a dilution, but the result was still above the linear calibration range. No uncompromised vial was available so the lab did not perform another dilution. Sample –14 was analyzed twice at two dilutions, but the results did not match. Another dilution was not performed because no uncompromised vial was available. The higher concentration was reported. The lab has been asked to analyzed compromised vials when additional dilutions are needed to obtain results within the linear calibration range.

Executive Summary

**Laboratory performance:** All quality control criteria were met for this fraction.

**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)."

William Howard Engle

Project Chemist
Tetra Tech NUS, Inc.

Joseph A. Samchuck

Data Validation Quality Assurance Officer
Tetra Tech NUS, Inc.

Attachments:
1. Appendix A - Qualified Analytical Results
2. Appendix B – Results as reported by the laboratory
3. Appendix C – Supporting Documentation

**Qualifier Codes:**

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration (i.e., % RSDs, %Ds, ICVs, CCVs, RPDs, RRFs, etc.) Noncompliance
D = MS/MSD Noncompliance
E = LCS/LCSD Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS - GFAA MSA's $r < 0.995$
K = ICP Interference - include ICSAB % R's
L = Instrument Calibration Range Exceedance
M = Sample Preservation
N = Internal Standard Noncompliance
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = Pest/PCB D% between columns for positive results
V = Non-linear calibrations, tuning $r < 0.995$ (correlation coefficient)
W = EMPC result
X = Signal to noise response drop
Y = % Solid content is less than 30%

**DATA QUALIFIER DEFINITIONS:**

U - Value is a nondetected result as reported by the laboratory and should not be considered present.

J - Positive result is estimated as a result of a value below the CRQL or a technical noncompliance.

UJ - Nondetected result is considered to be estimated as a result of technical noncompliances.

# APPENDIX A

## Qualified Analytical Results

**F7009**

HOLDING TIME

08/21/00

| 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 | OLFB59001 | F7009-34 | NORMAL | F7009 | M | 07/09/00 | 07/13/00 | 07/17/00 | 4 | 4 | 8 |
| UG/L | OLFB59D001 | F7009-29 | NORMAL | F7009 | M | 07/09/00 | 07/13/00 | 07/17/00 | 4 | 4 | 8 |
| UG/L | OLFB59D002 | F7009-30 | NORMAL | F7009 | M | 07/10/00 | 07/13/00 | 07/17/00 | 3 | 4 | 7 |
| UG/L | OLFB59MW01GW | F7009-24 | NORMAL | F7009 | M | 07/10/00 | 07/13/00 | 07/17/00 | 3 | 4 | 7 |
| UG/L | OLFB59MW02GW | F7009-23 | NORMAL | F7009 | M | 07/10/00 | 07/13/00 | 07/14/00 | 3 | 1 | 4 |
| UG/L | OLFB59MW04GW | F7009-25 | NORMAL | F7009 | M | 07/10/00 | 07/13/00 | 07/17/00 | 3 | 4 | 7 |
| UG/L | OLFB59MW20GW | F7009-21 | NORMAL | F7009 | M | 07/10/00 | 07/13/00 | 07/14/00 | 3 | 1 | 4 |
| UG/L | OLFB59MW21GW | F7009-22 | NORMAL | F7009 | M | 07/10/00 | 07/13/00 | 07/14/00 | 3 | 1 | 4 |
| UG/L | OLFB59MW22GW | F7009-17 | NORMAL | F7009 | M | 07/10/00 | 07/17/00 | 07/20/00 | 7 | 3 | 10 |
| UG/L | OLFB59MW23GW | F7009-18 | NORMAL | F7009 | M | 07/10/00 | 07/17/00 | 07/20/00 | 7 | 3 | 10 |
| UG/L | OLFB59MW27GW | F7009-14 | NORMAL | F7009 | M | 07/09/00 | 07/17/00 | 07/30/00 | 8 | 13 | 21 |
| UG/L | OLFB59MW28GW | F7009-11 | NORMAL | F7009 | M | 07/09/00 | 07/14/00 | 07/17/00 | 5 | 3 | 8 |
| UG/L | OLFB59MW34GW | F7009-16 | NORMAL | F7009 | M | 07/10/00 | 07/17/00 | 07/20/00 | 7 | 3 | 10 |
| UG/L | OLFB59MW47GW | F7009-12 | NORMAL | F7009 | M | 07/09/00 | 07/14/00 | 07/17/00 | 5 | 3 | 8 |
| UG/L | OLFB59MW52GW | F7009-28 | NORMAL | F7009 | M | 07/10/00 | 07/13/00 | 07/17/00 | 3 | 4 | 7 |
| UG/L | OLFB59MW60GW | F7009-15 | NORMAL | F7009 | M | 07/09/00 | 07/17/00 | 07/30/00 | 8 | 13 | 21 |
| UG/L | OLFB59MW63GW | F7009-13 | NORMAL | F7009 | M | 07/09/00 | 07/17/00 | 07/30/00 | 8 | 13 | 21 |
| UG/L | OLFB59MW67GW | F7009-26 | NORMAL | F7009 | M | 07/10/00 | 07/13/00 | 07/17/00 | 3 | 4 | 7 |
| UG/L | OLFB59MW68GW | F7009-27 | NORMAL | F7009 | M | 07/10/00 | 07/13/00 | 07/17/00 | 3 | 4 | 7 |
| UG/L | OLFB59MW69GW | F7009-19 | NORMAL | F7009 | M | 07/10/00 | 07/17/00 | 07/20/00 | 7 | 3 | 10 |
| UG/L | 16TB070900 | F7009-42 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/23/00 | 0 | 0 | 14 |
| UG/L | 20TB070800 | F7009-36 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | 59TB070900 | F7009-31 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB16001 | F7009-32 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |

| 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 | OLFB16MW03GW | F7009-40 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB16MW06GW | F7009-41 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB16MW08GW | F7009-39 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB16MW09GW | F7009-38 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB20001 | F7009-33 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB20D002 | F7009-35 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB20MW02GW | F7009-4 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB20MW11GW | F7009-7 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB20MW12GW | F7009-1 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/21/00 | 0 | 0 | 13 |
| UG/L | OLFB20MW17GW | F7009-3 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/21/00 | 0 | 0 | 13 |
| UG/L | OLFB20MW18GW | F7009-5 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB20MW19GW | F7009-37 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB20MW24GW | F7009-6 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB20MW25GW | F7009-9 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB20MW26GW | F7009-8 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB20MW30GW | F7009-10 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/22/00 | 0 | 0 | 14 |
| UG/L | OLFB20MW34GW | F7009-2 | NORMAL | F7009 | OV | 07/08/00 | / / | 07/21/00 | 0 | 0 | 13 |
| UG/L | OLFB59001 | F7009-34 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB59D001 | F7009-29 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB59D002 | F7009-30 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW01GW | F7009-24 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW02GW | F7009-23 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW04GW | F7009-25 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW20GW | F7009-21 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW21GW | F7009-22 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW22GW | F7009-17 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW23GW | F7009-18 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/21/00 | 0 | 0 | 11 |

| 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 | OLFB59MW27GW | F7009-14 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW28GW | F7009-11 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW34GW | F7009-16 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW47GW | F7009-12 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW52GW | F7009-28 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW60GW | F7009-15 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW63GW | F7009-13 | NORMAL | F7009 | OV | 07/09/00 | / / | 07/22/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW67GW | F7009-26 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/24/00 | 0 | 0 | 14 |
| UG/L | OLFB59MW68GW | F7009-27 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW69GW | F7009-19 | NORMAL | F7009 | OV | 07/10/00 | / / | 07/23/00 | 0 | 0 | 13 |
| UG/L | OLFB16001 | F7009-32 | NORMAL | F7009 | PAH | 07/09/00 | 07/13/00 | 07/22/00 | 4 | 9 | 13 |
| UG/L | OLFB18MW03GW | F7009-40 | NORMAL | F7009 | PAH | 07/09/00 | 07/13/00 | 07/23/00 | 4 | 10 | 14 |
| UG/L | OLFB16MW06GW | F7009-41 | NORMAL | F7009 | PAH | 07/09/00 | 07/13/00 | 07/23/00 | 4 | 10 | 14 |
| UG/L | OLFB16MW08GW | F7009-39 | NORMAL | F7009 | PAH | 07/09/00 | 07/13/00 | 07/23/00 | 4 | 10 | 14 |
| UG/L | OLFB16MW09GW | F7009-38 | NORMAL | F7009 | PAH | 07/09/00 | 07/13/00 | 07/23/00 | 4 | 10 | 14 |
| UG/L | OLFB20001 | F7009-33 | NORMAL | F7009 | PAH | 07/09/00 | 07/13/00 | 07/22/00 | 4 | 9 | 13 |
| UG/L | OLFB20D002 | F7009-35 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/22/00 | 5 | 9 | 14 |
| UG/L | OLFB20MW02GW | F7009-4 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/24/00 | 5 | 11 | 16 |
| UG/L | OLFB20MW11GW | F7009-7 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/22/00 | 5 | 9 | 14 |
| UG/L | OLFB20MW12GW | F7009-1 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/24/00 | 5 | 11 | 16 |
| UG/L | OLFB20MW17GW | F7009-3 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/24/00 | 5 | 11 | 16 |
| UG/L | OLFB20MW18GW | F7009-5 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/24/00 | 5 | 11 | 16 |
| UG/L | OLFB20MW19GW | F7009-37 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/22/00 | 5 | 9 | 14 |
| UG/L | OLFB20MW24GW | F7009-6 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/24/00 | 5 | 11 | 16 |
| UG/L | OLFB20MW25GW | F7009-9 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/24/00 | 5 | 11 | 16 |
| UG/L | OLFB20MW26GW | F7009-8 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/22/00 | 5 | 9 | 14 |
| UG/L | OLFB20MW30GW | F7009-10 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/22/00 | 5 | 9 | 14 |

| 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 | OLFB20MW34GW | F7009-2 | NORMAL | F7009 | PAH | 07/08/00 | 07/13/00 | 07/22/00 | 5 | 9 | 14 |
| MG/L | OLFB16001 | F7009-32 | NORMAL | F7009 | TPH | 07/09/00 | 07/14/00 | 07/20/00 | 5 | 6 | 11 |
| MG/L | OLFB16MW03GW | F7009-40 | NORMAL | F7009 | TPH | 07/09/00 | 07/14/00 | 07/21/00 | 5 | 7 | 12 |
| MG/L | OLFB16MW06GW | F7009-41 | NORMAL | F7009 | TPH | 07/09/00 | 07/14/00 | 07/21/00 | 5 | 7 | 12 |
| MG/L | OLFB16MW08GW | F7009-39 | NORMAL | F7009 | TPH | 07/09/00 | 07/14/00 | 07/21/00 | 5 | 7 | 12 |
| MG/L | OLFB16MW09GW | F7009-38 | NORMAL | F7009 | TPH | 07/09/00 | 07/14/00 | 07/21/00 | 5 | 7 | 12 |
| MG/L | OLFB20001 | F7009-33 | NORMAL | F7009 | TPH | 07/09/00 | 07/14/00 | 07/20/00 | 5 | 6 | 11 |
| MG/L | OLFB20D002 | F7009-35 | NORMAL | F7009 | TPH | 07/08/00 | 07/14/00 | 07/20/00 | 6 | 6 | 12 |
| MG/L | OLFB20MW02GW | F7009-4 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/17/00 | 5 | 4 | 9 |
| MG/L | OLFB20MW11GW | F7009-7 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/14/00 | 5 | 1 | 6 |
| MG/L | OLFB20MW12GW | F7009-1 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/14/00 | 5 | 1 | 6 |
| MG/L | OLFB20MW17GW | F7009-3 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/14/00 | 5 | 1 | 6 |
| MG/L | OLFB20MW18GW | F7009-5 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/17/00 | 5 | 4 | 9 |
| MG/L | OLFB20MW19GW | F7009-37 | NORMAL | F7009 | TPH | 07/08/00 | 07/14/00 | 07/20/00 | 6 | 6 | 12 |
| MG/L | OLFB20MW24GW | F7009-6 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/14/00 | 5 | 1 | 6 |
| MG/L | OLFB20MW25GW | F7009-9 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/17/00 | 5 | 4 | 9 |
| MG/L | OLFB20MW26GW | F7009-8 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/17/00 | 5 | 4 | 9 |
| MG/L | OLFB20MW30GW | F7009-10 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/17/00 | 5 | 4 | 9 |
| MG/L | OLFB20MW34GW | F7009-2 | NORMAL | F7009 | TPH | 07/08/00 | 07/13/00 | 07/14/00 | 5 | 1 | 6 |
| MG/L | OLFB59001 | F7009-34 | NORMAL | F7009 | TPH | 07/09/00 | 07/14/00 | 07/21/00 | 5 | 7 | 12 |
| MG/L | OLFB59D001 | F7009-29 | NORMAL | F7009 | TPH | 07/09/00 | 07/14/00 | 07/20/00 | 5 | 6 | 11 |
| MG/L | OLFB59D002 | F7009-30 | NORMAL | F7009 | TPH | 07/10/00 | 07/14/00 | 07/21/00 | 4 | 7 | 11 |
| MG/L | OLFB59MW01GW | F7009-24 | NORMAL | F7009 | TPH | 07/10/00 | 07/14/00 | 07/20/00 | 4 | 6 | 10 |
| MG/L | OLFB59MW02GW | F7009-23 | NORMAL | F7009 | TPH | 07/10/00 | 07/14/00 | 07/20/00 | 4 | 6 | 10 |
| MG/L | OLFB59MW04GW | F7009-25 | NORMAL | F7009 | TPH | 07/10/00 | 07/14/00 | 07/21/00 | 4 | 7 | 11 |
| MG/L | OLFB59MW20GW | F7009-21 | NORMAL | F7009 | TPH | 07/10/00 | 07/13/00 | 07/17/00 | 3 | 4 | 7 |
| MG/L | OLFB59MW21GW | F7009-22 | NORMAL | F7009 | TPH | 07/10/00 | 07/14/00 | 07/20/00 | 4 | 6 | 10 |

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MG/L | OLFB59MW22GW | F7009-17 | NORMAL | F7009 | TPH | 07/10/00 | 07/13/00 | 07/17/00 | 3 | 4 | 7 |
| MG/L | OLFB59MW23GW | F7009-18 | NORMAL | F7009 | TPH | 07/10/00 | 07/13/00 | 07/15/00 | 3 | 2 | 5 |
| MG/L | OLFB59MW27GW | F7009-14 | NORMAL | F7009 | TPH | 07/09/00 | 07/13/00 | 07/14/00 | 4 | 1 | 5 |
| MG/L | OLFB59MW28GW | F7009-11 | NORMAL | F7009 | TPH | 07/09/00 | 07/13/00 | 07/14/00 | 4 | 1 | 5 |
| MG/L | OLFB59MW34GW | F7009-16 | NORMAL | F7009 | TPH | 07/10/00 | 07/13/00 | 07/15/00 | 3 | 2 | 5 |
| MG/L | OLFB59MW47GW | F7009-12 | NORMAL | F7009 | TPH | 07/09/00 | 07/13/00 | 07/17/00 | 4 | 4 | 8 |
| MG/L | OLFB59MW52GW | F7009-28 | NORMAL | F7009 | TPH | 07/10/00 | 07/14/00 | 07/20/00 | 4 | 6 | 10 |
| MG/L | OLFB59MW60GW | F7009-15 | NORMAL | F7009 | TPH | 07/09/00 | 07/13/00 | 07/15/00 | 4 | 2 | 6 |
| MG/L | OLFB59MW63GW | F7009-13 | NORMAL | F7009 | TPH | 07/09/00 | 07/13/00 | 07/14/00 | 4 | 1 | 5 |
| MG/L | OLFB59MW67GW | F7009-26 | NORMAL | F7009 | TPH | 07/10/00 | 07/14/00 | 07/20/00 | 4 | 6 | 10 |
| MG/L | OLFB59MW68GW | F7009-27 | NORMAL | F7009 | TPH | 07/10/00 | 07/14/00 | 07/20/00 | 4 | 6 | 10 |
| MG/L | OLFB59MW69GW | F7009-19 | NORMAL | F7009 | TPH | 07/10/00 | 07/13/00 | 07/15/00 | 3 | 2 | 5 |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| | | | | |
|---|---|---|---|---|
| SAMPLE NUMBER: | 16TB070900 | 20TB070800 | 59TB070900 | OLFB16001 |
| SAMPLE DATE: | 07/09/00 | 07/08/00 | 07/08/00 | 07/09/00 |
| LABORATORY ID: | F7009-42 | F7009-36 | F7009-31 | F7009-32 |
| QC_TYPE: | NORMAL | NORMAL | NORMAL | NORMAL |
| % SOLIDS: | 0.0 % | 0.0 % | 0.0 % | 0.0 % |
| UNITS: | UG/L | UG/L | UG/L | UG/L |
| FIELD DUPLICATE OF: | | | | |

| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES** | | | | | | | | | | | | |
| BENZENE | 1 | U | | 1 | U | | 1 | U | | 1 | U | |
| ETHYLBENZENE | 1 | U | | 1 | U | | 1 | U | | 1 | U | |
| METHYL TERT-BUTYL ETHER | 1 | U | | 1 | U | | 1 | U | | 1 | U | |
| TOLUENE | 1 | U | | 1 | U | | 1 | U | | 1 | U | |
| XYLENES, TOTAL | 3 | U | | 3 | U | | 3 | U | | 3 | U | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB20MW34GW | | | OLFB59001 | | | OLFB59D001 | | | OLFB59D002 | | |
| SAMPLE DATE: | 07/08/00 | | | 07/09/00 | | | 07/09/00 | | | 07/10/00 | | |
| LABORATORY ID: | F7009-2 | | | F7009-34 | | | F7009-29 | | | F7009-30 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| VOLATILES | | | | | | | | | | | | |
| BENZENE | 1 | U | | 1 | U | | 1 | U | | 214 | | |
| ETHYLBENZENE | 1 | U | | 1 | U | | 1 | U | | 177 | | |
| METHYL TERT-BUTYL ETHER | 1 | U | | 1 | U | | 1 | U | | 9.2 | J | P |
| TOLUENE | 1 | U | | 1 | U | | 1 | U | | 1590 | | |
| XYLENES, TOTAL | 3 | U | | 3 | U | | 3 | U | | 1030 | | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59MW01GW | | | OLFB59MW02GW | | | OLFB59MW04GW | | | OLFB59MW20GW | | |
| SAMPLE DATE: | 07/10/00 | | | 07/10/00 | | | 07/10/00 | | | 07/10/00 | | |
| LABORATORY ID: | F7009-24 | | | F7009-23 | | | F7009-25 | | | F7009-21 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| VOLATILES | | | | | | | | | | | | |
| BENZENE | 547 | | | 1 | U | | 54.8 | | | 0.61 | J | P |
| ETHYLBENZENE | 195 | | | 44.8 | | | 52.9 | | | 1.2 | | |
| METHYL TERT-BUTYL ETHER | 12.2 | | | 1 | U | | 24.1 | | | 1 | U | |
| TOLUENE | 1580 | E | | 1 | U | | 296 | | | 4.6 | | |
| XYLENES, TOTAL | 909 | | | 83 | | | 262 | | | 21.8 | | |

# CTO112-NAS PENSACOLA
**WATER DATA**
**Accutest, NJ**
**SDG: F7009**



| SAMPLE NUMBER: | OLFB59MW21GW | | | OLFB59MW22GW | | | OLFB59MW23GW | | | OLFB59MW27GW | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 07/10/00 | | | 07/10/00 | | | 07/10/00 | | | 07/09/00 | | |
| LABORATORY ID: | F7009-22 | | | F7009-17 | | | F7009-18 | | | F7009-14 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **VOLATILES** | | | | | | | | | | | | |
| 1,2-DIBROMOETHANE | | | | | | | 0.02 | U | | | | |
| BENZENE | 1 | U | | 5 | U | | 225 | | | 483 | | |
| ETHYLBENZENE | 1 | | | 162 | | | 173 | | | 223 | | |
| METHYL TERT-BUTYL ETHER | 1 | U | | 38.6 | | | 10 | U | | 10 | U | |
| TOLUENE | 0.94 | J | P | 5.3 | | | 1750 | | | 2000 | E | |
| XYLENES, TOTAL | 40.3 | | | 512 | | | 1040 | | | 1680 | | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59MW28GW | | | OLFB59MW34GW | | | OLFB59MW47GW | | | OLFB59MW52GW | | |
| SAMPLE DATE: | 07/09/00 | | | 07/10/00 | | | 07/09/00 | | | 07/10/00 | | |
| LABORATORY ID: | F7009-11 | | | F7009-16 | | | F7009-12 | | | F7009-28 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| VOLATILES | | | | | | | | | | | | |
| BENZENE | 10 | U | | 1 | U | | 301 | | | 1 | U | |
| ETHYLBENZENE | 238 | | | 1 | U | | 574 | | | 1 | U | |
| METHYL TERT-BUTYL ETHER | 17.5 | | | 1 | U | | 109 | | | 1 | U | |
| TOLUENE | 815 | | | 1 | U | | 5870 | | | 1 | U | |
| XYLENES, TOTAL | 1550 | | | 3 | U | | 3620 | | | 3 | U | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| SAMPLE NUMBER: | OLFB59MW60GW | | | OLFB59MW63GW | | | OLFB59MW67GW | | | OLFB59MW68GW | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 07/09/00 | | | 07/09/00 | | | 07/10/00 | | | 07/10/00 | | |
| LABORATORY ID: | F7009-15 | | | F7009-13 | | | F7009-26 | | | F7009-27 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **VOLATILES** | | | | | | | | | | | | |
| BENZENE | 1 | U | | 1 | U | | 3.1 | | | 1 | U | |
| ETHYLBENZENE | 1 | U | | 1 | U | | 42.6 | | | 43.2 | | |
| METHYL TERT-BUTYL ETHER | 1 | U | | 1 | U | | 7.7 | | | 20.6 | | |
| TOLUENE | 1 | U | | 1 | U | | 4.8 | | | 1 | U | |
| XYLENES, TOTAL | 3 | U | | 3 | U | | 140 | | | 116 | | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59MW69GW | | | | | | | | | | | |
| SAMPLE DATE: | 07/10/00 | | | / / | | | / / | | | / / | | |
| LABORATORY ID: | F7009-19 | | | | | | | | | | | |
| QC_TYPE: | NORMAL | | | | | | | | | | | |
| % SOLIDS: | 0.0 % | | | 100.0 % | | | 100.0 % | | | 100.0 % | | |
| UNITS: | UG/L | | | | | | | | | | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| VOLATILES | | | | | | | | | | | | |
| BENZENE | 1 | U | | | | | | | | | | |
| ETHYLBENZENE | 1 | U | | | | | | | | | | |
| METHYL TERT-BUTYL ETHER | 1 | U | | | | | | | | | | |
| TOLUENE | 1 | U | | | | | | | | | | |
| XYLENES, TOTAL | 3 | U | | | | | | | | | | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB20MW30GW | | | OLFB20MW34GW | | | OLFB59001 | | | OLFB59D001 | | |
| SAMPLE DATE: | 07/08/00 | | | 07/08/00 | | | 07/09/00 | | | 07/09/00 | | |
| LABORATORY ID: | F7009-10 | | | F7009-2 | | | F7009-34 | | | F7009-29 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | MG/L | | | MG/L | | | MG/L | | | MG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **PETROLEUM HYDROCARBONS** | | | | | | | | | | | | |
| TOTAL PETROLEUM HYDROCARBONS | 0.51 | | | 0.28 | U | | 0.25 | U | | 0.28 | U | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| SAMPLE NUMBER: | OLFB59D002 | | | OLFB59MW01GW | | | OLFB59MW02GW | | | OLFB59MW04GW | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 07/10/00 | | | 07/10/00 | | | 07/10/00 | | | 07/10/00 | | |
| LABORATORY ID: | F7009-30 | | | F7009-24 | | | F7009-23 | | | F7009-25 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | MG/L | | | MG/L | | | MG/L | | | MG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **PETROLEUM HYDROCARBONS** | | | | | | | | | | | | |
| TOTAL PETROLEUM HYDROCARBONS | 3.34 | | | 1.75 | | | 1.21 | | | 3.21 | | |

# CTO112-NAS PENSACOLA
**WATER DATA**
**Accutest, NJ**
**SDG: F7009**



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59MW20GW | | | OLFB59MW21GW | | | OLFB59MW22GW | | | OLFB59MW23GW | | |
| SAMPLE DATE: | 07/10/00 | | | 07/10/00 | | | 07/10/00 | | | 07/10/00 | | |
| LABORATORY ID: | F7009-21 | | | F7009-22 | | | F7009-17 | | | F7009-18 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | MG/L | | | MG/L | | | MG/L | | | MG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **PETROLEUM HYDROCARBONS** | | | | | | | | | | | | |
| TOTAL PETROLEUM HYDROCARBONS | 0.204 | J | P | 0.25 | U | | 1.18 | | | 4.24 | | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| SAMPLE NUMBER: | OLFB59MW27GW | | | OLFB59MW28GW | | | OLFB59MW34GW | | | OLFB59MW47GW | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 07/09/00 | | | 07/09/00 | | | 07/10/00 | | | 07/09/00 | | |
| LABORATORY ID: | F7009-14 | | | F7009-11 | | | F7009-16 | | | F7009-12 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | MG/L | | | MG/L | | | MG/L | | | MG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **PETROLEUM HYDROCARBONS** | | | | | | | | | | | | |
| TOTAL PETROLEUM HYDROCARBONS | 7.07 | | | 5.43 | | | 0.28 | U | | 1.67 | | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| SAMPLE NUMBER: | OLFB59MW52GW | | | OLFB59MW60GW | | | OLFB59MW63GW | | | OLFB59MW67GW | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 07/10/00 | | | 07/09/00 | | | 07/09/00 | | | 07/10/00 | | |
| LABORATORY ID: | F7009-28 | | | F7009-15 | | | F7009-13 | | | F7009-26 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | MG/L | | | MG/L | | | MG/L | | | MG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **PETROLEUM HYDROCARBONS** | | | | | | | | | | | | |
| TOTAL PETROLEUM HYDROCARBONS | 0.28 | U | | 0.28 | U | | 0.28 | U | | 0.945 | | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59MW68GW | | | OLFB59MW69GW | | | | | | | | |
| SAMPLE DATE: | 07/10/00 | | | 07/10/00 | | | / / | | | / / | | |
| LABORATORY ID: | F7009-27 | | | F7009-19 | | | | | | | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | | | | | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 100.0 % | | | 100.0 % | | |
| UNITS: | MG/L | | | MG/L | | | | | | | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **PETROLEUM HYDROCARBONS** | | | | | | | | | | | | |
| TOTAL PETROLEUM HYDROCARBONS | 0.361 | | | 0.28 | U | | | | | | | |

# APPENDIX B

## Results as Reported by the Laboratory

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | 59TB070900 | | |
| **Lab Sample ID:** | F7009-31 | **Date Sampled:** | 07/08/00 |
| **Matrix:** | AQ - Trip Blank Water | **Date Received:** | 07/11/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016544.D | 1 | 07/22/00 | RAW | n/a | n/a | GCD586 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 89% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 98% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59001 | | |
| Lab Sample ID: | F7009-34 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | SW846 8021B | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016555.D | 1 | 07/22/00 | RAW | n/a | n/a | GCD586 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 91% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 98% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59D001 | | |
| Lab Sample ID: | F7009-29 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | SW846 8021B | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016551.D | 1 | 07/22/00 | RAW | n/a | n/a | GCD586 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 83% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 94% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59D002 | | |
| **Lab Sample ID:** | F7009-30 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016588.D | 10 | 07/23/00 | RAW | n/a | n/a | GCD587 |
| Run #2 [a] | CD016621.D | 25 | 07/24/00 | RAW | n/a | n/a | GCD587 |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | 214 | 10 | ug/l | |
| 108-88-3 | Toluene | 1590 [b] | 25 | ug/l | |
| 100-41-4 | Ethylbenzene | 177 | 10 | ug/l | |
| 1330-20-7 | Xylenes (total) | 1030 | 30 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 9.2 | 10 | ug/l | J |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 102% | 100% | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 115% | 102% | 72-125% |

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW01GW | | |
| **Lab Sample ID:** | F7009-24 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016583.D | 10 | 07/23/00 | RAW | n/a | n/a | GCD587 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | 547 | 10 | ug/l | |
| 108-88-3 | Toluene | 1580 | 10 | ug/l | E |
| 100-41-4 | Ethylbenzene | 195 | 10 | ug/l | |
| 1330-20-7 | Xylenes (total) | 909 | 30 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 12.2 | 10 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 105% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 108% | | 72-125% |

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW02GW | | |
| Lab Sample ID: | F7009-23 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | SW846 8021B | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016571.D | 1 | 07/23/00 | RAW | n/a | n/a | GCD587 |
| Run #2 | CD016582.D | 5 | 07/23/00 | RAW | n/a | n/a | GCD587 |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | 44.8 | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | 83.0 | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 103% | 99% | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 197% | 110% | 72-125% |

(a) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW04GW | | |
| **Lab Sample ID:** | F7009-25 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016584.D | 10 | 07/23/00 | RAW | n/a | n/a | GCD587 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | 54.8 | 10 | ug/l | |
| 108-88-3 | Toluene | 296 | 10 | ug/l | |
| 100-41-4 | Ethylbenzene | 52.9 | 10 | ug/l | |
| 1330-20-7 | Xylenes (total) | 262 | 30 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 24.1 | 10 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 100% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 111% | | 72-125% |

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW20GW | | |
| **Lab Sample ID:** | F7009-21 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016569.D | 1 | 07/23/00 | RAW | n/a | n/a | GCD587 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | 0.61 | 1.0 | ug/l | J |
| 108-88-3 | Toluene | 4.6 | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | 1.2 | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | 21.8 | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 94% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 116% | | 72-125% |

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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

**TO:** **Mr. Gerald Walker** **DATE: August 21, 2000**

**FROM:** **William Howard Engle** **CC: File**

**SUBJECT:** **Organic Data Validation – VOA, EDB, and TRPH**
**CTO112 – NAS Pensacola**
**SDG F7021**

**SAMPLES:** **14/Aqueous**

| | | |
|---|---|---|
| 59TB071100 | OLFB59D003 | OLFB59MW18GW |
| OLFB59MW19GW | OLFB59MW30GW | OLFB59MW33GW |
| OLFB59MW38GW | OLFB59MW44GW | OLFB59MW51GW |
| OLFB59MW53GW | OLFB59MW55GW | OLFB59MW61GW |
| OLFB59MW64GW | OLFB59MW66GW | |

**OVERVIEW**

The sample set for CTO112, SDG F7021; Naval Air Station Pensacola, Pensacola, Florida consists of thirteen (13) aqueous environmental samples and one (1) trip blank. A duplicate pair was included in this SDG (OLFB59MW61GW / OLFB59D003). The environmental samples, with the exception of samples 19TB070600 and OLFB59MW38GW, were analyzed for Benzene, Toluene, Ethylbenzene, Total Xylenes, and Methyl-tert-butyl ether (VOCs), and total residual petroleum hydrocarbons (TRPHs). Sample 19TB070600 was analyzed for VOCs only, and sample OLFB59MW38GW was analyzed for ethylene dibromide (EDB).

The samples were collected by Tetra Tech NUS on July 11, 2000 and analyzed by Accutest Southeast Laboratory. 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 8021B (VOCs), EPA method 504.1 (EDB), and FL-PRO (TRPHs) analytical and reporting protocols. 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. Supporting documentation is presented in Appendix C. Qualified analytical results are presented in Appendix A. The original laboratory data is contained in Appendix B.

Volatile Fraction

All quality control criteria were met for this fraction.

EDB

All quality control criteria were met for this fraction.

Total Residual Petroleum Fraction

All quality control criteria were met for this fraction.

Field Duplicate Summary

| Analyte | OLFB59MW61GW | OLFB59D003 |
|---|---|---|
| | No positive results | No positive results |

Executive Summary

**Laboratory performance:** All quality control criteria were met for this SDG.

**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)."

William Howard Engle

Project Chemist
Tetra Tech NUS, Inc.

Joseph A. Samchuck

Data Validation Quality Assurance Officer
Tetra Tech NUS, Inc.

Attachments:
1. Appendix A - Qualified Analytical Results
2. Appendix B – Results as reported by the laboratory
3. Appendix C – Supporting Documentation

**Qualifier Codes:**

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration (i.e., % RSDs, %Ds, ICVs, CCVs, RPDs, RRFs, etc.) Noncompliance
D = MS/MSD Noncompliance
E = LCS/LCSD Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS - GFAA MSA's $r < 0.995$
K = ICP Interference - include ICSAB % R's
L = Instrument Calibration Range Exceedance
M = Sample Preservation
N = Internal Standard Noncompliance
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = Pest/PCB D% between columns for positive results
V = Non-linear calibrations, tuning $r < 0.995$ (correlation coefficient)
W = EMPC result
X = Signal to noise response drop
Y = % Solid content is less than 30%

**DATA QUALIFIER DEFINITIONS:**

| | | |
|---|---|---|
| U | - | Value is a nondetected result as reported by the laboratory and should not be considered present. |
| J | - | Positive result is estimated as a result of a value below the CRQL or a technical noncompliance. |
| UJ | - | Nondetected result is considered to be estimated as a result of technical noncompliances. |

# APPENDIX A

## Qualified Analytical Results

HOLDING TIME
08/08/00

| 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 | OLFB59D003 | F7021-13 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW18GW | F7021-1 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW19GW | F7021-7 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW30GW | F7021-2 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW33GW | F7021-9 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW44GW | F7021-5 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW51GW | F7021-10 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW53GW | F7021-3 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW55GW | F7021-4 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW61GW | F7021-11 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW64GW | F7021-6 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW66GW | F7021-8 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | 59TB071100 | F7021-14 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59D003 | F7021-13 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW18GW | F7021-1 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW19GW | F7021-7 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/25/00 | 0 | 0 | 14 |
| UG/L | OLFB59MW30GW | F7021-2 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW33GW | F7021-9 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW38GW | F7021-12 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/21/00 | 0 | 0 | 10 |
| UG/L | OLFB59MW44GW | F7021-5 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW51GW | F7021-10 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW53GW | F7021-3 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW55GW | F7021-4 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW61GW | F7021-11 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW64GW | F7021-6 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |

| 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 | OLFB59MW66GW | F7021-8 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| MG/L | OLFB59D003 | F7021-13 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/22/00 | 6 | 5 | 11 |
| MG/L | OLFB59MW18GW | F7021-1 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/23/00 | 6 | 6 | 12 |
| MG/L | OLFB59MW19GW | F7021-7 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW30GW | F7021-2 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW33GW | F7021-9 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW44GW | F7021-5 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW51GW | F7021-10 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW53GW | F7021-3 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW55GW | F7021-4 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/23/00 | 6 | 6 | 12 |
| MG/L | OLFB59MW61GW | F7021-11 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW64GW | F7021-6 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW66GW | F7021-8 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |

HOLDING TIME
08/08/00

| 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 | OLFB59D003 | F7021-13 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW18GW | F7021-1 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW19GW | F7021-7 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW30GW | F7021-2 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW33GW | F7021-9 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW44GW | F7021-5 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW51GW | F7021-10 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW53GW | F7021-3 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW55GW | F7021-4 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW61GW | F7021-11 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW64GW | F7021-6 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW66GW | F7021-8 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | 59TB071100 | F7021-14 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59D003 | F7021-13 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW18GW | F7021-1 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW19GW | F7021-7 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/25/00 | 0 | 0 | 14 |
| UG/L | OLFB59MW30GW | F7021-2 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW33GW | F7021-9 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW38GW | F7021-12 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/21/00 | 0 | 0 | 10 |
| UG/L | OLFB59MW44GW | F7021-5 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW51GW | F7021-10 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW53GW | F7021-3 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW55GW | F7021-4 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW61GW | F7021-11 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW64GW | F7021-6 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |

| | | | | | | | | | TO EXTR_DATE | TO ANAL_DATE | TO ANAL_DATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| UG/L | OLFB59MW66GW | F7021-8 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| MG/L | OLFB59D003 | F7021-13 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/22/00 | 6 | 5 | 11 |
| MG/L | OLFB59MW18GW | F7021-1 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/23/00 | 6 | 6 | 12 |
| MG/L | OLFB59MW19GW | F7021-7 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW30GW | F7021-2 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW33GW | F7021-9 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW44GW | F7021-5 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW51GW | F7021-10 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW53GW | F7021-3 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW55GW | F7021-4 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/23/00 | 6 | 6 | 12 |
| MG/L | OLFB59MW61GW | F7021-11 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW64GW | F7021-6 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW66GW | F7021-8 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |

**WATER DATA**
**Accutest, NJ**
**SDG: F7021**



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | 59TB071100 | | | OLFB59D003 | | | OLFB59MW18GW | | | OLFB59MW19GW | | |
| SAMPLE DATE: | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | |
| LABORATORY ID: | F7021-14 | | | F7021-13 | | | F7021-1 | | | F7021-7 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| VOLATILES | | | | | | | | | | | | |
| BENZENE | 1 | U | | 1 | U | | 748 | | | 1 | U | |
| ETHYLBENZENE | 1 | U | | 1 | U | | 516 | | | 1 | U | |
| METHYL TERT-BUTYL ETHER | 1 | U | | 1 | U | | 30.2 | | | 1 | U | |
| TOLUENE | 1 | U | | 1 | U | | 5820 | | | 1 | U | |
| XYLENES, TOTAL | 3 | U | | 3 | U | | 3200 | | | 3 | U | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7021



| SAMPLE NUMBER: | OLFB59MW30GW | | | OLFB59MW33GW | | | OLFB59MW38GW | | | OLFB59MW44GW | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | |
| LABORATORY ID: | F7021-2 | | | F7021-9 | | | F7021-12 | | | F7021-5 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **VOLATILES** | | | | | | | | | | | | |
| 1,2-DIBROMOETHANE | | | | | | | 0.02 | U | | | | |
| BENZENE | 1.2 | | | 1 | U | | | | | 1 | U | |
| ETHYLBENZENE | 1.9 | | | 1 | U | | | | | 0.77 | J | P |
| METHYL TERT-BUTYL ETHER | 1 | U | | 1 | U | | | | | 5.4 | | |
| TOLUENE | 1 | U | | 1 | U | | | | | 1 | U | |
| XYLENES, TOTAL | 4.8 | | | 3 | U | | | | | 3 | U | |

| SAMPLE NUMBER: | OLFB59MW51GW | | | OLFB59MW53GW | | | OLFB59MW55GW | | | OLFB59MW61GW | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | |
| LABORATORY ID: | F7021-10 | | | F7021-3 | | | F7021-4 | | | F7021-11 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| VOLATILES | | | | | | | | | | | | |
| BENZENE | 1 | U | | 1 | U | | 10 | U | | 1 | U | |
| ETHYLBENZENE | 1 | U | | 1 | U | | 344 | | | 1 | U | |
| METHYL TERT-BUTYL ETHER | 1 | U | | 1 | U | | 63 | | | 1 | U | |
| TOLUENE | 1 | U | | 1 | U | | 403 | | | 1 | U | |
| XYLENES, TOTAL | 3 | U | | 3 | U | | 1300 | | | 3 | U | |

| | | | | |
|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59MW64GW | OLFB59MW66GW | | |
| SAMPLE DATE: | 07/11/00 | 07/11/00 | / / | / / |
| LABORATORY ID: | F7021-6 | F7021-8 | | |
| QC_TYPE: | NORMAL | NORMAL | | |
| % SOLIDS: | 0.0 % | 0.0 % | 100.0 % | 100.0 % |
| UNITS: | UG/L | UG/L | | |
| FIELD DUPLICATE OF: | | | | |

| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES** | | | | | | | | | | | | |
| BENZENE | 1 | U | | 1 | U | | | | | | | |
| ETHYLBENZENE | 14.1 | | | 1 | U | | | | | | | |
| METHYL TERT-BUTYL ETHER | 31.1 | | | 1 | U | | | | | | | |
| TOLUENE | 1 | U | | 1 | U | | | | | | | |
| XYLENES, TOTAL | 32.4 | | | 3 | U | | | | | | | |

CTO112-NAS PENSACOLA
WATER DATA
Accutest, NJ
SDG: F7021



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59D003 | | | OLFB59MW18GW | | | OLFB59MW19GW | | | OLFB59MW30GW | | |
| SAMPLE DATE: | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | |
| LABORATORY ID: | F7021-13 | | | F7021-1 | | | F7021-7 | | | F7021-2 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | MG/L | | | MG/L | | | MG/L | | | MG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| PETROLEUM HYDROCARBONS | | | | | | | | | | | | |
| TPH (C8-C40) | 0.28 | U | | 3.72 | | | 0.3 | U | | 0.25 | U | |

CTO112-NAS PENSACOLA
WATER DATA
Accutest, NJ
SDG: F7021



| SAMPLE NUMBER: | OLFB59MW33GW | | | OLFB59MW44GW | | | OLFB59MW51GW | | | OLFB59MW53GW | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | |
| LABORATORY ID: | F7021-9 | | | F7021-5 | | | F7021-10 | | | F7021-3 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | MG/L | | | MG/L | | | MG/L | | | MG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| PETROLEUM HYDROCARBONS | | | | | | | | | | | | |
| TPH (C8-C40) | 0.25 | U | | 0.28 | U | | 0.25 | U | | 0.28 | U | |

CTO112-NAS PENSACOLA
WATER DATA
Accutest, NJ
SDG: F7021



| SAMPLE NUMBER: | OLFB59MW55GW | | | OLFB59MW61GW | | | OLFB59MW64GW | | | OLFB59MW66GW | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | |
| LABORATORY ID: | F7021-4 | | | F7021-11 | | | F7021-6 | | | F7021-8 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | MG/L | | | MG/L | | | MG/L | | | MG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| PETROLEUM HYDROCARBONS | | | | | | | | | | | | |
| TPH (C8-C40) | 1.54 | | | 0.28 | U | | 0.28 | U | | 0.28 | U | |

# APPENDIX B

## Results as Reported by the Laboratory

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | 59TB071100 | | |
| **Lab Sample ID:** | F7021-14 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Trip Blank Water | **Date Received:** | 07/12/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016628.D | 1 | 07/24/00 | RA | n/a | n/a | GCD589 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 86% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 92% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59D003 | | |
| **Lab Sample ID:** | F7021-13 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016627.D | 1 | 07/24/00 | RA | n/a | n/a | GCD589 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 82% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 86% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW18GW | | |
| **Lab Sample ID:** | F7021-1 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016613.D | 10 | 07/24/00 | RA | n/a | n/a | GCD589 |
| Run #2 [a] | CD016629.D | 100 | 07/24/00 | RA | n/a | n/a | GCD589 |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | 748 | 10 | ug/l | |
| 108-88-3 | Toluene | 5820 [b] | 100 | ug/l | |
| 100-41-4 | Ethylbenzene | 516 | 10 | ug/l | |
| 1330-20-7 | Xylenes (total) | 3200 [b] | 300 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 30.2 | 10 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 107% | 96% | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 119% | 106% | 72-125% |

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW19GW | | |
| **Lab Sample ID:** | F7021-7 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016641.D | 1 | 07/25/00 | RA | n/a | n/a | GCD589 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 86% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 94% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW30GW | | |
| **Lab Sample ID:** | F7021-2 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016614.D | 1 | 07/24/00 | RA | n/a | n/a | GCD589 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1.2 | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | 1.9 | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | 4.8 | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 84% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 95% | | 72-125% |

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW33GW | | |
| **Lab Sample ID:** | F7021-9 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016624.D | 1 | 07/24/00 | RA | n/a | n/a | GCD589 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 84% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 94% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW38GW | | |
| **Lab Sample ID:** | F7021-12 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | EPA 504.1 | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | AB15086.D | 1 | 07/21/00 | SKW | n/a | n/a | GAB549 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 106-93-4 | 1,2-Dibromoethane | ND | 0.020 | ug/l | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW44GW | | |
| **Lab Sample ID:** | F7021-5 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016617.D | 10 | 07/24/00 | RA | n/a | n/a | GCD589 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | 0.77 | 1.0 | ug/l | J |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 5.4 | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 92% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 113% | | 72-125% |

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW51GW | | |
| **Lab Sample ID:** | F7021-10 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016625.D | 1 | 07/24/00 | RA | n/a | n/a | GCD589 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 86% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 96% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW53GW | | |
| **Lab Sample ID:** | F7021-3 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016615.D | 1 | 07/24/00 | RA | n/a | n/a | GCD589 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 76% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 89% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW55GW | | |
| **Lab Sample ID:** | F7021-4 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016616.D | 10 | 07/24/00 | RA | n/a | n/a | GCD589 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 10 | ug/l | |
| 108-88-3 | Toluene | 403 | 10 | ug/l | |
| 100-41-4 | Ethylbenzene | 344 | 10 | ug/l | |
| 1330-20-7 | Xylenes (total) | 1500 | 30 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 63.0 | 10 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 99% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 108% | | 72-125% |

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW61GW | | |
| **Lab Sample ID:** | F7021-11 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016626.D | 1 | 07/24/00 | RA | n/a | n/a | GCD589 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 87% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 95% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW64GW | | |
| **Lab Sample ID:** | F7021-6 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016618.D | 1 | 07/24/00 | RA | n/a | n/a | GCD589 |
| Run #2 | CD016653.D | 10 | 07/25/00 | RA | n/a | n/a | GCD589 |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | 14.1 | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | 32.4 | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 31.1 | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 97% | 94% | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 169% | 118% | 72-125% |

(a) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW66GW | | |
| **Lab Sample ID:** | F7021-8 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016623.D | 1 | 07/24/00 | RA | n/a | n/a | GCD589 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 85% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 95% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59D003 | | |
| **Lab Sample ID:** | F7021-13 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09637.D | 1 | 07/22/00 | CCJ | 07/17/00 | OP1835 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.28 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 91% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW18GW | | |
| **Lab Sample ID:** | F7021-1 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09679.D | 4 | 07/23/00 | CCJ | 07/17/00 | OP1835 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | 3.72 | 1.1 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 96% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW19GW | | |
| **Lab Sample ID:** | F7021-7 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09632.D | 1 | 07/21/00 | CCJ | 07/17/00 | OP1835 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.30 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 96% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW30GW | | |
| **Lab Sample ID:** | F7021-2 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09626.D | 1 | 07/21/00 | CCJ | 07/17/00 | OP1835 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.25 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 101% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW33GW | | |
| **Lab Sample ID:** | F7021-9 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09634.D | 1 | 07/21/00 | CCJ | 07/17/00 | OP1835 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.25 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 181% * | | 40-140% |

(a) Suspected double surrogate; however, sample was ND.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW44GW | | |
| **Lab Sample ID:** | F7021-5 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09630.D | 1 | 07/21/00 | CCJ | 07/17/00 | OP1835 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.28 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 95% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW51GW | | |
| **Lab Sample ID:** | F7021-10 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09635.D | 1 | 07/21/00 | CCJ | 07/17/00 | OP1835 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.25 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 101% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW53GW | | |
| **Lab Sample ID:** | F7021-3 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09628.D | 1 | 07/21/00 | CCJ | 07/17/00 | OP1835 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.28 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 97% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW55GW | | |
| **Lab Sample ID:** | F7021-4 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09680.D | 2 | 07/23/00 | CCJ | 07/17/00 | OP1835 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | 1.54 | 0.52 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 94% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW61GW | | |
| Lab Sample ID: | F7021-11 | Date Sampled: | 07/11/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/12/00 |
| Method: | FLORIDA-PRO | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09636.D | 1 | 07/21/00 | CCJ | 07/17/00 | OP1835 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.28 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 89% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW64GW | | |
| **Lab Sample ID:** | F7021-6 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09631.D | 1 | 07/21/00 | CCJ | 07/17/00 | OP1835 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.28 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 78% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW66GW | | |
| **Lab Sample ID:** | F7021-8 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09633.D | 1 | 07/21/00 | CCJ | 07/17/00 | OP1835 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.28 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 90% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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

**TO:** **Mr. Gerald Walker** **DATE: August 21, 2000**

**FROM:** **William Howard Engle** **CC: File**

**SUBJECT:** **Inorganic Data Validation – Total Lead**
**CTO112 – NAS Pensacola**
**SDG F7021**

**SAMPLES:** **12/Aqueous**

| | | |
|---|---|---|
| OLFB59D003 | OLFB59MW18GW | OLFB59MW19GW |
| OLFB59MW30GW | OLFB59MW33GW | OLFB59MW44GW |
| OLFB59MW51GW | OLFB59MW53GW | OLFB59MW55GW |
| OLFB59MW61GW | OLFB59MW64GW | OLFB59MW66GW |

**OVERVIEW**

The sample set for CTO112, SDG F7021; Naval Air Station Pensacola, Pensacola, Florida consists of twelve (12) aqueous environmental samples. This SDG also contained one (1) duplicate pair (OLFB59MW61GW / OLFB59D003). The environmental samples were analyzed for Total Lead.

The samples were collected by Tetra Tech NUS on July 11, 2000 and analyzed by Accutest Southeast 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 6010A analytical and reporting protocols. The data in this SDG was validated with regard to the following parameters:

- * Data Completeness
- * Holding Times
- * Initial/continuing calibrations
- Laboratory method/field quality control blank results
- * Detection Limits

The symbol (*) indicates that all quality control criteria were met for this parameter. Supporting documentation is presented in Appendix C. Qualified analytical results are presented in Appendix A. The original laboratory data is contained in Appendix B.

Laboratory Blank Analysis

Lead was detected in the laboratory method / preparation blanks at the following maximum concentrations:

Affected samples: OLFB59MW19GW
OLFB59MW30GW
OLFB59MW33GW
OLFB59MW51GW
OLFB59MW53GW
OLFB59MW61GW
OLFB59MW64GW
OLFB59MW66GW

| Analyte | Maximum Concentration (ug/L) | Action Level (ug/L) |
|---|---|---|
| Lead | 2.6 | 13 |

An action level of 5x the maximum concentration has been used to evaluate the sample for contamination in continuing calibration blank. Dilution factors and sample aliquots were taken into consideration when evaluating for blank contamination. Positive results < the action level for lead were qualified as nondetects (U) as a result of blank contamination.

All other quality control criteria were met for this fraction.

Field Duplicate Summary

| Analyte | OLFB59MW61GW | OLFB59D003 |
|---|---|---|
| | No positive results | No positive results |

Executive Summary

**Laboratory performance:** Lead was detected in the calibration blankS. Several samples were qualified for blank contamination.

**Other factors affecting data quality:** None.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Inorganic Data Validation (February, 1994), 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)."

William Howard Engle

Project Chemist
Tetra Tech NUS, Inc.

Joseph A. Samchuck

Data Validation Quality Assurance Officer
Tetra Tech NUS, Inc.

Attachments:
1. Appendix A - Qualified Analytical Results
2. Appendix B – Results as reported by the laboratory
3. Appendix C – Supporting Documentation

**Qualifier Codes:**

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration (i.e., % RSDs, %Ds, ICVs, CCVs, RPDs, RRFs, etc.) Noncompliance
D = MS/MSD Noncompliance
E = LCS/LCSD Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS - GFAA MSA's r < 0.995
K = ICP Interference - include ICSAB % R's
L = Instrument Calibration Range Exceedance
M = Sample Preservation
N = Internal Standard Noncompliance
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = Pest/PCB D% between columns for positive results
V = Non-linear calibrations, tuning r < 0.995 (correlation coefficient)
W = EMPC result
X = Signal to noise response drop
Y = % Solid content is less than 30%

**DATA QUALIFIER DEFINITIONS:**

| | | |
|---|---|---|
| U | - | Value is a nondetected result as reported by the laboratory and should not be considered present. |
| J | - | Positive result is estimated as a result of a value below the CRQL or a technical noncompliance. |
| UJ | - | Nondetected result is considered to be estimated as a result of technical noncompliances. |

# APPENDIX A

## Qualified Analytical Results

F7021

HOLDING TIME
08/08/00

| 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 | OLFB59D003 | F7021-13 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW18GW | F7021-1 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW19GW | F7021-7 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW30GW | F7021-2 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW33GW | F7021-9 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW44GW | F7021-5 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW51GW | F7021-10 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW53GW | F7021-3 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW55GW | F7021-4 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW61GW | F7021-11 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW64GW | F7021-6 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW66GW | F7021-8 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | 59TB071100 | F7021-14 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59D003 | F7021-13 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW18GW | F7021-1 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW19GW | F7021-7 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/25/00 | 0 | 0 | 14 |
| UG/L | OLFB59MW30GW | F7021-2 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW33GW | F7021-9 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW38GW | F7021-12 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/21/00 | 0 | 0 | 10 |
| UG/L | OLFB59MW44GW | F7021-5 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW51GW | F7021-10 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW53GW | F7021-3 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW55GW | F7021-4 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW61GW | F7021-11 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW64GW | F7021-6 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |

| 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 | OLFB59MW66GW | F7021-8 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| MG/L | OLFB59D003 | F7021-13 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/22/00 | 6 | 5 | 11 |
| MG/L | OLFB59MW18GW | F7021-1 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/23/00 | 6 | 6 | 12 |
| MG/L | OLFB59MW19GW | F7021-7 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW30GW | F7021-2 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW33GW | F7021-9 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW44GW | F7021-5 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW51GW | F7021-10 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW53GW | F7021-3 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW55GW | F7021-4 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/23/00 | 6 | 6 | 12 |
| MG/L | OLFB59MW61GW | F7021-11 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW64GW | F7021-6 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW66GW | F7021-8 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |

F7021

HOLDING TIME
08/08/00

| 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 | OLFB59D003 | F7021-13 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW18GW | F7021-1 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW19GW | F7021-7 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW30GW | F7021-2 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW33GW | F7021-9 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW44GW | F7021-5 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW51GW | F7021-10 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW53GW | F7021-3 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW55GW | F7021-4 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW61GW | F7021-11 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW64GW | F7021-6 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW66GW | F7021-8 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | 59TB071100 | F7021-14 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59D003 | F7021-13 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW18GW | F7021-1 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW19GW | F7021-7 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/25/00 | 0 | 0 | 14 |
| UG/L | OLFB59MW30GW | F7021-2 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW33GW | F7021-9 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW38GW | F7021-12 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/21/00 | 0 | 0 | 10 |
| UG/L | OLFB59MW44GW | F7021-5 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW51GW | F7021-10 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW53GW | F7021-3 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW55GW | F7021-4 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW61GW | F7021-11 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW64GW | F7021-6 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |

| 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 | OLFB59MW66GW | F7021-8 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| MG/L | OLFB59D003 | F7021-13 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/22/00 | 6 | 5 | 11 |
| MG/L | OLFB59MW18GW | F7021-1 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/23/00 | 6 | 6 | 12 |
| MG/L | OLFB59MW19GW | F7021-7 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW30GW | F7021-2 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW33GW | F7021-9 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW44GW | F7021-5 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW51GW | F7021-10 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW53GW | F7021-3 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW55GW | F7021-4 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/23/00 | 6 | 6 | 12 |
| MG/L | OLFB59MW61GW | F7021-11 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW64GW | F7021-6 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW66GW | F7021-8 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |

# CTO112-NAS PENSACOLA
**WATER DATA**
**Accutest, NJ**
**SDG: F7021**



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59D003 | | | OLFB59MW18GW | | | OLFB59MW19GW | | | OLFB59MW30GW | | |
| SAMPLE DATE: | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | |
| LABORATORY ID: | F7021-13 | | | F7021-1 | | | F7021-7 | | | F7021-2 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| INORGANICS | | | | | | | | | | | | |
| LEAD | 1.6 | U | | 62.9 | | | 7.7 | U | A | 2.0 | ~~B~~ U | A |

# CTO112-NAS PENSACOLA
**WATER DATA**
**Accutest, NJ**
**SDG: F7021**



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59MW33GW | | | OLFB59MW44GW | | | OLFB59MW51GW | | | OLFB59MW53GW | | |
| SAMPLE DATE: | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | |
| LABORATORY ID: | F7021-9 | | | F7021-5 | | | F7021-10 | | | F7021-3 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| INORGANICS | | | | | | | | | | | | |
| LEAD | 2.1 | ~~B~~ U | A | 1.6 | U | | 2.8 | ~~B~~ U | A | 2.1 | ~~B~~ U | A |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7021



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59MW55GW | | | OLFB59MW61GW | | | OLFB59MW64GW | | | OLFB59MW66GW | | |
| SAMPLE DATE: | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | |
| LABORATORY ID: | F7021-4 | | | F7021-11 | | | F7021-6 | | | F7021-8 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| INORGANICS | | | | | | | | | | | | |
| LEAD | 70.1 | | | 2.1 | ~~B~~ U | A | 5.2 | U | A | 1.8 | ~~B~~ U | A |

# APPENDIX B

## Results as Reported by the Laboratory

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW18GW | | |
| **Lab Sample ID:** | F7021-1 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 62.9 | 5.0 | ug/l | 1 | 07/13/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW30GW | | |
| **Lab Sample ID:** | F7021-2 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method |
|---|---|---|---|---|---|---|---|
| Lead | 2.0 B | 5.0 | ug/l | 1 | 07/13/00 | 07/17/00 JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW53GW | | |
| **Lab Sample ID:** | F7021-3 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 2.1 B | 5.0 | ug/l | 1 | 07/13/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW55GW | | |
| **Lab Sample ID:** | F7021-4 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 70.1 | 5.0 | ug/l | 1 | 07/13/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW44GW | | |
| **Lab Sample ID:** | F7021-5 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 1.6 U | 5.0 | ug/l | 1 | 07/13/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

**WATER DATA**
**Accutest, NJ**
**SDG: F7021**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59MW55GW | | | OLFB59MW61GW | | | OLFB59MW64GW | | | OLFB59MW66GW | | |
| SAMPLE DATE: | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | |
| LABORATORY ID: | F7021-4 | | | F7021-11 | | | F7021-6 | | | F7021-8 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **INORGANICS** | | | | | | | | | | | | |
| LEAD | 70.1 | | | 2.1 | ~~B~~ U | A | 5.2 | U | A | 1.8 | ~~B~~ U | A |

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW64GW | | |
| **Lab Sample ID:** | F7021-6 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 5.2 | 5.0 | ug/l | 1 | 07/13/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW19GW | | |
| **Lab Sample ID:** | F7021-7 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method |
|---|---|---|---|---|---|---|---|
| Lead | 7.7 | 5.0 | ug/l | 1 | 07/13/00 | 07/17/00 JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW66GW | | |
| **Lab Sample ID:** | F7021-8 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 1.8 B | 5.0 | ug/l | 1 | 07/14/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW33GW | | |
| **Lab Sample ID:** | F7021-9 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method |
|---|---|---|---|---|---|---|---|
| Lead | 2.1 B | 5.0 | ug/l | 1 | 07/14/00 | 07/17/00 JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW51GW | | |
| **Lab Sample ID:** | F7021-10 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 2.8 B | 5.0 | ug/l | 1 | 07/14/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW61GW | | |
| **Lab Sample ID:** | F7021-11 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 2.1 B | 5.0 | ug/l | 1 | 07/14/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59D003 | | |
| **Lab Sample ID:** | F7021-13 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 1.6 U | 5.0 | ug/l | 1 | 07/14/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW21GW | | |
| **Lab Sample ID:** | F7009-22 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016570.D | 1 | 07/23/00 | RAW | n/a | n/a | GCD587 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | 0.94 | 1.0 | ug/l | J |
| 100-41-4 | Ethylbenzene | 1.0 | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | 40.3 | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 93% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 125% | | 72-125% |

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW22GW | | |
| **Lab Sample ID:** | F7009-17 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016580.D | 5 | 07/23/00 | RAW | n/a | n/a | GCD586 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 5.0 | ug/l | |
| 108-88-3 | Toluene | 5.3 | 5.0 | ug/l | |
| 100-41-4 | Ethylbenzene | 162 | 5.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | 512 | 15 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 38.6 | 5.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 106% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 113% | | 72-125% |

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW23GW | | |
| **Lab Sample ID:** | F7009-18 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016564.D | 10 | 07/23/00 | RAW | n/a | n/a | GCD586 |
| Run #2 [a] | CD016581.D | 25 | 07/23/00 | RAW | n/a | n/a | GCD586 |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | 225 | 10 | ug/l | |
| 108-88-3 | Toluene | 1750 [b] | 25 | ug/l | |
| 100-41-4 | Ethylbenzene | 173 | 10 | ug/l | |
| 1330-20-7 | Xylenes (total) | 1040 | 30 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 10 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 99% | 100% | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 113% | 106% | 72-125% |

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW27GW | | |
| Lab Sample ID: | F7009-14 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | SW846 8021B | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016549.D | 10 | 07/22/00 | RAW | n/a | n/a | GCD586 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | 483 | 10 | ug/l | |
| 108-88-3 | Toluene | 2000 | 10 | ug/l | E |
| 100-41-4 | Ethylbenzene | 223 | 10 | ug/l | |
| 1330-20-7 | Xylenes (total) | 1680 | 30 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 10 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 104% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 119% | | 72-125% |

(a) Results from different vials are inconsistent. All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW28GW | | |
| Lab Sample ID: | F7009-11 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | SW846 8021B | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016537.D | 10 | 07/22/00 | RAW | n/a | n/a | GCD585 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 10 | ug/l | |
| 108-88-3 | Toluene | 815 | 10 | ug/l | |
| 100-41-4 | Ethylbenzene | 238 | 10 | ug/l | |
| 1330-20-7 | Xylenes (total) | 1550 | 30 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 17.5 | 10 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 94% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 108% | | 72-125% |

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW34GW | | |
| Lab Sample ID: | F7009-16 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | SW846 8021B | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016561.D | 1 | 07/23/00 | RAW | n/a | n/a | GCD586 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 88% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 95% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW47GW | | |
| Lab Sample ID: | F7009-12 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | SW846 8021B | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016538.D | 100 | 07/22/00 | RAW | n/a | n/a | GCD585 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | 301 | 100 | ug/l | |
| 108-88-3 | Toluene | 5870 | 100 | ug/l | |
| 100-41-4 | Ethylbenzene | 574 | 100 | ug/l | |
| 1330-20-7 | Xylenes (total) | 3620 | 300 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 109 | 100 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 90% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 90% | | 72-125% |

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW52GW | | |
| Lab Sample ID: | F7009-28 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | SW846 8021B | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016587.D | 1 | 07/23/00 | RAW | n/a | n/a | GCD587 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 82% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 93% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW60GW | | |
| Lab Sample ID: | F7009-15 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | SW846 8021B | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016550.D | 1 | 07/22/00 | RAW | n/a | n/a | GCD586 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 83% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 94% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW63GW | | |
| Lab Sample ID: | F7009-13 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | SW846 8021B | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016548.D | 1 | 07/22/00 | RAW | n/a | n/a | GCD586 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 92% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 116% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW67GW | | |
| **Lab Sample ID:** | F7009-26 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016619.D | 1 | 07/24/00 | RAW | n/a | n/a | GCD587 |
| Run #2 | CD016585.D | 10 | 07/23/00 | RAW | n/a | n/a | GCD587 |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | 3.1 | 1.0 | ug/l | |
| 108-88-3 | Toluene | 4.8 | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | 42.6 | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | 140 | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 7.7 | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 111% | 95% | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 141% | 111% | 72-125% |

(a) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW68GW | | |
| Lab Sample ID: | F7009-27 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | SW846 8021B | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016586.D | 1 | 07/23/00 | RAW | n/a | n/a | GCD587 |
| Run #2 | CD016620.D | 10 | 07/24/00 | RAW | n/a | n/a | GCD587 |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | 43.2 | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | 116 | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 20.6 | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 102% | 91% | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 133% | 108% | 72-125% |

(a) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW69GW | | |
| **Lab Sample ID:** | F7009-19 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016565.D | 1 | 07/23/00 | RAW | n/a | n/a | GCD586 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 85% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 91% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW23GW | | |
| **Lab Sample ID:** | F7009-18 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | EPA 504.1 | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | AB15084.D | 1 | 07/21/00 | SKW | n/a | n/a | GAB549 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 106-93-4 | 1,2-Dibromoethane | ND | 0.020 | ug/l | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59001 | | |
| **Lab Sample ID:** | F7009-34 | **Date Sampled:** | 07/09/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09603.D | 1 | 07/21/00 | ME | 07/14/00 | OP1826 | GOP412 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.25 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 93% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59D001 | | |
| Lab Sample ID: | F7009-29 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | FLORIDA-PRO | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09598.D | 1 | 07/20/00 | ME | 07/14/00 | OP1826 | GOP412 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.28 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 82% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59D002 | | |
| Lab Sample ID: | F7009-30 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | FLORIDA-PRO | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09615.D | 4 | 07/21/00 | CCJ | 07/14/00 | OP1826 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | 3.34 | 1.1 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 81% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW01GW | | |
| **Lab Sample ID:** | F7009-24 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09586.D | 1 | 07/20/00 | ME | 07/14/00 | OP1826 | GOP412 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | 1.75 | 0.28 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 76% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW02GW | | |
| **Lab Sample ID:** | F7009-23 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09585.D | 1 | 07/20/00 | ME | 07/14/00 | OP1826 | GOP412 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | 1.21 | 0.28 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 83% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW04GW | | |
| **Lab Sample ID:** | F7009-25 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09614.D | 4 | 07/21/00 | CCJ | 07/14/00 | OP1826 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | 3.21 | 1.0 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 96% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW20GW | | |
| Lab Sample ID: | F7009-21 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | FLORIDA-PRO | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09496.D | 1 | 07/17/00 | CCJ | 07/13/00 | OP1819 | GOP411 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | 0.204 | 0.25 | mg/l | J |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 100% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW21GW | | |
| Lab Sample ID: | F7009-22 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | FLORIDA-PRO | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09596.D | 1 | 07/20/00 | ME | 07/14/00 | OP1826 | GOP412 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.25 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 94% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW22GW | | |
| **Lab Sample ID:** | F7009-17 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09495.D | 2 | 07/17/00 | CCJ | 07/13/00 | OP1819 | GOP411 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | 1.18 | 0.50 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 86% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW23GW | | |
| Lab Sample ID: | F7009-18 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | FLORIDA-PRO | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09478.D | 10 | 07/15/00 | CCJ | 07/13/00 | OP1819 | GOP410 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | 4.24 | 2.5 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 85% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW27GW | | |
| **Lab Sample ID:** | F7009-14 | **Date Sampled:** | 07/09/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09474.D | 10 | 07/14/00 | CCJ | 07/13/00 | OP1819 | GOP410 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | 7.07 | 2.8 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 97% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW28GW | | |
| Lab Sample ID: | F7009-11 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | FLORIDA-PRO | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09471.D | 10 | 07/14/00 | CCJ | 07/13/00 | OP1819 | GOP410 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | 5.43 | 2.8 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 91% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW34GW | | |
| **Lab Sample ID:** | F7009-16 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09476.D | 1 | 07/15/00 | CCJ | 07/13/00 | OP1819 | GOP410 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.28 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 82% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW47GW | | |
| Lab Sample ID: | F7009-12 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | FLORIDA-PRO | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09494.D | 2 | 07/17/00 | CCJ | 07/13/00 | OP1819 | GOP411 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | 1.67 | 0.55 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 90% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW52GW | | |
| Lab Sample ID: | F7009-28 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | FLORIDA-PRO | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09597.D | 1 | 07/20/00 | ME | 07/14/00 | OP1826 | GOP412 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.28 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 98% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW60GW | | |
| Lab Sample ID: | F7009-15 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | FLORIDA-PRO | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09475.D | 1 | 07/15/00 | CCJ | 07/13/00 | OP1819 | GOP410 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.28 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 83% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW63GW | | |
| **Lab Sample ID:** | F7009-13 | **Date Sampled:** | 07/09/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09473.D | 1 | 07/14/00 | CCJ | 07/13/00 | OP1819 | GOP410 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.28 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 86% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW67GW | | |
| **Lab Sample ID:** | F7009-26 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09594.D | 1 | 07/20/00 | ME | 07/14/00 | OP1826 | GOP412 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | 0.945 | 0.30 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 81% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW68GW | | |
| **Lab Sample ID:** | F7009-27 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | OP09595.D | 1 | 07/20/00 | ME | 07/14/00 | OP1826 | GOP412 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | 0.361 | 0.28 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 91% | | 40-140% |

(a) Sample not preserved, adjusted to pH < 2 prior to extraction.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW69GW | | |
| **Lab Sample ID:** | F7009-19 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09480.D | 1 | 07/15/00 | CCJ | 07/13/00 | OP1819 | GOP410 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.28 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 83% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# ATTACHMENT G

## Aquifer Calculations and Slug Test Data

# CALCULATION OF VERTICAL HYDRAULIC GRADIENT

**Based On: Darcy Flow Equation**

**Reference: *Groundwater,* by Freeze and Cherry, pages 17, 71, and 72**

**EQUATION:** $i = \Delta H / \Delta L = dh/dl$

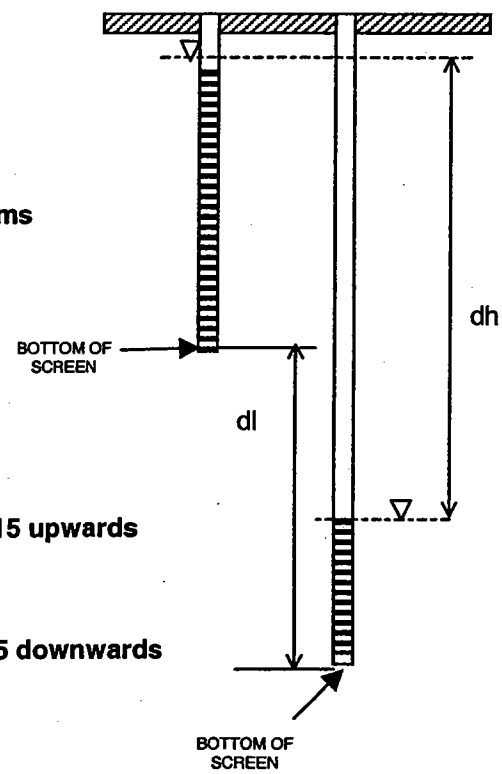
**WHERE:**

**i =** **the hydraulic gradient**

**dh = the difference in hydraulic head**

**dl = the linear distance over which the change in head is observed, in this this case the distance between the bottoms of the well screens.**

NOT TO SCALE




**CALCULATIONS - July 2000 DATA:**

$$i_{MW-47/DMW-60} = \frac{|18.99 - 19.26|}{18} = \frac{0.27}{18} = \mathbf{0.015\ upwards}$$

$$i_{MW-2/DMW-61} = \frac{|18.64 - 18.40|}{16} = \frac{0.24}{16} = \mathbf{0.015\ downwards}$$

**CALCULATION OF THE AVERAGE (ARITHMETIC MEAN) GRADIENT:**

$$i_{av} = \frac{0.015 + 0.015}{2} = \underline{\mathbf{0.015}}$$

Prepared By: _____ Checked By: _____

Date: _____ Date: _____

# CALCULATION OF HORIZONTAL HYDRAULIC GRADIENT

**Based On: Darcy Flow Equation**

**Reference: *Groundwater,* by Freeze and Cherry, pages 17, 71, and 72**

**EQUATION:** $i = \Delta H / \Delta L = dh/dl$

**WHERE:**

**i = the hydraulic gradient**

**dh = the difference in hydraulic head**

**dl = the linear distance over which the change in head is observed**

**CALCULATIONS - JULY 2000 DATA:**

$$i_{MW-44/MW-48} = \frac{18.96 - 18.76}{204} = \frac{0.20}{204} = 0.00098$$

$$i_{MW-45/MW-17} = \frac{19.11 - 18.67}{438} = \frac{0.44}{438} = 0.0010$$

$$i_{MW-37/MW-55} = \frac{19.16 - 18.63}{588} = \frac{0.53}{588} = 0.00090$$

**CALCULATION OF THE AVERAGE (ARITHMETIC MEAN) GRADIENT:**

$$i_{av} = \frac{0.00098 + 0.0010 + 0.00090}{3} = \underline{\mathbf{0.00096}}$$

Prepared By: _____ Checked By: _____

Date: _____ Date: _____

## CALCULATION OF GROUNDWATER SEEPAGE VELOCITY

**Based On: Darcy Flow Equation**

**References: *GROUNDWATER,* by Freeze and Cherry and *APPLIED HYDROGEOLOGY* by C. W. Fetter**

**Note: See accompanying Aqtesolv© data sheets in this Attachment for K values.**

### EQUATION: $V = K_{av}\, i/\eta_e$

**WHERE:**

**V= the groundwater seepage velocity (average linear velocity)**

**$K_{av}$ = the average hydraulic conductivity**

**i= the hydraulic gradient**

**$\eta_e$ = the effective porosity**

**CALCULATION A: Average (Arithmetic Mean) Hydraulic Conductivity,**

**MW-4 K values:**

**$K_{MW-4} = 4.299 \times 10^{-2}$ ft/min**
**$K_{MW-4} = 3.648 \times 10^{-2}$ ft/min**
**$K_{MW-4} = 4.039 \times 10^{-3}$ ft/min**

**MW-63 K value:**
**$K_{MW-63} = 9.08 \times 10^{-3}$ ft/min**

$$K_{av} = \frac{K_{MW-4} + K_{MW-4} + K_{MW-4} + K_{MW-63}}{4} = 2.31 \times 10^{-2} \text{ ft/min}$$

**$= 2.31 \times 10^{-2}$ ft/min x 1 min/60 sec $= 3.86 \times 10^{-4}$ ft/sec**

Prepared By: _____ Checked By: _____

Date: _____ Date: _____

## CALCULATION OF GROUNDWATER SEEPAGE VELOCITY (CONTINUED)

**EQUATION:** $V = K_{av}\, i/\eta_e$

$K_{av}$ = **3.86 x $10^{-4}$ ft/sec**

**i = 0.00096**

$\eta_e$ **= 0.30 – for sand (from Fetter, page 69)**

**CALCULATION B: Groundwater Seepage (Average Linear) Velocity**

$$V = \frac{(3.86 \times 10^{-4}\ \text{ft/sec})(0.00096)}{0.30} = 1.24 \times 10^{-6}\ \text{ft/sec}$$

**Converting to feet per year (ft/yr):**

1.24 X $10^{-6}$ ft/sec X 31,536,000 sec/yr = **39 ft/yr**

Prepared By: _____ Checked By: _____

Date: _____ Date: _____

**CALCULATION OF SEEPAGE VELOCITY CONSIDERING RETARDATION**

**Reference: ASTM Standard Guide for Risk-Based Corrective Action at Petroleum Release Sites**

**EQUATION:** $V_R = K_{av}\ i/\eta_e \times 1/R$

**WHERE:**

**R = the retardation factor =** $\left[1+\frac{k_s \rho_s}{\theta_s}\right]$

$k_s$ **= sorption coefficient = 0.13363 cm$^3$/g**

$\rho_s$ **= soil bulk density = 1.21 g/cm$^3$**

$\theta_s$ **= volumetric water content of saturated zone = 0.2**

**R = 1+** $\frac{0.13363 x 1.21}{0.2}$ **= *1.80846***

**CALCULATION C: Average Retarded Velocity**

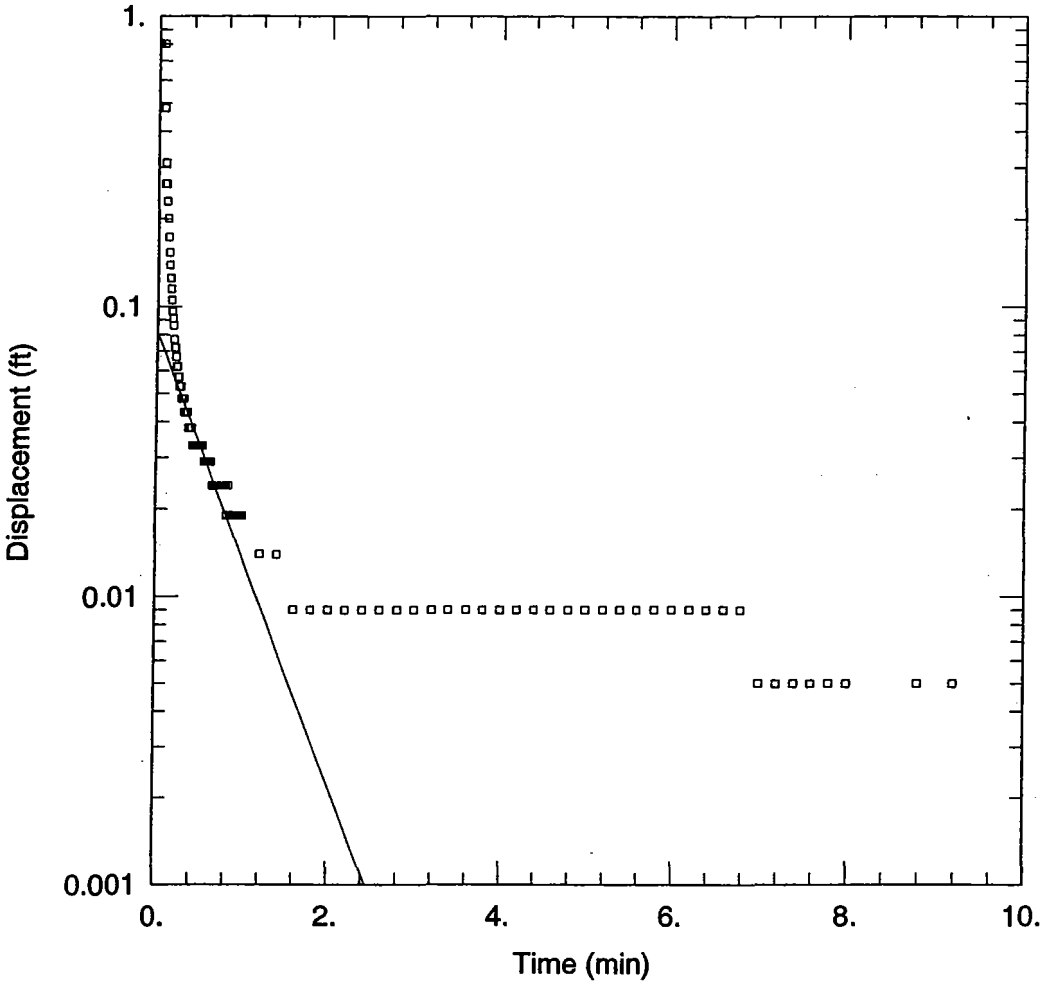
$V_R = \frac{(3.86 X 10^{-4}\ \text{ft/sec})(0.00096)}{(0.30)(1.80846)}$ **= 6.83 X 10$^{-7}$ ft/sec**

**Converting to feet per year (ft/yr):**

6.83 X 10$^{-7}$ ft/sec X 31,536,000 sec/yr = **22 ft/yr**

Prepared By: _____ Checked By: _____

Date: _____ Date: _____




## WELL TEST ANALYSIS

Data Set: C:\DATATRAN\PEN\1159\59M635S2.AQT
Date: 03/17/01 Time: 09:46:49

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N0401
Test Location: OLD Bronson 1159
Test Well: BR59MW63
Test Date: 7/21/00

## AQUIFER DATA

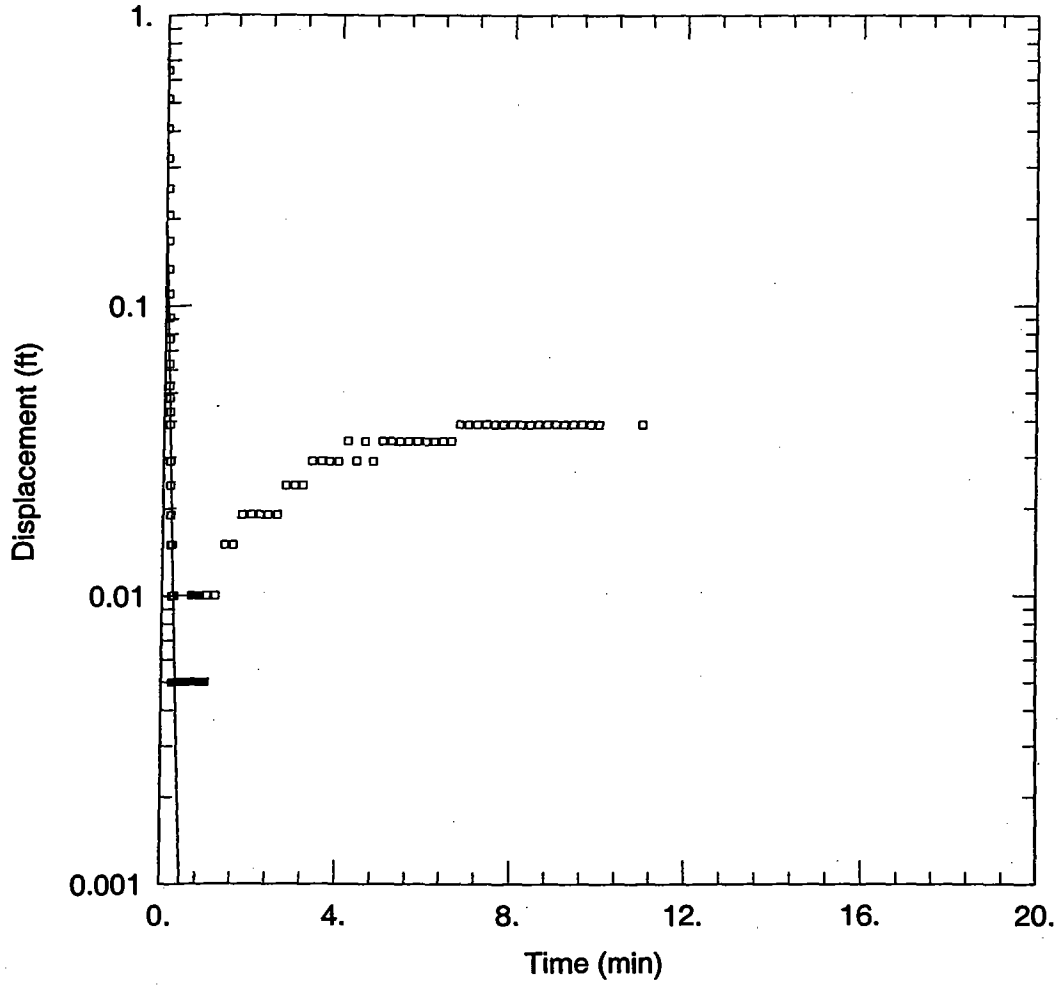
Saturated Thickness: 50. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 0.801 ft
Casing Radius: 0.0833 ft
Screen Length: 10. ft
Water Column Height: 4.82 ft
Wellbore Radius: 0.3333 ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.00908 ft/min
y0 = 0.08093 ft




## WELL TEST ANALYSIS

Data Set: C:\DATATRAN\PEN\1159\59M635S1.AQT
Date: 03/17/01 Time: 09:46:25

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N0401
Test Location: OLF Bronson 1159
Test Well: BR59MW63
Test Date: 7/21/00

## AQUIFER DATA

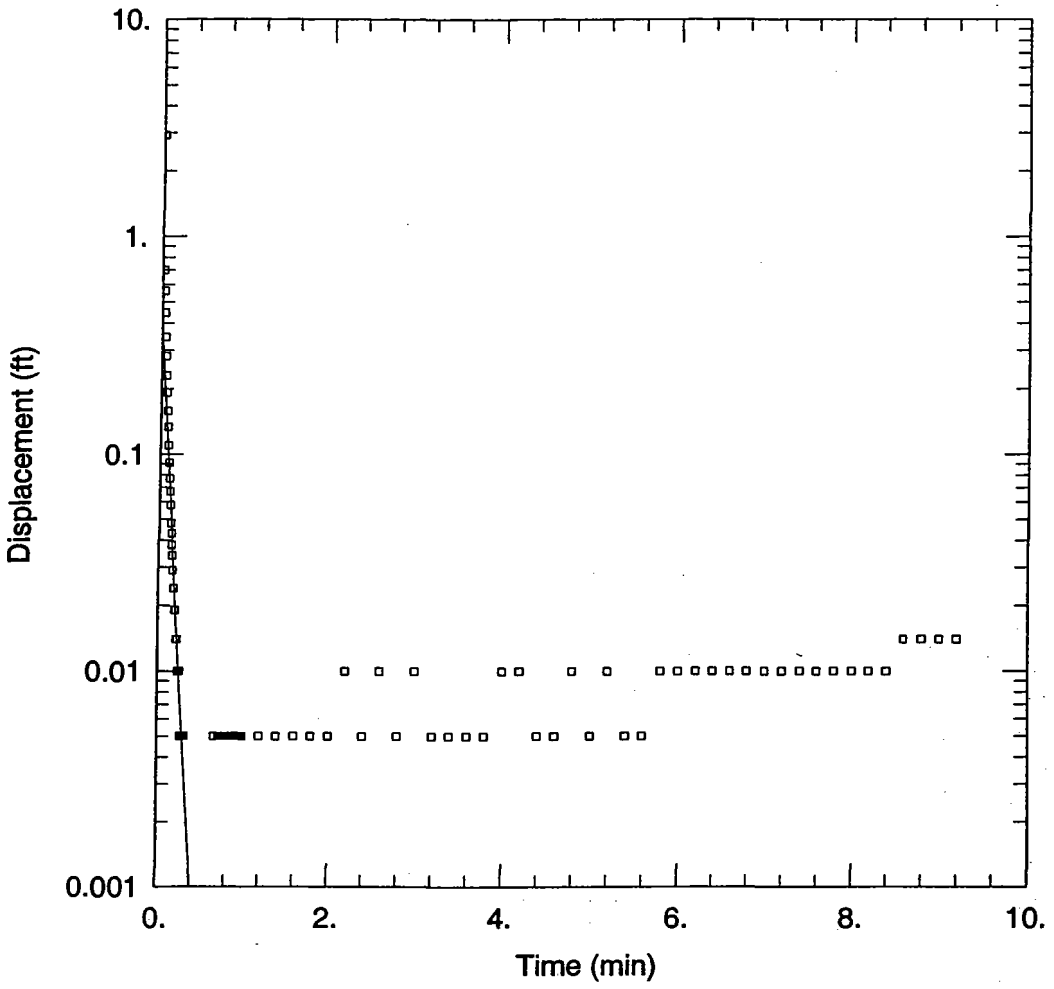
Saturated Thickness: 50. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 2.644 ft
Casing Radius: 0.0833 ft
Screen Length: 10. ft
Water Column Height: 4.82 ft
Wellbore Radius: 0.3333 ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.06034 ft/min
y0 = 0.1874 ft




## WELL TEST ANALYSIS

Data Set: C:\DATATRAN\PEN\1159\59M635S3.AQT
Date: 03/17/01 Time: 09:47:11

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N0401
Test Location: OLF Bronson 1159
Test Well: BR59MW63
Test Date: 7/21/00

## AQUIFER DATA

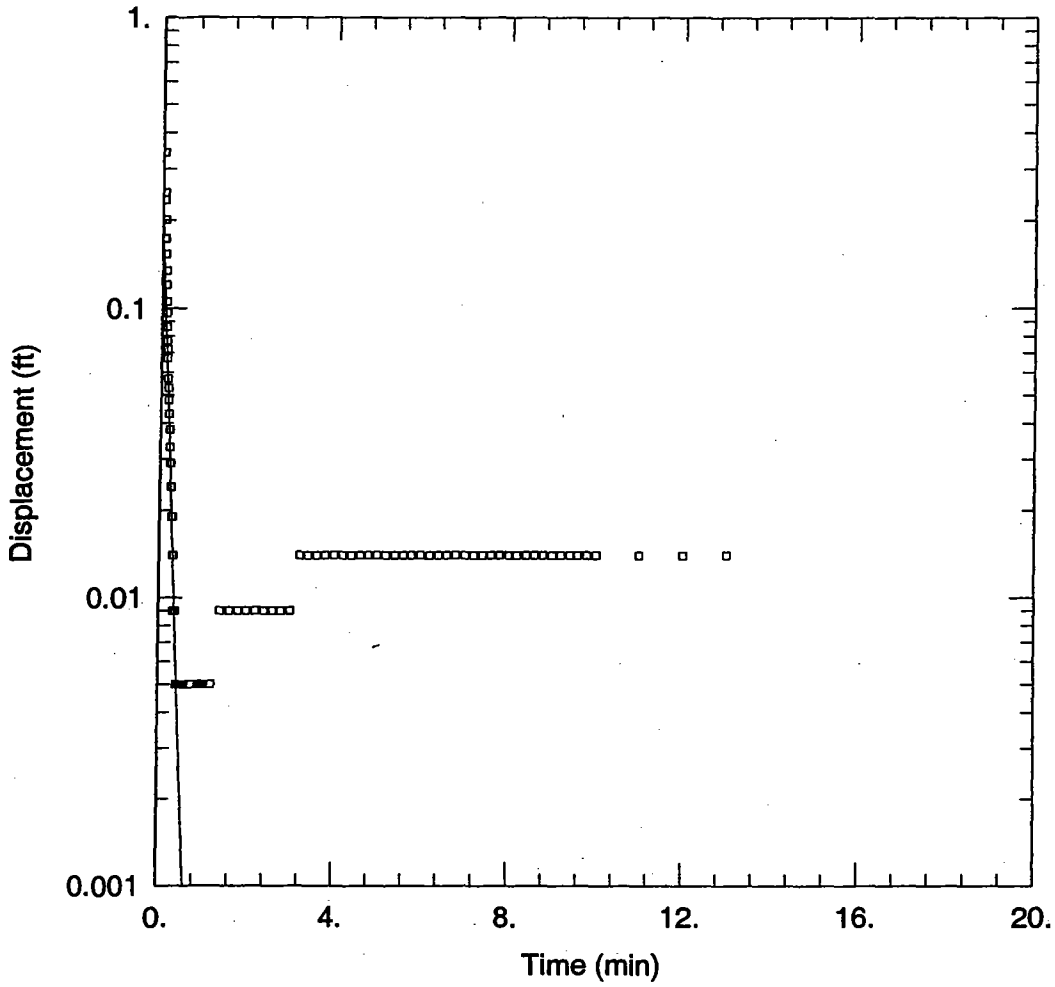
Saturated Thickness: 50. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 2.922 ft
Casing Radius: 0.0833 ft
Screen Length: 10. ft
Water Column Height: 4.82 ft
Wellbore Radius: 0.3333 ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.07424 ft/min
y0 = 0.3718 ft




## WELL TEST ANALYSIS

Data Set: C:\DATATRAN\PEN\1159\59M635S0.AQT
Date: 03/17/01 Time: 09:44:09

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N0401
Test Location: OLF Bronson 1159
Test Well: BR59MW63
Test Date: 7/21/00

## AQUIFER DATA

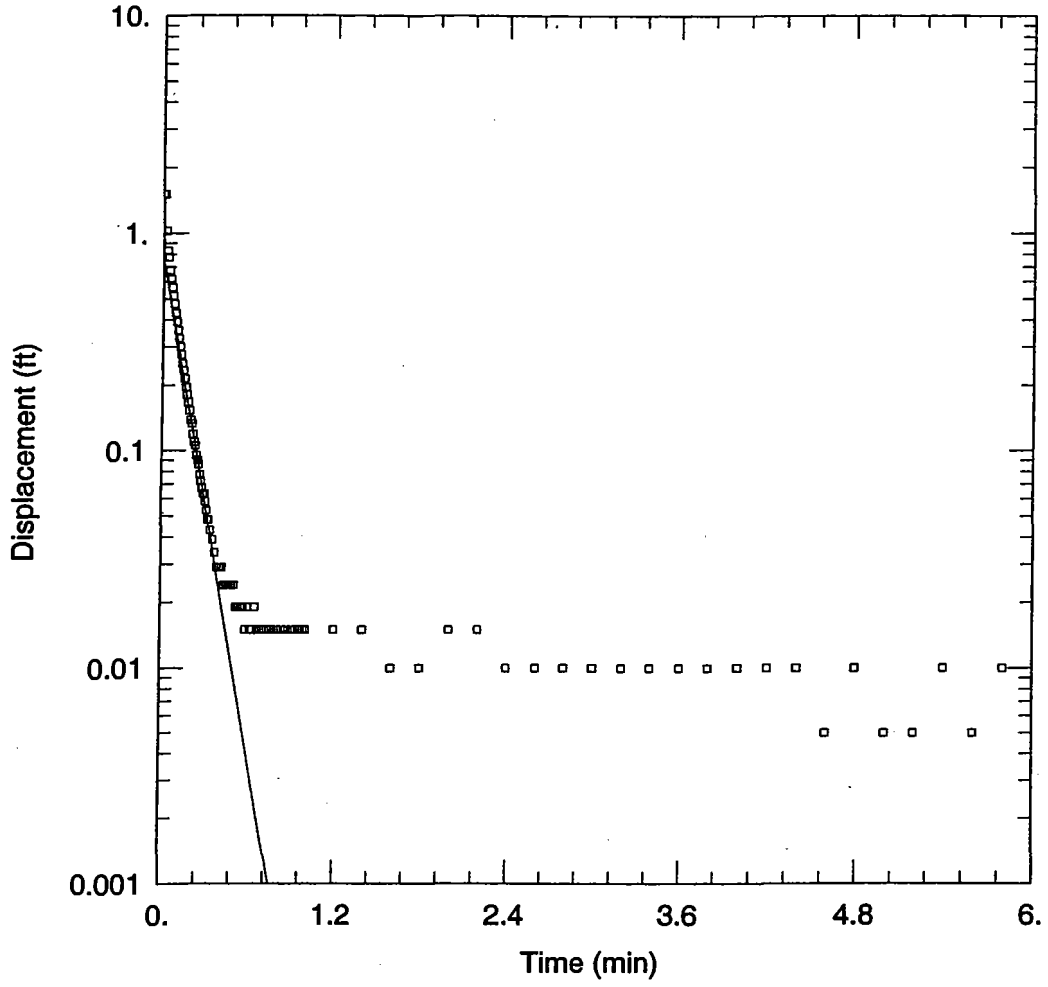
Saturated Thickness: 50. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 1.195 ft
Casing Radius: 0.0833 ft
Screen Length: 10. ft
Water Column Height: 4.82 ft
Wellbore Radius: 0.3333 ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.04223 ft/min
y0 = 0.1771 ft




## WELL TEST ANALYSIS

Data Set:
Date: 03/17/01 Time: 10:20:18

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N0401
Test Location: OLF Bronson 1159
Test Well: BR59MW04
Test Date: 7/22/00

## AQUIFER DATA

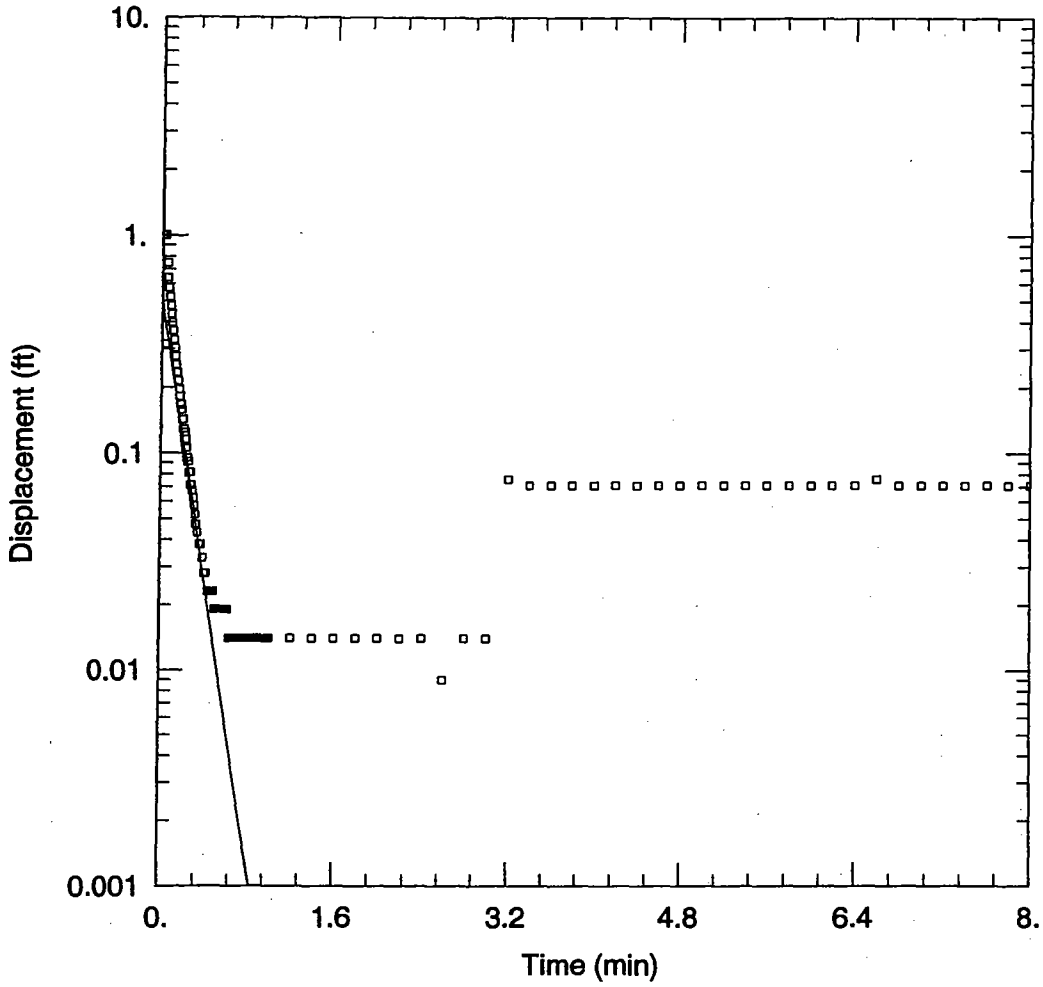
Saturated Thickness: 50. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 1.516 ft
Casing Radius: 0.0833 ft
Screen Length: 10. ft
Water Column Height: 4.22 ft
Wellbore Radius: 0.3333 ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.04299 ft/min
y0 = 0.7419 ft




## WELL TEST ANALYSIS

Data Set:
Date: 03/17/01 Time: 10:17:17

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N0401
Test Location: OLF Bronson 1159
Test Well: BR59MW04
Test Date: 7/22/00

## AQUIFER DATA

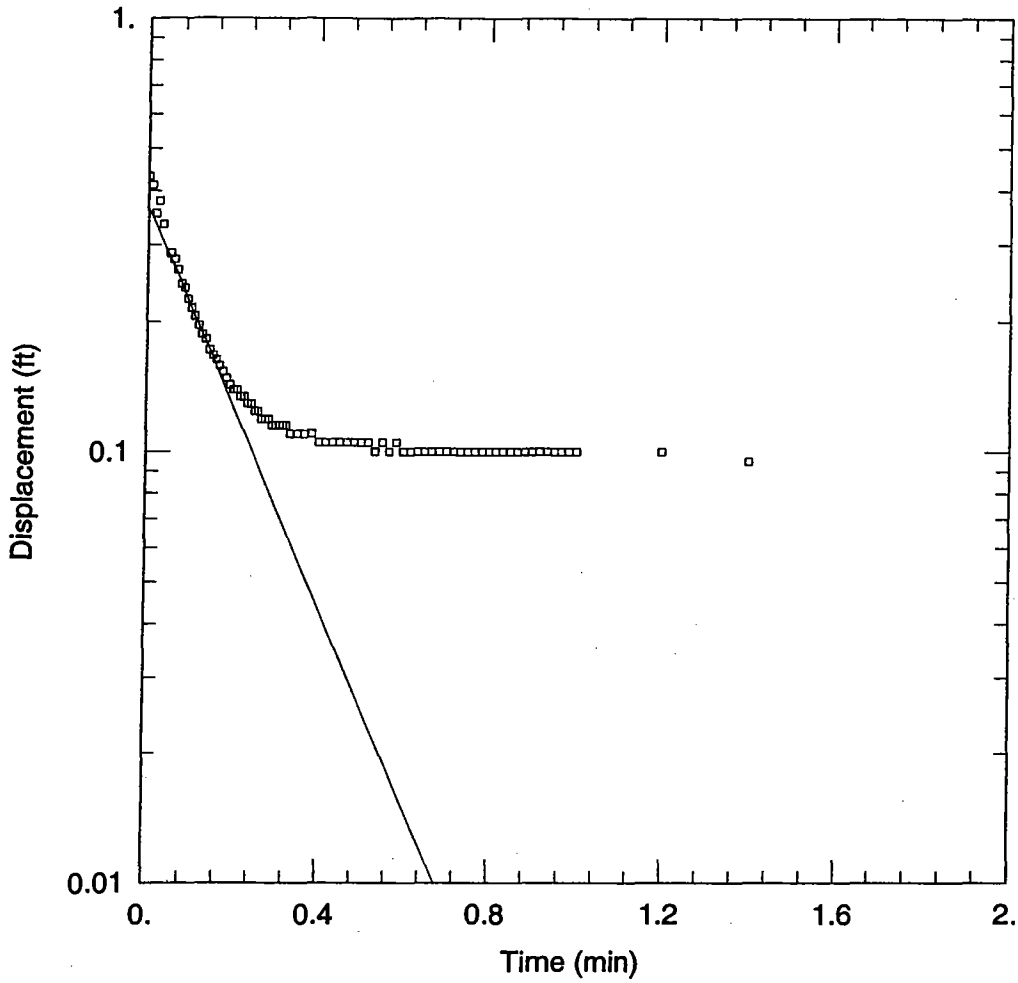
Saturated Thickness: 50. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 1.002 ft
Casing Radius: 0.0833 ft
Screen Length: 10. ft
Water Column Height: 4.22 ft
Wellbore Radius: 0.3333 ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.03648 ft/min
y0 = 0.4891 ft




## WELL TEST ANALYSIS

Data Set:
Date: 03/17/01 Time: 10:23:28

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N0401
Test Location: OLF Bronson 1159
Test Well: BR59MW04
Test Date: 7/22/00

## AQUIFER DATA

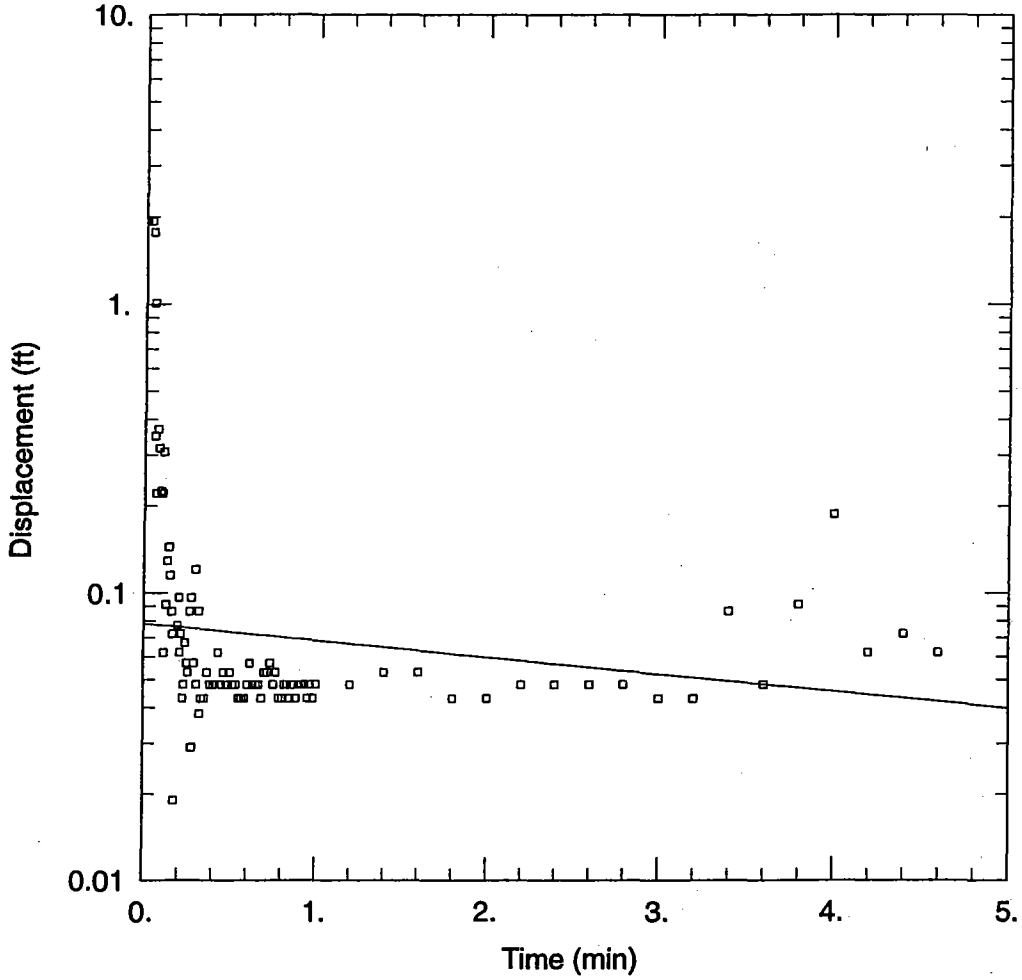
Saturated Thickness: 50. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 0.431 ft
Casing Radius: 0.0833 ft
Screen Length: 50. ft
Water Column Height: 4.22 ft
Wellbore Radius: 0.3333 ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.004039 ft/min
y0 = 0.3647 ft




## WELL TEST ANALYSIS

Data Set:
Date: 03/17/01 Time: 09:52:18

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N0401
Test Location: OLF Bronson 1159
Test Well: BR59MW60(D)
Test Date: 7/22/00

## AQUIFER DATA

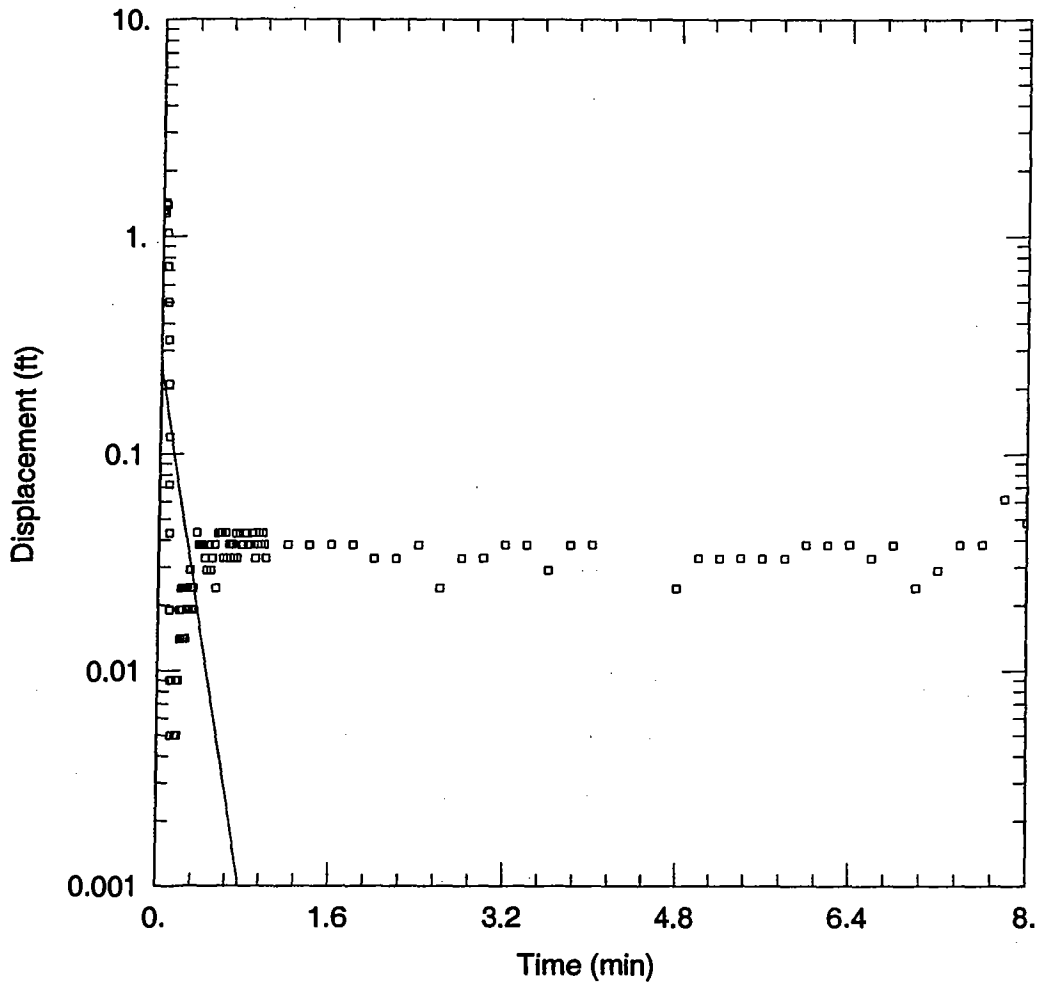
Saturated Thickness: 50. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 1.934 ft
Casing Radius: 0.0833 ft
Screen Length: 5. ft
Water Column Height: 23.16 ft
Wellbore Radius: 0.3333 ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.001593 ft/min
y0 = 0.0782 ft




## WELL TEST ANALYSIS

Data Set:
Date: 03/17/01 Time: 09:56:39

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N0401
Test Location: OLF Bronson 1159
Test Well: BR59MW60
Test Date: 7/22/00

## AQUIFER DATA

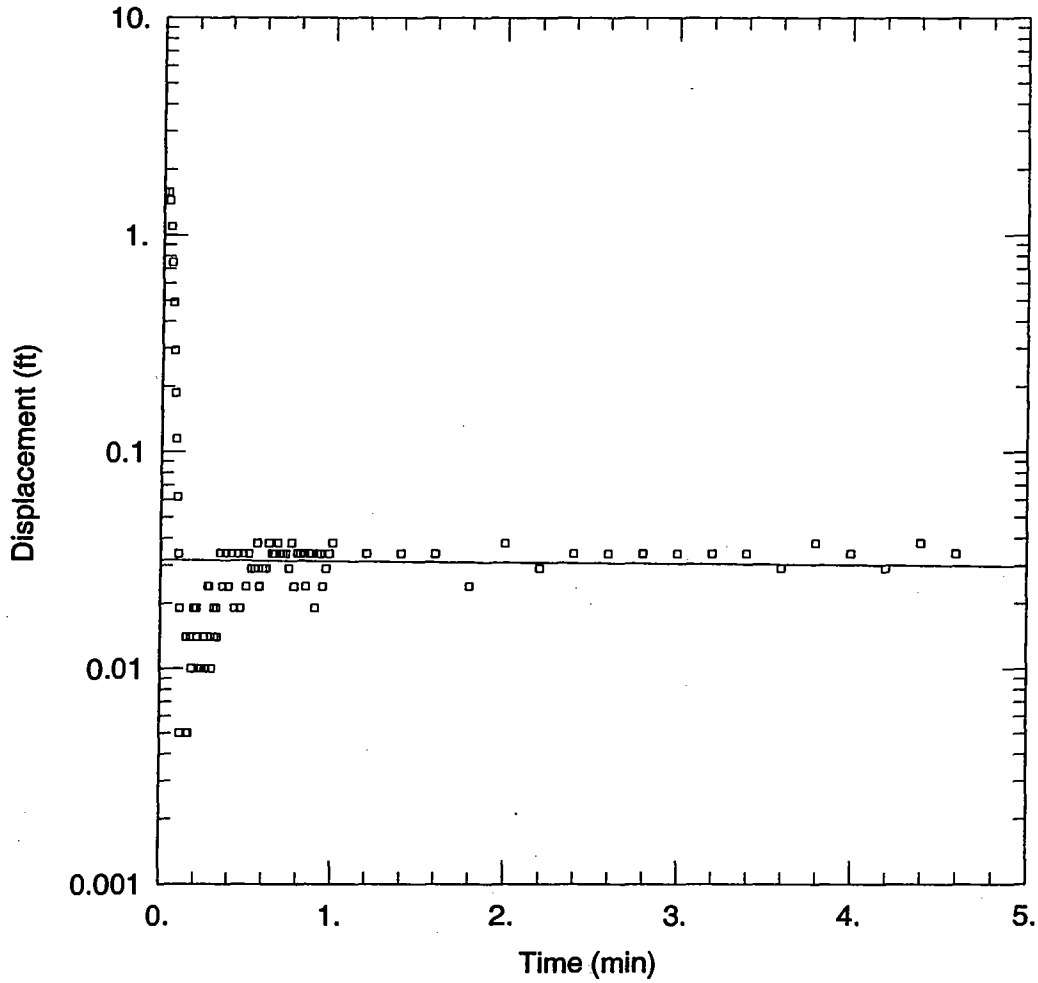
Saturated Thickness: 50. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 1.315 ft
Casing Radius: 0.0833 ft
Screen Length: 5. ft
Water Column Height: 23.16 ft
Wellbore Radius: 0.3333 ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.08458 ft/min
y0 = 0.2568 ft




## WELL TEST ANALYSIS

Data Set:
Date: 03/17/01 Time: 10:06:46

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N0401
Test Location: OLF Bronson 1159
Test Well: BR59MW60
Test Date: 7/22/00

## AQUIFER DATA

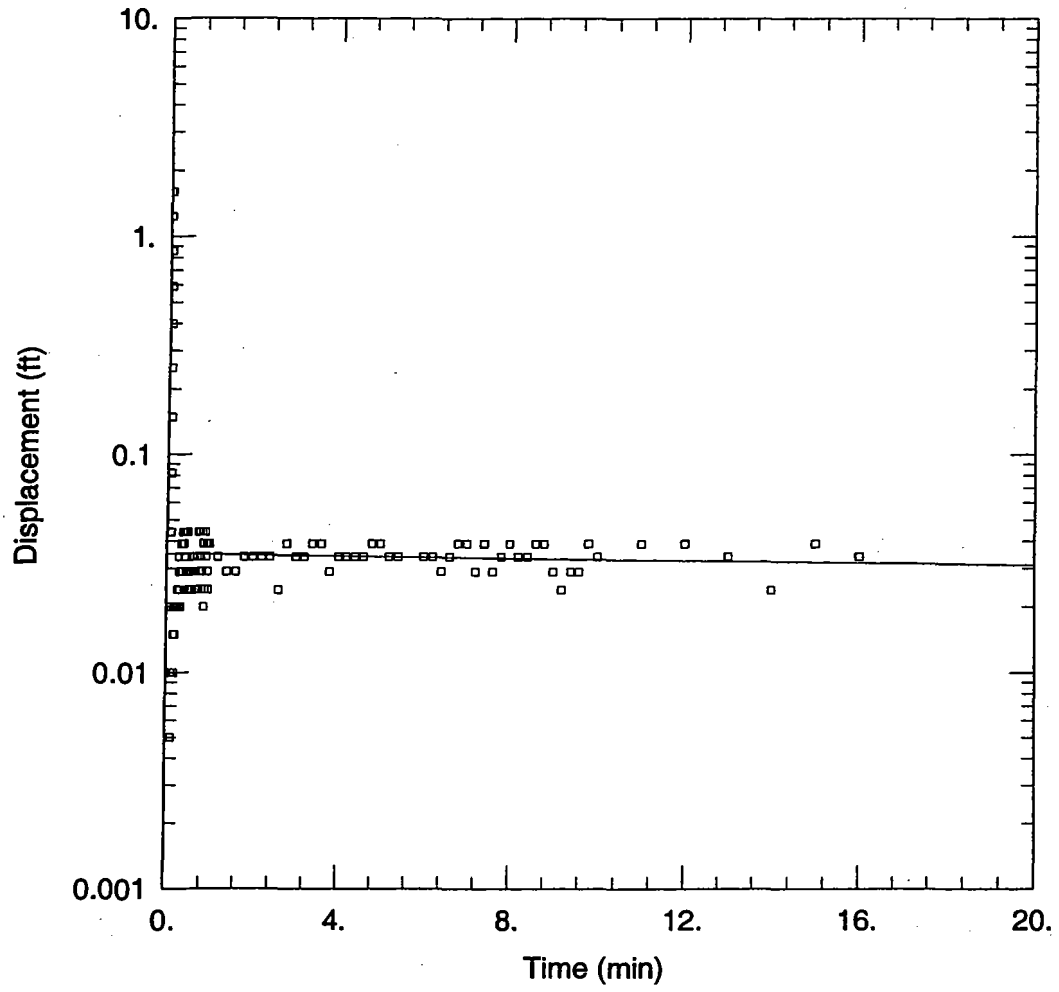
Saturated Thickness: 50. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 1.579 ft
Casing Radius: 0.0833 ft
Screen Length: 5. ft
Water Column Height: 23.16 ft
Wellbore Radius: 0.3333 ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.0001605 ft/min
y0 = 0.03183 ft




## WELL TEST ANALYSIS

Data Set:
Date: 03/17/01 Time: 10:02:58

## PROJECT INFORMATION

Company: Tetra tech NUS
Client: South Div
Project: N0401
Test Location: OLF Bronson 1159
Test Well: BR59MW60
Test Date: 7/22/00

## AQUIFER DATA

Saturated Thickness: 50. ft
Anisotropy Ratio (Kz/Kr): 0.1

## WELL DATA

Initial Displacement: 1.598 ft
Casing Radius: 0.0833 ft
Screen Length: 5. ft
Water Column Height: 23.16 ft
Wellbore Radius: 0.3333 ft
Gravel Pack Porosity: 0.3

## SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 6.906E-05 ft/min
y0 = 0.035 ft

SE2000
Environmental Logger
04/04 05:42

Unit# 191 Test 5

| Setups: | INPUT 1 |
|---|---|
| Type | Level (F) |
| Mode | TOC |
| I.D. | BR59MW60 |
| Reference | 0.000 |
| PSI at Ref. | 10.296 |
| SG | 1.000 |
| Linearity | 0.000 |
| Scale factor | 15.167 |
| Offset | -0.140 |
| Delay mSEC | 50.000 |

Step 0 07/22 14:41:00

| Elapsed Time | INPUT 1 |
|---|---|
| 0.0000 | 16.953 |
| 0.0083 | 18.282 |
| 0.0166 | 18.753 |
| 0.0250 | 17.807 |
| 0.0333 | 17.899 |
| 0.0416 | 17.913 |
| 0.0500 | 17.947 |
| 0.0583 | 17.975 |
| 0.0666 | 17.995 |
| 0.0750 | 18.014 |
| 0.0833 | 18.028 |
| 0.0916 | 18.043 |
| 0.1000 | 18.052 |
| 0.1083 | 18.062 |
| 0.1166 | 18.071 |
| 0.1250 | 18.076 |
| 0.1333 | 18.081 |
| 0.1416 | 18.091 |
| 0.1500 | 18.095 |
| 0.1583 | 18.095 |
| 0.1666 | 18.100 |
| 0.1750 | 18.105 |
| 0.1833 | 18.105 |
| 0.1916 | 18.110 |
| 0.2000 | 18.110 |
| 0.2083 | 18.115 |

| | |
|---|---|
| 0.9500 | 18.143 |
| 0.9666 | 18.143 |
| 0.9833 | 18.143 |
| 1.0000 | 18.143 |
| 1.2000 | 18.143 |
| 1.4000 | 18.139 |
| 1.6000 | 18.139 |
| 1.8000 | 18.139 |
| 2.0000 | 18.139 |
| 2.2000 | 18.139 |
| 2.4000 | 18.139 |
| 2.6000 | 18.139 |
| 2.8000 | 18.139 |
| 3.0000 | 18.139 |
| 3.2000 | 18.134 |
| 3.4000 | 18.134 |
| 3.6000 | 18.134 |
| 3.8000 | 18.134 |
| 4.0000 | 18.134 |
| 4.2000 | 18.134 |
| 4.4000 | 18.134 |
| 4.6000 | 18.134 |
| 4.8000 | 18.134 |
| 5.0000 | 18.134 |
| 5.2000 | 18.134 |
| 5.4000 | 18.134 |
| 5.6000 | 18.134 |
| 5.8000 | 18.134 |
| 6.0000 | 18.134 |
| 6.2000 | 18.134 |
| 6.4000 | 18.134 |
| 6.6000 | 18.134 |
| 6.8000 | 18.134 |
| 7.0000 | 18.134 |
| 7.2000 | 18.134 |
| 7.4000 | 18.134 |
| 7.6000 | 18.134 |
| 7.8000 | 18.134 |
| 8.0000 | 18.134 |
| 8.2000 | 18.134 |
| 8.4000 | 18.134 |
| 8.6000 | 18.134 |
| 8.8000 | 18.134 |
| 9.0000 | 18.134 |
| 9.2000 | 18.134 |
| 9.4000 | 18.134 |
| 9.6000 | 18.134 |
| 9.8000 | 18.134 |
| 10.0000 | 18.134 |
| 11.0000 | 18.134 |
| 12.0000 | 18.134 |

```
  13.0000        18.134
END
```

SE2000
Environmental Logger
04/04 05:44

Unit# 191 Test 5

| Setups: | INPUT 1 |
|---|---|
| Type | Level (F) |
| Mode | TOC |
| I.D. | BR59MW60 |
| Reference | 0.000 |
| PSI at Ref. | 10.296 |
| SG | 1.000 |
| Linearity | 0.000 |
| Scale factor | 15.167 |
| Offset | -0.140 |
| Delay mSEC | 50.000 |

Step 1 07/22 14:54:21

| Elapsed Time | INPUT 1 |
|---|---|
| 0.0000 | 20.792 |
| 0.0083 | 18.796 |
| 0.0166 | 18.666 |
| 0.0250 | 18.556 |
| 0.0333 | 18.470 |
| 0.0416 | 18.402 |
| 0.0500 | 18.354 |
| 0.0583 | 18.316 |
| 0.0666 | 18.282 |
| 0.0750 | 18.258 |
| 0.0833 | 18.239 |
| 0.0916 | 18.225 |
| 0.1000 | 18.211 |
| 0.1083 | 18.201 |
| 0.1166 | 18.196 |
| 0.1250 | 18.191 |
| 0.1333 | 18.187 |
| 0.1416 | 18.177 |
| 0.1500 | 18.177 |
| 0.1583 | 18.172 |
| 0.1666 | 18.167 |
| 0.1750 | 18.167 |
| 0.1833 | 18.163 |
| 0.1916 | 18.163 |
| 0.2000 | 18.163 |
| 0.2083 | 18.158 |

| | |
|---|---|
| 0.2166 | 18.158 |
| 0.2250 | 18.158 |
| 0.2333 | 18.158 |
| 0.2416 | 18.153 |
| 0.2500 | 18.158 |
| 0.2583 | 18.158 |
| 0.2666 | 18.153 |
| 0.2750 | 18.153 |
| 0.2833 | 18.153 |
| 0.2916 | 18.153 |
| 0.3000 | 18.153 |
| 0.3083 | 18.153 |
| 0.3166 | 18.153 |
| 0.3250 | 18.153 |
| 0.3333 | 18.153 |
| 0.3500 | 18.153 |
| 0.3666 | 18.148 |
| 0.3833 | 18.148 |
| 0.4000 | 18.153 |
| 0.4166 | 18.148 |
| 0.4333 | 18.153 |
| 0.4500 | 18.153 |
| 0.4666 | 18.153 |
| 0.4833 | 18.153 |
| 0.5000 | 18.153 |
| 0.5166 | 18.153 |
| 0.5333 | 18.153 |
| 0.5500 | 18.153 |
| 0.5666 | 18.153 |
| 0.5833 | 18.153 |
| 0.6000 | 18.153 |
| 0.6166 | 18.153 |
| 0.6333 | 18.153 |
| 0.6500 | 18.158 |
| 0.6666 | 18.153 |
| 0.6833 | 18.153 |
| 0.7000 | 18.158 |
| 0.7166 | 18.158 |
| 0.7333 | 18.158 |
| 0.7500 | 18.158 |
| 0.7666 | 18.158 |
| 0.7833 | 18.158 |
| 0.8000 | 18.158 |
| 0.8166 | 18.158 |
| 0.8333 | 18.158 |
| 0.8500 | 18.153 |
| 0.8666 | 18.153 |
| 0.8833 | 18.153 |
| 0.9000 | 18.153 |
| 0.9166 | 18.153 |
| 0.9333 | 18.153 |

| | |
|---|---|
| 0.9500 | 18.153 |
| 0.9666 | 18.153 |
| 0.9833 | 18.153 |
| 1.0000 | 18.158 |
| 1.2000 | 18.158 |
| 1.4000 | 18.163 |
| 1.6000 | 18.163 |
| 1.8000 | 18.167 |
| 2.0000 | 18.167 |
| 2.2000 | 18.167 |
| 2.4000 | 18.167 |
| 2.6000 | 18.167 |
| 2.8000 | 18.172 |
| 3.0000 | 18.172 |
| 3.2000 | 18.172 |
| 3.4000 | 18.177 |
| 3.6000 | 18.177 |
| 3.8000 | 18.177 |
| 4.0000 | 18.177 |
| 4.2000 | 18.182 |
| 4.4000 | 18.177 |
| 4.6000 | 18.182 |
| 4.8000 | 18.177 |
| 5.0000 | 18.182 |
| 5.2000 | 18.182 |
| 5.4000 | 18.182 |
| 5.6000 | 18.182 |
| 5.8000 | 18.182 |
| 6.0000 | 18.182 |
| 6.2000 | 18.182 |
| 6.4000 | 18.182 |
| 6.6000 | 18.182 |
| 6.8000 | 18.187 |
| 7.0000 | 18.187 |
| 7.2000 | 18.187 |
| 7.4000 | 18.187 |
| 7.6000 | 18.187 |
| 7.8000 | 18.187 |
| 8.0000 | 18.187 |
| 8.2000 | 18.187 |
| 8.4000 | 18.187 |
| 8.6000 | 18.187 |
| 8.8000 | 18.187 |
| 9.0000 | 18.187 |
| 9.2000 | 18.187 |
| 9.4000 | 18.187 |
| 9.6000 | 18.187 |
| 9.8000 | 18.187 |
| 10.0000 | 18.187 |
| 11.0000 | 18.187 |

END

test5step1

SE2000
Environmental Logger
04/04 05:48

Unit# 191 Test 5

| Setups: | INPUT 1 |
|---|---|
| Type | Level (F) |
| Mode | TOC |
| I.D. | BR59MW60 |
| Reference | 0.000 |
| PSI at Ref. | 10.296 |
| SG | 1.000 |
| Linearity | 0.000 |
| Scale factor | 15.167 |
| Offset | -0.140 |
| Delay mSEC | 50.000 |

Step 2 07/22 15:06:14

| Elapsed Time | INPUT 1 |
|---|---|
| 0.0000 | 18.187 |
| 0.0083 | 18.182 |
| 0.0166 | 18.182 |
| 0.0250 | 18.182 |
| 0.0333 | 18.182 |
| 0.0416 | 18.177 |
| 0.0500 | 17.649 |
| 0.0583 | 17.371 |
| 0.0666 | 17.692 |
| 0.0750 | 17.908 |
| 0.0833 | 17.860 |
| 0.0916 | 17.908 |
| 0.1000 | 17.942 |
| 0.1083 | 17.971 |
| 0.1166 | 17.999 |
| 0.1250 | 18.019 |
| 0.1333 | 18.033 |
| 0.1416 | 18.047 |
| 0.1500 | 18.057 |
| 0.1583 | 18.067 |
| 0.1666 | 18.076 |
| 0.1750 | 18.081 |
| 0.1833 | 18.086 |
| 0.1916 | 18.095 |
| 0.2000 | 18.100 |
| 0.2083 | 18.100 |

| | |
|---|---|
| 0.2166 | 18.105 |
| 0.2250 | 18.110 |
| 0.2333 | 18.110 |
| 0.2416 | 18.115 |
| 0.2500 | 18.115 |
| 0.2583 | 18.119 |
| 0.2666 | 18.119 |
| 0.2750 | 18.119 |
| 0.2833 | 18.124 |
| 0.2916 | 18.124 |
| 0.3000 | 18.124 |
| 0.3083 | 18.124 |
| 0.3166 | 18.129 |
| 0.3250 | 18.129 |
| 0.3333 | 18.129 |
| 0.3500 | 18.129 |
| 0.3666 | 18.134 |
| 0.3833 | 18.134 |
| 0.4000 | 18.134 |
| 0.4166 | 18.139 |
| 0.4333 | 18.139 |
| 0.4500 | 18.139 |
| 0.4666 | 18.139 |
| 0.4833 | 18.139 |
| 0.5000 | 18.139 |
| 0.5166 | 18.139 |
| 0.5333 | 18.139 |
| 0.5500 | 18.143 |
| 0.5666 | 18.143 |
| 0.5833 | 18.143 |
| 0.6000 | 18.143 |
| 0.6166 | 18.143 |
| 0.6333 | 18.143 |
| 0.6500 | 18.148 |
| 0.6666 | 18.148 |
| 0.6833 | 18.148 |
| 0.7000 | 18.148 |
| 0.7166 | 18.148 |
| 0.7333 | 18.148 |
| 0.7500 | 18.148 |
| 0.7666 | 18.148 |
| 0.7833 | 18.148 |
| 0.8000 | 18.148 |
| 0.8166 | 18.153 |
| 0.8333 | 18.148 |
| 0.8500 | 18.153 |
| 0.8666 | 18.153 |
| 0.8833 | 18.153 |
| 0.9000 | 18.153 |
| 0.9166 | 18.153 |
| 0.9333 | 18.153 |

| | |
|---|---|
| 0.9500 | 18.153 |
| 0.9666 | 18.153 |
| 0.9833 | 18.153 |
| 1.0000 | 18.153 |
| 1.2000 | 18.158 |
| 1.4000 | 18.158 |
| 1.6000 | 18.163 |
| 1.8000 | 18.163 |
| 2.0000 | 18.163 |
| 2.2000 | 18.163 |
| 2.4000 | 18.163 |
| 2.6000 | 18.163 |
| 2.8000 | 18.163 |
| 3.0000 | 18.163 |
| 3.2000 | 18.163 |
| 3.4000 | 18.163 |
| 3.6000 | 18.163 |
| 3.8000 | 18.163 |
| 4.0000 | 18.163 |
| 4.2000 | 18.163 |
| 4.4000 | 18.163 |
| 4.6000 | 18.163 |
| 4.8000 | 18.163 |
| 5.0000 | 18.163 |
| 5.2000 | 18.163 |
| 5.4000 | 18.163 |
| 5.6000 | 18.163 |
| 5.8000 | 18.163 |
| 6.0000 | 18.163 |
| 6.2000 | 18.163 |
| 6.4000 | 18.163 |
| 6.6000 | 18.163 |
| 6.8000 | 18.163 |
| 7.0000 | 18.167 |
| 7.2000 | 18.167 |
| 7.4000 | 18.167 |
| 7.6000 | 18.167 |
| 7.8000 | 18.167 |
| 8.0000 | 18.167 |
| 8.2000 | 18.172 |
| 8.4000 | 18.172 |
| 8.6000 | 18.172 |
| 8.8000 | 18.167 |
| 9.0000 | 18.172 |
| 9.2000 | 18.167 |
| 9.4000 | 18.172 |
| 9.6000 | 18.172 |
| 9.8000 | 18.172 |

END

SE2000
Environmental Logger
04/04 05:49

Unit# 191 Test 5

| Setups: | INPUT 1 |
|---|---|
| Type | Level (F) |
| Mode | TOC |
| I.D. | BR59MW60 |
| Reference | 0.000 |
| PSI at Ref. | 10.296 |
| SG | 1.000 |
| Linearity | 0.000 |
| Scale factor | 15.167 |
| Offset | -0.140 |
| Delay mSEC | 50.000 |

Step 3 07/22 15:16:05

| Elapsed Time | INPUT 1 |
|---|---|
| 0.0000 | 18.172 |
| 0.0083 | 21.075 |
| 0.0166 | 18.854 |
| 0.0250 | 18.714 |
| 0.0333 | 18.599 |
| 0.0416 | 18.498 |
| 0.0500 | 18.436 |
| 0.0583 | 18.383 |
| 0.0666 | 18.345 |
| 0.0750 | 18.311 |
| 0.0833 | 18.287 |
| 0.0916 | 18.263 |
| 0.1000 | 18.244 |
| 0.1083 | 18.230 |
| 0.1166 | 18.220 |
| 0.1250 | 18.211 |
| 0.1333 | 18.201 |
| 0.1416 | 18.196 |
| 0.1500 | 18.191 |
| 0.1583 | 18.187 |
| 0.1666 | 18.182 |
| 0.1750 | 18.177 |
| 0.1833 | 18.177 |
| 0.1916 | 18.172 |
| 0.2000 | 18.172 |
| 0.2083 | 18.167 |

| | |
|---|---|
| 0.2166 | 18.167 |
| 0.2250 | 18.167 |
| 0.2333 | 18.163 |
| 0.2416 | 18.163 |
| 0.2500 | 18.163 |
| 0.2583 | 18.163 |
| 0.2666 | 18.158 |
| 0.2750 | 18.158 |
| 0.2833 | 18.158 |
| 0.2916 | 18.158 |
| 0.3000 | 18.158 |
| 0.3083 | 18.158 |
| 0.3166 | 18.158 |
| 0.3250 | 18.153 |
| 0.3333 | 18.153 |
| 0.3500 | 18.153 |
| 0.3666 | 18.153 |
| 0.3833 | 18.153 |
| 0.4000 | 18.153 |
| 0.4166 | 18.153 |
| 0.4333 | 18.153 |
| 0.4500 | 18.153 |
| 0.4666 | 18.153 |
| 0.4833 | 18.153 |
| 0.5000 | 18.153 |
| 0.5166 | 18.153 |
| 0.5333 | 18.153 |
| 0.5500 | 18.153 |
| 0.5666 | 18.153 |
| 0.5833 | 18.153 |
| 0.6000 | 18.153 |
| 0.6166 | 18.153 |
| 0.6333 | 18.153 |
| 0.6500 | 18.153 |
| 0.6666 | 18.158 |
| 0.6833 | 18.153 |
| 0.7000 | 18.153 |
| 0.7166 | 18.158 |
| 0.7333 | 18.158 |
| 0.7500 | 18.158 |
| 0.7666 | 18.158 |
| 0.7833 | 18.158 |
| 0.8000 | 18.158 |
| 0.8166 | 18.158 |
| 0.8333 | 18.158 |
| 0.8500 | 18.158 |
| 0.8666 | 18.158 |
| 0.8833 | 18.158 |
| 0.9000 | 18.158 |
| 0.9166 | 18.158 |
| 0.9333 | 18.158 |

| | |
|---|---|
| 0.9500 | 18.158 |
| 0.9666 | 18.158 |
| 0.9833 | 18.158 |
| 1.0000 | 18.158 |
| 1.2000 | 18.158 |
| 1.4000 | 18.158 |
| 1.6000 | 18.158 |
| 1.8000 | 18.158 |
| 2.0000 | 18.158 |
| 2.2000 | 18.163 |
| 2.4000 | 18.158 |
| 2.6000 | 18.163 |
| 2.8000 | 18.158 |
| 3.0000 | 18.163 |
| 3.2000 | 18.158 |
| 3.4000 | 18.158 |
| 3.6000 | 18.158 |
| 3.8000 | 18.158 |
| 4.0000 | 18.163 |
| 4.2000 | 18.163 |
| 4.4000 | 18.158 |
| 4.6000 | 18.158 |
| 4.8000 | 18.163 |
| 5.0000 | 18.158 |
| 5.2000 | 18.163 |
| 5.4000 | 18.158 |
| 5.6000 | 18.158 |
| 5.8000 | 18.163 |
| 6.0000 | 18.163 |
| 6.2000 | 18.163 |
| 6.4000 | 18.163 |
| 6.6000 | 18.163 |
| 6.8000 | 18.163 |
| 7.0000 | 18.163 |
| 7.2000 | 18.163 |
| 7.4000 | 18.163 |
| 7.6000 | 18.163 |
| 7.8000 | 18.163 |
| 8.0000 | 18.163 |
| 8.2000 | 18.163 |
| 8.4000 | 18.163 |
| 8.6000 | 18.167 |
| 8.8000 | 18.167 |
| 9.0000 | 18.167 |
| 9.2000 | 18.167 |
| 9.4000 | 18.129 |
| 9.6000 | 18.143 |
| 9.8000 | 18.139 |
| 10.0000 | 18.143 |
| 11.0000 | 18.153 |
| 12.0000 | 18.158 |

END

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: OLF Bronson site 1159
Project No.: 0401

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

Sample ID No.: OLFB59MW69GW
Sample Location: 11569 DMW69
Sampled By: JA
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7 10 00 | | | | | | | | |
| Time: 1055 | | | | | | | | |
| Method: peristaltic | Clear | 4.47 | .033 | 22.4 | 7.9 | 4.83 | 0.00 | |

**PURGE DATA:**

| | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7 10 00 | | | | | | | | |
| Method: peristaltic | Initial | 4.50 | .086 | 23.0 | 144 | 4.06 | 0.00 | |
| Monitor Reading (ppm): —— | 1st | 4.47 | .035 | 22.0 | 46.2 | 5.09 | 0.00 | |
| Well Casing Diameter & Material | 2nd | 4.73 | .034 | 22.6 | 15.6 | 4.51 | 0.00 | |
| Type: 2" PVC | 3rd | 4.47 | .033 | 22.4 | 7.9 | 4.83 | 0.00 | |
| Total Well Depth (TD): 29.45 | | | | | | | | |
| Static Water Level (WL): 10.97 | | | | | | | | |
| One Casing Volume(gal/L): 2.9 | | | | | | | | |
| Start Purge (hrs): 0826 | | | | | | | | |
| End Purge (hrs): 1055 | | | | | | | | |
| Total Purge Time (min): 149 min | | | | | | | | |
| Total Vol. Purged (gal/L): ~8.7 gal | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| | | | |
| VOCs | HCl | 2 x 40ml glass | |
| TRPH | $H_2SO_4$ | 2 x 1 l amber | |
| Total Pb | $HNO_3$ | 1 x .5 plastic | |

**OBSERVATIONS / NOTES:**

521
18.42
.16
11052
18420
2.9472

Fe = 2.25 mg/L ORP = 184.5 mV

DO = 3.3 mg/L HS = 0.00 mg/L

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

MW 68

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: BRONSON
Project No.: N0401

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

Sample ID No.: OLFB/59/MW68/GW
Sample Location: SITE 59
Sampled By: P.D.B
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 7/10/00 | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Time: 1525 | | | | | | | | |
| Method: LOW FLOW/STRAW | 5.33 | 5.33 | .07 | 21.3 | 4.04 | 0.95 | — | ✓ |

**PURGE DATA:**

| Date: 7/10/00 | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Method: LOW FLOW | INITIAL | 5.47 | .076 | 21.7 | 8.99 | 0.59 | — | CLEAR |
| Monitor Reading (ppm): — | 1500 | 5.45 | .076 | 21.6 | 8.71 | 0.45 | — | CLEAR |
| Well Casing Diameter & Material | 1505 | 5.40 | .074 | 21.5 | 7.72 | 0.35 | — | CLEAR |
| Type: 2" PVC | 1510 | 5.36 | .072 | 21.5 | 6.11 | 0.74 | — | CLEAR |
| Total Well Depth (TD): 17.97 | 1515 | 5.33 | .070 | 21.3 | 4.61 | 1.02 | — | CLEAR |
| Static Water Level (WL): 13.51 | 1520 | 5.33 | .071 | 21.3 | 4.04 | 0.95 | — | CLEAR |
| One Casing Volume(gal/L): .8 | 1525 | | | | | | | |
| Start Purge (hrs): 1450 | 1530 | | | | | | | |
| End Purge (hrs): 1520 | 1535 | | | | | | | |
| Total Purge Time (min): 30 | 1540 | | | | | | | |
| Total Vol. Purged (gal/L): 2.4 | 1545 | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOC | HCL, ICE | 2x40mL VIAL | 2 |
| TRPH | $H_2SO_4$, ICE | 2x1000 mL AMBER | 2 |
| TOTAL Pb | $HNO_3$ | 2x 500 mL PLASTIC | 2 |

**OBSERVATIONS / NOTES:**

SAMPLES PLACED ON ICE
DO = 7.6 mg/L ORP = 130.4 mV
Fe = 3.30 (1:mH) mg/L HS = 0.00 mg/L

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|

Signature(s): [signature]

B

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: OLF Brown
Project No.: 0401

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

Sample ID No.: OLFB59MW67GW
Sample Location: Site 1159
Sampled By: JRH
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7-10-00 | | | | | | | | |
| Time: 1445 | | | | | | | | |
| Method: Pump | Clear | 5.36 | .129 | 26.3 | 2.5 | 0.46 | 0.0 | -335.7 |

**PURGE DATA:**

| | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7-10-00 | | | | | | | | |
| Method: Pump | Init. | 5.74 | .147 | 27.3 | >999 | 0.62 | 0.0 | -341.6 |
| Monitor Reading (ppm): | 1.0 | 5.38 | .131 | 26.7 | 8.8 | 0.51 | 0.0 | -324.6 |
| Well Casing Diameter & Material | 2.0 | 5.24 | .128 | 26.4 | 4.2 | 0.41 | 0.0 | -337.4 |
| Type: 2" PVC. | 3.0 | 5.36 | .129 | 26.3 | 2.5 | 0.46 | 0.0 | -335.7 |
| Total Well Depth (TD): 15.10 | | | | | | | | |
| Static Water Level (WL): 8.90 | | | | | | | | |
| One Casing Volume(gal/L): 1.0 | | | | | | | | |
| Start Purge (hrs): 1355 | | | | | | | | |
| End Purge (hrs): 1444 | | | | | | | | |
| Total Purge Time (min): 49 min | | | | | | | | |
| Total Vol. Purged (gal/L): ~3 gal | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOC | HCl | 2x40 ml vials | |
| TRPH | $H_2SO_4$ | 2x1000 ml ambers | |
| Lead | $HNO_3$ | 1x500 ml Plastic | |

**OBSERVATIONS / NOTES:**

DO = 2.3 mg/L  ORP = -78.6 mV

Fe = 3.30 mg/L (limit)  H/S = .74 mg/L

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

Signature(s): J.R.H.

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: OLF Bronson Site 1159
Project No.: 0401

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

Sample ID No.: OLFB59MW66GW
Sample Location: 1159 MW66
Sampled By: JA
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 7 11 00 | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Time: 1423 | | | | | | | | |
| Method: peristaltic | clear | 4.20 | .035 | 22.6 | 7 | 3.81 | 0.00 | |

**PURGE DATA:**

| Date: 7 11 00 | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | | 4.33 | .035 | 23.9 | 143 | 3.97 | 0.00 | |
| Monitor Reading (ppm): — | 1st | 4.31 | .035 | 22.8 | 154 | 4.16 | 0.00 | |
| Well Casing Diameter & Material | 2nd | 4.25 | .035 | 22.6 | 37 | 4.09 | 0.00 | |
| Type: 2" PVC | 3rd | 4.20 | .035 | 22.6 | 7 | 3.81 | 0.00 | |
| Total Well Depth (TD): 14.99 | | | | | | | | |
| Static Water Level (WL): 8.99 | | | | | | | | |
| One Casing Volume(gal/L): .89 | | | | | | | | |
| Start Purge (hrs): 1352 | | | | | | | | |
| End Purge (hrs): 1423 | | | | | | | | |
| Total Purge Time (min): 31 | | | | | | | | |
| Total Vol. Purged (gal/L): ~3 g | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOCs | HCl | 2 x 40 ml glass | |
| TRPH | $H_2SO_4$ | 2 x 1 l | |
| Total Pb | $HNO_3$ | 1 x .5 l plastic | |

**OBSERVATIONS / NOTES:**

3
.16
5
.80

DO = 0.0 mg/L ORP = 308.2 mV
Fe = 1.36 mg/L HS = 0.00 mg/L

Circle if Applicable:

| MS/MSD | Duplicate ID No.: |
|---|---|

Signature(s):

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: OLF Bronson site 1159
Project No.: 0401

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

Sample ID No.: OLFB59MW64GW
Sample Location: 1159 MW64
Sampled By: JA
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 7 11 00 | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Time: 1121 | | | | | | | | |
| Method: peristaltic | clear | 5.73 | .083 | 22.8 | Ø | 2.56 | 0.00 | |

**PURGE DATA:**

| Date: 7 11 00 | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | | 5.53 | .064 | 23.7 | 654 | 1.98 | 0.00 | |
| Monitor Reading (ppm): — | 1st | 5.92 | .076 | 22.6 | 23 | 1.86 | 0.00 | |
| Well Casing Diameter & Material | 2nd | 5.75 | .079 | 22.4 | 13 | 2.61 | 0.00 | |
| Type: 2" PVC | 3rd | 5.73 | .083 | 22.8 | Ø | 2.56 | 0.00 | |
| Total Well Depth (TD): 28.65 | | | | | | | | |
| Static Water Level (WL): 22.98 | | | | | | | | |
| One Casing Volume(gal/L): .9 g | | | | | | | | |
| Start Purge (hrs): 1010 | | | | | | | | |
| End Purge (hrs): 1121 | | | | | | | | |
| Total Purge Time (min): 70 | | | | | | | | |
| Total Vol. Purged (gal/L): ~3 | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| | | | |
| VOCs | HCl | 2 x 40ml glass | |
| TRPH | $H_2SO_4$ | 2 x 1 l amber | |
| Total Pb | $HNO_3$ | 1 x .5 l plastic | |

**OBSERVATIONS / NOTES:**

5.67
.16
3402
5670
.9072

DO = 5.3 mg/L ORP = -13.8 mV
Fe = 3.30 mg/L (limit) H/S = 0.00 mg/L

Circle if Applicable:

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

Signature(s):

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



63

Project Site Name: BRONSON
Project No.: 0401

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

Sample ID No.: OLFB/59/MW63/GW
Sample Location: SITE 59
Sampled By: [illegible]
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 7/9/00 | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Time: 1600 | | | | | | | | |
| Method: LOW FLOW / STRAW | Clear | 4.99 | .049 | 23.0 | 5.90 | 1.39 | — | |

**PURGE DATA:**

| Date: 7/9/00 | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Method: LOW FLOW | | | | | 34.9 ↓ | | | |
| Monitor Reading (ppm): — | INITIAL | 4.99 | .047 | 23.7 | ~~23.9~~ | 1.12 | — | CLEAR |
| Well Casing Diameter & Material | 1420 | 4.99 | .048 | 23.7 | 20.6 | 1.16 | — | CLEAR |
| Type: 2" PVC | 1425 | 5.02 | .048 | 23.2 | 15.0 | 1.25 | — | CLEAR |
| Total Well Depth (TD): 29.00 | 1430 | 4.98 | .049 | 23.2 | 9.59 | 1.33 | — | CLEAR |
| Static Water Level (WL): 24.05 | 1435 | 4.99 | .049 | 23.2 | 9.48 | 1.30 | — | CLEAR |
| One Casing Volume(gal/L): .8 | 1440 | 4.98 | .049 | 23.1 | 7.63 | 1.44 | — | CLEAR |
| Start Purge (hrs): 1415 | 1445 | 4.99 | .049 | 23.1 | 7.52 | 1.38 | — | CLEAR |
| End Purge (hrs): 1455 | 1450 | 4.98 | .048 | 22.9 | 5.81 | 1.45 | — | CLEAR |
| Total Purge Time (min): 40 | 1455 | 4.99 | .049 | 23.0 | 5.90 | 1.39 | — | CLEAR |
| Total Vol. Purged (gal/L): 2.4 | ~~1500~~ | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOC | HCL, ICE | 2x40mL | 2 |
| | | | |
| TRPH | $H_2SO_4$ | 2x1000mL | 2 |
| | | | |
| TOTAL Pb | $HNO_3$ | 1x500 mL | 1 |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

SAMPLES PLACED ON ICE
DO = 2.7 mg/L
ORP = 65.8 mV
Fe = 3.30 (limit) mg/L

Circle if Applicable:

| MS/MSD | Duplicate ID No.: |
|---|---|

Signature(s): [illegible]

MW 101

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: OLFB BRONSON
Project No.: N0401

Sample ID No.: OLFB/59/MW61/GW
Sample Location: SITE 159
Sampled By: [illegible]
C.O.C. No.:

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

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

**SAMPLING DATA:**

| | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7/11/00 | | | | | | | | |
| Time: 1605 | | | | | | | | |
| Method: LOW FLOW/STREAM | Clear | 4.10 | .033 | 21.9 | 0.00 | 7.14 | | |

**PURGE DATA:**

| | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7/11/00 | | | | | | | | |
| Method: LOW FLOW | INITIAL | 4.45 | .032 | 22.3 | 42.0 | 7.33 | — | CLEAR |
| Monitor Reading (ppm): | 1500 | 4.39 | .032 | 22.0 | 17.6 | 7.26 | — | CLEAR |
| Well Casing Diameter & Material | 1510 | 4.34 | .032 | 22.0 | 9.67 | 7.15 | — | CLEAR |
| Type: 2" PVC | 1520 | 4.21 | .033 | 21.9 | 2.67 | 7.09 | — | CLEAR |
| Total Well Depth (TD): 29.00 | 1530 | 4.16 | .033 | 21.8 | 1.35 | 7.11 | — | CLEAR |
| Static Water Level (WL): 8.81 | 1540 | 4.15 | .033 | 21.8 | 1.03 | 7.15 | — | CLEAR |
| One Casing Volume(gal/L): 3.4 | 1550 | 4.12 | .033 | 21.9 | 1.00 | 7.14 | — | CLEAR |
| Start Purge (hrs): 1450 | 1600 | 4.10 | .033 | 21.9 | 0.00 | 7.14 | — | CLEAR |
| End Purge (hrs): 1600 | | | | | | | | |
| Total Purge Time (min): 70 | | | | | | | | |
| Total Vol. Purged (gal/L): 10.2 | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOC. | HCL | 2x40 ml VIAL | 2 |
| | | | |
| TRPH | $H_2SO_4$ | 2x1000 ml AMBER | 2 |
| | | | |
| TOTAL Pb | $HNO_3$ | 1x500 ml PLASTIC | 1 |
| | | | |

**OBSERVATIONS / NOTES:**

DO = 3.2 mg/L
Fe = 1.12 mg/L
ORP = 214.3 mV

FLOW RATE 1 QT/MIN @ 1510
SAMPLES PLACED ON ICE
HS = 0.00 mg/L

Circle if Applicable:
MS/MSD
Duplicate ID No.: OLFB/59/D003

Signature(s):

B

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: OLF Bronson
Project No.: 0401

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

Sample ID No.: OLFB59MW60GW
Sample Location: Site 1159
Sampled By: JRH
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 7-9-00 | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Time: 1600 | | | | | | | | |
| Method: Pump | Clear | 4.77 | .023 | 22.4 | .35 | 7.27 | 0.00 | 145.1 |

**PURGE DATA:**

| Date: 7-9-00 | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other ORP |
|---|---|---|---|---|---|---|---|---|
| Method: Pump | Init. | 4.91 | .030 | 23.9 | >999 | 7.69 | 0.0 | 111.9 |
| Monitor Reading (ppm): | 3.7 | 4.22 | .022 | 22.7 | 3.2 | 7.87 | 0.0 | 113.8 |
| Well Casing Diameter & Material | 7.4 | 4.76 | .023 | 22.8 | .35 | 2.50 | 0.0 | 129.7 |
| Type: 2" PVC | 11.5 | 4.77 | .023 | 22.4 | .35 | 7.27 | 0.0 | 145.1 |
| Total Well Depth (TD): 38.60 | | | | | | | | |
| Static Water Level (WL): 15.22 | | | | | | | | |
| One Casing Volume(gal/L): 3.7 | | | | | | | | |
| Start Purge (hrs): 1355 | | | | | | | | |
| End Purge (hrs): 1600 | | | | | | | | |
| Total Purge Time (min): 175 min | | | | | | | | |
| Total Vol. Purged (gal/L): 11½ | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOC | HCl | 2x 40 ml vials | |
| TRPH | $H_2SO_4$ | 2x1000 ml amber | |
| Lead | $HNO_3$ | 1x500 ml Plastic. | |

**OBSERVATIONS / NOTES:**

DO= 8.0 mg/L ORP= 84.3 mV

Fe= 0.00 mg/L

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: OLFB59D001 |
|---|---|

Signature(s): J.R. Hill

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: OLF Bronson
Project No.: 0401

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

Sample ID No.: OLFB59MW55GW
Sample Location: 1159 MW55
Sampled By: JB
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7-11-00 | | | | | | | | |
| Time: 1016 | | | | | | | | |
| Method: peristaltic | clear | 5.91 | .076 | 22.6 | 3.3 | 4.55 | 0.00 | |

**PURGE DATA:**

| Date: 7-11-00 | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | | 5.91 | .076 | 23.5 | 23 | 3.15 | 0.00 | |
| Monitor Reading (ppm): — | | 5.91 | .079 | 22.8 | 8.6 | 3.96 | 0.00 | |
| Well Casing Diameter & Material | | 5.94 | .079 | 22.3 | 3.8 | -0.55 | 0.00 | |
| Type: 2" PVC | | 5.92 | .078 | 22.5 | 5.6 | 5.13 | 0.00 | |
| Total Well Depth (TD): 15.31 | | 5.90 | .078 | 22.5 | 4.5 | 4.51 | 0.00 | |
| Static Water Level (WL): 11.09 | | 5.91 | .076 | 22.6 | 3.3 | 4.56 | 0.00 | |
| One Casing Volume(gal/L): .7 | | | | | | | | |
| Start Purge (hrs): 0922 | | | | | | | | |
| End Purge (hrs): 1015 | | | | | | | | |
| Total Purge Time (min): 53 | | | | | | | | |
| Total Vol. Purged (gal/L): ~4 g | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOCs | HCl | 2 x 40ml glass | |
| TPH | $H_2SO_4$ | 2 x 1L amber | |
| Total Pb | $HNO_3$ | 1 x .5L plastic | |

**OBSERVATIONS / NOTES:**

DO = 2.3 mg/L ORP = -57.8 mV
Fe = 3.30 mg/L limit HS = .80 mg/L

Circle if Applicable:

| MS/MSD | Duplicate ID No.: |
|---|---|

Signature(s):

MW53

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: BROWSN OLFB
Project No.: N0401

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

Sample ID No.: OLFB/59/MW53/GW
Sample Location: SITE 19
Sampled By: RDK
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7/11/00 | | | | | | | | |
| Time: 1000 | | | | | | | | |
| Method: LOW FLOW | clear | 4.14 | .036 | 21.4 | 1.53 | 5.49 | 0.00 | |

**PURGE DATA:**

| | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7/11/00 | | | | | | | | |
| Method: LOW FLOW | INITIAL | 4.62 | .052 | 22.6 | 117 | 6.41 | — | CLOUDY |
| Monitor Reading (ppm): | 0935 | 4.53 | .038 | 21.0 | 20.5 | 6.10 | — | CLEAR |
| Well Casing Diameter & Material Type: 2" PVC | 0940 | 4.35 | .036 | 21.3 | 6.52 | 6.13 | — | CLEAR |
| | 0945 | 4.12 | .036 | 21.4 | 1.71 | 5.89 | — | CLEAR |
| Total Well Depth (TD): 25.02 | 0950 | 4.14 | .036 | 21.4 | 1.57 | 5.47 | — | CLEAR |
| Static Water Level (WL): 21.98 | 0958 | 4.14 | .036 | 21.4 | 1.53 | 5.49 | — | CLEAR |
| One Casing Volume(gal/L): .5 | 1000 | | | | | | | |
| Start Purge (hrs): 0925 | 1005 | | | | | | | |
| End Purge (hrs): 0958 | | | | | | | | |
| Total Purge Time (min): 33 | | | | | | | | |
| Total Vol. Purged (gal/L): ~3 | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOC | HCL | 3x40 ml | 6 |
| TPH | $H_2SO_4$ | 2x1000 ml | 6 |
| Total Pb | $HNO_3$ | 2 x 500 ml | 3 |

**OBSERVATIONS / NOTES:**

SAMPLES PLACED ON ICE

DO = 7.8 mg/L

MS = OLFB/59/MS/001
MSD - OLFB/59/MSD/001

Fe = 0.01 mg/L

ORP = 207.4 mV

HS = 0.00 mg/L

Circle if Applicable: MS/MSD

Duplicate ID No.:

Signature(s):

A

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: OLF Brooks
Project No.: 0401

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

Sample ID No.: OLFB59MW52GW
Sample Location: Site 1159 MW52
Sampled By: TCH
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7-10-00 | | | | | | | | |
| Time: 1600 | | | | | | | | |
| Method: Pump | Clear | 5.05 | .053 | 26.7 | 68 | 0.49 | 0.0 | 77.3 |

**PURGE DATA:**

| | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other ORP |
|---|---|---|---|---|---|---|---|---|
| Date: 7-10-00 | | | | | | | | |
| Method: Pump | Init | 5.32 | .064 | 26.7 | >999 | 0.90 | 0.0 | 77.4 |
| Monitor Reading (ppm): N/A | 0.6 | 5.06 | .054 | 26.9 | >999 | 0.64 | 0.0 | 85.5 |
| Well Casing Diameter & Material | 1.2 | 5.02 | .053 | 26.8 | 780 | 0.51 | 0.0 | 63.1 |
| Type: 2" PVC | 1.8 | 5.05 | .054 | 27.0 | 9.2 | 0.78 | 0.0 | 88.3 |
| Total Well Depth (TD): 17.66 | 2.5 | 5.05 | .053 | 26.8 | 300 | 0.59 | 0.0 | 82.3 |
| Static Water Level (WL): ~~[illegible]~~ 13.1 | 3.1 | 5.05 | .053 | 26.7 | 120 | 0.49 | 0.0 | 77.3 |
| One Casing Volume(gal/L): 5.6 | | | | | | | | |
| Start Purge (hrs): 1515 | | | | | | | | |
| End Purge (hrs): 1600 | | | | | | | | |
| Total Purge Time (min): 45 min | | | | | | | | |
| Total Vol. Purged (gal/L): ~3 gal | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOC | HCl | 2x 40 ml vials | |
| TRPH | $H_2SO_4$ | 2x 1000 ml ambers | |
| Lead | $HNO_3$ | 1x 500 ml Plastic | |

**OBSERVATIONS / NOTES:**

DO = 6.6 mg/L ORP = 189.8 mV
Fe = 0.05 mg/L HS = 0.00 mg/L

**Circle if Applicable:**

MS/MSD | Duplicate ID No.:

**Signature(s):** J. Pizzi

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

OLFB59MW51GW



SB 7/21

Project Site Name: OLF Bronson
Project No.: 0401

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

Sample ID No.: ~~OLFBMW51GW~~
Sample Location: MW51
Sampled By: JB/RH
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7-11-00 | | | | | | | | |
| Time: 1447 | | | | | | | | |
| Method: peristaltic | clear | 5.21 | .052 | 23.8 | 6.2 | 1.59 | 0.00 | |

**PURGE DATA:**

| | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7 11 00 | | | | | | | | |
| Method: peristaltic | | 5.07 | .059 | 25.0 | 45 | 8.44 | 0.00 | |
| Monitor Reading (ppm): — | | 5.05 | .052 | 24.3 | 65 | 4.41 | 0.00 | |
| Well Casing Diameter & Material | | 5.09 | .052 | 23.5 | 27 | 0.54 | 0.00 | |
| Type: 2" PVC | | 5.20 | .052 | 23.6 | 17 | 0.56 | 0.00 | |
| Total Well Depth (TD): 10.91 | | 5.21 | .052 | 23.8 | 6.2 | 1.59 | 0.00 | |
| Static Water Level (WL): 8.65 | | | | | | | | |
| One Casing Volume(gal/L): .4 | | | | | | | | |
| Start Purge (hrs): 1404 | | | | | | | | |
| End Purge (hrs): 1446 | | | | | | | | |
| Total Purge Time (min): 42 | | | | | | | | |
| Total Vol. Purged (gal/L): 3 | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOCs | HCl | 2 x 40 ml glass. | |
| TRPH | $H_2SO_4$ | 2 x 1 l amber | |
| Total Pb. | $HNO_3$ | 1 x .5 l plastic | |

**OBSERVATIONS / NOTES:**

DO ~~0.17~~ 4.3 mg/L
ORP = 272.2 mV
Fe = 0.06 mg/L
HS = 0.00 mg/L
Sampled MS/MSD on 7-13-00 @ 1345. After Purging 5 well volumes

Circle if Applicable:
MS/MSD
~~Duplicate ID~~ No.: OLFB59MS002
→ OLFB59MSD002

Signature(s):

SB 7/21

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

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Project Site Name: OLF Bronson site 1159
Project No.: 0401

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

Sample ID No.: OLFB59MW47GW
Sample Location: 1159 - MW47
Sampled By: JA
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7-9-00 | | | | | | | | |
| Time: 1458 | | | | | | | | |
| Method: peristaltic | Clear | 5.88 | .084 | 22.7 | 2 | 1.09 | 0.00 | |

**PURGE DATA:**

| | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7 9 00 | | | | | | | | |
| Method: peristaltic | Initial | 6.18 | .084 | 24.6 | 152 | 1.47 | 0.00 | |
| Monitor Reading (ppm): — | 1st | 6.00 | .085 | 23.8 | 35 | 1.33 | 0.0 | |
| Well Casing Diameter & Material | 2nd | 5.89 | .085 | 22.9 | 5 | 1.09 | 0.00 | |
| Type: 2" PVC | 3rd | 5.88 | .084 | 22.7 | 2 | 1.09 | 0.00 | |
| Total Well Depth (TD): 21.55 | | | | | | | | |
| Static Water Level (WL): 17.35 | | | | | | | | |
| One Casing Volume(gal/L): .67 | | | | | | | | |
| Start Purge (hrs): 1354 | | | | | | | | |
| End Purge (hrs): 1458 | | | | | | | | |
| Total Purge Time (min): 64 min | | | | | | | | |
| Total Vol. Purged (gal/L): ~2.68 g | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| | | | |
| VOC | HCl | 2 x 40 ml glass | |
| TRPH | $H_2SO_4$ | 2 x 1 l amber | |
| Total Pb | $HNO_3$ | 1 x .5 l plastic | |

**OBSERVATIONS / NOTES:**

4.20
.16
2520
4200
.6720

DO = 1.9 mg/L ORP = 59.8 mV
Fe = 3.30 mg/L
(limit)

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):**

A

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: OLFB
Project No.: 0401

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

Sample ID No.: OLFB59MW44GW
Sample Location: 1159 MW 44
Sampled By: JRH
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 7-11-00 | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other ORP |
|---|---|---|---|---|---|---|---|---|
| Time: 1115 | | | | | | | | |
| Method: peristaltic | Clear | 5.66 | .073 | 23.1 | 0.85 | 1.14 | 0.0 | -300.9 |

**PURGE DATA:**

| Date: 7-11-00 | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other ORP |
|---|---|---|---|---|---|---|---|---|
| Method: Pump | Init | 5.27 | .047 | 23.7 | 7999 | 0.89 | 0.0 | 91.6 |
| Monitor Reading (ppm): — | 1.0 | 5.18 | .050 | 23.4 | 340 | 0.97 | 0.0 | -85.0 |
| Well Casing Diameter & Material | 2.0 | 5.65 | .076 | 23.1 | 8.4 | 0.89 | 0.0 | -299.9 |
| Type: 2" PVC | 3.0 | 5.66 | .073 | 23.1 | 0.85 | 1.14 | 0.0 | -300.9 |
| Total Well Depth (TD): 29.50' | | | | | | | | |
| Static Water Level (WL): 23.54 | | | | | | | | |
| One Casing Volume(gal/L): 1.0 | | | | | | | | |
| Start Purge (hrs): 1030 | | | | | | | | |
| End Purge (hrs): 1115 | | | | | | | | |
| Total Purge Time (min): 45 | | | | | | | | |
| Total Vol. Purged (gal/L): 3.2 | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOC | HCl | 2x 40 ml. vials | |
| TRPH | $H_2SO_4$ | 2x1000 ml ambers | |
| Lead | $HNO_3$ | 1x500 ml Plastic | |

**OBSERVATIONS / NOTES:**

DO = 3.0 mg/L
Fe = 3.30 mg/L (Limit)
ORP = 17.6 mV
HS = 0.00 mg/L

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

Signature(s): J. R. Hill

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: OLF Bronson
Project No.: 0410

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

Sample ID No.: OLFB59MW38GW
Sample Location: 1159 ~~MW39~~-38
Sampled By: JA
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 7 11 00 | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Time: 1606 | | | | | | | | |
| Method: peristaltic | clear | 4.42 | .038 | 21.8 | 3 | 0.88 | 0.00 | |

**PURGE DATA:**

| Date: 7 11 00 | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | | 3.95 | .073 | 22.7 | 474 | 2.54 | 0.00 | — |
| Monitor Reading (ppm): — | 1st | 4.29 | .041 | 22.1 | 78 | 2.47 | 0.00 | |
| Well Casing Diameter & Material | 2nd | 4.58 | .032 | 21.8 | 12 | 1.58 | 0.00 | |
| Type: 2" PVC | 3rd | 4.42 | .038 | 21.8 | 3 | 0.98 | 0.00 | |
| Total Well Depth (TD): 25.05 | | | | | | | | |
| Static Water Level (WL): 20.22 | | | | | | | | |
| One Casing Volume(gal/L): .8 | | | | | | | | |
| Start Purge (hrs): 1535 | | | | | | | | |
| End Purge (hrs): 1605 | | | | | | | | |
| Total Purge Time (min): 30 | | | | | | | | |
| Total Vol. Purged (gal/L): ~2.5g | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| | | | |
| | | | |
| EDB | None | 3 x 40ml glass | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

DO = 2.8 mg/L ORP = 142.8 mV
Fe = 1.38 mg/L HS = 0.00 mg/L

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: OLFB BRONSON
Project No.:

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

Sample ID No.: OLFB/59/34/GW
Sample Location: SITE 19
Sampled By: PDP
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 7/10/00 | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Time: 0915 | | | | | | | | |
| Method: LOW FLOW/STRAW | | | | | | | | |

**PURGE DATA:**

| Date: 7/10/00 | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Method: LOW FLOW | INITIAL | 4.25 | .055 | 23.0 | 60.0 | 6.57 | — | CLEAR |
| Monitor Reading (ppm): — | 0840 | 4.22 | .052 | 22.3 | 40.0 | 6.48 | — | CLEAR |
| Well Casing Diameter & Material | 0845 | 4.22 | .052 | 22.2 | 31.0 | 6.53 | — | CLEAR |
| Type: 2" PVC | 0850 | 4.18 | .052 | 22.1 | 18.0 | 6.98 | — | CLEAR |
| Total Well Depth (TD): 29.7 | 0855 | 4.15 | .051 | 22.2 | 11.0 | 6.53 | — | CLEAR |
| Static Water Level (WL): 25.7 | 0900 | 4.12 | .051 | 22.2 | 8.2 | 6.39 | — | CLEAR |
| One Casing Volume (gal/L): .6 | 0905 | 4.11 | .051 | 22.2 | 4.9 | 6.40 | — | CLEAR |
| Start Purge (hrs): 0835 | 0910 | 4.12 | .051 | 22.2 | 2.7 | 6.63 | — | CLEAR |
| End Purge (hrs): 0910 | 0915 | | | | | | | |
| Total Purge Time (min): 35 | 0920 | | | | | | | |
| Total Vol. Purged (gal/L): 1.8 | 0925 | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOC | HCL, ICE | 2 x 40mL VIAL | 2 |
| TRPH | $H_2SO_4$ | 2 x 1000 mL AMBER | 2 |
| TOTAL LEAD | $HNO_3$ | 1 x 500 mL PLASTIC | 2 |

**OBSERVATIONS / NOTES:**

PLACED SAMPLES ON ICE.
DO = 6.8 mg/L ORP = 213.0 mV
Fe = 0.00 mg/L

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|

Signature(s): [signature]

A

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

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Project Site Name: OLFB Ronson
Project No.: 0401

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

Sample ID No.: OLFB59MW33GW
Sample Location: Site 1159
Sampled By: JRH
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other ORP |
|---|---|---|---|---|---|---|---|---|
| Date: 7-11-00 | | | | | | | | |
| Time: 1425 | | | | | | | | |
| Method: Pump | Clear | 4.68 | .053 | 23.5 | 2.9 | 3.34 | 0.0 | 103.6 |

**PURGE DATA:**

| | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7-11-00 | | | | | | | | |
| Method: Pump | Init | 4.83 | .056 | 24.4 | >999 | 3.59 | 0.0 | 73.8 |
| Monitor Reading (ppm): — | 1.0 | 4.24 | .053 | 23.3 | 150 | 3.65 | 0.0 | 107.0 |
| Well Casing Diameter & Material | 2.0 | 4.62 | .054 | 23.2 | 100 | 4.02 | 0.0 | 111.4 |
| Type: 2" PVC | 3.0 | 4.62 | .054 | 23.3 | 21 | 3.66 | 0.0 | 105.1 |
| Total Well Depth (TD): 28.9 | 4.0 | 4.67 | .053 | 23.4 | 18 | 3.51 | 0.0 | 104.1 |
| Static Water Level (WL): 22.44 | 5.0 | 4.68 | .053 | 23.5 | 2.9 | 3.34 | 0.0 | 103.6 |
| One Casing Volume(gal/L): 1.03 | | | | | | | | |
| Start Purge (hrs): 1320 | | | | | | | | |
| End Purge (hrs): 1425 | | | | | | | | |
| Total Purge Time (min): | | | | | | | | |
| Total Vol. Purged (gal/L): 5.0 gal | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOC | HCl | 2x 40ml vials | |
| TRPH | $H_2SO_4$ | 2x1000ml ambers | |
| Lead | $HNO_3$ | 1x500 ml Plastic | |

**OBSERVATIONS / NOTES:**

DO = 6.6 mg/L
ORP = 271.3 mV
Fe = 0.36 mg/L
HS = 0.00 mg/L

Circle if Applicable:

| MS/MSD | Duplicate ID No.: |
|---|---|

Signature(s): J.R.H.

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

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Project Site Name: OLF Bronson
Project No.: 0401

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

Sample ID No.: OLFB59MW30GW
Sample Location: 1159 MW30
Sampled By: JA
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7 11 00 | | | | | | | | |
| Time: 0948 | | | | | | | | |
| Method: peristaltic | clear | 5.99 | .096 | 26.9 | 5 | 0.54 | 0.00 | |

**PURGE DATA:**

| | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7 11 00 | | | | | | | | |
| Method: peristaltic | | 6.15 | .136 | 27.2 | 51 | 0.80 | 0.00 | |
| Monitor Reading (ppm): — | 1st | 6.16 | .095 | 26.8 | 38 | 0.75 | 0.00 | |
| Well Casing Diameter & Material | 2nd | 6.21 | .094 | 26.8 | 30 | 0.61 | 0.00 | |
| Type: 2" PVC | 3rd | 6.15 | .096 | 27.2 | 13 | 0.78 | 0.00 | |
| Total Well Depth (TD): 14.60 | 4th | 5.87 | .097 | 27.2 | 12 | 0.69 | 0.00 | |
| Static Water Level (WL): 6.35 | 5th | 5.99 | .096 | 26.9 | 5 | 0.54 | 0.00 | |
| One Casing Volume(gal/L): 1.3 | | | | | | | | |
| Start Purge (hrs): 0933 | | | | | | | | |
| End Purge (hrs): 0948 | | | | | | | | |
| Total Purge Time (min): 75 | | | | | | | | |
| Total Vol. Purged (gal/L): ~7 | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOCs | HCl | 2 x 40ml glass | |
| TRPH | $H_2SO_4$ | 2 x 1 l amber | |
| Total Pb | $HNO_3$ | 1 x .5 l plastic | |

**OBSERVATIONS / NOTES:**

14.60
6.35
8.25

8.25
.16
4550
8250
1.2800

DO=6.7 mg/L ORP=75.3 mV
Fe=0.09 mg/L HS=0.00 mg/L

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| | |

**Signature(s):**

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

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Project Site Name: OLF Bronson
Project No.: 0401

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

Sample ID No.: OLFB59MW28GW
Sample Location: Site 1159 MW28
Sampled By: JB
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7-9-00 | | | | | | | | |
| Time: 1441 | | | | | | | | |
| Method: peristaltic | clear | 5.62 | .095 | 23.5 | 4.10 | 3.78 | 0.00 | |

**PURGE DATA:**

| | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7-9-00 | | | | | | | | |
| Method: peristaltic | Initial | 5.63 | .105 | 27.6 | 122 | 1.06 | 0.00 | |
| Monitor Reading (ppm): — | 1st | 5.66 | .096 | 23.6 | 16.1 | 2.23 | 0.00 | |
| Well Casing Diameter & Material | 2nd | 5.64 | .096 | 23.7 | 5.13 | 2.67 | 0.00 | |
| Type: 2" PVC | 3rd | 5.56 | .096 | 23.6 | 4.45 | 1.54 | 0.00 | |
| Total Well Depth (TD): 13.90 | 4th | 5.62 | .095 | 23.5 | 4.10 | 3.78 | 0.00 | |
| Static Water Level (WL): 10.20 | | | | | | | | |
| One Casing Volume(gal/L): ~~2.29~~ .63g | | | | | | | | |
| Start Purge (hrs): 1400 | | | | | | | | |
| End Purge (hrs): 1440 | | | | | | | | |
| Total Purge Time (min): 40min | | | | | | | | |
| Total Vol. Purged (gal/L): 2.52g | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOC | HCl | 40 mL | 2 |
| Total Pb | $HNO_3$ | 500 mL | 1 |
| TRPH | $H_2SO_4$ | 1L Amber | 2 |

**OBSERVATIONS / NOTES:**

DO = 2.3 mg/L  ORP = -146.4 mV

Fe = 3.30 mg/L (limit)

Circle if Applicable:

| MS/MSD | Duplicate ID No.: |
|---|---|

Signature(s):

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

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Project Site Name: OLF Bronson
Project No.: 0401

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

Sample ID No.: OLFB59MW27GW
Sample Location: Site 159 MW27
Sampled By: JB
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7-9-00 | | | | | | | | |
| Time: 1552 | | | | | | | | |
| Method: peristaltic | Clear | 5.75 | .090 | 23.1 | 2.09 | 3.92 | 0.00 | |

**PURGE DATA:**

| | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7-9-00 | | | | | | | | |
| Method: peristaltic | Initial | 5.62 | .094 | 23.5 | 83.8 | 1.97 | 0.00 | |
| Monitor Reading (ppm): — | 1st | 5.64 | .091 | 23.2 | 9.30 | 1.45 | 0.00 | |
| Well Casing Diameter & Material | 2nd | 5.70 | .092 | 22.9 | 4.23 | -0.64 | 0.00 | |
| Type: 2" PVC | 3rd | 5.76 | .091 | 22.9 | 3.76 | 2.83 | 0.00 | |
| Total Well Depth (TD): 13.84 | 4th | 5.71 | .091 | 22.9 | 3.00 | 3.24 | 0.00 | |
| Static Water Level (WL): 10.04 | 5th | 5.75 | .090 | 23.1 | 2.09 | 3.92 | 0.00 | |
| .65 One Casing Volume(gal/L): ~~.23~~ | | | | | | | | |
| Start Purge (hrs): 1500 | | | | | | | | |
| End Purge (hrs): 1550 | | | | | | | | |
| Total Purge Time (min): 50 min | | | | | | | | |
| ~3.25 Total Vol. Purged (gal/L): ~~1.15~~ | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOC | HCl | 40 mL | 2 |
| Total Pb | $HNO_3$ | ~~1L Amber~~ 500 mL | 1 |
| TRPH | $H_2SO_4$ | 1L Amber | 2 |

**OBSERVATIONS / NOTES:**

DO = 1.3 mg/L ORP = 137.7 mv

Fe = 3.30 mg/L
limit

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|

Signature(s):

C

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: OLF Bassos
Project No.: 0401

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

Sample ID No.: OLFB59MW23GW
Sample Location: Site 11 59 MW23
Sampled By: JRH
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other ORP |
|---|---|---|---|---|---|---|---|---|
| Date: 7-10-00 | | | | | | | | |
| Time: 0950 | | | | | | | | |
| Method: Pump | Clear | 5.46 | .066 | 23.5 | 3.2 | 0.20 | 0.0 | -325.2 |

**PURGE DATA:**

| | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other ORP |
|---|---|---|---|---|---|---|---|---|
| Date: 7-10-00 | | | | | | | | |
| Method: Pump | Init | 5.55 | .083 | 23.8 | >999 | 0.61 | 0.0 | -327.0 |
| Monitor Reading (ppm): — | 0.7 | 5.44 | .071 | 23.8 | 66 | 0.39 | 0.0 | -223.5 |
| Well Casing Diameter & Material | 1.4 | 5.25 | .068 | 23.4 | 13 | 0.17 | 0.0 | -323.8 |
| Type: 2" PVC | 2.0 | 5.23 | .067 | 23.3 | 11 | 0.11 | 0.0 | -324.6 |
| Total Well Depth (TD): 13.70 | 2.7 | 5.47 | .066 | 23.5 | 4.5 | 0.56 | 0.0 | -318.5 |
| Static Water Level (WL): 9.72 | 3.4 | 5.46 | .066 | 23.5 | 3.2 | 0.20 | 0.0 | -325.2 |
| One Casing Volume(gal/L): 0.65 | | | | | | | | |
| Start Purge (hrs): 0843 | | | | | | | | |
| End Purge (hrs): 0949 | | | | | | | | |
| Total Purge Time (min): 66 min | | | | | | | | |
| Total Vol. Purged (gal/L): 2 gal. | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOC | HCl | 2x40 ml vials | |
| TRPH | $H_2SO_4$ | 2x1000 ml ambers | |
| Lead | $HNO_3$ | 1x500 ml Plastic. | |
| EDB | — | 3 x 40 mL vials | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

DO = 0.2 mg/L ORP = 127.1 mV

Fe = 3.30 mg/L (limit)

**Circle if Applicable:**

MS/MSD

Duplicate ID No.: OLFB59D002

**Signature(s):** J. R. Hill

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

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Project Site Name: OLF Bunker
Project No.: 0401

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

Sample ID No.: OLF359MW226W
Sample Location: Site 59 MW22
Sampled By: JB
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7-10-00 | | | | | | | | |
| Time: 0930 | | | | | | | | |
| Method: peristaltic | clear | 6.18 | .109 | 23.8 | 2.69 | 2.55 | 0.00 | |

**PURGE DATA:**

| | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7-10-00 | | | | | | | | |
| Method: peristaltic | Initial | 6.06 | .112 | 24.8 | 131 | 1.83 | 0.00 | |
| Monitor Reading (ppm): — | 1st | 6.10 | .111 | 24.0 | 41.3 | 1.27 | 0.00 | |
| Well Casing Diameter & Material | 2nd | 6.11 | .110 | 24.0 | 10.63 | 2.03 | 0.00 | |
| Type: 2" PVC | 3rd | 6.20 | .109 | 23.9 | 5.58 | 5.42 | 0.00 | |
| Total Well Depth (TD): 13.97 | 4th | 6.17 | .109 | 23.9 | 2.91 | 3.97 | 0.00 | |
| Static Water Level (WL): 9.85 | 5th | 6.18 | .109 | 23.8 | 2.69 | 2.55 | 0.00 | |
| One Casing Volume(gal/L): .70 g | | | | | | | | |
| Start Purge (hrs): 0838 | | | | | | | | |
| End Purge (hrs): 0928 | | | | | | | | |
| Total Purge Time (min): 50 min | | | | | | | | |
| Total Vol. Purged (gal/L): ~3.5 g | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOC | HCl | 40 mL Vial | 3 |
| Lead | $HNO_3$ | 500 mL Plastic | 1 |
| TRPH | $H_2SO_4$ | 1 L Amber | 2 |

**OBSERVATIONS / NOTES:**

DO = 1.0 mg/L ORP = -157.1 mV

Fe = 3.30 mg/L (limit)

**Circle If Applicable:**

MS/MSD

Duplicate ID No.:

**Signature(s):**

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: OLF Branson
Project No.: 0409

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

Sample ID No.: OLFB59MW21GW
Sample Location: Site 11B9 MW21
Sampled By: JB
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7-10-00 | | | | | | | | |
| Time: 1115 | | | | | | | | |
| Method: peristaltic | clear | 6.36 | .253 | 24.7 | 0.00 | 4.50 | 0.00 | |

**PURGE DATA:**

| | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7-10-00 | | | | | | | | |
| Method: peristaltic | Initial | 6.47 | .313 | 25.1 | 130 | 0.79 | 0.01 | |
| Monitor Reading (ppm): — | 1st | 6.38 | .276 | 24.9 | 33 | 4.20 | 0.01 | |
| Well Casing Diameter & Material | 2nd | 6.38 | .263 | 24.8 | 7.2 | 2.77 | 0.01 | |
| Type: 2" PVC | 3rd | 6.38 | .256 | 24.8 | 1.8 | 2.64 | 0.01 | |
| Total Well Depth (TD): 13.64 | 4th | 6.36 | .254 | 24.8 | 0.70 | 3.13 | 0.00 | |
| Static Water Level (WL): 9.10 | 5th | 6.36 | .253 | 24.7 | 0.00 | 4.50 | 0.00 | |
| One Casing Volume(gal/L): .77 gal | | | | | | | | |
| Start Purge (hrs): 1016 | | | | | | | | |
| End Purge (hrs): 1108 | | | | | | | | |
| Total Purge Time (min): 52 min | | | | | | | | |
| Total Vol. Purged (gal/L): ~3.85 gal | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOC | HCl | 40 mL VOA | 2 |
| Lead | $HNO_3$ | 500 mL Plastic | 1 |
| TRPH | $H_2SO_4$ | 1L Amber | 2 |

**OBSERVATIONS / NOTES:**

DO = 1.5 mg/L ORP = -123.2 mV

Fe = 2.33 mg/L

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|

Signature(s):

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

C

Page___ of ___

Project Site Name: OLF Bronson
Project No.: 0801

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

Sample ID No.: OLFBS9MW20GW
Sample Location: Site 1159
Sampled By: JRN
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7-10-00 | | | | | | | | |
| Time: 1110 | | | | | | | | |
| Method: Pump | Clear | 6.01 | .133 | 26.7 | 3.4 | 1.20 | 0.0 | -300.3 |

**PURGE DATA:**

| | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7-10-00 | | | | | | | | |
| Method: Pump | Init: | 5.94 | .139 | 26.8 | >999 | 1.31 | 0.0 | -245.0 |
| Monitor Reading (ppm): — | 0.7 | 6.03 | .134 | 26.8 | 110 | 1.20 | 0.0 | -281.7 |
| Well Casing Diameter & Material | 1.4 | 6.02 | .132 | 27.3 | 18 | 1.17 | 0.0 | -299.5 |
| Type: 2" PVC | 2.0 | 6.01 | .133 | 26.7 | 3.4 | 1.20 | 0.0 | -300.3 |
| Total Well Depth (TD): 13.87 | | | | | | | | |
| Static Water Level (WL): 7.72 | | | | | | | | |
| One Casing Volume(gal/L): 0.7 | | | | | | | | |
| Start Purge (hrs): 1030 | | | | | | | | |
| End Purge (hrs): 1109 | | | | | | | | |
| Total Purge Time (min): 39 min | | | | | | | | |
| Total Vol. Purged (gal/L): 2.2 gal | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOC | HCl | 2x 40 ml vials | |
| TRPH | $H_2SO_4$ | 2x 1000 ml ambers | |
| Lead | $HNO_3$ | 1x 500 ml Plastic | |

**OBSERVATIONS / NOTES:**

DO = 3.5 mg/L ORP = 81.9 mV

Fe = 3.30 mg/L (limit) HS = 0.00 mg/L

| Circle if Applicable: | | Signature(s): |
|---|---|---|
| MS/MSD | Duplicate ID No.: | J. R. [illegible] |

MW 19

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: OLFB / BRONSON
Project No.: N0401

Sample ID No.: OLFB/59/MW19/GW
Sample Location: SITE 59
Sampled By: [illegible]
C.O.C. No.:
Type of Sample:
[x] Low Concentration
[ ] High Concentration

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

**SAMPLING DATA:**

| | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7/11/00 | | | | | | | | |
| Time: 1410 | | | | | | | | |
| Method: LOW FLOW/STEAM | CLEAR | 6.40 | .228 | 25.8 | 3.96 | 1.34 | – | – |

**PURGE DATA:**

| | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7/11/00 | | | | | | | | |
| Method: LOW FLOW | INITIAL | 6.43 | .228 | 26.3 | 32.5 | 2.25 | – | CLEAR |
| Monitor Reading (ppm): — | 1345 | 6.47 | .228 | 26.1 | 23.7 | 2.12 | – | CLEAR |
| Well Casing Diameter & Material | 1350 | 6.46 | .228 | 26.0 | 11.9 | 1.73 | – | CLEAR |
| Type: 2" PVC | 1355 | 6.45 | .228 | 26.0 | 10.2 | | – | CLEAR |
| Total Well Depth (TD): 13.50 | 1400 | 6.43 | .228 | 25.9 | 7.45 | | – | CLEAR |
| Static Water Level (WL): 9.78 | 1405 | 6.40 | .228 | 25.8 | 3.96 | 1.34 | – | CLEAR |
| One Casing Volume(gal/L): 0 | 1410 | | | | | | | |
| Start Purge (hrs): 1335 | | | | | | | | |
| End Purge (hrs): 1405 | | | | | | | | |
| Total Purge Time (min): 30 | | | | | | | | |
| Total Vol. Purged (gal/L): 1.3 | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOC | HCL, ICE | 2x40ml VIAL | 2 |
| TRPH | $H_2SO_4$ | 2x1000ml AMBER | 2 |
| TOTAL Pb | $HNO_3$ | 1x500 ml PLASTIC | 1 |

**OBSERVATIONS / NOTES:**

SAMPLES PLACED ON ICE
DO = 5.7 mg/L ORP = 304.2 mV
Fe = 0.05 mg/L HS = 0.00 mg/L

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: | Signature(s): |
|---|---|---|
| | | [signature] |

C

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: OLF Bronson 1159
Project No.: 0401

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

Sample ID No.: OLFB59MW8GW
Sample Location: Site 1159
Sampled By: JDRN
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7-11-00 | | | | | | | | |
| Time: 0919 | | | | | | | | |
| Method: Pump | Clear | 5.74 | .105 | 23.2 | 3.0 | 0.01 | 0.0 | -338.0 |

**PURGE DATA:**

| | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7-11-00 | | | | | | | | |
| Method: Pump | Init= | 5.82 | .144 | 24.1 | 120 | 0.49 | 0.0 | -337.9 |
| Monitor Reading (ppm): — | 0.8 | 5.69 | .110 | 23.4 | 7.7 | 0.20 | 0.0 | -333.5 |
| Well Casing Diameter & Material | 1.6 | 5.68 | .108 | 23.2 | 4.0 | 0.04 | 0.0 | -341.3 |
| Type: 2" PVC | 2.5 | 5.74 | .105 | 23.2 | 3.0 | 0.01 | 0.0 | -338.0 |
| Total Well Depth (TD): 13.85' | | | | | | | | |
| Static Water Level (WL): 8.84 | | | | | | | | |
| One Casing Volume(gal/L): 0.8 | | | | | | | | |
| Start Purge (hrs): 0835 | | | | | | | | |
| End Purge (hrs): 0919 | | | | | | | | |
| Total Purge Time (min): 44 | | | | | | | | |
| Total Vol. Purged (gal/L): 2.5 | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOC | HCl | 2x40 ml vials | |
| TRPH | $H_2SO_4$ | 2x1000 ml ambers | |
| Lead | $HNO_3$ | 1x500 ml Plastic | |

**OBSERVATIONS / NOTES:**

DO = 3.6 mg/L
ORP = -66.2 mV
Fe = 3.30 mg/L (limit)
HS = 0.00 mg/L

**Circle if Applicable:**

MS/MSD
Duplicate ID No.:

Signature(s): J. R. Hill

MW 19

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: BRONSON
Project No.: 0401

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

Sample ID No.: OLFB/59MWOR/GW
Sample Location: SITE 59
Sampled By: PDB
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

**SAMPLING DATA:**

| Date: 7/10/00 | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Time: 1100 | | | | | | | | |
| Method: LOW FLOW / STRAW | CLEAR | 5.26 | 0.91 | 25.2 | 22.7 | 0.22 | — | — |

**PURGE DATA:**

| Date: 7/10/00 | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Method: LOW FLOW | INITIAL | 5.09 | .080 | 25.3 | 53.3 | 0.57 | — | CLEAR |
| Monitor Reading (ppm): — | 1010 | 5.13 | .085 | 25.1 | 23.5 | 0.36 | — | CLEAR |
| Well Casing Diameter & Material | 1015 | 5.14 | .089 | 25.1 | 18.9 | 0.27 | — | CLEAR |
| Type: 2" PVC | 1020 | 5.17 | .089 | 25.1 | 14.8 | 0.27 | — | CLEAR |
| Total Well Depth (TD): 13.9 | 1025 | 5.19 | .093 | 25.1 | 17.4 | 0.22 | — | CLEAR |
| Static Water Level (WL): 9.02 | 1030 | 5.20 | .092 | 25.2 | 26.0 | 0.35 | — | CLEAR |
| One Casing Volume(gal/L): .8 | 1035 | 5.23 | 0.92 | 25.2 | 27.5 | 0.29 | — | CLEAR |
| Start Purge (hrs): 1000 | 1040 | 5.24 | 0.92 | 25.2 | 28.7 | 0.27 | — | CLEAR |
| End Purge (hrs): 1055 | 1045 | 5.24 | 0.91 | 25.3 | 29.2 | 0.34 | — | CLEAR |
| Total Purge Time (min): 55 | 1050 | 5.24 | 0.91 | 25.3 | 25.6 | 0.29 | — | CLEAR |
| Total Vol. Purged (gal/L): 4.0 | 1055 | 5.26 | 0.91 | 25.2 | 22.7 | .022 | — | CLEAR |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOC | HCL, ICE | 2x40mL VIAL | 2 |
| TRPH | $H_2SO_4$ | 2x1000 mL AMBER | 2 |
| TOTAL Pb | $HNO_3$ | 1x500 mL PLASTIC | 1 |

**OBSERVATIONS / NOTES:**

SAMPLES PLACED ON ICE.
DO = 2.1 mg/L ORP = -128.0 mV
Fe = 3.30 mg/L (limit) HS = 1.06 mg/L

Circle if Applicable:

| MS/MSD | Duplicate ID No.: |
|---|---|

Signature(s):

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: OLF Branson
Project No.: 0401

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

Sample ID No.: OLF1359MW046W
Sample Location: Site 1159 MW04
Sampled By: DB
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7-10-00 | | | | | | | | |
| Time: 1426 | | | | | | | | |
| Method: peristaltic | clear | 5.81 | .099 | 25.2 | 0.85 | 0.22 | 0.00 | |

**PURGE DATA:**

| | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 7-10-00 | | | | | | | | |
| Method: peristaltic | Initial | 5.34 | .102 | 25.6 | 75 | 2.52 | 0.00 | |
| Monitor Reading (ppm): — | 1st | 5.75 | .099 | 25.2 | 26 | 3.59 | 0.00 | |
| Well Casing Diameter & Material | 2nd | 5.74 | .099 | 25.4 | 6.4 | 4.78 | 0.00 | |
| Type: 2" PVC | 3rd | 5.76 | .099 | 25.4 | 3.1 | 4.63 | 0.00 | |
| 8.08 Total Well Depth (TD): 12.47 | 4th | 5.80 | .098 | 25.0 | 1.4 | 1.71 | 0.00 | |
| Static Water Level (WL): ~~12.47~~ | 5th | 5.81 | .099 | 25.2 | 0.85 | 0.22 | 0.00 | |
| .75 gal One Casing Volume(gal/L): ~~.88~~ | | | | | | | | |
| Start Purge (hrs): 1328 | | | | | | | | |
| End Purge (hrs): 1424 | | | | | | | | |
| Total Purge Time (min): 56 min | | | | | | | | |
| Total Vol. Purged (gal/L) ~3.75 gal | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOC | HCl | 40 mL VOA | 2 |
| Lead | $HNO_3$ | 500 mL Plastic | 1 |
| TRPH | $H_2SO_4$ | 1L Amber | 2 |

**OBSERVATIONS / NOTES:**

DO = 0.6 mg/L
FE = 3.30 mg/L (limit)
ORP = 155.6 mV
HS = 2.39 mg/L

Circle if Applicable:

| MS/MSD | Duplicate ID No.: |
|---|---|

Signature(s):

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: OLF Bronson site 1159
Project No.: D401

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

Sample ID No.: OLFB59MW02GW
Sample Location: 1159 MW2
Sampled By: JA
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 7 10 02 | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Time: 1408 | | | | | | | | |
| Method: peristaltic | clear | 5.53 | .125 | 26.1 | 4.59 | 0.82 | 0.00 | |

**PURGE DATA:**

| Date: 7 10 02 | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | Initial | 5.60 | .112 | 27.0 | 42.4 | 1.05 | 0.00 | |
| Monitor Reading (ppm): — | 1st | 5.86 | .119 | 26.3 | 11.4 | 0.25 | 0.00 | |
| Well Casing Diameter & Material | 2nd | 5.86 | .126 | 25.9 | 4.22 | 0.72 | 0.00 | |
| Type: 2" PVC | 3rd | 5.53 | .125 | 26.1 | 4.59 | 0.82 | 0.00 | |
| Total Well Depth (TD): 13.77 | | | | | | | | |
| Static Water Level (WL): 8.50 | | | | | | | | |
| One Casing Volume(gal/L): .84 | | | | | | | | |
| Start Purge (hrs): 1325 | | | | | | | | |
| End Purge (hrs): 1407 | | | | | | | | |
| Total Purge Time (min): 42 min | | | | | | | | |
| Total Vol. Purged (gal/L): ~2.52 gal | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOCs | HCl | 2 x 40ml glass | |
| TRPH | $H_2SO_4$ | 2 x 1 l amber | |
| Total Pb | $HNO_3$ | 1 x .5 l plastic | |

**OBSERVATIONS / NOTES:**

13.77
8.50

5.23
.16
3138
5230
8368

DO = 2.8 mg/L ORP = -156.7 mV
Fe = 3.30 mg/L HS = 2.39 mg/L
(limit)

Circle if Applicable:

| MS/MSD | Duplicate ID No.: |
|---|---|

Signature(s):

Tetra Tech NUS, Inc.

# GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: BRONSON
Project No.: N0401

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

Sample ID No.: OLFB/59/MW01/GW
Sample Location: SITE 59
Sampled By: PDA
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 7/10/00 | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Time: 1410 | | | | | | | | |
| Method: LOW FLOW | clear | 5.74 | .123 | 24.6 | 7.62 | 0.08 | — | |

**PURGE DATA:**

| Date: 7/10/00 | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Method: LOW FLOW | INITIAL | 5.99 | .141 | 25.1 | 85.7 | 1.24 | — | CLEAR |
| Monitor Reading (ppm): — | 1345 | 5.89 | .132 | 24.8 | 25.0 | 0.15 | — | CLEAR |
| Well Casing Diameter & Material | 1350 | 5.80 | .127 | 24.7 | 11.9 | 0.10 | — | CLEAR |
| Type: 2" PVC | 1355 | 5.77 | .125 | 24.7 | 8.7 | 0.10 | — | CLEAR |
| Total Well Depth (TD): 16.61 | 1400 | 5.75 | .124 | 24.9 | 8.5 | 0.11 | — | CLEAR |
| Static Water Level (WL): 11.09 | 1405 | 5.74 | .123 | 24.6 | 7.62 | 0.08 | — | CLEAR |
| One Casing Volume(gal/L): .8 | 1410 | | | | | | | |
| Start Purge (hrs): 1335 | 1415 | | | | | | | |
| End Purge (hrs): ~~30~~ 1405 | 1420 | | | | | | | |
| Total Purge Time (min): ~~1405~~ 30 | 1425 | | | | | | | |
| Total Vol. Purged (gal/L): 2.41 | 1430 | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOC | HCL | 2x40mL VIALS | 2 |
| TRPH | $H_2SO_4$ | 2x1000 mL AMBER | 2 |
| TOTAL Pb | $HNO_3$ | 1x500 mL PLASTIC | 1 |

**OBSERVATIONS / NOTES:**

SAMPLES PLACED ON ICE.
DO=2.1 mg/L ORP= 140.5 mV
Fe=3.30 (limit) mg/L HS=2.39 mV

**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: | Signature(s): |
|---|---|---|
| | | [signature] |

# ATTACHMENT H

## Groundwater Sampling Forms

| | |
|---|---|
| 13.0000 | 7.231 |
| 14.0000 | 7.231 |
| 15.0000 | 7.231 |
| 16.0000 | 7.231 |
| 17.0000 | 7.231 |
| 18.0000 | 7.231 |
| 19.0000 | 7.231 |
| 20.0000 | 7.231 |
| 21.0000 | 7.231 |
| 22.0000 | 7.231 |
| 23.0000 | 7.231 |
| 24.0000 | 7.231 |
| 25.0000 | 7.231 |
| 26.0000 | 7.231 |
| 27.0000 | 7.231 |
| 28.0000 | 7.231 |
| 29.0000 | 7.231 |
| 30.0000 | 7.231 |
| 31.0000 | 7.231 |

END

| | |
|---|---|
| 0.9500 | -0.100 |
| 0.9666 | -0.100 |
| 0.9833 | -0.100 |
| 1.0000 | -0.100 |
| 1.2000 | -0.100 |
| 1.4000 | -0.095 |
| 1.6000 | 0.484 |
| 1.8000 | 7.231 |
| 2.0000 | 7.231 |
| 2.2000 | 7.231 |
| 2.4000 | 7.231 |
| 2.6000 | 7.231 |
| 2.8000 | 7.231 |
| 3.0000 | 7.231 |
| 3.2000 | 7.231 |
| 3.4000 | 7.231 |
| 3.6000 | 7.231 |
| 3.8000 | 7.231 |
| 4.0000 | 7.231 |
| 4.2000 | 7.231 |
| 4.4000 | 7.231 |
| 4.6000 | 7.231 |
| 4.8000 | 7.231 |
| 5.0000 | 7.231 |
| 5.2000 | 7.231 |
| 5.4000 | 7.231 |
| 5.6000 | 7.231 |
| 5.8000 | 7.231 |
| 6.0000 | 7.231 |
| 6.2000 | 7.231 |
| 6.4000 | 7.231 |
| 6.6000 | 7.231 |
| 6.8000 | 7.231 |
| 7.0000 | 7.231 |
| 7.2000 | 7.231 |
| 7.4000 | 7.231 |
| 7.6000 | 7.231 |
| 7.8000 | 7.231 |
| 8.0000 | 7.231 |
| 8.2000 | 7.231 |
| 8.4000 | 7.231 |
| 8.6000 | 7.231 |
| 8.8000 | 7.231 |
| 9.0000 | 7.231 |
| 9.2000 | 7.231 |
| 9.4000 | 7.231 |
| 9.6000 | 7.231 |
| 9.8000 | 7.231 |
| 10.0000 | 7.231 |
| 11.0000 | 7.231 |
| 12.0000 | 7.231 |

| | |
|---|---|
| 0.2166 | -0.134 |
| 0.2250 | -0.134 |
| 0.2333 | -0.129 |
| 0.2416 | -0.129 |
| 0.2500 | -0.124 |
| 0.2583 | -0.124 |
| 0.2666 | -0.119 |
| 0.2750 | -0.119 |
| 0.2833 | -0.119 |
| 0.2916 | -0.115 |
| 0.3000 | -0.115 |
| 0.3083 | -0.115 |
| 0.3166 | -0.115 |
| 0.3250 | -0.115 |
| 0.3333 | -0.110 |
| 0.3500 | -0.110 |
| 0.3666 | -0.110 |
| 0.3833 | -0.110 |
| 0.4000 | -0.105 |
| 0.4166 | -0.105 |
| 0.4333 | -0.105 |
| 0.4500 | -0.105 |
| 0.4666 | -0.105 |
| 0.4833 | -0.105 |
| 0.5000 | -0.105 |
| 0.5166 | -0.105 |
| 0.5333 | -0.100 |
| 0.5500 | -0.105 |
| 0.5666 | -0.100 |
| 0.5833 | -0.105 |
| 0.6000 | -0.100 |
| 0.6166 | -0.100 |
| 0.6333 | -0.100 |
| 0.6500 | -0.100 |
| 0.6666 | -0.100 |
| 0.6833 | -0.100 |
| 0.7000 | -0.100 |
| 0.7166 | -0.100 |
| 0.7333 | -0.100 |
| 0.7500 | -0.100 |
| 0.7666 | -0.100 |
| 0.7833 | -0.100 |
| 0.8000 | -0.100 |
| 0.8166 | -0.100 |
| 0.8333 | -0.100 |
| 0.8500 | -0.100 |
| 0.8666 | -0.100 |
| 0.8833 | -0.100 |
| 0.9000 | -0.100 |
| 0.9166 | -0.100 |
| 0.9333 | -0.100 |

SE2000
Environmental Logger
04/04 06:03

Unit# 191 Test 7

| Setups: | INPUT 1 |
|---|---|
| Type | Level (F) |
| Mode | TOC |
| I.D. | BR59MW04 |
| Reference | 0.000 |
| PSI at Ref. | 2.082 |
| SG | 1.000 |
| Linearity | 0.000 |
| Scale factor | 15.167 |
| Offset | -0.140 |
| Delay mSEC | 50.000 |

Step 2 07/23 09:22:40

| Elapsed Time | INPUT 1 |
|---|---|
| 0.0000 | -0.431 |
| 0.0083 | -0.412 |
| 0.0166 | -0.355 |
| 0.0250 | -0.379 |
| 0.0333 | -0.335 |
| 0.0416 | 0.000 |
| 0.0500 | -0.287 |
| 0.0583 | -0.278 |
| 0.0666 | -0.263 |
| 0.0750 | -0.244 |
| 0.0833 | -0.239 |
| 0.0916 | -0.225 |
| 0.1000 | -0.215 |
| 0.1083 | -0.206 |
| 0.1166 | -0.196 |
| 0.1250 | -0.187 |
| 0.1333 | -0.182 |
| 0.1416 | -0.172 |
| 0.1500 | -0.167 |
| 0.1583 | -0.163 |
| 0.1666 | -0.158 |
| 0.1750 | -0.153 |
| 0.1833 | -0.148 |
| 0.1916 | -0.143 |
| 0.2000 | -0.139 |
| 0.2083 | -0.139 |

| | |
|---|---|
| 0.9500 | -0.071 |
| 0.9666 | -0.071 |
| 0.9833 | -0.071 |
| 1.0000 | -0.071 |
| 1.2000 | -0.071 |
| 1.4000 | -0.071 |
| 1.6000 | -0.076 |
| 1.8000 | -0.076 |
| 2.0000 | -0.071 |
| 2.2000 | -0.071 |
| 2.4000 | -0.076 |
| 2.6000 | -0.076 |
| 2.8000 | -0.076 |
| 3.0000 | -0.076 |
| 3.2000 | -0.076 |
| 3.4000 | -0.076 |
| 3.6000 | -0.076 |
| 3.8000 | -0.076 |
| 4.0000 | -0.076 |
| 4.2000 | -0.076 |
| 4.4000 | -0.076 |
| 4.6000 | -0.081 |
| 4.8000 | -0.076 |
| 5.0000 | -0.081 |
| 5.2000 | -0.081 |
| 5.4000 | -0.076 |
| 5.6000 | -0.081 |
| 5.8000 | -0.076 |
| 6.0000 | -0.086 |
| 6.2000 | -0.086 |

END

| | |
|---|---|
| 0.2166 | 0.023 |
| 0.2250 | 0.019 |
| 0.2333 | 0.009 |
| 0.2416 | 0.004 |
| 0.2500 | 0.000 |
| 0.2583 | -0.009 |
| 0.2666 | -0.014 |
| 0.2750 | -0.019 |
| 0.2833 | -0.023 |
| 0.2916 | -0.023 |
| 0.3000 | -0.028 |
| 0.3083 | -0.033 |
| 0.3166 | -0.038 |
| 0.3250 | -0.038 |
| 0.3333 | -0.043 |
| 0.3500 | -0.047 |
| 0.3666 | -0.052 |
| 0.3833 | -0.057 |
| 0.4000 | -0.057 |
| 0.4166 | -0.057 |
| 0.4333 | -0.062 |
| 0.4500 | -0.062 |
| 0.4666 | -0.062 |
| 0.4833 | -0.062 |
| 0.5000 | -0.062 |
| 0.5166 | -0.067 |
| 0.5333 | -0.067 |
| 0.5500 | -0.067 |
| 0.5666 | -0.067 |
| 0.5833 | -0.071 |
| 0.6000 | -0.067 |
| 0.6166 | -0.071 |
| 0.6333 | -0.071 |
| 0.6500 | -0.067 |
| 0.6666 | -0.071 |
| 0.6833 | -0.071 |
| 0.7000 | -0.071 |
| 0.7166 | -0.071 |
| 0.7333 | -0.071 |
| 0.7500 | -0.071 |
| 0.7666 | -0.071 |
| 0.7833 | -0.071 |
| 0.8000 | -0.071 |
| 0.8166 | -0.071 |
| 0.8333 | -0.071 |
| 0.8500 | -0.071 |
| 0.8666 | -0.071 |
| 0.8833 | -0.071 |
| 0.9000 | -0.071 |
| 0.9166 | -0.071 |
| 0.9333 | -0.071 |

SE2000
Environmental Logger
04/04 06:01

Unit# 191 Test 7

| Setups: | INPUT 1 |
|---|---|
| Type | Level (F) |
| Mode | TOC |
| I.D. | BR59MW04 |
| Reference | 0.000 |
| PSI at Ref. | 2.082 |
| SG | 1.000 |
| Linearity | 0.000 |
| Scale factor | 15.167 |
| Offset | -0.140 |
| Delay mSEC | 50.000 |

Step 1 07/23 09:16:21

| Elapsed Time | INPUT 1 |
|---|---|
| 0.0000 | -0.071 |
| 0.0083 | 1.430 |
| 0.0166 | 0.940 |
| 0.0250 | 0.743 |
| 0.0333 | 0.691 |
| 0.0416 | 0.590 |
| 0.0500 | 0.532 |
| 0.0583 | 0.479 |
| 0.0666 | 0.431 |
| 0.0750 | 0.388 |
| 0.0833 | 0.345 |
| 0.0916 | 0.307 |
| 0.1000 | 0.273 |
| 0.1083 | 0.244 |
| 0.1166 | 0.215 |
| 0.1250 | 0.191 |
| 0.1333 | 0.167 |
| 0.1416 | 0.148 |
| 0.1500 | 0.129 |
| 0.1583 | 0.110 |
| 0.1666 | 0.095 |
| 0.1750 | 0.081 |
| 0.1833 | 0.067 |
| 0.1916 | 0.052 |
| 0.2000 | 0.047 |
| 0.2083 | 0.033 |

| | |
|---|---|
| 0.9500 | -0.014 |
| 0.9666 | -0.014 |
| 0.9833 | -0.014 |
| 1.0000 | -0.014 |
| 1.2000 | -0.014 |
| 1.4000 | -0.014 |
| 1.6000 | -0.014 |
| 1.8000 | -0.014 |
| 2.0000 | -0.014 |
| 2.2000 | -0.014 |
| 2.4000 | -0.014 |
| 2.6000 | -0.009 |
| 2.8000 | -0.014 |
| 3.0000 | -0.014 |
| 3.2000 | -0.076 |
| 3.4000 | -0.071 |
| 3.6000 | -0.071 |
| 3.8000 | -0.071 |
| 4.0000 | -0.071 |
| 4.2000 | -0.071 |
| 4.4000 | -0.071 |
| 4.6000 | -0.071 |
| 4.8000 | -0.071 |
| 5.0000 | -0.071 |
| 5.2000 | -0.071 |
| 5.4000 | -0.071 |
| 5.6000 | -0.071 |
| 5.8000 | -0.071 |
| 6.0000 | -0.071 |
| 6.2000 | -0.071 |
| 6.4000 | -0.071 |
| 6.6000 | -0.076 |
| 6.8000 | -0.071 |
| 7.0000 | -0.071 |
| 7.2000 | -0.071 |
| 7.4000 | -0.071 |
| 7.6000 | -0.071 |
| 7.8000 | -0.071 |
| 8.0000 | -0.071 |

END

| | |
|---|---|
| 0.2166 | -0.115 |
| 0.2250 | -0.105 |
| 0.2333 | -0.095 |
| 0.2416 | -0.091 |
| 0.2500 | -0.081 |
| 0.2583 | -0.081 |
| 0.2666 | -0.071 |
| 0.2750 | -0.071 |
| 0.2833 | -0.067 |
| 0.2916 | -0.062 |
| 0.3000 | -0.057 |
| 0.3083 | -0.052 |
| 0.3166 | -0.047 |
| 0.3250 | -0.047 |
| 0.3333 | -0.043 |
| 0.3500 | -0.038 |
| 0.3666 | -0.038 |
| 0.3833 | -0.033 |
| 0.4000 | -0.028 |
| 0.4166 | -0.028 |
| 0.4333 | -0.023 |
| 0.4500 | -0.023 |
| 0.4666 | -0.023 |
| 0.4833 | -0.023 |
| 0.5000 | -0.019 |
| 0.5166 | -0.019 |
| 0.5333 | -0.019 |
| 0.5500 | -0.019 |
| 0.5666 | -0.019 |
| 0.5833 | -0.019 |
| 0.6000 | -0.019 |
| 0.6166 | -0.019 |
| 0.6333 | -0.014 |
| 0.6500 | -0.014 |
| 0.6666 | -0.014 |
| 0.6833 | -0.014 |
| 0.7000 | -0.014 |
| 0.7166 | -0.014 |
| 0.7333 | -0.014 |
| 0.7500 | -0.014 |
| 0.7666 | -0.014 |
| 0.7833 | -0.014 |
| 0.8000 | -0.014 |
| 0.8166 | -0.014 |
| 0.8333 | -0.014 |
| 0.8500 | -0.014 |
| 0.8666 | -0.014 |
| 0.8833 | -0.014 |
| 0.9000 | -0.014 |
| 0.9166 | -0.014 |
| 0.9333 | -0.014 |

SE2000
Environmental Logger
04/04 05:57

Unit# 191 Test 7

| Setups: | INPUT 1 |
|---|---|
| Type | Level (F) |
| Mode | TOC |
| I.D. | BR59MW04 |
| Reference | 0.000 |
| PSI at Ref. | 2.082 |
| SG | 1.000 |
| Linearity | 0.000 |
| Scale factor | 15.167 |
| Offset | -0.140 |
| Delay mSEC | 50.000 |

Step 0 07/23 09:08:18

| Elapsed Time | INPUT 1 |
|---|---|
| 0.0000 | -0.004 |
| 0.0083 | -0.009 |
| 0.0166 | 0.000 |
| 0.0250 | -1.002 |
| 0.0333 | -0.316 |
| 0.0416 | -0.748 |
| 0.0500 | -0.638 |
| 0.0583 | -0.575 |
| 0.0666 | -0.523 |
| 0.0750 | -0.475 |
| 0.0833 | -0.436 |
| 0.0916 | -0.398 |
| 0.1000 | -0.364 |
| 0.1083 | -0.331 |
| 0.1166 | -0.302 |
| 0.1250 | -0.278 |
| 0.1333 | -0.254 |
| 0.1416 | -0.235 |
| 0.1500 | -0.215 |
| 0.1583 | -0.196 |
| 0.1666 | -0.182 |
| 0.1750 | -0.167 |
| 0.1833 | -0.158 |
| 0.1916 | -0.143 |
| 0.2000 | -0.129 |
| 0.2083 | -0.124 |

| | |
|---|---|
| 0.9500 | -19.031 |
| 0.9666 | -19.026 |
| 0.9833 | -19.021 |
| 1.0000 | -19.017 |
| 1.2000 | -19.021 |
| 1.4000 | -19.021 |
| 1.6000 | -19.021 |
| 1.8000 | -19.031 |
| 2.0000 | -19.017 |
| 2.2000 | -19.026 |
| 2.4000 | -19.021 |
| 2.6000 | -19.021 |
| 2.8000 | -19.021 |
| 3.0000 | -19.021 |
| 3.2000 | -19.021 |
| 3.4000 | -19.021 |
| 3.6000 | -19.026 |
| 3.8000 | -19.017 |
| 4.0000 | -19.021 |
| 4.2000 | -19.026 |
| 4.4000 | -19.017 |
| 4.6000 | -19.021 |

END

| | |
|---|---|
| 0.2166 | -19.041 |
| 0.2250 | -19.045 |
| 0.2333 | -19.045 |
| 0.2416 | -19.045 |
| 0.2500 | -19.041 |
| 0.2583 | -19.045 |
| 0.2666 | -19.045 |
| 0.2750 | -19.031 |
| 0.2833 | -19.031 |
| 0.2916 | -19.041 |
| 0.3000 | -19.045 |
| 0.3083 | -19.036 |
| 0.3166 | -19.041 |
| 0.3250 | -19.036 |
| 0.3333 | -19.041 |
| 0.3500 | -19.021 |
| 0.3666 | -19.031 |
| 0.3833 | -19.021 |
| 0.4000 | -19.031 |
| 0.4166 | -19.021 |
| 0.4333 | -19.036 |
| 0.4500 | -19.021 |
| 0.4666 | -19.036 |
| 0.4833 | -19.021 |
| 0.5000 | -19.031 |
| 0.5166 | -19.021 |
| 0.5333 | -19.026 |
| 0.5500 | -19.026 |
| 0.5666 | -19.017 |
| 0.5833 | -19.031 |
| 0.6000 | -19.026 |
| 0.6166 | -19.026 |
| 0.6333 | -19.017 |
| 0.6500 | -19.021 |
| 0.6666 | -19.021 |
| 0.6833 | -19.017 |
| 0.7000 | -19.021 |
| 0.7166 | -19.021 |
| 0.7333 | -19.021 |
| 0.7500 | -19.026 |
| 0.7666 | -19.017 |
| 0.7833 | -19.031 |
| 0.8000 | -19.021 |
| 0.8166 | -19.021 |
| 0.8333 | -19.021 |
| 0.8500 | -19.031 |
| 0.8666 | -19.021 |
| 0.8833 | -19.021 |
| 0.9000 | -19.036 |
| 0.9166 | -19.021 |
| 0.9333 | -19.021 |

SE2000
Environmental Logger
04/04 05:56

Unit# 191 Test 6

| Setups: | INPUT 1 |
|---|---|
| Type | Level (F) |
| Mode | TOC |
| I.D. | BR59MW60 |
| Reference | 0.000 |
| PSI at Ref. | 2.082 |
| SG | 1.000 |
| Linearity | 0.000 |
| Scale factor | 15.167 |
| Offset | -0.140 |
| Delay mSEC | 50.000 |

Step 3 07/23 08:41:47

| Elapsed Time | INPUT 1 |
|---|---|
| 0.0000 | -19.002 |
| 0.0083 | -18.043 |
| 0.0166 | -17.860 |
| 0.0250 | -17.476 |
| 0.0333 | -17.611 |
| 0.0416 | -17.961 |
| 0.0500 | -18.306 |
| 0.0583 | -18.566 |
| 0.0666 | -18.762 |
| 0.0750 | -18.868 |
| 0.0833 | -18.940 |
| 0.0916 | -18.993 |
| 0.1000 | -19.021 |
| 0.1083 | -19.036 |
| 0.1166 | -19.050 |
| 0.1250 | -19.055 |
| 0.1333 | -19.055 |
| 0.1416 | -19.055 |
| 0.1500 | -19.041 |
| 0.1583 | -19.050 |
| 0.1666 | -19.050 |
| 0.1750 | -19.041 |
| 0.1833 | -19.045 |
| 0.1916 | -19.036 |
| 0.2000 | -19.036 |
| 0.2083 | -19.036 |

```
  13.0000       -19.007
  14.0000       -19.017
  15.0000       -19.002
  16.0000       -19.007
  17.0000       -19.045
END
```

| | |
|---|---|
| 0.9500 | -19.012 |
| 0.9666 | -19.017 |
| 0.9833 | -19.002 |
| 1.0000 | -19.002 |
| 1.2000 | -19.007 |
| 1.4000 | -19.012 |
| 1.6000 | -19.012 |
| 1.8000 | -19.007 |
| 2.0000 | -19.007 |
| 2.2000 | -19.007 |
| 2.4000 | -19.007 |
| 2.6000 | -19.017 |
| 2.8000 | -19.002 |
| 3.0000 | -19.007 |
| 3.2000 | -19.007 |
| 3.4000 | -19.002 |
| 3.6000 | -19.002 |
| 3.8000 | -19.012 |
| 4.0000 | -19.007 |
| 4.2000 | -19.007 |
| 4.4000 | -19.007 |
| 4.6000 | -19.007 |
| 4.8000 | -19.002 |
| 5.0000 | -19.002 |
| 5.2000 | -19.007 |
| 5.4000 | -19.007 |
| 5.6000 | -19.204 |
| 5.8000 | -19.098 |
| 6.0000 | -19.007 |
| 6.2000 | -19.007 |
| 6.4000 | -19.012 |
| 6.6000 | -19.007 |
| 6.8000 | -19.002 |
| 7.0000 | -19.002 |
| 7.2000 | -19.012 |
| 7.4000 | -19.002 |
| 7.6000 | -19.012 |
| 7.8000 | -19.007 |
| 8.0000 | -19.002 |
| 8.2000 | -19.007 |
| 8.4000 | -19.007 |
| 8.6000 | -19.002 |
| 8.8000 | -19.002 |
| 9.0000 | -19.012 |
| 9.2000 | -19.017 |
| 9.4000 | -19.012 |
| 9.6000 | -19.012 |
| 9.8000 | -19.002 |
| 10.0000 | -19.007 |
| 11.0000 | -19.002 |
| 12.0000 | -19.002 |

| | |
|---|---|
| 0.2166 | -19.021 |
| 0.2250 | -19.021 |
| 0.2333 | -19.021 |
| 0.2416 | -19.021 |
| 0.2500 | -19.021 |
| 0.2583 | -19.017 |
| 0.2666 | -19.021 |
| 0.2750 | -19.017 |
| 0.2833 | -19.007 |
| 0.2916 | -19.012 |
| 0.3000 | -19.017 |
| 0.3083 | -19.012 |
| 0.3166 | -19.021 |
| 0.3250 | -19.012 |
| 0.3333 | -19.021 |
| 0.3500 | -19.002 |
| 0.3666 | -19.012 |
| 0.3833 | -18.997 |
| 0.4000 | -19.002 |
| 0.4166 | -19.007 |
| 0.4333 | -18.997 |
| 0.4500 | -19.007 |
| 0.4666 | -18.997 |
| 0.4833 | -18.997 |
| 0.5000 | -19.017 |
| 0.5166 | -19.012 |
| 0.5333 | -19.017 |
| 0.5500 | -19.012 |
| 0.5666 | -19.012 |
| 0.5833 | -19.017 |
| 0.6000 | -19.007 |
| 0.6166 | -19.012 |
| 0.6333 | -19.007 |
| 0.6500 | -19.017 |
| 0.6666 | -19.012 |
| 0.6833 | -19.017 |
| 0.7000 | -19.007 |
| 0.7166 | -19.017 |
| 0.7333 | -18.997 |
| 0.7500 | -19.012 |
| 0.7666 | -18.997 |
| 0.7833 | -19.007 |
| 0.8000 | -19.012 |
| 0.8166 | -19.012 |
| 0.8333 | -18.997 |
| 0.8500 | -19.002 |
| 0.8666 | -19.021 |
| 0.8833 | -19.017 |
| 0.9000 | -18.997 |
| 0.9166 | -19.007 |
| 0.9333 | -19.002 |

SE2000
Environmental Logger
04/04 05:54

Unit# 191 Test 6

| Setups: | INPUT 1 |
|---|---|
| Type | Level (F) |
| Mode | TOC |
| I.D. | BR59MW60 |
| Reference | 0.000 |
| PSI at Ref. | 2.082 |
| SG | 1.000 |
| Linearity | 0.000 |
| Scale factor | 15.167 |
| Offset | -0.140 |
| Delay mSEC | 50.000 |

Step 2 07/23 08:24:33

| Elapsed Time | INPUT 1 |
|---|---|
| 0.0000 | -18.973 |
| 0.0083 | -17.649 |
| 0.0166 | -17.572 |
| 0.0250 | -17.443 |
| 0.0333 | -17.807 |
| 0.0416 | -18.182 |
| 0.0500 | -18.450 |
| 0.0583 | -18.642 |
| 0.0666 | -18.791 |
| 0.0750 | -18.892 |
| 0.0833 | -18.959 |
| 0.0916 | -18.997 |
| 0.1000 | -19.021 |
| 0.1083 | -19.031 |
| 0.1166 | -19.036 |
| 0.1250 | -19.036 |
| 0.1333 | -19.045 |
| 0.1416 | -19.041 |
| 0.1500 | -19.041 |
| 0.1583 | -19.026 |
| 0.1666 | -19.031 |
| 0.1750 | -19.021 |
| 0.1833 | -19.026 |
| 0.1916 | -19.026 |
| 0.2000 | -19.021 |
| 0.2083 | -19.021 |

| | |
|---|---|
| 0.9500 | -18.988 |
| 0.9666 | -18.983 |
| 0.9833 | -18.988 |
| 1.0000 | -18.993 |
| 1.2000 | -18.988 |
| 1.4000 | -18.988 |
| 1.6000 | -18.988 |
| 1.8000 | -18.988 |
| 2.0000 | -18.993 |
| 2.2000 | -18.993 |
| 2.4000 | -18.988 |
| 2.6000 | -19.002 |
| 2.8000 | -18.993 |
| 3.0000 | -18.993 |
| 3.2000 | -18.988 |
| 3.4000 | -18.988 |
| 3.6000 | -18.997 |
| 3.8000 | -18.988 |
| 4.0000 | -18.988 |
| 4.2000 | -19.237 |
| 4.4000 | -19.074 |
| 4.6000 | -19.036 |
| 4.8000 | -19.002 |
| 5.0000 | -18.993 |
| 5.2000 | -18.993 |
| 5.4000 | -18.993 |
| 5.6000 | -18.993 |
| 5.8000 | -18.993 |
| 6.0000 | -18.988 |
| 6.2000 | -18.988 |
| 6.4000 | -18.988 |
| 6.6000 | -18.993 |
| 6.8000 | -18.988 |
| 7.0000 | -19.002 |
| 7.2000 | -18.997 |
| 7.4000 | -18.988 |
| 7.6000 | -18.988 |
| 7.8000 | -18.964 |
| 8.0000 | -18.978 |

END

| | |
|---|---|
| 0.2166 | -19.002 |
| 0.2250 | -19.007 |
| 0.2333 | -19.012 |
| 0.2416 | -19.002 |
| 0.2500 | -19.012 |
| 0.2583 | -19.002 |
| 0.2666 | -19.002 |
| 0.2750 | -19.007 |
| 0.2833 | -19.007 |
| 0.2916 | -18.997 |
| 0.3000 | -19.002 |
| 0.3083 | -19.007 |
| 0.3166 | -19.007 |
| 0.3250 | -19.002 |
| 0.3333 | -19.007 |
| 0.3500 | -18.983 |
| 0.3666 | -18.988 |
| 0.3833 | -18.988 |
| 0.4000 | -18.988 |
| 0.4166 | -18.988 |
| 0.4333 | -18.993 |
| 0.4500 | -18.997 |
| 0.4666 | -18.988 |
| 0.4833 | -18.997 |
| 0.5000 | -18.993 |
| 0.5166 | -18.988 |
| 0.5333 | -19.002 |
| 0.5500 | -18.983 |
| 0.5666 | -18.983 |
| 0.5833 | -18.983 |
| 0.6000 | -18.993 |
| 0.6166 | -18.983 |
| 0.6333 | -18.993 |
| 0.6500 | -18.988 |
| 0.6666 | -18.988 |
| 0.6833 | -18.988 |
| 0.7000 | -18.993 |
| 0.7166 | -18.983 |
| 0.7333 | -18.993 |
| 0.7500 | -18.983 |
| 0.7666 | -18.988 |
| 0.7833 | -18.988 |
| 0.8000 | -18.983 |
| 0.8166 | -18.983 |
| 0.8333 | -18.988 |
| 0.8500 | -18.988 |
| 0.8666 | -18.983 |
| 0.8833 | -18.988 |
| 0.9000 | -18.993 |
| 0.9166 | -18.988 |
| 0.9333 | -18.983 |

SE2000
Environmental Logger
04/04 05:53

Unit# 191 Test 6

| Setups: | INPUT 1 |
|---|---|
| Type | Level (F) |
| Mode | TOC |
| I.D. | BR59MW60 |
| Reference | 0.000 |
| PSI at Ref. | 2.082 |
| SG | 1.000 |
| Linearity | 0.000 |
| Scale factor | 15.167 |
| Offset | -0.140 |
| Delay mSEC | 50.000 |

Step 1 07/23 08:16:25

| Elapsed Time | INPUT 1 |
|---|---|
| 0.0000 | -18.973 |
| 0.0083 | -17.711 |
| 0.0166 | -17.750 |
| 0.0250 | -17.596 |
| 0.0333 | -17.630 |
| 0.0416 | -17.990 |
| 0.0500 | -18.297 |
| 0.0583 | -18.527 |
| 0.0666 | -18.690 |
| 0.0750 | -18.815 |
| 0.0833 | -18.906 |
| 0.0916 | -18.954 |
| 0.1000 | -18.983 |
| 0.1083 | -19.007 |
| 0.1166 | -19.017 |
| 0.1250 | -19.021 |
| 0.1333 | -19.017 |
| 0.1416 | -19.026 |
| 0.1500 | -19.026 |
| 0.1583 | -19.026 |
| 0.1666 | -19.021 |
| 0.1750 | -19.017 |
| 0.1833 | -19.021 |
| 0.1916 | -19.017 |
| 0.2000 | -19.007 |
| 0.2083 | -19.012 |

| | |
|---|---|
| 0.9500 | -18.959 |
| 0.9666 | -18.964 |
| 0.9833 | -18.959 |
| 1.0000 | -18.964 |
| 1.2000 | -18.964 |
| 1.4000 | -18.969 |
| 1.6000 | -18.969 |
| 1.8000 | -18.959 |
| 2.0000 | -18.959 |
| 2.2000 | -18.964 |
| 2.4000 | -18.964 |
| 2.6000 | -18.964 |
| 2.8000 | -18.964 |
| 3.0000 | -18.959 |
| 3.2000 | -18.959 |
| 3.4000 | -19.002 |
| 3.6000 | -18.964 |
| 3.8000 | -19.007 |
| 4.0000 | -19.103 |
| 4.2000 | -18.978 |
| 4.4000 | -18.988 |
| 4.6000 | -18.978 |

END

| | |
|---|---|
| 0.2166 | -18.988 |
| 0.2250 | -18.959 |
| 0.2333 | -18.964 |
| 0.2416 | -18.983 |
| 0.2500 | -18.973 |
| 0.2583 | -18.969 |
| 0.2666 | -19.002 |
| 0.2750 | -19.012 |
| 0.2833 | -18.945 |
| 0.2916 | -18.973 |
| 0.3000 | -19.036 |
| 0.3083 | -18.964 |
| 0.3166 | -19.002 |
| 0.3250 | -18.954 |
| 0.3333 | -18.959 |
| 0.3500 | -18.959 |
| 0.3666 | -18.969 |
| 0.3833 | -18.964 |
| 0.4000 | -18.964 |
| 0.4166 | -18.964 |
| 0.4333 | -18.978 |
| 0.4500 | -18.964 |
| 0.4666 | -18.969 |
| 0.4833 | -18.964 |
| 0.5000 | -18.969 |
| 0.5166 | -18.964 |
| 0.5333 | -18.964 |
| 0.5500 | -18.959 |
| 0.5666 | -18.959 |
| 0.5833 | -18.959 |
| 0.6000 | -18.964 |
| 0.6166 | -18.973 |
| 0.6333 | -18.964 |
| 0.6500 | -18.964 |
| 0.6666 | -18.964 |
| 0.6833 | -18.959 |
| 0.7000 | -18.969 |
| 0.7166 | -18.969 |
| 0.7333 | -18.973 |
| 0.7500 | -18.964 |
| 0.7666 | -18.969 |
| 0.7833 | -18.959 |
| 0.8000 | -18.959 |
| 0.8166 | -18.964 |
| 0.8333 | -18.964 |
| 0.8500 | -18.959 |
| 0.8666 | -18.964 |
| 0.8833 | -18.959 |
| 0.9000 | -18.964 |
| 0.9166 | -18.964 |
| 0.9333 | -18.964 |

SE2000
Environmental Logger
04/04 05:51

Unit# 191 Test 6

| Setups: | INPUT 1 |
|---|---|
| Type | Level (F) |
| Mode | TOC |
| I.D. | BR59MW60 |
| Reference | 0.000 |
| PSI at Ref. | 2.082 |
| SG | 1.000 |
| Linearity | 0.000 |
| Scale factor | 15.167 |
| Offset | -0.140 |
| Delay mSEC | 50.000 |

Step 0 07/23 08:11:38

| Elapsed Time | INPUT 1 |
|---|---|
| 0.0000 | -18.954 |
| 0.0083 | -19.065 |
| 0.0166 | -20.207 |
| 0.0250 | -20.475 |
| 0.0333 | -20.850 |
| 0.0416 | -20.682 |
| 0.0500 | -19.924 |
| 0.0583 | -19.266 |
| 0.0666 | -19.137 |
| 0.0750 | -19.285 |
| 0.0833 | -19.233 |
| 0.0916 | -19.141 |
| 0.1000 | -19.137 |
| 0.1083 | -19.223 |
| 0.1166 | -18.978 |
| 0.1250 | -19.007 |
| 0.1333 | -19.045 |
| 0.1416 | -19.060 |
| 0.1500 | -19.031 |
| 0.1583 | -19.002 |
| 0.1666 | -18.988 |
| 0.1750 | -18.935 |
| 0.1833 | -18.916 |
| 0.1916 | -18.993 |
| 0.2000 | -19.012 |
| 0.2083 | -18.978 |

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW20GW | | |
| Lab Sample ID: | F7009-21 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | FLORIDA-PRO | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09496.D | 1 | 07/17/00 | CCJ | 07/13/00 | OP1819 | GOP411 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | 0.204 | 0.25 | mg/l | J |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 100% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW04GW | | |
| **Lab Sample ID:** | F7009-25 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09614.D | 4 | 07/21/00 | CCJ | 07/14/00 | OP1826 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | 3.21 | 1.0 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 96% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW02GW | | |
| **Lab Sample ID:** | F7009-23 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09585.D | 1 | 07/20/00 | ME | 07/14/00 | OP1826 | GOP412 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | 1.21 | 0.28 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 83% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW01GW | | |
| Lab Sample ID: | F7009-24 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | FLORIDA-PRO | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09586.D | 1 | 07/20/00 | ME | 07/14/00 | OP1826 | GOP412 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | 1.75 | 0.28 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 76% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59D002 | | |
| Lab Sample ID: | F7009-30 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | FLORIDA-PRO | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09615.D | 4 | 07/21/00 | CCJ | 07/14/00 | OP1826 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | 3.34 | 1.1 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 81% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59D001 | | |
| Lab Sample ID: | F7009-29 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | FLORIDA-PRO | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09598.D | 1 | 07/20/00 | ME | 07/14/00 | OP1826 | GOP412 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.28 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 82% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59001 | | |
| **Lab Sample ID:** | F7009-34 | **Date Sampled:** | 07/09/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09603.D | 1 | 07/21/00 | ME | 07/14/00 | OP1826 | GOP412 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.25 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 93% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW23GW | | |
| **Lab Sample ID:** | F7009-18 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | EPA 504.1 | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | AB15084.D | 1 | 07/21/00 | SKW | n/a | n/a | GAB549 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 106-93-4 | 1,2-Dibromoethane | ND | 0.020 | ug/l | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW69GW | | |
| **Lab Sample ID:** | F7009-19 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016565.D | 1 | 07/23/00 | RAW | n/a | n/a | GCD586 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 85% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 91% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW68GW | | |
| Lab Sample ID: | F7009-27 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | SW846 8021B | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016586.D | 1 | 07/23/00 | RAW | n/a | n/a | GCD587 |
| Run #2 | CD016620.D | 10 | 07/24/00 | RAW | n/a | n/a | GCD587 |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | 43.2 | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | 116 | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 20.6 | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 102% | 91% | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 133% | 108% | 72-125% |

(a) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW67GW | | |
| Lab Sample ID: | F7009-26 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | SW846 8021B | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016619.D | 1 | 07/24/00 | RAW | n/a | n/a | GCD587 |
| Run #2 | CD016585.D | 10 | 07/23/00 | RAW | n/a | n/a | GCD587 |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | 3.1 | 1.0 | ug/l | |
| 108-88-3 | Toluene | 4.8 | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | 42.6 | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | 140 | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 7.7 | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 111% | 95% | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 141% | 111% | 72-125% |

(a) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW63GW | | |
| Lab Sample ID: | F7009-13 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | SW846 8021B | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016548.D | 1 | 07/22/00 | RAW | n/a | n/a | GCD586 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 92% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 116% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW60GW | | |
| Lab Sample ID: | F7009-15 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | SW846 8021B | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016550.D | 1 | 07/22/00 | RAW | n/a | n/a | GCD586 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 83% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 94% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW52GW | | |
| Lab Sample ID: | F7009-28 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | SW846 8021B | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016587.D | 1 | 07/23/00 | RAW | n/a | n/a | GCD587 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 82% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 93% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW47GW | | |
| **Lab Sample ID:** | F7009-12 | **Date Sampled:** | 07/09/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016538.D | 100 | 07/22/00 | RAW | n/a | n/a | GCD585 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | 301 | 100 | ug/l | |
| 108-88-3 | Toluene | 5870 | 100 | ug/l | |
| 100-41-4 | Ethylbenzene | 574 | 100 | ug/l | |
| 1330-20-7 | Xylenes (total) | 3620 | 300 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 109 | 100 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 90% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 90% | | 72-125% |

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW34GW | | |
| Lab Sample ID: | F7009-16 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | SW846 8021B | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016561.D | 1 | 07/23/00 | RAW | n/a | n/a | GCD586 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 88% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 95% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW28GW | | |
| Lab Sample ID: | F7009-11 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | SW846 8021B | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016537.D | 10 | 07/22/00 | RAW | n/a | n/a | GCD585 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 10 | ug/l | |
| 108-88-3 | Toluene | 815 | 10 | ug/l | |
| 100-41-4 | Ethylbenzene | 238 | 10 | ug/l | |
| 1330-20-7 | Xylenes (total) | 1550 | 30 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 17.5 | 10 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 94% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 108% | | 72-125% |

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW27GW | | |
| Lab Sample ID: | F7009-14 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | SW846 8021B | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016549.D | 10 | 07/22/00 | RAW | n/a | n/a | GCD586 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | 483 | 10 | ug/l | |
| 108-88-3 | Toluene | 2000 | 10 | ug/l | E |
| 100-41-4 | Ethylbenzene | 223 | 10 | ug/l | |
| 1330-20-7 | Xylenes (total) | 1680 | 30 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 10 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 104% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 119% | | 72-125% |

(a) Results from different vials are inconsistent. All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW23GW | | |
| **Lab Sample ID:** | F7009-18 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016564.D | 10 | 07/23/00 | RAW | n/a | n/a | GCD586 |
| Run #2 [a] | CD016581.D | 25 | 07/23/00 | RAW | n/a | n/a | GCD586 |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | 225 | 10 | ug/l | |
| 108-88-3 | Toluene | 1750 [b] | 25 | ug/l | |
| 100-41-4 | Ethylbenzene | 173 | 10 | ug/l | |
| 1330-20-7 | Xylenes (total) | 1040 | 30 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 10 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 99% | 100% | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 113% | 106% | 72-125% |

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW22GW | | |
| **Lab Sample ID:** | F7009-17 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016580.D | 5 | 07/23/00 | RAW | n/a | n/a | GCD586 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 5.0 | ug/l | |
| 108-88-3 | Toluene | 5.3 | 5.0 | ug/l | |
| 100-41-4 | Ethylbenzene | 162 | 5.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | 512 | 15 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 38.6 | 5.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 106% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 113% | | 72-125% |

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW21GW | | |
| **Lab Sample ID:** | F7009-22 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016570.D | 1 | 07/23/00 | RAW | n/a | n/a | GCD587 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | 0.94 | 1.0 | ug/l | J |
| 100-41-4 | Ethylbenzene | 1.0 | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | 40.3 | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 93% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 125% | | 72-125% |

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59D003 | | |
| **Lab Sample ID:** | F7021-13 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 1.6 U | 5.0 | ug/l | 1 | 07/14/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW61GW | | |
| **Lab Sample ID:** | F7021-11 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method |
|---|---|---|---|---|---|---|---|
| Lead | 2.1 B | 5.0 | ug/l | 1 | 07/14/00 | 07/17/00 JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW51GW | | |
| **Lab Sample ID:** | F7021-10 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 2.8 B | 5.0 | ug/l | 1 | 07/14/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW33GW | | |
| **Lab Sample ID:** | F7021-9 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method |
|---|---|---|---|---|---|---|---|
| Lead | 2.1 B | 5.0 | ug/l | 1 | 07/14/00 | 07/17/00 JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW66GW | | |
| **Lab Sample ID:** | F7021-8 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 1.8 B | 5.0 | ug/l | 1 | 07/14/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW19GW | | |
| **Lab Sample ID:** | F7021-7 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 7.7 | 5.0 | ug/l | 1 | 07/13/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW64GW | | |
| **Lab Sample ID:** | F7021-6 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 5.2 | 5.0 | ug/l | 1 | 07/13/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

**WATER DATA**
**Accutest, NJ**
**SDG: F7021**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59MW55GW | | | OLFB59MW61GW | | | OLFB59MW64GW | | | OLFB59MW66GW | | |
| SAMPLE DATE: | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | |
| LABORATORY ID: | F7021-4 | | | F7021-11 | | | F7021-6 | | | F7021-8 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| INORGANICS | | | | | | | | | | | | |
| LEAD | 70.1 | | | 2.1 | ~~B~~ U | A | 5.2 | U | A | 1.8 | ~~B~~ U | A |

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW44GW | | |
| **Lab Sample ID:** | F7021-5 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 1.6 U | 5.0 | ug/l | 1 | 07/13/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW55GW | | |
| **Lab Sample ID:** | F7021-4 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 70.1 | 5.0 | ug/l | 1 | 07/13/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW53GW | | |
| **Lab Sample ID:** | F7021-3 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 2.1 B | 5.0 | ug/l | 1 | 07/13/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW30GW | | |
| **Lab Sample ID:** | F7021-2 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method |
|---|---|---|---|---|---|---|---|
| Lead | 2.0 B | 5.0 | ug/l | 1 | 07/13/00 | 07/17/00 JK | SW846 6010A |

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW18GW | | |
| **Lab Sample ID:** | F7021-1 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| | | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|---|
| Lead | 62.9 | 5.0 | ug/l | 1 | 07/13/00 | 07/17/00 | JK | SW846 6010A |

RL = Reporting Limit

# APPENDIX B

## Results as Reported by the Laboratory

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7021



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59MW55GW | | | OLFB59MW61GW | | | OLFB59MW64GW | | | OLFB59MW66GW | | |
| SAMPLE DATE: | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | |
| LABORATORY ID: | F7021-4 | | | F7021-11 | | | F7021-6 | | | F7021-8 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| INORGANICS | | | | | | | | | | | | |
| LEAD | 70.1 | | | 2.1 | ~~B~~ U | A | 5.2 | U | A | 1.8 | ~~B~~ U | A |

# CTO112-NAS PENSACOLA
**WATER DATA**
**Accutest, NJ**
**SDG: F7021**



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59MW33GW | | | OLFB59MW44GW | | | OLFB59MW51GW | | | OLFB59MW53GW | | |
| SAMPLE DATE: | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | |
| LABORATORY ID: | F7021-9 | | | F7021-5 | | | F7021-10 | | | F7021-3 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| INORGANICS | | | | | | | | | | | | |
| LEAD | 2.1 | ~~B~~ U | A | 1.6 | U | | 2.8 | ~~B~~ U | A | 2.1 | ~~B~~ U | A |

# CTO112-NAS PENSACOLA
**WATER DATA**
**Accutest, NJ**
**SDG: F7021**



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59D003 | | | OLFB59MW18GW | | | OLFB59MW19GW | | | OLFB59MW30GW | | |
| SAMPLE DATE: | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | |
| LABORATORY ID: | F7021-13 | | | F7021-1 | | | F7021-7 | | | F7021-2 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| INORGANICS | | | | | | | | | | | | |
| LEAD | 1.6 | U | | 62.9 | | | 7.7 | U | A | 2.0 | ~~B~~ U | A |

| 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 | OLFB59MW66GW | F7021-8 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| MG/L | OLFB59D003 | F7021-13 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/22/00 | 6 | 5 | 11 |
| MG/L | OLFB59MW18GW | F7021-1 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/23/00 | 6 | 6 | 12 |
| MG/L | OLFB59MW19GW | F7021-7 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW30GW | F7021-2 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW33GW | F7021-9 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW44GW | F7021-5 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW51GW | F7021-10 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW53GW | F7021-3 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW55GW | F7021-4 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/23/00 | 6 | 6 | 12 |
| MG/L | OLFB59MW61GW | F7021-11 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW64GW | F7021-6 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW66GW | F7021-8 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |

F7021

HOLDING TIME
08/08/00

| 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 | OLFB59D003 | F7021-13 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW18GW | F7021-1 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW19GW | F7021-7 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW30GW | F7021-2 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW33GW | F7021-9 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW44GW | F7021-5 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW51GW | F7021-10 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW53GW | F7021-3 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW55GW | F7021-4 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW61GW | F7021-11 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW64GW | F7021-6 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW66GW | F7021-8 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | 59TB071100 | F7021-14 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59D003 | F7021-13 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW18GW | F7021-1 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW19GW | F7021-7 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/25/00 | 0 | 0 | 14 |
| UG/L | OLFB59MW30GW | F7021-2 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW33GW | F7021-9 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW38GW | F7021-12 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/21/00 | 0 | 0 | 10 |
| UG/L | OLFB59MW44GW | F7021-5 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW51GW | F7021-10 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW53GW | F7021-3 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW55GW | F7021-4 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW61GW | F7021-11 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW64GW | F7021-6 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |

| 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 | OLFB59MW66GW | F7021-8 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| MG/L | OLFB59D003 | F7021-13 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/22/00 | 6 | 5 | 11 |
| MG/L | OLFB59MW18GW | F7021-1 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/23/00 | 6 | 6 | 12 |
| MG/L | OLFB59MW19GW | F7021-7 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW30GW | F7021-2 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW33GW | F7021-9 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW44GW | F7021-5 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW51GW | F7021-10 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW53GW | F7021-3 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW55GW | F7021-4 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/23/00 | 6 | 6 | 12 |
| MG/L | OLFB59MW61GW | F7021-11 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW64GW | F7021-6 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW66GW | F7021-8 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |

F7021

HOLDING TIME
08/08/00

| 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 | OLFB59D003 | F7021-13 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW18GW | F7021-1 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW19GW | F7021-7 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW30GW | F7021-2 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW33GW | F7021-9 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW44GW | F7021-5 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW51GW | F7021-10 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW53GW | F7021-3 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW55GW | F7021-4 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW61GW | F7021-11 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW64GW | F7021-6 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW66GW | F7021-8 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | 59TB071100 | F7021-14 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59D003 | F7021-13 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW18GW | F7021-1 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW19GW | F7021-7 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/25/00 | 0 | 0 | 14 |
| UG/L | OLFB59MW30GW | F7021-2 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW33GW | F7021-9 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW38GW | F7021-12 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/21/00 | 0 | 0 | 10 |
| UG/L | OLFB59MW44GW | F7021-5 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW51GW | F7021-10 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW53GW | F7021-3 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW55GW | F7021-4 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW61GW | F7021-11 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW64GW | F7021-6 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |

# APPENDIX A

## Qualified Analytical Results

**DATA QUALIFIER DEFINITIONS:**

U - Value is a nondetected result as reported by the laboratory and should not be considered present.

J - Positive result is estimated as a result of a value below the CRQL or a technical noncompliance.

UJ - Nondetected result is considered to be estimated as a result of technical noncompliances.

**Qualifier Codes:**

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration (i.e., % RSDs, %Ds, ICVs, CCVs, RPDs, RRFs, etc.) Noncompliance
D = MS/MSD Noncompliance
E = LCS/LCSD Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS - GFAA MSA's $r < 0.995$
K = ICP Interference - include ICSAB % R's
L = Instrument Calibration Range Exceedance
M = Sample Preservation
N = Internal Standard Noncompliance
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = Pest/PCB D% between columns for positive results
V = Non-linear calibrations, tuning $r < 0.995$ (correlation coefficient)
W = EMPC result
X = Signal to noise response drop
Y = % Solid content is less than 30%

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Inorganic Data Validation (February, 1994), 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)."

William Howard Engle

Project Chemist
Tetra Tech NUS, Inc.

Joseph A. Samchuck

Data Validation Quality Assurance Officer
Tetra Tech NUS, Inc.

Attachments:
1. Appendix A - Qualified Analytical Results
2. Appendix B – Results as reported by the laboratory
3. Appendix C – Supporting Documentation

Laboratory Blank Analysis

Lead was detected in the laboratory method / preparation blanks at the following maximum concentrations:

Affected samples: OLFB59MW19GW
OLFB59MW30GW
OLFB59MW33GW
OLFB59MW51GW
OLFB59MW53GW
OLFB59MW61GW
OLFB59MW64GW
OLFB59MW66GW

| Analyte | Maximum Concentration (ug/L) | Action Level (ug/L) |
|---|---|---|
| Lead | 2.6 | 13 |

An action level of 5x the maximum concentration has been used to evaluate the sample for contamination in continuing calibration blank. Dilution factors and sample aliquots were taken into consideration when evaluating for blank contamination. Positive results < the action level for lead were qualified as nondetects (U) as a result of blank contamination.

All other quality control criteria were met for this fraction.

Field Duplicate Summary

| Analyte | OLFB59MW61GW | OLFB59D003 |
|---|---|---|
| | No positive results | No positive results |

Executive Summary

**Laboratory performance:** Lead was detected in the calibration blankS. Several samples were qualified for blank contamination.

**Other factors affecting data quality:** None.

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

**TO:** **Mr. Gerald Walker** **DATE: August 21, 2000**

**FROM:** **William Howard Engle** **CC: File**

**SUBJECT:** **Inorganic Data Validation – Total Lead**
**CTO112 – NAS Pensacola**
**SDG F7021**

**SAMPLES:** **12/Aqueous**

| | | |
|---|---|---|
| OLFB59D003 | OLFB59MW18GW | OLFB59MW19GW |
| OLFB59MW30GW | OLFB59MW33GW | OLFB59MW44GW |
| OLFB59MW51GW | OLFB59MW53GW | OLFB59MW55GW |
| OLFB59MW61GW | OLFB59MW64GW | OLFB59MW66GW |

**OVERVIEW**

The sample set for CTO112, SDG F7021; Naval Air Station Pensacola, Pensacola, Florida consists of twelve (12) aqueous environmental samples. This SDG also contained one (1) duplicate pair (OLFB59MW61GW / OLFB59D003). The environmental samples were analyzed for Total Lead.

The samples were collected by Tetra Tech NUS on July 11, 2000 and analyzed by Accutest Southeast 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 6010A analytical and reporting protocols. The data in this SDG was validated with regard to the following parameters:

- * Data Completeness
- * Holding Times
- * Initial/continuing calibrations
- Laboratory method/field quality control blank results
- * Detection Limits

The symbol (*) indicates that all quality control criteria were met for this parameter. Supporting documentation is presented in Appendix C. Qualified analytical results are presented in Appendix A. The original laboratory data is contained in Appendix B.

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW66GW | | |
| **Lab Sample ID:** | F7021-8 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09633.D | 1 | 07/21/00 | CCJ | 07/17/00 | OP1835 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.28 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 90% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW64GW | | |
| **Lab Sample ID:** | F7021-6 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09631.D | 1 | 07/21/00 | CCJ | 07/17/00 | OP1835 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.28 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 78% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW61GW | | |
| **Lab Sample ID:** | F7021-11 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09636.D | 1 | 07/21/00 | CCJ | 07/17/00 | OP1835 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.28 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 89% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW55GW | | |
| **Lab Sample ID:** | F7021-4 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09680.D | 2 | 07/23/00 | CCJ | 07/17/00 | OP1835 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | 1.54 | 0.52 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 94% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW53GW | | |
| **Lab Sample ID:** | F7021-3 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09628.D | 1 | 07/21/00 | CCJ | 07/17/00 | OP1835 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.28 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 97% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW51GW | | |
| **Lab Sample ID:** | F7021-10 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09635.D | 1 | 07/21/00 | CCJ | 07/17/00 | OP1835 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.25 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 101% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW44GW | | |
| **Lab Sample ID:** | F7021-5 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09630.D | 1 | 07/21/00 | CCJ | 07/17/00 | OP1835 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.28 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 95% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW33GW | | |
| **Lab Sample ID:** | F7021-9 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09634.D | 1 | 07/21/00 | CCJ | 07/17/00 | OP1835 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.25 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 181% * | | 40-140% |

(a) Suspected double surrogate; however, sample was ND.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW30GW | | |
| **Lab Sample ID:** | F7021-2 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09626.D | 1 | 07/21/00 | CCJ | 07/17/00 | OP1835 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.25 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 101% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW19GW | | |
| **Lab Sample ID:** | F7021-7 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09632.D | 1 | 07/21/00 | CCJ | 07/17/00 | OP1835 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.30 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 96% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW18GW | | |
| **Lab Sample ID:** | F7021-1 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09679.D | 4 | 07/23/00 | CCJ | 07/17/00 | OP1835 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | 3.72 | 1.1 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 96% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59D003 | | |
| **Lab Sample ID:** | F7021-13 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | FLORIDA-PRO | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OP09637.D | 1 | 07/22/00 | CCJ | 07/17/00 | OP1835 | GOP413 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| | TPH (C8-C40) | ND | 0.28 | mg/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 91% | | 40-140% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW66GW | | |
| **Lab Sample ID:** | F7021-8 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016623.D | 1 | 07/24/00 | RA | n/a | n/a | GCD589 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 85% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 95% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW64GW | | |
| **Lab Sample ID:** | F7021-6 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016618.D | 1 | 07/24/00 | RA | n/a | n/a | GCD589 |
| Run #2 | CD016653.D | 10 | 07/25/00 | RA | n/a | n/a | GCD589 |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | 34.1 | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | 32.4 | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 31.1 | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 97% | 94% | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 169% | 118% | 72-125% |

(a) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW61GW | | |
| **Lab Sample ID:** | F7021-11 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016626.D | 1 | 07/24/00 | RA | n/a | n/a | GCD589 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 87% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 95% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW55GW | | |
| **Lab Sample ID:** | F7021-4 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016616.D | 10 | 07/24/00 | RA | n/a | n/a | GCD589 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 10 | ug/l | |
| 108-88-3 | Toluene | 405 | 10 | ug/l | |
| 100-41-4 | Ethylbenzene | 344 | 10 | ug/l | |
| 1330-20-7 | Xylenes (total) | 1300 | 30 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 63.0 | 10 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 99% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 108% | | 72-125% |

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW53GW | | |
| **Lab Sample ID:** | F7021-3 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016615.D | 1 | 07/24/00 | RA | n/a | n/a | GCD589 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 76% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 89% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW51GW | | |
| **Lab Sample ID:** | F7021-10 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016625.D | 1 | 07/24/00 | RA | n/a | n/a | GCD589 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 86% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 96% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW44GW | | |
| **Lab Sample ID:** | F7021-5 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016617.D | 10 | 07/24/00 | RA | n/a | n/a | GCD589 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | 0.77 | 1.0 | ug/l | J |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 5.4 | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 92% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 113% | | 72-125% |

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW38GW | | |
| **Lab Sample ID:** | F7021-12 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | EPA 504.1 | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | AB15086.D | 1 | 07/21/00 | SKW | n/a | n/a | GAB549 |
| Run #2 | | | | | | | |

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 106-93-4 | 1,2-Dibromoethane | ND | 0.020 | ug/l | |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW33GW | | |
| **Lab Sample ID:** | F7021-9 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016624.D | 1 | 07/24/00 | RA | n/a | n/a | GCD589 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 84% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 94% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW30GW | | |
| **Lab Sample ID:** | F7021-2 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016614.D | 1 | 07/24/00 | RA | n/a | n/a | GCD589 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | 1.2 | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | 1.9 | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | 4.8 | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 84% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 95% | | 72-125% |

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW19GW | | |
| **Lab Sample ID:** | F7021-7 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016641.D | 1 | 07/25/00 | RA | n/a | n/a | GCD589 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 86% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 94% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW18GW | | |
| **Lab Sample ID:** | F7021-1 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016613.D | 10 | 07/24/00 | RA | n/a | n/a | GCD589 |
| Run #2 [a] | CD016629.D | 100 | 07/24/00 | RA | n/a | n/a | GCD589 |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | 748 | 10 | ug/l | |
| 108-88-3 | Toluene | 5820 [b] | 100 | ug/l | |
| 100-41-4 | Ethylbenzene | 516 | 10 | ug/l | |
| 1330-20-7 | Xylenes (total) | 3200 [b] | 300 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 30.2 | 10 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 107% | 96% | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 119% | 106% | 72-125% |

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59D003 | | |
| **Lab Sample ID:** | F7021-13 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/12/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016627.D | 1 | 07/24/00 | RA | n/a | n/a | GCD589 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 82% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 86% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | 59TB071100 | | |
| **Lab Sample ID:** | F7021-14 | **Date Sampled:** | 07/11/00 |
| **Matrix:** | AQ - Trip Blank Water | **Date Received:** | 07/12/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016628.D | 1 | 07/24/00 | RA | n/a | n/a | GCD589 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 86% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 92% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# APPENDIX B

## Results as Reported by the Laboratory

CTO112-NAS PENSACOLA
WATER DATA
Accutest, NJ
SDG: F7021



| SAMPLE NUMBER: | OLFB59MW55GW | | | OLFB59MW61GW | | | OLFB59MW64GW | | | OLFB59MW66GW | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | |
| LABORATORY ID: | F7021-4 | | | F7021-11 | | | F7021-6 | | | F7021-8 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | MG/L | | | MG/L | | | MG/L | | | MG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| PETROLEUM HYDROCARBONS | | | | | | | | | | | | |
| TPH (C8-C40) | 1.54 | | | 0.28 | U | | 0.28 | U | | 0.28 | U | |

CTO112-NAS PENSACOLA
WATER DATA
Accutest, NJ
SDG: F7021



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59MW33GW | | | OLFB59MW44GW | | | OLFB59MW51GW | | | OLFB59MW53GW | | |
| SAMPLE DATE: | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | |
| LABORATORY ID: | F7021-9 | | | F7021-5 | | | F7021-10 | | | F7021-3 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | MG/L | | | MG/L | | | MG/L | | | MG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| PETROLEUM HYDROCARBONS | | | | | | | | | | | | |
| TPH (C8-C40) | 0.25 | U | | 0.28 | U | | 0.25 | U | | 0.28 | U | |

CTO112-NAS PENSACOLA
WATER DATA
Accutest, NJ
SDG: F7021



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59D003 | | | OLFB59MW18GW | | | OLFB59MW19GW | | | OLFB59MW30GW | | |
| SAMPLE DATE: | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | |
| LABORATORY ID: | F7021-13 | | | F7021-1 | | | F7021-7 | | | F7021-2 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | MG/L | | | MG/L | | | MG/L | | | MG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **PETROLEUM HYDROCARBONS** | | | | | | | | | | | | |
| TPH (C8-C40) | 0.28 | U | | 3.72 | | | 0.3 | U | | 0.25 | U | |

CTO112-NAS PENSACOLA
WATER DATA
Accutest, NJ
SDG: F7021



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59MW64GW | | | OLFB59MW66GW | | | | | | | | |
| SAMPLE DATE: | 07/11/00 | | | 07/11/00 | | | / / | | | / / | | |
| LABORATORY ID: | F7021-6 | | | F7021-8 | | | | | | | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | | | | | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 100.0 % | | | 100.0 % | | |
| UNITS: | UG/L | | | UG/L | | | | | | | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| VOLATILES | | | | | | | | | | | | |
| BENZENE | 1 | U | | 1 | U | | | | | | | |
| ETHYLBENZENE | 14.1 | | | 1 | U | | | | | | | |
| METHYL TERT-BUTYL ETHER | 31.1 | | | 1 | U | | | | | | | |
| TOLUENE | 1 | U | | 1 | U | | | | | | | |
| XYLENES, TOTAL | 32.4 | | | 3 | U | | | | | | | |

| SAMPLE NUMBER: | OLFB59MW51GW | | | OLFB59MW53GW | | | OLFB59MW55GW | | | OLFB59MW61GW | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | |
| LABORATORY ID: | F7021-10 | | | F7021-3 | | | F7021-4 | | | F7021-11 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| VOLATILES | | | | | | | | | | | | |
| BENZENE | 1 | U | | 1 | U | | 10 | U | | 1 | U | |
| ETHYLBENZENE | 1 | U | | 1 | U | | 344 | | | 1 | U | |
| METHYL TERT-BUTYL ETHER | 1 | U | | 1 | U | | 63 | | | 1 | U | |
| TOLUENE | 1 | U | | 1 | U | | 403 | | | 1 | U | |
| XYLENES, TOTAL | 3 | U | | 3 | U | | 1300 | | | 3 | U | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7021



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59MW30GW | | | OLFB59MW33GW | | | OLFB59MW38GW | | | OLFB59MW44GW | | |
| SAMPLE DATE: | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | |
| LABORATORY ID: | F7021-2 | | | F7021-9 | | | F7021-12 | | | F7021-5 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| VOLATILES | | | | | | | | | | | | |
| 1,2-DIBROMOETHANE | | | | | | | 0.02 | U | | | | |
| BENZENE | 1.2 | | | 1 | U | | | | | 1 | U | |
| ETHYLBENZENE | 1.9 | | | 1 | U | | | | | 0.77 | J | P |
| METHYL TERT-BUTYL ETHER | 1 | U | | 1 | U | | | | | 5.4 | | |
| TOLUENE | 1 | U | | 1 | U | | | | | 1 | U | |
| XYLENES, TOTAL | 4.8 | | | 3 | U | | | | | 3 | U | |

**WATER DATA**
**Accutest, NJ**
**SDG: F7021**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | 59TB071100 | | | OLFB59D003 | | | OLFB59MW18GW | | | OLFB59MW19GW | | |
| SAMPLE DATE: | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | | 07/11/00 | | |
| LABORATORY ID: | F7021-14 | | | F7021-13 | | | F7021-1 | | | F7021-7 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| VOLATILES | | | | | | | | | | | | |
| BENZENE | 1 | U | | 1 | U | | 748 | | | 1 | U | |
| ETHYLBENZENE | 1 | U | | 1 | U | | 516 | | | 1 | U | |
| METHYL TERT-BUTYL ETHER | 1 | U | | 1 | U | | 30.2 | | | 1 | U | |
| TOLUENE | 1 | U | | 1 | U | | 5820 | | | 1 | U | |
| XYLENES, TOTAL | 3 | U | | 3 | U | | 3200 | | | 3 | U | |

| | | | | | | | | | TO EXTR_DATE | TO ANAL_DATE | TO ANAL_DATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| UG/L | OLFB59MW66GW | F7021-8 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| MG/L | OLFB59D003 | F7021-13 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/22/00 | 6 | 5 | 11 |
| MG/L | OLFB59MW18GW | F7021-1 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/23/00 | 6 | 6 | 12 |
| MG/L | OLFB59MW19GW | F7021-7 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW30GW | F7021-2 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW33GW | F7021-9 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW44GW | F7021-5 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW51GW | F7021-10 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW53GW | F7021-3 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW55GW | F7021-4 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/23/00 | 6 | 6 | 12 |
| MG/L | OLFB59MW61GW | F7021-11 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW64GW | F7021-6 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW66GW | F7021-8 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |

HOLDING TIME
08/08/00

| 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 | OLFB59D003 | F7021-13 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW18GW | F7021-1 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW19GW | F7021-7 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW30GW | F7021-2 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW33GW | F7021-9 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW44GW | F7021-5 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW51GW | F7021-10 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW53GW | F7021-3 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW55GW | F7021-4 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW61GW | F7021-11 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW64GW | F7021-6 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW66GW | F7021-8 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | 59TB071100 | F7021-14 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59D003 | F7021-13 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW18GW | F7021-1 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW19GW | F7021-7 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/25/00 | 0 | 0 | 14 |
| UG/L | OLFB59MW30GW | F7021-2 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW33GW | F7021-9 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW38GW | F7021-12 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/21/00 | 0 | 0 | 10 |
| UG/L | OLFB59MW44GW | F7021-5 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW51GW | F7021-10 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW53GW | F7021-3 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW55GW | F7021-4 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW61GW | F7021-11 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW64GW | F7021-6 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |

| Units | Nsample | Lab Id | Qc Type | Sog | Son | Samp Date | Extr Date | Anal Date | SAMP_DATE TO EXTR_DATE | EXTR_DATE TO ANAL_DATE | SAMP_DATE TO ANAL_DATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| UG/L | OLFB59MW66GW | F7021-8 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| MG/L | OLFB59D003 | F7021-13 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/22/00 | 6 | 5 | 11 |
| MG/L | OLFB59MW18GW | F7021-1 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/23/00 | 6 | 6 | 12 |
| MG/L | OLFB59MW19GW | F7021-7 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW30GW | F7021-2 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW33GW | F7021-9 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW44GW | F7021-5 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW51GW | F7021-10 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW53GW | F7021-3 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW55GW | F7021-4 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/23/00 | 6 | 6 | 12 |
| MG/L | OLFB59MW61GW | F7021-11 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW64GW | F7021-6 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |
| MG/L | OLFB59MW66GW | F7021-8 | NORMAL | F7021 | TPH | 07/11/00 | 07/17/00 | 07/21/00 | 6 | 4 | 10 |

HOLDING TIME
08/08/00

| 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 | OLFB59D003 | F7021-13 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW18GW | F7021-1 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW19GW | F7021-7 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW30GW | F7021-2 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW33GW | F7021-9 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW44GW | F7021-5 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW51GW | F7021-10 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW53GW | F7021-3 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW55GW | F7021-4 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW61GW | F7021-11 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | OLFB59MW64GW | F7021-6 | NORMAL | F7021 | M | 07/11/00 | 07/13/00 | 07/17/00 | 2 | 4 | 6 |
| UG/L | OLFB59MW66GW | F7021-8 | NORMAL | F7021 | M | 07/11/00 | 07/14/00 | 07/17/00 | 3 | 3 | 6 |
| UG/L | 59TB071100 | F7021-14 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59D003 | F7021-13 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW18GW | F7021-1 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW19GW | F7021-7 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/25/00 | 0 | 0 | 14 |
| UG/L | OLFB59MW30GW | F7021-2 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW33GW | F7021-9 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW38GW | F7021-12 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/21/00 | 0 | 0 | 10 |
| UG/L | OLFB59MW44GW | F7021-5 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW51GW | F7021-10 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW53GW | F7021-3 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW55GW | F7021-4 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW61GW | F7021-11 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |
| UG/L | OLFB59MW64GW | F7021-6 | NORMAL | F7021 | OV | 07/11/00 | / / | 07/24/00 | 0 | 0 | 13 |

# APPENDIX A

## Qualified Analytical Results

**DATA QUALIFIER DEFINITIONS:**

| | | |
|---|---|---|
| U | - | Value is a nondetected result as reported by the laboratory and should not be considered present. |
| J | - | Positive result is estimated as a result of a value below the CRQL or a technical noncompliance. |
| UJ | - | Nondetected result is considered to be estimated as a result of technical noncompliances. |

**Qualifier Codes:**

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration (i.e., % RSDs, %Ds, ICVs, CCVs, RPDs, RRFs, etc.) Noncompliance
D = MS/MSD Noncompliance
E = LCS/LCSD Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS - GFAA MSA's $r < 0.995$
K = ICP Interference - Include ICSAB % R's
L = Instrument Calibration Range Exceedance
M = Sample Preservation
N = Internal Standard Noncompliance
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = Pest/PCB D% between columns for positive results
V = Non-linear calibrations, tuning $r < 0.995$ (correlation coefficient)
W = EMPC result
X = Signal to noise response drop
Y = % Solid content is less than 30%

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)."

William Howard Engle

Project Chemist
Tetra Tech NUS, Inc.

Joseph A. Samchuck

Data Validation Quality Assurance Officer
Tetra Tech NUS, Inc.

Attachments:
1. Appendix A - Qualified Analytical Results
2. Appendix B – Results as reported by the laboratory
3. Appendix C – Supporting Documentation

Volatile Fraction

All quality control criteria were met for this fraction.

EDB

All quality control criteria were met for this fraction.

Total Residual Petroleum Fraction

All quality control criteria were met for this fraction.

Field Duplicate Summary

| Analyte | OLFB59MW61GW | OLFB59D003 |
|---|---|---|
| | No positive results | No positive results |

Executive Summary

**Laboratory performance:** All quality control criteria were met for this SDG.

**Other factors affecting data quality:** None.

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

**TO:** **Mr. Gerald Walker** **DATE: August 21, 2000**

**FROM:** **William Howard Engle** **CC: File**

**SUBJECT:** **Organic Data Validation – VOA, EDB, and TRPH**
**CTO112 – NAS Pensacola**
**SDG F7021**

**SAMPLES:** **14/Aqueous**

| | | |
|---|---|---|
| **59TB071100** | **OLFB59D003** | **OLFB59MW18GW** |
| **OLFB59MW19GW** | **OLFB59MW30GW** | **OLFB59MW33GW** |
| **OLFB59MW38GW** | **OLFB59MW44GW** | **OLFB59MW51GW** |
| **OLFB59MW53GW** | **OLFB59MW55GW** | **OLFB59MW61GW** |
| **OLFB59MW64GW** | **OLFB59MW66GW** | |

**OVERVIEW**

The sample set for CTO112, SDG F7021; Naval Air Station Pensacola, Pensacola, Florida consists of thirteen (13) aqueous environmental samples and one (1) trip blank. A duplicate pair was included in this SDG (OLFB59MW61GW / OLFB59D003). The environmental samples, with the exception of samples 19TB070600 and OLFB59MW38GW, were analyzed for Benzene, Toluene, Ethylbenzene, Total Xylenes, and Methyl-tert-butyl ether (VOCs), and total residual petroleum hydrocarbons (TRPHs). Sample 19TB070600 was analyzed for VOCs only, and sample OLFB59MW38GW was analyzed for ethylene dibromide (EDB).

The samples were collected by Tetra Tech NUS on July 11, 2000 and analyzed by Accutest Southeast Laboratory. 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 8021B (VOCs), EPA method 504.1 (EDB), and FL-PRO (TRPHs) analytical and reporting protocols. 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. Supporting documentation is presented in Appendix C. Qualified analytical results are presented in Appendix A. The original laboratory data is contained in Appendix B.

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW20GW | | |
| **Lab Sample ID:** | F7009-21 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016569.D | 1 | 07/23/00 | RAW | n/a | n/a | GCD587 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | 0.61 | 1.0 | ug/l | J |
| 108-88-3 | Toluene | 4.6 | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | 1.2 | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | 21.8 | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 94% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 116% | | 72-125% |

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW04GW | | |
| **Lab Sample ID:** | F7009-25 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016584.D | 10 | 07/23/00 | RAW | n/a | n/a | GCD587 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | 54.8 | 10 | ug/l | |
| 108-88-3 | Toluene | 296 | 10 | ug/l | |
| 100-41-4 | Ethylbenzene | 52.9 | 10 | ug/l | |
| 1330-20-7 | Xylenes (total) | 262 | 30 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 24.1 | 10 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 100% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 111% | | 72-125% |

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59MW02GW | | |
| Lab Sample ID: | F7009-23 | Date Sampled: | 07/10/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | SW846 8021B | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016571.D | 1 | 07/23/00 | RAW | n/a | n/a | GCD587 |
| Run #2 | CD016582.D | 5 | 07/23/00 | RAW | n/a | n/a | GCD587 |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | 44.8 | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | 83.0 | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 103% | 99% | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 197% | 110% | 72-125% |

(a) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59MW01GW | | |
| **Lab Sample ID:** | F7009-24 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016583.D | 10 | 07/23/00 | RAW | n/a | n/a | GCD587 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | 547 | 10 | ug/l | |
| 108-88-3 | Toluene | 1580 | 10 | ug/l | E |
| 100-41-4 | Ethylbenzene | 195 | 10 | ug/l | |
| 1330-20-7 | Xylenes (total) | 909 | 30 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 12.2 | 10 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 105% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 108% | | 72-125% |

(a) All hits confirmed by dual column analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59D002 | | |
| **Lab Sample ID:** | F7009-30 | **Date Sampled:** | 07/10/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 [a] | CD016588.D | 10 | 07/23/00 | RAW | n/a | n/a | GCD587 |
| Run #2 [a] | CD016621.D | 25 | 07/24/00 | RAW | n/a | n/a | GCD587 |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | 214 | 10 | ug/l | |
| 108-88-3 | Toluene | 1590 [b] | 25 | ug/l | |
| 100-41-4 | Ethylbenzene | 177 | 10 | ug/l | |
| 1330-20-7 | Xylenes (total) | 1030 | 30 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 9.2 | 10 | ug/l | J |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 102% | 100% | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 115% | 102% | 72-125% |

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | OLFB59D001 | | |
| Lab Sample ID: | F7009-29 | Date Sampled: | 07/09/00 |
| Matrix: | AQ - Ground Water | Date Received: | 07/11/00 |
| Method: | SW846 8021B | Percent Solids: | n/a |
| Project: | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016551.D | 1 | 07/22/00 | RAW | n/a | n/a | GCD586 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 83% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 94% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | OLFB59001 | | |
| **Lab Sample ID:** | F7009-34 | **Date Sampled:** | 07/09/00 |
| **Matrix:** | AQ - Ground Water | **Date Received:** | 07/11/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016555.D | 1 | 07/22/00 | RAW | n/a | n/a | GCD586 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 91% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 98% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | 59TB070900 | | |
| **Lab Sample ID:** | F7009-31 | **Date Sampled:** | 07/08/00 |
| **Matrix:** | AQ - Trip Blank Water | **Date Received:** | 07/11/00 |
| **Method:** | SW846 8021B | **Percent Solids:** | n/a |
| **Project:** | NAS Pensacola | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | CD016544.D | 1 | 07/22/00 | RAW | n/a | n/a | GCD586 |
| Run #2 | | | | | | | |

**Purgeable Aromatics, MTBE**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 71-43-2 | Benzene | ND | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 3.0 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 89% | | 69-125% |
| 98-08-8 | aaa-Trifluorotoluene | 98% | | 72-125% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# APPENDIX B

## Results as Reported by the Laboratory

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59MW68GW | | | OLFB59MW69GW | | | | | | | | |
| SAMPLE DATE: | 07/10/00 | | | 07/10/00 | | | / / | | | / / | | |
| LABORATORY ID: | F7009-27 | | | F7009-19 | | | | | | | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | | | | | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 100.0 % | | | 100.0 % | | |
| UNITS: | MG/L | | | MG/L | | | | | | | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| PETROLEUM HYDROCARBONS | | | | | | | | | | | | |
| TOTAL PETROLEUM HYDROCARBONS | 0.361 | | | 0.28 | U | | | | | | | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| SAMPLE NUMBER: | OLFB59MW52GW | | | OLFB59MW60GW | | | OLFB59MW63GW | | | OLFB59MW67GW | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 07/10/00 | | | 07/09/00 | | | 07/09/00 | | | 07/10/00 | | |
| LABORATORY ID: | F7009-28 | | | F7009-15 | | | F7009-13 | | | F7009-26 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | MG/L | | | MG/L | | | MG/L | | | MG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **PETROLEUM HYDROCARBONS** | | | | | | | | | | | | |
| TOTAL PETROLEUM HYDROCARBONS | 0.28 | U | | 0.28 | U | | 0.28 | U | | 0.945 | | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| SAMPLE NUMBER: | OLFB59MW27GW | | | OLFB59MW28GW | | | OLFB59MW34GW | | | OLFB59MW47GW | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 07/09/00 | | | 07/09/00 | | | 07/10/00 | | | 07/09/00 | | |
| LABORATORY ID: | F7009-14 | | | F7009-11 | | | F7009-16 | | | F7009-12 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | MG/L | | | MG/L | | | MG/L | | | MG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **PETROLEUM HYDROCARBONS** | | | | | | | | | | | | |
| TOTAL PETROLEUM HYDROCARBONS | 7.07 | | | 5.43 | | | 0.28 | U | | 1.67 | | |

# CTO112-NAS PENSACOLA
**WATER DATA**
**Accutest, NJ**
**SDG: F7009**



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59MW20GW | | | OLFB59MW21GW | | | OLFB59MW22GW | | | OLFB59MW23GW | | |
| SAMPLE DATE: | 07/10/00 | | | 07/10/00 | | | 07/10/00 | | | 07/10/00 | | |
| LABORATORY ID: | F7009-21 | | | F7009-22 | | | F7009-17 | | | F7009-18 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | MG/L | | | MG/L | | | MG/L | | | MG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **PETROLEUM HYDROCARBONS** | | | | | | | | | | | | |
| TOTAL PETROLEUM HYDROCARBONS | 0.204 | J | P | 0.25 | U | | 1.18 | | | 4.24 | | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| SAMPLE NUMBER: | OLFB59D002 | | | OLFB59MW01GW | | | OLFB59MW02GW | | | OLFB59MW04GW | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 07/10/00 | | | 07/10/00 | | | 07/10/00 | | | 07/10/00 | | |
| LABORATORY ID: | F7009-30 | | | F7009-24 | | | F7009-23 | | | F7009-25 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | MG/L | | | MG/L | | | MG/L | | | MG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **PETROLEUM HYDROCARBONS** | | | | | | | | | | | | |
| TOTAL PETROLEUM HYDROCARBONS | 3.34 | | | 1.75 | | | 1.21 | | | 3.21 | | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB20MW30GW | | | OLFB20MW34GW | | | OLFB59001 | | | OLFB59D001 | | |
| SAMPLE DATE: | 07/08/00 | | | 07/08/00 | | | 07/09/00 | | | 07/09/00 | | |
| LABORATORY ID: | F7009-10 | | | F7009-2 | | | F7009-34 | | | F7009-29 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | MG/L | | | MG/L | | | MG/L | | | MG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| **PETROLEUM HYDROCARBONS** | | | | | | | | | | | | |
| TOTAL PETROLEUM HYDROCARBONS | 0.51 | | | 0.28 | U | | 0.25 | U | | 0.28 | U | |

# CTO112-NAS PENSACOLA
**WATER DATA**
**Accutest, NJ**
**SDG: F7009**



| | | | | |
|---|---|---|---|---|
| SAMPLE NUMBER: | OLFB59MW69GW | | | |
| SAMPLE DATE: | 07/10/00 | / / | / / | / / |
| LABORATORY ID: | F7009-19 | | | |
| QC_TYPE: | NORMAL | | | |
| % SOLIDS: | 0.0 % | 100.0 % | 100.0 % | 100.0 % |
| UNITS: | UG/L | | | |
| FIELD DUPLICATE OF: | | | | |

| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES** | | | | | | | | | | | | |
| BENZENE | 1 | U | | | | | | | | | | |
| ETHYLBENZENE | 1 | U | | | | | | | | | | |
| METHYL TERT-BUTYL ETHER | 1 | U | | | | | | | | | | |
| TOLUENE | 1 | U | | | | | | | | | | |
| XYLENES, TOTAL | 3 | U | | | | | | | | | | |

# CTO112-NAS PENSACOLA
## WATER DATA
## Accutest, NJ
## SDG: F7009



| SAMPLE NUMBER: | OLFB59MW60GW | | | OLFB59MW63GW | | | OLFB59MW67GW | | | OLFB59MW68GW | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE DATE: | 07/09/00 | | | 07/09/00 | | | 07/10/00 | | | 07/10/00 | | |
| LABORATORY ID: | F7009-15 | | | F7009-13 | | | F7009-26 | | | F7009-27 | | |
| QC_TYPE: | NORMAL | | | NORMAL | | | NORMAL | | | NORMAL | | |
| % SOLIDS: | 0.0 % | | | 0.0 % | | | 0.0 % | | | 0.0 % | | |
| UNITS: | UG/L | | | UG/L | | | UG/L | | | UG/L | | |
| FIELD DUPLICATE OF: | | | | | | | | | | | | |
| | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE | RESULT | QUAL | CODE |
| VOLATILES | | | | | | | | | | | | |
| BENZENE | 1 | U | | 1 | U | | 3.1 | | | 1 | U | |
| ETHYLBENZENE | 1 | U | | 1 | U | | 42.6 | | | 43.2 | | |
| METHYL TERT-BUTYL ETHER | 1 | U | | 1 | U | | 7.7 | | | 20.6 | | |
| TOLUENE | 1 | U | | 1 | U | | 4.8 | | | 1 | U | |
| XYLENES, TOTAL | 3 | U | | 3 | U | | 140 | | | 116 | | |