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NTC ORLANDO
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QUARTERLY GROUNDWATER SAMPLING JULY AND AUGUST 1999 OPERABLE UNIT 3 (OU 3) WITH TRANSMITTAL LETTER NTC ORLANDO FL
12/7/1999
TETRA TECH

TETRA TECH NUS, INC.
800 Oak Ridge Tu
(423) 483-990

08.04.03.0001
00247

99-A219

December 7, 1999

Commanding Officer
SOUTHNAVFACENGCOM
ATTN: Ms. Barbara Nwokike, Code 1873
P.O. Box 190010
2155 Eagle Drive
North Charleston, SC 29419-9010

Subject: Operable Unit 3 Quarterly Groundwater Sampling, July/August 1999
McCoy Annex, NTC, Orlando

Dear Ms. Nwokike:

Enclosed are the results from the quarterly groundwater sampling conducted at OU 3 in July/August, 1999. The results for this and previous sampling events, are summarized in the attached tables and figures. Copies of the field log sheets are included in Attachment B.

The herbicide MCPP was detected in this round of sampling after being undetected in the previous round performed in March 1999. During both sampling rounds, however, the method detection limits for MCPA and MCPP exceeded the respective GCTL of 3.5 and 7 µg/L. While efforts continue to locate a laboratory which can meet the GCTL concentrations, discussions with several laboratories indicate that this may not be possible with standard analytical protocols.

The next sampling at OU 3 was performed in late October 1999 and the results will be issued in January 2000. If you have any questions please contact me at (423) 220-4730.

Sincerely,

Steven B. McCoy, P.E.
Task Order Manager

SBM:ckf

Enclosure

c: Mr. Allan Aikens, CH2M Hill
Mr. Rick Allen, Harding Lawson Associates
Mr. David Grabka, FDEP
Ms. Nancy Rodriguez, USEPA Region IV
Mr. Wayne Hansel, SOUTHNAVFACENGCOM
Mr. Michael Campbell, Tetra Tech NUS
Mr. Mark Perry, Tetra Tech NUS
File/db

# GROUNDWATER SAMPLING AT OPERABLE UNIT 3

**Trip Dates:** July 19-20, 1999
July 28 - August 4, 1999

**Site Name:** Operable Unit 3: Study Areas 8 and 9
Main Base, Naval Training Center Orlando, Florida

**TO Manager:** Mr. Steve McCoy

**Field Team:** Gary Braganza, Field Operations Leader
John Hofer
Paul Halverson
Greg Sisco
Janet Bouknight
Bobby Bobo
Kevin Margetts

**Prepared by:** John Hofer/Ches Lyon

## 1. PURPOSE

Quarterly groundwater sampling was conducted at Operable Unit (OU) 3 [Study Areas (SAs) 8 and 9] in July/August 1999. The fieldwork was performed in accordance with the *Project Operations Plan* (POP) (ABB-ES, 1997).

## 2. ACTIVITIES

Work at OU 3 began on July 19, 1999, with a site reconnaissance of SA 8. All site structures and contaminated soil had been removed from the site by the Charleston Detachment in April 1999. Access to several wells in the overgrown area along the Lake Baldwin shoreline at SA 8 was cleared by bush-hog because brush from the soil removal had been piled up along the tree line.

**Water Level Survey** - Groundwater levels were measured at SA 9 on July 19 and at SA 8 on July 20. Groundwater elevations for this and previous events are summarized in Tables 1 and 2 for SA 8 and SA 9, respectively.

**Well Installation** - To address questions regarding the groundwater elevations in the two deep microwells at SA 9 (OLD-09-13 and OLD-09-18), a 2-in monitoring well designated OLD-09-19 was installed on July 30, 1999. The new well is located next to OLD-09-18 with approximately the same depth and screen interval to facilitate comparison of the groundwater elevations. The dimensions for the two wells are summarized below and the well construction record for OLD-09-19 is provided as Attachment A.

| Well No. | Date Installed | Type/Diameter (inches) | Total Depth (ft bls) | Screened Interval (ft bls) |
|---|---|---|---|---|
| OLD-09-18 | 2/05/98 | microwell/0.5 | 30.1 | 23.6 – 29.6 |
| OLD-09-19 | 7/30/99 | monitor well/2.0 | 30.5 | 25.5 – 30.5 |

bls = below land surface

**Sampling** - Groundwater sampling was conducted July 28 - August 4, 1999. A total of 29 wells (nine 2-in wells and twenty ½-in microwells) were scheduled for sampling. All wells were purged using the low-flow method described in the POP. The purpose of the low-flow purging was to reduce turbidity, which could artificially raise the concentrations of inorganic constituents, and the volume of purge water required to obtain representative samples. Purging of the microwells consisted of removing groundwater with a peristaltic pump at a rate of approximately 90 to 300 ml/min until field parameters which included temperature, pH, conductivity, turbidity, dissolved oxygen, and oxidation-reduction potential, had stabilized. Water levels in the 2-in wells were monitored every 3 to 5 minutes to verify that drawdown was less than 0.3 ft. Wells OLD-09-03 and OLD-09-04, however, would not yield 100 ml/min without excessive drawdown (approximately 0.5 ft). Despite the excessive drawdown, samples were collected from these wells. The 0.5-in diameter of the microwells precluded measurement of the depth to water while tubing was in the wells. Groundwater sample log sheets are included in Attachment B.

The use of the low-flow purging method was effective in reducing the turbidity of the groundwater samples. Turbidity readings were less than 10 NTU in all but one sample (OLD-09-07). The turbidity in this well stabilized at 11 NTU.

Selected groundwater samples from SA 8 were analyzed for herbicides using Method 8151A and all the samples were analyzed for Target Analyte List (TAL) inorganics. Selected samples collected at SA 9 were analyzed for semivolatile organic compounds (SVOCs) using Method 8270 and all the samples were analyzed for pesticides (Method 8181), herbicides (Method 8151A), and TAL inorganics. The samples were placed in ice-cooled insulated chests and shipped overnight to Quanterra Environmental Services in North Canton, Ohio for analysis. The positive detections for this round of sampling are summarized in Table 3 and historical groundwater detections are presented in Table 4. A complete listing of the analytical data for the July/August 1999 sampling is included as Table 5.

## 3. PROBLEMS ENCOUNTERED IN THE FIELD

Problems encountered during the sampling event included fire ant nests, locating OLD-08-05, gaining access to wells in the area of overgrowth at SA 8, and hot weather throughout the field event.

Well OLD-08-05 was located with the use of a magnetometer. The well had been buried under approximately 3 to 4 inches of backfill soil following the soil removal action. Access to wells OLD-08-12, -13, -14, and -15 was partially blocked by debris from the building and soil removal. A bush-hog mower was used to mow new pathways to the wells. The afternoon heat was dealt with by the use of pop-up canopies for shade and the intake of fluids.

## 4. RESULTS

**Water Levels** - Groundwater elevation data for SA 8 and SA 9 are presented in Tables 1 and 2 and the water table configurations for the two sites are presented in Figures 1 and 2. Groundwater at SA 8 flows to the west toward Lake Baldwin. Groundwater at SA 9 shows divergent flow with groundwater north of Trident Lane flowing to the northeast and groundwater toward the eastern portion of the site flowing to the southeast. These flow directions are consistent with those reported earlier by Tetra Tech (1999) and HLA (1999).

The new well OLD-09-19 had not yet been installed at the time of the water level survey. During the sampling effort, however, the water level in OLD-09-19 was measured during purging and found to be consistent with levels in the other deep wells (OLD-09-13 and OLD-09-18) measured two weeks prior. OLD-09-13 and OLD-09-18 were not sampled, thus water level measurements were not taken concurrently with OLD-09-19.

| Well No. | Type/Diameter (inches) | Date Measured | Groundwater Elevation (feet AMSL) |
|---|---|---|---|
| OLD-09-13 | microwell/0.5 | 7/20/99 | 91.46 |
| OLD-09-18 | microwell/0.5 | 7/20/99 | 91.44 |
| OLD-09-19 | monitor well/2.0 | 8/04/99 | 91.07 |

AMSL = Above mean sea level

Although obtained on different dates, the above data show little difference between the water levels in the microwells and the 2-in monitor well. In addition, the water levels in the deep microwells OLD-09-13 and OLD-09-18 measured on 7/20/99 were consistent with the shallow wells which ranged from 91.29 to 92.59 ft AMSL. As discussed in the OPT meetings this summer, the 20-ft fluctuations reported earlier in the deep microwells appear to be the result of measurement problems, not actual differences in the responses between the deep microwells and the conventional 2-in monitoring wells.

**Data Validation** - All sample analyses were subjected to data validation in accordance with the guidance document *Navy Installation Restoration Chemical Data Quality Assurance Manual* (NFESC, 1998). Qualification of the data was performed using the USEPA Contract Laboratory Program guidelines for inorganic and organic data review (USEPA, 1994a, and 1994b). The data validation evaluated data completeness,

holding time compliance, calibration compliance, laboratory blank contamination, surrogate spike recovery, matrix spike recovery, blank spike recovery, internal standard response, sample quantitation, and detection limits. Qualifiers resulting from the validation process are shown with the analyte concentrations in Tables 3, 4, and 5.

**Analytical Results** - Table 3 presents the contaminant detections in this round of sampling. Shaded cells indicate concentrations above screening levels [Florida Groundwater Cleanup Target Levels (GCTLs) (FDEP, 1999) or established background concentrations (ABB-ES, 1995)]. The distributions of contaminants exceeding screening levels are shown in Figures 3 and 4.

At SA 8, arsenic concentrations exceeded the screening level in 11 of the 14 wells sampled. The maximum arsenic concentration of 609 µg/L was found in the sample for well OLD-08-02. The only organic analyte exceeding screening criteria at SA 8 was MCPP in three wells (OLD-08-08, -11, and -15). It should be noted, however, that the detection limits in samples in which MCPA and MCPP were not detected exceeded the respective MCPA and MCPP GCTLs of 3.5 and 7.0 µg/L. The exceedances at SA 8 are summarized below:

**Exceedances at SA 8 – July/August 1999**

| Analyte | Screening Criteria (µg/L) | No. of Wells * | Concentration Range (µg/L) |
|---|---|---|---|
| Primary Exceedances: | | | |
| antimony | 6 | 1 | 12.2 |
| arsenic | 50 | 11 | 99.2 - 609 |
| lead | 15 | 1 | 34.8 |
| MCPP | 7 | 4 | 99 J - 280 J |
| Secondary Exceedances | | | |
| aluminum | 4067 | 2 | 4300 J - 4310 J |
| iron | 1227 | 3 | 1650 - 5190 |
| manganese | 50 | 5 | 68.1 - 338 |

*A total of 14 wells were sampled.

At SA 9 arsenic was found above its screening criterion in 5 of the 15 wells sampled. The maximum arsenic concentration of 1370 µg/L was found in the sample for well OLD-09-05. Antimony was found above its screening level (GCTL) in the new well OLD-09-19. Several organic contaminants (α-BHC; 2,4-dichlorophenol; Lindane; and MCPP) exceeded GCTLs in well OLD-09-12. As with the analyses for SA 8, the detection limits for MCPA and MCPP exceeded the respective GCTLs. The exceedances at SA 9 are summarized below:

**Exceedances at SA 9 – July/August 1999**

| Analyte | Screening Criteria (µg/L) | No. of Wells * | Concentration Range (µg/L) |
|---|---|---|---|
| Primary Exceedances: | | | |
| antimony | 6 | 1 | 17.7 |
| arsenic | 50 | 5 | 141 - 1370 |
| α-BHC | 0.006 | 1 | 2.5 J |
| 2,4-dichlorophenol | 0.5 | 1 | 45/30 |
| Lindane | 0.2 | 1 | 1.9 J/1.7 J |
| MCPP | 7 | 3 | 170 J - 910 J |
| Secondary Exceedances | | | |
| aluminum | 4067 | 1 | 7740 J |
| iron | 1227 | 3 | 1290 - 6350 |
| manganese | 50 | 1 | 79.9 |

*A total of 15 wells were sampled.

**MCPA/MCPP Reporting and Method Detection Limits** - The reporting limits for MCPA and MCPP in the March 1999 samples were 50-100 µg/L for Accutest Laboratories. The reporting limits reported for the July/August samples analyzed by Quanterra were typically 400 µg/L. The higher Quanterra reporting limits were established by the calibration standards (concentrations of 400 µg/L) used by the lab in analyzing these samples. According to Quanterra's "detection limit study", the lab's Method Detection Limits (MDLs) for MCPA and MCPP are 30 and 33 µg/L, respectively. Thus, concentrations approaching 30 and 33 µg/L should have been detected and reported as "J" or estimated values. For example, the concentrations of MCPP in samples NTC08G00811 and NTC08G01111 are reported as 99 J and 110 J, respectively.

Quanterra, the laboratory presently under contract to Tetra Tech for work at NTC, Orlando, has been directed to take the necessary steps to lower their reporting limits to the 50-100 µg/L range but this will not be achieved until the January 2000 sampling round. The Quanterra MDLs for MCPA and MCPP, however, are significantly higher than the GCTLs of 3.5 µg/L for MCPA and 7 µg/L for MCPP. Efforts continue to locate a laboratory which can achieve MDLs meeting the GCTL concentrations, but discussions with several laboratories indicate that this may not be possible with standard analytical protocols.

# REFERENCES

ABB-ES (ABB Environmental Services, Inc.), 1995. *Background Sampling Report, Naval Training Center, Orlando Florida.* Unit Identification Code N65928, Contract No. N62467-89-D-0317, August.

ABB-ES, 1997. *Project Operations Plan for Site Investigations and Remedial Investigations*. Naval Training Center, Orlando, Florida, Unit Identification Code N65928, Navy CLEAN District 1, Contract No. N62467-89-D-0317, August.

FDEP (Florida Department of Environmental Protection), 1999. *Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-777, F.A.C.* CEHT/TR-99-01, May 26, 1999.

HLA (Harding Lawson Associates), 1999. *Remedial Investigation and Feasibility Study*, Operable Unit 3. Naval Training Center, Orlando, Florida, Unit Identification Code N65928, Navy CLEAN District 1, Contract No. N62467-89-D-0317/136, June.

NFESC (Naval Facilities Engineering Service Center), 1998. *Navy Installation Restoration Chemical Data Quality Assurance Manual (Interim Guidance Document)*. June.

Tetra Tech NUS, Inc., 1999. Monitoring Well Sampling at Operable Unit 3. Document No. R4706993, June 28, 1999.

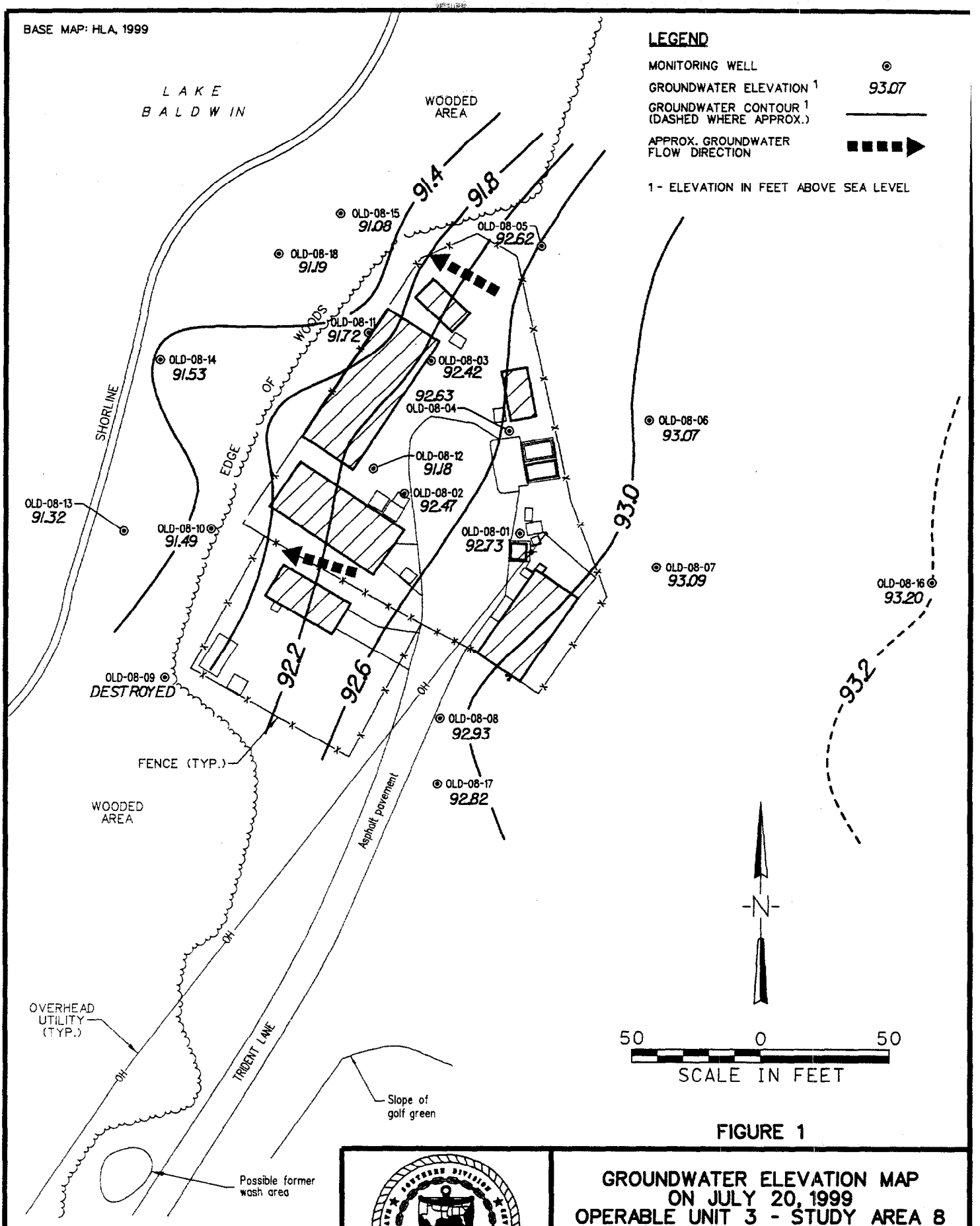
USEPA (U.S. Environmental Protection Agency), 1994a. *USEPA Contract Laboratory Program: Nation Functional Guidelines for Inorganic Data Review*. EPA/540/R-94/013, Office of Solid Waste and Emergency Response, Washington, D.C., February.

USEPA, 1994b. *USEPA Contract Laboratory Program: Nation Functional Guidelines for Organic Data Review*. EPA/540/R-94/012, Office of Solid Waste and Emergency Response, Washington, D.C., February.

# FIGURES

**No.**

1 Groundwater Elevation Map on July 20, 1999, Operable Unit 3 – Study Area 8
2 Groundwater Elevation Map on July 19, 1999, Operable Unit 3 – Study Area 9
3 Groundwater Concentrations, July 1999, Operable Unit 3 – Study Area 8
4 Groundwater Concentrations, August 1999, Operable Unit 3 – Study Area 9




NOTE:
WELL OLD-08-12 NOT INCLUDED IN CONTOURING.

FIGURE 1

GROUNDWATER ELEVATION MAP
ON JULY 20, 1999
OPERABLE UNIT 3 - STUDY AREA 8
GROUNDWATER MONITORING REPORT

NAVAL TRAINING CENTER
ORLANDO, FLORIDA

CAD FILE NO./DATE: 7457M011.dgn/10-9-99

n8-5x11v.dgn

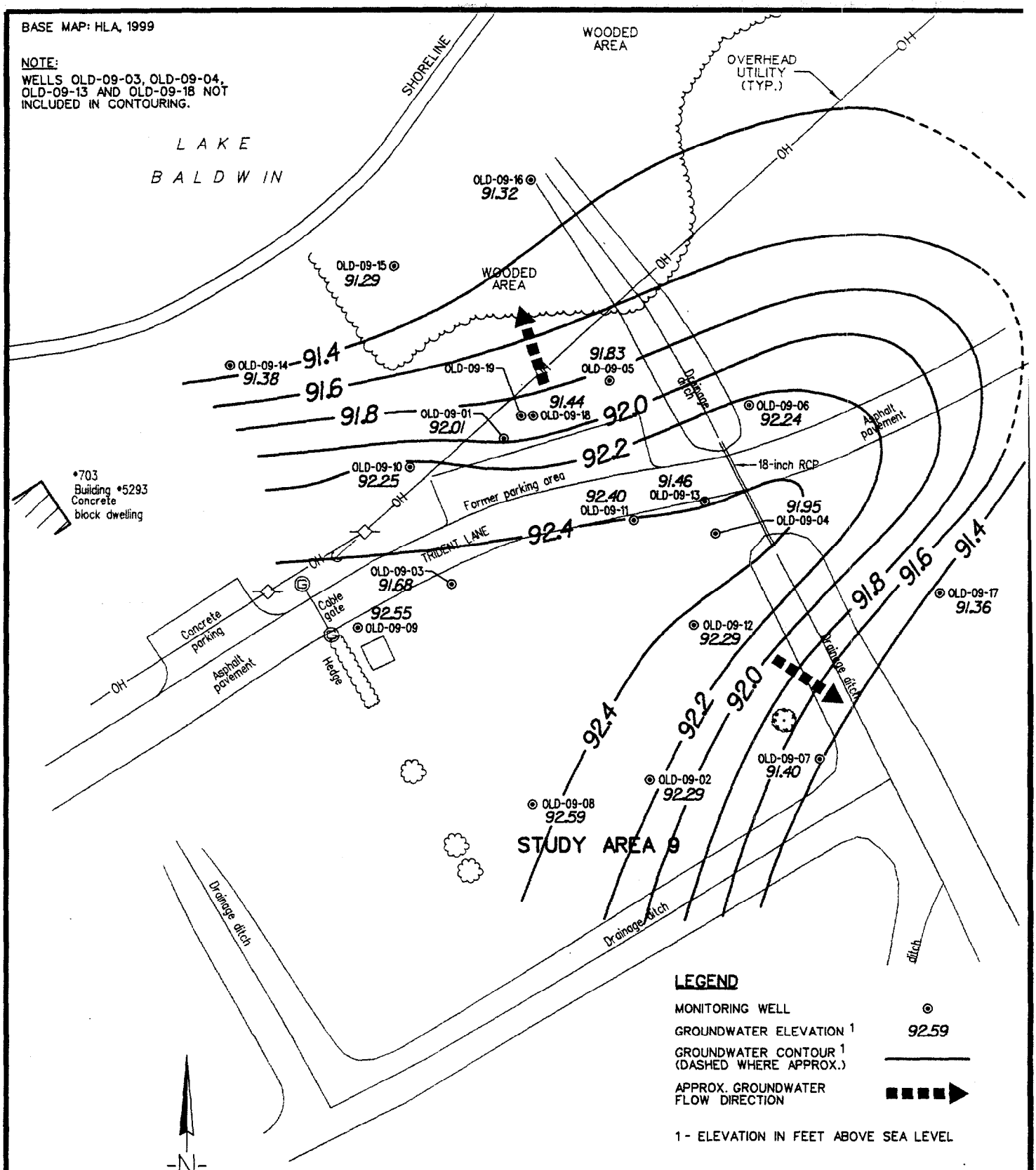



FIGURE 2

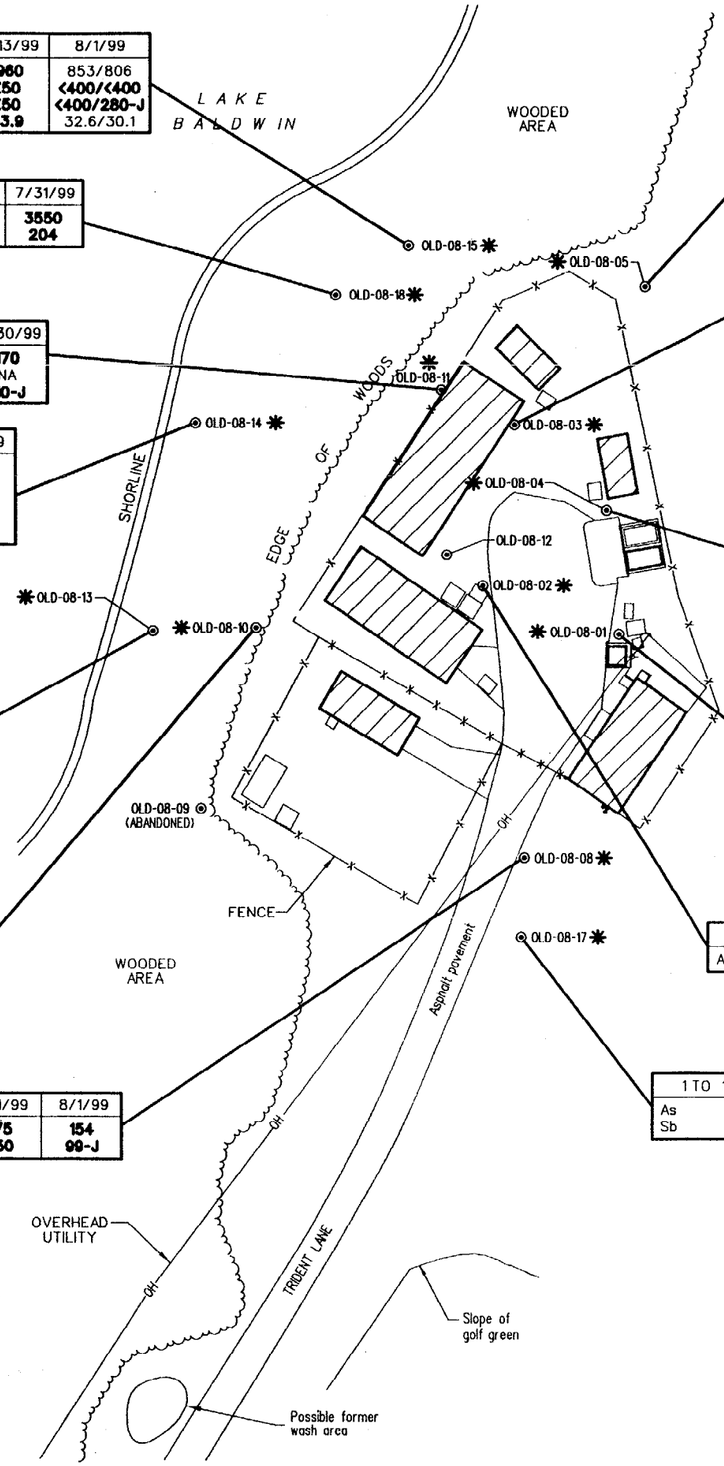
GROUNDWATER ELEVATION MAP
ON JULY 19, 1999
OPERABLE UNIT 3 - STUDY AREA 9
GROUNDWATER MONITORING REPORT

NAVAL TRAINING CENTER
ORLANDO, FLORIDA

n8-5x11v.dgn

CAD FILE NO./DATE: 7457M012.dgn/9-8-99

BASE MAP: HLA, 1999




| 1 TO 7 | 12/5/97 | 3/13/99 | 8/1/99 |
|---|---|---|---|
| Fe | 498 | **1960** | 853/806 |
| MCPA | **1200-DJ** | **<50** | **<400/<400** |
| MCPP | **<60** | **<50** | **<400/280-J** |
| Mn | **72.9** | **83.9** | 32.6/30.1 |

| 2 TO 11 | 2/19/98 | 3/12/99 | 7/31/99 |
|---|---|---|---|
| Fe | 550 | NS | **3550** |
| Mn | <23.4 | NS | **204** |

| 1 TO 10 | 10/23/97 | 3/12/99 | 7/30/99 |
|---|---|---|---|
| As | **223** | **315-J** | **170** |
| Dieldrin | **0.019-J** | NA | NA |
| MCPP | **660-J** | **<50** | **110-J** |

| 1 TO 7 | 12/8/97 | 3/15/99 | 7/31/99 |
|---|---|---|---|
| As | 7.1-J | 9.5 | **100** |
| Fe | **1730-J** | **7340-J** | **5190** |
| MCPP | **200-J** | **<50** | **190-J** |
| Mn | **172** | **132-J** | **304** |
| Pb | 3.1 | **21.1** | **34.8** |

| 1 TO 7 | 12/5/97 | 3/15/99 | 7/31/99 |
|---|---|---|---|
| As | **88.2** | 19 | 24.3/22.6 |
| Fe | 447 | **2470-J** | **1660/1650** |
| MCPA | **660-J** | **<100** | NA |
| Mn | **148** | **124-J** | **68.1/68.7** |

| 1 TO 10 | 10/23/97 | 3/12/99 | 7/30/99 |
|---|---|---|---|
| As | **209** | **122-J** | **189** |
| Fe | 825 | **1400** | <104 |
| MCPP | **900-J** | **<51** | **540-R** |
| Mn | **54.4** | **56.8** | <14.7 |

| 1 TO 10 | 10/22/97 | 3/11/99 | 8/1/99 |
|---|---|---|---|
| As | **122/120** | **175** | **154** |
| MCPP | **<110/710-J** | **<50** | **99-J** |

| 1 TO 10 | 10/23/97 | 3/10/99 | 7/29/99 |
|---|---|---|---|
| Al | <96.7/<120 | 126 | **4310-J** |
| As | **57.7/57.3** | **56.9** | **284** |
| Mn | **160/162** | **146-J** | **338** |

| 3 TO 13 | 10/22/97 | 3/11/99 | 7/28/99 |
|---|---|---|---|
| Al | <80.9 | 168 | **4300-J** |
| As | **79.9** | **260** | **234** |
| Fe | 231 | **1260** | 750 |
| MCPA | **640-J** | **<50** | NA |

| 1 TO 10 | 10/23/97 | 3/11/99 | 7/29/99 |
|---|---|---|---|
| As | **53** | **88.5** | **138** |
| Fe | 198 | **33300** | <61.9 |
| Mn | 24.2 | **110** | **69.6** |

| 3 TO 13 | 10/22/97 | 3/11/99 | 7/28/99 |
|---|---|---|---|
| As | **70.4** | **102/106** | **99.2** |

| 3 TO 13 | 10/22/97 | 3/13/99 | 7/28/99 |
|---|---|---|---|
| As | **133** | **138-J/128-J** | **163** |
| Fe | **1460** | <311/<451 | 155 |
| MCPP | **790-J** | **<50/<50** | NA |
| Naph | **25** | NA | NA |

| 3 TO 13 | 10/22/97 | 3/11/99 | 7/28/99 |
|---|---|---|---|
| As | **295** | **294** | **609** |

| 1 TO 10 | 2/18/98 | 3/11/99 | 7/30/99 |
|---|---|---|---|
| As | **98.8** | **167** | **191** |
| Sb | <2.5 | <3.3 | **12.2** |

## LEGEND

ASTERISK INDICATES WELLS SAMPLED — ✱OLD-08-01

MONITORING WELL — ⊙

SCREEN INTERVAL TO NEAREST FOOT — SAMPLE COLLECTION DATE

| 3 TO 13 | 10/22/97 | 3/13/99 | 7/28/99 |
|---|---|---|---|
| As | **133** | **138-J/128-J** | **163** |
| Fe | **1460** | <311/<451 | 155 |
| MCPP | **790-J** | **<50/<50** | NA |
| Naph | 25 | NA | NA |

ANALYTE — DUPLICATE SAMPLE — ANALYTE CONCENTRATION[1,2]

| | |
|---|---|
| ESTIMATED CONCENTRATION | J |
| VALUE FROM DILUTION | D |
| NOT ANALYZED | NA |
| REJECTED | R |
| NOT SAMPLED | NS |

1-CONCENTRATION IN MICROGRAMS PER LITER (ug/L)
2-BOLD CONCENTRATION INDICATES EXCEEDANCE

## SCREENING CRITERIA

| ANALYTE | GCTL[1] | BGSV[1] |
|---|---|---|
| Al | 200 | 4067 |
| As | 50 | 5 |
| Dieldrin | 0.005 | - |
| Fe | 300 | 1227 |
| MCPA | 3.5 | - |
| MCPP | 7 | - |
| Mn | 50 | 17 |
| Naph | 20 | - |
| Pb | 15 | 4 |
| Sb | 6 | 4.1 |

GCTL-GROUNDWATER CLEANUP TARGET LEVEL
BGSV-BACKGROUND SCREENING VALUE

NOTE:
DATA ARE SHOWN FOR LOCATIONS WITH PAST OR CURRENT SCREENING CRITERIA EXCEEDANCES.

N

50 0 50
SCALE IN FEET

FIGURE 3

GROUNDWATER EXCEEDANCES
JULY/AUGUST, 1999
QUARTERLY MONITORING REPORT
OPERABLE UNIT 3 - STUDY AREA 8

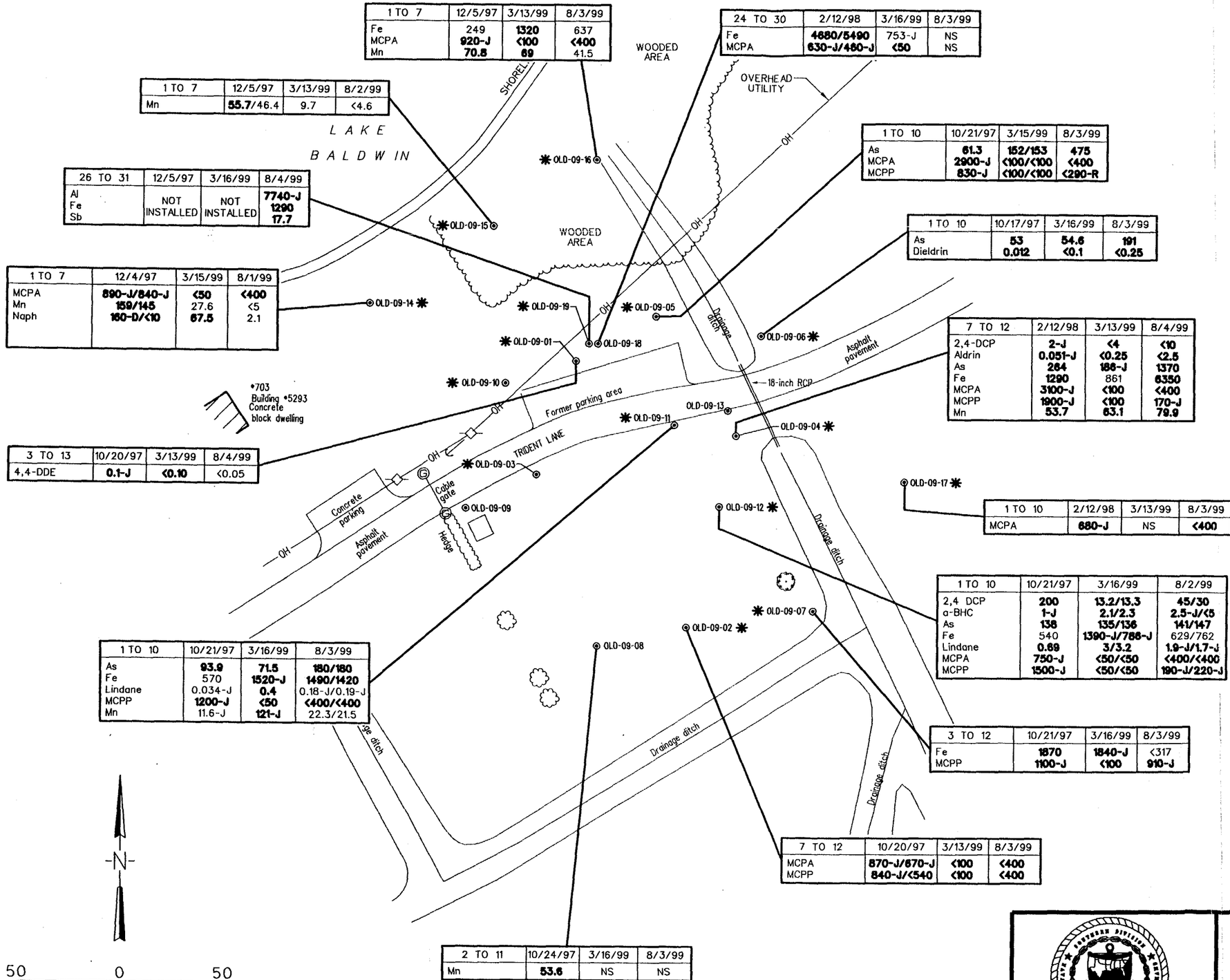
NAVAL TRAINING CENTER
ORLANDO, FLORIDA

CAD FILE NO./DATE: 7457M025.dgn/12-7-99

n11x17b.dgn

00247FB12

BASE MAP: HLA, 1999




| 1 TO 7 | 12/5/97 | 3/13/99 | 8/3/99 |
|---|---|---|---|
| Fe | 249 | **1320** | 637 |
| MCPA | **920-J** | **<100** | **<400** |
| Mn | **70.8** | **69** | 41.5 |

| 1 TO 7 | 12/5/97 | 3/13/99 | 8/2/99 |
|---|---|---|---|
| Mn | **55.7**/46.4 | 9.7 | <4.6 |

| 26 TO 31 | 12/5/97 | 3/16/99 | 8/4/99 |
|---|---|---|---|
| Al | NOT INSTALLED | NOT INSTALLED | **7740-J** |
| Fe | | | **1290** |
| Sb | | | **17.7** |

| 1 TO 7 | 12/4/97 | 3/15/99 | 8/1/99 |
|---|---|---|---|
| MCPA | **890-J/840-J** | **<50** | **<400** |
| Mn | **159/145** | 27.6 | <5 |
| Naph | **160-D/<10** | **67.5** | 2.1 |

| 3 TO 13 | 10/20/97 | 3/13/99 | 8/4/99 |
|---|---|---|---|
| 4,4-DDE | **0.1-J** | **<0.10** | <0.05 |

| 24 TO 30 | 2/12/98 | 3/16/99 | 8/3/99 |
|---|---|---|---|
| Fe | **4680/5490** | 753-J | NS |
| MCPA | **630-J/460-J** | **<50** | NS |

| 1 TO 10 | 10/21/97 | 3/15/99 | 8/3/99 |
|---|---|---|---|
| As | **61.3** | **152/153** | **475** |
| MCPA | **2900-J** | **<100/<100** | **<400** |
| MCPP | **830-J** | **<100/<100** | **<290-R** |

| 1 TO 10 | 10/17/97 | 3/16/99 | 8/3/99 |
|---|---|---|---|
| As | **53** | **54.6** | **191** |
| Dieldrin | **0.012** | **<0.1** | **<0.25** |

| 7 TO 12 | 2/12/98 | 3/13/99 | 8/4/99 |
|---|---|---|---|
| 2,4-DCP | **2-J** | **<4** | **<10** |
| Aldrin | **0.051-J** | **<0.25** | **<2.5** |
| As | **264** | **186-J** | **1370** |
| Fe | **1290** | 861 | **6350** |
| MCPA | **3100-J** | **<100** | **<400** |
| MCPP | **1900-J** | **<100** | **170-J** |
| Mn | **53.7** | **63.1** | **79.9** |

| 1 TO 10 | 2/12/98 | 3/13/99 | 8/3/99 |
|---|---|---|---|
| MCPA | **680-J** | NS | **<400** |

| 1 TO 10 | 10/21/97 | 3/16/99 | 8/2/99 |
|---|---|---|---|
| 2,4 DCP | **200** | **13.2/13.3** | **45/30** |
| α-BHC | **1-J** | **2.1/2.3** | **2.5-J/<5** |
| As | **138** | **135/136** | **141/147** |
| Fe | 540 | **1390-J/786-J** | 629/762 |
| Lindane | **0.69** | **3/3.2** | **1.9-J/1.7-J** |
| MCPA | **750-J** | **<50/<50** | **<400/<400** |
| MCPP | **1500-J** | **<50/<50** | **190-J/220-J** |

| 1 TO 10 | 10/21/97 | 3/16/99 | 8/3/99 |
|---|---|---|---|
| As | **93.9** | **71.5** | **180/180** |
| Fe | 570 | **1520-J** | **1490/1420** |
| Lindane | 0.034-J | **0.4** | 0.18-J/0.19-J |
| MCPP | **1200-J** | **<50** | **<400/<400** |
| Mn | 11.6-J | **121-J** | 22.3/21.5 |

| 3 TO 12 | 10/21/97 | 3/16/99 | 8/3/99 |
|---|---|---|---|
| Fe | **1870** | **1840-J** | <317 |
| MCPP | **1100-J** | **<100** | **910-J** |

| 7 TO 12 | 10/20/97 | 3/13/99 | 8/3/99 |
|---|---|---|---|
| MCPA | **870-J/870-J** | **<100** | **<400** |
| MCPP | **840-J/<540** | **<100** | **<400** |

| 2 TO 11 | 10/24/97 | 3/16/99 | 8/3/99 |
|---|---|---|---|
| Mn | **53.6** | NS | NS |

## LEGEND

ASTERISK INDICATES WELLS SAMPLED — ✱OLD-09-05

MONITORING WELL — ⊙

SCREEN INTERVAL TO NEAREST FOOT — SAMPLE COLLECTION DATE — DUPLICATE SAMPLE

| 1 TO 10 | 10/21/97 | 3/16/99 | 8/3/99 |
|---|---|---|---|
| As | **93.9** | **71.5** | **180/180** |
| Fe | 570 | **1520-J** | **1490/1420** |
| Lindane | 0.034-J | **0.4** | 0.18-J/0.19-J |
| MCPP | **1200-J** | **<50** | **<400/<400** |
| Mn | 11.6-J | **121-J** | 22.3/21.5 |

ANALYTE — ANALYTE CONCENTRATION [1,2]

| | |
|---|---|
| ESTIMATED CONCENTRATION | J |
| VALUE FROM DILUTION | D |
| REJECTED | R |
| NOT SAMPLED | NS |

1-CONCENTRATION IN MICROGRAMS PER LITER (ug/L)
2-BOLD CONCENTRATION INDICATES EXCEEDANCE

## SCREENING CRITERIA

| ANALYTE | GCTL[1] | BGSV[1] |
|---|---|---|
| Al | 200 | 4067 |
| Aldrin | 0.005 | - |
| As | 50 | 5 |
| Dieldrin | 0.005 | - |
| Fe | 300 | 1227 |
| MCPA | 3.5 | - |
| MCPP | 7 | - |
| Mn | 50 | 17 |
| Sb | 6 | 4.1 |
| α-BHC | 0.006 | - |
| 2,4-DCP | 0.5 | - |
| Lindane | 0.2 | - |
| Naph | 20 | - |

GCTL=GROUNDWATER CLEANUP TARGET LEVEL
BGSV=BACKGROUND SCREENING VALUE

NOTE:
DATA ARE SHOWN FOR LOCATIONS WITH PAST OR CURRENT SCREENING CRITERIA EXCEEDANCES.

FIGURE 4

GROUNDWATER EXCEEDANCES
JULY/AUGUST, 1999
QUARTERLY MONITORING REPORT
OPERABLE UNIT 3 - STUDY AREA 9

NAVAL TRAINING CENTER
ORLANDO, FLORIDA

CAD FILE NO./DATE: 7457M026.dgn/12-7-99

n11x17b.dgn

# TABLES

**No.**

1 Water-Level Elevations Summary Operable Unit 3 – Study Area 8

2 Water-Level Elevations Summary Operable Unit 3 – Study Area 9

3 Positive Detections in Groundwater – July/August 1999

4 Historical Detections in Groundwater

5 Validated Groundwater Analytical Results – July/August 1999

# TABLE 1

## WATER-LEVEL ELEVATIONS SUMMARY
## OPERABLE UNIT 3 - STUDY AREA 8

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| Well | Well Type | Screen Interval (BGS) | TOC Elevation (AMSL) | 11/97 | | 4/27/98 | | 5/13/98 | | 03/14/99 | | 07/20/99 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Depth to Water (BTOC) | Groundwater Elevation (AMSL) | Depth to Water (BTOC) | Groundwater Elevation (AMSL) | Depth to Water (BTOC) | Groundwater Elevation (AMSL) | Depth to Water (BTOC) | Groundwater Elevation (AMSL) | Depth to Water (BTOC) | Groundwater Elevation (AMSL) |
| OLD-08-01 | 2" well | 3-13 | 94.96 | 1.74 | 93.22 | 2.36 | 92.60 | 2.65 | 92.31 | 3.70 | 91.26 | 2.23 | 92.73 |
| OLD-08-02 | 2" well | 3-13 | 94.77 | 1.85 | 92.92 | 2.47 | 92.30 | 2.74 | 92.03 | 3.65 | 91.12 | 2.30 | 92.47 |
| OLD-08-03 | 2" well | 3-13 | 94.31 | 1.61 | 92.70 | 2.34 | 91.97 | 2.65 | 91.66 | 3.21 | 91.10 | 1.89 | 92.42 |
| OLD-08-04 | 2" well | 3-13 | 94.62 | 1.58 | 93.04 | 2.19 | 92.43 | 2.45 | 92.17 | 3.45 | 91.17 | 1.99 | 92.63 |
| OLD-08-05 | ½" µ well | 1-10 | 93.64 | 0.80 | 92.84 | 1.29 | 92.35 | 1.55 | 92.09 | 2.35 | 91.29 | 1.02 | 92.62 |
| OLD-08-06 | ½" µ well | 1-10 | 95.06 | 1.56 | 93.50 | 2.15 | 92.91 | 2.46 | 92.60 | 3.75 | 91.31 | 1.99 | 93.07 |
| OLD-08-07 | ½" µ well | 1-10 | 95.40 | 1.73 | 93.67 | 2.36 | 93.04 | 2.67 | 92.73 | 3.81 | 91.59 | 2.31 | 93.09 |
| OLD-08-08 | ½" µ well | 1-10 | 95.22 | 1.73 | 93.49 | 2.33 | 92.89 | 2.64 | 92.58 | 3.67 | 91.55 | 2.29 | 92.93 |
| OLD-08-09 | ½" µ well | 1-10 | 93.53 | 1.75 | 91.78 | 2.13 | 91.40 | 2.37 | 91.16 | destroyed | | destroyed | |
| OLD-08-10 | ½" µ well | 1-10 | 93.07 | 1.28 | 91.79 | 1.61 | 91.46 | 1.84 | 91.23 | 2.31 | 90.76 | 1.58 | 91.49 |
| OLD-08-11 | ½" µ well | 1-10 | 93.00 | 0.99 | 92.01 | 1.55 | 91.45 | 1.80 | 91.20 | 2.57 | 90.43 | 1.28 | 91.72 |
| OLD-08-12 | ½" µ well | 23-29 | 94.50 | not installed | | NM | NM | NM | NM | 4.27 | 90.23 | 3.32 | 91.18 |
| OLD-08-13 | ½" µ well | 1.13-7.13 | 95.98 | not installed | | 5.16 | 90.82 | 4.84 | 91.14 | 5.34 | 90.64 | 4.66 | 91.32 |
| OLD-08-14 | ½" µ well | 1.12-7.12 | 97.12 | not installed | | 5.86 | 91.26 | 6.03 | 91.09 | 6.44 | 90.68 | 5.59 | 91.53 |
| OLD-08-15 | ½" µ well | 1.22-7.22 | 96.41 | not installed | | 5.19 | 91.22 | 5.44 | 90.97 | 5.89 | 90.52 | 5.33 | 91.08 |
| OLD-08-16 | ½" µ well | 1-10 | 96.34 | not installed | | 3.05 | 93.29 | 3.42 | 92.92 | NM | NM | 3.14 | 93.20 |
| OLD-08-17 | ½" µ well | 09-9.9 | 94.92 | not installed | | 2.10 | 92.82 | 2.40 | 92.52 | 3.43 | 91.49 | 2.10 | 92.82 |
| OLD-08-18 | ½" µ well | 1.5-10.5 | 95.32 | not installed | | 5.18 | 90.14 | 4.33 | 90.99 | 5.10 | 90.22 | 4.13 | 91.19 |

Notes:
All measurements are in units of feet.

AMSL - Above mean sea level
BGS - Below ground surface
BTOC - Below top of casing
NM - Not measured
TOC - Top of casing

# TABLE 2

## WATER-LEVEL ELEVATIONS SUMMARY
## OPERABLE UNIT 3 - STUDY AREA 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| Well | Well Type | Screen Interval (BGS) | TOC Elevation (AMSL) | 11/97 | | 4/27/98 | | 5/8/98 | | 03/16/99 | | 07/19/99 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Depth to Water (BTOC) | Groundwater Elevation (AMSL) | Depth to Water (BTOC) | Groundwater Elevation (AMSL) | Depth to Water (BTOC) | Groundwater Elevation (AMSL) | Depth to Water (BTOC) | Groundwater Elevation (AMSL) | Depth to Water (BTOC) | Groundwater Elevation (AMSL) |
| OLD-09-01 | 2" well | 3-13 | 94.66 | 2.26 | 92.40 | 2.95 | 91.71 | 3.18 | 91.48 | 3.82 | 90.84 | 2.65 | 92.01 |
| OLD-09-02 | 2" well | 7-12 | 97.72 | 4.69 | 93.03 | 5.39 | 92.33 | 5.68 | 92.04 | 6.71 | 91.01 | 5.43 | 92.29 |
| OLD-09-03 | 2" well | 7-12 | 97.81 | 5.62 | 92.19 | 6.12 | 91.69 | 6.35 | 91.46 | 7.08 | 90.73 | 6.13 | 91.68 |
| OLD-09-04 | 2" well | 7-12 | 97.18 | 4.89 | 92.29 | 5.38 | 91.80 | 5.63 | 91.55 | 6.48 | 90.70 | 5.23 | 91.95 |
| OLD-09-05 | ½" µ well | 1-10 | 94.16 | 1.84 | 92.32 | 2.52 | 91.64 | 2.72 | 91.44 | 3.36 | 90.80 | 2.33 | 91.83 |
| OLD-09-06 | ½" µ well | 1-10 | 93.87 | 1.53 | 92.34 | 2.05 | 91.82 | 2.31 | 91.56 | 2.74 | 91.13 | 1.63 | 92.24 |
| OLD-09-07 | ½" µ well | 3-12 | 95.69 | 2.63 | 93.06 | 4.26 | 91.43 | 4.46 | 91.23 | 5.15 | 90.54 | 4.29 | 91.40 |
| OLD-09-08 | ½" µ well | 2-11 | 95.59 | 2.31 | 93.28 | 3.05 | 92.54 | 3.31 | 92.28 | 4.27 | 91.32 | 3.00 | 92.59 |
| OLD-09-09 | ½" µ well | 1-10 | 95.17 | 2.17 | 93.00 | 2.80 | 92.37 | 3.05 | 92.12 | 3.81 | 91.36 | 2.62 | 92.55 |
| OLD-09-10 | ½" µ well | 1-10 | 94.63 | 1.96 | 92.67 | 2.70 | 91.93 | 2.88 | 91.75 | 3.59 | 91.04 | 2.38 | 92.25 |
| OLD-09-11 | ½" µ well | 1-10 | 95.05 | 2.28 | 92.77 | 2.90 | 92.15 | 3.12 | 91.93 | 3.77 | 91.28 | 2.65 | 92.40 |
| OLD-09-12 | ½" µ well | 1-10 | 95.21 | 2.70 | 92.51 | 2.80 | 92.41 | 3.17 | 92.04 | 4.02 | 91.19 | 2.92 | 92.29 |
| OLD-09-13 | ½" µ well | 23-29 | 94.91 | 2.98 | 91.93 | 22.70 | 72.21 | 2.58 | 92.33 | 22.64 | 72.27 | 3.45 | 91.46 |
| OLD-09-14 | ½" µ well | 1.39-7.39 | 97.11 | not installed | | 5.60 | 91.51 | 5.78 | 91.33 | 6.29 | 90.82 | 5.73 | 91.38 |
| OLD-09-15 | ½" µ well | 1.18-7.18 | 96.62 | not installed | | 5.23 | 91.39 | 5.34 | 91.28 | 5.86 | 90.76 | 5.33 | 91.29 |
| OLD-09-16 | ½" µ well | 1.11-7.11 | 96.61 | not installed | | 5.19 | 91.42 | 5.35 | 91.26 | 5.86 | 90.75 | 5.29 | 91.32 |
| OLD-09-17 | ½" µ well | 0.93-9.93 | 95.00 | not installed | | 3.59 | 91.41 | 3.79 | 91.21 | 4.46 | 90.54 | 3.64 | 91.36 |
| OLD-09-18 | ½" µ well | 23.6-29.6 | 94.74 | not installed | | 23.45 | 71.29 | 3.44 | 91.30 | 23.38 | 71.36 | 3.30 | 91.44 |

Notes:
All measurements are in units of feet.

AMSL - Above mean sea level
BGS - Below ground surface
BTOC - Below top of casing
NM - Not measured
TOC - Top of casing

# TABLE 3

## POSITIVE DETECTIONS IN GROUNDWATER - JULY/AUGUST 1999
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| WELL DESIGNATION | Screening Criteria[a] | | OLD-08-01 | OLD-08-02 | OLD-08-03 | OLD-08-04 | OLD-08-05 | OLD-08-06 | OLD-08-08 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | Florida | NTC | NTC08G00111 | NTC08G00211 | NTC08G00311 | NTC08G00411 | NTC08G00511 | NTC08G00611 | NTC08G00811 |
| LAB ID | GCTL[b] | BGSV[c] | A9G290198006 | A9G290198009 | A9G290198008 | A9G290198007 | A9G300236003 | A9G300236004 | A9H030166007 |
| SAMPLE DATE | | | 7/28/99 | 7/28/99 | 7/28/99 | 7/28/99 | 7/29/99 | 7/29/99 | 8/1/99 |
| **Semivolatiles (µg/L)** | | | NA | NA | NA | NA | NA | NA | NA |
| 2,4-Dichlorophenol | 0.5 | | | | | | | | |
| 1-Methylnaphthalene | 20 | | | | | | | | |
| 2-Methylnaphthalene | 20 | | | | | | | | |
| Naphthalene | 20 | | | | | | | | |
| **Pesticides (µg/L)** | | | NA | NA | NA | NA | NA | NA | NA |
| alpha-BHC | 0.006 | | | | | | | | |
| alpha-Chlordane | 2[d] | | | | | | | | |
| Endosulfan II | 42[d] | | | | | | | | |
| gamma-BHC (Lindane) | 0.2 | | | | | | | | |
| gamma-Chlordane | 2[d] | | | | | | | | |
| Toxaphene | 3 | | | | | | | | |
| **Herbicides (µg/L)** | | | NA | NA | NA | NA | NA | NA | |
| 2,4,5-TP (Silvex) | 50 | | | | | | | | |
| 2,4-D | 70 | | | | | | | | |
| **Inorganics (µg/L)** | | | | | | | | | |
| Aluminum | 200 | 4067 | 192 J | 918 J | 4300J | 918 J | 4310J | 744 J | |
| Antimony | 6 | 4.1 | | | | | | | |
| Arsenic | 50 | 5 | 163 | 609 | 234 | 99.2 | 284 | 138 | 154 |
| Barium | 2000 | 31.4 | | 24.5 | 38.3 | | 77.8 | 38.3 | 18.9 |
| Calcium | * | 36830 | 55000 J | 74200 J | 67600 J | 26600 J | 101000 J | 67800 J | 71400 |
| Chromium | 100 | 7.8 | | | 5.2 | | 6.8 | | |
| Cobalt | 4-20 | * | | | | | | | |
| Copper | 1000 | 5.4 | | | 15.7 | 8.5 | 9.3 | 13.3 | |
| Iron | 300 | 1227 | 155 | 148 | 750 | | | | 370 |
| Lead | 15 | 4 | | | 2.8 | | 3.7 | 9.8 | |
| Magnesium | * | 4560 | 3980 | 4360 | 3450 | 2220 | 8500 | 5720 | 2550 |
| Manganese | 50 | 17 | 4.8 | 13.3 | 12.2 | 10.3 | 338 | 69.6 | |
| Nickel | 100 | * | | | 15 | 9.5 | | | |
| Potassium | * | 5400 | 6390 | 10100 | 9610 | 5380 | 12900 | 13200 | 7600 |
| Sodium | 160000 | 18222 | 6050 | 5850 | 5790 | 6630 | 8540 | 3630 | 3840 |
| Vanadium | 49 | 20.6 | | | | | | | |
| Zinc | 5000 | 4 | 129 | | 254 | 627 | 74.1 | 177 | |

# TABLE 3

## POSITIVE DETECTIONS IN GROUNDWATER - JULY/AUGUST 1999
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| WELL DESIGNATION | Screening Criteria[a] | | OLD-08-10 | OLD-08-11 | OLD-08-13 | | OLD-08-14 | OLD-08-15 | | OLD-08-17 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | Florida | NTC | NTC08G01011 | NTC08G01111 | NTC08G01311 | NTC08G01311-D | NTC08G01411 | NTC08G01511 | NTC08G01511-D | NTC08G01711 |
| LAB ID | GCTL[b] | BGSV[c] | A9H020124009 | A9H020124010 | A9H030166001 | A9H030166002 | A9H030166003 | A9H030166005 | A9H030166006 | A9H020124011 |
| SAMPLE DATE | | | 7/30/99 | 7/30/99 | 7/31/99 | 7/31/99 | 7/31/99 | 8/1/99 | 8/1/99 | 7/30/99 |
| **Semivolatiles (µg/L)** | | | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-Dichlorophenol | 0.5 | | | | | | | | | |
| 1-Methylnaphthalene | 20 | | | | | | | | | |
| 2-Methylnaphthalene | 20 | | | | | | | | | |
| Naphthalene | 20 | | | | | | | | | |
| **Pesticides (µg/L)** | | | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-BHC | 0.006 | | | | | | | | | |
| alpha-Chlordane | 2[d] | | | | | | | | | |
| Endosulfan II | 42[d] | | | | | | | | | |
| gamma-BHC (Lindane) | 0.2 | | | | | | | | | |
| gamma-Chlordane | 2[d] | | | | | | | | | |
| Toxaphene | 3 | | | | | | | | | |
| **Herbicides (µg/L)** | | | | | NA | NA | | | | NA |
| 2,4,5-TP (Silvex) | 50 | | | | | | | | | |
| 2,4-D | 70 | | | | | | | | | |
| **Inorganics (µg/L)** | | | | | | | | | | |
| Aluminum | 200 | 4067 | | | 823 | 729 | 1340 | 2430 | 2360 | |
| Antimony | 6 | 4.1 | | | | | | | | 12.2 |
| Arsenic | 50 | 5 | 189 | 170 | 24.3 | 22.6 | 100 | 3.6 | 2.5 | 191 |
| Barium | 2000 | 31.4 | 8.8 | | 17.9 | 17.7 | 53.3 | 15.4 | 13.9 | 18.7 |
| Calcium | * | 36830 | 42800 | 64700 | 12100 | 11500 | 65600 | 8880 | 8590 | 53500 |
| Chromium | 100 | 7.8 | 16.5 | | | | | | | |
| Cobalt | 4-20 | * | | | 0.98 | | 2.2 | | | |
| Copper | 1000 | 5.4 | 1.7 | | 1.9 | 1.4 | 4.3 | 2.6 | 1.5 | 3 |
| Iron | 300 | 1227 | | | 1660 | 1650 | 5190 | 853 | 806 | |
| Lead | 15 | 4 | | | | | 34.8 | | | |
| Magnesium | * | 4560 | 3870 | 4300 | 2320 | 2230 | 20000 | 4040 | 4000 | 2180 |
| Manganese | 50 | 17 | | | 68.1 | 68.7 | 304 | 32.6 | 30.1 | |
| Nickel | 100 | * | | | | | | | | |
| Potassium | * | 5400 | 3620 | 10600 | 277 | 284 | 1050 | 2010 | 1890 | 12100 |
| Sodium | 160000 | 18222 | 9180 | 9370 | 7980 | 7720 | 41200 | 30600 | 28500 | 4770 |
| Vanadium | 49 | 20.6 | 3.1 | | 1.4 | 0.92 | 4.7 | 2.5 | 2.9 | 10.3 |
| Zinc | 5000 | 4 | 13.6 | | | | 439 | 11.7 | | |

# TABLE 3

## POSITIVE DETECTIONS IN GROUNDWATER - JULY/AUGUST 1999
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| WELL DESIGNATION | Screening Criteria[a] | | OLD-08-18 | OLD-09-01 | OLD-09-02 | OLD-09-03 | OLD-09-04 | OLD-09-05 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | Florida | NTC | NTC08G01811 | NTC09G00111 | NTC09G00211 | NTC09G00311 | NTC09G00411 | NTC09G00511 |
| LAB ID | GCTL[b] | BGSV[c] | A9H030166004 | A9H050202002 | A9H040126009 | A9H050202001 | A9H050202003 | A9H040126007 |
| SAMPLE DATE | | | 7/31/99 | 8/4/99 | 8/3/99 | 8/4/99 | 8/4/99 | 8/3/99 |
| **Semivolatiles (µg/L)** | | | NA | NA | NA | | | NA |
| 2,4-Dichlorophenol | 0.5 | | | | | | | |
| 1-Methylnaphthalene | 20 | | | | | | 3.9 J | |
| 2-Methylnaphthalene | 20 | | | | | | 2 J | |
| Naphthalene | 20 | | | | | | 0.96 J | |
| **Pesticides (µg/L)** | | | NA | | | | | |
| alpha-BHC | 0.006 | | | | | | | |
| alpha-Chlordane | 2[d] | | | | | | | |
| Endosulfan II | 42[d] | | | | 0.047 J | | | |
| gamma-BHC (Lindane) | 0.2 | | | | | | | |
| gamma-Chlordane | 2[d] | | | 0.067 J | | | | |
| Toxaphene | 3 | | | 2.1 J | | | | |
| **Herbicides (µg/L)** | | | | | | | | |
| 2,4,5-TP (Silvex) | 50 | | | | | | | |
| 2,4-D | 70 | | | | | | | |
| **Inorganics (µg/L)** | | | | | | | | |
| Aluminum | 200 | 4067 | 1780 | | 2140 J | 452 J | | |
| Antimony | 6 | 4.1 | | | | | | 3.1 |
| Arsenic | 50 | 5 | | 34.9 | | | 1370 | 475 |
| Barium | 2000 | 31.4 | 42.8 | 53.5 | | | 17.8 | 8.8 |
| Calcium | * | 36830 | 5910 | 79900 | 10100 | 11200 | 52100 | 94500 |
| Chromium | 100 | 7.8 | | | | | | |
| Cobalt | 4-20 | * | 0.95 | | | | | |
| Copper | 1000 | 5.4 | 2.5 | 0.85 | 3.8 | 0.96 | 4.2 | |
| Iron | 300 | 1227 | 3550 | 289 | | | 6350 | |
| Lead | 15 | 4 | | | | | | |
| Magnesium | * | 4560 | 1730 | 6640 | 2240 | 2230 | 3000 | 5870 |
| Manganese | 50 | 17 | 204 | | | | 79.9 | 12 |
| Nickel | 100 | * | | | 1.6 | | | |
| Potassium | * | 5400 | 741 | 8180 J | 2500 J | 3420 J | 7490 J | 8570 J |
| Sodium | 160000 | 18222 | 9730 | 2350 | 5690 | 2710 | 1440 | 3620 |
| Vanadium | 49 | 20.6 | 6.2 | | | | | |
| Zinc | 5000 | 4 | | | 43.6 | | | 55.2 |

# TABLE 3

## POSITIVE DETECTIONS IN GROUNDWATER - JULY/AUGUST 1999
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| WELL DESIGNATION | Screening Criteria[a] | | OLD-09-06 | OLD-09-07 | OLD-09-10 | OLD-09-11 | | OLD-09-12 | | OLD-09-14 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | Florida | NTC | NTC09G00611 | NTC09G00711 | NTC09G01011 | NTC09G01111 | NTC09G01111-D | NTC09G01211 | NTC09G01211-D | NTC09G01411 |
| LAB ID | GCTL[b] | BGSV[c] | A9H040126003 | A9H040126001 | A9H040126008 | A9H040126004 | A9H040126005 | A9H030173002 | A9H030173004 | A9H030173001 |
| SAMPLE DATE | | | 8/3/99 | 8/3/99 | 8/3/99 | 8/3/99 | 8/3/99 | 8/2/99 | 8/2/99 | 8/1/99 |
| **Semivolatiles (µg/L)** | | | NA | NA | NA | NA | NA | | | |
| 2,4-Dichlorophenol | 0.5 | | | | | | | 45 | 30 | |
| 1-Methylnaphthalene | 20 | | | | | | | | | |
| 2-Methylnaphthalene | 20 | | | | | | | | | |
| Naphthalene | 20 | | | | | | | 2.4 | 2.4 | 2.1 |
| **Pesticides (µg/L)** | | | | | | | | | | |
| alpha-BHC | 0.006 | | | | | | | 2.5J | | |
| alpha-Chlordane | 2[d] | | | | | | 0.3 J | | | |
| Endosulfan II | 42[d] | | | | | | | | | |
| gamma-BHC (Lindane) | 0.2 | | | | | 0.18 J | 0.19 J | 1.9 J | 1.7 J | |
| gamma-Chlordane | 2[d] | | | | | | 0.21 J | | | |
| Toxaphene | 3 | | | | | | | | | |
| **Herbicides (µg/L)** | | | | | | | | | | |
| 2,4,5-TP (Silvex) | 50 | | | | | | | 1.6 J | 1.5 J | |
| 2,4-D | 70 | | | | | | | 33 J | 31 J | |
| **Inorganics (µg/L)** | | | | | | | | | | |
| Aluminum | 200 | 4067 | | 1180 J | | | | 1040 J | 1710 J | |
| Antimony | 6 | 4.1 | | | | 2.7 | 4 | | | |
| Arsenic | 50 | 5 | 191 | 5.3 | | 180 | 180 | 141 | 147 | |
| Barium | 2000 | 31.4 | 11 | | | 18.1 | 18 | 9.1 | 13.1 | 18.1 |
| Calcium | * | 36830 | 62600 | 10200 | 44700 | 55000 | 54700 | 15900 | 16500 | 45800 |
| Chromium | 100 | 7.8 | | 8.6 | | 11.4 | | | | |
| Cobalt | 4-20 | * | | | | | | | | |
| Copper | 1000 | 5.4 | | 5.1 | | | | | 3.5 | |
| Iron | 300 | 1227 | 465 | | 570 | 1490 | 1420 | 629 | 762 | |
| Lead | 15 | 4 | | | | | | | | |
| Magnesium | * | 4560 | 3090 | 1110 | 2960 | 2740 | 2720 | 2220 | 2280 | 4620 |
| Manganese | 50 | 17 | 35.4 | | 17.4 | 22.3 | 21.5 | 8.3 | 10.2 | |
| Nickel | 100 | * | | 5.8 | | 9.2 | | | | 5 |
| Potassium | * | 5400 | 3010 J | 588 J | 2100 J | 9220 J | 9320 J | 13200 J | 13200 J | 574 J |
| Sodium | 160000 | 18222 | 2340 | 6340 | 4020 | 1240 | 1320 | 2320 | 5850 | 32200 |
| Vanadium | 49 | 20.6 | | | | | | | | |
| Zinc | 5000 | 4 | | 70.4 | 43.8 | | | 75.5 | 92 | |

# TABLE 3

## POSITIVE DETECTIONS IN GROUNDWATER - JULY/AUGUST 1999
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| WELL DESIGNATION | Screening Criteria[a] | | OLD-09-15 | OLD-09-16 | OLD-09-17 | OLD-09-19 |
|---|---|---|---|---|---|---|
| SAMPLE ID | Florida | NTC | NTC09G01511 | NTC09G01611 | NTC09G01711 | NTC09G01911 |
| LAB ID | GCTL[b] | BGSV[c] | A9H030173003 | A9H040126006 | A9H040126002 | A9H050202004 |
| SAMPLE DATE | | | 8/2/99 | 8/3/99 | 8/3/99 | 8/4/99 |
| **Semivolatiles (µg/L)** | | | | NA | NA | |
| 2,4-Dichlorophenol | 0.5 | | | | | |
| 1-Methylnaphthalene | 20 | | | | | |
| 2-Methylnaphthalene | 20 | | | | | |
| Naphthalene | 20 | | 6.7 J | | | |
| **Pesticides (µg/L)** | | | | | | |
| alpha-BHC | 0.006 | | | | | |
| alpha-Chlordane | 2[d] | | | | | |
| Endosulfan II | 42[d] | | | | | |
| gamma-BHC (Lindane) | 0.2 | | | | | |
| gamma-Chlordane | 2[d] | | | | | |
| Toxaphene | 3 | | | | | |
| **Herbicides (µg/L)** | | | | | | |
| 2,4,5-TP (Silvex) | 50 | | | | | |
| 2,4-D | 70 | | | | | |
| **Inorganics (µg/L)** | | | | | | |
| Aluminum | 200 | 4067 | | 1670 J | | 7740 J |
| Antimony | 6 | 4.1 | | | | 17.7 |
| Arsenic | 50 | 5 | | | 8.3 | |
| Barium | 2000 | 31.4 | | 22.3 | | 51.5 |
| Calcium | * | 36830 | | 8250 | 42500 | 51600 |
| Chromium | 100 | 7.8 | | | | 3.4 |
| Cobalt | 4-20 | * | | | | |
| Copper | 1000 | 5.4 | | 2.6 | 1.3 | 6.6 |
| Iron | 300 | 1227 | | 637 | | 1290 |
| Lead | 15 | 4 | | | | |
| Magnesium | * | 4560 | | 1220 | | 1660 |
| Manganese | 50 | 17 | | 41.5 | | |
| Nickel | 100 | * | | 2.8 | 1.7 | |
| Potassium | * | 5400 | | 586 J | 2950 J | |
| Sodium | 160000 | 18222 | 5320 | 12000 | 1300 | 8260 |
| Vanadium | 49 | 20.6 | | | 8.9 | |
| Zinc | 5000 | 4 | | 41.5 | | |

# TABLE 3

## POSITIVE DETECTIONS IN GROUNDWATER – JULY/AUGUST 1999
## OPERABLE UNIT 3 – STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



Notes:

* indicates that the screening value is not available.
"J" qualifier indicates an estimated value.
NA Not analyzed.
Values in shaded cells exceed the screening criteria.
Empty cells indicate non-detects.

(a) For an organic analyte, the screening criterion is the GCTL; for an inorganic analyte with an established GCTL and BGSV, the screening criterion is the greater of the GCTL or the BGSV.
(b) Groundwater Cleanup Target Level (Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-777, F.A.C., May 26, 1999).
(c) Background Screening Value (Background Sampling Report for NTC, Orlando, Florida; ABB Environmental Services, August 1995).
(d) Screening Criteria Substitution – Chlordane for alpha-Chlordane and gamma-Chlordane, and Endosulfan for Endosulfan II.

TABLE 4

# HISTORICAL DETECTIONS IN GROUNDWATER
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| Well Designation | Screening Criteria[a] | | OLD-08-01 | | | | OLD-08-02 | | | OLD-08-03 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Florida GCTL[b] | NTC BGSV[c] | 08G00102 | NTC08G00110 | NTC08G00110-D | NTC08G00111 | 08G00202 | NTC08G00210 | NTC08G00211 | 08G00302 | NTC08G00310 |
| Lab ID | | | 873054 | F3846-7 | F3846-11 | A9G29018006 | 873055 | F3841-4 | A9G2901198009 | 873056 | F3841-6 |
| Sample Date | | | 10/22/97 | 3/13/99 | 3/13/99 | 7/28/99 | 10/22/97 | 3/11/99 | 7/28/99 | 10/22/97 | 3/11/99 |
| **Semivolatiles/PAHs (µg/L)** | | | | NA | NA | NA | | NA | NA | | NA |
| 1-Methylnaphthalene | 20 | | NA | | | | NA | | | NA | |
| 2,4,6-Trichlorophenol | 3.2 | | | | | | | | | | |
| 2,4-Dichlorophenol | 0.5 | | | | | | | | | | |
| 2,4-Dimethylphenol | 140 | | | | | | | | | | |
| 2-Methylnaphthalene | 20 | | | | | | | | | | |
| 2-Methylphenol | 35 | | | | | | | | | | |
| 2-Nitroaniline | 50 | | | | | | | | | | |
| 4-Methylphenol | 4 | | | | | | | | | | |
| Naphthalene | 20 | | 25 | | | | | | | | |
| Phenol | 10 | | | | | | | | | | |
| **Pesticides/PCBs (µg/L)** | | | | NA | NA | NA | | NA | NA | | NA |
| 4,4'-DDD | 0.1 | | | | | | | | | | |
| 4,4'-DDE | 0.1 | | | | | | | | | | |
| 4,4'-DDT | 0.1 | | 0.0056 J | | | | | | | | |
| Aldrin | 0.005 | | | | | | | | | | |
| alpha-BHC | 0.2 | | | | | | | | | | |
| alpha-Chlordane[d] | 2 | | | | | | | | | | |
| delta-BHC | 2.1 | | | | | | | | | | |
| Dieldrin | 0.005 | | | | | | | | | | |
| Endosulfan I | 42 | | | | | | | | | | |
| Endosulfan II[d] | 42 | | | | | | | | | | |
| Endosulfan Sulfate | * | | | | | | 0.012 J | | | | |
| Endrin | 2 | | 0.01 J | | | | | | | | |
| Endrin Aldehyde | * | | | | | | | | | | |
| gamma-BHC (Lindane) | 0.2 | | | | | | | | | | |
| gamma-Chlordane[d] | 2 | | | | | | | | | | |
| Toxaphene | 3 | | | | | | | | | | |
| **Herbicides (µg/L)** | | | | | | NA | | | NA | | |
| 2,4 5-TP (Silvex) | 50 | | | | | | | | | | |
| 2,4-D | 70 | | 0.095 J | | | | 0.0051 J | | | | |
| 2,4-DB | 56 | | 0.046 J | | | | 0.09 J | | | 0.6 J | |

# TABLE 4

## HISTORICAL DETECTIONS IN GROUNDWATER
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| Well Designation | Screening Criteria[a] | | OLD-08-01 | | | | OLD-08-02 | | | OLD-08-03 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Florida | NTC | 08G00102 | NTC08G00110 | NTC08G00110-D | NTC08G00111 | 08G00202 | NTC08G00210 | NTC08G00211 | 08G00302 | NTC08G00310 |
| Lab ID | GCTL[b] | BGSV[c] | 873054 | F3846-7 | F3846-11 | A9G29018006 | 873055 | F3841-4 | A9G2901198009 | 873056 | F3841-6 |
| Sample Date | | | 10/22/97 | 3/13/99 | 3/13/99 | 7/28/99 | 10/22/97 | 3/11/99 | 7/28/99 | 10/22/97 | 3/11/99 |
| **Herbicides (µg/L) (Cont)** | | | | | | NA | | | NA | | |
| Dalapon | 200 | | | | | | | | | | |
| Dicamba | | | | | | | | | | | |
| Dichloroprop | 35 | | | | | | | | | | |
| Dinoseb | 7 | | | | | | | | | | |
| MCPA | 3.5 | | | | | | | | | 640 J | |
| MCPP | 7 | | 790 J | | | | | | | | |
| **Inorganics (µg/L)** | | | | | | | | | | | |
| Aluminum | 200 | 4067 | | 199 | 235 | 192 J | | 207 | 918 J | | 168 |
| Antimony | 6 | 4.1 | 3.7 J | | | | | | | | |
| Arsenic | 50 | 5 | 133 | 138 J | 128 J | 183 | 295 | 294 | 609 | 79.9 | 260 |
| Barium | 2000 | 31.4 | 19 J | | | | 25.1 J | 21.5 J | 24.5 | 14.7 J | 20.9 J |
| Calcium | * | 36830 | 101000 | 35500 | 34500 | 55000 J | 104000 | 62100 | 74200 J | 37500 | 28600 |
| Chromium | 100 | 7.8 | 2.6 J | 13.7 | 10.7 | | 1.4 J | | | 1.7 J | |
| Cobalt | 420 | * | | | | | | | | | |
| Copper | 1000 | 5.4 | | | | | | 2.1 | | 1.5 J | 3.3 |
| Iron | 300 | 1227 | 1480 | | | 155 | | 250 | 148 | 231 | 1260 |
| Lead | 15 | 4 | | | | | | | | | |
| Magnesium | * | 4560 | | 2810 | 2920 | 3980 | | 3710 | 4360 | | 2440 |
| Manganese | 50 | 17 | 12.6 J | | 5.8 | 4.8 | 6.7 J | 13.1 | 13.3 | 15.3 | 19.6 |
| Mercury | 2 | 0.12 | | | | | | | | | |
| Nickel | 100 | * | 1.7 J | 6.2 | 6.9 | | 1.4 J | 1.4 | | 1.6 J | 10.0 |
| Potassium | * | 5400 | 16000 | 6200 | 5780 | 6390 | 10800 | 6710 | 10100 | 9130 | 6400 |
| Selenium | 50 | 9.7 | | | | | | | | | |
| Silver | 100 | * | | | | | | | | | |
| Sodium | 160000 | 18222 | | 3500 | 3620 | 6050 | | 6470 | 5850 | | 4290 |
| Vanadium | 49 | 20.6 | 0.86 J | 13.6 | 11.8 | | | 0.50 | | | 0.77 |
| Zinc | 5000 | 4 | | | | 129 | | 47.1 J | | | 180 J |
| **General Chemistry (mg/L)** | | | | NA | NA | NA | | NA | NA | | NA |
| Total Organic Carbon | | | 27.4 | | | | 28.8 | | | 30.6 | |
| Total Suspended Solids | | | 5 | | | | | | | | |

# TABLE 4

## HISTORICAL DETECTIONS IN GROUNDWATER
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| Well Designation | Screening Criteria[a] | | OLD-08-03 | OLD-08-04 | | | | OLD-08-05 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Florida GCTL[b] | NTC BGSV[c] | NTC08G00311 | 08G00402 | NTC08G00410 | NTC08G00410-D | NTC08G00411 | 08G00501 | 08G00501D | NTC08G00510 | NTC08G00511 |
| Lab ID | | | A9G290198008 | 873064 | F3841-5 | F3841-7 | A9G290198007 | 873270 | 873272 | F3832-1 | A9G300236003 |
| Sample Date | | | 7/28/99 | 10/22/97 | 3/11/99 | 3/11/99 | 7/28/99 | 10/23/97 | 10/23/97 | 3/10/99 | 7/29/99 |
| **Semivolatiles/PAHs (µg/L)** | | | NA | | NA | NA | NA | | | NA | NA |
| 1-Methylnaphthalene | 20 | | | NA | | | | NA | NA | | |
| 2,4,6-Trichlorophenol | 3.2 | | | | | | | | | | |
| 2,4-Dichlorophenol | 0.5 | | | | | | | | | | |
| 2,4-Dimethylphenol | 140 | | | | | | | | | | |
| 2-Methylnaphthalene | 20 | | | | | | | | | | |
| 2-Methylphenol | 35 | | | | | | | | | | |
| 2-Nitroaniline | 50 | | | | | | | | | | |
| 4-Methylphenol | 4 | | | | | | | | | | |
| Naphthalene | 20 | | | | | | | | | | |
| Phenol | 10 | | | | | | | | | | |
| **Pesticides/PCBs (µg/L)** | | | NA | | NA | NA | NA | | | NA | NA |
| 4,4'-DDD | 0.1 | | | | | | | | | | |
| 4,4'-DDE | 0.1 | | | | | | | | | | |
| 4,4'-DDT | 0.1 | | | | | | | | | | |
| Aldrin | 0.005 | | | | | | | | | | |
| alpha-BHC | 0.2 | | | | | | | | | | |
| alpha-Chlordane[d] | 2 | | | | | | | | | | |
| delta-BHC | 2.1 | | | | | | | | | | |
| Dieldrin | 0.005 | | | | | | | | | | |
| Endosulfan I | 42 | | | | | | | | | | |
| Endosulfan II[d] | 42 | | | | | | | | | | |
| Endosulfan Sulfate | * | | | | | | | | | | |
| Endrin | 2 | | | | | | | | | | |
| Endrin Aldehyde | * | | | | | | | | | | |
| gamma-BHC (Lindane) | 0.2 | | | | | | | | | | |
| gamma-Chlordane[d] | 2 | | | | | | | | | | |
| Toxaphene | 3 | | | | | | | | | | |
| **Herbicides (µg/L)** | | | NA | | | | NA | | | | NA |
| 2,4 5-TP (Silvex) | 50 | | | | | | | | | | |
| 2,4-D | 70 | | | 0.023 J | | | | | | | |
| 2,4-DB | 56 | | | 0.18 J | | | | 1.4 J | | | |

# TABLE 4

## HISTORICAL DETECTIONS IN GROUNDWATER
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| Well Designation | Screening Criteria[a] | | OLD-08-03 | OLD-08-04 | | | | OLD-08-05 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Florida GCTL[b] | NTC BGSV[c] | NTC08G00311 | 08G00402 | NTC08G00410 | NTC08G00410-D | NTC08G00411 | 08G00501 | 08G00501D | NTC08G00510 | NTC08G00511 |
| Lab ID | | | A9G290198008 | 873064 | F3841-5 | F3841-7 | A9G290198007 | 873270 | 873272 | F3832-1 | A9G300236003 |
| Sample Date | | | 7/28/99 | 10/22/97 | 3/11/99 | 3/11/99 | 7/28/99 | 10/23/97 | 10/23/97 | 3/10/99 | 7/29/99 |
| **Herbicides (µg/L) (Cont)** | | | NA | | | | NA | | | | NA |
| Dalapon | 200 | | | | | | | | | | |
| Dicamba | | | | | | | | | | | |
| Dichloroprop | 35 | | | | | | | | | | |
| Dinoseb | 7 | | | | | | | 0.098 J | | | |
| MCPA | 3.5 | | | | | | | | | | |
| MCPP | 7 | | | | | | | | | | |
| **Inorganics (µg/L)** | | | | | | | | | | | |
| Aluminum | 200 | 4067 | 4300 J | | 240 | 304 | 918 J | | | 126 | 4310 J |
| Antimony | 6 | 4.1 | | | | | | | | | |
| Arsenic | 50 | 5 | 234 | 70.4 | 102 | 106 | 99.2 | 57.7 | 57.3 | 56.9 | 284 |
| Barium | 2000 | 31.4 | 38.3 | | | | | 11.8 J | 11.3 J | 17.8 | 77.8 |
| Calcium | * | 36830 | 67600 J | 28900 | 21700 | 22900 | 26600 J | 33200 | 33100 | 19800 | 101000 J |
| Chromium | 100 | 7.8 | 5.2 | 1.5 J | | | | 1.8 J | 2.3 J | 10.5 | 6.8 |
| Cobalt | 420 | * | | | | | | | | | |
| Copper | 1000 | 5.4 | 15.7 | 1.3 J | 5.0 | 37.6 | 8.5 | 1.2 J | 0.96 J | 2.3 | 9.3 |
| Iron | 300 | 1227 | 750 | | | 222 | | | | | |
| Lead | 15 | 4 | 2.8 | | | | | | | | 3.7 |
| Magnesium | * | 4560 | 3450 | | 2230 | 2420 | 2220 | | | 2640 | 8500 |
| Manganese | 50 | 17 | 12.2 | 16.4 | 19.8 | 18.1 | 10.3 | 160 | 162 | 146 J | 338 |
| Mercury | 2 | 0.12 | | | | | | | | | |
| Nickel | 100 | * | 15 | 3 J | 6.8 | 7.5 | 9.5 | | | 1.4 | |
| Potassium | * | 5400 | 9610 | 9940 | 6430 | 6750 | 5380 | 11200 | 11200 | 5910 J | 12900 |
| Selenium | 50 | 9.7 | | | | | | | | | |
| Silver | 100 | * | | | | | | | | | |
| Sodium | 160000 | 18222 | 5790 | | 4580 | 5070 | 6630 | | | 3850 | 8540 |
| Vanadium | 49 | 20.6 | | | 2.1 | 2.4 | | | | 0.43 | |
| Zinc | 5000 | 4 | 254 | | 295 J | 337 J | 627 | | | 40.9 J | 74.1 |
| **General Chemistry (mg/L)** | | | NA | | NA | NA | NA | | NA | NA | NA |
| Total Organic Carbon | | | | 27 | | | | 31.2 | | | |
| Total Suspended Solids | | | | | | | | | | | |

TABLE 4

HISTORICAL DETECTIONS IN GROUNDWATER
OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

NAVAL TRAINING CENTER
ORLANDO, FLORIDA



| Well Designation | Screening Criteria[a] | | OLD-08-06 | | | OLD-08-07 | | OLD-08-08 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Florida GCTL[b] | NTC BGSV[c] | 08G00601 | NTC08G00610 | NTC08G00611 | 08G00701 | NTC08G00710 | 08G00801 | 08G00801D | NTC08G00810 | NTC08G00811 |
| Lab ID | | | 873268 | F3841-1 | A9G300236004 | 873267 | F3849-1 | 873069 | 873074 | F3841-3 | A9H030166007 |
| Sample Date | | | 10/23/97 | 3/11/99 | 7/29/99 | 10/23/97 | 3/15/99 | 10/22/97 | 10/22/97 | 3/11/99 | 8/1/99 |
| **Semivolatiles/PAHs (µg/L)** | | | | NA | NA | | NA | | | NA | NA |
| 1-Methylnaphthalene | 20 | | NA | | | NA | | NA | NA | | |
| 2,4,6-Trichlorophenol | 3.2 | | | | | | | | | | |
| 2,4-Dichlorophenol | 0.5 | | | | | | | | | | |
| 2,4-Dimethylphenol | 140 | | | | | | | | | | |
| 2-Methylnaphthalene | 20 | | | | | | | | | | |
| 2-Methylphenol | 35 | | | | | | | | | | |
| 2-Nitroaniline | 50 | | | | | | | | | | |
| 4-Methylphenol | 4 | | | | | | | | | | |
| Naphthalene | 20 | | | | | | | | | | |
| Phenol | 10 | | | | | | | | | | |
| **Pesticides/PCBs (µg/L)** | | | | NA | NA | | NA | | | NA | NA |
| 4,4'-DDD | 0.1 | | | | | | | | | | |
| 4,4'-DDE | 0.1 | | | | | | | | | | |
| 4,4'-DDT | 0.1 | | | | | | | | | | |
| Aldrin | 0.005 | | | | | | | | | | |
| alpha-BHC | 0.2 | | | | | | | | | | |
| alpha-Chlordane[d] | 2 | | | | | | | | | | |
| delta-BHC | 2.1 | | | | | | | | | | |
| Dieldrin | 0.005 | | | | | | | | | | |
| Endosulfan I | 42 | | | | | | | | | | |
| Endosulfan II[d] | 42 | | | | | | | | | | |
| Endosulfan Sulfate | * | | | | | | | | | | |
| Endrin | 2 | | | | | | | | | | |
| Endrin Aldehyde | * | | | | | | | | | | |
| gamma-BHC (Lindane) | 0.2 | | | | | | | | | | |
| gamma-Chlordane[d] | 2 | | | | | | | | | | |
| Toxaphene | 3 | | | | | | | | | | |
| **Herbicides (µg/L)** | | | | | NA | | | | | | NA |
| 2,4 5-TP (Silvex) | 50 | | | | | | | | | | |
| 2,4-D | 70 | | 0.22 J | | | | | 0.12 J | 0.11 J | | |
| 2,4-DB | 56 | | 0.57 J | | | | | 0.16 J | 0.11 J | | |

# TABLE 4

## HISTORICAL DETECTIONS IN GROUNDWATER
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| Well Designation | Screening Criteria[a] | | OLD-08-06 | | | OLD-08-07 | | OLD-08-08 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Florida GCTL[b] | NTC BGSV[c] | 08G00601 | NTC08G00610 | NTC08G00611 | 08G00701 | NTC08G00710 | 08G00801 | 08G00801D | NTC08G00810 | NTC08G00811 |
| Lab ID | | | 873268 | F3841-1 | A9G300236004 | 873267 | F3849-1 | 873069 | 873074 | F3841-3 | A9H030166007 |
| Sample Date | | | 10/23/97 | 3/11/99 | 7/29/99 | 10/23/97 | 3/15/99 | 10/22/97 | 10/22/97 | 3/11/99 | 8/1/99 |
| **Herbicides (µg/L) (Cont)** | | | | | NA | | | | | | NA |
| Dalapon | 200 | | | | | | | | | | |
| Dicamba | | | | | | | | | | | |
| Dichloroprop | 35 | | | | | | | 0.69 J | 0.66 J | | |
| Dinoseb | 7 | | 0.28 J | | | | | | | | |
| MCPA | 3.5 | | | | | | | | | | |
| MCPP | 7 | | | | | | | | 7.10 J | | 99 J |
| **Inorganics (µg/L)** | | | | | | | | | | | |
| Aluminum | 200 | 4067 | | 150 | 744 J | | | | | | |
| Antimony | 6 | 4.1 | | | | | | | | | |
| Arsenic | 50 | 5 | 53 | 88.5 | 138 | 56.4 | 47.9 | 122 | 120 | 179 | 3154 |
| Barium | 2000 | 31.4 | 12.3 J | 27.8 J | 38.3 | 8 J | | 26.6 J | 26.1 J | 10.4 J | 18.9 |
| Calcium | * | 36830 | 28100 | 21000 | 67800 J | 45300 | 26800 J | 131000 | 134000 | 58800 | 71400 |
| Chromium | 100 | 7.8 | 3.4 J | 22.0 | | 1.1 J | | | | | |
| Cobalt | 420 | * | | | | | | | | | |
| Copper | 1000 | 5.4 | 6.7 J | 13.3 | 13.3 | 3.3 J | 8.6 | 1.5 J | 1.4 J | 7.1 | |
| Iron | 300 | 1227 | 198 | 33300 | | 529 | | | | | 370 |
| Lead | 15 | 4 | 6.6 | 13.2 | 9.8 | | | | | | |
| Magnesium | * | 4560 | | 2610 | 5720 | | 2750 J | | | 2620 | 2550 |
| Manganese | 50 | 17 | 24.2 | 110 | 69.6 | 11 J | | 6.3 J | 6.4 J | 3.4 | |
| Mercury | 2 | 0.12 | | | | | | | | | |
| Nickel | 100 | * | | 16.8 | | | | | | 2.5 | |
| Potassium | * | 5400 | 11700 | 5450 | 13200 | 11000 | 3140 J | 8670 | 8900 | 8780 | 7600 |
| Selenium | 50 | 9.7 | | | | | | | | | |
| Silver | 100 | * | | | | | | | | | |
| Sodium | 160000 | 18222 | | 4690 | 3630 | | 3930 | | | 5310 | 3840 |
| Vanadium | 49 | 20.6 | 2 J | 0.53 | | 1.8 J | | | | 0.96 | |
| Zinc | 5000 | 4 | | 38.2 J | 177 | | | | | 42.1 J | |
| **General Chemistry (mg/L)** | | | | NA | NA | | NA | | NA | NA | NA |
| Total Organic Carbon | | | 33.7 | | | 22.9 | | 20.7 | | | |
| Total Suspended Solids | | | | | | | | | | | |

TABLE 4

# HISTORICAL DETECTIONS IN GROUNDWATER
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

NAVAL TRAINING CENTER
ORLANDO, FLORIDA


| Well Designation | Screening Criteria[a] | | OLD-08-09 | OLD-08-09 | OLD-08-10 | | | OLD-08-11 | | | OLD-08-12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Florida GCTL[b] | NTC BGSV[c] | 08F00901 | 08G00901 | 08G01001 | NTC08G01010 | NTC08G01011 | 08G01101 | NTC08G01110 | NTC08G01111 | 08F01201 |
| Lab ID | | | 873053 | 873070 | 873269 | F3846-3 | A9H020124009 | 873271 | F3846-2 | A9H020124010 | 873265 |
| Sample Date | | | 10/22/97 | 10/22/97 | 10/23/97 | 3/12/99 | 7/30/99 | 10/23/97 | 3/12/99 | 7/30/99 | 10/23/97 |
| **Semivolatiles/PAHs (µg/L)** | | | NA | | | NA | NA | | NA | NA | NA |
| 1-Methylnaphthalene | 20 | | | NA | NA | | | NA | | | |
| 2,4,6-Trichlorophenol | 3.2 | | | | | | | | | | |
| 2,4-Dichlorophenol | 0.5 | | | | | | | | | | |
| 2,4-Dimethylphenol | 140 | | | | | | | | | | |
| 2-Methylnaphthalene | 20 | | | | | | | | | | |
| 2-Methylphenol | 35 | | | | | | | | | | |
| 2-Nitroaniline | 50 | | | | | | | | | | |
| 4-Methylphenol | 4 | | | | | | | | | | |
| Naphthalene | 20 | | | | | | | | | | |
| Phenol | 10 | | | | | | | | | | |
| **Pesticides/PCBs (µg/L)** | | | NA | | | NA | NA | | NA | NA | NA |
| 4,4'-DDD | 0.1 | | | | | | | | | | |
| 4,4'-DDE | 0.1 | | | | | | | | | | |
| 4,4'-DDT | 0.1 | | | | | | | | | | |
| Aldrin | 0.005 | | | | | | | | | | |
| alpha-BHC | 0.2 | | | | | | | | | | |
| alpha-Chlordane[d] | 2 | | | | | | | | | | |
| delta-BHC | 2.1 | | | | | | | | | | |
| Dieldrin | 0.005 | | | | | | | 0.019 J | | | |
| Endosulfan I | 42 | | | | | | | | | | |
| Endosulfan II[d] | 42 | | | | | | | | | | |
| Endosulfan Sulfate | * | | | | | | | | | | |
| Endrin | 2 | | | | | | | | | | |
| Endrin Aldehyde | * | | | | | | | | | | |
| gamma-BHC (Lindane) | 0.2 | | | | | | | | | | |
| gamma-Chlordane[d] | 2 | | | | | | | | | | |
| Toxaphene | 3 | | | | | | | | | | |
| **Herbicides (µg/L)** | | | NA | | | | NA | | | NA | NA |
| 2,4 5-TP (Silvex) | 50 | | | | | | | | | | |
| 2,4-D | 70 | | | 0.076 J | | | | 0.046 J | | | |
| 2,4-DB | 56 | | | 0.061 J | | | | | | | |

# TABLE 4

## HISTORICAL DETECTIONS IN GROUNDWATER
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| Well Designation | Screening Criteria[a] | | OLD-08-09 | OLD-08-09 | OLD-08-10 | | | OLD-08-11 | | | OLD-08-12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Florida GCTL[b] | NTC BGSV[c] | 08F00901 | 08G00901 | 08G01001 | NTC08G01010 | NTC08G01011 | 08G01101 | NTC08G01110 | NTC08G01111 | 08F01201 |
| Lab ID | | | 873053 | 873070 | 873269 | F3846-3 | A9H020124009 | 873271 | F3846-2 | A9H020124010 | 873265 |
| Sample Date | | | 10/22/97 | 10/22/97 | 10/23/97 | 3/12/99 | 7/30/99 | 10/23/97 | 3/12/99 | 7/30/99 | 10/23/97 |
| **Herbicides (µg/L) (Cont)** | | | NA | | | | NA | | | NA | NA |
| Dalapon | 200 | | | | | | 2J | | | | |
| Dicamba | | | | | | | | | | | |
| Dichloroprop | 35 | | | | | | | | | | |
| Dinoseb | 7 | | | | | | | | | | |
| MCPA | 3.5 | | | | | | | | | | |
| MCPP | 7 | | | | 900 J | | | 660 J | | 110 J | |
| **Inorganics (µg/L)** | | | | | | | | | | | |
| Aluminum | 200 | 4067 | 252 | 372 | 614 | 409 | | | 171 | | 412 |
| Antimony | 6 | 4.1 | | | | | | | | | |
| Arsenic | 50 | 5 | 96.4 | 117 | 209 | 122 J | 189 | 223 | 315 J | 170 | |
| Barium | 2000 | 31.4 | 4.9 J | | 15 J | | 8.8 | | 63.4 J | | 18.2 J |
| Calcium | * | 36830 | 43300 | 45600 | 7230 | 17100 | 42800 | 89800 | 60000 | 64700 | |
| Chromium | 100 | 7.8 | 1.3 J | | | | 16.5 | | | | |
| Cobalt | 420 | * | | | | | | | | | |
| Copper | 1000 | 5.4 | | 1.2 J | 6.5 J | | 1.7 | 0.9 J | | | 0.95 J |
| Iron | 300 | 1227 | 410 | 455 | 825 | 1400 | | | | | 4080 |
| Lead | 15 | 4 | | | | | | | | | |
| Magnesium | * | 4560 | | | | 1970 | 3870 | | 4740 | 4300 | |
| Manganese | 50 | 17 | 18.9 | 18.5 | 54.4 | 56.6 | | 5.3 J | 6.4 | | 61 |
| Mercury | 2 | 0.12 | | | | | | | | | |
| Nickel | 100 | * | 1.7 J | | | | | | | | |
| Potassium | * | 5400 | 4720 J | 4980 J | | 822 | 3620 | 11600 | 5130 | 10600 | |
| Selenium | 50 | 9.7 | | | | | | | | | |
| Silver | 100 | * | | | | | | | | | |
| Sodium | 160000 | 18222 | | | | 5910 | 9180 | | 7330 | 9370 | |
| Vanadium | 49 | 20.6 | 2.3 J | 2.3 J | 2.8 J | | 3.1 | | | | 2.6 J |
| Zinc | 5000 | 4 | | | | | 13.6 | | | | |
| **General Chemistry (mg/L)** | | | NA | | | NA | NA | | NA | NA | NA |
| Total Organic Carbon | | | | 31.5 | 21.1 | | | 20.9 | | | |
| Total Suspended Solids | | | | | | | | | | | |

TABLE 4

HISTORICAL DETECTIONS IN GROUNDWATER
OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

NAVAL TRAINING CENTER
ORLANDO, FLORIDA


| Well Designation | Screening Criteria[a] | | OLD-08-12 | OLD-08-13 | | | | | OLD-08-14 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Florida GCTL[b] | NTC BGSV[c] | 08G01201 | 08F01301 | 08G01301 | NTC08G01310 | NTC08G01311 | NTC08G01311-D | 08G01401 | NTC08G01410 | NTC08G01411 |
| Lab ID | | | 873266 | 876944 | 876943 | F3849-3 | A9H030166001 | A9H030166002 | 878090 | F3849-2 | A9H030166003 |
| Sample Date | | | 10/23/97 | 12/5/97 | 12/5/97 | 3/15/99 | 7/31/99 | 7/31/99 | 12/8/97 | 3/15/99 | 7/31/99 |
| **Semivolatiles/PAHs (µg/L)** | | | | NA | | NA | NA | NA | | NA | NA |
| 1-Methylnaphthalene | 20 | | NA | | NA | | | | NA | | |
| 2,4,6-Trichlorophenol | 3.2 | | | | | | | | | | |
| 2,4-Dichlorophenol | 0.5 | | | | | | | | | | |
| 2,4-Dimethylphenol | 140 | | | | | | | | | | |
| 2-Methylnaphthalene | 20 | | | | | | | | | | |
| 2-Methylphenol | 35 | | | | | | | | | | |
| 2-Nitroaniline | 50 | | | | | | | | | | |
| 4-Methylphenol | 4 | | | | | | | | | | |
| Naphthalene | 20 | | | | | | | | | | |
| Phenol | 10 | | | | | | | | | | |
| **Pesticides/PCBs (µg/L)** | | | | NA | | NA | NA | NA | | NA | NA |
| 4,4'-DDD | 0.1 | | | | | | | | | | |
| 4,4'-DDE | 0.1 | | | | | | | | | | |
| 4,4'-DDT | 0.1 | | | | | | | | | | |
| Aldrin | 0.005 | | | | | | | | | | |
| alpha-BHC | 0.2 | | | | | | | | | | |
| alpha-Chlordane[d] | 2 | | | | | | | | | | |
| delta-BHC | 2.1 | | | | 0.0051 J | | | | | | |
| Dieldrin | 0.005 | | | | | | | | | | |
| Endosulfan I | 42 | | | | | | | | | | |
| Endosulfan II[d] | 42 | | | | | | | | | | |
| Endosulfan Sulfate | * | | | | | | | | | | |
| Endrin | 2 | | | | | | | | | | |
| Endrin Aldehyde | * | | | | | | | | 0.0066 J | | |
| gamma-BHC (Lindane) | 0.2 | | | | | | | | | | |
| gamma-Chlordane[d] | 2 | | | | | | | | | | |
| Toxaphene | 3 | | | | | | | | | | |
| **Herbicides (µg/L)** | | | | NA | | | NA | NA | | | NA |
| 2,4 5-TP (Silvex) | 50 | | | | | | | | | | |
| 2,4-D | 70 | | 0.082 J | | 0.16 J | | | | | | |
| 2,4-DB | 56 | | | | 0.31 J | | | | | | |

# TABLE 4

## HISTORICAL DETECTIONS IN GROUNDWATER
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| Well Designation | Screening Criteria[a] | | OLD-08-12 | OLD-08-13 | | | | | OLD-08-14 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Florida | NTC | 08G01201 | 08F01301 | 08G01301 | NTC08G01310 | NTC08G01311 | NTC08G01311-D | 08G01401 | NTC08G01410 | NTC08G01411 |
| Lab ID | GCTL[b] | BGSV[c] | 873266 | 876944 | 876943 | F3849-3 | A9H030166001 | A9H030166002 | 878090 | F3849-2 | A9H030166003 |
| Sample Date | | | 10/23/97 | 12/5/97 | 12/5/97 | 3/15/99 | 7/31/99 | 7/31/99 | 12/8/97 | 3/15/99 | 7/31/99 |
| **Herbicides (µg/L) (Cont)** | | | | NA | | | NA | NA | | | NA |
| Dalapon | 200 | | | | | | | | 1.4 J | | 7.5 J |
| Dicamba | | | | | | | | | | | |
| Dichloroprop | 35 | | | | 0.4 J | | | | 0.14 J | | |
| Dinoseb | 7 | | | | | | | | | | |
| MCPA | 3.5 | | | | 660 J | | | | | | |
| MCPP | 7 | | | | | | | | 200 J | | 190 J |
| **Inorganics (µg/L)** | | | | | | | | | | | |
| Aluminum | 200 | 4067 | 1450 | 529 | 1870 | 527 | 823 | 729 | 1380 J | 1800 | 1340 |
| Antimony | 6 | 4.1 | | | | | | | | | |
| Arsenic | 50 | 5 | | 71.1 | 88.2 | 19.0 | 24.3 | 22.6 | 7.1 J | 9.5 | 100 |
| Barium | 2000 | 31.4 | 38.5 J | 25.6 J | 42.1 J | 76.4 J | 17.9 | 17.7 | 39.2 J | 99.5 J | 53.3 |
| Calcium | * | 36830 | | 11400 | 12900 | 9170 J | 12100 | 11500 | 34200 | 12200 J | 65600 |
| Chromium | 100 | 7.8 | 0.83 J | | | | | | | | |
| Cobalt | 420 | * | | 1.5 J | 1.9 J | | 0.98 | | 2.3 J | | 2.2 |
| Copper | 1000 | 5.4 | 1.5 J | 4.5 J | 5.5 J | 23.1 | 1.9 | 1.4 | 9.5 J | 17.5 | 4.3 |
| Iron | 300 | 1227 | 5800 | 293 | 447 | 2470 J | 1660 | 1650 | 1730 J | 7340 J | 5190 |
| Lead | 15 | 4 | | | 3.2 | 6.5 | | | 3.1 | 211 | 34.8 |
| Magnesium | * | 4560 | | | | 1770 J | 2320 | 2230 | | 3190 J | 20000 |
| Manganese | 50 | 17 | 71.8 | 94.1 | 148 | 124 J | 68.1 | 68.7 | 172 | 132 J | 304 |
| Mercury | 2 | 0.12 | | | | | | | | | |
| Nickel | 100 | * | | 7.3 J | 9.6 J | | | | 5.8 J | | |
| Potassium | * | 5400 | | | | 848 J | 277 | 284 | | 1240 J | 1050 |
| Selenium | 50 | 9.7 | | | | | | | | | |
| Silver | 100 | * | | | | | | | | | |
| Sodium | 160000 | 18222 | | | | 8490 | 7980 | 7720 | | 15600 | 41200 |
| Vanadium | 49 | 20.6 | 4.2 J | 1.2 J | 2 J | | 1.4 | 0.92 | 2.5 J | | 4.7 |
| Zinc | 5000 | 4 | | | | | | | | | 439 |
| **General Chemistry (mg/L)** | | | | NA | | NA | NA | NA | | NA | NA |
| Total Organic Carbon | | | 8.47 | | 22.1 | | | | 46.8 | | |
| Total Suspended Solids | | | 8 | | 22 | | | | 20 | | |

# TABLE 4

## HISTORICAL DETECTIONS IN GROUNDWATER
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| Well Designation | Screening Criteria[a] | | OLD-08-15 | | | | OLD-08-16 | OLD-08-17 | | | OLD-08-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Florida | NTC | 08G01501 | NTC08G01510 | NTC08G01511 | NTC08G01511-D | 08G01601 | 08G01701 | NTC08G01710 | NTC08G01711 | 08G01801 |
| Lab ID | GCTL[b] | BGSV[c] | 876942 | F3846-1 | A9H030166005 | A9H030166006 | 882951 | 882943 | F3841-2 | A9H020124011 | 882980 |
| Sample Date | | | 12/5/97 | 3/13/99 | 8/1/99 | 8/1/99 | 2/18/98 | 2/18/98 | 3/11/99 | 7/30/99 | 2/19/98 |
| **Semivolatiles/PAHs (µg/L)** | | | | NA | NA | NA | NA | NA | NA | NA | NA |
| 1-Methylnaphthalene | 20 | | NA | | | | | | | | |
| 2,4,6-Trichlorophenol | 3.2 | | | | | | | | | | |
| 2,4-Dichlorophenol | 0.5 | | | | | | | | | | |
| 2,4-Dimethylphenol | 140 | | | | | | | | | | |
| 2-Methylnaphthalene | 20 | | | | | | | | | | |
| 2-Methylphenol | 35 | | | | | | | | | | |
| 2-Nitroaniline | 50 | | | | | | | | | | |
| 4-Methylphenol | 4 | | | | | | | | | | |
| Naphthalene | 20 | | | | | | | | | | |
| Phenol | 10 | | | | | | | | | | |
| **Pesticides/PCBs (µg/L)** | | | | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDD | 0.1 | | | | | | | | | | |
| 4,4'-DDE | 0.1 | | | | | | | | | | |
| 4,4'-DDT | 0.1 | | | | | | | | | | |
| Aldrin | 0.005 | | | | | | | | | | |
| alpha-BHC | 0.2 | | | | | | | | | | |
| alpha-Chlordane[d] | 2 | | | | | | | | | | |
| delta-BHC | 2.1 | | 0.0077 J | | | | | | | | |
| Dieldrin | 0.005 | | | | | | | | | | |
| Endosulfan I | 42 | | | | | | | | | | |
| Endosulfan II[d] | 42 | | | | | | | | | | |
| Endosulfan Sulfate | * | | | | | | | | | | |
| Endrin | 2 | | | | | | | | | | |
| Endrin Aldehyde | * | | | | | | | | | | |
| gamma-BHC (Lindane) | 0.2 | | | | | | | | | | |
| gamma-Chlordane[d] | 2 | | | | | | | | | | |
| Toxaphene | 3 | | | | | | | | | | |
| **Herbicides (µg/L)** | | | | | NA | | NA | NA | | NA | NA |
| 2,4 5-TP (Silvex) | 50 | | | | | | | | | | |
| 2,4-D | 70 | | 0.16 J | | | | | | | | |
| 2,4-DB | 56 | | 0.29 J | | | NA | | | | | |

# TABLE 4

## HISTORICAL DETECTIONS IN GROUNDWATER
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| Well Designation | Screening Criteria[a] | | OLD-08-15 | | | | OLD-08-16 | OLD-08-17 | | | OLD-08-18 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Florida GCTL[b] | NTC BGSV[c] | 08G01501 | NTC08G01510 | NTC08G01511 | NTC08G01511-D | 08G01601 | 08G01701 | NTC08G01710 | NTC08G01711 | 08G01801 |
| Lab ID | | | 876942 | F3846-1 | A9H030166005 | A9H030166006 | 882951 | 882943 | F3841-2 | A9H020124011 | 882980 |
| Sample Date | | | 12/5/97 | 3/13/99 | 8/1/99 | 8/1/99 | 2/18/98 | 2/18/98 | 3/11/99 | 7/30/99 | 2/19/98 |
| **Herbicides (µg/L) (Cont)** | | | | | NA | | NA | NA | | NA | NA |
| Dalapon | 200 | | | | 36 J | | | | | | |
| Dicamba | | | | | | | | | | | |
| Dichloroprop | 35 | | | | | | | | | | |
| Dinoseb | 7 | | | | | | | | | | |
| MCPA | 3.5 | | 1200 DJ | | | | | | | | |
| MCPP | 7 | | | | | 280 J | | | | | |
| **Inorganics (µg/L)** | | | | | | | | | | | |
| Aluminum | 200 | 4067 | 1420 | 811 | 2430 | 2360 | 454 | 88.3 J | 88.1 | | 87.3 J |
| Antimony | 6 | 4.1 | | | | | | | | 12.2 | 2.9 J |
| Arsenic | 50 | 5 | | | 3.6 | 2.5 | 3.9 J | 98.6 | 167 | 191 | |
| Barium | 2000 | 31.4 | 21.6 J | | 15.4 | 13.9 | 27.7 J | 20 J | | 18.7 | 12.1 J |
| Calcium | * | 36830 | 18100 | 5440 | 8880 | 8590 | | | 38300 | 53500 | |
| Chromium | 100 | 7.8 | | | | | | | | | |
| Cobalt | 420 | * | 1.2 J | | | | 1.9 J | | | | |
| Copper | 1000 | 5.4 | 8.3 J | | 2.6 | 1.5 | | | 5.5 | 3 | |
| Iron | 300 | 1227 | 498 | 1980 | 853 | 806 | 580 | | | | 550 |
| Lead | 15 | 4 | 2.3 J | | | | | | | | |
| Magnesium | * | 4560 | | 2810 | 4040 | 4000 | | | 2220 | 2180 | |
| Manganese | 50 | 17 | 72.9 | 83.9 | 32.6 | 30.1 | 164 | | 10.1 | | |
| Mercury | 2 | 0.12 | | | | | | | | | |
| Nickel | 100 | * | 5.9 J | | | | 11.4 J | 4.4 J | 8.0 | | 3 J |
| Potassium | * | 5400 | | 806 | 2010 | 1890 | | 10900 | 7580 | 12100 | |
| Selenium | 50 | 9.7 | | | | | | | | | |
| Silver | 100 | * | | | | | | | | | |
| Sodium | 160000 | 18222 | 28900 | 13200 | 30600 | 28500 | | | 6340 | 4770 | |
| Vanadium | 49 | 20.6 | 3 J | | 2.5 | 2.9 | 3.5 J | 4.4 J | | 10.3 | 2.4 J |
| Zinc | 5000 | 4 | | | 11.7 | | | | 30.2 J | | |
| **General Chemistry (mg/L)** | | | | NA | NA | NA | | | NA | NA | |
| Total Organic Carbon | | | 27.2 | | | | 25.2 | 19.9 | | | 23.5 |
| Total Suspended Solids | | | 13 | | | | | | | | |

# TABLE 4

## HISTORICAL DETECTIONS IN GROUNDWATER
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| Well Designation | Screening Criteria[a] | | OLD-08-18 | OLD-09-01 | OLD-09-01 | | OLD-09-02 | | | | OLD-09-03 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Florida | NTC | NTC08G01811 | 09G00102 | NTC09G00110 | NTC09G00111 | 09G00202 | 09G00202D | NTC09G00210 | NTC09G00211 | 09G00302 |
| Lab ID | GCTL[b] | BGSV[c] | A9H030166004 | 872936 | F3846-8 | A9H050202002 | 872937 | 872939 | F3846-9 | A9H040126009 | 872938 |
| Sample Date | | | 7/31/99 | 10/20/97 | 3/13/99 | 8/4/99 | 10/20/97 | 10/20/97 | 3/13/99 | 8/3/99 | 10/20/97 |
| **Semivolatiles/PAHs (µg/L)** | | | NA | | | NA | | | | NA | |
| 1-Methylnaphthalene | 20 | | | NA | NA | | NA | NA | NA | | NA |
| 2,4,6-Trichlorophenol | 3.2 | | | | | | | | | | |
| 2,4-Dichlorophenol | 0.5 | | | | | | | | | | |
| 2,4-Dimethylphenol | 140 | | | | | | | 2 J | | | |
| 2-Methylnaphthalene | 20 | | | | | | | | | | |
| 2-Methylphenol | 35 | | | | | | | 1 J | | | |
| 2-Nitroaniline | 50 | | | | | | | | | | |
| 4-Methylphenol | 4 | | | | | | | 3 J | | | |
| Naphthalene | 20 | | | | | | | | | | 1 J |
| Phenol | 10 | | | | | | | 2 J | | | |
| **Pesticides/PCBs (µg/L)** | | | NA | | (e) | (e) | | | (e) | (e) | |
| 4,4'-DDD | 0.1 | | | | | | | | | | |
| 4,4'-DDE | 0.1 | | | 0.1 J | | | | | | | |
| 4,4'-DDT | 0.1 | | | | | | | | | | 0.0039 J |
| Aldrin | 0.005 | | | | | | | | | | |
| alpha-BHC | 0.2 | | | | | | | | | | |
| alpha-Chlordane[d] | 2 | | | | | | | | | | |
| delta-BHC | 2.1 | | | | | | | | | | |
| Dieldrin | 0.005 | | | | | | | | | | |
| Endosulfan I | 42 | | | | | | | | | | |
| Endosulfan II[d] | 42 | | | | | | | | | 0.047 J | |
| Endosulfan Sulfate | * | | | | | | | | | | |
| Endrin | 2 | | | | | | | | | | |
| Endrin Aldehyde | * | | | | | | | | | | |
| gamma-BHC (Lindane) | 0.2 | | | | | | | | | | |
| gamma-Chlordane[d] | 2 | | | | | 0.067 J | | | | | |
| Toxaphene | 3 | | | | | 2.1 J | | | | | |
| **Herbicides (µg/L)** | | | NA | | | NA | | | | NA | |
| 2,4 5-TP (Silvex) | 50 | | | | | | | | | | |
| 2,4-D | 70 | | | 0.0018 J | | | | | | | 0.0035 J |
| 2,4-DB | 56 | | | 0.42 J | | | 0.44 J | 0.33 J | | | 0.17 J |

TABLE 4

HISTORICAL DETECTIONS IN GROUNDWATER
OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

NAVAL TRAINING CENTER
ORLANDO, FLORIDA


| Well Designation | Screening Criteria[a] | | OLD-08-18 | OLD-09-01 | OLD-09-01 | | OLD-09-02 | | | | OLD-09-03 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Florida GCTL[b] | NTC BGSV[c] | NTC08G01811 | 09G00102 | NTC09G00110 | NTC09G00111 | 09G00202 | 09G00202D | NTC09G00210 | NTC09G00211 | 09G00302 |
| Lab ID | | | A9H030166004 | 872936 | F3846-8 | A9H050202002 | 872937 | 872939 | F3846-9 | A9H040126009 | 872938 |
| Sample Date | | | 7/31/99 | 10/20/97 | 3/13/99 | 8/4/99 | 10/20/97 | 10/20/97 | 3/13/99 | 8/3/99 | 10/20/97 |
| **Herbicides (µg/L) (Cont)** | | | NA | | | NA | | | | NA | |
| Dalapon | 200 | | | | | | | | | | |
| Dicamba | | | | | | | | | | | |
| Dichloroprop | 35 | | | | | | | 3.1 J | | | |
| Dinoseb | 7 | | | | | | | | | | |
| MCPA | 3.5 | | | 640 | | | 870 J | 670 J | | | |
| MCPP | 7 | | | | | | 840 J | | | | |
| **Inorganics (µg/L)** | | | | | | | | | | | |
| Aluminum | 200 | 4067 | 1780 | 318 | 102 | | 731 | 781 | 1810 | 2140 J | 471 |
| Antimony | 6 | 4.1 | | | | | | | | | |
| Arsenic | 50 | 5 | | 13.2 | 31.8 J | 34.9 | | | | | |
| Barium | 2000 | 31.4 | 42.8 | 24.5 J | | 53.5 | 1.8 J | 2.4 J | | | 4 J |
| Calcium | * | 36830 | 5910 | 24600 | 119000 | 79900 | 5830 | 6350 | 7500 | 10100 | 10600 |
| Chromium | 100 | 7.8 | | 0.81 J | 15.3 | | 1.3 J | 1.1 J | | | 0.88 J |
| Cobalt | 420 | * | 0.95 | | | | | | | | |
| Copper | 1000 | 5.4 | 2.5 | | | 0.85 | | | | 3.8 | |
| Iron | 300 | 1227 | 3550 | 391 | | 289 | | | | | |
| Lead | 15 | 4 | | | | | | | | | |
| Magnesium | * | 4560 | 1730 | | 10200 | 6640 | | | 1630 | 2240 | |
| Manganese | 50 | 17 | 204 | 6.7 J | 16.1 | | | | | | |
| Mercury | 2 | 0.12 | | | | | | | | | |
| Nickel | 100 | * | | 2.5 J | 7.9 | | | | | 1.6 | |
| Potassium | * | 5400 | 741 | | 12200 | 8180 J | | | 2970 | 2500 J | |
| Selenium | 50 | 9.7 | | | | | | | 3.5 | | |
| Silver | 100 | * | | | | | 1.1 J | | | | |
| Sodium | 160000 | 18222 | 9730 | | 2000 | 2350 | | | 2500 | 5690 | |
| Vanadium | 49 | 20.6 | 6.2 | | | | 0.73 J | 0.73 J | | | |
| Zinc | 5000 | 4 | | | | | | | | 43.6 | |
| **General Chemistry (mg/L)** | | | NA | | NA | NA | | NA | NA | NA | |
| Total Organic Carbon | | | | 37.2 | | | 34.5 | | | | 47.5 |
| Total Suspended Solids | | | | | | | | | | | |

# TABLE 4

## HISTORICAL DETECTIONS IN GROUNDWATER
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| Well Designation | Screening Criteria[a] | | OLD-09-03 | OLD-09-04 | | | | OLD-09-05 | | OLD-09-05 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Florida | NTC | NTC09G00311 | 09F00402 | 09G00402 | NTC09G00410 | NTC09G00411 | 09G00501 | NTC09G00510 | NTC09G00510-D | NTC09G00511 |
| Lab ID | GCTL[b] | BGSV[c] | A9H050202001 | 872971 | 872975 | F3846-10 | A9H050202003 | 872976 | F3849-6 | F3849-7 | A9H040126007 |
| Sample Date | | | 8/4/99 | 10/21/97 | 2/12/98 | 3/13/99 | 8/4/99 | 10/21/97 | 3/15/99 | 3/15/99 | 8/3/99 |
| **Semivolatiles/PAHs (µg/L)** | | | | NA | | | | | | | NA |
| 1-Methylnaphthalene | 20 | | | | NA | NA | 3.9 J | NA | NA | NA | |
| 2,4,6-Trichlorophenol | 3.2 | | | | | | | | | | |
| 2,4-Dichlorophenol | 0.5 | | | | 2 J | | | | | | |
| 2,4-Dimethylphenol | 140 | | | | | | | | | | |
| 2-Methylnaphthalene | 20 | | | | 14 J | | 2 J | | | | |
| 2-Methylphenol | 35 | | | | | | | | | | |
| 2-Nitroaniline | 50 | | | | | | | | | | |
| 4-Methylphenol | 4 | | | | | | | | | | |
| Naphthalene | 20 | | | | 6 J | 3.3 J | 0.96 J | | | | |
| Phenol | 10 | | | | | | | | | | |
| **Pesticides/PCBs (µg/L)** | | | (e) | NA | | (e) | (e) | | (e) | (e) | (e) |
| 4,4'-DDD | 0.1 | | | | 0.088 J | | | 0.029 J | | | |
| 4,4'-DDE | 0.1 | | | | | | | 0.0081 J | | | |
| 4,4'-DDT | 0.1 | | | | | | | | | | |
| Aldrin | 0.005 | | | | 0.051 J | | | | | | |
| alpha-BHC | 0.2 | | | | | | | | | | |
| alpha-Chlordane[d] | 2 | | | | | 0.34 J | | 0.11 J | | | |
| delta-BHC | 2.1 | | | | | | | 0.021 J | | | |
| Dieldrin | 0.005 | | | | | | | | | | |
| Endosulfan I | 42 | | | | 0.094 J | | | | | | |
| Endosulfan II[d] | 42 | | | | | | | | | | |
| Endosulfan Sulfate | * | | | | | | | | | | |
| Endrin | 2 | | | | | | | 0.022 J | | | |
| Endrin Aldehyde | * | | | | | | | | | | |
| gamma-BHC (Lindane) | 0.2 | | | | 0.011 J | | | 0.0076 J | | | |
| gamma-Chlordane[d] | 2 | | | | 0.67 | 0.43 J | | 0.17 | | | |
| Toxaphene | 3 | | | | | | | | | | |
| **Herbicides (µg/L)** | | | NA | NA | | | NA | | | | NA |
| 2,4 5-TP (Silvex) | 50 | | | | | | | | | | |
| 2,4-D | 70 | | | | 0.099 J | | | 0.11 J | | | |
| 2,4-DB | 56 | | | | 1.8 J | | | 0.83 J | | | |

TABLE 4

HISTORICAL DETECTIONS IN GROUNDWATER
OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

NAVAL TRAINING CENTER
ORLANDO, FLORIDA


| Well Designation | Screening Criteria[a] | | OLD-09-03 | OLD-09-04 | | | | OLD-09-05 | | OLD-09-05 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Florida GCTL[b] | NTC BGSV[c] | NTC09G00311 | 09F00402 | 09G00402 | NTC09G00410 | NTC09G00411 | 09G00501 | NTC09G00510 | NTC09G00510-D | NTC09G00511 |
| Lab ID | | | A9H050202001 | 872971 | 872975 | F3846-10 | A9H050202003 | 872976 | F3849-6 | F3849-7 | A9H040126007 |
| Sample Date | | | 8/4/99 | 10/21/97 | 2/12/98 | 3/13/99 | 8/4/99 | 10/21/97 | 3/15/99 | 3/15/99 | 8/3/99 |
| **Herbicides (µg/L) (Cont)** | | | NA | NA | | | NA | | | | NA |
| Dalapon | 200 | | | | | | 9.9 J | | | | |
| Dicamba | | | | | | | | | | | |
| Dichloroprop | 35 | | | | | | | | | | |
| Dinoseb | 7 | | | | 0.098 J | | | | | | |
| MCPA | 3.5 | | | | 3100 J | | | 2900 J | | | |
| MCPP | 7 | | | | 1900 J | | 170 J | 830 J | | | |
| **Inorganics (µg/L)** | | | | | | | | | | | |
| Aluminum | 200 | 4067 | 452 J | 373 | 448 | 176 | | 224 | | | |
| Antimony | 6 | 4.1 | | 3.5 J | | | | | | | 3.1 |
| Arsenic | 50 | 5 | | 232 | 264 | 186 J | 1370 | 61.9 | 152 J | 153 | 175 |
| Barium | 2000 | 31.4 | | 8.6 J | 8.6 J | | 17.8 | 7.6 J | | | 8.8 |
| Calcium | * | 36830 | 11200 | 48000 | 43800 | 41600 | 52100 | 53400 | 62500 J | 64300 J | 94500 |
| Chromium | 100 | 7.8 | | 1.7 J | 1.6 J | | | 1.4 J | | | |
| Cobalt | 420 | * | | 0.75 J | | | | | | | |
| Copper | 1000 | 5.4 | 0.96 | 42.7 | 56 | | 4.2 | | | | |
| Iron | 300 | 1227 | | 1380 | 1260 | 861 | 6350 | 188 | 962 J | 966 J | |
| Lead | 15 | 4 | | 4.2 | 6.1 | | | | 1.6 | 2.1 | |
| Magnesium | * | 4560 | 2230 | | | 2020 | 3000 | | 5080 J | 5210 J | 5870 |
| Manganese | 50 | 17 | | 62.7 | 53.7 | 83.1 | 79.9 | 11.3 J | 27.4 J | 27.8 J | 12 |
| Mercury | 2 | 0.12 | | 0.12 J | 0.11 J | | | | | | |
| Nickel | 100 | * | | 2 J | 2.2 J | | | | | | |
| Potassium | * | 5400 | 3420 J | | | 6680 | 7490 J | | 12100 J | 12000 J | 8570 J |
| Selenium | 50 | 9.7 | | | | | | | | | |
| Silver | 100 | * | | | | | | | | | |
| Sodium | 160000 | 18222 | 2710 | | | 1700 | 1440 | | 3630 | 3910 | 3620 |
| Vanadium | 49 | 20.6 | | 1.5 J | 0.99 J | | | 3.4 J | | | |
| Zinc | 5000 | 4 | | | | | | | | | 55.2 |
| **General Chemistry (mg/L)** | | | NA | NA | | NA | NA | | NA | NA | NA |
| Total Organic Carbon | | | | | 54.6 | | | 33.1 | | | |
| Total Suspended Solids | | | | | | | | | | | |

TABLE 4

HISTORICAL DETECTIONS IN GROUNDWATER
OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

NAVAL TRAINING CENTER
ORLANDO, FLORIDA


| Well Designation | Screening Criteria[a] | | OLD-09-06 | | | | OLD-09-07 | OLD-09-07 | | | OLD-09-08 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Florida GCTL[b] | NTC BGSV[c] | 09F00601 | 09G00601 | NTC09G00610 | NTC09G00611 | 09F00701 | 09G00701 | NTC09G00710 | NTC09G00711 | 09G00801 |
| Lab ID | | | 872655 | 872659 | F3854-1 | A9H040126003 | 872972 | 872977 | F3854-4 | A9H040126001 | 873307 |
| Sample Date | | | 10/17/97 | 10/17/97 | 3/16/99 | 8/3/99 | 10/21/97 | 10/21/97 | 3/16/99 | 8/3/99 | 10/24/97 |
| **Semivolatiles/PAHs (µg/L)** | | | | | | NA | NA | | | NA | |
| 1-Methylnaphthalene | 20 | | | NA | NA | | | NA | NA | | NA |
| 2,4,6-Trichlorophenol | 3.2 | | | | | | | | | | |
| 2,4-Dichlorophenol | 0.5 | | | | | | | | | | |
| 2,4-Dimethylphenol | 140 | | | | | | | | | | |
| 2-Methylnaphthalene | 20 | | | | | | | | | | |
| 2-Methylphenol | 35 | | | | | | | | | | |
| 2-Nitroaniline | 50 | | | | | | | | | | |
| 4-Methylphenol | 4 | | | | | | | | | | |
| Naphthalene | 20 | | | | | | | | | | |
| Phenol | 10 | | | | | | | | | | |
| **Pesticides/PCBs (µg/L)** | | | NA | | (e) | (e) | NA | | (e) | (e) | |
| 4,4'-DDD | 0.1 | | | | | | | | | | |
| 4,4'-DDE | 0.1 | | | | | | | | | | |
| 4,4'-DDT | 0.1 | | | 0.0067 J | | | | | | | |
| Aldrin | 0.005 | | | | | | | | | | |
| alpha-BHC | 0.2 | | | | | | | | | | |
| alpha-Chlordane[d] | 2 | | | | | | | | | | |
| delta-BHC | 2.1 | | | | | | | | | | |
| Dieldrin | 0.005 | | | 0.012 J | | | | | | | |
| Endosulfan I | 42 | | | | | | | | | | |
| Endosulfan II[d] | 42 | | | 0.0093 J | | | | | | | |
| Endosulfan Sulfate | * | | | | | | | | | | |
| Endrin | 2 | | | 0.019 J | | | | | | | |
| Endrin Aldehyde | * | | | | | | | | | | |
| gamma-BHC (Lindane) | 0.2 | | | | | | | | | | |
| gamma-Chlordane[d] | 2 | | | 0.03 J | | | | | | | |
| Toxaphene | 3 | | | | | | | | | | |
| **Herbicides (µg/L)** | | | NA | | | | NA | | | NA | |
| 2,4 5-TP (Silvex) | 50 | | | | | | | | | | |
| 2,4-D | 70 | | | 0.9 J | | | | 0.0047 J | | | 0.21 J |
| 2,4-DB | 56 | | | | | | | 0.18 J | | | |

# TABLE 4

## HISTORICAL DETECTIONS IN GROUNDWATER
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| Well Designation | Screening Criteria[a] | | OLD-09-06 | | | | OLD-09-07 | OLD-09-07 | | | OLD-09-08 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Florida GCTL[b] | NTC BGSV[c] | 09F00601 | 09G00601 | NTC09G00610 | NTC09G00611 | 09F00701 | 09G00701 | NTC09G00710 | NTC09G00711 | 09G00801 |
| Lab ID | | | 872655 | 872659 | F3854-1 | A9H040126003 | 872972 | 872977 | F3854-4 | A9H040126001 | 873307 |
| Sample Date | | | 10/17/97 | 10/17/97 | 3/16/99 | 8/3/99 | 10/21/97 | 10/21/97 | 3/16/99 | 8/3/99 | 10/24/97 |
| **Herbicides (µg/L) (Cont)** | | | NA | | | | NA | | | NA | |
| Dalapon | 200 | | | | | | | | | | |
| Dicamba | | | | | | | | | | 0.87 J | |
| Dichloroprop | 35 | | | | | | | | | | 0.59 J |
| Dinoseb | 7 | | | | | | | | | | |
| MCPA | 3.5 | | | | | | | | | | |
| MCPP | 7 | | | | | | | 1100 J | | 910 J | |
| **Inorganics (µg/L)** | | | | | | | | | | | |
| Aluminum | 200 | 4067 | | 538 | 797 | | 1600 | 2040 | 1500 | 1180 J | 290 |
| Antimony | 6 | 4.1 | 5.1 J | | | | | | | | |
| Arsenic | 50 | 5 | 61.5 | 53 | 54.6 | 181 | | | | 5.3 | |
| Barium | 2000 | 31.4 | 13.7 J | 9.5 J | | 11 | 11.5 J | 13.8 J | | | 12.5 J |
| Calcium | * | 36830 | 53400 | 55000 | 21000 J | 62600 | | | 10200 J | 10200 | 17900 |
| Chromium | 100 | 7.8 | 0.85 J | 1 J | | | 2.6 J | 3.7 J | | 8.6 | |
| Cobalt | 420 | * | 1.5 J | | | | | 1.1 J | | | |
| Copper | 1000 | 5.4 | 6.3 J | | | | | | | 5.1 | 0.76 J |
| Iron | 300 | 1227 | 740 | 638 | 1120 J | 465 | 1640 | 1870 | 1840 J | | 1000 |
| Lead | 15 | 4 | | | | | | | | | |
| Magnesium | * | 4560 | | | 2360 J | 3090 | | | 1760 J | 1110 | |
| Manganese | 50 | 17 | 39 | 32.9 | 39.6 J | 35.4 | 38.4 | 48.9 | 19.7 J | | 63.8 |
| Mercury | 2 | 0.12 | | | | | | | | | |
| Nickel | 100 | * | 2.7 J | | | | 4.9 J | 5.4 J | | 5.8 | |
| Potassium | * | 5400 | | | 2820 | 3010 J | | | 2360 | 588 J | |
| Selenium | 50 | 9.7 | | | | | | | | | |
| Silver | 100 | * | 0.95 J | | | | | | | | |
| Sodium | 160000 | 18222 | | | 2740 | 2340 | | | 3950 | 6340 | |
| Vanadium | 49 | 20.6 | 1.7 J | 0.86 J | | | 0.8 J | 1.3 J | | | 0.91 J |
| Zinc | 5000 | 4 | | | | | | | | 70.4 | |
| **General Chemistry (mg/L)** | | | NA | | NA | NA | NA | | NA | NA | |
| Total Organic Carbon | | | | 24.3 | | | | 41.1 | | | 47.8 |
| Total Suspended Solids | | | | 20 | | | | | | | |

TABLE 4

HISTORICAL DETECTIONS IN GROUNDWATER
OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

NAVAL TRAINING CENTER
ORLANDO, FLORIDA



| Well Designation | Screening Criteria[a] | | OLD-09-09 | OLD-09-10 | | OLD-09-10 | OLD-09-11 | | | | OLD-09-12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Florida GCTL[b] | NTC BGSV[c] | 09G00901 | 09G01001 | NTC09G01010 | NTC09G01011 | 09G01101 | NTC09G01110 | NTC09G01111 | NTC09G01111-D | 09G01201 |
| Lab ID | | | 873310 | 872978 | F3849-5 | A9H040126008 | 872979 | F3854-5 | A9H040126004 | A9H040126005 | 872980 |
| Sample Date | | | 10/24/97 | 10/21/97 | 3/15/99 | 8/3/99 | 10/21/97 | 3/16/99 | 8/3/99 | 8/3/99 | 10/21/97 |
| **Semivolatiles/PAHs (µg/L)** | | | | | | NA | | | NA | NA | |
| 1-Methylnaphthalene | 20 | | NA | NA | NA | | NA | NA | | | NA |
| 2,4,6-Trichlorophenol | 3.2 | | | | | | | | | | 2 J |
| 2,4-Dichlorophenol | 0.5 | | | | | | | | | | 200 |
| 2,4-Dimethylphenol | 140 | | | | | | | | | | |
| 2-Methylnaphthalene | 20 | | | | | | | | | | |
| 2-Methylphenol | 35 | | | | | | | | | | |
| 2-Nitroaniline | 50 | | | | | | | | | | |
| 4-Methylphenol | 4 | | | | | | | | | | |
| Naphthalene | 20 | | | | | | | | | | 8 J |
| Phenol | 10 | | | | | | | | | | |
| **Pesticides/PCBs (µg/L)** | | | | | (e) | (e) | | (e) | (e) | (e) | |
| 4,4'-DDD | 0.1 | | | | | | | | | | |
| 4,4'-DDE | 0.1 | | | | | | 0.0051 J | | | | |
| 4,4'-DDT | 0.1 | | | | | | 0.0092 J | | | | |
| Aldrin | 0.005 | | | | | | | | | | |
| alpha-BHC | 0.2 | | | | | | 0.0042 J | | | | 1 J |
| alpha-Chlordane[d] | 2 | | | | | | | | | 0.3 J | 0.028 J |
| delta-BHC | 2.1 | | | | | | | | | | 0.3 |
| Dieldrin | 0.005 | | | | | | | | | | |
| Endosulfan I | 42 | | | | | | | | | | 0.046 J |
| Endosulfan II[d] | 42 | | | | | | | | | | |
| Endosulfan Sulfate | * | | | | | | | | | | |
| Endrin | 2 | | | | | | | | | | |
| Endrin Aldehyde | * | | | | | | 0.078 J | | | | |
| gamma-BHC (Lindane) | 0.2 | | | | | | 0.034 J | 0.40 | 0.18 J | 0.19 J | 0.09 |
| gamma-Chlordane[d] | 2 | | | | | | | | | 0.21 J | 0.013 J |
| Toxaphene | 3 | | | | | | | | | | |
| **Herbicides (µg/L)** | | | | | | NA | | | NA | NA | |
| 2,4 5-TP (Silvex) | 50 | | | | | | | | | | |
| 2,4-D | 70 | | 0.24 J | | | | 1.4 J | | | | 110 J |
| 2,4-DB | 56 | | | 0.14 J | | | 1 J | | | | |

# TABLE 4

## HISTORICAL DETECTIONS IN GROUNDWATER
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| Well Designation | Screening Criteria[a] | | OLD-09-09 | OLD-09-10 | | OLD-09-10 | OLD-09-11 | | | | OLD-09-12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Florida GCTL[b] | NTC BGSV[c] | 09G00901 | 09G01001 | NTC09G01010 | NTC09G01011 | 09G01101 | NTC09G01110 | NTC09G01111 | NTC09G01111-D | 09G01201 |
| Lab ID | | | 873310 | 872978 | F3849-5 | A9H040126008 | 872979 | F3854-5 | A9H040126004 | A9H040126005 | 872980 |
| Sample Date | | | 10/24/97 | 10/21/97 | 3/15/99 | 8/3/99 | 10/21/97 | 3/16/99 | 8/3/99 | 8/3/99 | 10/21/97 |
| **Herbicides (µg/L) (Cont)** | | | | | | NA | | | NA | NA | |
| Dalapon | 200 | | | | | | | | | | |
| Dicamba | | | | | | | | | | | |
| Dichloroprop | 35 | | 0.37 J | | | | | | | | |
| Dinoseb | 7 | | 0.099 J | | | | | | | | |
| MCPA | 3.5 | | | | | | | | | | 750 J |
| MCPP | 7 | | | | | | 1200 J | | | | 1500 J |
| **Inorganics (µg/L)** | | | | | | | | | | | |
| Aluminum | 200 | 4067 | 243 | 212 | 502 | | 539 | | | | 1030 |
| Antimony | 6 | 4.1 | 3.5 J | | | | | | 2.7 | 4 | |
| Arsenic | 50 | 5 | | | | | 93.9 | 71.5 | 180 | 180 | 138 |
| Barium | 2000 | 31.4 | | 5.4 J | | | 6.8 J | | 18.1 | 18 | 10.3 J |
| Calcium | * | 36830 | 31100 | 33700 | 23900 J | 44700 | 36900 | 32100 J | 55000 | 54700 | 11700 |
| Chromium | 100 | 7.8 | | 0.91 J | | | 1 J | 43.6 | 11.4 | | 3.3 J |
| Cobalt | 420 | * | 1 J | | | | | | | | |
| Copper | 1000 | 5.4 | 2.6 J | | | | | | | | 6.1 J |
| Iron | 300 | 1227 | 200 | 1030 | 959 J | 570 | 570 | 1620 J | 1490 | 1420 | 540 |
| Lead | 15 | 4 | | | | | | | | | 1.9 J |
| Magnesium | * | 4560 | | | 2690 J | 2960 | | 2100 J | 2740 | 2720 | |
| Manganese | 50 | 17 | 3 J | 16.7 | 18.5 J | 17.4 | 11.6 J | 121 J | 22.3 | 21.5 | 24.9 |
| Mercury | 2 | 0.12 | | | | | | | | | |
| Nickel | 100 | * | | | | | | 24.2 | 9.2 | | 3.4 J |
| Potassium | * | 5400 | | | 3000 J | 2100 J | | 6230 | 9220 J | 9320 J | |
| Selenium | 50 | 9.7 | | | | | | | | | |
| Silver | 100 | * | | | | | | | | | |
| Sodium | 160000 | 18222 | | | 2880 | 4020 | | 2940 | 1240 | 1320 | |
| Vanadium | 49 | 20.6 | 1.8 J | | | | | | | | 0.79 J |
| Zinc | 5000 | 4 | | | | 43.8 | | | | | |
| **General Chemistry (mg/L)** | | | | | NA | NA | | NA | NA | NA | |
| Total Organic Carbon | | | 62.3 | 28 | | | 36 | | | | 38.5 |
| Total Suspended Solids | | | | | | | 28 | | | | |

TABLE 4

HISTORICAL DETECTIONS IN GROUNDWATER
OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

NAVAL TRAINING CENTER
ORLANDO, FLORIDA


| Well Designation | Screening Criteria[a] | | OLD-09-12 | | | | OLD-09-13 | | OLD-09-14 | | OLD-09-14 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Florida | NTC | NTC09G01210 | NTC09G01210-D | NTC09G01211 | NTC09G01211-D | 09G01301 | NTC09G01310 | 09G01401 | 09G01401D | NTC09G01410 |
| Lab ID | GCTL[b] | BGSV[c] | F3854-6 | F3854-7 | A9H030173002 | A9H030173004 | 872981 | F3854-3 | 876803 | 876821 | F3849-4 |
| Sample Date | | | 3/16/99 | 3/16/99 | 8/2/99 | 8/2/99 | 10/21/97 | 3/16/99 | 12/4/97 | 12/4/97 | 3/15/99 |
| **Semivolatiles/PAHs (µg/L)** | | | | | | | | | | | |
| 1-Methylnaphthalene | 20 | | NA | NA | | | NA | NA | | | NA |
| 2,4,6-Trichlorophenol | 3.2 | | | | | | | | | | |
| 2,4-Dichlorophenol | 0.5 | | 13.2 | 13.3 | 45 | 30 | | | | | |
| 2,4-Dimethylphenol | 140 | | | | | | | | | | |
| 2-Methylnaphthalene | 20 | | | | | | | | | | |
| 2-Methylphenol | 35 | | | | | | | | | | |
| 2-Nitroaniline | 50 | | | | | | | | | | |
| 4-Methylphenol | 4 | | | | | | | | | | |
| Naphthalene | 20 | | 4.3 J | 3.7 J | 2.4 | 2.4 | 2 J | | 160 D | | 57.5 |
| Phenol | 10 | | | | | | | | | | |
| **Pesticides/PCBs (µg/L)** | | | (e) | (e) | (e) | (e) | | (e) | | | (e) |
| 4,4'-DDD | 0.1 | | | | | | | | | | |
| 4,4'-DDE | 0.1 | | | | | | | | | | |
| 4,4'-DDT | 0.1 | | | | | | | | | | |
| Aldrin | 0.005 | | | | | | | | | | |
| alpha-BHC | 0.2 | | 2.1 | 2.3 | 2.5 J | | | | | | |
| alpha-Chlordane[d] | 2 | | | | | | | | | | |
| delta-BHC | 2.1 | | | | | | | | | | |
| Dieldrin | 0.005 | | | | | | | | | | |
| Endosulfan I | 42 | | | | | | | | | | |
| Endosulfan II[d] | 42 | | | | | | | | | | |
| Endosulfan Sulfate | * | | | | | | | | | | |
| Endrin | 2 | | | | | | | | | | |
| Endrin Aldehyde | * | | | | | | | | | | |
| gamma-BHC (Lindane) | 0.2 | | 3.0 | 3.2 | 1.9 J | 1.7 J | | | | | |
| gamma-Chlordane[d] | 2 | | | | | | | | | | |
| Toxaphene | 3 | | | | | | | | | | |
| **Herbicides (µg/L)** | | | NA | | | | | | | | |
| 2,4 5-TP (Silvex) | 50 | | | | 1.6 J | 1.5 J | | | | | |
| 2,4-D | 70 | | | | 33 J | 31 J | 0.0012 J | | 0.26 J | | |
| 2,4-DB | 56 | | | | | | 0.38 J | | 0.21 J | | |

# TABLE 4

## HISTORICAL DETECTIONS IN GROUNDWATER
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| Well Designation | Screening Criteria[a] | | OLD-09-12 | | | | OLD-09-13 | | OLD-09-14 | | OLD-09-14 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Florida GCTL[b] | NTC BGSV[c] | NTC09G01210 | NTC09G01210-D | NTC09G01211 | NTC09G01211-D | 09G01301 | NTC09G01310 | 09G01401 | 09G01401D | NTC09G01410 |
| Lab ID | | | F3854-6 | F3854-7 | A9H030173002 | A9H030173004 | 872981 | F3854-3 | 876803 | 876821 | F3849-4 |
| Sample Date | | | 3/16/99 | 3/16/99 | 8/2/99 | 8/2/99 | 10/21/97 | 3/16/99 | 12/4/97 | 12/4/97 | 3/15/99 |
| **Herbicides (µg/L) (Cont)** | | | NA | | | | | | | | |
| Dalapon | 200 | | | | | 21 J | | | | | |
| Dicamba | | | | | | | | | | | |
| Dichloroprop | 35 | | | | | | | | | | |
| Dinoseb | 7 | | | | | | | | | | |
| MCPA | 3.5 | | | | | | | | 890 J | 840 J | |
| MCPP | 7 | | | | 190 J | 220 J | | | | | |
| **Inorganics (µg/L)** | | | | | | | | | | | |
| Aluminum | 200 | 4067 | 1830 | 1340 | 1040 J | 1710 J | 353 | 536 | 315 | 294 | 448 |
| Antimony | 6 | 4.1 | | | | | | | | | |
| Arsenic | 50 | 5 | 135 | 136 | 141 | 147 | | | | | |
| Barium | 2000 | 31.4 | | | 9.1 | 13.1 | 19.7 J | | 47.2 J | 38 J | |
| Calcium | * | 36830 | 15700 J | 15700 J | 15900 | 16500 | | | 105000 | 80800 | 12900 J |
| Chromium | 100 | 7.8 | | | | | 1.3 J | | | | |
| Cobalt | 420 | * | | | | | 0.88 J | | 1.7 J | 2.1 J | |
| Copper | 1000 | 5.4 | | | | 3.5 | | | 4.5 J | 5.6 J | |
| Iron | 300 | 1227 | 1390 J | 786 J | 629 | 762 | 2400 | 741 J | 430 | 451 | |
| Lead | 15 | 4 | | | | | | | | | 1.6 |
| Magnesium | * | 4560 | 2340 J | 2340 J | 2220 | 2280 | | 882 J | 9780 | 7410 | 1230 J |
| Manganese | 50 | 17 | 19.0 J | 20.9 J | 8.3 | 10.2 | 82.9 | 29.4 J | 159 | 146 | 27.6 J |
| Mercury | 2 | 0.12 | | | | | | | | | |
| Nickel | 100 | * | | | | | 3.5 J | | 9.9 J | 9.4 J | |
| Potassium | * | 5400 | 11100 | 11400 | 13200 J | 13200 J | | | | | |
| Selenium | 50 | 9.7 | | | | | | | | | |
| Silver | 100 | * | | | | | | | | | |
| Sodium | 160000 | 18222 | 2560 | 2510 | 2320 | 5850 | | 7400 | | | 5050 |
| Vanadium | 49 | 20.6 | | | | | 1.3 J | | 1.6 J | 1.6 J | |
| Zinc | 5000 | 4 | | | 75.5 | 92 | | | | | |
| **General Chemistry (mg/L)** | | | NA | NA | NA | NA | | NA | | NA | NA |
| Total Organic Carbon | | | | | | | 10.1 | | 21.2 | | |
| Total Suspended Solids | | | | | | | | | 7 | | |

# TABLE 4

## HISTORICAL DETECTIONS IN GROUNDWATER
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| Well Designation | Screening Criteria[a] | | OLD-09-14 | OLD-09-15 | | | | OLD-09-16 | OLD-09-16 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Florida | NTC | NTC09G01411 | 09F01501 | 09G01501 | NTC09G01510 | NTC09G01511 | 09F01601 | 09G01601 | NTC09G01610 | NTC09G01611 |
| Lab ID | GCTL[b] | BGSV[c] | A9H030173001 | 876945 | 876940 | F3846-5 | A9H030173003 | 876946 | 876941 | F3846-6 | A9H040126006 |
| Sample Date | | | 8/1/99 | 12/5/97 | 12/5/97 | 3/13/99 | 8/2/99 | 12/5/97 | 12/5/97 | 3/13/99 | 8/3/99 |
| **Semivolatiles/PAHs (µg/L)** | | | | NA | | | | NA | | | NA |
| 1-Methylnaphthalene | 20 | | | | | NA | | | NA | NA | |
| 2,4,6-Trichlorophenol | 3.2 | | | | | | | | | | |
| 2,4-Dichlorophenol | 0.5 | | | | | | | | | | |
| 2,4-Dimethylphenol | 140 | | | | | | | | | | |
| 2-Methylnaphthalene | 20 | | | | | | | | | | |
| 2-Methylphenol | 35 | | | | | | | | | | |
| 2-Nitroaniline | 50 | | | | | | | | | | |
| 4-Methylphenol | 4 | | | | | | | | | | |
| Naphthalene | 20 | | 2.1 | | 5 J | 11.2 | 6.7 J | | | | |
| Phenol | 10 | | | | | | | | | | |
| **Pesticides/PCBs (µg/L)** | | | (e) | NA | | (e) | (e) | NA | | (e) | (e) |
| 4,4'-DDD | 0.1 | | | | | | | | | | |
| 4,4'-DDE | 0.1 | | | | | | | | | | |
| 4,4'-DDT | 0.1 | | | | | | | | | | |
| Aldrin | 0.005 | | | | | | | | | | |
| alpha-BHC | 0.2 | | | | | | | | | | |
| alpha-Chlordane[d] | 2 | | | | | | | | | | |
| delta-BHC | 2.1 | | | | | | | | | | |
| Dieldrin | 0.005 | | | | | | | | | | |
| Endosulfan I | 42 | | | | | | | | | | |
| Endosulfan II[d] | 42 | | | | 0.0075 J | | | | | | |
| Endosulfan Sulfate | * | | | | | | | | | | |
| Endrin | 2 | | | | | | | | | | |
| Endrin Aldehyde | * | | | | | | | | | | |
| gamma-BHC (Lindane) | 0.2 | | | | | | | | | | |
| gamma-Chlordane[d] | 2 | | | | | | | | | | |
| Toxaphene | 3 | | | | | | | | | | |
| **Herbicides (µg/L)** | | | | NA | | | | NA | | | |
| 2,4 5-TP (Silvex) | 50 | | | | | | | | | | |
| 2,4-D | 70 | | | | 0.068 J | | | | | | |
| 2,4-DB | 56 | | | | 0.18 J | | | | 0.31 J | | |

# TABLE 4

## HISTORICAL DETECTIONS IN GROUNDWATER
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| Well Designation | Screening Criteria[a] | | OLD-09-14 | OLD-09-15 | | | | OLD-09-16 | OLD-09-16 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Florida GCTL[b] | NTC BGSV[c] | NTC09G01411 | 09F01501 | 09G01501 | NTC09G01510 | NTC09G01511 | 09F01601 | 09G01601 | NTC09G01610 | NTC09G01611 |
| Lab ID | | | A9H030173001 | 876945 | 876940 | F3846-5 | A9H030173003 | 876946 | 876941 | F3846-6 | A9H040126006 |
| Sample Date | | | 8/1/99 | 12/5/97 | 12/5/97 | 3/13/99 | 8/2/99 | 12/5/97 | 12/5/97 | 3/13/99 | 8/3/99 |
| **Herbicides (µg/L) (Cont)** | | | | NA | | | | NA | | | |
| Dalapon | 200 | | | | | | | | | | |
| Dicamba | | | | | | | | | | | |
| Dichloroprop | 35 | | | | 0.42 J | | | | 0.36 J | | |
| Dinoseb | 7 | | | | | | | | 0.12 J | | |
| MCPA | 3.5 | | | | | | | | 920 J | | |
| MCPP | 7 | | | | | | | | 0.36 J | | |
| **Inorganics (µg/L)** | | | | | | | | | | | |
| Aluminum | 200 | 4067 | | 872 | 3260 | 470 | | 405 | 1840 | 443 | 1670 J |
| Antimony | 6 | 4.1 | | | | | | | | | |
| Arsenic | 50 | 5 | | | | | | 2.4 J | 2.2 J | | |
| Barium | 2000 | 31.4 | 18.1 | 13.3 J | 18.3 J | | | 10.5 J | 17.8 J | | 22.3 |
| Calcium | * | 36830 | 45800 | 8060 | 9800 | | | 13100 | 15000 | 5740 | 8250 |
| Chromium | 100 | 7.8 | | | | | | | | | |
| Cobalt | 420 | * | | 0.63 J | 0.8 J | | | 0.75 J | 0.55 J | | |
| Copper | 1000 | 5.4 | | 4.4 J | 7.2 J | | | 4 J | 5.1 J | | 2.6 |
| Iron | 300 | 1227 | | 284 | 374 | | | | 249 | 1320 | 637 |
| Lead | 15 | 4 | | | 2.8 J | | | | | | |
| Magnesium | * | 4560 | 4620 | | | 807 | | | | 750 | 1220 |
| Manganese | 50 | 17 | | 46.4 | 55.7 | 9.7 | | 44.5 | 70.6 | 68.0 | 41.5 |
| Mercury | 2 | 0.12 | | | | | | | | | |
| Nickel | 100 | * | 5 | 5.6 J | 7.5 J | | | 3 J | 5.1 J | | 2.8 |
| Potassium | * | 5400 | 574 J | | | | | | | 584 | 586 J |
| Selenium | 50 | 9.7 | | | | | | | | | |
| Silver | 100 | * | | | | | | | | | |
| Sodium | 160000 | 18222 | 32200 | 7890 | | 6970 | 5320 | | | 9040 | 12000 |
| Vanadium | 49 | 20.6 | | 0.93 J | 1.9 J | | | 3.1 J | 5.1 J | | |
| Zinc | 5000 | 4 | | | | | | | | | 41.5 |
| **General Chemistry (mg/L)** | | | NA | NA | | NA | NA | NA | | NA | NA |
| Total Organic Carbon | | | | | 25.3 | | | | 22 | | |
| Total Suspended Solids | | | | | 58 | | | | 4 | | |

# TABLE 4

## HISTORICAL DETECTIONS IN GROUNDWATER
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| Well Designation | Screening Criteria[a] | | OLD-09-17 | | OLD-09-18 | | OLD-09-18 | OLD-09-19 |
|---|---|---|---|---|---|---|---|---|
| Sample ID | Florida GCTL[b] | NTC BGSV[c] | 09G01701 | NTC09G01711 | 09G01801 | 09G01801D | NTC09G01810 | NTC09G01911 |
| Lab ID | | | 882644 | A9H040126002 | 882638 | 882641 | F3854-2 | A9H050202004 |
| Sample Date | | | 2/12/98 | 8/3/99 | 2/12/98 | 2/12/98 | 3/16/99 | 8/4/99 |
| **Semivolatiles/PAHs (µg/L)** | | | NA | NA | NA | NA | | |
| 1-Methylnaphthalene | 20 | | | | | | NA | |
| 2,4,6-Trichlorophenol | 3.2 | | | | | | | |
| 2,4-Dichlorophenol | 0.5 | | | | | | | |
| 2,4-Dimethylphenol | 140 | | | | | | | |
| 2-Methylnaphthalene | 20 | | | | | | | |
| 2-Methylphenol | 35 | | | | | | | |
| 2-Nitroaniline | 50 | | | | | | | |
| 4-Methylphenol | 4 | | | | | | | |
| Naphthalene | 20 | | | | | | | |
| Phenol | 10 | | | | | | | |
| **Pesticides/PCBs (µg/L)** | | | NA | (e) | NA | NA | (e) | (e) |
| 4,4'-DDD | 0.1 | | | | | | | |
| 4,4'-DDE | 0.1 | | | | | | | |
| 4,4'-DDT | 0.1 | | | | | | | |
| Aldrin | 0.005 | | | | | | | |
| alpha-BHC | 0.2 | | | | | | | |
| alpha-Chlordane[d] | 2 | | | | | | | |
| delta-BHC | 2.1 | | | | | | | |
| Dieldrin | 0.005 | | | | | | | |
| Endosulfan I | 42 | | | | | | | |
| Endosulfan II[d] | 42 | | | | | | | |
| Endosulfan Sulfate | * | | | | | | | |
| Endrin | 2 | | | | | | | |
| Endrin Aldehyde | * | | | | | | | |
| gamma-BHC (Lindane) | 0.2 | | | | | | | |
| gamma-Chlordane[d] | 2 | | | | | | | |
| Toxaphene | 3 | | | | | | | |
| **Herbicides (µg/L)** | | | | | | | | |
| 2,4 5-TP (Silvex) | 50 | | | | | | | |
| 2,4-D | 70 | | 0.32 J | | | | | |
| 2,4-DB | 56 | | 0.55 J | | | | | |

# TABLE 4

## HISTORICAL DETECTIONS IN GROUNDWATER
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| Well Designation | Screening Criteria[a] | | OLD-09-17 | | OLD-09-18 | | OLD-09-18 | OLD-09-19 |
|---|---|---|---|---|---|---|---|---|
| Sample ID | Florida GCTL[b] | NTC BGSV[c] | 09G01701 | NTC09G01711 | 09G01801 | 09G01801D | NTC09G01810 | NTC09G01911 |
| Lab ID | | | 882644 | A9H040126002 | 882638 | 882641 | F3854-2 | A9H050202004 |
| Sample Date | | | 2/12/98 | 8/3/99 | 2/12/98 | 2/12/98 | 3/16/99 | 8/4/99 |
| **Herbicides (µg/L) (Cont)** | | | | | | | | |
| Dalapon | 200 | | 0.69 J | | 0.3 J | | | |
| Dicamba | | | | | | | | |
| Dichloroprop | 35 | | 0.29 J | | 0.24 J | 0.12 J | | |
| Dinoseb | 7 | | | | | | | |
| MCPA | 3.5 | | 880 J | | 630 J | 460 J | | |
| MCPP | 7 | | | | | | | |
| **Inorganics (µg/L)** | | | | | | | | |
| Aluminum | 200 | 4067 | 349 | | 567 | 667 | 2180 | 7740 J |
| Antimony | 6 | 4.1 | | | | | | 17.7 |
| Arsenic | 50 | 5 | 4.3 J | 8.3 | | | | |
| Barium | 2000 | 31.4 | | | 20.8 J | 23.4 J | | 51.5 |
| Calcium | * | 36830 | | 42500 | | | | 51600 |
| Chromium | 100 | 7.8 | | | 1.5 J | 1.9 J | | 3.4 |
| Cobalt | 420 | * | | | | | | |
| Copper | 1000 | 5.4 | | 1.3 | | | | 6.6 |
| Iron | 300 | 1227 | 53.6 J | | 4680 | 5490 | 753 J | 1290 |
| Lead | 15 | 4 | | | | | | |
| Magnesium | * | 4560 | | | | | 997 J | 1660 |
| Manganese | 50 | 17 | | | | | | |
| Mercury | 2 | 0.12 | | | | | | |
| Nickel | 100 | * | 1.4 J | 1.7 | | | | |
| Potassium | * | 5400 | | 2950 J | | | | |
| Selenium | 50 | 9.7 | | | | | | |
| Silver | 100 | * | | | | | | |
| Sodium | 160000 | 18222 | | 1300 | | | 7670 | 8260 |
| Vanadium | 49 | 20.6 | 4.3 J | 8.9 | 1.6 J | 1.6 J | | |
| Zinc | 5000 | 4 | | | | | | |
| **General Chemistry (mg/L)** | | | NA | NA | | | NA | NA |
| Total Organic Carbon | | | | | 7.05 | 5.94 | | |
| Total Suspended Solids | | | | | | | | |

**TABLE 4**

**HISTORICAL DETECTIONS IN GROUNDWATER**
**OPERABLE UNIT 3 – STUDY AREAS 8 AND 9**

**NAVAL TRAINING CENTER**
**ORLANDO, FLORIDA**


Notes:

* Indicates that the screening value is not available.
"D" qualifier indicates the reported value is from a dilution.
"J" qualifier indicates an estimated value.
Empty cells indicate non-detects.
NA Not analyzed.
Only chemicals detected in at least one sample are shown.
Values in shaded cells exceed the screening criteria.

(a) For an organic analyte, the screening criterion is the GCTL; for an inorganic analyte with an established GCTL and BGSV, the screening criterion is the greater of the GCTL or the BGSV.
(b) Groundwater Cleanup Target Level (Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-777, F.A.C., May 26, 1999).
(c) Background Screening Value (Background Sampling Report for NTC, Orlando, Florida; ABB Environmental Services, August 1995) for inorganics only.
(d) Screening Criteria Substitution – Chlordane for alpha-Chlordane and gamma-Chlordane, and Endosulfan for Endosulfan II.
(e) PCBs not analyzed for.

# TABLE 5

## VALIDATED GROUNDWATER ANALYTICAL RESULTS - JULY/AUGUST 1999
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| WELL DESIGNATION | | Screening Criteria [a] | | OLD-08-01 | OLD-08-02 | OLD-08-03 | OLD-08-04 | OLD-08-05 | OLD-08-06 | OLD-08-08 | OLD-08-10 | OLD-08-11 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | CAS Number | Florida GCTL[b] | NTC BGSV [c] | NTC08G00111 | NTC08G00211 | NTC08G00311 | NTC08G00411 | NTC08G00511 | NTC08G00611 | NTC08G00811 | NTC08G01011 | NTC08G01111 |
| LAB ID | | | | A9G290198006 | A9G290198009 | A9G290198008 | A9G290198007 | A9G300236003 | A9G300236004 | A9H030166007 | A9H020124009 | A9H020124010 |
| SAMPLE DATE | | | | 7/28/99 | 7/28/99 | 7/28/99 | 7/28/99 | 7/29/99 | 7/29/99 | 8/1/99 | 7/30/99 | 7/30/99 |
| **Semivolatiles (µg/L)** | | | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | 70 | | | | | | | | | | |
| 1,2-Dichlorobenzene | 95-50-1 | 600 | | | | | | | | | | |
| 1,3-Dichlorobenzene | 541-73-1 | 10 | | | | | | | | | | |
| 1,4-Dichlorobenzene | 106-46-7 | 75 | | | | | | | | | | |
| 2,2'-Oxybis (1-Chloropropane) | 108-60-1 | 10 | | | | | | | | | | |
| 2,4,5-Trichlorophenol | 95-95-4 | 4 | | | | | | | | | | |
| 2,4,6-Trichlorophenol | 88-06-2 | 3.2 | | | | | | | | | | |
| 2,4-Dichlorophenol | 120-83-2 | 0.5 | | | | | | | | | | |
| 2,4-Dimethylphenol | 105-67-9 | 140 | | | | | | | | | | |
| 2,4-Dinitrophenol | 51-28-5 | 14 | | | | | | | | | | |
| 2,4-Dinitrotoluene | 121-14-2 | 0.1 | | | | | | | | | | |
| 2,6-Dinitrotoluene | 606-20-2 | 0.1 | | | | | | | | | | |
| 2-Chloronaphthalene | 91-58-7 | 560 | | | | | | | | | | |
| 2-Chlorophenol | 95-57-8 | 35 | | | | | | | | | | |
| 2-Methylnaphthalene | 91-57-6 | 20 | | | | | | | | | | |
| 2-Methylphenol | 95-48-7 | 35 | | | | | | | | | | |
| 2-Nitroaniline | 88-74-4 | 50 | | | | | | | | | | |
| 2-Nitrophenol | 88-75-5 | * | | | | | | | | | | |
| 3,3'-Dichlorobenzidine | 91-94-1 | 12 | | | | | | | | | | |
| 3-Nitroaniline | 99-09-2 | 50 | | | | | | | | | | |
| 4,6-Dinitro-2-Methylphenol | 534-52-1 | * | | | | | | | | | | |
| 4-Bromophenyl Phenyl Ether | 101-55-3 | 406 | | | | | | | | | | |
| 4-Chloro-3-Methylphenol | 59-50-7 | 63 | | | | | | | | | | |
| 4-Chloroaniline | 106-47-8 | 28 | | | | | | | | | | |
| 4-Chlorophenyl Phenyl Ether | 7005-72-3 | * | | | | | | | | | | |
| 4-Methylphenol | 106-44-5 | 4 | | | | | | | | | | |
| 4-Nitroaniline | 100-01-6 | 21 | | | | | | | | | | |
| 4-Nitrophenol | 100-02-7 | 56 | | | | | | | | | | |
| Bis(2-Chloroethoxy)Methane | 111-91-1 | * | | | | | | | | | | |
| Bis(2-Chloroethyl)Ether | 111-44-4 | 4 | | | | | | | | | | |
| Bis(2-Ethylhexyl)Phthalate | 117-81-7 | 6 | | | | | | | | | | |
| Butylbenzyl Phthalate | 85-68-7 | 140 | | | | | | | | | | |
| Carbazole | 86-74-8 | 4 | | | | | | | | | | |

# TABLE 5

## VALIDATED GROUNDWATER ANALYTICAL RESULTS - JULY/AUGUST 1999
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| WELL DESIGNATION | | Screening Criteria [a] | | OLD-08-01 | OLD-08-02 | OLD-08-03 | OLD-08-04 | OLD-08-05 | OLD-08-06 | OLD-08-08 | OLD-08-10 | OLD-08-11 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | CAS Number | Florida GCTL[b] | NTC BGSV [c] | NTC08G00111 | NTC08G00211 | NTC08G00311 | NTC08G00411 | NTC08G00511 | NTC08G00611 | NTC08G00811 | NTC08G01011 | NTC08G01111 |
| LAB ID | | | | A9G290198006 | A9G290198009 | A9G290198008 | A9G290198007 | A9G300236003 | A9G300236004 | A9H030166007 | A9H020124009 | A9H020124010 |
| SAMPLE DATE | | | | 7/28/99 | 7/28/99 | 7/28/99 | 7/28/99 | 7/29/99 | 7/29/99 | 8/1/99 | 7/30/99 | 7/30/99 |
| **Semivolatiles (µg/L) (Cont)** | | | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Di-N-Butyl Phthalate | 84-74-2 | 700 | | | | | | | | | | |
| Di-N-Octyl Phthalate | 117-84-0 | 140 | | | | | | | | | | |
| Dibenzofuran | 132-64-9 | 28 | | | | | | | | | | |
| Diethyl Phthalate | 84-66-2 | 5600 | | | | | | | | | | |
| Dimethyl Phthalate | 131-11-3 | 70000 | | | | | | | | | | |
| Hexachlorobenzene | 118-74-1 | 1 | | | | | | | | | | |
| Hexachlorobutadiene | 87-68-3 | 0.5 | | | | | | | | | | |
| Hexachlorocyclopentadiene | 77-47-4 | 50 | | | | | | | | | | |
| Hexachloroethane | 67-72-1 | 2.5 | | | | | | | | | | |
| Isophorone | 78-59-1 | 37 | | | | | | | | | | |
| N-Nitroso-Di-N-Propylamine | 621-64-7 | 4 | | | | | | | | | | |
| N-Nitrosodiphenylamine | 86-30-6 | 7.1 | | | | | | | | | | |
| Nitrobenzene | 98-95-3 | 4 | | | | | | | | | | |
| Phenol | 108-95-2 | 10 | | | | | | | | | | |
| **PAHs (µg/L)** | | | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1-Methylnaphthalene | 90-12-0 | 20 | | | | | | | | | | |
| 2-Methylnaphthalene | 91-57-6 | 20 | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 20 | | | | | | | | | | |
| Acenaphthylene | 208-96-8 | 210 | | | | | | | | | | |
| Anthracene | 120-12-7 | 2100 | | | | | | | | | | |
| Benzo(a)Anthracene | 56-55-3 | 0.2 | | | | | | | | | | |
| Benzo(a)Pyrene | 50-32-8 | 0.2 | | | | | | | | | | |
| Benzo(b)Fluoranthene | 205-99-2 | 0.2 | | | | | | | | | | |
| Benzo(g,h,i)Perylene | 191-24-2 | 210 | | | | | | | | | | |
| Benzo(k)Fluoranthene | 207-08-9 | 0.5 | | | | | | | | | | |
| Chrysene | 218-01-9 | 4.8 | | | | | | | | | | |
| Dibenzo(a,h)Anthracene | 53-70-3 | 0.2 | | | | | | | | | | |
| Fluoranthene | 206-44-0 | 280 | | | | | | | | | | |
| Fluorene | 86-73-7 | 280 | | | | | | | | | | |
| Indeno(1,2,3-cd)Pyrene | 193-39-5 | 0.2 | | | | | | | | | | |
| Naphthalene | 91-20-3 | 20 | | | | | | | | | | |
| Phenanthrene | 85-01-8 | 210 | | | | | | | | | | |
| Pyrene | 129-00-0 | 210 | | | | | | | | | | |

# TABLE 5

## VALIDATED GROUNDWATER ANALYTICAL RESULTS - JULY/AUGUST 1999
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| WELL DESIGNATION | | Screening Criteria [a] | | OLD-08-01 | OLD-08-02 | OLD-08-03 | OLD-08-04 | OLD-08-05 | OLD-08-06 | OLD-08-08 | OLD-08-10 | OLD-08-11 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | CAS Number | Florida GCTL[b] | NTC BGSV [c] | NTC08G00111 | NTC08G00211 | NTC08G00311 | NTC08G00411 | NTC08G00511 | NTC08G00611 | NTC08G00811 | NTC08G01011 | NTC08G01111 |
| LAB ID | | | | A9G290198006 | A9G290198009 | A9G290198008 | A9G290198007 | A9G300236003 | A9G300236004 | A9H030166007 | A9H020124009 | A9H020124010 |
| SAMPLE DATE | | | | 7/28/99 | 7/28/99 | 7/28/99 | 7/28/99 | 7/29/99 | 7/29/99 | 8/1/99 | 7/30/99 | 7/30/99 |
| **Pesticides (µg/L)** | | | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDD | 72-54-8 | 0.1 | | | | | | | | | | |
| 4,4'-DDE | 72-55-9 | 0.1 | | | | | | | | | | |
| 4,4'-DDT | 50-29-3 | 0.1 | | | | | | | | | | |
| Aldrin | 309-00-2 | 0.005 | | | | | | | | | | |
| alpha-BHC | 319-84-6 | 0.2 | | | | | | | | | | |
| alpha-Chlordane[d] | 5103-71-9 | 2 | | | | | | | | | | |
| Beta-BHC | 319-85-7 | 0.02 | | | | | | | | | | |
| Delta-BHC | 319-86-8 | 2.1 | | | | | | | | | | |
| Dieldrin | 60-57-1 | 0.005 | | | | | | | | | | |
| Endosulfan I | 115-29-7 | 42 | | | | | | | | | | |
| Endosulfan II[d] | 33213-65-9 | 42 | | | | | | | | | | |
| Endosulfan Sulfate | 1031-07-8 | * | | | | | | | | | | |
| Endrin | 72-20-8 | 2 | | | | | | | | | | |
| Endrin Aldehyde | 7421-93-4 | * | | | | | | | | | | |
| Endrin Ketone | 53494-70-5 | * | | | | | | | | | | |
| gamma-BHC (Lindane) | 58-89-9 | 0.2 | | | | | | | | | | |
| gamma-Chlordane[d] | 12789-03-6 | 2 | | | | | | | | | | |
| Heptachlor | 76-44-8 | 0.4 | | | | | | | | | | |
| Heptachlor Epoxide | 1024-57-3 | 0.2 | | | | | | | | | | |
| Methoxychlor | 72-43-5 | 40 | | | | | | | | | | |
| Toxaphene | 8001-35-2 | 3 | | | | | | | | | | |
| **Herbicides (µg/L)** | | | | NA | NA | NA | NA | NA | NA | | | |
| 2,4,5-TP (Silvex) | 93-72-1 | 50 | | | | | | | | 1 U | 1 U | 1 U |
| 2,4,5-T | 93-76-5 | 70 | | | | | | | | 1 U | 1 U | 1 U |
| 2,4-D | 94-75-7 | 70 | | | | | | | | 4 U | 4 U | 4 U |
| 2,4-DB | 94-82-6 | 56 | | | | | | | | 4 U | 4 U | 4 U |

# TABLE 5

## VALIDATED GROUNDWATER ANALYTICAL RESULTS - JULY/AUGUST 1999
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| WELL DESIGNATION | | Screening Criteria [a] | | OLD-08-01 | OLD-08-02 | OLD-08-03 | OLD-08-04 | OLD-08-05 | OLD-08-06 | OLD-08-08 | OLD-08-10 | OLD-08-11 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | CAS Number | Florida GCTL[b] | NTC BGSV [c] | NTC08G00111 | NTC08G00211 | NTC08G00311 | NTC08G00411 | NTC08G00511 | NTC08G00611 | NTC08G00811 | NTC08G01011 | NTC08G01111 |
| LAB ID | | | | A9G290198006 | A9G290198009 | A9G290198008 | A9G290198007 | A9G300236003 | A9G300236004 | A9H030166007 | A9H020124009 | A9H020124010 |
| SAMPLE DATE | | | | 7/28/99 | 7/28/99 | 7/28/99 | 7/28/99 | 7/29/99 | 7/29/99 | 8/1/99 | 7/30/99 | 7/30/99 |
| **Herbicides (µg/L) (Cont)** | | | | NA | NA | NA | NA | NA | NA | | | |
| Dalapon | 75-99-0 | 200 | | | | | | | | 2 UJ | 2 J | 2 U |
| Dicamba | 1918-00-9 | 210 | | | | | | | | 2 U | 1.7 R | 2 U |
| Dichloroprop | 120-36-5 | 35 | | | | | | | | 4 U | 4 U | 4 U |
| Dinoseb | 88-85-7 | 7 | | | | | | | | 0.6 U | 0.6 U | 0.6 U |
| MCPA | 94-74-6 | 3.5 | | | | | | | | 400 U | 400 UJ | 400 UJ |
| MCPP | 7085-19-0 | 7 | | | | | | | | 89 J | 540 R | 110 J |
| Pentachlorophenol | 87-86-5 | 1 | | | | | | | | NA | 0.1 U | 0.1 U |
| **Inorganics (µg/L)** | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | 200 | 4067 | 192 J | 918 J | 4300 J | 918 J | 4310 J | 744 J | 125 U | 353 U | 318 U |
| Antimony | 7440-36-0 | 6 | 4.1 | 3.6 U | 3.4 U | 8.1 U | 5.6 U | 9.4 U | 3.7 U | 3.6 U | 5.9 U | 7.6 UJ |
| Arsenic | 7440-38-2 | 50 | 5 | 163 | 609 | 234 | 89.2 | 284 | 138 | 154 | 189 | 170 |
| Barium | 7440-39-3 | 2000 | 31.4 | 9.6 U | 24.5 | 38.3 | 8.8 U | 77.8 | 38.3 | 18.9 | 8.8 | 2.7 U |
| Beryllium | 7440-41-7 | 4 | * | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U |
| Cadmium | 7440-43-9 | 5 | 5.6 | 0.21 U | 0.23 U | 0.2 U | 0.57 U | 0.2 U | 0.3 U | 0.2 U | 0.2 U | 0.2 U |
| Calcium | 7440-70-2 | * | 36830 | 55000 J | 74200 J | 67600 J | 26600 J | 101000 J | 67800 J | 71400 | 42800 | 64700 |
| Chromium | 7440-47-3 | 100 | 7.8 | 1.6 U | 1.2 U | 5.2 | 2.6 U | 6.8 | 4.7 U | 1.9 U | 16.5 | 7.8 U |
| Cobalt | 7440-48-4 | 420 | * | 1.2 U | 0.93 U | 1.5 U | 1.1 U | 1.1 U | 1.1 U | 0.7 U | 0.7 U | 0.7 U |
| Copper | 7440-50-8 | 1000 | 5.4 | 2.3 U | 2.4 U | 15.7 | 8.5 | 9.3 | 13.3 | 1 U | 1.7 | 1 U |
| Iron | 7439-89-6 | 300 | 1227 | 155 | 148 | 750 | 57 U | 143 U | 61.9 U | 370 | 104 U | 124 U |
| Lead | 7439-92-1 | 15 | 4 | 1.2 U | 1.2 U | 2.8 | 1.2 U | 3.7 | 9.8 | 1.8 U | 1.2 U | 1.2 U |
| Magnesium | 7439-95-4 | * | 4560 | 3980 | 4360 | 3450 | 2220 | 8500 | 5720 | 2550 | 3870 | 4300 |
| Manganese | 7439-96-5 | 50 | 17 | 4.8 | 13.3 | 12.2 | 10.3 | 338 | 69.6 | 9.9 U | 14.7 U | 10.5 U |
| Mercury | 7439-97-6 | 2 | 0.12 | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U |
| Nickel | 7440-02-0 | 100 | * | 1.3 U | 1.3 U | 15 | 9.5 | 5.9 U | 4.3 U | 1.5 U | 5.4 U | 7 U |
| Potassium | 7440-09-7 | * | 5400 | 6390 | 10100 | 9610 | 5380 | 12900 | 13200 | 7600 | 3620 | 10600 |
| Selenium | 7782-49-2 | 50 | 9.7 | 3.3 U | 2.4 U | 2.4 U | 2.4 U | 4.5 U | 2.5 U | 2.4 U | 3 U | 2.4 U |
| Silver | 7440-22-4 | 100 | * | 0.9 U | 0.9 U | 0.9 U | 0.9 U | 0.9 U | 0.9 U | 0.9 U | 0.9 U | 0.9 U |
| Sodium | 7440-23-5 | 160000 | 18222 | 6050 | 5850 | 5790 | 6630 | 8540 | 3630 | 3840 | 9180 | 9370 |
| Thallium | 7440-28-0 | 2 | 3.8 | 1 U | 0.6 U | 0.6 U | 1.1 U | 0.6 UJ | 1 U | 0.6 UJ | 0.6 UJ | 0.6 UJ |
| Vanadium | 7440-62-2 | 49 | 20.6 | 1.8 U | 0.8 U | 1.8 U | 5 U | 2.6 U | 5.1 U | 0.8 U | 3.1 | 0.8 U |
| Zinc | 7440-66-6 | 5000 | 4 | 129 | 14 U | 254 | 627 | 74.1 | 177 | 0.5 U | 13.6 | 2.5 U |

# TABLE 5

## VALIDATED GROUNDWATER ANALYTICAL RESULTS - JULY/AUGUST 1999
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| WELL DESIGNATION | | Screening Criteria [a] | | OLD-08-13 | | OLD-08-14 | OLD-08-15 | | OLD-08-17 | OLD-08-18 | OLD-09-01 | OLD-09-02 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | CAS Number | Florida GCTL [b] | NTC BGSV [c] | NTC08G01311 | NTC08G01311-D | NTC08G01411 | NTC08G01511 | NTC08G01511-D | NTC08G01711 | NTC08G01811 | NTC09G00111 | NTC09G00211 |
| LAB ID | | | | A9H030166001 | A9H030166002 | A9H030166003 | A9H030166005 | A9H030166006 | A9H020124011 | A9H030166004 | A9H050202002 | A9H040126009 |
| SAMPLE DATE | | | | 7/31/99 | 7/31/99 | 7/31/99 | 8/1/99 | 8/1/99 | 7/30/99 | 7/31/99 | 8/4/99 | 8/3/99 |
| **Semivolatiles (µg/L)** | | | | NA | NA | | | | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | 70 | | | | | | | | | | |
| 1,2-Dichlorobenzene | 95-50-1 | 600 | | | | | | | | | | |
| 1,3-Dichlorobenzene | 541-73-1 | 10 | | | | | | | | | | |
| 1,4-Dichlorobenzene | 106-46-7 | 75 | | | | | | | | | | |
| 2,2'-Oxybis (1-Chloropropane) | 108-60-1 | 10 | | | | | | | | | | |
| 2,4,5-Trichlorophenol | 95-95-4 | 4 | | | | | | | | | | |
| 2,4,6-Trichlorophenol | 88-06-2 | 3.2 | | | | | | | | | | |
| 2,4-Dichlorophenol | 120-83-2 | 0.5 | | | | | | | | | | |
| 2,4-Dimethylphenol | 105-67-9 | 140 | | | | | | | | | | |
| 2,4-Dinitrophenol | 51-28-5 | 14 | | | | | | | | | | |
| 2,4-Dinitrotoluene | 121-14-2 | 0.1 | | | | | | | | | | |
| 2,6-Dinitrotoluene | 606-20-2 | 0.1 | | | | | | | | | | |
| 2-Chloronaphthalene | 91-58-7 | 560 | | | | | | | | | | |
| 2-Chlorophenol | 95-57-8 | 35 | | | | | | | | | | |
| 2-Methylnaphthalene | 91-57-6 | 20 | | | | | | | | | | |
| 2-Methylphenol | 95-48-7 | 35 | | | | | | | | | | |
| 2-Nitroaniline | 88-74-4 | 50 | | | | | | | | | | |
| 2-Nitrophenol | 88-75-5 | * | | | | | | | | | | |
| 3,3'-Dichlorobenzidine | 91-94-1 | 12 | | | | | | | | | | |
| 3-Nitroaniline | 99-09-2 | 50 | | | | | | | | | | |
| 4,6-Dinitro-2-Methylphenol | 534-52-1 | * | | | | | | | | | | |
| 4-Bromophenyl Phenyl Ether | 101-55-3 | 406 | | | | | | | | | | |
| 4-Chloro-3-Methylphenol | 59-50-7 | 63 | | | | | | | | | | |
| 4-Chloroaniline | 106-47-8 | 28 | | | | | | | | | | |
| 4-Chlorophenyl Phenyl Ether | 7005-72-3 | * | | | | | | | | | | |
| 4-Methylphenol | 106-44-5 | 4 | | | | | | | | | | |
| 4-Nitroaniline | 100-01-6 | 21 | | | | | | | | | | |
| 4-Nitrophenol | 100-02-7 | 56 | | | | | | | | | | |
| Bis(2-Chloroethoxy)Methane | 111-91-1 | * | | | | | | | | | | |
| Bis(2-Chloroethyl)Ether | 111-44-4 | 4 | | | | | | | | | | |
| Bis(2-Ethylhexyl)Phthalate | 117-81-7 | 6 | | | | | | | | | | |
| Butylbenzyl Phthalate | 85-68-7 | 140 | | | | | | | | | | |
| Carbazole | 86-74-8 | 4 | | | | | | | | | | |

# TABLE 5

## VALIDATED GROUNDWATER ANALYTICAL RESULTS - JULY/AUGUST 1999
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| WELL DESIGNATION | | Screening Criteria [a] | | OLD-08-13 | | OLD-08-14 | OLD-08-15 | | OLD-08-17 | OLD-08-18 | OLD-09-01 | OLD-09-02 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | CAS Number | Florida GCTL[b] | NTC BGSV [c] | NTC08G01311 | NTC08G01311-D | NTC08G01411 | NTC08G01511 | NTC08G01511-D | NTC08G01711 | NTC08G01811 | NTC09G00111 | NTC09G00211 |
| LAB ID | | | | A9H030166001 | A9H030166002 | A9H030166003 | A9H030166005 | A9H030166006 | A9H020124011 | A9H030166004 | A9H050202002 | A9H040126009 |
| SAMPLE DATE | | | | 7/31/99 | 7/31/99 | 7/31/99 | 8/1/99 | 8/1/99 | 7/30/99 | 7/31/99 | 8/4/99 | 8/3/99 |
| **Semivolatiles (µg/L) (Cont)** | | | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Di-N-Butyl Phthalate | 84-74-2 | 700 | | | | | | | | | | |
| Di-N-Octyl Phthalate | 117-84-0 | 140 | | | | | | | | | | |
| Dibenzofuran | 132-64-9 | 28 | | | | | | | | | | |
| Diethyl Phthalate | 84-66-2 | 5600 | | | | | | | | | | |
| Dimethyl Phthalate | 131-11-3 | 70000 | | | | | | | | | | |
| Hexachlorobenzene | 118-74-1 | 1 | | | | | | | | | | |
| Hexachlorobutadiene | 87-68-3 | 0.5 | | | | | | | | | | |
| Hexachlorocyclopentadiene | 77-47-4 | 50 | | | | | | | | | | |
| Hexachloroethane | 67-72-1 | 2.5 | | | | | | | | | | |
| Isophorone | 78-59-1 | 37 | | | | | | | | | | |
| N-Nitroso-Di-N-Propylamine | 621-64-7 | 4 | | | | | | | | | | |
| N-Nitrosodiphenylamine | 86-30-6 | 7.1 | | | | | | | | | | |
| Nitrobenzene | 98-95-3 | 4 | | | | | | | | | | |
| Phenol | 108-95-2 | 10 | | | | | | | | | | |
| **PAHs (µg/L)** | | | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1-Methylnaphthalene | 90-12-0 | 20 | | | | | | | | | | |
| 2-Methylnaphthalene | 91-57-6 | 20 | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 20 | | | | | | | | | | |
| Acenaphthylene | 208-96-8 | 210 | | | | | | | | | | |
| Anthracene | 120-12-7 | 2100 | | | | | | | | | | |
| Benzo(a)Anthracene | 56-55-3 | 0.2 | | | | | | | | | | |
| Benzo(a)Pyrene | 50-32-8 | 0.2 | | | | | | | | | | |
| Benzo(b)Fluoranthene | 205-99-2 | 0.2 | | | | | | | | | | |
| Benzo(g,h,i)Perylene | 191-24-2 | 210 | | | | | | | | | | |
| Benzo(k)Fluoranthene | 207-08-9 | 0.5 | | | | | | | | | | |
| Chrysene | 218-01-9 | 4.8 | | | | | | | | | | |
| Dibenzo(a,h)Anthracene | 53-70-3 | 0.2 | | | | | | | | | | |
| Fluoranthene | 206-44-0 | 280 | | | | | | | | | | |
| Fluorene | 86-73-7 | 280 | | | | | | | | | | |
| Indeno(1,2,3-cd)Pyrene | 193-39-5 | 0.2 | | | | | | | | | | |
| Naphthalene | 91-20-3 | 20 | | | | | | | | | | |
| Phenanthrene | 85-01-8 | 210 | | | | | | | | | | |
| Pyrene | 129-00-0 | 210 | | | | | | | | | | |

# TABLE 5

## VALIDATED GROUNDWATER ANALYTICAL RESULTS - JULY/AUGUST 1999
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| WELL DESIGNATION | | Screening Criteria [a] | | OLD-08-13 | | OLD-08-14 | OLD-08-15 | | OLD-08-17 | OLD-08-18 | OLD-09-01 | OLD-09-02 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | CAS Number | Florida GCTL[b] | NTC BGSV [c] | NTC08G01311 | NTC08G01311-D | NTC08G01411 | NTC08G01511 | NTC08G01511-D | NTC08G01711 | NTC08G01811 | NTC09G00111 | NTC09G00211 |
| LAB ID | | | | A9H030166001 | A9H030166002 | A9H030166003 | A9H030166005 | A9H030166006 | A9H020124011 | A9H030166004 | A9H050202002 | A9H040126009 |
| SAMPLE DATE | | | | 7/31/99 | 7/31/99 | 7/31/99 | 8/1/99 | 8/1/99 | 7/30/99 | 7/31/99 | 8/4/99 | 8/3/99 |
| **Pesticides (µg/L)** | | | | NA | NA | NA | NA | NA | NA | NA | | |
| 4,4'-DDD | 72-54-8 | 0.1 | | | | | | | | | 0.05 U | 0.05 UR |
| 4,4'-DDE | 72-55-9 | 0.1 | | | | | | | | | 0.05 U | 0.05 UR |
| 4,4'-DDT | 50-29-3 | 0.1 | | | | | | | | | 0.05 U | 0.05 UR |
| Aldrin | 309-00-2 | 0.005 | | | | | | | | | 0.05 U | 0.05 UR |
| alpha-BHC | 319-84-6 | 0.2 | | | | | | | | | 0.05 U | 0.05 UR |
| alpha-Chlordane[d] | 5103-71-9 | 2 | | | | | | | | | 0.043 R | 0.05 UR |
| Beta-BHC | 319-85-7 | 0.02 | | | | | | | | | 0.05 U | 0.05 UR |
| Delta-BHC | 319-86-8 | 2.1 | | | | | | | | | 0.05 U | 0.05 UR |
| Dieldrin | 60-57-1 | 0.005 | | | | | | | | | 0.05 U | 0.05 UR |
| Endosulfan I | 115-29-7 | 42 | | | | | | | | | 0.05 U | 0.05 UR |
| Endosulfan II[d] | 33213-65-9 | 42 | | | | | | | | | 0.05 U | 0.047 J |
| Endosulfan Sulfate | 1031-07-8 | * | | | | | | | | | 0.05 U | 0.05 UR |
| Endrin | 72-20-8 | 2 | | | | | | | | | 0.05 U | 0.05 UR |
| Endrin Aldehyde | 7421-93-4 | * | | | | | | | | | 0.05 U | 0.05 UR |
| Endrin Ketone | 53494-70-5 | * | | | | | | | | | 0.05 U | 0.05 UR |
| gamma-BHC (Lindane) | 58-89-9 | 0.2 | | | | | | | | | 0.05 U | 0.05 UR |
| gamma-Chlordane[d] | 12789-03-6 | 2 | | | | | | | | | 0.067 J | 0.05 UR |
| Heptachlor | 76-44-8 | 0.4 | | | | | | | | | 0.05 U | 0.05 UR |
| Heptachlor Epoxide | 1024-57-3 | 0.2 | | | | | | | | | 0.2 R | 0.05 UR |
| Methoxychlor | 72-43-5 | 40 | | | | | | | | | 0.1 U | 0.1 UR |
| Toxaphene | 8001-35-2 | 3 | | | | | | | | | 2.1 J | 2 UR |
| **Herbicides (µg/L)** | | | | NA | NA | | | | NA | | | |
| 2,4,5-TP (Silvex) | 93-72-1 | 50 | | | | 1 U | 1 U | 1 U | | 1 U | 1 U | 1 U |
| 2,4,5-T | 93-76-5 | 70 | | | | 1 U | 1 U | 1 U | | 1 U | 1 U | 1 U |
| 2,4-D | 94-75-7 | 70 | | | | 4 U | 4 U | 4 U | | 4 U | 4 U | 4 U |
| 2,4-DB | 94-82-6 | 56 | | | | 4 U | 4 U | 4 U | | 4 U | 4 U | 4 U |

# TABLE 5

## VALIDATED GROUNDWATER ANALYTICAL RESULTS - JULY/AUGUST 1999
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| WELL DESIGNATION | | Screening Criteria [a] | | OLD-08-13 | | OLD-08-14 | OLD-08-15 | | OLD-08-17 | OLD-08-18 | OLD-09-01 | OLD-09-02 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | CAS Number | Florida GCTL[b] | NTC BGSV [c] | NTC08G01311 | NTC08G01311-D | NTC08G01411 | NTC08G01511 | NTC08G01511-D | NTC08G01711 | NTC08G01811 | NTC09G00111 | NTC09G00211 |
| LAB ID | | | | A9H030166001 | A9H030166002 | A9H030166003 | A9H030166005 | A9H030166006 | A9H020124011 | A9H030166004 | A9H050202002 | A9H040126009 |
| SAMPLE DATE | | | | 7/31/99 | 7/31/99 | 7/31/99 | 8/1/99 | 8/1/99 | 7/30/99 | 7/31/99 | 8/4/99 | 8/3/99 |
| **Herbicides (µg/L) (Cont)** | | | | NA | NA | | | | NA | | | |
| Dalapon | 75-99-0 | 200 | | | | 7.5 J | 36 J | 2 UJ | | 61 R | 2 U | 2 U |
| Dicamba | 1918-00-9 | 210 | | | | 2 U | 2 U | 2 U | | 2 U | 2 U | 2 U |
| Dichloroprop | 120-36-5 | 35 | | | | 4 U | 4 U | 4 U | | 4 U | 4 U | 4 U |
| Dinoseb | 88-85-7 | 7 | | | | 0.6 U | 0.6 U | 0.6 U | | 0.6 U | 0.6 U | 0.6 U |
| MCPA | 94-74-6 | 3.5 | | | | 400 U | 400 U | 400 U | | 400 U | 400 UJ | 400 UJ |
| MCPP | 7085-19-0 | 7 | | | | 190 J | 400 UJ | 280 J | | 320 R | 400 UJ | 400 UJ |
| Pentachlorophenol | 87-86-5 | 1 | | | | NA | NA | NA | | NA | NA | NA |
| **Inorganics (µg/L)** | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | 200 | 4067 | 823 | 729 | 1340 | 2430 | 2360 | 230 U | 1780 | 134 U | 2140 J |
| Antimony | 7440-36-0 | 6 | 4.1 | 4.2 U | 3 U | 6.8 U | 2.1 U | 3.3 U | 12.2 | 2.1 U | 2.2 U | 2.1 U |
| Arsenic | 7440-38-2 | 50 | 5 | 24.3 | 22.6 | 100 | 3.6 | 2.5 | 191 | 2.2 U | 34.9 | 2.2 U |
| Barium | 7440-39-3 | 2000 | 31.4 | 17.9 | 17.7 | 53.3 | 15.4 | 13.9 | 18.7 | 42.8 | 53.5 | 5.1 U |
| Beryllium | 7440-41-7 | 4 | * | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.38 U | 0.3 U | 0.3 U | 0.08 U | 0.38 U |
| Cadmium | 7440-43-9 | 5 | 5.6 | 0.2 U | 0.2 U | 1.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.56 U | 0.28 U |
| Calcium | 7440-70-2 | * | 36830 | 12100 | 11500 | 65600 | 8880 | 8590 | 53500 | 5910 | 79900 | 10100 |
| Chromium | 7440-47-3 | 100 | 7.8 | 4 U | 3.3 U | 4.6 U | 4.2 U | 4.6 U | 5.9 U | 7.1 U | 0.8 U | 4.7 U |
| Cobalt | 7440-48-4 | 420 | * | 0.98 | 0.7 U | 2.2 | 0.7 U | 0.7 U | 0.7 U | 0.95 | 1.1 U | 0.7 U |
| Copper | 7440-50-8 | 1000 | 5.4 | 1.9 | 1.4 | 4.3 | 2.6 | 1.5 | 3 | 2.5 | 0.85 | 3.8 |
| Iron | 7439-89-6 | 300 | 1227 | 1680 | 1650 | 5190 | 853 | 806 | 49.9 U | 3550 | 289 | 208 U |
| Lead | 7439-92-1 | 15 | 4 | 1.2 U | 1.2 U | 34.8 | 2.8 U | 2.4 U | 3.8 U | 2.4 U | 1.1 U | 1.2 U |
| Magnesium | 7439-95-4 | * | 4560 | 2320 | 2230 | 20000 | 4040 | 4000 | 2180 | 1730 | 6640 | 2240 |
| Manganese | 7439-96-5 | 50 | 17 | 68.1 | 68.7 | 304 | 32.6 | 30.1 | 6 U | 204 | 13.2 U | 6.6 U |
| Mercury | 7439-97-6 | 2 | 0.12 | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U |
| Nickel | 7440-02-0 | 100 | * | 2.5 U | 2.2 U | 8.4 U | 2.4 U | 2.1 U | 3.8 U | 3.2 U | 1.5 U | 1.6 |
| Potassium | 7440-09-7 | * | 5400 | 277 | 284 | 1050 | 2010 | 1890 | 12100 | 741 | 8180 J | 2500 J |
| Selenium | 7782-49-2 | 50 | 9.7 | 4.2 U | 3.3 U | 2.4 U | 5.6 U | 2.6 U | 2.4 U | 2.4 U | 3.5 U | 2.4 U |
| Silver | 7440-22-4 | 100 | * | 0.9 U | 0.9 U | 0.9 U | 0.9 U | 0.9 U | 0.9 U | 0.9 U | 0.6 U | 0.9 U |
| Sodium | 7440-23-5 | 160000 | 18222 | 7980 | 7720 | 41200 | 30600 | 28500 | 4770 | 9730 | 2350 | 5690 |
| Thallium | 7440-28-0 | 2 | 3.8 | 0.6 UJ | 0.6 UJ | 0.6 UJ | 0.6 UJ | 0.6 UJ | 1.2 UJ | 0.6 UJ | 0.6 UR | 0.6 UJ |
| Vanadium | 7440-62-2 | 49 | 20.6 | 1.4 | 0.92 | 4.7 | 2.5 | 2.9 | 10.3 | 6.2 | 0.6 U | 1.7 U |
| Zinc | 7440-66-6 | 5000 | 4 | 6.8 U | 7.1 U | 439 | 11.7 | 9 U | 8.7 U | 6.7 U | 9.7 U | 43.6 |

# TABLE 5

## VALIDATED GROUNDWATER ANALYTICAL RESULTS - JULY/AUGUST 1999
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| WELL DESIGNATION | | Screening Criteria [a] | | OLD-09-03 | OLD-09-04 | OLD-09-05 | OLD-09-06 | OLD-09-07 | OLD-09-010 | OLD-09-11 | | OLD-09-12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | CAS Number | Florida GCTL[b] | NTC BGSV [c] | NTC09G00311 | NTC09G00411 | NTC09G00511 | NTC09G00611 | NTC09G00711 | NTC09G01011 | NTC09G01111 | NTC09G01111-D | NTC09G01211 |
| LAB ID | | | | A9H050202001 | A9H050202003 | A9H040126007 | A9H040126003 | A9H040126001 | A9H040126008 | A9H040126004 | A9H040126005 | A9H030173002 |
| SAMPLE DATE | | | | 8/4/99 | 8/4/99 | 8/3/99 | 8/3/99 | 8/3/99 | 8/3/99 | 8/3/99 | 8/3/99 | 8/2/99 |
| **Semivolatiles (µg/L)** | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 120-82-1 | 70 | | 10 U | 10 U | | | | | | | 10 U |
| 1,2-Dichlorobenzene | 95-50-1 | 600 | | 10 U | 10 U | | | | | | | 10 U |
| 1,3-Dichlorobenzene | 541-73-1 | 10 | | 10 U | 10 U | | | | | | | 10 U |
| 1,4-Dichlorobenzene | 106-46-7 | 75 | | 10 U | 10 U | | | | | | | 10 U |
| 2,2'-Oxybis (1-Chloropropane) | 108-60-1 | 10 | | 10 U | 10 U | | | | | | | 10 U |
| 2,4,5-Trichlorophenol | 95-95-4 | 4 | | 10 U | 10 U | | | | | | | 10 U |
| 2,4,6-Trichlorophenol | 88-06-2 | 3.2 | | 10 U | 10 U | | | | | | | 10 U |
| 2,4-Dichlorophenol | 120-83-2 | 0.5 | | 10 U | 10 U | | | | | | | 15 |
| 2,4-Dimethylphenol | 105-67-9 | 140 | | 10 U | 10 U | | | | | | | 10 U |
| 2,4-Dinitrophenol | 51-28-5 | 14 | | 25 U | 25 U | | | | | | | 25 U |
| 2,4-Dinitrotoluene | 121-14-2 | 0.1 | | 10 U | 10 U | | | | | | | 10 U |
| 2,6-Dinitrotoluene | 606-20-2 | 0.1 | | 10 U | 10 U | | | | | | | 10 U |
| 2-Chloronaphthalene | 91-58-7 | 560 | | 10 U | 10 U | | | | | | | 10 U |
| 2-Chlorophenol | 95-57-8 | 35 | | 10 U | 10 U | | | | | | | 10 U |
| 2-Methylnaphthalene | 91-57-6 | 20 | | 10 U | 10 U | | | | | | | NA |
| 2-Methylphenol | 95-48-7 | 35 | | 10 U | 10 U | | | | | | | 10 U |
| 2-Nitroaniline | 88-74-4 | 50 | | 25 U | 25 U | | | | | | | 25 U |
| 2-Nitrophenol | 88-75-5 | * | | 10 U | 10 U | | | | | | | 10 U |
| 3,3'-Dichlorobenzidine | 91-94-1 | 12 | | 10 UR | 10 U | | | | | | | 10 U |
| 3-Nitroaniline | 99-09-2 | 50 | | 25 U | 25 U | | | | | | | 25 U |
| 4,6-Dinitro-2-Methylphenol | 534-52-1 | * | | 25 U | 25 U | | | | | | | 25 U |
| 4-Bromophenyl Phenyl Ether | 101-55-3 | 406 | | 10 U | 10 U | | | | | | | 10 U |
| 4-Chloro-3-Methylphenol | 59-50-7 | 63 | | 10 U | 10 U | | | | | | | 10 U |
| 4-Chloroaniline | 106-47-8 | 28 | | 10 U | 10 U | | | | | | | 10 U |
| 4-Chlorophenyl Phenyl Ether | 7005-72-3 | * | | 10 U | 10 U | | | | | | | 10 U |
| 4-Methylphenol | 106-44-5 | 4 | | 10 U | 10 U | | | | | | | 10 U |
| 4-Nitroaniline | 100-01-6 | 21 | | 25 U | 25 U | | | | | | | 25 U |
| 4-Nitrophenol | 100-02-7 | 56 | | 25 UJ | 25 UJ | | | | | | | 25 U |
| Bis(2-Chloroethoxy)Methane | 111-91-1 | * | | 10 U | 10 U | | | | | | | 10 U |
| Bis(2-Chloroethyl)Ether | 111-44-4 | 4 | | 10 U | 10 U | | | | | | | 10 U |
| Bis(2-Ethylhexyl)Phthalate | 117-81-7 | 6 | | 10 U | 10 U | | | | | | | 10 U |
| Butylbenzyl Phthalate | 85-68-7 | 140 | | 10 U | 10 U | | | | | | | 10 U |
| Carbazole | 86-74-8 | 4 | | 10 U | 10 U | | | | | | | 10 U |

# TABLE 5

## VALIDATED GROUNDWATER ANALYTICAL RESULTS - JULY/AUGUST 1999
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| WELL DESIGNATION | | Screening Criteria [a] | | OLD-09-03 | OLD-09-04 | OLD-09-05 | OLD-09-06 | OLD-09-07 | OLD-09-010 | OLD-09-11 | | OLD-09-12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | CAS Number | Florida GCTL [b] | NTC BGSV [c] | NTC09G00311 | NTC09G00411 | NTC09G00511 | NTC09G00611 | NTC09G00711 | NTC09G01011 | NTC09G01111 | NTC09G01111-D | NTC09G01211 |
| LAB ID | | | | A9H050202001 | A9H050202003 | A9H040126007 | A9H040126003 | A9H040126001 | A9H040126008 | A9H040126004 | A9H040126005 | A9H030173002 |
| SAMPLE DATE | | | | 8/4/99 | 8/4/99 | 8/3/99 | 8/3/99 | 8/3/99 | 8/3/99 | 8/3/99 | 8/3/99 | 8/2/99 |
| **Semivolatiles (µg/L) (Cont)** | | | | | | NA | NA | NA | NA | NA | NA | |
| Di-N-Butyl Phthalate | 84-74-2 | 700 | | 10 U | 10 U | | | | | | | 10 U |
| Di-N-Octyl Phthalate | 117-84-0 | 140 | | 10 U | 10 U | | | | | | | 10 U |
| Dibenzofuran | 132-64-9 | 28 | | 10 U | 10 U | | | | | | | 10 U |
| Diethyl Phthalate | 84-66-2 | 5600 | | 10 U | 10 U | | | | | | | 10 U |
| Dimethyl Phthalate | 131-11-3 | 70000 | | 10 U | 10 U | | | | | | | 10 U |
| Hexachlorobenzene | 118-74-1 | 1 | | 10 U | 10 U | | | | | | | 10 U |
| Hexachlorobutadiene | 87-68-3 | 0.5 | | 10 U | 10 U | | | | | | | 10 U |
| Hexachlorocyclopentadiene | 77-47-4 | 50 | | 10 UR | 10 UR | | | | | | | 10 UR |
| Hexachloroethane | 67-72-1 | 2.5 | | 10 U | 10 U | | | | | | | 10 U |
| Isophorone | 78-59-1 | 37 | | 10 U | 10 U | | | | | | | 10 U |
| N-Nitroso-Di-N-Propylamine | 621-64-7 | 4 | | 10 U | 10 U | | | | | | | 10 U |
| N-Nitrosodiphenylamine | 86-30-6 | 7.1 | | 10 U | 10 U | | | | | | | 10 U |
| Nitrobenzene | 98-95-3 | 4 | | 10 U | 10 U | | | | | | | 10 U |
| Phenol | 108-95-2 | 10 | | 10 U | 10 U | | | | | | | 10 U |
| **PAHs (µg/L)** | | | | | | NA | NA | NA | NA | NA | NA | |
| 1-Methylnaphthalene | 90-12-0 | 20 | | 2 UJ | 3.9 J | | | | | | | 2 U |
| 2-Methylnaphthalene | 91-57-6 | 20 | | 2 UJ | 2 J | | | | | | | 2 U |
| Acenaphthene | 83-32-9 | 20 | | 1 UJ | 1 UJ | | | | | | | 1 U |
| Acenaphthylene | 208-96-8 | 210 | | 1 UJ | 1 UJ | | | | | | | 1 U |
| Anthracene | 120-12-7 | 2100 | | 1 UJ | 1 UJ | | | | | | | 1 U |
| Benzo(a)Anthracene | 56-55-3 | 0.2 | | 0.1 UJ | 0.1 UJ | | | | | | | 0.1 U |
| Benzo(a)Pyrene | 50-32-8 | 0.2 | | 0.1 UJ | 0.1 UJ | | | | | | | 0.1 U |
| Benzo(b)Fluoranthene | 205-99-2 | 0.2 | | 0.1 UJ | 0.1 UJ | | | | | | | 0.1 U |
| Benzo(g,h,i)Perylene | 191-24-2 | 210 | | 0.1 UJ | 0.1 UJ | | | | | | | 0.1 U |
| Benzo(k)Fluoranthene | 207-08-9 | 0.5 | | 0.3 UJ | 0.3 UJ | | | | | | | 0.3 U |
| Chrysene | 218-01-9 | 4.8 | | 0.1 UJ | 0.1 UJ | | | | | | | 0.1 U |
| Dibenzo(a,h)Anthracene | 53-70-3 | 0.2 | | 0.1 UJ | 0.1 UJ | | | | | | | 0.1 U |
| Fluoranthene | 206-44-0 | 280 | | 0.2 UJ | 0.2 UJ | | | | | | | 0.2 U |
| Fluorene | 86-73-7 | 280 | | 2 UJ | 2 UJ | | | | | | | 2 U |
| Indeno(1,2,3-cd)Pyrene | 193-39-5 | 0.2 | | 0.1 UJ | 0.1 UJ | | | | | | | 0.1 U |
| Naphthalene | 91-20-3 | 20 | | 2 UJ | 0.96 J | | | | | | | 2.4 |
| Phenanthrene | 85-01-8 | 210 | | 1 UJ | 1 UJ | | | | | | | 1 U |
| Pyrene | 129-00-0 | 210 | | 0.1 UJ | 0.1 UJ | | | | | | | 0.1 U |

# TABLE 5

## VALIDATED GROUNDWATER ANALYTICAL RESULTS - JULY/AUGUST 1999
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| WELL DESIGNATION | | Screening Criteria [a] | | OLD-09-03 | OLD-09-04 | OLD-09-05 | OLD-09-06 | OLD-09-07 | OLD-09-010 | OLD-09-11 | | OLD-09-12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | CAS Number | Florida GCTL[b] | NTC BGSV [c] | NTC09G00311 | NTC09G00411 | NTC09G00511 | NTC09G00611 | NTC09G00711 | NTC09G01011 | NTC09G01111 | NTC09G01111-D | NTC09G01211 |
| LAB ID | | | | A9H050202001 | A9H050202003 | A9H040126007 | A9H040126003 | A9H040126001 | A9H040126008 | A9H040126004 | A9H040126005 | A9H030173002 |
| SAMPLE DATE | | | | 8/4/99 | 8/4/99 | 8/3/99 | 8/3/99 | 8/3/99 | 8/3/99 | 8/3/99 | 8/3/99 | 8/2/99 |
| **Pesticides (µg/L)** | | | | | | | | | | | | |
| 4,4'-DDD | 72-54-8 | 0.1 | | 0.05 UJ | 2.5 UJ | 0.05 U | 0.25 U | 0.05 UR | 0.05 UR | 0.5 U | 0.5 U | 5 U |
| 4,4'-DDE | 72-55-9 | 0.1 | | 0.05 UJ | 2.5 U | 0.05 U | 0.25 U | 0.05 UR | 0.05 UR | 0.5 U | 0.5 U | 5 U |
| 4,4'-DDT | 50-29-3 | 0.1 | | 0.05 UJ | 2.5 U | 0.05 U | 0.25 U | 0.05 UR | 0.05 UR | 0.5 U | 0.5 U | 5 U |
| Aldrin | 309-00-2 | 0.005 | | 0.05 UJ | 2.5 U | 0.05 U | 0.25 U | 0.05 UR | 0.05 UR | 0.5 U | 0.5 U | 5 U |
| alpha-BHC | 319-84-6 | 0.2 | | 0.05 UJ | 2.5 U | 0.05 U | 0.25 U | 0.05 UR | 0.05 UR | 0.5 U | 0.5 U | 2.5 J |
| alpha-Chlordane[d] | 5103-71-9 | 2 | | 0.05 UJ | 2.5 U | 0.05 U | 0.25 U | 0.05 UR | 0.05 UR | 0.5 U | 0.3 J | 5 U |
| Beta-BHC | 319-85-7 | 0.02 | | 0.05 UJ | 2.5 U | 0.05 U | 0.25 U | 0.05 UR | 0.05 UR | 0.5 U | 0.5 U | 5 U |
| Delta-BHC | 319-86-8 | 2.1 | | 0.05 UJ | 2.5 U | 0.05 U | 0.25 U | 0.05 UR | 0.05 UR | 0.5 U | 0.5 U | 5 U |
| Dieldrin | 60-57-1 | 0.005 | | 0.05 UJ | 2.5 UJ | 0.05 U | 0.25 U | 0.05 UR | 0.05 UR | 0.5 U | 0.5 U | 5 U |
| Endosulfan I | 115-29-7 | 42 | | 0.05 UJ | 2.5 U | 0.05 U | 0.25 U | 0.05 UR | 0.05 UR | 0.5 U | 0.5 U | 5 U |
| Endosulfan II[d] | 33213-65-9 | 42 | | 0.05 UJ | 2.5 U | 0.05 U | 0.25 U | 0.05 UR | 0.05 UR | 0.5 U | 0.5 U | 5 U |
| Endosulfan Sulfate | 1031-07-8 | * | | 0.05 UJ | 2.5 U | 0.05 U | 0.25 U | 0.05 UR | 0.05 UR | 0.5 U | 0.5 U | 5 U |
| Endrin | 72-20-8 | 2 | | 0.05 UJ | 2.5 U | 0.05 U | 0.25 U | 0.05 UR | 0.05 UR | 0.5 U | 0.5 U | 5 U |
| Endrin Aldehyde | 7421-93-4 | * | | 0.05 UJ | 2.5 U | 0.05 U | 0.25 U | 0.05 UR | 0.05 UR | 0.5 U | 0.5 U | 5 U |
| Endrin Ketone | 53494-70-5 | * | | 0.05 UJ | 2.5 U | 0.05 U | 0.25 U | 0.05 UR | 0.05 UR | 0.5 U | 0.5 U | 5 U |
| gamma-BHC (Lindane) | 58-89-9 | 0.2 | | 0.05 UJ | 2.5 U | 0.05 U | 0.25 U | 0.05 UR | 0.05 UR | 0.18 J | 0.19 J | 1.9 J |
| gamma-Chlordane[d] | 12789-03-6 | 2 | | 0.05 UJ | 2.5 U | 0.05 U | 0.25 U | 0.05 UR | 0.05 UR | 0.5 U | 0.21 J | 5 U |
| Heptachlor | 76-44-8 | 0.4 | | 0.05 UJ | 2.5 UJ | 0.05 U | 0.25 U | 0.05 UR | 0.05 UR | 0.5 U | 0.5 U | 5 U |
| Heptachlor Epoxide | 1024-57-3 | 0.2 | | 0.05 UJ | 2.5 U | 0.05 U | 0.25 U | 0.05 UR | 0.05 UR | 0.5 U | 0.5 U | 5 U |
| Methoxychlor | 72-43-5 | 40 | | 0.1 UJ | 5 UJ | 0.1 UJ | 0.5 UJ | 0.1 UR | 0.1 UR | 1 UJ | 1 UJ | 10 UJ |
| Toxaphene | 8001-35-2 | 3 | | 2 UJ | 100 U | 2 U | 10 U | 2 UR | 2 UR | 20 U | 20 U | 200 U |
| **Herbicides (µg/L)** | | | | | | | | | | | | |
| 2,4,5-TP (Silvex) | 93-72-1 | 50 | | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1.6 J |
| 2,4,5-T | 93-76-5 | 70 | | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 2,4-D | 94-75-7 | 70 | | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U | 33 J |
| 2,4-DB | 94-82-6 | 56 | | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U | 4 UJ |

# TABLE 5

## VALIDATED GROUNDWATER ANALYTICAL RESULTS - JULY/AUGUST 1999
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| WELL DESIGNATION | | Screening Criteria [a] | | OLD-09-03 | OLD-09-04 | OLD-09-05 | OLD-09-06 | OLD-09-07 | OLD-09-010 | OLD-09-11 | | OLD-09-12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | CAS Number | Florida GCTL[b] | NTC BGSV [c] | NTC09G00311 | NTC09G00411 | NTC09G00511 | NTC09G00611 | NTC09G00711 | NTC09G01011 | NTC09G01111 | NTC09G01111-D | NTC09G01211 |
| LAB ID | | | | A9H050202001 | A9H050202003 | A9H040126007 | A9H040126003 | A9H040126001 | A9H040126008 | A9H040126004 | A9H040126005 | A9H030173002 |
| SAMPLE DATE | | | | 8/4/99 | 8/4/99 | 8/3/99 | 8/3/99 | 8/3/99 | 8/3/99 | 8/3/99 | 8/3/99 | 8/2/99 |
| **Herbicides (µg/L) (Cont)** | | | | | | | | | | | | |
| Dalapon | 75-99-0 | 200 | | 2 U | 9.9 J | 3.8 U | 2.9 U | 4.7 U | 2.5 U | 3.6 U | 4.3 U | 41 R |
| Dicamba | 1918-00-9 | 210 | | 2 U | 2 U | 2 U | 2 U | 0.87 J | 2 U | 2 U | 2 U | 2 UJ |
| Dichloroprop | 120-36-5 | 35 | | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U |
| Dinoseb | 88-85-7 | 7 | | 0.6 U | 0.6 U | 0.6 U | 0.6 U | 0.6 U | 0.6 U | 0.6 U | 0.6 U | 0.6 U |
| MCPA | 94-74-6 | 3.5 | | 400 UJ | 400 UJ | 400 UJ | 400 UJ | 400 UJ | 400 UJ | 400 UJ | 400 UJ | 400 UJ |
| MCPP | 7085-19-0 | 7 | | 400 UJ | 170 J | 290 R | 400 UJ | 910 J | 400 UJ | 400 UJ | 400 UJ | 190 J |
| Pentachlorophenol | 87-86-5 | 1 | | 25 U | 25 U | NA | NA | NA | NA | NA | NA | 25 U |
| **Inorganics (µg/L)** | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | 200 | 4067 | 452 J | 216 U | 102 U | 183 U | 1180 J | 208 U | 234 U | 227 U | 1040 J |
| Antimony | 7440-36-0 | 6 | 4.1 | 2.2 U | 2.2 U | 3.1 | 2.1 U | 2.1 U | 2.1 U | 2.7 | 4 | 2.1 U |
| Arsenic | 7440-38-2 | 50 | 5 | 2.3 U | 1370 | 475 | 191 | 5.3 | 2.2 U | 160 | 140 | 14.9 |
| Barium | 7440-39-3 | 2000 | 31.4 | 3.6 U | 17.8 | 8.8 | 11 | 6.5 U | 5 U | 18.1 | 18 | 9.1 |
| Beryllium | 7440-41-7 | 4 | * | 0.08 U | 0.08 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U |
| Cadmium | 7440-43-9 | 5 | 5.6 | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U |
| Calcium | 7440-70-2 | * | 36830 | 11200 | 52100 | 94500 | 62600 | 10200 | 44700 | 55000 | 54700 | 15900 |
| Chromium | 7440-47-3 | 100 | 7.8 | 0.8 U | 0.8 U | 1.9 U | 0.94 U | 8.6 | 2.2 U | 11.4 | 2.2 U | 1.9 U |
| Cobalt | 7440-48-4 | 420 | * | 0.6 U | 1.2 U | 0.7 U | 0.7 U | 0.7 U | 0.7 U | 0.7 U | 0.7 U | 0.7 U |
| Copper | 7440-50-8 | 1000 | 5.4 | 0.96 | 4.2 | 1 U | 1 U | 5.1 | 1 U | 1 U | 1 U | 1 U |
| Iron | 7439-89-6 | 300 | 1227 | 143 U | 6350 | 91.1 U | 465 | 317 U | 570 | 1490 | 1420 | 629 |
| Lead | 7439-92-1 | 15 | 4 | 1.1 U | 1.1 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U |
| Magnesium | 7439-95-4 | * | 4560 | 2230 | 3000 | 5870 | 3090 | 1110 | 2960 | 2740 | 2720 | 2220 |
| Manganese | 7439-96-5 | 50 | 17 | 1.1 U | 79.8 | 12 | 35.4 | 5.7 U | 17.4 | 22.3 | 21.5 | 8.3 |
| Mercury | 7439-97-6 | 2 | 0.12 | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.13 U | 0.1 U | 0.1 U |
| Nickel | 7440-02-0 | 100 | * | 1.5 U | 1.5 U | 1.3 U | 1.3 U | 5.8 | 1.3 U | 9.2 | 1.3 U | 1.3 U |
| Potassium | 7440-09-7 | * | 5400 | 3420 J | 7490 J | 8570 J | 3010 J | 588 J | 2100 J | 9220 J | 9320 J | 13200 J |
| Selenium | 7782-49-2 | 50 | 9.7 | 3.5 U | 3.5 U | 2.4 U | 2.4 U | 2.4 U | 2.4 U | 2.4 U | 2.4 U | 2.4 U |
| Silver | 7440-22-4 | 100 | * | 0.6 U | 0.6 U | 0.9 U | 0.9 U | 0.9 U | 0.9 U | 0.9 U | 0.9 U | 0.9 U |
| Sodium | 7440-23-5 | 160000 | 18222 | 2710 | 1440 | 3620 | 2340 | 6340 | 4020 | 1240 | 1320 | 2320 |
| Thallium | 7440-28-0 | 2 | 3.8 | 0.6 UR | 0.6 UR | 0.6 UJ | 0.6 UJ | 0.6 UJ | 0.6 UJ | 0.6 UJ | 0.6 UJ | 0.6 UJ |
| Vanadium | 7440-62-2 | 49 | 20.6 | 0.65 U | 0.66 U | 4.1 U | 0.84 U | 4.7 U | 0.8 U | 0.8 U | 0.8 U | 0.89 U |
| Zinc | 7440-66-6 | 5000 | 4 | 4.9 U | 19.1 U | 55.2 | 9 U | 70.4 | 43.8 | 8.8 U | 20.9 U | 75.5 |

# TABLE 5

## VALIDATED GROUNDWATER ANALYTICAL RESULTS - JULY/AUGUST 1999
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| WELL DESIGNATION | | Screening Criteria [a] | | OLD-09-12 | OLD-09-14 | OLD-09-15 | OLD-09-16 | OLD-09-17 | OLD-09-19 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | CAS Number | Florida GCTL[b] | NTC BGSV [c] | NTC09G01211-D | NTC09G01411 | NTC09G01511 | NTC09G01611 | NTC09G01711 | NTC09G01911 |
| LAB ID | | | | A9H030173004 | A9H030173001 | A9H030173003 | A9H040126006 | A9H040126002 | A9H050202004 |
| SAMPLE DATE | | | | 8/2/99 | 8/1/99 | 8/2/99 | 8/3/99 | 8/3/99 | 8/4/99 |
| **Semivolatiles (µg/L)** | | | | | | | NA | NA | |
| 1,2,4-Trichlorobenzene | 120-82-1 | 70 | | 10 U | 10 U | 10 U | | | 10 U |
| 1,2-Dichlorobenzene | 95-50-1 | 600 | | 10 U | 10 U | 10 U | | | 10 U |
| 1,3-Dichlorobenzene | 541-73-1 | 10 | | 10 U | 10 U | 10 U | | | 10 U |
| 1,4-Dichlorobenzene | 106-46-7 | 75 | | 10 U | 10 U | 10 U | | | 10 U |
| 2,2'-Oxybis (1-Chloropropane) | 108-60-1 | 10 | | 10 U | 10 U | 10 U | | | 10 U |
| 2,4,5-Trichlorophenol | 95-95-4 | 4 | | 10 U | 10 U | 10 U | | | 10 U |
| 2,4,6-Trichlorophenol | 88-06-2 | 3.2 | | 10 U | 10 U | 10 U | | | 10 U |
| 2,4-Dichlorophenol | 120-83-2 | 0.5 | | 30 | 10 U | 10 U | | | 10 U |
| 2,4-Dimethylphenol | 105-67-9 | 140 | | 10 U | 10 U | 10 U | | | 10 U |
| 2,4-Dinitrophenol | 51-28-5 | 14 | | 25 U | 25 U | 25 U | | | 25 U |
| 2,4-Dinitrotoluene | 121-14-2 | 0.1 | | 10 U | 10 U | 10 U | | | 10 U |
| 2,6-Dinitrotoluene | 606-20-2 | 0.1 | | 10 U | 10 U | 10 U | | | 10 U |
| 2-Chloronaphthalene | 91-58-7 | 560 | | 10 U | 10 U | 10 U | | | 10 U |
| 2-Chlorophenol | 95-57-8 | 35 | | 10 U | 10 U | 10 U | | | 10 U |
| 2-Methylnaphthalene | 91-57-6 | 20 | | NA | NA | NA | | | 10 U |
| 2-Methylphenol | 95-48-7 | 35 | | 10 U | 10 U | 10 U | | | 10 U |
| 2-Nitroaniline | 88-74-4 | 50 | | 25 U | 25 U | 25 U | | | 25 U |
| 2-Nitrophenol | 88-75-5 | * | | 10 U | 10 U | 10 U | | | 10 U |
| 3,3'-Dichlorobenzidine | 91-94-1 | 12 | | 10 U | 10 U | 10 U | | | 10 U |
| 3-Nitroaniline | 99-09-2 | 50 | | 25 U | 25 U | 25 U | | | 25 U |
| 4,6-Dinitro-2-Methylphenol | 534-52-1 | * | | 25 U | 25 U | 25 U | | | 25 U |
| 4-Bromophenyl Phenyl Ether | 101-55-3 | 406 | | 10 U | 10 U | 10 U | | | 10 U |
| 4-Chloro-3-Methylphenol | 59-50-7 | 63 | | 10 U | 10 U | 10 U | | | 10 U |
| 4-Chloroaniline | 106-47-8 | 28 | | 10 U | 10 U | 10 U | | | 10 U |
| 4-Chlorophenyl Phenyl Ether | 7005-72-3 | * | | 10 U | 10 U | 10 U | | | 10 U |
| 4-Methylphenol | 106-44-5 | 4 | | 10 U | 10 U | 10 U | | | 10 U |
| 4-Nitroaniline | 100-01-6 | 21 | | 25 U | 25 U | 25 U | | | 25 U |
| 4-Nitrophenol | 100-02-7 | 56 | | 25 U | 25 U | 25 UJ | | | 25 UJ |
| Bis(2-Chloroethoxy)Methane | 111-91-1 | * | | 10 U | 10 U | 10 U | | | 10 U |
| Bis(2-Chloroethyl)Ether | 111-44-4 | 4 | | 10 U | 10 U | 10 U | | | 10 U |
| Bis(2-Ethylhexyl)Phthalate | 117-81-7 | 6 | | 10 U | 10 U | 10 UJ | | | 10 U |
| Butylbenzyl Phthalate | 85-68-7 | 140 | | 10 U | 10 U | 10 UJ | | | 10 U |
| Carbazole | 86-74-8 | 4 | | 10 U | 10 U | 10 U | | | 10 U |

# TABLE 5

## VALIDATED GROUNDWATER ANALYTICAL RESULTS - JULY/AUGUST 1999
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| WELL DESIGNATION | | Screening Criteria [a] | | OLD-09-12 | OLD-09-14 | OLD-09-15 | OLD-09-16 | OLD-09-17 | OLD-09-19 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | CAS Number | Florida GCTL[b] | NTC BGSV [c] | NTC09G01211-D | NTC09G01411 | NTC09G01511 | NTC09G01611 | NTC09G01711 | NTC09G01911 |
| LAB ID | | | | A9H030173004 | A9H030173001 | A9H030173003 | A9H040126006 | A9H040126002 | A9H050202004 |
| SAMPLE DATE | | | | 8/2/99 | 8/1/99 | 8/2/99 | 8/3/99 | 8/3/99 | 8/4/99 |
| **Semivolatiles (µg/L) (Cont)** | | | | | | | NA | NA | |
| Di-N-Butyl Phthalate | 84-74-2 | 700 | | 10 U | 10 U | 10 U | | | 10 U |
| Di-N-Octyl Phthalate | 117-84-0 | 140 | | 10 U | 10 U | 10 U | | | 10 U |
| Dibenzofuran | 132-64-9 | 28 | | 10 U | 10 U | 10 U | | | 10 U |
| Diethyl Phthalate | 84-66-2 | 5600 | | 10 U | 10 U | 10 U | | | 10 U |
| Dimethyl Phthalate | 131-11-3 | 70000 | | 10 U | 10 U | 10 U | | | 10 U |
| Hexachlorobenzene | 118-74-1 | 1 | | 10 U | 10 U | 10 U | | | 10 U |
| Hexachlorobutadiene | 87-68-3 | 0.5 | | 10 U | 10 U | 10 U | | | 10 U |
| Hexachlorocyclopentadiene | 77-47-4 | 50 | | 10 UR | 10 UR | 10 UR | | | 10 UR |
| Hexachloroethane | 67-72-1 | 2.5 | | 10 U | 10 U | 10 U | | | 10 U |
| Isophorone | 78-59-1 | 37 | | 10 U | 10 U | 10 U | | | 10 U |
| N-Nitroso-Di-N-Propylamine | 621-64-7 | 4 | | 10 U | 10 U | 10 U | | | 10 U |
| N-Nitrosodiphenylamine | 86-30-6 | 7.1 | | 10 U | 10 U | 10 U | | | 10 U |
| Nitrobenzene | 98-95-3 | 4 | | 10 U | 10 U | 10 U | | | 10 U |
| Phenol | 108-95-2 | 10 | | 10 U | 10 U | 10 U | | | 10 U |
| **PAHs (µg/L)** | | | | | | | NA | NA | |
| 1-Methylnaphthalene | 90-12-0 | 20 | | 2.1 U | 2.1 U | 2.1 U | | | 2 UJ |
| 2-Methylnaphthalene | 91-57-6 | 20 | | 2.1 U | 2.1 U | 2.1 U | | | 2 UJ |
| Acenaphthene | 83-32-9 | 20 | | 1.1 U | 1.1 U | 1.1 U | | | 1 UJ |
| Acenaphthylene | 208-96-8 | 210 | | 1.1 U | 1.1 U | 1.1 U | | | 1 UJ |
| Anthracene | 120-12-7 | 2100 | | 1.1 U | 1.1 U | 1.1 U | | | 1 UJ |
| Benzo(a)Anthracene | 56-55-3 | 0.2 | | 0.11 U | 0.11 U | 0.11 U | | | 0.1 UJ |
| Benzo(a)Pyrene | 50-32-8 | 0.2 | | 0.11 U | 0.11 U | 0.11 U | | | 0.1 UJ |
| Benzo(b)Fluoranthene | 205-99-2 | 0.2 | | 0.11 U | 0.11 U | 0.11 U | | | 0.1 UJ |
| Benzo(g,h,i)Perylene | 191-24-2 | 210 | | 0.11 U | 0.11 U | 0.11 U | | | 0.1 UJ |
| Benzo(k)Fluoranthene | 207-08-9 | 0.5 | | 0.32 U | 0.32 U | 0.32 U | | | 0.3 UJ |
| Chrysene | 218-01-9 | 4.8 | | 0.11 U | 0.11 U | 0.11 U | | | 0.1 UJ |
| Dibenzo(a,h)Anthracene | 53-70-3 | 0.2 | | 0.11 U | 0.11 U | 0.11 U | | | 0.1 UJ |
| Fluoranthene | 206-44-0 | 280 | | 0.21 U | 0.21 U | 0.21 U | | | 0.2 UJ |
| Fluorene | 86-73-7 | 280 | | 2.1 U | 2.1 U | 2.1 U | | | 2 UJ |
| Indeno(1,2,3-cd)Pyrene | 193-39-5 | 0.2 | | 0.11 U | 0.11 U | 0.11 U | | | 0.1 UJ |
| Naphthalene | 91-20-3 | 20 | | 2.4 | 2.1 | 6.7 J | | | 2 UJ |
| Phenanthrene | 85-01-8 | 210 | | 1.1 U | 1.1 U | 1.1 U | | | 1 UJ |
| Pyrene | 129-00-0 | 210 | | 0.11 U | 0.11 U | 0.11 U | | | 0.1 UJ |

# TABLE 5

## VALIDATED GROUNDWATER ANALYTICAL RESULTS - JULY/AUGUST 1999
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| WELL DESIGNATION | | Screening Criteria [a] | | OLD-09-12 | OLD-09-14 | OLD-09-15 | OLD-09-16 | OLD-09-17 | OLD-09-19 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | CAS Number | Florida GCTL [b] | NTC BGSV [c] | NTC09G01211-D | NTC09G01411 | NTC09G01511 | NTC09G01611 | NTC09G01711 | NTC09G01911 |
| LAB ID | | | | A9H030173004 | A9H030173001 | A9H030173003 | A9H040126006 | A9H040126002 | A9H050202004 |
| SAMPLE DATE | | | | 8/2/99 | 8/1/99 | 8/2/99 | 8/3/99 | 8/3/99 | 8/4/99 |
| **Pesticides (µg/L)** | | | | | | | | | |
| 4,4'-DDD | 72-54-8 | 0.1 | | 5 U | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 U |
| 4,4'-DDE | 72-55-9 | 0.1 | | 5 U | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 U |
| 4,4'-DDT | 50-29-3 | 0.1 | | 5 U | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 U |
| Aldrin | 309-00-2 | 0.005 | | 5 U | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 UR |
| alpha-BHC | 319-84-6 | 0.2 | | 5 U | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 U |
| alpha-Chlordane[d] | 5103-71-9 | 2 | | 5 U | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 U |
| Beta-BHC | 319-85-7 | 0.02 | | 5 U | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 U |
| Delta-BHC | 319-86-8 | 2.1 | | 5 U | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 U |
| Dieldrin | 60-57-1 | 0.005 | | 5 U | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 U |
| Endosulfan I | 115-29-7 | 42 | | 5 U | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 U |
| Endosulfan II[d] | 33213-65-9 | 42 | | 5 U | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 U |
| Endosulfan Sulfate | 1031-07-8 | * | | 5 U | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 U |
| Endrin | 72-20-8 | 2 | | 5 U | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 U |
| Endrin Aldehyde | 7421-93-4 | * | | 5 U | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 U |
| Endrin Ketone | 53494-70-5 | * | | 5 U | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 U |
| gamma-BHC (Lindane) | 58-89-9 | 0.2 | | 1.7 J | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 U |
| gamma-Chlordane[d] | 12789-03-6 | 2 | | 5 U | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 U |
| Heptachlor | 76-44-8 | 0.4 | | 5 U | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 U |
| Heptachlor Epoxide | 1024-57-3 | 0.2 | | 5 U | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 UR | 0.05 U |
| Methoxychlor | 72-43-5 | 40 | | 10 UJ | 0.1 UR | 0.1 UR | 0.1 UR | 0.1 UR | 0.1 U |
| Toxaphene | 8001-35-2 | 3 | | 200 U | 2 UR | 2 UR | 2 UR | 2 UR | 2 U |
| **Herbicides (µg/L)** | | | | | | | | | |
| 2,4,5-TP (Silvex) | 93-72-1 | 50 | | 1.5 J | 1 U | 1 U | 1 U | 1 U | 1 U |
| 2,4,5-T | 93-76-5 | 70 | | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 2,4-D | 94-75-7 | 70 | | 31 J | 4 U | 4 U | 4 U | 4 U | 4 U |
| 2,4-DB | 94-82-6 | 56 | | 4 UJ | 4 UJ | 4 UJ | 4 U | 4 U | 4 U |

# TABLE 5

## VALIDATED GROUNDWATER ANALYTICAL RESULTS - JULY/AUGUST 1999
## OPERABLE UNIT 3 - STUDY AREAS 8 AND 9

## NAVAL TRAINING CENTER
## ORLANDO, FLORIDA



| WELL DESIGNATION | | Screening Criteria [a] | | OLD-09-12 | OLD-09-14 | OLD-09-15 | OLD-09-16 | OLD-09-17 | OLD-09-19 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | CAS Number | Florida GCTL[b] | NTC BGSV [c] | NTC09G01211-D | NTC09G01411 | NTC09G01511 | NTC09G01611 | NTC09G01711 | NTC09G01911 |
| LAB ID | | | | A9H030173004 | A9H030173001 | A9H030173003 | A9H040126006 | A9H040126002 | A9H050202004 |
| SAMPLE DATE | | | | 8/2/99 | 8/1/99 | 8/2/99 | 8/3/99 | 8/3/99 | 8/4/99 |
| **Herbicides (µg/L) (Cont)** | | | | | | | | | |
| Dalapon | 75-99-0 | 200 | | 21 J | 2 UJ | 2 UJ | 1.5 U | 3.4 U | 2 U |
| Dicamba | 1918-00-9 | 210 | | 2 UJ | 2 UJ | 2 UJ | 2 U | 2 U | 2 U |
| Dichloroprop | 120-36-5 | 35 | | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U |
| Dinoseb | 88-85-7 | 7 | | 0.6 U | 0.6 U | 0.6 U | 0.6 U | 0.6 U | 0.6 U |
| MCPA | 94-74-6 | 3.5 | | 400 U | 400 U | 400 U | 400 UJ | 400 UJ | 400 UJ |
| MCPP | 7085-19-0 | 7 | | 220 J | 400 U | 410 U | 400 UJ | 400 UJ | 400 UJ |
| Pentachlorophenol | 87-86-5 | 1 | | 25 U | 25 U | 25 U | NA | NA | 25 U |
| **Inorganics (µg/L)** | | | | | | | | | |
| Aluminum | 7429-90-5 | 200 | 4067 | 1710 J | 446 U | 414 U | 1670 J | 166 U | 7740 J |
| Antimony | 7440-36-0 | 6 | 4.1 | 2.1 U | 2.1 U | 2.1 U | 2.1 U | 2.1 U | 17.7 |
| Arsenic | 7440-38-2 | 50 | 5 | 147 | 2.2 U | 2.2 U | 2.2 U | 8.3 | 2.3 U |
| Barium | 7440-39-3 | 2000 | 31.4 | 13.1 | 18.1 | 5.9 U | 22.3 | 6.5 U | 51.5 |
| Beryllium | 7440-41-7 | 4 | * | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.21 U |
| Cadmium | 7440-43-9 | 5 | 5.6 | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.3 U | 0.27 U |
| Calcium | 7440-70-2 | * | 36830 | 16500 | 45800 | 371 U | 8250 | 42500 | 51600 |
| Chromium | 7440-47-3 | 100 | 7.8 | 3.6 U | 2.3 U | 1.4 U | 4.5 U | 2.8 U | 3.4 |
| Cobalt | 7440-48-4 | 420 | * | 0.74 U | 0.7 U | 0.7 U | 0.7 U | 0.7 U | 1.2 U |
| Copper | 7440-50-8 | 1000 | 5.4 | 3.5 | 1 U | 1 U | 2.6 | 1.3 | 6.6 |
| Iron | 7439-89-6 | 300 | 1227 | 762 | 171 U | 258 U | 637 | 27.2 U | 1250 |
| Lead | 7439-92-1 | 15 | 4 | 2.9 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 6.5 U |
| Magnesium | 7439-95-4 | * | 4560 | 2280 | 4620 | 523 U | 1220 | 759 U | 1660 |
| Manganese | 7439-96-5 | 50 | 17 | 10.2 | 5 U | 4.6 U | 41.5 | 1.4 U | 9.9 U |
| Mercury | 7439-97-6 | 2 | 0.12 | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U |
| Nickel | 7440-02-0 | 100 | * | 1.3 U | 5 | 1.3 U | 2.8 | 1.7 | 1.5 U |
| Potassium | 7440-09-7 | * | 5400 | 13200 J | 574 J | 26.9 U | 586 J | 2950 J | 488 U |
| Selenium | 7782-49-2 | 50 | 9.7 | 2.4 U | 2.4 U | 2.4 U | 2.4 U | 2.4 U | 3.5 U |
| Silver | 7440-22-4 | 100 | * | 0.9 U | 0.9 U | 0.9 U | 0.9 U | 0.9 U | 0.6 U |
| Sodium | 7440-23-5 | 160000 | 18222 | 5850 | 32200 | 5320 | 12000 | 1300 | 8260 |
| Thallium | 7440-28-0 | 2 | 3.8 | 0.6 UJ | 0.6 UJ | 0.6 UJ | 0.6 UJ | 0.6 UJ | 0.6 UR |
| Vanadium | 7440-62-2 | 49 | 20.6 | 2 U | 2.6 U | 0.8 U | 6.3 U | 8.9 | 7.2 U |
| Zinc | 7440-66-6 | 5000 | 4 | 92 | 3.8 U | 3.4 U | 41.5 | 8.5 U | 11.2 U |

**TABLE 5**

**VALIDATED GROUNDWATER ANALYTICAL RESULTS – JULY/AUGUST 1999**
**OPERABLE UNIT 3 – STUDY AREAS 8 AND 9**

**NAVAL TRAINING CENTER**
**ORLANDO, FLORIDA**


Notes:

* indicates that the criteria or screening value not available.
"J" qualifier indicates an estimated value.
"U" qualifier indicates a non-detect.
"R" qualifier indicates rejected value.
NA Not analyzed.
Values in shaded cells exceed the screening criteria.
Empty cells indicate analyte not analyzed for.

(a) For an organic analyte, the screening criterion is the GCTL; for an inorganic analyte with an established GCTL and BGSV, the screening criterion is the greater of the GCTL or the BGSV.
(b) Groundwater Cleanup Target Level (Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-777, F.A.C., May 26, 1999)
(c) Background Screening Value (Background Sampling Report for NTC, Orlando, Florida; ABB Environmental Services, August 1995) for inorganics only.
(d) Screening Criteria Substitution – Chlordane for alpha-Chlordane and gamma-Chlordane, and Endosulfan for Endosulfan II.

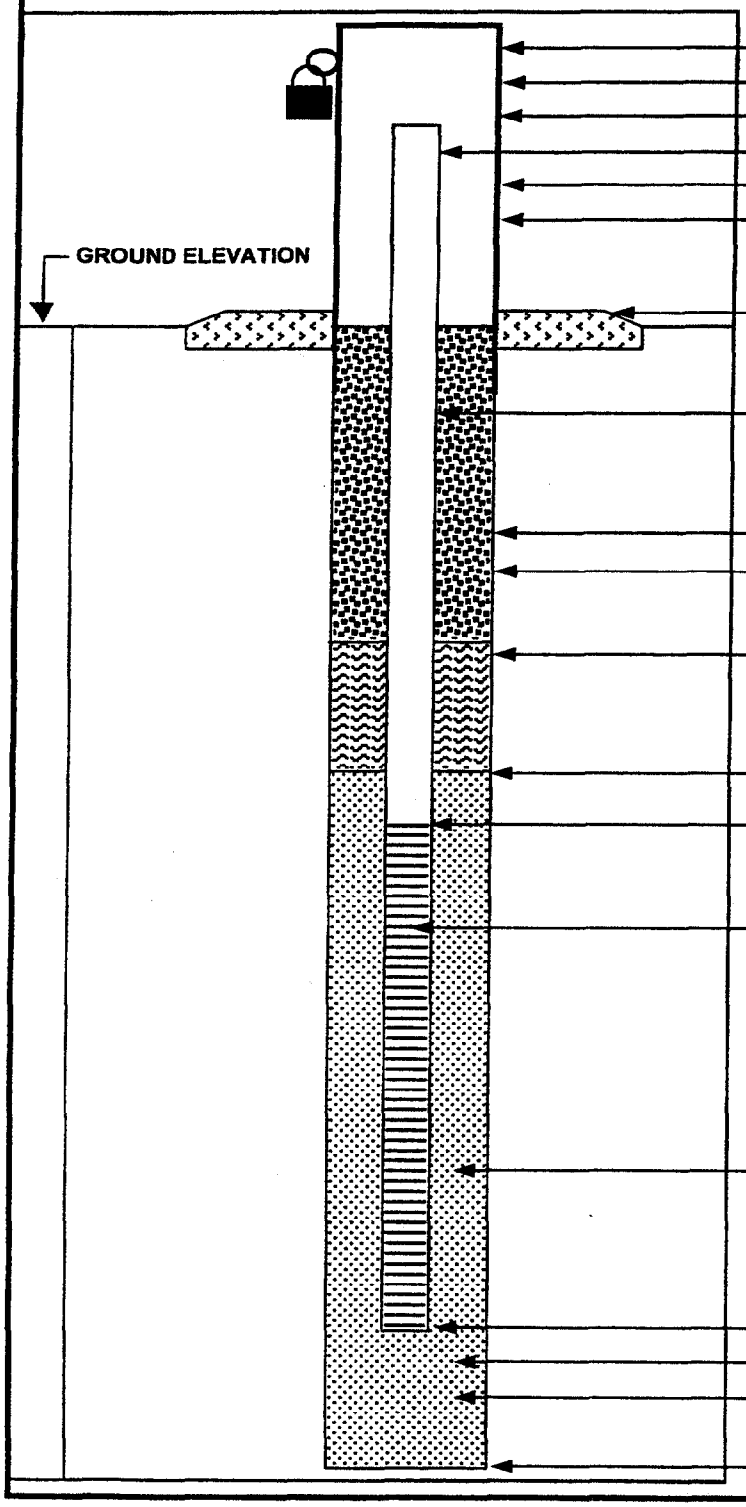
# ATTACHMENT A

## WELL NO. OLD-09-19 CONSTRUCTION DIAGRAM

WELL NO.: OLD-09-19

# OVERBURDEN MONITORING WELL SHEET

| | | | | | |
|---|---|---|---|---|---|
| PROJECT | NTC Orlando | LOCATION | SA9 | DRILLER | Jeff Ziesler |
| PROJECT NO. | 7457 | BORING | NTC-09-19 | METHOD: | |
| ELEVATION | 94.59' (TOC) | DATE | 7-30-99 | DRILLING | HSA |
| FIELD GEOLOGIST | John Hofer | | | DEVELOPMENT | sub. pump |




ELEVATION OF TOP OF SURFACE CASING: _____

ELEVATION OF TOP OF RISER PIPE: _____

STICK-UP TOP OF SURFACE CASING: flush

STICK-UP OF RISER PIPE: flush

I.D. OF SURFACE CASING: _____

TYPE OF SURFACE CASING: 8-in. Christy box

TYPE OF SURFACE SEAL: concrete

RISER PIPE I.D.: PVC

TYPE OF RISER PIPE: _____

BOREHOLE DIAMETER: 8.25-in.

TYPE OF SEAL: Neat grout w/ bentonite powder

ELEVATION / DEPTH OF SEAL: / 18.5 ft

TYPE OF SEAL: bentonite

DEPTH - TOP OF SAND PACK: / 20.5 ft

ELEVATION / DEPTH - TOP OF SCREEN: / 25.5 ft

TYPE OF SCREEN: PVC

SLOT SIZE X LENGTH: 0.01-in. x 5 ft

I.D. OF SCREEN: 2-in.

TYPE OF SAND PACK: 20/30 22.5 ft to 31 ft
30/65 20.5 ft to 22.5 ft

ELEVATION / DEPTH TO BOTTOM OF SCREEN: / 30.5 ft

ELEVATION / DEPTH TO BOTTOM OF SAND PACK: / 31 ft

TYPE OF BACKFILL BELOW MONITORING WELL: sand

ELEVATION / DEPTH TO BOTTOM OF BOREHOLE: / 31 ft

# ATTACHMENT B

# GROUNDWATER SAMPLE LOG SHEETS

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NTC Orlando/OU 3 - Study Area 8
Project No.: 7457

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

Sample ID No.: NTC08GW0111
Sample Location: OLD-OB-01
Sampled By: JK, PH
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

**PURGE DATA**

| Date: 7/28/99 | (ml) Volume | pH | S.C. | Temp (°C) | Turbidity | DO | ORP | DTW | Flow |
|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | 500 Initial | 6.28 | 411 | 28.92 | 5.3 | 38.2 | -30.8 | 2.18 | 150 |
| Monitor Reading (ppm): 0 | 1250 | 6.29 | 399 | 29.15 | 2.7 | 31.5 | -15.3 | 2.18 | 100 |
| Well Casing Diameter: 2 | 1750 | 6.31 | 391 | 29.34 | 2.7 | 31.9 | -13.5 | 2.18 | 100 |
| Well Casing Material: PVC | 2200 | 6.30 | 385 | 29.36 | 2.7 | 27.9 | -10.9 | 2.18 | 100 |
| Total Well Depth (TD): ~~2.18~~ | 2700 | 6.30 | 384 | 29.39 | 2.9 | 27.8 | -12.5 | 2.18 | 100 |
| Static Water Level (WL): 2.18 | 3200 | 6.30 | 383 | 29.47 | 2.4 | 25.1 | -11.4 | 2.18 | 100 |
| One Casing Volume(gal/L): | 3700 | 6.32 | 381 | 29.45 | 2.3 | 24.2 | -13.7 | 2.18 | 100 |
| Start Purge (hrs): 0850 | 4200 | 6.27 | 382 | 29.49 | 1.9 | 24.3 | -12.1 | 2.18 | 100 |
| End Purge (hrs): | | | | | | | | | |
| Total Purge Time (min): | | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | | |

**SAMPLING DATA**

| Date: 7/28/99 Time: 0937 | Color | pH | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/L | ORP | DTW ft BTOC | Flow ml/min |
|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | Yellow | 6.27 | 382 | 29.49 | 1.9 | 24.3 | -12.1 | 2.18 | 100 |

**SAMPLE COLLECTION INFORMATION**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| TAL Metals | $HNO_3$ | 1 1-Liter Plastic | X |

**OBSERVATIONS / NOTES**

Circle if Applicable:
MS/MSD
Duplicate ID No.:

Signature(s):

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NTC Orlando/OU 3 - Study Area 8
Project No.: 7457

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

Sample ID No.: NTC08G00211
Sample Location: OLD-08-02
Sampled By: JH, PH
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

**PURGE DATA**

| Date: | Volume (mL) | pH | S.C. | Temp (°C) | Turbidity | DO | ORP | DTW | Flow |
|---|---|---|---|---|---|---|---|---|---|
| Method: | 7[illegible] | 6.05 | 439 | 28.98 | 5.4 | 24.3 | -72.3 | 2.25 | 100 |
| Monitor Reading (ppm): | 9[illegible] | 6.14 | 439 | 28.91 | 2.8 | 25.5 | -77.5 | 2.25 | 100 |
| Well Casing Diameter: | 1800 | 6.30 | 436 | 28.91 | 2.0 | 23.4 | -84.0 | 2.25 | 120 |
| Well Casing Material: | 2450 | 6.25 | 429 | 28.76 | 2.0 | 21.2 | -83.5 | 2.25 | 120 |
| Total Well Depth (TD): | 3000 | 6.38 | 415 | 28.80 | 1.6 | 23.6 | -92.6 | 2.25 | 100 |
| Static Water Level (WL): | 3500 | 6.33 | 409 | 28.80 | 1.8 | 20.6 | -90.5 | 2.25 | 100 |
| One Casing Volume(gal/L): | 4100 | 6.34 | 405 | 28.80 | 1.5 | 19.9 | -90.6 | 2.25 | 120 |
| Start Purge (hrs): | 4500 | 6.33 | 405 | 28.79 | 1.7 | 19.8 | -90.7 | 2.25 | 120 |
| End Purge (hrs): | | | | | | | | | |
| Total Purge Time (min): | | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | | |

**SAMPLING DATA**

| Date: 7/28/99 Time: 1508 | Color | pH | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/L | ORP | DTW ft BTOC | Flow ml/min |
|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic pump | yellow | 6.33 | 405 | 28.79 | 1.7 | 19.8 | -90.7 | 2.25 | 100 |

**SAMPLE COLLECTION INFORMATION**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| TAL Metals | $HNO_3$ | 1 1-Liter Plastic | X |

**OBSERVATIONS / NOTES**

Circle if Applicable:
MS/MSD
Duplicate ID No.:

Signature(s):

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NTC Orlando/OU 3 - Study Area 8
Project No.: 7457

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

Sample ID No.: NTC08G00311
Sample Location: NTC OLD-08-03
Sampled By: JH, PH
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

## PURGE DATA

| Date: 7/28/99 | Volume (mL) | pH | S.C. | Temp (°C) | Turbidity | DO | ORP | DTW | Flow |
|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | 1000 | 5.32 | 287 | 29.23 | 11 | 21.0 | -14.9 | 1.90 | 150 |
| Monitor Reading (ppm): 0 | 1600 | 5.72 | 285 | 29.21 | 10 | 18.5 | -39.5 | 1.90 | 120 |
| Well Casing Diameter: 2 | 2300 | 5.81 | 277 | 29.19 | 9.1 | 18.2 | -50.2 | 1.99 | 120 |
| Well Casing Material: PVC | 3000 | 5.83 | 263 | 29.21 | 4.0 | 16.6 | -60.3 | 1.89 | 120 |
| Total Well Depth (TD): 12.90 | 4200 | 5.86 | 265 | 29.26 | 3.2 | 16.1 | -66.2 | 1.89 | 120 |
| Static Water Level (WL): 1.85 | 4700 | 5.74 | 265 | 29.21 | 2.5 | 15.9 | -63.4 | 1.89 | 100 |
| One Casing Volume(gal/L): | 5200 | 5.78 | 264 | 29.23 | 2.5 | 14.6 | -66.1 | 1.89 | 100 |
| Start Purge (hrs): 1305 | 5700 | 5.82 | 266 | 29.20 | 2.2 | 15.0 | -68.3 | 1.89 | 100 |
| End Purge (hrs): 1352 | | | | | | | | | |
| Total Purge Time (min): 47 | | | | | | | | | |
| Total Vol. Purged (gal/L): 5.7 | | | | | | | | | |

## SAMPLING DATA

| Date: 7/28/99 Time: 1400 | Color | pH | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/L | ORP | DTW ft BTOC | Flow ml/min |
|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | Yellow | 5.82 | 266 | 29.2 | 2.2 | 15.0 | -68.3 | 1.89 | 100 |

## SAMPLE COLLECTION INFORMATION

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| TAL Metals | $HNO_3$ | 1 1-Liter Plastic | X |

## OBSERVATIONS / NOTES

Circle if Applicable:
MS/MSD
Duplicate ID No.:

Signature(s):

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NTC Orlando/OU 3 - Study Area 8
Project No.: 7457

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

Sample ID No.: NTC08G00411
Sample Location: OLD-08-04
Sampled By: JH, PH
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

## PURGE DATA

| Date: 7/28/99 | Volume (gal) | pH | S.C. | Temp (°C) | Turbidity | DO | ORP | DTW | Flow |
|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | 500 | 5.94 | 208.0 | 27.74 | 7.00 | 19.0 | 5.4 | 2.00 | 100 |
| Monitor Reading (ppm): 0 | 1000 | 5.84 | 206.0 | 27.75 | 7.2 | 15.0 | -0.4 | 2.00 | 100 |
| Well Casing Diameter: 2 | 1500 | 5.81 | 205 | 27.85 | 7.7 | 13.8 | -2.1 | 2.00 | 100 |
| Well Casing Material: PVC | 2500 | 5.99 | 202 | 28.09 | 5.3 | 12.1 | -17.4 | 2.00 | 150 |
| Total Well Depth (TD): | 3000 | 6.06 | 198 | 28.23 | 5.4 | 12.9 | -24.0 | 2.00 | 100 |
| Static Water Level (WL): 1.92 | 3500 | 6.02 | 188 | 28.21 | 4.8 | 12.7 | -27.9 | 2.00 | 100 |
| One Casing Volume(gal/L): | 4000 | 6.02 | 181 | 28.21 | 4.0 | 11.9 | -36.9 | 2.00 | 100 |
| Start Purge (hrs): 1005 | 4500 | 5.97 | 176 | 28.28 | 4.2 | 11.6 | -39.7 | 2.00 | 100 |
| End Purge (hrs): | 5000 | 6.00 | 175 | 28.30 | 4.4 | 12.5 | -45.3 | 2.00 | 100 |
| Total Purge Time (min): | 5600 | 5.97 | 175 | 28.34 | 4.4 | 11.4 | -44.4 | 2.00 | 120 |
| Total Vol. Purged (gal/L): | 6100 | 5.99 | 174 | 28.38 | 4.5 | 11.6 | -47.9 | 2.00 | 120 |

## SAMPLING DATA

| Date: 7/28/99<br>Time: 1103 | Color | pH | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/L | ORP | DTW ft BTOC | Flow ml/min |
|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | Yellow | 5.99 | 174 | 28.38 | 4.4 | 11.6 | -47.9 | 2.00 | 120 |

## SAMPLE COLLECTION INFORMATION

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| TAL Metals | $HNO_3$ | 1 1-Liter Plastic | X |

## OBSERVATIONS / NOTES

Circle if Applicable:

| MS/MSD | Duplicate ID No.: | Signature(s): |
|---|---|---|
| | | |

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NTC Orlando/OU 3 - Study Area 8
Project No.: 7457

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

Sample ID No.: NTC 086 00511
Sample Location: OLD 0805
Sampled By: BRB - PH
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

## PURGE DATA

| Date: 072999 | Volume | pH | S.C. | Temp (°C) | Turbidity | DO | ORP | DTW | Flow |
|---|---|---|---|---|---|---|---|---|---|
| Method: Micro Purge | 1330 Initial | 5.77 | 531 | 28.35 | 20 | 3.43 | -12.4 | 1.04 | 100 ml/m |
| Monitor Reading (ppm): 0 | 1340 1 | 5.45 | 529 | 28.16 | 2.8 | 4.15 | -30.8 | N/A | 100 |
| Well Casing Diameter: 1/2" | 1350 2 | 5.68 | 521 | 28.01 | 1.5 | 2.75 | -43.0 | N/A | 100 |
| Well Casing Material: PVC | 1400 3 | 5.62 | 508 | 28.02 | 1.4 | 2.82 | -43.4 | N/A | 100 |
| Total Well Depth (TD): 9.45 | 1410 | 5.63 | 503 | 28.29 | 1.6 | 2.31 | -44.3 | N/A | 100 |
| Static Water Level (WL): 1.04 | 1420 | 5.67 | 502 | 28.22 | 1.5 | 2.34 | -46.4 | N/A | 100 |
| One Casing Volume(gal/L): | | | | | | | | | |
| Start Purge (hrs): 1325 | | | | | | | | | |
| End Purge (hrs): 1420 | | | | | | | | | |
| Total Purge Time (min): 55 | | | | | | | | | |
| Total Vol. Purged ~~(gal/L)~~: | | | | | | | | | |
| 5500 ML | | | | | | | | | |

## SAMPLING DATA

| Date: 072999 | Color | pH | S.C. | Temp. | Turbidity | DO | ORP | DTW | Flow |
|---|---|---|---|---|---|---|---|---|---|
| Time: 1420 | yellow | | mS/cm | °C | NTU | mg/L | | ft BTOC | ml/min |
| Method: Pump | clear | 5.64 | 501 | 28.21 | 1.5 | 2.27 | -45.3 | N/A | 100 ml/m |

## SAMPLE COLLECTION INFORMATION

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| TAL metals | HNO3 | 1-liter plastic | X |

## OBSERVATIONS / NOTES

Circle if Applicable:

| MS/MSD | Duplicate ID No.: | Signature(s): |
|---|---|---|
| | | |

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NTC Orlando/OU 3 - Study Area 8
Project No.: 7457

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

Sample ID No.: NTC086 00611
Sample Location: OLD 0806
Sampled By: BBS - PH
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

**PURGE DATA**

| Date: 072999 | Volume | pH | S.C. | Temp (°C) | Turbidity | DO | ORP | DTW | Flow |
|---|---|---|---|---|---|---|---|---|---|
| Method: Peristaltic Pump | 1440 Initial | 5.45 | 481 | 29.26 | 3.1 | 2.27 | -37.4 | 2.00 | 100 ml/min |
| Monitor Reading (ppm): 0 | 1450 1 | 5.58 | 468 | 29.42 | 1.4 | 1.73 | -49.6 | N/A | 100 |
| Well Casing Diameter: 1/2" | 1500 2 | 5.59 | 465 | 29.21 | 1.4 | 1.74 | -51.0 | N/A | 100 |
| Well Casing Material: PVC | 1510 3 | 5.65 | 461 | 29.13 | 1.1 | 1.47 | -54.3 | N/A | 100 |
| Total Well Depth (TD): 9.62 | 1520 | 5.59 | 459 | 29.10 | 1.2 | 1.71 | -54.7 | N/A | 100 |
| Static Water Level (WL): 2.00 | 1530 | 5.66 | 459 | 29.08 | 1.1 | 1.75 | -54.4 | N/A | 100 |
| One Casing Volume(gal/L): | 1540 | 5.65 | 460 | 29.09 | 1.0 | 1.73 | -54.2 | N/A | 100 |
| Start Purge (hrs): 1440 | | | | | | | | | |
| End Purge (hrs): 1540 | | | | | | | | | |
| Total Purge Time (min): | | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | | |
| 6000 mL | | | | | | | | | |

**SAMPLING DATA**

| Date: 072999 Time: 1540 | Color | pH | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/L | ORP | DTW ft BTOC | Flow ml/min |
|---|---|---|---|---|---|---|---|---|---|
| Method: P. Pump | clear | 5.64 | 460 | 29.09 | 1.0 | 1.74 | -54.4 | N/A | 100 |

**SAMPLE COLLECTION INFORMATION**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| TAL metals | HNO3 | 1-1 Litre Plastic | X |

**OBSERVATIONS / NOTES**

Circle if Applicable:
MS/MSD
Duplicate ID No.:

Signature(s):

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NTC Orlando/OU 3 - Study Area 8
Project No.: 7457

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

Sample ID No.: NTC08G008LL
Sample Location: OLD-08-08
Sampled By: JH, PH
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

## PURGE DATA

| Date: 8/1/99 | Volume (gal) | pH | S.C. | Temp (°C) | Turbidity | DO | ORP | DTW | Flow |
|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | 3000 | 6.22 | 239 | 30.92 | 9.6 | 21.6 | -128.8 | NA | 100 |
| Monitor Reading (ppm): 0 | 1300 | 5.84 | 344 | 30.92 | 2.7 | 5.7 | -119.2 | NA | 100 |
| Well Casing Diameter: 1/2 | 2300 | 5.96 | 343 | 30.96 | 1.9 | 4.9 | -126.3 | NA | 100 |
| Well Casing Material: PVC | 3300 | 6.17 | 341 | 31.02 | 1.9 | 4.2 | -135.9 | NA | 100 |
| Total Well Depth (TD): 8.5 | 4300 | 6.24 | 342 | 31.13 | 1.9 | 3.6 | -139.8 | NA | 100 |
| Static Water Level (WL): 2.41 | 4600 | 6.27 | 341 | 31.00 | 1.4 | 4.0 | -140.0 | NA | 100 |
| One Casing Volume(gal/L): | 4900 | 6.23 | 341 | 30.98 | 1.4 | 4.0 | -135.9 | NA | 100 |
| Start Purge (hrs): 1057 | | | | | | | | | |
| End Purge (hrs): 1050 | | | | | | | | | |
| Total Purge Time (min): 53 | | | | | | | | | |
| Total Vol. Purged (gal/L) | | | | | | | | | |

## SAMPLING DATA

| Date: 8/1/99 Time: 1153 | Color | pH | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/L | ORP | DTW ft BTOC | Flow ml/min |
|---|---|---|---|---|---|---|---|---|---|
| Method: Peristaltic | Clear | 6.23 | 341 | 30.98 | 1.4 | 4.0 | -135.9 | NA | 100 |

## SAMPLE COLLECTION INFORMATION

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| TAL Metals | $HNO_3$ | 1 1-Liter Plastic | X |
| Herbicides | None | 2 1-Liter Amber | |

## OBSERVATIONS / NOTES

Circle if Applicable:
MS/MSD
Duplicate ID No.:

Signature(s):

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NTC Orlando/OU 3 - Study Area 8
Project No.: 7457

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

Sample ID No.: NTC 08 G 01011
Sample Location: OLD 08-10
Sampled By: BKB - PH
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

**PURGE DATA**

| Date: 073099 | Volume | pH | S.C. | Temp (°C) | Turbidity | DO | ORP | DTW | Flow |
|---|---|---|---|---|---|---|---|---|---|
| Method: micropurge | Initial | | | | | | | | |
| Monitor Reading (ppm): 0 | 1 | | | | | | | | |
| Well Casing Diameter: 1/2" | 2 | | | | | | | | |
| Well Casing Material: PVC | 3 | | | | | | | | |
| Total Well Depth (TD): 9.52 | 0910 | 6.25 | 261 | 25.67 | 25.0 | 5.93 | -22.8 | 1.64 | 100 mL/m |
| Static Water Level (WL): 1.62 | 0920 | 6.16 | 261 | 25.77 | 14.0 | 4.99 | -20.6 | N/A | 100 |
| One Casing Volume(gal/L): | 0930 | 6.26 | 261 | 25.79 | 8.0 | 3.77 | -27.1 | N/A | 100 |
| Start Purge (hrs): 0910 | 0940 | 6.33 | 262 | 25.79 | 6.4 | 2.98 | -34.8 | N/A | 100 |
| End Purge (hrs): 1010 | 0950 | 6.33 | 262 | 25.82 | 5.9 | 2.63 | -44.9 | N/A | 100 |
| Total Purge Time (min): 60 | 1000 | 6.37 | 261 | 25.90 | 5.4 | 3.20 | -48.6 | N/A | 100 |
| Total Vol. Purged (gal/L): | 1010 | 6.39 | 260 | 25.80 | 4.7 | 2.11 | -50.9 | N/A | 100 |
| 6000 mL | | | | | | | | | |

**SAMPLING DATA**

| Date: 073099 Time: 1015 | Color | pH | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/L | ORP | DTW ft BTOC | Flow ml/min |
|---|---|---|---|---|---|---|---|---|---|
| Method: micro sample | clear | 6.38 | 260 | 25.83 | 4.2 | 2.10 | -50.6 | N/A | 100 |

**SAMPLE COLLECTION INFORMATION**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| TAL METALS | HNO3 | 1 - 1 Litre Plastic | X |
| Herbicides 8151 | None | 2 - 1 Litre Amber Glass | X |

**OBSERVATIONS / NOTES**

Circle if Applicable:
MS/MSD
Duplicate ID No.:

Signature(s):

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NTC Orlando/OU 3 - Study Area 8
Project No.: 7457

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

Sample ID No.: NTC 08G01111
Sample Location: OLD 0811
Sampled By: BAB - PH
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

## PURGE DATA

| Date: 073099 | Volume | pH | S.C. | Temp (°C) | Turbidity | DO | ORP | DTW | Flow |
|---|---|---|---|---|---|---|---|---|---|
| Method: microPurge | Initial | | | | | | | | |
| Monitor Reading (ppm): 0 | 1 | | | | | | | | |
| Well Casing Diameter: 1/2" | 2 | | | | | | | | |
| Well Casing Material: PVC | 3 | | | | | | | | |
| Total Well Depth (TD): 9.74 | 1040 | 5.93 | 390 | 27.34 | 18 | 3.30 | -103.9 | 1.35 | 100 mL/m |
| Static Water Level (WL): 1.35 | 1050 | 5.77 | 391 | 27.00 | 5.3 | 1.87 | -108.8 | N/A | 100 |
| One Casing Volume(gal/L): | 1100 | 5.76 | 391 | 27.06 | 2.5 | 1.12 | -109.8 | N/A | 100 |
| Start Purge (hrs): 1040 | 1110 | 5.86 | 390 | 26.93 | 2.1 | .39 | -112.4 | N/A | 100 |
| End Purge (hrs): 1140 | 1120 | 6.15 | 388 | 27.23 | 1.7 | .82 | -126.3 | N/A | 100 |
| Total Purge Time (min): 60 | 1130 | 6.00 | 390 | 27.02 | 1.5 | .58 | -117.6 | N/A | 100 |
| Total Vol. Purged (gal/L): | 1140 | 6.05 | 389 | 27.04 | 1.4 | .63 | -119.7 | N/A | 100 |
| 6000 mL | | | | | | | | | |

## SAMPLING DATA

| Date: 073099 Time: 1145 | Color | pH | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/L | ORP | DTW ft BTOC | Flow ml/min |
|---|---|---|---|---|---|---|---|---|---|
| Method: micro sample | clear | 6.07 | 389 | 27.06 | 1.2 | .71 | -120.3 | N/A | 100 |

## SAMPLE COLLECTION INFORMATION

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| TAL METALS | HNO3 | 1 - 1 Liter Plastic | ✓ |
| 8151 Herbicides | None | 2 - 1 Liter Amber Glass | ✓ |

## OBSERVATIONS / NOTES

Circle if Applicable:
MS/MSD
Duplicate ID No.:

Signature(s):

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NTC Orlando/OU 3 - Study Area 8
Project No.: 7457

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

Sample ID No.: NTC08G01311
Sample Location: OLD-08-13
Sampled By: JH, PH
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

## PURGE DATA

| Date: 7/31/99 | Volume | pH | S.C. | Temp (°C) | Turbidity | DO | ORP | DTW | Flow | |
|---|---|---|---|---|---|---|---|---|---|---|
| Method: Peristaltic | 1125 | 4.49 | 134 | 26.74 | 370 | 33.0 | -53.6 | NA | 100 | 09 |
| Monitor Reading (ppm): 0 | 1125 | 4.68 | 120 | 26.77 | 90 | 46.0 | -52.2 | NA | 100 | 09 |
| Well Casing Diameter: 1/2 | 2125 | 4.87 | 116 | 26.71 | 28 | 51.2 | -58.1 | NA | 100 | 09 |
| Well Casing Material: PVC | 3125 | 4.90 | 113 | 26.84 | 15 | 50.9 | -61.0 | NA | 100 | 09 |
| Total Well Depth (TD): 11.0 | 4125 | 4.92 | 111 | 26.91 | 10 | 53.3 | -61.1 | NA | 100 | 10 |
| Static Water Level (WL): 4.64 | 5100 | 4.94 | 111 | 27.02 | 8.8 | 56.1 | -61.0 | NA | 100 | 101 |
| One Casing Volume(gal/L): | 5400 | 4.89 | 110 | 26.98 | 8.5 | 55.8 | -59.2 | NA | 100 | 101 |
| Start Purge (hrs): 0910 | 5700 | 4.91 | 110 | 26.95 | 8.0 | 56.5 | -61.4 | NA | 100 | 101 |
| End Purge (hrs): 1016 | | | | | | | | | | |
| Total Purge Time (min): 66 | | | | | | | | | | |
| Total Vol. Purged (gal/L) 5,700 | | | | | | | | | | |

## SAMPLING DATA

| Date: 7/31/99 Time: 1016 | Color | pH | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/L | ORP | DTW ft BTOC | Flow ml/min |
|---|---|---|---|---|---|---|---|---|---|
| Method: Peristaltic | Clear | 4.91 | 110 | 26.95 | 8.0 | 56.5 | -61.4 | NA | 100 |

## SAMPLE COLLECTION INFORMATION

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| TAL Metals | $HNO_3$ | 1 1-liter Plastic | |

## OBSERVATIONS / NOTES

Circle if Applicable:
MS/MSD
Duplicate ID No.: NTC08DP0001

Signature(s):

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NTC Orlando/OU 3 - Study Area 8
Project No.: 7457

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

Sample ID No.: NTC08G01411
Sample Location: OLD-08-14
Sampled By: JH, PH
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

## PURGE DATA

| Date: 7/31/99 | Volume (ml) | pH | S.C. | Temp (°C) | Turbidity | DO % | ORP | DTW | Flow | |
|---|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | 500 | 3.41 | 760 | 27.32 | 32 | 41.7 | 42.2 | NA | 100 | 100 |
| Monitor Reading (ppm): 0 | 1500 | 3.53 | 725 | 27.40 | 15 | 58.2 | 60.8 | NA | 100 | 111 |
| Well Casing Diameter: 1/2 | 2500 | 3.71 | 695 | 27.20 | 7.3 | 74.1 | 49.9 | NA | 100 | 112 |
| Well Casing Material: PVC | 3500 | 3.75 | 684 | 27.22 | 5.2 | 78.6 | 42.5 | NA | 100 | 113 |
| Total Well Depth (TD): 11.0 | 4500 | 3.88 | 671 | 27.02 | 4.7 | 84.6 | 35.7 | NA | 100 | 114 |
| Static Water Level (WL): 5.8 | 4900 | 3.88 | 663 | 27.00 | 4.8 | 84.8 | 33.1 | NA | 100 | 115 |
| One Casing Volume(gal/L): | 5200 | 3.89 | 659 | 27.03 | 4.7 | 84.6 | 31.2 | NA | 100 | 115 |
| Start Purge (hrs): 1100 | 5500 | 3.89 | 658 | 26.98 | 4.5 | 83.9 | 32.3 | NA | 100 | 115 |
| End Purge (hrs): | | | | | | | | | | |
| Total Purge Time (min): | | | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | | | |

## SAMPLING DATA

| Date: 7/31/99 Time: 1200 Method: peristaltic | Color | pH | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/L | ORP | DTW ft BTOC | Flow ml/min |
|---|---|---|---|---|---|---|---|---|---|
| | Clear | 3.89 | 658 | 26.98 | 4.5 | 83.9 | 32.3 | NA | 100 |

## SAMPLE COLLECTION INFORMATION

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| TAL Metals | $HNO_3$ | 1 1-Liter Plastic | X |
| Herbicides | None | 2 1-Liter Amber | X |

## OBSERVATIONS / NOTES

Circle if Applicable:
MS/MSD
Duplicate ID No.:

Signature(s):

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NTC Orlando/OU 3 - Study Area 8
Project No.: 7457

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

Sample ID No.: NTC08G01511
Sample Location: OLD-08-15
Sampled By: JH, PH
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

## PURGE DATA

| Date: 8/1/99 | Volume (gal) | pH | S.C. | Temp (°C) | Turbidity | DO | ORP | DTW | Flow | |
|---|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | 500 | 4.54 | 264 | 25.13 | 16 | 17.1 | -57.1 | NA | 100 | 090 |
| Monitor Reading (ppm): 0 | 1500 | 4.59 | 25.82 | 25.72 | 12 | 11.1 | -70.9 | | 100 | 091 |
| Well Casing Diameter: 1/2 | 2500 | 4.56 | 272 | 25.82 | 6.3 | 6.2 | -72.5 | | 100 | 092 |
| Well Casing Material: PVC | 3500 | 4.51 | 266 | 25.97 | 5.4 | 5.1 | -75.0 | | 100 | 093 |
| Total Well Depth (TD): 11 | 4200 | 4.47 | 263 | 25.92 | 9.9 | 4.4 | -74.7 | | 100 | 093 |
| Static Water Level (WL): 5.47 | 5200 | 4.52 | 253 | 26.14 | 10.0 | 5.0 | -74.7 | | 100 | 094 |
| One Casing Volume(gal/L): | 5500 | 4.44 | 259 | 25.80 | 5.0 | 4.6 | -73.0 | | 100 | 095 |
| Start Purge (hrs): 0855 | 5800 | 4.35 | 258 | 25.78 | 4.3 | 4.1 | -70.0 | | 100 | 095 |
| End Purge (hrs): 1002 | 6100 | 4.29 | 257 | 25.77 | 4.2 | 3.9 | -68.1 | | 100 | 095 |
| Total Purge Time (min): 67 | 6400 | 4.27 | 256 | 25.72 | 4.3 | 3.6 | -68.0 | | 100 | 095 |
| Total Vol. Purged (gal/L): 6.7 | 6700 | 4.28 | 254 | 25.75 | 4.2 | 3.9 | -68.0 | | 100 | 100 |

## SAMPLING DATA

| Date: 8/1/99<br>Time: 1005 | Color | pH | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/L | ORP | DTW ft BTOC | Flow ml/min |
|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | Clear | 4.28 | 254 | 25.75 | 4.2 | 3.9 | -68.0 | NA | 100 |

## SAMPLE COLLECTION INFORMATION

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| TAL Metals | $HNO_3$ | 1-Liter Plastic | X |
| Herbicides | None | 1-Liter Amber | X |

## OBSERVATIONS / NOTES

Circle if Applicable:

MS/MSD

Duplicate ID No.: NTC08DP0002

Signature(s):

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NTC Orlando/OU 3 - Study Area 8
Project No.: 7457

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

Sample ID No.: NTC08G01711
Sample Location: OLD 08-17
Sampled By: BRB - PH
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

## PURGE DATA

| Date: 073099 | Volume | pH | S.C. | Temp (°C) | Turbidity | DO | ORP | DTW | Flow |
|---|---|---|---|---|---|---|---|---|---|
| Method: micropurge | Initial | | | | | | | | |
| Monitor Reading (ppm): 0 | 1 | | | | | | | | |
| Well Casing Diameter: 1/2" | 2 | | | | | | | | |
| Well Casing Material: PVC | 3 | | | | | | | | |
| Total Well Depth (TD): 9.35 | 1400 | 5.84 | 314 | 29.96 | 23 | 1.15 | -17.1 | 2.09 | 100 ml/m |
| Static Water Level (WL): 2.09 | 1410 | 5.75 | 3.15 | 30.12 | 3.2 | 1.07 | -32.6 | N/A | |
| One Casing Volume(gal/L): | 1420 | 5.91 | 315 | 30.67 | 1.4 | 1.06 | -39.8 | | |
| Start Purge (hrs): 1400 | 1430 | 6.01 | 315 | 30.52 | .45 | 1.12 | -40.1 | | |
| End Purge (hrs): 1500 | 1440 | 6.02 | 315 | 30.41 | .92 | 1.15 | -44.8 | | |
| Total Purge Time (min): 60 | 1450 | 5.86 | 315 | 29.97 | .97 | 1.05 | -40.9 | | |
| Total Vol. Purged (gal/L): | 1500 | 5.94 | 315 | 30.35 | 1.1 | .98 | -38.8 | | |
| 6000 mL | | | | | | | | | |

## SAMPLING DATA

| Date: 073099<br>Time: 1510 | Color | pH | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/L | ORP | DTW ft BTOC | Flow ml/min |
|---|---|---|---|---|---|---|---|---|---|
| Method: Micro sample | clear | 5.95 | 315 | 30.40 | .98 | 1.00 | -41.2 | N/A | 100 |

## SAMPLE COLLECTION INFORMATION

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| TAL METALS | HNO3 | 1-1 Litre Plastic | ✓ |

## OBSERVATIONS / NOTES

Circle if Applicable:

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

Signature(s):

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NTC Orlando/OU 3 - Study Area 8
Project No.: 7457

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

Sample ID No.: NTC08G01811
Sample Location: OLD-08-18
Sampled By: JH, PH
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

## PURGE DATA

| Date: 7/31/99 | Volume (mL) | pH | S.C. | Temp (°C) | Turbidity | DO % | ORP | DTW | Flow | |
|---|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | 500 | 4.46 | 126 | 25.52 | 180 | 12.1 | -73.1 | NA | 100 | 1300 |
| Monitor Reading (ppm): 0 | 1500 | 4.10 | 104 | 25.79 | 90 | 5.6 | -66.5 | | 100 | 1310 |
| Well Casing Diameter: 1/2 | 2500 | 4.46 | 97 | 25.57 | 35 | 4.5 | -84.4 | | 100 | 1320 |
| Well Casing Material: PVC | 3500 | 4.64 | 93 | 25.47 | 20 | 3.9 | -90.4 | | 100 | 1330 |
| Total Well Depth (TD): 14 | 4500 | 4.66 | 92 | 25.61 | 09 | 3.3 | -92.0 | | 100 | 1340 |
| Static Water Level (WL): 4.15 | 5500 | 4.49 | 90.0 | 25.97 | 14 | 4.0 | -84.1 | | 100 | 1350 |
| One Casing Volume(gal/L): | 6500 | 4.62 | 91.0 | 25.78 | 13 | 4.0 | -89.0 | | 100 | 1400 |
| Start Purge (hrs): 1255 | 7000 | 4.52 | 90.0 | 25.86 | 13 | 4.0 | -83.4 | | 100 | 1405 |
| End Purge (hrs): | 7500 | 4.51 | 90.0 | 25.93 | 10 | 4.0 | -87.4 | | 100 | 1410 |
| Total Purge Time (min): | 7900 | 4.66 | 90.0 | 25.92 | 10 | 4.1 | -90.0 | | 100 | 1414 |
| Total Vol. Purged (gal/L): | 8200 | 4.63 | 90.0 | 25.94 | 9.7 | 4.1 | -89.3 | | 100 | 1411 |
| | 8500 | 4.61 | 89.0 | 26.03 | 9.1 | 4.2 | -88.9 | | 100 | 1420 |

## SAMPLING DATA

| Date: 7/31/99 Time: 1423 | Color | pH | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/L | ORP | DTW ft BTOC | Flow ml/min |
|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | Clear | 4.61 | 89.0 | 26.03 | 9.1 | 4.2 | -89.9 | NA | 100 |

## SAMPLE COLLECTION INFORMATION

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| TAL Metals | $HNO_3$ | 1 - 1-Liter Plastic | 2 |
| Herbicides | None | 2 1-Liter Amber | 3 |

## OBSERVATIONS / NOTES

Circle if Applicable:
MS/MSD
Duplicate ID No.:

Signature(s):

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NTC Orlando/OU 3 - Study Area 9
Project No.: 7457

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

Sample ID No.: NTC09G00811
Sample Location: OLD-09-01
Sampled By: JC, DH
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

## PURGE DATA

Date: 8/4/99
Method: peristaltic
Monitor Reading (ppm): 0
Well Casing Diameter: 2"
Well Casing Material: PVC
Total Well Depth (TD): 12.6
Static Water Level (WL): 3.03
One Casing Volume(gal/L):
Start Purge (hrs): 0835
End Purge (hrs):
Total Purge Time (min):
Total Vol. Purged (gal/L):

| Volume | pH | S.C. | Temp (°C) | Turbidity | DO | ORP | DTW | Flow | |
|---|---|---|---|---|---|---|---|---|---|
| Initial | 6.28 | 459 | 27.34 | 2.6 | 49.9 | -131.9 | 3.04 | 100 | 0835 |
| 1000 | 6.33 | 458 | 27.57 | 2.1 | 17.0 | -131.9 | 3.04 | 100 | 0845 |
| 2000 | 6.37 | 451 | 27.58 | 5.3 | 12.6 | -134.1 | 3.04 | 100 | 0855 |
| 3000 | 6.40 | 437 | 27.64 | 4.1 | 8.9 | -134.3 | 3.04 | 100 | 0905 |
| 4000 | 6.39 | 437 | 27.77 | 2.7 | 7.8 | -138.2 | 3.04 | 100 | 0915 |
| 5000 | 6.38 | 434 | 27.82 | 2.0 | 6.1 | -139.8 | 3.04 | 100 | 0925 |
| 5300 | 6.39 | 433 | 27.85 | 1.8 | 6.1 | -140.8 | 3.04 | 100 | 0929 |
| 5600 | 6.38 | 433 | 27.89 | 1.5 | 5.6 | -141.4 | 3.04 | 100 | 0931 |

## SAMPLING DATA

| Date: 8/4/99 Time: 0935 Method: peristaltic | Color | pH | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/L | ORP | DTW ft BTOC | Flow ml/min |
|---|---|---|---|---|---|---|---|---|---|
| | Clear | 6.38 | 433 | 27.89 | 1.5 | 5.6 | -141.4 | 3.04 | 100 |

## SAMPLE COLLECTION INFORMATION

| Analysis | Preservative | Container Requirements | | Collected |
|---|---|---|---|---|
| TAL Metals | $HNO_3$ | 1 | 1-Liter Plastic | X |
| Herb/Pest | None | 3 | 1-Liter Amber | X |

## OBSERVATIONS / NOTES

Circle if Applicable:
MS/MSD
Duplicate ID No.:

Signature(s):

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NTC Orlando/OU 3 - Study Area 9
Project No.: 7457

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

Sample ID No.: NTC09G0020 1
Sample Location: OLD-09-02
Sampled By: JM, PH
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

**PURGE DATA**

| Date: 8/3/99 | Volume | pH | S.C. | Temp (°C) | Turbidity | DO | ORP | DTW | Flow | |
|---|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | Initial | 5.25 | 77.0 | 30.48 | 6.8 | 33.8 | -64.7 | 5.95 | 100 | 151 |
| Monitor Reading (ppm): 0 | 1000 | 4.18 | 72.0 | 29.89 | 6.5 | 20.6 | -46.2 | 5.96 | 100 | 152 |
| Well Casing Diameter: 2 | 1700 | 4.20 | 72.0 | 29.61 | 9.7 | 9.4 | -53.9 | 6.02 | 100 | 153 |
| Well Casing Material: PVC | 2200 | 4.20 | 73.0 | 29.43 | 16.0 | 7.5 | -58.7 | 6.02 | 100 | 153 |
| Total Well Depth (TD): 13.76 | 3200 | 3.96 | 75.0 | 29.72 | 37.0 | 2.2 | -59.3 | 6.02 | 100 | 154 |
| Static Water Level (WL): 5.65 | 4500 | 4.44 | 80.0 | 28.81 | 50.0 | 10.5 | -70.4 | 6.04 | 100 | 160 |
| One Casing Volume(gal/L): | 5000 | 4.47 | 80.0 | 28.68 | 50.0 | 8.6 | -72.3 | 6.06 | 100 | 160 |
| Start Purge (hrs): 1515 | 5500 | 4.51 | 79.0 | 28.73 | 55.0 | 5.9 | -74.0 | 6.06 | 100 | 161 |
| End Purge (hrs): | 6100 | 4.59 | 81.0 | 28.90 | 55.0 | 5.9 | -77.7 | 6.07 | 100 | 161 |
| Total Purge Time (min): | 6900 | 4.58 | 79.0 | 28.76 | 55.0 | 5.4 | -76.9 | 6.06 | 100 | 162 |
| Total Vol. Purged (gal/L): | 7300 | 4.58 | 79.0 | 28.76 | 55.0 | 5.4 | -77.3 | 6.06 | 100 | 162 |
| | 7600 | 4.57 | 79.0 | 28.77 | 55.0 | 5.0 | -77.0 | 6.06 | 100 | 163 |

**SAMPLING DATA**

| Date: 8/3/99 | Color | pH | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/L | ORP | DTW ft BTOC | Flow ml/min |
|---|---|---|---|---|---|---|---|---|---|
| Time: 1635 | | | | | | | | | |
| Method: peristaltic | | | | | | | | | |

**SAMPLE COLLECTION INFORMATION**

| Analysis | Preservative | Container Requirements | | Collected |
|---|---|---|---|---|
| TAL Metals | $HNO_3$ | 1 | 1-Liter Plastic | X |
| Herb/Pest | None | 3 | 1-liter Amber | X |

**OBSERVATIONS / NOTES**

Circle if Applicable:
MS/MSD
Duplicate ID No.:

Signature(s):

# GROUNDWATER SAMPLE LOG SHEET

| | | | |
|---|---|---|---|
| Project Site Name: | NTC Orlando/OU 3 - Study Area 9 | Sample ID No.: | NTC09G05311 |
| Project No.: | 7457 | Sample Location: | Old - 19-03 |
| | | Sampled By: | Gain, J.B. |
| [ ] Domestic Well Data | | C.O.C. No.: | |
| [X] Monitoring Well Data | | Type of Sample: | |
| [ ] Other Well Type: | | [X] Low Concentration | |
| [ ] QA Sample Type: | | [ ] High Concentration | |

**PURGE DATA**

| Date: 8/4/09 | Volume | pH | S.C. | Temp (°C) | Turbidity | DO | ORP | DTW | Flow | Tim |
|---|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic pump* | Initial | 6.11 | 196 | 26.91 | 4.98 | 23.14 | 78.9 | 7.30 | 90 | 08 |
| Monitor Reading (ppm): — | 1 | 5.30 | 147 | 26.96 | 3.45 | 27.82 | 85.3 | 7.45 | 100 | 08 |
| Well Casing Diameter: 2" | 2 | 5.11 | 128 | 27.08 | 2.94 | 24.40 | 86.7 | 7.51 | 90 | 08 |
| Well Casing Material: PVC | 3 | 4.99 | 114 | 27.17 | 2.78 | 32.73 | 93.0 | ↓ | | 08 |
| Total Well Depth (TD): 13.91 | | 4.97 | 113 | 27.19 | 2.86 | 38.01 | 93.0 | 7.78 | | 08 |
| Static Water Level (WL): 6.35 | | 4.96 | 111 | 27.13 | 2.69 | 41.50 | 92.6 | ↓ | | 08 |
| One Casing Volume(gal/L): | | 4.95 | 114 | 27.12 | 2.85 | 42.24 | 96.6 | 7.81 | ✓ | 08 |
| Start Purge (hrs): 0820 | | | | | | | | | | |
| End Purge (hrs): 0840 | | | | | | | | | | |
| Total Purge Time (min): 20 | | | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | | | |

**SAMPLING DATA**

| Date: 8/4/09 | Color | pH | S.C. | Temp. | Turbidity | DO | ORP | DTW | Flow |
|---|---|---|---|---|---|---|---|---|---|
| Time: 0840 | very light | | mS/cm | °C | NTU | mg/L | | ft BTOC | ml/min |
| Method: peristaltic pump* | yellow | 4.95 | 114 | 27.12 | 2.85 | 42.24 | 96.6 | 7.81 | 90 |

**SAMPLE COLLECTION INFORMATION**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| Metals | $HNO_3$ | 1 1-L HDPE | ✓ |
| SVOCs | None | 4 1-L Amber jars | ✓ |
| Herbicides/pesticides | None | 3 1-L Amber jars | |

**OBSERVATIONS / NOTES**

peristaltic pump cannot be dialed down lower than 90 ml/min without the water flow stopping

*all organics sampled by ~~vacuum~~ vacuum jug method & decon [illegible]

| Circle if Applicable: | | Signature(s): |
|---|---|---|
| MS/MSD | Duplicate ID No.: | J. Breknight |

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NTC Orlando/OU 3 - Study Area 9
Project No.: 7457

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

Sample ID No.: NTC09G00411
Sample Location: 01d-01-01
Sampled By: G.S., J.B.
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

**PURGE DATA**

| Date: 8/4/99 | Volume | pH | S.C. | Temp (°C) | Turbidity | DO | ORP | DTW | Flow | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| Method: Peristaltic pump* | Initial | 5.57 | 351 | 28.31 | 11.2 | 62.84 | -22.2 | 6.28 | 150 | 1000 |
| Monitor Reading (ppm): — | 1 | 5.55 | 351 | 28.32 | 10.5 | 62.82 | -28.3 | 6.44 | 120 | 1010 |
| Well Casing Diameter: 2" | 2 | 5.53 | 351 | 28.34 | 9.24 | 62.77 | -35.4 | 7.51 | 100 | 1015 |
| Well Casing Material: PVC | 3 | 5.52 | 349 | 28.50 | 9.34 | 62.52 | -43.8 | 6.65 | 90 | 1020 |
| Total Well Depth (TD): 13.63 | | 5.49 | 335 | 28.82 | 8.12 | 61.93 | -54.8 | 6.74 | ↓ | 1025 |
| Static Water Level (WL): 5.48 | | 5.49 | 331 | 28.87 | 8.22 | 61.83 | -59.6 | 6.78 | ↓ | 1030 |
| One Casing Volume(gal/L): | | 5.49 | 332 | 28.96 | 8.09 | 59.08 | -64.8 | 6.80 | ↓ | 1035 |
| Start Purge (hrs): 1005 | | | | | | | | | | |
| End Purge (hrs): 1035 | | | | | | | | | | |
| Total Purge Time (min): 30 | | | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | | | |

**SAMPLING DATA**

| Date: 8/4/99 Time: 1035 | Color | pH | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/L | ORP | DTW ft BTOC | Flow ml/min |
|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic pump* | light yellow | 5.49 | 332 | 28.96 | 8.09 | 59.08 | -64.8 | 6.80 | 90 |

**SAMPLE COLLECTION INFORMATION**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| Metals | $HNO_3$ | 1 1-L HDPE | ✓ |
| SVOCs | None | 4 1-L Amber jars | ✓ |
| pesticides/herbicides | None | 3 1-L Amber jars | ✓ |

**OBSERVATIONS / NOTES**

*all organics sampled by vacuum jug method ? dedicated Teflon tubing
peristaltic pump cannot be dialed down lower than 90 ml/min without the water flow stopping

**Circle if Applicable:**

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

Signature(s): J. Bowdright

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NTC Orlando/OU 3 - Study Area 9
Project No.: 7457

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

Sample ID No.: NTC09G00511
Sample Location: OLD-09-05
Sampled By: JH, PH
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

## PURGE DATA

| Date: 8/3/59 | Volume (mL) | pH | S.C. | Temp (°C) | Turbidity | DO $S_o$ | ORP | DTW | Flow | |
|---|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | 500 | 6.07 | 474 | 28.55 | 1.6 | 27.2 | -133.5 | NA | 100 | 111 |
| Monitor Reading (ppm): 0 | 1500 | 6.08 | 478 | 28.52 | 1.7 | 16.1 | -129.4 | NA | 100 | 112 |
| Well Casing Diameter: 1/2 | 2500 | 6.25 | 500 | 28.75 | 0.20 | 17.3 | -126.1 | NA | 100 | 113 |
| Well Casing Material: PVC | 3500 | 6.27 | 501 | 28.70 | 0.25 | 17.5 | -129.9 | NA | 100 | 114 |
| Total Well Depth (TD): 9.52 | 4000 | 6.28 | 505 | 28.80 | 0.30 | 17.4 | -129.2 | NA | 100 | 115 |
| Static Water Level (WL): 2.55 | 4500 | 6.30 | 504 | 28.78 | 0.30 | 18.1 | -130.6 | NA | 100 | 115 |
| One Casing Volume(gal/L): | 5000 | 6.29 | 504 | 28.81 | 0.30 | 18.3 | -129.0 | NA | 100 | 120 |
| Start Purge (hrs): 1110 | | | | | | | | | | |
| End Purge (hrs): 1205 | | | | | | | | | | |
| Total Purge Time (min): 55 | | | | | | | | | | |
| Total Vol. Purged (gal/L): 5.5 | | | | | | | | | | |

## SAMPLING DATA

| Date: 8/3/59 Time: 1205 | Color | pH | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/L | ORP | DTW ft BTOC | Flow ml/min |
|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | Clear | 6.29 | 504 | 28.81 | 0.30 | 18.3 | -129.0 | NA | 100 |

## SAMPLE COLLECTION INFORMATION

| Analysis | Preservative | Container Requirements | | Collected |
|---|---|---|---|---|
| TAL Metals | $HNO_3$ | 1 | 1 Liter Plastic | X |
| Pest/Herb | None | 3 | 1 Liter Amber | X |

## OBSERVATIONS / NOTES

Circle if Applicable:
MS/MSD
Duplicate ID No.:

Signature(s):

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NTC Orlando/OU 3 - Study Area 9
Project No.: 7457

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

Sample ID No.: NTC09GC06W11
Sample Location:
Sampled By: G.S., J.B.
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

**PURGE DATA**

| Date: 8/3/99 | Volume | pH | S.C. | Temp (°C) | Turbidity | DO | ORP | DTW | Flow | Time |
|---|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic pump* | Initial | 6.01 | 327 | 29.01 | 21.8 | 40.46 | 72.5 | — | 120 | 1320 |
| Monitor Reading (ppm): — | 1 | 5.92 | 332 | 28.69 | 12.0 | 40.82 | 58.5 | — | ↓ | 1330 |
| Well Casing Diameter: 0.5" | 2 | 5.90 | 332 | 28.74 | 8.96 | 40.76 | 51.3 | — | ↓ | 1335 |
| Well Casing Material: PVC | 3 | 5.89 | 331 | 28.74 | 6.4 | 40.77 | 46.1 | — | ↓ | 1340 |
| Total Well Depth (TD): 9.40 | | 5.88 | 331 | 28.72 | 6.05 | 40.80 | 43.8 | — | ↓ | 1345 |
| Static Water Level (WL): 2.40 | | 5.87 | 330 | 28.70 | 5.56 | 40.82 | 40.7 | — | ↓ | 1350 |
| One Casing Volume(gal/L): | | | | | | | | | | |
| Start Purge (hrs): 1320 | | | | | | | | | | |
| End Purge (hrs): 1350 | | | | | | | | | | |
| Total Purge Time (min): 30 | | | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | | | |

from top of 0.5" casing

**SAMPLING DATA**

| Date: 8/3/99 | Color | pH | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/L | ORP | DTW ft BTOC | Flow ml/min |
|---|---|---|---|---|---|---|---|---|---|
| Time: 1350 | | | | | | | | | |
| Method: peristaltic pump* | light yellow | 5.87 | 330 | 28.70 | 5.56 | 40.82 | 40.7 | — | 120 |

**SAMPLE COLLECTION INFORMATION**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| Metals | $HNO_3$ | 1-L HDPE | ✓ |
| Herbicides/Pesticides | None | 3 1-L Amber jars | ✓ |

**OBSERVATIONS / NOTES**

Could not take water level measurements because the lid level indicator was too big to put down the well while the Teflon tubing was in the well

* all organics sampled with Teflon tubing by vacuum jug method

Circle if Applicable:

| MS/MSD | Duplicate ID No.: | Signature(s): |
|---|---|---|
| | | J. Brickenright |

# GROUNDWATER SAMPLE LOG SHEET

| | | | |
|---|---|---|---|
| Project Site Name: | NTC Orlando/OU 3 - Study Area 9 | Sample ID No.: | NTCOMG00711 |
| Project No.: | 7457 | Sample Location: | |
| | | Sampled By: | G.S., J.B. |
| [ ] Domestic Well Data | | C.O.C. No.: | |
| [X] Monitoring Well Data | | Type of Sample: | |
| [ ] Other Well Type: | | [X] Low Concentration | |
| [ ] QA Sample Type: | | [ ] High Concentration | |

**PURGE DATA**

| Date: 8/3/99 | Volume | pH | S.C. | Temp (°C) | Turbidity | DO | ORP | DTW | Flow (mL/min) | T. |
|---|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic pump* | Initial | 5.22 | 102 | 27.13 | 33.4 | 8.58 | 262.8 | — | 200 | 09 |
| Monitor Reading (ppm): — | (5 min) 1 | 4.56 | .77 | 27.22 | 29.3 | 4.75 | 301.1 | — | ~~100~~ 150 | 09 |
| Well Casing Diameter: 0.5" | (12 min) 2 | 4.47 | .65 | 27.26 | 24.1 | 4.52 | 318.9 | — | | 093 |
| Well Casing Material: PVC | 3 | 4.42 | .64 | 27.19 | 20.6 | 4.44 | 331.9 | — | | 094 |
| Total Well Depth (TD): 11.6 | | 4.39 | .64 | 27.18 | 18.4 | 4.36 | 341.1 | — | | 094 |
| Static Water Level (WL): 4.49 | | 4.37 | .63 | 27.16 | 17.4 | 4.30 | 349.8 | — | | 094 |
| One Casing Volume(~~gal/L~~): 277 mL | | 4.36 | .63 | 27.15 | 17.4 | 4.25 | 355.8 | — | | 095 |
| Start Purge (hrs): 0920 | | 4.35 | .64 | 27.18 | 17.9 | 4.14 | 359.9 | — | | 095 |
| End Purge (hrs): 1020 | | 4.35 | .63 | 27.22 | 17.9 | 4.08 | 364.0 | — | 150 | 100 |
| Total Purge Time (min): | | 4.35 | .63 | 27.22 | 18.3 | 4.00 | 361.8 | — | 120 | 100 |
| Total Vol. Purged (gal/L): | | 4.35 | .63 | 27.33 | 18.2 | 4.00 | 368.9 | — | | 101 |
| | | 4.36 | .63 | 27.40 | 18.1 | 3.97 | 370.5 | — | | 101 |
| | | 4.35 | .63 | 27.40 | 18.6 | 3.91 | 373.3 | — | | 102 |

**SAMPLING DATA**

| Date: 8/3/99 Time: 1020 | Color | pH | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/L | ORP | DTW ft BTOC | Flow ml/min |
|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic pump* | clear yellow | 4.35 | .63 | 27.40 | 18.6 | 3.91 | 373.3 | — | 120 |

**SAMPLE COLLECTION INFORMATION**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| Metals | $HNO_3$ | 1-L HDPE | ✓ |
| Herbicides/Pesticides | None | 3 1-L Amber bottles | ✓ |

**OBSERVATIONS / NOTES**

could not take water level measurements because the water level indicator was too big to put down the well while the Teflon tubing was in the well

* all organics sampled with Teflon tubing by vacuum jug method

| Circle if Applicable: | | Signature(s): |
|---|---|---|
| MS/MSD | Duplicate ID No.: | J. Bontenight |

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NTC Orlando/OU 3 - Study Area 9
Project No.: 7457

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

Sample ID No.: NTC09G01011
Sample Location: OLD-09-10
Sampled By: JH, PH
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

## PURGE DATA

| Date: 8/3/99 | Volume (mL) | pH | S.C. | Temp (°C) | Turbidity | DO | ORP | DTW | Flow | |
|---|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | Initial | 6.31 | 251 | 29.03 | 19 | 78.5 | -58.8 | NA | 100 | 1300 |
| Monitor Reading (ppm): 0 | 1000 | 5.59 | 250 | 28.68 | 7.2 | 62.3 | -54.9 | NA | 100 | 1311 |
| Well Casing Diameter: 1/2 | 2000 | 5.48 | 249 | 27.61 | 2.2 | 25.8 | -62.2 | NA | 100 | 1322 |
| Well Casing Material: PVC | 3000 | 5.56 | 248 | 27.57 | 1.4 | 19.8 | -67.9 | NA | 100 | 1332 |
| Total Well Depth (TD): 9.25 | 4000 | 5.74 | 250 | 27.60 | 1.1 | 17.4 | -72.8 | NA | 100 | 1340 |
| Static Water Level (WL): 2.76 | 5000 | 5.91 | 250 | 27.54 | 1.2 | 15.2 | -79.6 | N/A | 100 | 1350 |
| One Casing Volume(gal/L): | 6000 | 5.86 | 251 | 27.55 | 0.8 | 15.4 | -79.5 | NA | 100 | 1400 |
| Start Purge (hrs): 1300 | 6300 | 5.85 | 250 | 27.58 | 0.95 | 14.2 | -78.1 | NA | 100 | 1403 |
| End Purge (hrs): 1406 | 6600 | 5.87 | 251 | 27.64 | 0.85 | 14.4 | -79.6 | NA | 100 | 1406 |
| Total Purge Time (min): | | | | | | | | | | |
| Total Vol. Purged (gal/L): | | | | | | | | | | |

## SAMPLING DATA

| Date: 8/3/99 Time: 1409 | Color | pH | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/L | ORP | DTW ft BTOC | Flow ml/min |
|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | Clear | 5.87 | 251 | 27.64 | 0.85 | 14.4 | -79.6 | NA | 100 |

## SAMPLE COLLECTION INFORMATION

| Analysis | Preservative | Container Requirements | | Collected |
|---|---|---|---|---|
| TAL Metals | $HNO_3$ | 1 | 1-Liter Plastic | X |
| Pest/Herb | None | 3 | 1-Liter Amber | X |

## OBSERVATIONS / NOTES

Circle if Applicable:
MS/MSD
Duplicate ID No.:

Signature(s):

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NTC Orlando/OU 3 - Study Area 9
Project No.: 7457

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

Sample ID No.: NTC09G011 11
Sample Location:
Sampled By: G.S., J.B.
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

## PURGE DATA

Date: 8/3/99
Method: peristaltic pump*
Monitor Reading (ppm): —
Well Casing Diameter: 0.5"
Well Casing Material: PVC
Total Well Depth (TD): 9.05 from top of 0.5" casing
Static Water Level (WL): 3.00
One Casing Volume(gal/L):
Start Purge (hrs): 1440
End Purge (hrs):
Total Purge Time (min):
Total Vol. Purged (gal/L):

| Volume | pH | S.C. | Temp (°C) | Turbidity | DO | ORP | DTW | Flow | Ti |
|---|---|---|---|---|---|---|---|---|---|
| Initial | 6.47 | 328 | 31.47 | 14.6 | 37.77 | 8.3 | — | 140 | 14 |
| 1 | 6.28 | 317 | 31.31 | 13.3 | 37.84 | 3.8 | — | 100 | 144 |
| 2 | 6.23 | 313 | 31.41 | 11.1 | 37.82 | -2.4 | — | | 145 |
| 3 | 6.17 | 307 | 31.20 | 10.9 | 38.06 | -7.9 | — | | 148 |
| | 6.15 | 304 | 31.12 | 9.9 | 38.11 | -8.5 | — | | 150 |
| | 6.12 | 301 | 31.17 | 8.83 | 38.00 | -10.0 | — | | 150 |
| | 6.10 | 298 | 31.14 | 8.05 | 38.10 | -10.8 | — | | 151 |
| | 6.08 | 295 | 31.00 | 7.04 | 38.25 | -11.1 | — | | 1515 |
| | 6.07 | 291 | 31.07 | 6.34 | 38.19 | -11.6 | — | ✓ | 153 |

## SAMPLING DATA

Date: 8/3/99
Time: 1520
Method: peristaltic pump*

| Color | pH | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/L | ORP | DTW ft BTOC | Flow ml/min |
|---|---|---|---|---|---|---|---|---|
| very light yellow | 6.07 | 291 | 31.07 | 6.34 | 38.19 | -11.6 | — | 100 |

## SAMPLE COLLECTION INFORMATION

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| Metals | HNO3 | 2 1-L HDPE | ✓ |
| Herbicides/pesticides | None | 6 1-L Amber jars | ✓ |

## OBSERVATIONS / NOTES

Could not take H2O level measurements because the H2O level indicator was too big to fit down the well while the Teflon tubing was in the well
*all organics sampled with Teflon tubing by vacuum jug method

Circle if Applicable:
MS/MSD
Duplicate ID No.: NTC09DP0002

Signature(s): J. Bockright

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NTC Orlando/OU 3 - Study Area 9
Project No.: 7457

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

Sample ID No.: NTC09601211
Sample Location: OLD-09-12
Sampled By: JH, PH
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

## PURGE DATA

(Na I)

| Date: 8/2/99 | Volume | pH | S.C. | Temp (°C) | Turbidity | DO | ORP | DTW | Flow | |
|---|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | 900 | 3.57 | 227 | 29.39 | 150 | 35.7 | -38.1 | NA | 100 | 085 |
| Monitor Reading (ppm): 0 | 1900 | 3.27 | 228 | 29.29 | 33 | 24.9 | -36.8 | NA | 100 | 090 |
| Well Casing Diameter: 1/2 | 2400 | 3.39 | 230 | 29.38 | 45 | 12.2 | -45.9 | NA | 100 | 091 |
| Well Casing Material: PVC | 3900 | 3.34 | 230 | 29.28 | 28 | 8.6 | -45.8 | NA | 100 | 092 |
| Total Well Depth (TD): 9.22 | 4900 | 3.32 | 232 | 29.33 | 16 | 6.7 | -46.4 | NA | 100 | 093 |
| Static Water Level (WL): 2.98 | 5900 | 3.28 | 233 | 29.40 | 6.6 | 5.6 | -43.5 | NA | 100 | 094 |
| One Casing Volume(gal/L): | 6200 | 3.27 | 234 | 29.38 | 5.8 | 5.1 | -43.6 | NA | 100 | 095 |
| Start Purge (hrs): 0846 | 6500 | 3.25 | 234 | 29.40 | 5.2 | 5.2 | -42.5 | NA | 100 | 095 |
| End Purge (hrs): 0951 | | | | | | | | | | |
| Total Purge Time (min): 65 | | | | | | | | | | |
| Total Vol. Purged (gal/L): 6.5 | | | | | | | | | | |

## SAMPLING DATA

| Date: 8/2/99 Time: 0954 | Color | pH | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/L | ORP | DTW ft BTOC | Flow ml/min |
|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | Clear | 3.25 | 234 | 29.40 | 5.2 | 5.2 | -42.5 | NA | 100 |

## SAMPLE COLLECTION INFORMATION

| Analysis | Preservative | | Container Requirements | Collected |
|---|---|---|---|---|
| TAL Metals | $HNO_3$ | 1 | 1-Liter Plastic | X |
| Herb/Pest | None | 3 | 1-Liter Amber | X |
| SVOC | None | 4 | 1-Liter Amber | X |

## OBSERVATIONS / NOTES

Circle if Applicable:
MS/MSD
Duplicate ID No.: NTC09DP0001

Signature(s):

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NTC Orlando/OU 3 - Study Area 9
Project No.: 7457

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

Sample ID No.: NTC090141I
Sample Location: OLD-09-14
Sampled By: JH, PH
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

## PURGE DATA

| Date: 8/1/99 | Volume | pH | S.C. | Temp (°C) | Turbidity | DO | ORP | DTW | Flow | |
|---|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | 500 | 5.30 | 460 | 26.54 | 6.8 | 14.4 | -42.8 | NA | 100 | 12 |
| Monitor Reading (ppm): 0 | 1500 | 5.38 | 474 | 27.00 | 6.0 | 14.3 | -43.9 | NA | 100 | 12 |
| Well Casing Diameter: 1/2 | 2500 | 5.41 | 479 | 27.04 | 5.3 | 16.1 | -47.2 | NA | 100 | 12 |
| Well Casing Material: PVC | 3500 | 5.49 | 480 | 27.02 | 4.8 | 15.6 | -54.1 | NA | 100 | 13 |
| Total Well Depth (TD): 10.9 | 4500 | 5.51 | 478 | 26.86 | 3.8 | 14.4 | -58.7 | NA | 100 | 13 |
| Static Water Level (WL): 5.84 | 5000 | 5.59 | 479 | 26.89 | 3.4 | 14.0 | -62.7 | NA | 100 | 13 |
| One Casing Volume(gal/L): | 5400 | 5.62 | 478 | 26.96 | 3.2 | 14.4 | -65.7 | NA | 100 | 13 |
| Start Purge (hrs): 1225 | 5700 | 5.64 | 477 | 27.00 | 3.2 | 14.5 | -67.4 | NA | 100 | 13 |
| End Purge (hrs): 1326 | 6000 | 5.65 | 477 | 27.01 | 3.0 | 14.7 | -67.8 | NA | 100 | 13 |
| Total Purge Time (min): | | | | | | | | | | |
| Total Vol. Purged (gal/L) | | | | | | | | | | |

## SAMPLING DATA

| Date: 8/1/99 Time: 1329 | Color | pH | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/L | ORP | DTW ft BTOC | Flow ml/min |
|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | Clear | 5.65 | 477 | 27.01 | 3.0 | 14.7 | -67.8 | NA | 100 |

## SAMPLE COLLECTION INFORMATION

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| TAL Metals | $HNO_3$ | 1 - 1-Liter Plast | X |
| Pest/Herbicide | None | 3 1-Liter Amber | X |
| SVOC | None | 4 1-Liter Amber | X |

## OBSERVATIONS / NOTES

Circle if Applicable:

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

Signature(s):

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NTC Orlando/OU 3 - Study Area 9
Project No.: 7457

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

Sample ID No.: NTC09G0151
Sample Location: OLD-09-15
Sampled By: JH, PH
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

## PURGE DATA

| Date: 8/2/99 | Volume (mL) | pH | S.C. | Temp (°C) | Turbidity | DO | ORP | DTW | Flow | |
|---|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | 600 | 3.49 | 55.0 | 27.46 | 29 | 17.6 | -14.6 | NA | 100 | 134 |
| Monitor Reading (ppm): 0 | 1600 | 3.00 | 54.0 | 26.89 | 5.6 | 8.0 | -32.3 | NA | 100 | 135 |
| Well Casing Diameter: 1/2 | 2600 | 3.07 | 53.0 | 26.70 | 5.0 | 6.2 | -38.8 | NA | 100 | 140 |
| Well Casing Material: PVC | 3600 | 3.08 | 53.0 | 26.56 | 0.65 | 5.6 | -45.7 | NA | 100 | 141 |
| Total Well Depth (TD): 11.0 | 5200 | 3.76 | 53.0 | 26.74 | 0.40 | 5.1 | -65.0 | NA | 100 | 143 |
| Static Water Level (WL): 5.48 | 6200 | 3.34 | 53.0 | 26.70 | 0.65 | 5.3 | -63.1 | NA | 100 | 144 |
| One Casing Volume(gal/L): | 6600 | 3.86 | 52.0 | 26.70 | 0.10 | 5.5 | -71.1 | NA | 100 | 144 |
| Start Purge (hrs): 1341 | 6900 | 3.84 | 53.0 | 26.75 | 0.00 | 5.4 | -68.6 | NA | 100 | 145 |
| End Purge (hrs): | 7200 | 3.79 | 53.0 | 26.71 | 0.35 | 5.4 | -67.9 | NA | 100 | 145 |
| Total Purge Time (min): | 7500 | 3.78 | 52.0 | 26.75 | 0.40 | 5.4 | -66.6 | NA | 100 | 145 |
| Total Vol. Purged (gal/L): | 7800 | 3.75 | 52.0 | 26.73 | 0.40 | 5.4 | -67.4 | NA | 100 | 145 |

## SAMPLING DATA

| Date: 8/2/99 Time: 1500 | Color | pH | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/L | ORP | DTW ft BTOC | Flow ml/min |
|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | Clear | 3.75 | 52.0 | 26.73 | 0.40 | 5.4 | -67.4 | NA | 100 |

## SAMPLE COLLECTION INFORMATION

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| TAL Metals | $HNO_3$ | 2 1-Liter ~~Amber~~ Plastic | |
| Herb/Pest | None | 4 1-Liter Amber | |
| SVOC | None | 6 1-Liter Amber | |

## OBSERVATIONS / NOTES

Circle if Applicable:
MS/MSD
Duplicate ID No.:

Signature(s):

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NTC Orlando/OU 3 - Study Area 9
Project No.: 7457

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

Sample ID No.: NTC09G01611
Sample Location: OLD-09-16
Sampled By: JH, PH
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

## PURGE DATA

| Date: 8/3/99 | Volume | pH | S.C. | Temp (°C) | Turbidity | DO % | ORP | DTW | Flow | |
|---|---|---|---|---|---|---|---|---|---|---|
| Method: peristaltic | 500 | 4.30 | 114.0 | 25.25 | 16 | 16.1 | -78.0 | NA | 100 | 092 |
| Monitor Reading (ppm): 0 | 1500 | 4.23 | 114.0 | 25.26 | 12.4 | 12.4 | -77.4 | NA | 100 | 093 |
| Well Casing Diameter: 1/2 | 2500 | 4.29 | 112 | 25.18 | 8.9 | 5.0 | -80.7 | NA | 100 | 094 |
| Well Casing Material: PVC | 3500 | 4.41 | 112 | 25.25 | 4.6 | 4.7 | -84.2 | NA | 100 | 095 |
| Total Well Depth (TD): 11.00 | 4500 | 4.50 | 111 | 25.20 | 2.3 | 3.7 | -87.1 | NA | 100 | 100 |
| Static Water Level (WL): 5.60 | 5200 | 4.53 | 111 | 25.22 | 1.8 | 2.9 | -88.1 | NA | 100 | 100 |
| One Casing Volume(gal/L): | 5500 | 4.53 | 111 | 25.20 | 1.6 | 3.1 | -88.5 | NA | 100 | 101 |
| Start Purge (hrs): 0915 | 5800 | 4.54 | 111 | 25.24 | 1.3 | 3.1 | -88.6 | NA | 100 | 101 |
| End Purge (hrs): 1017 | | | | | | | | | | |
| Total Purge Time (min): 62 | | | | | | | | | | |
| Total Vol. Purged (gal/L): 6.2 | | | | | | | | | | |

## SAMPLING DATA

| Date: 8/3/99 | Color | pH | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/L | ORP | DTW ft BTOC | Flow ml/min |
|---|---|---|---|---|---|---|---|---|---|
| Time: 1020 | | | | | | | | | |
| Method: Peristaltic | Clear | 4.54 | 111 | 25.24 | 1.3 | 3.1 | -88.6 | NA | 100 |

## SAMPLE COLLECTION INFORMATION

| Analysis | Preservative | Container Requirements | | Collected |
|---|---|---|---|---|
| TAL Metals | $HNO_3$ | 1 | 1-Liter Plastic | X |
| Pest/Herb | None | 3 | 1-Liter Amber | X |

## OBSERVATIONS / NOTES

Circle if Applicable:
MS/MSD
Duplicate ID No.:

Signature(s): [signature]

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NTC Orlando/OU 3 - Study Area 9
Project No.: 7457

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

Sample ID No.: NTC09GE1711
Sample Location:
Sampled By: G.S., J.B.
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

**PURGE DATA**

Date: 8/3/99
Method: peristaltic pump*
Monitor Reading (ppm): —
Well Casing Diameter: 0.5"
Well Casing Material: PVC
Total Well Depth (TD): 9.70'
Static Water Level (WL): 3.84
One Casing Volume(gal/L):
Start Purge (hrs): 1115
End Purge (hrs): 1215
Total Purge Time (min): 60
Total Vol. Purged (gal/L):

| Volume | pH | S.C. | Temp (°C) | Turbidity | DO | ORP | DTW | Flow | Time |
|---|---|---|---|---|---|---|---|---|---|
| Initial | 6.45 | 194 | 28.18 | 12.6 | 22.69 | 253.0 | — | 100 | 1120 |
| 1 | 6.54 | 193 | 28.17 | 6.77 | 22.10 | 265.6 | — | | 1125 |
| 2 | 6.54 | 194 | 28.09 | 5.06 | 22.63 | 271.8 | — | | 1130 |
| 3 | 6.54 | 194 | 28.08 | 4.25 | 21.87 | 277.7 | — | | 1135 |
| | 6.55 | 194 | 28.11 | 4.00 | 22.13 | 281.6 | — | | 1140 |
| | 6.55 | 195 | 28.14 | 3.85 | 21.99 | 284.7 | — | | 1145 |
| | 6.55 | 195 | 28.26 | 3.89 | 22.55 | 287.2 | — | | 1150 |
| | 6.55 | 196 | 28.30 | 3.66 | 22.06 | 289.1 | — | | 1155 |
| | 6.55 | 197 | 28.32 | 3.71 | 22.45 | 291.7 | — | | 1200 |
| | 6.55 | 197 | 28.37 | 3.69 | 21.05 | 294.3 | — | | 1205 |
| | 6.54 | 197 | 28.40 | 3.66 | 22.91 | 297.2 | — | | 1210 |
| | 6.54 | 198 | 28.35 | 3.63 | 22.19 | 299.8 | — | | 1215 |

**SAMPLING DATA**

| | Color | pH | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/L | ORP | DTW ft BTOC | Flow ml/min |
|---|---|---|---|---|---|---|---|---|---|
| Date: 8/3/99 Time: 1215 Method: peristaltic pump* | Light yellow | 6.54 | 198 | 28.35 | 3.63 | 22.19 | 299.8 | — | 100 |

**SAMPLE COLLECTION INFORMATION**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| Metals | $HNO_3$ | 1 1-L HDPE | ✓ |
| Herbicides/Pesticides | None | 3 1-L Amber jars | ✓ |

**OBSERVATIONS / NOTES**

Could not take water level measurements because the $H_2O$ level indicator was too big to put down the well while the Teflon tubing was in the well

*all organics sampled with Teflon tubing by vacuum jug method

Circle if Applicable:
MS/MSD
Duplicate ID No.:

Signature(s): J. Bonkenight

# GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NTC Orlando/OU 3 - Study Area 9
Project No.: 7457

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

Sample ID No.: NTC09G019 11
Sample Location: OLD-09-19B
Sampled By: JH, PH
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[ ] High Concentration

## PURGE DATA

Date: 8/4/99
Method: peristaltic
Monitor Reading (ppm): 0
Well Casing Diameter: 2"
Well Casing Material: PVC
Total Well Depth (TD): 31.25
Static Water Level (WL): 3.52
One Casing Volume(gal/L):
Start Purge (hrs): 1023
End Purge (hrs):
Total Purge Time (min):
Total Vol. Purged (gal/L):

| Volume | pH | S.C. | Temp (°C) | Turbidity | DO | ORP | DTW | Flow | |
|---|---|---|---|---|---|---|---|---|---|
| 5100 | 5.67 | 109 | 27.67 | 130 | 21.3 | -99.1 | 3.52 | 100 | 102 |
| 1700 | 4.67 | 100 | 27.74 | 120 | 5.9 | -78.8 | 3.54 | 200 | 103 |
| 3200 | 4.54 | 96 | 27.00 | 100 | 4.0 | -82.1 | 3.55 | 150 | 104 |
| 4700 | 4.54 | 93 | 27.18 | 90 | 3.4 | -82.4 | 3.54 | 150 | 105 |
| 5700 | 5.02 | 94 | 27.62 | 75 | 3.8 | -106.6 | 3.55 | 100 | 110 |
| 6200 | 5.05 | 91 | 27.46 | 60 | 3.5 | -109.7 | 3.55 | 100 | 110 |
| 6700 | 4.81 | 90 | 27.63 | 60 | 3.2 | -100.7 | 3.56 | 100 | 111 |
| 7700 | 4.92 | 90. | 27.73 | 55 | 3.5 | -105.7 | 3.56 | 100 | 112 |
| 9300 | 4.45 | 87.0 | 26.01 | 50 | 2.2 | -84.8 | 3.58 | 300 | 113 |
| 12300 | 4.22 | 86.0 | 25.95 | 40 | 2.0 | -83.5 | 3.60 | 300 | 1144 |
| 15300 | 4.26 | 85.0 | 25.88 | 36 | 1.9 | -88.4 | 3.59 | 300 | 1154 |
| 18300 | 4.35 | 85.0 | 25.90 | 33 | 2.1 | -89.4 | 3.59 | 300 | 1204 |
| 19200 | 4.39 | 85.0 | 25.90 | 32 | 2.1 | -91.2 | 3.59 | 300 | 1207 |
| 20100 | 4.47 | 85.0 | 25.93 | 31 | 2.1 | -96.7 | 3.60 | 300 | 1210 |
| 21300 | 4.56 | 84. | 25.91 | 33 | 2.3 | -99.0 | 3.60 | 300 | 1214 |
| 22200 | 4.55 | 84 | 25.86 | 31 | 2.2 | -98.7 | 3.60 | 300 | 121 |
| 23100 | 4.54 | 84 | 25.87 | 29 | 2.3 | -98.1 | 3.60 | 300 | 1221 |
| 25000 | | | | | | | | | |

## SAMPLING DATA

Date: 8/4/99
Time: 1222
Method: peristaltic

| Color | pH | S.C. mS/cm | Temp. °C | Turbidity NTU | DO mg/L | ORP | DTW ft BTOC | Flow ml/min |
|---|---|---|---|---|---|---|---|---|
| Clear | 4.54 | 84 | 25.87 | 29 | 2.3 | -98.1 | 3.60 | 100 |

## SAMPLE COLLECTION INFORMATION

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| TAL Metals | $HNO_3$ | 1 1-Liter Plastic | X |
| Pest/Herb | None | 3 1-Liter Amber | X |
| SVOC | None | 4 1-Liter Amber | X |

## OBSERVATIONS / NOTES

Circle if Applicable:
MS/MSD
Duplicate ID No.:

Signature(s):

# WELL DEVELOPMENT SHEET

PROJECT SITE NAME: NTC 09-19B
PROJECT NUMBER: 7457
WEATHER: Cloudy-Humid
STATIC WATER LEVEL: 3.51
TOTAL WELL DEPTH: 31.35
ONE CASING VOLUME:
START TIME: 1100
END TIME:

SITE/LOCATION
WELL ID.: 09-19B
DATE: 080399
PERSONNEL:
WELL TYPE: (PVC), S.S., or OTHER
MEASURING DEVICE: Horiba
ADJUSTMENT FACTOR: —

[ ] DOMESTIC WELL, [✓] MONITORING WELL, [ ] OTHER

METHOD & REMARKS: Grundfos pump

| | Approximate Volume | Flow gpm | Time | Color | pH (S.U.) | Cond. (mS/cm) | Turbidity (NTU) | DO (mg/L) | Temp. (Celcius) | Salinity (%) |
|---|---|---|---|---|---|---|---|---|---|---|
| Flow | 10 | 2.2 | 1110 | Brown Turbid | 5.37 | .159 | 999 | .98 | 25.1 | 0.[illegible] |
| | 20 | 2.2 | 1115 | Slight Turbid | 5.31 | .086 | ~~1.96~~ 196 | .93 | 25.0 | 0.00 |
| | 27 | 1.75 | 1125 | Brown | 5.29 | .078 | 946 | 1.50 | 24.9 | 0.00 |
| | 36 | ↓ | 1135 | Slight Turbid | 5.22 | .075 | 321 | 1.16 | 24.9 | 0.00 |
| | 50 | ↓ | 1140 | Slight Turbid | 5.17 | .072 | 129 | 1.21 | 24.9 | 0.00 |
| * Slowed pump | 58 | 1 | 1145 | Clear | 5.11 | .071 | 139 | .95 | 25.2 | 0.00 |
| | 62 | .5 | 1200 | Clear | 5.12 | .069 | 86 | .50 | 25.8 | 0.00 |
| | 70 | .5 | 1210 | Clearing | 5.24 | .070 | 46 | 1.40 | 26.3 | 0.00 |
| | 75 | .5 | 1220 | ↓ | 5.15 | .070 | 36.4 | .60 | 26.5 | 0.00 |
| | 80 | .5 | 1230 | ↓ | 5.17 | .069 | 35.1 | .63 | 26.5 | 0.00 |

NOTE: All measurements to nearest 0.01 foot measured from top of well riser pipe unless otherwise noted.

ADDITIONAL COMMENTS:

SIGNATURE(s): [signature]