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NAS CECIL FIELD, FL
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"THIRD QUARTER 2006 OPERATION AND MAINTENANCE STATUS REPORT FOR NUTRIENT INJECTION SYSTEM AT BUILDING 46 FORMER TANKS 46R, 46D, 46SUL AND 46UL NAS CECIL FIELD FL"

2/1/2007

TERRAINE INC ENVIRONMENTAL SERVICES

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# Third Quarter 2006
# Operation and Maintenance
# Status Report
# July 1, 2006 to September 30, 2006

## NUTRIENT INJECTION SYSTEM

## BUILDING 46

## Former Tanks 46R, 46D, 46SUL and 46UL

## Naval Air Station Cecil Field
## Jacksonville, Florida

**Contract No. N62467-02-G-0352**
**Contract Task Order No. 0001**

**Submitted to:**

**U.S. Naval Facilities**
**Engineering Command**
**Southeast**

**Prepared by:**

TERRAINE
Environmental Consulting

**February 2007**

## SIGNATURE PAGE

We, the undersigned, do hereby affirm that the information contained in this report is accurate and correct to the best of our knowledge and belief.

| | | |
|---|---|---|
| James L. Young, P.G., REM<br>President/CEO<br>TERRAINE, Inc. | 2-9/2007<br>Date | PG-FL2090, REM-6089<br>Registration Nos. |

JAMES L YOUNG
LICENSE
NO. 2090
STATE OF
FLORIDA
PROFESSIONAL GEOLOGIST

| | |
|---|---|
| Karen L. Baer<br>Field Superintendent<br>TERRAINE, Inc. | 2/09/2007<br>Date |

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September 2006 Groundwater Purging and Sampling Logs

# ACRONYMS

| | |
|---|---|
| bgs | Below ground surface |
| BOA | Blanket Ordering Agreement |
| BTEX | Benzene, Toluene, Ethylbenzene, and Xylenes |
| °C | degrees Celsius |
| CTO | Contract Task Order |
| DO | Dissolved Oxygen |
| EPA | U.S. Environmental Protection Agency |
| FAC | Florida Administrative Code |
| FID | Flame Ionization Detector |
| FL PRO | Florida Petroleum Residual Organic |
| Ft. | Feet |
| Gal/min. | Gallons per minute |
| GCTL | Groundwater Cleanup Target Levels |
| IDW | Investigation Derived Waste |
| LNAPL | Light Non-Aqueous Phase Liquid |
| µS/cm | microsiemens per centimeter |
| µg/L | micrograms per liter |
| mg/kg | milligrams per kilogram |
| mg/L | milligrams per liter |
| mS/cm | millisiemens per centimeter |
| MTBE | Methyl-tert-butyl-ether |
| mV | millivolts |
| NAS | Naval Air Station |
| NAVFAC | Naval Facilities Engineering Command |
| N/A | Not Analyzed |
| ND | Non Detect |
| NGVD | National Geodetic Vertical Datum |
| NM | Not measured |
| NR | Not recorded |
| NS | Not sampled |
| NTU | Nephelometric Turbidity Units |
| O&M | Operation and Maintenance |
| ORP | Oxidation Reduction Potential |
| PAHs | Polynuclear Aromatic Hydrocarbons |
| SCTL | Soil Cleanup Target Level |
| S.U. | Standard Units |
| TERRAINE | Terraine, Inc. |
| TRPH | Total Recoverable Petroleum Hydrocarbons |

# EXECUTIVE SUMMARY

## SCOPE

The objective of the remedial action at the Building 46 site is to reduce the concentrations of petroleum-related contaminants in the groundwater and unsaturated soils to target levels specified by Florida Administrative Code (FAC) 62-777.

To treat the impacted soil and groundwater and thereby achieve state-mandated cleanup target levels, a Nutrient Injection System was installed at the site during the period of November 2000 to January 2001. The Nutrient Injection System commenced operation on January 18, 2001.

As a result of anaerobic conditions in the aquifer which were not conducive to biodegradation of the contaminants of concern, nutrient injection was discontinued in April, 2004. Nitrogen and phosphorus are no longer being injected into the subsurface; rather the compressors are currently used to inject air as an oxygen source into the subsurface to enhance the biodegradation of Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX), naphthalene, Methyl-Tert-Butyl-Ether (MTBE), and Total Recoverable Petroleum Hydrocarbons (TRPH).

The purpose of this quarterly Operations and Maintenance (O&M) Report is to provide a summary of activities performed at the site during the period of July 1, 2006 to September 30, 2006.

## CONCLUSIONS AND RECOMMENDATIONS

For the Third Quarter of 2006, laboratory analytical reports indicated groundwater sampled from two (2) wells (CEF-46-1S and -7I) had BTEX and/or MTBE contaminant concentrations exceeding the Groundwater Cleanup Target Levels (GCTLs). Polynuclear Aromatic Hydrocarbons (PAH) concentrations in groundwater sampled from two (2) wells (CEF-46-1S and -7I) were above the GCTL. The sulfate concentrations in groundwater sampled at five (5) wells (CEF-46-2S, -5I, -6D, -24D, and -26I) were above the GCTL. Groundwater from one (1) well (CEF-46-1S) exceeded the GCTL for TRPH.

The soil samples collected from soil boring SB-14 exhibited xylene concentrations greater than the Soil Cleanup Target Levels (SCTL) during the Third Quarter 2006. MTBE exceeded the SCTL in soil samples collected from all three soil borings; however, the reported values failed to meet the established quality control criteria for either precision and/or accuracy.

Based on laboratory data obtained to date, the following is recommended for the site:

- Increase air injection in subsurface in order to create aerobic conditions.
- Continue soil sampling in the vicinity of boring locations SB-1, SB-2, and SB-14 on a quarterly basis.
- Continue groundwater sampling on a quarterly basis.
- Optimize the remediation system based on CH2MHill's recommendations to be submitted to the Navy in February 2007.

# OPERATIONS AND MAINTENANCE STATUS REPORT

## BUILDING 46

## NAVAL AIR STATION, CECIL FIELD

## JACKSONVILLE, FLORIDA

## SEPTEMBER 2006

| | |
|---|---|
| *PREPARED FOR:* | Mr. Mark Davidson |
| *PREPARED BY:* | *TERRAINE, Inc.* |
| *PERIOD OF PERFORMANCE:* | July 1, 2006 to September 30, 2006 |
| *FIELD TEAM:* | Robert Brookshire and Danny Hockett |
| *CONTRACT NUMBER:* | N62467-02-G-0352 |
| *TASK ORDER NUMBER:* | 0001 |
| *TASK ORDER MANAGER:* | James L. Young, P.G.; REM |
| *SUBMITTAL DATE:* | February 2007 |

## 1.0 INTRODUCTION

Terraine, Inc. (TERRAINE) has been contracted by the Department of the Navy, Southeast Division, Naval Facilities Engineering Command (NAVFAC), to provide O&M services at Building 46, Naval Air Station (NAS) Cecil Field, Jacksonville, Florida, under the **Basic Ordering Agreement (BOA) Contract No. N62467-02-G-0352, Contract Task Order (CTO) No. 0001**. The purpose of this Third Quarter 2006 O&M Report is to provide a summary of activities performed at the site during the period of July 1, 2006 to September 30, 2006.

### 1.1 Purpose

The objective of the remedial action at the Building 46 site is to reduce concentrations of petroleum-related contaminants in the groundwater and unsaturated soils to target levels specified by FAC 62-777.

To treat the impacted soil and groundwater and thereby achieve state-mandated cleanup target levels, a Nutrient Injection System was installed at the site during the period of November 2000 to January 2001. The Nutrient Injection System commenced operation on January 18, 2001. A remediation system/technology description of the east and west Nutrient Injection Systems and a more detailed site background and history are provided in the First Quarter Operation and Maintenance Status Report submitted by TERRAINE in June 2004.

As a result of anaerobic conditions in the aquifer which were not conducive to biodegradation of the contaminants of concern, nutrient injection was discontinued in April, 2004. Nitrogen and phosphorus are no longer being injected into the subsurface; rather the system compressors are currently used to inject air as an oxygen source into the subsurface

to enhance the biodegradation of benzene, toluene, ethyl benzene, and xylenes (BTEX), naphthalene, methyl-tert-butyl-ether (MTBE), and TRPH (Total Recoverable Petroleum Hydrocarbons).

## 1.2 Site Location and Description

A base map illustrating the site location at NAS Cecil Field is included in ***Figure 1, Appendix A***. A site map is included in ***Figure 2, Appendix A.***

# 2.0 INVESTIGATION AND METHODOLOGY SUMMARY

## 2.1 System Performance Monitoring

The system was shut down for monthly checks on July 12, August 15, and September 12, 2006. The system was also shut down for quarterly sampling activities. Otherwise, the system did not experience any downtime. Site Visit O&M Logs are provided in ***Appendix B***.

## 2.2 Summary of Maintenance

No maintenance was performed during the Third Quarter 2006.

## 2.3 Water Level Measurements

Depth-to-water measurements were recorded on September 24 and 25, 2006 at all monitoring wells which were sampled (CEF-46-1S, -2S, -5I, -6D, -7I, -9I, -12I, -13I, -14D, -15I, -21I, -24D, -25I, and -26I). The top-of-casing elevation, depth-to-water measurements, and calculated water level elevations are provided in ***Table 1, Appendix C***. The locations of the wells are shown on ***Figure 2, Appendix A.***

According to depth to water measurements obtained on September 24 and 25, 2006, groundwater flow in the intermediate aquifer was southwest ***(Figure 3, Appendix A).*** Due to limited data points, groundwater flow in the shallow and deep aquifers could not be determined.

Light Non-Aqueous Phase Liquids (LNAPL) were not noted in any monitoring well during the monitoring period.

## 2.4 Groundwater Sampling

### 2.4.1 Methodology

Groundwater sampling was conducted at Building 46 on September 24 and 25, 2006. Fourteen (14) wells (CEF-46-1S, -2S, -5I, -6D, -7I, -9I, -12I, -13I, -14D, -15I, -21I, -24D, -25I, and -26I) were purged and sampled using low-flow methodology. Purging of wells consisted of removing groundwater with a Geotech© peristaltic pump at a rate equal or less than the groundwater recharge rate until field parameters (temperature, pH, conductivity, turbidity, Dissolved Oxygen [DO] and Oxidation Reduction Potential [ORP]) had stabilized. Water levels in the 2-inch wells were continuously monitored to maintain drawdown at less than 0.3 feet with the exception of monitoring well CEF-46-1S. Although purged at the slowest rate possible, monitoring well CEF-46-1S was purged dry before field parameters stabilized. Samples were collected after the well was allowed to recharge.

Field analytical tests using Hach© kits were performed during the Third Quarter 2006 sampling event. Groundwater from the fourteen monitoring wells was tested for carbon dioxide, alkalinity, ferrous iron, hydrogen sulfide, and DO.

The results from the field parameters and field analytical tests are summarized in ***Table 2, Appendix C.*** Copies of the groundwater purging/sampling logs including all field parameter measurements are provided in ***Appendix D***.

### 2.4.2 Chemical Analysis Suite

Groundwater samples from the monitoring wells were laboratory analyzed for the following analyte suite:

- BTEX and MTBE by U.S. Environmental Protection Agency (EPA) Method 8260B.
- PAHs by EPA Method 8270C.
- TRPH by Florida Petroleum Residual Organic (FL-PRO).
- Sulfate by EPA Series 300.0.

## 2.5 Soil Sampling

### 2.5.1 Methodology

Quarterly soil sampling was conducted on September 24, 2006 during the monitoring period. Three soil borings, labeled SB-1, SB-2, and SB-14, were installed using a bucket auger. The location of these soil borings is shown in ***Figure 2, Appendix A***. The soil was screened using a Heath© Porta Flame Ionization Detector (FID). The results of the screening are shown in ***Table 5, Appendix C***. A soil sample was collected and sent to the laboratory for analysis from soil borings SB-1, SB-2, and SB-14 at 10 feet below ground surface.

### 2.5.2 Chemical Analysis Suite

Soil collected from the soil borings were laboratory analyzed for the following analyte suite:

- BTEX and MTBE by EPA Method 8260B
- PAHs by EPA Method 8270C
- TRPH by FL-PRO

## 2.6 Investigative Derived Waste

Purge water collected from the monitoring wells was collected and containerized. All investigative derived waste (IDW) was stored at the Day Tank 1 remediation compound site in 55-gallon drums and was transported to Industrial Water Services in Jacksonville, Florida by SWS Environmental First Response in September 2006.

# 3.0 SUMMARY OF SAMPLING AND LABORATORY ANALYTICAL RESULTS

## 3.1 Data Validation

A review of quality control data was performed. This review evaluated data completeness, holding time compliance, laboratory blank contamination, and detection limits. The validation process results in qualifiers that are shown with the analyte concentrations in ***Tables 3 and 4, Appendix C***.

## 3.2 Groundwater Monitoring

The baseline-sampling event, conducted December 20, 2000, revealed that samples from seven (7) of the 14 wells had contaminant concentrations above the GCTL per Chapter 62-777 FAC. Groundwater was not analyzed for MTBE in December, 2000; groundwater was first analyzed for MTBE in January 2001.

For the Third Quarter of 2006, laboratory analytical reports indicated groundwater sampled from two (2) wells (CEF-46-1S and -7I) had BTEX and/or MTBE contaminant concentrations exceeding the GCTL. PAH concentrations in groundwater sampled from two (2) wells (CEF-46-1S and -7I) were above the GCTL. The sulfate concentrations in groundwater sampled at five (5) wells (CEF-46-2S, -5I, -6D, -24D, and -26I) were above the GCTL. Groundwater from one (1) well (CEF-46-1S) exceeded the GCTL for TRPH. Groundwater analytical results are summarized in ***Table 3, Appendix C***.

### 3.2.1 BTEX/MTBE

- In comparison to the baseline sampling event, groundwater sample results from all monitoring wells with historically high concentrations of total BTEX (CEF-46-1S, -2S, -5I, -7I, and -26I) have decreased over time.
- Total BTEX concentrations have increased in groundwater sampled from monitoring well CEF-46-1S, decreased in groundwater sampled from monitoring well CEF-46-7I, and remained nondetect or demonstrated negligible fluctuations in the remaining twelve (12) monitoring wells in comparison to the June 2006 sampling event.
- Groundwater sample results indicated MTBE concentrations have increased in groundwater sampled from monitoring wells CEF-46-1S and -9I, decreased in groundwater sampled from monitoring wells CEF-46-2S, -7I, -12I, and -13I, and remained nondetect or demonstrated minor fluctuations in groundwater sampled from the remaining eight (8) monitoring wells in comparison to the January 2001 sampling event. Samples from two wells (CEF-46-1S and -7I) had MTBE concentrations that exceeded the GCTL during the 3rd Quarter 2006.
- MTBE concentrations have decreased in groundwater sampled from monitoring wells CEF-46-1S and -7I and have remained nondetect or demonstrated minor fluctuations in the remaining 12 monitoring wells in comparison to the June 2006 sampling event.

### 3.2.2 PAHs

- Groundwater sample results indicated that naphthalene concentrations have decreased, remained nondetect or demonstrated minor fluctuations in groundwater sampled from the monitoring wells in comparison to the baseline sampling event.

- Naphthalene concentrations have increased in groundwater sampled from monitoring wells CEF-46-1S and -7I and remained nondetect in groundwater sampled from the remaining 12 wells in comparison to the June 2006 sampling event.
- 1-methylnaphthalene and 2-methylnaphthalene concentrations have increased in groundwater sampled from monitoring well CEF-46-1S in comparison to the June 2006 sampling event.

3.2.3 TRPH

- Groundwater sample results indicated that TRPH concentrations have decreased in groundwater sampled from monitoring wells CEF-46-1S, -2S, and -7I, and remained nondetect or demonstrated minor fluctuations in the remaining 11 monitoring wells in comparison to the baseline sampling event.
- TRPH concentrations have increased in groundwater sampled from monitoring well CEF-46-2S and decreased in groundwater sampled from monitoring wells CEF-46-1S, -5I, -6D, -7I, -9I, -12I, -13I, -14D, -15I, -21I, -24D, -25I, and -26I in comparison to the June 2006 sampling event.

3.2.4 Sulfate

- Sulfate concentrations exceeded the GCTL from wells CEF-46-2S, -5I, -6D, -24D, and -26I, with the highest concentration observed at well CEF-46-6D (5,290 mg/L).

### 3.3 Groundwater Field Test Kits / Field Parameter Readings

During the September 2006 sampling event the following was observed:

- pH values ranged from 2.56 to 5.81 Standard Units (S.U.). In all 14 wells, pH values were below the preferred range (6.00 to 8.00 S.U.) for optimal microbial activity. Low pH values can be attributed to acid formation resulting from the injection of nutrients, the presence of high concentrations of natural sulfate, and possible production of metabolic acids and carbon dioxide from microbial degradation activity.
- Dissolved oxygen concentrations ranged from 0.17 mg/L to 0.60 mg/L. DO concentrations indicated anaerobic conditions. The apparent decrease in DO in some deep wells can be attributed to reconfiguration of airflow in the area to focus on areas of higher contamination. The low DO in the shallow and intermediate wells is more likely due to the fact that injected air has been effectively diffusing in the more shallow portions of the aquifer.
- ORP levels ranged from -85.30 mV to 508.10 mV in groundwater sampled. No distinct pattern was observed in the comparison of contaminant concentrations and ORP levels.
- Carbon dioxide values ranged from 105 mg/L to 443 mg/L. Carbon dioxide levels could not be measured in four (3) of the wells due to interference. No distinct pattern was observed in the comparison of contaminant concentrations and carbon dioxide levels.
- Alkalinity concentrations ranged from nondetect to 75 mg/L.
- Ferrous iron concentrations ranged from 2.4 mg/L to 10.0 mg/L in groundwater from monitoring wells sampled. No pattern was observed in ferrous iron levels in comparison to contaminant concentrations.

- Hydrogen sulfide concentrations ranged from nondetect to 5.0 mg/L. No pattern was observed in sulfide levels in comparison to contaminant concentrations.

## 3.4 Soil Monitoring

### 3.4.1 BTEX/MTBE

The soil sample collected from soil boring SB-14 exhibited xylene concentrations greater than the SCTL during the Third Quarter 2006 (1.740 mg/kg). MTBE exceeded the SCTL in soil samples collected from all three soil borings; however, the reported values failed to meet the established quality control criteria for either precision and/or accuracy.

### 3.4.2 PAHs

No PAHs were detected at concentrations greater than the SCTLs in the soil samples collected from soil borings SB-1, SB-2, and SB-14 during the Third Quarter 2006.

### 3.4.3 TRPH

TRPH was detected in all three soil samples collected on September 24, 2006; however, concentrations detected in soil sampled were below the SCTL of 340 mg/kg.

The locations of the soil borings are shown on ***Figure 2, Appendix A***. Soil analytical results are summarized on ***Table 5, Appendix C***.

## 4.0 CONCLUSIONS AND RECOMMENDATIONS

For the Third Quarter of 2006, laboratory analytical reports indicated groundwater sampled from two (2) wells (CEF-46-1S and -7I) had BTEX and/or MTBE contaminant concentrations exceeding the GCTL. PAH concentrations in groundwater sampled from two (2) wells (CEF-46-1S and -7I) were above the GCTL. The sulfate concentrations in groundwater sampled at five (5) wells (CEF-46-2S, -5I, -6D, -24D, and -26I) were above the GCTL. Groundwater from one (1) well (CEF-46-1S) exceeded the GCTL for TRPH. Groundwater analytical results are summarized in ***Table 3, Appendix C***.

The soil samples collected from soil boring SB-14 exhibited xylene concentrations greater than the SCTL during the Third Quarter 2006. MTBE exceeded the SCTL in soil samples collected from all three soil borings; however, the reported values failed to meet the established quality control criteria for either precision and/or accuracy.

Based on laboratory data obtained to date, the following is recommended for the site:

- Increase air injection in subsurface in order to create aerobic conditions.
- Continue soil sampling in the vicinity of boring locations SB-1, SB-2, and SB-14 on a quarterly basis.
- Continue groundwater sampling on a quarterly basis.
- Optimize the remediation system based on CH2MHill's recommendations to be submitted to the Navy in February 2007.

## 5.0 REFERENCES

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.

Terraine, Inc. First Quarter, 2004 Operations and Maintenance Status Report, Nutrient Injection System, Building 46, Naval Air Station, Cecil Field, Jacksonville, Florida.

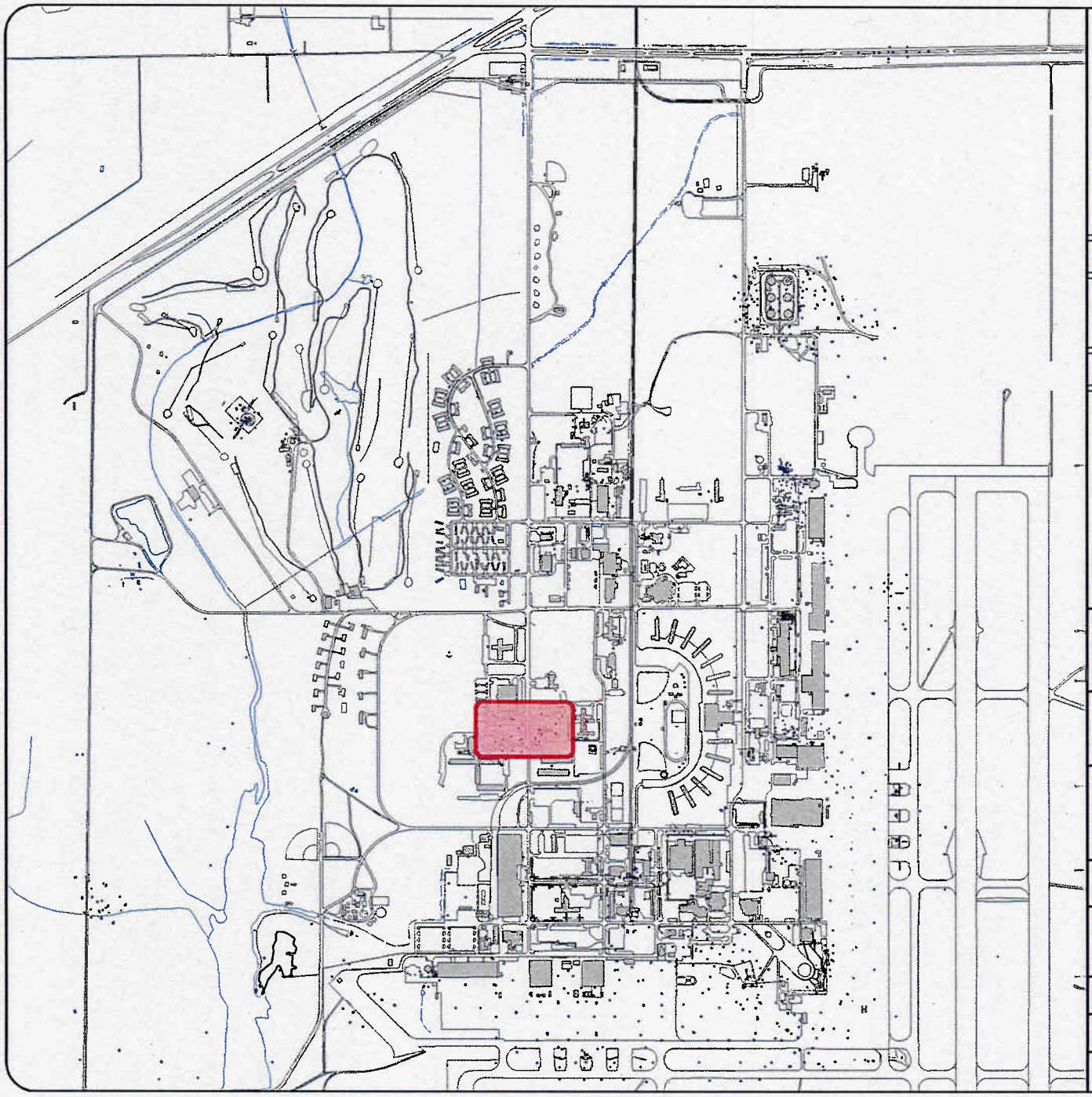
# APPENDIX A

## FIGURES

**Figure 1** *Site Location Map, Building 46*

**Figure 2** *Site Map, Building 46*

**Figure 3** *Groundwater Elevation Map, Intermediate Zone*



N
W E
S

## NOTES

Sources: Environmental IR Gateway (www.sdirport.com)

## LEGEND

APPROXIMATE SITE BOUNDARY

0 0.25 0.5

APPROXIMATE SCALE IN MILES

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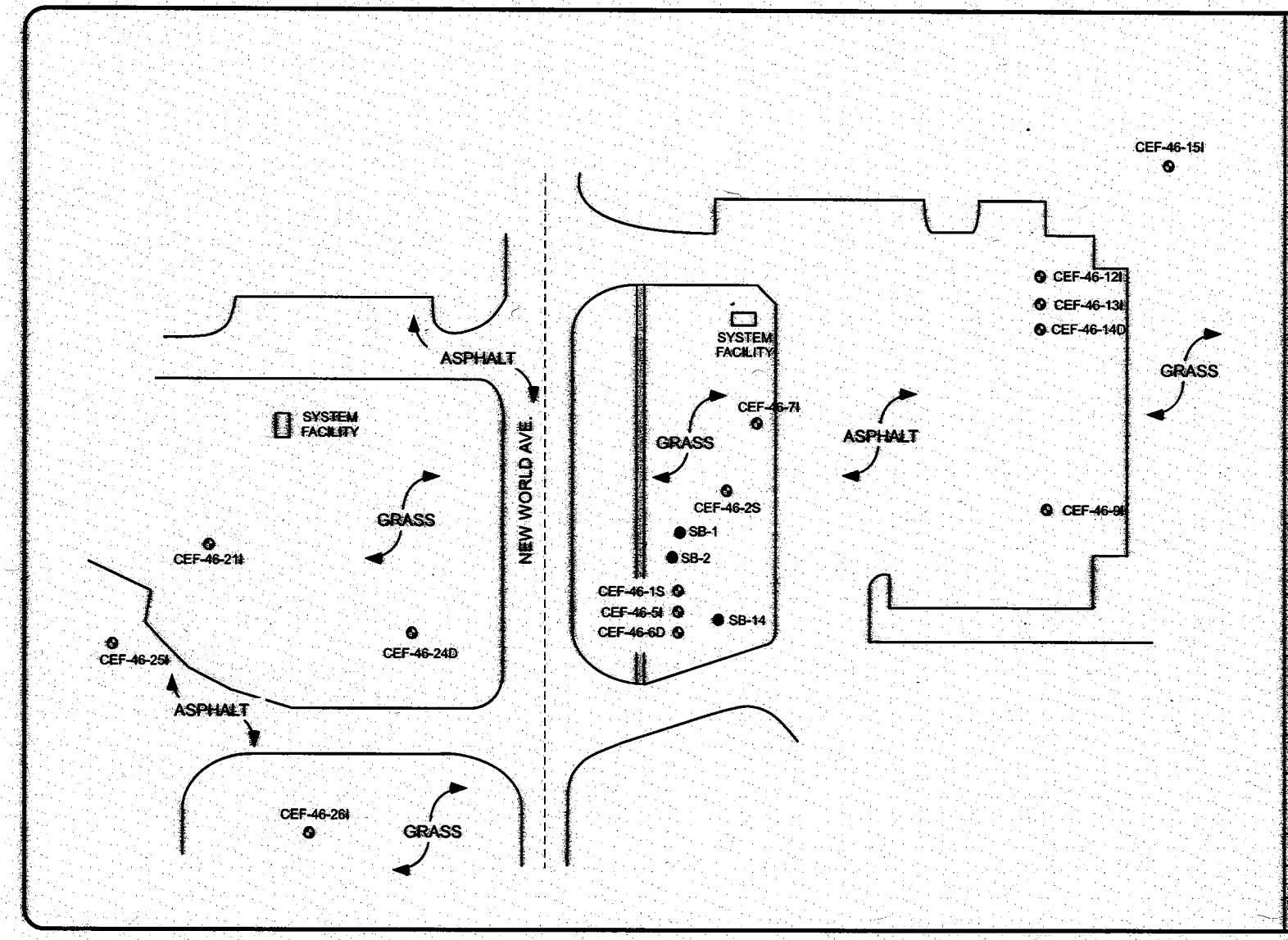
**NAS CECIL FIELD**
**FIGURE 1: SITE LOCATION MAP**
**BUILDING 46**

Prepared For:
U.S. Naval Facilities Engineering Command, Southeast

| | |
|---|---|
| DWN BY: LFW | CHK BY: KBG |
| SCALE: SEE LEGEND | APR BY: JLY |
| DATE:10/12/04 | FILE: N/A |




NOTES

LEGEND

- MONITORING WELL
- SOIL BORING

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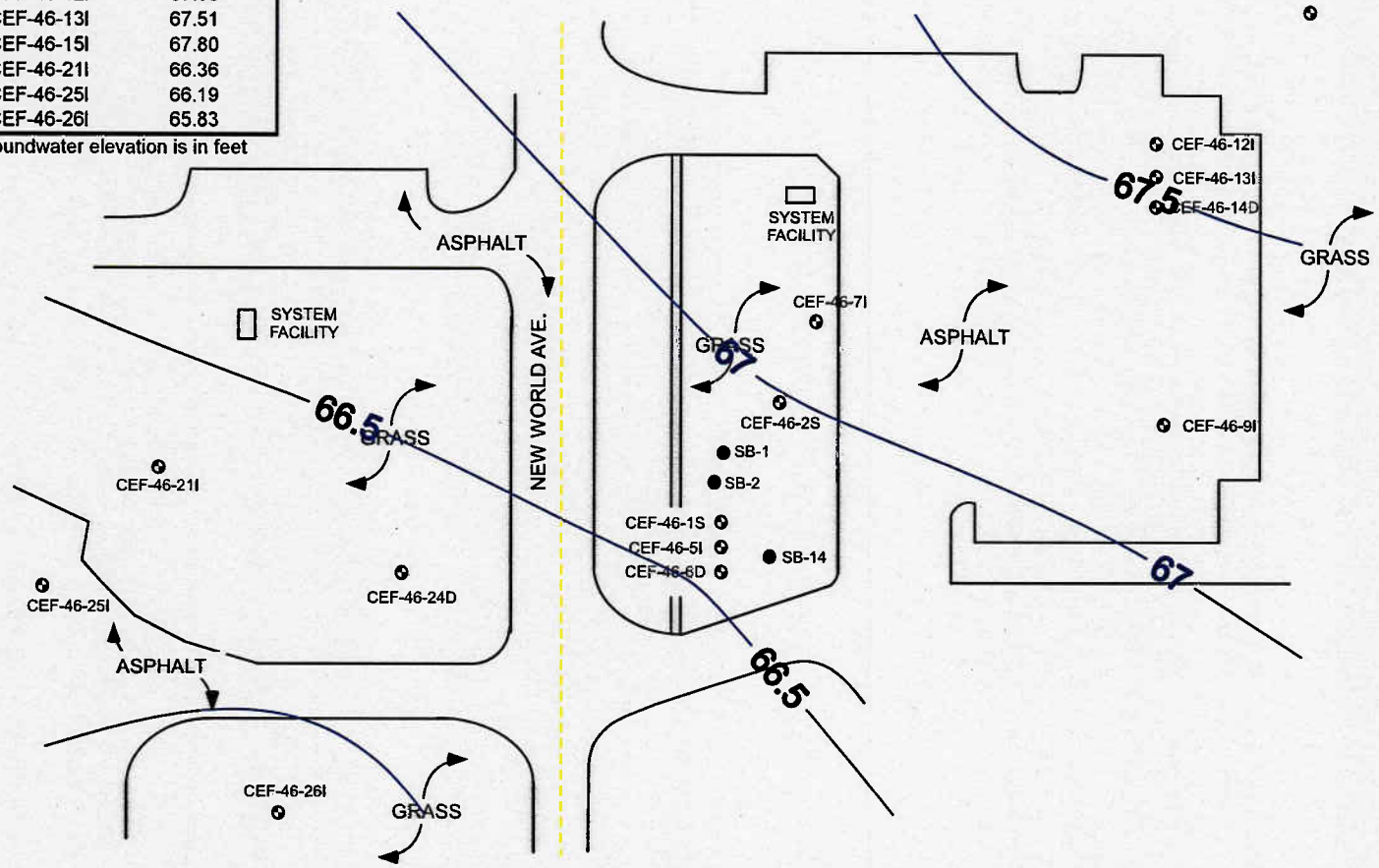
**NAS CECIL FIELD**
**FIGURE 2: SITE MAP**
**BUILDING 46**

Prepared For:
U.S. Naval Facilities Engineering Command, Southeast

| | |
|---|---|
| DWN BY: KLB | CHK BY: LFW |
| | APR BY: JLY |
| DATE: 03/01/2006 | FILE: 04-41001 |

| Well ID | Groundwater Elevation |
|---|---|
| CEF-46-5I | 66.56 |
| CEF-46-7I | 67.20 |
| CEF-46-9I | 67.16 |
| CEF-46-12I | 67.60 |
| CEF-46-13I | 67.51 |
| CEF-46-15I | 67.80 |
| CEF-46-21I | 66.36 |
| CEF-46-25I | 66.19 |
| CEF-46-26I | 65.83 |

Groundwater elevation is in feet




N
W E
S

## NOTES

Contour plot generated using kriging algorithm with linear variogram model.

## LEGEND

- MONITORING WELL
- SOIL BORING
- Indicates groundwater flow direction

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**NAS CECIL FIELD**
**FIGURE 3: GROUNDWATER ELEVATION MAP, INTERMEDIATE ZONE**
**BUILDING 46**

Prepared For:
U.S. Naval Facilities Engineering Command, Southeast

| | |
|---|---|
| DWN BY: KLB | CHK BY: LFW |
| | APR BY: JLY |
| DATE: 09/01/2006 | FILE: 04-41001 |

# APPENDIX B

*Site Visit O&M Logs*

| | | | |
|---|---|---|---|
| **pHA-ER OPERATION and MAINTENANCE LOG** | | **Date:** | 7/12/2006 |
| **Site Name: Cecil Field Site 46 East** | | **Arrival Time:** | 10:00 AM |
| **Personnel on Site:** | L E Priester | **Departure Time:** | 12:00 PM |

| **Exterior Parameters** | **Arrival** | | **Departure** | | **Comments** |
|---|---|---|---|---|---|
| Power Disconnect (On/Off) | On | | On | | |
| Power Hour Meter (Hours) | | | 41,179.0 | | |
| Pressure Hour Meter (Hours) | | | 41,096.0 | | |
| **Air Supply** | | | | | |
| Leg 1 (PSIG) | | 50 | 50 | | |
| Leg 2 (PSIG) | | 50 | 50 | | |
| **Nitrous Oxide** | | | | | |
| Cylinder 1 (psig, primary/secondary) | None | | None | | |
| Cylinder 2 (psig, primary/secondary) | None | | None | | Nitrous off per Navy |
| Cylinder 3 (psig, primary/secondary) | None | | None | | |
| Cylinder 4 (psig, primary/secondary) | None | | None | | |
| Cylinder 5 (psig, primary/secondary) | None | | None | | |
| Flow Meter (CFH) | | 0 | | 0 | |
| **Adjunct Gas** | | | | | |
| Cylinder 1 (psig, primary/secondary) | NA | | NA | | |
| Flow Meter | | | | | |
| **TEP** | | | | | |
| Gallons (US, Liq.) | 0.75 | | 0.75 | | Turned Off per Navy |
| Air Flow (CFM) | 0 | | 0 | | |
| **Air Flow** | | | | | |
| Inj. Well I4 (Valve % Open/CFM) | 0 | | 0 | | No change to air flow distribution to leg 1 . |
| Inj. Well I5 (Valve % Open/CFM) | 100 | | 100 | | |
| Inj. Well D9 (Valve % Open/CFM) | 0 | | 0 | | |
| Inj. Well D10 (Valve % Open/CFM) | 0 | | 0 | | |
| Inj. Well D11 (Valve % Open/CFM) | 0 | | 0 | | |
| Inj. Well I2 (Valve % Open/CFM) | 0 | | 0 | | |
| Inj. Well I3 (Valve % Open/CFM) | 100 | | 100 | | |
| Inj. Well I6 (Valve % Open/CFM) | 100 | | 100 | | |
| Inj. Well I7 (Valve % Open/CFM) | 100 | | 100 | | |
| Inj. Well I8 (Valve % Open/CFM) | 0 | | 0 | | |
| Inj. Well I1 (Valve % Open/CFM) | 0 | | 0 | | |
| Inj. Well D1 (Valve % Open/CFM) | 100 | | 100 | | No change to air flow distribution to leg 2 . |
| Inj. Well D2 (Valve % Open/CFM) | 100 | | 100 | | |
| Inj. Well D3 (Valve % Open/CFM) | 100 | | 100 | | |
| Inj. Well D4 (Valve % Open/CFM) | 50 | | 50 | | |
| Inj. Well D5 (Valve % Open/CFM) | 0 | | 0 | | |
| Inj. Well D6 (Valve % Open/CFM) | 25 | | 25 | | |
| Inj. Well D7 (Valve % Open/CFM) | 25 | | 25 | | |
| Inj. Well D8 (Valve % Open/CFM) | 0 | | 0 | | |

| **Maintenance Information** | **Maintenance Performed** |
|---|---|
| Nitrous System Cylinders/Regulators | OK-Off No N20 |
| Nitrous Oxide Solenoid Valve | OK-Off No N20 |
| TEP System | OK-Off |
| AC Gast M853 Mod 5K49ZN4223 | |
| #1 | OK |
| #2 | Turned off |
| #3 | Turned off |
| #4 | Turned off |
| | |
| | |
| Air Legs/ Solenoid Valves | OK |
| Ventilation Fans | OK. Roof fan OK. Verified thermostat function. |
| Primary Electrical System | OK |
| PLC-Telemetry | OK |
| Relay Assembly | OK |
| Pressure Switch | OK |
| Flow Switch | OK |

**Additional Notes:**

Flow continues to be directed to plume hot spot.
Checked filters--OK
Removed all Nitrous Oxide Cylinders per Navy (Magwood) in March 2004

One three phase 6LDH is in trailer for spare.

| | | | |
|---|---|---|---|
| **pHA-ER OPERATION and MAINTENANCE LOG** | | **Date:** | 7/12/2006 |
| **Site Name: Cecil Field Site 46 West** | | **Arrival Time:** | 10:00 AM |
| **Personnel on Site:** | L E Priester | **Departure Time:** | 12:00 PM |

| **Exterior Parameters** | **Arrival** | | **Departure** | | **Comments** |
|---|---|---|---|---|---|
| Power Disconnect (On/Off) | On | | On | | |
| Power Hour Meter (Hours) | | | 7,448.0 | | |
| Pressure Hour Meter (Hours) | | | 40,794.0 | | |
| **Air Supply** | | | | | |
| Leg 1 (PSIG) | 50 | | 50 | | |
| Leg 2 (PSIG) | 50 | | 50 | | |
| **Nitrous Oxide** | | | | | |
| Cylinder 1 (psig, primary/secondary) | None | | None | | AG Jax No Nitrous Oxide per Navy |
| Cylinder 2 (psig, primary/secondary) | None | | None | | AG Jax |
| Cylinder 3 (psig, primary/secondary) | None | | None | | AG Jax |
| Flow Meter (CFH) | 0 | | 0 | | |
| **Adjunct Gas** | | | | | |
| Cylinder 1 (psig, primary/secondary) | NA | | NA | | |
| Flow Meter | | | | | |
| **TEP** | | | | | |
| Gallons (US, Liq.) | 0.55 | | 0.55 | | TEP turned off per Navy |
| Air Flow (CFM) | 0 | | 0 | | |
| **Air Flow** | | | | | |
| Inj. Well I1 (Valve % Open/CFM) | 0 | | 0 | | No change to flow rates. |
| Inj. Well I2 (Valve % Open/CFM) | 25 | | 25 | | |
| Inj. Well I3 (Valve % Open/CFM) | 0 | | 0 | | |
| Inj. Well I4 (Valve % Open/CFM) | 25 | | 25 | | |
| Inj. Well I5 (Valve % Open/CFM) | 25 | | 25 | | |
| Inj. Well I8 (Valve % Open/CFM) | 25 | | 25 | | No change to flow rates. |
| Inj. Well I6 (Valve % Open/CFM) | 25 | | 25 | | Set up for maintenance flow. |
| Inj. Well I7 (Valve % Open/CFM) | 0 | | 0 | | |
| Inj. Well D1 (Valve % Open/CFM) | 100 | | 100 | | |
| Inj. Well D2 (Valve % Open/CFM) | 100 | | 100 | | |
| Inj. Well D3 (Valve % Open/CFM) | 0 | | 0 | | |

| **Maintenance Information** | **Maintenance Performed** |
|---|---|
| Nitrous System Cylinders/Regulator | OK. No N2O |
| Nitrous Oxide Solenoid Valve | OK. No N2O |
| TEP System | OK -Off |
| AC Gast M853 Mod 5K49ZN4223 | |
| #1 SN 0103706074 | OK |
| #2 SN 0103706070 | OK |
| #3 SN 0103706076 | Removed |
| #4 SN0103706073 | Turned off. |
| Air Legs/ Solenoid Valves | OK. |
| Ventilation Fan | OK. |
| Primary Electrical System | OK |
| PLC-Telemetry | OK |
| Relay Assembly | OK |
| Pressure Switch | OK |
| Flow Switch | OK |

**Additional Notes:**

Flows continue to be directed towards maintenance of treatment area.
Removed all Nitous Oxide cylinders per Navy (Magwood) in March 2004

Reset Compressor #2

| | | | |
|---|---|---|---|
| **pHA-ER OPERATION and MAINTENANCE LOG** | | **Date:** | 8/15/2006 |
| **Site Name: Cecil Field Site 46 East** | | **Arrival Time:** | 10:00 AM |
| **Personnel on Site:** | L E Priester | **Departure Time:** | 12:00 PM |

| **Exterior Parameters** | **Arrival** | | **Departure** | | **Comments** |
|---|---|---|---|---|---|
| Power Disconnect (On/Off) | On | | On | | |
| Power Hour Meter (Hours) | | | 41,962.0 | | |
| Pressure Hour Meter (Hours) | | | 41,879.0 | | |
| **Air Supply** | | | | | |
| Leg 1 (PSIG) | | 50 | 50 | | |
| Leg 2 (PSIG) | | 50 | 50 | | |
| **Nitrous Oxide** | | | | | |
| Cylinder 1 (psig, primary/secondary) | None | | None | | |
| Cylinder 2 (psig, primary/secondary) | None | | None | | Nitrous off per Navy |
| Cylinder 3 (psig, primary/secondary) | None | | None | | |
| Cylinder 4 (psig, primary/secondary) | None | | None | | |
| Cylinder 5 (psig, primary/secondary) | None | | None | | |
| Flow Meter (CFH) | | 0 | | 0 | |
| **Adjunct Gas** | | | | | |
| Cylinder 1 (psig, primary/secondary) | NA | | NA | | |
| Flow Meter | | | | | |
| **TEP** | | | | | |
| Gallons (US, Liq.) | 0.75 | | 0.75 | | Turned Off per Navy |
| Air Flow (CFM) | 0 | | 0 | | |
| **Air Flow** | | | | | |
| Inj. Well I4 (Valve % Open/CFM) | 0 | | 0 | | No change to air flow distribution to leg 1 . |
| Inj. Well I5 (Valve % Open/CFM) | 100 | | 100 | | |
| Inj. Well D9 (Valve % Open/CFM) | 0 | | 0 | | |
| Inj. Well D10 (Valve % Open/CFM) | 0 | | 0 | | |
| Inj. Well D11 (Valve % Open/CFM) | 0 | | 0 | | |
| Inj. Well I2 (Valve % Open/CFM) | 0 | | 0 | | |
| Inj. Well I3 (Valve % Open/CFM) | 100 | | 100 | | |
| Inj. Well I6 (Valve % Open/CFM) | 100 | | 100 | | |
| Inj. Well I7 (Valve % Open/CFM) | 100 | | 100 | | |
| Inj. Well I8 (Valve % Open/CFM) | 0 | | 0 | | |
| Inj. Well I1 (Valve % Open/CFM) | 0 | | 0 | | |
| Inj. Well D1 (Valve % Open/CFM) | 100 | | 100 | | No change to air flow distribution to leg 2 . |
| Inj. Well D2 (Valve % Open/CFM) | 100 | | 100 | | |
| Inj. Well D3 (Valve % Open/CFM) | 100 | | 100 | | |
| Inj. Well D4 (Valve % Open/CFM) | 50 | | 50 | | |
| Inj. Well D5 (Valve % Open/CFM) | 0 | | 0 | | |
| Inj. Well D6 (Valve % Open/CFM) | 25 | | 25 | | |
| Inj. Well D7 (Valve % Open/CFM) | 25 | | 25 | | |
| Inj. Well D8 (Valve % Open/CFM) | 0 | | 0 | | |

| **Maintenance Information** | **Maintenance Performed** |
|---|---|
| Nitrous System Cylinders/Regulators | OK-Off No N20 |
| Nitrous Oxide Solenoid Valve | OK-Off No N20 |
| TEP System | OK-Off |
| AC Gast M853 Mod 5K49ZN4223 | |
| #1 | OK |
| #2 | Turned off |
| #3 | Turned off |
| #4 | Turned off |
| | |
| | |
| Air Legs/ Solenoid Valves | OK |
| Ventilation Fans | OK. Roof fan OK. Verified thermostat function. |
| Primary Electrical System | OK |
| PLC-Telemetry | OK |
| Relay Assembly | OK |
| Pressure Switch | OK |
| Flow Switch | OK |

**Additional Notes:**

Flow continues to be directed to plume hot spot.
Checked filters--OK
Removed all Nitrous Oxide Cylinders per Navy (Magwood) in March 2004

One three phase 6LDH is in trailer for spare.

| | | | |
|---|---|---|---|
| **pHA-ER OPERATION and MAINTENANCE LOG** | | **Date:** | 8/15/2006 |
| **Site Name: Cecil Field Site 46 West** | | **Arrival Time:** | 10:00 AM |
| **Personnel on Site:** | L E Priester | **Departure Time:** | 12:00 PM |

| **Exterior Parameters** | **Arrival** | | **Departure** | | **Comments** |
|---|---|---|---|---|---|
| Power Disconnect (On/Off) | On | | On | | |
| Power Hour Meter (Hours) | | | 8,231.0 | | |
| Pressure Hour Meter (Hours) | | | 41,576.0 | | |
| **Air Supply** | | | | | |
| Leg 1 (PSIG) | 50 | | 50 | | |
| Leg 2 (PSIG) | 50 | | 50 | | |
| **Nitrous Oxide** | | | | | |
| Cylinder 1 (psig, primary/secondary) | None | | None | | AG Jax No Nitrous Oxide per Navy |
| Cylinder 2 (psig, primary/secondary) | None | | None | | AG Jax |
| Cylinder 3 (psig, primary/secondary) | None | | None | | AG Jax |
| Flow Meter (CFH) | 0 | | 0 | | |
| **Adjunct Gas** | | | | | |
| Cylinder 1 (psig, primary/secondary) | NA | | NA | | |
| Flow Meter | | | | | |
| **TEP** | | | | | |
| Gallons (US, Liq.) | 0.55 | | 0.55 | | TEP turned off per Navy |
| Air Flow (CFM) | 0 | | 0 | | |
| **Air Flow** | | | | | |
| Inj. Well I1 (Valve % Open/CFM) | 0 | | 0 | | No change to flow rates. |
| Inj. Well I2 (Valve % Open/CFM) | 25 | | 25 | | |
| Inj. Well I3 (Valve % Open/CFM) | 0 | | 0 | | |
| Inj. Well I4 (Valve % Open/CFM) | 25 | | 25 | | |
| Inj. Well I5 (Valve % Open/CFM) | 25 | | 25 | | |
| Inj. Well I8 (Valve % Open/CFM) | 25 | | 25 | | No change to flow rates. |
| Inj. Well I6 (Valve % Open/CFM) | 25 | | 25 | | Set up for maintenance flow. |
| Inj. Well I7 (Valve % Open/CFM) | 0 | | 0 | | |
| Inj. Well D1 (Valve % Open/CFM) | 100 | | 100 | | |
| Inj. Well D2 (Valve % Open/CFM) | 100 | | 100 | | |
| Inj. Well D3 (Valve % Open/CFM) | 0 | | 0 | | |

| **Maintenance Information** | **Maintenance Performed** |
|---|---|
| Nitrous System Cylinders/Regulator | OK. No N2O |
| Nitrous Oxide Solenoid Valve | OK. No N2O |
| TEP System | OK -Off |
| AC Gast M853 Mod 5K49ZN4223 | |
| #1 SN 0103706074 | OK |
| #2 SN 0103706070 | OK |
| #3 SN 0103706076 | Removed |
| #4 SN0103706073 | Turned off. |
| Air Legs/ Solenoid Valves | OK. |
| Ventilation Fan | OK. |
| Primary Electrical System | OK |
| PLC-Telemetry | OK |
| Relay Assembly | OK |
| Pressure Switch | OK |
| Flow Switch | OK |
| **Additional Notes:** | Flows continue to be directed towards maintenance of treatment area.<br>Removed all Nitous Oxide cylinders per Navy (Magwood) in March 2004<br><br>Reset Compressor #2 |

| | | | |
|---|---|---|---|
| **pHA-ER OPERATION and MAINTENANCE LOG** | | **Date:** | 9/12/2006 |
| **Site Name: Cecil Field Site 46 East** | | **Arrival Time:** | 11:00 AM |
| **Personnel on Site:** | L E Priester | **Departure Time:** | 1:00 PM |

| **Exterior Parameters** | **Arrival** | | **Departure** | | **Comments** |
|---|---|---|---|---|---|
| Power Disconnect (On/Off) | On | | On | | |
| Power Hour Meter (Hours) | | | 42,608.0 | | |
| Pressure Hour Meter (Hours) | | | 42,525.0 | | |
| **Air Supply** | | | | | |
| Leg 1 (PSIG) | | 50 | 50 | | |
| Leg 2 (PSIG) | | 50 | 50 | | |
| **Nitrous Oxide** | | | | | |
| Cylinder 1 (psig, primary/secondary) | None | | None | | |
| Cylinder 2 (psig, primary/secondary) | None | | None | | Nitrous off per Navy |
| Cylinder 3 (psig, primary/secondary) | None | | None | | |
| Cylinder 4 (psig, primary/secondary) | None | | None | | |
| Cylinder 5 (psig, primary/secondary) | None | | None | | |
| Flow Meter (CFH) | | 0 | | 0 | |
| **Adjunct Gas** | | | | | |
| Cylinder 1 (psig, primary/secondary) | NA | | NA | | |
| Flow Meter | | | | | |
| **TEP** | | | | | |
| Gallons (US, Liq.) | 0.75 | | 0.75 | | Turned Off per Navy |
| Air Flow (CFM) | 0 | | 0 | | |
| **Air Flow** | | | | | |
| Inj. Well I4 (Valve % Open/CFM) | 0 | | 0 | | No change to air flow distribution to leg 1 . |
| Inj. Well I5 (Valve % Open/CFM) | 100 | | 100 | | |
| Inj. Well D9 (Valve % Open/CFM) | 0 | | 0 | | |
| Inj. Well D10 (Valve % Open/CFM) | 0 | | 0 | | |
| Inj. Well D11 (Valve % Open/CFM) | 0 | | 0 | | |
| Inj. Well I2 (Valve % Open/CFM) | 0 | | 0 | | |
| Inj. Well I3 (Valve % Open/CFM) | 100 | | 100 | | |
| Inj. Well I6 (Valve % Open/CFM) | 100 | | 100 | | |
| Inj. Well I7 (Valve % Open/CFM) | 100 | | 100 | | |
| Inj. Well I8 (Valve % Open/CFM) | 0 | | 0 | | |
| Inj. Well I1 (Valve % Open/CFM) | 0 | | 0 | | |
| Inj. Well D1 (Valve % Open/CFM) | 100 | | 100 | | No change to air flow distribution to leg 2 . |
| Inj. Well D2 (Valve % Open/CFM) | 100 | | 100 | | |
| Inj. Well D3 (Valve % Open/CFM) | 100 | | 100 | | |
| Inj. Well D4 (Valve % Open/CFM) | 50 | | 50 | | |
| Inj. Well D5 (Valve % Open/CFM) | 0 | | 0 | | |
| Inj. Well D6 (Valve % Open/CFM) | 25 | | 25 | | |
| Inj. Well D7 (Valve % Open/CFM) | 25 | | 25 | | |
| Inj. Well D8 (Valve % Open/CFM) | 0 | | 0 | | |

| **Maintenance Information** | **Maintenance Performed** |
|---|---|
| Nitrous System Cylinders/Regulators | OK-Off No N20 |
| Nitrous Oxide Solenoid Valve | OK-Off No N20 |
| TEP System | OK-Off |
| AC Gast M853 Mod 5K49ZN4223 | |
| #1 | OK |
| #2 | Turned off |
| #3 | Turned off |
| #4 | Turned off |
| | |
| | |
| Air Legs/ Solenoid Valves | OK |
| Ventilation Fans | OK. Roof fan OK. Verified thermostat function. |
| Primary Electrical System | OK |
| PLC-Telemetry | OK |
| Relay Assembly | OK |
| Pressure Switch | OK |
| Flow Switch | OK |

**Additional Notes:**

Flow continues to be directed to plume hot spot.
Checked filters--OK
Removed all Nitrous Oxide Cylinders per Navy (Magwood) in March 2004

One three phase 6LDH is in trailer for spare.

| | | | |
|---|---|---|---|
| **pHA-ER OPERATION and MAINTENANCE LOG** | | **Date:** | 9/12/2006 |
| **Site Name: Cecil Field Site 46 West** | | **Arrival Time:** | 11:00 AM |
| **Personnel on Site:** | L E Priester | **Departure Time:** | 1:00 PM |

| **Exterior Parameters** | **Arrival** | | **Departure** | | **Comments** |
|---|---|---|---|---|---|
| Power Disconnect (On/Off) | On | | On | | |
| Power Hour Meter (Hours) | | | 9,513.0 | | |
| Pressure Hour Meter (Hours) | | | 42,858.0 | | |
| **Air Supply** | | | | | |
| Leg 1 (PSIG) | 50 | | 50 | | |
| Leg 2 (PSIG) | 50 | | 50 | | |
| **Nitrous Oxide** | | | | | |
| Cylinder 1 (psig, primary/secondary) | None | | None | | AG Jax No Nitrous Oxide per Navy |
| Cylinder 2 (psig, primary/secondary) | None | | None | | AG Jax |
| Cylinder 3 (psig, primary/secondary) | None | | None | | AG Jax |
| Flow Meter (CFH) | 0 | | 0 | | |
| **Adjunct Gas** | | | | | |
| Cylinder 1 (psig, primary/secondary) | NA | | NA | | |
| Flow Meter | | | | | |
| **TEP** | | | | | |
| Gallons (US, Liq.) | 0.55 | | 0.55 | | TEP turned off per Navy |
| Air Flow (CFM) | 0 | | 0 | | |
| **Air Flow** | | | | | |
| Inj. Well I1 (Valve % Open/CFM) | 0 | | 0 | | No change to flow rates. |
| Inj. Well I2 (Valve % Open/CFM) | 25 | | 25 | | |
| Inj. Well I3 (Valve % Open/CFM) | 0 | | 0 | | |
| Inj. Well I4 (Valve % Open/CFM) | 25 | | 25 | | |
| Inj. Well I5 (Valve % Open/CFM) | 25 | | 25 | | |
| Inj. Well I8 (Valve % Open/CFM) | 25 | | 25 | | No change to flow rates. |
| Inj. Well I6 (Valve % Open/CFM) | 25 | | 25 | | Set up for maintenance flow. |
| Inj. Well I7 (Valve % Open/CFM) | 0 | | 0 | | |
| Inj. Well D1 (Valve % Open/CFM) | 100 | | 100 | | |
| Inj. Well D2 (Valve % Open/CFM) | 100 | | 100 | | |
| Inj. Well D3 (Valve % Open/CFM) | 0 | | 0 | | |

| **Maintenance Information** | **Maintenance Performed** |
|---|---|
| Nitrous System Cylinders/Regulator | OK. No N2O |
| Nitrous Oxide Solenoid Valve | OK. No N2O |
| TEP System | OK -Off |
| AC Gast M853 Mod 5K49ZN4223 | |
| #1 SN 0103706074 | OK |
| #2 SN,0103706070 | OK |
| #3 SN 0103706076 | Removed |
| #4 SN0103706073 | Turned off. |
| Air Legs/ Solenoid Valves | OK. |
| Ventilation Fan | OK. |
| Primary Electrical System | OK |
| PLC-Telemetry | OK |
| Relay Assembly | OK |
| Pressure Switch | OK |
| Flow Switch | OK |

**Additional Notes:**

Flows continue to be directed towards maintenance of treatment area.
Removed all Nitous Oxide cylinders per Navy (Magwood) in March 2004

Reset Compressor #2

# APPENDIX C

# TABLES


| | |
|---|---|
| **Table 1** | *Groundwater Elevation and Free Product Data* |
| **Table 2** | *Groundwater Field Analytical Results* |
| **Table 3** | *Groundwater Analytical Results* |
| **Table 4** | *Soil Analytical Results* |
| **Table 5** | *Flame Ionization Detector Results* |

**TABLE 1**
**GROUNDWATER ELEVATION AND FREE PRODUCT DATA**

BUILDING 46 NUTRIENT INJECTION SYSTEM
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

| Well Identification | Well Total Depth (Feet BGS) | Date | Top of Casing Elevation (Feet) | Depth to Product (Feet) | Depth to Water (Feet) | Water Level Elevation (Feet) |
|---|---|---|---|---|---|---|
| CEF-46-1S | 14.24 | 12/21/00 | 79.08 | No Product | 4.94 | 74.14 |
| | | 03/14/03 | | No Product | 2.55 | 76.53 |
| | | 06/09/03 | | No Product | 2.40 | 76.68 |
| | | 09/03/03 | | No Product | 3.42 | 75.66 |
| | | 12/11/03 | | No Product | 5.20 | 73.88 |
| | | 03/18/04 | | No Product | 5.92 | 73.16 |
| | | 06/08/04 | | No Product | 7.80 | 71.28 |
| | | 09/21/04 | | No Product | 3.42 | 75.66 |
| | | 12/01/04 | | No Product | 7.06 | 72.02 |
| | | 03/13/05 | | No Product | 9.00 | 70.08 |
| | | 06/09/05 | | No Product | 9.04 | 70.04 |
| | | 09/06/05 | | No Product | 6.95 | 72.13 |
| | | 12/06/05 | | No Product | 8.79 | 70.29 |
| | | 03/29/06 | | No Product | 9.31 | 69.77 |
| | | 06/09/06 | | No Product | 10.95 | 68.13 |
| | | 09/24/06 | | No Product | 12.60 | 66.48 |
| CEF-46-2S | 13.88 | 12/21/00 | 79.08 | No Product | 5.02 | 74.06 |
| | | 03/14/03 | | No Product | 2.55 | 76.53 |
| | | 06/05/03 | | No Product | 3.75 | 75.33 |
| | | 09/03/03 | | No Product | 2.70 | 76.38 |
| | | 12/11/03 | | No Product | 5.04 | 74.04 |
| | | 03/18/04 | | No Product | 6.02 | 73.06 |
| | | 06/08/04 | | No Product | 7.80 | 71.28 |
| | | 09/21/04 | | No Product | 3.75 | 75.33 |
| | | 12/01/04 | | No Product | 7.02 | 72.06 |
| | | 03/13/05 | | No Product | 8.86 | 70.22 |
| | | 06/09/05 | | No Product | 8.95 | 70.13 |
| | | 09/06/05 | | No Product | 6.70 | 72.38 |
| | | 09/21/05 | | No Product | 6.60 | 72.48 |
| | | 12/06/05 | | No Product | 8.23 | 70.85 |
| | | 03/30/06 | | No Product | 9.22 | 69.86 |
| | | 06/09/06 | | No Product | 10.83 | 68.25 |
| | | 09/24/06 | | No Product | 11.54 | 67.54 |
| CEF-46-3S | 16.00 | 12/06/05 | 79.14 | No Product | 9.19 | 69.95 |
| CEF-46-4S | 15.00 | 12/06/05 | 79.29 | No Product | 8.85 | 70.44 |
| CEF-46-5I | 49.65 | 12/21/00 | 79.18 | No Product | 5.81 | 73.37 |
| | | 03/14/03 | | No Product | 3.40 | 75.78 |
| | | 06/05/03 | | No Product | 4.90 | 74.28 |
| | | 09/03/03 | | No Product | 6.25 | 72.93 |
| | | 12/11/03 | | No Product | 6.64 | 72.54 |
| | | 03/18/04 | | No Product | 7.89 | 71.29 |
| | | 06/08/04 | | No Product | 9.40 | 69.78 |
| | | 09/21/04 | | No Product | 5.71 | 73.47 |
| | | 12/01/04 | | No Product | 9.23 | 69.95 |
| | | 03/13/05 | | No Product | 10.11 | 69.07 |
| | | 06/09/05 | | No Product | 10.45 | 68.73 |
| | | 09/06/05 | | No Product | 8.63 | 70.55 |
| | | 12/06/05 | | No Product | 10.01 | 69.17 |
| | | 03/29/06 | | No Product | 10.68 | 68.50 |
| | | 06/09/06 | | No Product | 11.95 | 67.23 |
| | | 09/24/06 | | No Product | 12.62 | 66.56 |
| CEF-46-6D | 79.82 | 12/21/00 | 78.17 | No Product | 7.40 | 71.77 |
| | | 03/14/03 | | No Product | 6.50 | 72.67 |
| | | 06/09/03 | | No Product | 8.00 | 71.17 |
| | | 09/03/03 | | No Product | 5.82 | 73.35 |
| | | 12/10/03 | | No Product | 7.30 | 71.87 |
| | | 03/16/04 | | No Product | 10.60 | 68.57 |
| | | 06/08/04 | | No Product | 11.69 | 67.48 |
| | | 09/21/04 | | No Product | 7.46 | 71.71 |
| | | 12/01/04 | | No Product | 9.72 | 69.45 |
| | | 03/13/05 | | No Product | 10.58 | 68.59 |
| | | 06/09/05 | | No Product | 10.20 | 68.97 |
| | | 09/06/05 | | No Product | 9.66 | 69.51 |
| | | 12/06/05 | | No Product | 10.95 | 68.22 |
| | | 03/29/06 | | No Product | 10.78 | 68.39 |
| | | 06/09/06 | | No Product | 12.24 | 66.93 |
| | | 09/24/06 | | No Product | 9.21 | 69.96 |
| CEF-46-7I | 29.68 | 12/21/00 | 79.02 | No Product | 5.45 | 73.57 |
| | | 03/14/03 | | No Product | 3.30 | 75.72 |
| | | 06/09/03 | | No Product | 3.20 | 75.82 |
| | | 09/03/03 | | No Product | 2.80 | 76.22 |
| | | 12/11/03 | | No Product | 5.84 | 73.18 |
| | | 03/16/04 | | No Product | 7.40 | 71.62 |
| | | 06/08/04 | | No Product | 8.80 | 70.22 |
| | | 09/21/04 | | No Product | 4.95 | 74.07 |
| | | 12/01/04 | | No Product | 8.60 | 70.42 |
| | | 03/13/05 | | No Product | 9.71 | 69.31 |
| | | 06/09/05 | | No Product | 9.40 | 69.62 |
| | | 09/06/05 | | No Product | 7.19 | 71.83 |
| | | 12/06/05 | | No Product | 9.00 | 70.02 |
| | | 03/30/06 | | No Product | 9.91 | 69.11 |
| | | 06/09/06 | | No Product | 11.30 | 67.72 |
| | | 09/24/06 | | No Product | 11.82 | 67.20 |
| CEF-46-8I | 30.50 | 12/06/05 | 78.91 | No Product | 9.10 | 69.81 |

**TABLE 1**
**GROUNDWATER ELEVATION AND FREE PRODUCT DATA**

BUILDING 46 NUTRIENT INJECTION SYSTEM
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

| Well Identification | Well Total Depth (Feet BGS) | Date | Top of Casing Elevation (Feet) | Depth to Product (Feet) | Depth to Water (Feet) | Water Level Elevation (Feet) |
|---|---|---|---|---|---|---|
| CEF-46-9I | 48.81 | 12/21/00 | 79.05 | No Product | 5.67 | 73.38 |
| | | 03/14/03 | | No Product | 2.55 | 76.50 |
| | | 06/04/03 | | No Product | 4.10 | 74.95 |
| | | 09/03/03 | | No Product | 3.32 | 75.73 |
| | | 12/11/03 | | No Product | 5.79 | 73.26 |
| | | 03/16/04 | | No Product | 7.20 | 71.85 |
| | | 06/08/04 | | No Product | 8.92 | 70.13 |
| | | 09/21/04 | | No Product | 5.29 | 73.76 |
| | | 12/01/04 | | No Product | 8.44 | 70.61 |
| | | 03/13/05 | | No Product | 9.58 | 69.47 |
| | | 06/09/05 | | No Product | 9.78 | 69.27 |
| | | 09/06/05 | | No Product | 7.86 | 71.19 |
| | | 12/06/05 | | No Product | 9.40 | 69.65 |
| | | 03/30/06 | | No Product | 9.95 | 69.10 |
| | | 06/09/06 | | No Product | 11.32 | 67.73 |
| | | 09/24/06 | | No Product | 11.89 | 67.16 |
| CEF-46-10I | 30.50 | 12/06/05 | 80.18 | No Product | 9.08 | 71.10 |
| CEF-46-11I | 50.50 | 12/06/05 | 80.23 | No Product | 9.73 | 70.50 |
| CEF-46-12I | 29.61 | 12/21/00 | 78.73 | No Product | 5.23 | 73.50 |
| | | 03/14/03 | | No Product | 2.10 | 76.63 |
| | | 06/05/03 | | No Product | 3.30 | 75.43 |
| | | 09/03/03 | | No Product | 2.90 | 75.83 |
| | | 12/11/03 | | No Product | 5.45 | 73.28 |
| | | 03/18/04 | | No Product | 6.45 | 72.28 |
| | | 06/08/04 | | No Product | 8.10 | 70.63 |
| | | 09/21/04 | | No Product | 4.30 | 74.43 |
| | | 12/01/04 | | No Product | 7.25 | 71.48 |
| | | 03/13/05 | | No Product | 8.70 | 70.03 |
| | | 06/09/05 | | No Product | 8.80 | 69.93 |
| | | 09/06/05 | | No Product | 6.80 | 71.93 |
| | | 12/06/05 | | No Product | 8.35 | 70.38 |
| | | 03/29/06 | | No Product | 8.93 | 69.80 |
| | | 06/09/06 | | No Product | 10.54 | 68.19 |
| | | 09/25/06 | | No Product | 11.13 | 67.60 |
| CEF-46-13I | 39.56 | 12/21/00 | 78.87 | No Product | 5.43 | 73.44 |
| | | 03/14/03 | | No Product | 2.31 | 76.56 |
| | | 06/05/03 | | No Product | 3.50 | 75.37 |
| | | 09/03/03 | | No Product | 3.10 | 75.77 |
| | | 12/11/03 | | No Product | 5.90 | 72.97 |
| | | 03/18/04 | | No Product | 6.85 | 72.02 |
| | | 06/08/04 | | No Product | 8.61 | 70.26 |
| | | 09/21/04 | | No Product | 4.65 | 74.22 |
| | | 12/01/04 | | No Product | 7.60 | 71.27 |
| | | 03/13/05 | | No Product | 8.91 | 69.96 |
| | | 06/09/05 | | No Product | 9.10 | 69.77 |
| | | 09/06/05 | | No Product | 7.15 | 71.72 |
| | | 12/06/05 | | No Product | 8.64 | 70.23 |
| | | 03/29/06 | | No Product | 9.17 | 69.70 |
| | | 06/09/06 | | No Product | 10.95 | 67.92 |
| | | 09/25/06 | | No Product | 11.36 | 67.51 |
| CEF-46-14D | 78.79 | 12/21/00 | 78.88 | No Product | 6.86 | 72.02 |
| | | 03/14/03 | | No Product | 4.20 | 74.68 |
| | | 06/04/03 | | No Product | 6.15 | 72.73 |
| | | 09/03/03 | | No Product | 5.15 | 73.73 |
| | | 12/10/03 | | No Product | 7.20 | 71.68 |
| | | 03/16/04 | | No Product | 8.72 | 70.16 |
| | | 06/08/04 | | No Product | 9.75 | 69.13 |
| | | 09/21/04 | | No Product | 5.34 | 73.54 |
| | | 12/01/04 | | No Product | 7.66 | 71.22 |
| | | 03/13/05 | | No Product | 8.54 | 70.34 |
| | | 06/09/05 | | No Product | 9.74 | 69.14 |
| | | 09/06/05 | | No Product | 8.09 | 70.79 |
| | | 12/06/05 | | No Product | 8.42 | 70.46 |
| | | 03/26/06 | | No Product | 9.50 | 69.38 |
| | | 06/09/06 | | No Product | 10.70 | 68.18 |
| | | 09/24/06 | | No Product | 11.14 | 67.74 |
| CEF-46-15I | 29.77 | 12/21/00 | 79.75 | No Product | 6.33 | 73.42 |
| | | 03/13/03 | | No Product | 3.47 | 76.28 |
| | | 06/04/03 | | No Product | 4.54 | 75.21 |
| | | 09/03/03 | | No Product | 4.22 | 75.53 |
| | | 12/10/03 | | No Product | 6.53 | 73.22 |
| | | 03/16/04 | | No Product | 7.40 | 72.35 |
| | | 06/08/04 | | No Product | 9.22 | 70.53 |
| | | 09/21/04 | | No Product | 5.20 | 74.55 |
| | | 12/01/04 | | No Product | 8.07 | 71.68 |
| | | 03/13/05 | | No Product | 9.31 | 70.44 |
| | | 06/09/05 | | No Product | 9.54 | 70.21 |
| | | 09/06/05 | | No Product | 7.69 | 72.06 |
| | | 12/06/05 | | No Product | 9.10 | 70.65 |
| | | 03/30/06 | | No Product | 9.95 | 69.80 |
| | | 06/09/06 | | No Product | 11.46 | 68.29 |
| | | 09/24/06 | | No Product | 11.95 | 67.80 |

## TABLE 1
## GROUNDWATER ELEVATION AND FREE PRODUCT DATA

BUILDING 46 NUTRIENT INJECTION SYSTEM
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

| Well Identification | Well Total Depth (Feet BGS) | Date | Top of Casing Elevation (Feet) | Depth to Product (Feet) | Depth to Water (Feet) | Water Level Elevation (Feet) |
|---|---|---|---|---|---|---|
| CEF-46-16I | 50.00 | 12/06/05 | 79.42 | No Product | 8.96 | 70.46 |
| CEF-46-17D | 80.50 | 12/06/05 | 79.15 | No Product | 8.78 | 70.37 |
| CEF-46-18I | 30.50 | 12/07/05 | 78.54 | No Product | 9.44 | 69.10 |
| CEF-46-19I | 50.50 | 12/07/05 | 78.88 | No Product | 10.55 | 68.33 |
| CEF-46-20I | 30.50 | 12/07/05 | 79.34 | No Product | 9.60 | 69.74 |
| CEF-46-21I | 29.70 | 12/21/00 | 79.33 | No Product | 6.02 | 73.31 |
| | | 03/13/03 | | No Product | 2.79 | 76.54 |
| | | 06/05/03 | | No Product | 4.18 | 75.15 |
| | | 09/03/03 | | No Product | 3.70 | 75.63 |
| | | 12/11/03 | | No Product | 7.50 | 71.83 |
| | | 03/18/04 | | No Product | 8.35 | 70.98 |
| | | 06/08/04 | | No Product | 10.10 | 69.23 |
| | | 09/21/04 | | No Product | 5.80 | 73.53 |
| | | 12/01/04 | | No Product | 9.15 | 70.18 |
| | | 03/13/05 | | No Product | 10.60 | 68.73 |
| | | 06/10/05 | | No Product | 10.90 | 68.43 |
| | | 09/06/05 | | No Product | NR | NR |
| | | 12/07/05 | | No Product | 10.11 | 69.22 |
| | | 03/29/06 | | No Product | 10.60 | 68.73 |
| | | 06/09/06 | | No Product | 12.18 | 67.15 |
| | | 09/24/06 | | No Product | 12.97 | 66.36 |
| CEF-46-22I | 50.50 | 12/07/05 | 79.22 | No Product | 9.91 | 69.31 |
| CEF-46-23D | 92.50 | 12/07/05 | NA | No Product | 11.16 | NA |
| CEF-46-24D | 90.45 | 12/21/00 | 78.74 | No Product | 7.30 | 71.44 |
| | | 03/14/03 | | No Product | 13.78 | 64.96 |
| | | 06/05/03 | | No Product | 6.40 | 72.34 |
| | | 09/03/03 | | No Product | 4.97 | 73.77 |
| | | 12/10/03 | | No Product | 7.40 | 71.34 |
| | | 03/16/04 | | No Product | 8.95 | 69.79 |
| | | 06/08/04 | | No Product | 10.68 | 68.06 |
| | | 09/21/04 | | No Product | 6.31 | 72.43 |
| | | 12/01/04 | | No Product | 9.11 | 69.63 |
| | | 03/13/05 | | No Product | 9.92 | 68.82 |
| | | 06/09/05 | | No Product | 10.28 | 68.46 |
| | | 09/06/05 | | No Product | 8.93 | 69.81 |
| | | 12/07/05 | | No Product | 9.92 | 68.82 |
| | | 03/29/06 | | No Product | 10.15 | 68.59 |
| | | 06/09/06 | | No Product | 11.69 | 67.05 |
| | | 09/24/06 | | No Product | 12.12 | 66.62 |
| CEF-46-25I | 50.45 | 12/21/00 | 79.17 | No Product | 6.25 | 72.92 |
| | | 03/13/03 | | No Product | 2.49 | 76.68 |
| | | 06/04/03 | | No Product | 3.98 | 75.19 |
| | | 09/03/03 | | No Product | 3.50 | 75.67 |
| | | 12/10/03 | | No Product | 5.98 | 73.19 |
| | | 03/16/04 | | No Product | 8.30 | 70.87 |
| | | 06/08/04 | | No Product | 10.03 | 69.14 |
| | | 09/21/04 | | No Product | 5.61 | 73.56 |
| | | 12/01/04 | | No Product | 9.11 | 70.06 |
| | | 03/13/05 | | No Product | 10.46 | 68.71 |
| | | 06/09/05 | | No Product | 10.56 | 68.61 |
| | | 09/06/05 | | No Product | 8.93 | 70.24 |
| | | 12/07/05 | | No Product | 10.10 | 69.07 |
| | | 03/29/06 | | No Product | 10.50 | 68.67 |
| | | 06/09/06 | | No Product | 12.19 | 66.98 |
| | | 09/24/06 | | No Product | 12.98 | 66.19 |
| CEF-46-26I | 47.78 | 12/21/00 | 79.43 | No Product | 7.09 | 72.34 |
| | | 03/14/03 | | No Product | 3.82 | 75.61 |
| | | 06/05/03 | | No Product | 4.30 | 75.13 |
| | | 09/03/03 | | No Product | 3.73 | 75.70 |
| | | 12/11/03 | | No Product | 6.65 | 72.78 |
| | | 03/18/04 | | No Product | 8.05 | 71.38 |
| | | 06/08/04 | | No Product | 10.40 | 69.03 |
| | | 09/21/04 | | No Product | 6.56 | 72.87 |
| | | 12/01/04 | | No Product | 10.20 | 69.23 |
| | | 03/13/05 | | No Product | 11.50 | 67.93 |
| | | 06/09/05 | | No Product | 11.50 | 67.93 |
| | | 09/06/05 | | No Product | 9.90 | 69.53 |
| | | 12/07/05 | | No Product | 11.01 | 68.42 |
| | | 03/29/06 | | No Product | 11.00 | 68.43 |
| | | 06/09/06 | | No Product | 12.90 | 66.53 |
| | | 09/24/06 | | No Product | 13.60 | 65.83 |
| CEF-46-27D | 90.00 | 12/07/05 | 78.94 | No Product | 10.65 | 68.29 |
| CEF-46-28I | 50.00 | 12/07/05 | 79.38 | No Product | 11.21 | 68.17 |
| CEF-46-29I | 50.00 | 12/07/05 | 79.88 | No Product | 11.75 | 68.13 |
| CEF-46-30I | 50.00 | 12/07/05 | 79.66 | No Product | 11.10 | 68.56 |
| CEF-46-31I | 50.00 | 12/07/05 | 90.02 | No Product | 12.20 | 77.82 |

BGS = Below Ground Surface
NR = not recorded due to water level meter malfunction
Elevation is referenced to National Geodetic Vertical Datum 1929 (NGVD 1929)
Depth-to-product measured from top of casing
Depth-to-water measured from top of casing

## TABLE 2
## GROUNDWATER FIELD ANALYTICAL RESULTS

BUILDING 46 NUTRIENT INJECTION SYSTEM
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

| Well | Date | pH | Conductivity (mS/cm) | Dissolved Oxygen (mg/L)* | Oxidation Reduction Potential (mV) | Temperature (°C) | Carbon Dioxide (mg/L) | Alkalinity as $CaCO_3$ (mg/L) | Ferrous Iron (mg/L) | Hydrogen Sulfide (mg/L) | Dissolved Oxygen (mg/L)** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CEF-46-1S | 12/21/00 | 6.20 | 0.512 | 1.05 | NM | 22.70 | NM | 200 | 1.4 | 1.0 | NM |
| | 03/14/03 | 7.54 | 2.520 | 0.89 | -204.00 | 20.77 | ND | 100 | 2.2 | 5.0 | NM |
| | 06/09/03 | 6.39 | 1.730 | ND | -238.00 | 25.28 | Interference | 140 | 3.2 | 5.0 | NM |
| | 09/03/03 | 6.27 | 0.201 | 2.03 | -364.00 | 27.53 | Interference | 205 | 1.0 | 5.0 | NM |
| | 12/11/03 | 5.98 | 0.234 | ND | -332.00 | 23.15 | 400 | 250 | 1.4 | 5.0 | ND |
| | 03/18/04 | 6.48 | 0.220 | NM | -278.00 | 22.33 | Interference | 175 | 2.0 | 5.0 | ND |
| | 06/08/04 | 6.00 | 1.920 | 0.04 | -296.00 | 26.24 | Interference | 130 | 1.0 | 5.0 | ND |
| | 09/21/04 | 7.42 | 0.122 | 0.00 | -234.00 | 27.97 | Interference | 100 | 5.4 | 5.0 | ND |
| | 12/01/04 | 6.39 | 2.404 | 0.15 | -356.90 | 26.07 | 362 | 205 | ND | 5.0 | ND |
| | 03/13/05 | 6.23 | 1.467 | 0.18 | -347.60 | 24.63 | 170 | 275 | 2.8 | 5.0 | ND |
| | 06/09/05 | 6.24 | 1.223 | 0.71 | -347.10 | 26.88 | 140 | 195 | 1.8 | 5.0 | ND |
| | 09/06/05 | 6.52 | 0.927 | 0.20 | -367.70 | 27.64 | 140 | 120 | 1.6 | 5.0 | ND |
| | 12/06/05 | 6.92 | 0.507 | 0.22 | -269.80 | 23.49 | 123 | 85 | 1.6 | 5.0 | ND |
| | 03/29/06 | 5.73 | 0.355 | 0.24 | -129.80 | 24.21 | 280 | ND | 2.6 | 5.0 | ND |
| | 06/09/06 | 4.30 | 0.405 | 0.50 | -130.00 | 25.49 | 83 | 375 | 1.5 | 1.0 | ND |
| | 9/24/2006*** | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM |
| CEF-46-2S | 12/21/00 | 6.20 | 0.962 | 1.06 | NM | 23.20 | 352 | 720 | 1.0 | ND | NM |
| | 03/14/03 | 7.08 | 1.620 | 1.60 | -112.00 | 20.88 | 310 | 165 | 2.2 | 0.1 | NM |
| | 06/05/03 | 6.44 | 1.860 | ND | NM | 24.66 | 228 | 195 | 2.2 | 0.3 | NM |
| | 09/03/03 | 6.25 | 1.480 | 0.03 | -132.00 | 27.94 | 245 | 160 | 2.0 | 0.3 | NM |
| | 12/11/03 | 6.47 | 1.070 | 0.40 | -258.00 | 23.85 | 218 | 190 | 1.0 | 1.0 | 0.6 |
| | 03/18/04 | 6.80 | 0.123 | NM | -111.00 | 20.09 | 231 | 190 | 1.4 | 0.7 | ND |
| | 06/08/04 | 5.73 | 0.855 | 0.16 | -145.00 | 25.17 | 154 | 95 | 4.8 | ND | 3.0 |
| | 09/21/04 | 7.06 | 0.142 | 0.03 | -153.00 | 26.76 | 157 | 130 | 3.8 | 2.0 | ND |
| | 12/01/04 | 6.45 | 2.454 | 0.06 | -215.20 | 25.63 | 88 | 100 | 0.6 | 5.00 | ND |
| | 03/13/05 | 5.92 | 2.547 | 0.07 | -181.60 | 22.86 | 207 | 60 | 2.2 | 1.00 | ND |
| | 06/09/05 | 6.14 | 2.530 | 0.59 | -199.90 | 24.39 | 127 | 55 | 5.0 | 0.50 | ND |
| | 09/06/05 | 6.68 | 3.436 | 0.04 | -295.10 | 27.26 | 184 | 90 | 3.8 | 1.00 | ND |
| | 09/21/05 | 6.61 | 2.954 | 0.49 | -125.00 | 26.67 | NM | NM | NM | NM | NM |
| | 12/06/05 | 6.41 | 1.839 | 0.33 | -25.00 | 24.31 | 175 | 65 | 3.0 | 0.10 | ND |
| | 03/30/06 | 5.84 | 3.300 | 0.24 | -10.00 | 24.29 | 167 | 60 | 5.2 | ND | ND |
| | 06/09/06 | 4.75 | 0.994 | 0.66 | -47.90 | 25.94 | 67 | 60 | 4.4 | 0.10 | ND |
| | 09/25/06 | 5.81 | 1.175 | 0.39 | -85.10 | 26.25 | 237 | 75 | 4.0 | 0.70 | ND |
| CEF-46-3S | 12/06/05 | 7.38 | 2.078 | 0.16 | -106.90 | 25.11 | 108 | 325 | ND | 5.00 | ND |
| CEF-46-4S | 12/06/05 | 6.11 | 0.728 | 0.36 | -57.10 | 25.04 | 167 | 20 | 3.8 | 5.00 | ND |
| CEF-46-5I | 12/21/00 | 5.60 | 0.140 | 1.10 | NM | 23.20 | 183 | 100 | 1.8 | 1.0 | NM |
| | 03/14/03 | 3.54 | 5.810 | 2.05 | 393.00 | 25.23 | ND | ND | 4.2 | ND | NM |
| | 06/05/03 | 2.00 | 4.840 | 0.23 | 407.00 | 26.92 | Interference | ND | 9.9 | ND | NM |
| | 09/03/03 | 2.74 | 4.450 | 0.04 | 320.00 | 27.29 | Interference | ND | 10.0 | ND | NM |
| | 12/11/03 | 2.84 | 4.480 | 4.01 | 331.00 | 22.90 | 568 | ND | 6.0 | ND | ND |
| | 03/18/04 | 2.48 | 4.074 | NM | NM | 25.00 | 172 | ND | 4.2 | ND | ND |
| | 06/08/04 | 2.28 | 5.216 | 0.10 | 503.60 | 27.25 | 93 | ND | 15.0 | ND | 15.0 |
| | 09/21/04 | 6.04 | 0.103 | 0.05 | -61.80 | 26.85 | 171 | 5 | 4.8 | 0.1 | ND |
| | 12/01/04 | 4.48 | 0.638 | 0.23 | 267.70 | 26.86 | Interference | ND | 7.2 | 0.1 | ND |
| | 03/13/05 | 4.21 | 2.300 | 0.00 | 283.00 | 27.41 | 579 | ND | 9.2 | ND | ND |
| | 06/09/05 | 2.71 | 5.151 | 0.06 | 319.90 | 29.89 | 390 | ND | 10.0 | ND | ND |
| | 09/06/05 | 2.91 | 0.946 | 0.18 | 513.50 | 26.98 | 145 | ND | 3.8 | ND | ND |
| | 12/06/05 | 2.62 | 4.721 | 2.15 | 554.10 | 24.95 | 94 | ND | ND | ND | ND |
| | 03/29/06 | 2.36 | 3.174 | 0.21 | 418.90 | 25.71 | 478 | ND | 4.8 | ND | ND |
| | 06/09/06 | 2.69 | 4.061 | 0.67 | 406.40 | 29.66 | 535 | ND | 6.0 | 0.1 | ND |
| | 09/24/06 | 2.91 | 3.865 | 0.24 | 361.70 | 28.12 | Interference | 5 | 9.8 | ND | ND |
| CEF-46-6D | 12/21/00 | 9.71 | 0.180 | 6.51 | NM | 23.50 | 8 | 120 | 0.4 | 0.3 | NM |
| | 03/14/03 | 3.23 | 8.600 | 2.64 | 404.00 | 25.71 | ND | ND | 4.2 | ND | NM |
| | 06/09/03 | 2.69 | 9.740 | 0.09 | 77.00 | 27.97 | Interference | ND | 7.0 | ND | NM |
| | 09/03/03 | 2.70 | 8.759 | 0.37 | 335.00 | 27.71 | Interference | ND | 10.0 | ND | NM |
| | 12/10/03 | 2.62 | 0.790 | ND | 376.00 | 23.95 | Interference | ND | 5.4 | ND | 0.8 |
| | 03/16/04 | 2.53 | 0.746 | 6.00 | NM | 24.60 | 263 | ND | ND | 3.0 | ND |
| | 06/08/04 | 2.42 | 8.973 | 0.09 | 431.60 | 26.46 | Interference | ND | 9.8 | ND | 15.0 |
| | 09/21/04 | 2.37 | 10.411 | 0.23 | 434.30 | 26.45 | 109 | ND | 9.8 | 0.1 | ND |
| | 12/01/04 | 2.59 | 18.791 | 0.15 | 437.10 | 27.16 | 118 | ND | 7.6 | 0.1 | ND |
| | 03/13/05 | 2.44 | 9.000 | 0.14 | 414.00 | 26.45 | 176 | ND | 10.0 | ND | ND |
| | 06/09/05 | 2.49 | 8.012 | 0.15 | 431.90 | 26.79 | Interference | ND | 10.0 | ND | ND |
| | 09/06/05 | 2.48 | 7.592 | 0.99 | 608.90 | 28.41 | 154 | ND | 4.2 | 0.1 | ND |
| | 12/06/05 | 2.52 | 10.154 | 5.44 | 515.70 | 25.87 | 99 | ND | 10.0 | ND | ND |
| | 03/29/06 | 2.21 | 9.429 | 1.82 | 598.90 | 26.23 | 241 | 200 | 4.6 | ND | 1.8 |
| | 06/09/06 | 2.49 | 8.276 | 0.71 | 564.50 | 28.89 | 128 | ND | 2.5 | 0.1 | ND |
| | 09/24/06 | 2.56 | 8.092 | 0.33 | 508.10 | 28.70 | Interference | 60 | 10.0 | ND | ND |

## TABLE 2
## GROUNDWATER FIELD ANALYTICAL RESULTS

BUILDING 46 NUTRIENT INJECTION SYSTEM
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

| Well | Date | pH | Conductivity (mS/cm) | Dissolved Oxygen (mg/L)* | Oxidation Reduction Potential (mV) | Temperature (°C) | Carbon Dioxide (mg/L) | Alkalinity as $CaCO_3$ (mg/L) | Ferrous Iron (mg/L) | Hydrogen Sulfide (mg/L) | Dissolved Oxygen (mg/L)** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CEF-46-7I | 12/21/00 | 4.90 | 0.510 | 1.11 | NM | 25.40 | 317 | 60 | 0.6 | 0.3 | NM |
| | 03/14/03 | 3.23 | 0.250 | 5.24 | 360.00 | 23.41 | 121 | ND | 1.8 | ND | NM |
| | 06/09/03 | 3.80 | 0.191 | 1.05 | 278.00 | 26.12 | 233 | ND | 2.2 | ND | NM |
| | 09/03/03 | 4.51 | 0.226 | 0.12 | 81.00 | 27.32 | 143 | ND | 4.0 | 2.0 | NM |
| | 12/11/03 | 5.19 | 0.180 | 0.67 | -170.00 | 23.07 | 70 | 25 | 3.7 | 2.0 | ND |
| | 03/18/04 | 4.89 | 0.230 | NM | 120.00 | 24.42 | 75 | 15 | 4.0 | ND | ND |
| | 06/08/04 | 3.67 | 0.089 | 0.24 | 256.00 | 25.91 | 99 | ND | 4.4 | ND | ND |
| | 09/21/04 | 3.55 | 0.085 | 0.00 | 163.00 | 26.80 | 68 | 5 | 10.0 | ND | ND |
| | 12/01/04 | 5.62 | 0.175 | 0.06 | -50.60 | 26.45 | 217 | 10 | 5.8 | 1.0 | ND |
| | 03/13/05 | 4.90 | 0.130 | 0.12 | -79.20 | 25.78 | 122 | 35 | 4.0 | 2.0 | ND |
| | 06/09/05 | 4.04 | 0.439 | 0.67 | -39.50 | 26.99 | 148 | ND | 3.8 | 2.0 | ND |
| | 09/06/05 | 3.65 | 0.461 | 0.15 | 253.60 | 26.26 | 140 | ND | 4.6 | 0.1 | ND |
| | 12/06/05 | 3.90 | 0.188 | 0.40 | 258.30 | 23.64 | 113 | ND | 3.0 | 0.1 | ND |
| | 03/30/06 | 4.40 | 0.244 | 0.38 | 120.70 | 23.92 | 128 | 20 | 5.0 | 0.1 | ND |
| | 06/09/06 | 2.04 | 0.126 | 0.68 | 37.20 | 25.43 | 176 | 70 | 5.8 | 0.7 | ND |
| | 09/25/06 | 4.84 | 0.108 | 0.25 | 3.40 | 25.61 | 105 | 15 | 4.8 | 2.0 | ND |
| CEF-46-8I | 12/06/05 | 4.89 | 0.076 | 0.59 | 80.80 | 25.87 | Interference | 15 | 3.0 | ND | ND |
| CEF-46-9I | 12/20/00 | 5.29 | 0.079 | 1.47 | NM | 24.60 | 84.6 | 20 | 0.8 | 0.3 | NM |
| | 03/14/03 | 5.47 | 0.914 | 1.35 | 64.00 | 25.40 | ND | ND | 2.2 | 1.0 | NM |
| | 06/04/03 | 4.75 | 1.090 | 0.60 | -8.00 | 25.73 | Interference | ND | 6.0 | 1.0 | NM |
| | 09/03/03 | 3.74 | 1.040 | 0.84 | 18.00 | 26.85 | Interference | ND | 3.8 | 1.0 | NM |
| | 12/10/03 | 3.64 | 1.010 | 6.21 | -100.00 | 26.29 | Interference | ND | 5.2 | 0.5 | ND |
| | 03/16/04 | 3.67 | 0.165 | NM | 199.00 | 25.08 | Interference | ND | 2.8 | 2.0 | ND |
| | 06/08/04 | 3.58 | 1.770 | 0.14 | 68.00 | 25.99 | Interference | ND | 8.0 | 5.0 | 3.0 |
| | 09/21/04 | 3.50 | 1.401 | 0.17 | -18.20 | 25.99 | Interference | ND | 8.4 | 3.0 | ND |
| | 12/01/04 | 3.68 | NM | 0.11 | -74.80 | 26.09 | 370 | ND | 4.5 | 3.0 | ND |
| | 03/13/05 | 5.92 | 0.540 | 0.00 | 72.00 | 25.01 | 296 | ND | 5.4 | 1.0 | ND |
| | 06/09/05 | 3.76 | 0.830 | 0.14 | -29.30 | 26.31 | 201 | ND | 3.6 | 2.0 | ND |
| | 09/06/05 | 3.74 | 0.641 | 0.18 | -39.70 | 28.43 | 352 | ND | 3.5 | 5.0 | ND |
| | 12/06/05 | 3.76 | 1.055 | 0.24 | 225.80 | 25.47 | Interference | ND | 3.0 | 5.0 | ND |
| | 03/30/06 | 3.96 | 20.384 | 0.37 | -34.40 | 24.92 | Interference | ND | 5.0 | 2.0 | ND |
| | 06/09/06 | 2.86 | 0.756 | 0.33 | 177.80 | 29.25 | Interference | ND | 7.0 | 2.0 | ND |
| | 09/24/06 | 3.70 | 0.661 | 0.17 | 218.80 | 29.13 | 413 | 5 | 7.2 | 0.1 | ND |
| CEF-46-10I | 12/06/05 | 5.68 | 0.119 | 0.50 | 33.20 | 23.89 | 99 | 15 | 2.0 | 1.0 | ND |
| CEF-46-11I | 12/06/05 | 6.44 | 0.406 | 0.63 | -46.20 | 23.45 | 134 | 85 | 2.0 | 5.0 | ND |
| CEF-46-12I | 12/20/00 | 5.57 | 0.160 | 1.91 | NM | 26.50 | 193.6 | 80 | 0.8 | 2.0 | NM |
| | 03/14/03 | 3.38 | 0.178 | 3.92 | 333.00 | 26.07 | 96 | ND | 2.2 | ND | NM |
| | 06/05/03 | 4.22 | 0.155 | 1.65 | 117.00 | 26.33 | 168 | ND | 1.0 | ND | NM |
| | 09/03/03 | 4.71 | 0.308 | 0.00 | 164.00 | 27.88 | 136 | 5 | 0.0 | ND | NM |
| | 12/11/03 | 4.97 | 0.310 | 0.61 | 129.00 | 23.96 | 84 | 1 | 2.2 | 0.1 | 0.8 |
| | 03/18/04 | 5.33 | 0.129 | 0.60 | NM | 24.90 | 86 | 5 | 3.5 | 0.1 | 0.6 |
| | 06/08/04 | 4.69 | 0.142 | 0.47 | 162.00 | 26.48 | 122 | 5 | 3.0 | ND | 13.0 |
| | 09/21/04 | 4.65 | 0.245 | 0.01 | 124.00 | 24.84 | 115 | 5 | 3.0 | ND | ND |
| | 12/01/04 | 5.30 | 0.661 | 0.12 | 133.40 | 26.37 | 45 | 5 | 1.4 | ND | ND |
| | 03/13/05 | 5.12 | 0.384 | 0.12 | 120.10 | 24.02 | 220 | 25 | 1.0 | ND | ND |
| | 06/09/05 | 5.13 | 0.412 | 0.97 | 121.10 | 25.29 | 217 | 25 | 1.8 | ND | ND |
| | 09/06/05 | 5.06 | 0.417 | 0.22 | 4.20 | 26.82 | 306 | 20 | 2.8 | 0.1 | ND |
| | 12/06/05 | 4.79 | 0.185 | 0.50 | 170.40 | 22.70 | 273 | ND | 4.8 | ND | ND |
| | 03/29/06 | 4.54 | 0.234 | 0.42 | 66.50 | 24.92 | 253 | 25 | 2.8 | 0.3 | ND |
| | 06/09/06 | 3.73 | 0.203 | 0.59 | 216.8 | 26.76 | 246 | 15 | 5.2 | 0.1 | ND |
| | 09/25/06 | 3.93 | 0.222 | 0.60 | -49.8 | 25.73 | 443 | 15 | 3.2 | 0.1 | ND |
| CEF-46-13I | 12/20/00 | 5.40 | 0.120 | 1.23 | NM | 25.00 | 188 | 20 | 1.4 | 5.0 | NM |
| | 03/14/03 | 6.29 | 0.110 | 0.99 | -31.00 | 25.90 | 280 | ND | 2.5 | 5.0 | NM |
| | 06/05/03 | 3.71 | 0.643 | 0.00 | 1.00 | 26.44 | Interference | ND | 3.6 | 5.0 | NM |
| | 09/03/03 | 3.81 | 0.999 | 0.36 | 57.00 | 28.50 | Interference | ND | 2.4 | 2.0 | NM |
| | 12/11/03 | 3.93 | 0.990 | 1.11 | 160.00 | 24.10 | Interference | ND | 3.2 | 5.0 | ND |
| | 03/18/04 | 3.76 | 1.282 | 0.50 | NM | 25.60 | Interference | ND | 3.0 | 0.3 | ND |
| | 06/08/04 | 3.08 | 1.170 | 0.34 | 286.00 | 26.73 | Interference | ND | 3.6 | ND | 1.0 |
| | 09/21/04 | 4.96 | 0.588 | 0.17 | -32.00 | 26.20 | Interference | ND | 7.8 | 5.0 | ND |
| | 12/01/04 | 3.93 | 0.931 | 0.06 | 37.70 | 26.53 | Interference | ND | 0.7 | 5.00 | ND |
| | 03/13/05 | 2.92 | 0.947 | 0.75 | 494.30 | 24.67 | Interference | ND | 2.8 | 1.00 | ND |
| | 06/09/05 | 2.98 | 1.584 | 0.71 | 361.30 | 25.97 | Interference | ND | 4.0 | 0.70 | ND |
| | 09/06/05 | 3.84 | 1.698 | 0.84 | -90.00 | 26.30 | Interference | ND | 4.1 | 1.00 | ND |
| | 12/06/05 | 3.55 | 0.568 | 0.47 | 257.70 | 22.63 | 167 | ND | 3.0 | 2.00 | ND |
| | 03/29/06 | 2.48 | 0.538 | 0.63 | 571.60 | 24.98 | 246 | ND | 3.4 | 0.10 | ND |
| | 06/09/06 | 3.04 | 0.205 | 0.26 | 125.10 | 27.12 | 58 | ND | 10.0 | 2.00 | ND |
| | 09/25/06 | 3.86 | 0.154 | 0.47 | -42.30 | 26.38 | 395 | ND | 5.4 | 0.10 | ND |

## TABLE 2
## GROUNDWATER FIELD ANALYTICAL RESULTS

BUILDING 46 NUTRIENT INJECTION SYSTEM
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

| Well | Date | pH | Conductivity (mS/cm) | Dissolved Oxygen (mg/L)* | Oxidation Reduction Potential (mV) | Temperature (°C) | Carbon Dioxide (mg/L) | Alkalinity as $CaCO_3$ (mg/L) | Ferrous Iron (mg/L) | Hydrogen Sulfide (mg/L) | Dissolved Oxygen (mg/L) ** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CEF-46-14D | 12/20/00 | 5.87 | 0.109 | 1.52 | NM | 24.90 | 84 | 540 | 2.4 | 0.3 | NM |
| | 03/14/03 | 6.26 | 0.098 | 0.85 | -33.00 | 25.32 | 180 | 15 | 2.5 | 5.0 | NM |
| | 06/04/03 | 5.77 | 0.106 | 0.17 | -39.00 | 26.14 | 186 | 20 | 2.3 | 2.0 | NM |
| | 09/03/03 | 4.82 | 0.215 | 0.86 | -54.00 | 27.66 | 155 | 20 | 2.2 | 5.0 | NM |
| | 12/10/03 | 5.36 | 0.282 | 0.07 | -62.00 | 25.92 | 136 | 10 | 2.4 | 1.0 | ND |
| | 03/16/04 | 5.43 | 0.105 | 0.80 | NM | 25.60 | 154 | 20 | 24.0 | 5.0 | ND |
| | 06/08/04 | 5.17 | 0.109 | 0.10 | -58.90 | 26.00 | NM | NM | NM | NM | NM |
| | 09/21/04 | 5.26 | 0.125 | 0.16 | -159.20 | 25.37 | 120 | 15 | 4.8 | 3.0 | ND |
| | 12/01/04 | 5.51 | 0.239 | 0.42 | -174.00 | 25.41 | 176 | 25 | 2.4 | 0.1 | ND |
| | 03/13/05 | 7.68 | 0.110 | 0.20 | -29.00 | 22.89 | 109 | 25 | 3.8 | 2.0 | ND |
| | 06/09/05 | 5.38 | 0.156 | 0.25 | -64.40 | 25.86 | 94 | 15 | 1.5 | 0.1 | ND |
| | 09/06/05 | 5.33 | 0.108 | 0.25 | -169.70 | 26.70 | 109 | 15 | 3.5 | 1.0 | ND |
| | 12/06/05 | 5.22 | 0.127 | ND | -28.60 | 22.36 | 185 | ND | 2.6 | 2.0 | ND |
| | 03/29/06 | 3.67 | 0.106 | 0.51 | 192.00 | 24.43 | 160 | 15 | 4.8 | 0.3 | ND |
| | 06/09/06 | 4.02 | 0.093 | 0.52 | 25.10 | 29.19 | 93 | 10 | 2.6 | 0.1 | ND |
| | 09/24/06 | 3.34 | 0.095 | 0.49 | 148.90 | 28.48 | 252 | 40 | 3.0 | 0.3 | ND |
| CEF-46-15I | 12/20/00 | 5.01 | 0.108 | 1.27 | NM | 22.20 | 86.6 | 40 | 3.2 | 1.0 | NM |
| | 03/13/03 | 4.64 | 0.191 | 0.90 | 328.00 | 22.79 | 343 | ND | 3.2 | ND | NM |
| | 06/04/03 | 1.76 | 0.172 | 0.59 | 92.00 | 22.89 | 368 | 10 | 3.3 | ND | NM |
| | 09/03/03 | 3.99 | 0.369 | 0.45 | 195.00 | 24.16 | 367 | ND | 2.8 | ND | NM |
| | 12/10/03 | 4.00 | 0.290 | 6.16 | 99.00 | 23.64 | 124 | 1 | 3.5 | 0.1 | 5.0 |
| | 03/16/04 | 4.30 | 0.501 | NM | 241.00 | 22.91 | 324 | ND | 3.0 | ND | ND |
| | 06/08/04 | 4.26 | 0.168 | 0.22 | 193.30 | 22.89 | 317 | 15 | 3.8 | ND | 3.0 |
| | 09/21/04 | 4.25 | 0.179 | 0.27 | -55.00 | 23.27 | 319 | ND | 3.5 | ND | ND |
| | 12/01/04 | 4.42 | 0.347 | 0.19 | -91.40 | 23.69 | 143 | 15 | 3.4 | 0.1 | ND |
| | 03/13/05 | 4.47 | 0.180 | 2.07 | 256.00 | 22.05 | 291 | ND | ND | ND | 1.0 |
| | 06/09/05 | 4.16 | 0.244 | 0.19 | -51.00 | 22.93 | 312 | 10 | 4.8 | ND | ND |
| | 09/06/05 | 4.32 | 0.138 | 0.66 | -101.60 | 23.90 | 219 | ND | 2.5 | 3.0 | ND |
| | 12/06/05 | 4.66 | 0.180 | 0.76 | 86.00 | 20.99 | 155 | 15 | 2.0 | 0.7 | ND |
| | 03/30/06 | 4.54 | 2.820 | 0.55 | 23.20 | 22.20 | 234 | 15 | 4.8 | 0.1 | ND |
| | 06/09/06 | 3.10 | 0.146 | 0.45 | 138.80 | 24.19 | 241 | 20 | 5.4 | 0.5 | ND |
| | 09/24/06 | 3.07 | 0.142 | 0.29 | 192.90 | 24.45 | 253 | 5 | 6.4 | ND | ND |
| CEF-46-16I | 12/06/05 | 4.87 | 0.148 | 0.90 | 44.90 | 20.67 | 241 | 20 | 2.5 | 5.0 | ND |
| CEF-46-17D | 12/06/05 | 4.44 | 1.904 | 0.61 | 53.50 | 20.08 | Interference | ND | 3.5 | 3.0 | ND |
| CEF-46-18I | 12/07/05 | 3.80 | 0.856 | 0.99 | 318.80 | 23.56 | 0.186 | ND | 9.0 | 0.1 | ND |
| CEF-46-19I | 12/07/05 | 2.58 | 5.885 | 0.77 | 476.90 | 22.01 | Interference | ND | 3.6 | 5.0 | ND |
| CEF-46-20I | 12/07/05 | 3.84 | 1.054 | 0.95 | 324.00 | 23.14 | 241 | ND | 9.0 | 0.1 | ND |
| CEF-46-21I | 12/20/00 | 4.86 | 0.047 | 1.35 | NM | 23.20 | 9.4 | 60 | 0.8 | ND | NM |
| | 03/13/03 | 3.75 | 0.713 | 2.35 | 397.00 | 23.94 | 0.0 | ND | 3.0 | ND | NM |
| | 06/05/03 | 3.12 | 0.798 | 0.00 | 251.00 | 24.22 | Interference | ND | 3.9 | 0.7 | NM |
| | 09/03/03 | 3.34 | 0.406 | 2.82 | 449.00 | 26.30 | 115 | ND | 1.6 | ND | NM |
| | 12/11/03 | 3.58 | 0.476 | 3.43 | 407.00 | 23.07 | 89 | ND | 1.6 | ND | 2.0 |
| | 03/18/04 | 3.81 | 0.162 | 2.10 | NM | 23.00 | 91 | ND | 2.4 | ND | 1.0 |
| | 06/08/04 | 3.39 | 0.147 | 0.86 | 406.00 | 23.91 | 78 | ND | 1.4 | ND | 13.0 |
| | 09/21/04 | 2.61 | 0.147 | 0.44 | 317.00 | 24.62 | 69 | ND | 0.8 | ND | ND |
| | 12/01/04 | 3.89 | 0.334 | 2.30 | 439.10 | 24.76 | 54 | ND | 0.3 | ND | ND |
| | 03/13/05 | 3.66 | 0.175 | 0.10 | 311.20 | 23.58 | 112 | ND | 0.8 | ND | 0.10 |
| | 06/09/05 | 3.61 | 0.114 | 1.21 | 319.00 | 23.57 | 45 | 5 | 1.4 | ND | 0.00 |
| | 09/06/05 | 4.22 | 0.103 | 0.26 | 79.30 | 25.31 | 75 | 5 | 1.0 | ND | ND |
| | 12/07/05 | 4.36 | 0.218 | 2.03 | 219.80 | 23.24 | 35 | ND | 4.5 | 3.00 | 3.60 |
| | 03/29/06 | 3.54 | 0.072 | 0.43 | 83.90 | 23.97 | 31 | 10 | 1.0 | 0.30 | ND |
| | 06/09/06 | 3.70 | 0.056 | 0.15 | 209.70 | 25.52 | NM | NM | NM | NM | NM |
| | 09/24/06 | 3.83 | 0.095 | 0.47 | -45.30 | 25.78 | 156 | 20 | 2.4 | 0.10 | ND |
| CEF-46-22I | 12/07/05 | 3.70 | 4.124 | 1.03 | 153.30 | 22.84 | 95 | ND | 10.00 | 5.00 | ND |
| CEF-46-23D | 12/07/05 | 2.44 | 21.506 | 1.23 | 438.80 | 24.49 | 86 | ND | 8.50 | 0.10 | ND |
| CEF-46-24D | 12/20/00 | 6.15 | 0.129 | 0.13 | NM | 21.90 | 16.4 | 60 | 2.3 | 0.1 | NM |
| | 03/14/03 | 3.70 | 2.530 | 2.23 | 402.00 | 27.46 | ND | ND | 4.0 | ND | NM |
| | 06/05/03 | 0.36 | 3.160 | 0.36 | 250.00 | 28.22 | Interference | ND | 5.9 | ND | NM |
| | 09/03/03 | 3.20 | 2.110 | 0.21 | 282.00 | 27.68 | Interference | ND | 5.4 | ND | NM |
| | 12/10/03 | 3.24 | 0.200 | 0.30 | 308.00 | 26.18 | Interference | ND | 3.8 | ND | ND |
| | 03/16/04 | 3.45 | 1.285 | 0.60 | NM | 27.60 | Interference | ND | 4.2 | 0.1 | ND |
| | 06/08/04 | 3.09 | 1.564 | 0.20 | 386.40 | 27.04 | Interference | ND | 7.2 | 0.1 | ND |
| | 09/21/04 | 3.74 | 1.218 | 0.44 | 17.20 | 26.06 | Interference | ND | 9.6 | 0.3 | ND |
| | 12/01/04 | 3.74 | 2.133 | 0.33 | 211.60 | 24.52 | Interference | ND | 8.5 | 0.3 | ND |
| | 03/13/05 | 6.16 | 1.200 | 0.12 | 58.00 | 25.70 | Interference | 5 | 7.4 | 1.0 | ND |
| | 06/09/05 | 4.26 | 4.395 | 0.06 | 106.40 | 26.31 | Interference | 5 | 10.0 | 0.5 | ND |
| | 09/06/05 | 4.12 | 2.946 | 0.17 | 161.20 | 26.94 | Interference | ND | 9.0 | 1.0 | ND |
| | 12/07/05 | 4.38 | 8.358 | 0.96 | 207.30 | 23.42 | 72 | ND | 5.2 | 0.3 | 0.96 |
| | 03/29/06 | 4.34 | 3.362 | 0.46 | 97.90 | 24.67 | Interference | 5 | 5.2 | ND | ND |
| | 06/09/06 | 3.66 | 2.810 | 0.41 | 212.10 | 26.11 | Interference | ND | 10.0 | 0.1 | ND |
| | 09/24/06 | 4.09 | 2.319 | 0.50 | 20.40 | 26.75 | Interference | ND | 5.0 | 0.1 | ND |

## TABLE 2
## GROUNDWATER FIELD ANALYTICAL RESULTS

BUILDING 46 NUTRIENT INJECTION SYSTEM
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

| Well | Date | pH | Conductivity (mS/cm) | Dissolved Oxygen (mg/L)* | Oxidation Reduction Potential (mV) | Temperature (°C) | Carbon Dioxide (mg/L) | Alkalinity as $CaCO_3$ (mg/L) | Ferrous Iron (mg/L) | Hydrogen Sulfide (mg/L) | Dissolved Oxygen (mg/L) ** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CEF-46-25I | 12/20/00 | 5.81 | 0.167 | 2.88 | NM | 24.60 | 20.6 | 120 | 0.6 | 5.0 | NM |
| | 03/13/03 | 6.16 | 1.420 | 1.03 | -58.00 | 25.35 | ND | ND | 4.5 | 5.0 | NM |
| | 06/04/03 | 5.98 | 1.440 | 0.00 | -87.00 | 25.76 | ND | ND | 6.0 | 5.0 | NM |
| | 09/03/03 | 3.77 | 0.910 | 0.53 | -107.00 | 26.43 | Interference | ND | 3.8 | 5.0 | NM |
| | 12/10/03 | 3.95 | 0.860 | 5.82 | -198.00 | 24.15 | Interference | ND | 3.5 | 5.0 | ND |
| | 03/16/04 | 3.74 | 0.179 | NM | -2.00 | 23.99 | Interference | ND | 5.4 | 5.0 | ND |
| | 06/08/04 | 3.53 | 2.054 | 0.13 | -92.90 | 25.15 | Interference | ND | 6.2 | 5.0 | ND |
| | 09/21/04 | 3.66 | 1.736 | 0.41 | -97.40 | 24.31 | Interference | ND | NM | 2.0 | ND |
| | 12/01/04 | 3.72 | 3.586 | 0.08 | -153.10 | 24.20 | Interference | ND | 7.8 | 5.0 | ND |
| | 03/13/05 | 6.67 | 0.800 | 0.19 | 8.00 | 22.96 | Interference | ND | 12.0 | 5.0 | ND |
| | 06/09/05 | 3.74 | 1.429 | 0.13 | -111.30 | 24.71 | Interference | ND | 9.8 | 5.0 | ND |
| | 09/06/05 | 3.44 | 0.871 | 0.14 | -96.00 | 25.26 | Interference | ND | 9.5 | 5.0 | ND |
| | 12/07/05 | 3.96 | 2.015 | 1.03 | 140.40 | 21.84 | 58 | ND | 7.0 | 5.0 | ND |
| | 03/29/06 | 4.05 | 0.340 | 0.43 | 121.40 | 23.78 | Interference | 5 | 5.0 | 5.0 | ND |
| | 06/09/06 | 3.52 | 0.235 | 0.33 | -28.40 | 24.84 | NM | NM | NM | NM | NM |
| | 09/24/06 | 3.86 | 0.201 | 0.47 | -85.30 | 25.71 | 316 | ND | 3.4 | 5.0 | ND |
| CEF-46-26I | 12/20/00 | 8.53 | 0.099 | 0.03 | NM | 23.10 | 24.2 | NM | 1.4 | NM | NM |
| | 03/14/03 | 6.34 | 0.063 | 4.66 | 3.00 | 26.88 | ND | ND | 4.6 | 5.0 | NM |
| | 06/05/03 | 3.31 | 2.880 | 0.00 | -2.00 | 24.60 | Interference | ND | 9.0 | 5.0 | NM |
| | 09/03/03 | 3.40 | 1.990 | 0.12 | 111.00 | 25.14 | Interference | ND | 7.8 | 5.0 | NM |
| | 12/11/03 | 3.52 | 0.224 | 0.00 | 151.00 | 22.18 | Interference | ND | 3.0 | 5.0 | ND |
| | 03/18/04 | 3.51 | 0.268 | NM | 203.00 | 22.45 | Interference | ND | 5.0 | 5.0 | ND |
| | 06/08/04 | 2.43 | 3.460 | 0.32 | 284.00 | 24.34 | Interference | ND | 4.0 | 1.0 | 4.0 |
| | 09/21/04 | 3.69 | 0.280 | 0.00 | 91.00 | 23.88 | Interference | ND | 10.0 | 5.0 | ND |
| | 12/01/04 | 2.62 | 6.045 | 0.11 | 371.60 | 23.43 | Interference | ND | 3.33 | 5.00 | ND |
| | 03/13/05 | 2.90 | 5.353 | 0.12 | 250.30 | 24.33 | Interference | ND | 10.0 | 2.00 | ND |
| | 06/09/05 | 2.54 | 6.025 | 0.82 | 297.10 | 24.22 | Interference | ND | 10.0 | 5.00 | ND |
| | 09/06/05 | 3.40 | 5.927 | 0.06 | 74.90 | 24.57 | Interference | ND | 6.2 | 3.00 | ND |
| | 12/07/05 | 3.50 | 6.642 | 0.43 | 225.50 | 22.19 | Interference | ND | 8.0 | 5.00 | ND |
| | 03/29/06 | 2.84 | 3.147 | 0.46 | 498.40 | 23.82 | Interference | ND | 8.0 | ND | ND |
| | 06/09/06 | 2.72 | 2.493 | 0.23 | 281.80 | 24.46 | Interference | ND | 9.2 | 5.00 | ND |
| | 09/24/06 | 3.78 | 1.952 | 0.42 | -63.80 | 26.59 | Interference | ND | 8.2 | 2.00 | ND |
| CEF-46-27D | 12/07/05 | 7.67 | 1.491 | 1.08 | -79.40 | 22.38 | 169 | 280 | 5.0 | ND | ND |
| CEF-46-28I | 12/07/05 | 4.00 | 5.614 | 0.53 | 84.50 | 21.24 | Interference | ND | 4.8 | 5.00 | ND |
| CEF-46-29I | 12/07/05 | 3.52 | 7.275 | 0.53 | 152.90 | 21.24 | Interference | ND | 7.0 | 5.00 | ND |
| CEF-46-30I | 12/07/05 | 3.64 | 4.614 | 0.29 | -3.20 | 21.97 | Interference | ND | 10.0 | 5.00 | ND |
| CEF-46-31I | 12/07/05 | 3.68 | 6.551 | 0.44 | 71.60 | 21.08 | Interference | ND | 10.0 | 5.00 | ND |

* Horiba Multimeter
**Dissolved Oxygen Hach Test Kit
***Well went dry after pumping 0.7 gallons, final readings not obtained.
ND = Non Detect
NM = Not Measured

TABLE 3
GROUNDWATER ANALYTICAL RESULTS

BUILDING 46 NUTRIENT INJECTION SYSTEM
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

| Well | Date | Benzene | Ethyl Benzene | Toluene | Xylene | BTEX | Methyl tert-butyl ether | Naphthalene | 1-Methylnaphthalene | 2-Methylnaphthalene |
|---|---|---|---|---|---|---|---|---|---|---|
| CEF-46-15 | 12/21/00 | 13000 | 2900 | 40000 | 18000 | 74900 | NM | 550 | NM | NM |
| | 01/25/01 | 0.28 | 0.44 | 1.4 | 3.2 | 5.32 | <1.0 | <1.0 | NM | NM |
| | 03/14/03 | 502 | 1160 | 1190 | 4580 | 7522 | 619 | 496 | <4.0 | <4.0 |
| | 06/09/03 | 262 | 626 | 316 | 1070 | 2276 | 511 | 947 | 136 | 162 |
| | 09/03/03 | 350 | 735 | 575 | 2920 | 4580 | 365 | 661 | 133 | 126 |
| | 12/11/03 | 430 | 982 | 1410 | 3540 | 6362 | 432 | 501 | 89 | 117 |
| | 03/18/04 | 401 | 741 | 1160 | 2280 | 4582 | 486 | 508 | 61.5 | 98.5 |
| | 06/08/04 | 163 | 484 | 194 | 526 | 1367 | 310 | 342 | 36.5 | 76.5 |
| | 09/21/04 | 54.8Y | 321Y | 97.4Y | 2140Y | 2613.2Y | 276Y | 252 J3Y | 24.2 J3Y | 64.2 J3Y |
| | 12/01/04 | 153 | 601.5 | 163.9 | 779 | 1697.4 | 216.1 | 621.4 | 66.6 | 143 |
| | 03/13/05 | 174 | 667 | 162 | 1100 | 2113 | 334 | 593 | 56.9 | 94.6 |
| | 06/09/05 | 283 | 787 | 308 | 1330 | 2668 | 270 | 316 | 51.3 | 73.0 |
| | 09/06/05 | 127 | 664 | 169 | 2520 | 3480 | 133 | 697 | 52.6 | 168 |
| | 12/06/05 | 85.9 | 627 | 95.6 | 1410 | 2218.7 | 644 | 709 | 20.9 I | 108 |
| | 03/29/06 | 15.2 | 205 | 36.2 | 458 | 714.4 | 267 | 544 | 65.8 | 119 |
| | 06/09/06 | 21.9 | 259 | 118 | 698 | 1096.9 | 187 | 322 | 36.7 | 78 |
| | 09/24/06 | 31.6 | 259 | 87.1 | 1390 | 1767.7 | 140 | 502 | 36.8 | 111 |
| CEF-46-25 | 12/21/00 | 300 | 72 | 51 | 200 | 623 | NA | 230 | NM | NM |
| | 01/25/01 | 7.3 | 0.96 | 1.5 | 3.3 | 13.06 | 7.1 | 11 | NM | NM |
| | 03/14/03 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 156 | <2.0 | <2.0 | <2.0 |
| | 06/05/03 | <1.00 | <1.0 | <1.0 | <1.0 | <1.0 | 64.5 | <0.10 | <0.10 | <0.10 |
| | 09/03/03 | <1.00 | <1.0 | <1.0 | <1.0 | <1.0 | 21.3 | 0.24 | <0.10 | <0.10 |
| | 12/11/03 | <1.00 | <1.0 | <1.0 | <3.0 | <1.0 | 21.7 | <0.10 | <0.10 | <0.10 |
| | 03/18/04 | 12.4 | <1.0 | <1.0 | 3.7 | 16.1 | 24.3 | 1.4 | 0.16 | 0.21 |
| | 06/08/04 | 3.72 | <1.00 | <1.00 | <1.00 | 3.72 | 26.1 | 0.643 I | <2.04 | <2.04 |
| | 09/21/04 | <1.00Y | <1.00Y | <1.00Y | <1.00Y | <1.00Y | 8.32Y | <2.17 J3Y | <2.17 J3Y | <2.17 J3Y |
| | 12/01/04 | 118 | 134.8 | 0.5700 I | 136 | 389.17 | 135.8 | 61.30 | 4.56 I | <0.214 |
| | 03/13/05 | 54.6 | 1.04 I | 0.210 I | 1.64 | 57.49 | 47.8 | 96.60 | 7.77 | 0.439 I |
| | 06/09/05 | 25.9 | < 0.201 | < 0.142 | < 0.220 | 25.9 | 17.2 | <0.101 | < 0.133 | < 0.210 |
| | 09/06/05 | <0.143 | <0.201 | <0.142 | < 0.220 | <0.220 | 3.95 | 26.0 | 1.12 I | <0.203 |
| | 09/21/05 | NM | NM | NM | NM | NM | NM | NM | NM | NM |
| | 12/06/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | 4.47 | <0.100 | <0.133 | <0.203 |
| | 03/30/06 | 0.460 I | 0.420 I | <0.176 | <0.298 | 0.880 I | 3.41 | 8.9 | 0.610 I | <0.203 |
| | 06/09/06 | <0.305 | <0.338 | <0.257 | <0.433 | <0.433 | 2.00 | <0.100 | <0.133 | <0.203 |
| | 09/25/06 | <0.305 | <0.338 | <0.257 | <0.433 | <0.433 | 1.69 | <0.100 | <0.133 | <0.203 |
| CEF-46-35 | 12/06/05 | 17.2 | 1.81 I | 0.490 I | 1.56 I | 21.06 | 16.3 | <0.103 | <0.137 | [illegible] |
| CEF-46-43 | 12/06/05 | 0.570 I | <0.201 | <0.142 | 0.540 I | 1.11 I | 1.47 I | <0.103 | <0.137 | <0.209 |
| CEF-46-44 | 12/21/00 | 850 | 38 | 13 | 160 | 1061 | NM | 1.6 | NM | NM |
| | 01/25/01 | 160 | 7.4 | 3.1 | 51 | 221.5 | <1.0 | <1.0 | NM | NM |
| | 03/14/03 | <1.0 | <1.0 | <1.0 | 9.0 | 9.0 | <1.0 | <2.0 | <2.0 | <2.0 |
| | 06/05/03 | <1.00 | <1.0 | <1.0 | 5.2 | 5.2 | 4.6 | <0.10 | <0.10 | <0.10 |
| | 09/03/03 | <1.00 | <1.0 | <1.0 | 6.6 | 6.6 | 66.2 | <0.10 | <0.10 | <0.10 |
| | 12/11/03 | <1.00 | <1.0 | <1.0 | 4.1 | 4.1 | 70 | <0.10 | <0.10 | <0.10 |
| | 03/18/04 | 1.4 | <1.0 | 1.1 | 3.9 | 6.4 | 26.4 | <0.10 | <0.10 | <0.10 |
| | 06/08/04 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | 2.3 | <2.04 | <2.04 | <2.04 |
| | 09/21/04 | <1.00Y | 1.61Y | <1.00Y | 2.93Y | 4.54Y | <1.00Y | <2.20 J3Y | <2.20 J3Y | <2.20 J3Y |
| | 12/01/04 | <0.143 | 0.4400 I | <0.1417 | <0.220 | 0.4400 I | <0.2359 | <0.23 | <0.206 | <0.216 |
| | 03/13/05 | 1.75 I | <0.201 | <0.142 | 1.23 I | 2.98 I | 3.56 | <0.112 | <0.148 | <0.233 |
| | 06/09/05 | < 0.143 | < 0.201 | < 0.142 | 0.950 I | 0.950 I | 8.55 | <0.101 | < 0.133 | < 0.210 |
| | 09/06/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | <0.236 | <0.100 | <0.133 | <0.203 |
| | 12/06/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | <0.236 | <0.100 | <0.133 | <0.203 |
| | 03/29/06 | <0.140 | <0.126 | <0.176 | <0.298 | <0.298 | <0.236 | <0.100 | <0.133 | <0.203 |
| | 06/09/06 | 0.340 I | <0.338 | <0.257 | <0.433 | 0.340 I | <0.336 | <0.100 | <0.133 | <0.203 |
| | 09/24/06 | <0.305 | <0.338 | <0.257 | <0.433 | <0.433 | <0.336 | <0.100 | <0.133 | <0.203 |
| CEF-46-63 | 12/21/00 | 2.9 | 9.8 | 6 | 18 | 36.7 | NM | 3.5 | NM | NM |
| | 02/08/01 | <1.0 | <1.0 | <1.0 | <1.0 | <4.0 | <1.0 | <1.1 | NM | NM |
| | 03/14/03 | <1.0 | <1.0 | <1.0 | 6.0 | 6.0 | <1.0 | <2.0 | <2.0 | <2.0 |
| | 06/09/03 | <1.00 | <1.0 | <1.0 | 6.7 | 6.7 | <1.0 | <1.0 | <1.0 | <1.0 |
| | 09/03/03 | <1.00 | <1.0 | <1.0 | 3.3 | 3.3 | <1.0 | <1.0 | <1.0 | <1.0 |
| | 12/10/03 | <1.00 | <1.0 | <1.0 | <3.0 | <3.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| | 03/18/04 | <1.00 | <1.0 | <1.0 | <3.0 | <3.0 | <1.0 | <0.10 | <0.10 | <0.10 |
| | 06/08/04 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <2.04 | <2.04 | <2.04 |
| | 09/21/04 | <1.00Y | <1.00Y | <1.00Y | <1.00Y | <1.00Y | <1.00Y | <2.15 J3Y | <2.15 J3Y | <2.15 J3Y |
| | 12/01/04 | <0.143 | 1.180 I | <0.1417 | 1.35 I | 2.53 I | <0.2359 | <0.23 | <0.206 | <0.216 |
| | 03/13/05 | <0.143 | <0.201 | <0.142 | 1.78 I | 1.78 I | <0.236 | <0.112 | <0.148 | <0.233 |
| | 06/09/05 | < 0.143 | < 0.201 | < 0.142 | 1.01 I | 1.01 I | < 0.236 | <0.101 | < 0.133 | < 0.210 |
| | 09/06/05 | <0.143 | <0.201 | <0.142 | 0.340 I | 0.340 I | <0.236 | <0.100 | <0.133 | <0.203 |
| | 12/06/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | <0.236 | <0.100 | <0.133 | <0.203 |
| | 03/29/06 | <0.140 | <0.126 | <0.176 | <0.298 | <0.298 | <0.236 | <0.100 | <0.133 | <0.203 |
| | 06/09/06 | <0.305 | <0.338 | <0.257 | <0.433 | <0.433 | <0.336 | <0.100 | <0.133 | <0.203 |
| | 09/24/06 | <0.305 | <0.338 | <0.257 | <0.433 | <0.433 | <0.336 | <0.100 | <0.0133 | <0.203 |
| CEF-46-71 | 12/21/00 | 9100 | 2800 | 17000 | 15000 | 43900 | NM | 260 | NM | NM |
| | 02/22/01 | 6500 | 1400 | 10000 | 7900 | 25800 | 6100 | 120 | NM | NM |
| | 03/14/03 | 946 | 150 | 86.5 | 904 | 2086 | 4380 | <7.9 | <2.0 | <2.0 |
| | 06/09/03 | 678 | 123 | 51.6 | 752 | 1604.6 | 4190 | 32.4 | 0.42 | 0.24 |
| | 09/03/03 | 832 | 158 | <10.0 | 697 | 1687.0 | 5140 | 123 | 6.12 | 7.92 |
| | 12/11/03 | 734 | 111 | 5 | 290 | 1140.0 | 5820 | 96.2 | 4.76 | 5.28 |
| | 03/18/04 | 386 | 66 | 8.5 ? | 414 | 874.5 | 3460 | 2.15 | <0.10 | <0.10 |
| | 06/08/04 | 208 | 42.7 | 11.3 | 330 | 592.0 | 3080 | 3.34 | <2.04 | <2.04 |
| | 09/21/04 | 494Y | 38.1Y | 9.99Y | 387Y | 929.09Y | 2190Y | 0.242 J3, IY | <2.20 J3Y | <2.20 J3Y |
| | 12/01/04 | 633 | 144.9 | 10.30 | 631 | 1619.2 | 1943 | 131.2 | 5.18 | 6.13 |
| | 03/13/05 | 775 | 176 | 3.26 | 269 | 1223.3 | 1480 | 128 | 5.39 | 7.40 |
| | 06/09/05 | 394 | 127 | 2.79 | 199 | 722.79 | 628 | <0.101 | < 0.133 | < 0.210 |
| | 09/06/05 | 92.9 | 41.3 | 2.52 | 95.6 | 232.32 | 1730 | <0.100 | <0.133 | <0.203 |
| | 12/06/05 | 651 | 144 | 11.3 I | 357 | 1163.3 | 2140 | 28.6 | <0.148 | <0.226 |
| | 03/30/06 | 146 | 26.0 | 0.650 I | 29 | 201.65 | 1280 | 33.7 | 0.900 I | 1.10 I |
| | 06/09/06 | 207 | 33.2 | 0.310 I | 11.4 | 251.91 | 652 | 60.7 | 2.67 I | 1.24 I |
| | 09/25/06 | 162 | 25.4 | 0.310 I | 5.57 | 192.78 | 296 I | 75.1 | 2.96 I | 0.510 I |
| Groundwater Criteria[1] | | 1 | 30 | 40 | 20 | n/a | 20 | 14 | 28 | 28 |
| Natural Attenuation Default Source[2] | | 100 | 300 | 400 | 200 | n/a | 200 | 140 | 280 | 280 |

| Well | Date | Acenaphthylene | Acenaphthene | Fluorene | Phenanthrene | Anthracene | Fluoranthene | Pyrene | Benzo (a) anthracene | Chrysene |
|---|---|---|---|---|---|---|---|---|---|---|
| CEF-46-15 | 12/21/00 | 1.4 | <1.1 | 0.36 | <1.1 | <1.1 | <0.22 | <0.22 | <0.22 | <0.22 |
| | 01/25/01 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.20 | <0.20 | <0.20 | <0.20 |
| | 03/14/03 | <4.0 | <4.0 | <4.0 | <4.0 | <4.0 | <4.0 | <4.0 | <4.0 | <4.0 |
| | 06/09/03 | <0.10 | 0.29 | 0.22 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 09/03/03 | <0.10 | 0.45 | 0.26 | 0.48 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 12/11/03 | <0.10 | 0.26 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 03/18/04 | <0.10 | 0.24 | <0.10 | 0.16 | 0.27 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 06/08/04 | <5.10 | <2.04 | <2.04 | <5.10 | <1.02 | <1.02 | <5.10 | <0.204 | <0.204 |
| | 09/21/04 | <5.49 J3Y | <2.20 J3Y | <2.20 J3Y | <5.49Y | <1.10Y | <1.10Y | <5.49Y | <0.220Y | <2.20Y |
| | 12/01/04 | <0.235 | <0.165 | <0.347 | <0.110 | 0.204 I | <0.106 | <0.102 | <0.150 | <0.084 |
| | 03/13/05 | <0.0840 | <0.012 | <0.0900 | <0.0990 | <0.0780 | <0.108 | <0.135 | <0.106 | <0.0630 |
| | 06/09/05 | < 0.0840 | < 0.112 | < 0.0900 | < 0.0990 | < 0.0780 | < 0.108 | < 0.135 J3 | < 0.106 | < 0.0630 |
| | 09/06/05 | <0.0840 | <0.112 | 0.500 I | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 |
| | 12/06/05 | <0.933 | <1.24 | <1.00 | <1.11 | <0.889 | <1.20 | <1.50 | <1.18 | <0.744 |
| | 03/29/06 | <0.0840 | <0.112 | 0.240 I | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 |
| | 06/09/06 | <0.0840 | 0.280 I | 0.200 I | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 |
| | 09/24/06 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 |
| CEF-46-25 | 12/21/00 | <1.1 | 5.5 | 3.1 | 0.35 | <1.1 | <0.22 | <0.22 | <0.22 | <0.22 |
| | 01/25/01 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.20 | <0.20 | <0.20 | <0.20 |
| | 03/14/03 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 |
| | 06/05/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 09/03/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | 0.11 | <0.10 | <0.10 | <0.10 |
| | 12/11/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 03/18/04 | <0.10 | 0.11 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 06/08/04 | <5.10 | 0.398 I | <2.04 | <5.10 | <1.02 | <1.02 | <5.10 | <0.204 | <0.204 |
| | 09/21/04 | <2.17 J3Y | <2.17 J3Y | <2.17 J3Y | <5.43Y | <1.09Y | <1.09Y | <5.43Y | <0.217Y | <2.17Y |
| | 12/01/04 | <0.235 | 2.32 I | 2.00 I | <0.110 | <0.118 | <0.106 | <0.102 | <0.150 | <0.084 |
| | 03/13/05 | <0.0840 | 0.602 I | 0.684 I | 0.306 I | <0.0780 | <0.108 | <0.135 | <0.106 | <0.0630 |
| | 06/09/05 | < 0.0840 | < 0.112 | < 0.0900 | < 0.0990 | < 0.0780 | < 0.108 | < 0.135 J3 | < 0.106 | < 0.0630 |
| | 09/06/05 | < 0.0840 | < 0.112 | 0.240 I | <0.100 | <0.0800 | <0.108 | <0.135 | < 0.106 | <0.0670 |
| | 09/21/05 | NM | NM | NM | NM | NM | NM | NM | NM | NM |
| | 12/06/05 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 |
| | 03/30/06 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <.0106 | <0.0670 |
| | 06/09/06 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 |
| | 09/25/06 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 |
| CEF-46-35 | 12/06/05 | <0.0866 | <0.115 | <0.0928 | <0.103 | <0.0825 | <0.111 | <0.109 | <0.0991 | <0.0619 |
| CEF-46-43 | 12/06/05 | <0.0866 | <0.115 | <0.0928 | <0.103 | <0.0825 | <0.111 | <0.109 | <0.109 | <0.0621 |
| CEF-46-44 | 12/21/00 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <0.22 | <0.22 | <0.22 | <0.22 |
| | 01/25/01 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.20 | <0.20 | <0.20 | <0.20 |
| | 03/14/03 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 |
| | 06/05/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 09/03/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 12/11/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 03/18/04 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 06/08/04 | <5.10 | <2.04 | <2.04 | <5.10 | <1.02 | <1.02 | <5.10 | <0.204 | <2.04 |
| | 09/21/04 | <5.49 J3Y | <2.20 J3Y | <2.20 J3Y | <5.49Y | <1.10Y | <1.10Y | <5.49Y | <0.220Y | <2.20Y |
| | 12/01/04 | <0.237 | <0.167 | <0.127 | <0.111 | <0.120 | <0.107 | <0.103 | <0.152 | <0.085 |
| | 03/13/05 | <0.0933 | <0.124 | <0.100 | <0.110 | <0.0867 | <0.120 | <0.150 | <0.118 | <0.0700 |
| | 06/09/05 | < 0.0840 | < 0.112 | < 0.0900 | < 0.0990 | < 0.0780 | < 0.108 | < 0.135 J3 | < 0.106 | < 0.0630 |
| | 09/06/05 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 |
| | 12/06/05 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 |
| | 03/29/06 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 |
| | 06/09/06 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 |
| | 09/24/06 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 |
| CEF-46-63 | 12/21/00 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <0.21 | <0.21 | <0.21 | <0.21 |
| | 02/08/01 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <0.21 | <0.21 | <0.21 | <0.21 |
| | 03/14/03 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 |
| | 06/09/03 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| | 09/03/03 | <1.0 | <1.0 | <1.0 | 0.31 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| | 12/10/03 | <1.0 | <1.0 | <1.0 | <0.10 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| | 03/18/04 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 06/08/04 | <5.10 | <2.04 | <2.04 | <5.10 | <1.02 | <1.02 | <5.10 | <0.204 | <2.04 |
| | 09/21/04 | <5.38 J3Y | <2.15 J3Y | <2.15 J3Y | <5.38Y | <1.08Y | <1.08Y | <5.38Y | <0.215Y | <2.15Y |
| | 12/01/04 | <0.240 | <0.169 | <0.128 | <0.112 | <0.121 | <0.108 | <0.104 | <0.153 | <0.085 |
| | 03/13/05 | <0.0933 | <0.124 | <0.100 | <0.110 | <0.0867 | <0.120 | <0.150 | <0.118 | <0.0700 |
| | 06/09/05 | < 0.0840 | < 0.112 | < 0.0900 | < 0.0990 | < 0.0780 | < 0.108 | < 0.135 J3 | < 0.106 | < 0.0630 |
| | 09/06/05 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 |
| | 12/06/05 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 |
| | 03/29/06 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 |
| | 06/09/06 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 |
| | 09/24/06 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 |
| CEF-46-71 | 12/21/00 | 0.86 | <1.1 | 0.7 | <1.1 | <1.1 | <0.22 | <0.22 | <0.22 | <0.22 |
| | 02/22/01 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.20 | <0.20 | <0.20 | <0.20 |
| | 03/14/03 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 |
| | 06/09/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 09/03/03 | <0.10 | <0.10 | 0.14 | 0.47 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 12/11/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 03/18/04 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 06/08/04 | <5.10 | <2.04 | <2.04 | <5.10 | <1.02 | <1.02 | <5.10 | <0.204 | <2.04 |
| | 09/21/04 | <5.49 J3Y | <2.20 J3Y | <2.20 J3Y | <5.49Y | <1.10Y | <1.10Y | <5.49Y | <0.220Y | <2.20Y |
| | 12/01/04 | <0.230 | <0.162 | <0.123 | <0.107 | <0.116 | <0.104 | <0.100 | <0.147 | <0.082 |
| | 03/13/05 | <0.0840 | <0.112 | <0.0900 | <0.0990 | <0.0780 | <0.108 | <0.135 | <0.106 | <0.0630 |
| | 06/09/05 | < 0.0840 | < 0.112 | < 0.0900 | < 0.0990 | < 0.0780 | < 0.108 | < 0.135 J3 | < 0.106 | < 0.0630 |
| | 09/06/05 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 |
| | 12/06/05 | <0.0933 | <0.124 | <0.100 | <0.111 | <0.0889 | <0.120 | <0.150 | <0.118 | <0.0744 |
| | 03/30/06 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 |
| | 06/09/06 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 |
| | 09/25/06 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 |
| Groundwater Criteria[1] | | 210 | 20 | 280 | 210 | 2100 | 280 | 210 | 0.05 | 4.8 |
| Natural Attenuation Default Source[2] | | 2100 | 200 | 2800 | 2100 | 21000 | 2800 | 2100 | 5 | 480 |

| Well | Date | Benzo (b) fluoranthene | Benzo (k) fluoranthene | Benzo (a) pyrene | Indeno (1, 2, 3-cd) pyrene | Dibenzo (a,h) anthracene | Benzo (g,h,i) perylene | Nitrate (mg/L) | Nitrite (mg/L) | Orthophosphate (mg/L) | Sulfate (mg/L) | TRPH (ug/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CEF-46-15 | 12/21/00 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | 0.065 J | 0.15 | <1 | NM | 23000 |
| | 01/25/01 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.60 | 0.2 | 0.25 | NM | 290 |
| | 03/14/03 | <4.0 | <4.0 | <4.0 | <4.0 | <4.0 | <4.0 | <0.100 | 0.15 | <0.100 | NM | 77000 |
| | 06/09/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | NM | 33200 |
| | 09/03/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | NM | 38300 |
| | 12/11/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.30 | <0.100 | NM | 39600 |
| | 03/18/04 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | <0.30 | <0.100 | NM | 16200 |
| | 06/08/04 | <0.204 | <0.510 | <0.204 | <0.204 | <0.204 | <0.204 | <0.100 | <0.005 | 0.063 ? | NM | 15400 |
| | 09/21/04 | <0.220Y | <0.549Y | <0.220Y | <0.220Y | <0.220Y | <2020 J3Y | <0.02Y | <0.005Y | 0.389Y | NM | 33300Y |
| | 12/01/04 | <0.102 | <0.259 | <0.167 | <0.133 | <0.094 | <0.160 | <0.018 | <0.005 | 0.098 | NM | 25200 |
| | 03/13/05 | <0.0600 | <0.0900 | <0.154 | <0.121 | <0.146 | <0.102 | <0.0550 | 0.006 | 0.0317 V | NM | 23000 |
| | 06/09/05 | < 0.0600 | < 0.0900 | < 0.154 | < 0.121 | < 0.146 | < 0.102 | < 0.055 | < 0.005 J4 | 0.0740 | 109 | 41100 |
| | 09/06/05 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | <0.055 | <0.005 | 0.116 | 97.9 | 51000 |
| | 12/06/05 | <0.667 | <1.00 | <1.67 | <1.34 | <1.62 | <1.11 | NM | NM | NM | 42.8 | 35500 |
| | 03/29/06 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 4.37 | 36300 |
| | 06/09/06 | <0.0600 | <0.0900 | <0.150 | <0.121 | <.0146 | <0.100 | NM | NM | NM | 24.5 | 17100 |
| | 09/24/06 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 63.0 | 12300 |
| CEF-46-25 | 12/21/00 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.60 | <0.4 | 0.22 | NM | 3100 |
| | 01/25/01 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | 0.083 | <0.40 | <1.0 | NM | 840 |
| | 03/14/03 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <0.100 | 0.100 | <0.100 | NM | 1370 |
| | 06/05/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | NM | 339 |
| | 09/03/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | NM | 339 |
| | 12/11/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.30 | <0.100 | NM | 796 |
| | 03/18/04 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | <0.30 | <0.100 | NM | 436 |
| | 06/08/04 | <0.204 | <0.510 | <0.204 | <0.204 | <0.204 | <2.04 | <0.10 | <0.005 | 0.150 ? | NM | 530 |
| | 09/21/04 | <0.217Y | <0.543Y | <0.217Y | <0.217Y | <0.217Y | <2.17 J3Y | 0.1Y | 0.005Y | 0.027 ?Y | NM | 0.26Y |
| | 12/01/04 | <0.102 | <0.259 | <0.167 | <0.133 | <0.094 | <0.160 | <0.018 | 0.007 | 0.08 | NM | 2450 |
| | 03/13/05 | <0.0600 | <0.0900 | <0.154 | <0.121 | <0.146 | <0.102 | <0.0550 | 0.006 | 0.0350 V | NM | 1600 |
| | 06/09/05 | < 0.0600 | < 0.0900 | < 0.154 | < 0.121 | < 0.146 | < 0.102 | < 0.055 | 0.014 | 0.0330 | 664 | 1650 |
| | 09/06/05 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | < 0.055 | <0.005 | 0.00600 | 843 | NM |
| | 09/21/05 | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM | 341 |
| | 12/06/05 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 1860 | 654 |
| | 03/30/06 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 722 | 1170 |
| | 06/09/06 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 442 | 623 |
| | 09/25/06 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 317 | 794 |
| CEF-46-35 | 12/06/05 | <0.0619 | <0.0928 | <0.155 | <0.125 | <0.151 | <0.103 | NM | NM | NM | 302 | 45 I |
| CEF-46-43 | 12/06/05 | <0.0619 | <0.0928 | <0.155 | <0.125 | <0.151 | <0.103 | NM | NM | NM | 255 | <18 |
| CEF-46-44 | 12/21/00 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.6 | <0.4 | <1.0 | NM | <550 |
| | 01/25/01 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.60 | <0.40 | <1.0 | NM | <520 |
| | 03/14/03 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <0.100 | 0.35 | 3.92 | NM | <200 |
| | 06/05/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.30 | <0.30 | <0.282 | NM | <106 |
| | 09/03/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | <0.30 | 0.965 | NM | 333 |
| | 12/11/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | <0.30 | 1.31 | NM | 456 |
| | 03/18/04 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.600 | <0.60 | <0.100 | NM | 242 |
| | 06/08/04 | <0.204 | <0.510 | <0.204 | <0.204 | <0.204 | <2.04 | <0.100 | 0.46 | 2.09 ? | NM | <200 |
| | 09/21/04 | <0.220Y | <0.549Y | <0.220Y | <0.220Y | <0.220Y | <2.20 J3Y | <0.02Y | 0.118Y | 0.103Y | NM | <200Y |
| | 12/01/04 | <0.103 | <0.262 | <0.168 | <0.134 | <0.095 | <0.162 | <0.018 | <0.005 | <0.003 | NM | 120 I V |
| | 03/13/05 | <0.0667 | <0.100 | <0.171 | <0.134 | <0.162 | <0.113 | <0.0550 | 0.021 | 1.91 | NM | <18 |
| | 06/09/05 | < 0.0600 | < 0.0900 | < 0.154 | < 0.121 | < 0.146 | < 0.102 | < 0.055 | 0.005 | 4.16 | 5440 | 18 I |
| | 09/06/05 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | <0.055 | 0.023 | 0.0410 | 462 | <18 |
| | 12/06/05 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 2520 | <18 |
| | 03/29/06 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 1660 | <18 |
| | 06/09/06 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 2360 | 129 I |
| | 09/24/06 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 1910 | 56 I |
| CEF-46-63 | 12/21/00 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | <0.6 | <0.4 | 0.22 | NM | <550 |
| | 02/08/01 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | <0.60 | <0.40 | <1.0 | NM | <500 |
| | 03/14/03 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <0.100 | 0.270 | 4.61 | NM | 274 |
| | 06/09/03 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 0.674 | NM | <200 |
| | 09/03/03 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.300 | <0.30 | 5.81 | NM | <225 |
| | 12/10/03 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.100 | 0.33 | 1.34 | NM | <200 |
| | 03/18/04 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.600 | <1.00 | <0.100 | NM | <100 |
| | 06/08/04 | <0.204 | <0.510 | <0.204 | <0.204 | <0.204 | <2.04 | <0.100 | 0.102 | 0.127 ? | NM | <200 |
| | 09/21/04 | <0.215Y | <0.538Y | <0.215Y | <0.215Y | <0.215Y | <2.15 J3Y | <0.02Y | 0.008Y | 0.013 ?Y | NM | <220Y |
| | 12/01/04 | <0.104 | <0.265 | <0.170 | <0.135 | <0.096 | <0.164 | <0.018 | <0.084 | 22.5 | NM | 140 I V |
| | 03/13/05 | <0.0667 | <0.100 | <0.171 | <0.134 | <0.162 | <0.113 | <0.0550 | 0.069 | 17.8 | NM | <18 |
| | 06/09/05 | < 0.0600 | < 0.0900 | < 0.154 | < 0.121 | < 0.146 | < 0.102 | < 0.055 | 0.054 | 19.8 Q | 8580 | 24 I |
| | 09/06/05 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | <0.150 | 1.20 | 0.0680 | 7050 | <18 |
| | 12/06/05 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 8480 | <18 |
| | 03/29/06 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 8270 | <18 |
| | 06/09/06 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 7510 | 135 I |
| | 09/24/06 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 5260 | 36 I |
| CEF-46-71 | 12/21/00 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.6 | <0.4 | <1.0 | NM | 13000 |
| | 02/22/01 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.6 | <0.4 | <1.0 | NM | 17000 |
| | 03/14/03 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <0.100 | <0.100 | <0.100 | NM | 5480 |
| | 06/09/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.50 | <0.50 | <0.100 | NM | 4080 |
| | 09/03/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | <0.10 | <0.100 | NM | 2530 |
| | 12/11/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | <0.30 | <0.100 | NM | 3410 |
| | 03/18/04 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | <0.60 | <0.100 | NM | 1900 |
| | 06/08/04 | <0.204 | <0.510 | <0.204 | <0.204 | <0.204 | <2.04 | <0.100 | 0.022 | 0.073 ? | NM | 650 |
| | 09/21/04 | <0.220Y | <0.549Y | <0.220Y | <0.220Y | <0.220Y | <2.20 J3Y | <0.02Y | 0.016Y | 0.028 ?Y | NM | 980Y |
| | 12/01/04 | <0.100 | <0.254 | <0.163 | <0.130 | <0.092 | <0.157 | 0.018 | 0.034 | 0.012 | NM | 1770 |
| | 03/13/05 | <0.0600 | <0.0900 | <0.154 | <0.121 | <0.146 | <0.102 | <0.0550 | <0.005 | 0.00510 V I | NM | 1570 |
| | 06/09/05 | < 0.0600 | < 0.0900 | < 0.154 | < 0.121 | < 0.146 | < 0.102 | < 0.055 | 0.005 | 0.0250 | 279 | 1380 |
| | 09/06/05 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | <0.055 | 0.013 | 0.0190 | 167 | 1280 |
| | 12/06/05 | <0.0667 | <0.100 | <0.167 | <0.134 | <0.162 | <0.111 | NM | NM | NM | 54.6 | 970 |
| | 03/30/06 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 37.1 | <18 |
| | 06/09/06 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 33.0 | 832 |
| | 09/25/06 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 28.6 | 544 |
| Groundwater Criteria[1] | | 0.05 | 0.5 | 0.2 | 0.05 | 0.005 | 210 | 10 * | 1 * | n/a | 250 * | 5000 |
| Natural Attenuation Default Source[2] | | 5 | 50 | 20 | 5 | 0.5 | 2100 | 100 * | 10 * | n/a | n/a | 50000 |

**TABLE 3**
**GROUNDWATER ANALYTICAL RESULTS**

**BUILDING 46 NUTRIENT INJECTION SYSTEM**
**NAS CECIL FIELD**
**JACKSONVILLE, FLORIDA**

| Well | Date | Benzene | Ethyl Benzene | Toluene | Xylene | BTEX | Methyl tert-butyl ether | Naphthalene | 1-Methylnaphthalene | 2-Methylnaphthalene | Acenaphthylene | Acenaphthene | Fluorene | Phenanthrene | Anthracene | Fluoranthene | Pyrene | Benzo (a) anthracene | Chrysene | Benzo (b) fluoranthene | Benzo (k) fluoranthene | Benzo (a) pyrene | Indeno (1, 2, 3-cd) pyrene | Dibenzo (a,h) anthracene | Benzo (g,h,i) perylene | Nitrate (mg/L) | Nitrite (mg/L) | Orthophosphate (mg/L) | Sulfate (mg/L) | TRPH (ug/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CEF-46-[illegible] | 12/06/05 | <0.143 | <0.201 | <0.142 | <0.228 | <0.228 | 13.8 | <0.103 | <0.137 | <0.209 | <0.0866 | <0.115 | <0.0929 | <0.103 | <0.0625 | <0.111 | <0.139 | <0.109 | <0.0691 | <0.0619 | <0.0929 | <0.155 | <0.125 | <0.151 | <0.103 | NM | NM | NM | 13.3 | <18 |
| CEF-46-6I | 12/20/00 | <1.0 | <1.0 | <1.0 | <1.0 | <4.0 | NM | <1.1 | NM | NM | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.5 | <0.4 | <1.0 | NM | <770 |
| | 01/25/01 | <1.0 | <1.0 | <1.0 | <1.0 | <4.0 | 1.3 | <1.0 | NM | NM | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.60 | <0.40 | <1.0 | NM | <500 |
| | 03/14/03 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <0.100 | 0.170 | <0.100 | NM | <200 |
| | 06/04/03 | <1.00 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.30 | 0.411 | NM | <211 |
| | 09/03/03 | <1.00 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 0.22 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.100 | <0.30 | <0.100 | NM | <225 |
| | 12/10/03 | <1.00 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 0.22 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.100 | 0.180 | 0.308 | NM | <200 |
| | 03/16/04 | <1.00 | <1.0 | <1.0 | <3.0 | <3.0 | <1.0 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.300 | <0.30 | <0.100 | NM | <111 |
| | 06/08/04 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <2.20 | <2.20 | <2.20 | <5.49 | <2.20 | <2.20 | <5.49 | <2.20 | <1.10 | <5.49 | <0.220 | <2.20 | <0.220 | <0.549 | <0.220 | <0.220 | <0.220 | <2.20 | <0.100 | <0.005 | 0.055 ? | NM | <210 |
| | 09/21/04 | <1.00Y | <1.00Y | <1.00Y | <1.00Y | <1.00Y | 3.92Y | <2.20 J3Y | <2.20 J3Y | <2.20 J3Y | <5.49 J3Y | <2.20 J3Y | <2.20 J3Y | <5.49Y | <1.10Y | <1.10Y | <5.49Y | <0.220Y | <2.20Y | <0.220Y | <0.549Y | <0.220Y | <0.220Y | <0.220Y | <0.220 J3Y | <0.02Y | <0.005Y | 0.018 ?Y | NM | 220Y |
| | 12/01/04 | <0.143 | 0.5500 I | <0.1417 | 0.440 I | 0.990 I | 28.85 | 0.32 I | <0.202 | <0.212 | <0.232 | <0.164 | <0.124 | <0.108 | <0.117 | <0.105 | <0.101 | <0.149 | <0.083 | <0.101 | <0.257 | <0.165 | <0.131 | <0.093 | <0.159 | <0.018 | <0.005 | 0.013 | NM | 80 I V |
| | 03/13/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | 16.0 | <0.101 | <0.133 | <0.210 | <0.0840 | <0.112 | <0.0900 | <0.0990 | <0.0780 | <0.108 | <0.135 | <0.106 | <0.0630 | <0.0600 | <0.0900 | <0.154 | <0.121 | <0.146 | <0.102 | <0.0550 | <0.005 | 0.00830 V | NM | <18 |
| | 06/09/05 | < 0.143 | 0.420 I | < 0.142 | 0.550 I | 0.970 I | 13.5 | <0.101 | < 0.133 | < 0.210 | < 0.0840 | < 0.112 | < 0.0900 | < 0.0990 | < 0.0780 | < 0.108 | < 0.135 J3 | < 0.106 | < 0.0630 | < 0.0600 | < 0.0900 | < 0.154 | < 0.121 | < 0.146 | < 0.102 | < 0.055 | < 0.005 | 0.00800 | 263 | < 18 |
| | 09/06/05 | < 0.143 | <0.201 | <0.142 | 0.220 I | 0.220 I | 79.7 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | <0.055 | <0.005 | 0.0340 | 288 ? | < 18 |
| | 12/06/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | 48.1 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 466 | <18 |
| | 03/30/06 | 0.260 I | <0.126 | <0.176 | <0.298 | <0.298 | 24.2 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 555 | 181 |
| | 06/08/06 | <0.305 | <0.338 | <0.257 | <0.433 | <0.433 | 12.7 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 380 | 452 |
| | 09/24/06 | <0.305 | <0.338 | <0.257 | <0.433 | <0.433 | 14.6 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 514 | 64 I |
| CEF-46-10I | 12/06/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | <0.236 | <0.102 | <0.136 | <0.207 | <0.0867 | <0.114 | <0.0916 | <0.102 | <0.0616 | <0.110 | <0.138 | <0.106 | <0.0684 | <0.0612 | <0.0916 | <0.153 | <0.123 | <0.148 | <0.102 | NM | NM | NM | 9.04 | <18 |
| CEF-46-11I | 12/06/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | <0.236 | <0.105 | <0.140 | <0.214 | <0.0884 | <0.115 | <0.0947 | <0.105 | <0.0642 | <0.114 | <0.142 | <0.112 | <0.0705 | <0.0632 | <0.0947 | <0.158 | <0.127 | <0.154 | <0.105 | NM | NM | NM | 17.4 | <18 |
| CEF-46-12I | 12/20/00 | <1.0 | <1.0 | <1.0 | <1.0 | <4.0 | NM | <1.1 | NM | NM | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.6 | <0.4 | <1.0 | NM | <530 |
| | 01/24/01 | <1.0 | <1.0 | <1.0 | <1.0 | <4.0 | 14 | <1.0 | NM | NM | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.60 | <0.40 | <1.0 | NM | <520 |
| | 03/14/03 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <0.100 | <0.100 | <0.100 | NM | <200 |
| | 06/05/03 | <1.00 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | NM | <100 |
| | 09/03/03 | <1.00 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | <0.30 | <0.100 | NM | <225 |
| | 12/11/03 | <1.00 | <1.0 | <1.0 | <3.0 | <1.0 | 2.2 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | <0.30 | <0.100 | NM | <200 |
| | 03/18/04 | <1.00 | <1.0 | <1.0 | <3.0 | <3.0 | 75.9 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.600 | <0.60 | <0.100 | NM | <222 |
| | 06/08/04 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | 502 | <2.20 | <2.20 | <2.20 | <5.49 | <2.20 | <2.20 | <5.49 | <1.10 | <1.10 | <5.49 | <0.220 | <2.20 | <0.220 | <0.549 | <0.220 | <0.220 | <0.220 | <2.20 | 0.028 ? | 0.014 | 0.017 ? | NM | <200 |
| | 09/21/04 | <1.00Y | <1.00Y | <1.00Y | <1.00Y | <1.00Y | 18.9Y | <2.00 J3Y | <2.00 J3Y | <2.00 J3Y | <5.00 J3Y | <2.00 J3Y | <2.00 J3Y | <5.00Y | <1.00Y | <1.00Y | <5.00Y | <0.200Y | <2.00Y | <0.200Y | <0.500Y | <0.200Y | <0.200Y | <0.200Y | <0.200 J3Y | <0.02Y | <0.005Y | 0.052 ?Y | NM | <200Y |
| | 12/01/04 | <0.143 | <0.2010 | <0.1417 | <0.220 | <0.220 | 8.480 | <0.22 | <0.200 | <0.210 | <0.230 | <0.162 | <0.123 | <0.107 | <0.116 | <0.104 | <0.100 | <0.147 | <0.082 | <0.100 | <0.254 | <0.163 | <0.130 | <0.092 | <0.157 | 0.046 | 0.006 | 0.017 | NM | 240 I V |
| | 03/13/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | 0.450 I | <0.101 | <0.133 | <0.210 | <0.0840 | <0.112 | <0.0900 | <0.0990 | <0.0780 | <0.108 | <0.135 | <0.106 | <0.0630 | <0.0600 | <0.0900 | <0.154 | <0.121 | <0.146 | <0.102 | <0.0550 | 0.009 I | 0.00500 V I | NM | <18 |
| | 06/09/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | < 0.236 | <0.101 | < 0.133 | < 0.210 | < 0.0840 | < 0.112 | < 0.0900 | < 0.0990 | < 0.0780 | < 0.108 | < 0.135 J3 | < 0.106 | < 0.0630 | < 0.0600 | < 0.0900 | < 0.154 | < 0.121 | < 0.146 | < 0.102 | < 0.055 | 0.006 | 0.00800 | 47.5 | < 18 |
| | 09/06/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | < 0.236 | <0.100 | <0.133 | <0.203 | <0.0810 | < 0.112 | < 0.0900 | <0.100 | <0.0800 | < 0.108 | <0.135 | < 0.106 | <0.0670 | < 0.0600 | < 0.0900 | <0.150 | < 0.121 | < 0.146 | <0.100 | < 0.055 | <0.005 | 0.0230 | 57.1 | < 18 |
| | 12/06/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | <0.236 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 43.9 | <18 |
| | 03/29/06 | <0.140 | <0.126 | <0.176 | <0.298 | <0.298 | 0.310 I | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 47.8 | <18 |
| | 06/08/06 | <0.305 | <0.338 | <0.257 | <0.433 | <0.433 | <0.336 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 49.9 | 70 I |
| | 09/25/06 | <0.305 | <0.338 | <0.257 | <0.433 | <0.433 | <0.336 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 63 | <18 |
| CEF-46-13I | 12/20/00 | <1.0 | <1.0 | <1.0 | 0.45 | 0.45 | NM | 0.89 | NM | NM | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.6 | <0.4 | <1.0 | NM | <540 |
| | 01/24/01 | <1.0 | <1.0 | 1.5 | 0.62 | 2.12 | 280 | 0.8 | NM | NM | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.60 | <0.40 | <1.0 | NM | 320 |
| | 03/14/03 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 318 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <0.100 | <0.100 | <0.100 | NM | 276 |
| | 06/05/03 | 1.10 | <1.0 | <1.0 | <1.0 | 1.1 | 254 | 0.19 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | NM | <100 |
| | 09/03/03 | <1.00 | <1.0 | <1.0 | <1.0 | <1.0 | 240 | 0.12 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | <0.30 | <0.100 | NM | <225 |
| | 12/11/03 | <1.00 | <1.0 | <1.0 | <0.30 | <1.0 | 114 | 0.5 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | <0.60 | <0.100 | NM | 208 |
| | 03/18/04 | <1.00 | <1.0 | <1.0 | <3.0 | <3.0 | 60.7 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.600 | <0.30 | <0.100 | NM | <250 |
| | 06/08/04 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | 83.8 | <2.02 | <2.02 | <2.02 | <5.05 | <2.02 | <2.02 | <5.05 | <1.01 | <1.01 | <5.05 | <0.202 | <2.02 | <0.202 | <0.505 | <0.202 | <0.202 | <0.202 | <2.02 | <0.02 | <0.005 | 0.078 ? | NM | <220 |
| | 09/21/04 | <1.00Y | <1.00Y | <1.00Y | <1.00Y | <1.00Y | 149Y | <2.22 J3Y | <2.22 J3Y | <2.22 J3Y | <5.56 J3Y | <2.22 J3Y | <2.22 J3Y | <5.56Y | <1.11Y | <1.11Y | <5.56Y | <0.222Y | <2.22Y | <0.222Y | <0.556Y | <0.222Y | <0.222Y | <0.222Y | <2.22 J3Y | <0.02Y | <0.005Y | 0.013?Y | NM | <200Y |
| | 12/01/04 | <0.143 | 0.9000 I | <0.1417 | 1.29 I | 2.19 I | 337.8 | <0.22 | <0.202 | <0.212 | <0.232 | <0.164 | <0.124 | <0.108 | <0.117 | <0.106 | <0.101 | <0.149 | <0.083 | <0.101 | <0.257 | <0.165 | <0.131 | <0.093 | <0.159 | <0.018 | <0.005 | 0.017 | NM | 150 I V |
| | 03/13/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | 133 | <0.101 | <0.133 | <0.210 | <0.0840 | <0.112 | <0.0900 | <0.0990 | <0.0780 | <0.108 | <0.135 | <0.106 | <0.0630 | <0.0600 | <0.0900 | <0.154 | <0.121 | <0.146 | <0.102 | <0.0550 | 0.013 | 0.00600 I V | NM | <18 |
| | 06/09/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | 62.7 | <0.101 | < 0.133 | < 0.210 | < 0.0840 | < 0.112 | < 0.0900 | < 0.0990 | < 0.0780 | < 0.108 | < 0.135 J3 | < 0.106 | < 0.0630 | < 0.0600 | < 0.0900 | < 0.154 | < 0.121 | < 0.146 | < 0.102 | < 0.055 | < 0.005 | 0.0180 | 461 | < 18 |
| | 09/06/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | 1.75 I | <0.100 | < 0.133 | <0.203 | <0.0840 | <0.112 | < 0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | < 0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | < 0.146 | <0.100 | < 0.055 | < 0.005 | 0.0370 | 519 | < 18 |
| | 12/06/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | 0.880 I | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 189 | <18 |
| | 03/29/06 | <0.140 | <0.126 | <0.176 | <0.298 | <0.298 | 0.400 I | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 104 | <18 |
| | 06/09/06 | <0.305 | <0.338 | <0.257 | <0.433 | <0.433 | <0.336 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 54.3 | 96 I |
| | 09/25/06 | <0.305 | <0.338 | <0.257 | <0.433 | <0.433 | <0.336 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 33.6 | <18 |
| CEF-46-14D | 12/20/00 | <1.0 | <1.0 | 0.42 | 0.37 | 0.79 | NM | <1.1 | NM | NM | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | 0.068 | <0.4 | 0.28 | NM | <550 |
| | 01/24/01 | <1.0 | <1.0 | <1.0 | 0.23 | 0.23 | <1.0 | <1.0 | NM | NM | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.60 | <0.40 | 0.17 | NM | <530 |
| | 03/14/03 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <0.100 | <0.100 | 0.102 | NM | 248 |
| | 06/04/03 | <1.00 | <1.0 | <1.0 | <1.0 | <1.0 | 1 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | 0.102 | NM | <211 |
| | 09/03/03 | <1.00 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | <0.30 | 0.188 | NM | <225 |
| | 12/10/03 | <1.00 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | <0.100 | 0.176 | NM | <200 |
| | 03/16/04 | <1.00 | <1.0 | <1.0 | <3.0 | <3.0 | 4.2 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | <0.10 | <0.100 | NM | <100 |
| | 06/08/04 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | 2.4 | <2.20 | <2.20 | <2.20 | <5.49 | <2.20 | <2.20 | <5.49 | <1.10 | <1.10 | <5.49 | <0.220 | <2.20 | <0.220 | <0.549 | <0.220 | <0.220 | <0.220 | <2.20 | 0.016 ? | <0.005 | 0.134 ? | NM | <220 |
| | 09/21/04 | <1.00Y | <1.00Y | <1.00Y | <1.00Y | <1.00Y | 2.97Y | <2.20 J3Y | <2.20 J3Y | <2.20 J3Y | <5.49 J3Y | <2.20 J3Y | <2.20 J3Y | <5.49Y | <1.10Y | <1.10Y | <5.49Y | <0.220Y | <2.20Y | <0.220Y | <0.549Y | <0.220Y | <0.220Y | <0.220Y | <2.20 J3Y | <0.02 QY | <0.005Y | 0.144Y | NM | <200Y |
| | 12/01/04 | <0.143 | <0.2010 | <0.1417 | <0.220 | <0.220 | 2.500 | <0.22 | <0.204 | <0.214 | <0.235 | <0.165 | <0.126 | <0.110 | <0.118 | <0.106 | <0.102 | <0.150 | <0.084 | <0.102 | <0.258 | <0.167 | <0.133 | <0.094 | <0.160 | <0.018 | <0.005 | 0.161 | NM | 80 I V |
| | 03/13/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | 3.190 | <0.101 | <0.133 | <0.210 | <0.084 | <0.112 | <0.0900 | <0.0990 | <0.0780 | <0.108 | <0.135 J3 | <0.106 | <0.0630 | <0.0600 | <0.0900 | <0.154 | <0.121 | <0.146 | <0.102 | <0.0550 | <0.005 | 0.169 | NM | <20 |
| | 06/09/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | 1.38 I | <0.101 | < 0.133 | < 0.210 | < 0.0840 | < 0.112 | < 0.0900 | < 0.0990 | < 0.0780 | < 0.108 | < 0.135 J3 | < 0.106 | < 0.0630 | < 0.0600 | < 0.0900 | < 0.154 | < 0.121 | < 0.146 | < 0.102 | < 0.055 | 0.005 | 0.271 | 5.16 | < 20 |
| | 09/06/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | 5.30 | <0.100 | < 0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | < 0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | < 0.146 | <0.100 | < 0.055 | 0.005 | 0.316 | 29.3 ? | <18 |
| | 12/06/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | 6.21 | <0.111 | <0.148 | <0.228 | <0.0933 | <0.124 | <0.100 | <0.111 | <0.0889 | <0.120 | <0.150 | <0.118 | <0.0744 | <0.0667 | <0.100 | <0.167 | <0.134 | <0.162 | <0.111 | NM | NM | NM | 15.3 | <18 |
| | 03/29/06 | <0.140 | <0.126 | <0.176 | <0.298 | <0.298 | 1.07 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 2.12 | <18 |
| | 06/08/06 | <0.305 | <0.338 | <0.257 | <0.433 | <0.433 | <0.336 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | <2.00 | 94 I |
| | 09/24/06 | <0.305 | <0.338 | <0.257 | <0.433 | <0.433 | <0.336 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 2.91 J4 | <18 |
| CEF-46-15I | 12/20/00 | <1.0 | <1.0 | <1.0 | <1.0 | <4.0 | NM | <1.1 | NM | NM | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.6 | <0.4 | <1.0 | NM | <560 |
| | 01/24/01 | 0.17 | <1.0 | <1.0 | <1.0 | 0.17 | <1.0 | <1.0 | NM | NM | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.60 | <0.40 | <1.0 | NM | <530 |
| | 03/13/03 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <2.4 | <2.4 | <2.4 | <2.4 | <2.4 | <2.4 | <2.4 | <2.4 | <2.4 | <2.4 | <2.4 | <2.4 | <2.4 | <2.4 | <2.4 | <2.4 | <2.4 | <2.4 | <0.100 | <0.100 | <0.100 | NM | <200 |
| | 06/04/03 | <1.00 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | NM | <222 |
| | 09/03/03 | <1.00 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | 0.42 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | <0.10 | <0.100 | NM | <225 |
| | 12/10/03 | <1.00 | <1.0 | <1.0 | <3.0 | <1.0 | <1.0 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | 0.42 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | <0.100 | <0.100 | NM | <200 |
| | 03/16/04 | <1.00 | <1.0 | <1.0 | <3.0 | <3.0 | <1.0 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.100 | <0.10 | <0.100 | NM | <100 |
| | 06/08/04 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <2.20 | <2.20 | <2.20 | <5.49 | <2.20 | <2.20 | <5.49 | <1.10 | <1.10 | <5.49 | <0.220 | <2.20 | <0.220 | <0.549 | <0.220 | <0.220 | <0.220 | <2.20 | 0.021 ? | <0.005 | 0.005 ? | NM | <220 |
| | 09/21/04 | <1.00Y | <1.00Y | <1.00Y | <1.00Y | <1.00Y | <1.00Y | <2.11Y | <2.11 J3Y | <2.11 J3Y | <5.26Y | <2.11Y | <2.11Y | <5.26Y | <1.05Y | <1.05Y | <5.26Y | <0.211Y | <2.11Y | <0.211Y | <0.526Y | <0.211Y | <0.211Y | <0.211Y | <2.11Y | <0.02 QY | <0.005Y | 0.006 ?Y | NM | <220Y |
| | 12/01/04 | <0.143 | <0.2010 | <0.1417 | <0.220 | <0.220 | <0.2359 | <0.23 | <0.206 | <0.216 | <0.237 | <0.167 | <0.127 | <0.111 | <0.120 | <0.107 | <0.103 | <0.152 | <0.085 | <0.103 | <0.262 | <0.168 | <0.134 | <0.095 | <0.162 | <0.018 | <0.005 | 0.005 I | NM | 110 I V |
| | 03/13/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | <0.236 | <0.101 | <0.133 | <0.210 | <0.0840 | <0.112 | <0.0900 | <0.0990 | <0.0780 | <0.108 | <0.135 | <0.106 | <0.0630 | <0.0600 | <0.0900 | <0.154 | <0.121 | <0.146 | <0.102 | <0.0550 | <0.005 | 0.00500 I V | NM | <18.0 |
| | 06/09/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | < 0.236 | <0.101 | < 0.133 | < 0.210 | < 0.0840 | < 0.112 | < 0.0900 | < 0.0990 | < 0.0780 | < 0.108 | < 0.135 J3 | < 0.106 | < 0.0630 | < 0.0600 | < 0.0900 | < 0.154 | < 0.121 | < 0.146 | < 0.102 | < 0.055 | < 0.05 | 0.0100 | 25.6 | < 20 |
| | 09/06/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | < 0.236 | <0.100 | < 0.133 | <0.203 | < 0.0840 | < 0.112 | < 0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | < 0.146 | <0.100 | < 0.055 | <0.005 | <0.00360 | 34.8 ? | <18 |
| | 12/06/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | <0.236 | <0.111 | <0.148 | <0.226 | <0.0933 | <0.124 | <0.100 | <0.111 | <0.0889 | <0.120 | <0.150 | <0.118 | <0.0744 | <0.0667 | <0.100 | <0.167 | <0.134 | <0.162 | <0.111 | NM | NM | NM | 20.3 | <18 |
| | 03/30/06 | <0.140 | <0.126 | <0.176 | <0.298 | <0.298 | <0.236 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 29.8 | <18 |
| | 06/09/06 | <0.305 | <0.338 | <0.257 | <0.433 | <0.433 | <0.336 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 26.7 | 28 I |
| | 09/24/06 | <0.305 | <0.338 | <0.257 | <0.433 | <0.433 | <0.336 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 23.9 | <18 |
| Groundwater Criteria[1] | | 1 | 30 | 40 | 20 | n/a | 20 | 14 | 28 | 28 | 210 | 20 | 280 | 210 | 2100 | 280 | 210 | 0.05 | 4.8 | 0.05 | 0.5 | 0.2 | 0.05 | 0.005 | 210 | 10 * | 1 * | n/a | 250 * | 5000 |
| Natural Attenuation Default Source[2] | | 100 | 300 | 400 | 200 | n/a | 200 | 140 | 280 | 280 | 2100 | 200 | 2800 | 2100 | 21000 | 2800 | 2100 | 5 | 480 | 5 | 50 | 20 | 5 | 0.5 | 2100 | 100 * | 10 * | n/a | n/a | 50000 |

# TABLE 3
## GROUNDWATER ANALYTICAL RESULTS
### BUILDING 46 NUTRIENT INJECTION SYSTEM
### NAS CECIL FIELD
### JACKSONVILLE, FLORIDA

| Well | Date | Benzene | Ethyl Benzene | Toluene | Xylene | BTEX | Methyl tert-butyl ether | Naphthalene | 1-Methylnaphthalene | 2-Methylnaphthalene | Acenaphthylene | Acenaphthene | Fluorene | Phenanthrene | Anthracene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CEF-46-16I | 12/06/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | <0.236 | <0.102 | <0.136 | <0.207 | <0.0857 | <0.114 | <0.0918 | <0.102 | <0.0616 |
| CEF-46-17D | 12/06/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | 27.4 | <0.105 | <0.140 | <0.214 | <0.0884 | <0.118 | <0.0947 | <0.105 | <0.0842 |
| CEF-46-18I | 12/07/05 | <0.143 | <0.201 | <0.142 | 0.440 I | 0.440 I | 4.17 I | <0.111 | <0.148 | <0.226 | <0.0933 | <0.124 | <0.100 | <0.111 | <0.0689 |
| CEF-46-19I | 12/07/05 | [illegible] | 0.640 I | <0.142 | 4.86 | 26.46 | 27.7 | <0.103 | <0.137 | <0.209 | <0.0866 | <0.115 | <0.0928 | <0.103 | <0.0825 |
| CEF-46-20I | 12/07/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | 0.940 I | <0.109 | <0.145 | <0.221 | <0.0913 | <0.122 | <0.0978 | <0.109 | <0.0870 |
| CEF-46-21I | 12/20/00 | <1.0 | <1.0 | <1.0 | <1.0 | <4.0 | NM | <1.1 | NM | NM | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 |
| | 01/25/01 | 0.25 | <1.0 | 0.7 | <1.0 | 0.95 | <1.0 | <1.0 | NM | NM | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| | 03/13/03 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <2.2 | <2.2 | <2.2 | <2.2 | <2.2 | <2.2 | <2.2 | <2.2 |
| | 06/05/03 | <1.00 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 09/03/03 | <1.00 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 0.18 | 0.27 | 0.2 | <0.10 | 0.5 | 0.67 | 2.82 | 0.16 |
| | 12/11/03 | <1.00 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 03/18/04 | <1.00 | <1.0 | <1.0 | <3.0 | <3.0 | <1.0 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 06/08/04 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <2.04 | <2.04 | <2.04 | <5.10 | <2.04 | <2.04 | <5.10 | <1.02 |
| | 09/21/04 | <1.00Y | <1.00Y | <1.00Y | <1.00Y | <1.00Y | <1.00Y | <2.20Y | <2.20 J3Y | <2.20 J3Y | <5.49Y | <2.20Y | <2.20Y | <5.49Y | <1.10Y |
| | 12/01/04 | <0.143 | <0.2010 | <0.1417 | <0.220 | <0.220 | <0.2359 | <0.23 | <0.206 | <0.218 | <0.237 | <0.167 | <0.127 | <0.111 | <0.120 |
| | 03/13/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | <0.236 | <0.101 | <0.133 | <0.210 | <0.0840 | <0.112 | <0.0900 | <0.0990 | <0.0780 |
| | 06/09/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | < 0.236 | <0.101 | < 0.133 | < 0.210 | < 0.0840 | < 0.112 | < 0.0900 | < 0.0990 | < 0.0780 |
| | 09/06/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | < 0.236 | <0.100 | <0.133 | <0.203 | <0.0840 | < 0.112 | < 0.0900 | <0.100 | <0.0800 |
| | 12/07/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | <0.236 | <0.111 | <0.148 | <0.226 | <0.0933 | <0.124 | <0.100 | <0.111 | <0.0689 |
| | 03/29/06 | <0.140 | <0.126 | <0.176 | <0.298 | <0.298 | <0.236 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 |
| | 06/09/06 | <0.305 | <0.338 | <0.257 | <0.433 | <0.433 | <0.336 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 |
| | 08/24/06 | <0.305 | <0.338 | <0.257 | <0.433 | <0.433 | <0.336 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 |
| CEF-46-22I | 12/07/05 | <0.143 | <0.201 | <0.142 | 0.570 I | 0.570 I | <0.236 | <0.105 | <0.140 | <0.214 | <0.0884 | <0.118 | <0.0947 | <0.105 | <0.0842 |
| CEF-46-23D | 12/07/05 | 0.800 I | 2.84 | 1.48 I | 42.7 | 45.12 | 0.320 I | <0.111 | <0.148 | <0.226 | <0.0933 | <0.124 | <0.100 | <0.111 | <0.0689 |
| CEF-46-24D | 12/20/00 | <1.0 | <1.0 | 0.47 | 0.41 | 0.88 | NM | <1.1 | NM | NM | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 |
| | 01/25/01 | 8.3 | 0.81 | 1 | 2 | 12.11 | <1.0 | <1.0 | NM | NM | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| | 03/14/03 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 |
| | 06/05/03 | <1.00 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 09/03/03 | <1.00 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 12/10/03 | <1.00 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 03/16/04 | <1.00 | <1.0 | <1.0 | <3.0 | <3.0 | <1.0 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 06/08/04 | <1.00 | <1.00 | <1 00 | <1.00 | <1.00 | <1.00 | <2.20 | <2.20 | <2.20 | <5.49 | <2.20 | <2.20 | <5.49 | <1.10 |
| | 09/21/04 | <1.00Y | <1.00Y | <1.00Y | <1.00Y | <1.00Y | <1.00Y | <2.04Y | <2.04 J3Y | <2.04 J3Y | <5.10Y | <2.04Y | <2.04Y | <5.10Y | <1.02Y |
| | 12/01/04 | <0.143 | <0.2010 | <0.1417 | <0.220 | <0.220 | <0.2359 | 0.40 I | <0.200 | <0.210 | <0.230 | <0.162 | <0.123 | <0.107 | <0.116 |
| | 03/13/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | <0.236 | <0.101 | <0.133 | <0.210 | <0.0840 | <0.112 | <0.0900 | <0.0990 | <0.0780 |
| | 06/09/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | < 0.236 | <0.101 | < 0.133 | < 0.210 | < 0.0840 | < 0.112 | < 0.0900 | < 0.0990 | < 0.0780 |
| | 09/06/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | <0.236 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 |
| | 12/07/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | <0.236 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 |
| | 03/29/06 | <0.140 | <0.126 | <0.176 | <0.298 | <0.298 | <0.236 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 |
| | 06/09/06 | <0.305 | <0.388 | <0.257 | <0.433 | <0.433 | <0.336 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 |
| | 08/24/06 | <0.305 | <0.338 | <0.257 | <0.433 | <0.433 | <0.336 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 |
| CEF-46-25I | 12/20/00 | <1.0 | <1.0 | <1.0 | <1.0 | <4.0 | NM | <1.1 | NM | NM | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 |
| | 01/25/01 | 0.25 | <1.0 | <1.0 | 0.42 | 0.67 | <1.0 | <1.0 | NM | NM | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| | 03/13/03 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <2.3 | <2.3 | <2.3 | <2.3 | <2.3 | <2.3 | <2.3 | <2.3 |
| | 06/04/03 | <1.00 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 09/03/03 | <1.00 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 12/10/03 | <1.00 | <1.0 | <1.0 | <3.0 | <1.0 | <1.0 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 03/16/04 | <1.00 | <1.0 | <1.0 | <3.0 | <3.0 | <1.0 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 06/08/04 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <1.00 | <2.02 | <2.02 | <2.02 | <5.05 | <2.02 | <2.02 | <5.05 | <1.01 |
| | 09/21/04 | <1.00Y | <1.00Y | <1.00Y | <1.00Y | <1.00Y | <1.00Y | <2.11Y | <2.11 J3Y | <2.11 J3Y | <5.26Y | <2.11Y | <2.11Y | <5.26Y | <1.05Y |
| | 12/01/04 | <0.143 | 0.4800 I | <0.1417 | <0.220 | 0.4800 I | <0.2359 | <0.22 | <0.204 | <0.214 | <0.235 | <0.168 | <0.126 | <0.110 | <0.118 |
| | 03/13/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | <0.236 | <0.101 | <0.133 | <0.210 | <0.0840 | <0.112 | <0.0900 | <0.0990 | <0.0780 |
| | 06/09/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | < 0.236 | <0.101 | < 0.133 | < 0.210 | < 0.0840 | < 0.112 | < 0.0900 | < 0.0990 | < 0.0760 |
| | 09/06/05 | <0.143 | <0.201 | <0.142 | 0.590 I | <0.220 | < 0.236 | 0.260 I | < 0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 |
| | 12/07/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | <0.236 | <0.102 | <0.136 | <0.207 | <0.0857 | <0.114 | <0.0918 | <0.102 | <0.0616 |
| | 03/29/06 | <0.140 | 0.126 | <0.176 | <0.298 | <0.298 | <0.236 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 |
| | 06/09/06 | <0.305 | <0.388 | <0.257 | <0.433 | <0.433 | <0.336 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 |
| | 08/24/06 | <0.305 | <0.388 | <0.257 | <0.433 | <0.433 | <0.336 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 |
| CEF-46-26I | 12/20/00 | 1300 | 78 | 41 | 310 | 1729 | NM | <1.1 | NM | NM | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 |
| | 01/25/01 | 2400 | 270 | 100 | 820 | 3590 | <5.0 | <1.0 | NM | NM | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| | 03/14/03 | [illegible] | 23.3 | 5.4 | 199 | 1094 | 15.9 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 |
| | 06/05/03 | 645 | 30 | <10.0 | 314 | 1189 | 21 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 09/03/03 | 902 | 24 | <10.0 | 347 | 1273 | 17.0 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | 0.12 | <0.10 |
| | 12/11/03 | 693 | 16.5 | 7.9 | 198 | 915 | 19.4 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 03/16/04 | 870 | 6.3 | 6.3 ? | 162 | 1046.6 | 20.3 | <2.20 | <2.20 | <2.20 | <5.49 | <2.20 | <2.20 | <5.49 | <1.10 |
| | 06/08/04 | 832 | 87.9 | 47.7 | 371 | 1338.6 | 25.4 | 0.13 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 |
| | 09/21/04 | 184Y | 27.7Y | 7.84Y | 233Y | 452.54Y | 141Y | <2.04Y | <2.04 J3Y | <2.04 J3Y | <5.10Y | <2.04Y | <2.04Y | <5.10Y | <1.02Y |
| | 12/01/04 | 168 | 16.67 | 6.42 | 128 | 319.09 | 12.05 | 0.56 I | <0.206 | <0.216 | <0.237 | <0.167 | <0.127 | <0.111 | <0.120 |
| | 03/13/05 | 5.17 | 2.03 | 0.420 I | 17.6 | 25.22 | 1.83 I | 0.216 I | <0.133 | <0.210 | <0.0840 | <0.112 | <0.0900 | <0.0990 | <0.0780 |
| | 06/09/05 | 9.21 | 4.58 | 0.570 I | 42.4 | 56.86 | 2.33 | <0.101 | < 0.133 | < 0.210 | < 0.0840 | < 0.112 | < 0.0900 | < 0.0990 | < 0.0780 |
| | 09/06/05 | 1.16 I | 0.900 I | <0.142 | 13.3 | 15.36 | <0.236 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | < 0.0900 | <0.100 | <0.0800 |
| | 12/07/05 | 6.72 | 0.740 I | <0.142 | 11.5 | 18.96 | 0.460 I | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 |
| | 03/29/06 | 1.00 | 0.490 I | <0.176 | 9.64 | 11.13 | 1.89 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 |
| | 06/09/06 | 0.460 I | <0.338 | <0.257 | 6.35 | 6.81 | 0.380 I | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 |
| | 08/24/06 | 0.490 I | <0.338 | <0.257 | 4.10 | 5.05 | <0.336 | <0.100 | <0.133 | <0.203 | <0.0840 | <0.112 | <0.0900 | <0.100 | <0.0800 |
| CEF-46-27D | 12/07/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | <0.236 | <0.101 | <0.134 | <0.205 | <0.0846 | <0.113 | <0.0909 | <0.101 | <0.0609 |
| CEF-46-28I | 12/07/05 | 13.6 | <0.201 | <0.142 | 1.34 I | 14.94 | 18.5 | <0.109 | <0.145 | <0.221 | <0.0913 | <0.122 | <0.0978 | <0.109 | <0.0870 |
| CEF-46-29I | 12/07/05 | 19.8 | <0.201 | <0.142 | 2.46 | 22.26 | 0.350 I | <0.103 | <0.137 | <0.209 | <0.0866 | <0.115 | <0.0928 | <0.103 | <0.0825 |
| CEF-46-30I | 12/07/05 | <0.143 | <0.201 | <0.142 | <0.220 | <0.220 | <0.236 | <0.111 | <0.148 | <0.226 | <0.0933 | <0.124 | <0.100 | <0.111 | <0.0689 |
| CEF-46-31I | 12/07/05 | 0.560 I | <0.201 | <0.142 | <0.220 | 0.560 I | <0.236 | <0.111 | <0.148 | <0.226 | <0.0933 | <0.124 | <0.100 | <0.111 | <0.0689 |
| Groundwater Criteria[1] | | 1 | 30 | 40 | 20 | n/a | 20 | 14 | 28 | 28 | 210 | 20 | 280 | 210 | 2100 |
| Natural Attenuation Default Source[1] | | 100 | 300 | 400 | 200 | n/a | 200 | 140 | 280 | 280 | 2100 | 200 | 2800 | 2100 | 21000 |

| Well | Date | Fluoranthene | Pyrene | Benzo (a) anthracene | Chrysene | Benzo (b) fluoranthene | Benzo (k) fluoranthene | Benzo (a) pyrene | Indeno (1, 2, 3-cd) pyrene | Dibenzo (a,h) anthracene | Benzo (g,h,i) perylene | Nitrate (mg/L) | Nitrite (mg/L) | Orthophosphate (mg/L) | Sulfate (mg/L) | TRPH (ug/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CEF-46-16I | 12/06/05 | <0.110 | <0.138 | <0.0684 | <0.0684 | <0.0612 | <0.0918 | <0.153 | <0.123 | <0.149 | <0.102 | NM | NM | NM | 20.5 | <18 |
| CEF-46-17D | 12/06/05 | <0.114 | <0.142 | <0.112 | <0.0705 | <0.0632 | <0.0947 | <0.158 | <0.127 | <0.154 | <0.105 | NM | NM | NM | 982 | 158 I |
| CEF-46-18I | 12/07/05 | <0.120 | <0.150 | <0.118 | <0.0744 | <0.0667 | <0.100 | <0.167 | <0.134 | <0.162 | <0.111 | NM | NM | NM | 84.7 | <20 |
| CEF-46-19I | 12/07/05 | <0.111 | <0.139 | <0.109 | <0.0691 | <0.0619 | <0.0928 | <0.155 | <0.125 | <0.151 | <0.103 | NM | NM | NM | 1230 | <20 |
| CEF-46-20I | 12/07/05 | <0.117 | <0.147 | <0.115 | <0.0728 | <0.0652 | <0.0978 | <0.163 | <0.132 | <0.159 | <0.109 | NM | NM | NM | 112 | <18 |
| CEF-46-21I | 12/20/00 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.6 | <0.4 | <1.0 | NM | <550 |
| | 01/25/01 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.60 | <0.40 | <1.0 | NM | 300 |
| | 03/13/03 | <2.2 | <2.2 | <2.2 | <2.2 | <2.2 | <2.2 | <2.2 | <2.2 | <2.2 | <2.2 | <0.100 | <0.100 | <0.100 | NM | <200 |
| | 06/05/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | NM | <100 |
| | 09/03/03 | 0.35 | 0.16 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | 0.16 | <0.10 | <0.100 | NM | 308 |
| | 12/11/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | <0.10 | <0.100 | NM | <200 |
| | 03/18/04 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.300 | <0.30 | <0.100 | NM | <222 |
| | 06/08/04 | <1.02 | <5.10 | <0.204 | <2.04 | <0.204 | <0.510 | <0.204 | <0.204 | <0.204 | <2.04 | <0.020 | <0.005 | 0.010 ? | NM | <200 |
| | 09/21/04 | <1.10Y | <5.49Y | <0.220Y | <2.20Y | <0.220Y | <0.549Y | <0.220Y | <0.220Y | <0.220Y | <2.20Y | <0.04 QY | <0.005Y | 0.006Y | NM | <220Y |
| | 12/01/04 | <0.107 | <0.103 | <0.152 | <0.085 | <0.103 | <0.262 | <0.168 | <0.134 | <0.095 | <0.162 | <0.016 | <0.005 | 0.007 | NM | 100 I V |
| | 03/13/05 | <0.108 | <0.135 J3 | <0.106 | <0.0630 | <0.0600 | <0.0900 | <0.154 | <0.121 | <0.146 | <0.102 | <0.0550 | <0.005 | 0.00500 I V | NM | <18 |
| | 06/09/05 | < 0.108 | < 0.135 J3 | < 0.106 | < 0.0630 | < 0.0600 | < 0.0900 | < 0.154 | < 0.121 | < 0.146 | < 0.102 | < 0.055 | < 0.05 | < 0.00360 | 14.1 | < 18 |
| | 09/06/05 | <0.108 | <0.135 | <0.106 | <0.0670 | < 0.0600 | < 0.0900 | <0.150 | < 0.121 | < 0.146 | <0.100 | < 0.055 | <0.005 | <0.00360 | 29.5 | < 18 |
| | 12/07/05 | <0.120 | <0.150 | <0.118 | <0.0744 | <0.0667 | <0.100 | <0.167 | <0.134 | <0.162 | <0.111 | NM | NM | NM | 10.6 | <20 |
| | 03/29/06 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 14.9 | <18 |
| | 06/09/06 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 12.6 | 76 I |
| | 08/24/06 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 26.2 | 35 I |
| CEF-46-22I | 12/07/05 | <0.114 | <0.142 | <0.112 | <0.0705 | <0.0632 | <0.0947 | <0.158 | <0.127 | <0.154 | <0.105 | NM | NM | NM | 1060 | <20 |
| CEF-46-23D | 12/07/05 | <0.120 | <0.150 | <0.118 | <0.0744 | <0.0667 | <0.100 | <0.167 | <0.134 | <0.162 | <0.111 | NM | NM | NM | 6310 | 102 I |
| CEF-46-24D | 12/20/00 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.6 | <0.4 | 0.16 | NM | <500 |
| | 01/25/01 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.60 | <0.40 | 0.19 | NM | <510 |
| | 03/14/03 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <0.100 | 0.21 | 0.841 | NM | <200 |
| | 06/05/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | 0.439 | NM | <100 |
| | 09/03/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | <0.30 | 0.212 | NM | <225 |
| | 12/10/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | 0.16 | 0.118 | NM | <200 |
| | 03/16/04 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.300 | <0.10 | <0.100 | NM | <100 |
| | 06/08/04 | <1.10 | <5.49 | <0.220 | <2.20 | <0.220 | <0.549 | <0.220 | <0.220 | <0.220 | <2.20 | 0.018 ? | <0.005 | 0.679 ? | NM | <200 |
| | 09/21/04 | <1.02Y | <5.10Y | <0.204Y | <2.04Y | <0.204Y | <0.510Y | <0.204Y | <0.204Y | <0.204Y | <0.204Y | <0.02 QY | <0.005Y | 0.027Y | NM | <200Y |
| | 12/01/04 | <0.104 | <0.100 | <0.147 | <0.082 | <0.100 | <0.254 | <0.163 | <0.130 | <0.092 | <0.157 | <0.018 | <0.005 | <0.003 | NM | 130 I V |
| | 03/13/05 | <0.108 | <0.135 J3 | <0.106 | <0.0630 | <0.0600 | <0.0900 | <0.154 | <0.121 | <0.146 | <0.102 | <0.0550 | <0.005 | 0.138 | NM | <18 |
| | 06/09/05 | < 0.108 | < 0.135 J3 | < 0.106 | < 0.0630 | < 0.0600 | < 0.0900 | < 0.154 | < 0.121 | < 0.146 | < 0.102 | < 0.055 | < 0.005 | 0.154 | 2030 | < 20 |
| | 09/06/05 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | <0.055 | <0.005 | 0.0960 | 1840 | <18 |
| | 12/07/05 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 2120 | <22 |
| | 03/29/06 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 1800 | <18 |
| | 06/09/06 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 1430 | 125 I |
| | 08/24/06 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 732 | 31 I |
| CEF-46-25I | 12/20/00 | <0.23 | <0.23 | <0.23 | <0.23 | <0.23 | <0.23 | <0.23 | <0.23 | <0.23 | <0.23 | <0.6 | <0.4 | <1.0 | NM | <560 |
| | 01/25/01 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.60 | <0.40 | <1.0 | NM | 320 |
| | 03/13/03 | <2.3 | <2.3 | <2.3 | <2.3 | <2.3 | <2.3 | <2.3 | <2.3 | <2.3 | <2.3 | <0.100 | 0.15 | <0.100 | NM | <200 |
| | 06/04/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | NM | <200 |
| | 09/03/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.300 | <0.30 | <0.100 | NM | <225 |
| | 12/10/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | <0.100 | <0.100 | NM | <200 |
| | 03/16/04 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.300 | <0.10 | <0.100 | NM | <111 |
| | 06/08/04 | <1.01 | <5.05 | <0.202 | <2.02 | <0.202 | <0.505 | <0.202 | <0.202 | <0.202 | <2.02 | <0.020 | <0.005 | 0.040 ? | NM | <200 |
| | 09/21/04 | <1.05Y | <5.26Y | <0.211Y | <2.11Y | <0.211Y | <0.526Y | <0.211Y | <0.211Y | <0.211Y | <2.11Y | <0.02 QY | <0.005Y | 0.035 ?Y | NM | <220Y |
| | 12/01/04 | <0.106 | <0.102 | <0.150 | <0.084 | <0.102 | <0.259 | <0.167 | <0.133 | <0.094 | <0.160 | <0.018 | <0.005 | <0.027 | NM | 100 I V |
| | 03/13/05 | <0.108 | <0.135 J3 | <0.105 | <0.0630 | <0.0600 | <0.0900 | <0.154 | <0.121 | <0.146 | <0.102 | <0.0550 | <0.005 | 0.0176 V | NM | <18 |
| | 06/09/05 | < 0.108 | < 0.135 J3 | < 0.106 | < 0.0630 | < 0.0600 | < 0.0900 | < 0.154 | < 0.121 | < 0.146 | < 0.102 | < 0.055 | < 0.005 | 0.0210 | 622 | < 20 |
| | 09/06/05 | <0.108 | <0.135 | < 0.106 | <0.0670 | < 0.0600 | < 0.0900 | <0.150 | < 0.121 | < 0.146 | <0.100 | <0.055 | <0.005 | 0.0230 | 477 | < 20 |
| | 12/07/05 | <0.110 | <0.138 | <0.108 | <0.0684 | <0.0612 | <0.0918 | <0.153 | <0.123 | <0.149 | <0.102 | NM | NM | NM | 271 | <20 |
| | 03/29/06 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 93.2 | <18 |
| | 06/09/06 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0600 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 66.1 | 68 I |
| | 08/24/06 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 33.0 | 38.0 I |
| CEF-46-26I | 12/20/00 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.22 | <0.6 | <0.4 | <1.0 | NM | <530 |
| | 01/25/01 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.60 | <0.40 | <1.0 | NM | 890 |
| | 03/14/03 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <0.100 | 0.35 | <0.100 | NM | 628 |
| | 06/05/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | NM | 598 |
| | 09/03/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.300 | <0.10 | <0.100 | NM | 488 |
| | 12/11/03 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.300 | <0.30 | <0.100 | NM | 954 |
| | 03/16/04 | <1.10 | <5.49 | <0.220 | <2.20 | <0.220 | <0.549 | <0.220 | <0.220 | <0.220 | <2.20 | 0.02 | <0.005 | 0.071 ? | NM | 380 |
| | 06/08/04 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | <0.100 | <0.60 | <0.100 | NM | 524 |
| | 09/21/04 | <1.02Y | <5.10Y | <0.204Y | <2.04Y | <0.204Y | <0.510Y | <0.204Y | <0.204Y | <0.204Y | <2.04Y | <0.02 QY | <0.005Y | 0.047 ?Y | NM | 280Y |
| | 12/01/04 | <0.107 | <0.103 | <0.152 | <0.085 | <0.103 | <0.262 | <0.168 | <0.134 | <0.095 | <0.162 | <0.018 | <0.005 | 0.03 | NM | 1500 |
| | 03/13/05 | <0.108 | <0.135 J3 | <0.106 | <0.0630 | <0.0600 | <0.0900 | <0.154 | <0.121 | <0.146 | <0.102 | <0.0550 | <0.005 | 0.00500 I V | NM | 59 I |
| | 06/09/05 | < 0.108 | < 0.135 J3 | < 0.106 | < 0.0630 | < 0.0600 | < 0.0900 | < 0.154 | < 0.121 | < 0.146 | < 0.102 | < 0.055 | < 0.005 | 0.0460 | 3180 | 1730 |
| | 09/06/05 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | <0.055 | <0.005 | 0.0410 | 2300 | 67 I |
| | 12/07/05 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 1890 | <18 |
| | 03/29/06 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 415 | 350 |
| | 06/09/06 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 1460 | 107 I |
| | 08/24/06 | <0.108 | <0.135 | <0.106 | <0.0670 | <0.0600 | <0.0900 | <0.150 | <0.121 | <0.146 | <0.100 | NM | NM | NM | 878 | 19 I |
| CEF-46-27D | 12/07/05 | <0.109 | <0.136 | <0.107 | <0.0677 | <0.0606 | <0.0909 | <0.152 | <0.122 | <0.147 | <0.101 | NM | NM | NM | 2.22 | <18 |
| CEF-46-28I | 12/07/05 | <0.117 | <0.147 | <0.115 | <0.0728 | <0.0652 | <0.0978 | <0.163 | <0.132 | <0.159 | <0.106 | NM | NM | NM | 3300 | <18 |
| CEF-46-29I | 12/07/05 | <0.111 | <0.139 | <0.109 | <0.0691 | <0.0619 | <0.0928 | <0.155 | <0.125 | <0.151 | <0.103 | NM | NM | NM | 2220 | <18 |
| CEF-46-30I | 12/07/05 | <0.120 | <0.150 | <0.118 | <0.0744 | <0.0667 | <0.100 | <0.167 | <0.134 | <0.162 | <0.111 | NM | NM | NM | 121 | <18 |
| CEF-46-31I | 12/07/05 | <0.120 | <0.150 | <0.118 | <0.0744 | <0.0667 | <0.100 | <0.167 | <0.134 | <0.162 | <0.111 | NM | NM | NM | 2170 | <20 |
| Groundwater Criteria[1] | | 280 | 210 | 0.05 | 4.8 | 0.05 | 0.5 | 0.2 | 0.05 | 0.005 | 210 | 10 * | 1 * | n/a | 250 * | 5000 |
| Natural Attenuation Default Source[1] | | 2800 | 2100 | 5 | 480 | 5 | 50 | 20 | 5 | 0.5 | 2100 | 100 * | 10 * | n/a | n/a | 50000 |

All values reported in ug/L unless otherwise noted
1 = Ch 62-777 F.A.C Groundwater Cleanup Target Levels (GCTL) reported in ug/L unless otherwise noted by "*"
(yellow) Concentrations exceed their respective GCTL value
* GCTL Reported in mg/L

NM = Not Measured
n/a = Not applicable
? = Rejected during data validation
"V" = the analyte was detected in both the sample and the associated method blank

L = Off-scale high, actual value is known to be greater than the value given.
I= The reported value is between the laboratory method and detection limit
J3 = The reported value failed to meet the established quality control criteria for either precision and/or accuracy
Q= Sample was represerved out of hold time due to preservative with nitric acid instead of sulfuric acid. The lab error did not impact validity of reported values
Y = Sample was received into laboratory out of acceptable temperature range.

**TABLE 4**
**SOIL ANALYTICAL RESULTS**

BUILDING 46 NUTRIENT INJECTION SYSTEM
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

| Soil Boring Number | Sample Date | Benzene | Ethyl Benzene | Toluene | Xylene | BETX | Methyl tert-butyl ether | Naphthalene | Acenaphthylene | Acenaphthene | Fluorene | Phenanthrene | Anthracene | Fluoranthene | 1-Methylnaphthalene | 2-Methylnaphthalene | Pyrene | Benzo (a) anthracene | Chrysene | Benzo (b) fluoranthene | Benzo (k) fluoranthene | Benzo (a) pyrene | Indeno (1, 2, 3-cd) pyrene | Dibenzo (a,h) anthracene | Benzo (g,h,i) perylene | TRPH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SB-1 | 01/04/01 | <0.9 | 65 | 14 | 390 | 469 | 3.1 | 73 | <0.18 | <1.8 | 1.235 | 0.67 | <0.18 | 0.176 | -- | -- | 0.039 | <.018 | 0.48 | 0.02 | 0.0243 | 0.0102 | 0.0063 | <0.018 | <0.018 | 9900 |
| | 06/27/01 | 0.61 | 34 | 9.1 | 110 | 153.71 | <0.0012 | 1.4 | <0.18 | 0.16 | 0.15 | 0.15 | <0.18 | 0.051 | -- | -- | 0.012 | 0.022 | 0.19 | 0.012 | 0.013 | 0.0056 | 0.0073 | <0.018 | 0.0049 | 150 |
| | 09/20/01 | 0.65 | 6.1 | 0.69 | 40 | 47.44 | <0.15 | 6.8 | <0.2 | <0.2 | <0.2 | 0.28 | <0.2 | 0.11 | -- | -- | 0.019 | <0.02 | 0.15 | 0.034 | 0.026 | 0.018 | 0.011 | 0.026 | 0.024 | 1500 |
| | 12/12/01 | 0.069 | 0.13 | 0.013 | 0.55 | 0.762 | 0.0084 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.02 | -- | -- | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | 18 |
| | 03/07/02 | 3 | 67 | 7.1 | 200 | 277.1 | <1.2 | 23 | <0.19 | <0.19 | <0.19 | 0.27 | <0.19 | 0.057 | -- | -- | 0.0057 | 0.023 | 0.26 | <0.019 | <0.19 | 0.0053 | <0.018 | <0.019 | <0.019 | 1800 |
| | 06/20/02 | 0.15 | 7.9 | 0.82 | 27 | 35.87 | <.11 | 5.2 | <0.18 | <0.18 | 0.92 J | 0.086 J | <0.18 | 0.024 J | -- | -- | <0.018 | <0.018 | 0.04 | <0.018 | <0.018 | .0035 J | .0038 J | <0.018 | <0.018 | 180 |
| | 09/26/02 | 2.17 | 97.7 | 10.7 | 532 | 642.57 | <1.19 | 21.1 | <0.20 | <0.20 | <0.20 | 0.27 J | <0.20 | 0.054 J | -- | -- | 0.017 J | 0.032 J | <0.020 | 0.015 J | 0.022 J | <0.020 | <0.020 | 0.017 J | 0.012 J | 800 |
| | 12/13/02 | 0.153 | 4.17 | 0.406 | 27.8 | 32.5 | <0.166 | 2.84 | <0.68 | <0.68 | <0.143 | <0.0436 | <0.0449 | 0.0517 | <1.02 | 3.02 | 0.0251 | <0.00885 | <0.0102 | <0.0122 | <0.0116 | <0.0068 | <0.0292 | <0.0204 | <0.0517 | 151 |
| | 03/15/03 | <0.034 | 0.155 | <0.034 | 0.794 | 0.949 | <0.169 | <0.066 | <0.066 | <0.066 | <0.066 | <0.066 | <0.066 | <0.066 | 0.069 | 0.132 | <0.066 | <0.066 | <0.066 | <0.066 | <0.066 | <0.066 | <0.066 | <0.066 | <0.066 | 65.3 |
| | 06/09/03 | 0.1869 | 1.526 | 0.2224 | 3.082 | 5.017 | <0.252 | 0.0605 | 0.00432 | 0.00864 | 0.0755 | 0.0502 | 0.0176 | 0.00943 | 0.62 | 0.976 | 0.0118 | <0.00393 | <0.00393 | <0.00393 | <0.00393 | <0.00393 | <0.00393 | <0.00393 | <0.00393 | 27.7 |
| | 09/04/03 | 0.0226 | 1.8 | 0.043 | 1.48 | 3.346 | 0.011 | 0.231 | <0.0033 | 0.00561 | 0.0531 | 0.0182 | 0.00528 | 0.00561 | 0.615 | 0.985 | 0.0066 | <0.0033 | <0.0033 | 0.00462 | 0.00363 | 0.0066 | 0.00825 | 0.0033 | 0.00924 | 34.6 |
| | 12/11/03 | 0.486 | 1.11 | 0.572 | 12 | 14.168 | 0.228 | 2.11 | <0.0033 | 0.0099 | 0.0356 | 0.0238 | 0.0191 | 0.0158 | 1.72 | 2.9 | 0.0122 | <0.0033 | <0.0033 | 0.0102 | 0.00726 | 0.0142 | 0.0116 | <0.0033 | <0.00857 | 154 |
| | 03/18/04 | 0.0021 | 0.0597 | 0.0218 | 0.333 | 0.417 | <0.006 | 0.277 | <0.00398 | <0.00398 | 0.0131 | 0.0123 | <0.00398 | 0.00796 | 0.322 | 0.704 | <0.00398 | <0.00398 | <0.00398 | <0.00398 | <0.00398 | <0.00398 | <0.00398 | <0.00398 | <0.00398 | 12.3 |
| | 06/07/04 | <0.514 | <0.514 | <0.514 | 3.2 | 3.200 | <0.514 | <0.0998 | <0.0998 | <0.0998 | <0.0998 | <0.0998 | <0.0998 | <0.0998 | 0.175 | 0.4 | <0.150 | <0.0998 | <0.0998 | <0.0998 | <0.0998 | <0.0998 | <0.0998 | <0.0998 | <0.0998 | 13.2 |
| | 09/20/04 | <0.256Y | <0.256Y | <0.256Y | 0.273Y | 0.273Y | 0.418Y | <0.100Y | <0.100 Y | <0.100 J3Y | <0.100 J3Y | <0.100 Y | <0.100Y | <0.100Y | <0.100 J3Y | <0.150 J3Y | <0.150Y | <0.100Y | <0.100Y | <0.100Y | <0.100Y | <0.100Y | <0.100Y | <0.100Y | <0.100Y | 9.9Y |
| | 12/01/04 | <0.000596 | <0.0005623 | <0.0005623 | <0.000874 | <0.000874 | <0.0005827 | <0.07708 | <0.06734 | <0.07411 | <0.09095 | <0.05945 | <0.02727 | <0.02912 | <0.06959 | <0.07128 | <0.03468 J3 | <0.01810 | <0.02000 | <0.01776 | <0.01776 | <0.02057 | <0.02164 | <0.02196 | <0.01735 | 65.3 |
| | 03/13/05 | <0.000709 | 0.680 | 0.118 I | 4.050 | 4.848 | 0.152 I | 1.110 | <0.0977 | <0.074 | <0.0654 | <0.0394 | <0.0532 | <0.024 | 0.654 | 1.460 | <0.0039 | <0.0181 | <0.020 | <0.0176 | <0.0176 | <0.0206 | <0.0216 | <0.0219 | <0.0173 | 35.0 |
| | 06/09/05 | < 0.000635 | < 0.000524 | < 0.000876 | < 0.00108 | < 0.003115 | < 0.000667 | <0.0671 | < 0.0977 | < 0.074 | < 0.0654 | < 0.0394 | < 0.0532 | < 0.024 | < 0.0838 | < 0.0712 | < 0.0339 | < 0.0181 | < 0.020 | < 0.0176 | < 0.0176 | < 0.0206 | < 0.0216 | < 0.0219 | < 0.0173 | 17.9 |
| | 09/07/05 | <0.000575 | <0.000474 | <0.000793 | 0.00275 I | 0.00275 I | <0.000604 | <0.0671 | <0.0977 | <0.074 | <0.0654 | <0.0394 | <0.0532 | <0.024 | <0.0838 | <0.0712 | <0.0339 | <0.0181 | <0.020 | <0.0176 | <0.0176 | <0.0206 | <0.0216 | <0.0219 | <0.0173 | 2.66 I |
| | 12/05/05 | <0.000684 | 0.00208 I | 0.00379 I | 0.00202 I | 0.00789 I | <0.000928 | <0.0671 | <0.0977 | <0.074 | <0.0654 | <0.0394 | <0.0532 | <0.024 | <0.0838 | 0.166 I | <0.0339 | <0.0181 | <0.020 | <0.0176 | <0.0176 | <0.0206 | <0.0216 | <0.0219 | <0.0173 | 17.7 |
| | 03/29/06 | <0.223 | 2.170 | 1.050 | 10.800 J3 | 14.12 | <0.177 | 4.360 | <0.0977 | <0.074 | <0.0654 | 0.04971 | <0.0532 | <0.024 | 1.810 | 3.830 | <0.0339 | <0.0181 | <0.020 | <0.0176 | <0.0176 | <0.0206 | <0.0216 | <0.0219 | <0.0173 | 190 |
| | 06/09/06 | <0.00212 | <0.00221 | <0.00227 | <0.00451 | <0.00451 | <0.00168 | <0.00671 | <0.0977 | <0.074 | <0.0654 | <0.0394 | <0.0532 | <0.024 | <0.0838 | <0.0712 | <0.0339 | <0.0181 | <0.020 | <0.0176 | <0.0176 | <0.0206 | <0.0216 | <0.0219 | <0.0173 | 42.1 |
| | 09/24/06 | <0.00644 | 0.0272 J3 | 0.0480 | 0.124 J3 | 0.1982 | 0.724 J3 | <0.0671 | <0.0977 | <0.0740 | <0.0654 | <0.0394 | <0.0532 | <0.0240 | 0.168 | 0.309 | 0.0933 I | 0.0343 I | 0.0437 I | 0.432 | 0.362 | 0.179 | 0.151 I | <0.0219 | 0.0967 I | 14.5 |
| SB-2 | 01/04/01 | 7.1 | 120 | 19 | 610 | 747.1 | 3.8 | 36.5 | <0.18 | <0.18 | 0.515 | 0.66 | <0.18 | 0.173 | -- | -- | 0.044 | 0.0425 | <0.018 | 0.01685 | 0.02945 | 0.0215 | <0.018 | <0.018 | 0.0255 | 3900 |
| | 06/27/01 | 1.4 | 57 | 47 | 420 | 525.4 | <0.0011 | 0.84 | 0.17 | 1 | 0.46 | 0.59 | 0.066 | 0.21 | -- | -- | 0.046 | 0.077 | 0.071 | 0.026 | 0.037 | 0.019 | 0.0072 | <0.019 | 0.0091 | 1300 |
| | 09/20/01 | 0.51 | 32 | 6 | 290 | 328.51 | <0.12 | 7.4 | <0.2 | 2.1 | <0.20 | 0.58 | <0.2 | 0.2 | -- | -- | 0.048 | 0.076 | 0.16 | 0.026 | <0.020 | 0.02 | <0.020 | <0.020 | <0.020 | 430 |
| | 12/12/01 | <11 | 99 | 110 | 620 | 829 | <11 | 34 | <0.2 | 0.12 | 0.38 | 0.23 | <0.2 | 0.043 | -- | -- | 0.018 | 0.017 | 0.15 | 0.01 | 0.0066 | 0.007 | <0.020 | 0.0081 | 0.015 | 1600 |
| | 03/07/02 | 1.7 | 38 | 24 | 430 | 493.7 | <1 | 24 | <0.19 | <0.19 | <0.19 | 0.47 | <0.19 | 0.085 | -- | -- | 0.012 | 0.049 | <0.019 | 0.027 | 0.051 | 0.026 | 0.051 | <0.019 | 0.015 | 2000 |
| | 06/20/02 | 0.14 | 2.8 | 6 | 72 | 80.94 | <.12 | 11 | <0.17 | <0.17 | <0.17 | 0.2 | 0.1 J | 0.065 J | -- | -- | 0.015 J | 0.028 J | 0.075 | 0.013 J | 0.018 J | 0.010 J | <0.017 | <0.017 | <0.017 | 550 |
| | 09/26/02 | 0.746 J | 8.15 | 22 | 274 | 305.15 | <1.2 | 20.5 | <0.19 | <0.19 | <0.19 | 0.98 | <0.19 | 0.17 J | -- | -- | 0.060 J | 0.12 J | <0.019 | 0.030 J | 0.042 J | 0.029 | 0.0079 J | 0.032 J | 0.016 J | 970 |
| | 12/13/02 | <0.611 | 8.01 | 12.8 | 80.7 | 101.51 | <3.06 | 8.98 | <0.661 | <0.661 | <0.139 | 0.0582 | <0.0436 | <0.0139 | 2.13 | 9.78 | 0.0906 | <0.00859 | <0.00991 | <0.0119 | <0.0112 | <0.00661 | <0.0284 | <0.0198 | <0.0502 | 428 |
| | 03/15/03 | 1.32 | 43.1 | 31.1 | 322 | 398 | <0.532 | 10.7 | <0.066 | 0.079 | <0.066 | 0.317 | 0.066 | <0.066 | 7.59 | 12.9 | <0.066 | <0.066 | <0.066 | <0.066 | <0.066 | <0.066 | <0.066 | <0.066 | <0.066 | 897 |
| | 06/09/03 | 0.4545 | 11.07 | 0.4463 | 75.58 | 88 | <0.413 | 11.2 | 0.033 | 0.0632 | 0.136 | 0.206 | 0.058 | 0.0333 | 7.06 | 12 | 0.0425 | 0.00853 | 0.0123 | 0.0107 | 0.00556 | 0.0111 | 0.0107 | <0.00397 | 0.0115 | 298 |
| | 09/04/03 | 0.717 | 18.6 | 3.05 | 115 | 137 | <0.466 | 10.7 | 0.0304 | 0.0544 | 0.108 | 0.141 | 0.0403 | 0.0188 | 5.99 | 9.95 | 0.0224 | 0.00825 | 0.00528 | <0.0033 | <0.0033 | 0.00627 | <0.0033 | <0.0033 | 0.00528 | 453 |
| | 12/11/03 | 0.0442 | 14.9 | 10.4 | 192 | 217 | 0.008 | 39.2 | 0.108 | 0.17 | 0.311 | 0.414 | 0.117 | 0.0696 | 21.1 | 39.5 | 0.101 | 0.0459 | 0.0221 | 0.0191 | 0.0122 | 0.0284 | 0.0158 | <0.0033 | 0.0188 | 1010 |
| | 03/18/04 | 0.0028 | 1.46 | 0.0369 | 6.52 | 8.0217 | 0.015 | 1.1 | 0.0253 | <0.00422 | 0.0611 | 0.0769 | <0.00422 | 0.011 | 1.65 | 2.93 | 0.0143 | <0.00422 | <0.00422 | <0.00422 | <0.00422 | <0.00422 | <0.00422 | <0.00422 | <0.00422 | 48.2 |
| | 06/07/04 | <0.467 | <0.467 | <0.467 | 8.26 | 8.2600 | <0.467 | 3.32 | <0.100 | 0.115 | 0.183 | 0.27 | <0.100 | <0.100 | 7.13 | 13.4 | <0.150 | <0.100 | <0.100 | <0.100 | <0.100 | <0.100 | <0.100 | <0.100 | <0.100 | 657 |
| | 09/20/04 | <0.280Y | 4.31Y | <0.280Y | 21Y | 25.431Y | 0.369Y | 1.35Y | <0.100Y | <0.100 J3Y | <0.100 J3Y | <0.100Y | <0.100Y | <0.100Y | 0.794 J3Y | 1.746 J3Y | <0.150Y | <0.100Y | <0.100Y | <0.100Y | <0.100Y | <0.100Y | <0.100Y | <0.100Y | <0.100Y | 155Y |
| | 12/01/04 | 0.249 | 28.94 | 41.13 | 178.000 | 248.319 | <0.05174 | 9.700 | <0.06734 | <0.07411 | <0.09095 | 0.097001 | <0.02727 | <0.02912 | 4.163 | 9.587 | <0.03468 J3 | <0.01810 | <0.020000 | <0.01776 | <0.01776 | <0.02057 | <0.02164 | <0.02196 | <0.01735 | 645 |
| | 03/13/05 | <0.0594 | 0.306 | 0.888 | 1.800 | 2.894 | 0.191 | 1.080 | <0.0977 | <0.0740 | <0.654 | <0.0394 | <0.0532 | <0.0240 | 0.734 | 1.500 | <0.0339 | <0.0181 | <0.020 | <0.0176 | <0.0176 | <0.0206 | <0.0216 | <0.0219 | <0.0173 | 28.0 |
| | 06/09/05 | < 0.0660 | 0.104 I | <0.0809 | 0.951 | 1.055 | <0.0693 | 0.149 I | < 0.0977 | < 0.740 | < 0.0654 | 0.0420 I | < 0.532 | < 0.0240 | 0.311 | 0.573 | < 0.0339 | < 0.0181 | <0.0200 | <0.0176 | <0.0176 | < 0.0206 | < 0.0216 | < 0.0219 | < 0.0173 | 31.2 |
| | 09/07/05 | <0.126 | 10.400 | 1.700 | 57.400 | 67.800 | <0.132 | 8.150 | <0.0977 | <0.0740 | 0.0720 I | 0.0720 I | <0.0532 | <0.0240 | 2.720 | 5.850 | <0.0339 | <0.0181 | <0.0200 | <0.0176 | <0.0176 | <0.0206 | <0.0216 | <0.0219 | <0.0173 | 357 |
| | 12/05/05 | <0.0872 | 3.060 | 2.360 | 21.600 | 27.020 | <0.0916 | 1.140 | <0.0977 | <0.0740 | <0.0654 | <0.0394 | <0.0532 | <0.0240 | 0.410 | 1.160 | <0.0339 | <0.0181 | <0.0200 | <0.0176 | <0.0176 | <0.0206 | <0.0216 | <0.0219 | <0.0173 | 87.2 |
| | 03/29/06 | <0.210 | 2.780 | 3.530 | 16.700 J3 | 23.01 | <0.167 | 2.310 | <0.0977 | <0.0740 | <0.0654 | <0.0394 | <0.0532 | <0.0240 | 1.060 | 2.370 | <0.0339 | <0.0181 | <0.0200 | <0.0176 | <0.0176 | <0.0206 | <0.0216 | <0.0219 | <0.0173 | 58.6 |
| | 06/09/06 | <0.0242 | 5.160 | <0.00258 | 20.500 | 25.660 | <0.00192 | 9.990 | <0.0977 | 0.0853 I | 0.217 | 0.127 I | 0.124 I | <0.0240 | 5.560 | 13.000 | <0.0339 | <0.0181 | <0.0200 | <0.0176 | <0.0176 | <0.0206 | <0.0216 | <0.0219 | <0.0173 | 553 |
| | 09/24/06 | <0.0820 | 0.0157 J3 I | 0.0349 | 0.0681 J3 | 0.1187 | 1.040 J3 | <0.0671 | <0.0977 | <0.0740 | <0.0654 | <0.0394 | <0.0532 | <0.0240 | <0.0838 | <0.0712 | <0.0339 | <0.0181 | <0.0200 | <0.0176 | <0.0176 | <0.0206 | <0.0216 | <0.0219 | <0.0173 | 4.22 I |
| SB-14 | 01/04/01 | <0.001 | <0.001 | 0.011 | 0.0077 | 0.0187 | 0.0061 | 0.23 | <0.18 | <0.18 | <0.18 | <0.18 | <0.18 | <0.018 | -- | -- | <0.018 | <0.018 | 0.785 | 0.0145 | 0.008 | 0.0115 | 0.0075 | 0.0101 | 0.016 | 43 |
| | 06/27/01 | 0.1 | 0.16 | <0.0011 | 0.15 | 0.41 | 0.015 | <0.19 | <0.19 | <0.19 | <0.19 | <0.19 | <0.19 | 0.014 | -- | -- | <0.019 | <0.019 | 0.44 | 0.0058 | 0.0072 | 0.019 | <0.019 | 0.023 | <0.019 | 270 |
| | 09/20/01 | 0.0025 | 0.0025 | 0.002 | 0.0024 | 0.0084 | <0.0012 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.020 | -- | -- | <0.020 | <0.020 | 0.32 | <0.020 | <0.020 | <0.020 | <0.020 | <0.020 | <0.020 | 55 |
| | 12/12/01 | 0.11 | 0.18 | 0.014 | 0.71 | 1.014 | 0.012 | <0.19 | <0.19 | <0.19 | <0.19 | <0.19 | <0.19 | <0.019 | -- | -- | <0.019 | <0.019 | 0.056 | <0.019 | <0.019 | <0.019 | <0.019 | <0.019 | <0.019 | 65 |
| | 03/07/02 | 0.054 | 0.045 | <0.0011 | 0.032 | 0.131 | 0.0021 | 0.56 | <0.19 | <0.19 | <0.19 | <0.19 | <0.19 | 0.011 | -- | -- | <0.019 | <0.019 | 1.2 | <0.019 | <0.019 | <0.019 | <0.019 | <0.019 | <0.019 | 120 |
| | 06/20/02 | <0.11 | 110 J | 110 J | 110 J | 220 | <0.11 | <0.18 | <0.18 | <0.18 | <0.18 | <0.18 | <0.18 | <0.018 | -- | -- | <0.018 | <0.018 | 1.4 J | <0.018 | <0.018 | <0.018 | <0.018 | <0.018 | <0.018 | 23 |
| | 09/26/02 | <0.001 | 0.0286 | <0.001 | 0.0321 | 0.0609 | 0.00268 | <0.19 | <0.19 | <0.19 | <0.19 | <0.19 | <0.19 | 0.011 J | -- | -- | 0.0098 J | <0.019 | 0.38 J | 0.03 | 0.018 J | 0.062 J | <0.019 | 0.059 J | <0.019 | 117 |
| | 12/13/02 | <0.125 | 0.402 | 0.602 | 0.602 | 1.606 | <0.314 | <2.08 | <2.08 | <2.08 | <0.439 | <1.34 | <1.38 | <0.439 | <3.14 | <3.14 | <0.565 | <0.271 | <0.314 | <0.376 | <0.355 | <0.208 | <0.698 | <0.627 | <1.59 | 192 |
| | 03/15/03 | 0.138 | 0.823 | 0.087 | 0.966 | 2.01 | <0.140 | 0.185 | <0.066 | <0.066 | <0.066 | <0.066 | <0.066 | <0.066 | 0.228 | 0.429 | <0.066 | <0.066 | <0.066 | <0.066 | <0.066 | <0.066 | <0.066 | <0.066 | <0.066 | 51.2 |
| | 06/09/03 | 0.0099 | 0.1241 | 0.02 | 0.1563 | 0.31 | 0.006 | 6.2 | 0.0334 | 0.0645 | 0.137 | 0.154 | 0.0523 | 0.0556 | 6.15 | 10.5 | 0.0499 | 0.0277 | 0.0265 | 0.0319 | 0.0242 | 0.0292 | 0.0292 | 0.013 | 0.0299 | 413 |
| | 09/04/03 | 0.0046 | 0.0045 | 0.0061 | 0.0083 | 0.0235 | <0.005 | 0.553 | <0.0033 | <0.0033 | 0.00627 | 0.00584 | <0.0033 | <0.0033 | 0.353 | 0.543 | <0.0033 | <0.0033 | <0.0033 | <0.0033 | <0.0033 | <0.0033 | <0.0033 | <0.0033 | 0.00627 | 54.5 |
| | 12/11/03 | 0.0147 | 0.0016 | 0.0011 | 0.0055 | 0.0229 | <0.005 | 1.01 | 0.0155 | <0.0033 | 0.00891 | 0.00758 | 0.0132 | 0.0287 | 0.49 | 0.795 | 0.0337 | 0.0234 | 0.0191 | 0.0241 | 0.0241 | 0.0419 | 0.0333 | 0.0162 | 0.0376 | 126 |
| | 03/18/04 | 0.0012 | 0.0063 | 0.0019 | 0.0027 | 0.0121 | <0.006 | 0.0085 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | 0.00628 | 0.0144 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | 0.0103 | 20.7 |
| | 06/07/04 | <0.455 | <0.455 | <0.455 | <0.455 | <0.455 | <0.455 | 1.67 | <0.100 | <0.100 | <0.100 | <0.100 | <0.100 | <0.100 | 0.368 | 0.68 | <0.150 | <0.100 | <0.100 | <0.100 | <0.100 | <0.100 | <0.100 | <0.100 | <0.100 | 116 |
| | 09/20/04 | <0.450Y | <0.450Y | <0.450Y | <0.450Y | <0.450Y | 0.612Y | 15.1Y | <0.100Y | 0.328 J3Y | 0.433 J3Y | 0.905Y | 0.940 IY | 0.103Y | 8.560 J3Y | 16.800 J3Y | 0.215Y | <0.100Y | <0.100Y | <0.100Y | <0.100Y | <0.100Y | <0.100Y | <0.100Y | <0.100Y | 633Y |
| | 12/01/04 | <0.000707 | 0.07285 | 0.002564 | 0.218 | 0.2934 | < 0.0006913 | 0.9073 | <0.06734 | <0.07411 | <0.09095 | <0.05945 | <0.02727 | <0.02912 | 0.3703 | 0.829 | <0.03468 | <0.01810 | <0.02000 | <0.01776 | <0.01776 | <0.02057 | <0.02164 | <0.02196 | <0.01735 | 19.2 |
| | 03/13/05 | <0.0547 | 0.336 | 0.601 | 1.280 | 2.2170 | <0.0534 | 0.245 | <0.0977 | <0.0740 | <0.0654 | <0.0394 | <0.0532 | <0.024 | 0.115 I | 0.246 | <0.0339 | <0.0181 | <0.020 | <0.0176 | <0.0176 | <0.0206 | <0.0216 | <0.0219 | <0.0173 | 26.9 |
| | 06/09/05 | < 0.000604 | < 0.000498 | < 0.000833 | < 0.00103 | < 0.002965 | <0.0693 | 0.224 | < 0.0977 | < 0.740 | < 0.0654 | 0.0420 I | < 0.532 | < 0.0240 | 0.105 I | 0.0733 I | < 0.0339 | < 0.0181 | <0.0200 | <0.0176 | <0.0176 | < 0.0206 | < 0.0216 | < 0.0219 | < 0.0173 | 18.2 |
| | 09/07/05 | <0.0905 | 6.380 | 1.860 | 38.400 | 46.78 | <0.0650 | 3.980 | <0.0977 | <0.0740 | <0.0654 | <0.0394 | <0.0532 | <0.0240 | 1.380 | 3.240 | <0.0339 | <0.0181 | <0.0200 | <0.0176 | <0.0176 | <0.0206 | <0.0216 | <0.0219 | <0.0173 | 238 |
| | 12/05/05 | <0.0872 | 0.876 | 1.540 | 5.140 | 7.556 | <0.0765 | 0.135 I | <0.0977 | <0.0740 | <0.0654 | <0.0394 | <0.0532 | <0.0240 | <0.0838 | <0.0712 | <0.0339 | <0.0181 | <0.0200 | <0.0176 | <0.0176 | <0.0206 | <0.0216 | <0.0219 | <0.0173 | 9.51 |
| | 03/29/06 | 2.281 | 0.0255 J4 | <0.00229 J4 | 0.0206 J3 | 2.3261 | <0.00170 | <0.0671 | <0.0977 | <0.0740 | <0.0654 | <0.0394 | <0.0532 | <0.0240 | <0.0838 | <0.0712 | <0.0339 | <0.0181 | <0.0200 | <0.0176 | <0.0176 | <0.0206 | <0.0216 | <0.0219 | <0.0173 | 18.6 |
| | 06/09/06 | <0.00232 | <0.00242 | <0.00248 | 0.0174 | 0.0174 | <0.00184 | 0.663 | <0.0977 | <0.0740 | <0.0654 | <0.0394 | <0.0532 | <0.0240 | 0.287 | 0.192 | <0.0339 | <0.0181 | <0.0200 | <0.0176 | <0.0176 | <0.0206 | <0.0216 | <0.0219 | <0.0173 | 246 |
| | 09/24/06 | <0.00862 | 0.258 J3 | 0.143 | 1.740 J3 | 2.141 | 1.420 J3 | 0.374 | <0.0977 | <0.0740 | <0.0654 | <0.0394 | <0.0532 | <0.0240 | 0.443 | 0.908 | <0.0339 | <0.0181 | <0.0200 | <0.0176 | <0.0176 | <0.0206 | <0.0216 | <0.0219 | <0.0173 | 16.3 |
| Direct Exposure Residential[1] | | 1.2 | 1500 | 7500 | 130 | n/a | 4400 | 55 | 1800 | 2400 | 2600 | 2200 | 21000 | 3200 | 200 | 210 | 2400 | 1.4 | 140 | 1.4 | 15 | 0.1 | 1.5 | 0.1 | 2500 | 460 |
| Leachability from GW Criteria[1] | | 0.007 | 0.6 | 0.5 | 0.2 | n/a | 0.09 | 1.2 | 27 | 2.1 | 160 | 250 | 2500 | 1200 | 3.1 | 8.5 | 880 | 0.8 | 77 | 2.4 | 24 | 8 | 6.6 | 0.7 | 32000 | 340 |

Y = The sample was received into laboratory out of acceptable temperature range.
I = The reported value is between the laboratory method detection limit and the laboratory practicial quantitation limit.
J = Estimated value
J3 = The reported value failed to meet the established quality control criteria for either precision and/or accuracy.
All values reported in mg/kg
1 = Ch 62-777 F.A.C Soil Cleanup Target Levels (SCTL) reported in mg/kg
Highlighted values indicate compounds that exceed the SCTL or the Leachability Criteria

## TABLE 5
## FLAME IONIZATION DETECTOR RESULTS

BUILDING 46 NUTRIENT INJECTION SYSTEM
NAS CECIL FIELD
JACKSONVILLE, FLORIDA
SEPTEMBER 2006

| | |
|---|---|
| **SB-1** | |
| 2 feet | 0 ppm |
| 4 feet | 0 ppm |
| 6 feet | 50 ppm |
| 8 feet | 3000 ppm |
| 10 feet* | >5000 ppm |
| **SB-2** | |
| 2 feet | 0 ppm |
| 4 feet | 300 ppm |
| 6 feet | 600 ppm |
| 8 feet | 900 ppm |
| 10 feet* | 1050 ppm |
| **SB-14** | |
| 2 feet | 0 ppm |
| 4 feet | 25 ppm |
| 6 feet | 2500 ppm |
| 8 feet | 3000 ppm |
| 10 feet* | >5000 ppm |

ppm = parts per million
* Sample submitted to laboratory for analysis

# APPENDIX D

*September 2006 Groundwater Purging and Sampling Logs*

# GROUNDWATER PURGING & SAMPLING LOG

TERRAINE
Environmental Consulting

## Project Information

| | | |
|---|---|---|
| Project No: 04-41001/3 | Project Name: Building 46 - Cecil Field LTM/RAO | |
| Technician 1: Danny Hockett | Technician 2: | Weather: Hot |
| Sampling ID: 04-41001/3:CEF-46-1S:9/24/06 | | |
| Notes: Well went dry after pumping 0.7 gallons. measured TD=14.3 ft. Screen may be obstructed by sediment. Well may need to be redeveloped. | | |

## Well Information

| | | |
|---|---|---|
| Well ID: **CEF-46-1S** | Sampling Date: **9/24/2006** | |
| Well Diam (in): 2.0 | Total Well Depth (ft): 15.00 | Well Screen Interval (ft): 4-14 |
| TOC Elevation (ft amsl): 79.08 | Northing: 2143916.75 | Easting: 375278.32 |
| Static Depth to Water (ft): 12.60 | Well Capacity (gal): 0.39 | |

## Purge Setup

| | | | |
|---|---|---|---|
| Purge Method: Peristaltic | Tubing Material: PPE | | Pump Set at (ft): 13.00 |
| pH Meter: YSI 556 MPS | Cond. Meter: YSI 556 MPS | DO Meter: YSI 556 MPS | Turb. Meter: Hach Portable Tu |
| Purge Start: 13:40:00 | Purge End: 18:56:53 | Total Volume Purged (gal): 0.70 | |

## Purging Data

| Time | Water Level (ft) | Vol Purged (gal) | Pump Rate (gal/min) | DO (mg/L) | Temp (°C) | SEC (µS/cm) | pH | ORP (mV) | Turbidity (NTU) | Salinity | Color | Odor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13:56:11 | 13.75 | 0.30 | 0.019 | 0.23 | 28.53 | 501.0 | 5.94 | -244.4 | 65.50 | | | |
| 13:59:43 | 13.75 | 0.40 | 0.028 | 0.26 | 29.17 | 528.0 | 5.90 | -270.3 | 55.40 | | | |

## Sampling Data

**Sample Information**

Sample Date: 9/24/2006
Sample Start Time: 18:56:53
Sample End Time: 19:15:07
Field Filtered: ☐
Duplicate: ☐

**Final Purge Readings**

DO (mg/L):
Temp (°C):
SEC (uS/cm):
pH:
ORP (mV):
Turb (NTU):
Salinity:

**Hach Field Data (mg/L)**

DO:
CO2:
Alkalinity:
Ferrous Iron:
H2S:
Manganese:
Sulfate:
Sulfide:
Nitrate:

**CHEMetrics Field Data (mg/L)**

DO High Range:
DO High Range:

CO2 High Range:
CO2 Low Range:

Alkalinity High Range:
Alkalinity Low Range:

**Lab Analyses/Methods:**

"BTEX/MTBE, PAHs, Sulfate, VOCs"

**Technician Initials**

# GROUNDWATER PURGING & SAMPLING LOG

TERRAINE
Environmental Consulting

## Project Information

| | | |
|---|---|---|
| Project No: 04-41001/3 | Project Name: Building 46 - Cecil Field LTM/RAO | |
| Technician 1: Danny Hockett | Technician 2: | Weather: Hot |
| Sampling ID: 04-41001/3:CEF-46-2S:9/25/06 | | |
| Notes: | | |

## Well Information

| | | |
|---|---|---|
| Well ID: **CEF-46-2S** | Sampling Date: **9/25/2006** | |
| Well Diam (in): 2.0 | Total Well Depth (ft): 15.00 | Well Screen Interval (ft): 4-14 |
| TOC Elevation (ft amsl): 79.08 | Northing: 2143967.22 | Easting: 375303.76 |
| Static Depth to Water (ft): 11.54 | Well Capacity (gal): 0.56 | |

## Purge Setup

| | | | |
|---|---|---|---|
| Purge Method: Peristaltic | Tubing Material: PPE | | Pump Set at (ft): 13.00 |
| pH Meter: YSI 556 MPS | Cond. Meter: YSI 556MPS | DO Meter: YSI 556 MPS | Turb. Meter: Hach 2100P |
| Purge Start: 07:12:22 | Purge End: 07:35:34 | Total Volume Purged (gal): 0.50 | |

## Purging Data

| Time | Water Level (ft) | Vol Purged (gal) | Pump Rate (gal/min) | DO (mg/L) | Temp (°C) | SEC (µS/cm) | pH | ORP (mV) | Turbidity (NTU) | Salinity | Color | Odor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:16:53 | 11.63 | 0.10 | 0.022 | 0.72 | 25.86 | 1,162.0 | 5.21 | -3.6 | 10.50 | | clear | none |
| 07:22:33 | 11.64 | 0.20 | 0.018 | 0.51 | 26.04 | 1,162.0 | 5.51 | -22.2 | 4.04 | | | sulfuric |
| 07:26:54 | 11.65 | 0.30 | 0.023 | 0.46 | 26.15 | 1,164.0 | 5.68 | -63.7 | 3.34 | | | |
| 07:30:40 | 11.65 | 0.40 | 0.027 | 0.42 | 26.23 | 1,168.0 | 5.77 | -82.9 | 3.21 | | | |
| 07:34:14 | 11.65 | 0.50 | 0.028 | 0.40 | 26.23 | 1,171.0 | 5.80 | -85.2 | 2.99 | | | |

## Sampling Data

| Sample Information | | Final Purge Readings | | Hach Field Data (mg/L) | | CHEMetrics Field Data (mg/L) |
|---|---|---|---|---|---|---|
| Sample Date: | 9/25/2006 | DO (mg/L): | 0.39 | DO: | 0 | DO High Range: |
| Sample Start Time: | 07:35:34 | Temp (°C): | 26.25 | CO2: | 237 | DO High Range: |
| Sample End Time: | 07:55:03 | SEC (uS/cm): | 1175 | Alkalinity: | 75 | |
| Field Filtered: | ☐ | pH: | 5.81 | Ferrous Iron: | 4 | CO2 High Range: |
| Duplicate: | ☐ | ORP (mV): | -85.1 | H2S: | 0.7 | CO2 Low Range: |
| | | Turb (NTU): | 3.02 | Manganese: | | |
| | | Salinity: | | Sulfate: | | Alkalinity High Range: |
| | | | | Sulfide: | | Alkalinity Low Range: |
| | | | | Nitrate: | | |

| Lab Analyses/Methods: | Technician Initials |
|---|---|
| "BTEX/MTBE, PAHs, Sulfate, TRPH" | |

# GROUNDWATER PURGING & SAMPLING LOG

TERRAINE
Environmental Consulting

## Project Information

| | | |
|---|---|---|
| Project No: 04-41001/3 | Project Name: Building 46 - Cecil Field LTM/RAO | |
| Technician 1: Danny Hockett | Technician 2: | Weather: Hot |
| Sampling ID: 04-41001/3:CEF-46-5I:9/24/06 | | |
| Notes: CO2 - Interference | | |

## Well Information

| | | |
|---|---|---|
| Well ID: **CEF-46-5I** | Sampling Date: **9/24/2006** | |
| Well Diam (in): 2.0 | Total Well Depth (ft): 50.50 | Well Screen Interval (ft): 45-50 |
| TOC Elevation (ft amsl): 79.18 | Northing: 2143911.96 | Easting: 375278.45 |
| Static Depth to Water (ft): 12.62 | Well Capacity (gal): 6.18 | |

## Purge Setup

| | | | |
|---|---|---|---|
| Purge Method: Peristaltic | Tubing Material: PPE | | Pump Set at (ft): 46.00 |
| pH Meter: | Cond. Meter: | DO Meter: | Turb. Meter: |
| Purge Start: 12:29:42 | Purge End: 12:59:18 | Total Volume Purged (gal): | 0.60 |

## Purging Data

| Time | Water Level (ft) | Vol Purged (gal) | Pump Rate (gal/min) | DO (mg/L) | Temp (°C) | SEC (µS/cm) | pH | ORP (mV) | Turbidity (NTU) | Salinity | Color | Odor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:45:21 | 12.74 | 0.30 | 0.019 | 0.29 | 28.14 | 3,872.0 | 2.91 | 368.4 | 3.69 | | clear | none |
| 12:50:28 | 12.75 | 0.40 | 0.020 | 0.27 | 28.10 | 3,867.0 | 2.91 | 363.8 | 3.27 | | | |
| 12:56:33 | 12.75 | 0.60 | 0.033 | 0.25 | 28.10 | 3,865.0 | 2.91 | 357.5 | 3.60 | | | |

## Sampling Data

**Sample Information**

| | |
|---|---|
| Sample Date: | 9/24/2006 |
| Sample Start Time: | 12:59:18 |
| Sample End Time: | 13:15:12 |
| Field Filtered: | ☐ |
| Duplicate: | ☐ |

**Final Purge Readings**

| | |
|---|---|
| DO (mg/L): | 0.24 |
| Temp (°C): | 28.12 |
| SEC (uS/cm): | 3865 |
| pH: | 2.91 |
| ORP (mV): | 361.7 |
| Turb (NTU): | 3.16 |
| Salinity: | |

**Hach Field Data (mg/L)**

| | |
|---|---|
| DO: | 0 |
| CO2: | 0 |
| Alkalinity: | 5 |
| Ferrous Iron: | 9.8 |
| H2S: | 0.0 |
| Manganese: | |
| Sulfate: | |
| Sulfide: | |
| Nitrate: | |

**CHEMetrics Field Data (mg/L)**

DO High Range:
DO High Range:

CO2 High Range:
CO2 Low Range:

Alkalinity High Range:
Alkalinity Low Range:

**Lab Analyses/Methods:**

"BTEX/MTBE, PAHs, Sulfate, TRPH"

**Technician Initials**

# GROUNDWATER PURGING & SAMPLING LOG

TERRAINE
Environmental Consulting

## Project Information

| | | |
|---|---|---|
| Project No: 04-41001/3 | Project Name: Building 46 - Cecil Field LTM/RAO | |
| Technician 1: Danny Hockett | Technician 2: | Weather: Hot |
| Sampling ID: 04-41001/3:CEF-46-6D:9/24/06 | | |
| Notes: CO2 - Interference | | |

## Well Information

| | | |
|---|---|---|
| Well ID: **CEF-46-6D** | Sampling Date: **9/24/2006** | |
| Well Diam (in): 2.0 | Total Well Depth (ft): 80.50 | Well Screen Interval (ft): 70-80 |
| TOC Elevation (ft amsl): 79.17 | Northing: 2143906.99 | Easting: 375278.07 |
| Static Depth to Water (ft): 9.21 | Well Capacity (gal): 11.63 | |

## Purge Setup

| | | | |
|---|---|---|---|
| Purge Method: Peristaltic | Tubing Material: PPE | | Pump Set at (ft): 75.00 |
| pH Meter: YSI 556 MPS | Cond. Meter: YSI 556MPS | DO Meter: YSI 556 MPS | Turb. Meter: Hach 2100P |
| Purge Start: 11:37:00 | Purge End: 12:07:54 | Total Volume Purged (gal): 0.70 | |

## Purging Data

| Time | Water Level (ft) | Vol Purged (gal) | Pump Rate (gal/min) | DO (mg/L) | Temp (°C) | SEC (µS/cm) | pH | ORP (mV) | Turbidity (NTU) | Salinity | Color | Odor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11:53:19 | 13.22 | 0.30 | 0.018 | 0.27 | 28.94 | 8,111.0 | 2.55 | 507.7 | 4.31 | | clear | none |
| 11:57:03 | 12.29 | 0.40 | 0.027 | 0.36 | 28.76 | 8,107.0 | 2.56 | 508.1 | 3.28 | | yellow | |
| 12:00:59 | 13.31 | 0.50 | 0.025 | 0.32 | 28.44 | 8,066.0 | 2.56 | 508.4 | 2.49 | | | |
| 12:04:08 | 13.35 | 0.60 | 0.032 | 0.32 | 28.62 | 8,079.0 | 2.56 | 508.2 | 1.96 | | | |

## Sampling Data

**Sample Information**

| | |
|---|---|
| Sample Date: | 9/24/2006 |
| Sample Start Time: | 12:07:54 |
| Sample End Time: | 12:21:03 |
| Field Filtered: | ☐ |
| Duplicate: | ☐ |

**Final Purge Readings**

| | |
|---|---|
| DO (mg/L): | 0.33 |
| Temp (°C): | 28.70 |
| SEC (uS/cm): | 8092 |
| pH: | 2.56 |
| ORP (mV): | 508.1 |
| Turb (NTU): | 1.65 |
| Salinity: | |

**Hach Field Data (mg/L)**

| | |
|---|---|
| DO: | 0 |
| CO2: | 0 |
| Alkalinity: | 60 |
| Ferrous Iron: | 10 |
| H2S: | 0.0 |
| Manganese: | |
| Sulfate: | |
| Sulfide: | |
| Nitrate: | |

**CHEMetrics Field Data (mg/L)**

DO High Range:
DO High Range:

CO2 High Range:
CO2 Low Range:

Alkalinity High Range:
Alkalinity Low Range:

**Lab Analyses/Methods:**

"BTEX/MTBE, PAHs, Sulfate, TRPH"

**Technician Initials**

# GROUNDWATER PURGING & SAMPLING LOG

TERRAINE
Environmental Consulting

## Project Information

| | | |
|---|---|---|
| Project No: 04-41001/3 | Project Name: Building 46 - Cecil Field LTM/RAO | |
| Technician 1: Danny Hockett | Technician 2: | Weather: Beautiful Day |
| Sampling ID: 04-41001/3:CEF-46-7I:9/25/06 | | |
| Notes: | | |

## Well Information

| | | |
|---|---|---|
| Well ID: **CEF-46-7I** | Sampling Date: **9/25/2006** | |
| Well Diam (in): 2.0 | Total Well Depth (ft): 30.50 | Well Screen Interval (ft): 25-30 |
| TOC Elevation (ft amsl): 79.02 | Northing: 2143997.08 | Easting: 375315.68 |
| Static Depth to Water (ft): 11.82 | Well Capacity (gal): 3.04 | |

## Purge Setup

| | | | |
|---|---|---|---|
| Purge Method: Peristaltic | Tubing Material: PPE | | Pump Set at (ft): 27.00 |
| pH Meter: YSI 556 MPS | Cond. Meter: YSI 556MPS | DO Meter: YSI 556 MPS | Turb. Meter: Hach 2100P |
| Purge Start: 08:01:50 | Purge End: 08:30:21 | Total Volume Purged (gal): | 0.50 |

## Purging Data

| Time | Water Level (ft) | Vol Purged (gal) | Pump Rate (gal/min) | DO (mg/L) | Temp (°C) | SEC (µS/cm) | pH | ORP (mV) | Turbidity (NTU) | Salinity | Color | Odor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 08:18:46 | 13.61 | 0.30 | 0.018 | 0.30 | 25.55 | 111.0 | 4.92 | 6.7 | 3.02 | | clear | none |
| 08:24:23 | 12.58 | 0.40 | 0.018 | 0.25 | 25.58 | 108.0 | 4.85 | 4.6 | 8.68 | | | |
| 08:28:00 | 12.57 | 0.50 | 0.028 | 0.25 | 25.60 | 108.0 | 4.85 | 3.9 | 8.71 | | | |

## Sampling Data

| Sample Information | | Final Purge Readings | | Hach Field Data (mg/L) | | CHEMetrics Field Data (mg/L) |
|---|---|---|---|---|---|---|
| Sample Date: | 9/25/2006 | DO (mg/L): | 0.25 | DO: | 0 | DO High Range: |
| Sample Start Time: | 08:30:21 | Temp (°C): | 25.61 | CO2: | 105 | DO High Range: |
| Sample End Time: | 08:43:31 | SEC (uS/cm): | 108 | Alkalinity: | 15 | |
| Field Filtered: | ☐ | pH: | 4.84 | Ferrous Iron: | 4.8 | CO2 High Range: |
| Duplicate: | ☐ | ORP (mV): | 3.4 | H2S: | 2.0 | CO2 Low Range: |
| | | Turb (NTU): | 10.7 | Manganese: | | |
| | | Salinity: | | Sulfate: | | |
| | | | | Sulfide: | | Alkalinity High Range: |
| | | | | Nitrate: | | Alkalinity Low Range: |

| Lab Analyses/Methods: | Technician Initials |
|---|---|
| "BTEX/MTBE, PAHs, Sulfate, TRPH" | |

# GROUNDWATER PURGING & SAMPLING LOG

TERRAINE
Environmental Consulting

## Project Information

| | | |
|---|---|---|
| Project No: 04-41001/3 | Project Name: Building 46 - Cecil Field LTM/RAO | |
| Technician 1: Danny Hockett | Technician 2: | Weather: Hot |
| Sampling ID: 04-41001/3:CEF-46-9I:9/24/06 | | |
| Notes: | | |

## Well Information

| | | |
|---|---|---|
| Well ID: **CEF-46-9I** | Sampling Date: **9/24/2006** | |
| Well Diam (in): 2.0 | Total Well Depth (ft): 50.50 | Well Screen Interval (ft): 45-50 |
| TOC Elevation (ft amsl): 79.05 | Northing: 2143958.42 | Easting: 375470.18 |
| Static Depth to Water (ft): 11.89 | Well Capacity (gal): 6.30 | |

## Purge Setup

| | | | |
|---|---|---|---|
| Purge Method: Peristaltic | Tubing Material: PPE | | Pump Set at (ft): 45.00 |
| pH Meter: YSI 556 MPS | Cond. Meter: YSI 556MPS | DO Meter: YSI 556 MPS | Turb. Meter: Hach 2100P |
| Purge Start: 15:59:10 | Purge End: 16:39:01 | Total Volume Purged (gal): 0.90 | |

## Purging Data

| Time | Water Level (ft) | Vol Purged (gal) | Pump Rate (gal/min) | DO (mg/L) | Temp (°C) | SEC (µS/cm) | pH | ORP (mV) | Turbidity (NTU) | Salinity | Color | Odor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:15:20 | 11.90 | 0.30 | 0.018 | 0.27 | 28.55 | 645.0 | 3.69 | 227.4 | 6.68 | | clear | none |
| 16:19:03 | 11.91 | 0.40 | 0.026 | 0.24 | 28.53 | 631.0 | 3.66 | 209.4 | 4.27 | | | |
| 16:22:59 | 11.91 | 0.50 | 0.025 | 0.23 | 28.25 | 630.0 | 3.86 | 189.0 | 3.97 | | | |
| 16:26:10 | 11.91 | 0.60 | 0.031 | 0.23 | 28.36 | 634.0 | 3.52 | 212.2 | 3.28 | | | |
| 16:30:24 | 11.91 | 0.70 | 0.023 | 0.20 | 28.89 | 647.0 | 3.67 | 212.6 | 2.81 | | | |
| 16:33:54 | 11.91 | 0.80 | 0.028 | 0.19 | 29.16 | 653.0 | 3.69 | 214.1 | 1.96 | | | |
| 16:37:08 | 11.91 | 0.90 | 0.030 | 0.18 | 29.09 | 658.0 | 3.70 | 217.1 | 2.59 | | | |

## Sampling Data

| Sample Information | | Final Purge Readings | | Hach Field Data (mg/L) | | CHEMetrics Field Data (mg/L) |
|---|---|---|---|---|---|---|
| Sample Date: | 9/24/2006 | DO (mg/L): | 0.17 | DO: | | DO High Range: |
| Sample Start Time: | 16:39:01 | Temp (°C): | 29.13 | CO2: | 413 | DO High Range: |
| Sample End Time: | 16:50:13 | SEC (uS/cm): | 661 | Alkalinity: | 5 | |
| Field Filtered: | ☐ | pH: | 3.70 | Ferrous Iron: | 7.2 | CO2 High Range: |
| Duplicate: | ☐ | ORP (mV): | 218.8 | H2S: | 0.1 | CO2 Low Range: |
| | | Turb (NTU): | 2.77 | Manganese: | | |
| | | Salinity: | | Sulfate: | | Alkalinity High Range: |
| | | | | Sulfide: | | Alkalinity Low Range: |
| | | | | Nitrate: | | |

| Lab Analyses/Methods: | Technician Initials |
|---|---|
| "BTEX/MTBE, PAHs, Sulfate, TRPH" | |

# GROUNDWATER PURGING & SAMPLING LOG

TERRAINE
Environmental Consulting

## Project Information

| | | |
|---|---|---|
| Project No: 04-41001/3 | Project Name: Building 46 - Cecil Field LTM/RAO | |
| Technician 1: Robert Brookshire | Technician 2: Danny Hockett | Weather: Beautiful Day |
| Sampling ID: 04-41001/3:CEF-46-12I:9/25/06 | | |
| Notes: | | |

## Well Information

| | | |
|---|---|---|
| Well ID: **CEF-46-12I** | Sampling Date: **9/25/2006** | |
| Well Diam (in): 2.0 | Total Well Depth (ft): 30.50 | Well Screen Interval (ft): 25-30 |
| TOC Elevation (ft amsl): 78.73 | Northing: 2144067.28 | Easting: 375469.94 |
| Static Depth to Water (ft): 11.13 | Well Capacity (gal): 3.16 | |

## Purge Setup

| | | | |
|---|---|---|---|
| Purge Method: Peristaltic | Tubing Material: PPE | | Pump Set at (ft): 31.00 |
| pH Meter: YSI 556 MPS | Cond. Meter: YSI 556MPS | DO Meter: YSI 556 MPS | Turb. Meter: Hach 2100P |
| Purge Start: 07:15:11 | Purge End: 07:40:52 | Total Volume Purged (gal): 0.60 | |

## Purging Data

| Time | Water Level (ft) | Vol Purged (gal) | Pump Rate (gal/min) | DO (mg/L) | Temp (°C) | SEC (µS/cm) | pH | ORP (mV) | Turbidity (NTU) | Salinity | Color | Odor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07:32:05 | 11.16 | 0.30 | 0.018 | 0.79 | 25.82 | 222.0 | 3.92 | -30.1 | 11.90 | | clear | |
| 07:35:16 | 11.16 | 0.40 | 0.031 | 0.66 | 25.79 | 222.0 | 3.92 | -41.3 | 11.70 | | clear | |
| 07:38:58 | 11.16 | 0.50 | 0.027 | 0.61 | 25.72 | 222.0 | 3.93 | -50.3 | 11.00 | | clear | |

## Sampling Data

**Sample Information**

Sample Date: 9/25/2006
Sample Start Time: 07:40:52
Sample End Time: 08:00:08
Field Filtered: ☐
Duplicate: ☐

**Final Purge Readings**

DO (mg/L): 0.60
Temp (°C): 25.73
SEC (uS/cm): 222
pH: 3.93
ORP (mV): -49.8
Turb (NTU): 9.79
Salinity:

**Hach Field Data (mg/L)**

DO: 0
CO2: 443
Alkalinity: 15
Ferrous Iron: 3.2
H2S: 0.1
Manganese:
Sulfate:
Sulfide:
Nitrate:

**CHEMetrics Field Data (mg/L)**

DO High Range:
DO High Range:

CO2 High Range:
CO2 Low Range:

Alkalinity High Range:
Alkalinity Low Range:

**Lab Analyses/Methods:**

"BTEX/MTBE, PAHs, Sulfate, TRPH"

**Technician Initials**

# GROUNDWATER PURGING & SAMPLING LOG

TERRAINE
Environmental Consulting

## Project Information

| | | |
|---|---|---|
| Project No: 04-41001/3 | Project Name: Building 46 - Cecil Field LTM/RAO | |
| Technician 1: Robert Brookshire | Technician 2: Danny Hockett | Weather: Beautiful Day |
| Sampling ID: 04-41001/3:CEF-46-13I:9/25/06 | | |
| Notes: | | |

## Well Information

| | | |
|---|---|---|
| Well ID: **CEF-46-13I** | Sampling Date: **9/25/2006** | |
| Well Diam (in): 2.0 | Total Well Depth (ft): 50.50 | Well Screen Interval (ft): 45-50 |
| TOC Elevation (ft amsl): 78.87 | Northing: 2144061.03 | Easting: 375470.06 |
| Static Depth to Water (ft): 11.36 | Well Capacity (gal): 6.38 | |

## Purge Setup

| | | | |
|---|---|---|---|
| Purge Method: Peristaltic | Tubing Material: PPE | | Pump Set at (ft): 45.00 |
| pH Meter: YSI 556 MPS | Cond. Meter: YSI 556MPS | DO Meter: YSI 556 MPS | Turb. Meter: Hach 2100P |
| Purge Start: 08:05:51 | Purge End: 08:35:45 | Total Volume Purged (gal): 0.60 | |

## Purging Data

| Time | Water Level (ft) | Vol Purged (gal) | Pump Rate (gal/min) | DO (mg/L) | Temp (°C) | SEC (µS/cm) | pH | ORP (mV) | Turbidity (NTU) | Salinity | Color | Odor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 08:24:04 | 11.39 | 0.30 | 0.016 | 0.58 | 26.44 | 157.0 | 3.86 | -30.9 | 6.38 | | clear | |
| 08:27:35 | 11.39 | 0.40 | 0.028 | 0.52 | 26.40 | 156.0 | 3.86 | -36.9 | 6.05 | | clear | |
| 08:30:45 | 11.39 | 0.50 | 0.032 | 0.48 | 26.39 | 155.0 | 3.86 | -40.4 | 6.95 | | clear | |

## Sampling Data

**Sample Information**

| | |
|---|---|
| Sample Date: | 9/25/2006 |
| Sample Start Time: | 08:35:45 |
| Sample End Time: | 08:55:03 |
| Field Filtered: | ☐ |
| Duplicate: | ☐ |

**Final Purge Readings**

| | |
|---|---|
| DO (mg/L): | 0.47 |
| Temp (°C): | 26.38 |
| SEC (uS/cm): | 154 |
| pH: | 3.86 |
| ORP (mV): | -42.3 |
| Turb (NTU): | 5.86 |
| Salinity: | |

**Hach Field Data (mg/L)**

| | |
|---|---|
| DO: | 0 |
| CO2: | 395 |
| Alkalinity: | 0 |
| Ferrous Iron: | 5.4 |
| H2S: | 0.1 |
| Manganese: | |
| Sulfate: | |
| Sulfide: | |
| Nitrate: | |

**CHEMetrics Field Data (mg/L)**

DO High Range:
DO High Range:

CO2 High Range:
CO2 Low Range:

Alkalinity High Range:
Alkalinity Low Range:

**Lab Analyses/Methods:**

"BTEX/MTBE, PAHs, Sulfate, TRPH"

**Technician Initials**

# GROUNDWATER PURGING & SAMPLING LOG

TERRAINE
Environmental Consulting

## Project Information

| | | |
|---|---|---|
| Project No: 04-41001/3 | Project Name: Building 46 - Cecil Field LTM/RAO | |
| Technician 1: Robert Brookshire | Technician 2: Danny Hockett | Weather: "Beautiful Day, Hot" |
| Sampling ID: 04-41001/3:CEF-46-14D:9/24/06 | | |
| Notes: | | |

## Well Information

| | | |
|---|---|---|
| Well ID: **CEF-46-14D** | Sampling Date: **9/24/2006** | |
| Well Diam (in): 2.0 | Total Well Depth (ft): 80.00 | Well Screen Interval (ft): 70-80 |
| TOC Elevation (ft amsl): 78.88 | Northing: 2144054.45 | Easting: 375470.04 |
| Static Depth to Water (ft): 11.14 | Well Capacity (gal): 11.23 | |

## Purge Setup

| | | | |
|---|---|---|---|
| Purge Method: Peristaltic | Tubing Material: PPE | | Pump Set at (ft): 0.00 |
| pH Meter: YSI 556 MPS | Cond. Meter: YSI 556MPS | DO Meter: YSI 556 MPS | Turb. Meter: Hach 2100P |
| Purge Start: 16:21:36 | Purge End: 16:50:57 | Total Volume Purged (gal): 0.75 | |

## Purging Data

| Time | Water Level (ft) | Vol Purged (gal) | Pump Rate (gal/min) | DO (mg/L) | Temp (°C) | SEC (µS/cm) | pH | ORP (mV) | Turbidity (NTU) | Salinity | Color | Odor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:33:20 | 11.39 | 0.30 | 0.026 | 0.81 | 28.61 | 97.0 | 3.68 | 27.7 | 11.40 | | clear | |
| 16:37:03 | 11.40 | 0.40 | 0.027 | 0.67 | 28.52 | 96.0 | 4.47 | 32.5 | 14.30 | | clear | |
| 16:40:11 | 11.40 | 0.50 | 0.032 | 0.59 | 28.60 | 96.0 | 3.41 | 63.2 | 9.90 | | clear | |
| 16:43:14 | 11.40 | 0.60 | 0.033 | 0.54 | 28.64 | 96.0 | 3.49 | 128.8 | 8.97 | | clear | |

## Sampling Data

**Sample Information**

| | |
|---|---|
| Sample Date: | 9/24/2006 |
| Sample Start Time: | 16:50:57 |
| Sample End Time: | 17:10:03 |
| Field Filtered: | ☐ |
| Duplicate: | ☐ |

**Final Purge Readings**

| | |
|---|---|
| DO (mg/L): | 0.49 |
| Temp (°C): | 28.48 |
| SEC (uS/cm): | 95 |
| pH: | 3.34 |
| ORP (mV): | 148.9 |
| Turb (NTU): | 4.33 |
| Salinity: | |

**Hach Field Data (mg/L)**

| | |
|---|---|
| DO: | 0 |
| CO2: | 252 |
| Alkalinity: | 40 |
| Ferrous Iron: | 3 |
| H2S: | 0.3 |
| Manganese: | |
| Sulfate: | |
| Sulfide: | |
| Nitrate: | |

**CHEMetrics Field Data (mg/L)**

DO High Range:
DO High Range:

CO2 High Range:
CO2 Low Range:

Alkalinity High Range:
Alkalinity Low Range:

**Lab Analyses/Methods:**

"BTEX/MTBE, PAHs, Sulfate, TRPH"

**Technician Initials**

# GROUNDWATER PURGING & SAMPLING LOG

TERRAINE
Environmental Consulting

## Project Information

| | | |
|---|---|---|
| Project No: 04-41001/3 | Project Name: Building 46 - Cecil Field LTM/RAO | |
| Technician 1: Danny Hockett | Technician 2: | Weather: "Hot, Humid" |
| Sampling ID: 04-41001/3:CEF-46-15I:9/24/06 | | |
| Notes: | | |

## Well Information

| | | |
|---|---|---|
| Well ID: **CEF-46-15I** | Sampling Date: **9/24/2006** | |
| Well Diam (in): 2.0 | Total Well Depth (ft): 30.50 | Well Screen Interval (ft): 25-30 |
| TOC Elevation (ft amsl): 79.75 | Northing: 0 | Easting: 0 |
| Static Depth to Water (ft): 11.95 | Well Capacity (gal): 3.02 | |

## Purge Setup

| | | | |
|---|---|---|---|
| Purge Method: Peristaltic | Tubing Material: PPE | | Pump Set at (ft): 27.00 |
| pH Meter: YSI 556 MPS | Cond. Meter: YSI 556MPS | DO Meter: YSI 556 MPS | Turb. Meter: Hach 2100P |
| Purge Start: 15:10:00 | Purge End: 15:39:14 | Total Volume Purged (gal): 0.60 | |

## Purging Data

| Time | Water Level (ft) | Vol Purged (gal) | Pump Rate (gal/min) | DO (mg/L) | Temp (°C) | SEC (µS/cm) | pH | ORP (mV) | Turbidity (NTU) | Salinity | Color | Odor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15:26:50 | 12.03 | 0.30 | 0.017 | 0.38 | 24.70 | 150.0 | 2.76 | 222.9 | 10.80 | | clear | none |
| 15:30:15 | 12.03 | 0.40 | 0.029 | 0.34 | 24.76 | 147.0 | 2.85 | 216.4 | 12.90 | | | |
| 15:33:39 | 12.03 | 0.50 | 0.029 | 0.31 | 24.59 | 143.0 | 3.08 | 192.0 | 7.53 | | | |
| 15:37:19 | 12.03 | 0.60 | 0.027 | 0.30 | 24.49 | 142.0 | 3.06 | 193.2 | 5.92 | | | |

## Sampling Data

**Sample Information**

| | |
|---|---|
| Sample Date: | 9/24/2006 |
| Sample Start Time: | 15:39:14 |
| Sample End Time: | 15:54:26 |
| Field Filtered: | ☐ |
| Duplicate: | ☐ |

**Final Purge Readings**

| | |
|---|---|
| DO (mg/L): | 0.29 |
| Temp (°C): | 24.45 |
| SEC (uS/cm): | 142 |
| pH: | 3.07 |
| ORP (mV): | 192.9 |
| Turb (NTU): | 5.46 |
| Salinity: | |

**Hach Field Data (mg/L)**

| | |
|---|---|
| DO: | 0 |
| CO2: | 253 |
| Alkalinity: | 5 |
| Ferrous Iron: | 6.4 |
| H2S: | 0.0 |
| Manganese: | |
| Sulfate: | |
| Sulfide: | |
| Nitrate: | |

**CHEMetrics Field Data (mg/L)**

DO High Range:
DO High Range:

CO2 High Range:
CO2 Low Range:

Alkalinity High Range:
Alkalinity Low Range:

**Lab Analyses/Methods:**

"BTEX/MTBE, PAHs, Sulfate, TRPH"

**Technician Initials**

# GROUNDWATER PURGING & SAMPLING LOG

TERRAINE
Environmental Consulting

## Project Information

| | | |
|---|---|---|
| Project No: 04-41001/3 | Project Name: Building 46 - Cecil Field LTM/RAO | |
| Technician 1: Robert Brookshire | Technician 2: Danny Hockett | Weather: "Beautiful Day, Hot" |
| Sampling ID: 04-41001/3:CEF-46-21I:9/24/06 | | |
| Notes: | | |

## Well Information

| | | |
|---|---|---|
| Well ID: **CEF-46-21I** | Sampling Date: **9/24/2006** | |
| Well Diam (in): 2.0 | Total Well Depth (ft): 30.50 | Well Screen Interval (ft): 25-30 |
| TOC Elevation (ft amsl): 79.31 | Northing: 2143935.49 | Easting: 375041.5 |
| Static Depth to Water (ft): 12.97 | Well Capacity (gal): 2.86 | |

## Purge Setup

| | | | |
|---|---|---|---|
| Purge Method: Peristaltic | Tubing Material: PPE | | Pump Set at (ft): 32.00 |
| pH Meter: YSI 556 MPS | Cond. Meter: YSI 556MPS | DO Meter: YSI 556 MPS | Turb. Meter: Hach 2100P |
| Purge Start: 12:50:48 | Purge End: 13:20:57 | Total Volume Purged (gal): 0.75 | |

## Purging Data

| Time | Water Level (ft) | Vol Purged (gal) | Pump Rate (gal/min) | DO (mg/L) | Temp (°C) | SEC (µS/cm) | pH | ORP (mV) | Turbidity (NTU) | Salinity | Color | Odor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13:05:45 | 13.02 | 0.30 | 0.020 | 0.64 | 25.99 | 95.0 | 3.75 | -10.7 | 14.30 | | clear | |
| 13:08:58 | 13.01 | 0.40 | 0.031 | 0.58 | 25.98 | 95.0 | 3.66 | 6.6 | 16.70 | | clear | |
| 13:11:59 | 13.01 | 0.50 | 0.033 | 0.54 | 25.84 | 95.0 | 3.88 | -17.7 | 10.30 | | clear | |
| 13:16:01 | 13.01 | 0.70 | 0.050 | 0.48 | 25.89 | 95.0 | 3.84 | -42.0 | 11.10 | | clear | |

## Sampling Data

| Sample Information | | Final Purge Readings | | Hach Field Data (mg/L) | | CHEMetrics Field Data (mg/L) |
|---|---|---|---|---|---|---|
| Sample Date: | 9/24/2006 | DO (mg/L): | 0.47 | DO: | 0 | DO High Range: |
| Sample Start Time: | 13:20:57 | Temp (°C): | 25.78 | CO2: | 156 | DO High Range: |
| Sample End Time: | 13:45:14 | SEC (uS/cm): | 95 | Alkalinity: | 20 | |
| Field Filtered: | ☐ | pH: | 3.83 | Ferrous Iron: | 2.4 | CO2 High Range: |
| Duplicate: | ☐ | ORP (mV): | -45.3 | H2S: | 0.1 | CO2 Low Range: |
| | | Turb (NTU): | 9.23 | Manganese: | | |
| | | Salinity: | | Sulfate: | | |
| | | | | Sulfide: | | Alkalinity High Range: |
| Lab Analyses/Methods: | | Technician Initials | | Nitrate: | | Alkalinity Low Range: |
| "BTEX/MTBE, PAHs, Sulfate, TRPH" | | | | | | |

# GROUNDWATER PURGING & SAMPLING LOG

TERRAINE
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## Project Information

| | | |
|---|---|---|
| Project No: 04-41001/3 | Project Name: Building 46 - Cecil Field LTM/RAO | |
| Technician 1: Robert Brookshire | Technician 2: Danny Hockett | Weather: "Beautiful Day, Hot" |
| Sampling ID: 04-41001/3:CEF-46-24D:9/24/06 | | |
| Notes: | | |

## Well Information

| | | |
|---|---|---|
| Well ID: **CEF-46-24D** | Sampling Date: **9/24/2006** | |
| Well Diam (in): 2.0 | Total Well Depth (ft): 90.45 | Well Screen Interval (ft): |
| TOC Elevation (ft amsl): 78.74 | Northing: 0 | Easting: 0 |
| Static Depth to Water (ft): 12.12 | Well Capacity (gal): 12.78 | |

## Purge Setup

| | | | |
|---|---|---|---|
| Purge Method: Peristaltic | Tubing Material: PPE | | Pump Set at (ft): 0.00 |
| pH Meter: YSI 556 MPS | Cond. Meter: YSI 556MPS | DO Meter: YSI 556 MPS | Turb. Meter: Hach 2100P |
| Purge Start: 15:07:35 | Purge End: 15:35:52 | Total Volume Purged (gal): 0.75 | |

## Purging Data

| Time | Water Level (ft) | Vol Purged (gal) | Pump Rate (gal/min) | DO (mg/L) | Temp (°C) | SEC (µS/cm) | pH | ORP (mV) | Turbidity (NTU) | Salinity | Color | Odor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15:26:29 | 12.16 | 0.50 | 0.026 | 0.58 | 26.65 | 2,319.0 | 4.08 | 52.7 | 14.90 | | clear | |
| 15:29:56 | 12.16 | 0.60 | 0.029 | 0.54 | 26.75 | 2,320.0 | 4.10 | 33.4 | 18.00 | | clear | |
| 15:33:29 | 12.16 | 0.70 | 0.028 | 0.50 | 26.75 | 2,319.0 | 4.09 | 20.4 | 15.80 | | clear | |

## Sampling Data

| Sample Information | | Final Purge Readings | | Hach Field Data (mg/L) | | CHEMetrics Field Data (mg/L) |
|---|---|---|---|---|---|---|
| Sample Date: | 9/24/2006 | DO (mg/L): | 0.50 | DO: | 0 | DO High Range: |
| Sample Start Time: | 15:35:52 | Temp (°C): | 26.75 | CO2: | Unknown/ | DO High Range: |
| Sample End Time: | 15:55:07 | SEC (uS/cm): | <<< | Alkalinity: | 0 | |
| Field Filtered: | ☐ | pH: | 4.00 | Ferrous Iron: | 5 | CO2 High Range: |
| Duplicate: | ☐ | ORP (mV): | 20.4 | H2S: | 0.1 | CO2 Low Range: |
| | | Turb (NTU): | 15.8 | Manganese: | | |
| | | Salinity: | | Sulfate: | | Alkalinity High Range: |
| | | | | Sulfide: | | Alkalinity Low Range: |
| | | | | Nitrate: | | |
| Lab Analyses/Methods: | | Technician Initials | | | | |
| "BTEX/MTBE, PAHs, Sulfate, TRPH" | | | | | | |

# GROUNDWATER PURGING & SAMPLING LOG

TERRAINE
Environmental Consulting

## Project Information

| | | |
|---|---|---|
| Project No: 04-41001/3 | Project Name: Building 46 - Cecil Field LTM/RAO | |
| Technician 1: Robert Brookshire | Technician 2: Danny Hockett | Weather: "Beautiful Day, Hot" |
| Sampling ID: 04-41001/3:CEF-46-25I:9/24/06 | | |
| Notes: | | |

## Well Information

| | | |
|---|---|---|
| Well ID: **CEF-46-25I** | Sampling Date: **9/24/2006** | |
| Well Diam (in): 2.0 | Total Well Depth (ft): 50.45 | Well Screen Interval (ft): |
| TOC Elevation (ft amsl): 79.17 | Northing: 0 | Easting: 0 |
| Static Depth to Water (ft): 12.98 | Well Capacity (gal): 6.11 | |

## Purge Setup

| | | | |
|---|---|---|---|
| Purge Method: Peristaltic | Tubing Material: PPE | | Pump Set at (ft): 45.00 |
| pH Meter: YSI 556 MPS | Cond. Meter: YSI 556MPS | DO Meter: YSI 556 MPS | Turb. Meter: Hach 2100P |
| Purge Start: 11:51:43 | Purge End: 12:20:22 | Total Volume Purged (gal): 0.70 | |

## Purging Data

| Time | Water Level (ft) | Vol Purged (gal) | Pump Rate (gal/min) | DO (mg/L) | Temp (°C) | SEC (µS/cm) | pH | ORP (mV) | Turbidity (NTU) | Salinity | Color | Odor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:06:00 | 13.01 | 0.30 | 0.021 | 0.65 | 25.80 | 201.0 | 3.93 | -86.4 | 14.50 | | clear | |
| 12:11:35 | 13.01 | 0.50 | 0.036 | 0.52 | 25.70 | 199.0 | 3.88 | -86.0 | 13.20 | | clear | |
| 12:15:08 | 13.01 | 0.60 | 0.028 | 0.48 | 25.60 | 200.0 | 3.86 | -86.5 | 11.60 | | clear | |

## Sampling Data

**Sample Information**

Sample Date: 9/24/2006
Sample Start Time: 12:20:22
Sample End Time: 12:40:43
Field Filtered: ☐
Duplicate: ☐

**Final Purge Readings**

DO (mg/L): 0.47
Temp (°C): 25.71
SEC (uS/cm): 201
pH: 3.86
ORP (mV): -85.3
Turb (NTU): 10.3
Salinity:

**Hach Field Data (mg/L)**

DO: 0
CO2: 316
Alkalinity: 0
Ferrous Iron: 3.4
H2S: 5.0
Manganese:
Sulfate:
Sulfide:
Nitrate:

**CHEMetrics Field Data (mg/L)**

DO High Range:
DO High Range:
CO2 High Range:
CO2 Low Range:
Alkalinity High Range:
Alkalinity Low Range:

**Lab Analyses/Methods:**

"BTEX/MTBE, PAHs, Sulfate, TRPH"

**Technician Initials**

# GROUNDWATER PURGING & SAMPLING LOG

TERRAINE
Environmental Consulting

## Project Information

| | | |
|---|---|---|
| Project No: 04-41001/3 | Project Name: Building 46 - Cecil Field LTM/RAO | |
| Technician 1: Robert Brookshire | Technician 2: Danny Hockett | Weather: "Beautiful Day, Hot" |
| Sampling ID: 04-41001/3:CEF-46-26I:9/24/06 | | |
| Notes: | | |

## Well Information

| | | |
|---|---|---|
| Well ID: **CEF-46-26I** | Sampling Date: **9/24/2006** | |
| Well Diam (in): 2.0 | Total Well Depth (ft): 47.76 | Well Screen Interval (ft): |
| TOC Elevation (ft amsl): 79.43 | Northing: 0 | Easting: 0 |
| Static Depth to Water (ft): 13.60 | Well Capacity (gal): 5.57 | |

## Purge Setup

| | | | |
|---|---|---|---|
| Purge Method: Peristaltic | Tubing Material: PPE | | Pump Set at (ft): 43.00 |
| pH Meter: YSI 556 MPS | Cond. Meter: YSI 556MPS | DO Meter: YSI 556 MPS | Turb. Meter: Hach 2100P |
| Purge Start: 13:52:55 | Purge End: 14:25:07 | Total Volume Purged (gal): 0.80 | |

## Purging Data

| Time | Water Level (ft) | Vol Purged (gal) | Pump Rate (gal/min) | DO (mg/L) | Temp (°C) | SEC (µS/cm) | pH | ORP (mV) | Turbidity (NTU) | Salinity | Color | Odor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14:11:30 | 13.63 | 0.40 | 0.022 | 0.86 | 26.21 | 2,018.0 | 3.91 | -44.1 | 16.70 | | clear | |
| 14:14:37 | 13.63 | 0.50 | 0.032 | 0.61 | 25.98 | 1,947.0 | 3.85 | -51.4 | 18.70 | | clear | |
| 14:20:56 | 13.63 | 0.60 | 0.016 | 0.46 | 26.41 | 1,949.0 | 3.79 | -57.7 | 14.40 | | clear | |
| 14:24:09 | 13.63 | 0.70 | 0.031 | 0.44 | 26.50 | 1,949.0 | 3.79 | -61.8 | 13.60 | | clear | |

## Sampling Data

| Sample Information | | Final Purge Readings | | Hach Field Data (mg/L) | | CHEMetrics Field Data (mg/L) |
|---|---|---|---|---|---|---|
| Sample Date: | 9/24/2006 | DO (mg/L): | 0.42 | DO: | 0 | DO High Range: |
| Sample Start Time: | 14:25:07 | Temp (°C): | 26.59 | CO2: | Unknown/ | DO High Range: |
| Sample End Time: | 14:38:22 | SEC (uS/cm): | 1952 | Alkalinity: | 0 | |
| Field Filtered: | ☐ | pH: | 3.78 | Ferrous Iron: | 8.2 | CO2 High Range: |
| Duplicate: | ☐ | ORP (mV): | -63.8 | H2S: | 2.0 | CO2 Low Range: |
| | | Turb (NTU): | 12.5 | Manganese: | | |
| | | Salinity: | | Sulfate: | | |
| | | | | Sulfide: | | Alkalinity High Range: |
| Lab Analyses/Methods: | | Technician Initials | | Nitrate: | | Alkalinity Low Range: |
| "BTEX/MTBE, PAHs, Sulfate, TRPH" | | | | | | |