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NAS CECIL FIELD, FL
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"SECOND SEMI-ANNUAL SECOND YEAR GROUNDWATER MONITORING LETTER
REPORT FOR BUILDING 860 TANKS 860 A, B AND D NAS CECIL FIELD FL "

6/12/2003

TETRA TECH NUS INC

**TETRA TECH NUS, INC.**

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Document Tracking Number 03JAX0144

June 12, 2003

Project Number N4248

Florida Department of Environmental Protection
Mr. David Grabka
Remedial Project Manager
Technical Review/Federal Facilities
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Reference: CLEAN Contract Number N62467-94-D-0888
Contract Task Order Number 0248

Subject: Groundwater Monitoring Report
2nd Semi-Annual Report, 2nd Year (January 2003)
Building 860 –Tanks 860 A/B/D
Naval Air Station Cecil Field
Jacksonville, Florida

Dear Mr. Grabka:

Tetra Tech NUS, Inc. (TtNUS) is pleased to submit this Groundwater Monitoring Report in both hardcopy and compact disk (CD) formats for the referenced Contract Task Order (CTO). This report was prepared by TtNUS for the United States Navy Southern Division, Naval Facilities Engineering Command (SOUTHNAVFACENGCOM) under the Comprehensive Long-term Environmental Action Navy (CLEAN) Contract Number N62467-94-D-0888. The objective of this task is to semi-annually monitor groundwater associated with the site. The guidance document for this report is Chapter 62-770, Florida Administrative Code (FAC). The sampling program was accomplished in general accordance with the Natural Attenuation Monitoring Only Plan (MOP) Approval Order that was issued by the Florida Department of Environmental Protection (FDEP) on April 6, 2001 (Attachment A). This report summarizes the fieldwork and analytical results for the subject site that was conducted in January 2003. The work was performed in general accordance with the Base-wide Generic Work Plan Volumes I and II (TtNUS, 1998).

FIELD OPERATIONS

Figure 1 shows the location of the site. On February 17, 2003, water level measurements were obtained from eight monitoring wells prior to sample collection.

Groundwater samples were collected on February 17, 2003, from five monitoring wells in general accordance with the MOP Approval Order and were analyzed for total recoverable petroleum hydrocarbons (TRPH). Those wells included CEF-860-2S (perimeter well), CEF-860-3S (contaminated well), CEF-860-4S (contaminated well), CEF-860-7S (perimeter well), and CEF-860-8S (perimeter well).

Following collection efforts, the groundwater samples were shipped on ice and under chain-of-custody to Accutest Laboratories in Orlando, Florida, for analysis. The samples were analyzed using the Florida Petroleum Range Organics method for TRPH.



RESULTS

Figure 2 illustrates the groundwater elevations as measured on February 17, 2003. The groundwater contours indicate the flow is to the northwest. Table 1 provides the water table elevation data for the event. The depth to water ranged from 5.37 to 6.35 feet (ft) below top of casing (btoc). The depth-to-water measurements, along with top-of-casing elevations, were used to calculate groundwater elevations.

The laboratory report for the February 2003 event is provided in Attachment B, and the results are summarized in Table 2. The laboratory data indicates that TRPH concentrations were below the applicable groundwater cleanup target levels (GCTLs) in all of the five monitoring wells that were sampled. Perimeter monitoring wells CEF-860-2S and CEF-860-8S exhibited a concentration of 1.78 and 0.319 milligrams per liter (mg/L) for TRPH, respectively, which is below the applicable action level of 5 mg/L. Monitoring wells CEF-860-3S and CEF-860-4S exhibited a TRPH concentration of 4.36 mg/L and 0.319 mg/L respectively. Likewise, those levels are below the GCTL of 5 mg/L. Figure 3 depicts TRPH concentrations that were detected in the groundwater samples collected.

The historical laboratory data for the site is included on Table 3. The historical data for the contaminated well CEF-860-4S indicates that the TRPH concentration for that well has decreased below GCTLs and has remained so for the last four monitoring events. The historical data for the contaminated well CEF-860-3S indicates a continual decrease in concentration of TRPH and is now below the GCTL. TRPH has not been detected in excess of GCTLs in the downgradient perimeter wells (CEF-860-7S and CEF-860-8S).

CONCLUSIONS AND RECOMMENDATIONS

Groundwater flow direction to the northwest has remained generally unchanged for this site.

The laboratory data indicates that TRPH concentrations were below the applicable GCTLs in the five monitoring wells that were sampled. Since contaminated well CEF-860-4S has not exceeded the TRPH GCTL for four consecutive events and its downgradient perimeter well, CEF-860-7S, has shown no detectable petroleum impact during those same four events, TtNUS recommends deleting these wells from the current MOP Approval Order.

Since a GCTL was exceeded during the July 2002 sampling event and there has not been at least two consecutive events without the GCTL being exceeded, TtNUS recommends continued monitoring to confirm the TRPH concentrations will consistently remain below the TRPH GCTL.

If you have any questions with regard to this submittal, or if TtNUS can be of assistance in any other way, please contact me at (813) 806-0405.

Sincerely,

Paul E. Calligan, P.G.
Task Order Manager

FOR

PC/mwd

Attachments (9)

pc: W. Hansel, SOUTHNAVFACENCOM (CD only)
M. Perry, TtNUS (unbound and CD)
Project File

Mervin W. Dale, P.G.
Florida Professional Geologist
P.G. Number 1917

D. Vaughn-Wright, USEPA
D. Wroblewski, TtNUS (cover letter only)

TABLES

Table 1
Monitoring Well Construction and Water Table Elevation Data
Groundwater Monitoring Report, Building 860, Tanks A/B/D
Naval Air Station Cecil Field
Jacksonville, Florida

Monitoring Well Identification	Total Depth (ft, btoc)	Screened Interval (ft, btoc)	Top of Casing Elevation (ft, msl)	August 6, 2001		February 1, 2002	
				Depth to Water (ft, btoc)	Water Level Elevation (ft, msl)	Depth to Water (ft, btoc)	Water Level Elevation (ft, msl)
CEF-860-1S	15	5-15	74.63	6.05	68.58	6.60	68.03
CEF-860-2S	14	4-14	73.53	5.30	68.23	5.93	67.60
CEF-860-3S	14	4-14	73.73	5.44	68.29	6.09	67.64
CEF-860-4S	14	4-14	74.35	5.76	68.59	6.44	67.91
CEF-860-5S	14	4-14	74.46	5.84	68.62	6.51	67.95
CEF-860-6S	14	4-14	74.02	5.23	68.79	5.89	68.13
CEF-860-7S	14	4-14	73.35	5.00	68.35	5.72	67.63
CEF-860-8S	14	4-14	73.35	5.51	67.84	6.22	67.13

Monitoring Well Identification	Total Depth (ft, btoc)	Screened Interval (ft, btoc)	Top of Casing Elevation (ft, msl)	July 25, 2002		February 17, 2003	
				Depth to Water (ft, btoc)	Water Level Elevation (ft, msl)	Depth to Water (ft, btoc)	Water Level Elevation (ft, msl)
CEF-860-1S	15	5-15	74.63	7.05	67.58	6.35	68.28
CEF-860-2S	14	4-14	73.53	6.35	67.18	5.64	67.89
CEF-860-3S	14	4-14	73.73	6.45	67.28	5.80	67.93
CEF-860-4S	14	4-14	74.35	6.86	67.49	6.12	68.23
CEF-860-5S	14	4-14	74.46	6.84	67.62	6.14	68.32
CEF-860-6S	14	4-14	74.02	6.27	67.75	5.56	68.46
CEF-860-7S	14	4-14	73.35	6.12	67.23	5.37	67.98
CEF-860-8S	14	4-14	73.35	6.63	66.72	5.89	67.46

Notes:

Elevation is referenced to 1988 National Geodetic Vertical Datum.
msl = mean sea level

**Table 2
Summary of Detections**

**Groundwater Monitoring Report, Building 860, Tanks A/B/D
Naval Air Station Cecil Field
Jacksonville, Florida**

	Contaminated Monitoring Wells CEF-860-		Perimeter Monitoring Wells CEF-860-			Action Levels for Perimeter Wells/ Contaminated	Milestone Objective for Contaminated Wells
Location	3S	4S	2S	7S	8S		
Sample Date	2/17/03	2/17/03	2/17/03	2/17/03	2/17/03		
Total Petroleum Hydrocarbons (mg/L)							
TRPH	4.36	0.319	1.78	0.26U	0.319	5/50	11
Notes: NS = not sampled U = undetected at detection limit shown							

**Table 3
Historical Analytical Data**

**Groundwater Monitoring Report, Building 860, Tanks A/B/D
Naval Air Station Jacksonville
Jacksonville, Florida**

Location	FDEP GCTLs	CEF-860-1S			CEF-860-2S					CEF-860-2S	
Sample Number		1S	GW-1S-03	GW-DU06	GW-2S-01	GW-2S	GW-2S-01A	2S-05	2S-06	2S-06A	2S-07
Sample Date		10-Jul-98	10-May-00	10-May-00	6-Oct-99	6-Aug-01	11-Sep-01	1-Feb-02	25-Jul-02	3-Oct-02	18-Feb-03
Well Depth (ft)		15	15	15	14	14	14	14	14	14	14
<u>Volatile Organic Compounds (µg/L)</u>											
Ethylbenzene	30	21	NM	NM	1 U	NM	NM	NM	NM	NM	NM
Xylenes	20	1.7	NM	NM	3 U	NM	NM	NM	NM	NM	NM
<u>Semivolatile Organic Compounds (µg/L)</u>											
1-Methylnaphthalene	20	40	2 U	2 U	1 U	NM	NM	NM	NM	NM	NM
2-Methylnaphthalene	20	45	2 U	2 U	1 U	NM	NM	NM	NM	NM	NM
Acenaphthene	20	2 U	2 U	2 U	1 U	NM	NM	NM	NM	NM	NM
Anthracene	2100	3	2 U	2 U	1 U	NM	NM	NM	NM	NM	NM
Benzo(g,h,i)perylene	210	0.2 U	0.2 U	0.2 U	0.16 U	NM	NM	NM	NM	NM	NM
Naphthalene	20	27	2 U	2 U	1 U	NM	NM	NM	NM	NM	NM
Phenanthrene	210	2.6	2 U	2 U	1 U	NM	NM	NM	NM	NM	NM
Pyrene	210	3	2 U	2 U	1 U	NM	NM	NM	NM	NM	NM
<u>Total Petroleum Hydrocarbons (mg/L)</u>											
TRPH	5	12	3.33	2.88	1.09	17.4	0.215	0.559	7.07	0.295	1.78
See notes at end of table.											

**Table 3
Historical Analytical Data**

**Groundwater Monitoring Report, Building 860, Tanks A/B/D
Naval Air Station Jacksonville
Jacksonville, Florida**

Location	FDEP GCTLs	CEF-860-3S			CEF-860-4S				CEF-860-5S	CEF-860-7S	
Sample Number		GW-3S-01	GW-3S-03	GW-3S	4S-04	4S-05	4S-06	4S-07	GW-5S-01	GW-7S	GW-DUP1
Sample Date		7-Oct-99	10-May-00	6-Aug-01	6-Aug-01	1-Feb-02	25-Jul-02	17-Feb-03	6-Oct-99	6-Aug-01	6-Aug-01
Well Depth (ft)		14	14	14	14	14	14	14	14	14	14
<u>Volatile Organic Compounds (µg/L)</u>											
Ethylbenzene	30	1 U	NM	NM	NM	NM	NM	NM	1 U	NM	NM
Xylenes	20	3 U	NM	NM	NM	NM	NM	NM	3 U	NM	NM
<u>Semivolatile Organic Compounds (µg/L)</u>											
1-Methylnaphthalene	20	1.1 U	2 U	NM	NM	NM	NM	NM	16.5	NM	NM
2-Methylnaphthalene	20	1.1 U	2 U	NM	NM	NM	NM	NM	18.1	NM	NM
Acenaphthene	20	1.1 U	2 U	NM	NM	NM	NM	NM	13.4	NM	NM
Anthracene	2100	1 U	2 U	NM	NM	NM	NM	NM	1 U	NM	NM
Benzo(g,h,i)perylene	210	0.17 U	0.2 U	NM	NM	NM	NM	NM	0.15 U	NM	NM
Naphthalene	20	1.1 U	2 U	NM	NM	NM	NM	NM	21.7	NM	NM
Phenanthrene	210	1.1 U	2 U	NM	NM	NM	NM	NM	2.6	NM	NM
Pyrene	210	1 U	2 U	NM	NM	NM	NM	NM	1 U	NM	NM
<u>Total Petroleum Hydrocarbons (mg/L)</u>											
TRPH	5	6.86	13.6	5.62	0.389	0.364	1.09	0.319	13.5	0.25 U	0.25 U
See notes at end of table.											

**Table 3
Historical Analytical Data**

**Groundwater Monitoring Report, Building 860, Tanks A/B/D
Naval Air Station Jacksonville
Jacksonville, Florida**

Location	FDEP GCTLs	CEF-860-7S			CEF-860-8S				
Sample Number		GW-7S	7S-06	7S-07	GW-8S-02	GW-8S	GW-8S	8S-06	8S-07
Sample Date		1-Feb-02	25-Jul-02	17-Feb-03	18-Feb-00	6-Aug-01	1-Feb-02	25-Jul-02	17-Feb-03
Well Depth (ft)		14	14	14	14	14	14	14	14
<u>Volatile Organic Compounds (µg/L)</u>									
Ethylbenzene	30	NM	NM	NM	1 U	NM	NM	NM	NM
Xylenes	20	NM	NM	NM	3 U	NM	NM	NM	NM
<u>Semivolatile Organic Compounds (µg/L)</u>									
1-Methylnaphthalene	20	NM	NM	NM	NM	NM	NM	NM	NM
2-Methylnaphthalene	20	NM	NM	NM	NM	NM	NM	NM	NM
Acenaphthene	20	NM	NM	NM	NM	NM	NM	NM	NM
Anthracene	2100	NM	NM	NM	NM	NM	NM	NM	NM
Benzo(g,h,i)perylene	210	NM	NM	NM	NM	NM	NM	NM	NM
Naphthalene	20	NM	NM	NM	NM	NM	NM	NM	NM
Phenanthrene	210	NM	NM	NM	NM	NM	NM	NM	NM
Pyrene	210	NM	NM	NM	NM	NM	NM	NM	NM
<u>Total Petroleum Hydrocarbons (mg/L)</u>									
TRPH	5	0.28 U	0.26 U	0.26 U	0.907	0.28 U	0.326	1.21	0.319

Notes:

Bold values are greater than criteria.

FDEP GCTLs taken from Chapter 62-777, FAC.

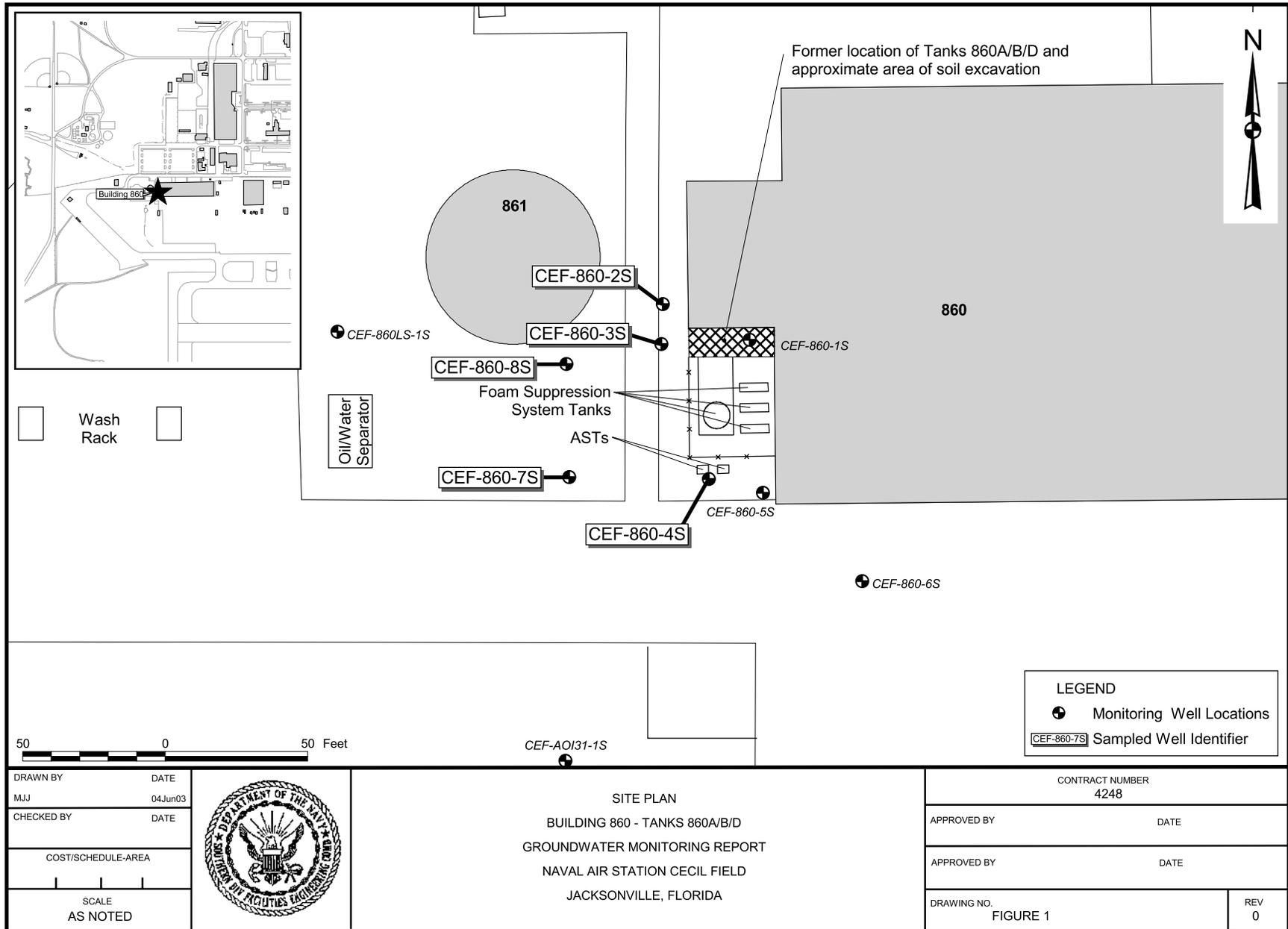
U = undetected at detection limit shown

J = estimated value

µg/L = micrograms per liter

NM = not measured

FIGURES

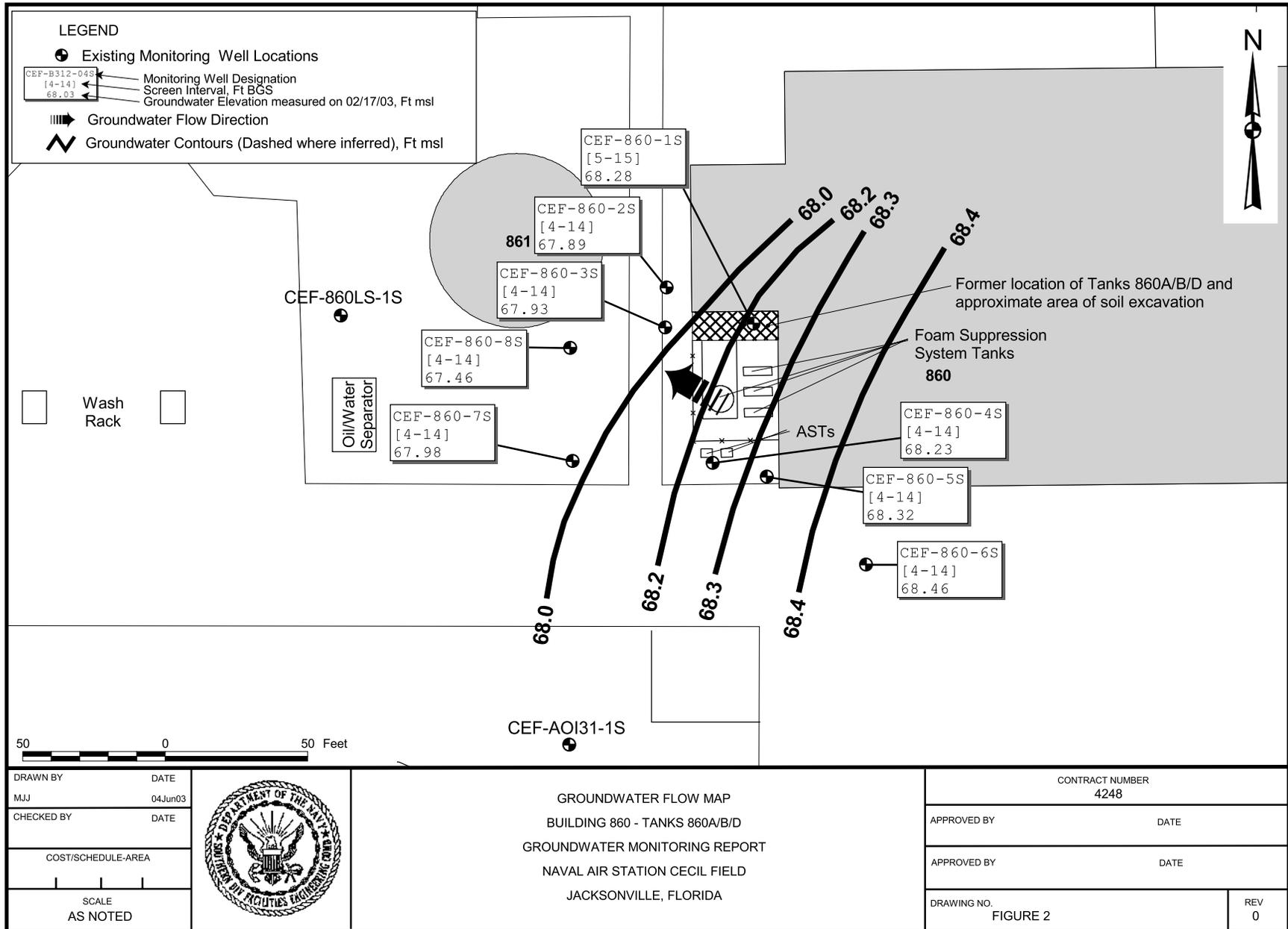


DRAWN BY	DATE
MJJ	04Jun03
CHECKED BY	DATE
COST/SCHEDULE-AREA	
SCALE AS NOTED	



SITE PLAN
 BUILDING 860 - TANKS 860A/B/D
 GROUNDWATER MONITORING REPORT
 NAVAL AIR STATION CECIL FIELD
 JACKSONVILLE, FLORIDA

CONTRACT NUMBER 4248	
APPROVED BY	DATE
APPROVED BY	DATE
DRAWING NO. FIGURE 1	REV 0

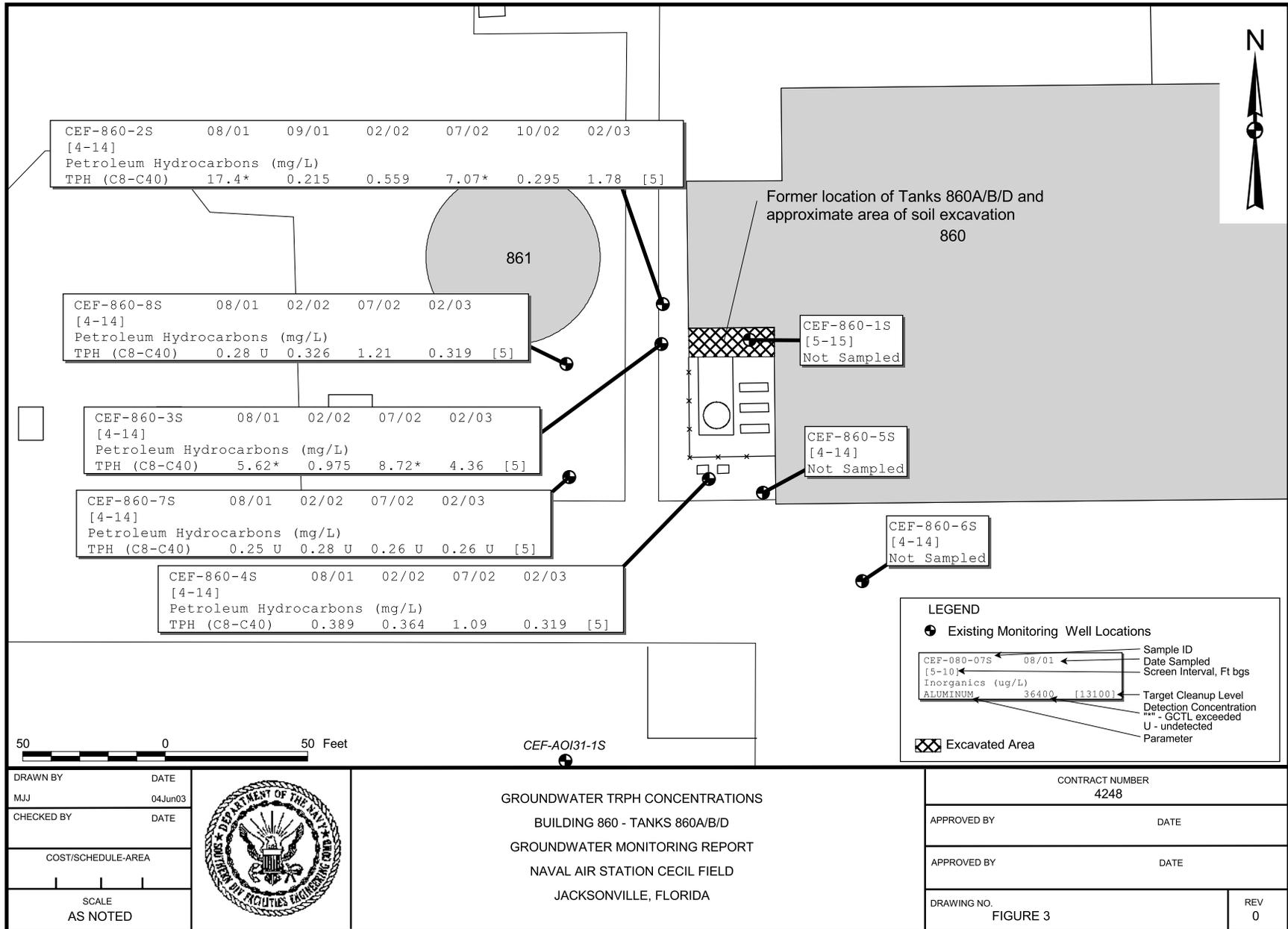


DRAWN BY	DATE
MJJ	04Jun03
CHECKED BY	DATE
COST/SCHEDULE-AREA	
SCALE AS NOTED	



GROUNDWATER FLOW MAP
 BUILDING 860 - TANKS 860A/B/D
 GROUNDWATER MONITORING REPORT
 NAVAL AIR STATION CECIL FIELD
 JACKSONVILLE, FLORIDA

CONTRACT NUMBER 4248	
APPROVED BY	DATE
APPROVED BY	DATE
DRAWING NO. FIGURE 2	REV 0



ATTACHMENT A

FDEP MONA APPROVAL ORDER



Department of Environmental Protection

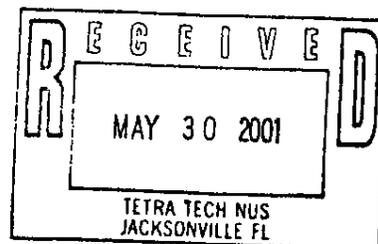
Jeb Bush
Governor

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

David B. Struhs
Secretary

April 6, 2001

Mr. Nick Ugolini
Code 1843 (UST RPM)
Southern Division
Naval Facilities Engineering Command
Post Office Box 190010
North Charleston, South Carolina 29419-9010



RE: **Site Assessment Report Addendum, Building 860, Tanks 860 A/B/D, Naval Air Station Cecil Field, Jacksonville, Florida**

Dear Mr. Ugolini:

I have completed the review of the Site Assessment Report Addendum (SARA) and Monitoring Only Proposal (MOP) for Building 860, Tanks 860 A/B/D, Naval Air Station Cecil Field, dated March 2001 (received March 19, 2001), prepared and submitted by Tetra Tech NUS, Inc. The SAR provides adequate evidence that natural attenuation at this site will reduce contaminant concentrations to below groundwater cleanup target levels (GCTLs) in five years. I have attached a Monitoring Only Plan Approval Order signed by Douglas A. Jones specifying the actions to be taken in monitoring the site.

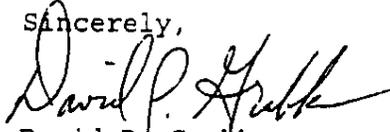
Based on the information provided in the SARA, petroleum contaminated soil has been removed to the extent practicable. Building footings, containment wall footings, a road and the water table has limited further removal of contaminated soil. The contaminated soil remaining does not appear to be at concentrations that would cause groundwater contamination above the Departments GCTLs. Also, most of the contaminated soil remaining on site is located beneath structures that act as a cap to prevent leaching of the contaminants to groundwater. As proposed in the SARA, institutional controls should be put in place to restrict access to the residual contaminated material and restrict the site for industrial use. The restrictions should also require that the roadway and earth cover be maintained in good condition.

If I can be of any further assistance with this matter, please contact me at (850) 488-3693.

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Mr. Nick Ugolini
Building 860, Tanks 860 A/B/D
Naval Air Station Cecil Field
April 6, 2001
Page Two

Sincerely,



David P. Grabka
Remedial Project Manager

cc: Scott Glass, Southern Division
Debbie Vaughn-Wright, USEPA Region 4
Mark Speranza, TetraTech NUS, Pittsburgh
Sam Ross, CH2M Hill Constructors, Inc.
Mike Fitzsimmons, FDEP Northeast District

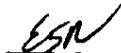
TJB



JJC



ESN



Mr. Nick Ugolini
Building 860, Tanks 860 A/B/D
Cecil Field Naval Air Station

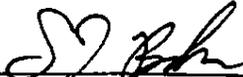
P.G. CERTIFICATION

SARA/MOP for Building 860, Tanks 860 A/B/D

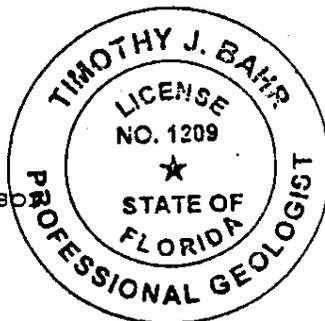
I hereby certify that in my professional judgement, the components of this Site Assessment Report Addendum and Monitoring Only Plan for Building 860, Tanks 860 A/B/D, Cecil Field Naval Air Station, Jacksonville, Florida, satisfy the requirements set forth in Chapter 62-770, F.A.C., and that the geological interpretations in this report provide reasonable assurances of achieving the Assessment objectives stated in Chapter 62-770, F.A.C.

I personally completed this review.

This review was conducted by David P. Grabka working under my supervision.



Timothy J. Bahr, P.G.
Professional Geologist Supervisor
Technical Review Section



4/6/01
Date



Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

April 6, 2001

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Nick Ugolini
Code 1843 (UST RPM)
Southern Division
Naval Facilities Engineering Command
Post Office Box 190010
North Charleston, South Carolina 29419-9010

Subject: Natural Attenuation Monitoring Plan Approval Order
Building 860, Tanks 860 A/B/D
Cecil Field Naval Air Station
Jacksonville, Duval County

Dear Mr. Ugolini:

The Bureau of Waste Cleanup has completed the review of the Site Assessment Report Addendum and Natural Attenuation Monitoring Plan dated March 2001 (received March 19, 2001), submitted for the petroleum product discharge discovered at this site. Pursuant to Rule 62-770.690, Florida Administrative Code (F.A.C.), the Department of Environmental Protection (Department) approves the Natural Attenuation Monitoring Plan. Pursuant to Rule 62-770.690(7), F.A.C., you are required to complete the monitoring program outlined below. The first sampling event should be performed within 60 days of receipt of this Natural Attenuation Monitoring Plan Approval Order (Order). Water-level measurements should be made immediately prior to each sampling event. The analytical results (laboratory report), chain of custody, cumulative summary table of the analytical results, site map(s) illustrating the most recent analytical results, and the water-level elevation information (cumulative summary table and most recent flow interpretation map), should be submitted to the Department within 60 days of sample collection.

The monitoring wells to be sampled, the sampling parameters, and the sampling frequency are as follows:

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Mr. Nick Ugolini
April 6, 2001
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<u>Monitoring Wells</u>	<u>Contaminants of Concern</u>	<u>Frequency</u>	<u>Duration</u>
CEF-860-3S, CEF-860-4S, CEF-860-2S, CEF-860-7S, CEF-860-8S	TRPH	Semi-annual	Five years

The approved Remedial Action by Natural Attenuation monitoring period is five years. The sampling frequency will be evaluated following the submittal of the first annual report to determine whether semiannual or annual sampling may be appropriate.

The following are the "milestone" objectives that will be used for annual evaluation of remediation progress by natural attenuation. An explanation of the progress relative to these milestone objectives, and the need for corrective action (if applicable), should be provided in the annual evaluation:

<u>TRPH</u>	<u>CEF-860-3S</u>	<u>CEF-860-4S</u>
End of year 1	13 mg/l	13 mg/l
End of year 2	11 mg/l	11 mg/l
End of year 5	<5 mg/l	<5 mg/l

If concentrations of contaminants of concern in any of the designated wells increase above the action levels listed below, the well or wells must be resampled no later than 30 days after the initial positive results are known. If the results of the resampling confirm the initial sampling results, then a proposal must be submitted to the Department, as described in Rule 62-770.690(7)(f), F.A.C.

Contaminated wells:

CEF-860-3S and CEF-860-4S: 50 mg/l TRPH

Perimeter well (temporary point of compliance):

CEF-860-2S, CEF-860-7S and CEF-860-8S: 5 mg/l TRPH

If the applicable No Further Action criteria in Rule 62-770.680, F.A.C., are met at the end of the monitoring period, a Site Rehabilitation Completion Report, summarizing the monitoring program and containing documentation supporting the opinion that the cleanup objectives have been achieved, should be submitted as required in Rule 62-770.690(8), F.A.C. If the applicable No Further Action criteria in Rule 62-770.680, F.A.C., are not met following five years of monitoring, then a report summarizing the monitoring program should be submitted, including a proposal as described in Rule 62-770.690(7)(g), F.A.C.

Mr. Nick Ugolini
April 6, 2001
Page Three

Legal Issues

The Department's Order shall become final unless a timely petition for an administrative proceeding (hearing) is filed under Sections 120.569 and 120.57, Florida Statutes (F.S.), within 21 days of receipt of this Order. The procedures for petitioning for a hearing are set forth below.

Persons affected by this Order have the following options:

If you choose to accept the above decision by the Department about the Site Assessment Report Addendum you do not have to do anything. This Order is final and effective as of the date on the top of the first page of this Order.

If you disagree with the decision, you may do one of the following:

- (1) File a petition for administrative hearing with the Department's Office of General Counsel within 21 days of receipt of this Order; or
- (2) File a request for an extension of time to file a petition for hearing with the Department's Office of General Counsel within 21 days of receipt of this Order. Such a request should be made if you wish to meet with the Department in an attempt to informally resolve any disputes without first filing a petition for hearing.

Please be advised that mediation of this decision pursuant to Section 120.573, F.S., is not available.

How to Request an Extension of Time to File a Petition for Hearing

For good cause shown, pursuant to Rule 62-110.106(4), F.A.C., the Department may grant a request for an extension of time to file a petition for hearing. Such a request must be filed (received) in the Department's Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from Commanding Officer, Southern Division Naval Facilities Engineering Command, shall mail a copy of the request to Commanding Officer, Southern Division Naval Facilities Engineering Command at the time of filing. Timely filing a request for an extension of time tolls the time period within which a petition for administrative hearing must be made.

How to File a Petition for Administrative Hearing

A person whose substantial interests are affected by this Order may petition for an administrative hearing under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Department's Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from Commanding Officer,

Mr. Nick Ugolini
April 6, 2001
Page Four

Southern Division Naval Facilities Engineering Command, shall mail a copy of the petition to Commanding Officer, Southern Division Naval Facilities Engineering Command at the time of filing. Failure to file a petition within this time period shall waive the right of anyone who may request an administrative hearing under Sections 120.569 and 120.57, F.S.

Pursuant to Section 120.54(5)(b)4.a., F.S. (1998, Supp.), and Rule 28-106.201, F.A.C., a petition for administrative hearing shall contain the following information:

- (a) The name, address, and telephone number of each petitioner, the name, address, and telephone number of the petitioner's representative, if any, the site owner's name and address, if different from the petitioner, the FDEP facility number, and the name and address of the facility;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) An explanation of how each petitioner's substantial interests are or will be affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by the petitioner, or a statement that there are no disputed facts;
- (e) A statement of the ultimate facts alleged, including a statement of the specific facts the petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the Department's action or proposed action; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the Department to take with respect to the Department's action or proposed action.

This Order is final and effective as of the date on the top of the first page of this Order. Timely filing a petition for administrative hearing postpones the date this Order takes effect until the Department issues either a final order pursuant to an administrative hearing or an order responding to supplemental information provided pursuant to meetings with the Department.

Judicial Review

Any party to this Order has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days after this Order is filed with the clerk of the Department (see below).

Mr. Nick Ugolini
April 6, 2001
Page Five

Questions

Any questions regarding the Department's review of your Site Assessment Report Addendum should be directed to David P. Grabka at (850) 488-3693. Questions regarding legal issues should be referred to the Department's Office of General Counsel at (850) 488-9314. Contact with any of the above does not constitute a petition for administrative hearing or request for an extension of time to file a petition for administrative hearing.

Sincerely,



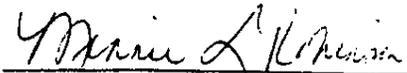
Douglas A. Jones, Chief
Bureau of Waste Cleanup
Division of Waste Management

DAJ/dpg

cc: Mike Fitzsimmons, FDEP Northeast District Office
Scott Glass, Southern Division
Debbie Vaughn-Wright, USEPA Region 4
Mark Speranza, Tetra Tech NUS, Pittsburgh
Sam Ross, CH2M Hill Constructors, Inc.
File

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to
§120.52 Florida Statutes, with the
designated Department Clerk, receipt
of which is hereby acknowledged.



Clerk
(or Deputy Clerk)



Date



Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

June 21, 2002

Mr. Wayne Hansel
Code ES245 (UST RPM)
Southern Division
Naval Facilities Engineering Command
Post Office Box 190010
North Charleston, South Carolina 29419-9010

RE: Groundwater Monitoring Report, 2nd Semi-Annual/Annual
Report, 1st Year (February 2002), Building 860 - Tanks 860
A/B/D, Naval Air Station Cecil Field, Jacksonville, Florida

Dear Mr. Ugolini:

I have completed the review of the Groundwater Monitoring
Report, 2nd Semi-Annual/Annual Report, 1st Year (February 2002),
Building 860 - Tanks 860 A/B/D, Naval Air Station Cecil Field,
dated March 26, 2002 (received March 27, 2002), prepared and
submitted by Tetra Tech NUS, Inc. Groundwater monitoring should
continue as specified in the Natural Attenuation Monitoring Only
Plan Approval Order dated April 6, 2001.

If I can be of any further assistance with this matter,
please contact me at (850) 921-9991.

Sincerely,

David P. Grabka, P.G.
Remedial Project Manager

cc: [REDACTED], Southern Division
Dawn Taylor, USEPA Region 4
Mark Speranza, TetraTech NUS, Pittsburgh
Sam Ross, CH2M Hill Constructors, Inc.
Mike Fitzsimmons, FDEP Northeast District

TJB

B

JJC

JJC

ESN

ESN

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

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ATTACHMENT B
GROUNDWATER ANALYTICAL REPORTS

Technical Report for

Tetra Tech, NUS

NAS Cecil Field-B860, Tanks 860

CTO248 WR 309

Accutest Job Number: F16640

Report to:

Tetra Tech, NUS

dalem@ttnus.com

ATTN: Merv Dale

Total number of pages in report: 8



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK
This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sample Summary

Tetra Tech, NUS

Job No: F16640

NAS Cecil Field-B860, Tanks 860
Project No: CTO248 WR 309

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F16640-1	02/17/03	10:35 CM	02/18/03	AQ	Ground Water	CEF-860-2S-07
F16640-2	02/17/03	11:00 CM	02/18/03	AQ	Ground Water	CEF-860-3S-07
F16640-3	02/17/03	12:25 CM	02/18/03	AQ	Ground Water	CEF-860-8S-07
F16640-4	02/17/03	12:30 CM	02/18/03	AQ	Ground Water	CEF-860-7S-07
F16640-5	02/17/03	13:35 CM	02/18/03	AQ	Ground Water	CEF-860-4S-07
F16640-6	02/17/03	00:00 CM	02/18/03	AQ	Ground Water	CEF-860-DUP1-07

Report of Analysis

Client Sample ID: CEF-860-2S-07	Date Sampled: 02/17/03
Lab Sample ID: F16640-1	Date Received: 02/18/03
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: FLORIDA-PRO SW846 3510C	
Project: NAS Cecil Field-B860, Tanks 860	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP27292.D	1	02/20/03	SKW	02/19/03	OP6970	GOP935
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	1.78	0.27	0.18	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	99%		51-125%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

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

Report of Analysis

Client Sample ID: CEF-860-3S-07	Date Sampled: 02/17/03
Lab Sample ID: F16640-2	Date Received: 02/18/03
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: FLORIDA-PRO SW846 3510C	
Project: NAS Cecil Field-B860, Tanks 860	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP27313.D	5	02/20/03	SKW	02/19/03	OP6970	GOP935
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	4.36	1.3	0.89	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	79%		51-125%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

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

Report of Analysis

Client Sample ID: CEF-860-8S-07	Date Sampled: 02/17/03
Lab Sample ID: F16640-3	Date Received: 02/18/03
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: FLORIDA-PRO SW846 3510C	
Project: NAS Cecil Field-B860, Tanks 860	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP27294.D	1	02/20/03	SKW	02/19/03	OP6970	GOP935
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	0.319	0.26	0.17	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	95%		51-125%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

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

Report of Analysis

Client Sample ID: CEF-860-7S-07	Date Sampled: 02/17/03
Lab Sample ID: F16640-4	Date Received: 02/18/03
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: FLORIDA-PRO SW846 3510C	
Project: NAS Cecil Field-B860, Tanks 860	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP27295.D	1	02/20/03	SKW	02/19/03	OP6970	GOP935
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	ND	0.26	0.18	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	89%		51-125%		

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

Report of Analysis

Client Sample ID: CEF-860-4S-07	Date Sampled: 02/17/03
Lab Sample ID: F16640-5	Date Received: 02/18/03
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: FLORIDA-PRO SW846 3510C	
Project: NAS Cecil Field-B860, Tanks 860	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP27296.D	1	02/20/03	SKW	02/19/03	OP6970	GOP935
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	0.319	0.27	0.18	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	56%		51-125%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

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

Report of Analysis

Client Sample ID:	CEF-860-DUP1-07	Date Sampled:	02/17/03
Lab Sample ID:	F16640-6	Date Received:	02/18/03
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	FLORIDA-PRO SW846 3510C		
Project:	NAS Cecil Field-B860, Tanks 860		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP27302.D	1	02/20/03	SKW	02/19/03	OP6970	GOP935
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	1.57	0.26	0.18	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	94%		51-125%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

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



TETRA TECH NUS, INC.

CECIL FIELD

CHAIN OF CUSTODY

NUMBER 2244

PAGE 1 OF 1

PROJECT NO: ABN4248 CTO248		FACILITY: B.860 TANKS		PROJECT MANAGER: PAUL CAWIGAN		PHONE NUMBER: 813 806 0202		LABORATORY NAME AND CONTACT: ACCUTEST Julie Bell			
SAMPLERS (SIGNATURE): Charles M...		ABD		FIELD OPERATIONS LEADER: MERY DALE		PHONE NUMBER: 904 636 6125		ADDRESS: 4405 Vineland Rd C-15			
STANDARD TAT <input checked="" type="checkbox"/>				CARRIER/WAYBILL NUMBER: Fedex 8371 1005 8/23/8/34				CITY, STATE: ORLANDO, FL 32811			
RUSH TAT <input type="checkbox"/>				CONTAINER TYPE PLASTIC (P) or GLASS (G)		PRESERVATIVE USED		TYPE OF ANALYSIS TRTH FL-PR0			
<input type="checkbox"/> 24 hr. <input type="checkbox"/> 48 hr. <input type="checkbox"/> 72 hr. <input type="checkbox"/> 7 day <input type="checkbox"/> 14 day											
DATE YEAR	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAP (G) COMP (C)	No. OF CONTAINERS	COMMENTS		
2003		F16640									
1	2/17/03 1035	CEF-860-25-07				GW	G	2	2	Cool to 4°C	
2	2/17/03 1100	CEF-860-35-07				GW	G	2	2		
3	2/17/03 1225	CEF-860-85-07				GW	G	2	2	WR 309	
4	2/17/03 1230	CEF-860-75-07				GW	G	2	2		
5	2/17/03 1335	CEF-860-45-07 *				GW	G	6	6	* Use for MSMSD.	
6	2/17/03 0000	CEF-860-DUPI-07				GW	G	2	2		
1. RELINQUISHED BY: Mery Dale				DATE: 2/17/03	TIME: 1600	1. RECEIVED BY: Fedex				DATE:	TIME:
2. RELINQUISHED BY: FED EX				DATE:	TIME:	2. RECEIVED BY: Muna Mohammed				DATE: 2/18/03	TIME: 0900
3. RELINQUISHED BY:				DATE:	TIME:	3. RECEIVED BY:				DATE:	TIME:
COMMENTS											

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