N60200.AR.004246
NAS CECIL FIELD, FL
5090.3a

"SUPPLEMENTAL SITE ASSESSMENT LETTER REPORT FOR BUILDING 81 TANKS 81 A, B AND C NAS CECIL FIELD FL"
8/3/2005
TETRA TECH NUS INC

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August 3, 2005

Project Number 9945

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

Reference: CLEAN III Contract Number N62467-94-D0888
Contract Task Order Number 0361

Subject: Supplemental Site Assessment Letter Report
Building 81, Tanks 81 A, B, and C
Naval Air Station Cecil Field
Jacksonville, Florida

Dear Mr. Grabka:

Tetra Tech NUS, Inc. (TtNUS) is pleased to submit this Supplemental Site Assessment Letter Report for the referenced Contract Task Order (CTO) for the subject site. This report has been prepared for the United States Navy Southern Division, Naval Facilities Engineering Command (NAVFAC EFD SOUTH) under CTO 0361, for the Comprehensive Long-term Environmental Action Navy (CLEAN) III Contract Number N62467-94-D-0888. This report provides the results of the supplemental site assessment activities and a limited review of prior site investigation results to aid in evaluating current site conditions and recommending future actions at the site. Figure 1 shows the general location of this site.

SITE HISTORY

The Site Assessment Report (SAR) for this site (TtNUS, 2002) documents past land use and the associated environmental investigation history. It also includes information on the source removals that occurred prior to submittal of the SAR to the Florida Department of Environmental Protection (FDEP). The conclusions and recommendations from the SAR were as follows:

"The following conclusions are made in this SAR:

- The soil contamination was adequately addressed and removed by previous investigations.
- The groundwater contamination has been delineated to the water table.
- There is no free product and the contamination does no appear to extend deeper than the water table.

The following additional activities are recommended in this SAR:

- Monitor the contaminated groundwater in five water table wells for the four COCs referenced in section ES.2 for five years in accordance with Chapter 62-770, FAC.
- Implement institutional controls to prevent the use of groundwater as a potable water source."

- Implement institutional controls to prevent the use of groundwater as a potable water source."

The four contaminants of concern (COCs) specified in the SAR were isopropylbenzene, naphthalene, 1,2,4-trimethylbenzene (TMB), and 1,3,5-TMB. The FDEP generally accepted the recommendations in their Monitoring Only Plan Approval Order dated October 1, 2002, with the exception of altering the recommended monitoring well list. The well list specified in the order was as follows: CEF-81-08SR, CEF-81-9S, CEF-81-13S, CEF-81-14S, and CEF-81-01I.

The first quarterly monitoring event, held in January 2003, revealed the concentrations of COCs in intermediate well CEF-81-01I exceeded the GCTLs. The report (TtNUS, 2003) recommended the monitoring program be discontinued, and a supplemental site assessment be conducted. The FDEP approved the recommendation for a supplemental investigation in a letter dated February 5, 2004.

SUPPLEMENTAL SITE ASSESSMENT OBJECTIVES

The objective of the supplemental assessment at Tanks 81 A, B, and C was to evaluate the site's current groundwater conditions. The site assessment data will be used to determine appropriate future actions at the site.

MONITORING WELL INSTALLATION

Four intermediate [30 feet (ft) deep with screens from 25 to 30 ft below land surface (bls)] monitoring wells (CEF-81-02I, CEF-81-03I, CEF-81-04I, and CEF-81-05I) and one deep (55 ft deep with a screen interval from 50 to 55 ft bls) well (CEF-81-01D) were installed and developed in February 2005 (Figure 2). The Boring Logs, Monitoring Well (Construction) Sheets, Certificates of Conformance and Monitoring Well Development Records for each well are provided in Attachment A. The top-of-casing (TOC) elevations of these five new wells were surveyed in March 2005, and the data set from the registered surveyor is provided in Attachment B.

GROUNDWATER SAMPLING AND ANALYSIS

On February 18, 2005, TtNUS personnel mobilized to Tanks 81 A, B, and C to conduct the groundwater sampling event. The sampling activities were completed on February 21, 2005, in accordance with the FDEP's Standard Operating Procedures for Field Activities (DEP-SOP-001/01). A copy of the field data record for the water level measurements is included in Attachment C.

Water level measurements were recorded from several monitoring wells on February 18, 2005. The depth-to-water measurements coupled with TOC elevation data were used to calculate groundwater elevations (Table 1). Depth to groundwater ranged from 6.21 to 7.52 ft below top of casing (btoc) for the shallow wells. The water level data were used to estimate groundwater flow direction at the site for the water table interval (Figure 3). Similarly, depth to groundwater ranged from 6.54 to 7.01 ft btoc for the intermediate interval. The groundwater flow direction at the site for this interval is indicated on Figure 4.

The sampling team collected groundwater samples from the original five MOP wells and the five new wells. Copies of the groundwater sample log sheets and low flow purge data sheets are provided for each well in Attachment C. The samples were packed on ice and transported to Accutest Laboratories in Orlando, Florida. The groundwater samples were analyzed for the following:

- Benzene, toluene, ethylbenzene, and xylene; isopropylbenzene (cumene); 1,2,4-TMB; 1,3,5-TMB; and tentatively identified compounds (TICs) using Environmental Protection Agency (EPA) Method SW846 8260B.

- Polynuclear aromatic hydrocarbons (PAHs) using EPA Method SW846 8310.

TICs were completed for the samples in order to provide results for the compound 1,2,3-TMB observed in previous samples (collected circa June 2001) from this site at concentrations above the groundwater cleanup target level (GCTL). PAHs were analyzed and reported to ensure that the COC, naphthalene, would be adequately characterized. Copies of the laboratory analytical report and chain-of-custody documentation are provided in Attachment D.

GROUNDWATER ANALYTICAL RESULTS

The analytical results for the groundwater samples collected at Tanks 81 A, B, and C from this supplemental assessment have been compared to the appropriate GCTLs. Cumene was detected, above its respective GCTL [0.8 micrograms per liter (µg/L)], in the groundwater samples collected from CEF-81-09S (2.8 µg/L), CEF-81-14S (3.3 µg/L), and CEF-81-04I (1.7 µg/L). Concentrations of other analytes [other volatile organic compounds (VOCs) and PAHs] were either below the respective GCTL, below the method detection limits, or had no established GCTL for comparison. The analytical results for the COCs from this supplemental assessment are summarized in Table 2.

SITE ASSESSMENT SUMMARY

The water level data collected as part of the supplemental site assessment indicates that shallow groundwater flow is approximately to the north. This conclusion generally agrees with the flow data direction given in the SAR, which also indicated flow from the source well (CEF-81-09S) toward the perimeter well (CEF-81-14S).

With the addition of four new intermediate wells, water level data was also collected and compared for this interval. The elevation data indicates that the groundwater flow for this interval at 25 to 30 ft bls is approximately to the west-northwest from the source area around well CEF-81-01I toward well CEF-81-04I.

While the shallow source area well CEF-81-09S appears to remain impacted by a COC (specifically, cumene), the groundwater contamination is also impacting the downgradient perimeter well CEF-81-14S (Figure 5). This situation indicates the groundwater contamination at the water table interval is not delineated downgradient.

The sample data for the intermediate well CEF-81-01I appears to indicate the impact from cumene has decreased to below the GCTL; however, the concentration of COCs in the downgradient intermediate well, CEF-81-04I, indicate the contamination is moving in that direction (Figure 5). Since CEF-81-04I is impacted with a cumene level above the GCTL and there are no other downgradient intermediate wells, that interval is also not completely delineated.

The vertical extent of COCs in groundwater is now delineated by the new deep well, CEF-81-01D, which is screened from 50 to 55 ft bls (Figure 5).

RECOMMENDATIONS

Based on the results of the groundwater monitoring, TtNUS recommends additional monitoring wells be installed to delineate the shallow and intermediate intervals. Figure 6 provides the proposed locations for these new wells. Following installation and development, a round of water levels will be collected on the same wells as before coupled with the new wells to determine groundwater elevation and flow direction, the new wells will be surveyed by a registered surveyor, and only the new wells will be sampled for the same COCs and methods used in this supplemental investigation.

If you should have any questions or require additional information, please feel free to contact Mr. Paul Calligan at (813) 806-0202.

Sincerely,

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

Mervin W. Dale, P.G.
Florida Professional Geologist
P.G. Number 0001917

MERVIN W. DALE
LICENSE
NO. 1917
STATE OF FLORIDA
PROFESSIONAL GEOLOGIST

PC/md

Attachments (12)

pc: Gabe Magwood, NAVFAC EFD SOUTH
Debbie Humbert (Cover Letter Only)
Mark Perry/File (Unbound)
CTO 361 File

TABLES

Table 1
Groundwater Elevation Data

Supplemental Site Assessment Letter Report
Building 81, Tanks 81 A, B, and C
Naval Air Station Cecil Field
Jacksonville, Florida

Monitoring Well Identification	Well Depth (ft, btoc)	TOC Elevation (ft, msl)	January 11, 2002		May 23, 2002		January 7, 2003		March 13, 2003		February 18, 2005	
			Depth to Water (ft, btoc)	Water-Level Elevation (ft, msl)	Depth to Water (ft, btoc)	Water-Level Elevation (ft, msl)	Depth to Water (ft, btoc)	Water-Level Elevation (ft, msl)	Depth to Water (ft, btoc)	Water-Level Elevation (ft, msl)	Depth to Water (ft, btoc)	Water-Level Elevation (ft, msl)
CEF-80-3S	15.12	77.68	4.74	72.94	5.22	72.46	5.07	72.61	3.16	74.52	6.61	71.07
CEF-80-13S	14.90	78.17	4.96	73.21	5.48	72.69	5.51	72.66	3.56	74.61	7.09	71.08
CEF-81-2S	15.00	78.41	NM	NM	6.02	72.39	NM	NM	3.39	75.02	7.34	71.07
CEF-81-8SR	12.94	77.61	4.62	72.99	5.06	72.55	5.14	72.47	2.90	74.71	6.57	71.04
CEF-81-9S	12.74	77.72	4.73	72.99	5.19	72.53	5.16	72.56	3.08	74.64	6.78	70.94
CEF-81-10S	12.99	78.46	5.45	73.01	5.98	72.48	5.68	72.78	4.18	74.28	7.52	70.94
CEF-81-11S	12.88	78.47	5.46	73.01	5.97	72.50	5.56	72.91	4.06	74.41	7.48	70.99
CEF-81-12S	11.68	77.37	4.37	73.00	4.81	72.56	4.91	72.46	2.42	74.95	6.21	71.16
CEF-81-13S	12.14	77.91	4.92	72.99	5.36	72.55	5.27	72.64	3.24	74.67	6.91	71.00
CEF-81-14S	13.00	78.30	NI	NI	5.85	72.45	6.13	72.17	3.78	74.52	7.41	70.89
CEF-81-1I	29.25	77.73	4.77	72.96	4.77	72.96	5.65	72.08	3.16	74.57	6.79	70.94
CEF-P25-1S	12.00	77.57	NM	NM	5.17	72.40	6.00	71.57	2.36	75.21	6.52	71.05
CEF-81-2I	30.00	77.42	NI	NI	NI	NI	NI	NI	NI	NI	6.54	70.88
CEF-81-3I	30.00	77.78	NI	NI	NI	NI	NI	NI	NI	NI	6.95	70.83
CEF-81-4I	30.00	77.54	NI	NI	NI	NI	NI	NI	NI	NI	6.74	70.80
CEF-81-5I	30.00	77.84	NI	NI	NI	NI	NI	NI	NI	NI	7.01	70.83
CEF-81-1D	55.00	77.77	NI	NI	NI	NI	NI	NI	NI	NI	6.83	70.94

Notes:
msl = mean sea level
NI = not installed
NM = not measured

Table 2
Groundwater Analytical Data

Supplemental Site Assessment Letter Report
Building 81, Tanks 81 A, B, and C
Naval Air Station Cecil Field
Jacksonville, Florida

Contaminants of Concern	Source Monitoring Well				Perimeter Monitoring Wells							
	CEF-81-09S				CEF-81-01I				CEF-81-08SR			
	12/13/2001	1/8/2003	3/13/2003	2/18/2005	12/13/2001	1/8/2003	3/13/2003	2/18/2005	12/13/2001	1/8/2003	3/13/2003	2/18/2005
Priority Pollutant Semi-Volatile Organic Compounds (SVOCs) (EPA Method 8270C) or PAHs (EPA Method 8310) (µg/L)												
Naphthalene	12.5	5.5	NA	4.2	4.4 J	**329**	NA	0.98 U	6.0 U	1.0 U	NA	0.98 U
VOCs (EPA Method 8260B) (µg/L)												
Isopropyl benzene	**6.2**	NA	**4.8**	**2.8**	ND	NA	**11.6**	0.69	ND	NA	0.50 U	0.50 U
Naphthalene [3]	**27.3**	NA	**65.0**	12 JN	ND	NA	**45.0**	ND	ND	NA	1.0 U	ND
1,2,3-TMB [3]	ND	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND
1,2,4-TMB	**79.4**	NA	**32.6**	6.0	ND	NA	5.7	1.0 U	ND	NA	0.50 U	1.0 U
1,3,5-TMB	**19.0**	NA	8.2	1.0 U	ND	NA	2.0	1.0 U	ND	NA	0.50 U	1.0 U
TICs	ND	[4]	NA	[5]	ND	[4]	NA	[5]	ND	ND	NA	[5]

See notes at end of table.

Table 2
Groundwater Analytical Data

Supplemental Site Assessment Letter Report
Building 81, Tanks 81 A, B, and C
Naval Air Station Cecil Field
Jacksonville, Florida

Contaminants of Concern	Perimeter Monitoring Wells								NADSC/ GCTL[1, 2]
	CEF-81-13S				CEF-81-14S				
	12/13/2001	1/8/2003	3/13/2003	2/21/2005	5/23/2002	1/8/2003	3/13/2003	2/18/2005	
Priority Pollutant SVOCs (EPA Method 8270C) or PAHns (EPA Method 8310) (µg/L)									
Naphthalene	5.5 U	1.0 U	NA	0.96 U	5.0 U	1.1 U	NA	7.8	200/20
VOCs (EPA Method 8260B) (µg/L)									
Isopropyl benzene	ND	NA	0.50 U	0.50 U	ND	NA	0.50 U	**3.3**	8/0.8
Naphthalene [3]	ND	NA	1.0 U	ND	ND	NA	1.0 U	15	200/20
1,2,3-TMB [3]	ND	NA	NA	ND	ND	NA	NA	ND	100/10
1,2,4-TMB	ND	NA	0.50 U	1.0 U	ND	NA	0.50 U	1.5	100/10
1,3,5-TMB	ND	NA	0.50 U	1.0 U	ND	NA	0.50 U	1.0 U	100/10
TICs	ND	ND	NA	[5]	ND	ND	NA	[5]	---

See notes at end of table.

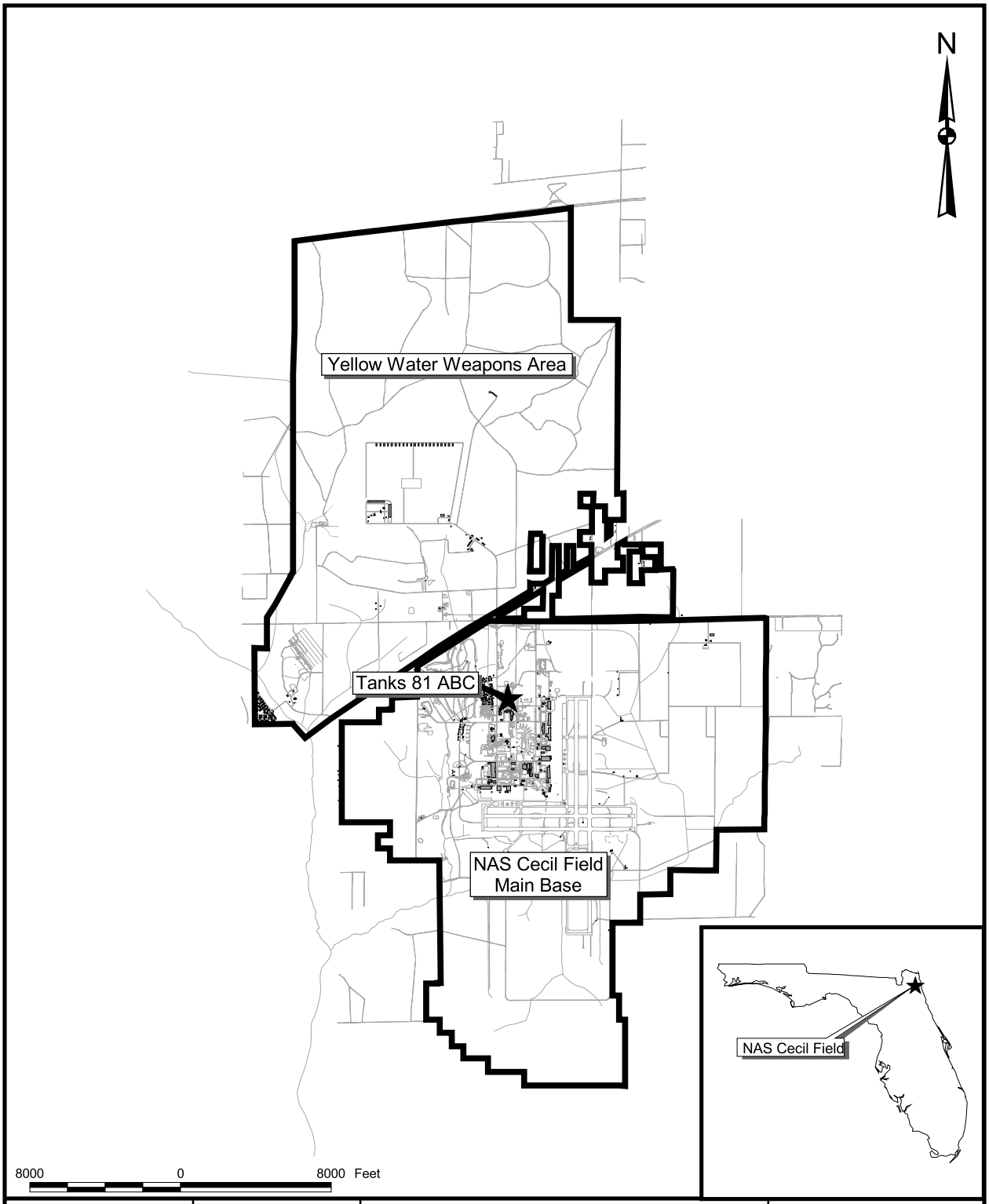
Table 2
Groundwater Analytical Data

Supplemental Site Assessment Letter Report
Building 81, Tanks 81 A, B, and C
Naval Air Station Cecil Field
Jacksonville, Florida

Contaminants of Concern	CEF-81-02I	CEF-81-03I	CEF-81-04I	CEF-81-05I	CEF-81-01D	NADSC/ GCTL[1, 2]
	2/18/2005	2/18/2005	2/18/2005	2/21/2005	2/18/2005	
Priority Pollutant SVOCs (EPA Method 8270C) or PAHs (EPA Method 8310) (µg/L)						
Naphthalene	0.95 U	0.97 U	2.2	0.96 U	0.95 U	200/20
VOCs (EPA Method 8260B) (µg/L)						
Isopropyl benzene	0.50 U	0.50 U	**1.7**	0.50 U	0.50 U	8/0.8
Naphthalene [3]	ND	ND	ND	ND	ND	200/20
1,2,3-TMB [3]	ND	ND	ND	ND	ND	100/10
1,2,4-TMB	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	100/10
1,3,5-TMB	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	100/10
TICs	5	5	5	5	5	---

Notes:
[1] GCTLs based on Chapter 62-777, Florida Administrative Code.
[2] NADSC as promulgated in Chapter 62-770.690.
[3] These compounds (listed under VOCs) were analyzed using a library search and are considered TICs.
[4] See Groundwater Monitoring Report, 1st Quarter, 1st Year (January 2003), TtNUS, 2003.
[5] See Appendix A, Accutest Laboratory Report. It was noted that none of the detected TICs with established GCTLs exceeded those standards.
U = not detected at detection limit shown
N indicates presumptive evidence of a compound.
Bold indicates values exceeding NADSC or GCTL standards.
NADSC = Natural Attenuation Default Source Concentrations
NA = not analyzed
ND = not detected
J = estimated value

FIGURES



DRAWN BY MJJ	DATE 24Mar05	GENERAL LOCATION MAP TANKS 81 A, B, & C SUPPLEMENTAL SITE ASSESSMENT REPORT NAVAL AIR STATION CECIL FIELD JACKSONVILLE, FLORIDA	CONTRACT NUMBER 9945
CHECKED BY	DATE		APPROVED BY DATE
COST/SCHEDULE-AREA			APPROVED BY DATE
SCALE AS NOTED			DRAWING NO. FIGURE 1 / REV 0

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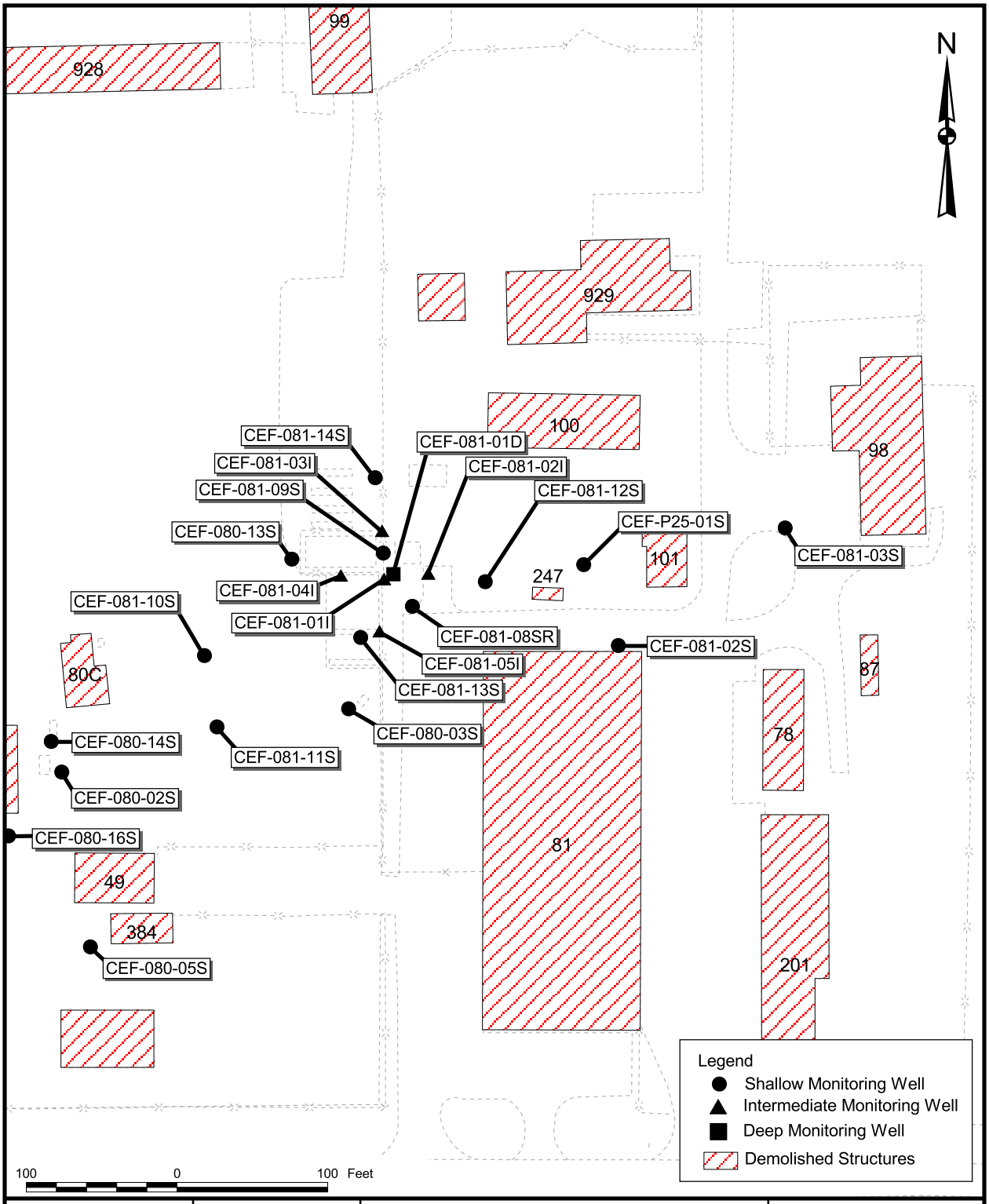

DRAWN BY MJJ	DATE 24Mar05	MONITROING WELL LOCATION MAP TANKS 81 A, B, & C SUPPLEMENTAL SITE ASSESSMENT REPORT NAVAL AIR STATION CECIL FIELD JACKSONVILLE, FLORIDA	CONTRACT NUMBER 9945
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COST/SCHEDULE-AREA			APPROVED BY DATE
SCALE AS NOTED			DRAWING NO. FIGURE 2 / REV 0

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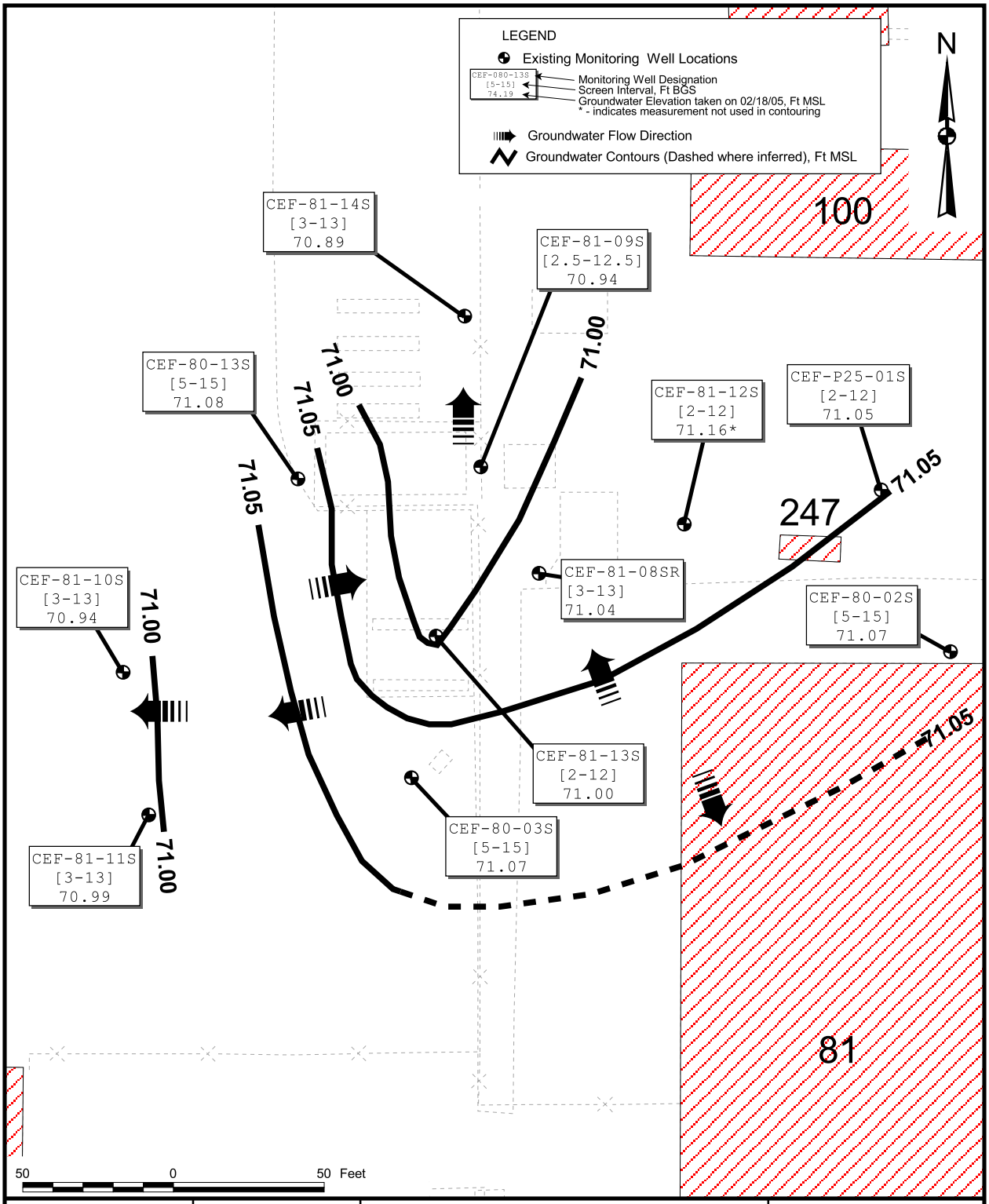

DRAWN BY MJJ	DATE 24Mar05	GROUNDWATER FLOW MAP (02/18/05) SHALLOW ZONE TANKS 81 A, B, & C SUPPLEMENTAL SITE ASSESSMENT REPORT NAVAL AIR STATION CECIL FIELD JACKSONVILLE, FLORIDA	CONTRACT NUMBER 9945
CHECKED BY	DATE		APPROVED BY DATE
COST/SCHEDULE-AREA			APPROVED BY DATE
SCALE AS NOTED			DRAWING NO. FIGURE 3 / REV 0

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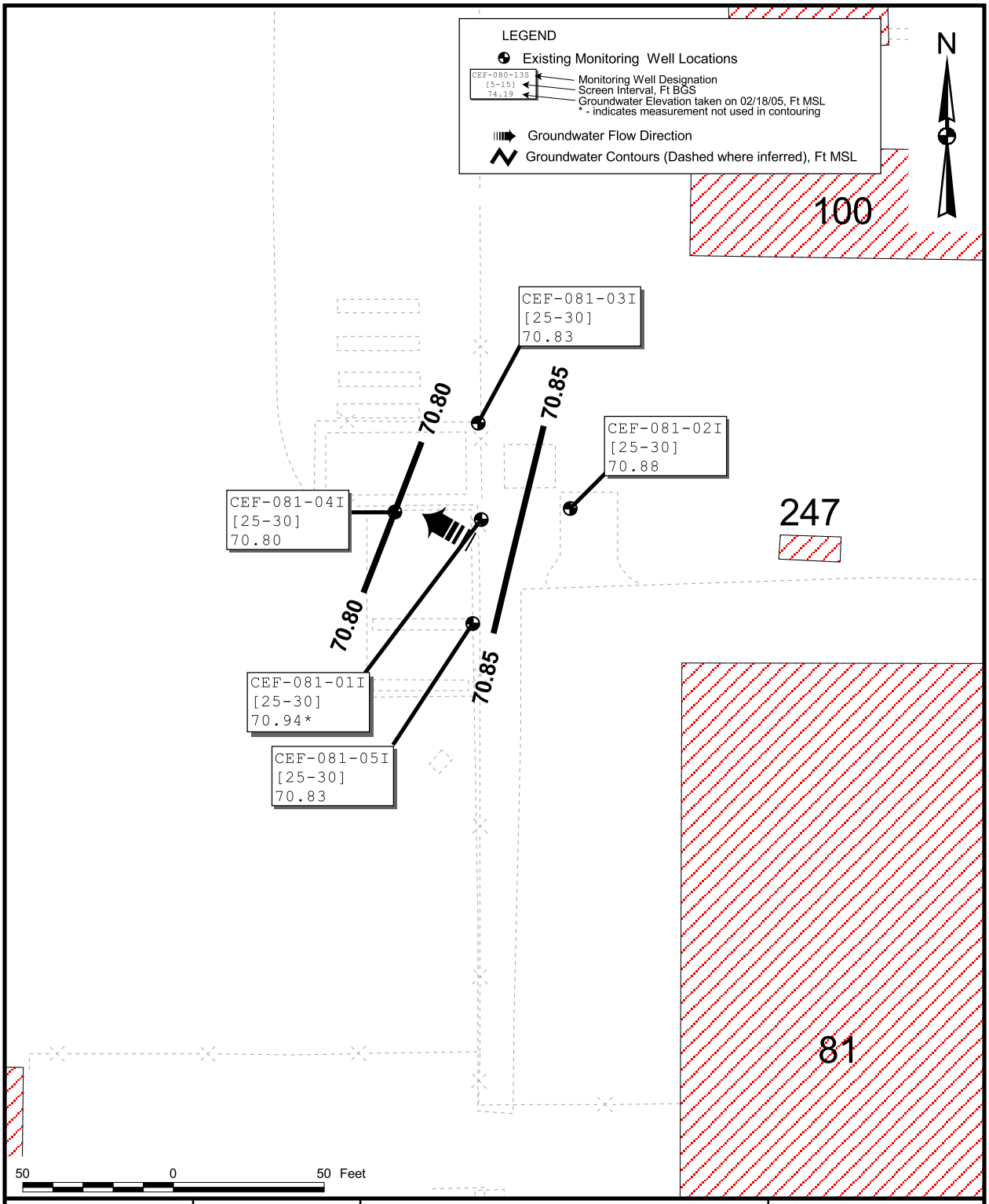

DRAWN BY MJJ	DATE 24Mar05	GROUNDWATER FLOW MAP (02/18/05) INTERMEDIATE ZONE TANKS 81 A, B, & C SUPPLEMENTAL SITE ASSESSMENT REPORT NAVAL AIR STATION CECIL FIELD JACKSONVILLE, FLORIDA	CONTRACT NUMBER 9945
CHECKED BY	DATE		APPROVED BY / DATE
COST/SCHEDULE-AREA			APPROVED BY / DATE
SCALE AS NOTED	NAVFAC		DRAWING NO. FIGURE 4 / REV 0

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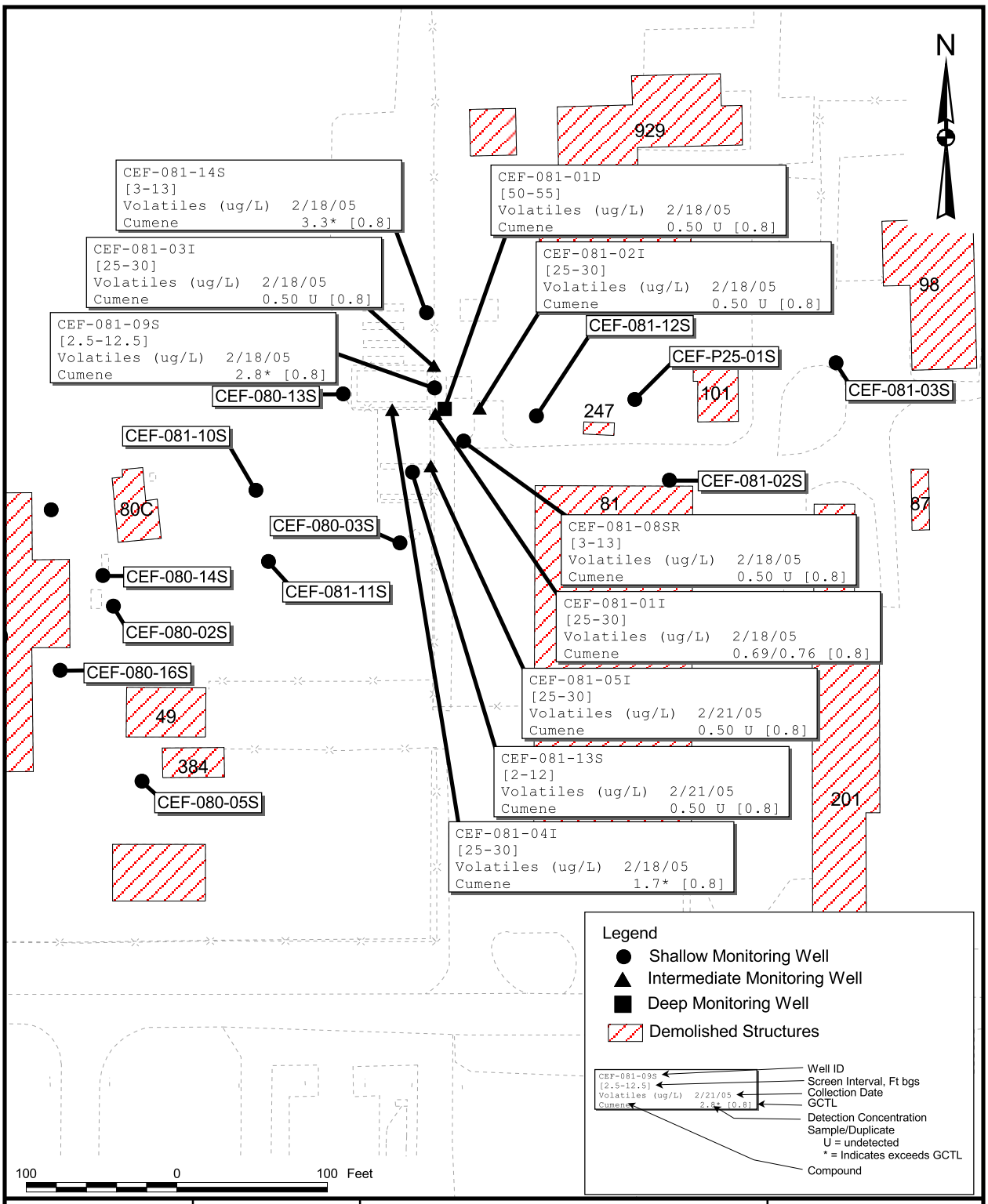

DRAWN BY	DATE			CONTRACT NUMBER
MJJ	24Mar05	GROUNDWATER COC MAP		9945
CHECKED BY	DATE	TANKS 81 A, B, & C		APPROVED BY / DATE
COST/SCHEDULE-AREA		SUPPLEMENTAL SITE ASSESSMENT REPORT		APPROVED BY / DATE
SCALE		NAVAL AIR STATION CECIL FIELD		DRAWING NO. / REV
AS NOTED		JACKSONVILLE, FLORIDA		FIGURE 5 / 0

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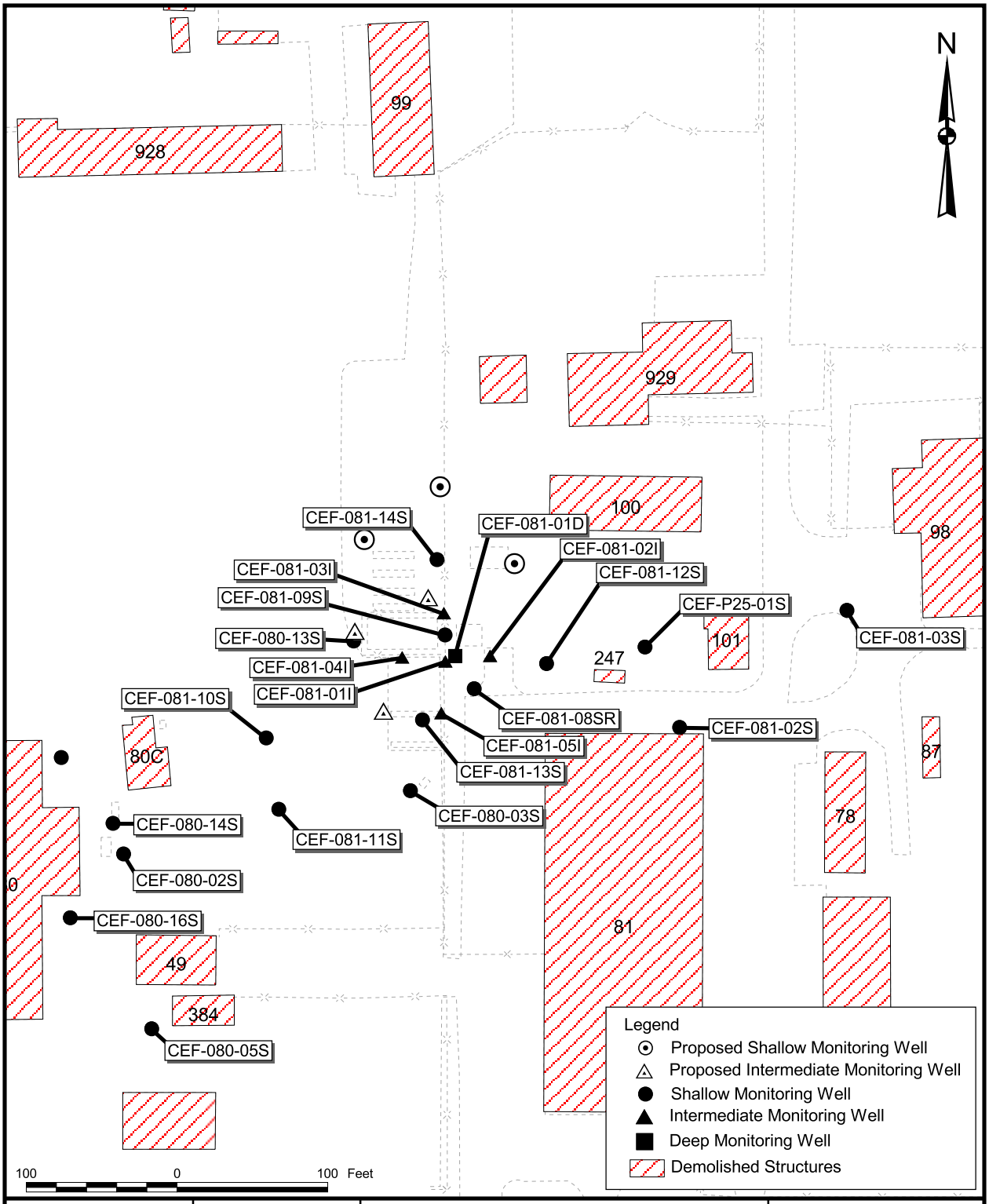

DRAWN BY MJJ	DATE 24Mar05	**PROPOSED MONITORING WELL LOCATIONS**	CONTRACT NUMBER 9945
CHECKED BY	DATE	TANKS 81 A, B, & C	APPROVED BY DATE
COST/SCHEDULE-AREA		SUPPLEMENTAL SITE ASSESSMENT REPORT	APPROVED BY DATE
SCALE AS NOTED		NAVAL AIR STATION CECIL FIELD JACKSONVILLE, FLORIDA	DRAWING NO. FIGURE 6 / REV 0

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ATTACHMENT A

MONITORING WELL INSTALLATION FORMS

BORING LOG

COPY

Tetra Tech NUS, Inc.

PROJECT NAME: TANKS 81 ABC SUPPLEMENTAL GW ASSESSMENT
PROJECT NUMBER: N9945
DRILLING COMPANY: PARTRIDGE WELL CO.
DRILLING RIG: DRILMASTER 400
BORING NO.: 005
DATE: 02/15/2005
GEOLOGIST: MERVIN DALE
DRILLER: JEFF WEATHERFORD

~~Sample No. and Type or RQD~~ MD	Depth (Ft.) or Run No.	~~Blows / 6" or RQD (%)~~ MD	~~Sample Recovery / Sample Length~~ MD	~~Lithology Change (Depth/Ft.) or Screened Interval~~ MD	~~Soil Density/ Consistency or Rock Hardness~~ MD	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
	0-4					LT. BRN.	SILTY FINE SAND	SM	DRY			0.3	0.3
	4-7					LT. BRN	SILTY FINE SAND	SM	MOIST				
	7-8					LT. GRAY	SILTY FINE SAND	SM	wet				
	8-13					LT. GRAY	SILTY FINE SAND	SM	wet *			0.3	0.3
	13-55.5					LT. GRAY	SILTY FINE SAND	SM				0.3	0.3 **
							EOB @ 55.5 ft. bls.						

* When rock coring, enter rock brokeness.

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

Remarks: * Slight non-petroleum odor (sweet).
** read @ 55 FT BLS.

Drilling Area Background (ppm): 0.0

Converted to Well: Yes X No ____ Well I.D. #: CEF-81-1D

Tetra Tech NUS, Inc.

COPY

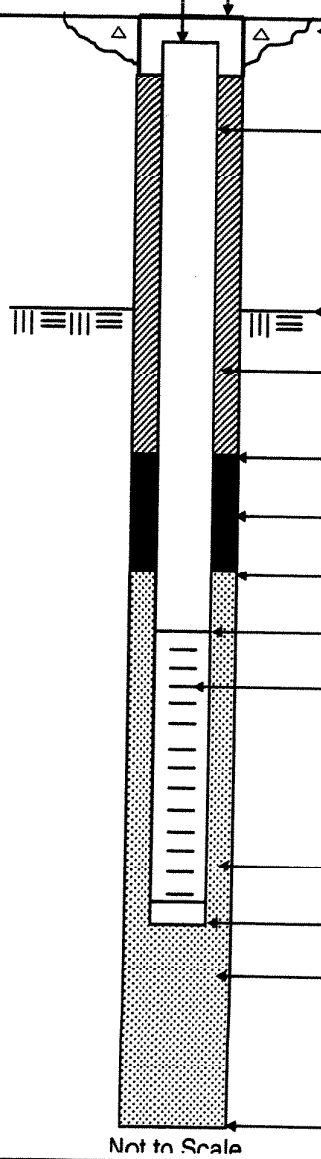
WELL No.: CEF-81-1D

MONITORING WELL SHEET

PROJECT:	SUPPLEMENTAL	DRILLING Co.:	Partridge Well	BORING No.:	005
PROJECT No.:	N9945	DRILLER:	J. Weatherford	DATE COMPLETED:	02/15/05
SITE:	TANKS 81ABC	DRILLING METHOD:	Hollow Stem	NORTHING:	
GEOLOGIST:	M. Dale	DEV. METHOD:	Bladder Pump	EASTING:	

Ground Elevation =

Datum:



Not to Scale

Elevation / Depth of Top of Riser: 1 1 IN.

Elevation / Height of Top of Surface Casing: 1 0.5IN

I.D. of Surface Casing: 8"

Type of Surface Casing: Steel boltdown manhole

Type of Surface Seal: Concrete

2 ft x 2 ft x 6 inch pad

I.D. of Riser: 2 inch

Type of Riser: Sch. 40 PVC

Borehole Diameter: 8 inch

Elevation / Depth Top of Rock: N/A

Type of Backfill: Type I/II Portland Cement

Elevation / Depth of Seal: 144 FT. 6 IN.

Type of Seal: 30/65 FINE SAND

Elevation / Depth of Top of Filter Pack: 147 FT 11 IN.

Elevation / Depth of Top of Screen: 150 FT.

Type of Screen: Sch. 40 PVC

Slot Size x Length: 0.010 inch x 5 FT.

I.D. of Screen: 2 inch

Type of Filter Pack: 20/30 SAND

Elevation / Depth of Bottom of Screen: 155 FT.

Elevation / Depth of Bottom of Filter Pack: 155.5 FT.

Type of Backfill Below Well: 20/30 GRADE SAND

Elevation / Total Depth of Borehole: 155.5 ft.

MONITORING WELL MATERIALS
CERTIFICATE OF CONFORMANCE

Well Designation: CEF-81-10
Site Name: TANKS 81 ABC
Date Installed: 02/15/2005
Project Name: SUPPLEMENTAL GW ASSESSMENT

Site Geologist: MERVIN W. DALE
Drilling Company: PARTRIDGE WELL CO.
Driller: JEFF WEATHERFORD
Project Number: N9945 SYO 050

Material	Brand/Description	Source/Supplier	Sample Collected ?
Well Casing	Sch. 40 PVC, 2 IN. DIAM.	ATLANTIC DRILLING SUPPLY (ADS), JAX, FL.	NO
Well Screen	Sch. 40 PVC, 2 IN. DIAM., 0.010 IN	MACHINE SLOT ADS, JAX, FL.	NO
End Cap	Sch. 40 PVC, 2 IN. DIAM., well pt., 6 IN. long	ADS, JACKSONVILLE FL	NO
Drilling Fluid	Potable WATER	ARTESIAN Well AT Partridge	NO
Drilling Fluid Additives	None	—	—
Backfill Material	20/30 GRADE SAND	STANDARD SAND, JAX, FL.	NO
Annular Filter Pack	20/30 GRADE SAND	STANDARD SAND, JAX, FL.	NO
~~Bentonite~~ Seal	30/65 GRADE FINE SAND	STANDARD SAND, JAX FL	NO
Annular Grout	Type I/II Portland Cement	Lehigh (Allentown, PA) or Quikrete (Atl, GA)	NO
Surface Cement	Quikrete Concrete	Quikrete Co. (Atlanta, GA.)	NO
Protective Casing	Steel bolt down Manhole, 8 IN. DIAM.	ADS, JACKSONVILLE, FL	NO
Paint	None	—	—
Rod Lubricant	None	—	—
Compressor Oil	None	—	—

To the best of my knowledge, I certify that the above described materials were used during installation of this monitoring well.

Signature of Site Geologist: Mervin W. Dale

COPY

BORING LOG

COPY

Tetra Tech NUS, Inc.

PROJECT NAME: TANKS 81 ABC SUPPLEMENTAL GW ASSESSMENT
PROJECT NUMBER: N9945
DRILLING COMPANY: PARTRIDGE WELL CO.
DRILLING RIG: DRILMASTER 400
BORING NO.: 001
DATE: 02/14/2005
GEOLOGIST: MERVIN W. DALE
DRILLER: JEFF WEATHERFORD

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistenc or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0-4					LT. BRN	SILTY FINE SAND	SM	FILL, DRY			0.2	0.2
	4-10					LT. BRN	SILTY FINE SAND	SM	FILL, MOIST			0.2	0.2
	10-14					LT. GRAY	SILTY FINE SAND	SM	wet				
	14-19					LT. BRN GRAY	SILTY FINE SAND	SM	wet			0.2	0.2
	19-30.5					LT. BRN. GRAY	SILTY FINE	SM	wet			0.2	0.2
							EOB @ 30.5 ft. b/s. MWX						

* When rock coring, enter rock brokeness.

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

Remarks:

Drilling Area Background (ppm): 0.2

Converted to Well: Yes X No _____ Well I.D. #: CEF-81-2I

Tetra Tech NUS, Inc.

COPY

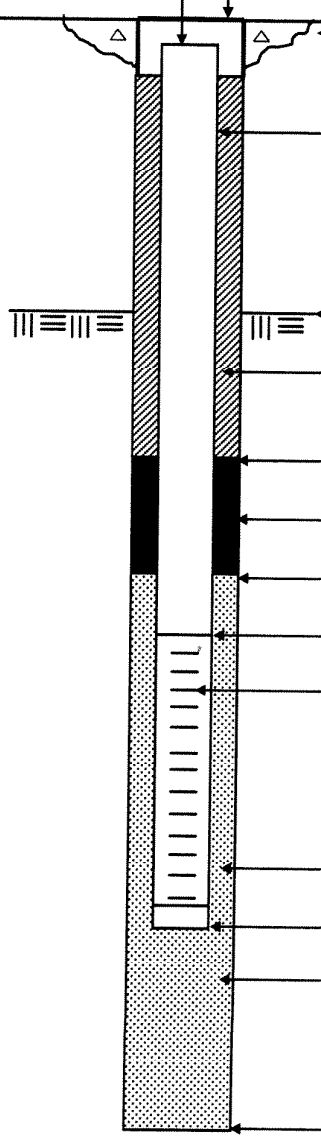
WELL No.: CEF-81-2I

MONITORING WELL SHEET

PROJECT:	Supp. Gw. Assess.	DRILLING Co.:	Partridge Well	BORING No.:	001
PROJECT No.:	N9945	DRILLER:	J. Weatherford	DATE COMPLETED:	02/14/05
SITE:	Tanks 81 ABC	DRILLING METHOD:	Hollow Stem	NORTHING:	
GEOLOGIST:	M. Dale	DEV. METHOD:	Bladder Pump	EASTING:	

Ground Elevation =

Datum:



Not to Scale

Elevation / Depth of Top of Riser: 1 1 in.

Elevation / Height of Top of Surface Casing: 1 0.5 in.

I.D. of Surface Casing: 8"

Type of Surface Casing: Steel boltdown manhole

Type of Surface Seal: Concrete
2 ft x 2 ft x 6 inch pad

I.D. of Riser: 2 inch

Type of Riser: Sch. 40 PVC

Borehole Diameter: 8 inch

Elevation / Depth Top of Rock: N/A

Type of Backfill: Type I and II Portland cement

Elevation / Depth of Seal: 120.5 ft.

Type of Seal: 30/65 Fine Sand

Elevation / Depth of Top of Filter Pack: 1 ~~23~~ 22 ft. 9 in.

Elevation / Depth of Top of Screen: 125 ft.

Type of Screen: Sch. 40 PVC

Slot Size x Length: 0.010 inch x 5 ft.

I.D. of Screen: 2 inch

Type of Filter Pack: 20/30 Sand filter

Elevation / Depth of Bottom of Screen: 130 ft.

Elevation / Depth of Bottom of Filter Pack: 130.5 ft.

Type of Backfill Below Well: 20/30 GRADE SAND

Elevation / Total Depth of Borehole: 130.5 ft.

MONITORING WELL MATERIALS
CERTIFICATE OF CONFORMANCE

Well Designation: CEF-81-2I
Site Name: TANKS 81 ABC
Date Installed: 02/14/2005
Project Name: SUPPLEMENTAL GW ASSESSMENT

Site Geologist: MERVIN W. DALE
Drilling Company: PARTRIDGE WELL CO.
Driller: JEFF WEATHERFORD
Project Number: N9945 SYO 050

Material	Brand/Description	Source/Supplier	Sample Collected ?
Well Casing	Sch. 40 PVC, 2 IN. DIAM.	ATLANTIC DRILLING SUPPLY (ADS), JAX, FL.	NO
Well Screen	Sch. 40 PVC, 2 IN. DIAM., 0.010 IN MACHINE SLOT	ADS, JAX, FL.	NO
End Cap	Sch. 40 PVC, 2 IN. DIAM., well pt. 6 in. long	ADS, JACKSONVILLE FL	NO
Drilling Fluid	POTABLE WATER	ARTESIAN WELL AT PARTRIDGE	NO
Drilling Fluid Additives	NONE	—	—
Backfill Material	20/30 GRADE SAND	STANDARD SAND, JAX, FL.	NO
Annular Filter Pack	20/30 GRADE SAND	STANDARD SAND, JAX, FL.	NO
NO ~~Bentonite~~ Seal	30/65 GRADE FINE SAND	STANDARD SAND, JAX, FL	NO
Annular Grout	TYPE I/II Portland Cement	Lehigh (Allentown, PA) or Quikrete (Atl, GA)	NO
Surface Cement	Quikrete Concrete	Quikrete Co. (Atlanta, GA.)	NO
Protective Casing	Steel bolt down manhole, 8 IN. DIAM.	ADS, JACKSONVILLE, FL	NO
Paint	None	—	—
Rod Lubricant	NONE	—	—
Compressor Oil	NONE	—	—

To the best of my knowledge, I certify that the above described materials were used during installation of this monitoring well.

Signature of Site Geologist: Mervin W. Dale

COPY

BORING LOG

COPY

Tetra Tech NUS, Inc.

PROJECT NAME: JANKS & ABC SUPPLEMENTAL GW ASSESSMENT
PROJECT NUMBER: N9943
DRILLING COMPANY: PARTRIDGE WELL CO.
DRILLING RIG: DRILMASTER 400
BORING NO.: 002
DATE: 02/14/2005
GEOLOGIST: Mervin W. Dale
DRILLER: JEFF WEATHERFORD

~~Sample No. and Type or RQD~~ (NO)	Depth (Ft.) or Run No.	~~Blows/ 6" or RQD (%)~~ (NO)	~~Sample Recovery / Sample Length~~ (NO)	~~Lithology Change (Depth/Ft.) or Screened Interval~~ (NO)	~~Soil Density/ Consistency or Rock Hardness~~ (NO)	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
	0-4				lt.	brn	silty fine sand	SM	DRY			0.3	0.3
	4-7				lt.	brn	silty fine sand	SM	Moist				
	7-8.5				lt.	gray	silty fine sand	SM	wet, pet. odor	*16.5		1.5	0.4
	8.5-24				lt.	gray	silty fine sand	SM	wet, pet. odor	8.0*		0.8	0.4
	24-30.5				lt.	gray	silty fine sand	SM	wet, slight petroleum odor				
							EOB @ 30.5 ft. bls.						

* When rock coring, enter rock brokeness.

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

Remarks: * read from drum

Drilling Area Background (ppm): 0.3

Converted to Well: Yes X No ____ Well I.D. #: CEF-81-3I

Tetra Tech NUS, Inc.

COPY

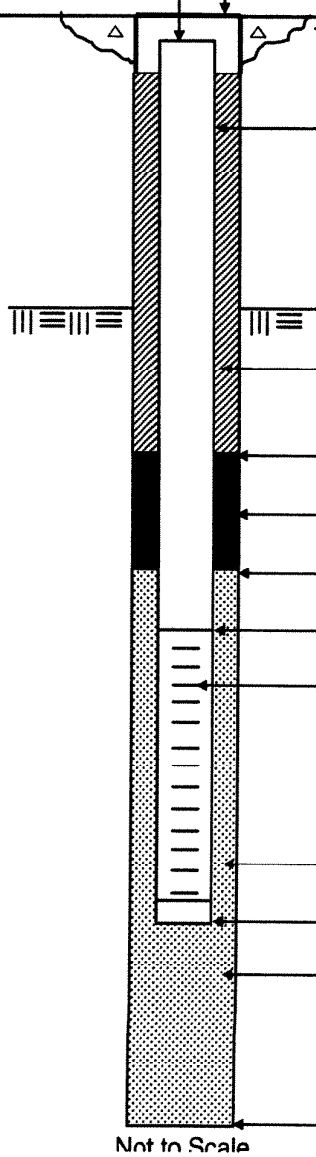
WELL No.: CEF-81-3I

MONITORING WELL SHEET

PROJECT:	SUPPLEMENTAL	DRILLING Co.:	Partridge Well	BORING No.:	002
PROJECT No.:	N9945	DRILLER:	J. Weatherford	DATE COMPLETED:	02/14/05
SITE:	TANKS 81 ABC	DRILLING METHOD:	Hollow Stem	NORTHING:	
GEOLOGIST:	M. Dale	DEV. METHOD:	Bladder Pump	EASTING:	

Ground Elevation =

Datum:



Not to Scale

Elevation / Depth of Top of Riser:	1 1 IN.
Elevation / Height of Top of Surface Casing:	1 0.5 IN.
I.D. of Surface Casing:	8"
Type of Surface Casing:	Steel boltdown manhole
Type of Surface Seal:	Concrete 2 ft x 2 ft x 6 inch pad
I.D. of Riser:	2 inch
Type of Riser:	Sch. 40 PVC
Borehole Diameter:	8 inch
Elevation / Depth Top of Rock:	N/A
Type of Backfill:	Type I/II Portland Cement
Elevation / Depth of Seal:	121 FT.
Type of Seal:	30/65 Fine Sand
Elevation / Depth of Top of Filter Pack:	122 FT. 8 IN.
Elevation / Depth of Top of Screen:	125 FT.
Type of Screen:	Sch. 40 PVC
Slot Size x Length:	0.010 inch x 5 FT.
I.D. of Screen:	2 inch
Type of Filter Pack:	20/30 Filter Sand
Elevation / Depth of Bottom of Screen:	130 FT.
Elevation / Depth of Bottom of Filter Pack:	130.5 FT.
Type of Backfill Below Well:	20/30 Filter Sand
Elevation / Total Depth of Borehole:	130.5 FT.

MONITORING WELL MATERIALS
CERTIFICATE OF CONFORMANCE

Well Designation: CEF-81-3I
Site Name: TANKS 81 ABC
Date Installed: 02/14/2005
Project Name: SUPPLEMENTAL GW ASSESSMENT

Site Geologist: MERVIN W. DALE
Drilling Company: PARTRIDGE WELL CO.
Driller: JEFF WEATHERFORD
Project Number: N9945 SYO 050

Material	Brand/Description	Source/Supplier	Sample Collected ?
Well Casing	Sch. 40 PVC, 2 IN. DIAM.	ATLANTIC DRILLING SUPPLY (ADS), JAX, FL.	NO
Well Screen	Sch. 40 PVC, 2 IN. DIAM, 0.010 IN MACHINE Slot	ADS, JAX, FL.	NO
End Cap	Sch. 40 PVC, 2 IN. DIAM., well pt. 6 in long	ADS, JACKSONVILLE FL	NO
Drilling Fluid	Potable WATER	Artesian Well AT Partridge	NO
Drilling Fluid Additives	None	—	—
Backfill Material	20/30 GRADE SAND	STANDARD SAND, JAX, FL.	NO
Annular Filter Pack	20/30 GRADE SAND	STANDARD SAND, JAX, FL.	NO
NO ~~Bentonite~~ Seal	30/65 GRADE FINE SAND	STANDARD SAND, JAX FL	NO
Annular Grout	Type I/II Portland Cement	Lehigh (Allentown, PA) or Quikrete (Atl, GA)	NO
Surface Cement	Quikrete Concrete	Quikrete Co. (Atlanta GA.)	NO
Protective Casing	Steel bolt down Manhole, 8 IN. DIAM.	ADS, JACKSONVILLE, FL	NO
Paint	None	—	—
Rod Lubricant	None	—	—
Compressor Oil	None	—	—

To the best of my knowledge, I certify that the above described materials were used during installation of this monitoring well.

Signature of Site Geologist: Mervin W. Dale

COPY

BORING LOG

COPY

Tetra Tech NUS, Inc.

PROJECT NAME: SUPPLEMENTAL GW. ASSESSMENT
PROJECT NUMBER: N9945
DRILLING COMPANY: PARTRIDGE WELL. CO.
DRILLING RIG: DRILMASTER 400
BORING NO.: 003
DATE: 02/15/2005
GEOLOGIST: MERVIN W. DALE
DRILLER: JEFF WEATHERFORD

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Sample	Sampler BZ	Borehole**	Driller BZ**
	0-4					LT. BRN.	SILTY FINE SAND	SM	DRY FILL			0.0	0.0
	4-7					LT. BRN.	SILTY FINE SAND	SM	~~DRY~~ MOIST, FILL				
	7-8					LT. GRAY	SILTY FINE SAND	SM	WET			0.9	0.0
	8-13					LT. GRAY	SILTY FINE SAND	SM	wet				
	13-20					LT. GRAY	SILTY FINE SAND	SM	wet *			4.2	0.0
	20-					LT.	SILTY FINE SAND	SM	wet				
	30.5					GRAY	↓	SM	wet			0.2	0.0
							EOB @ 30.5 ft. b/s.						

* When rock coring, enter rock brokeness.

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

Remarks: * SLIGHT ODOR, NON-PETROLEUM

Drilling Area Background (ppm): 0.0

Converted to Well: Yes X No ____ Well I.D. #: CEF-81-4I

Tetra Tech NUS, Inc.

COPY

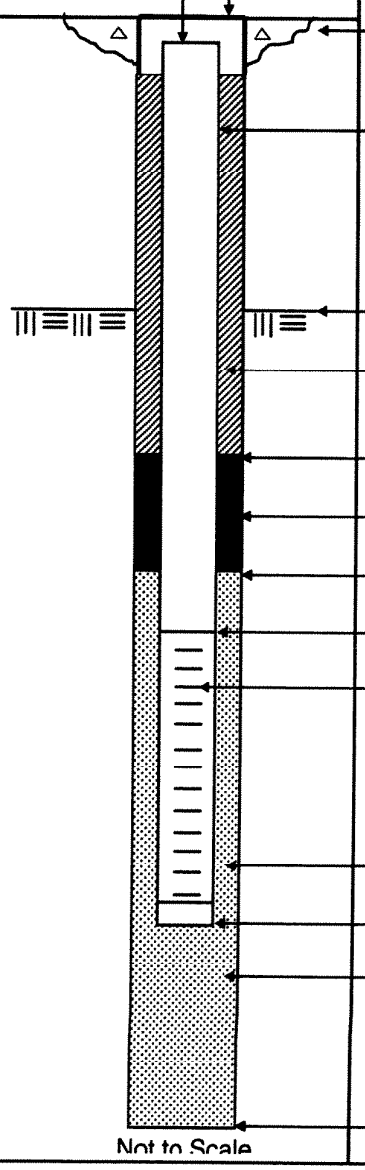
WELL No.: CEF-81-4I

MONITORING WELL SHEET

PROJECT:	SUPPLEMENTAL	DRILLING Co.:	Partridge Well	BORING No.:	003
PROJECT No.:	N9945	DRILLER:	J. Weatherford	DATE COMPLETED:	2/15/05
SITE:	TANKS 81 ABC	DRILLING METHOD:	Hollow Stem	NORTHING:	
GEOLOGIST:	M. Dale	DEV. METHOD:	Bladder Pump	EASTING:	

Ground Elevation =

Datum:



Not to Scale

Elevation / Depth of Top of Riser: 1 1 IN.

Elevation / Height of Top of Surface Casing: 1 0.5 IN.

I.D. of Surface Casing: 8"

Type of Surface Casing: Steel boltdown manhole

Type of Surface Seal: Concrete
2 ft x 2 ft x 6 inch pad

I.D. of Riser: 2 inch

Type of Riser: Sch. 40 PVC

Borehole Diameter: 8 inch

Elevation / Depth Top of Rock: N/A

Type of Backfill: Type I/II PORTLAND CEMENT

Elevation / Depth of Seal: 121 FT.

Type of Seal: 30/65 FINE SAND

Elevation / Depth of Top of Filter Pack: 122 FT. 10 IN.

Elevation / Depth of Top of Screen: 125 FT.

Type of Screen: Sch. 40 PVC

Slot Size x Length: 0.010 inch x 5 FT.

I.D. of Screen: 2 inch

Type of Filter Pack: 20/30 FILTER SAND

Elevation / Depth of Bottom of Screen: 130 FT.

Elevation / Depth of Bottom of Filter Pack: 130.5 FT.

Type of Backfill Below Well: 20/30 GRADE FILTER SAND

Elevation / Total Depth of Borehole: 130.5 ft

MONITORING WELL MATERIALS
CERTIFICATE OF CONFORMANCE

Well Designation: CEF-81-4I
Site Name: TANKS 81 ABC
Date Installed: 02/15/2005
Project Name: SUPPLEMENTAL GW ASSESSMENT

Site Geologist: MERVIN W. DALE
Drilling Company: PARTRIDGE WELL CO.
Driller: JEFF WEATHERFORD
Project Number: N9945 SYO 050

Material	Brand/Description	Source/Supplier	Sample Collected ?
Well Casing	Sch. 40 PVC, 2 IN. DIAM.	ATLANTIC DRILLING SUPPLY (ADS), JAX, FL.	NO
Well Screen	Sch. 40 PVC, 2 IN. DIAM., 0.010 IN MACHINE SLOT	ADS, JAX, FL.	NO
End Cap	Sch. 40 PVC, 2 IN. DIAM., well pt., 6 in. long	ADS, JACKSONVILLE FL	NO
Drilling Fluid	Potable WATER	ARTESIAN WELL AT PARTRIDGE	NO
Drilling Fluid Additives	None	—	—
Backfill Material	20/30 GRADE SAND	STANDARD SAND, JAX, FL.	NO
Annular Filter Pack	20/30 GRADE SAND	STANDARD SAND, JAX, FL.	NO
~~Bentonite~~ Seal	30/65 GRADE FINE SAND	STANDARD SAND, JAX, FL	NO
Annular Grout	Type I/II Portland Cement	Lehigh (Allentown, PA) or Quikrete (Atl, GA)	NO
Surface Cement	Quikrete Concrete	Quikrete Co. (Atlanta, GA.)	NO
Protective Casing	Steel bolt down Manhole, 8 IN. DIAM.	ADS, JACKSONVILLE, FL	NO
Paint	None	—	—
Rod Lubricant	None	—	—
Compressor Oil	None	—	—

To the best of my knowledge, I certify that the above described materials were used during installation of this monitoring well.

Signature of Site Geologist: Mervin W. Dale

COPY

BORING LOG

COPY

Tetra Tech NUS, Inc.

PROJECT NAME: TANKS 81 ABC SUPPLEMENTAL GW. ASSESSMENT
PROJECT NUMBER: N9945
DRILLING COMPANY: PARTRIDGE WELL CO.
DRILLING RIG: DRILMASTER 400
BORING NO.: 004
DATE: 02/15/2005
GEOLOGIST: Merl DALE
DRILLER: JEFF WEATHERFORD

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm) Drill Sample	Sampler BZ	Borehole**	Driller BZ**
	0-4				LT. BRN		SILTY FINE SAND	SM	DRY FILL			0.3	0.3
	4-7				LT. BRN		SILTY FINE SAND	SM	MOIST				
	7-8				GRAY		SILTY FINE SAND	SM	WET, PET. ODOR	16.0		0.8	0.3
	8-10				GRAY		SILTY FINE SAND	SM	WET				
	10-13				YEL. ORG.		SILTY FINE SAND	SM	WET				
	13-25				LT. GRAY		SILTY FINE SAND	SM	WET			0.7	0.3
	25-30.5				LT. GRAY		SILTY FINE SAND	SM	WET				0.3
							EOB @ 30.5 FT. BLS.						

* When rock coring, enter rock brokeness.

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

Remarks:

Drilling Area 0.2-
Background (ppm): 0.3

Converted to Well: Yes X No ____ Well I.D. #: CEF-81-5I

Tetra Tech NUS, Inc.

COPY

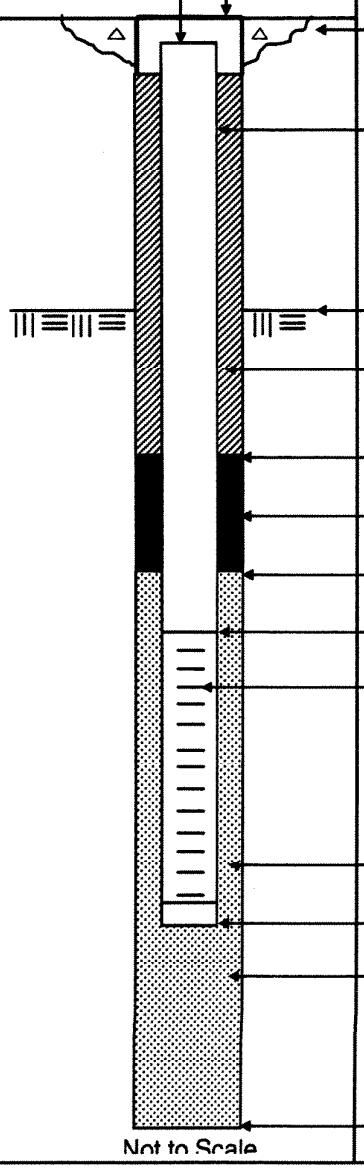
WELL No.: CEF-81-5I

MONITORING WELL SHEET

PROJECT:	SUPPLEMENTAL	DRILLING Co.:	Partridge Well	BORING No.:	004
PROJECT No.:	N9945	DRILLER:	J. Weatherford	DATE COMPLETED:	02/15/05
SITE:	TANKS 81 ABC	DRILLING METHOD:	Hollow Stem	NORTHING:	
GEOLOGIST:	M. Dale	DEV. METHOD:	Bladder Pump	EASTING:	

Ground Elevation =

Datum:



Not to Scale

Elevation / Depth of Top of Riser:	1 1 IN.
Elevation / Height of Top of Surface Casing:	1 0.5IN.
I.D. of Surface Casing:	8"
Type of Surface Casing:	Steel boltdown manhole
Type of Surface Seal:	Concrete 2 ft x 2 ft x 6 inch pad
I.D. of Riser:	2 inch
Type of Riser:	Sch. 40 PVC
Borehole Diameter:	8 inch
Elevation / Depth Top of Rock:	N/A
Type of Backfill:	Type I/II portland cement
Elevation / Depth of Seal:	1 21 FT.
Type of Seal:	30/65 FINE SAND
Elevation / Depth of Top of Filter Pack:	1 23 FT.
Elevation / Depth of Top of Screen:	1 25 FT.
Type of Screen:	Sch. 40 PVC
Slot Size x Length:	0.010 inch x 5 FT.
I.D. of Screen:	2 inch
Type of Filter Pack:	20/30 FILTER SAND
Elevation / Depth of Bottom of Screen:	1 30 FT.
Elevation / Depth of Bottom of Filter Pack:	1 30.5 FT.
Type of Backfill Below Well:	20/30 GRADE SAND
Elevation / Total Depth of Borehole:	1 30.5 FT.

MONITORING WELL MATERIALS
CERTIFICATE OF CONFORMANCE

Well Designation: CEF-81-5I
Site Name: TANKS 81 ABC
Date Installed: 02/15/2005
Project Name: SUPPLEMENTAL GW ASSESSMENT

Site Geologist: MERVIN W. DALE
Drilling Company: PARTRIDGE WELL CO.
Driller: JEFF WEATHERFORD
Project Number: N9945 SYO 050

Material	Brand/Description	Source/Supplier	Sample Collected ?
Well Casing	Sch. 40 PVC, 2 IN. DIAM.	Atlantic Drilling Supply (ADS), JAX, FL.	NO
Well Screen	Sch. 40 PVC, 2 IN. DIAM., 0.010 IN MACHINE Slot	ADS, JAX, FL.	NO
End Cap	Sch. 40 PVC, 2 IN. DIAM., well pt. 6 IN. long	ADS, JACKSONVILLE FL	NO
Drilling Fluid	Potable WATER	Artesian Well at Partridge	NO
Drilling Fluid Additives	None	—	—
Backfill Material	20/30 GRADE SAND	STANDARD SAND, JAX, FL.	NO
Annular Filter Pack	20/30 GRADE SAND	STANDARD SAND, JAX, FL.	NO
~~Bentonite~~ Seal	30/65 GRADE FINE SAND	STANDARD SAND, JAX FL	NO
Annular Grout	Type I/II Portland Cement	Lehigh (Allentown, PA) or Quikrete (Atl, GA)	NO
Surface Cement	Quikrete Concrete	Quikrete Co. (Atlanta, GA.)	NO
Protective Casing	Steel bolt down Manhole, 8 IN. DIAM.	ADS, JACKSONVILLE, FL	NO
Paint	None	—	—
Rod Lubricant	None	—	—
Compressor Oil	None	—	—

To the best of my knowledge, I certify that the above described materials were used during installation of this monitoring well.

Signature of Site Geologist: Mervin W. Dale

COPY

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: CEF-81-21
Site: NASCF,
Date Installed: 2/14/05
Date Developed: 2/16/05
Dev. Method: Pump
Pump Type: BLADDER PUMP

Depth to Bottom (ft.): 30.80
Static Water Level Before (ft.): 6.75
Static Water Level After (ft.): 6.83
Screen Length (ft.): 3
Specific Capacity: n/a
Casing ID (in.): 2

Responsible Personnel: M. Dale
Drilling Co.: Partridge Well Drilling
Project Name: Supplemental GW Assessment Tanks 81 ABC
Project Number: N9945 CTO 3C1

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)*	Water Level Readings (Ft. below TOC) **	Temperature (Degrees C)	pH	Specific Conductance (Units: mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.)
1448	—	—	—	—	—	—	—	—
1453	—	55	—	—	—	—	—	—
1458	—		—	24.47	5.27	81	120	cloudy
1503	—	110	—	24.12	5.32	79	110	"
1508	—		—	24.07	5.09	80	22	clear
1513	—	165	—	24.05	5.11	80	18	clearer than previous

*Minimum Pump out rate for bladder pump used
** Tubing/piping too wide to measure water levels while pumping

COPY

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: CEF-81-3I
Site: NASCF,
Date Installed: 2/14/05
Date Developed: 2/16/05
Dev. Method: Pump
Pump Type: BLADDER Pump

Depth to Bottom (ft.): 30.75
Static Water Level Before (ft.): 7.15
Static Water Level After (ft.): 7.21
Screen Length (ft.): 5
Specific Capacity: n/a
Casing ID (in.): 2

Responsible Personnel: M. Dale
Drilling Co.: Partridge Well Drilling
Project Name: Supplemental GW Assessment Tanks 8/A
Project Number: N9945 CTO 3261

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.) *	Water Level Readings (Ft. below TOC) **	Temperature (Degrees C)	pH	Specific Conductance (Units: mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.)
1320	—	—	—	—	—	—	—	—
1325	—	55	—	—	—	—	—	—
1330	—		—	24.38	5.85	94	40	Slightly Cloudy
1332	—		—	23.78	5.80	84	80	Slightly Cloudy
1335	—	110	—	23.66	5.90	82	38	"
1340	—		—	23.70	5.83	80	9.2	Clearing up
1345	—	~148	—	23.69	5.83	84	5.7	Clear
								End development b/c target criteria obtained.

COPY

* Minimum pump rate approximately 1.1 gpm maintained b/c pump wouldn't stay primed and pump continuously at lower rate.

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: CEF-81-4I
Site: NASCF,
Date Installed: 2/15/05
Date Developed: 2/16/05
Dev. Method: Pump
Pump Type: BLADDER Pump

Depth to Bottom (ft.): 30.80
Static Water Level Before (ft.): 6.89
Static Water Level After (ft.): 6.87
Screen Length (ft.): 5
Specific Capacity: n/a
Casing ID (in.): 2

Responsible Personnel: M. Dale
Drilling Co.: Partridge Well Drilling
Project Name: SUPPLEMENTAL GW ASSESSMENT TANKS 81 AB
Project Number: N 9945 CTO 361

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.) *	Water Level Readings (Ft. below TOC) **	Temperature (Degrees C)	pH	Specific Conductance (Units: mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.)
1045	—	—	—	—	—	—	—	—
1055	—	55gal	—	24.25	5.84	202	250	Muddy Brown
1100	—		—	24.12	5.36	178	37	
1105	—		—	24.59	6.17	176	9.9	Slightly Clear
1110	—	110gal	—	25.02	5.97	184	70	Milky Again
1115	—		—	24.34	5.90	171	14	Clearing Up again
1118				24.15	5.90	168	6.6	
1120		165gal		24.14	5.87	168	3.9	Clear

*Minimum pump rate between 5-10 gpm maintained b/c pump wouldn't stay primed and pump continuously at a lower rate.

COPY

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: CEI-81-5I
Site: NASCF
Date Installed: 2/15/05
Date Developed: 2/16/05
Dev. Method: Pump
Pump Type: BLADDER PUMP

Depth to Bottom (ft.): 30.63
Static Water Level Before (ft.): 7.27
Static Water Level After (ft.): 7.33
Screen Length (ft.): 5
Specific Capacity: n/a
Casing ID (in.): 2

Responsible Personnel: M. Dale
Drilling Co.: Partridge Well Drilling
Project Name: Supplemental GW ASSESSMENT TANKS 81AB
Project Number: N9945 CTO 361

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)*	Water Level Readings (Ft. below TOC) **	Temperature (Degrees C)	pH	Specific Conductance (Units: mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.)
1533	—	—	—	—	—	—	—	—
1538	—	55gal	—	—	—	—	—	cloudy
1543	—		—	23.76	5.72	161	50	less cloudy
1548	—		—	23.93	5.97	165	45	"
1553	—		—	24.45	6.02	164	12	clear
1553	—	110gal	—	24.19	5.99	161	120	cloudy again
1558	—		—	24.09	5.93	158	15	clear
1603	—		—	24.11	6.03	157	23	slightly cloudy
1608	—	165gal	—	24.24	5.97	161	11	clearer than before

* Minimum pump out rate for bladder pump used
** Tubing/piping too wide to take water level while pumping

COPY

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: CEF-81-10
Site: NASCF,
Date Installed: 2/15/05
Date Developed: 2/16/05
Dev. Method: Pump
Pump Type: BLADDER PUMP

Depth to Bottom (ft.): 55.35
Static Water Level Before (ft.): 7.13
Static Water Level After (ft.): 7.19
Screen Length (ft.): 5
Specific Capacity: n/a
Casing ID (in.): 2

Responsible Personnel: M. Dale
Drilling Co.: Partridge Well Drilling
Project Name: Supplemental GW ASSESSMENT TANKS & ABS
Project Number: N9945 CTO 301

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)*	Water Level Readings (Ft. below TOC) **	Temperature (Degrees C)	pH	Specific Conductance (Units: mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.)
1407	—		—					
1412	—	55	—	23.42	5.07	73	>999	Extremely Muddy
1417	—		—	23.29	5.07	78	>999	" "
1422	—	110	—	23.55	4.98	73	1000	" "
1427	—		—	23.50	5.03	71	750	" "
1429	—	165	—	23.55	5.09	68	700	" "

* Minimum pump out rate for bladder pump used.
** Tubing/pipe too wide to measure water levels while pumping

COPY

ATTACHMENT B

WELL SURVEY DATA

TETRA TECH - SITES 293,815,199,81 AND 21
SURVEYED : 3/01/05

Site 293 Monitoring Wells

	Northing	Easting	Elevation	Description
51	2144149	377675.7	75.095	CEF-29323S NG
52	2144148	377675.7	75.131	CEF-29323S CONC
53	2144148	377675.7	74.882	CEF-29323S PVC

Site 815 Soil Borings

55	2145754	377966.4	75.916	CEF815 B01
56	2145752	378060	75.97	CEF815 B02
57	2145666	378054.8	76.073	CEF815 B03
54	2145666	377971.9	76.071	CEF815 B04
60	2145722	377997.5	75.697	CEF815 B05
59	2145722	378027.7	75.725	CEF815 B06
58	2145692	378027.8	75.866	CEF815 B07
61	2145692	377997.9	75.795	CEF815 B08

Site 199 Monitoring Wells

62	2144943	376060.2	76.701	CEF199-11S CHK CONC
63	2144906	376106.5	75.644	CEF199-7SR NG
64	2144906	376106.7	75.718	CEF199-7SR CONC
65	2144905	376106.7	75.403	CEF199-7SR PVC

Site 81 Monitoring Wells

66	2146370	375806.7	77.92	CEF-81-5I NG
67	2146369	375806.8	78.064	CEF-81-5I CONC
68	2146369	375806.7	77.839	CEF-81-5I PVC
69	2146408	375816	78.012	CEF-81-1D NG
70	2146407	375815.8	78.066	CEF-81-1D CONC
71	2146407	375815.7	77.773	CEF-81-1D PVC
72	2146408	375838.9	77.733	CEF-81-2I NG
73	2146407	375838.8	77.703	CEF-81-2I CONC
74	2146407	375838.7	77.419	CEF-81-2I PVC
75	2146437	375808.4	78.015	CEF-81-3I NG
76	2146436	375808.7	78.094	CEF-81-3I CONC
77	2146435	375808.7	77.777	CEF-81-3I PVC
78	2146407	375780.8	77.719	CEF-81-4I NG
79	2146406	375780.9	77.992	CEF-81-4I CONC
80	2146406	375781.1	77.539	CEF-81-4I PVC

Site 21 Monitoring Wells

85	2146672	372845.8	73.286	CEF21-09S NG
86	2146673	372845.7	73.409	CEF21-09S CONC
87	2146673	372845.5	73.203	CEF21-09S PVC

ATTACHMENT C

FIELD SAMPLING FORMS

Tetra Tech NUS, Inc.

COPY

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name: Supplemental GW Assessment
Project No.: N9945 SY0 050 122
Location: Tanks 81 ABC, NAS Cecil Field
Personnel: PL/SR
Weather Conditions: 50°F Sunny
Measuring Device: Solinst Model 101
Tidally Influenced: Yes ___ No _x_
Remarks: #27760

Well or Piezometer Number	Date	Time	Elevation of Reference Point (feet)*	Total Well Depth (feet)*	Water Level Indicator Reading (feet)*	Thickness of Free Product (feet)*	Groundwater Elevation (feet)*	PID (ppm) Comments BH / BZ
CEF-80-3S	2/18/05	0944	77.68	15.12	6.61			0.2/0.0
CEF-80-13S		0941	78.17	14.90	7.09			0.2/0.0
CEF-81-2S		0928	78.41	15.00	7.34			0.1/0.0
CEF-81-8SR		0934	77.61	12.94	6.57			0.0/0.0
CEF-81-9S		0936	77.72	12.74	6.78			2.6/0.0
CEF-81-10S		0942	78.46	12.99	7.52			0.1/0.0
CEF-81-11S		0943	78.47	12.88	7.48			0.3/0.0
CEF-81-12S		0931	77.37	11.68	6.21			0.1/0.0
CEF-81-13S		0926	77.91	12.14	6.91			0.3/0.0
CEF-81-14S		0939	78.30	13.00	7.41			0.2/0.0
CEF-81-1I		0937	77.73	29.25	6.79			0.3/0.0
CEF-P25-1S		0930	77.57	12.00	6.52			0.2/0.0
CEF-81-2I		0933		30	6.54			0.6/0.0
CEF-81-3I		0938		30	6.95			2.2/0.0
CEF-81-4I		0940		30	6.74			0.7/0.0
CEF-81-5I		0925		30	7.01			1.1/0.0
CEF-81-1D		0935		55	6.83			0.9/0.0

PID = Photoionization Detector; BH = borehole of well; and BZ = breathing zone of workers.

* All measurements to the nearest 0.01 foot

COPY

Tetra Tech NUS, Inc. GROUNDWATER SAMPLE LOG SHEET

Project Name:	Supplemental GW Assessment	Sample ID No.:	81ABCGL05I01
Project No.:	N9945 SY0 050 122	Sample Location:	CEF-81-05I
Site:	Tanks 81 ABC, NAS Cecil Field		
[X] Monitoring Well		Sampler:	P. LEVERETTE
[ ] Domestic Well			
[ ] Other:			

SAMPLING DATA

Date: 2/21/05	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	
Time: 0930		S.U.	mS/cm	°C	NTU	mg/L	mV	
Method: Peristaltic	Clear	6.08	0.213	23.18	45.2	0.22	-11.2	

PURGE DATA

Date:	2/21/05
Method:	Peristaltic
Monitor Reading (ppm):	1.3
Well Casing Diameter:	2-inch
Well Casing Material:	PVC
Total Well Depth (ft):	30
Static Water Level (ft):	6.84
One ~~Casing~~ SCREN Volume(gal/L):	@ 1L
Start Purge (hrs):	0855
End Purge (hrs):	0925
Total Purge Time (min):	35
Total Vol. Purged (gal/L):	9.0

See Attached Low Flow Purge Data Sheet for Purge Data

SAMPLE COLLECTION INFORMATION

Analysis	Preservative	Container Requirements	Laboratory	Collected
Select VOCs, SW 846 8260B*	HCl, Cool to 4 ° C	3 - 40 ml teflon-lined vials	Accutest	✓
PAHs, SW 846 8310!	Cool to 4 ° C	2 - 1 liter glass amber	Accutest	✓

OBSERVATIONS / NOTES

* Report BTEX, MTBE, isopropyl benzene, 1,2,3-TMB, 1,2,4-TMB and 1,3,5-TMB.
! Include 1- and 2-methylnaphthalene
Dedicated tubing in situ.

LAB INFO

LAB: Accutest
4405 Vineland Rd., C-15
Orlando, FL 32811

COC #: 81ABC-02

Check if Collected:

☐ MS / MSD ☐ DUPLICATE / ID No.: NONE

Signature(s):

Tetra Tech NUS, Inc.

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Tanks 81 ABC, NAS CECIL FIELD
PROJECT NUMBER: N9945 SY0 050 122 CTO 361

WELL ID.: CEF-81-05I
DATE: 2/21/05

Time (Hrs.)	Water Level (Ft. below TOC)	Cum.Vol. (liters)	Flow (mL/Min.)	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
0855	6.84	—	300	—	—	—	—	—	—	START PURGE
0900	6.94	1.5	300	6.14	0.229	262	1.12	23.07	-10.2	
0905	6.94	3.0	300	6.15	0.226	181	0.52	23.21	-14.7	
0910	6.94	4.5	300	6.14	0.223	118	0.31	23.15	-13.1	
0915	6.94	6.0	300	6.11	0.219	76.7	0.26	23.17	-14.2	
0920	6.94	7.5	300	6.10	0.215	58.8	0.24	23.15	-12.5	
0925	6.94	9.0	300	6.08	0.213	45.2	0.22	23.18	-14.2	
	SAMPLE TIME 0930									

SIGNATURE(S):

COPY

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Tetra Tech NUS, Inc. GROUNDWATER SAMPLE LOG SHEET

Project Name:	Supplemental GW Assessment	Sample ID No.:	81ABCGL13S01
Project No.:	N9945 SY0 050 122	Sample Location:	CEF-81-13S
Site:	Tanks 81 ABC, NAS Cecil Field		
[X] Monitoring Well		Sampler:	P. Leverette
[ ] Domestic Well			
[ ] Other:			

SAMPLING DATA

Date: 2/21/05 Time: 1045	Color	pH S.U.	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/L	ORP mV	
Method: Peristaltic	Lt. Orange	4.49	0.057	20.25	79.3	0.37	280.6	

PURGE DATA

Date:	2/21/05
Method:	Peristaltic
Monitor Reading (ppm):	0.2
Well Casing Diameter:	2-inch
Well Casing Material:	PVC
Total Well Depth (ft):	12.14
Static Water Level (ft):	6.85
One ~~Casing~~ Screen Volume(gal):	3.3
Start Purge (hrs):	0947
End Purge (hrs):	1042
Total Purge Time (min):	55
Total Vol. Purged (gal):	16.5

See Attached Low Flow Purge Data Sheet for Purge Data

SAMPLE COLLECTION INFORMATION

Analysis	Preservative	Container Requirements	Laboratory	Collected
Select VOCs, SW 846 8260B*	HCl, Cool to 4 ° C	3 - 40 ml teflon-lined vials	Accutest	✓
PAHs, SW 846 8310!	Cool to 4 ° C	2 - 1 liter glass amber	Accutest	✓

OBSERVATIONS / NOTES

* Report BTEX, MTBE, isopropyl benzene, 1,2,3-TMB, 1,2,4-TMB and 1,3,5-TMB.
! Include 1- and 2-methylnaphthalene
Dedicated tubing in situ.

LAB INFO

LAB: Accutest
4405 Vineland Rd., C-15
Orlando, FL 32811
COC #: 81ABC-02

Check if Collected:

☐ MS / MSD ☐ DUPLICATE / ID No.: None

Signature(s):

Tetra Tech NUS, Inc.

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Tanks 81 ABC, NAS CECIL FIELD

PROJECT NUMBER: N9945 SY0 050 122 CTO 361

WELL ID.: CEF-81-13S

DATE: 2/21/05

Time (Hrs.)	Water Level (Ft. below TOC)	Cum.Vol. (liters)	Flow (mL/Min.)	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
0947	6.85	—	300	—	—	—	—	—	—	START PURGE
0957	7.11	3.0	300	4.47	0.059	130	0.92	20.07	287.2	
1007	7.10	4.5	300	4.51	0.058	97.0	0.57	20.04	283.1	
1007	7.10	6.0	300	4.50	0.057	94.0	0.48	20.09	294.6	
1012	7.10	7.5	300	4.48	0.057	97.1	0.39	20.07	287.0	
1017	7.10	9.0	300	4.48	0.057	96.3	0.44	20.23	284.4	
1022	7.10	10.5	300	4.49	0.057	91.6	0.39	20.21	284.1	
1027	7.10	12.0	300	4.49	0.057	87.8	0.39	20.22	288.7	
1032	7.10	13.5	300	4.50	0.057	84.0	0.39	20.20	296.3	
1037	7.10	15.0	300	4.48	0.058	81.4	0.39	20.19	283.8	
1042	7.10	16.5	300	4.49	0.057	79.3	0.37	20.25	280.6	

SAMPLE TIME 1045

SIGNATURE(S):

COPY

COPY

Tetra Tech NUS, Inc. GROUNDWATER SAMPLE LOG SHEET

Project Name: Supplemental GW Assessment
Project No.: N9945 SY0 050 122
Site: Tanks 81 ABC, NAS Cecil Field
[X] Monitoring Well
[ ] Domestic Well
[ ] Other:

Sample ID No.: 81ABCGL8SR01
Sample Location: CEF-81-8SR
Sampler: P. Leverette

SAMPLING DATA

Date: 2/18/05	Color	pH S.U.	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/L	ORP mV	
Time: 1055								
Method: Peristaltic	Clear	4.36	0.065	20.62	19.4	0.63	303.6	

PURGE DATA

Date:	2/18/05
Method:	Peristaltic
Monitor Reading (ppm):	0.0
Well Casing Diameter:	2-inch
Well Casing Material:	PVC
Total Well Depth (ft):	12.94
Static Water Level (ft):	6.57
One ~~casing~~ Volume(gal/L)	3.9
Start Purge (hrs):	0957
End Purge (hrs):	1055
Total Purge Time (min):	58
Total Vol. Purged (gal/L)	17.5

See Attached Low Flow Purge Data Sheet for Purge Data

SAMPLE COLLECTION INFORMATION

Analysis	Preservative	Container Requirements	Laboratory	Collected
Select VOCs, SW 846 8260B*	HCl, Cool to 4 ° C	3 - 40 ml teflon-lined vials	Accutest	✓
PAHs, SW 846 8310!	Cool to 4 ° C	2 - 1 liter glass amber	Accutest	✓

OBSERVATIONS / NOTES

* Report BTEX, MTBE, isopropyl benzene, 1,2,3-TMB, 1,2,4-TMB and 1,3,5-TMB.
! Include 1- and 2-methylnaphthalene
Dedicated tubing in situ.

LAB INFO

LAB: Accutest
4405 Vineland Rd., C-15
Orlando, FL 32811
COC #: 81ABC-01

Check if Collected:

☐ MS / MSD ☐ DUPLICATE / ID No.: None

Signature(s):

Tetra Tech NUS, Inc.

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Tanks 81 ABC, NAS CECIL FIELD
PROJECT NUMBER: N9945 SY0 050 122 CTO 361

WELL ID.: CEF-81-8SR
DATE: 2/18/05

Time (Hrs.)	Water Level (Ft. below TOC)	Cum.Vol. (liters)	Flow (mL/Min.)	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
0957	6.57	—	300	—	-	—	—	—	—	START PURGE
1007	6.82	3.0	300	4.22	0.069	90.5	2.77	19.79	236.8	
1017	6.82	6.0	300	4.28	0.067	77.2	1.74	20.21	274.1	
1027	6.82	9.0	300	4.31	0.067	48.3	1.26	20.36	274.4	
1037	6.82	12.0	300	4.34	0.066	31.6	0.81	20.53	295.0	
1042	6.82	13.5	300	4.36	0.067	26.8	0.76	20.57	297.3	
1047	6.82	15.0	300	4.35	0.066	24.2	0.74	20.55	298.8	
1052	6.82	16.5	300	4.36	0.065	21.3	0.67	20.61	301.4	
1055	6.82	17.5	300	4.36	0.065	19.4	0.63	20.62	303.6	
	SAMPLE TIME 1055									

SIGNATURE(S):

COPY

COPY

Tetra Tech NUS, Inc. GROUNDWATER SAMPLE LOG SHEET

Project Name:	Supplemental GW Assessment	Sample ID No.:	81ABCGL04I01
Project No.:	N9945 SY0 050 122	Sample Location:	CEF-81-04I
Site:	Tanks 81 ABC, NAS Cecil Field		
[X] Monitoring Well		Sampler:	P. LEVERETTE
[ ] Domestic Well			
[ ] Other:			

SAMPLING DATA

Date: 2/18/05	Color	pH S.U.	S.C. mS/cm	Temp °C	Turbidity NTU	DO mg/L	ORP mV	
Time: 1525								
Method: Peristaltic	CLEAR	5.82	0.204	~~18.3~~ 23.36	18.3	0.22	32.1	

PURGE DATA

Date:	2/18/05
Method:	Peristaltic
Monitor Reading (ppm):	0.7
Well Casing Diameter:	2-inch
Well Casing Material:	PVC
Total Well Depth (ft):	30
Static Water Level (ft):	6.74
One ~~Casing~~ Screen Volume(gal/L):	@1L
Start Purge (hrs):	1457
End Purge (hrs):	1525
Total Purge Time (min):	28
Total Vol. Purged (gal/L):	8.5

See Attached Low Flow Purge Data Sheet for Purge Data

SAMPLE COLLECTION INFORMATION

Analysis	Preservative	Container Requirements	Laboratory	Collected
Select VOCs, SW 846 8260B*	HCl, Cool to 4 ° C	3 - 40 ml teflon-lined vials	Accutest	✓
PAHs, SW 846 8310!	Cool to 4 ° C	2 - 1 liter glass amber	Accutest	✓

OBSERVATIONS / NOTES

* Report BTEX, MTBE, isopropyl benzene, 1,2,3-TMB, 1,2,4-TMB and 1,3,5-TMB.
! Include 1- and 2-methylnaphthalene
Dedicated tubing in situ.

LAB INFO

LAB: Accutest
4405 Vineland Rd., C-15
Orlando, FL 32811
COC #: 81ABC-01

Check if Collected:

☐ MS / MSD ☐ DUPLICATE / ID No.: NONE

Signature(s):

Tetra Tech NUS, Inc.

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Tanks 81 ABC, NAS CECIL FIELD
PROJECT NUMBER: N9945 SY0 050 122 CTO 361

WELL ID.: CEF-81-04I
DATE: 2/18/05

Time (Hrs.)	Water Level (Ft. below TOC)	Cum.Vol. (liters)	Flow (mL/Min.)	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
1457	6.74	—	300	—	—	—	—	—	—	Start Purge
1502	6.75	1.5	300	5.85	0.209	175	0.87	23.48	14.3	
1507	6.75	3.0	300	5.85	0.208	123	0.44	23.47	18.4	
1512	6.75	4.5	300	5.85	0.207	94.0	0.26	23.33	19.8	
1517	6.75	6.0	300	5.83	0.205	73.5	0.22	23.38	27.7	
1522	6.75	7.5	300	5.82	0.204	24.9	0.23	23.34	34.5	
1525	6.75	8.5	300	5.82	0.204	18.3	0.22	23.36	37.1	
	Sample Time		1525							

SIGNATURE(S):

COPY

COPY

Tetra Tech NUS, Inc. GROUNDWATER SAMPLE LOG SHEET

Project Name:	Supplemental GW Assessment	Sample ID No.:	81ABCGL9S01
Project No.:	N9945 SY0 050 122	Sample Location:	CEF-81-9S
Site:	Tanks 81 ABC, NAS Cecil Field		
[X] Monitoring Well		Sampler:	P. LEVERETTE
[ ] Domestic Well			
[ ] Other:			

SAMPLING DATA

Date: 2/18/05 Time: 1440	Color	pH S.U.	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/L	ORP mV	
Method: Peristaltic	ORANGE	5.02	0.076	21.14	713	0.72	-29.1	

PURGE DATA

Date:	2/18/05
Method:	Peristaltic
Monitor Reading (ppm):	2.6
Well Casing Diameter:	2-inch
Well Casing Material:	PVC
Total Well Depth (ft):	12.74
Static Water Level (ft):	~~1330~~ PD 6.78
One ~~Casing~~ Screen Volume(gal) (1)	3.7
Start Purge (hrs):	1330
End Purge (hrs):	1435
Total Purge Time (min):	65
Total Vol. Purged (gal) (5)	19.5

See Attached Low Flow Purge Data Sheet for Purge Data

SAMPLE COLLECTION INFORMATION

Analysis	Preservative	Container Requirements	Laboratory	Collected
Select VOCs, SW 846 8260B*	HCl, Cool to 4 ° C	3 - 40 ml teflon-lined vials	Accutest	✓
PAHs, SW 846 8310!	Cool to 4 ° C	2 - 1 liter glass amber	Accutest	✓

OBSERVATIONS / NOTES

* Report BTEX, MTBE, isopropyl benzene, 1,2,3-TMB, 1,2,4-TMB and 1,3,5-TMB.
! Include 1- and 2-methylnaphthalene
Dedicated tubing in situ.

LAB INFO

LAB: Accutest
4405 Vineland Rd., C-15
Orlando, FL 32811
COC #: 81ABC-01

Check if Collected:

☐ MS / MSD ☐ DUPLICATE / ID No.: None

Signature(s):

Tetra Tech NUS, Inc.

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Tanks 81 ABC, NAS CECIL FIELD
PROJECT NUMBER: N9945 SY0 050 122 CTO 361

WELL ID.: CEF-81-9S
DATE: 2/18/05

Time (Hrs.)	Water Level (Ft. below TOC)	Cum.Vol. (liters)	Flow (mL/Min.)	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
1330	6.78	—	300	—	—	—	—	—	—	Start Purge
1335	6.90	1.5	300	4.99	0.073	542	0.29	20.61	15.5	
1340	6.91	3.0	300	5.09	0.074	555	0.32	20.71	-3.6	
1350	6.91	6.0	300	5.06	0.073	612	0.26	20.74	-39.3	
1400	6.91	9.0	300	5.06	0.072	798	0.11	20.96	-54.5	
1410	6.91	12.0	300	5.06	0.073	897	0.24	21.08	-56.6	
1420	6.91	15.0	300	5.03	0.074	883	0.48	21.30	-41.2	
1430	6.91	18.0	300	5.03	0.075	742	0.62	21.16	-34.1	
1435	6.91	19.5	300	5.02	0.076	713	0.72	21.14	-29.1	

Sample Time 1440

SIGNATURE(S):

COPY

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Tetra Tech NUS, Inc. GROUNDWATER SAMPLE LOG SHEET

Project Name:	Supplemental GW Assessment	Sample ID No.:	81ABCGL01I01
Project No.:	N9945 SY0 050 122	Sample Location:	CEF-81-01I
Site:	Tanks 81 ABC, NAS Cecil Field		
[X] Monitoring Well		Sampler:	P. LEVEROTTE
[ ] Domestic Well			
[ ] Other:			

SAMPLING DATA

Date: 2/18/05 Time: 1310	Color	pH S.U.	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/L	ORP mV	
Method: Peristaltic	CLEAR	5.41	0.109	22.61	14.6	0.17	67.0	

PURGE DATA

Date:	2/18/05
Method:	Peristaltic
Monitor Reading (ppm):	0.3
Well Casing Diameter:	2-inch
Well Casing Material:	PVC
Total Well Depth (ft):	29.25
Static Water Level (ft):	6.79
One ~~Casing~~ SCW Volume(gal/L):	3.1
Start Purge (hrs):	1240
End Purge (hrs):	1305
Total Purge Time (min):	25
Total Vol. Purged (gal/L):	7.5

See Attached Low Flow Purge Data Sheet for Purge Data

SAMPLE COLLECTION INFORMATION

Analysis	Preservative	Container Requirements	Laboratory	Collected
Select VOCs, SW 846 8260B*	HCl, Cool to 4 ° C	3 - 40 ml teflon-lined vials	Accutest	✓
PAHs, SW 846 8310!	Cool to 4 ° C	2 - 1 liter glass amber	Accutest	✓

OBSERVATIONS / NOTES

* Report BTEX, MTBE, isopropyl benzene, 1,2,3-TMB, 1,2,4-TMB and 1,3,5-TMB.
! Include 1- and 2-methylnaphthalene
Dedicated tubing in situ.

LAB INFO

LAB: Accutest
4405 Vineland Rd., C-15
Orlando, FL 32811
COC #: 81ABC-01

Check if Collected:

☐ MS / MSD ☒ DUPLICATE / ID No.: 81ABCGL01I010

Signature(s):

Tetra Tech NUS, Inc.

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Tanks 81 ABC, NAS CECIL FIELD
PROJECT NUMBER: N9945 SY0 050 122 CTO 361

WELL ID.: CEF-81-01I
DATE: 2/18/05

Time (Hrs.)	Water Level (Ft. below TOC)	Cum.Vol. (liters)	Flow (mL/Min.)	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
1240	6.79	—	300	—	—	—	—	—	—	Start Purge
1250	6.85	3.0	300	5.26	0.100	27.5	0.37	22.37	107.9	
1255	6.85	4.5	300	5.36	0.105	23.5	0.23	22.38	92.9	
1300	6.85	6.0	300	5.40	0.107	17.1	0.20	22.47	78.7	
1305	6.85	7.5	300	5.41	0.109	14.6	0.17	22.61	67.0	

Sample Time 1310

SIGNATURE(S):

COPY

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Tetra Tech NUS, Inc. GROUNDWATER SAMPLE LOG SHEET

Project Name:	Supplemental GW Assessment	Sample ID No.:	81ABCGL01D01
Project No.:	N9945 SY0 050 122	Sample Location:	CEF-81-01D
Site:	Tanks 81 ABC, NAS Cecil Field		
[X] Monitoring Well		Sampler:	Rome
[ ] Domestic Well			
[ ] Other:			

SAMPLING DATA

Date: 2/18/05	Color	pH S.U.	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/L	ORP mV	
Time: 1550								
Method: Peristaltic	Clear	5.34	0.092	24.02	60.2	0.43	178.0	

PURGE DATA

Date: 2/18/05	
Method:	Peristaltic
Monitor Reading (ppm):	0.9
Well Casing Diameter:	2-inch
Well Casing Material:	PVC
Total Well Depth (ft):	55'
Static Water Level (ft):	6.83
One ~~Casing~~ Volume(gal/L):	3.1 (Screen)
Start Purge (hrs):	1300
End Purge (hrs):	1350
Total Purge Time (min):	50
Total Vol. Purged (gal/L):	11.4 L

See Attached Low Flow Purge Data Sheet for Purge Data

SAMPLE COLLECTION INFORMATION

Analysis	Preservative	Container Requirements	Laboratory	Collected
Select VOCs, SW 846 8260B*	HCl, Cool to 4 ° C	3 - 40 ml teflon-lined vials	Accutest	✓
PAHs, SW 846 8310!	Cool to 4 ° C	2 - 1 liter glass amber	Accutest	✓

OBSERVATIONS / NOTES

* Report BTEX, MTBE, isopropyl benzene, 1,2,3-TMB, 1,2,4-TMB and 1,3,5-TMB.
! Include 1- and 2-methylnaphthalene
Dedicated tubing in situ.
x5 Volumes due to high (720) turbidity

LAB INFO

LAB: Accutest
4405 Vineland Rd., C-15
Orlando, FL 32811
COC #: 81ABC-01

Check if Collected:

☐ MS / MSD ☐ DUPLICATE / ID No.: None

Signature(s): Rome

Tetra Tech NUS, Inc.

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Tanks 81 ABC, NAS CECIL FIELD
PROJECT NUMBER: N9945 SY0 050 122 CTO 361

WELL ID.: CEF-81-01D
DATE: 2/18/09

Time (Hrs.)	Water Level (Ft. below TOC)	Cum.Vol. (liters)	Flow (mL/Min.)	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
1300	6.88	Initial	310	5.62	0.138	755	0.1	23.66	138.5	Hvy Seds (Developed)
1310	6.91	3.1	310	5.31	0.109	581	0.40	24.10	159.3	
1320	6.94	6.2	310	5.40	0.102	319	0.42	24.12	165.6	
1330	6.98	9.3	310	5.38	0.097	164	0.47	24.01	169.1	
1340	7.04	11.4	310	5.34	0.092	60.2	0.43	24.02	178.0	

SIGNATURE(S): S. Rose

PAGE ~~1~~ OF ~~1~~ 2 2

COPY

Tetra Tech NUS, Inc. GROUNDWATER SAMPLE LOG SHEET

COPY

Project Name:	Supplemental GW Assessment	Sample ID No.:	81ABCGL03I01
Project No.:	N9945 SY0 050 122	Sample Location:	CEF-81-03I
Site:	Tanks 81 ABC, NAS Cecil Field		
[X] Monitoring Well		Sampler:	Rome
[ ] Domestic Well			
[ ] Other:			

SAMPLING DATA

Date: 2/18/05	Color	pH S.U.	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/L	ORP mV	
Time: 1440								
Method: Peristaltic	Clear	6.00	0.141	23.70	5.41	0.10	36.9	

PURGE DATA

Date:	2/18/05
Method:	Peristaltic
Monitor Reading (ppm):	2.2
Well Casing Diameter:	2-inch
Well Casing Material:	PVC
Total Well Depth (ft):	30
Static Water Level (ft):	6.95
One ~~Casing~~ SCM Volume(gal/L):	3.1 (Screen)
Start Purge (hrs):	~~1400~~ 1410
End Purge (hrs):	1430
Total Purge Time (min):	20
Total Vol. Purged (gal/L):	6.20

See Attached Low Flow Purge Data Sheet for Purge Data

SAMPLE COLLECTION INFORMATION

Analysis	Preservative	Container Requirements	Laboratory	Collected
Select VOCs, SW 846 8260B*	HCl, Cool to 4 ° C	3 - 40 ml teflon-lined vials	Accutest	✓
PAHs, SW 846 8310!	Cool to 4 ° C	2 - 1 liter glass amber	Accutest	✓

OBSERVATIONS / NOTES

* Report BTEX, MTBE, isopropyl benzene, 1,2,3-TMB, 1,2,4-TMB and 1,3,5-TMB.
! Include 1- and 2-methylnaphthalene
Dedicated tubing in situ.

Screen fully submerged removed + due ~~tubing~~ pump system volume

LAB INFO

LAB: Accutest
4405 Vineland Rd., C-15
Orlando, FL 32811

COC #: 81ABC-01

Check if Collected:

☐ MS / MSD ☐ DUPLICATE / ID No.: NONE

Signature(s): S. Rome

Tetra Tech NUS, Inc.

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Tanks 81 ABC, NAS CECIL FIELD
PROJECT NUMBER: N9945 SY0 050 122 CTO 361

WELL ID.: CEF-81-03I
DATE: 2/18/05

	Time (Hrs.)	Water Level (Ft. below TOC)	Cum.Vol. (liters)	Flow (mL/Min.)	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
	1410	6.95	Initial	310	5.63	0.136	34.1	0.34	23.77	250	Clear / No Odor
	1420	7.04	3.10	310	6.00	0.118	12.1	0.17	23.73	33.6	" "
SR	~~1420~~1425	7.11	4.65	310	6.01	0.117	7.07	0.14	23.74	34.4	" "
SR	~~1440~~1430	7.13	6.20	310	6.00	0.114	5.41	0.10	23.70	36.9	" "

SIGNATURE(S): S. Rowe

PAGE 7 OF 7

COPY

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Tetra Tech NUS, Inc. GROUNDWATER SAMPLE LOG SHEET

Project Name:	Supplemental GW Assessment	Sample ID No.:	81ABCGL14S01
Project No.:	N9945 SY0 050 122	Sample Location:	CEF-81-14S
Site:	Tanks 81 ABC, NAS Cecil Field		
[X] Monitoring Well		Sampler:	Rome
[ ] Domestic Well			
[ ] Other:			

SAMPLING DATA

Date: 2/18/05	Color	pH S.U.	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/L	ORP mV	
Time: 1545								
Method: Peristaltic	Clear	5.26	0.174	20.81	5.15	0.68	244.9	

PURGE DATA

Date:	2/18/05
Method:	Peristaltic
Monitor Reading (ppm):	0.2
Well Casing Diameter:	2-inch
Well Casing Material:	PVC
Total Well Depth (ft):	13.00
Static Water Level (ft):	7.41
One ~~Casing~~ Screen Volume(gal/L):	4.0 L
Start Purge (hrs):	1450
End Purge (hrs):	1539
Total Purge Time (min):	49
Total Vol. Purged (gal/L):	12 L

See Attached Low Flow Purge Data Sheet for Purge Data

SAMPLE COLLECTION INFORMATION

Analysis	Preservative	Container Requirements	Laboratory	Collected
Select VOCs, SW 846 8260B*	HCl, Cool to 4 ° C	3 - 40 ml teflon-lined vials	Accutest	✓
PAHs, SW 846 8310!	Cool to 4 ° C	2 - 1 liter glass amber	Accutest	✓

OBSERVATIONS / NOTES

* Report BTEX, MTBE, isopropyl benzene, 1,2,3-TMB, 1,2,4-TMB and 1,3,5-TMB.
! Include 1- and 2-methylnaphthalene
Dedicated tubing in situ.

LAB INFO

LAB: Accutest
4405 Vineland Rd., C-15
Orlando, FL 32811
COC #: 81 ABC-01

Check if Collected:

☑ MS / MSD ☐ DUPLICATE / ID No.:

Signature(s): Rome

81ABCGL14S01S'
81ABCGL14S01M

Tetra Tech NUS, Inc.

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Tanks 81 ABC, NAS CECIL FIELD
PROJECT NUMBER: N9945 SY0 050 122 CTO 361

WELL ID.: CEF-81-14S
DATE: 2/18/05

Time (Hrs.)	Water Level (Ft. below TOC)	Cum.Vol. (liters)	Flow (mL/Min.)	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
1450	7.41	Initial	500	5.19	0.167	8.77	1.65	20.71	209.5	Clear / No Odor
1503	7.47	4.0	300	5.34	0.169	6.82	0.79	20.73	240.3	" "
1516	7.51	8.0	300	5.29	0.171	5.45	0.67	20.80	247.1	" "
1539	7.56	12.0	300	5.26	0.174	5.15	0.68	20.81	244.9	" "

SIGNATURE(S): S. Rome

PAGE 2 **OF** 3

COPY

Tetra Tech NUS, Inc. **GROUNDWATER SAMPLE LOG SHEET**

COPY

Project Name:	Supplemental GW Assessment	Sample ID No.:	81ABCGL02I01
Project No.:	N9945 SY0 050 122	Sample Location:	CEF-81-02I
Site:	Tanks 81 ABC, NAS Cecil Field		
[X] Monitoring Well		Sampler:	S. Rowe
[ ] Domestic Well			
[ ] Other:			

SAMPLING DATA

Date: 2/18/05 Time: 1100	Color	pH S.U.	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/L	ORP mV	
Method: Peristaltic	Clear	5.42	0.107	23.41	5.01	0.26	92.7	

PURGE DATA

Date:	2/18/05
Method:	Peristaltic
Monitor Reading (ppm):	0.6
Well Casing Diameter:	2-inch
Well Casing Material:	PVC
Total Well Depth (ft):	30.0'
Static Water Level (ft):	6.54
One ~~Casing~~ Screen Volume(gal/L):	3.1 (Screen)
Start Purge (hrs):	1000
End Purge (hrs):	1040
Total Purge Time (min):	40
Total Vol. Purged (gal/L):	11.4

See Attached Low Flow Purge Data Sheet for Purge Data

SAMPLE COLLECTION INFORMATION

Analysis	Preservative	Container Requirements	Laboratory	Collected
Select VOCs, SW 846 8260B*	HCl, Cool to 4 ° C	3 - 40 ml teflon-lined vials	Accutest	✓
PAHs, SW 846 8310!	Cool to 4 ° C	2 - 1 liter glass amber	Accutest	✓

OBSERVATIONS / NOTES

* Report BTEX, MTBE, isopropyl benzene, 1,2,3-TMB, 1,2,4-TMB and 1,3,5-TMB.
! Include 1- and 2-methylnaphthalene
Dedicated tubing in situ.
- 5 foot Screen Interval (0.10 slot)

LAB INFO

LAB: Accutest
4405 Vineland Rd., C-15
Orlando, FL 32811
COC #: 81ABC-01

Check if Collected:

☐ MS / MSD ☐ DUPLICATE / ID No.:

Signature(s): S. Rowe

Tetra Tech NUS, Inc.

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Tanks 81 ABC, NAS CECIL FIELD
PROJECT NUMBER: N9945 SY0 050 122 CTO 361

WELL ID.: CEF-81-02I
DATE: 2/18/05

Time (Hrs.)	Water Level (Ft. below TOC)	Cum.Vol. (liters)	Flow (mL/Min.)	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
1000	6.54	Initial	310/min	5.52	0.129	39.1	0.45	23.29	79.9	No odor / Clear
1010	6.61	3.1	310	5.51	0.120	81.1	0.39	23.20	80.1	" "
1020	6.63	6.2	310	5.48	0.110	12.1	0.20	23.40	90.7	" / ~~Discharge~~ Grab sample for TAB.
1030	6.66	9.3	310	5.42	0.105	5.40	0.29	23.42	93.4	
1040	6.71	11.4	310	5.42	0.107	5.01	0.26	23.41	92.7	

SIGNATURE(S): S. Rome

PAGE ~~1~~ 2 **OF** ~~1~~ 2

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ATTACHMENT D

LABORATORY REPORTS

Southeast
ACCUTEST
Laboratories

08/03/05

Technical Report for

Tetra Tech NUS

NAS Cecil Field-CTO #361

N9945-WR1000892 /CTO361

Accutest Job Number: F29927

Sampling Date: 02/18/05

Report to:

Tetra Tech, NUS

dalem@ttnus.com

ATTN: Merv Dale

Total number of pages in report: 33

ACCREDITED IN ACCORDANCE WITH nelac

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

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Sample Summary

Tetra Tech NUS

Job No: F29927

NAS Cecil Field-CTO #361
Project No: N9945-WR1000892 /CTO361

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
F29927-1	02/18/05	10:55	SR	02/19/05	AQ	Ground Water	81ABCGL8SR01
F29927-2	02/18/05	11:00	SR	02/19/05	AQ	Ground Water	81ABCGL02I01
F29927-3	02/18/05	13:10	SR	02/19/05	AQ	Ground Water	81ABCGL01I01
F29927-4	02/18/05	13:50	SR	02/19/05	AQ	Ground Water	81ABCGL01D01
F29927-5	02/18/05	14:40	SR	02/19/05	AQ	Ground Water	81ABCGL09S01
F29927-6	02/18/05	14:40	SR	02/19/05	AQ	Ground Water	81ABCGL03I01
F29927-7	02/18/05	15:45	SR	02/19/05	AQ	Ground Water	81ABCGL14S01
F29927-7D	02/18/05	15:45	SR	02/19/05	AQ	Water Dup/MSD	81ABCGL14S01
F29927-7S	02/18/05	15:45	SR	02/19/05	AQ	Water Matrix Spike	81ABCGL14S01
F29927-8	02/18/05	15:25	SR	02/19/05	AQ	Ground Water	81ABCGL04I01
F29927-9	02/18/05	00:00	SR	02/19/05	AQ	Ground Water	81ABCGL01I01D
F29927-10	02/18/05	09:55	SR	02/19/05	AQ	Ground Water	81ABCEL00101
F29927-11	02/18/05	11:05	SR	02/19/05	AQ	Ground Water	81ABCFL00101

Sample Summary
(continued)

Tetra Tech NUS

Job No: F29927

NAS Cecil Field-CTO #361
Project No: N9945-WR1000892 /CTO361

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
F29927-12	02/18/05	10:35	SR	02/19/05	AQ	Trip Blank Water	81ABCTL01

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Tetra Tech NUS **Job No:** F29927

Site: NAS Cecil Field-CTO #361 **Report Date:** 3/8/2005 12:51:32 PM

11 Samples and 1 Trip Blank were collected on 02/18/2005 and were received at Accutest on 02/19/2005 properly preserved, at 3.8 Deg. C and intact. These Samples received an Accutest job number of F29927. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS by Method SW846 8260B

Matrix: AQ **Batch ID:** VN119

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F29927-7MS, F29927-7MSD were used as the QC samples indicated.

Extractables by GC by Method SW846 8310

Matrix: AQ **Batch ID:** OP12551

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F29927-7MS, F29927-7MSD were used as the QC samples indicated.

F29927-4: All hits confirmed by spectral match using a diode array detector.

F29927-5: All hits confirmed by spectral match using a diode array detector.

F29927-7: All hits confirmed by spectral match using a diode array detector.

F29927-8: All hits confirmed by spectral match using a diode array detector.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Date: March 8, 2005

Ellen Pampel, Inorganic QA (signature on file)

Tuesday, March 08, 2005

Report of Analysis

Client Sample ID:	81ABCGL8SR01		
Lab Sample ID:	F29927-1	Date Sampled:	02/18/05
Matrix:	AQ - Ground Water	Date Received:	02/19/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO #361		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0002591.D	1	02/22/05	NJ	n/a	n/a	VN119
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	0.50 U	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	0.50 U	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		86-115%
17060-07-0	1,2-Dichloroethane-D4	103%		73-126%
2037-26-5	Toluene D8	91%		86-112%
460-00-4	4-Bromofluorobenzene	97%		83-119%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) No TICs detected.

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
L = Indicates value exceeds calibration range
I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	81ABCGL8SR01		
Lab Sample ID:	F29927-1	Date Sampled:	02/18/05
Matrix:	AQ - Ground Water	Date Received:	02/19/05
Method:	SW846 8310 SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO #361		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE030326.D	1	03/04/05	MRE	02/22/05	OP12551	GEE1195
Run #2							

	Initial Volume	Final Volume
Run #1	1020 ml	1.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.98 U	3.9	0.98	ug/l	
208-96-8	Acenaphthylene	0.98 U	3.9	0.98	ug/l	
120-12-7	Anthracene	0.98 U	2.0	0.98	ug/l	
56-55-3	Benzo(a)anthracene	0.098 U	0.20	0.098	ug/l	
50-32-8	Benzo(a)pyrene	0.098 U	0.20	0.098	ug/l	
205-99-2	Benzo(b)fluoranthene	0.098 U	0.20	0.098	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.098 U	0.20	0.098	ug/l	
207-08-9	Benzo(k)fluoranthene	0.098 U	0.20	0.098	ug/l	
218-01-9	Chrysene	0.98 U	2.0	0.98	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.098 U	0.20	0.098	ug/l	
206-44-0	Fluoranthene	0.49 U	2.0	0.49	ug/l	
86-73-7	Fluorene	0.98 U	2.0	0.98	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.098 U	0.20	0.098	ug/l	
91-20-3	Naphthalene	0.98 U	2.0	0.98	ug/l	
90-12-0	1-Methylnaphthalene	0.49 U	2.0	0.49	ug/l	
91-57-6	2-Methylnaphthalene	0.49 U	2.0	0.49	ug/l	
85-01-8	Phenanthrene	0.98 U	2.0	0.98	ug/l	
129-00-0	Pyrene	0.49 U	2.0	0.49	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	88%		36-114%
92-94-4	p-Terphenyl	87%		31-121%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	81ABCGL02I01		
Lab Sample ID:	F29927-2	Date Sampled:	02/18/05
Matrix:	AQ - Ground Water	Date Received:	02/19/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO #361		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0002592.D	1	02/22/05	NJ	n/a	n/a	VN119
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	0.50 U	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	0.50 U	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		86-115%
17060-07-0	1,2-Dichloroethane-D4	104%		73-126%
2037-26-5	Toluene-D8	92%		86-112%
460-00-4	4-Bromofluorobenzene	95%		83-119%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) No TICs detected.

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
L = Indicates value exceeds calibration range
I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	81ABCGL02I01		
Lab Sample ID:	F29927 2	Date Sampled:	02/18/05
Matrix:	AQ - Ground Water	Date Received:	02/19/05
Method:	SW846 8310 SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO #361		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE030327.D	1	03/04/05	MRE	02/22/05	OP12551	GEE1195
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.95 U	3.8	0.95	ug/l	
208-96-8	Acenaphthylene	0.95 U	3.8	0.95	ug/l	
120-12-7	Anthracene	0.95 U	1.9	0.95	ug/l	
56-55-3	Benzo(a)anthracene	0.095 U	0.19	0.095	ug/l	
50-32-8	Benzo(a)pyrene	0.095 U	0.19	0.095	ug/l	
205-99-2	Benzo(b)fluoranthene	0.095 U	0.19	0.095	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.095 U	0.19	0.095	ug/l	
207-08-9	Benzo(k)fluoranthene	0.095 U	0.19	0.095	ug/l	
218-01-9	Chrysene	0.95 U	1.9	0.95	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.095 U	0.19	0.095	ug/l	
206-44-0	Fluoranthene	0.48 U	1.9	0.48	ug/l	
86-73-7	Fluorene	0.95 U	1.9	0.95	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.095 U	0.19	0.095	ug/l	
91-20-3	Naphthalene	0.95 U	1.9	0.95	ug/l	
90-12-0	1-Methylnaphthalene	0.48 U	1.9	0.48	ug/l	
91-57-6	2-Methylnaphthalene	0.48 U	1.9	0.48	ug/l	
85-01-8	Phenanthrene	0.95 U	1.9	0.95	ug/l	
129-00-0	Pyrene	0.48 U	1.9	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	84%		36-114%
92-94-4	p-Terphenyl	76%		31-121%

U = Not detected MDL - Method Detection Limit I = Result > = MDL but < RL J = Estimated value
RL = Reporting Limit V = Indicates analyte found in associated method blank
L = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	81ABCGL01I01		
Lab Sample ID:	F29927-3	Date Sampled:	02/18/05
Matrix:	AQ - Ground Water	Date Received:	02/19/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO #361		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0002593.D	1	02/22/05	NJ	n/a	n/a	VN119
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	0.50 U	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	0.69	1.0	0.50	ug/l	I
95-63-6	1,2,4-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		86-115%
17060-07-0	1,2-Dichloroethane-D4	104%		73-126%
2037-26-5	Toluene-D8	90%		86-112%
460-00-4	4-Bromofluorobenzene	97%		83-119%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) No TICs detected.

U = Not detected MDL - Method Detection Limit I = Result > = MDL but < RL J = Estimated value
RL = Reporting Limit V = Indicates analyte found in associated method blank
L = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	81ABCGL01I01		
Lab Sample ID:	F29927-3	Date Sampled:	02/18/05
Matrix:	AQ - Ground Water	Date Received:	02/19/05
Method:	SW846 8310 SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO #361		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE030328.D	1	03/04/05	MRE	02/22/05	OP12551	GEE1195
Run #2							

	Initial Volume	Final Volume
Run #1	1020 ml	1.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.98 U	3.9	0.98	ug/l	
208-96-8	Acenaphthylene	0.98 U	3.9	0.98	ug/l	
120-12-7	Anthracene	0.98 U	2.0	0.98	ug/l	
56-55-3	Benzo(a)anthracene	0.098 U	0.20	0.098	ug/l	
50-32-8	Benzo(a)pyrene	0.098 U	0.20	0.098	ug/l	
205-99-2	Benzo(b)fluoranthene	0.098 U	0.20	0.098	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.098 U	0.20	0.098	ug/l	
207-08-9	Benzo(k)fluoranthene	0.098 U	0.20	0.098	ug/l	
218-01-9	Chrysene	0.98 U	2.0	0.98	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.098 U	0.20	0.098	ug/l	
206-44-0	Fluoranthene	0.49 U	2.0	0.49	ug/l	
86-73-7	Fluorene	0.98 U	2.0	0.98	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.098 U	0.20	0.098	ug/l	
91-20-3	Naphthalene	0.98 U	2.0	0.98	ug/l	
90-12-0	1-Methylnaphthalene	0.49 U	2.0	0.49	ug/l	
91-57-6	2-Methylnaphthalene	0.49 U	2.0	0.49	ug/l	
85-01-8	Phenanthrene	0.98 U	2.0	0.98	ug/l	
129-00-0	Pyrene	0.49 U	2.0	0.49	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	91%		36-114%
92-94-4	p-Terphenyl	64%		31-121%

U = Not detected MDL - Method Detection Limit I = Result > = MDL but < RL J = Estimated value
RL = Reporting Limit V = Indicates analyte found in associated method blank
L = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	81ABCGL01D01		
Lab Sample ID:	F29927-4	Date Sampled:	02/18/05
Matrix:	AQ - Ground Water	Date Received:	02/19/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO #361		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0002594.D	1	02/22/05	NJ	n/a	n/a	VN119
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	1.1	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	0.50 U	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	0.50 U	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		86-115%
17060-07-0	1,2-Dichloroethane-D4	105%		73-126%
2037-26-5	Toluene-D8	90%		86-112%
460-00-4	4-Bromofluorobenzene	98%		83-119%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) No TICs detected.

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	81ABCGL01D01		
Lab Sample ID:	F29927-4	Date Sampled:	02/18/05
Matrix:	AQ - Ground Water	Date Received:	02/19/05
Method:	SW846 8310 SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO #361		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EE030329.D	1	03/04/05	MRE	02/22/05	OP12551	GEE1195
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.95 U	3.8	0.95	ug/l	
208-96-8	Acenaphthylene	0.95 U	3.8	0.95	ug/l	
120-12-7	Anthracene	0.95 U	1.9	0.95	ug/l	
56-55-3	Benzo(a)anthracene	0.095 U	0.19	0.095	ug/l	
50-32-8	Benzo(a)pyrene	0.095 U	0.19	0.095	ug/l	
205-99-2	Benzo(b)fluoranthene	0.095 U	0.19	0.095	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.095 U	0.19	0.095	ug/l	
207-08-9	Benzo(k)fluoranthene	0.095 U	0.19	0.095	ug/l	
218-01-9	Chrysene	0.95 U	1.9	0.95	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.095 U	0.19	0.095	ug/l	
206-44-0	Fluoranthene	0.48 U	1.9	0.48	ug/l	
86-73-7	Fluorene	0.95 U	1.9	0.95	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.095 U	0.19	0.095	ug/l	
91-20-3	Naphthalene	0.95 U	1.9	0.95	ug/l	
90-12-0	1-Methylnaphthalene	0.75	1.9	0.48	ug/l	I
91-57-6	2-Methylnaphthalene	0.48 U	1.9	0.48	ug/l	
85-01-8	Phenanthrene	0.95 U	1.9	0.95	ug/l	
129-00-0	Pyrene	0.48 U	1.9	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	89%		36-114%
92-94-4	p-Terphenyl	76%		31-121%

(a) All hits confirmed by spectral match using a diode array detector.

U = Not detected MDL - Method Detection Limit I = Result > = MDL but < RL J = Estimated value
RL = Reporting Limit V = Indicates analyte found in associated method blank
L = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	81ABCGL09S01		
Lab Sample ID:	F29927-5	Date Sampled:	02/18/05
Matrix:	AQ - Ground Water	Date Received:	02/19/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO #361		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0002595.D	1	02/22/05	NJ	n/a	n/a	VN119
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.60	1.0	0.50	ug/l	I
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	0.50 U	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	2.8	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	6.0	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		86-115%
17060-07-0	1,2-Dichloroethane-D4	104%		73-126%
2037-26-5	Toluene-D8	91%		86-112%
460-00-4	4-Bromofluorobenzene	96%		83-119%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
141-93-5	Benzene, 1,3-diethyl-	17.41	6.5	ug/l	JN
135-01-3	Benzene, 1,2-diethyl-	17.68	6.2	ug/l	JN
99-87-6	Benzene, 1-methyl-4-(1-methylethyl	17.92	8.9	ug/l	JN
1587-04-8	Benzene, 1-methyl-2-(2-propenyl)-	18.04	11	ug/l	JN
767-58-8	Indan, 1-methyl-	18.11	17	ug/l	JN
4912-92-9	1H-Indene, 2,3-dihydro-1,1-dimethy	18.28	7.4	ug/l	JN
95-93-2	Benzene, 1,2,4,5-tetramethyl-	18.36	7.8	ug/l	JN
874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	18.41	7.1	ug/l	JN
1595-16-0	Benzene, 1-methyl-4-(1-methylpropy	18.61	5.7	ug/l	JN
2039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	18.89	38	ug/l	JN
17059-48-2	1H-Indene, 2,3-dihydro-1,6-dimethy	19.27	6.7	ug/l	JN
97664-18-1	Benzene, 1-methyl-4-(1-methyl-2-pr	19.37	13	ug/l	JN
40650-41-7	1H-Indene, 2,3-dihydro-1,1,5-trime	19.48	5.8	ug/l	JN
3877-19-8	Naphthalene, 1,2,3,4-tetrahydro-2-	19.69	10	ug/l	JN

U = Not detected MDL - Method Detection Limit I = Result > = MDL but < RL J = Estimated value
RL = Reporting Limit V = Indicates analyte found in associated method blank
L = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	81ABCGL09S01		
Lab Sample ID:	F29927-5	Date Sampled:	02/18/05
Matrix:	AQ - Ground Water	Date Received:	02/19/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO #361		

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
6682-71-9	1H-Indene, 2,3-dihydro-4,7-dimethy	20.17	8.9	ug/l	JN
2809-64-5	Naphthalene, 1,2,3,4-tetrahydro-5-	20.62	6.1	ug/l	JN
91-20-3	Naphthalene	19.82	12	ug/l	JN
91-57-6	Naphthalene, 2-methyl-	21.15	14	ug/l	JN
4453-90-1	1,4-Methanonaphthalene, 1,4-dihydr	21.39	16	ug/l	JN
	Total TIC, Volatile		208.1	ug/l	J

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	81ABCGL09S01		
Lab Sample ID:	F29927-5	Date Sampled:	02/18/05
Matrix:	AQ - Ground Water	Date Received:	02/19/05
Method:	SW846 8310 SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO #361		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EE030330.D	1	03/04/05	MRE	02/22/05	OP12551	GEE1195
Run #2							

	Initial Volume	Final Volume
Run #1	1010 ml	1.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.99 U	4.0	0.99	ug/l	
208-96-8	Acenaphthylene	0.99 U	4.0	0.99	ug/l	
120-12-7	Anthracene	0.99 U	2.0	0.99	ug/l	
56-55-3	Benzo(a)anthracene	0.099 U	0.20	0.099	ug/l	
50-32-8	Benzo(a)pyrene	0.099 U	0.20	0.099	ug/l	
205-99-2	Benzo(b)fluoranthene	0.099 U	0.20	0.099	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.099 U	0.20	0.099	ug/l	
207-08-9	Benzo(k)fluoranthene	0.099 U	0.20	0.099	ug/l	
218-01-9	Chrysene	0.99 U	2.0	0.99	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.099 U	0.20	0.099	ug/l	
206-44-0	Fluoranthene	0.50 U	2.0	0.50	ug/l	
86-73-7	Fluorene	0.99 U	2.0	0.99	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.099 U	0.20	0.099	ug/l	
91-20-3	Naphthalene	4.2	2.0	0.99	ug/l	
90-12-0	1-Methylnaphthalene	9.2	2.0	0.50	ug/l	
91-57-6	2-Methylnaphthalene	5.7	2.0	0.50	ug/l	
85-01-8	Phenanthrene	0.99 U	2.0	0.99	ug/l	
129-00-0	Pyrene	0.50 U	2.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	70%		36-114%
92-94-4	p-Terphenyl	45%		31-121%

(a) All hits confirmed by spectral match using a diode array detector.

U = Not detected MDL - Method Detection Limit I = Result > = MDL but < RL J = Estimated value
RL = Reporting Limit V = Indicates analyte found in associated method blank
L = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	81ABCGL03I01		
Lab Sample ID:	F29927-6	Date Sampled:	02/18/05
Matrix:	AQ - Ground Water	Date Received:	02/19/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO #361		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0002596.D	1	02/22/05	NJ	n/a	n/a	VN119
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	0.50 U	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	0.50 U	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		86-115%
17060-07-0	1,2-Dichloroethane-D4	105%		73-126%
2037-26-5	Toluene-D8	90%		86-112%
460-00-4	4-Bromofluorobenzene	99%		83-119%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) No TICs detected.

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
L = Indicates value exceeds calibration range
I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	81ABCGL03I01		
Lab Sample ID:	F29927-6	Date Sampled:	02/18/05
Matrix:	AQ - Ground Water	Date Received:	02/19/05
Method:	SW846 8310 SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO #361		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE030332.D	1	03/04/05	MRE	02/22/05	OP12551	GEE1195
Run #2							

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.97 U	3.9	0.97	ug/l	
208-96-8	Acenaphthylene	0.97 U	3.9	0.97	ug/l	
120-12-7	Anthracene	0.97 U	1.9	0.97	ug/l	
56-55-3	Benzo(a)anthracene	0.097 U	0.19	0.097	ug/l	
50-32-8	Benzo(a)pyrene	0.097 U	0.19	0.097	ug/l	
205-99-2	Benzo(b)fluoranthene	0.097 U	0.19	0.097	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.097 U	0.19	0.097	ug/l	
207-08-9	Benzo(k)fluoranthene	0.097 U	0.19	0.097	ug/l	
218-01-9	Chrysene	0.97 U	1.9	0.97	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.097 U	0.19	0.097	ug/l	
206-44-0	Fluoranthene	0.49 U	1.9	0.49	ug/l	
86-73-7	Fluorene	0.97 U	1.9	0.97	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.097 U	0.19	0.097	ug/l	
91-20-3	Naphthalene	0.97 U	1.9	0.97	ug/l	
90-12-0	1-Methylnaphthalene	0.49 U	1.9	0.49	ug/l	
91-57-6	2-Methylnaphthalene	0.49 U	1.9	0.49	ug/l	
85-01-8	Phenanthrene	0.97 U	1.9	0.97	ug/l	
129-00-0	Pyrene	0.49 U	1.9	0.49	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	89%		36-114%
92-94-4	p-Terphenyl	75%		31-121%

U = Not detected MDL - Method Detection Limit I = Result > = MDL but < RL J = Estimated value
RL = Reporting Limit V = Indicates analyte found in associated method blank
L = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	81ABCGL14S01		
Lab Sample ID:	F29927-7	Date Sampled:	02/18/05
Matrix:	AQ - Ground Water	Date Received:	02/19/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO #361		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0002588.D	1	02/22/05	NJ	n/a	n/a	VN119
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	0.50 U	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	3.3	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.5	2.0	1.0	ug/l	I
108-67-8	1,3,5-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		86-115%
17060-07-0	1,2-Dichloroethane-D4	103%		73-126%
2037-26-5	Toluene-D8	91%		86-112%
460-00-4	4-Bromofluorobenzene	94%		83-119%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
141-93-5	Benzene, 1,3-diethyl-	17.41	5.4	ug/l	JN
1758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	17.92	6.2	ug/l	JN
768-49-0	Benzene, (2-methyl-1-propenyl)-	18.04	7.3	ug/l	JN
767-58-8	Indan, 1-methyl-	18.11	18	ug/l	JN
824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	18.89	32	ug/l	JN
119-64-2	Naphthalene, 1,2,3,4-tetrahydro-	19.09	15	ug/l	JN
4175-53-5	1H-Indene, 2,3-dihydro-1,3-dimethy	19.28	5.4	ug/l	JN
17059-48-2	1H-Indene, 2,3-dihydro-1,6-dimethy	19.37	9.9	ug/l	JN
3877-19-8	Naphthalene, 1,2,3,4-tetrahydro-2-	19.69	5.3	ug/l	JN
1680-51-9	Naphthalene, 1,2,3,4-tetrahydro-6-	20.62	6.5	ug/l	JN
91-20-3	Naphthalene	19.82	15	ug/l	JN
91-57-6	Naphthalene, 2-methyl-	21.15	9.4	ug/l	JN
4453-90-1	1,4-Methanonaphthalene, 1,4-dihydr	21.39	11	ug/l	JN
	Total TIC, Volatile		146.4	ug/l	J

U = Not detected MDL - Method Detection Limit I = Result > = MDL but < RL J = Estimated value
RL = Reporting Limit V = Indicates analyte found in associated method blank
L = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	81ABCGL14S01		
Lab Sample ID:	F29927-7	Date Sampled:	02/18/05
Matrix:	AQ - Ground Water	Date Received:	02/19/05
Method:	SW846 8310 SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO #361		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EE030333.D	1	03/04/05	MRE	02/22/05	OP12551	GEE1195
Run #2							

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.97 U	3.9	0.97	ug/l	
208-96-8	Acenaphthylene	0.97 U	3.9	0.97	ug/l	
120-12-7	Anthracene	0.97 U	1.9	0.97	ug/l	
56-55-3	Benzo(a)anthracene	0.097 U	0.19	0.097	ug/l	
50-32-8	Benzo(a)pyrene	0.097 U	0.19	0.097	ug/l	
205-99-2	Benzo(b)fluoranthene	0.097 U	0.19	0.097	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.097 U	0.19	0.097	ug/l	
207-08-9	Benzo(k)fluoranthene	0.097 U	0.19	0.097	ug/l	
218-01-9	Chrysene	0.97 U	1.9	0.97	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.097 U	0.19	0.097	ug/l	
206-44-0	Fluoranthene	0.49 U	1.9	0.49	ug/l	
86-73-7	Fluorene	0.97 U	1.9	0.97	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.097 U	0.19	0.097	ug/l	
91-20-3	Naphthalene	7.8	1.9	0.97	ug/l	
90-12-0	1-Methylnaphthalene	9.9	1.9	0.49	ug/l	
91-57-6	2-Methylnaphthalene	6.2	1.9	0.49	ug/l	
85-01-8	Phenanthrene	0.97 U	1.9	0.97	ug/l	
129-00-0	Pyrene	0.49 U	1.9	0.49	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	91%		36-114%
92-94-4	p-Terphenyl	87%		31-121%

(a) All hits confirmed by spectral match using a diode array detector.

U = Not detected MDL - Method Detection Limit I = Result > = MDL but < RL J = Estimated value
RL = Reporting Limit V = 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:	81ABCGL04I01		
Lab Sample ID:	F29927-8	Date Sampled:	02/18/05
Matrix:	AQ - Ground Water	Date Received:	02/19/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO #361		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0002597.D	1	02/22/05	NJ	n/a	n/a	VN119
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	1.5	1.0	0.50	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	0.50 U	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	1.7	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		86-115%
17060-07-0	1,2-Dichloroethane-D4	105%		73-126%
2037-26-5	Toluene-D8	91%		86-112%
460-00-4	4-Bromofluorobenzene	97%		83-119%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	17.53	6	ug/l	J
1560-06-1	Benzene, 2-butenyl-	18.04	7.1	ug/l	JN
767-58-8	Indan, 1-methyl-	18.11	8.1	ug/l	JN
4912-92-9	1H-Indene, 2,3-dihydro-1,1-dimethy	18.28	8.7	ug/l	JN
95-93-2	Benzene, 1,2,4,5-tetramethyl-	18.36	5.9	ug/l	JN
934-10-1	3-Phenylbut-1-ene	18.89	17	ug/l	JN
1075-22-5	1H-Indene, 2,3-dihydro-5,6-dimethy	19.27	8.2	ug/l	JN
17059-48-2	1H-Indene, 2,3-dihydro-1,6-dimethy	19.37	12	ug/l	JN
40650-41-7	1H-Indene, 2,3-dihydro-1,1,5-trime	19.47	8.2	ug/l	JN
2461-34-9	Naphth[1,2-b]oxirene, 1a,2,3,7b-te	20.07	5.6	ug/l	JN
17057-82-8	1H-Indene, 2,3-dihydro-1,2-dimethy	20.16	6.3	ug/l	JN
700-12-9	Benzene, pentamethyl-	20.31	7.8	ug/l	JN
90-12-0	Naphthalene, 1-methyl-	21.38	8.9	ug/l	JN
	Total TIC, Volatile		109.8	ug/l	J

U = Not detected MDL - Method Detection Limit I = Result > = MDL but < RL J = Estimated value
RL = Reporting Limit V = Indicates analyte found in associated method blank
L = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	81ABCGL04I01		
Lab Sample ID:	F29927-8	Date Sampled:	02/18/05
Matrix:	AQ - Ground Water	Date Received:	02/19/05
Method:	SW846 8310 SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO #361		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EE030336.D	1	03/04/05	MRE	02/22/05	OP12551	GEE1195
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	1.0 U	4.0	1.0	ug/l	
208-96-8	Acenaphthylene	1.0 U	4.0	1.0	ug/l	
120-12-7	Anthracene	1.0 U	2.0	1.0	ug/l	
56-55-3	Benzo(a)anthracene	0.10 U	0.20	0.10	ug/l	
50-32-8	Benzo(a)pyrene	0.10 U	0.20	0.10	ug/l	
205-99-2	Benzo(b)fluoranthene	0.10 U	0.20	0.10	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.10 U	0.20	0.10	ug/l	
207-08-9	Benzo(k)fluoranthene	0.10 U	0.20	0.10	ug/l	
218-01-9	Chrysene	1.0 U	2.0	1.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.10 U	0.20	0.10	ug/l	
206-44-0	Fluoranthene	0.50 U	2.0	0.50	ug/l	
86-73-7	Fluorene	1.1	2.0	1.0	ug/l	I
193-39-5	Indeno(1,2,3-cd)pyrene	0.10 U	0.20	0.10	ug/l	
91-20-3	Naphthalene	2.2	2.0	1.0	ug/l	
90-12-0	1-Methylnaphthalene	6.3	2.0	0.50	ug/l	
91-57-6	2-Methylnaphthalene	4.6	2.0	0.50	ug/l	
85-01-8	Phenanthrene	1.0 U	2.0	1.0	ug/l	
129-00-0	Pyrene	0.50 U	2.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	87%		36-114%
92-94-4	p-Terphenyl	80%		31-121%

(a) All hits confirmed by spectral match using a diode array detector.

U = Not detected MDL - Method Detection Limit I = Result > = MDL but < RL J = Estimated value
RL = Reporting Limit V = Indicates analyte found in associated method blank
L = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	81ABCGL01I01D		
Lab Sample ID:	F29927-9	Date Sampled:	02/18/05
Matrix:	AQ - Ground Water	Date Received:	02/19/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO #361		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0002598.D	1	02/22/05	NJ	n/a	n/a	VN119
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	0.50 U	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	0.76	1.0	0.50	ug/l	I
95-63-6	1,2,4-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		86-115%
17060-07-0	1,2-Dichloroethane-D4	104%		73-126%
2037-26-5	Toluene-D8	89%		86-112%
460-00-4	4-Bromofluorobenzene	98%		83-119%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) No TICs detected.

U = Not detected MDL - Method Detection Limit I = Result > = MDL but < RL J = Estimated value
RL = Reporting Limit V = Indicates analyte found in associated method blank
L = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	81ABCGL01I01D		
Lab Sample ID:	F29927-9	Date Sampled:	02/18/05
Matrix:	AQ - Ground Water	Date Received:	02/19/05
Method:	SW846 8310 SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO #361		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE030337.D	1	03/04/05	MRE	02/22/05	OP12551	GEE1195
Run #2							

	Initial Volume	Final Volume
Run #1	1020 ml	1.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.98 U	3.9	0.98	ug/l	
208-96-8	Acenaphthylene	0.98 U	3.9	0.98	ug/l	
120-12-7	Anthracene	0.98 U	2.0	0.98	ug/l	
56-55-3	Benzo(a)anthracene	0.098 U	0.20	0.098	ug/l	
50-32-8	Benzo(a)pyrene	0.098 U	0.20	0.098	ug/l	
205-99-2	Benzo(b)fluoranthene	0.098 U	0.20	0.098	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.098 U	0.20	0.098	ug/l	
207-08-9	Benzo(k)fluoranthene	0.098 U	0.20	0.098	ug/l	
218-01-9	Chrysene	0.98 U	2.0	0.98	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.098 U	0.20	0.098	ug/l	
206-44-0	Fluoranthene	0.49 U	2.0	0.49	ug/l	
86-73-7	Fluorene	0.98 U	2.0	0.98	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.098 U	0.20	0.098	ug/l	
91-20-3	Naphthalene	0.98 U	2.0	0.98	ug/l	
90-12-0	1-Methylnaphthalene	0.49 U	2.0	0.49	ug/l	
91-57-6	2-Methylnaphthalene	0.49 U	2.0	0.49	ug/l	
85-01-8	Phenanthrene	0.98 U	2.0	0.98	ug/l	
129-00-0	Pyrene	0.49 U	2.0	0.49	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	89%		36-114%
92-94-4	p-Terphenyl	79%		31-121%

U = Not detected MDL - Method Detection Limit I = Result > = MDL but < RL J = Estimated value
RL = Reporting Limit V = Indicates analyte found in associated method blank
L = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	81ABCEL00101		
Lab Sample ID:	F29927-10	Date Sampled:	02/18/05
Matrix:	AQ - Ground Water	Date Received:	02/19/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO #361		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0002599.D	1	02/22/05	NJ	n/a	n/a	VN119
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	0.50 U	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	0.50 U	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		86-115%
17060-07-0	1,2-Dichloroethane-D4	105%		73-126%
2037-26-5	Toluene-D8	90%		86-112%
460-00-4	4-Bromofluorobenzene	97%		83-119%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) No TICs detected.

U = Not detected MDL - Method Detection Limit I = Result > = MDL but < RL J = Estimated value
RL = Reporting Limit V = Indicates analyte found in associated method blank
L = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	81ABCEL00101		
Lab Sample ID:	F29927-10	Date Sampled:	02/18/05
Matrix:	AQ - Ground Water	Date Received:	02/19/05
Method:	SW846 8310 SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO #361		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE030338.D	1	03/04/05	MRE	02/22/05	OP12551	GEE1195
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	1.0 U	4.0	1.0	ug/l	
208-96-8	Acenaphthylene	1.0 U	4.0	1.0	ug/l	
120-12-7	Anthracene	1.0 U	2.0	1.0	ug/l	
56-55-3	Benzo(a)anthracene	0.10 U	0.20	0.10	ug/l	
50-32-8	Benzo(a)pyrene	0.10 U	0.20	0.10	ug/l	
205-99-2	Benzo(b)fluoranthene	0.10 U	0.20	0.10	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.10 U	0.20	0.10	ug/l	
207-08-9	Benzo(k)fluoranthene	0.10 U	0.20	0.10	ug/l	
218-01-9	Chrysene	1.0 U	2.0	1.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.10 U	0.20	0.10	ug/l	
206-44-0	Fluoranthene	0.50 U	2.0	0.50	ug/l	
86-73-7	Fluorene	1.0 U	2.0	1.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.10 U	0.20	0.10	ug/l	
91-20-3	Naphthalene	1.0 U	2.0	1.0	ug/l	
90-12-0	1-Methylnaphthalene	0.50 U	2.0	0.50	ug/l	
91-57-6	2-Methylnaphthalene	0.50 U	2.0	0.50	ug/l	
85-01-8	Phenanthrene	1.0 U	2.0	1.0	ug/l	
129-00-0	Pyrene	0.50 U	2.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	85%		36-114%
92-94-4	p-Terphenyl	72%		31-121%

U = Not detected MDL - Method Detection Limit I = Result > = MDL but < RL J = Estimated value
RL = Reporting Limit V = Indicates analyte found in associated method blank
L = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	81ABCFL00101		
Lab Sample ID:	F29927-11	Date Sampled:	02/18/05
Matrix:	AQ - Ground Water	Date Received:	02/19/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO #361		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0002600.D	1	02/22/05	NJ	n/a	n/a	VN119
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	0.50 U	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	0.50 U	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		86-115%
17060-07-0	1,2-Dichloroethane-D4	105%		73-126%
2037-26-5	Toluene-D8	92%		86-112%
460-00-4	4-Bromofluorobenzene	98%		83-119%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) No TICs detected.

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	81ABCFL00101		
Lab Sample ID:	F29927-11	Date Sampled:	02/18/05
Matrix:	AQ - Ground Water	Date Received:	02/19/05
Method:	SW846 8310 SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO #361		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE030339.D	1	03/04/05	MRE	02/22/05	OP12551	GEE1195
Run #2							

	Initial Volume	Final Volume
Run #1	1010 ml	1.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.99 U	4.0	0.99	ug/l	
208-96-8	Acenaphthylene	0.99 U	4.0	0.99	ug/l	
120-12-7	Anthracene	0.99 U	2.0	0.99	ug/l	
56-55-3	Benzo(a)anthracene	0.099 U	0.20	0.099	ug/l	
50-32-8	Benzo(a)pyrene	0.099 U	0.20	0.099	ug/l	
205-99-2	Benzo(b)fluoranthene	0.099 U	0.20	0.099	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.099 U	0.20	0.099	ug/l	
207-08-9	Benzo(k)fluoranthene	0.099 U	0.20	0.099	ug/l	
218-01-9	Chrysene	0.99 U	2.0	0.99	ug/l	
53-70-3	Dibenzo(a,h)anthracene	0.099 U	0.20	0.099	ug/l	
206-44-0	Fluoranthene	0.50 U	2.0	0.50	ug/l	
86-73-7	Fluorene	0.99 U	2.0	0.99	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.099 U	0.20	0.099	ug/l	
91-20-3	Naphthalene	0.99 U	2.0	0.99	ug/l	
90-12-0	1-Methylnaphthalene	0.50 U	2.0	0.50	ug/l	
91-57-6	2-Methylnaphthalene	0.50 U	2.0	0.50	ug/l	
85-01-8	Phenanthrene	0.99 U	2.0	0.99	ug/l	
129-00-0	Pyrene	0.50 U	2.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	94%		36-114%
92-94-4	p-Terphenyl	81%		31-121%

U = Not detected MDL - Method Detection Limit I = Result > = MDL but < RL J = Estimated value
RL = Reporting Limit V = Indicates analyte found in associated method blank
L = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	81ABCTL01		
Lab Sample ID:	F29927-12	Date Sampled:	02/18/05
Matrix:	AQ - Trip Blank Water	Date Received:	02/19/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO #361		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0002601.D	1	02/22/05	NJ	n/a	n/a	VN119
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.50 U	1.0	0.50	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	ug/l	
	m,p-Xylene	0.50 U	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	0.50 U	1.0	0.50	ug/l	
95-63-6	1,2,4 Trimethylbenzene	1.0 U	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	1.0 U	2.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		86-115%
17060-07-0	1,2-Dichloroethane-D4	106%		73-126%
2037-26-5	Toluene-D8	91%		86-112%
460-00-4	4-Bromofluorobenzene	98%		83-119%

CAS No.	Tentatively Identified Compounds [a]	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) No TICs detected.

U = Not detected MDL - Method Detection Limit
RL – Reporting Limit
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

TETRA TECH NUS, INC. — CHAIN OF CUSTODY — NUMBER 81ABC-01 F29927 — PAGE 1 OF 2

PROJECT NO: N7945 CTD36	FACILITY: TANKS 81 ABC, NASCF
PROJECT MANAGER: PAUL CALLIGAN	PHONE NUMBER: 813 806 0202
LABORATORY NAME AND CONTACT: ACCUTEST H. WANDREY	
SAMPLERS (SIGNATURE): S. Rone	FIELD OPERATIONS LEADER: MERV DALE
PHONE NUMBER: 904 636 6125	ADDRESS: 4405 Vineland Rd. C-15
CARRIER/WAYBILL NUMBER: Fedex 8481 5068 2180	CITY, STATE: ORLANDO, FL 32811
STANDARD TAT ☒ RUSH TAT ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day	CONTAINER TYPE PLASTIC (P) or GLASS (G): G/G
	PRESERVATIVE USED: HCl / None

	DATE YEAR 2005	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAP (G) COMP (C)	No. OF CONTAINERS	TYPE OF ANALYSIS: Select VOCs *	PAHs **						COMMENTS
1	2/18	1055	81ABCGLBSR01				GW	G	5	3	2						Cool to 4°C
2	2/18	1100	81ABCGL02I01				GW	G	5	3	2						
3	2/18	1310	81ABCGL01I01				GW	G	5	3	2						Work Release
4	2/18	1350	81ABCGL01001				GW	G	5	3	2						1000892
5	2/18	1440	81ABCGL09S01				GW	G	5	3	2						** 16 method-listed
6	2/18	1440	81ABCGL03I01				GW	G	5	3	2						PAHs plus 1-methyl
7	2/18	1545	81ABCGL14S01				GW	G	5	3	2						and 2-methylnaphthalene
8	2/18	1525	81ABCGL04I01				GW	G	5	3	2						using SW846 8310.
9	2/18	0000	81ABCGL01I01D				GW	G	5	3	2						
10	2/18	0955	81ABCEL00101				QC	G	5	3	2						~~* See Work Release~~ MO
11	2/18	[illegible]	81ABCFL00101				QC	G	5	3	2						~~for list of methods~~
12	2/18	1545	81ABCGL14S01S				GW	G	5	3	2						
13	2/18	1545	81ABCGL14S01M				GW	G	5	3	2						

3 COOLERS

1. RELINQUISHED BY: Merv W. Dale	DATE 2/18/05	TIME 1705	1. RECEIVED BY: Fedex	DATE 2/18/05	TIME
2. RELINQUISHED BY: FX	DATE	TIME	2. RECEIVED BY: Steven Carson	DATE 2-19-05	TIME 9:30
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS: *SW846 8260B for BTEX, MTBE, 1,2,3-TMB (trimethylbenzene), 1,2,4-TMB and 1,3,5-TMB. 3.8, 3.6, 30

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY) 4/02R

4.1 4

F29927: Chain of Custody
Page 1 of 3

ACCUTEST LABORATORIES F29927

TETRA TECH NUS, INC. — CHAIN OF CUSTODY — NUMBER 81ABC-01 — PAGE 2 OF 2 — F29927

PROJECT NO: N9945, CTO 361	FACILITY: TANKS 81 ABC, NASCF	PROJECT MANAGER: PAUL CALLIGAN	PHONE NUMBER: 813 806 0202	LABORATORY NAME AND CONTACT: ACCUTEST H. WANDREY
SAMPLERS (SIGNATURE): [signature]		FIELD OPERATIONS LEADER: MERV Dale	PHONE NUMBER: 904 636 6125	ADDRESS: 4405 Vineland Rd., C-15
		CARRIER/WAYBILL NUMBER: 8427 1834 9568 Fedex 8436 4375 3820		CITY, STATE: ORLANDO FL 32811

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

CONTAINER TYPE PLASTIC (P) or GLASS (G): G / G
PRESERVATIVE USED: HCL / None

DATE YEAR 2005	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	TYPE OF ANALYSIS: Select VOCs *	PAHs **	COMMENTS
2/18	1055	81ABC TZ01				QC	G	2	✓		Cool to 4°C
											Work Release 1000892
											*SW846 8260B for BTEX, MTBE, 1,2,3-trimethylbenzene (TMB), 1,2,4-TMB, and 1,3,5-TMB.

1. RELINQUISHED BY: [signature]	DATE: 2/18/05	TIME: 1705	1. RECEIVED BY: Fedex	DATE: 2/19/05	TIME
2. RELINQUISHED BY: FX	DATE	TIME	2. RECEIVED BY: [signature]	DATE: 2-19-05	TIME: 8:30
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS: ** SW846 8310 for 16 method-listed PAHs plus 1-methyl and 2-methyl Naphthalene.

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY) 4/02R

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F29927: Chain of Custody
Page 2 of 3

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: F29927 CLIENT: tetra tech PROJECT: tanks #1, ABC. MasFC

DATE/TIME RECEIVED: 2-14-05 / 9:30 # OF COOLERS RECEIVED: 3 COOLER TEMPS: 3.8, 3.6, 3.0

METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 843643753820

COOLER INFORMATION

- [X] CUSTODY SEAL NOT PRESENT/INTACT
- [ ] NO COC RECEIVED
- [ ] ANALYSES NOT MARKED ON COC
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- [X] TRIP BLANK NOT PROVIDED (FC 2-14-05)
- [ ] TRIP BLANK NOT ON COC
- [X] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [X] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

SAMPLE INFORMATION

- [ ] SAMPLE LABELS PRESENT ON ALL BOTTLES
- [ ] CORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] SAMPLE RECEIVED PAST HOLD TIME
- [ ] TIMES ON COC DON'T MATCH LABEL
- [ ] ID'S ON COC DON'T MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING INSTRUCTIONS
- [ ] UNCLEAR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED

SOIL INFORMATION

NUMBER OF ENCORES ? Ø

NUMBER OF 5035 FIELD KITS ? Ø

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE Steve Cerny / 2-14-05 TECHNICIAN SIGNATURE/DATE

ASBD02/04/05

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F29927: Chain of Custody
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