N60200.AR.003759
NAS CECIL FIELD, FL
5090.3a

"FIRST QUARTER FIRST YEAR GROUNDWATER MONITORING LETTER REPORT FOR BUILDING 81 TANKS 81 A, B AND C NAS CECIL FIELD FL"
11/17/2003
TETRA TECH NUS INC

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Document Tracking Number 04JAX0027

November 17, 2003

Project Number N4248

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-D-0888
Contract Task Order Number 0248

Subject: Groundwater Monitoring Report, 1st Quarter, 1st Year (January 2003)
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 Quarterly Groundwater Monitoring Report for the referenced Contract Task Order (CTO) for Building 81, Tanks 81 A, B, and C. This groundwater monitoring report was prepared for the United States Navy Southern Division, Naval Facilities Engineering Command (NAVFAC EFD SOUTH) under the Comprehensive Long-term Environmental Action Navy (CLEAN) III Contract Number N62467-94-D-0888. The objective of this task is to quarterly monitor groundwater associated with this site. The guidance document for this report is Chapter 62-770, Florida Administrative Code (FAC). The sampling program was accomplished in general accordance with the Natural Attenuation Monitoring Plan (MONA) Approval Order signed by the Florida Department of Environmental Protection (FDEP) on October 1, 2002 (Attachment A).

This report summarizes the fieldwork and analytical results for the sampling events conducted in January and March 2003. The work was performed in general accordance with the new FDEP standard operating procedures (SOPs) under DEP-SOP-001/01.

FIELD OPERATIONS

On January 7, 2003, water level measurements were recorded from each of the site's monitoring wells prior to sample collection. The depth-to-water ranged from 4.91 feet (ft) below top of casing (btoc) (CEF-81-12S) to 6.13 ft btoc (CEF-81-14S). The depth-to-water measurements, along with top-of-casing elevations, were used to calculate groundwater elevations.

Groundwater samples were collected from four shallow monitoring wells (CEF-81-09S, CEF-81-08SR, CEF-81-13S, and CEF-81-14S) and one intermediate monitoring well (CEF-81-01I) on January 8, 2003 (Figure 1). Following collection, the samples were placed on ice and subsequently shipped under chain-of-custody to Accutest Laboratories in Orlando, Florida. The laboratory analyzed the samples for semivolatile organic compounds (SVOCs) using United States Environmental Protection Agency (USEPA) Method 8270C.

RESULTS

Groundwater elevation data from this event is shown on Table 1. The groundwater flow direction with elevation data is shown on Figure 1. Based on the data, the inferred general direction of groundwater flow is to the northeast.

The compounds of concern (COCs) listed in the MONA Approval Order (Attachment A) include isopropyl benzene; naphthalene; 1,2,4-trimethylbenzene; and 1,3,5-trimethylbenzene. The COCs reported by the laboratory for the groundwater samples collected for this sampling event were compared to FDEP Groundwater Cleanup Target Levels (GCTLs) and Natural Attenuation Default Source Concentrations (NADSCs). The data and comparable standards are indicated on Table 2, and the results are illustrated on Figure 2. The laboratory data (Attachment B) indicates that the sample from perimeter well CEF-81-01I had a concentration of 329 micrograms per liter (µg/L) for naphthalene, which exceeds the GCTL of 20 µg/L. None of the other target analytes for SW846 8270C were detected above the laboratory's reporting limit. Some additional compounds were detected at estimated concentrations which were below applicable GCTLs.

Several tentatively identified compounds (TICs) were identified by the laboratory in the samples from wells CEF-81-9S and CEF-81-1I. The TICs with established GCTLs are reported in Table 2. The GCTLs for ethylbenzene and 1,2,3-trimethylbenzene were exceeded in the sample from well CEF-81-1I. Also, the GCTL for 1, 3, 5-trimethylbenzene was exceeded in the sample from well CEF-81-9S.

ADDITIONAL GROUNDWATER SAMPLING

Since a GCTL was exceeded in perimeter well CEF-81-01I, TtNUS returned to the site on March 13, 2003, to resample. The laboratory data (Attachment C) indicated a concentration of 45 µg/L for naphthalene (GCTL of 20 µg/L) and a concentration of 11.6 µg/L for isopropyl benzene (GCTL of 0.8 µg/L) for the sample from perimeter well CEF-81-01I. In the source well, CEF-81-09S, the concentrations for three of the four COCs (Table 2) listed in the MONA Approval Order continued to exceed the respective GCTLs. The concentrations of the COCs were below detection limits in the other perimeter wells that were sampled.

CONCLUSIONS and RECOMMENDATIONS

Groundwater flow direction is to the northeast, which is consistent with the last round of groundwater data from the May 2002 event.

The laboratory analytical results from both the January and March 2003 sampling events indicate that concentrations of naphthalene in groundwater exceed the GCTL in perimeter monitoring well CEF-81-01I. Naphthalene and isopropyl benzene concentrations were above the applicable GCTLs in both the source well (CEF-81-09S) and the vertical extent perimeter well (CEF-81-01I). There were no GCTLs exceeded for the COCs listed by the MONA Approval Order for the other three perimeter wells CEF-81-08SR, CEF-81-13S, and CEF-81-14S during either sampling events.

Since the concentrations of naphthalene and isopropylbenzene exceed the applicable GCTLs in the vertical extent perimeter monitoring well, CEF-81-01I, TtNUS recommends that the monitoring program be discontinued and a supplemental site assessment be conducted. The objectives of the supplemental assessment would be to delineate the vertical extent of the COCs below monitoring well CEF-81-01I, delineate the horizontal extent of the COCs in the intermediate zone around monitoring well CEF-81-01I, and make appropriate recommendations for continued monitoring or remedial action.

TtNUS also recommends the following COC and laboratory method list for future work at the site:

COC	Laboratory Method
Naphthalene	SW 846 8270C
Isopropyl benzene	SW 846 8260B
1,2,3-trimethylbenzene	SW 846 8260B
1,2,4-trimethylbenzene	SW 846 8260B
1,3,5-trimethylbenzene	SW 846 8260B

If you have any questions regarding this submittal, please feel free to contact me by phone at (813) 806-0202 or via e-mail at calliganp@ttnus.com.

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 (7)

pc: G. Magwood, NAVFAC EFD SOUTH (CD only)
M. Perry, TtNUS (unbound and CD)
D. Wroblewski, TtNUS (cover letter only)
CTO 0248 Project File

TABLES

Table 1
Groundwater Elevation Data

Quarterly Groundwater Monitoring Report
Building 81, Tanks 81 A, B, and C
Naval Air Station Cecil Field
Jacksonville, Florida

Monitoring Well Identification	Well Depth (ft, btoc)	Top-of-Casing Elevation (ft, msl)	December 13, 2001		January 11, 2002		May 23, 2002		January 7, 2003		March 13, 2003	
			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	3.72	73.96	4.74	72.94	5.22	72.46	5.07	72.61	3.16	74.52
CEF-80-13S	14.90	78.17	3.98	74.19	4.96	73.21	5.48	72.69	5.51	72.66	3.56	74.61
CEF-81-2S	15.00	78.41	NM	NM	NM	NM	6.02	72.39	NM	NM	3.39	75.02
CEF-81-8SR	12.94	77.61	3.49	74.12	4.62	72.99	5.06	72.55	5.14	72.47	2.90	74.71
CEF-81-9S	12.74	77.72	3.59	74.13	4.73	72.99	5.19	72.53	5.16	72.56	3.08	74.64
CEF-81-10S	12.99	78.46	4.52	73.94	5.45	73.01	5.98	72.48	5.68	72.78	4.18	74.28
CEF-81-11S	12.88	78.47	4.53	73.94	5.46	73.01	5.97	72.50	5.56	72.91	4.06	74.41
CEF-81-12S	11.68	77.37	3.12	74.25	4.37	73.00	4.81	72.56	4.91	72.46	2.42	74.95
CEF-81-13S	12.14	77.91	3.79	74.12	4.92	72.99	5.36	72.55	5.27	72.64	3.24	74.67
CEF-81-14S	13.00	78.30	NI	NI	NI	NI	5.85	72.45	6.13	72.17	3.78	74.52
CEF-81-1I	29.25	77.73	3.72	74.01	4.77	72.96	4.77	72.96	5.65	72.08	3.16	74.57
CEF-P25-1S	12.00	77.57	NM	NM	NM	NM	5.17	72.40	6.00	71.57	2.36	75.21

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

Table 2
Groundwater Analytical Data

Quarterly Groundwater Monitoring Report
Building 81, Tanks 81 A, B, and C
Naval Air Station Cecil Field
Jacksonville, Florida
Page 1 of 2

Compounds Detected	Source Monitoring Well			Perimeter Monitoring Wells					
	CEF-81-09S			CEF-81-01I			CEF-81-08SR		
	12/13/2001	1/8/2003	3/13/2003	12/13/2001	1/8/2003	3/13/2003	12/13/2001	1/8/2003	3/13/2003
Priority Pollutant SVOCs (USEPA Method 8270C) (µg/L)									
Naphthalene	12.5	5.5	NA	4.4 J	**329**	NA	<6.0	<1.0	NA
Fluorene	<5.5	<1.0	NA	<5.5	2.0 J	NA	<6.0	<1.0	NA
Di-n-octyl phthalate	<5.5	3.7 J	NA	<5.5	<2.6	NA	<6.0	3.4 J	NA
Bis(2-ethylhexyl)phthalate	4.5 J	4.7 J	NA	<5.5	<2.6	NA	<6.0	4.3 J	NA
TICs (USEPA Method 8270C) (µg/L)									
Ethylbenzene	ND	ND	NA	ND	**71**	NA	ND	ND	NA
1,2,3-Trimethylbenzene	ND	ND	NA	ND	**140**	NA	ND	ND	NA
1,3,5-Trimethylbenzene	ND	**21**	NA	ND	ND	NA	ND	ND	NA
Volatile Organic Compounds (VOCs) (USEPA Method 8260B) (µg/L)									
Isopropyl benzene	**6.2**	NA	**4.8**	ND	NA	**11.6**	ND	NA	<0.50
Naphthalene	**27.3**	NA	**65.0**	ND	NA	**45.0**	ND	NA	<1.0
1,2,4-Trimethylbenzene	**79.4**	NA	**32.6**	ND	NA	5.7	ND	NA	<0.50
1,3,5-Trimethylbenzene	**19.0**	NA	8.2	ND	NA	2.0	ND	NA	<0.50

See notes at end of table.

Table 2
Groundwater Analytical Data

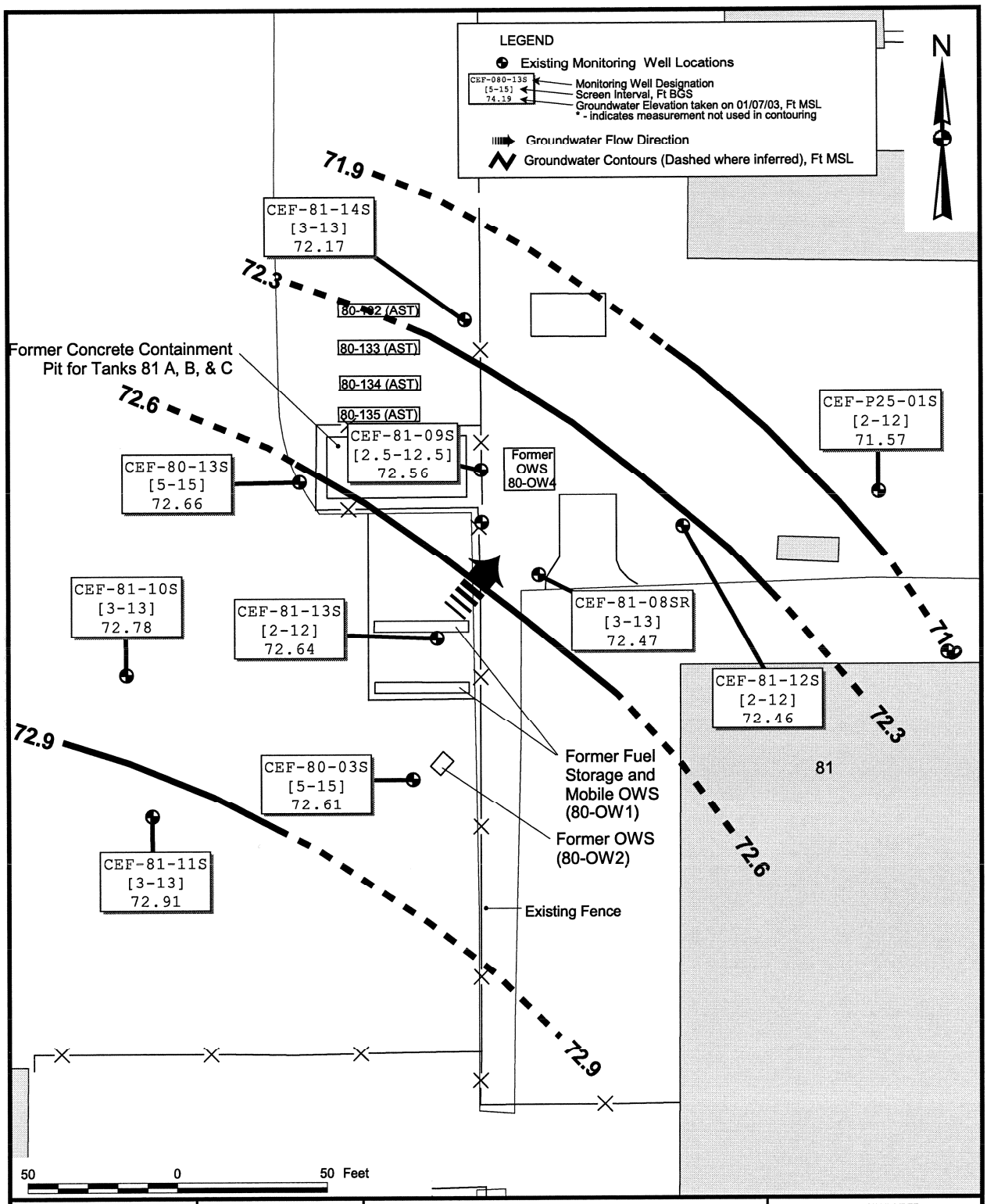
Quarterly Groundwater Monitoring Report
Building 81, Tanks 81 A, B, and C
Naval Air Station Cecil Field
Jacksonville, Florida

Compounds Detected	Perimeter Monitoring Wells						NADSC/ GCTL[1, 2]
	CEF-81-13S			CEF-81-14S			
	12/13/2001	1/8/2003	3/13/2003	5/23/2002	1/8/2003	3/13/2003	
Priority Pollutant SVOCs (USEPA Method 8270C) (µg/L)							
Naphthalene	<5.5	<1.0	NA	<5.0	<1.1	NA	200/20
Fluorene	<5.5	<1.0	NA	<5.0	<1.1	NA	2800/280
Di-n-octyl phthalate	<5.5	<2.6	NA	<5.0	<2.6	NA	1400/140
Bis(2-ethylhexyl)phthalate	<5.5	<2.6	NA	<5.0	<2.6	NA	600/6
TICs (USEPA Method 8270C) (µg/L)							
Ethylbenzene	ND	ND	NA	ND	ND	NA	300/30
1,2,3-Trimethylbenzene	ND	ND	NA	ND	ND	NA	100/10
1,3,5-Trimethylbenzene	ND	ND	NA	ND	ND	NA	100/10
VOCs (USEPA Method 8260B) (µg/L)							
Isopropyl benzene	ND	NA	<0.50	ND	NA	<0.50	8/0.8
Naphthalene	ND	NA	<1.0	ND	NA	<1.0	200/20
1,2,4-Trimethylbenzene	ND	NA	<0.50	ND	NA	<0.50	100/10
1,3,5-Trimethylbenzene	ND	NA	<0.50	ND	NA	<0.50	100/10

Notes:
[1]GCTLs based on Chapter 62-777, FAC.
[2] NADSC as promulgated in Chapter 62-770.690.
Bold indicates values exceeding NADSC or GCTL standards.

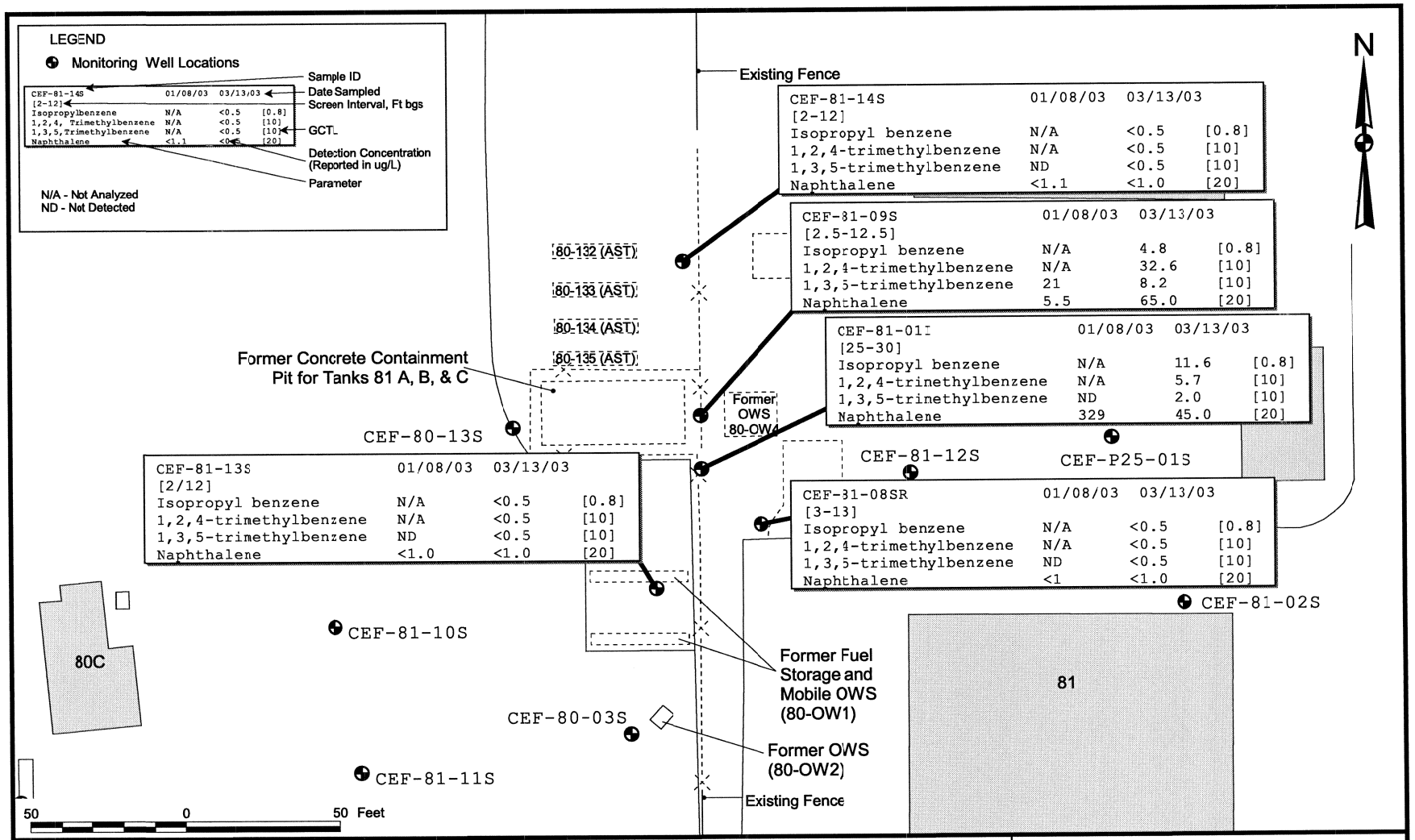
NA = not analyzed
J = estimated
< = less than

FIGURES



DRAWN BY MJJ	DATE 27Jun02	GROUNDWATER FLOW MAP (01/07/03)	CONTRACT NUMBER 4248
CHECKED BY	DATE	TANKS 81 A, B, & C	APPROVED BY DATE
COST/SCHEDULE-AREA		GROUNDWATER MONITORING REPORT	APPROVED BY DATE
SCALE AS NOTED		NAVAL AIR STATION CECIL FIELD JACKSONVILLE, FLORIDA	DRAWING NO. FIGURE 1 / REV 1

P:\GIS\NAS_CecilField\PSC25_Tanks81ABC-01.apr 23July03 JAL 05_Potentiometric Layout



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

GROUNDWATER CONCENTRATION MAP
TANKS 81 A, B, & C
GROUNDWATER MONITORING REPORT
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

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

P:\GIS\NAS_CecilField\PSC25_Tanks81ABC-02.apr 23July03 JAL 01_SiteLocationLayout

ATTACHMENT A

FDEP MONA APPROVAL ORDER

Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

October 1, 2002

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Commanding Officer
Attn: Mr. Wayne Hansel, Code ES245
Southern Division
Naval Facilities Engineering Command
Post Office Box 190010
North Charleston, South Carolina 29419-9010

Subject: Natural Attenuation Monitoring Plan Approval Order
Building 81, Tanks 81 A, B and C
Naval Air Station Cecil Field
Jacksonville, Duval County

Dear Mr. Hansel:

The Bureau of Waste Cleanup has completed the review of the Site Assessment Report dated July 2002 (received July 22, 2002) for the petroleum product discharge discovered at this site. Pursuant to Rule 62-770.690, Florida Administrative Code (F.A.C.), the Department of Environmental Protection (Department) approves the Natural Attenuation Monitoring Plan. Pursuant to Rule 62-770.690(7), F.A.C., you are required to complete the monitoring program outlined below. The first sampling event should be performed within 60 days of receipt of this Natural Attenuation Monitoring Plan Approval Order (Order). Water-level measurements should be made immediately prior to each sampling event. The analytical results (laboratory report), chain of custody, cumulative summary table of the analytical results, site map(s) illustrating the most recent analytical results, and the water-level elevation information (cumulative summary table and most recent flow interpretation map), must be submitted to the Department within 60 days of sample collection.

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

Monitoring Wells	Contaminants of Concern	Frequency	Duration
CEF-81-9S, CEF-81-13S, CEF-81-8SR, CEF-81-1I, and CEF-81-14S	SVOCs	Quarterly	One year

The approved Remedial Action by Natural Attenuation monitoring period is one year. The sampling frequency will be evaluated following the submittal of the first annual report to determine whether semiannual or annual sampling may be appropriate. If there are enough data at a later time to estimate the monitoring period necessary to meet the applicable No Further Action criteria set forth in Rule 62-770.680, F.A.C., then that time period should be established and annual "milestone" objectives calculated.

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

Contaminated well:

CEF-81-9S: 8 µg/l isopropyl benzene; 200 µg/l naphthalene; 100 µg/l 1,2,4-trimethylbenzene; 100 µg/l 1,3,5-trimethylbenzene

Perimeter wells (temporary points of compliance):

CEF-81-13S, CEF-81-8SR, CEF-81-1S and CEF-81-14S: .8 µg/l isopropyl benzene; 20 µg/l naphthalene; 10 µg/l 1,2,4-trimethylbenzene; 10 µg/l 1,3,5-trimethylbenzene

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

Legal Issues

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

Persons affected by this Order have the following options:

If you choose to accept the above decision by the Department about the Post-Active Remediation Monitoring Plan you do not have to do anything. This Order is final and effective as of the date on the top of the first page of this Order.

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

(1) File a petition for administrative hearing with the Department's Office of General Counsel within 21 days of receipt of this Order; or

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

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

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

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

How to File a Petition for Administrative Hearing

A person whose substantial interests are affected by this Order may petition for an administrative hearing under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Department's Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from Southern Division Naval Facilities Engineering Command, shall mail a copy of the petition to Southern Division Naval Facilities Engineering Command at the time of filing. Failure to file a petition within this time period shall waive the right of anyone who may request an administrative hearing under Sections 120.569 and 120.57, F.S.

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

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

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

Judicial Review

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

Questions

Any questions regarding the Department's review of your Site Assessment Report should be directed to David P. Grabka at (850) 921-9991. Questions regarding legal issues should be referred to the Department's Office of General Counsel at (850) 488-9314. Contact with any of

the above does not constitute a petition for administrative hearing or request for an extension of time to file a petition for administrative hearing.

Sincerely,

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

DAJ/dpg

cc: Brian Cheary, FDEP Northeast District Office
Paul Calligan, Tetra Tech NUS, Inc., Tampa
Debbie Vaughn-Wright, USEPA Region 4, Atlanta, GA
Scott Glass, Southern Division Naval Facilities Engineering Command, Charleston, SC
File

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

Minnie L Robinson — October 1, 2002
Clerk (or Deputy Clerk) — Date

ATTACHMENT B

GROUNDWATER ANALYTICAL REPORT
JANUARY 8, 2003

Southeast
ACCUTEST
Laboratories

01/16/03

Technical Report for

Tetra Tech, NUS

NAS Cecil Field-CTO-248

N4248 WR105

Accutest Job Number: F16145

Report to:

Total number of pages in report: 45

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

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sample Summary

Tetra Tech, NUS

Job No: F16145

NAS Cecil Field-CTO-248
Project No: N4248 WR105

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F16145-1	01/08/03	11:20 RM	01/10/03	AQ	Ground Water	CEF-81-GW-1I-03
F16145-2	01/08/03	12:15 RM	01/10/03	AQ	Ground Water	CEF-81-GW-85R-03
F16145-3	01/08/03	11:45 RM	01/10/03	AQ	Ground Water	CEF-81-GW-9S-03
F16145-4	01/08/03	14:00 RM	01/10/03	AQ	Ground Water	CEF-81-GW-13S-03
F16145-5	01/08/03	14:05 RM	01/10/03	AQ	Ground Water	CEF-81-GW-14S-07
F16145-6	01/08/03	00:00 RM	01/10/03	AQ	Ground Water	CEF-81-GW-DUP1-03

Report of Analysis

Client Sample ID:	CEF-81-GW-1I-03		
Lab Sample ID:	F16145-1	Date Sampled:	01/08/03
Matrix:	AQ - Ground Water	Date Received:	01/10/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L015948.D	1	01/14/03	ME	01/13/03	OP6735	SL871
Run #2	L015967.D	4	01/15/03	ME	01/13/03	OP6735	SL872

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

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.2	2.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.2	2.1	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.2	2.1	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.2	2.1	ug/l	
51-28-5	2,4-Dinitrophenol	ND	26	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	7.8	ug/l	
88-75-5	2-Nitrophenol	ND	5.2	2.1	ug/l	
100-02-7	4-Nitrophenol	ND	26	10	ug/l	
87-86-5	Pentachlorophenol	ND	26	10	ug/l	
108-95-2	Phenol	ND	5.2	2.1	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.2	2.1	ug/l	
83-32-9	Acenaphthene	ND	5.2	1.0	ug/l	
208-96-8	Acenaphthylene	ND	5.2	1.0	ug/l	
120-12-7	Anthracene	ND	5.2	1.0	ug/l	
92-87-5	Benzidine	ND	52	26	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.2	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	1.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	1.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	1.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.2	1.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.2	2.1	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.2	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	5.2	2.1	ug/l	
218-01-9	Chrysene	ND	5.2	1.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.2	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.2	2.1	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.2	1.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.2	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.2	1.0	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.2	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.2	1.0	ug/l	

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

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

Report of Analysis

Client Sample ID:	CEF-81-GW-1I-03		
Lab Sample ID:	F16145-1	Date Sampled:	01/08/03
Matrix:	AQ - Ground Water	Date Received:	01/10/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO-248		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
106-46-7	1,4-Dichlorobenzene	ND	5.2	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.2	2.1	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.2	2.1	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	5.2	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.2	2.1	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.2	2.1	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.2	2.6	ug/l	
84-66-2	Diethyl phthalate	ND	5.2	2.1	ug/l	
131-11-3	Dimethyl phthalate	ND	5.2	2.1	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.2	2.6	ug/l	
206-44-0	Fluoranthene	ND	5.2	1.0	ug/l	
86-73-7	Fluorene	2.0	5.2	1.0	ug/l	J
118-74-1	Hexachlorobenzene	ND	5.2	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.2	2.1	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.2	2.1	ug/l	
67-72-1	Hexachloroethane	ND	5.2	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.2	2.1	ug/l	
78-59-1	Isophorone	ND	5.2	1.0	ug/l	
91-20-3	Naphthalene	329 [a]	21	4.2	ug/l	
98-95-3	Nitrobenzene	ND	5.2	1.0	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.2	2.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.2	2.1	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.2	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.2	1.0	ug/l	
129-00-0	Pyrene	ND	5.2	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	52%	55%	19-90%
4165-62-2	Phenol-d5	34%	35%	10-68%
118-79-6	2,4,6-Tribromophenol	94%	92%	36-137%
4165-60-0	Nitrobenzene-d5	89%	81%	49-119%
321-60-8	2-Fluorobiphenyl	90%	81%	45-118%
1718-51-0	Terphenyl-d14	74%	78%	46-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
100-41-4	Ethylbenzene	3.83	71	ug/l	JN
526-73-8	Benzene, 1,2,3-trimethyl-	4.93	140	ug/l	JN

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

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

Report of Analysis

Client Sample ID:	CEF-81-GW-1I-03		
Lab Sample ID:	F16145-1	Date Sampled:	01/08/03
Matrix:	AQ - Ground Water	Date Received:	01/10/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO-248		

ABN PPL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
105-05-5	Benzene, 1,4-diethyl-	5.35	55	ug/l	JN
1127-76-0	Naphthalene, 1-ethyl-	7.89	44	ug/l	JN
575-43-9	Naphthalene, 1,6-dimethyl-	8.01	68	ug/l	JN
582-16-1	Naphthalene, 2,7-dimethyl-	8.11	69	ug/l	JN
571-61-9	Naphthalene, 1,5-dimethyl-	8.15	86	ug/l	JN
581-40-8	Naphthalene, 2,3-dimethyl-	8.41	55	ug/l	JN
98-73-7	Benzoic acid, p-tert-butyl-	8.68	110	ug/l	JN
528-90-5	Benzoic acid, 2,4,5-trimethyl-	8.80	84	ug/l	JN
	unknown	9.03	56	ug/l	J
	unknown	9.20	48	ug/l	J
	unknown	9.45	39	ug/l	J
	unknown	9.78	46	ug/l	J
85-08-5	1-Naphthaleneacetic acid, 2-methyl-	12.00	61	ug/l	JN
	Total TIC, Semi-Volatile		1032	ug/l	

(a) Result is from Run# 2

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

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

Report of Analysis

Client Sample ID:	CEF-81-GW-85R-03		
Lab Sample ID:	F16145-2	Date Sampled:	01/08/03
Matrix:	AQ - Ground Water	Date Received:	01/10/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L015949.D	1	01/14/03	ME	01/13/03	OP6735	SL871
Run #2							

	Initial Volume	Final Volume
Run #1	970 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.2	2.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.2	2.1	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.2	2.1	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.2	2.1	ug/l	
51-28-5	2,4-Dinitrophenol	ND	26	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	7.7	ug/l	
88-75-5	2-Nitrophenol	ND	5.2	2.1	ug/l	
100-02-7	4-Nitrophenol	ND	26	10	ug/l	
87-86-5	Pentachlorophenol	ND	26	10	ug/l	
108-95-2	Phenol	ND	5.2	2.1	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.2	2.1	ug/l	
83-32-9	Acenaphthene	ND	5.2	1.0	ug/l	
208-96-8	Acenaphthylene	ND	5.2	1.0	ug/l	
120-12-7	Anthracene	ND	5.2	1.0	ug/l	
92-87-5	Benzidine	ND	52	26	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.2	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	1.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	1.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	1.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.2	1.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.2	2.1	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.2	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	5.2	2.1	ug/l	
218-01-9	Chrysene	ND	5.2	1.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.2	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.2	2.1	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.2	1.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.2	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.2	1.0	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.2	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.2	1.0	ug/l	

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

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

Report of Analysis

Client Sample ID:	CEF-81-GW-85R-03		
Lab Sample ID:	F16145-2	Date Sampled:	01/08/03
Matrix:	AQ - Ground Water	Date Received:	01/10/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO-248		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
106-46-7	1,4-Dichlorobenzene	ND	5.2	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.2	2.1	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.2	2.1	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	5.2	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.2	2.1	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.2	2.1	ug/l	
117-84-0	Di-n-octyl phthalate	3.4	5.2	2.6	ug/l	J
84-66-2	Diethyl phthalate	ND	5.2	2.1	ug/l	
131-11-3	Dimethyl phthalate	ND	5.2	2.1	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	4.3	5.2	2.6	ug/l	J
206-44-0	Fluoranthene	ND	5.2	1.0	ug/l	
86-73-7	Fluorene	ND	5.2	1.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.2	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.2	2.1	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.2	2.1	ug/l	
67-72-1	Hexachloroethane	ND	5.2	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.2	2.1	ug/l	
78-59-1	Isophorone	ND	5.2	1.0	ug/l	
91-20-3	Naphthalene	ND	5.2	1.0	ug/l	
98-95-3	Nitrobenzene	ND	5.2	1.0	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.2	2.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.2	2.1	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.2	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.2	1.0	ug/l	
129-00-0	Pyrene	ND	5.2	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	42%		19-90%
4165-62-2	Phenol-d5	28%		10-68%
118-79-6	2,4,6-Tribromophenol	81%		36-137%
4165-60-0	Nitrobenzene-d5	66%		49-119%
321-60-8	2-Fluorobiphenyl	67%		45-118%
1718-51-0	Terphenyl-d14	81%		46-135%

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

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

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

Report of Analysis

Client Sample ID:	CEF-81-GW-85R-03		
Lab Sample ID:	F16145-2	Date Sampled:	01/08/03
Matrix:	AQ - Ground Water	Date Received:	01/10/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO-248		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q

(a) No TICs detected.

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

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

Report of Analysis

Client Sample ID:	CEF-81-GW-9S-03		
Lab Sample ID:	F16145-3	Date Sampled:	01/08/03
Matrix:	AQ - Ground Water	Date Received:	01/10/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L015952.D	1	01/14/03	ME	01/13/03	OP6735	SL871
Run #2							

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

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.2	2.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.2	2.1	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.2	2.1	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.2	2.1	ug/l	
51-28-5	2,4-Dinitrophenol	ND	26	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	7.8	ug/l	
88-75-5	2-Nitrophenol	ND	5.2	2.1	ug/l	
100-02-7	4-Nitrophenol	ND	26	10	ug/l	
87-86-5	Pentachlorophenol	ND	26	10	ug/l	
108-95-2	Phenol	ND	5.2	2.1	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.2	2.1	ug/l	
83-32-9	Acenaphthene	ND	5.2	1.0	ug/l	
208-96-8	Acenaphthylene	ND	5.2	1.0	ug/l	
120-12-7	Anthracene	ND	5.2	1.0	ug/l	
92-87-5	Benzidine	ND	52	26	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.2	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	1.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	1.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	1.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.2	1.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.2	2.1	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.2	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	5.2	2.1	ug/l	
218-01-9	Chrysene	ND	5.2	1.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.2	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.2	2.1	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.2	1.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.2	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.2	1.0	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.2	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.2	1.0	ug/l	

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

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

Report of Analysis

Client Sample ID:	CEF-81-GW-9S-03		
Lab Sample ID:	F16145-3	Date Sampled:	01/08/03
Matrix:	AQ - Ground Water	Date Received:	01/10/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO-248		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
106-46-7	1,4-Dichlorobenzene	ND	5.2	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.2	2.1	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.2	2.1	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	5.2	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.2	2.1	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.2	2.1	ug/l	
117-84-0	Di-n-octyl phthalate	3.7	5.2	2.6	ug/l	J
84-66-2	Diethyl phthalate	ND	5.2	2.1	ug/l	
131-11-3	Dimethyl phthalate	ND	5.2	2.1	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	4.7	5.2	2.6	ug/l	J
206-44-0	Fluoranthene	ND	5.2	1.0	ug/l	
86-73-7	Fluorene	ND	5.2	1.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.2	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.2	2.1	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.2	2.1	ug/l	
67-72-1	Hexachloroethane	ND	5.2	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.2	2.1	ug/l	
78-59-1	Isophorone	ND	5.2	1.0	ug/l	
91-20-3	Naphthalene	5.5	5.2	1.0	ug/l	
98-95-3	Nitrobenzene	ND	5.2	1.0	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.2	2.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.2	2.1	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.2	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.2	1.0	ug/l	
129-00-0	Pyrene	ND	5.2	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	51%		19-90%
4165-62-2	Phenol-d5	33%		10-68%
118-79-6	2,4,6-Tribromophenol	87%		36-137%
4165-60-0	Nitrobenzene-d5	95%		49-119%
321-60-8	2-Fluorobiphenyl	92%		45-118%
1718-51-0	Terphenyl-d14	90%		46-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
108-67-8	Benzene, 1,3,5-trimethyl-	4.93	21	ug/l	JN
1074-43-7	Benzene, 1-methyl-3-propyl-	5.31	21	ug/l	JN

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

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

Report of Analysis

Client Sample ID:	CEF-81-GW-9S-03		
Lab Sample ID:	F16145-3	Date Sampled:	01/08/03
Matrix:	AQ - Ground Water	Date Received:	01/10/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO-248		

ABN PPL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
105-05-5	Benzene, 1,4-diethyl-	5.35	45	ug/l	JN
1074-17-5	Benzene, 1-methyl-2-propyl-	5.42	21	ug/l	JN
934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	5.48	18	ug/l	JN
535-77-3	Benzene, 1-methyl-3-(1-methylethyl)-	5.50	24	ug/l	JN
2049-95-8	Benzene, (1,1-dimethylpropyl)-	5.65	19	ug/l	JN
874-41-9	Benzene, 1-ethyl-2,4-dimethyl-	5.68	17	ug/l	JN
25155-15-1	Benzene, methyl(1-methylethyl)	5.79	14	ug/l	JN
	unknown	5.93	20	ug/l	J
2870-04-4	Benzene, 2-ethyl-1,3-dimethyl-	6.01	28	ug/l	JN
16251-77-7	Benzenepropanal, .beta.-methyl-	6.09	14	ug/l	JN
2809-64-5	Naphthalene, 1,2,3,4-tetrahydro-5-methyl	6.87	13	ug/l	JN
575-37-1	Naphthalene, 1,7-dimethyl-	8.10	15	ug/l	JN
	Total TIC, Semi-Volatile		290	ug/l	

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

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

Report of Analysis

Client Sample ID:	CEF-81-GW-13S-03		
Lab Sample ID:	F16145-4	Date Sampled:	01/08/03
Matrix:	AQ - Ground Water	Date Received:	01/10/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L015953.D	1	01/14/03	ME	01/13/03	OP6735	SL871
Run #2							

	Initial Volume	Final Volume
Run #1	970 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.2	2.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.2	2.1	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.2	2.1	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.2	2.1	ug/l	
51-28-5	2,4-Dinitrophenol	ND	26	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	7.7	ug/l	
88-75-5	2-Nitrophenol	ND	5.2	2.1	ug/l	
100-02-7	4-Nitrophenol	ND	26	10	ug/l	
87-86-5	Pentachlorophenol	ND	26	10	ug/l	
108-95-2	Phenol	ND	5.2	2.1	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.2	2.1	ug/l	
83-32-9	Acenaphthene	ND	5.2	1.0	ug/l	
208-96-8	Acenaphthylene	ND	5.2	1.0	ug/l	
120-12-7	Anthracene	ND	5.2	1.0	ug/l	
92-87-5	Benzidine	ND	52	26	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.2	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	1.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	1.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	1.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.2	1.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.2	2.1	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.2	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	5.2	2.1	ug/l	
218-01-9	Chrysene	ND	5.2	1.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.2	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.2	2.1	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.2	1.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.2	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.2	1.0	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.2	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.2	1.0	ug/l	

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

Report of Analysis

Client Sample ID:	CEF-81-GW-13S-03		
Lab Sample ID:	F16145-4	Date Sampled:	01/08/03
Matrix:	AQ - Ground Water	Date Received:	01/10/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO-248		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
106-46-7	1,4-Dichlorobenzene	ND	5.2	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.2	2.1	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.2	2.1	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	5.2	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.2	2.1	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.2	2.1	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.2	2.6	ug/l	
84-66-2	Diethyl phthalate	ND	5.2	2.1	ug/l	
131-11-3	Dimethyl phthalate	ND	5.2	2.1	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.2	2.6	ug/l	
206-44-0	Fluoranthene	ND	5.2	1.0	ug/l	
86-73-7	Fluorene	ND	5.2	1.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.2	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.2	2.1	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.2	2.1	ug/l	
67-72-1	Hexachloroethane	ND	5.2	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.2	2.1	ug/l	
78-59-1	Isophorone	ND	5.2	1.0	ug/l	
91-20-3	Naphthalene	ND	5.2	1.0	ug/l	
98-95-3	Nitrobenzene	ND	5.2	1.0	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.2	2.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.2	2.1	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.2	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.2	1.0	ug/l	
129-00-0	Pyrene	ND	5.2	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367 12 4	2 Fluorophenol	59%		19-90%
4165-62-2	Phenol-d5	38%		10-68%
118-79-6	2,4,6-Tribromophenol	87%		36-137%
4165-60-0	Nitrobenzene-d5	91%		49-119%
321-60-8	2-Fluorobiphenyl	90%		45-118%
1718-51-0	Terphenyl-d14	87%		46-135%

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

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

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

Report of Analysis

Client Sample ID:	CEF-81-GW-13S-03		
Lab Sample ID:	F16145-4	Date Sampled:	01/08/03
Matrix:	AQ - Ground Water	Date Received:	01/10/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO-248		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q

(a) No TICs detected.

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

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

Report of Analysis

Client Sample ID:	CEF-81-GW-14S-07		
Lab Sample ID:	F16145-5	Date Sampled:	01/08/03
Matrix:	AQ - Ground Water	Date Received:	01/10/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L015954.D	1	01/14/03	ME	01/13/03	OP6735	SL871
Run #2							

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

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.3	2.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.3	2.1	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.3	2.1	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.3	2.1	ug/l	
51-28-5	2,4-Dinitrophenol	ND	26	11	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	7.9	ug/l	
88-75-5	2-Nitrophenol	ND	5.3	2.1	ug/l	
100-02-7	4-Nitrophenol	ND	26	11	ug/l	
87-86-5	Pentachlorophenol	ND	26	11	ug/l	
108-95-2	Phenol	ND	5.3	2.1	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.3	2.1	ug/l	
83-32-9	Acenaphthene	ND	5.3	1.1	ug/l	
208-96-8	Acenaphthylene	ND	5.3	1.1	ug/l	
120-12-7	Anthracene	ND	5.3	1.1	ug/l	
92-87-5	Benzidine	ND	53	26	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.3	1.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.3	1.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.3	1.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.3	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.3	1.1	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.3	1.1	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.3	2.1	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.3	1.1	ug/l	
106-47-8	4-Chloroaniline	ND	5.3	2.1	ug/l	
218-01-9	Chrysene	ND	5.3	1.1	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.3	1.1	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.3	2.1	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.3	1.1	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.3	1.1	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.3	1.1	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.3	1.1	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.3	1.1	ug/l	

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

Report of Analysis

Client Sample ID:	CEF-81-GW-14S-07		
Lab Sample ID:	F16145-5	Date Sampled:	01/08/03
Matrix:	AQ - Ground Water	Date Received:	01/10/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO-248		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
106-46-7	1,4-Dichlorobenzene	ND	5.3	1.1	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.3	2.1	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.3	2.1	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	11	5.3	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.3	2.1	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.3	2.1	ug/l	
117-84-0	Di-n-octyl phthalate	3.5	5.3	2.6	ug/l	J
84-66-2	Diethyl phthalate	ND	5.3	2.1	ug/l	
131-11-3	Dimethyl phthalate	ND	5.3	2.1	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	4.2	5.3	2.6	ug/l	J
206-44-0	Fluoranthene	ND	5.3	1.1	ug/l	
86-73-7	Fluorene	ND	5.3	1.1	ug/l	
118-74-1	Hexachlorobenzene	ND	5.3	1.1	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.3	2.1	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.3	2.1	ug/l	
67-72-1	Hexachloroethane	ND	5.3	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.3	2.1	ug/l	
78-59-1	Isophorone	ND	5.3	1.1	ug/l	
91-20-3	Naphthalene	ND	5.3	1.1	ug/l	
98-95-3	Nitrobenzene	ND	5.3	1.1	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.3	2.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.3	2.1	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.3	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.3	1.1	ug/l	
129-00-0	Pyrene	ND	5.3	1.1	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.3	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	53%		19-90%
4165-62-2	Phenol-d5	35%		10-68%
118-79-6	2,4,6-Tribromophenol	83%		36-137%
4165-60-0	Nitrobenzene-d5	82%		49-119%
321-60-8	2-Fluorobiphenyl	80%		45-118%
1718-51-0	Terphenyl-d14	83%		46-135%

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

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

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

Report of Analysis

Client Sample ID:	CEF-81-GW-14S-07		
Lab Sample ID:	F16145-5	Date Sampled:	01/08/03
Matrix:	AQ - Ground Water	Date Received:	01/10/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO-248		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q

(a) No TICs detected.

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

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-81-GW-DUP1-03		
Lab Sample ID:	F16145-6	Date Sampled:	01/08/03
Matrix:	AQ - Ground Water	Date Received:	01/10/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L015955.D	1	01/14/03	ME	01/13/03	OP6735	SL871
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.6	2.2	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.6	2.2	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.6	2.2	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.6	2.2	ug/l	
51-28-5	2,4-Dinitrophenol	ND	28	11	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	8.3	ug/l	
88-75-5	2-Nitrophenol	ND	5.6	2.2	ug/l	
100-02-7	4-Nitrophenol	ND	28	11	ug/l	
87-86-5	Pentachlorophenol	ND	28	11	ug/l	
108-95-2	Phenol	ND	5.6	2.2	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.6	2.2	ug/l	
83-32-9	Acenaphthene	ND	5.6	1.1	ug/l	
208-96-8	Acenaphthylene	ND	5.6	1.1	ug/l	
120-12-7	Anthracene	ND	5.6	1.1	ug/l	
92-87-5	Benzidine	ND	56	28	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.6	1.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.6	1.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.6	1.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.6	2.2	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.6	1.1	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.6	1.1	ug/l	
85 68 7	Butyl benzyl phthalate	ND	5.6	2.2	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.6	1.1	ug/l	
106-47-8	4-Chloroaniline	ND	5.6	2.2	ug/l	
218-01-9	Chrysene	ND	5.6	1.1	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.6	1.1	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.6	2.2	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.6	1.1	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.6	1.1	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.6	1.1	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.6	1.1	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.6	1.1	ug/l	

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

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

Report of Analysis

Client Sample ID:	CEF-81-GW-DUP1-03		
Lab Sample ID:	F16145-6	Date Sampled:	01/08/03
Matrix:	AQ - Ground Water	Date Received:	01/10/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO-248		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
106-46-7	1,4-Dichlorobenzene	ND	5.6	1.1	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.6	2.2	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.6	2.2	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	11	5.6	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.6	2.2	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.6	2.2	ug/l	
117-84-0	Di-n-octyl phthalate	4.5	5.6	2.8	ug/l	J
84-66-2	Diethyl phthalate	ND	5.6	2.2	ug/l	
131-11-3	Dimethyl phthalate	ND	5.6	2.2	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	6.3	5.6	2.8	ug/l	
206-44-0	Fluoranthene	ND	5.6	1.1	ug/l	
86-73-7	Fluorene	ND	5.6	1.1	ug/l	
118-74-1	Hexachlorobenzene	ND	5.6	1.1	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.6	2.2	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.6	2.2	ug/l	
67-72-1	Hexachloroethane	ND	5.6	2.2	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.6	2.2	ug/l	
78-59-1	Isophorone	ND	5.6	1.1	ug/l	
91-20-3	Naphthalene	5.1	5.6	1.1	ug/l	J
98-95-3	Nitrobenzene	ND	5.6	1.1	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.6	2.2	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.6	2.2	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	2.2	ug/l	
85-01-8	Phenanthrene	ND	5.6	1.1	ug/l	
129-00-0	Pyrene	ND	5.6	1.1	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.6	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	53%		19-90%
4165-62-2	Phenol-d5	35%		10-68%
118-79-6	2,4,6-Tribromophenol	87%		36-137%
4165-60-0	Nitrobenzene-d5	88%		49-119%
321-60-8	2-Fluorobiphenyl	89%		45-118%
1718-51-0	Terphenyl-d14	86%		46-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
108-67-8	Benzene, 1,3,5-trimethyl-	4.93	20	ug/l	JN
1074-17-5	Benzene, 1-methyl-2-propyl-	5.31	19	ug/l	JN

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

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

Report of Analysis

Client Sample ID:	CEF-81-GW-DUP1-03		
Lab Sample ID:	F16145-6	Date Sampled:	01/08/03
Matrix:	AQ - Ground Water	Date Received:	01/10/03
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	NAS Cecil Field-CTO-248		

ABN PPL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
105-05-5	Benzene, 1,4-diethyl-	5.35	42	ug/l	JN
1074-17-5	Benzene, 1-methyl-2-propyl-	5.42	20	ug/l	JN
933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	5.48	20	ug/l	JN
535-77-3	Benzene, 1-methyl-3-(1-methylethyl)-	5.50	19	ug/l	JN
2050-24-0	Benzene, 1,3-diethyl-5-methyl-	5.65	17	ug/l	JN
95-93-2	Benzene, 1,2,4,5-tetramethyl-	5.79	15	ug/l	JN
934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	5.92	19	ug/l	JN
99-87-6	Benzene, 1-methyl-4-(1-methylethyl)-	6.01	28	ug/l	JN
16251-77-7	Benzenepropanal, .beta.-methyl-	6.09	14	ug/l	JN
1680-51-9	Naphthalene, 1,2,3,4-tetrahydro-6-methyl	6.86	13	ug/l	JN
581-40-8	Naphthalene, 2,3-dimethyl-	8.10	15	ug/l	JN
581-42-0	Naphthalene, 2,6-dimethyl-	8.14	13	ug/l	JN
	Total TIC, Semi-Volatile		274	ug/l	

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

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Blank Spike Summary

Job Number: F16145
Account: TETRPAPT Tetra Tech, NUS
Project: NAS Cecil Field-CTO-248

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6735-BS	L015946.D	1	01/14/03	ME	01/13/03	OP6735	SL871

The QC reported here applies to the following samples: Method: SW846 8270C

F16145-1, F16145-2, F16145-3, F16145-4, F16145-5, F16145-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-57-8	2-Chlorophenol	50	44.8	90	42-119
59-50-7	4-Chloro-3-methyl phenol	50	46.4	93	58-117
120-83-2	2,4-Dichlorophenol	50	46.3	93	45-125
105-67-9	2,4-Dimethylphenol	50	35.2	70	33-100
51-28-5	2,4-Dinitrophenol	50	18.2	36	14-157
534-52-1	4,6-Dinitro-o-cresol	50	38.2	76	31-145
88-75-5	2-Nitrophenol	50	46.6	93	44-130
100-02-7	4-Nitrophenol	50	22.4	45	16-71
87-86-5	Pentachlorophenol	50	39.3	79	36-141
108-95-2	Phenol	50	24.7	49	20-66
88-06-2	2,4,6-Trichlorophenol	50	45.1	90	39-130
83-32-9	Acenaphthene	50	46.5	93	68-112
208-96-8	Acenaphthylene	50	49.3	99	76-124
120-12-7	Anthracene	50	46.4	93	77-119
56-55-3	Benzo(a)anthracene	50	47.5	95	75-117
50-32-8	Benzo(a)pyrene	50	47.6	95	79-124
205-99-2	Benzo(b)fluoranthene	50	43.8	88	74-121
191-24-2	Benzo(g,h,i)perylene	50	49.3	99	59-137
207-08-9	Benzo(k)fluoranthene	50	48.0	96	73-120
101-55-3	4-Bromophenyl phenyl ether	50	45.2	90	73-115
85-68-7	Butyl benzyl phthalate	50	46.1	92	71-123
91-58-7	2-Chloronaphthalene	50	46.2	92	66-113
106-47-8	4-Chloroaniline	50	50.1	100	61-116
218-01-9	Chrysene	50	46.3	93	73-115
111-91-1	bis(2-Chloroethoxy)methane	50	44.8	90	67-113
111-44-4	bis(2-Chloroethyl)ether	50	45.2	90	64-111
108-60-1	bis(2-Chloroisopropyl)ether	50	46.4	93	60-114
7005-72-3	4-Chlorophenyl phenyl ether	50	46.9	94	75-113
95-50-1	1,2-Dichlorobenzene	50	46.1	92	51-113
122-66-7	1,2-Diphenylhydrazine	50	46.0	92	72-115
541-73-1	1,3-Dichlorobenzene	50	45.8	92	47-110
106-46-7	1,4-Dichlorobenzene	50	46.3	93	48-111
121-14-2	2,4-Dinitrotoluene	50	50.1	100	75-126
606-20-2	2,6-Dinitrotoluene	50	49.7	99	79-125
91-94-1	3,3'-Dichlorobenzidine	50	47.3	95	57-126
53-70-3	Dibenzo(a,h)anthracene	50	50.1	100	61-131

Blank Spike Summary

Job Number: F16145
Account: TETRPAPT Tetra Tech, NUS
Project: NAS Cecil Field-CTO-248

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6735-BS	L015946.D	1	01/14/03	ME	01/13/03	OP6735	SL871

The QC reported here applies to the following samples: Method: SW846 8270C

F16145-1, F16145-2, F16145-3, F16145-4, F16145-5, F16145-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
84-74-2	Di-n-butyl phthalate	50	50.3	101	78-122
117-84-0	Di-n-octyl phthalate	50	45.2	90	69-134
84-66-2	Diethyl phthalate	50	50.0	100	69-121
131-11-3	Dimethyl phthalate	50	46.2	92	43-136
117-81-7	bis(2-Ethylhexyl)phthalate	50	51.5	103	77-129
206-44-0	Fluoranthene	50	48.0	96	75-123
86-73-7	Fluorene	50	47.2	94	75-115
118-74-1	Hexachlorobenzene	50	47.4	95	74-115
87-68-3	Hexachlorobutadiene	50	42.6	85	41-105
77-47-4	Hexachlorocyclopentadiene	50	25.3	51	26-99
67-72-1	Hexachloroethane	50	46.6	93	42-115
193-39-5	Indeno(1,2,3-cd)pyrene	50	46.0	92	62-131
78-59-1	Isophorone	50	46.4	93	66-114
91-20-3	Naphthalene	50	46.3	93	63-113
98-95-3	Nitrobenzene	50	46.9	94	66-115
62-75-9	N-Nitrosodimethylamine	50	28.5	57	18-89
621-64-7	N-Nitroso-di-n-propylamine	50	45.8	92	65-121
86-30-6	N-Nitrosodiphenylamine	50	48.7	97	79-125
85-01-8	Phenanthrene	50	45.9	92	73-115
129-00-0	Pyrene	50	43.3	87	67-118
120-82-1	1,2,4-Trichlorobenzene	50	47.2	94	55-113

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	67%	19-90%
4165-62-2	Phenol-d5	46%	10-68%
118-79-6	2,4,6-Tribromophenol	98%	36-137%
4165-60-0	Nitrobenzene-d5	95%	49-119%
321-60-8	2-Fluorobiphenyl	96%	45-118%
1718-51-0	Terphenyl-d14	97%	46-135%

Method Blank Summary

Job Number: F16145
Account: TETRPAPT Tetra Tech, NUS
Project: NAS Cecil Field-CTO-248

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6735-MB	L015947.D	1	01/14/03	ME	01/13/03	OP6735	SL871

The QC reported here applies to the following samples: Method: SW846 8270C

F16145-1, F16145-2, F16145-3, F16145-4, F16145-5, F16145-6

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	ug/l	
100-02-7	4-Nitrophenol	ND	25	ug/l	
87-86-5	Pentachlorophenol	ND	25	ug/l	
108-95-2	Phenol	ND	5.0	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	ug/l	
83-32-9	Acenaphthene	ND	5.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	ug/l	
120-12-7	Anthracene	ND	5.0	ug/l	
92-87-5	Benzidine	ND	50	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	ug/l	
218-01-9	Chrysene	ND	5.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	ug/l	

Method Blank Summary

Job Number: F16145
Account: TETRPAPT Tetra Tech, NUS
Project: NAS Cecil Field-CTO-248

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6735-MB	L015947.D	1	01/14/03	ME	01/13/03	OP6735	SL871

The QC reported here applies to the following samples: Method: SW846 8270C

F16145-1, F16145-2, F16145-3, F16145-4, F16145-5, F16145-6

CAS No.	Compound	Result	RL	Units	Q
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	ug/l	
86-73-7	Fluorene	ND	5.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	ug/l	
67-72-1	Hexachloroethane	ND	5.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	ug/l	
78-59-1	Isophorone	ND	5.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
98-95-3	Nitrobenzene	ND	5.0	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	ug/l	
129-00-0	Pyrene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	64%	19-90%
4165-62-2	Phenol-d5	45%	10-68%
118-79-6	2,4,6-Tribromophenol	92%	36-137%
4165-60-0	Nitrobenzene-d5	94%	49-119%
321-60-8	2-Fluorobiphenyl	95%	45-118%
1718-51-0	Terphenyl-d14	84%	46-135%

Method Blank Summary

Job Number: F16145
Account: TETRPAPT Tetra Tech, NUS
Project: NAS Cecil Field-CTO-248

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6735-MB	L015966.D	1	01/15/03	ME	01/13/03	OP6735	SL872

The QC reported here applies to the following samples: Method: SW846 8270C

F16145-1, F16145-2, F16145-3, F16145-4, F16145-5, F16145-6

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	ug/l	
100-02-7	4-Nitrophenol	ND	25	ug/l	
87-86-5	Pentachlorophenol	ND	25	ug/l	
108-95-2	Phenol	ND	5.0	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	ug/l	
83-32-9	Acenaphthene	ND	5.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	ug/l	
120-12-7	Anthracene	ND	5.0	ug/l	
92-87-5	Benzidine	ND	50	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	ug/l	
218-01-9	Chrysene	ND	5.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	ug/l	

Method Blank Summary

Job Number: F16145
Account: TETRPAPT Tetra Tech, NUS
Project: NAS Cecil Field-CTO-248

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6735-MB	L015966.D	1	01/15/03	ME	01/13/03	OP6735	SL872

The QC reported here applies to the following samples: Method: SW846 8270C

F16145-1, F16145-2, F16145-3, F16145-4, F16145-5, F16145-6

CAS No.	Compound	Result	RL	Units	Q
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	ug/l	
86-73-7	Fluorene	ND	5.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	ug/l	
67-72-1	Hexachloroethane	ND	5.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	ug/l	
78-59-1	Isophorone	ND	5.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
98-95-3	Nitrobenzene	ND	5.0	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	ug/l	
129-00-0	Pyrene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	66%	19-90%
4165-62-2	Phenol-d5	47%	10-68%
118-79-6	2,4,6-Tribromophenol	94%	36-137%
4165-60-0	Nitrobenzene-d5	96%	49-119%
321-60-8	2-Fluorobiphenyl	95%	45-118%
1718-51-0	Terphenyl-d14	95%	46-135%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F16145
Account: TETRPAPT Tetra Tech, NUS
Project: NAS Cecil Field-CTO-248

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6735-MS	L015950.D	1	01/14/03	ME	01/13/03	OP6735	SL871
OP6735-MSD	L015951.D	1	01/14/03	ME	01/13/03	OP6735	SL871
F16145-2	L015949.D	1	01/14/03	ME	01/13/03	OP6735	SL871

The QC reported here applies to the following samples: Method: SW846 8270C

F16145-1, F16145-2, F16145-3, F16145-4, F16145-5, F16145-6

CAS No.	Compound	F16145-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	ND		104	78.3	75	86.6	83	10	49-112/26
59-50-7	4-Chloro-3-methyl phenol	ND		104	84.0	81	87.3	84	4	60-116/21
120-83-2	2,4-Dichlorophenol	ND		104	78.5	75	89.0	85	13	55-115/27
105-67-9	2,4-Dimethylphenol	ND		104	60.6	58	71.2	68	16	28-105/25
51-28-5	2,4-Dinitrophenol	ND		104	46.2	44	53.9	52	15	10-151/47
534-52-1	4,6-Dinitro-o-cresol	ND		104	82.9	80	82.9	80	0	27-146/28
88-75-5	2-Nitrophenol	ND		104	79.2	76	87.8	84	10	53-119/23
100-02-7	4-Nitrophenol	ND		104	59.4	57	60.3	58	2	23-102/28
87-86-5	Pentachlorophenol	ND		104	89.0	85	86.2	83	3	33-147/29
108-95-2	Phenol	ND		104	58.2	56	62.3	60	7	31-87/25
88-06-2	2,4,6-Trichlorophenol	ND		104	78.7	76	88.2	85	11	49-122/24
83-32-9	Acenaphthene	ND		104	79.8	77	87.3	84	9	52-125/20
208-96-8	Acenaphthylene	ND		104	84.3	81	91.3	88	8	66-132/18
120-12-7	Anthracene	ND		104	90.7	87	92.5	89	2	68-126/19
56-55-3	Benzo(a)anthracene	ND		104	95.5	92	92.6	89	3	67-122/19
50-32-8	Benzo(a)pyrene	ND		104	92.3	89	96.0	92	4	69-130/18
205-99-2	Benzo(b)fluoranthene	ND		104	85.9	82	90.0	86	5	65-128/20
191-24-2	Benzo(g,h,i)perylene	ND		104	94.6	91	99.5	96	5	52-145/21
207-08-9	Benzo(k)fluoranthene	ND		104	89.7	86	93.7	90	4	65-125/19
101-55-3	4-Bromophenyl phenyl ether	ND		104	86.9	83	90.5	87	4	64-123/20
85-68-7	Butyl benzyl phthalate	ND		104	91.7	88	84.6	81	8	62-130/22
91-58-7	2-Chloronaphthalene	ND		104	76.5	73	90.3	87	17	58-119/20
106-47-8	4-Chloroaniline	ND		104	80.9	78	88.6	85	9	47-113/19
218-01-9	Chrysene	ND		104	89.6	86	87.0	84	3	65-120/19
111 91 1	bis(2 Chloroethoxy)methane	ND		104	75.4	72	87.0	84	14	54-120/22
111-44-4	bis(2-Chloroethyl)ether	ND		104	79.1	76	84.3	81	6	52-118/22
108-60-1	bis(2-Chloroisopropyl)ether	ND		104	80.3	77	86.4	83	7	50-120/22
7005-72-3	4-Chlorophenyl phenyl ether	ND		104	84.1	81	89.4	86	6	66-120/18
95-50-1	1,2-Dichlorobenzene	ND		104	79.2	76	85.7	82	8	46-115/23
122-66-7	1,2-Diphenylhydrazine	ND		104	84.1	81	90.3	87	7	63-122/20
541-73-1	1,3-Dichlorobenzene	ND		104	77.2	74	84.6	81	9	45-110/23
106-46-7	1,4-Dichlorobenzene	ND		104	76.5	73	85.9	82	12	46-112/23
121-14-2	2,4-Dinitrotoluene	ND		104	96.5	93	92.4	89	4	67-131/20
606-20-2	2,6-Dinitrotoluene	ND		104	92.6	89	95.7	92	3	70-131/19
91-94-1	3,3'-Dichlorobenzidine	ND		104	86.8	83	93.6	90	8	19-136/23
53-70-3	Dibenzo(a,h)anthracene	ND		104	93.4	90	98.0	94	5	55-137/21

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F16145
Account: TETRPAPT Tetra Tech, NUS
Project: NAS Cecil Field-CTO-248

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6735-MS	L015950.D	1	01/14/03	ME	01/13/03	OP6735	SL871
OP6735-MSD	L015951.D	1	01/14/03	ME	01/13/03	OP6735	SL871
F16145-2	L015949.D	1	01/14/03	ME	01/13/03	OP6735	SL871

The QC reported here applies to the following samples: Method: SW846 8270C

F16145-1, F16145-2, F16145-3, F16145-4, F16145-5, F16145-6

CAS No.	Compound	F16145-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
84-74-2	Di-n-butyl phthalate	ND		104	99.2	95	96.8	93	2	71-127/19
117-84-0	Di-n-octyl phthalate	3.4	J	104	91.5	85	84.6	78	8	60-143/29
84-66-2	Diethyl phthalate	ND		104	95.0	91	92.5	89	3	58-129/20
131-11-3	Dimethyl phthalate	ND		104	87.0	84	92.1	88	6	31-145/33
117-81-7	bis(2-Ethylhexyl)phthalate	4.3	J	104	104	96	96.6	89	7	69-137/29
206-44-0	Fluoranthene	ND		104	91.7	88	94.0	90	2	68-128/18
86-73-7	Fluorene	ND		104	87.3	84	89.4	86	2	64-124/18
118-74-1	Hexachlorobenzene	ND		104	91.3	88	92.4	89	1	65-123/18
87-68-3	Hexachlorobutadiene	ND		104	69.6	67	80.8	78	15	41-106/24
77-47-4	Hexachlorocyclopentadiene	ND		104	41.5	40	58.5	56	34	22-103/35
67-72-1	Hexachloroethane	ND		104	80.8	78	88.9	85	10	42-115/25
193-39-5	Indeno(1,2,3-cd)pyrene	ND		104	92.9	89	96.2	92	3	57-137/22
78-59-1	Isophorone	ND		104	79.0	76	89.3	86	12	56-119/20
91-20-3	Naphthalene	ND		104	78.2	75	88.8	85	13	53-119/21
98-95-3	Nitrobenzene	ND		104	77.5	74	88.6	85	13	55-122/22
62-75-9	N-Nitrosodimethylamine	ND		104	59.1	57	66.7	64	12	32-105/28
621-64-7	N-Nitroso-di-n-propylamine	ND		104	78.8	76	84.6	81	7	56-125/21
86-30-6	N-Nitrosodiphenylamine	ND		104	94.8	91	101	97	6	72-131/19
85-01-8	Phenanthrene	ND		104	89.0	85	91.7	88	3	63-123/19
129-00-0	Pyrene	ND		104	92.3	89	79.9	77	14	58-125/25
120-82-1	1,2,4-Trichlorobenzene	ND		104	79.3	76	90.3	87	13	51-116/22

CAS No.	Surrogate Recoveries	MS	MSD	F16145-2	Limits
367-12-4	2-Fluorophenol	67%	74%	42%	19-90%
4165-62-2	Phenol-d5	52%	57%	28%	10-68%
118-79-6	2,4,6-Tribromophenol	85%	93%	81%	36-137%
4165-60-0	Nitrobenzene-d5	75%	85%	66%	49-119%
321-60-8	2-Fluorobiphenyl	75%	87%	67%	45-118%
1718-51-0	Terphenyl-d14	95%	86%	81%	46-135%

Instrument Performance Check (DFTPP)

Job Number: F16145
Account: TETRPAPT Tetra Tech, NUS
Project: NAS Cecil Field-CTO-248

Sample: SL871-DFTPP
Lab File ID: L015937.D
Instrument ID: GCMSL

Injection Date: 01/14/03
Injection Time: 09:12

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	133207	44.2		Pass
68	Less than 2.0% of mass 69	0	0.0	(0.0) [a]	Pass
69	Mass 69 relative abundance	103528	34.3		Pass
70	Less than 2.0% of mass 69	458	0.15	(0.44) [a]	Pass
127	40.0 - 60.0% of mass 198	133779	44.4		Pass
197	Less than 1.0% of mass 198	0	0.0		Pass
198	Base peak, 100% relative abundance	301611	100.0		Pass
199	5.0 - 9.0% of mass 198	20379	6.8		Pass
275	10.0 - 30.0% of mass 198	65256	21.6		Pass
365	1.0 - 100.0% of mass 198	6302	2.1		Pass
441	Present, but less than mass 443	35109	11.6	(75.1) [b]	Pass
442	40.0 - 100.0% of mass 198	238147	79.0		Pass
443	17.0 - 23.0% of mass 442	46725	15.5	(19.6) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SL871-CC859	L015938.D	01/14/03	09:31	00:19	Continuing cal 75
OP6727-MB	L015939.D	01/14/03	10:01	00:49	Method Blank
ZZZZZZ	L015940.D	01/14/03	10:30	01:18	(unrelated sample)
ZZZZZZ	L015941.D	01/14/03	11:00	01:48	(unrelated sample)
ZZZZZZ	L015942.D	01/14/03	11:30	02:18	(unrelated sample)
ZZZZZZ	L015943.D	01/14/03	12:00	02:48	(unrelated sample)
ZZZZZZ	L015944.D	01/14/03	12:30	03:18	(unrelated sample)
ZZZZZZ	L015945.D	01/14/03	13:00	03:48	(unrelated sample)
OP6735-BS	L015946.D	01/14/03	13:30	04:18	Blank Spike
OP6735-MB	L015947.D	01/14/03	14:01	04:49	Method Blank
F16145-1	L015948.D	01/14/03	14:31	05:19	CEF-81-GW-1I-03
F16145-2	L015949.D	01/14/03	15:01	05:49	CEF-81-GW-85R-03
OP6735-MS	L015950.D	01/14/03	15:31	06:19	Matrix Spike
OP6735-MSD	L015951.D	01/14/03	16:01	06:49	Matrix Spike Duplicate
F16145-3	L015952.D	01/14/03	16:31	07:19	CEF-81-GW-9S-03
F16145-4	L015953.D	01/14/03	17:01	07:49	CEF-81-GW-13S-03
F16145-5	L015954.D	01/14/03	17:31	08:19	CEF-81-GW-14S-07
F16145-6	L015955.D	01/14/03	18:00	08:48	CEF-81-GW-DUP1-03
ZZZZZZ	L015956.D	01/14/03	18:30	09:18	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: F16145
Account: TETRPAPT Tetra Tech, NUS
Project: NAS Cecil Field-CTO-248

Sample:	SL871-DFTPP	Injection Date:	01/14/03
Lab File ID:	L015937.D	Injection Time:	09:12
Instrument ID:	GCMSL		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	L015957.D	01/14/03	19:00	09:48	(unrelated sample)
ZZZZZZ	L015958.D	01/14/03	19:30	10:18	(unrelated sample)
ZZZZZZ	L015959.D	01/14/03	19:59	10:47	(unrelated sample)
ZZZZZZ	L015960.D	01/14/03	20:29	11:17	(unrelated sample)
ZZZZZZ	L015961.D	01/14/03	20:59	11:47	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: F16145
Account: TETRPAPT Tetra Tech, NUS
Project: NAS Cecil Field-CTO-248

Sample: SL872-DFTPP
Lab File ID: L015964.D
Instrument ID: GCMSL

Injection Date: 01/15/03
Injection Time: 09:10

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	119765	44.1		Pass
68	Less than 2.0% of mass 69	522	0.19	(0.56) [a]	Pass
69	Mass 69 relative abundance	92941	34.3		Pass
70	Less than 2.0% of mass 69	444	0.16	(0.48) [a]	Pass
127	40.0 - 60.0% of mass 198	121501	44.8		Pass
197	Less than 1.0% of mass 198	0	0.0		Pass
198	Base peak, 100% relative abundance	271317	100.0		Pass
199	5.0 - 9.0% of mass 198	17731	6.5		Pass
275	10.0 - 30.0% of mass 198	58147	21.4		Pass
365	1.0 - 100.0% of mass 198	5788	2.1		Pass
441	Present, but less than mass 443	32109	11.8	(73.7) [b]	Pass
442	40.0 - 100.0% of mass 198	223123	82.2		Pass
443	17.0 - 23.0% of mass 442	43541	16.0	(19.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SL872-CC859	L015965.D	01/15/03	09:29	00:19	Continuing cal 50
OP6735-MB	L015966.D	01/15/03	10:00	00:50	Method Blank
F16145-1	L015967.D	01/15/03	10:31	01:21	CEF-81-GW-1I-03
ZZZZZZ	L015968.D	01/15/03	11:00	01:50	(unrelated sample)
ZZZZZZ	L015969.D	01/15/03	11:32	02:22	(unrelated sample)
OP6743-LBS	L015970.D	01/15/03	12:02	02:52	Blank Spike
OP6743-LB	L015971.D	01/15/03	12:32	03:22	Leachate Blank
F16112-1	L015972.D	01/15/03	13:02	03:52	(used for QC only; not part of job F16145)
OP6743-MS	L015973.D	01/15/03	13:32	04:22	Matrix Spike
OP6743-MSD	L015974.D	01/15/03	14:03	04:53	Matrix Spike Duplicate
OP6738-BS	L015975.D	01/15/03	14:33	05:23	Blank Spike
OP6738-MB	L015976.D	01/15/03	15:03	05:53	Method Blank
ZZZZZZ	L015977.D	01/15/03	15:33	06:23	(unrelated sample)
F16124-2	L015978.D	01/15/03	16:02	06:52	(used for QC only; not part of job F16145)
OP6738-MS	L015979.D	01/15/03	16:33	07:23	Matrix Spike
OP6738-MSD	L015980.D	01/15/03	17:02	07:52	Matrix Spike Duplicate
ZZZZZZ	L015981.D	01/15/03	17:33	08:23	(unrelated sample)
ZZZZZZ	L015982.D	01/15/03	18:02	08:52	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: F16145
Account: TETRPAPT Tetra Tech, NUS
Project: NAS Cecil Field-CTO-248

Sample: SL859-DFTPP
Lab File ID: L015659.D
Instrument ID: GCMSL

Injection Date: 12/13/02
Injection Time: 10:35

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	98088	43.8		Pass
68	Less than 2.0% of mass 69	0	0.0	(0.0) [a]	Pass
69	Mass 69 relative abundance	74765	33.4		Pass
70	Less than 2.0% of mass 69	305	0.14	(0.41) [a]	Pass
127	40.0 - 60.0% of mass 198	98584	44.0		Pass
197	Less than 1.0% of mass 198	239	0.11		Pass
198	Base peak, 100% relative abundance	223843	100.0		Pass
199	5.0 - 9.0% of mass 198	14384	6.4		Pass
275	10.0 - 30.0% of mass 198	47541	21.2		Pass
365	1.0 - 100.0% of mass 198	4619	2.1		Pass
441	Present, but less than mass 443	28128	12.6	(72.9) [b]	Pass
442	40.0 - 100.0% of mass 198	191504	85.6		Pass
443	17.0 - 23.0% of mass 442	38595	17.2	(20.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SL859-ICC859	L015660.D	12/13/02	10:55	00:20	Initial cal 75
SL859-IC859	L015661.D	12/13/02	11:25	00:50	Initial cal 5
SL859-IC859	L015662.D	12/13/02	11:56	01:21	Initial cal 25
SL859-IC859	L015663.D	12/13/02	12:27	01:52	Initial cal 50
SL859-IC859	L015664.D	12/13/02	12:57	02:22	Initial cal 100
SL859-IC859	L015665.D	12/13/02	13:28	02:53	Initial cal 125

Semivolatile Internal Standard Area Summary

Job Number: F16145
Account: TETRPAPT Tetra Tech, NUS
Project: NAS Cecil Field-CTO-248

Check Std:	SL871-CC859	Injection Date:	01/14/03
Lab File ID:	L015938.D	Injection Time:	09:31
Instrument ID:	GCMSL	Method:	SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	225646	5.08	807366	6.29	354405	8.61	425849	11.14	234233	16.07	142031	18.57
Upper Limit [a]	451292	5.58	1614732	6.79	708810	9.11	851698	11.64	468466	16.57	284062	19.07
Lower Limit [b]	112823	4.58	403683	5.79	177203	8.11	212925	10.64	117117	15.57	71016	18.07

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP6727-MB	318010	5.07	1117609	6.28	489618	8.61	585263	11.13	271144	16.06	145586	18.56
ZZZZZZ	252937	5.07	859000	6.28	381599	8.61	475264	11.13	258970	16.06	142101	18.57
ZZZZZZ	264570	5.07	928812	6.29	408018	8.61	505722	11.13	252419	16.06	144308	18.57
ZZZZZZ	252061	5.07	888373	6.28	411950	8.61	518853	11.13	267824	16.06	142699	18.56
ZZZZZZ	242394	5.07	838950	6.28	370582	8.61	471399	11.13	288355	16.06	163572	18.57
ZZZZZZ	253802	5.07	907556	6.29	394910	8.61	455670	11.13	231221	16.06	131998	18.57
ZZZZZZ	268185	5.07	920348	6.29	401215	8.61	482790	11.13	254093	16.06	131642	18.57
OP6735-BS	242893	5.08	885291	6.29	400836	8.62	501310	11.13	240099	16.06	140835	18.57
OP6735-MB	218239	5.07	749408	6.28	329743	8.61	410976	11.13	235802	16.06	131258	18.57
F16145-1	275607	5.08	819244	6.29	341557	8.62	390349	11.14	238710	16.06	144552	18.57
F16145-2	305434	5.07	1109162	6.29	522152	8.62	649640	11.13	323357	16.06	166347	18.57
OP6735-MS	281485	5.08	1074738	6.29	506899	8.62	620948	11.13	268423	16.06	145978	18.56
OP6735-MSD	260236	5.08	925024	6.29	418115	8.61	478367	11.14	239273	16.07	142460	18.57
F16145-3	283015	5.08	956787	6.29	456444	8.61	608155	11.13	314340	16.06	161160	18.56
F16145-4	260646	5.08	943531	6.28	427496	8.61	550344	11.13	294948	16.06	150425	18.56
F16145-5	330649	5.08	1172456	6.28	533387	8.61	671744	11.14	332502	16.06	169256	18.57
F16145-6	242160	5.07	798316	6.29	366576	8.61	455674	11.13	254655	16.06	142405	18.56
ZZZZZZ	251834	5.08	860480	6.29	379548	8.62	450227	11.13	253675	16.06	144175	18.57
ZZZZZZ	298038	5.08	1068521	6.28	494981	8.61	599044	11.13	330020	16.06	175723	18.57
ZZZZZZ	224488	5.08	801808	6.28	368224	8.61	485088	11.13	279146	16.06	155503	18.57
ZZZZZZ	287779	5.07	1020470	6.29	472498	8.62	645405	11.13	370054	16.06	194809	18.57
ZZZZZZ	290847	5.07	1046776	6.29	481335	8.62	584126	11.13	305239	16.06	163140	18.57
ZZZZZZ	297114	5.08	1081579	6.28	490231	8.61	677383	11.13	397987	16.06	196163	18.57

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: F16145
Account: TETRPAPT Tetra Tech, NUS
Project: NAS Cecil Field-CTO-248

Check Std:	SL872-CC859	Injection Date:	01/15/03
Lab File ID:	L015965.D	Injection Time:	09:29
Instrument ID:	GCMSL	Method:	SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	218896	5.07	766093	6.29	351618	8.62	450742	11.13	268031	16.07	152480	18.57
Upper Limit [a]	437792	5.57	1532186	6.79	703236	9.12	901484	11.63	536062	16.57	304960	19.07
Lower Limit [b]	109448	4.57	383047	5.79	175809	8.12	225371	10.63	134016	15.57	76240	18.07

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP6735-MB	316150	5.07	1112540	6.29	492975	8.61	607317	11.13	323607	16.06	178452	18.56
F16145-1	242484	5.07	882188	6.29	425753	8.61	519743	11.13	310662	16.06	168984	18.56
ZZZZZZ	245331	5.07	867102	6.28	386749	8.61	518367	11.13	324478	16.06	174529	18.56
ZZZZZZ	296179	5.07	1051034	6.29	487570	8.61	611197	11.13	332062	16.06	179728	18.56
OP6743-LBS	268283	5.07	962260	6.29	428224	8.62	514133	11.13	260922	16.06	145251	18.56
OP6743-LB	310256	5.08	1129728	6.28	531311	8.61	662190	11.13	309089	16.06	162558	18.57
F16112-1	294693	5.07	1052484	6.29	507267	8.62	655322	11.13	325113	16.06	158894	18.57
OP6743-MS	247065	5.07	866223	6.29	361489	8.62	430071	11.13	244956	16.06	138394	18.57
OP6743-MSD	276382	5.07	999005	6.29	446653	8.62	533280	11.13	285528	16.06	156356	18.56
OP6738-BS	234911	5.08	806631	6.28	354440	8.61	444777	11.13	262302	16.07	147738	18.57
OP6738-MB	263424	5.08	931131	6.28	406784	8.61	506684	11.13	237811	16.06	128343	18.57
ZZZZZZ	285556	5.07	993069	6.29	444694	8.61	539845	11.13	265844	16.06	140573	18.57
F16124-2	259744	5.08	905399	6.28	408550	8.61	498490	11.13	277796	16.06	149632	18.56
OP6738-MS	294191	5.08	1090516	6.29	477957	8.62	562644	11.13	268560	16.07	138811	18.57
OP6738-MSD	321762	5.08	1176552	6.29	519305	8.62	612688	11.13	292420	16.06	159341	18.56
ZZZZZZ	266614	5.08	961306	6.28	451189	8.61	598898	11.13	310755	16.06	151281	18.57
ZZZZZZ	249589	5.08	902158	6.28	411116	8.61	534157	11.13	296372	16.06	155996	18.57

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: F16145
Account: TETRPAPT Tetra Tech, NUS
Project: NAS Cecil Field-CTO-248

Method: SW846 8270C Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
F16145-1	L015967.D	55.0	35.0	92.0	81.0	81.0	78.0
F16145-1	L015948.D	52.0	34.0	94.0	89.0	90.0	74.0
F16145-2	L015949.D	42.0	28.0	81.0	66.0	67.0	81.0
F16145-3	L015952.D	51.0	33.0	87.0	95.0	92.0	90.0
F16145-4	L015953.D	59.0	38.0	87.0	91.0	90.0	87.0
F16145-5	L015954.D	53.0	35.0	83.0	82.0	80.0	83.0
F16145-6	L015955.D	53.0	35.0	87.0	88.0	89.0	86.0
OP6735-BS	L015946.D	67.0	46.0	98.0	95.0	96.0	97.0
OP6735 MB	L015947.D	64.0	45.0	92.0	94.0	95.0	84.0
OP6735-MB	L015966.D	66.0	47.0	94.0	96.0	95.0	95.0
OP6735-MS	L015950.D	67.0	52.0	85.0	75.0	75.0	95.0
OP6735-MSD	L015951.D	74.0	57.0	93.0	85.0	87.0	86.0

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	19-90%
S2 = Phenol-d5	10-68%
S3 = 2,4,6-Tribromophenol	36-137%
S4 = Nitrobenzene-d5	49-119%
S5 = 2-Fluorobiphenyl	45-118%
S6 = Terphenyl-d14	46-135%

Initial Calibration Summary

Job Number: F16145
Account: TETRPAPT Tetra Tech, NUS
Project: NAS Cecil Field-CTO-248

Sample: SL859-ICC859
Lab FileID: L015660.D

Response Factor Report MSBNA02

Method : C:\HPCHEM\1\METHODS\8270C.M (RTE Integrator)
Title : SW846 8270C OR EPA 625
Last Update : Mon Dec 16 09:13:17 2002
Response via : Initial Calibration

Calibration Files
5 =L015661.D 25 =L015662.D 50 =L015663.D
75 =L015660.D 100 =L015664.D 125 =L015665.D

		Compound	5	25	50	75	100	125	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------ISTD----------							
2)		1,4-Dioxane	0.519	0.525	0.545	0.527	0.512	0.519	0.524	2.18
3)		N-nitrosodimethylam	0.703	0.756	0.849	0.783	0.794	0.775	0.777	6.14
4)		Pyridine	1.233	1.134	1.281	1.236	1.289	1.253	1.238	4.49
5)		Benzaldehyde		0.241	0.517	0.438	0.413	0.335	0.389	26.98
6)		Aniline	2.021	1.843	1.959	1.691	1.559	1.481	1.759	12.39
7)	S	2-Fluorophenol	1.425	1.334	1.279	1.196	1.104	1.057	1.233	11.37
8)		bis(2-Chloroethyl)e	1.464	1.315	1.428	1.294	1.286	1.221	1.335	6.93
9)	S	Phenol-d5	1.703	1.465	1.526	1.349	1.263	1.212	1.420	12.85
10)	C	Phenol	2.002	1.753	1.759	1.543	1.410		1.693	13.39
11)		2-Chlorophenol	1.518	1.421	1.523	1.391	1.347	1.312	1.419	6.15
12)		1,3-Dichlorobenzene	1.756	1.646	1.622	1.483	1.413	1.391	1.552	9.37
13)	C	1,4-Dichlorobenzene	1.724	1.598	1.628	1.457	1.358	1.345	1.518	10.21
14)		1,2-Dichlorobenzene	1.676	1.538	1.522	1.413	1.295	1.239	1.447	11.31
15)		Benzyl alcohol	0.856	0.817	0.966	0.849	0.819	0.791	0.850	7.24
16)		bis(2-chloroisoprop	3.249	2.851	3.072	2.718	2.504	2.419	2.802	11.49
17)		2-Methylphenol	1.333	1.172	1.294	1.135	1.093	1.042	1.178	9.67
18)		Acetophenone	1.792	1.595	1.662	1.443	1.358	1.307	1.526	12.32
19)		Hexachloroethane	0.632	0.605	0.614	0.570	0.525	0.516	0.577	8.39
20)	P	N-Nitroso-di-n-prop	0.966	0.830	0.904	0.800	0.805	0.771	0.846	8.75
21)		3&4-Methylphenol	1.360	1.133	1.193	1.043	0.981	0.948	1.110	13.81
22)	I	Naphthalene-d8	----------ISTD----------							
23)	S	Nitrobenzene-d5	0.363	0.358	0.370	0.359	0.327	0.321	0.350	5.85
24)		Nitrobenzene	0.381	0.367	0.363	0.349	0.320	0.314	0.349	7.68
25)		Isophorone	0.662	0.626	0.666	0.639	0.628	0.596	0.636	4.07
26)	C	2-Nitrophenol	0.202	0.211	0.218	0.215	0.203	0.197	0.208	3.85
27)		2,4-Dimethylphenol	0.365	0.348	0.355	0.340	0.318	0.298	0.337	7.40
28)		bis(2-Chloroethoxy)	0.471	0.428	0.423	0.410	0.373	0.362	0.411	9.66
29)		Benzoic Acid		0.193	0.263	0.265	0.263	0.241	0.245	12.61
30)	C	2,4-Dichlorophenol	0.327	0.319	0.322	0.302	0.278	0.268	0.303	8.17
31)		1,2,4-Trichlorobenz	0.330	0.320	0.309	0.301	0.276	0.266	0.300	8.37
32)		Naphthalene	1.115	1.081	1.025	0.964	0.864	0.844	0.982	11.39
33)		4-Chloroaniline	0.406	0.392	0.393	0.364	0.323	0.314	0.365	10.59
34)		2,6-Dichlorophenol	0.322	0.302	0.297	0.280	0.253	0.244	0.283	10.60
35)	C	Hexachlorobutadiene	0.199	0.190	0.178	0.174	0.155	0.152	0.175	10.66
36)		Caprolactam	0.082	0.087	0.100	0.093	0.092	0.086	0.090	7.06
37)	C	4-Chloro-3-methylph	0.277	0.270	0.282	0.279	0.256	0.252	0.269	4.75
38)		2-Methylnaphthalene	0.665	0.677	0.676	0.620	0.580	0.564	0.630	7.90
39)		1-Methylnaphthalene	0.671	0.651	0.654	0.612	0.562	0.544	0.616	8.58
40)		1,2,4,5-Tetrachloro	0.298	0.281	0.276	0.260	0.242	0.230	0.264	9.61
41)	I	Acenaphthene-d10	----------ISTD----------							
42)	P	Hexachlorocyclopent	0.232	0.321	0.345	0.350	0.331	0.321	0.317	13.69
43)	C	2,4,6-Trichlorophen	0.424	0.436	0.450	0.438	0.431	0.406	0.431	3.44
44)		2,4,5-Trichlorophen	0.420	0.458	0.475	0.439	0.431	0.408	0.438	5.60

Initial Calibration Summary

Job Number: F16145
Account: TETRPAPT Tetra Tech, NUS
Project: NAS Cecil Field-CTO-248

Sample: SL859-ICC859
Lab FileID: L015660.D

45)	S	2-Fluorobiphenyl	1.633	1.593	1.505	1.469	1.342	1.284	1.471	9.30
46)		1,1'-Biphenyl	1.696	1.741	1.710	1.654	1.550	1.488	1.640	6.08
47)		2-Chloronaphthalene	1.463	1.438	1.354	1.283	1.190	1.129	1.310	10.23
48)		2-Nitroaniline	0.333	0.353	0.378	0.363	0.351	0.344	0.354	4.41
49)		Acenaphthylene	1.915	1.932	1.921	1.826	1.687	1.642	1.821	7.00
50)		Dimethylphthalate	1.387	1.341	1.408	1.330	1.279	1.249	1.332	4.57
51)		2,6-Dinitrotoluene	0.267	0.302	0.322	0.313	0.292	0.282	0.297	6.81
52)	C	Acenaphthene	1.252	1.200	1.175	1.122	1.045	1.009	1.134	8.23
53)		3-Nitroaniline	0.315	0.345	0.349	0.333	0.322	0.326	0.332	4.01
54)	P	2,4-Dinitrophenol		0.128	0.170	0.170	0.174	0.174	0.163	11.98
55)		Dibenzofuran	1.752	1.690	1.595	1.542	1.396	1.342	1.553	10.37
56)		2,4-Dinitrotoluene	0.346	0.374	0.375	0.350	0.326	0.323	0.349	6.42
57)	P	4-Nitrophenol	0.116	0.137	0.144	0.147	0.141	0.140	0.137	7.95
58)		2,3,4,6-Tetrachloro	0.233	0.278	0.290	0.281	0.277	0.269	0.271	7.40
59)		Fluorene	1.343	1.338	1.313	1.244	1.152	1.104	1.249	8.11
60)		4-Chlorophenyl-phen	0.621	0.605	0.604	0.569	0.529	0.488	0.569	9.07
61)		Diethylphthalate	1.210	1.204	1.224	1.136	1.057	1.011	1.140	7.81
62)		4-Nitroaniline	0.247	0.276	0.304	0.278	0.276	0.284	0.277	6.68
63)	I	Phenanthrene-d10	----------ISTD----------							
64)		4,6-Dinitro-2-methy		0.157	0.180	0.176	0.176	0.170	0.172	5.12
65)	C	n-Nitrosodiphenylam	0.730	0.703	0.697	0.670	0.644	0.599	0.674	6.99
66)		1,2-Diphenylhydrazi	1.038	1.014	0.984	0.967	0.904	0.832	0.957	8.00
67)	S	2,4,6-Tribromopheno	0.114	0.113	0.113	0.110	0.104	0.098	0.109	5.94
68)		4-Bromophenyl-pheny	0.250	0.241	0.239	0.228	0.223	0.206	0.231	6.81
69)		Hexachlorobenzene	0.239	0.231	0.239	0.223	0.219	0.204	0.226	5.96
70)		Atrazine	0.128	0.148	0.154	0.147	0.141	0.137	0.143	6.68
71)	C	Pentachlorophenol		0.122	0.144	0.143	0.134	0.135	0.136	6.53
72)		Phenanthrene	1.315	1.247	1.221	1.167	1.083	1.059	1.182	8.34
73)		Anthracene	1.362	1.272	1.216	1.160	1.116	1.060	1.198	9.12
74)		Carbazole	1.076	1.079	1.066	0.954	0.914	0.925	1.002	7.91
75)		Di-n-butylphthalate	1.129	1.237	1.325	1.243	1.155	1.123	1.202	6.65
76)	C	Fluoranthene	1.013	1.045	1.045	0.997	0.910	0.932	0.990	5.81
77)	I	Chrysene-d12	----------ISTD----------							
78)		Benzidine		0.288	0.410	0.343	0.339	0.367	0.349	12.73
79)		Pyrene	1.978	1.958	2.379	2.197	2.163	2.165	2.140	7.27
80)	S	Terphenyl-d14	1.156	1.096	1.335	1.298	1.273	1.243	1.234	7.32
81)		Butylbenzylphthalat	0.577	0.683	0.899	0.858	0.835	0.858	0.785	16.09
		----- Linear regression ----- Coefficient = 0.9971								
		Response Ratio = -0.04639 + 0.87136 *A								
82)		3,3'-Dichlorobenzid	0.318	0.357	0.379	0.350	0.351	0.354	0.351	5.55
83)		Benzo[a]anthracene	1.155	1.216	1.350	1.304	1.302	1.308	1.273	5.67
84)		Chrysene	1.287	1.304	1.326	1.267	1.244	1.265	1.282	2.33
85)		bis(2-Ethylhexyl)ph	0.671	0.845	1.087	1.039	1.026	1.070	0.956	17.22
		----- Linear regression ----- Coefficient = 0.9976								
		Response Ratio = -0.07694 + 1.08296 *A								
86)	I	Perylene-d12	----------ISTD----------							
87)	C	Di-n-octylphthalate	1.497	2.041	2.732	2.786	2.857	2.628	2.424	22.30
		----- Linear regression ----- Coefficient = 0.9931								
		Response Ratio = -0.19439 + 2.80248 *A								
88)		Benzo[b]fluoranthen	1.469	1.497	1.677	1.616	1.681	1.588	1.588	5.62
89)		Benzo[k]fluoranthen	1.632	1.674	1.746	1.647	1.688	1.633	1.670	2.60
90)	C	Benzo[a]pyrene	1.267	1.407	1.517	1.409	1.452	1.394	1.408	5.84
91)		Indeno[1,2,3-cd]pyr	0.786	0.968	0.970	0.941	1.030	1.032	0.954	9.46
92)		Dibenz[a,h]anthrace	0.787	1.007	1.024	1.002	1.018	1.074	0.985	10.20

Initial Calibration Summary

Job Number: F16145
Account: TETRPAPT Tetra Tech, NUS
Project: NAS Cecil Field-CTO-248

Sample: SL859-ICC859
Lab FileID: L015660.D

93)	Benzo[g,h,i]perylen	1.057	1.187	1.092	1.108	1.163	1.168	1.129	4.53

(#) = Out of Range

8270C.M Mon Dec 16 09:41:35 2002

Continuing Calibration Summary

Job Number: F16145
Account: TETRPAPT Tetra Tech, NUS
Project: NAS Cecil Field-CTO-248

Sample: SL871-CC859
Lab FileID: L015938.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\011403\L015938.D
Acq On : 14 Jan 2003 9:31 am
Sample : cc859-75
Misc : op6727,sl871,1000,,,1,1,water
MS Integration Params: RTEINT.P

Vial: 2
Operator: marke
Inst : MSBNA02
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270C.M (RTE Integrator)
Title : SW846 8270C OR EPA 625
Last Update : Tue Jan 14 09:54:50 2003
Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	85	0.00	5.08
2		1,4-Dioxane	0.524	0.557	-6.3	90	0.00	1.56
3		N-nitrosodimethylamine	0.777	0.788	-1.4	86	-0.09	2.22
4		Pyridine	1.238	1.200	3.1	82	-0.08	2.27
5		Benzaldehyde	0.389	0.411	-5.7	80	0.00	4.70
6		Aniline	1.759	1.558	11.4	78	0.00	4.80
7	S	2-Fluorophenol	1.233	1.225	0.6	87	-0.01	3.95
8		bis(2-Chloroethyl)ether	1.335	1.298	2.8	85	0.00	4.86
9	S	Phenol-d5	1.420	1.359	4.3	86	0.00	4.78
10	C	Phenol	1.693	1.564	7.6	86	0.00	4.79
11		2-Chlorophenol	1.419	1.395	1.7	85	0.00	4.90
12		1,3-Dichlorobenzene	1.552	1.520	2.1	87	0.00	5.02
13	C	1,4-Dichlorobenzene	1.518	1.499	1.3	87	0.00	5.09
14		1,2-Dichlorobenzene	1.447	1.423	1.7	86	0.00	5.22
15		Benzyl alcohol	0.850	0.857	-0.8	86	0.00	5.20
16		bis(2-chloroisopropyl)eth	2.802	2.706	3.4	85	0.00	5.31
17		2-Methylphenol	1.178	1.134	3.7	85	0.00	5.30
18		Acetophenone	1.526	1.468	3.8	86	0.00	5.44
19		Hexachloroethane	0.577	0.571	1.0	85	0.00	5.53
20	P	N-Nitroso-di-n-propylamin	0.846	0.815	3.7	87	0.00	5.44
21		3&4-Methylphenol	1.110	1.047	5.7	85	0.00	5.43
22	I	Naphthalene-d8	1.000	1.000	0.0	86	0.00	6.29
23	S	Nitrobenzene-d5	0.350	0.345	1.4	83	0.00	5.57
24		Nitrobenzene	0.349	0.346	0.9	85	0.00	5.59
25		Isophorone	0.636	0.635	0.2	85	0.00	5.82
26	C	2-Nitrophenol	0.208	0.215	-3.4	86	0.00	5.89
27		2,4-Dimethylphenol	0.337	0.334	0.9	84	0.00	5.93
28		bis(2-Chloroethoxy)methan	0.411	0.406	1.2	85	0.00	6.03
29		Benzoic Acid	0.245	0.246	-0.4	80	0.00	6.10
30	C	2,4-Dichlorophenol	0.303	0.311	-2.6	88	0.00	6.14
31		1,2,4-Trichlorobenzene	0.300	0.313	-4.3	89	0.00	6.23
32		Naphthalene	0.982	0.980	0.2	87	0.00	6.31
33		4-Chloroaniline	0.365	0.356	2.5	84	0.00	6.37
34		2,6-Dichlorophenol	0.283	0.281	0.7	86	0.00	6.38
35	C	Hexachlorobutadiene	0.175	0.176	-0.6	87	0.00	6.44
36		Caprolactam	0.090	0.095	-5.6	88	0.00	6.85
37	C	4-Chloro-3-methylphenol	0.269	0.271	-0.7	83	0.00	6.93
38		2-Methylnaphthalene	0.630	0.642	-1.9	89	0.00	7.13
39		1-Methylnaphthalene	0.616	0.617	-0.2	86	0.00	7.25
40		1,2,4,5-Tetrachlorobenzen	0.264	0.264	0.0	87	0.00	7.35

Continuing Calibration Summary

Job Number: F16145
Account: TETRPAPT Tetra Tech, NUS
Project: NAS Cecil Field-CTO-248

Sample: SL871-CC859
Lab FileID: L015938.D

41	I	Acenaphthene-d10	1.000	1.000	0.0	85	0.00	8.61
42	P	Hexachlorocyclopentadiene	0.317	0.329	-3.8	80	0.00	7.33
43	C	2,4,6-Trichlorophenol	0.431	0.449	-4.2	87	0.00	7.50
44		2,4,5-Trichlorophenol	0.438	0.453	-3.4	88	0.00	7.55
45	S	2-Fluorobiphenyl	1.471	1.459	0.8	84	0.00	7.62
46		1,1'-Biphenyl	1.640	1.653	-0.8	85	0.00	7.76
47		2-Chloronaphthalene	1.310	1.319	-0.7	87	0.00	7.79
48		2-Nitroaniline	0.354	0.371	-4.8	87	0.00	7.94
49		Acenaphthylene	1.821	1.856	-1.9	86	0.00	8.40
50		Dimethylphthalate	1.332	1.264	5.1	81	0.00	8.23
51		2,6-Dinitrotoluene	0.297	0.297	0.0	81	0.00	8.32
52	C	Acenaphthene	1.134	1.149	-1.3	87	0.00	8.67
53		3-Nitroaniline	0.332	0.350	-5.4	90	0.00	8.57
54	P	2,4-Dinitrophenol	0.163	0.169	-3.7	85	0.00	8.75
55		Dibenzofuran	1.553	1.576	-1.5	87	0.00	8.95
56		2,4-Dinitrotoluene	0.349	0.369	-5.7	90	0.00	8.96
57	P	4-Nitrophenol	0.137	0.148	-8.0	86	0.00	8.88
58		2,3,4,6-Tetrachlorophenol	0.271	0.282	-4.1	85	0.00	9.15
59		Fluorene	1.249	1.274	-2.0	87	0.00	9.51
60		4-Chlorophenyl-phenylethe	0.569	0.588	-3.3	88	0.00	9.54
61		Diethylphthalate	1.140	1.138	0.2	85	0.00	9.39
62		4-Nitroaniline	0.277	0.295	-6.5	90	0.00	9.58
63	I	Phenanthrene-d10	1.000	1.000	0.0	85	0.00	11.14
64		4,6-Dinitro-2-methylpheno	0.172	0.171	0.6	83	0.00	9.65
65	C	n-Nitrosodiphenylamine	0.674	0.670	0.6	86	0.00	9.75
66		1,2-Diphenylhydrazine	0.957	0.935	2.3	83	0.00	9.81
67	S	2,4,6-Tribromophenol	0.109	0.114	-4.6	89	0.00	9.92
68		4-Bromophenyl-phenylether	0.231	0.230	0.4	86	0.00	10.38
69		Hexachlorobenzene	0.226	0.233	-3.1	89	0.00	10.45
70		Atrazine	0.143	0.100	30.1#	58	0.00	10.73
71	C	Pentachlorophenol	0.136	0.140	-2.9	83	0.00	10.82
72		Phenanthrene	1.182	1.207	-2.1	88	0.00	11.18
73		Anthracene	1.198	1.214	-1.3	89	0.00	11.27
74		Carbazole	1.002	1.058	-5.6	95	0.00	11.59
75		Di-n-butylphthalate	1.202	1.338	-11.3	92	0.02	12.37
76	C	Fluoranthene	0.990	1.085	-9.6	93	0.03	13.36
77	I	Chrysene-d12	1.000	1.000	0.0	107	0.00	16.07
78		Benzidine	0.349	0.216	38.1#	67	0.00	13.69
79		Pyrene	2.140	1.945	9.1	95	-0.02	13.77
80	S	Terphenyl-d14	1.234	1.155	6.4	95	0.00	14.17
		----------	True	Calc.	% Drift	----------		
81		Butylbenzylphthalate	75.000	72.053	3.9	101	0.00	15.18
		----------	AvgRF	CCRF	% Dev	----------		
82		3,3'-Dichlorobenzidine	0.351	0.414	-17.9	126	0.00	16.08
83		Benzo[a]anthracene	1.273	1.324	-4.0	108	0.00	16.05
84		Chrysene	1.282	1.313	-2.4	111	0.00	16.12
		----------	True	Calc.	% Drift	----------		
85		bis(2-Ethylhexyl)phthalat	75.000	75.030	-0.0	107	0.02	16.36
		----------	AvgRF	CCRF	% Dev	----------		
86	I	Perylene-d12	1.000	1.000	0.0	126	0.00	18.57
		----------	True	Calc.	% Drift	----------		
87	C	Di-n-octylphthalate	75.000	70.365	6.2	114	0.00	17.55

Continuing Calibration Summary

Job Number: F16145
Account: TETRPAPT Tetra Tech, NUS
Project: NAS Cecil Field-CTO-248

Sample: SL871-CC859
Lab FileID: L015938.D

		AvgRF	CCRF	% Dev			
88	Benzo[b]fluoranthene	1.588	1.666	-4.9	129	0.00	17.96
89	Benzo[k]fluoranthene	1.670	1.757	-5.2	134	0.00	18.01
90 C	Benzo[a]pyrene	1.408	1.410	-0.1	126	0.00	18.48
91	Indeno[1,2,3-cd]pyrene	0.954	1.092	-14.5	146	0.02	20.15
92	Dibenz[a,h]anthracene	0.985	1.076	-9.2	135	0.02	20.20
93	Benzo[g,h,i]perylene	1.129	1.242	-10.0	141	0.01	20.50

(2.3 %) 2 of 87 compounds'%D > 20

(#) = Out of Range SPCC's out = 0 CCC's out = 0
L015660.D 8270C.M Wed Jan 15 10:24:40 2003

Continuing Calibration Summary

Job Number: F16145
Account: TETRPAPT Tetra Tech, NUS
Project: NAS Cecil Field-CTO-248

Sample: SL872-CC859
Lab FileID: L015965.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\011503\L015965.D Vial: 2
Acq On : 15 Jan 2003 9:29 am Operator: marke
Sample : cc859-50 Inst : MSBNA02
Misc : op6735,sl872,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\8270C.M (RTE Integrator)
Title : SW846 8270C OR EPA 625
Last Update : Tue Jan 14 09:54:50 2003
Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	73	0.00	5.07
2		1,4-Dioxane	0.524	0.569	-8.6	77	0.00	1.55
3		N-nitrosodimethylamine	0.777	0.788	-1.4	68	-0.10	2.21
4		Pyridine	1.238	1.112	10.2	64	-0.09	2.26
5		Benzaldehyde	0.389	0.499	-28.3#	71	0.00	4.70
6		Aniline	1.759	1.769	-0.6	66	0.00	4.80
7	S	2-Fluorophenol	1.233	1.304	-5.8	75	-0.02	3.95
8		bis(2-Chloroethyl)ether	1.335	1.339	-0.3	69	0.00	4.85
9	S	Phenol-d5	1.420	1.465	-3.2	70	0.00	4.77
10	C	Phenol	1.693	1.720	-1.6	72	0.00	4.78
11		2-Chlorophenol	1.419	1.467	-3.4	71	0.00	4.90
12		1,3-Dichlorobenzene	1.552	1.649	-6.2	75	0.00	5.03
13	C	1,4-Dichlorobenzene	1.518	1.596	-5.1	72	0.00	5.09
14		1,2-Dichlorobenzene	1.447	1.506	-4.1	73	0.00	5.22
15		Benzyl alcohol	0.850	0.872	-2.6	66	0.00	5.20
16		bis(2-chloroisopropyl)eth	2.802	2.901	-3.5	69	0.00	5.31
17		2-Methylphenol	1.178	1.163	1.3	66	0.00	5.29
18		Acetophenone	1.526	1.543	-1.1	68	0.00	5.43
19		Hexachloroethane	0.577	0.602	-4.3	72	0.00	5.52
20	P	N-Nitroso-di-n-propylamin	0.846	0.832	1.7	68	0.00	5.43
21		3&4-Methylphenol	1.110	1.114	-0.4	69	0.00	5.43
22	I	Naphthalene-d8	1.000	1.000	0.0	68	0.00	6.29
23	S	Nitrobenzene-d5	0.350	0.359	-2.6	66	0.00	5.57
24		Nitrobenzene	0.349	0.363	-4.0	68	0.00	5.59
25		Isophorone	0.636	0.657	-3.3	67	0.00	5.82
26	C	2-Nitrophenol	0.208	0.218	-4.8	68	0.00	5.89
27		2,4-Dimethylphenol	0.337	0.344	-2.1	66	0.00	5.93
28		bis(2-Chloroethoxy)methan	0.411	0.424	-3.2	68	0.00	6.02
29		Benzoic Acid	0.245	0.243	0.8	63	-0.02	6.07
30	C	2,4-Dichlorophenol	0.303	0.324	-6.9	68	0.00	6.14
31		1,2,4-Trichlorobenzene	0.300	0.321	-7.0	70	0.00	6.22
32		Naphthalene	0.982	1.036	-5.5	69	0.00	6.31
33		4-Chloroaniline	0.365	0.401	-9.9	69	0.00	6.37
34		2,6-Dichlorophenol	0.283	0.297	-4.9	68	0.00	6.37
35	C	Hexachlorobutadiene	0.175	0.187	-6.9	71	0.00	6.44
36		Caprolactam	0.090	0.107	-18.9	72	-0.03	6.82
37	C	4-Chloro-3-methylphenol	0.269	0.290	-7.8	70	0.00	6.93
38		2-Methylnaphthalene	0.630	0.683	-8.4	69	0.00	7.12
39		1-Methylnaphthalene	0.616	0.674	-9.4	70	0.00	7.25
40		1,2,4,5-Tetrachlorobenzen	0.264	0.289	-9.5	71	0.00	7.34

Continuing Calibration Summary

Job Number: F16145
Account: TETRPAPT Tetra Tech, NUS
Project: NAS Cecil Field-CTO-248

Sample: SL872-CC859
Lab FileID: L015965.D

41	I	Acenaphthene-d10	1.000	1.000	0.0	69	0.00	8.62
42	P	Hexachlorocyclopentadiene	0.317	0.305	3.8	61	-0.01	7.33
43	C	2,4,6-Trichlorophenol	0.431	0.447	-3.7	69	0.00	7.50
44		2,4,5-Trichlorophenol	0.438	0.474	-8.2	69	-0.01	7.55
45	S	2-Fluorobiphenyl	1.471	1.540	-4.7	71	0.00	7.62
46		1,1'-Biphenyl	1.640	1.706	-4.0	69	0.00	7.76
47		2-Chloronaphthalene	1.310	1.369	-4.5	70	-0.01	7.78
48		2-Nitroaniline	0.354	0.386	-9.0	71	0.00	7.94
49		Acenaphthylene	1.821	1.933	-6.2	70	0.00	8.39
50		Dimethylphthalate	1.332	1.418	-6.5	70	0.00	8.23
51		2,6-Dinitrotoluene	0.297	0.342	-15.2	74	0.00	8.32
52	C	Acenaphthene	1.134	1.199	-5.7	71	0.00	8.66
53		3-Nitroaniline	0.332	0.387	-16.6	77	0.00	8.57
54	P	2,4-Dinitrophenol	0.163	0.168	-3.1	68	0.00	8.74
55		Dibenzofuran	1.553	1.662	-7.0	72	0.00	8.94
56		2,4-Dinitrotoluene	0.349	0.400	-14.6	74	0.00	8.95
57	P	4-Nitrophenol	0.137	0.159	-16.1	76	0.00	8.88
58		2,3,4,6-Tetrachlorophenol	0.271	0.304	-12.2	73	0.00	9.15
59		Fluorene	1.249	1.357	-8.6	72	0.00	9.51
60		4-Chlorophenyl-phenylethe	0.569	0.628	-10.4	72	0.00	9.53
61		Diethylphthalate	1.140	1.289	-13.1	73	0.00	9.39
62		4-Nitroaniline	0.277	0.346	-24.9#	79	0.00	9.57
63	I	Phenanthrene-d10	1.000	1.000	0.0	73	0.00	11.13
64		4,6-Dinitro-2-methylpheno	0.172	0.179	-4.1	73	-0.01	9.64
65	C	n-Nitrosodiphenylamine	0.674	0.713	-5.8	75	0.00	9.75
66		1,2-Diphenylhydrazine	0.957	0.999	-4.4	74	-0.01	9.81
67	S	2,4,6-Tribromophenol	0.109	0.117	-7.3	76	-0.01	9.92
68		4-Bromophenyl-phenylether	0.231	0.239	-3.5	73	0.00	10.38
69		Hexachlorobenzene	0.226	0.238	-5.3	73	0.00	10.45
70		Atrazine	0.143	0.127	11.2	60	0.00	10.74
71	C	Pentachlorophenol	0.136	0.147	-8.1	74	0.00	10.82
72		Phenanthrene	1.182	1.267	-7.2	76	0.00	11.17
73		Anthracene	1.198	1.279	-6.8	77	0.00	11.27
74		Carbazole	1.002	1.133	-13.1	78	0.00	11.59
75		Di-n-butylphthalate	1.202	1.432	-19.1	79	0.02	12.37
76	C	Fluoranthene	0.990	1.160	-17.2	81	0.02	13.36
77	I	Chrysene-d12	1.000	1.000	0.0	98	0.00	16.07
78		Benzidine	0.349	0.325	6.9	77	0.00	13.69
79		Pyrene	2.140	1.998	6.6	82	-0.02	13.76
80	S	Terphenyl-d14	1.234	1.162	5.8	85	-0.01	14.17
		----------	True	Calc.	% Drift	----------		
81		Butylbenzylphthalate	50.000	49.835	0.3	90	0.00	15.19
		----------	AvgRF	CCRF	% Dev	----------		
82		3,3'-Dichlorobenzidine	0.351	0.418	-19.1	108	0.00	16.08
83		Benzo[a]anthracene	1.273	1.367	-7.4	99	0.00	16.05
84		Chrysene	1.282	1.344	-4.8	99	0.00	16.12
		----------	True	Calc.	% Drift	----------		
85		bis(2-Ethylhexyl)phthalat	50.000	52.016	-4.0	96	0.01	16.36
		----------	AvgRF	CCRF	% Dev	----------		
86	I	Perylene-d12	1.000	1.000	0.0	106	0.00	18.57
		----------	True	Calc.	% Drift	----------		
87	C	Di-n-octylphthalate	50.000	53.137	-6.3	110	0.00	17.55

Continuing Calibration Summary

Job Number: F16145
Account: TETRPAPT Tetra Tech, NUS
Project: NAS Cecil Field-CTO-248

Sample: SL872-CC859
Lab FileID: L015965.D

		AvgRF	CCRF	% Dev			
88	Benzo[b]fluoranthene	1.588	1.706	-7.4	108	0.00	17.95
89	Benzo[k]fluoranthene	1.670	1.824	-9.2	111	0.00	18.01
90 C	Benzo[a]pyrene	1.408	1.552	-10.2	109	0.00	18.48
91	Indeno[1,2,3-cd]pyrene	0.954	1.063	-11.4	116	0.01	20.15
92	Dibenz[a,h]anthracene	0.985	1.077	-9.3	112	0.01	20.19
93	Benzo[g,h,i]perylene	1.129	1.250	-10.7	122	0.00	20.50

(2.3 %) 2 of 87 compounds'%D > 20

(#) = Out of Range SPCC's out = 0 CCC's out = 0
L015663.D 8270C.M Thu Jan 16 09:13:45 2003

TETRA TECH NUS, INC.

CHAIN OF CUSTODY

NUMBER 0389 F16145

PAGE 1 OF 1

PROJECT NO: N4248	FACILITY: NASCF TANKS 81 ABC	PROJECT MANAGER: PAUL CALLOWAY	PHONE NUMBER: 813-806-0202
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER: MERV DALE	PHONE NUMBER: 904-636-6125
		CARRIER/WAYBILL NUMBER	

LABORATORY NAME AND CONTACT: ACCUTEST Sue Bell

ADDRESS: 4405 VineLand Rd., C-15

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

PRESERVATIVE USED: None

TYPE OF ANALYSIS: SELECT SVOCS 8270

	DATE YEAR 2003	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		COMMENTS
1)	1/8	1120	CEF-81-GW-1I-03	1I			GW	G	2	2	Cool to 4°C
2)	1/8	1215	CEF-81-GW-8SR-03	8SR	MS/MSD		GW	G	6	6	N4248
3)	1/8	1145	CEF-81-GW-9S-03	9S			GW	G	2	2	WK 105
4)	1/8	1400	CEF-81-GW-13S-03	13S			GW	G	2	2	
5)	1/8	1405	CEF-81-GW-14S-03	14S			GW	G	2	2	
6)	1/8	0000	CEF-81-GW-DUP1-03				GW	G	2	2	

1. RELINQUISHED BY	DATE 1/10/03	TIME 1300	1. RECEIVED BY	DATE 1/10/03	TIME 12:50
2. RELINQUISHED BY	DATE 1/10/03	TIME 15:10	2. RECEIVED BY	DATE 1/10/03	TIME 1510
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS: 2.4, 3.0, 2.6, 2.0, 2.4, 2.8, 3.0, 3.2, 2.0

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R

FORM NO. TtNUS-001

ATTACHMENT C

GROUNDWATER ANALYTICAL REPORT
MARCH 13, 2003

Southeast ACCUTEST Laboratories

04/17/03

Technical Report for

Tetra Tech, NUS

Building 81, Tanks 81A,B,&C Cecil Field

N4248 WR-resampling

Accutest Job Number: F16964

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: F16964

Building 81, Tanks 81A,B,&C Cecil Field
Project No: N4248 WR-resampling

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F16964-1	03/13/03	11:25 MD	03/15/03	AQ	Ground Water	CEF-81-GW-01I-04
F16964-2	03/13/03	12:10 MD	03/15/03	AQ	Ground Water	CEF-81-GW-9S-04
F16964-3	03/13/03	14:45 MD	03/15/03	AQ	Ground Water	CEF-81-GW-14S-04
F16964-4	03/13/03	15:20 MD	03/15/03	AQ	Ground Water	CEF-81-GW-8SR-04
F16964-5	03/13/03	16:30 MD	03/15/03	AQ	Ground Water	CEF-81-GW-13S-04
F16964 6	03/13/03	00:00 MD	03/15/03	AQ	Ground Water	CEF-81-GW-DUP1-04

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-81-GW-01I-04		
Lab Sample ID:	F16964-1	Date Sampled:	03/13/03
Matrix:	AQ - Ground Water	Date Received:	03/15/03
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Building 81, Tanks 81A,B,&C Cecil Field		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0020902.D	1	03/24/03	JG	n/a	n/a	VG725
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	11.6	1.0	0.50	ug/l	
91-20-3	Naphthalene	45.0	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	5.7	1.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	2.0	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	114%		86-115%
17060-07-0	1,2 Dichloroethane-D4	113%		78-125%
2037-26-5	Toluene-D8	93%		87-113%
460-00-4	4-Bromofluorobenzene	94%		84-117%

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

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-81-GW-9S-04		
Lab Sample ID:	F16964-2	Date Sampled:	03/13/03
Matrix:	AQ - Ground Water	Date Received:	03/15/03
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Building 81, Tanks 81A,B,&C Cecil Field		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0020916.D	1	03/25/03	JG	n/a	n/a	VG727
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	4.8	1.0	0.50	ug/l	
91-20-3	Naphthalene	65.0	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	32.6	1.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	8.2	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		86-115%
17060-07-0	1,2-Dichloroethane-D4	116%		78-125%
2037-26-5	Toluene-D8	97%		87-113%
460-00-4	4-Bromofluorobenzene	96%		84-117%

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

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

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-81-GW-14S-04		
Lab Sample ID:	F16964-3	Date Sampled:	03/13/03
Matrix:	AQ - Ground Water	Date Received:	03/15/03
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Building 81, Tanks 81A,B,&C Cecil Field		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0020903.D	1	03/24/03	JG	n/a	n/a	VG725
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.50	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		86-115%
17060-07-0	1,2-Dichloroethane-D4	111%		78-125%
2037-26-5	Toluene-D8	92%		87-113%
460-00-4	4-Bromofluorobenzene	96%		84-117%

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

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

Report of Analysis

Client Sample ID:	CEF-81-GW-8SR-04		
Lab Sample ID:	F16964-4	Date Sampled:	03/13/03
Matrix:	AQ - Ground Water	Date Received:	03/15/03
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Building 81, Tanks 81A,B,&C Cecil Field		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0020914.D	1	03/25/03	JG	n/a	n/a	VG727
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.50	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		86-115%
17060-07-0	1,2-Dichloroethane-D4	106%		78-125%
2037-26-5	Toluene-D8	99%		87-113%
460-00-4	4-Bromofluorobenzene	98%		84-117%

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

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

Report of Analysis

Client Sample ID:	CEF-81-GW-13S-04		
Lab Sample ID:	F16964-5	Date Sampled:	03/13/03
Matrix:	AQ - Ground Water	Date Received:	03/15/03
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Building 81, Tanks 81A,B,&C Cecil Field		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0020915.D	1	03/25/03	JG	n/a	n/a	VG727
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.50	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		86-115%
17060-07-0	1,2-Dichloroethane-D4	113%		78-125%
2037-26-5	Toluene-D8	98%		87-113%
460-00-4	4-Bromofluorobenzene	100%		84-117%

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

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

Report of Analysis

Client Sample ID:	CEF-81-GW-DUP1-04		
Lab Sample ID:	F16964-6	Date Sampled:	03/13/03
Matrix:	AQ - Ground Water	Date Received:	03/15/03
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Building 81, Tanks 81A,B,&C Cecil Field		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0020904.D	1	03/24/03	JG	n/a	n/a	VG725
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	12.1	1.0	0.50	ug/l	
91-20-3	Naphthalene	40.2	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	5.3	1.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	1.7	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	114%		86-115%
17060-07-0	1,2-Dichloroethane-D4	111%		78-125%
2037-26-5	Toluene-D8	93%		87-113%
460-00-4	4-Bromofluorobenzene	94%		84-117%

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

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

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Blank Spike Summary

Job Number: F16964
Account: TETRPAPT Tetra Tech, NUS
Project: Building 81, Tanks 81A,B,&C Cecil Field

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG725-BS	G0020882.D	1	03/24/03	JG	n/a	n/a	VG725

The QC reported here applies to the following samples: Method: SW846 8260B

F16964-1, F16964-3, F16964-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
98-82-8	Isopropylbenzene	25	27.9	112	71-126
91-20-3	Naphthalene	25	23.6	94	64-122
95-63-6	1,2,4-Trimethylbenzene	25	25.6	102	76-124
108-67-8	1,3,5-Trimethylbenzene	25	25.8	103	75-121

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	104%	86-115%
17060-07-0	1,2-Dichloroethane-D4	101%	78-125%
2037-26-5	Toluene-D8	94%	87-113%
460-00-4	4-Bromofluorobenzene	97%	84-117%

Blank Spike Summary

Job Number: F16964
Account: TETRPAPT Tetra Tech, NUS
Project: Building 81, Tanks 81A,B,&C Cecil Field

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG727-BS	G0020912.D	1	03/25/03	JG	n/a	n/a	VG727

The QC reported here applies to the following samples: Method: SW846 8260B

F16964-2, F16964-4, F16964-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
98-82-8	Isopropylbenzene	25	28.8	115	71-126
91-20-3	Naphthalene	25	25.0	100	64-122
95-63-6	1,2,4-Trimethylbenzene	25	26.1	104	76-124
108-67-8	1,3,5-Trimethylbenzene	25	27.5	110	75-121

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	86-115%
17060-07-0	1,2-Dichloroethane-D4	101%	78-125%
2037-26-5	Toluene-D8	99%	87-113%
460-00-4	4-Bromofluorobenzene	99%	84-117%

Duplicate Summary

Job Number: F16964
Account: TETRPAPT Tetra Tech, NUS
Project: Building 81, Tanks 81A,B,&C Cecil Field

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F16962-6DUP	G0020928.D	1	03/25/03	JG	n/a	n/a	VG727
F16962-6	G0020929.D	1	03/25/03	JG	n/a	n/a	VG727

The QC reported here applies to the following samples: Method: SW846 8260B

F16964-2, F16964-4, F16964-5

CAS No.	Compound	F16962-6 ug/l	Q	DUP ug/l	Q	RPD	Limits
98-82-8	Isopropylbenzene	ND		ND		nc	
91-20-3	Naphthalene	ND		ND		nc	
95-63-6	1,2,4-Trimethylbenzene	ND		ND		nc	
108-67-8	1,3,5-Trimethylbenzene	ND		ND		nc	

CAS No.	Surrogate Recoveries	DUP	F16962-6	Limits
1868-53-7	Dibromofluoromethane	109%	110%	86-115%
17060-07-0	1,2-Dichloroethane-D4	114%	115%	78-125%
2037-26-5	Toluene-D8	98%	97%	87-113%
460-00-4	4-Bromofluorobenzene	101%	98%	84-117%

Method Blank Summary

Job Number: F16964
Account: TETRPAPT Tetra Tech, NUS
Project: Building 81, Tanks 81A,B,&C Cecil Field

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG725-MB	G0020883.D	1	03/24/03	JG	n/a	n/a	VG725

The QC reported here applies to the following samples: Method: SW846 8260B

F16964-1, F16964-3, F16964-6

CAS No.	Compound	Result	RL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	110%	86-115%
17060-07-0	1,2-Dichloroethane-D4	109%	78-125%
2037-26-5	Toluene-D8	93%	87-113%
460-00-4	4-Bromofluorobenzene	97%	84-117%

Method Blank Summary

Job Number: F16964
Account: TETRPAPT Tetra Tech, NUS
Project: Building 81, Tanks 81A,B,&C Cecil Field

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG727-MB	G0020913.D	1	03/25/03	JG	n/a	n/a	VG727

The QC reported here applies to the following samples: Method: SW846 8260B

F16964-2, F16964-4, F16964-5

CAS No.	Compound	Result	RL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	ug/l	
91 20 3	Naphthalene	ND	2.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	108%	86-115%
17060-07-0	1,2-Dichloroethane-D4	107%	78-125%
2037-26-5	Toluene-D8	100%	87-113%
460-00-4	4-Bromofluorobenzene	97%	84-117%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F16964
Account: TETRPAPT Tetra Tech, NUS
Project: Building 81, Tanks 81A,B,&C Cecil Field

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F16964-2MS	G0020919.D	1	03/25/03	JG	n/a	n/a	VG727
F16964-2MSD	G0020920.D	1	03/25/03	JG	n/a	n/a	VG727
F16964-2	G0020916.D	1	03/25/03	JG	n/a	n/a	VG727

The QC reported here applies to the following samples: Method: SW846 8260B

F16964-2, F16964-4, F16964-5

CAS No.	Compound	F16964-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
98-82-8	Isopropylbenzene	4.8		25	34.1	117	34.4	118	1	67-124/9
91-20-3	Naphthalene	65.0		25	91.1	104	93.6	114	3	50-130/17
95-63-6	1,2,4-Trimethylbenzene	32.6		25	58.2	102	57.6	100	1	71-124/8
108-67-8	1,3,5-Trimethylbenzene	8.2		25	35.5	109	35.0	107	1	71-119/7

CAS No.	Surrogate Recoveries	MS	MSD	F16964-2	Limits
1868-53-7	Dibromofluoromethane	106%	105%	112%	86-115%
17060-07-0	1,2-Dichloroethane-D4	110%	106%	116%	78-125%
2037-26-5	Toluene-D8	101%	98%	97%	87-113%
460-00-4	4-Bromofluorobenzene	99%	94%	96%	84-117%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F16964
Account: TETRPAPT Tetra Tech, NUS
Project: Building 81, Tanks 81A,B,&C Cecil Field

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F16987-7MS	G0020890.D	1	03/24/03	JG	n/a	n/a	VG725
F16987-7MSD	G0020891.D	1	03/24/03	JG	n/a	n/a	VG725
F16987-7	G0020887.D	1	03/24/03	JG	n/a	n/a	VG725

The QC reported here applies to the following samples: Method: SW846 8260B

F16964-1, F16964-3, F16964-6

CAS No.	Compound	F16987-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
98-82-8	Isopropylbenzene	68.6		25	96.2	110	92.2	94	4	67-124/9
91-20-3	Naphthalene	18.2		25	36.7	74	37.4	77	2	50-130/17
95-63-6	1,2,4-Trimethylbenzene	28.6		25	45.1	66*	46.2	70*	2	71-124/8
108-67-8	1,3,5-Trimethylbenzene	5.9		25	30.0	96	30.2	97	1	71-119/7

CAS No.	Surrogate Recoveries	MS	MSD	F16987-7	Limits
1868-53-7	Dibromofluoromethane	104%	104%	108%	86-115%
17060-07-0	1,2-Dichloroethane-D4	100%	97%	101%	78-125%
2037-26-5	Toluene-D8	95%	97%	93%	87-113%
460-00-4	4-Bromofluorobenzene	98%	100%	99%	84-117%

Instrument Performance Check (BFB)

Job Number: F16964
Account: TETRPAPT Tetra Tech, NUS
Project: Building 81, Tanks 81A,B,&C Cecil Field

Sample:	VG725-BFB	Injection Date:	03/24/03
Lab File ID:	G0020879.D	Injection Time:	11:01
Instrument ID:	GCMSG		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	14278	23.4		Pass
75	30.0 - 60.0% of mass 95	36465	59.8		Pass
95	Base peak, 100% relative abundance	60989	100.0		Pass
96	5.0 - 9.0% of mass 95	4928	8.1		Pass
173	Less than 2.0% of mass 174	0	0.0	(0.0) [a]	Pass
174	50.0 - 100.0% of mass 95	51773	84.9		Pass
175	5.0 - 9.0% of mass 174	4002	6.6	(7.7) [a]	Pass
176	95.0 - 101.0% of mass 174	50561	82.9	(97.7) [a]	Pass
177	5.0 - 9.0% of mass 176	4232	6.9	(8.4) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VG725-CC706	G0020881.D	03/24/03	11:53	00:52	Continuing cal 40PPB
VG725-BS	G0020882.D	03/24/03	12:24	01:23	Blank Spike
VG725-MB	G0020883.D	03/24/03	12:51	01:50	Method Blank
ZZZZZZ	G0020884.D	03/24/03	13:18	02:17	(unrelated sample)
ZZZZZZ	G0020885.D	03/24/03	13:44	02:43	(unrelated sample)
ZZZZZZ	G0020886.D	03/24/03	14:12	03:11	(unrelated sample)
F16987-7	G0020887.D	03/24/03	14:39	03:38	(used for QC only; not part of job F16964)
ZZZZZZ	G0020888.D	03/24/03	15:06	04:05	(unrelated sample)
ZZZZZZ	G0020889.D	03/24/03	15:33	04:32	(unrelated sample)
F16987-7MS	G0020890.D	03/24/03	16:00	04:59	Matrix Spike
F16987-7MSD	G0020891.D	03/24/03	16:27	05:26	Matrix Spike Duplicate
ZZZZZZ	G0020892.D	03/24/03	16:55	05:54	(unrelated sample)
ZZZZZZ	G0020893.D	03/24/03	17:22	06:21	(unrelated sample)
ZZZZZZ	G0020894.D	03/24/03	17:49	06:48	(unrelated sample)
ZZZZZZ	G0020895.D	03/24/03	18:16	07:15	(unrelated sample)
ZZZZZZ	G0020896.D	03/24/03	18:43	07:42	(unrelated sample)
ZZZZZZ	G0020897.D	03/24/03	19:10	08:09	(unrelated sample)
ZZZZZZ	G0020898.D	03/24/03	19:37	08:36	(unrelated sample)
ZZZZZZ	G0020899.D	03/24/03	20:04	09:03	(unrelated sample)
ZZZZZZ	G0020900.D	03/24/03	20:32	09:31	(unrelated sample)
ZZZZZZ	G0020901.D	03/24/03	21:01	10:00	(unrelated sample)
F16964-1	G0020902.D	03/24/03	21:28	10:27	CEF-81-GW-01I-04
F16964-3	G0020903.D	03/24/03	21:55	10:54	CEF-81-GW-14S-04
F16964-6	G0020904.D	03/24/03	22:22	11:21	CEF-81-GW-DUP1-04

Instrument Performance Check (BFB)

Job Number: F16964
Account: TETRPAPT Tetra Tech, NUS
Project: Building 81, Tanks 81A,B,&C Cecil Field

Sample:	VG725-BFB	Injection Date:	03/24/03
Lab File ID:	G0020879.D	Injection Time:	11:01
Instrument ID:	GCMSG		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VG726-BS1	G0020905.D	03/24/03	22:49	11:48	Blank Spike
VG726-MB1	G0020906.D	03/24/03	23:16	12:15	Method Blank
F16968-1	G0020907.D	03/24/03	23:43	12:42	(used for QC only; not part of job F16964)

Instrument Performance Check (BFB)

Job Number: F16964
Account: TETRPAPT Tetra Tech, NUS
Project: Building 81, Tanks 81A,B,&C Cecil Field

Sample:	VG727-BFB	Injection Date:	03/25/03
Lab File ID:	G0020910.D	Injection Time:	09:09
Instrument ID:	GCMSG		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	15977	23.4		Pass
75	30.0 - 60.0% of mass 95	39066	57.1		Pass
95	Base peak, 100% relative abundance	68375	100.0		Pass
96	5.0 - 9.0% of mass 95	5704	8.3		Pass
173	Less than 2.0% of mass 174	0	0.0	(0.0) [a]	Pass
174	50.0 - 100.0% of mass 95	59886	87.6		Pass
175	5.0 - 9.0% of mass 174	4979	7.3	(8.3) [a]	Pass
176	95.0 - 101.0% of mass 174	59777	87.4	(99.8) [a]	Pass
177	5.0 - 9.0% of mass 176	4442	6.5	(7.4) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VG727-CC706	G0020911.D	03/25/03	09:51	00:42	Continuing cal 40PPB
VG727-BS	G0020912.D	03/25/03	10:24	01:15	Blank Spike
VG727-MB	G0020913.D	03/25/03	10:51	01:42	Method Blank
F16964-4	G0020914.D	03/25/03	11:18	02:09	CEF-81-GW-8SR-04
F16964-5	G0020915.D	03/25/03	11:46	02:37	CEF-81-GW-13S-04
F16964-2	G0020916.D	03/25/03	12:13	03:04	CEF-81-GW-9S-04
ZZZZZZ	G0020917.D	03/25/03	12:40	03:31	(unrelated sample)
ZZZZZZ	G0020918.D	03/25/03	13:07	03:58	(unrelated sample)
F16964-2MS	G0020919.D	03/25/03	13:34	04:25	Matrix Spike
F16964-2MSD	G0020920.D	03/25/03	14:01	04:52	Matrix Spike Duplicate
F16962-6DUP	G0020928.D	03/25/03	17:46	08:37	Duplicate
F16962-6	G0020929.D	03/25/03	18:13	09:04	(used for QC only; not part of job F16964)
ZZZZZZ	G0020930.D	03/25/03	18:42	09:33	(unrelated sample)
ZZZZZZ	G0020931.D	03/25/03	19:10	10:01	(unrelated sample)
ZZZZZZ	G0020932.D	03/25/03	19:39	10:30	(unrelated sample)
ZZZZZZ	G0020933.D	03/25/03	20:07	10:58	(unrelated sample)
ZZZZZZ	G0020934.D	03/25/03	20:36	11:27	(unrelated sample)
VG726-BS	G0020935.D	03/25/03	21:03	11:54	Blank Spike
VG726-MB	G0020936.D	03/25/03	21:29	12:20	Method Blank
F16968-1	G0020937.D	03/25/03	21:56	12:47	(used for QC only; not part of job F16964)
F16968-1MS	G0020938.D	03/25/03	22:24	13:15	Matrix Spike
F16968-1MSD	G0020939.D	03/25/03	22:51	13:42	Matrix Spike Duplicate

Instrument Performance Check (BFB)

Job Number: F16964
Account: TETRPAPT Tetra Tech, NUS
Project: Building 81, Tanks 81A,B,&C Cecil Field

Sample:	VG706-BFB	Injection Date:	02/21/03
Lab File ID:	G0020483.D	Injection Time:	13:09
Instrument ID:	GCMSG		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	12486	22.4		Pass
75	30.0 - 60.0% of mass 95	31296	56.1		Pass
95	Base peak, 100% relative abundance	55783	100.0		Pass
96	5.0 - 9.0% of mass 95	4763	8.5		Pass
173	Less than 2.0% of mass 174	275	0.49	(0.61) [a]	Pass
174	50.0 - 100.0% of mass 95	45083	80.8		Pass
175	5.0 - 9.0% of mass 174	3319	5.9	(7.4) [a]	Pass
176	95.0 - 101.0% of mass 174	45024	80.7	(99.9) [a]	Pass
177	5.0 - 9.0% of mass 176	3677	6.6	(8.2) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VG706-IC706	G0020484.D	02/21/03	13:35	00:26	Initial cal 1PPB
VG706-IC706	G0020485.D	02/21/03	14:02	00:53	Initial cal 5PPB
VG706-IC706	G0020486.D	02/21/03	14:29	01:20	Initial cal 20PPB
VG706-ICC706	G0020487.D	02/21/03	14:56	01:47	Initial cal 40PPB
VG706-IC706	G0020488.D	02/21/03	15:23	02:14	Initial cal 70PPB
VG706-IC706	G0020489.D	02/21/03	15:51	02:42	Initial cal 100PPB
VG706-BS	G0020491.D	02/21/03	16:47	03:38	Blank Spike
VG706-MB	G0020492.D	02/21/03	17:14	04:05	Method Blank
ZZZZZZ	G0020493.D	02/21/03	17:42	04:33	(unrelated sample)
ZZZZZZ	G0020494.D	02/21/03	18:10	05:01	(unrelated sample)
ZZZZZZ	G0020495.D	02/21/03	18:37	05:28	(unrelated sample)
ZZZZZZ	G0020496.D	02/21/03	19:04	05:55	(unrelated sample)
ZZZZZZ	G0020497.D	02/21/03	19:32	06:23	(unrelated sample)
F16618-6	G0020498.D	02/21/03	19:59	06:50	(used for QC only; not part of job F16964)
F16618-6MS	G0020499.D	02/21/03	20:26	07:17	Matrix Spike
F16618-6MSD	G0020500.D	02/21/03	20:53	07:44	Matrix Spike Duplicate
ZZZZZZ	G0020501.D	02/21/03	21:20	08:11	(unrelated sample)
ZZZZZZ	G0020502.D	02/21/03	21:47	08:38	(unrelated sample)
ZZZZZZ	G0020503.D	02/21/03	22:14	09:05	(unrelated sample)
ZZZZZZ	G0020504.D	02/21/03	22:41	09:32	(unrelated sample)
ZZZZZZ	G0020505.D	02/21/03	23:08	09:59	(unrelated sample)
ZZZZZZ	G0020506.D	02/21/03	23:35	10:26	(unrelated sample)
ZZZZZZ	G0020507.D	02/22/03	00:03	10:54	(unrelated sample)
ZZZZZZ	G0020508.D	02/22/03	00:31	11:22	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: F16964
Account: TETRPAPT Tetra Tech, NUS
Project: Building 81, Tanks 81A,B,&C Cecil Field

Sample:	VG706-BFB	Injection Date:	02/21/03
Lab File ID:	G0020483.D	Injection Time:	13:09
Instrument ID:	GCMSG		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	G0020509.D	02/22/03	01:00	11:51	(unrelated sample)

Volatile Internal Standard Area Summary

Job Number: F16964
Account: TETRPAPT Tetra Tech, NUS
Project: Building 81, Tanks 81A,B,&C Cecil Field

Check Std:	VG725-CC706	Injection Date:	03/24/03
Lab File ID:	G0020881.D	Injection Time:	11:53
Instrument ID:	GCMSG	Method:	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	1612908	11.10	1308613	14.67	751177	17.21	118802	7.99
Upper Limit [a]	3225816	11.60	2617226	15.17	1502354	17.71	237604	8.49
Lower Limit [b]	806454	10.60	654307	14.17	375589	16.71	59401	7.49

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
VG725-BS	1518240	11.11	1270072	14.68	720557	17.21	109755	8.00
VG725-MB	1467824	11.10	1246226	14.67	692557	17.22	110357	7.99
ZZZZZZ	1379999	11.10	1181607	14.67	645960	17.22	115803	7.99
ZZZZZZ	1455103	11.11	1223354	14.67	680074	17.22	120211	8.00
ZZZZZZ	1584725	11.10	1311014	14.68	711569	17.22	141301	7.99
F16987-7	1552600	11.10	1272057	14.67	697071	17.22	107949	8.00
ZZZZZZ	1575452	11.10	1359755	14.67	726530	17.22	118163	7.99
ZZZZZZ	1556403	11.10	1277903	14.67	739725	17.22	122152	8.00
F16987-7MS	1467291	11.10	1195827	14.67	697029	17.22	107927	7.99
F16987-7MSD	1543797	11.10	1245570	14.67	687565	17.22	112833	7.99
ZZZZZZ	1583320	11.10	1273683	14.67	704554	17.22	128599	7.99
ZZZZZZ	1558664	11.10	1254367	14.67	740153	17.22	116551	7.99
ZZZZZZ	1485250	11.10	1257725	14.67	717609	17.22	105216	7.98
ZZZZZZ	1490289	11.11	1299719	14.67	685532	17.22	117679	8.00
ZZZZZZ	1449182	11.10	1166611	14.67	686267	17.22	111167	8.00
ZZZZZZ	1367733	11.10	1165002	14.67	647866	17.22	96636	8.00
ZZZZZZ	1387425	11.10	1138240	14.67	624439	17.22	105220	8.01
ZZZZZZ	1285429	11.10	1102372	14.67	613009	17.21	85035	7.99
ZZZZZZ	1269813	11.10	1056116	14.68	574519	17.22	96734	8.00
ZZZZZZ	1165547	11.10	1060707	14.67	601361	17.21	81507	8.00
F16964-1	1182829	11.11	1009155	14.67	580137	17.21	89266	7.98
F16964-3	1316304	11.10	1138713	14.67	637437	17.21	94698	7.99
F16964-6	1257180	11.11	1070297	14.67	603798	17.21	100865	7.99
VG726-BS1	1357980	11.09	1124914	14.67	625963	17.21	93305	8.00
VG726-MB1	1339262	11.10	1146163	14.67	640280	17.21	93265	7.99
F16968-1	1300853	11.10	1081414	14.67	627772	17.21	96532	7.99

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4
IS 4 = Tert Butyl Alcohol-D10

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: F16964
Account: TETRPAPT Tetra Tech, NUS
Project: Building 81, Tanks 81A,B,&C Cecil Field

Check Std:	VG727-CC706	Injection Date:	03/25/03
Lab File ID:	G0020911.D	Injection Time:	09:51
Instrument ID:	GCMSG	Method:	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	1885848	11.10	1168164	14.67	651849	17.22	126915	7.99
Upper Limit [a]	3771696	11.60	2336328	15.17	1303698	17.72	253830	8.49
Lower Limit [b]	942924	10.60	584082	14.17	325925	16.72	63458	7.49

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
VG727-BS	1536156	11.10	1155217	14.68	638937	17.21	97356	7.99
VG727-MB	1497028	11.09	1126982	14.67	604333	17.21	96601	7.99
F16964-4	1423512	11.09	1052778	14.67	565020	17.21	85428	7.99
F16964-5	1351397	11.10	1041574	14.67	551638	17.21	84269	8.00
F16964-2	1243073	11.10	971725	14.67	550200	17.21	85073	7.98
ZZZZZZ	1396802	11.10	1063830	14.67	560984	17.21	84759	7.99
ZZZZZZ	1335347	11.09	1005977	14.67	550164	17.21	89153	8.00
F16964-2MS	1247808	11.09	958890	14.67	551417	17.21	91176	7.98
F16964-2MSD	1318334	11.10	980776	14.67	578831	17.21	100553	7.98
F16962-6DUP	1195108	11.11	926859	14.67	498640	17.21	78489	8.00
F16962-6	1145495	11.10	906045	14.67	504098	17.21	75552	7.99
ZZZZZZ	1098129	11.10	818725	14.67	453740	17.22	61948*	7.98
ZZZZZZ	1087139	11.10	817148	14.68	440021	17.21	62947*	7.99
ZZZZZZ	1051110	11.11	803819	14.68	441210	17.21	59954*	7.99
ZZZZZZ	1009610	11.11	794079	14.67	455081	17.22	62943*	7.99
ZZZZZZ	1001651	11.10	801749	14.67	440499	17.21	66667	7.99
VG726-BS	1040149	11.10	836541	14.67	476260	17.22	61399*	7.99
VG726-MB	1134989	11.11	866187	14.67	463981	17.21	61704*	8.00
F16968-1	1065469	11.10	828472	14.67	447812	17.21	56614*	7.99
F16968-1MS	1070582	11.10	805974	14.67	459782	17.21	60021*	7.98
F16968-1MSD	1156119	11.10	884322	14.67	493435	17.21	66195	7.99

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4
IS 4 = Tert Butyl Alcohol-D10

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: F16964
Account: TETRPAPT Tetra Tech, NUS
Project: Building 81, Tanks 81A,B,&C Cecil Field

Method: SW846 8260B Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
F16964-1	G0020902.D	114.0	113.0	93.0	94.0
F16964-2	G0020916.D	112.0	116.0	97.0	96.0
F16964-3	G0020903.D	108.0	111.0	92.0	96.0
F16964-4	G0020914.D	106.0	106.0	99.0	98.0
F16964-5	G0020915.D	110.0	113.0	98.0	100.0
F16964-6	G0020904.D	114.0	111.0	93.0	94.0
F16962-6DUP	G0020928.D	109.0	114.0	98.0	101.0
F16964-2MS	G0020919.D	106.0	110.0	101.0	99.0
F16964-2MSD	G0020920.D	105.0	106.0	98.0	94.0
F16987-7MS	G0020890.D	104.0	100.0	95.0	98.0
F16987-7MSD	G0020891.D	104.0	97.0	97.0	100.0
VG725-BS	G0020882.D	104.0	101.0	94.0	97.0
VG725-MB	G0020883.D	110.0	109.0	93.0	97.0
VG727-BS	G0020912.D	101.0	101.0	99.0	99.0
VG727-MB	G0020913.D	108.0	107.0	100.0	97.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	86-115%
S2 = 1,2-Dichloroethane-D4	78-125%
S3 = Toluene-D8	87-113%
S4 = 4-Bromofluorobenzene	84-117%

Initial Calibration Summary

Job Number: F16964
Account: TETRPAPT Tetra Tech, NUS
Project: Building 81, Tanks 81A,B,&C Cecil Field

Sample: VG706-ICC706
Lab FileID: G0020487.D

Response Factor Report MSVOA1

Method : C:\HPCHEM\1\METHODS\022103W.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Sat Feb 22 16:36:40 2003
Response via : Initial Calibration

Calibration Files
1 =G0020484.D 2 =G0020485.D 3 =G0020486.D
4 =G0020487.D 5 =G0020488.D 6 =G0020489.D

		Compound	1	2	3	4	5	6	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------							
2)		Dichlorodifluoromet	0.285	0.364	0.275	0.266	0.259	0.251	0.283	14.53
3)	P	Chloromethane		0.402	0.328	0.325	0.286	0.283	0.325	14.78
4)	C	Vinyl Chloride	0.294	0.342	0.292	0.290	0.267	0.263	0.291	9.62
5)		Bromomethane	0.268	0.287	0.230	0.212	0.195	0.182	0.229	18.02
		----- Linear regression ----- Coefficient = 0.9953								
		Response Ratio = 0.01339 + 0.18071 *A								
6)		Chloroethane	0.205	0.221	0.179	0.170	0.160	0.158	0.182	14.01
7)		Trichlorofluorometh	0.359	0.484	0.435	0.431	0.396	0.404	0.418	10.15
8)		Ethyl Ether	0.223	0.241	0.198	0.198	0.187	0.188	0.206	10.51
9)	C	1,1-Dichloroethene	0.419	0.524	0.486	0.442	0.420	0.409	0.450	10.14
10)		Freon 113	0.281	0.343	0.291	0.267	0.265	0.249	0.283	11.58
11)		Carbon Disulfide	0.867	0.914	0.774	0.736	0.709	0.682	0.781	11.75
12)		Iodomethane	0.394	0.550	0.482	0.461	0.438	0.440	0.461	11.37
13)		Acrolein	0.018	0.015	0.013	0.013	0.012	0.013	0.014	14.29
14)		Methylene Chloride	1.521	0.566	0.450	0.404	0.378	0.365	0.614	73.35
		----- Linear regression ----- Coefficient = 0.9991								
		Response Ratio = 0.02947 + 0.35440 *A								
15)		Acetone	0.171	0.092	0.072	0.068	0.064	0.067	0.089	46.64
		----- Linear regression ----- Coefficient = 0.9991								
		Response Ratio = 0.01167 + 0.06454 *A								
16)		Methyl acetate	0.215	0.202	0.176	0.171	0.161	0.162	0.181	12.37
17)		trans-1,2-Dichloroe	0.403	0.478	0.440	0.410	0.392	0.381	0.417	8.58
18)		Hexane	0.195	0.196	0.186	0.170	0.157	0.148	0.176	11.43
19)		Methyl Tert Butyl E	0.901	0.896	0.763	0.733	0.697	0.700	0.782	11.97
20)		Di-isopropyl ether	0.858	1.005	0.894	0.850	0.807	0.796	0.868	8.73
21)	P	1,1-Dichloroethane	0.469	0.597	0.512	0.489	0.465	0.450	0.497	10.72
22)		Acrylonitrile	0.116	0.108	0.102	0.103	0.094	0.098	0.104	7.32
23)		ETBE	0.953	0.985	0.852	0.803	0.749	0.750	0.849	11.93
24)		Vinyl acetate	0.655	0.699	0.639	0.594	0.538	0.523	0.608	11.37
25)		cis-1,2-Dichloroeth	0.307	0.329	0.295	0.283	0.268	0.263	0.291	8.59
26)		2,2-Dichloropropane		0.530	0.458	0.427	0.402	0.388	0.441	12.81
27)		Bromochloromethane	0.176	0.183	0.158	0.156	0.144	0.145	0.160	9.92
28)		Cyclohexane	0.344	0.448	0.376	0.346	0.330	0.313	0.360	13.38
29)	C	Chloroform	0.563	0.683	0.583	0.546	0.522	0.500	0.566	11.36
30)		Tetrahydrofuran	0.096	0.085	0.068	0.061	0.059	0.064	0.072	20.66
		----- Linear regression ----- Coefficient = 0.9964								
		Response Ratio = 0.00077 + 0.06227 *A								
31)	S	Dibromofluoromethan	0.359	0.369	0.358	0.362	0.346	0.348	0.357	2.46
32)		Carbon Tetrachlorid	0.399	0.552	0.478	0.467	0.454	0.433	0.464	11.13
33)		1,1,1-Trichloroetha	0.528	0.623	0.540	0.508	0.483	0.468	0.525	10.45
34)		2-Butanone	0.107	0.113	0.098	0.095	0.091	0.092	0.099	8.97

Initial Calibration Summary

Job Number: F16964
Account: TETRPAPT Tetra Tech, NUS
Project: Building 81, Tanks 81A,B,&C Cecil Field

Sample: VG706-ICC706
Lab FileID: G0020487.D

35)		1,1-Dichloropropene	0.397	0.432	0.373	0.348	0.337	0.320	0.368	11.34
36)		Benzene	0.967	1.077	0.947	0.873	0.842	0.808	0.919	10.69
37)		TAME	0.718	0.829	0.753	0.736	0.697	0.683	0.736	7.08
38)	S	1,2-Dichloroethane-	0.430	0.446	0.439	0.439	0.431	0.421	0.434	2.07
39)		1,2-Dichloroethane		0.577	0.506	0.473	0.455	0.430	0.488	11.65
40)		Trichloroethene	0.347	0.354	0.305	0.293	0.278	0.267	0.307	11.62
41)		Methylcyclohexane	0.285	0.318	0.299	0.277	0.274	0.252	0.284	7.95
42)		Dibromomethane	0.207	0.242	0.220	0.205	0.194	0.192	0.210	8.77
43)	C	1,2-Dichloropropane	0.279	0.279	0.277	0.259	0.245	0.233	0.262	7.59
44)		Bromodichloromethan	0.409	0.506	0.444	0.427	0.407	0.395	0.431	9.42
45)		2-Chloroethyl vinyl	0.145	0.164	0.154	0.151	0.144	0.137	0.149	6.22
46)		cis-1,3-Dichloropro	0.440	0.504	0.461	0.436	0.421	0.407	0.445	7.71
47)	I	Chlorobenzene-d5	----------ISTD----------							
48)	S	Toluene-d8	1.221	1.260	1.292	1.299	1.311	1.355	1.290	3.55
49)	C	Toluene	1.403	1.518	1.350	1.278	1.241	1.253	1.341	7.96
50)		2-Nitropropane	0.106	0.119	0.112	0.111	0.114	0.119	0.113	4.29
51)		4-Methyl-2-pentanon	0.312	0.322	0.297	0.285	0.276	0.286	0.296	6.01
52)		trans-1,3-Dichlorop	0.637	0.620	0.582	0.565	0.561	0.563	0.588	5.58
53)		Tetrachloroethene	0.414	0.453	0.382	0.360	0.358	0.349	0.386	10.46
54)		1,1,2-Trichloroetha	0.325	0.302	0.279	0.265	0.261	0.264	0.283	9.04
55)		Dibromochloromethan	0.393	0.420	0.408	0.419	0.435	0.434	0.418	3.78
56)		1,3-Dichloropropane	0.594	0.596	0.557	0.512	0.505	0.506	0.545	7.94
57)		1,2-Dibromoethane	0.349	0.397	0.357	0.346	0.358	0.353	0.360	5.23
58)		2-hexanone	0.202	0.219	0.208	0.203	0.206	0.205	0.207	2.98
59)		1-Chlorohexane	0.368	0.430	0.391	0.371	0.379	0.366	0.384	6.28
60)	C	Ethylbenzene	1.540	1.578	1.469	1.368	1.348	1.275	1.430	8.29
61)	P	Chlorobenzene	0.920	1.002	0.889	0.850	0.830	0.814	0.884	7.89
62)		1,1,1,2-Tetrachloro	0.375	0.421	0.411	0.381	0.392	0.381	0.394	4.73
63)		m,p-Xylene	1.090	1.255	1.169	1.093	1.065	1.007	1.113	7.78
64)		o-Xylene	1.227	1.356	1.264	1.215	1.212	1.152	1.238	5.52
65)		Styrene	0.828	1.003	0.945	0.893	0.905	0.873	0.908	6.65
66)	P	Bromoform	0.227	0.264	0.274	0.272	0.287	0.291	0.269	8.53
67)		Isopropylbenzene	1.094	1.377	1.297	1.217	1.215	1.175	1.229	7.96
68)	I	1,4-Dichlorobenzene-d	----------ISTD----------							
69)	S	4-Bromofluorobenzen	0.985	1.034	1.061	1.068	1.053	1.042	1.040	2.86
70)		n-Propylbenzene	2.645	3.119	2.806	2.628	2.540	2.406	2.691	9.20
71)		Bromobenzene	0.783	0.825	0.775	0.712	0.691	0.646	0.739	9.02
72)	P	1,1,2,2-Tetrachloro	0.811	0.758	0.703	0.678	0.638	0.635	0.704	9.85
73)		1,3,5-Trimethylbenz	1.825	2.183	1.949	1.847	1.776	1.708	1.881	8.93
74)		2-Chlorotoluene	2.224	2.461	2.207	2.092	1.986	1.883	2.142	9.50
75)		trans-1,4-Dichloro-	0.210	0.183	0.182	0.201	0.197	0.199	0.195	5.54
76)		1,2,3-Trichloroprop	0.280	0.258	0.234	0.224	0.201	0.207	0.234	13.08
77)		Cyclohexanone	0.025	0.024	0.018	0.017	0.016	0.017	0.020	21.10

----- Linear regression ----- Coefficient = 0.9952
Response Ratio = 0.00236 + 0.01634 *A

78)		4-Chlorotoluene	2.095	2.339	2.032	1.946	1.868	1.757	2.006	10.08
79)		tert-Butylbenzene	1.215	1.409	1.308	1.234	1.196	1.146	1.251	7.48
80)		1,2,4-Trimethylbenz	1.911	2.184	2.015	1.840	1.808	1.726	1.914	8.59
81)		sec-Butylbenzene	2.167	2.393	2.115	1.975	1.872	1.798	2.053	10.58
82)		4-Isopropyltoluene	1.803	2.024	1.722	1.644	1.602	1.536	1.722	10.16
83)		1,3-Dichlorobenzene	1.321	1.404	1.274	1.200	1.151	1.096	1.241	9.18
84)		1,4-Dichlorobenzene	1.404	1.416	1.282	1.200	1.156	1.107	1.261	10.22
85)		n-Butylbenzene	1.024	1.125	1.023	0.986	0.926	0.902	0.998	7.99
86)		Benzyl Chloride	0.284	0.305	0.294	0.275	0.259	0.261	0.280	6.46
87)		1,2-Dichlorobenzene	1.396	1.415	1.196	1.198	1.119	1.082	1.234	11.33
88)		1,2-Dibromo-3-Chlor	0.217	0.167	0.162	0.153	0.152	0.157	0.168	14.68
89)		Hexachlorobutadiene	0.486	0.321	0.255	0.223	0.225	0.225	0.289	35.77

Initial Calibration Summary

Job Number: F16964
Account: TETRPAPT Tetra Tech, NUS
Project: Building 81, Tanks 81A,B,&C Cecil Field

Sample: VG706-ICC706
Lab FileID: G0020487.D

```
            ----- Linear regression -----  Coefficient =  0.9995
              Response Ratio = 0.00832 + 0.21974 *A

90)     1,2,4-Trichlorobenz 0.839 0.784 0.722 0.683 0.685 0.622 0.723  10.78
91)     Naphthalene         1.631 1.629 1.465 1.498 1.443 1.435 1.517   5.96
92)     1,2,3-Trichlorobenz 0.842 0.724 0.645 0.628 0.592 0.584 0.669  14.68

93) I   Tert Butyl Alcohol-d1 ----------------ISTD---------------------
94)     Tert Butyl Alcohol        1.538 1.668 1.510 1.423 1.463 1.520   6.14
95)     1,4-Dioxane         0.172 0.208 0.174 0.156 0.158 0.165 0.172  11.08
---------------------------------------------------------------------------
(#) = Out of Range

          022103W.M         Sat Feb 22 17:06:42 2003   RP1
```

Continuing Calibration Summary

Job Number: F16964
Account: TETRPAPT Tetra Tech, NUS
Project: Building 81, Tanks 81A,B,&C Cecil Field

Sample: VG725-CC706
Lab FileID: G0020881.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\032403\G0020881.D Vial: 2
Acq On : 24 Mar 2003 11:53 am Operator: JuanG
Sample : cc706-40ppb Inst : MSVOA1
Misc : ms2161,vg725,,,,, Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\022103W.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Sat Feb 22 16:36:36 2003
Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.000	1.000	0.0	94	-0.02
2		Dichlorodifluoromethane	0.288	0.299	-3.8	97	0.00
3	P	Chloromethane	0.325	0.293	9.8	85	0.03
4	C	Vinyl Chloride	0.291	0.283	2.7	92	0.00
5		Bromomethane	0.229	0.254	-10.9	113	0.01
6		Chloroethane	0.182	0.176	3.3	98	-0.01
7		Trichlorofluoromethane	0.418	0.498	-19.1	109	0.00
8		Ethyl Ether	0.206	0.215	-4.4	102	-0.01
9	C	1,1-Dichloroethene	0.450	0.441	2.0	94	-0.01
10		Freon 113	0.283	0.310	-9.5	110	-0.01
11		Carbon Disulfide	0.781	0.729	6.7	93	0.00
12		Iodomethane	0.461	0.510	-10.6	104	-0.01
13		Acrolein	0.014	0.020	-42.9#	142	0.00
14		Methylene Chloride	0.614	0.369	39.9#	86	0.00
15		Acetone	0.089	0.071	20.2#	98	0.00
16		Methyl acetate	0.181	0.158	12.7	87	-0.01
17		trans-1,2-Dichloroethene	0.417	0.406	2.6	93	-0.01
18		Hexane	0.176	0.206	-17.0	114	-0.02
19		Methyl Tert Butyl Ether	0.782	0.750	4.1	97	-0.02
20		Di-isopropyl ether	0.868	0.795	8.4	88	-0.01
21	P	1,1-Dichloroethane	0.497	0.478	3.8	92	-0.01
22		Acrylonitrile	0.104	0.065	37.5#	59	-0.01
23		ETBE	0.849	0.803	5.4	94	-0.01
24		Vinyl acetate	0.608	0.557	8.4	89	-0.02
25		cis-1,2-Dichloroethene	0.291	0.296	-1.7	99	-0.01
26		2,2-Dichloropropane	0.441	0.484	-9.8	107	-0.02
27		Bromochloromethane	0.160	0.171	-6.9	104	-0.01
28		Cyclohexane	0.360	0.369	-2.5	101	-0.02
29	C	Chloroform	0.566	0.583	-3.0	101	-0.01
30		Tetrahydrofuran	0.072	0.057	20.8#	89	0.00
31	S	Dibromofluoromethane	0.357	0.371	-3.9	97	-0.01
32		Carbon Tetrachloride	0.464	0.525	-13.1	106	-0.01
33		1,1,1-Trichloroethane	0.525	0.566	-7.8	105	-0.01
34		2-Butanone	0.099	0.092	7.1	91	-0.02
35		1,1-Dichloropropene	0.368	0.371	-0.8	101	-0.01
36		Benzene	0.919	0.882	4.0	95	-0.01
37		TAME	0.736	0.742	-0.8	95	-0.02
38	S	1,2-Dichloroethane-d4	0.434	0.443	-2.1	95	-0.02
39		1,2-Dichloroethane	0.488	0.498	-2.0	99	0.00
40		Trichloroethene	0.307	0.314	-2.3	101	-0.02
41		Methylcyclohexane	0.284	0.373	-31.3#	127	-0.02
42		Dibromomethane	0.210	0.214	-1.9	99	-0.02

Continuing Calibration Summary

Job Number: F16964
Account: TETRPAPT Tetra Tech, NUS
Project: Building 81, Tanks 81A,B,&C Cecil Field

Sample: VG725-CC706
Lab FileID: G0020881.D

43	C	1,2-Dichloropropane	0.262	0.245	6.5	89	-0.02
44		Bromodichloromethane	0.431	0.456	-5.8	101	-0.01
45		2-Chloroethyl vinyl ether	0.149	0.135	9.4	84	-0.02
46		cis-1,3-Dichloropropene	0.445	0.448	-0.7	97	-0.01
47	I	Chlorobenzene-d5	1.000	1.000	0.0	103	-0.02
48	S	Toluene-d8	1.290	1.226	5.0	97	-0.02
49	C	Toluene	1.341	1.242	7.4	100	-0.02
50		2-Nitropropane	0.113	0.103	8.8	95	-0.02
51		4-Methyl-2-pentanone	0.296	0.244	17.6	88	-0.02
52		trans-1,3-Dichloropropene	0.588	0.541	8.0	99	-0.01
53		Tetrachloroethene	0.386	0.396	-2.6	113	-0.01
54		1,1,2-Trichloroethane	0.283	0.243	14.1	94	-0.01
55		Dibromochloromethane	0.418	0.434	-3.8	106	-0.02
56		1,3-Dichloropropane	0.545	0.469	13.9	94	-0.01
57		1,2-Dibromoethane	0.360	0.331	8.1	99	-0.02
58		2-hexanone	0.207	0.175	15.5	89	-0.02
59		1-Chlorohexane	0.384	0.427	-11.2	118	-0.02
60	C	Ethylbenzene	1.430	1.405	1.7	106	-0.01
61	P	Chlorobenzene	0.884	0.856	3.2	104	-0.02
62		1,1,1,2-Tetrachloroethane	0.394	0.395	-0.3	107	-0.02
63		m,p-Xylene	1.114	1.113	0.1	105	-0.01
64		o-Xylene	1.238	1.221	1.4	103	-0.01
65		Styrene	0.908	0.900	0.9	104	-0.01
66	P	Bromoform	0.269	0.295	-9.7	112	-0.01
67		Isopropylbenzene	1.229	1.343	-9.3	114	-0.01
68	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	108	-0.02
69	S	4-Bromofluorobenzene	1.040	1.000	3.8	101	-0.02
70		n-Propylbenzene	2.691	2.784	-3.5	114	-0.02
71		Bromobenzene	0.739	0.703	4.9	106	-0.01
72	P	1,1,2,2-Tetrachloroethane	0.704	0.588	16.5	93	-0.02
73		1,3,5-Trimethylbenzene	1.881	1.989	-5.7	116	-0.02
74		2-Chlorotoluene	2.142	2.075	3.1	107	-0.01
75		trans-1,4-Dichloro-2-Butene	0.195	0.216	-10.8	116	-0.01
76		1,2,3-Trichloropropane	0.234	0.208	11.1	100	-0.01
77		Cyclohexanone	0.020	0.014	30.0#	89	-0.01
78		4-Chlorotoluene	2.006	1.858	7.4	103	-0.02
79		tert-Butylbenzene	1.251	1.381	-10.4	121	-0.02
80		1,2,4-Trimethylbenzene	1.914	1.988	-3.9	116	-0.01
81		sec-Butylbenzene	2.053	2.328	-13.4	127	-0.01
82		4-Isopropyltoluene	1.722	2.018	-17.2	132	-0.01
83		1,3-Dichlorobenzene	1.241	1.253	-1.0	113	-0.02
84		1,4-Dichlorobenzene	1.261	1.223	3.0	110	-0.02
85		n-Butylbenzene	0.998	1.183	-18.5	129	-0.02
86		Benzyl Chloride	0.280	0.258	7.9	101	-0.02
87		1,2-Dichlorobenzene	1.234	1.221	1.1	110	-0.02
88		1,2-Dibromo-3-Chloropropane	0.168	0.140	16.7	98	-0.02
89		Hexachlorobutadiene	0.289	0.401	-38.8#	193	0.00
90		1,2,4-Trichlorobenzene	0.723	0.833	-15.2	131	-0.02
91		Naphthalene	1.517	1.502	1.0	108	-0.02
92		1,2,3-Trichlorobenzene	0.669	0.751	-12.3	129	-0.02
93	I	Tert Butyl Alcohol-d10	1.000	1.000	0.0	100	-0.02
94		Tert Butyl Alcohol	1.523	1.406	7.7	93	0.00
95		1,4-Dioxane	0.172	0.163	5.2	105	-0.02

Average % D = 9.3

Continuing Calibration Summary

Job Number: F16964
Account: TETRPAPT Tetra Tech, NUS
Project: Building 81, Tanks 81A,B,&C Cecil Field

Sample: VG725-CC706
Lab FileID: G0020881.D

```
(#) = Out of Range                SPCC's out = 0  CCC's out = 0
 G0020487.D 022103W.M        Tue Mar 25 11:06:30 2003   RP1
```

Continuing Calibration Summary

Job Number: F16964
Account: TETRPAPT Tetra Tech, NUS
Project: Building 81, Tanks 81A,B,&C Cecil Field

Sample: VG727-CC706
Lab FileID: G0020911.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\032503\G0020911.D
Acq On : 25 Mar 2003 9:51 am
Sample : cc706-40ppb
Misc : ms2161,vg727,,,,,
MS Integration Params: LSCINT.P

Vial: 1
Operator: JuanG
Inst : MSVOA1
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\022103W.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Sat Feb 22 16:36:36 2003
Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.000	1.000	0.0	110	-0.02
2		Dichlorodifluoromethane	0.288	0.329	-14.2	124	0.00
3	P	Chloromethane	0.325	0.285	12.3	97	0.04
4	C	Vinyl Chloride	0.291	0.302	-3.8	115	0.00
5		Bromomethane	0.229	0.245	-7.0	127	0.00
6		Chloroethane	0.182	0.182	0.0	118	-0.01
7		Trichlorofluoromethane	0.418	0.519	-24.2#	133	-0.01
8		Ethyl Ether	0.206	0.211	-2.4	118	-0.01
9	C	1,1-Dichloroethene	0.450	0.411	8.7	103	-0.01
10		Freon 113	0.283	0.299	-5.7	124	0.00
11		Carbon Disulfide	0.781	0.705	9.7	106	-0.01
12		Iodomethane	0.461	0.503	-9.1	121	-0.01
13		Acrolein	0.014	0.019	-35.7#	161	-0.01
14		Methylene Chloride	0.614	0.338	45.0#	92	-0.02
15		Acetone	0.089	0.062	30.3#	101	-0.02
16		Methyl acetate	0.181	0.151	16.6	97	-0.01
17		trans-1,2-Dichloroethene	0.417	0.382	8.4	103	-0.02
18		Hexane	0.176	0.199	-13.1	129	-0.02
19		Methyl Tert Butyl Ether	0.782	0.723	7.5	109	-0.02
20		Di-isopropyl ether	0.868	0.745	14.2	97	-0.01
21	P	1,1-Dichloroethane	0.497	0.448	9.9	101	-0.02
22		Acrylonitrile	0.104	0.061	41.3#	66	-0.01
23		ETBE	0.849	0.743	12.5	102	-0.01
24		Vinyl acetate	0.608	0.521	14.3	97	-0.02
25		cis-1,2-Dichloroethene	0.291	0.288	1.0	112	-0.01
26		2,2-Dichloropropane	0.441	0.451	-2.3	117	-0.02
27		Bromochloromethane	0.160	0.162	-1.3	115	-0.01
28		Cyclohexane	0.360	0.332	7.8	106	-0.01
29	C	Chloroform	0.566	0.546	3.5	110	-0.01
30		Tetrahydrofuran	0.072	0.053	26.4#	95	-0.01
31	S	Dibromofluoromethane	0.357	0.360	-0.8	110	-0.01
32		Carbon Tetrachloride	0.464	0.483	-4.1	114	-0.01
33		1,1,1-Trichloroethane	0.525	0.523	0.4	114	-0.01
34		2-Butanone	0.099	0.083	16.2	96	-0.02
35		1,1-Dichloropropene	0.368	0.344	6.5	109	-0.01
36		Benzene	0.919	0.832	9.5	105	-0.01
37		TAME	0.736	0.697	5.3	105	-0.01
38	S	1,2-Dichloroethane-d4	0.434	0.439	-1.2	110	-0.02
39		1,2-Dichloroethane	0.488	0.459	5.9	107	-0.01
40		Trichloroethene	0.307	0.287	6.5	108	-0.01
41		Methylcyclohexane	0.284	0.356	-25.4#	142	-0.01
42		Dibromomethane	0.210	0.202	3.8	109	-0.01

Continuing Calibration Summary

Job Number: F16964
Account: TETRPAPT Tetra Tech, NUS
Project: Building 81, Tanks 81A,B,&C Cecil Field

Sample: VG727-CC706
Lab FileID: G0020911.D

43	C	1,2-Dichloropropane	0.262	0.219	16.4	94	-0.02
44		Bromodichloromethane	0.431	0.408	5.3	106	-0.01
45		2-Chloroethyl vinyl ether	0.149	0.121	18.8	88	-0.02
46		cis-1,3-Dichloropropene	0.445	0.336	24.5#	85	-0.01
47	I	Chlorobenzene-d5	1.000	1.000	0.0	92	-0.02
48	S	Toluene-d8	1.290	1.252	2.9	89	-0.02
49	C	Toluene	1.341	1.209	9.8	87	-0.01
50		2-Nitropropane	0.113	0.103	8.8	85	-0.01
51		4-Methyl-2-pentanone	0.296	0.248	16.2	80	-0.02
52		trans-1,3-Dichloropropene	0.588	0.538	8.5	88	-0.01
53		Tetrachloroethene	0.386	0.391	-1.3	100	-0.01
54		1,1,2-Trichloroethane	0.283	0.236	16.6	82	-0.01
55		Dibromochloromethane	0.418	0.430	-2.9	94	-0.01
56		1,3-Dichloropropane	0.545	0.473	13.2	85	-0.01
57		1,2-Dibromoethane	0.360	0.342	5.0	91	-0.01
58		2-hexanone	0.207	0.176	15.0	80	-0.02
59		1-Chlorohexane	0.384	0.422	-9.9	105	-0.02
60	C	Ethylbenzene	1.430	1.398	2.2	94	-0.01
61	P	Chlorobenzene	0.884	0.847	4.2	92	-0.02
62		1,1,1,2-Tetrachloroethane	0.394	0.392	0.5	94	-0.02
63		m,p-Xylene	1.114	1.113	0.1	93	-0.01
64		o-Xylene	1.238	1.210	2.3	91	-0.01
65		Styrene	0.908	0.910	-0.2	94	-0.01
66	P	Bromoform	0.269	0.296	-10.0	100	-0.01
67		Isopropylbenzene	1.229	1.352	-10.0	102	-0.01
68	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	93	-0.01
69	S	4-Bromofluorobenzene	1.040	1.022	1.7	89	-0.02
70		n-Propylbenzene	2.691	2.885	-7.2	103	-0.01
71		Bromobenzene	0.739	0.727	1.6	95	-0.01
72	P	1,1,2,2-Tetrachloroethane	0.704	0.619	12.1	85	-0.02
73		1,3,5-Trimethylbenzene	1.881	2.040	-8.5	103	-0.02
74		2-Chlorotoluene	2.142	2.116	1.2	95	-0.01
75		trans-1,4-Dichloro-2-Butene	0.195	0.214	-9.7	99	-0.01
76		1,2,3-Trichloropropane	0.234	0.211	9.8	88	-0.02
77		Cyclohexanone	0.020	0.016	20.0	85	-0.02
78		4-Chlorotoluene	2.006	1.933	3.6	93	-0.02
79		tert-Butylbenzene	1.251	1.424	-13.8	108	-0.02
80		1,2,4-Trimethylbenzene	1.914	2.069	-8.1	105	-0.01
81		sec-Butylbenzene	2.053	2.444	-19.0	116	-0.01
82		4-Isopropyltoluene	1.722	2.070	-20.2#	118	-0.01
83		1,3-Dichlorobenzene	1.241	1.322	-6.5	103	-0.02
84		1,4-Dichlorobenzene	1.261	1.311	-4.0	102	-0.01
85		n-Butylbenzene	0.998	1.234	-23.6#	117	-0.02
86		Benzyl Chloride	0.280	0.293	-4.6	100	-0.02
87		1,2-Dichlorobenzene	1.234	1.281	-3.8	100	-0.01
88		1,2-Dibromo-3-Chloropropane	0.168	0.149	11.3	91	-0.01
89		Hexachlorobutadiene	0.289	0.400	-38.4#	168	-0.01
90		1,2,4-Trichlorobenzene	0.723	0.877	-21.3#	120	-0.02
91		Naphthalene	1.517	1.638	-8.0	102	-0.02
92		1,2,3-Trichlorobenzene	0.669	0.749	-12.0	111	-0.02
93	I	Tert Butyl Alcohol-d10	1.000	1.000	0.0	107	-0.02
94		Tert Butyl Alcohol	1.523	1.510	0.9	106	-0.02
95		1,4-Dioxane	0.172	0.172	0.0	118	-0.02

Average % D = 10.4

Continuing Calibration Summary

Job Number: F16964
Account: TETRPAPT Tetra Tech, NUS
Project: Building 81, Tanks 81A,B,&C Cecil Field

Sample: VG727-CC706
Lab FileID: G0020911.D

```
(#) = Out of Range                SPCC's out = 0  CCC's out = 0
 G0020487.D 022103W.M        Wed Mar 26 12:23:12 2003   RP1
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TETRA TECH NUS, INC. CHAIN OF CUSTODY | NUMBER 2237 | PAGE 1 OF 1

PROJECT NO: N4248	FACILITY: TANKS 81 ABC	PROJECT MANAGER: PAUL CALLIGAN	PHONE NUMBER: 813 806 0202	LABORATORY NAME AND CONTACT: ACCUTEST Sue Bell
SAMPLERS (SIGNATURE): [signature]		FIELD OPERATIONS LEADER: MEZ / DALE	PHONE NUMBER: 904 636 6125	ADDRESS: 4405 Vineland Rd. C-15
		CARRIER/WAYBILL NUMBER: Fedex 8371 1005 6782 / 8178		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
PRESERVATIVE USED: HCL

	DATE YEAR	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAP (G) COMP (C)	No. OF CONTAINERS	TYPE OF ANALYSIS: VOCs SW8260B*	COMMENTS
1	3/13	1125	CEF-81-GW-01I-04				GW	G	3	3	Cool to 4°C
2	3/13	1210	CEF-81-GW-9S-04				GW	G	9	9*	*Analyte for
3	3/13	1445	CEF-81-GW-14S-04				GW	G	3	3	isopropylbenzene,
4	3/13	1520	CEF-81-GW-8SR-04				GW	G	3	3	1,2,4-trimethyl-
5	3/13	1630	CEF-81-GW-13S-04				GW	G	3	3	benzene, +
6	3/13	0000	CEF-81-GW-DUP1-04				GW	G	3	3	1,3,5-trimethyl-
											benzene
											WORK Release:
											Resampling
											*use for MS/MSD

1. RELINQUISHED BY: [signature]	DATE: 3/14/03	TIME: 1500	1. RECEIVED BY: Fedex	DATE	TIME
2. RELINQUISHED BY: FEDEX	DATE	TIME	2. RECEIVED BY: Mina Mohammed	DATE: 3/15/03	TIME: 0915
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R
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