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SAMPLING AND ANALYSIS REPORT FOR BUILDING 610 FORMER HAZARDOUS WASTE STORAGE FACILITY BASE REALIGNMENT AND CLOSURE NAS CECIL FIELD FL

2/22/2002

TETRA TECH NUS INC

Sampling and Analysis Report
for
Building 610
Former Hazardous Waste Storage Facility
Base Realignment and Closure

Naval Air Station Cecil Field
Jacksonville, Florida

Southern Division
Naval Facilities Engineering Command
Contract Number N62467-94-D-0888
Contract Task Order 0078

February 2002

120105/P

SAMPLING AND ANALYSIS REPORT
FOR
BUILDING 610
FORMER HAZARDOUS WASTE STORAGE FACILITY
BASE REALIGNMENT AND CLOSURE

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

COMPREHENSIVE LONG-TERM
ENVIRONMENTAL ACTION NAVY (CLEAN) CONTRACT

Submitted to:
Southern Division
Naval Facilities Engineering Command
2155 Eagle Drive
North Charleston, South Carolina 29406

Submitted by:
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CONTRACT NUMBER N62467-94-D-0888
CONTRACT TASK ORDER 0078

FEBRUARY 2002

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The professional opinions rendered in this decision document identified as Sampling and Analysis Report for Building 610, Former Hazardous Waste Storage Facility, Naval Air Station Cecil Field, Jacksonville, Florida were developed in accordance with commonly accepted procedures consistent with applicable standards of practice. Decision documents are based on information obtained from others and under the supervision of the signing engineer. If conditions are determined to exist differently than those described in this document, then the undersigned professional engineer should be notified to evaluate the effects of any additional information on the project described in this report.

Mark Speranza

Mark Speranza, P.E.
Professional Engineering No. PE0050304

Mark Speranza

CERTIFICATION OF TECHNICAL
DATA CONFORMITY

The Contractor, Tetra Tech NUS, Inc., hereby certifies that, to the best of its knowledge and belief, the technical data delivered herewith under Contract No. N62467-94-D-0888 are complete and accurate and comply with all requirements of this contract.

DATE: February 22, 2002

COMPANY CERTIFICATION AUTHORIZATION NUMBER: 7988
Tetra Tech NUS, Inc.
661 Anderson Drive
Pittsburgh, PA 15220

NAME AND TITLE OF CERTIFYING OFFICIAL: Mark Speranza, P.E.
Task Order Manager

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LIST OF ACRONYMS AND ABBREVIATIONS

µg/kg	Microgram(s) per kilogram
µg/L	Microgram(s) per liter
ABB-ES	ABB Environmental Services
AOI	Area of interest
BaP	Benzo(a)pyrene
BCT	BRAC Cleanup Team
bgs	Below ground surface
BRAC	Base Realignment and Closure
CCME	Canadian Council of Ministers of the Environment
CLEAN	Comprehensive Long-Term Environmental Action Navy
COPC	Chemical of potential concern
CTO	Contract Task Order
DON	Department of the Navy
DPT	Direct-push technology
EBS	Environmental Baseline Survey
EISOPQAM	Environmental Investigations Standard Operating Procedures and Quality Assurance Manual
ELCR	Excess lifetime cancer risk
FDEP	Florida Department of Environmental Protection
FL-PRO	Florida Petroleum Residual Organics
GCTL	Groundwater Cleanup Target Level
HI	Hazard Index
HLA	Harding Lawson Associates
HQ	Hazard Quotient
IBDS	Inorganic Background Data Set
MCPA	4-chloro-4-methylphenoxyacetic acid
mg/kg	Milligram(s) per kilogram
MHSP&E	Ministry of Housing, Spatial Planning, and the Environment (Holland)
MS/MSD	Matrix spike / matrix spike duplicate
NAGS	Naval Air Gunnery School
NAS	Naval Air Station
NPL	National Priorities List
ORNL	Oak Ridge National Laboratory
PAH	Polynuclear aromatic hydrocarbon
PCB	Polychlorinated biphenyl

PCE	Tetrachloroethene
PRE	Preliminary Risk Evaluation
PWC	Public Works Commission
QA/QC	Quality assurance/quality control
RAC	Remedial Action Contractor
RBC	Risk-based concentration
RCRA	Resource Conservation and Recovery Act
SAR	Sampling and Analysis Report
SCTL	Soil Cleanup Target Level
SOUTHNAVFACENGCOM	Southern Division, Naval Facilities Engineering Command
SVOC	Semivolatile organic compound
TCE	Trichloroethene
TCL	Target Compound List
TRPH	Total recoverable petroleum hydrocarbons
TtNUS	Tetra Tech NUS, Inc.
UCL	Upper confidence limit
U.S. EPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
UST	Underground storage tank
VOC	Volatile organic compound
YWWA	Yellow Water Weapons Area

1.0 INTRODUCTION

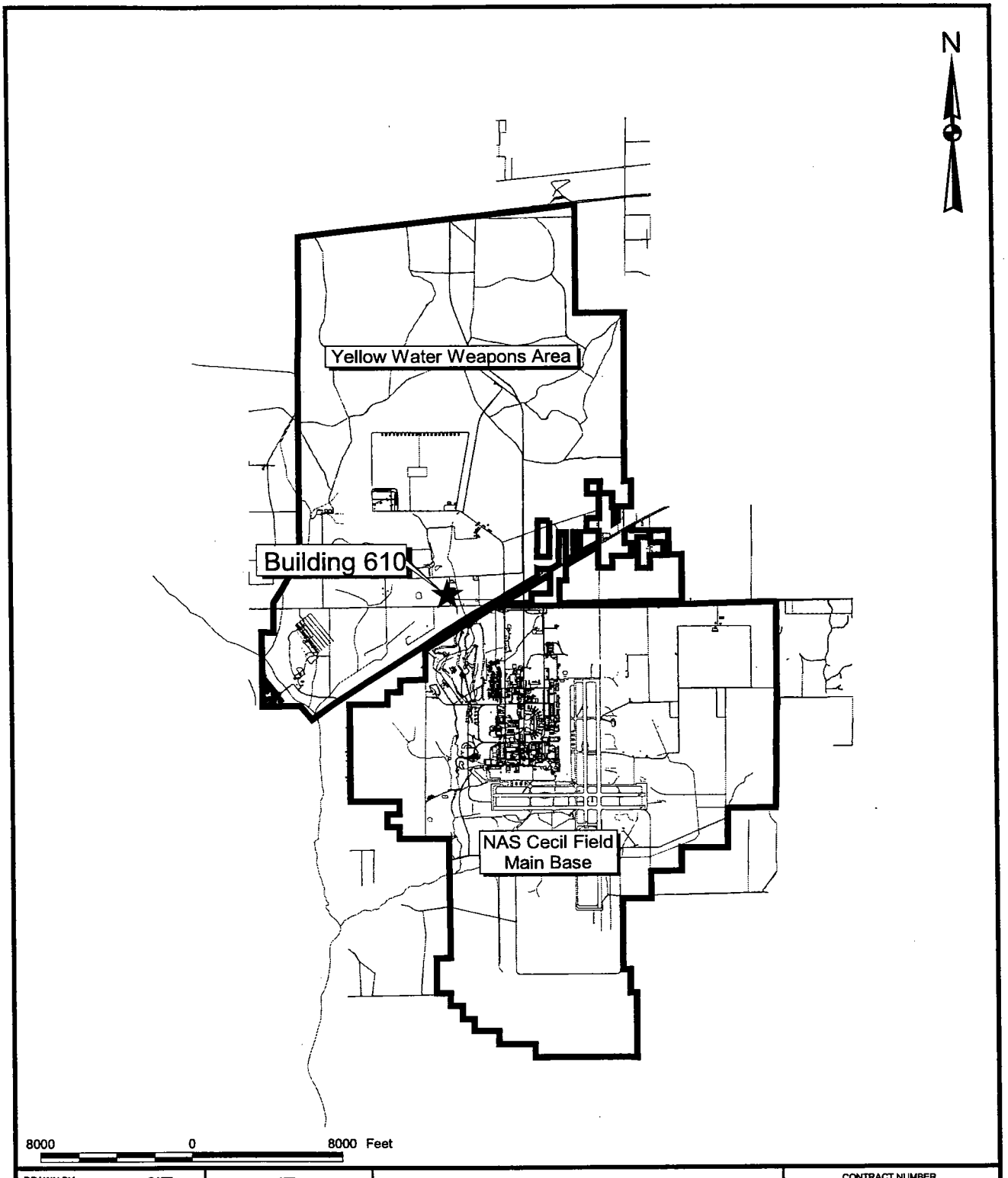
This Sampling and Analysis Report (SAR) for Building 610, Former Hazardous Waste Storage Facility (Building 610) at Naval Air Station (NAS) Cecil Field in Jacksonville, Florida has been prepared by Tetra Tech NUS, Inc. (TtNUS) for the Department of the Navy, Southern Division, Naval Facilities Engineering Command (SOUTHNAVFACENGCOM). The work was conducted under the Comprehensive Long-Term Environmental Action Navy (CLEAN) Program, Contract Number N6246-94-D-0888, Contract Task Order (CTO) 0078.

As shown on Figures 1-1 and 1-2, Building 610 is located in the Yellow Water Weapons Area (YWWA) within a fenced area on former B Street, near former Mariner Street.

Building 610 currently consists of a concrete pad covered by a roof structure that operated as a Resource Conservation and Recovery Act (RCRA)-permitted Part B hazardous waste storage facility from 1985 to 1999. An uncovered concrete foundation within the fenced area south of Building 610 was modified for use as a staging area for hazardous and nonhazardous wastes. Modifications to the foundation included sealing and secondary containment to meet RCRA spill containment requirements. This concrete staging area, designated as Area of Interest (AOI) 20 in the Environmental Baseline Survey (EBS) [ABB-Environmental Services, Inc. (ABB-ES), 1994], was the foundation of the former station maintenance building associated with the Naval Air Gunnery School (NAGS), which occupied much of the southern portion of YWWA in the 1940s and 1950s [Harding Lawson Associates (HLA), 1999]. According to aerial photographs, the maintenance building was demolished in the 1950s or 1960s. In the late 1990s, the staging area was used by the Public Works Commission (PWC) of NAS Jacksonville as a 90-day temporary collection point for hazardous wastes. The foundation was demolished in July and August 1999 as part of site closure procedures. On August 2, 2000, RCRA closure of the facility was approved.

An asphalt road borders the storage area on the eastern, southern, and western sides. The entire area is fenced, and brush and vegetation cover the area outside the fenced area (Figure 1-2). The area is in a former, industrial setting, and the reuse plan identifies this area for active recreational uses.

This area was initially evaluated during the EBS (ABB-ES, 1994). No specific environmental problems, such as stained concrete or evidence of spills, were identified in the report. The report speculated on the presence of an underground storage tank (UST), but none was ever found. No visible evidence of a tank was observed at the site (ABB-ES, 1994). The EBS classified the site as Grey because of the use of the site as a hazardous and nonhazardous waste storage facility.



DRAWN BY MJJ	DATE 30Mar01	GENERAL LOCATION MAP BUILDING 610 SAMPLING AND ANALYSIS REPORT NAVAL AIR STATION CECIL FIELD JACKSONVILLE, FLORIDA	CONTRACT NUMBER 0039
CHECKED BY	DATE		APPROVED BY DATE
COST/SCHEDULE-AREA			APPROVED BY DATE
SCALE AS NOTED			DRAWING NO. FIGURE 1-1 REV 0

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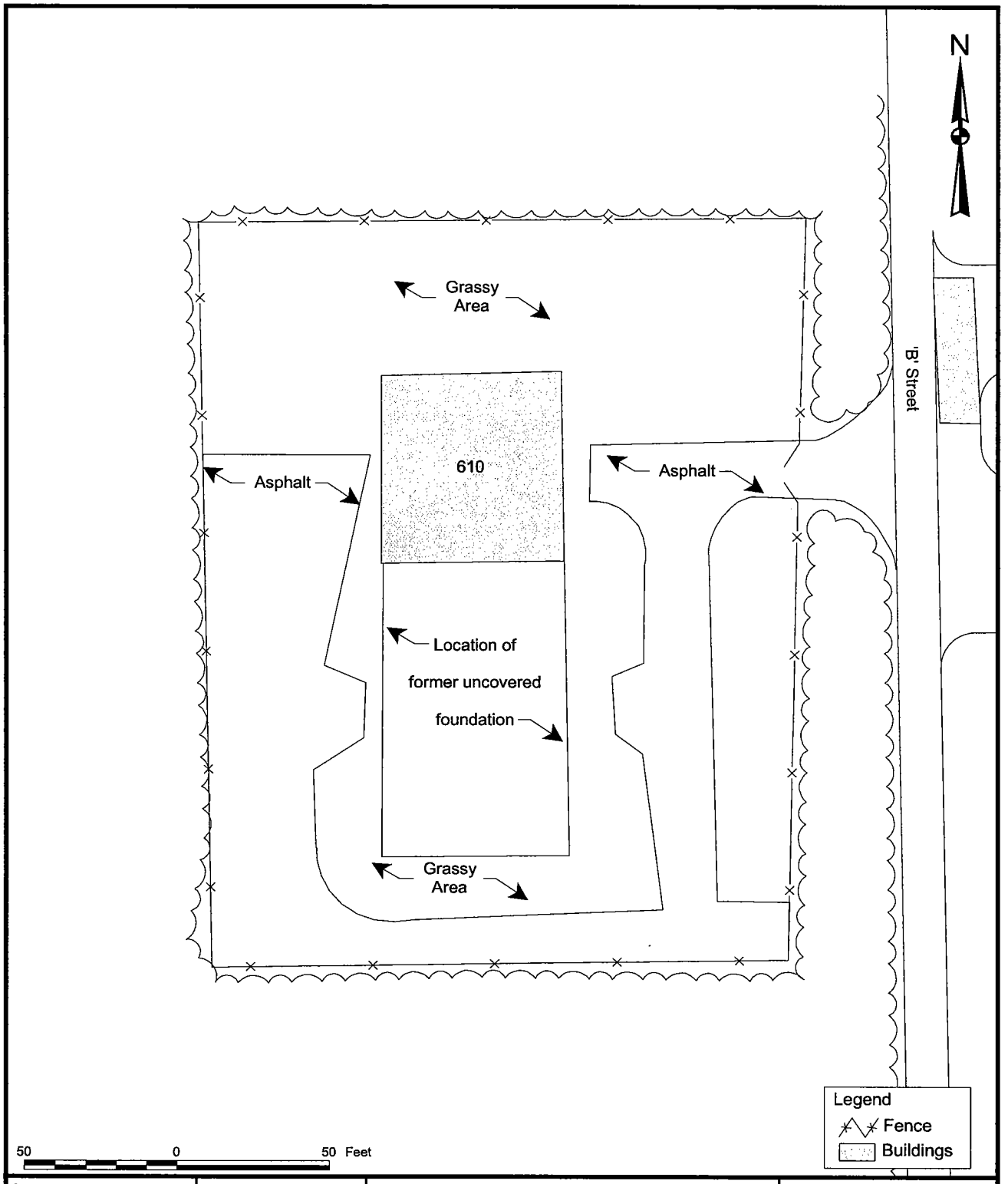

DRAWN BY MJJ	DATE 30Mar01	SITE LAYOUT MAP BUILDING 610 SAMPLING AND ANALYSIS REPORT NAVAL AIR STATION CECIL FIELD JACKSONVILLE, FLORIDA	CONTRACT NUMBER 0039
CHECKED BY	DATE		APPROVED BY — DATE —
COST/SCHEDULE-AREA			APPROVED BY — DATE —
SCALE AS NOTED			DRAWING NO. FIGURE 1-2 / REV 0

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Because the facility was an active RCRA facility, no investigations were performed until the facility was closed under RCRA regulations. During the investigation of YWWA, the facility was identified but not investigated (HLA, 1999).

In late 1998, the NAS Jacksonville PWC collected 14 soil samples adjacent to the sides of the uncovered concrete foundation and Building 610. In February 1999, HLA collected an additional four soil samples under the uncovered concrete foundation. These samples were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, herbicides, polychlorinated biphenyls (PCBs), metals, and total petroleum hydrocarbons (TRPH). These results showed the presence of trichloroethene (TCE), tetrachloroethene (PCE), benzo(a)pyrene, dibenzo(a,h)anthracene, 4-chloro-2-methylphenoxyacetic acid (MCPA), arsenic, barium, chromium, selenium, and TRPH at concentrations greater than the more stringent of the Florida Department of Environmental Protection (FDEP) Soil Cleanup Target Levels (SCTLs) for direct residential exposure or leachability to groundwater. A summary of the analytical results from these sampling is presented in Table 1-1.

Following the RCRA closure, Building 610 was investigated by TtNUS from October 2000 through September 2001. Four sampling events (Phases I through IV) were conducted to verify and/or delineate the extent of VOC, polynuclear aromatic hydrocarbon (PAH), herbicide (MCPA), metals (arsenic, barium, chromium, selenium), and TRPH contamination in the soil. In addition, one sampling event (Phase V) was conducted to evaluate the impact of soil contamination on groundwater quality.

This SAR presents information from the previous investigations and summarizes the related field operations, results, conclusions, and recommendations of the investigation conducted by TtNUS from October 2000 through September 2001 and the activities related to the July 2001 removal action as described in the Source Removal Report for Building 610 (CH2M Hill, 2001). The results of the investigations and the subsequent removal action indicate that no further action is needed at this site.

TABLE 1-1

SOIL ANALYTICAL DATA - PREVIOUS INVESTIGATIONS
BUILDING 610 SAMPLING AND ANALYSIS REPORT
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA
PAGE 1 OF 2

PARAMETER	FDEP RESIDENTIAL SCTL[1]	FDEP LEACHABILITY SCTL[1]	IBDS VALUE[3]	PWC-								
				610-01	610-02	610-03	610-04	610-05	610-06	610-07	610-08	610-09
Volatile Organic Compounds (ug/kg)												
ACETONE	780,000	2,800	NC	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DICHLOROETHANE	290,000	400	NC	ND	ND	ND	ND	ND	ND	ND	ND	ND
TETRACHLOROETHENE	8,900	30	NC	**5**	ND	ND	ND	ND	ND	**9**	ND	ND
TRICHLOROTEHENE	6,000	30	NC	ND	ND	ND	ND	ND	ND	ND	ND	ND
Semivolatile Organic Compounds (ug/kg)												
BENZO(A)ANTHRACENE	1,400	3,200	NC	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(A)PYRENE	100	8,000	NC	**540**	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(B)FLUORANTHENE	1,400	10,000	NC	**450**	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(G,H,I)PERYLENE	2,300,000	32,000,000	NC	**880**	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(K)FLUORANTHENE	15,000	25,000	NC	**550**	ND	ND	ND	ND	ND	ND	ND	ND
CHYRSENE	140,000	77,000	NC	**250**	ND	ND	ND	ND	ND	ND	ND	ND
DIBENZO(A,H)ANTHRACENE	100	30,000	NC	**300**	ND	ND	ND	ND	ND	ND	ND	ND
FLUORANTHENE	2,900,000	1,200,000	NC	ND	ND	ND	ND	ND	ND	ND	ND	ND
INDENO(1,2,3-CD)PYRENE	1,500	28,000	NC	**620**	ND	ND	ND	ND	ND	ND	ND	ND
PYRENE	2,200,000	880,000	NC	**320**	ND	ND	ND	ND	ND	ND	ND	ND
Herbicides (ug/kg)												
MCPA	30,000	20	NC	ND	ND	ND	ND	ND	ND	ND	ND	ND
Inorganics (mg/kg)												
ALUMINUM	720,000	NC	4,430	ND	ND	ND	ND	ND	ND	ND	ND	ND
ANTIMONY	26	5	9.44	ND	ND	ND	ND	**0.451**	ND	ND	ND	**5.78**
ARSENIC	0.8	29	2.04	ND	ND	**0.692**	ND	ND	ND	**3.74**	**3.42**	ND
BARIUM	110	1600	14.4	**190**	**11.8**	**124**	**87.9**	**6.45**	**3.68**	**1.35**	**1.99**	**12.6**
BERYLLIUM	120	63	0.35	**0.11**	**0.024**	**0.064**	**0.052**	**0.088**	**0.047**	**0.031**	**0.362**	**0.034**
CADMIUM	75	8	1.72	**3.338**	**0.142**	**1.55**	**0.534**	**0.13**	**0.081**	ND	**0.066**	**0.49**
CALCIUM	NC	NC	9.44	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHROMIUM	210[2]	38[2]	7.75	**11.5**	**3.98**	**13.6**	**8.16**	**2.32**	**2.25**	**1.91**	**1.71**	**4.2**
IRON	23,000	NC	1,490	ND	ND	ND	ND	ND	ND	ND	ND	ND
LEAD	400	NC	197	**230**	**13.6**	**210**	**153**	**8.54**	**3.68**	**1.08**	**5.5**	**41.2**
MAGNESIUM	NC	NC	329	ND	ND	ND	ND	ND	ND	ND	ND	ND
MANGANESE	1,600	(2)	22	ND	ND	ND	ND	ND	ND	ND	ND	ND
MERCURY	3.4	2.1	0.16	**0.0007**	ND	**0.00031**	**0.00036**	**0.00032**	ND	ND	ND	**0.00026**
NICKEL	110	130	3.89	**7.67**	**1.32**	**4.93**	**1.55**	**2.11**	ND	**1.33**	**0.477**	**0.624**
SELENIUM	390	5	1.68	ND	ND	**150**	ND	ND	ND	ND	ND	ND
THALLIUM	NC	NC	2.84	ND	ND	ND	ND	ND	ND	ND	ND	ND
VANADIUM	15	980	6.3	ND	ND	ND	ND	ND	ND	ND	ND	ND
ZINC	23,000	6,000	37	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Recoverable Petroleum Hydrocarbons (mg/kg)												
TRPH	340	340	NC	**100**	**45**	**13**	**120**	**20**	**53**	ND	**16**	**28**

TABLE 1-1

SOIL ANALYTICAL DATA - PREVIOUS INVESTIGATIONS
BUILDING 610 SAMPLING AND ANALYSIS REPORT
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA
PAGE 2 OF 2

PARAMETER	FDEP RESIDENTIAL SCTL[1]	FDEP LEACHABILITY SCTL[1]	IBDS VALUE[3]	PWC-									
				610-10	610-11	610-12	610-13	610-14	610-15	610-23	610-24	610-25	610-26
Volatile Organic Compounds (ug/kg)													
ACETONE	780,000	2,800	NC	400	ND	ND	ND	ND	ND	300 U	300 U	310 U	280 U
1,1-DICHLOROETHANE	290,000	400	NC	ND	ND	ND	ND	ND	ND	13	11	6 U	6 U
TETRACHLOROETHENE	8,900	30	NC	ND	ND	ND	17	ND	ND	18 U	18 U	120	17 U
TRICHLOROTEHENE	6,000	30	NC	ND	ND	ND	ND	ND	ND	160	81	28	14
Semivolatile Organic Compounds (ug/kg)													
BENZO(A)ANTHRACENE	1,400	3,200	NC	ND	750	ND	ND	ND	ND	390 U	390 U	410 U	370 U
BENZO(A)PYRENE	100	8,000	NC	ND	1600	ND	ND	ND	ND	390 U	390 U	410 U	370 U
BENZO(B)FLUORANTHENE	1,400	10,000	NC	ND	1200	ND	ND	ND	ND	390 U	390 U	410 U	370 U
BENZO(G,H,I)PERYLENE	2,300,000	32,000,000	NC	ND	1100	ND	ND	ND	ND	390 U	390 U	410 U	370 U
BENZO(K)FLUORANTHENE	15,000	25,000	NC	ND	1200	ND	ND	ND	ND	390 U	390 U	410 U	370 U
CHYRSENE	140,000	77,000	NC	ND	940	ND	ND	ND	ND	390 U	390 U	410 U	370 U
DIBENZO(A,H)ANTHRACENE	100	30,000	NC	ND	370	ND	ND	ND	ND	390 U	390 U	410 U	370 U
FLUORANTHENE	2,900,000	1,200,000	NC	ND	940	ND	ND	ND	ND	390 U	390 U	410 U	370 U
INDENO(1,2,3-CD)PYRENE	1,500	28,000	NC	ND	1100	ND	ND	ND	ND	390 U	390 U	410 U	370 U
PYRENE	2,200,000	880,000	NC	ND	810	ND	ND	ND	ND	390 U	390 U	410 U	370 U
Herbicides (ug/kg)													
MCPA	30,000	20	NC	ND	3400	U	4300	ND	ND	ND	ND	ND	ND
Inorganics (mg/kg)													
ALUMINUM	720,000	NC	4,430	ND	ND	ND	ND	ND	ND	1200	1100	1600	900
ANTIMONY	26	5	9.44	ND	4.5	ND	5.45	ND	ND	2 U	2 U	2 U	2 U
ARSENIC	0.8	29	2.04	2.35	3.22	ND	ND	3.4	ND	1.1 J	0.6 J	3.1	0.6 U
BARIUM	110	1600	14.4	20.8	102	91.1	79.54	13.6	4.25	24 U	24 U	25 U	22 U
BERYLLIUM	120	63	0.35	0.037	0.077	0.072	0.174	0.09	0.137	1 U	1 U	1 U	1 U
CADMIUM	75	8	1.72	0.399	1.14	0.717	2.38	1.97	ND	1 U	1 U	1 U	1 U
CALCIUM	NC	NC	9.44	ND	ND	ND	ND	ND	ND	790	1200	760	440
CHROMIUM	210[2]	38[2]	7.75	11.9	8.29	18.1	69.5	220	4.71	2.3	2	5.2	1.9
IRON	23,000	NC	1,490	ND	ND	ND	ND	ND	ND	230 U	240	290	210 U
LEAD	400	NC	197	37.4	209	112	320	97.2	2	1.5	1 U	8.6	1 U
MAGNESIUM	NC	NC	329	ND	ND	ND	ND	ND	ND	30 U	31	42	28 U
MANGANESE	1,600	(2)	22	ND	ND	ND	ND	ND	ND	1 U	1	3.9	1 U
MERCURY	3.4	2.1	0.16	0.00045	0.00085	ND	ND	ND	ND	0.01 U	0.01 U	0.01 U	0.01 U
NICKEL	110	130	3.89	4.2	8.6	9	25	7.3	2.8	6 U	6 U	6 U	6 U
SELENIUM	390	5	1.68	ND	ND	ND	0.83	ND	ND	2 U	2 U	2 U	2 U
THALLIUM	NC	NC	2.84	ND	2.14	ND	ND	3.25	ND	1 U	1 U	1 U	1 U
VANADIUM	15	980	6.3	ND	ND	ND	ND	ND	ND	1	1 U	1.6	1 U
ZINC	23,000	6,000	37	ND	ND	ND	ND	ND	ND	6 U	6 U	36	6 U
Total Recoverable Petroleum Hydrocarbons (mg/kg)													
TRPH	340	340	NC	59	52	160	1200	870	33	7.8 U	7.8 U	8.2 U	7.3 U

(1) Soil Cleanup Target Levels, FAC 62-777 (FDEP, 1999).
(2) Criterion for hexavalent chromium only.
(3) Inorganic Background Dat Set (HLA, 1998).

U = Not detected at or above detection limit (associated value).
ND = Not detected.
NC = No criterion.

Shaded values exceed lesser of residential and leachability SCTLs, and greater of that value and IBDS value.

2.0 FIELD INVESTIGATIONS

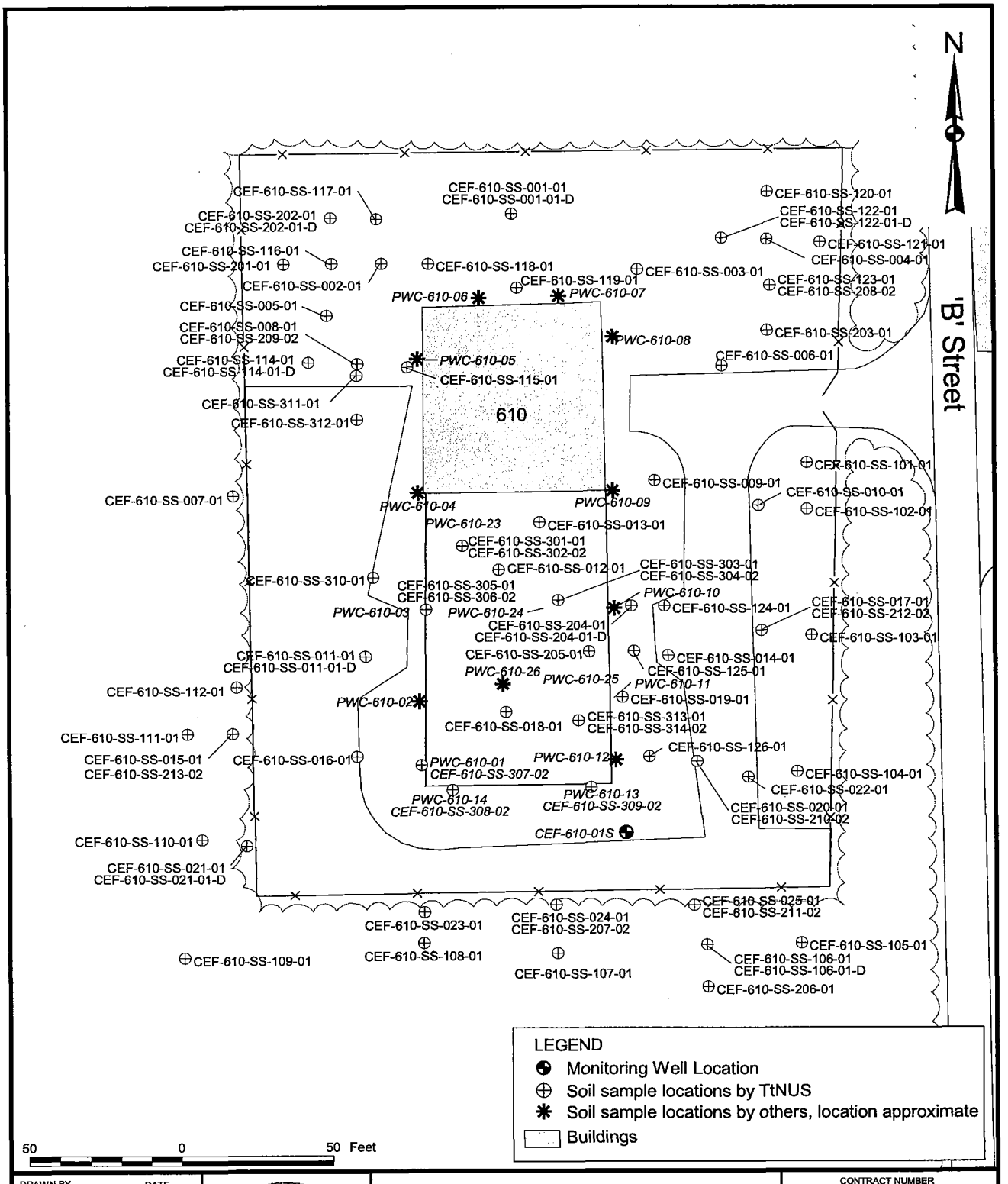
To investigate potential site contamination resulting from past hazardous waste storage activities, TtNUS initiated Phase I of soil sampling Building 610 in October 2000 (TtNUS, 2000a). The field activities included collection of 25 surface soil samples (CEF-610-SS-001 to CEF-610-SS-025) from 0 to 1 foot below ground surface (bgs) at locations shown on Figure 2-1. These samples were analyzed for Target Compound List (TCL) VOCs, PAHs, herbicides, TRPH, arsenic, barium, chromium, selenium, and thallium. Locations and analyses of these samples were selected based upon the results of the historical samplings performed by PWC Jacksonville and HLA.

Based on the results of the Phase I sampling and analysis, TtNUS initiated Phase II sampling in December 2000 (TtNUS, 2000b). During this sampling event, a total of 25 surface soil samples (CEF-610-SS-101 to CEF-610-112 and CEF-610-SS-114 to CEF-610-SS-126) were collected from 0 to 1 foot bgs at locations shown on Figure 2-1. One additional Phase II sample (CEF-610-SS-113) had been planned, but the location proved to be under pavement, so it was not collected. Based on the Phase I results, all 25 Phase II samples were analyzed for PAHs, eight samples (CEF-610-SS-103-01 to -107-01, CEF-610-SS-111-01 and –112-01, and CEF-610-SS-126-01) were analyzed for TRPH, and one sample (CEF-610-SS-119-01) was analyzed for arsenic. During the first and second soil sampling phases, a total of 10 quality assurance/quality control (QA/QC) samples were collected, including six field duplicates and four laboratory matrix spike/matrix spike duplicate (MS/MSD) samples.

Based on the results of the Phase I and Phase II sampling events, TtNUS initiated Phase III soil sampling in February 2001 (TtNUS, 2001a) that consisted of 13 additional soil samples to further delineate the horizontal and vertical extent of PAH and TRPH contamination. As shown on Figure 2-1, six of the samples (CEF-610-SS-201-01 to CEF-610-SS-206-01) were collected from 0 to 1 foot bgs within 15 feet of previous sampling locations, and the remaining seven samples (CEF-610-SS-207-02 to CEF-610-SS-213-02) were collected below previous sampling locations at 1 to 2 feet bgs. All 13 Phase III samples were analyzed for PAHs and TRPH. For the Phase III sampling event, three QA/QC samples were collected, including two field duplicates and one MS/MSD sample.

To address leachability concerns associated with historical data, TtNUS initiated Phase IV sampling in March 2001 (TtNUS, 2001c) and Phase V sampling in September 2001 (TtNUS, 2001d).

Phase IV consisted of a total of 14 soil samples. Eleven samples were collected at the approximate location of seven historical NAS Jacksonville PWC samples, and the remaining three samples were used to further investigate two Phase I sampling locations. Samples CEF-610-SS-301-01 and CEF-601-SS-302-02 were collected from 0 to 1 and 1 to 2 feet bgs, respectively, at the approximate location



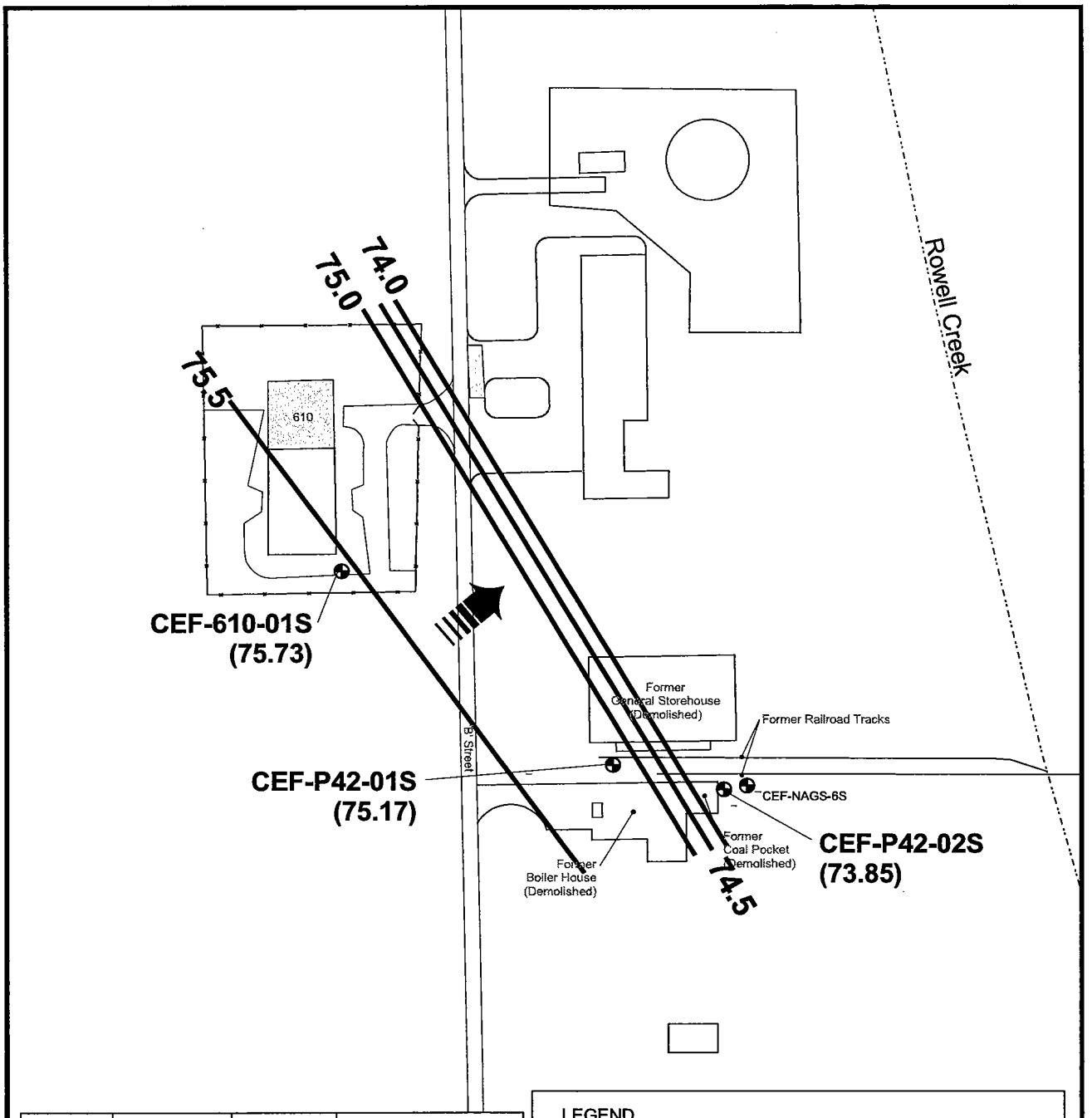
DRAWN BY	DATE		CONTRACT NUMBER
MJJ	30Mar01	SAMPLE LOCATIONS BUILDING 610 SAMPLING AND ANALYSIS REPORT NAVAL AIR STATION CECIL FIELD JACKSONVILLE, FLORIDA	0039
CHECKED BY	DATE		APPROVED BY / DATE
COST/SCHEDULE-AREA			APPROVED BY / DATE
SCALE AS NOTED			DRAWING NO. FIGURE 2-1 / REV 0

P:\GIS\NAS_CecilField\Bldg0610_SAR.apr 10Dec01 MJJ Layout 2-1

of historical sample PWC-610-23, and analyzed for VOCs. Samples CEF-610-SS-303-01 and CEF-601-SS-303-02 were collected from 0 to 1 and 1 to 2 feet bgs, respectively, at the approximate location of historical sample PWC-610-24, and analyzed for VOCs. Samples CEF-610-SS-305-01 and CEF-610-SS-306-02 were collected from 0 to 1 and 1 to 2 feet bgs, respectively, at the approximate location of historical sample PWC-610-3, and analyzed for barium and selenium. Sample CEF-610-SS-307-02 was collected from 1 to 2 feet bgs, at the approximate location of historical sample PWC-610-1, and analyzed for barium. Sample CEF-610-SS-308-02 was collected from 1 to 2 feet bgs, at the approximate location of historical sample PWC-610-14, and analyzed for chromium and TRPH. Sample CEF-610-SS-309-02 was collected from 1 to 2 feet bgs, at the approximate location of historical sample PWC-610-13, and analyzed for TRPH. Samples CEF-610-SS-313-01 and CEF-610-SS-314-02 were collected from 0 to 1 and 1 to 2 feet bgs, respectively, at the approximate location of historical sample PWC-610-25, and analyzed for VOCs. Sample CEF-610-SS-310-01 was collected from 0 to 1 foot bgs in the vicinity of Phase I sample CEF-610-SS-011 and analyzed for barium and selenium. Samples CEF-610-SS-311-01 and CEF-610-SS-312-01 were collected from 0 to 1 foot bgs in the vicinity of Phase I sample CEF-610-SS-008 and analyzed for PAHs. For QA/QC purposes, one laboratory matrix spike sample was collected.

Phase V consisted of installing and sampling one shallow monitoring well (CEF-610-01S). The well had a total depth of 15 feet and was screened in the interval from 5 to 15 feet bgs. Phase V activities also included one round of groundwater level measurements in the new monitoring well and two nearby existing wells (CEF-P42-1S, CEF-P42-2S). Figure 2-2 shows monitoring well locations and potentiometric surface elevations in the area. As shown on Figure 2-1 and as agreed upon during the Base Realignment and Closure (BRAC) Team (BCT) meeting of April 30, 2001 (BCT, 2001), well CEF-610-01S was located approximately halfway between Phase I soil sampling locations CEF-610-SS-020 and CEF-610-SS-024. The groundwater sample collected from well CEF-610-01S was analyzed for VOCs, PAHs, TRPH, and RCRA metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver). Although FDEP initially requested that groundwater also be analyzed for pesticides to address concern about potential MCPA leaching from soil, the BCT agreed (BCT, 2001) that such analysis was neither required nor practical because MCPA was not detected above its SCTL in any of the Phase I soil samples and the detection limit for MCPA using the normal analytical method for pesticides in groundwater [United States Environmental Protection Agency (U.S. EPA) Method SW-846] is significantly higher [35 micrograms per liter (µg/L)] than the FDEP Groundwater Cleanup Target Level (GCTL) for this chemical (3.5 µg/L). A total of two QA/QC samples were collected and analyzed, including one field duplicate pair and one MS/MSD sample.

All surface soil samples for Phases I through IV were collected as grab samples using plastic, disposable trowels. Groundwater sampling for Phase V was performed using low-flow techniques. Monitoring well installation and soil and groundwater sampling activities were performed in accordance with the procedures



Well	Top of Casing	Water Level	Groundwater Elevation
CEF-P42-1S	80.77	5.60	75.17
CEF-P42-2S	80.10	6.25	73.85
CEF-610-1S	79.42	3.69	75.73

LEGEND
- Monitoring Well Location
- (75.17) ← Groundwater Elevation taken on 01/24/02, Ft MSL
- Groundwater Flow Direction
- Groundwater Contours (Dashed where inferred), Ft MSL

150 0 150 Feet

DRAWN BY MJJ	DATE 01Feb02	WELL LOCATIONS AND POTENTIOMTRIC SURFACE ELEVATION MAP SHALLOW ZONE BUILDING 610 NAVAL AIR STATION CECIL FIELD JACKSONVILLE, FLORIDA	CONTRACT NUMBER 0039
CHECKED BY	DATE		APPROVED BY / DATE
COST/SCHEDULE-AREA			APPROVED BY / DATE
SCALE AS NOTED			DRAWING NO. FIGURE 2-2 / REV 0

P:\GIS\NAS_CecilField\Bldg610_ActionMemo.apr 01Feb02 MJJ PotentiometricLayout

described in the U.S. EPA Region IV Environmental Investigations Standard Operating Procedures and Quality Assurance Manual (EISOPQAM) (U.S. EPA, 1996) and the NAS Cecil Field Base-Wide Generic Work Plan (TtNUS, 1998). As agreed by the BCT, no rinsate and trip blanks were collected. In addition, field blanks were not collected because the sampling equipment was disposable.

Soil and groundwater samples were analyzed for VOCs using U.S. EPA Method SW-846 8260B, PAHs using U.S. EPA Method SW-846 8310, herbicides (soil only) using U.S. EPA Method SW-846 8151A, metals using U.S. EPA Method SW-846 6010B, and TRPH using the Florida Petroleum Residual Organics (FL-PRO) method. ACCUTEST SouthEast, in Orlando, Florida performed the analyses.

3.0 DATA EVALUATION AND REMOVAL ACTION

3.1 NATURE AND EXTENT OF CONTAMINATION

As shown on Figure 3-1, the results of the Phases I through IV samplings showed that soil contamination extends in two areas, including a smaller 1,750-square foot (ft^2) area next to the northwestern corner of Building 610 and a larger 26,478-ft^2 J-shaped area east and south of Building 610. Phases I through IV sampling results also showed that soil contamination does not extend beyond 1 foot bgs. The results of the Phase V sampling established that groundwater quality has not been adversely impacted by soil contamination.

As shown on Tables 3-1, 3-2, and 3-3, Phases I through IV soil analytical results for VOCs, PAHs, herbicides, metals, and TRPH were compared to the most stringent FDEP SCTLs either for direct residential exposure or leachability to groundwater. Metals concentrations were also compared to their NAS Cecil Field site-specific Inorganic Background Data Set (IBDS) values (HLA, 1998). These comparisons showed exceedances of SCTLs for several PAHs, one metal (barium), and TRPH. However, the results of the Phases I through IV soil sampling showed no SCTL exceedances of VOCs, herbicides (MCPA), and other metals (arsenic, chromium, and selenium).

One VOC (methylene chloride) was in fact detected slightly in excess of its leachability SCTL (20 µg/kg) in seven Phase I samples at concentrations ranging from 20.6 µg/kg (CEF-610-SS-024-01) to 27.1 µg/kg (CEF-610-SS-025-01). However, validation later determined these detections to be false positives.

PAH exceedances were detected in 13 Phase I, five Phase II, and two Phase III samples. A single Phase I sample slightly exceeded the barium SCTL. TRPH exceedances were detected in five Phase I samples.

Benzo(a)pyrene (BaP) was detected in excess of its residential SCTL [100 micrograms per kilogram (µg/kg)] in 20 samples at concentrations ranging from 103 µg/kg (CEF-610-SS-106-01) to 8,470 µg/kg (CEF-610-SS-024-01). Benzo(a)anthracene was detected in excess of its residential SCTL (1,400 µg/kg) in three samples at concentrations ranging from 1,970 µg/kg (CEF-610-SS-017-01) to 3,370 µg/kg (CEF-610-SS-020-01). Benzo(b)fluoranthene was detected in excess of its residential SCTL (1,400 µg/kg) in four samples at concentrations ranging from 2,720 µg/kg (CEF-610-SS-025-01) to 7,160 µg/kg (CEF-610-SS-024-01). Dibenzo(a,h)anthracene was detected in excess of its residential SCTL (100 µg/kg) in a single sample (CEF-610-SS-020-01) at a concentration of 366 µg/kg.

TABLE 3-1

SOIL ANALYTICAL DATA
VOLATILE ORGANIC COMPOUNDS
BUILDING 610 SAMPLING AND ANALYSIS REPORT
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA
PAGE 1 OF 5

PARAMETER	FDEP RESIDENTIAL SCTL	FDEP LEACHABILITY SCTL	CEF-610-							
			SS-001-01		SS-002-01	SS-003-01	SS-004-01	SS-005-01	SS-006-01	SS-007-01
			Sample	Duplicate						
Volatile Organic Compounds (ug/kg)										
1,1,1-TRICHLOROETHANE	400,000	1,900	6.2 U	6.2 U	5.7 U	5.6 U	5.8 U	5.9 U	5.2 U	7.2 U
1,1,2,2-TETRACHLOROETHANE	70	2	6.2 U	6.2 U	5.7 U	5.6 U	5.8 U	5.9 U	5.2 U	7.2 U
1,1,2-TRICHLOROETHANE	1,300	30	6.2 U	6.2 U	5.7 U	5.6 U	5.8 U	5.9 U	5.2 U	7.2 U
1,1-DICHLOROETHANE	290,000	400	6.2 U	6.2 U	5.7 U	5.6 U	5.8 U	5.9 U	5.2 U	7.2 U
1,1-DICHLOROETHENE	90	60	6.2 U	6.2 U	5.7 U	5.6 U	5.8 U	5.9 U	5.2 U	7.2 U
1,2-DICHLOROETHANE	500	10	6.2 U	6.2 U	5.7 U	5.6 U	5.8 U	5.9 U	5.2 U	7.2 U
1,2-DICHLOROPROPANE	600	30	6.2 U	6.2 U	5.7 U	5.6 U	5.8 U	5.9 U	5.2 U	7.2 U
2-BUTANONE	3,100,000	17,000	12 U	12 U	11 U	11 U	12 U	12 U	10 U	14 U
2-HEXANONE	5,100	1,400	12 U	12 U	11 U	11 U	12 U	12 U	10 U	14 U
4-METHYL-2-PENTANONE	220,000	2,600	12 U	12 U	11 U	11 U	12 U	12 U	10 U	14 U
ACETONE	780,000	2,800	62 U	62 U	57 U	56 U	58 U	59 U	52 U	72 U
BENZENE	1,100	7	6.2 U	6.2 U	5.7 U	5.6 U	5.8 U	5.9 U	5.2 U	7.2 U
BROMODICHLOROMETHANE	1,400	4	6.2 U	6.2 U	5.7 U	5.6 U	5.8 U	5.9 U	5.2 U	7.2 U
BROMOFORM	48,000	30	6.2 U	6.2 U	5.7 U	5.6 U	5.8 U	5.9 U	5.2 U	7.2 U
BROMOMETHANE	2,200	50	NA	NA	NA	NA	NA	NA	NA	NA
CARBON DISULFIDE	200,000	5,600	12 U	12 U	11 U	11 U	12 U	12 U	10 U	14 U
CARBON TETRACHLORIDE	400	40	6.2 U	6.2 U	5.7 U	5.6 U	5.8 U	5.9 U	5.2 U	7.2 U
CHLOROBENZENE	30,000	1,300	6.2 U	6.2 U	5.7 U	5.6 U	5.8 U	5.9 U	5.2 U	7.2 U
CHLORODIBROMOMETHANE	NC	NC	6.2 U	6.2 U	5.7 U	5.6 U	5.8 U	5.9 U	5.2 U	7.2 U
CHLOROETHANE	NC	NC	6.2 U	6.2 U	5.7 U	5.6 U	5.8 U	5.9 U	5.2 U	7.2 U
CHLOROFORM	400	30	6.2 U	6.2 U	5.7 U	5.6 U	5.8 U	5.9 U	5.2 U	7.2 U
CHLOROMETHANE	1,700	10	NA	NA	NA	NA	NA	NA	NA	NA
CIS-1,2-DICHLOROETHENE	19,000	400	6.2 U	6.2 U	5.7 U	5.6 U	5.8 U	5.9 U	5.2 U	7.2 U
CIS-1,3-DICHLOROPROPENE	600	30	6.2 U	6.2 U	5.7 U	5.6 U	5.8 U	5.9 U	5.2 U	7.2 U
DIBROMOMETHANE	NC	NC	6.2 U	6.2 U	5.7 U	5.6 U	5.8 U	5.9 U	5.2 U	7.2 U
ETHYLBENZENE	1,100,000	600	6.2 U	6.2 U	5.7 U	5.6 U	5.8 U	5.9 U	5.2 U	7.2 U
METHYL TERT-BUTYL ETHER	3,200,000	200	6.2 U	6.2 U	5.7 U	5.6 U	5.8 U	5.9 U	5.2 U	7.2 U
METHYLENE CHLORIDE	16,000	20	**13.7 J**	**15.2 J**	**11.8 J**	**11.5 J**	**12.3 J**	12 U	10 U	**19.9 J**
STYRENE	2,700,000	3,600	6.2 U	6.2 U	5.7 U	5.6 U	5.8 U	5.9 U	5.2 U	7.2 U
TETRACHLOROETHENE	8,900	30	6.2 U	6.2 U	5.7 U	5.6 U	5.8 U	5.9 U	5.2 U	7.2 U
TOLUENE	380,000	500	6.2 U	6.2 U	**2.4 J**	5.6 U	5.8 U	5.9 U	5.2 U	7.2 U
TOTAL XYLENES	5,900,000	200	19 U	20 U	17 U	17 U	17 U	18 U	16 U	21 U
TRANS-1,2-DICHLOROETHENE	31,000	700	6.2 U	6.2 U	5.7 U	5.6 U	5.8 U	5.9 U	5.2 U	7.2 U
TRANS-1,3-DICHLOROPROPENE	200	1	6.2 U	6.2 U	5.7 U	5.6 U	5.8 U	5.9 U	5.2 U	7.2 U
TRICHLOROETHENE	6,000	30	6.2 U	6.2 U	5.7 U	5.6 U	5.8 U	5.9 U	5.2 U	7.2 U
VINYL CHLORIDE	300	7	6.2 U	6.2 U	5.7 U	5.6 U	5.8 U	5.9 U	5.2 U	7.2 U

TABLE 3-1

SOIL ANALYTICAL DATA
VOLATILE ORGANIC COMPOUNDS
BUILDING 610 SAMPLING AND ANALYSIS REPORT
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA
PAGE 2 OF 5

PARAMETER	FDEP RESIDENTIAL SCTL	FDEP LEACHABILITY SCTL	CEF-610-							
			SS-008-01	SS-009-01	SS-010-01	SS-011-01		SS-012-01	SS-013-01	SS-014-01
						Sample	Duplicate			
Volatile Organic Compounds (ug/kg)										
1,1,1-TRICHLOROETHANE	400,000	1,900	5.8 U	6 U	6 U	6 U	5.8 U	6.4 U	6 U	6 U
1,1,2,2-TETRACHLOROETHANE	70	2	5.8 U	6 U	6 U	6 U	5.8 U	6.4 U	6 U	6 U
1,1,2-TRICHLOROETHANE	1,300	30	5.8 U	6 U	6 U	6 U	5.8 U	6.4 U	6 U	6 U
1,1-DICHLOROETHANE	290,000	400	5.8 U	6 U	6 U	6 U	5.8 U	6.4 U	6 U	6 U
1,1-DICHLOROETHENE	90	60	5.8 U	6 U	6 U	6 U	5.8 U	6.4 U	6 U	6 U
1,2-DICHLOROETHANE	500	10	5.8 U	6 U	6 U	6 U	5.8 U	6.4 U	6 U	6 U
1,2-DICHLOROPROPANE	600	30	5.8 U	6 U	6 U	6 U	5.8 U	6.4 U	6 U	6 U
2-BUTANONE	3,100,000	17,000	12 U	12 U	12 U	12 U	12 U	13 U	12 U	12 U
2-HEXANONE	5,100	1,400	12 U	12 U	12 U	12 U	12 U	13 U	12 U	12 U
4-METHYL-2-PENTANONE	220,000	2,600	12 U	12 U	12 U	12 U	12 U	13 U	12 U	12 U
ACETONE	780,000	2,800	58 U	60 U	60 U	60 U	58 U	64 U	60 U	60 U
BENZENE	1,100	7	5.8 U	6 U	6 U	6 U	5.8 U	6.4 U	6 U	6 U
BROMODICHLOROMETHANE	1,400	4	5.8 U	6 U	6 U	6 U	5.8 U	6.4 U	6 U	6 U
BROMOFORM	48,000	30	5.8 U	6 U	6 U	6 U	5.8 U	6.4 U	6 U	6 U
BROMOMETHANE	2,200	50	NA	NA	NA	NA	NA	NA	NA	NA
CARBON DISULFIDE	200,000	5,600	12 U	12 U	12 U	12 U	12 U	13 U	12 U	12 U
CARBON TETRACHLORIDE	400	40	5.8 U	6 U	6 U	6 U	5.8 U	6.4 U	6 U	6 U
CHLOROBENZENE	30,000	1,300	5.8 U	6 U	6 U	6 U	5.8 U	6.4 U	6 U	6 U
CHLORODIBROMOMETHANE	NC	NC	5.8 U	6 U	6 U	6 U	5.8 U	6.4 U	6 U	6 U
CHLOROETHANE	NC	NC	5.8 U	6 U	6 U	6 U	5.8 U	6.4 U	6 U	6 U
CHLOROFORM	400	30	5.8 U	6 U	6 U	6 U	5.8 U	6.4 U	6 U	6 U
CHLOROMETHANE	1,700	10	NA	NA	NA	NA	NA	NA	NA	NA
CIS-1,2-DICHLOROETHENE	19,000	400	5.8 U	6 U	6 U	6 U	5.8 U	6.4 U	6 U	6 U
CIS-1,3-DICHLOROPROPENE	600	30	5.8 U	6 U	6 U	6 U	5.8 U	6.4 U	6 U	6 U
DIBROMOMETHANE	NC	NC	5.8 U	6 U	6 U	6 U	5.8 U	6.4 U	6 U	6 U
ETHYLBENZENE	1,100,000	600	5.8 U	6 U	6 U	6 U	5.8 U	6.4 U	6 U	6 U
METHYL TERT-BUTYL ETHER	3,200,000	200	5.8 U	6 U	6 U	6 U	5.8 U	6.4 U	6 U	6 U
METHYLENE CHLORIDE	16,000	20	12 U	**16.8 J**	**20.8 J**	12 UJ	**13.6 J**	**14.8 J**	**13.8 J**	**18.4 J**
STYRENE	2,700,000	3,600	5.8 U	6 U	6 U	6 U	5.8 U	6.4 U	6 U	6 U
TETRACHLOROETHENE	8,900	30	5.8 U	6 U	6 U	6 U	5.8 U	6.4 U	6 U	6 U
TOLUENE	380,000	500	**3 J**	**2.8 J**	**4 J**	**5.4 J**	5.8 U	**2.6 J**	**2.6 J**	**3.3 J**
TOTAL XYLENES	5,900,000	200	17 U	18 U	18 U	18 U	17 U	19 U	18 U	18 U
TRANS-1,2-DICHLOROETHENE	31,000	700	5.8 U	6 U	6 U	6 U	5.8 U	6.4 U	6 U	6 U
TRANS-1,3-DICHLOROPROPENE	200	1	5.8 U	6 U	6 U	6 U	5.8 U	6.4 U	6 U	6 U
TRICHLOROETHENE	6,000	30	5.8 U	6 U	6 U	6 U	5.8 U	6.4 U	6 U	6 U
VINYL CHLORIDE	300	7	5.8 U	6 U	6 U	6 U	5.8 U	6.4 U	6 U	6 U

TABLE 3-1

SOIL ANALYTICAL DATA
VOLATILE ORGANIC COMPOUNDS
BUILDING 610 SAMPLING AND ANALYSIS REPORT
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA
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PARAMETER	FDEP RESIDENTIAL SCTL	FDEP LEACHABILITY SCTL	CEF-610-							
			SS-015-01	SS-016-01	SS-017-01	SS-018-01	SS-019-01	SS-020-01	SS-021-01	
									Sample	Duplicate
Volatile Organic Compounds (ug/kg)										
1,1,1-TRICHLOROETHANE	400,000	1,900	8.4 U	8.2 U	6.3 U	5.8 U	6.1 U	6.8 U	7.8 U	8.2 U
1,1,2,2-TETRACHLOROETHANE	70	2	8.4 U	8.2 U	6.3 U	5.8 U	6.1 U	6.8 U	7.8 U	8.2 U
1,1,2-TRICHLOROETHANE	1,300	30	8.4 U	8.2 U	6.3 U	5.8 U	6.1 U	6.8 U	7.8 U	8.2 U
1,1-DICHLOROETHANE	290,000	400	8.4 U	8.2 U	6.3 U	5.8 U	6.1 U	6.8 U	7.8 U	8.2 U
1,1-DICHLOROETHENE	90	60	8.4 U	8.2 U	6.3 U	5.8 U	6.1 U	6.8 U	7.8 U	8.2 U
1,2-DICHLOROETHANE	500	10	8.4 U	8.2 U	6.3 U	5.8 U	6.1 U	6.8 U	7.8 U	8.2 U
1,2-DICHLOROPROPANE	600	30	8.4 U	8.2 U	6.3 U	5.8 U	6.1 U	6.8 U	7.8 U	8.2 U
2-BUTANONE	3,100,000	17,000	17 U	16 U	13 U	12 U	12 U	14 U	16 U	16 U
2-HEXANONE	5,100	1,400	17 U	16 U	13 U	12 U	12 U	14 U	16 U	16 U
4-METHYL-2-PENTANONE	220,000	2,600	17 U	16 U	13 U	12 U	12 U	14 U	16 U	16 U
ACETONE	780,000	2,800	84 U	82 U	63 U	58 U	61 U	68 U	**60.4 J**	**47.7 J**
BENZENE	1,100	7	8.4 U	8.2 U	6.3 U	5.8 U	6.1 U	6.8 U	7.8 U	8.2 U
BROMODICHLOROMETHANE	1,400	4	8.4 U	8.2 U	6.3 U	5.8 U	6.1 U	6.8 U	7.8 U	8.2 U
BROMOFORM	48,000	30	8.4 U	8.2 U	6.3 U	5.8 U	6.1 U	6.8 U	7.8 U	8.2 U
BROMOMETHANE	2,200	50	NA	NA	NA	NA	NA	NA	NA	NA
CARBON DISULFIDE	200,000	5,600	17 U	16 U	13 U	12 U	12 U	14 U	16 U	16 U
CARBON TETRACHLORIDE	400	40	8.4 U	8.2 U	6.3 U	5.8 U	6.1 U	6.8 U	7.8 U	8.2 U
CHLOROBENZENE	30,000	1,300	8.4 U	8.2 U	6.3 U	5.8 U	6.1 U	6.8 U	7.8 U	8.2 U
CHLORODIBROMOMETHANE	NC	NC	8.4 U	8.2 U	6.3 U	5.8 U	6.1 U	6.8 U	7.8 U	8.2 U
CHLOROETHANE	NC	NC	8.4 U	8.2 U	6.3 U	5.8 U	6.1 U	6.8 U	7.8 U	8.2 U
CHLOROFORM	400	30	8.4 U	8.2 U	6.3 U	5.8 U	6.1 U	6.8 U	7.8 U	8.2 U
CHLOROMETHANE	1,700	10	NA	NA	NA	NA	NA	NA	NA	NA
CIS-1,2-DICHLOROETHENE	19,000	400	8.4 U	8.2 U	6.3 U	5.8 U	6.1 U	6.8 U	7.8 U	8.2 U
CIS-1,3-DICHLOROPROPENE	600	30	8.4 U	8.2 U	6.3 U	5.8 U	6.1 U	6.8 U	7.8 U	8.2 U
DIBROMOMETHANE	NC	NC	8.4 U	8.2 U	6.3 U	5.8 U	6.1 U	6.8 U	7.8 U	8.2 U
ETHYLBENZENE	1,100,000	600	8.4 U	8.2 U	6.3 U	5.8 U	6.1 U	6.8 U	7.8 U	8.2 U
METHYL TERT-BUTYL ETHER	3,200,000	200	8.4 U	8.2 U	6.3 U	5.8 U	6.1 U	6.8 U	7.8 U	8.2 U
METHYLENE CHLORIDE	16,000	20	**20.7 J**	**16.6 J**	**15.3 J**	**12.2 J**	**20.7 J**	**18.6 J**	**20.4 J**	**23.1 J**
STYRENE	2,700,000	3,600	8.4 U	8.2 U	6.3 U	5.8 U	6.1 U	6.8 U	7.8 U	8.2 U
TETRACHLOROETHENE	8,900	30	8.4 U	8.2 U	6.3 U	5.8 U	6.1 U	6.8 U	7.8 U	8.2 U
TOLUENE	380,000	500	**6 J**	**3.8 J**	6.3 U	**3.5 J**	**2.9 J**	**3.4 J**	**4.5 J**	8.2 U
TOTAL XYLENES	5,900,000	200	25 U	25 U	19 U	17 U	18 U	20 U	23 U	25 U
TRANS-1,2-DICHLOROETHENE	31,000	700	8.4 U	8.2 U	6.3 U	5.8 U	6.1 U	6.8 U	7.8 U	8.2 U
TRANS-1,3-DICHLOROPROPENE	200	1	8.4 U	8.2 U	6.3 U	5.8 U	6.1 U	6.8 U	7.8 U	8.2 U
TRICHLOROETHENE	6,000	30	8.4 U	8.2 U	6.3 U	5.8 U	6.1 U	6.8 U	7.8 U	8.2 U
VINYL CHLORIDE	300	7	8.4 U	8.2 U	6.3 U	5.8 U	6.1 U	6.8 U	7.8 U	8.2 U

TABLE 3-1

SOIL ANALYTICAL DATA
VOLATILE ORGANIC COMPOUNDS
BUILDING 610 SAMPLING AND ANALYSIS REPORT
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA
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PARAMETER	FDEP RESIDENTIAL SCTL	FDEP LEACHABILITY SCTL	CEF-610-					
			SS-022-01	SS-023-01	SS-024-01	SS-025-01	SS-301-01	SS-302-02
Volatile Organic Compounds (ug/kg)								
1,1,1-TRICHLOROETHANE	400,000	1,900	5.6 U	7.8 U	7.5 U	9 U	5.6 U	5.8 U
1,1,2,2-TETRACHLOROETHANE	70	2	5.6 U	7.8 U	7.5 U	9 U	5.6 U	5.8 U
1,1,2-TRICHLOROETHANE	1,300	30	5.6 U	7.8 U	7.5 U	9 U	5.6 U	5.8 U
1,1-DICHLOROETHANE	290,000	400	5.6 U	7.8 U	7.5 U	9 U	5.6 U	5.8 U
1,1-DICHLOROETHENE	90	60	5.6 U	7.8 U	7.5 U	9 U	5.6 U	5.8 U
1,2-DICHLOROETHANE	500	10	5.6 U	7.8 U	7.5 U	9 U	5.6 U	5.8 U
1,2-DICHLOROPROPANE	600	30	5.6 U	7.8 U	7.5 U	9 U	5.6 U	5.8 U
2-BUTANONE	3,100,000	17,000	11 U	16 U	15 U	18 U	11 U	12 U
2-HEXANONE	5,100	1,400	11 U	16 U	15 U	18 U	11 U	12 U
4-METHYL-2-PENTANONE	220,000	2,600	11 U	16 U	15 U	18 U	11 U	12 U
ACETONE	780,000	2,800	56 U	**44.5 J**	**34.4 J**	90 U	56 U	58 U
BENZENE	1,100	7	5.6 U	7.8 U	7.5 U	9 U	5.6 U	5.8 U
BROMODICHLOROMETHANE	1,400	4	5.6 U	7.8 U	7.5 U	9 U	5.6 U	5.8 U
BROMOFORM	48,000	30	5.6 U	7.8 U	7.5 U	9 U	5.6 U	5.8 U
BROMOMETHANE	2,200	50	NA	NA	NA	NA	5.6 U	5.8 U
CARBON DISULFIDE	200,000	5,600	11 U	16 U	15 J	18 U	11 U	12 U
CARBON TETRACHLORIDE	400	40	5.6 U	7.8 U	7.5 U	9 U	5.6 U	5.8 U
CHLOROBENZENE	30,000	1,300	5.6 U	7.8 U	7.5 U	9 U	5.6 U	5.8 U
CHLORODIBROMOMETHANE	NC	NC	5.6 U	7.8 U	7.5 U	9 U	5.6 U	5.8 U
CHLOROETHANE	NC	NC	5.6 U	7.8 U	7.5 U	9 U	5.6 U	5.8 U
CHLOROFORM	400	30	5.6 U	7.8 U	7.5 U	9 U	5.6 U	5.8 U
CHLOROMETHANE	1,700	10	NA	NA	NA	NA	5.6 U	5.8 U
CIS-1,2-DICHLOROETHENE	19,000	400	5.6 U	7.8 U	7.5 U	9 U	5.6 U	5.8 U
CIS-1,3-DICHLOROPROPENE	600	30	5.6 U	7.8 U	7.5 U	9 U	5.6 U	5.8 U
DIBROMOMETHANE	NC	NC	5.6 U	7.8 U	7.5 U	9 U	NA	NA
ETHYLBENZENE	1,100,000	600	5.6 U	7.8 U	7.5 U	9 U	5.6 U	5.8 U
METHYL TERT-BUTYL ETHER	3,200,000	200	5.6 U	7.8 U	7.5 U	9 U	NA	NA
METHYLENE CHLORIDE	16,000	20	**13.2 J**	**21.5 J**	**20.6 J**	**27.1 J**	11 U	12 U
STYRENE	2,700,000	3,600	5.6 U	7.8 U	7.5 U	9 U	5.6 U	5.8 U
TETRACHLOROETHENE	8,900	30	5.6 U	7.8 U	7.5 U	9 U	**2.6 J**	**2.3 J**
TOLUENE	380,000	500	**3.8 J**	**5.7 J**	**5.8 J**	**7.3 J**	5.6 U	5.8 U
TOTAL XYLENES	5,900,000	200	17 U	23 U	22 U	27 U	17 U	17 U
TRANS-1,2-DICHLOROETHENE	31,000	700	5.6 U	7.8 U	7.5 U	9 U	5.6 U	5.8 U
TRANS-1,3-DICHLOROPROPENE	200	1	5.6 U	7.8 U	7.5 U	9 U	5.6 U	5.8 U
TRICHLOROETHENE	6,000	30	5.6 U	7.8 U	7.5 U	9 U	5.6 U	5.8 U
VINYL CHLORIDE	300	7	5.6 U	7.8 U	7.5 U	9 U	5.6 U	5.8 U

TABLE 3-1

SOIL ANALYTICAL DATA
VOLATILE ORGANIC COMPOUNDS
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PARAMETER	FDEP RESIDENTIAL SCTL	FDEP LEACHABILITY SCTL	CEF-610-			
			SS-303-01	SS-304-02	SS-313-01	SS-314-02
Volatile Organic Compounds (ug/kg)						
1,1,1-TRICHLOROETHANE	400,000	1,900	6 U	5.7 U	5.6 U	5.7 U
1,1,2,2-TETRACHLOROETHANE	70	2	6 U	5.7 U	5.6 U	5.7 U
1,1,2-TRICHLOROETHANE	1,300	30	6 U	5.7 U	5.6 U	5.7 U
1,1-DICHLOROETHANE	290,000	400	6 U	5.7 U	5.6 U	5.7 U
1,1-DICHLOROETHENE	90	60	6 U	5.7 U	5.6 U	5.7 U
1,2-DICHLOROETHANE	500	10	6 U	5.7 U	5.6 U	5.7 U
1,2-DICHLOROPROPANE	600	30	6 U	5.7 U	5.6 U	5.7 U
2-BUTANONE	3,100,000	17,000	12 U	11 U	11 U	11 U
2-HEXANONE	5,100	1,400	12 U	11 U	11 U	11 U
4-METHYL-2-PENTANONE	220,000	2,600	12 U	11 U	11 U	11 U
ACETONE	780,000	2,800	60 U	57 U	56 U	57 U
BENZENE	1,100	7	6 U	5.7 U	5.6 U	5.7 U
BROMODICHLOROMETHANE	1,400	4	6 U	5.7 U	5.6 U	5.7 U
BROMOFORM	48,000	30	6 U	5.7 U	5.6 U	5.7 U
BROMOMETHANE	2,200	50	6 U	5.7 U	5.6 U	5.7 U
CARBON DISULFIDE	200,000	5,600	12 U	11 U	11 U	11 U
CARBON TETRACHLORIDE	400	40	6 U	5.7 U	5.6 U	5.7 U
CHLOROBENZENE	30,000	1,300	6 U	5.7 U	5.6 U	5.7 U
CHLORODIBROMOMETHANE	NC	NC	6 U	5.7 U	5.6 U	5.7 U
CHLOROETHANE	NC	NC	6 U	5.7 U	5.6 U	5.7 U
CHLOROFORM	400	30	6 U	5.7 U	5.6 U	5.7 U
CHLOROMETHANE	1,700	10	6 U	5.7 U	5.6 U	5.7 U
CIS-1,2-DICHLOROETHENE	19,000	400	6 U	5.7 U	5.6 U	5.7 U
CIS-1,3-DICHLOROPROPENE	600	30	6 U	5.7 U	5.6 U	5.7 U
DIBROMOMETHANE	NC	NC	NA	NA	NA	NA
ETHYLBENZENE	1,100,000	600	6 U	5.7 U	5.6 U	5.7 U
METHYL TERT-BUTYL ETHER	3,200,000	200	NA	NA	NA	NA
METHYLENE CHLORIDE	16,000	20	12 U	11 U	11 U	11 U
STYRENE	2,700,000	3,600	6 U	5.7 U	5.6 U	5.7 U
TETRACHLOROETHENE	8,900	30	6 U	5.7 U	5.6 U	5.7 U
TOLUENE	380,000	500	6 U	5.7 U	5.6 U	5.7 U
TOTAL XYLENES	5,900,000	200	18 U	17 U	17 U	17 U
TRANS-1,2-DICHLOROETHENE	31,000	700	6 U	5.7 U	5.6 U	5.7 U
TRANS-1,3-DICHLOROPROPENE	200	1	6 U	5.7 U	5.6 U	5.7
TRICHLOROETHENE	6,000	30	6 U	5.7 U	5.6 U	5.7
VINYL CHLORIDE	300	7	6 U	5.7 U	5.6 U	5.7

SCTL = Soil Target Cleanup Level , FAC 62-777 (FDEP, 1999).

TABLE 3-2

SOIL ANALYTICAL DATA
POLYNUCLEAR AROMATIC HYDROCARBONS
BUILDING 610 SAMPLING ANA ANALYSIS REPORT
NAVAL AIR STATION CECIL FIELD
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PARAMETER	FDEP RESIDENTIAL SCTL	FDEP LEACHABILITY SCTL	CEF-610-							
			SS-001-01		SS-002-01	SS-003-01	SS-004-01	SS-005-01	SS-006-01	SS-007-01
			Sample	Duplicate						
Polynuclear Aromatic Hydrocarbons (ug/kg)										
1-METHYLNAPHTHALENE	68,000	2,200	380 U	380 U	370 U	410 U	370 U	390 U	380 U	390 U
2-METHYLNAPHTHALENE	83,000	6,100	380 U	380 U	370 U	410 U	370 U	390 U	380 U	390 U
ACENAPHTHENE	1,900,000	2,100	750 U	760 U	750 U	830 U	750 U	780 U	750 U	770 U
ACENAPHTHYLENE	1,100,000	27,000	750 U	760 U	750 U	830 U	750 U	780 U	750 U	770 U
ANTHRACENE	18,000,000	2,500,000	380 U	380 U	370 U	410 U	370 U	390 U	380 U	390 U
BENZO(A)ANTHRACENE	1,400	3,200	380 U	**38.5 J**	370 U	410 U	370 U	390 U	380 U	390 U
BENZO(A)PYRENE	100	8,000	**68.5 J**	**68.7 J**	**104**	**52.9 J**	**232**	**48.6 J**	**41.4 J**	**26.1 J**
BENZO(B)FLUORANTHENE	1,400	10,000	**86.3**	**86.5**	**142**	**44.2 J**	**173**	**68.6 J**	**38.9 J**	**22.6 J**
BENZO(G,H,I)PERYLENE	2,300,000	32,000,000	**74.5 J**	**124**	**108**	**58.7 J**	**168**	**67.5 J**	**50.8 J**	**25.6 J**
BENZO(K)FLUORANTHENE	15,000	25,000	**51.6 J**	**52.8 J**	**82.2**	83 U	**94.5**	**36.5 J**	75 U	77 U
CHRYSENE	140,000	77,000	380 U	380 U	370 U	410 U	370 U	390 U	380 U	390 U
DIBENZO(A,H)ANTHRACENE	100	30,000	75 U	76 U	75 U	83 U	75 U	78 U	75 U	**26.4 J**
FLUORANTHENE	2,900,000	1,200,000	380 U	380 U	370 U	410 U	370 U	390 U	380 U	390 U
FLUORENE	2,200,000	160,000	380 U	380 U	370 U	410 U	370 U	390 U	380 U	390 U
INDENO(1,2,3-CD)PYRENE	1,500	28,000	**87.5**	**98.8**	**110**	**64.5 J**	**235**	**62.6 J**	**59.8 J**	**26.9 J**
NAPHTHALENE	40,000	1,700	380 U	380 U	370 U	410 U	370 U	390 U	380 U	390 U
PENTACHLOROPHENOL	7,700	30	2 U	1.9 U	1.8 U	2 U	1.9 U	2.1 U	2 U	2.1 U
PHENANTHRENE	2,000,000	250,000	380 U	380 U	370 U	410 U	370 U	390 U	380 U	390 U
PYRENE	2,200,000	880,000	380 U	380 U	370 U	410 U	**249 J**	390 U	380 U	390 U

TABLE 3-2

SOIL ANALYTICAL DATA
POLYNUCLEAR AROMATIC HYDROCARBONS
BUILDING 610 SAMPLING ANA ANALYSIS REPORT
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA
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PARAMETER	FDEP RESIDENTIAL SCTL	FDEP LEACHABILITY SCTL	CEF-610-							
			SS-008-01	SS-009-01	SS-010-01	SS-011-01		SS-012-01	SS-013-01	SS-014-01
						Sample	Duplicate			
Polynuclear Aromatic Hydrocarbons (ug/kg)										
1-METHYLNAPHTHALENE	68,000	2,200	380 U	370 U	380 U	390 U	380 U	370 U	370 U	380 U
2-METHYLNAPHTHALENE	83,000	6,100	380 U	370 U	380 U	390 U	380 U	370 U	370 U	380 U
ACENAPHTHENE	1,900,000	2,100	770 U	750 U	760 U	780 U	770 U	750 U	740 U	760 U
ACENAPHTHYLENE	1,100,000	27,000	770 U	750 U	760 U	780 U	770 U	750 U	740 U	760 U
ANTHRACENE	18,000,000	2,500,000	380 U	370 U	380 U	390 U	380 U	370 U	370 U	380 U
BENZO(A)ANTHRACENE	1,400	3,200	380 U	370 U	**168 J**	390 U	380 U	370 U	370 U	380 U
BENZO(A)PYRENE	100	8,000	**226**	**40.2 J**	**278**	78 U	77 U	75 U	74 U	**465**
BENZO(B)FLUORANTHENE	1,400	10,000	**182**	**70.1 J**	**312**	78 U	77 U	75 U	74 U	**444**
BENZO(G,H,I)PERYLENE	2,300,000	32,000,000	**322**	**76.7**	**303**	**55.9 J**	77 U	75 U	74 U	**704**
BENZO(K)FLUORANTHENE	15,000	25,000	**177**	**32.9 J**	**172**	78 U	77 U	75 U	74 U	**203**
CHRYSENE	140,000	77,000	380 U	370 U	**212 J**	390 U	380 U	370 U	370 U	380 U
DIBENZO(A,H)ANTHRACENE	100	30,000	77 U	75 U	76 U	78 U	77 U	75 U	74 U	76 U
FLUORANTHENE	2,900,000	1,200,000	380 U	370 U	**197 J**	390 U	380 U	370 U	370 U	**193 J**
FLUORENE	2,200,000	160,000	380 U	370 U	380 U	390 U	380 U	370 U	370 U	380 U
INDENO(1,2,3-CD)PYRENE	1,500	28,000	**344**	**65.7 J**	**373**	**63.8 J**	77 U	75 U	74 U	**786**
NAPHTHALENE	40,000	1,700	380 U	370 U	380 U	390 U	380 U	370 U	370 U	380 U
PENTACHLOROPHENOL	7,700	30	2 U	2 U	1.9 U	2.1 U	1.9 U	1.6 U	1.9 U	2.1 U
PHENANTHRENE	2,000,000	250,000	380 U	370 U	380 U	390 U	380 U	370 U	370 U	380 U
PYRENE	2,200,000	880,000	380 U	370 U	**205 J**	390 U	380 U	370 U	370 U	**258 J**

TABLE 3-2

SOIL ANALYTICAL DATA
POLYNUCLEAR AROMATIC HYDROCARBONS
BUILDING 610 SAMPLING ANA ANALYSIS REPORT
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA
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PARAMETER	FDEP RESIDENTIAL SCTL	FDEP LEACHABILITY SCTL	CEF-610-							
			SS-015-01	SS-016-01	SS-017-01	SS-018-01	SS-019-01	SS-020-01	SS-021-01	
									Sample	Duplicate
Polynuclear Aromatic Hydrocarbons (ug/kg)										
1-METHYLNAPHTHALENE	68,000	2,200	800 U	810 U	4200 U	370 U	370 U	3000 U	1600 U	820 U
2-METHYLNAPHTHALENE	83,000	6,100	800 U	810 U	4200 U	370 U	370 U	3000 U	1600 U	820 U
ACENAPHTHENE	1,900,000	2,100	1600 U	1600 U	8400 U	740 U	740 U	6100 U	3300 U	1600 U
ACENAPHTHYLENE	1,100,000	27,000	1600 U	1600 U	8400 U	740 U	740 U	6100 U	3300 U	1600 U
ANTHRACENE	18,000,000	2,500,000	800 U	810 U	4200 U	370 U	370 U	3000 U	1600 U	820 U
BENZO(A)ANTHRACENE	1,400	3,200	**535 J**	810 U	**1970 J**	370 U	370 U	**3,370**	**1050 J**	**262 J**
BENZO(A)PYRENE	100	8,000	**648**	**74.6 J**	**3,290**	74 U	74 U	**7,110**	**2230 J**	**1220 J**
BENZO(B)FLUORANTHENE	1,400	10,000	**526**	**87.1 J**	**3,350**	74 U	74 U	**6,550**	**1690***	**1050***
BENZO(G,H,I)PERYLENE	2,300,000	32,000,000	**637**	**169**	**4,220**	74 U	74 U	**7,580**	**1980 J**	**1180 J**
BENZO(K)FLUORANTHENE	15,000	25,000	**321**	160 U	**1,890**	74 U	74 U	**3,480**	**940 J**	**527 J**
CHRYSENE	140,000	77,000	**556 J**	810 U	**2240 J**	370 U	370 U	**3,640**	**1100 J**	**384 J**
DIBENZO(A,H)ANTHRACENE	100	30,000	160 U	160 U	840 U	74 U	74 U	**366 J**	330 U	**91.6 J**
FLUORANTHENE	2,900,000	1,200,000	**932**	810 U	**2030 J**	370 U	370 U	**3,980**	**1180 J**	820 U
FLUORENE	2,200,000	160,000	800 U	810 U	4200 U	370 U	370 U	3000 U	1600 U	820 U
INDENO(1,2,3-CD)PYRENE	1,500	28,000	**695**	**159 J**	**4,580**	74 U	74 U	**8,790**	**2,510**	**1,640**
NAPHTHALENE	40,000	1,700	800 U	810 U	4200 U	370 U	370 U	3000 U	1600 U	820 U
PENTACHLOROPHENOL	7,700	30	2.1 U	2.2 U	2.1 U	2 U	1.8 U	2 U	2 U	2.1 U
PHENANTHRENE	2,000,000	250,000	800 U	810 U	4200 U	370 U	370 U	3000 U	1600 U	820 U
PYRENE	2,200,000	880,000	**798 J**	810 U	**2020 J**	370 U	370 U	**4,660**	**1190 J**	**424 J**

TABLE 3-2

SOIL ANALYTICAL DATA
POLYNUCLEAR AROMATIC HYDROCARBONS
BUILDING 610 SAMPLING ANA ANALYSIS REPORT
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PARAMETER	FDEP RESIDENTIAL SCTL	FDEP LEACHABILITY SCTL	CEF-610							
			SS-022-01	SS-023-01	SS-024-01	SS-025-01	SS-101-01	SS-102-01	SS-103-01	SS-104-01
Polynuclear Aromatic Hydrocarbons (ug/kg)										
1-METHYLNAPHTHALENE	68,000	2,200	380 U	800 U	8100 U	3400 U	360 U	390 U	360 U	370 U
2-METHYLNAPHTHALENE	83,000	6,100	380 U	800 U	8100 U	3400 U	360 U	390 U	360 U	370 U
ACENAPHTHENE	1,900,000	2,100	750 U	1600 U	16000 U	6800 U	720 U	770 U	730 U	730 U
ACENAPHTHYLENE	1,100,000	27,000	750 U	1600 U	16000 U	6800 U	720 U	770 U	730 U	730 U
ANTHRACENE	18,000,000	2,500,000	380 U	800 U	8100 U	3400 U	360 U	390 U	360 U	370 U
BENZO(A)ANTHRACENE	1,400	3,200	380 U	800 U	**2720 J**	**1190 J**	360 U	390 U	360 U	370 U
BENZO(A)PYRENE	100	8,000	**258**	**816**	**8,470**	**2,870**	72 U	77 U	73 U	73 U
BENZO(B)FLUORANTHENE	1,400	10,000	**206**	**716**	**7,160**	**2,720**	72 U	77 U	73 U	73 U
BENZO(G,H,I)PERYLENE	2,300,000	32,000,000	**314**	**816**	**8,180**	**3,190**	72 U	77 U	**35.5 J**	73 U
BENZO(K)FLUORANTHENE	15,000	25,000	**90.5**	**378**	**3,670**	**1,420**	72 U	77 U	73 U	73 U
CHRYSENE	140,000	77,000	380 U	800 U	**3410 J**	**1500 J**	360 U	390 U	360 U	370 U
DIBENZO(A,H)ANTHRACENE	100	30,000	75 U	160 U	1600 U	680 U	72 U	77 U	73 U	73 U
FLUORANTHENE	2,900,000	1,200,000	380 U	800 U	8100 U	3400 U	360 U	390 U	360 U	370 U
FLUORENE	2,200,000	160,000	380 U	800 U	8100 U	3400 U	360 U	390 U	360 U	370 U
INDENO(1,2,3-CD)PYRENE	1,500	28,000	**335**	**1,100**	**10,300**	**3,720**	72 U	77 U	**37.2 J**	73 U
NAPHTHALENE	40,000	1,700	380 U	800 U	8100 U	3400 U	360 U	390 U	360 U	370 U
PENTACHLOROPHENOL	7,700	30	1.9 U	2.2 U	2.1 U	2.3 U	NA	NA	NA	NA
PHENANTHRENE	2,000,000	250,000	380 U	800 U	8100 U	3400 U	360 U	390 U	360 U	370 U
PYRENE	2,200,000	880,000	380 U	800 U	**6000 J**	1940 J	360 U	390 U	360 U	370 U

TABLE 3-2

SOIL ANALYTICAL DATA
POLYNUCLEAR AROMATIC HYDROCARBONS
BUILDING 610 SAMPLING ANA ANALYSIS REPORT
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PARAMETER	FDEP RESIDENTIAL SCTL	FDEP LEACHABILITY SCTL	CEF-610-							
			SS-105-01	SS-106-01		SS-107-01	SS-108-01	SS-109-01	SS-110-01	SS-111-01
				Sample	Duplicate					
Polynuclear Aromatic Hydrocarbons (ug/kg)										
1-METHYLNAPHTHALENE	68,000	2,200	390 U	380 U	390 U	370 U	370 U	360 U	360 U	400 U
2-METHYLNAPHTHALENE	83,000	6,100	390 U	380 U	390 U	370 U	370 U	360 U	360 U	400 U
ACENAPHTHENE	1,900,000	2,100	770 U	750 U	770 U	730 U	750 U	720 U	720 U	810 U
ACENAPHTHYLENE	1,100,000	27,000	770 U	750 U	770 U	730 U	750 U	720 U	720 U	810 U
ANTHRACENE	18,000,000	2,500,000	390 U	380 U	390 U	370 U	370 U	360 U	360 U	400 U
BENZO(A)ANTHRACENE	1,400	3,200	390 U	380 U	390 U	370 U	370 U	360 U	360 U	400 U
BENZO(A)PYRENE	100	8,000	**87.4**	**103**	**286**	73 U	75 U	72 U	**39.8 J**	81 U
BENZO(B)FLUORANTHENE	1,400	10,000	**99**	**108**	**254**	73 U	75 U	72 U	72 U	81 U
BENZO(G,H,I)PERYLENE	2,300,000	32,000,000	**62.4 J**	**74.9 J**	**184**	73 U	75 U	72 U	**36.4 J**	81 U
BENZO(K)FLUORANTHENE	15,000	25,000	**81.8**	**59.1 J**	**149**	73 U	75 U	72 U	72 U	81 U
CHRYSENE	140,000	77,000	390 U	380 U	390 U	370 U	370 U	360 U	360 U	400 U
DIBENZO(A,H)ANTHRACENE	100	30,000	77 U	75 U	77 U	73 U	75 U	72 U	72 U	81 U
FLUORANTHENE	2,900,000	1,200,000	390 U	380 U	390 U	370 U	370 U	360 U	360 U	400 U
FLUORENE	2,200,000	160,000	390 U	380 U	390 U	370 U	370 U	360 U	360 U	400 U
INDENO(1,2,3-CD)PYRENE	1,500	28,000	**82**	**80.3**	**190**	73 U	75 U	72 U	**34.1 J**	81 U
NAPHTHALENE	40,000	1,700	390 U	380 U	390 U	370 U	370 U	360 U	360 U	400 U
PENTACHLOROPHENOL	7,700	30	NA	NA	NA	NA	NA	NA	NA	NA
PHENANTHRENE	2,000,000	250,000	390 U	380 U	390 U	370 U	370 U	360 U	360 U	400 U
PYRENE	2,200,000	880,000	390 U	380 U	390 U	370 U	370 U	360 U	360 U	400 U

TABLE 3-2

SOIL ANALYTICAL DATA
POLYNUCLEAR AROMATIC HYDROCARBONS
BUILDING 610 SAMPLING ANA ANALYSIS REPORT
NAVAL AIR STATION CECIL FIELD
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PARAMETER	FDEP RESIDENTIAL SCTL	FDEP LEACHABILITY SCTL	CEF-610-							
			SS-112-01	SS-114-01		SS-115-01	SS-116-01	SS-117-01	SS-118-01	SS-120-01
				Sample	Duplicate					
Polynuclear Aromatic Hydrocarbons (ug/kg)										
1-METHYLNAPHTHALENE	68,000	2,200	360 U	390 U	360 U	390 U	360 U	370 U	370 U	360 U
2-METHYLNAPHTHALENE	83,000	6,100	360 U	390 U	360 U	390 U	360 U	370 U	370 U	360 U
ACENAPHTHENE	1,900,000	2,100	730 U	780 U	730 U	780 U	720 U	740 U	740 U	720 U
ACENAPHTHYLENE	1,100,000	27,000	730 U	780 U	730 U	780 U	720 U	740 U	740 U	720 U
ANTHRACENE	18,000,000	2,500,000	360 U	390 U	360 U	390 U	360 U	370 U	370 U	360 U
BENZO(A)ANTHRACENE	1,400	3,200	360 U	390 U	**80.7 J**	390 U	**79.6 J**	370 U	370 U	360 U
BENZO(A)PYRENE	100	8,000	73 U	78 U	**88.2**	78 U	**146**	74 U	74 U	72 U
BENZO(B)FLUORANTHENE	1,400	10,000	73 U	78 U	**58.9 J**	78 U	**135**	74 U	74 U	72 U
BENZO(G,H,I)PERYLENE	2,300,000	32,000,000	73 U	78 U	**75.4**	78 U	**172**	74 U	74 U	72 U
BENZO(K)FLUORANTHENE	15,000	25,000	73 U	78 U	**41.7 J**	78 U	**67.1 J**	74 U	74 U	72 U
CHRYSENE	140,000	77,000	360 U	390 U	**83.7 J**	390 U	**77.6 J**	370 U	370 U	360 U
DIBENZO(A,H)ANTHRACENE	100	30,000	73 U	78 U	73 U	78 U	72 U	74 U	74 U	72 U
FLUORANTHENE	2,900,000	1,200,000	360 U	390 U	**142 J**	390 U	**81.1 J**	370 U	370 U	360 U
FLUORENE	2,200,000	160,000	360 U	390 U	360 U	390 U	360 U	370 U	370 U	360 U
INDENO(1,2,3-CD)PYRENE	1,500	28,000	73 U	78 U	**67.4 J**	78 U	**186**	74 U	74 U	72 U
NAPHTHALENE	40,000	1,700	360 U	390 U	360 U	390 U	360 U	370 U	370 U	360 U
PENTACHLOROPHENOL	7,700	30	NA	NA	NA	NA	NA	NA	NA	NA
PHENANTHRENE	2,000,000	250,000	360 U	390 U	360 U	390 U	360 U	370 U	370 U	360 U
PYRENE	2,200,000	880,000	360 U	390 U	**109 J**	390 U	**129 J**	370 U	370 U	360 U

TABLE 3-2

SOIL ANALYTICAL DATA
POLYNUCLEAR AROMATIC HYDROCARBONS
BUILDING 610 SAMPLING ANA ANALYSIS REPORT
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PARAMETER	FDEP RESIDENTIAL SCTL	FDEP LEACHABILITY SCTL	CEF-610-							
			SS-121-01	SS-122-01		SS-123-01	SS-124-01	SS-125-01	SS-126-01	SS-201-01
				Sample	Duplicate					
Polynuclear Aromatic Hydrocarbons (ug/kg)										
1-METHYLNAPHTHALENE	68,000	2,200	440 U	360 U	420 U	370 U	450 U	360 U	360 U	380 U
2-METHYLNAPHTHALENE	83,000	6,100	440 U	360 U	420 U	370 U	450 U	360 U	360 U	380 U
ACENAPHTHENE	1,900,000	2,100	880 U	730 U	850 U	750 U	900 U	720 U	710 U	750 U
ACENAPHTHYLENE	1,100,000	27,000	880 U	730 U	850 U	750 U	900 U	720 U	710 U	750 U
ANTHRACENE	18,000,000	2,500,000	440 U	360 U	420 U	370 U	450 U	360 U	360 U	380 U
BENZO(A)ANTHRACENE	1,400	3,200	440 U	360 U	420 U	**349 J**	**632**	**93.2 J**	360 U	380 U
BENZO(A)PYRENE	100	8,000	88 U	**25.6 J**	**32.3 J**	**291**	**763**	**135**	71 U	**43.6 J**
BENZO(B)FLUORANTHENE	1,400	10,000	88 U	**26.3 J**	**35.2 J**	**281**	**528**	**119**	71 U	75 U
BENZO(G,H,I)PERYLENE	2,300,000	32,000,000	88 U	**23.2 J**	**30.5 J**	**291**	**665**	**172**	71 U	**50.6 J**
BENZO(K)FLUORANTHENE	15,000	25,000	88 U	73 U	85 U	**206**	**336**	**71.1 J**	71 U	75 U
CHRYSENE	140,000	77,000	440 U	360 U	420 U	**356 J**	**456**	**88.2 J**	360 U	380 U
DIBENZO(A,H)ANTHRACENE	100	30,000	88 U	73 U	85 U	75 U	90 U	72 U	71 U	75 U
FLUORANTHENE	2,900,000	1,200,000	440 U	360 U	420 U	**578**	**562**	360 U	360 U	380 U
FLUORENE	2,200,000	160,000	440 U	360 U	420 U	370 U	450 U	360 U	360 U	380 U
INDENO(1,2,3-CD)PYRENE	1,500	28,000	88 U	**25 J**	**36.7 J**	**330**	**845**	**171**	71 U	**43.1 J**
NAPHTHALENE	40,000	1,700	440 U	360 U	420 U	370 U	450 U	360 U	360 U	380 U
PENTACHLOROPHENOL	7,700	30	NA	NA	NA	NA	NA	NA	NA	NA
PHENANTHRENE	2,000,000	250,000	440 U	360 U	420 U	370 U	450 U	360 U	360 U	380 U
PYRENE	2,200,000	880,000	440 U	360 U	420 U	**488**	**495**	360 U	360 U	380 U

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SOIL ANALYTICAL DATA
POLYNUCLEAR AROMATIC HYDROCARBONS
BUILDING 610 SAMPLING ANA ANALYSIS REPORT
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PARAMETER	FDEP RESIDENTIAL SCTL	FDEP LEACHABILITY SCTL	CEF-610-							
			SS-202-01		SS-203-01	SS-204-01		SS-205-01	SS-206-01	SS-207-02
			Sample	Duplicate		Sample	Duplicate			
Polynuclear Aromatic Hydrocarbons (ug/kg)										
1-METHYLNAPHTHALENE	68,000	2,200	370 U	370 U	370 U	370 U	370 U	370 U	380 U	480 U
2-METHYLNAPHTHALENE	83,000	6,100	370 U	370 U	370 U	370 U	370 U	370 U	380 U	480 U
ACENAPHTHENE	1,900,000	2,100	740 U	740 U	750 U	740 U	730 U	740 U	760 U	970 U
ACENAPHTHYLENE	1,100,000	27,000	740 U	740 U	750 U	740 U	730 U	740 U	760 U	970 U
ANTHRACENE	18,000,000	2,500,000	370 U	370 U	370 U	370 U	370 U	370 U	380 U	480 U
BENZO(A)ANTHRACENE	1,400	3,200	370 U	370 U	**185 J**	**339 J**	**358 J**	370 U	380 U	480 U
BENZO(A)PYRENE	100	8,000	74 U	74 U	**676**	**672**	**694**	74 U	76 U	**84.4 J**
BENZO(B)FLUORANTHENE	1,400	10,000	74 U	74 U	**360**	**426**	**475**	74 U	76 U	**67.6 J**
BENZO(G,H,I)PERYLENE	2,300,000	32,000,000	74 U	74 U	**439**	**685**	**723**	74 U	76 U	**66.7 J**
BENZO(K)FLUORANTHENE	15,000	25,000	74 U	74 U	**201**	**244**	**229**	74 U	76 U	97 U
CHRYSENE	140,000	77,000	370 U	370 U	**273 J**	**345 J**	**373**	370 U	380 U	480 U
DIBENZO(A,H)ANTHRACENE	100	30,000	74 U	74 U	**48.2 J**	**44.8 J**	**50 J**	74 U	76 U	97 U
FLUORANTHENE	2,900,000	1,200,000	370 U	370 U	**332 J**	**359 J**	**346 J**	370 U	380 U	480 U
FLUORENE	2,200,000	160,000	370 U	370 U	370 U	370 U	370 U	370 U	380 U	480 U
INDENO(1,2,3-CD)PYRENE	1,500	28,000	74 U	74 U	**468**	**632**	**689**	74 U	76 U	**80.4 J**
NAPHTHALENE	40,000	1,700	370 U	370 U	370 U	370 U	370 U	370 U	380 U	480 U
PENTACHLOROPHENOL	7,700	30	NA	NA	NA	NA	NA	NA	NA	NA
PHENANTHRENE	2,000,000	250,000	370 U	370 U	370 U	370 U	370 U	370 U	380 U	480 U
PYRENE	2,200,000	880,000	370 U	370 U	**603**	**342 J**	**331 J**	370 U	380 U	480 U

TABLE 3-2

SOIL ANALYTICAL DATA
POLYNUCLEAR AROMATIC HYDROCARBONS
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PARAMETER	FDEP RESIDENTIAL SCTL	FDEP LEACHABILITY SCTL	CEF-610-							
			SS-208-02	SS-209-02	SS-210-02	SS-211-02	SS-212-02	SS-213-02	SS-311-01	SS-312-01
Polynuclear Aromatic Hydrocarbons (ug/kg)										
1-METHYLNAPHTHALENE	68,000	2,200	360 U	380 U	410 U	360 U	370 U	370 U	440 U	400 U
2-METHYLNAPHTHALENE	83,000	6,100	360 U	380 U	410 U	360 U	370 U	370 U	440 U	400 U
ACENAPHTHENE	1,900,000	2,100	720 U	750 U	820 U	730 U	740 U	740 U	880 U	810 U
ACENAPHTHYLENE	1,100,000	27,000	720 U	750 U	820 U	730 U	740 U	740 U	880 U	810 U
ANTHRACENE	18,000,000	2,500,000	360 U	380 U	410 U	360 U	370 U	370 U	440 U	400 U
BENZO(A)ANTHRACENE	1,400	3,200	360 U	380 U	410 U	360 U	370 U	370 U	440 U	400 U
BENZO(A)PYRENE	100	8,000	**48 J**	75 U	82 U	73 U	74 U	74 U	88 U	81 U
BENZO(B)FLUORANTHENE	1,400	10,000	72 U	75 U	82 U	73 U	74 U	74 U	88 U	81 U
BENZO(G,H,I)PERYLENE	2,300,000	32,000,000	**39.6 J**	75 U	82 U	73 U	74 U	74 U	88 U	81 U
BENZO(K)FLUORANTHENE	15,000	25,000	72 U	75 U	82 U	73 U	74 U	74 U	88 U	81 U
CHRYSENE	140,000	77,000	360 U	380 U	410 U	360 U	370 U	370 U	440 U	400 U
DIBENZO(A,H)ANTHRACENE	100	30,000	72 U	75 U	82 U	73 U	74 U	74 U	88 U	81 U
FLUORANTHENE	2,900,000	1,200,000	360 U	380 U	410 U	360 U	370 U	370 U	440 U	400 U
FLUORENE	2,200,000	160,000	360 U	380 U	410 U	360 U	370 U	370 U	440 U	400 U
INDENO(1,2,3-CD)PYRENE	1,500	28,000	**38.5 J**	75 U	82 U	73 U	74 U	74 U	88 U	81 U
NAPHTHALENE	40,000	1,700	360 U	380 U	410 U	360 U	370 U	370 U	440 U	400 U
PENTACHLOROPHENOL	7,700	30	NA	NA	NA	NA	NA	NA	NA	NA
PHENANTHRENE	2,000,000	250,000	360 U	380 U	410 U	360 U	370 U	370 U	440 U	400 U
PYRENE	2,200,000	880,000	360 U	380 U	410 U	360 U	370 U	370 U	440 U	400 U

NA = Not analyzed.
U = Not detected at or above detection limit (associated value).
J = Estimated concentration.
* Average of sample and duplicate does not exceed SCTL.
SCTL = Soil Target Cleanup Level , FAC 62-777 (FDEP, 1999).
Bolded values exceed detection limit.
Shaded values exceed SCTL.

TABLE 3-3

SOIL ANALYTICAL DATA
HERBICIDES, TOTAL RECOVERABLE PETROLEUM HYDROCARBONS, AND INORGANICS
BUILDING 610 SAMPLING AND ANALYSIS REPORT
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PARAMETER	FDEP RESIDENTIAL SCTL	FDEP LEACHABILITY SCTL	IBDS VALUE	CEF-610-					
				SS-001-01		SS-002-01	SS-003-01	SS-004-01	SS-005-01
				Sample	Duplicate				
Herbicides (ug/kg)									
2,4,5-T	590,000	400	NA	4 U	3.7 U	3.7 U	4.1 U	3.8 U	4.1 U
2,4,5-TP (SILVEX)	590,000	5,400	NA	4 U	3.7 U	3.7 U	4.1 U	3.8 U	4.1 U
2,4-D	670,000	700	NA	20 U	19 U	18 U	20 U	19 U	21 U
2,4-DB	NA	NA	NA	20 U	19 U	18 U	20 U	19 U	21 U
DALAPON	NA	NA	NA	4 U	3.7 U	3.7 U	4.1 U	3.8 U	4.1 U
DICAMBA	1,800,000	2,600	NA	20 U	19 U	18 U	20 U	19 U	21 U
DICHLOROPROP	270,000	300	NA	20 U	19 U	18 U	20 U	19 U	21 U
DINOSEB	55,000	30	NA	20 U	19 U	18 U	20 U	19 U	21 U
MCPA	30,000	20	NA	2000 U	1900 U	1800 U	2000 U	1900 U	2100 U
MCPP	NA	NA	NA	2000 U	1900 U	1800 U	2000 U	1900 U	2100 U
Total Recoverable Petroleum Hydrocarbons (mg/kg)									
TRPH	340	340	NA	**24.8**	**23.3**	**23**	**24.2**	**33.9**	**49.5**
Inorganics (mg/kg)									
ARSENIC	0.8	29	2.04	0.55 U	0.49 U	0.57 U	0.41 U	0.34 U	0.75 U
BARIUM	110	1,600	14.4	**9.9**	**12.6**	**7.4**	**11.6**	**7.3**	**11.8**
CHROMIUM	210	38*	7.75	**3.6**	**5.3**	**3**	**3.7**	**2.1**	**6.3**
SELENIUM	390	5	1.68	0.26 U	0.3 U	0.29 U	0.33 U	0.27 U	0.63 U
THALLIUM	NC	NC	2.84	0.22 U	0.25 U	0.24 U	0.27 U	0.23 U	0.2 U

TABLE 3-3

SOIL ANALYTICAL DATA
HERBICIDES, TOTAL RECOVERABLE PETROLEUM HYDROCARBONS, AND INORGANICS
BUILDING 610 SAMPLING AND ANALYSIS REPORT
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PARAMETER	FDEP RESIDENTIAL SCTL	FDEP LEACHABILITY SCTL	IBDS VALUE	CEF-610-						
				SS-006-01	SS-007-01	SS-008-01	SS-009-01	SS-010-01	SS-011-01	
									Sample	Duplicate
Herbicides (ug/kg)										
2,4,5-T	590,000	400	NA	3.9 U	4.2 U	4.1 U	3.9 U	3.8 U	4.2 U	3.9 U
2,4,5-TP (SILVEX)	590,000	5,400	NA	3.9 U	4.2 U	4.1 U	3.9 U	3.8 U	4.2 U	3.9 U
2,4-D	670,000	700	NA	20 U	21 U	20 U	20 U	19 U	21 U	19 U
2,4-DB	NA	NA	NA	20 U	21 U	20 U	20 U	19 U	21 U	19 U
DALAPON	NA	NA	NA	3.9 U	4.2 U	4.1 U	3.9 U	3.8 U	4.2 U	3.9 U
DICAMBA	1,800,000	2,600	NA	20 U	21 U	20 U	20 U	19 U	21 U	19 U
DICHLOROPROP	270,000	300	NA	20 U	21 U	20 U	20 U	19 U	21 U	19 U
DINOSEB	55,000	30	NA	20 U	21 U	20 U	20 U	19 U	21 U	19 U
MCPA	30,000	20	NA	2000 U	2100 U	2000 U	2000 U	1900 U	2100 U	1900 U
MCPP	NA	NA	NA	2000 U	2100 U	2000 U	2000 U	1900 U	2100 U	1900 U
Total Recoverable Petroleum Hydrocarbons (mg/kg)										
TRPH	340	340	NA	**21.8**	**18.4**	**89.6**	**22**	**21**	**15.4**	**9.6 U**
Inorganics (mg/kg)										
ARSENIC	0.8	29	2.04	0.59 U	0.65 U	0.63 U	0.39 U	0.32 U	0.35 U	0.47 U
BARIUM	110	1,600	14.4	**8.3**	**11.5**	**10.8**	**10.7**	**7.1**	**5.4**	**5.6**
CHROMIUM	210	38*	7.75	**4.1**	**12.7**	**5**	**1.6**	**4.9**	**2.7**	**2.8**
SELENIUM	390	5	1.68	0.32 U	1.1 U	0.29 U	0.27 U	0.25 U	0.23 U	0.53 U
THALLIUM	NC	NC	2.84	0.23 U	0.25 U	0.24 U	0.22 U	0.21 U	0.19 U	0.24 U

TABLE 3-3

SOIL ANALYTICAL DATA
HERBICIDES, TOTAL RECOVERABLE PETROLEUM HYDROCARBONS, AND INORGANICS
BUILDING 610 SAMPLING AND ANALYSIS REPORT
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PARAMETER	FDEP RESIDENTIAL SCTL	FDEP LEACHABILITY SCTL	IBDS VALUE	CEF-610-					
				SS-012-01	SS-013-01	SS-014-01	SS-015-01	SS-016-01	SS-017-01
Herbicides (ug/kg)									
2,4,5-T	590,000	400	NA	3.1 U	3.8 U	4.2 U	4.2 U	4.3 U	4.2 U
2,4,5-TP (SILVEX)	590,000	5,400	NA	3.1 U	3.8 U	4.2 U	4.2 U	4.3 U	4.2 U
2,4-D	670,000	700	NA	16 U	19 U	21 U	21 U	22 U	21 U
2,4-DB	NA	NA	NA	16 U	19 U	21 U	21 U	22 U	21 U
DALAPON	NA	NA	NA	3.1 U	3.8 U	4.2 U	4.2 U	4.3 U	4.2 U
DICAMBA	1,800,000	2,600	NA	16 U	19 U	21 U	21 U	22 U	21 U
DICHLOROPROP	270,000	300	NA	16 U	19 U	21 U	21 U	22 U	21 U
DINOSEB	55,000	30	NA	16 U	19 U	21 U	21 U	22 U	21 U
MCPA	30,000	20	NA	1,600	1900 U	2100 U	2100 U	2200 U	2100 U
MCPP	NA	NA	NA	1,600	1900 U	2100 U	2100 U	2200 U	2100 U
Total Recoverable Petroleum Hydrocarbons (mg/kg)									
TRPH	340	340	NA	**13.9**	**13.2**	**12.8**	**433**	**119**	**367**
Inorganics (mg/kg)									
ARSENIC	0.8	29	2.04	0.36 U	0.37 U	0.75 U	1.6 U	0.65 U	0.51 U
BARIUM	110	1,600	14.4	**7.6**	**9**	**9.1**	**112**	**22**	**17.2**
CHROMIUM	210	38*	7.75	**1.5**	**1.3**	**4**	**10.2**	**5.1**	**14**
SELENIUM	390	5	1.68	0.28 U	0.29 U	0.24 U	0.26 U	0.58 U	0.32 U
THALLIUM	NC	NC	2.84	0.23 U	0.24 U	0.2 U	0.21 U	0.24 U	0.26 U

TABLE 3-3

SOIL ANALYTICAL DATA
HERBICIDES, TOTAL RECOVERABLE PETROLEUM HYDROCARBONS, AND INORGANICS
BUILDING 610 SAMPLING AND ANALYSIS REPORT
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PARAMETER	FDEP RESIDENTIAL SCTL	FDEP LEACHABILITY SCTL	IBDS VALUE	CEF-610-					
				SS-018-01	SS-019-01	SS-020-01	SS-021-01		SS-022-01
							Sample	Duplicate	
Herbicides (ug/kg)									
2,4,5-T	590,000	400	NA	4 U	3.6 U	3.9 U	4 U	4.2 U	3.8 U
2,4,5-TP (SILVEX)	590,000	5,400	NA	4 U	3.6 U	3.9 U	4 U	4.2 U	3.8 U
2,4-D	670,000	700	NA	20 U	18 U	20 U	20 U	21 U	19 U
2,4-DB	NA	NA	NA	20 U	18 U	20 U	20 U	21 U	19 U
DALAPON	NA	NA	NA	4 U	3.6 U	3.9 U	4 U	4.2 U	3.8 U
DICAMBA	1,800,000	2,600	NA	20 U	18 U	20 U	20 U	21 U	19 U
DICHLOROPROP	270,000	300	NA	20 U	18 U	20 U	20 U	21 U	19 U
DINOSEB	55,000	30	NA	20 U	18 U	20 U	20 U	21 U	19 U
MCPA	30,000	20	NA	2000 U	1800 U	2000 U	2000 U	2100 U	1900 U
MCPP	NA	NA	NA	2000 U	1800 U	2000 U	2000 U	2100 U	1900 U
Total Recoverable Petroleum Hydrocarbons (mg/kg)									
TRPH	340	340	NA	**9.08 J**	**19**	**341**	**224 J**	**128 J**	**18.8**
Inorganics (mg/kg)									
ARSENIC	0.8	29	2.04	0.36 U	0.39 U	1.8 U	0.8 U	1.2 U	0.35 U
BARIUM	110	1,600	14.4	**8.9**	**16.3**	**30.8**	**19.1**	**50.9**	**7**
CHROMIUM	210	38*	7.75	**1.3**	**7.6**	**9.8**	**11.8**	**10.9**	**4.5**
SELENIUM	390	5	1.68	0.28 U	0.29 U	0.3 U	0.59 U	0.4 U	0.27 U
THALLIUM	NC	NC	2.84	0.23 U	0.23 U	0.25 U	0.23 U	0.26 U	0.23 U

TABLE 3-3

SOIL ANALYTICAL DATA
HERBICIDES, TOTAL RECOVERABLE PETROLEUM HYDROCARBONS, AND INORGANICS
BUILDING 610 SAMPLING AND ANALYSIS REPORT
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA
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PARAMETER	FDEP RESIDENTIAL SCTL	FDEP LEACHABILITY SCTL	IBDS VALUE	CEF-610-					
				SS-023-01	SS-024-01	SS-025-01	SS-103-01	SS-104-01	SS-105-01
Herbicides (ug/kg)									
2,4,5-T	590,000	400	NA	4.4 U	4.2 U	4.6 U	NA	NA	NA
2,4,5-TP (SILVEX)	590,000	5,400	NA	4.4 U	4.2 U	4.6 U	NA	NA	NA
2,4-D	670,000	700	NA	22 U	21 U	23 U	NA	NA	NA
2,4-DB	NA	NA	NA	22 U	21 U	23 U	NA	NA	NA
DALAPON	NA	NA	NA	4.4 U	4.2 U	4.6 U	NA	NA	NA
DICAMBA	1,800,000	2,600	NA	22 U	21 U	23 U	NA	NA	NA
DICHLOROPROP	270,000	300	NA	22 U	21 U	23 U	NA	NA	NA
DINOSEB	55,000	30	NA	22 U	21 U	23 U	NA	NA	NA
MCPA	30,000	20	NA	2200 U	2100 U	2300 U	NA	NA	NA
MCPP	NA	NA	NA	2200 U	2100 U	2300 U	NA	NA	NA
Total Recoverable Petroleum Hydrocarbons (mg/kg)									
TRPH	340	340	NA	**129**	**719**	**695**	9.1 U	**20**	**141**
Inorganics (mg/kg)									
ARSENIC	0.8	29	2.04	0.59 U	1 U	1.9 U	NA	NA	NA
BARIUM	110	1,600	14.4	**19.8**	**34.8**	**50.7**	NA	NA	NA
CHROMIUM	210	38*	7.75	**53.4**	**11.4**	**9.6**	NA	NA	NA
SELENIUM	390	5	1.68	0.55 U	0.28 U	0.34 U	NA	NA	NA
THALLIUM	NC	NC	2.84	0.25 U	0.23 U	0.28 U	NA	NA	NA

TABLE 3-3

SOIL ANALYTICAL DATA
HERBICIDES, TOTAL RECOVERABLE PETROLEUM HYDROCARBONS, AND INORGANICS
BUILDING 610 SAMPLING AND ANALYSIS REPORT
NAVAL AIR STATION CECIL FIELD
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PARAMETER	FDEP RESIDENTIAL SCTL	FDEP LEACHABILITY SCTL	IBDS VALUE	CEF-610-					
				SS-111-01	SS-112-01	SS-119-01	SS-106-01		SS-107-01
							Sample	Duplicate	
Herbicides (ug/kg)									
2,4,5-T	590,000	400	NA	NA	NA	NA	NA	NA	NA
2,4,5-TP (SILVEX)	590,000	5,400	NA	NA	NA	NA	NA	NA	NA
2,4-D	670,000	700	NA	NA	NA	NA	NA	NA	NA
2,4-DB	NA	NA	NA	NA	NA	NA	NA	NA	NA
DALAPON	NA	NA	NA	NA	NA	NA	NA	NA	NA
DICAMBA	1,800,000	2,600	NA	NA	NA	NA	NA	NA	NA
DICHLOROPROP	270,000	300	NA	NA	NA	NA	NA	NA	NA
DINOSEB	55,000	30	NA	NA	NA	NA	NA	NA	NA
MCPA	30,000	20	NA	NA	NA	NA	NA	NA	NA
MCPP	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Recoverable Petroleum Hydrocarbons (mg/kg)									
TRPH	340	340	NA	**22.7**	**10.2**	**NA**	**147**	**128**	**29.1**
Inorganics (mg/kg)									
ARSENIC	0.8	29	2.04	NA	NA	0.35 U	NA	NA	NA
BARIUM	110	1,600	14.4	NA	NA	NA	NA	NA	NA
CHROMIUM	210	38*	7.75	NA	NA	NA	NA	NA	NA
SELENIUM	390	5	1.68	NA	NA	NA	NA	NA	NA
THALLIUM	NC	NC	2.84	NA	NA	NA	NA	NA	NA

TABLE 3-3

SOIL ANALYTICAL DATA
HERBICIDES, TOTAL RECOVERABLE PETROLEUM HYDROCARBONS, AND INORGANICS
BUILDING 610 SAMPLING AND ANALYSIS REPORT
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PARAMETER	FDEP RESIDENTIAL SCTL	FDEP LEACHABILITY SCTL	IBDS VALUE	CEF-610-						
				SS-126-01	SS-201-01	SS-202-01	SS-202-01-D	SS-203-01	SS-204-01	
									Sample	Duplicate
Herbicides (ug/kg)										
2,4,5-T	590,000	400	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-TP (SILVEX)	590,000	5,400	NA	NA	NA	NA	NA	NA	NA	NA
2,4-D	670,000	700	NA	NA	NA	NA	NA	NA	NA	NA
2,4-DB	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DALAPON	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DICAMBA	1,800,000	2,600	NA	NA	NA	NA	NA	NA	NA	NA
DICHLOROPROP	270,000	300	NA	NA	NA	NA	NA	NA	NA	NA
DINOSEB	55,000	30	NA	NA	NA	NA	NA	NA	NA	NA
MCPA	30,000	20	NA	NA	NA	NA	NA	NA	NA	NA
MCPP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Recoverable Petroleum Hydrocarbons (mg/kg)										
TRPH	340	340	NA	**7.41 J**	**19.7**	**14.3**	**18.5**	**36.1**	**86**	**63.5**
Inorganics (mg/kg)										
ARSENIC	0.8	29	2.04	NA	NA	NA	NA	NA	NA	NA
BARIUM	110	1,600	14.4	NA	NA	NA	NA	NA	NA	NA
CHROMIUM	210	38*	7.75	NA	NA	NA	NA	NA	NA	NA
SELENIUM	390	5	1.68	NA	NA	NA	NA	NA	NA	NA
THALLIUM	NC	NC	2.84	NA	NA	NA	NA	NA	NA	NA

TABLE 3-3

SOIL ANALYTICAL DATA
HERBICIDES, TOTAL RECOVERABLE PETROLEUM HYDROCARBONS, AND INORGANICS
BUILDING 610 SAMPLING AND ANALYSIS REPORT
NAVAL AIR STATION CECIL FIELD
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PARAMETER	FDEP RESIDENTIAL SCTL	FDEP LEACHABILITY SCTL	IBDS VALUE	CEF-610-						
				SS-205-01	SS-206-01	SS-207-02	SS-208-02	SS-209-02	SS-210-02	SS-211-02
Herbicides (ug/kg)										
2,4,5-T	590,000	400	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-TP (SILVEX)	590,000	5,400	NA	NA	NA	NA	NA	NA	NA	NA
2,4-D	670,000	700	NA	NA	NA	NA	NA	NA	NA	NA
2,4-DB	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DALAPON	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DICAMBA	1,800,000	2,600	NA	NA	NA	NA	NA	NA	NA	NA
DICHLOROPROP	270,000	300	NA	NA	NA	NA	NA	NA	NA	NA
DINOSEB	55,000	30	NA	NA	NA	NA	NA	NA	NA	NA
MCPA	30,000	20	NA	NA	NA	NA	NA	NA	NA	NA
MCPP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Recoverable Petroleum Hydrocarbons (mg/kg)										
TRPH	340	340	NA	**12.2**	**8.41 J**	**64.4**	**18.7**	9.4 U	10 U	9.1 U
Inorganics (mg/kg)										
ARSENIC	0.8	29	2.04	NA	NA	NA	NA	NA	NA	NA
BARIUM	110	1,600	14.4	NA	NA	NA	NA	NA	NA	NA
CHROMIUM	210	38*	7.75	NA	NA	NA	NA	NA	NA	NA
SELENIUM	390	5	1.68	NA	NA	NA	NA	NA	NA	NA
THALLIUM	NC	NC	2.84	NA	NA	NA	NA	NA	NA	NA

TABLE 3-3

SOIL ANALYTICAL DATA
HERBICIDES, TOTAL RECOVERABLE PETROLEUM HYDROCARBONS, AND INORGANICS
BUILDING 610 SAMPLING AND ANALYSIS REPORT
NAVAL AIR STATION CECIL FIELD
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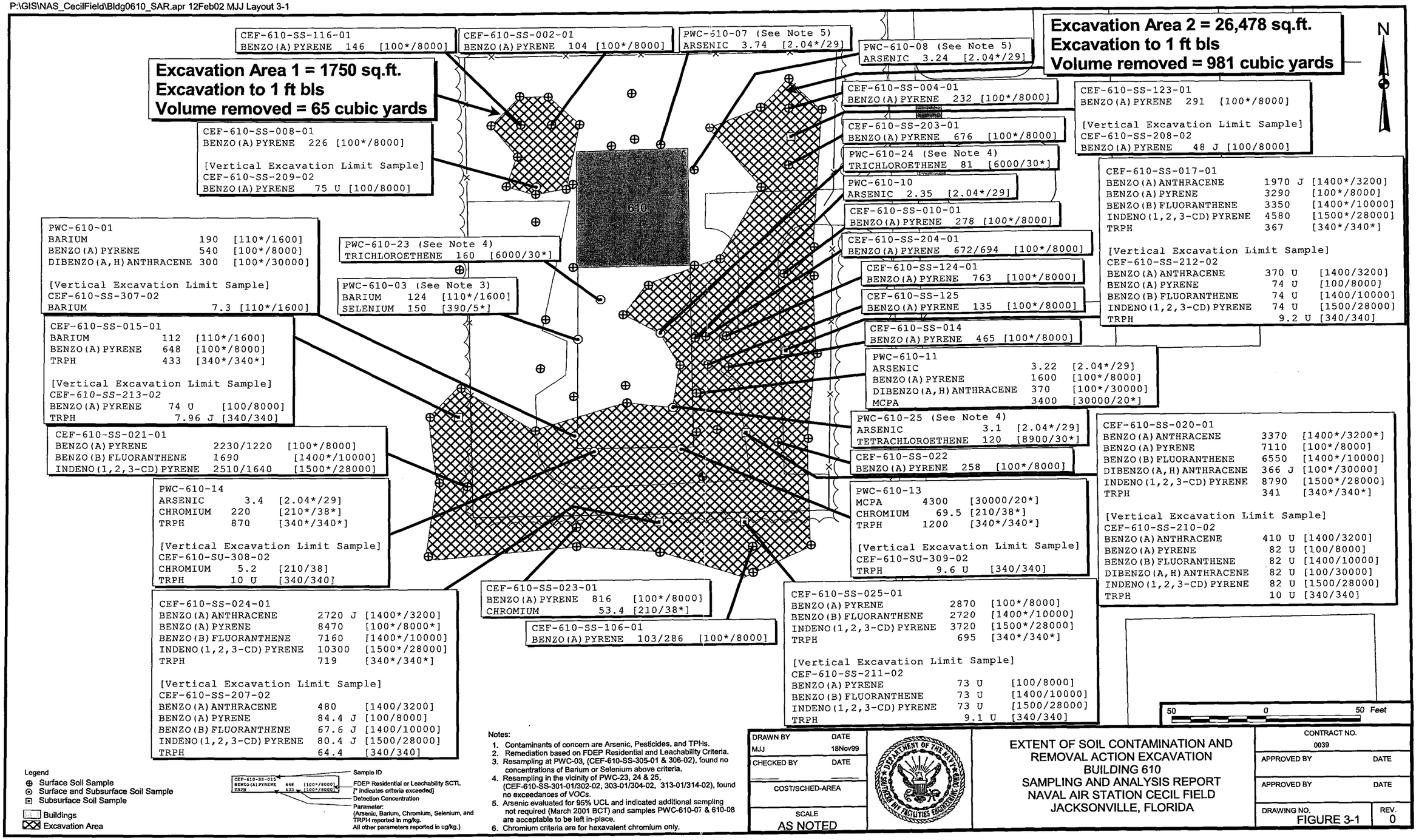
PARAMETER	FDEP RESIDENTIAL SCTL	FDEP LEACHABILITY SCTL	IBDS VALUE	CEF-610-							
				SS-212-02	SS-213-02	SS-305-01	SS-306-02	SS-307-02	SS-308-02	SS-309-02	SS-310-01
Herbicides (ug/kg)											
2,4,5-T	590,000	400	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-TP (SILVEX)	590,000	5,400	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-D	670,000	700	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-DB	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DALAPON	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DICAMBA	1,800,000	2,600	NA	NA	NA	NA	NA	NA	NA	NA	NA
DICHLOROPROP	270,000	300	NA	NA	NA	NA	NA	NA	NA	NA	NA
DINOSEB	55,000	30	NA	NA	NA	NA	NA	NA	NA	NA	NA
MCPA	30,000	20	NA	NA	NA	NA	NA	NA	NA	NA	NA
MCPP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Recoverable Petroleum Hydrocarbons (mg/kg)											
TRPH	340	340	NA	9.2 U	**7.96 J**	NA	NA	NA	10 U	9.6 U	NA
Inorganics (mg/kg)											
ARSENIC	0.8	29	2.04	NA	NA	NA	NA	NA	NA	NA	NA
BARIUM	110	1,600	14.4	NA	NA	**32.8**	**19.4**	**7.3**	NA	NA	**7**
CHROMIUM	210	38*	7.75	NA	NA	NA	NA	NA	**5.2**	NA	NA
SELENIUM	390	5	1.68	NA	NA	0.29 U	**0.33**	NA	NA	NA	0.28 U
THALLIUM	NC	NC	2.84	NA	NA	NA	NA	NA	NA	NA	NA

* SCTL for total chromium.
NA = Not analyzed.
U = Not detected at or above detection limit (associated value).
J = Estimated concentration.
** Average of sample and duplicate does not exceed SCTL.
SCTL = Soil Target Cleanup Level , FAC 62-777 (FDEP, 1999).
Bolded values exceed detection limit.
Shaded values exceed SCTL.

P:\GIS\NAS_CecilField\Bldg0610_SAR.apr 12Feb02 MJJ Layout 3-1



Legend
- Surface Soil Sample
- Surface and Subsurface Soil Sample
- Subsurface Soil Sample
- Buildings
- Excavation Area

CEF-610-SS-015 — Sample ID
BENZO(A)PYRENE 648 [100*/8000] — FDEP Residential or Leachability SCTL [* indicates criteria exceeded]
TRPH 433 [100*/8000] — Detection Concentration
Parameter: (Arsenic, Barium, Chromium, Selenium, and TRPH reported in mg/kg. All other parameters reported in ug/kg.)

Notes:
1. Contaminants of concern are Arsenic, Pesticides, and TPHs.
2. Remediation based on FDEP Residential and Leachability Criteria.
3. Resampling at PWC-03, (CEF-610-SS-305-01 & 306-02), found no concentrations of Barium or Selenium above criteria.
4. Resampling in the vicinity of PWC-23, 24 & 25, (CEF-610-SS-301-01/302-02, 303-01/304-02, 313-01/314-02), found no exceedances of VOCs.
5. Arsenic evaluated for 95% UCL and indicated additional sampling not required (March 2001 BCT) and samples PWC-610-07 & 610-08 are acceptable to be left in-place.
6. Chromium criteria are for hexavalent chromium only.

DRAWN BY MJJ	DATE 18Nov99	EXTENT OF SOIL CONTAMINATION AND REMOVAL ACTION EXCAVATION BUILDING 610 SAMPLING AND ANALYSIS REPORT NAVAL AIR STATION CECIL FIELD JACKSONVILLE, FLORIDA
CHECKED BY	DATE	
COST/SCHED-AREA		
SCALE AS NOTED		

CONTRACT NO. 0039
APPROVED BY DATE
APPROVED BY DATE
DRAWING NO. FIGURE 3-1
REV. 0

Indeno(1,2,3-cd)pyrene was detected in excess of its residential SCTL (1,500 µg/kg) in five samples at concentrations ranging from 2,075 µg/kg (CEF-610-SS-021-01) to 10,300 µg/kg (CEF-610-SS-024-01).

Barium was detected in excess of its residential SCTL [110 milligrams per kilogram (mg/kg)] in a single sample (CEF-610-SS-015-01) at a concentration of 112 mg/kg.

TRPH was detected in excess of its residential and leachability SCTL (340 mg/kg) in five samples at concentrations ranging from 341 mg/kg (CEF-610-SS-020-01) to 719 mg/kg (CEF-610-SS-024-01).

As shown on Table 3-4, Phase V groundwater analytical results for VOCs, PAHs, RCRA metals, and TRPH were compared to the FDEP GCTLs. Metals concentrations were also compared to their NAS Cecil Field site-specific IBDS values (HLA, 1998). These comparisons showed no GCTL or IBDS exceedances for any of the Phase V analytical results.

Laboratory analytical results are provided in Appendix A. Soil and groundwater sampling chain of custody forms are provided in Appendix B. Appendix C includes monitoring well construction, development, and sampling data for CEF-610-GW-01S.

3.2 REMOVAL ACTION

Based on the investigations conducted at Building 610, the BCT determined that the best course of action to reduce risks associated with this site was to remove the contaminated soils (BCT, 2001). Accordingly, a source removal was conducted at Building 610 on July 9 through 12, 2001, and a total of 2,011 tons of PAH- and TRPH-contaminated soil were excavated from the area surrounding the aforementioned sampling locations. Soils were excavated to the horizontal limits, as specified in the Dig and Haul Package for Building 610 (TtNUS, 2001c) and as shown on Figure 3-1. The excavated soil was transported and disposed off site the same day that the soil removal occurred. The soil was excavated using a hydraulic track excavator and loaded directly into tarp-covered dump trucks for transportation and disposal. The soil was characterized prior to disposal by the Remedial Action Contractor (RAC). The excavated soil was transported by Beaver Bulk Trucking to the Broadhurst Landfill, a Subtitle D solid waste disposal facility in Jessup, Georgia (CH2M Hill, 2001).

Certified clean fill material from Coxwell's Crystal Springs Pit was used to backfill the excavation. The site was graded and seeded with hydro-seed containing a mixture of bahia and rye grass. A layer of straw was applied to help prevent wind and water erosion. No confirmatory soil sampling was performed (CH2M Hill, 2001).

TABLE 3-4

GROUNDWATER ANALYTICAL DATA
BUILDING 610 SAMPLING AND ANALYSIS REPORT
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA
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PARAMETER	FDEP GCTL	IBDS VALUE	CEF-610-GW-01S		
			Sample	Duplicate	Filtered
Volatile Organic Compounds (ug/L)					
1,1,1-TRICHLOROETHANE	200	NC	2 U	2 U	NA
1,1,2,2-TETRACHLOROETHANE	1.3	NC	2 U	2 U	NA
1,1,2-TRICHLOROETHANE	5	NC	2 U	2 U	NA
1,1-DICHLOROETHANE	70	NC	2 U	2 U	NA
1,1-DICHLOROETHENE	7	NC	2 U	2 U	NA
1,2-DICHLOROETHANE	3	NC	2 U	2 U	NA
1,2-DICHLOROPROPANE	5	NC	2 U	2 U	NA
2-BUTANONE	4200	NC	10 U	10 U	NA
2-HEXANONE	280	NC	10 U	10 U	NA
4-METHYL-2-PENTANONE	560	NC	10 U	10 U	NA
ACETONE	700	NC	50 U	50 U	NA
BENZENE	1	NC	1 U	1 U	NA
BROMODICHLOROMETHANE	0.6	NC	2 U	2 U	NA
BROMOFORM	4.4	NC	2 U	2 U	NA
BROMOMETHANE	9.8	NC	5 U	5 U	NA
CARBON DISULFIDE	700	NC	10 U	10 U	NA
CARBON TETRACHLORIDE	3	NC	2 U	2 U	NA
CHLOROBENZENE	100	NC	2 U	2 U	NA
CHLORODIBROMOMETHANE	NC	NC	2 U	2 U	NA
CHLOROETHANE	12	NC	5 U	5 U	NA
CHLOROFORM	5.7	NC	2 U	2 U	NA
CHLOROMETHANE	2.7	NC	5 U	5 U	NA
CIS-1,2-DICHLOROETHENE	70	NC	2 U	2 U	NA
CIS-1,3-DICHLOROPROPENE	0.2	NC	2 U	2 U	NA
ETHYLBENZENE	30	NC	2 U	2 U	NA
METHYLENE CHLORIDE	5	NC	5 U	5 U	NA
STYRENE	100	NC	2 U	2 U	NA
TETRACHLOROETHENE	3	NC	2 U	2 U	NA
TOLUENE	40	NC	2 U	2 U	NA
TOTAL XYLENES	20	NC	6 U	6 U	NA
TRANS-1,2-DICHLOROETHENE	100	NC	2 U	2 U	NA
TRANS-1,3-DICHLOROPROPENE	0.2	NC	2 U	2 U	NA
TRICHLOROETHENE	3	NC	2 U	2 U	NA
VINYL CHLORIDE	1	NC	1 U	1 U	NA

TABLE 3-4

GROUNDWATER ANALYTICAL DATA
BUILDING 610 SAMPLING AND ANALYSIS REPORT
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA
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PARAMETER	FDEP GCTL	IBDS VALUE	CEF-610-GW-01S		
			Sample	Duplicate	Filtered
Polynuclear Aromatic Hydrocarbons (ug/L)					
1-METHYLNAPHTHALENE	20	NC	2 U	2 U	NA
2-METHYLNAPHTHALENE	20	NC	2 U	2 U	NA
ACENAPHTHENE	20	NA	4 U	4 U	NA
ACENAPHTHYLENE	210	NA	4 U	4 U	NA
ANTHRACENE	2100	NA	2 U	2 U	NA
BENZO(A)ANTHRACENE	0.2	NA	0.2 U	0.2 U	NA
BENZO(A)PYRENE	0.2	NA	0.2 U	0.2 U	NA
BENZO(B)FLUORANTHENE	0.2	NA	0.2 U	0.2 U	NA
BENZO(G,H,I)PERYLENE	210	NA	0.2 U	0.2 U	NA
BENZO(K)FLUORANTHENE	0.5	NA	0.2 U	0.2 U	NA
CHRYSENE	4.8	NA	2 U	2 U	NA
DIBENZO(A,H)ANTHRACENE	0.2	NA	0.2 U	0.2 U	NA
FLUORANTHENE	280	NA	2 U	2 U	NA
FLUORENE	280	NA	2 U	2 U	NA
INDENO(1,2,3-CD)PYRENE	0.2	NA	0.2 U	0.2 U	NA
NAPHTHALENE	20	NA	2 U	2 U	NA
PHENANTHRENE	210	NA	2 U	2 U	NA
PYRENE	210	NA	2 U	2 U	NA
Inorganics (ug/L)					
ARSENIC	50	7.1	3.2 U	3.2 U	3.2 U
BARIUM	2000	88.2	**7.5**	**9.1**	**8.7**
CADMIUM	5	6	0.27 U	0.27 U	0.27 U
CHROMIUM	100	18	**0.54**	**2.1**	**1.1**
LEAD	15	5.35	**1.4**	**2.7**	**1.4**
MERCURY	2	0.34	**0.11**	**0.11**	**0.08**
SELENIUM	50	7	**30.2**	**31.6**	**32.5**
SILVER	100	6	0.59 U	0.59 U	0.59 U
Total Recoverable Petroleum Hydrocarbons (mg/L)					
TRPH	5	NC	0.25 U	0.25 U	NA

GCTL = Groundwater Target Cleanup Level, FAC 62-777 (FDEP, 1999).
IBDS = NAS Cecil Field Inorganic Background Data Set (HLA, 1998).
U = Not detected at or above detection limit (associated value).
NA = Not analyzed.
NC = No criterion.

Detailed information on the remedial activities, including photographs, laboratory results, copies of the soil manifests, certificates of disposal, and certificate of clean fill, is provided in the Source Removal Report (CH2M Hill, 2001).

3.3 HUMAN HEALTH PRELIMINARY RISK EVALUATION

Soil sampling at Building 610 identified concentrations of VOCs, PAHs, metals, and TRPH in excess of the FDEP SCTLs for direct residential exposure. Following remedial action excavation, arsenic is the only constituent remaining on site at a concentration in excess of its SCTL and IBDS value. However, exceedance of a criterion by two samples (PWC-610-07 and -08) does not necessarily indicate a significant exceedance of a target risk level. Exposure to a contaminant in the soil is a result of exposure to an area, not an individual sampling location; therefore, the entire data set was used to determine post-excavation exposure concentrations. This exposure concentration is best represented by the 95 percent upper confidence limit (UCL) of residual concentrations.

Data from the fill were used to calculate post-excavation concentrations for arsenic by replacing pre-excavation concentrations with concentrations in the fill, or one-half the detection limit if the analyte was not detected in the fill. On this basis, the calculated post-excavation exposure concentration of arsenic (1.44 mg/kg) was lower than the IBDS value (2.04 mg/kg). Therefore, a human health Preliminary Risk Evaluation (PRE) is not required (see Table 3-5).

3.4 ECOLOGICAL RISK ASSESSMENT

A screening ecological risk assessment was conducted to evaluate the potential risks to ecological receptors at Building 610 following recent soil remediation activities. All data used in this assessment were from samples collected outside the remediation areas. The ecological risk assessment was conducted in accordance with guidance described by U.S. EPA (U.S. EPA, 2001; U.S. EPA, 1997), U.S. EPA Region IV (U.S. EPA, 2000a), and the Navy [Department of the Navy (DON), 1999] for Steps 1 through 3a of ecological risk assessments. Steps 1 through 3a consist of the following:

Step 1	Screening-Level Problem Formulation and Ecological Effects Evaluation
Step 2	Screening-Level Exposure Estimate and Risk Calculation
Step 3a	Refinement of Preliminary Contaminants of Concern

3.4.1 Screening-Level Problem Formulation and Ecological Effects Evaluation

The site consists of a 1.0-acre area enclosed by a chain-link fence and approximately 0.1 acre south and southwest of the enclosed area (Figure 1-2). Building 610 is located in the north-central

TABLE 3-5

ATTAINMENT OF SCTLs
BUILDING 610 SAMPLING AND ANALYSIS REPORT
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA
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nsample	Arsenic
MIN	0.6920
MAX	3.74
MEAN	1.58
t 0.95, n-1	0.221044
STANDARD DEVIATION	0.48
COEFFICIENT OF VARIATION	0.30
n	38
UCL $_{0.95}$	1.60
Goal	**2.04**
remediation level	**1.5**
CEF-610-SS-001-001-D	0.27*
CEF-610-SS-002-01	**1.5**
CEF-610-SS-003-01	**1.5**
CEF-610-SS-004-01	**1.5**
CEF-610-SS-005-01	**1.5**
CEF-610-SS-006-01	**1.5**
CEF-610-SS-007-01	0.33*
CEF-610-SS-008-01	**1.5**
CEF-610-SS-009-01	**1.5**
CEF-610-SS-010-01	**1.5**
CEF-610-SS-011-01-D	0.21*
CEF-610-SS-012-01	**1.5**
CEF-610-SS-013-01	**1.5**
CEF-610-SS-014-01	**1.5**
CEF-610-SS-015-01	**1.5**
CEF-610-SS-016-01	**1.5**
CEF-610-SS-017-01	**1.5**
CEF-610-SS-018-01	**1.5**
CEF-610-SS-019-01	**1.5**
PWC-610-11	**1.5**
CEF-610-SS-020-01	**1.5**
CEF-610-SS-021-010-D	**1.5**
CEF-610-SS-022-01	**1.5**
CEF-610-SS-023-01	**1.5**
CEF-610-SS-024-01	**1.5**
CEF-610-SS-025-01	**1.5**
CEF-610-SS-119-01	0.18*
98S02301[02/11/99]	1.1 J
98S02401[02/11/99]	**1.5**
PWC-610-3	0.692
PWC-610-1	**1.5**
PWC-610-14	**1.5**
PWC-610-13	**1.5**

TABLE 3-5

ATTAINMENT OF SCTLs
BUILDING 610 SAMPLING AND ANALYSIS REPORT
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JACKSONVILLE, FLORIDA
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nsample	Arsenic
MIN	0.6920
MAX	3.74
MEAN	1.58
t 0.95, n-1	0.221044
STANDARD DEVIATION	0.48
COEFFICIENT OF VARIATION	0.30
n	38
UCL $_{0.95}$	1.60
Goal remediation level	**2.04** **1.5**
98S02501[02/11/99]	**1.5**
PWC-610-2	**1.5**
PWC-610-4	**1.5**
PWC-610-5	**1.5**
PWC-610-6	**1.5**
PWC-610-7	3.74
PWC-610-8	3.24
PWC-610-9	**1.5**
PWC-610-10	**1.5**
PWC-610-12	**1.5**
98S02601[02/11/99]	0.3*

* Nondetect result; value used is one-half the detection limit.
J Estimated value.
Bolded samples were excavated; value used was one-half the detection limit of the clean fill sample.

portion of the site. The remainder of the site consists of bare soil, grass, and scattered weeds. The terrain at the site and in the surrounding area is flat. There are no wetlands or surface water bodies in the vicinity of the site.

Pine flatwoods habitat borders the site to the north, south, and west. An unpaved road borders the site to the east, and beyond that is more pine flatwoods habitat. Vegetation in the pine flatwoods consists of species typically associated with this habitat in northern Florida, with an overstory dominated by longleaf pine (*Pinus palustris*) and slash pine (*Pinus elliottii*) and an understory of various shrubby species.

Due to recent remedial activities associated with soil excavation and removal, vegetation is sparse at the site. Thus, very few terrestrial species currently utilize the site. As vegetation becomes established, however, use of the site by terrestrial receptors will undoubtedly increase. As long as the site remains enclosed by a chain-link fence, receptors will be limited to invertebrates, birds, small mammals such as shrews, moles, and mice, and reptiles such as snakes and lizards. If the chain-link fence is removed (or if portions are removed), then the site would be expected to be utilized by larger receptors typically found in North Florida pine flatwoods, such as deer, rabbits, raccoons, etc.

The contaminant sources at Building 610 are contaminants from the former hazardous waste temporary storage facility and wastes associated with use of the site as a public works garage. Contaminant migration pathways applicable at the site include volatilization, erosion, overland runoff, and infiltration. Compounds such as PAHs could volatilize from surface material or become airborne through wind erosion. Surface soil could serve as a source for airborne transport of contaminants, which could then be transported to downwind locations. Precipitation runoff could carry contaminants to off-site locations. However, the flat topography at the site and in the surrounding area minimizes this migration pathway. Infiltrating precipitation could cause contamination of subsurface soil and groundwater, and contaminated groundwater from the site could eventually discharge to surface water. However, there are no surface water bodies near the site, and groundwater data from a single monitoring well at the site indicate minimal groundwater contamination. Thus, the soil-to-groundwater pathway is essentially absent at Building 610.

A complete exposure pathway has three components: a source of contaminants that can be released to the environment, a route of contaminant transport through an environmental medium, and an exposure or contact point for an ecological receptor. As discussed above, very few terrestrial species currently utilize the site due to the lack of vegetation. For this reason, a complete exposure pathway does not exist at the site; therefore, the potential for ecological impacts from site-related contaminants does not exist. Nevertheless, future conditions could result in significant use of the site by a variety of receptors. The current ecological risk assessment, therefore, is being conducted to evaluate potential risk to receptors that could eventually utilize the site.

Animals eventually utilizing the site could be exposed to site-related soil contaminants through ingestion of contaminated food items. Animals could also incidentally ingest soil while grooming fur, preening feathers, digging, grazing close to the soil, or feeding on items to which soil has adhered (such as roots and tubers). Terrestrial vegetation could be exposed to contaminants via direct aerial deposition and root translocation. Wildlife exposure to contaminants in the soil via dermal contact may occur but is unlikely to represent a major exposure pathway because fur, feathers, and chitinous exoskeletons minimize transfer of contaminants across dermal tissue.

All analytes (except calcium, magnesium, potassium, and sodium) detected in surface soil samples collected from locations outside the remediation areas were evaluated. Calcium, magnesium, potassium, and sodium were excluded since they are essential nutrients that are toxic only at extremely high concentrations. The limited toxicity data available indicate that high dietary intake of these nutrients is well tolerated.

One of the tasks in preliminary problem formulation is the selection of preliminary assessment and measurement endpoints. An assessment endpoint is defined as "an explicit expression of actual environmental values that are to be protected" (U.S. EPA, 1997). Region IV has specified that assessment endpoints for the screening-level assessment should be broad and generic. For this screening-level assessment, the assessment endpoint is the protection of terrestrial organisms from adverse effects of chemicals on their growth, survival, and reproduction. Measurement endpoints represent the assessment endpoints chosen for a site and are measures of biological effects (U.S. EPA, 1997). Measurement endpoints for the screening-level assessment are chemical concentrations in surface soil associated with adverse effects on growth, survival, and reproduction of terrestrial organisms. The measurement endpoints are represented by U.S. EPA Region IV ecological screening values for surface soil.

The objective of the assessment was to determine if exposure to contaminants present in surface soil at Building 610 is likely to result in declines in ecological receptor populations that could eventually utilize the site.

3.4.2 Screening-Level Exposure Estimate and Risk Calculation

Maximum chemical concentrations in surface soils were compared to conservative ecological screening values established by U.S. EPA Region IV (U.S. EPA, 2000b). The ratio of the chemical concentration to the screening value is called the Hazard Quotient (HQ). When the HQ exceeded 1.0, adverse impacts were considered possible, and the chemical was selected as an ecological chemical of potential concern (COPC).

3.4.3 Screening Results

The results of the screening-level comparisons are presented in Table 3-6. As stated earlier, potential ecological risks assessed herein are based on samples collected outside the remediation areas. Chemicals with maximum concentrations that exceeded U.S. EPA Region IV ecological screening values consisted of one VOC (trichloroethene) and four metals (aluminum, chromium, lead, and selenium). In addition, one VOC (1,1-dichloroethane) and six PAH compounds were retained as COPCs because ecological screening vales were not available (Table 3-6).

3.4.4 Step 3a: Refinement of Preliminary Contaminants of Potential Concern

Subsequent to the initial screening, other factors were considered to further refine COPCs. These factors included background data for inorganics, toxicological evaluation of COPCs, frequency of detection, spatial analysis of detections, and comparisons of COPCs to alternate guidelines. U.S. EPA and the Navy (DON, 1999) consider the evaluation of these factors to be part of Step 3 in the eight-step process for conducting ecological risk assessments, or specifically, "Step 3a, Refinement of Contaminants of Potential Concern." DON has specified that Step 3a be conducted following all screening-level ecological risk assessments at its bases when COPCs remain after the screening. Thus, although U.S. EPA (1997) guidance suggests that the results of the screening-level risk assessment should be provided to the risk manager at the end of Step 2, the current risk assessment also includes the results of Step 3a of the eight-step process. Inclusion of Step 3a in screening-level ecological risk assessments for sites at NAS Cecil Field has been approved by the NAS Cecil BCT.

Concentrations of metals in surface soil at Building 610 were also compared in Step 3a to the NAS Cecil Field site-specific IBDS values (HLA, 1998).

Concentrations of COPCs were compared to alternate (usually less conservative) guidelines in Step 3a of this assessment (Table 3-7). The use of guidelines that are less conservative than Region IV screening values provides balance to the conservative screening-level assessment. Alternative surface soil guidelines consisted of those identified by Oak Ridge National Laboratory (ORNL), Beyer (1990), the Canadian Council of Ministers of the Environment (CCME, 1997), and Dutch "target" and "intervention" values (MHSPE, 1994). The ORNL values were developed to be protective of terrestrial plants (Efroymson et al., 1997a) and soil invertebrates and microbial processes (Efroymson et al., 1997b). Beyer's (1990) "A" values in Table 3-7 refer to background concentrations in soil or detection limits, and "B" values refer to moderate soil contamination that requires additional study. The CCME guidelines

TABLE 3-6

CHEMICALS OF POTENTIAL ECOLOGICAL CONCERN IN SURFACE SOIL
BUILDING 610 SAMPLING AND ANALYSIS REPORT
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

PARAMETER	FREQUENCY OF DETECTION	RANGE OF DETECTED CONCENTRATIONS		LOCATION OF MAXIMUM DETECTION	ECOLOGICAL SCREENING VALUE	MAXIMUM HAZARD QUOTIENT	SELECTED AS COPC? (Yes/No)	IBDS VALUE
		MINIMUM	MAXIMUM					
Volatile Organic Compounds (µg/kg)								
1,1-Dichloroethane	1 / 6	13	13	PWC-610-23	NA	NA	Yes	NA
Methylene Chloride	3 / 6	13.6	19.9	CEF-610-SS-007-01	2000	0.01	No	NA
Tetrachloroethene	2 / 7	2.6	9	PWC-610-07	10	0.9	No	NA
Toluene	1 / 6	5.4	5.4	CEF-610-SS-011-01	50	0.1	No	NA
Trichloroethene	2 / 6	14	160	PWC-610-23	1	160	Yes	NA
Semivolatile Organic Compounds (µg/kg)								
Benzo(a)anthracene	1 / 6	38.5	38.5	CEF-610-SS-001-01	NA	NA	Yes	NA
Benzo(a)pyrene	2 / 6	26.1	68.7	CEF-610-SS-001-01	100	0.7	No	NA
Benzo(b)fluoranthene	2 / 6	22.6	86.5	CEF-610-SS-001-01	NA	NA	Yes	NA
Benzo(g,h,i)perylene	3 / 6	25.6	124	CEF-610-SS-001-01	NA	NA	Yes	NA
Benzo(k)fluoranthene	1 / 6	51.6	52.8	CEF-610-SS-001-01	NA	NA	Yes	NA
Dibenzo(a,h)anthracene	1 / 6	26.4	26.4	CEF-610-SS-007-01	NA	NA	Yes	NA
Indeno(1,2,3-cd)pyrene	3 / 6	26.9	98.8	CEF-610-SS-001-01	NA	NA	Yes	NA
Total PAHs	3 / 6	119.7	469.3	CEF-610-SS-001-01	1000	0.5	No	NA
Inorganics (mg/kg)								
Aluminum	2 / 2	900	1200	PWC-610-23	50	24.0	Yes	4430
Antimony	1 / 3	0.461	0.461	PWC-610-05	3.5	0.1	No	9.44
Arsenic	4 / 9	0.692	3.74	PWC-610-07	10	0.4	No	2.04
Barium	12 / 14	1.35	124	PWC-610-03	165	0.8	No	14.4
Beryllium	7 / 9	0.024	0.362	PWC-610-08	1.1	0.3	No	0.35
Cadmium	6 / 8	0.066	1.55	PWC-610-03	1.6	0.97	No	1.72
Chromium	12 / 12	1.71	13.6	PWC-610-03	0.4	34.0	Yes	7.75
Lead	8 / 9	1.08	210	PWC-610-03	50	4.2	Yes	197
Mercury	3 / 5	0.0003	0.0004	PWC-610-04	0.1	0.8	No	0.16
Nickel	6 / 8	0.477	4.93	PWC-610-03	30	0.2	No	3.89
Selenium	1 / 8	150	150	PWC-610-03	0.81	185.0	Yes	1.68
Vanadium	1 / 2	1	1.6	PWC-610-25	2.0	0.8	No	6.3

NA = Not available or not applicable.
IBDS = NAS Cecil Field site-specific Inorganic Background Data Set (HLA, 1998).

TABLE 3-7

COMPARISON OF SURFACE SOIL CHEMICALS OF POTENTIAL CONCERN (COPCs) TO OTHER GUIDELINES
BUILDING 610 SAMPLING AND ANALYSIS REPORT
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

COPC	Maximum Concentration	CCME Soil Guideline	ORNL[a] Earthworms/ microorganisms	ORNL Soil Phytotoxicity	Beyer (1990) "A" Value	Beyer (1990) "B" Value	Dutch (1994) Target	Dutch (1994) Intervention
VOLATILE ORGANIC COMPOUNDS (µg/kg)								
1,1-Dichloroethane	13	NA	NA	NA	NA	NA	4000[b]	NA
Trichloroethene	160	3,000	NA	NA	NA	NA	1.0	60,000
SEMIVOLATILE ORGANIC COMPOUNDS (µg/kg)								
Benzo(a)anthracene	38.5	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	86.5	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	124	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	52.8	NA	NA	NA	NA	NA	NA	NA
Dienzo(a,h)anthracene	26.4	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	98.8	NA	NA	NA	NA	NA	NA	NA
Total PAHs	469.3	NA	NA	NA	1,000	20,000	1,000	40,000
INORGANICS (mg/kg)								
Aluminum	1200	NA	600	50	NA	NA	NA	NA
Chromium	13.6	64[c]	0.4[d]	1.0[d]	100[c]	250[c]	100[c]	380[c]
Lead	210	70	500	50	50	150	85	530
Selenium	150	NA	70	1.0	NA	NA	NA	NA

NA Not available.
a Lowest of earthworm and micro-organism screening values.
b Guideline for 1,2-dichloroethane.
c Total chromium.
d Hexavalent chromium (Cr^{+6}).
Beyer Evaluating Soil Contamination. United States Fish and Wildlife Service (USFWS) Biological Report 90(2). 1990.
CCME Canadian Council of Ministers of the Environment. Recommended Canadian Soil Quality Guidelines. 1997.
COPC Chemical of potential concern.
Dutch Intervention and target values - soil quality standards. Ministry of Housing, Spatial Planning, and the Environment (MHSP&E), Department of Soil Protection. The Hague, Netherlands. 1994.

were derived to protect wildlife and native flora from adverse effects due to direct soil contact and the ingestion of soil and food (CCME, 1997). The Dutch target values in Table 3-7 represent "clean" soil and indicate the soil quality required for the full restoration of the soil's functionality for human, animal, and plant life [Ministry of Housing, Spatial Planning, and the Environment (MHSP&E), 1994; Swartjes, 1999]. Dutch intervention values represent seriously contaminated soil, and the concentration midway between the target and intervention values is known as the intermediate value (Swartjes, 1999). Under the Dutch standards, concentrations greater than the target value but less than the intermediate value require no further investigation (but minor restrictions may be applied on soil use), and concentrations greater than the intermediate value and less than the intervention value indicate that further investigation is required (Swartjes, 1999).

Chemicals with maximum concentrations that exceeded U.S. EPA Region IV ecological screening values are discussed below.

3.4.4.1 Volatile Organic Compounds

No ecological guidelines were available for 1,1-dichloroethane, which was detected in one of six surface soil samples, at 13 µg/kg. The highest detection limit for 1,1-dichloroethane in non-detected samples was 6.2 µg/kg. The U.S. EPA Region IV ecological screening value for 1,2-dichloroethane, a closely related isomer, is 4,000 µg/kg. The data for 1,1-dichloroethane, when compared to the 4,000 µg/kg screening value for 1,2-dichloroethane, suggest that risks to ecological receptors from this VOC are negligible.

Trichloroethene was detected in two of six samples, and concentrations in both samples exceeded the ecological screening value of 1 µg/kg. The maximum concentration of trichloroethene (160 µg/kg) was in sample PWC-610-23, which was collected in 1999. Trichloroethene was not detected when this location was re-sampled for VOCs in 2001 (CEF-610-SS-301); the detection limit was 5.6 µg/kg in the re-sample (Appendix A). Trichloroethene detection limits in other non-detect samples ranged from 5.2 to 7.2 µg/kg (Appendix A), which exceeded the 1 µg/kg ecological screening value. There are few ecological guidelines for trichloroethene, but all detected and non-detected values were well below 30,000 µg/kg, which is the intermediate value midway between the Dutch target and intervention values (Table 3-7). In addition, all values were much less than the 3,000 µg/kg CCME guideline (Table 3-7). Because of the above factors, potential ecological risk from trichloroethene is considered to be negligible.

3.4.4.2 Semivolatile Organic Compounds

PAHs were the only semivolatile compounds detected at the site; they were detected in three of six samples. Detected concentrations of most individual PAHs ranged from 20 to 60 µg/kg (Appendix A). The maximum concentration of benzo(a)pyrene was less than its Region IV ecological screening value,

and screening values were not available for the other detected PAHs (Table 3-6). Concentrations of total PAHs in all samples were less than the 1,000 µg/kg ecological screening value (Table 3-6).

Ecological COPCs generally fall into two classes: chemicals for which the exposure route of concern is direct contact, and chemicals for which the exposure route of concern is the food chain (U.S. EPA, 2000a). PAHs fall in the first category, since they do not biomagnify in the food web, and PAHs present at the concentrations measured at Building 610 would not bioaccumulate. Thus, toxicity through direct contact is the only applicable exposure route for PAHs at the site. With this in mind, potentially adverse ecological risks from PAHs at Building 610 would be limited primarily to soil invertebrates such as earthworms. However, since concentrations of individual PAHs were relatively low and since concentrations of total PAHs in all samples were less than the ecological screening value, ecological risks from PAHs are considered to be negligible.

3.4.4.3 Metals

Maximum concentrations of aluminum, chromium, lead, and selenium exceeded Region IV ecological screening values (Table 3-6). Although few ecological guidelines are available for aluminum (Table 3-7), its maximum concentration was less than the facility-wide background concentration of aluminum (Table 3-6). Thus, although concentrations of aluminum exceeded conservative screening values, the concentrations do not indicate site-related contamination.

Chromium

Surface soil guidelines for chromium cover a wide range of values (Table 3-7). The ORNL values in Table 3-6 (the lowest of which is the U.S. EPA Region IV screening value) are for hexavalent chromium, which is the most toxic form of this metal. The other chromium guidelines in Table 3-7 are for total chromium. Soil chromium concentrations exceeded the facility-wide background chromium concentration (7.75 mg/kg) in three samples, but the maximum chromium concentration (13.6 mg/kg) was well below the lowest guideline value for total chromium (64 mg/kg). In summary, although the ratio of hexavalent chromium to total chromium in site samples cannot be determined, the total chromium concentrations were much less than ecological guidelines for total chromium. Therefore, potential site-related ecological risk from chromium is considered to be negligible.

Lead

Lead concentrations exceeded the 50 mg/kg screening value in two samples (PWC-610-03 at 210 mg/kg and PWC-610-04 at 153 mg/kg). The maximum lead concentration was only slightly elevated relative to the facility-wide background concentration of lead (197 mg/kg). The Region IV ecological screening value

for lead in surface soil is based on guidelines generated by ORNL (Efroymson et al., 1997a) and Beyer (1990). The ORNL guideline (50 mg/kg) was developed to be protective of terrestrial plants (Efroymson et al. 1997a), and Beyer's 50 mg/kg guideline is an "A" value that refers to background concentrations in soil or detection limits (Beyer, 1990). Beyer's "B" value for lead (150 mg/kg) refers to moderate soil contamination that requires additional study (Beyer, 1990). The ORNL guideline for toxicity to earthworms is 500 mg/kg (Efroymson et al., 1997b).

Lead in soil can pose risk to ecological receptors through direct contact and through the food chain. Potential risk via the food chain is considered to be negligible at Building 610 for at the following reasons. Lead was elevated in only two of nine samples. The area in the vicinity of the two elevated-lead samples would comprise only a minuscule portion of wide-ranging terrestrial receptors. The maximum concentration in the remaining seven samples was 13.6 mg/kg, which is well below all soil lead guidelines. In addition, previous ecological risk assessments at NAS Cecil Field using a variety of representative ecological receptors have shown that risk via the food chain does not occur at the relatively low concentration of 210 mg/kg.

Lead concentrations exceeded the phytotoxicity-based screening value (50 mg/kg) in two samples. Thus, phytotoxicity (toxicity to plants) could occur in the vicinity of these samples. Toxicity to soil invertebrates such as earthworms and soil micro-organisms does not appear to be an issue, since the maximum concentration was less than available guidelines for these receptors (Table 3-7). In summary, since lead concentrations exceeded the 50 mg/kg phytotoxicity guideline in two samples, potentially adverse ecological risks from lead at Building 610 exist for plants. The area in the vicinity of these two samples comprises a very small portion of the 1.1-acre site. The maximum lead concentration was only slightly elevated relative to the facility-wide background concentration of lead.

Selenium

The selenium concentration in surface soil sample PWC-610-03 was 150 mg/kg. This concentration was highly elevated relative to the Region IV ecological screening value, with an HQ of 185 (Table 3-6). Sample PWC-610-03 was collected in 1999. Selenium was not detected in surface soil (CEF-610-SS-305-01) or in soil 1 to 2 feet deep (CEF-610-SS-306-02) when the location of PWC-610-03 was re-sampled in 2001. The selenium detection limits were 0.29 mg/kg in the surface soil re-sample and 0.33 mg/kg in the 1- to 2-foot sample (Table 3-3). Selenium detection limits in non-detect samples ranged from 0.23 to 2.0 mg/kg (Appendix A).

Selenium in soil can pose risk to ecological receptors through direct contact and through the food chain. Potential risk via the food chain is considered to be negligible at Building 610 for reasons similar to those discussed above for lead regarding the size of the site. Selenium detection limits in some samples

exceeded the 1.0 mg/kg guideline for phytotoxicity (Table 3-7). Thus, toxicity to plants cannot be ruled out. However, selenium data from samples collected in the area that was later remediated provide no indication of selenium contamination at the site (Table 3-3). In summary, the absence of detected selenium in the 2001 re-sample, combined with other selenium data at the site, indicate negligible or minor risk to ecological receptors.

Metals – Cumulative Toxicity

Concentrations of metals detected at Building 610 pose negligible potential risks to ecological receptors when considered as individual COPCs. However, as discussed by U.S. EPA (1997), the potential effects of cumulative toxicity should be considered when appropriate. The maximum soil concentrations of barium, cadmium, chromium, lead, nickel, and selenium were recorded in sample PWC-610-03 (Table 3-6). At this location, the Hazard Index (HI) of metals in soil would be well above 1.0. The exact HI was not calculated since the toxic mechanisms of metals are complex and thus it is difficult to ascertain the degree to which the metals "produce effects by the same toxic mechanism" (U.S. EPA, 1997). The important point here is that concentrations of six metals were highest at this location. The extent of potential cumulative toxicity to terrestrial receptors from these elevated concentrations is not clear. Likewise, definitive conclusions regarding which metals could pose the greatest potential risks from cumulative toxicity cannot be made. It is assumed, however, that the concentrations of metals in this sample could pose potential risks to terrestrial receptors such as plants and soil invertebrates from cumulative toxicity. This sample represents an extremely small area, however.

3.4.5 Uncertainties

Uncertainty is associated with all aspects of the ecological risk assessment process. This section briefly provides a summary of specific uncertainties involved in this ecological risk assessment.

The inhalation exposure route is usually considered to be miniscule, but since this cannot be quantitatively assessed, uncertainties remain. Burrowing wildlife could be exposed to some contaminants via inhalation. Although data regarding inhalation exposure and toxicity for wildlife were not available, COPC concentrations at Building 610 are not excessively elevated.

Uncertainty in risk characterization of soil contaminants at Building 610 results from the lack of toxicity data regarding the cumulative toxicity of metals. Concentrations of some metals were elevated in sample PWC-610-03. Concentrations of these metals, when assessed individually, appear to pose negligible or minor potential risks to terrestrial receptors. The extent to which these same concentrations of metals might contribute to cumulative toxicity is uncertain.

The data set was rather small. Specifically, analytical data from only two to six samples were available for most analytes. Ordinarily, this might underestimate potential risks. Since the site is only 1.1 acres in areal extent, however, a large number of samples is not necessary to adequately characterize the extent of contamination at Building 610. Thus, the small number of samples is not a significant limitation in the evaluation of potential risks at the site.

3.4.6 Ecological Risk Summary

Several inorganic and organic compounds were present in surface soil samples at concentrations that exceeded U.S. EPA Region IV ecological screening values, and screening values were not available from U.S. EPA Region IV for some compounds. The VOCs and SVOCs ecological COPCs do not biomagnify in the food web and would not bioaccumulate at the concentrations measured at the site. Overall, since concentrations of VOCs and SVOCs were relatively low, ecological risk at the site is considered to be negligible.

Maximum concentrations of aluminum, chromium, lead, and selenium exceeded Region IV ecological screening values. The maximum concentration of aluminum was less than its facility-wide background concentration, indicating that concentrations of aluminum are not site related. Concentrations of chromium were well below the lowest available guideline for total chromium. Risk from lead is limited to potential phytotoxic effects in the vicinity of two samples. Selenium was elevated in one sample but was not detected at the same location 2 years later. Potential risk from cumulative toxicity of metals is limited to receptors such as soil invertebrates and plants and exist only in the immediate vicinity of one sample. Thus, potential risks from cumulative toxicity are probably minor at worst.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Field investigations determined that PAHs, TRPH, and barium contamination was present in soil at Building 610, and a removal action was performed in July 2001 to excavate and dispose off site the soil contaminated above residential SCTLs. Since the removal action, the soil at Building 610 no longer represents a threat to human health or the environment.

Based upon these conclusions, the recommendation for Building 610 is No Further Action. It is also recommended that the color code for Building 610 be changed from Yellow to Dark Green to denote that releases of hazardous substances have occurred and that remedial actions to protect human health have been taken. Residual concentrations of PAHs, TRPH, and barium in surface soil no longer represent a hazard to human health or the environment.

REFERENCES

ABB-ES (ABB Environmental SERVICES, Inc.), 1994. Base Realignment and Closure Environmental Baseline Survey Report, Naval Air Station Cecil Field, Jacksonville, Florida. Prepared for Southern Division Naval Facilities Engineering Command (SOUTHNAVFACENGCOM), Charleston, South Carolina, November.

BCT (BRAC Cleanup Team), 2001. Meeting of April 30, 2001, Minute No. 1462, Action/Decision Nos. 527 and 528.

Beyer, N. 1990. Evaluating Soil Contamination. United States Fish and Wildlife Service (USFWS) Biological Report 90(2).

CCME (Canadian Council of Ministers of the Environment), 1997. Recommended Canadian Soil Quality Guidelines. Winnipeg, Manitoba.

CH2M Hill, 2001. Source Removal Report, Excavation of Petroleum-Contaminated Soil, Public Works Center, Building 610, Yellow Water Weapons Area, Naval Air Station Cecil Field, Jacksonville, Florida. Prepared for SOUTHNAVFACENGCOM, Charleston, South Carolina, October.

Department of the Navy (DON), 1999. Navy Policy for Conducting Ecological Risk Assessments. Office of the Chief of Naval Operations, Washington, D.C., April 6.

Efroymson, R.A., M. E. Will, G. W. Suter, and A.C. Wooten, 1997a. Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Terrestrial Plants, 1997 Revision, Oak Ridge National Laboratory, Oak Ridge, Tennessee.

Efroymson, R.A., M. E. Will, and G. W. Suter, 1997b. Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Soil Litter Invertebrates and Heterotrophic Processes, 1997 Revision; ES/ER/TM-126-R2, Oak Ridge National Laboratory, Oak Ridge, Tennessee.

FDEP (Florida Department of Environmental Protection), 1999. Contaminant Target Rule, Soil, Groundwater, and Surface Water Target Cleanup Levels. Florida Administrative Code (FAC) 62-777, August.

HLA (Harding Lawson Associates), 1998. NAS Cecil Field Inorganic Background Data Set. Prepared for SOUTHNAVFACENGCOM, Charleston, South Carolina, July.

HLA, 1999. Sampling and Analysis Outline and Report, Yellow Water Weapons Area, Base Realingment and Closure. Prepared for SOUTHNAVFACENGCOM, Charleston, South Carolina, January.

MHSP&E (Ministry of Housing, Spatial Planning and Environment). 1994. Intervention values and target values – soil quality standards. Department of Soil Protection, The Hague, The Netherlands.

Swartjes, F.A. 1999. "Risk based assessment of soil and groundwater quality in the Netherlands: standards and remediation urgency." In Risk Analysis; 19 (6): 1235-1249.

TtNUS (Tetra Tech NUS, Inc.), 1998. Base-Wide Generic Work Plan, NAS Cecil Field, Jacksonville, Florida. Prepared for SOUTHNAVFACENGCOM, Charleston, South Carolina, October.

TtNUS, 2000a. Sampling and Analysis Work Plan, Building 610, Naval Air Station Cecil Field, Jacksonville, Florida. Prepared for SOUTHNAVFACENGCOM, Charleston, South Carolina, September.

TtNUS, 2000b. Sampling and Analysis Work Plan Phase II (Rev 1), Building 610, Naval Air Station Cecil Field, Jacksonville, Florida. Prepared for SOUTHNAVFACENGCOM, Charleston, South Carolina, December.

TtNUS, 2001a. Phase III Sampling and Analysis Work Plan, Building 610, Naval Air Station Cecil Field, Jacksonville, Florida. Prepared for SOUTHNAVFACENGCOM, Charleston, South Carolina, January.

TtNUS, 2001b. Phase IV Sampling and Analysis Work Plan, Building 610, Naval Air Station Cecil Field, Jacksonville, Florida. Prepared for SOUTHNAVFACENGCOM, Charleston, South Carolina, March.

TtNUS, 2001c. Dig and Haul Package for Building 610, Naval Air Station Cecil Field, Jacksonville, Florida. Prepared for SOUTHNAVFACENGCOM, Charleston, South Carolina, May.

TtNUS, 2001d. Phase V Sampling and Analysis Work Plan, Building 610, Naval Air Station Cecil Field, Jacksonville, Florida. Prepared for SOUTHNAVFACENGCOM, Charleston, South Carolina, July.

U.S. EPA (United States Environmental Protection Agency) Region IV, 1996. Environmental Investigations Standard Operating Procedures and Quality Assurance Manual. Athens, Georgia, May.

U.S. EPA, 1997. Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments, June 5, Edison, New Jersey.

U.S. EPA, 1998. Risk-Based Concentration Table. Region III, Philadelphia, Pennsylvania.

U.S. EPA, 2000a. Amended Guidance on Ecological Risk Assessment at Military Bases: Process Considerations, Timing of Activities, and Inclusion of Stakeholders. Memorandum from Ted W. Simon, Region IV Office of Technical Services, Atlanta, Georgia, June 23.

U.S. EPA, 2000b. Region 4 Ecological Risk Assessment Bulletins – Supplement to RAGs. Waste Management Division, Atlanta, Georgia, March 9. http://www.epa.gov/region4/waste/oftecser/ecolbul.htm.

U.S. EPA, 2001. ECO Update. Publication 9345.0-14, EPA 540/F-01/014, Office of Solid Waste and Emergency and Response, June.

APPENDIX A

LABORATORY ANALYTICAL DATA

A.1 SOIL ANALYTICAL DATA

A.2 GROUNDWATER ANALYTICAL DATA

APPENDIX A.1

SOIL ANALYTICAL DATA

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

PITT-07-0-026

TO: **MARK SPERANZA** **DATE: DECEMBER 19, 2000**

FROM: **JUSTIN ORBICH** **CC: DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOA/PAH/HERB/TPH**
CTO 078 – NAS CECIL FIELD
SDG F7816

SAMPLES: 28/Surface Soil

CEF-610-SS-001-01	CEF-610-SS-002-01
CEF-610-SS-003-01	CEF-610-SS-004-01
CEF-610-SS-005-01	CEF-610-SS-006-01
CEF-610-SS-007-01	CEF-610-SS-008-01
CEF-610-SS-009-01	CEF-610-SS-010-01
CEF-610-SS-011-01	CEF-610-SS-012-01
CEF-610-SS-013-01	CEF-610-SS-014-01
CEF-610-SS-015-01	CEF-610-SS-016-01
CEF-610-SS-017-01	CEF-610-SS-018-01
CEF-610-SS-019-01	CEF-610-SS-020-01
CEF-610-SS-021-01	CEF-610-SS-022-01
CEF-610-SS-023-01	CEF-610-SS-024-01
CEF-610-SS-025-01	CEF-610-SS-DU01
CEF-610-SS-DU02	CEF-610-SS-DU03

OVERVIEW

The sample set for CTO 078, SDG F7816 Naval Air Station (NAS) Cecil Field; Florida consists of twenty-eight (28) surface soil environmental samples. The samples were analyzed for Target Compound List (TCL) volatiles plus metyltert-butyl ether, Polynuclear Aromatic Hydrocarbon (PAH), herbicide, Total Petroleum Hydrocarbon (TPH) organic compounds. Three (3) field duplicate pairs (CEF-610-SS-001-01/CEF-610-SS-DU01, CEF-610-SS-011-01/CEF-610-SS-DU02, and CEF-610-SS-021-01/CEF-610-SS-DU03) were included within this SDG.

The samples were collected by Tetra Tech, NUS on October 5th, 2000 and analyzed by Accutest Laboratories. All analyses were performed in accordance with Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria and analyzed according to SW 846 Method 8260B, 8310, 8151A, and FLORIDA-PRO analytical and reporting protocols. The data in this SDG was validated with regard to the following parameters:

- Data Completeness
- Holding Times
- Initial/continuing calibrations
- Laboratory method/field quality control blank results
- Field Duplicate Precision
- Detection Limits

The symbol (*) indicates that all quality control criteria were met for this parameter. Problems affecting data quality are discussed below; documentation supporting these findings is presented in Appendix C. Qualified analytical results are presented in Appendix A.

VOLATILE FRACTION

It should be noted that the laboratory electronic data deliverables reported all results for methylene chloride as nondetected. However, the laboratory Form Is reported results for methylene chloride as positive results. Therefore, the reviewer transposed the positive results for methylene chloride on the laboratory electronic data deliverables. In addition, the laboratory claimed laboratory contamination for the methylene chloride results, however, the laboratory method blanks reported methylene chloride as nondetected. Despite the absence of methylene chloride in the method blanks, all positive results for methylene chloride were qualified as estimated, (J).

The field duplicate pair (CEF-610-SS-011-01/CEF-610-SS-DU02) Relative Percent Difference (RPD) exceeded the upper control limit for methylene chloride. The positive and nondetected results were qualified as estimated (J) and (UJ), in the aforementioned pair.

PAH FRACTION

Samples CEF-610-SS-015-01, CEF-610-SS-023-01, CEF-610-SS-DU03 and CEF-610-SS-016-01 were analyzed at a 2X dilution thus causing elevated reporting limits.

Sample CEF-610-SS-017-01 was analyzed at a 10X dilution thus causing elevated reporting limits.

Samples CEF-610-SS-020-01 and CEF-610-SS-025-01 were analyzed at an 8X dilution thus causing elevated reporting limits.

Sample CEF-610-SS-021-01 was analyzed at a 4X dilution thus causing elevated reporting limits.

Sample CEF-610-SS-024-01 was analyzed at a 20X dilution thus causing elevated reporting limits.

The field duplicate pair (CEF-610-SS-021-01/CEF-610-SS-DU03) Relative Percent Difference (RPD) exceeded the upper control limit for benzo(a)anthracene, benzo(a)pyrene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and pyrene. The positive results were qualified as estimated (J), in the aforementioned pair.

HERBICIDE FRACTION

It should be noted that 4-nitrophenol was missing from the 8151A list.

It should be noted that the reporting limits for MCPP and MCPA were greater than the leachibility limit (20 µg/kg).

TPH FRACTION

The field duplicate pair (CEF-610-SS-021-01/CEF-610-SS-DU03) Relative Percent Difference (RPD) exceeded the upper control limit for TPH (C8-C40). The positive results were qualified as estimated (J), in the aforementioned pair.

MEMO TO: MARK SPERANZA
DATE: DECEMBER 19, 2000 – PAGE 3

ADDITIONAL COMMENTS

Several samples contained positive results for compounds below the reporting limits. These results were qualified as estimated (J).

EXECUTIVE SUMMARY

Laboratory performance: None.

Other Factors Affecting Data Quality: Several samples were analyzed at a dilution in the PAH and TPH fractions. Several field duplicate pair RPDs exceeded the upper control limit in several fractions.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (October 1999) and the NFESC guidelines "Navy IRCDQM" (September 1999). The text of this report has been formulated to address only those problems affecting data quality.

"I attest that the data referenced herein was validated according to the agreed upon validation criteria as specified in the NFESC Guidelines and the Quality Assurance Project Plan (QAPP)."

Justin Orbich

Chemist/Data Validator
Tetra Tech, NUS

Joseph A. Samchuck

Data Validation Quality Assurance Officer
Tetra Tech, NUS

Attachments:
1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

DATA QUALIFIER DEFINITIONS:

U - Value is a nondetected result as reported by the laboratory and should not be considered present.

J - Positive result is estimated as a result of a value below the CRQL or a technical noncompliance.

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration (i.e., % RSDs, %Ds, ICVs, CCVs, RPDs, RRFs, etc.) Noncompliance
D = MS/MSD Noncompliance
E = LCS/LCSD Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS - GFAA MSA's $r < 0.995$
K = ICP Interference - include ICSAB % R's
L = Instrument Calibration Range Exceedance
M = Sample Preservation
N = Internal Standard Noncompliance
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = Pest/PCB D% between columns for positive results
V = Non-linear calibrations, tuning $r < 0.995$ (correlation coefficient)
W = EMPC result
X = Signal to noise response drop
Y = % Solid content is less than 30%

APPENDIX A

Qualified Analytical Results

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F7816

SAMPLE NUMBER:	CEF-610-SS-001-01	CEF-610-SS-002-01	CEF-610-SS-003-01	CEF-610-SS-004-01
SAMPLE DATE:	10/05/00	10/05/00	10/05/00	10/05/00
LABORATORY ID:	F7816-4	F7816-5	F7816-3	F7816-2
QC_TYPE:	NORMAL	NORMAL	NORMAL	NORMAL
% SOLIDS:	88.5 %	89.0 %	80.5 %	89.1 %
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG
FIELD DUPLICATE OF:				

	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
VOLATILES												
1,1,1-TRICHLOROETHANE	6.2	U		5.7	U		5.6	U		5.8	U	
1,1,2,2-TETRACHLOROETHANE	6.2	U		5.7	U		5.6	U		5.8	U	
1,1,2-TRICHLOROETHANE	6.2	U		5.7	U		5.6	U		5.8	U	
1,1-DICHLOROETHANE	6.2	U		5.7	U		5.6	U		5.8	U	
1,1-DICHLOROETHENE	6.2	U		5.7	U		5.6	U		5.8	U	
1,2-DICHLOROETHANE	6.2	U		5.7	U		5.6	U		5.8	U	
1,2-DICHLOROPROPANE	6.2	U		5.7	U		5.6	U		5.8	U	
2-BUTANONE	12	U		11	U		11	U		12	U	
2-HEXANONE	12	U		11	U		11	U		12	U	
4-METHYL-2-PENTANONE	12	U		11	U		11	U		12	U	
ACETONE	62	U		57	U		56	U		58	U	
BENZENE	6.2	U		5.7	U		5.6	U		5.8	U	
BROMODICHLOROMETHANE	6.2	U		5.7	U		5.6	U		5.8	U	
BROMOFORM	6.2	U		5.7	U		5.6	U		5.8	U	
CARBON DISULFIDE	12	U		11	U		11	U		12	U	
CARBON TETRACHLORIDE	6.2	U		5.7	U		5.6	U		5.8	U	
CHLOROBENZENE	6.2	U		5.7	U		5.6	U		5.8	U	
CHLOROETHANE	6.2	U		5.7	U		5.6	U		5.8	U	
CHLOROFORM	6.2	U		5.7	U		5.6	U		5.8	U	
CIS-1,2-DICHLOROETHENE	6.2	U		5.7	U		5.6	U		5.8	U	
CIS-1,3-DICHLOROPROPENE	6.2	U		5.7	U		5.6	U		5.8	U	
DIBROMOCHLOROMETHANE	6.2	U		5.7	U		5.6	U		5.8	U	
ETHYLBENZENE	6.2	U		5.7	U		5.6	U		5.8	U	
METHYL TERT-BUTYL ETHER	6.2	U		5.7	U		5.6	U		5.8	U	
METHYLENE BROMIDE	6.2	U		5.7	U		5.6	U		5.8	U	
METHYLENE CHLORIDE	13.7	J	A	11.8	J	A	11.5	J	A	12.3	J	A
STYRENE	6.2	U		5.7	U		5.6	U		5.8	U	
TETRACHLOROETHENE	6.2	U		5.7	U		5.6	U		5.8	U	
TOLUENE	6.2	U		2.4	J	P	5.6	U		5.8	U	
TRANS-1,2-DICHLOROETHENE	6.2	U		5.7	U		5.6	U		5.8	U	
TRANS-1,3-DICHLOROPROPENE	6.2	U		5.7	U		5.6	U		5.8	U	
TRICHLOROETHENE	6.2	U		5.7	U		5.6	U		5.8	U	
VINYL CHLORIDE	6.2	U		5.7	U		5.6	U		5.8	U	

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F7816

SAMPLE NUMBER:	CEF-610-SS-001-01			CEF-610-SS-002-01			CEF-610-SS-003-01			CEF-610-SS-004-01		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-4			F7816-5			F7816-3			F7816-2		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	88.5 %			89.0 %			80.5 %			89.1 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
VOLATILES												
XYLENES, TOTAL	19	U		17	U		17	U		17	U	

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F7816

SAMPLE NUMBER:	CEF-610-SS-005-01	CEF-610-SS-006-01	CEF-610-SS-007-01	CEF-610-SS-008-01
SAMPLE DATE:	10/05/00	10/05/00	10/05/00	10/05/00
LABORATORY ID:	F7816-6	F7816-1	F7816-25	F7816-7
QC_TYPE:	NORMAL	NORMAL	NORMAL	NORMAL
% SOLIDS:	85.7 %	88.8 %	86.1 %	86.5 %
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG
FIELD DUPLICATE OF:				

	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
VOLATILES												
1,1,1-TRICHLOROETHANE	5.9	U		5.2	U		7.2	U		5.8	U	
1,1,2,2-TETRACHLOROETHANE	5.9	U		5.2	U		7.2	U		5.8	U	
1,1,2-TRICHLOROETHANE	5.9	U		5.2	U		7.2	U		5.8	U	
1,1-DICHLOROETHANE	5.9	U		5.2	U		7.2	U		5.8	U	
1,1-DICHLOROETHENE	5.9	U		5.2	U		7.2	U		5.8	U	
1,2-DICHLOROETHANE	5.9	U		5.2	U		7.2	U		5.8	U	
1,2-DICHLOROPROPANE	5.9	U		5.2	U		7.2	U		5.8	U	
2-BUTANONE	12	U		10	U		14	U		12	U	
2-HEXANONE	12	U		10	U		14	U		12	U	
4-METHYL-2-PENTANONE	12	U		10	U		14	U		12	U	
ACETONE	59	U		52	U		72	U		58	U	
BENZENE	5.9	U		5.2	U		7.2	U		5.8	U	
BROMODICHLOROMETHANE	5.9	U		5.2	U		7.2	U		5.8	U	
BROMOFORM	5.9	U		5.2	U		7.2	U		5.8	U	
CARBON DISULFIDE	12	U		10	U		14	U		12	U	
CARBON TETRACHLORIDE	5.9	U		5.2	U		7.2	U		5.8	U	
CHLOROBENZENE	5.9	U		5.2	U		7.2	U		5.8	U	
CHLOROETHANE	5.9	U		5.2	U		7.2	U		5.8	U	
CHLOROFORM	5.9	U		5.2	U		7.2	U		5.8	U	
CIS-1,2-DICHLOROETHENE	5.9	U		5.2	U		7.2	U		5.8	U	
CIS-1,3-DICHLOROPROPENE	5.9	U		5.2	U		7.2	U		5.8	U	
DIBROMOCHLOROMETHANE	5.9	U		5.2	U		7.2	U		5.8	U	
ETHYLBENZENE	5.9	U		5.2	U		7.2	U		5.8	U	
METHYL TERT-BUTYL ETHER	5.9	U		5.2	U		7.2	U		5.8	U	
METHYLENE BROMIDE	5.9	U		5.2	U		7.2	U		5.8	U	
METHYLENE CHLORIDE	12	U		10	U		19.9	J	A	12	U	
STYRENE	5.9	U		5.2	U		7.2	U		5.8	U	
TETRACHLOROETHENE	5.9	U		5.2	U		7.2	U		5.8	U	
TOLUENE	5.9	U		5.2	U		7.2	U		3	J	P
TRANS-1,2-DICHLOROETHENE	5.9	U		5.2	U		7.2	U		5.8	U	
TRANS-1,3-DICHLOROPROPENE	5.9	U		5.2	U		7.2	U		5.8	U	
TRICHLOROETHENE	5.9	U		5.2	U		7.2	U		5.8	U	
VINYL CHLORIDE	5.9	U		5.2	U		7.2	U		5.8	U	

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F7816

SAMPLE NUMBER:	CEF-610-SS-005-01			CEF-610-SS-006-01			CEF-610-SS-007-01			CEF-610-SS-008-01		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-6			F7816-1			F7816-25			F7816-7		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	85.7 %			88.8 %			86.1 %			86.5 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
VOLATILES												
XYLENES, TOTAL	18	U		16	U		21	U		17	U	

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F7816

SAMPLE NUMBER:	CEF-610-SS-009-01			CEF-610-SS-010-01			CEF-610-SS-011-01			CEF-610-SS-012-01		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-19			F7816-18			F7816-8			F7816-11		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	89.3 %			87.1 %			86.0 %			89.3 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
VOLATILES												
1,1,1-TRICHLOROETHANE	6	U		6	U		6	U		6.4	U	
1,1,2,2-TETRACHLOROETHANE	6	U		6	U		6	U		6.4	U	
1,1,2-TRICHLOROETHANE	6	U		6	U		6	U		6.4	U	
1,1-DICHLOROETHANE	6	U		6	U		6	U		6.4	U	
1,1-DICHLOROETHENE	6	U		6	U		6	U		6.4	U	
1,2-DICHLOROETHANE	6	U		6	U		6	U		6.4	U	
1,2-DICHLOROPROPANE	6	U		6	U		6	U		6.4	U	
2-BUTANONE	12	U		12	U		12	U		13	U	
2-HEXANONE	12	U		12	U		12	U		13	U	
4-METHYL-2-PENTANONE	12	U		12	U		12	U		13	U	
ACETONE	60	U		60	U		60	U		64	U	
BENZENE	6	U		6	U		6	U		6.4	U	
BROMODICHLOROMETHANE	6	U		6	U		6	U		6.4	U	
BROMOFORM	6	U		6	U		6	U		6.4	U	
CARBON DISULFIDE	12	U		12	U		12	U		13	U	
CARBON TETRACHLORIDE	6	U		6	U		6	U		6.4	U	
CHLOROBENZENE	6	U		6	U		6	U		6.4	U	
CHLOROETHANE	6	U		6	U		6	U		6.4	U	
CHLOROFORM	6	U		6	U		6	U		6.4	U	
CIS-1,2-DICHLOROETHENE	6	U		6	U		6	U		6.4	U	
CIS-1,3-DICHLOROPROPENE	6	U		6	U		6	U		6.4	U	
DIBROMOCHLOROMETHANE	6	U		6	U		6	U		6.4	U	
ETHYLBENZENE	6	U		6	U		6	U		6.4	U	
METHYL TERT-BUTYL ETHER	6	U		6	U		6	U		6.4	U	
METHYLENE BROMIDE	6	U		6	U		6	U		6.4	U	
METHYLENE CHLORIDE	16.8	J	A	20.8	J	A	12	UJ	G	14.8	J	A
STYRENE	6	U		6	U		6	U		6.4	U	
TETRACHLOROETHENE	6	U		6	U		6	U		6.4	U	
TOLUENE	2.8	J	P	4	J	P	5.4	J	P	2.6	J	P
TRANS-1,2-DICHLOROETHENE	6	U		6	U		6	U		6.4	U	
TRANS-1,3-DICHLOROPROPENE	6	U		6	U		6	U		6.4	U	
TRICHLOROETHENE	6	U		6	U		6	U		6.4	U	
VINYL CHLORIDE	6	U		6	U		6	U		6.4	U	

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F7816

SAMPLE NUMBER:	CEF-610-SS-009-01			CEF-610-SS-010-01			CEF-610-SS-011-01			CEF-610-SS-012-01		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-19			F7816-18			F7816-8			F7816-11		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	89.3 %			87.1 %			86.0 %			89.3 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
VOLATILES												
XYLENES, TOTAL	18	U		18	U		18	U		19	U	

CTO078-NAS CECIL FIELD
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SAMPLE NUMBER:	CEF-610-SS-013-01			CEF-610-SS-014-01			CEF-610-SS-015-01			CEF-610-SS-016-01		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-12			F7816-16			F7816-24			F7816-9		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	89.9 %			87.8 %			83.1 %			82.3 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
VOLATILES												
1,1,1-TRICHLOROETHANE	6	U		6	U		8.4	U		8.2	U	
1,1,2,2-TETRACHLOROETHANE	6	U		6	U		8.4	U		8.2	U	
1,1,2-TRICHLOROETHANE	6	U		6	U		8.4	U		8.2	U	
1,1-DICHLOROETHANE	6	U		6	U		8.4	U		8.2	U	
1,1-DICHLOROETHENE	6	U		6	U		8.4	U		8.2	U	
1,2-DICHLOROETHANE	6	U		6	U		8.4	U		8.2	U	
1,2-DICHLOROPROPANE	6	U		6	U		8.4	U		8.2	U	
2-BUTANONE	12	U		12	U		17	U		16	U	
2-HEXANONE	12	U		12	U		17	U		16	U	
4-METHYL-2-PENTANONE	12	U		12	U		17	U		16	U	
ACETONE	60	U		60	U		84	U		82	U	
BENZENE	6	U		6	U		8.4	U		8.2	U	
BROMODICHLOROMETHANE	6	U		6	U		8.4	U		8.2	U	
BROMOFORM	6	U		6	U		8.4	U		8.2	U	
CARBON DISULFIDE	12	U		12	U		17	U		16	U	
CARBON TETRACHLORIDE	6	U		6	U		8.4	U		8.2	U	
CHLOROBENZENE	6	U		6	U		8.4	U		8.2	U	
CHLOROETHANE	6	U		6	U		8.4	U		8.2	U	
CHLOROFORM	6	U		6	U		8.4	U		8.2	U	
CIS-1,2-DICHLOROETHENE	6	U		6	U		8.4	U		8.2	U	
CIS-1,3-DICHLOROPROPENE	6	U		6	U		8.4	U		8.2	U	
DIBROMOCHLOROMETHANE	6	U		6	U		8.4	U		8.2	U	
ETHYLBENZENE	6	U		6	U		8.4	U		8.2	U	
METHYL TERT-BUTYL ETHER	6	U		6	U		8.4	U		8.2	U	
METHYLENE BROMIDE	6	U		6	U		8.4	U		8.2	U	
METHYLENE CHLORIDE	13.8	J	A	18.4	J	A	20.7	J	A	16.6	J	A
STYRENE	6	U		6	U		8.4	U		8.2	U	
TETRACHLOROETHENE	6	U		6	U		8.4	U		8.2	U	
TOLUENE	2.6	J	P	3.3	J	P	6	J	P	3.8	J	P
TRANS-1,2-DICHLOROETHENE	6	U		6	U		8.4	U		8.2	U	
TRANS-1,3-DICHLOROPROPENE	6	U		6	U		8.4	U		8.2	U	
TRICHLOROETHENE	6	U		6	U		8.4	U		8.2	U	
VINYL CHLORIDE	6	U		6	U		8.4	U		8.2	U	

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SAMPLE NUMBER:	CEF-610-SS-013-01			CEF-610-SS-014-01			CEF-610-SS-015-01			CEF-610-SS-016-01		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-12			F7816-16			F7816-24			F7816-9		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	89.9 %			87.8 %			83.1 %			82.3 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
VOLATILES												
XYLENES, TOTAL	18	U		18	U		25	U		25	U	

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SAMPLE NUMBER:	CEF-610-SS-017-01			CEF-610-SS-018-01			CEF-610-SS-019-01			CEF-610-SS-020-01		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-17			F7816-10			F7816-13			F7816-14		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	79.0 %			90.0 %			90.4 %			87.9 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
VOLATILES												
1,1,1-TRICHLOROETHANE	6.3	U		5.8	U		6.1	U		6.8	U	
1,1,2,2-TETRACHLOROETHANE	6.3	U		5.8	U		6.1	U		6.8	U	
1,1,2-TRICHLOROETHANE	6.3	U		5.8	U		6.1	U		6.8	U	
1,1-DICHLOROETHANE	6.3	U		5.8	U		6.1	U		6.8	U	
1,1-DICHLOROETHENE	6.3	U		5.8	U		6.1	U		6.8	U	
1,2-DICHLOROETHANE	6.3	U		5.8	U		6.1	U		6.8	U	
1,2-DICHLOROPROPANE	6.3	U		5.8	U		6.1	U		6.8	U	
2-BUTANONE	13	U		12	U		12	U		14	U	
2-HEXANONE	13	U		12	U		12	U		14	U	
4-METHYL-2-PENTANONE	13	U		12	U		12	U		14	U	
ACETONE	63	U		58	U		61	U		68	U	
BENZENE	6.3	U		5.8	U		6.1	U		6.8	U	
BROMODICHLOROMETHANE	6.3	U		5.8	U		6.1	U		6.8	U	
BROMOFORM	6.3	U		5.8	U		6.1	U		6.8	U	
CARBON DISULFIDE	13	U		12	U		12	U		14	U	
CARBON TETRACHLORIDE	6.3	U		5.8	U		6.1	U		6.8	U	
CHLOROBENZENE	6.3	U		5.8	U		6.1	U		6.8	U	
CHLOROETHANE	6.3	U		5.8	U		6.1	U		6.8	U	
CHLOROFORM	6.3	U		5.8	U		6.1	U		6.8	U	
CIS-1,2-DICHLOROETHENE	6.3	U		5.8	U		6.1	U		6.8	U	
CIS-1,3-DICHLOROPROPENE	6.3	U		5.8	U		6.1	U		6.8	U	
DIBROMOCHLOROMETHANE	6.3	U		5.8	U		6.1	U		6.8	U	
ETHYLBENZENE	6.3	U		5.8	U		6.1	U		6.8	U	
METHYL TERT-BUTYL ETHER	6.3	U		5.8	U		6.1	U		6.8	U	
METHYLENE BROMIDE	6.3	U		5.8	U		6.1	U		6.8	U	
METHYLENE CHLORIDE	15.3	J	A	12.2	J	A	20.7	J	A	18.6	J	A
STYRENE	6.3	U		5.8	U		6.1	U		6.8	U	
TETRACHLOROETHENE	6.3	U		5.8	U		6.1	U		6.8	U	
TOLUENE	6.3	U		3.5	J	P	2.9	J	P	3.4	J	P
TRANS-1,2-DICHLOROETHENE	6.3	U		5.8	U		6.1	U		6.8	U	
TRANS-1,3-DICHLOROPROPENE	6.3	U		5.8	U		6.1	U		6.8	U	
TRICHLOROETHENE	6.3	U		5.8	U		6.1	U		6.8	U	
VINYL CHLORIDE	6.3	U		5.8	U		6.1	U		6.8	U	

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SAMPLE NUMBER:	CEF-610-SS-017-01			CEF-610-SS-018-01			CEF-610-SS-019-01			CEF-610-SS-020-01		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-17			F7816-10			F7816-13			F7816-14		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	79.0 %			90.0 %			90.4 %			87.9 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
VOLATILES												
XYLENES, TOTAL	19	U		17	U		18	U		20	U	

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SAMPLE NUMBER:	CEF-610-SS-021-01			CEF-610-SS-022-01			CEF-610-SS-023-01			CEF-610-SS-024-01		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-23			F7816-15			F7816-22			F7816-21		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	81.0 %			88.6 %			82.9 %			82.3 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
VOLATILES												
1,1,1-TRICHLOROETHANE	7.8	U		5.6	U		7.8	U		7.5	U	
1,1,2,2-TETRACHLOROETHANE	7.8	U		5.6	U		7.8	U		7.5	U	
1,1,2-TRICHLOROETHANE	7.8	U		5.6	U		7.8	U		7.5	U	
1,1-DICHLOROETHANE	7.8	U		5.6	U		7.8	U		7.5	U	
1,1-DICHLOROETHENE	7.8	U		5.6	U		7.8	U		7.5	U	
1,2-DICHLOROETHANE	7.8	U		5.6	U		7.8	U		7.5	U	
1,2-DICHLOROPROPANE	7.8	U		5.6	U		7.8	U		7.5	U	
2-BUTANONE	16	U		11	U		16	U		15	U	
2-HEXANONE	16	U		11	U		16	U		15	U	
4-METHYL-2-PENTANONE	16	U		11	U		16	U		15	U	
ACETONE	60.4	J	P	56	U		44.5	J	P	34.4	J	P
BENZENE	7.8	U		5.6	U		7.8	U		7.5	U	
BROMODICHLOROMETHANE	7.8	U		5.6	U		7.8	U		7.5	U	
BROMOFORM	7.8	U		5.6	U		7.8	U		7.5	U	
CARBON DISULFIDE	16	U		11	U		16	U		15	U	
CARBON TETRACHLORIDE	7.8	U		5.6	U		7.8	U		7.5	U	
CHLOROBENZENE	7.8	U		5.6	U		7.8	U		7.5	U	
CHLOROETHANE	7.8	U		5.6	U		7.8	U		7.5	U	
CHLOROFORM	7.8	U		5.6	U		7.8	U		7.5	U	
CIS-1,2-DICHLOROETHENE	7.8	U		5.6	U		7.8	U		7.5	U	
CIS-1,3-DICHLOROPROPENE	7.8	U		5.6	U		7.8	U		7.5	U	
DIBROMOCHLOROMETHANE	7.8	U		5.6	U		7.8	U		7.5	U	
ETHYLBENZENE	7.8	U		5.6	U		7.8	U		7.5	U	
METHYL TERT-BUTYL ETHER	7.8	U		5.6	U		7.8	U		7.5	U	
METHYLENE BROMIDE	7.8	U		5.6	U		7.8	U		7.5	U	
METHYLENE CHLORIDE	20.4	J	A	13.2	J	A	21.5	J	A	20.6	J	A
STYRENE	7.8	U		5.6	U		7.8	U		7.5	U	
TETRACHLOROETHENE	7.8	U		5.6	U		7.8	U		7.5	U	
TOLUENE	4.5	J	P	3.8	J	P	5.7	J	P	5.8	J	P
TRANS-1,2-DICHLOROETHENE	7.8	U		5.6	U		7.8	U		7.5	U	
TRANS-1,3-DICHLOROPROPENE	7.8	U		5.6	U		7.8	U		7.5	U	
TRICHLOROETHENE	7.8	U		5.6	U		7.8	U		7.5	U	
VINYL CHLORIDE	7.8	U		5.6	U		7.8	U		7.5	U	

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SAMPLE NUMBER:	CEF-610-SS-021-01			CEF-610-SS-022-01			CEF-610-SS-023-01			CEF-610-SS-024-01		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-23			F7816-15			F7816-22			F7816-21		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	81.0 %			88.6 %			82.9 %			82.3 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
VOLATILES												
XYLENES, TOTAL	23	U		17	U		23	U		22	U	

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SAMPLE NUMBER:	CEF-610-SS-025-01			CEF-610-SS-DU01			CEF-610-SS-DU02			CEF-610-SS-DU03		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-20			F7816-26			F7816-27			F7816-28		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	78.1 %			87.3 %			86.7 %			81.4 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:				CEF-610-SS-001-01			CEF-610-SS-011-01			CEF-610-SS-021-01		
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
VOLATILES												
1,1,1-TRICHLOROETHANE	9	U		6.2	U		5.8	U		8.2	U	
1,1,2,2-TETRACHLOROETHANE	9	U		6.2	U		5.8	U		8.2	U	
1,1,2-TRICHLOROETHANE	9	U		6.2	U		5.8	U		8.2	U	
1,1-DICHLOROETHANE	9	U		6.2	U		5.8	U		8.2	U	
1,1-DICHLOROETHENE	9	U		6.2	U		5.8	U		8.2	U	
1,2-DICHLOROETHANE	9	U		6.2	U		5.8	U		8.2	U	
1,2-DICHLOROPROPANE	9	U		6.2	U		5.8	U		8.2	U	
2-BUTANONE	18	U		12	U		12	U		16	U	
2-HEXANONE	18	U		12	U		12	U		16	U	
4-METHYL-2-PENTANONE	18	U		12	U		12	U		16	U	
ACETONE	90	U		62	U		58	U		47.7	J	P
BENZENE	9	U		6.2	U		5.8	U		8.2	U	
BROMODICHLOROMETHANE	9	U		6.2	U		5.8	U		8.2	U	
BROMOFORM	9	U		6.2	U		5.8	U		8.2	U	
CARBON DISULFIDE	18	U		12	U		12	U		16	U	
CARBON TETRACHLORIDE	9	U		6.2	U		5.8	U		8.2	U	
CHLOROBENZENE	9	U		6.2	U		5.8	U		8.2	U	
CHLOROETHANE	9	U		6.2	U		5.8	U		8.2	U	
CHLOROFORM	9	U		6.2	U		5.8	U		8.2	U	
CIS-1,2-DICHLOROETHENE	9	U		6.2	U		5.8	U		8.2	U	
CIS-1,3-DICHLOROPROPENE	9	U		6.2	U		5.8	U		8.2	U	
DIBROMOCHLOROMETHANE	9	U		6.2	U		5.8	U		8.2	U	
ETHYLBENZENE	9	U		6.2	U		5.8	U		8.2	U	
METHYL TERT-BUTYL ETHER	9	U		6.2	U		5.8	U		8.2	U	
METHYLENE BROMIDE	9	U		6.2	U		5.8	U		8.2	U	
METHYLENE CHLORIDE	27.1	J	A	15.2	J	A	13.6	J	AG	23.1	J	A
STYRENE	9	U		6.2	U		5.8	U		8.2	U	
TETRACHLOROETHENE	9	U		6.2	U		5.8	U		8.2	U	
TOLUENE	7.3	J	P	6.2	U		5.8	U		8.2	U	
TRANS-1,2-DICHLOROETHENE	9	U		6.2	U		5.8	U		8.2	U	
TRANS-1,3-DICHLOROPROPENE	9	U		6.2	U		5.8	U		8.2	U	
TRICHLOROETHENE	9	U		6.2	U		5.8	U		8.2	U	
VINYL CHLORIDE	9	U		6.2	U		5.8	U		8.2	U	

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SAMPLE NUMBER:	CEF-610-SS-025-01			CEF-610-SS-DU01			CEF-610-SS-DU02			CEF-610-SS-DU03		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-20			F7816-26			F7816-27			F7816-28		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	78.1 %			87.3 %			86.7 %			81.4 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:				CEF-610-SS-001-01			CEF-610-SS-011-01			CEF-610-SS-021-01		
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
VOLATILES												
XYLENES, TOTAL	27	U		19	U		17	U		25	U	

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SAMPLE NUMBER:	CEF-610-SS-021-01			CEF-610-SS-022-01			CEF-610-SS-023-01			CEF-610-SS-024-01		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-23			F7816-15			F7816-22			F7816-21		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	81.0 %			88.6 %			82.9 %			82.3 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
HERBICIDES												
2,4,5-T	4	U		3.8	U		4.4	U		4.2	U	
2,4,5-TP (SILVEX)	4	U		3.8	U		4.4	U		4.2	U	
2,4-D	20	U		19	U		22	U		21	U	
2,4-DB	20	U		19	U		22	U		21	U	
DALAPON	4	U		3.8	U		4.4	U		4.2	U	
DICAMBA	20	U		19	U		22	U		21	U	
DICHLOROPROP	20	U		19	U		22	U		21	U	
DINOSEB	20	U		19	U		22	U		21	U	
MCPA	2000	U		1900	U		2200	U		2100	U	
MCPP	2000	U		1900	U		2200	U		2100	U	
PENTACHLOROPHENOL	2	U		1.9	U		2.2	U		2.1	U	

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SAMPLE NUMBER:	CEF-610-SS-025-01			CEF-610-SS-DU01			CEF-610-SS-DU02			CEF-610-SS-DU03		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-20			F7816-26			F7816-27			F7816-28		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	78.1 %			87.3 %			86.7 %			81.4 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:				CEF-610-SS-001-01			CEF-610-SS-011-01			CEF-610-SS-021-01		
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
HERBICIDES												
2,4,5-T	4.6	U		3.7	U		3.9	U		4.2	U	
2,4,5-TP (SILVEX)	4.6	U		3.7	U		3.9	U		4.2	U	
2,4-D	23	U		19	U		19	U		21	U	
2,4-DB	23	U		19	U		19	U		21	U	
DALAPON	4.6	U		3.7	U		3.9	U		4.2	U	
DICAMBA	23	U		19	U		19	U		21	U	
DICHLOROPROP	23	U		19	U		19	U		21	U	
DINOSEB	23	U		19	U		19	U		21	U	
MCPA	2300	U		1900	U		1900	U		2100	U	
MCPP	2300	U		1900	U		1900	U		2100	U	
PENTACHLOROPHENOL	2.3	U		1.9	U		1.9	U		2.1	U	

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SAMPLE NUMBER:	CEF-610-SS-001-01			CEF-610-SS-002-01			CEF-610-SS-003-01			CEF-610-SS-004-01		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-4			F7816-5			F7816-3			F7816-2		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	88.5 %			89.0 %			80.5 %			89.1 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
POLYNUCLEAR AROMATIC HYDROCARBONS												
1-METHYLNAPHTHALENE	380	U		370	U		410	U		370	U	
2-METHYLNAPHTHALENE	380	U		370	U		410	U		370	U	
ACENAPHTHENE	750	U		750	U		830	U		750	U	
ACENAPHTHYLENE	750	U		750	U		830	U		750	U	
ANTHRACENE	380	U		370	U		410	U		370	U	
BENZO(A)ANTHRACENE	380	U		370	U		410	U		370	U	
BENZO(A)PYRENE	68.5	J	P	104			52.9	J	P	232		
BENZO(B)FLUORANTHENE	86.3			142			44.2	J	P	173		
BENZO(G,H,I)PERYLENE	74.5	J	P	108			58.7	J	P	168		
BENZO(K)FLUORANTHENE	51.6	J	P	82.2			83	U		94.5		
CHRYSENE	380	U		370	U		410	U		370	U	
DIBENZO(A,H)ANTHRACENE	75	U		75	U		83	U		75	U	
FLUORANTHENE	380	U		370	U		410	U		370	U	
FLUORENE	380	U		370	U		410	U		370	U	
INDENO(1,2,3-CD)PYRENE	87.5			110			64.5	J	P	235		
NAPHTHALENE	380	U		370	U		410	U		370	U	
PHENANTHRENE	380	U		370	U		410	U		370	U	
PYRENE	380	U		370	U		410	U		249	J	P

CTO078-NAS CECIL FIELD
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Accutest, NJ
SDG: F7816

SAMPLE NUMBER:	CEF-610-SS-005-01			CEF-610-SS-006-01			CEF-610-SS-007-01			CEF-610-SS-008-01		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-6			F7816-1			F7816-25			F7816-7		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	85.7 %			88.8 %			86.1 %			86.5 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
POLYNUCLEAR AROMATIC HYDROCARBONS												
1-METHYLNAPHTHALENE	390	U		380	U		390	U		380	U	
2-METHYLNAPHTHALENE	390	U		380	U		390	U		380	U	
ACENAPHTHENE	780	U		750	U		770	U		770	U	
ACENAPHTHYLENE	780	U		750	U		770	U		770	U	
ANTHRACENE	390	U		380	U		390	U		380	U	
BENZO(A)ANTHRACENE	390	U		380	U		390	U		380	U	
BENZO(A)PYRENE	48.6	J	P	41.4	J	P	26.1	J	P	226		
BENZO(B)FLUORANTHENE	68.6	J	P	38.9	J	P	22.6	J	P	182		
BENZO(G,H,I)PERYLENE	67.5	J	P	50.8	J	P	25.6	J	P	322		
BENZO(K)FLUORANTHENE	36.5	J	P	75	U		77	U		177		
CHRYSENE	390	U		380	U		390	U		380	U	
DIBENZO(A,H)ANTHRACENE	78	U		75	U		26.4	J	P	77	U	
FLUORANTHENE	390	U		380	U		390	U		380	U	
FLUORENE	390	U		380	U		390	U		380	U	
INDENO(1,2,3-CD)PYRENE	62.6	J	P	59.8	J	P	26.9	J	P	344		
NAPHTHALENE	390	U		380	U		390	U		380	U	
PHENANTHRENE	390	U		380	U		390	U		380	U	
PYRENE	390	U		380	U		390	U		380	U	

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Accutest, NJ
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SAMPLE NUMBER:	CEF-610-SS-009-01			CEF-610-SS-010-01			CEF-610-SS-011-01			CEF-610-SS-012-01		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-19			F7816-18			F7816-8			F7816-11		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	89.3 %			87.1 %			86.0 %			89.3 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
POLYNUCLEAR AROMATIC HYDROCARBONS												
1-METHYLNAPHTHALENE	370	U		380	U		390	U		370	U	
2-METHYLNAPHTHALENE	370	U		380	U		390	U		370	U	
ACENAPHTHENE	750	U		760	U		780	U		750	U	
ACENAPHTHYLENE	750	U		760	U		780	U		750	U	
ANTHRACENE	370	U		380	U		390	U		370	U	
BENZO(A)ANTHRACENE	370	U		168	J	P	390	U		370	U	
BENZO(A)PYRENE	40.2	J	P	278			78	U		75	U	
BENZO(B)FLUORANTHENE	70.1	J	P	312			78	U		75	U	
BENZO(G,H,I)PERYLENE	76.7			303			55.9	J	P	75	U	
BENZO(K)FLUORANTHENE	32.9	J	P	172			78	U		75	U	
CHRYSENE	370	U		212	J	P	390	U		370	U	
DIBENZO(A,H)ANTHRACENE	75	U		76	U		78	U		75	U	
FLUORANTHENE	370	U		197	J	P	390	U		370	U	
FLUORENE	370	U		380	U		390	U		370	U	
INDENO(1,2,3-CD)PYRENE	65.7	J	P	373			63.8	J	P	75	U	
NAPHTHALENE	370	U		380	U		390	U		370	U	
PHENANTHRENE	370	U		380	U		390	U		370	U	
PYRENE	370	U		205	J	P	390	U		370	U	

CTO078-NAS CECIL FIELD
SOIL DATA
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SAMPLE NUMBER:	CEF-610-SS-013-01			CEF-610-SS-014-01			CEF-610-SS-015-01			CEF-610-SS-016-01		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-12			F7816-16			F7816-24			F7816-9		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	89.9 %			87.8 %			83.1 %			82.3 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
POLYNUCLEAR AROMATIC HYDROCARBONS												
1-METHYLNAPHTHALENE	370	U		380	U		800	U		810	U	
2-METHYLNAPHTHALENE	370	U		380	U		800	U		810	U	
ACENAPHTHENE	740	U		760	U		1600	U		1600	U	
ACENAPHTHYLENE	740	U		760	U		1600	U		1600	U	
ANTHRACENE	370	U		380	U		800	U		810	U	
BENZO(A)ANTHRACENE	370	U		380	U		535	J	P	810	U	
BENZO(A)PYRENE	74	U		465			648			74.6	J	P
BENZO(B)FLUORANTHENE	74	U		444			526			87.1	J	P
BENZO(G,H,I)PERYLENE	74	U		704			637			169		
BENZO(K)FLUORANTHENE	74	U		203			321			160	U	
CHRYSENE	370	U		380	U		556	J	P	810	U	
DIBENZO(A,H)ANTHRACENE	74	U		76	U		160	U		160	U	
FLUORANTHENE	370	U		193	J	P	932			810	U	
FLUORENE	370	U		380	U		800	U		810	U	
INDENO(1,2,3-CD)PYRENE	74	U		786			695			159	J	P
NAPHTHALENE	370	U		380	U		800	U		810	U	
PHENANTHRENE	370	U		380	U		800	U		810	U	
PYRENE	370	U		258	J	P	798	J	P	810	U	

CTO078-NAS CECIL FIELD
SOIL DATA
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SAMPLE NUMBER:	CEF-610-SS-017-01			CEF-610-SS-018-01			CEF-610-SS-019-01			CEF-610-SS-020-01		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-17			F7816-10			F7816-13			F7816-14		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	79.0 %			90.0 %			90.4 %			87.9 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
POLYNUCLEAR AROMATIC HYDROCARBONS												
1-METHYLNAPHTHALENE	4200	U		370	U		370	U		3000	U	
2-METHYLNAPHTHALENE	4200	U		370	U		370	U		3000	U	
ACENAPHTHENE	8400	U		740	U		740	U		6100	U	
ACENAPHTHYLENE	8400	U		740	U		740	U		6100	U	
ANTHRACENE	4200	U		370	U		370	U		3000	U	
BENZO(A)ANTHRACENE	1970	J	P	370	U		370	U		3370		
BENZO(A)PYRENE	3290			74	U		74	U		7110		
BENZO(B)FLUORANTHENE	3350			74	U		74	U		6550		
BENZO(G,H,I)PERYLENE	4220			74	U		74	U		7580		
BENZO(K)FLUORANTHENE	1890			74	U		74	U		3480		
CHRYSENE	2240	J	P	370	U		370	U		3640		
DIBENZO(A,H)ANTHRACENE	840	U		74	U		74	U		366	J	P
FLUORANTHENE	2030	J	P	370	U		370	U		3980		
FLUORENE	4200	U		370	U		370	U		3000	U	
INDENO(1,2,3-CD)PYRENE	4580			74	U		74	U		8790		
NAPHTHALENE	4200	U		370	U		370	U		3000	U	
PHENANTHRENE	4200	U		370	U		370	U		3000	U	
PYRENE	2020	J	P	370	U		370	U		4660		

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SAMPLE NUMBER:	CEF-610-SS-021-01	CEF-610-SS-022-01	CEF-610-SS-023-01	CEF-610-SS-024-01
SAMPLE DATE:	10/05/00	10/05/00	10/05/00	10/05/00
LABORATORY ID:	F7816-23	F7816-15	F7816-22	F7816-21
QC_TYPE:	NORMAL	NORMAL	NORMAL	NORMAL
% SOLIDS:	81.0 %	88.6 %	82.9 %	82.3 %
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG
FIELD DUPLICATE OF:				

	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
POLYNUCLEAR AROMATIC HYDROCARBONS												
1-METHYLNAPHTHALENE	1600	U		380	U		800	U		8100	U	
2-METHYLNAPHTHALENE	1600	U		380	U		800	U		8100	U	
ACENAPHTHENE	3300	U		750	U		1600	U		16000	U	
ACENAPHTHYLENE	3300	U		750	U		1600	U		16000	U	
ANTHRACENE	1600	U		380	U		800	U		8100	U	
BENZO(A)ANTHRACENE	1050	J	GP	380	U		800	U		2720	J	P
BENZO(A)PYRENE	2230	J	G	258			816			8470		
BENZO(B)FLUORANTHENE	1690			206			716			7160		
BENZO(G,H,I)PERYLENE	1980	J	G	314			816			8180		
BENZO(K)FLUORANTHENE	940	J	G	90.5			378			3670		
CHRYSENE	1100	J	GP	380	U		800	U		3410	J	P
DIBENZO(A,H)ANTHRACENE	330	U		75	U		160	U		1600	U	
FLUORANTHENE	1180	J	P	380	U		800	U		8100	U	
FLUORENE	1600	U		380	U		800	U		8100	U	
INDENO(1,2,3-CD)PYRENE	2510			335			1100			10300		
NAPHTHALENE	1600	U		380	U		800	U		8100	U	
PHENANTHRENE	1600	U		380	U		800	U		8100	U	
PYRENE	1190	J	GP	380	U		800	U		6000	J	P

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SAMPLE NUMBER:	CEF-610-SS-025-01			CEF-610-SS-DU01			CEF-610-SS-DU02			CEF-610-SS-DU03		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-20			F7816-26			F7816-27			F7816-28		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	78.1 %			87.3 %			86.7 %			81.4 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:				CEF-610-SS-001-01			CEF-610-SS-011-01			CEF-610-SS-021-01		
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
POLYNUCLEAR AROMATIC HYDROCARBONS												
1-METHYLNAPHTHALENE	3400	U		380	U		380	U		820	U	
2-METHYLNAPHTHALENE	3400	U		380	U		380	U		820	U	
ACENAPHTHENE	6800	U		760	U		770	U		1600	U	
ACENAPHTHYLENE	6800	U		760	U		770	U		1600	U	
ANTHRACENE	3400	U		380	U		380	U		820	U	
BENZO(A)ANTHRACENE	1190	J	P	38.5	J	P	380	U		262	J	GP
BENZO(A)PYRENE	2870			68.7	J	P	77	U		1220	J	G
BENZO(B)FLUORANTHENE	2720			86.5			77	U		1050		
BENZO(G,H,I)PERYLENE	3190			124			77	U		1180	J	G
BENZO(K)FLUORANTHENE	1420			52.8	J	P	77	U		527	J	G
CHRYSENE	1500	J	P	380	U		380	U		384	J	GP
DIBENZO(A,H)ANTHRACENE	680	U		76	U		77	U		91.6	J	GP
FLUORANTHENE	3400	U		380	U		380	U		820	U	
FLUORENE	3400	U		380	U		380	U		820	U	
INDENO(1,2,3-CD)PYRENE	3720			98.8			77	U		1640		
NAPHTHALENE	3400	U		380	U		380	U		820	U	
PHENANTHRENE	3400	U		380	U		380	U		820	U	
PYRENE	1940	J	P	380	U		380	U		424	J	GP

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SAMPLE NUMBER:	CEF-610-SS-001-01			CEF-610-SS-002-01			CEF-610-SS-003-01			CEF-610-SS-004-01		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-4			F7816-5			F7816-3			F7816-2		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	88.5 %			89.0 %			80.5 %			89.1 %		
UNITS:	MG/KG			MG/KG			MG/KG			MG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
PETROLEUM HYDROCARBONS												
TPH (C8-C40)	24.8			23			24.2			33.9		

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SAMPLE NUMBER:	CEF-610-SS-005-01			CEF-610-SS-006-01			CEF-610-SS-007-01			CEF-610-SS-008-01		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-6			F7816-1			F7816-25			F7816-7		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	85.7 %			88.8 %			86.1 %			86.5 %		
UNITS:	MG/KG			MG/KG			MG/KG			MG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
PETROLEUM HYDROCARBONS												
TPH (C8-C40)	49.5			21.8			18.4			89.6		

CTO078-NAS CECIL FIELD
SOIL DATA
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SAMPLE NUMBER:	CEF-610-SS-009-01			CEF-610-SS-010-01			CEF-610-SS-011-01			CEF-610-SS-012-01		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-19			F7816-18			F7816-8			F7816-11		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	89.3 %			87.1 %			86.0 %			89.3 %		
UNITS:	MG/KG			MG/KG			MG/KG			MG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
PETROLEUM HYDROCARBONS												
TPH (C8-C40)	22			21			15.4			13.9		

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F7816

SAMPLE NUMBER:	CEF-610-SS-013-01	CEF-610-SS-014-01	CEF-610-SS-015-01	CEF-610-SS-016-01
SAMPLE DATE:	10/05/00	10/05/00	10/05/00	10/05/00
LABORATORY ID:	F7816-12	F7816-16	F7816-24	F7816-9
QC_TYPE:	NORMAL	NORMAL	NORMAL	NORMAL
% SOLIDS:	89.9 %	87.8 %	83.1 %	82.3 %
UNITS:	MG/KG	MG/KG	MG/KG	MG/KG
FIELD DUPLICATE OF:				

	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
PETROLEUM HYDROCARBONS												
TPH (C8-C40)	13.2			12.8			433			119		

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SDG: F7816

SAMPLE NUMBER:	CEF-610-SS-017-01			CEF-610-SS-018-01			CEF-610-SS-019-01			CEF-610-SS-020-01		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-17			F7816-10			F7816-13			F7816-14		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	79.0 %			90.0 %			90.4 %			87.9 %		
UNITS:	MG/KG			MG/KG			MG/KG			MG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
PETROLEUM HYDROCARBONS												
TPH (C8-C40)	367			9.08	J	P	19			341		

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Accutest, NJ
SDG: F7816

SAMPLE NUMBER:	CEF-610-SS-021-01			CEF-610-SS-022-01			CEF-610-SS-023-01			CEF-610-SS-024-01		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-23			F7816-15			F7816-22			F7816-21		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	81.0 %			88.6 %			82.9 %			82.3 %		
UNITS:	MG/KG			MG/KG			MG/KG			MG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
PETROLEUM HYDROCARBONS												
TPH (C8-C40)	224	J	G	18.8			129			719		

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F7816

SAMPLE NUMBER:	CEF-610-SS-025-01			CEF-610-SS-DU01			CEF-610-SS-DU02			CEF-610-SS-DU03		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-20			F7816-26			F7816-27			F7816-28		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	78.1 %			87.3 %			86.7 %			81.4 %		
UNITS:	MG/KG			MG/KG			MG/KG			MG/KG		
FIELD DUPLICATE OF:				CEF-610-SS-001-01			CEF-610-SS-011-01			CEF-610-SS-021-01		
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
PETROLEUM HYDROCARBONS												
TPH (C8-C40)	695			23.3			9.6	U		128	J	G

APPENDIX B

Results as Reported by the Laboratory

Report of Analysis

Client Sample ID:	CEF-610-SS-001-01		
Lab Sample ID:	F7816-4	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	88.5
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H009588.D	1	10/12/00	NAF	n/a	n/a	VH200
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	62	ug/kg	
71-43-2	Benzene	ND	6.2	ug/kg	
75-27-4	Bromodichloromethane	ND	6.2	ug/kg	
75-25-2	Bromoform	ND	6.2	ug/kg	
108-90-7	Chlorobenzene	ND	6.2	ug/kg	
75-00-3	Chloroethane	ND	6.2	ug/kg	
67-66-3	Chloroform	ND	6.2	ug/kg	
75-15-0	Carbon disulfide	ND	12	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.2	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.2	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	6.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.2	ug/kg	
124-48-1	Dibromochloromethane	ND	6.2	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	6.2	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.2	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	6.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.2	ug/kg	
100-41-4	Ethylbenzene	ND	6.2	ug/kg	
591-78-6	2-Hexanone	ND	12	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	12	ug/kg	
74-83-9	Methyl bromide	ND	6.2	ug/kg	
74-87-3	Methyl chloride	ND	6.2	ug/kg	
75-09-2	Methylene chloride [a]	13.7	12	ug/kg	
78-93-3	Methyl ethyl ketone	ND	12	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	6.2	ug/kg	
100-42-5	Styrene	ND	6.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.2	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.2	ug/kg	
127-18-4	Tetrachloroethylene	ND	6.2	ug/kg	
108-88-3	Toluene	ND	6.2	ug/kg	
79-01-6	Trichloroethylene	ND	6.2	ug/kg	
75-01-4	Vinyl chloride	ND	6.2	ug/kg	
1330-20-7	Xylene (total)	ND	19	ug/kg	

ND = Not detected
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-610-SS-001-01		
Lab Sample ID:	F7816-4	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	88.5
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		71-122%
2037-26-5	Toluene-D8	107%		73-128%
460-00-4	4-Bromofluorobenzene	118%		53-158%
17060-07-0	1,2-Dichloroethane-D4	111%		71-122%

(a) Suspected laboratory contaminant.

ND = Not detected
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-610-SS-002-01		
Lab Sample ID:	F7816-5	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	89.0
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H009589.D	1	10/12/00	NAF	n/a	n/a	VH200
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	57	ug/kg	
71-43-2	Benzene	ND	5.7	ug/kg	
75-27-4	Bromodichloromethane	ND	5.7	ug/kg	
75-25-2	Bromoform	ND	5.7	ug/kg	
108-90-7	Chlorobenzene	ND	5.7	ug/kg	
75-00-3	Chloroethane	ND	5.7	ug/kg	
67-66-3	Chloroform	ND	5.7	ug/kg	
75-15-0	Carbon disulfide	ND	11	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.7	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.7	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.7	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.7	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.7	ug/kg	
124-48-1	Dibromochloromethane	ND	5.7	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.7	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.7	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.7	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.7	ug/kg	
100-41-4	Ethylbenzene	ND	5.7	ug/kg	
591-78-6	2-Hexanone	ND	11	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	11	ug/kg	
74-83-9	Methyl bromide	ND	5.7	ug/kg	
74-87-3	Methyl chloride	ND	5.7	ug/kg	
75-09-2	Methylene chloride [a]	11.8	11	ug/kg	
78-93-3	Methyl ethyl ketone	ND	11	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.7	ug/kg	
100-42-5	Styrene	ND	5.7	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.7	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.7	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.7	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.7	ug/kg	
108-88-3	Toluene	2.4	5.7	ug/kg	J
79-01-6	Trichloroethylene	ND	5.7	ug/kg	
75-01-4	Vinyl chloride	ND	5.7	ug/kg	
1330-20-7	Xylene (total)	ND	17	ug/kg	

ND = Not detected
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-610-SS-002-01		
Lab Sample ID:	F7816-5	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	89.0
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		71-122%
2037-26-5	Toluene-D8	104%		73-128%
460-00-4	4-Bromofluorobenzene	107%		53-158%
17060-07-0	1,2-Dichloroethane-D4	112%		71-122%

(a) Suspected laboratory contaminant.

ND = Not detected
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-610-SS-003-01		
Lab Sample ID:	F7816-3	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	80.5
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H009587.D	1	10/12/00	NAF	n/a	n/a	VH200
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	56	ug/kg	
71-43-2	Benzene	ND	5.6	ug/kg	
75-27-4	Bromodichloromethane	ND	5.6	ug/kg	
75-25-2	Bromoform	ND	5.6	ug/kg	
108-90-7	Chlorobenzene	ND	5.6	ug/kg	
75-00-3	Chloroethane	ND	5.6	ug/kg	
67-66-3	Chloroform	ND	5.6	ug/kg	
75-15-0	Carbon disulfide	ND	11	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.6	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.6	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.6	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.6	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.6	ug/kg	
124-48-1	Dibromochloromethane	ND	5.6	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.6	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.6	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.6	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.6	ug/kg	
100-41-4	Ethylbenzene	ND	5.6	ug/kg	
591-78-6	2-Hexanone	ND	11	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	11	ug/kg	
74-83-9	Methyl bromide	ND	5.6	ug/kg	
74-87-3	Methyl chloride	ND	5.6	ug/kg	
75-09-2	Methylene chloride [a]	11.5	11	ug/kg	
78-93-3	Methyl ethyl ketone	ND	11	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.6	ug/kg	
100-42-5	Styrene	ND	5.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.6	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.6	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.6	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.6	ug/kg	
108-88-3	Toluene	ND	5.6	ug/kg	
79-01-6	Trichloroethylene	ND	5.6	ug/kg	
75-01-4	Vinyl chloride	ND	5.6	ug/kg	
1330-20-7	Xylene (total)	ND	17	ug/kg	

ND = Not detected
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-610-SS-003-01		
Lab Sample ID:	F7816-3	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	80.5
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		71-122%
2037-26-5	Toluene-D8	102%		73-128%
460-00-4	4-Bromofluorobenzene	104%		53-158%
17060-07-0	1,2-Dichloroethane-D4	110%		71-122%

(a) Suspected laboratory contaminant.

ND = Not detected
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-610-SS-004-01		
Lab Sample ID:	F7816-2	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	89.1
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	H009586.D	1	10/12/00	NAF	n/a	n/a	VH200
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	58	ug/kg	
71-43-2	Benzene	ND	5.8	ug/kg	
75-27-4	Bromodichloromethane	ND	5.8	ug/kg	
75-25-2	Bromoform	ND	5.8	ug/kg	
108-90-7	Chlorobenzene	ND	5.8	ug/kg	
75-00-3	Chloroethane	ND	5.8	ug/kg	
67-66-3	Chloroform	ND	5.8	ug/kg	
75-15-0	Carbon disulfide	ND	12	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.8	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.8	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.8	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.8	ug/kg	
124-48-1	Dibromochloromethane	ND	5.8	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.8	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.8	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.8	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.8	ug/kg	
100-41-4	Ethylbenzene	ND	5.8	ug/kg	
591-78-6	2-Hexanone	ND	12	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	12	ug/kg	
74-83-9	Methyl bromide	ND	5.8	ug/kg	
74-87-3	Methyl chloride	ND	5.8	ug/kg	
75-09-2	Methylene chloride [b]	12.3	12	ug/kg	
78-93-3	Methyl ethyl ketone	ND	12	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.8	ug/kg	
100-42-5	Styrene	ND	5.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.8	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.8	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.8	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.8	ug/kg	
108-88-3	Toluene	ND	5.8	ug/kg	
79-01-6	Trichloroethylene	ND	5.8	ug/kg	
75-01-4	Vinyl chloride	ND	5.8	ug/kg	
1330-20-7	Xylene (total)	ND	17	ug/kg	

ND = Not detected
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-610-SS-004-01		
Lab Sample ID:	F7816-2	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	89.1
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		71-122%
2037-26-5	Toluene-D8	106%		73-128%
460-00-4	4-Bromofluorobenzene	112%		53-158%
17060-07-0	1,2-Dichloroethane-D4	110%		71-122%

(a) En Core sampler was not properly capped; results are considered minimum values.
(b) Suspected laboratory contaminant.

ND = Not detected
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-610-SS-005-01		
Lab Sample ID:	F7816-6	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	85.7
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	H009592.D	1	10/12/00	NAF	n/a	n/a	VH200
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	59	ug/kg	
71-43-2	Benzene	ND	5.9	ug/kg	
75-27-4	Bromodichloromethane	ND	5.9	ug/kg	
75-25-2	Bromoform	ND	5.9	ug/kg	
108-90-7	Chlorobenzene	ND	5.9	ug/kg	
75-00-3	Chloroethane	ND	5.9	ug/kg	
67-66-3	Chloroform	ND	5.9	ug/kg	
75-15-0	Carbon disulfide	ND	12	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.9	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.9	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.9	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.9	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.9	ug/kg	
124-48-1	Dibromochloromethane	ND	5.9	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.9	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.9	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.9	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.9	ug/kg	
100-41-4	Ethylbenzene	ND	5.9	ug/kg	
591-78-6	2-Hexanone	ND	12	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	12	ug/kg	
74-83-9	Methyl bromide	ND	5.9	ug/kg	
74-87-3	Methyl chloride	ND	5.9	ug/kg	
75-09-2	Methylene chloride	ND	12	ug/kg	
78-93-3	Methyl ethyl ketone	ND	12	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.9	ug/kg	
100-42-5	Styrene	ND	5.9	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.9	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.9	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.9	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.9	ug/kg	
108-88-3	Toluene	ND	5.9	ug/kg	
79-01-6	Trichloroethylene	ND	5.9	ug/kg	
75-01-4	Vinyl chloride	ND	5.9	ug/kg	
1330-20-7	Xylene (total)	ND	18	ug/kg	

ND = Not detected
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-610-SS-005-01		
Lab Sample ID:	F7816-6	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	85.7
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		71-122%
2037-26-5	Toluene-D8	99%		73-128%
460-00-4	4-Bromofluorobenzene	104%		53-158%
17060-07-0	1,2-Dichloroethane-D4	111%		71-122%

(a) En Core sampler was not properly capped; results are considered minimum values.

ND = Not detected
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-610-SS-006-01		
Lab Sample ID:	F7816-1	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	88.8
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H009585.D	1	10/12/00	NAF	n/a	n/a	VH200
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	52	ug/kg	
71-43-2	Benzene	ND	5.2	ug/kg	
75-27-4	Bromodichloromethane	ND	5.2	ug/kg	
75-25-2	Bromoform	ND	5.2	ug/kg	
108-90-7	Chlorobenzene	ND	5.2	ug/kg	
75-00-3	Chloroethane	ND	5.2	ug/kg	
67-66-3	Chloroform	ND	5.2	ug/kg	
75-15-0	Carbon disulfide	ND	10	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.2	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.2	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.2	ug/kg	
124-48-1	Dibromochloromethane	ND	5.2	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.2	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.2	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.2	ug/kg	
100-41-4	Ethylbenzene	ND	5.2	ug/kg	
591-78-6	2-Hexanone	ND	10	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	10	ug/kg	
74-83-9	Methyl bromide	ND	5.2	ug/kg	
74-87-3	Methyl chloride	ND	5.2	ug/kg	
75-09-2	Methylene chloride	ND	10	ug/kg	
78-93-3	Methyl ethyl ketone	ND	10	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.2	ug/kg	
100-42-5	Styrene	ND	5.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.2	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.2	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.2	ug/kg	
108-88-3	Toluene	ND	5.2	ug/kg	
79-01-6	Trichloroethylene	ND	5.2	ug/kg	
75-01-4	Vinyl chloride	ND	5.2	ug/kg	
1330-20-7	Xylene (total)	ND	16	ug/kg	

ND = Not detected
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-610-SS-006-01		
Lab Sample ID:	F7816-1	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	88.8
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		71-122%
2037-26-5	Toluene-D8	104%		73-128%
460-00-4	4-Bromofluorobenzene	114%		53-158%
17060-07-0	1,2-Dichloroethane-D4	98%		71-122%

ND = Not detected
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-610-SS-007-01		
Lab Sample ID:	F7816-25	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	86.1
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	H009623.D	1	10/16/00	NAF	n/a	n/a	VH202
Run #2	H009634.D	1	10/16/00	NAF	n/a	n/a	VH202

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	72	ug/kg	
71-43-2	Benzene	ND	7.2	ug/kg	
75-27-4	Bromodichloromethane	ND	7.2	ug/kg	
75-25-2	Bromoform	ND	7.2	ug/kg	
108-90-7	Chlorobenzene	ND	7.2	ug/kg	
75-00-3	Chloroethane	ND	7.2	ug/kg	
67-66-3	Chloroform	ND	7.2	ug/kg	
75-15-0	Carbon disulfide	ND	14	ug/kg	
56-23-5	Carbon tetrachloride	ND	7.2	ug/kg	
75-34-3	1,1-Dichloroethane	ND	7.2	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	7.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	7.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	7.2	ug/kg	
124-48-1	Dibromochloromethane	ND	7.2	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	7.2	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	7.2	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	7.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	7.2	ug/kg	
100-41-4	Ethylbenzene	ND	7.2	ug/kg	
591-78-6	2-Hexanone	ND	14	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	14	ug/kg	
74-83-9	Methyl bromide	ND	7.2	ug/kg	
74-87-3	Methyl chloride	ND	7.2	ug/kg	
75-09-2	Methylene chloride [b]	19.9	14	ug/kg	
78-93-3	Methyl ethyl ketone	ND	14	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	7.2	ug/kg	
100-42-5	Styrene	ND	7.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	7.2	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	7.2	ug/kg	
127-18-4	Tetrachloroethylene	ND	7.2	ug/kg	
108-88-3	Toluene	ND	7.2	ug/kg	
79-01-6	Trichloroethylene	ND	7.2	ug/kg	
75-01-4	Vinyl chloride	ND	7.2	ug/kg	
1330-20-7	Xylene (total)	ND	21	ug/kg	

ND = Not detected
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-610-SS-007-01		
Lab Sample ID:	F7816-25	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	86.1
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	128% [c]	110%	71-122%
2037-26-5	Toluene-D8	111%	102%	73-128%
460-00-4	4-Bromofluorobenzene	122%	110%	53-158%
17060-07-0	1,2-Dichloroethane-D4	133% [c]	123%	71-122%

(a) En Core sampler was not properly capped; results are considered minimum values.
(b) Suspected laboratory contaminant.
(c) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected
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-610-SS-008-01		
Lab Sample ID:	F7816-7	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	86.5
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	H009593.D	1	10/12/00	NAF	n/a	n/a	VH200
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	58	ug/kg	
71-43-2	Benzene	ND	5.8	ug/kg	
75-27-4	Bromodichloromethane	ND	5.8	ug/kg	
75-25-2	Bromoform	ND	5.8	ug/kg	
108-90-7	Chlorobenzene	ND	5.8	ug/kg	
75-00-3	Chloroethane	ND	5.8	ug/kg	
67-66-3	Chloroform	ND	5.8	ug/kg	
75-15-0	Carbon disulfide	ND	12	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.8	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.8	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.8	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.8	ug/kg	
124-48-1	Dibromochloromethane	ND	5.8	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.8	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.8	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.8	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.8	ug/kg	
100-41-4	Ethylbenzene	ND	5.8	ug/kg	
591-78-6	2-Hexanone	ND	12	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	12	ug/kg	
74-83-9	Methyl bromide	ND	5.8	ug/kg	
74-87-3	Methyl chloride	ND	5.8	ug/kg	
75-09-2	Methylene chloride	ND	12	ug/kg	
78-93-3	Methyl ethyl ketone	ND	12	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.8	ug/kg	
100-42-5	Styrene	ND	5.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.8	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.8	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.8	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.8	ug/kg	
108-88-3	Toluene	3.0	5.8	ug/kg	J
79-01-6	Trichloroethylene	ND	5.8	ug/kg	
75-01-4	Vinyl chloride	ND	5.8	ug/kg	
1330-20-7	Xylene (total)	ND	17	ug/kg	

ND = Not detected
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-610-SS-008-01		
Lab Sample ID:	F7816-7	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	86.5
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		71-122%
2037-26-5	Toluene-D8	103%		73-128%
460-00-4	4-Bromofluorobenzene	113%		53-158%
17060-07-0	1,2-Dichloroethane-D4	115%		71-122%

(a) En Core sampler was not properly capped; results are considered minimum values.

ND = Not detected
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-610-SS-009-01		
Lab Sample ID:	F7816-19	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	89.3
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H009613.D	1	10/13/00	NAF	n/a	n/a	VH201
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	60	ug/kg	
71-43-2	Benzene	ND	6.0	ug/kg	
75-27-4	Bromodichloromethane	ND	6.0	ug/kg	
75-25-2	Bromoform	ND	6.0	ug/kg	
108-90-7	Chlorobenzene	ND	6.0	ug/kg	
75-00-3	Chloroethane	ND	6.0	ug/kg	
67-66-3	Chloroform	ND	6.0	ug/kg	
75-15-0	Carbon disulfide	ND	12	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	6.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.0	ug/kg	
124-48-1	Dibromochloromethane	ND	6.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	6.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	6.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.0	ug/kg	
100-41-4	Ethylbenzene	ND	6.0	ug/kg	
591-78-6	2-Hexanone	ND	12	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	12	ug/kg	
74-83-9	Methyl bromide	ND	6.0	ug/kg	
74-87-3	Methyl chloride	ND	6.0	ug/kg	
75-09-2	Methylene chloride [a]	16.8	12	ug/kg	
78-93-3	Methyl ethyl ketone	ND	12	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	6.0	ug/kg	
100-42-5	Styrene	ND	6.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	6.0	ug/kg	
108-88-3	Toluene	2.8	6.0	ug/kg	J
79-01-6	Trichloroethylene	ND	6.0	ug/kg	
75-01-4	Vinyl chloride	ND	6.0	ug/kg	
1330-20-7	Xylene (total)	ND	18	ug/kg	

ND = Not detected
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-610-SS-009-01		
Lab Sample ID:	F7816-19	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	89.3
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		71-122%
2037-26-5	Toluene-D8	109%		73-128%
460-00-4	4-Bromofluorobenzene	115%		53-158%
17060-07-0	1,2-Dichloroethane-D4	118%		71-122%

(a) Suspected laboratory contaminant.

ND = Not detected
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-610-SS-010-01		
Lab Sample ID:	F7816-18	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	87.1
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	H009630.D	1	10/16/00	NAF	n/a	n/a	VH202
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	60	ug/kg	
71-43-2	Benzene	ND	6.0	ug/kg	
75-27-4	Bromodichloromethane	ND	6.0	ug/kg	
75-25-2	Bromoform	ND	6.0	ug/kg	
108-90-7	Chlorobenzene	ND	6.0	ug/kg	
75-00-3	Chloroethane	ND	6.0	ug/kg	
67-66-3	Chloroform	ND	6.0	ug/kg	
75-15-0	Carbon disulfide	ND	12	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	6.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.0	ug/kg	
124-48-1	Dibromochloromethane	ND	6.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	6.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	6.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.0	ug/kg	
100-41-4	Ethylbenzene	ND	6.0	ug/kg	
591-78-6	2-Hexanone	ND	12	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	12	ug/kg	
74-83-9	Methyl bromide	ND	6.0	ug/kg	
74-87-3	Methyl chloride	ND	6.0	ug/kg	
75-09-2	Methylene chloride [b]	20.8	12	ug/kg	
78-93-3	Methyl ethyl ketone	ND	12	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	6.0	ug/kg	
100-42-5	Styrene	ND	6.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	6.0	ug/kg	
108-88-3	Toluene	4.0	6.0	ug/kg	J
79-01-6	Trichloroethylene	ND	6.0	ug/kg	
75-01-4	Vinyl chloride	ND	6.0	ug/kg	
1330-20-7	Xylene (total)	ND	18	ug/kg	

ND = Not detected
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-610-SS-010-01		
Lab Sample ID:	F7816-18	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	87.1
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		71-122%
2037-26-5	Toluene-D8	101%		73-128%
460-00-4	4-Bromofluorobenzene	112%		53-158%
17060-07-0	1,2-Dichloroethane-D4	118%		71-122%

(a) En Core sampler was not properly capped; results are considered minimum values.
(b) Suspected laboratory contaminant.

ND = Not detected
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-610-SS-011-01		
Lab Sample ID:	F7816-8	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	86.0
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H009594.D	1	10/12/00	NAF	n/a	n/a	VH200
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	60	ug/kg	
71-43-2	Benzene	ND	6.0	ug/kg	
75-27-4	Bromodichloromethane	ND	6.0	ug/kg	
75-25-2	Bromoform	ND	6.0	ug/kg	
108-90-7	Chlorobenzene	ND	6.0	ug/kg	
75-00-3	Chloroethane	ND	6.0	ug/kg	
67-66-3	Chloroform	ND	6.0	ug/kg	
75-15-0	Carbon disulfide	ND	12	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	6.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.0	ug/kg	
124-48-1	Dibromochloromethane	ND	6.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	6.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	6.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.0	ug/kg	
100-41-4	Ethylbenzene	ND	6.0	ug/kg	
591-78-6	2-Hexanone	ND	12	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	12	ug/kg	
74-83-9	Methyl bromide	ND	6.0	ug/kg	
74-87-3	Methyl chloride	ND	6.0	ug/kg	
75-09-2	Methylene chloride	ND	12	ug/kg	
78-93-3	Methyl ethyl ketone	ND	12	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	6.0	ug/kg	
100-42-5	Styrene	ND	6.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	6.0	ug/kg	
108-88-3	Toluene	5.4	6.0	ug/kg	J
79-01-6	Trichloroethylene	ND	6.0	ug/kg	
75-01-4	Vinyl chloride	ND	6.0	ug/kg	
1330-20-7	Xylene (total)	ND	18	ug/kg	

ND = Not detected
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-610-SS-011-01		
Lab Sample ID:	F7816-8	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	86.0
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		71-122%
2037-26-5	Toluene-D8	101%		73-128%
460-00-4	4-Bromofluorobenzene	108%		53-158%
17060-07-0	1,2-Dichloroethane-D4	116%		71-122%

ND = Not detected
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-610-SS-012-01		
Lab Sample ID:	F7816-11	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	89.3
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H009597.D	1	10/12/00	NAF	n/a	n/a	VH200
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	64	ug/kg	
71-43-2	Benzene	ND	6.4	ug/kg	
75-27-4	Bromodichloromethane	ND	6.4	ug/kg	
75-25-2	Bromoform	ND	6.4	ug/kg	
108-90-7	Chlorobenzene	ND	6.4	ug/kg	
75-00-3	Chloroethane	ND	6.4	ug/kg	
67-66-3	Chloroform	ND	6.4	ug/kg	
75-15-0	Carbon disulfide	ND	13	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.4	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.4	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	6.4	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.4	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.4	ug/kg	
124-48-1	Dibromochloromethane	ND	6.4	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	6.4	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.4	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	6.4	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.4	ug/kg	
100-41-4	Ethylbenzene	ND	6.4	ug/kg	
591-78-6	2-Hexanone	ND	13	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	13	ug/kg	
74-83-9	Methyl bromide	ND	6.4	ug/kg	
74-87-3	Methyl chloride	ND	6.4	ug/kg	
75-09-2	Methylene chloride [a]	14.8	13	ug/kg	
78-93-3	Methyl ethyl ketone	ND	13	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	6.4	ug/kg	
100-42-5	Styrene	ND	6.4	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.4	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.4	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.4	ug/kg	
127-18-4	Tetrachloroethylene	ND	6.4	ug/kg	
108-88-3	Toluene	2.6	6.4	ug/kg	J
79-01-6	Trichloroethylene	ND	6.4	ug/kg	
75-01-4	Vinyl chloride	ND	6.4	ug/kg	
1330-20-7	Xylene (total)	ND	19	ug/kg	

ND = Not detected
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-610-SS-012-01		
Lab Sample ID:	F7816-11	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	89.3
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		71-122%
2037-26-5	Toluene-D8	107%		73-128%
460-00-4	4-Bromofluorobenzene	114%		53-158%
17060-07-0	1,2-Dichloroethane-D4	120%		71-122%

(a) Suspected laboratory contaminant.

ND = Not detected
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-610-SS-013-01		
Lab Sample ID:	F7816-12	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	89.9
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H009598.D	1	10/12/00	NAF	n/a	n/a	VH200
Run #2	H009606.D	1	10/13/00	NAF	n/a	n/a	VH201

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	60	ug/kg	
71-43-2	Benzene	ND	6.0	ug/kg	
75-27-4	Bromodichloromethane	ND	6.0	ug/kg	
75-25-2	Bromoform	ND	6.0	ug/kg	
108-90-7	Chlorobenzene	ND	6.0	ug/kg	
75-00-3	Chloroethane	ND	6.0	ug/kg	
67-66-3	Chloroform	ND	6.0	ug/kg	
75-15-0	Carbon disulfide	ND	12	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	6.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.0	ug/kg	
124-48-1	Dibromochloromethane	ND	6.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	6.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	6.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.0	ug/kg	
100-41-4	Ethylbenzene	ND	6.0	ug/kg	
591-78-6	2-Hexanone	ND	12	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	12	ug/kg	
74-83-9	Methyl bromide	ND	6.0	ug/kg	
74-87-3	Methyl chloride	ND	6.0	ug/kg	
75-09-2	Methylene chloride [a]	13.8	12	ug/kg	
78-93-3	Methyl ethyl ketone	ND	12	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	6.0	ug/kg	
100-42-5	Styrene	ND	6.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	6.0	ug/kg	
108-88-3	Toluene	2.6	6.0	ug/kg	J
79-01-6	Trichloroethylene	ND	6.0	ug/kg	
75-01-4	Vinyl chloride	ND	6.0	ug/kg	
1330-20-7	Xylene (total)	ND	18	ug/kg	

ND = Not detected
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-610-SS-013-01		
Lab Sample ID:	F7816-12	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	89.9
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%	109%	71-122%
2037-26-5	Toluene-D8	115%	110%	73-128%
460-00-4	4-Bromofluorobenzene	127%	123%	53-158%
17060-07-0	1,2-Dichloroethane-D4	125% [b]	123%	71-122%

(a) Suspected laboratory contaminant.
(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected
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-610-SS-014-01		
Lab Sample ID:	F7816-16	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	87.8
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H009608.D	1	10/13/00	NAF	n/a	n/a	VH201
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	60	ug/kg	
71-43-2	Benzene	ND	6.0	ug/kg	
75-27-4	Bromodichloromethane	ND	6.0	ug/kg	
75-25-2	Bromoform	ND	6.0	ug/kg	
108-90-7	Chlorobenzene	ND	6.0	ug/kg	
75-00-3	Chloroethane	ND	6.0	ug/kg	
67-66-3	Chloroform	ND	6.0	ug/kg	
75-15-0	Carbon disulfide	ND	12	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	6.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.0	ug/kg	
124-48-1	Dibromochloromethane	ND	6.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	6.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	6.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.0	ug/kg	
100-41-4	Ethylbenzene	ND	6.0	ug/kg	
591-78-6	2-Hexanone	ND	12	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	12	ug/kg	
74-83-9	Methyl bromide	ND	6.0	ug/kg	
74-87-3	Methyl chloride	ND	6.0	ug/kg	
75-09-2	Methylene chloride [a]	18.4	12	ug/kg	
78-93-3	Methyl ethyl ketone	ND	12	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	6.0	ug/kg	
100-42-5	Styrene	ND	6.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	6.0	ug/kg	
108-88-3	Toluene	3.3	6.0	ug/kg	J
79-01-6	Trichloroethylene	ND	6.0	ug/kg	
75-01-4	Vinyl chloride	ND	6.0	ug/kg	
1330-20-7	Xylene (total)	ND	18	ug/kg	

ND = Not detected
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-610-SS-014-01		
Lab Sample ID:	F7816-16	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	87.8
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		71-122%
2037-26-5	Toluene-D8	108%		73-128%
460-00-4	4-Bromofluorobenzene	118%		53-158%
17060-07-0	1,2-Dichloroethane-D4	119%		71-122%

(a) Suspected laboratory contaminant.

ND = Not detected
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-610-SS-015-01		
Lab Sample ID:	F7816-24	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	83.1
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	H009618.D	1	10/13/00	NAF	n/a	n/a	VH201
Run #2	H009627.D	1	10/16/00	NAF	n/a	n/a	VH202

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	84	ug/kg	
71-43-2	Benzene	ND	8.4	ug/kg	
75-27-4	Bromodichloromethane	ND	8.4	ug/kg	
75-25-2	Bromoform	ND	8.4	ug/kg	
108-90-7	Chlorobenzene	ND	8.4	ug/kg	
75-00-3	Chloroethane	ND	8.4	ug/kg	
67-66-3	Chloroform	ND	8.4	ug/kg	
75-15-0	Carbon disulfide	ND	17	ug/kg	
56-23-5	Carbon tetrachloride	ND	8.4	ug/kg	
75-34-3	1,1-Dichloroethane	ND	8.4	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	8.4	ug/kg	
107-06-2	1,2-Dichloroethane	ND	8.4	ug/kg	
78-87-5	1,2-Dichloropropane	ND	8.4	ug/kg	
124-48-1	Dibromochloromethane	ND	8.4	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	8.4	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	8.4	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	8.4	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	8.4	ug/kg	
100-41-4	Ethylbenzene	ND	8.4	ug/kg	
591-78-6	2-Hexanone	ND	17	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	17	ug/kg	
74-83-9	Methyl bromide	ND	8.4	ug/kg	
74-87-3	Methyl chloride	ND	8.4	ug/kg	
75-09-2	Methylene chloride [b]	20.7	17	ug/kg	
78-93-3	Methyl ethyl ketone	ND	17	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	8.4	ug/kg	
100-42-5	Styrene	ND	8.4	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	8.4	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	8.4	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	8.4	ug/kg	
127-18-4	Tetrachloroethylene	ND	8.4	ug/kg	
108-88-3	Toluene	6.0	8.4	ug/kg	J
79-01-6	Trichloroethylene	ND	8.4	ug/kg	
75-01-4	Vinyl chloride	ND	8.4	ug/kg	
1330-20-7	Xylene (total)	ND	25	ug/kg	

ND = Not detected
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-610-SS-015-01		
Lab Sample ID:	F7816-24	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	83.1
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%	115%	71-122%
2037-26-5	Toluene-D8	113%	114%	73-128%
460-00-4	4-Bromofluorobenzene	139%	142%	53-158%
17060-07-0	1,2-Dichloroethane-D4	125% [c]	126%	71-122%

(a) En Core sampler was not properly capped; results are considered minimum values.
(b) Suspected laboratory contaminant.
(c) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected
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-610-SS-016-01		
Lab Sample ID:	F7816-9	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	82.3
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H009607.D	1	10/13/00	NAF	n/a	n/a	VH201
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	82	ug/kg	
71-43-2	Benzene	ND	8.2	ug/kg	
75-27-4	Bromodichloromethane	ND	8.2	ug/kg	
75-25-2	Bromoform	ND	8.2	ug/kg	
108-90-7	Chlorobenzene	ND	8.2	ug/kg	
75-00-3	Chloroethane	ND	8.2	ug/kg	
67-66-3	Chloroform	ND	8.2	ug/kg	
75-15-0	Carbon disulfide	ND	16	ug/kg	
56-23-5	Carbon tetrachloride	ND	8.2	ug/kg	
75-34-3	1,1-Dichloroethane	ND	8.2	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	8.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	8.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	8.2	ug/kg	
124-48-1	Dibromochloromethane	ND	8.2	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	8.2	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	8.2	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	8.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	8.2	ug/kg	
100-41-4	Ethylbenzene	ND	8.2	ug/kg	
591-78-6	2-Hexanone	ND	16	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	16	ug/kg	
74-83-9	Methyl bromide	ND	8.2	ug/kg	
74-87-3	Methyl chloride	ND	8.2	ug/kg	
75-09-2	Methylene chloride [a]	16.6	16	ug/kg	
78-93-3	Methyl ethyl ketone	ND	16	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	8.2	ug/kg	
100-42-5	Styrene	ND	8.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	8.2	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	8.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	8.2	ug/kg	
127-18-4	Tetrachloroethylene	ND	8.2	ug/kg	
108-88-3	Toluene	3.8	8.2	ug/kg	J
79-01-6	Trichloroethylene	ND	8.2	ug/kg	
75-01-4	Vinyl chloride	ND	8.2	ug/kg	
1330-20-7	Xylene (total)	ND	25	ug/kg	

ND = Not detected
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-610-SS-016-01		
Lab Sample ID:	F7816-9	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	82.3
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		71-122%
2037-26-5	Toluene-D8	110%		73-128%
460-00-4	4-Bromofluorobenzene	118%		53-158%
17060-07-0	1,2-Dichloroethane-D4	121%		71-122%

(a) Suspected laboratory contaminant.

ND = Not detected
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-610-SS-017-01		
Lab Sample ID:	F7816-17	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	79.0
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	H009611.D	1	10/13/00	NAF	n/a	n/a	VH201
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	63	ug/kg	
71-43-2	Benzene	ND	6.3	ug/kg	
75-27-4	Bromodichloromethane	ND	6.3	ug/kg	
75-25-2	Bromoform	ND	6.3	ug/kg	
108-90-7	Chlorobenzene	ND	6.3	ug/kg	
75-00-3	Chloroethane	ND	6.3	ug/kg	
67-66-3	Chloroform	ND	6.3	ug/kg	
75-15-0	Carbon disulfide	ND	13	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.3	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.3	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	6.3	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.3	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.3	ug/kg	
124-48-1	Dibromochloromethane	ND	6.3	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	6.3	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.3	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	6.3	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.3	ug/kg	
100-41-4	Ethylbenzene	ND	6.3	ug/kg	
591-78-6	2-Hexanone	ND	13	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	13	ug/kg	
74-83-9	Methyl bromide	ND	6.3	ug/kg	
74-87-3	Methyl chloride	ND	6.3	ug/kg	
75-09-2	Methylene chloride [b]	15.3	13	ug/kg	
78-93-3	Methyl ethyl ketone	ND	13	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	6.3	ug/kg	
100-42-5	Styrene	ND	6.3	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.3	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.3	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.3	ug/kg	
127-18-4	Tetrachloroethylene	ND	6.3	ug/kg	
108-88-3	Toluene	ND	6.3	ug/kg	
79-01-6	Trichloroethylene	ND	6.3	ug/kg	
75-01-4	Vinyl chloride	ND	6.3	ug/kg	
1330-20-7	Xylene (total)	ND	19	ug/kg	

ND = Not detected
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-610-SS-017-01		
Lab Sample ID:	F7816-17	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	79.0
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		71-122%
2037-26-5	Toluene-D8	103%		73-128%
460-00-4	4-Bromofluorobenzene	105%		53-158%
17060-07-0	1,2-Dichloroethane-D4	116%		71-122%

(a) En Core sampler was not properly capped; results are considered minimum values.
(b) Suspected laboratory contaminant.

ND = Not detected
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-610-SS-018-01		
Lab Sample ID:	F7816-10	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	90.0
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H009596.D	1	10/12/00	NAF	n/a	n/a	VH200
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	58	ug/kg	
71-43-2	Benzene	ND	5.8	ug/kg	
75-27-4	Bromodichloromethane	ND	5.8	ug/kg	
75-25-2	Bromoform	ND	5.8	ug/kg	
108-90-7	Chlorobenzene	ND	5.8	ug/kg	
75-00-3	Chloroethane	ND	5.8	ug/kg	
67-66-3	Chloroform	ND	5.8	ug/kg	
75-15-0	Carbon disulfide	ND	12	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.8	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.8	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.8	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.8	ug/kg	
124-48-1	Dibromochloromethane	ND	5.8	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.8	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.8	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.8	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.8	ug/kg	
100-41-4	Ethylbenzene	ND	5.8	ug/kg	
591-78-6	2-Hexanone	ND	12	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	12	ug/kg	
74-83-9	Methyl bromide	ND	5.8	ug/kg	
74-87-3	Methyl chloride	ND	5.8	ug/kg	
75-09-2	Methylene chloride [a]	12.2	12	ug/kg	
78-93-3	Methyl ethyl ketone	ND	12	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.8	ug/kg	
100-42-5	Styrene	ND	5.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.8	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.8	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.8	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.8	ug/kg	
108-88-3	Toluene	3.5	5.8	ug/kg	J
79-01-6	Trichloroethylene	ND	5.8	ug/kg	
75-01-4	Vinyl chloride	ND	5.8	ug/kg	
1330-20-7	Xylene (total)	ND	17	ug/kg	

ND = Not detected
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-610-SS-018-01		
Lab Sample ID:	F7816-10	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	90.0
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		71-122%
2037-26-5	Toluene-D8	102%		73-128%
460-00-4	4-Bromofluorobenzene	111%		53-158%
17060-07-0	1,2-Dichloroethane-D4	118%		71-122%

(a) Suspected laboratory contaminant.

ND = Not detected
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-610-SS-019-01		
Lab Sample ID:	F7816-13	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	90.4
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H009599.D	1	10/12/00	NAF	n/a	n/a	VH200
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	61	ug/kg	
71-43-2	Benzene	ND	6.1	ug/kg	
75-27-4	Bromodichloromethane	ND	6.1	ug/kg	
75-25-2	Bromoform	ND	6.1	ug/kg	
108-90-7	Chlorobenzene	ND	6.1	ug/kg	
75-00-3	Chloroethane	ND	6.1	ug/kg	
67-66-3	Chloroform	ND	6.1	ug/kg	
75-15-0	Carbon disulfide	ND	12	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.1	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	6.1	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.1	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.1	ug/kg	
124-48-1	Dibromochloromethane	ND	6.1	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	6.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.1	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	6.1	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.1	ug/kg	
100-41-4	Ethylbenzene	ND	6.1	ug/kg	
591-78-6	2-Hexanone	ND	12	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	12	ug/kg	
74-83-9	Methyl bromide	ND	6.1	ug/kg	
74-87-3	Methyl chloride	ND	6.1	ug/kg	
75-09-2	Methylene chloride [a]	20.7	12	ug/kg	
78-93-3	Methyl ethyl ketone	ND	12	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	6.1	ug/kg	
100-42-5	Styrene	ND	6.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.1	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.1	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.1	ug/kg	
127-18-4	Tetrachloroethylene	ND	6.1	ug/kg	
108-88-3	Toluene	2.9	6.1	ug/kg	J
79-01-6	Trichloroethylene	ND	6.1	ug/kg	
75-01-4	Vinyl chloride	ND	6.1	ug/kg	
1330-20-7	Xylene (total)	ND	18	ug/kg	

ND = Not detected
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-610-SS-019-01		
Lab Sample ID:	F7816-13	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	90.4
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		71-122%
2037-26-5	Toluene-D8	104%		73-128%
460-00-4	4-Bromofluorobenzene	107%		53-158%
17060-07-0	1,2-Dichloroethane-D4	114%		71-122%

(a) Suspected laboratory contaminant.

ND = Not detected
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-610-SS-020-01		
Lab Sample ID:	F7816-14	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	87.9
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H009604.D	1	10/13/00	NAF	n/a	n/a	VH201
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	68	ug/kg	
71-43-2	Benzene	ND	6.8	ug/kg	
75-27-4	Bromodichloromethane	ND	6.8	ug/kg	
75-25-2	Bromoform	ND	6.8	ug/kg	
108-90-7	Chlorobenzene	ND	6.8	ug/kg	
75-00-3	Chloroethane	ND	6.8	ug/kg	
67-66-3	Chloroform	ND	6.8	ug/kg	
75-15-0	Carbon disulfide	ND	14	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.8	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.8	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	6.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.8	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.8	ug/kg	
124-48-1	Dibromochloromethane	ND	6.8	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	6.8	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.8	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	6.8	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.8	ug/kg	
100-41-4	Ethylbenzene	ND	6.8	ug/kg	
591-78-6	2-Hexanone	ND	14	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	14	ug/kg	
74-83-9	Methyl bromide	ND	6.8	ug/kg	
74-87-3	Methyl chloride	ND	6.8	ug/kg	
75-09-2	Methylene chloride [a]	18.6	14	ug/kg	
78-93-3	Methyl ethyl ketone	ND	14	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	6.8	ug/kg	
100-42-5	Styrene	ND	6.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.8	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.8	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.8	ug/kg	
127-18-4	Tetrachloroethylene	ND	6.8	ug/kg	
108-88-3	Toluene	3.4	6.8	ug/kg	J
79-01-6	Trichloroethylene	ND	6.8	ug/kg	
75-01-4	Vinyl chloride	ND	6.8	ug/kg	
1330-20-7	Xylene (total)	ND	20	ug/kg	

ND = Not detected
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-610-SS-020-01		
Lab Sample ID:	F7816-14	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	87.9
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		71-122%
2037-26-5	Toluene-D8	111%		73-128%
460-00-4	4-Bromofluorobenzene	121%		53-158%
17060-07-0	1,2-Dichloroethane-D4	114%		71-122%

(a) Suspected laboratory contaminant.

ND = Not detected
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-610-SS-021-01		
Lab Sample ID:	F7816-23	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	81.0
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H009617.D	1	10/13/00	NAF	n/a	n/a	VH201
Run #2	H009633.D	1	10/16/00	NAF	n/a	n/a	VH202

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	60.4	78	ug/kg	J
71-43-2	Benzene	ND	7.8	ug/kg	
75-27-4	Bromodichloromethane	ND	7.8	ug/kg	
75-25-2	Bromoform	ND	7.8	ug/kg	
108-90-7	Chlorobenzene	ND	7.8	ug/kg	
75-00-3	Chloroethane	ND	7.8	ug/kg	
67-66-3	Chloroform	ND	7.8	ug/kg	
75-15-0	Carbon disulfide	ND	16	ug/kg	
56-23-5	Carbon tetrachloride	ND	7.8	ug/kg	
75-34-3	1,1-Dichloroethane	ND	7.8	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	7.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	7.8	ug/kg	
78-87-5	1,2-Dichloropropane	ND	7.8	ug/kg	
124-48-1	Dibromochloromethane	ND	7.8	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	7.8	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	7.8	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	7.8	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	7.8	ug/kg	
100-41-4	Ethylbenzene	ND	7.8	ug/kg	
591-78-6	2-Hexanone	ND	16	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	16	ug/kg	
74-83-9	Methyl bromide	ND	7.8	ug/kg	
74-87-3	Methyl chloride	ND	7.8	ug/kg	
75-09-2	Methylene chloride [a]	20.4	16	ug/kg	
78-93-3	Methyl ethyl ketone	ND	16	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	7.8	ug/kg	
100-42-5	Styrene	ND	7.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	7.8	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.8	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	7.8	ug/kg	
127-18-4	Tetrachloroethylene	ND	7.8	ug/kg	
108-88-3	Toluene	4.5	7.8	ug/kg	J
79-01-6	Trichloroethylene	ND	7.8	ug/kg	
75-01-4	Vinyl chloride	ND	7.8	ug/kg	
1330-20-7	Xylene (total)	ND	23	ug/kg	

ND = Not detected
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-610-SS-021-01		
Lab Sample ID:	F7816-23	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	81.0
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%	112%	71-122%
2037-26-5	Toluene-D8	107%	102%	73-128%
460-00-4	4-Bromofluorobenzene	123%	123%	53-158%
17060-07-0	1,2-Dichloroethane-D4	128% [b]	124%	71-122%

(a) Suspected laboratory contaminant.
(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected
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-610-SS-022-01		
Lab Sample ID:	F7816-15	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	88.6
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H009605.D	1	10/13/00	NAF	n/a	n/a	VH201
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	56	ug/kg	
71-43-2	Benzene	ND	5.6	ug/kg	
75-27-4	Bromodichloromethane	ND	5.6	ug/kg	
75-25-2	Bromoform	ND	5.6	ug/kg	
108-90-7	Chlorobenzene	ND	5.6	ug/kg	
75-00-3	Chloroethane	ND	5.6	ug/kg	
67-66-3	Chloroform	ND	5.6	ug/kg	
75-15-0	Carbon disulfide	ND	11	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.6	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.6	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.6	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.6	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.6	ug/kg	
124-48-1	Dibromochloromethane	ND	5.6	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.6	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.6	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.6	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.6	ug/kg	
100-41-4	Ethylbenzene	ND	5.6	ug/kg	
591-78-6	2-Hexanone	ND	11	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	11	ug/kg	
74-83-9	Methyl bromide	ND	5.6	ug/kg	
74-87-3	Methyl chloride	ND	5.6	ug/kg	
75-09-2	Methylene chloride [a]	13.2	11	ug/kg	
78-93-3	Methyl ethyl ketone	ND	11	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.6	ug/kg	
100-42-5	Styrene	ND	5.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.6	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.6	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.6	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.6	ug/kg	
108-88-3	Toluene	3.8	5.6	ug/kg	J
79-01-6	Trichloroethylene	ND	5.6	ug/kg	
75-01-4	Vinyl chloride	ND	5.6	ug/kg	
1330-20-7	Xylene (total)	ND	17	ug/kg	

ND = Not detected
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-610-SS-022-01		
Lab Sample ID:	F7816-15	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	88.6
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		71-122%
2037-26-5	Toluene-D8	107%		73-128%
460-00-4	4-Bromofluorobenzene	118%		53-158%
17060-07-0	1,2-Dichloroethane-D4	116%		71-122%

(a) Suspected laboratory contaminant.

ND = Not detected
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-610-SS-023-01		
Lab Sample ID:	F7816-22	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	82.9
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H009616.D	1	10/13/00	NAF	n/a	n/a	VH201
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	44.5	78	ug/kg	J
71-43-2	Benzene	ND	7.8	ug/kg	
75-27-4	Bromodichloromethane	ND	7.8	ug/kg	
75-25-2	Bromoform	ND	7.8	ug/kg	
108-90-7	Chlorobenzene	ND	7.8	ug/kg	
75-00-3	Chloroethane	ND	7.8	ug/kg	
67-66-3	Chloroform	ND	7.8	ug/kg	
75-15-0	Carbon disulfide	ND	16	ug/kg	
56-23-5	Carbon tetrachloride	ND	7.8	ug/kg	
75-34-3	1,1-Dichloroethane	ND	7.8	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	7.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	7.8	ug/kg	
78-87-5	1,2-Dichloropropane	ND	7.8	ug/kg	
124-48-1	Dibromochloromethane	ND	7.8	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	7.8	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	7.8	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	7.8	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	7.8	ug/kg	
100-41-4	Ethylbenzene	ND	7.8	ug/kg	
591-78-6	2-Hexanone	ND	16	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	16	ug/kg	
74-83-9	Methyl bromide	ND	7.8	ug/kg	
74-87-3	Methyl chloride	ND	7.8	ug/kg	
75-09-2	Methylene chloride [a]	21.5	16	ug/kg	
78-93-3	Methyl ethyl ketone	ND	16	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	7.8	ug/kg	
100-42-5	Styrene	ND	7.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	7.8	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.8	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	7.8	ug/kg	
127-18-4	Tetrachloroethylene	ND	7.8	ug/kg	
108-88-3	Toluene	5.7	7.8	ug/kg	J
79-01-6	Trichloroethylene	ND	7.8	ug/kg	
75-01-4	Vinyl chloride	ND	7.8	ug/kg	
1330-20-7	Xylene (total)	ND	23	ug/kg	

ND = Not detected
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-610-SS-023-01		
Lab Sample ID:	F7816-22	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	82.9
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		71-122%
2037-26-5	Toluene-D8	108%		73-128%
460-00-4	4-Bromofluorobenzene	125%		53-158%
17060-07-0	1,2-Dichloroethane-D4	121%		71-122%

(a) Suspected laboratory contaminant.

ND = Not detected
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-610-SS-024-01		
Lab Sample ID:	F7816-21	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	82.3
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H009615.D	1	10/13/00	NAF	n/a	n/a	VH201
Run #2	H009632.D	1	10/16/00	NAF	n/a	n/a	VH202

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	34.4	75	ug/kg	J
71-43-2	Benzene	ND	7.5	ug/kg	
75-27-4	Bromodichloromethane	ND	7.5	ug/kg	
75-25-2	Bromoform	ND	7.5	ug/kg	
108-90-7	Chlorobenzene	ND	7.5	ug/kg	
75-00-3	Chloroethane	ND	7.5	ug/kg	
67-66-3	Chloroform	ND	7.5	ug/kg	
75-15-0	Carbon disulfide	ND	15	ug/kg	
56-23-5	Carbon tetrachloride	ND	7.5	ug/kg	
75-34-3	1,1-Dichloroethane	ND	7.5	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	7.5	ug/kg	
107-06-2	1,2-Dichloroethane	ND	7.5	ug/kg	
78-87-5	1,2-Dichloropropane	ND	7.5	ug/kg	
124-48-1	Dibromochloromethane	ND	7.5	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	7.5	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	7.5	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	7.5	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	7.5	ug/kg	
100-41-4	Ethylbenzene	ND	7.5	ug/kg	
591-78-6	2-Hexanone	ND	15	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	15	ug/kg	
74-83-9	Methyl bromide	ND	7.5	ug/kg	
74-87-3	Methyl chloride	ND	7.5	ug/kg	
75-09-2	Methylene chloride [a]	20.6	15	ug/kg	
78-93-3	Methyl ethyl ketone	ND	15	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	7.5	ug/kg	
100-42-5	Styrene	ND	7.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	7.5	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.5	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	7.5	ug/kg	
127-18-4	Tetrachloroethylene	ND	7.5	ug/kg	
108-88-3	Toluene	5.8	7.5	ug/kg	J
79-01-6	Trichloroethylene	ND	7.5	ug/kg	
75-01-4	Vinyl chloride	ND	7.5	ug/kg	
1330-20-7	Xylene (total)	ND	22	ug/kg	

ND = Not detected
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-610-SS-024-01		
Lab Sample ID:	F7816-21	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	82.3
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	114%	111%	71-122%
2037-26-5	Toluene-D8	108%	110%	73-128%
460-00-4	4-Bromofluorobenzene	127%	128%	53-158%
17060-07-0	1,2-Dichloroethane-D4	127% [b]	124%	71-122%

(a) Suspected laboratory contaminant.
(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected
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-610-SS-025-01		
Lab Sample ID:	F7816-20	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	78.1
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H009614.D	1	10/13/00	NAF	n/a	n/a	VH201
Run #2	H009631.D	1	10/16/00	NAF	n/a	n/a	VH202

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	90	ug/kg	
71-43-2	Benzene	ND	9.0	ug/kg	
75-27-4	Bromodichloromethane	ND	9.0	ug/kg	
75-25-2	Bromoform	ND	9.0	ug/kg	
108-90-7	Chlorobenzene	ND	9.0	ug/kg	
75-00-3	Chloroethane	ND	9.0	ug/kg	
67-66-3	Chloroform	ND	9.0	ug/kg	
75-15-0	Carbon disulfide	ND	18	ug/kg	
56-23-5	Carbon tetrachloride	ND	9.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	9.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	9.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	9.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	9.0	ug/kg	
124-48-1	Dibromochloromethane	ND	9.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	9.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	9.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	9.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	9.0	ug/kg	
100-41-4	Ethylbenzene	ND	9.0	ug/kg	
591-78-6	2-Hexanone	ND	18	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	18	ug/kg	
74-83-9	Methyl bromide	ND	9.0	ug/kg	
74-87-3	Methyl chloride	ND	9.0	ug/kg	
75-09-2	Methylene chloride [a]	27.1	18	ug/kg	
78-93-3	Methyl ethyl ketone	ND	18	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	9.0	ug/kg	
100-42-5	Styrene	ND	9.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	9.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	9.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	9.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	9.0	ug/kg	
108-88-3	Toluene	7.3	9.0	ug/kg	J
79-01-6	Trichloroethylene	ND	9.0	ug/kg	
75-01-4	Vinyl chloride	ND	9.0	ug/kg	
1330-20-7	Xylene (total)	ND	27	ug/kg	

ND = Not detected
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-610-SS-025-01		
Lab Sample ID:	F7816-20	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	78.1
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%	112%	71-122%
2037-26-5	Toluene-D8	116%	107%	73-128%
460-00-4	4-Bromofluorobenzene	132%	131%	53-158%
17060-07-0	1,2-Dichloroethane-D4	125% [b]	125%	71-122%

(a) Suspected laboratory contaminant.
(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected
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-610-SS-DU01		
Lab Sample ID:	F7816-26	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	87.3
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H009624.D	1	10/16/00	NAF	n/a	n/a	VH202
Run #2	H009635.D	1	10/16/00	NAF	n/a	n/a	VH202

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	62	ug/kg	
71-43-2	Benzene	ND	6.2	ug/kg	
75-27-4	Bromodichloromethane	ND	6.2	ug/kg	
75-25-2	Bromoform	ND	6.2	ug/kg	
108-90-7	Chlorobenzene	ND	6.2	ug/kg	
75-00-3	Chloroethane	ND	6.2	ug/kg	
67-66-3	Chloroform	ND	6.2	ug/kg	
75-15-0	Carbon disulfide	ND	12	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.2	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.2	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	6.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.2	ug/kg	
124-48-1	Dibromochloromethane	ND	6.2	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	6.2	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.2	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	6.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.2	ug/kg	
100-41-4	Ethylbenzene	ND	6.2	ug/kg	
591-78-6	2-Hexanone	ND	12	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	12	ug/kg	
74-83-9	Methyl bromide	ND	6.2	ug/kg	
74-87-3	Methyl chloride	ND	6.2	ug/kg	
75-09-2	Methylene chloride [a]	15.2	12	ug/kg	
78-93-3	Methyl ethyl ketone	ND	12	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	6.2	ug/kg	
100-42-5	Styrene	ND	6.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.2	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.2	ug/kg	
127-18-4	Tetrachloroethylene	ND	6.2	ug/kg	
108-88-3	Toluene	ND	6.2	ug/kg	
79-01-6	Trichloroethylene	ND	6.2	ug/kg	
75-01-4	Vinyl chloride	ND	6.2	ug/kg	
1330-20-7	Xylene (total)	ND	19	ug/kg	

ND = Not detected
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-610-SS-DU01		
Lab Sample ID:	F7816-26	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	87.3
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	130% [b]	113%	71-122%
2037-26-5	Toluene-D8	105%	104%	73-128%
460-00-4	4-Bromofluorobenzene	119%	113%	53-158%
17060-07-0	1,2-Dichloroethane-D4	124% [b]	125%	71-122%

(a) Suspected laboratory contaminant.
(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected
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-610-SS-DU02		
Lab Sample ID:	F7816-27	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	86.7
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H009625.D	1	10/16/00	NAF	n/a	n/a	VH202
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	58	ug/kg	
71-43-2	Benzene	ND	5.8	ug/kg	
75-27-4	Bromodichloromethane	ND	5.8	ug/kg	
75-25-2	Bromoform	ND	5.8	ug/kg	
108-90-7	Chlorobenzene	ND	5.8	ug/kg	
75-00-3	Chloroethane	ND	5.8	ug/kg	
67-66-3	Chloroform	ND	5.8	ug/kg	
75-15-0	Carbon disulfide	ND	12	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.8	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.8	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.8	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.8	ug/kg	
124-48-1	Dibromochloromethane	ND	5.8	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.8	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.8	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.8	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.8	ug/kg	
100-41-4	Ethylbenzene	ND	5.8	ug/kg	
591-78-6	2-Hexanone	ND	12	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	12	ug/kg	
74-83-9	Methyl bromide	ND	5.8	ug/kg	
74-87-3	Methyl chloride	ND	5.8	ug/kg	
75-09-2	Methylene chloride [a]	13.6	12	ug/kg	
78-93-3	Methyl ethyl ketone	ND	12	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.8	ug/kg	
100-42-5	Styrene	ND	5.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.8	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.8	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.8	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.8	ug/kg	
108-88-3	Toluene	ND	5.8	ug/kg	
79-01-6	Trichloroethylene	ND	5.8	ug/kg	
75-01-4	Vinyl chloride	ND	5.8	ug/kg	
1330-20-7	Xylene (total)	ND	17	ug/kg	

ND = Not detected
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-610-SS-DU02		
Lab Sample ID:	F7816-27	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	86.7
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		71-122%
2037-26-5	Toluene-D8	100%		73-128%
460-00-4	4-Bromofluorobenzene	108%		53-158%
17060-07-0	1,2-Dichloroethane-D4	122%		71-122%

(a) Suspected laboratory contaminant.

ND = Not detected
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-610-SS-DU03		
Lab Sample ID:	F7816-28	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	81.4
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H009626.D	1	10/16/00	NAF	n/a	n/a	VH202
Run #2	H009637.D	1	10/16/00	NAF	n/a	n/a	VH202

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	47.7	82	ug/kg	J
71-43-2	Benzene	ND	8.2	ug/kg	
75-27-4	Bromodichloromethane	ND	8.2	ug/kg	
75-25-2	Bromoform	ND	8.2	ug/kg	
108-90-7	Chlorobenzene	ND	8.2	ug/kg	
75-00-3	Chloroethane	ND	8.2	ug/kg	
67-66-3	Chloroform	ND	8.2	ug/kg	
75-15-0	Carbon disulfide	ND	16	ug/kg	
56-23-5	Carbon tetrachloride	ND	8.2	ug/kg	
75-34-3	1,1-Dichloroethane	ND	8.2	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	8.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	8.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	8.2	ug/kg	
124-48-1	Dibromochloromethane	ND	8.2	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	8.2	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	8.2	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	8.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	8.2	ug/kg	
100-41-4	Ethylbenzene	ND	8.2	ug/kg	
591-78-6	2-Hexanone	ND	16	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	16	ug/kg	
74-83-9	Methyl bromide	ND	8.2	ug/kg	
74-87-3	Methyl chloride	ND	8.2	ug/kg	
75-09-2	Methylene chloride [a]	23.1	16	ug/kg	
78-93-3	Methyl ethyl ketone	ND	16	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	8.2	ug/kg	
100-42-5	Styrene	ND	8.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	8.2	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	8.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	8.2	ug/kg	
127-18-4	Tetrachloroethylene	ND	8.2	ug/kg	
108-88-3	Toluene	ND	8.2	ug/kg	
79-01-6	Trichloroethylene	ND	8.2	ug/kg	
75-01-4	Vinyl chloride	ND	8.2	ug/kg	
1330-20-7	Xylene (total)	ND	25	ug/kg	

ND = Not detected
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-610-SS-DU03		
Lab Sample ID:	F7816-28	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8260B	**Percent Solids:**	81.4
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%	128%	71-122%
2037-26-5	Toluene-D8	107%	108%	73-128%
460-00-4	4-Bromofluorobenzene	112%	122%	53-158%
17060-07-0	1,2-Dichloroethane-D4	124% [b]	143%	71-122%

(a) Suspected laboratory contaminant.
(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected
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-610-SS-001-01		
Lab Sample ID:	F7816-4	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	88.5
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004866.D	1	10/24/00	MRE	10/17/00	OP2188	GAA160
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	750	ug/kg	
208-96-8	Acenaphthylene	ND	750	ug/kg	
120-12-7	Anthracene	ND	380	ug/kg	
56-55-3	Benzo(a)anthracene	ND	380	ug/kg	
50-32-8	Benzo(a)pyrene	68.5	75	ug/kg	J
205-99-2	Benzo(b)fluoranthene	86.3	75	ug/kg	
191-24-2	Benzo(g,h,i)perylene	74.5	75	ug/kg	J
207-08-9	Benzo(k)fluoranthene	51.6	75	ug/kg	J
218-01-9	Chrysene	ND	380	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	75	ug/kg	
206-44-0	Fluoranthene	ND	380	ug/kg	
86-73-7	Fluorene	ND	380	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	87.5	75	ug/kg	
91-20-3	Naphthalene	ND	380	ug/kg	
90-12-0	1-Methylnaphthalene	ND	380	ug/kg	
91-57-6	2-Methylnaphthalene	ND	380	ug/kg	
85-01-8	Phenanthrene	ND	380	ug/kg	
129-00-0	Pyrene	ND	380	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	102%		22-130%
92-94-4	p-Terphenyl	103%		53-130%

ND = Not detected
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-610-SS-002-01		
Lab Sample ID:	F7816-5	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	89.0
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004867.D	1	10/24/00	MRE	10/17/00	OP2188	GAA160
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	750	ug/kg	
208-96-8	Acenaphthylene	ND	750	ug/kg	
120-12-7	Anthracene	ND	370	ug/kg	
56-55-3	Benzo(a)anthracene	ND	370	ug/kg	
50-32-8	Benzo(a)pyrene	104	75	ug/kg	
205-99-2	Benzo(b)fluoranthene	142	75	ug/kg	
191-24-2	Benzo(g,h,i)perylene	108	75	ug/kg	
207-08-9	Benzo(k)fluoranthene	82.2	75	ug/kg	
218-01-9	Chrysene	ND	370	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	75	ug/kg	
206-44-0	Fluoranthene	ND	370	ug/kg	
86-73-7	Fluorene	ND	370	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	110	75	ug/kg	
91-20-3	Naphthalene	ND	370	ug/kg	
90-12-0	1-Methylnaphthalene	ND	370	ug/kg	
91-57-6	2-Methylnaphthalene	ND	370	ug/kg	
85-01-8	Phenanthrene	ND	370	ug/kg	
129-00-0	Pyrene	ND	370	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	104%		22-130%
92-94-4	p-Terphenyl	104%		53-130%

ND = Not detected
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-610-SS-003-01		
Lab Sample ID:	F7816-3	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	80.5
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004865.D	1	10/24/00	MRE	10/17/00	OP2188	GAA160
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	830	ug/kg	
208-96-8	Acenaphthylene	ND	830	ug/kg	
120-12-7	Anthracene	ND	410	ug/kg	
56-55-3	Benzo(a)anthracene	ND	410	ug/kg	
50-32-8	Benzo(a)pyrene	52.9	83	ug/kg	J
205-99-2	Benzo(b)fluoranthene	44.2	83	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	58.7	83	ug/kg	J
207-08-9	Benzo(k)fluoranthene	ND	83	ug/kg	
218-01-9	Chrysene	ND	410	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	83	ug/kg	
206-44-0	Fluoranthene	ND	410	ug/kg	
86-73-7	Fluorene	ND	410	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	64.5	83	ug/kg	J
91-20-3	Naphthalene	ND	410	ug/kg	
90-12-0	1-Methylnaphthalene	ND	410	ug/kg	
91-57-6	2-Methylnaphthalene	ND	410	ug/kg	
85-01-8	Phenanthrene	ND	410	ug/kg	
129-00-0	Pyrene	ND	410	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	92%		22-130%
92-94-4	p-Terphenyl	93%		53-130%

ND = Not detected
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-610-SS-004-01		
Lab Sample ID:	F7816-2	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	89.1
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004864.D	1	10/24/00	MRE	10/17/00	OP2188	GAA160
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	750	ug/kg	
208-96-8	Acenaphthylene	ND	750	ug/kg	
120-12-7	Anthracene	ND	370	ug/kg	
56-55-3	Benzo(a)anthracene	ND	370	ug/kg	
50-32-8	Benzo(a)pyrene	232	75	ug/kg	
205-99-2	Benzo(b)fluoranthene	173	75	ug/kg	
191-24-2	Benzo(g,h,i)perylene	168	75	ug/kg	
207-08-9	Benzo(k)fluoranthene	94.5	75	ug/kg	
218-01-9	Chrysene	ND	370	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	75	ug/kg	
206-44-0	Fluoranthene	ND	370	ug/kg	
86-73-7	Fluorene	ND	370	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	235	75	ug/kg	
91-20-3	Naphthalene	ND	370	ug/kg	
90-12-0	1-Methylnaphthalene	ND	370	ug/kg	
91-57-6	2-Methylnaphthalene	ND	370	ug/kg	
85-01-8	Phenanthrene	ND	370	ug/kg	
129-00-0	Pyrene	249	370	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	91%		22-130%
92-94-4	p-Terphenyl	91%		53-130%

ND = Not detected
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-610-SS-005-01		
Lab Sample ID:	F7816-6	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	85.7
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004868.D	1	10/24/00	MRE	10/17/00	OP2188	GAA160
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	780	ug/kg	
208-96-8	Acenaphthylene	ND	780	ug/kg	
120-12-7	Anthracene	ND	390	ug/kg	
56-55-3	Benzo(a)anthracene	ND	390	ug/kg	
50-32-8	Benzo(a)pyrene	48.6	78	ug/kg	J
205-99-2	Benzo(b)fluoranthene	68.6	78	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	67.5	78	ug/kg	J
207-08-9	Benzo(k)fluoranthene	36.5	78	ug/kg	J
218-01-9	Chrysene	ND	390	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	78	ug/kg	
206-44-0	Fluoranthene	ND	390	ug/kg	
86-73-7	Fluorene	ND	390	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	62.6	78	ug/kg	J
91-20-3	Naphthalene	ND	390	ug/kg	
90-12-0	1-Methylnaphthalene	ND	390	ug/kg	
91-57-6	2-Methylnaphthalene	ND	390	ug/kg	
85-01-8	Phenanthrene	ND	390	ug/kg	
129-00-0	Pyrene	ND	390	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	80%		22-130%
92-94-4	p-Terphenyl	82%		53-130%

ND = Not detected
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-610-SS-006-01		
Lab Sample ID:	F7816-1	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	88.8
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004863.D	1	10/24/00	MRE	10/17/00	OP2188	GAA160
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	750	ug/kg	
208-96-8	Acenaphthylene	ND	750	ug/kg	
120-12-7	Anthracene	ND	380	ug/kg	
56-55-3	Benzo(a)anthracene	ND	380	ug/kg	
50-32-8	Benzo(a)pyrene	41.4	75	ug/kg	J
205-99-2	Benzo(b)fluoranthene	38.9	75	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	50.8	75	ug/kg	J
207-08-9	Benzo(k)fluoranthene	ND	75	ug/kg	
218-01-9	Chrysene	ND	380	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	75	ug/kg	
206-44-0	Fluoranthene	ND	380	ug/kg	
86-73-7	Fluorene	ND	380	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	59.8	75	ug/kg	J
91-20-3	Naphthalene	ND	380	ug/kg	
90-12-0	1-Methylnaphthalene	ND	380	ug/kg	
91-57-6	2-Methylnaphthalene	ND	380	ug/kg	
85-01-8	Phenanthrene	ND	380	ug/kg	
129-00-0	Pyrene	ND	380	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	93%		22-130%
92-94-4	p-Terphenyl	93%		53-130%

ND = Not detected
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-610-SS-007-01		
Lab Sample ID:	F7816-25	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	86.1
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004816.D	1	10/21/00	MRE	10/17/00	OP2190	GAA157
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	770	ug/kg	
208-96-8	Acenaphthylene	ND	770	ug/kg	
120-12-7	Anthracene	ND	390	ug/kg	
56-55-3	Benzo(a)anthracene	ND	390	ug/kg	
50-32-8	Benzo(a)pyrene	26.1	77	ug/kg	J
205-99-2	Benzo(b)fluoranthene	22.6	77	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	25.6	77	ug/kg	J
207-08-9	Benzo(k)fluoranthene	ND	77	ug/kg	
218-01-9	Chrysene	ND	390	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	26.4	77	ug/kg	J
206-44-0	Fluoranthene	ND	390	ug/kg	
86-73-7	Fluorene	ND	390	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	26.9	77	ug/kg	J
91-20-3	Naphthalene	ND	390	ug/kg	
90-12-0	1-Methylnaphthalene	ND	390	ug/kg	
91-57-6	2-Methylnaphthalene	ND	390	ug/kg	
85-01-8	Phenanthrene	ND	390	ug/kg	
129-00-0	Pyrene	ND	390	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	96%		22-130%
92-94-4	p-Terphenyl	95%		53-130%

ND = Not detected
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-610-SS-008-01		
Lab Sample ID:	F7816-7	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	86.5
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004869.D	1	10/24/00	MRE	10/17/00	OP2188	GAA160
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	770	ug/kg	
208-96-8	Acenaphthylene	ND	770	ug/kg	
120-12-7	Anthracene	ND	380	ug/kg	
56-55-3	Benzo(a)anthracene	ND	380	ug/kg	
50-32-8	Benzo(a)pyrene	226	77	ug/kg	
205-99-2	Benzo(b)fluoranthene	182	77	ug/kg	
191-24-2	Benzo(g,h,i)perylene	322	77	ug/kg	
207-08-9	Benzo(k)fluoranthene	177	77	ug/kg	
218-01-9	Chrysene	ND	380	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	77	ug/kg	
206-44-0	Fluoranthene	ND	380	ug/kg	
86-73-7	Fluorene	ND	380	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	344	77	ug/kg	
91-20-3	Naphthalene	ND	380	ug/kg	
90-12-0	1-Methylnaphthalene	ND	380	ug/kg	
91-57-6	2-Methylnaphthalene	ND	380	ug/kg	
85-01-8	Phenanthrene	ND	380	ug/kg	
129-00-0	Pyrene	ND	380	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	88%		22-130%
92-94-4	p-Terphenyl	90%		53-130%

ND = Not detected
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-610-SS-009-01		
Lab Sample ID:	F7816-19	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	89.3
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004885.D	1	10/24/00	MRE	10/17/00	OP2188	GAA160
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	750	ug/kg	
208-96-8	Acenaphthylene	ND	750	ug/kg	
120-12-7	Anthracene	ND	370	ug/kg	
56-55-3	Benzo(a)anthracene	ND	370	ug/kg	
50-32-8	Benzo(a)pyrene	40.2	75	ug/kg	J
205-99-2	Benzo(b)fluoranthene	70.1	75	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	76.7	75	ug/kg	
207-08-9	Benzo(k)fluoranthene	32.9	75	ug/kg	J
218-01-9	Chrysene	ND	370	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	75	ug/kg	
206-44-0	Fluoranthene	ND	370	ug/kg	
86-73-7	Fluorene	ND	370	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	65.7	75	ug/kg	J
91-20-3	Naphthalene	ND	370	ug/kg	
90-12-0	1-Methylnaphthalene	ND	370	ug/kg	
91-57-6	2-Methylnaphthalene	ND	370	ug/kg	
85-01-8	Phenanthrene	ND	370	ug/kg	
129-00-0	Pyrene	ND	370	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	101%		22-130%
92-94-4	p-Terphenyl	99%		53-130%

ND = Not detected
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-610-SS-010-01		
Lab Sample ID:	F7816-18	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	87.1
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004884.D	1	10/24/00	MRE	10/17/00	OP2188	GAA160
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	760	ug/kg	
208-96-8	Acenaphthylene	ND	760	ug/kg	
120-12-7	Anthracene	ND	380	ug/kg	
56-55-3	Benzo(a)anthracene	168	380	ug/kg	J
50-32-8	Benzo(a)pyrene	278	76	ug/kg	
205-99-2	Benzo(b)fluoranthene	312	76	ug/kg	
191-24-2	Benzo(g,h,i)perylene	303	76	ug/kg	
207-08-9	Benzo(k)fluoranthene	172	76	ug/kg	
218-01-9	Chrysene	212	380	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND	76	ug/kg	
206-44-0	Fluoranthene	197	380	ug/kg	J
86-73-7	Fluorene	ND	380	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	373	76	ug/kg	
91-20-3	Naphthalene	ND	380	ug/kg	
90-12-0	1-Methylnaphthalene	ND	380	ug/kg	
91-57-6	2-Methylnaphthalene	ND	380	ug/kg	
85-01-8	Phenanthrene	ND	380	ug/kg	
129-00-0	Pyrene	205	380	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	90%		22-130%
92-94-4	p-Terphenyl	89%		53-130%

ND = Not detected
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-610-SS-011-01		
Lab Sample ID:	F7816-8	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	86.0
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004871.D	1	10/24/00	MRE	10/17/00	OP2188	GAA160
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	780	ug/kg	
208-96-8	Acenaphthylene	ND	780	ug/kg	
120-12-7	Anthracene	ND	390	ug/kg	
56-55-3	Benzo(a)anthracene	ND	390	ug/kg	
50-32-8	Benzo(a)pyrene	ND	78	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	78	ug/kg	
191-24-2	Benzo(g,h,i)perylene	55.9	78	ug/kg	J
207-08-9	Benzo(k)fluoranthene	ND	78	ug/kg	
218-01-9	Chrysene	ND	390	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	78	ug/kg	
206-44-0	Fluoranthene	ND	390	ug/kg	
86-73-7	Fluorene	ND	390	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	63.8	78	ug/kg	J
91-20-3	Naphthalene	ND	390	ug/kg	
90-12-0	1-Methylnaphthalene	ND	390	ug/kg	
91-57-6	2-Methylnaphthalene	ND	390	ug/kg	
85-01-8	Phenanthrene	ND	390	ug/kg	
129-00-0	Pyrene	ND	390	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	98%		22-130%
92-94-4	p-Terphenyl	98%		53-130%

ND = Not detected
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-610-SS-012-01		
Lab Sample ID:	F7816-11	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	89.3
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004874.D	1	10/24/00	MRE	10/17/00	OP2188	GAA160
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	750	ug/kg	
208-96-8	Acenaphthylene	ND	750	ug/kg	
120-12-7	Anthracene	ND	370	ug/kg	
56-55-3	Benzo(a)anthracene	ND	370	ug/kg	
50-32-8	Benzo(a)pyrene	ND	75	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	75	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	75	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	75	ug/kg	
218-01-9	Chrysene	ND	370	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	75	ug/kg	
206-44-0	Fluoranthene	ND	370	ug/kg	
86-73-7	Fluorene	ND	370	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	75	ug/kg	
91-20-3	Naphthalene	ND	370	ug/kg	
90-12-0	1-Methylnaphthalene	ND	370	ug/kg	
91-57-6	2-Methylnaphthalene	ND	370	ug/kg	
85-01-8	Phenanthrene	ND	370	ug/kg	
129-00-0	Pyrene	ND	370	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	93%		22-130%
92-94-4	p-Terphenyl	89%		53-130%

ND = Not detected
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-610-SS-013-01		
Lab Sample ID:	F7816-12	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	89.9
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004875.D	1	10/24/00	MRE	10/17/00	OP2188	GAA160
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	740	ug/kg	
208-96-8	Acenaphthylene	ND	740	ug/kg	
120-12-7	Anthracene	ND	370	ug/kg	
56-55-3	Benzo(a)anthracene	ND	370	ug/kg	
50-32-8	Benzo(a)pyrene	ND	74	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	74	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	74	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	74	ug/kg	
218-01-9	Chrysene	ND	370	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	74	ug/kg	
206-44-0	Fluoranthene	ND	370	ug/kg	
86-73-7	Fluorene	ND	370	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	74	ug/kg	
91-20-3	Naphthalene	ND	370	ug/kg	
90-12-0	1-Methylnaphthalene	ND	370	ug/kg	
91-57-6	2-Methylnaphthalene	ND	370	ug/kg	
85-01-8	Phenanthrene	ND	370	ug/kg	
129-00-0	Pyrene	ND	370	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	86%		22-130%
92-94-4	p-Terphenyl	85%		53-130%

ND = Not detected
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-610-SS-014-01		
Lab Sample ID:	F7816-16	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	87.8
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004880.D	1	10/24/00	MRE	10/17/00	OP2188	GAA160
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	760	ug/kg	
208-96-8	Acenaphthylene	ND	760	ug/kg	
120-12-7	Anthracene	ND	380	ug/kg	
56-55-3	Benzo(a)anthracene	ND	380	ug/kg	
50-32-8	Benzo(a)pyrene	465	76	ug/kg	
205-99-2	Benzo(b)fluoranthene	444	76	ug/kg	
191-24-2	Benzo(g,h,i)perylene	704	76	ug/kg	
207-08-9	Benzo(k)fluoranthene	203	76	ug/kg	
218-01-9	Chrysene	ND	380	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	76	ug/kg	
206-44-0	Fluoranthene	193	380	ug/kg	J
86-73-7	Fluorene	ND	380	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	786	76	ug/kg	
91-20-3	Naphthalene	ND	380	ug/kg	
90-12-0	1-Methylnaphthalene	ND	380	ug/kg	
91-57-6	2-Methylnaphthalene	ND	380	ug/kg	
85-01-8	Phenanthrene	ND	380	ug/kg	
129-00-0	Pyrene	258	380	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	102%		22-130%
92-94-4	p-Terphenyl	103%		53-130%

ND = Not detected
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-610-SS-015-01		
Lab Sample ID:	F7816-24	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	83.1
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004832.D	2	10/23/00	MRE	10/17/00	OP2190	GAA158
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	1600	ug/kg	
208-96-8	Acenaphthylene	ND	1600	ug/kg	
120-12-7	Anthracene	ND	800	ug/kg	
56-55-3	Benzo(a)anthracene	535	800	ug/kg	J
50-32-8	Benzo(a)pyrene	648	160	ug/kg	
205-99-2	Benzo(b)fluoranthene	526	160	ug/kg	
191-24-2	Benzo(g,h,i)perylene	637	160	ug/kg	
207-08-9	Benzo(k)fluoranthene	321	160	ug/kg	
218-01-9	Chrysene	556	800	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND	160	ug/kg	
206-44-0	Fluoranthene	932	800	ug/kg	
86-73-7	Fluorene	ND	800	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	695	160	ug/kg	
91-20-3	Naphthalene	ND	800	ug/kg	
90-12-0	1-Methylnaphthalene	ND	800	ug/kg	
91-57-6	2-Methylnaphthalene	ND	800	ug/kg	
85-01-8	Phenanthrene	ND	800	ug/kg	
129-00-0	Pyrene	798	800	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	80%		22-130%
92-94-4	p-Terphenyl	84%		53-130%

ND = Not detected
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-610-SS-016-01		
Lab Sample ID:	F7816-9	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	82.3
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004872.D	2	10/24/00	MRE	10/17/00	OP2188	GAA160
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	1600	ug/kg	
208-96-8	Acenaphthylene	ND	1600	ug/kg	
120-12-7	Anthracene	ND	810	ug/kg	
56-55-3	Benzo(a)anthracene	ND	810	ug/kg	
50-32-8	Benzo(a)pyrene	74.6	160	ug/kg	J
205-99-2	Benzo(b)fluoranthene	87.1	160	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	169	160	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	160	ug/kg	
218-01-9	Chrysene	ND	810	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	160	ug/kg	
206-44-0	Fluoranthene	ND	810	ug/kg	
86-73-7	Fluorene	ND	810	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	159	160	ug/kg	J
91-20-3	Naphthalene	ND	810	ug/kg	
90-12-0	1-Methylnaphthalene	ND	810	ug/kg	
91-57-6	2-Methylnaphthalene	ND	810	ug/kg	
85-01-8	Phenanthrene	ND	810	ug/kg	
129-00-0	Pyrene	ND	810	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	97%		22-130%
92-94-4	p-Terphenyl	98%		53-130%

ND = Not detected
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-610-SS-017-01		
Lab Sample ID:	F7816-17	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	79.0
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004883.D	10	10/24/00	MRE	10/17/00	OP2188	GAA160
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	8400	ug/kg	
208-96-8	Acenaphthylene	ND	8400	ug/kg	
120-12-7	Anthracene	ND	4200	ug/kg	
56-55-3	Benzo(a)anthracene	1970	4200	ug/kg	J
50-32-8	Benzo(a)pyrene	3290	840	ug/kg	
205-99-2	Benzo(b)fluoranthene	3350	840	ug/kg	
191-24-2	Benzo(g,h,i)perylene	4220	840	ug/kg	
207-08-9	Benzo(k)fluoranthene	1890	840	ug/kg	
218-01-9	Chrysene	2240	4200	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND	840	ug/kg	
206-44-0	Fluoranthene	2030	4200	ug/kg	J
86-73-7	Fluorene	ND	4200	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	4580	840	ug/kg	
91-20-3	Naphthalene	ND	4200	ug/kg	
90-12-0	1-Methylnaphthalene	ND	4200	ug/kg	
91-57-6	2-Methylnaphthalene	ND	4200	ug/kg	
85-01-8	Phenanthrene	ND	4200	ug/kg	
129-00-0	Pyrene	2020	4200	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	92%		22-130%
92-94-4	p-Terphenyl	108%		53-130%

ND = Not detected
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-610-SS-018-01		
Lab Sample ID:	F7816-10	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	90.0
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004873.D	1	10/24/00	MRE	10/17/00	OP2188	GAA160
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	740	ug/kg	
208-96-8	Acenaphthylene	ND	740	ug/kg	
120-12-7	Anthracene	ND	370	ug/kg	
56-55-3	Benzo(a)anthracene	ND	370	ug/kg	
50-32-8	Benzo(a)pyrene	ND	74	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	74	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	74	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	74	ug/kg	
218-01-9	Chrysene	ND	370	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	74	ug/kg	
206-44-0	Fluoranthene	ND	370	ug/kg	
86-73-7	Fluorene	ND	370	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	74	ug/kg	
91-20-3	Naphthalene	ND	370	ug/kg	
90-12-0	1-Methylnaphthalene	ND	370	ug/kg	
91-57-6	2-Methylnaphthalene	ND	370	ug/kg	
85-01-8	Phenanthrene	ND	370	ug/kg	
129-00-0	Pyrene	ND	370	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	94%		22-130%
92-94-4	p-Terphenyl	94%		53-130%

ND = Not detected
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-610-SS-019-01		
Lab Sample ID:	F7816-13	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	90.4
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004876.D	1	10/24/00	MRE	10/17/00	OP2188	GAA160
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	740	ug/kg	
208-96-8	Acenaphthylene	ND	740	ug/kg	
120-12-7	Anthracene	ND	370	ug/kg	
56-55-3	Benzo(a)anthracene	ND	370	ug/kg	
50-32-8	Benzo(a)pyrene	ND	74	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	74	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	74	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	74	ug/kg	
218-01-9	Chrysene	ND	370	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	74	ug/kg	
206-44-0	Fluoranthene	ND	370	ug/kg	
86-73-7	Fluorene	ND	370	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	74	ug/kg	
91-20-3	Naphthalene	ND	370	ug/kg	
90-12-0	1-Methylnaphthalene	ND	370	ug/kg	
91-57-6	2-Methylnaphthalene	ND	370	ug/kg	
85-01-8	Phenanthrene	ND	370	ug/kg	
129-00-0	Pyrene	ND	370	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	95%		22-130%
92-94-4	p-Terphenyl	94%		53-130%

ND = Not detected
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-610-SS-020-01		
Lab Sample ID:	F7816-14	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	87.9
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004877.D	8	10/24/00	MRE	10/17/00	OP2188	GAA160
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	6100	ug/kg	
208-96-8	Acenaphthylene	ND	6100	ug/kg	
120-12-7	Anthracene	ND	3000	ug/kg	
56-55-3	Benzo(a)anthracene	3370	3000	ug/kg	
50-32-8	Benzo(a)pyrene	7110	610	ug/kg	
205-99-2	Benzo(b)fluoranthene	6550	610	ug/kg	
191-24-2	Benzo(g,h,i)perylene	7580	610	ug/kg	
207-08-9	Benzo(k)fluoranthene	3480	610	ug/kg	
218-01-9	Chrysene	3640	3000	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	366	610	ug/kg	J
206-44-0	Fluoranthene	3980	3000	ug/kg	
86-73-7	Fluorene	ND	3000	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	8790	610	ug/kg	
91-20-3	Naphthalene	ND	3000	ug/kg	
90-12-0	1-Methylnaphthalene	ND	3000	ug/kg	
91-57-6	2-Methylnaphthalene	ND	3000	ug/kg	
85-01-8	Phenanthrene	ND	3000	ug/kg	
129-00-0	Pyrene	4660	3000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	76%		22-130%
92-94-4	p-Terphenyl	104%		53-130%

ND = Not detected
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-610-SS-021-01		
Lab Sample ID:	F7816-23	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	81.0
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004831.D	4	10/23/00	MRE	10/17/00	OP2190	GAA158
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	3300	ug/kg	
208-96-8	Acenaphthylene	ND	3300	ug/kg	
120-12-7	Anthracene	ND	1600	ug/kg	
56-55-3	Benzo(a)anthracene	1050	1600	ug/kg	J
50-32-8	Benzo(a)pyrene	2230	330	ug/kg	
205-99-2	Benzo(b)fluoranthene	1690	330	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1980	330	ug/kg	
207-08-9	Benzo(k)fluoranthene	940	330	ug/kg	
218-01-9	Chrysene	1100	1600	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND	330	ug/kg	
206-44-0	Fluoranthene	1180	1600	ug/kg	J
86-73-7	Fluorene	ND	1600	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	2510	330	ug/kg	
91-20-3	Naphthalene	ND	1600	ug/kg	
90-12-0	1-Methylnaphthalene	ND	1600	ug/kg	
91-57-6	2-Methylnaphthalene	ND	1600	ug/kg	
85-01-8	Phenanthrene	ND	1600	ug/kg	
129-00-0	Pyrene	1190	1600	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	81%		22-130%
92-94-4	p-Terphenyl	84%		53-130%

ND = Not detected
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-610-SS-022-01		
Lab Sample ID:	F7816-15	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	88.6
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004878.D	1	10/24/00	MRE	10/17/00	OP2188	GAA160
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	750	ug/kg	
208-96-8	Acenaphthylene	ND	750	ug/kg	
120-12-7	Anthracene	ND	380	ug/kg	
56-55-3	Benzo(a)anthracene	ND	380	ug/kg	
50-32-8	Benzo(a)pyrene	258	75	ug/kg	
205-99-2	Benzo(b)fluoranthene	206	75	ug/kg	
191-24-2	Benzo(g,h,i)perylene	314	75	ug/kg	
207-08-9	Benzo(k)fluoranthene	90.5	75	ug/kg	
218-01-9	Chrysene	ND	380	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	75	ug/kg	
206-44-0	Fluoranthene	ND	380	ug/kg	
86-73-7	Fluorene	ND	380	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	335	75	ug/kg	
91-20-3	Naphthalene	ND	380	ug/kg	
90-12-0	1-Methylnaphthalene	ND	380	ug/kg	
91-57-6	2-Methylnaphthalene	ND	380	ug/kg	
85-01-8	Phenanthrene	ND	380	ug/kg	
129-00-0	Pyrene	ND	380	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	92%		22-130%
92-94-4	p-Terphenyl	93%		53-130%

ND = Not detected
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-610-SS-023-01		
Lab Sample ID:	F7816-22	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	82.9
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004830.D	2	10/23/00	MRE	10/17/00	OP2190	GAA158
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	1600	ug/kg	
208-96-8	Acenaphthylene	ND	1600	ug/kg	
120-12-7	Anthracene	ND	800	ug/kg	
56-55-3	Benzo(a)anthracene	ND	800	ug/kg	
50-32-8	Benzo(a)pyrene	816	160	ug/kg	
205-99-2	Benzo(b)fluoranthene	716	160	ug/kg	
191-24-2	Benzo(g,h,i)perylene	816	160	ug/kg	
207-08-9	Benzo(k)fluoranthene	378	160	ug/kg	
218-01-9	Chrysene	ND	800	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	160	ug/kg	
206-44-0	Fluoranthene	ND	800	ug/kg	
86-73-7	Fluorene	ND	800	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	1100	160	ug/kg	
91-20-3	Naphthalene	ND	800	ug/kg	
90-12-0	1-Methylnaphthalene	ND	800	ug/kg	
91-57-6	2-Methylnaphthalene	ND	800	ug/kg	
85-01-8	Phenanthrene	ND	800	ug/kg	
129-00-0	Pyrene	ND	800	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	96%		22-130%
92-94-4	p-Terphenyl	96%		53-130%

ND = Not detected
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-610-SS-024-01		
Lab Sample ID:	F7816-21	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	82.3
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004812.D	20	10/21/00	MRE	10/17/00	OP2190	GAA157
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	16000	ug/kg	
208-96-8	Acenaphthylene	ND	16000	ug/kg	
120-12-7	Anthracene	ND	8100	ug/kg	
56-55-3	Benzo(a)anthracene	2720	8100	ug/kg	J
50-32-8	Benzo(a)pyrene	8470	1600	ug/kg	
205-99-2	Benzo(b)fluoranthene	7160	1600	ug/kg	
191-24-2	Benzo(g,h,i)perylene	8180	1600	ug/kg	
207-08-9	Benzo(k)fluoranthene	3670	1600	ug/kg	
218-01-9	Chrysene	3410	8100	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND	1600	ug/kg	
206-44-0	Fluoranthene	ND	8100	ug/kg	
86-73-7	Fluorene	ND	8100	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	10300	1600	ug/kg	
91-20-3	Naphthalene	ND	8100	ug/kg	
90-12-0	1-Methylnaphthalene	ND	8100	ug/kg	
91-57-6	2-Methylnaphthalene	ND	8100	ug/kg	
85-01-8	Phenanthrene	ND	8100	ug/kg	
129-00-0	Pyrene	6000	8100	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	107%		22-130%
92-94-4	p-Terphenyl	123%		53-130%

ND = Not detected
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-610-SS-025-01		
Lab Sample ID:	F7816-20	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	78.1
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004917.D	8	10/25/00	MRE	10/17/00	OP2188	GAA161
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	6800	ug/kg	
208-96-8	Acenaphthylene	ND	6800	ug/kg	
120-12-7	Anthracene	ND	3400	ug/kg	
56-55-3	Benzo(a)anthracene	1190	3400	ug/kg	J
50-32-8	Benzo(a)pyrene	2870	680	ug/kg	
205-99-2	Benzo(b)fluoranthene	2720	680	ug/kg	
191-24-2	Benzo(g,h,i)perylene	3190	680	ug/kg	
207-08-9	Benzo(k)fluoranthene	1420	680	ug/kg	
218-01-9	Chrysene	1500	3400	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND	680	ug/kg	
206-44-0	Fluoranthene	ND	3400	ug/kg	
86-73-7	Fluorene	ND	3400	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	3720	680	ug/kg	
91-20-3	Naphthalene	ND	3400	ug/kg	
90-12-0	1-Methylnaphthalene	ND	3400	ug/kg	
91-57-6	2-Methylnaphthalene	ND	3400	ug/kg	
85-01-8	Phenanthrene	ND	3400	ug/kg	
129-00-0	Pyrene	1940	3400	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	78%		22-130%
92-94-4	p-Terphenyl	92%		53-130%

ND = Not detected
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-610-SS-DU01		
Lab Sample ID:	F7816-26	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	87.3
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004819.D	1	10/21/00	MRE	10/17/00	OP2190	GAA157
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	760	ug/kg	
208-96-8	Acenaphthylene	ND	760	ug/kg	
120-12-7	Anthracene	ND	380	ug/kg	
56-55-3	Benzo(a)anthracene	38.5	380	ug/kg	J
50-32-8	Benzo(a)pyrene	68.7	76	ug/kg	J
205-99-2	Benzo(b)fluoranthene	86.5	76	ug/kg	
191-24-2	Benzo(g,h,i)perylene	124	76	ug/kg	
207-08-9	Benzo(k)fluoranthene	52.8	76	ug/kg	J
218-01-9	Chrysene	ND	380	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	76	ug/kg	
206-44-0	Fluoranthene	ND	380	ug/kg	
86-73-7	Fluorene	ND	380	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	98.8	76	ug/kg	
91-20-3	Naphthalene	ND	380	ug/kg	
90-12-0	1-Methylnaphthalene	ND	380	ug/kg	
91-57-6	2-Methylnaphthalene	ND	380	ug/kg	
85-01-8	Phenanthrene	ND	380	ug/kg	
129-00-0	Pyrene	ND	380	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	94%		22-130%
92-94-4	p-Terphenyl	95%		53-130%

ND = Not detected
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-610-SS-DU02		
Lab Sample ID:	F7816-27	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	86.7
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004820.D	1	10/21/00	MRE	10/17/00	OP2190	GAA157
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	770	ug/kg	
208-96-8	Acenaphthylene	ND	770	ug/kg	
120-12-7	Anthracene	ND	380	ug/kg	
56-55-3	Benzo(a)anthracene	ND	380	ug/kg	
50-32-8	Benzo(a)pyrene	ND	77	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	77	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	77	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	77	ug/kg	
218-01-9	Chrysene	ND	380	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	77	ug/kg	
206-44-0	Fluoranthene	ND	380	ug/kg	
86-73-7	Fluorene	ND	380	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	77	ug/kg	
91-20-3	Naphthalene	ND	380	ug/kg	
90-12-0	1-Methylnaphthalene	ND	380	ug/kg	
91-57-6	2-Methylnaphthalene	ND	380	ug/kg	
85-01-8	Phenanthrene	ND	380	ug/kg	
129-00-0	Pyrene	ND	380	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	92%		22-130%
92-94-4	p-Terphenyl	93%		53-130%

ND = Not detected
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-610-SS-DU03		
Lab Sample ID:	F7816-28	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	EPA 8310	**Percent Solids:**	81.4
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA004833.D	2	10/23/00	MRE	10/17/00	OP2190	GAA158
Run #2							

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	1600	ug/kg	
208-96-8	Acenaphthylene	ND	1600	ug/kg	
120-12-7	Anthracene	ND	820	ug/kg	
56-55-3	Benzo(a)anthracene	262	820	ug/kg	J
50-32-8	Benzo(a)pyrene	1220	160	ug/kg	
205-99-2	Benzo(b)fluoranthene	1050	160	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1180	160	ug/kg	
207-08-9	Benzo(k)fluoranthene	527	160	ug/kg	
218-01-9	Chrysene	384	820	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	91.6	160	ug/kg	J
206-44-0	Fluoranthene	ND	820	ug/kg	
86-73-7	Fluorene	ND	820	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	1640	160	ug/kg	
91-20-3	Naphthalene	ND	820	ug/kg	
90-12-0	1-Methylnaphthalene	ND	820	ug/kg	
91-57-6	2-Methylnaphthalene	ND	820	ug/kg	
85-01-8	Phenanthrene	ND	820	ug/kg	
129-00-0	Pyrene	424	820	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	89%		22-130%
92-94-4	p-Terphenyl	91%		53-130%

ND = Not detected
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-610-SS-001-01		
Lab Sample ID:	F7816-4	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	88.5
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30447.D	1	10/12/00	LAG	10/11/00	OP8367	GEF1754
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	20	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	4.0	ug/kg	
93-76-5	2,4,5-T	ND	4.0	ug/kg	
75-99-0	Dalapon	ND	4.0	ug/kg	
1918-00-9	Dicamba	ND	20	ug/kg	
120-36-5	Dichloroprop	ND	20	ug/kg	
88-85-7	Dinoseb	ND	20	ug/kg	
94-74-6	MCPA	ND	2000	ug/kg	
93-65-2	MCPP	ND	2000	ug/kg	
87-86-5	Pentachlorophenol	ND	2.0	ug/kg	
94-82-6	2,4-DB	ND	20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	112%		40-150%
19719-28-9	2,4-DCAA	104%		40-150%

ND = Not detected
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-610-SS-002-01		
Lab Sample ID:	F7816-5	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	89.0
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30448.D	1	10/12/00	LAG	10/11/00	OP8367	GEF1754
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	18	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	3.7	ug/kg	
93-76-5	2,4,5-T	ND	3.7	ug/kg	
75-99-0	Dalapon	ND	3.7	ug/kg	
1918-00-9	Dicamba	ND	18	ug/kg	
120-36-5	Dichloroprop	ND	18	ug/kg	
88-85-7	Dinoseb	ND	18	ug/kg	
94-74-6	MCPA	ND	1800	ug/kg	
93-65-2	MCPP	ND	1800	ug/kg	
87-86-5	Pentachlorophenol	ND	1.8	ug/kg	
94-82-6	2,4-DB	ND	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	59%		40-150%
19719-28-9	2,4-DCAA	62%		40-150%

ND = Not detected
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-610-SS-003-01		
Lab Sample ID:	F7816-3	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	80.5
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30446.D	1	10/12/00	LAG	10/11/00	OP8367	GEF1754
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	20	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	4.1	ug/kg	
93-76-5	2,4,5-T	ND	4.1	ug/kg	
75-99-0	Dalapon	ND	4.1	ug/kg	
1918-00-9	Dicamba	ND	20	ug/kg	
120-36-5	Dichloroprop	ND	20	ug/kg	
88-85-7	Dinoseb	ND	20	ug/kg	
94-74-6	MCPA	ND	2000	ug/kg	
93-65-2	MCPP	ND	2000	ug/kg	
87-86-5	Pentachlorophenol	ND	2.0	ug/kg	
94-82-6	2,4-DB	ND	20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	104%		40-150%
19719-28-9	2,4-DCAA	102%		40-150%

ND = Not detected
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-610-SS-004-01		
Lab Sample ID:	F7816-2	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	89.1
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30445.D	1	10/12/00	LAG	10/11/00	OP8367	GEF1754
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	19	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	3.8	ug/kg	
93-76-5	2,4,5-T	ND	3.8	ug/kg	
75-99-0	Dalapon	ND	3.8	ug/kg	
1918-00-9	Dicamba	ND	19	ug/kg	
120-36-5	Dichloroprop	ND	19	ug/kg	
88-85-7	Dinoseb	ND	19	ug/kg	
94-74-6	MCPA	ND	1900	ug/kg	
93-65-2	MCPP	ND	1900	ug/kg	
87-86-5	Pentachlorophenol	ND	1.9	ug/kg	
94-82-6	2,4-DB	ND	19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	116%		40-150%
19719-28-9	2,4-DCAA	107%		40-150%

ND = Not detected
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-610-SS-005-01		
Lab Sample ID:	F7816-6	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	85.7
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30449.D	1	10/12/00	LAG	10/11/00	OP8367	GEF1754
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	21	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	4.1	ug/kg	
93-76-5	2,4,5-T	ND	4.1	ug/kg	
75-99-0	Dalapon	ND	4.1	ug/kg	
1918-00-9	Dicamba	ND	21	ug/kg	
120-36-5	Dichloroprop	ND	21	ug/kg	
88-85-7	Dinoseb	ND	21	ug/kg	
94-74-6	MCPA	ND	2100	ug/kg	
93-65-2	MCPP	ND	2100	ug/kg	
87-86-5	Pentachlorophenol	ND	2.1	ug/kg	
94-82-6	2,4-DB	ND	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	112%		40-150%
19719-28-9	2,4-DCAA	105%		40-150%

ND = Not detected
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-610-SS-006-01		
Lab Sample ID:	F7816-1	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	88.8
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30444.D	1	10/12/00	LAG	10/11/00	OP8367	GEF1754
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	20	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	3.9	ug/kg	
93-76-5	2,4,5-T	ND	3.9	ug/kg	
75-99-0	Dalapon	ND	3.9	ug/kg	
1918-00-9	Dicamba	ND	20	ug/kg	
120-36-5	Dichloroprop	ND	20	ug/kg	
88-85-7	Dinoseb	ND	20	ug/kg	
94-74-6	MCPA	ND	2000	ug/kg	
93-65-2	MCPP	ND	2000	ug/kg	
87-86-5	Pentachlorophenol	ND	2.0	ug/kg	
94-82-6	2,4-DB	ND	20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	115%		40-150%
19719-28-9	2,4-DCAA	111%		40-150%

ND = Not detected
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-610-SS-007-01		
Lab Sample ID:	F7816-25	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	86.1
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30540.D	1	10/26/00	LAG	10/12/00	OP8368	GEF1757
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	21	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	4.2	ug/kg	
93-76-5	2,4,5-T	ND	4.2	ug/kg	
75-99-0	Dalapon	ND	4.2	ug/kg	
1918-00-9	Dicamba	ND	21	ug/kg	
120-36-5	Dichloroprop	ND	21	ug/kg	
88-85-7	Dinoseb	ND	21	ug/kg	
94-74-6	MCPA	ND	2100	ug/kg	
93-65-2	MCPP	ND	2100	ug/kg	
87-86-5	Pentachlorophenol	ND	2.1	ug/kg	
94-82-6	2,4-DB	ND	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	148%		40-150%
19719-28-9	2,4-DCAA	102%		40-150%

ND = Not detected
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-610-SS-008-01		
Lab Sample ID:	F7816-7	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	86.5
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30452.D	1	10/12/00	LAG	10/11/00	OP8367	GEF1754
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	20	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	4.1	ug/kg	
93-76-5	2,4,5-T	ND	4.1	ug/kg	
75-99-0	Dalapon	ND	4.1	ug/kg	
1918-00-9	Dicamba	ND	20	ug/kg	
120-36-5	Dichloroprop	ND	20	ug/kg	
88-85-7	Dinoseb	ND	20	ug/kg	
94-74-6	MCPA	ND	2000	ug/kg	
93-65-2	MCPP	ND	2000	ug/kg	
87-86-5	Pentachlorophenol	ND	2.0	ug/kg	
94-82-6	2,4-DB	ND	20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	119%		40-150%
19719-28-9	2,4-DCAA	106%		40-150%

ND = Not detected
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-610-SS-009-01		
Lab Sample ID:	F7816-19	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	89.3
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30534.D	1	10/26/00	LAG	10/12/00	OP8368	GEF1757
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	20	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	3.9	ug/kg	
93-76-5	2,4,5-T	ND	3.9	ug/kg	
75-99-0	Dalapon	ND	3.9	ug/kg	
1918-00-9	Dicamba	ND	20	ug/kg	
120-36-5	Dichloroprop	ND	20	ug/kg	
88-85-7	Dinoseb	ND	20	ug/kg	
94-74-6	MCPA	ND	2000	ug/kg	
93-65-2	MCPP	ND	2000	ug/kg	
87-86-5	Pentachlorophenol	ND	2.0	ug/kg	
94-82-6	2,4-DB	ND	20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	122%		40-150%
19719-28-9	2,4-DCAA	112%		40-150%

ND = Not detected
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-610-SS-010-01		
Lab Sample ID:	F7816-18	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	87.1
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30533.D	1	10/26/00	LAG	10/12/00	OP8368	GEF1757
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	19	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	3.8	ug/kg	
93-76-5	2,4,5-T	ND	3.8	ug/kg	
75-99-0	Dalapon	ND	3.8	ug/kg	
1918-00-9	Dicamba	ND	19	ug/kg	
120-36-5	Dichloroprop	ND	19	ug/kg	
88-85-7	Dinoseb	ND	19	ug/kg	
94-74-6	MCPA	ND	1900	ug/kg	
93-65-2	MCPP	ND	1900	ug/kg	
87-86-5	Pentachlorophenol	ND	1.9	ug/kg	
94-82-6	2,4-DB	ND	19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	122%		40-150%
19719-28-9	2,4-DCAA	105%		40-150%

ND = Not detected
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-610-SS-011-01		
Lab Sample ID:	F7816-8	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	86.0
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30453.D	1	10/12/00	LAG	10/11/00	OP8367	GEF1754
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	21	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	4.2	ug/kg	
93-76-5	2,4,5-T	ND	4.2	ug/kg	
75-99-0	Dalapon	ND	4.2	ug/kg	
1918-00-9	Dicamba	ND	21	ug/kg	
120-36-5	Dichloroprop	ND	21	ug/kg	
88-85-7	Dinoseb	ND	21	ug/kg	
94-74-6	MCPA	ND	2100	ug/kg	
93-65-2	MCPP	ND	2100	ug/kg	
87-86-5	Pentachlorophenol	ND	2.1	ug/kg	
94-82-6	2,4-DB	ND	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	105%		40-150%
19719-28-9	2,4-DCAA	110%		40-150%

ND = Not detected
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-610-SS-012-01		
Lab Sample ID:	F7816-11	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	89.3
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30456.D	1	10/13/00	LAG	10/11/00	OP8367	GEF1754
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	16	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	3.1	ug/kg	
93-76-5	2,4,5-T	ND	3.1	ug/kg	
75-99-0	Dalapon	ND	3.1	ug/kg	
1918-00-9	Dicamba	ND	16	ug/kg	
120-36-5	Dichloroprop	ND	16	ug/kg	
88-85-7	Dinoseb	ND	16	ug/kg	
94-74-6	MCPA	ND	1600	ug/kg	
93-65-2	MCPP	ND	1600	ug/kg	
87-86-5	Pentachlorophenol	ND	1.6	ug/kg	
94-82-6	2,4-DB	ND	16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	112%		40-150%
19719-28-9	2,4-DCAA	106%		40-150%

ND = Not detected
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-610-SS-013-01		
Lab Sample ID:	F7816-12	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	89.9
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30457.D	1	10/13/00	LAG	10/11/00	OP8367	GEF1754
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	19	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	3.8	ug/kg	
93-76-5	2,4,5-T	ND	3.8	ug/kg	
75-99-0	Dalapon	ND	3.8	ug/kg	
1918-00-9	Dicamba	ND	19	ug/kg	
120-36-5	Dichloroprop	ND	19	ug/kg	
88-85-7	Dinoseb	ND	19	ug/kg	
94-74-6	MCPA	ND	1900	ug/kg	
93-65-2	MCPP	ND	1900	ug/kg	
87-86-5	Pentachlorophenol	ND	1.9	ug/kg	
94-82-6	2,4-DB	ND	19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	103%		40-150%
19719-28-9	2,4-DCAA	108%		40-150%

ND = Not detected
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-610-SS-014-01		
Lab Sample ID:	F7816-16	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	87.8
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30531.D	1	10/26/00	LAG	10/12/00	OP8368	GEF1757
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	21	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	4.2	ug/kg	
93-76-5	2,4,5-T	ND	4.2	ug/kg	
75-99-0	Dalapon	ND	4.2	ug/kg	
1918-00-9	Dicamba	ND	21	ug/kg	
120-36-5	Dichloroprop	ND	21	ug/kg	
88-85-7	Dinoseb	ND	21	ug/kg	
94-74-6	MCPA	ND	2100	ug/kg	
93-65-2	MCPP	ND	2100	ug/kg	
87-86-5	Pentachlorophenol	ND	2.1	ug/kg	
94-82-6	2,4-DB	ND	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	116%		40-150%
19719-28-9	2,4-DCAA	104%		40-150%

ND = Not detected
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-610-SS-015-01		
Lab Sample ID:	F7816-24	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	83.1
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30539.D	1	10/26/00	LAG	10/12/00	OP8368	GEF1757
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	21	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	4.2	ug/kg	
93-76-5	2,4,5-T	ND	4.2	ug/kg	
75-99-0	Dalapon	ND	4.2	ug/kg	
1918-00-9	Dicamba	ND	21	ug/kg	
120-36-5	Dichloroprop	ND	21	ug/kg	
88-85-7	Dinoseb	ND	21	ug/kg	
94-74-6	MCPA	ND	2100	ug/kg	
93-65-2	MCPP	ND	2100	ug/kg	
87-86-5	Pentachlorophenol	ND	2.1	ug/kg	
94-82-6	2,4-DB	ND	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	87%		40-150%
19719-28-9	2,4-DCAA	40%		40-150%

ND = Not detected
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-610-SS-016-01		
Lab Sample ID:	F7816-9	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	82.3
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30454.D	1	10/12/00	LAG	10/11/00	OP8367	GEF1754
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	22	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	4.3	ug/kg	
93-76-5	2,4,5-T	ND	4.3	ug/kg	
75-99-0	Dalapon	ND	4.3	ug/kg	
1918-00-9	Dicamba	ND	22	ug/kg	
120-36-5	Dichloroprop	ND	22	ug/kg	
88-85-7	Dinoseb	ND	22	ug/kg	
94-74-6	MCPA	ND	2200	ug/kg	
93-65-2	MCPP	ND	2200	ug/kg	
87-86-5	Pentachlorophenol	ND	2.2	ug/kg	
94-82-6	2,4-DB	ND	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	119%		40-150%
19719-28-9	2,4-DCAA	109%		40-150%

ND = Not detected
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-610-SS-017-01		
Lab Sample ID:	F7816-17	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	79.0
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30532.D	1	10/26/00	LAG	10/12/00	OP8368	GEF1757
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	21	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	4.2	ug/kg	
93-76-5	2,4,5-T	ND	4.2	ug/kg	
75-99-0	Dalapon	ND	4.2	ug/kg	
1918-00-9	Dicamba	ND	21	ug/kg	
120-36-5	Dichloroprop	ND	21	ug/kg	
88-85-7	Dinoseb	ND	21	ug/kg	
94-74-6	MCPA	ND	2100	ug/kg	
93-65-2	MCPP	ND	2100	ug/kg	
87-86-5	Pentachlorophenol	ND	2.1	ug/kg	
94-82-6	2,4-DB	ND	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	104%		40-150%
19719-28-9	2,4-DCAA	90%		40-150%

ND = Not detected
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-610-SS-018-01		
Lab Sample ID:	F7816-10	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	90.0
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30455.D	1	10/12/00	LAG	10/11/00	OP8367	GEF1754
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	20	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	4.0	ug/kg	
93-76-5	2,4,5-T	ND	4.0	ug/kg	
75-99-0	Dalapon	ND	4.0	ug/kg	
1918-00-9	Dicamba	ND	20	ug/kg	
120-36-5	Dichloroprop	ND	20	ug/kg	
88-85-7	Dinoseb	ND	20	ug/kg	
94-74-6	MCPA	ND	2000	ug/kg	
93-65-2	MCPP	ND	2000	ug/kg	
87-86-5	Pentachlorophenol	ND	2.0	ug/kg	
94-82-6	2,4-DB	ND	20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	102%		40-150%
19719-28-9	2,4-DCAA	105%		40-150%

ND = Not detected
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-610-SS-019-01		
Lab Sample ID:	F7816-13	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	90.4
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30458.D	1	10/13/00	LAG	10/11/00	OP8367	GEF1754
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	18	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	3.6	ug/kg	
93-76-5	2,4,5-T	ND	3.6	ug/kg	
75-99-0	Dalapon	ND	3.6	ug/kg	
1918-00-9	Dicamba	ND	18	ug/kg	
120-36-5	Dichloroprop	ND	18	ug/kg	
88-85-7	Dinoseb	ND	18	ug/kg	
94-74-6	MCPA	ND	1800	ug/kg	
93-65-2	MCPP	ND	1800	ug/kg	
87-86-5	Pentachlorophenol	ND	1.8	ug/kg	
94-82-6	2,4-DB	ND	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	122%		40-150%
19719-28-9	2,4-DCAA	110%		40-150%

ND = Not detected
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-610-SS-020-01		
Lab Sample ID:	F7816-14	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	87.9
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30459.D	1	10/13/00	LAG	10/11/00	OP8367	GEF1754
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	20	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	3.9	ug/kg	
93-76-5	2,4,5-T	ND	3.9	ug/kg	
75-99-0	Dalapon	ND	3.9	ug/kg	
1918-00-9	Dicamba	ND	20	ug/kg	
120-36-5	Dichloroprop	ND	20	ug/kg	
88-85-7	Dinoseb	ND	20	ug/kg	
94-74-6	MCPA	ND	2000	ug/kg	
93-65-2	MCPP	ND	2000	ug/kg	
87-86-5	Pentachlorophenol	ND	2.0	ug/kg	
94-82-6	2,4-DB	ND	20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	106%		40-150%
19719-28-9	2,4-DCAA	103%		40-150%

ND = Not detected
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-610-SS-021-01		
Lab Sample ID:	F7816-23	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	81.0
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30538.D	1	10/26/00	LAG	10/12/00	OP8368	GEF1757
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	20	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	4.0	ug/kg	
93-76-5	2,4,5-T	ND	4.0	ug/kg	
75-99-0	Dalapon	ND	4.0	ug/kg	
1918-00-9	Dicamba	ND	20	ug/kg	
120-36-5	Dichloroprop	ND	20	ug/kg	
88-85-7	Dinoseb	ND	20	ug/kg	
94-74-6	MCPA	ND	2000	ug/kg	
93-65-2	MCPP	ND	2000	ug/kg	
87-86-5	Pentachlorophenol	ND	2.0	ug/kg	
94-82-6	2,4-DB	ND	20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	79%		40-150%
19719-28-9	2,4-DCAA	55%		40-150%

ND = Not detected
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-610-SS-022-01		
Lab Sample ID:	F7816-15	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	88.6
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30460.D	1	10/13/00	LAG	10/11/00	OP8367	GEF1754
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	19	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	3.8	ug/kg	
93-76-5	2,4,5-T	ND	3.8	ug/kg	
75-99-0	Dalapon	ND	3.8	ug/kg	
1918-00-9	Dicamba	ND	19	ug/kg	
120-36-5	Dichloroprop	ND	19	ug/kg	
88-85-7	Dinoseb	ND	19	ug/kg	
94-74-6	MCPA	ND	1900	ug/kg	
93-65-2	MCPP	ND	1900	ug/kg	
87-86-5	Pentachlorophenol	ND	1.9	ug/kg	
94-82-6	2,4-DB	ND	19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	107%		40-150%
19719-28-9	2,4-DCAA	108%		40-150%

ND = Not detected
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-610-SS-023-01		
Lab Sample ID:	F7816-22	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	82.9
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30537.D	1	10/26/00	LAG	10/12/00	OP8368	GEF1757
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	22	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	4.4	ug/kg	
93-76-5	2,4,5-T	ND	4.4	ug/kg	
75-99-0	Dalapon	ND	4.4	ug/kg	
1918-00-9	Dicamba	ND	22	ug/kg	
120-36-5	Dichloroprop	ND	22	ug/kg	
88-85-7	Dinoseb	ND	22	ug/kg	
94-74-6	MCPA	ND	2200	ug/kg	
93-65-2	MCPP	ND	2200	ug/kg	
87-86-5	Pentachlorophenol	ND	2.2	ug/kg	
94-82-6	2,4-DB	ND	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	80%		40-150%
19719-28-9	2,4-DCAA	64%		40-150%

ND = Not detected
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-610-SS-024-01		
Lab Sample ID:	F7816-21	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	82.3
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30536.D	1	10/26/00	LAG	10/12/00	OP8368	GEF1757
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	21	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	4.2	ug/kg	
93-76-5	2,4,5-T	ND	4.2	ug/kg	
75-99-0	Dalapon	ND	4.2	ug/kg	
1918-00-9	Dicamba	ND	21	ug/kg	
120-36-5	Dichloroprop	ND	21	ug/kg	
88-85-7	Dinoseb	ND	21	ug/kg	
94-74-6	MCPA	ND	2100	ug/kg	
93-65-2	MCPP	ND	2100	ug/kg	
87-86-5	Pentachlorophenol	ND	2.1	ug/kg	
94-82-6	2,4-DB	ND	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	66%		40-150%
19719-28-9	2,4-DCAA	50%		40-150%

ND = Not detected
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-610-SS-025-01		
Lab Sample ID:	F7816-20	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	78.1
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30535.D	1	10/26/00	LAG	10/12/00	OP8368	GEF1757
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	23	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	4.6	ug/kg	
93-76-5	2,4,5-T	ND	4.6	ug/kg	
75-99-0	Dalapon	ND	4.6	ug/kg	
1918-00-9	Dicamba	ND	23	ug/kg	
120-36-5	Dichloroprop	ND	23	ug/kg	
88-85-7	Dinoseb	ND	23	ug/kg	
94-74-6	MCPA	ND	2300	ug/kg	
93-65-2	MCPP	ND	2300	ug/kg	
87-86-5	Pentachlorophenol	ND	2.3	ug/kg	
94-82-6	2,4-DB	ND	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	48%		40-150%
19719-28-9	2,4-DCAA	32% [a]		40-150%

(a) Outside control limits due to matrix interference.

ND = Not detected
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-610-SS-DU01		
Lab Sample ID:	F7816-26	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	87.3
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30541.D	1	10/26/00	LAG	10/12/00	OP8368	GEF1757
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	19	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	3.7	ug/kg	
93-76-5	2,4,5-T	ND	3.7	ug/kg	
75-99-0	Dalapon	ND	3.7	ug/kg	
1918-00-9	Dicamba	ND	19	ug/kg	
120-36-5	Dichloroprop	ND	19	ug/kg	
88-85-7	Dinoseb	ND	19	ug/kg	
94-74-6	MCPA	ND	1900	ug/kg	
93-65-2	MCPP	ND	1900	ug/kg	
87-86-5	Pentachlorophenol	ND	1.9	ug/kg	
94-82-6	2,4-DB	ND	19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	104%		40-150%
19719-28-9	2,4-DCAA	87%		40-150%

ND = Not detected
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-610-SS-DU02		
Lab Sample ID:	F7816-27	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	86.7
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30542.D	1	10/26/00	LAG	10/12/00	OP8368	GEF1757
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	19	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	3.9	ug/kg	
93-76-5	2,4,5-T	ND	3.9	ug/kg	
75-99-0	Dalapon	ND	3.9	ug/kg	
1918-00-9	Dicamba	ND	19	ug/kg	
120-36-5	Dichloroprop	ND	19	ug/kg	
88-85-7	Dinoseb	ND	19	ug/kg	
94-74-6	MCPA	ND	1900	ug/kg	
93-65-2	MCPP	ND	1900	ug/kg	
87-86-5	Pentachlorophenol	ND	1.9	ug/kg	
94-82-6	2,4-DB	ND	19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	137%		40-150%
19719-28-9	2,4-DCAA	110%		40-150%

ND = Not detected
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-610-SS-DU03		
Lab Sample ID:	F7816-28	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	81.4
Project:	TETRPAPT: NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30543.D	1	10/26/00	LAG	10/12/00	OP8368	GEF1757
Run #2							

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	21	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	4.2	ug/kg	
93-76-5	2,4,5-T	ND	4.2	ug/kg	
75-99-0	Dalapon	ND	4.2	ug/kg	
1918-00-9	Dicamba	ND	21	ug/kg	
120-36-5	Dichloroprop	ND	21	ug/kg	
88-85-7	Dinoseb	ND	21	ug/kg	
94-74-6	MCPA	ND	2100	ug/kg	
93-65-2	MCPP	ND	2100	ug/kg	
87-86-5	Pentachlorophenol	ND	2.1	ug/kg	
94-82-6	2,4-DB	ND	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	102%		40-150%
19719-28-9	2,4-DCAA	54%		40-150%

ND = Not detected
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-610-SS-001-01		
Lab Sample ID:	F7816-4	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	88.5
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11401.D	1	10/20/00	KP	10/13/00	OP2179	GOP465
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	24.8	9.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	89%		40-140%

ND = Not detected
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-610-SS-002-01		
Lab Sample ID:	F7816-5	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	89.0
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11363.D	1	10/19/00	KP	10/13/00	OP2179	GOP464
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	23.0	9.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	94%		40-140%

ND = Not detected
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-610-SS-003-01		
Lab Sample ID:	F7816-3	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	80.5
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11400.D	1	10/20/00	KP	10/13/00	OP2179	GOP465
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	24.2	10	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	85%		40-140%

ND = Not detected
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-610-SS-004-01		
Lab Sample ID:	F7816-2	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	89.1
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11399.D	1	10/20/00	KP	10/13/00	OP2179	GOP465
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	33.9	9.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	90%		40-140%

ND = Not detected
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-610-SS-005-01		
Lab Sample ID:	F7816-6	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	85.7
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11366.D	4	10/19/00	KP	10/13/00	OP2179	GOP464
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	49.5	39	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	87%		40-140%

ND = Not detected
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-610-SS-006-01		
Lab Sample ID:	F7816-1	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	88.8
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11398.D	1	10/20/00	KP	10/13/00	OP2179	GOP465
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	21.8	9.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	89%		40-140%

ND = Not detected
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-610-SS-007-01		
Lab Sample ID:	F7816-25	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	86.1
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11441.D	1	10/21/00	ME	10/17/00	OP2189	GOP466
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	18.4	9.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	86%		40-140%

ND = Not detected
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-610-SS-008-01		
Lab Sample ID:	F7816-7	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	86.5
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11368.D	4	10/19/00	KP	10/13/00	OP2179	GOP464
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	89.6	38	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	80%		40-140%

ND = Not detected
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-610-SS-009-01		
Lab Sample ID:	F7816-19	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	89.3
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11391.D	1	10/19/00	KP	10/13/00	OP2179	GOP464
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	22.0	9.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	92%		40-140%

ND = Not detected
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-610-SS-010-01		
Lab Sample ID:	F7816-18	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	87.1
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11409.D	1	10/20/00	KP	10/13/00	OP2179	GOP465
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	21.0	9.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	87%		40-140%

ND = Not detected
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-610-SS-011-01		
Lab Sample ID:	F7816-8	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	86.0
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11402.D	1	10/20/00	KP	10/13/00	OP2179	GOP465
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	15.4	9.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	88%		40-140%

ND = Not detected
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-610-SS-012-01		
Lab Sample ID:	F7816-11	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	89.3
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11383.D	1	10/19/00	KP	10/13/00	OP2179	GOP464
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	13.9	9.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	79%		40-140%

ND = Not detected
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-610-SS-013-01		
Lab Sample ID:	F7816-12	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	89.9
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11384.D	1	10/19/00	KP	10/13/00	OP2179	GOP464
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	13.2	9.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	92%		40-140%

ND = Not detected
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-610-SS-014-01		
Lab Sample ID:	F7816-16	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	87.8
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11407.D	1	10/20/00	KP	10/13/00	OP2179	GOP465
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	12.8	9.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	80%		40-140%

ND = Not detected
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-610-SS-015-01		
Lab Sample ID:	F7816-24	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	83.1
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11438.D	10	10/21/00	ME	10/17/00	OP2189	GOP466
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	433	100	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	96%		40-140%

ND = Not detected
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-610-SS-016-01		
Lab Sample ID:	F7816-9	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	82.3
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	OP11370.D	10	10/19/00	KP	10/13/00	OP2179	GOP464
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	119	100	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	93%		40-140%

(a) Dilution required due to matrix interference; extract was viscous.

ND = Not detected
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-610-SS-017-01		
Lab Sample ID:	F7816-17	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	79.0
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11408.D	10	10/20/00	KP	10/13/00	OP2179	GOP465
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	367	100	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	100%		40-140%

ND = Not detected
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-610-SS-018-01		
Lab Sample ID:	F7816-10	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	90.0
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11371.D	1	10/19/00	KP	10/13/00	OP2179	GOP464
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	9.08	9.2	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	88%		40-140%

ND = Not detected
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-610-SS-019-01		
Lab Sample ID:	F7816-13	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	90.4
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11385.D	1	10/19/00	KP	10/13/00	OP2179	GOP464
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	19.0	9.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	90%		40-140%

ND = Not detected
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-610-SS-020-01		
Lab Sample ID:	F7816-14	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	87.9
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11406.D	20	10/20/00	KP	10/13/00	OP2179	GOP465
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	341	190	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	88%		40-140%

ND = Not detected
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-610-SS-021-01		
Lab Sample ID:	F7816-23	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	81.0
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11437.D	10	10/21/00	ME	10/17/00	OP2189	GOP466
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	224	100	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	95%		40-140%

ND = Not detected
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-610-SS-022-01		
Lab Sample ID:	F7816-15	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	88.6
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11387.D	1	10/19/00	KP	10/13/00	OP2179	GOP464
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	18.8	9.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	88%		40-140%

ND = Not detected
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-610-SS-023-01		
Lab Sample ID:	F7816-22	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	82.9
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	OP11436.D	10	10/21/00	ME	10/17/00	OP2189	GOP466
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	129	100	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	97%		40-140%

(a) Dilution required due to matrix interference; extract was viscous.

ND = Not detected
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-610-SS-024-01		
Lab Sample ID:	F7816-21	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	82.3
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11435.D	40	10/21/00	ME	10/17/00	OP2189	GOP466
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	719	400	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	0% [a]		40-140%

(a) Outside control limits due to dilution.

ND = Not detected
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-610-SS-025-01		
Lab Sample ID:	F7816-20	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	78.1
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11410.D	40	10/20/00	KP	10/13/00	OP2179	GOP465
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	695	430	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	0% [a]		40-140%

(a) Outside control limits due to dilution.

ND = Not detected
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-610-SS-DU01		
Lab Sample ID:	F7816-26	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	87.3
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	OP11442.D	2	10/21/00	ME	10/17/00	OP2189	GOP466
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	23.3	19	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	88%		40-140%

(a) Dilution required due to matrix interference; extract was viscous.

ND = Not detected
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-610-SS-DU02		
Lab Sample ID:	F7816-27	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	86.7
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP11443.D	1	10/21/00	ME	10/17/00	OP2189	GOP466
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	ND	9.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	78%		40-140%

ND = Not detected
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-610-SS-DU03		
Lab Sample ID:	F7816-28	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
Method:	FLORIDA-PRO	**Percent Solids:**	81.4
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	OP11444.D	10	10/21/00	ME	10/17/00	OP2189	GOP466
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	128	100	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	96%		40-140%

(a) Dilution required due to matrix interference; extract was viscous.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

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

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO:	**M. SPERANZA**	**DATE:**	**JANUARY 4, 2001**
FROM:	**JENNIFER M. MALLE**	**COPIES:**	**DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION – SELECTED METALS**
CTO-078 NAS CECIL FIELD
SDG- F7816

SAMPLES: 28/Soil/

CEF-610-SS-001-01	CEF-610-SS-002-01	CEF-610-SS-003-01
CEF-610-SS-004-01	CEF-610-SS-005-01	CEF-610-SS-006-01
CEF-610-SS-007-01	CEF-610-SS-008-01	CEF-610-SS-009-01
CEF-610-SS-010-01	CEF-610-SS-011-01	CEF-610-SS-012-01
CEF-610-SS-013-01	CEF-610-SS-014-01	CEF-610-SS-015-01
CEF-610-SS-016-01	CEF-610-SS-017-01	CEF-610-SS-018-01
CEF-610-SS-019-01	CEF-610-SS-020-01	CEF-610-SS-021-01
CEF-610-SS-022-01	CEF-610-SS-023-01	CEF-610-SS-024-01
CEF-610-SS-025-01	CEF-610-SS-DU01	CEF-610-SS-DU02
CEF-610-SS-DU03		

Overview

The sample set for CTO 078, NAS Cecil Field SDG F7816 includes twenty-eight (28) soil environmental samples. Three duplicate pairs were included within this SDG (CEF-610-SS-DU01/CEF-610-SS-001-01, CEF-610-SS-DU02/CEF-610-SS-011-01 and CEF-610-SS-DU03/CEF-610-SS-021-01)

All samples were analyzed for selected metals consisting of arsenic, barium, chromium, selenium and thallium. The samples were collected by Tetra Tech NUS on October 5, 2000 and analyzed by Accutest Laboratories in accordance with Naval Facilities Engineering Service Center (NFESC) Navy Installation Restoration Chemical Data Quality Manual, (September 1999). All metal analyses analyses were conducted using SW846 method 6010B.

The data was evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
• Initial and Continuing Calibration Verifications
• Laboratory Blank Analyses
* • Detection Limits

* - All quality control criteria were met for this parameter.

Laboratory Blank Analyses

The following contaminant was detected in the laboratory method/preparation blanks at the following maximum concentration:

Affected samples : All

Analyte	Maximum Concentration	Action Level (soil)
Arsenic	5.4 ug/L	2.7 mg/kg
Barium	2.0 ug/L	1.0 mg/kg
Chromium	1.7 ug/L	0.85 mg/kg
Selenium	4.8 ug/L	2.4 mg/kg
Thallium	7.0 ug/L	3.5 mg/kg

An action level of 5X the maximum concentration was used to evaluate the sample data for blank contamination. Sample aliquot, percent solids and dilution factors were taken into consideration in evaluation for blank contamination. The positive results less than the action level for arsenic and selenium were qualified as nondetected, "U", for laboratory blank contamination.

Notes

Several continuing calibration verifications (CCVs) for thallium were above the 110% quality control limits. However, all samples within this SDG were nondetected and a positive bias does not affect the data. Therefore validation action was not required.

Executive Summary

Laboratory Performance: Aluminum was present in the laboratory method/preparation blanks.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Review", February 1994 and the NFESC document entitled "Navy IRCDQM" (9/99). The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the NFESC Guidelines and the Quality Assurance Project Plan (QAPP)."

Tetra Tech NUS
Jennifer M. Malle
Environmental Scientist

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

APPENDIX A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration (i.e., % RSDs, %Ds, ICVs, CCVs, RPDs, RRFs, etc.) Noncompliance
D = MS/MSD Noncompliance
E = LCS/LCSD Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS - GFAA MSA's $r < 0.995$
K = ICP Interference - include ICSAB % R's
L = Instrument Calibration Range Exceedance
M = Sample Preservation
N = Internal Standard Noncompliance
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = Pest/PCB D% between columns for positive results
V = Non-linear calibrations, tuning $r < 0.995$ (correlation coefficient)
W = EMPC result
X = Signal to noise response drop
Y = % Solid content is less than 30%

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F7816

SAMPLE NUMBER:	CEF-610-SS-001-01			CEF-610-SS-002-01			CEF-610-SS-003-01			CEF-610-SS-004-01		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-4			F7816-5			F7816-3			F7816-2		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	88.5 %			89.0 %			80.5 %			89.1 %		
UNITS:	MG/KG			MG/KG			MG/KG			MG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
INORGANICS												
ARSENIC	0.55	U	A	0.57	U	A	0.41	U		0.34	U	
BARIUM	9.9			7.4			11.6			7.3		
CHROMIUM	3.6			3.0			3.7			2.1		
SELENIUM	0.26	U		0.29	U		0.33	U	A	0.27	U	
THALLIUM	0.22	U		0.24	U		0.27	U		0.23	U	

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F7816

SAMPLE NUMBER:	CEF-610-SS-005-01			CEF-610-SS-006-01			CEF-610-SS-007-01			CEF-610-SS-008-01		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-6			F7816-1			F7816-25			F7816-7		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	85.7 %			88.8 %			86.1 %			86.5 %		
UNITS:	MG/KG			MG/KG			MG/KG			MG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
INORGANICS												
ARSENIC	0.75	U	A	0.59	U	A	0.65	U	A	0.63	U	A
BARIUM	11.8			8.3			11.5			10.8		
CHROMIUM	6.3			4.1			12.7			5.0		
SELENIUM	0.63	U	A	0.32	U	A	1.1	U	A	0.29	U	
THALLIUM	0.20	U		0.23	U		0.25	U		0.24	U	

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F7816

SAMPLE NUMBER:	CEF-610-SS-009-01			CEF-610-SS-010-01			CEF-610-SS-011-01			CEF-610-SS-012-01		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-19			F7816-18			F7816-8			F7816-11		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	89.3 %			87.1 %			86.0 %			89.3 %		
UNITS:	MG/KG			MG/KG			MG/KG			MG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
INORGANICS												
ARSENIC	0.39	U	A	0.32	U		0.35	U	A	0.36	U	
BARIUM	10.7			7.1			5.4			7.6		
CHROMIUM	1.6			4.9			2.7			1.5		
SELENIUM	0.27	U		0.25	U		0.23	U		0.28	U	
THALLIUM	0.22	U		0.21	U		0.19	U		0.23	U	

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F7816

SAMPLE NUMBER:	CEF-610-SS-013-01			CEF-610-SS-014-01			CEF-610-SS-015-01			CEF-610-SS-016-01		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-12			F7816-16			F7816-24			F7816-9		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	89.9 %			87.8 %			83.1 %			82.3 %		
UNITS:	MG/KG			MG/KG			MG/KG			MG/KG		
FIELD DUPLICATE OF:												
	RESULT	**QUAL**	**CODE**	**RESULT**	**QUAL**	**CODE**	**RESULT**	**QUAL**	**CODE**	**RESULT**	**QUAL**	**CODE**
INORGANICS												
ARSENIC	0.37	U		0.75	U	A	1.6	U	A	0.65	U	A
BARIUM	9.0			9.1			112			22.0		
CHROMIUM	1.3			4.0			10.2			5.1		
SELENIUM	0.29	U		0.24	U		0.26	U		0.58	U	A
THALLIUM	0.24	U		0.20	U		0.21	U		0.24	U	

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F7816

SAMPLE NUMBER:	CEF-610-SS-017-01			CEF-610-SS-018-01			CEF-610-SS-019-01			CEF-610-SS-020-01		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-17			F7816-10			F7816-13			F7816-14		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	79.0 %			90.0 %			90.4 %			87.9 %		
UNITS:	MG/KG			MG/KG			MG/KG			MG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
INORGANICS												
ARSENIC	0.51	U	A	0.36	U	A	0.39	U	A	1.8	U	A
BARIUM	17.2			8.9			16.3			30.8		
CHROMIUM	14.0			1.3			7.6			9.8		
SELENIUM	0.32	U		0.28	U		0.29	U	A	0.30	U	
THALLIUM	0.26	U		0.23	U		0.23	U		0.25	U	

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F7816

SAMPLE NUMBER:	CEF-610-SS-021-01			CEF-610-SS-022-01			CEF-610-SS-023-01			CEF-610-SS-024-01		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-23			F7816-15			F7816-22			F7816-21		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	81.0 %			88.6 %			82.9 %			82.3 %		
UNITS:	MG/KG			MG/KG			MG/KG			MG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
INORGANICS												
ARSENIC	0.80	U	A	0.35	U		0.59	U	A	1.0	U	A
BARIUM	19.1			7.0			19.8			34.8		
CHROMIUM	11.8			4.5			53.4			11.4		
SELENIUM	0.59	U	A	0.27	U		0.55	U	A	0.28	U	
THALLIUM	0.23	U		0.23	U		0.25	U		0.23	U	

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F7816

SAMPLE NUMBER:	CEF-610-SS-025-01			CEF-610-SS-DU01			CEF-610-SS-DU02			CEF-610-SS-DU03		
SAMPLE DATE:	10/05/00			10/05/00			10/05/00			10/05/00		
LABORATORY ID:	F7816-20			F7816-26			F7816-27			F7816-28		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	78.1 %			87.3 %			86.7 %			81.4 %		
UNITS:	MG/KG			MG/KG			MG/KG			MG/KG		
FIELD DUPLICATE OF:				CEF-610-SS-001-01			CEF-610-SS-011-01			CEF-610-SS-021-01		
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
INORGANICS												
ARSENIC	1.9	U	A	0.49	U	A	0.47	U	A	1.2	U	A
BARIUM	50.7			12.6			5.6			50.9		
CHROMIUM	9.6			5.3			2.8			10.9		
SELENIUM	0.34	U		0.30	U		0.53	U	A	0.40	U	A
THALLIUM	0.28	U		0.25	U		0.24	U		0.26	U	

APPENDIX B

Results as Reported by the Laboratory

Report of Analysis

Client Sample ID:	CEF-610-SS-001-01		
Lab Sample ID:	F7816-4	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	88.5
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By		Method
Arsenic	0.55	0.52	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Barium	9.9 B	20.9	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Chromium	3.6	1.0	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Selenium	0.26 U	10.5	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Thallium	0.22 U	1.0	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CEF-610-SS-002-01		
Lab Sample ID:	F7816-5	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	89.0
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By		Method
Arsenic	0.57 B	0.57	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Barium	7.4 B	22.9	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Chromium	3.0	1.1	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Selenium	0.29 U	11.5	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Thallium	0.24 U	1.1	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CEF-610-SS-003-01		
Lab Sample ID:	F7816-3	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	80.5
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By		Method
Arsenic	0.41 U	0.65	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Barium	11.6 B	25.9	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Chromium	3.7	1.3	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Selenium	0.33 B	12.9	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Thallium	0.27 U	1.3	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CEF-610-SS-004-01		
Lab Sample ID:	F7816-2	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	89.1
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By		Method
Arsenic	0.34 U	0.54	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Barium	7.3 B	21.8	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Chromium	2.1	1.1	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Selenium	0.27 U	10.9	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Thallium	0.23 U	1.1	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CEF-610-SS-005-01		
Lab Sample ID:	F7816-6	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	85.7
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By		Method
Arsenic	0.75	0.47	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Barium	11.8 B	19.0	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Chromium	6.3	0.95	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Selenium	0.63 B	9.5	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Thallium	0.20 U	0.95	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CEF-610-SS-006-01		
Lab Sample ID:	F7816-1	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	88.8
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By		Method
Arsenic	0.59	0.56	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Barium	8.3 B	22.5	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Chromium	4.1	1.1	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Selenium	0.32 B	11.3	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Thallium	0.23 U	1.1	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CEF-610-SS-007-01		
Lab Sample ID:	F7816-25	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	86.1
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By		Method
Arsenic	0.65	0.59	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Barium	11.5 B	23.7	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Chromium	12.7	1.2	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Selenium	1.1 B	11.9	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Thallium	0.25 U	4.8	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CEF-610-SS-008-01		
Lab Sample ID:	F7816-7	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	86.5
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By		Method
Arsenic	0.63	0.58	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Barium	10.8 B	23.1	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Chromium	5.0	1.2	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Selenium	0.29 U	11.6	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Thallium	0.24 U	1.2	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CEF-610-SS-009-01		
Lab Sample ID:	F7816-19	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	89.3
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By		Method
Arsenic	0.39 B	0.53	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Barium	10.7 B	21.3	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Chromium	1.6	1.1	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Selenium	0.27 U	10.7	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Thallium	0.22 U	1.1	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CEF-610-SS-010-01		
Lab Sample ID:	F7816-18	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	87.1
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By		Method
Arsenic	0.32 U	0.51	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Barium	7.1 B	20.3	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Chromium	4.9	1.0	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Selenium	0.25 U	10.2	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Thallium	0.21 U	1.0	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CEF-610-SS-011-01		
Lab Sample ID:	F7816-8	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	86.0
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method
Arsenic	0.35 B	0.47	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Barium	5.4 B	18.6	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Chromium	2.7	0.93	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Selenium	0.23 U	9.3	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Thallium	0.19 U	0.93	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CEF-610-SS-012-01		
Lab Sample ID:	F7816-11	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	89.3
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method
Arsenic	0.36 U	0.57	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Barium	7.6 B	22.6	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Chromium	1.5	1.1	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Selenium	0.28 U	11.3	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Thallium	0.23 U	1.1	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CEF-610-SS-013-01		
Lab Sample ID:	F7816-12	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	89.9
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method
Arsenic	0.37 U	0.59	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Barium	9.0 B	23.4	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Chromium	1.3	1.2	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Selenium	0.29 U	11.7	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Thallium	0.24 U	1.2	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CEF-610-SS-014-01		
Lab Sample ID:	F7816-16	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	87.8
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By		Method
Arsenic	0.75	0.48	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Barium	9.1 B	19.3	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Chromium	4.0	0.97	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Selenium	0.24 U	9.7	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Thallium	0.20 U	0.97	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CEF-610-SS-015-01		
Lab Sample ID:	F7816-24	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	83.1
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method
Arsenic	1.6	0.51	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Barium	112	20.6	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Chromium	10.2	1.0	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Selenium	0.26 U	10.3	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Thallium	0.21 U	3.0	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CEF-610-SS-016-01		
Lab Sample ID:	F7816-9	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	82.3
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By		Method
Arsenic	0.65	0.58	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Barium	22.0 B	23.4	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Chromium	5.1	1.2	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Selenium	0.58 B	11.7	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Thallium	0.24 U	1.2	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CEF-610-SS-017-01		
Lab Sample ID:	F7816-17	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	79.0
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method
Arsenic	0.51 B	0.63	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Barium	17.2 B	25.3	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Chromium	14.0	1.3	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Selenium	0.32 U	12.7	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Thallium	0.26 U	1.3	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CEF-610-SS-018-01		
Lab Sample ID:	F7816-10	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	90.0
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By		Method
Arsenic	0.36 B	0.56	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Barium	8.9 B	22.4	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Chromium	1.3	1.1	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Selenium	0.28 U	11.2	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Thallium	0.23 U	1.1	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CEF-610-SS-019-01		
Lab Sample ID:	F7816-13	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	90.4
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By		Method
Arsenic	0.39 B	0.55	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Barium	16.3 B	21.9	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Chromium	7.6	1.1	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Selenium	0.29 B	11.0	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Thallium	0.23 U	1.1	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CEF-610-SS-020-01		
Lab Sample ID:	F7816-14	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	87.9
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method
Arsenic	1.8	0.60	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Barium	30.8	24.0	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Chromium	9.8	1.2	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Selenium	0.30 U	12.0	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Thallium	0.25 U	1.2	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CEF-610-SS-021-01		
Lab Sample ID:	F7816-23	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	81.0
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method
Arsenic	0.80	0.56	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Barium	19.1 B	22.4	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Chromium	11.8	1.1	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Selenium	0.59 B	11.2	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Thallium	0.23 U	4.4	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CEF-610-SS-022-01		
Lab Sample ID:	F7816-15	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	88.6
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By		Method
Arsenic	0.35 U	0.55	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Barium	7.0 B	21.9	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Chromium	4.5	1.1	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Selenium	0.27 U	11.0	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Thallium	0.23 U	1.1	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CEF-610-SS-023-01		
Lab Sample ID:	F7816-22	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	82.9
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method
Arsenic	0.59 B	0.60	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Barium	19.8 B	24.1	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Chromium	53.4	1.2	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Selenium	0.55 B	12.1	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Thallium	0.25 U	3.6	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CEF-610-SS-024-01		
Lab Sample ID:	F7816-21	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	82.3
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method
Arsenic	1.0	0.55	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Barium	34.8	22.1	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Chromium	11.4	1.1	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Selenium	0.28 U	11.0	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Thallium	0.23 U	4.4	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CEF-610-SS-025-01		
Lab Sample ID:	F7816-20	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	78.1
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By		Method
Arsenic	1.9	0.67	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Barium	50.7	27.0	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Chromium	9.6	1.3	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Selenium	0.34 U	13.5	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B
Thallium	0.28 U	1.3	mg/kg	1	10/10/00	10/11/00	JK	SW846 6010B

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CEF-610-SS-DU01		
Lab Sample ID:	F7816-26	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	87.3
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method
Arsenic	0.49 B	0.60	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Barium	12.6 B	23.9	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Chromium	5.3	1.2	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Selenium	0.30 U	11.9	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Thallium	0.25 U	2.4	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CEF-610-SS-DU02		
Lab Sample ID:	F7816-27	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	86.7
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method
Arsenic	0.47 B	0.58	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Barium	5.6 B	23.3	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Chromium	2.8	1.2	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Selenium	0.53 B	11.7	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Thallium	0.24 U	2.4	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CEF-610-SS-DU03		
Lab Sample ID:	F7816-28	**Date Sampled:**	10/05/00
Matrix:	SO - Soil	**Date Received:**	10/06/00
		Percent Solids:	81.4
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By		Method
Arsenic	1.2	0.62	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Barium	50.9	24.8	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Chromium	10.9	1.2	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Selenium	0.40 B	12.4	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B
Thallium	0.26 U	7.2	mg/kg	1	10/12/00	10/18/00	JK	SW846 6010B

RL = Reporting Limit

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO: **MARK SPERANZA** **DATE: APRIL 4, 2001**

FROM: **SETH STAFFEN** **CC: DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – PAH/TPH**
CTO 078 – NAS CECIL FIELD
SDG F8436

SAMPLES: 27/Surface Soil

CEF-610-SS-101-01	CEF-610-SS-112-01	CEF-610-SS-125-01
CEF-610-SS-102-01	CEF-610-SS-114-01	CEF-610-SS-126-01
CEF-610-SS-103-01	CEF-610-SS-115-01	CEF-610-SS-DUP1-01
CEF-610-SS-104-01	CEF-610-SS-116-01	CEF-610-SS-DUP2-01
CEF-610-SS-105-01	CEF-610-SS-117-01	CEF-610-SS-DUP3-01
CEF-610-SS-106-01	CEF-610-SS-118-01	
CEF-610-SS-107-01	CEF-610-SS-120-01	
CEF-610-SS-108-01	CEF-610-SS-121-01	
CEF-610-SS-109-01	CEF-610-SS-122-01	
CEF-610-SS-110-01	CEF-610-SS-123-01	
CEF-610-SS-111-01	CEF-610-SS-124-01	

OVERVIEW

The sample set for CTO 078, SDG F8436 Naval Air Station (NAS) Cecil Field; Florida consists of twenty-seven (27) surface soil environmental samples. All the samples were analyzed for Polynuclear Aromatic Hydrocarbon and nine samples analyzed for Total Petroleum Hydrocarbon organic compounds. Three (3) field duplicate pairs were included within this SDG (CEF-610-SS-114-01 / CEF-610-SS-DUP1-01) (CEF-610-SS-122-01 / CEF-610-SS-DUP2-01) (CEF-610-SS-106-01 / CEF-610-SS-DUP3-01).

The samples were collected by Tetra Tech, NUS on December 18th, 2000 and analyzed by Accutest Laboratories. All analyses were performed in accordance with Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria and analyzed according to SW 846 Method 8310 and Florida PRO analytical and reporting protocols. The data in this SDG was validated with regard to the following parameters:

* • Data Completeness
* • Holding Times
* • Initial/continuing calibrations
* • Field Duplicate Results
* • Laboratory method/field quality control blank results
* • Detection Limits

The symbol (*) indicates that all quality control criteria were met for this parameter. Problems affecting data quality are discussed below; documentation supporting these findings is presented in Appendix C. Qualified analytical results are presented in Appendix A.

PAH FRACTION

All data quality parameters were met for this fraction.

TPH FRACTION

All data quality parameters were met for this fraction.

ADDITIONAL COMMENTS

Several samples contained positive results for compounds below the reporting limits. These results were qualified as estimated (J).

EXECUTIVE SUMMARY

Laboratory performance: None.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (October 1999) and the NFESC guidelines "Navy IRCDQM" (September 1999). The text of this report has been formulated to address only those problems affecting data quality.

"I attest that the data referenced herein was validated according to the agreed upon validation criteria as specified in the NFESC Guidelines and the Quality Assurance Project Plan (QAPP)."

Seth Staffen

Chemist/Data Validator
Tetra Tech, NUS

Joseph A. Samchuck

Data Validation Quality Assurance Officer
Tetra Tech, NUS

Attachments:
1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration (i.e., % RSDs, %Ds, ICVs, CCVs, RPDs, RRFs, etc.) Noncompliance
D = MS/MSD Noncompliance
E = LCS/LCSD Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS - GFAA MSA's $r < 0.995$
K = ICP Interference - include ICSAB % R's
L = Instrument Calibration Range Exceedance
M = Sample Preservation
N = Internal Standard Noncompliance
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = Pest/PCD% between columns for positive results
V = Non-linear calibrations, tuning $r < 0.995$ (correlation coefficient)
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is less than sample activity

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F8436

SAMPLE NUMBER:	CEF-610-SS-101-01			CEF-610-SS-102-01			CEF-610-SS-103-01			CEF-610-SS-104-01		
SAMPLE DATE:	12/18/00			12/18/00			12/18/00			12/18/00		
LABORATORY ID:	F8436-17			F8436-16			F8436-18			F8436-19		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	92.6 %			86.3 %			91.4 %			90.8 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
POLYNUCLEAR AROMATIC HYDROCARBONS												
1-METHYLNAPHTHALENE	360	U		390	U		360	U		370	U	
2-METHYLNAPHTHALENE	360	U		390	U		360	U		370	U	
ACENAPHTHENE	720	U		770	U		730	U		730	U	
ACENAPHTHYLENE	720	U		770	U		730	U		730	U	
ANTHRACENE	360	U		390	U		360	U		370	U	
BENZO(A)ANTHRACENE	360	U		390	U		360	U		370	U	
BENZO(A)PYRENE	72	U		77	U		73	U		73	U	
BENZO(B)FLUORANTHENE	72	U		77	U		73	U		73	U	
BENZO(G,H,I)PERYLENE	72	U		77	U		35.5	J	P	73	U	
BENZO(K)FLUORANTHENE	72	U		77	U		73	U		73	U	
CHRYSENE	360	U		390	U		360	U		370	U	
DIBENZO(A,H)ANTHRACENE	72	U		77	U		73	U		73	U	
FLUORANTHENE	360	U		390	U		360	U		370	U	
FLUORENE	360	U		390	U		360	U		370	U	
INDENO(1,2,3-CD)PYRENE	72	U		77	U		37.2	J	P	73	U	
NAPHTHALENE	360	U		390	U		360	U		370	U	
PHENANTHRENE	360	U		390	U		360	U		370	U	
PYRENE	360	U		390	U		360	U		370	U	

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F8436

SAMPLE NUMBER:	CEF-610-SS-105-01			CEF-610-SS-106-01			CEF-610-SS-107-01			CEF-610-SS-108-01		
SAMPLE DATE:	12/18/00			12/18/00			12/18/00			12/18/00		
LABORATORY ID:	F8436-27			F8436-26			F8436-25			F8436-24		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	86.1 %			88.9 %			91.0 %			89.1 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
POLYNUCLEAR AROMATIC HYDROCARBONS												
1-METHYLNAPHTHALENE	390	U		380	U		370	U		370	U	
2-METHYLNAPHTHALENE	390	U		380	U		370	U		370	U	
ACENAPHTHENE	770	U		750	U		730	U		750	U	
ACENAPHTHYLENE	770	U		750	U		730	U		750	U	
ANTHRACENE	390	U		380	U		370	U		370	U	
BENZO(A)ANTHRACENE	390	U		380	U		370	U		370	U	
BENZO(A)PYRENE	87.4			103			73	U		75	U	
BENZO(B)FLUORANTHENE	99			108			73	U		75	U	
BENZO(G,H,I)PERYLENE	62.4	J	P	74.9	J	P	73	U		75	U	
BENZO(K)FLUORANTHENE	81.8			59.1	J	P	73	U		75	U	
CHRYSENE	390	U		380	U		370	U		370	U	
DIBENZO(A,H)ANTHRACENE	77	U		75	U		73	U		75	U	
FLUORANTHENE	390	U		380	U		370	U		370	U	
FLUORENE	390	U		380	U		370	U		370	U	
INDENO(1,2,3-CD)PYRENE	82			80.3			73	U		75	U	
NAPHTHALENE	390	U		380	U		370	U		370	U	
PHENANTHRENE	390	U		380	U		370	U		370	U	
PYRENE	390	U		380	U		370	U		370	U	

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F8436

SAMPLE NUMBER:	CEF-610-SS-109-01			CEF-610-SS-110-01			CEF-610-SS-111-01			CEF-610-SS-112-01		
SAMPLE DATE:	12/18/00			12/18/00			12/18/00			12/18/00		
LABORATORY ID:	F8436-23			F8436-22			F8436-21			F8436-20		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	92.2 %			93.2 %			82.2 %			91.4 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
POLYNUCLEAR AROMATIC HYDROCARBONS												
1-METHYLNAPHTHALENE	360	U		360	U		400	U		360	U	
2-METHYLNAPHTHALENE	360	U		360	U		400	U		360	U	
ACENAPHTHENE	720	U		720	U		810	U		730	U	
ACENAPHTHYLENE	720	U		720	U		810	U		730	U	
ANTHRACENE	360	U		360	U		400	U		360	U	
BENZO(A)ANTHRACENE	360	U		360	U		400	U		360	U	
BENZO(A)PYRENE	72	U		39.8	J	P	81	U		73	U	
BENZO(B)FLUORANTHENE	72	U		72	U		81	U		73	U	
BENZO(G,H,I)PERYLENE	72	U		36.4	J	P	81	U		73	U	
BENZO(K)FLUORANTHENE	72	U		72	U		81	U		73	U	
CHRYSENE	360	U		360	U		400	U		360	U	
DIBENZO(A,H)ANTHRACENE	72	U		72	U		81	U		73	U	
FLUORANTHENE	360	U		360	U		400	U		360	U	
FLUORENE	360	U		360	U		400	U		360	U	
INDENO(1,2,3-CD)PYRENE	72	U		34.1	J	P	81	U		73	U	
NAPHTHALENE	360	U		360	U		400	U		360	U	
PHENANTHRENE	360	U		360	U		400	U		360	U	
PYRENE	360	U		360	U		400	U		360	U	

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F8436

SAMPLE NUMBER:	CEF-610-SS-114-01			CEF-610-SS-115-01			CEF-610-SS-116-01			CEF-610-SS-117-01		
SAMPLE DATE:	12/18/00			12/18/00			12/18/00			12/18/00		
LABORATORY ID:	F8436-8			F8436-7			F8436-5			F8436-4		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	86.0 %			85.8 %			92.2 %			89.8 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
POLYNUCLEAR AROMATIC HYDROCARBONS												
1-METHYLNAPHTHALENE	390	U		390	U		360	U		370	U	
2-METHYLNAPHTHALENE	390	U		390	U		360	U		370	U	
ACENAPHTHENE	780	U		780	U		720	U		740	U	
ACENAPHTHYLENE	780	U		780	U		720	U		740	U	
ANTHRACENE	390	U		390	U		360	U		370	U	
BENZO(A)ANTHRACENE	390	U		390	U		79.6	J	P	370	U	
BENZO(A)PYRENE	78	U		78	U		146			74	U	
BENZO(B)FLUORANTHENE	78	U		78	U		135			74	U	
BENZO(G,H,I)PERYLENE	78	U		78	U		172			74	U	
BENZO(K)FLUORANTHENE	78	U		78	U		67.1	J	P	74	U	
CHRYSENE	390	U		390	U		77.6	J	P	370	U	
DIBENZO(A,H)ANTHRACENE	78	U		78	U		72	U		74	U	
FLUORANTHENE	390	U		390	U		81.1	J	P	370	U	
FLUORENE	390	U		390	U		360	U		370	U	
INDENO(1,2,3-CD)PYRENE	78	U		78	U		186			74	U	
NAPHTHALENE	390	U		390	U		360	U		370	U	
PHENANTHRENE	390	U		390	U		360	U		370	U	
PYRENE	390	U		390	U		129	J	P	370	U	

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F8436

SAMPLE NUMBER:	CEF-610-SS-118-01			CEF-610-SS-120-01			CEF-610-SS-121-01			CEF-610-SS-122-01		
SAMPLE DATE:	12/18/00			12/18/00			12/18/00			12/18/00		
LABORATORY ID:	F8436-6			F8436-9			F8436-12			F8436-10		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	90.4 %			92.7 %			76.0 %			91.2 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
POLYNUCLEAR AROMATIC HYDROCARBONS												
1-METHYLNAPHTHALENE	370	U		360	U		440	U		360	U	
2-METHYLNAPHTHALENE	370	U		360	U		440	U		360	U	
ACENAPHTHENE	740	U		720	U		880	U		730	U	
ACENAPHTHYLENE	740	U		720	U		880	U		730	U	
ANTHRACENE	370	U		360	U		440	U		360	U	
BENZO(A)ANTHRACENE	370	U		360	U		440	U		360	U	
BENZO(A)PYRENE	74	U		72	U		88	U		25.6	J	P
BENZO(B)FLUORANTHENE	74	U		72	U		88	U		26.3	J	P
BENZO(G,H,I)PERYLENE	74	U		72	U		88	U		23.2	J	P
BENZO(K)FLUORANTHENE	74	U		72	U		88	U		73	U	
CHRYSENE	370	U		360	U		440	U		360	U	
DIBENZO(A,H)ANTHRACENE	74	U		72	U		88	U		73	U	
FLUORANTHENE	370	U		360	U		440	U		360	U	
FLUORENE	370	U		360	U		440	U		360	U	
INDENO(1,2,3-CD)PYRENE	74	U		72	U		88	U		25	J	P
NAPHTHALENE	370	U		360	U		440	U		360	U	
PHENANTHRENE	370	U		360	U		440	U		360	U	
PYRENE	370	U		360	U		440	U		360	U	

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F8436

SAMPLE NUMBER:	CEF-610-SS-123-01			CEF-610-SS-124-01			CEF-610-SS-125-01			CEF-610-SS-126-01		
SAMPLE DATE:	12/18/00			12/18/00			12/18/00			12/18/00		
LABORATORY ID:	F8436-11			F8436-15			F8436-13			F8436-14		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	89.1 %			74.2 %			92.6 %			93.4 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
POLYNUCLEAR AROMATIC HYDROCARBONS												
1-METHYLNAPHTHALENE	370	U		450	U		360	U		360	U	
2-METHYLNAPHTHALENE	370	U		450	U		360	U		360	U	
ACENAPHTHENE	750	U		900	U		720	U		710	U	
ACENAPHTHYLENE	750	U		900	U		720	U		710	U	
ANTHRACENE	370	U		450	U		360	U		360	U	
BENZO(A)ANTHRACENE	349	J	P	632			93.2	J	P	360	U	
BENZO(A)PYRENE	291			763			135			71	U	
BENZO(B)FLUORANTHENE	281			528			119			71	U	
BENZO(G,H,I)PERYLENE	291			665			172			71	U	
BENZO(K)FLUORANTHENE	206			336			71.1	J	P	71	U	
CHRYSENE	356	J	P	456			88.2	J	P	360	U	
DIBENZO(A,H)ANTHRACENE	75	U		90	U		72	U		71	U	
FLUORANTHENE	578			562			360	U		360	U	
FLUORENE	370	U		450	U		360	U		360	U	
INDENO(1,2,3-CD)PYRENE	330			845			171			71	U	
NAPHTHALENE	370	U		450	U		360	U		360	U	
PHENANTHRENE	370	U		450	U		360	U		360	U	
PYRENE	488			495			360	U		360	U	

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F8436

SAMPLE NUMBER:	CEF-610-SS-DUP1-01			CEF-610-SS-DUP2-01			CEF-610-SS-DUP3-01					
SAMPLE DATE:	12/18/00			12/18/00			12/18/00			/ /		
LABORATORY ID:	F8436-1			F8436-2			F8436-28					
QC_TYPE:	NORMAL			NORMAL			NORMAL					
% SOLIDS:	91.5 %			78.8 %			86.2 %			100.0 %		
UNITS:	UG/KG			UG/KG			UG/KG					
FIELD DUPLICATE OF:	CEF-610-SS-114-01			CEF-610-SS-122-01			CEF-610-SS-106-01					
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
POLYNUCLEAR AROMATIC HYDROCARBONS												
1-METHYLNAPHTHALENE	360	U		420	U		390	U				
2-METHYLNAPHTHALENE	360	U		420	U		390	U				
ACENAPHTHENE	730	U		850	U		770	U				
ACENAPHTHYLENE	730	U		850	U		770	U				
ANTHRACENE	360	U		420	U		390	U				
BENZO(A)ANTHRACENE	80.7	J	P	420	U		390	U				
BENZO(A)PYRENE	88.2			32.3	J	P	286					
BENZO(B)FLUORANTHENE	58.9	J	P	35.2	J	P	254					
BENZO(G,H,I)PERYLENE	75.4			30.5	J	P	184					
BENZO(K)FLUORANTHENE	41.7	J	P	85	U		149					
CHRYSENE	83.7	J	P	420	U		390	U				
DIBENZO(A,H)ANTHRACENE	73	U		85	U		77	U				
FLUORANTHENE	142	J	P	420	U		390	U				
FLUORENE	360	U		420	U		390	U				
INDENO(1,2,3-CD)PYRENE	67.4	J	P	36.7	J	P	190					
NAPHTHALENE	360	U		420	U		390	U				
PHENANTHRENE	360	U		420	U		390	U				
PYRENE	109	J	P	420	U		390	U				

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F8436

SAMPLE NUMBER:	CEF-610-SS-103-01			CEF-610-SS-104-01			CEF-610-SS-105-01			CEF-610-SS-106-01		
SAMPLE DATE:	12/18/00			12/18/00			12/18/00			12/18/00		
LABORATORY ID:	F8436-18			F8436-19			F8436-27			F8436-26		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	91.4 %			90.8 %			86.1 %			88.9 %		
UNITS:	MG/KG			MG/KG			MG/KG			MG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
TOTAL PETROLEUM HYDROCARBONS	9.1	U		20			141			147		

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F8436

SAMPLE NUMBER:	CEF-610-SS-107-01			CEF-610-SS-111-01			CEF-610-SS-112-01			CEF-610-SS-126-01		
SAMPLE DATE:	12/18/00			12/18/00			12/18/00			12/18/00		
LABORATORY ID:	F8436-25			F8436-21			F8436-20			F8436-14		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	91.0 %			82.2 %			91.4 %			93.4 %		
UNITS:	MG/KG			MG/KG			MG/KG			MG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
TOTAL PETROLEUM HYDROCARBONS	29.1			22.7			10.2			7.41	J	P

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F8436

SAMPLE NUMBER:	CEF-610-SS-DUP3-01			
SAMPLE DATE:	12/18/00	/ /	/ /	/ /
LABORATORY ID:	F8436-28			
QC_TYPE:	NORMAL			
% SOLIDS:	86.2 %	100.0 %	100.0 %	100.0 %
UNITS:	MG/KG			
FIELD DUPLICATE OF:	CEF-610-SS-106-01			

	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
TOTAL PETROLEUM HYDROCARBONS	128											

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

Report of Analysis

Client Sample ID:	CEF-610-SS-DUP1-01		
Lab Sample ID:	F8436-1	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	91.5
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA005814.D	1	12/22/00	MRE	12/21/00	OP2470	GAA207
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	730	ug/kg	
208-96-8	Acenaphthylene	ND	730	ug/kg	
120-12-7	Anthracene	ND	360	ug/kg	
56-55-3	Benzo(a)anthracene	80.7	360	ug/kg	J
50-32-8	Benzo(a)pyrene	88.2	73	ug/kg	
205-99-2	Benzo(b)fluoranthene	58.9	73	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	75.4	73	ug/kg	
207-08-9	Benzo(k)fluoranthene	41.7	73	ug/kg	J
218-01-9	Chrysene	83.7	360	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND	73	ug/kg	
206-44-0	Fluoranthene	142	360	ug/kg	J
86-73-7	Fluorene	ND	360	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	67.4	73	ug/kg	J
91-20-3	Naphthalene	ND	360	ug/kg	
90-12-0	1-Methylnaphthalene	ND	360	ug/kg	
91-57-6	2-Methylnaphthalene	ND	360	ug/kg	
85-01-8	Phenanthrene	ND	360	ug/kg	
129-00-0	Pyrene	109	360	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	89%		22-130%
92-94-4	p-Terphenyl	97%		53-130%

ND = Not detected
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-610-SS-DUP2-01		
Lab Sample ID:	F8436-2	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	78.8
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA005815.D	1	12/22/00	MRE	12/21/00	OP2470	GAA207
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	850	ug/kg	
208-96-8	Acenaphthylene	ND	850	ug/kg	
120-12-7	Anthracene	ND	420	ug/kg	
56-55-3	Benzo(a)anthracene	ND	420	ug/kg	
50-32-8	Benzo(a)pyrene	32.3	85	ug/kg	J
205-99-2	Benzo(b)fluoranthene	35.2	85	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	30.5	85	ug/kg	J
207-08-9	Benzo(k)fluoranthene	ND	85	ug/kg	
218-01-9	Chrysene	ND	420	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	85	ug/kg	
206-44-0	Fluoranthene	ND	420	ug/kg	
86-73-7	Fluorene	ND	420	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	36.7	85	ug/kg	J
91-20-3	Naphthalene	ND	420	ug/kg	
90-12-0	1-Methylnaphthalene	ND	420	ug/kg	
91-57-6	2-Methylnaphthalene	ND	420	ug/kg	
85-01-8	Phenanthrene	ND	420	ug/kg	
129-00-0	Pyrene	ND	420	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	95%		22-130%
92-94-4	p-Terphenyl	99%		53-130%

ND = Not detected
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-610-SS-117-01		
Lab Sample ID:	F8436-4	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	89.8
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA005816.D	1	12/22/00	MRE	12/21/00	OP2470	GAA207
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	740	ug/kg	
208-96-8	Acenaphthylene	ND	740	ug/kg	
120-12-7	Anthracene	ND	370	ug/kg	
56-55-3	Benzo(a)anthracene	ND	370	ug/kg	
50-32-8	Benzo(a)pyrene	ND	74	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	74	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	74	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	74	ug/kg	
218-01-9	Chrysene	ND	370	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	74	ug/kg	
206-44-0	Fluoranthene	ND	370	ug/kg	
86-73-7	Fluorene	ND	370	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	74	ug/kg	
91-20-3	Naphthalene	ND	370	ug/kg	
90-12-0	1-Methylnaphthalene	ND	370	ug/kg	
91-57-6	2-Methylnaphthalene	ND	370	ug/kg	
85-01-8	Phenanthrene	ND	370	ug/kg	
129-00-0	Pyrene	ND	370	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	99%		22-130%
92-94-4	p-Terphenyl	106%		53-130%

ND = Not detected
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-610-SS-116-01		
Lab Sample ID:	F8436-5	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	92.2
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA005817.D	1	12/22/00	MRE	12/21/00	OP2470	GAA207
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	720	ug/kg	
208-96-8	Acenaphthylene	ND	720	ug/kg	
120-12-7	Anthracene	ND	360	ug/kg	
56-55-3	Benzo(a)anthracene	79.6	360	ug/kg	J
50-32-8	Benzo(a)pyrene	146	72	ug/kg	
205-99-2	Benzo(b)fluoranthene	135	72	ug/kg	
191-24-2	Benzo(g,h,i)perylene	172	72	ug/kg	
207-08-9	Benzo(k)fluoranthene	67.1	72	ug/kg	J
218-01-9	Chrysene	77.6	360	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND	72	ug/kg	
206-44-0	Fluoranthene	81.1	360	ug/kg	J
86-73-7	Fluorene	ND	360	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	186	72	ug/kg	
91-20-3	Naphthalene	ND	360	ug/kg	
90-12-0	1-Methylnaphthalene	ND	360	ug/kg	
91-57-6	2-Methylnaphthalene	ND	360	ug/kg	
85-01-8	Phenanthrene	ND	360	ug/kg	
129-00-0	Pyrene	129	360	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	93%		22-130%
92-94-4	p-Terphenyl	100%		53-130%

ND = Not detected
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-610-SS-118-01		
Lab Sample ID:	F8436-6	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	90.4
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA005818.D	1	12/22/00	MRE	12/21/00	OP2470	GAA207
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	740	ug/kg	
208-96-8	Acenaphthylene	ND	740	ug/kg	
120-12-7	Anthracene	ND	370	ug/kg	
56-55-3	Benzo(a)anthracene	ND	370	ug/kg	
50-32-8	Benzo(a)pyrene	ND	74	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	74	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	74	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	74	ug/kg	
218-01-9	Chrysene	ND	370	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	74	ug/kg	
206-44-0	Fluoranthene	ND	370	ug/kg	
86-73-7	Fluorene	ND	370	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	74	ug/kg	
91-20-3	Naphthalene	ND	370	ug/kg	
90-12-0	1-Methylnaphthalene	ND	370	ug/kg	
91-57-6	2-Methylnaphthalene	ND	370	ug/kg	
85-01-8	Phenanthrene	ND	370	ug/kg	
129-00-0	Pyrene	ND	370	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	86%		22-130%
92-94-4	p-Terphenyl	87%		53-130%

ND = Not detected
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-610-SS-115-01		
Lab Sample ID:	F8436-7	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	85.8
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA005820.D	1	12/22/00	MRE	12/21/00	OP2470	GAA207
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	780	ug/kg	
208-96-8	Acenaphthylene	ND	780	ug/kg	
120-12-7	Anthracene	ND	390	ug/kg	
56-55-3	Benzo(a)anthracene	ND	390	ug/kg	
50-32-8	Benzo(a)pyrene	ND	78	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	78	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	78	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	78	ug/kg	
218-01-9	Chrysene	ND	390	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	78	ug/kg	
206-44-0	Fluoranthene	ND	390	ug/kg	
86-73-7	Fluorene	ND	390	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	78	ug/kg	
91-20-3	Naphthalene	ND	390	ug/kg	
90-12-0	1-Methylnaphthalene	ND	390	ug/kg	
91-57-6	2-Methylnaphthalene	ND	390	ug/kg	
85-01-8	Phenanthrene	ND	390	ug/kg	
129-00-0	Pyrene	ND	390	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	98%		22-130%
92-94-4	p-Terphenyl	102%		53-130%

ND = Not detected
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-610-SS-114-01		
Lab Sample ID:	F8436-8	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	86.0
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA005823.D	1	12/22/00	MRE	12/21/00	OP2470	GAA207
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	780	ug/kg	
208-96-8	Acenaphthylene	ND	780	ug/kg	
120-12-7	Anthracene	ND	390	ug/kg	
56-55-3	Benzo(a)anthracene	ND	390	ug/kg	
50-32-8	Benzo(a)pyrene	ND	78	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	78	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	78	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	78	ug/kg	
218-01-9	Chrysene	ND	390	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	78	ug/kg	
206-44-0	Fluoranthene	ND	390	ug/kg	
86-73-7	Fluorene	ND	390	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	78	ug/kg	
91-20-3	Naphthalene	ND	390	ug/kg	
90-12-0	1-Methylnaphthalene	ND	390	ug/kg	
91-57-6	2-Methylnaphthalene	ND	390	ug/kg	
85-01-8	Phenanthrene	ND	390	ug/kg	
129-00-0	Pyrene	ND	390	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	95%		22-130%
92-94-4	p-Terphenyl	100%		53-130%

ND = Not detected
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-610-SS-120-01		
Lab Sample ID:	F8436-9	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	92.7
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA005824.D	1	12/22/00	MRE	12/21/00	OP2470	GAA207
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	720	ug/kg	
208-96-8	Acenaphthylene	ND	720	ug/kg	
120-12-7	Anthracene	ND	360	ug/kg	
56-55-3	Benzo(a)anthracene	ND	360	ug/kg	
50-32-8	Benzo(a)pyrene	ND	72	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	72	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	72	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	72	ug/kg	
218-01-9	Chrysene	ND	360	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	72	ug/kg	
206-44-0	Fluoranthene	ND	360	ug/kg	
86-73-7	Fluorene	ND	360	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	72	ug/kg	
91-20-3	Naphthalene	ND	360	ug/kg	
90-12-0	1-Methylnaphthalene	ND	360	ug/kg	
91-57-6	2-Methylnaphthalene	ND	360	ug/kg	
85-01-8	Phenanthrene	ND	360	ug/kg	
129-00-0	Pyrene	ND	360	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	98%		22-130%
92-94-4	p-Terphenyl	105%		53-130%

ND = Not detected
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-610-SS-122-01		
Lab Sample ID:	F8436-10	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	91.2
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA005825.D	1	12/22/00	MRE	12/21/00	OP2470	GAA207
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	730	ug/kg	
208-96-8	Acenaphthylene	ND	730	ug/kg	
120-12-7	Anthracene	ND	360	ug/kg	
56-55-3	Benzo(a)anthracene	ND	360	ug/kg	
50-32-8	Benzo(a)pyrene	25.6	73	ug/kg	J
205-99-2	Benzo(b)fluoranthene	26.3	73	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	23.2	73	ug/kg	J
207-08-9	Benzo(k)fluoranthene	ND	73	ug/kg	
218-01-9	Chrysene	ND	360	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	73	ug/kg	
206-44-0	Fluoranthene	ND	360	ug/kg	
86-73-7	Fluorene	ND	360	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	25.0	73	ug/kg	J
91-20-3	Naphthalene	ND	360	ug/kg	
90-12-0	1-Methylnaphthalene	ND	360	ug/kg	
91-57-6	2-Methylnaphthalene	ND	360	ug/kg	
85-01-8	Phenanthrene	ND	360	ug/kg	
129-00-0	Pyrene	ND	360	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	90%		22-130%
92-94-4	p-Terphenyl	98%		53-130%

ND = Not detected
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-610-SS-123-01		
Lab Sample ID:	F8436-11	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	89.1
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA005826.D	1	12/22/00	MRE	12/21/00	OP2470	GAA207
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	750	ug/kg	
208-96-8	Acenaphthylene	ND	750	ug/kg	
120-12-7	Anthracene	ND	370	ug/kg	
56-55-3	Benzo(a)anthracene	349	370	ug/kg	J
50-32-8	Benzo(a)pyrene	291	75	ug/kg	
205-99-2	Benzo(b)fluoranthene	281	75	ug/kg	
191-24-2	Benzo(g,h,i)perylene	291	75	ug/kg	
207-08-9	Benzo(k)fluoranthene	206	75	ug/kg	
218-01-9	Chrysene	356	370	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND	75	ug/kg	
206-44-0	Fluoranthene	578	370	ug/kg	
86-73-7	Fluorene	ND	370	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	330	75	ug/kg	
91-20-3	Naphthalene	ND	370	ug/kg	
90-12-0	1-Methylnaphthalene	ND	370	ug/kg	
91-57-6	2-Methylnaphthalene	ND	370	ug/kg	
85-01-8	Phenanthrene	ND	370	ug/kg	
129-00-0	Pyrene	488	370	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	89%		22-130%
92-94-4	p-Terphenyl	99%		53-130%

ND = Not detected
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-610-SS-121-01		
Lab Sample ID:	F8436-12	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	76.0
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA005827.D	1	12/22/00	MRE	12/21/00	OP2470	GAA207
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	880	ug/kg	
208-96-8	Acenaphthylene	ND	880	ug/kg	
120-12-7	Anthracene	ND	440	ug/kg	
56-55-3	Benzo(a)anthracene	ND	440	ug/kg	
50-32-8	Benzo(a)pyrene	ND	88	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	88	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	88	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	88	ug/kg	
218-01-9	Chrysene	ND	440	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	88	ug/kg	
206-44-0	Fluoranthene	ND	440	ug/kg	
86-73-7	Fluorene	ND	440	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	88	ug/kg	
91-20-3	Naphthalene	ND	440	ug/kg	
90-12-0	1-Methylnaphthalene	ND	440	ug/kg	
91-57-6	2-Methylnaphthalene	ND	440	ug/kg	
85-01-8	Phenanthrene	ND	440	ug/kg	
129-00-0	Pyrene	ND	440	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	93%		22-130%
92-94-4	p-Terphenyl	101%		53-130%

ND = Not detected
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-610-SS-125-01		
Lab Sample ID:	F8436-13	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	92.6
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA005829.D	1	12/22/00	MRE	12/21/00	OP2470	GAA207
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	720	ug/kg	
208-96-8	Acenaphthylene	ND	720	ug/kg	
120-12-7	Anthracene	ND	360	ug/kg	
56-55-3	Benzo(a)anthracene	93.2	360	ug/kg	J
50-32-8	Benzo(a)pyrene	135	72	ug/kg	
205-99-2	Benzo(b)fluoranthene	119	72	ug/kg	
191-24-2	Benzo(g,h,i)perylene	172	72	ug/kg	
207-08-9	Benzo(k)fluoranthene	71.1	72	ug/kg	J
218-01-9	Chrysene	88.2	360	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND	72	ug/kg	
206-44-0	Fluoranthene	ND	360	ug/kg	
86-73-7	Fluorene	ND	360	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	171	72	ug/kg	
91-20-3	Naphthalene	ND	360	ug/kg	
90-12-0	1-Methylnaphthalene	ND	360	ug/kg	
91-57-6	2-Methylnaphthalene	ND	360	ug/kg	
85-01-8	Phenanthrene	ND	360	ug/kg	
129-00-0	Pyrene	ND	360	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	88%		22-130%
92-94-4	p-Terphenyl	96%		53-130%

ND = Not detected
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-610-SS-126-01		
Lab Sample ID:	F8436-14	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	93.4
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA005830.D	1	12/22/00	MRE	12/21/00	OP2470	GAA207
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	710	ug/kg	
208-96-8	Acenaphthylene	ND	710	ug/kg	
120-12-7	Anthracene	ND	360	ug/kg	
56-55-3	Benzo(a)anthracene	ND	360	ug/kg	
50-32-8	Benzo(a)pyrene	ND	71	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	71	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	71	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	71	ug/kg	
218-01-9	Chrysene	ND	360	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	71	ug/kg	
206-44-0	Fluoranthene	ND	360	ug/kg	
86-73-7	Fluorene	ND	360	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	71	ug/kg	
91-20-3	Naphthalene	ND	360	ug/kg	
90-12-0	1-Methylnaphthalene	ND	360	ug/kg	
91-57-6	2-Methylnaphthalene	ND	360	ug/kg	
85-01-8	Phenanthrene	ND	360	ug/kg	
129-00-0	Pyrene	ND	360	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	93%		22-130%
92-94-4	p-Terphenyl	102%		53-130%

ND = Not detected
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-610-SS-124-01		
Lab Sample ID:	F8436-15	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	74.2
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA005831.D	1	12/22/00	MRE	12/21/00	OP2470	GAA207
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	900	ug/kg	
208-96-8	Acenaphthylene	ND	900	ug/kg	
120-12-7	Anthracene	ND	450	ug/kg	
56-55-3	Benzo(a)anthracene	632	450	ug/kg	
50-32-8	Benzo(a)pyrene	763	90	ug/kg	
205-99-2	Benzo(b)fluoranthene	528	90	ug/kg	
191-24-2	Benzo(g,h,i)perylene	665	90	ug/kg	
207-08-9	Benzo(k)fluoranthene	336	90	ug/kg	
218-01-9	Chrysene	456	450	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	90	ug/kg	
206-44-0	Fluoranthene	562	450	ug/kg	
86-73-7	Fluorene	ND	450	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	845	90	ug/kg	
91-20-3	Naphthalene	ND	450	ug/kg	
90-12-0	1-Methylnaphthalene	ND	450	ug/kg	
91-57-6	2-Methylnaphthalene	ND	450	ug/kg	
85-01-8	Phenanthrene	ND	450	ug/kg	
129-00-0	Pyrene	495	450	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	90%		22-130%
92-94-4	p-Terphenyl	104%		53-130%

ND = Not detected
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-610-SS-102-01		
Lab Sample ID:	F8436-16	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	86.3
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA005832.D	1	12/22/00	MRE	12/21/00	OP2470	GAA207
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	770	ug/kg	
208-96-8	Acenaphthylene	ND	770	ug/kg	
120-12-7	Anthracene	ND	390	ug/kg	
56-55-3	Benzo(a)anthracene	ND	390	ug/kg	
50-32-8	Benzo(a)pyrene	ND	77	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	77	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	77	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	77	ug/kg	
218-01-9	Chrysene	ND	390	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	77	ug/kg	
206-44-0	Fluoranthene	ND	390	ug/kg	
86-73-7	Fluorene	ND	390	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	77	ug/kg	
91-20-3	Naphthalene	ND	390	ug/kg	
90-12-0	1-Methylnaphthalene	ND	390	ug/kg	
91-57-6	2-Methylnaphthalene	ND	390	ug/kg	
85-01-8	Phenanthrene	ND	390	ug/kg	
129-00-0	Pyrene	ND	390	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	98%		22-130%
92-94-4	p-Terphenyl	104%		53-130%

ND = Not detected
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-610-SS-101-01		
Lab Sample ID:	F8436-17	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	92.6
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA005833.D	1	12/22/00	MRE	12/21/00	OP2470	GAA207
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	720	ug/kg	
208-96-8	Acenaphthylene	ND	720	ug/kg	
120-12-7	Anthracene	ND	360	ug/kg	
56-55-3	Benzo(a)anthracene	ND	360	ug/kg	
50-32-8	Benzo(a)pyrene	ND	72	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	72	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	72	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	72	ug/kg	
218-01-9	Chrysene	ND	360	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	72	ug/kg	
206-44-0	Fluoranthene	ND	360	ug/kg	
86-73-7	Fluorene	ND	360	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	72	ug/kg	
91-20-3	Naphthalene	ND	360	ug/kg	
90-12-0	1-Methylnaphthalene	ND	360	ug/kg	
91-57-6	2-Methylnaphthalene	ND	360	ug/kg	
85-01-8	Phenanthrene	ND	360	ug/kg	
129-00-0	Pyrene	ND	360	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	98%		22-130%
92-94-4	p-Terphenyl	102%		53-130%

ND = Not detected
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-610-SS-103-01		
Lab Sample ID:	F8436-18	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	91.4
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE001204.D	1	01/02/01	MRE	12/29/00	OP2509	GEE61
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	730	ug/kg	
208-96-8	Acenaphthylene	ND	730	ug/kg	
120-12-7	Anthracene	ND	360	ug/kg	
56-55-3	Benzo(a)anthracene	ND	360	ug/kg	
50-32-8	Benzo(a)pyrene	ND	73	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	73	ug/kg	
191-24-2	Benzo(g,h,i)perylene	35.5	73	ug/kg	J
207-08-9	Benzo(k)fluoranthene	ND	73	ug/kg	
218-01-9	Chrysene	ND	360	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	73	ug/kg	
206-44-0	Fluoranthene	ND	360	ug/kg	
86-73-7	Fluorene	ND	360	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	37.2	73	ug/kg	J
91-20-3	Naphthalene	ND	360	ug/kg	
90-12-0	1-Methylnaphthalene	ND	360	ug/kg	
91-57-6	2-Methylnaphthalene	ND	360	ug/kg	
85-01-8	Phenanthrene	ND	360	ug/kg	
129-00-0	Pyrene	ND	360	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	101%		22-130%
92-94-4	p-Terphenyl	109%		53-130%

ND = Not detected
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-610-SS-104-01		
Lab Sample ID:	F8436-19	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	90.8
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE001205.D	1	01/02/01	MRE	12/29/00	OP2509	GEE61
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	730	ug/kg	
208-96-8	Acenaphthylene	ND	730	ug/kg	
120-12-7	Anthracene	ND	370	ug/kg	
56-55-3	Benzo(a)anthracene	ND	370	ug/kg	
50-32-8	Benzo(a)pyrene	ND	73	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	73	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	73	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	73	ug/kg	
218-01-9	Chrysene	ND	370	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	73	ug/kg	
206-44-0	Fluoranthene	ND	370	ug/kg	
86-73-7	Fluorene	ND	370	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	73	ug/kg	
91-20-3	Naphthalene	ND	370	ug/kg	
90-12-0	1-Methylnaphthalene	ND	370	ug/kg	
91-57-6	2-Methylnaphthalene	ND	370	ug/kg	
85-01-8	Phenanthrene	ND	370	ug/kg	
129-00-0	Pyrene	ND	370	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	112%		22-130%
92-94-4	p-Terphenyl	114%		53-130%

ND = Not detected
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-610-SS-112-01		
Lab Sample ID:	F8436-20	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	91.4
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE001206.D	1	01/02/01	MRE	12/29/00	OP2509	GEE61
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	730	ug/kg	
208-96-8	Acenaphthylene	ND	730	ug/kg	
120-12-7	Anthracene	ND	360	ug/kg	
56-55-3	Benzo(a)anthracene	ND	360	ug/kg	
50-32-8	Benzo(a)pyrene	ND	73	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	73	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	73	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	73	ug/kg	
218-01-9	Chrysene	ND	360	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	73	ug/kg	
206-44-0	Fluoranthene	ND	360	ug/kg	
86-73-7	Fluorene	ND	360	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	73	ug/kg	
91-20-3	Naphthalene	ND	360	ug/kg	
90-12-0	1-Methylnaphthalene	ND	360	ug/kg	
91-57-6	2-Methylnaphthalene	ND	360	ug/kg	
85-01-8	Phenanthrene	ND	360	ug/kg	
129-00-0	Pyrene	ND	360	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	110%		22-130%
92-94-4	p-Terphenyl	115%		53-130%

ND = Not detected
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-610-SS-111-01		
Lab Sample ID:	F8436-21	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	82.2
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE001207.D	1	01/02/01	MRE	12/29/00	OP2509	GEE61
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	810	ug/kg	
208-96-8	Acenaphthylene	ND	810	ug/kg	
120-12-7	Anthracene	ND	400	ug/kg	
56-55-3	Benzo(a)anthracene	ND	400	ug/kg	
50-32-8	Benzo(a)pyrene	ND	81	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	81	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	81	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	81	ug/kg	
218-01-9	Chrysene	ND	400	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	81	ug/kg	
206-44-0	Fluoranthene	ND	400	ug/kg	
86-73-7	Fluorene	ND	400	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	81	ug/kg	
91-20-3	Naphthalene	ND	400	ug/kg	
90-12-0	1-Methylnaphthalene	ND	400	ug/kg	
91-57-6	2-Methylnaphthalene	ND	400	ug/kg	
85-01-8	Phenanthrene	ND	400	ug/kg	
129-00-0	Pyrene	ND	400	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	110%		22-130%
92-94-4	p-Terphenyl	119%		53-130%

ND = Not detected
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-610-SS-110-01		
Lab Sample ID:	F8436-22	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	93.2
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE001208.D	1	01/02/01	MRE	12/29/00	OP2509	GEE61
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	720	ug/kg	
208-96-8	Acenaphthylene	ND	720	ug/kg	
120-12-7	Anthracene	ND	360	ug/kg	
56-55-3	Benzo(a)anthracene	ND	360	ug/kg	
50-32-8	Benzo(a)pyrene	39.8	72	ug/kg	J
205-99-2	Benzo(b)fluoranthene	ND	72	ug/kg	
191-24-2	Benzo(g,h,i)perylene	36.4	72	ug/kg	J
207-08-9	Benzo(k)fluoranthene	ND	72	ug/kg	
218-01-9	Chrysene	ND	360	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	72	ug/kg	
206-44-0	Fluoranthene	ND	360	ug/kg	
86-73-7	Fluorene	ND	360	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	34.1	72	ug/kg	J
91-20-3	Naphthalene	ND	360	ug/kg	
90-12-0	1-Methylnaphthalene	ND	360	ug/kg	
91-57-6	2-Methylnaphthalene	ND	360	ug/kg	
85-01-8	Phenanthrene	ND	360	ug/kg	
129-00-0	Pyrene	ND	360	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	95%		22-130%
92-94-4	p-Terphenyl	97%		53-130%

ND = Not detected
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-610-SS-109-01		
Lab Sample ID:	F8436-23	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	92.2
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE001211.D	1	01/02/01	MRE	12/29/00	OP2509	GEE61
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	720	ug/kg	
208-96-8	Acenaphthylene	ND	720	ug/kg	
120-12-7	Anthracene	ND	360	ug/kg	
56-55-3	Benzo(a)anthracene	ND	360	ug/kg	
50-32-8	Benzo(a)pyrene	ND	72	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	72	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	72	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	72	ug/kg	
218-01-9	Chrysene	ND	360	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	72	ug/kg	
206-44-0	Fluoranthene	ND	360	ug/kg	
86-73-7	Fluorene	ND	360	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	72	ug/kg	
91-20-3	Naphthalene	ND	360	ug/kg	
90-12-0	1-Methylnaphthalene	ND	360	ug/kg	
91-57-6	2-Methylnaphthalene	ND	360	ug/kg	
85-01-8	Phenanthrene	ND	360	ug/kg	
129-00-0	Pyrene	ND	360	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	105%		22-130%
92-94-4	p-Terphenyl	110%		53-130%

ND = Not detected
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-610-SS-108-01		
Lab Sample ID:	F8436-24	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	89.1
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE001213.D	1	01/02/01	MRE	12/29/00	OP2509	GEE61
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	750	ug/kg	
208-96-8	Acenaphthylene	ND	750	ug/kg	
120-12-7	Anthracene	ND	370	ug/kg	
56-55-3	Benzo(a)anthracene	ND	370	ug/kg	
50-32-8	Benzo(a)pyrene	ND	75	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	75	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	75	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	75	ug/kg	
218-01-9	Chrysene	ND	370	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	75	ug/kg	
206-44-0	Fluoranthene	ND	370	ug/kg	
86-73-7	Fluorene	ND	370	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	75	ug/kg	
91-20-3	Naphthalene	ND	370	ug/kg	
90-12-0	1-Methylnaphthalene	ND	370	ug/kg	
91-57-6	2-Methylnaphthalene	ND	370	ug/kg	
85-01-8	Phenanthrene	ND	370	ug/kg	
129-00-0	Pyrene	ND	370	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	78%		22-130%
92-94-4	p-Terphenyl	84%		53-130%

ND = Not detected
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-610-SS-107-01		
Lab Sample ID:	F8436-25	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	91.0
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE001214.D	1	01/02/01	MRE	12/29/00	OP2509	GEE61
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	730	ug/kg	
208-96-8	Acenaphthylene	ND	730	ug/kg	
120-12-7	Anthracene	ND	370	ug/kg	
56-55-3	Benzo(a)anthracene	ND	370	ug/kg	
50-32-8	Benzo(a)pyrene	ND	73	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	73	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	73	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	73	ug/kg	
218-01-9	Chrysene	ND	370	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	73	ug/kg	
206-44-0	Fluoranthene	ND	370	ug/kg	
86-73-7	Fluorene	ND	370	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	73	ug/kg	
91-20-3	Naphthalene	ND	370	ug/kg	
90-12-0	1-Methylnaphthalene	ND	370	ug/kg	
91-57-6	2-Methylnaphthalene	ND	370	ug/kg	
85-01-8	Phenanthrene	ND	370	ug/kg	
129-00-0	Pyrene	ND	370	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	106%		22-130%
92-94-4	p-Terphenyl	114%		53-130%

ND = Not detected
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-610-SS-106-01		
Lab Sample ID:	F8436-26	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	88.9
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE001215.D	1	01/02/01	MRE	12/29/00	OP2509	GEE61
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	750	ug/kg	
208-96-8	Acenaphthylene	ND	750	ug/kg	
120-12-7	Anthracene	ND	380	ug/kg	
56-55-3	Benzo(a)anthracene	ND	380	ug/kg	
50-32-8	Benzo(a)pyrene	103	75	ug/kg	
205-99-2	Benzo(b)fluoranthene	108	75	ug/kg	
191-24-2	Benzo(g,h,i)perylene	74.9	75	ug/kg	J
207-08-9	Benzo(k)fluoranthene	59.1	75	ug/kg	J
218-01-9	Chrysene	ND	380	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	75	ug/kg	
206-44-0	Fluoranthene	ND	380	ug/kg	
86-73-7	Fluorene	ND	380	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	80.3	75	ug/kg	
91-20-3	Naphthalene	ND	380	ug/kg	
90-12-0	1-Methylnaphthalene	ND	380	ug/kg	
91-57-6	2-Methylnaphthalene	ND	380	ug/kg	
85-01-8	Phenanthrene	ND	380	ug/kg	
129-00-0	Pyrene	ND	380	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	106%		22-130%
92-94-4	p-Terphenyl	112%		53-130%

ND = Not detected
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-610-SS-105-01		
Lab Sample ID:	F8436-27	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	86.1
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE001216.D	1	01/02/01	MRE	12/29/00	OP2509	GEE61
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	770	ug/kg	
208-96-8	Acenaphthylene	ND	770	ug/kg	
120-12-7	Anthracene	ND	390	ug/kg	
56-55-3	Benzo(a)anthracene	ND	390	ug/kg	
50-32-8	Benzo(a)pyrene	87.4	77	ug/kg	
205-99-2	Benzo(b)fluoranthene	99.0	77	ug/kg	
191-24-2	Benzo(g,h,i)perylene	62.4	77	ug/kg	J
207-08-9	Benzo(k)fluoranthene	81.8	77	ug/kg	
218-01-9	Chrysene	ND	390	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	77	ug/kg	
206-44-0	Fluoranthene	ND	390	ug/kg	
86-73-7	Fluorene	ND	390	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	82.0	77	ug/kg	
91-20-3	Naphthalene	ND	390	ug/kg	
90-12-0	1-Methylnaphthalene	ND	390	ug/kg	
91-57-6	2-Methylnaphthalene	ND	390	ug/kg	
85-01-8	Phenanthrene	ND	390	ug/kg	
129-00-0	Pyrene	ND	390	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	107%		22-130%
92-94-4	p-Terphenyl	106%		53-130%

ND = Not detected
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-610-SS-DUP3-01		
Lab Sample ID:	F8436-28	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	86.2
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE001217.D	1	01/02/01	MRE	12/29/00	OP2509	GEE61
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	770	ug/kg	
208-96-8	Acenaphthylene	ND	770	ug/kg	
120-12-7	Anthracene	ND	390	ug/kg	
56-55-3	Benzo(a)anthracene	ND	390	ug/kg	
50-32-8	Benzo(a)pyrene	286	77	ug/kg	
205-99-2	Benzo(b)fluoranthene	254	77	ug/kg	
191-24-2	Benzo(g,h,i)perylene	184	77	ug/kg	
207-08-9	Benzo(k)fluoranthene	149	77	ug/kg	
218-01-9	Chrysene	ND	390	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	77	ug/kg	
206-44-0	Fluoranthene	ND	390	ug/kg	
86-73-7	Fluorene	ND	390	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	190	77	ug/kg	
91-20-3	Naphthalene	ND	390	ug/kg	
90-12-0	1-Methylnaphthalene	ND	390	ug/kg	
91-57-6	2-Methylnaphthalene	ND	390	ug/kg	
85-01-8	Phenanthrene	ND	390	ug/kg	
129-00-0	Pyrene	ND	390	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	112%		22-130%
92-94-4	p-Terphenyl	118%		53-130%

ND = Not detected
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-610-SS-126-01		
Lab Sample ID:	F8436-14	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	93.4
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP12665.D	1	01/02/01	ME	12/29/00	OP2510	GOP502
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	7.41	8.9	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	87%		40-140%

ND = Not detected
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-610-SS-103-01		
Lab Sample ID:	F8436-18	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	91.4
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP12668.D	1	01/02/01	ME	12/29/00	OP2510	GOP502
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	ND	9.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	91%		40-140%

ND = Not detected
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-610-SS-104-01		
Lab Sample ID:	F8436-19	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	90.8
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP12669.D	1	01/02/01	ME	12/29/00	OP2510	GOP502
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	20.0	9.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	88%		40-140%

ND = Not detected
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-610-SS-112-01		
Lab Sample ID:	F8436-20	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	91.4
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP12670.D	1	01/02/01	ME	12/29/00	OP2510	GOP502
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	10.2	9.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	94%		40-140%

ND = Not detected
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-610-SS-111-01		
Lab Sample ID:	F8436-21	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	82.2
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP12671.D	1	01/02/01	ME	12/29/00	OP2510	GOP502
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	22.7	10	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	91%		40-140%

ND = Not detected
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-610-SS-107-01		
Lab Sample ID:	F8436-25	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	91.0
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP12672.D	1	01/02/01	ME	12/29/00	OP2510	GOP502
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	29.1	9.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	92%		40-140%

ND = Not detected
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-610-SS-106-01		
Lab Sample ID:	F8436-26	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	88.9
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF00696.D	8	01/04/01	ME	12/29/00	OP2510	GZF33
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	147	75	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	91%		40-140%

ND = Not detected
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-610-SS-105-01		
Lab Sample ID:	F8436-27	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	86.1
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF00697.D	5	01/04/01	ME	12/29/00	OP2510	GZF33
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	141	48	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	95%		40-140%

ND = Not detected
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-610-SS-DUP3-01		
Lab Sample ID:	F8436-28	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	86.2
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF00691.D	5	01/04/01	ME	12/29/00	OP2510	GZF33
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	128	48	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	95%		40-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

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

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO:	**M. SPERANZA**	**DATE:**	**JANUARY 26, 2001**
FROM:	**ERIN M. FAUST**	**COPIES:**	**DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION – SELECT METALS**
CTO-078 NAS CECIL FIELD
SDG's – F8436 ~~& F8461~~

SAMPLES: 2/Soil/

CEF-610-SS-119-01 ~~CEF-P52-SS-101-02~~

Overview

The sample set for CTO 078, NAS Cecil Field, SDG's F8436 and F8461, consist of two (2) soil environmental samples.

Sample CEF-610-SS-119-01 was analyzed for arsenic only and sample CEF-P52-SS-101-02 was analyzed for cadmium only. The samples were collected by TetraTech NUS on December 18 and 20, 2000 and analyzed by Accutest Laboratory under Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria. Metals were conducted using SW 846 method 6010B.

These data were evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • Calibration Recoveries
• Laboratory Blank Analyses
* • Detection Limits

* - All quality control criteria were met for this parameter.

Laboratory Blank Analyses

The following contaminants were detected in the laboratory method blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Arsenic	8.7 µg/L	0.87 mg/kg
Cadmium	0.34 µg/L	0.034 mg/kg

An action level of 5X the maximum concentration were used to evaluate the sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluation for blank contamination. No qualification of results was necessary since the result reported for arsenic was nondetected and the result reported for cadmium was greater than the action level.

Executive Summary

Laboratory Performance: Arsenic and cadmium were present in the laboratory method blanks, however, no qualification of results was necessary.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Review", February 1994 and the NFESC document entitled "Navy IRCDQM" (September 1999).

The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the NFESC Guidelines and the Quality Assurance Project Plan (QAPP)."

Tetra Tech NUS
Erin M. Faust
Environmental Scientist

TetraTech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

APPENDIX A
QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration (i.e., % RSDs, %Ds, ICVs, CCVs, RPDs, RRFs, etc.) Noncompliance
D = MS/MSD Noncompliance
E = LCS/LCSD Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS - GFAA MSA's $r < 0.995$
K = ICP Interference - include ICSAB % R's
L = Instrument Calibration Range Exceedance
M = Sample Preservation
N = Internal Standard Noncompliance
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = Pest/PCD% between columns for positive results
V = Non-linear calibrations, tuning $r < 0.995$ (correlation coefficient)
W = EMPC result
X = Signal to noise response drop

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest
SDG: F8436

SAMPLE NUMBER:	CEF-610-SS-119-01			
SAMPLE DATE:	12/18/00	/ /	/ /	/ /
LABORATORY ID:	F8436-3			
QC_TYPE:	NORMAL			
% SOLIDS:	89.6 %	100.0 %	100.0 %	100.0 %
UNITS:	MG/KG			
FIELD DUPLICATE OF:				

	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
INORGANICS												
ARSENIC	0.35	U										

APPENDIX B
RESULTS AS REPORTED BY THE LABORATORY

Report of Analysis

Client Sample ID:	CEF-610-SS-119-01		
Lab Sample ID:	F8436-3	**Date Sampled:**	12/18/00
Matrix:	SO - Soil	**Date Received:**	12/19/00
		Percent Solids:	89.6
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By		Method
Arsenic	0.35 U	0.55	mg/kg	1	12/28/00	12/29/00	JK	SW846 6010B

RL = Reporting Limit

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO:	**M. SPERANZA**	**DATE:**	**APRIL 5, 2001**
FROM:	**DOUGLAS S. SCHLOER**	**COPIES:**	**DV FILE**
SUBJECT:	**ORGANIC DATA VALIDATION – PAH / TPH** **CTO 078, NAS CECIL FIELD** **SDG F8870**		
SAMPLES:	15 / Soil / PAH / TPH		

CEF-610-SS-201-01	CEF-610-SS-202-01	CEF-610-SS-203-01
CEF-610-SS-204-01	CEF-610-SS-205-01	CEF-610-SS-206-01
CEF-610-SS-207-02	CEF-610-SS-208-02	CEF-610-SS-209-02
CEF-610-SS-210-02	CEF-610-SS-211-02	CEF-610-SS-212-02
CEF-610-SS-213-02	CEF-610-SS-DUP3	CEF-610-SS-DUP4

OVERVIEW

The sample set for CTO 078, NAS Cecil Field; SDG F8870 consists of fifteen (15) soil environmental samples. The samples were analyzed for Polynuclear Aromatic Hydrocarbon compounds (PAH) and Total Petroleum Hydrocarbons (TRPH). Two field duplicate pairs were included in this SDG: CEF-610-SS-DUP3 – CEF-610-SS-202-01 and CEF-610-SS-DUP4 – CEF-610-SS-204-01.

The samples were collected by TetraTech NUS on February 1st, 2001 and analyzed by Accutest Laboratories. All analyses were conducted in accordance with Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria using SW-846 Method 8310 and Florida Petroleum Residual Organic (FL-PRO) analytical and reporting protocol. The data contained in this SDG were validated with regard to the following parameters:

- * Data completeness
- * Holding times
- * Initial/continuing calibrations
- * Laboratory method blank results
- Matrix Spike / Matrix Spike Duplicate results
- * Field Duplicate results
- * Surrogate spike recoveries
- * Detection Limits

The symbol (*) indicates that quality control criteria were met for this parameter. Problems affecting data quality are discussed below; documentation supporting these findings is presented in Appendix C. Qualified Analytical results are presented in Appendix A. Results as reported by the laboratory are presented in Appendix B.

The text of this report is formulated to address only gross noncompliances resulting in the rejection of data and the elimination of false positives.

PAH

An initial calibration percent Relative Standard Deviation (%RSD) Exceeded the 20% quality control limit for anthracene on instrument A, on 11/30/00. Since this noncompliance did not result in the rejection of analytical data, no action was taken.

TPH

TPH percent recovery in the matrix spike / matrix spike duplicate sample CEF-610-SS-203-01 fell below the 50%-132% quality control limit. No action was taken based on this noncompliance.

Due to the presence of target compounds, samples CEF-610-SS-204-01 and CEF-610-SS-DUP4 were analyzed and reported at a 4X dilution. This accounts for the elevated reporting limits for these samples.

EXECUTIVE SUMMARY

Laboratory Performance Issues: Initial calibration of anthracene did not meet linearity criteria; however, no qualification of analytical data resulted from this noncompliance.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (10/99) and the NFESC guidelines "Navy IRCDQM" (Sept 1999). The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the NFESC guidelines and the Quality Assurance Project Plan (QAPP)."

Tetra Tech NUS

Douglas S. Schloer
Chemist/Data Validator

TetraTech NUS

Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as Reported by the Laboratory
3. Appendix C - Support Documentation

NAS CECIL FIELD, CTO078 FIELD DUPLICATE RESULTS

	CEF-610-SS-DUP3		CEF-610-SS-202-01		RPD	CEF-610-SS-DUP4		CEF-610-SS-204-01		RPD
PAH	ug/kg		ug/kg			ug/kg		ug/kg		
Benzo(a)anthracene		U		U	NC	358	J	339	J	5.45
Benzo(a)pyrene		U		U	NC	694	J	672	J	3.22
Benzo(b)fluoranthene		U		U	NC	475	J	426	J	10.88
Benzo(g,h,I)perylene		U		U	NC	723	J	685	J	5.40
Benzo(k)fluoranthene		U		U	NC	229	J	244	J	-6.34
Chrysene		U		U	NC	373	J	345	J	7.80
Dibenzo(a,h)anthracene		U		U	NC	50	J	44.8	J	10.97
Fluoranthene		U		U	NC	346	J	359	J	-3.69
Indeno(1,2,3-cd)pyrene		U		U	NC	689	J	632	J	8.63
Pyrene		U		U	NC	331	J	342	J	-3.27
TPH			mg/kg					mg/kg		
C_8-C_{40}	18.5		14.3		25.61	63.5		86		-30.10

NC = Relative Percent Difference not calculated.

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F8870

SAMPLE NUMBER:	CEF-610-SS-201-01			CEF-610-SS-202-01			CEF-610-SS-203-01			CEF-610-SS-204-01		
SAMPLE DATE:	02/01/01			02/01/01			02/01/01			02/01/01		
LABORATORY ID:	F8870-1			F8870-2			F8870-4			F8870-5		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	88.7 %			90.0 %			89.1 %			89.9 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
POLYNUCLEAR AROMATIC HYDROCARBONS												
1-METHYLNAPHTHALENE	380	U		370	U		370	U		370	U	
2-METHYLNAPHTHALENE	380	U		370	U		370	U		370	U	
ACENAPHTHENE	750	U		740	U		750	U		740	U	
ACENAPHTHYLENE	750	U		740	U		750	U		740	U	
ANTHRACENE	380	U		370	U		370	U		370	U	
BENZO(A)ANTHRACENE	380	U		370	U		185	J	P	339	J	P
BENZO(A)PYRENE	43.6	J	P	74	U		676			672		
BENZO(B)FLUORANTHENE	75	U		74	U		360			426		
BENZO(G,H,I)PERYLENE	50.6	J	P	74	U		439			685		
BENZO(K)FLUORANTHENE	75	U		74	U		201			244		
CHRYSENE	380	U		370	U		273	J	P	345	J	P
DIBENZO(A,H)ANTHRACENE	75	U		74	U		48.2	J	P	44.8	J	P
FLUORANTHENE	380	U		370	U		332	J	P	359	J	P
FLUORENE	380	U		370	U		370	U		370	U	
INDENO(1,2,3-CD)PYRENE	43.1	J	P	74	U		468			632		
NAPHTHALENE	380	U		370	U		370	U		370	U	
PHENANTHRENE	380	U		370	U		370	U		370	U	
PYRENE	380	U		370	U		603			342	J	P

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F8870

SAMPLE NUMBER:	CEF-610-SS-205-01			CEF-610-SS-206-01			CEF-610-SS-207-02			CEF-610-SS-208-02		
SAMPLE DATE:	02/01/01			02/01/01			02/01/01			02/01/01		
LABORATORY ID:	F8870-7			F8870-8			F8870-9			F8870-10		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	90.6 %			88.2 %			68.9 %			92.8 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
POLYNUCLEAR AROMATIC HYDROCARBONS												
1-METHYLNAPHTHALENE	370	U		380	U		480	U		360	U	
2-METHYLNAPHTHALENE	370	U		380	U		480	U		360	U	
ACENAPHTHENE	740	U		760	U		970	U		720	U	
ACENAPHTHYLENE	740	U		760	U		970	U		720	U	
ANTHRACENE	370	U		380	U		480	U		360	U	
BENZO(A)ANTHRACENE	370	U		380	U		480	U		360	U	
BENZO(A)PYRENE	74	U		76	U		84.4	J	P	48	J	P
BENZO(B)FLUORANTHENE	74	U		76	U		67.6	J	P	72	U	
BENZO(G,H,I)PERYLENE	74	U		76	U		66.7	J	P	39.6	J	P
BENZO(K)FLUORANTHENE	74	U		76	U		97	U		72	U	
CHRYSENE	370	U		380	U		480	U		360	U	
DIBENZO(A,H)ANTHRACENE	74	U		76	U		97	U		72	U	
FLUORANTHENE	370	U		380	U		480	U		360	U	
FLUORENE	370	U		380	U		480	U		360	U	
INDENO(1,2,3-CD)PYRENE	74	U		76	U		80.4	J	P	38.5	J	P
NAPHTHALENE	370	U		380	U		480	U		360	U	
PHENANTHRENE	370	U		380	U		480	U		360	U	
PYRENE	370	U		380	U		480	U		360	U	

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F8870

SAMPLE NUMBER:	CEF-610-SS-209-02			CEF-610-SS-210-02			CEF-610-SS-211-02			CEF-610-SS-212-02		
SAMPLE DATE:	02/01/01			02/01/01			02/01/01			02/01/01		
LABORATORY ID:	F8870-11			F8870-12			F8870-13			F8870-14		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	88.7 %			81.1 %			91.2 %			90.7 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
POLYNUCLEAR AROMATIC HYDROCARBONS												
1-METHYLNAPHTHALENE	380	U		410	U		360	U		370	U	
2-METHYLNAPHTHALENE	380	U		410	U		360	U		370	U	
ACENAPHTHENE	750	U		820	U		730	U		740	U	
ACENAPHTHYLENE	750	U		820	U		730	U		740	U	
ANTHRACENE	380	U		410	U		360	U		370	U	
BENZO(A)ANTHRACENE	380	U		410	U		360	U		370	U	
BENZO(A)PYRENE	75	U		82	U		73	U		74	U	
BENZO(B)FLUORANTHENE	75	U		82	U		73	U		74	U	
BENZO(G,H,I)PERYLENE	75	U		82	U		73	U		74	U	
BENZO(K)FLUORANTHENE	75	U		82	U		73	U		74	U	
CHRYSENE	380	U		410	U		360	U		370	U	
DIBENZO(A,H)ANTHRACENE	75	U		82	U		73	U		74	U	
FLUORANTHENE	380	U		410	U		360	U		370	U	
FLUORENE	380	U		410	U		360	U		370	U	
INDENO(1,2,3-CD)PYRENE	75	U		82	U		73	U		74	U	
NAPHTHALENE	380	U		410	U		360	U		370	U	
PHENANTHRENE	380	U		410	U		360	U		370	U	
PYRENE	380	U		410	U		360	U		370	U	

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F8870

SAMPLE NUMBER:	CEF-610-SS-213-02			CEF-610-SS-DUP3			CEF-610-SS-DUP4					
SAMPLE DATE:	02/01/01			02/01/01			02/01/01			/ /		
LABORATORY ID:	F8870-15			F8870-3			F8870-6					
QC_TYPE:	NORMAL			NORMAL			NORMAL					
% SOLIDS:	89.8 %			89.6 %			91.1 %			100.0 %		
UNITS:	UG/KG			UG/KG			UG/KG					
FIELD DUPLICATE OF:				CEF-610-SS-202			CEF-610-SS-204					
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
POLYNUCLEAR AROMATIC HYDROCARBONS												
1-METHYLNAPHTHALENE	370	U		370	U		370	U				
2-METHYLNAPHTHALENE	370	U		370	U		370	U				
ACENAPHTHENE	740	U		740	U		730	U				
ACENAPHTHYLENE	740	U		740	U		730	U				
ANTHRACENE	370	U		370	U		370	U				
BENZO(A)ANTHRACENE	370	U		370	U		358	J	P			
BENZO(A)PYRENE	74	U		74	U		694					
BENZO(B)FLUORANTHENE	74	U		74	U		475					
BENZO(G,H,I)PERYLENE	74	U		74	U		723					
BENZO(K)FLUORANTHENE	74	U		74	U		229					
CHRYSENE	370	U		370	U		373					
DIBENZO(A,H)ANTHRACENE	74	U		74	U		50	J	P			
FLUORANTHENE	370	U		370	U		346	J	P			
FLUORENE	370	U		370	U		370	U				
INDENO(1,2,3-CD)PYRENE	74	U		74	U		689					
NAPHTHALENE	370	U		370	U		370	U				
PHENANTHRENE	370	U		370	U		370	U				
PYRENE	370	U		370	U		331	J	P			

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F8870

SAMPLE NUMBER:	CEF-610-SS-201-01	CEF-610-SS-202-01	CEF-610-SS-203-01	CEF-610-SS-204-01
SAMPLE DATE:	02/01/01	02/01/01	02/01/01	02/01/01
LABORATORY ID:	F8870-1	F8870-2	F8870-4	F8870-5
QC_TYPE:	NORMAL	NORMAL	NORMAL	NORMAL
% SOLIDS:	88.7 %	90.0 %	89.1 %	89.9 %
UNITS:	MG/KG	MG/KG	MG/KG	MG/KG
FIELD DUPLICATE OF:				

	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
TOTAL PETROLEUM HYDROCARBONS	19.7			14.3			36.1			86		

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F8870

SAMPLE NUMBER:	CEF-610-SS-205-01			CEF-610-SS-206-01			CEF-610-SS-207-02			CEF-610-SS-208-02		
SAMPLE DATE:	02/01/01			02/01/01			02/01/01			02/01/01		
LABORATORY ID:	F8870-7			F8870-8			F8870-9			F8870-10		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	90.6 %			88.2 %			68.9 %			92.8 %		
UNITS:	MG/KG			MG/KG			MG/KG			MG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
TOTAL PETROLEUM HYDROCARBONS	12.2			8.41	J	P	64.4			18.7		

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F8870

SAMPLE NUMBER:	CEF-610-SS-209-02			CEF-610-SS-210-02			CEF-610-SS-211-02			CEF-610-SS-212-02		
SAMPLE DATE:	02/01/01			02/01/01			02/01/01			02/01/01		
LABORATORY ID:	F8870-11			F8870-12			F8870-13			F8870-14		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	88.7 %			81.1 %			91.2 %			90.7 %		
UNITS:	MG/KG			MG/KG			MG/KG			MG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
TOTAL PETROLEUM HYDROCARBONS	9.4	U		10	U		9.1	U		9.2	U	

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F8870

SAMPLE NUMBER:	CEF-610-SS-213-02			CEF-610-SS-DUP3			CEF-610-SS-DUP4					
SAMPLE DATE:	02/01/01			02/01/01			02/01/01			/ /		
LABORATORY ID:	F8870-15			F8870-3			F8870-6					
QC_TYPE:	NORMAL			NORMAL			NORMAL					
% SOLIDS:	89.8 %			89.6 %			91.1 %			100.0 %		
UNITS:	MG/KG			MG/KG			MG/KG					
FIELD DUPLICATE OF:				CEF-610-SS-202			CEF-610-SS-204					
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
TOTAL PETROLEUM HYDROCARBONS	7.96	J	P	18.5			63.5					

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F8870

SAMPLE NUMBER:	CEF-610-SS-201-01			CEF-610-SS-202-01			CEF-610-SS-203-01			CEF-610-SS-204-01		
SAMPLE DATE:	02/01/01			02/01/01			02/01/01			02/01/01		
LABORATORY ID:	F8870-1			F8870-2			F8870-4			F8870-5		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	88.7 %			90.0 %			89.1 %			89.9 %		
UNITS:	MG/KG			MG/KG			MG/KG			MG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
TOTAL PETROLEUM HYDROCARBONS	19.7	U		14.3	U		36.1	U		86	U	

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F8870

SAMPLE NUMBER:	CEF-610-SS-205-01	CEF-610-SS-206-01	CEF-610-SS-207-02	CEF-610-SS-208-02
SAMPLE DATE:	02/01/01	02/01/01	02/01/01	02/01/01
LABORATORY ID:	F8870-7	F8870-8	F8870-9	F8870-10
QC_TYPE:	NORMAL	NORMAL	NORMAL	NORMAL
% SOLIDS:	90.6 %	88.2 %	68.9 %	92.8 %
UNITS:	MG/KG	MG/KG	MG/KG	MG/KG
FIELD DUPLICATE OF:				

	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
TOTAL PETROLEUM HYDROCARBONS	12.2	U		8.41	J	P	64.4	U		18.7	U	

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F8870

SAMPLE NUMBER:	CEF-610-SS-209-02			CEF-610-SS-210-02			CEF-610-SS-211-02			CEF-610-SS-212-02		
SAMPLE DATE:	02/01/01			02/01/01			02/01/01			02/01/01		
LABORATORY ID:	F8870-11			F8870-12			F8870-13			F8870-14		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	88.7 %			81.1 %			91.2 %			90.7 %		
UNITS:	MG/KG			MG/KG			MG/KG			MG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
TOTAL PETROLEUM HYDROCARBONS	9.4	U		10	U		9.1	U		9.2	U	

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F8870

SAMPLE NUMBER:	CEF-610-SS-213-02			CEF-610-SS-DUP3			CEF-610-SS-DUP4					
SAMPLE DATE:	02/01/01			02/01/01			02/01/01			/ /		
LABORATORY ID:	F8870-15			F8870-3			F8870-6					
QC_TYPE:	NORMAL			NORMAL			NORMAL					
% SOLIDS:	89.8 %			89.6 %			91.1 %			100.0 %		
UNITS:	MG/KG			MG/KG			MG/KG					
FIELD DUPLICATE OF:				CEF-610-SS-202			CEF-610-SS-204					
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
TOTAL PETROLEUM HYDROCARBONS	7.96	J	P	18.5	U		63.5	U				

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

Report of Analysis

Client Sample ID:	CEF-610-SS-201-01		
Lab Sample ID:	F8870-1	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	88.7
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA006336.D	1	02/06/01	MRE	02/05/01	OP2677	GAA237
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	750	ug/kg	
208-96-8	Acenaphthylene	ND	750	ug/kg	
120-12-7	Anthracene	ND	380	ug/kg	
56-55-3	Benzo(a)anthracene	ND	380	ug/kg	
50-32-8	Benzo(a)pyrene	43.6	75	ug/kg	J
205-99-2	Benzo(b)fluoranthene	ND	75	ug/kg	
191-24-2	Benzo(g,h,i)perylene	50.6	75	ug/kg	J
207-08-9	Benzo(k)fluoranthene	ND	75	ug/kg	
218-01-9	Chrysene	ND	380	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	75	ug/kg	
206-44-0	Fluoranthene	ND	380	ug/kg	
86-73-7	Fluorene	ND	380	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	43.1	75	ug/kg	J
91-20-3	Naphthalene	ND	380	ug/kg	
90-12-0	1-Methylnaphthalene	ND	380	ug/kg	
91-57-6	2-Methylnaphthalene	ND	380	ug/kg	
85-01-8	Phenanthrene	ND	380	ug/kg	
129-00-0	Pyrene	ND	380	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	96%		22-130%
92-94-4	p-Terphenyl	104%		53-130%

ND = Not detected
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-610-SS-202-01		
Lab Sample ID:	F8870-2	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	90.0
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA006337.D	1	02/06/01	MRE	02/05/01	OP2677	GAA237
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	740	ug/kg	
208-96-8	Acenaphthylene	ND	740	ug/kg	
120-12-7	Anthracene	ND	370	ug/kg	
56-55-3	Benzo(a)anthracene	ND	370	ug/kg	
50-32-8	Benzo(a)pyrene	ND	74	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	74	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	74	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	74	ug/kg	
218-01-9	Chrysene	ND	370	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	74	ug/kg	
206-44-0	Fluoranthene	ND	370	ug/kg	
86-73-7	Fluorene	ND	370	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	74	ug/kg	
91-20-3	Naphthalene	ND	370	ug/kg	
90-12-0	1-Methylnaphthalene	ND	370	ug/kg	
91-57-6	2-Methylnaphthalene	ND	370	ug/kg	
85-01-8	Phenanthrene	ND	370	ug/kg	
129-00-0	Pyrene	ND	370	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	93%		22-130%
92-94-4	p-Terphenyl	104%		53-130%

ND = Not detected
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-610-SS-203-01		
Lab Sample ID:	F8870-4	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	89.1
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA006339.D	1	02/06/01	MRE	02/05/01	OP2677	GAA237
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	750	ug/kg	
208-96-8	Acenaphthylene	ND	750	ug/kg	
120-12-7	Anthracene	ND	370	ug/kg	
56-55-3	Benzo(a)anthracene	185	370	ug/kg	J
50-32-8	Benzo(a)pyrene	676	75	ug/kg	
205-99-2	Benzo(b)fluoranthene	360	75	ug/kg	
191-24-2	Benzo(g,h,i)perylene	439	75	ug/kg	
207-08-9	Benzo(k)fluoranthene	201	75	ug/kg	
218-01-9	Chrysene	273	370	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	48.2	75	ug/kg	J
206-44-0	Fluoranthene	332	370	ug/kg	J
86-73-7	Fluorene	ND	370	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	468	75	ug/kg	
91-20-3	Naphthalene	ND	370	ug/kg	
90-12-0	1-Methylnaphthalene	ND	370	ug/kg	
91-57-6	2-Methylnaphthalene	ND	370	ug/kg	
85-01-8	Phenanthrene	ND	370	ug/kg	
129-00-0	Pyrene	603	370	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	91%		22-130%
92-94-4	p-Terphenyl	102%		53-130%

ND = Not detected
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-610-SS-204-01		
Lab Sample ID:	F8870-5	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	89.9
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA006342.D	1	02/06/01	MRE	02/05/01	OP2677	GAA237
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	740	ug/kg	
208-96-8	Acenaphthylene	ND	740	ug/kg	
120-12-7	Anthracene	ND	370	ug/kg	
56-55-3	Benzo(a)anthracene	339	370	ug/kg	J
50-32-8	Benzo(a)pyrene	672	74	ug/kg	
205-99-2	Benzo(b)fluoranthene	426	74	ug/kg	
191-24-2	Benzo(g,h,i)perylene	685	74	ug/kg	
207-08-9	Benzo(k)fluoranthene	244	74	ug/kg	
218-01-9	Chrysene	345	370	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	44.8	74	ug/kg	J
206-44-0	Fluoranthene	359	370	ug/kg	J
86-73-7	Fluorene	ND	370	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	632	74	ug/kg	
91-20-3	Naphthalene	ND	370	ug/kg	
90-12-0	1-Methylnaphthalene	ND	370	ug/kg	
91-57-6	2-Methylnaphthalene	ND	370	ug/kg	
85-01-8	Phenanthrene	ND	370	ug/kg	
129-00-0	Pyrene	342	370	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	101%		22-130%
92-94-4	p-Terphenyl	111%		53-130%

ND = Not detected
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-610-SS-205-01		
Lab Sample ID:	F8870-7	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	90.6
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA006345.D	1	02/06/01	MRE	02/05/01	OP2677	GAA237
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	740	ug/kg	
208-96-8	Acenaphthylene	ND	740	ug/kg	
120-12-7	Anthracene	ND	370	ug/kg	
56-55-3	Benzo(a)anthracene	ND	370	ug/kg	
50-32-8	Benzo(a)pyrene	ND	74	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	74	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	74	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	74	ug/kg	
218-01-9	Chrysene	ND	370	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	74	ug/kg	
206-44-0	Fluoranthene	ND	370	ug/kg	
86-73-7	Fluorene	ND	370	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	74	ug/kg	
91-20-3	Naphthalene	ND	370	ug/kg	
90-12-0	1-Methylnaphthalene	ND	370	ug/kg	
91-57-6	2-Methylnaphthalene	ND	370	ug/kg	
85-01-8	Phenanthrene	ND	370	ug/kg	
129-00-0	Pyrene	ND	370	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	85%		22-130%
92-94-4	p-Terphenyl	94%		53-130%

ND = Not detected
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-610-SS-206-01		
Lab Sample ID:	F8870-8	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	88.2
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA006346.D	1	02/06/01	MRE	02/05/01	OP2677	GAA237
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	760	ug/kg	
208-96-8	Acenaphthylene	ND	760	ug/kg	
120-12-7	Anthracene	ND	380	ug/kg	
56-55-3	Benzo(a)anthracene	ND	380	ug/kg	
50-32-8	Benzo(a)pyrene	ND	76	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	76	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	76	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	76	ug/kg	
218-01-9	Chrysene	ND	380	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	76	ug/kg	
206-44-0	Fluoranthene	ND	380	ug/kg	
86-73-7	Fluorene	ND	380	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	76	ug/kg	
91-20-3	Naphthalene	ND	380	ug/kg	
90-12-0	1-Methylnaphthalene	ND	380	ug/kg	
91-57-6	2-Methylnaphthalene	ND	380	ug/kg	
85-01-8	Phenanthrene	ND	380	ug/kg	
129-00-0	Pyrene	ND	380	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	89%		22-130%
92-94-4	p-Terphenyl	102%		53-130%

ND = Not detected
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-610-SS-207-02		
Lab Sample ID:	F8870-9	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	68.9
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA006347.D	1	02/06/01	MRE	02/05/01	OP2677	GAA237
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	970	ug/kg	
208-96-8	Acenaphthylene	ND	970	ug/kg	
120-12-7	Anthracene	ND	480	ug/kg	
56-55-3	Benzo(a)anthracene	ND	480	ug/kg	
50-32-8	Benzo(a)pyrene	84.4	97	ug/kg	J
205-99-2	Benzo(b)fluoranthene	67.6	97	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	66.7	97	ug/kg	J
207-08-9	Benzo(k)fluoranthene	ND	97	ug/kg	
218-01-9	Chrysene	ND	480	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	97	ug/kg	
206-44-0	Fluoranthene	ND	480	ug/kg	
86-73-7	Fluorene	ND	480	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	80.4	97	ug/kg	J
91-20-3	Naphthalene	ND	480	ug/kg	
90-12-0	1-Methylnaphthalene	ND	480	ug/kg	
91-57-6	2-Methylnaphthalene	ND	480	ug/kg	
85-01-8	Phenanthrene	ND	480	ug/kg	
129-00-0	Pyrene	ND	480	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	86%		22-130%
92-94-4	p-Terphenyl	96%		53-130%

ND = Not detected
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-610-SS-208-02		
Lab Sample ID:	F8870-10	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	92.8
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA006348.D	1	02/06/01	MRE	02/05/01	OP2677	GAA237
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	720	ug/kg	
208-96-8	Acenaphthylene	ND	720	ug/kg	
120-12-7	Anthracene	ND	360	ug/kg	
56-55-3	Benzo(a)anthracene	ND	360	ug/kg	
50-32-8	Benzo(a)pyrene	48.0	72	ug/kg	J
205-99-2	Benzo(b)fluoranthene	ND	72	ug/kg	
191-24-2	Benzo(g,h,i)perylene	39.6	72	ug/kg	J
207-08-9	Benzo(k)fluoranthene	ND	72	ug/kg	
218-01-9	Chrysene	ND	360	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	72	ug/kg	
206-44-0	Fluoranthene	ND	360	ug/kg	
86-73-7	Fluorene	ND	360	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	38.5	72	ug/kg	J
91-20-3	Naphthalene	ND	360	ug/kg	
90-12-0	1-Methylnaphthalene	ND	360	ug/kg	
91-57-6	2-Methylnaphthalene	ND	360	ug/kg	
85-01-8	Phenanthrene	ND	360	ug/kg	
129-00-0	Pyrene	ND	360	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	90%		22-130%
92-94-4	p-Terphenyl	100%		53-130%

ND = Not detected
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-610-SS-209-02		
Lab Sample ID:	F8870-11	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	88.7
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA006349.D	1	02/06/01	MRE	02/05/01	OP2677	GAA237
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	750	ug/kg	
208-96-8	Acenaphthylene	ND	750	ug/kg	
120-12-7	Anthracene	ND	380	ug/kg	
56-55-3	Benzo(a)anthracene	ND	380	ug/kg	
50-32-8	Benzo(a)pyrene	ND	75	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	75	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	75	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	75	ug/kg	
218-01-9	Chrysene	ND	380	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	75	ug/kg	
206-44-0	Fluoranthene	ND	380	ug/kg	
86-73-7	Fluorene	ND	380	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	75	ug/kg	
91-20-3	Naphthalene	ND	380	ug/kg	
90-12-0	1-Methylnaphthalene	ND	380	ug/kg	
91-57-6	2-Methylnaphthalene	ND	380	ug/kg	
85-01-8	Phenanthrene	ND	380	ug/kg	
129-00-0	Pyrene	ND	380	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	81%		22-130%
92-94-4	p-Terphenyl	92%		53-130%

ND = Not detected
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-610-SS-210-02		
Lab Sample ID:	F8870-12	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	81.1
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA006350.D	1	02/06/01	MRE	02/05/01	OP2677	GAA237
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	820	ug/kg	
208-96-8	Acenaphthylene	ND	820	ug/kg	
120-12-7	Anthracene	ND	410	ug/kg	
56-55-3	Benzo(a)anthracene	ND	410	ug/kg	
50-32-8	Benzo(a)pyrene	ND	82	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	82	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	82	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	82	ug/kg	
218-01-9	Chrysene	ND	410	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	82	ug/kg	
206-44-0	Fluoranthene	ND	410	ug/kg	
86-73-7	Fluorene	ND	410	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	82	ug/kg	
91-20-3	Naphthalene	ND	410	ug/kg	
90-12-0	1-Methylnaphthalene	ND	410	ug/kg	
91-57-6	2-Methylnaphthalene	ND	410	ug/kg	
85-01-8	Phenanthrene	ND	410	ug/kg	
129-00-0	Pyrene	ND	410	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	84%		22-130%
92-94-4	p-Terphenyl	96%		53-130%

ND = Not detected
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-610-SS-211-02		
Lab Sample ID:	F8870-13	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	91.2
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA006351.D	1	02/06/01	MRE	02/05/01	OP2677	GAA237
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	730	ug/kg	
208-96-8	Acenaphthylene	ND	730	ug/kg	
120-12-7	Anthracene	ND	360	ug/kg	
56-55-3	Benzo(a)anthracene	ND	360	ug/kg	
50-32-8	Benzo(a)pyrene	ND	73	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	73	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	73	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	73	ug/kg	
218-01-9	Chrysene	ND	360	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	73	ug/kg	
206-44-0	Fluoranthene	ND	360	ug/kg	
86-73-7	Fluorene	ND	360	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	73	ug/kg	
91-20-3	Naphthalene	ND	360	ug/kg	
90-12-0	1-Methylnaphthalene	ND	360	ug/kg	
91-57-6	2-Methylnaphthalene	ND	360	ug/kg	
85-01-8	Phenanthrene	ND	360	ug/kg	
129-00-0	Pyrene	ND	360	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	97%		22-130%
92-94-4	p-Terphenyl	106%		53-130%

ND = Not detected
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-610-SS-212-02		
Lab Sample ID:	F8870-14	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	90.7
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA006352.D	1	02/06/01	MRE	02/05/01	OP2677	GAA237
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	740	ug/kg	
208-96-8	Acenaphthylene	ND	740	ug/kg	
120-12-7	Anthracene	ND	370	ug/kg	
56-55-3	Benzo(a)anthracene	ND	370	ug/kg	
50-32-8	Benzo(a)pyrene	ND	74	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	74	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	74	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	74	ug/kg	
218-01-9	Chrysene	ND	370	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	74	ug/kg	
206-44-0	Fluoranthene	ND	370	ug/kg	
86-73-7	Fluorene	ND	370	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	74	ug/kg	
91-20-3	Naphthalene	ND	370	ug/kg	
90-12-0	1-Methylnaphthalene	ND	370	ug/kg	
91-57-6	2-Methylnaphthalene	ND	370	ug/kg	
85-01-8	Phenanthrene	ND	370	ug/kg	
129-00-0	Pyrene	ND	370	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	87%		22-130%
92-94-4	p-Terphenyl	98%		53-130%

ND = Not detected
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-610-SS-213-02		
Lab Sample ID:	F8870-15	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	89.8
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA006353.D	1	02/06/01	MRE	02/05/01	OP2677	GAA237
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	740	ug/kg	
208-96-8	Acenaphthylene	ND	740	ug/kg	
120-12-7	Anthracene	ND	370	ug/kg	
56-55-3	Benzo(a)anthracene	ND	370	ug/kg	
50-32-8	Benzo(a)pyrene	ND	74	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	74	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	74	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	74	ug/kg	
218-01-9	Chrysene	ND	370	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	74	ug/kg	
206-44-0	Fluoranthene	ND	370	ug/kg	
86-73-7	Fluorene	ND	370	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	74	ug/kg	
91-20-3	Naphthalene	ND	370	ug/kg	
90-12-0	1-Methylnaphthalene	ND	370	ug/kg	
91-57-6	2-Methylnaphthalene	ND	370	ug/kg	
85-01-8	Phenanthrene	ND	370	ug/kg	
129-00-0	Pyrene	ND	370	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	94%		22-130%
92-94-4	p-Terphenyl	105%		53-130%

ND = Not detected
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-610-SS-DUP3		
Lab Sample ID:	F8870-3	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	89.6
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA006338.D	1	02/06/01	MRE	02/05/01	OP2677	GAA237
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	740	ug/kg	
208-96-8	Acenaphthylene	ND	740	ug/kg	
120-12-7	Anthracene	ND	370	ug/kg	
56-55-3	Benzo(a)anthracene	ND	370	ug/kg	
50-32-8	Benzo(a)pyrene	ND	74	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	74	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	74	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	74	ug/kg	
218-01-9	Chrysene	ND	370	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	74	ug/kg	
206-44-0	Fluoranthene	ND	370	ug/kg	
86-73-7	Fluorene	ND	370	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	74	ug/kg	
91-20-3	Naphthalene	ND	370	ug/kg	
90-12-0	1-Methylnaphthalene	ND	370	ug/kg	
91-57-6	2-Methylnaphthalene	ND	370	ug/kg	
85-01-8	Phenanthrene	ND	370	ug/kg	
129-00-0	Pyrene	ND	370	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	89%		22-130%
92-94-4	p-Terphenyl	99%		53-130%

ND = Not detected
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-610-SS-DUP4		
Lab Sample ID:	F8870-6	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	91.1
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA006343.D	1	02/06/01	MRE	02/05/01	OP2677	GAA237
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	730	ug/kg	
208-96-8	Acenaphthylene	ND	730	ug/kg	
120-12-7	Anthracene	ND	370	ug/kg	
56-55-3	Benzo(a)anthracene	358	370	ug/kg	J
50-32-8	Benzo(a)pyrene	694	73	ug/kg	
205-99-2	Benzo(b)fluoranthene	475	73	ug/kg	
191-24-2	Benzo(g,h,i)perylene	723	73	ug/kg	
207-08-9	Benzo(k)fluoranthene	229	73	ug/kg	
218-01-9	Chrysene	373	370	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	50.0	73	ug/kg	J
206-44-0	Fluoranthene	346	370	ug/kg	J
86-73-7	Fluorene	ND	370	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	689	73	ug/kg	
91-20-3	Naphthalene	ND	370	ug/kg	
90-12-0	1-Methylnaphthalene	ND	370	ug/kg	
91-57-6	2-Methylnaphthalene	ND	370	ug/kg	
85-01-8	Phenanthrene	ND	370	ug/kg	
129-00-0	Pyrene	331	370	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	91%		22-130%
92-94-4	p-Terphenyl	102%		53-130%

ND = Not detected
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-610-SS-201-01		
Lab Sample ID:	F8870-1	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	88.7
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP13453.D	1	02/07/01	SKW	02/05/01	OP2678	GOP526
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	19.7	9.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	101%		40-140%

ND = Not detected
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-610-SS-202-01		
Lab Sample ID:	F8870-2	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	90.0
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP13454.D	1	02/07/01	SKW	02/05/01	OP2678	GOP526
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	14.3	9.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	98%		40-140%

ND = Not detected
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-610-SS-203-01		
Lab Sample ID:	F8870-4	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	89.1
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP13456.D	1	02/07/01	SKW	02/05/01	OP2678	GOP526
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	36.1	9.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	99%		40-140%

ND = Not detected
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-610-SS-204-01		
Lab Sample ID:	F8870-5	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	89.9
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP13476.D	4	02/08/01	SKW	02/05/01	OP2678	GOP527
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	86.0	37	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	92%		40-140%

ND = Not detected
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-610-SS-205-01		
Lab Sample ID:	F8870-7	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	90.6
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP13462.D	1	02/08/01	SKW	02/05/01	OP2678	GOP526
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	12.2	9.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	92%		40-140%

ND = Not detected
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-610-SS-206-01		
Lab Sample ID:	F8870-8	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	88.2
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP13463.D	1	02/08/01	SKW	02/05/01	OP2678	GOP526
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	8.41	9.4	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	92%		40-140%

ND = Not detected
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-610-SS-207-02		
Lab Sample ID:	F8870-9	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	68.9
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP13464.D	1	02/08/01	SKW	02/05/01	OP2678	GOP526
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	64.4	12	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	95%		40-140%

ND = Not detected
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-610-SS-208-02		
Lab Sample ID:	F8870-10	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	92.8
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP13465.D	1	02/08/01	SKW	02/05/01	OP2678	GOP526
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	18.7	9.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	94%		40-140%

ND = Not detected
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-610-SS-209-02		
Lab Sample ID:	F8870-11	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	88.7
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP13466.D	1	02/08/01	SKW	02/05/01	OP2678	GOP526
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	ND	9.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	102%		40-140%

ND = Not detected
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-610-SS-210-02		
Lab Sample ID:	F8870-12	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	81.1
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP13467.D	1	02/08/01	SKW	02/05/01	OP2678	GOP526
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	ND	10	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	94%		40-140%

ND = Not detected
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-610-SS-211-02		
Lab Sample ID:	F8870-13	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	91.2
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP13468.D	1	02/08/01	SKW	02/05/01	OP2678	GOP526
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	ND	9.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	88%		40-140%

ND = Not detected
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-610-SS-212-02		
Lab Sample ID:	F8870-14	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	90.7
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP13469.D	1	02/08/01	SKW	02/05/01	OP2678	GOP526
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	ND	9.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	96%		40-140%

ND = Not detected
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-610-SS-213-02		
Lab Sample ID:	F8870-15	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	89.8
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP13470.D	1	02/08/01	SKW	02/05/01	OP2678	GOP526
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	7.96	9.3	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	95%		40-140%

ND = Not detected
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-610-SS-DUP3		
Lab Sample ID:	F8870-3	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	89.6
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP13455.D	1	02/07/01	SKW	02/05/01	OP2678	GOP526
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	18.5	9.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	97%		40-140%

ND = Not detected
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-610-SS-DUP4		
Lab Sample ID:	F8870-6	**Date Sampled:**	02/01/01
Matrix:	SO - Soil	**Date Received:**	02/02/01
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	91.1
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP13477.D	4	02/08/01	SKW	02/05/01	OP2678	GOP527
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	63.5	36	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	90%		40-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

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

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO:	**MR. M. SPERANZA**	**DATE:**	**APRIL 5, 2001**
FROM:	**ANGELA SCHEETZ**	**COPIES:**	**DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION- VOA/PAH/TPH**
CTO 078, NAS CECIL FIELD
SDG F9175

SAMPLES: 6/Soils/VOA

CEF-610-SS-301-01	CEF-610-SS-302-02
CEF-610-SS-303-01	CEF-610-SS-304-02
CEF-610-SS-313-01'	CEF-610-SS-314-02

2/Soils/PAH

CEF-610-SS-311-01'	CEF-610-SS-312-01'

2/Soils/TPH

CEF-610-SS-308-02	CEF-610-SS-309-02

OVERVIEW

The sample set for CTO 078, NAS Cecil Field, SDG F9175 consists of ten (10) soil environmental samples. The samples were analyzed for volatile organic compounds (VOCs), Target Compound List (TCL) polynuclear aromatic hydrocarbons (PAHs), or total petroleum hydrocarbons (TPH).

The samples were collected by TetraTech NUS on March 12, 2001 and analyzed by Accutest. All analyses were conducted in accordance with Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria using SW-846 Methods 8260B, 8310, and Florida Pro analytical and reporting protocols. The data contained in this SDG were validated with regard to the following parameters:

* • Data completeness
* • Holding times
* • Initial and continuing calibration
* • Laboratory method and field quality control blank results
* • Detection Limits

The symbol (*) indicates that all quality control criteria were met for this parameter. Problems affecting data quality are discussed below; documentation supporting these findings is presented in Appendix C. Qualified Analytical results are presented in Appendix A.

Volatiles

The percent solids for this fraction were unable to be calculated due to the lab not receiving enough sample.

Polynuclear aromatic hydrocarbons

No qualifiers were assigned to this fraction.

Total Petroleum Hydrocarbons

No qualifiers were assigned to this fraction.

Additional Comments

Positive results below the reporting limit (RL) were qualified as estimated, J, due to uncertainty near the detection limit.

EXECUTIVE SUMMARY

Laboratory Performance Issues: None

Other Factors Affecting Data Quality: None

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (10/99) and the NFESC guidelines (September, 1999). The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the NFESC guidelines and the Quality Assurance Project Plan (QAPP)."

Angela Scheetz
Tetra Tech NUS

Angela Scheetz
Chemist/Data Validator

TetraTech NUS

Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as Reported by the Laboratory
3. Appendix C - Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F9175

SAMPLE NUMBER:	CEF-610-SS-301-01			CEF-610-SS-302-02			CEF-610-SS-303-01			CEF-610-SS-304-02		
SAMPLE DATE:	03/12/01			03/12/01			03/12/01			03/12/01		
LABORATORY ID:	F9175-1			F9175-2			F9175-3			F9175-4		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	0.0 %			0.0 %			0.0 %			0.0 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
VOLATILES												
1,1,1-TRICHLOROETHANE	5.6	U		5.8	U		6	U		5.7	U	
1,1,2,2-TETRACHLOROETHANE	5.6	U		5.8	U		6	U		5.7	U	
1,1,2-TRICHLOROETHANE	5.6	U		5.8	U		6	U		5.7	U	
1,1-DICHLOROETHANE	5.6	U		5.8	U		6	U		5.7	U	
1,1-DICHLOROETHENE	5.6	U		5.8	U		6	U		5.7	U	
1,2-DICHLOROETHANE	5.6	U		5.8	U		6	U		5.7	U	
1,2-DICHLOROPROPANE	5.6	U		5.8	U		6	U		5.7	U	
2-BUTANONE	11	U		12	U		12	U		11	U	
2-HEXANONE	11	U		12	U		12	U		11	U	
4-METHYL-2-PENTANONE	11	U		12	U		12	U		11	U	
ACETONE	56	U		58	U		60	U		57	U	
BENZENE	5.6	U		5.8	U		6	U		5.7	U	
BROMODICHLOROMETHANE	5.6	U		5.8	U		6	U		5.7	U	
BROMOFORM	5.6	U		5.8	U		6	U		5.7	U	
BROMOMETHANE	5.6	U		5.8	U		6	U		5.7	U	
CARBON DISULFIDE	11	U		12	U		12	U		11	U	
CARBON TETRACHLORIDE	5.6	U		5.8	U		6	U		5.7	U	
CHLOROBENZENE	5.6	U		5.8	U		6	U		5.7	U	
CHLORODIBROMOMETHANE	5.6	U		5.8	U		6	U		5.7	U	
CHLOROETHANE	5.6	U		5.8	U		6	U		5.7	U	
CHLOROFORM	5.6	U		5.8	U		6	U		5.7	U	
CHLOROMETHANE	5.6	U		5.8	U		6	U		5.7	U	
CIS-1,2-DICHLOROETHENE	5.6	U		5.8	U		6	U		5.7	U	
CIS-1,3-DICHLOROPROPENE	5.6	U		5.8	U		6	U		5.7	U	
ETHYLBENZENE	5.6	U		5.8	U		6	U		5.7	U	
METHYLENE CHLORIDE	11	U		12	U		12	U		11	U	
STYRENE	5.6	U		5.8	U		6	U		5.7	U	
TETRACHLOROETHENE	2.6	J	P	2.3	J	P	6	U		5.7	U	
TOLUENE	5.6	U		5.8	U		6	U		5.7	U	
TOTAL XYLENES	17	U		17	U		18	U		17	U	
TRANS-1,2-DICHLOROETHENE	5.6	U		5.8	U		6	U		5.7	U	
TRANS-1,3-DICHLOROPROPENE	5.6	U		5.8	U		6	U		5.7	U	
TRICHLOROETHENE	5.6	U		5.8	U		6	U		5.7	U	

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F9175

SAMPLE NUMBER:	CEF-610-SS-301-01			CEF-610-SS-302-02			CEF-610-SS-303-01			CEF-610-SS-304-02		
SAMPLE DATE:	03/12/01			03/12/01			03/12/01			03/12/01		
LABORATORY ID:	F9175-1			F9175-2			F9175-3			F9175-4		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	0.0 %			0.0 %			0.0 %			0.0 %		
UNITS:	UG/KG			UG/KG			UG/KG			UG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
VOLATILES												
VINYL CHLORIDE	5.6	U		5.8	U		6	U		5.7	U	

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F9175

SAMPLE NUMBER:	CEF-610-SS-313-01'			CEF-610-SS-314-02								
SAMPLE DATE:	03/12/01			03/12/01			/ /			/ /		
LABORATORY ID:	F9175-13			F9175-14								
QC_TYPE:	NORMAL			NORMAL								
% SOLIDS:	0.0 %			0.0 %			100.0 %			100.0 %		
UNITS:	UG/KG			UG/KG								
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
VOLATILES												
1,1,1-TRICHLOROETHANE	5.6	U		5.7	U							
1,1,2,2-TETRACHLOROETHANE	5.6	U		5.7	U							
1,1,2-TRICHLOROETHANE	5.6	U		5.7	U							
1,1-DICHLOROETHANE	5.6	U		5.7	U							
1,1-DICHLOROETHENE	5.6	U		5.7	U							
1,2-DICHLOROETHANE	5.6	U		5.7	U							
1,2-DICHLOROPROPANE	5.6	U		5.7	U							
2-BUTANONE	11	U		11	U							
2-HEXANONE	11	U		11	U							
4-METHYL-2-PENTANONE	11	U		11	U							
ACETONE	56	U		57	U							
BENZENE	5.6	U		5.7	U							
BROMODICHLOROMETHANE	5.6	U		5.7	U							
BROMOFORM	5.6	U		5.7	U							
BROMOMETHANE	5.6	U		5.7	U							
CARBON DISULFIDE	11	U		11	U							
CARBON TETRACHLORIDE	5.6	U		5.7	U							
CHLOROBENZENE	5.6	U		5.7	U							
CHLORODIBROMOMETHANE	5.6	U		5.7	U							
CHLOROETHANE	5.6	U		5.7	U							
CHLOROFORM	5.6	U		5.7	U							
CHLOROMETHANE	5.6	U		5.7	U							
CIS-1,2-DICHLOROETHENE	5.6	U		5.7	U							
CIS-1,3-DICHLOROPROPENE	5.6	U		5.7	U							
ETHYLBENZENE	5.6	U		5.7	U							
METHYLENE CHLORIDE	11	U		11	U							
STYRENE	5.6	U		5.7	U							
TETRACHLOROETHENE	5.6	U		5.7	U							
TOLUENE	5.6	U		5.7	U							
TOTAL XYLENES	17	U		17	U							
TRANS-1,2-DICHLOROETHENE	5.6	U		5.7	U							
TRANS-1,3-DICHLOROPROPENE	5.6	U		5.7	U							
TRICHLOROETHENE	5.6	U		5.7	U							

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F9175

SAMPLE NUMBER:	CEF-610-SS-313-01'	CEF-610-SS-314-02		
SAMPLE DATE:	03/12/01	03/12/01	/ /	/ /
LABORATORY ID:	F9175-13	F9175-14		
QC_TYPE:	NORMAL	NORMAL		
% SOLIDS:	0.0 %	0.0 %	100.0 %	100.0 %
UNITS:	UG/KG	UG/KG		
FIELD DUPLICATE OF:				

	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
VOLATILES												
VINYL CHLORIDE	5.6	U		5.7	U							

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F9175

SAMPLE NUMBER:	CEF-610-SS-311-01'	CEF-610-SS-312-01'		
SAMPLE DATE:	03/12/01	03/12/01	/ /	/ /
LABORATORY ID:	F9175-11	F9175-12		
QC_TYPE:	NORMAL	NORMAL		
% SOLIDS:	75.6 %	82.3 %	100.0 %	100.0 %
UNITS:	UG/KG	UG/KG		
FIELD DUPLICATE OF:				

	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
POLYNUCLEAR AROMATIC HYDROCARBONS												
1-METHYLNAPHTHALENE	440	U		400	U							
2-METHYLNAPHTHALENE	440	U		400	U							
ACENAPHTHENE	880	U		810	U							
ACENAPHTHYLENE	880	U		810	U							
ANTHRACENE	440	U		400	U							
BENZO(A)ANTHRACENE	440	U		400	U							
BENZO(A)PYRENE	88	U		81	U							
BENZO(B)FLUORANTHENE	88	U		81	U							
BENZO(G,H,I)PERYLENE	88	U		81	U							
BENZO(K)FLUORANTHENE	88	U		81	U							
CHRYSENE	440	U		400	U							
DIBENZO(A,H)ANTHRACENE	88	U		81	U							
FLUORANTHENE	440	U		400	U							
FLUORENE	440	U		400	U							
INDENO(1,2,3-CD)PYRENE	88	U		81	U							
NAPHTHALENE	440	U		400	U							
PHENANTHRENE	440	U		400	U							
PYRENE	440	U		400	U							

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F9175

SAMPLE NUMBER:	CEF-610-SS-308-02			CEF-610-SS-309-02								
SAMPLE DATE:	03/12/01			03/12/01			/ /			/ /		
LABORATORY ID:	F9175-8			F9175-9								
QC_TYPE:	NORMAL			NORMAL								
% SOLIDS:	82.1 %			86.2 %			100.0 %			100.0 %		
UNITS:	MG/KG			MG/KG								
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
TOTAL PETROLEUM HYDROCARBONS	10	U		9.6	U							

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

Report of Analysis

Client Sample ID:	CEF-610-SS-301-01		
Lab Sample ID:	F9175-1	**Date Sampled:**	03/12/01
Matrix:	SO - Soil	**Date Received:**	03/13/01
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	H011284.D	1	03/14/01	NAF	n/a	n/a	VH291
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	56	ug/kg	
71-43-2	Benzene	ND	5.6	ug/kg	
75-27-4	Bromodichloromethane	ND	5.6	ug/kg	
75-25-2	Bromoform	ND	5.6	ug/kg	
108-90-7	Chlorobenzene	ND	5.6	ug/kg	
75-00-3	Chloroethane	ND	5.6	ug/kg	
67-66-3	Chloroform	ND	5.6	ug/kg	
75-15-0	Carbon disulfide	ND	11	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.6	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.6	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.6	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.6	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.6	ug/kg	
124-48-1	Dibromochloromethane	ND	5.6	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.6	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.6	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.6	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.6	ug/kg	
100-41-4	Ethylbenzene	ND	5.6	ug/kg	
591-78-6	2-Hexanone	ND	11	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	11	ug/kg	
74-83-9	Methyl bromide	ND	5.6	ug/kg	
74-87-3	Methyl chloride	ND	5.6	ug/kg	
75-09-2	Methylene chloride	ND	11	ug/kg	
78-93-3	Methyl ethyl ketone	ND	11	ug/kg	
100-42-5	Styrene	ND	5.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.6	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.6	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.6	ug/kg	
127-18-4	Tetrachloroethylene	2.6	5.6	ug/kg	J
108-88-3	Toluene	ND	5.6	ug/kg	
79-01-6	Trichloroethylene	ND	5.6	ug/kg	
75-01-4	Vinyl chloride	ND	5.6	ug/kg	
1330-20-7	Xylene (total)	ND	17	ug/kg	

ND = Not detected
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-610-SS-301-01		
Lab Sample ID:	F9175-1	**Date Sampled:**	03/12/01
Matrix:	SO - Soil	**Date Received:**	03/13/01
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		71-122%
2037-26-5	Toluene-D8	107%		73-128%
460-00-4	4-Bromofluorobenzene	113%		53-158%
17060-07-0	1,2-Dichloroethane-D4	106%		71-122%

(a) Results reported on a wet weight basis.

ND = Not detected
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-610-SS-302-02		
Lab Sample ID:	F9175-2	**Date Sampled:**	03/12/01
Matrix:	SO - Soil	**Date Received:**	03/13/01
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	H011279.D	1	03/14/01	NAF	n/a	n/a	VH291
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	58	ug/kg	
71-43-2	Benzene	ND	5.8	ug/kg	
75-27-4	Bromodichloromethane	ND	5.8	ug/kg	
75-25-2	Bromoform	ND	5.8	ug/kg	
108-90-7	Chlorobenzene	ND	5.8	ug/kg	
75-00-3	Chloroethane	ND	5.8	ug/kg	
67-66-3	Chloroform	ND	5.8	ug/kg	
75-15-0	Carbon disulfide	ND	12	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.8	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.8	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.8	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.8	ug/kg	
124-48-1	Dibromochloromethane	ND	5.8	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.8	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.8	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.8	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.8	ug/kg	
100-41-4	Ethylbenzene	ND	5.8	ug/kg	
591-78-6	2-Hexanone	ND	12	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	12	ug/kg	
74-83-9	Methyl bromide	ND	5.8	ug/kg	
74-87-3	Methyl chloride	ND	5.8	ug/kg	
75-09-2	Methylene chloride	ND	12	ug/kg	
78-93-3	Methyl ethyl ketone	ND	12	ug/kg	
100-42-5	Styrene	ND	5.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.8	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.8	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.8	ug/kg	
127-18-4	Tetrachloroethylene	2.3	5.8	ug/kg	J
108-88-3	Toluene	ND	5.8	ug/kg	
79-01-6	Trichloroethylene	ND	5.8	ug/kg	
75-01-4	Vinyl chloride	ND	5.8	ug/kg	
1330-20-7	Xylene (total)	ND	17	ug/kg	

ND = Not detected
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-610-SS-302-02		
Lab Sample ID:	F9175-2	**Date Sampled:**	03/12/01
Matrix:	SO - Soil	**Date Received:**	03/13/01
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		71-122%
2037-26-5	Toluene-D8	101%		73-128%
460-00-4	4-Bromofluorobenzene	107%		53-158%
17060-07-0	1,2-Dichloroethane-D4	96%		71-122%

(a) Results reported on a wet weight basis.

ND = Not detected
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-610-SS-303-01		
Lab Sample ID:	F9175-3	**Date Sampled:**	03/12/01
Matrix:	SO - Soil	**Date Received:**	03/13/01
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	H011280.D	1	03/14/01	NAF	n/a	n/a	VH291
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	60	ug/kg	
71-43-2	Benzene	ND	6.0	ug/kg	
75-27-4	Bromodichloromethane	ND	6.0	ug/kg	
75-25-2	Bromoform	ND	6.0	ug/kg	
108-90-7	Chlorobenzene	ND	6.0	ug/kg	
75-00-3	Chloroethane	ND	6.0	ug/kg	
67-66-3	Chloroform	ND	6.0	ug/kg	
75-15-0	Carbon disulfide	ND	12	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	6.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.0	ug/kg	
124-48-1	Dibromochloromethane	ND	6.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	6.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	6.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.0	ug/kg	
100-41-4	Ethylbenzene	ND	6.0	ug/kg	
591-78-6	2-Hexanone	ND	12	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	12	ug/kg	
74-83-9	Methyl bromide	ND	6.0	ug/kg	
74-87-3	Methyl chloride	ND	6.0	ug/kg	
75-09-2	Methylene chloride	ND	12	ug/kg	
78-93-3	Methyl ethyl ketone	ND	12	ug/kg	
100-42-5	Styrene	ND	6.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	6.0	ug/kg	
108-88-3	Toluene	ND	6.0	ug/kg	
79-01-6	Trichloroethylene	ND	6.0	ug/kg	
75-01-4	Vinyl chloride	ND	6.0	ug/kg	
1330-20-7	Xylene (total)	ND	18	ug/kg	

ND = Not detected
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-610-SS-303-01		
Lab Sample ID:	F9175-3	**Date Sampled:**	03/12/01
Matrix:	SO - Soil	**Date Received:**	03/13/01
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		71-122%
2037-26-5	Toluene-D8	99%		73-128%
460-00-4	4-Bromofluorobenzene	100%		53-158%
17060-07-0	1,2-Dichloroethane-D4	100%		71-122%

(a) Results reported on a wet weight basis.

ND = Not detected
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-610-SS-304-02		
Lab Sample ID:	F9175-4	**Date Sampled:**	03/12/01
Matrix:	SO - Soil	**Date Received:**	03/13/01
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	H011281.D	1	03/14/01	NAF	n/a	n/a	VH291
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	57	ug/kg	
71-43-2	Benzene	ND	5.7	ug/kg	
75-27-4	Bromodichloromethane	ND	5.7	ug/kg	
75-25-2	Bromoform	ND	5.7	ug/kg	
108-90-7	Chlorobenzene	ND	5.7	ug/kg	
75-00-3	Chloroethane	ND	5.7	ug/kg	
67-66-3	Chloroform	ND	5.7	ug/kg	
75-15-0	Carbon disulfide	ND	11	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.7	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.7	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.7	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.7	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.7	ug/kg	
124-48-1	Dibromochloromethane	ND	5.7	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.7	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.7	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.7	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.7	ug/kg	
100-41-4	Ethylbenzene	ND	5.7	ug/kg	
591-78-6	2-Hexanone	ND	11	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	11	ug/kg	
74-83-9	Methyl bromide	ND	5.7	ug/kg	
74-87-3	Methyl chloride	ND	5.7	ug/kg	
75-09-2	Methylene chloride	ND	11	ug/kg	
78-93-3	Methyl ethyl ketone	ND	11	ug/kg	
100-42-5	Styrene	ND	5.7	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.7	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.7	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.7	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.7	ug/kg	
108-88-3	Toluene	ND	5.7	ug/kg	
79-01-6	Trichloroethylene	ND	5.7	ug/kg	
75-01-4	Vinyl chloride	ND	5.7	ug/kg	
1330-20-7	Xylene (total)	ND	17	ug/kg	

ND = Not detected
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-610-SS-304-02		
Lab Sample ID:	F9175-4	**Date Sampled:**	03/12/01
Matrix:	SO - Soil	**Date Received:**	03/13/01
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		71-122%
2037-26-5	Toluene-D8	104%		73-128%
460-00-4	4-Bromofluorobenzene	107%		53-158%
17060-07-0	1,2-Dichloroethane-D4	100%		71-122%

(a) Results reported on a wet weight basis.

ND = Not detected
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-610-SS-313-01'		
Lab Sample ID:	F9175-13	**Date Sampled:**	03/12/01
Matrix:	SO - Soil	**Date Received:**	03/13/01
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	H011282.D	1	03/14/01	NAF	n/a	n/a	VH291
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	56	ug/kg	
71-43-2	Benzene	ND	5.6	ug/kg	
75-27-4	Bromodichloromethane	ND	5.6	ug/kg	
75-25-2	Bromoform	ND	5.6	ug/kg	
108-90-7	Chlorobenzene	ND	5.6	ug/kg	
75-00-3	Chloroethane	ND	5.6	ug/kg	
67-66-3	Chloroform	ND	5.6	ug/kg	
75-15-0	Carbon disulfide	ND	11	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.6	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.6	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.6	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.6	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.6	ug/kg	
124-48-1	Dibromochloromethane	ND	5.6	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.6	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.6	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.6	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.6	ug/kg	
100-41-4	Ethylbenzene	ND	5.6	ug/kg	
591-78-6	2-Hexanone	ND	11	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	11	ug/kg	
74-83-9	Methyl bromide	ND	5.6	ug/kg	
74-87-3	Methyl chloride	ND	5.6	ug/kg	
75-09-2	Methylene chloride	ND	11	ug/kg	
78-93-3	Methyl ethyl ketone	ND	11	ug/kg	
100-42-5	Styrene	ND	5.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.6	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.6	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.6	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.6	ug/kg	
108-88-3	Toluene	ND	5.6	ug/kg	
79-01-6	Trichloroethylene	ND	5.6	ug/kg	
75-01-4	Vinyl chloride	ND	5.6	ug/kg	
1330-20-7	Xylene (total)	ND	17	ug/kg	

ND = Not detected
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-610-SS-313-01'		
Lab Sample ID:	F9175-13	**Date Sampled:**	03/12/01
Matrix:	SO - Soil	**Date Received:**	03/13/01
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		71-122%
2037-26-5	Toluene-D8	101%		73-128%
460-00-4	4-Bromofluorobenzene	103%		53-158%
17060-07-0	1,2-Dichloroethane-D4	109%		71-122%

(a) En Core sampler was not properly capped; results are considered minimum values. Results reported on a wet weight basis.

ND = Not detected
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-610-SS-314-02		
Lab Sample ID:	F9175-14	**Date Sampled:**	03/12/01
Matrix:	SO - Soil	**Date Received:**	03/13/01
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	H011283.D	1	03/14/01	NAF	n/a	n/a	VH291
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	57	ug/kg	
71-43-2	Benzene	ND	5.7	ug/kg	
75-27-4	Bromodichloromethane	ND	5.7	ug/kg	
75-25-2	Bromoform	ND	5.7	ug/kg	
108-90-7	Chlorobenzene	ND	5.7	ug/kg	
75-00-3	Chloroethane	ND	5.7	ug/kg	
67-66-3	Chloroform	ND	5.7	ug/kg	
75-15-0	Carbon disulfide	ND	11	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.7	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.7	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.7	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.7	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.7	ug/kg	
124-48-1	Dibromochloromethane	ND	5.7	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.7	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.7	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.7	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.7	ug/kg	
100-41-4	Ethylbenzene	ND	5.7	ug/kg	
591-78-6	2-Hexanone	ND	11	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	11	ug/kg	
74-83-9	Methyl bromide	ND	5.7	ug/kg	
74-87-3	Methyl chloride	ND	5.7	ug/kg	
75-09-2	Methylene chloride	ND	11	ug/kg	
78-93-3	Methyl ethyl ketone	ND	11	ug/kg	
100-42-5	Styrene	ND	5.7	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.7	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.7	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.7	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.7	ug/kg	
108-88-3	Toluene	ND	5.7	ug/kg	
79-01-6	Trichloroethylene	ND	5.7	ug/kg	
75-01-4	Vinyl chloride	ND	5.7	ug/kg	
1330-20-7	Xylene (total)	ND	17	ug/kg	

ND = Not detected
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-610-SS-314-02		
Lab Sample ID:	F9175-14	**Date Sampled:**	03/12/01
Matrix:	SO - Soil	**Date Received:**	03/13/01
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		71-122%
2037-26-5	Toluene-D8	104%		73-128%
460-00-4	4-Bromofluorobenzene	104%		53-158%
17060-07-0	1,2-Dichloroethane-D4	103%		71-122%

(a) Results reported on a wet weight basis.

ND = Not detected
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-610-SS-311-01'		
Lab Sample ID:	F9175-11	**Date Sampled:**	03/12/01
Matrix:	SO - Soil	**Date Received:**	03/13/01
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	75.6
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE002299.D	1	03/16/01	MRE	03/15/01	OP2860	GEE115
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	880	ug/kg	
208-96-8	Acenaphthylene	ND	880	ug/kg	
120-12-7	Anthracene	ND	440	ug/kg	
56-55-3	Benzo(a)anthracene	ND	440	ug/kg	
50-32-8	Benzo(a)pyrene	ND	88	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	88	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	88	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	88	ug/kg	
218-01-9	Chrysene	ND	440	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	88	ug/kg	
206-44-0	Fluoranthene	ND	440	ug/kg	
86-73-7	Fluorene	ND	440	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	88	ug/kg	
91-20-3	Naphthalene	ND	440	ug/kg	
90-12-0	1-Methylnaphthalene	ND	440	ug/kg	
91-57-6	2-Methylnaphthalene	ND	440	ug/kg	
85-01-8	Phenanthrene	ND	440	ug/kg	
129-00-0	Pyrene	ND	440	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	78%		22-130%
92-94-4	p-Terphenyl	76%		53-130%

ND = Not detected
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-610-SS-312-01'		
Lab Sample ID:	F9175-12	**Date Sampled:**	03/12/01
Matrix:	SO - Soil	**Date Received:**	03/13/01
Method:	EPA 8310 SW846 3550B	**Percent Solids:**	82.3
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE002300.D	1	03/16/01	MRE	03/15/01	OP2860	GEE115
Run #2							

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	810	ug/kg	
208-96-8	Acenaphthylene	ND	810	ug/kg	
120-12-7	Anthracene	ND	400	ug/kg	
56-55-3	Benzo(a)anthracene	ND	400	ug/kg	
50-32-8	Benzo(a)pyrene	ND	81	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	81	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	81	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	81	ug/kg	
218-01-9	Chrysene	ND	400	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	81	ug/kg	
206-44-0	Fluoranthene	ND	400	ug/kg	
86-73-7	Fluorene	ND	400	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	81	ug/kg	
91-20-3	Naphthalene	ND	400	ug/kg	
90-12-0	1-Methylnaphthalene	ND	400	ug/kg	
91-57-6	2-Methylnaphthalene	ND	400	ug/kg	
85-01-8	Phenanthrene	ND	400	ug/kg	
129-00-0	Pyrene	ND	400	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	78%		22-130%
92-94-4	p-Terphenyl	79%		53-130%

ND = Not detected
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-610-SS-308-02		
Lab Sample ID:	F9175-8	**Date Sampled:**	03/12/01
Matrix:	SO - Soil	**Date Received:**	03/13/01
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	82.1
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP14019.D	1	03/16/01	SKW	03/15/01	OP2859	GOP550
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	ND	10	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	77%		40-140%

ND = Not detected
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-610-SS-309-02		
Lab Sample ID:	F9175-9	**Date Sampled:**	03/12/01
Matrix:	SO - Soil	**Date Received:**	03/13/01
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	86.2
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP14020.D	1	03/16/01	SKW	03/15/01	OP2859	GOP550
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	ND	9.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	88%		40-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

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

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO:	**M. SPERANZA**	**DATE:**	**MARCH 29, 2001**
FROM:	**ANGELA SCHEETZ**	**COPIES:**	**DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION – BARIUM/SELENIUM**
CTO-078 NAS CECIL FIELD
SDG – F9175

SAMPLES: 4/Soils/

CEF-610-SS-305-01	CEF-610-SS-306-02
CEF-610-SS-307-02	CEF-610-SS-310-01

Overview

The sample set for CTO 078, NAS Cecil Field, SDG F9175, consists of four (4) environmental soil samples.

All samples were analyzed for barium. All samples but CEF-610-307-02 were analyzed for selenium also. The samples were collected by TetraTech NUS on March 12, 2001 and analyzed by Accutest Laboratory under Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria. Metals analyses were conducted using SW 846 method 6010B.

These data were evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • Calibration Recoveries
• Laboratory Blank Analyses
* • Detection Limits

* - All quality control criteria were met for this parameter.

Laboratory Blank Analyses

The following contaminant was detected in the laboratory preparation blank at the following maximum concentration:

Analyte	Maximum Concentration	Action Level
Barium	0.49 mg/kg	2.45 mg/kg

An action level of 5X the maximum concentration were used to evaluate the sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluation for blank contamination. No qualifiers were assigned on this basis.

Executive Summary

Laboratory Performance: Barium was present in the laboratory preparation blank.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Review", February 1994 and the NFESC document entitled "Navy IRCDQM" (September 1999).

The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the NFESC Guidelines and the Quality Assurance Project Plan (QAPP)."

Angela Scheetz

Tetra Tech NUS
Angela Scheetz
Environmental Scientist

TetraTech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F9175

SAMPLE NUMBER:	CEF-610-SS-305-01			CEF-610-SS-306-02			CEF-610-SS-307-02			CEF-610-SS-310-01		
SAMPLE DATE:	03/12/01			03/12/01			03/12/01			03/12/01		
LABORATORY ID:	F9175-5			F9175-6			F9175-7			F9175-10		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	83.4 %			83.6 %			89.6 %			91.7 %		
UNITS:	MG/KG			MG/KG			MG/KG			MG/KG		
FIELD DUPLICATE OF:												
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
INORGANICS												
BARIUM	32.8			19.4			7.3			7.0		
SELENIUM	0.29	U		0.33						0.28	U	

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

Report of Analysis

Client Sample ID:	CEF-610-SS-305-01		
Lab Sample ID:	F9175-5	**Date Sampled:**	03/12/01
Matrix:	SO - Soil	**Date Received:**	03/13/01
		Percent Solids:	83.4
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed By		Method
Barium	32.8	23.5	0.11	mg/kg	1	03/15/01	03/19/01	JK	SW846 6010B
Selenium	0.29 U	11.8	0.29	mg/kg	1	03/15/01	03/19/01	JK	SW846 6010B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Report of Analysis

Client Sample ID:	CEF-610-SS-306-02		
Lab Sample ID:	F9175-6	**Date Sampled:**	03/12/01
Matrix:	SO - Soil	**Date Received:**	03/13/01
		Percent Solids:	83.6
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method
Barium	19.4 B	23.5	0.11	mg/kg	1	03/15/01	03/19/01	JK	SW846 6010B
Selenium	0.33 B	11.7	0.29	mg/kg	1	03/15/01	03/19/01	JK	SW846 6010B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Report of Analysis

Client Sample ID:	CEF-610-SS-307-02		
Lab Sample ID:	F9175-7	**Date Sampled:**	03/12/01
Matrix:	SO - Soil	**Date Received:**	03/13/01
		Percent Solids:	89.6
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed By	Method
Barium	7.3 B	22.5	0.11	mg/kg	1	03/15/01	03/19/01 JK	SW846 6010B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Report of Analysis

Client Sample ID:	CEF-610-SS-310-01		
Lab Sample ID:	F9175-10	**Date Sampled:**	03/12/01
Matrix:	SO - Soil	**Date Received:**	03/13/01
		Percent Solids:	91.7
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed By	Method
Barium	7.0 B	22.5	0.11	mg/kg	1	03/15/01	03/19/01 JK	SW846 6010B
Selenium	0.28 U	11.2	0.28	mg/kg	1	03/15/01	03/19/01 JK	SW846 6010B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO:	**M. SPERANZA**	**DATE:**	**APRIL 17, 2001**
FROM:	**ERIN M. FAUST**	**COPIES:**	**DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION – CHROMIUM**
CTO-078 NAS CECIL FIELD
SAMPLE DELIVERY GROUP (SDG) – F9175R

SAMPLES: 1/Soil/

CFE-610-SS-308-02

Overview

The sample set for CTO 078, NAS Cecil Field, SDG F9175R, consists of one (1) soil environmental sample.

The sample was analyzed for chromium. The sample was collected by TetraTech NUS on March 12, 2001 and analyzed by Accutest Laboratory under Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria. Chromium analyses were conducted using SW 846 method 6010B.

These data were evaluated based on the following parameters:

- Data Completeness
- * Holding Times
- * Calibration Recoveries
- Laboratory Blank Analyses
- * Detection Limits

* - All quality control criteria were met for this parameter.

Laboratory Blank Analyses

The following contaminants were detected in the laboratory method blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Chromium[1]	0.44 mg/kg	2.2 mg/kg

[1]Maximum concentration present in a laboratory preparation blank.

An action level of 5X the maximum concentration was used to evaluate the sample data for blank contamination. Sample aliquot, dilution factors and percent solids, if applicable, were taken into consideration when evaluation for blank contamination. The result reported for chromium was greater than the action level; therefore no qualification action was required.

Executive Summary

Laboratory Performance: Chromium was present in the laboratory method/preparation blanks.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Review", February 1994 and the NFESC document entitled "Navy IRCDQM" (September 1999).

The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the NFESC Guidelines and the Quality Assurance Project Plan (QAPP)."

Erin M Faust

Tetra Tech NUS
Erin M. Faust
Environmental Scientist

TetraTech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
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APPENDIX A
QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration (i.e., % RSDs, %Ds, ICVs, CCVs, RPDs, RRFs, etc.) Noncompliance
D = MS/MSD Noncompliance
E = LCS/LCSD Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS - GFAA MSA's $r < 0.995$
K = ICP Interference - include ICSAB % R's
L = Instrument Calibration Range Exceedance
M = Sample Preservation
N = Internal Standard Noncompliance
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = Pest/PCD% between columns for positive results
V = Non-linear calibrations, tuning $r < 0.995$ (correlation coefficient)
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is less than sample activity

CTO078-NAS CECIL FIELD
SOIL DATA
Accutest, NJ
SDG: F9175R

SAMPLE NUMBER:	CEF-610-SS-308-02			
SAMPLE DATE:	03/12/01	/ /	/ /	/ /
LABORATORY ID:	F9175-8R			
QC_TYPE:	NORMAL			
% SOLIDS:	82.1 %	100.0 %	100.0 %	100.0 %
UNITS:	MG/KG			
FIELD DUPLICATE OF:				

	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
INORGANICS												
CHROMIUM	5.2											

APPENDIX B
RESULTS AS REPORTED BY THE LABORATORY

Report of Analysis

Client Sample ID:	CEF-610-SS-308-02		
Lab Sample ID:	F9175-8R	**Date Sampled:**	03/12/01
Matrix:	SO - Soil	**Date Received:**	03/13/01
		Percent Solids:	82.1
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method
Chromium	5.2	1.1	0.038	mg/kg	1	04/06/01	04/06/01	JK	SW846 6010B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

APPENDIX A.2

GROUNDWATER ANALYTICAL DATA

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO:	**M. SPERANZA**	**DATE:**	**OCTOBER 25, 2001**
FROM:	**DOUGLAS S. SCHLOER**	**COPIES:**	**DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOA / PEST / PAH / TPH**
CTO 078, NAS CECIL FIELD
SDGs~~: F10677R, F10950 and~~ F10990

SAMPLES: 2 / Aqueous / VOA / PAH / TPH

CEF-610-GW-01S-01 CEF-610-GW-DUP1-01

2 / Aqueous / PAH / PEST / TPH

~~CEF-P52-GW-01S CEF-P52-GW-DUP1~~

2 / Soil / PAH

~~CEF-635-SU-806-03 CEF-635-SU-813-04~~

OVERVIEW

The sample set for CTO 078, NAS Cecil Field; SDGs: F10677R, F10950, and F10990 consists of four (4) aqueous environmental samples and two (2) soil environmental samples. Two aqueous samples were analyzed for Target Compound List (TCL) volatile organic compounds (VOA), polynuclear aromatic hydrocarbons (PAH) and total petroleum hydrocarbons (TPH). Two aqueous samples were analyzed for PAHs, the pesticide compound Dieldrin and TPH. Two soil samples were analyzed for the PAH benzo(a)pyrene only. Two field duplicate pairs were included in this SDG: CEF-610-GW-01S-01 / CEF-610-GW-DUP1-01 and CEF-P52-GW-01S / CEF-P52-GW-DUP1.

The samples were collected by TetraTech NUS on August 21st, September 19th and 21st, 2001 and analyzed by Accutest Laboratories. All analyses were conducted in accordance with Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria using U. S. EPA Test Methods for Evaluating Solid Wastes (SW-846) Methods 8260B, 8330, 8081A analytical and reporting protocols. TPH analyses were conducted in accordance with the state the of Florida Department of Environmental Protection (DEP) Method "Florida Petroleum Residual Organic" (FL-PRO). The data contained in this SDG were validated with regard to the following parameters:

- Data completeness
- Holding times
- * Initial and continuing calibration
- * Blank results
- * Blank Spike Results
- Surrogate spike recoveries
- * Detection Limits
- * Field Duplicate Precision

The symbol (*) indicates that all quality control criteria were met for this parameter. Problems affecting data quality are discussed below; documentation supporting these findings is presented in Appendix C. Qualified Analytical results are presented in Appendix A. Results as reported by the laboratory are presented in Appendix B.

The text of this report is formulated to address only gross noncompliances resulting in the rejection of data and the elimination of false positives.

VOA

All data were reported without qualification.

PAH

Samples CEF-635-SU-806-03 and CEF-635-SU-813-04 were extracted 24 days out of hold time. Positive and nondetected results for benzo(a)pyrene were qualified as estimated (J) and (UJ), respectively.

PEST

Recovery of the pesticide surrogate tetrachloro-m-xylene (TMX) fell below the 57% (but was >10%) quality control limit on one analytical column for the analysis of sample CEF-P52-GW-DUP1-01. No action was taken based on this noncompliance.

Matrix Spike / Matrix Spike Duplicate (MS/MSD) recoveries of Dieldrin resulted in a Relative Percent Difference (RPD) that exceeded the 20% quality control limit. No action was taken based on this noncompliance.

Additional Comments

Positive results below the Reporting Limit (RL) were qualified as estimated (J), due to uncertainty near the detection limit.

Pesticide surrogate recoveries were reported from one analytical column. However, this surrogate reporting convention may be standard laboratory protocol if only nondetected results are reported in environmental samples. Therefore, no action was taken based on this noncompliance.

EXECUTIVE SUMMARY

Laboratory Performance Issues: Environmental soil samples were extracted 24 days out of hold time resulting in the qualification (estimation) of analytical data.

Other Factors Affecting Data Quality: None

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (10/99) and the NFESC guidelines "Navy IRCDQM" (Sept 1999). The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the NFESC guidelines and the Quality Assurance Project Plan (QAPP)."

Tetra Tech NUS

Douglas Schloer
Chemist/Data Validator

TetraTech NUS

Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:

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APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A	=	Lab Blank Contamination
B	=	Field Blank Contamination
C	=	Calibration (i.e., % RSDs, %Ds, ICVs, CCVs, RPDs, RRFs, etc.) Noncompliance
D	=	MS/MSD Noncompliance
E	=	LCS/LCSD Noncompliance
F	=	Lab Duplicate Imprecision
G	=	Field Duplicate Imprecision
H	=	Holding Time Exceedance
I	=	ICP Serial Dilution Noncompliance
J	=	GFAA PDS - GFAA MSA's $r < 0.995$
K	=	ICP Interference - include ICSAB % R's
L	=	Instrument Calibration Range Exceedance
M	=	Sample Preservation
N	=	Internal Standard Noncompliance
N01	=	Internal Standard Noncompliance Dioxins
N02	=	Recovery Standard Noncompliance Dioxins
N03	=	Clean-up Standard Noncompliance Dioxins
O	=	Poor Instrument Performance (i.e., base-time drifting)
P	=	Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q	=	Other problems (can encompass a number of issues)
R	=	Surrogates Recovery Noncompliance
S	=	Pesticide/PCB Resolution
T	=	% Breakdown Noncompliance for DDT and Endrin
U	=	Pest/PCD% between columns for positive results
V	=	Non-linear calibrations, tuning $r < 0.995$ (correlation coefficient)
W	=	EMPC result
X	=	Signal to noise response drop
Y	=	Percent solids <30%
Z	=	Uncertainty at 2 sigma deviation is less than sample activity

CTO078-NAS CECIL FIELD
WATER DATA
Accutest, NJ
SDG: F10990

SAMPLE NUMBER:	CEF-610-GW-01S-01	CEF-610-GW-DUP1-01		
SAMPLE DATE:	09/21/01	09/21/01	/ /	/ /
LABORATORY ID:	F10990-1	F10990-2		
QC_TYPE:	NORMAL	NORMAL		
% SOLIDS:	0.0 %	0.0 %	100.0 %	100.0 %
UNITS:	UG/L	UG/L		
FIELD DUPLICATE OF:		CEF-610-GW-015-01		

	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
VOLATILES												
1,1,1-TRICHLOROETHANE	2	U		2	U							
1,1,2,2-TETRACHLOROETHANE	2	U		2	U							
1,1,2-TRICHLOROETHANE	2	U		2	U							
1,1-DICHLOROETHANE	2	U		2	U							
1,1-DICHLOROETHENE	2	U		2	U							
1,2-DICHLOROETHANE	2	U		2	U							
1,2-DICHLOROPROPANE	2	U		2	U							
2-BUTANONE	10	U		10	U							
2-HEXANONE	10	U		10	U							
4-METHYL-2-PENTANONE	10	U		10	U							
ACETONE	50	U		50	U							
BENZENE	1	U		1	U							
BROMODICHLOROMETHANE	2	U		2	U							
BROMOFORM	2	U		2	U							
BROMOMETHANE	5	U		5	U							
CARBON DISULFIDE	10	U		10	U							
CARBON TETRACHLORIDE	2	U		2	U							
CHLOROBENZENE	2	U		2	U							
CHLORODIBROMOMETHANE	2	U		2	U							
CHLOROETHANE	5	U		5	U							
CHLOROFORM	2	U		2	U							
CHLOROMETHANE	5	U		5	U							
CIS-1,2-DICHLOROETHENE	2	U		2	U							
CIS-1,3-DICHLOROPROPENE	2	U		2	U							
ETHYLBENZENE	2	U		2	U							
METHYLENE CHLORIDE	5	U		5	U							
STYRENE	2	U		2	U							
TETRACHLOROETHENE	2	U		2	U							
TOLUENE	2	U		2	U							
TOTAL XYLENES	6	U		6	U							
TRANS-1,2-DICHLOROETHENE	2	U		2	U							
TRANS-1,3-DICHLOROPROPENE	2	U		2	U							

CTO078-NAS CECIL FIELD
WATER DATA
Accutest, NJ
SDG: F10990

SAMPLE NUMBER:	CEF-610-GW-01S-01	CEF-610-GW-DUP1-01		
SAMPLE DATE:	09/21/01	09/21/01	/ /	/ /
LABORATORY ID:	F10990-1	F10990-2		
QC_TYPE:	NORMAL	NORMAL		
% SOLIDS:	0.0 %	0.0 %	100.0 %	100.0 %
UNITS:	UG/L	UG/L		
FIELD DUPLICATE OF:		CEF-610-GW-015-01		

	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
VOLATILES												
TRICHLOROETHENE	2	U		2	U							
VINYL CHLORIDE	1	U		1	U							

CTO078-NAS CECIL FIELD
WATER DATA
Accutest, NJ
SDG: F10990

SAMPLE NUMBER:	CEF-610-GW-01S-01	CEF-610-GW-DUP1-01		
SAMPLE DATE:	09/21/01	09/21/01	/ /	/ /
LABORATORY ID:	F10990-1	F10990-2		
QC_TYPE:	NORMAL	NORMAL		
% SOLIDS:	0.0 %	0.0 %	100.0 %	100.0 %
UNITS:	UG/L	UG/L		
FIELD DUPLICATE OF:		CEF-610-GW-015-01		

	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
POLYNUCLEAR AROMATIC HYDROCARBONS												
1-METHYLNAPHTHALENE	2	U		2	U							
2-METHYLNAPHTHALENE	2	U		2	U							
ACENAPHTHENE	4	U		4	U							
ACENAPHTHYLENE	4	U		4	U							
ANTHRACENE	2	U		2	U							
BENZO(A)ANTHRACENE	0.2	U		0.2	U							
BENZO(A)PYRENE	0.2	U		0.2	U							
BENZO(B)FLUORANTHENE	0.2	U		0.2	U							
BENZO(G,H,I)PERYLENE	0.2	U		0.2	U							
BENZO(K)FLUORANTHENE	0.2	U		0.2	U							
CHRYSENE	2	U		2	U							
DIBENZO(A,H)ANTHRACENE	0.2	U		0.2	U							
FLUORANTHENE	2	U		2	U							
FLUORENE	2	U		2	U							
INDENO(1,2,3-CD)PYRENE	0.2	U		0.2	U							
NAPHTHALENE	2	U		2	U							
PHENANTHRENE	2	U		2	U							
PYRENE	2	U		2	U							

CTO078-NAS CECIL FIELD
WATER DATA
Accutest, NJ
SDG: F10990

SAMPLE NUMBER:	CEF-610-GW-01S-01			CEF-610-GW-DUP1-01								
SAMPLE DATE:	09/21/01			09/21/01			/ /			/ /		
LABORATORY ID:	F10990-1			F10990-2								
QC_TYPE:	NORMAL			NORMAL								
% SOLIDS:	0.0 %			0.0 %			100.0 %			100.0 %		
UNITS:	MG/L			MG/L								
FIELD DUPLICATE OF:				CEF-610-GW-015-01								
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
PETROLEUM HYDROCARBONS												
TOTAL PETROLEUM HYDROCARBONS	0.25	U		0.25	U							

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-610-GW-01S-01		
Lab Sample ID:	F10990-1	**Date Sampled:**	09/21/01
Matrix:	AQ - Ground Water	**Date Received:**	09/21/01
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H013549.D	1	09/26/01	NAF	n/a	n/a	VH415
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	50	ug/l	
71-43-2	Benzene	ND	1.0	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	ug/l	
75-25-2	Bromoform	ND	2.0	ug/l	
108-90-7	Chlorobenzene	ND	2.0	ug/l	
75-00-3	Chloroethane	ND	5.0	ug/l	
67-66-3	Chloroform	ND	2.0	ug/l	
75-15-0	Carbon disulfide	ND	10	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
591-78-6	2-Hexanone	ND	10	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	ug/l	
74-83-9	Methyl bromide	ND	5.0	ug/l	
74-87-3	Methyl chloride	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	ug/l	
100-42-5	Styrene	ND	2.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
79-01-6	Trichloroethylene	ND	2.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	6.0	ug/l	

ND = Not detected
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-610-GW-01S-01		
Lab Sample ID:	F10990-1	**Date Sampled:**	09/21/01
Matrix:	AQ - Ground Water	**Date Received:**	09/21/01
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		80-120%
17060-07-0	1,2-Dichloroethane-D4	100%		80-120%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	116%		80-120%

ND = Not detected
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-610-GW-DUP1-01		
Lab Sample ID:	F10990-2	**Date Sampled:**	09/21/01
Matrix:	AQ - Ground Water	**Date Received:**	09/21/01
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H013550.D	1	09/26/01	NAF	n/a	n/a	VH415
Run #2							

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	50	ug/l	
71-43-2	Benzene	ND	1.0	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	ug/l	
75-25-2	Bromoform	ND	2.0	ug/l	
108-90-7	Chlorobenzene	ND	2.0	ug/l	
75-00-3	Chloroethane	ND	5.0	ug/l	
67-66-3	Chloroform	ND	2.0	ug/l	
75-15-0	Carbon disulfide	ND	10	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
591-78-6	2-Hexanone	ND	10	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	ug/l	
74-83-9	Methyl bromide	ND	5.0	ug/l	
74-87-3	Methyl chloride	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	ug/l	
100-42-5	Styrene	ND	2.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
79-01-6	Trichloroethylene	ND	2.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	6.0	ug/l	

ND = Not detected
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-610-GW-DUP1-01		
Lab Sample ID:	F10990-2	**Date Sampled:**	09/21/01
Matrix:	AQ - Ground Water	**Date Received:**	09/21/01
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	NAS Cecil Field 0039		

VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		80-120%
17060-07-0	1,2-Dichloroethane-D4	100%		80-120%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	100%		80-120%

ND = Not detected
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-610-GW-01S-01		
Lab Sample ID:	F10990-1	**Date Sampled:**	09/21/01
Matrix:	AQ - Ground Water	**Date Received:**	09/21/01
Method:	EPA 8310 SW846 3510C	**Percent Solids:**	n/a
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA008920.D	1	09/27/01	MRE	09/26/01	OP3907	GAA387
Run #2							

Polynuclear Aromatic Hydrocarbons

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	81%		33-141%
92-94-4	p-Terphenyl	82%		31-122%

ND = Not detected
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-610-GW-DUP1-01		
Lab Sample ID:	F10990-2	**Date Sampled:**	09/21/01
Matrix:	AQ - Ground Water	**Date Received:**	09/21/01
Method:	EPA 8310 SW846 3510C	**Percent Solids:**	n/a
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA008923.D	1	09/27/01	MRE	09/26/01	OP3907	GAA387
Run #2							

Polynuclear Aromatic Hydrocarbons

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	77%		33-141%
92-94-4	p-Terphenyl	80%		31-122%

ND = Not detected
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-610-GW-01S-01		
Lab Sample ID:	F10990-1	**Date Sampled:**	09/21/01
Matrix:	AQ - Ground Water	**Date Received:**	09/21/01
Method:	FLORIDA-PRO SW846 3510C	**Percent Solids:**	n/a
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP17233.D	1	09/27/01	ME	09/25/01	OP3899	GOP667
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	ND	0.25	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	81%		55-130%

ND = Not detected
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-610-GW-DUP1-01		
Lab Sample ID:	F10990-2	**Date Sampled:**	09/21/01
Matrix:	AQ - Ground Water	**Date Received:**	09/21/01
Method:	FLORIDA-PRO SW846 3510C	**Percent Solids:**	n/a
Project:	NAS Cecil Field 0039		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP17236.D	1	09/27/01	ME	09/25/01	OP3899	GOP667
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	ND	0.25	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	88%		55-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

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

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO:	**SPERANZA, M.**	**DATE:**	**OCTOBER 16, 2001**
FROM:	**CATHERINE NORONHA**	**COPIES:**	**DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION – TAL METALS**
CTO-078 NAS CECIL FIELD
SAMPLE DELIVERY GROUP (SDG) –F10990

SAMPLES: 3/Aqueous/

CEF-610-GF-01S-01-F
CEF-610-GW-01S-01
CEF-610-GW-DUP1-01

Overview

The sample set for CTO 078, NAS cecil field, SDG F10990, consists of three (3), aqueous environmental samples. One field duplicate (CEF-610-GW-DUP1-01/ CEF-610-GW-01S-01) is included in this SDG.

All samples were analyzed for selected (TAL) metals. The samples were collected by TetraTech NUS on September 4th, 2001 and analyzed by Accutest Labs under Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria. Metals analyses, with the exception of mercury, were conducted using SW 846 method 6010B. Mercury analyses were conducted using SW 846 method 7470A.

These data were evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • Calibration Recoveries
• Laboratory Blank Analyses
* • Field Duplicate Results
* • Detection Limits

* - All quality control criteria were met for this parameter.

Laboratory Blank Analyses

The following contaminants were detected in the laboratory method/preparation blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Selenium	2.8 µg/L	14.0 µg/L

An action level of 5X the maximum concentration was used to evaluate the sample data for blank contamination. Sample aliquot, percent moisture, and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Positive results less than the action level reported for arsenic and lead were qualified "U" as a result of blank contamination. No action was taken because all sample results were non-detected.

Executive Summary

Laboratory Performance: Several analytes were present in the laboratory method/preparation blanks.

Other Factors Affecting Data Quality: None

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Review", February 1994 and the NFESC document entitled "Navy IRCDQM" (September 1999).

The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the NFESC Guidelines and the Quality Assurance Project Plan (QAPP)."

Tetra Tech NUS
Catherine Noronha
Environmental Scientist

TetraTech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

APPENDIX A
QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration (i.e., % RSDs, %Ds, ICVs, CCVs, RPDs, RRFs, etc.) Noncompliance
D = MS/MSD Noncompliance
E = LCS/LCSD Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = GFAA PDS - GFAA MSA's $r < 0.995$
K = ICP Interference - include ICSAB % R's
L = Instrument Calibration Range Exceedance
M = Sample Preservation
N = Internal Standard Noncompliance
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = Pest/PCD% between columns for positive results
V = Non-linear calibrations, tuning $r < 0.995$ (correlation coefficient)
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is less than sample activity

CTO078-NAS CECIL FIELD
WATER DATA
Accutest, NJ
SDG: F10990

SAMPLE NUMBER:	CEF-610-GF-01S-01-F	CEF-610-GW-01S-01	CEF-610-GW-DUP1-01	
SAMPLE DATE:	09/21/01	09/21/01	09/21/01	/ /
LABORATORY ID:	F10990-3	F10990-1	F10990-2	
QC_TYPE:	NORMAL	NORMAL	NORMAL	
% SOLIDS:	0.0 %	0.0 %	0.0 %	100.0 %
UNITS:	UG/L	UG/L	UG/L	
FIELD DUPLICATE OF:			CEF-610-GW-015-01-D	

	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
INORGANICS												
ARSENIC	3.2	U		3.2	U		3.2	U				
BARIUM	7.5			9.1			8.7					
CADMIUM	0.27	U		0.27	U		0.27	U				
CHROMIUM	0.54			2.1			1.1					
LEAD	1.4			2.7			1.4					
MERCURY	0.11			0.11			0.08					
SELENIUM	30.2			31.6			32.5					
SILVER	0.59	U		0.59	U		0.59	U				

APPENDIX B
RESULTS AS REPORTED BY THE LABORATORY

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-610-GW-01S-01		
Lab Sample ID:	F10990-1	**Date Sampled:**	09/21/01
Matrix:	AQ - Ground Water	**Date Received:**	09/21/01
		Percent Solids:	n/a
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method
Arsenic	3.2 U	10	3.2	ug/l	1	09/25/01	09/26/01	JK	SW846 6010B
Barium	9.1 B	200	0.94	ug/l	1	09/25/01	09/26/01	JK	SW846 6010B
Cadmium	0.27 U	5.0	0.27	ug/l	1	09/25/01	09/26/01	JK	SW846 6010B
Chromium	2.1 B	10	0.35	ug/l	1	09/25/01	09/26/01	JK	SW846 6010B
Lead	2.7 B	5.0	1.2	ug/l	1	09/25/01	09/26/01	JK	SW846 6010B
Mercury	0.11 B	1.0	0.060	ug/l	1	09/27/01	09/28/01	LIR	SW846 7470A
Selenium	31.6	10	2.5	ug/l	1	09/25/01	09/26/01	JK	SW846 6010B
Silver	0.59 U	10	0.59	ug/l	1	09/25/01	09/26/01	JK	SW846 6010B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-610-GF-01S-01		
Lab Sample ID:	F10990-3	**Date Sampled:**	09/21/01
Matrix:	AQ - Groundwater Filtered	**Date Received:**	09/21/01
		Percent Solids:	n/a
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method
Arsenic	3.2 U	10	3.2	ug/l	1	09/25/01	09/26/01	JK	SW846 6010B
Barium	7.5 B	200	0.94	ug/l	1	09/25/01	09/26/01	JK	SW846 6010B
Cadmium	0.27 U	5.0	0.27	ug/l	1	09/25/01	09/26/01	JK	SW846 6010B
Chromium	0.54 B	10	0.35	ug/l	1	09/25/01	09/26/01	JK	SW846 6010B
Lead	1.4 B	5.0	1.2	ug/l	1	09/25/01	09/26/01	JK	SW846 6010B
Mercury	0.11 B	1.0	0.060	ug/l	1	09/27/01	09/28/01	LIR	SW846 7470A
Selenium	30.2	10	2.5	ug/l	1	09/25/01	09/26/01	JK	SW846 6010B
Silver	0.59 U	10	0.59	ug/l	1	09/25/01	09/26/01	JK	SW846 6010B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-610-GW-DUP1-01		
Lab Sample ID:	F10990-2	**Date Sampled:**	09/21/01
Matrix:	AQ - Ground Water	**Date Received:**	09/21/01
		Percent Solids:	n/a
Project:	NAS Cecil Field 0039		

Metals Analysis

Analyte	Result	RL	IDL	Units	DF	Prep	Analyzed	By	Method
Arsenic	3.2 U	10	3.2	ug/l	1	09/25/01	09/26/01	JK	SW846 6010B
Barium	8.7 B	200	0.94	ug/l	1	09/25/01	09/26/01	JK	SW846 6010B
Cadmium	0.27 U	5.0	0.27	ug/l	1	09/25/01	09/26/01	JK	SW846 6010B
Chromium	1.1 B	10	0.35	ug/l	1	09/25/01	09/26/01	JK	SW846 6010B
Lead	1.4 B	5.0	1.2	ug/l	1	09/25/01	09/26/01	JK	SW846 6010B
Mercury	0.084 B	1.0	0.060	ug/l	1	09/27/01	09/28/01	LIR	SW846 7470A
Selenium	32.5	10	2.5	ug/l	1	09/25/01	09/26/01	JK	SW846 6010B
Silver	0.59 U	10	0.59	ug/l	1	09/25/01	09/26/01	JK	SW846 6010B

RL = Reporting Limit
IDL = Instrument Detection Limit

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

APPENDIX B

CHAIN-OF-CUSTODY FORMS

TETRA TECH NUS, INC. Cecil Field

CHAIN OF CUSTODY NUMBER 610-1

PAGE 1 OF 1

PROJECT NO: N0039	SITE NAME: Bldg 610
PROJECT MANAGER AND PHONE NUMBER	Joe Logan 412 921 7231
LABORATORY NAME AND CONTACT:	Accutest H. Behgadi
SAMPLERS (SIGNATURE)	Mark Walker
FIELD OPERATIONS LEADER AND PHONE NUMBER	Mark Davis 904 281-1941 x.14
ADDRESS	4405 Vineland Rd. C-15
CARRIER/WAYBILL NUMBER	Fedex 8219 5407 1317
CITY, STATE	ORLANDO, FLORIDA 32811

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

DATE YEAR 2000	TIME	SAMPLE ID	MATRIX	GRAB (G) COMP (C)	No. OF CONTAINERS	VOCs SW846 8260B	PAHs SW846 8310	Herbicides SW846 8151A	TRPH	ARSENIC, BARIUM, CHROMIUM, SELENIUM, THALLIUM*	FL-PRO			COMMENTS
CONTAINER TYPE PLASTIC (P) or GLASS (G)						P	G	G	G	G	G			
PRESERVATIVE USED						None	None	None	None	None	None			
10/5	1138	CEF-610-SS-006-01	Soil	G	5	✓	✓	✓	✓	✓	✓			Cool to 4°c
10/5	1143	CEF-610-SS-004-01	Soil	G	5	✓	✓	✓	✓	✓	✓			
10/5	1152	CEF-610-SS-003-01	Soil	G	5	✓	✓	✓	✓	✓	✓			*SW846 6010B
10/5	1159	CEF-610-SS-001-01	Soil	G	5	✓	✓	✓	✓	✓	✓			
10/5	1210	CEF-610-SS-002-01	Soil	G	5	✓	✓		✓	✓	✓			Work Release
10/5	1225	CEF-610-SS-005-01	Soil	G	5	✓	✓	✓	✓	✓	✓			CF 19
10/5	1245	CEF-610-SS-008-01	Soil	G	5	✓	✓	✓	✓	✓	✓			
10/5	1258	CEF-610-SS-011-01	Soil	G	5	✓	✓	✓	✓	✓	✓			
10/5	1310	CEF-610-SS-016-01	Soil	G	5	✓	✓	✓	✓	✓	✓			
10/5	1320	CEF-610-SS-018-01	Soil	G	5	✓	✓	✓	✓	✓	✓			
10/5	1327	CEF-610-SS-012-01	Soil	G	5	✓	✓	✓	✓	✓	✓			
10/5	1335	CEF-610-SS-013-01	Soil	G	5	✓	✓	✓	✓	✓	✓			
10/5	1340	CEF-610-SS-019-01	Soil	G	5	✓	✓	✓	✓	✓	✓			

1. RELINQUISHED BY	DATE 10/6/00	TIME 1800	1. RECEIVED BY	DATE	TIME
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS N0039. DQ QSP 520

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

3/99

FORM NO. TtNUS-001

TETRA TECH NUS, INC. Cecil Field CHAIN OF CUSTODY NUMBER 610-1 PAGE 2 OF 2

PROJECT NO:	SITE NAME:	PROJECT MANAGER AND PHONE NUMBER	LABORATORY NAME AND CONTACT:
N0039	Bldg. 610	Jok Logan 412 921 7231	Accutest H. Behzadi
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER AND PHONE NUMBER: Merlin Dale 904 281 1941 x 14	ADDRESS: 4405 Vineland Rd. C-15
		CARRIER/WAYBILL NUMBER: Fedex 8219 5407 1317	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): P G G G

PRESERVATIVE USED: None None None None

DATE YEAR 2000	TIME	SAMPLE ID	MATRIX	GRAB (G) COMP (C)	No. OF CONTAINERS	VOCs SW846 5035 8260B	SVOCs SW846 8270	Herbicides SW846 8310	ARSENIC SW846 7060A	CHROMIUM*	SELENIUM*	BARIUM*	THALLIUM*	COMMENTS
10/5	1345	CEF-610-SS-020-01	Soil	G	5	✓	✓	✓	✓	✓				Cool to 4°C
10/5	1355	CEF-610-SS-022-01	Soil	G	5	✓	✓	✓	✓	✓				
10/5	1404	CEF-610-SS-014-01	Soil	G	5	✓	✓	✓	✓	✓				*SW846 6010B
10/5	1424	CEF-610-SS-017-01	Soil	G	5	✓	✓	✓	✓	✓				
10/5	1435	CEF-610-SS-010-01	Soil	G	5	✓	✓	✓	✓	✓				Work Release
10/5	1440	CEF-610-SS-009-01	Soil	G	5	✓	✓	✓	✓	✓				CF19
10/5	1455	CEF-610-SS-025-01	Soil	G	5	✓	✓	✓	✓	✓				
10/5	1505	CEF-610-SS-024-01	Soil	G	5	✓	✓	✓	✓	✓				
10/5	1510	CEF-610-SS-023-01	Soil	G	5	✓	✓	✓	✓	✓				
10/5	1520	CEF-610-SS-021-01	Soil	G	5	✓	✓	✓	✓	✓				
10/5	1535	CEF-610-SS-015-01	Soil	G	5	✓	✓	✓	✓	✓				
10/5	1540	CEF-610-SS-007-01	Soil	G	5	✓	✓	✓	✓	✓				
10/5	0000	CEF-610-SS-DU01	Soil	G	5	✓	✓	✓	✓	✓				

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY [signature]	10/5/00	1500	1. RECEIVED BY		
2. RELINQUISHED BY			2. RECEIVED BY		
3. RELINQUISHED BY			3. RECEIVED BY		

COMMENTS: Non Rt. 120. 057.520

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3/99
FORM NO. TtNUS-001

TETRA TECH NUS, INC. Cell Field CHAIN OF CUSTODY NUMBER 610-1 PAGE 3 OF

PROJECT NO:	SITE NAME:	PROJECT MANAGER AND PHONE NUMBER	LABORATORY NAME AND CONTACT:
N0039	Bldg. 610	Joe Lugan 1112 921 7231	Accutest H. Rehnadi
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER AND PHONE NUMBER	ADDRESS
		Mike Dale 904 321 1941 x.14	4405 Vineland Rd. C-15
		CARRIER/WAYBILL NUMBER	CITY, STATE
		FedEx 5219 5407 1317	Orlando, FL 32811

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

DATE YEAR 2000	TIME	SAMPLE ID	MATRIX	GRAB (G) COMP (C)	No. OF CONTAINERS	VOCs SW846 8260B	PAHs SW846 8270	Herbicides SW846 8310	TRPH 418.1A	TCLP Pb	Arsenic Barium Chromium Selenium Thallium *			COMMENTS
					CONTAINER TYPE PLASTIC (P) or GLASS (G)	P	G	G	G	G	G			
					PRESERVATIVE USED	none	none	none	none	none	none			
10/5	0000	CEF-610-SS-D002	Soil	G	5	✓	✓	✓	✓	✓	✓	✓		Cool to 4°C
10/5	0000	CEF-610-SS-D003	Soil	G	5	✓	✓	✓	✓	✓	✓	✓		
10/5	1010	CEF-610-SS-MS/MSD01	Soil	G	5	✓	✓	✓	✓	✓	✓	✓		* SW846 6010B
10/5	1404	CEF-610-SS-MS/MSD02	Soil	G	5	✓	✓	✓	✓	✓	✓	✓		
														Work Release
														CF 19

1. RELINQUISHED BY Chris Wells	DATE 10/5/00	TIME 1500	1. RECEIVED BY	DATE	TIME
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS N0039, Dal OSP 520

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3/99
FORM NO. TtNUS-001

TETRA TECH NUS, INC. CHAIN OF CUSTODY NUMBER 610-2 | PAGE 1 OF 3

PROJECT NO: N0039	SITE NAME: Bldg. 610	PROJECT MANAGER AND PHONE NUMBER: Joe Logan 412 721 7231	LABORATORY NAME AND CONTACT: Accutest H. Behgadi
SAMPLERS (SIGNATURE): Olivia X Rodriguez		FIELD OPERATIONS LEADER AND PHONE NUMBER: Mary Dale 904 281 1741 x 14	ADDRESS: 4405 Vineland Rd. C-15
		CARRIER/WAYBILL NUMBER: Fedex	CITY, STATE: ORLANDO FL 32811

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

DATE YEAR 2000	TIME	SAMPLE ID	MATRIX	GRAB (G) COMP (C)	No. OF CONTAINERS	PAHs SW846 8310	TRPH	FL-PRO	ARSENIC SW846 6010B					COMMENTS
CONTAINER TYPE PLASTIC (P) or GLASS (G)						G	G	G						
PRESERVATIVE USED						none	none	none						
12/18	0000	CEF-610-SS-DUP1-01	S	G	1	X								Cool to 4°C
12/18	0000	CEF-610-SS-DUP2-01	S	G	1	X								
12/18	0956	CEF-610-SS-119-01	S	G	1			X						Work Release
12/18	1002	CEF-610-SS-117-01	S	G	1	X								CF-19
12/18	1008	CEF-610-SS-116-01	S	G	1	X								
12/18	1013	CEF-610-SS-118-01	S	G	1	X								
12/18	1047	CEF-610-SS-115-01	S	G	2	X								(MS/MSD)
12/18	1057	CEF-610-SS-114-01	S	G	1	X								
12/18	1108	CEF-610-SS-120-01	S	G	1	X								
12/18	1110	CEF-610-SS-122-01	S	G	1	X								
12/18	1116	CEF-610-SS-123-01	S	G	1	X								
12/18	1123	CEF-610-SS-121-01	S	G	1	X								
12/18	1143	CEF-610-SS-125-01	S	G	1	X								

1. RELINQUISHED BY: Olivia X Rodriguez	DATE 12/18/00	TIME	1. RECEIVED BY	DATE	TIME
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS: N0039. DSO. 05E.145

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

3/99
FORM NO. TINUS-001

TETRA TECH NUS, INC. CHAIN OF CUSTODY NUMBER 610-2 PAGE 2 OF 3

PROJECT NO: N0039	SITE NAME: Bldg 610
PROJECT MANAGER AND PHONE NUMBER: Joe Fogan 412-921-7231	LABORATORY NAME AND CONTACT: Accutest L. Williams
SAMPLERS (SIGNATURE): Elena A Rodriguez	FIELD OPERATIONS LEADER AND PHONE NUMBER: Merne Lale 904 281 0400
ADDRESS: 4405 Vineland Rd #C15	CARRIER/WAYBILL NUMBER: FEDEX
CITY, STATE: Orlando, FL 32811	

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

DATE YEAR 2000	TIME	SAMPLE ID	MATRIX	GRAB (G) COMP (C)	No. OF CONTAINERS	PAHs 8310	TRPH FL PRO	RS 601/602						COMMENTS
CONTAINER TYPE PLASTIC (P) or GLASS (G)						G	G	G						
PRESERVATIVE USED						none	none	none						
12/18	1147	CEF-610-SS-126-01	S	G	2	X	X				(MS/MSD)			Cool to 4°C
12/18	1157	CEF-610-SS-124-01	S	G	1	X								
12/18	1202	CEF-610-SS-102-01	S	G	1	X								Work Release
12/18	1204	CEF-610-SS-101-01	S	G	1	X								CF-19
12/18	1400	CEF-610-SS-103-01	S	G	1	X	X							
12/18	1406	CEF-610-SS-104-01	S	G	1	X	X							
12/18	1430	CEF-610-SS-112-01	S	G	1	X	X							
12/18	1435	CEF-610-SS-111-01	S	G	1	X	X							
12/18	1440	CEF-610-SS-110-01	S	G	1	X								
12/18	1445	CEF-610-SS-109-01	S	G	1	X								
12/18	505	CEF-610-SS-108-01	S	G	1	X								
12/18	1508	CEF-610-SS-107-01	S	G	1	X	X							
12/18	1513	CEF-610-SS-106-01	S	G	1	X	X							

1. RELINQUISHED BY: Elena A Rodriguez	DATE 12/18/00	TIME	1. RECEIVED BY	DATE / TIME
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE / TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE / TIME

COMMENTS N0039.PS0.05E.145

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3/99
FORM NO. TINUS-001

TETRA TECH NUS, INC. CHAIN OF CUSTODY NUMBER 610-2 PAGE 3 OF 3

PROJECT NO: N0039	SITE NAME: Bldg 610	PROJECT MANAGER AND PHONE NUMBER: Joe Logan 412-912-7231	LABORATORY NAME AND CONTACT: Accutest L. Williams
SAMPLERS (SIGNATURE): Elena Rodriguez		FIELD OPERATIONS LEADER AND PHONE NUMBER: Merv Dale	ADDRESS: 4405 Vineland Rd #C15
		CARRIER/WAYBILL NUMBER: FEDEX	CITY, STATE: Orlando FL 32811

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

DATE YEAR 2002	TIME	SAMPLE ID	MATRIX	GRAB (G) COMP (C)	No. OF CONTAINERS	PAHs 8310	TRPH FLTR-O	As 6010B						COMMENTS
CONTAINER TYPE PLASTIC (P) or GLASS (G)						G	G	G						
PRESERVATIVE USED						none	none	none						
12/15	1520	CEF-610-SS-105-01	S	G	1	X	X							Cool to 4°C
12/15	0000	CEF-610-SS-DUP3-01	S	G	1	X	X							
														Work Release CF-19

1. RELINQUISHED BY: Elena Rodriguez	DATE 12/15/02	TIME 1700	1. RECEIVED BY	DATE	TIME
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS: N0039. DS0. 05E, 145

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FORM NO. TINUS-001

TETRA TECH NUS, INC. CHAIN OF CUSTODY | NUMBER 610-3 | PAGE 1 OF 2

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PROJECT NO.	N0039
SITE NAME	B.610
PROJECT MANAGER AND PHONE NUMBER	Bo Joe Logan 412 921 7231
LABORATORY NAME AND CONTACT	ACCutest H. Behlyodi
SAMPLERS (SIGNATURE)	K. [illegible] / Louis Knight
FIELD OPERATIONS LEADER AND PHONE NUMBER	M. Bone 904 281 0400
ADDRESS	4405 Vineland Rd C-15
CARRIER/WAYBILL NUMBER	Fedex 8219 5407 1935
CITY, STATE	ORLANDO, FL 32811

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

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

	DATE YEAR 2001	TIME	SAMPLE ID	MATRIX	GRAB (G) COMP (C)	No. OF CONTAINERS	TYPE OF ANALYSIS: PAHs SW846 8310	TPH FL-PRO							COMMENTS
1	2/1	1055	CEF-610-SS-201-01	Soil	G	2	X	X							Cool to 4°C
2	2/1	1100	CEF-610-SS-202-01	Soil	G	2	X	X							
3	2/1	0000	CEF-610-SS-Dup3	Soil	G	2	X	X							Work Release
4	2/1	1040	CEF-610-SS-203-01	Soil	G	2	X	X							CF-1819
4	2/1	1040	CEF-610-SS-MSMSD03	Soil	G	2	X	X							MO
5	2/1	1025	CEF-610-SS-204-01	Soil	G	2	X	X							
6	2/1	0000	CEF-610-SS-Dup4	Soil	G	2	X	X							
7	2/1	1032	CEF-610-SS-205-01	Soil	G	2	X	X							
8	2/1	1207	CEF-610-SS-206-01	Soil	G	2	X	X							
9	2/1	1200	CEF-610-SS-207-02	Soil	G	2	X	X							
10	2/1	1115	CEF-610-SS-208-02	Soil	G	2	X	X							
11	2/1	1215	CEF-610-SS-209-02	Soil	G	2	X	X							
12	2/1	1120	CEF-610-SS-210-02	Soil	G	2	X	X							

1. RELINQUISHED BY [signature]	DATE 2/1/01	TIME 1520	1. RECEIVED BY Mike Jewett	DATE 2/2/01	TIME 1000
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS: N0039. OSO.056.145

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

TETRA TECH NUS, INC. CHAIN OF CUSTODY | NUMBER 610-3 | PAGE 2 OF 2

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PROJECT NO:	SITE NAME:	PROJECT MANAGER AND PHONE NUMBER	LABORATORY NAME AND CONTACT:
N0039	B. 610	JOE LOGAN 412-921-7231	ACCUTEST
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER AND PHONE NUMBER	ADDRESS
		M. DALE 904-281-0400	4405 VINELAND RD C-15
		CARRIER/WAYBILL NUMBER	CITY, STATE
		FED EX 821954071935	ORLANDO, FL 32811

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

	DATE YEAR 2001	TIME	SAMPLE ID	MATRIX	GRAB (G) COMP (C)	No. OF CONTAINERS	PAHS	SW 846 TRPH	FL-PRO						COMMENTS
CONTAINER TYPE PLASTIC (P) or GLASS (G)							G	G							
PRESERVATIVE USED							NONE	NONE							
13	2/1	1205	CEF-610-SS-211-02	SOIL	G	2	X	X							COOL TO 4°C
14	2/1	1020	CEF-610-SS-212-02	SOIL	G	2	X	X							
15	2/1	1140	CEF-610-SS-213-02	SOIL	G	2	X	X							WORK RELEASE CF-19

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY	2/1/01	1520	1. RECEIVED BY	2/2/01	1000
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS N0039.D50.05E.145

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TETRA TE NUS, INC. CHAIN OF CUSTODY | NUMB 610-4 | PAGE 1 OF 2

PROJECT NO: N0039	SITE NAME: Bldg. 610	PROJECT MANAGER AND PHONE NUMBER: Joe Logan 412 921 7231	LABORATORY NAME AND CONTACT: Accutest H. Behbahani
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER AND PHONE NUMBER: Mark Dale 904 281 1941 x.14	ADDRESS: 4405 Vineland Rd C-15
		CARRIER/WAYBILL NUMBER: Fedex 8244 2558 4788	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)

PRESERVATIVE USED

DATE YEAR 2001	TIME	SAMPLE ID	MATRIX	GRAB (G) COMP (C)	No. OF CONTAINERS	VOCs SW846 8260 (None)	PAHs SW846 8310 (None)	TRPH FL-PRO (None)	BARIUM, SELENIUM SW846 6010B (None)					COMMENTS
3/12	1504	CEF-610-SS-301-01	S	G	3	3								Cool to 4°C
3/12	1512	CEF-610-SS-302-02	S	G	3	3								
3/12	1646	CEF-610-SS-303-01	S	G	3	3								
3/12	1656	CEF-610-SS-304-02	S	G	3	3								Work Release
3/12	1533	CEF-610-SS-305-01	S	G	1				1					CF-17
3/12	1539	CEF-610-SS-306-02	S	G	1				1					
3/12	1600	CEF-610-SS-307-02	S	G	1				* 1					* Do not sample
3/12	1616	CEF-610-SS-308-02	S	G	1			1						for Selenium
3/12	1622	CEF-610-SS-309-02	S	G	1			1						only Barium
3/12	1524	CEF-610-SS-310-01	S	G	1		7 MO		1					
3/12	1441	CEF-610-SS-311-01	S	G	1		1							
3/12	1451	CEF-610-SS-312-01	S	G	1		1							
3/12	1629	CEF-610-SS-313-01	S	G	3	3								

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY	3/12/01	1746	1. RECEIVED BY		
2. RELINQUISHED BY			2. RECEIVED BY		
3. RELINQUISHED BY			3. RECEIVED BY		

COMMENTS

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FORM NO. TINUS-001

TETRA TI NUS, INC. CHAIN OF CUSTODY | NUMI 610-4 | PAGE 2 OF 2

PROJECT NO: N0039
SITE NAME: Bldg 610
PROJECT MANAGER AND PHONE NUMBER: Joe Hogan 412-921-7231
LABORATORY NAME AND CONTACT: Accutest H. Behzadi
SAMPLERS (SIGNATURE)
FIELD OPERATIONS LEADER AND PHONE NUMBER: Mary Dale 904-281-1941 ext 14
ADDRESS: 4405 Vineland Rd C-15
CARRIER/WAYBILL NUMBER: Fed Ex 8244 2558 4799
CITY, STATE: Orlando, FL 32811

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

DATE YEAR 2001	TIME	SAMPLE ID	MATRIX	GRAB (G) COMP (C)	No. OF CONTAINERS	VOCs SW846 8260B	PAHs SW846 8310	TRPH FL-PRO	BARIUM, SELENIUM SW846 6010B					COMMENTS
CONTAINER TYPE PLASTIC (P) or GLASS (G)						Encore	G	G	G					
PRESERVATIVE USED						None	None	None	None					
3/12	1631	CEF-610-SS-314-02	S	G	3	3								Cool to 4°C
3/12	1533	CEF-610-SS-MSMSD04	S	G	1	~~X~~ MS			X					
														Work Release CF19

1. RELINQUISHED BY	DATE	TIME	1. RECEIVED BY	DATE	TIME
	3-12-01	1740			
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

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FORM NO. TtNUS-001

TETRA TECH NUS, INC. CHAIN OF CUSTODY | NUMBER CF610-092101 PAGE ___ OF ___

PROJECT NO:	SITE NAME:	PROJECT MANAGER AND PHONE NUMBER	LABORATORY NAME AND CONTACT:
N0039	Bldg 610	Joe Logan 412-921-7231	Occulest
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER AND PHONE NUMBER	ADDRESS
Elena Rodriguez		Elena Rodriguez 904 2810400	4405 Vineland Rd #C-15
		CARRIER/WAYBILL NUMBER	CITY, STATE
		Courier	Orlando, FL 32811

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

DATE YEAR 2001	TIME	SAMPLE ID	MATRIX	GRAB (G) COMP (C)	No. OF CONTAINERS	VOCs (8260B)	PAHs (8310)	TRPH (FL PRO)	RCRA Metals (6010B/7240)	*Dissolved RCRA Metals (6010B/7240)				COMMENTS
CONTAINER TYPE PLASTIC (P) or GLASS (G)						G	G	G	P	P				
PRESERVATIVE USED						HCl	—	H_2SO_4	HNO_3	HNO_3				
9/21	1515	CEF-610-GW-015-01	GW	G	8	X	X	X	X					Cool to 4°C
9/21	0000	CEF-610-GW-DUP1-01	GW	G	8 (6)	X	X	X	X					
9/21	1515	CEF-610-GW-MSMSD-01	GW	G	12 (9)	X	X	X	X					Work Release
9/21	1515	CEF-610-GF-015-01	GW	G	1					X				CF-26
														Metals:
														As, Ba, Cd, Cr,
														Pb, Se, Ag, & Hg
														*Field filtered

	DATE	TIME		DATE	TIME
1. RELINQUISHED BY Elena Rodriguez	9/21/01	1600	1. RECEIVED BY Gerald Shelton	9/21/01	1620
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY	DATE	TIME
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS N0039 DS0 05G 120

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3/99
FORM NO. TtNUS-001

APPENDIX C

MONITORING WELL CONSTRUCTION, DEVELOPMENT, AND SAMPLING DATA

Tetra Tech NUS, Inc.

BORING LOG

Page ___ of ___

PROJECT NAME: BLDG 610 (YELLOW WATER)
PROJECT NUMBER: N0039
DRILLING COMPANY: PRECISION
DRILLING RIG: CME 75

BORING NUMBER: CEF-610-MW15
DATE: 9-5-01
GEOLOGIST: L. KNIGHT
DRILLER: TOMMY LYNCH

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0						SAND, brown-orange; damp; no odor						
	0.8						SAND; light gray and tan; saturated						
							▼ ~20" bls						
	2.0						SAND; dark to med. brown; saturated; no odor						
	12.0						→ END of BORING						

* When rock coring, enter rock brokeness.

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

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes ✓ No ___ Well I.D. #: CEF-610-MW15

Tetra Tech NUS, Inc.

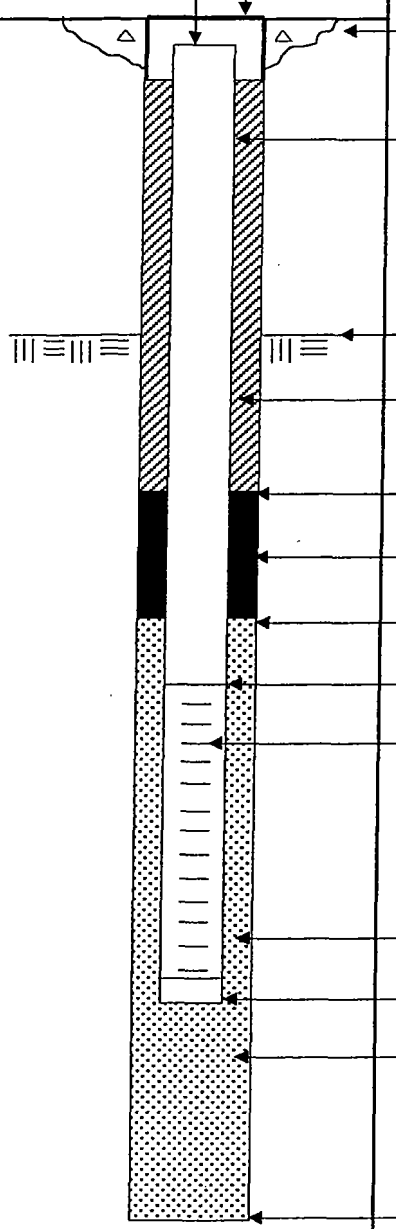
WELL No.: _____

MONITORING WELL SHEET

PROJECT:	BLDG 610 (YW)	DRILLING Co.:	PRECISION	BORING No.:	CEF-610-MW15
PROJECT No.:	N0039	DRILLER:	TOMMY LYNCH	DATE COMPLETED:	9-5-01
SITE:	BLDG 610 (YELLOW WOW)	DRILLING METHOD:	HSA	NORTHING:	
GEOLOGIST:	L. KNIGHT	DEV. METHOD:	SUBM. PUMP	EASTING:	

Ground Elevation =

Datum:



Not to Scale

Elevation / Depth of Top of Riser:	/
Elevation / Height of Top of Surface Casing:	/
I.D. of Surface Casing:	8"
Type of Surface Casing:	Steel
Type of Surface Seal:	
I.D. of Riser:	2" ~~3/4"~~
Type of Riser:	PVC
Borehole Diameter:	8" ~~2"~~
Elevation / Depth Top of Rock:	N/A
Type of Backfill:	CONCRETE
Elevation / Depth of Seal:	/ 0.5
Type of Seal:	30/65 Sand
Elevation / Depth of Top of Filter Pack:	/ 1.0
Elevation / Depth of Top of Screen:	/ 1.5
Type of Screen:	PVC
Slot Size x Length:	
I.D. of Screen:	
Type of Filter Pack:	Prepacked
Elevation / Depth of Bottom of Screen:	/ 11.5
Elevation / Depth of Bottom of Filter Pack:	/
Type of Backfill Below Well:	
Elevation / Total Depth of Borehole:	/ 12.0

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

PID → 0.0

Well: CEF-610-MW1S
Site: BLDG 610
Date Installed: 9-5-01
Date Developed: 9-6-01
Dev. Method: SUBM. PUMP
Pump Type: WHALE

Depth to Bottom (ft.): 11.0
Static Water Level Before (ft.): 0.78
Static Water Level After (ft.):
Screen Length (ft.): 10
Specific Capacity:
Casing ID (in.): 2"

Responsible Personnel: L. KNIGHT
Drilling Co.: PRECISION
Project Name: NAS CECIL FIELD
Project Number: 0039 DS0 05E 125

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units _____)	Turbidity (NTU)	Remarks (odor, color, etc.)
1010	—	—	0.78	—	—	—	—	—
1020	START	PUMPING	—	—	—	—	—	START DEVELOPING;
1025	—	8	—	26.8	4.69	0.148	>K	VERY DK. BROWN
1030	—	12	—	26.7	4.82	0.119	>K	
1035	—	18	—	26.6	4.86	0.105	860	
1040	—	20	—	26.6	4.87	0.102	578	WATER CLEAR NOW
1045	—	24	—	26.6	4.91	0.100	348	
1050	—	28	—	26.6	4.94	0.099	221	
1055	—	32	—	26.6	4.96	0.099	234	
1100	—	36	—	26.6	4.99	0.098	204	
1105	—	40	—	26.6	5.00	0.097	169	
1110	—	44	—	26.6	5.02	0.098	133	
1115	—	55	—	26.5	5.03	0.098	184	VOLUME ADJUSTMENT
1115	STOP PUMP: TOTAL PUMP TIME = 55 minutes							(AVG. PUMP RATE = 1 gpm)
1130			0.93					

MONITORING WELL MATERIALS
CERTIFICATE OF CONFORMANCE

Well Designation: CEF-610-MW15
Site Name: Bldg 610
Date Installed: 9-5-01
Project Name: Bldg 610 CF

Site Geologist: LOUIS KNIGHT
Drilling Company: PRECISION
Driller: TOMMY LYNCH
Project Number: N0039

Material	Brand/Description	Source/Supplier	Sample Collected ?
Well Casing	2" PVC (SCH 40)	PRECISION DRILLING	
Well Screen	2" PVC (SCH 40)		
End Cap	SCH 40 PVC		
Drilling Fluid	N/A		
Drilling Fluid Additives	N/A		
Backfill Material	N/A		
Annular Filter Pack	20/30 (STANDARD SILICA CO.)		
~~Bentonite Seal~~ CHOKE SAND	30/65 (STANDARD SILICA CO.)		
Annular Grout	TYPE I PORTLAND CEMENT (TARMAC TN)		
Surface Cement	QUIKRETE / SURE-MIX (BONSAL)		
Protective Casing	N/A		
Paint	N/A		
Rod Lubricant	N/A		
Compressor Oil	N/A		

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

Signature of Site Geologist: Louis Knight

Tetra Tech NUS, Inc.

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: NAS Cecil Field Bldg 610
PROJECT NUMBER: N0039.DSO05G120

WELL ID.: CEF-610-MW- 01S
DATE: 9-21-01

Time (HHMM)	Water Level (Feet BTOC)	Flow (mL/min.)	Cum. Vol. (Liters)	pH (S.U.)	Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celsius)	ORP (mV)	Comments
1326	<6.95	400	—							muddy brown.
1331	1.38	400	2	4.62	0.146	334	3.85	27.1	255	
1336	1.39	400	4	4.98	0.135	328	3.01	27.0	241	
1341	1.40	400	6	5.09	0.105	222	3.00	26.9	226	
1346	1.43	400	8	5.03	0.105	201	2.55	26.9	225	
1351	1.46	400	10	5.16	0.105	163	2.43	27.0	217	
1356	1.48	400	12	5.16	0.105	167	2.44	27.1	215	
1401	1.49	400	14	5.10	0.106	185	2.76	27.0	225	clear lt. tinge &
1406	1.47	400	16	5.08	0.104	144	2.77	27.0	225	effervescent
1411	1.46	400	18	5.10	0.105	149	2.44	27.1	227	
1416	1.31	400	19	5.29	0.113	68.8	2.58	27.4	220	slow pump for turbidity
1420	~~end pumping~~ 1.29	200	20	5.24	0.103	148.0	3.44	27.3	225	
~~1425~~	~~begin sampling~~									
1424	return to field house (restroom) while pumping									
1445	1.22	200	24	5.44	0.110	89.3	3.85	28.5	221	
1450	1.20	200	25	5.29	0.109	86.5	2.13	28.3	222	
1455	1.21	200	26	5.27	0.109	84.9	2.11	28.1	223	
1500	~~end pumping~~ 1.20	200	27	5.21	0.107	55.6	3.63	27.7	229	
1505	1.18	200	28	4.98	0.105	40.1	3.21	27.6	240	
1510	1.19	200	29	4.96	0.106	44.1	2.99	27.4	244	
1515	1.20	200	30	4.95	0.108	51.8	2.83	27.3	247	end of 3 volumes
end pumping & begin sampling										

SIGNATURE(S): Elena Rodriguez

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

Project / Site: NAS Cecil Field Bldg 610
Project No.: N0039.DSO05G120
[X] Monitoring Well
[ ] Domestic Well
[ ] Other:

Sample ID No.: CEF-610-GW- 01S
Sample Location: CEF-610-MW- 01S
Sampler: Elena Rodriguez

SAMPLING DATA

	Color	pH S.U.	S.C. mS/cm	Turbidity NTU	DO mg/L	Temp. °C	ORP mV	
Date: 9-21-01								
Time: 1515								
Method: Peristaltic	lt beige	4.95	0.108	51.8	2.83	27.3	247	

PURGE DATA

Date: 9-21-01
Method: Peristaltic
Monitor Reading (ppm): 0.0
Well Casing Diameter: 2 inch
Well Casing Material: PVC
Total Well Depth (ft): 11.1
Static Water Level (ft): 0.95 (10 ft. screen)
One Casing Volume(gal/L): 1.6/6.1
Start Purge (hrs): 1326
End Purge (hrs): 1515
Total Purge Time (min): 109
Total Vol. Purged (gal/L): 30

GeoPump # 333
WCI # 418

See Attached Low Flow Purge Data Sheet for Purge Data

Horiba U-22 # 929 2020
pH/sc pre cal 4.03/4.60
post cal 4.00/4.49
Soln # 2525 exp 6/03
4.01/4.49

SAMPLE COLLECTION INFORMATION

Analysis	Preservative	Container Requirements	Laboratory	Collected
VOCs	HCl	3 - 40ml vials	Accutest	✓
PAHs	none	2 - 1L Amber	Accutest	✓
TRPH (FL PRO)	H2SO4	2 - 1L Amber	Accutest	✓
Total RCRA Metals	HNO3	1L HDPE	Accutest	✓
Dissolved RCRA Metals*	HNO3	1L HDPE	Accutest	✓

OBSERVATIONS / NOTES

*CEF-610-GF-01S-01 (filtered sample)
*Dissolved Metals filtered through 1 micron filter.

Background PID = 0.0

LAB INFO

LAB: Accutest
4405 Vineland Rd., C-15
Orlando, FL 32811
COC #: CF610-092101

Check if Collected:

[X] DUPLICATE	ID No.:	CEF-610-GW-DUP1-01
[X] MS/MSD		CEF-610-GW-MSMSD-01

Signature(s): Elena Rodriguez