N60200.AR.002612
NAS CECIL FIELD, FL
5090.3a

FINAL TECHNICAL MEMORANDUM FOR NO FURTHER ACTION FOR POTENTIAL SOURCE OF CONTAMINATION 55 FACILITY 805 RECYCLING CENTER NAS CECIL FIELD FL

8/18/2000

TETRA TECH NUS INC

NAS Cecil Field Administrative Record
Document Index Number
Rev. 1
08/18/00

32215-000
01.03.00.0086

Technical Memorandum
for
No Further Action

Potential Source of Contamination 55
Facility 805 – Recycling Center

Naval Air Station Cecil Field
Jacksonville, Florida

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

August 2000

Rev. 1
08/18/00

TECHNICAL MEMORANDUM FOR NO FURTHER ACTION

POTENTIAL SOURCE OF CONTAMINATION 55
FACILITY 805 – RECYCLING CENTER

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:
Tetra Tech NUS, Inc.
661 Andersen Drive
Foster Plaza 7
Pittsburgh, Pennsylvania 15220

CONTRACT NUMBER N62467-94-D-0888
CONTRACT TASK ORDER 0078

August 2000

PREPARED UNDER THE SUPERVISION OF:

MARK SPERANZA, P.E.
TASK ORDER MANAGER
TETRA TECH NUS, INC.
PITTSBURGH, PENNSYLVANIA

APPROVED FOR SUBMITTAL BY:

DEBBIE WROBLEWSKI
PROGRAM MANAGER
TETRA TECH NUS, INC.
PITTSBURGH, PENNSYLVANIA

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: August 18, 2000

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

The professional opinions rendered in this decision document identified as Technical Memorandum for No Further Action, Potential Source of Contamination 55, 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 this project described in this report.

Mark P. Speranza

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

Date: 8/18/00

Mark Speranza

TABLE OF CONTENTS

SECTION **PAGE NO.**

CERTIFICATION ..... **ii**

PROFESSIONAL ENGINEERING AUTHORIZATION ..... **iii**

ACRONYMS ..... **vi**

1.0 INTRODUCTION **1-1**

2.0 SITE DESCRIPTION **2-1**
2.1 PHYSICAL SETTING 2-1
2.2 SITE HISTORY 2-1
2.3 SITE GEOLOGY AND HYDROGEOLOGY 2-1

3.0 PREVIOUS INVESTIGATIONS **3-1**

4.0 FIELD INVESTIGATION **4-1**

5.0 NATURE AND EXTENT OF CONTAMINATION **5-1**

6.0 PRELIMINARY RISK EVALUATION **6-1**
6.1 HUMAN HEALTH RISK EVALUATION 6-1
6.2 ECOLOGICAL RISK EVALUATION 6-1

7.0 CONCLUSIONS AND RECOMMENDATIONS **7-1**
7.1 CONCLUSIONS 7-1
7.2 RECOMMENDATIONS 7-1

REFERENCES **R-1**

APPENDIX

A ANALYTICAL LABORATORY RESULTS
B ANALYTICAL LABORATORY RESULTS AND VALIDATION LETTER FROM 1999 SAMPLING EFFORT

TABLES

NUMBER **PAGE NO.**

5-1 Soil Analytical Results 5-3
5-2 Soil Analytical Result for December 1999 Sampling Effort 5-4

FIGURES

NUMBER **PAGE NO.**

2-1 Site Location Map 2-3
2-2 Sampling and Analysis Report 2-4
3-1 Previous Sampling Results 3-3
4-1 Phase I Investigation Sample Results 4-3

LIST OF ACRONYMS AND ABBREVIATIONS

ABB-ES	ABB Environmental Services, Inc.
BCT	BRAC Cleanup Team
BRAC	Base Realignment and Closure
CLEAN	Comprehensive Long-Term Environmental Action Navy
CTO	Contract Task Order
EBS	Environmental Baseline Survey
ELCR	Excess lifetime cancer risk
F.A.C.	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
GCTL	Groundwater Cleanup Target Level
HI	Hazard Index
HLA	Harding Lawson Associates
IBDS	Inorganic Background Data Set
mg/kg	Milligram per kilogram
µg/kg	Microgram per kilogram
NAS	Naval Air Station
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
PCBs	Polychlorinated Biphenyls
PRE	Preliminary risk evaluation
PSC	Potential source of contamination
QA/QC	Quality assurance/quality control
SAR	Sampling and Analysis Report
SCTL	Soil Cleanup Target Level
SOUTHNAVFACENGCOM	Southern Division Naval Facilities Engineering Command
SVOCs	Semi-Volatile Organic Compounds
TCL	Target Compound List
TAL	Target Analyte List
TRPH	Total Recoverable Petroleum Hydrocarbons
TtNUS	Tetra Tech NUS, Inc.
U.S. EPA	United States Environmental Protection Agency
VOCs	Volatile Organic Compounds

1.0 INTRODUCTION

This Technical Memorandum for Potential Source of Contamination (PSC) 55 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 N62467-94-D-0888, Contract Task Order (CTO) 0078.

PSC 55 also known as Facility 805, the Recycling Center, at Naval Air Station (NAS) Cecil Field, was investigated for potential arsenic contamination in the surface soil, based on the information submitted in the Sampling and Analysis Report (SAR) for Facility 805.

Four rounds of field investigations were conducted at PSC 55, three conducted by ABB Environmental Services Inc. (ABB-ES) and one by TtNUS. The investigations were conducted to determine if operations at the site had an impact on the soils in the area. The purpose of TtNUS investigation was to verify the investigative results presented by ABB-ES related to potentially arsenic-contaminated soil.

This technical memorandum presents information from the previous investigations and the PSC investigation conducted in November 1999 by TtNUS. This technical memorandum summarizes the related field operations, results, conclusions, and recommendations of the PSC 55 field investigations. The results of the investigation identify that no further action is needed at this site, and the Environmental Baseline Survey (EBS) color classification should be revised from 5/Yellow to 3/Light Green.

2.0 SITE DESCRIPTION

2.1 PHYSICAL SETTING

Facility 805 is referred to as the Recycling Center in the EBS (ABB-ES, 1994a). This area, now identified as PSC 55, is located in the Main Base Area of NAS Cecil Field (Figure 2-1). It is bordered by 10th Street to the north and east and by storage yards to the south and west (Figure 2-2). The Recycling Center is surrounded by a perimeter security fence.

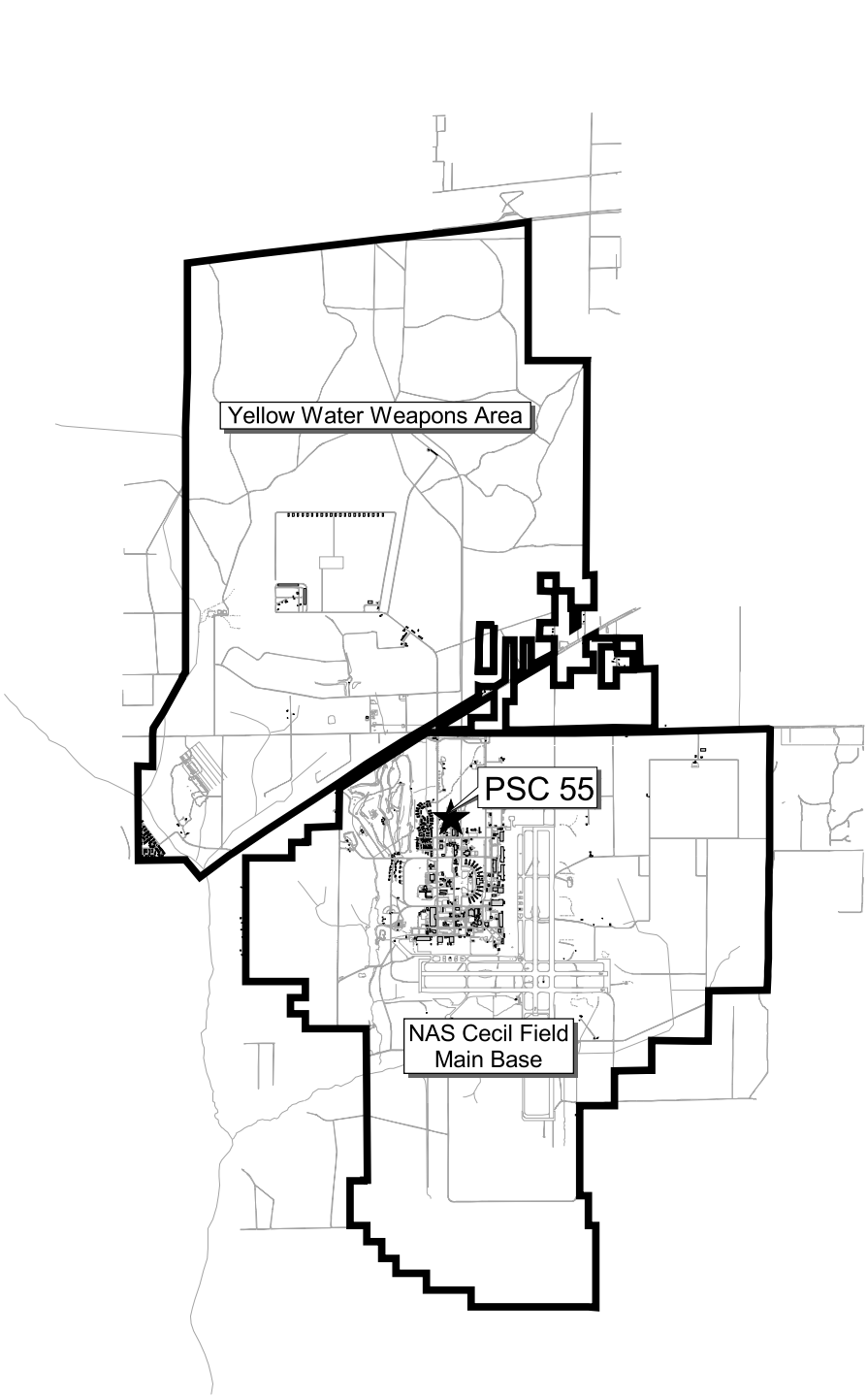
2.2 SITE HISTORY

Facility 805 was previously used as a warehouse for forestry supplies and heavy equipment. The Recycling Center collects metals, wood, and plastic and hazardous materials such as petroleum, oils, solvents, paints, and brake fluid. Paint residues are collected in 55-gallon drums and transferred to the Public Works Center. Waste oil, oil filters, antifreeze, and batteries were stored in a shack near the north border of the property. Building 805 was color-coded Grey during the EBS because of the storage of hazardous materials, staining, and poor housekeeping. The color classification was changed to Yellow in the SAR which determined that further evaluation of surface soils was needed and stated that this area would subsequently be identified as PSC 55.

2.3 SITE GEOLOGY AND HYDROGEOLOGY

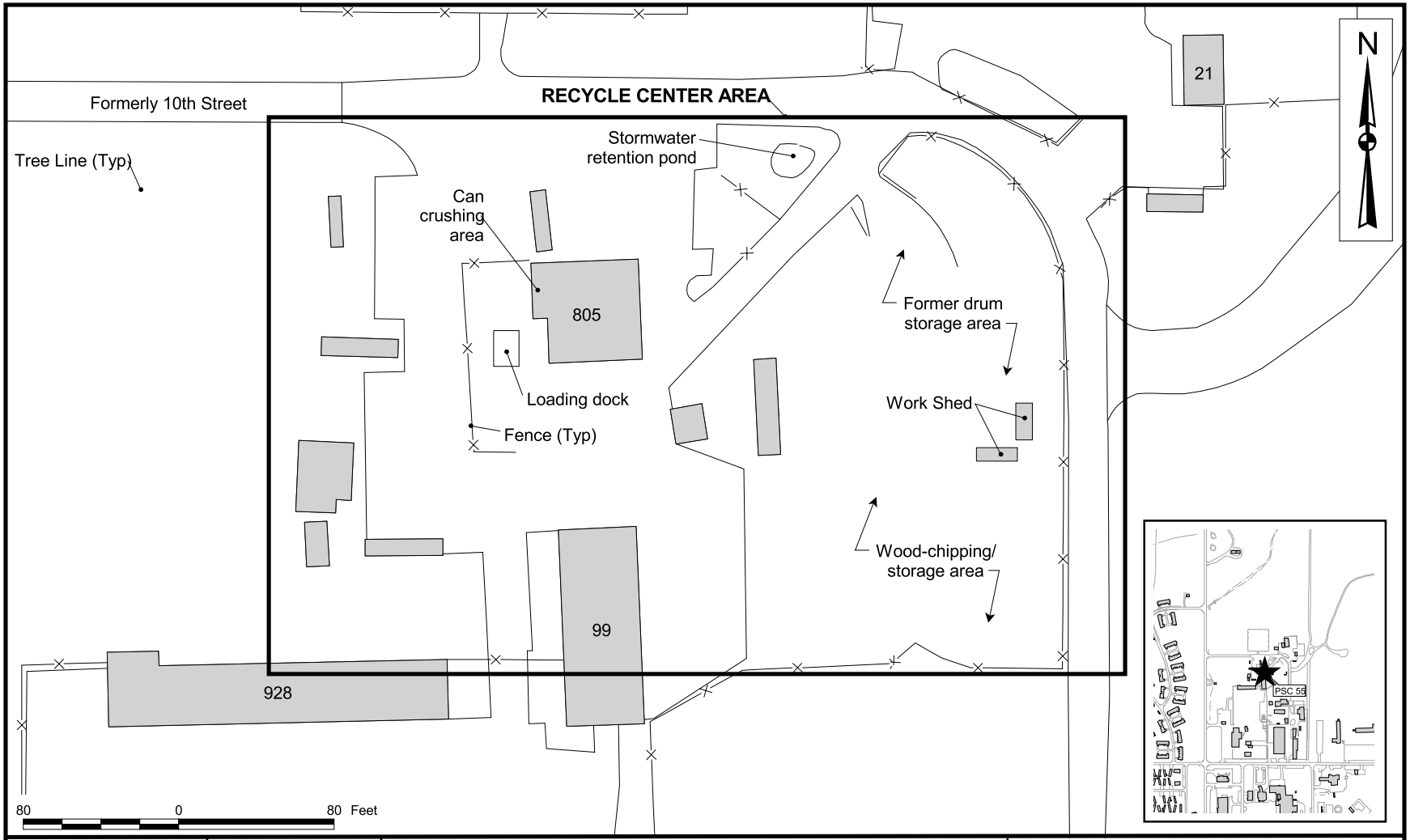
PSC 55 is located in the main base area near Operable Units 6, Site 11 and 7, Site 16. The geological and hydrological characteristics of these sites are very similar, indicating the immediate area is relatively uniform. Detailed information on the geological and hydrogeological characteristics of these areas is provided in their respective remedial investigation reports.

This page intentionally left blank.



DRAWN BY MJJ	DATE 06Apr00	SITE LOCATION MAP PSC 55, BUILDING 805 RECYCLING CENTER 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 2-1 / REV 0

P:\GIS\CECIL\PSC55.APR 06Apr00 MJJ Site Location Map Layout



DRAWN BY MJJ	DATE 06Apr00	SITE PLAN PSC 55, BUILDING 805 RECYCLING CENTER 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\CECIL\PSC55.APR 06Apr00 MJJ Site Plan Layout

3.0 PREVIOUS INVESTIGATIONS

Previous investigations were conducted by ABB-ES, now part of Harding Lawson Associates (HLA). The results of the investigations are presented in the Sampling and Analysis Report (SAR) for Facility 805, Rev. 1 (HLA, 1999). The results of the detected arsenic concentrations are summarized on the tag map in the Figure 3-1 and the complete data set is provided in Appendix A.

The initial investigation was conducted in February 1996. The investigation consisted of collecting four surface soil samples and one groundwater sample and analyzing for Target Compound List (TCL) volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticide compounds, polychlorinated biphenyl compounds (PCBs), Target Analyte List (TAL) inorganics, and total recoverable petroleum hydrocarbons (TRPH).

Nine inorganic analytes were detected in the groundwater sample collected in the study area. No analytes were detected at concentrations in excess of the NAS Cecil Field Site-Specific Inorganic Background Data Set (IBDS) screening criteria for inorganics. No compounds or analytes were detected at concentrations in excess of groundwater cleanup target levels (GCTLs). Therefore, no Hazard Index (HI) or Excess Lifetime Cancer Risk (ELCR) was calculated in association with a potential groundwater exposure scenario.

The results of the initial soil investigation identified arsenic as the only constituent detected above the screening criteria. No other organic compounds or inorganic analytes were detected at concentrations in excess of screening criteria in surface soil samples collected within the area of investigation. Arsenic was only detected at one of the four sample locations (53S00401), at a concentration of 22.3 mg/kg, which exceeds the NAS Cecil Field Site-Specific IBDS (2.04 mg/kg).

A screening strategy was developed based on this arsenic detection to further evaluate the area. A composite sampling strategy for additional sampling was discussed and agreed upon at the March 1997 BCT meeting. In September 1997, subsamples were collected at each of 5 locations within 100-foot by 100-foot cells defined by an orthogonal grid, and composited for analysis for TCL SVOCs, pesticide compounds, PCBs, TAL inorganics, and TRPH. Grab samples for TCL VOC, analysis were collected from the central subsample locations. Prior to compositing, each subsample was split, and a portion was retained in a secure, refrigerated environment. Split samples were retained for arsenic analysis at select subsample locations, subsequent to the analysis of the composite samples.

Discrete surface soil samples were also specified at 4 areas of special interest; near the loading dock, and can crusher, in the wood chipping area, former drum storage area, and at the southern end of Facility 99 adjacent to a storage area for salvaged underground storage tanks. These samples were submitted for analysis for TCL SVOCs, pesticide compounds, PCBs, TAL inorganics, and TRPH.

Two of the seven composite samples analyzed in September 1997 and were identified as having arsenic detections in excess of the NAS Cecil Field Site-Specific IBDS; therefore, the individual samples that made up the composite samples were analyzed in October 1997. None of the thirty-four individual samples analyzed, had arsenic detections in excess of the NAS Cecil Field Site-Specific IBDS.

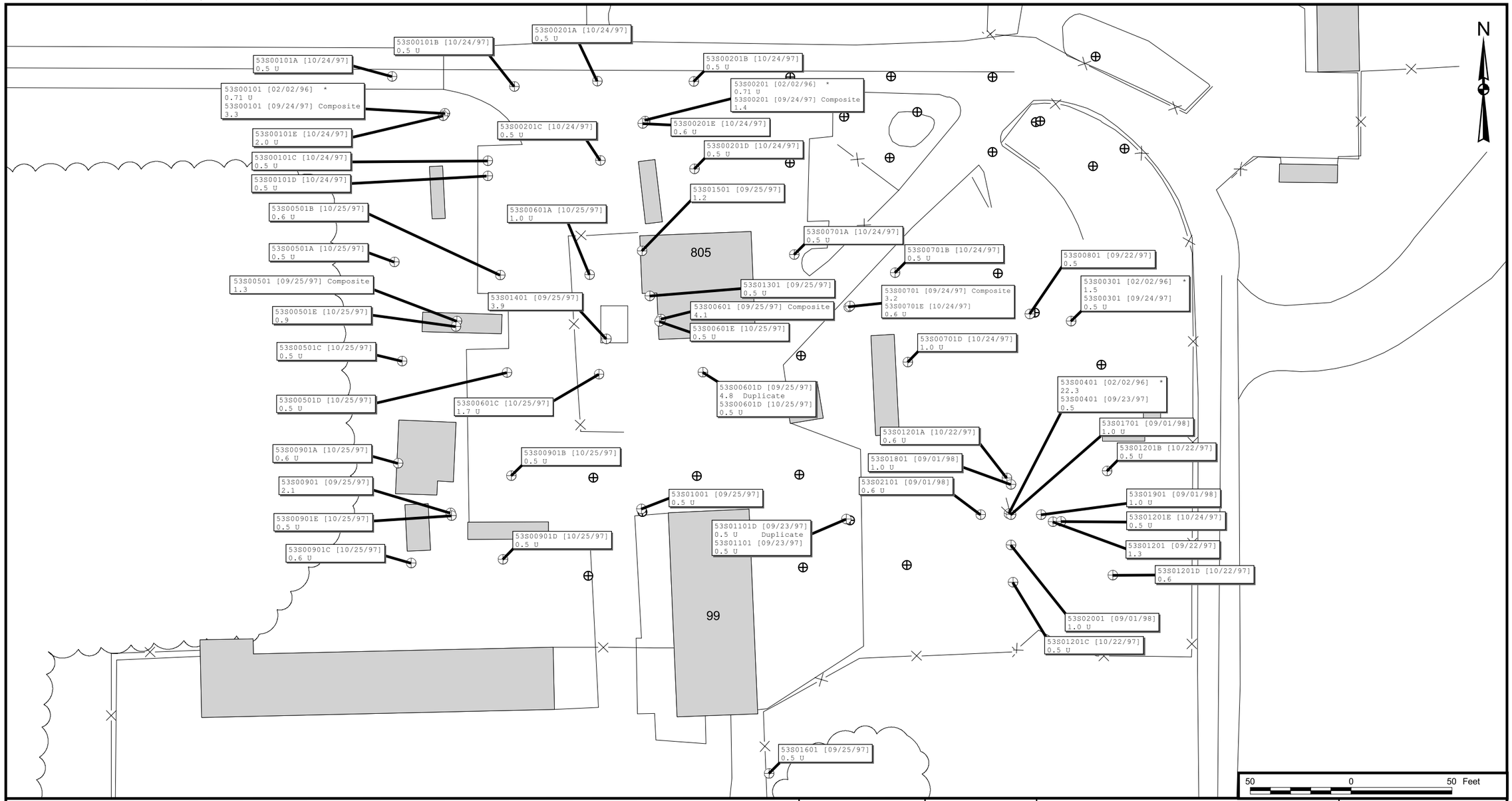
The maximum detected arsenic concentration among the composite samples collected was 4.8 mg/kg. Arsenic was not detected in any of the subsamples that made up the composite samples. In addition, arsenic was not detected in excess of screening criteria at any of the 8 subsample and delineation samples collected from the area surrounding sample location 53S00401, which had originally exhibited a high arsenic concentration.

The SAR concluded that arsenic was detected at concentrations in excess of screening criteria in 6 surface soil samples collected within the area of investigation for Facility 805. An ELCR of $3x10^{-4}$ was calculated in association with a potential surface soil exposure scenario. No other organic or inorganic analytes were detected in surface soil or groundwater samples collected within the area of investigation at concentrations in excess of screening criteria.

During the September 1998 investigation arsenic was not detected in any of the sample collected during attempts to again locate and delineate the extent of contamination identified in the sample 53S00401 collected in 1996. Based upon a review of the data, the SAR recommended that additional assessment be undertaken to determine requirements for further action.

As requested, the color classification for Facility 805 was changed to 5/Yellow. The BRAC Cleanup Team (BCT) then designated Facility 805 and the entire recycle center as PSC 55.

P:\GIS\CECIL\PSC55.APR 06Apr00 MJJ Layout PSC 55 Samples



NOTE: * 1996 DATA FULL ANALYSIS; TPH, VOCs, SVOCs,PEST/PCBs, METALS AND CYANIDE

FEBRUARY 1996: FOUR SAMPLE FULL ANALYSIS

COMPOSITE SAMPLING CONDUCTED 1997
(COMPOSITES ANALYZED 9/97 & INDIVIDUAL ANALYZED SAMPLES 10/97)

1998 SAMPLING EFFORT AT AND NEAR 53S00401 (22.3 mg/kg)

DRAWN BY MJJ	DATE 14Oct99
CHECKED BY	DATE
COST/SCHED-AREA	
SCALE AS NOTED	

PREVIOUS SAMPLING RESULTS
PSC 55, BUILDING 805 RECYCLING CENTER
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

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

4.0 FIELD INVESTIGATION

A soil sampling and analysis event was conducted at PSC 55 in December 1999 to identify if arsenic contamination above the NAS Cecil Field Site-Specific IBDS values exists in the surface soils. The results of the previous investigations were inconclusive; therefore, a sampling plan was developed that:

- Re-sampled locations where elevated arsenic detections were obtained.
- Collected samples in a weighted grid pattern across the site.

The field investigation was performed in accordance with the PSC 55 Phase I Sampling and Analysis Work Plan (TtNUS, 1999). Sampling locations and analytical results for arsenic are shown on Figure 4-1.

A total of twenty samples were collected, including seventeen surface soil samples from 0 to 1 foot bgs, one surface soil sample from 1 to 2 feet bgs, and two duplicate samples:

- Six samples were collected to investigate the location where the September 1997 sampling effort identified an arsenic detection of 3.9 mg/kg 53S01401.

  - CEF-P55-SS-001 through CEF-P55–SS-004 were collected 15’ from 53SO1401 in each direction.
  - CEF-P55-SS-005 and CEF-P55-SS–006 were collected in the same location as 53SO1401 at 0’-1’ bgs and 1’-2’ bgs depths, respectively.

- One sample (CEF-P55-SS-014-01) was collected to investigate the location of the original arsenic detection in February 1996 at 53SO0401 (which was re-sampled in September 1997 and September 1998 and identified as being below the arsenic IBDS value).

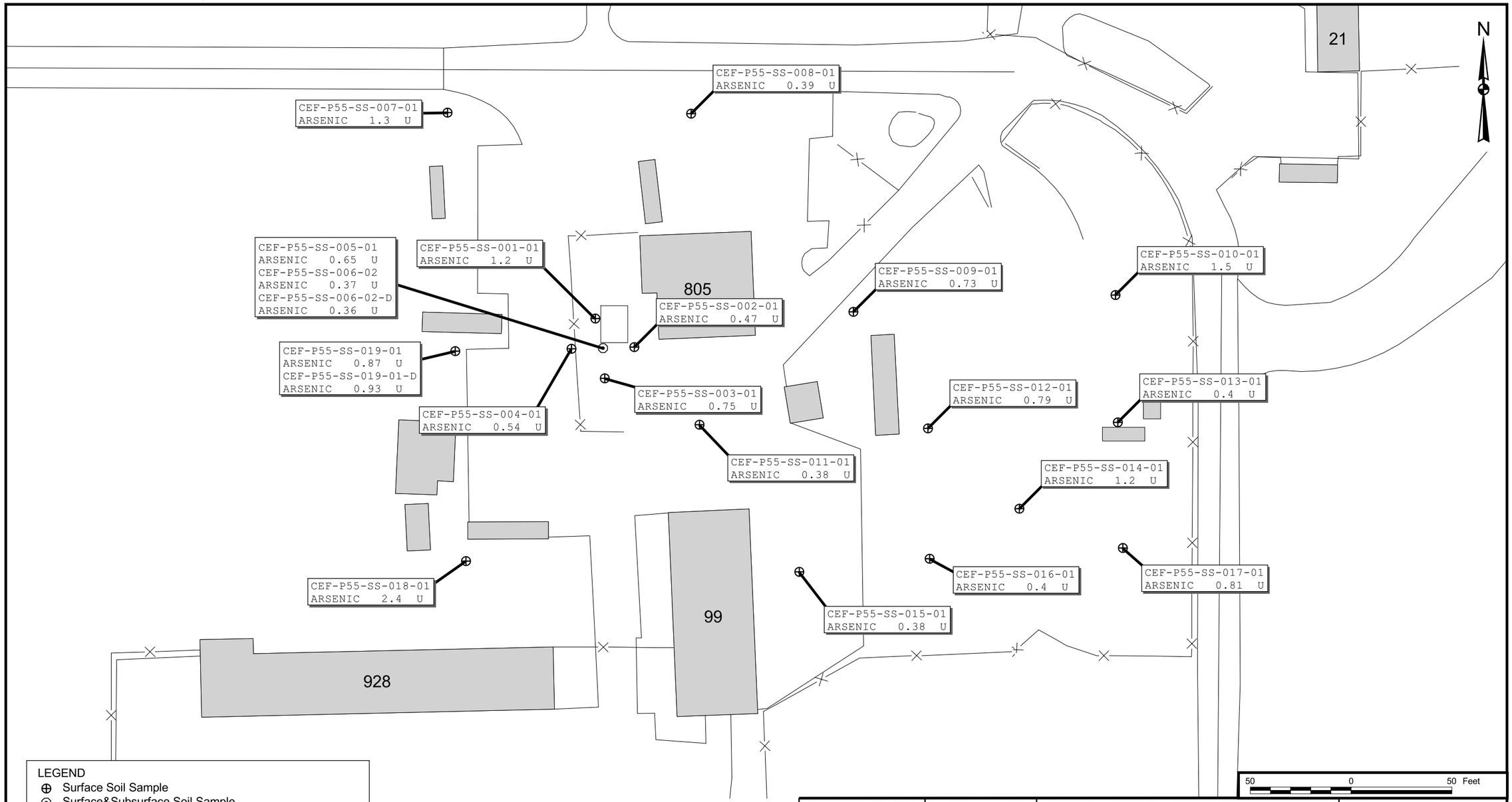
- Twelve samples were collected to investigate the remaining area of PSC 55. The samples were placed in a grid pattern in areas that historically showed the potential to be impacted by site activities.

- Two duplicate surface soil samples were collected for quality assurance / quality control (QA/QC). Field duplicate CEF-P55-DUP01 was collected at CEF-P55-SS-006-02, and CEF-P55-DUP02 was collected at CEF-P55-SS-019-01.

Soil samples were collected as grab samples using plastic, disposable trowels. Sampling activities were performed in accordance with the procedures described in the U.S. Environmental Protection Agency (U.S. EPA Region IV, 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. A total of two QA/QC samples were collected. Two matrix spike samples for the laboratory internal quality control checks were also collected.

The samples were analyzed for arsenic by U.S. EPA Method SW-846 6010B. ACCUTEST SouthEast, in Orlando, Florida, conducted the analysis. All holding times were observed and no variations from standard procedures were reported.

P:\GIS\CECIL\PSC55.APR 29Mar00 MJJ Layout PSC 55 Arsenic Results



DRAWN BY MJJ	DATE 29Mar00	PHASE I INVESTIGATION SAMPLE RESULTS PSC 55, BUILDING 805 RECYCLING CENTER NAVAL AIR STATION CECIL FIELD JACKSONVILLE, FLORIDA	CONTRACT NO. 0039
CHECKED BY	DATE		APPROVED BY / DATE
COST/SCHED-AREA			APPROVED BY / DATE
SCALE AS NOTED			DRAWING NO. FIGURE 4-1 / REV. 0

5.0 NATURE AND EXTENT OF CONTAMINATION

Analytical results for the soil samples collected during all field investigations are shown on Table 5-1, and complete laboratory data set is included in Appendix A. Table 5-2 provides a summary of the detections of arsenic from the December 1999 sampling effort conducted by TtNUS in December 1999. Based on the re-sampling effort and conflicting results from the previous data, the BCT decided to conduct this final field effort and only use this data regarding future actions at the site. The results of the sampling and analysis did not detect any arsenic contamination. The laboratory data and validation letter for this round of sampling is provided in Appendix B.

This page intentionally left blank.

TABLE 5-1

SOIL ANALYTICAL RESULTS
SUMMARY OF POSITIVE DETECTIONS FOR ALL SAMPLES
PSC 55 - FACILITY 805 - RECYCLE CENTER
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

Parameter	Frequency of Detections	Range of Detections	Maximum Sample Location	Average of Positive Detections	Average of all Sample Collected
VOLATILES (mg/kg)					
2-Butanone	1/22	27	53S00301 [02/02/96]	27	6.16
Acetone	2/22	53 - 62	53S00801 [09/22/97]	57.5	9.9318
M+p-Xylenes	1/17	11	53S01501 [09/25/97]	11	5.3529
Methylene Chloride	2/22	18 - 24	53S00801 [09/22/97]	21	7.7045
Styrene	1/22	230	53S01501 [09/25/97]	230	12.9545
Toluene	2/22	7 - 46	53S01501 [09/25/97]	26.5	4.7955
Trichloroethene	1/22	87	53S01401 [09/25/97]	87	6.4545
SEMIVOLATILES (mg/kg)					
Benzo(a)pyrene	1/22	21	53S00201 [02/02/96]	21	164.1591
Benzo(b)fluoranthene	3/22	23 - 38	53S00201 [02/02/96]	28	150.4318
Bis(2-Ethylhexyl)phthalate	3/22	39 - 4191	53S00801 [09/22/97]	1490	351.3409
Chrysene	3/22	22 - 24	53S00301 [02/02/96]	23	149.75
Fluoranthene	2/22	25 - 29	53S00301 [02/02/96]	27	158.1591
Pyrene	3/22	21 - 22	53S00301 [02/02/96]	21.33	149.5227
PESTICIDES/PCBs (mg/kg)					
4,4'-DDD	5/22	0.84 - 9.2	53S01001 [09/25/97]	4.326	1.8252
4,4'-DDE	7/22	0.63 - 33	53S01001 [09/25/97]	9.4329	3.7218
4,4'-DDT	6/22	3.6 - 28	53S01001 [09/25/97]	10.4417	3.6989
Aldrin	1/22	0.36	53S00401 [02/02/96]	0.36	0.8334
Alpha-Chlordane	2/22	0.16 - 2.4	53S00301 [02/02/96]	1.28	13.0027
Aroclor-1260	1/22	150	53S00201 [02/02/96]	150	23.0455
Dieldrin	2/22	0.28 - 0.7	53S00301 [02/02/96]	0.49	0.9525
Endrin	1/22	0.08	53S00301 [02/02/96]	0.08	0.9957
Endrin Aldehyde	1/22	0.67	53S00301 [02/02/96]	0.67	1.0225
Gamma-Chlordane	2/22	0.2 - 3	53S00301 [02/02/96]	1.6	13.0273
Heptachlor	1/22	2.6	53S00901 [09/25/97]	2.6	0.9386
Heptachlor Epoxide	2/22	0.86 - 6.3	53S00901 [09/25/97]	3.58	1.1027
gamma-BHC (Lindane)	1/22	0.22	53S00301 [02/02/96]	0.22	0.8248
INORGANICS (mg/kg)					
Aluminum	21/21	150 - 3000	53S00801 [09/22/97]	1067.3333	1067.3333
Antimony	4/21	2.5 - 3.5	53S00601D [09/25/97]	3	1.2781
Arsenic	16/80	0.5 - 22.3	53S00401 [02/02/96]	3.3063	0.9434
Barium	4/21	1.7 - 8	53S00401 [02/02/96]	5.025	9.0524
Cadmium	1/21	0.41	53S00201 [02/02/96]	0.41	0.4405
Calcium	21/21	437 - 120000	53S01301 [09/25/97]	37834.619	37834.619
Chromium	19/21	1.1 - 8.9	53S00401 [02/02/96]	3.2211	2.9619
Cobalt	1/21	4	53S00201 [02/02/96]	4	2.3095
Copper	6/21	0.76 - 16	53S01401 [09/25/97]	7.0267	3.7933
Iron	21/21	73 - 1410	53S00401 [02/02/96]	367.7143	367.7143
Lead	10/21	1.4 - 14	53S01001 [09/25/97]	5.74	2.9952
Magnesium	21/21	32 - 800	53S01401 [09/25/97]	281.1619	281.1619
Manganese	20/21	2 - 18	53S01001 [09/25/97]	6.89	6.5857
Mercury	5/21	0.01 - 0.034	53S00801 [09/22/97]	0.0152	0.0181
Nickel	4/21	0.5 - 1.5	53S00201 [02/02/96]	0.7875	2.1738
Potassium	9/21	25 - 150	53S01001 [09/25/97]	43.7444	25.5857
Sodium	21/21	8.5 - 122	53S00301 [02/02/96]	34.4429	34.4429
Vanadium	19/21	1 - 3.7	53S00601D [09/25/97]	2.0474	1.9
Zinc	21/21	2.2 - 28	53S00701 [09/24/97]	13.04	13.04
PETROLEUM HYDROCARBONS (mg/kg)					
Tph	1/5	21	53S00101 [02/02/96]	21	8.8

TABLE 5-2

SOIL ANALYTICAL RESULT FOR DECEMBER 1999 SAMPLING EFFORT
SUMMARY OF ANALYTICAL RESULTS
PSC 55 - FACILITY 805 - RECYCLE CENTER
NAS CECIL FIELD
JACKSONVILLE, FLORIDA

Parameter	NAS Cecil Field Inorganic Background Criteria	Frequency of Detection	Range of Detections	Average Concentration
Inorganics (mg/kg)				
Arsenic	2.04	0/21	0.36U - 2.4U	0.4005U

6.0 PRELIMINARY RISK EVALUATION

The Sampling and Analysis Report for Facility 805 prepared by Harding Lawson Associates (HLA, 1999) included a Preliminary Risk Evaluation (PRE) to assess the potential risk to human and ecological receptors posed by contaminants in the surface soil. The PRE conducted prior to the last round of sampling identified that arsenic at concentrations in excess of screening criteria in 6 surface soil samples collected within the area of investigation for Facility 805, including the initial 1996 sample 53SO0401, which was subsequently re-sampled. An ELCR of $3x10^{-4}$ was calculated using all the data obtained prior to the last sampling event. No other organic or inorganic analytes were detected at concentrations in excess of screening criteria in surface soil or groundwater samples collected within the area of investigation.

6.1 HUMAN HEALTH RISK EVALUATION

A preliminary risk evaluation (PRE) was conducted using only the data from the last sampling event to assess potential risks to human receptors posed by contaminants in the soil. Primary exposure pathways were evaluated to determine those pathways that potentially contribute to human health risks. The detected analytes were compared to readily available risk-based screening levels to assess the likelihood of adverse human health effects associated with potential exposure to surface soil. The detected analytes were also compared to the NAS Cecil Field Site-Specific IBDS. Any sample with concentrations greater than the NAS Cecil Field Site-Specific IBDS are then compared to the Florida Department of Environmental Protection (FDEP) Residential Soil Target Level (SCTL) as proposed in Chapter 62-777 of the Florida Administrative Code (F.A.C.) [Florida Department of Environmental Protection (FDEP), [1999] and Federal Risk Based Screening Values.

The results of the sampling at PSC 55 did not have any positive detections for arsenic. Given the concentrations of the individual samples were all below the NAS Cecil Field Site-Specific IBDS concentration of 2.04 mg/kg, therefore, no HI or ELCR was calculated in association with a potential soil exposure scenario.

6.2 ECOLOGICAL RISK EVALUATION

Based on data collected during the most recent sampling event, the maximum concentration of arsenic in surface soil was 1.2 mg/kg. This concentration is less than the U.S. EPA Region IV ecological screening value of 10 mg/kg for arsenic in surface soil (EPA, 1999). Therefore, arsenic in surface soil poses negligible risks to ecological receptors at PSC 55.

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 CONCLUSIONS

Conclusions pertaining to PSC 55, Facility 805 – Recycling Center are as follows:

- No contamination in excess of the FDEP GCTL or inorganic background values was observed in the groundwater.

- Multiple rounds of soil sampling were conducted in the area of Facility 805. The only constituent observed in excess of the FDEP SCTL or IBDS values was arsenic. Locations where IBDS elevated arsenic levels were observed in early sampling and analysis efforts were re-sampled.

- Results from the previous sampling events (2/96, 9/97, and 9/98) were not used because the latest re-sampling efforts at the location of the elevated levels of arsenic observed in the initial investigation indicated arsenic to be below IBDS levels. In addition, the earlier composite sampling effort results were inconclusive because the individual samples that made up the composite samples containing elevated arsenic values did not themselves have any arsenic concentrations detected above screening values.

- Sample results did not identify any arsenic contamination in excess of the IBDS values for arsenic. Therefore, there are no contaminants or pathways that pose a threat to the public health, welfare, or the environment.

7.2 RECOMMENDATIONS

Based on the evaluation conducted at PSC 55, no further action is warranted. The recommendation for PSC 55 is No Further Action.

It is also recommended that the color classification of PSC 55 be changed from Yellow to Light Green to denote that a release, disposal and/or migration of hazardous substances has occurred but at concentrations that do not require a removal or remedial response.

REFERENCES

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

ABB-ES, 1994b. Project Operations Plan for Cecil Field and Health and Safety Plan. Prepared for SOUTHNAVFACENGCOM, North Charleston, South Carolina. November.

ABB-ES, 1995a. Sampling and Analysis Outline, Facility 805, Base Realignment and Closure, Zone D, Industrial and Flightline Area, Group IV, Naval Air Station Cecil Field, Jacksonville, Florida. Prepared for SOUTHNAVFACENGCOM, North Charleston, South Carolina. April.

ABB-ES, 1995b. Minutes of September 25, 1995, conference call to discuss preliminary risk evaluations.

Florida Department of Environmental Protection (FDEP), 1998. Brownfields Cleanup Criteria Rule: Chapter 62-785, Florida Administrative Code. Tallahassee, Florida.

FDEP, 1999. Contaminant Target Levels Rule, Soil, Groundwater and Surface Water Target Cleanup Levels. Florida Administrative Code (F.A.C) Chapter 62-777. August.

HLA (Harding Lawson Associates), 1998. Inorganic Background Data Set.

Hoaglin, D.C., F. Mosteller, and J.W. Turkey, 1983. Understanding Robust and Exploratory Data Analysis. New York: John Wiley and Sons, Inc.

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

U.S. EPA, 1994. Subject: Amended Guidance on Preliminary Risk Evaluations (PREs) for the Purpose of Reaching a Finding of Suitability to Lease (FOSL). Memorandum from U.S. EPA Region X. Atlanta, Georgia. December 20.

U.S. EPA, 1995. Ecological Risk Assessment, Bulletin No. 1. Supplemental Guidance to RAGS: Region IV Bulletin. U.S. EPA Region IV Waste Management Division. Atlanta, Georgia. November.

U.S. EPA, 1996. Region III Risk-Based Screening Table, Technical Guidance Manual. Risk Assessment. EPA/903/R-93-001. May.

U.S. EPA Region 4, 1996. Environmental Investigations Standard Operating Procedures and Quality Assurance Manual (EISOPQAM). Athens, Georgia.

APPENDIX A

ANALYTICAL LABORATORY RESULTS

SOIL ANALYTICAL RESULTS

PSC 55 - CECIL FIELD
SUMMARY OF SOIL ANALYTIC RESULTS

SITE	05	05	BRAC	BRAC	BRAC	05	05
LOCATION	53S00101	53S00101	53S00101A	53S00101B	53S00101C	53S00101D	53S00101D
MATRIX	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S00101 [02/02/96]	53S00101 [09/24/97]	53S00101A [10/24/97]	53S00101B [10/24/97]	53S00101C [10/24/97]	53S00101D [02/02/96]	53S00101D [10/24/97]
SAMPLE	53S00101	53S00101	53S00101A	53S00101B	53S00101C	53S00101D	53S00101D
SACODE	DUP	DUP	DUP	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19960202	19970924	19971024	19971024	19971024	19960202	19971024
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	Logan, J.	Logan, J.	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	Logan, J.	Logan, J.
INORGANIC (MG/KG)							
ALUMINUM	1280	1100					
ANTIMONY	0.95 U	2 U					
ARSENIC	0.71 U	3.3	0.5 U	0.5 U	0.5 U		0.5 U
BARIUM	1.7	20 U					
BERYLLIUM	0.24 U	1 U					
CADMIUM	0.24 U	1 U					
CALCIUM	437	75000					
CHROMIUM	1.2	3.8					
COBALT	1.4 U	5 U					
COPPER	0.76	5 U					
CYANIDE	0.12 U						
IRON	227	430					
LEAD	1.4	1 U					
MAGNESIUM	44.9	430					
MANGANESE	2.2	10					
MERCURY	0.12 U	0.01 U					
NICKEL	0.56	5 U					
POTASSIUM	21.6 U	32					
SELENIUM	0.95 U	2 U					
SILVER	0.24 U	2 U					
SODIUM	75.3	21					
THALLIUM	0.71 U	1 U					
VANADIUM	1.6	2.8					
ZINC	2.2	12					
SEMIVOLATILE (UG/KG)							
1,2,4-TRICHLOROBENZENE	390 U	333 U				400 U	
1,2-DICHLOROBENZENE	390 U	333 U				400 U	
1,3-DICHLOROBENZENE	390 U	333 U				400 U	
1,4-DICHLOROBENZENE	390 U	333 U				400 U	
2,2'-OXYBIS(1-CHLOROPROPANE)	390 U					400 U	
2,4,5-TRICHLOROPHENOL	950 U	333 U				970 U	
2,4,6-TRICHLOROPHENOL	390 U	333 U				400 U	
2,4-DICHLOROPHENOL	390 U	333 U				400 U	
2,4-DIMETHYLPHENOL	390 U	333 U				400 U	
2,4-DINITROPHENOL	950 U	1666 U				970 U	
2,4-DINITROTOLUENE	390 U	333 U				400 U	
2,6-DINITROTOLUENE	390 U	333 U				400 U	
2-CHLORONAPHTHALENE	390 U	333 U				400 U	
2-CHLOROPHENOL	390 U	333 U				400 U	
2-METHYLNAPHTHALENE	390 U	333 U				400 U	
2-METHYLPHENOL	390 U	333 U				400 U	
2-NITROANILINE	950 U	333 U				970 U	
2-NITROPHENOL	390 U	333 U				400 U	
3&4-METHYLPHENOL		333 U					

SITE	05	05	BRAC	BRAC	BRAC	05	05
LOCATION	53S00101	53S00101	53S00101A	53S00101B	53S00101C	53S00101D	53S00101D
MATRIX	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S00101 [02/02/96]	53S00101 [09/24/97]	53S00101A [10/24/97]	53S00101B [10/24/97]	53S00101C [10/24/97]	53S00101D [02/02/96]	53S00101D [10/24/97]
SAMPLE	53S00101	53S00101	53S00101A	53S00101B	53S00101C	53S00101D	53S00101D
SACODE	DUP	DUP	DUP	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19960202	19970924	19971024	19971024	19971024	19960202	19971024
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	Logan, J.	Logan, J.	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	Logan, J.	Logan, J.
3,3'-DICHLOROBENZIDINE	390 U	666 U				400 U	
3-NITROANILINE	950 U	333 U				970 U	
4,6-DINITRO-2-METHYLPHENOL	950 U	999 U				970 U	
4-BROMOPHENYLPHENYLETHER	390 U	333 U				400 U	
4-CHLORO-3-METHYLPHENOL	390 U	333 U				400 U	
4-CHLOROANILINE	390 U	333 U				400 U	
4-CHLOROPHENYLPHENYLETHER	390 U	333 U				400 U	
4-METHYLPHENOL	390 U					400 U	
4-NITROANILINE	950 U	333 U				970 U	
4-NITROPHENOL	950 U	333 U				970 U	
ACENAPHTHENE	390 U	333 U				400 U	
ACENAPHTHYLENE	390 U	333 U				400 U	
ANTHRACENE	390 U	333 U				400 U	
BENZO(A)ANTHRACENE	390 U	333 U				400 U	
BENZO(A)PYRENE	390 U	333 U				400 U	
BENZO(B)FLUORANTHENE	390 U	333 U				400 U	
BENZO(G,H,I)PERYLENE	390 U	333 U				400 U	
BENZO(K)FLUORANTHENE	390 U	333 U				400 U	
BENZYLBUTYLPHTHALATE		333 U					
BIS(2-CHLOROETHOXY)METHANE	390 U	333 U				400 U	
BIS(2-CHLOROETHYL)ETHER	390 U	333 U				400 U	
BIS(2-CHLOROISOPROPYL)ETHER		333 U					
BIS(2-ETHYLHEXYL)PHTHALATE	390 U	333 U				400 U	
BUTYLBENZYLPHTHALATE	390 U					400 U	
CARBAZOLE	390 U	333 U				400 U	
CHRYSENE	390 U	333 U				400 U	
DI-N-BUTYLPHTHALATE	390 U	333 U				400 U	
DI-N-OCTYLPHTHALATE	390 U	333 U				400 U	
DIBENZO(A,H)ANTHRACENE	390 U	333 U				400 U	
DIBENZOFURAN	390 U	333 U				400 U	
DIETHYLPHTHALATE	390 U	333 U				400 U	
DIMETHYLPHTHALATE	390 U	333 U				400 U	
FLUORANTHENE	390 U	333 U				400 U	
FLUORENE	390 U	333 U				400 U	
HEXACHLOROBENZENE	390 U	333 U				400 U	
HEXACHLOROBUTADIENE	390 U	333 U				400 U	
HEXACHLOROCYCLOPENTADIENE	390 U	333 U				400 U	
HEXACHLOROETHANE	390 U	333 U				400 U	
INDENO(1,2,3-CD)PYRENE	390 U	333 U				400 U	
ISOPHORONE	390 U	333 U				400 U	
N-NITROSO-DI-N-PROPYLAMINE	390 U	333 U				400 U	
N-NITROSODIPHENYLAMINE	390 U	333 U				400 U	
NAPHTHALENE	390 U	333 U				400 U	
NITROBENZENE	390 U	333 U				400 U	
PENTACHLOROPHENOL	950 U	333 U				970 U	

SITE	05	05	BRAC	BRAC	BRAC	05	05
LOCATION	53S00101	53S00101	53S00101A	53S00101B	53S00101C	53S00101D	53S00101D
MATRIX	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S00101 [02/02/96]	53S00101 [09/24/97]	53S00101A [10/24/97]	53S00101B [10/24/97]	53S00101C [10/24/97]	53S00101D [02/02/96]	53S00101D [10/24/97]
SAMPLE	53S00101	53S00101	53S00101A	53S00101B	53S00101C	53S00101D	53S00101D
SACODE	DUP	DUP	DUP	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19960202	19970924	19971024	19971024	19971024	19960202	19971024
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	Logan, J.	Logan, J.	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	Logan, J.	Logan, J.
PHENANTHRENE	390 U	333 U				400 U	
PHENOL	390 U	333 U				400 U	
PYRENE	390 U	333 U				400 U	
VOLATILE (UG/KG)							
1,1,1-TRICHLOROETHANE	6 U	5 U				6 U	
1,1,2,2-TETRACHLOROETHANE	6 U	5 U				6 U	
1,1,2-TRICHLOROETHANE	6 U	5 U				6 U	
1,1-DICHLOROETHANE	6 U	5 U				6 U	
1,1-DICHLOROETHENE	6 U	5 U				6 U	
1,2-DICHLOROETHANE	6 U	5 U				6 U	
1,2-DICHLOROETHENE (TOTAL)	6 U					6 U	
1,2-DICHLOROPROPANE	6 U	5 U				6 U	
2-BUTANONE	12 U	10 U				12 U	
2-HEXANONE	12 U	10 U				12 U	
4-METHYL-2-PENTANONE	12 U	10 U				12 U	
ACETONE	12 U	10 U				12 U	
BENZENE	6 U	5 U				6 U	
BROMODICHLOROMETHANE	6 U	5 U				6 U	
BROMOFORM	6 U	5 U				6 U	
BROMOMETHANE	12 U	10 U				12 U	
CARBON DISULFIDE	6 U	5 U				6 U	
CARBON TETRACHLORIDE	6 U	5 U				6 U	
CHLOROBENZENE	6 U	5 U				6 U	
CHLOROETHANE	12 U	10 U				12 U	
CHLOROFORM	6 U	5 U				6 U	
CHLOROMETHANE	12 U	5 U				12 U	
CIS-1,2-DICHLOROETHENE		5 U					
CIS-1,3-DICHLOROPROPENE	6 U	5 U				6 U	
DIBROMOCHLOROMETHANE	6 U	5 U				6 U	
ETHYLBENZENE	6 U	5 U				6 U	
M+P-XYLENES		10 U					
METHYLENE CHLORIDE	6 U	15 U				6 U	
O-XYLENE		5 U					
STYRENE	6 U	5 U				6 U	
TETRACHLOROETHENE	6 U	15 U				6 U	
TOLUENE	6 U	5 U				6 U	
TRANS-1,2-DICHLOROETHENE		5 U					
TRANS-1,3-DICHLOROPROPENE	6 U	5 U				6 U	
TRICHLOROETHENE	6 U	5 U				6 U	
VINYL CHLORIDE	12 U	5 U				12 U	
XYLENES, TOTAL	6 U					6 U	
PESTICIDE/PCB (UG/KG)							
4,4'-DDD	3.9 U	1.65 U				4 U	
4,4'-DDE	3.9 U	1.65 U				4 U	
4,4'-DDT	3.9 U	1.65 U				4 U	

PSC 55 - CECIL FIELD
SUMMARY OF SOIL ANALYTIC RESULTS

SITE	05	05	BRAC	BRAC	BRAC	05	05
LOCATION	53S00101	53S00101	53S00101A	53S00101B	53S00101C	53S00101D	53S00101D
MATRIX	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S00101 [02/02/96]	53S00101 [09/24/97]	53S00101A [10/24/97]	53S00101B [10/24/97]	53S00101C [10/24/97]	53S00101D [02/02/96]	53S00101D [10/24/97]
SAMPLE	53S00101	53S00101	53S00101A	53S00101B	53S00101C	53S00101D	53S00101D
SACODE	DUP	DUP	DUP	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19960202	19970924	19971024	19971024	19971024	19960202	19971024
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	Logan, J.	Logan, J.	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	Logan, J.	Logan, J.
ALDRIN	2 U	1.65 U				2 U	
ALPHA-BHC	2 U	1.65 U				2 U	
ALPHA-CHLORDANE	2 U	33 U				2 U	
AROCLOR-1016	39 U					40 U	
AROCLOR-1016/1242		33 U					
AROCLOR-1221	79 U	33 U				80 U	
AROCLOR-1232	39 U	33 U				40 U	
AROCLOR-1242	39 U					40 U	
AROCLOR-1248	39 U	33 U				40 U	
AROCLOR-1254	39 U	33 U				40 U	
AROCLOR-1260	39 U	33 U				40 U	
BETA-BHC	2 U	1.65 U				2 U	
DELTA-BHC	2 U	1.65 U				2 U	
DIELDRIN	3.9 U	1.65 U				4 U	
ENDOSULFAN I	2 U	1.65 U				2 U	
ENDOSULFAN II	3.9 U	1.65 U				4 U	
ENDOSULFAN SULFATE	3.9 U	1.65 U				4 U	
ENDRIN	3.9 U	1.65 U				4 U	
ENDRIN ALDEHYDE	3.9 U	1.65 U				4 U	
ENDRIN KETONE	3.9 U	1.65 U				4 U	
GAMMA-BHC (LINDANE)	2 U	1.65 U				2 U	
GAMMA-CHLORDANE	2 U	33 U				2 U	
HEPTACHLOR	2 U	1.65 U				2 U	
HEPTACHLOR EPOXIDE	2 U	1.65 U				2 U	
METHOXYCHLOR	20 U	1.65 U				20 U	
TOXAPHENE	200 U	66 U				200 U	
PETROLEUM HYDROCARBON (MG/KG)							
TPH	21					12 U	

PSC 55 - CECIL FIELD
SUMMARY OF SOIL ANALYTIC RESULTS

SITE	BRAC	05	05	BRAC	BRAC	BRAC	BRAC
LOCATION	53S00101E	53S00201	53S00201	53S00201A	53S00201B	53S00201C	53S00201D
MATRIX	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S00101E [10/24/97]	53S00201 [02/02/96]	53S00201 [09/24/97]	53S00201A [10/24/97]	53S00201B [10/24/97]	53S00201C [10/24/97]	53S00201D [10/24/97]
SAMPLE	53S00101E	53S00201	53S00201	53S00201A	53S00201B	53S00201C	53S00201D
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19971024	19960202	19970924	19971024	19971024	19971024	19971024
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	Logan, J.	Logan, J.	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
INORGANIC (MG/KG)							
ALUMINUM		2580	1000				
ANTIMONY		0.95 U	2 U				
ARSENIC	2 U	0.71 U	1.4	0.5 U	0.5 U	0.5 U	0.5 U
BARIUM		7.2	20 U				
BERYLLIUM		0.24 U	1 U				
CADMIUM		0.41	1 U				
CALCIUM		16800	20000				
CHROMIUM		8.8	1.6				
COBALT		4	5 U				
COPPER		3.9	5 U				
CYANIDE		0.12 U					
IRON		522	150				
LEAD		13.9	2.6				
MAGNESIUM		175	170				
MANGANESE		11.7	2.5				
MERCURY		0.13 U	0.01 U				
NICKEL		1.5	5 U				
POTASSIUM		25.7	25 U				
SELENIUM		0.95 U	2 U				
SILVER		0.24 U	2 U				
SODIUM		101	10				
THALLIUM		0.71 U	1 U				
VANADIUM		3	1.4				
ZINC		15.3	7.6				
SEMIVOLATILE (UG/KG)							
1,2,4-TRICHLOROBENZENE		400 U	333 U				
1,2-DICHLOROBENZENE		400 U	333 U				
1,3-DICHLOROBENZENE		400 U	333 U				
1,4-DICHLOROBENZENE		400 U	333 U				
2,2'-OXYBIS(1-CHLOROPROPANE)		400 U					
2,4,5-TRICHLOROPHENOL		960 U	333 U				
2,4,6-TRICHLOROPHENOL		400 U	333 U				
2,4-DICHLOROPHENOL		400 U	333 U				
2,4-DIMETHYLPHENOL		400 U	333 U				
2,4-DINITROPHENOL		960 U	1663 U				
2,4-DINITROTOLUENE		400 U	333 U				
2,6-DINITROTOLUENE		400 U	333 U				
2-CHLORONAPHTHALENE		400 U	333 U				
2-CHLOROPHENOL		400 U	333 U				
2-METHYLNAPHTHALENE		400 U	333 U				
2-METHYLPHENOL		400 U	333 U				
2-NITROANILINE		960 U	333 U				
2-NITROPHENOL		400 U	333 U				
3&4-METHYLPHENOL			333 U				

SITE	BRAC	05	05	BRAC	BRAC	BRAC	BRAC
LOCATION	53S00101E	53S00201	53S00201	53S00201A	53S00201B	53S00201C	53S00201D
MATRIX	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S00101E [10/24/97]	53S00201 [02/02/96]	53S00201 [09/24/97]	53S00201A [10/24/97]	53S00201B [10/24/97]	53S00201C [10/24/97]	53S00201D [10/24/97]
SAMPLE	53S00101E	53S00201	53S00201	53S00201A	53S00201B	53S00201C	53S00201D
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19971024	19960202	19970924	19971024	19971024	19971024	19971024
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	Logan, J.	Logan, J.	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
3,3'-DICHLOROBENZIDINE		400 U	665 U				
3-NITROANILINE		960 U	333 U				
4,6-DINITRO-2-METHYLPHENOL		960 U	998 U				
4-BROMOPHENYLPHENYLETHER		400 U	333 U				
4-CHLORO-3-METHYLPHENOL		400 U	333 U				
4-CHLOROANILINE		400 U	333 U				
4-CHLOROPHENYLPHENYLETHER		400 U	333 U				
4-METHYLPHENOL		400 U					
4-NITROANILINE		960 U	333 U				
4-NITROPHENOL		960 U	333 U				
ACENAPHTHENE		400 U	333 U				
ACENAPHTHYLENE		400 U	333 U				
ANTHRACENE		400 U	333 U				
BENZO(A)ANTHRACENE		400 U	333 U				
BENZO(A)PYRENE		21	333 U				
BENZO(B)FLUORANTHENE		38	333 U				
BENZO(G,H,I)PERYLENE		400 U	333 U				
BENZO(K)FLUORANTHENE		400 U	333 U				
BENZYLBUTYLPHTHALATE			333 U				
BIS(2-CHLOROETHOXY)METHANE		400 U	333 U				
BIS(2-CHLOROETHYL)ETHER		400 U	333 U				
BIS(2-CHLOROISOPROPYL)ETHER			333 U				
BIS(2-ETHYLHEXYL)PHTHALATE		400 U	333 U				
BUTYLBENZYLPHTHALATE		400 U					
CARBAZOLE		400 U	333 U				
CHRYSENE		23	333 U				
DI-N-BUTYLPHTHALATE		400 U	333 U				
DI-N-OCTYLPHTHALATE		400 U	333 U				
DIBENZO(A,H)ANTHRACENE		400 U	333 U				
DIBENZOFURAN		400 U	333 U				
DIETHYLPHTHALATE		400 U	333 U				
DIMETHYLPHTHALATE		400 U	333 U				
FLUORANTHENE		400 U	333 U				
FLUORENE		400 U	333 U				
HEXACHLOROBENZENE		400 U	333 U				
HEXACHLOROBUTADIENE		400 U	333 U				
HEXACHLOROCYCLOPENTADIENE		400 U	333 U				
HEXACHLOROETHANE		400 U	333 U				
INDENO(1,2,3-CD)PYRENE		400 U	333 U				
ISOPHORONE		400 U	333 U				
N-NITROSO-DI-N-PROPYLAMINE		400 U	333 U				
N-NITROSODIPHENYLAMINE		400 U	333 U				
NAPHTHALENE		400 U	333 U				
NITROBENZENE		400 U	333 U				
PENTACHLOROPHENOL		960 U	333 U				

SITE	BRAC	05	05	BRAC	BRAC	BRAC	BRAC
LOCATION	53S00101E	53S00201	53S00201	53S00201A	53S00201B	53S00201C	53S00201D
MATRIX	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S00101E [10/24/97]	53S00201 [02/02/96]	53S00201 [09/24/97]	53S00201A [10/24/97]	53S00201B [10/24/97]	53S00201C [10/24/97]	53S00201D [10/24/97]
SAMPLE	53S00101E	53S00201	53S00201	53S00201A	53S00201B	53S00201C	53S00201D
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19971024	19960202	19970924	19971024	19971024	19971024	19971024
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	Logan, J.	Logan, J.	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
PHENANTHRENE		400 U	333 U				
PHENOL		400 U	333 U				
PYRENE		21	333 U				
VOLATILE (UG/KG)							
1,1,1-TRICHLOROETHANE		6 U	5 U				
1,1,2,2-TETRACHLOROETHANE		6 U	5 U				
1,1,2-TRICHLOROETHANE		6 U	5 U				
1,1-DICHLOROETHANE		6 U	5 U				
1,1-DICHLOROETHENE		6 U	5 U				
1,2-DICHLOROETHANE		6 U	5 U				
1,2-DICHLOROETHENE (TOTAL)		6 U					
1,2-DICHLOROPROPANE		6 U	5 U				
2-BUTANONE		12 U	10 U				
2-HEXANONE		12 U	10 U				
4-METHYL-2-PENTANONE		12 U	10 U				
ACETONE		12 U	10 U				
BENZENE		6 U	5 U				
BROMODICHLOROMETHANE		6 U	5 U				
BROMOFORM		6 U	5 U				
BROMOMETHANE		12 U	10 U				
CARBON DISULFIDE		6 U	5 U				
CARBON TETRACHLORIDE		6 U	5 U				
CHLOROBENZENE		6 U	5 U				
CHLOROETHANE		12 U	10 U				
CHLOROFORM		6 U	5 U				
CHLOROMETHANE		12 U	5 U				
CIS-1,2-DICHLOROETHENE			5 U				
CIS-1,3-DICHLOROPROPENE		6 U	5 U				
DIBROMOCHLOROMETHANE		6 U	5 U				
ETHYLBENZENE		6 U	5 U				
M+P-XYLENES			10 U				
METHYLENE CHLORIDE		6 U	15 U				
O-XYLENE			5 U				
STYRENE		6 U	5 U				
TETRACHLOROETHENE		6 U	15 U				
TOLUENE		6 U	5 U				
TRANS-1,2-DICHLOROETHENE			5 U				
TRANS-1,3-DICHLOROPROPENE		6 U	5 U				
TRICHLOROETHENE		6 U	5 U				
VINYL CHLORIDE		12 U	5 U				
XYLENES, TOTAL		6 U					
PESTICIDE/PCB (UG/KG)							
4,4'-DDD		4 U	1.65 U				
4,4'-DDE		4 U	1.65 U				
4,4'-DDT		4 U	1.65 U				

PSC 55 - CECIL FIELD
SUMMARY OF SOIL ANALYTIC RESULTS

SITE	BRAC	05	05	BRAC	BRAC	BRAC	BRAC
LOCATION	53S00101E	53S00201	53S00201	53S00201A	53S00201B	53S00201C	53S00201D
MATRIX	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S00101E [10/24/97]	53S00201 [02/02/96]	53S00201 [09/24/97]	53S00201A [10/24/97]	53S00201B [10/24/97]	53S00201C [10/24/97]	53S00201D [10/24/97]
SAMPLE	53S00101E	53S00201	53S00201	53S00201A	53S00201B	53S00201C	53S00201D
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19971024	19960202	19970924	19971024	19971024	19971024	19971024
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	Logan, J.	Logan, J.	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
ALDRIN		2 U	1.65 U				
ALPHA-BHC		2 U	1.65 U				
ALPHA-CHLORDANE		2 U	33 U				
AROCLOR-1016		40 U					
AROCLOR-1016/1242			33 U				
AROCLOR-1221		80 U	33 U				
AROCLOR-1232		40 U	33 U				
AROCLOR-1242		40 U					
AROCLOR-1248		40 U	33 U				
AROCLOR-1254		40 U	33 U				
AROCLOR-1260		150	33 U				
BETA-BHC		2 U	1.65 U				
DELTA-BHC		2 U	1.65 U				
DIELDRIN		4 U	1.65 U				
ENDOSULFAN I		2 U	1.65 U				
ENDOSULFAN II		4 U	1.65 U				
ENDOSULFAN SULFATE		4 U	1.65 U				
ENDRIN		4 U	1.65 U				
ENDRIN ALDEHYDE		4 U	1.65 U				
ENDRIN KETONE		4 U	1.65 U				
GAMMA-BHC (LINDANE)		2 U	1.65 U				
GAMMA-CHLORDANE		0.2	33 U				
HEPTACHLOR		2 U	1.65 U				
HEPTACHLOR EPOXIDE		2 U	1.65 U				
METHOXYCHLOR		20 U	1.65 U				
TOXAPHENE		200 U	66 U				
PETROLEUM HYDROCARBON (MG/KG)							
TPH		12 U					

SITE	BRAC	05	05	05	05	BRAC	BRAC	BRAC
LOCATION	53S00201E	53S00301	53S00301	53S00401	53S00401	53S00501	53S00501A	53S00501B
MATRIX	SO	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S00201E [10/24/97]	53S00301 [02/02/96]	53S00301 [09/24/97]	53S00401 [02/02/96]	53S00401 [09/23/97]	53S00501 [09/25/97]	53S00501A [10/25/97]	53S00501B [10/25/97]
SAMPLE	53S00201E	53S00301	53S00301	53S00401	53S00401	53S00501	53S00501A	53S00501B
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19971024	19960202	19970924	19960202	19970923	19970925	19971025	19971025
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	Logan, J.	Logan, J.	Logan, J.	Logan, J.	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
INORGANIC (MG/KG)								
ALUMINUM		2210	720	644	900	900		
ANTIMONY		0.89 U	2 U	0.89 U	2 U	2 U		
ARSENIC	0.6 U	1.5	0.5 U	22.3	0.5	1.3	0.5 U	0.6 U
BARIUM		3.2	20 U	8	20 U	20 U		
BERYLLIUM		0.22 U	1 U	0.22 U	1 U	1 U		
CADMIUM		0.22 U	1 U	0.22 U	1 U	1 U		
CALCIUM		6070	9900	7620	9300	19000		
CHROMIUM		4	1.6	8.9	1.6	1.1		
COBALT		1.3 U	5 U	1.3 U	5 U	5 U		
COPPER		2.6	5 U	3.9	5 U	5 U		
CYANIDE		0.11 U		0.11 U				
IRON		481	150	1410	160	140		
LEAD		7.7	2.8	5.3	1 U	1 U		
MAGNESIUM		88.8	50	76.7	86	80		
MANGANESE		8.1	3.3	4.9	2.8	1 U		
MERCURY		0.12 U	0.01 U	0.12 U	0.01	0.01 U		
NICKEL		0.59	5 U	0.5	5 U	5 U		
POTASSIUM		20.2 U	25 U	20.4 U	25 U	25 U		
SELENIUM		0.89 U	2 U	0.89 U	2 U	2 U		
SILVER		0.22 U	2 U	0.22 U	2 U	2 U		
SODIUM		122	8.5	109	9	17		
THALLIUM		0.67 U	1 U	0.67 U	1 U	1 U		
VANADIUM		2.1	1.1	1.8	1	1.2		
ZINC		17	8.4	11.6	7.8	8.4		
SEMIVOLATILE (UG/KG)								
1,2,4-TRICHLOROBENZENE		370 U	333 U	360 U	333 U	333 U		
1,2-DICHLOROBENZENE		370 U	333 U	360 U	333 U	333 U		
1,3-DICHLOROBENZENE		370 U	333 U	360 U	333 U	333 U		
1,4-DICHLOROBENZENE		370 U	333 U	360 U	333 U	333 U		
2,2'-OXYBIS(1-CHLOROPROPANE)		370 U		360 U				
2,4,5-TRICHLOROPHENOL		900 U	333 U	880 U	333 U	333 U		
2,4,6-TRICHLOROPHENOL		370 U	333 U	360 U	333 U	333 U		
2,4-DICHLOROPHENOL		370 U	333 U	360 U	333 U	333 U		
2,4-DIMETHYLPHENOL		370 U	333 U	360 U	333 U	333 U		
2,4-DINITROPHENOL		900 U	1663 U	880 U	1665 U	1667 U		
2,4-DINITROTOLUENE		370 U	333 U	360 U	333 U	333 U		
2,6-DINITROTOLUENE		370 U	333 U	360 U	333 U	333 U		
2-CHLORONAPHTHALENE		370 U	333 U	360 U	333 U	333 U		
2-CHLOROPHENOL		370 U	333 U	360 U	333 U	333 U		
2-METHYLNAPHTHALENE		370 U	333 U	360 U	333 U	333 U		
2-METHYLPHENOL		370 U	333 U	360 U	333 U	333 U		
2-NITROANILINE		900 U	333 U	880 U	333 U	333 U		
2-NITROPHENOL		370 U	333 U	360 U	333 U	333 U		
3&4-METHYLPHENOL			333 U		333 U	333 U		

SITE	BRAC	05	05	05	05	BRAC	BRAC	BRAC
LOCATION	53S00201E	53S00301	53S00301	53S00401	53S00401	53S00501	53S00501A	53S00501B
MATRIX	SO	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S00201E [10/24/97]	53S00301 [02/02/96]	53S00301 [09/24/97]	53S00401 [02/02/96]	53S00401 [09/23/97]	53S00501 [09/25/97]	53S00501A [10/25/97]	53S00501B [10/25/97]
SAMPLE	53S00201E	53S00301	53S00301	53S00401	53S00401	53S00501	53S00501A	53S00501B
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19971024	19960202	19970924	19960202	19970923	19970925	19971025	19971025
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	Logan, J.	Logan, J.	Logan, J.	Logan, J.	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
3,3'-DICHLOROBENZIDINE		370 U	665 U	360 U	666 U	667 U		
3-NITROANILINE		900 U	333 U	880 U	333 U	333 U		
4,6-DINITRO-2-METHYLPHENOL		900 U	998 U	880 U	999 U	1000 U		
4-BROMOPHENYLPHENYLETHER		370 U	333 U	360 U	333 U	333 U		
4-CHLORO-3-METHYLPHENOL		370 U	333 U	360 U	333 U	333 U		
4-CHLOROANILINE		370 U	333 U	360 U	333 U	333 U		
4-CHLOROPHENYLPHENYLETHER		370 U	333 U	360 U	333 U	333 U		
4-METHYLPHENOL		370 U		360 U				
4-NITROANILINE		900 U	333 U	880 U	333 U	333 U		
4-NITROPHENOL		900 U	333 U	880 U	333 U	333 U		
ACENAPHTHENE		370 U	333 U	360 U	333 U	333 U		
ACENAPHTHYLENE		370 U	333 U	360 U	333 U	333 U		
ANTHRACENE		370 U	333 U	360 U	333 U	333 U		
BENZO(A)ANTHRACENE		370 U	333 U	360 U	333 U	333 U		
BENZO(A)PYRENE		370 U	333 U	360 U	333 U	333 U		
BENZO(B)FLUORANTHENE		23	333 U	23	333 U	333 U		
BENZO(G,H,I)PERYLENE		370 U	333 U	360 U	333 U	333 U		
BENZO(K)FLUORANTHENE		370 U	333 U	360 U	333 U	333 U		
BENZYLBUTYLPHTHALATE			333 U		333 U	333 U		
BIS(2-CHLOROETHOXY)METHANE		370 U	333 U	360 U	333 U	333 U		
BIS(2-CHLOROETHYL)ETHER		370 U	333 U	360 U	333 U	333 U		
BIS(2-CHLOROISOPROPYL)ETHER			333 U		333 U	333 U		
BIS(2-ETHYLHEXYL)PHTHALATE		240	333 U	39	333 U	333 U		
BUTYLBENZYLPHTHALATE		370 U		360 U				
CARBAZOLE		370 U	333 U	360 U	333 U	333 U		
CHRYSENE		24	333 U	22	333 U	333 U		
DI-N-BUTYLPHTHALATE		370 U	333 U	360 U	333 U	333 U		
DI-N-OCTYLPHTHALATE		370 U	333 U	360 U	333 U	333 U		
DIBENZO(A,H)ANTHRACENE		370 U	333 U	360 U	333 U	333 U		
DIBENZOFURAN		370 U	333 U	360 U	333 U	333 U		
DIETHYLPHTHALATE		370 U	333 U	360 U	333 U	333 U		
DIMETHYLPHTHALATE		370 U	333 U	360 U	333 U	333 U		
FLUORANTHENE		29	333 U	25	333 U	333 U		
FLUORENE		370 U	333 U	360 U	333 U	333 U		
HEXACHLOROBENZENE		370 U	333 U	360 U	333 U	333 U		
HEXACHLOROBUTADIENE		370 U	333 U	360 U	333 U	333 U		
HEXACHLOROCYCLOPENTADIENE		370 U	333 U	360 U	333 U	333 U		
HEXACHLOROETHANE		370 U	333 U	360 U	333 U	333 U		
INDENO(1,2,3-CD)PYRENE		370 U	333 U	360 U	333 U	333 U		
ISOPHORONE		370 U	333 U	360 U	333 U	333 U		
N-NITROSO-DI-N-PROPYLAMINE		370 U	333 U	360 U	333 U	333 U		
N-NITROSODIPHENYLAMINE		370 U	333 U	360 U	333 U	333 U		
NAPHTHALENE		370 U	333 U	360 U	333 U	333 U		
NITROBENZENE		370 U	333 U	360 U	333 U	333 U		
PENTACHLOROPHENOL		900 U	333 U	880 U	333 U	333 U		

SITE	BRAC	05	05	05	05	BRAC	BRAC	BRAC
LOCATION	53S00201E	53S00301	53S00301	53S00401	53S00401	53S00501	53S00501A	53S00501B
MATRIX	SO	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S00201E [10/24/97]	53S00301 [02/02/96]	53S00301 [09/24/97]	53S00401 [02/02/96]	53S00401 [09/23/97]	53S00501 [09/25/97]	53S00501A [10/25/97]	53S00501B [10/25/97]
SAMPLE	53S00201E	53S00301	53S00301	53S00401	53S00401	53S00501	53S00501A	53S00501B
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19971024	19960202	19970924	19960202	19970923	19970925	19971025	19971025
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	Logan, J.	Logan, J.	Logan, J.	Logan, J.	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
PHENANTHRENE		370 U	333 U	360 U	333 U	333 U		
PHENOL		370 U	333 U	360 U	333 U	333 U		
PYRENE		22	333 U	21	333 U	333 U		
VOLATILE (UG/KG)								
1,1,1-TRICHLOROETHANE		6 U	5 U	6 U	5 U	5 U		
1,1,2,2-TETRACHLOROETHANE		6 U	5 U	6 U	5 U	5 U		
1,1,2-TRICHLOROETHANE		6 U	5 U	6 U	5 U	5 U		
1,1-DICHLOROETHANE		6 U	5 U	6 U	5 U	5 U		
1,1-DICHLOROETHENE		6 U	5 U	6 U	5 U	5 U		
1,2-DICHLOROETHANE		6 U	5 U	6 U	5 U	5 U		
1,2-DICHLOROETHENE (TOTAL)		6 U		6 U				
1,2-DICHLOROPROPANE		6 U	5 U	6 U	5 U	5 U		
2-BUTANONE		27	10 U	11 U	10 U	10 U		
2-HEXANONE		11 U	10 U	11 U	10 U	10 U		
4-METHYL-2-PENTANONE		11 U	10 U	11 U	10 U	10 U		
ACETONE		53	10 U	11 U	10 U	10 U		
BENZENE		6 U	5 U	6 U	5 U	5 U		
BROMODICHLOROMETHANE		6 U	5 U	6 U	5 U	5 U		
BROMOFORM		6 U	5 U	6 U	5 U	5 U		
BROMOMETHANE		11 U	10 U	11 U	10 U	10 U		
CARBON DISULFIDE		6 U	5 U	6 U	5 U	5 U		
CARBON TETRACHLORIDE		6 U	5 U	6 U	5 U	5 U		
CHLOROBENZENE		6 U	5 U	6 U	5 U	5 U		
CHLOROETHANE		11 U	10 U	11 U	10 U	10 U		
CHLOROFORM		6 U	5 U	6 U	5 U	5 U		
CHLOROMETHANE		11 U	5 U	11 U	5 U	5 U		
CIS-1,2-DICHLOROETHENE			5 U		5 U	5 U		
CIS-1,3-DICHLOROPROPENE		6 U	5 U	6 U	5 U	5 U		
DIBROMOCHLOROMETHANE		6 U	5 U	6 U	5 U	5 U		
ETHYLBENZENE		6 U	5 U	6 U	5 U	5 U		
M+P-XYLENES			10 U		10 U	10 U		
METHYLENE CHLORIDE		6 U	18	6 U	15 U	15 U		
O-XYLENE			5 U		5 U	5 U		
STYRENE		6 U	5 U	6 U	5 U	5 U		
TETRACHLOROETHENE		6 U	15 U	6 U	15 U	15 U		
TOLUENE		6 U	5 U	6 U	5 U	5 U		
TRANS-1,2-DICHLOROETHENE			5 U		5 U	5 U		
TRANS-1,3-DICHLOROPROPENE		6 U	5 U	6 U	5 U	5 U		
TRICHLOROETHENE		6 U	5 U	6 U	5 U	5 U		
VINYL CHLORIDE		11 U	5 U	11 U	5 U	5 U		
XYLENES, TOTAL		6 U		6 U				
PESTICIDE/PCB (UG/KG)								
4,4'-DDD		3.7 U	1.65 U	0.84	1.65 U	1.65 U		
4,4'-DDE		0.63	1.65 U	11	1.65 U	1.65 U		
4,4'-DDT		3.7 U	1.65 U	3.7 U	1.65 U	1.65 U		

SITE	BRAC	05	05	05	05	BRAC	BRAC	BRAC
LOCATION	53S00201E	53S00301	53S00301	53S00401	53S00401	53S00501	53S00501A	53S00501B
MATRIX	SO	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S00201E [10/24/97]	53S00301 [02/02/96]	53S00301 [09/24/97]	53S00401 [02/02/96]	53S00401 [09/23/97]	53S00501 [09/25/97]	53S00501A [10/25/97]	53S00501B [10/25/97]
SAMPLE	53S00201E	53S00301	53S00301	53S00401	53S00401	53S00501	53S00501A	53S00501B
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19971024	19960202	19970924	19960202	19970923	19970925	19971025	19971025
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	Logan, J.	Logan, J.	Logan, J.	Logan, J.	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
ALDRIN		1.9 U	1.65 U	0.36	1.65 U	1.65 U		
ALPHA-BHC		1.9 U	1.65 U	1.8 U	1.65 U	1.65 U		
ALPHA-CHLORDANE		2.4	33 U	0.16	33 U	33 U		
AROCLOR-1016		37 U		37 U				
AROCLOR-1016/1242			33 U		33 U	33 U		
AROCLOR-1221		74 U	33 U	74 U	33 U	33 U		
AROCLOR-1232		37 U	33 U	37 U	33 U	33 U		
AROCLOR-1242		37 U		37 U				
AROCLOR-1248		37 U	33 U	37 U	33 U	33 U		
AROCLOR-1254		37 U	33 U	37 U	33 U	33 U		
AROCLOR-1260		37 U	33 U	37 U	33 U	33 U		
BETA-BHC		1.9 U	1.65 U	1.8 U	1.65 U	1.65 U		
DELTA-BHC		1.9 U	1.65 U	1.8 U	1.65 U	1.65 U		
DIELDRIN		0.7	1.65 U	0.28	1.65 U	1.65 U		
ENDOSULFAN I		1.9 U	1.65 U	1.8 U	1.65 U	1.65 U		
ENDOSULFAN II		3.7 U	1.65 U	3.7 U	1.65 U	1.65 U		
ENDOSULFAN SULFATE		3.7 U	1.65 U	3.7 U	1.65 U	1.65 U		
ENDRIN		0.08	1.65 U	3.7 U	1.65 U	1.65 U		
ENDRIN ALDEHYDE		0.67	1.65 U	3.7 U	1.65 U	1.65 U		
ENDRIN KETONE		3.7 U	1.65 U	3.7 U	1.65 U	1.65 U		
GAMMA-BHC (LINDANE)		0.22	1.65 U	1.8 U	1.65 U	1.65 U		
GAMMA-CHLORDANE		3	33 U	1.8 U	33 U	33 U		
HEPTACHLOR		1.9 U	1.65 U	1.8 U	1.65 U	1.65 U		
HEPTACHLOR EPOXIDE		0.86	1.65 U	1.8 U	1.65 U	1.65 U		
METHOXYCHLOR		19 U	1.65 U	18 U	1.65 U	1.65 U		
TOXAPHENE		190 U	66 U	180 U	66 U	66 U		
PETROLEUM HYDROCARBON (MG/KG)								
TPH		11 U		11 U				

SITE	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC
LOCATION	53S00501C	53S00501D	53S00501E	53S00601	53S00601A	53S00601C	53S00601D
MATRIX	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S00501C [10/25/97]	53S00501D [10/25/97]	53S00501E [10/25/97]	53S00601 [09/25/97]	53S00601A [10/25/97]	53S00601C [10/25/97]	53S00601D [09/25/97]
SAMPLE	53S00501C	53S00501D	53S00501E	53S00601	53S00601A	53S00601C	53S00601D
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19971025	19971025	19971025	19970925	19971025	19971025	19970925
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
INORGANIC (MG/KG)							
ALUMINUM				950			1700
ANTIMONY				3.1			3.5
ARSENIC	0.5 U	0.5 U	0.9	4.1	1 U	1.7 U	4.8
BARIUM				20 U			20 U
BERYLLIUM				1 U			1 U
CADMIUM				1 U			1 U
CALCIUM				77000			88000
CHROMIUM				2.7			3.6
COBALT				5 U			5 U
COPPER				5 U			5 U
CYANIDE							
IRON				390			860
LEAD				1 U			1 U
MAGNESIUM				640			720
MANGANESE				9.2			12
MERCURY				0.01 U			0.01 U
NICKEL				5 U			5 U
POTASSIUM				34			42
SELENIUM				2 U			2 U
SILVER				2 U			2 U
SODIUM				25			30
THALLIUM				1 U			1 U
VANADIUM				2.7			3.7
ZINC				14			13
SEMIVOLATILE (UG/KG)							
1,2,4-TRICHLOROBENZENE				333 U			333 U
1,2-DICHLOROBENZENE				333 U			333 U
1,3-DICHLOROBENZENE				333 U			333 U
1,4-DICHLOROBENZENE				333 U			333 U
2,2'-OXYBIS(1-CHLOROPROPANE)							
2,4,5-TRICHLOROPHENOL				333 U			333 U
2,4,6-TRICHLOROPHENOL				333 U			333 U
2,4-DICHLOROPHENOL				333 U			333 U
2,4-DIMETHYLPHENOL				333 U			333 U
2,4-DINITROPHENOL				1664 U			1667 U
2,4-DINITROTOLUENE				333 U			333 U
2,6-DINITROTOLUENE				333 U			333 U
2-CHLORONAPHTHALENE				333 U			333 U
2-CHLOROPHENOL				333 U			333 U
2-METHYLNAPHTHALENE				333 U			333 U
2-METHYLPHENOL				333 U			333 U
2-NITROANILINE				333 U			333 U
2-NITROPHENOL				333 U			333 U
3&4-METHYLPHENOL				333 U			333 U

SITE	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC
LOCATION	53S00501C	53S00501D	53S00501E	53S00601	53S00601A	53S00601C	53S00601D
MATRIX	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S00501C [10/25/97]	53S00501D [10/25/97]	53S00501E [10/25/97]	53S00601 [09/25/97]	53S00601A [10/25/97]	53S00601C [10/25/97]	53S00601D [09/25/97]
SAMPLE	53S00501C	53S00501D	53S00501E	53S00601	53S00601A	53S00601C	53S00601D
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19971025	19971025	19971025	19970925	19971025	19971025	19970925
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
3,3'-DICHLOROBENZIDINE				666 U			667 U
3-NITROANILINE				333 U			333 U
4,6-DINITRO-2-METHYLPHENOL				998 U			1000 U
4-BROMOPHENYLPHENYLETHER				333 U			333 U
4-CHLORO-3-METHYLPHENOL				333 U			333 U
4-CHLOROANILINE				333 U			333 U
4-CHLOROPHENYLPHENYLETHER				333 U			333 U
4-METHYLPHENOL							
4-NITROANILINE				333 U			333 U
4-NITROPHENOL				333 U			333 U
ACENAPHTHENE				333 U			333 U
ACENAPHTHYLENE				333 U			333 U
ANTHRACENE				333 U			333 U
BENZO(A)ANTHRACENE				333 U			333 U
BENZO(A)PYRENE				333 U			333 U
BENZO(B)FLUORANTHENE				333 U			333 U
BENZO(G,H,I)PERYLENE				333 U			333 U
BENZO(K)FLUORANTHENE				333 U			333 U
BENZYLBUTYLPHTHALATE				333 U			333 U
BIS(2-CHLOROETHOXY)METHANE				333 U			333 U
BIS(2-CHLOROETHYL)ETHER				333 U			333 U
BIS(2-CHLOROISOPROPYL)ETHER				333 U			333 U
BIS(2-ETHYLHEXYL)PHTHALATE				333 U			333 U
BUTYLBENZYLPHTHALATE							
CARBAZOLE				333 U			333 U
CHRYSENE				333 U			333 U
DI-N-BUTYLPHTHALATE				333 U			333 U
DI-N-OCTYLPHTHALATE				333 U			333 U
DIBENZO(A,H)ANTHRACENE				333 U			333 U
DIBENZOFURAN				333 U			333 U
DIETHYLPHTHALATE				333 U			333 U
DIMETHYLPHTHALATE				333 U			333 U
FLUORANTHENE				333 U			333 U
FLUORENE				333 U			333 U
HEXACHLOROBENZENE				333 U			333 U
HEXACHLOROBUTADIENE				333 U			333 U
HEXACHLOROCYCLOPENTADIENE				333 U			333 U
HEXACHLOROETHANE				333 U			333 U
INDENO(1,2,3-CD)PYRENE				333 U			333 U
ISOPHORONE				333 U			333 U
N-NITROSO-DI-N-PROPYLAMINE				333 U			333 U
N-NITROSODIPHENYLAMINE				333 U			333 U
NAPHTHALENE				333 U			333 U
NITROBENZENE				333 U			333 U
PENTACHLOROPHENOL				333 U			333 U

SITE	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC
LOCATION	53S00501C	53S00501D	53S00501E	53S00601	53S00601A	53S00601C	53S00601D
MATRIX	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S00501C [10/25/97]	53S00501D [10/25/97]	53S00501E [10/25/97]	53S00601 [09/25/97]	53S00601A [10/25/97]	53S00601C [10/25/97]	53S00601D [09/25/97]
SAMPLE	53S00501C	53S00501D	53S00501E	53S00601	53S00601A	53S00601C	53S00601D
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19971025	19971025	19971025	19970925	19971025	19971025	19970925
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
PHENANTHRENE				333 U			333 U
PHENOL				333 U			333 U
PYRENE				333 U			333 U
VOLATILE (UG/KG)							
1,1,1-TRICHLOROETHANE				5 U			5 U
1,1,2,2-TETRACHLOROETHANE				5 U			5 U
1,1,2-TRICHLOROETHANE				5 U			5 U
1,1-DICHLOROETHANE				5 U			5 U
1,1-DICHLOROETHENE				5 U			5 U
1,2-DICHLOROETHANE				5 U			5 U
1,2-DICHLOROETHENE (TOTAL)							
1,2-DICHLOROPROPANE				5 U			5 U
2-BUTANONE				10 U			10 U
2-HEXANONE				10 U			10 U
4-METHYL-2-PENTANONE				10 U			10 U
ACETONE				10 U			10 U
BENZENE				5 U			5 U
BROMODICHLOROMETHANE				5 U			5 U
BROMOFORM				5 U			5 U
BROMOMETHANE				10 U			10 U
CARBON DISULFIDE				5 U			5 U
CARBON TETRACHLORIDE				5 U			5 U
CHLOROBENZENE				5 U			5 U
CHLOROETHANE				10 U			10 U
CHLOROFORM				5 U			5 U
CHLOROMETHANE				5 U			5 U
CIS-1,2-DICHLOROETHENE				5 U			5 U
CIS-1,3-DICHLOROPROPENE				5 U			5 U
DIBROMOCHLOROMETHANE				5 U			5 U
ETHYLBENZENE				5 U			5 U
M+P-XYLENES				10 U			10 U
METHYLENE CHLORIDE				15 U			15 U
O-XYLENE				5 U			5 U
STYRENE				5 U			5 U
TETRACHLOROETHENE				15 U			15 U
TOLUENE				5 U			5 U
TRANS-1,2-DICHLOROETHENE				5 U			5 U
TRANS-1,3-DICHLOROPROPENE				5 U			5 U
TRICHLOROETHENE				5 U			5 U
VINYL CHLORIDE				5 U			5 U
XYLENES, TOTAL							
PESTICIDE/PCB (UG/KG)							
4,4'-DDD				1.65 U			1.65 U
4,4'-DDE				2.3			2.3
4,4'-DDT				7.6			7.3

PSC 55 - CECIL FIELD
SUMMARY OF SOIL ANALYTIC RESULTS

SITE	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC
LOCATION	53S00501C	53S00501D	53S00501E	53S00601	53S00601A	53S00601C	53S00601D
MATRIX	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S00501C [10/25/97]	53S00501D [10/25/97]	53S00501E [10/25/97]	53S00601 [09/25/97]	53S00601A [10/25/97]	53S00601C [10/25/97]	53S00601D [09/25/97]
SAMPLE	53S00501C	53S00501D	53S00501E	53S00601	53S00601A	53S00601C	53S00601D
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19971025	19971025	19971025	19970925	19971025	19971025	19970925
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
ALDRIN				1.65 U			1.65 U
ALPHA-BHC				1.65 U			1.65 U
ALPHA-CHLORDANE				33 U			33 U
AROCLOR-1016							
AROCLOR-1016/1242				33 U			33 U
AROCLOR-1221				33 U			33 U
AROCLOR-1232				33 U			33 U
AROCLOR-1242							
AROCLOR-1248				33 U			33 U
AROCLOR-1254				33 U			33 U
AROCLOR-1260				33 U			33 U
BETA-BHC				1.65 U			1.65 U
DELTA-BHC				1.65 U			1.65 U
DIELDRIN				1.65 U			1.65 U
ENDOSULFAN I				1.65 U			1.65 U
ENDOSULFAN II				1.65 U			1.65 U
ENDOSULFAN SULFATE				1.65 U			1.65 U
ENDRIN				1.65 U			1.65 U
ENDRIN ALDEHYDE				1.65 U			1.65 U
ENDRIN KETONE				1.65 U			1.65 U
GAMMA-BHC (LINDANE)				1.65 U			1.65 U
GAMMA-CHLORDANE				33 U			33 U
HEPTACHLOR				1.65 U			1.65 U
HEPTACHLOR EPOXIDE				1.65 U			1.65 U
METHOXYCHLOR				1.65 U			1.65 U
TOXAPHENE				66 U			66 U
PETROLEUM HYDROCARBON (MG/KG)							
TPH							

PSC 55 - CECIL FIELD
SUMMARY OF SOIL ANALYTIC RESULTS

SITE	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC
LOCATION	53S00601D	53S00601E	53S00701	53S00701A	53S00701B	53S00701D	53S00701E
MATRIX	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S00601D [10/25/97]	53S00601E [10/25/97]	53S00701 [09/24/97]	53S00701A [10/24/97]	53S00701B [10/24/97]	53S00701D [10/24/97]	53S00701E [10/24/97]
SAMPLE	53S00601D	53S00601E	53S00701	53S00701A	53S00701B	53S00701D	53S00701E
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19971025	19971025	19970924	19971024	19971024	19971024	19971024
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
INORGANIC (MG/KG)							
ALUMINUM			890				
ANTIMONY			2.5				
ARSENIC	0.5 U	0.5 U	3.2	0.5 U	0.5 U	1 U	0.6 U
BARIUM			20 U				
BERYLLIUM			1 U				
CADMIUM			1 U				
CALCIUM			85000				
CHROMIUM			3.1				
COBALT			5 U				
COPPER			5 U				
CYANIDE							
IRON			350				
LEAD			3.1				
MAGNESIUM			400				
MANGANESE			7.6				
MERCURY			0.01 U				
NICKEL			5 U				
POTASSIUM			31				
SELENIUM			2 U				
SILVER			2 U				
SODIUM			16				
THALLIUM			1 U				
VANADIUM			2.9				
ZINC			28				
SEMIVOLATILE (UG/KG)							
1,2,4-TRICHLOROBENZENE			334 U				
1,2-DICHLOROBENZENE			334 U				
1,3-DICHLOROBENZENE			334 U				
1,4-DICHLOROBENZENE			334 U				
2,2'-OXYBIS(1-CHLOROPROPANE)							
2,4,5-TRICHLOROPHENOL			334 U				
2,4,6-TRICHLOROPHENOL			334 U				
2,4-DICHLOROPHENOL			334 U				
2,4-DIMETHYLPHENOL			334 U				
2,4-DINITROPHENOL			1668 U				
2,4-DINITROTOLUENE			334 U				
2,6-DINITROTOLUENE			334 U				
2-CHLORONAPHTHALENE			334 U				
2-CHLOROPHENOL			334 U				
2-METHYLNAPHTHALENE			334 U				
2-METHYLPHENOL			334 U				
2-NITROANILINE			334 U				
2-NITROPHENOL			334 U				
3&4-METHYLPHENOL			334 U				

SITE	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC
LOCATION	53S00601D	53S00601E	53S00701	53S00701A	53S00701B	53S00701D	53S00701E
MATRIX	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S00601D [10/25/97]	53S00601E [10/25/97]	53S00701 [09/24/97]	53S00701A [10/24/97]	53S00701B [10/24/97]	53S00701D [10/24/97]	53S00701E [10/24/97]
SAMPLE	53S00601D	53S00601E	53S00701	53S00701A	53S00701B	53S00701D	53S00701E
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19971025	19971025	19970924	19971024	19971024	19971024	19971024
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
3,3'-DICHLOROBENZIDINE			667 U				
3-NITROANILINE			334 U				
4,6-DINITRO-2-METHYLPHENOL			1001 U				
4-BROMOPHENYLPHENYLETHER			334 U				
4-CHLORO-3-METHYLPHENOL			334 U				
4-CHLOROANILINE			334 U				
4-CHLOROPHENYLPHENYLETHER			334 U				
4-METHYLPHENOL							
4-NITROANILINE			334 U				
4-NITROPHENOL			334 U				
ACENAPHTHENE			334 U				
ACENAPHTHYLENE			334 U				
ANTHRACENE			334 U				
BENZO(A)ANTHRACENE			334 U				
BENZO(A)PYRENE			334 U				
BENZO(B)FLUORANTHENE			334 U				
BENZO(G,H,I)PERYLENE			334 U				
BENZO(K)FLUORANTHENE			334 U				
BENZYLBUTYLPHTHALATE			334 U				
BIS(2-CHLOROETHOXY)METHANE			334 U				
BIS(2-CHLOROETHYL)ETHER			334 U				
BIS(2-CHLOROISOPROPYL)ETHER			334 U				
BIS(2-ETHYLHEXYL)PHTHALATE			334 U				
BUTYLBENZYLPHTHALATE							
CARBAZOLE			334 U				
CHRYSENE			334 U				
DI-N-BUTYLPHTHALATE			334 U				
DI-N-OCTYLPHTHALATE			334 U				
DIBENZO(A,H)ANTHRACENE			334 U				
DIBENZOFURAN			334 U				
DIETHYLPHTHALATE			334 U				
DIMETHYLPHTHALATE			334 U				
FLUORANTHENE			334 U				
FLUORENE			334 U				
HEXACHLOROBENZENE			334 U				
HEXACHLOROBUTADIENE			334 U				
HEXACHLOROCYCLOPENTADIENE			334 U				
HEXACHLOROETHANE			334 U				
INDENO(1,2,3-CD)PYRENE			334 U				
ISOPHORONE			334 U				
N-NITROSO-DI-N-PROPYLAMINE			334 U				
N-NITROSODIPHENYLAMINE			334 U				
NAPHTHALENE			334 U				
NITROBENZENE			334 U				
PENTACHLOROPHENOL			334 U				

SITE	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC
LOCATION	53S00601D	53S00601E	53S00701	53S00701A	53S00701B	53S00701D	53S00701E
MATRIX	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S00601D [10/25/97]	53S00601E [10/25/97]	53S00701 [09/24/97]	53S00701A [10/24/97]	53S00701B [10/24/97]	53S00701D [10/24/97]	53S00701E [10/24/97]
SAMPLE	53S00601D	53S00601E	53S00701	53S00701A	53S00701B	53S00701D	53S00701E
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19971025	19971025	19970924	19971024	19971024	19971024	19971024
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
PHENANTHRENE			334 U				
PHENOL			334 U				
PYRENE			334 U				
VOLATILE (UG/KG)							
1,1,1-TRICHLOROETHANE			5 U				
1,1,2,2-TETRACHLOROETHANE			5 U				
1,1,2-TRICHLOROETHANE			5 U				
1,1-DICHLOROETHANE			5 U				
1,1-DICHLOROETHENE			5 U				
1,2-DICHLOROETHANE			5 U				
1,2-DICHLOROETHENE (TOTAL)							
1,2-DICHLOROPROPANE			5 U				
2-BUTANONE			10 U				
2-HEXANONE			10 U				
4-METHYL-2-PENTANONE			10 U				
ACETONE			10 U				
BENZENE			5 U				
BROMODICHLOROMETHANE			5 U				
BROMOFORM			5 U				
BROMOMETHANE			10 U				
CARBON DISULFIDE			5 U				
CARBON TETRACHLORIDE			5 U				
CHLOROBENZENE			5 U				
CHLOROETHANE			10 U				
CHLOROFORM			5 U				
CHLOROMETHANE			5 U				
CIS-1,2-DICHLOROETHENE			5 U				
CIS-1,3-DICHLOROPROPENE			5 U				
DIBROMOCHLOROMETHANE			5 U				
ETHYLBENZENE			5 U				
M+P-XYLENES			10 U				
METHYLENE CHLORIDE			15 U				
O-XYLENE			5 U				
STYRENE			5 U				
TETRACHLOROETHENE			15 U				
TOLUENE			5 U				
TRANS-1,2-DICHLOROETHENE			5 U				
TRANS-1,3-DICHLOROPROPENE			5 U				
TRICHLOROETHENE			5 U				
VINYL CHLORIDE			5 U				
XYLENES, TOTAL							
PESTICIDE/PCB (UG/KG)							
4,4'-DDD			1.65 U				
4,4'-DDE			1.65 U				
4,4'-DDT			3.6				

PSC 55 - CECIL FIELD
SUMMARY OF SOIL ANALYTIC RESULTS

SITE	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC
LOCATION	53S00601D	53S00601E	53S00701	53S00701A	53S00701B	53S00701D	53S00701E
MATRIX	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S00601D [10/25/97]	53S00601E [10/25/97]	53S00701 [09/24/97]	53S00701A [10/24/97]	53S00701B [10/24/97]	53S00701D [10/24/97]	53S00701E [10/24/97]
SAMPLE	53S00601D	53S00601E	53S00701	53S00701A	53S00701B	53S00701D	53S00701E
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19971025	19971025	19970924	19971024	19971024	19971024	19971024
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
ALDRIN			1.65 U				
ALPHA-BHC			1.65 U				
ALPHA-CHLORDANE			33 U				
AROCLOR-1016							
AROCLOR-1016/1242			33 U				
AROCLOR-1221			33 U				
AROCLOR-1232			33 U				
AROCLOR-1242							
AROCLOR-1248			33 U				
AROCLOR-1254			33 U				
AROCLOR-1260			33 U				
BETA-BHC			1.65 U				
DELTA-BHC			1.65 U				
DIELDRIN			1.65 U				
ENDOSULFAN I			1.65 U				
ENDOSULFAN II			1.65 U				
ENDOSULFAN SULFATE			1.65 U				
ENDRIN			1.65 U				
ENDRIN ALDEHYDE			1.65 U				
ENDRIN KETONE			1.65 U				
GAMMA-BHC (LINDANE)			1.65 U				
GAMMA-CHLORDANE			33 U				
HEPTACHLOR			1.65 U				
HEPTACHLOR EPOXIDE			1.65 U				
METHOXYCHLOR			1.65 U				
TOXAPHENE			66 U				
PETROLEUM HYDROCARBON (MG/KG)							
TPH							

PSC 55 - CECIL FIELD
SUMMARY OF SOIL ANALYTIC RESULTS

SITE	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC
LOCATION	53S00801	53S00901	53S00901A	53S00901B	53S00901C	53S00901D	53S00901E	53S01001
MATRIX	SO	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S00801 [09/22/97]	53S00901 [09/25/97]	53S00901A [10/25/97]	53S00901B [10/25/97]	53S00901C [10/25/97]	53S00901D [10/25/97]	53S00901E [10/25/97]	53S01001 [09/25/97]
SAMPLE	53S00801	53S00901	53S00901A	53S00901B	53S00901C	53S00901D	53S00901E	53S01001
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19970922	19970925	19971025	19971025	19971025	19971025	19971025	19970925
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
INORGANIC (MG/KG)								
ALUMINUM	3000	600						1000
ANTIMONY	2 U	2 U						2 U
ARSENIC	0.5	2.1	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
BARIUM	20 U	20 U						20 U
BERYLLIUM	1 U	1 U						1 U
CADMIUM	1 U	1 U						1 U
CALCIUM	4100	33000						104000
CHROMIUM	3.9	2						3.6
COBALT	5 U	5 U						5 U
COPPER	5 U	5 U						5 U
CYANIDE								
IRON	330	310						580
LEAD	2.4	1 U						14
MAGNESIUM	58	360						680
MANGANESE	2.3	11						18
MERCURY	0.034	0.011						0.01 U
NICKEL	5 U	5 U						5 U
POTASSIUM	28	26						150
SELENIUM	2 U	2 U						2 U
SILVER	2 U	2 U						2 U
SODIUM	16	21						36
THALLIUM	1 U	1 U						1 U
VANADIUM	1.6	2.3						2.5
ZINC	24	17						20
SEMIVOLATILE (UG/KG)								
1,2,4-TRICHLOROBENZENE	332 U	333 U						333 U
1,2-DICHLOROBENZENE	332 U	333 U						333 U
1,3-DICHLOROBENZENE	332 U	333 U						333 U
1,4-DICHLOROBENZENE	332 U	333 U						333 U
2,2'-OXYBIS(1-CHLOROPROPANE)								
2,4,5-TRICHLOROPHENOL	332 U	333 U						333 U
2,4,6-TRICHLOROPHENOL	332 U	333 U						333 U
2,4-DICHLOROPHENOL	332 U	333 U						333 U
2,4-DIMETHYLPHENOL	332 U	333 U						333 U
2,4-DINITROPHENOL	1661 U	1665 U						1667 U
2,4-DINITROTOLUENE	332 U	333 U						333 U
2,6-DINITROTOLUENE	332 U	333 U						333 U
2-CHLORONAPHTHALENE	332 U	333 U						333 U
2-CHLOROPHENOL	332 U	333 U						333 U
2-METHYLNAPHTHALENE	332 U	333 U						333 U
2-METHYLPHENOL	332 U	333 U						333 U
2-NITROANILINE	332 U	333 U						333 U
2-NITROPHENOL	332 U	333 U						333 U
3&4-METHYLPHENOL	332 U	333 U						333 U

SITE	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC
LOCATION	53S00801	53S00901	53S00901A	53S00901B	53S00901C	53S00901D	53S00901E	53S01001
MATRIX	SO	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S00801 [09/22/97]	53S00901 [09/25/97]	53S00901A [10/25/97]	53S00901B [10/25/97]	53S00901C [10/25/97]	53S00901D [10/25/97]	53S00901E [10/25/97]	53S01001 [09/25/97]
SAMPLE	53S00801	53S00901	53S00901A	53S00901B	53S00901C	53S00901D	53S00901E	53S01001
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19970922	19970925	19971025	19971025	19971025	19971025	19971025	19970925
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
3,3'-DICHLOROBENZIDINE	664 U	666 U						667 U
3-NITROANILINE	332 U	333 U						333 U
4,6-DINITRO-2-METHYLPHENOL	997 U	999 U						1000 U
4-BROMOPHENYLPHENYLETHER	332 U	333 U						333 U
4-CHLORO-3-METHYLPHENOL	332 U	333 U						333 U
4-CHLOROANILINE	332 U	333 U						333 U
4-CHLOROPHENYLPHENYLETHER	332 U	333 U						333 U
4-METHYLPHENOL								
4-NITROANILINE	332 U	333 U						333 U
4-NITROPHENOL	332 U	333 U						333 U
ACENAPHTHENE	332 U	333 U						333 U
ACENAPHTHYLENE	332 U	333 U						333 U
ANTHRACENE	332 U	333 U						333 U
BENZO(A)ANTHRACENE	332 U	333 U						333 U
BENZO(A)PYRENE	332 U	333 U						333 U
BENZO(B)FLUORANTHENE	332 U	333 U						333 U
BENZO(G,H,I)PERYLENE	332 U	333 U						333 U
BENZO(K)FLUORANTHENE	332 U	333 U						333 U
BENZYLBUTYLPHTHALATE	332 U	333 U						333 U
BIS(2-CHLOROETHOXY)METHANE	332 U	333 U						333 U
BIS(2-CHLOROETHYL)ETHER	332 U	333 U						333 U
BIS(2-CHLOROISOPROPYL)ETHER	332 U	333 U						333 U
BIS(2-ETHYLHEXYL)PHTHALATE	4191	333 U						333 U
BUTYLBENZYLPHTHALATE								
CARBAZOLE	332 U	333 U						333 U
CHRYSENE	332 U	333 U						333 U
DI-N-BUTYLPHTHALATE	332 U	333 U						333 U
DI-N-OCTYLPHTHALATE	332 U	333 U						333 U
DIBENZO(A,H)ANTHRACENE	332 U	333 U						333 U
DIBENZOFURAN	332 U	333 U						333 U
DIETHYLPHTHALATE	332 U	333 U						333 U
DIMETHYLPHTHALATE	332 U	333 U						333 U
FLUORANTHENE	332 U	333 U						333 U
FLUORENE	332 U	333 U						333 U
HEXACHLOROBENZENE	332 U	333 U						333 U
HEXACHLOROBUTADIENE	332 U	333 U						333 U
HEXACHLOROCYCLOPENTADIENE	332 U	333 U						333 U
HEXACHLOROETHANE	332 U	333 U						333 U
INDENO(1,2,3-CD)PYRENE	332 U	333 U						333 U
ISOPHORONE	332 U	333 U						333 U
N-NITROSO-DI-N-PROPYLAMINE	332 U	333 U						333 U
N-NITROSODIPHENYLAMINE	332 U	333 U						333 U
NAPHTHALENE	332 U	333 U						333 U
NITROBENZENE	332 U	333 U						333 U
PENTACHLOROPHENOL	332 U	333 U						333 U

PSC 55 - CECIL FIELD
SUMMARY OF SOIL ANALYTIC RESULTS

SITE	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC
LOCATION	53S00801	53S00901	53S00901A	53S00901B	53S00901C	53S00901D	53S00901E	53S01001
MATRIX	SO	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S00801 [09/22/97]	53S00901 [09/25/97]	53S00901A [10/25/97]	53S00901B [10/25/97]	53S00901C [10/25/97]	53S00901D [10/25/97]	53S00901E [10/25/97]	53S01001 [09/25/97]
SAMPLE	53S00801	53S00901	53S00901A	53S00901B	53S00901C	53S00901D	53S00901E	53S01001
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19970922	19970925	19971025	19971025	19971025	19971025	19971025	19970925
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
PHENANTHRENE	332 U	333 U						333 U
PHENOL	332 U	333 U						333 U
PYRENE	332 U	333 U						333 U
VOLATILE (UG/KG)								
1,1,1-TRICHLOROETHANE	5 U	5 U						5 U
1,1,2,2-TETRACHLOROETHANE	5 U	5 U						5 U
1,1,2-TRICHLOROETHANE	5 U	5 U						5 U
1,1-DICHLOROETHANE	5 U	5 U						5 U
1,1-DICHLOROETHENE	5 U	5 U						5 U
1,2-DICHLOROETHANE	5 U	5 U						5 U
1,2-DICHLOROETHENE (TOTAL)								
1,2-DICHLOROPROPANE	5 U	5 U						5 U
2-BUTANONE	10 U	10 U						10 U
2-HEXANONE	10 U	10 U						10 U
4-METHYL-2-PENTANONE	10 U	10 U						10 U
ACETONE	62	10 U						10 U
BENZENE	5 U	5 U						5 U
BROMODICHLOROMETHANE	5 U	5 U						5 U
BROMOFORM	5 U	5 U						5 U
BROMOMETHANE	10 U	10 U						10 U
CARBON DISULFIDE	5 U	5 U						5 U
CARBON TETRACHLORIDE	5 U	5 U						5 U
CHLOROBENZENE	5 U	5 U						5 U
CHLOROETHANE	10 U	10 U						10 U
CHLOROFORM	5 U	5 U						5 U
CHLOROMETHANE	5 U	5 U						5 U
CIS-1,2-DICHLOROETHENE	5 U	5 U						5 U
CIS-1,3-DICHLOROPROPENE	5 U	5 U						5 U
DIBROMOCHLOROMETHANE	5 U	5 U						5 U
ETHYLBENZENE	5 U	5 U						5 U
M+P-XYLENES	10 U	10 U						10 U
METHYLENE CHLORIDE	24	15 U						15 U
O-XYLENE	5 U	5 U						5 U
STYRENE	5 U	5 U						5 U
TETRACHLOROETHENE	15 U	15 U						15 U
TOLUENE	5 U	5 U						5 U
TRANS-1,2-DICHLOROETHENE	5 U	5 U						5 U
TRANS-1,3-DICHLOROPROPENE	5 U	5 U						5 U
TRICHLOROETHENE	5 U	5 U						5 U
VINYL CHLORIDE	5 U	5 U						5 U
XYLENES, TOTAL								
PESTICIDE/PCB (UG/KG)								
4,4'-DDD	5	4.29						9.2
4,4'-DDE	8.2	8.6						33
4,4'-DDT	7.9	1.65 U						28

PSC 55 - CECIL FIELD
SUMMARY OF SOIL ANALYTIC RESULTS

SITE	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC
LOCATION	53S00801	53S00901	53S00901A	53S00901B	53S00901C	53S00901D	53S00901E	53S01001
MATRIX	SO	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S00801 [09/22/97]	53S00901 [09/25/97]	53S00901A [10/25/97]	53S00901B [10/25/97]	53S00901C [10/25/97]	53S00901D [10/25/97]	53S00901E [10/25/97]	53S01001 [09/25/97]
SAMPLE	53S00801	53S00901	53S00901A	53S00901B	53S00901C	53S00901D	53S00901E	53S01001
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19970922	19970925	19971025	19971025	19971025	19971025	19971025	19970925
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
ALDRIN	1.65 U	1.65 U						1.65 U
ALPHA-BHC	1.65 U	1.65 U						1.65 U
ALPHA-CHLORDANE	33 U	33 U						33 U
AROCLOR-1016								
AROCLOR-1016/1242	33 U	33 U						33 U
AROCLOR-1221	33 U	33 U						33 U
AROCLOR-1232	33 U	33 U						33 U
AROCLOR-1242								
AROCLOR-1248	33 U	33 U						33 U
AROCLOR-1254	33 U	33 U						33 U
AROCLOR-1260	33 U	33 U						33 U
BETA-BHC	1.65 U	1.65 U						1.65 U
DELTA-BHC	1.65 U	1.65 U						1.65 U
DIELDRIN	1.65 U	1.65 U						1.65 U
ENDOSULFAN I	1.65 U	1.65 U						1.65 U
ENDOSULFAN II	1.65 U	1.65 U						1.65 U
ENDOSULFAN SULFATE	1.65 U	1.65 U						1.65 U
ENDRIN	1.65 U	1.65 U						1.65 U
ENDRIN ALDEHYDE	1.65 U	1.65 U						1.65 U
ENDRIN KETONE	1.65 U	1.65 U						1.65 U
GAMMA-BHC (LINDANE)	1.65 U	1.65 U						1.65 U
GAMMA-CHLORDANE	33 U	33 U						33 U
HEPTACHLOR	1.65 U	2.6						1.65 U
HEPTACHLOR EPOXIDE	1.65 U	6.3						1.65 U
METHOXYCHLOR	1.65 U	1.65 U						1.65 U
TOXAPHENE	66 U	66 U						66 U
PETROLEUM HYDROCARBON (MG/KG)								
TPH								

PSC 55 - CECIL FIELD
SUMMARY OF SOIL ANALYTIC RESULTS

SITE	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC
LOCATION	53S01101	53S01101	53S01201	53S01201A	53S01201B	53S01201C	53S01201D
MATRIX	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S01101 [09/23/97]	53S01101D [09/23/97]	53S01201 [09/22/97]	53S01201A [10/22/97]	53S01201B [10/22/97]	53S01201C [10/22/97]	53S01201D [10/22/97]
SAMPLE	53S01101	53S01101D	53S01201	53S01201A	53S01201B	53S01201C	53S01201D
SACODE	DUP	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19970923	19970923	19970922	19971022	19971022	19971022	19971022
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
INORGANIC (MG/KG)							
ALUMINUM	150	160	1000				
ANTIMONY	2 U	2 U	2 U				
ARSENIC	0.5 U	0.5 U	1.3	0.6 U	0.5 U	0.5 U	0.6
BARIUM	20 U	20 U	20 U				
BERYLLIUM	1 U	1 U	1 U				
CADMIUM	1 U	1 U	1 U				
CALCIUM	4100	6700	18500				
CHROMIUM	1 U	1 U	2				
COBALT	5 U	5 U	5 U				
COPPER	5 U	5 U	5 U				
CYANIDE							
IRON	73	89	270				
LEAD	1 U	1 U	1 U				
MAGNESIUM	32	53	160				
MANGANESE	2	2	3.6				
MERCURY	0.01 U	0.01 U	0.011				
NICKEL	5 U	5 U	5 U				
POTASSIUM	25 U	25 U	25 U				
SELENIUM	2 U	2 U	2 U				
SILVER	2 U	2 U	2 U				
SODIUM	12	9.5	18				
THALLIUM	1 U	1 U	1 U				
VANADIUM	1 U	1 U	1.5				
ZINC	10	7.4	14				
SEMIVOLATILE (UG/KG)							
1,2,4-TRICHLOROBENZENE	333 U	333 U	333 U				
1,2-DICHLOROBENZENE	333 U	333 U	333 U				
1,3-DICHLOROBENZENE	333 U	333 U	333 U				
1,4-DICHLOROBENZENE	333 U	333 U	333 U				
2,2'-OXYBIS(1-CHLOROPROPANE)							
2,4,5-TRICHLOROPHENOL	333 U	333 U	333 U				
2,4,6-TRICHLOROPHENOL	333 U	333 U	333 U				
2,4-DICHLOROPHENOL	333 U	333 U	333 U				
2,4-DIMETHYLPHENOL	333 U	333 U	333 U				
2,4-DINITROPHENOL	1665 U	1667 U	1664 U				
2,4-DINITROTOLUENE	333 U	333 U	333 U				
2,6-DINITROTOLUENE	333 U	333 U	333 U				
2-CHLORONAPHTHALENE	333 U	333 U	333 U				
2-CHLOROPHENOL	333 U	333 U	333 U				
2-METHYLNAPHTHALENE	333 U	333 U	333 U				
2-METHYLPHENOL	333 U	333 U	333 U				
2-NITROANILINE	333 U	333 U	333 U				
2-NITROPHENOL	333 U	333 U	333 U				
3&4-METHYLPHENOL	333 U	333 U	333 U				

SITE	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC
LOCATION	53S01101	53S01101	53S01201	53S01201A	53S01201B	53S01201C	53S01201D
MATRIX	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S01101 [09/23/97]	53S01101D [09/23/97]	53S01201 [09/22/97]	53S01201A [10/22/97]	53S01201B [10/22/97]	53S01201C [10/22/97]	53S01201D [10/22/97]
SAMPLE	53S01101	53S01101D	53S01201	53S01201A	53S01201B	53S01201C	53S01201D
SACODE	DUP	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19970923	19970923	19970922	19971022	19971022	19971022	19971022
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
3,3'-DICHLOROBENZIDINE	666 U	667 U	666 U				
3-NITROANILINE	333 U	333 U	333 U				
4,6-DINITRO-2-METHYLPHENOL	999 U	1000 U	999 U				
4-BROMOPHENYLPHENYLETHER	333 U	333 U	333 U				
4-CHLORO-3-METHYLPHENOL	333 U	333 U	333 U				
4-CHLOROANILINE	333 U	333 U	333 U				
4-CHLOROPHENYLPHENYLETHER	333 U	333 U	333 U				
4-METHYLPHENOL							
4-NITROANILINE	333 U	333 U	333 U				
4-NITROPHENOL	333 U	333 U	333 U				
ACENAPHTHENE	333 U	333 U	333 U				
ACENAPHTHYLENE	333 U	333 U	333 U				
ANTHRACENE	333 U	333 U	333 U				
BENZO(A)ANTHRACENE	333 U	333 U	333 U				
BENZO(A)PYRENE	333 U	333 U	333 U				
BENZO(B)FLUORANTHENE	333 U	333 U	333 U				
BENZO(G,H,I)PERYLENE	333 U	333 U	333 U				
BENZO(K)FLUORANTHENE	333 U	333 U	333 U				
BENZYLBUTYLPHTHALATE	333 U	333 U	333 U				
BIS(2-CHLOROETHOXY)METHANE	333 U	333 U	333 U				
BIS(2-CHLOROETHYL)ETHER	333 U	333 U	333 U				
BIS(2-CHLOROISOPROPYL)ETHER	333 U	333 U	333 U				
BIS(2-ETHYLHEXYL)PHTHALATE	333 U	333 U	333 U				
BUTYLBENZYLPHTHALATE							
CARBAZOLE	333 U	333 U	333 U				
CHRYSENE	333 U	333 U	333 U				
DI-N-BUTYLPHTHALATE	333 U	333 U	333 U				
DI-N-OCTYLPHTHALATE	333 U	333 U	333 U				
DIBENZO(A,H)ANTHRACENE	333 U	333 U	333 U				
DIBENZOFURAN	333 U	333 U	333 U				
DIETHYLPHTHALATE	333 U	333 U	333 U				
DIMETHYLPHTHALATE	333 U	333 U	333 U				
FLUORANTHENE	333 U	333 U	333 U				
FLUORENE	333 U	333 U	333 U				
HEXACHLOROBENZENE	333 U	333 U	333 U				
HEXACHLOROBUTADIENE	333 U	333 U	333 U				
HEXACHLOROCYCLOPENTADIENE	333 U	333 U	333 U				
HEXACHLOROETHANE	333 U	333 U	333 U				
INDENO(1,2,3-CD)PYRENE	333 U	333 U	333 U				
ISOPHORONE	333 U	333 U	333 U				
N-NITROSO-DI-N-PROPYLAMINE	333 U	333 U	333 U				
N-NITROSODIPHENYLAMINE	333 U	333 U	333 U				
NAPHTHALENE	333 U	333 U	333 U				
NITROBENZENE	333 U	333 U	333 U				
PENTACHLOROPHENOL	333 U	333 U	333 U				

SITE	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC
LOCATION	53S01101	53S01101	53S01201	53S01201A	53S01201B	53S01201C	53S01201D
MATRIX	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S01101 [09/23/97]	53S01101D [09/23/97]	53S01201 [09/22/97]	53S01201A [10/22/97]	53S01201B [10/22/97]	53S01201C [10/22/97]	53S01201D [10/22/97]
SAMPLE	53S01101	53S01101D	53S01201	53S01201A	53S01201B	53S01201C	53S01201D
SACODE	DUP	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19970923	19970923	19970922	19971022	19971022	19971022	19971022
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
PHENANTHRENE	333 U	333 U	333 U				
PHENOL	333 U	333 U	333 U				
PYRENE	333 U	333 U	333 U				
VOLATILE (UG/KG)							
1,1,1-TRICHLOROETHANE	5 U	5 U	5 U				
1,1,2,2-TETRACHLOROETHANE	5 U	5 U	5 U				
1,1,2-TRICHLOROETHANE	5 U	5 U	5 U				
1,1-DICHLOROETHANE	5 U	5 U	5 U				
1,1-DICHLOROETHENE	5 U	5 U	5 U				
1,2-DICHLOROETHANE	5 U	5 U	5 U				
1,2-DICHLOROETHENE (TOTAL)							
1,2-DICHLOROPROPANE	5 U	5 U	5 U				
2-BUTANONE	10 U	10 U	10 U				
2-HEXANONE	10 U	10 U	10 U				
4-METHYL-2-PENTANONE	10 U	10 U	10 U				
ACETONE	10 U	10 U	10 U				
BENZENE	5 U	5 U	5 U				
BROMODICHLOROMETHANE	5 U	5 U	5 U				
BROMOFORM	5 U	5 U	5 U				
BROMOMETHANE	10 U	10 U	10 U				
CARBON DISULFIDE	5 U	5 U	5 U				
CARBON TETRACHLORIDE	5 U	5 U	5 U				
CHLOROBENZENE	5 U	5 U	5 U				
CHLOROETHANE	10 U	10 U	10 U				
CHLOROFORM	5 U	5 U	5 U				
CHLOROMETHANE	5 U	5 U	5 U				
CIS-1,2-DICHLOROETHENE	5 U	5 U	5 U				
CIS-1,3-DICHLOROPROPENE	5 U	5 U	5 U				
DIBROMOCHLOROMETHANE	5 U	5 U	5 U				
ETHYLBENZENE	5 U	5 U	5 U				
M+P-XYLENES	10 U	10 U	10 U				
METHYLENE CHLORIDE	15 U	15 U	15 U				
O-XYLENE	5 U	5 U	5 U				
STYRENE	5 U	5 U	5 U				
TETRACHLOROETHENE	15 U	15 U	15 U				
TOLUENE	7	5 U	5 U				
TRANS-1,2-DICHLOROETHENE	5 U	5 U	5 U				
TRANS-1,3-DICHLOROPROPENE	5 U	5 U	5 U				
TRICHLOROETHENE	5 U	5 U	5 U				
VINYL CHLORIDE	5 U	5 U	5 U				
XYLENES, TOTAL							
PESTICIDE/PCB (UG/KG)							
4,4'-DDD	1.65 U	1.65 U	2.3				
4,4'-DDE	1.65 U	1.65 U	1.65 U				
4,4'-DDT	1.65 U	1.65 U	8.25				

PSC 55 - CECIL FIELD
SUMMARY OF SOIL ANALYTIC RESULTS

SITE	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC
LOCATION	53S01101	53S01101	53S01201	53S01201A	53S01201B	53S01201C	53S01201D
MATRIX	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S01101 [09/23/97]	53S01101D [09/23/97]	53S01201 [09/22/97]	53S01201A [10/22/97]	53S01201B [10/22/97]	53S01201C [10/22/97]	53S01201D [10/22/97]
SAMPLE	53S01101	53S01101D	53S01201	53S01201A	53S01201B	53S01201C	53S01201D
SACODE	DUP	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19970923	19970923	19970922	19971022	19971022	19971022	19971022
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
ALDRIN	1.65 U	1.65 U	1.65 U				
ALPHA-BHC	1.65 U	1.65 U	1.65 U				
ALPHA-CHLORDANE	33 U	33 U	33 U				
AROCLOR-1016							
AROCLOR-1016/1242	33 U	33 U	33 U				
AROCLOR-1221	33 U	33 U	33 U				
AROCLOR-1232	33 U	33 U	33 U				
AROCLOR-1242							
AROCLOR-1248	33 U	33 U	33 U				
AROCLOR-1254	33 U	33 U	33 U				
AROCLOR-1260	33 U	33 U	33 U				
BETA-BHC	1.65 U	1.65 U	1.65 U				
DELTA-BHC	1.65 U	1.65 U	1.65 U				
DIELDRIN	1.65 U	1.65 U	1.65 U				
ENDOSULFAN I	1.65 U	1.65 U	1.65 U				
ENDOSULFAN II	1.65 U	1.65 U	1.65 U				
ENDOSULFAN SULFATE	1.65 U	1.65 U	1.65 U				
ENDRIN	1.65 U	1.65 U	1.65 U				
ENDRIN ALDEHYDE	1.65 U	1.65 U	1.65 U				
ENDRIN KETONE	1.65 U	1.65 U	1.65 U				
GAMMA-BHC (LINDANE)	1.65 U	1.65 U	1.65 U				
GAMMA-CHLORDANE	33 U	33 U	33 U				
HEPTACHLOR	1.65 U	1.65 U	1.65 U				
HEPTACHLOR EPOXIDE	1.65 U	1.65 U	1.65 U				
METHOXYCHLOR	1.65 U	1.65 U	1.65 U				
TOXAPHENE	66 U	66 U	66 U				
PETROLEUM HYDROCARBON (MG/KG)							
TPH							

PSC 55 - CECIL FIELD
SUMMARY OF SOIL ANALYTIC RESULTS

SITE	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC
LOCATION	53S01201E	53S01301	53S01401	53S01501	53S01701	53S01801	53S01901	53S02001
MATRIX	SO	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S01201E [10/24/97]	53S01301 [09/25/97]	53S01401 [09/25/97]	53S01501 [09/25/97]	53S01701 [09/01/98]	53S01801 [09/01/98]	53S01901 [09/01/98]	53S02001 [09/01/98]
SAMPLE	53S01201E	53S01301	53S01401	53S01501	53S01701	53S01801	53S01901	53S02001
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19971024	19970925	19970925	19970925	19980901	19980901	19980901	19980901
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
INORGANIC (MG/KG)								
ALUMINUM		290	810	530				
ANTIMONY		2 U	2.9	2 U				
ARSENIC	0.5 U	0.5 U	3.9	1.2	1 U	1 U	1 U	1 U
BARIUM		20 U	20 U	20 U				
BERYLLIUM		1 U	1 U	1 U				
CADMIUM		1 U	1 U	1 U				
CALCIUM		120000	67000	23000				
CHROMIUM		3.6	2.9	1.2				
COBALT		5 U	5 U	5 U				
COPPER		15	16	5 U				
CYANIDE								
IRON		250	390	160				
LEAD		4.2	1 U	1 U				
MAGNESIUM		590	800	210				
MANGANESE		7.3	13	4.3				
MERCURY		0.01	0.01 U	0.01 U				
NICKEL		5 U	5 U	5 U				
POTASSIUM		25	25 U	25 U				
SELENIUM		2 U	2 U	2 U				
SILVER		2 U	2 U	2 U				
SODIUM		30	22	15				
THALLIUM		1 U	1 U	1 U				
VANADIUM		1.9	2.6	1.2				
ZINC		11	16	9.2				
SEMIVOLATILE (UG/KG)								
1,2,4-TRICHLOROBENZENE		333 U	333 U	333 U				
1,2-DICHLOROBENZENE		333 U	333 U	333 U				
1,3-DICHLOROBENZENE		333 U	333 U	333 U				
1,4-DICHLOROBENZENE		333 U	333 U	333 U				
2,2'-OXYBIS(1-CHLOROPROPANE)								
2,4,5-TRICHLOROPHENOL		333 U	333 U	333 U				
2,4,6-TRICHLOROPHENOL		333 U	333 U	333 U				
2,4-DICHLOROPHENOL		333 U	333 U	333 U				
2,4-DIMETHYLPHENOL		333 U	333 U	333 U				
2,4-DINITROPHENOL		1665 U	1664 U	1665 U				
2,4-DINITROTOLUENE		333 U	333 U	333 U				
2,6-DINITROTOLUENE		333 U	333 U	333 U				
2-CHLORONAPHTHALENE		333 U	333 U	333 U				
2-CHLOROPHENOL		333 U	333 U	333 U				
2-METHYLNAPHTHALENE		333 U	333 U	333 U				
2-METHYLPHENOL		333 U	333 U	333 U				
2-NITROANILINE		333 U	333 U	333 U				
2-NITROPHENOL		333 U	333 U	333 U				
3&4-METHYLPHENOL		333 U	333 U	333 U				

SITE	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC
LOCATION	53S01201E	53S01301	53S01401	53S01501	53S01701	53S01801	53S01901	53S02001
MATRIX	SO	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S01201E [10/24/97]	53S01301 [09/25/97]	53S01401 [09/25/97]	53S01501 [09/25/97]	53S01701 [09/01/98]	53S01801 [09/01/98]	53S01901 [09/01/98]	53S02001 [09/01/98]
SAMPLE	53S01201E	53S01301	53S01401	53S01501	53S01701	53S01801	53S01901	53S02001
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19971024	19970925	19970925	19970925	19980901	19980901	19980901	19980901
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
3,3'-DICHLOROBENZIDINE		666 U	666 U	666 U				
3-NITROANILINE		333 U	333 U	333 U				
4,6-DINITRO-2-METHYLPHENOL		999 U	999 U	999 U				
4-BROMOPHENYLPHENYLETHER		333 U	333 U	333 U				
4-CHLORO-3-METHYLPHENOL		333 U	333 U	333 U				
4-CHLOROANILINE		333 U	333 U	333 U				
4-CHLOROPHENYLPHENYLETHER		333 U	333 U	333 U				
4-METHYLPHENOL								
4-NITROANILINE		333 U	333 U	333 U				
4-NITROPHENOL		333 U	333 U	333 U				
ACENAPHTHENE		333 U	333 U	333 U				
ACENAPHTHYLENE		333 U	333 U	333 U				
ANTHRACENE		333 U	333 U	333 U				
BENZO(A)ANTHRACENE		333 U	333 U	333 U				
BENZO(A)PYRENE		333 U	333 U	333 U				
BENZO(B)FLUORANTHENE		333 U	333 U	333 U				
BENZO(G,H,I)PERYLENE		333 U	333 U	333 U				
BENZO(K)FLUORANTHENE		333 U	333 U	333 U				
BENZYLBUTYLPHTHALATE		333 U	333 U	333 U				
BIS(2-CHLOROETHOXY)METHANE		333 U	333 U	333 U				
BIS(2-CHLOROETHYL)ETHER		333 U	333 U	333 U				
BIS(2-CHLOROISOPROPYL)ETHER		333 U	333 U	333 U				
BIS(2-ETHYLHEXYL)PHTHALATE		333 U	333 U	333 U				
BUTYLBENZYLPHTHALATE								
CARBAZOLE		333 U	333 U	333 U				
CHRYSENE		333 U	333 U	333 U				
DI-N-BUTYLPHTHALATE		333 U	333 U	333 U				
DI-N-OCTYLPHTHALATE		333 U	333 U	333 U				
DIBENZO(A,H)ANTHRACENE		333 U	333 U	333 U				
DIBENZOFURAN		333 U	333 U	333 U				
DIETHYLPHTHALATE		333 U	333 U	333 U				
DIMETHYLPHTHALATE		333 U	333 U	333 U				
FLUORANTHENE		333 U	333 U	333 U				
FLUORENE		333 U	333 U	333 U				
HEXACHLOROBENZENE		333 U	333 U	333 U				
HEXACHLOROBUTADIENE		333 U	333 U	333 U				
HEXACHLOROCYCLOPENTADIENE		333 U	333 U	333 U				
HEXACHLOROETHANE		333 U	333 U	333 U				
INDENO(1,2,3-CD)PYRENE		333 U	333 U	333 U				
ISOPHORONE		333 U	333 U	333 U				
N-NITROSO-DI-N-PROPYLAMINE		333 U	333 U	333 U				
N-NITROSODIPHENYLAMINE		333 U	333 U	333 U				
NAPHTHALENE		333 U	333 U	333 U				
NITROBENZENE		333 U	333 U	333 U				
PENTACHLOROPHENOL		333 U	333 U	333 U				

SITE	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC
LOCATION	53S01201E	53S01301	53S01401	53S01501	53S01701	53S01801	53S01901	53S02001
MATRIX	SO	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S01201E [10/24/97]	53S01301 [09/25/97]	53S01401 [09/25/97]	53S01501 [09/25/97]	53S01701 [09/01/98]	53S01801 [09/01/98]	53S01901 [09/01/98]	53S02001 [09/01/98]
SAMPLE	53S01201E	53S01301	53S01401	53S01501	53S01701	53S01801	53S01901	53S02001
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19971024	19970925	19970925	19970925	19980901	19980901	19980901	19980901
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
PHENANTHRENE		333 U	333 U	333 U				
PHENOL		333 U	333 U	333 U				
PYRENE		333 U	333 U	333 U				
VOLATILE (UG/KG)								
1,1,1-TRICHLOROETHANE		5 U	5 U	5 U				
1,1,2,2-TETRACHLOROETHANE		5 U	5 U	5 U				
1,1,2-TRICHLOROETHANE		5 U	5 U	5 U				
1,1-DICHLOROETHANE		5 U	5 U	5 U				
1,1-DICHLOROETHENE		5 U	5 U	5 U				
1,2-DICHLOROETHANE		5 U	5 U	5 U				
1,2-DICHLOROETHENE (TOTAL)								
1,2-DICHLOROPROPANE		5 U	5 U	5 U				
2-BUTANONE		10 U	10 U	10 U				
2-HEXANONE		10 U	10 U	10 U				
4-METHYL-2-PENTANONE		10 U	10 U	10 U				
ACETONE		10 U	10 U	10 U				
BENZENE		5 U	5 U	5 U				
BROMODICHLOROMETHANE		5 U	5 U	5 U				
BROMOFORM		5 U	5 U	5 U				
BROMOMETHANE		10 U	10 U	10 U				
CARBON DISULFIDE		5 U	5 U	5 U				
CARBON TETRACHLORIDE		5 U	5 U	5 U				
CHLOROBENZENE		5 U	5 U	5 U				
CHLOROETHANE		10 U	10 U	10 U				
CHLOROFORM		5 U	5 U	5 U				
CHLOROMETHANE		5 U	5 U	5 U				
CIS-1,2-DICHLOROETHENE		5 U	5 U	5 U				
CIS-1,3-DICHLOROPROPENE		5 U	5 U	5 U				
DIBROMOCHLOROMETHANE		5 U	5 U	5 U				
ETHYLBENZENE		5 U	5 U	5 U				
M+P-XYLENES		10 U	10 U	11				
METHYLENE CHLORIDE		15 U	15 U	15 U				
O-XYLENE		5 U	5 U	5 U				
STYRENE		5 U	5 U	230				
TETRACHLOROETHENE		15 U	15 U	15 U				
TOLUENE		5 U	5 U	46				
TRANS-1,2-DICHLOROETHENE		5 U	5 U	5 U				
TRANS-1,3-DICHLOROPROPENE		5 U	5 U	5 U				
TRICHLOROETHENE		5 U	87	5 U				
VINYL CHLORIDE		5 U	5 U	5 U				
XYLENES, TOTAL								
PESTICIDE/PCB (UG/KG)								
4,4'-DDD		1.65 U	1.65 U	1.65 U				
4,4'-DDE		1.65 U	1.65 U	1.65 U				
4,4'-DDT		1.65 U	1.65 U	1.65 U				

PSC 55 - CECIL FIELD
SUMMARY OF SOIL ANALYTIC RESULTS

SITE	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC	BRAC
LOCATION	53S01201E	53S01301	53S01401	53S01501	53S01701	53S01801	53S01901	53S02001
MATRIX	SO	SO	SO	SO	SO	SO	SO	SO
NSAMPLE	53S01201E [10/24/97]	53S01301 [09/25/97]	53S01401 [09/25/97]	53S01501 [09/25/97]	53S01701 [09/01/98]	53S01801 [09/01/98]	53S01901 [09/01/98]	53S02001 [09/01/98]
SAMPLE	53S01201E	53S01301	53S01401	53S01501	53S01701	53S01801	53S01901	53S02001
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19971024	19970925	19970925	19970925	19980901	19980901	19980901	19980901
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	HLA	HLA	HLA	HLA	HLA	HLA	HLA
PROJECT MANAGER	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98	FRED pre17Nov98
ALDRIN		1.65 U	1.65 U	1.65 U				
ALPHA-BHC		1.65 U	1.65 U	1.65 U				
ALPHA-CHLORDANE		33 U	33 U	33 U				
AROCLOR-1016								
AROCLOR-1016/1242		33 U	33 U	33 U				
AROCLOR-1221		33 U	33 U	33 U				
AROCLOR-1232		33 U	33 U	33 U				
AROCLOR-1242								
AROCLOR-1248		33 U	33 U	33 U				
AROCLOR-1254		33 U	33 U	33 U				
AROCLOR-1260		33 U	33 U	33 U				
BETA-BHC		1.65 U	1.65 U	1.65 U				
DELTA-BHC		1.65 U	1.65 U	1.65 U				
DIELDRIN		1.65 U	1.65 U	1.65 U				
ENDOSULFAN I		1.65 U	1.65 U	1.65 U				
ENDOSULFAN II		1.65 U	1.65 U	1.65 U				
ENDOSULFAN SULFATE		1.65 U	1.65 U	1.65 U				
ENDRIN		1.65 U	1.65 U	1.65 U				
ENDRIN ALDEHYDE		1.65 U	1.65 U	1.65 U				
ENDRIN KETONE		1.65 U	1.65 U	1.65 U				
GAMMA-BHC (LINDANE)		1.65 U	1.65 U	1.65 U				
GAMMA-CHLORDANE		33 U	33 U	33 U				
HEPTACHLOR		1.65 U	1.65 U	1.65 U				
HEPTACHLOR EPOXIDE		1.65 U	1.65 U	1.65 U				
METHOXYCHLOR		1.65 U	1.65 U	1.65 U				
TOXAPHENE		66 U	66 U	66 U				
PETROLEUM HYDROCARBON (MG/KG)								
TPH								

PSC 55 - CECIL FIELD
SUMMARY OF SOIL ANALYTIC RESULTS

SITE	BRAC							
LOCATION	53S02101	CEF-P55-SS-001	CEF-P55-SS-002	CEF-P55-SS-003	CEF-P55-SS-004	CEF-P55-SS-005	CEF-P55-SS-006	CEF-P55-SS-006
MATRIX	SO	SS	SS	SS	SS	SS	SS	SS
NSAMPLE	53S02101 [09/01/98]	CEF-P55-SS-001-01	CEF-P55-SS-002-01	CEF-P55-SS-003-01	CEF-P55-SS-004-01	CEF-P55-SS-005-01	CEF-P55-SS-006-02	CEF-P55-SS-006-02-D
SAMPLE	53S02101	CEF-P55-SS-001-01	CEF-P55-SS-002-01	CEF-P55-SS-003-01	CEF-P55-SS-004-01	CEF-P55-SS-005-01	CEF-P55-SS-006-02	CEF-P55-SS-DU01
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	DUP	DUP
QC_TYPE	NM	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19980901	19991208	19991208	19991208	19991208	19991208	19991208	19991208
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	078	078	078	078	078	078	078
PROJECT MANAGER	FRED pre17Nov98	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.
INORGANIC (MG/KG)								
ALUMINUM								
ANTIMONY								
ARSENIC	0.6 U	1.2 U	0.47 U	0.75 U	0.54 U	0.65 U	0.37 U	0.36 U
BARIUM								
BERYLLIUM								
CADMIUM								
CALCIUM								
CHROMIUM								
COBALT								
COPPER								
CYANIDE								
IRON								
LEAD								
MAGNESIUM								
MANGANESE								
MERCURY								
NICKEL								
POTASSIUM								
SELENIUM								
SILVER								
SODIUM								
THALLIUM								
VANADIUM								
ZINC								
SEMIVOLATILE (UG/KG)								
1,2,4-TRICHLOROBENZENE								
1,2-DICHLOROBENZENE								
1,3-DICHLOROBENZENE								
1,4-DICHLOROBENZENE								
2,2'-OXYBIS(1-CHLOROPROPANE)								
2,4,5-TRICHLOROPHENOL								
2,4,6-TRICHLOROPHENOL								
2,4-DICHLOROPHENOL								
2,4-DIMETHYLPHENOL								
2,4-DINITROPHENOL								
2,4-DINITROTOLUENE								
2,6-DINITROTOLUENE								
2-CHLORONAPHTHALENE								
2-CHLOROPHENOL								
2-METHYLNAPHTHALENE								
2-METHYLPHENOL								
2-NITROANILINE								
2-NITROPHENOL								
3&4-METHYLPHENOL								

SITE	BRAC							
LOCATION	53S02101	CEF-P55-SS-001	CEF-P55-SS-002	CEF-P55-SS-003	CEF-P55-SS-004	CEF-P55-SS-005	CEF-P55-SS-006	CEF-P55-SS-006
MATRIX	SO	SS	SS	SS	SS	SS	SS	SS
NSAMPLE	53S02101 [09/01/98]	CEF-P55-SS-001-01	CEF-P55-SS-002-01	CEF-P55-SS-003-01	CEF-P55-SS-004-01	CEF-P55-SS-005-01	CEF-P55-SS-006-02	CEF-P55-SS-006-02-D
SAMPLE	53S02101	CEF-P55-SS-001-01	CEF-P55-SS-002-01	CEF-P55-SS-003-01	CEF-P55-SS-004-01	CEF-P55-SS-005-01	CEF-P55-SS-006-02	CEF-P55-SS-DU01
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	DUP	DUP
QC_TYPE	NM	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19980901	19991208	19991208	19991208	19991208	19991208	19991208	19991208
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	078	078	078	078	078	078	078
PROJECT MANAGER	FRED pre17Nov98	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.
3,3'-DICHLOROBENZIDINE								
3-NITROANILINE								
4,6-DINITRO-2-METHYLPHENOL								
4-BROMOPHENYLPHENYLETHER								
4-CHLORO-3-METHYLPHENOL								
4-CHLOROANILINE								
4-CHLOROPHENYLPHENYLETHER								
4-METHYLPHENOL								
4-NITROANILINE								
4-NITROPHENOL								
ACENAPHTHENE								
ACENAPHTHYLENE								
ANTHRACENE								
BENZO(A)ANTHRACENE								
BENZO(A)PYRENE								
BENZO(B)FLUORANTHENE								
BENZO(G,H,I)PERYLENE								
BENZO(K)FLUORANTHENE								
BENZYLBUTYLPHTHALATE								
BIS(2-CHLOROETHOXY)METHANE								
BIS(2-CHLOROETHYL)ETHER								
BIS(2-CHLOROISOPROPYL)ETHER								
BIS(2-ETHYLHEXYL)PHTHALATE								
BUTYLBENZYLPHTHALATE								
CARBAZOLE								
CHRYSENE								
DI-N-BUTYLPHTHALATE								
DI-N-OCTYLPHTHALATE								
DIBENZO(A,H)ANTHRACENE								
DIBENZOFURAN								
DIETHYLPHTHALATE								
DIMETHYLPHTHALATE								
FLUORANTHENE								
FLUORENE								
HEXACHLOROBENZENE								
HEXACHLOROBUTADIENE								
HEXACHLOROCYCLOPENTADIENE								
HEXACHLOROETHANE								
INDENO(1,2,3-CD)PYRENE								
ISOPHORONE								
N-NITROSO-DI-N-PROPYLAMINE								
N-NITROSODIPHENYLAMINE								
NAPHTHALENE								
NITROBENZENE								
PENTACHLOROPHENOL								

SITE	BRAC							
LOCATION	53S02101	CEF-P55-SS-001	CEF-P55-SS-002	CEF-P55-SS-003	CEF-P55-SS-004	CEF-P55-SS-005	CEF-P55-SS-006	CEF-P55-SS-006
MATRIX	SO	SS	SS	SS	SS	SS	SS	SS
NSAMPLE	53S02101 [09/01/98]	CEF-P55-SS-001-01	CEF-P55-SS-002-01	CEF-P55-SS-003-01	CEF-P55-SS-004-01	CEF-P55-SS-005-01	CEF-P55-SS-006-02	CEF-P55-SS-006-02-D
SAMPLE	53S02101	CEF-P55-SS-001-01	CEF-P55-SS-002-01	CEF-P55-SS-003-01	CEF-P55-SS-004-01	CEF-P55-SS-005-01	CEF-P55-SS-006-02	CEF-P55-SS-DU01
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	DUP	DUP
QC_TYPE	NM	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19980901	19991208	19991208	19991208	19991208	19991208	19991208	19991208
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	078	078	078	078	078	078	078
PROJECT MANAGER	FRED pre17Nov98	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.
PHENANTHRENE								
PHENOL								
PYRENE								
VOLATILE (UG/KG)								
1,1,1-TRICHLOROETHANE								
1,1,2,2-TETRACHLOROETHANE								
1,1,2-TRICHLOROETHANE								
1,1-DICHLOROETHANE								
1,1-DICHLOROETHENE								
1,2-DICHLOROETHANE								
1,2-DICHLOROETHENE (TOTAL)								
1,2-DICHLOROPROPANE								
2-BUTANONE								
2-HEXANONE								
4-METHYL-2-PENTANONE								
ACETONE								
BENZENE								
BROMODICHLOROMETHANE								
BROMOFORM								
BROMOMETHANE								
CARBON DISULFIDE								
CARBON TETRACHLORIDE								
CHLOROBENZENE								
CHLOROETHANE								
CHLOROFORM								
CHLOROMETHANE								
CIS-1,2-DICHLOROETHENE								
CIS-1,3-DICHLOROPROPENE								
DIBROMOCHLOROMETHANE								
ETHYLBENZENE								
M+P-XYLENES								
METHYLENE CHLORIDE								
O-XYLENE								
STYRENE								
TETRACHLOROETHENE								
TOLUENE								
TRANS-1,2-DICHLOROETHENE								
TRANS-1,3-DICHLOROPROPENE								
TRICHLOROETHENE								
VINYL CHLORIDE								
XYLENES, TOTAL								
PESTICIDE/PCB (UG/KG)								
4,4'-DDD								
4,4'-DDE								
4,4'-DDT								

PSC 55 - CECIL FIELD
SUMMARY OF SOIL ANALYTIC RESULTS

SITE	BRAC							
LOCATION	53S02101	CEF-P55-SS-001	CEF-P55-SS-002	CEF-P55-SS-003	CEF-P55-SS-004	CEF-P55-SS-005	CEF-P55-SS-006	CEF-P55-SS-006
MATRIX	SO	SS	SS	SS	SS	SS	SS	SS
NSAMPLE	53S02101 [09/01/98]	CEF-P55-SS-001-01	CEF-P55-SS-002-01	CEF-P55-SS-003-01	CEF-P55-SS-004-01	CEF-P55-SS-005-01	CEF-P55-SS-006-02	CEF-P55-SS-006-02-D
SAMPLE	53S02101	CEF-P55-SS-001-01	CEF-P55-SS-002-01	CEF-P55-SS-003-01	CEF-P55-SS-004-01	CEF-P55-SS-005-01	CEF-P55-SS-006-02	CEF-P55-SS-DU01
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	DUP	DUP
QC_TYPE	NM	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	19980901	19991208	19991208	19991208	19991208	19991208	19991208	19991208
VALIDATED	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	HLA	078	078	078	078	078	078	078
PROJECT MANAGER	FRED pre17Nov98	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.
ALDRIN								
ALPHA-BHC								
ALPHA-CHLORDANE								
AROCLOR-1016								
AROCLOR-1016/1242								
AROCLOR-1221								
AROCLOR-1232								
AROCLOR-1242								
AROCLOR-1248								
AROCLOR-1254								
AROCLOR-1260								
BETA-BHC								
DELTA-BHC								
DIELDRIN								
ENDOSULFAN I								
ENDOSULFAN II								
ENDOSULFAN SULFATE								
ENDRIN								
ENDRIN ALDEHYDE								
ENDRIN KETONE								
GAMMA-BHC (LINDANE)								
GAMMA-CHLORDANE								
HEPTACHLOR								
HEPTACHLOR EPOXIDE								
METHOXYCHLOR								
TOXAPHENE								
PETROLEUM HYDROCARBON (MG/KG)								
TPH								

PSC 55 - CECIL FIELD
SUMMARY OF SOIL ANALYTIC RESULTS

SITE	PSC 55		PSC 55	PSC 55		PSC 55	PSC 55	PSC 55
LOCATION	CEF-P55-SS-007	CEF-P55-SS-008	CEF-P55-SS-009	CEF-P55-SS-010	CEF-P55-SS-011	CEF-P55-SS-012	CEF-P55-SS-013	CEF-P55-SS-014
MATRIX	SO	SS	SO	SO	SS	SO	SO	SO
NSAMPLE	CEF-P55-SS-007-01	CEF-P55-SS-008-01	CEF-P55-SS-009-01	CEF-P55-SS-010-01	CEF-P55-SS-011-01	CEF-P55-SS-012-01	CEF-P55-SS-013-01	CEF-P55-SS-014-01
SAMPLE	CEF-P55-SS-007-01	CEF-P55-SS-008-01	CEF-P55-SS-009-01	CEF-P55-SS-010-01	CEF-P55-SS-011-01	CEF-P55-SS-012-01	CEF-P55-SS-013-01	CEF-P55-SS-014-01
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	0	19991208	0	0	19991208	0	0	0
VALIDATED	TRUE	FALSE	TRUE	TRUE	FALSE	TRUE	TRUE	TRUE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	078	078	078	078	078	078	078	078
PROJECT MANAGER	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.
INORGANIC (MG/KG)								
ALUMINUM								
ANTIMONY								
ARSENIC	1.3 U	0.39 U	0.73 U	1.5 U	0.38 U	0.79 U	0.4 U	1.2 U
BARIUM								
BERYLLIUM								
CADMIUM								
CALCIUM								
CHROMIUM								
COBALT								
COPPER								
CYANIDE								
IRON								
LEAD								
MAGNESIUM								
MANGANESE								
MERCURY								
NICKEL								
POTASSIUM								
SELENIUM								
SILVER								
SODIUM								
THALLIUM								
VANADIUM								
ZINC								
SEMIVOLATILE (UG/KG)								
1,2,4-TRICHLOROBENZENE								
1,2-DICHLOROBENZENE								
1,3-DICHLOROBENZENE								
1,4-DICHLOROBENZENE								
2,2'-OXYBIS(1-CHLOROPROPANE)								
2,4,5-TRICHLOROPHENOL								
2,4,6-TRICHLOROPHENOL								
2,4-DICHLOROPHENOL								
2,4-DIMETHYLPHENOL								
2,4-DINITROPHENOL								
2,4-DINITROTOLUENE								
2,6-DINITROTOLUENE								
2-CHLORONAPHTHALENE								
2-CHLOROPHENOL								
2-METHYLNAPHTHALENE								
2-METHYLPHENOL								
2-NITROANILINE								
2-NITROPHENOL								
3&4-METHYLPHENOL								

SITE	PSC 55		PSC 55	PSC 55		PSC 55	PSC 55	PSC 55
LOCATION	CEF-P55-SS-007	CEF-P55-SS-008	CEF-P55-SS-009	CEF-P55-SS-010	CEF-P55-SS-011	CEF-P55-SS-012	CEF-P55-SS-013	CEF-P55-SS-014
MATRIX	SO	SS	SO	SO	SS	SO	SO	SO
NSAMPLE	CEF-P55-SS-007-01	CEF-P55-SS-008-01	CEF-P55-SS-009-01	CEF-P55-SS-010-01	CEF-P55-SS-011-01	CEF-P55-SS-012-01	CEF-P55-SS-013-01	CEF-P55-SS-014-01
SAMPLE	CEF-P55-SS-007-01	CEF-P55-SS-008-01	CEF-P55-SS-009-01	CEF-P55-SS-010-01	CEF-P55-SS-011-01	CEF-P55-SS-012-01	CEF-P55-SS-013-01	CEF-P55-SS-014-01
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	0	19991208	0	0	19991208	0	0	0
VALIDATED	TRUE	FALSE	TRUE	TRUE	FALSE	TRUE	TRUE	TRUE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	078	078	078	078	078	078	078	078
PROJECT MANAGER	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.
3,3'-DICHLOROBENZIDINE								
3-NITROANILINE								
4,6-DINITRO-2-METHYLPHENOL								
4-BROMOPHENYLPHENYLETHER								
4-CHLORO-3-METHYLPHENOL								
4-CHLOROANILINE								
4-CHLOROPHENYLPHENYLETHER								
4-METHYLPHENOL								
4-NITROANILINE								
4-NITROPHENOL								
ACENAPHTHENE								
ACENAPHTHYLENE								
ANTHRACENE								
BENZO(A)ANTHRACENE								
BENZO(A)PYRENE								
BENZO(B)FLUORANTHENE								
BENZO(G,H,I)PERYLENE								
BENZO(K)FLUORANTHENE								
BENZYLBUTYLPHTHALATE								
BIS(2-CHLOROETHOXY)METHANE								
BIS(2-CHLOROETHYL)ETHER								
BIS(2-CHLOROISOPROPYL)ETHER								
BIS(2-ETHYLHEXYL)PHTHALATE								
BUTYLBENZYLPHTHALATE								
CARBAZOLE								
CHRYSENE								
DI-N-BUTYLPHTHALATE								
DI-N-OCTYLPHTHALATE								
DIBENZO(A,H)ANTHRACENE								
DIBENZOFURAN								
DIETHYLPHTHALATE								
DIMETHYLPHTHALATE								
FLUORANTHENE								
FLUORENE								
HEXACHLOROBENZENE								
HEXACHLOROBUTADIENE								
HEXACHLOROCYCLOPENTADIENE								
HEXACHLOROETHANE								
INDENO(1,2,3-CD)PYRENE								
ISOPHORONE								
N-NITROSO-DI-N-PROPYLAMINE								
N-NITROSODIPHENYLAMINE								
NAPHTHALENE								
NITROBENZENE								
PENTACHLOROPHENOL								

SITE	PSC 55		PSC 55	PSC 55		PSC 55	PSC 55	PSC 55
LOCATION	CEF-P55-SS-007	CEF-P55-SS-008	CEF-P55-SS-009	CEF-P55-SS-010	CEF-P55-SS-011	CEF-P55-SS-012	CEF-P55-SS-013	CEF-P55-SS-014
MATRIX	SO	SS	SO	SO	SS	SO	SO	SO
NSAMPLE	CEF-P55-SS-007-01	CEF-P55-SS-008-01	CEF-P55-SS-009-01	CEF-P55-SS-010-01	CEF-P55-SS-011-01	CEF-P55-SS-012-01	CEF-P55-SS-013-01	CEF-P55-SS-014-01
SAMPLE	CEF-P55-SS-007-01	CEF-P55-SS-008-01	CEF-P55-SS-009-01	CEF-P55-SS-010-01	CEF-P55-SS-011-01	CEF-P55-SS-012-01	CEF-P55-SS-013-01	CEF-P55-SS-014-01
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	0	19991208	0	0	19991208	0	0	0
VALIDATED	TRUE	FALSE	TRUE	TRUE	FALSE	TRUE	TRUE	TRUE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	078	078	078	078	078	078	078	078
PROJECT MANAGER	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.
PHENANTHRENE								
PHENOL								
PYRENE								
VOLATILE (UG/KG)								
1,1,1-TRICHLOROETHANE								
1,1,2,2-TETRACHLOROETHANE								
1,1,2-TRICHLOROETHANE								
1,1-DICHLOROETHANE								
1,1-DICHLOROETHENE								
1,2-DICHLOROETHANE								
1,2-DICHLOROETHENE (TOTAL)								
1,2-DICHLOROPROPANE								
2-BUTANONE								
2-HEXANONE								
4-METHYL-2-PENTANONE								
ACETONE								
BENZENE								
BROMODICHLOROMETHANE								
BROMOFORM								
BROMOMETHANE								
CARBON DISULFIDE								
CARBON TETRACHLORIDE								
CHLOROBENZENE								
CHLOROETHANE								
CHLOROFORM								
CHLOROMETHANE								
CIS-1,2-DICHLOROETHENE								
CIS-1,3-DICHLOROPROPENE								
DIBROMOCHLOROMETHANE								
ETHYLBENZENE								
M+P-XYLENES								
METHYLENE CHLORIDE								
O-XYLENE								
STYRENE								
TETRACHLOROETHENE								
TOLUENE								
TRANS-1,2-DICHLOROETHENE								
TRANS-1,3-DICHLOROPROPENE								
TRICHLOROETHENE								
VINYL CHLORIDE								
XYLENES, TOTAL								
PESTICIDE/PCB (UG/KG)								
4,4'-DDD								
4,4'-DDE								
4,4'-DDT								

PSC 55 - CECIL FIELD
SUMMARY OF SOIL ANALYTIC RESULTS

SITE	PSC 55		PSC 55	PSC 55		PSC 55	PSC 55	PSC 55
LOCATION	CEF-P55-SS-007	CEF-P55-SS-008	CEF-P55-SS-009	CEF-P55-SS-010	CEF-P55-SS-011	CEF-P55-SS-012	CEF-P55-SS-013	CEF-P55-SS-014
MATRIX	SO	SS	SO	SO	SS	SO	SO	SO
NSAMPLE	CEF-P55-SS-007-01	CEF-P55-SS-008-01	CEF-P55-SS-009-01	CEF-P55-SS-010-01	CEF-P55-SS-011-01	CEF-P55-SS-012-01	CEF-P55-SS-013-01	CEF-P55-SS-014-01
SAMPLE	CEF-P55-SS-007-01	CEF-P55-SS-008-01	CEF-P55-SS-009-01	CEF-P55-SS-010-01	CEF-P55-SS-011-01	CEF-P55-SS-012-01	CEF-P55-SS-013-01	CEF-P55-SS-014-01
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
QC_TYPE	NM	NM	NM	NM	NM	NM	NM	NM
COLLECTION DATE	0	19991208	0	0	19991208	0	0	0
VALIDATED	TRUE	FALSE	TRUE	TRUE	FALSE	TRUE	TRUE	TRUE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	078	078	078	078	078	078	078	078
PROJECT MANAGER	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.
ALDRIN								
ALPHA-BHC								
ALPHA-CHLORDANE								
AROCLOR-1016								
AROCLOR-1016/1242								
AROCLOR-1221								
AROCLOR-1232								
AROCLOR-1242								
AROCLOR-1248								
AROCLOR-1254								
AROCLOR-1260								
BETA-BHC								
DELTA-BHC								
DIELDRIN								
ENDOSULFAN I								
ENDOSULFAN II								
ENDOSULFAN SULFATE								
ENDRIN								
ENDRIN ALDEHYDE								
ENDRIN KETONE								
GAMMA-BHC (LINDANE)								
GAMMA-CHLORDANE								
HEPTACHLOR								
HEPTACHLOR EPOXIDE								
METHOXYCHLOR								
TOXAPHENE								
PETROLEUM HYDROCARBON (MG/KG)								
TPH								

PSC 55 - CECIL FIELD
SUMMARY OF SOIL ANALYTIC RESULTS

SITE	PSC 55	PSC 55	PSC 55	PSC 55	PSC 55	PSC 55
LOCATION	CEF-P55-SS-015	CEF-P55-SS-016	CEF-P55-SS-017	CEF-P55-SS-018	CEF-P55-SS-019	CEF-P55-SS-019
MATRIX	SO	SO	SO	SO	SO	SO
NSAMPLE	CEF-P55-SS-015-01	CEF-P55-SS-016-01	CEF-P55-SS-017-01	CEF-P55-SS-018-01	CEF-P55-SS-019-01	CEF-P55-SS-019-01-D
SAMPLE	CEF-P55-SS-015-01	CEF-P55-SS-016-01	CEF-P55-SS-017-01	CEF-P55-SS-018-01	CEF-P55-SS-019-01	CEF-P55-SS-DU02
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	DUP	DUP
QC_TYPE	NM	NM	NM	NM	NM	NM
COLLECTION DATE	0	0	0	0	0	0
VALIDATED	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	078	078	078	078	078	078
PROJECT MANAGER	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.
INORGANIC (MG/KG)						
ALUMINUM						
ANTIMONY						
ARSENIC	0.38 U	0.4 U	0.81 U	2.4 U	0.87 U	0.93 U
BARIUM						
BERYLLIUM						
CADMIUM						
CALCIUM						
CHROMIUM						
COBALT						
COPPER						
CYANIDE						
IRON						
LEAD						
MAGNESIUM						
MANGANESE						
MERCURY						
NICKEL						
POTASSIUM						
SELENIUM						
SILVER						
SODIUM						
THALLIUM						
VANADIUM						
ZINC						
SEMIVOLATILE (UG/KG)						
1,2,4-TRICHLOROBENZENE						
1,2-DICHLOROBENZENE						
1,3-DICHLOROBENZENE						
1,4-DICHLOROBENZENE						
2,2'-OXYBIS(1-CHLOROPROPANE)						
2,4,5-TRICHLOROPHENOL						
2,4,6-TRICHLOROPHENOL						
2,4-DICHLOROPHENOL						
2,4-DIMETHYLPHENOL						
2,4-DINITROPHENOL						
2,4-DINITROTOLUENE						
2,6-DINITROTOLUENE						
2-CHLORONAPHTHALENE						
2-CHLOROPHENOL						
2-METHYLNAPHTHALENE						
2-METHYLPHENOL						
2-NITROANILINE						
2-NITROPHENOL						
3&4-METHYLPHENOL						

SITE	PSC 55	PSC 55	PSC 55	PSC 55	PSC 55	PSC 55
LOCATION	CEF-P55-SS-015	CEF-P55-SS-016	CEF-P55-SS-017	CEF-P55-SS-018	CEF-P55-SS-019	CEF-P55-SS-019
MATRIX	SO	SO	SO	SO	SO	SO
NSAMPLE	CEF-P55-SS-015-01	CEF-P55-SS-016-01	CEF-P55-SS-017-01	CEF-P55-SS-018-01	CEF-P55-SS-019-01	CEF-P55-SS-019-01-D
SAMPLE	CEF-P55-SS-015-01	CEF-P55-SS-016-01	CEF-P55-SS-017-01	CEF-P55-SS-018-01	CEF-P55-SS-019-01	CEF-P55-SS-DU02
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	DUP	DUP
QC_TYPE	NM	NM	NM	NM	NM	NM
COLLECTION DATE	0	0	0	0	0	0
VALIDATED	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	078	078	078	078	078	078
PROJECT MANAGER	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.
3,3'-DICHLOROBENZIDINE						
3-NITROANILINE						
4,6-DINITRO-2-METHYLPHENOL						
4-BROMOPHENYLPHENYLETHER						
4-CHLORO-3-METHYLPHENOL						
4-CHLOROANILINE						
4-CHLOROPHENYLPHENYLETHER						
4-METHYLPHENOL						
4-NITROANILINE						
4-NITROPHENOL						
ACENAPHTHENE						
ACENAPHTHYLENE						
ANTHRACENE						
BENZO(A)ANTHRACENE						
BENZO(A)PYRENE						
BENZO(B)FLUORANTHENE						
BENZO(G,H,I)PERYLENE						
BENZO(K)FLUORANTHENE						
BENZYLBUTYLPHTHALATE						
BIS(2-CHLOROETHOXY)METHANE						
BIS(2-CHLOROETHYL)ETHER						
BIS(2-CHLOROISOPROPYL)ETHER						
BIS(2-ETHYLHEXYL)PHTHALATE						
BUTYLBENZYLPHTHALATE						
CARBAZOLE						
CHRYSENE						
DI-N-BUTYLPHTHALATE						
DI-N-OCTYLPHTHALATE						
DIBENZO(A,H)ANTHRACENE						
DIBENZOFURAN						
DIETHYLPHTHALATE						
DIMETHYLPHTHALATE						
FLUORANTHENE						
FLUORENE						
HEXACHLOROBENZENE						
HEXACHLOROBUTADIENE						
HEXACHLOROCYCLOPENTADIENE						
HEXACHLOROETHANE						
INDENO(1,2,3-CD)PYRENE						
ISOPHORONE						
N-NITROSO-DI-N-PROPYLAMINE						
N-NITROSODIPHENYLAMINE						
NAPHTHALENE						
NITROBENZENE						
PENTACHLOROPHENOL						

PSC 55 - CECIL FIELD
SUMMARY OF SOIL ANALYTIC RESULTS

SITE	PSC 55	PSC 55	PSC 55	PSC 55	PSC 55	PSC 55
LOCATION	CEF-P55-SS-015	CEF-P55-SS-016	CEF-P55-SS-017	CEF-P55-SS-018	CEF-P55-SS-019	CEF-P55-SS-019
MATRIX	SO	SO	SO	SO	SO	SO
NSAMPLE	CEF-P55-SS-015-01	CEF-P55-SS-016-01	CEF-P55-SS-017-01	CEF-P55-SS-018-01	CEF-P55-SS-019-01	CEF-P55-SS-019-01-D
SAMPLE	CEF-P55-SS-015-01	CEF-P55-SS-016-01	CEF-P55-SS-017-01	CEF-P55-SS-018-01	CEF-P55-SS-019-01	CEF-P55-SS-DU02
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	DUP	DUP
QC_TYPE	NM	NM	NM	NM	NM	NM
COLLECTION DATE	0	0	0	0	0	0
VALIDATED	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	078	078	078	078	078	078
PROJECT MANAGER	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.
PHENANTHRENE						
PHENOL						
PYRENE						
VOLATILE (UG/KG)						
1,1,1-TRICHLOROETHANE						
1,1,2,2-TETRACHLOROETHANE						
1,1,2-TRICHLOROETHANE						
1,1-DICHLOROETHANE						
1,1-DICHLOROETHENE						
1,2-DICHLOROETHANE						
1,2-DICHLOROETHENE (TOTAL)						
1,2-DICHLOROPROPANE						
2-BUTANONE						
2-HEXANONE						
4-METHYL-2-PENTANONE						
ACETONE						
BENZENE						
BROMODICHLOROMETHANE						
BROMOFORM						
BROMOMETHANE						
CARBON DISULFIDE						
CARBON TETRACHLORIDE						
CHLOROBENZENE						
CHLOROETHANE						
CHLOROFORM						
CHLOROMETHANE						
CIS-1,2-DICHLOROETHENE						
CIS-1,3-DICHLOROPROPENE						
DIBROMOCHLOROMETHANE						
ETHYLBENZENE						
M+P-XYLENES						
METHYLENE CHLORIDE						
O-XYLENE						
STYRENE						
TETRACHLOROETHENE						
TOLUENE						
TRANS-1,2-DICHLOROETHENE						
TRANS-1,3-DICHLOROPROPENE						
TRICHLOROETHENE						
VINYL CHLORIDE						
XYLENES, TOTAL						
PESTICIDE/PCB (UG/KG)						
4,4'-DDD						
4,4'-DDE						
4,4'-DDT						

PSC 55 - CECIL FIELD
SUMMARY OF SOIL ANALYTIC RESULTS

SITE	PSC 55	PSC 55	PSC 55	PSC 55	PSC 55	PSC 55
LOCATION	CEF-P55-SS-015	CEF-P55-SS-016	CEF-P55-SS-017	CEF-P55-SS-018	CEF-P55-SS-019	CEF-P55-SS-019
MATRIX	SO	SO	SO	SO	SO	SO
NSAMPLE	CEF-P55-SS-015-01	CEF-P55-SS-016-01	CEF-P55-SS-017-01	CEF-P55-SS-018-01	CEF-P55-SS-019-01	CEF-P55-SS-019-01-D
SAMPLE	CEF-P55-SS-015-01	CEF-P55-SS-016-01	CEF-P55-SS-017-01	CEF-P55-SS-018-01	CEF-P55-SS-019-01	CEF-P55-SS-DU02
SACODE	NORMAL	NORMAL	NORMAL	NORMAL	DUP	DUP
QC_TYPE	NM	NM	NM	NM	NM	NM
COLLECTION DATE	0	0	0	0	0	0
VALIDATED	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
COLLECTION METHOD	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
CTO PROJECT	078	078	078	078	078	078
PROJECT MANAGER	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.	Speranza, M.
ALDRIN						
ALPHA-BHC						
ALPHA-CHLORDANE						
AROCLOR-1016						
AROCLOR-1016/1242						
AROCLOR-1221						
AROCLOR-1232						
AROCLOR-1242						
AROCLOR-1248						
AROCLOR-1254						
AROCLOR-1260						
BETA-BHC						
DELTA-BHC						
DIELDRIN						
ENDOSULFAN I						
ENDOSULFAN II						
ENDOSULFAN SULFATE						
ENDRIN						
ENDRIN ALDEHYDE						
ENDRIN KETONE						
GAMMA-BHC (LINDANE)						
GAMMA-CHLORDANE						
HEPTACHLOR						
HEPTACHLOR EPOXIDE						
METHOXYCHLOR						
TOXAPHENE						
PETROLEUM HYDROCARBON (MG/KG)						
TPH						

GROUNDWATER ANALYTICAL RESULTS

PSC 55 - CECIL FIELD
SUMMARY OF ANALYTIC RESULTS

site	BRAC05
location	CEF-805-1S
matrix	GW
nsample	53G00101 [02/26/96]
sample	53G00101
sacode	NORMAL
qc_type	NM
gis_date	19960226
validated	FALSE
coll_metho	GRAB
cto_proj	HLA
proj_manag	Logan, J.
INORGANICS (UG/L)	
ALUMINUM	247
ANTIMONY	2 U
ARSENIC	3 U
BARIUM	24.9
BERYLLIUM	1 U
CADMIUM	1 U
CALCIUM	59400
CHROMIUM	9 U
COBALT	2 U
COPPER	3
CYANIDE	4.3
IRON	425
LEAD	2 U
MAGNESIUM	3380
MANGANESE	59
MERCURY	0.1 U
NICKEL	2 U
POTASSIUM	6420
SELENIUM	3 U
SILVER	1 U
SODIU	14600
THALLIUM	4 U
VANADIUM	3.5
ZINC	4.9
SEMIVOLATILES (UG/L)	
1,2,4-TRICHLOROBENZENE	10 U
1,2-DICHLOROBENZENE	10 U
1,3-DICHLOROBENZENE	10 U
1,4-DICHLOROBENZENE	10 U
2,2'-OXYBIS(1-CHLOROPROPANE)	10 U
2,4,5-TRICHLOROPHENOL	25 U
2,4,6-TRICHLOROPHENOL	10 U
2,4-DICHLOROPHENOL	10 U
2,4-DIMETHYLPHENOL	10 U
2,4-DINITROPHENOL	25 U
2,4-DINITROTOLUENE	10 U
2,6-DINITROTOLUENE	10 U
2-CHLORONAPHTHALENE	10 U
2-CHLOROPHENOL	10 U
2-METHYLNAPHTHALENE	10 U
2-METHYLPHENOL	10 U
2-NITROANILINE	25 U
2-NITROPHENOL	10 U
3,3'-DICHLOROBENZIDINE	10 U

PSC 55 - CECIL FIELD
SUMMARY OF ANALYTIC RESULTS

site	BRAC05
location	CEF-805-1S
matrix	GW
nsample	53G00101 [02/26/96]
sample	53G00101
sacode	NORMAL
qc_type	NM
gis_date	19960226
validated	FALSE
coll_metho	GRAB
cto_proj	HLA
proj_manag	Logan, J.
3-NITROANILINE	25 U
4,6-DINITRO-2-METHYLPHENOL	25 U
4-BROMOPHENYL PHENYL ETHER	10 U
4-CHLORO-3-METHYLPHENOL	10 U
4-CHLOROANILINE	10 U
4-CHLOROPHENYL PHENYL ETHER	10 U
4-METHYLPHENOL	10 U
4-NITROANILINE	25 U
4-NITROPHENOL	25 U
ACENAPHTHENE	10 U
ACENAPHTHYLENE	10 U
ANTHRACENE	10 U
BENZO(A)ANTHRACENE	10 U
BENZO(A)PYRENE	10 U
BENZO(B)FLUORANTHENE	10 U
BENZO(G,H,I)PERYLENE	10 U
BENZO(K)FLUORANTHENE	10 U
BIS(2-CHLOROETHOXY)METHANE	10 U
BIS(2-CHLOROETHYL)ETHER	10 U
BIS(2-ETHYLHEXYL)PHTHALATE	10 U
BUTYLBENZYL PHTHALATE	10 U
CARBAZOLE	10 U
CHRYSENE	10 U
DI-N-BUTYL PHTHALATE	10 U
DI-N-OCTYL PHTHALATE	10 U
DIBENZO(A,H)ANTHRACENE	10 U
DIBENZOFURAN	10 U
DIETHYL PHTHALATE	10 U
DIMETHYL PHTHALATE	10 U
FLUORANTHENE	10 U
FLUORENE	10 U
HEXACHLOROBENZENE	10 U
HEXACHLOROBUTADIENE	10 U
HEXACHLOROCYCLOPENTADIENE	10 U
HEXACHLOROETHANE	10 U
INDENO(1,2,3-CD)PYRENE	10 U
ISOPHORONE	10 U
N-NITROSO-DI-N-PROPYLAMINE	10 U
N-NITROSODIPHENYLAMINE	10 U
NAPHTHALENE	10 U
NITROBENZENE	10 U
PENTACHLOROPHENOL	25 U
PHENANTHRENE	10 U
PHENOL	10 U
PYRENE	10 U

PSC 55 - CECIL FIELD
SUMMARY OF ANALYTIC RESULTS

site	BRAC05
location	CEF-805-1S
matrix	GW
nsample	53G00101 [02/26/96]
sample	53G00101
sacode	NORMAL
qc_type	NM
gis_date	19960226
validated	FALSE
coll_metho	GRAB
cto_proj	HLA
proj_manag	Logan, J.
VOLATILES (UG/L)	
1,1,1-TRICHLOROETHANE	1 U
1,1,2,2-TETRACHLOROETHANE	1 U
1,1,2-TRICHLOROETHANE	1 U
1,1-DICHLOROETHANE	1 U
1,1-DICHLOROETHENE	1 U
1,2-DICHLOROETHANE	1 U
1,2-DICHLOROETHENE (TOTAL)	1 U
1,2-DICHLOROPROPANE	1 U
2-BUTANONE	2 U
2-HEXANONE	2 U
4-METHYL-2-PENTANONE	2 U
ACETONE	5
BENZENE	1 U
BROMODICHLOROMETHANE	1 U
BROMOFORM	1 U
BROMOMETHANE	2 U
CARBON DISULFIDE	1 U
CARBON TETRACHLORIDE	1 U
CHLOROBENZENE	1 U
CHLOROETHANE	2 U
CHLOROFORM	1 U
CHLOROMETHANE	2 U
CIS-1,3-DICHLOROPROPENE	1 U
DIBROMOCHLOROMETHANE	1 U
ETHYLBENZENE	1 U
METHYLENE CHLORIDE	1 U
STYRENE	1 U
TETRACHLOROETHENE	1 U
TOLUENE	1 U
TRANS-1,3-DICHLOROPROPENE	1 U
TRICHLOROETHENE	1 U
VINYL CHLORIDE	2 U
XYLENES, TOTAL	1 U
PESTICIDE/PCB (UG/L)	
4,4'-DDD	0.1 U
4,4'-DDE	0.1 U
4,4'-DDT	0.1 U
ALDRIN	0.05 U
ALPHA-BHC	0.05 U
ALPHA-CHLORDANE	0.05 U
AROCLOR-1016	1 U
AROCLOR-1221	2 U
AROCLOR-1232	1 U
AROCLOR-1242	1 U

PSC 55 - CECIL FIELD
SUMMARY OF ANALYTIC RESULTS

site	BRAC05
location	CEF-805-1S
matrix	GW
nsample	53G00101 [02/26/96]
sample	53G00101
sacode	NORMAL
qc_type	NM
gis_date	19960226
validated	FALSE
coll_metho	GRAB
cto_proj	HLA
proj_manag	Logan, J.
AROCLOR-1248	1 U
AROCLOR-1254	1 U
AROCLOR-1260	1 U
BETA-BHC	0.05 U
DELTA-BHC	0.05 U
DIELDRIN	0.1 U
ENDOSULFANI	0.05 U
ENDOSULFANII	0.1 U
ENDOSULFANSULFATE	0.1 U
ENDRIN	0.1 U
ENDRINALDEHYDE	0.1 U
ENDRINKETONE	0.1 U
GAMMA-BHC(LINDANE)	0.05 U
GAMMA-CHLORDANE	0.05 U
HEPTACHLOR	0.05 U
HEPTACHLOREPOXIDE	0.05 U
METHOXYCHLOR	0.5 U
TOXAPHENE	5 U
PETROLEUM HYDROCARBONS (MG/L)	
TPH	0.5 U

APPENDIX B

ANALYTICAL LABORATORY RESULTS AND VALIDATION LETTER FROM 1999 SAMPLING EFFORT

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO:	**M. SPERANZA**	**DATE:**	**JANUARY 5, 2000**
FROM:	**GRETCHEN PHIPPS**	**COPIES:**	**DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION – ARSENIC**
CTO 078 - CECIL FIELD
SDGs – F5464

SAMPLES: 14/Soils/

CEF-P55-SS-007-01	CEF-P55-SS-009-01
CEF-P55-SS-010-01	CEF-P55-SS-012-01
CEF-P55-SS-013-01	CEF-P55-SS-014-01
CEF-P55-SS-015-01	CEF-P55-SS-016-01
CEF-P55-SS-017-01	CEF-P55-SS-018-01
CEF-P55-SS-019-01	CEF-P55-SS-DU02

Overview

The sample set for CTO 078, Cecil Field, SDG F5464 consists of fourteen (14) soil environmental samples. One (1) field duplicate pairs (CEF-P55-SS-019-01 / CEF-P55-SS-DU02) was included within this SDG.

The samples were analyzed for arsenic. The samples were collected by Tetra Tech NUS on December 8, 1999 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.

The data was evaluated based on the following parameters:

* • Data Completeness
* • Holding Times
* • Calibration Verifications
• Laboratory Blank Analyses
* • Field Duplicate Precision
* • Detection Limits

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

Laboratory Blank Analyses

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

Analyte	Maximum Concentration	Action Level(soil)
Arsenic	6.9µg/L	3.45mg/kg

An action level of 5X the maximum concentration has been used to evaluate the sample data for blank contamination. Sample aliquot, percent solids and dilution factors were taken into consideration when determining blank contamination. Positive results less than the blank action level for arsenic were qualified, "U", as a result of blank contamination.

Notes

A comparison of field duplicate pair (CEF-P55-SS-019-01 / CEF-P55-SS-DU02) is included in Appendix C.

Executive Summary

Laboratory Performance: Arsenic 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 Installation Restoration Laboratory Quality Assurance Guide." (NFESC 2/96).

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)."

Gretchen A. Phipps

Tetra Tech NUS
Gretchen A. Phipps

Tetra Tech NUS
Joseph A. Samchuck
Quality Control Officer

Attachments:

1. Appendix A - Qualified Analytical Data
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
SOIL DATA
Accutest, NJ
SDG: F5464

SAMPLE NUMBER:	CEF-P55-SS-007-01	CEF-P55-SS-009-01	CEF-P55-SS-010-01	CEF-P55-SS-012-01
SAMPLE DATE:	12/08/99	12/08/99	12/08/99	12/08/99
LABORATORY ID:	F5464-3	F5464-9	F5464-10	F5464-11
QC_TYPE:	NORMAL	NORMAL	NORMAL	NORMAL
% SOLIDS:	78.3 %	89.4 %	91.7 %	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	1.3	U	A	0.73	U	A	1.5	U	A	0.79	U	A

CTO078-NAS CECIL
SOIL DATA
Accutest, NJ
SDG: F5464

SAMPLE NUMBER:	CEF-P55-SS-013-01			CEF-P55-SS-014-01			CEF-P55-SS-015-01			CEF-P55-SS-016-01		
SAMPLE DATE:	12/08/99			12/08/99			12/08/99			12/08/99		
LABORATORY ID:	F5464-8			F5464-5			F5464-2			F5464-4		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	91.5 %			90.8 %			91.7 %			92.9 %		
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	0.40	U		1.2	U	A	0.38	U		0.40	U	

CTO078-NAS CECIL
SOIL DATA
Accutest, NJ
SDG: F5464

SAMPLE NUMBER:	CEF-P55-SS-017-01			CEF-P55-SS-018-01			CEF-P55-SS-019-01			CEF-P55-SS-DU02		
SAMPLE DATE:	12/08/99			12/08/99			12/08/99			12/08/99		
LABORATORY ID:	F5464-6			F5464-7			F5464-1			F5464-12		
QC_TYPE:	NORMAL			NORMAL			NORMAL			NORMAL		
% SOLIDS:	90.8 %			89.3 %			91.2 %			92.1 %		
UNITS:	MG/KG			MG/KG			MG/KG			MG/KG		
FIELD DUPLICATE OF:										CEF-P55-SS-019-01		
	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE	RESULT	QUAL	CODE
INORGANICS												
ARSENIC	0.81	U	A	2.4	U	A	0.87	U	A	0.93	U	A