N60200.AR.002198
NAS CECIL FIELD, FL
5090.3a

SAMPLING AND ANALYSIS OUTLINE AND REPORT FOR YELLOW WATER WEAPONS AREA BASE REALIGNMENT AND CLOSURE REVISION 1 NAS CECIL FIELD FL
12/1/1999
HARDING LAWSON ASSOCIATES

SAMPLING AND ANALYSIS OUTLINE AND REPORT

YELLOW WATER WEAPONS AREA

BASE REALIGNMENT AND CLOSURE

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

Unit Identification Code: N60200

Contract No.: N62467-89-D-0317/090

Prepared by:

Harding Lawson Associates
2590 Executive Center Circle, East
Tallahassee, Florida 32301

Prepared for:

Department of the Navy, Southern Division
Naval Facilities Engineering Command
2155 Eagle Drive
North Charleston, South Carolina 29418

Mr. Scott Glass, Code 18B12, BRAC Environmental Coordinator

December 1999

Revision 1.0

TABLE OF CONTENTS

Sampling and Analysis Outline and Report
Yellow Water Weapons Area
Base Realignment and Closure
Naval Air Station Cecil Field
Jacksonville, Florida

Chapter	Title	Page No.
1.0	INTRODUCTION	1
2.0	SAMPLING AND ANALYSIS OUTLINE	1
2.1	YELLOW WATER NORTH	1
2.2	YELLOW WATER WEAPONS COMPOUND	3
2.3	YELLOW WATER WEAPONS COMPLEX	5
2.4	YELLOW WATER SOUTHEAST	5
2.5	YELLOW WATER SOUTHWEST	8
2.5.1	NAGS Target Ranges	8
2.5.2	NAGS Public Works Area	12
2.5.3	NAGS WWTP and Station Dump	12
2.5.4	NAGS WWTP and Station Dump	15
3.0	RESULTS AND PRELIMINARY RISK EVALUATION	15
3.1	YELLOW WATER NORTH	16
3.2	YELLOW WATER WEAPONS COMPOUND	16
3.3	YELLOW WATER WEAPONS COMPLEX	17
3.4	YELLOW WATER SOUTHEAST	17
3.5	YELLOW WATER SOUTHWEST	17
3.5.1	NAGS Target Ranges	17
3.5.2	NAGS Public Works Area	19
3.5.2.1	Public Works Property Yard	19
3.5.2.2	Firehouse and Garage	19
3.5.2.3	Boilerhouse and Rail Siding	21
3.5.2.4	Area of Surface Dumping East of Former NAGS Brig	21
3.5.2.5	Former Ammunition Belting Plant	21
3.5.2.6	Former Electrical Substation	23
3.5.3	NAGS Wastewater Treatment Plant	23
3.5.4	NAGS Station Dump	23
4.0	CONCLUSIONS AND RECOMMENDATIONS	23
5.0	REFERENCES	27

APPENDICES

Appendix A: Soil Boring Logs
Appendix B: Preliminary Risk Evaluation Tables
Appendix C: Laboratory Analytical Data

04109

LIST OF FIGURES

Sampling and Analysis Outline and Report
Yellow Water Weapons Area
Base Realignment and Closure
Naval Air Station Cecil Field
Jacksonville, Florida

Figure	Title	Page No.
1	Yellow Water Weapons Area, General Location Plan	2
2	Yellow Water North, Previously Evaluated Areas of Concern	4
3	Yellow Water Area Weapons Compound, Potential Areas of Concern and Proposed Sample Locations	6
4	Yellow Water Southeast, Potential Areas of Concern and Proposed Sample Locations	7
5	Yellow Water Southwest, General Location Map	9
6	Naval Air Gunnery School Facilities	10
7	Naval Air Gunnery School Target Range, Proposed Sample Locations	11
8	Public Works Area, Proposed Sample Locations	13
9	Abandoned Wastewater Treatment Plant, Proposed Sample Locations	14
10	Former Naval Air Gunnery School Target Range, Summary of Analytes Exceeding Screening Criteria	18
11	Public Works Area, Summary of Analytes Exceeding Screening Criteria	20
12	Former Steam Plant, Summary of Analytes Exceeding Screening Criteria	22
13	Naval Air Gunnery School Station Dump, Summary of Analytes Exceeding Screening Criteria	24

GLOSSARY

ABB-ES	ABB Environmental Services, Inc.
BCT	Base Realignment and Closure (BRAC) cleanup team
CTL	cleanup target level
EBS	environmental baseline survey
ELCR	excess lifetime cancer risk
FDEP	Florida Department of Environmental Protection
FOSL	Finding of Suitability to Lease
GCTL	groundwater cleanup target level
HQ	hazard quotient
HLA	Harding Lawson Associates
IR	installation restoration
mg/kg	milligrams per kilogram
$\mu g/\ell$	micrograms per liter
NAGS	Naval Air Gunnery School
NAS	Naval Air Station
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
PRE	preliminary risk evaluation
RBC	risk-based concentration
RCRA	Resource Conservation and Recovery Act
SAO	sampling and analysis outline
SAR	site assessment report
SCTL	soil cleanup target level
SVOC	semivolatile organic compound
TAL	target analyte list
TCA	trichloroethane
TCE	trichloroethene
TCL	target compound list
TRPH	total recoverable petroleum hydrocarbon
USEPA	U.S. Environmental Protection Agency
UXO	unexploded ordnance
VOC	volatile organic compound
WWTP	wastewater treatment plant

YWCX	Yellow Water Weapons Complex
YWN	Yellow Water North
YWWA	Yellow Water Weapons Area
YWWC	Yellow Water Weapons Compound
YWSE	Yellow Water Southeast
YWSW	Yellow Water Southwest

1.0 INTRODUCTION

The Yellow Water Weapons Area (YWWA) comprises 8,091 acres of land north of the Main Base area of Naval Air Station (NAS) Cecil Field, Jacksonville, Florida. In general terms, the north and south perimeters of YWWA are defined by easements for Interstate Highway 10 and Normandy Boulevard, respectively. The east and west perimeters of the YWWA are bordered by privately owned wooded, undeveloped, and lightly developed residential areas.

YWWA has been subdivided into 5 areas, for ease of reference (refer to Figure 1):

- Yellow Water North (YWN)
- Yellow Water Weapons Compound (YWWC)
- Yellow Water Weapons Complex (YWCX)
- Yellow Water Southeast (YWSE)
- Yellow Water Southwest (YWSW)

Sampling and analysis strategies, to evaluate specific environmental concerns documented in the environmental baseline survey (EBS) report and other concerns identified during subsequent site visits, were developed for each of the above-referenced areas during Base Realignment and Closure (BRAC) cleanup team (BCT) meetings in 1996 and 1997. Environmental concerns associated with named or numbered facilities or Installation Restoration (IR) Program sites may be discussed or referenced herein, but have been evaluated separately.

Information pertaining to unexploded ordnance (UXO) and radiological surveys is also available in separate documents. An UXO survey was conducted at 11 sites within the YWWA in 1995 by EODT Services, Inc., for Harding Lawson Associates (HLA). Using historic maps and aerial photographs, the 11 sites selected were areas where ordnance would most likely be encountered. The details of the survey and the results are documented in a report submitted to the Navy in 1996 (ABB Environmental Services, Inc. [ABB-ES], 1996a). A radiological scoping survey of the YWWA concluded that even though it was likely that the YWWC may have been used to store, handle, and maintain special weapons from 1959 through 1993, site activities did not "cause or create any significant radiological hazard or leave residual contamination." A work plan for a detailed follow-up radiological closure survey has been completed and is anticipated to be implemented in the near future.

2.0 SAMPLING AND ANALYSIS OUTLINE

Environmental concerns and sampling and analysis strategies for each of the five areas within the YWWA are discussed below. Sample collection techniques, quality assurance objectives, quality control requirements, and sample handling and shipping procedures are outlined in the BRAC Project Operations Plan (ABB-ES, 1994b).

2.1 YELLOW WATER NORTH. The YWN comprises approximately 5,500 acres of mostly undeveloped or forested land. Environmental concerns identified in the EBS Report for YWN relate to issues that have been evaluated separately. The most

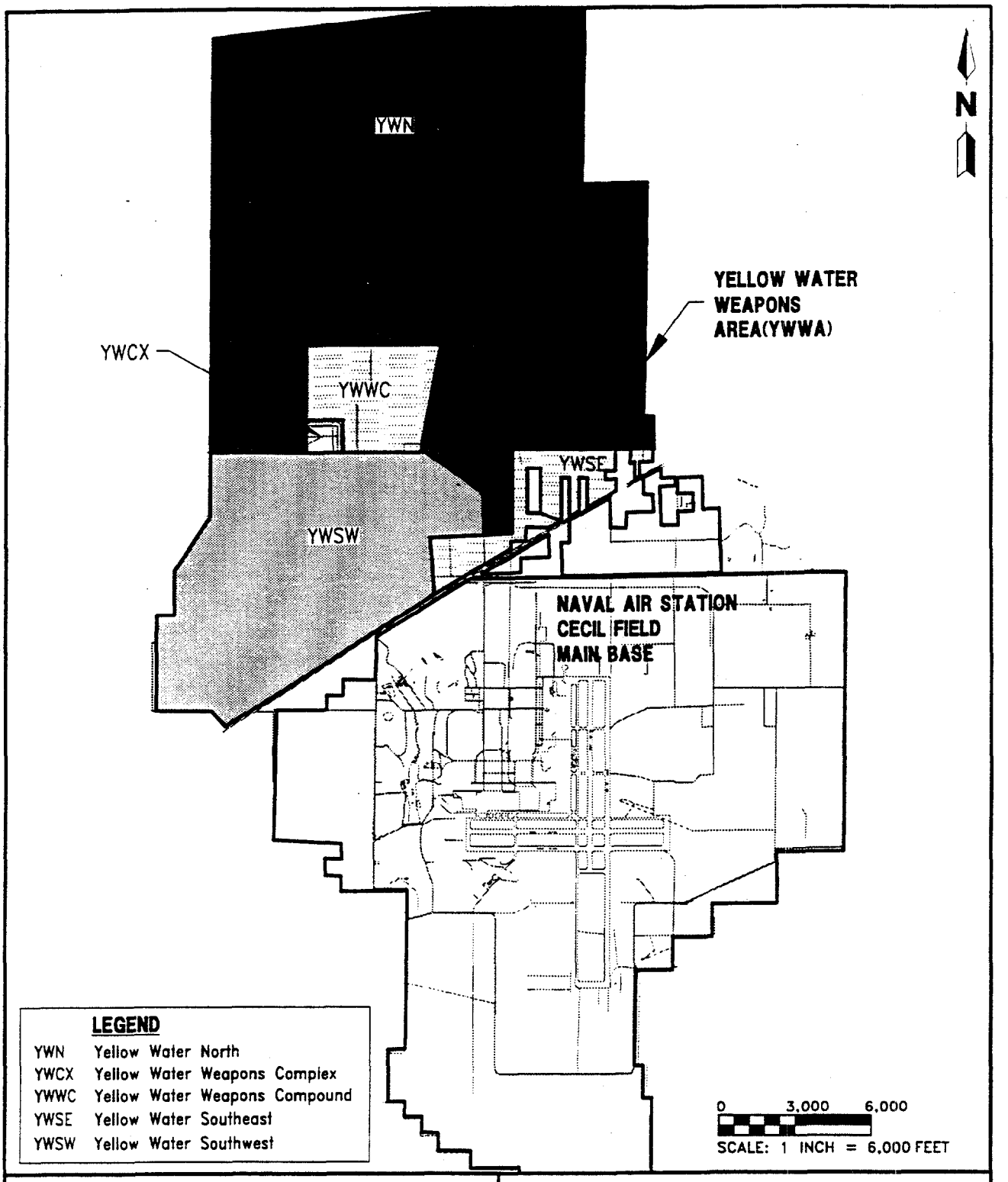


FIGURE 1
YELLOW WATER WEAPONS AREA
GENERAL LOCATION PLAN

K:\02523\02523-25\SAR\02523455.DWG, VC-VC 12/31/98 11:44:08, AutoCAD R14

SAMPLING ANALYSIS OUTLINE AND REPORT
YELLOW WATER WEAPONS AREA

NAVAL AIR STATION CECIL FIELD
ORLANDO, FLORIDA

significant concerns relate to the Blue 5 ordnance disposal area, currently designated as IR Site 14 (Figure 2). IR Site 14 comprises approximately 19 acres of open undeveloped land, and a small concrete bunker formerly used for destruction of ordnance by burning or detonation. Mounds of debris and rubble were also present in the area surrounding Site 14. Contaminants were detected at IR Site 14 during the Remedial Investigation. However, a baseline risk assessment conducted for the site does not indicate a requirement for further action.

Three surface dump sites described in the EBS Report for the YWN were revisited for site walkovers. Sampling and analysis outlines (SAOs) prepared for two of the sites (Sites A-1 and A-2 [Figure 2] [ABB-ES, 1995a and 1995b]) concluded that the small amounts of inert solid waste present at each site were not likely to represent an environmental concern. On closer inspection, it was determined that the third dump site described in the EBS Report was a former small arms range (ABB-ES, 1995c). The area was designated as Site A-5 (Figure 2). Soil samples from Site A-5 were collected and analyzed for lead. The Sampling and Analysis Report (SAR) for Site A-5 (ABB-ES, 1996b) concluded that elevated concentrations of lead were present in the backstop area of the range, but at concentrations which do not exceed risk-based screening criteria.

Site A-3 is the designation given to Facility 637, a storage building located northeast of the YWWC (Figure 2). Environmental concerns identified for Facility 637 during the EBS relate to its former use for tear gas test purposes. Upon further evaluation (ABB-ES, 1995c) it was concluded that site activities are unlikely to have resulted in an adverse environmental impact.

Site A-4 is the designation given to an abandoned wastewater treatment plant (WWTP) located west of YWCX (Figure 2). An SAO for Site A-4 was prepared in 1995 (ABB-ES, 1995d). The SAR (ABB-ES, 1996) contained recommendations for further evaluation of elevated concentrations of inorganic analytes detected in surface soil and groundwater. The BCT has designated this area Potential Source of Contamination (PSC) 40. Additional evaluation is currently in progress. Information pertinent to this evaluation will be presented in a Technical Memorandum for PSC 40.

Part of a 60-acre parcel, which was evaluated as a potential site for industrial reuse in 1996, lies within the YWN. The backstop area to a small arms firing range used in the 1940s and 1950s was evaluated for potential lead contamination. The detected lead concentration did not exceed residential cleanup standards.

No other environmental concerns were identified in the EBS Report for the YWN, and no other concerns were identified during subsequent site walkovers. Therefore, with the exception of the isolated areas of concern discussed above, the remaining area within the YWN should remain classified 1/White, with no requirement for sampling or further evaluation.

2.2 YELLOW WATER WEAPONS COMPOUND. The YWWC is a 450-acre secured area in the YWWA. The YWWC was constructed in 1958-59 as a weapons maintenance and storage compound, and was in use until 1993. Facilities include an asphalt-paved perimeter road, several buildings in the southeast corner, a large asphalt-paved helicopter landing pad in the center of the compound, and 21 bunkers along the north perimeter road.

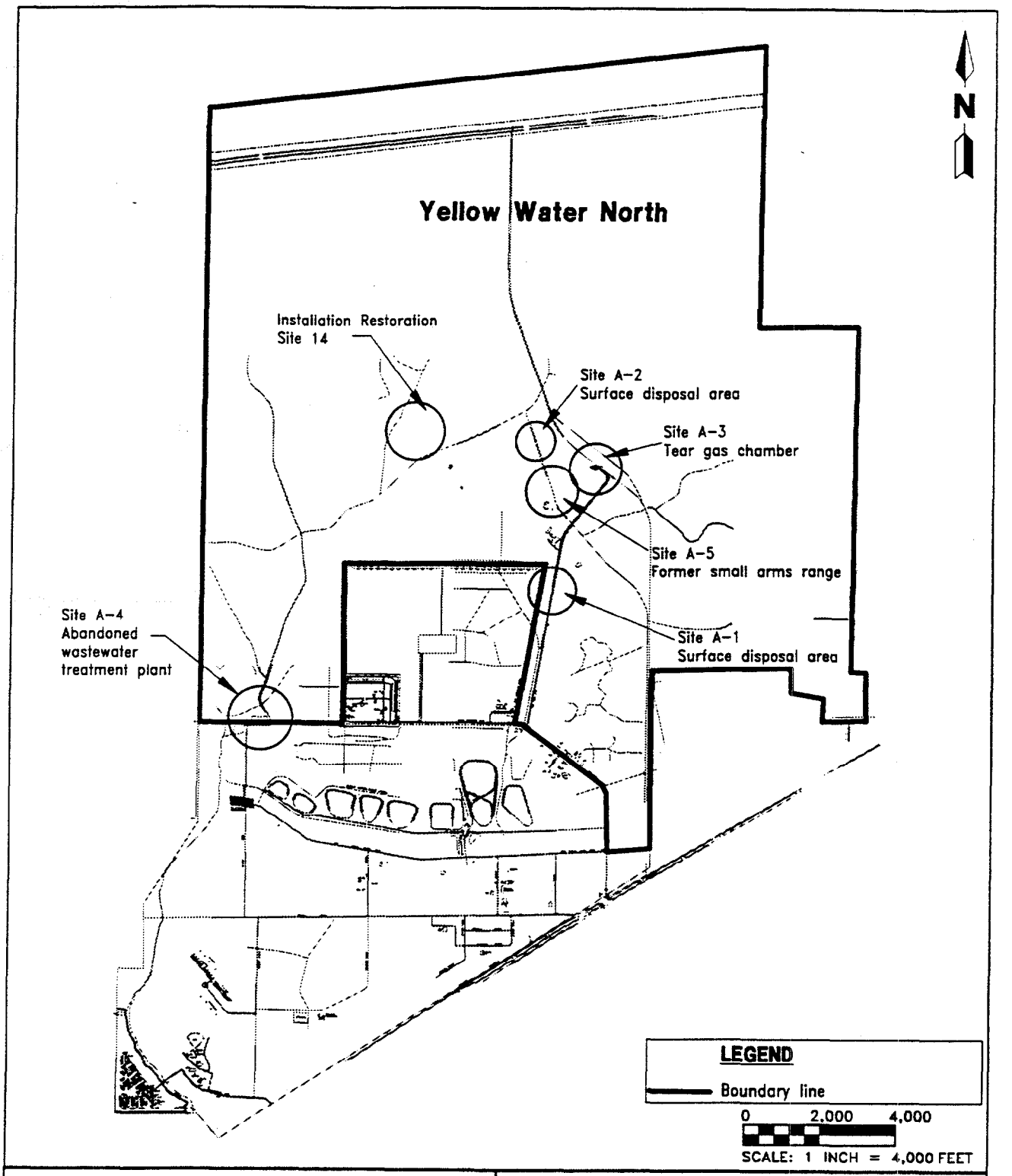


FIGURE 2
YELLOW WATER NORTH
PREVIOUSLY EVALUATED AREAS OF CONCERN

K:\02523\02523-25\SAR\02523454.DWG, VC-VC 12/30/98 13:10:55, AutoCAD R14

SAMPLING ANALYSIS OUTLINE AND REPORT
YELLOW WATER WEAPONS AREA

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

No environmental concerns were identified during the EBS or subsequent site walkovers for the 21 bunkers located along the north perimeter of the YWWC. However, a radiological survey for closure is still required for these structures. No other sampling or evaluation is proposed. Environmental concerns associated with numbered facilities in the southeast corner of the YWWC are addressed separately.

The undeveloped areas were inspected from March 18 through 21, 1997. Two areas of stressed vegetation located between the east boundary of the YWCX and the south access road to the helicopter pad appear to be related to accumulations of spent ammunition and were the only environmental concerns noted in the undeveloped area (Figure 3). One of the locations is a pit where signal flare cartridges had been burned, according to interviews with Weapons Department personnel.

The BCT reviewed the available data and discussed the strategy for Phase II Sampling and Analysis of the YWWC during a meeting on December 12, 1996. The BCT consensus on the strategy for assessment reached at this meeting involved collection and analysis of four surface soil samples in the area littered with spent ammunition, and two subsurface soil samples in an area where flare cartridges had been burned. Analytical requirements were established to include the full target analyte list (TAL) suite of inorganic analytes for all four samples, and a nitroaromatic compound list for the burn pit samples.

2.3 YELLOW WATER WEAPONS COMPLEX. The YWCX is a 41-acre area in the southwest corner of the YWWC. The YWCX is surrounded by a double chain-link fence and pole-mounted security lights. Physical features within the YWCX include a perimeter road, two rows of 20 bunkers, 10 buildings, and a water tower. Surface vegetation in the areas surrounding roads and facilities within the YWCX is limited to grassy plants.

All numbered facilities within the YWCX were evaluated during the EBS. Environmental concerns associated with numbered facilities in the YWCX are addressed separately. A radiological survey for closure is required for these facilities. No specific environmental concerns have been identified for open areas within the YWCX during the EBS or subsequent site walkovers. Therefore, the color classification for the YWCX should remain 1/White, with no requirement for further evaluation.

2.4 YELLOW WATER SOUTHEAST. The YWSE is an undeveloped area of approximately 400 acres. A small area of surface dumping west of "A" Street (Figure 4) was identified during the EBS. In addition, a 1,000-gallon portable storage tank and several 5-gallon cans were noted in a wooded area east of McCracken Road during a subsequent site walkover of the YWSE conducted in February and March, 1997. No other environmental concerns were identified for the YWSE.

The BCT reviewed the available data and discussed the strategy for Phase II Sampling and Analysis of the YWSE during a meeting on December 12, 1996. The BCT consensus on the strategy for assessment reached at this meeting involved collection and analysis of two surface soil samples at each of the two identified areas of concern. Analytical requirements were established to include the full

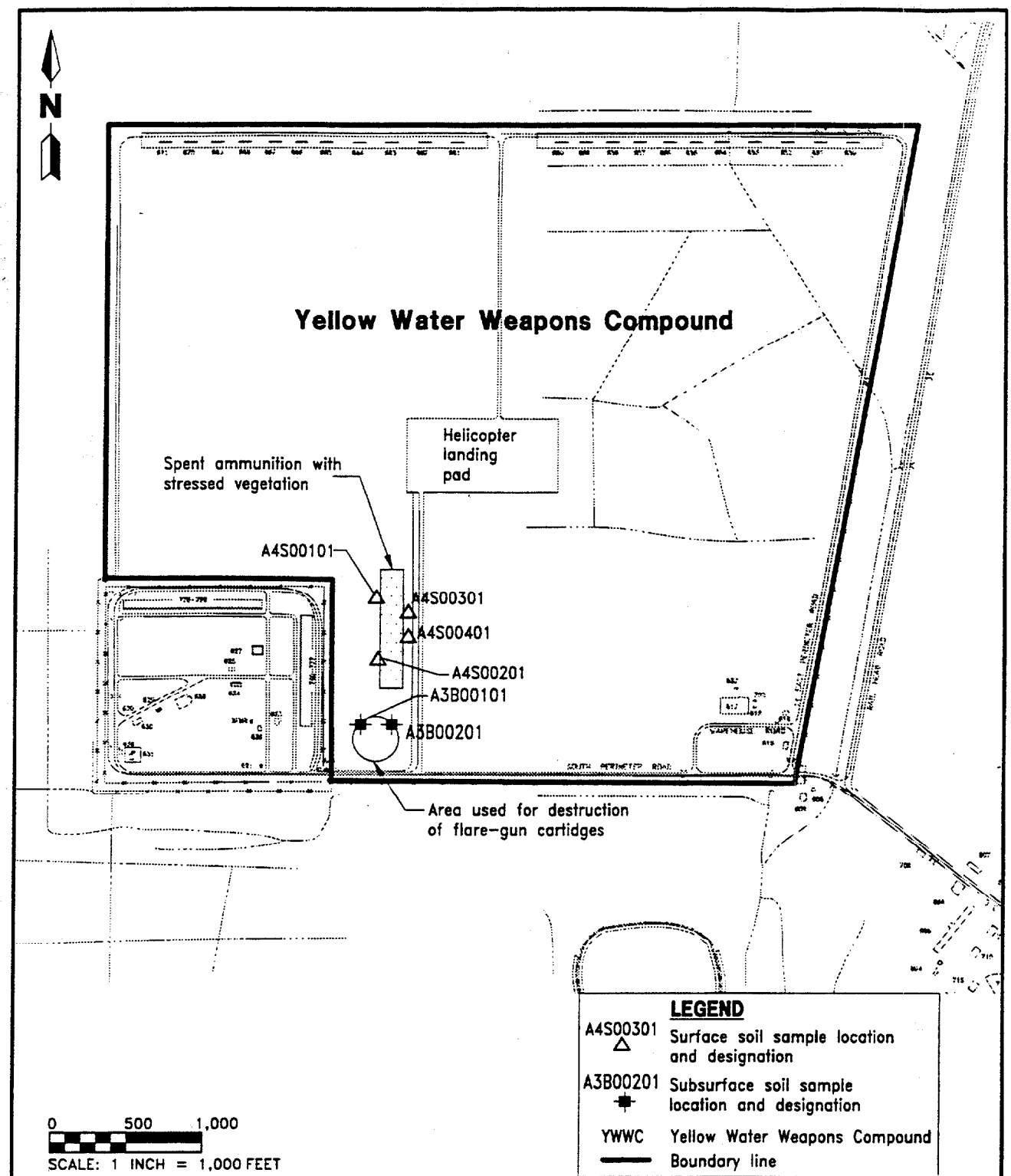


FIGURE 3
YELLOW WATER AREA WEAPONS COMPOUND POTENTIAL AREAS OF CONCERN AND PROPOSED SAMPLE LOCATIONS

K:\02523\02523-25\SAR\02523453.DWG, VC-VC 12/30/98 14:03:35, AutoCAD R14

SAMPLING AND ANALYSIS OUTLINE AND REPORT
YELLOW WATER WEAPONS AREA

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

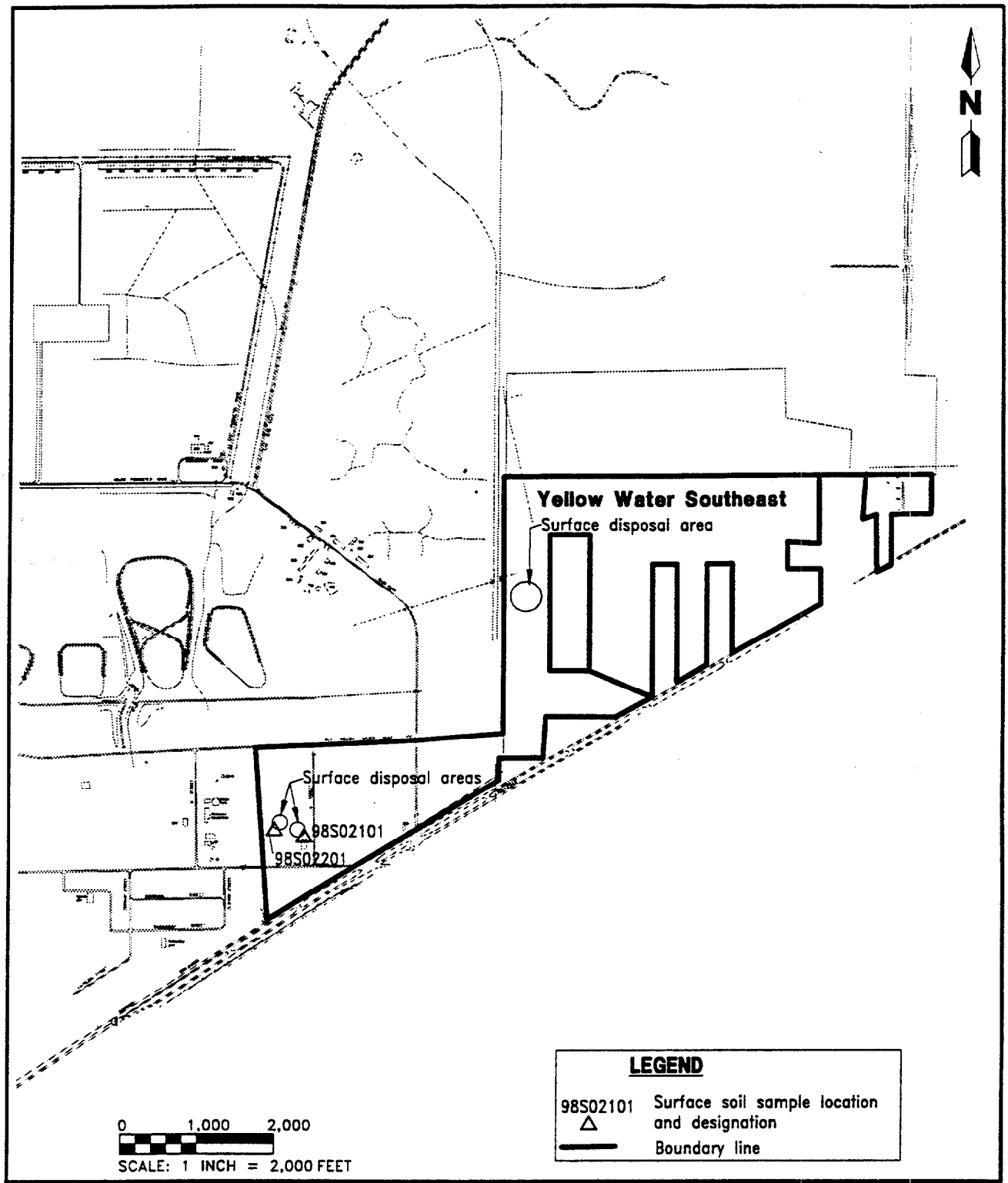


FIGURE 4
YELLOW WATER SOUTHEAST
POTENTIAL AREAS OF CONCERN AND PROPOSED SAMPLE LOCATIONS

K:\02523\02523-25\SAR\02523452.DWG, VC-VC 12/30/98 14:52:36, AutoCAD R14

SAMPLING AND ANALYSIS OUTLINE AND REPORT
YELLOW WATER WEAPONS AREA

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

TAL suite of inorganic analytes and target compound list (TCL) suite of organic, and pesticide and polychlorinated biphenyl (PCB) compounds for all four samples.

2.5 YELLOW WATER SOUTHWEST. The YWSW is a large open area of approximately 2,100 acres (Figure 5). Extensive facilities were constructed in the YWSW the mid-1940s to the mid-1950s in support of a Naval Air Gunnery School (NAGS). Facilities included mobile and fixed target ranges for small arms and machine guns, a skeet range, water and wastewater treatment plants, Public Works maintenance buildings, barracks, classrooms, and recreational facilities (Figure 6). With few exceptions, most former NAGS facilities have been abandoned and demolished. Building 610 and 647 are the only former NAGS facilities known to be in use at present. Potential environmental concerns associated with Facility 647 have been evaluated separately.

Facility 610 and the concrete slab to the south were Public Works Maintenance facilities for the former NAGS, but have been converted for use as a Resource Conservation and Recovery Act (RCRA) Part B hazardous waste storage facility. The RCRA storage facility has been closed and is currently a 90-day temporary collection point for hazardous wastes, operated by Public Works Commission Jacksonville. An RCRA closure assessment plan was submitted as part of the application process for the facility's permit. However, closure assessment activities have not been completed for this facility. The BCT has designated Facility 610 and other nearby facilities, PSC 42. Therefore, the color classification code for facility 610 should remain 7/Grey. Information pertinent to additional evaluation of Facility 610 will be presented in a Technical Memorandum for PSC 42.

IR Site 15 is located in the west area of the YWSW. IR Site 15 is an abandoned skeet shooting range. Records and observations also indicate that ordnance was previously burned in a special furnace located within IR Site 15. Soil within Site 15 has been impacted by elevated concentrations of lead and polynuclear aromatic hydrocarbons (PAHs). IR Site 15 has been evaluated in a separate report.

Naval housing facilities and associated community and recreational facilities were constructed during the late 1970s in the southwest corner of the YWSW and have been transferred within the Navy to NAS Jacksonville. No sampling and analysis is proposed for these facilities.

NAGS. The remainder of environmental concerns identified within the YWSW pertain to abandoned facilities of the former NAGS (Figure 6), and include bullet impact areas, septic systems, vehicle maintenance facilities, an ammunition belting plant, a boiler house, a rail siding and coal pocket, and an electrical substation. The BCT consensus on the strategy for assessment reached at this meeting involved collection and analysis of surface soil, groundwater, surface water, and sediment samples, where applicable, to each of the identified areas of concern. Analytical requirements varied according to the former site activities.

2.5.1 NAGS Target Ranges The sampling strategy for the mobile and fixed target ranges involved collecting surface soil samples from areas most likely to be impacted by fired rounds (Figure 7). The former firing positions were located

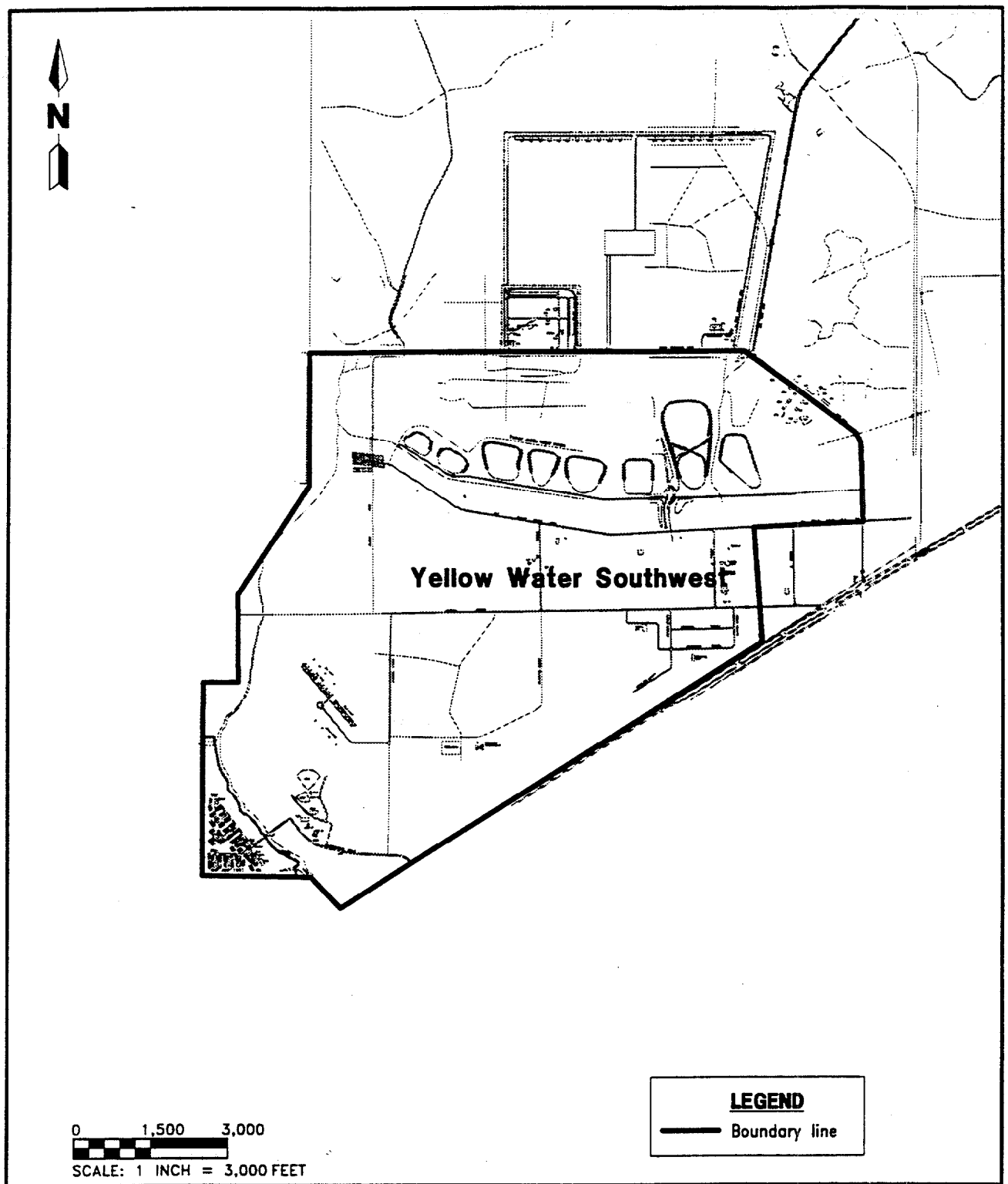


FIGURE 5
YELLOW WATER SOUTHWEST
GENERAL LOCATION MAP

K:\02523\02523-25\SAR\02523451.DWG, VC-VC 12/30/98 14:55:56, AutoCAD R14

SAMPLING AND ANALYSIS OUTLINE AND REPORT
YELLOW WATER WEAPONS AREA

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

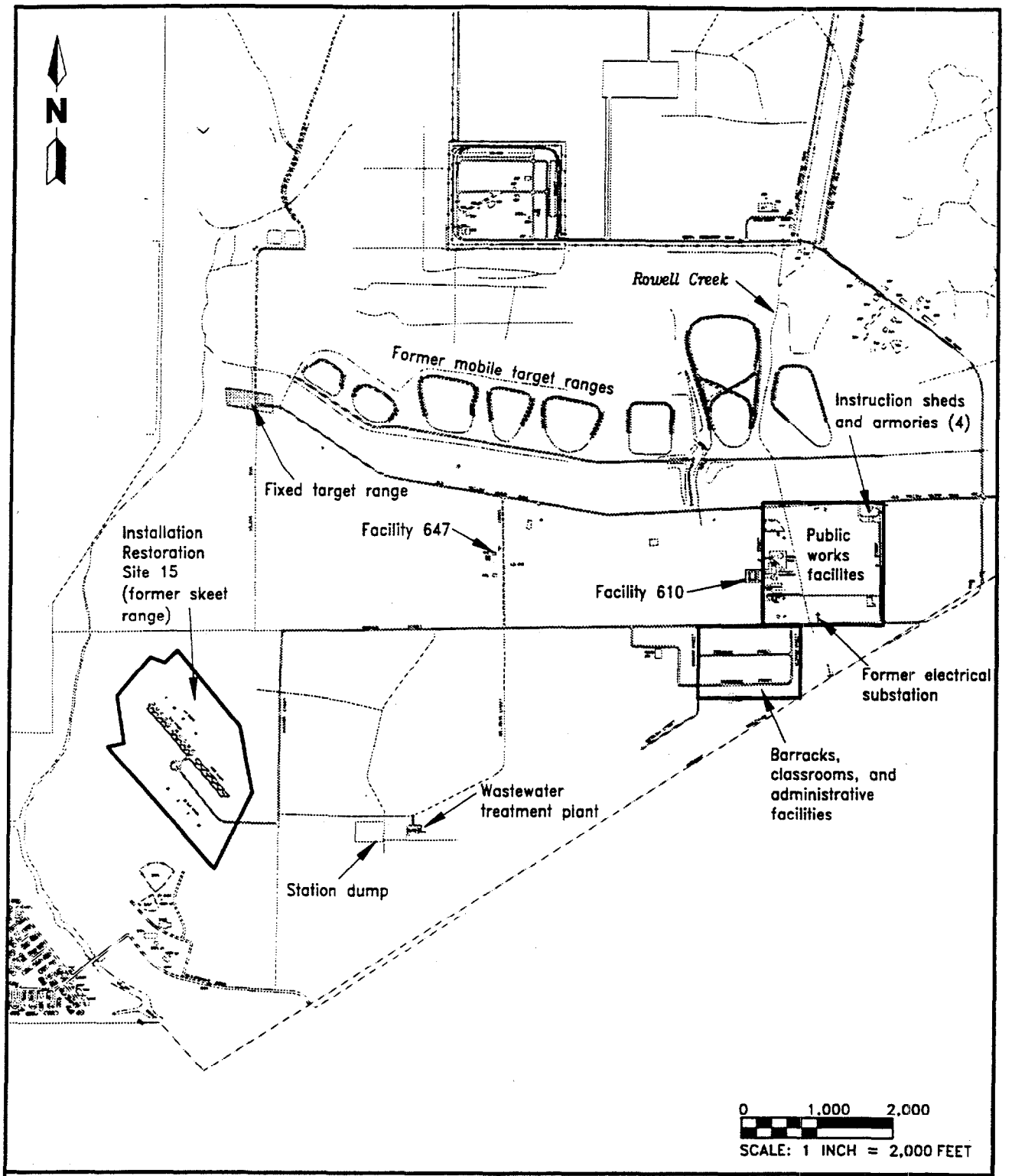


FIGURE 6
NAVAL AIR GUNNERY SCHOOL FACILITIES

K:\02523\02523-25\SAR\02523450.DWG, VC-VC 12/30/98 15:21:25, AutoCAD R14

SAMPLING AND ANAYSIS OUTLINE AND REPORT
YELLOW WATER WEAPONS AREA

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

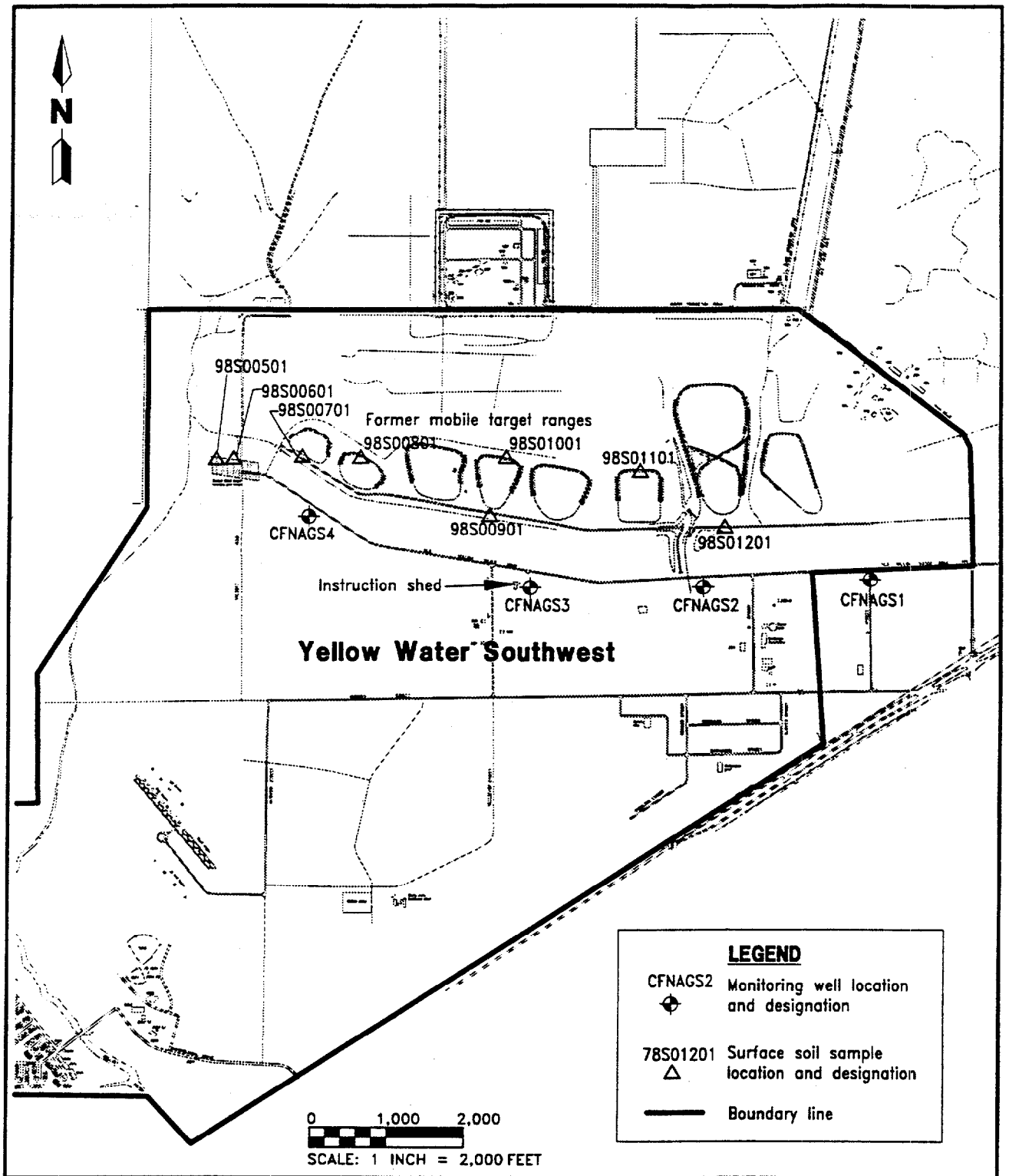


FIGURE 7
NAVAL AIR GUNNERY SCHOOL
TARGET RANGE
PROPOSED SAMPLE LOCATIONS

K:\02523\02523-25\SAR\02523446.DWG, VC-VC 12/30/98 15:51:59, AutoCAD R14

SAMPLING AND ANALYSIS OUTLINE AND REPORT
YELLOW WATER WEAPONS AREA

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

south of fixed and mobile targets. Therefore, the six sample locations selected for the mobile target ranges were located on south-facing slopes of the berms or backstops, and two surface soil sample locations selected for the fixed target firing range were located at the former target backstop distance of 100 feet form the firing positions. Analytical requirements were established to include the full TAL suite of inorganic analytes.

Eight former septic systems were identified in the vicinity of the target ranges on facility drawings of the former NAGS. The BCT regards septic tank and leachfield systems as potential pathways for contaminants to enter the groundwater, if improperly used. Solvents may have been used to clean weapons in the vicinity of armories. Therefore, groundwater samples were specified for collection from each of the four leachfield areas located adjacent to former NAGS armories. Analytical requirements were established to include the full TAL suite of inorganic analytes and TCL suite of organic, and pesticide and PCB compounds for all groundwater samples.

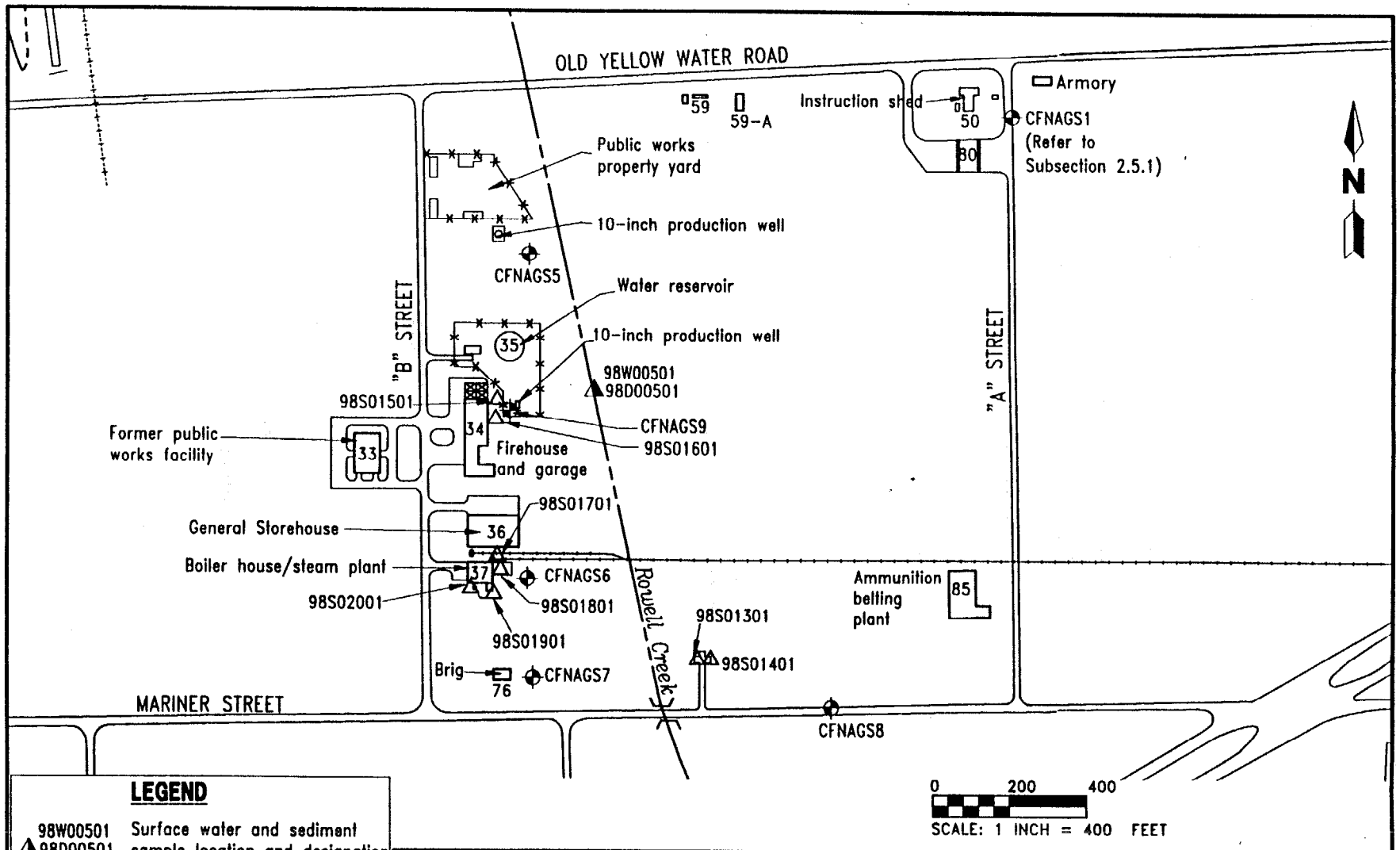
2.5.2 NAGS Public Works Area The area between Old Yellow Water Road and Mariner Street, to the north and south, respectively, and between Privateer Road and Seagull Street, to the east and west, respectively, is referred to as the Public Works Area of the former NAGS (Figure 6). Samples were specified to be collected for facilities in the Public Works Area where a potential for past release of hazardous substances was identified. These facilities include the former NAGS Public Works Department Property Yard, the former NAGS Fire Department vehicle maintenance area, an abandoned boilerhouse, a former ammunition belting facility, and an area of surface dumping observed near the former NAGS Brig (Figure 8).

Groundwater samples were scheduled for collection downgradient of each of the five areas described above. Analytical requirements specified for all groundwater samples include the full TAL suite of inorganic analytes and TCL suite of organic, and pesticide and PCB compounds. Rowell Creek bisects the area from north to south and influences the direction of groundwater flow.

Two surface soil sample locations were selected along the back of the fire department vehicle maintenance area, in an area with scattered surface debris, including oil cans. Four surface soil sample locations were selected in the vicinity of the former boilerhouse and adjacent railroad siding. Two surface soil sample locations were selected in the location of the former electrical substation. Analytical requirements were established for the two surface soil samples associated with the abandoned electrical substation and include the full TCL suite of PCB compounds. Analytical requirements established for the remainder of the surface soil samples in this area include the full TAL suite of inorganic analytes and TCL suite of organic, and pesticide and PCB compounds.

Surface water and sediment samples were specified to be collected from Rowell Creek, downgradient of the Public Works Property Yard and downstream of an outfall pipe connected to vehicle maintenance pits associated with the former NAGS Firehouse. Analytical requirements were established for these samples and include the full TAL suite of inorganic analytes and TCL suite of organic, and pesticide and PCB compounds.

2.5.3 NAGS WWTP and Station Dump Former NAGS WWTP facilities included a control house, digester, sludge beds, aerator, clarifiers, and a chlorine chamber (Figure 9). The abandoned facilities are still in place. A 6-inch-diameter



LEGEND

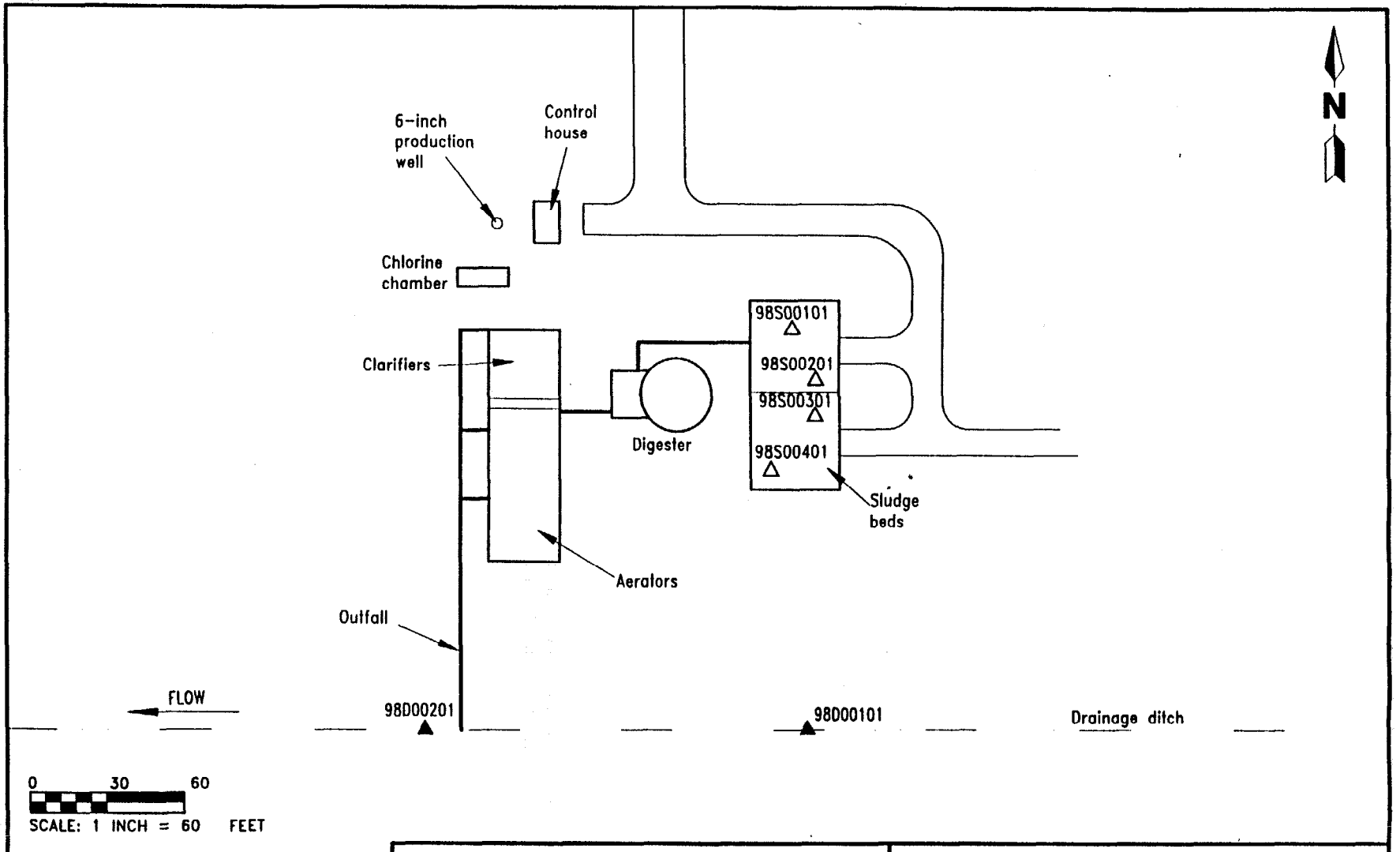
98W00501 / 98D00501	Surface water and sediment sample location and designation
98S01401	Surface soil sample location and designation
CFNAGS5	Monitoring well location and designation
	Railroad
	Fence

K:\02523\02523-25\SAR\02523449.DWG, VC-VC 12/31/98 08:22:22

FIGURE 8
PUBLIC WORKS AREA
PROPOSED SAMPLE LOCATIONS

SAMPLING AND ANALYSIS OUTLINE AND REPORT
YELLOW WATER WEAPONS AREA

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA



LEGEND

98S00101 △ Surface soil sample location and designation

98D00101 ▲ Sediment sample location and designation

K:\02523\02523-25\SAR\02523448.DWG, -VC 12/31/98 09:45:49

FIGURE 9
ABANDONED WASTEWATER TREATMENT PLANT PROPOSED SAMPLE LOCATIONS

SAMPLING AND ANALYSIS OUTLINE AND REPORT
YELLOW WATER WEAPONS AREA

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

water supply well is also located on the site. Effluent from the WWTP was discharged to a canal south of the WWTP.

Four surface soil sample locations were selected for the abandoned sludge drying beds at the former NAGS WWTP to determine whether residual inorganic elements leached from sludge have accumulated. Two sediment samples were specified to be collected from the drainage canal on the south side of the former NAGS WWTP to determine whether effluent formerly discharged from the WWTP has impacted sediment.

2.5.4 NAGS WWTP and Station Dump NAGS facility drawings include an area of approximately 3 acres, designated as the station dump (Figure 6). The area is located to the west of the WWTP and is labelled as approved for construction. Records do not clearly indicate whether the area was actually used as the station dump. However, concrete rubble and metal debris were observed at the ground surface in this area during a site walkover. A deeply incised drainage ditch forms the east perimeter of the area.

Two surface water and sediment samples were specified to be collected from the drainage canal on the east side of the former NAGS station dump to determine whether surface water or sediment has been affected by contaminants leaching from a potential landfill area.

3.0 RESULTS AND PRELIMINARY RISK EVALUATION

Preliminary risk evaluations (PREs) were conducted to assess potential risks to human and ecological receptors posed by contaminants in environmental media at each of the identified areas of concern. The evaluations were conducted in general conformance with methodology provided in the U.S. Environmental Protection Agency (USEPA) Region IV memorandum entitled "Amended Guidance on PREs for the Purpose of Reaching a Finding of Suitability to Lease (FOSL)" (USEPA, 1994), a USEPA Region IV bulletin on ecological risk assessment (USEPA, 1995), and minutes of meetings with the USEPA and the Florida Department of Environmental Protection (FDEP) concerning PREs (ABB-ES, 1995e).

Inorganic analytes were compared to NAS Cecil Field screening criteria for inorganics, established by the NAS Cecil Field partnering team. The NAS Cecil Field screening criteria for manganese in groundwater is equal to 2 times the arithmetic mean of the concentrations detected in background monitoring wells. The remainder of the NAS Cecil Field screening criteria were determined by using the nonparametric upper-outside value cutoffs as described in *Understanding Robust and Exploratory Data Analysis* (Hoaglin et al., 1983). These screening values were developed from data collected throughout NAS Cecil Field. No risk evaluation is conducted for inorganic analytes detected at concentrations below NAS Cecil Field screening criteria for inorganics.

All detected analytes were compared to readily available risk-based screening values to assess the likelihood of adverse human health effects associated with potential exposure to environmental media. Risk-based screening values were obtained from USEPA Region III Risk-Based Concentrations (RBCs), (USEPA, 1996), and FDEP cleanup target levels (CTL) (Florida Administrative Code, 1998). Most screening values published in the references listed above are based on toxicity

constants and standard human exposure scenarios, and correspond to fixed levels of risk. The designated level of risk for noncarcinogenic chemicals is based on a hazard quotient (HQ) of 1. The level of risk for carcinogenic chemicals is based on an excess lifetime cancer risk (ELCR) of 1x10-6. Cancer and noncancer risks associated with industrial and residential land use are estimated by dividing the maximum detected analyte concentration by the corresponding USEPA Region III RBC value at the designated level of risk (ELCR of 1x10-6 or HQ of 1).

3.1 YELLOW WATER NORTH. All environmental concerns identified in the EBS Report and during subsequent site walkovers for the YWN have been previously evaluated. No additional sampling was conducted for the remaining open area within the YWN.

3.2 YELLOW WATER WEAPONS COMPOUND. Surface and subsurface soil samples were collected from two potential areas of environmental concern identified within the YWWC. Samples were collected from the locations shown on Figure 3.

Two subsurface soil samples were collected in an area reportedly used for burning flare cartridges. Residual evidence of this activity (shell casings) was observed during site walkovers. The shell casings were removed, and the excavation was backfilled prior to the sampling event. Sample numbers A3B00101 and A3B00201 were analyzed for the full TCL suite of volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticide and PCBs compounds, the TAL suite of inorganic analytes, and nitroaromatic compounds.

Nine inorganic analytes were detected in the subsurface soil samples. Calcium and sodium were detected at concentrations of 1900 and 750 milligrams per kilogram (mg/kg), respectively, which exceed the NAS Cecil Field inorganic background data set values. There are no soil cleanup target levels (SCTLs) for calcium or sodium. Calcium and sodium are naturally occurring essential nutrients, and do not represent a hazard to human health or the environment. No analytes were detected at concentrations in excess of SCTLs. Therefore, no PRE is required for this area. A summary of results for detected analytes is tabulated in Appendix B. A complete analytical data set is included in Appendix C.

Four surface soil samples were collected in an area of stressed vegetation littered with spent ammunition (inert projectiles). Sample numbers A4S00101, A4S00201, A4S00301, and A4S00401 were analyzed for the full TAL suite of inorganic analytes.

Eight inorganic analytes were detected in the surface soil samples. Calcium was detected at a concentration of 52 mg/kg, which exceeds the NAS Cecil Field inorganic background data set value. There is no SCTL for calcium. Calcium is a naturally occurring essential nutrient and does not represent a hazard to human health or the environment. No analytes were detected at concentrations in excess of SCTLs. Therefore, no PRE is required for this area. A summary of results for detected analytes is tabulated in Appendix B. A complete analytical data set is included in Appendix C.

3.3 YELLOW WATER WEAPONS COMPLEX. All environmental concerns identified in the EBS Report and during subsequent site walkovers for the YWCX are associated with numbered facilities, which have been evaluated separately. No specific environmental concerns have been identified for open areas within the YWCX during the EBS or subsequent site walkovers. Therefore, no further evaluation is required for the open area within YWCX.

3.4 YELLOW WATER SOUTHEAST. Two surface soil samples were collected from a small area of surface dumping west of "A" Street (Figure 4) and submitted for the full TCL suite of VOCs, SVOCs, pesticide and PCB compounds, and the TAL suite of inorganic analytes. Eight inorganic analytes were detected in the surface soil samples. Calcium was detected at a concentration of 4,000 mg/kg, which exceeds the NAS Cecil Field inorganic background data set value. There is no SCTL for calcium. Calcium is a naturally occurring essential nutrient, and does not represent a hazard to human health or the environment. Tetrachloroethene and toluene were also detected in the surface soil samples. However, no analytes were detected at concentrations in excess of SCTLs. Therefore, no PRE is required for this area. A summary of results for detected analytes is tabulated in Appendix B. A complete analytical data set is included in Appendix C.

An additional area of potential environmental concern identified during site walkovers has been disturbed during logging activities in the area. The 1,000-gallon portable storage tank and 5-gallon cans noted in a wooded area east of McCracken Road in February and March, 1997, were not found at this location. The NAS Cecil Field forestry supervisor indicated the portable storage tank was a temporary fuel facility for timber cutters working in the area. The exact location of the 5-gallon cans area was not surveyed during the site walkover. Therefore, no surface soil samples were collected.

3.5 YELLOW WATER SOUTHWEST. Environmental concerns identified within the YWSW pertain to abandoned facilities of the former NAGS, including target ranges, public works facilities, and an electrical substation.

3.5.1 NAGS Target Ranges Eight surface soil samples (98S00501 through 98S01201) were collected from the areas most likely to be impacted by fired rounds at the former target ranges (see Figure 7). The samples were submitted for the full TAL suite of inorganic analytes. Fourteen inorganic analytes were detected in the surface soil samples. Seven inorganic analytes were detected at a concentrations in excess of NAS Cecil Field inorganic background data set values. Arsenic was detected at a concentration of 2.8 mg/kg at sample location 98S01001, and was the only analyte detected at a concentration in excess of the NAS Cecil Field inorganic background data set value (2.04 mg/kg) and the SCTL (0.8 mg/kg) (Figure 10). An elevated lead concentration (450 mg/kg) was detected in sample 98S00701. However, this value does not exceed the SCTL for lead (500 mg/kg). There is no SCTL for calcium. Calcium is a naturally occurring essential nutrient and does not represent a hazard to human health or the environment.

Groundwater samples were collected from shallow monitoring wells installed at four leachfield areas located adjacent to former NAGS Armories. Soil boring logs from monitoring wells installed in this area are presented in Appendix A. The samples were analyzed for the full TAL suite of inorganic analytes and TCL suite of organic, and pesticide and PCB compounds. Low levels of acetone, carbon

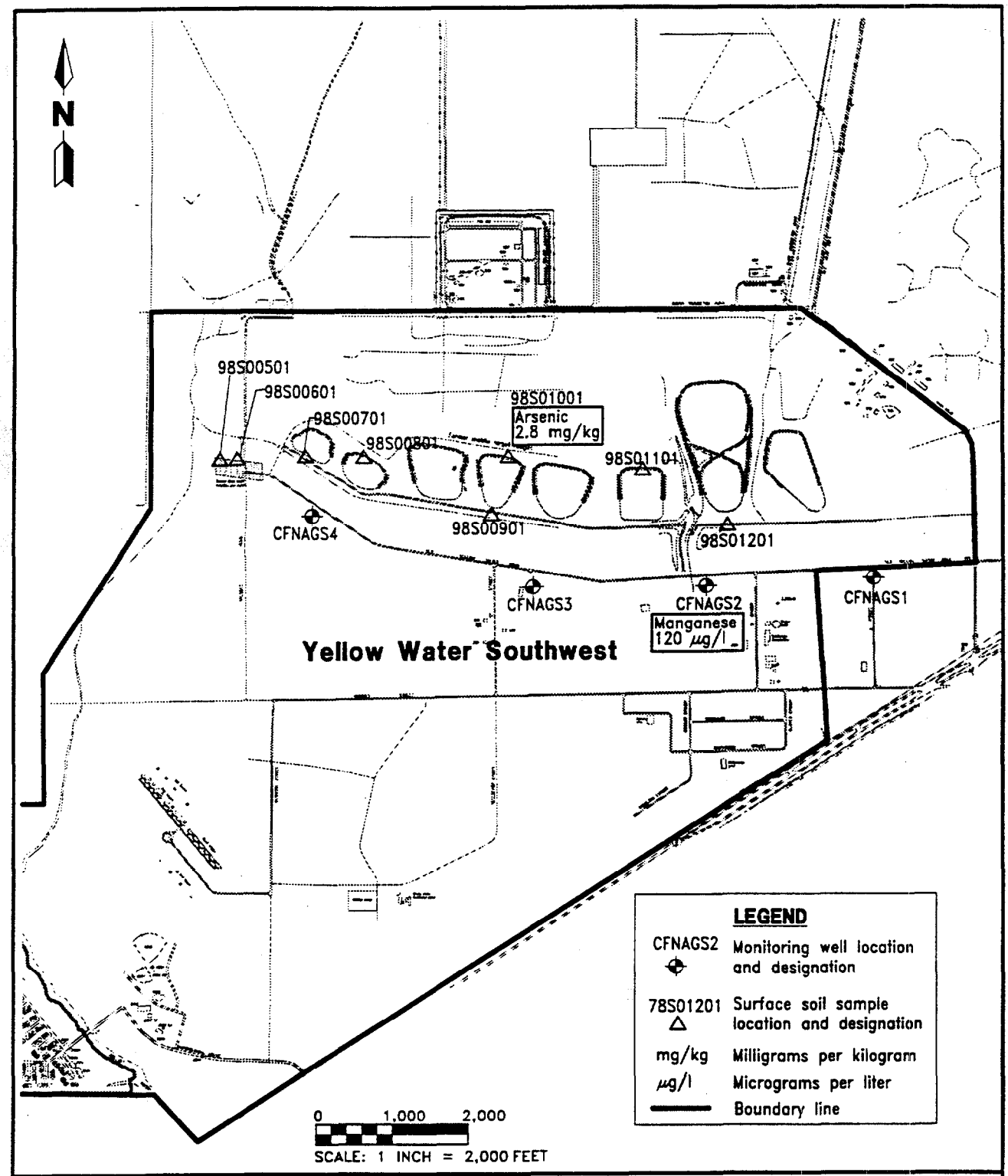


FIGURE 10
FORMER NAVAL AIR GUNNERY SCHOOL TARGET RANGE
SUMMARY OF ANALYTES EXCEEDING SCREENING CRITERIA

K:\02523\02523-25\SAR\02523447.DWG, VC-VC 12/31/98 09:52:26, AutoCAD R14

SAMPLING AND ANALYSIS OUTLINE AND REPORT
YELLOW WATER WEAPONS AREA

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

disulfide and toluene were detected at sample locations 98G00301 and 98G00401. Groundwater cleanup target levels (GCTLs) for these compounds are much higher than the detected concentrations. Ten inorganic elements were also detected in the groundwater samples. Manganese was detected at a concentration of 300 micrograms per liter ($\mu g/\ell$) at sample location CFNAGS2S, which exceeds both the NAS Cecil Field inorganic background data set value (150 $\mu g/\ell$) and the GCTL (50 $\mu g/\ell$). Additional samples were collected to assure that suspended solids were not influencing the analyses. Manganese was detected at concentrations of 120 $\mu g/\ell$ and 140 $\mu g/\ell$ in unfiltered samples and at 120 $\mu g/\ell$ and 150 $\mu g/\ell$ in filtered samples. No other analytes were detected in excess of NAS Cecil Field inorganic background data set values and GCTLs (Figure 10).

An ELCR of 6.5x10-6 was calculated, based upon a comparison of the detected arsenic concentration in surface soil and the residential RBC. The GCTL for manganese is based upon secondary water quality standards. However, the RBC for tap water is 840 $\mu g/\ell$. Therefore, the HQ of 0.1 based on the elevated concentration of manganese detected in sample CFNAGS2S does not represent a hazard to human health. Summaries of results, and risk comparisons for analytes detected in soil and groundwater, are tabulated in Appendix B. A complete analytical data set is included in Appendix C.

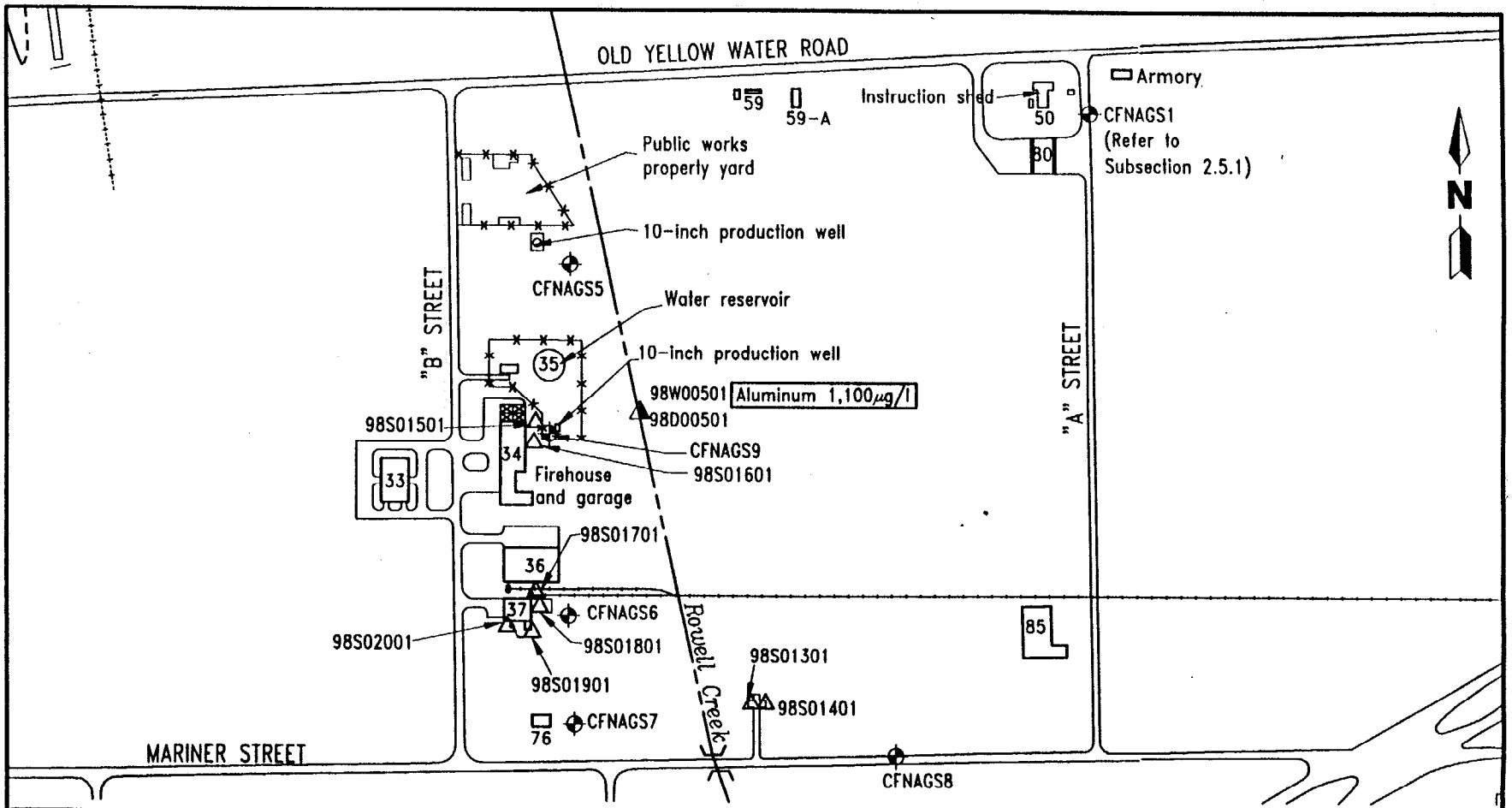
3.5.2 NAGS Public Works Area

3.5.2.1 **Public Works Property Yard** One shallow groundwater monitoring well was installed downgradient of the former Public Works Property Yard and potable water production well. One groundwater sample was collected and analyzed for the full TAL suite of inorganic analytes and TCL suite of organic, and pesticide and PCB compounds. Eleven inorganic analytes were detected in the groundwater sample. Five of the inorganic analytes were detected at concentrations in excess of NAS Cecil Field inorganic background data set values. Aluminum was detected at a concentration of 36,000 $\mu g/\ell$, and was the only analyte detected at a concentration in excess of its NAS Cecil Field inorganic background data set value and GCTL (Figure 11). This well was resampled and aluminum was detected at a concentration of 450 $\mu g/\ell$ in a filtered groundwater sample.

The GCTL for aluminum is based upon secondary water quality standards. However, the RBC for tap water is 37,000 $\mu g/\ell$. Therefore, the HQ of 1.0 based on the elevated concentration of aluminum detected in sample CFNAGS5S does not represent a risk to human health. A summary of results and risk comparisons for analytes detected in groundwater are tabulated in Appendix B. A complete analytical data set is included in Appendix C.

3.5.2.2 **Firehouse and Garage** Three VOCs, one SVOC, three pesticide compounds, and thirteen inorganic analytes were detected at two surface soil sample locations on the east side of the former firehouse garage. Six inorganic analytes were detected at concentrations in excess of NAS Cecil Field inorganic background data set values. However, no compounds or analytes were detected at concentrations in excess of SCTLs. Therefore, no PRE is required for surface soil in this area. A summary of results for detected analytes is tabulated in Appendix B. A complete analytical data set is included in Appendix C.

One shallow groundwater monitoring well was installed downgradient of the former firehouse garage.



LEGEND

98W00501 / 98D00501	Surface water and sediment sample location and designation
98S01401	Surface soil sample location and designation
CFNAGS5	Monitoring well location and designation
µg/l	Micrograms per liter
	Railroad
	Fence

K:\02523\02523-25\SAR\02523445.DWG, VC-VC 12/31/98 10:05:51

FIGURE 11
PUBLIC WORKS AREA
SUMMARY OF ANALYTES EXCEEDING SCREENING CRITERIA

SAMPLING AND ANALYSIS OUTLINE AND REPORT
YELLOW WATER WEAPONS AREA

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

Surface water and sediment samples collected downstream of the outfall pipe in Rowell Creek were analyzed for the full TAL suite of inorganic analytes and TCL suite of organic, and pesticide and PCB compounds. No analytes were detected in the sediment sample at concentrations in excess of the NAS Cecil Field inorganic background data set values. However, the concentration of aluminum detected in the surface water (1,100 $\mu g/\ell$) was slightly in excess of the NAS Cecil Field inorganic background data set value (1,042 $\mu g/\ell$).

3.5.2.3 **Boilerhouse and Rail Siding** Four surface soil samples were collected from the area surrounding the former boilerhouse and rail siding. In addition, one shallow groundwater sample was collected from a monitoring well installed downgradient of the former boilerhouse. All samples were analyzed for the full TAL suite of inorganic analytes and TCL suite of organic, and pesticide and PCB compounds.

Several PAH compounds were detected at concentrations in excess of SCTLs in three of the four surface soil samples collected from the area. Arsenic and barium were detected at concentrations in excess of SCTLs in the fourth sample (98S01801). An ELCR of 1×10^{-4} was calculated based upon a comparison of the detected concentrations of arsenic and PAHs in surface soil and their respective residential RBCs (Figure 12). A summary of results and risk comparisons for analytes detected in surface soil is tabulated in Appendix B. A complete analytical data set is included in Appendix C.

Seven inorganic analytes were detected in the groundwater sample collected downgradient of the former boilerhouse. No analytes were detected at concentrations in excess of NAS Cecil Field inorganic background data set values. Therefore, no PRE is required for a potential groundwater exposure scenario in this area. A summary of results for detected analytes is tabulated in Appendix B. A complete analytical data set is included in Appendix C.

3.5.2.4 **Area of Surface Dumping East of Former NAGS Brig** One shallow groundwater monitoring well was installed downgradient of an area of surface dumping identified on the east side of the former (see Figure 8) NAGS Brig. Six inorganic analytes and 1,1,1-trichloroethane (TCA) were detected in the groundwater sample collected downgradient of the former brig. No analytes were detected at concentrations in excess of NAS Cecil Field inorganic background data set values. The detected concentration of 1,1,1-TCA (11 $\mu g/\ell$) does not exceed the GCTL (200 $\mu g/\ell$). Therefore, no PRE is required for a potential groundwater exposure scenario in this area. A summary of results for detected analytes is tabulated in Appendix B. A complete analytical data set is included in Appendix C.

3.5.2.5 **Former Ammunition Belting Plant** One shallow groundwater monitoring well was installed downgradient of the septic system associated with a former ammunition belting plant (see Figure 8). Seven inorganic analytes were detected in the groundwater sample collected downgradient of the septic system. No analytes were detected at concentrations in excess of NAS Cecil Field inorganic background data set values. Therefore, no PRE is required for a potential groundwater exposure scenario in this area. A summary of results for detected analytes is tabulated in Appendix B. A complete analytical data set is included in Appendix C.

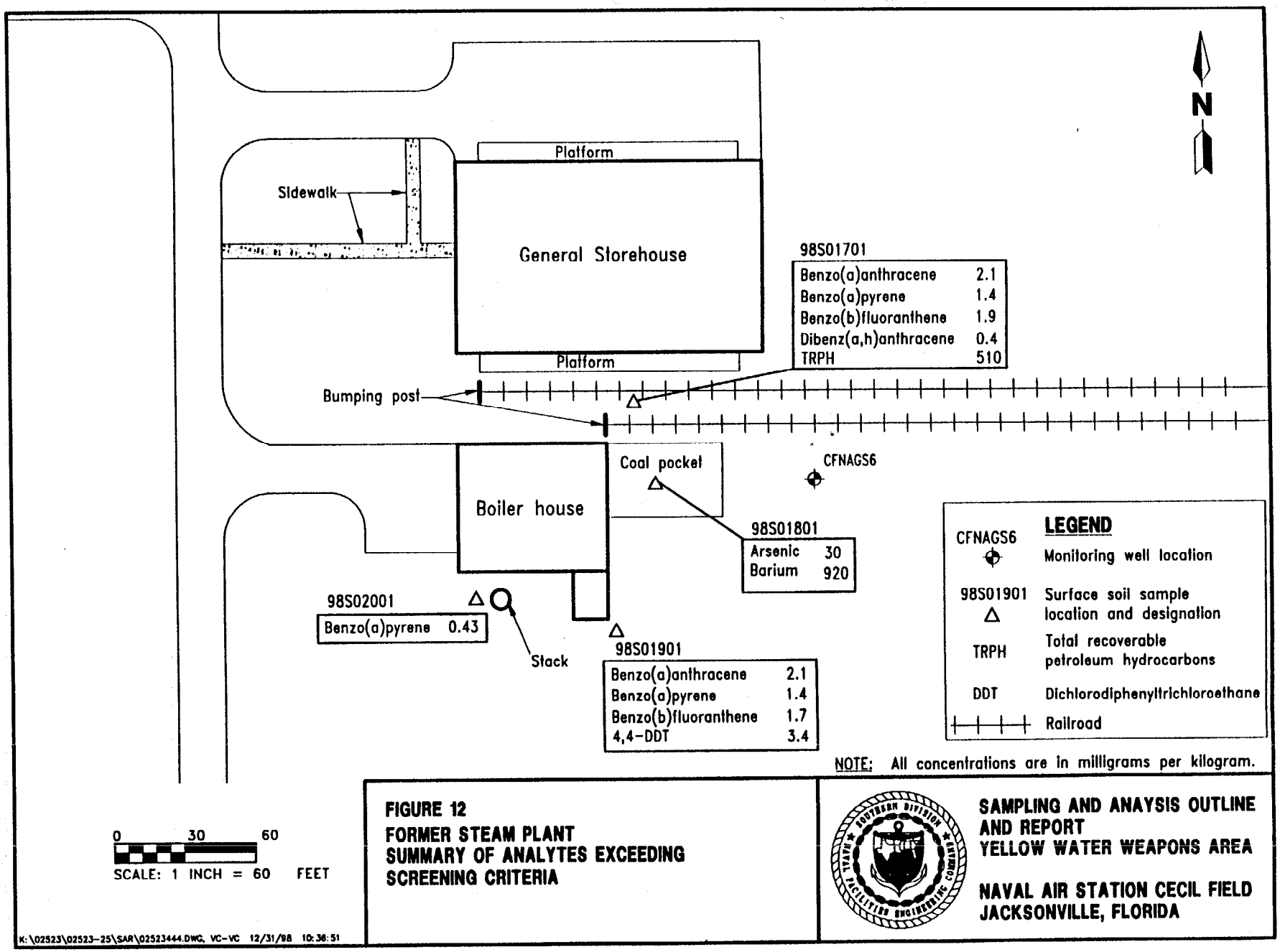


FIGURE 12
FORMER STEAM PLANT
SUMMARY OF ANALYTES EXCEEDING SCREENING CRITERIA

SAMPLING AND ANAYSIS OUTLINE AND REPORT
YELLOW WATER WEAPONS AREA

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

3.5.2.6 **Former Electrical Substation** Two surface soil samples were collected at the site of a former electrical substation (see Figure 8). Both samples were analyzed for TCL PCBs. No PCBs were detected in either sample. Therefore, no PRE is required for a potential surface soil exposure scenario in this area. A complete analytical data set is included in Appendix C.

3.5.3 NAGS Wastewater Treatment Plant Four surface soil samples were collected from abandoned sludge drying beds at the former NAGS WWTP and were analyzed for the full TAL suite of inorganic analytes. Fifteen inorganic analytes were detected in the samples. No analytes were detected at concentrations in excess of SCTLs.

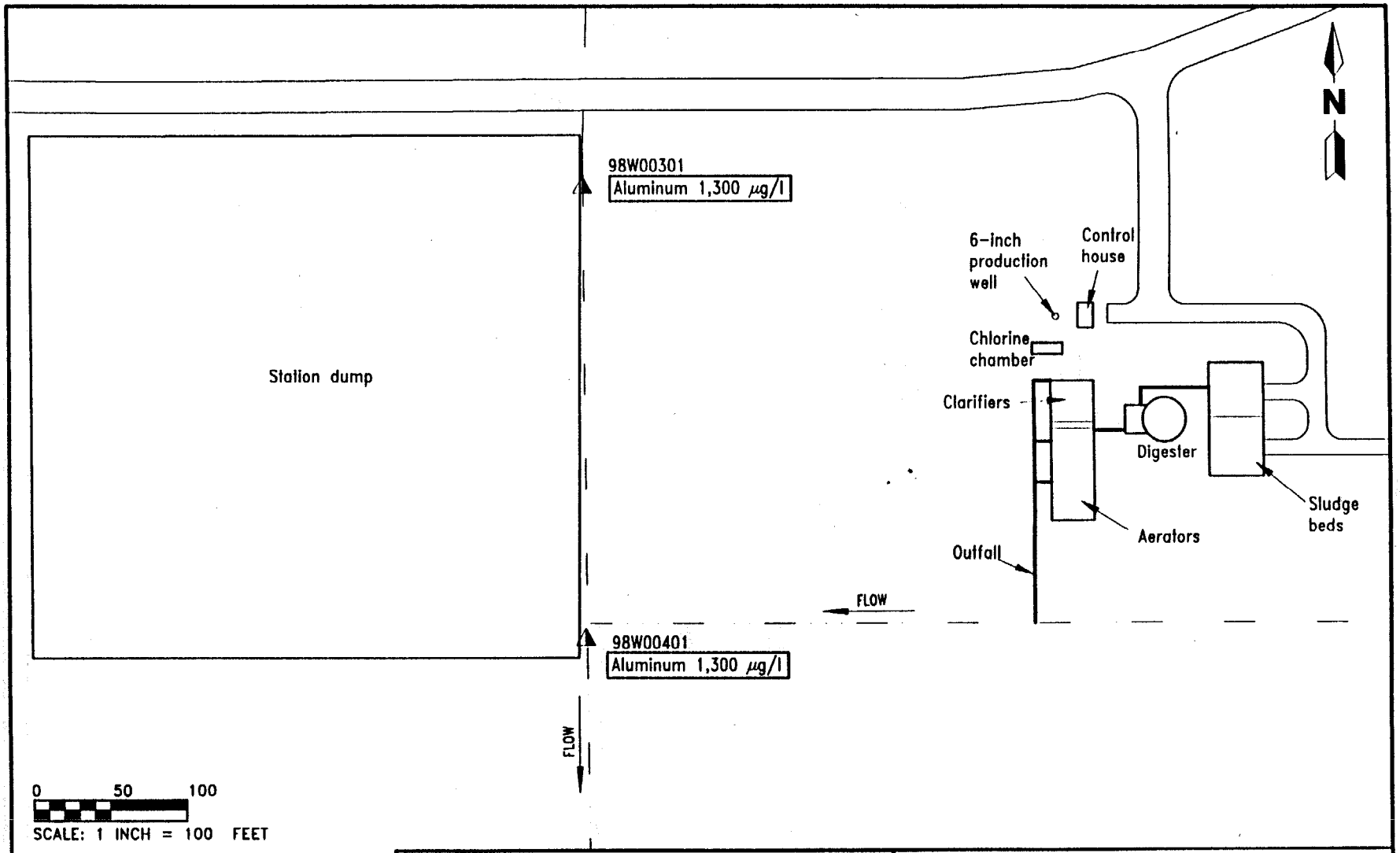
Two sediment samples were collected from the drainage canal south of the former NAGS wastewater treatment plant and analyzed for the full TAL suite of inorganic analytes and TCL suite of organic, and pesticide and PCB compounds. Ten inorganic analytes and m,p-xylene were detected in the sediment samples. The detected concentration of m,p-xylene does not exceed the ecological screening criteria for benthic receptors. No inorganic analytes were detected at concentrations in excess of NAS Cecil Field inorganic background data set values.

3.5.4 NAGS Station Dump Two surface water samples were collected from the drainage canal east of the former NAGS Station Dump. The samples were analyzed for the full TAL suite of inorganic analytes and TCL suite of organic, and pesticide and PCB compounds. Five inorganic analytes were detected in surface water samples. No other compounds or analytes were detected. The detected concentration of aluminum in each surface water sample (1,300 $\mu g/\ell$) exceeds the NAS Cecil Field inorganic background data set value (1,042 $\mu g/\ell$). No other analytes were detected at concentrations in excess of NAS Cecil Field inorganic background data set values (see Figure 13). Surface water was resampled at the same locations, at a later date, and did not exceed screening criteria for aluminum.

Two sediment samples were collected from the drainage canal east of the former NAGS Station Dump and analyzed for the full TAL suite of inorganic analytes and TCL suite of organic, and pesticide and PCB compounds. Carbon disulfide and nine inorganic analytes were detected in sediment samples. No other compounds or analytes were detected in the sediment samples. The detected concentration of carbon disulfide does not exceed the ecological screening criteria for benthic receptors. With the exception of magnesium, which is an essential nutrient, no inorganic analytes were detected at concentrations in excess of NAS Cecil Field inorganic background data set values.

4.0 CONCLUSIONS AND RECOMMENDATIONS

YWN. No outstanding environmental concerns were identified within the undeveloped or open areas within the YWN. Therefore, with the exception of IR Site 14 and the abandoned WWTP, which are evaluated separately, the YWN should be classified 1/White. The BCT has designated the abandoned WWTP in YWN PSC 40. Information pertinent to the subsequent evaluation of contamination in this area will be presented in a Technical Memorandum for PSC 40.



LEGEND

98W00401 — Surface water and sediment sample location and designation

µg/l — Micrograms per liter

K:\02523\02523-25\SAR\02523443.DWG, VC-VC 12/31/98 11:22:54

FIGURE 13
NAVAL AIR GUNNERY SCHOOL STATION DUMP SUMMARY OF ANALYTES EXCEEDING SCREENING CRITERIA

SAMPLING AND ANALYSIS OUTLINE AND REPORT
YELLOW WATER WEAPONS AREA

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

YWCX. No outstanding environmental concerns were identified within the undeveloped or open areas within the YWCX. Therefore, with the exception of the numbered facilities, which are evaluated separately, the YWCX should be classified 1/White. A radiological survey for closure is required prior to transfer of property or facilities within the YWCX.

YWWC. Two areas of environmental concern identified within YWWC have been evaluated. Analyses of soil samples collected in these two areas indicate there has been no environmental impact. No other environmental concerns were identified within the undeveloped or open areas within the YWWC. Therefore, with the exception of the numbered facilities, which are evaluated separately, the YWWC should be classified 1/White. A radiological survey for closure is required prior to transfer of property or facilities within the YWWC.

YWSE. Two areas of environmental concern were identified within the YWSE. Both areas of concern involved surface disposal areas. The area east of McCracken Road was a temporary situation related to logging activities in the area and could not be located for sampling. Tetrachloroethene (TCE) and toluene were detected in samples collected from the surface disposal area west of Privateer Road. The detected concentrations of TCE and toluene were less than the SCTLs. No other environmental concerns were identified within the undeveloped or open areas within the YWWC. Therefore, the area of surface dumping on the west side of Privateer Road should be classified 3/Light Green, to indicate that a release has occurred, but at concentrations which do not warrant additional sampling or evaluation. The remainder of the YWSE should be classified 1/White.

YWSW. Surface soil, groundwater, surface water, and sediment samples were collected at numerous areas of potential environmental concern within the YWSW. All of the areas were associated with facilities of the former NAGS.

Fixed and Mobile Target Ranges. Arsenic was detected at a concentration in excess of the SCTL in surface soil sample location 98S01001, which is associated with the mobile target range. Arsenic was not detected in any other target range soil sample. Elevated concentrations of lead in surface soil associated with target ranges do not exceed the SCTL. The BCT has designated the area surrounding sample 98501001 as PSC 41. Information pertinent to the subsequent evaluation of contamination in this area will be presented in a Technical Memorandum for PSC 41.

Three volatile organic compounds were detected at concentrations less than the GCTLs, in groundwater samples collected from septic leachfields associated with NAGS armories. The detected concentrations are unlikely to represent a hazard to human health or the environment.

Hazardous substances have been detected in surface soil in the vicinity of the former NAGS Target Ranges. However, with the exception of the area surrounding the arsenic detection, the remainder of the area does not represent a hazard to human health or the environment. Therefore, the target ranges and the area surrounding each septic leachfield should be reclassified to 3/Light Green, to indicate that a release has occurred, but at concentrations which do not warrant additional sampling or evaluation. A small area surrounding sample 98S01001 should remain grey until the arsenic has been resampled and delineated.

Former Public Works Property Yard. Aluminum was detected at a concentration in excess of the GCTL in unfiltered groundwater samples collected downgradient of the former Public Works Property Yard. A filtered sample collected from this site did not exceed screening criteria. The concentration of aluminum detected is less than the RBC for tap water, and is therefore unlikely to represent a hazard to human health or the environment. Therefore, the Public Works Property Yard should be reclassified to 3/Light Green, to indicate that contaminants were detected, but at concentrations that do not warrant additional sampling or evaluation. In addition, the improperly abandoned 10-inch-diameter production well southeast of the Property Yard should be properly abandoned to prevent contamination of the deep aquifer.

Former Firehouse and Garage. No compounds or analytes were detected at concentrations in excess of CTLs in surface soil, sediment, or groundwater samples collected in association with the former firehouse and garage. Aluminum was detected at an elevated concentration (1,100 $\mu g/\ell$) in a surface water sample collected downgradient of the site. Upgradient groundwater with a high aluminum content is likely to enter the stream and is a likely source for the elevated concentrations detected in surface water. The detected concentration does not pose a threat to human health or the environment. Therefore, the firehouse, garage and vicinity should be reclassified to 3/Light Green, to indicate that a release may have occurred, but at concentrations that do not warrant additional sampling or evaluation. In addition, the improperly abandoned 10-inch-diameter production well east of the firehouse should be properly abandoned to prevent contamination of the deep aquifer.

Former Boilerhouse. PAH, arsenic, and barium contaminants were detected in soil samples collected in the vicinity of the former boilerhouse. No contaminants were detected in a shallow groundwater sample collected downgradient of the boilerhouse. The elevated concentrations of contaminants in surface soil may be related to former coal storage, fallout from airborne emissions, or on-site release or disposal of ash. Additional samples are required to determine the extent of contaminated soil in this area. Therefore, the former boilerhouse and surrounding area should be reclassified to 5/Yellow, to indicate that assessment is still in progress. The BCT has designated the former Boilerhouse PSC 42. Information pertinent to the subsequent evaluation of contamination in this area will be presented in a Technical Memorandum for PSC 42.

Surface Disposal Area. 1,1,1-TCA was detected in a groundwater sample collected downgradient of a surface disposal area near the former NAGS Brig. No analytes were detected at concentrations in excess of GCTLs. Therefore, the disposal area and the area downgradient of the Brig should be should be reclassified to 3/Light Green, to indicate that a release may have occurred, but at concentrations that do not warrant additional sampling or evaluation. Miscellaneous surface debris in the area should be removed from site.

Former NAGS Ammunition Belting Plant. No compounds or analytes were detected at concentrations in excess of GCTLs in the groundwater sample collected downgradient of the septic leachfield associated with the former NAGS Ammunition Belting Plant. Therefore, the area surrounding the former belting plant should be classified 1/White.

Former Electrical Substation. No PCB compounds were detected in surface soil samples collected at the former electrical substation. Therefore, the former electrical substation and surrounding area should be classified as 1/White.

Former NAGS WWTP. Surface soil samples collected from sludge drying beds, and sediment samples collected from the drainage canal at the abandoned NAGS WWTP, did not contain contaminants at concentrations in excess of screening criteria. Xylene was detected in one sediment sample at a concentration below benthic receptor screening criteria. Therefore, the WWTP and drainage canal should be reclassified to 3/Light Green, to indicate that a release may have occurred, but at concentrations that do not warrant additional sampling or evaluation. An improperly abandoned 6-inch-diameter production well north of the WWTP should be properly abandoned to prevent contamination of the deep aquifer.

Former NAGS Station Dump. The concentration of aluminum detected in surface water samples collected from the drainage ditch adjacent to the east of the area identified as the former NAGS Station Dump was slightly in excess of the NAS Cecil Field inorganic background data set value. Surface water was subsequently resampled and did not exceed screening criteria for aluminum. Aluminum is naturally occurring in shallow groundwater at Cecil Field. The detected concentration of aluminum may be attributable to influent groundwater. Total recoverable hydrocarbon (TRPH) was 1.4 milligrams per liter.

In addition, magnesium was detected in one sediment sample at a concentration in excess of the NAS Cecil Field inorganic background data set value. Magnesium is an essential nutrient and does not represent a hazard to human health or the environment. The detected concentration of TRPH in sediment at this location was 8 mg/kg. The area of the former Station Dump and the drainage canal should be should be reclassified to 3/Light Green, to indicate that a release may have occurred, but at concentrations that do not warrant additional sampling or evaluation.

5.0 REFERENCES

ABB Environmental Services, Inc. (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, (November).

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

ABB-ES. 1995a. *Sampling and Analysis Outline, Site A-1, Base Realignment and Closure, Zone A, Yellow Water Weapons Area, Group I, Naval Air Station Cecil Field, Jacksonville, Florida.* Prepared for SOUTHNAVFACENGCOM, North Charleston, South Carolina.

ABB-ES. 1995b. *Sampling and Analysis Outline, Site A-2, Base Realignment and Closure, Zone A, Yellow Water Weapons Area, Group I, Naval Air Station Cecil Field, Jacksonville, Florida*. Prepared for SOUTHNAVFACENGCOM, North Charleston, South Carolina.

ABB-ES. 1995c. *Sampling and Analysis Outline, Site A-3, Building 637, Base Realignment and Closure, Zone A, Yellow Water Weapons Area, Group I, Naval Air Station Cecil Field, Jacksonville, Florida*. Prepared for SOUTHNAVFAC-ENGCOM, North Charleston, South Carolina.

ABB-ES. 1995d. *Sampling and Analysis Outline, Site A-4, Facility 682, Base Realignment and Closure, Zone A, Yellow Water Weapons Area, Group I, Naval Air Station Cecil Field, Jacksonville, Florida*. Prepared for SOUTHNAVFAC-ENGCOM, North Charleston, South Carolina.

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

ABB-ES. 1996a. *UXO Survey Report, Naval Air Station Cecil Field, Jacksonville, Florida*. Prepared for SOUTHNAVFACENGCOM, North Charleston, South Carolina (August).

ABB-ES. 1996b. *Sampling and Analysis Report, Site A-5 Former Small-Arms Range, Base Realignment and Closure, Zone A, Yellow Water Weapons Area, Group I, Naval Air Station Cecil Field, Jacksonville, Florida*. Prepared for SOUTHNAVFACENGCOM, North Charleston, South Carolina (June).

Florida Administrative Code. 1998. *Brownfields Cleanup Criteria Rule*: Chapter 62-785. Tallahassee, Florida.

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

USEPA. 1995. *Supplemental Guidance to RAGS*. Region IV bulletins. USEPA Region IV Waste Management Division. Atlanta, Georgia.

USEPA. 1998. *Risk-Based Concentration Table*. Region III. Philadelphia, Pennsylvania.

APPENDIX A

SOIL BORING LOGS

Project: NAS Cecil Field BRAC		**Well ID:** CEF-NAGS-1S	**Boring No.:** CEF-NAGS-1S
Client: SOUTHDIVNAVFACENGCOM			**Job No.:** 02523-28
Contractor: Custom Drilling		**Date started:** 12-1-97	**Completd:** 12-1-97
Method: Hollow Stem Auger	**Casing Size:** 2"	**Screen Int.:** 2-12	**Protection level:** .010 in.
Ground Elev.:	**Type of OVM.:** PID	**Total depth:** 12Ft.	**Dpth to ∇** 3.5 Ft.
Logged by: R. Holloway	**Well Development Date:**		**Site:** Naval Air Gunner School

Depth Ft.	Sample ID (Depth) (Type)	Split Spoon	Recovery	Headspace (ppm)	Soil/Rock Description and comments	Lithologic symbol	Soil class.	Blows/6-in.
				0	SILTY SAND: quartz, light to dark gray, fine- to very fine-grained, sub-rounded to sub-angular		SM	posthole
				0				posthole
5				0.3				3,2,2,4
				0	SANDY CLAY: yellowish brown, moist, low plasticity, some iron oxide staining		CL	7,8,9,11
				0.9	SILTY SAND: quartz, light to dark gray, fine- to very fine-grained, sub-rounded to sub-angular		SM	5,5,6,6
10				0				4,5,5,6
					TD = 12' bls			
15								

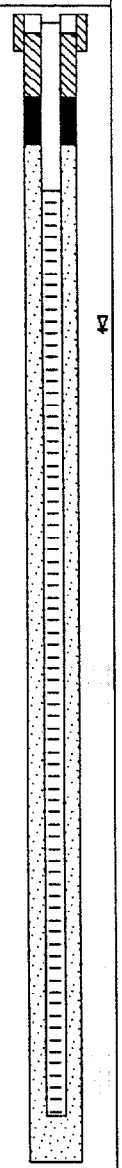


 ABB ENVIRONMENTAL SERVICES, INC.

Project: NAS Cecil Field BRAC		**Well ID:** CEF-NAGS-2S	**Boring No.:** CEF-NAGS-2S
Client: SOUTHDIVNAVFACENGCOM			**Job No.:** 02523-28
Contractor: Custom Drilling		**Date started:** 12-2-97	**Completd:** 12-2-97
Method: Hollow Stem Auger	**Casing Size:** 2"	**Screen Int.:** 2-12	**Protection level:** .010 in.
Ground Elev.:	**Type of OVM.:** PID	**Total depth:** 12Ft.	**Dpth to ∇** 3 Ft.
Logged by: R. Holloway	**Well Development Date:**		**Site:** Naval Air Gunner School

Depth Ft.	Sample ID (Depth) (Type)	Split Spoon	Recovery	Headspace (ppm)	Soil/Rock Description and comments	Lithologic symbol	Soil class.	Blows/6-in.
				0	SILTY SAND: quartz, light to dark gray, fine- to very fine-grained, sub-rounded to sub-angular, wet at 3.0' bls		SM	posthole
				0				posthole
5				0				4,3,3,2
				0				4,5,7,7
				0				3,6,4,2
10				0				1,4,1,2
					TD = 12' bls			
15								

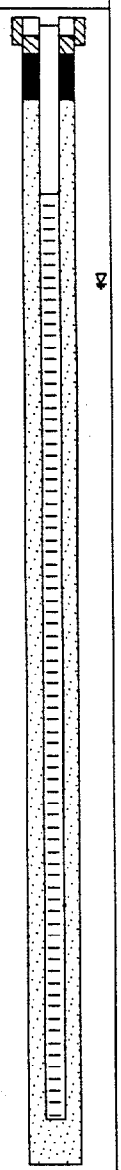


 ABB ENVIRONMENTAL SERVICES, INC.

Project: NAS Cecil Field BRAC		**Well ID:** CEF-NAGS-5S	**Boring No.:** CEF-NAGS-5S
Client: SOUTHDIVNAVFACENGCOM			**Job No.:** 02523-28
Contractor: Custom Drilling		**Date started:** 12-1-97	**Completd:** 12-1-97
Method: Hollow Stem Auger	**Casing Size:** 2"	**Screen Int.:** 6-16	**Protection level:** .010 in.
Ground Elev.:	**Type of OVM.:** PID	**Total depth:** 16Ft.	**Dpth to ∇** 8.5 Ft.
Logged by: R. Holloway	**Well Development Date:**		**Site:** Naval Air Gunner School

Depth Ft.	Sample ID (Depth) (Type)	Split Spoon	Recovery	Headspace (ppm)	Soil/Rock Description and comments	Lithologic symbol	Soil class.	Blows/6-in.
				0	SILTY SAND: quartz, light to dark gray, fine- to very fine-grained, sub-rounded to sub-angular		SM	posthole
				0				posthole
5				0				6,13,13,17
				0	CLAYEY SAND: quartz, dark gray, very fine-grained, sub-rounded to sub- angular, moist at 7.5' bls		SC	11,9,7,4
				0	SILTY SAND: as above (0 - 8' bls), wet at 8.5' bls		SM	2,3,2,3
10				0				5,3,6,4
				0				4,3,2,4
15				0				4,7,11,6
					TD = 16' bls			
20								

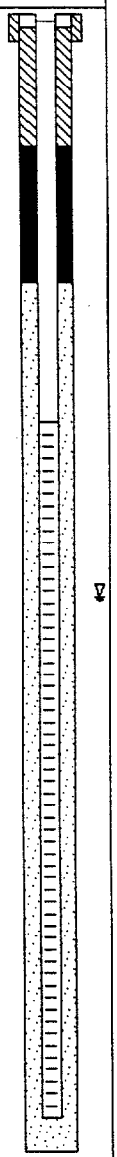


 ABB ENVIRONMENTAL SERVICES, INC.

Project: NAS Cecil Field BRAC		**Well ID:** CEF-NAGS-6S	**Boring No.:** CEF-NAGS-6S
Client: SOUTHDIVNAVFACENGCOM			**Job No.:** 02523-28
Contractor: Custom Drilling		**Date started:** 12-1-97	**Completd:** 12-1-97
Method: Hollow Stem Auger	**Casing Size:** 2"	**Screen Int.:** 6-16	**Protection level:** .010 in.
Ground Elev.:	**Type of OVM.:** PID	**Total depth:** 16Ft.	**Dpth to ∇** 8 Ft.
Logged by: R. Holloway	**Well Development Date:**		**Site:** Naval Air Gunner School

Depth Ft.	Sample ID (Depth) (Type)	Split Spoon	Recovery	Headspace (ppm)	Soil/Rock Description and comments	Lithologic symbol	Soil class.	Blows/6-in.
				0	SILTY SAND: quartz, light to dark gray, fine- to very fine-grained, sub-rounded to sub-angular, saturated at 8.0' bls		SM	posthole
				0				posthole
5				0				4,6,8,9
				0				10,8,11,12
				0				10,20,20,12
10				0				10,11,11,14
				0				9,8,13,16
15				0				10,10,11,15
					TD = 16' bls			
20								

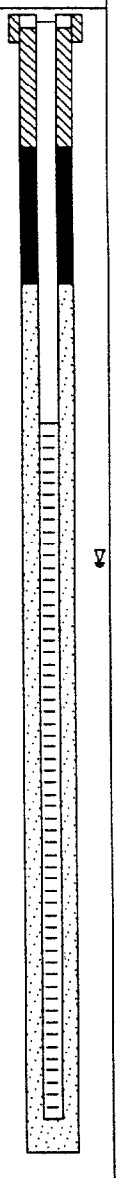


 ABB ENVIRONMENTAL SERVICES, INC.

Project: NAS Cecil Field BRAC		**Well ID:** CEF-NAGS-7S	**Boring No.:** CEF-NAGS-7S
ent: SOUTHDIVNAVFACENGCOM			**Job No.:** 02523-28
Contractor: Custom Drilling		**Date started:** 12-1-97	**Compltd:** 12-1-97
Method: Hollow Stem Auger	**Casing Size:** 2"	**Screen Int.:** 6-16	**Protection level:** .010 in.
Ground Elev.:	**Type of OVM.:** PID	**Total depth:** 16Ft.	**Dpth to ∇** 8 Ft.
Logged by: R. Holloway	**Well Development Date:**		**Site:** Naval Air Gunner School

Depth Ft.	Sample ID (Depth) (Type)	Split Spoon	Recovery	Headspace (ppm)	Soil/Rock Description and comments	Lithologic symbol	Soil class.	Blows/6-in.
				0	SILTY SAND: quartz, dark gray, fine- to very fine-grained, sub-rounded to sub-angular		SM	posthole
				0				posthole
5				1.4	SANDY CLAY: yellowish brown, dry, low plasticity		CL	9,11,11,14
				0				12,13,13,17
				1.3	SILTY SAND: quartz, light gray to white, fine- to very fine-grained, sub-rounded to sub-angular		SM	7,4,3,6
10				0				3,5,6,5
				0				7,7,6,4
15				0				7,8,5,5
					TD = 16' bls			
20								

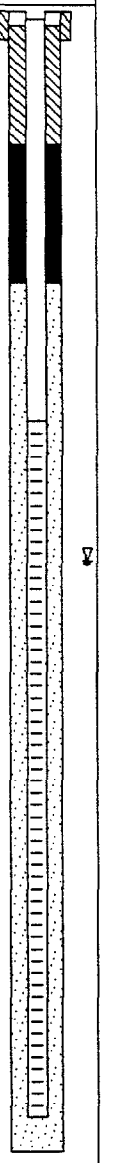


 ABB ENVIRONMENTAL SERVICES, INC.

Project: NAS Cecil Field BRAC		**Well ID:** CEF-NAGS-8S	**Boring No.:** CEF-NAGS-8S
Client: SOUTHDIVNAVFACENGCOM			**Job No.:** 02523-28
Contractor: Custom Drilling		**Date started:** 12-1-97	**Compltd:** 12-1-97
Method: Hollow Stem Auger	**Casing Size:** 2"	**Screen Int.:** 6-16	**Protection level:** .010 in.
Ground Elev.:	**Type of OVM.:** PID	**Total depth:** 16Ft.	**Dpth to ∇** 8 Ft.
Logged by: R. Holloway	**Well Development Date:**		**Site:** Naval Air Gunner School

Depth Ft.	Sample ID (Depth) (Type)	Split Spoon	Recovery	Headspace (ppm)	Soil/Rock Description and comments	Lithologic symbol	Soil class.	Blows/6-in.
				0	SILTY SAND: quartz, light to dark gray, fine- to very fine-grained, sub-rounded to sub-angular		SM	posthole
				0				posthole
5				0	SANDY CLAY: yellowish brown, moist, low plasticity, some iron oxide staining		CL	3,4,6,5
				1.2	SILTY SAND: light gray, fine- to very fine-grained, sub-rounded to sub-angular, saturated at 8.0' bls		SM	8,8,12,10
				1.4				4,6,7,8
10				0				2,3,7,5
				0				8,7,6,5
15				0				7,9,9,8
					TD = 16' bls			
20								

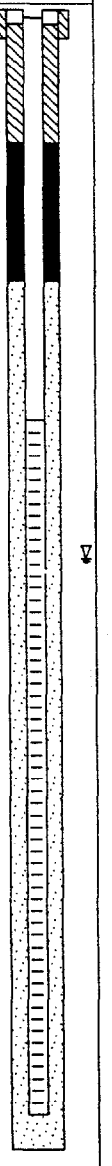


 ABB ENVIRONMENTAL SERVICES, INC.

APPENDIX B

PRELIMINARY RISK EVALUATION TABLES

BRAC Preliminary Risk Evaluation Table for Analytes Detected in Surface Soil
Yellow Water Southeast, Naval Air Station Cecil Field

Analyte[1]	Samples 98S02101	Samples 98S02201	BKGRD	SCTL	RBC(R)	Calculated Risk Values[2] ELCR	Calculated Risk Values[2] HQ
Tetrachloroethene	0.015	0.021		10	12 c		
Toluene	0.0026	0.0014		300	16000 n		
Aluminum	1400	2200	4432.5	72000	78000 n		
*Calcium	3800	4000	9.44				
Chromium	1	2.1	7.75	290	390 n		
Iron	280	550	1486	23000	23000 n		
Lead	1.4	1.3	196.9	500			
Magnesium	54	65	328.65				
Manganese	1	1	21.95	1600	1600 n		
Vanadium	1.8	3.2	6.3	15	550 n		

Notes:

[1] All detected analytes are reported. Concentrations and screening values are expressed in mg/kg

[2] ELCR and HI are only calculated for analytes detected at concentrations in excess of BKGRD and SCTL

*= *Background screening criteria or SCTLs have been exeeded*

BKGRD=NAS Cecil Field Inorganic Background Data Set

SCTL = Soil Cleanup Target Level, Chapter 62-785, Florida Administrative Code

RBC(R)= Risk-based Concentration (Residential), USEPA Region III, April 1998

c=carcinogenic risk

n=non-carcinogenic risk

ELCR = calculated excess lifetime cancer risk, based on RBC(R) values. (ELCR = detected concentration/RBC(R) * 1 E-06)

HQ = calculated Hazard Quotient for non-carcinogenic analytes (HQ=detected concentration/RBC(R))

BRAC Preliminary Risk Evaluation Table for Analytes Detected in Subsurface Soil
Flare Cartridge Burn Pit, Yellow Water Weapons Compound
Naval Air Station Cecil Field

	Samples						Calculated Risk Values[2]	
Analyte[1]	A3B00101	A3B00201	A3B00201D	BKGRD	SCTL	RBC(R)	ELCR	HI
Aluminum	670	610	850	4432.5	72000	78000 n		
*Calcium	100	1900	1900	9.44				
*Copper	15	19	31	5.965	390	3100 n		
Iron	540	480	490	1486	23000	23000 n		
Lead	11	17	20	196.9	500			
Manganese			1	21.95	1600	1600 n		
*Sodium			750	343				
Vanadium	2	2	1	6.3	15	550 n		
Zinc	25	12	25	36.5	23000	23000 n		

Notes:

[1] All detected analytes are reported. Concentrations and screening values are expressed in mg/kg

[2] ELCR and HI are only calculated for analytes detected at concentrations in excess of BKGRD and SCTL

*= Background screening criteria or SCTLs have been exeeded

BKGRD=NAS Cecil Field Inorganic Background Data Set

SCTL = Soil Cleanup Target Level, Chapter 62-785, Florida Administrative Code

RBC(R)= Risk-based Concentration (Residential), USEPA Region III, April 1998

c=carcinogenic risk

n=non-carcinogenic risk

ELCR = calculated excess lifetime cancer risk, based on RBC(R) values. (ELCR = detected concentration/RBC(R) * 1 E-06)

HI = calculated Hazard Index for non-carcinogenic analytes (HI=detected concentration/RBC(R))

BRAC Preliminary Risk Evaluation Table for Analytes Detected in Surface Soil
Area of Stressed Vegetation, Yellow Water Weapons Compound
Naval Air Station Cecil Field

	Samples							Calculated Risk Values[2]	
Analyte[1]	A4S00101	A4S00201	A4S00301	A4S00401	BKGRD	SCTL	RBC(R)	ELCR	HQ
Aluminum	950	380	1800	1200	4432.5	72000	78000 n		
*Calcium	35	31	52	38	9.44				
Chromium			1		7.75	290	390 n		
*Copper		8	71	31	5.965	390	3100 n		
Iron	160	60	320	490	1486	23000	23000 n		
Lead		9	6	7	196.9	500			
Vanadium	1		2	2	6.3	15	550 n		
Zinc	7	11	20	12	36.5	23000	23000 n		

Notes:

[1] All detected analytes are reported. Concentrations and screening values are expressed in mg/kg

[2]ELCR and HI are only calculated for analytes detected at concentrations in excess of BKGRD and SCTL

** = Background screening criteria or SCTLs have been exeeded*

BKGRD = NAS Cecil Field Inorganic Background Data Set

SCTL = Soil Cleanup Target Level, Chapter 62-785, Florida Administrative Code

RBC(R) = Risk-based Concentration (Residential), USEPA Region III, April 1998

c = carcinogenic risk

n = non-carcinogenic risk

ELCR = calculated excess lifetime cancer risk, based on RBC(R) values. (ELCR = detected concentration/RBC(R) * 1 E-06)

HQ = calculated Hazard Quotient for non-carcinogenic analytes (HQ = detected concentration/RBC(R))

BRAC Preliminary Risk Evaluation Table for Analytes Detected in Surface Soil
Former Naval Air Gunner's School Fixed and Mobile Target Ranges
Yellow Water Southwest, Naval Air Station Cecil Field

	Samples											Calculated Risk Values[2]	
Analyte[1]	98S00501	98S00601	98S00701	98S00801	98S00901	98S01001	98S01101	98S01201	BKGRD	SCTL	RBC(R)	ELCR	HQ
*Aluminum	2800	3600	4500	560	1400	1300	770	7000	4432.5	72000	78000 n		
*Arsenic						2.8			2.0	0.8	0.43 c	6.5E-6	
*Calcium	120	5600	65	33	28	31	480	54	9.4				
Chromium	2.9	5.2	4.8			1.9		6	7.8	290	390 n		
*Copper	38		140	13	70	40	22		6.0	390	3100 n		
Iron	440	730	1100	140	110	270	1300	420	1486.0	23000	23000 n		
*Lead	13	5.5	450	1.5	140	20	1.8	7.9	196.9	500			
Magnesium	46	130	70				31	75	328.7				
Manganese	2	7.4	1.9				4.1		22.0	1600	1600 n		
Mercury	0.015	0.01							0.2	3.7	23 n		
Potassium	34							73	101.8				
*Thallium				2.1		19			2.8				
*Vanadium	2.4	4	6.2		1.2	1.7	1.9	7.5	6.3	15	550 n		
Zinc	20		12	14		12	17		36.5	23000	23000 n		
											Sum=	6.5E-6	

Notes:

[1] All detected analytes are reported. Concentrations and screening values are expressed in mg/kg

[2] ELCR and HI are only calculated for analytes detected at concentrations in excess of BKGRD and SCTL

*= Background screening criteria or SCTLs have been exeeded

BKGRD=NAS Cecil Field Inorganic Background Data Set

SCTL = Soil Cleanup Target Level, Chapter 62-785, Florida Administrative Code

RBC(R)= Risk-based Concentration (Residential), USEPA Region III, April 1998

c=carcinogenic risk

n=non-carcinogenic risk

ELCR = calculated excess lifetime cancer risk, based on RBC(R) values. (ELCR = detected concentration/RBC(R) * 1 E-06)

HQ= calculated Hazard Quotient for non-carcinogenic analytes (HQ=detected concentration/RBC(R))

BRAC Preliminary Risk Evaluation Table for Analytes Detected in Surface Soil Former Naval Air Gunner's School Firehouse and Garage,Yellow Water Southwest, Naval Air Station Cecil Field

Analyte[1]	Samples 98S01501	Samples 98S01601	BKGRD	SCTL	RBC(R)		Calculated Risk Values[2] ELCR	Calculated Risk Values[2] HQ
Carbon disulfide	0.011	0.028		200	7800	n		
Tetrachloroethene	0.02			10	12	c		
Fluoranthene		2.4		2800	3100	n		
Methoxychlor	0.031	0.067		380	390	n		
alpha-Chlordane	0.0026	0.011		3	0.49	c		
gamma-Chlordane	0.0038	0.0075		3	1.8	c		
Aluminum	1300	1100	4432.5	72000	78000	n		
Antimony	6.4		9.44	26	31	n		
*Cadmium	1.8		1.715	75	39	n		
*Calcium	61000	16000	9.44					
Chromium	4.8	*1.6	7.75	290	390	n		
*Copper	21	9.2	5.965	390	3100	n		
*Iron	3000	280	1486	23000	23000	n		
Lead	140	10	196.9	500				
*Magnesium	410	140	328.65					
Manganese	20	5.3	21.95	1600	1600	n		
Mercury	0.018	0.013	0.16	3.7	23	n		
Vanadium	3	1.7	6.3	15	550	n		
*Zinc	50	31	36.5	23000	23000	n		
TPH C8-C40	90			350				

Notes:

[1] All detected analytes are reported. Concentrations and screening values are expressed in mg/kg

[2] ELCR and HI are only calculated for analytes detected at concentrations in excess of BKGRD and SCTL

*= Background screening criteria or SCTLs have been exeeded

BKGRD=NAS Cecil Field Inorganic Background Data Set

SCTL = Soil Cleanup Target Level, Chapter 62-785, Florida Administrative Code

RBC(R)= Risk-based Concentration (Residential), USEPA Region III, April 1998

c=carcinogenic risk

n=non-carcinogenic risk

ELCR = calculated excess lifetime cancer risk, based on RBC(R) values. (ELCR = detected concentration/RBC(R) * 1 E-06)

HQ = calculated Hazard Quotient for non-carcinogenic analytes (HQ =detected concentration/RBC(R))

Preliminary Ecological Risk Evaluation Table for Analytes Detected in Sediment Samples
Former Naval Air Gunner's School, Firehouse and Garage
Yellow Water Southwest, Naval Air Station Cecil Field

	Sample		Screening Criteria							
Analyte	98D00501	BKGRD	Region IV[1]	ER-L[2]	ER-M[3]	LEL[4]	SQG[5]	TEL[6]	PEL[7]	PEL[7]
Aluminum	540	4432.5								
*Calcium	50	9.44								
Carbon disulfide	7.7									
Iron	69	1486				20000				
Lead	2.6	196.9	30.2	46.7	218	31		30.2	112	
TPH C8-C40	8									
Vanadium	1.8	6.3								

Notes:
All Analytes are reported in mg/kg.
* Asterisk indicates screening criteria has been exceeded.

Screening Criteria (refer to the Project Operations Plan, ABB-ES, 1995, Appendix A for details, acronyms and definitions)

[1] Draft USEPA Region IV Waste Management Division Sediment Screening Values. (USEPA, 11/95)

[2] ER-L NOAA Sediment Guidelines, protective of 90% of the test population of benthic organisms

[3] ER-M NOAA Sediment Guidelines, protective of 50% of the test population of benthic organisms

[4] LEL OME Provincial Sediment Quality Guidelines (Persaud et al., 1992)

[5] SQG USEPA Sediment Quality Guidelines (USEPA, 1988, 1993)

[6] TEL Sediment quality Assessment Guidelines, MacDonald Environmental Sciences, Ltd., 1994.

[4] PEL Sediment quality Assessment Guidelines, MacDonald Environmental Sciences, Ltd., 1994.

Preliminary Ecological Risk Evaluation Table for Analytes Detected in Surface Water
Former Naval Air Gunner's School, Firehouse and Garage
Yellow Water Southwest, Naval Air Station Cecil Field

	Sample	Screening Criteria				
Analyte	98W00501	BKGRD	Region IV[1]	Ambient[2]	Florida[3]	AQUIRE[4]
*Aluminum	1100	1042	87	87		50
Calcium	4300	43000				
*Iron	2200	3027	1000	1000	1000	3700
Magnesium	1100	5575				
Manganese	15	49.25				280
Potassium	1400	2057				
Sodium	5000	12175				
TPH C8-C40	0.4					

Notes:
All values are reported in ug/l
BKGRD=NAS Cecil Field Inorganic Background Data Set
* Asterisk indicates screening criteria has been exceeded.
Screening Criteria
(refer to the Project Operations Plan, ABB-ES, 1995, Appendix A for details, acronyms and definitions)
[1] USEPA Region IV Waste Management Division Chronic Freshwater Surface Water Screening Values for Hazardous Waste Sites (November, 1995)
[2] Federal Ambient Water Criteria (USEPA 1988, 1991)
[3] Florida Administrative Code Surface water Quality Standards, Chapter 62-302 (1995)
[4] Reported toxicity values from the USEPA Aquire database

BRAC Preliminary Risk Evaluation Table for Analytes Detected in Surface Soil
Former Naval Air Gunner's School Steam Plant
Yellow Water Southwest, Naval Air Station Cecil Field

Analyte[1]	Samples 98S01701	98S01801	98S01901	98S02001	BKGRD	SCTL	RBC(R)	Calculated Risk Values[2] ELCR	HQ
Carbon disulfide	0.02	0.0074	0.0066			200	7800 n		
Acenaphthene	0.2		0.29			2200	4700 n		
Anthracene			0.51			19000	23000 n		
Anthracene	0.41					19000	23000 n		
*Benzo (a) anthracene	2.1		2.1	0.71		1.4	0.88 c	2.4E-6	
*Benzo (a) pyrene	1.4		1.3	0.43		0.1	0.088 c	1.6E-5	
*Benzo (b) fluoranthene	1.9		1.7	0.58		1.4	0.88 c	2.2E-6	
Benzo (g,h,i) perylene	1.3		1.1	0.44		2300			
Benzo (k) fluoranthene	1.2		1.3	0.53		15	8.8 c		
Carbazole	0.44		0.54			53	32 c		
Carbazole				0.23		53	32 c		
Chrysene	1.7		1.6	0.64		140	88 c		
*Dibenzo (a,h) anthracene	0.4					0.1	0.088 c	4.6E-6	
Fluoranthene	4.7		4.5	1.8		2800	3100 n		
Fluorene			0.25			2100	3100 n		
*Indeno (1,2,3-cd) pyrene	1.1		0.99	0.37		1.5	0.88 c		
Phenanthrene	2.3		2.8	1.1		1900			
Pyrene	3.9		3.9	1.4		2200	2300 n		
*4,4-DDD	0.0074		3			4.5	2.7 c		
4,4-DDE	0.011		1.9			3.2	1.9 c		
*4,4-DDT	0.016		3.4			3.2	1.9 c	1.8E-6	
Aldrin			0.0053			0.06	0.038 c		
Methoxychlor	0.052		0.15	0.016		380	390 n		
alpha-Chlordane	0.0074			0.0036		3	0.49 c		
gamma-Chlordane	0.0074			0.0036		3	1.8 c		
Aluminum	400	210	2200	1400	4432.5	72000	78000 n		
Antimony			4		9.44	26	31 n		
*Arsenic	1.9	30	0.8	0.5	2.0375	0.8	0.43 c	7.0E-5	
*Barium		920	76	25	14.4	105	5500 n		0.2
*Calcium	330	550	2600	1600	9.44				
*Chromium		3.5	9.1	1.6	7.75	290	390 n		
*Copper	6.9	9.7	18	22	5.965	390	3100 n		
*Iron	1400	4500	1200	720	1486	23000	23000 n		
*Lead	10	15	260	37	196.9	500			
*Magnesium	31	38	350	150	328.65				
*Manganese	7.1	2.4	39	22	21.95	1600	1600 n		
Mercury			0.02	0.15	0.16	3.7	23 n		
Potassium		37	37	35	101.8				
Sodium		33			343				
Vanadium			2.8	1.5	6.3	15	550 n		
*Zinc	29	19	430	91	36.5	23000	23000 n		
*TPH C8-C40	510		31	9		350			
							Sum=	1E-4	0.2

Notes:

[1] All detected analytes are reported. Concentrations and screening values are expressed in mg/kg

[2] ELCR and HI are only calculated for analytes detected at concentrations in excess of BKGRD and SCTL

* = Background screening criteria or SCTLs have been exceeded

BKGRD = NAS Cecil Field Inorganic Background Data Set

SCTL = Soil Cleanup Target Level, Chapter 62-785, Florida Administrative Code

RBC(R) = Risk-based Concentration (Residential), USEPA Region III, April 1998

c = carcinogenic risk

n = non-carcinogenic risk

ELCR = calculated excess lifetime cancer risk, based on RBC(R) values. (ELCR = detected concentration/RBC(R) * 1 E-06)

HQ = calculated Hazard Quotient for non-carcinogenic analytes (HQ = detected concentration/RBC(R))

BRAC Preliminary Risk Evaluation Table for Analytes Detected in Surface Soil
Former Naval Air Gunner's School, Wastewater Treatment Plant
Yellow Water Southwest, Naval Air Station Cecil Field

	Samples							Calculated Risk Values[2]	
Analyte[1]	98S00101	98S00201	98S00301	98S00401	BKGRD	SCTL	RBC(R)	ELCR	HQ
Aluminum	1000	830	950	820	4432.5	72000	78000 n		
*Arsenic			1		2.0375	0.8	0.43 c		
Cadmium			1		1.715	75	39 n		
*Calcium	250	210	540	550	9.44				
Chromium	5	5	5	3	7.75	290	390 n		
*Copper	24	17	12	10	5.965	390	3100 n		
*Iron	2600	2000	3300	1900	1486	23000	23000 n		
Lead	55	40	32	32	196.9	500			
Magnesium	77	72	110	100	328.65				
*Manganese	8	7	32	13	21.95	1600	1600 n		
*Mercury	3	2	3	1	0.16	3.7	23 n		
Potassium	35	31	32	48	101.8				
*Silver	7	5	3	3	2.13	390	390 n		
Vanadium	2	2	3	3	6.3	15	550 n		
*Zinc	16	20	79	18	36.5	23000	23000 n		

Notes:

[1] All detected analytes are reported. Concentrations and screening values are expressed in mg/kg

[2] ELCR and HI are only calculated for analytes detected at concentrations in excess of BKGRD and SCTL

* = Background screening criteria or SCTLs have been exeeded

BKGRD = NAS Cecil Field Inorganic Background Data Set

SCTL = Soil Cleanup Target Level, Chapter 62-785, Florida Administrative Code

RBC(R) = Risk-based Concentration (Residential), USEPA Region III, April 1998

c = carcinogenic risk

n = non-carcinogenic risk

ELCR = calculated excess lifetime cancer risk, based on RBC(R) values. (ELCR = detected concentration/RBC(R) * 1 E-06)

HQ = calculated Hazard Quotient for non-carcinogenic analytes (HQ = detected concentration/RBC(R))

Preliminary Ecological Risk Evaluation Table for Analytes Detected in Sediment Samples
Former Naval Air Gunner's School, Waste Water Treatment Plant
Yellow Water Southwest, Naval Air Station Cecil Field

	Samples			Screening Criteria						
Analyte	98D00101	98D00201	BKGRD	Region IV[1]	ER-L[2]	ER-M[3]	LEL[4]	SQG[5]	TEL[6]	PEL[7]
m,p-Xylene		3								
*Aluminum	5200	7600	4432.5							
*Calcium	44	130	9.44							
Chromium	4	5	7.75	52.3	81	370	26		52.3	160
Iron	420	480	1486				20000			
Lead	4	12	196.9	30.2	46.7	218	31		30.2	112
Magnesium	110	140	328.65							
Manganese	2	3	21.95				460			
*Potassium	110	130	101.8							
Vanadium	5	6	6.3							
Zinc	10	30	36.5	124	150	410	120		124	271

Notes:
All Analytes are reported in mg/kg.
* Asterisk indicates screening criteria has been exceeded.

Screening Criteria (refer to the Project Operations Plan, ABB-ES, 1995, Appendix A for details, acronyms and definitions)

[1] Draft USEPA Region IV Waste Management Division Sediment Screening Values. (USEPA, 11/95)

[2] ER-L NOAA Sediment Guidelines, protective of 90% of the test population of benthic organisms

[3] ER-M NOAA Sediment Guidelines, protective of 50% of the test population of benthic organisms

[4] LEL OME Provincial Sediment Quality Guidelines (Persaud et al., 1992)

[5] SQG USEPA Sediment Quality Guidelines (USEPA, 1988, 1993)

[6] TEL Sediment quality Assessment Guidelines, MacDonald Environmental Sciences, Ltd., 1994.

[4] PEL Sediment quality Assessment Guidelines, MacDonald Environmental Sciences, Ltd., 1994.

Preliminary Ecological Risk Evaluation Table for Analytes Detected in Sediment Samples
Former Naval Air Gunner's School, Station Dump
Yellow Water Southwest, Naval Air Station Cecil Field

	Samples		Screening Criteria							
Analyte	98D00301	98D00401	BKGRD	Region IV[1]	ER-L[2]	ER-M[3]	LEL[4]	SQG[5]	TEL[6]	PEL[7]
*Aluminum	860	8000	4432.5							
*Calcium	75	160	9.44							
Carbon disulfide	7	7.4								
Chromium		5.5	7.75	52.3	81	370	26		52.3	160
Iron	100	810	1486				20000			
Lead	1.7	4.9	196.9	30.2	46.7	218	31		30.2	112
*Magnesium	52	470	328.65							
Manganese		5.8	21.95				460			
*Potassium		260	101.8							
*Vanadium	2.5	8.4	6.3							

Notes:
All Analytes are reported in mg/kg.
* Asterisk indicates screening criteria has been exceeded.

Screening Criteria (refer to the Project Operations Plan, ABB-ES, 1995, Appendix A for details, acronyms and definitions)

[1] Draft USEPA Region IV Waste Management Division Sediment Screening Values. (USEPA, 11/95)

[2] ER-L NOAA Sediment Guidelines, protective of 90% of the test population of benthic organisms

[3] ER-M NOAA Sediment Guidelines, protective of 50% of the test population of benthic organisms

[4] LEL OME Provincial Sediment Quality Guidelines (Persaud et al., 1992)

[5] SQG USEPA Sediment Quality Guidelines (USEPA, 1988, 1993)

[6] TEL Sediment quality Assessment Guidelines, MacDonald Environmental Sciences, Ltd., 1994.

[4] PEL Sediment quality Assessment Guidelines, MacDonald Environmental Sciences, Ltd., 1994.

Preliminary Ecological Risk Evaluation Table for Analytes Detected in Surface Water
Former Naval Air Gunners School, Station Dump,
Yellow Water Southwest, Naval Air Station Cecil Field

	Sample				Screening Criteria				
Analyte	98W00301	98W00302	98W00401	98W00402	BKGRD	Region IV[1]	Ambient[2]	Florida[3]	AQUIRE[4]
*Aluminum	1300	700	1300	430	1042	87	87		50
Calcium	2100	1000	2100	1400	43000				
*Iron	1800	880	1800	1600	3027	1000	1000	1000	3700
Magnesium	590	1200	610	1300	5575				
Potassium		1100		1200	2057				
Sodium	4200	5800	4300	6000	12175				
TPH C8-C40	1400		1000						

Notes:
All values are reported in ug/l
BKGRD=NAS Cecil Field Inorganic Background Data Set
* Asterisk indicates screening criteria has been exceeded.
Screening Criteria
(refer to the Project Operations Plan, ABB-ES, 1995, Appendix A for details, acronyms and definitions)
[1] USEPA Region IV Waste Management Division Chronic Freshwater Surface Water Screening Values for Hazardous Waste Sites (November, 1995)
[2] Federal Ambient Water Criteria (USEPA 1988, 1991)
[3] Florida Administrative Code Surface water Quality Standards, Chapter 62-302 (1995)
[4] Reported toxicity values from the USEPA Aquire database

□

Preliminary Human Health Risk Evaluation Table for Analytes Detected in Groundwater
Former Naval Air Gunners School Fixed and Mobile Target Ranges
Yellow Water Southwest, Naval Air Station Cecil Field

Analyte[1]	Samples							Screening Values			Calculated Risk Values[2]	
	CFNAGS1S	CFNAGS2S	CFNAG2S02	CF-NAG-2S03	CF-NAG-2S03F	98G00301	98G00401	BKGRD	GCTL	RBC(T)	ELCR	HQ
Acetone						2.5	4.7		700	3700 n		
Carbon disulfide						22	23		700	1000 n		
Toluene						1.2			40	750 n		
*Aluminum	910	240				340	2900	13100	200	37000 n		
Calcium	19000	65000				1200	1100	81100				
*Iron	1400	670				950	760	7760	300	11000 n		
*Lead							6	5.35	15			
Magnesium	3400	2200				560	1400	10000				
*Manganese	81	300	120	140		16	11	150	50	840 n		0.4
*Manganese-DISS			120					150	50	840 n		
Potassium	1100	1100					1300	4330				
Sodium	9900	7000				7400	4300	16500	160000			
*Thallium		2.9						13.3	2	2.9 n		
											Sum =	0.4

Notes:

[1] All detected analytes are reported. Concentrations and screening values are expressed in ug/l

[2] ELCR and HQ are only calculated for analytes detected at concentrations in excess of BKGRD and GWCTL

* = Background screening criteria or GWCTLs have been exceeded

BKGRD = NAS Cecil Field Inorganic Background Data Set

GCTL = Groundwater Cleanup Target Levels, FDEP, Chapter 62-785, Florida Administrative Code

RBC(T) = Risk-based Concentration (Tap Water), USEPA Region III, April 1998

n = non-carcinogenic risk

c = carcinogenic risk

ELCR = calculated excess lifetime cancer risk, based on RBC(T) values.

(ELCR = maximum detected concentration/RBC(T) * 1E-06)

HQ = calculated Hazard Quotient for non-carcinogenic analytes

(HQ = maximum detected concentration/RBC(T))

Preliminary Human Health Risk Evaluation Table for Analytes Detected in Groundwater
Former Naval Air Gunners School, Public Works Area
Yellow Water Southwest, Naval Air Station Cecil Field

Analyte[1]	Samples							Screening Values			Calculated Risk Values[2]	
	CFNAGS5S	CFNAG5S02	CFNAGS6S	CFNAGS7S	CFNAGS8S	CFNAGS8S02	CFNAGS9S	BKGRD	GCTL	RBC(T)	ELCR	HQ
1,1,1-Trichloroethane				11					200	790 n		
*Aluminum	36000	27000	660	600	99			13100	200	37000 n		1.0
Aluminum-DISS		450										
*Antimony	19							44.5	6	15 n		
Calcium	13000		6500	8000	21000			81100				
*Chromium	29							18	100	180 n		
*Iron	4500		470	76	89			7760	300	11000 n		
*Lead	11							5.35	15			
Magnesium	2800		760	720	1700			10000				
*Manganese			72	60	140			96.2	50	840 n		0.2
Manganese-DISS						10		96.2	50	840 n		
Potassium	1400		1200		630			4330				
Sodium	3600		2700	1000	1500			16500	160000			
*Vanadium	42							20.2	49	260 n		
*Zinc	120							76.8	5000	11000 n		
											Sum =	1.1

Notes:

[1] All detected analytes are reported. Concentrations and screening values are expressed in ug/l

[2] ELCR and HQ are only calculated for analytes detected at concentrations in excess of BKGRD and GWCTL

* = Background screening criteria or GWCTLs have been exceeded

BKGRD = NAS Cecil Field Inorganic Background Data Set

GCTL = Groundwater Cleanup Target Levels, FDEP, Chapter 62-785, Florida Administrative Code

RBC(T) = Risk-based Concentration (Tap Water), USEPA Region III, April 1998

n = non-carcinogenic risk

c = carcinogenic risk

ELCR = calculated excess lifetime cancer risk, based on RBC(T) values.

(ELCR = maximum detected concentration/RBC(T) * 1E-06)

HQ = calculated Hazard Quotient for non-carcinogenic analytes

(HQ = maximum detected concentration/RBC(T))

APPENDIX C

LABORATORY ANALYTICAL DATA

NAS CECIL FIELD -- . LOW WATER SOUTHEAST
SURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10517

Lab Sample Number:	JR24911			JR24912			JR24913			JR24914		
Site	BRAC			BRAC			BRAC			BRAC		
Locator	98S00101			98S00201			98S00301			98S00401		
Collect Date:	28-JUL-98			28-JUL-98			28-JUL-98			28-JUL-98		
	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL
CLP VOLATILES 90-SOW												
Chloromethane		-			-			-			-	
Bromomethane		-			-			-			-	
Vinyl chloride		-			-			-			-	
Chloroethane		-			-			-			-	
Methylene chloride		-			-			-			-	
Acetone		-			-			-			-	
Carbon disulfide		-			-			-			-	
1,1-Dichloroethene		-			-			-			-	
1,1-Dichloroethane		-			-			-			-	
1,2-Dichloroethene (total)		-			-			-			-	
Chloroform		-			-			-			-	
1,2-Dichloroethane		-			-			-			-	
2-Butanone		-			-			-			-	
1,1,1-Trichloroethane		-			-			-			-	
Carbon tetrachloride		-			-			-			-	
Bromodichloromethane		-			-			-			-	
1,2-Dichloropropane		-			-			-			-	
cis-1,3-Dichloropropene		-			-			-			-	
Trichloroethene		-			-			-			-	
Dibromochloromethane		-			-			-			-	
1,1,2-Trichloroethane		-			-			-			-	
Benzene		-			-			-			-	
trans-1,3-Dichloropropene		-			-			-			-	
Bromoform		-			-			-			-	
4-Methyl-2-pentanone		-			-			-			-	
2-Hexanone		-			-			-			-	
Tetrachloroethene		-			-			-			-	
Toluene		-			-			-			-	
1,1,2,2-Tetrachloroethane		-			-			-			-	
Chlorobenzene		-			-			-			-	
Ethylbenzene		-			-			-			-	
Styrene		-			-			-			-	
Xylenes (total)		-			-			-			-	
CLP SEMIVOLATILES 90-SOW												
Phenol		-			-			-			-	
bis(2-Chloroethyl) ether		-			-			-			-	
2-Chlorophenol		-			-			-			-	
1,3-Dichlorobenzene		-			-			-			-	
1,4-Dichlorobenzene		-			-			-			-	
1,2-Dichlorobenzene		-			-			-			-	
2-Methylphenol		-			-			-			-	
2,2-oxybis(1-Chloropropane)		-			-			-			-	
4-Methylphenol		-			-			-			-	
N-Nitroso-di-n-propylamine		-			-			-			-	
Hexachloroethane		-			-			-			-	
Nitrobenzene		-			-			-			-	
Isophorone		-			-			-			-	
2-Nitrophenol		-			-			-			-	
2,4-Dimethylphenol		-			-			-			-	

NAS CECIL FIELD -- ...LOW WATER SOUTHEAST
SURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10517

Lab Sample Number:	JR24911			JR24912			JR24913			JR24914		
Site	BRAC			BRAC			BRAC			BRAC		
Locator	98S00101			98S00201			98S00301			98S00401		
Collect Date:	28-JUL-98			28-JUL-98			28-JUL-98			28-JUL-98		
	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL
bis(2-Chloroethoxy) methane		-			-			-			-	
2,4-Dichlorophenol		-			-			-			-	
1,2,4-Trichlorobenzene		-			-			-			-	
Naphthalene		-			-			-			-	
4-Chloroaniline		-			-			-			-	
Hexachlorobutadiene		-			-			-			-	
4-Chloro-3-methylphenol		-			-			-			-	
2-Methylnaphthalene		-			-			-			-	
Hexachlorocyclopentadiene		-			-			-			-	
2,4,6-Trichlorophenol		-			-			-			-	
2,4,5-Trichlorophenol		-			-			-			-	
2-Chloronaphthalene		-			-			-			-	
2-Nitroaniline		-			-			-			-	
Dimethylphthalate		-			-			-			-	
Acenaphthylene		-			-			-			-	
2,6-Dinitrotoluene		-			-			-			-	
3-Nitroaniline		-			-			-			-	
Acenaphthene		-			-			-			-	
2,4-Dinitrophenol		-			-			-			-	
4-Nitrophenol		-			-			-			-	
Dibenzofuran		-			-			-			-	
2,4-Dinitrotoluene		-			-			-			-	
Diethylphthalate		-			-			-			-	
4-Chlorophenyl-phenylether		-			-			-			-	
Fluorene		-			-			-			-	
4-Nitroaniline		-			-			-			-	
4,6-Dinitro-2-methylphenol		-			-			-			-	
N-Nitrosodiphenylamine		-			-			-			-	
4-Bromophenyl-phenylether		-			-			-			-	
Hexachlorobenzene		-			-			-			-	
Pentachlorophenol		-			-			-			-	
Phenanthrene		-			-			-			-	
Anthracene		-			-			-			-	
Carbazole		-			-			-			-	
Di-n-butylphthalate		-			-			-			-	
Fluoranthene		-			-			-			-	
Pyrene		-			-			-			-	
Butylbenzylphthalate		-			-			-			-	
3,3-Dichlorobenzidine		-			-			-			-	
Benzo (a) anthracene		-			-			-			-	
Chrysene		-			-			-			-	
bis(2-Ethylhexyl) phthalate		-			-			-			-	
Di-n-octylphthalate		-			-			-			-	
Benzo (b) fluoranthene		-			-			-			-	
Benzo (k) fluoranthene		-			-			-			-	
Benzo (a) pyrene		-			-			-			-	
Indeno (1,2,3-cd) pyrene		-			-			-			-	
Dibenzo (a,h) anthracene		-			-			-			-	
Benzo (g,h,i) perylene		-			-			-			-	
CLP PESTICIDES/PCBS 90-SOW												
alpha-BHC		-			-			-			-	

NAS CECIL FIELD -- LOW WATER SOUTHEAST
SURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10517

Lab Sample Number:	JR24911			JR24912			JR24913			JR24914		
Site	BRAC			BRAC			BRAC			BRAC		
Locator	98S00101			98S00201			98S00301			98S00401		
Collect Date:	28-JUL-98			28-JUL-98			28-JUL-98			28-JUL-98		
	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
beta-BHC	-			-			-			-		
delta-BHC	-			-			-			-		
gamma-BHC (Lindane)	-			-			-			-		
Heptachlor	-			-			-			-		
Aldrin	-			-			-			-		
Heptachlor epoxide	-			-			-			-		
Endosulfan I	-			-			-			-		
Dieldrin	-			-			-			-		
4,4-DDE	-			-			-			-		
Endrin	-			-			-			-		
Endosulfan II	-			-			-			-		
4,4-DDD	-			-			-			-		
Endosulfan sulfate	-			-			-			-		
4,4-DDT	-			-			-			-		
Methoxychlor	-			-			-			-		
Endrin ketone	-			-			-			-		
Endrin aldehyde	-			-			-			-		
alpha-Chlordane	-			-			-			-		
gamma-Chlordane	-			-			-			-		
Toxaphene	-			-			-			-		
Aroclor-1016	-			-			-			-		
Aroclor-1221	-			-			-			-		
Aroclor-1232	-			-			-			-		
Aroclor-1242	-			-			-			-		
Aroclor-1248	-			-			-			-		
Aroclor-1254	-			-			-			-		
Aroclor-1260	-			-			-			-		
CLP METALS AND CYANIDE												
Aluminum	1000	mg/kg	22	830	mg/kg	21	950	mg/kg	21	820	mg/kg	22
Antimony	2 U	mg/kg	2	2 U	mg/kg	2	2 U	mg/kg	2	2 U	mg/kg	2
Arsenic	.5 U	mg/kg	.5	.5 U	mg/kg	.5	.7 I	mg/kg	.5	.5 U	mg/kg	.5
Barium	22 U	mg/kg	22	21 U	mg/kg	21	21 U	mg/kg	21	22 U	mg/kg	22
Beryllium	1 U	mg/kg	1	1 U	mg/kg	1	1 U	mg/kg	1	1 U	mg/kg	1
Cadmium	1 U	mg/kg	1	1 U	mg/kg	1	1	mg/kg	1	1 U	mg/kg	1
Calcium	250	mg/kg	27	210	mg/kg	26	540	mg/kg	26	550	mg/kg	27
Chromium	5.1	mg/kg	1	5.2	mg/kg	1	4.8	mg/kg	1	3.4	mg/kg	1
Cobalt	5 U	mg/kg	5	5 U	mg/kg	5	5 U	mg/kg	5	5 U	mg/kg	5
Copper	24	mg/kg	5	17	mg/kg	5	12	mg/kg	5	10	mg/kg	5
Iron	2600	mg/kg	11	2000	mg/kg	11	3300	mg/kg	11	1900	mg/kg	11
Lead	55	mg/kg	1	40	mg/kg	1	32	mg/kg	1	32	mg/kg	1
Magnesium	77	mg/kg	27	72	mg/kg	26	110	mg/kg	26	100	mg/kg	27
Manganese	7.5	mg/kg	1	6.9	mg/kg	1	32	mg/kg	1	13	mg/kg	1
Mercury	3	mg/kg	.01	1.8	mg/kg	.01	2.7	mg/kg	.01	1.1	mg/kg	.01
Nickel	5 U	mg/kg	5	5 U	mg/kg	5	5 U	mg/kg	5	5 U	mg/kg	5
Potassium	35	mg/kg	27	31	mg/kg	26	32	mg/kg	26	48	mg/kg	27
Selenium	2 U	mg/kg	2	2 U	mg/kg	2	2 U	mg/kg	2	2 U	mg/kg	2
Silver	7.1	mg/kg	2	4.8	mg/kg	2	2.6	mg/kg	2	2.9	mg/kg	2
Sodium	27 U	mg/kg	27	26 U	mg/kg	26	26 U	mg/kg	26	27 U	mg/kg	27
Thallium	1 U	mg/kg	1	1 U	mg/kg	1	1 U	mg/kg	1	1 U	mg/kg	1
Vanadium	2.5	mg/kg	1	2	mg/kg	1	3	mg/kg	1	2.7	mg/kg	1
Zinc	16	mg/kg	5	20	mg/kg	5	79	mg/kg	5	18	mg/kg	5

NAS CECIL FIELD -- OW WATER SOUTHEAST
SURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10517

Lab Sample Number:	JR24911			JR24912			JR24913			JR24914		
Site	BRAC			BRAC			BRAC			BRAC		
Locator	98S00101			98S00201			98S00301			98S00401		
Collect Date:	28-JUL-98			28-JUL-98			28-JUL-98			28-JUL-98		
	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL
Cyanide	-			-			-			-		

U = NOT DETECTED J = ESTIMATED VALUE
UJ = REPORTED QUANTITATION LIMIT IS QUALIFIED AS ESTIMATED
R = RESULT IS REJECTED AND UNUSABLE

NAS CECIL FIELD -- YELLOW WATER SOUTHEAST
SURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10517

Lab Sample Number:	JR35274			JR35273			JR35275			JR35323		
Site	BRAC			BRAC			BRAC			BRAC		
Locator	98S00501			98S00601			98S00701			98S00801		
Collect Date:	06-OCT-98			06-OCT-98			06-OCT-98			07-OCT-98		
	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL
CLP VOLATILES 90-SOW												
Chloromethane	-			-			-			-		
Bromomethane	-			-			-			-		
Vinyl chloride	-			-			-			-		
Chloroethane	-			-			-			-		
Methylene chloride	-			-			-			-		
Acetone	-			-			-			-		
Carbon disulfide	-			-			-			-		
1,1-Dichloroethene	-			-			-			-		
1,1-Dichloroethane	-			-			-			-		
1,2-Dichloroethene (total)	-			-			-			-		
Chloroform	-			-			-			-		
1,2-Dichloroethane	-			-			-			-		
2-Butanone	-			-			-			-		
1,1,1-Trichloroethane	-			-			-			-		
Carbon tetrachloride	-			-			-			-		
Bromodichloromethane	-			-			-			-		
1,2-Dichloropropane	-			-			-			-		
cis-1,3-Dichloropropene	-			-			-			-		
Trichloroethene	-			-			-			-		
Dibromochloromethane	-			-			-			-		
1,1,2-Trichloroethane	-			-			-			-		
Benzene	-			-			-			-		
trans-1,3-Dichloropropene	-			-			-			-		
Bromoform	-			-			-			-		
4-Methyl-2-pentanone	-			-			-			-		
2-Hexanone	-			-			-			-		
Tetrachloroethene	-			-			-			-		
Toluene	-			-			-			-		
1,1,2,2-Tetrachloroethane	-			-			-			-		
Chlorobenzene	-			-			-			-		
Ethylbenzene	-			-			-			-		
Styrene	-			-			-			-		
Xylenes (total)	-			-			-			-		
CLP SEMIVOLATILES 90-SOW												
Phenol	-			-			-			-		
bis(2-Chloroethyl) ether	-			-			-			-		
2-Chlorophenol	-			-			-			-		
1,3-Dichlorobenzene	-			-			-			-		
1,4-Dichlorobenzene	-			-			-			-		

NAS CECIL FIELD -- YELLOW WATER SOUTHEAST
SURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10517

Lab Sample Number:	JR35274			JR35273			JR35275			JR35323		
Site	BRAC			BRAC			BRAC			BRAC		
Locator	98S00501			98S00601			98S00701			98S00801		
Collect Date:	06-OCT-98			06-OCT-98			06-OCT-98			07-OCT-98		
	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL
1,2-Dichlorobenzene		-			-			-			-	
2-Methylphenol		-			-			-			-	
2,2-oxybis(1-Chloropropane)		-			-			-			-	
4-Methylphenol		-			-			-			-	
N-Nitroso-di-n-propylamine		-			-			-			-	
Hexachloroethane		-			-			-			-	
Nitrobenzene		-			-			-			-	
Isophorone		-			-			-			-	
2-Nitrophenol		-			-			-			-	
2,4-Dimethylphenol		-			-			-			-	
bis(2-Chloroethoxy) methane		-			-			-			-	
2,4-Dichlorophenol		-			-			-			-	
1,2,4-Trichlorobenzene		-			-			-			-	
Naphthalene		-			-			-			-	
4-Chloroaniline		-			-			-			-	
Hexachlorobutadiene		-			-			-			-	
4-Chloro-3-methylphenol		-			-			-			-	
2-Methylnaphthalene		-			-			-			-	
Hexachlorocyclopentadiene		-			-			-			-	
2,4,6-Trichlorophenol		-			-			-			-	
2,4,5-Trichlorophenol		-			-			-			-	
2-Chloronaphthalene		-			-			-			-	
2-Nitroaniline		-			-			-			-	
Dimethylphthalate		-			-			-			-	
Acenaphthylene		-			-			-			-	
2,6-Dinitrotoluene		-			-			-			-	
3-Nitroaniline		-			-			-			-	
Acenaphthene		-			-			-			-	
2,4-Dinitrophenol		-			-			-			-	
4-Nitrophenol		-			-			-			-	
Dibenzofuran		-			-			-			-	
2,4-Dinitrotoluene		-			-			-			-	
Diethylphthalate		-			-			-			-	
4-Chlorophenyl-phenylether		-			-			-			-	
Fluorene		-			-			-			-	
4-Nitroaniline		-			-			-			-	
4,6-Dinitro-2-methylphenol		-			-			-			-	
N-Nitrosodiphenylamine		-			-			-			-	
4-Bromophenyl-phenylether		-			-			-			-	
Hexachlorobenzene		-			-			-			-	
Pentachlorophenol		-			-			-			-	
Phenanthrene		-			-			-			-	
Anthracene		-			-			-			-	
Carbazole		-			-			-			-	
Di-n-butylphthalate		-			-			-			-	
Fluoranthene		-			-			-			-	
Pyrene		-			-			-			-	
Butylbenzylphthalate		-			-			-			-	
3,3-Dichlorobenzidine		-			-			-			-	
Benzo (a) anthracene		-			-			-			-	
Chrysene		-			-			-			-	
bis(2-Ethylhexyl) phthalate		-			-			-			-	

NAS CECIL FIELD -- ...LOW WATER SOUTHEAST
SURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10517

Lab Sample Number:	JR35274			JR35273			JR35275			JR35323		
Site	BRAC			BRAC			BRAC			BRAC		
Locator	98S00501			98S00601			98S00701			98S00801		
Collect Date:	06-OCT-98			06-OCT-98			06-OCT-98			07-OCT-98		
	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
Di-n-octylphthalate	-			-			-			-		
Benzo (b) fluoranthene	-			-			-			-		
Benzo (k) fluoranthene	-			-			-			-		
Benzo (a) pyrene	-			-			-			-		
Indeno (1,2,3-cd) pyrene	-			-			-			-		
Dibenzo (a,h) anthracene	-			-			-			-		
Benzo (g,h,i) perylene	-			-			-			-		
CLP PESTICIDES/PCBS 90-SOW												
alpha-BHC	-			-			-			-		
beta-BHC	-			-			-			-		
delta-BHC	-			-			-			-		
gamma-BHC (Lindane)	-			-			-			-		
Heptachlor	-			-			-			-		
Aldrin	-			-			-			-		
Heptachlor epoxide	-			-			-			-		
Endosulfan I	-			-			-			-		
Dieldrin	-			-			-			-		
4,4-DDE	-			-			-			-		
Endrin	-			-			-			-		
Endosulfan II	-			-			-			-		
4,4-DDD	-			-			-			-		
Endosulfan sulfate	-			-			-			-		
4,4-DDT	-			-			-			-		
Methoxychlor	-			-			-			-		
Endrin ketone	-			-			-			-		
Endrin aldehyde	-			-			-			-		
alpha-Chlordane	-			-			-			-		
gamma-Chlordane	-			-			-			-		
Toxaphene	-			-			-			-		
Aroclor-1016	-			-			-			-		
Aroclor-1221	-			-			-			-		
Aroclor-1232	-			-			-			-		
Aroclor-1242	-			-			-			-		
Aroclor-1248	-			-			-			-		
Aroclor-1254	-			-			-			-		
Aroclor-1260	-			-			-			-		
CLP METALS AND CYANIDE												
Aluminum	2800	mg/kg	22	3600	mg/kg	240	4500	mg/kg	220	560	mg/kg	22
Antimony	2 U	mg/kg	2	2 U	mg/kg	2	2 U	mg/kg	2	2 U	mg/kg	2
Arsenic	.6 U	mg/kg	.6	.6 U	mg/kg	.6	.6 U	mg/kg	.6	.5 U	mg/kg	.5
Barium	22 U	mg/kg	22	24 U	mg/kg	24	22 U	mg/kg	22	22 U	mg/kg	22
Beryllium	1 U	mg/kg	1	1 U	mg/kg	1	1 U	mg/kg	1	1 U	mg/kg	1
Cadmium	1 U	mg/kg	1	1 U	mg/kg	1	1 U	mg/kg	1	1 U	mg/kg	1
Calcium	120	mg/kg	28	5600	mg/kg	29	65	mg/kg	28	33	mg/kg	27
Chromium	2.9	mg/kg	1	5.2	mg/kg	1	4.8	mg/kg	1	1 U	mg/kg	1
Cobalt	6 U	mg/kg	6	6 U	mg/kg	6	6 U	mg/kg	6	5 U	mg/kg	5
Copper	38	mg/kg	6	6 U	mg/kg	6	140	mg/kg	6	13	mg/kg	5
Iron	440	mg/kg	11	730	mg/kg	12	1100	mg/kg	11	140	mg/kg	11
Lead	13	mg/kg	1	5.5	mg/kg	1	450	mg/kg	1	1.5	mg/kg	1
Magnesium	46	mg/kg	28	130	mg/kg	29	70	mg/kg	28	27 U	mg/kg	27

NAS CECIL FIELD -- YELLOW WATER SOUTHEAST
SURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10517

Lab Sample Number:	JR35274				JR35273				JR35275				JR35323			
Site	BRAC				BRAC				BRAC				BRAC			
Locator	98S00501				98S00601				98S00701				98S00801			
Collect Date:	06-OCT-98				06-OCT-98				06-OCT-98				07-OCT-98			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Manganese	2		mg/kg	1	7.4		mg/kg	1	1.9		mg/kg	1	1	U	mg/kg	1
Mercury	.015	J	mg/kg	.01	.01	J	mg/kg	.01	.01	U	mg/kg	.01	.01	U	mg/kg	.01
Nickel	6	U	mg/kg	6	6	U	mg/kg	6	6	U	mg/kg	6	5	U	mg/kg	5
Potassium	34		mg/kg	28	29	U	mg/kg	29	28	U	mg/kg	28	27	U	mg/kg	27
Selenium	2	U	mg/kg	2	2	U	mg/kg	2	2	U	mg/kg	2	2	U	mg/kg	2
Silver	2	U	mg/kg	2	2	U	mg/kg	2	2	U	mg/kg	2	2	U	mg/kg	2
Sodium	28	U	mg/kg	28	29	U	mg/kg	29	28	U	mg/kg	28	27	U	mg/kg	27
Thallium	1	U	mg/kg	1	1	U	mg/kg	1	1	U	mg/kg	1	2.1		mg/kg	1
Vanadium	2.4		mg/kg	1	4		mg/kg	1	6.2		mg/kg	1	1	U	mg/kg	1
Zinc	20		mg/kg	6	6	U	mg/kg	6	12		mg/kg	6	14		mg/kg	5
Cyanide	-				-				-				-			

U = NOT DETECTED J = ESTIMATED VALUE
UJ = REPORTED QUANTITATION LIMIT IS QUALIFIED AS ESTIMATED
R = RESULT IS REJECTED AND UNUSABLE

NAS CECIL FIELD -- . OW WATER SOUTHEAST
SURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10517

Lab Sample Number:	JR35276			JR35322			JR35321			JR35277		
Site	BRAC			BRAC			BRAC			BRAC		
Locator	98S00901			98S01001			98S01101			98S01201		
Collect Date:	06-OCT-98			07-OCT-98			07-OCT-98			06-OCT-98		
	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL
CLP VOLATILES 90-SOW												
Chloromethane	-			-			-			-		
Bromomethane	-			-			-			-		
Vinyl chloride	-			-			-			-		
Chloroethane	-			-			-			-		
Methylene chloride	-			-			-			-		
Acetone	-			-			-			-		
Carbon disulfide	-			-			-			-		
1,1-Dichloroethene	-			-			-			-		
1,1-Dichloroethane	-			-			-			-		
1,2-Dichloroethene (total)	-			-			-			-		
Chloroform	-			-			-			-		
1,2-Dichloroethane	-			-			-			-		
2-Butanone	-			-			-			-		
1,1,1-Trichloroethane	-			-			-			-		
Carbon tetrachloride	-			-			-			-		
Bromodichloromethane	-			-			-			-		
1,2-Dichloropropane	-			-			-			-		
cis-1,3-Dichloropropene	-			-			-			-		
Trichloroethene	-			-			-			-		
Dibromochloromethane	-			-			-			-		
1,1,2-Trichloroethane	-			-			-			-		
Benzene	-			-			-			-		
trans-1,3-Dichloropropene	-			-			-			-		
Bromoform	-			-			-			-		
4-Methyl-2-pentanone	-			-			-			-		
2-Hexanone	-			-			-			-		
Tetrachloroethene	-			-			-			-		
Toluene	-			-			-			-		
1,1,2,2-Tetrachloroethane	-			-			-			-		
Chlorobenzene	-			-			-			-		
Ethylbenzene	-			-			-			-		
Styrene	-			-			-			-		
Xylenes (total)	-			-			-			-		
CLP SEMIVOLATILES 90-SOW												
Phenol	-			-			-			-		
bis(2-Chloroethyl) ether	-			-			-			-		
2-Chlorophenol	-			-			-			-		
1,3-Dichlorobenzene	-			-			-			-		
1,4-Dichlorobenzene	-			-			-			-		

NAS CECIL FIELD -- ...OW WATER SOUTHEAST
SURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10517

Lab Sample Number:	JR35276			JR35322			JR35321			JR35277		
Site	BRAC			BRAC			BRAC			BRAC		
Locator	98S00901			98S01001			98S01101			98S01201		
Collect Date:	06-OCT-98			07-OCT-98			07-OCT-98			06-OCT-98		
	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL
1,2-Dichlorobenzene		-			-			-			-	
2-Methylphenol		-			-			-			-	
2,2-oxybis(1-Chloropropane)		-			-			-			-	
4-Methylphenol		-			-			-			-	
N-Nitroso-di-n-propylamine		-			-			-			-	
Hexachloroethane		-			-			-			-	
Nitrobenzene		-			-			-			-	
Isophorone		-			-			-			-	
2-Nitrophenol		-			-			-			-	
2,4-Dimethylphenol		-			-			-			-	
bis(2-Chloroethoxy) methane		-			-			-			-	
2,4-Dichlorophenol		-			-			-			-	
1,2,4-Trichlorobenzene		-			-			-			-	
Naphthalene		-			-			-			-	
4-Chloroaniline		-			-			-			-	
Hexachlorobutadiene		-			-			-			-	
4-Chloro-3-methylphenol		-			-			-			-	
2-Methylnaphthalene		-			-			-			-	
Hexachlorocyclopentadiene		-			-			-			-	
2,4,6-Trichlorophenol		-			-			-			-	
2,4,5-Trichlorophenol		-			-			-			-	
2-Chloronaphthalene		-			-			-			-	
2-Nitroaniline		-			-			-			-	
Dimethylphthalate		-			-			-			-	
Acenaphthylene		-			-			-			-	
2,6-Dinitrotoluene		-			-			-			-	
3-Nitroaniline		-			-			-			-	
Acenaphthene		-			-			-			-	
2,4-Dinitrophenol		-			-			-			-	
4-Nitrophenol		-			-			-			-	
Dibenzofuran		-			-			-			-	
2,4-Dinitrotoluene		-			-			-			-	
Diethylphthalate		-			-			-			-	
4-Chlorophenyl-phenylether		-			-			-			-	
Fluorene		-			-			-			-	
4-Nitroaniline		-			-			-			-	
4,6-Dinitro-2-methylphenol		-			-			-			-	
N-Nitrosodiphenylamine		-			-			-			-	
4-Bromophenyl-phenylether		-			-			-			-	
Hexachlorobenzene		-			-			-			-	
Pentachlorophenol		-			-			-			-	
Phenanthrene		-			-			-			-	
Anthracene		-			-			-			-	
Carbazole		-			-			-			-	
Di-n-butylphthalate		-			-			-			-	
Fluoranthene		-			-			-			-	
Pyrene		-			-			-			-	
Butylbenzylphthalate		-			-			-			-	
3,3-Dichlorobenzidine		-			-			-			-	
Benzo (a) anthracene		-			-			-			-	
Chrysene		-			-			-			-	
bis(2-Ethylhexyl) phthalate		-			-			-			-	

NAS CECIL FIELD -- OW WATER SOUTHEAST
SURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10517

Lab Sample Number:	JR35276			JR35322			JR35321			JR35277		
Site	BRAC			BRAC			BRAC			BRAC		
Locator	98S00901			98S01001			98S01101			98S01201		
Collect Date:	06-OCT-98			07-OCT-98			07-OCT-98			06-OCT-98		
	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
Di-n-octylphthalate	-			-			-			-		
Benzo (b) fluoranthene	-			-			-			-		
Benzo (k) fluoranthene	-			-			-			-		
Benzo (a) pyrene	-			-			-			-		
Indeno (1,2,3-cd) pyrene	-			-			-			-		
Dibenzo (a,h) anthracene	-			-			-			-		
Benzo (g,h,i) perylene	-			-			-			-		
CLP PESTICIDES/PCBS 90-SOW												
alpha-BHC	-			-			-			-		
beta-BHC	-			-			-			-		
delta-BHC	-			-			-			-		
gamma-BHC (Lindane)	-			-			-			-		
Heptachlor	-			-			-			-		
Aldrin	-			-			-			-		
Heptachlor epoxide	-			-			-			-		
Endosulfan I	-			-			-			-		
Dieldrin	-			-			-			-		
4,4-DDE	-			-			-			-		
Endrin	-			-			-			-		
Endosulfan II	-			-			-			-		
4,4-DDD	-			-			-			-		
Endosulfan sulfate	-			-			-			-		
4,4-DDT	-			-			-			-		
Methoxychlor	-			-			-			-		
Endrin ketone	-			-			-			-		
Endrin aldehyde	-			-			-			-		
alpha-Chlordane	-			-			-			-		
gamma-Chlordane	-			-			-			-		
Toxaphene	-			-			-			-		
Aroclor-1016	-			-			-			-		
Aroclor-1221	-			-			-			-		
Aroclor-1232	-			-			-			-		
Aroclor-1242	-			-			-			-		
Aroclor-1248	-			-			-			-		
Aroclor-1254	-			-			-			-		
Aroclor-1260	-			-			-			-		
CLP METALS AND CYANIDE												
Aluminum	1400	mg/kg	22	1300	mg/kg	22	770	mg/kg	22	7000	mg/kg	24
Antimony	2 U	mg/kg	2	2 U	mg/kg	2	2 U	mg/kg	2	2 U	mg/kg	2
Arsenic	.6 U	mg/kg	.6	2.8	mg/kg	.6	.5 U	mg/kg	.5	.6 U	mg/kg	.6
Barium	22 U	mg/kg	22	22 U	mg/kg	22	22 U	mg/kg	22	24 U	mg/kg	24
Beryllium	1 U	mg/kg	1	1 U	mg/kg	1	1 U	mg/kg	1	1 U	mg/kg	1
Cadmium	1 U	mg/kg	1	1 U	mg/kg	1	1 U	mg/kg	1	1 U	mg/kg	1
Calcium	28	mg/kg	28	31	mg/kg	28	480	mg/kg	27	54	mg/kg	29
Chromium	1 U	mg/kg	1	1.9	mg/kg	1	1 U	mg/kg	1	6	mg/kg	1
Cobalt	6 U	mg/kg	6	6 U	mg/kg	6	5 U	mg/kg	5	6 U	mg/kg	6
Copper	70	mg/kg	6	40	mg/kg	6	22	mg/kg	5	6 U	mg/kg	6
Iron	110	mg/kg	11	270	mg/kg	11	1300	mg/kg	11	420	mg/kg	12
Lead	140	mg/kg	1	20	mg/kg	1	1.8	mg/kg	1	7.9	mg/kg	1
Magnesium	28 U	mg/kg	28	28 U	mg/kg	28	31	mg/kg	27	75	mg/kg	29

NAS CECIL FIELD -- LOW WATER SOUTHEAST
SURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10517

Lab Sample Number:	JR35276				JR35322				JR35321				JR35277			
Site	BRAC				BRAC				BRAC				BRAC			
Locator	98S00901				98S01001				98S01101				98S01201			
Collect Date:	06-OCT-98				07-OCT-98				07-OCT-98				06-OCT-98			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Manganese	1	U	mg/kg	1	1	U	mg/kg	1	4.1		mg/kg	1	1	U	mg/kg	1
Mercury	.01	U	mg/kg	.01	.01	U	mg/kg	.01	.01	U	mg/kg	.01	.01	U	mg/kg	.01
Nickel	6	U	mg/kg	6	6	U	mg/kg	6	5	U	mg/kg	5	6	U	mg/kg	6
Potassium	28	U	mg/kg	28	28	U	mg/kg	28	27	U	mg/kg	27	73		mg/kg	29
Selenium	2	U	mg/kg	2	2	U	mg/kg	2	2	U	mg/kg	2	2	U	mg/kg	2
Silver	2	U	mg/kg	2	2	U	mg/kg	2	2	U	mg/kg	2	2	U	mg/kg	2
Sodium	28	U	mg/kg	28	28	U	mg/kg	28	27	U	mg/kg	27	29	U	mg/kg	29
Thallium	1	U	mg/kg	1	19		mg/kg	1	1	U	mg/kg	1	1	U	mg/kg	1
Vanadium	1.2		mg/kg	1	1.7		mg/kg	1	1.9		mg/kg	1	7.5		mg/kg	1
Zinc	6	U	mg/kg	6	12		mg/kg	6	17		mg/kg	5	6	U	mg/kg	6
Cyanide	-				-				-				-			

U = NOT DETECTED J = ESTIMATED VALUE
UJ = REPORTED QUANTITATION LIMIT IS QUALIFIED AS ESTIMATED
R = RESULT IS REJECTED AND UNUSABLE

NAS CECIL FIELD -- OW WATER SOUTHEAST
SURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10517

Lab Sample Number:	JR35325				JR35324				JR35327				JR35328			
Site	BRAC				BRAC				BRAC				BRAC			
Locator	98S01501				98S01601				98S01701				98S01801			
Collect Date:	07-OCT-98				07-OCT-98				07-OCT-98				07-OCT-98			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
CLP VOLATILES 90-SOW																
Chloromethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Bromomethane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Vinyl chloride	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Chloroethane	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Methylene chloride	57	U	ug/kg	57	56	U	ug/kg	56	56	U	ug/kg	56	55	U	ug/kg	55
Acetone	57	U	ug/kg	57	56	U	ug/kg	56	56	U	ug/kg	56	55	U	ug/kg	55
Carbon disulfide	11	J	ug/kg	6	28		ug/kg	6	20	J	ug/kg	6	7.4	J	ug/kg	5
1,1-Dichloroethene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,1-Dichloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dichloroethene (total)	-				-				-				-			
Chloroform	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dichloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
2-Butanone	57	U	ug/kg	57	56	U	ug/kg	56	56	U	ug/kg	56	55	U	ug/kg	55
1,1,1-Trichloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Carbon tetrachloride	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Bromodichloromethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,2-Dichloropropane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
cis-1,3-Dichloropropene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Trichloroethene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Dibromochloromethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,1,2-Trichloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Benzene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
trans-1,3-Dichloropropene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Bromoform	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
4-Methyl-2-pentanone	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
2-Hexanone	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11	11	U	ug/kg	11
Tetrachloroethene	20	J	ug/kg	17	17	U	ug/kg	17	17	U	ug/kg	17	16	U	ug/kg	16
Toluene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
1,1,2,2-Tetrachloroethane	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Chlorobenzene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Ethylbenzene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Styrene	6	U	ug/kg	6	6	U	ug/kg	6	6	U	ug/kg	6	5	U	ug/kg	5
Xylenes (total)	-				-				-				-			
CLP SEMIVOLATILES 90-SOW																
Phenol	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
bis(2-Chloroethyl) ether	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
2-Chlorophenol	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
1,3-Dichlorobenzene	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
1,4-Dichlorobenzene	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180

NAS CECIL FIELD -- LOW WATER SOUTHEAST
SURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10517

Lab Sample Number:	JR35325				JR35324				JR35327				JR35328			
Site	BRAC				BRAC				BRAC				BRAC			
Locator	98S01501				98S01601				98S01701				98S01801			
Collect Date:	07-OCT-98				07-OCT-98				07-OCT-98				07-OCT-98			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,2-Dichlorobenzene	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
2-Methylphenol	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
2,2-oxybis(1-Chloropropane)	-				-				-				-			
4-Methylphenol	-				-				-				-			
N-Nitroso-di-n-propylamine	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
Hexachloroethane	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
Nitrobenzene	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
Isophorone	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
2-Nitrophenol	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
2,4-Dimethylphenol	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
bis(2-Chloroethoxy) methane	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
2,4-Dichlorophenol	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
1,2,4-Trichlorobenzene	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
Naphthalene	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
4-Chloroaniline	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
Hexachlorobutadiene	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
4-Chloro-3-methylphenol	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
2-Methylnaphthalene	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
Hexachlorocyclopentadiene	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
2,4,6-Trichlorophenol	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
2,4,5-Trichlorophenol	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
2-Chloronaphthalene	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
2-Nitroaniline	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
Dimethylphthalate	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
Acenaphthylene	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
2,6-Dinitrotoluene	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
3-Nitroaniline	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
Acenaphthene	1900	U	ug/kg	1900	1900	U	ug/kg	1900	200	J	ug/kg	190	180	U	ug/kg	180
2,4-Dinitrophenol	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
4-Nitrophenol	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
Dibenzofuran	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
2,4-Dinitrotoluene	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
Diethylphthalate	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
4-Chlorophenyl-phenylether	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
Fluorene	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
4-Nitroaniline	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
4,6-Dinitro-2-methylphenol	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
N-Nitrosodiphenylamine	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
4-Bromophenyl-phenylether	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
Hexachlorobenzene	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
Pentachlorophenol	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
Phenanthrene	1900	U	ug/kg	1900	1900	U	ug/kg	1900	2300		ug/kg	190	180	U	ug/kg	180
Anthracene	1900	U	ug/kg	1900	1900	U	ug/kg	1900	410	J	ug/kg	190	180	U	ug/kg	180
Carbazole	1900	U	ug/kg	1900	1900	U	ug/kg	1900	440		ug/kg	190	180	U	ug/kg	180
Di-n-butylphthalate	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
Fluoranthene	1900	U	ug/kg	1900	2400	J	ug/kg	1900	4700		ug/kg	190	180	U	ug/kg	180
Pyrene	1900	U	ug/kg	1900	1900	U	ug/kg	1900	3900		ug/kg	190	180	U	ug/kg	180
Butylbenzylphthalate	-				-				-				-			
3,3-Dichlorobenzidine	7700	U	ug/kg	7700	7500	U	ug/kg	7500	740	U	ug/kg	740	730	U	ug/kg	730
Benzo (a) anthracene	1900	U	ug/kg	1900	1900	U	ug/kg	1900	2100		ug/kg	190	180	U	ug/kg	180
Chrysene	1900	U	ug/kg	1900	1900	U	ug/kg	1900	1700		ug/kg	190	180	U	ug/kg	180
bis(2-Ethylhexyl) phthalate	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180

NAS CECIL FIELD -- YELLOW WATER SOUTHEAST
SURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10517

Lab Sample Number:	JR35325				JR35324				JR35327				JR35328			
Site	BRAC				BRAC				BRAC				BRAC			
Locator	98S01501				98S01601				98S01701				98S01801			
Collect Date:	07-OCT-98				07-OCT-98				07-OCT-98				07-OCT-98			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Di-n-octylphthalate	1900	U	ug/kg	1900	1900	U	ug/kg	1900	190	U	ug/kg	190	180	U	ug/kg	180
Benzo (b) fluoranthene	1900	U	ug/kg	1900	1900	U	ug/kg	1900	1900		ug/kg	190	180	U	ug/kg	180
Benzo (k) fluoranthene	1900	U	ug/kg	1900	1900	U	ug/kg	1900	1200		ug/kg	190	180	U	ug/kg	180
Benzo (a) pyrene	1900	U	ug/kg	1900	1900	U	ug/kg	1900	1400		ug/kg	190	180	U	ug/kg	180
Indeno (1,2,3-cd) pyrene	1900	U	ug/kg	1900	1900	U	ug/kg	1900	1100		ug/kg	190	180	U	ug/kg	180
Dibenzo (a,h) anthracene	1900	U	ug/kg	1900	1900	U	ug/kg	1900	400	J	ug/kg	190	180	U	ug/kg	180
Benzo (g,h,i) perylene	1900	U	ug/kg	1900	1900	U	ug/kg	1900	1300		ug/kg	190	180	U	ug/kg	180
CLP PESTICIDES/PCBS 90-SOW																
alpha-BHC	2	U	ug/kg	2	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9
beta-BHC	2	U	ug/kg	2	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9
delta-BHC	2	U	ug/kg	2	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9
gamma-BHC (Lindane)	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	1.8	U	ug/kg	1.8
Heptachlor	2	U	ug/kg	2	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9
Aldrin	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	1.8	U	ug/kg	1.8
Heptachlor epoxide	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	1.8	U	ug/kg	1.8
Endosulfan I	2	U	ug/kg	2	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9
Dieldrin	2	U	ug/kg	2	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9
4,4-DDE	2	U	ug/kg	2	1.9	U	ug/kg	1.9	11		ug/kg	1.9	1.9	U	ug/kg	1.9
Endrin	2	U	ug/kg	2	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9
Endosulfan II	2	U	ug/kg	2	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9
4,4-DDD	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	7.4		ug/kg	1.9	1.8	U	ug/kg	1.8
Endosulfan sulfate	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	1.8	U	ug/kg	1.8
4,4-DDT	2	U	ug/kg	2	1.9	U	ug/kg	1.9	16		ug/kg	1.9	1.9	U	ug/kg	1.9
Methoxychlor	31		ug/kg	3	67		ug/kg	3	52		ug/kg	3	3	U	ug/kg	3
Endrin ketone	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	1.8	U	ug/kg	1.8
Endrin aldehyde	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	1.8	U	ug/kg	1.8
alpha-Chlordane	2.6		ug/kg	1.9	11		ug/kg	1.9	7.4		ug/kg	1.9	1.8	U	ug/kg	1.8
gamma-Chlordane	3.8		ug/kg	2	7.5		ug/kg	1.9	7.4		ug/kg	1.9	1.9	U	ug/kg	1.9
Toxaphene	77	U	ug/kg	77	75	U	ug/kg	75	74	U	ug/kg	74	73	U	ug/kg	73
Aroclor-1016	-				-				-				-			
Aroclor-1221	38	U	ug/kg	38	37	U	ug/kg	37	37	U	ug/kg	37	37	U	ug/kg	37
Aroclor-1232	38	U	ug/kg	38	37	U	ug/kg	37	37	U	ug/kg	37	37	U	ug/kg	37
Aroclor-1242	-				-				-				-			
Aroclor-1248	38	U	ug/kg	38	37	U	ug/kg	37	37	U	ug/kg	37	37	U	ug/kg	37
Aroclor-1254	38	U	ug/kg	38	37	U	ug/kg	37	37	U	ug/kg	37	37	U	ug/kg	37
Aroclor-1260	38	U	ug/kg	38	37	U	ug/kg	37	37	U	ug/kg	37	37	U	ug/kg	37
CLP METALS AND CYANIDE																
Aluminum	1300		mg/kg	23	1100		mg/kg	22	400		mg/kg	22	210		mg/kg	22
Antimony	6.4		mg/kg	2	2	U	mg/kg	2	2	U	mg/kg	2	2	U	mg/kg	2
Arsenic	.6	U	mg/kg	.6	.6	U	mg/kg	.6	1.9		mg/kg	.6	30		mg/kg	.5
Barium	23	U	mg/kg	23	22	U	mg/kg	22	22	U	mg/kg	22	920		mg/kg	22
Beryllium	1	U	mg/kg	1	1	U	mg/kg	1	1	U	mg/kg	1	1	U	mg/kg	1
Cadmium	1.8		mg/kg	1	1	U	mg/kg	1	1	U	mg/kg	1	1	U	mg/kg	1
Calcium	61000		mg/kg	29	16000		mg/kg	28	330		mg/kg	28	550		mg/kg	27
Chromium	4.8		mg/kg	1	1.6		mg/kg	1	1	U	mg/kg	1	3.5		mg/kg	1
Cobalt	6	U	mg/kg	6	6	U	mg/kg	6	6	U	mg/kg	6	5	U	mg/kg	5
Copper	21		mg/kg	6	9.2		mg/kg	6	6.9		mg/kg	6	9.7		mg/kg	5
Iron	3000		mg/kg	11	280		mg/kg	11	1400		mg/kg	11	4500		mg/kg	11
Lead	140		mg/kg	1	10		mg/kg	1	10		mg/kg	1	15		mg/kg	1
Magnesium	410		mg/kg	29	140		mg/kg	28	31		mg/kg	28	38		mg/kg	27

NAS CECIL FIELD -- . .LOW WATER SOUTHEAST
SURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10517

Lab Sample Number:	JR35325				JR35324				JR35327				JR35328			
Site	BRAC				BRAC				BRAC				BRAC			
Locator	98S01501				98S01601				98S01701				98S01801			
Collect Date:	07-OCT-98				07-OCT-98				07-OCT-98				07-OCT-98			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Manganese	20		mg/kg	1	5.3		mg/kg	1	7.1		mg/kg	1	2.4		mg/kg	1
Mercury	.018		mg/kg	.01	.013	J	mg/kg	.01	.01	U	mg/kg	.01	.01	U	mg/kg	.01
Nickel	6	U	mg/kg	6	6	U	mg/kg	6	6	U	mg/kg	6	5	U	mg/kg	5
Potassium	29	U	mg/kg	29	28	U	mg/kg	28	28	U	mg/kg	28	37		mg/kg	27
Selenium	2	U	mg/kg	2	2	U	mg/kg	2	2	U	mg/kg	2	2	U	mg/kg	2
Silver	2	U	mg/kg	2	2	U	mg/kg	2	2	U	mg/kg	2	2	U	mg/kg	2
Sodium	29	U	mg/kg	29	28	U	mg/kg	28	28	U	mg/kg	28	33		mg/kg	27
Thallium	1	U	mg/kg	1	1	U	mg/kg	1	1	U	mg/kg	1	1	U	mg/kg	1
Vanadium	3		mg/kg	1	1.7		mg/kg	1	1	U	mg/kg	1	1	U	mg/kg	1
Zinc	50		mg/kg	6	31		mg/kg	6	29		mg/kg	6	19		mg/kg	5
Cyanide	-				-				-				-			

U = NOT DETECTED J = ESTIMATED VALUE
UJ = REPORTED QUANTITATION LIMIT IS QUALIFIED AS ESTIMATED
R = RESULT IS REJECTED AND UNUSABLE

NAS CECIL FIELD -- YELLOW WATER SOUTHEAST
SURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10517

Lab Sample Number:	JR35326			JR35329			JR35721			JR35722		
Site	BRAC			BRAC			BRAC			BRAC		
Locator	98S01901			98S02001			98S02101			98S02201		
Collect Date:	07-OCT-98			07-OCT-98			08-OCT-98			08-OCT-98		
	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL
CLP VOLATILES 90-SOW												
Chloromethane	6	U ug/kg	6	5	U ug/kg	5	1	U ug/kg	1	1	U ug/kg	1
Bromomethane	11	U ug/kg	11	11	U ug/kg	11	1	U ug/kg	1	1	U ug/kg	1
Vinyl chloride	6	U ug/kg	6	5	U ug/kg	5	1	U ug/kg	1	1	U ug/kg	1
Chloroethane	11	U ug/kg	11	11	U ug/kg	11	1	U ug/kg	1	1	U ug/kg	1
Methylene chloride	56	U ug/kg	56	55	U ug/kg	55	32	U ug/kg	32	29	U ug/kg	29
Acetone	56	U ug/kg	56	55	U ug/kg	55	130	U ug/kg	130	120	U ug/kg	120
Carbon disulfide	6.6	J ug/kg	6	5	U ug/kg	5	6	U ug/kg	6	6	U ug/kg	6
1,1-Dichloroethene	6	U ug/kg	6	5	U ug/kg	5	1	U ug/kg	1	1	U ug/kg	1
1,1-Dichloroethane	6	U ug/kg	6	5	U ug/kg	5	1	U ug/kg	1	1	U ug/kg	1
1,2-Dichloroethene (total)	-			-			-			-		
Chloroform	6	U ug/kg	6	5	U ug/kg	5	1	U ug/kg	1	1	U ug/kg	1
1,2-Dichloroethane	6	U ug/kg	6	5	U ug/kg	5	1	U ug/kg	1	1	U ug/kg	1
2-Butanone	56	U ug/kg	56	55	U ug/kg	55	13	U ug/kg	13	12	U ug/kg	12
1,1,1-Trichloroethane	6	U ug/kg	6	5	U ug/kg	5	1	U ug/kg	1	1	U ug/kg	1
Carbon tetrachloride	6	U ug/kg	6	5	U ug/kg	5	1	U ug/kg	1	1	U ug/kg	1
Bromodichloromethane	6	U ug/kg	6	5	U ug/kg	5	1	U ug/kg	1	1	U ug/kg	1
1,2-Dichloropropane	6	U ug/kg	6	5	U ug/kg	5	1	U ug/kg	1	1	U ug/kg	1
cis-1,3-Dichloropropene	6	U ug/kg	6	5	U ug/kg	5	1	U ug/kg	1	1	U ug/kg	1
Trichloroethene	6	U ug/kg	6	5	U ug/kg	5	1	U ug/kg	1	1	U ug/kg	1
Dibromochloromethane	6	U ug/kg	6	5	U ug/kg	5	1	U ug/kg	1	1	U ug/kg	1
1,1,2-Trichloroethane	6	U ug/kg	6	5	U ug/kg	5	1	U ug/kg	1	1	U ug/kg	1
Benzene	6	U ug/kg	6	5	U ug/kg	5	1	U ug/kg	1	1	U ug/kg	1
trans-1,3-Dichloropropene	6	U ug/kg	6	5	U ug/kg	5	1	U ug/kg	1	1	U ug/kg	1
Bromoform	6	U ug/kg	6	5	U ug/kg	5	1	U ug/kg	1	1	U ug/kg	1
4-Methyl-2-pentanone	11	U ug/kg	11	11	U ug/kg	11	13	U ug/kg	13	12	U ug/kg	12
2-Hexanone	11	U ug/kg	11	11	U ug/kg	11	6	U ug/kg	6	6	U ug/kg	6
Tetrachloroethene	17	U ug/kg	17	16	U ug/kg	16	15	ug/kg	1	21	ug/kg	1
Toluene	6	U ug/kg	6	5	U ug/kg	5	2.6	ug/kg	1	1.4	J ug/kg	1
1,1,2,2-Tetrachloroethane	6	U ug/kg	6	5	U ug/kg	5	1	U ug/kg	1	1	U ug/kg	1
Chlorobenzene	6	U ug/kg	6	5	U ug/kg	5	1	U ug/kg	1	1	U ug/kg	1
Ethylbenzene	6	U ug/kg	6	5	U ug/kg	5	1	U ug/kg	1	1	U ug/kg	1
Styrene	6	U ug/kg	6	5	U ug/kg	5	1	U ug/kg	1	1	U ug/kg	1
Xylenes (total)	-			-			-			-		
CLP SEMIVOLATILES 90-SOW												
Phenol	190	U ug/kg	190	180	U ug/kg	180	420	U ug/kg	420	390	U ug/kg	390
bis(2-Chloroethyl) ether	190	U ug/kg	190	180	U ug/kg	180	420	U ug/kg	420	390	U ug/kg	390
2-Chlorophenol	190	U ug/kg	190	180	U ug/kg	180	420	U ug/kg	420	390	U ug/kg	390
1,3-Dichlorobenzene	190	U ug/kg	190	180	U ug/kg	180	420	U ug/kg	420	390	U ug/kg	390
1,4-Dichlorobenzene	190	U ug/kg	190	180	U ug/kg	180	420	U ug/kg	420	390	U ug/kg	390

NAS CECIL FIELD -- LOW WATER SOUTHEAST
SURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10517

Lab Sample Number:	JR35326				JR35329				JR35721				JR35722			
Site	BRAC				BRAC				BRAC				BRAC			
Locator	98S01901				98S02001				98S02101				98S02201			
Collect Date:	07-OCT-98				07-OCT-98				08-OCT-98				08-OCT-98			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,2-Dichlorobenzene	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
2-Methylphenol	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
2,2-oxybis(1-Chloropropane)	-				-				-				-			
4-Methylphenol	-				-				-				-			
N-Nitroso-di-n-propylamine	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Hexachloroethane	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Nitrobenzene	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Isophorone	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
2-Nitrophenol	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
2,4-Dimethylphenol	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
bis(2-Chloroethoxy) methane	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
2,4-Dichlorophenol	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
1,2,4-Trichlorobenzene	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Naphthalene	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
4-Chloroaniline	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Hexachlorobutadiene	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
4-Chloro-3-methylphenol	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
2-Methylnaphthalene	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Hexachlorocyclopentadiene	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
2,4,6-Trichlorophenol	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
2,4,5-Trichlorophenol	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
2-Chloronaphthalene	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
2-Nitroaniline	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Dimethylphthalate	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Acenaphthylene	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
2,6-Dinitrotoluene	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
3-Nitroaniline	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Acenaphthene	290	J	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
2,4-Dinitrophenol	190	U	ug/kg	190	180	U	ug/kg	180	2100	U	ug/kg	2100	1900	U	ug/kg	1900
4-Nitrophenol	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Dibenzofuran	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
2,4-Dinitrotoluene	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Diethylphthalate	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
4-Chlorophenyl-phenylether	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Fluorene	250	J	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
4-Nitroaniline	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
4,6-Dinitro-2-methylphenol	190	U	ug/kg	190	180	U	ug/kg	180	1200	U	ug/kg	1200	1200	U	ug/kg	1200
N-Nitrosodiphenylamine	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
4-Bromophenyl-phenylether	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Hexachlorobenzene	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Pentachlorophenol	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Phenanthrene	2800		ug/kg	190	1100		ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Anthracene	510		ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Carbazole	540		ug/kg	190	230	J	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Di-n-butylphthalate	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Fluoranthene	4500		ug/kg	190	1800		ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Pyrene	3900		ug/kg	190	1400		ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Butylbenzylphthalate	-				-				-				-			
3,3-Dichlorobenzidine	750	U	ug/kg	750	730	U	ug/kg	730	840	U	ug/kg	840	780	U	ug/kg	780
Benzo (a) anthracene	2100		ug/kg	190	710		ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Chrysene	1600		ug/kg	190	640		ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
bis(2-Ethylhexyl) phthalate	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390

NAS CECIL FIELD -- [illegible]OW WATER SOUTHEAST
SURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10517

Lab Sample Number:	JR35326				JR35329				JR35721				JR35722			
Site	BRAC				BRAC				BRAC				BRAC			
Locator	98S01901				98S02001				98S02101				98S02201			
Collect Date:	07-OCT-98				07-OCT-98				08-OCT-98				08-OCT-98			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Di-n-octylphthalate	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Benzo (b) fluoranthene	1700		ug/kg	190	580		ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Benzo (k) fluoranthene	1300		ug/kg	190	530		ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Benzo (a) pyrene	1300		ug/kg	190	430		ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Indeno (1,2,3-cd) pyrene	990		ug/kg	190	370		ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Dibenzo (a,h) anthracene	190	U	ug/kg	190	180	U	ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
Benzo (g,h,i) perylene	1100		ug/kg	190	440		ug/kg	180	420	U	ug/kg	420	390	U	ug/kg	390
CLP PESTICIDES/PCBS 90-SOW																
alpha-BHC	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	2.1	U	ug/kg	2.1	1.9	U	ug/kg	1.9
beta-BHC	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	2.1	U	ug/kg	2.1	1.9	U	ug/kg	1.9
delta-BHC	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	2.1	U	ug/kg	2.1	1.9	U	ug/kg	1.9
gamma-BHC (Lindane)	1.9	U	ug/kg	1.9	1.8	U	ug/kg	1.8	2.1	U	ug/kg	2.1	1.9	U	ug/kg	1.9
Heptachlor	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	2.1	U	ug/kg	2.1	1.9	U	ug/kg	1.9
Aldrin	5.3		ug/kg	1.9	1.8	U	ug/kg	1.8	2.1	U	ug/kg	2.1	1.9	U	ug/kg	1.9
Heptachlor epoxide	1.9	U	ug/kg	1.9	1.8	U	ug/kg	1.8	2.1	U	ug/kg	2.1	1.9	U	ug/kg	1.9
Endosulfan I	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	2.1	U	ug/kg	2.1	1.9	U	ug/kg	1.9
Dieldrin	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	2.1	U	ug/kg	2.1	1.9	U	ug/kg	1.9
4,4-DDE	1900		ug/kg	190	1.9	U	ug/kg	1.9	2.1	U	ug/kg	2.1	1.9	U	ug/kg	1.9
Endrin	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	2.1	U	ug/kg	2.1	1.9	U	ug/kg	1.9
Endosulfan II	1.9	U	ug/kg	1.9	1.9	U	ug/kg	1.9	2.1	U	ug/kg	2.1	1.9	U	ug/kg	1.9
4,4-DDD	3000		ug/kg	190	1.8	U	ug/kg	1.8	2.1	U	ug/kg	2.1	1.9	U	ug/kg	1.9
Endosulfan sulfate	1.9	U	ug/kg	1.9	1.8	U	ug/kg	1.8	2.1	U	ug/kg	2.1	1.9	U	ug/kg	1.9
4,4-DDT	3400		ug/kg	190	1.9	U	ug/kg	1.9	2.1	U	ug/kg	2.1	1.9	U	ug/kg	1.9
Methoxychlor	150		ug/kg	37	16		ug/kg	3	2.1	U	ug/kg	2.1	1.9	U	ug/kg	1.9
Endrin ketone	1.9	U	ug/kg	1.9	1.8	U	ug/kg	1.8	2.1	U	ug/kg	2.1	1.9	U	ug/kg	1.9
Endrin aldehyde	1.9	U	ug/kg	1.9	1.8	U	ug/kg	1.8	2.1	U	ug/kg	2.1	1.9	U	ug/kg	1.9
alpha-Chlordane	1.9	U	ug/kg	1.9	3.6		ug/kg	1.8	42	U	ug/kg	42	39	U	ug/kg	39
gamma-Chlordane	1.9	U	ug/kg	1.9	3.6		ug/kg	1.9	42	U	ug/kg	42	39	U	ug/kg	39
Toxaphene	75	U	ug/kg	75	73	U	ug/kg	73	84	U	ug/kg	84	78	U	ug/kg	78
Aroclor-1016	-				-				-				-			
Aroclor-1221	37	U	ug/kg	37	37	U	ug/kg	37	42	U	ug/kg	42	39	U	ug/kg	39
Aroclor-1232	37	U	ug/kg	37	37	U	ug/kg	37	42	U	ug/kg	42	39	U	ug/kg	39
Aroclor-1242	-				-				-				-			
Aroclor-1248	37	U	ug/kg	37	37	U	ug/kg	37	42	U	ug/kg	42	39	U	ug/kg	39
Aroclor-1254	37	U	ug/kg	37	37	U	ug/kg	37	42	U	ug/kg	42	39	U	ug/kg	39
Aroclor-1260	37	U	ug/kg	37	37	U	ug/kg	37	42	U	ug/kg	42	39	U	ug/kg	39
CLP METALS AND CYANIDE																
Aluminum	2200		mg/kg	22	1400		mg/kg	22	1400		mg/kg	25	2200		mg/kg	24
Antimony	4		mg/kg	2	2	U	mg/kg	2	2	U	mg/kg	2	2	U	mg/kg	2
Arsenic	.8	J	mg/kg	.6	.5	J	mg/kg	.5	.6	U	mg/kg	.6	.6	U	mg/kg	.6
Barium	76		mg/kg	22	25		mg/kg	22	25	U	mg/kg	25	24	U	mg/kg	24
Beryllium	1	U	mg/kg	1	1	U	mg/kg	1	1	U	mg/kg	1	1	U	mg/kg	1
Cadmium	1	U	mg/kg	1	1	U	mg/kg	1	1	U	mg/kg	1	1	U	mg/kg	1
Calcium	2600		mg/kg	28	1600		mg/kg	27	3800		mg/kg	32	4000		mg/kg	29
Chromium	9.1		mg/kg	1	1.6		mg/kg	1	1		mg/kg	1	2.1		mg/kg	1
Cobalt	6	U	mg/kg	6	5	U	mg/kg	5	6	U	mg/kg	6	6	U	mg/kg	6
Copper	18		mg/kg	6	22		mg/kg	5	6	U	mg/kg	6	6	U	mg/kg	6
Iron	1200		mg/kg	11	720		mg/kg	11	280		mg/kg	13	550		mg/kg	12
Lead	260		mg/kg	1	37		mg/kg	1	1.4		mg/kg	1	1.3		mg/kg	1
Magnesium	350		mg/kg	28	150		mg/kg	27	54		mg/kg	32	65		mg/kg	29

NAS CECIL FIELD -- OW WATER SOUTHEAST
SURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10517

Lab Sample Number:	JR35326				JR35329				JR35721				JR35722			
Site	BRAC				BRAC				BRAC				BRAC			
Locator	98S01901				98S02001				98S02101				98S02201			
Collect Date:	07-OCT-98				07-OCT-98				08-OCT-98				08-OCT-98			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Manganese	39		mg/kg	1	22		mg/kg	1	1		mg/kg	1	1		mg/kg	1
Mercury	.02		mg/kg	.01	.15		mg/kg	.01	.01	U	mg/kg	.01	.01	U	mg/kg	.01
Nickel	6	U	mg/kg	6	5	U	mg/kg	5	6	U	mg/kg	6	6	U	mg/kg	6
Potassium	37		mg/kg	28	35		mg/kg	27	32	U	mg/kg	32	29	U	mg/kg	29
Selenium	2	U	mg/kg	2	2	U	mg/kg	2	2	U	mg/kg	2	2	U	mg/kg	2
Silver	2	U	mg/kg	2	2	U	mg/kg	2	2	U	mg/kg	2	2	U	mg/kg	2
Sodium	28	U	mg/kg	28	27	U	mg/kg	27	32	U	mg/kg	32	29	U	mg/kg	29
Thallium	1	U	mg/kg	1	1	U	mg/kg	1	1	U	mg/kg	1	1	U	mg/kg	1
Vanadium	2.8		mg/kg	1	1.5		mg/kg	1	1.8		mg/kg	1	3.2		mg/kg	1
Zinc	430		mg/kg	6	91		mg/kg	5	6	U	mg/kg	6	6	U	mg/kg	6
Cyanide	-				-				-				-			

U = NOT DETECTED J = ESTIMATED VALUE
UJ = REPORTED QUANTITATION LIMIT IS QUALIFIED AS ESTIMATED
R = RESULT IS REJECTED AND UNUSABLE

NAS CECIL FIELD -- YELLOW WATER SOUTHEAST
SURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10517

Lab Sample Number:	JR24903			JR24904			JR24905			JR24906		
Site	BRAC			BRAC			BRAC			BRAC		
Locator	A4S00101			A4S00201			A4S00301			A4S00401		
Collect Date:	27-JUL-98			27-JUL-98			27-JUL-98			27-JUL-98		
	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL
CLP VOLATILES 90-SOW												
Chloromethane	-			-			-			-		
Bromomethane	-			-			-			-		
Vinyl chloride	-			-			-			-		
Chloroethane	-			-			-			-		
Methylene chloride	-			-			-			-		
Acetone	-			-			-			-		
Carbon disulfide	-			-			-			-		
1,1-Dichloroethene	-			-			-			-		
1,1-Dichloroethane	-			-			-			-		
1,2-Dichloroethene (total)	-			-			-			-		
Chloroform	-			-			-			-		
1,2-Dichloroethane	-			-			-			-		
2-Butanone	-			-			-			-		
1,1,1-Trichloroethane	-			-			-			-		
Carbon tetrachloride	-			-			-			-		
Bromodichloromethane	-			-			-			-		
1,2-Dichloropropane	-			-			-			-		
cis-1,3-Dichloropropene	-			-			-			-		
Trichloroethene	-			-			-			-		
Dibromochloromethane	-			-			-			-		
1,1,2-Trichloroethane	-			-			-			-		
Benzene	-			-			-			-		
trans-1,3-Dichloropropene	-			-			-			-		
Bromoform	-			-			-			-		
4-Methyl-2-pentanone	-			-			-			-		
2-Hexanone	-			-			-			-		
Tetrachloroethene	-			-			-			-		
Toluene	-			-			-			-		
1,1,2,2-Tetrachloroethane	-			-			-			-		
Chlorobenzene	-			-			-			-		
Ethylbenzene	-			-			-			-		
Styrene	-			-			-			-		
Xylenes (total)	-			-			-			-		
CLP SEMIVOLATILES 90-SOW												
Phenol	-			-			-			-		
bis(2-Chloroethyl) ether	-			-			-			-		
2-Chlorophenol	-			-			-			-		
1,3-Dichlorobenzene	-			-			-			-		
1,4-Dichlorobenzene	-			-			-			-		

NAS CECIL FIELD -- YELLOW WATER SOUTHEAST
SURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10517

Lab Sample Number:	JR24903			JR24904			JR24905			JR24906		
Site	BRAC			BRAC			BRAC			BRAC		
Locator	A4S00101			A4S00201			A4S00301			A4S00401		
Collect Date:	27-JUL-98			27-JUL-98			27-JUL-98			27-JUL-98		
	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL
1,2-Dichlorobenzene		-			-			-			-	
2-Methylphenol		-			-			-			-	
2,2-oxybis(1-Chloropropane)		-			-			-			-	
4-Methylphenol		-			-			-			-	
N-Nitroso-di-n-propylamine		-			-			-			-	
Hexachloroethane		-			-			-			-	
Nitrobenzene		-			-			-			-	
Isophorone		-			-			-			-	
2-Nitrophenol		-			-			-			-	
2,4-Dimethylphenol		-			-			-			-	
bis(2-Chloroethoxy) methane		-			-			-			-	
2,4-Dichlorophenol		-			-			-			-	
1,2,4-Trichlorobenzene		-			-			-			-	
Naphthalene		-			-			-			-	
4-Chloroaniline		-			-			-			-	
Hexachlorobutadiene		-			-			-			-	
4-Chloro-3-methylphenol		-			-			-			-	
2-Methylnaphthalene		-			-			-			-	
Hexachlorocyclopentadiene		-			-			-			-	
2,4,6-Trichlorophenol		-			-			-			-	
2,4,5-Trichlorophenol		-			-			-			-	
2-Chloronaphthalene		-			-			-			-	
2-Nitroaniline		-			-			-			-	
Dimethylphthalate		-			-			-			-	
Acenaphthylene		-			-			-			-	
2,6-Dinitrotoluene		-			-			-			-	
3-Nitroaniline		-			-			-			-	
Acenaphthene		-			-			-			-	
2,4-Dinitrophenol		-			-			-			-	
4-Nitrophenol		-			-			-			-	
Dibenzofuran		-			-			-			-	
2,4-Dinitrotoluene		-			-			-			-	
Diethylphthalate		-			-			-			-	
4-Chlorophenyl-phenylether		-			-			-			-	
Fluorene		-			-			-			-	
4-Nitroaniline		-			-			-			-	
4,6-Dinitro-2-methylphenol		-			-			-			-	
N-Nitrosodiphenylamine		-			-			-			-	
4-Bromophenyl-phenylether		-			-			-			-	
Hexachlorobenzene		-			-			-			-	
Pentachlorophenol		-			-			-			-	
Phenanthrene		-			-			-			-	
Anthracene		-			-			-			-	
Carbazole		-			-			-			-	
Di-n-butylphthalate		-			-			-			-	
Fluoranthene		-			-			-			-	
Pyrene		-			-			-			-	
Butylbenzylphthalate		-			-			-			-	
3,3-Dichlorobenzidine		-			-			-			-	
Benzo (a) anthracene		-			-			-			-	
Chrysene		-			-			-			-	
bis(2-Ethylhexyl) phthalate		-			-			-			-	

NAS CECIL FIELD -- YELLOW WATER SOUTHEAST
SURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10517

Lab Sample Number:	JR24903			JR24904			JR24905			JR24906		
Site	BRAC			BRAC			BRAC			BRAC		
Locator	A4S00101			A4S00201			A4S00301			A4S00401		
Collect Date:	27-JUL-98			27-JUL-98			27-JUL-98			27-JUL-98		
	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
Di-n-octylphthalate	-			-			-			-		
Benzo (b) fluoranthene	-			-			-			-		
Benzo (k) fluoranthene	-			-			-			-		
Benzo (a) pyrene	-			-			-			-		
Indeno (1,2,3-cd) pyrene	-			-			-			-		
Dibenzo (a,h) anthracene	-			-			-			-		
Benzo (g,h,i) perylene	-			-			-			-		
CLP PESTICIDES/PCBS 90-SOW												
alpha-BHC	-			-			-			-		
beta-BHC	-			-			-			-		
delta-BHC	-			-			-			-		
gamma-BHC (Lindane)	-			-			-			-		
Heptachlor	-			-			-			-		
Aldrin	-			-			-			-		
Heptachlor epoxide	-			-			-			-		
Endosulfan I	-			-			-			-		
Dieldrin	-			-			-			-		
4,4-DDE	-			-			-			-		
Endrin	-			-			-			-		
Endosulfan II	-			-			-			-		
4,4-DDD	-			-			-			-		
Endosulfan sulfate	-			-			-			-		
4,4-DDT	-			-			-			-		
Methoxychlor	-			-			-			-		
Endrin ketone	-			-			-			-		
Endrin aldehyde	-			-			-			-		
alpha-Chlordane	-			-			-			-		
gamma-Chlordane	-			-			-			-		
Toxaphene	-			-			-			-		
Aroclor-1016	-			-			-			-		
Aroclor-1221	-			-			-			-		
Aroclor-1232	-			-			-			-		
Aroclor-1242	-			-			-			-		
Aroclor-1248	-			-			-			-		
Aroclor-1254	-			-			-			-		
Aroclor-1260	-			-			-			-		
CLP METALS AND CYANIDE												
Aluminum	950	mg/kg	24	380	mg/kg	25	1800	mg/kg	25	1200	mg/kg	24
Antimony	2 U	mg/kg	2	2 U	mg/kg	2	2 U	mg/kg	2	2 U	mg/kg	2
Arsenic	.6 U	mg/kg	.6	.6 U	mg/kg	.6	.6 U	mg/kg	.6	.6 U	mg/kg	.6
Barium	24 U	mg/kg	24	25 U	mg/kg	25	25 U	mg/kg	25	24 U	mg/kg	24
Beryllium	1 U	mg/kg	1	1 U	mg/kg	1	1 U	mg/kg	1	1 U	mg/kg	1
Cadmium	1 U	mg/kg	1	1 U	mg/kg	1	1 U	mg/kg	1	1 U	mg/kg	1
Calcium	35	mg/kg	29	31	mg/kg	31	52	mg/kg	31	38	mg/kg	30
Chromium	1 U	mg/kg	1	1 U	mg/kg	1	1.4	mg/kg	1	1 U	mg/kg	1
Cobalt	6 U	mg/kg	6	6 U	mg/kg	6	6 U	mg/kg	6	6 U	mg/kg	6
Copper	6 U	mg/kg	6	8.4	mg/kg	6	71	mg/kg	6	31	mg/kg	6
Iron	160	mg/kg	12	60	mg/kg	12	320	mg/kg	12	490	mg/kg	12
Lead	1 U	mg/kg	1	9	mg/kg	1	5.5	mg/kg	1	7.3	mg/kg	1
Magnesium	29 U	mg/kg	29	31 U	mg/kg	31	31 U	mg/kg	31	30 U	mg/kg	30

NAS CECIL FIELD -- YELLOW WATER SOUTHEAST
SURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10517

Lab Sample Number:	JR24903				JR24904				JR24905				JR24906			
Site	BRAC				BRAC				BRAC				BRAC			
Locator	A4S00101				A4S00201				A4S00301				A4S00401			
Collect Date:	27-JUL-98				27-JUL-98				27-JUL-98				27-JUL-98			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Manganese	1	U	mg/kg	1	1	U	mg/kg	1	1	U	mg/kg	1	1	U	mg/kg	1
Mercury	.01	U	mg/kg	.01	.01	U	mg/kg	.01	.01	U	mg/kg	.01	.01	U	mg/kg	.01
Nickel	6	U	mg/kg	6	6	U	mg/kg	6	6	U	mg/kg	6	6	U	mg/kg	6
Potassium	29	U	mg/kg	29	31	U	mg/kg	31	31	U	mg/kg	31	30	U	mg/kg	30
Selenium	2	U	mg/kg	2	2	U	mg/kg	2	2	U	mg/kg	2	2	U	mg/kg	2
Silver	2	U	mg/kg	2	2	U	mg/kg	2	2	U	mg/kg	2	2	U	mg/kg	2
Sodium	29	U	mg/kg	29	31	U	mg/kg	31	31	U	mg/kg	31	30	U	mg/kg	30
Thallium	1	U	mg/kg	1	1	U	mg/kg	1	1	U	mg/kg	1	1	U	mg/kg	1
Vanadium	1.4		mg/kg	1	1	U	mg/kg	1	1.6		mg/kg	1	1.7		mg/kg	1
Zinc	6.8		mg/kg	6	11		mg/kg	6	20		mg/kg	6	12		mg/kg	6
Cyanide	-				-				-				-			

U = NOT DETECTED J = ESTIMATED VALUE
UJ = REPORTED QUANTITATION LIMIT IS QUALIFIED AS ESTIMATED
R = RESULT IS REJECTED AND UNUSABLE

NAS CECIL FIELD -- LOW WATER SOUTHEAST
SUBSURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10518

Lab Sample Number:	JR24901				JR2490-1				JR24902				JR2490-2			
Site	BRAC				BRAC				BRAC				BRAC			
Locator	A3B00101				A3B00101				A3B00201				A3B00201			
Collect Date:	27-JUL-98				29-JUL-98				27-JUL-98				29-JUL-98			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
CLP VOLATILES 90-SOW																
Chloromethane	1	U	ug/kg	1	-				1	U	ug/kg	1	-			
Bromomethane	1	U	ug/kg	1	-				1	U	ug/kg	1	-			
Vinyl chloride	1	U	ug/kg	1	-				1	U	ug/kg	1	-			
Chloroethane	1	U	ug/kg	1	-				1	U	ug/kg	1	-			
Methylene chloride	69	U	ug/kg	69	-				67	U	ug/kg	67	-			
Acetone	69	U	ug/kg	69	-				67	U	ug/kg	67	-			
Carbon disulfide	7	U	ug/kg	7	-				7	U	ug/kg	7	-			
1,1-Dichloroethene	1	U	ug/kg	1	-				1	U	ug/kg	1	-			
1,1-Dichloroethane	1	U	ug/kg	1	-				1	U	ug/kg	1	-			
1,2-Dichloroethene (total)	-				-				-				-			
Chloroform	1	U	ug/kg	1	-				1	U	ug/kg	1	-			
1,2-Dichloroethane	1	U	ug/kg	1	-				1	U	ug/kg	1	-			
2-Butanone	14	U	ug/kg	14	-				13	U	ug/kg	13	-			
1,1,1-Trichloroethane	1	U	ug/kg	1	-				1	U	ug/kg	1	-			
Carbon tetrachloride	1	U	ug/kg	1	-				1	U	ug/kg	1	-			
Bromodichloromethane	1	U	ug/kg	1	-				1	U	ug/kg	1	-			
1,2-Dichloropropane	1	U	ug/kg	1	-				1	U	ug/kg	1	-			
cis-1,3-Dichloropropene	1	U	ug/kg	1	-				1	U	ug/kg	1	-			
Trichloroethene	1	U	ug/kg	1	-				1	U	ug/kg	1	-			
Dibromochloromethane	1	U	ug/kg	1	-				1	U	ug/kg	1	-			
1,1,2-Trichloroethane	1	U	ug/kg	1	-				1	U	ug/kg	1	-			
Benzene	1	U	ug/kg	1	-				1	U	ug/kg	1	-			
trans-1,3-Dichloropropene	1	U	ug/kg	1	-				1	U	ug/kg	1	-			
Bromoform	1	U	ug/kg	1	-				1	U	ug/kg	1	-			
4-Methyl-2-pentanone	14	U	ug/kg	14	-				13	U	ug/kg	13	-			
2-Hexanone	7	U	ug/kg	7	-				7	U	ug/kg	7	-			
Tetrachloroethene	1	U	ug/kg	1	-				1	U	ug/kg	1	-			
Toluene	1	U	ug/kg	1	-				1	U	ug/kg	1	-			
1,1,2,2-Tetrachloroethane	1	U	ug/kg	1	-				1	U	ug/kg	1	-			
Chlorobenzene	1	U	ug/kg	1	-				1	U	ug/kg	1	-			
Ethylbenzene	1	U	ug/kg	1	-				1	U	ug/kg	1	-			
Styrene	1	U	ug/kg	1	-				1	U	ug/kg	1	-			
Xylenes (total)	-				-				-				-			
CLP SEMIVOLATILES 90-SOW																
Phenol	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
bis(2-Chloroethyl) ether	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
2-Chlorophenol	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
1,3-Dichlorobenzene	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
1,4-Dichlorobenzene	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
1,2-Dichlorobenzene	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
2-Methylphenol	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
2,2-oxybis(1-Chloropropane)	-				-				-				-			
4-Methylphenol	-				-				-				-			
N-Nitroso-di-n-propylamine	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
Hexachloroethane	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
Nitrobenzene	460	U	ug/kg	460	.25	U	mg/kg	.25	440	U	ug/kg	440	.25	U	mg/kg	.25
Isophorone	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
2-Nitrophenol	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
2,4-Dimethylphenol	460	U	ug/kg	460	-				440	U	ug/kg	440	-			

NAS CECIL FIELD -- LOW WATER SOUTHEAST
SUBSURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10518

Lab Sample Number:	JR24901				JR2490-1				JR24902				JR2490-2			
Site	BRAC				BRAC				BRAC				BRAC			
Locator	A3B00101				A3B00101				A3B00201				A3B00201			
Collect Date:	27-JUL-98				29-JUL-98				27-JUL-98				29-JUL-98			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
bis(2-Chloroethoxy) methane	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
2,4-Dichlorophenol	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
1,2,4-Trichlorobenzene	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
Naphthalene	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
4-Chloroaniline	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
Hexachlorobutadiene	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
4-Chloro-3-methylphenol	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
2-Methylnaphthalene	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
Hexachlorocyclopentadiene	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
2,4,6-Trichlorophenol	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
2,4,5-Trichlorophenol	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
2-Chloronaphthalene	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
2-Nitroaniline	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
Dimethylphthalate	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
Acenaphthylene	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
2,6-Dinitrotoluene	460	U	ug/kg	460	.25	U	mg/kg	.25	440	U	ug/kg	440	.25	U	mg/kg	.25
3-Nitroaniline	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
Acenaphthene	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
2,4-Dinitrophenol	2300	U	ug/kg	2300	-				2200	U	ug/kg	2200	-			
4-Nitrophenol	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
Dibenzofuran	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
2,4-Dinitrotoluene	460	U	ug/kg	460	.25	U	mg/kg	.25	440	U	ug/kg	440	.25	U	mg/kg	.25
Diethylphthalate	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
4-Chlorophenyl-phenylether	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
Fluorene	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
4-Nitroaniline	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
4,6-Dinitro-2-methylphenol	1400	U	ug/kg	1400	-				1300	U	ug/kg	1300	-			
N-Nitrosodiphenylamine	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
4-Bromophenyl-phenylether	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
Hexachlorobenzene	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
Pentachlorophenol	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
Phenanthrene	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
Anthracene	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
Carbazole	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
Di-n-butylphthalate	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
Fluoranthene	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
Pyrene	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
Butylbenzylphthalate	-				-				-				-			
3,3-Dichlorobenzidine	920	U	ug/kg	920	-				880	U	ug/kg	880	-			
Benzo (a) anthracene	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
Chrysene	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
bis(2-Ethylhexyl) phthalate	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
Di-n-octylphthalate	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
Benzo (b) fluoranthene	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
Benzo (k) fluoranthene	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
Benzo (a) pyrene	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
Indeno (1,2,3-cd) pyrene	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
Dibenzo (a,h) anthracene	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
Benzo (g,h,i) perylene	460	U	ug/kg	460	-				440	U	ug/kg	440	-			
CLP PESTICIDES/PCBS 90-SOW																
alpha-BHC	2.3	U	ug/kg	2.3	-				2.2	U	ug/kg	2.2	-			

NAS CECIL FIELD -- OW WATER SOUTHEAST
SUBSURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10518

Lab Sample Number:	JR24901				JR2490-1				JR24902				JR2490-2			
Site	BRAC				BRAC				BRAC				BRAC			
Locator	A3B00101				A3B00101				A3B00201				A3B00201			
Collect Date:	27-JUL-98				29-JUL-98				27-JUL-98				29-JUL-98			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
beta-BHC	2.3	U	ug/kg	2.3	-				2.2	U	ug/kg	2.2	-			
delta-BHC	2.3	U	ug/kg	2.3	-				2.2	U	ug/kg	2.2	-			
gamma-BHC (Lindane)	2.3	U	ug/kg	2.3	-				2.2	U	ug/kg	2.2	-			
Heptachlor	2.3	U	ug/kg	2.3	-				2.2	U	ug/kg	2.2	-			
Aldrin	2.3	U	ug/kg	2.3	-				2.2	U	ug/kg	2.2	-			
Heptachlor epoxide	2.3	U	ug/kg	2.3	-				2.2	U	ug/kg	2.2	-			
Endosulfan I	2.3	U	ug/kg	2.3	-				2.2	U	ug/kg	2.2	-			
Dieldrin	2.3	U	ug/kg	2.3	-				2.2	U	ug/kg	2.2	-			
4,4-DDE	2.3	U	ug/kg	2.3	-				2.2	U	ug/kg	2.2	-			
Endrin	2.3	U	ug/kg	2.3	-				2.2	U	ug/kg	2.2	-			
Endosulfan II	2.3	U	ug/kg	2.3	-				2.2	U	ug/kg	2.2	-			
4,4-DDD	2.3	U	ug/kg	2.3	-				2.2	U	ug/kg	2.2	-			
Endosulfan sulfate	2.3	U	ug/kg	2.3	-				2.2	U	ug/kg	2.2	-			
4,4-DDT	2.3	U	ug/kg	2.3	-				2.2	U	ug/kg	2.2	-			
Methoxychlor	2.3	U	ug/kg	2.3	-				2.2	U	ug/kg	2.2	-			
Endrin ketone	2.3	U	ug/kg	2.3	-				2.2	U	ug/kg	2.2	-			
Endrin aldehyde	2.3	U	ug/kg	2.3	-				2.2	U	ug/kg	2.2	-			
alpha-Chlordane	46	U	ug/kg	46	-				44	U	ug/kg	44	-			
gamma-Chlordane	46	U	ug/kg	46	-				44	U	ug/kg	44	-			
Toxaphene	92	U	ug/kg	92	-				88	U	ug/kg	88	-			
Aroclor-1016	-				-				-				-			
Aroclor-1221	46	U	ug/kg	46	-				44	U	ug/kg	44	-			
Aroclor-1232	46	U	ug/kg	46	-				44	U	ug/kg	44	-			
Aroclor-1242	-				-				-				-			
Aroclor-1248	46	U	ug/kg	46	-				44	U	ug/kg	44	-			
Aroclor-1254	46	U	ug/kg	46	-				44	U	ug/kg	44	-			
Aroclor-1260	46	U	ug/kg	46	-				44	U	ug/kg	44	-			
CLP METALS AND CYANIDE																
Aluminum	670		mg/kg	28	-				610		mg/kg	27	-			
Antimony	3	U	mg/kg	3	-				3	U	mg/kg	3	-			
Arsenic	.7	U	mg/kg	.7	-				.7	U	mg/kg	.7	-			
Barium	28	U	mg/kg	28	-				27	U	mg/kg	27	-			
Beryllium	1	U	mg/kg	1	-				1	U	mg/kg	1	-			
Cadmium	1	U	mg/kg	1	-				1	U	mg/kg	1	-			
Calcium	100		mg/kg	35	-				1900		mg/kg	33	-			
Chromium	1	U	mg/kg	1	-				1	U	mg/kg	1	-			
Cobalt	7	U	mg/kg	7	-				7	U	mg/kg	7	-			
Copper	15		mg/kg	7	-				19		mg/kg	7	-			
Iron	540		mg/kg	14	-				480		mg/kg	13	-			
Lead	11		mg/kg	1	-				17		mg/kg	1	-			
Magnesium	35	U	mg/kg	35	-				33	U	mg/kg	33	-			
Manganese	1	U	mg/kg	1	-				1	U	mg/kg	1	-			
Mercury	.01	U	mg/kg	.01	-				.01	U	mg/kg	.01	-			
Nickel	7	U	mg/kg	7	-				7	U	mg/kg	7	-			
Potassium	35	U	mg/kg	35	-				33	U	mg/kg	33	-			
Selenium	3	U	mg/kg	3	-				3	U	mg/kg	3	-			
Silver	3	U	mg/kg	3	-				3	U	mg/kg	3	-			
Sodium	35	U	mg/kg	35	-				33	U	mg/kg	33	-			
Thallium	1	U	mg/kg	1	-				1	U	mg/kg	1	-			
Vanadium	1.9		mg/kg	1	-				1.5		mg/kg	1	-			
Zinc	25		mg/kg	7	-				12		mg/kg	7	-			

NAS CECIL FIELD -- LOW WATER SOUTHEAST
SUBSURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10518

Lab Sample Number:	JR24901			JR2490-1			JR24902			JR2490-2		
Site	BRAC			BRAC			BRAC			BRAC		
Locator	A3B00101			A3B00101			A3B00201			A3B00201		
Collect Date:	27-JUL-98			29-JUL-98			27-JUL-98			29-JUL-98		
	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL
Cyanide		-			-			-			-	

U = NOT DETECTED J = ESTIMATED VALUE
UJ = REPORTED QUANTITATION LIMIT IS QUALIFIED AS ESTIMATED
R = RESULT IS REJECTED AND UNUSABLE

NAS CECIL FIELD -- YELLOW WATER SOUTHEAST
SUBSURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10518

Lab Sample Number:	JR24907				JR2490-7			
Site	BRAC				BRAC			
Locator	A3B00201D				A3B00201D			
Collect Date:	27-JUL-98				29-JUL-98			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
CLP VOLATILES 90-SOW								
Chloromethane	1	U	ug/kg	1	-			
Bromomethane	1	U	ug/kg	1	-			
Vinyl chloride	1	U	ug/kg	1	-			
Chloroethane	1	U	ug/kg	1	-			
Methylene chloride	67	U	ug/kg	67	-			
Acetone	67	U	ug/kg	67	-			
Carbon disulfide	7	U	ug/kg	7	-			
1,1-Dichloroethene	1	U	ug/kg	1	-			
1,1-Dichloroethane	1	U	ug/kg	1	-			
1,2-Dichloroethene (total)	-				-			
Chloroform	1	U	ug/kg	1	-			
1,2-Dichloroethane	1	U	ug/kg	1	-			
2-Butanone	13	U	ug/kg	13	-			
1,1,1-Trichloroethane	1	U	ug/kg	1	-			
Carbon tetrachloride	1	U	ug/kg	1	-			
Bromodichloromethane	1	U	ug/kg	1	-			
1,2-Dichloropropane	1	U	ug/kg	1	-			
cis-1,3-Dichloropropene	1	U	ug/kg	1	-			
Trichloroethene	1	U	ug/kg	1	-			
Dibromochloromethane	1	U	ug/kg	1	-			
1,1,2-Trichloroethane	1	U	ug/kg	1	-			
Benzene	1	U	ug/kg	1	-			
trans-1,3-Dichloropropene	1	U	ug/kg	1	-			
Bromoform	1	U	ug/kg	1	-			
4-Methyl-2-pentanone	13	U	ug/kg	13	-			
2-Hexanone	7	U	ug/kg	7	-			
Tetrachloroethene	1	U	ug/kg	1	-			
Toluene	1	U	ug/kg	1	-			
1,1,2,2-Tetrachloroethane	1	U	ug/kg	1	-			
Chlorobenzene	1	U	ug/kg	1	-			
Ethylbenzene	1	U	ug/kg	1	-			
Styrene	1	U	ug/kg	1	-			
Xylenes (total)	-				-			
CLP SEMIVOLATILES 90-SOW								
Phenol	440	U	ug/kg	440	-			
bis(2-Chloroethyl) ether	440	U	ug/kg	440	-			
2-Chlorophenol	440	U	ug/kg	440	-			
1,3-Dichlorobenzene	440	U	ug/kg	440	-			
1,4-Dichlorobenzene	440	U	ug/kg	440	-			

NAS CECIL FIELD -- LOW WATER SOUTHEAST
SUBSURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10518

Lab Sample Number:	JR24907				JR2490-7			
Site	BRAC				BRAC			
Locator	A3B00201D				A3B00201D			
Collect Date:	27-JUL-98				29-JUL-98			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,2-Dichlorobenzene	440	U	ug/kg	440	-			
2-Methylphenol	440	U	ug/kg	440	-			
2,2-oxybis(1-Chloropropane)	-				-			
4-Methylphenol	-				-			
N-Nitroso-di-n-propylamine	440	U	ug/kg	440	-			
Hexachloroethane	440	U	ug/kg	440	-			
Nitrobenzene	440	U	ug/kg	440	.25	U	mg/kg	.25
Isophorone	440	U	ug/kg	440	-			
2-Nitrophenol	440	U	ug/kg	440	-			
2,4-Dimethylphenol	440	U	ug/kg	440	-			
bis(2-Chloroethoxy) methane	440	U	ug/kg	440	-			
2,4-Dichlorophenol	440	U	ug/kg	440	-			
1,2,4-Trichlorobenzene	440	U	ug/kg	440	-			
Naphthalene	440	U	ug/kg	440	-			
4-Chloroaniline	440	U	ug/kg	440	-			
Hexachlorobutadiene	440	U	ug/kg	440	-			
4-Chloro-3-methylphenol	440	U	ug/kg	440	-			
2-Methylnaphthalene	440	U	ug/kg	440	-			
Hexachlorocyclopentadiene	440	U	ug/kg	440	-			
2,4,6-Trichlorophenol	440	U	ug/kg	440	-			
2,4,5-Trichlorophenol	440	U	ug/kg	440	-			
2-Chloronaphthalene	440	U	ug/kg	440	-			
2-Nitroaniline	440	U	ug/kg	440	-			
Dimethylphthalate	440	U	ug/kg	440	-			
Acenaphthylene	440	U	ug/kg	440	-			
2,6-Dinitrotoluene	440	U	ug/kg	440	.25	U	mg/kg	.25
3-Nitroaniline	440	U	ug/kg	440	-			
Acenaphthene	440	U	ug/kg	440	-			
2,4-Dinitrophenol	2200	U	ug/kg	2200	-			
4-Nitrophenol	440	U	ug/kg	440	-			
Dibenzofuran	440	U	ug/kg	440	-			
2,4-Dinitrotoluene	440	U	ug/kg	440	.25	U	mg/kg	.25
Diethylphthalate	440	U	ug/kg	440	-			
4-Chlorophenyl-phenylether	440	U	ug/kg	440	-			
Fluorene	440	U	ug/kg	440	-			
4-Nitroaniline	440	U	ug/kg	440	-			
4,6-Dinitro-2-methylphenol	1300	U	ug/kg	1300	-			
N-Nitrosodiphenylamine	440	U	ug/kg	440	-			
4-Bromophenyl-phenylether	440	U	ug/kg	440	-			
Hexachlorobenzene	440	U	ug/kg	440	-			
Pentachlorophenol	440	U	ug/kg	440	-			
Phenanthrene	440	U	ug/kg	440	-			
Anthracene	440	U	ug/kg	440	-			
Carbazole	440	U	ug/kg	440	-			
Di-n-butylphthalate	440	U	ug/kg	440	-			
Fluoranthene	440	U	ug/kg	440	-			
Pyrene	440	U	ug/kg	440	-			
Butylbenzylphthalate	-				-			
3,3-Dichlorobenzidine	880	U	ug/kg	880	-			
Benzo (a) anthracene	440	U	ug/kg	440	-			
Chrysene	440	U	ug/kg	440	-			
bis(2-Ethylhexyl) phthalate	440	U	ug/kg	440	-			

NAS CECIL FIELD -- . .LOW WATER SOUTHEAST
SUBSURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10518

Lab Sample Number:	JR24907				JR2490-7			
Site	BRAC				BRAC			
Locator	A3B00201D				A3B00201D			
Collect Date:	27-JUL-98				29-JUL-98			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Di-n-octylphthalate	440	U	ug/kg	440	-			
Benzo (b) fluoranthene	440	U	ug/kg	440	-			
Benzo (k) fluoranthene	440	U	ug/kg	440	-			
Benzo (a) pyrene	440	U	ug/kg	440	-			
Indeno (1,2,3-cd) pyrene	440	U	ug/kg	440	-			
Dibenzo (a,h) anthracene	440	U	ug/kg	440	-			
Benzo (g,h,i) perylene	440	U	ug/kg	440	-			
CLP PESTICIDES/PCBS 90-SOW								
alpha-BHC	2.2	U	ug/kg	2.2	-			
beta-BHC	2.2	U	ug/kg	2.2	-			
delta-BHC	2.2	U	ug/kg	2.2	-			
gamma-BHC (Lindane)	2.2	U	ug/kg	2.2	-			
Heptachlor	2.2	U	ug/kg	2.2	-			
Aldrin	2.2	U	ug/kg	2.2	-			
Heptachlor epoxide	2.2	U	ug/kg	2.2	-			
Endosulfan I	2.2	U	ug/kg	2.2	-			
Dieldrin	2.2	U	ug/kg	2.2	-			
4,4-DDE	2.2	U	ug/kg	2.2	-			
Endrin	2.2	U	ug/kg	2.2	-			
Endosulfan II	2.2	U	ug/kg	2.2	-			
4,4-DDD	2.2	U	ug/kg	2.2	-			
Endosulfan sulfate	2.2	U	ug/kg	2.2	-			
4,4-DDT	2.2	U	ug/kg	2.2	-			
Methoxychlor	2.2	U	ug/kg	2.2	-			
Endrin ketone	2.2	U	ug/kg	2.2	-			
Endrin aldehyde	2.2	U	ug/kg	2.2	-			
alpha-Chlordane	44	U	ug/kg	44	-			
gamma-Chlordane	44	U	ug/kg	44	-			
Toxaphene	88	U	ug/kg	88	-			
Aroclor-1016	-				-			
Aroclor-1221	44	U	ug/kg	44	-			
Aroclor-1232	44	U	ug/kg	44	-			
Aroclor-1242	-				-			
Aroclor-1248	44	U	ug/kg	44	-			
Aroclor-1254	44	U	ug/kg	44	-			
Aroclor-1260	44	U	ug/kg	44	-			
CLP METALS AND CYANIDE								
Aluminum	850		mg/kg	27	-			
Antimony	3	U	mg/kg	3	-			
Arsenic	.7	U	mg/kg	.7	-			
Barium	27	U	mg/kg	27	-			
Beryllium	1	U	mg/kg	1	-			
Cadmium	1	U	mg/kg	1	-			
Calcium	1900		mg/kg	33	-			
Chromium	1	U	mg/kg	1	-			
Cobalt	7	U	mg/kg	7	-			
Copper	31		mg/kg	7	-			
Iron	490		mg/kg	13	-			
Lead	20		mg/kg	1	-			
Magnesium	33	U	mg/kg	33	-			

NAS CECIL FIELD -- YELLOW WATER SOUTHEAST
SUBSURFACE SOIL -- ANALYTICAL DATA -- REPORT REQUEST NO. 10518

Lab Sample Number:	JR24907				JR2490-7			
Site	BRAC				BRAC			
Locator	A3B00201D				A3B00201D			
Collect Date:	27-JUL-98				29-JUL-98			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Manganese	1		mg/kg	1	-			
Mercury	.01	U	mg/kg	.01	-			
Nickel	7	U	mg/kg	7	-			
Potassium	33	U	mg/kg	33	-			
Selenium	3	U	mg/kg	3	-			
Silver	3	U	mg/kg	3	-			
Sodium	750		mg/kg	33	-			
Thallium	1	U	mg/kg	1	-			
Vanadium	1		mg/kg	1	-			
Zinc	25		mg/kg	7	-			
Cyanide	-				-			

U = NOT DETECTED J = ESTIMATED VALUE
UJ = REPORTED QUANTITATION LIMIT IS QUALIFIED AS ESTIMATED
R = RESULT IS REJECTED AND UNUSABLE

NAS CECIL FIELD -- ...LOW WATER SOUTHEAST
SEDIMENT -- ANALYTICAL DATA -- REPORT REQUEST NO. 10519

Lab Sample Number:	JR24915				JR24916				JR353215				JR353213			
Site	BRAC				BRAC				BRAC				BRAC			
Locator	98D00101				98D00201				98D00301				98D00401			
Collect Date:	28-JUL-98				28-JUL-98				07-OCT-98				07-OCT-98			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
CLP VOLATILES 90-SOW																
Chloromethane	1	U	ug/kg	1	1	U	ug/kg	1	7	U	ug/kg	7	7	U	ug/kg	7
Bromomethane	1	U	ug/kg	1	1	U	ug/kg	1	14	U	ug/kg	14	14	U	ug/kg	14
Vinyl chloride	1	U	ug/kg	1	1	U	ug/kg	1	7	U	ug/kg	7	7	U	ug/kg	7
Chloroethane	1	U	ug/kg	1	1	U	ug/kg	1	14	U	ug/kg	14	14	U	ug/kg	14
Methylene chloride	70	U	ug/kg	70	70	U	ug/kg	70	72	U	ug/kg	72	68	U	ug/kg	68
Acetone	70	U	ug/kg	70	70	U	ug/kg	70	72	U	ug/kg	72	68	U	ug/kg	68
Carbon disulfide	8	I	ug/kg	7	7	U	ug/kg	7	7	J	ug/kg	7	7.4	J	ug/kg	7
1,1-Dichloroethene	1	U	ug/kg	1	1	U	ug/kg	1	7	U	ug/kg	7	7	U	ug/kg	7
1,1-Dichloroethane	1	U	ug/kg	1	1	U	ug/kg	1	7	U	ug/kg	7	7	U	ug/kg	7
1,2-Dichloroethene (total)	-				-				-				-			
Chloroform	1	U	ug/kg	1	1	U	ug/kg	1	7	U	ug/kg	7	7	U	ug/kg	7
1,2-Dichloroethane	1	U	ug/kg	1	1	U	ug/kg	1	7	U	ug/kg	7	7	U	ug/kg	7
2-Butanone	14	U	ug/kg	14	14	U	ug/kg	14	72	U	ug/kg	72	68	U	ug/kg	68
1,1,1-Trichloroethane	1	U	ug/kg	1	1	U	ug/kg	1	7	U	ug/kg	7	7	U	ug/kg	7
Carbon tetrachloride	1	U	ug/kg	1	1	U	ug/kg	1	7	U	ug/kg	7	7	U	ug/kg	7
Bromodichloromethane	1	U	ug/kg	1	1	U	ug/kg	1	7	U	ug/kg	7	7	U	ug/kg	7
1,2-Dichloropropane	1	U	ug/kg	1	1	U	ug/kg	1	7	U	ug/kg	7	7	U	ug/kg	7
cis-1,3-Dichloropropene	1	U	ug/kg	1	1	U	ug/kg	1	7	U	ug/kg	7	7	U	ug/kg	7
Trichloroethene	1	U	ug/kg	1	1	U	ug/kg	1	7	U	ug/kg	7	7	U	ug/kg	7
Dibromochloromethane	1	U	ug/kg	1	1	U	ug/kg	1	7	U	ug/kg	7	7	U	ug/kg	7
1,1,2-Trichloroethane	1	U	ug/kg	1	1	U	ug/kg	1	7	U	ug/kg	7	7	U	ug/kg	7
Benzene	1	U	ug/kg	1	1	U	ug/kg	1	7	U	ug/kg	7	7	U	ug/kg	7
trans-1,3-Dichloropropene	1	U	ug/kg	1	1	U	ug/kg	1	7	U	ug/kg	7	7	U	ug/kg	7
Bromoform	1	U	ug/kg	1	1	U	ug/kg	1	7	U	ug/kg	7	7	U	ug/kg	7
4-Methyl-2-pentanone	14	U	ug/kg	14	14	U	ug/kg	14	14	U	ug/kg	14	14	U	ug/kg	14
2-Hexanone	7	U	ug/kg	7	7	U	ug/kg	7	14	U	ug/kg	14	14	U	ug/kg	14
Tetrachloroethene	1	U	ug/kg	1	1	U	ug/kg	1	22	U	ug/kg	22	20	U	ug/kg	20
Toluene	1	U	ug/kg	1	1	U	ug/kg	1	7	U	ug/kg	7	7	U	ug/kg	7
1,1,2,2-Tetrachloroethane	1	U	ug/kg	1	1	U	ug/kg	1	7	U	ug/kg	7	7	U	ug/kg	7
Chlorobenzene	1	U	ug/kg	1	1	U	ug/kg	1	7	U	ug/kg	7	7	U	ug/kg	7
Ethylbenzene	1	U	ug/kg	1	1	U	ug/kg	1	7	U	ug/kg	7	7	U	ug/kg	7
Styrene	1	U	ug/kg	1	1	U	ug/kg	1	7	U	ug/kg	7	7	U	ug/kg	7
Xylenes (total)	-				-				-				-			
CLP SEMIVOLATILES 90-SOW																
Phenol	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
bis(2-Chloroethyl) ether	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
2-Chlorophenol	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
1,3-Dichlorobenzene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
1,4-Dichlorobenzene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
1,2-Dichlorobenzene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
2-Methylphenol	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
2,2-oxybis(1-Chloropropane)	-				-				-				-			
4-Methylphenol	-				-				-				-			
N-Nitroso-di-n-propylamine	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Hexachloroethane	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Nitrobenzene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Isophorone	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
2-Nitrophenol	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
2,4-Dimethylphenol	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230

NAS CECIL FIELD -- LOW WATER SOUTHEAST
SEDIMENT -- ANALYTICAL DATA -- REPORT REQUEST NO. 10519

Lab Sample Number:	JR24915				JR24916				JR353215				JR353213			
Site	BRAC				BRAC				BRAC				BRAC			
Locator	98D00101				98D00201				98D00301				98D00401			
Collect Date:	28-JUL-98				28-JUL-98				07-OCT-98				07-OCT-98			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
bis(2-Chloroethoxy) methane	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
2,4-Dichlorophenol	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
1,2,4-Trichlorobenzene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Naphthalene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
4-Chloroaniline	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Hexachlorobutadiene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
4-Chloro-3-methylphenol	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
2-Methylnaphthalene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Hexachlorocyclopentadiene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
2,4,6-Trichlorophenol	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
2,4,5-Trichlorophenol	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
2-Chloronaphthalene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
2-Nitroaniline	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Dimethylphthalate	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Acenaphthylene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
2,6-Dinitrotoluene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
3-Nitroaniline	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Acenaphthene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
2,4-Dinitrophenol	2300	U	ug/kg	2300	2300	U	ug/kg	2300	240	U	ug/kg	240	230	U	ug/kg	230
4-Nitrophenol	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Dibenzofuran	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
2,4-Dinitrotoluene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Diethylphthalate	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
4-Chlorophenyl-phenylether	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Fluorene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
4-Nitroaniline	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
4,6-Dinitro-2-methylphenol	1400	U	ug/kg	1400	1400	U	ug/kg	1400	240	U	ug/kg	240	230	U	ug/kg	230
N-Nitrosodiphenylamine	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
4-Bromophenyl-phenylether	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Hexachlorobenzene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Pentachlorophenol	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Phenanthrene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Anthracene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Carbazole	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Di-n-butylphthalate	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Fluoranthene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Pyrene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Butylbenzylphthalate	-				-				-				-			
3,3-Dichlorobenzidine	930	U	ug/kg	930	930	U	ug/kg	930	970	U	ug/kg	970	900	U	ug/kg	900
Benzo (a) anthracene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Chrysene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
bis(2-Ethylhexyl) phthalate	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Di-n-octylphthalate	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Benzo (b) fluoranthene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Benzo (k) fluoranthene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Benzo (a) pyrene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Indeno (1,2,3-cd) pyrene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Dibenzo (a,h) anthracene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
Benzo (g,h,i) perylene	460	U	ug/kg	460	460	U	ug/kg	460	240	U	ug/kg	240	230	U	ug/kg	230
CLP PESTICIDES/PCBS 90-SOW																
alpha-BHC	2.3	U	ug/kg	2.3	2.3	U	ug/kg	2.3	2.5	U	ug/kg	2.5	2.3	U	ug/kg	2.3

NAS CECIL FIELD -- OW WATER SOUTHEAST
SEDIMENT -- ANALYTICAL DATA -- REPORT REQUEST NO. 10519

Lab Sample Number:	JR24915				JR24916				JR353215				JR353213			
Site	BRAC				BRAC				BRAC				BRAC			
Locator	98D00101				98D00201				98D00301				98D00401			
Collect Date:	28-JUL-98				28-JUL-98				07-OCT-98				07-OCT-98			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
beta-BHC	2.3	U	ug/kg	2.3	2.3	U	ug/kg	2.3	2.5	U	ug/kg	2.5	2.3	U	ug/kg	2.3
delta-BHC	2.3	U	ug/kg	2.3	2.3	U	ug/kg	2.3	2.5	U	ug/kg	2.5	2.3	U	ug/kg	2.3
gamma-BHC (Lindane)	2.3	U	ug/kg	2.3	2.3	U	ug/kg	2.3	2.4	U	ug/kg	2.4	2.3	U	ug/kg	2.3
Heptachlor	2.3	U	ug/kg	2.3	2.3	U	ug/kg	2.3	2.5	U	ug/kg	2.5	2.3	U	ug/kg	2.3
Aldrin	2.3	U	ug/kg	2.3	2.3	U	ug/kg	2.3	2.4	U	ug/kg	2.4	2.3	U	ug/kg	2.3
Heptachlor epoxide	2.3	U	ug/kg	2.3	2.3	U	ug/kg	2.3	2.4	U	ug/kg	2.4	2.3	U	ug/kg	2.3
Endosulfan I	2.3	U	ug/kg	2.3	2.3	U	ug/kg	2.3	2.5	U	ug/kg	2.5	2.3	U	ug/kg	2.3
Dieldrin	2.3	U	ug/kg	2.3	2.3	U	ug/kg	2.3	2.5	U	ug/kg	2.5	2.3	U	ug/kg	2.3
4,4-DDE	2.3	U	ug/kg	2.3	2.3	U	ug/kg	2.3	2.5	U	ug/kg	2.5	2.3	U	ug/kg	2.3
Endrin	2.3	U	ug/kg	2.3	2.3	U	ug/kg	2.3	2.5	U	ug/kg	2.5	2.3	U	ug/kg	2.3
Endosulfan II	2.3	U	ug/kg	2.3	2.3	U	ug/kg	2.3	2.5	U	ug/kg	2.5	2.3	U	ug/kg	2.3
4,4-DDD	2.3	U	ug/kg	2.3	2.3	U	ug/kg	2.3	2.4	U	ug/kg	2.4	2.3	U	ug/kg	2.3
Endosulfan sulfate	2.3	U	ug/kg	2.3	2.3	U	ug/kg	2.3	2.4	U	ug/kg	2.4	2.3	U	ug/kg	2.3
4,4-DDT	2.3	U	ug/kg	2.3	2.3	U	ug/kg	2.3	2.5	U	ug/kg	2.5	2.3	U	ug/kg	2.3
Methoxychlor	2.3	U	ug/kg	2.3	2.3	U	ug/kg	2.3	4	U	ug/kg	4	4	U	ug/kg	4
Endrin ketone	2.3	U	ug/kg	2.3	2.3	U	ug/kg	2.3	2.4	U	ug/kg	2.4	2.3	U	ug/kg	2.3
Endrin aldehyde	2.3	U	ug/kg	2.3	2.3	U	ug/kg	2.3	2.4	U	ug/kg	2.4	2.3	U	ug/kg	2.3
alpha-Chlordane	46	U	ug/kg	46	46	U	ug/kg	46	2.4	U	ug/kg	2.4	2.3	U	ug/kg	2.3
gamma-Chlordane	46	U	ug/kg	46	46	U	ug/kg	46	2.5	U	ug/kg	2.5	2.3	U	ug/kg	2.3
Toxaphene	93	U	ug/kg	93	93	U	ug/kg	93	97	U	ug/kg	97	90	U	ug/kg	90
Aroclor-1016	-				-				-				-			
Aroclor-1221	46	U	ug/kg	46	46	U	ug/kg	46	48	U	ug/kg	48	45	U	ug/kg	45
Aroclor-1232	46	U	ug/kg	46	46	U	ug/kg	46	48	U	ug/kg	48	45	U	ug/kg	45
Aroclor-1242	-				-				-				-			
Aroclor-1248	46	U	ug/kg	46	46	U	ug/kg	46	48	U	ug/kg	48	45	U	ug/kg	45
Aroclor-1254	46	U	ug/kg	46	46	U	ug/kg	46	48	U	ug/kg	48	45	U	ug/kg	45
Aroclor-1260	46	U	ug/kg	46	46	U	ug/kg	46	48	U	ug/kg	48	45	U	ug/kg	45
CLP METALS AND CYANIDE																
Aluminum	5200		mg/kg	28	7600		mg/kg	28	860		mg/kg	29	8000		mg/kg	27
Antimony	3	U	mg/kg	3	3	U	mg/kg	3	3	U	mg/kg	3	3	U	mg/kg	3
Arsenic	.7	U	mg/kg	.7	.7	U	mg/kg	.7	.7	U	mg/kg	.7	.7	U	mg/kg	.7
Barium	28	U	mg/kg	28	28	U	mg/kg	28	29	U	mg/kg	29	27	U	mg/kg	27
Beryllium	1	U	mg/kg	1	1	U	mg/kg	1	1	U	mg/kg	1	1	U	mg/kg	1
Cadmium	1	U	mg/kg	1	1	U	mg/kg	1	1	U	mg/kg	1	1	U	mg/kg	1
Calcium	44		mg/kg	35	130		mg/kg	35	75		mg/kg	36	160		mg/kg	34
Chromium	3.7		mg/kg	1	4.8		mg/kg	1	1	U	mg/kg	1	5.5		mg/kg	1
Cobalt	7	U	mg/kg	7	7	U	mg/kg	7	7	U	mg/kg	7	7	U	mg/kg	7
Copper	7	U	mg/kg	7	7	U	mg/kg	7	7	U	mg/kg	7	7	U	mg/kg	7
Iron	420		mg/kg	14	480		mg/kg	14	100		mg/kg	14	810		mg/kg	14
Lead	3.5		mg/kg	1	12		mg/kg	1	1.7		mg/kg	1	4.9		mg/kg	1
Magnesium	110		mg/kg	35	140		mg/kg	35	52		mg/kg	36	470		mg/kg	34
Manganese	2.4		mg/kg	1	3.1		mg/kg	1	1	U	mg/kg	1	5.8		mg/kg	1
Mercury	.01	U	mg/kg	.01	.01	U	mg/kg	.01	.01	U	mg/kg	.01	.01	U	mg/kg	.01
Nickel	7	U	mg/kg	7	7	U	mg/kg	7	7	U	mg/kg	7	7	U	mg/kg	7
Potassium	110		mg/kg	35	130		mg/kg	35	36	U	mg/kg	36	260		mg/kg	34
Selenium	3	U	mg/kg	3	3	U	mg/kg	3	3	U	mg/kg	3	3	U	mg/kg	3
Silver	3	U	mg/kg	3	3	U	mg/kg	3	3	U	mg/kg	3	3	U	mg/kg	3
Sodium	35	U	mg/kg	35	35	U	mg/kg	35	36	U	mg/kg	36	34	U	mg/kg	34
Thallium	1	U	mg/kg	1	1	U	mg/kg	1	1	U	mg/kg	1	1	U	mg/kg	1
Vanadium	5.1		mg/kg	1	6		mg/kg	1	2.5		mg/kg	1	8.4		mg/kg	1
Zinc	9.6		mg/kg	7	30		mg/kg	7	7	U	mg/kg	7	7	U	mg/kg	7

NAS CECIL FIELD -- ...LOW WATER SOUTHEAST
SEDIMENT -- ANALYTICAL DATA -- REPORT REQUEST NO. 10519

Lab Sample Number:	JR24915			JR24916			JR353215			JR353213		
Site	BRAC			BRAC			BRAC			BRAC		
Locator	98D00101			98D00201			98D00301			98D00401		
Collect Date:	28-JUL-98			28-JUL-98			07-OCT-98			07-OCT-98		
	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL
Cyanide		-			-			-			-	

U = NOT DETECTED J = ESTIMATED VALUE
UJ = REPORTED QUANTITATION LIMIT IS QUALIFIED AS ESTIMATED
R = RESULT IS REJECTED AND UNUSABLE

NAS CECIL FIELD -- [illegible]OW WATER SOUTHEAST
SEDIMENT -- ANALYTICAL DATA -- REPORT REQUEST NO. 10519

Lab Sample Number:		JR353211		
Site		BRAC		
Locator		98D00501		
Collect Date:		07-OCT-98		
	VALUE	QUAL	UNITS	DL
CLP VOLATILES 90-SOW				
Chloromethane	7	U	ug/kg	7
Bromomethane	14	U	ug/kg	14
Vinyl chloride	7	U	ug/kg	7
Chloroethane	14	U	ug/kg	14
Methylene chloride	68	U	ug/kg	68
Acetone	68	U	ug/kg	68
Carbon disulfide	7.7	J	ug/kg	7
1,1-Dichloroethene	7	U	ug/kg	7
1,1-Dichloroethane	7	U	ug/kg	7
1,2-Dichloroethene (total)	-			
Chloroform	7	U	ug/kg	7
1,2-Dichloroethane	7	U	ug/kg	7
2-Butanone	68	U	ug/kg	68
1,1,1-Trichloroethane	7	U	ug/kg	7
Carbon tetrachloride	7	U	ug/kg	7
Bromodichloromethane	7	U	ug/kg	7
1,2-Dichloropropane	7	U	ug/kg	7
cis-1,3-Dichloropropene	7	U	ug/kg	7
Trichloroethene	7	U	ug/kg	7
Dibromochloromethane	7	U	ug/kg	7
1,1,2-Trichloroethane	7	U	ug/kg	7
Benzene	7	U	ug/kg	7
trans-1,3-Dichloropropene	7	U	ug/kg	7
Bromoform	7	U	ug/kg	7
4-Methyl-2-pentanone	14	U	ug/kg	14
2-Hexanone	14	U	ug/kg	14
Tetrachloroethene	20	U	ug/kg	20
Toluene	7	U	ug/kg	7
1,1,2,2-Tetrachloroethane	7	U	ug/kg	7
Chlorobenzene	7	U	ug/kg	7
Ethylbenzene	7	U	ug/kg	7
Styrene	7	U	ug/kg	7
Xylenes (total)	-			
CLP SEMIVOLATILES 90-SOW				
Phenol	230	U	ug/kg	230
bis(2-Chloroethyl) ether	230	U	ug/kg	230
2-Chlorophenol	230	U	ug/kg	230
1,3-Dichlorobenzene	230	U	ug/kg	230
1,4-Dichlorobenzene	230	U	ug/kg	230

NAS CECIL FIELD -- YELLOW WATER SOUTHEAST
SEDIMENT -- ANALYTICAL DATA -- REPORT REQUEST NO. 10519

Lab Sample Number:	JR353211
Site	BRAC
Locator	98D00501
Collect Date:	07-OCT-98

	VALUE	QUAL	UNITS	DL
1,2-Dichlorobenzene	230	U	ug/kg	230
2-Methylphenol	230	U	ug/kg	230
2,2-oxybis(1-Chloropropane)	-			
4-Methylphenol	-			
N-Nitroso-di-n-propylamine	230	U	ug/kg	230
Hexachloroethane	230	U	ug/kg	230
Nitrobenzene	230	U	ug/kg	230
Isophorone	230	U	ug/kg	230
2-Nitrophenol	230	U	ug/kg	230
2,4-Dimethylphenol	230	U	ug/kg	230
bis(2-Chloroethoxy) methane	230	U	ug/kg	230
2,4-Dichlorophenol	230	U	ug/kg	230
1,2,4-Trichlorobenzene	230	U	ug/kg	230
Naphthalene	230	U	ug/kg	230
4-Chloroaniline	230	U	ug/kg	230
Hexachlorobutadiene	230	U	ug/kg	230
4-Chloro-3-methylphenol	230	U	ug/kg	230
2-Methylnaphthalene	230	U	ug/kg	230
Hexachlorocyclopentadiene	230	U	ug/kg	230
2,4,6-Trichlorophenol	230	U	ug/kg	230
2,4,5-Trichlorophenol	230	U	ug/kg	230
2-Chloronaphthalene	230	U	ug/kg	230
2-Nitroaniline	230	U	ug/kg	230
Dimethylphthalate	230	U	ug/kg	230
Acenaphthylene	230	U	ug/kg	230
2,6-Dinitrotoluene	230	U	ug/kg	230
3-Nitroaniline	230	U	ug/kg	230
Acenaphthene	230	U	ug/kg	230
2,4-Dinitrophenol	230	U	ug/kg	230
4-Nitrophenol	230	U	ug/kg	230
Dibenzofuran	230	U	ug/kg	230
2,4-Dinitrotoluene	230	U	ug/kg	230
Diethylphthalate	230	U	ug/kg	230
4-Chlorophenyl-phenylether	230	U	ug/kg	230
Fluorene	230	U	ug/kg	230
4-Nitroaniline	230	U	ug/kg	230
4,6-Dinitro-2-methylphenol	230	U	ug/kg	230
N-Nitrosodiphenylamine	230	U	ug/kg	230
4-Bromophenyl-phenylether	230	U	ug/kg	230
Hexachlorobenzene	230	U	ug/kg	230
Pentachlorophenol	230	U	ug/kg	230
Phenanthrene	230	U	ug/kg	230
Anthracene	230	U	ug/kg	230
Carbazole	230	U	ug/kg	230
Di-n-butylphthalate	230	U	ug/kg	230
Fluoranthene	230	U	ug/kg	230
Pyrene	230	U	ug/kg	230
Butylbenzylphthalate	-			
3,3-Dichlorobenzidine	900	U	ug/kg	900
Benzo (a) anthracene	230	U	ug/kg	230
Chrysene	230	U	ug/kg	230
bis(2-Ethylhexyl) phthalate	230	U	ug/kg	230

NAS CECIL FIELD -- ...LOW WATER SOUTHEAST
SEDIMENT -- ANALYTICAL DATA -- REPORT REQUEST NO. 10519

Lab Sample Number:	JR353211
Site	BRAC
Locator	98D00501
Collect Date:	07-OCT-98

	VALUE	QUAL	UNITS	DL
Di-n-octylphthalate	230	U	ug/kg	230
Benzo (b) fluoranthene	230	U	ug/kg	230
Benzo (k) fluoranthene	230	U	ug/kg	230
Benzo (a) pyrene	230	U	ug/kg	230
Indeno (1,2,3-cd) pyrene	230	U	ug/kg	230
Dibenzo (a,h) anthracene	230	U	ug/kg	230
Benzo (g,h,i) perylene	230	U	ug/kg	230
CLP PESTICIDES/PCBS 90-SOW				
alpha-BHC	2.3	U	ug/kg	2.3
beta-BHC	2.3	U	ug/kg	2.3
delta-BHC	2.3	U	ug/kg	2.3
gamma-BHC (Lindane)	2.3	U	ug/kg	2.3
Heptachlor	2.3	U	ug/kg	2.3
Aldrin	2.3	U	ug/kg	2.3
Heptachlor epoxide	2.3	U	ug/kg	2.3
Endosulfan I	2.3	U	ug/kg	2.3
Dieldrin	2.3	U	ug/kg	2.3
4,4-DDE	2.3	U	ug/kg	2.3
Endrin	2.3	U	ug/kg	2.3
Endosulfan II	2.3	U	ug/kg	2.3
4,4-DDD	2.3	U	ug/kg	2.3
Endosulfan sulfate	2.3	U	ug/kg	2.3
4,4-DDT	2.3	U	ug/kg	2.3
Methoxychlor	4	U	ug/kg	4
Endrin ketone	2.3	U	ug/kg	2.3
Endrin aldehyde	2.3	U	ug/kg	2.3
alpha-Chlordane	2.3	U	ug/kg	2.3
gamma-Chlordane	2.3	U	ug/kg	2.3
Toxaphene	90	U	ug/kg	90
Aroclor-1016	-			
Aroclor-1221	45	U	ug/kg	45
Aroclor-1232	45	U	ug/kg	45
Aroclor-1242	-			
Aroclor-1248	45	U	ug/kg	45
Aroclor-1254	45	U	ug/kg	45
Aroclor-1260	45	U	ug/kg	45
CLP METALS AND CYANIDE				
Aluminum	540		mg/kg	27
Antimony	3	U	mg/kg	3
Arsenic	.7	U	mg/kg	.7
Barium	27	U	mg/kg	27
Beryllium	1	U	mg/kg	1
Cadmium	1	U	mg/kg	1
Calcium	50		mg/kg	34
Chromium	1	U	mg/kg	1
Cobalt	7	U	mg/kg	7
Copper	7	U	mg/kg	7
Iron	69		mg/kg	14
Lead	2.6		mg/kg	1
Magnesium	34	U	mg/kg	34

NAS CECIL FIELD -- ..LOW WATER SOUTHEAST
SEDIMENT -- ANALYTICAL DATA -- REPORT REQUEST NO. 10519

Lab Sample Number:	JR353211			
Site	BRAC			
Locator	98D00501			
Collect Date:	07-OCT-98			
	VALUE	QUAL	UNITS	DL
Manganese	1	U	mg/kg	1
Mercury	.01	U	mg/kg	.01
Nickel	7	U	mg/kg	7
Potassium	34	U	mg/kg	34
Selenium	3	U	mg/kg	3
Silver	3	U	mg/kg	3
Sodium	34	U	mg/kg	34
Thallium	1	U	mg/kg	1
Vanadium	1.8		mg/kg	1
Zinc	7	U	mg/kg	7
Cyanide	-			

U = NOT DETECTED J = ESTIMATED VALUE
UJ = REPORTED QUANTITATION LIMIT IS QUALIFIED AS ESTIMATED
R = RESULT IS REJECTED AND UNUSABLE

NAS CECIL FIELD -- YELLOW WATER SOUTHEAST
SURFACE WATER -- ANALYTICAL DATA -- REPORT REQUEST NO. 10520

Lab Sample Number:	JR353214			JR353212			JR353210		
Site	BRAC			BRAC			BRAC		
Locator	98W00301			98W00401			98W00501		
Collect Date:	07-OCT-98			07-OCT-98			07-OCT-98		
	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL	VALUE QUAL	UNITS	DL
CLP VOLATILES 90-SOW									
Chloromethane	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Bromomethane	2 U	ug/l	2	2 U	ug/l	2	2 U	ug/l	2
Vinyl chloride	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Chloroethane	2 U	ug/l	2	2 U	ug/l	2	2 U	ug/l	2
Methylene chloride	3 U	ug/l	3	3 U	ug/l	3	3 U	ug/l	3
Acetone	2 U	ug/l	2	2 U	ug/l	2	2 U	ug/l	2
Carbon disulfide	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
1,1-Dichloroethene	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
1,1-Dichloroethane	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
1,2-Dichloroethene (total)	-			-			-		
Chloroform	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
1,2-Dichloroethane	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
2-Butanone	2 U	ug/l	2	2 U	ug/l	2	2 U	ug/l	2
1,1,1-Trichloroethane	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Carbon tetrachloride	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Bromodichloromethane	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
1,2-Dichloropropane	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
cis-1,3-Dichloropropene	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Trichloroethene	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Dibromochloromethane	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
1,1,2-Trichloroethane	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Benzene	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
trans-1,3-Dichloropropene	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Bromoform	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
4-Methyl-2-pentanone	2 U	ug/l	2	2 U	ug/l	2	2 U	ug/l	2
2-Hexanone	2 U	ug/l	2	2 U	ug/l	2	2 U	ug/l	2
Tetrachloroethene	3 U	ug/l	3	3 U	ug/l	3	3 U	ug/l	3
Toluene	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
1,1,2,2-Tetrachloroethane	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Chlorobenzene	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Ethylbenzene	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Styrene	1 U	ug/l	1	1 U	ug/l	1	1 U	ug/l	1
Xylenes (total)	-			-			-		
CLP SEMIVOLATILES 90-SOW									
Phenol	5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
bis(2-Chloroethyl) ether	5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
2-Chlorophenol	5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
1,3-Dichlorobenzene	5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
1,4-Dichlorobenzene	5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
1,2-Dichlorobenzene	5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
2-Methylphenol	5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
2,2-oxybis(1-Chloropropane)	-			-			-		
4-Methylphenol	-			-			-		
N-Nitroso-di-n-propylamine	5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Hexachloroethane	5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Nitrobenzene	5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
Isophorone	5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
2-Nitrophenol	5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5
2,4-Dimethylphenol	5 U	ug/l	5	5 U	ug/l	5	5 U	ug/l	5

NAS CECIL FIELD -- OW WATER SOUTHEAST
SURFACE WATER -- ANALYTICAL DATA -- REPORT REQUEST NO. 10520

Lab Sample Number:	JR353214				JR353212				JR353210			
Site	BRAC				BRAC				BRAC			
Locator	98W00301				98W00401				98W00501			
Collect Date:	07-OCT-98				07-OCT-98				07-OCT-98			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
bis(2-Chloroethoxy) methane	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
2,4-Dichlorophenol	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
1,2,4-Trichlorobenzene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Naphthalene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
4-Chloroaniline	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Hexachlorobutadiene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
4-Chloro-3-methylphenol	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
2-Methylnaphthalene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Hexachlorocyclopentadiene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
2,4,6-Trichlorophenol	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
2,4,5-Trichlorophenol	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
2-Chloronaphthalene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
2-Nitroaniline	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Dimethylphthalate	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Acenaphthylene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
2,6-Dinitrotoluene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
3-Nitroaniline	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Acenaphthene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
2,4-Dinitrophenol	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
4-Nitrophenol	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Dibenzofuran	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
2,4-Dinitrotoluene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Diethylphthalate	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
4-Chlorophenyl-phenylether	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Fluorene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
4-Nitroaniline	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
4,6-Dinitro-2-methylphenol	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
N-Nitrosodiphenylamine	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
4-Bromophenyl-phenylether	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Hexachlorobenzene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Pentachlorophenol	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Phenanthrene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Anthracene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Carbazole	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Di-n-butylphthalate	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Fluoranthene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Pyrene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Butylbenzylphthalate	-				-				-			
3,3-Dichlorobenzidine	20	U	ug/l	20	20	U	ug/l	20	20	U	ug/l	20
Benzo (a) anthracene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Chrysene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
bis(2-Ethylhexyl) phthalate	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Di-n-octylphthalate	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Benzo (b) fluoranthene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Benzo (k) fluoranthene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Benzo (a) pyrene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Indeno (1,2,3-cd) pyrene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Dibenzo (a,h) anthracene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
Benzo (g,h,i) perylene	5	U	ug/l	5	5	U	ug/l	5	5	U	ug/l	5
CLP PESTICIDES/PCBS 90-SOW												
alpha-BHC	.05	U	ug/l	.05	.05	U	ug/l	.05	.05	U	ug/l	.05

NAS CECIL FIELD -- LOW WATER SOUTHEAST
SURFACE WATER -- ANALYTICAL DATA -- REPORT REQUEST NO. 10520

Lab Sample Number:	JR353214				JR353212				JR353210			
Site	BRAC				BRAC				BRAC			
Locator	98W00301				98W00401				98W00501			
Collect Date:	07-OCT-98				07-OCT-98				07-OCT-98			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
beta-BHC	.05	U	ug/l	.05	.05	U	ug/l	.05	.05	U	ug/l	.05
delta-BHC	.05	U	ug/l	.05	.05	U	ug/l	.05	.05	U	ug/l	.05
gamma-BHC (Lindane)	.05	U	ug/l	.05	.05	U	ug/l	.05	.05	U	ug/l	.05
Heptachlor	.05	U	ug/l	.05	.05	U	ug/l	.05	.05	U	ug/l	.05
Aldrin	.05	U	ug/l	.05	.05	U	ug/l	.05	.05	U	ug/l	.05
Heptachlor epoxide	.05	U	ug/l	.05	.05	U	ug/l	.05	.05	U	ug/l	.05
Endosulfan I	.05	U	ug/l	.05	.05	U	ug/l	.05	.05	U	ug/l	.05
Dieldrin	.05	U	ug/l	.05	.05	U	ug/l	.05	.05	U	ug/l	.05
4,4-DDE	.05	U	ug/l	.05	.05	U	ug/l	.05	.05	U	ug/l	.05
Endrin	.05	U	ug/l	.05	.05	U	ug/l	.05	.05	U	ug/l	.05
Endosulfan II	.05	U	ug/l	.05	.05	U	ug/l	.05	.05	U	ug/l	.05
4,4-DDD	.05	U	ug/l	.05	.05	U	ug/l	.05	.05	U	ug/l	.05
Endosulfan sulfate	.05	U	ug/l	.05	.05	U	ug/l	.05	.05	U	ug/l	.05
4,4-DDT	.05	U	ug/l	.05	.05	U	ug/l	.05	.05	U	ug/l	.05
Methoxychlor	.1	U	ug/l	.1	.1	U	ug/l	.1	.1	U	ug/l	.1
Endrin ketone	.05	U	ug/l	.05	.05	U	ug/l	.05	.05	U	ug/l	.05
Endrin aldehyde	.05	U	ug/l	.05	.05	U	ug/l	.05	.05	U	ug/l	.05
alpha-Chlordane	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
gamma-Chlordane	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Toxaphene	2	U	ug/l	2	2	U	ug/l	2	2	U	ug/l	2
Aroclor-1016	-				-				-			
Aroclor-1221	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1232	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1242	-				-				-			
Aroclor-1248	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1254	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
Aroclor-1260	1	U	ug/l	1	1	U	ug/l	1	1	U	ug/l	1
CLP METALS AND CYANIDE												
Aluminum	1.3		mg/l	.05	1.3		mg/l	.05	1.1		mg/l	.05
Antimony	.006	U	mg/l	.006	.006	U	mg/l	.006	.006	U	mg/l	.006
Arsenic	.01	U	mg/l	.01	.01	U	mg/l	.01	.01	U	mg/l	.01
Barium	.1	U	mg/l	.1	.1	U	mg/l	.1	.1	U	mg/l	.1
Beryllium	.001	U	mg/l	.001	.001	U	mg/l	.001	.001	U	mg/l	.001
Cadmium	.001	U	mg/l	.001	.001	U	mg/l	.001	.001	U	mg/l	.001
Calcium	2.1		mg/l	.5	2.1		mg/l	.5	4.3		mg/l	.5
Chromium	.01	U	mg/l	.01	.01	U	mg/l	.01	.01	U	mg/l	.01
Cobalt	.05	U	mg/l	.05	.05	U	mg/l	.05	.05	U	mg/l	.05
Copper	.05	U	mg/l	.05	.05	U	mg/l	.05	.05	U	mg/l	.05
Iron	1.8		mg/l	.05	1.8		mg/l	.05	2.2		mg/l	.05
Lead	.005	U	mg/l	.005	.005	U	mg/l	.005	.005	U	mg/l	.005
Magnesium	.59		mg/l	.5	.61		mg/l	.5	1.1		mg/l	.5
Manganese	.01	U	mg/l	.01	.01	U	mg/l	.01	.015		mg/l	.01
Mercury	.0002	U	mg/l	.0002	.0002	U	mg/l	.0002	.0002	U	mg/l	.0002
Nickel	.01	U	mg/l	.01	.01	U	mg/l	.01	.01	U	mg/l	.01
Potassium	.5	U	mg/l	.5	.5	U	mg/l	.5	1.4		mg/l	.5
Selenium	.01	U	mg/l	.01	.01	U	mg/l	.01	.01	U	mg/l	.01
Silver	.01	U	mg/l	.01	.01	U	mg/l	.01	.01	U	mg/l	.01
Sodium	4.2		mg/l	.5	4.3		mg/l	.5	5		mg/l	.5
Thallium	.004	U	mg/l	.004	.004	U	mg/l	.004	.004	U	mg/l	.004
Vanadium	.01	U	mg/l	.01	.01	U	mg/l	.01	.01	U	mg/l	.01
Zinc	.1	U	mg/l	.1	.1	U	mg/l	.1	.1	U	mg/l	.1

NAS CECIL FIELD -- LOW WATER SOUTHEAST
SURFACE WATER -- ANALYTICAL DATA -- REPORT REQUEST NO. 10520

Lab Sample Number:	JR353214			JR353212			JR353210		
Site	BRAC			BRAC			BRAC		
Locator	98W00301			98W00401			98W00501		
Collect Date:	07-OCT-98			07-OCT-98			07-OCT-98		
	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL
Cyanide	-			-			-		

U = NOT DETECTED J = ESTIMATED VALUE
UJ = REPORTED QUANTITATION LIMIT IS QUALIFIED AS ESTIMATED
R = RESULT IS REJECTED AND UNUSABLE

NAS CECIL FIELD -- OW WATER SOUTHEAST
GROUNDWATER -- ANALYTICAL DATA -- REPORT REQUEST NO. 10521

Lab Sample Number:	JR84692				JR84691				JR38453				JR99752			
Site	BRAC				BRAC				BRAC				YWW GUN			
Locator	CFNAGS1S				CFNAGS2S				CFNAG2S02				98G00301			
Collect Date:	22-DEC-97				22-DEC-97				27-OCT-98				14-APR-98			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
CLP VOLATILES 90-SOW																
Chloromethane	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
Bromomethane	2	U	ug/l	2	2	U	ug/l	2	-				2	U	ug/l	2
Vinyl chloride	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
Chloroethane	2	U	ug/l	2	2	U	ug/l	2	-				2	U	ug/l	2
Methylene chloride	3	U	ug/l	3	3	U	ug/l	3	-				3	U	ug/l	3
Acetone	2	U	ug/l	2	2	U	ug/l	2	-				2.5	J	ug/l	2
Carbon disulfide	1	U	ug/l	1	1	U	ug/l	1	-				22		ug/l	1
1,1-Dichloroethene	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
1,1-Dichloroethane	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
1,2-Dichloroethene (total)	-				-				-				-			
Chloroform	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
1,2-Dichloroethane	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
2-Butanone	2	U	ug/l	2	2	U	ug/l	2	-				2	U	ug/l	2
1,1,1-Trichloroethane	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
Carbon tetrachloride	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
Bromodichloromethane	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
1,2-Dichloropropane	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
cis-1,3-Dichloropropene	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
Trichloroethene	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
Dibromochloromethane	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
1,1,2-Trichloroethane	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
Benzene	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
trans-1,3-Dichloropropene	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
Bromoform	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
4-Methyl-2-pentanone	2	U	ug/l	2	2	U	ug/l	2	-				2	U	ug/l	2
2-Hexanone	2	U	ug/l	2	2	U	ug/l	2	-				2	U	ug/l	2
Tetrachloroethene	3	U	ug/l	3	3	U	ug/l	3	-				3	U	ug/l	3
Toluene	1	U	ug/l	1	1	U	ug/l	1	-				1.2	J	ug/l	1
1,1,2,2-Tetrachloroethane	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
Chlorobenzene	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
Ethylbenzene	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
Styrene	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
Xylenes (total)	-				-				-				-			
CLP SEMIVOLATILES 90-SOW																
Phenol	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
bis(2-Chloroethyl) ether	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
2-Chlorophenol	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
1,3-Dichlorobenzene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
1,4-Dichlorobenzene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
1,2-Dichlorobenzene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
2-Methylphenol	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
2,2-oxybis(1-Chloropropane)	-				-				-				-			
4-Methylphenol	-				-				-				-			
N-Nitroso-di-n-propylamine	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Hexachloroethane	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Nitrobenzene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Isophorone	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
2-Nitrophenol	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
2,4-Dimethylphenol	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5

NAS CECIL FIELD -- OW WATER SOUTHEAST
GROUNDWATER -- ANALYTICAL DATA -- REPORT REQUEST NO. 10521

Lab Sample Number:	JR84692				JR84691				JR38453				JR99752			
Site	BRAC				BRAC				BRAC				YWW GUN			
Locator	CFNAGS1S				CFNAGS2S				CFNAG2S02				98G00301			
Collect Date:	22-DEC-97				22-DEC-97				27-OCT-98				14-APR-98			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
bis(2-Chloroethoxy) methane	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
2,4-Dichlorophenol	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
1,2,4-Trichlorobenzene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Naphthalene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
4-Chloroaniline	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Hexachlorobutadiene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
4-Chloro-3-methylphenol	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
2-Methylnaphthalene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Hexachlorocyclopentadiene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
2,4,6-Trichlorophenol	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
2,4,5-Trichlorophenol	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
2-Chloronaphthalene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
2-Nitroaniline	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Dimethylphthalate	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Acenaphthylene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
2,6-Dinitrotoluene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
3-Nitroaniline	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Acenaphthene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
2,4-Dinitrophenol	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
4-Nitrophenol	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Dibenzofuran	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
2,4-Dinitrotoluene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Diethylphthalate	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
4-Chlorophenyl-phenylether	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Fluorene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
4-Nitroaniline	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
4,6-Dinitro-2-methylphenol	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
N-Nitrosodiphenylamine	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
4-Bromophenyl-phenylether	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Hexachlorobenzene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Pentachlorophenol	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Phenanthrene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Anthracene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Carbazole	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Di-n-butylphthalate	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Fluoranthene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Pyrene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Butylbenzylphthalate	-				-				-				-			
3,3-Dichlorobenzidine	20	U	ug/l	20	20	U	ug/l	20	-				20	U	ug/l	20
Benzo (a) anthracene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Chrysene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
bis(2-Ethylhexyl) phthalate	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Di-n-octylphthalate	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Benzo (b) fluoranthene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Benzo (k) fluoranthene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Benzo (a) pyrene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Indeno (1,2,3-cd) pyrene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Dibenzo (a,h) anthracene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Benzo (g,h,i) perylene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
CLP PESTICIDES/PCBS 90-SOW																
alpha-BHC	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05

NAS CECIL FIELD -- YELLOW WATER SOUTHEAST
GROUNDWATER -- ANALYTICAL DATA -- REPORT REQUEST NO. 10521

Lab Sample Number:	JR84692				JR84691				JR38453				JR99752			
Site	BRAC				BRAC				BRAC				YWW GUN			
Locator	CFNAGS1S				CFNAGS2S				CFNAG2S02				98G00301			
Collect Date:	22-DEC-97				22-DEC-97				27-OCT-98				14-APR-98			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
beta-BHC	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
delta-BHC	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
gamma-BHC (Lindane)	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
Heptachlor	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
Aldrin	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
Heptachlor epoxide	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
Endosulfan I	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
Dieldrin	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
4,4-DDE	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
Endrin	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
Endosulfan II	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
4,4-DDD	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
Endosulfan sulfate	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
4,4-DDT	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
Methoxychlor	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
Endrin ketone	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
Endrin aldehyde	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
alpha-Chlordane	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
gamma-Chlordane	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
Toxaphene	2	U	ug/l	2	2	U	ug/l	2	-				2	U	ug/l	2
Aroclor-1016	-				-				-				-			
Aroclor-1221	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
Aroclor-1232	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
Aroclor-1242	-				-				-				-			
Aroclor-1248	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
Aroclor-1254	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
Aroclor-1260	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
CLP METALS AND CYANIDE																
Aluminum	.91		mg/l	.05	.24		mg/l	.05	-				.34		mg/l	.05
Antimony	.006	U	mg/l	.006	.006	U	mg/l	.006	-				.005	U	mg/l	.005
Arsenic	.01	U	mg/l	.01	.01	U	mg/l	.01	-				.01	U	mg/l	.01
Barium	.1	U	mg/l	.1	.1	U	mg/l	.1	-				.1	U	mg/l	.1
Beryllium	.001	U	mg/l	.001	.001	U	mg/l	.001	-				.001	U	mg/l	.001
Cadmium	.001	U	mg/l	.001	.001	U	mg/l	.001	-				.001	U	mg/l	.001
Calcium	19		mg/l	.5	65		mg/l	.5	-				1.2		mg/l	.5
Chromium	.01	U	mg/l	.01	.01	U	mg/l	.01	-				.075	U	mg/l	.075
Cobalt	.05	U	mg/l	.05	.05	U	mg/l	.05	-				.05	U	mg/l	.05
Copper	.05	U	mg/l	.05	.05	U	mg/l	.05	-				.05	U	mg/l	.05
Iron	1.4		mg/l	.05	.67		mg/l	.05	-				.95		mg/l	.05
Lead	.005	U	mg/l	.005	.005	U	mg/l	.005	-				.005	U	mg/l	.005
Magnesium	3.4		mg/l	.5	2.2		mg/l	.5	-				.56		mg/l	.5
Manganese	.081	J	mg/l	.025	.3		mg/l	.025	.12		mg/l	.01	.016		mg/l	.01
Mercury	.0002	U	mg/l	.0002	.0002	U	mg/l	.0002	-				.0002	U	mg/l	.0002
Nickel	.01	U	mg/l	.01	.01	U	mg/l	.01	-				.055	U	mg/l	.055
Potassium	1.1		mg/l	.5	1.1		mg/l	.5	-				.5	U	mg/l	.5
Selenium	.01	U	mg/l	.01	.01	U	mg/l	.01	-				.01	U	mg/l	.01
Silver	.01	U	mg/l	.01	.01	U	mg/l	.01	-				.01	U	mg/l	.01
Sodium	9.9		mg/l	.13	7		mg/l	.13	-				7.4		mg/l	.13
Thallium	.002	U	mg/l	.002	.0029		mg/l	.002	-				.002	U	mg/l	.002
Vanadium	.01	U	mg/l	.01	.01	U	mg/l	.01	-				.01	U	mg/l	.01
Zinc	.1	U	mg/l	.1	.1	U	mg/l	.1	-				.1	U	mg/l	.1

NAS CECIL FIELD -- YELLOW WATER SOUTHEAST
GROUNDWATER -- ANALYTICAL DATA -- REPORT REQUEST NO. 10521

Lab Sample Number:	JR84692			JR84691			JR38453			JR99752		
Site	BRAC			BRAC			BRAC			YWW GUN		
Locator	CFNAGS1S			CFNAGS2S			CFNAG2S02			98G00301		
Collect Date:	22-DEC-97			22-DEC-97			27-OCT-98			14-APR-98		
	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL
Cyanide	-			-			-			-		

U = NOT DETECTED J = ESTIMATED VALUE
UJ = REPORTED QUANTITATION LIMIT IS QUALIFIED AS ESTIMATED
R = RESULT IS REJECTED AND UNUSABLE

NAS CECIL FIELD -- YELLOW WATER SOUTHEAST
GROUNDWATER -- ANALYTICAL DATA -- REPORT REQUEST NO. 10521

Lab Sample Number:	JR10111			JR84392			JR38454			JR84393		
Site	YWW GUN			BRAC			BRAC			BRAC		
Locator	98G00401			CFNAGS5S			CFNAG5S02			CFNAGS6S		
Collect Date:	17-APR-98			18-DEC-97			27-OCT-98			18-DEC-97		
	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS	DL
CLP VOLATILES 90-SOW												
Chloromethane	1	U ug/l	1	1	U ug/l	1	-			1	U ug/l	1
Bromomethane	2	U ug/l	2	2	U ug/l	2	-			2	U ug/l	2
Vinyl chloride	1	U ug/l	1	1	U ug/l	1	-			1	U ug/l	1
Chloroethane	2	U ug/l	2	2	U ug/l	2	-			2	U ug/l	2
Methylene chloride	3	U ug/l	3	3	U ug/l	3	-			3	U ug/l	3
Acetone	4.7	J ug/l	2	2	U ug/l	2	-			2	U ug/l	2
Carbon disulfide	23	ug/l	1	1	U ug/l	1	-			1	U ug/l	1
1,1-Dichloroethene	1	U ug/l	1	1	U ug/l	1	-			1	U ug/l	1
1,1-Dichloroethane	1	U ug/l	1	1	U ug/l	1	-			1	U ug/l	1
1,2-Dichloroethene (total)	-			-			-			-		
Chloroform	1	U ug/l	1	1	U ug/l	1	-			1	U ug/l	1
1,2-Dichloroethane	1	U ug/l	1	1	U ug/l	1	-			1	U ug/l	1
2-Butanone	2	U ug/l	2	2	U ug/l	2	-			2	U ug/l	2
1,1,1-Trichloroethane	1	U ug/l	1	1	U ug/l	1	-			1	U ug/l	1
Carbon tetrachloride	1	U ug/l	1	1	U ug/l	1	-			1	U ug/l	1
Bromodichloromethane	1	U ug/l	1	1	U ug/l	1	-			1	U ug/l	1
1,2-Dichloropropane	1	U ug/l	1	1	U ug/l	1	-			1	U ug/l	1
cis-1,3-Dichloropropene	1	U ug/l	1	1	U ug/l	1	-			1	U ug/l	1
Trichloroethene	1	U ug/l	1	1	U ug/l	1	-			1	U ug/l	1
Dibromochloromethane	1	U ug/l	1	1	U ug/l	1	-			1	U ug/l	1
1,1,2-Trichloroethane	1	U ug/l	1	1	U ug/l	1	-			1	U ug/l	1
Benzene	1	U ug/l	1	1	U ug/l	1	-			1	U ug/l	1
trans-1,3-Dichloropropene	1	U ug/l	1	1	U ug/l	1	-			1	U ug/l	1
Bromoform	1	U ug/l	1	1	U ug/l	1	-			1	U ug/l	1
4-Methyl-2-pentanone	2	U ug/l	2	2	U ug/l	2	-			2	U ug/l	2
2-Hexanone	2	U ug/l	2	2	U ug/l	2	-			2	U ug/l	2
Tetrachloroethene	3	U ug/l	3	3	U ug/l	3	-			3	U ug/l	3
Toluene	1	U ug/l	1	1	U ug/l	1	-			1	U ug/l	1
1,1,2,2-Tetrachloroethane	1	U ug/l	1	1	U ug/l	1	-			1	U ug/l	1
Chlorobenzene	1	U ug/l	1	1	U ug/l	1	-			1	U ug/l	1
Ethylbenzene	1	U ug/l	1	1	U ug/l	1	-			1	U ug/l	1
Styrene	1	U ug/l	1	1	U ug/l	1	-			1	U ug/l	1
Xylenes (total)	-			-			-			-		
CLP SEMIVOLATILES 90-SOW												
Phenol	5	U ug/l	5	5	U ug/l	5	-			5	U ug/l	5
bis(2-Chloroethyl) ether	5	U ug/l	5	5	U ug/l	5	-			5	U ug/l	5
2-Chlorophenol	5	U ug/l	5	5	U ug/l	5	-			5	U ug/l	5
1,3-Dichlorobenzene	5	U ug/l	5	5	U ug/l	5	-			5	U ug/l	5
1,4-Dichlorobenzene	5	U ug/l	5	5	U ug/l	5	-			5	U ug/l	5

NAS CECIL FIELD -- YELLOW WATER SOUTHEAST
GROUNDWATER -- ANALYTICAL DATA -- REPORT REQUEST NO. 10521

Lab Sample Number:	JR10111				JR84392				JR38454				JR84393			
Site	YWW GUN				BRAC				BRAC				BRAC			
Locator	98G00401				CFNAGS5S				CFNAG5S02				CFNAGS6S			
Collect Date:	17-APR-98				18-DEC-97				27-OCT-98				18-DEC-97			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,2-Dichlorobenzene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
2-Methylphenol	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
2,2-oxybis(1-Chloropropane)	-				-				-				-			
4-Methylphenol	-				-				-				-			
N-Nitroso-di-n-propylamine	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Hexachloroethane	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Nitrobenzene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Isophorone	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
2-Nitrophenol	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
2,4-Dimethylphenol	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
bis(2-Chloroethoxy) methane	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
2,4-Dichlorophenol	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
1,2,4-Trichlorobenzene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Naphthalene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
4-Chloroaniline	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Hexachlorobutadiene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
4-Chloro-3-methylphenol	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
2-Methylnaphthalene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Hexachlorocyclopentadiene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
2,4,6-Trichlorophenol	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
2,4,5-Trichlorophenol	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
2-Chloronaphthalene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
2-Nitroaniline	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Dimethylphthalate	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Acenaphthylene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
2,6-Dinitrotoluene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
3-Nitroaniline	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Acenaphthene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
2,4-Dinitrophenol	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
4-Nitrophenol	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Dibenzofuran	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
2,4-Dinitrotoluene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Diethylphthalate	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
4-Chlorophenyl-phenylether	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Fluorene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
4-Nitroaniline	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
4,6-Dinitro-2-methylphenol	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
N-Nitrosodiphenylamine	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
4-Bromophenyl-phenylether	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Hexachlorobenzene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Pentachlorophenol	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Phenanthrene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Anthracene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Carbazole	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Di-n-butylphthalate	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Fluoranthene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Pyrene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Butylbenzylphthalate	-				-				-				-			
3,3-Dichlorobenzidine	20	U	ug/l	20	20	U	ug/l	20	-				20	U	ug/l	20
Benzo (a) anthracene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Chrysene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
bis(2-Ethylhexyl) phthalate	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5

NAS CECIL FIELD -- YELLOW WATER SOUTHEAST
GROUNDWATER -- ANALYTICAL DATA -- REPORT REQUEST NO. 10521

Lab Sample Number:	JR10111				JR84392				JR38454				JR84393			
Site	YWW GUN				BRAC				BRAC				BRAC			
Locator	98G00401				CFNAGS5S				CFNAG5S02				CFNAGS6S			
Collect Date:	17-APR-98				18-DEC-97				27-OCT-98				18-DEC-97			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Di-n-octylphthalate	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Benzo (b) fluoranthene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Benzo (k) fluoranthene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Benzo (a) pyrene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Indeno (1,2,3-cd) pyrene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Dibenzo (a,h) anthracene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
Benzo (g,h,i) perylene	5	U	ug/l	5	5	U	ug/l	5	-				5	U	ug/l	5
CLP PESTICIDES/PCBS 90-SOW																
alpha-BHC	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
beta-BHC	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
delta-BHC	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
gamma-BHC (Lindane)	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
Heptachlor	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
Aldrin	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
Heptachlor epoxide	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
Endosulfan I	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
Dieldrin	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
4,4-DDE	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
Endrin	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
Endosulfan II	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
4,4-DDD	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
Endosulfan sulfate	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
4,4-DDT	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
Methoxychlor	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
Endrin ketone	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
Endrin aldehyde	.05	U	ug/l	.05	.05	U	ug/l	.05	-				.05	U	ug/l	.05
alpha-Chlordane	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
gamma-Chlordane	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
Toxaphene	2	U	ug/l	2	2	U	ug/l	2	-				2	U	ug/l	2
Aroclor-1016	-				-				-				-			
Aroclor-1221	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
Aroclor-1232	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
Aroclor-1242	-				-				-				-			
Aroclor-1248	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
Aroclor-1254	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
Aroclor-1260	1	U	ug/l	1	1	U	ug/l	1	-				1	U	ug/l	1
CLP METALS AND CYANIDE																
Aluminum	2.9		mg/l	.05	36		mg/l	.05	27		mg/l	.05	.66		mg/l	.05
Antimony	.005	U	mg/l	.005	.019	J	mg/l	.006	-				.006	U	mg/l	.006
Arsenic	.01	U	mg/l	.01	.01	U	mg/l	.01	-				.01	U	mg/l	.01
Barium	.1	U	mg/l	.1	.1	U	mg/l	.1	-				.1	U	mg/l	.1
Beryllium	.001	U	mg/l	.001	.001	U	mg/l	.001	-				.001	U	mg/l	.001
Cadmium	.001	U	mg/l	.001	.001	U	mg/l	.001	-				.001	U	mg/l	.001
Calcium	1.1		mg/l	.5	13		mg/l	.5	-				6.5		mg/l	.5
Chromium	.075	U	mg/l	.075	.029		mg/l	.01	-				.01	U	mg/l	.01
Cobalt	.05	U	mg/l	.05	.05	U	mg/l	.05	-				.05	U	mg/l	.05
Copper	.05	U	mg/l	.05	.05	U	mg/l	.05	-				.05	U	mg/l	.05
Iron	.76		mg/l	.05	4.5		mg/l	.05	-				.47		mg/l	.05
Lead	.006	J	mg/l	.005	.011	J	mg/l	.005	-				.005	U	mg/l	.005
Magnesium	1.4		mg/l	.5	2.8		mg/l	.5	-				.76		mg/l	.5

NAS CECIL FIELD -- YELLOW WATER SOUTHEAST
GROUNDWATER -- ANALYTICAL DATA -- REPORT REQUEST NO. 10521

Lab Sample Number:	JR10111				JR84392				JR38454				JR84393			
Site	YWW GUN				BRAC				BRAC				BRAC			
Locator	98G00401				CFNAGS5S				CFNAG5S02				CFNAGS6S			
Collect Date:	17-APR-98				18-DEC-97				27-OCT-98				18-DEC-97			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Manganese	.011		mg/l	.01	.025	U	mg/l	.025	-				.072	J	mg/l	.025
Mercury	.0002	U	mg/l	.0002	.0002	U	mg/l	.0002	-				.0002	U	mg/l	.0002
Nickel	.055	U	mg/l	.055	.01	U	mg/l	.01	-				.01	U	mg/l	.01
Potassium	1.3		mg/l	.5	1.4		mg/l	.5	-				1.2		mg/l	.5
Selenium	.01	U	mg/l	.01	.01	U	mg/l	.01	-				.01	U	mg/l	.01
Silver	.01	U	mg/l	.01	.01	U	mg/l	.01	-				.01	U	mg/l	.01
Sodium	4.3		mg/l	.13	3.6		mg/l	.13	-				2.7		mg/l	.13
Thallium	.002	U	mg/l	.002	.002	U	mg/l	.002	-				.002	U	mg/l	.002
Vanadium	.01	U	mg/l	.01	.042		mg/l	.01	-				.01	U	mg/l	.01
Zinc	.1	U	mg/l	.1	.12		mg/l	.1	-				.1	U	mg/l	.1
Cyanide	-				-				-				-			

U = NOT DETECTED J = ESTIMATED VALUE
UJ = REPORTED QUANTITATION LIMIT IS QUALIFIED AS ESTIMATED
R = RESULT IS REJECTED AND UNUSABLE

NAS CECIL FIELD -- OW WATER SOUTHEAST
GROUNDWATER -- ANALYTICAL DATA -- REPORT REQUEST NO. 10521

Lab Sample Number:	JR84394				JR84391				JR38455		
Site	BRAC				BRAC				BRAC		
Locator	CFNAGS7S				CFNAGS8S				CFNAG8S02		
Collect Date:	18-DEC-97				18-DEC-97				27-OCT-98		
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
CLP VOLATILES 90-SOW												
Chloromethane	1	U	ug/l	1	1	U	ug/l	1	-			
Bromomethane	2	U	ug/l	2	2	U	ug/l	2	-			
Vinyl chloride	1	U	ug/l	1	1	U	ug/l	1	-			
Chloroethane	2	U	ug/l	2	2	U	ug/l	2	-			
Methylene chloride	3	U	ug/l	3	3	U	ug/l	3	-			
Acetone	2	U	ug/l	2	2	U	ug/l	2	-			
Carbon disulfide	1	U	ug/l	1	1	U	ug/l	1	-			
1,1-Dichloroethene	1	U	ug/l	1	1	U	ug/l	1	-			
1,1-Dichloroethane	1	U	ug/l	1	1	U	ug/l	1	-			
1,2-Dichloroethene (total)	-				-				-			
Chloroform	1	U	ug/l	1	1	U	ug/l	1	-			
1,2-Dichloroethane	1	U	ug/l	1	1	U	ug/l	1	-			
2-Butanone	2	U	ug/l	2	2	U	ug/l	2	-			
1,1,1-Trichloroethane	11		ug/l	1	1	U	ug/l	1	-			
Carbon tetrachloride	1	U	ug/l	1	1	U	ug/l	1	-			
Bromodichloromethane	1	U	ug/l	1	1	U	ug/l	1	-			
1,2-Dichloropropane	1	U	ug/l	1	1	U	ug/l	1	-			
cis-1,3-Dichloropropene	1	U	ug/l	1	1	U	ug/l	1	-			
Trichloroethene	1	U	ug/l	1	1	U	ug/l	1	-			
Dibromochloromethane	1	U	ug/l	1	1	U	ug/l	1	-			
1,1,2-Trichloroethane	1	U	ug/l	1	1	U	ug/l	1	-			
Benzene	1	U	ug/l	1	1	U	ug/l	1	-			
trans-1,3-Dichloropropene	1	U	ug/l	1	1	U	ug/l	1	-			
Bromoform	1	U	ug/l	1	1	U	ug/l	1	-			
4-Methyl-2-pentanone	2	U	ug/l	2	2	U	ug/l	2	-			
2-Hexanone	2	U	ug/l	2	2	U	ug/l	2	-			
Tetrachloroethene	3	U	ug/l	3	3	U	ug/l	3	-			
Toluene	1	U	ug/l	1	1	U	ug/l	1	-			
1,1,2,2-Tetrachloroethane	1	U	ug/l	1	1	U	ug/l	1	-			
Chlorobenzene	1	U	ug/l	1	1	U	ug/l	1	-			
Ethylbenzene	1	U	ug/l	1	1	U	ug/l	1	-			
Styrene	1	U	ug/l	1	1	U	ug/l	1	-			
Xylenes (total)	-				-				-			
CLP SEMIVOLATILES 90-SOW												
Phenol	5	U	ug/l	5	5	U	ug/l	5	-			
bis(2-Chloroethyl) ether	5	U	ug/l	5	5	U	ug/l	5	-			
2-Chlorophenol	5	U	ug/l	5	5	U	ug/l	5	-			
1,3-Dichlorobenzene	5	U	ug/l	5	5	U	ug/l	5	-			
1,4-Dichlorobenzene	5	U	ug/l	5	5	U	ug/l	5	-			

NAS CECIL FIELD -- LOW WATER SOUTHEAST
GROUNDWATER -- ANALYTICAL DATA -- REPORT REQUEST NO. 10521

Lab Sample Number:	JR84394				JR84391				JR38455			
Site	BRAC				BRAC				BRAC			
Locator	CFNAGS7S				CFNAGS8S				CFNAG8S02			
Collect Date:	18-DEC-97				18-DEC-97				27-OCT-98			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
1,2-Dichlorobenzene	5	U	ug/l	5	5	U	ug/l	5	-			
2-Methylphenol	5	U	ug/l	5	5	U	ug/l	5	-			
2,2-oxybis(1-Chloropropane)	-				-				-			
4-Methylphenol	-				-				-			
N-Nitroso-di-n-propylamine	5	U	ug/l	5	5	U	ug/l	5	-			
Hexachloroethane	5	U	ug/l	5	5	U	ug/l	5	-			
Nitrobenzene	5	U	ug/l	5	5	U	ug/l	5	-			
Isophorone	5	U	ug/l	5	5	U	ug/l	5	-			
2-Nitrophenol	5	U	ug/l	5	5	U	ug/l	5	-			
2,4-Dimethylphenol	5	U	ug/l	5	5	U	ug/l	5	-			
bis(2-Chloroethoxy) methane	5	U	ug/l	5	5	U	ug/l	5	-			
2,4-Dichlorophenol	5	U	ug/l	5	5	U	ug/l	5	-			
1,2,4-Trichlorobenzene	5	U	ug/l	5	5	U	ug/l	5	-			
Naphthalene	5	U	ug/l	5	5	U	ug/l	5	-			
4-Chloroaniline	5	U	ug/l	5	5	U	ug/l	5	-			
Hexachlorobutadiene	5	U	ug/l	5	5	U	ug/l	5	-			
4-Chloro-3-methylphenol	5	U	ug/l	5	5	U	ug/l	5	-			
2-Methylnaphthalene	5	U	ug/l	5	5	U	ug/l	5	-			
Hexachlorocyclopentadiene	5	U	ug/l	5	5	U	ug/l	5	-			
2,4,6-Trichlorophenol	5	U	ug/l	5	5	U	ug/l	5	-			
2,4,5-Trichlorophenol	5	U	ug/l	5	5	U	ug/l	5	-			
2-Chloronaphthalene	5	U	ug/l	5	5	U	ug/l	5	-			
2-Nitroaniline	5	U	ug/l	5	5	U	ug/l	5	-			
Dimethylphthalate	5	U	ug/l	5	5	U	ug/l	5	-			
Acenaphthylene	5	U	ug/l	5	5	U	ug/l	5	-			
2,6-Dinitrotoluene	5	U	ug/l	5	5	U	ug/l	5	-			
3-Nitroaniline	5	U	ug/l	5	5	U	ug/l	5	-			
Acenaphthene	5	U	ug/l	5	5	U	ug/l	5	-			
2,4-Dinitrophenol	5	U	ug/l	5	5	U	ug/l	5	-			
4-Nitrophenol	5	U	ug/l	5	5	U	ug/l	5	-			
Dibenzofuran	5	U	ug/l	5	5	U	ug/l	5	-			
2,4-Dinitrotoluene	5	U	ug/l	5	5	U	ug/l	5	-			
Diethylphthalate	5	U	ug/l	5	5	U	ug/l	5	-			
4-Chlorophenyl-phenylether	5	U	ug/l	5	5	U	ug/l	5	-			
Fluorene	5	U	ug/l	5	5	U	ug/l	5	-			
4-Nitroaniline	5	U	ug/l	5	5	U	ug/l	5	-			
4,6-Dinitro-2-methylphenol	5	U	ug/l	5	5	U	ug/l	5	-			
N-Nitrosodiphenylamine	5	U	ug/l	5	5	U	ug/l	5	-			
4-Bromophenyl-phenylether	5	U	ug/l	5	5	U	ug/l	5	-			
Hexachlorobenzene	5	U	ug/l	5	5	U	ug/l	5	-			
Pentachlorophenol	5	U	ug/l	5	5	U	ug/l	5	-			
Phenanthrene	5	U	ug/l	5	5	U	ug/l	5	-			
Anthracene	5	U	ug/l	5	5	U	ug/l	5	-			
Carbazole	5	U	ug/l	5	5	U	ug/l	5	-			
Di-n-butylphthalate	5	U	ug/l	5	5	U	ug/l	5	-			
Fluoranthene	5	U	ug/l	5	5	U	ug/l	5	-			
Pyrene	5	U	ug/l	5	5	U	ug/l	5	-			
Butylbenzylphthalate	-				-				-			
3,3-Dichlorobenzidine	20	U	ug/l	20	20	U	ug/l	20	-			
Benzo (a) anthracene	5	U	ug/l	5	5	U	ug/l	5	-			
Chrysene	5	U	ug/l	5	5	U	ug/l	5	-			
bis(2-Ethylhexyl) phthalate	5	U	ug/l	5	5	U	ug/l	5	-			

NAS CECIL FIELD -- LOW WATER SOUTHEAST
GROUNDWATER -- ANALYTICAL DATA -- REPORT REQUEST NO. 10521

Lab Sample Number:	JR84394				JR84391				JR38455		
Site	BRAC				BRAC				BRAC		
Locator	CFNAGS7S				CFNAGS8S				CFNAG8S02		
Collect Date:	18-DEC-97				18-DEC-97				27-OCT-98		
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Di-n-octylphthalate	5	U	ug/l	5	5	U	ug/l	5	-			
Benzo (b) fluoranthene	5	U	ug/l	5	5	U	ug/l	5	-			
Benzo (k) fluoranthene	5	U	ug/l	5	5	U	ug/l	5	-			
Benzo (a) pyrene	5	U	ug/l	5	5	U	ug/l	5	-			
Indeno (1,2,3-cd) pyrene	5	U	ug/l	5	5	U	ug/l	5	-			
Dibenzo (a,h) anthracene	5	U	ug/l	5	5	U	ug/l	5	-			
Benzo (g,h,i) perylene	5	U	ug/l	5	5	U	ug/l	5	-			
CLP PESTICIDES/PCBS 90-SOW												
alpha-BHC	.05	U	ug/l	.05	.05	U	ug/l	.05	-			
beta-BHC	.05	U	ug/l	.05	.05	U	ug/l	.05	-			
delta-BHC	.05	U	ug/l	.05	.05	U	ug/l	.05	-			
gamma-BHC (Lindane)	.05	U	ug/l	.05	.05	U	ug/l	.05	-			
Heptachlor	.05	U	ug/l	.05	.05	U	ug/l	.05	-			
Aldrin	.05	U	ug/l	.05	.05	U	ug/l	.05	-			
Heptachlor epoxide	.05	U	ug/l	.05	.05	U	ug/l	.05	-			
Endosulfan I	.05	U	ug/l	.05	.05	U	ug/l	.05	-			
Dieldrin	.05	U	ug/l	.05	.05	U	ug/l	.05	-			
4,4-DDE	.05	U	ug/l	.05	.05	U	ug/l	.05	-			
Endrin	.05	U	ug/l	.05	.05	U	ug/l	.05	-			
Endosulfan II	.05	U	ug/l	.05	.05	U	ug/l	.05	-			
4,4-DDD	.05	U	ug/l	.05	.05	U	ug/l	.05	-			
Endosulfan sulfate	.05	U	ug/l	.05	.05	U	ug/l	.05	-			
4,4-DDT	.05	U	ug/l	.05	.05	U	ug/l	.05	-			
Methoxychlor	.05	U	ug/l	.05	.05	U	ug/l	.05	-			
Endrin ketone	.05	U	ug/l	.05	.05	U	ug/l	.05	-			
Endrin aldehyde	.05	U	ug/l	.05	.05	U	ug/l	.05	-			
alpha-Chlordane	1	U	ug/l	1	1	U	ug/l	1	-			
gamma-Chlordane	1	U	ug/l	1	1	U	ug/l	1	-			
Toxaphene	2	U	ug/l	2	2	U	ug/l	2	-			
Aroclor-1016	-				-				-			
Aroclor-1221	1	U	ug/l	1	1	U	ug/l	1	-			
Aroclor-1232	1	U	ug/l	1	1	U	ug/l	1	-			
Aroclor-1242	-				-				-			
Aroclor-1248	1	U	ug/l	1	1	U	ug/l	1	-			
Aroclor-1254	1	U	ug/l	1	1	U	ug/l	1	-			
Aroclor-1260	1	U	ug/l	1	1	U	ug/l	1	-			
CLP METALS AND CYANIDE												
Aluminum	.6		mg/l	.05	.099		mg/l	.05	-			
Antimony	.006	U	mg/l	.006	.006	U	mg/l	.006	-			
Arsenic	.01	U	mg/l	.01	.01	U	mg/l	.01	-			
Barium	.1	U	mg/l	.1	.1	U	mg/l	.1	-			
Beryllium	.001	U	mg/l	.001	.001	U	mg/l	.001	-			
Cadmium	.001	U	mg/l	.001	.001	U	mg/l	.001	-			
Calcium	8		mg/l	.5	21		mg/l	.5	-			
Chromium	.01	U	mg/l	.01	.01	U	mg/l	.01	-			
Cobalt	.05	U	mg/l	.05	.05	U	mg/l	.05	-			
Copper	.05	U	mg/l	.05	.05	U	mg/l	.05	-			
Iron	.076		mg/l	.05	.089		mg/l	.05	-			
Lead	.005	U	mg/l	.005	.005	U	mg/l	.005	-			
Magnesium	.72		mg/l	.5	1.7		mg/l	.5	-			

NAS CECIL FIELD -- LOW WATER SOUTHEAST
GROUNDWATER -- ANALYTICAL DATA -- REPORT REQUEST NO. 10521

Lab Sample Number:	JR84394				JR84391				JR38455			
Site	BRAC				BRAC				BRAC			
Locator	CFNAGS7S				CFNAGS8S				CFNAG8S02			
Collect Date:	18-DEC-97				18-DEC-97				27-OCT-98			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Manganese	.06	J	mg/l	.025	.14		mg/l	.025	.01	U	mg/l	.01
Mercury	.0002	U	mg/l	.0002	.0002	U	mg/l	.0002	-			
Nickel	.01	U	mg/l	.01	.01	U	mg/l	.01	-			
Potassium	.5	U	mg/l	.5	.63		mg/l	.5	-			
Selenium	.01	U	mg/l	.01	.01	U	mg/l	.01	-			
Silver	.01	U	mg/l	.01	.01	U	mg/l	.01	-			
Sodium	1		mg/l	.13	1.5		mg/l	.13	-			
Thallium	.002	U	mg/l	.002	.002	U	mg/l	.002	-			
Vanadium	.01	U	mg/l	.01	.01	U	mg/l	.01	-			
Zinc	.1	U	mg/l	.1	.1	U	mg/l	.1	-			
Cyanide	-				-				-			

U = NOT DETECTED J = ESTIMATED VALUE
UJ = REPORTED QUANTITATION LIMIT IS QUALIFIED AS ESTIMATED
R = RESULT IS REJECTED AND UNUSABLE