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N62661 AR 001704
NAVSTA NEWPORT RI
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C-NAVY-01-04-1686W

January 30, 2004

Project Number N5152

961

Mr. Curtis Frye
Remedial Project Manager
EFA Northeast, Naval Facilities Engineering Command
10 Industrial Highway, Mail Stop 82
Lester, Pennsylvania 19113

Reference: CLEAN Contract No. N62467-94-D-0888
Contract Task Order No. 0842

Subject: EPA Report on Sediment Sampling
Gould Island and Coasters Harbor
Naval Station Newport, Newport Rhode Island

Dear Mr. Frye:

Enclosed you will find the EPA report on sediment sample collection and analysis that they conducted near Gould Island and at Coasters Harbor, proximal to Naval Station Newport Sites 17 and 09, respectively.

Data collected were compared with ERL, ERM and AET which are ecological-based reference values for marine sediment Data provided in this report indicate presence of PCBs in excess of the ERM values at six of 22 stations at Gould Island, and PAHs in excess of ERM values at two of twelve stations at Coasters Harbor. Several metals including cyanide were detected at low concentrations near Gould Island

This information should be taken into consideration for future sediment investigations at these sites.

Very truly yours,

Stephen S. Parker, LSP
Project Manager

SSP/rp

Attachment

c: D. Barclift, EFANE (w/encl. – 1)
T. Bober, EFANE (w/encl. – 1)
A. Cerise, NSN (w/encl. - 1)
J. Trepanowski/G. Glenn, TtNUS (w/o encl)
File N5152-3.2 (w/o encl.)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 1 New England
Office of Environmental Measurement and Evaluation
11 Technology Drive, North Chelmsford, MA 01863

Memorandum

Date: December 3, 2003

Subj: Naval Education and Training Center Superfund Site
Newport, MA

From: Lisa Thuot - EIA Field Investigations Team
Jerry Keefe - EIA Field Investigations Team

To: Kymberlee Keckler, HBT

On September 29-30, 2003, Dan Granz, Jerry Keefe, Bill Osbahr, and Lisa Thuot of the USEPA Investigations & Analysis Unit collected marine sediment samples from locations in the Naval Education and Training Center Superfund Site in Newport, RI. EIA was assisted by the USEPA Office of Research & Development's Atlantic Ecology Division (AED) from Narragansett, RI. A site reconnaissance was conducted on September 29, 2003, and maps with approximate sampling locations were provided to the sampling team.

Gould Island 0-6" sediment samples were collected with a petit ponar dredge deployed from the EIA boat, or a hydraulic sediment dredge deployed from the AED boat. Sediment cores were collected with equipment from the AED boat. Samples from Coasters' Harbor Island were collected at the island shoreline during low tide. Each sediment sample was homogenized before dispensing into containers.

Some unforeseen issues were encountered when trying to collect sediment cores. The 12-18" interval at ARD1 did not yield sediment, and the rocky bottom at GISD6 did not yield a core sample. Coring equipment could not be deployed at GISD12 due to rough water conditions and a mechanical problem with the AED boat. At location FS-1, coring equipment loss occurred. EIA can conduct additional sampling at the site in spring/summer 2004 as necessary.

Gould Island samples (GISD, ARD, FS series) were analyzed for total metals, cynanide, and polychlorinated biphenyls (PCBs) and Coasters' Harbor Island samples (FTA series) were analyzed for polycyclic aromatic hydrocarbons (PAHs) at the EPA New England Regional Laboratory in North Chelmsford, MA. Laboratory analytical reports are enclosed for review.

Other attachments include:
- Key/list of Sample ID numbers originally assigned to each sampling location.
- Field data (including sample location, date, and time, sediment depth, water depth, and descriptions).

Results were compared with ELR, ERM, and AET* values from NOAA Screening Quick Reference Tables (SQUIRTs) for marine sediment. Results that were found to exceed one or more of these SQUIRT reference values are highlighted below.

Metals:

Sample ID	Parameter	Result (mg/Kg)	Result in ppb	ELR (ppb)	ERM (ppb)	AET (ppb)
ARD1b	Cu Pb	44 51	44,000 51,000	34,000 46,700	270,000 218,000	390,000 400,000
FS2	Pb	67	67,000	46,700	218,000	400,000
GISD10	Cu	100	100,000	34,000	270,000	390,000
GISD12	Mn	280	280,000	-	-	260,000 N

N = Neanthes bioassays

PCBs:

Sample ID	Compound	Result (mg/Kg)	Result in ppb	ELR (ppb)	ERM (ppb)	AET (ppb)
ARD1a	Aroclor-1260	0.14	140	22.7	180	130 M
ARD1b	Aroclor-1260	0.45	450	22.7	180	130 M
ARD2	Aroclor-1260	0.52	520	22.7	180	130 M
ARD5	Aroclor-1260	0.23	230	22.7	180	130 M
ARD9	Aroclor-1260	0.49	490	22.7	180	130 M
FS2	Aroclor-1260	2.0	2000	22.7	180	130 M
GISD1	Aroclor-1260	0.17	170	22.7	180	130 M
GISD3	Aroclor-1260	0.18	180	22.7	180	130 M
GISD4	Aroclor-1260	0.13	130	22.7	180	130 M
GISD5	Aroclor-1260	0.11	110	22.7	180	130 M

M = Microtox

* ERL = Effects Range-Low; ERM = Effects Range-Median; AET = Apparent Effect Threshold

Cyanide*:

Sample ID	**Result** (mg/Kg)
ARD1a	0.21
ARD1b	0.44
ARD2	0.32
GISD6	0.18
GISD6D	0.23
GISD7	0.41

* Please note SQUIRT values for cynanide in sediment were not available for comparison purposes. All other locations not listed above were either not detected or below the laboratory reporting limit.

PAHs:

Compound	ERL (ppb)	AET (ppb)	ERM (ppb)	Sample #s above ERL (please see results)	Samples #s above AET (please see results)	Samples #s above ERM (please see results)
Acenaphthene	16	130 E	500	FTA1 - FTA9; FTA11	None	None
Acenaphthylene	44	71 E	640	FTA2; FTA4 - FTA9	FTA2; FTA5 - FTA9	None
Anthracene	85.3	280 E	1100	FTA1 - FTA11	FTA2; FTA4 - FTA7	None
Benzo(a)anthracene	261	960 E	1600	FTA1 - FTA11	FTA1 - FTA2; FTA4 - FTA8	None
Benzo(a)pyrene	430	1100 E	1600	FTA1 - FTA9; FTA11	FTA4	None
Benzo(b)fluoranthene	-	-	1800 EI	None	None	None
Benzo(g,h,i)perylene	-	-	670 M	None	None	None
Benzo(k)fluoranthene	-	-	1800 EI	None	None	None
Chrysene	384	950 E	2800	FTA1 - FTA9; FTA11	FTA2; FTA5; FTA9	None
Dibenzo(a,h)anthracene	63.4	230 OM	260	FTA1 - FTA2; FTA4; FTA6 - FTA7	None	None
Fluoranthene	600	1300E	5100	FTA1 - FTA11	FTA1 FTA2; FTA4 - FTA8	None
Fluorene	19	120 E	540	FTA1 - FTA11	FTA4	None
Ideno(1,2,3-cd)pyrene	-	-	600 M	None	None	None
Naphthalene	160	230 E	2100	None	None	None
Phenanthrene	240	660 E	1500	FTA1 - FTA11	FTA1 - FTA9; FTA11	None
Pyrene	665	2400 E	2600	FTA1 - FTA11	FTA4; FTA6; FTA7	FTA4; FTA6

E = Echinoderm larvae
O = Oyster larvae
M = Microtox
I = Infaunal community impacts

The SQUIRT source used for this data comparison is located on the following website: http://response.restoration.noaa.gov/cpr/sediment/squirt/squirt.html

Geographic Information System (GIS) maps outlining the site and sampling locations will follow this report at a later date.

If you have any questions regarding this report, please contact Lisa Thuot at 8-8366 or Jerry Keefe at 8-8376.

Naval Ed. and Training Center Superfund Site Sampling (9/29/03-9/30/03)

Sample Location	Sample Date	Sample Time	Sedmt. Depth	Water Depth	Location Description	Sample Description	Site Information, other comments
ARD-1a	09/29/03	13:35	0-6"	18'	GI - Acid Resistant Drain Area	Dark, black, silty, sandy w/ shells, etc.	Sediment core. Sampled w/ AED boat.
ARD-1b	09/29/03	13:35	6-12"	18'	GI - Acid Resistant Drain	Same as ARD-1a	Sediment core. Could not collect 12-18" interval. Sampled w/ AED boat.
ARD-2	09/29/03	13:00	0-6"	30'	GI - Acid Resistant Drain Area	Black, dark silt w/ shells, etc.	Sampled w/ AED boat.
ARD-3	09/30/03	12:30	0-6"	23'	GI - Acid Resistant Drain Area	Fine, silty material, dark brown w/ some shell debris	Sampled w/ AED boat.
ARD-4	09/30/03	12:20	0-6"	18.8'	GI - Acid Resistant Drain Area	Thick, medium to fine/silty. Some organic & shell debris.	Sampled w/ AED boat.
ARD-5	09/30/03	11:50	0-6"	36.5'	GI - Acid Resistant Drain Area	Thick, medium to fine grained, dark brown, w/ significant shell debris.	Sampled w/ AED boat.
ARD-6	09/30/03	11:40	0-6"	41.4'	GI - Acid Resistant Drain Area	Thick, med. to fine grained, dark brown, sign. shell/organic material	Sampled w/ AED boat.
ARD-7	09/30/03	11:25	0-6"	40.3'	GI - Acid Resistant Drain Area	Thick, med-sized grains w/ organic & shell debris, dark brown.	Sampled w/ AED boat.
ARD-8	09/30/03	11:15	0-6"	38'	GI - Acid Resistant Drain Area	Fine, silty, dark brown w/ significant shell debris	Sampled w/ AED boat.
ARD-9	09/30/03	12:00	0-6"	26.4'	GI - Acid Resistant Drain Area	Thick, dark brown, fine, w/ significant shell debris	Sampled w/ AED boat.
FS-1	09/30/03	14:00	0-6"	10.9'	GI - Ferry Slip	Med. To coarse sand & pebbles w/ some organic & shell debris.	Sampled w/ AED boat. Could not collect core due to equipment loss.
FS-2	09/30/03	12:00	0-6"	5.7'	GI - Ferry Slip	Med. to coarse sandy material, w/ eel grass	Sampled w/ AED boat tied to EIA boat.
FTA-1	09/30/03	16:40	0-6"	n/a	CI - Fire training area	Med. to coarse sandy material.	Collected on shoreline at low tide. Scattered pavement, brick, cement observed at sampling site.
FTA-2	09/30/03	16:45	0-6"	n/a	CI - Fire training area	Med. to coarse sandy material.	Collected on shoreline at low tide. Scattered pavement, brick, cement observed at sampling site.
FTA-3	09/30/03	16:55	0-6"	n/a	CI - Fire training area	Med. to coarse sand and silt; black/brown. Strong petroleum odor.	Collected on shoreline at low tide. Scattered pavement, brick, cement observed at sampling site.
FTA-4	09/30/03	17:00	0-6"	n/a	CI - Fire training area	Med. to fine sand/silt. Petroleum odor & slight sheen observed.	Collected on shoreline at low tide. Scattered pavement, brick, cement observed at sampling site.

Naval Ed. and Training Center Superfund Site Sampling (9/29/03-9/30/03)

Sample Location	Sample Date	Sample Time	Sedmt. Depth	Water Depth	Location Description	Sample Description	Site Information, other comments
FTA-5	09/30/03	17:03	0-6"	n/a	CI - Fire training area	Med. to fine brown sand/silt. Slight petroleum odor.	Collected on shoreline at low tide. Scattered pavement, brick, cement observed at sampling site.
FTA-6	09/30/03	17:07	0-6"	n/a	CI - Fire training area	Med. to fine sand/silt. No odor.	Collected on shoreline at low tide. Scattered pavement, brick, cement observed at sampling site.
FTA-7	09/30/03	17:13	0-6"	n/a	CI - Fire training area	Med. to coarse sand, brown, no odor.	Collected on shoreline at low tide. Scattered pavement, brick, cement observed at sampling site.
FTA-8	09/30/03	17:16	0-6"	n/a	CI - Fire training area	Med. to coarse sand, brown, no odor.	Collected on shoreline at low tide. Scattered pavement, brick, cement observed at sampling site.
FTA-9	09/30/03	17:18	0-6"	n/a	CI - Fire training area	Med. to coarse sand, brown, no odor.	Collected on shoreline at low tide. Scattered pavement, brick, cement observed at sampling site.
FTA-10	09/30/03	17:33	0-6"	n/a	CI - Fire training area	Med. to coarse sand and gravel, no odor.	Collected on shoreline at low tide. Scattered pavement, brick, cement observed at sampling site.
FTA-11	09/30/03	17:36	0-6"	n/a	CI - Fire training area	Med. to coarse sand and gravel, no odor.	Collected on shoreline at low tide. Scattered pavement, brick, cement observed at sampling site.
FTA-12	09/30/03	17:42	0-6"	n/a	CI - Fire training area	Coarse gravel & sand. Pebbles & rocks (~1-3") covered sample location.	Collected on shoreline at low tide. Scattered pavement, brick, cement observed at sampling site.
GISD-1	09/30/03	14:29	0-4"	18.7'	GI - island perimeter	Brownish gray w/ shell material.	Sampled w/ EIA boat.
GISD-3	09/30/03	11:50	0-4"	14'	GI - island perimeter	Grayish silty sand w/ shells.	Sampled w/ EIA boat.
GISD-4	09/30/03	11:26	0-4"	17'	GI - island perimeter	Grayish silty sand, some brown color mixed in.	Sampled w/ EIA boat.
GISD-5	09/30/03	10:50	0-4"	25'	GI - island perimeter	Grayish dark silty sand w/ mussel, periwinkle, cherrystone shells (none alive).	Field duplicate taken (GISD-5D). Sampled w/ EIA boat.
GISD-6	09/30/03	10:25	0-6"	12'	GI - island south side	Fines, dark brown, silt-sized w/ some sand-sized mixed in.	Field duplicate taken (GISD-6D). Sampled w/ AED boat.
GISD-6a	09/30/03	15:00	0-6"	28.0'	GI - island south side	Fine, silty brown. Minimal to no organic or shell material.	Couldn't collect core (insufficient sed. depth). Sampled w/ AED boat.
GISD-7	09/29/03	14:37	0-6"	18'	GI - island perimeter (18" outfall pipe)	Black, grayish silty sand	Sampled w/ AED boat.

Naval Ed. and Training Center Superfund Site Sampling (9/29/03-9/30/03)

Sample Location	Sample Date	Sample Time	Sedmt. Depth	Water Depth	Location Description	Sample Description	Site Information, other comments
GISD-8	09/29/03	14:48	0-6"	6-10'	GI - island perimeter (8" outfall)	Black/gray silty sand	Sampled w/ AED boat.
GISD-10	09/29/03	15:01	0-6"	6-10'	GI - along perimeter	Gray silty sand, eel grass.	Field duplicate taken (GISD-10D). Sampled w/ AED boat.
GISD-11	09/29/03	14:00	0-6"	20'	GI - along perimeter	Black, grayish silty sand w/ some shells	Sampled w/ AED boat.
GISD-12	09/30/03	14:20	0-6"	123'	GI - deep water	Very fine silt, light brown color.	Sampled w/ AED boat.
GISD-12a	09/30/03	14:30	0-6"	119'	GI - deep water	Very fine silt, light brown color.	Field duplicate taken (GISD-12aD). Sampled w/ AED boat.

Sample IDs for Newport Naval Ed. Training Ctr. Sampling (9/29/03-9/30/03)

Sample ID	Depth (in.)	Description	Sample collected?
ARD-1a	0-6	GI sediment core - Acid Resistant Drain area	Yes
ARD-1b	6-12	GI sediment core - Acid Resistant Drain area	Yes
ARD-1c	12-18	GI sediment core - Acid Resistant Drain area	Sediment did not extend to this depth
ARD-2	0-6	GI sediment - Acid Resistant Drain area	Yes
ARD-3	0-6	GI sediment - Acid Resistant Drain area	Yes
ARD-4	0-6	GI sediment - Acid Resistant Drain area	Yes
ARD-5	0-6	GI sediment - Acid Resistant Drain area	Yes
ARD-6	0-6	GI sediment - Acid Resistant Drain area	Yes
ARD-7	0-6	GI sediment - Acid Resistant Drain area	Yes
ARD-8	0-6	GI sediment - Acid Resistant Drain area	Yes
ARD-9	0-6	GI sediment - Acid Resistant Drain area	Yes
FS-1a	0-6	GI sediment core - Ferry Slip	Could not collect sed. core due to equipment loss. See sample FS-1
FS-1b	6-12	GI sediment core - Ferry Slip	Could not collect sed. core due to equipment loss. See sample FS-1
FS-1c	12-18	GI sediment core - Ferry Slip	Could not collect sed. core due to equipment loss. See sample FS-1
FS-2	0-6	GI sediment - Ferry Slip	Yes
FTA-1	0-6	CHI sediment - Fire training area	Yes
FTA-2	0-6	CHI sediment - Fire training area	Yes
FTA-3	0-6	CHI sediment - Fire training area	Yes
FTA-4	0-6	CHI sediment - Fire training area	Yes
FTA-5	0-6	CHI sediment - Fire training area	Yes
FTA-6	0-6	CHI sediment - Fire training area	Yes
FTA-7	0-6	CHI sediment - Fire training area	Yes
FTA-8	0-6	CHI sediment - Fire training area	Yes
FTA-9	0-6	CHI sediment - Fire training area	Yes
FTA-10	0-6	CHI sediment - Fire training area	Yes
FTA-11	0-6	CHI sediment - Fire training area	Yes
FTA-12	0-6	CHI sediment - Fire training area	Yes
GISD-1	0-6	GI sediment - along island perimeter	Yes
GISD-2	0-6	GI sediment - along island perimeter	Not collected due to an oversight.
GISD-3	0-6	GI sediment - along island perimeter	Yes
GISD-4	0-6	GI sediment - along island perimeter	Yes
GISD-5	0-6	GI sediment - along island perimeter	Yes
GISD-6	0-6	GI sediment - along island perimeter	Yes
GISD-6a1	0-6	GI sediment core	No, insufficient sediment at location. See alternate sample GISD-6a
GISD-6a2	6-12	GI sediment core	No, insufficient sediment at location. See alternate sample GISD-6a
GISD-6a3	12-18	GI sediment core	No, insufficient sediment at location. See alternate sample GISD-6a
GISD-7	0-6	GI sediment - along island perimeter	Yes
GISD-8	0-6	GI sediment - along island perimeter	Yes
GISD-9	0-6	GI sediment - along island perimeter	No: Location cancelled on 9/29/03.
GISD-10	0-6	GI sediment - along island perimeter	Yes
GISD-11	0-6	GI sediment - along island perimeter	Yes
GISD-12	0-6	GI sediment - in deep water	Yes
GISD-12a	0-6	GI sediment - in deep water	Yes

Key: GI = Gould Island; CHI = Coasters Harbor Island

Sample IDs for Newport Naval Ed. Training Ctr. Sampling (9/29/03-9/30/03)

Sample ID	Depth (in.)	Description	Sample collected?
GISD-12b1	0-6	GI sediment core in deep water	Could not collect sed. core due to rough waters & boat malfunction.
GISD-12b2	6-12	GI sediment core in deep water	Could not collect sed. core due to rough waters & boat malfunction.
GISD-12b3	12-18	GI sediment core in deep water	Could not collect sed. core due to rough waters & boat malfunction.

Key: GI = Gould Island; CHI = Coasters Harbor Island

EPA
Region 1, New England

United States Environmental Protection Agency
Office of Environmental Measurement & Evaluation
11 Technology Drive
North Chelmsford, MA 01863-2431

Laboratory Report

October 23, 2003

Ms Kim Keckler - HBT
USEPA New England, Region 1
One Congress Street
Boston, MA 02114 - 2023

Project Number: 03100001
Project: Naval Ed. Training Center
Analysis: PCBs Medium Level in Soils and Sediments
Analyst: Paul Carroll Pcarroll 11-6-03

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, PESTSOIL2.SOP.

The analysis was performed using high resolution capillary column chromatography on a Hewlett Packard 5890 Series II gas chromatograph equipped with dual electron capture detectors. The 30 meter dual capillary column system consists of a J&W DB-5 and J&W DB-1701, both with 0.25mm ID and 0.25 micron film thickness.

The results are reported on a dry weight basis.

Date Samples Received by the Laboratory: 10/1/03

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions please call me at 617-918-8333.

Sincerely,
Wil Andrade 11/13/03
Dr. William J. Andrade
Advanced Analytical Chemistry Specialist

Qualifiers	**RL**	Reporting limit
	ND	Not Detected above Reporting limit
	NA	Not Applicable due to high sample dilutions or sample interferences
	J	Estimated value
	E	Estimated value exceeds the calibration range
	L	Estimated value is below the calibration range
	B	Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.
	P	The confirmation value exceeded 35% difference and is less than 100%. The lower value is reported.
	C	The identification has been confirmed by GC/MS.
	R	No recovery was calculated since the analyte concentration is greater than four times the spike level.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PCBs Medium Level in Soils and Sediments

Client Sample ID:	ARD2	Lab Sample ID:	AA34773
Date of Collection:	9/29/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/6/03	Percent Solids:	82%
Dry Weight Extracted:	4.64 grams	Extract Dilution:	1
Wet Weight Extracted:	5.65 grams		

CAS Number	Compound	Concentration mg/Kg (ppm)	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	**0.52**	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	83	36 - 131
Decachlorobiphenyl	89	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 51%.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PCBs Medium Level in Soils and Sediments

Client Sample ID:	ARD1a	Lab Sample ID:	AA34774
Date of Collection:	9/29/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/6/03	Percent Solids:	81%
Dry Weight Extracted:	4.29 grams	Extract Dilution:	1
Wet Weight Extracted:	5.27 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	**0.14**	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	88	36 - 131
Decachlorobiphenyl	86	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 49%.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PCBs Medium Level in Soils and Sediments

Client Sample ID:	ARD1b	Lab Sample ID:	AA34775
Date of Collection:	9/29/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/6/03	Percent Solids:	84%
Dry Weight Extracted:	4.38 grams	Extract Dilution:	1
Wet Weight Extracted:	5.20 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	**0.45**	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	91	36 - 131
Decachlorobiphenyl	86	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 42%.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PCBs Medium Level in Soils and Sediments

Client Sample ID:	GSD11	Lab Sample ID:	AA34776
Date of Collection:	9/29/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/6/03	Percent Solids:	88%
Dry Weight Extracted:	5.1 grams	Extract Dilution:	1
Wet Weight Extracted:	5.8 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	**0.07**	0.10	L
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	90	36 - 131
Decachlorobiphenyl	86	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 60%.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PCBs Medium Level in Soils and Sediments

Client Sample ID:	GSD7	Lab Sample ID:	AA34777
Date of Collection:	9/29/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/6/03	Percent Solids:	99%
Dry Weight Extracted:	5.68 grams	Extract Dilution:	1
Wet Weight Extracted:	5.71 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	87	36 - 131
Decachlorobiphenyl	89	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 81%.

US ENVIRONMENTAL PROTECTION AGENCY
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Naval Ed. Training Center

PCBs Medium Level in Soils and Sediments

Client Sample ID:	GSD8	Lab Sample ID:	AA34778
Date of Collection:	9/29/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/6/03	Percent Solids:	99%
Dry Weight Extracted:	5.67 grams	Extract Dilution:	1
Wet Weight Extracted:	5.73 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	79	36 - 131
Decachlorobiphenyl	88	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 81%.

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Naval Ed. Training Center

PCBs Medium Level in Soils and Sediments

Client Sample ID:	GSD10	Lab Sample ID:	AA34779
Date of Collection:	9/29/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	99%
Dry Weight Extracted:	6.00 grams	Extract Dilution:	1
Wet Weight Extracted:	6.04 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	83	36 - 131
Decachlorobiphenyl	88	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 78%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	GSD6	Lab Sample ID:	AA34780
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	100%
Dry Weight Extracted:	5.39 grams	Extract Dilution:	1
Wet Weight Extracted:	5.41 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	81	36 - 131
Decachlorobiphenyl	89	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 81%.

US ENVIRONMENTAL PROTECTION AGENCY
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Naval Ed. Training Center

PCBs Medium Level in Soils and Sediments

Client Sample ID:	GSD6D	Lab Sample ID:	AA34781
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	100%
Dry Weight Extracted:	5.65 grams	Extract Dilution:	1
Wet Weight Extracted:	5.66 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	90	36 - 131
Decachlorobiphenyl	92	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 85%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	ARD8	Lab Sample ID:	AA34782
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	91%
Dry Weight Extracted:	4.62 grams	Extract Dilution:	1
Wet Weight Extracted:	5.05 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	81	36 - 131
Decachlorobiphenyl	91	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 50%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	ARD7	Lab Sample ID:	AA34783
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	91%
Dry Weight Extracted:	5.31 grams	Extract Dilution:	1
Wet Weight Extracted:	5.82 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	**0.06**	0.10	L
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	78	36 - 131
Decachlorobiphenyl	90	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 58%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	ARD6	Lab Sample ID:	AA34784
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	98%
Dry Weight Extracted:	5.59 grams	Extract Dilution:	1
Wet Weight Extracted:	5.70 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	86	36 - 131
Decachlorobiphenyl	92	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 65%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	ARD5	Lab Sample ID:	AA34785
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	85%
Dry Weight Extracted:	4.79 grams	Extract Dilution:	1
Wet Weight Extracted:	5.66 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	**0.23**	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	87	36 - 131
Decachlorobiphenyl	89	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 52%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	ARD9	Lab Sample ID:	AA34786
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	90%
Dry Weight Extracted:	4.90 grams	Extract Dilution:	1
Wet Weight Extracted:	5.46 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	**0.49**	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	74	36 - 131
Decachlorobiphenyl	89	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 58%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	ARD4	Lab Sample ID:	AA34787
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	88%
Dry Weight Extracted:	4.71 grams	Extract Dilution:	1
Wet Weight Extracted:	5.38 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	82	36 - 131
Decachlorobiphenyl	83	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 54%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	ARD3	Lab Sample ID:	AA34788
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	84%
Dry Weight Extracted:	4.51 grams	Extract Dilution:	1
Wet Weight Extracted:	5.38 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	**0.06**	0.10	L
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	84	36 - 131
Decachlorobiphenyl	86	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 50%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	FS2	Lab Sample ID:	AA34789
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/8/03	Percent Solids:	99%
Dry Weight Extracted:	5.95 grams	Extract Dilution:	2
Wet Weight Extracted:	5.98 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.20	
11104-28-2	Aroclor-1221	ND	0.20	
11141-16-5	Aroclor-1232	ND	0.20	
53469-21-9	Aroclor-1242	ND	0.20	
12672-29-6	Aroclor-1248	ND	0.20	
11097-69-1	Aroclor-1254	ND	0.20	
11096-82-5	Aroclor-1260	**2.0**	0.20	
11100-14-4	Aroclor-1262	ND	0.20	
37324-23-5	Aroclor-1268	ND	0.20	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	77	36 - 131
Decachlorobiphenyl	89	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 84%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	FS1	Lab Sample ID:	AA34790
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	99%
Dry Weight Extracted:	5.58 grams	Extract Dilution:	1
Wet Weight Extracted:	5.65 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	**0.09**	0.10	L
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	92	36 - 131
Decachlorobiphenyl	83	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 72%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	GISD12	Lab Sample ID:	AA34791
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	94%
Dry Weight Extracted:	5.02 grams	Extract Dilution:	1
Wet Weight Extracted:	5.34 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	81	36 - 131
Decachlorobiphenyl	91	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 58%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	GISD12a	Lab Sample ID:	AA34792
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	98%
Dry Weight Extracted:	6.02 grams	Extract Dilution:	1
Wet Weight Extracted:	6.14 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	82	36 - 131
Decachlorobiphenyl	91	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 63%.

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PCBs Medium Level in Soils and Sediments

Client Sample ID:	GISD12aD	Lab Sample ID:	AA34793
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	98%
Dry Weight Extracted:	6.28 grams	Extract Dilution:	1
Wet Weight Extracted:	6.40 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	85	36 - 131
Decachlorobiphenyl	86	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 61%.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PCBs Medium Level in Soils and Sediments

Client Sample ID:	GISD6a	Lab Sample ID:	AA34794
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	99%
Dry Weight Extracted:	5.99 grams	Extract Dilution:	1
Wet Weight Extracted:	6.03 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	80	36 - 131
Decachlorobiphenyl	87	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 80%.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PCBs Medium Level in Soils and Sediments

Client Sample ID:	GISD5	Lab Sample ID:	AA34795
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	98%
Dry Weight Extracted:	5.84 grams	Extract Dilution:	1
Wet Weight Extracted:	5.96 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	**0.11**	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	92	36 - 131
Decachlorobiphenyl	88	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 68%.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PCBs Medium Level in Soils and Sediments

Client Sample ID:	GISD5D	Lab Sample ID:	AA34796
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	99%
Dry Weight Extracted:	5.39 grams	Extract Dilution:	1
Wet Weight Extracted:	5.47 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	91	36 - 131
Decachlorobiphenyl	93	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 69%.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PCBs Medium Level in Soils and Sediments

Client Sample ID:	GISD4	Lab Sample ID:	AA34797
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	100%
Dry Weight Extracted:	5.40 grams	Extract Dilution:	1
Wet Weight Extracted:	5.41 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	**0.13**	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	90	36 - 131
Decachlorobiphenyl	91	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 81%.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PCBs Medium Level in Soils and Sediments

Client Sample ID:	GISD3	Lab Sample ID:	AA34798
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	100%
Dry Weight Extracted:	5.40 grams	Extract Dilution:	1
Wet Weight Extracted:	5.41 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	**0.18**	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	79	36 - 131
Decachlorobiphenyl	88	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 82%.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PCBs Medium Level in Soils and Sediments

Client Sample ID:	GISD1	Lab Sample ID:	AA34799
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	96%
Dry Weight Extracted:	5.11 grams	Extract Dilution:	1
Wet Weight Extracted:	5.33 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	**0.17**	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	88	36 - 131
Decachlorobiphenyl	86	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 69%.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PCBs Medium Level in Soils and Sediments

Client Sample ID:	GISD10D	Lab Sample ID:	AA34800
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/7/03	Percent Solids:	100%
Dry Weight Extracted:	5.34 grams	Extract Dilution:	1
Wet Weight Extracted:	5.35 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	83	36 - 131
Decachlorobiphenyl	94	30 - 165

Comments: Samples were air dried prior to % solids determination. The initial % solid for this sample was 79%.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Laboratory Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	Sediment
Date of Extraction:	10/2/03	Final Volume:	5 mL
Date of Analysis:	10/6/03	Percent Solids:	100%
Dry Weight Extracted:	6.22 grams	Extract Dilution:	1
Wet Weight Extracted:	6.23 grams		

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	63	60 - 104
Decachlorobiphenyl	95	65 - 110

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

PCB MATRIX SPIKE (MS) / MATRIX SPIKE DUPLICATE (MSD) RECOVERY

Naval Ed. Training Center

Sample ID: AA34774

PARAMETER	SPIKE ADDED mg/Kg	SAMPLE CONCENTRATION mg/Kg	MS CONCENTRATION mg/Kg	MS % REC	QC LIMITS (% REC)
Aroclor-1260	1	0.14	.816	103	77 - 136

PARAMETER	MSD SPIKE ADDED	MSD CONCENTRATION mg/Kg	MSD % REC	RPD %	QC LIMITS RPD
Aroclor-1260	1	.771	102	1	50

Samples in Batch: AA34773 AA34774 AA34775 AA34776 AA34777 AA34778 AA34779 AA34780 AA34781 AA34782 AA34783 AA34784 AA34785 AA34786 AA34787 AA34788 AA34789 AA34790 AA34791 AA34792 AA34793 AA34794 AA34795 AA34796 AA34797 AA34798 AA34799 AA34800

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

LABORATORY DUPLICATE RESULTS

Naval Ed. Training Center

Sample ID: AA34773

PARAMETER	SAMPLE RESULT mg/Kg	SAMPLE DUPLICATE RESULT mg/Kg	PRECISION RPD %	QC LIMITS
Aroclor-1016	ND	ND	ND	50
Aroclor-1221	ND	ND	ND	50
Aroclor-1232	ND	ND	ND	50
Aroclor-1242	ND	ND	ND	50
Aroclor-1248	ND	ND	ND	50
Aroclor-1254	ND	ND	ND	50
Aroclor-1260	0.52	0.33	45	50
Aroclor-1262	ND	ND	ND	50
Aroclor-1268	ND	ND	ND	50

EPA
New England

United States Environmental Protection Agency
Office of Environmental Measurement & Evaluation
11 Technology Drive
North Chelmsford, MA 01863-2431

Laboratory Report

October 29, 2003

Ms Kim Keckler - HBT
USEPA New England, Region 1
One Congress Street
Boston, MA 02114 - 2023

Project Number: 03100001
Project: Naval Ed. Training Center
Analysis: Metals in Soil Medium Level by ICP
Analysts: Janet Paquin, Mike Dowling
JP 10/29/03 MD 10/29/03

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Samples were analyzed following the EPA Region I SOP, INGICP4.SOP.

Sample preparation was done following the EPA Region I SOP, INGMETALSPREP3.SOP.

Samples were analyzed by inductively coupled plasma - atomic emission spectrometry using pneumatic nebulization. Preparation and analysis SOP's are based on "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Edition, Revision 2, Final Update III, Methods 3050B and 6010B," respectively.

Date Samples Received by the Laboratory: 10/1/03

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions, please call me at 617-918-8333.

Sincerely,
Wil Andrade 11/21/03
Dr. William J. Andrade
Advanced Analytical Chemistry Specialist

Qualifiers:

RL	Reporting limit
ND	Not Detected above reporting limit
NA	Not Applicable
NC	Not calculated since analyte concentration is ND
J1	Estimated value due to MS recovery outside accceptance criteria
J2	Estimated value due to LFB result outside acceptance criteria
J3	Estimated value due to RPD result outside acceptance criteria
J4	Estimated value due to LCS result outside acceptance criteria
B	Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.
R	No recovery was calculated since the analyte concentration is greater than four times the spike level.

Samples were prepared by ESAT contractors.

Comments:

Results are in "mg/kg dry wt." units.

Calcium results were not requested.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	ARD2	Lab Sample ID:	AA34773
Date of Collection:	9/29/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**9200**	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	**25**	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	**32**	3.0	
7440-48-4	Cobalt	**6.1**	3.0	
7440-50-8	Copper	**29**	3.0	
7439-89-6	Iron	**17000**	10	
7439-92-1	Lead	**38**	10	
7439-95-4	Magnesium	**6100**	10	
7439-96-5	Manganese	**190**	2.0	
7440-02-0	Nickel	**14**	6.0	
7440-09-7	Potassium	**3000**	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	**16000**	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	**32**	3.0	
7440-66-6	Zinc	**88**	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	ARD1a	Lab Sample ID:	AA34774
Date of Collection:	9/29/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**7100**	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	**21**	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	**25**	3.0	
7440-48-4	Cobalt	**4.8**	3.0	
7440-50-8	Copper	**25**	3.0	
7439-89-6	Iron	**13000**	10	
7439-92-1	Lead	**35**	10	
7439-95-4	Magnesium	**5400**	10	
7439-96-5	Manganese	**160**	2.0	
7440-02-0	Nickel	**10**	6.0	
7440-09-7	Potassium	**2500**	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	**15000**	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	**26**	3.0	
7440-66-6	Zinc	**79**	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	ARD1b	Lab Sample ID:	AA34775
Date of Collection:	9/29/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**9100**	24	
7440-36-0	Antimony	ND	12	
7440-38-2	Arsenic	ND	24	
7440-39-3	Barium	**25**	3.6	
7440-41-7	Beryllium	ND	1.2	
7440-43-9	Cadmium	ND	3.6	
7440-47-3	Chromium	**38**	3.6	
7440-48-4	Cobalt	**6.0**	3.6	
7440-50-8	Copper	**44**	3.6	
7439-89-6	Iron	**17000**	12	
7439-92-1	Lead	**51**	12	
7439-95-4	Magnesium	**6300**	12	
7439-96-5	Manganese	**170**	2.4	
7440-02-0	Nickel	**20**	7.2	
7440-09-7	Potassium	**3100**	480	
7782-49-2	Selenium	ND	12	
7440-22-4	Silver	ND	3.6	
7440-23-5	Sodium	**18000**	1200	
7440-28-0	Thallium	ND	24	
7440-62-2	Vanadium	**36**	3.6	
7440-66-6	Zinc	**110**	3.6	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	G1SD11	Lab Sample ID:	AA34776
Date of Collection:	9/29/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**7900**	22	
7440-36-0	Antimony	ND	11	
7440-38-2	Arsenic	ND	22	
7440-39-3	Barium	**26**	3.3	
7440-41-7	Beryllium	ND	1.1	
7440-43-9	Cadmium	ND	3.3	
7440-47-3	Chromium	**26**	3.3	
7440-48-4	Cobalt	**5.4**	3.3	
7440-50-8	Copper	**25**	3.3	
7439-89-6	Iron	**15000**	11	
7439-92-1	Lead	**32**	11	
7439-95-4	Magnesium	**4700**	11	
7439-96-5	Manganese	**150**	2.2	
7440-02-0	Nickel	**13**	6.6	
7440-09-7	Potassium	**2300**	440	
7782-49-2	Selenium	ND	11	
7440-22-4	Silver	ND	3.3	
7440-23-5	Sodium	**9200**	1100	
7440-28-0	Thallium	ND	22	
7440-62-2	Vanadium	**25**	3.3	
7440-66-6	Zinc	**71**	3.3	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	G1SD7	Lab Sample ID:	AA34777
Date of Collection:	9/29/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**4400**	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	**14**	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	**13**	3.0	
7440-48-4	Cobalt	**3.3**	3.0	
7440-50-8	Copper	**11**	3.0	
7439-89-6	Iron	**9000**	10	
7439-92-1	Lead	**13**	10	J3
7439-95-4	Magnesium	**2400**	10	
7439-96-5	Manganese	**91**	2.0	
7440-02-0	Nickel	**7.5**	6.0	
7440-09-7	Potassium	**1000**	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	**2800**	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	**13**	3.0	
7440-66-6	Zinc	**39**	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	G1SD8	Lab Sample ID:	AA34778
Date of Collection:	9/29/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**4200**	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	**17**	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	**11**	3.0	
7440-48-4	Cobalt	**3.5**	3.0	
7440-50-8	Copper	**8.7**	3.0	
7439-89-6	Iron	**9300**	10	
7439-92-1	Lead	**11**	10	
7439-95-4	Magnesium	**2400**	10	
7439-96-5	Manganese	**94**	2.0	
7440-02-0	Nickel	**6.9**	6.0	
7440-09-7	Potassium	**980**	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	**3500**	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	**13**	3.0	
7440-66-6	Zinc	**36**	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	G1SD10	Lab Sample ID:	AA34779
Date of Collection:	9/29/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**6200**	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	**32**	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	**14**	3.0	
7440-48-4	Cobalt	**5.4**	3.0	
7440-50-8	Copper	**20**	3.0	
7439-89-6	Iron	**14000**	10	
7439-92-1	Lead	**12**	10	
7439-95-4	Magnesium	**3600**	10	
7439-96-5	Manganese	**100**	2.0	
7440-02-0	Nickel	**12**	6.0	
7440-09-7	Potassium	**2400**	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	**3800**	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	**20**	3.0	
7440-66-6	Zinc	**53**	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	G1SD6	Lab Sample ID:	AA34780
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**5600**	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	**11**	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	**12**	3.0	
7440-48-4	Cobalt	**4.8**	3.0	
7440-50-8	Copper	**11**	3.0	
7439-89-6	Iron	**11000**	10	
7439-92-1	Lead	**12**	10	
7439-95-4	Magnesium	**3000**	10	
7439-96-5	Manganese	**110**	2.0	
7440-02-0	Nickel	**8.2**	6.0	
7440-09-7	Potassium	**930**	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	**3700**	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	**12**	3.0	
7440-66-6	Zinc	**38**	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	G1SD6D	Lab Sample ID:	AA34781
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**6900**	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	**11**	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	**12**	3.0	
7440-48-4	Cobalt	**5.5**	3.0	
7440-50-8	Copper	**11**	3.0	
7439-89-6	Iron	**15000**	10	
7439-92-1	Lead	ND	10	
7439-95-4	Magnesium	**3400**	10	
7439-96-5	Manganese	**130**	2.0	
7440-02-0	Nickel	**9.6**	6.0	
7440-09-7	Potassium	**960**	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	**3100**	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	**12**	3.0	
7440-66-6	Zinc	**39**	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	ARD8	Lab Sample ID:	AA34782
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**9000**	24	
7440-36-0	Antimony	ND	12	
7440-38-2	Arsenic	ND	24	
7440-39-3	Barium	**26**	3.6	
7440-41-7	Beryllium	ND	1.2	
7440-43-9	Cadmium	ND	3.6	
7440-47-3	Chromium	**28**	3.6	
7440-48-4	Cobalt	**6.2**	3.6	
7440-50-8	Copper	**21**	3.6	
7439-89-6	Iron	**16000**	12	
7439-92-1	Lead	**28**	12	
7439-95-4	Magnesium	**6100**	12	
7439-96-5	Manganese	**230**	2.4	
7440-02-0	Nickel	**10**	7.2	
7440-09-7	Potassium	**2900**	480	
7782-49-2	Selenium	ND	12	
7440-22-4	Silver	ND	3.6	
7440-23-5	Sodium	**15000**	1200	
7440-28-0	Thallium	ND	24	
7440-62-2	Vanadium	**26**	3.6	
7440-66-6	Zinc	**69**	3.6	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	ARD7	Lab Sample ID:	AA34783
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**7400**	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	**20**	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	**25**	3.0	
7440-48-4	Cobalt	**4.9**	3.0	
7440-50-8	Copper	**22**	3.0	
7439-89-6	Iron	**13000**	10	
7439-92-1	Lead	**27**	10	
7439-95-4	Magnesium	**5100**	10	
7439-96-5	Manganese	**180**	2.0	
7440-02-0	Nickel	**10**	6.0	
7440-09-7	Potassium	**2400**	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	**11000**	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	**24**	3.0	
7440-66-6	Zinc	**66**	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	ARD6	Lab Sample ID:	AA34784
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**7600**	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	**15**	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	**22**	3.0	
7440-48-4	Cobalt	**5.3**	3.0	
7440-50-8	Copper	**14**	3.0	
7439-89-6	Iron	**16000**	10	
7439-92-1	Lead	**23**	10	
7439-95-4	Magnesium	**4500**	10	
7439-96-5	Manganese	**170**	2.0	
7440-02-0	Nickel	**11**	6.0	
7440-09-7	Potassium	**1900**	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	**6600**	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	**22**	3.0	
7440-66-6	Zinc	**58**	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	ARD5	Lab Sample ID:	AA34785
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**8400**	22	
7440-36-0	Antimony	ND	11	
7440-38-2	Arsenic	ND	22	
7440-39-3	Barium	**24**	3.3	
7440-41-7	Beryllium	ND	1.1	
7440-43-9	Cadmium	ND	3.3	
7440-47-3	Chromium	**27**	3.3	
7440-48-4	Cobalt	**5.7**	3.3	
7440-50-8	Copper	**22**	3.3	
7439-89-6	Iron	**16000**	11	
7439-92-1	Lead	**32**	11	
7439-95-4	Magnesium	**5600**	11	
7439-96-5	Manganese	**210**	2.2	
7440-02-0	Nickel	**12**	6.6	
7440-09-7	Potassium	**2700**	440	
7782-49-2	Selenium	ND	11	
7440-22-4	Silver	ND	3.3	
7440-23-5	Sodium	**13000**	1100	
7440-28-0	Thallium	ND	22	
7440-62-2	Vanadium	**27**	3.3	
7440-66-6	Zinc	**71**	3.3	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	ARD9	Lab Sample ID:	AA34786
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	N/A
Date of Analysis:	10/22/03	Digestate Dilution:	N/A
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**6700**	22	
7440-36-0	Antimony	ND	11	
7440-38-2	Arsenic	ND	22	
7440-39-3	Barium	**19**	3.3	
7440-41-7	Beryllium	ND	1.1	
7440-43-9	Cadmium	ND	3.3	
7440-47-3	Chromium	**22**	3.3	
7440-48-4	Cobalt	**4.4**	3.3	
7440-50-8	Copper	**20**	3.3	
7439-89-6	Iron	**12000**	11	
7439-92-1	Lead	**26**	11	
7439-95-4	Magnesium	**4800**	11	
7439-96-5	Manganese	**180**	2.2	
7440-02-0	Nickel	**8.3**	6.6	
7440-09-7	Potassium	**2200**	440	
7782-49-2	Selenium	ND	11	
7440-22-4	Silver	ND	3.3	
7440-23-5	Sodium	**12000**	1100	
7440-28-0	Thallium	ND	22	
7440-62-2	Vanadium	**21**	3.3	
7440-66-6	Zinc	**59**	3.3	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	ARD4	Lab Sample ID:	AA34787
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**6200**	24	
7440-36-0	Antimony	ND	12	
7440-38-2	Arsenic	ND	24	
7440-39-3	Barium	**19**	3.6	
7440-41-7	Beryllium	ND	1.2	
7440-43-9	Cadmium	ND	3.6	
7440-47-3	Chromium	**23**	3.6	
7440-48-4	Cobalt	**4.3**	3.6	
7440-50-8	Copper	**25**	3.6	
7439-89-6	Iron	**13000**	12	
7439-92-1	Lead	**29**	12	
7439-95-4	Magnesium	**5300**	12	
7439-96-5	Manganese	**150**	2.4	
7440-02-0	Nickel	**12**	7.2	
7440-09-7	Potassium	**2200**	480	
7782-49-2	Selenium	ND	12	
7440-22-4	Silver	ND	3.6	
7440-23-5	Sodium	**16000**	1200	
7440-28-0	Thallium	ND	24	
7440-62-2	Vanadium	**23**	3.6	
7440-66-6	Zinc	**71**	3.6	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	ARD3	Lab Sample ID:	AA34788
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**6600**	22	
7440-36-0	Antimony	ND	11	
7440-38-2	Arsenic	ND	22	
7440-39-3	Barium	**20**	3.3	
7440-41-7	Beryllium	ND	1.1	
7440-43-9	Cadmium	ND	3.3	
7440-47-3	Chromium	**22**	3.3	
7440-48-4	Cobalt	**4.4**	3.3	
7440-50-8	Copper	**20**	3.3	
7439-89-6	Iron	**12000**	11	
7439-92-1	Lead	**26**	11	
7439-95-4	Magnesium	**5000**	11	
7439-96-5	Manganese	**170**	2.2	
7440-02-0	Nickel	**11**	6.6	
7440-09-7	Potassium	**2300**	440	
7782-49-2	Selenium	ND	11	
7440-22-4	Silver	ND	3.3	
7440-23-5	Sodium	**14000**	1100	
7440-28-0	Thallium	ND	22	
7440-62-2	Vanadium	**22**	3.3	
7440-66-6	Zinc	**62**	3.3	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	FS2	Lab Sample ID:	AA34789
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**6700**	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	**17**	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	**18**	3.0	
7440-48-4	Cobalt	**5.3**	3.0	
7440-50-8	Copper	**17**	3.0	
7439-89-6	Iron	**21000**	10	
7439-92-1	Lead	**67**	10	
7439-95-4	Magnesium	**4300**	10	
7439-96-5	Manganese	**250**	2.0	
7440-02-0	Nickel	**10**	6.0	
7440-09-7	Potassium	**1200**	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	**5600**	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	**18**	3.0	
7440-66-6	Zinc	**45**	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	FS1	Lab Sample ID:	AA34790
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**3700**	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	**17**	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	**16**	3.0	
7440-48-4	Cobalt	**3.5**	3.0	
7440-50-8	Copper	**20**	3.0	
7439-89-6	Iron	**20000**	10	
7439-92-1	Lead	**21**	10	
7439-95-4	Magnesium	**4700**	10	
7439-96-5	Manganese	**160**	2.0	
7440-02-0	Nickel	**7.8**	6.0	
7440-09-7	Potassium	**1000**	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	**8800**	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	**14**	3.0	
7440-66-6	Zinc	**42**	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	GISD12	Lab Sample ID:	AA34791
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**8800**	20	
7440-36-0	Antimony	ND	10	J1
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	**20**	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	**26**	3.0	
7440-48-4	Cobalt	**6.8**	3.0	
7440-50-8	Copper	**16**	3.0	
7439-89-6	Iron	**21000**	10	
7439-92-1	Lead	**26**	10	
7439-95-4	Magnesium	**5200**	10	
7439-96-5	Manganese	**280**	2.0	
7440-02-0	Nickel	**14**	6.0	
7440-09-7	Potassium	**2600**	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	**8200**	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	**25**	3.0	
7440-66-6	Zinc	**72**	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	GISD12a	Lab Sample ID:	AA34792
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**7300**	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	**18**	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	**22**	3.0	
7440-48-4	Cobalt	**6.0**	3.0	
7440-50-8	Copper	**14**	3.0	
7439-89-6	Iron	**19000**	10	
7439-92-1	Lead	**21**	10	
7439-95-4	Magnesium	**4600**	10	
7439-96-5	Manganese	**230**	2.0	
7440-02-0	Nickel	**12**	6.0	
7440-09-7	Potassium	**2400**	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	**7100**	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	**22**	3.0	
7440-66-6	Zinc	**63**	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	GISD12aD	Lab Sample ID:	AA34793
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/8/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**7000**	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	**18**	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	**21**	3.0	
7440-48-4	Cobalt	**5.7**	3.0	
7440-50-8	Copper	**12**	3.0	
7439-89-6	Iron	**18000**	10	
7439-92-1	Lead	**21**	10	
7439-95-4	Magnesium	**4200**	10	
7439-96-5	Manganese	**220**	2.0	
7440-02-0	Nickel	**11**	6.0	
7440-09-7	Potassium	**2300**	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	**5800**	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	**21**	3.0	
7440-66-6	Zinc	**58**	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	GISD6a	Lab Sample ID:	AA34794
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/8/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**6500**	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	**11**	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	**15**	3.0	
7440-48-4	Cobalt	**4.6**	3.0	
7440-50-8	Copper	**8.3**	3.0	
7439-89-6	Iron	**14000**	10	
7439-92-1	Lead	**14**	10	
7439-95-4	Magnesium	**3600**	10	
7439-96-5	Manganese	**140**	2.0	
7440-02-0	Nickel	**9.0**	6.0	
7440-09-7	Potassium	**1200**	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	**3600**	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	**16**	3.0	
7440-66-6	Zinc	**47**	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	GISD5	Lab Sample ID:	AA34795
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/8/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**7300**	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	**17**	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	**20**	3.0	
7440-48-4	Cobalt	**4.6**	3.0	
7440-50-8	Copper	**15**	3.0	
7439-89-6	Iron	**14000**	10	
7439-92-1	Lead	**22**	10	
7439-95-4	Magnesium	**4500**	10	
7439-96-5	Manganese	**160**	2.0	
7440-02-0	Nickel	**10**	6.0	
7440-09-7	Potassium	**1600**	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	**7800**	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	**19**	3.0	
7440-66-6	Zinc	**67**	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	GISD5D	Lab Sample ID:	AA34796
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/8/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**7400**	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	**19**	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	**26**	3.0	
7440-48-4	Cobalt	**5.2**	3.0	
7440-50-8	Copper	**18**	3.0	
7439-89-6	Iron	**15000**	10	
7439-92-1	Lead	**26**	10	
7439-95-4	Magnesium	**4600**	10	
7439-96-5	Manganese	**180**	2.0	
7440-02-0	Nickel	**13**	6.0	
7440-09-7	Potassium	**1900**	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	**7500**	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	**22**	3.0	
7440-66-6	Zinc	**70**	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	GISD4	Lab Sample ID:	AA34797
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/8/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**6800**	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	**20**	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	**17**	3.0	
7440-48-4	Cobalt	**4.6**	3.0	
7440-50-8	Copper	**14**	3.0	
7439-89-6	Iron	**14000**	10	
7439-92-1	Lead	**22**	10	
7439-95-4	Magnesium	**4000**	10	
7439-96-5	Manganese	**130**	2.0	
7440-02-0	Nickel	**6.1**	6.0	
7440-09-7	Potassium	**1500**	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	**4500**	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	**17**	3.0	
7440-66-6	Zinc	**69**	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	GISD3	Lab Sample ID:	AA34798
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/8/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**4100**	20	
7440-36-0	Antimony	ND	10	J1
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	**11**	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	**10**	3.0	
7440-48-4	Cobalt	**3.3**	3.0	
7440-50-8	Copper	**9.5**	3.0	
7439-89-6	Iron	**8700**	10	
7439-92-1	Lead	**15**	10	
7439-95-4	Magnesium	**2300**	10	
7439-96-5	Manganese	**88**	2.0	
7440-02-0	Nickel	ND	6.0	
7440-09-7	Potassium	**880**	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	**3000**	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	**11**	3.0	
7440-66-6	Zinc	**34**	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	GISD1	Lab Sample ID:	AA34799
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/8/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**6800**	22	
7440-36-0	Antimony	ND	11	
7440-38-2	Arsenic	ND	22	
7440-39-3	Barium	**18**	3.3	
7440-41-7	Beryllium	ND	1.1	
7440-43-9	Cadmium	ND	3.3	
7440-47-3	Chromium	**21**	3.3	
7440-48-4	Cobalt	**4.7**	3.3	
7440-50-8	Copper	**19**	3.3	
7439-89-6	Iron	**13000**	11	
7439-92-1	Lead	**25**	11	
7439-95-4	Magnesium	**4700**	11	
7439-96-5	Manganese	**180**	2.2	
7440-02-0	Nickel	**8.5**	6.6	
7440-09-7	Potassium	**2000**	440	
7782-49-2	Selenium	ND	11	
7440-22-4	Silver	ND	3.3	
7440-23-5	Sodium	**11000**	1100	
7440-28-0	Thallium	ND	22	
7440-62-2	Vanadium	**21**	3.3	
7440-66-6	Zinc	**69**	3.3	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Laboratory Reagent Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	Water
Date of Digestion:	10/7/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	50 mL	pH:	N/A

CAS Number	Parameter	Concentration ug/L	RL ug/L	Qualifier
7429-90-5	Aluminum	ND	200	
7440-36-0	Antimony	ND	100	
7440-38-2	Arsenic	ND	200	
7440-39-3	Barium	ND	30	
7440-41-7	Beryllium	ND	10	
7440-43-9	Cadmium	ND	30	
7440-47-3	Chromium	ND	30	
7440-48-4	Cobalt	ND	30	
7440-50-8	Copper	ND	30	
7439-89-6	Iron	ND	100	
7439-92-1	Lead	ND	100	
7439-95-4	Magnesium	ND	100	
7439-96-5	Manganese	ND	20	
7440-02-0	Nickel	ND	60	
7440-09-7	Potassium	ND	4000	
7782-49-2	Selenium	ND	100	
7440-22-4	Silver	ND	30	
7440-23-5	Sodium	ND	10000	
7440-28-0	Thallium	ND	200	
7440-62-2	Vanadium	ND	30	
7440-66-6	Zinc	ND	30	

Comments: **Laboratory Reagent Blank Sample #1**

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Metals in Soil Medium Level by ICP

Client Sample ID:	GISD10D	Lab Sample ID:	AA34800
Date of Collection:	9/30/03	Matrix	Sediment
Date of Digestion:	10/8/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	**5300**	20	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	**14**	3.0	
7440-41-7	Beryllium	ND	1.0	
7440-43-9	Cadmium	ND	3.0	
7440-47-3	Chromium	**11**	3.0	
7440-48-4	Cobalt	**3.8**	3.0	
7440-50-8	Copper	**100**	3.0	
7439-89-6	Iron	**11000**	10	
7439-92-1	Lead	**12**	10	
7439-95-4	Magnesium	**3600**	10	
7439-96-5	Manganese	**120**	2.0	
7440-02-0	Nickel	**8.0**	6.0	
7440-09-7	Potassium	**1200**	400	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	3.0	
7440-23-5	Sodium	**4800**	1000	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	**15**	3.0	
7440-66-6	Zinc	**64**	3.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Laboratory Reagent Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	Water
Date of Digestion:	10/8/03	Final Volume:	50 mL
Date of Analysis:	10/22/03	Digestate Dilution:	1
Volume Digested:	50 mL	pH:	N/A

CAS Number	Parameter	Concentration ug/L	RL ug/L	Qualifier
7429-90-5	Aluminum	ND	200	
7440-36-0	Antimony	ND	100	
7440-38-2	Arsenic	ND	200	
7440-39-3	Barium	ND	30	
7440-41-7	Beryllium	ND	10	
7440-43-9	Cadmium	ND	30	
7440-47-3	Chromium	ND	30	
7440-48-4	Cobalt	ND	30	
7440-50-8	Copper	ND	30	
7439-89-6	Iron	ND	100	
7439-92-1	Lead	ND	100	
7439-95-4	Magnesium	ND	100	
7439-96-5	Manganese	ND	20	
7440-02-0	Nickel	ND	60	
7440-09-7	Potassium	ND	4000	
7782-49-2	Selenium	ND	100	
7440-22-4	Silver	ND	30	
7440-23-5	Sodium	ND	10000	
7440-28-0	Thallium	ND	200	
7440-62-2	Vanadium	ND	30	
7440-66-6	Zinc	ND	30	

Comments: **Laboratory Reagent Blank Sample #2**

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

METALS MATRIX SPIKE (MS) RESULTS

Sample ID: AA34791

PARAMETER	SPIKE ADDED mg/Kg	SAMPLE CONCENTRATION mg/Kg	MS CONCENTRATION mg/Kg	MS % REC	QC LIMITS (% REC)
Antimony	100	ND	32	32	75 - 125
Arsenic	100	ND	98	98	75 - 125
Barium	100	20	116	96	75 - 125
Beryllium	40	ND	39	98	75 - 125
Cadmium	50	ND	44	88	75 - 125
Chromium	100	26	117	91	75 - 125
Cobalt	100	6.8	98	91	75 - 125
Copper	100	16	108	92	75 - 125
Lead	100	26	112	86	75 - 125
Manganese	100	280	368	88	75 - 125
Nickel	100	14	105	91	75 - 125
Selenium	100	ND	95	95	75 - 125
Silver	20	ND	19	95	75 - 125
Thallium	100	ND	77	77	75 - 125
Vanadium	100	25	118	93	75 - 125
Zinc	100	72	158	86	75 - 125

Comments: **No spike is required for Al, Fe, K, Mg and Na**

Naval Ed. Training Center
PN:03100001

Matrix Spike Results

Sample GISD3
(AA34798)

Parameter	Accuracy Recovery
Antimony	64
Arsenic	94
Barium	104
Beryllium	100
Cadmium	94
Chromium	101
Cobalt	98
Copper	98
Lead	91
Manganese	114
Nickel	103
Selenium	94
Silver	95
Thallium	84
Vanadium	101
Zinc	96

Acceptance Limits: 75-125% ✓

No spike is required for Al, Fe, K, Mg,and Na

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Laboratory Duplicate Results

Sample ID: AA34777

PARAMETER	SAMPLE RESULT mg/Kg	SAMPLE DUPLICATE RESULT mg/Kg	PRECISION RPD %	QC LIMITS
Aluminum	4400	4400	0	35
Antimony	ND	ND	NC	35
Arsenic	ND	ND	NC	35
Barium	14	14	0	35
Beryllium	ND	ND	NC	35
Cadmium	ND	ND	NC	35
Chromium	13	13	0	35
Cobalt	3.3	3.5	6	35
Copper	11	12	9	35
Iron	9000	9700	8	35
Lead	13	19	38	35
Magnesium	2400	2400	0	35
Manganese	91	94	3	35
Nickel	7.5	8.1	8	35
Potassium	1000	1000	0	35
Selenium	ND	ND	NC	35
Silver	ND	ND	NC	35
Sodium	2800	2900	4	35
Thallium	ND	ND	NC	35
Vanadium	13	14	7	35
Zinc	39	42	7	35

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Laboratory Duplicate Results

Sample ID: AA34795

PARAMETER	SAMPLE RESULT mg/Kg	SAMPLE DUPLICATE RESULT mg/Kg	PRECISION RPD %	QC LIMITS
Aluminum	7300	7000	4	35
Antimony	ND	ND	NC	35
Arsenic	ND	ND	NC	35
Barium	17	14	19	35
Beryllium	ND	ND	NC	35
Cadmium	ND	ND	NC	35
Chromium	20	18	11	35
Cobalt	4.6	4.8	4	35
Copper	15	15	0	35
Iron	14000	15000	7	35
Lead	22	27	20	35
Magnesium	4500	4200	7	35
Manganese	160	160	0	35
Nickel	10	10	0	35
Potassium	1600	1500	7	35
Selenium	ND	ND	NC	35
Silver	ND	ND	NC	35
Sodium	7800	7000	11	35
Thallium	ND	ND	NC	35
Vanadium	19	19	0	35
Zinc	67	60	11	35

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Laboratory Fortified Blank (LFB) Results

PARAMETER	LFB AMOUNT SPIKED ug/L	LFB RESULT ug/L	LFB RECOVERY %	QC LIMITS %
Aluminum	1000	1000	100	85 - 115
Antimony	1000	960	96	85 - 115
Arsenic	1000	980	98	85 - 115
Barium	1000	1000	100	85 - 115
Beryllium	400	400	100	85 - 115
Cadmium	500	460	92	85 - 115
Chromium	1000	990	99	85 - 115
Cobalt	1000	990	99	85 - 115
Copper	1000	990	99	85 - 115
Iron	1000	1000	100	85 - 115
Lead	1000	940	94	85 - 115
Magnesium	10000	9900	99	85 - 115
Manganese	1000	990	99	85 - 115
Nickel	1000	980	98	85 - 115
Potassium	50000	50000	100	85 - 115
Selenium	1000	980	98	85 - 115
Silver	200	190	95	85 - 115
Sodium	50000	53000	106	85 - 115
Thallium	1000	960	96	85 - 115
Vanadium	1000	1000	100	85 - 115
Zinc	1000	950	95	85 - 115

Comments: **Laboratory Fortified Blank Sample #1**

Samples in Batch: AA34773 AA34774 AA34775 AA34776 AA34777 AA34778 AA34779 AA34780 AA34781 AA34782 AA34783 AA34784 AA34785 AA34786 AA34787 AA34788 AA34789 AA34790 AA34791 AA34792 AA34793 AA34794 AA34795 AA34796 AA34797 AA34798 AA34799 AA34800

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Laboratory Fortified Blank (LFB) Results

PARAMETER	LFB AMOUNT SPIKED ug/L	LFB RESULT ug/L	LFB RECOVERY %	QC LIMITS %
Aluminum	1000	1100	110	85 - 115
Antimony	1000	960	96	85 - 115
Arsenic	1000	980	98	85 - 115
Barium	1000	1000	100	85 - 115
Beryllium	400	410	102	85 - 115
Cadmium	500	470	94	85 - 115
Chromium	1000	1000	100	85 - 115
Cobalt	1000	1000	100	85 - 115
Copper	1000	1000	100	85 - 115
Iron	1000	1000	100	85 - 115
Lead	1000	950	95	85 - 115
Magnesium	10000	10000	100	85 - 115
Manganese	1000	1000	100	85 - 115
Nickel	1000	1000	100	85 - 115
Potassium	50000	50000	100	85 - 115
Selenium	1000	980	98	85 - 115
Silver	200	190	95	85 - 115
Sodium	50000	53000	106	85 - 115
Thallium	1000	950	95	85 - 115
Vanadium	1000	1000	100	85 - 115
Zinc	1000	950	95	85 - 115

Comments: **Laboratory Fortified Blank Sample #2**

Samples in Batch: AA34773 AA34774 AA34775 AA34776 AA34777 AA34778 AA34779 AA34780 AA34781 AA34782 AA34783 AA34784 AA34785 AA34786 AA34787 AA34788 AA34789 AA34790 AA34791 AA34792 AA34793 AA34794 AA34795 AA34796 AA34797 AA34798 AA34799 AA34800

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Solid Laboratory Control Sample (LCS) Results

PARAMETER	LCS RESULTS mg/Kg	CONTROL LIMITS mg/Kg
Aluminum	8520	5470 - 13200
Antimony	21.6	0 - 79.2
Arsenic	124	98.2 - 166
Barium	794	602 - 961
Beryllium	95.0	70.6 - 110
Cadmium	52.4	39.7 - 63.3
Chromium	141	113 - 170
Cobalt	50.2	39.3 - 59.3
Copper	157	124 - 179
Iron	12800	8760 - 20100
Lead	46.3	39.6 - 66.2
Magnesium	2970	2390 - 3800
Manganese	442	362 - 573
Nickel	54.9	43.4 - 67.6
Potassium	3430	2640 - 4140
Selenium	66.5	43.1 - 78.6
Silver	134	64.5 - 185
Sodium	825	581 - 1140
Thallium	97.1	61.9 - 154
Vanadium	31.9	19.1 - 58.2
Zinc	578	429 - 746

Comments: **Laboratory Control Sample #1**

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Solid Laboratory Control Sample (LCS) Results

PARAMETER	LCS RESULTS mg/Kg	CONTROL LIMITS mg/Kg
Aluminum	8590	5470 - 13200
Antimony	20.2	0 - 79.2
Arsenic	121	98.2 - 166
Barium	780	602 - 961
Beryllium	91.8	70.6 - 110
Cadmium	48.3	39.7 - 63.3
Chromium	135	113 - 170
Cobalt	49.5	39.3 - 59.3
Copper	148	124 - 179
Iron	13800	8760 - 20100
Lead	50.2	39.6 - 66.2
Magnesium	2990	2390 - 3800
Manganese	445	362 - 573
Nickel	53.4	43.4 - 67.6
Potassium	3430	2640 - 4140
Selenium	64.5	43.1 - 78.6
Silver	127	64.5 - 185
Sodium	808	581 - 1140
Thallium	99.0	61.9 - 154
Vanadium	35.3	19.1 - 58.2
Zinc	554	429 - 746

Comments: **Laboratory Control Sample #2**

Region 1, New England

United States Environmental Protection Agency
Office of Environmental Measurement & Evaluation
11 Technology Drive
North Chelmsford, MA 01863-2431

Laboratory Results

October 15, 2003

Ms Kim Keckler - HBT
USEPA New England, Region 1
One Congress Street
Boston, MA 02114 - 2023

Project Number: 03100001
Project: Naval Ed. Training Center
Analysis: Total Cyanide in Soil
Analyst: Inna Germansderfer IG 10/15/03

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England SOP for sample Log-In.

Sample preparation and analysis was done following the EPA Region I SOP, INGCN4.SOP.

The sample preparation and analysis SOP is based on Method 335.2 CLP-M, Method for Total Cyanide Analysis by Midi Distillation, "USEPA Contract Laboratory Program, Statement of Work for Inorganic Analysis, Multi-Media Multi-Concentration, ILMO, EPA/540/R95/121".

Date Samples Received by the Laboratory: 10/01/2003

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

Dr. William J. Andrade, Advanced Analytical Chemistry Specialist
617-918-8333

Signature: W J Andrade

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Total Cyanide in Soil

Date of Collection: 09/29/2003

Matrix: Sediment

Sample Number	Lab ID	Analysis Date	Concentration mg/Kg	RL mg/Kg	Qualifier
ARD1a	AA34774	10/08/2003	**0.21**	0.17	
Comment:					
ARD1b	AA34775	10/08/2003	**0.44**	0.24	
Comment:					
ARD2	AA34773	10/08/2003	**0.32**	0.19	
Comment:					
ARD3	AA34788	10/08/2003	ND	0.21	
Comment:					
ARD4	AA34787	10/08/2003	ND	0.19	
Comment:					
ARD5	AA34785	10/08/2003	ND	0.15	
Comment:					

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Total Cyanide in Soil

Date of Collection: 09/30/2003

Matrix: Sediment

Sample Number	Lab ID	Analysis Date	Concentration mg/Kg	RL mg/Kg	Qualifier
ARD6	AA34784	10/08/2003	ND	0.15	
Comment:					
ARD7	AA34783	10/08/2003	ND	0.18	
Comment:					
ARD8	AA34782	10/08/2003	ND	0.16	
Comment:					
ARD9	AA34786	10/08/2003	ND	0.09	
Comment:					
FS1	AA34790	10/08/2003	ND	0.18	
Comment:					
FS2	AA34789	10/08/2003	ND	0.15	
Comment:					

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Total Cyanide in Soil

Date of Collection: 09/30/2003

Matrix: Sediment

Sample Number	Lab ID	Analysis Date	Concentration mg/Kg	RL mg/Kg	Qualifier
GISD1	AA34799	10/08/2003	ND	0.17	
Comment:					
GISD10D	AA34800	10/08/2003	ND	0.10	
Comment:					
GISD12	AA34791	10/08/2003	ND	0.18	
Comment:					
GISD12a	AA34792	10/08/2003	ND	0.15	
Comment:					
GISD12aD	AA34793	10/08/2003	ND	0.10	
Comment:					
GISD3	AA34798	10/08/2003	ND	0.12	
Comment:					

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Total Cyanide in Soil

Date of Collection: 09/30/2003

Matrix: Sediment

Sample Number	Lab ID	Analysis Date	Concentration mg/Kg	RL mg/Kg	Qualifier
GISD4	AA34797	10/08/2003	ND	0.13	
Comment:					
GISD5	AA34795	10/08/2003	ND	0.18	
Comment:					
GISD5D	AA34796	10/08/2003	ND	0.17	
Comment:					
GISD6a	AA34794	10/08/2003	ND	0.17	
Comment:					
GSD10	AA34779	10/08/2003	**0.09**	0.12	J
Comment: J- estimated value, below reporting limit					
GSD11	AA34776	10/08/2003	ND	0.23	
Comment:					

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Total Cyanide in Soil

Date of Collection: 09/30/2003

Matrix: Sediment

Sample Number	Lab ID	Analysis Date	Concentration mg/Kg	RL mg/Kg	Qualifier
GSD6	AA34780	10/08/2003	**0.18**	0.08	
Comment:					
GSD6D	AA34781	10/08/2003	**0.23**	0.09	
Comment:					
GSD7	AA34777	10/08/2003	**0.41**	0.11	
Comment:					
GSD8	AA34778	10/08/2003	ND	0.09	
Comment:					
N/A	Blank	10/08/2003	ND	0.25	
Comment:					
N/A	Blank	10/08/2003	ND	0.20	
Comment:					

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

MATRIX SPIKE (MS) RESULTS

Naval Ed. Training Center

SAMPLE ID	PARAMETER	SPIKE ADDED mg/Kg	SAMPLE CONCENTRATION mg/Kg	MS CONCENTRATION mg/Kg	MS % REC	QC LIMITS (% REC)
AA34776	Total Cyanide in Soil	4.65	ND	3.99	85.8	75 - 125
AA34790	Total Cyanide in Soil	0.67	ND	0.83	124	75 - 125

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Low/High Laboratory Fortified Blank (LFB) Results

Naval Ed. Training Center

High Level

PARAMETER	LFB AMOUNT SPIKED ug/L	LFB RESULT ug/L	LFB RECOVERY %	QC LIMITS %
Total Cyanide in Soil	400	422	106	90 - 110

Comments:

Low Level

PARAMETER	LFB AMOUNT SPIKED ug/L	LFB RESULT ug/L	LFB RECOVERY %	QC LIMITS %
Total Cyanide in Soil	40	38.9	97.2	85 - 115

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Solid Laboratory Control Sample (LCS) Results

Naval Ed. Training Center

Sample ID: AA34776

PARAMETER	LCS RESULTS mg/Kg	CONTROL LIMITS mg/Kg
Total Cyanide in Soil	5.5	4.1 - 7.1

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

MATRIX SPIKE (MS) RESULTS

Naval Ed. Training Center

SAMPLE ID	PARAMETER	SPIKE ADDED mg/Kg	SAMPLE CONCENTRATION mg/Kg	MS CONCENTRATION mg/Kg	MS % REC	QC LIMITS (% REC)
AA34776	Total Cyanide in Soil	4.65	ND	3.99	85.8	75 - 125
AA34790	Total Cyanide in Soil	0.67	ND	0.83	124	75 - 125

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Laboratory Duplicate Results

Naval Ed. Training Center

SAMPLE ID	PARAMETER	SAMPLE RESULT mg/Kg	SAMPLE DUPLICATE RESULT mg/Kg	PRECISION RPD %	QC LIMITS (%RPD)
AA34776	Total Cyanide in Soil	ND	ND		20
AA34790	Total Cyanide in Soil	ND	ND		20

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Laboratory Duplicate Results

Naval Ed. Training Center

SAMPLE ID	PARAMETER	SAMPLE RESULT mg/Kg	SAMPLE DUPLICATE RESULT mg/Kg	PRECISION RPD %	QC LIMITS (%RPD)
AA34776	Total Cyanide in Soil	ND	ND		20
AA34790	Total Cyanide in Soil	ND	ND		20

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Low/High Laboratory Fortified Blank (LFB) Results

Naval Ed. Training Center

High Level

PARAMETER	LFB AMOUNT SPIKED ug/L	LFB RESULT ug/L	LFB RECOVERY %	QC LIMITS %
Total Cyanide in Soil	400	422	106	90 - 110

Comments:

Low Level

PARAMETER	LFB AMOUNT SPIKED ug/L	LFB RESULT ug/L	LFB RECOVERY %	QC LIMITS %
Total Cyanide in Soil	40	38.9	97.2	85 - 115

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Solid Laboratory Control Sample (LCS) Results

Naval Ed. Training Center

Sample ID: AA34776

PARAMETER	LCS RESULTS mg/Kg	CONTROL LIMITS mg/Kg
Total Cyanide in Soil	5.5	4.1 - 7.1

Comments:

Region 1, New England

United States Environmental Protection Agency
Office of Environmental Measurement & Evaluation
11 Technology Drive
North Chelmsford, MA 01863-2431

Laboratory Report

November 04, 2003

Ms Kim Keckler - HBT
USEPA New England, Region 1
One Congress Street
Boston, MA 02114 - 2023

Project Number: 03100001
Project: Naval Ed. Training Center
Analysis: PAHs in Soil
Analyst: Dan Boudreau DB 11/4/03

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, EIA-PAHSOLL4.SOP.

Samples Were Analyzed by GC/MSD Doing Selected Ion Monitoring (SIM). The Extraction and Analysis SOPs are Based on SW-846 Methods 3545A, 8270, and USEPA CLP SOW OLM04.2.

Analytical Support for This Project was Provided by ESAT Contractors at the Region 1 Laboratory.

Date Samples Received by the Laboratory: 10/1/03

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions please call me at 617-918-8333.

Sincerely,

W J Andrade 11/07/03

Dr. William J. Andrade
Advanced Analytical Chemistry Specialist

Qualifiers: RL = Reporting limit
ND = Not Detected above reporting limit
NA = Not Applicable
NC = Not calculated since analyte concentration is ND
J1 = Estimated value due to MS recovery outside accceptance criteria
J2 = Estimated value due to LFB result outside acceptance criteria
J3 = Estimated value due to RPD result outside acceptance criteria
J4 = Estimated value due to LCS result outside acceptance criteria
B = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.
R = No recovery was calculated since the analyte concentration is greater than four times the spike level.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PAHs in Soil

Client Sample ID:	FTA1	Lab Sample ID:	AA34801
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/24/03	Percent Solids:	83%
Dry Weight Extracted:	26.341 grams	Extract Dilution:	5
Wet Weight Extracted:	31.822 grams	pH:	6.7

ppb

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	**52**	9.5	
208-96-8	Acenaphthylene	**23**	9.5	
120-12-7	Anthracene	**190**	9.5	
56-55-3	Benzo(a)anthracene	**1000**	9.5	J
50-32-8	Benzo(a)pyrene	**710**	9.5	J
205-99-2	Benzo(b)fluoranthene	**850**	9.5	J
191-24-2	Benzo(g,h,i)perylene	**260**	9.5	J
207-08-9	Benzo(k)fluoranthene	**460**	9.5	J
218-01-9	Chrysene	**860**	9.5	J
53-70-3	Dibenzo(a,h)anthracene	**75**	9.5	J
206-44-0	Fluoranthene	**1400**	9.5	
86-73-7	Fluorene	**57**	9.5	
193-39-5	Indeno(1,2,3-cd)pyrene	**240**	9.5	J
91-20-3	Naphthalene	**23**	9.5	
85-01-8	Phenanthrene	**770**	9.5	
129-00-0	Pyrene	**2000**	9.5	J

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	73	30 - 115
Terphenyl	84	18 - 137

Comments: This sample was run on 10/22/03 at a 2x dilution. The CCV for this sequence had several compounds out of spec and the last two internal standards had low recovery. The samples were diluted 5x and re-analyzed on 10/24/03. The last two internal recoveries were still low. The results of the 5x analysis are reported and all compounds referenced to the last two internal standards are qualified with a J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PAHs in Soil

Client Sample ID:	FTA2	Lab Sample ID:	AA34802
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/24/03	Percent Solids:	81%
Dry Weight Extracted:	26.452 grams	Extract Dilution:	5
Wet Weight Extracted:	32.457 grams	pH:	7.8

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	**38**	9.5	J
208-96-8	Acenaphthylene	**100**	9.5	J
120-12-7	Anthracene	**300**	9.5	J
56-55-3	Benzo(a)anthracene	**1300**	9.5	J
50-32-8	Benzo(a)pyrene	**990**	9.5	J
205-99-2	Benzo(b)fluoranthene	**1200**	9.5	J
191-24-2	Benzo(g,h,i)perylene	**290**	9.5	J
207-08-9	Benzo(k)fluoranthene	**600**	9.5	J
218-01-9	Chrysene	**1100**	9.5	J
53-70-3	Dibenzo(a,h)anthracene	**90**	9.5	J
206-44-0	Fluoranthene	**2000**	9.5	J
86-73-7	Fluorene	**97**	9.5	J
193-39-5	Indeno(1,2,3-cd)pyrene	**320**	9.5	J
91-20-3	Naphthalene	**60**	9.5	J
85-01-8	Phenanthrene	**1400**	9.5	J
129-00-0	Pyrene	**2200**	9.5	J

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	63	30 - 115
Terphenyl	70	18 - 137

Comments: This sample was run on 10/22/03 at a 5x dilution. The CCV for this sequence had several compounds out of spec and the last two internal standards had low recovery. The samples were diluted 2x and re-analyzed on 10/24/03. All of the internal recoveries were low. The results of the 5x analysis are reported and all compounds are qualified with a J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PAHs in Soil

Client Sample ID:	FTA3	Lab Sample ID:	AA34803
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/22/03	Percent Solids:	80%
Dry Weight Extracted:	26.654 grams	Extract Dilution:	5
Wet Weight Extracted:	33.521 grams	pH:	7.7

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	**67**	9.4	
208-96-8	Acenaphthylene	**15**	9.4	
120-12-7	Anthracene	**160**	9.4	
56-55-3	Benzo(a)anthracene	**750**	9.4	J
50-32-8	Benzo(a)pyrene	**590**	9.4	J
205-99-2	Benzo(b)fluoranthene	**1100**	9.4	J
191-24-2	Benzo(g,h,i)perylene	**180**	9.4	J
207-08-9	Benzo(k)fluoranthene	**460**	9.4	J
218-01-9	Chrysene	**680**	9.4	J
53-70-3	Dibenzo(a,h)anthracene	**43**	9.4	J
206-44-0	Fluoranthene	**1200**	9.4	
86-73-7	Fluorene	**53**	9.4	
193-39-5	Indeno(1,2,3-cd)pyrene	**160**	9.4	J
91-20-3	Naphthalene	**29**	9.4	
85-01-8	Phenanthrene	**850**	9.4	
129-00-0	Pyrene	**2100**	9.4	J

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	75	30 - 115
Terphenyl	124	18 - 137

Comments: This sample was run on 10/22/03 at a 5x dilution. The last two internal standards had low recovery. The samples were re-analyzed on 10/24/03. The last two internal recoveries were still low. The results of the original analysis are reported and all compounds referenced to the last two internal standards are qualified with a J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PAHs in Soil

Client Sample ID:	FTA4	Lab Sample ID:	AA34804
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/21/03	Percent Solids:	79%
Dry Weight Extracted:	24.661 grams	Extract Dilution:	2
Wet Weight Extracted:	31.339 grams	pH:	7.8

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	**110**	4.1	
208-96-8	Acenaphthylene	**80**	4.1	
120-12-7	Anthracene	**420**	4.1	
56-55-3	Benzo(a)anthracene	**1200**	4.1	
50-32-8	Benzo(a)pyrene	**1300**	4.1	J
205-99-2	Benzo(b)fluoranthene	**1700**	10.1	J
191-24-2	Benzo(g,h,i)perylene	**290**	4.1	J
207-08-9	Benzo(k)fluoranthene	**930**	4.1	J
218-01-9	Chrysene	**900**	4.1	
53-70-3	Dibenzo(a,h)anthracene	**69**	4.1	J
206-44-0	Fluoranthene	**2400**	10.1	
86-73-7	Fluorene	**190**	4.1	
193-39-5	Indeno(1,2,3-cd)pyrene	**290**	4.1	J
91-20-3	Naphthalene	**130**	4.1	
85-01-8	Phenanthrene	**1500**	4.1	
129-00-0	Pyrene	**2800**	10.1	J

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	66	30 - 115
Terphenyl	91	18 - 137

Comments: This sample was run on 10/21/03 at a 2x dilution. The last internal standard had low recovery. Results for fluoranthene, pyrene and benzo(b)fluoranthene exceeded the calibration range. The samples were re-analyzed on 10/25/03 with a 5x dilution. The last two internal recoveries were still low. The results of the original analysis are reported for compounds but the three that exceeded the curve and all compounds referenced to the last two internal standards are qualified with a J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PAHs in Soil

Client Sample ID:	FTA2D	Lab Sample ID:	AA34805
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/21/03	Percent Solids:	79%
Dry Weight Extracted:	26.611 grams	Extract Dilution:	5
Wet Weight Extracted:	33.772 grams	pH:	7.7

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	**54**	9.4	
208-96-8	Acenaphthylene	**16**	9.4	
120-12-7	Anthracene	**120**	9.4	
56-55-3	Benzo(a)anthracene	**500**	9.4	J
50-32-8	Benzo(a)pyrene	**440**	9.4	J
205-99-2	Benzo(b)fluoranthene	**730**	9.4	J
191-24-2	Benzo(g,h,i)perylene	**140**	9.4	J
207-08-9	Benzo(k)fluoranthene	**300**	9.4	J
218-01-9	Chrysene	**450**	9.4	J
53-70-3	Dibenzo(a,h)anthracene	**29**	9.4	J
206-44-0	Fluoranthene	**860**	9.4	
86-73-7	Fluorene	**47**	9.4	
193-39-5	Indeno(1,2,3-cd)pyrene	**110**	9.4	J
91-20-3	Naphthalene	**29**	9.4	
85-01-8	Phenanthrene	**580**	9.4	
129-00-0	Pyrene	**1400**	9.4	J

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	79	30 - 115
Terphenyl	124	18 - 137

Comments: This sample was run on 10/21/03 at a 5x dilution. The last two internal standards had low recovery. The samples were re-analyzed on 10/25/03 with a 5x dilution. The last two internal recoveries were still low. The results of the original analysis are reported and all compounds referenced to the last two internal standards are qualified with a J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PAHs in Soil

Client Sample ID:	FTA5	Lab Sample ID:	AA34806
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/21/03	Percent Solids:	78%
Dry Weight Extracted:	25.137 grams	Extract Dilution:	2
Wet Weight Extracted:	32.325 grams	pH:	7.8

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	**54**	4.0	
208-96-8	Acenaphthylene	**82**	4.0	
120-12-7	Anthracene	**310**	4.0	
56-55-3	Benzo(a)anthracene	**1100**	4.0	
50-32-8	Benzo(a)pyrene	**1000**	4.0	J
205-99-2	Benzo(b)fluoranthene	**1400**	4.0	J
191-24-2	Benzo(g,h,i)perylene	**210**	4.0	J
207-08-9	Benzo(k)fluoranthene	**750**	4.0	J
218-01-9	Chrysene	**970**	4.0	
53-70-3	Dibenzo(a,h)anthracene	**53**	4.0	J
206-44-0	Fluoranthene	**2100**	9.9	J
86-73-7	Fluorene	**110**	4.0	
193-39-5	Indeno(1,2,3-cd)pyrene	**230**	4.0	J
91-20-3	Naphthalene	**68**	4.0	
85-01-8	Phenanthrene	**1300**	4.0	
129-00-0	Pyrene	**2400**	9.9	J

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	67	30 - 115
Terphenyl	85	18 - 137

Comments: This sample was run on 10/21/03 at a 2x dilution. The last internal standard had low recovery. Results for fluoranthene and pyrene exceeded the calibration range. The samples were re-analyzed on 10/25/03 with a 5x dilution. The last two internal recoveries were still low. The results of the original analysis are reported for compounds but the two that exceeded the curve and all compounds referenced to the internal standard are qualified with a J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PAHs in Soil

Client Sample ID:	FTA6	Lab Sample ID:	AA34807
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/21/03	Percent Solids:	81%
Dry Weight Extracted:	26.041 grams	Extract Dilution:	2
Wet Weight Extracted:	32.337 grams	pH:	7.7

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	**28**	3.8	
208-96-8	Acenaphthylene	**120**	3.8	
120-12-7	Anthracene	**320**	3.8	
56-55-3	Benzo(a)anthracene	**1300**	3.8	
50-32-8	Benzo(a)pyrene	**1100**	3.8	J
205-99-2	Benzo(b)fluoranthene	**1500**	3.8	J
191-24-2	Benzo(g,h,i)perylene	**220**	3.8	J
207-08-9	Benzo(k)fluoranthene	**900**	3.8	J
218-01-9	Chrysene	**890**	3.8	
53-70-3	Dibenzo(a,h)anthracene	**71**	3.8	J
206-44-0	Fluoranthene	**2300**	9.6	J
86-73-7	Fluorene	**110**	3.8	
193-39-5	Indeno(1,2,3-cd)pyrene	**240**	3.8	J
91-20-3	Naphthalene	**74**	3.8	
85-01-8	Phenanthrene	**1200**	3.8	
129-00-0	Pyrene	**2700**	9.6	J

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	61	30 - 115
Terphenyl	83	18 - 137

Comments: This sample was run on 10/21/03 at a 2x dilution. The last internal standard had low recovery. Results for fluoranthene and pyrene exceeded the calibration range. The samples were re-analyzed on 10/25/03 with a 5x dilution. The last two internal recoveries were still low. The results of the original analysis are reported for all compounds but the two that exceeded the curve and all compounds referenced to the last internal standard are qualified with a J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PAHs in Soil

Client Sample ID:	FTA7	Lab Sample ID:	AA34808
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/21/03	Percent Solids:	80%
Dry Weight Extracted:	24.949 grams	Extract Dilution:	2
Wet Weight Extracted:	31.279 grams	pH:	8.0

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	**48**	4.0	
208-96-8	Acenaphthylene	**92**	4.0	
120-12-7	Anthracene	**330**	4.0	
56-55-3	Benzo(a)anthracene	**1300**	4.0	J
50-32-8	Benzo(a)pyrene	**1100**	4.0	J
205-99-2	Benzo(b)fluoranthene	**1400**	4.0	J
191-24-2	Benzo(g,h,i)perylene	**240**	4.0	J
207-08-9	Benzo(k)fluoranthene	**840**	4.0	J
218-01-9	Chrysene	**890**	4.0	J
53-70-3	Dibenzo(a,h)anthracene	**75**	4.0	J
206-44-0	Fluoranthene	**2300**	10.0	J
86-73-7	Fluorene	**120**	4.0	
193-39-5	Indeno(1,2,3-cd)pyrene	**250**	4.0	J
91-20-3	Naphthalene	**73**	4.0	
85-01-8	Phenanthrene	**1300**	4.0	
129-00-0	Pyrene	**2600**	10.0	J

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	63	30 - 115
Terphenyl	86	18 - 137

Comments: This sample was run on 10/21/03 at a 2x dilution. The last internal standard had low recovery. Results for fluoranthene and pyrene exceeded the calibration range. The samples were re-analyzed on 10/25/03 with a 5x dilution. The last two internal recoveries were still low. The results of the original analysis are reported for compounds but the two that exceeded the curve and all compounds referenced to the last internal standard are qualified with a J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PAHs in Soil

Client Sample ID:	FTA8	Lab Sample ID:	AA34809
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/21/03	Percent Solids:	79%
Dry Weight Extracted:	25.917 grams	Extract Dilution:	2
Wet Weight Extracted:	32.765 grams	pH:	7.9

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	**45**	3.9	
208-96-8	Acenaphthylene	**84**	3.9	
120-12-7	Anthracene	**280**	3.9	
56-55-3	Benzo(a)anthracene	**1200**	3.9	
50-32-8	Benzo(a)pyrene	**920**	3.9	J
205-99-2	Benzo(b)fluoranthene	**1200**	3.9	J
191-24-2	Benzo(g,h,i)perylene	**190**	3.9	J
207-08-9	Benzo(k)fluoranthene	**720**	3.9	J
218-01-9	Chrysene	**780**	3.9	
53-70-3	Dibenzo(a,h)anthracene	**49**	3.9	J
206-44-0	Fluoranthene	**1500**	3.9	
86-73-7	Fluorene	**94**	3.9	
193-39-5	Indeno(1,2,3-cd)pyrene	**210**	3.9	J
91-20-3	Naphthalene	**66**	3.9	
85-01-8	Phenanthrene	**1100**	3.9	
129-00-0	Pyrene	**2300**	9.6	J

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	59	30 - 115
Terphenyl	76	18 - 137

Comments: This sample was run on 10/21/03 at a 2x dilution. The last internal standard had low recovery. Result for pyrene exceeded the calibration range. The samples were re-analyzed on 10/25/03 with a 5x dilution. The last two internal recoveries were still low. The results of the original analysis are reported for all compounds but pyrene and all compounds referenced to the last internal standard are qualified with a J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PAHs in Soil

Client Sample ID:	FTA9	Lab Sample ID:	AA34810
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/21/03	Percent Solids:	81%
Dry Weight Extracted:	25.150 grams	Extract Dilution:	2
Wet Weight Extracted:	31.014 grams	pH:	7.9

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	**22**	4.0	
208-96-8	Acenaphthylene	**100**	4.0	
120-12-7	Anthracene	**270**	4.0	
56-55-3	Benzo(a)anthracene	**800**	4.0	
50-32-8	Benzo(a)pyrene	**710**	4.0	J
205-99-2	Benzo(b)fluoranthene	**960**	4.0	J
191-24-2	Benzo(g,h,i)perylene	**140**	4.0	J
207-08-9	Benzo(k)fluoranthene	**530**	4.0	J
218-01-9	Chrysene	**690**	4.0	
53-70-3	Dibenzo(a,h)anthracene	**46**	4.0	J
206-44-0	Fluoranthene	**1300**	4.0	
86-73-7	Fluorene	**87**	4.0	
193-39-5	Indeno(1,2,3-cd)pyrene	**160**	4.0	J
91-20-3	Naphthalene	**54**	4.0	
85-01-8	Phenanthrene	**1100**	4.0	
129-00-0	Pyrene	**1500**	4.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	66	30 - 115
Terphenyl	80	18 - 137

Comments: This sample was run on 10/21/03 at a 2x dilution. The last internal standard had low recovery. The samples were re-analyzed on 10/25/03 with a 2x dilution. The last two internal recoveries were low. The results of the original analysis are reported for all compounds and all compounds referenced to the last internal standard are qualified with a J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PAHs in Soil

Client Sample ID:	FTA10	Lab Sample ID:	AA34811
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/21/03	Percent Solids:	82%
Dry Weight Extracted:	25.848 grams	Extract Dilution:	2
Wet Weight Extracted:	31.534 grams	pH:	8.023

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	**12**	3.9	
208-96-8	Acenaphthylene	**48**	3.9	
120-12-7	Anthracene	**130**	3.9	
56-55-3	Benzo(a)anthracene	**360**	3.9	
50-32-8	Benzo(a)pyrene	**270**	3.9	J
205-99-2	Benzo(b)fluoranthene	**380**	3.9	J
191-24-2	Benzo(g,h,i)perylene	**62**	3.9	J
207-08-9	Benzo(k)fluoranthene	**180**	3.9	J
218-01-9	Chrysene	**320**	3.9	
53-70-3	Dibenzo(a,h)anthracene	**16**	3.9	J
206-44-0	Fluoranthene	**660**	3.9	
86-73-7	Fluorene	**52**	3.9	
193-39-5	Indeno(1,2,3-cd)pyrene	**68**	3.9	J
91-20-3	Naphthalene	**22**	3.9	
85-01-8	Phenanthrene	**560**	3.9	
129-00-0	Pyrene	**730**	3.9	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	58	30 - 115
Terphenyl	76	18 - 137

Comments: This sample was run on 10/21/03 at a 2x dilution. The last internal standard had low recovery. The samples were re-analyzed on 10/25/03 with a 2x dilution. The last two internal recoveries were low. The results of the original analysis are reported for all compounds and all compounds referenced to the last internal standard are qualified with a J.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PAHs in Soil

Client Sample ID:	FTA11	Lab Sample ID:	AA34812
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/21/03	Percent Solids:	81%
Dry Weight Extracted:	25.906 grams	Extract Dilution:	5
Wet Weight Extracted:	31.828 grams	pH:	7.6

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	**20**	9.7	
208-96-8	Acenaphthylene	**42**	9.7	
120-12-7	Anthracene	**120**	9.7	
56-55-3	Benzo(a)anthracene	**510**	9.7	
50-32-8	Benzo(a)pyrene	**530**	9.7	
205-99-2	Benzo(b)fluoranthene	**700**	9.7	
191-24-2	Benzo(g,h,i)perylene	**130**	9.7	
207-08-9	Benzo(k)fluoranthene	**350**	9.7	
218-01-9	Chrysene	**500**	9.7	
53-70-3	Dibenzo(a,h)anthracene	**31**	9.7	
206-44-0	Fluoranthene	**1200**	9.7	
86-73-7	Fluorene	**46**	9.7	
193-39-5	Indeno(1,2,3-cd)pyrene	**140**	9.7	
91-20-3	Naphthalene	**31**	9.7	
85-01-8	Phenanthrene	**750**	9.7	
129-00-0	Pyrene	**1100**	9.7	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	61	30 - 115
Terphenyl	65	18 - 137

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

Polynuclear Aromatic Hydrocarbons (PAHs)

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/21/03	Percent Solids:	100%
Dry Weight Extracted:	30.000 grams	Extract Dilution:	1
Wet Weight Extracted:	30.000 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	ND	1.7	
208-96-8	Acenaphthylene	ND	1.7	
120-12-7	Anthracene	ND	1.7	
56-55-3	Benzo(a)anthracene	ND	1.7	
50-32-8	Benzo(a)pyrene	ND	1.7	
205-99-2	Benzo(b)fluoranthene	ND	1.7	
191-24-2	Benzo(g,h,i)perylene	ND	1.7	
207-08-9	Benzo(k)fluoranthene	ND	1.7	
218-01-9	Chrysene	ND	1.7	
53-70-3	Dibenzo(a,h)anthracene	ND	1.7	
206-44-0	Fluoranthene	ND	1.7	
86-73-7	Fluorene	ND	1.7	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.7	
91-20-3	Naphthalene	ND	1.7	
85-01-8	Phenanthrene	ND	1.7	
129-00-0	Pyrene	ND	1.7	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	57	30 - 115
Terphenyl	56	18 - 137

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Naval Ed. Training Center

PAHs in Soil

Client Sample ID:	FTA12	Lab Sample ID:	AA34813
Date of Collection:	9/30/2003	Matrix	Sediment
Date of Extraction:	10/8/03	Volume Extracted:	N/A
Date of Analysis:	10/21/03	Percent Solids:	82%
Dry Weight Extracted:	27.038 grams	Extract Dilution:	2
Wet Weight Extracted:	32.800 grams	pH:	8.0

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
83-32-9	Acenaphthene	**5.18**	3.7	
208-96-8	Acenaphthylene	**7.03**	3.7	
120-12-7	Anthracene	**25**	3.7	
56-55-3	Benzo(a)anthracene	**130**	3.7	
50-32-8	Benzo(a)pyrene	**100**	3.7	
205-99-2	Benzo(b)fluoranthene	**140**	3.7	
191-24-2	Benzo(g,h,i)perylene	**27**	3.7	
207-08-9	Benzo(k)fluoranthene	**70**	3.7	
218-01-9	Chrysene	**130**	3.7	
53-70-3	Dibenzo(a,h)anthracene	**7.31**	3.7	
206-44-0	Fluoranthene	**240**	3.7	
86-73-7	Fluorene	**8.93**	3.7	
193-39-5	Indeno(1,2,3-cd)pyrene	**28**	3.7	
91-20-3	Naphthalene	**6.72**	3.7	
85-01-8	Phenanthrene	**140**	3.7	
129-00-0	Pyrene	**290**	3.7	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorobiphenyl	60	30 - 115
Terphenyl	75	18 - 137

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

PAH MATRIX SPIKE (MS) / MATRIX SPIKE DUPLICATE (MSD) RECOVERY

Naval Ed. Training Center

Sample ID: AA34813

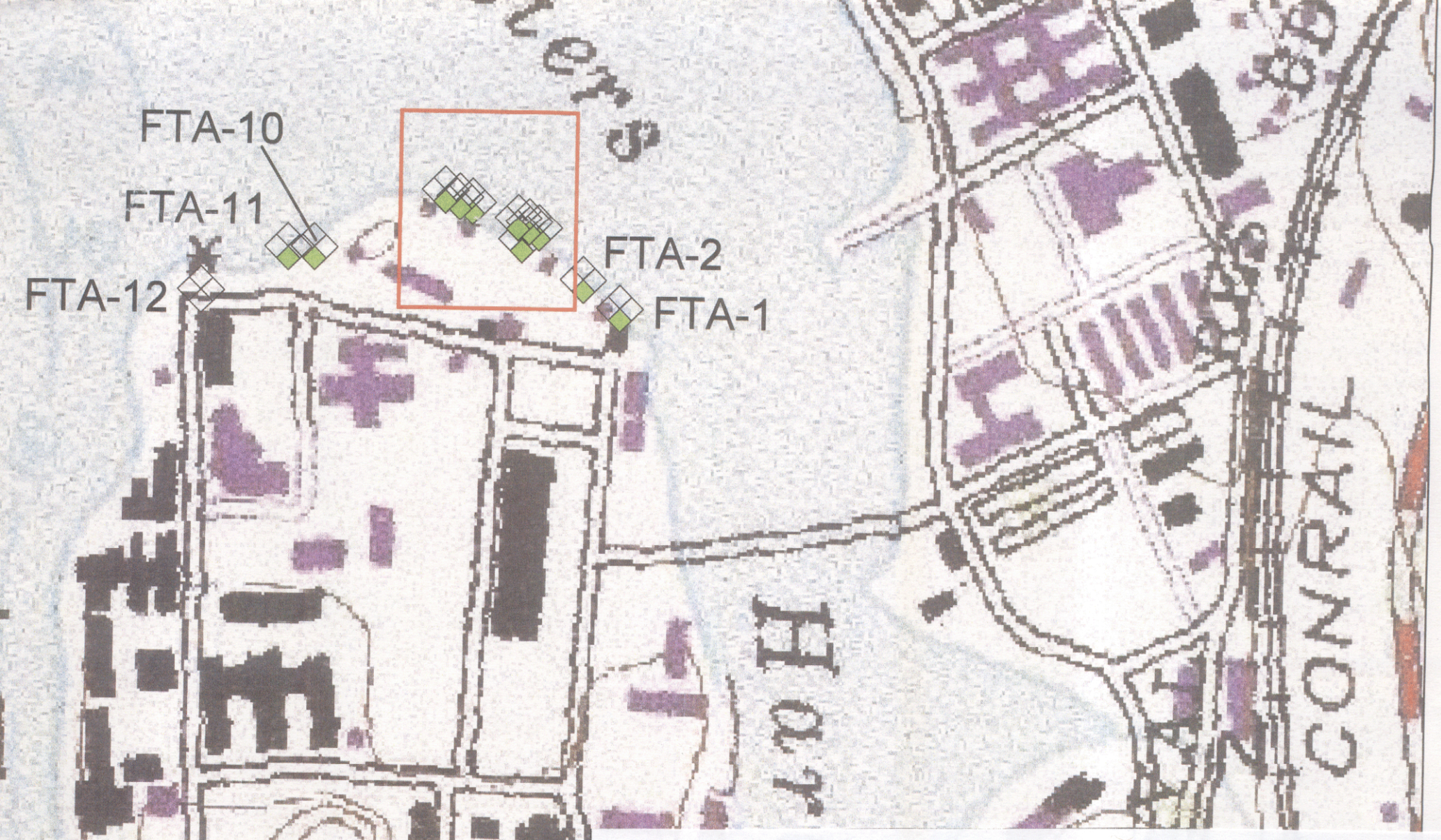
PARAMETER	SPIKE ADDED ug/Kg	SAMPLE CONCENTRATION ug/Kg	MS CONCENTRATION ug/Kg	MS % REC	QC LIMITS (% REC)
Acenaphthene	140	5.18	100	68	70 - 130
Acenaphthylene	140	7.03	96	62	70 - 130
Anthracene	140	25	130	71	70 - 130
Benzo(a)anthracene	140	130	250	84	70 - 130
Benzo(a)pyrene	140	100	250	105	70 - 130
Benzo(b)fluoranthene	140	140	300	110	70 - 130
Benzo(g,h,i)perylene	140	27	73	32	70 - 130
Benzo(k)fluoranthene	140	70	190	86	70 - 130
Chrysene	140	130	260	89	70 - 130
Dibenzo(a,h)anthracene	140	7.31	55	33	70 - 130
Fluoranthene	140	240	360	87	70 - 130
Fluorene	140	8.93	110	70	70 - 130
Indeno(1,2,3-cd)pyrene	140	28	80	36	70 - 130
Naphthalene	140	6.72	95	61	70 - 130
Phenanthrene	140	140	280	94	70 - 130
Pyrene	140	290	480	127	70 - 130

Comments:

PARAMETER	MSD SPIKE ADDED	MSD CONCENTRATION ug/Kg	MSD % REC	RPD %	QC LIMITS RPD
Acenaphthene	140	89	59	15	30
Acenaphthylene	140	90	58	6.16	30
Anthracene	140	130	76	7.24	30
Benzo(a)anthracene	140	230	69	20	30
Benzo(a)pyrene	140	220	85	21	30
Benzo(b)fluoranthene	140	260	83	28	30
Benzo(g,h,i)perylene	140	90	44	32	30
Benzo(k)fluoranthene	140	180	76	13	30
Chrysene	140	220	57	44	30
Dibenzo(a,h)anthracene	140	68	43	24	30
Fluoranthene	140	420	130	41	30
Fluorene	140	110	67	3.51	30
Indeno(1,2,3-cd)pyrene	140	100	52	36	30
Naphthalene	140	82	53	15	30
Phenanthrene	140	300	110	19	30
Pyrene	140	390	68	61	30

Comments:

Samples in Batch: AA34801 AA34802 AA34803 AA34804 AA34805 AA34806 AA34807 AA34808 AA34809 AA34810 AA34811 AA34812 AA34813



Newport Naval Ed. And Training Center

Sediment Sample Locations (old FFTA)

Coasters Harbor Island - Newport, RI

9/30/03

PAHs *

non-detects

* exceeds ERL, AET or ERM

Produced By The EPA New England GIS Center
19-December-2003
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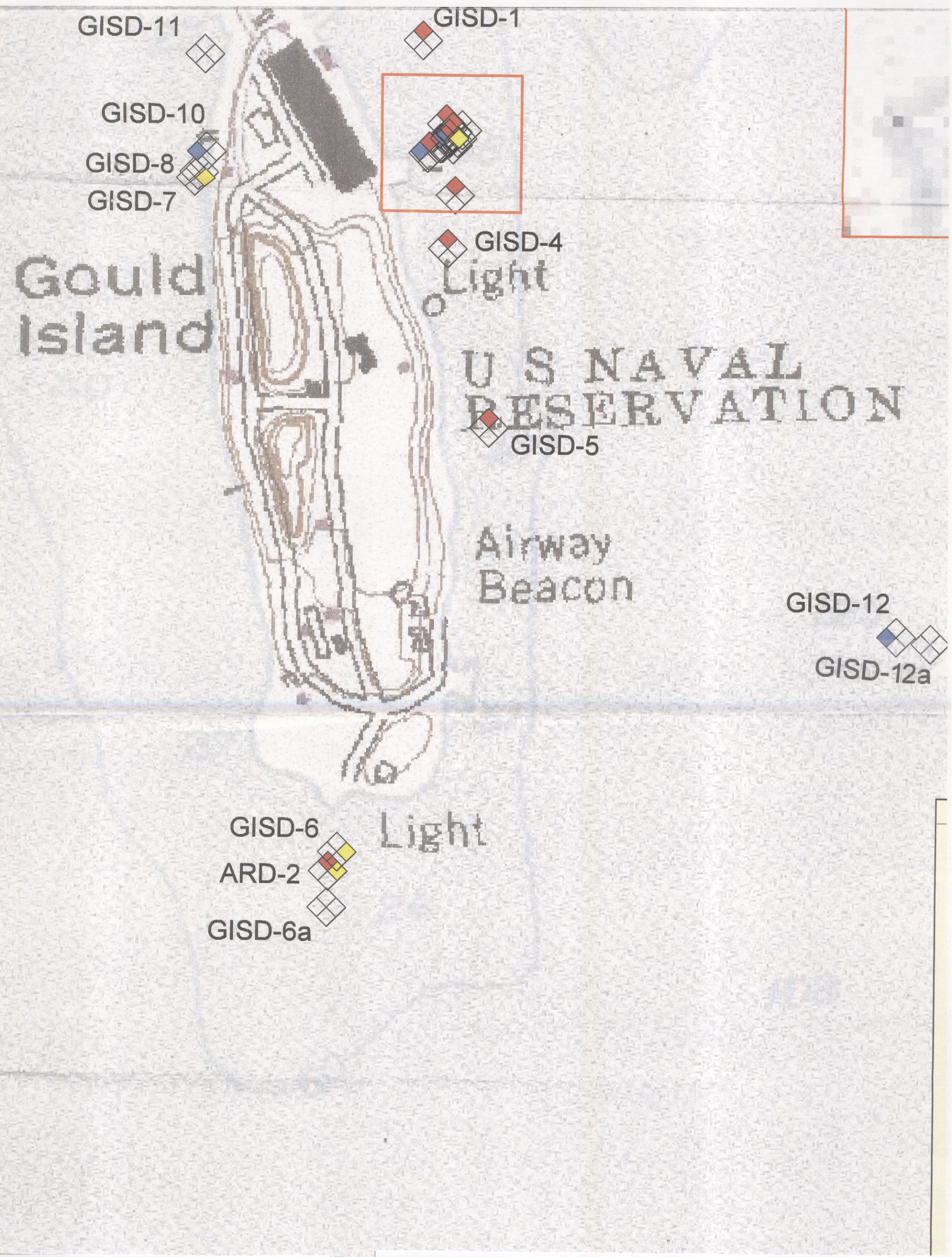

PCBs *

Metals * Cyanide **

* exceeds ERL, AET or ERM

** detected

Newport Naval Ed. And Training Center

Sediment Sample Locations

Gould Island - Newport, RI

9/29/03 - 9/30/03

Produced By The EPA New England GIS Center

17-December-2003

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ARD-5
ARD-9
ARD-6
ARD-1ab
ARD-7
ARD-4
ARD-8
FS-1
FS-2
ARD-3
GISD-3
GISD-11
GISD-1
GISD-10
GISD-8
GISD-7
GISD-4
Gould Island
Light
U S NAVAL RESERVATION
GISD-5
Airway Beacon
GISD-12
GISD-12a
GISD-6
Light
ARD-2
GISD-6a
MA
RI
CT
PCBs *
Metals *
Cyanide **
* exceeds ERL, AET or ERM
** detected
0
500
1,000
2,000
Feet
Newport Naval Ed. And Training Center
Sediment Sample Locations
Gould Island - Newport, RI
9/29/03 - 9/30/03
Produced By The EPA New England GIS Center
17-December-2003
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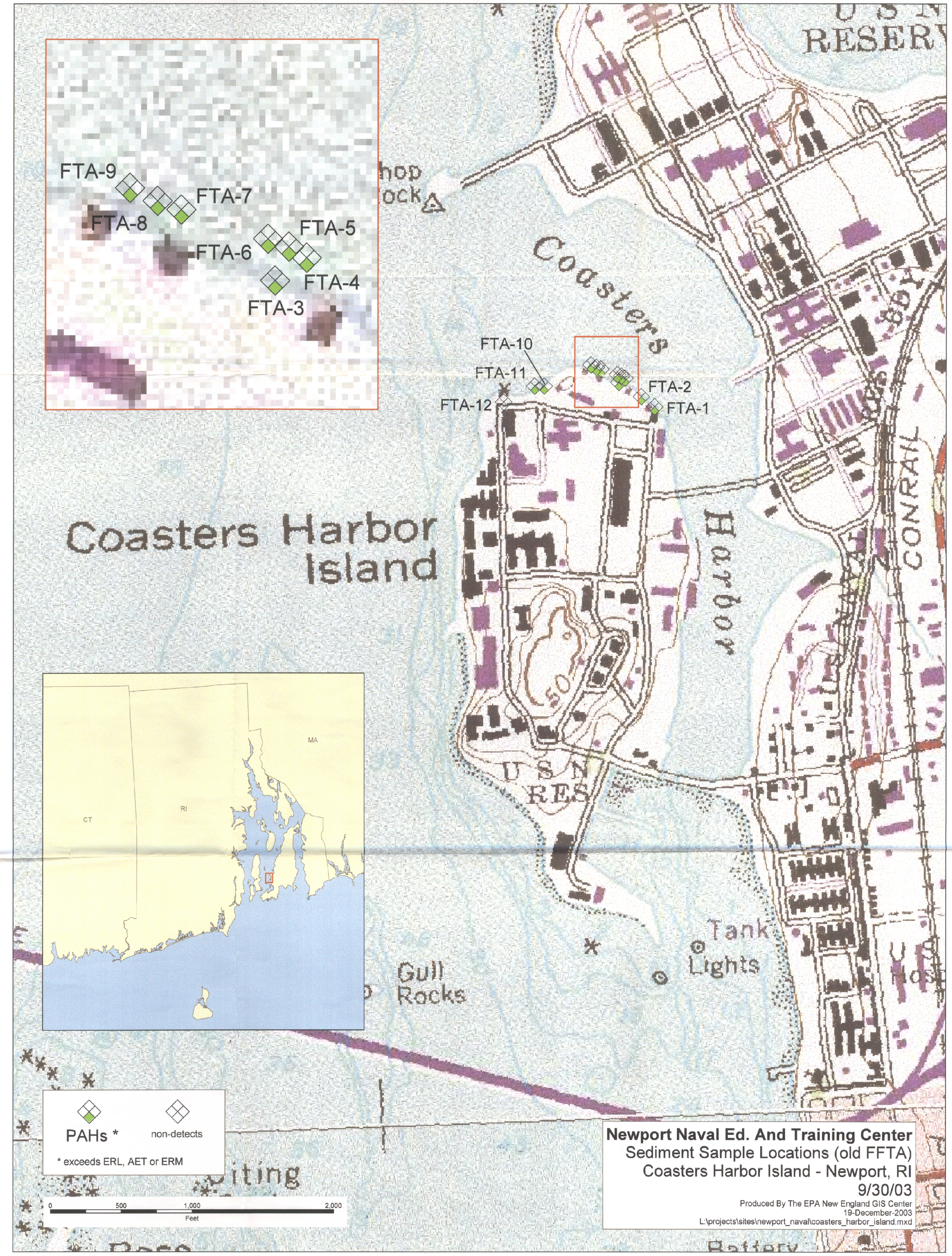
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FTA-7
FTA-8
FTA-5
FTA-6
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FTA-3
FTA-10
FTA-11
FTA-12
FTA-2
FTA-1
Coasters Harbor Island
Coasters
Harbor
U S N
RESERV
U S N
RES
CONRAIL
Tank
Lights
Gull
Rocks
MA
RI
CT
PAHs *
non-detects
* exceeds ERL, AET or ERM
0
500
1,000
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Feet
Newport Naval Ed. And Training Center
Sediment Sample Locations (old FFTA)
Coasters Harbor Island - Newport, RI
9/30/03
Produced By The EPA New England GIS Center
19-December-2003
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