

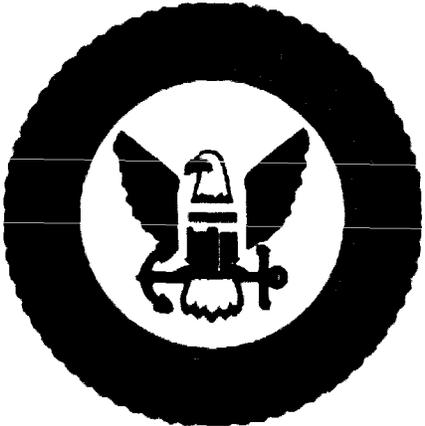
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CNC CHARLESTON
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COMPLETION REPORT FOR INTERIM MEASURE FOR AREA OF CONCERN 696 (AOC696)
WITH TRANSMITTAL CNC CHARLESTON SC
1/27/1998
U S NAVY



COMPLETION REPORT

INTERIM MEASURE FOR
AOC 696
NAVAL BASE CHARLESTON
CHARLESTON, SC



Prepared for:

DEPARTMENT OF THE NAVY
SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
CHARLESTON SC



Prepared by:

Supervisor of Shipbuilding, Conversion and Repair,
USN, (SUPSHIP) Portsmouth Va.,
Environmental Detachment Charleston, S.C.
1899 North Hobson Ave.
North Charleston, SC 29405-2106

January 27, 1998



DEPARTMENT OF THE NAVY
SUPERVISOR OF SHIPBUILDING, CONVERSION AND REPAIR, USN
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IN REPLY REFER TO:

Ser: 091

JAN 20 1998

Mr. G. Randall Thompson, Director
Division of Hazardous and Infectious Waste Management
Bureau of Solid and Hazardous Waste Management
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia SC 29201

Dear Mr. Thompson:

The enclosed interim measure completion report for Area of Concern (AOC) 696 is submitted to fulfill the requirement of Permit Condition IV.D.6 for Permit Number SCO 170 022 560. If the Department of Health and Environmental Control should have any questions, please contact Reece Batten of Southern Division Naval Facilities Engineering Command (NAVFAC) at (803) 820-5578.

Sincerely,

E.R. Dearhart
E.R. Dearhart
Director

Encl:

(1) AOC 696 Completion Report

Copy to:

SCDHEC (Mr. Tapia, Mr. Bergstrand)

USEPA (Mr. Spariosu)

██████████ (LCDR Rose)

NAVFAC (Mr. Batten)

EA&H (Ms. Maddux)



COMPLETION REPORT

INTERIM MEASURE FOR
AOC 696
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ACRONYMS, ABBREVIATIONS and SYMBOL

AOC	Area of Concern
BLS	Below Land Surface
CMS	Corrective Measures Study
CSAP	Comprehensive Sampling & Analysis Plan
DERP	Defense Environmental Restoration Program
DET	Environmental Detachment Charleston
DON	Department of the Navy
DRMO	Defense Reutilization & Marketing Office
GEL	General Engineering Laboratories
IA	Immunoassay
IM	Interim Measure
IR	Installation Restoration
LB	Pound
mg/kg	Milligrams per Kilogram (equal to parts per million)
PCB	Poly Chlorinated Biphenyl
PPM	Parts Per Million
RCRA	Resource Conservation and Recovery Act
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
SARA	Superfund Amendments and Reauthorization Act
SCDHEC	South Carolina Department of Health and Environmental Control
SUPSHIP	Supervisor of Shipbuilding, Conversion and Repair, USN
SWMU	Solid Waste Management Unit
USN	United States Navy

1. INTRODUCTION

1.1 INSTALLATION RESTORATION PROGRAM. The purpose of the Department of the Navy (DON) Installation Restoration (IR) Program is to identify, assess, characterize and clean up or control contamination from past hazardous waste disposal operations and hazardous material spills at Navy and Marine Corps activities. The Defense Environmental Restoration Program (DERP) is codified in the Superfund Amendments and Reauthorization Act (SARA) Section 211 (10 USC 2701). The IR Program is a component of DERP.

1.1.1 Naval Base Charleston IR Program. At Naval Base Charleston, a Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA) was prepared which divided the Naval Base into zones and identified Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) within each zone. The RFA evaluated each SWMU and AOC and determined which sites required further investigation. Based on the RFA, a RCRA Facility Investigation (RFI) work plan has been or is being prepared for each zone containing SWMUs and AOCs requiring further investigation. On completion of the RFI for each Zone, a RFI report will be prepared for that zone. The RFI reports will identify SWMUs and AOCs containing wastes requiring remediation. Eventually, Corrective Measures Studies (CMSs) will be prepared to determine the best means of remediating each site.

1.2 INTERIM MEASURES. Interim Measures (IM) performed as part of the IR Program are intended to eliminate sources of environmental contamination or limit the spread of environmental contaminants prior to the completion of the RFI CMSs.

1.3 AREA OF CONCERN 696. AOC 696 was the transformer station located north of Building 2509 at the Naval Annex. The transformer station contained a total of 6 transformers. Two of the transformers were damaged by fire and were abandoned in place; the remaining 3 were in service providing power to Building 2509. Figure 2 of Appendix A illustrates the area. The primary constituent of concern for AOC 696 was the possibility of poly chlorinated biphenyl (PCB)

containing dielectric fluid. Results from samples obtained from the transformers in 1991 contained less than 50 ppm PCBs. However, liquid samples collected in 1997 resulted in two of the three out-of-service transformers containing PCB levels greater than 50 ppm. Past investigations reported in the RFI indicated Arsenic, Beryllium, and PCB concentrations exceeding USEPA RBCs. In November 1996, ENSAFE collected six soil borings from stressed areas of vegetation surrounding the transformer station. Sample 696SB001 indicated Arsenic and Beryllium concentrations above USEPA RBCs. Sample 696SB003 reported PCB concentrations above clean levels established for this site. See Figure 2 in Appendix A for sample locations. The table below lists sample results exceeding USEPA RBCs and the cleanup goals established by South Carolina Department of Health and Environmental Control (SCDHEC) for each constituent.

ENSAFE, Inc. November 1996

Sample No.	Constituent	Result (mg/kg)	Cleanup Goal	USEPA RBCs
696SB001	Arsenic	5.400	*0.430	0.430
	Beryllium	0.180	*0.150	0.150
696SB003	Aroclor 1260	1.780	1.00	0.083

*Background levels for Arsenic (3.00 mg/kg) and Beryllium (0.17 mg/kg) were established for Zone K, Naval Annex.

1.4 AREA OF CONCERN 696 INTERIM MEASURE. During the interval between the RFI and the completion of the CMS, it was decided by Southern Division Naval Facilities Engineering Command (SOUTHDIV) that an IM would be performed by Supervisor of Shipbuilding, Conversion and Repair (SUPSHIP), United States Navy (USN), Portsmouth Va. Environmental Detachment Charleston (DET). The objective of this IM was to excavate soil impacted by PCBs, Arsenic, and Beryllium to clean levels outlined in the table included in paragraph 1.3 and to demolish/remove transformer station. This IM is consistent with the ultimate cleanup of the site and is not intended to circumvent the public participation process inherent within environmental cleanup under RCRA.

2. INTERIM MEASURE EXECUTION

2.1 ACTIONS REQUIRED BY INTERIM MEASURE WORKPLAN. Removal of the identified waste streams was performed to the maximum extent possible and disposed appropriately. Approximately 50 cubic yards of contaminated soil were removed from the site.

Required actions are listed below:

- Excavation and disposal of approximately 10 cubic yards of Beryllium and Arsenic contaminated soils from land surface to approximately 1 foot below land surface (BLS).
- Excavation and disposal of approximately 40 cubic yards of PCB contaminated soils from land surface to approximately 1 foot below land surface (BLS).
- Demolition and disposal of the transformer station including fence and 22' x 24' x 6" concrete slab.
- Collect confirmation samples from underneath the 22' x 24' x 6" concrete slab to verify clean levels for PCBs and excavations to verify cleanup of the site.

2.2 OBSERVATIONS NOTED

Transformer Station Demolition. Utilities were secured by South Carolina Electric and Gas (SCE&G) before demolition. Fire damage was visible on two of the three 4500 lb. transformers as well as all the associated electrical cables and busbar. Concrete samples were collected in stained areas in the vicinity of the concrete slab and analyzed for PCB content. Results indicated no PCB contamination on the surface of the concrete slab. The concrete slab was removed with earth moving equipment and placed into construction debris containers. An approximate 6 inch depth of crushed rock was discovered underneath the concrete slab. This was removed and disposed accordingly.

2.2.2 Excavation. Soil removal was executed on 02 October 1997 and completed the same day. Soil removal from the two impacted areas were conducted under the specifications of the IM Work Plan (See Figure 1 of Appendix D). The impacted soil was removed with earth moving equipment and placed directly into haul trucks for transportation to the approved Subtitle D landfill. The depth of excavation was approximately 1 foot BLS for each area. Groundwater was not encountered during removal. Confirmation sampling indicated concentrations of arsenic and PCBs above the recommended clean levels (beryllium was within the clean levels) outlined in the IM Work Plan for each area excavated. Therefore, delineation of each area was required to determine further soil removal volumes beyond the original scope of this IM. Immunoassay kits for PCBs were used to delineate the extent of contamination northwest of the excavation as shown in Figure 2 of Appendix B. The area impacted by arsenic and beryllium was not delineated, however, past investigative data was used to estimate volumes for excavation. On 30 October 1997, approximately 29 cubic yards of soil still containing elevated levels of arsenic and PCBs were removed and disposed accordingly. Confirmation samples to be analyzed for arsenic and PCBs were collected the same day and processed by a certified laboratory. Two samples reported elevated levels of PCBs. The soil in these areas were removed and confirmation samples collected later reported no PCB contamination. See Figure 1 in Appendix D for excavated areas.

3. INTERIM MEASURE OUTCOME

3.1 SITE CONDITIONS FOLLOWING COMPLETION OF WORK. Following completion of all site work on 26 November 1997, the DET had accomplished removal of PCB, arsenic, and beryllium contaminated soil and demolition/removal of the transformer station. The excavated areas and the former transformer station area were back filled, graded to existing conditions and seeded with grass.

4. SAMPLING

4.1 SAMPLING EVOLUTIONS AND RESULTS.

4.1.1 Soil Screening. On 18 September 1997, three soil samples were collected and analyzed using the ENSYS Inc. PCB (Rapid Immunoassay Screen) RIS[®] TEST for On-Site Testing of PCB's in Soil as the screening method. The immunoassay limit for PCB detection in soil for this screening method is a minimum detection of 1 ppm and a maximum detection of 5 ppm. These samples (IA-1, IA-2 and IA-3) were the initial site delineation for PCB contamination before removal activities. Results indicated levels greater than 1 ppm but less than 5 ppm PCBs. These results prompted more investigative sampling which seven samples were collected on 23 September 1997 (IA-4 through IA-10) and analyzed using the same screening method. Based on these results (see Table 4-1 in Appendix B), the initial excavations were conducted. See Figure 2 of Appendix B for locations. Due to the confirmation sampling results from the initial excavations, more investigative sampling was required northeast and west of the excavation for PCBs. On 17 and 23 October 1997, a total of 14 samples (IA12 through IA25) were collected to delineate extent of PCB contamination northwest of the initial excavation. Based on results of the immunoassay testing performed on these samples, the extended excavation area was determined. See Table 4-1 in Appendix B for results and Figure 2 in Appendix B for locations.

4.1.2 Confirmation Sampling. In accordance with the IM work plan, confirmation samples were to be collected from underneath the transformer station's concrete slab and areas adjacent to the transformer station to confirm the soils in the area free from PCB contamination. Two soil samples (SPORT0522-1 and SPORT0522-2) were collected from underneath the concrete slab. Sample results reported no concentrations of PCBs from these two sample locations. See Figure 1 in Appendix B for locations. First round confirmation sampling after the initial excavation was completed on 06 October 1997. Five samples (SPORT0536-12 through SPORT0536-16) were collected from the area of Beryllium and Arsenic contamination as shown in Figure 1 in Appendix B. Samples were collected from the side walls and center of the excavated area. Eleven samples

(SPORT0536-1 through SPORT0536-11) were collected from the PCB contaminated area as shown in Figure 1 in Appendix B. Samples were also collected from the side walls and center of the excavated area. See Table 4-2 for results in Appendix B. Elevated levels of Arsenic and PCBs were reported from the first round confirmation sampling. After excavating these areas, another round of confirmation sampling was performed on 30 October 1997. Elevated levels of PCB's of 1.1 and 3.1 ppm respectively were reported. After excavating these areas confirmation samples were collected from each area on 18 November 1997 with the results below clean levels directed for this site.

4.1.3 Waste Characterization Sampling. The following waste streams were sampled to determine proper waste disposal:

4.1.3.1 Concrete. On 07 February 1997, three concrete samples were obtained from the transformer station concrete surface and tested for PCBs using the ENSYS Inc. PCB (Rapid Immunoassay Screen) RIS[®] TEST. Initial results indicated no PCB levels greater than 5 ppm. The same three samples were sent to General Engineering Laboratories (GEL) for validation. All results received from GEL indicated PCB levels less than 1 ppm for the three concrete samples. See Table 4-4 in Appendix B.

4.1.3.2 Electrical Cables. Insulation was removed from various electrical cables and tested for PCB's. Three samples were collected and sent to GEL to be analyzed for PCB content on 05 September 1997. Sample results indicated PCB levels less than 1 ppm. See Table 4-5 in Appendix B.

4.1.3.3 Dielectric Fluid. In order to properly dispose the transformers, dielectric fluid was tested for PCB's from each 4500 lb. transformer. Although each transformer was marked certified PCB free, the certifications lacked visible signatures. Each sample was collected from the sample valves located at the bottom of each transformer into previously cleaned 8 oz. jars. The three samples were sent to the Environmental Laboratory located at Naval Air Station (NAS) Pensacola, Florida.

Sample results of two of the three transformers indicated PCB levels greater than 50 ppm. See Table 4-6 in Appendix B for results.

4.1.3.4 Composite Sampling. A composite sample was collected from the impacted areas adjacent to the transformer station on 12 September 1997 for waste characterization. A duplicate sample was collected for QA/QC requirements. The samples were analyzed for metals and PCB's. The purpose of the composite sample was to characterize the area to determine proper waste disposal. The results of the analysis allowed for disposal in a certified subtitle D landfill. See Table 4-7 in Appendix B.

4.2 METHODOLOGY. All confirmation and waste characterization sampling was performed in accordance with the Comprehensive Sampling and Analysis Plan (CSAP). A Chain of Custody Record was completed for each sampling evolution and the samples were transferred to General Engineering Laboratories for PCB or metals (Beryllium and Arsenic) analysis. All dielectric fluid samples were sent to Navy Public Works Center, Environmental Laboratory in NAS Pensacola, Florida. Certificates of Analysis for all the sampling evolutions are located in Appendix B.

5. WASTE GENERATION

5.1 NON-HAZARDOUS WASTE.

5.1.1 Excavated Soil. Approximately 50 cubic yards of non-hazardous excavated soil was transported by three 20 cubic yard haul trucks to Chambers Landfill.

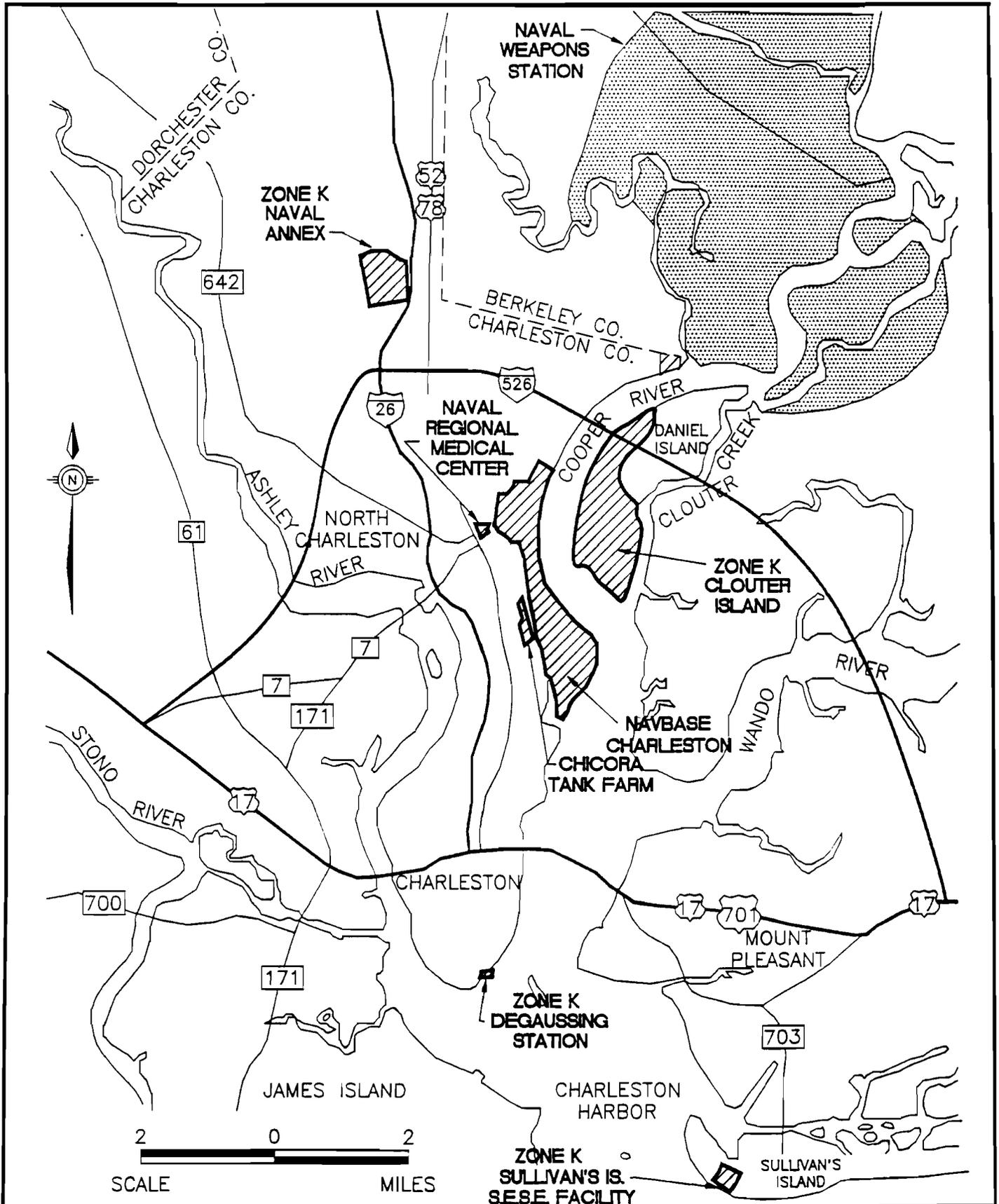
5.1.2 Construction Debris. Construction debris resulting from the demolition was segregated and disposed to Bees Ferry Landfill. All scrap metal and concrete was disposed per (4) roll off containers.

5.1.3 Electrical Cables. As a result of the waste characterization, all electrical cabling was salvaged from the demolition and recycled.

5.1.4 Transformers. One 4500 lb. transformer was disposed as non-regulated solid waste. The three active transformers in the transformer station were removed and placed in the main substation located on the annex. These transformers will be re-utilized by South Carolina Electric and Gas (SCE&G) at their request. Two of the out-of-service 4500 lb. transformers were disposed through Defense Reutilization Marketing Office (DRMO) as PCB contaminated waste due to the dielectric fluid containing greater than 50 ppm PCB's reported in each. Approximately (6) 55 gal. drums of dielectric fluid was disposed as PCB contaminated liquid through DRMO.

APPENDIX A

SITE MAPS



ZONE K
FINAL RFI WORK PLAN
NAVAL BASE CHARLESTON
CHARLESTON, S.C.

FIGURE 1-1
LOCATION OF NAVBASE CHARLESTON
NAVAL ANNEX
AND CLOUTER ISLAND

DWG DATE: 08/15/96

DWG NAME: 29CHZK02

Figure 1

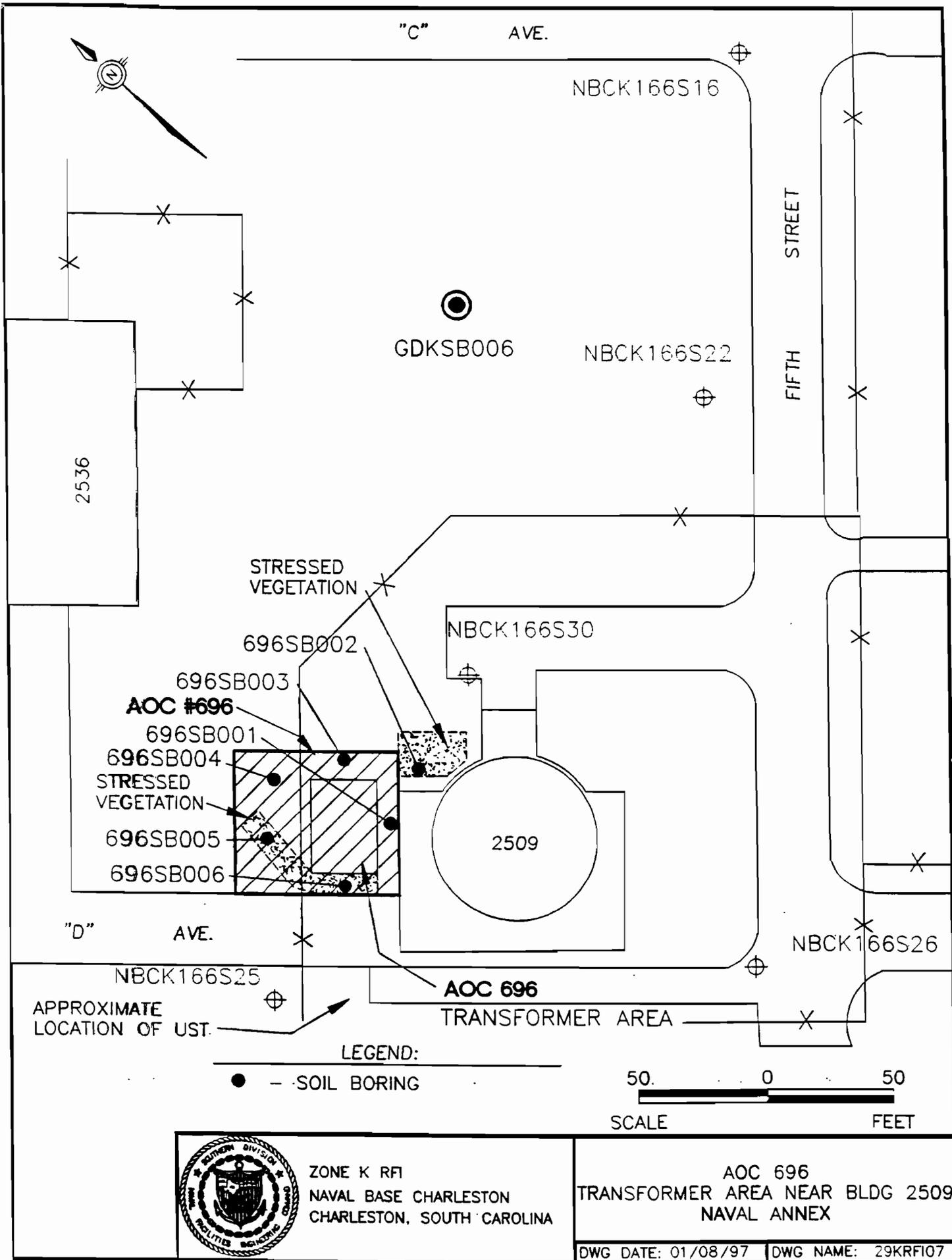


Figure 2

APPENDIX B

SAMPLING

DOCUMENTATION

Table 4-1
Immunoassay
Soil Screening Results

Soil Sample	Sample Date	Sample Depth	*Results (mg/kg)
IA696-1	09-18-97	0-1'	>1<5
IA696-2	09-18-97	0-1'	>1<5
IA696-3	09-18-97	0-1'	>1<5
IA696-4	09-18-97	0-1'	<1<5
IA696-5	09-23-97	0-1'	<1<5
IA696-6	09-23-97	0-1'	<1<5
IA696-7	09-23-97	0-1'	<1<5
IA696-8	09-23-97	0-1'	<1<5
IA696-9	09-23-97	0-1'	<1<5
IA696-10	09-23-97	0-1'	<1<5
IA696-11	09-23-97	0-1'	>1<5
IA696-12	10-17-97	0-1'	>1<5
IA696-13	10-17-97	0-1'	>1>5
IA696-14	10-17-97	0-1'	>1<5
IA696-15	10-17-97	0-1'	>1<5
IA696-16	10-17-97	0-1'	>1<5
IA696-17	10-17-97	0-1'	<1<5
IA696-18	10-23-97	0-1'	<1<5
IA696-19	10-23-97	0-1'	<1<5
IA696-20	10-23-97	0-1'	>1<5
IA696-21	10-23-97	0-1'	<1<5
IA696-22	10-23-97	0-1'	<1<5
IA696-23	10-23-97	0-1'	>1<5
IA696-24	10-23-97	0-1'	<1<5
IA696-25	10-23-97	0-1'	>1<5

<1 ppm is the clean level for soil as defined in 40 CFR 761.125 (c) (4)
Shaded areas exceed this level

Table 4-2

**Confirmation Sample Results
(Initial Excavation)**

Sample No.	Sample Date	Sample Depth	Target Level (mg/kg)	Results (mg/kg)
Sport0536-1	10-06-97	0-1'	1.0 (PCB)	0.336
Sport0536-2	10-06-97	0-1'	1.0 (PCB)	0.000
Sport0536-3	10-06-97	0-1'	1.0 (PCB)	0.348
Sport0536-4	10-06-97	0-1'	1.0 (PCB)	0.088
Sport0536-5	10-06-97	0-1'	1.0 (PCB)	8.960
Sport0536-6	10-06-97	0-1'	1.0 (PCB)	0.012
Sport0536-7	10-06-97	0-1'	1.0 (PCB)	14.20
Sport0536-8	10-06-97	0-1'	1.0 (PCB)	35.30
Sport0536-9	10-06-97	0-1'	1.0 (PCB)	0.055
Sport0536-10	10-06-97	0-1'	1.0 (PCB)	0.163
Sport0536-11	10-06-97	0-1'	1.0 (PCB)	0.000
Sport0536-12	10-06-97	0-1'	3.0 (As)	9.150
			0.150 (Be)	0.055
Sport0536-13	10-06-97	0-1'	3.0 (As)	8.840
			0.150 (Be)	0.063
Sport0536-14	10-06-97	0-1'	3.0 (As)	1.780
			0.150 (Be)	0.067
Sport0536-15	10-06-97	0-1'	3.0 (As)	13.40
			0.150 (Be)	0.042
Sport0536-16	10-06-97	0-1'	3.0 (As)	4.690
			0.150 (Be)	0.044

Shaded Areas Exceed Target Levels

Table 4-3

**Confirmation Sample Results
(Second Excavation)**

Sample No.	Sample Date	Sample Depth	Target Level (mg/kg)	Results (mg/kg)
Sport0560-1	10-30-97	0-1'	3.0 (As)	2.500
Sport0560-2	10-30-97	0-1'	3.0 (As)	1.320
Sport0560-3	10-30-97	0-1'	3.0 (As)	0.292
Sport0560-4	10-30-97	0-1'	1.0 (PCB)	0.000
Sport0560-5	10-30-97	0-1'	1.0 (PCB)	3.100
Sport0560-6	10-30-97	0-1'	1.0 (PCB)	1.100
Sport0560-7	10-30-97	0-1'	1.0 (PCB)	0.940
Sport0560-8	10-30-97	0-1'	1.0 (PCB)	0.0387
Sport0560-9	10-30-97	0-1'	1.0 (PCB)	0.000
Sport0560-10	10-30-97	0-1'	1.0 (PCB)	0.000
Sport0560-11	10-30-97	0-1'	1.0 (PCB)	0.000
Sport0560-12	10-30-97	0-1'	1.0 (PCB)	0.000
Sport0560-13	10-30-97	0-1'	1.0 (PCB)	0.000
Sport0572-1	11-18-97	0-1'	1.0 (PCB)	0.000
Sport0572-2	11-18-97	0-1'	1.0 (PCB)	0.000

Shaded Areas Exceed Target Levels

Table 4-4

**Waste Characterization Results
for Concrete Slab**

Concrete Boring ID No.	PCB (mg/kg)	Result (mg/kg)	Target Level
Sport0364-1	Aroclor 1254	0.320	1.00
	Aroclor 1260	0.769	1.00
*696J001	Immunoassay	<5<50	
Sport0364-2	Aroclor 1254	0.000	1.00
	Aroclor 1260	0.000	1.00
*696J002	Immunoassay	<5<50	
Sport0364-3	Aroclor 1254	0.000	1.00
	Aroclor 1260	0.000	1.00
*696003	Immunoassay	<5<50	

***Duplicate**

Table 4-5

**Waste Characterization Results
for
Electrical Cables**

Sample No.	Sample Date	PCB Result (mg/kg)
Sport0507-1	09-05-97	0.000
Sport0507-2	09-05-97	0.000
Sport0507-3	09-05-97	0.000

Table 4-6

**Waste Characterization Results
for
Dielectric Fluid**

Sample No.	Sample Date	PCB Result (mg/kg)	Target Level (mg/kg)	Transformer
97CNS015-1	09-09-97	59	50	#1
97CNS015-2	09-09-97	73	50	#2
97CNS015-3	09-09-97	0.00	50	#3

Shaded Areas Exceed Target Levels

Table 4-7

Composite Sample Results

Sample No.	Sample Date	Sample Depth	Constituent	Results (mg/kg)
Sport0517-1	09-12-97	0-1'	PCB	2.590
			Arsenic	5.360
			Beryllium	0.0972
*Sport0517-2	09-12-97	0-1'	PCB	5.780
			Arsenic	5.280
			Beryllium	0.0889

***Duplicate**

**Survey Data
(See Figure 1)**

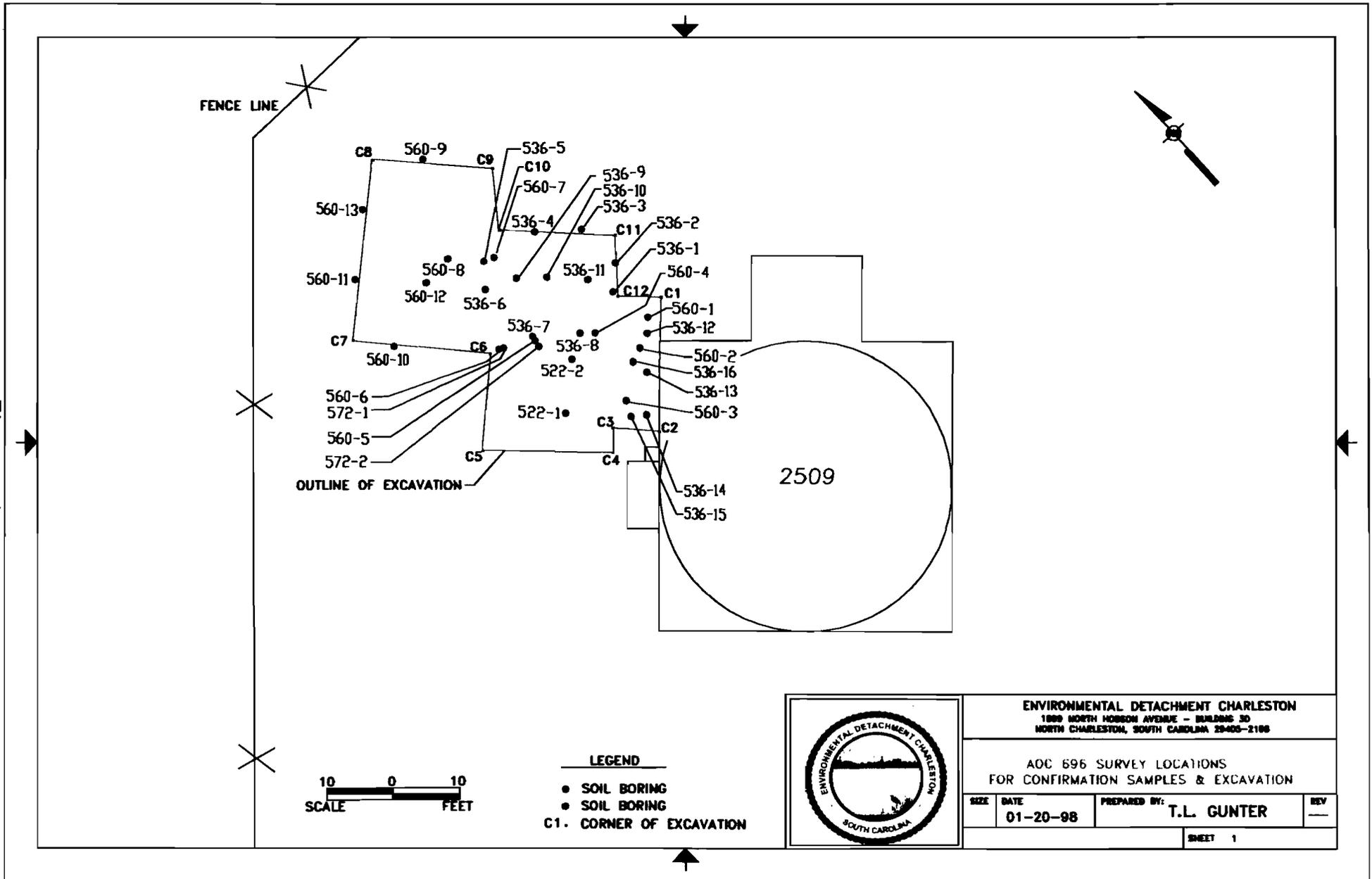
EASTING	NORTHING	STATION
2299710.65	388048.72	SPORT0 522-1
2299718.09	388053.42	SPORT0 522-2
2299730.91	388055.04	SPORT0 536-1
2299734.85	388057.70	SPORT0 536-2
2299735.68	388065.43	SPORT0 536-3
2299730.59	388071.10	SPORT0 536-4
2299721.63	388074.49	SPORT0 536-5
2299718.19	388071.43	SPORT0 536-6
2299717.01	388060.67	SPORT0536-7
2299722.20	388055.03	SPORT0 536-8
2299722.78	388068.67	SPORT0 536-9
2299726.04	388064.93	SPORT0 536-10
2299729.92	388059.48	SPORT0 536-11
2299729.08	388046.47	SPORT0 536-12
2299724.13	388042.61	SPORT0 536-13
2299718.64	388038.27	SPORT0 536-14
2299716.88	388040.11	SPORT0 536-15
2299724.03	388045.41	SPORT0 536-16
2299731.18	388048.03	SPORT0 560-1
2299726.44	388045.91	SPORT0 560-2
2299718.39	388042.34	SPORT0 560-3
2299723.82	388053.14	SPORT0 560-4
2299716.71	388059.93	SPORT0 560-5
2299711.95	388063.57	SPORT0 560-6
2299723.16	388073.60	SPORT0 560-7
2299718.31	388079.34	SPORT0 560-8
2299728.34	388092.65	SPORT0 560-9
2299701.58	388077.31	SPORT0560-10
2299706.04	388089.18	SPORT0 560-11
2299713.00	388079.71	SPORT0 560-12
2299715.69	388095.34	SPORT0 560-13

Survey Data Continues

2299712.57	388063.12	SPORT0 572-1
2299716.36	388058.84	SPORT0 572-2
2299735.13	388048.45	*C1
2299717.84	388035.05	*C2
2299713.61	388041.23	*C3
2299710.48	388038.66	*C4
2299697.49	388055.46	*C5
2299710.60	388064.22	*C6
2299698.05	388083.24	*C7
2299723.08	388099.27	*C8
2299734.32	388082.88	*C9
2299727.24	388075.81	*C10
2299738.33	388060.60	*C11
2299730.96	388054.03	*C12

***Location for the corners of the excavation area**

Figure 1



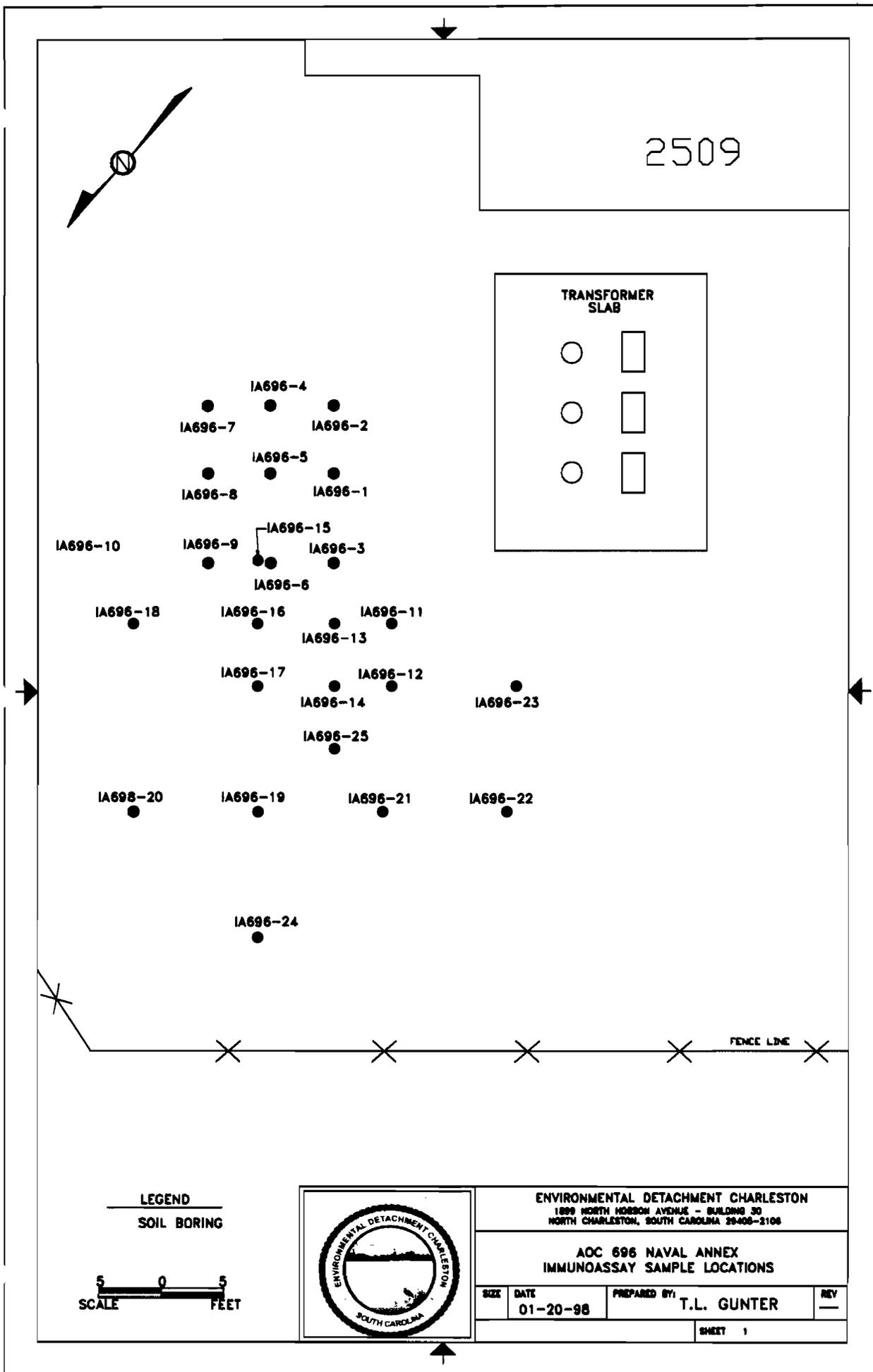


Figure 2

February 1997 Sampling Event



GENERAL ENGINEERING LABORATORIES

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Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/87458
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00196

Report Date: March 12, 1997

Page 1 of 2

Sample ID : SPORT0364-1
 Lab ID : 9702574-01
 Matrix : Misc.
 Date Collected : 02/07/97
 Date Received : 02/27/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	58.4	73.0	ug/kg	20.	TLD	03/09/97	1740	98561	1
PCB-1221	U	0.00	58.4	73.0	ug/kg	20.					
PCB-1232	U	0.00	58.4	73.0	ug/kg	20.					
PCB-1242	U	0.00	58.4	73.0	ug/kg	20.					
PCB-1248	U	0.00	58.4	73.0	ug/kg	20.					
PCB-1254		320	58.4	73.0	ug/kg	20.					
PCB-1260		769	58.4	73.0	ug/kg	20.					

The following prep procedures were performed:

PCB's

GWL 03/05/97 1300 98561 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	92.1	(50.0 - 150.)

M = Method	Method-Description
M 1	EPA 8080
M 2	EPA 3550





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SC	10120	10582
TN	02934	02934

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1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00196

Report Date: March 12, 1997

Page 2 of 2

Sample ID : SPORT0364-1

M = Method

Method-Description

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories standard operating procedures. Please direct any questions to your Project Manager, Karen Blakeney at (803) 769-7386.



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TN	02934	02934

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 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00196

Report Date: March 12, 1997

Page 1 of 2

Sample ID : SPORT0364-2
 Lab ID : 9702574-02
 Matrix : Misc.
 Date Collected : 02/07/97
 Date Received : 02/27/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	31.8	41.6	ug/kg	10.	TLD	03/07/97	1922	98561	1
PCB-1221	U	0.00	31.8	41.6	ug/kg	10.					
PCB-1232	U	0.00	31.8	41.6	ug/kg	10.					
PCB-1242	U	0.00	31.8	41.6	ug/kg	10.					
PCB-1248	U	0.00	31.8	41.6	ug/kg	10.					
PCB-1254	U	0.00	31.8	41.6	ug/kg	10.					
PCB-1260	U	0.00	31.8	41.6	ug/kg	10.					

The following prep procedures were performed:

PCB's

GWL 03/05/97 1300 98561 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	112.	(50.0 - 150.)

M = Method	Method-Description
M 1	EPA 8080
M 2	EPA 3550





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SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
SUPSHIP-Portsmouth Detachment-Env.
1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00196

Report Date: March 12, 1997

Page 2 of 2

Sample ID : SPORT0364-2

M = Method

Method-Description

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

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Reviewed By





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NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00196

Report Date: March 12, 1997

Page 1 of 2

Sample ID : SPORT0364-3
 Lab ID : 9702574-03
 Matrix : Misc.
 Date Collected : 02/07/97
 Date Received : 02/27/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	32.5	41.6	ug/kg	10.	TLD	03/07/97	1959	98561	1
PCB-1221	U	0.00	32.5	41.6	ug/kg	10.					
PCB-1232	U	0.00	32.5	41.6	ug/kg	10.					
PCB-1242	U	0.00	32.5	41.6	ug/kg	10.					
PCB-1248	U	0.00	32.5	41.6	ug/kg	10.					
PCB-1254	U	0.00	32.5	41.6	ug/kg	10.					
PCB-1260	U	0.00	32.5	41.6	ug/kg	10.					

The following prep procedures were performed:

PCB's

GWL 03/05/97 1300 98561 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	58.1	(50.0 - 150.)

M = Method	Method-Description
M 1	EPA 8080
M 2	EPA 3550





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STATE	GEL	EPI
FL	E87156/87294	E87472/87458
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
SUPSHIP-Portsmouth Detachment-Env.
1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00196

Report Date: March 12, 1997

Page 2 of 2

Sample ID : SPORT0364-3

M = Method

Method-Description

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

I indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories standard operating procedures. Please direct any questions to your Project Manager, Karen Blakeney at (803) 769-7386.

Karen Blakeney

Reviewed By



September 1997 Sampling Events

**Navy Public Works Center
Environmental Laboratory**

Analytical Report

Polychlorinated Biphenyls by Method 8080A

Bldg. 3887, Code 440
NAS Pensacola, FL 32508
Phone (850) 452-3180/3642
DSN 922-3180/3642
FAX (850) 452-2799/2387

Client: SPORTENVDETHASN Lab
Address: 1899 North Hobson Avenue
N. Charleston, SC 29405-2106
Phone #: (803) 743-3239 ext 26
Contact: Fred McLean

Lab Report Number: 74048
Sample Date: 09/09/97
Received Date: 09/10/97
Sample Site: NAVAL ANNEX
Job Order No.: 127 4021

LAB Sample ID#	1- 74048			
Sample Name / Location	NBCK696J 00040 97CNS015-1			
Collector's Name	T L Gurter			
Date & Time Collected	09/09/97 @ 0859			
Sample Type (composite or grab)	Grab			
Analyst	J Moore			
Date of Extraction / Initials	10/02/97 JM			
Date of Analysis	10/02/97			
Sample Matrix	Oil			
Dilution	X 5			
Compound Name	1- 74048	units	Det. Limit	Flags
PCB - 1260	59	mg/Kg	2.0	
PCB - 1254	BDL	mg/Kg	2.5	
PCB - 1248	BDL	mg/Kg	2.0	
PCB - 1242	BDL	mg/Kg	3.0	
PCB - 1232	BDL	mg/Kg	5.0	
PCB - 1221	BDL	mg/Kg	14.0	
PCB - 1016	BDL	mg/Kg	21.5	

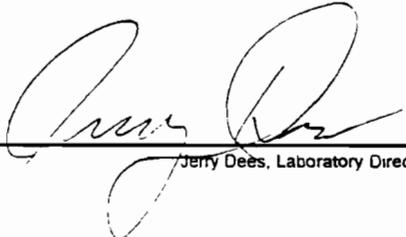
SURROGATE SPIKE RECOVERY

	Acceptance Limits	Percent Recovery
Tetrachloro-m-xylene	64-128	102
Decachlorobiphenyl	57-135	114

Explanation of Flags: _____

COMMENTS : _____

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram.

Approved by : 
 Jerry Dees, Laboratory Director

Date: 10/3/97
 Report Generated

Navy Public Works Center Environmental Laboratory

Bldg. 3887, Code 440
NAS Pensacola, FL 32508
Phone (850) 452-3180/3642
DSN 922-3180/3642
FAX (850) 452-2799/2387

Client: SPORTENVDETHASN Lab
Address: 1899 North Hobson Avenue
N Charleston, SC 29405-2106
Phone #: (803) 743-3239 ext. 26
Contact: Fred McLean

Analytical Report

Polychlorinated Biphenyls by Method 8080A

Lab Report Number: 74049
Sample Date: 09/09/97
Received Date: 09/10/97
Sample Site: NAVAL ANNEX
Job Order No.: 127 4021

LAB Sample ID#	1- 74049			
Sample Name / Location	NBCK696J 000500 97CNS015-2			
Collector's Name	T. L. Gurter			
Date & Time Collected	09/09/97 @ 0855			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of Extraction / Initials	10/02/97 JM			
Date of Analysis	10/02/97			
Sample Matrix	Oil			
Dilution	X 5			
Compound Name	1- 74049	units	Det. Limit	Flags
PCB - 1260	73	mg/Kg	2.0	
PCB - 1254	BDL	mg/Kg	2.5	
PCB - 1248	BDL	mg/Kg	2.0	
PCB - 1242	BDL	mg/Kg	3.0	
PCB - 1232	BDL	mg/Kg	5.0	
PCB - 1221	BDL	mg/Kg	14.0	
PCB - 1016	BDL	mg/Kg	21.5	

SURROGATE SPIKE RECOVERY

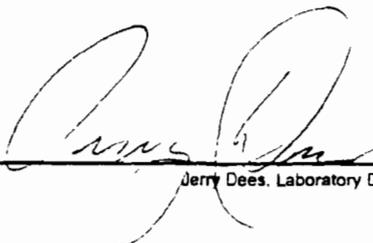
	Acceptance Limits	Percent Recovery
Tetrachloro-m-xylene	64-128	100
Decachlorobiphenyl	57-135	116

Explanation of Flags:

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram.

Approved by :



Jerry Dees, Laboratory Director

Date: 10/3/97

Report Generated

**Navy Public Works Center
Environmental Laboratory**

Analytical Report

Polychlorinated Biphenyls by Method 8080A

Bldg. 3887, Code 440
NAS Pensacola, FL 32508
Phone (850) 452-3180/3642
DSN 922-3180/3642
FAX (850) 452-2799/2387

Client: SPORTENVDETHASN Lab
Address: 1899 North Hobson Avenue
N. Charleston, SC 29405-2106
Phone #: (803) 743-3239 ext. 26
Contact: Fred McLean

Lab Report Number: 74050
Sample Date: 09/09/97
Received Date: 09/10/97
Sample Site: NAVAL ANNEX
Job Order No.: 127 4021

LAB Sample ID#	1- 74050			
Sample Name / Location	NBCK696J 000600 97CNS015-3			
Collector's Name	T.L. Gurter			
Date & Time Collected	09/09/97 @ 0851			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of Extraction / Initials	10/02/97 JM			
Date of Analysis	10/02/97			
Sample Matrix	Oil			
Dilution	X 1			
Compound Name	1- 74050	units	Det. Limit	Flags
PCB - 1260	BDL	mg/Kg	0.4	
PCB - 1254	BDL	mg/Kg	0.5	
PCB - 1248	BDL	mg/Kg	0.4	
PCB - 1242	BDL	mg/Kg	0.6	
PCB - 1232	BDL	mg/Kg	1.0	
PCB - 1221	BDL	mg/Kg	2.8	
PCB - 1016	BDL	mg/Kg	4.3	

SURROGATE SPIKE RECOVERY

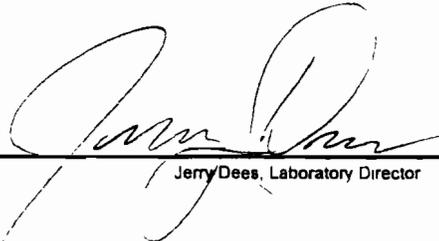
	Acceptance Limits	Percent Recovery
Tetrachloro-m-xylene	64-128	122
Decachlorobiphenyl	57-135	135

Explanation of Flags:

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram.

Approved by :



Jerry Dees, Laboratory Director

Date: 10/3/97

Report Generated



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SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: September 15, 1997

Page 1 of 2

Sample ID : SPORT0507-1
 Lab ID : 9709134-01
 Matrix : Misc.
 Date Collected : 09/05/97
 Date Received : 09/05/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	40000	50000	ug/kg	40.	JPA	09/11/97	2239	107500	1
PCB-1221	U	0.00	40000	50000	ug/kg	40.					
PCB-1232	U	0.00	40000	50000	ug/kg	40.					
PCB-1242	U	0.00	40000	50000	ug/kg	40.					
PCB-1248	U	0.00	40000	50000	ug/kg	40.					
PCB-1254	U	0.00	40000	50000	ug/kg	40.					
PCB-1260	U	0.00	40000	50000	ug/kg	40.					

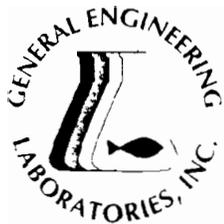
The following prep procedures were performed:

PCB's JPA 09/09/97 1500 107500 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	0.00*	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8080
M 2	EPA 3550





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TN	02934	02934

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1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: September 15, 1997

Page 2 of 2

Sample ID : SPORT0507-1

M = Method

Method-Description

Notes:

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ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

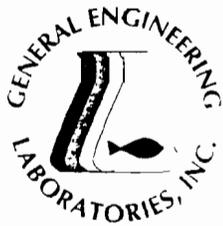
* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories standard operating procedures. Please direct any questions to your Project Manager, Karen Blakeney at (803) 769-7386.



Reviewed By





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NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: September 15, 1997

Page 1 of 2

Sample ID : SPORT0507-2
 Lab ID : 9709134-02
 Matrix : Misc.
 Date Collected : 09/05/97
 Date Received : 09/05/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	40000	50000	ug/kg	40.	JPA	09/11/97	2316	107500	1
PCB-1221	U	0.00	40000	50000	ug/kg	40.					
PCB-1232	U	0.00	40000	50000	ug/kg	40.					
PCB-1242	U	0.00	40000	50000	ug/kg	40.					
PCB-1248	U	0.00	40000	50000	ug/kg	40.					
PCB-1254	U	0.00	40000	50000	ug/kg	40.					
PCB-1260	U	0.00	40000	50000	ug/kg	40.					

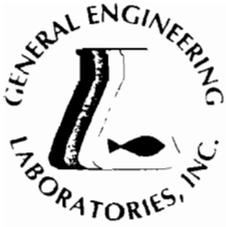
The following prep procedures were performed:
 PCB's

JPA 09/09/97 1500 107500 2

Surrogate Recovery	Test	Percent %	Acceptable Limits
4CMX	PCB	0.00*	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8080
M 2	EPA 3550





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SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
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1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: September 15, 1997

Page 2 of 2

Sample ID : SPORT0507-2

M = Method

Method-Description

Notes:

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ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

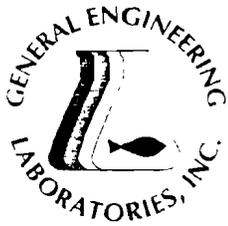
U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

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Reviewed By





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FL	E87156/87294	E87472/87458
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: September 15, 1997

Page 1 of 2

Sample ID : SPORT0507-3
 Lab ID : 9709134-03
 Matrix : Misc.
 Date Collected : 09/05/97
 Date Received : 09/05/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	36400	45500	ug/kg	40.	JPA	09/11/97	2354	107500	1
PCB-1221	U	0.00	36400	45500	ug/kg	40.					
PCB-1232	U	0.00	36400	45500	ug/kg	40.					
PCB-1242	U	0.00	36400	45500	ug/kg	40.					
PCB-1248	U	0.00	36400	45500	ug/kg	40.					
PCB-1254	U	0.00	36400	45500	ug/kg	40.					
PCB-1260	U	0.00	36400	45500	ug/kg	40.					

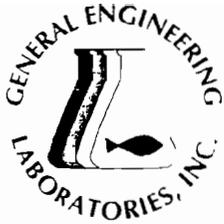
The following prep procedures were performed:
 PCB's

JPA 09/09/97 1500 107500 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	0.00*	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8080
M 2	EPA 3550





GENERAL ENGINEERING LABORATORIES

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Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/87458
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
SUPSHIP-Portsmouth Detachment-Env.
1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: September 15, 1997

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Sample ID : SPORT0507-3

M = Method

Method-Description

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

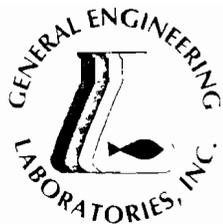
J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories standard operating procedures. Please direct any questions to your Project Manager, Karen Blakeney at (803) 769-7386.


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STATE	GEL	EPI
FL	E87156/87294	E87472/87458
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: September 17, 1997

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Sample ID : SPORT0517-1
 Lab ID : 9709304-01
 Matrix : Soil
 Date Collected : 09/12/97
 Date Received : 09/12/97
 Priority : Rush
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	648	810	ug/kg	200	JPA	09/17/97	1308	107906	1
PCB-1221	U	0.00	648	810	ug/kg	200					
PCB-1232	U	0.00	648	810	ug/kg	200					
PCB-1242	U	0.00	648	810	ug/kg	200					
PCB-1248	U	0.00	648	810	ug/kg	200					
PCB-1254		2590	648	810	ug/kg	200					
PCB-1260	U	0.00	648	810	ug/kg	200					
Metals Analysis											
Arsenic		5360	289	485	ug/kg	2.0	MBL	09/14/97	1337	107773	2
Beryllium	J	97.2	21.6	485	ug/kg	2.0					

The following prep procedures were performed:

PCB's HDB 09/16/97 1400 107906 3
 TRACE FGD 09/12/97 1330 107773 4

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	0.00*	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8081
M 2	EPA 6010A
M 3	EPA 3550





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TN	02934	02934

Client: Supervisor of Ship Building & Conversion
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1899 North Hobson Ave.
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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: September 17, 1997

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Sample ID : SPORT0517-1

M = Method	Method-Description
M 4	EPA 3050

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

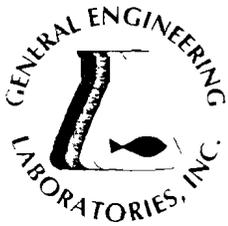
U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

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FL	E87156/87294	E87472/87458
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: September 17, 1997

Page 1 of 2

Sample ID : SPORT0517-2
 Lab ID : 9709304-02
 Matrix : Soil
 Date Collected : 09/12/97
 Date Received : 09/12/97
 Priority : Rush
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	664	830	ug/kg	200	JPA	09/17/97	1341	107906	1
PCB-1221	U	0.00	664	830	ug/kg	200					
PCB-1232	U	0.00	664	830	ug/kg	200					
PCB-1242	U	0.00	664	830	ug/kg	200					
PCB-1248	U	0.00	664	830	ug/kg	200					
PCB-1254		5780	664	830	ug/kg	200					
PCB-1260	U	0.00	664	830	ug/kg	200					
Metals Analysis											
Arsenic		5280	282	472	ug/kg	2.0	MBL	09/14/97	1342	107773	2
Beryllium	J	88.9	21.1	472	ug/kg	2.0					

The following prep procedures were performed:

PCB's HDB 09/16/97 1400 107906 3
 TRACE FGD 09/12/97 1330 107773 4

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	0.00*	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8081
M 2	EPA 6010A
M 3	EPA 3550





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TN	02934	02934

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1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: September 17, 1997

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Sample ID : SPORT0517-2

M = Method	Method-Description
M 4	EPA 3050

Notes:

The qualifiers in this report are defined as follows:

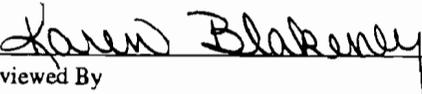
ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

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 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: September 29, 1997

Page 1 of 2

Sample ID : SPORT0522-1
 Lab ID : 9709436-01
 Matrix : Soil
 Date Collected : 09/17/97
 Date Received : 09/18/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	33.2	41.6	ug/kg	10.	JPA	09/26/97	1630	108295	1
PCB-1221	U	0.00	33.2	41.6	ug/kg	10.					
PCB-1232	U	0.00	33.2	41.6	ug/kg	10.					
PCB-1242	U	0.00	33.2	41.6	ug/kg	10.					
PCB-1248	U	0.00	33.2	41.6	ug/kg	10.					
PCB-1254	U	0.00	33.2	41.6	ug/kg	10.					
PCB-1260	U	0.00	33.2	41.6	ug/kg	10.					

The following prep procedures were performed:

PCB's

HDB 09/24/97 1200 108295 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	130.	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8081
M 2	EPA 3550





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TN	02934	02934

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North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: September 29, 1997

Page 2 of 2

Sample ID : SPORT0522-1

M = Method

Method-Description

Notes:

The qualifiers in this report are defined as follows:

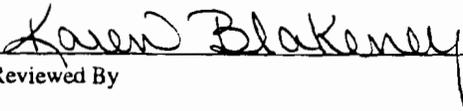
ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

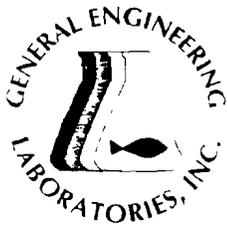
* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories standard operating procedures. Please direct any questions to your Project Manager, Karen Blakeney at (803) 769-7386.



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 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: September 29, 1997

Page 1 of 2

Sample ID : SPORT0522-2
 Lab ID : 9709436-02
 Matrix : Soil
 Date Collected : 09/17/97
 Date Received : 09/18/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	32.7	41.6	ug/kg	10.	JPA	09/26/97	1709	108295	1
PCB-1221	U	0.00	32.7	41.6	ug/kg	10.					
PCB-1232	U	0.00	32.7	41.6	ug/kg	10.					
PCB-1242	U	0.00	32.7	41.6	ug/kg	10.					
PCB-1248	U	0.00	32.7	41.6	ug/kg	10.					
PCB-1254	U	0.00	32.7	41.6	ug/kg	10.					
PCB-1260	U	0.00	32.7	41.6	ug/kg	10.					

The following prep procedures were performed:

PCB's

HDB 09/24/97 1200 108295 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	116.	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8081
M 2	EPA 3550





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STATE	GEL	EPI
FL	E87156/87294	E87472/87458
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
SUPSHIP-Portsmouth Detachment-Env.
1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: September 29, 1997

Page 2 of 2

Sample ID : SPORT0522-2

M = Method

Method-Description

Notes:

The qualifiers in this report are defined as follows:

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J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

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October 1997 Sampling Events



GENERAL ENGINEERING LABORATORIES

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Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/87458
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: October 14, 1997

Page 1 of 2

Sample ID : SPOR0536-1
 Lab ID : 9710121-01
 Matrix : Soil
 Date Collected : 10/06/97
 Date Received : 10/06/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	32.9	41.6	ug/kg	10.	JPA	10/13/97	0249	108968	1
PCB-1221	U	0.00	32.9	41.6	ug/kg	10.					
PCB-1232	U	0.00	32.9	41.6	ug/kg	10.					
PCB-1242	U	0.00	32.9	41.6	ug/kg	10.					
PCB-1248	U	0.00	32.9	41.6	ug/kg	10.					
PCB-1254	U	0.00	32.9	41.6	ug/kg	10.					
PCB-1260		336	32.9	41.6	ug/kg	10.					

The following prep procedures were performed:

PCB's

JPB 10/07/97 1600 108968 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	103.	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8081
M 2	EPA 3550





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FL	E87156/87294	E87472/87458
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
SUPSHIP-Portsmouth Detachment-Env.
1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: October 14, 1997

Page 2 of 2

Sample ID : SPORT0536-1

M = Method

Method-Description

Notes:

The qualifiers in this report are defined as follows:

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J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

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TN	02934	02934

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 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: October 14, 1997

Page 1 of 2

Sample ID : SPOR0536-2
 Lab ID : 9710121-02
 Matrix : Soil
 Date Collected : 10/06/97
 Date Received : 10/06/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	32.9	41.6	ug/kg	10.	JPA	10/12/97	0335	108968	1
PCB-1221	U	0.00	32.9	41.6	ug/kg	10.					
PCB-1232	U	0.00	32.9	41.6	ug/kg	10.					
PCB-1242	U	0.00	32.9	41.6	ug/kg	10.					
PCB-1248	U	0.00	32.9	41.6	ug/kg	10.					
PCB-1254	U	0.00	32.9	41.6	ug/kg	10.					
PCB-1260	U	0.00	32.9	41.6	ug/kg	10.					

The following prep procedures were performed:

PCB's JPB 10/07/97 1600 108968 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	153.	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8081
M 2	EPA 3550





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NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
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1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: October 14, 1997

Page 2 of 2

Sample ID : SPORTO536-2

M = Method Method-Description

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

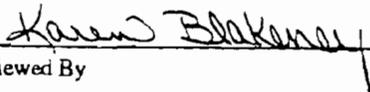
J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

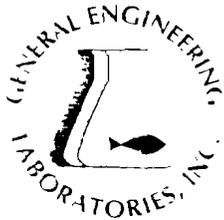
U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

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FL	E87156/87294	E87472/87458
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: October 14, 1997

Page 1 of 2

Sample ID : SPORTO536-3
 Lab ID : 9710121-03
 Matrix : Soil
 Date Collected : 10/06/97
 Date Received : 10/06/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	33.1	41.6	ug/kg	10.	JPA	10/13/97	0327	108968	1
PCB-1221	U	0.00	33.1	41.6	ug/kg	10.					
PCB-1232	U	0.00	33.1	41.6	ug/kg	10.					
PCB-1242	U	0.00	33.1	41.6	ug/kg	10.					
PCB-1248		161	33.1	41.6	ug/kg	10.					
PCB-1254	U	0.00	33.1	41.6	ug/kg	10.					
PCB-1260		348	33.1	41.6	ug/kg	10.					

The following prep procedures were performed:

PCB's

JPB 10/07/97 1600 108968 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	111.	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8081
M 2	EPA 3550





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NC	233	
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TN	02934	02934

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Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: October 14, 1997

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Sample ID : SPORTO536-3

M = Method

Method-Description

Notes:

The qualifiers in this report are defined as follows:

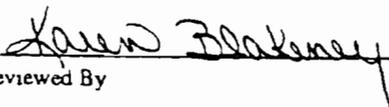
ND indicates that the analyte was not detected at a concentration greater than the detection limit.

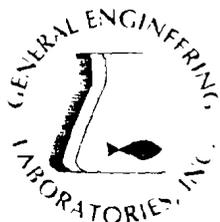
J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

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SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: October 14, 1997

Page 1 of 2

Sample ID : SPORT0536-4
 Lab ID : 9710121-04
 Matrix : Soil
 Date Collected : 10/06/97
 Date Received : 10/06/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	33.0	41.6	ug/kg	10.	JPA	10/13/97	0405	108968	1
PCB-1221	U	0.00	33.0	41.6	ug/kg	10.					
PCB-1232	U	0.00	33.0	41.6	ug/kg	10.					
PCB-1242	U	0.00	33.0	41.6	ug/kg	10.					
PCB-1248	U	0.00	33.0	41.6	ug/kg	10.					
PCB-1254	U	0.00	33.0	41.6	ug/kg	10.					
PCB-1260		88.4	33.0	41.6	ug/kg	10.					

The following prep procedures were performed:

PCB's JPB 10/07/97 1600 108968 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	111.	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8081
M 2	EPA 3550





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SUPSHIP-Portsmouth Detachment-Env.
1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

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Report Date: October 14, 1997

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Sample ID : SPORT0536-4

M = Method Method-Description

Notes:

The qualifiers in this report are defined as follows:

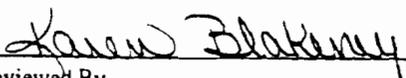
ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

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 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

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Sample ID : SPORT0536-5
 Lab ID : 9710121-05
 Matrix : Soil
 Date Collected : 10/06/97
 Date Received : 10/06/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	1660	1660	ug/kg	500	JPA	10/13/97	1235	108968	1
PCB-1221	U	0.00	1660	1660	ug/kg	500					
PCB-1232	U	0.00	1660	1660	ug/kg	500					
PCB-1242	U	0.00	1660	1660	ug/kg	500					
PCB-1248		8960	1660	1660	ug/kg	500					
PCB-1254	U	0.00	1660	1660	ug/kg	500					
PCB-1260		6040	1660	1660	ug/kg	500					

The following prep procedures were performed:

PCB's JPB 10/07/97 1600 108968 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	0.00*	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8081
M 2	EPA 3550





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Sample ID : SPORTO536-5

M = Method Method-Description

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

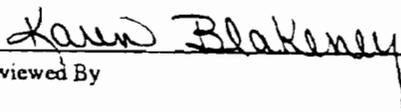
J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

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Contact: Mr. Bill Hiers

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Sample ID : SPORTO536-6
 Lab ID : 9710121-06
 Matrix : Soil
 Date Collected : 10/06/97
 Date Received : 10/06/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	32.6	41.6	ug/kg	10.	JPA	10/13/97	1119	108968	1
PCB-1221	U	0.00	32.6	41.6	ug/kg	10.					
PCB-1232	U	0.00	32.6	41.6	ug/kg	10.					
PCB-1242	U	0.00	32.6	41.6	ug/kg	10.					
PCB-1248	U	0.00	32.6	41.6	ug/kg	10.					
PCB-1254	U	0.00	32.6	41.6	ug/kg	10.					
PCB-1260		119	32.6	41.6	ug/kg	10.					

The following prep procedures were performed:

PCB's JPB 10/07/97 1600 108968 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	120.	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8081
M 2	EPA 3550





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Sample ID : SPORT0536-6

M = Method

Method-Description

Notes:

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Sample ID : SPORTO536-7
 Lab ID : 9710121-07
 Matrix : Soil
 Date Collected : 10/06/97
 Date Received : 10/06/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	1630	1630	ug/kg	500	JPA	10/13/97	1312	108968	1
PCB-1221	U	0.00	1630	1630	ug/kg	500					
PCB-1232	U	0.00	1630	1630	ug/kg	500					
PCB-1242	U	0.00	1630	1630	ug/kg	500					
PCB-1248		14200	1630	1630	ug/kg	500					
PCB-1254	U	0.00	1630	1630	ug/kg	500					
PCB-1260		5380	1630	1630	ug/kg	500					

The following prep procedures were performed:

PCB's JPB 10/07/97 1600 108968 2

Surrogate Recovery	Test	Percent %	Acceptable Limits
4CMX	PCB	0.00*	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8081
M 2	EPA 3550





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Sample ID : SPORTO536-7

M = Method

Method-Description

Notes:

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J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

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Karen Blakeney



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Sample ID : SPOR0536-8
 Lab ID : 9710121-08
 Matrix : Soil
 Date Collected : 10/06/97
 Date Received : 10/06/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	3270	3270	ug/kg	1000	JPA	10/13/97	1350	108968	1
PCB-1221	U	0.00	3270	3270	ug/kg	1000					
PCB-1232	U	0.00	3270	3270	ug/kg	1000					
PCB-1242	U	0.00	3270	3270	ug/kg	1000					
PCB-1248		35300	3270	3270	ug/kg	1000					
PCB-1254	U	0.00	3270	3270	ug/kg	1000					
PCB-1260		12800	3270	3270	ug/kg	1000					

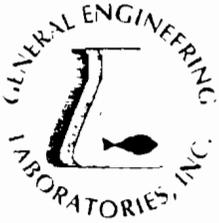
The following prep procedures were performed:

PCB's JPB 10/07/97 1600 108968 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	0.00*	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8081
M 2	EPA 3550





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Contact: Mr. Bill Hiers

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Sample ID : SPORTO536-8

M = Method

Method-Description

Notes:

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TN	02934	02934

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Sample ID : SPORTO536-9
 Lab ID : 9710121-09
 Matrix : Soil
 Date Collected : 10/06/97
 Date Received : 10/06/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	33.3	41.6	ug/kg	10.	JPA	10/13/97	1157	108968	1
PCB-1221	U	0.00	33.3	41.6	ug/kg	10.					
PCB-1232	U	0.00	33.3	41.6	ug/kg	10.					
PCB-1242	U	0.00	33.3	41.6	ug/kg	10.					
PCB-1248		54.9	33.3	41.6	ug/kg	10.					
PCB-1254	U	0.00	33.3	41.6	ug/kg	10.					
PCB-1260		110	33.3	41.6	ug/kg	10.					

The following prep procedures were performed:

PCB's JPB 10/07/97 1600 108968 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	99.8	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8081
M 2	EPA 3550





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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

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Report Date: October 14, 1997

Page 2 of 2

Sample ID : SPORTO536-9

M = Method

Method-Description

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

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Sample ID : SPORT0536-10
 Lab ID : 9710121-10
 Matrix : Soil
 Date Collected : 10/06/97
 Date Received : 10/06/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	32.6	41.6	ug/kg	10.	JPA	10/13/97	0908	108968	1
PCB-1221	U	0.00	32.6	41.6	ug/kg	10.					
PCB-1232	U	0.00	32.6	41.6	ug/kg	10.					
PCB-1242	U	0.00	32.6	41.6	ug/kg	10.					
PCB-1248		49.2	32.6	41.6	ug/kg	10.					
PCB-1254	U	0.00	32.6	41.6	ug/kg	10.					
PCB-1260		163	32.6	41.6	ug/kg	10.					

The following prep procedures were performed:
 PCB's

JPB 10/07/97 1600 108968 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	99.1	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8081
M 2	EPA 3550





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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

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Page 2 of 2

Sample ID : SPORTO536-10

M = Method Method-Description

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

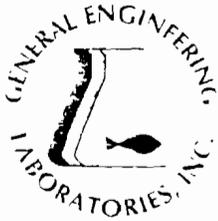
J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

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Sample ID : SPORTO536-11
 Lab ID : 9710121-11
 Matrix : Soil
 Date Collected : 10/06/97
 Date Received : 10/06/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	32.6	41.6	ug/kg	10.	JPA	10/12/97	1109	108968	1
PCB-1221	U	0.00	32.6	41.6	ug/kg	10.					
PCB-1232	U	0.00	32.6	41.6	ug/kg	10.					
PCB-1242	U	0.00	32.6	41.6	ug/kg	10.					
PCB-1248	U	0.00	32.6	41.6	ug/kg	10.					
PCB-1254	U	0.00	32.6	41.6	ug/kg	10.					
PCB-1260	U	0.00	32.6	41.6	ug/kg	10.					

The following prep procedures were performed:

PCB's

JPB 10/07/97 1600 108968 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	119.	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8081
M 2	EPA 3550





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Sample ID : SPORTO536-11

M = Method

Method-Description

Notes:

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Sample ID : SPORT0536-12
 Lab ID : 9710121-12
 Matrix : Soil
 Date Collected : 10/06/97
 Date Received : 10/06/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Metals Analysis											
Arsenic		9150	276	463	ug/kg	2.0	MBL	10/12/97	1355	108994	1
Beryllium	J	55.3	20.6	463	ug/kg	2.0					

The following prep procedures were performed:
 TRACE

CRB 10/07/97 1800 108994 2

M = Method	Method-Description
M 1	EPA 6010A
M 2	EPA 3050

Notes:

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SC	10120	10582
TN	02934	02934

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 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers
 Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: October 14, 1997

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Sample ID : SPORTO536-13
 Lab ID : 9710121-13
 Matrix : Soil
 Date Collected : 10/06/97
 Date Received : 10/06/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Metals Analysis											
Arsenic		8840	289	485	ug/kg	2.0	MBL	10/12/97	1400	108994	1
Beryllium	J	63.0	21.6	485	ug/kg	2.0					

The following prep procedures were performed:

TRACE

CRB 10/07/97 1800 108994 2

M = Method	Method-Description
M 1	EPA 6010A
M 2	EPA 3050

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

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Sample ID : SPORTO536-14
 Lab ID : 9710121-14
 Matrix : Soil
 Date Collected : 10/06/97
 Date Received : 10/06/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Metals Analysis											
Arsenic		1780	274	459	ug/kg	2.0	MBL	10/12/97	1405	108994	1
Beryllium	J	66.8	20.5	459	ug/kg	2.0					

The following prep procedures were performed:

TRACE

CRB 10/07/97 1800 108994 2

M = Method	Method-Description
M 1	EPA 6010A
M 2	EPA 3050

Notes:

The qualifiers in this report are defined as follows:

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U indicates that the analyte was not detected at a concentration greater than the detection limit.

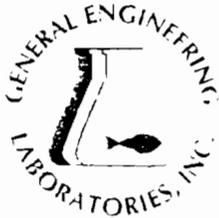
* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

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Sample ID : SPOR0536-15
 Lab ID : 9710121-15
 Matrix : Soil
 Date Collected : 10/06/97
 Date Received : 10/06/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Metals Analysis											
Arsenic		13400	274	459	ug/kg	2.0	MBL	10/12/97	1410	108994	1
Beryllium	J	42.0	20.5	459	ug/kg	2.0					

The following prep procedures were performed:
 TRACE

CRB 10/07/97 1800 108994 2

M = Method	Method-Description
M 1	EPA 6010A
M 2	EPA 3050

Notes:

- The qualifiers in this report are defined as follows:
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Sample ID : SPORTO536-16
 Lab ID : 9710121-16
 Matrix : Soil
 Date Collected : 10/06/97
 Date Received : 10/06/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Metals Analysis											
Arsenic		4690	274	459	ug/kg	2.0	MBL	10/12/97	1415	108994	1
Beryllium	J	44.4	20.5	459	ug/kg	2.0					

The following prep procedures were performed:
 TRACE

CRB 10/07/97 1800 108994 2

M = Method	Method-Description
M 1	EPA 6010A
M 2	EPA 3050

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

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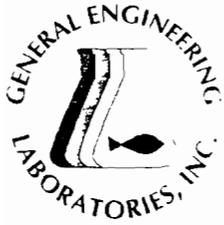
U indicates that the analyte was not detected at a concentration greater than the detection limit.

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Sample ID : SPORT0560-1
 Lab ID : 9710822-01
 Matrix : Soil
 Date Collected : 10/30/97
 Date Received : 10/30/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Metals Analysis											
Arsenic		2500	282	472	ug/kg	2.0	MBL	11/07/97	1422	110590	1

The following prep procedures were performed:

TRACE FGD 11/05/97 1700 110590 2

M = Method	Method-Description
M 1	EPA 6010A
M 2	EPA 3050

Notes:

The qualifiers in this report are defined as follows:

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Sample ID : SPORT0560-2
 Lab ID : 9710822-02
 Matrix : Soil
 Date Collected : 10/30/97
 Date Received : 10/30/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Metals Analysis											
Arsenic		1320	284	476	ug/kg	2.0	MBL	11/07/97	1412	110590	1

The following prep procedures were performed:

TRACE

FGD 11/05/97 1700 110590 2

M = Method

Method-Description

M 1	EPA 6010A
M 2	EPA 3050

Notes:

The qualifiers in this report are defined as follows:

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J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

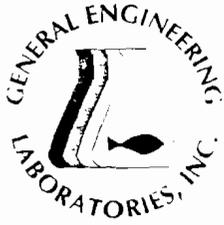
* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

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Sample ID : SPORT0560-3
 Lab ID : 9710822-03
 Matrix : Soil
 Date Collected : 10/30/97
 Date Received : 10/30/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Metals Analysis											
Arsenic	J	292	289	485	ug/kg	2.0	MBL	11/07/97	1417	110590	1

The following prep procedures were performed:

TRACE

FGD 11/05/97 1700 110590 2

M = Method	Method-Description
M 1	EPA 6010A
M 2	EPA 3050

Notes:

The qualifiers in this report are defined as follows:

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J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

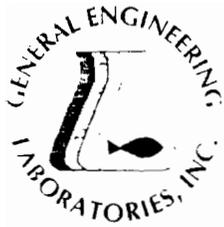
U indicates that the analyte was not detected at a concentration greater than the detection limit.

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Sample ID : SPORT0560-4
 Lab ID : 9710822-04
 Matrix : Soil
 Date Collected : 10/30/97
 Date Received : 10/30/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	33.0	41.6	ug/kg	10.	JPA	11/04/97	1945	110519	1
PCB-1221	U	0.00	33.0	41.6	ug/kg	10.					
PCB-1232	U	0.00	33.0	41.6	ug/kg	10.					
PCB-1242	U	0.00	33.0	41.6	ug/kg	10.					
PCB-1248	U	0.00	33.0	41.6	ug/kg	10.					
PCB-1254	U	0.00	33.0	41.6	ug/kg	10.					
PCB-1260	U	0.00	33.0	41.6	ug/kg	10.					

The following prep procedures were performed:

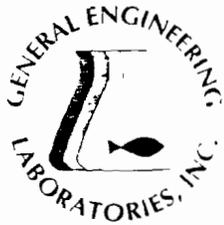
PCB's

HDB 11/03/97 1045 110519 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	130.	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8081
M 2	EPA 3550





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Sample ID : SPORT0560-4

M = Method

Method-Description

Notes:

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J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

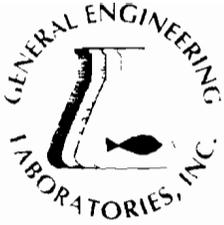
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Sample ID : SPORT0560-5
 Lab ID : 9710822-05
 Matrix : Soil
 Date Collected : 10/30/97
 Date Received : 10/30/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	325	325	ug/kg	100	JPA	11/05/97	0551	110519	1
PCB-1221	U	0.00	325	325	ug/kg	100					
PCB-1232	U	0.00	325	325	ug/kg	100					
PCB-1242	U	0.00	325	325	ug/kg	100					
PCB-1248		3100	325	325	ug/kg	100					
PCB-1254		1560	325	325	ug/kg	100					
PCB-1260	U	0.00	325	325	ug/kg	100					

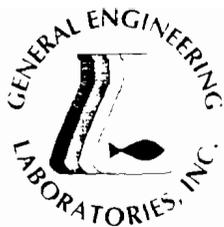
The following prep procedures were performed:
 PCB's

HDB 11/03/97 1045 110519 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	0.00*	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8081
M 2	EPA 3550





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Sample ID : SPORT0560-5

M = Method

Method-Description

Notes:

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Sample ID : SPORT0560-6
 Lab ID : 9710822-06
 Matrix : Soil
 Date Collected : 10/30/97
 Date Received : 10/30/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	131	131	ug/kg	40.	JPA	11/05/97	0628	110519	1
PCB-1221	U	0.00	131	131	ug/kg	40.					
PCB-1232	U	0.00	131	131	ug/kg	40.					
PCB-1242	U	0.00	131	131	ug/kg	40.					
PCB-1248		1100	131	131	ug/kg	40.					
PCB-1254	U	0.00	131	131	ug/kg	40.					
PCB-1260		705	131	131	ug/kg	40.					

The following prep procedures were performed:

PCB's

HDB 11/03/97 1045 110519 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	96.2	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8081
M 2	EPA 3550





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Sample ID : SPORT0560-6

M = Method

Method-Description

Notes:

The qualifiers in this report are defined as follows:

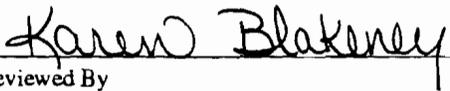
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Sample ID : SPORT0560-7
 Lab ID : 9710822-07
 Matrix : Soil
 Date Collected : 10/30/97
 Date Received : 10/30/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	132	132	ug/kg	40.	JPA	11/05/97	0706	110519	1
PCB-1221	U	0.00	132	132	ug/kg	40.					
PCB-1232	U	0.00	132	132	ug/kg	40.					
PCB-1242	U	0.00	132	132	ug/kg	40.					
PCB-1248		940	132	132	ug/kg	40.					
PCB-1254		542	132	132	ug/kg	40.					
PCB-1260	U	0.00	132	132	ug/kg	40.					

The following prep procedures were performed:

PCB's

HDB 11/03/97 1045 110519 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	120.	(36.5 - 172.)

M = Method

Method-Description

M 1	EPA 8081
M 2	EPA 3550





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Project Description: SUPSHIP-Portsmouth Detachment

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Sample ID : SPORT0560-7

M = Method

Method-Description

Notes:

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Sample ID : SPORT0560-8
 Lab ID : 9710822-08
 Matrix : Soil
 Date Collected : 10/30/97
 Date Received : 10/30/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	32.5	41.6	ug/kg	10.	JPA	11/05/97	0745	110519	1
PCB-1221	U	0.00	32.5	41.6	ug/kg	10.					
PCB-1232	U	0.00	32.5	41.6	ug/kg	10.					
PCB-1242	U	0.00	32.5	41.6	ug/kg	10.					
PCB-1248	U	0.00	32.5	41.6	ug/kg	10.					
PCB-1254	U	0.00	32.5	41.6	ug/kg	10.					
PCB-1260	J	38.7	32.5	41.6	ug/kg	10.					

The following prep procedures were performed:

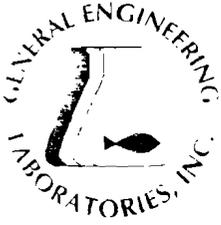
PCB's

HDB 11/03/97 1045 110519 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	114.	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8081
M 2	EPA 3550





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 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: November 06, 1997

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Sample ID : SPORT0560-9
 Lab ID : 9710822-09
 Matrix : Soil
 Date Collected : 10/30/97
 Date Received : 10/30/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	33.1	41.6	ug/kg	10.	JPA	11/05/97	0010	110519	1
PCB-1221	U	0.00	33.1	41.6	ug/kg	10.					
PCB-1232	U	0.00	33.1	41.6	ug/kg	10.					
PCB-1242	U	0.00	33.1	41.6	ug/kg	10.					
PCB-1248	U	0.00	33.1	41.6	ug/kg	10.					
PCB-1254	U	0.00	33.1	41.6	ug/kg	10.					
PCB-1260	U	0.00	33.1	41.6	ug/kg	10.					

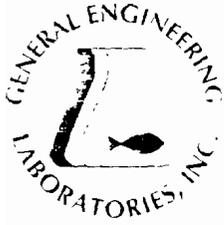
The following prep procedures were performed:
 PCB's

HDB 11/03/97 1045 110519 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	144.	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8081
M 2	EPA 3550





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Sample ID : SPORT0560-9

M = Method

Method-Description

Notes:

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ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

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Sample ID : SPORT0560-10
 Lab ID : 9710822-10
 Matrix : Soil
 Date Collected : 10/30/97
 Date Received : 10/30/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	32.8	41.6	ug/kg	10.	JPA	11/05/97	0048	110519	1
PCB-1221	U	0.00	32.8	41.6	ug/kg	10.					
PCB-1232	U	0.00	32.8	41.6	ug/kg	10.					
PCB-1242	U	0.00	32.8	41.6	ug/kg	10.					
PCB-1248	U	0.00	32.8	41.6	ug/kg	10.					
PCB-1254	U	0.00	32.8	41.6	ug/kg	10.					
PCB-1260	U	0.00	32.8	41.6	ug/kg	10.					

The following prep procedures were performed:

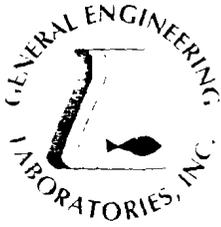
PCB's

HDB 11/03/97 1045 110519 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	152.	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8081
M 2	EPA 3550





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Sample ID : SPORT0560-10

M = Method

Method-Description

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

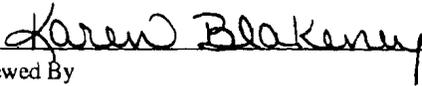
J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

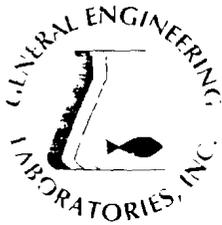
* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

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Sample ID : SPORT0560-11
 Lab ID : 9710822-11
 Matrix : Soil
 Date Collected : 10/30/97
 Date Received : 10/30/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	33.0	41.6	ug/kg	10.	JPA	11/05/97	0127	110519	1
PCB-1221	U	0.00	33.0	41.6	ug/kg	10.					
PCB-1232	U	0.00	33.0	41.6	ug/kg	10.					
PCB-1242	U	0.00	33.0	41.6	ug/kg	10.					
PCB-1248	U	0.00	33.0	41.6	ug/kg	10.					
PCB-1254	U	0.00	33.0	41.6	ug/kg	10.					
PCB-1260	U	0.00	33.0	41.6	ug/kg	10.					

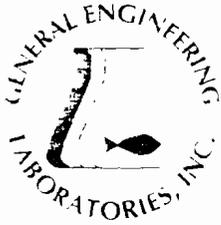
The following prep procedures were performed:
 PCB's

HDB 11/03/97 1045 110519 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	146.	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8081
M 2	EPA 3550





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Sample ID : SPORT0560-11

M = Method

Method-Description

Notes:

The qualifiers in this report are defined as follows:

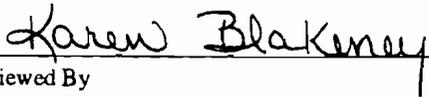
ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

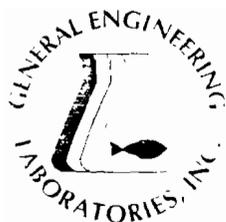
* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

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Sample ID : SPORT0560-12
 Lab ID : 9710822-12
 Matrix : Soil
 Date Collected : 10/30/97
 Date Received : 10/30/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	33.3	41.6	ug/kg	10.	JPA	11/05/97	0204	110519	1
PCB-1221	U	0.00	33.3	41.6	ug/kg	10.					
PCB-1232	U	0.00	33.3	41.6	ug/kg	10.					
PCB-1242	U	0.00	33.3	41.6	ug/kg	10.					
PCB-1248	U	0.00	33.3	41.6	ug/kg	10.					
PCB-1254	U	0.00	33.3	41.6	ug/kg	10.					
PCB-1260	U	0.00	33.3	41.6	ug/kg	10.					

The following prep procedures were performed:

PCB's

HDB 11/03/97 1045 110519 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	118.	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8081
M 2	EPA 3550





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Sample ID : SPORT0560-12

M = Method

Method-Description

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

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Karen Blakeney

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Contact: Mr. Bill Hiers

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Page 1 of 2

Sample ID : SPORT0560-13
 Lab ID : 9710822-13
 Matrix : Soil
 Date Collected : 10/30/97
 Date Received : 10/30/97
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	32.9	41.6	ug/kg	10.	JPA	11/05/97	0242	110519	1
PCB-1221	U	0.00	32.9	41.6	ug/kg	10.					
PCB-1232	U	0.00	32.9	41.6	ug/kg	10.					
PCB-1242	U	0.00	32.9	41.6	ug/kg	10.					
PCB-1248	U	0.00	32.9	41.6	ug/kg	10.					
PCB-1254	U	0.00	32.9	41.6	ug/kg	10.					
PCB-1260	U	0.00	32.9	41.6	ug/kg	10.					

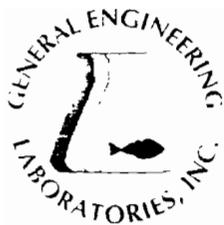
The following prep procedures were performed:

PCB's HDB 11/03/97 1045 110519 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	58.2	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8081
M 2	EPA 3550





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TN	02934	02934

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Sample ID : SPORT0560-13

M = Method

Method-Description

Notes:

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J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

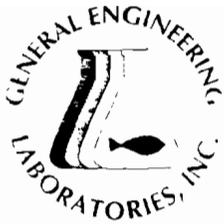
* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

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November 1997 Sampling Event



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Contact: Mr. Bill Hiers

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Sample ID : Sport 0572-1
 Lab ID : 9711564-01
 Matrix : Soil
 Date Collected : 11/18/97
 Date Received : 11/19/97
 Priority : Rush
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	32.7	41.6	ug/kg	10.	JPA	11/23/97	1828	111628	1
PCB-1221	U	0.00	32.7	41.6	ug/kg	10.					
PCB-1232	U	0.00	32.7	41.6	ug/kg	10.					
PCB-1242	U	0.00	32.7	41.6	ug/kg	10.					
PCB-1248	U	0.00	32.7	41.6	ug/kg	10.					
PCB-1254	U	0.00	32.7	41.6	ug/kg	10.					
PCB-1260	U	0.00	32.7	41.6	ug/kg	10.					

The following prep procedures were performed:

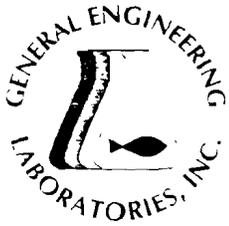
PCB's

HDB 11/20/97 0900 111628 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
4CMX	PCB	88.2	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8081
M 2	EPA 3550





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Sample ID : Sport 0572-1

M = Method

Method-Description

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

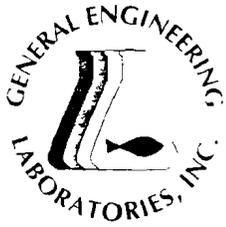
* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

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SC	10120	10582
TN	02934	02934

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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

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Sample ID : Sport 0572-2
 Lab ID : 9711564-02
 Matrix : Soil
 Date Collected : 11/18/97
 Date Received : 11/19/97
 Priority : Rush
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>PCB analysis - 7 items</i>											
PCB-1016	U	0.00	33.3	41.6	ug/kg	10.	JPA	11/23/97	1904	111628	1
PCB-1221	U	0.00	33.3	41.6	ug/kg	10.					
PCB-1232	U	0.00	33.3	41.6	ug/kg	10.					
PCB-1242	U	0.00	33.3	41.6	ug/kg	10.					
PCB-1248	U	0.00	33.3	41.6	ug/kg	10.					
PCB-1254	U	0.00	33.3	41.6	ug/kg	10.					
PCB-1260	U	0.00	33.3	41.6	ug/kg	10.					

The following prep procedures were performed:
 PCB's

HDB 11/20/97 0900 111628 2

Surrogate Recovery	Test	Percent %	Acceptable Limits
4CMX	PCB	85.8	(36.5 - 172.)

M = Method	Method-Description
M 1	EPA 8081
M 2	EPA 3550





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SC	10120	10582
TN	02934	02934

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Sample ID : Sport 0572-2

M = Method	Method-Description
------------	--------------------

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U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

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APPENDIX C

PHOTOGRAPHS



Transformer station facing west.



Transformer station facing south. Three 500 lb transformers are visible in foreground, the three 4500 lb transformers are in the background.



**Transformers damaged by fire, building 2509 is to the right.
Facing northwest.**



Area excavated on 02 October 1997, building 2509 in background.



Area excavated on 30 October 1997, facing south.



Area excavated on 30 October 1997, facing east.



Site conditions upon completion of excavation activities, building 2509 in background.

APPENDIX D

DRAWINGS

Figure 1

