N60201.AR.000581
NS MAYPORT
5090.3a

LIMITED TANK CLOSURE REPORT ABOVEGROUND STORAGE TANK NUMBER 204 RELIABLE MECHANICAL JOB NS MAYPORT FL

10/16/2001

AEROSTAR ENVIRONMENTAL SERVICES

LIMITED TANK CLOSURE REPORT
ABOVEGROUND STORAGE TANK NO. 204
RELIABLE MECHANICAL JOB
MAYPORT NAVAL STATION
MAYPORT, FLORIDA

AEROSTAR
ENVIRONMENTAL SERVICES, INC.

11200-1 St. Johns Industrial Parkway • Jacksonville, Florida 32246 • 904/565-2820 • FAX 904/565-2830
1041 Johnnie Dodds Boulevard, Suite 5C • Mt. Pleasant, South Carolina 29464 • 843/971-2689 • FAX 843/971-6912
e-mail www.aerostar.net

LIMITED TANK CLOSURE REPORT
ABOVEGROUND STORAGE TANK NO. 204
RELIABLE MECHANICAL JOB
MAYPORT NAVAL STATION
MAYPORT, FLORIDA

PREPARED FOR:

Environmental Recovery Group, Inc.
251 Levy Road
Atlantic Beach, Florida 32233-0569
ERG Job Number 3369

PREPARED BY:

Aerostar Environmental Services, Inc.
11200 St. Johns Industrial Parkway, Suite 1
Jacksonville, Florida 32246
(904) 565-2820

RECEIVED
JAN 0 8 2002
BY:

Richard D. McCann, Project Manager — 10/16/01 Date

Leon J. Carrero, P.G.; Manager, Environmental Services — 10/16/01 Date

F:\PROJECTS\2001\01-150-06\AST204closure.wpd

TABLE OF CONTENTS

SECTION		PAGE
1.0	INTRODUCTION	1
2.0	STORAGE TANK REMOVAL PROCEDURES	1
3.0	ENVIRONMENTAL MONITORING ACTIVITIES	2
4.0	RECOMMENDATIONS	4

TABLES

TABLE 1	Soil Screening Summary
TABLE 2	Soil Analytical Summary
TABLE 3	Temporary Well Construction Details
TABLE 4	Groundwater Laboratory Analytical Summary

FIGURES

FIGURE 1	Topographic Site Location Map
FIGURE 2	Site Plan and Sampling Locations

APPENDICES

APPENDIX A	Limited Closure Summary Report
APPENDIX B	Storage Tank Facility Registration Form
APPENDIX C	Photographic Documentation
APPENDIX D	Laboratory Analytical Reports

1.0 INTRODUCTION

Aerostar Environmental Services, Inc. (AEROSTAR) provided environmental services during closure of an aboveground storage tank (AST) system (hereafter referred to as Tank #204), located at the Mayport Naval Station, Mayport, Duval County, Florida, Florida Department of Environmental Protection (FDEP) facility ID #168626008; hereafter referred to as the site. According to Navy records, the AST was used to store diesel fuel. A topographic map showing the location of the site is included as Figure 1. Demolition and AST closure activities were conducted by Realco Wrecking and Recycling under the management of Reliable Mechanical, Inc. (RMI) of Louisville, Kentucky. Environmental assessment activities were conducted by AEROSTAR personnel in accordance with the guidelines established in the Storage Tank System Closure Assessment Requirements and following closure specifications provided by RMI. Based on the results of this investigation, further assessment is recommended for the area of the former AST system. The following sections present the AST system location and description, closure procedures and results of the environmental monitoring activities.

2.0 STORAGE TANK REMOVAL PROCEDURES

The former AST system was located approximately 350 feet south of the St. Johns River on the Mayport Naval Station, and consisted of a 1.5 million gallon steel tank containing diesel fuel. The AST was constructed of welded steel sheets and placed on a one-foot thick round concrete pad, approximately 100 feet in diameter. Information obtained by AEROSTAR from the Navy indicated that the AST was installed in 1964. A site plan showing the location of the former AST system is included as Figure 2.

The AST system was removed between August 14 and August15, 2001 by Realco Recycling and Wrecking Company, a subcontractor to RMI. Prior to demolition, the remaining contents of Tank #204 were transferred to another tank located at the site. The interior of the tank was cleaned by Environmental Recovery Group, Inc. (ERG). The rinse water was transported by ERG to Waste Recovery, Incorporated (WRI) in Jacksonville, Florida for proper disposal. The steel roof and walls of the tank were demolished and properly disposed of, leaving only the steel tank bottom (approximately 0.5-inches thick) and the one-foot thick concrete pad. Copies of the Limited Closure

Summary Report and the Storage Tank Facility Registration Form are included in Appendices A and B, respectively. Photographic documentation of the site conditions during soil and groundwater sampling activities is included in Appendix C.

3.0 ENVIRONMENTAL MONITORING ACTIVITIES

On August 16 and August 17, 2001, soil borings PB-1 through PB-8 were advanced around the perimeter of the former AST. On August 17, 2001, additional soil borings TB-1 through TB-5 were advanced through the concrete pad to further evaluate soil quality. Soil samples were collected during boring advancement at one-foot intervals from approximately one foot below land surface (BLS) to approximately four feet BLS using a three-inch diameter, stainless steel hand auger. The soil samples from the perimeter borings PB-1 through PB-8 were screened with a calibrated portable Heath Tech Porta-FID III™ Organic Vapor Analyzer with a Flame Ionization Detector (OVA-FID). Each sample was also screened with a charcoal filter to differentiate the instrument's response to naturally occurring methane vapors. The difference between the readings is the vapor concentration attributed to petroleum hydrocarbons. In addition to the OVA-FID screening, each sample was inspected for signs of hydrocarbon staining and unusual odors. All soil samples collected from the tank bottom borings TB-1 through TB-5 were saturated and therefore were not field screened for organic vapors. Soil sample collection and screening activities were conducted in accordance with AEROSTAR's FDEP-approved Comprehensive Quality Assurance Project Plan (ComQAPP) #940023G.

Hydrocarbon vapors were detected above the State target level of 10 parts per million (ppm), established as a "positive field screening result" in Chapter 62-770, Florida Administrative Code (FAC). Maximum vapor concentrations detected in soil samples collected from the vadose zone ranged from 12 ppm to 1660 ppm. Results of the soil vapor screening are included in Table 1. The soil sample locations are shown in Figure 2.

Soil samples exhibiting the highest OVA responses from each borehole were collected for laboratory analyses. A soil sample was collected for laboratory analyses from each boring location with no "positive field screening result." The sample was collected approximately one foot above the static

water table. The samples were submitted to Environmental Conservation Laboratories, Inc. (Enco) in Jacksonville, Florida for analyses of the parameters listed in EPA Method 8260 for Volatile Organic Aromatics (VOAs), EPA Method 8310 for Polynuclear Aromatic Hydrocarbons (PAHs), and Total Recoverable Petroleum Hydrocarbons (TRPHs) by the FL-PRO Method. Soil sampling activities were conducted in accordance with AEROSTAR's FDEP-approved ComQAPP #940023G.

Results of the soil laboratory analyses indicated TRPH concentrations above State Cleanup Target Levels (SCTLs) in soil samples collected from the area of the former AST. Soil analytical results are summarized in Table 2. The laboratory analytical reports are included in Appendix D.

On August 16 and August 17, 2001, thirteen temporary wells (PB-1 through PB-8 and TB-1 through TB-5) were installed at the locations of the soil borings, as shown in Figure 2. The temporary wells were installed approximately eight feet BLS using a three-inch diameter, stainless steel hand auger. The water table surface was encountered at approximately 4.5 feet BLS during the assessment activities. The temporary well construction details are summarized in Table 3.

Groundwater samples were collected from the temporary wells for analyses of the parameters listed in EPA Method 601 for Volatile Organic Hydrocarbons (VOHs), EPA Method 602 for VOAs, EPA Method 610 for PAHs, EPA Method 504 for Ethylene Dibromide, TRPH by the FL-PRO Method, and EPA Method 200.7 for Total Lead by the quiescent sampling method using an adjustable-flow peristaltic pump to minimize sample turbidity. The remaining samples were collected using disposable bailers after purging each well of five well volumes to ensure representative samples of actual aquifer conditions. Groundwater sampling activities were conducted in accordance with AEROSTAR's FDEP-approved ComQAPP #940023G.

Results of the groundwater analyses showed hydrocarbons concentrations above SCTLs in the samples collected in the area of the AST. Groundwater analytical results with corresponding State target levels are summarized in Table 4. Laboratory analytical reports are included in Appendix D.

4.0 RECOMMENDATIONS

Hydrocarbon concentrations were detected above the State target levels established in Chapter 62-777, FAC, in the groundwater and soil samples collected for this investigation. Based on the results of the tank closure, further assessment activities are recommended for the area of the former AST.

TABLES

TABLE 1: SOIL SCREENING SUMMARY

Facility Name: Mayport AST Closure /Tank #204 **Facility ID No: 168626008**

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
TB-1	8/17/01	~0.5	1	NS	NS	NS	TB-1 = Tank Bottom Sampling Location 1
			2	NS	NS	NS	
			3	NS	NS	NS	
TB-2	8/17/01	~0.5	1	NS	NS	NS	Concrete Bottom ~16-in. Thick
			2	NS	NS	NS	
			3	NS	NS	NS	
TB-3	8/17/01	~0.5	1	NS	NS	NS	Concrete Bottom ~16-in. Thick
			2	NS	NS	NS	
			3	NS	NS	NS	
TB-4	8/17/01	~0.5	1	NS	NS	NS	Concrete Bottom ~16-in. Thick
			2	NS	NS	NS	
			3	NS	NS	NS	
TB-5	8/17/01	~0.5	1	NS	NS	NS	Concrete Bottom ~16-in. Thick
			2	NS	NS	NS	
			3	NS	NS	NS	
PB-1	8/16/01	~4.5	1	3	0	3	PB-1 = Perimeter Boring 1
			2	12	0	12	
			3	0	0	0	
			4	0	0	0	
PB-2	8/16/01	~4.5	1	0	0	0	
			2	0	0	0	
			3	0	0	0	
			4	0	0	0	
PB-3	8/16/01	~4.5	1	0	0	0	
			2	0	0	0	
			3	0	0	0	
			4	0	0	0	
PB-4	8/16/01	~4.5	1	0	0	0	
			2	0	0	0	
			3	0	0	0	
			4	2000	340	1660	
PB-5	8/16/01	~4.0	1	0	0	0	
			2	0	0	0	
			3	0	0	0	
PB-6	8/17/01	~4.0	1	0	0	0	
			2	0	0	0	
			3	0	0	0	
PB-7	8/17/01	~3.0	1	0	0	0	
			2	0	0	0	
			3	0	0	0	
PB-8	8/17/01	~3.0	1	0	0	0	
			2	0	0	0	
			3	0	0	0	

NS = Not Screened-All samples were saturated

TABLE 2: SOIL ANALYTICAL SUMMARY

Facility Name: Mayport Tank Closure/Tank #204 **Facility ID Number: 168626008**

Sample				OVA									
Sample ID	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	Naph-thalene (mg/kg)	1-Methyl-napthalene (mg/kg)	2-Methyl-napthalene (mg/kg)	TRPH (mg/kg)
Residenital Direct Exposure Limits					1.1	380	1100	5900	3200	40	68	80	340
Commercial Direct Exposure Limits					1.6	2600	8400	40000	22000	270	470	560	2500
Leachability Groundwater Limits					0.007	0.5	0.6	0.2	0.2	1.7	2.2	6.1	340
TB-1	8/17/01	~0.5	3	NS	<0.0011	<0.0011	<0.0011	0.001	<0.0011	<0.020	<0.040	<0.040	<8.0
TB-2	8/17/01	~0.5	2.5	NS	<0.001	0.0015	<0.001	0.0022	<0.001	<0.021	<0.041	<0.041	<8.2
TB-3	8/17/01	~0.5	3.5	NS	<0.0012	0.002	<0.001	0.0018	<0.001	<0.020	<0.040	<0.040	<8.0
TB-4	8/17/01	~0.5	3	NS	<0.0012	0.0056	0.0021	0.0129	<0.001	<0.020	<0.041	<0.041	<8.1
TB-5	8/17/01	~0.5	2.5	NS	<0.0012	<0.001	<0.001	0.001	<0.001	<0.020	<0.041	<0.041	<8.1
PB-1	8/16/01	~4.5	2	12	<0.0013	<0.0013	<0.0013	<0.0037	<0.0013	<0.019	<0.038	<0.038	<7.6
PB-2	8/16/01	~4.5	4	0	<0.0015	<0.0015	<0.0015	<0.0046	<0.0015	<0.022	<0.044	<0.044	<8.8
PB-3	8/16/01	~4.5	4	0	<0.0014	<0.0014	<0.0014	<0.0042	<0.0014	<0.021	<0.042	<0.042	**350**
PB-4	8/16/01	~4.5	4	1660	<0.13	<0.13	<0.13	<0.39	<0.13	<0.21	<0.43	<0.43	**5200**
PB-5	8/16/01	~4.0	3	0	<0.0014	<0.0014	<0.0014	<0.0041	<0.0014	<0.021	<0.042	<0.042	14
PB-6	8/17/01	~4.0	3	0	<0.0013	<0.0013	<0.0013	0.0014	<0.0013	<0.020	<0.039	<0.039	<7.8
PB-7	8/17/01	~3.0	2	0	<0.002	<0.002	<0.002	0.0017	<0.002	<0.025	<0.051	<0.051	<10
PB-8	8/17/01	~3.0	2	0	<0.001	<0.001	<0.001	0.0012	<0.001	<0.018	<0.036	<0.036	<7.2

NS = Not Screened-All samples were saturated

TABLE 2: SOIL ANALYTICAL SUMMARY

Facility Name: Mayport Tank Closure/Tank #204 **Facility ID Number: 168626008**

Sample				OVA														
Sample ID	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (mg/kg)	Acenaphthene (mg/kg)	Fluorene (mg/kg)	Phenanthrene (mg/kg)	Anthracene (mg/kg)	Fluor-anthene (mg/kg)	Pyrene (mg/kg)	Benzo (a)-anthracene (mg/kg)	Chrysene (mg/kg)	Benzo (b) fluoranthene (mg/kg)	Benzo (k) fluoranthene (mg/kg)	Benzo (a)-pyrere (mg/kg)	Dibenzo(a,h)-anthracene (mg/kg)	Benzo(g,h,i,)-perylene (mg/kg)	Ideno(1,2,3-cd)-pyrene (mg/kg)
Direct Exposure Limits					1900	2200	2000	18000	2900	2200	1.4	140	1.4	15	0.1	0.1	2300	1.5
Direct Exposure Limits					18000	28000	30000	260000	48000	37000	5	450	4.8	52	0.5	0.5	41000	5.3
Groundwater Limits					2.1	160	250	2500	1200	880	32	77	10	25	8	30	32000	28
TB-1	8/17/01	~0.5	3	NS	<0.020	<0.004	<0.040	<0.020	<0.004	<0.004	<0.020	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
TB-2	8/17/01	~0.5	2.5	NS	<0.021	<0.0041	<0.041	<0.021	<0.0041	<0.0041	<0.021	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041
TB-3	8/17/01	~0.5	3.5	NS	<0.020	<0.004	<0.040	<0.020	0.008	0.0099	<0.020	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
TB-4	8/17/01	~0.5	3	NS	<0.020	<0.0041	<0.041	<0.020	<0.0041	<0.0041	<0.020	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041
TB-5	8/17/01	~0.5	2.5	NS	<0.020	<0.0041	<0.041	<0.020	<0.0041	<0.0041	<0.020	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041	<0.0041
PB-1	8/16/01	~4.5	2	12	0.097	<0.0038	0.2	<0.019	0.42	0.43	0.16	0.15	0.056	0.04	0.052	0.017	0.02	0.038
PB-2	8/16/01	~4.5	4	0	<0.022	<0.0044	<0.044	<0.022	0.074	0.084	0.039	0.04	0.017	0.011	0.014	0.0047	0.0056	0.029
PB-3	8/16/01	~4.5	4	0	<0.021	<0.0042	<0.042	<0.021	0.023	0.042	<0.021	0.01	<0.0042	<0.0042	<0.0042	<0.0042	<0.0042	<0.0042
PB-4	8/16/01	~4.5	4	1660	<0.21	0.043	<0.43	<0.21	0.058	0.093	<0.21	<0.043	<0.043	<0.043	<0.043	<0.043	<0.043	<0.043
PB-5	8/16/01	~4.0	3	0	0.31	<0.0042	0.76	<0.021	1.2	1.3	0.49	0.46	0.16	0.12	0.17	0.049	0.059	0.11
PB-6	8/17/01	~4.0	3	0	<0.020	<0.0039	<0.039	<0.020	0.012	0.015	<0.020	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039
PB-7	8/17/01	~3.0	2	0	<0.025	<0.0051	<0.051	<0.025	0.0069	0.0078	<0.025	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051
PB-8	8/17/01	~3.0	2	0	<0.018	<0.0036	<0.036	<0.018	<0.013	<0.016	<0.018	<0.0035	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036

NS = Not Screened-All samples were saturated

TABLE 3: TEMPORARY WELL CONSTRUCTION DETAILS

Facility Name: Mayport Tank Closure/Tank #204 Facility ID No: 168626008

WELL NO.	DATE INSTALLED	INSTALLATION METHOD	TOP OF CASING ELEVATION	A/G RISER LENGTH, IF APPLICABLE	TOTAL WELL DEPTH (FEET)	SCREENED INTERVAL (FBLS)	WELL DIAMETER (IN.)	LITHOLOGY OF SCREENED INTERVAL
TB-1	8/17/01	HAND AUGER	NA	NA	~8	0-8	2	light tan-gray, sand with trace shell fragments
TB-2	8/17/01	HAND AUGER	NA	NA	~8	0-8	2	light tan-gray, sand with trace shell fragments
TB-3	8/17/01	HAND AUGER	NA	NA	~8	0-8	2	light tan-gray, sand with trace shell fragments
TB-4	8/17/01	HAND AUGER	NA	NA	~8	0-8	2	light tan-gray, sand with trace shell fragments
TB-5	8/17/01	HAND AUGER	NA	NA	~8	0-8	2	light tan-gray, sand with trace shell fragments
PB-1	8/16/01	HAND AUGER	NA	NA	~8	0-8	2	light tan-gray, sand with trace shell fragments
PB-2	8/16/01	HAND AUGER	NA	NA	~8	0-8	2	light tan-gray, sand with trace shell fragments
PB-3	8/16/01	HAND AUGER	NA	NA	~8	0-8	2	light tan-gray, sand with trace shell fragments
PB-4	8/16/01	HAND AUGER	NA	NA	~8	0-8	2	light tan-gray, sand with trace shell fragments
PB-5	8/16/01	HAND AUGER	NA	NA	~8	0-8	2	light tan-gray, sand with trace shell fragments
PB-6	8/17/01	HAND AUGER	NA	NA	~8	0-8	2	light tan-gray, sand with trace shell fragments
PB-7	8/17/01	HAND AUGER	NA	NA	~8	0-8	2	light tan-gray, sand with trace shell fragments
PB-8	8/17/01	HAND AUGER	NA	NA	~8	0-8	2	light tan-gray, sand with trace shell fragments

TABLE 4: GROUNDWATER LABORATORY ANALYTICAL SUMMARY

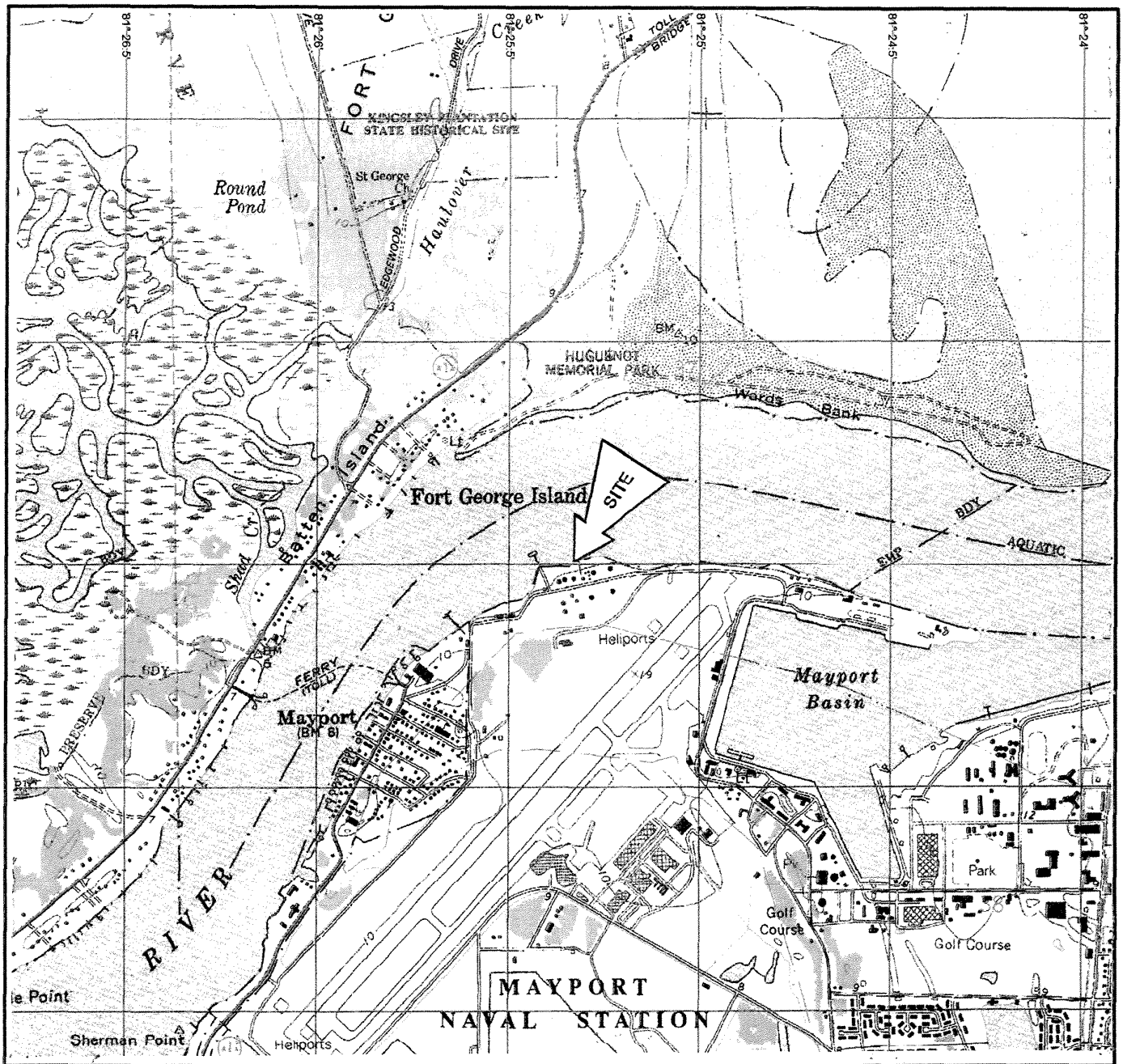
Facility Name: Mayport Tank Closure/Tank #204

Facility ID No: 168626008

Not Analyzed = NA
All results in micrograms per liter (ug/L)

Sample Location	Date	Benzene	Toluene	Ethyl-berzene	Total Xylenes	MTBE	Naph-thalene	1-Methyl napthalene	2-Methyl napthalene	Chloro-methane	Acenaph-thene	Fluorene	Fluor-anthene	Pyrene	Benzo(a)-anthracene	Chrysene	Lead	EDB	TRPH mg/L
SCTL		1	40	30	20	50	20	20	20	2.7	20	280	280	210	0.2	4.8	15	0.02	5000
TB-1	08/17/01	<1.0	<1.0	<1.0	<2.0	<2.0	3.1	3.9	3.8	<1.0	<0.50	<0.10	0.94	1.1	<0.10	<0.10	<5.0	<0.020	1.2
TB-2	08/17/01	<1.0	<1.0	<1.0	<2.0	<2.0	1.2	<1.0	<1.0	<1.0	<0.50	1.2	1.7	1.6	<0.10	<0.10	<5.0	<0.020	0.87
TB-3	08/17/01	<1.0	<1.0	<1.0	<2.0	<2.0	<0.50	<1.0	<1.0	<1.0	<0.50	<0.10	2.5	2.7	**0.64**	0.76	<5.0	<0.020	1.1
TB-4	08/17/01	<1.0	<1.0	<1.0	<2.0	<2.0	<0.50	<1.0	<1.0	**3.8**	<0.50	<0.10	2.4	2.3	**0.30**	0.33	6.0	<0.020	1.2
TB-5	08/17/01	<1.0	<1.0	<1.0	<2.0	<2.0	<0.50	<1.0	<1.0	**6.1**	<0.50	<0.10	2.1	1.9	**0.26**	0.28	8.0	<0.020	0.91
PB-1	08/16/01	<1.0	<1.0	<1.0	<2.0	<2.0	<0.50	<1.0	<1.0	**4.7**	<0.50	<0.10	0.95	0.69	<0.10	<0.10	<5.0	<0.020	0.69
PB-2	08/16/01	<1.0	<1.0	<1.0	<2.0	<2.0	<0.50	<1.0	<1.0	<1.0	<0.50	<0.10	0.14	0.35	<0.10	<0.10	<5.0	<0.020	<0.20
PB-3	08/16/01	<1.0	<1.0	<1.0	<2.0	<2.0	<0.50	<1.0	<1.0	<1.0	<0.50	<0.10	0.17	0.57	<0.10	<0.10	<5.0	<0.020	0.28
PB-4	08/16/01	<1.0	<1.0	<1.0	<2.0	<2.0	<0.50	<1.0	<1.0	<1.0	<0.50	<0.10	0.46	1.1	<0.10	<0.10	<5.0	<0.020	7.7
PB-5	08/16/01	<1.0	<1.0	<1.0	<2.0	<2.0	<0.50	<1.0	<1.0	<1.0	<0.50	<0.10	<0.10	0.21	<0.10	<0.10	<5.0	<0.020	<0.20
PB-6	08/17/01	<1.0	<1.0	<1.0	<2.0	<2.0	<0.50	<1.0	<1.0	<1.0	<0.50	<0.10	<0.10	0.26	<0.10	<0.10	<5.0	<0.020	<0.20
PB-7	08/17/01	<1.0	<1.0	<1.0	<2.0	<2.0	<0.50	<1.0	<1.0	<1.0	0.51	<0.10	0.83	1.3	<0.10	<0.10	<5.0	<0.020	3.3
PB-8	08/17/01	<1.0	<1.0	<1.0	<2.0	<2.0	<0.50	<1.0	<1.0	<1.0	<0.50	<0.10	<0.10	<0.10	<0.10	<0.10	<5.0	<0.020	<0.20

FIGURES



MAYPORT QUADRANGLE

30081-B5-TF-024

PHOTOREVISED 1982

DMA 4744 IV NW-SERIES V847

7.5 MINUTE SERIES
(TOPOGRAPHIC)

CONTOUR INTERVAL 10 FEET

QUADRANGLE LOCATION

SCALE:
1:24,000

NATIONAL GEODETIC VERTICAL DATUM OF 1929

FIGURE 1 TOPOGRAPHIC SITE LOCATION MAP

AEROSTAR
ENVIRONMENTAL SERVICES, INC.

MAYPORT TANK CLOSURE/TANK #204
MAYPORT NAVAL STATION

DRAWN BY: JJR

REFERENCE: MAP OF MAYPORT, FLORIDA
PREPARED BY: U. S. GEOLOGICAL SURVEY

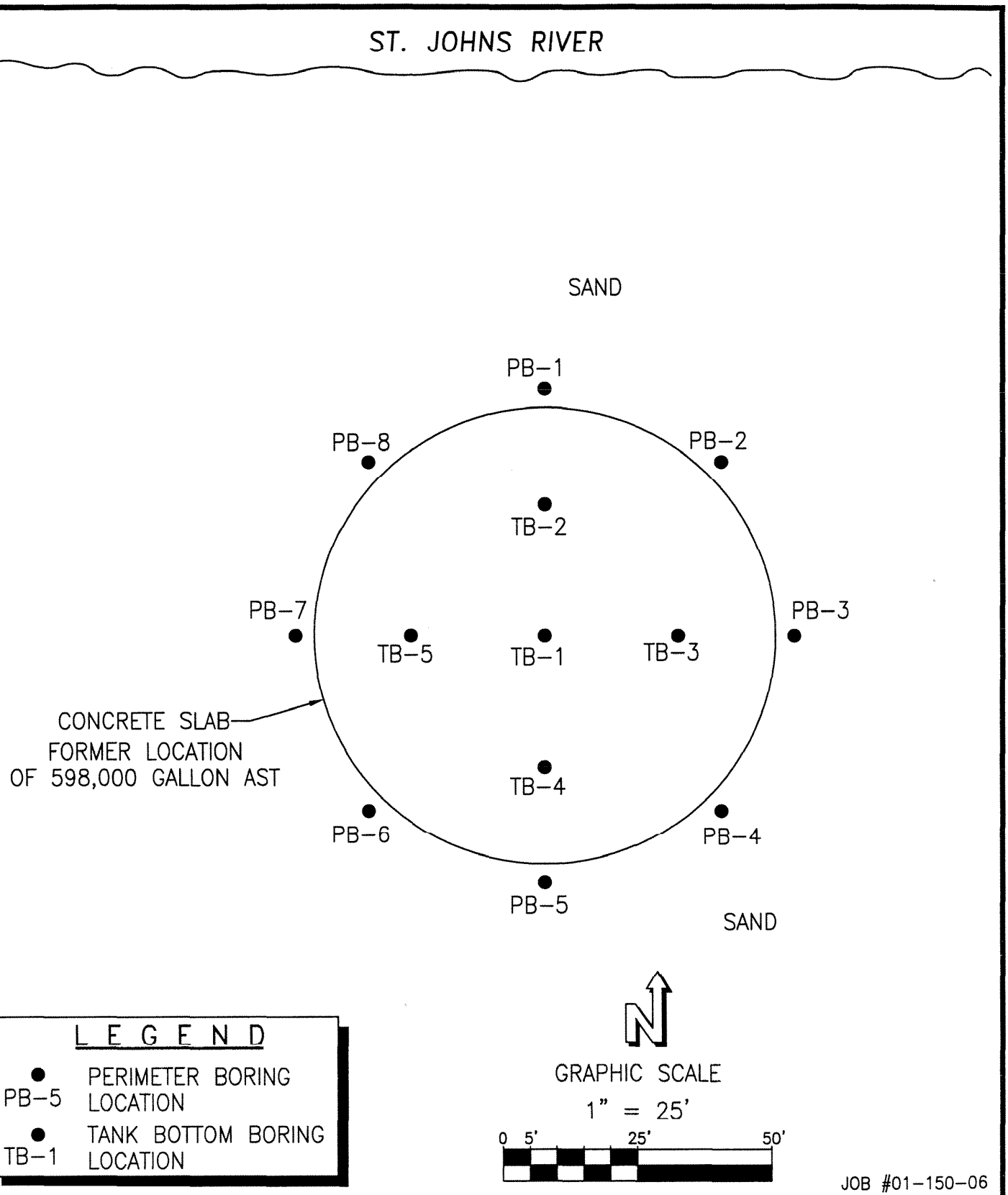


FIGURE 2. SITE PLAN & SAMPLING LOCATIONS

AEROSTAR ENVIRONMENTAL SERVICES, INC.	MAYPORT AST CLOSURE/TANK #204 MAYPORT NAVAL AIR STATION JACKSONVILLE, FLORIDA	DRAWN BY: KJS DATE: 10/8/01

APPENDIX A
LIMITED CLOSURE SUMMARY REPORT

Department of Environmental Protection

ı Towers Office Building♦2600 Blair Stone Road♦Tallahassee, Florida 32399-2400

DEP Form 62-761.900(8)
Form Title: Limited Closure Summary Report:
Effective Date: July 13, 1998

Limited Closure Summary Report

This form is required for facilities that have sites with documented contamination requiring a site assessment in accordance with Chapter 62-770, F.A.C. This includes those facilities that are eligible for the Early Detection Incentive Program (EDI), the Florida Petroleum Liability and Restoration Insurance Program (FPLRIP), and the Petroleum Cleanup Participation Program (PCPP), pursuant to Sections 376.3071 and 376.3072, F.S. Documentation of procedures followed, and results obtained during closure shall be reported in this form, along with any attachments. This form shall be submitted to the County within 60 days of completion of the closure in accordance with Section A of the "Storage Tank System Closure Assessment Requirements."

Complete All Applicable Blanks. Please Print or Type

General Information

Date: 08/17/01	FDEP Facility ID Number: 168626008	County: DUVAL
Facility Name MAYPORT NAVAL STATION	Facility Telephone #: ( )	
Facility Address:		
Owner or Operator Name:	Owner/Operator phone #: ( )	
Mailing Address:		

Storage Tank System Closure Information

1. Were the storage tanks(s): (Check one or both)

☑ Aboveground	☐ Underground

2. General System Information

Types of Products Stored: Diesel Fuel	Number of Tanks: ONE (1)	Age(s) of Tanks: ~40 yrs.

3. Was the Limited Closure Summary Report Performed as a Result of: (check one or more)

☑ Tank Systems Removal?	☐ Spill Containment Installation?	☐ Change in Storage to a Non-Regulated Substance?
☐ Tank Systems Closed in Place?	☐ Dispenser Liners Installation?	☐ Release Prevention Barrier Installation?
☐ Piping Sump Installation?	☐ Secondary Containment Installation?	☐ Other? (please explain)

4. Please Check Yes or No to the following:

a. Was there previously reported contamination discovered on site? If yes, was	☐ Yes	☑ No
1. A Discharge Report Form submitted to the County?	☐ Yes	☐ No
2. An investigation performed in accordance with Rule 62-761.820, F.A.C.?	☐ Yes	☐ No
b. Is the depth to groundwater less than 20 feet?	☑ Yes	☐ No
c. Are there monitoring wells on site? If yes, were they	☐ Yes	☑ No
1. Groundwater monitoring wells?	☐ Yes	☐ No
2. Vapor monitoring wells?	☐ Yes	☐ No
3. Used for closure assessment sampling?	☐ Yes	☐ No
4. Properly closed?	☐ Yes	☐ No
5. Retained for site assessment purposes?	☐ Yes	☐ No
d. If tanks were replaced, were contaminated soils returned to the tank excavation?	☐ Yes	☐ No

Signature of owner or operator	Richard D. McCann Signature of person performing Limited Closure Assessment	Richard D. McCann Name of person performing Limited Closure Assessment

(date) _____ (date) 8/17/01 Affiliation Aerostar Env. Svcs, Inc.

Printed on recycled paper.

APPENDIX B
STORAGE TANK FACILITY REGISTRATION FORM

Florida Department of Environmental Protection
Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Storage Tank Facility Registration Form

DEP Form #	62-761.900(2)
Form Title	Storage Tank Registration Form
Effective Date:	July 13, 1998
DEP Application No.	(Filled in by DEP)

Submit a completed form for the facility when registration of storage tanks or compression vessels is required by Chapter 376.303, Florida Statutes

Please review *Registration Instructions* before completing the form.

Please check all that apply	[ ] New Registration	[ ] New Owner	[ ] New Tanks
	[ ] Facility Info Update/Correction	[ ] Owner Info Update/Correction	[✓] Tank Info Update/Correction

A. FACILITY INFORMATION

County: DUVAL	**DEP Facility ID:**	**168626008**

Facility Name: MAYPORT NAVAL STATION

Facility Address: _____ City: Jacksonville Zip: _____

Facility Contact: _____ Business Phone: (____)___

Facility Type(s): _____ NAICS Code: _____ Financial Responsibility: _____

24 Hour Emergency Contact: _____ **Emergency Phone:(____)___**

B. RESPONSIBLE PERSON INFORMATION - Identify Individual(s) or Business(es) responsible for storage tank management, fueling operations, and/or cleanup activities at the facility location named above. **Provide additional information in an attachment if necessary.**

Name:	Facility - Responsible Person Relation Type:	Effective Date
Mail address:	[√] **Facility Account Owner (pays fees)**	
City, ST, Zip:	Facility Account Owner information must be provided when the facility contains active (in-use) storage tanks on site.	
Contact:		
Telephone:	**STCM Account Number (if known)**	
Identify other appropriate facility relationships for this party: [ ] Facility Owner/Operator [ ] Property Owner [ ] Storage Tank Owner		

Name:	Other owner, relationship type(s)	Effective Date
Mail address:	[ ] Facility Owner/Operator	
City, ST, Zip:	[ ] Property Owner	
Contact:	[ ] Storage Tank Owner	
Telephone:	[ ] Other:	

C. TANK/VESSEL INFORMATION - Complete one row for each storage tank or compression vessel system located at this facility.

Tank ID	T/V	A/U	Capacity	Installed	Content	Status/Effective Date		Construction	Piping	Monitoring
1	T	A	1.5 m gal	1964	D	B	08/01	C		

Certified Contractor (performing tank installation or removal): _____ DBPR License No.: _____

Registration Certification: **To the best of my knowledge and belief, all information submitted on this form is true, accurate, and complete.**

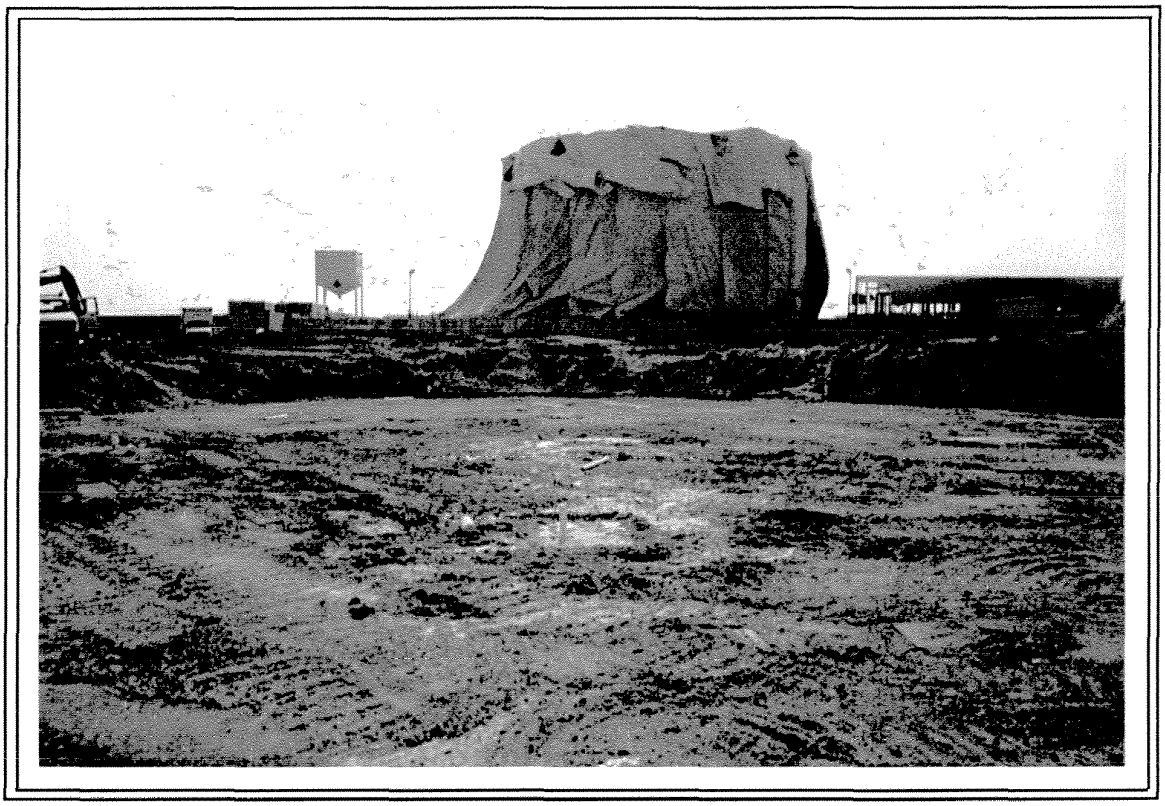
_____ _____ _____
Printed Name & Title **Signature** **Date**

DEP 62-761.900(2)

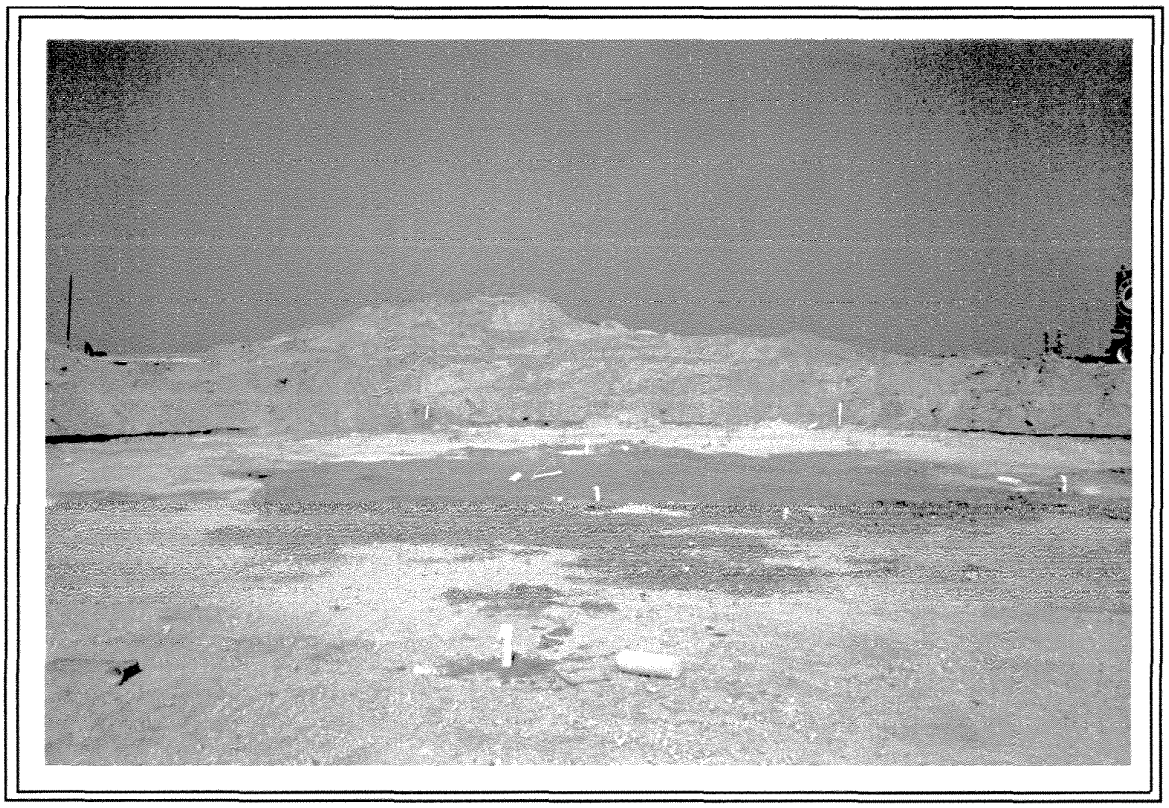
APPENDIX C
PHOTOGRAPHIC DOCUMENTATION

1) View facing north across the bottom of former Tank #204, St. Johns River in the background.

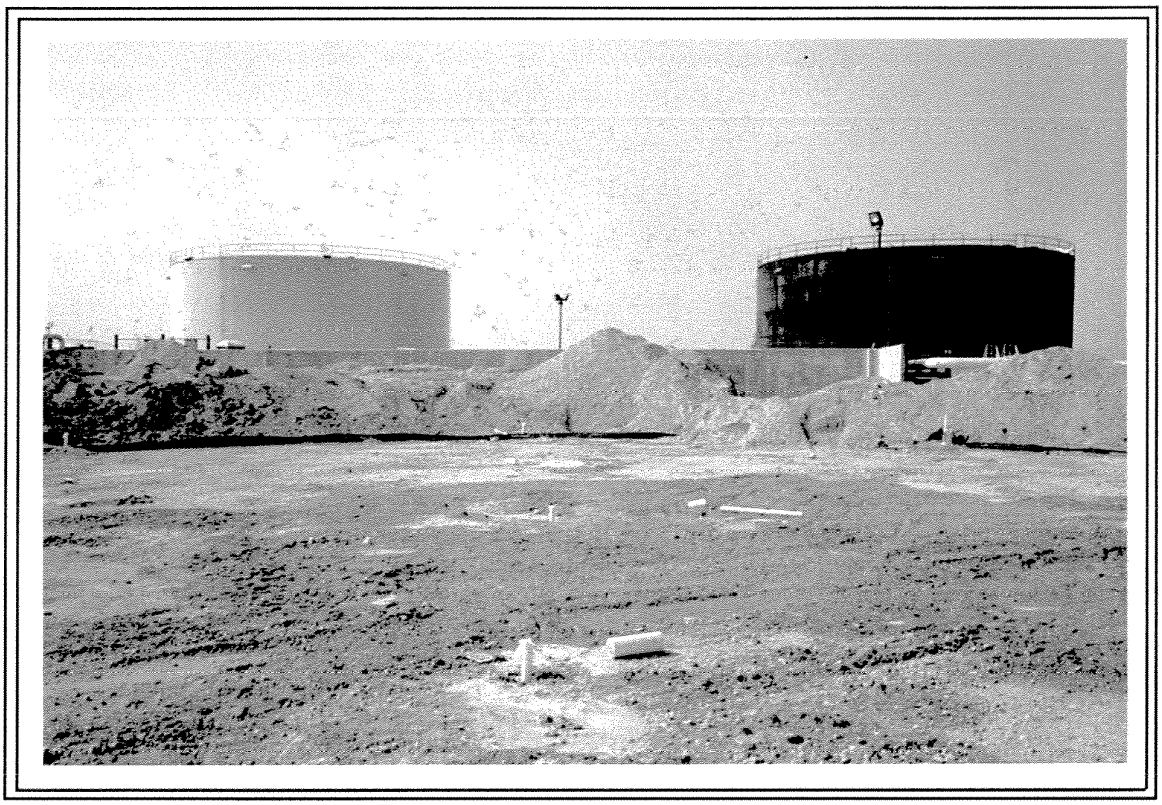
2) View facing west across the bottom former Tank #204, new tank and St. Johns River in the background.



3) View facing south with new tank construction in the background.



4) View facing east across bottom of former Tank #204.



5) View facing northwest at soil/groundwater sampling locations in the former tank bottom and northwestern perimeter.

6) View facing southeast at soil/groundwater sampling locations in the former tank bottom and southeastern perimeter.

APPENDIX D
LABORATORY ANALYTICAL REPORTS

CLIENT : Environmental Recovery
ADDRESS: 251 Levy Road
Atlantic Beach, FL 32233

REPORT # : JAX19195
DATE SUBMITTED: August 21, 2001
DATE REPORTED : August 30, 2001

ATTENTION: Mr. Chuck Nevin

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

PROJECT : MAYPORT NAVAL ST.

Tank Closure

08/20/01

#1 - PB4 @ 10:10
#2 - PB6 @ 10:35
#3 - PB5 @ 11:00
#4 - PB7 @ 11:20
#5 - PB8 @ 11:35
#6 - TB1 @ 13:20
#7 - TB2 @ 14:00
#8 - TB3 @ 14:45
#9 - TB4 @ 15:00
#10 - TB5 @ 13:40

PROJECT MANAGER _____
Scott D. Martin

ENCO LABORATORIES
REPORT # : JAX19195
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 601 - VOLATILE HALOCARBONS	PB4	PB6	Units
Dichlorodifluoromethane	1.0 U	1.0 U	µg/L
Chloromethane	1.0 U	1.0 U	µg/L
Vinyl Chloride	1.0 U	1.0 U	µg/L
Bromomethane	1.0 U	1.0 U	µg/L
Chloroethane	1.0 U	1.0 U	µg/L
Trichlorofluoromethane	2.0 U	2.0 U	µg/L
1,1-Dichloroethene	1.0 U	1.0 U	µg/L
Methylene Chloride	5.0 U	5.0 U	µg/L
t-1,2-Dichloroethene	1.0 U	1.0 U	µg/L
1,1-Dichloroethane	1.0 U	1.0 U	µg/L
c-1,2-Dichloroethene	1.0 U	1.0 U	µg/L
Chloroform	1.0 U	1.0 U	µg/L
1,1,1-Trichloroethane	1.0 U	1.0 U	µg/L
Carbon Tetrachloride	1.0 U	1.0 U	µg/L
1,2-Dichloroethane	1.0 U	1.0 U	µg/L
Trichloroethene	1.0 U	1.0 U	µg/L
1,2-Dichloropropane	1.0 U	1.0 U	µg/L
Bromodichloromethane	1.0 U	1.0 U	µg/L
c-1,3-Dichloropropene	1.0 U	1.0 U	µg/L
t-1,3-Dichloropropene	1.0 U	1.0 U	µg/L
1,1,2-Trichloroethane	1.0 U	1.0 U	µg/L
Tetrachloroethene	1.0 U	1.0 U	µg/L
Dibromochloromethane	1.0 U	1.0 U	µg/L
Chlorobenzene	1.0 U	1.0 U	µg/L
Bromoform	1.0 U	1.0 U	µg/L
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	µg/L
1,3-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,4-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,2-Dichlorobenzene	1.0 U	1.0 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Bromofluorobenzene	57	56	37-161
Date Analyzed	08/24/01 16:44	08/24/01 17:45	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19195
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 602 - VOLATILE AROMATICS	**PB4**	**PB6**	**Units**
Methyl tert-butyl ether	2.0 U	2.0 U	µg/L
Benzene	1.0 U	1.0 U	µg/L
Toluene	1.0 U	1.0 U	µg/L
Chlorobenzene	1.0 U	1.0 U	µg/L
Ethylbenzene	1.0 U	1.0 U	µg/L
m-Xylene & p-Xylene	1.0 U	1.0 U	µg/L
o-Xylene	1.0 U	1.0 U	µg/L
1,3-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,4-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,2-Dichlorobenzene	1.0 U	1.0 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Bromofluorobenzene	116	117	52-147
Date Analyzed	08/24/01 16:44	08/24/01 17:45	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19195
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 8310 - PAH BY HPLC	**PB4**	**PB6**	**Units**
Naphthalene	0.50 U	0.50 U	µg/L
Acenaphthylene	1.0 U	1.0 U	µg/L
1-Methylnaphthalene	1.0 U	1.0 U	µg/L
2-Methylnaphthalene	1.0 U	1.0 U	µg/L
Acenaphthene	0.50 U	0.50 U	µg/L
Fluorene	0.10 U	0.10 U	µg/L
Phenanthrene	1.0 U	1.0 U	µg/L
Anthracene	0.20 U	0.20 U	µg/L
Fluoranthene	**0.46**	0.10 U	µg/L
Pyrene	**1.1**	**0.26**	µg/L
Benzo(a)anthracene	0.10 U	0.10 U	µg/L
Chrysene	0.10 U	0.10 U	µg/L
Benzo(b)fluoranthene	0.10 U	0.10 U	µg/L
Benzo(k)fluoranthene	0.10 U	0.10 U	µg/L
Benzo(a)pyrene	0.10 U	0.10 U	µg/L
Dibenzo(a,h)anthracene	0.10 U	0.10 U	µg/L
Benzo(g,h,i)perylene	0.10 U	0.10 U	µg/L
Indeno(1,2,3-cd)pyrene	0.10 U	0.10 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
p-terphenyl	77	77	43-148
Date Prepared	08/23/01 22:30	08/23/01 22:30	
Date Analyzed	08/27/01 11:12	08/27/01 12:04	

EPA METHOD 504 - ETHYLENE DIBROMIDE	**PB4**	**PB6**	**Units**
Ethylene Dibromide	0.020 U	0.020 U	µg/L
Date Prepared	08/23/01 09:30	08/23/01 09:30	
Date Analyzed	08/24/01 12:40	08/24/01 12:58	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19195
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	PB4	PB6	Units
Lead	200.7	0.0050 U	0.0050 U	mg/L
Date Analyzed		08/26/01 10:34	08/26/01 10:42	

EPA METHOD FLPRO - PETROL. RESIDUAL ORG.	PB4	PB6	Units
Hydrocarbons (C8-C40)	**7.7**	0.20 U	mg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
o-Terphenyl	84	86	65-140
Date Prepared	08/24/01 11:30	08/22/01 10:00	
Date Analyzed	08/29/01 13:02	08/23/01 13:43	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19195
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 601 - VOLATILE HALOCARBONS	PB5	PB7	Units
Dichlorodifluoromethane	1.0 U	1.0 U	µg/L
Chloromethane	1.0 U	1.0 U	µg/L
Vinyl Chloride	1.0 U	1.0 U	µg/L
Bromomethane	1.0 U	1.0 U	µg/L
Chloroethane	1.0 U	1.0 U	µg/L
Trichlorofluoromethane	2.0 U	2.0 U	µg/L
1,1-Dichloroethene	1.0 U	1.0 U	µg/L
Methylene Chloride	5.0 U	5.0 U	µg/L
t-1,2-Dichloroethene	1.0 U	1.0 U	µg/L
1,1-Dichloroethane	1.0 U	1.0 U	µg/L
c-1,2-Dichloroethene	1.0 U	1.0 U	µg/L
Chloroform	1.0 U	1.0 U	µg/L
1,1,1-Trichloroethane	1.0 U	1.0 U	µg/L
Carbon Tetrachloride	1.0 U	1.0 U	µg/L
1,2-Dichloroethane	1.0 U	1.0 U	µg/L
Trichloroethene	1.0 U	1.0 U	µg/L
1,2-Dichloropropane	1.0 U	1.0 U	µg/L
Bromodichloromethane	1.0 U	1.0 U	µg/L
c-1,3-Dichloropropene	1.0 U	1.0 U	µg/L
t-1,3-Dichloropropene	1.0 U	1.0 U	µg/L
1,1,2-Trichloroethane	1.0 U	1.0 U	µg/L
Tetrachloroethene	1.0 U	1.0 U	µg/L
Dibromochloromethane	1.0 U	1.0 U	µg/L
Chlorobenzene	1.0 U	1.0 U	µg/L
Bromoform	1.0 U	1.0 U	µg/L
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	µg/L
1,3-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,4-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,2-Dichlorobenzene	1.0 U	1.0 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Bromofluorobenzene	58	56	37-161
Date Analyzed	08/24/01 18:47	08/24/01 19:47	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19195
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 602 - VOLATILE AROMATICS	**PB5**	**PB7**	**Units**
Methyl tert-butyl ether	2.0 U	2.0 U	µg/L
Benzene	1.0 U	1.0 U	µg/L
Toluene	1.0 U	1.0 U	µg/L
Chlorobenzene	1.0 U	1.0 U	µg/L
Ethylbenzene	1.0 U	1.0 U	µg/L
m-Xylene & p-Xylene	1.0 U	1.0 U	µg/L
o-Xylene	1.0 U	1.0 U	µg/L
1,3-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,4-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,2-Dichlorobenzene	1.0 U	1.0 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Bromofluorobenzene	117	118	52-147
Date Analyzed	08/24/01 18:47	08/24/01 19:47	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19195
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 8310 - PAH BY HPLC	**PB5**	**PB7**	**Units**
Naphthalene	0.50 U	0.50 U	µg/L
Acenaphthylene	1.0 U	1.0 U	µg/L
1-Methylnaphthalene	1.0 U	1.0 U	µg/L
2-Methylnaphthalene	1.0 U	1.0 U	µg/L
Acenaphthene	0.50 U	**0.51**	µg/L
Fluorene	0.10 U	0.10 U	µg/L
Phenanthrene	1.0 U	1.0 U	µg/L
Anthracene	0.20 U	0.20 U	µg/L
Fluoranthene	0.10 U	**0.83**	µg/L
Pyrene	**0.21**	**1.3**	µg/L
Benzo(a)anthracene	0.10 U	0.10 U	µg/L
Chrysene	0.10 U	0.10 U	µg/L
Benzo(b)fluoranthene	0.10 U	0.10 U	µg/L
Benzo(k)fluoranthene	0.10 U	0.10 U	µg/L
Benzo(a)pyrene	0.10 U	0.10 U	µg/L
Dibenzo(a,h)anthracene	0.10 U	0.10 U	µg/L
Benzo(g,h,i)perylene	0.10 U	0.10 U	µg/L
Indeno(1,2,3-cd)pyrene	0.10 U	0.10 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
p-terphenyl	82	83	43-148
Date Prepared	08/23/01 22:30	08/23/01 22:30	
Date Analyzed	08/27/01 15:31	08/27/01 16:22	

EPA METHOD 504 - ETHYLENE DIBROMIDE	**PB5**	**PB7**	**Units**
Ethylene Dibromide	0.020 U	0.020 U	µg/L
Date Prepared	08/23/01 09:30	08/23/01 09:30	
Date Analyzed	08/24/01 13:16	08/24/01 13:43	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19195
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	PB5	PB7	Units
Lead	200.7	0.0050 U	0.0050 U	mg/L
Date Analyzed		08/26/01 10:50	08/26/01 10:59	

EPA METHOD FLPRO - PETROL. RESIDUAL ORG.	PB5	PB7	Units
Hydrocarbons (C8-C40)	0.20 U	**3.3**	mg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
o-Terphenyl	97	78	65-140
Date Prepared	08/22/01 10:00	08/24/01 12:00	
Date Analyzed	08/23/01 14:23	08/29/01 13:43	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19195
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 601 - VOLATILE HALOCARBONS	PB8	TB1	Units
Dichlorodifluoromethane	1.0 U	1.0 U	µg/L
Chloromethane	1.0 U	1.0 U	µg/L
Vinyl Chloride	1.0 U	1.0 U	µg/L
Bromomethane	1.0 U	1.0 U	µg/L
Chloroethane	1.0 U	1.0 U	µg/L
Trichlorofluoromethane	2.0 U	2.0 U	µg/L
1,1-Dichloroethene	1.0 U	1.0 U	µg/L
Methylene Chloride	5.0 U	5.0 U	µg/L
t-1,2-Dichloroethene	1.0 U	1.0 U	µg/L
1,1-Dichloroethane	1.0 U	1.0 U	µg/L
c-1,2-Dichloroethene	1.0 U	1.0 U	µg/L
Chloroform	1.0 U	1.0 U	µg/L
1,1,1-Trichloroethane	1.0 U	1.0 U	µg/L
Carbon Tetrachloride	1.0 U	1.0 U	µg/L
1,2-Dichloroethane	1.0 U	1.0 U	µg/L
Trichloroethene	1.0 U	1.0 U	µg/L
1,2-Dichloropropane	1.0 U	1.0 U	µg/L
Bromodichloromethane	1.0 U	1.0 U	µg/L
c-1,3-Dichloropropene	1.0 U	1.0 U	µg/L
t-1,3-Dichloropropene	1.0 U	1.0 U	µg/L
1,1,2-Trichloroethane	1.0 U	1.0 U	µg/L
Tetrachloroethene	1.0 U	1.0 U	µg/L
Dibromochloromethane	1.0 U	1.0 U	µg/L
Chlorobenzene	1.0 U	1.0 U	µg/L
Bromoform	1.0 U	1.0 U	µg/L
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	µg/L
1,3-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,4-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,2-Dichlorobenzene	1.0 U	1.0 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Bromofluorobenzene	61	58	37-161
Date Analyzed	08/24/01 20:46	08/24/01 21:45	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19195
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 602 - VOLATILE AROMATICS	**PB8**	**TB1**	**Units**
Methyl tert-butyl ether	2.0 U	2.0 U	µg/L
Benzene	1.0 U	1.0 U	µg/L
Toluene	1.0 U	1.0 U	µg/L
Chlorobenzene	1.0 U	1.0 U	µg/L
Ethylbenzene	1.0 U	1.0 U	µg/L
m-Xylene & p-Xylene	1.0 U	1.0 U	µg/L
o-Xylene	1.0 U	1.0 U	µg/L
1,3-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,4-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,2-Dichlorobenzene	1.0 U	1.0 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Bromofluorobenzene	121	116	52-147
Date Analyzed	08/24/01 20:46	08/24/01 21:45	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19195
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 8310 - PAH BY HPLC	**PB8**	**TB1**	**Units**
Naphthalene	0.50 U	**3.1**	µg/L
Acenaphthylene	1.0 U	1.0 U	µg/L
1-Methylnaphthalene	1.0 U	**3.9**	µg/L
2-Methylnaphthalene	1.0 U	**3.8**	µg/L
Acenaphthene	0.50 U	0.50 U	µg/L
Fluorene	0.10 U	0.10 U	µg/L
Phenanthrene	1.0 U	1.0 U	µg/L
Anthracene	0.20 U	0.20 U	µg/L
Fluoranthene	0.10 U	**0.94**	µg/L
Pyrene	0.10 U	**1.1**	µg/L
Benzo(a)anthracene	0.10 U	0.10 U	µg/L
Chrysene	0.10 U	0.10 U	µg/L
Benzo(b)fluoranthene	0.10 U	0.10 U	µg/L
Benzo(k)fluoranthene	0.10 U	0.10 U	µg/L
Benzo(a)pyrene	0.10 U	0.10 U	µg/L
Dibenzo(a,h)anthracene	0.10 U	0.10 U	µg/L
Benzo(g,h,i)perylene	0.10 U	0.10 U	µg/L
Indeno(1,2,3-cd)pyrene	0.10 U	0.10 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
p-terphenyl	84	75	43-148
Date Prepared	08/23/01 22:30	08/23/01 22:30	
Date Analyzed	08/27/01 17:14	08/27/01 18:06	

EPA METHOD 504 - ETHYLENE DIBROMIDE	**PB8**	**TB1**	**Units**
Ethylene Dibromide	0.020 U	0.020 U	µg/L
Date Prepared	08/23/01 09:30	08/23/01 09:30	
Date Analyzed	08/24/01 14:19	08/24/01 14:37	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19195
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	PB8	TB1	Units
Lead	200.7	0.0050 U	0.0050 U	mg/L
Date Analyzed		08/26/01 11:07	08/26/01 11:15	

EPA METHOD FLPRO - PETROL. RESIDUAL ORG.	PB8	TB1	Units
Hydrocarbons (C8-C40)	0.20 U	**1.2**	mg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
o-Terphenyl	97	97	65-140
Date Prepared	08/24/01 12:00	08/24/01 12:00	
Date Analyzed	08/29/01 14:24	08/29/01 15:05	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19195
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 601 - VOLATILE HALOCARBONS	**TB2**	**TB3**	**Units**
Dichlorodifluoromethane	1.0 U	1.0 U	µg/L
Chloromethane	1.0 U	1.0 U	µg/L
Vinyl Chloride	1.0 U	1.0 U	µg/L
Bromomethane	1.0 U	1.0 U	µg/L
Chloroethane	1.0 U	1.0 U	µg/L
Trichlorofluoromethane	2.0 U	2.0 U	µg/L
1,1-Dichloroethene	1.0 U	1.0 U	µg/L
Methylene Chloride	5.0 U	5.0 U	µg/L
t-1,2-Dichloroethene	1.0 U	1.0 U	µg/L
1,1-Dichloroethane	1.0 U	1.0 U	µg/L
c-1,2 Dichloroethene	1.0 U	1.0 U	µg/L
Chloroform	1.0 U	1.0 U	µg/L
1,1,1-Trichloroethane	1.0 U	1.0 U	µg/L
Carbon Tetrachloride	1.0 U	1.0 U	µg/L
1,2-Dichloroethane	1.0 U	1.0 U	µg/L
Trichloroethene	1.0 U	1.0 U	µg/L
1,2-Dichloropropane	1.0 U	1.0 U	µg/L
Bromodichloromethane	1.0 U	1.0 U	µg/L
c-1,3-Dichloropropene	1.0 U	1.0 U	µg/L
t-1,3-Dichloropropene	1.0 U	1.0 U	µg/L
1,1,2-Trichloroethane	1.0 U	1.0 U	µg/L
Tetrachloroethene	1.0 U	1.0 U	µg/L
Dibromochloromethane	1.0 U	1.0 U	µg/L
Chlorobenzene	1.0 U	1.0 U	µg/L
Bromoform	1.0 U	1.0 U	µg/L
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	µg/L
1,3-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,4-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,2-Dichlorobenzene	1.0 U	1.0 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Bromofluorobenzene	53	62	37-161
Date Analyzed	08/24/01 22:43	08/24/01 23:41	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19195
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 602 - VOLATILE AROMATICS	**TB2**	**TB3**	**Units**
Methyl tert-butyl ether	2.0 U	2.0 U	µg/L
Benzene	1.0 U	1.0 U	µg/L
Toluene	1.0 U	1.0 U	µg/L
Chlorobenzene	1.0 U	1.0 U	µg/L
Ethylbenzene	1.0 U	1.0 U	µg/L
m-Xylene & p-Xylene	1.0 U	1.0 U	µg/L
o-Xylene	1.0 U	1.0 U	µg/L
1,3-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,4-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,2-Dichlorobenzene	1.0 U	1.0 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Bromofluorobenzene	118	117	52-147
Date Analyzed	08/24/01 22:43	08/24/01 23:41	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19195
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 8310 - PAH BY HPLC	TB2	TB3	Units
Naphthalene	**1.2**	0.50 U	µg/L
Acenaphthylene	1.0 U	1.0 U	µg/L
1-Methylnaphthalene	1.0 U	1.0 U	µg/L
2-Methylnaphthalene	1.0 U	1.0 U	µg/L
Acenaphthene	0.50 U	0.50 U	µg/L
Fluorene	0.10 U	0.10 U	µg/L
Phenanthrene	**1.2**	1.0 U	µg/L
Anthracene	0.20 U	0.20 U	µg/L
Fluoranthene	**1.7**	**2.5**	µg/L
Pyrene	**1.6**	**2.7**	µg/L
Benzo(a)anthracene	0.10 U	**0.64**	µg/L
Chrysene	0.10 U	**0.76**	µg/L
Benzo(b)fluoranthene	0.10 U	0.10 U	µg/L
Benzo(k)fluoranthene	0.10 U	0.10 U	µg/L
Benzo(a)pyrene	0.10 U	0.10 U	µg/L
Dibenzo(a,h)anthracene	0.10 U	0.10 U	µg/L
Benzo(g,h,i)perylene	0.10 U	0.10 U	µg/L
Indeno(1,2,3-cd)pyrene	0.10 U	0.10 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
p-terphenyl	74	73	43-148
Date Prepared	08/23/01 22:30	08/23/01 22:30	
Date Analyzed	08/27/01 18:57	08/27/01 19:49	

EPA METHOD 504 - ETHYLENE DIBROMIDE	TB2	TB3	Units
Ethylene Dibromide	0.020 U	0.020 U	µg/L
Date Prepared	08/23/01 09:30	08/23/01 09:30	
Date Analyzed	08/24/01 14:55	08/24/01 15:14	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19195
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	TB2	TB3	Units
Lead	200.7	0.0050 U	0.0050 U	mg/L
Date Analyzed		08/26/01 11:24	08/26/01 11:49	

EPA METHOD FLPRO - PETROL. RESIDUAL ORG.	TB2	TB3	Units
Hydrocarbons (C8-C40)	**0.87**	**1.1**	mg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
o-Terphenyl	99	113	65-140
Date Prepared	08/24/01 12:00	08/24/01 12:00	
Date Analyzed	08/29/01 15:46	08/29/01 17:09	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19195
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 601 - VOLATILE HALOCARBONS	**TB4**	**TB5**	**Units**
Dichlorodifluoromethane	1.0 U	1.0 U	µg/L
Chloromethane	**3.8**	**6.1**	µg/L
Vinyl Chloride	1.0 U	1.0 U	µg/L
Bromomethane	1.0 U	1.0 U	µg/L
Chloroethane	1.0 U	1.0 U	µg/L
Trichlorofluoromethane	2.0 U	2.0 U	µg/L
1,1-Dichloroethene	1.0 U	1.0 U	µg/L
Methylene Chloride	5.0 U	5.0 U	µg/L
t-1,2-Dichloroethene	1.0 U	1.0 U	µg/L
1,1-Dichloroethane	1.0 U	1.0 U	µg/L
c 1,2-Dichloroethene	1.0 U	1.0 U	µg/L
Chloroform	1.0 U	1.0 U	µg/L
1,1,1-Trichloroethane	1.0 U	1.0 U	µg/L
Carbon Tetrachloride	1.0 U	1.0 U	µg/L
1,2-Dichloroethane	1.0 U	1.0 U	µg/L
Trichloroethene	1.0 U	1.0 U	µg/L
1,2-Dichloropropane	1.0 U	1.0 U	µg/L
Bromodichloromethane	1.0 U	1.0 U	µg/L
c-1,3-Dichloropropene	1.0 U	1.0 U	µg/L
t-1,3-Dichloropropene	1.0 U	1.0 U	µg/L
1,1,2-Trichloroethane	1.0 U	1.0 U	µg/L
Tetrachloroethene	1.0 U	1.0 U	µg/L
Dibromochloromethane	1.0 U	1.0 U	µg/L
Chlorobenzene	1.0 U	1.0 U	µg/L
Bromoform	1.0 U	1.0 U	µg/L
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	µg/L
1,3-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,4-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,2-Dichlorobenzene	1.0 U	1.0 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Bromofluorobenzene	57	56	37-161
Date Analyzed	08/25/01 04:29	08/25/01 05:26	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19195
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 602 - VOLATILE AROMATICS	**TB4**	**TB5**	**Units**
Methyl tert-butyl ether	2.0 U	2.0 U	µg/L
Benzene	1.0 U	1.0 U	µg/L
Toluene	1.0 U	1.0 U	µg/L
Chlorobenzene	1.0 U	1.0 U	µg/L
Ethylbenzene	1.0 U	1.0 U	µg/L
m-Xylene & p-Xylene	1.0 U	1.0 U	µg/L
o-Xylene	1.0 U	1.0 U	µg/L
1,3-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,4-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,2-Dichlorobenzene	1.0 U	1.0 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Bromofluorobenzene	129	118	52-147
Date Analyzed	08/25/01 04:29	08/25/01 05:26	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD 8310 - PAH BY HPLC	**TB4**	**TB5**	**Units**
Naphthalene	0.50 U	0.50 U	µg/L
Acenaphthylene	1.0 U	1.0 U	µg/L
1-Methylnaphthalene	1.0 U	1.0 U	µg/L
2-Methylnaphthalene	1.0 U	1.0 U	µg/L
Acenaphthene	0.50 U	0.50 U	µg/L
Fluorene	0.10 U	0.10 U	µg/L
Phenanthrene	**2.3**	**1.6**	µg/L
Anthracene	0.20 U	0.20 U	µg/L
Fluoranthene	**2.4**	**2.1**	µg/L
Pyrene	**2.3**	**1.9**	µg/L
Benzo(a)anthracene	**0.30**	**0.26**	µg/L
Chrysene	**0.33**	**0.28**	µg/L
Benzo(b)fluoranthene	0.10 U	0.10 U	µg/L
Benzo(k)fluoranthene	0.10 U	0.10 U	µg/L
Benzo(a)pyrene	0.10 U	0.10 U	µg/L
Dibenzo(a,h)anthracene	0.10 U	0.10 U	µg/L
Benzo(g,h,i)perylene	0.10 U	0.10 U	µg/L
Indeno(1,2,3-cd)pyrene	0.10 U	0.10 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
p-terphenyl	91	103	43-148
Date Prepared	08/23/01 22:30	08/23/01 22:30	
Date Analyzed	08/27/01 20:41	08/27/01 21:32	

EPA METHOD 504 - ETHYLENE DIBROMIDE	**TB4**	**TB5**	**Units**
Ethylene Dibromide	0.020 U	0.020 U	µg/L
Date Prepared	08/23/01 09:30	08/23/01 09:30	
Date Analyzed	08/24/01 15:32	08/24/01 15:50	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19195
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	TB4	TB5	Units
Lead	200.7	**0.0060** I	**0.0080** I	mg/L
Date Analyzed		08/26/01 11:57	08/26/01 12:05	

EPA METHOD FLPRO - PETROL. RESIDUAL ORG.	TB4	TB5	Units
Hydrocarbons (C8-C40)	**1.2**	**0.91**	mg/L
Surrogate:	% RECOV	% RECOV	LIMITS
o-Terphenyl	104	96	65-140
Date Prepared	08/24/01 12:00	08/24/01 12:00	
Date Analyzed	08/29/01 17:50	08/29/01 18:31	

I = Analyte detected; value is between the Method Detection Level (MDL) and the Practical Quantitation Level (PQL).

ENCO LABORATORIES
REPORT # : JAX19195
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 601 - VOLATILE HALOCARBONS	LAB BLANK	LAB BLANK	Units
Dichlorodifluoromethane	1.0 U	1.0 U	µg/L
Chloromethane	1.0 U	1.0 U	µg/L
Vinyl Chloride	1.0 U	1.0 U	µg/L
Bromomethane	1.0 U	1.0 U	µg/L
Chloroethane	1.0 U	1.0 U	µg/L
Trichlorofluoromethane	2.0 U	2.0 U	µg/L
1,1-Dichloroethene	1.0 U	1.0 U	µg/L
Methylene Chloride	5.0 U	5.0 U	µg/L
t-1,2-Dichloroethene	1.0 U	1.0 U	µg/L
1,1-Dichloroethane	1.0 U	1.0 U	µg/L
c-1,2-Dichloroethene	1.0 U	1.0 U	µg/L
Chloroform	1.0 U	1.0 U	µg/L
1,1,1-Trichloroethane	1.0 U	1.0 U	µg/L
Carbon Tetrachloride	1.0 U	1.0 U	µg/L
1,2-Dichloroethane	1.0 U	1.0 U	µg/L
Trichloroethene	1.0 U	1.0 U	µg/L
1,2-Dichloropropane	1.0 U	1.0 U	µg/L
Bromodichloromethane	1.0 U	1.0 U	µg/L
c-1,3-Dichloropropene	1.0 U	1.0 U	µg/L
t-1,3-Dichloropropene	1.0 U	1.0 U	µg/L
1,1,2-Trichloroethane	1.0 U	1.0 U	µg/L
Tetrachloroethene	1.0 U	1.0 U	µg/L
Dibromochloromethane	1.0 U	1.0 U	µg/L
Chlorobenzene	1.0 U	1.0 U	µg/L
Bromoform	1.0 U	1.0 U	µg/L
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	µg/L
1,3-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,4-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,2-Dichlorobenzene	1.0 U	1.0 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Bromofluorobenzene	60	60	37-161
Date Analyzed	08/24/01 08:40	08/24/01 08:40	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19195
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 602 - VOLATILE AROMATICS	**LAB BLANK**	**LAB BLANK**	**Units**
Methyl tert-butyl ether	2.0 U	2.0 U	µg/L
Benzene	1.0 U	1.0 U	µg/L
Toluene	1.0 U	1.0 U	µg/L
Chlorobenzene	1.0 U	1.0 U	µg/L
Ethylbenzene	1.0 U	1.0 U	µg/L
m-Xylene & p-Xylene	1.0 U	1.0 U	µg/L
o-Xylene	1.0 U	1.0 U	µg/L
1,3-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,4-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,2-Dichlorobenzene	1.0 U	1.0 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Bromofluorobenzene	118	118	52-147
Date Analyzed	08/24/01 08:40	08/24/01 08:40	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD 8310 - PAH BY HPLC	**LAB BLANK**	**Units**
Naphthalene	0.50 U	µg/L
Acenaphthylene	1.0 U	µg/L
1-Methylnaphthalene	1.0 U	µg/L
2-Methylnaphthalene	1.0 U	µg/L
Acenaphthene	0.50 U	µg/L
Fluorene	0.10 U	µg/L
Phenanthrene	1.0 U	µg/L
Anthracene	0.20 U	µg/L
Fluoranthene	0.10 U	µg/L
Pyrene	0.10 U	µg/L
Benzo(a)anthracene	0.10 U	µg/L
Chrysene	0.10 U	µg/L
Benzo(b)fluoranthene	0.10 U	µg/L
Benzo(k)fluoranthene	0.10 U	µg/L
Benzo(a)pyrene	0.10 U	µg/L
Dibenzo(a,h)anthracene	0.10 U	µg/L
Benzo(g,h,i)perylene	0.10 U	µg/L
Indeno(1,2,3-cd)pyrene	0.10 U	µg/L
Surrogate:	**% RECOV**	**LIMITS**
p-terphenyl	79	43-148
Date Prepared	08/23/01 22:30	
Date Analyzed	08/26/01 23:08	

EPA METHOD 504 - ETHYLENE DIBROMIDE	**LAB BLANK**	**Units**
Ethylene Dibromide	0.020 U	µg/L
Date Prepared	08/23/01 09:30	
Date Analyzed	08/23/01 11:58	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19195
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	LAB BLANK	LAB BLANK	Units
Lead	200.7	0.0050 U	NA	mg/L
Date Analyzed		08/24/01 11:19		

EPA METHOD FLPRO - PETROL. RESIDUAL ORG.	LAB BLANK	LAB BLANK	Units
Hydrocarbons (C8-C40)	0.20 U	0.20 U	mg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
o-Terphenyl	84	100	65-140
Date Prepared	08/22/01 10:00	08/24/01 11:30	
Date Analyzed	08/22/01 16:54	08/29/01 11:41	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19195
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method 601				
Methylene Chloride	112/116/111	45-161	4	29
Chloroform	114/136/111	64-154	#18	16
Carbon Tetrachloride	124/136/116	71-165	9	21
Trichloroethene	117/126/114	69-158	7	24
Tetrachloroethene	125/128/119	63-166	2	21
Chlorobenzene	116/118/108	67-147	2	19
EPA Method 601				
Methylene Chloride	110/122/102	45-161	10	29
Chloroform	124/125/105	64-154	<1	16
Carbon Tetrachloride	120/124/111	71-165	3	21
Trichloroethene	118/126/109	69-158	6	24
Tetrachloroethene	120/122/104	63-166	2	21
Chlorobenzene	110/114/101	67-147	4	19
EPA Method 602				
Benzene	130/130/120	60-138	<1	17
Toluene	126/123/116	57-138	2	16
Ethylbenzene	136/132/121	49-144	3	17
o-Xylene	120/119/108	50-151	<1	17
EPA Method 602				
Benzene	118/126/119	60-138	6	17
Toluene	116/122/116	57-138	5	16
Ethylbenzene	122/124/118	49-144	2	17
o-Xylene	133/138/107	50-151	4	17

Environmental Conservation Laboratories Comprehensive QA Plan #910190
< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference
# = One or more of the associated values failed to meet laboratory established limits for precision.

This report shall not be reproduced except in full, without the written approval of the laboratory. Results for these procedures apply only to the samples as submitted.

ENCO LABORATORIES
REPORT # : JAX19195
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method 8310				
Naphthalene	75/ 65/ 75	59-111	#14	12
Acenaphthene	72/ 69/ 79	58-128	4	13
Benzo(a)pyrene	89/ 84/ 88	78-134	6	15
Benzo(g,h,i)perylene	91/ 85/ 89	62-115	7	30
EPA Method 504				
Ethylene Dibromide	68/ 64/ 96	57-130	6	18
Dibromochloropropane	72/ 76/104	60-130	5	20
TOTAL METALS				
Lead, 200.7	106/105/101	68-126	<1	19
PETROL. RESIDUAL ORG.				
Hydrocarbons (C8-C40)	100/100/ 97	49-162	<1	28
PETROL. RESIDUAL ORG.				
Hydrocarbons (C8-C40)	100/100/ 90	49-162	<1	28

Environmental Conservation Laboratories Comprehensive QA Plan #910190
< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference
# = One or more of the associated values failed to meet laboratory established limits for precision.
This report shall not be reproduced except in full, without the written approval of the laboratory. Results for these procedures apply only to the samples as submitted

01-150-06

CLIENT : Environmental Recovery
ADDRESS: 251 Levy Road
Atlantic Beach, FL 32233

REPORT # : JAX19140
DATE SUBMITTED: August 16, 2001
DATE REPORTED : August 28, 2001

ATTENTION: Mr. Chuck Nevin

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

PROJECT : MAYPORT NAVAL ST.

Tank Closure

08/16/01

#1 - PB-1-2' @ 11:45
#2 - PB-2-4' @ 14:05
#3 - PB-3-4' @ 15:20
#4 - PB-4-4' @ 16:05
#5 - PB-5-3' @ 17:15

PROJECT MANAGER _____
Scott D. Martin

ENCO LABORATORIES
REPORT # : JAX19140
DATE REPORTED: August 28, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 8260 - VOLATILE ORGANICS	PB-1-2'			PB-2-4'			Units
Methyl tert-butyl ether	1.3	U	D1	1.5	U	D2	µg/Kg
Benzene	1.3	U	D1	1.5	U	D2	µg/Kg
Toluene	1.3	U	D1	1.5	U	D2	µg/Kg
Chlorobenzene	1.3	U	D1	1.5	U	D2	µg/Kg
Ethylbenzene	1.3	U	D1	1.5	U	D2	µg/Kg
m-Xylene & p-Xylene	2.4	U	D1	3.1	U	D2	µg/Kg
o-Xylene	1.3	U	D1	1.5	U	D2	µg/Kg
1,3-Dichlorobenzene	1.3	U	D1	1.5	U	D2	µg/Kg
1,4-Dichlorobenzene	1.3	U	D1	1.5	U	D2	µg/Kg
1,2-Dichlorobenzene	1.3	U	D1	1.5	U	D2	µg/Kg
Surrogate:	**% RECOV**			**% RECOV**			**LIMITS**
Dibromofluoromethane	97			97			70-134
D8-Toluene	98			95			60-144
Bromofluorobenzene	101			101			71-127
Date Prepared	08/17/01 17:45			08/17/01 17:45			
Date Analyzed	08/22/01 12:33			08/22/01 13:05			

U = Compound was analyzed for but not detected to the level shown.
D1 = Analyte value determined from a 1:1.07 dilution.
D2 = Analyte value determined from a 1:1.14 dilution.

ENCO LABORATORIES
REPORT # : JAX19140
DATE REPORTED: August 28, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 8310 - PAH BY HPLC	PB-1-2'	PB-2-4'	Units
Naphthalene	19 U	22 U	µg/Kg
Acenaphthylene	38 U	44 U	µg/Kg
1-Methylnaphthalene	38 U	44 U	µg/Kg
2-Methylnaphthalene	38 U	44 U	µg/Kg
Acenaphthene	97	22 U	µg/Kg
Fluorene	3.8 U	4.4 U	µg/Kg
Phenanthrene	200	44 U	µg/Kg
Anthracene	19 U	22 U	µg/Kg
Fluoranthene	420	74	µg/Kg
Pyrene	430	84	µg/Kg
Benzo(a)anthracene	160	39	µg/Kg
Chrysene	150	40	µg/Kg
Benzo(b)fluoranthene	56	17	µg/Kg
Benzo(k)fluoranthene	40	11	µg/Kg
Benzo(a)pyrene	52	14	µg/Kg
Dibenzo(a,h)anthracene	17	4.7	µg/Kg
Benzo(g,h,i)perylene	20	5.6	µg/Kg
Indeno(1,2,3-cd)pyrene	38	29	µg/Kg
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
o-terphenyl	89	80	39-141
Date Prepared	08/21/01 22:00	08/21/01 22:00	
Date Analyzed	08/24/01 15:47	08/24/01 16:38	

MISCELLANEOUS	METHOD	PB-1-2'	PB-2-4'	Units
Percent Solids	SM2540G	87	75	%
Date Analyzed		08/20/01 10:00	08/20/01 10:00	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19140
DATE REPORTED: August 28, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD FLPRO - PETROL. RESIDUAL ORG.	PB-1-2'	PB-2-4'	Units
Hydrocarbons (C8-C40)	7.6 U	8.8 U	mg/Kg
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
o-Terphenyl	65	51	51-148
Date Prepared	08/21/01 23:00	08/21/01 23:00	
Date Analyzed	08/22/01 16:12	08/22/01 15:32	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19140
DATE REPORTED: August 28, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 8260 - VOLATILE ORGANICS	PB-3-4'			PB-4-4'			Units
Methyl tert-butyl ether	1.4	U	D3	130	U	D4	µg/Kg
Benzene	1.4	U	D3	130	U	D4	µg/Kg
Toluene	1.4	U	D3	130	U	D4	µg/Kg
Chlorobenzene	1.4	U	D3	130	U	D4	µg/Kg
Ethylbenzene	1.4	U	D3	130	U	D4	µg/Kg
m-Xylene & p-Xylene	2.8	U	D3	260	U	D4	µg/Kg
o-Xylene	1.4	U	D3	130	U	D4	µg/Kg
1,3-Dichlorobenzene	1.4	U	D3	130	U	D4	µg/Kg
1,4-Dichlorobenzene	1.4	U	D3	130	U	D4	µg/Kg
1,2-Dichlorobenzene	1.4	U	D3	130	U	D4	µg/Kg
Surrogate:	% RECOV			% RECOV			LIMITS
Dibromofluoromethane	99			95			70-134
D8-Toluene	96			95			60-144
Bromofluorobenzene	97			95			71-127
Date Prepared	08/17/01 17:45						
Date Analyzed	08/22/01 13:37			08/20/01 22:39			

U = Compound was analyzed for but not detected to the level shown.
D3 = Analyte value determined from a 1:1.1 dilution.
D4 = Analyte value determined from a 1:100 dilution.

ENCO LABORATORIES
REPORT # : JAX19140
DATE REPORTED: August 28, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 8310 - PAH BY HPLC	PB-3-4'	PB-4-4'		Units
Naphthalene	21 U	210 U	D5	µg/Kg
Acenaphthylene	42 U	430 U	D5	µg/Kg
1-Methylnaphthalene	42 U	430 U	D5	µg/Kg
2-Methylnaphthalene	42 U	430 U	D5	µg/Kg
Acenaphthene	21 U	210 U	D5	µg/Kg
Fluorene	4.2 U	43 U	D5	µg/Kg
Phenanthrene	42 U	430 U	D5	µg/Kg
Anthracene	21 U	210 U	D5	µg/Kg
Fluoranthene	23	58	D5	µg/Kg
Pyrene	42	93	D5	µg/Kg
Benzo(a)anthracene	21 U	210 U	D5	µg/Kg
Chrysene	10	43 U	D5	µg/Kg
Benzo(b)fluoranthene	4.2 U	43 U	D5	µg/Kg
Benzo(k)fluoranthene	4.2 U	43 U	D5	µg/Kg
Benzo(a)pyrene	4.2 U	43 U	D5	µg/Kg
Dibenzo(a,h)anthracene	4.2 U	43 U	D5	µg/Kg
Benzo(g,h,i)perylene	4.2 U	43 U	D5	µg/Kg
Indeno(1,2,3-cd)pyrene	4.2 U	43 U	D5	µg/Kg
Surrogate:	**% RECOV**	**% RECOV**		**LIMITS**
p-terphenyl	88	77		39-141
Date Prepared	08/21/01 22:00	08/21/01 22:00		
Date Analyzed	08/24/01 17:30	08/27/01 13:47		

MISCELLANEOUS	METHOD	PB-3-4'	PB-4-4'	Units
Percent Solids	SM2540G	79	77	%
Date Analyzed		08/20/01 10:00	08/20/01 10:00	

U = Compound was analyzed for but not detected to the level shown.
D5 = Analyte value determined from a 1:10 dilution.

ENCO LABORATORIES
REPORT # : JAX19140
DATE REPORTED: August 28, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD FLPRO - PETROL. RESIDUAL ORG.	PB-3-4'	PB-4-4'		Units
Hydrocarbons (C8-C40)	350	5200	D6	mg/Kg
Surrogate:	**% RECOV**	**% RECOV**		**LIMITS**
o-Terphenyl	78	*		51-148
Date Prepared	08/21/01 23:00	08/21/01 23:00		
Date Analyzed	08/22/01 15:42	08/22/01 16:52		

* = Surrogate recovery unavailable due to sample dilution.
U = Compound was analyzed for but not detected to the level shown.
D6 = Analyte value determined from a 1:20 dilution.

ENCO LABORATORIES
REPORT # : JAX19140
DATE REPORTED: August 28, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 8260 - VOLATILE ORGANICS	PB-5-3'			LAB BLANK			Units
Methyl tert-butyl ether	1.4	U	D2	100	U	D4	µg/Kg
Benzene	1.4	U	D2	100	U	D4	µg/Kg
Toluene	1.4	U	D2	100	U	D4	µg/Kg
Chlorobenzene	1.4	U	D2	100	U	D4	µg/Kg
Ethylbenzene	1.4	U	D2	100	U	D4	µg/Kg
m-Xylene & p-Xylene	2.9	U	D2	200	U	D4	µg/Kg
o-Xylene	1.4	U	D2	100	U	D4	µg/Kg
1,3-Dichlorobenzene	1.4	U	D2	100	U	D4	µg/Kg
1,4-Dichlorobenzene	1.4	U	D2	100	U	D4	µg/Kg
1,2-Dichlorobenzene	1.4	U	D2	100	U	D4	µg/Kg

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	90	92	70-134
D8-Toluene	115	91	60-144
Bromofluorobenzene	98	94	71-127
Date Prepared	08/17/01 17:45		
Date Analyzed	08/22/01 14:16	08/20/01 13:36	

U = Compound was analyzed for but not detected to the level shown.
D2 = Analyte value determined from a 1:1.14 dilution.
D4 = Analyte value determined from a 1:100 dilution.

ENCO LABORATORIES
REPORT # : JAX19140
DATE REPORTED: August 28, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 8310 - PAH BY HPLC	PB-5-3'	LAB BLANK	Units
Naphthalene	21 U	16 U	µg/Kg
Acenaphthylene	42 U	33 U	µg/Kg
1-Methylnaphthalene	42 U	33 U	µg/Kg
2-Methylnaphthalene	42 U	33 U	µg/Kg
Acenaphthene 1900/18000/2.1	310	16 U	µg/Kg
Fluorene 2200/28000/160	4.2 U	3.3 U	µg/Kg
Phenanthrene 2000/30000/250	760	33 U	µg/Kg
Anthracene 18000/260000/2500	21 U	16 U	µg/Kg
Fluoranthene 2900/48000/1200	1200	3.3 U	µg/Kg
Pyrene 2200/37000/880	1300	3.3 U	µg/Kg
Benzo(a)anthracene 1.4/5/32	490	16 U	µg/Kg
Chrysene 140/450/77	460	3.3 U	µg/Kg
Benzo(b)fluoranthene 1.4/4.8/10	160	3.3 U	µg/Kg
Benzo(k)fluoranthene 15/52/25	120	3.3 U	µg/Kg
Benzo(a)pyrene 0.1/0.5/8	170	3.3 U	µg/Kg
Dibenzo(a,h)anthracene 0.1/0.5/30	49	3.3 U	µg/Kg
Benzo(g,h,i)perylene 2300/41000/32000	59	3.3 U	µg/Kg
Indeno(1,2,3-cd)pyrene 1.5/5.3/28	110	3.3 U	µg/Kg

Surrogate:	% RECOV	% RECOV	LIMITS
p-terphenyl	122	91	39-141
Date Prepared	08/21/01 22:00	08/21/01 22:00	
Date Analyzed	08/24/01 18:22	08/23/01 01:15	

MISCELLANEOUS	METHOD	PB-5-3'	LAB BLANK	Units
Percent Solids	SM2540G	79	NA	%
Date Analyzed		08/20/01 10:00		

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19140
DATE REPORTED: August 28, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD FLPRO - PETROL. RESIDUAL ORG.	PB-5-3'	LAB BLANK	Units
Hydrocarbons (C8-C40)	14	6.6 U	mg/Kg
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
o-Terphenyl	60	68	51-148
Date Prepared	08/21/01 23:00	08/21/01 23:00	
Date Analyzed	08/22/01 16:02	08/22/01 12:58	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19140
DATE REPORTED: August 28, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 8260 - VOLATILE ORGANICS	LAB BLANK	Units
Methyl tert-butyl ether	1.0 U	µg/Kg
Benzene	1.0 U	µg/Kg
Toluene	1.0 U	µg/Kg
Chlorobenzene	1.0 U	µg/Kg
Ethylbenzene	1.0 U	µg/Kg
m-Xylene & p-Xylene	2.0 U	µg/Kg
o-Xylene	1.0 U	µg/Kg
1,3-Dichlorobenzene	1.0 U	µg/Kg
1,4-Dichlorobenzene	1.0 U	µg/Kg
1,2-Dichlorobenzene	1.0 U	µg/Kg
Surrogate:	**% RECOV**	**LIMITS**
Dibromofluoromethane	97	70-134
D8-Toluene	94	60-144
Bromofluorobenzene	97	71-127
Date Analyzed	08/22/01 07:21	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19140
DATE REPORTED: August 28, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method 8260				
1,1-Dichloroethene	99/101/ 98	44-169	2	19
Benzene	102/103/101	50-140	<1	23
Trichloroethene	92/ 94/ 92	75-125	2	17
Toluene	93/ 93/ 91	56-139	<1	22
Chlorobenzene	100/100/101	73-123	<1	24
EPA Method 8260				
1,1-Dichloroethene	92/ 92/ 98	44-169	<1	19
Benzene	96/ 95/108	50-140	1	23
Trichloroethene	88/ 89/103	75-125	1	17
Toluene	90/ 87/ 95	56-139	3	22
Chlorobenzene	90/ 90/ 99	73-123	<1	24
EPA Method 8310				
Naphthalene	53/ 55/ 60	48-130	4	20
Acenaphthene	58/ 59/ 60	36-127	2	17
Benzo(a)pyrene	71/ 67/ 72	64-141	6	22
Benzo(g,h,i)perylene	71/ 70/ 78	58-168	1	21
PETROL. RESIDUAL ORG.				
Hydrocarbons (C8-C40)	101/ 77/101	62-204	#27	25

Environmental Conservation Laboratories Comprehensive QA Plan #910190

< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference
# = One or more of the associated values failed to meet laboratory established limits for precision.

This report shall not be reproduced except in full, without the written approval of the laboratory. Results for these procedures apply only to the samples as submitted

CLIENT : Environmental Recovery
ADDRESS: 251 Levy Road
Atlantic Beach, FL 32233

REPORT # : JAX19158
DATE SUBMITTED: August 17, 2001
DATE REPORTED : August 29, 2001

ATTENTION: Mr. Chuck Nevin

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

PROJECT : MAYPORT NAVAL ST.

Tank Closure

08/17/01

#1 - PB6-3' @ 09:10
#2 - PB7-2' @ 09:35
#3 - PB8-2' @ 10:05
#4 - TB1-3' @ 11:10
#5 - TB2-2.5' @ 11:50
#6 - TB3-3.5' @ 12:45
#7 - TB4-3' @ 14:00
#8 - TB5-2.5' @ 15:30

PROJECT MANAGER _____
Scott D. Martin

ENCO LABORATORIES
REPORT # : JAX19158
DATE REPORTED: August 29, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 8260 - VOLATILE ORGANICS	PB6-3'			PB7-2'			Units
Methyl tert-butyl ether	1.3	U	D1	2.0	U	D2	µg/Kg
Benzene	1.3	U	D1	2.0	U	D2	µg/Kg
Toluene	1.3	U	D1	2.0	U	D2	µg/Kg
Chlorobenzene	1.3	U	D1	2.0	U	D2	µg/Kg
Ethylbenzene	1.3	U	D1	2.0	U	D2	µg/Kg
m-Xylene & p-Xylene	2.7	U	D1	3.0	U	D2	µg/Kg
o-Xylene	1.4		D1	1.7		D2	µg/Kg
1,3-Dichlorobenzene	1.3	U	D1	2.0	U	D2	µg/Kg
1,4-Dichlorobenzene	1.3	U	D1	2.0	U	D2	µg/Kg
1,2-Dichlorobenzene	1.3	U	D1	2.0	U	D2	µg/Kg

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	97	99	70-134
D8-Toluene	97	98	60-144
Bromofluorobenzene	100	98	71-127
Date Prepared	08/18/01 13:00	08/18/01 13:00	
Date Analyzed	08/21/01 23:49	08/22/01 00:20	

U = Compound was analyzed for but not detected to the level shown.
D1 = Analyte value determined from a 1:1.13 dilution.
D2 = Analyte value determined from a 1:1.02 dilution.

ENCO LABORATORIES
REPORT # : JAX19158
DATE REPORTED: August 29, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 8310 - PAH BY HPLC	PB6-3'	PB7-2'	Units
Naphthalene	20 U	25 U	µg/Kg
Acenaphthylene	39 U	51 U	µg/Kg
1-Methylnaphthalene	39 U	51 U	µg/Kg
2-Methylnaphthalene	39 U	51 U	µg/Kg
Acenaphthene	20 U	25 U	µg/Kg
Fluorene	3.9 U	5.1 U	µg/Kg
Phenanthrene	39 U	51 U	µg/Kg
Anthracene	20 U	25 U	µg/Kg
Fluoranthene	12	6.9	µg/Kg
Pyrene	15	7.8	µg/Kg
Benzo(a)anthracene	20 U	25 U	µg/Kg
Chrysene	3.9 U	5.1 U	µg/Kg
Benzo(b)fluoranthene	3.9 U	5.1 U	µg/Kg
Benzo(k)fluoranthene	3.9 U	5.1 U	µg/Kg
Benzo(a)pyrene	3.9 U	5.1 U	µg/Kg
Dibenzo(a,h)anthracene	3.9 U	5.1 U	µg/Kg
Benzo(g,h,i)perylene	3.9 U	5.1 U	µg/Kg
Indeno(1,2,3-cd)pyrene	3.9 U	5.1 U	µg/Kg
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
p-terphenyl	78	53	39-141
Date Prepared	08/22/01 20:00	08/22/01 20:00	
Date Analyzed	08/28/01 03:35	08/28/01 04:26	

MISCELLANEOUS	METHOD	PB6-3'	PB7-2'	Units
Percent Solids	SM2540G	84	65	%
Date Prepared		08/20/01 10:15	08/20/01 10:15	
Date Analyzed		08/21/01 11:30	08/21/01 11:30	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19158
DATE REPORTED: August 29, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD FLPRO - PETROL. RESIDUAL ORG.	PB6-3'	PB7-2'	Units
Hydrocarbons (C8-C40)	7.8 U	10 U	mg/Kg
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
o-Terphenyl	111	57	51-148
Date Prepared	08/27/01 14:00	08/22/01 20:00	
Date Analyzed	08/28/01 09:30	08/24/01 09:53	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19158
DATE REPORTED: August 29, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 8260 - VOLATILE ORGANICS	PB8-2'			TB1-3'		Units
Methyl tert-butyl ether	1.0	U	D3	1.1	U	µg/Kg
Benzene	1.0	U	D3	1.1	U	µg/Kg
Toluene	1.0	U	D3	1.1	U	µg/Kg
Chlorobenzene	1.0	U	D3	1.1	U	µg/Kg
Ethylbenzene	1.0	U	D3	1.1	U	µg/Kg
m-Xylene & p-Xylene	2.3	U	D3	2.2	U	µg/Kg
o-Xylene	1.2		D3	1.0		µg/Kg
1,3-Dichlorobenzene	1.0	U	D3	1.1	U	µg/Kg
1,4-Dichlorobenzene	1.0	U	D3	1.1	U	µg/Kg
1,2-Dichlorobenzene	1.0	U	D3	1.1	U	µg/Kg

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	95	86	70-134
D8-Toluene	97	96	60-144
Bromofluorobenzene	99	104	71-127
Date Prepared	08/18/01 13:00	08/18/01 13:00	
Date Analyzed	08/22/01 00:50	08/22/01 01:21	

U = Compound was analyzed for but not detected to the level shown.
D3 = Analyte value determined from a 1:1.04 dilution.

ENCO LABORATORIES
REPORT # : JAX19158
DATE REPORTED: August 29, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 8310 - PAH BY HPLC	PB8-2'	TB1-3'	Units
Naphthalene	18 U	< 0.020 U	µg/Kg
Acenaphthylene	36 U	40 U	µg/Kg
1-Methylnaphthalene	36 U	40 U	µg/Kg
2-Methylnaphthalene	36 U	40 U	µg/Kg
Acenaphthene	18 U	20 U	µg/Kg
Fluorene	3.6 U	4.0 U	µg/Kg
Phenanthrene	36 U	40 U	µg/Kg
Anthracene	18 U	20 U	µg/Kg
Fluoranthene	13	4.0 U	µg/Kg
Pyrene	16	4.0 U	µg/Kg
Benzo(a)anthracene	18 U	20 U	µg/Kg
Chrysene	3.6 U	4.0 U	µg/Kg
Benzo(b)fluoranthene	3.6 U	4.0 U	µg/Kg
Benzo(k)fluoranthene	3.6 U	4.0 U	µg/Kg
Benzo(a)pyrene	3.6 U	4.0 U	µg/Kg
Dibenzo(a,h)anthracene	3.6 U	4.0 U	µg/Kg
Benzo(g,h,i)perylene	3.6 U	4.0 U	µg/Kg
Indeno(1,2,3-cd)pyrene	3.6 U	4.0 U	µg/Kg
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
o-terphenyl	82	85	39-141
Date Prepared	08/22/01 20:00	08/22/01 20:00	
Date Analyzed	08/28/01 05:18	08/28/01 07:02	

MISCELLANEOUS	METHOD	PB8-2'	TB1-3'	Units
Percent Solids	SM2540G	91	82	%
Date Prepared		08/20/01 10:15	08/20/01 10:15	
Date Analyzed		08/21/01 11:30	08/21/01 11:30	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19158
DATE REPORTED: August 29, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD FLPRO - PETROL. RESIDUAL ORG.	PB8-2'	TB1-3'	Units
Hydrocarbons (C8-C40)	7.2 U	8.0 U	mg/Kg
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
o-Terphenyl	54	61	51-148
Date Prepared	08/22/01 20:00	08/22/01 20:00	
Date Analyzed	08/24/01 10:03	08/24/01 10:12	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19158
DATE REPORTED: August 29, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 8260 - VOLATILE ORGANICS	TB2-2.5'			TB3-3.5'		Units
Methyl tert-butyl ether	1.0	U	D2	1.0	U	µg/Kg
Benzene	1.0	U	D2	1.2	U	µg/Kg
Toluene	1.5		D2	2.0		µg/Kg
Chlorobenzene	1.0	U	D2	1.0	U	µg/Kg
Ethylbenzene	1.0	U	D2	1.0	U	µg/Kg
m-Xylene & p-Xylene	2.0	U	D2	2.0	U	µg/Kg
o-Xylene	2.2		D2	1.8		µg/Kg
1,3-Dichlorobenzene	1.0	U	D2	1.0	U	µg/Kg
1,4-Dichlorobenzene	1.0	U	D2	1.0	U	µg/Kg
1,2-Dichlorobenzene	1.0	U	D2	1.0	U	µg/Kg

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	47	54	70-134
D8-Toluene	98	96	60-144
Bromofluorobenzene	101	100	71-127
Date Prepared	08/18/01 13:00	08/18/01 13:00	
Date Analyzed	08/22/01 01:52	08/22/01 02:22	

U = Compound was analyzed for but not detected to the level shown.
D2 = Analyte value determined from a 1:1.02 dilution.

ENCO LABORATORIES
REPORT # : JAX19158
DATE REPORTED: August 29, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 8310 - PAH BY HPLC	TB2-2.5'	TB3-3.5'	Units
Naphthalene	21 U	20 U	µg/Kg
Acenaphthylene	41 U	40 U	µg/Kg
1-Methylnaphthalene	41 U	40 U	µg/Kg
2-Methylnaphthalene	41 U	40 U	µg/Kg
Acenaphthene	21 U	20 U	µg/Kg
Fluorene	4.1 U	4.0 U	µg/Kg
Phenanthrene	41 U	40 U	µg/Kg
Anthracene	21 U	20 U	µg/Kg
Fluoranthene	4.1 U	8.0	µg/Kg
Pyrene	4.1 U	9.9	µg/Kg
Benzo(a)anthracene	21 U	20 U	µg/Kg
Chrysene	4.1 U	4.0 U	µg/Kg
Benzo(b)fluoranthene	4.1 U	4.0 U	µg/Kg
Benzo(k)fluoranthene	4.1 U	4.0 U	µg/Kg
Benzo(a)pyrene	4.1 U	4.0 U	µg/Kg
Dibenzo(a,h)anthracene	4.1 U	4.0 U	µg/Kg
Benzo(g,h,i)perylene	4.1 U	4.0 U	µg/Kg
Indeno(1,2,3-cd)pyrene	4.1 U	4.0 U	µg/Kg
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
o-terphenyl	82	79	39-141
Date Prepared	08/22/01 20:00	08/22/01 20:00	
Date Analyzed	08/28/01 07:53	08/28/01 08:45	

MISCELLANEOUS	METHOD	TB2-2.5'	TB3-3.5'	Units
Percent Solids	SM2540G	80	82	%
Date Prepared		08/20/01 10:15	08/20/01 10:15	
Date Analyzed		08/21/01 11:30	08/21/01 11:30	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19158
DATE REPORTED: August 29, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD FLPRO - PETROL. RESIDUAL ORG.	TB2-2.5'	TB3-3.5'	Units
Hydrocarbons (C8-C40)	8.2 U	8.0 U	mg/Kg
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
o-Terphenyl	64	51	51-148
Date Prepared	08/22/01 20:00	08/22/01 20:00	
Date Analyzed	08/24/01 10:40	08/24/01 10:50	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19158
DATE REPORTED: August 29, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 8260 - VOLATILE ORGANICS	TB4-3'	TB5-2.5'	Units
Methyl tert-butyl ether	1.0 U	1.0 U	µg/Kg
Benzene	1.2 U	1.2 U	µg/Kg
Toluene	5.6	1.0 U	µg/Kg
Chlorobenzene	1.0 U	1.0 U	µg/Kg
Ethylbenzene	2.1	1.0 U	µg/Kg
m-Xylene & p-Xylene	7.0	2.3 U	µg/Kg
o-Xylene	5.9	1.0	µg/Kg
1,3-Dichlorobenzene	1.0 U	1.0 U	µg/Kg
1,4-Dichlorobenzene	1.0 U	1.0 U	µg/Kg
1,2-Dichlorobenzene	1.0 U	1.0 U	µg/Kg
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	42	96	70-134
D8-Toluene	98	101	60-144
Bromofluorobenzene	99	101	71-127
Date Prepared	08/18/01 13:00	08/18/01 13:00	
Date Analyzed	08/22/01 02:53	08/22/01 03:23	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19158
DATE REPORTED: August 29, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 8310 - PAH BY HPLC	TB4-3'	TB5-2.5'	Units
Naphthalene	20 U	20 U	µg/Kg
Acenaphthylene	41 U	41 U	µg/Kg
1-Methylnaphthalene	41 U	41 U	µg/Kg
2-Methylnaphthalene	41 U	41 U	µg/Kg
Acenaphthene	20 U	20 U	µg/Kg
Fluorene	4.1 U	4.1 U	µg/Kg
Phenanthrene	41 U	41 U	µg/Kg
Anthracene	20 U	20 U	µg/Kg
Fluoranthene	4.1 U	4.1 U	µg/Kg
Pyrene	4.1 U	4.1 U	µg/Kg
Benzo(a)anthracene	20 U	20 U	µg/Kg
Chrysene	4.1 U	4.1 U	µg/Kg
Benzo(b)fluoranthene	4.1 U	4.1 U	µg/Kg
Benzo(k)fluoranthene	4.1 U	4.1 U	µg/Kg
Benzo(a)pyrene	4.1 U	4.1 U	µg/Kg
Dibenzo(a,h)anthracene	4.1 U	4.1 U	µg/Kg
Benzo(g,h,i)perylene	4.1 U	4.1 U	µg/Kg
Indeno(1,2,3-cd)pyrene	4.1 U	4.1 U	µg/Kg
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
o-terphenyl	62	81	39-141
Date Prepared	08/22/01 20:00	08/22/01 20:00	
Date Analyzed	08/28/01 09:37	08/28/01 10:29	

MISCELLANEOUS	METHOD	TB4-3'	TB5-2.5'	Units
Percent Solids	SM2540G	81	81	%
Date Prepared		08/20/01 10:15	08/20/01 10:15	
Date Analyzed		08/21/01 11:30	08/21/01 11:30	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19158
DATE REPORTED: August 29, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD FLPRO - PETROL. RESIDUAL ORG.	TB4-3'	TB5-2.5'	Units
Hydrocarbons (C8-C40)	8.1 U	8.1 U	mg/Kg
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
o-Terphenyl	52	59	51-148
Date Prepared	08/27/01 14:00	08/22/01 20:00	
Date Analyzed	08/28/01 09:41	08/24/01 11:09	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19158
DATE REPORTED: August 29, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 8260 - VOLATILE ORGANICS	LAB BLANK	Units
Methyl tert-butyl ether	1.0 U	µg/Kg
Benzene	1.0 U	µg/Kg
Toluene	1.0 U	µg/Kg
Chlorobenzene	1.0 U	µg/Kg
Ethylbenzene	1.0 U	µg/Kg
m-Xylene & p-Xylene	2.0 U	µg/Kg
o-Xylene	1.0 U	µg/Kg
1,3-Dichlorobenzene	1.0 U	µg/Kg
1,4-Dichlorobenzene	1.0 U	µg/Kg
1,2-Dichlorobenzene	1.0 U	µg/Kg

Surrogate:	% RECOV	LIMITS
Dibromofluoromethane	95	70-134
D8-Toluene	98	60-144
Bromofluorobenzene	98	71-127
Date Analyzed	08/21/01 18:04	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19158
DATE REPORTED: August 29, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 8310 - PAH BY HPLC	LAB BLANK	Units
Naphthalene	16 U	µg/Kg
Acenaphthylene	33 U	µg/Kg
1-Methylnaphthalene	33 U	µg/Kg
2-Methylnaphthalene	33 U	µg/Kg
Acenaphthene	16 U	µg/Kg
Fluorene	3.3 U	µg/Kg
Phenanthrene	33 U	µg/Kg
Anthracene	16 U	µg/Kg
Fluoranthene	3.3 U	µg/Kg
Pyrene	3.3 U	µg/Kg
Benzo(a)anthracene	16 U	µg/Kg
Chrysene	3.3 U	µg/Kg
Benzo(b)fluoranthene	3.3 U	µg/Kg
Benzo(k)fluoranthene	3.3 U	µg/Kg
Benzo(a)pyrene	3.3 U	µg/Kg
Dibenzo(a,h)anthracene	3.3 U	µg/Kg
Benzo(g,h,i)perylene	3.3 U	µg/Kg
Indeno(1,2,3-cd)pyrene	3.3 U	µg/Kg

Surrogate:	% RECOV	LIMITS
o-terphenyl	91	39-141
Date Prepared	08/22/01 20:00	
Date Analyzed	08/27/01 23:16	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19158
DATE REPORTED: August 29, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD FLPRO - PETROL. RESIDUAL ORG.	LAB BLANK	LAB BLANK	Units
Hydrocarbons (C8-C40)	6.6 U	6.6 U	mg/Kg
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
o-Terphenyl	58	59	51-148
Date Prepared	08/22/01 20:00	08/27/01 14:00	
Date Analyzed	08/24/01 08:58	08/28/01 09:10	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19158
DATE REPORTED: August 29, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method 8260				
1,1-Dichloroethene	84/ 85/ 96	44-169	1	19
Benzene	89/ 87/100	50-140	2	23
Trichloroethene	74/ 74/100	75-125	<1	17
Toluene	*/ */ 92	56-139	*	22
Chlorobenzene	71/ 68/ 96	73-123	4	24
EPA Method 8310				
Naphthalene	73/ 77/ 68	48-130	5	20
Acenaphthene	70/ 78/ 67	36-127	11	17
Benzo(a)pyrene	71/ 76/ 71	64-141	7	22
Benzo(g,h,i)perylene	74/ 78/ 88	58-168	5	21
PETROL. RESIDUAL ORG. Hydrocarbons (C8-C40)	71/ 70/ 67	62-204	1	25
PETROL. RESIDUAL ORG. Hydrocarbons (C8-C40)	71/ 70/ 76	62-204	1	25

Environmental Conservation Laboratories Comprehensive QA Plan #910190

< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference
* = MS/MSD/RPD unavailable due to high original sample concentration.

This report shall not be reproduced except in full, without the written approval of the laboratory. Results for these procedures apply only to the samples as submitted

CLIENT : Environmental Recovery
ADDRESS: 251 Levy Road
Atlantic Beach, FL 32233

REPORT # : JAX19159
DATE SUBMITTED: August 17, 2001
DATE REPORTED : August 30, 2001

ATTENTION: Mr. Chuck Nevin

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

PROJECT : MAYPORT NAVAL ST.

Tank Closure

08/17/01

#1 - PB1 @ 15:00
#2 - PB2 @ 15:20
#3 - PB3 @ 15:40

PROJECT MANAGER _____
Scott D. Martin

ENCO LABORATORIES
REPORT # : JAX19159
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 601 - VOLATILE HALOCARBONS	PB1	PB2	Units
Dichlorodifluoromethane	1.0 U	1.0 U	µg/L
Chloromethane	4.7	1.0 U	µg/L
Vinyl Chloride	1.0 U	1.0 U	µg/L
Bromomethane	1.0 U	1.0 U	µg/L
Chloroethane	1.0 U	1.0 U	µg/L
Trichlorofluoromethane	2.0 U	2.0 U	µg/L
1,1-Dichloroethene	1.0 U	1.0 U	µg/L
Methylene Chloride	5.0 U	5.0 U	µg/L
c-1,2-Dichloroethene	1.0 U	1.0 U	µg/L
1,1-Dichloroethane	1.0 U	1.0 U	µg/L
t-1,2-Dichloroethene	1.0 U	1.0 U	µg/L
Chloroform	1.0 U	1.0 U	µg/L
1,1,1-Trichloroethane	1.0 U	1.0 U	µg/L
Carbon Tetrachloride	1.0 U	1.0 U	µg/L
1,2-Dichloroethane	1.0 U	1.0 U	µg/L
Trichloroethene	1.0 U	1.0 U	µg/L
1,2-Dichloropropane	1.0 U	1.0 U	µg/L
Bromodichloromethane	1.0 U	1.0 U	µg/L
c-1,3-Dichloropropene	1.0 U	1.0 U	µg/L
t-1,3-Dichloropropene	1.0 U	1.0 U	µg/L
1,1,2-Trichloroethane	1.0 U	1.0 U	µg/L
Tetrachloroethene	1.0 U	1.0 U	µg/L
Dibromochloromethane	1.0 U	1.0 U	µg/L
Chlorobenzene	1.0 U	1.0 U	µg/L
Bromoform	1.0 U	1.0 U	µg/L
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	µg/L
1,3-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,4-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,2-Dichlorobenzene	1.0 U	1.0 U	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Bromofluorobenzene	54	50	37-161
Date Analyzed	08/26/01 10:23	08/26/01 11:21	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19159
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 602 - VOLATILE AROMATICS	PB1	PB2	Units
Methyl tert-butyl ether	2.0 U	2.0 U	µg/L
Benzene	1.0 U	1.0 U	µg/L
Toluene	1.0 U	1.0 U	µg/L
Chlorobenzene	1.0 U	1.0 U	µg/L
Ethylbenzene	1.0 U	1.0 U	µg/L
m-Xylene & p-Xylene	1.0 U	1.0 U	µg/L
o-Xylene	1.0 U	1.0 U	µg/L
1,3-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,4-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,2-Dichlorobenzene	1.0 U	1.0 U	µg/L
Surrogate:	% RECOV	% RECOV	LIMITS
Bromofluorobenzene	127	114	52-147
Date Analyzed	08/26/01 10:23	08/26/01 11:21	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19159
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 8310 - PAH BY HPLC	PB1	PB2	Units
Naphthalene	0.50 U	0.50 U	µg/L
Acenaphthylene	1.0 U	1.0 U	µg/L
1-Methylnaphthalene	1.0 U	1.0 U	µg/L
2-Methylnaphthalene	1.0 U	1.0 U	µg/L
Acenaphthene	0.50 U	0.50 U	µg/L
Fluorene	0.10 U	0.10 U	µg/L
Phenanthrene	1.0 U	1.0 U	µg/L
Anthracene	0.20 U	0.20 U	µg/L
Fluoranthene	0.95	0.14	µg/L
Pyrene	0.69	0.35	µg/L
Benzo(a)anthracene	0.10 U	0.10 U	µg/L
Chrysene	0.10 U	0.10 U	µg/L
Benzo(b)fluoranthene	0.10 U	0.10 U	µg/L
Benzo(k)fluoranthene	0.10 U	0.10 U	µg/L
Benzo(a)pyrene	0.10 U	0.10 U	µg/L
Dibenzo(a,h)anthracene	0.10 U	0.10 U	µg/L
Benzo(g,h,i)perylene	0.10 U	0.10 U	µg/L
Indeno(1,2,3-cd)pyrene	0.10 U	0.10 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
o-terphenyl	89	83	43-148
Date Prepared	08/23/01 22:30	08/23/01 22:30	
Date Analyzed	08/27/01 03:26	08/27/01 04:18	

EPA METHOD 504 - ETHYLENE DIBROMIDE	PB1	PB2	Units
Ethylene Dibromide	0.020 U	0.020 U	µg/L
Date Prepared	08/23/01 09:30	08/23/01 09:30	
Date Analyzed	08/24/01 11:46	08/24/01 12:04	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19159
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	PB1	PB2	Units
Lead	200.7	0.0050 U	0.0050 U	mg/L
Date Analyzed		08/24/01 12:25	08/24/01 12:34	

EPA METHOD FLPRO - PETROL. RESIDUAL ORG.	PB1	PB2	Units
Hydrocarbons (C8-C40)	0.69	0.20 U	mg/L
Surrogate:	% RECOV	% RECOV	LIMITS
o-Terphenyl	95	92	65-140
Date Prepared	08/22/01 10:00	08/22/01 10:00	
Date Analyzed	08/23/01 10:24	08/23/01 11:43	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19159
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 601 - VOLATILE HALOCARBONS	PB3	LAB BLANK	Units
Dichlorodifluoromethane	1.0 U	1.0 U	µg/L
Chloromethane	1.0 U	1.0 U	µg/L
Vinyl Chloride	1.0 U	1.0 U	µg/L
Bromomethane	1.0 U	1.0 U	µg/L
Chloroethane	1.0 U	1.0 U	µg/L
Trichlorofluoromethane	2.0 U	2.0 U	µg/L
1,1-Dichloroethene	1.0 U	1.0 U	µg/L
Methylene Chloride	5.0 U	5.0 U	µg/L
t-1,2-Dichloroethene	1.0 U	1.0 U	µg/L
1,1-Dichloroethane	1.0 U	1.0 U	µg/L
c-1,2-Dichloroethene	1.0 U	1.0 U	µg/L
Chloroform	1.0 U	1.0 U	µg/L
1,1,1-Trichloroethane	1.0 U	1.0 U	µg/L
Carbon Tetrachloride	1.0 U	1.0 U	µg/L
1,2-Dichloroethane	1.0 U	1.0 U	µg/L
Trichloroethene	1.0 U	1.0 U	µg/L
1,2-Dichloropropane	1.0 U	1.0 U	µg/L
Bromodichloromethane	1.0 U	1.0 U	µg/L
c-1,3-Dichloropropene	1.0 U	1.0 U	µg/L
t-1,3-Dichloropropene	1.0 U	1.0 U	µg/L
1,1,2-Trichloroethane	1.0 U	1.0 U	µg/L
Tetrachloroethene	1.0 U	1.0 U	µg/L
Dibromochloromethane	1.0 U	1.0 U	µg/L
Chlorobenzene	1.0 U	1.0 U	µg/L
Bromoform	1.0 U	1.0 U	µg/L
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	µg/L
1,3-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,4-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,2-Dichlorobenzene	1.0 U	1.0 U	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Bromofluorobenzene	56	56	37-161
Date Analyzed	08/26/01 12:20	08/26/01 07:41	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19159
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 602 - VOLATILE AROMATICS	PB3	LAB BLANK	Units
Methyl tert-butyl ether	2.0 U	2.0 U	µg/L
Benzene	1.0 U	1.0 U	µg/L
Toluene	1.0 U	1.0 U	µg/L
Chlorobenzene	1.0 U	1.0 U	µg/L
Ethylbenzene	1.0 U	1.0 U	µg/L
m-Xylene & p-Xylene	1.0 U	1.0 U	µg/L
o-Xylene	1.0 U	1.0 U	µg/L
1,3-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,4-Dichlorobenzene	1.0 U	1.0 U	µg/L
1,2-Dichlorobenzene	1.0 U	1.0 U	µg/L
Surrogate:	% RECOV	% RECOV	LIMITS
Bromofluorobenzene	120	127	52-147
Date Analyzed	08/26/01 12:20	08/26/01 07:41	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19159
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

EPA METHOD 8310 - PAH BY HPLC	PB3	LAB BLANK	Units
Naphthalene	0.50 U	0.50 U	µg/L
Acenaphthylene	1.0 U	1.0 U	µg/L
1-Methylnaphthalene	1.0 U	1.0 U	µg/L
2-Methylnaphthalene	1.0 U	1.0 U	µg/L
Acenaphthene	0.50 U	0.50 U	µg/L
Fluorene	0.10 U	0.10 U	µg/L
Phenanthrene	1.0 U	1.0 U	µg/L
Anthracene	0.20 U	0.20 U	µg/L
Fluoranthene	0.17	0.10 U	µg/L
Pyrene	0.57	0.10 U	µg/L
Benzo(a)anthracene	0.10 U	0.10 U	µg/L
Chrysene	0.10 U	0.10 U	µg/L
Benzo(b)fluoranthene	0.10 U	0.10 U	µg/L
Benzo(k)fluoranthene	0.10 U	0.10 U	µg/L
Benzo(a)pyrene	0.10 U	0.10 U	µg/L
Dibenzo(a,h)anthracene	0.10 U	0.10 U	µg/L
Benzo(g,h,i)perylene	0.10 U	0.10 U	µg/L
Indeno(1,2,3-cd)pyrene	0.10 U	0.10 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
o-terphenyl	79	79	43-148
Date Prepared	08/23/01 22:30	08/23/01 22:30	
Date Analyzed	08/27/01 06:53	08/26/01 23:08	

EPA METHOD 504 - ETHYLENE DIBROMIDE	PB3	LAB BLANK	Units
Ethylene Dibromide	0.020 U	0.020 U	µg/L
Date Prepared	08/23/01 09:30	08/23/01 09:30	
Date Analyzed	08/24/01 12:22	08/23/01 11:58	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19159
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	PB3	LAB BLANK	Units
Lead	200.7	0.0050 U	0.0050 U	mg/L
Date Analyzed		08/24/01 12:58	08/24/01 11:19	

EPA METHOD FLPRO - PETROL. RESIDUAL ORG.	PB3	LAB BLANK	Units
Hydrocarbons (C8-C40)	0.28	0.20 U	mg/L
Surrogate:	% RECOV	% RECOV	LIMITS
o-Terphenyl	92	84	65-140
Date Prepared	08/22/01 10:00	08/22/01 10:00	
Date Analyzed	08/23/01 12:23	08/22/01 16:54	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX19159
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method 601				
Methylene Chloride	110/122/102	45-161	10	29
Chloroform	124/125/105	64-154	<1	16
Carbon Tetrachloride	120/124/111	71-165	3	21
Trichloroethene	118/126/109	69-158	6	24
Tetrachloroethene	120/122/104	63-166	2	21
Chlorobenzene	110/114/101	67-147	4	19
EPA Method 602				
Benzene	118/126/119	60-138	6	17
Toluene	116/122/116	57-138	5	16
Ethylbenzene	122/124/118	49-144	2	17
o-Xylene	133/138/107	50-151	4	17
EPA Method 8310				
Naphthalene	75/ 65/ 75	59-111	#14	12
Acenaphthene	72/ 69/ 79	58-128	4	13
Benzo(a)pyrene	89/ 84/ 88	78-134	6	15
Benzo(g,h,i)perylene	91/ 85/ 89	62-115	7	30

Environmental Conservation Laboratories Comprehensive QA Plan #910190

= One or more of the associated values failed to meet laboratory established limits for precision.
< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

This report shall not be reproduced except in full, without the written approval of the laboratory. Results for these procedures apply only to the samples as submitted.

ENCO LABORATORIES
REPORT # : JAX19159
DATE REPORTED: August 30, 2001
REFERENCE : MAYPORT NAVAL ST.
PROJECT NAME : Tank Closure

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method 504				
Ethylene Dibromide	68/ 64/ 96	57-130	6	18
Dibromochloropropane	72/ 76/104	60-130	5	20
TOTAL METALS				
Lead, 200.7	106/105/101	68-126	<1	19
PETROL. RESIDUAL ORG.				
Hydrocarbons (C8-C40)	100/100/ 97	49-162	<1	28

Environmental Conservation Laboratories Comprehensive QA Plan #910190

< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

This report shall not be reproduced except in full, without the written approval of the laboratory. Results for these procedures apply only to the samples as submitted