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ADDENDUM TO THE CONTAMINATION ASSESSMENT REPORT TANK SITE 1343 NS
MAYPORT FL
6/25/1999
BHATE ENVIRONMENTAL ASSOCIATES, INC.

Florida Department of
Environmental
Protection

128 026

FILE

Tank 1343



Bhate Environmental Associates, Inc.
Environmental Engineers & Scientists

NAVAL STATION MAYPORT
MAYPORT, FLORIDA
BHATE PROJECT NO: 9970058
BHATE COMPQAP NO:970052G

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7-20-99

ADDENDUM TO THE
CONTAMINATION ASSESSMENT REPORT
TANK SITE 1343

BUREAU OF NAVAL FACILITIES
JUL 1 1999
TECHNICAL SERVICES CENTER

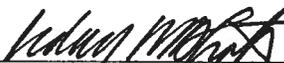
DEPARTMENT OF THE NAVY
SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
2155 EAGLE DRIVE, POST OFFICE BOX 190010
NORTH CHARLESTON, SOUTH CAROLINA 29419-1910

ATTENTION: MS. BEVERLY S. WASHINGTON

Prepared by:

BHATE ENVIRONMENTAL ASSOCIATES, INC.
1608 13TH AVENUE SOUTH
BIRMINGHAM, ALABAMA 35205
TELEPHONE: (205) 918-4000

June 25, 1999



Uday R. Bhat, P.G./P.E. Principal
Florida Registration Number 31619





Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

July 20, 1999

Ms. Beverly Washington
Department of the Navy, Petroleum Program
Southern Division - Naval Facilities Engineering Command
PO Box 190010
2155 Eagle Drive
North Charleston, SC 29419-9010

file: 1343sa2.doc

RE: Site Assessment Report Addendum Tank Site 1343, Naval Station Mayport,
Mayport, FL

Dear Ms. Washington:

I have reviewed the above document dated June 25, 1999 (received July 15, 1999). Information provided in the addendum indicates that the requirements of Chapter 62-770.600, F.A.C. have not been met. Please submit a Site Assessment Addendum, which addresses the following comments:

1. Examination of the ground water flow data on Figure 1 indicates that the flow direction is opposite to that indicated. For the record, the three wells are not placed optimally for ground water flow direction determination. Were it not for the free product observed in monitoring well MW-1, this point would be relatively minor; however, since it was observed, it is important. Please determine the ground water flow direction, including using any new wells as part of the data acquisition. Prepare and present a revised ground water flow direction determination, modifying Figure 1.
2. Based on the presence of free product in monitoring well MW-1, the extent of free product nor possible ground water contamination has not been delineated. Additional monitoring wells should be installed in appropriate directions sufficient to determine the extent of contamination by both free product and any ground water contamination.
3. Please obtain at least one soil boring in the area south-southeast of S-1, as close to the fill port as possible. If contamination is noted, conduct additional borings to sufficiently characterize the extent of contamination. This was previously requested in comment 2 of my letter of June 4, 1998.
4. Please observe the soil sampling requirements in Chapter 62-770, F.A.C. when conducting the soil borings.

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

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Ms. Beverly Washington

Page Two

July 20, 1999

5. Please sample the additional shallow monitoring wells and MW-1 (if free product is not encountered) for semivolatile constituents, lead and TRPH, ensuring that the detection limits for compounds with cleanup target levels are low enough to allow the results to be utilized for determining the presence or absence of contamination.

Please present the above requested data in a SAR Addendum. Based on the provisions of Chapter 62-770, F.A.C., please evaluate the data and propose a course of action for the site. If further clarification is required or if you have any questions, please contact me at 850-921-4230.

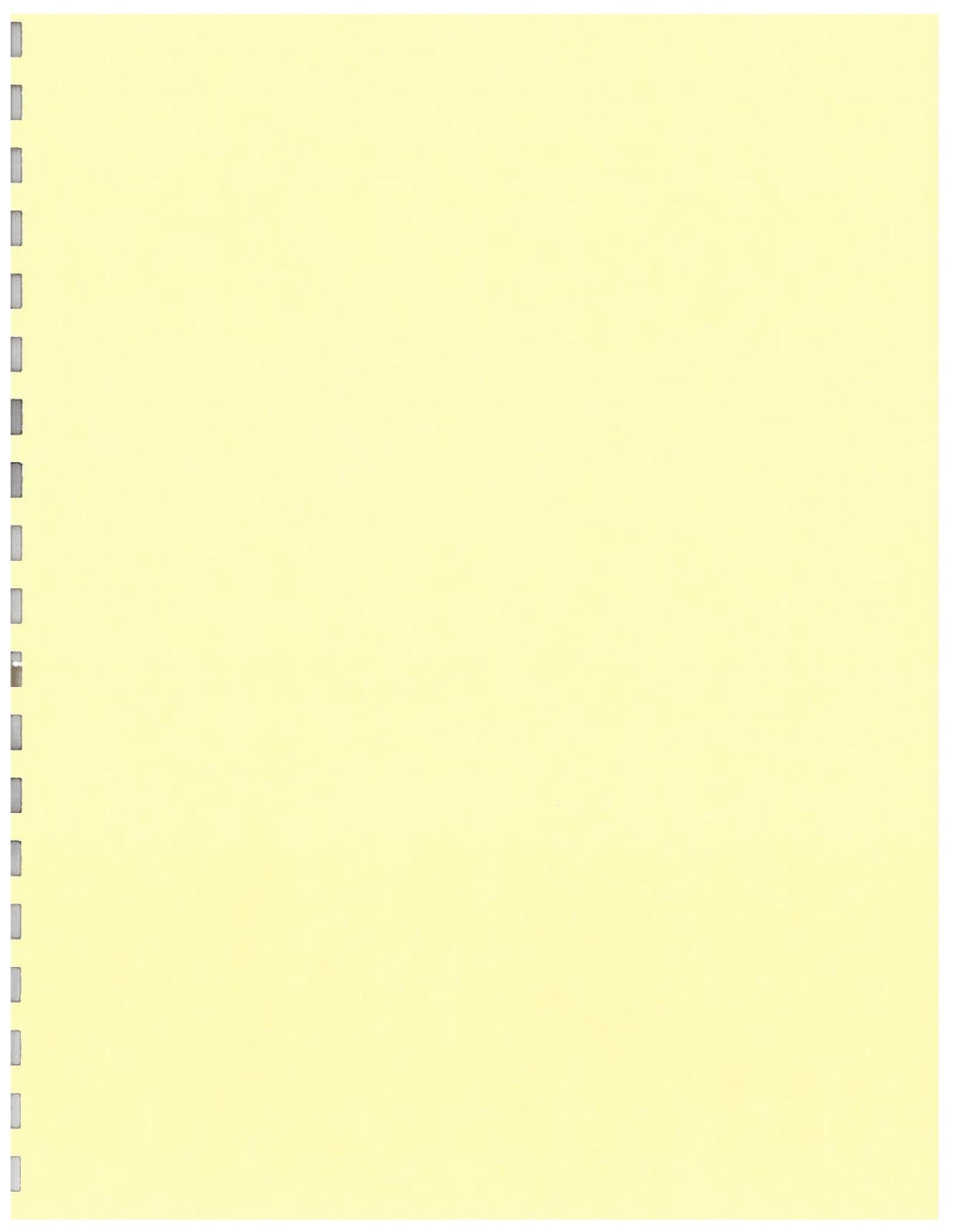
Sincerely,

James H. Cason, P.G.
Remedial Project Manager

Date

CC: Emmett A. Beers, BHATE Environmental, Birmingham, AL
Brian Cheary, FDEP Northeast District
Jerry Young, City of Jacksonville

TJB _____ JJC _____ ESN _____





Bhate Environmental Associates, Inc.
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June 25, 1999

Commanding Officer
Attn: Code 1848
Southern Division, Naval Facilities Engineering Command
2155 Eagle Drive
Post Office Box 190010
North Charleston, South Carolina 29419-1910

Attention: Ms. Beverly S. Washington

Subject: Addendum to the Contamination Assessment Report
Site UST-1343
Naval Station Mayport
Mayport, Florida
Contract No. N62467-96-D-0976
BHATE Project No.: 9970058

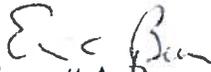
Dear Ms. Washington:

Bhate Environmental Associates (BHATE) is pleased to submit a final copy of the addendum to the Contamination Assessment at the above referenced site. BHATE has prepared this report on behalf of the Southern Division of the Naval Facilities Engineering Command. The report describes the soil and groundwater investigation to determine the extent of petroleum related contamination. The scope of work was prepared to comply with the Florida Department of Environmental Protection (FDEP) regulations pertaining to Corrective Actions (FAC 62-770).

A final copy of the report has been submitted to the FDEP.

If you have any questions or need additional information, please contact us at your earliest convenience at 1 (800) 806-4001.

Respectfully Submitted,
BHATE ENVIRONMENTAL ASSOCIATES


Emmett A. Beers
Senior Project Manager

I:\PROJECT.BEA\1997\9970058\UST 1343 REPORT


Uday R. Bhate, P.G./P.E.
Principal



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NAVAL STATION MAYPORT
UST 1343
BEA PROJECT NO.: 9970082

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NAVAL STATION MAYPORT
UST 1343
BEA PROJECT NO.: 9970082

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Appendix B	-	Tank Assessment Closure Report by G.B. Robbins
Appendix C	-	FDEP Letter



EXECUTIVE SUMMARY

Bhate Environmental, Inc. (Bhate) completed additional assessment activities at the subject site in February of 1999. The assessment activities consisted of soil sampling near an underground storage tank (UST) location at Building 1343 to supplement a site assessment report (SAR) prepared by Bhate in February of 1998. The Florida Department of Environmental Protection (FDEP) reviewed the SAR and requested additional assessment activities in a letter dated June 4, 1998. The following activities were requested by the FDEP to be included in a SAR Addendum.

FDEP Comment #1:

Tank 1343 was a 10,000 gallon fuel oil tank, which was closed in place. At the time of closure, it is stated in the report that contaminated soil was noted and that no soil was removed nor was a groundwater sample obtained at the time of closure. Please submit a copy of the closure documentation.

Bhate Response:

A copy of a UST Closure Report prepared by G.B. Robbins, Inc. is included in Appendix B of the SAR addendum report.

FDEP Comment #2:

Soil borings obtained during the investigation are inadequate for determining the extent of soil contamination. Utilizing the general instructions (from "Storage Tank System Closure Assessment Requirements." February 1998- copy enclosed) for sampling requirements for storage tanks abandoned in place, obtain four soil borings around the tank, placed as close to the tank as possible with one of the borings in close proximity to the fill port. If contamination is noted, conduct additional borings as required to sufficiently characterize the extent of contamination. Additionally, because of the contamination noted in the screening for soil borings S-3 and due to the lack of sufficient laboratory analyses, please obtain a soil sample for this location for laboratory analysis as required in Chapter 62-770, F.A.C. Please note that soil analytical samples of soil must be obtained during an assessment. Not less than one is required; more are required if contaminated soil is found. Please follow the guidance in Chapter 62-770 F.A.C. in "Guidelines for Assessment and Source Removal of Petroleum Contaminated Soil, May 1998," a copy of which I am enclosing. Please also note the different analytical requirements in Table I or Table II, depending on the type of contamination at the site, in this particular case, the requirements in Table I apply.



Bhate response:

Bhate prepared a work plan dated August 27, 1998 and a letter addendum dated September 14, 1998 that proposed soil sampling at the ends of the tank near the product line, and near previous sample location S-3. The work plan was approved by the FDEP in a letter dated October 9, 1998 (Appendix C).

Additional soil sampling shows excessive soil contamination (OVA results >10 ppm) of soil samples collected from borings S-5 and S-9 near the north end of the UST. Three samples were selected for laboratory analysis of Table 1 parameters in accordance with Chapter 62.770-600 (3)(e), F.A.C. Samples S-3B, S-5A, and S-8B did not exceed the 2,500 mg/kg maximum contaminant level (MCL) for FL-PRO as established in Chapter 62-770 F.A.C. None of the soil samples had concentrations of BTEX or PAH parameters exceeding the regulatory MCLs. Sample S-3B contained Toluene and Xylenes at 0.1150 mg/kg and 0.2350 mg/kg, respectively.

FDEP Comment #3:

Please confirm the disposition of the former product piping. Was it removed or is it still operational? Please obtain one soil boring midway between the end of the tank and Building 1343, along or in close proximity to the piping or its former location. If contamination is noted, obtain additional borings, sufficient to characterize any contamination. Additionally, obtain soil borings along the existing fuel line, the 12" water line and the sanitary sewer line in order to assess the possible migration of contamination along their pathways. If contamination is noted, please obtain additional borings, which will sufficiently characterize any possible soil contamination.

Bhate response:

According to Mr. Jan Bovier of the Naval Base Mayport, the product piping was closed in place. Soil samples were collected in the requested areas as noted above in comment #2.

FDEP Comment #4:

Please observe the soil sampling requirements in Chapter 62-770, F.A.C. when conducting the soil borings.

Bhate response:

Soil samples were taken following the requirements in Chapter 62-770, F.A.C.



FDEP Comment #5:

Detection limits for five semivolatile constituents in groundwater were above regulated limits. Monitoring well MW-1 exhibited naphthalene contamination. Additionally, TRPH was not determined and lead was present above the Florida standard. Please resample MW-1 for semivolatile constituents, lead and TRPH, ensuring that the detection limits for compounds with regulatory guidelines or standards are low enough for all the results to be utilized for determining the presence or absence of contamination.

Bhate response:

Prior to sample collection of MW-1, fluids taken from the upper water column within MW-1 were examined for the presence of separate phase petroleum hydrocarbons (free product). Approximately 9.5 inches of product was measured within the Teflon bailer used to collect the sample. Due to the presence of free product, a groundwater sample was not collected.

FDEP Comment #6:

If soil contamination is noted in the new soil borings, install a shallow monitoring well in the center of the area of greatest contamination or as close as possible if it cannot be installed in the source area and sample the groundwater for volatile and semivolatile petroleum constituents, remembering the caution on detection limits noted in comment 5. Please be aware that if significant soil contamination is found, additional monitoring wells should be installed, sufficient to delineate the extent of groundwater contamination.

Bhate response:

Due to the confined area around the UST, additional monitoring wells were not installed in accordance with the FDEP approved work plan.

FDEP Comment #7:

Please submit a properly certified copy of the Assessment Report for Tank Site 1343. Please assure that all future and additional documents in this regard are also properly signed and sealed according to Chapter 62-770 (6), F.A.C. In lieu of submitting a complete report, you may submit a properly executed certification page, which references the site report, and I will insert the page into my copy.

Bhate response:

The SAR addendum enclosed has been reviewed and certified by a professional engineer in the State of Florida.



Closing Comments

Free petroleum product is present and excessively contaminated soil (OVA results >10 ppm) is present at the site. The soil contamination appears to be limited to soils at the NW end of the UST. Bhat recommends the preparation of a remedial action plan (RAP) for the subject site.



1.0 INTRODUCTION

1.1 Location and Area of Investigation

The subject site is located at the Mayport Naval Station in Mayport, Florida. A 10,000-gallon underground storage tank (UST) that had contained fuel oil was closed in place in June of 1995.

The UST is located adjacent to Building 1343 (Figure 1). A fenced security area to the northeast contains electrical transformers and a replacement above ground fuel tank. Two above ground storage tanks, situated on a concrete pad, are located immediately north of the site, also within a fenced area. The ground surface at the immediate area of the UST is not covered and is relatively flat with poor surface water drainage. Surface water drainage outside of the area is toward surface drainage ditches to the southeast.

1.2 Site History

In June of 1995, the 10,000-gallon UST-1343 was closed in place. An area of stained soil was reported on the northwestern end of the UST at the ground surface. This was the location of the UST fill port. According to a UST closure report prepared by G.B. Robbins, heavily contaminated soils were identified during the excavation to the top of the tank. A copy of the closure report is provided in Appendix B.

Soil samples collected at the north and east ends of the fill port at depths of one and two feet, exhibited very strong petroleum odors. A soil sample collected from the east side of the tank at a depth of three feet also exhibited very strong petroleum odors. The soils had elevated OVA headspace concentrations. Contaminated soils were not removed and ground water samples were not taken during the abandonment.

Bhate conducted a contamination assessment during June and July of 1997. The following is a summary of site conditions based on the results of field and laboratory investigations made during the contamination assessment:

- Soil borings indicated soils beneath the site consist of well-sorted fine sands to silty fine sands with shell fragments extending to boring termination at approximate depths of fourteen feet, bls. Construction material was encountered within the upper five feet of well MW-3.
- Groundwater was encountered at depths of approximately 4 to 4.5 feet bls. The direction of groundwater movement is generally to the east as determined from measurements on two different dates.
- OVA-FID headspace concentrations of soil samples collected from each boring at a depth of one to three feet were less than 50 ppm. Stained soils were visible at the northwest end of the UST.



- Laboratory analyses of soil samples collected from depths of 4.0 to 6.0 feet bls indicated FL-PRO concentrations at locations S-1 and S-3 of 28 and 35 ppm, respectively. The concentrations are below the regulatory limit MCL of 2,500 ppm. Concentrations were below laboratory detection limits in soil samples collected from S-2 and S-4.
- Laboratory analyses of groundwater samples from three permanent monitoring wells installed at the site indicated one well, MW-1, contained detectable PAH constituents. PAH concentrations were below the regulatory limits. BTEX was not detected.
- Lead concentrations were above the regulatory limit at well 1343-MW-1. The elevated concentrations may be a result of the sampling method employed.
- Free petroleum product was not measurable on June 13, 1997 during groundwater sample collection. Approximately 3/8 inch of product was measured in 1343-MW-1 on August 8, 1997.

A CAR dated February 2, 1998 was submitted to the Florida Department of Environmental Protection (FDEP). The FDEP subsequently requested additional sampling activities in a letter dated June 4, 1998 (Appendix C). The following report was prepared to address the FDEP comments.

2.0 SITE ASSESSMENT METHODS

Additional assessment activities conducted at the site included the collection of soil samples adjacent to the area of surface contamination, soil headspace screening to define the extent of soil contamination and laboratory analyses of soil samples. The following is a summary of the site activities.

2.1 Soil Headspace Screening

Soil screening conducted during the initial contamination assessment did not encounter soil contamination with elevated FID concentrations above 10 ppm. Soil observance determined that the probable source of soil contamination may have been from over spillage at the fill port on the northern end of the UST (Figure 2). To further define the extent of contamination, additional soil samples were collected at locations indicated on Figure 2. Soil samples (S-5 through S-11) were collected at the specified intervals of one and three feet below the ground surface. The samples were collected above the groundwater capillary fringe.

The soil samples were collected utilizing a stainless steel hand auger. Following retrieval, each soil sample was examined for visual and olfactory evidence of petroleum hydrocarbons. They were transferred into 16-ounce decontaminated glass jars, which were half filled. Each sample was split into two jars, covered with tin foil, and brought to a temperature of between 20°C and 32°C. The readings were obtained within approximately five minutes of containment using a flame ionization detector (FID) to screen the soil gas headspace of each sample. Carbon filters were used with the FID, to aid in distinguishing naturally occurring methane from hydrocarbon vapors.



2.2 Laboratory Soil Sample Collection

Three soil grab samples were collected for laboratory analyses from areas of high, medium and low field screening results. Soil samples submitted for analyses were contained in laboratory supplied clean glass jars, sealed with Teflon-lined lids, and cooled to approximately 4°C. All soil samples were delivered under chain-of-custody to Specialized Assays Laboratory in Nashville, Tennessee for analyses. Soil samples were analyzed for the following parameters:

- Benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Method 8021B.
- Methyl tertiary-butyl ether (MTBE) by EPA method 8021B.
- Naphthalene and the 15 method-listed PAHs by EPA Method 8270.
- Florida Petroleum Residual Organics (FL-PRO) by Method TRPH (FDEP).

2.3 Monitoring Well Groundwater Sampling

A groundwater sample had been proposed for collection from monitoring well MW-1, which had contained petroleum constituents in the initial sampling event. Prior to sample collection, fluids taken from the upper water column within MW-1 were examined for the presence of separate phase petroleum hydrocarbons (free product). Approximately 9.5 inches of product was measured within the Teflon bailer used to collect the sample.

Due to the presence of free product, a groundwater sample was not collected from monitoring well MW-1, as originally proposed.

2.4 Groundwater Flow Direction

Groundwater levels were measured on February 19, 1999. Water-level measurements were obtained with an electronic water-level indicator. Groundwater measurements were taken to the nearest 0.01 foot and are referenced to a point on top of the well casing. Relative groundwater elevations were calculated and are summarized in Table 1, along with previous water-level measurements. The groundwater elevation for MW-1 was corrected for the presence of free petroleum product using the following formula:

$$Z_{aw} = Z_{ow} + \rho_{ro}H_o$$

Where

- Z_{aw} = Corrected water surface elevation
- Z_{ow} = Measured petroleum free product / water interface elevation
- ρ_{ro} = Petroleum specific gravity (free product assumed to be diesel with a specific gravity of 0.73)
- H_o = Measures petroleum thickness

(SpillCAD User and Technical Guide, Version 3.2, 1994).



The water-level elevations on February 19, 1999 were used to prepare a water-table contour map (Figure 1). As indicated on the figure, the direction of groundwater migration is generally toward the east and is consistent with previous measurements.

3.0 RESULTS OF THE CONTAMINATION ASSESSMENT

3.1 Soil Analytical Results

The results of the OVA headspace analysis of soil samples taken during the contamination assessment are shown in Table 2. Field screening of the soil samples collected from one and three feet, bls, and above the groundwater table indicate that excessive soil contamination (OVA results > 10 ppm) exists on site (Figure 2). The highest headspace concentration was encountered north of the former fill port at sample location S-5 from a depth of one foot below the ground surface (bgs).

A summary of the laboratory analytical results is presented in Table 3. Copies of the laboratory analytical reports and chain-of-custody records are provided in Appendix A. The FL-PRO concentrations within soil samples S-3B, S-5A and S-8B did not exceed the 2,500 mg/kg Maximum Contaminant Level (MCL), as established in Chapter 62-770 F.A.C. for the direct exposure industrial scenario that appears here. S-8B had the highest FL-PRO concentration of 76 mg/kg.

None of the soil samples had concentrations exceeding the regulatory MCL for BTEX or PAH parameters. Laboratory analysis of soil sample S-3B detected Toluene and Xylenes at 0.1150 mg/kg and 0.2350 mg/kg, respectively. No other constituents were detected within the samples.

A dilution factor was used to calculate the report limit for BTEX and MTBE in each of the three samples. However, the laboratory report limits for the dilution samples were below the regulatory MCL for all parameters.

4.0 QUALITY ASSURANCE/QUALITY CONTROL

BHATE maintained a stringent QA/QC program for all activities from data acquisition through report preparation in accordance with Comprehensive Quality Assurance Plan 970052G. All appropriate soil sampling equipment was decontaminated by appropriate FDEP procedures. The soil sampling equipment was decontaminated with laboratory-grade detergent, appropriate solvent and alcohol wash and then rinsed with deionized and analyte-free water before each sample collection.



5.0 SUMMARY AND CONCLUSIONS

5.1 Summary

The following is a summary of site conditions based on the results of field and laboratory investigations made during the contamination assessment:

- Groundwater was encountered at depths of approximately 4.3 to 5.3 feet bls. The direction of groundwater movement is generally to the east.
- Field screening of the soil samples collected from one and three feet, bls indicate that excessive soil contamination (OVA results > 10 ppm) exists on site. Excessive soil contamination was encountered in the general area of the UST fill port. Stained soils were visible at the northwest end of the UST.
- Laboratory analyses of soil samples collected from sample S-8B from a depth of 3 feet bls had a FL-PRO concentration of 76 ppm. All other samples were below the laboratory detection limit. The concentrations are all below the regulatory MCL of 2,500 ppm.
- Approximately 9.5 inches of free product was measured in monitoring well MW-1. Therefore, a groundwater water sample was not collected from MW-1 for laboratory analysis.

5.2 Conclusions

- FID soil headspace analyses indicated excessively contaminated soils in the immediate area of the UST fill port, possible from overfilling. However, elevated FL-PRO concentrations above regulatory MCLs have not been encountered within soils at the site.
- Free product was measured in one monitoring well and indicates that groundwater has been effected by a contaminant release from the UST.



6.0 RECOMMENDATIONS

Based on field results and analysis of all the data obtained during the contamination assessment BHATE recommends the preparation of a Remedial Action Plan (RAP) for the subject site. BHATE has determined that:

- Free petroleum product is present at the site.
- Excessively contaminated soil (OVA results > 10 ppm) is present at the site. The soil contamination appears to be limited to soils at the northwest end of the UST.

7.0 CLOSING REMARKS

This Contamination Assessment Report has been prepared on behalf of the Department of Navy, Southern Division, for specific application to the subject site. Future environmental conditions at the subject site can change subject to alterations in operations and land usage. The opinions and findings of this report represent those conditions apparent at the time and dates the work was performed. New regulations, changes in surrounding land use, altered geologic conditions and other factors may also result in changed conditions.

The work described in this report has been conducted in accordance with current FDEP UST regulations and with standard industry practice. No other warranty is implied or expressed.



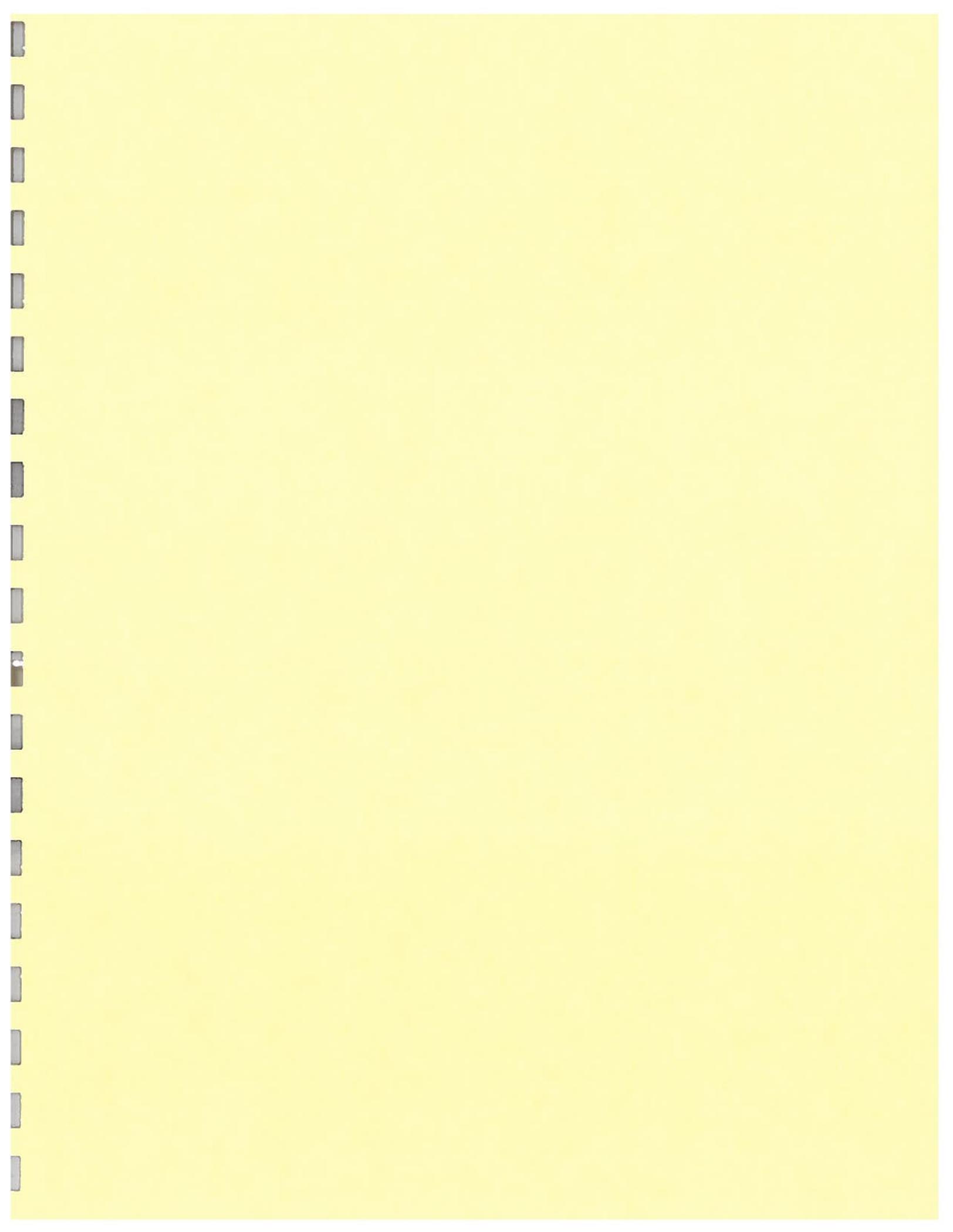


TABLE 1
MONITORING WELL CONSTRUCTION AND WATER LEVEL DATA
CONTAMINATION ASSESSMENT REPORT
NAVAL STATION MAYPORT
UST-1343

WELL NO.	DATE	TOTAL DEPTHS OF WELL (ft. bls)	TOP OF CASING (ft. bls)	SURVEYED TOP OF CASING ELEVATION (msl)*	SCREENED INTERVAL DEPTH BLS (ft.)	DEPTH TO WATER FROM TOP OF CASING (ft.)	DEPTH TO FREE PRODUCT FROM TOP OF CASING (ft.)	ELEVATION OF WATER TABLE (msl)*
1343-MW-1	2/19/99	13.75	0.25	9.45	3.54-13.04	5.26	4.47	4.88
	7/24/97						ND	5.13
	6/13/97						ND	5.29
1343-MW-2	2/19/99	13.75	0.25	9.47	3.54-13.04	4.71	ND	4.76
	7/24/97						ND	4.85
	6/13/97						ND	5.24
1343-MW-3	2/19/99	13.75	0.25	9.17	3.54-13.04	4.33	ND	4.84
	7/24/97						ND	4.99
	6/13/97						ND	5.24

Notes:

bls = below land surface

* = Elevations referenced to msl (mean sea level)

Free product assumed to be #2 fuel oil with a specific gravity of 0.87

ND – Free product not detected in well

Groundwater elevation at MW-1 corrected for presence of 9.5 inches free product

**TABLE 2
SUMMARY OF SOIL HEADSPACE ANALYSES
NAVAL STATION MAYPORT
UST 1343**

SAMPLE DESIGNATION	DEPTH (feet)	OVA HEADSPACE READING (ppm)	OVA HEADSPACE READING WITH CARBON FILTER (ppm)	CORRECTED OVA HEADSPACE READING (ppm)
S-1	1 - 3	12	< 1	12 ✓
S-2	1 - 3	0	--	0
S-3	1 - 3	0	--	0
S-4	1 - 3	1	<1	1
S-5A	1	20	---	20 ✓
S-5B	3	6	1	5
S-6A	1	0	--	0
S-6B	3	0	--	0
S-7A	1	0	--	0
S-7B	3	0	--	0
S-8A	1	0	--	0
S-8B	3	2	--	2 ✓
S-9A	1	14	1	13 ✓
S-9B	3	0	--	0
S-10A	1	0	--	0
S-10B	3	0	--	0
S-11A	1	9	0	9
S-11B	3	0	--	0

Notes:
ppm = parts per million NR = not recorded
OVA = Organic Vapor Analyzer **Bold** corrected values fall in the "excessively contaminated" range

TABLE 3
SUMMARY OF SOIL ANALYTICAL RESULTS
UST 1343
NAVAL STATION MAYUPORT
MAYPORT, FLORIDA

POLYNUCLEAR AROMATIC HYDROCARBONS (Method 8100)

PARAMETER	1343-S-3B (Medium)	1343-S-5A (High)	1343-S-8B (Low)	RS
DATE	2/12/99	2/11/99	2/12/99	
Naphthalene mg/kg	< 0.165	< 0.165	< 0.165	8600
Acenaphthene mg/kg	< 0.165	< 0.165	< 0.165	22000
Anthracene mg/kg	< 0.165	< 0.165	< 0.165	290000
Fluoranthene mg/kg	< 0.165	< 0.165	< 0.165	45000
Fluorene mg/kg	< 0.165	< 0.165	< 0.165	24000
Pyrene mg/kg	< 0.165	< 0.165	< 0.165	40000
Benzo(a)anthracene mg/kg	< 0.165	< 0.165	< 0.165	5.1
Benzo(a)pyrene mg/kg	< 0.165	< 0.165	< 0.165	0.5
Benzo(b)Fluoranthene mg/kg	< 0.165	< 0.165	< 0.165	5.0
Benzo(k)Fluoranthene mg/kg	< 0.165	< 0.165	< 0.165	52
Chrysene mg/kg	< 0.165	< 0.165	< 0.165	490
Dibenzo(a,h)Anthracene mg/kg	< 0.165	< 0.165	< 0.165	0.5
Indeno(1,2,3-c,d)pyrene mg/kg	< 0.165	< 0.165	< 0.165	5.2
Acenaphthylene mg/kg	< 0.165	< 0.165	< 0.165	11000
Benzo (g,h,i) perylene mg/kg	< 0.165	< 0.165	< 0.165	45000
Phenanthrene mg/kg	< 0.165	< 0.165	< 0.165	29000
Benzo(g,h,i)perylene mg/kg	< 0.165	< 0.165	< 0.165	210

PURGEABLE AROMATICS (Method 8021B)

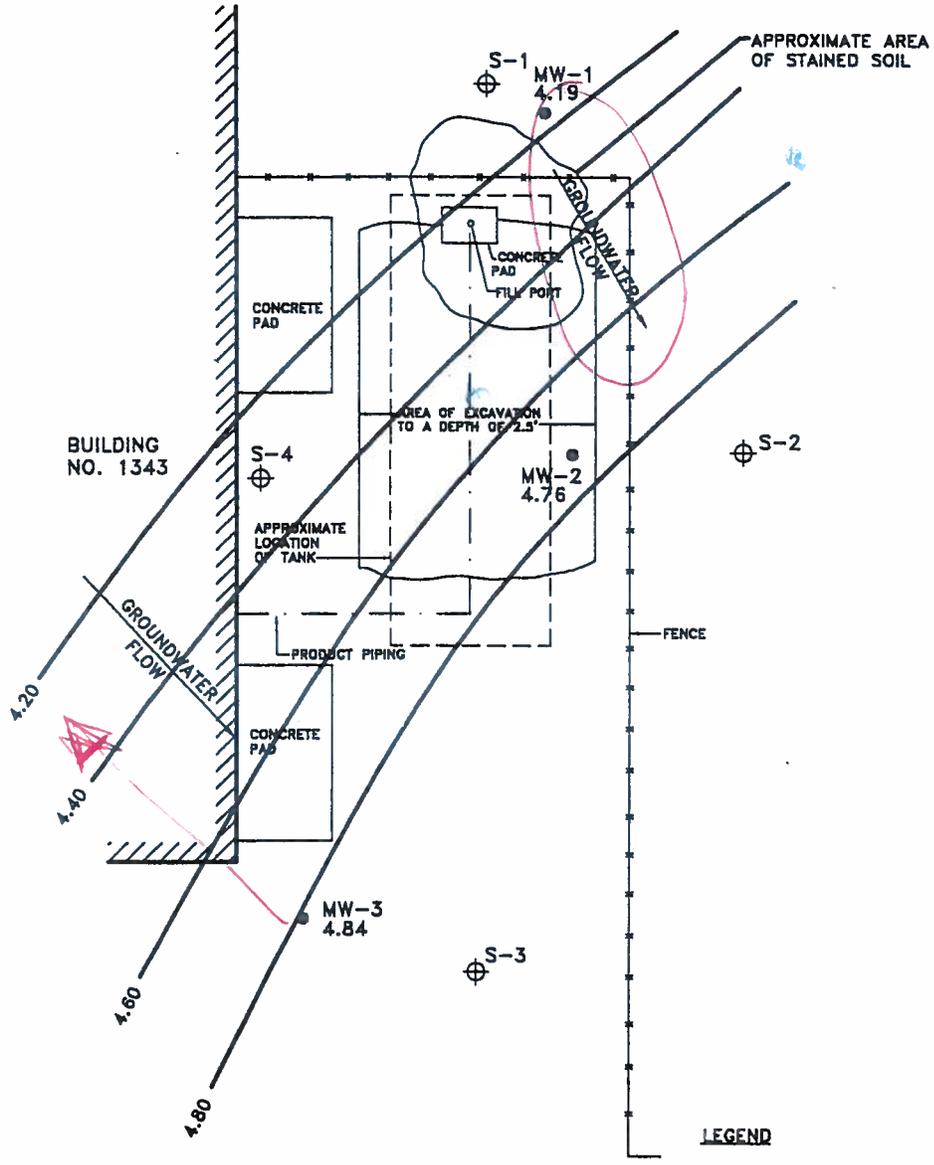
Benzene mg/kg	< 0.0500	< 0.0500	< 0.0010	
Ethylbenzene mg/kg	< 0.0500	< 0.0500	< 0.0010	240
Toluene mg/kg	0.1150	< 0.0500	< 0.0010	2000
Total Xylenes mg/kg	0.2350	< 0.1000	< 0.0020	290
MTBE mg/kg	< 0.2500	< 0.2500	< 0.0050	35

PETROLEUM HYDROCARBONS

FL-PRO mg/kg	<10.0	< 10	76	2500
--------------	-------	------	----	------

Notes: * = Dilution factor was used to establish Report Limit
 Shaded values indicate value exceeding regulatory standard
 RS = Regulatory Standard
 NR = Not Regulated

Industrial



LEGEND

- ⊕ SOIL SAMPLING LOCATIONS
- MONITOR WELL LOCATIONS
- ESTIMATED DIRECTION OF GROUNDWATER MOVEMENT
- WATER TABLE ELEVATION CONTOUR (CONTOUR INTERVALS = 0.05 Ft.)
- 4.84 WATER TABLE ELEVATION IN FEET ABOVE MEAN SEA LEVEL

NOTE:
 The information shown on this map was obtained from existing maps from previous investigations prepared by others. This information is depicted to provide visual aid within the context of this plan and should not be used as a sole reference in precise dimensioning of features indicated.

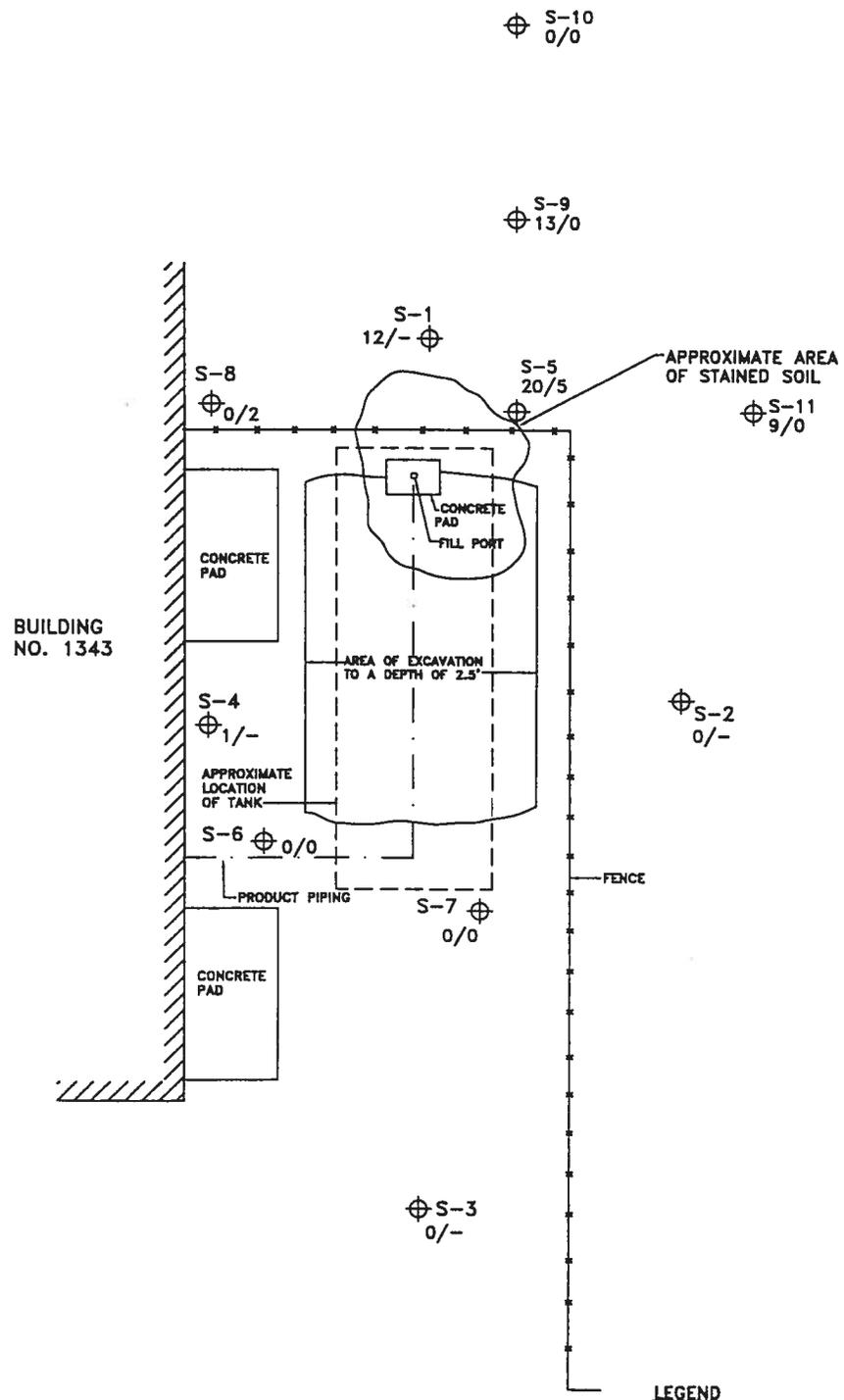


WATER TABLE CONTOUR MAP
 2/19/99

Contamination Assessment Report
 UST 1343
 Department of the Navy
 Naval Station Mayport
 Mayport, Florida

PROJECT NO:	SCALE	DATE	DRAWN BY:
9970058	1" = 10'	3/26/99	-
DRAWING NO:			FIG-5

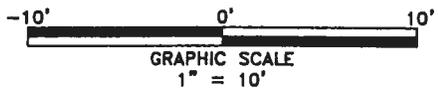
Figure 1



LEGEND

- ⊕ GEOPROBE SOIL AND GROUNDWATER SAMPLING LOCATIONS
- FL-PRO FLORIDA PETROLEUM RESIDUAL ORGANICS IN PARTS PER MILLION (ppm)
- FID FLAME IONIZATION DETECTOR IN PARTS PER MILLION
- BDL BELOW DETECTION LIMITS
- NA NOT ANALYZED

NOTE:
 The information shown on this map was obtained from existing maps from previous investigations prepared by others. This information is depicted to provide visual aid within the context of this plan and should not be used as a sole reference in precise dimensioning of features indicated.



SOIL HEADSPACE SCREENING MAP

Contamination Assessment Report
 UST 1343
 Department of the Navy
 Naval Station Mayport
 Mayport, Florida

PROJECT NO.	SCALE	DATE	DRAWN BY:
9970058	1"=10'	3/26/99	-
			DRAWING NO:
			FIG-8-1



S-8B

DEPTH	BTEX	PAH	FL-PRO	FID
3'	BDL	BDL	76	

DEPTH	FL-PRO	FID
1'-3'	NA	<1
4'-6'	28	

S-5A

DEPTH	BTEX	PAH	FL-PRO	FID
1'	NA	NA	NA	NA
3'	BDL	BDL	BDL	BDL

DEPTH	FL-PRO	FID
1'-3'	BDL	<1
4'-6'	NA	

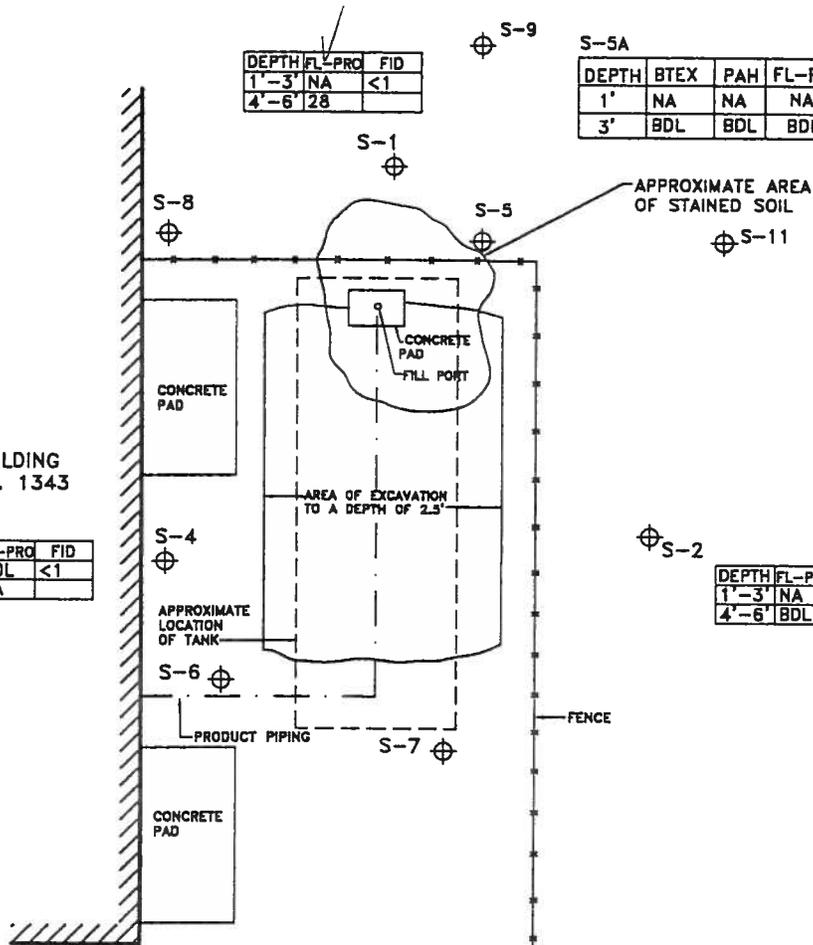
DEPTH	FL-PRO	FID
1'-3'	NA	<1
4'-6'	BDL	

S-3B

DEPTH	BTEX	PAH	FL-PRO	FID
3'	TOLUENE 0.1150 XYLENES 0.2350	BDL	BDL	

S-3

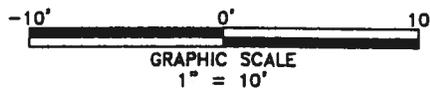
DEPTH	FL-PRO	FID
1'-3'	NA	<1
4'-6'	35	



LEGEND

- ⊕ GEOPROBE SOIL AND GROUNDWATER SAMPLING LOCATIONS
- FL-PRO FLORIDA PETROLEUM RESIDUAL ORGANICS IN PARTS PER MILLION (ppm)
- FID FLAME IONIZATION DETECTOR IN PARTS PER MILLION
- BDL BELOW DETECTION LIMITS
- NA NOT ANALYZED
- BTEX BENZENE, TOLUENE, ETHYLBENZENE, XYLENE IN ppm
- PAH POLYNUCLEAR AROMATIC HYDROCARBONS IN ppm

NOTE:
The information shown on this map was obtained from existing maps from previous investigations prepared by others. This information is depicted to provide visual aid within the context of this plan and should not be used as a sole reference in precise dimensioning of features indicated.



SOIL ANALYTICAL RESULTS

PROJECT NO.	SCALE	DATE	DRAWN BY:
9970058	1"=10'	3/26/99	-
			DRAWING NO:
			FIG-8-2

Contamination Assessment Report
UST 1343
Department of the Navy
Naval Station Mayport
Mayport, Florida



SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

SHATE ENVIRONMENTAL, INC. 889A

509 13TH AVENUE SOUTH
BIRMINGHAM, AL 35205

Lab Number: 99-A21517

Sample ID: 8-38

Sample Type: Soil

Site ID:

Project: 99/0050

Project Name: NAYSTA NAYFORD CREST 1340

Applicant: DT/DT

Date Collected: 2/12/99

Time Collected: 8:45

Date Received: 2/16/99

Time Received: 9:00

Analyte	Result	Unit	Report Limit	Min. Conc.	Det. Conc.	Date	Time	Analyst	Method	Batch
ORGANIC PIGMENTERY										
Benzene	ND	ng/kg	0.0500	0.0010	50	2/17/99	23:07	H. Hineslock	80210	9560
Toluene	0.2150	ng/kg	0.0500	0.0010	50	2/17/99	23:07	H. Hineslock	80210	9560
Ethylbenzene	ND	ng/kg	0.0500	0.0010	50	2/17/99	23:07	H. Hineslock	80210	9560
Xylenes, (total)	0.2950	ng/kg	0.1000	0.0010	50	2/17/99	23:07	H. Hineslock	80210	9560
BTX	ND	ng/kg	0.2500	0.0050	50	2/17/99	23:07	H. Hineslock	80210	9560
PH High Fluoride Prod	ND	ng/kg	10.0	0.0	1	2/22/99	6:57	H. Goodrich	82700	8446
Anthracene	ND	ng/kg	0.165	0.165	1	2/22/99	6:57	H. Goodrich	82700	8446
Benzo(a)anthracene	ND	ng/kg	0.165	0.165	1	2/22/99	6:57	H. Goodrich	82700	8446
Fluoranthene	ND	ng/kg	0.165	0.165	1	2/22/99	6:57	H. Goodrich	82700	8446
Pyrene	ND	ng/kg	0.165	0.165	1	2/22/99	6:57	H. Goodrich	82700	8446
Benzo(b)fluoranthene	ND	ng/kg	0.165	0.165	1	2/22/99	6:57	H. Goodrich	82700	8446
Benzo(k)fluoranthene	ND	ng/kg	0.165	0.165	1	2/22/99	6:57	H. Goodrich	82700	8446
Chrysene	ND	ng/kg	0.165	0.165	1	2/22/99	6:57	H. Goodrich	82700	8446
Benzo(a)pyrene	ND	ng/kg	0.165	0.165	1	2/22/99	6:57	H. Goodrich	82700	8446
Indeno(1,2,3-cd)pyrene	ND	ng/kg	0.165	0.165	1	2/22/99	6:57	H. Goodrich	82700	8446
Acenaphthylene	ND	ng/kg	0.165	0.165	1	2/22/99	6:57	H. Goodrich	82700	8446
Acenaphthene	ND	ng/kg	0.165	0.165	1	2/22/99	6:57	H. Goodrich	82700	8446
1-Methylanthracene	ND	ng/kg	0.165	0.165	1	2/22/99	6:57	H. Goodrich	82700	8446
1-Methylfluoranthene	ND	ng/kg	0.165	0.165	1	2/22/99	6:57	H. Goodrich	82700	8446
GENERAL CHEMISTRY PIGMENTERY										
As Height	ND	g			1	2/19/99	9:30	R. Carlsen	CLP	8960

ND = Not detected at the report limit.



SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 99-A21517
Sample ID: S-38

Page 2

Sample Extraction Data

Parameter	Wt/Vol		Date	Analyst	Method
	Extracted	Extract Vol			
WGA's	30.0 gm	1.0 mL	2/17/99	Citizwater	5550
BTK Prep	4.0 g	5.0 mL	2/12/99	N HinalioP	5035

Surrogate	% Recovery	Target Range
surrogate-1,1,1-trifluoro-2,4-dinitrobenzene	104	50 - 150
surrogate-1,2-dichlorobenzene	93	62 - 109
Flu Pro Surrogate - C-25 hydrocarbons	87	60 - 128
surrogate-1,2-dichlorobenzene-d5	48	20 - 110
surrogate-2-fluorobiphenyl	49	13 - 110
surrogate-1,2-dichlorobenzene-d4	91	27 - 128

Report Approved By

Report Date 2/23/99

Theodore J. Duello, Ph.D., Lab Director
Michael M. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director

Laboratory Certification Number HRS-ES7356



SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

WASTE ENVIRONMENTAL, INC. 5896

505 13TH AVENUE SOUTH
BIRMINGHAM, AL 35205

Lab Number: 99-A21518

Sample ID: S-82

Sample Type: Soil

Site ID:

Project: 9970058

Project Name: NAYSTA MAYPORT/UST 1343

Sampler: DT/UT

Date Collected: 2/12/99

Time Collected: 9:40

Date Received: 2/16/99

Time Received: 9:00

Analyte	Result	Units	Report Limit	Run Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Benzene	ND	ng/kg	0.0010	0.0010	1	2/17/99	23:44	M. Hinkelick	8021B	9560
Toluene	ND	ng/kg	0.0010	0.0010	1	2/17/99	23:44	M. Hinkelick	8021B	9560
Ethylbenzene	ND	ng/kg	0.0010	0.0010	1	2/17/99	23:44	M. Hinkelick	8021B	9560
Xylenes, total	ND	ng/kg	0.0020	0.0010	1	2/17/99	23:44	M. Hinkelick	8021B	9560
MTBE	ND	ng/kg	0.0050	0.0050	1	2/17/99	23:44	M. Hinkelick	8021B	9560
TPH-High (Florida Pro)	76.0	ng/kg	15.0	5.0	1	2/18/99	21:03	K. Phelps	FDEP	8503
Naphthalene	ND	ng/kg	0.165	0.165	1	2/22/99	7:33	M. Goodrich	8270C	8446
Acenaphthene	ND	ng/kg	0.165	0.165	1	2/22/99	7:33	M. Goodrich	8270C	8446
Anthracene	ND	ng/kg	0.165	0.165	1	2/22/99	7:33	M. Goodrich	8270C	8446
Fluoranthene	ND	ng/kg	0.165	0.165	1	2/22/99	7:33	M. Goodrich	8270C	8446
Fluorene	ND	ng/kg	0.165	0.165	1	2/22/99	7:33	M. Goodrich	8270C	8446
Pyrene	ND	ng/kg	0.165	0.165	1	2/22/99	7:33	M. Goodrich	8270C	8446
Benz(a)anthracene	ND	ng/kg	0.165	0.165	1	2/22/99	7:33	M. Goodrich	8270C	8446
Benzo(a)pyrene	ND	ng/kg	0.165	0.165	1	2/22/99	7:33	M. Goodrich	8270C	8446
Benzo(b)fluoranthene	ND	ng/kg	0.165	0.165	1	2/22/99	7:33	M. Goodrich	8270C	8446
Benzo(k)fluoranthene	ND	ng/kg	0.165	0.165	1	2/22/99	7:33	M. Goodrich	8270C	8446
Chrysene	ND	ng/kg	0.165	0.165	1	2/22/99	7:33	M. Goodrich	8270C	8446
Dibenz(a,h)anthracene	ND	ng/kg	0.165	0.165	1	2/22/99	7:33	M. Goodrich	8270C	8446
Indeno(1,2,3-cd)pyrene	ND	ng/kg	0.165	0.165	1	2/22/99	7:33	M. Goodrich	8270C	8446
Acenaphthylene	ND	ng/kg	0.165	0.165	1	2/22/99	7:33	M. Goodrich	8270C	8446
Benzo(g,h,i)perylene	ND	ng/kg	0.165	0.165	1	2/22/99	7:33	M. Goodrich	8270C	8446
Phenanthrene	ND	ng/kg	0.165	0.165	1	2/22/99	7:33	M. Goodrich	8270C	8446
1-Methyl naphthalene	ND	ng/kg	0.165	0.165	1	2/22/99	7:33	M. Goodrich	8270C	8446
2-Methyl naphthalene	ND	ng/kg	0.165	0.165	1	2/22/99	7:33	M. Goodrich	8270C	8446

GENERAL CHEMISTRY PARAMETERS

% Dry Weight	63	%			1	2/19/99	9:35	M. Carthen	CLP	6960
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ND = Not detected at the report limit.



SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 99-A21518
Sample ID: 9-88

Page 2

Sample Extraction Data

Parameter	µg/0.03		Date	Analyst	Method
	Extracted	Extract Vol			
PAH's	50.0 µg	1.0 ml	2/17/99	L. Swann	8250
MX Prep	5.0 µg	5.0 ml	2/12/99	A. Hinkelack	5005

Substrate	% Recovery	Target Range
para, p-4-Trifluorobenzene	103	50 - 150
meta-p-Terphenyl	84	22 - 109
1,2,3,4-Tetra, C-13 Hydrocarbon	101	60 - 119
meta-Nitrobenzene-d5	96	20 - 115
meta-2-Fluorobiphenyl	93	10 - 114
meta-Terphenyl-d14	86	27 - 129

Report approved by

Report Date: 2/23/99

Theodore A. Dushin, Ph.D., Lab Director
Michael H. Pump, Ph.D., Technical Director
Johnny A. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director

Laboratory Certification Number: NCS-287308



SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

WASTE ENVIRONMENTAL, INC. 5896

508 13TH AVENUE SOUTH
BIRMINGHAM, AL 35205

Lab Number: 99-A21519

Sample ID: S-5A

Sample Type: Soil

Site ID:

Project: 9970058

Project Name: NAYSTA MAYPORT/UST 1343

Analyst: DT/JT

Date Collected: 2/11/99

Time Collected: 17:45

Date Received: 2/16/99

Time Received: 9:00

Constituent	Result	Units	Report Limit	Comp List	DFL Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Benzene	ND	ng/kg	0.0500	0.0010	50	2/18/99	8:21	M. Hinkelick	8021B	9560
Toluene	ND	ng/kg	0.0500	0.0010	50	2/18/99	8:21	M. Hinkelick	8021B	9560
Ethylbenzene	ND	ng/kg	0.0500	0.0010	50	2/18/99	8:21	M. Hinkelick	8021B	9560
Xylenes, total	ND	ng/kg	0.1000	0.0010	50	2/18/99	8:21	M. Hinkelick	8021B	9560
BTEX	ND	ng/kg	0.2500	0.0050	50	2/18/99	8:21	M. Hinkelick	8021B	9560
TPH-High (Florida Pro)	ND	ng/kg	10.0	5.0	1	2/19/99	13:51	K. Phelps	FDEP	3503
Naphthalene	ND	ng/kg	0.165	0.165	1	2/22/99	8:10	H. Goodrich	8270C	8446
Acenaphthene	ND	ng/kg	0.165	0.165	1	2/22/99	8:10	H. Goodrich	8270C	8446
Anthracene	ND	ng/kg	0.165	0.165	1	2/22/99	8:10	H. Goodrich	8270C	8446
Fluoranthene	ND	ng/kg	0.165	0.165	1	2/22/99	8:10	H. Goodrich	8270C	8446
Fluorene	ND	ng/kg	0.165	0.165	1	2/22/99	8:10	H. Goodrich	8270C	8446
Pyrene	ND	ng/kg	0.165	0.165	1	2/22/99	8:10	H. Goodrich	8270C	8446
Benzo(a)anthracene	ND	ng/kg	0.165	0.165	1	2/22/99	8:10	H. Goodrich	8270C	8446
Benzo(a)pyrene	ND	ng/kg	0.165	0.165	1	2/22/99	8:10	H. Goodrich	8270C	8446
Benzo(k)fluoranthene	ND	ng/kg	0.165	0.165	1	2/22/99	8:10	H. Goodrich	8270C	8446
Benzo(b)fluoranthene	ND	ng/kg	0.165	0.165	1	2/22/99	8:10	H. Goodrich	8270C	8446
Chrysene	ND	ng/kg	0.165	0.165	1	2/22/99	8:10	H. Goodrich	8270C	8446
Benzo(a,h)anthracene	ND	ng/kg	0.165	0.165	1	2/22/99	8:10	H. Goodrich	8270C	8446
Indeno(1,2,3-cd)pyrene	ND	ng/kg	0.165	0.165	1	2/22/99	8:10	H. Goodrich	8270C	8446
Acenaphthylene	ND	ng/kg	0.165	0.165	1	2/22/99	8:10	H. Goodrich	8270C	8446
Benzo(g,h,i)perylene	ND	ng/kg	0.165	0.165	1	2/22/99	8:10	H. Goodrich	8270C	8446
Phenanthrene	ND	ng/kg	0.165	0.165	1	2/22/99	8:10	H. Goodrich	8270C	8446
1-methylnaphthalene	ND	ng/kg	0.165	0.165	1	2/22/99	8:10	H. Goodrich	8270C	8446
2-methylnaphthalene	ND	ng/kg	0.165	0.165	1	2/22/99	8:10	H. Goodrich	8270C	8446
GENERAL CHEMISTRY PARAMETERS										
% Dry Weight	98.1	%			1	2/19/99	8:55	M. Eastman	CLP	6960

ND = Not detected at the report limit



SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 99-A21519
Sample ID: S-5A

Page 2

Sample Extraction Data

Parameter	Wt./Vol	Extracted	Extract Vol.	Date	Analyst	Method
URR's		50.0 gm	1.0 ml	2/17/99	Fitzwater	5050
URR Prep		5.0 g	5.0 ml	2/11/99	R. Kime/Trak	5055

Surrogate	% Recovery	Target Range
surrogate-a, a-trifluorotoluene	104	50 - 150
surrogate-b-Terphenyl	97	82 - 109
Fluoro Surrogate C-35 Hydrocarbon	97	80 - 118
surrogate-dinitrobenzene-d5	87	20 - 116
surrogate-2-Fluorobiphenyl	54	10 - 100
surrogate-terphenyl d14	81	27 - 128

Report Approved By

Report Date: 2/23/99

Theodore J. Duello, Ph.D., Lab Director
Michael W. Dunn, M.S., Technical Director
Johnny D. Mitchell, Dir. Technical Services
Eric Smith, Assistant Technical Director

Laboratory Certification Number: HRS-287856



Environmental Engineers and Scientists

1608 13th Avenue South
Birmingham, Alabama 35205
(205) 918-4000 (FAX) (205) 918-4050

#15896

CHAIN-OF-CUSTODY

NO.: 00001

Page: 1 of 1

PROJECT NO.: 9710058 PROJECT NAME: NAVSTA MAYPORT / UST 1343

P.O. NO.: LAB DESTINATION: SPECIALIZED ASSAYS

SAMPLER(S) NAME: Dewey Tiapp / Jim Torcivia

TITLE:

Lab Code - for Lab use only	Yr. Date	Time	Gr	Gr	Sample No./ Sample Location	CONTAINERS			REMARKS
						SOL. WATER	SOLID OTHER	NON-AQUEOUS LIQUID	
21517	2/12/99	0845	✓	✓	S-3B	0000	0000	0000	TEST: BTEX METH: (R020) ✓ TEST: TPH METH: (R270) ✓ TEST: METH: (L1720) ✓
21518	2/12/99	0540	✓	✓	S-8B	0000	0000	0000	
21519	2/11/99	1745	✓	✓	S-5A	0000	0000	0000	
						0000	0000	0000	
						0000	0000	0000	
						0000	0000	0000	
						0000	0000	0000	
						0000	0000	0000	
						0000	0000	0000	
						0000	0000	0000	

Relinquished by: (Signature): [Signature] Date: 2/15/99 Time: 1730

Relinquished by: (Signature): [Signature] Date: 2/16/99 Time: 0800

Relinquished by: (Signature): [Signature] Date: 2/16/99 Time: 0800

LAB COMMENTS: 4c

REMARKS ON SAMPLE RECEIVED BY LAB:

Bottle Intact: Preserved: Chilled: Other:

SAMPLE SHIPPING METHOD: Hand Delivery Air (specify) Other (specify)

SAMPLE CONTAINER TYPE: P = Plastic G = Glass GA = Glass Amber

MEI Environmental Services, Inc.
TANK CLOSURE ASSESSMENT REPORT

Tank ID # 1343
FDEP FAC # 168626008
Naval Base Mayport
Mayport, Florida

July 17, 1995

Presented to:
MEI Environmental Services, Inc.
8351 Leesburg Pike
Vienna, Virginia (703) 893-1200

Presented By:
G.B. ROBBINS, INC.
P.O. Box 17132
Jacksonville, Florida 32245
(904) 724-9039



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CLOSURE REPORTING FORM

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 Quadrangles, USGS 7.5 Minute Topographic Series

Figure 2 Tank Location

Figure 3 Soil Boring Locations

List of Attachments

Tables
Figures
Photographs
Permits
Discharge Reporting Form



Closure Assessment Form

Owners of storage tank systems that are replacing, removing or closing in place storage tanks shall use this form to demonstrate that a site system closure assessment was performed in accordance with Rule 17-761 or 17-762, Florida Administrative Code. Eligible Early Detection Incentive (EDI) and Reimbursement Program sites do not have to perform a closure assessment.

Please Print or Type
Complete All Applicable Blanks

- 1 Date 7/17/95
- 2 DER Facility ID Number 168626008 3 County DUVAL
- 4 Facility Name NAVAL STATION MAYPORT
- 5 Facility Owner DEPARTMENT OF NAVY
- 6 Facility Address: NAVAL STATION MAYPORT, MAYPORT, FL 32228-0067
- 7 Mailing Address: --SAME--
- 8 Telephone Number: (904) 270-6730 9 Facility Operator U. S. GOVERNMENT
- 10 Are the Storage Tank(s). (Circle one or both) A Aboveground or (B) Underground
- 11 Type of Product(s) Stored: HEAT FUEL OIL
- 12 Were the Tank(s): (Circle one) (A) Replaced B. Removed C Closed in Place D Upgraded (aboveground tanks)
13. Number of Tanks Closed: 1: # 1343 14. Age of Tanks: 35 YEARS

Facility Assessment Information

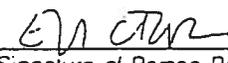
Yes No ^{Not} Applicable

- | | | | |
|-------------------------------------|-------------------------------------|-------------------------------------|--|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1. Is the facility participating in the Florida Petroleum Liability Insurance and Restoration Program (FPLIRP)? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 2. Was a Discharge Reporting Form submitted to the Department?
If yes, When: <u>verbally 7/14/95</u> Where: <u>City of Jacksonville DRES</u> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 3. Is the depth to ground water less than 20 feet? <u>A.C. Carroll's Office</u> |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Are monitoring wells present around the storage system?
If yes, specify type: <input type="checkbox"/> Water monitoring <input type="checkbox"/> Vapor monitoring |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5. Is there free product present in the monitoring wells or within the excavation? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 6. Were the petroleum hydrocarbon vapor levels in the soils greater than 500 parts per million for gasoline?
Specify sample type: <input type="checkbox"/> Vapor Monitoring wells <input type="checkbox"/> Soil sample(s) |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 7. Were the petroleum hydrocarbon vapor levels in the soils greater than 50 parts per million for diesel/kero
Specify sample type: <input type="checkbox"/> Vapor Monitoring wells <input checked="" type="checkbox"/> Soil sample(s) |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 8. Were the analytical laboratory results of the ground water sample(s) greater than the allowable state target
(See target levels on reverse side of this form and supply laboratory data sheets) |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 9. If a used oil storage system, did a visual inspection detect any discolored soil indicating a release? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 10. Are any potable wells located within 1/4 of a mile radius of the facility? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 11. Is there a surface water body within 1/4 mile radius of the site? If yes, indicate distance <u>1000'</u> |

12. A detailed drawing or sketch of the facility that includes the storage system location, monitoring wells, buildings, storm drains, sample locations and dispenser locations must accompany this form.
13. If a facility has a pollutant storage tank system that has both gasoline and kerosene/diesel stored on site, both EPA Method 602 and EPA Method 610 must be performed on the ground water samples obtained.
14. Amount of soils removed and receipt of proper disposal.
15. If yes is answered to any one of questions 5-9, a Discharge Reporting Form 17-761.900(1) indicating a suspected release shall be submitted to the Department within one working day.
16. A copy of this form and any attachments must be submitted to the Department's district office in your area and to the locally administered program office under contract with the Department within 60 days of completion of tank removal or filling a tank with an inert material.


ROBERT P. WALDEN, LCDR, CEC, USN STAFF CIVIL ENGINEER
 Signature of Owner

10/20/95
 Date


E.A. Victor
 Signature of Person Performing Assessment

7/17/95
 Date

Elizabeth A. Victor / SC Environmental Systems / G.B. Keating, Inc.
 Title of Person Performing Assessment

State Ground Water Target Levels That Affect A
 Pollutant Storage Tank System Closure Assessment

State ground water target levels are as follows:

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. For gasoline (EPA Method 602): <ol style="list-style-type: none"> a. Benzene 1 ug/l b. Total VOA 50 ug/l <ul style="list-style-type: none"> - Benzene - Toluene - Total Xylenes - Ethylbenzene c. Methyl Test-Buryl Ether (MTBE) 50 ug/l | <ol style="list-style-type: none"> 2. For kerosene/diesel (EPA Method 610) <ol style="list-style-type: none"> a. Polynuclear Aromatic Hydrocarbons (PAHS)
(Best achievable detection limit, 10 ug/l maximum) |
|---|---|

TANK CLOSURE FIELD ACTIVITIES

United States Navy
Tank ID # 1343
FDEP FAC #168626008
Naval Base Mayport
Mayport, Florida

This is supplemental information to accompany Department of Environmental Protection Form 62-761.900(6) for closure of one 10,000 gallon, underground fuel oil storage tank located north of Buildings 1343 at the Naval Base Mayport, Mayport, Florida. The location is shown in Figure 1, Site Location.

The storage tank was used to store fuel oil for on-site heating. Approximately 10 feet of product piping extended south from the tank to the building. The tank was cleaned and degassed prior to tank closure. The location is identified in Figure 2, Tank Location.

Tank closure was performed on June 28, 1995 by MEI, Inc. Per project specifications, the tank was abandoned in place. As part of the tank closure, the tank was exposed, opened and filled with inert material by MEI Environmental Services, Inc. Photographs of the area of the tank are attached.

G.B. Robbins, Inc. performed the closure assessment as required by Chapter 62-762.800, FAC and described in the Florida Department of Environmental Protection's, "Pollutant Storage Tank Closure Assessment Requirements" dated June, 1995 and "Quality Assurance Standard Operating Procedures for Petroleum Storage Tank System Closure Assessment" dated April, 1992. Screening, performed as outlined in Chapter 62-770.2, FAC, was conducted on-site using a Foxboro Century 128 Organic Vapor Analyzer equipped with a Flame Ionization Detector (OVA-FID). Calibration was performed according to the manufacturer's requirements and per FDER/FDEP SOPs. The OVA-FID procedure is

presented immediately before the tabulated OVA-FID results.

Soil screening associated with the tank closure was performed by G.B. Robbins, Inc. on June 28, 1995. Eleven soil borings were installed around the tank using a hand auger. Soil samples were collected from each of the borings at approximately 2 foot intervals starting from 1 foot below land surface (bls) to the water table which was encountered at a depth of between 4 ft bls. Screening results are presented in Table 1. Sample locations are shown in Figure 3, Soil Boring Locations.

Tank Closure

- * *Soil borings were installed at no greater than ten foot spacings.*
- * *Soil samples were collected from the borings at approximately two foot intervals to the water table.*
- * *The area adjacent to the tank was inspected for staining. Any stressed vegetation in the area of the tank was noted.*

Piping closure

- * *Piping Closure was not required.*

An area measuring approximately 10 feet by 10 feet of stained soil and distressed vegetation was observed at and to the north of the concrete pad for the fill port. Excessively contaminated soil, as defined by Chapter 62-770.200(2) was identified by screening. The excessively contaminated soil was associated with the stained soil. Notification of discharge was given verbally to A. C. Carroll's office at the City of Jacksonville Department of Regulatory and Environmental Service (DRES) on July 14, 1995. A copy of the Discharge Reporting Form is attached.

Attachments

Tables

Organic Vapor Analysis Procedure :

G. B. Robbins, Inc.

Soil screening for petroleum contaminated soils is performed using a Foxboro Century 128 Organic Vapor Analyzer equipped with a flame ionization detector (OVA-FID). The OVA-FID is calibrated prior to use with a methane standard calibration gas manufactured by Alphagaz/Liquid Air, Cambridge, Md.

Soil samples are collected above the water table and are screened, according to Chapter 62-770.200(2), Florida Administrative Code (FAC), as follows:

"... This reading shall be obtained on an organic vapor analysis instrument equipped with a flame ionization detector in the survey mode upon sampling the headspace in a half filled 16-ounce soil jar. The soil sample shall be brought to a temperature of between 20 degrees celsius and 32 degrees celsius and sampled five minutes thereafter. Analytical instruments shall be calibrated in accordance with the manufacturer's instructions."

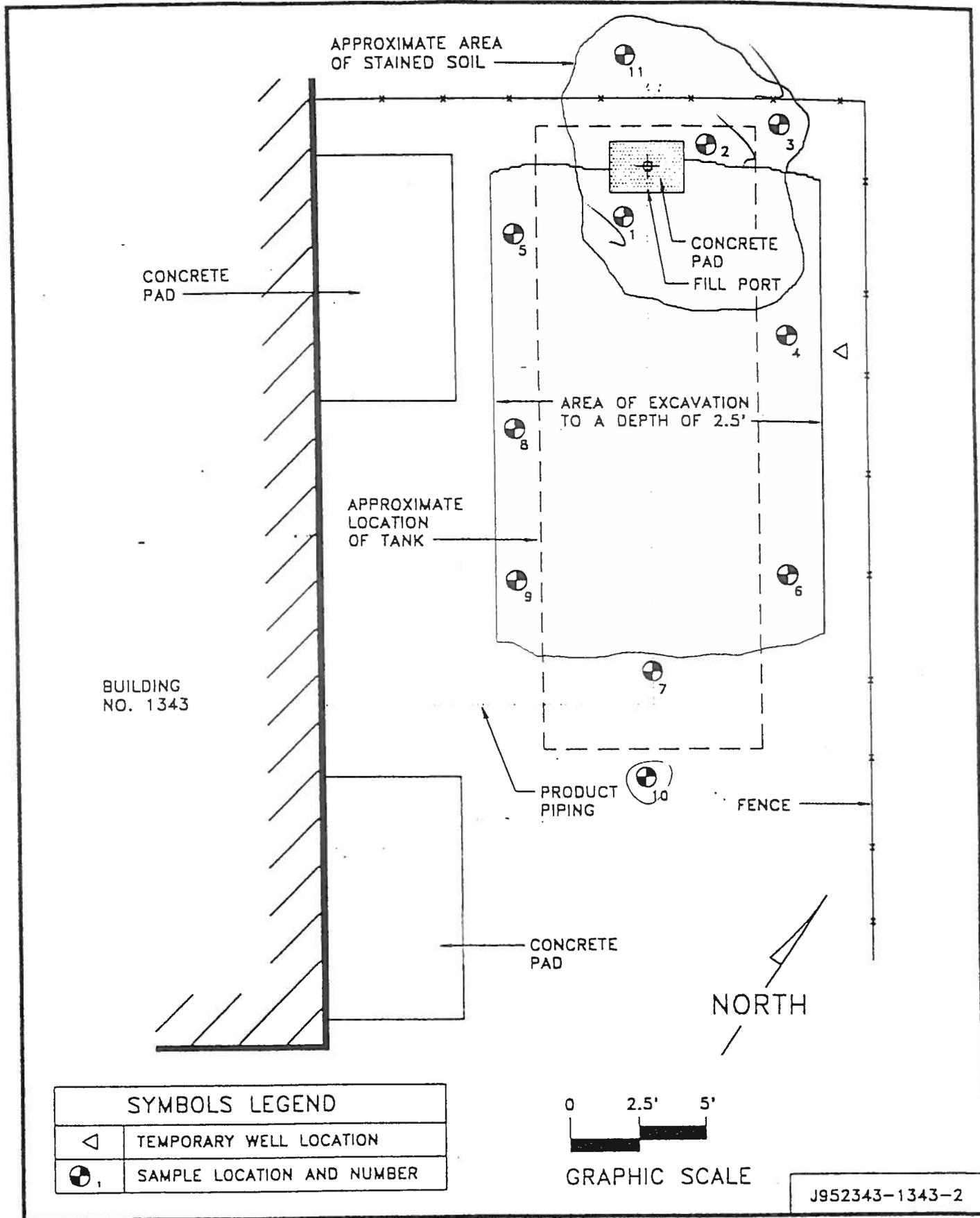
Soil screening results are corrected for ambient methane by use of an activated charcoal filter. Reported results include both uncorrected and corrected data.

Table 1
OVA-FID SCREENING RESULTS -Tank # 1343

Sample No.	Sample Location	Depth ft - bls	Without Filter ppm	With Filter ppm	Corrected ppm	Notes
1	Directly east of fillport	1	120	200	**	Very Strong
2	Directly north of fill port	1	240	380	**	Very Strong Petroleum odors
3	Five feet north of fill port	2	160	360	**	Very Strong petroleum odors
4	North side of tank, west end	2	40	40	0	No odor
		3	12	12	0	No odor
5	South side of tank, west end	1	2	0	2	No odor
6	North side of tank, east end	2	2	0	2	No odor
		3	2	0	2	No odor
7	East end of tank	1	2	0	2	No odor
8	South end of tank, center	3	0	-	0	No odor
9	South end of tank, east end	3	0	-	0	No odor
10	East side of tank	3	> 1000	300	> 700	Very Strong petroleum odors
11	West side of tank	3	0	-	0	No odor

** Value is indeterminate - breakthrough of carbon filter likely occurred.

Figur

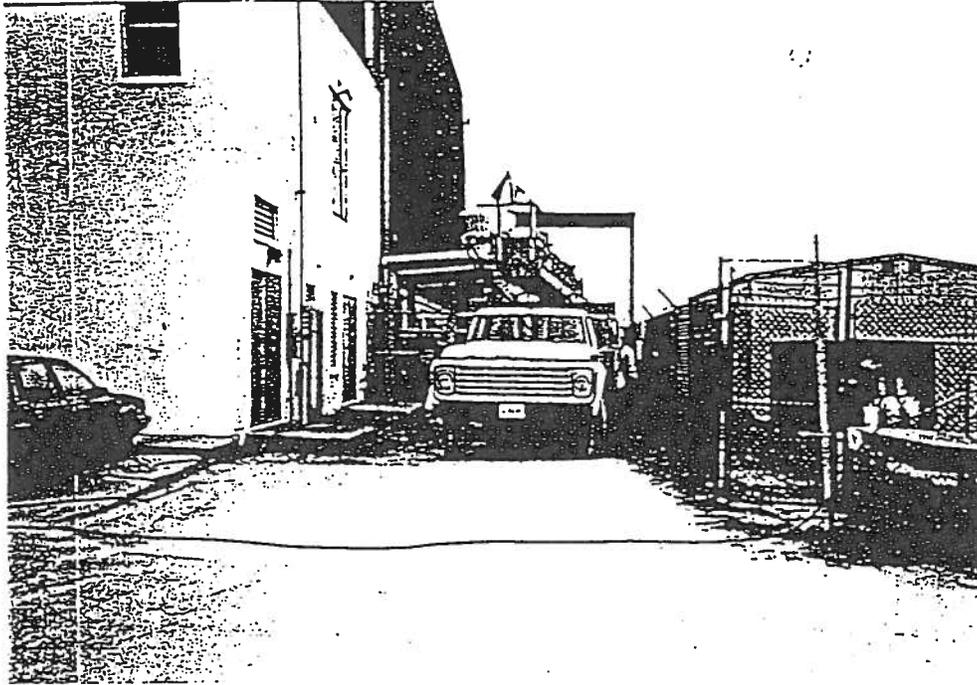


MAYPORT NAVAL STATION
MAYPORT, FLORIDA

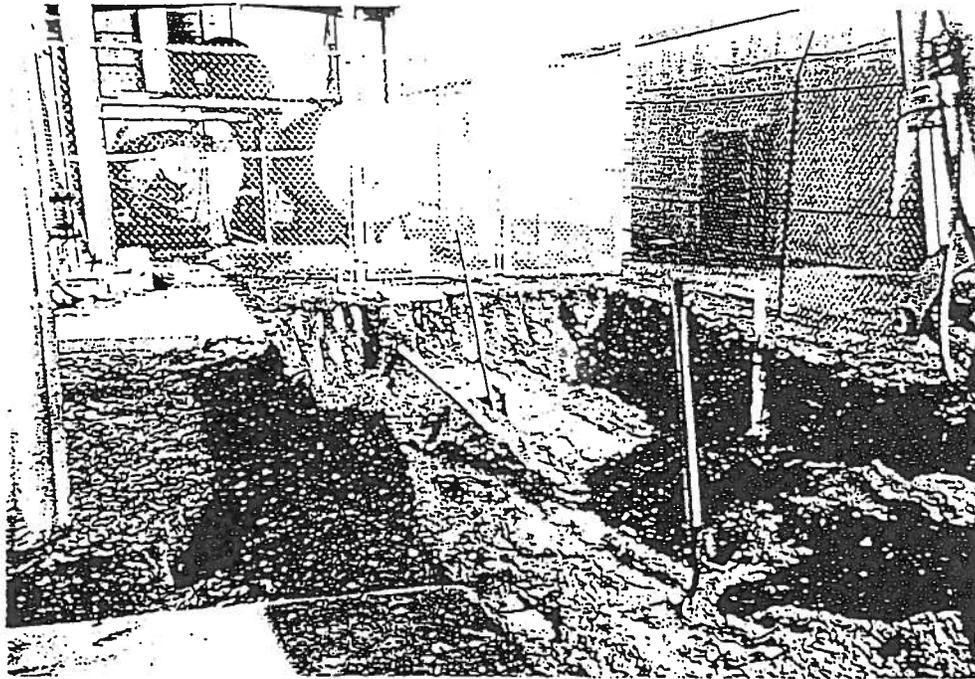
TANK 1343
FIGURE 2
TANK AND SAMPLE
LOCATIONS

Photograp

mei 1343



View to North. Drill rig is positioned for installation of temporary well.



Excavation of overburden from Tank 1343 prior to closure in place. Fill port is yellow pad toward the rear of the excavation.

Permi

mei 1343

MEI

Environmental Svcs.

MAIN OFFICE:
2136 Gallows Road
Suite H
Dunn Loring, VA 22027
703-207-0500
703-207-3981(fax)

FIELD OFFICE:
Next to Bldg. 1267
Naval Station Mayport
Mayport, FL 32227
904-249-0024
904-249-0063(fax)

January 19, 1995

Duval Cty Reg & Bioenv Svcs
Water Quality Division
421 W. Church Street Suite 412
Jacksonville, FL 32203

ATTN: Lewis Shields

RE : DACA17-94-C-0084 Remove/Replace Fuel Storage Tanks, Mayport
Naval Station, FL

SUB: Mayport Naval Station DER FAC ID#168626008
MEI PCC053987

Dear Mr. Shields:

We are hereby giving our notification for the closure, replacement and/or upgrade of the various storage tank systems on the above stated project. Enclosed you will find page C-2 of the Contract Plans and page 3 of the Contract Specifications section 00010, "Description of Work", which show the action required for each tank, as well as the schedule of priority.

Pursuant to our telephone conversation on January 6, MEI will commence work during the week of February 6, 1995. An estimated completion time would fall between four to six months thereafter. The required Tank Registration Forms are being generated and will be forthcoming.

MEI letter of 01-19-95
(cont'd)

In order to further discuss the schedule of work and the procedural details, we would like to meet at your convenience. Please call us at our office trailer number, 904-249-0024.

Sincerely

Phillip W. Giuliani

encl.

cc: DER/Stg Tank Reg Section & Bureau of Waste Cleanup
2600 Blair Stone Road
Tallahassee, FL 32399-2400

DER/Stg Tank Prgm, NE District
7825 Baymeadows Way, Suite B200
Jacksonville, FL 32256-7577

Rebull & Associates
P.O. Box 85
Arlington, VA 22210-0085

Z 750 176 609



Receipt for
Certified Mail

No Insurance Coverage Provided
Do not use for International Mail.
(See Reverse)

Sent to LEVISHHIELDS% DJHLCTYREGT BUREAU SEC WATER QUAL DIV	
Street and No. 421 W. Church St # 412	
P.O., State and ZIP Code Jacksonville FL 32203	
Postage	\$ 55
Certified Fee	110
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	110
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$ 275
Postmark	JAN 19 1995 ATLANTIC BEACH BR

PS Form 3800, March 1993

Z 750 176 610



Receipt for
Certified Mail

No Insurance Coverage Pro
Do not use for International
(See Reverse)

Sent to DER/STG TANK REG. SEC	
Street and No. 2600 BLAIR STONE RD	
P.O., State and ZIP Code TALLAHASSEE, FL 32399-2	
Postage	\$ 55
Certified Fee	110
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	110
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$ 27
Postmark	JAN 19 1995 ATLANTIC BEACH BR

PS Form 3800, March 1993

Title of Project:

Remove/Replace Fuel Storage Tanks
Naval Station Mayport
Mayport, Florida

Description of Work:

The project consists of furnishing all materials, labor, tools, equipment, utilities, water and fuel supply, vehicular transportation, manifests, certificates, licenses, permits, and all necessary incidental services meeting all Federal, State, and local requirements to remove, close-in-place, upgrade, dismantle, temporarily store, purge, clean, haul, and dispose of underground and aboveground storage tanks, tank contents, and ancillary equipment. The project involves 48 underground storage tanks and 7 aboveground storage tanks. Work shall include: (I) closure in place of six (6) underground tanks; (II) removal only of five (5) underground tanks; (III) removal and replacement of thirty-six (36) underground tanks; (IV) the upgrading of one (1) underground storage tank; (V) the removal only of three (3) aboveground storage tanks; (VI) the removal and replacement of two (2) aboveground storage tanks; (VII) the upgrading of two (2) aboveground storage tanks; and (VIII) the restoration of tank sites to original lines and grades.

Additional remediation at the site may also be required if soil and/or groundwater contamination is detected after all of the tanks and structures are removed.

The Contractor shall be an authorized Florida Pollutant Storage System Specialty Contractor (PSSSC) licensed by the Florida Department of Professional Regulation (FDPR). All subcontractors or individuals performing soil and groundwater sampling must have an approved generic quality assurance plan on file with the Florida Department of Environmental Protection (FDEP). In addition, only laboratories that have a generic quality assurance plan approved by FDEP may be used to analyze soil and groundwater samples. LICENSING AND CERTIFICATION PROOF REQUIRED WITHIN 5 DAYS AFTER BID OPENING. Contractor's analytical laboratory must be validated by the Corps of Engineers' Missouri River Division. Proof of validation must be furnished prior to issuance of Notice to Proceed. All persons entering the work site must have current OSHA Hazardous Material Health and Safety annual training as per 29 CFR Part 1910.120. The contract shall require personnel specialized in removal and disposal of underground storage tanks as well as minor construction workers. The Contractor must obtain security clearance from the Mayport Naval Station and abide by Station regulations as put forth in SECTION 01010, Paragraph 6, CONTRACTOR ACCESS AND USE OF PREMISES.

FACILITY NUMBER	CAPACITY GALLONS	CURRENT CONTENTS	YEAR INSTALLED	TYPE OF CONSTRUCTION	ACTION	REMARKS	DWG NO	BIC 'EW
4	20,000	DIESEL	1950	CONCRETE UST	CLOSE		C-1	0001
4-A	240	DIESEL	1950	STEEL UST	REMOVE		C-1	0001
22	25,000	GASOLINE	1950	STEEL UST	CLOSE		C-3	0001
84	25,000	GASOLINE	1950	STEEL UST	CLOSE		C-1	0001
85	10,000	GASOLINE	1950	STEEL UST	CLOSE		C-3	0001
90	100	FUEL OIL	UNKNOWN	STEEL UST	REMOVE	(2) (4)	C-4	0001
149-A	1000	GASOLINE	1966	STEEL UST	REPLACE	(3)	C-5	0001
149-B	100	DIESEL	1966	STEEL UST	REPLACE	(3)	C-5	0001
149-C	150	FUEL OIL	1975	STEEL UST	REPLACE		C-5	0001
165	500	FUEL OIL	1965	STEEL UST	REPLACE	(2)	C-6	0001
1-165	300	DIESEL	1965	STEEL UST	UPGRADE	(1)	C-6	0001
438	550	DIESEL	1969	STEEL UST	REPLACE	(4)	C-7	0001
3-438	1000	FUEL OIL	1969	STEEL UST	REPLACE	(2) (4)	C-7	0001
142	550	WASTE OIL	1975	STEEL UST	REPLACE		C-9	0001
163	2,500	DIESEL	1975	STEEL UST	REPLACE		C-10	0001
2-163	1,500	FUEL OIL	1974	STEEL UST	REPLACE		C-10	0001
141	1000	WASTE OIL	1981	STEEL UST	REPLACE	(2) (4)	C-11	0001
1488	20,000	FUEL OIL	1981	STEEL UST	REPLACE	(2)	C-12	0001
1488-B	1,500	FUEL OIL	1979	STEEL UST	REMOVE		C-12	0001
151	1000	WASTE OIL	1980	STEEL UST	REPLACE		C-13	0001
151	1000	WASTE OIL	1980	STEEL UST	REPLACE	(2)	C-14	0001
2-155	4,000	DIESEL	1983	STEEL UST	REPLACE	(2)	C-15	0001
2-159	550	DIESEL	1984	STEEL UST	REPLACE	(2)	C-16	0001
155	5,000	FUEL OIL	1983	STEEL UST	REPLACE		C-20	0001
1613	100	WASTE OIL	1984	FIBERGLASS UST	REPLACE		C-17	0001
164	1000	WASTE OIL	1984	STEEL UST	REPLACE		C-18	0001
1665	150	WASTE OIL	1984	STEEL UST	REPLACE	(2) (4)	C-19	0001
166	500	WASTE OIL	1983	STEEL UST	REPLACE		C-20	0001
168	4,000	WASTE OIL	1980	STEEL UST	REPLACE		C-17	0001
156-9	150	WASTE OIL	1984	STEEL UST	REPLACE		C-39	0001

GENERAL NOTES

1. COMPLETE ALL WORK ON PRIORITY 1 TANKS PRIOR TO BEGINNING ANY WORK ON PRIORITY 2 TANKS. THE CONTRACTOR'S ACTIVITIES SHALL BE RESTRICTED TO FIVE TANK LOCATIONS, UNLESS OTHERWISE APPROVED. PERMISSION TO WORK AT MORE THAN FIVE LOCATIONS SHALL BE DEPENDENT ON THE CONTRACTOR'S PRODUCTION CAPABILITIES AND TIMELY COMPLETION OF WORK AT INDIVIDUAL SITES
2. EXISTING PIPING GASKETS MAY CONTAIN ASBESTOS
3. EXISTING UTILITIES HAVE BEEN SHOWN TO THE EXTENT KNOWN AND AS DISCOVERED IN THE PREPARATION OF THE CONSTRUCTION DOCUMENTS. THE LOCATIONS OF EXISTING UTILITIES IS APPROXIMATE AND PROVIDED FOR INFORMATION PURPOSES ONLY. NO GUARANTEE AS TO THE EXACT LOCATION OF ANY UNDERGROUND UTILITIES IS MADE. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR LOCATING AND PROTECTING EXISTING UTILITIES DURING THE COURSE OF THE PROJECT.
4. NO DISRUPTION OF SERVICE OF ANY UTILITY WILL BE ALLOWED WITHOUT THE PRIOR WRITTEN CONSENT OF THE CONTRACTING OFFICER.
5. FUEL TANKS. THE CONTRACTOR SHALL PROVIDE TEMPORARY FUEL TANKS, PIPING AND PUMPS AS REQUIRED TO MAINTAIN FUEL SUPPLIES TO EXISTING FACILITIES. NO FACILITY MAY BE DISCONNECTED FROM ITS FUEL SUPPLY WITHOUT PRIOR APPROVAL OF THE CONTRACTING OFFICER. CONTRACTOR SHALL ENSURE THAT TEMPORARY EQUIPMENT IS CAPABLE OF MAINTAINING PROPER FUEL SUPPLY TO EQUIPMENT. CONTRACTOR SHALL ALSO ENSURE THAT CONTAINMENT FOR ALL TEMPORARY PUMPS, PIPING AND EQUIPMENT IS PROVIDED IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION.
6. WASTE OIL TANKS. PRIOR TO REMOVAL OF ANY WASTE OIL TANK, THE CONTRACTOR SHALL PUMP OUT THE EXISTING OIL/WATER SEPARATORS TO REDUCE THE POSSIBILITY OF DISCHARGE WHILE THE EXISTING WASTE OIL TANKS ARE BEING REMOVED. THE CONTRACTOR SHALL ALSO PROVIDE PERSONNEL AND EQUIPMENT TO PUMP OUT OIL/WATER SEPARATORS, AS REQUIRED BY FACILITY OPERATIONS, DURING THE TANK REMOVAL/REPLACEMENT OPERATION IN ORDER TO ELIMINATE DISCHARGE FROM THE SEPARATORS.
7. OIL/WATER FROM OIL/WATER SEPARATORS MAY BE DISPOSED OF IN THE BASE OIL/WATER SYSTEM, WITH THE APPROVAL OF THE CONTRACTING OFFICER. OIL/WATER SHALL BE FILTERED TO REMOVE LARGE OBJECTS IN ACCORDANCE WITH STATION REGULATIONS. FILTER REQUIREMENTS TO BE PROVIDED BY STATION.
8. ALL EXCAVATIONS FOR REMOVAL OF TANKS SHALL BE BACKFILLED WITH COMPACTED MATERIALS TO A LEVEL WHICH MATCHES ADJACENT ELEVATIONS.
9. WHERE EXISTING PAVEMENT IS SHOWN TO BE REMOVED, PAVEMENT SHALL BE REPLACED AS INDICATED IN TYPICAL DETAILS.
10. THE CONTRACTOR SHALL PROVIDE BARRICADES AND WARNING LIGHTS, AS REQUIRED BY THE CONTRACTING OFFICER TO WARN VEHICULAR AND PEDESTRIAN TRAFFIC OF OPEN EXCAVATIONS AND CONSTRUCTION AREAS.
11. ALL WORK TO BE DONE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION.
12. THE CONTRACTOR SHALL PROVIDE A NEW DATE VALVE BETWEEN NEW FUEL PIPING AND EXISTING FUEL PIPING AT ALL LOCATIONS EXCLUDING WASTE OIL TANKS. SEE TYPICAL DETAIL DWG C-49.

NO.	DATE	DESCRIPTION

SCHEDULE OF PRIORITY 2 TANKS								
FACILITY NUMBER	CAPACITY (GALLON)	MOST RECENT CONTENTS	YEAR INSTALLED	TYPE OF CONSTRUCTION	ACTION	REMARKS	OWC NO.	BID ITEM
53	200	FUEL OIL	1942	STEEL AST	UPGRADE	①	C-42	0010
164	100	DIESEL	1988	STEEL AST	REMOVE		C-21	0010
191-A	6000	FUEL OIL	1987	FIBERGLASS. UST	UPGRADE		C-22	0010
21C	300	FUEL OIL	1960	STEEL AST	REMOVE		C-21	0010
242	2,000	FUEL OIL	1962	STEEL UST	REPLACE		C-23	0002
243	2,000	FUEL OIL	1962	STEEL UST	REPLACE		C-24	0002
245	2,000	FUEL OIL	1962	STEEL UST	REPLACE	②	C-25	0002
264	250	FUEL OIL	1967	STEEL UST	REMOVE		C-26	0002
35C	1,000	FUEL OIL	1965	STEEL UST	REPLACE	②	C-27	0002
351	2,000	FUEL OIL	1981	STEEL UST	CLOSE		C-28	0009
353	2,000	FUEL OIL	1963	STEEL UST	CLOSE		C-38	0010
412	560	FUEL OIL	1972	STEEL UST	REPLACE		C-30	0010
425	1,000	FUEL OIL	1968	STEEL UST	REPLACE		C-31	0009
448-A	1,000	FUEL OIL	1969	STEEL UST	REPLACE		C-32	0010
448-B	1,000	FUEL OIL	1984	STEEL UST	REPLACE		C-32	0010
451	4,000	FUEL OIL	1969	STEEL UST	REPLACE		C-33	0009
1267	1,000	FUEL OIL	1973	STEEL UST	REMOVE		C-34	0010
1326 -	550	FUEL OIL	1978	STEEL AST	REPLACE		C-41	0010
1333	1,500	FUEL OIL	1981	STEEL UST	REPLACE		C-35	0010
1343	10,000	FUEL OIL	1960	STEEL UST	REPLACE	②	C-36	0009
1380	8,000	UNKNOWN	1982	STEEL AST	REMOVE		C-4	0010
1388	1,000	FUEL OIL	1977	STEEL UST	REPLACE	②	C-28	0009
1397	2,000	FUEL OIL	1977	STEEL UST	REPLACE	②	C-40	0009
1556-A	1,000	FUEL OIL	1984	STEEL UST	REPLACE		C-39	0010
437	1000	DIESEL	1969	STEEL UST	REPLACE		C-8	0009

REMARKS

- ① RELOCATE TANK AND PROVIDE SECONDARY CONTAINMENT
- ② SHORE EXCAVATION DURING TANK REMOVAL TO MINIMIZE EXCAVATION AND PROTECT EXIST' STRUCTURES, EQUIPMENT AND PLANTS
- ③ PROVIDE FUEL DISPENSERS
- △ ④ OBTAIN PERMISSION PRIOR TO ENTERING AREA OF THE BASE
- △ ⑤ PROVIDE TEMPORARY FENCES AND SECURITY FOR ALL AREAS WHERE EXISTING FENCES MUST BE REMOVED FOR CONSTRUCTION PURPOSES

DEPARTMENT OF THE ARMY
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
 JACKSONVILLE, FLORIDA
 NAUFRONT NAVAL STATION
 NAUFRONT, FLORIDA
 REMOVE/REPLACE FUEL STORAGE TANKS
 SCHEDULE AND NOTES

DESIGNER
 T.M.T.

Discharge Reporting For

nei 1343

Memorandum

To: A.C. Carroll Fax 630-3638
CC: Ken Kivlin, Rebull and Associates Fax 249-0063
From: Geraldine Bixler Robbins, G. B. Robbins, Inc.
Date: June 26, 1995 updated July 14, 1995
Subject: Naval Station , Mayport
FAC ID# 168626008
Discharge notification

Mr. Carroll, verbal discharge notification was made to your office for the following:

<u>Tank No.</u>	<u>Closure Date</u>	<u>Verbal Notification Date</u>
1388	6/21/95	6/26/95
353	6/21/95	6/26/95
1343	6/28/95	7/14/95

Formal Discharge Notification Form will be submitted as soon as they are made available to us by the Navy.



Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

June 4, 1998

Ms. Beverly Washington
Department of the Navy, Petroleum Program
Southern Division - Naval Facilities Engineering Command
PO Box 190010
2155 Eagle Drive
North Charleston, SC 29419-9010

file: 1343a1.doc

RE: Draft Contamination Assessment Report Tank Site 1343, Naval Station Mayport,
Mayport, FL

Dear Ms. Washington:

I have reviewed the above document dated February 1998 (received February 12, 1998). The following comments should be considered by the Navy and the response submitted as a Site Assessment Report (SAR) Addendum:

1. Tank 1343 was a 10,000 gallon fuel oil tank which was closed in place. At the time of closure, it is stated in the report that contaminated soil was noted and that no soil was removed nor was a ground water sample obtained at the time of closure. Please submit a copy of the closure documentation.
2. Soil borings obtained during the investigation are inadequate for determining the extent of soil contamination. Utilizing the general instructions (from "Storage Tank System Closure Assessment Requirements," February 1998 - copy enclosed) for sampling requirements for storage tanks abandoned in place, obtain four soil borings around the tank, placed as close to the tank as possible with one of the borings in close proximity to the fill port. If contamination is noted, conduct additional borings as required to sufficiently characterize the extent of contamination. Additionally, because of the contamination noted in the screening for soil boring S-3 and due to the lack of sufficient laboratory analyses, please obtain a soil sample for this location for laboratory analysis as required in Chapter 62-770, F.A.C. Please note that soil analytical samples of soil must be obtained during an assessment. Not less than one is required; more are required if contaminated soil is found. Please follow the guidance in Chapter 62-770 F.A.C. and in "Guidelines for Assessment and Source Removal of Petroleum Contaminated Soil, May 1998," a copy of which I am enclosing. Please also note the different analytical requirements in Table I or Table II, depending on the type of contamination at the site; in this particular case, the requirements in Table I apply.

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Printed on recycled paper.

June 4, 1998

3. Please confirm the disposition of the former product piping. Was it removed or is it still operational? Please obtain one soil boring midway between the end of the tank and Building 1343, along or in close proximity to the piping or its former location. If contamination is noted, obtain additional borings, sufficient to characterize any contamination. Additionally, obtain soil borings along the existing fuel line, the 12" water line and the sanitary sewer line in order to assess the possible migration of contamination along their pathways. If contamination is noted, please obtain additional borings which will sufficiently characterize any possible soil contamination.
4. Please observe the soil sampling requirements in Chapter 62-770, F.A.C when conducting the soil borings.
5. Detection limits for five semivolatile constituents in ground water were above regulated limits. Monitoring well MW-1 exhibited naphthalene contamination. Additionally, TRPH was not determined and lead was present above the Florida standard. Please resample MW-1 for semivolatile constituents, lead and TRPH, ensuring that the detection limits for compounds with regulatory guidelines or standards are low enough to allow the results to be utilized for determining the presence or absence of contamination.
6. If soil contamination is noted in the new soil borings, install a shallow monitoring well in the center of the area of greatest contamination or as close as possible if it cannot be installed in the source area and sample the ground water for volatile and semivolatile petroleum constituents, remembering the caution on detection limits noted in comment 5. Please be aware that if significant soil contamination is found, additional monitoring wells should be installed, sufficient to delineate the extent of ground water contamination.
7. Please submit a properly certified copy of the Assessment Report for Tank Site 1343. Please assure that all future and additional documents in this regard are also properly signed and sealed according to Chapter 62-770.600(6), F.A.C. In lieu of submitting a complete report, you may submit a properly executed certification page which references the site report and I will insert the page into my copy.

Please present the above requested data in a SAR Addendum. Based on the provisions of Chapter 62-770, F.A.C., please evaluate the data and propose a course of action for the site. If further clarification is required or if you have any questions, please contact me at 850-921-4230.

Sincerely,



James H. Cason, P.G.
Remedial Project Manager

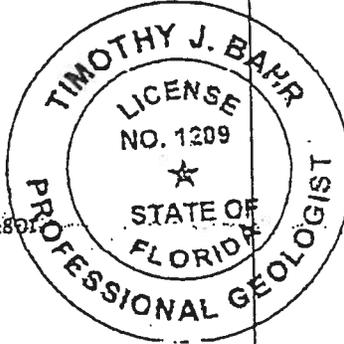
Ms. Beverly Washington
Page Three
June 4, 1998

CC: Jan Bouvier, NAVSTA Mayport
Brian Cheary, FDEP Northeast District
Jerry Young, City of Jacksonville

Reviewed by:



Timothy J. Bahr, P.G.
Professional Geologist Supervisor
Bureau of Waste Cleanup



6/5/98

Date

JJC  ESN ESN



Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

October 9, 1998

Ms. Beverly Washington
Department of the Navy, Southern Division
Naval Facilities Engineering Command
2155 Eagle Drive, PO Box 190010
North Charleston, SC 29419-9010

file: 1343wp1.doc

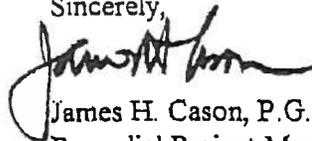
RE: Contamination Assessment Workplan, UST Site 1343, including Letter Addendum dated September 14, 1998, NAVSTA Mayport

Dear Ms. Washington,

Please consider these comments as courtesy review. I have reviewed the above document dated August 27, 1998 (received August 31, 1998) and the letter addendum dated September 14, 1998 (received September 17, 1998). As I noted in my previous comments (Appendix B) that at a site where soil contamination is not found by OVA, one sample is required for chemical analysis. At a site where contamination is found by OVA, not less than three soil samples are required to be analyzed. Please be sure that the protocols specified in Chapter 62-770.600 (3) (e), F.A.C. are followed. You may want to review my previous comment (2) to be sure that the additional work as proposed satisfies the requirements. Other than this comment, the proposed work plan and the additional tasks described in the work plan appear to be adequate.

Thank you for the opportunity to review this document. If you need further clarification or other assistance, please contact me at (850) 921-4230.

Sincerely,



James H. Cason, P.G.
Remedial Project Manager

cc: Randy Bishop, NAVSTA Mayport

TJB T JJC JJC ESN ESN

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