

N00213.AR.000210
NAS KEY WEST
5090.3a

ABOVEGROUND STORAGE TANK CLOSURE REPORT FOR HAMACA HAWK MISSILE SITE
AND TRUMAN ANNEX BUILDING 1287 NAS KEY WEST FL
5/23/1997
NAS KEY WEST

Public Works Engineering

COMMANDING OFFICER, PUBLIC WORKS CODE 188
POST OFFICE BOX 9007, KEY WEST FL 33040-9001



FAX

Date: 5/23/97
Number of pages including cover sheet: 10

To: Chuck Bryan
003-642-9454

Phone: _____
Fax phone: _____
CC: _____

From: Phillip Williams
IR - Manager

Phone: 305/293-2194 (DSN 483)
Fax phone: 305/293-2542 (DSN 483)

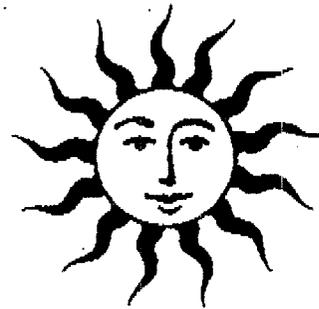
REMARKS: Urgent For your review Reply ASAP Please comment

Chuck, here is a copy of the
gate closure report from HWS

Phillip

Hamaca Hawk Missile
B

Truman Annex Bldg #81287
AST closure



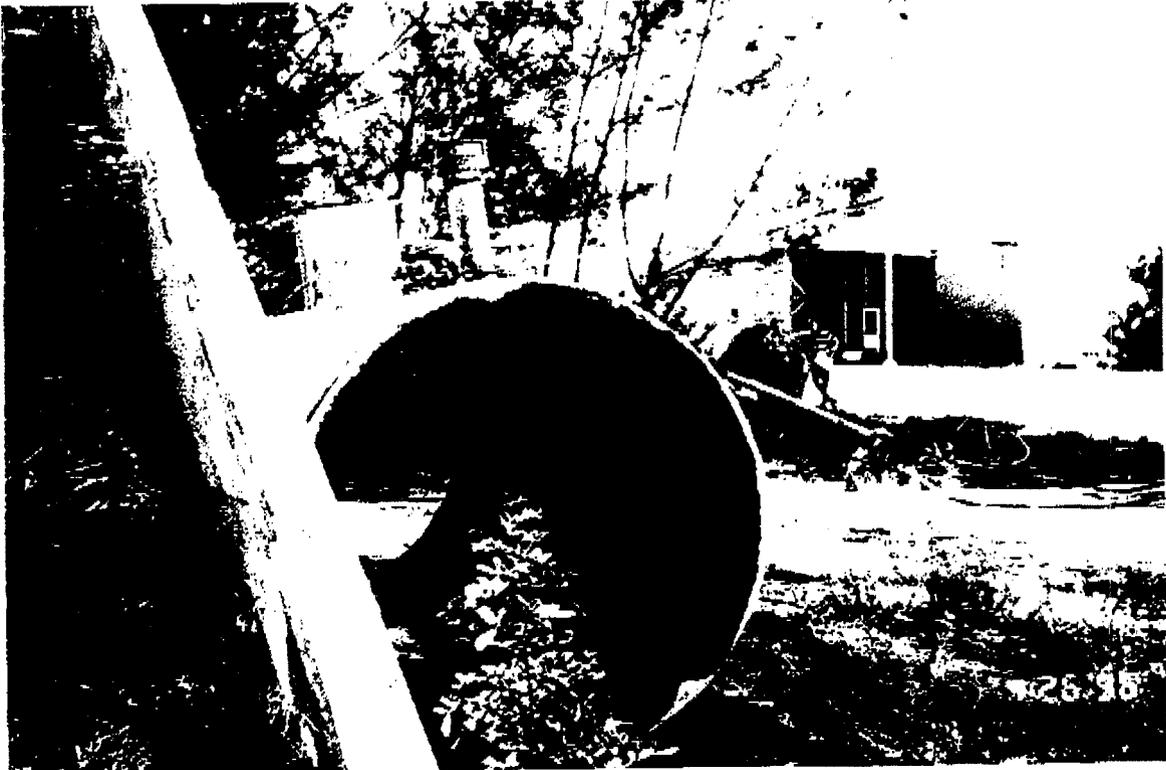
TINUS
AIK

I01, I02

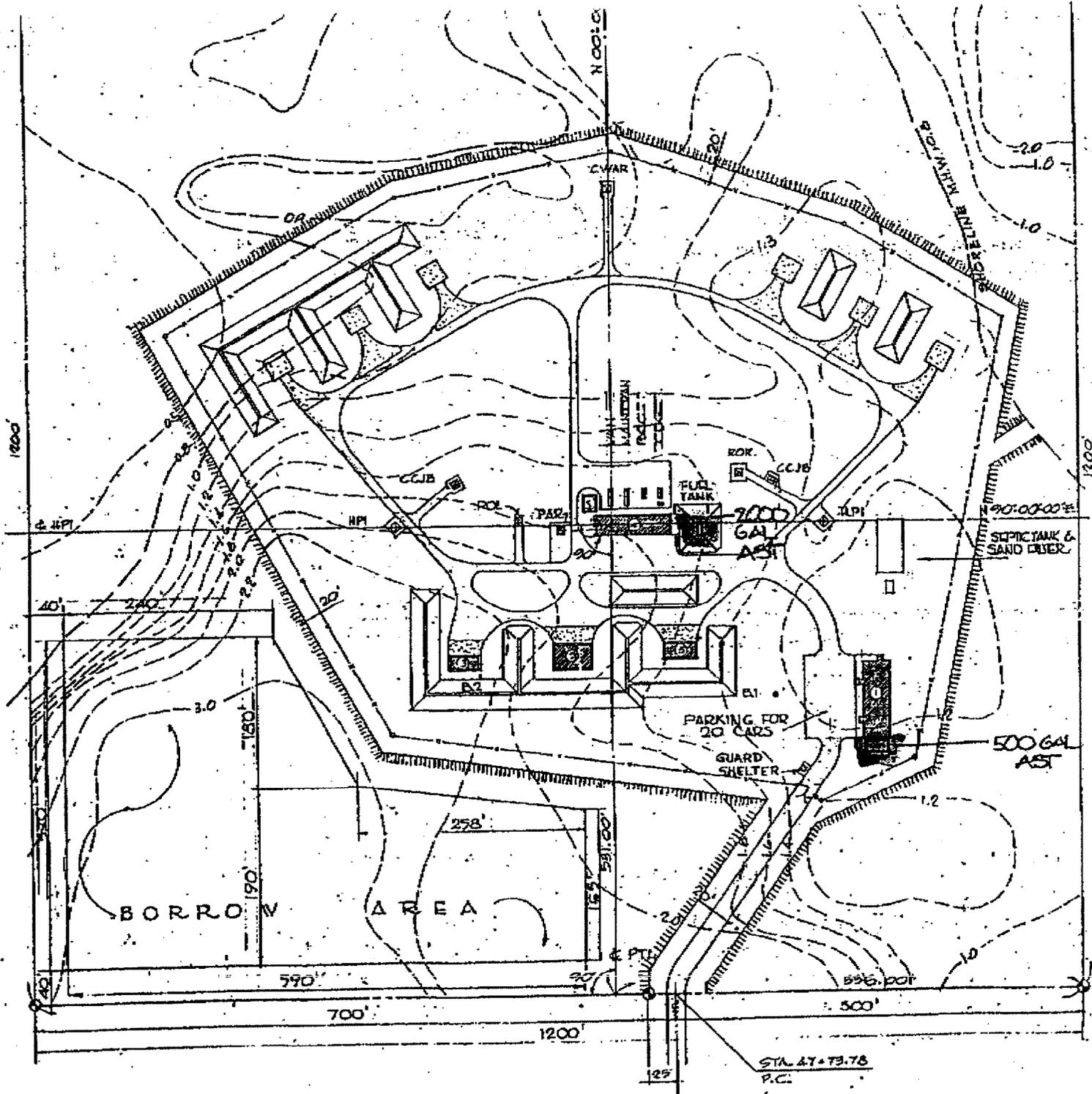
There were two aboveground storage tank (AST) systems at the Hamaca Hawk Missile Site, Key West, Florida. There was a 2,000 gallon AST and a 500 gallon AST, both used to store diesel.

The AST's were emptied and the product shipped and properly disposed. The AST's were removed on 26 April 1996, triple rinsed, demolished, and properly disposed.

The soil and groundwater at the 2,000 gallon AST showed signs of contamination above the state target levels. The soil and groundwater at the 500 gallon AST did not show signs of contamination above the state target levels. A Contamination Assessment Report (CAR) should be initiated at the 2,000 gallon AST site.

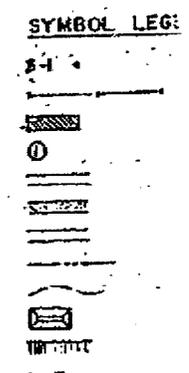


ELEVATION UM.
 15.27 63. M DATUM 0.00



DEPTH	DESCRIPTION
0.0	SEE NO. 1
1.0	SEE NO. 1
2.0	SEE NO. 1
3.0	DENSE LI.
4.5	DENSE LI.
5.0	MEDIUM, LIME ROCK THIN HARD
6.0	MEDIUM, LIME ROCK THIN HARD
15.0	MEDIUM, LIME ROCK THIN HARD
20.0	SEE NO. 1
21.0	END OF

NOTE #1: WATER WATER (9' ROCK SE
 NOTE #2: VERY LIME ROCK
 NOTE #3: MEDIUM LIME ROCK THIN HARD



MAY-29-97 FRI 2:39 PM PUBLIC WORKS FAX NO. 3062932642 P. 3



Florida Department of Environmental Regulation

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

DER Form # 17-761(2002B)
Form Title: Closure Assessment Form
Effective Date: December 10, 1990
DER Application No. (Filled in by DER)

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 storage 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

- Date: 17 June 1996
- DER Facility ID Number: (Applied For) 3. County: Monroe
- Facility Name: U.S. Navy
- Facility Owner: Commanding Officer, NAS Key West
- Facility Address: Hamaca (H01) Hawk Missile Site
- Mailing Address: Code 1883 Public Works Dept. P.O. Box 9007 Key West, FL 33040
- Telephone Number: (305) 293-2881 9. Facility Operator: Mr. Jim Simmen
- Are the Storage Tank(s): (Circle one or both) Aboveground or Underground
Type of Product(s) Stored: Diesel
- Were the Tank(s): (Circle one) A. Replaced B. Removed C. Closed in Place D. Upgraded (aboveground tanks only)
- Number of Tanks Closed: One (1) 14. Age of Tanks: _____

Facility Assessment Information

- | Yes | No | Not Applicable | |
|-------------------------------------|-------------------------------------|-------------------------------------|---|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | | 1. Is the facility participating in the Florida Petroleum Liability Insurance and Restoration Program (FPLIRP)? |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | | 2. Was a Discharge Reporting Form submitted to the Department?
If yes, When: _____ Where: _____ |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | | 3. Is the depth to ground water less than 20 feet? |
| <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 checked="" type="checkbox"/> | <input 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/kerosene?
Specify sample type: <input type="checkbox"/> Vapor Monitoring wells <input checked="" type="checkbox"/> Soil sample(s) |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 8. Were the analytical laboratory results of the ground water sample(s) greater than the allowable state target levels?
(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 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 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: _____ |

**Navy Public Works Center
Environmental Laboratory**

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
SN 922-4728/3642

Client: Key West NAS
Address Key West, FL
Phone DSN 483-2881
Contact Paul Semmes

**Analytical Report
602 Volatiles by Method 8260**

Lab Report Number: 61816
Sample Date: 04 May 96
Received Date: 07 May 96
Sample Site: Key West NAS
Job Order No.: 1024019

LAB Sample ID#	1- 61816		
Sample Name / Location	Hamaca 01		
Collector's Name	R. Davis		
Date & Time Collected	05/04/96 @ 0740		
Sample Type (composite or grab)	Grab		
Analyst	J. Moore		
Date of Extraction / Initials	05/10/96 JM		
Date of Analysis	05/10/96		
Sample Matrix	Groundwater		
Dilution	X 1		
COMPOUND NAME	1- 61816	units	Det. Limit
Benzene	BDL	UG/L	1
Chlorobenzene	BDL	UG/L	1
1,2-Dichlorobenzene	BDL	UG/L	1
1,3-Dichlorobenzene	BDL	UG/L	1
1,4-Dichlorobenzene	BDL	UG/L	1
Ethylbenzene	9	UG/L	1
Toluene	BDL	UG/L	1
Xylenes (Total)	BDL	UG/L	1
Methyl-tert-butyl ether (MTBE) *	BDL	UG/L	1
Total VOA	9	UG/L	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	
1,2-Dichloroethane-d4	75-133	108
Toluene-d8	86-119	111
Bromofluorobenzene	85-116	111

COMMENTS :

BDL = Below detection limit. UG/L = Microgram per liter. * = FL HRS certification pending

Approved by :

Jim Taylor for J. Dees

Date:

5/28/96

**Navy Public Works Center
Environmental Laboratory**

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: Key West NAS
Address Key West, FL
Phone DSN 483-2881
Contract Paul Semmes

Analytical Report

610 PAH's by Method 8270

Lab Report Number: 61816
Sample Date: 04 May 96
Received Date: 07 May 96
Sample Site: Key West NAS
Job Order No.: 1024019

LAB Sample ID#	1- 61816
Sample Name / Location	Hamaca 01
Collector's Name	R. Davis
Date & Time Collected	05/04/96 @ 0740
Sample Type (composite or grab)	Grab
Analyst	J. Moore
Date of Extraction / Initials	05/09/96 JJ
Date of Analysis	05/21/96
Sample Matrix	Groundwater
Dilution	X 1

COMPOUND NAME	1- 61816	units	Det. Limit	61816		Det. Limit
				Re-extract	units	
Acenaphthene ✓	3 J	UG/L	5	7	UG/L	5
Acenaphthylene ✓	BDL	UG/L	5	BDL	UG/L	5
Anthracene ✓	BDL	UG/L	2	BDL	UG/L	2
Benzo(a)anthracene ✓	BDL	UG/L	3	BDL	UG/L	3
Benzo(a)pyrene ✓	BDL	UG/L	2	BDL	UG/L	2
Benzo(b)fluoranthene ✓	BDL	UG/L	4	BDL	UG/L	4
Benzo(g,h,i)perylene ✓	BDL	UG/L	3	BDL	UG/L	3
Benzo(k)fluoranthene ✓	BDL	UG/L	4	BDL	UG/L	4
Chrysene ✓	BDL	UG/L	3	BDL	UG/L	3
Fluoranthene ✓	BDL	UG/L	2	BDL	UG/L	2
Fluorene ✓	4	UG/L	4	11	UG/L	4
Indeno(1,2,3-cd)pyrene ✓	BDL	UG/L	2	BDL	UG/L	2
1-Methylnaphthalene ✓	42	UG/L	7	120	UG/L	7
2-Methylnaphthalene ✓	4 J	UG/L	5	12	UG/L	5
Naphthalene ✓	2 J	UG/L	7	3 J	UG/L	7
Phenanthrene ✓	4	UG/L	3	12	UG/L	3
Pyrene ✓	BDL	UG/L	3	BDL	UG/L	3

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	61816	61816 RE-EXTRACT
Nitrobenzene-d5	35-114	55	76
2-Fluorobiphenyl	43-116	28 **	79
Terphenyl-d14	33-141	17 **	77

COMMENTS : This sample was extracted on 05/09/96 and analyzed on 05/22/96. Surrogate recoveries on the initial extraction were below acceptance limits. The sample was re-extracted and analyzed on 05/24/96. The results were within limits, but the re-extraction date had exceeded holding times.

BDL = Below detection limit. UG/L = Microgram per liter. ** = Surrogate recovery outside of acceptance limits
J = Compound was detected at a concentration below reporting limits.

Approved by: *J. Moore for Jerry Dees*

Date: 5/28/96

**Navy Public Works Center
Environmental Laboratory**

Bldg. 3887, Code 920
NAS Pensacola, FL 32503 - 6500
Phone (904) 452-4728/3642
SN 922-4728/3642

Client: Key West NAS
Address Key West, FL
Phone DSN 483-2881
Contact Paul Semmes

**Analytical Report
602 Volatiles by Method 8260**

Lab Report Number: 61815
Sample Date: 04 May 96
Received Date: 07 May 96
Sample Site: Key West NAS
Job Order No.: 1024019

LAB Sample ID#	1- 61815		
Sample Name / Location	Hamaca 02		
Collector's Name	R. Davis		
Date & Time Collected	05/04/96 @ 0755		
Sample Type (composites or grab)	Grab		
Analyst	J. Moore		
Date of Extraction / Initials	05/09/96 JM		
Date of Analysis	05/09/96		
Sample Matrix	Groundwater		
Dilution	X 1		
COMPOUND NAME	1- 61815	units	Det. Limit
Benzene	BDL	UG/L	1
Chlorobenzene	BDL	UG/L	1
1,2-Dichlorobenzene	BDL	UG/L	1
1,3-Dichlorobenzene	BDL	UG/L	1
1,4-Dichlorobenzene	BDL	UG/L	1
Ethylbenzene	BDL	UG/L	1
Toluene	BDL	UG/L	1
Xylenes (Total)	BDL	UG/L	1
Methyl-tert-butyl ether (MTBE) *	BDL	UG/L	1
Total VOA		UG/L	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	
1,2-Dichloroethane-d4	75-133	107
Toluene-d8	86-119	110
Bromoflourobenzene	85-116	109

COMMENTS :

BDL = Below detection limit. UG/L = Microgram per liter. * = FL HRS certification pending

Approved by: Jim Taylor for J. Does

Date: 5/28/96

**Navy Public Works Center
Environmental Laboratory**

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: Key West NAS
Address Key West, FL
Phone DSN 483-2881
Contact Paul Semmes

Analytical Report

610 PAH's by Method 8270

Lab Report Number: 61815
Sample Date: 04 May 96
Received Date: 07 May 96
Sample Site: Key West NAS
Job Order No.: 1024019

LAB Sample ID#	1- 61815		
Sample Name / Location	Hamaca 02		
Collector's Name	R. Davis		
Date & Time Collected	05/04/96 @ 0755		
Sample Type (composite or grab)	Grab		
Analyst	M. Chambers		
Date of Extraction / Initials	05/09/96 JJ		
Date of Analysis	05/21/96		
Sample Matrix	Groundwater		
Dilution	X 1		
COMPOUND NAME	1- 61815	units	Det. Limit
Acenaphthene	BDL	UG/L	5
Acenaphthylene	BDL	UG/L	5
Anthracene	BDL	UG/L	2
Benzo(a)anthracene	BDL	UG/L	3
Benzo(a)pyrene	BDL	UG/L	2
Benzo(b)fluoranthene	BDL	UG/L	4
Benzo(g,h,i)perylene	BDL	UG/L	3
Benzo(k)fluoranthene	BDL	UG/L	4
Chrysenes	BDL	UG/L	3
Fluorene	BDL	UG/L	2
Fluorene	BDL	UG/L	4
Indeno(1,2,3-cd)pyrene	BDL	UG/L	2
1-Methylnaphthalene	BDL	UG/L	7
2-Methylnaphthalene	BDL	UG/L	5
Naphthalene	BDL	UG/L	7
Phenanthrene	BDL	UG/L	3
Pyrene	BDL	UG/L	3

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	
Nitrobenzene-d5	35-114	98
2-Fluorobiphenyl	43-116	92
Terphenyl-d14	33-141	106

COMMENTS :

BDL = Below detection limit. UG/L = Microgram per liter. C16

Approved by :

Jim Taylor for J. Dees

Date:

5/28/96

APPLICATION FOR CLOSURE OF POLLUTANT STORAGE TANK SYSTEM
HRS-MONROE COUNTY PUBLIC HEALTH UNIT

Provide the facility information requested below.

FDEP Facility # Applied For Facility Name U.S. Navy
Facility Location Building H01, Key West, Florida
Property Owner Commanding Officer, NAS Key West
Property Owner Address Code 1883, PWD, P.O. Box 9007, Key West, 33040
Phone (305) 293-2881

Method of Tank Closure Removal

Pollutant Storage Systems Specialty Contractor (PSSSC) who will be on site supervising closure activities. Attach copy of PSSSC license.

Individual Licensed as PSSSC N/A PSSSC# N/A
Firm U.S. Navy - Public Works Center (PWC)
Address 310 John Tower Road, Pensacola, FL 32508

Indicate the firm (s) that will degas, remove, and transport the tank(s), and the method of degassification.

Degassification Method Air Eduction (API 1604-4.2.5)
Firm Removing Tanks U.S. Navy - Public Works Center (PWC)
Contact Mr. Paul R. Semmes, P.E. Phone (904) 452-2170
Firm Transporting Tanks U.S. Navy - Public Works Center (PWC)
Contact Mr. Paul R. Semmes, P.E. Phone (904) 452-2170
Firm Receiving Tanks for Ultimate Disposal U.S. Navy - DRMO
Contact Mr. Robert Saxman (Doc# N00213-6110-1353) Phone (305) 293-5271

Indicate the laboratory that will conduct groundwater analysis

Contracted Laboratory U.S. Navy - PWC Phone (904) 452-4728

Contact Mr. Joe Moore FDEP QA/QC 920121G

Indicate firm(s) transporting and disposing of contaminated soils

Firm Transporting Soils N/A

Contact _____ Phone _____

Firm Remediating/Disposing Soils N/A

Contact _____ Phone _____

Disposal/Remediation Method _____

Indicate the firm(s) that will transport and ultimately dispose of residual product and sludge from the tanks.

Firm Transporting Residual Product and Sludge PMI

Contact Mr. Judd Gilbert Phone (954) 581-4455

Firm Receiving/Disposal Residual Product and Sludge PMI

Contact Mr. Judd Gilbert Phone (954) 581-4455

Indicate the firm and names of personnel that will conduct field sampling.

Contracted Firm U.S. Navy - Public Works Center (PWC)

Contact Mr. Paul R. Semmes, P.E. Phone (904) 452-2170

Person (s) Sampling Mr. Paul R. Semmes, P.E.

Equipment used for soil screening (Specific Make and Model) _____

Organic Vapor Analyzer (OVA) Flame Ionization Detector (FID)

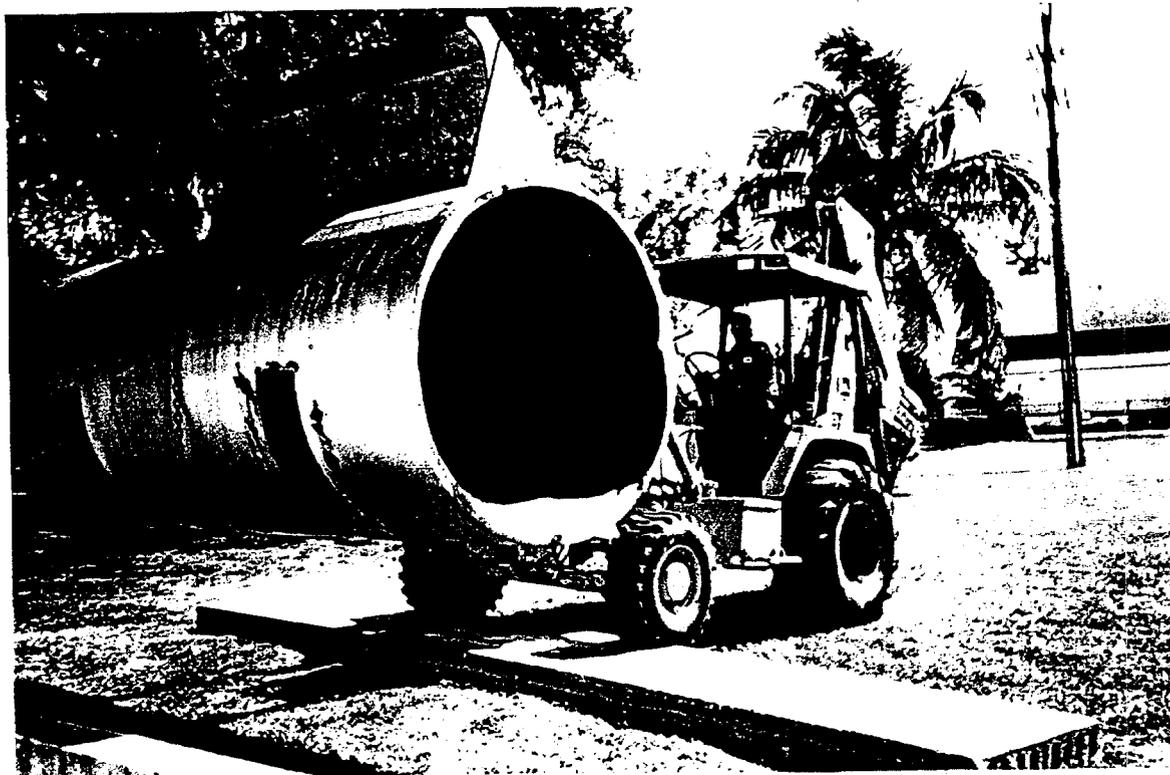
Thermo Environmental, Inc. Model 680-HVM (508) 520-0430

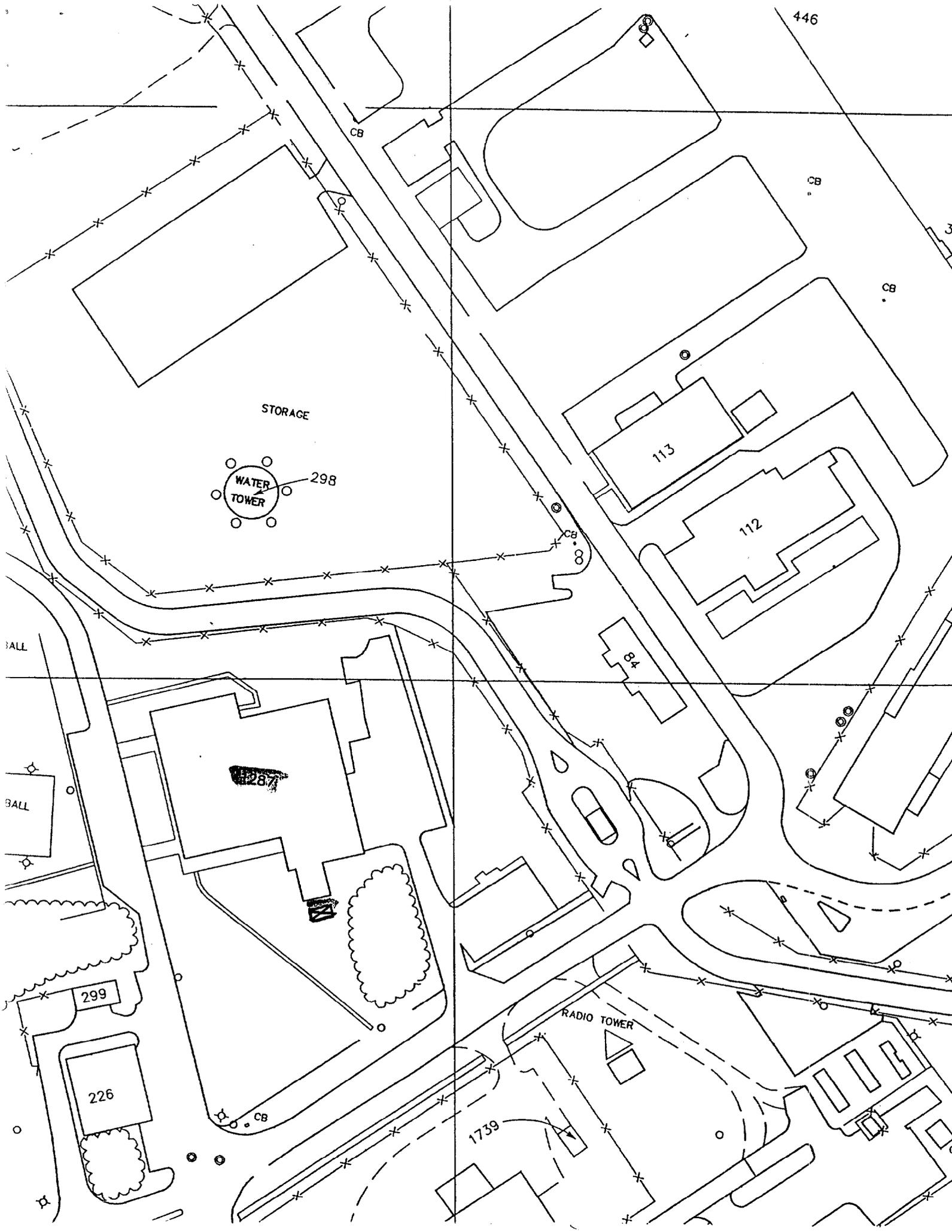
1287

There was an aboveground storage tank (AST) located at the Galley, Building 1287, Truman Annex, Key West, Florida. There was a masonry wall around the AST. The AST was used to store diesel.

The AST was emptied and the product shipped and properly disposed. The AST was removed on 26 April 1996, triple rinsed, demolished, and properly disposed.

The soil and groundwater showed signs of contamination above the state target levels. A Contamination Assessment Report (CAR) should be initiated.





Navy Public Works Center
Environmental Laboratory

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
DSN 922-4728/3642

Client: Key West NAS
Address Key West, FL
Phone DSN 483-2881
Contact Paul Semmes

Analytical Report
602 Volatiles by Method 8260

Lab Report Number: 61775
Sample Date: 03 May 96
Received Date: 06 May 96
Sample Site: Key West NAS
Job Order No.: 1024019

LAB Sample ID#	1- 61775		
Sample Name / Location	Key West 1287		
Collector's Name	R. Davis		
Date & Time Collected	03 May 96 @ 1250		
Sample Type (composite or grab)	Grab		
Analyst	J. Moore		
Date of Extraction / Initials	09 May 96 / JWM		
Date of Analysis	09 May 96		
Sample Matrix	GW		
Dilution	X 1		
COMPOUND NAME	1- 61775	units	Det. Limit
Benzene	3	UG/L	1
Chlorobenzene	BDL	UG/L	1
1,2-Dichlorobenzene	BDL	UG/L	1
1,3-Dichlorobenzene	BDL	UG/L	1
1,4-Dichlorobenzene	BDL	UG/L	1
Ethylbenzene	7	UG/L	1
Toluene	BDL	UG/L	1
Xylenes (Total)	7	UG/L	1
Metyl-tert-butyl ether (MTBE)	BDL	UG/L	1
Total VOA	17	UG/L	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	
1,2-Dichloroethane-d4	75-133	109
Toluene-d8	86-119	112
Bromoflourobenezene	85-116	108

COMMENTS :

BDL = Below detection limit. UG/L = Microgram per liter. * = FL HRS certification pending

Approved by : Jim Taylor for J. Ders

Date : 5/28/96

**Navy Public Works Center
Environmental Laboratory**

Bldg. 3887, Code 920
NAS Pensacola, FL 32508 - 6500
Phone (904) 452-4728/3642
JSN 922-4728/3642

Client: Key West NAS
Address Key West, FL
Phone DSN 483-2881
Contact Paul Semmes

Analytical Report

610 PAH's by Method 8270

Lab Report Number: 61817
Sample Date: 04 May 96
Received Date: 07 May 96
Sample Site: Key West NAS
Job Order No.: 1024019

LAB Sample ID#	1- 61817		
Sample Name / Location	KEY WEST 1287		
Collector's Name	R. Davis		
Date & Time Collected	Not Submitted		
Sample Type (composite or grab)	Grab		
Analyst	J. Moore		
Date of Extraction / Initials	05/09/96 JJ		
Date of Analysis	05/24/96		
Sample Matrix	Groundwater		
Dilution	X 1		
COMPOUND NAME	1- 61817	units	Det. Limit
Acenaphthene	5	UG/L	5
Acenaphthylene	BDL	UG/L	5
Anthracene	BDL	UG/L	2
Benzo(a)anthracene	BDL	UG/L	3
Benzo(a)pyrene	BDL	UG/L	2
Benzo(b)fluoranthene	BDL	UG/L	4
Benzo(g,h,i)perylene	BDL	UG/L	3
Benzo(k)fluoranthene	BDL	UG/L	4
Chrysene	BDL	UG/L	3
Fluorene	13	UG/L	4
Indeno(1,2,3-cd)pyrene	BDL	UG/L	2
1-Methylnaphthalene	62	UG/L	7
2-Methylnaphthalene	74	UG/L	5
Naphthalene	41	UG/L	7
Phenanthrene	11	UG/L	3
Pyrene	BDL	UG/L	3

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	
Nitrobenzene- d5	35-114	85
2-Fluorobiphenyl	43-116	82
Terphenyl -d14	33-141	82

COMMENTS : Petroleum hydrocarbons were present in the sample based on the chromatogram.
Only site information was submitted.

BDL = Below detection limit. UG/L = Microgram per liter.

Approved by :

Jim Taylor for Jerry Dees Date:

5/28/96