

03.01-03/12/96-00275



DEPARTMENT OF THE NAVY
U. S. NAVAL STATION, ROOSEVELT ROADS
PSC 1008, BOX 3001
FPO AA 34051

5090
Ser N02C-B14/0722
12 Mar 96

U.S. Environmental Protection Agency
Region II
Attn: Mr. Andrew Bellina, P.E.
Chief, Hazardous Waste Facilities Branch
New Jersey-Caribbean Permitting Section
290 Broadway, 22nd Floor
New York, NY 10007-1866

Gentlemen:

In accordance with the Corrective Action Plan (CAP) for the Tow Way Fuel Farm Facility, enclosed are two copies each of the reports for activities conducted at this site for the month of February 1996. An advance copy of this report was forwarded to Mr. Tim Gordon, of your staff via facsimile on March 12, 1996.

If you have any questions, please contact Mr. Pedro Ruiz, Pollution Abatement Program Manager, at (787)865-4429.

Sincerely,


S. CASTILLO

Director, Environmental
Engineering Division
Public Works Department
By direction of the
Commanding Officer

5090
Ser N02C-B14/ 0722
12 Mar 96

Encl:
(1) Free Product Removal Report

Copy to:
Environmental Quality Board
Attn: Katherine Batista
Underground Storage Tank Office
P.O. Box 11488
Santurce, PR 00910

Environmental Quality Board
Attn: Israel Torres
Land Pollution Control
RCRA Section
P.O. Box 11488
Santurce, PR 00910

Commander, Atlantic Division
Naval Facilities Engineering Command
Code 182
1510 Gilbert Street
Norfolk, VA 23511-2699

Commander in Chief (w/o encl)
U.S. Atlantic Fleet
Code N4652
Norfolk, VA 23511

TERRA VAC

**Free Product Removal Report 96-02
FEBRUARY 1996
Sampling, Testing and Free Product Removal
U.S. Naval Station
Roosevelt Roads, Puerto Rico
Contract No. No-92-D-6257
Terra Vac Project No. 11-0234**

March 7, 1996

**Prepared for:
Officer in Charge
Contracting Office
U.S. Naval Station
Roosevelt Roads, Puerto Rico**

INTRODUCTION

Terra Vac has been contracted by the U.S. Navy to conduct sampling, testing and free product removal operations at the U.S. Naval Station, Tow Way Fuel Facility, Roosevelt Roads, Puerto Rico, under Contract No. NO-92-D-6257. Figure 1 presents the site map. The scope of work includes set up of 7 recovery systems, free product measurements, free product analysis, free product recovery system operations, and disposal of recovered free product.

The contract requires monthly reporting of recovery operations and recovered product. This is the second monthly report and represents February 1996 operations of the free product recovery system.

FIELD ACTIVITIES

The 7 free product recovery systems were operating in wells PW-1, PW-2, PW-3, PW-4, PW-5, PW-6 and MW-1 for 27 days in February. Free product measurements were recorded at 35 wells on February 9 and at 36 wells on February 28. The product recovery rate was also recorded on February 9 and February 28. Minor maintenance was performed on the air compressor which required the system to be shut down for 48 hours. There was no free product sampled or transferred during February.

SUMMARY OF RESULTS

PUMP OPERATING HOURS

MONTH	OPERATING HOURS	TOTAL FOR 1996
JANUARY	1260	1260
FEBRUARY	4536	5796

FREE PRODUCT THICKNESS MEASUREMENTS

MONTH	NUMBER MEASUREMENTS	TOTAL FOR 1996
JANUARY	7	7
FEBRUARY	71	78

FREE PRODUCT RECOVERED

MONTH	GALLONS RECOVERED	TOTAL for 1996
JANUARY	0	N/A
FEBRUARY	236	236

SAMPLE AND TEST FREE PRODUCT (TANKS)

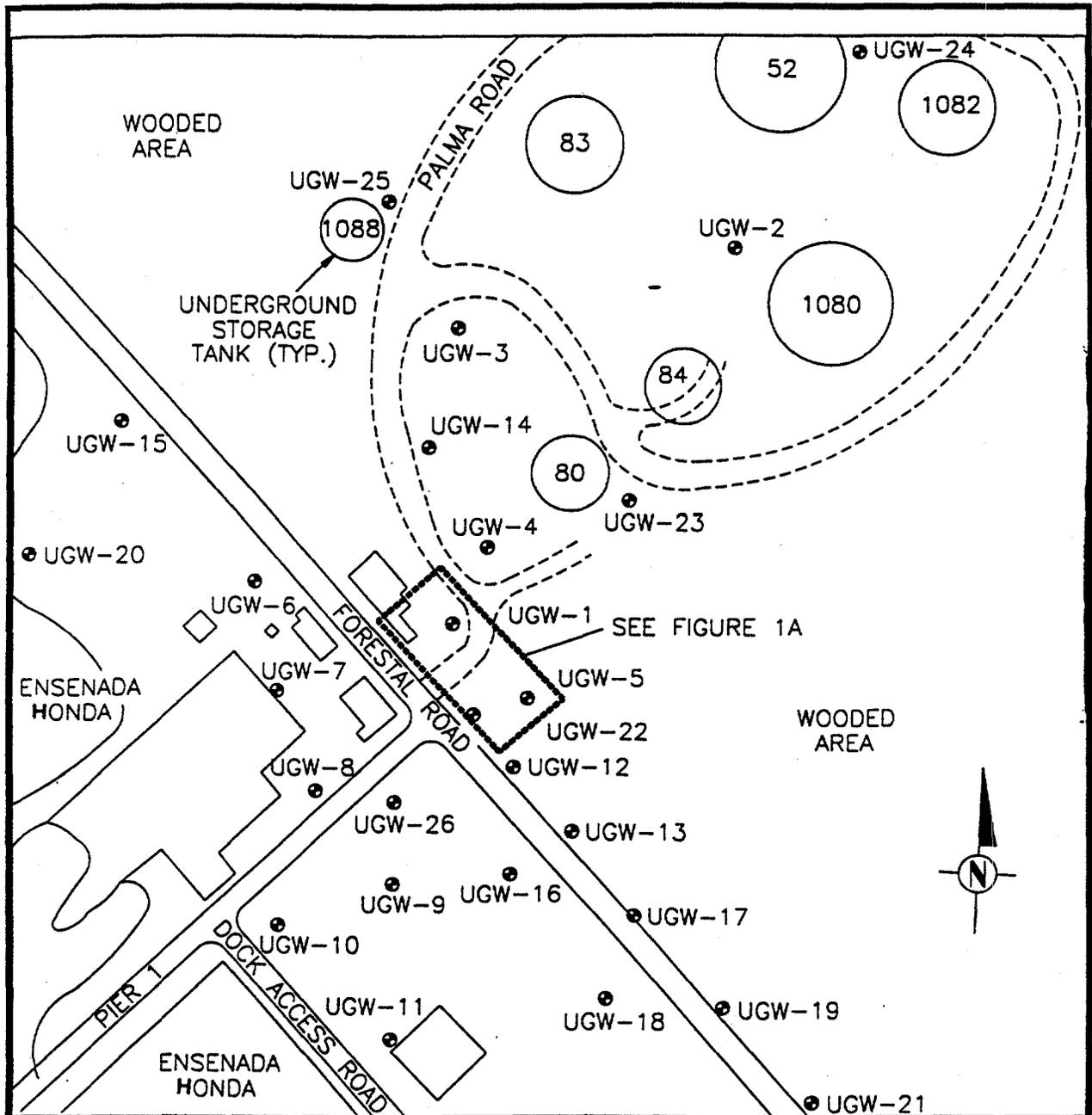
MONTH	NUMBER of SAMPLES	TOTAL for 1996
JANUARY	0	0
FEBRUARY	0	0

EVALUATION OF DATA

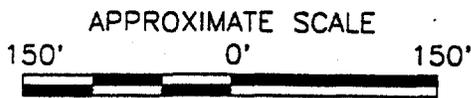
Measurements of the free product layer in the available wells near the Tow Way Fuel Facility indicate significant product (greater than 0.1 ft.) was present in 15 wells on February 28. Figure 2 presents the free product thickness contours on February 28.

A total of 71 free product thickness measurements were recorded at the UGW, MW and PW wells during February 1996. Measurable product (0.01 feet) was observed in 18 wells measured on February 28 and in 17 wells on February 9. The thickness in product ranged from 0.02 to 15.45 feet. Well UGW-4 had the largest product thickness at 12.80 feet on February 28 and 15.45 feet on February 9. UGW-1,3, 4, 12, 13, 17, 19, and 25 have shown substantial product thickness since September 30, 1994. Table 1 presents the free product thickness of individual wells.

The free product recovery rate from February 9 to February 28 is calculated to be 12 gpd, with an average of 7 gpd since starting the system on January 25, 1996. There were 236 gallons of product recovered from January 25, 1996 to February 28. Table 2 presents the product holding tanks records.



TV11-0234\3-6-96\FIG1.DWG



NOTE: ALL LOCATIONS ARE APPROXIMATE

LEGEND:

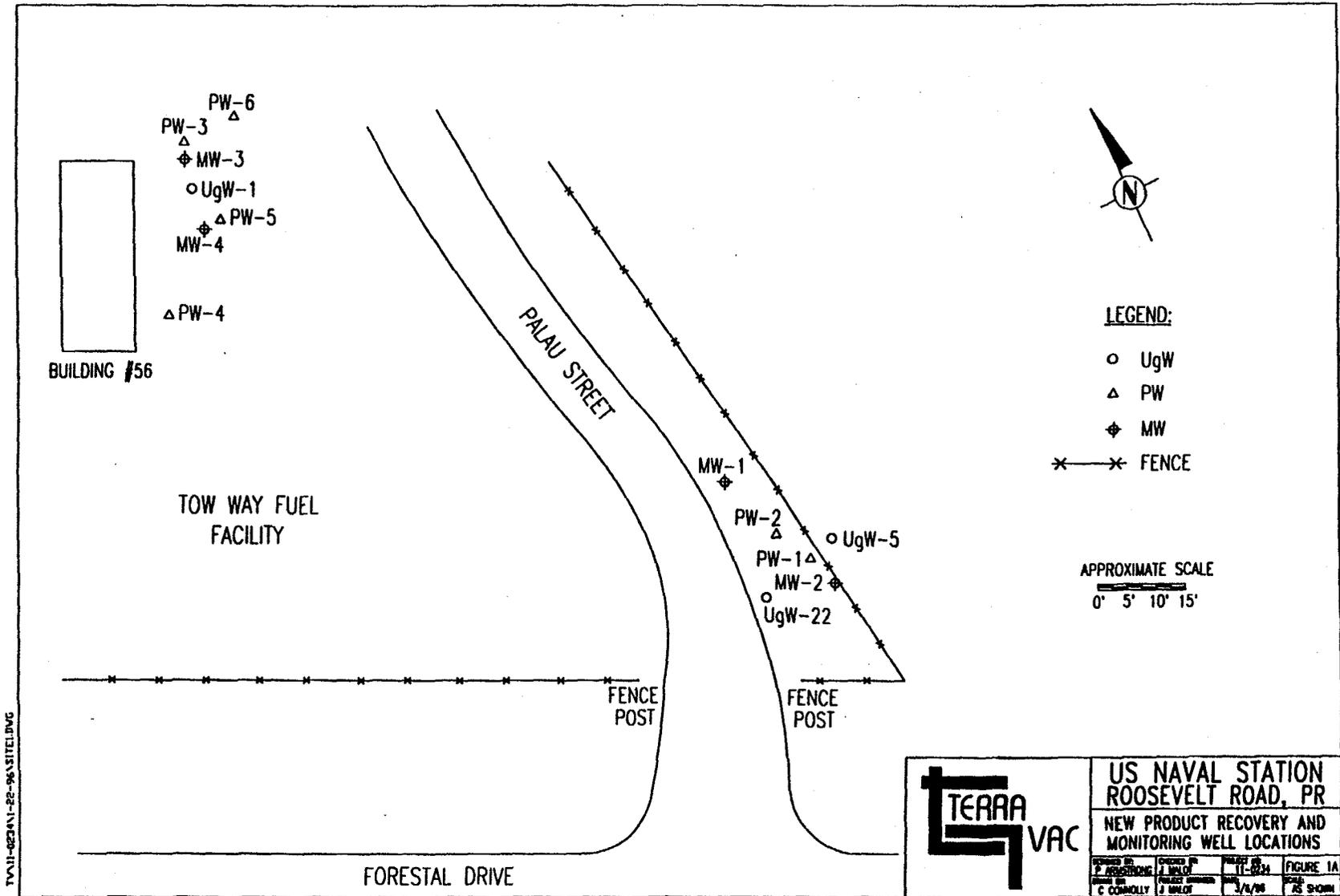
● MONITORING WELLS INSTALLED BY BB&L (1993)



US NAVAL STATION
ROOSEVELT ROAD, PR

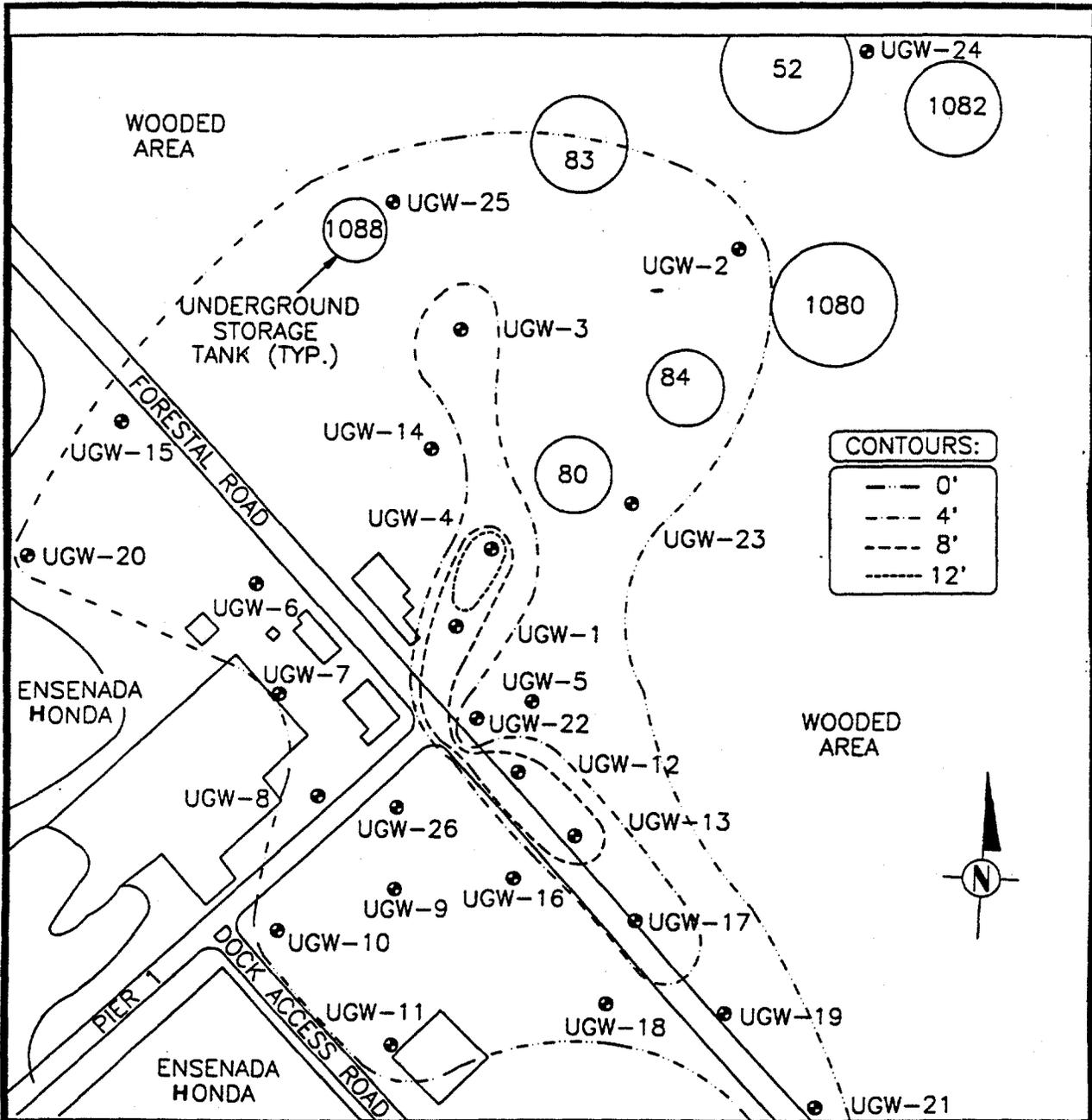
SITE MAP
TOW WAY FUEL FACILITY

DESIGNED BY: P. ARMSTRONG	CHECKED BY: J. MALOT	DWG. NO.:	FIGURE 1
DRAWN BY: C. CONNOLLY	PROJECT MANAGER: J. MALOT	DATE: 3/6/96	SCALE: AS SHOWN



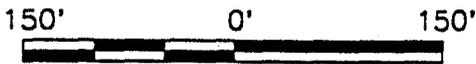
TVA-02941-22-96/STEL/DWG

TERRA VAC



TV 11-0234\3-6-96\PLUME.DWG

APPROXIMATE SCALE



LEGEND:

- MONITORING WELLS INSTALLED BY BB&L (1993)

NOTE: ALL LOCATIONS ARE APPROXIMATE



US NAVAL STATION
ROOSEVELT ROAD, PR

FREE PRODUCT THICKNESS CONTOURS
FEBRUARY 28, 1996
TOW WAY FUEL FACILITY

DESIGNED BY: P. ARMSTRONG	CHECKED BY: J. MALOT	DWG. NO: 11-0234	FIGURE 2
DRAWN BY: C. CONNOLLY	PROJECT MANAGER: J. MALOT	DATE: 3/6/96	SCALE: AS SHOWN

US NAVAL STATION
ROOSEVELT ROADS, PUERTO RICO
TOW WAY FUEL FACILITY
TV PROJECT 110234

TABLE TWO

PRODUCT HOLDING TANK RECORDS														TOTAL GALLONS			FROM
DATE	TIME	DAYS	TANK A			TANK B			TANK C			TANK D	PUMPED THIS PERIOD	CUMULATIVE GALLONS	GPD	START AVG GPD	
			PRODUCT #	WATER #	GALLONS	PRODUCT #	WATER #	GALLONS	PRODUCT #	WATER #	GALLONS						
25-Jan-96	13:30	0	1.7	10.75	850.7	5.83	5.83	0	5.83	5.83	0	0	0	0	0	0	
09-Feb-96	14:35	15.05	1.69	10.74	850.7	5.82	5.83	0.93	5.74	5.83	8.37	0	9.3	9.3	0.6	0.6	
28-Feb-96	12:05	33.9	1.74	10.15	790.54	4.76	5.95	110.67	4.7	6.05	125.55	0	226.9	236.2	12.0	7.0	