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NAS WHITING FIELD  
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LETTER REPORT ON FREE PRODUCT RECOVERY OF AVGAS PIPELINE SECTION E NAS  
WHITING FIELD FL  
8/27/2004  
TETRA TECH

**TETRA TECH NUS, INC.**

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TtNUS/TPA-04-012/4138-3.2

August 27, 2004

Project Number 4038

Mr. James Cason  
Florida Dept. of Environmental Protection  
Twin Towers Office Bldg.  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

Reference: Clean Contract No. N62467-94-D0888  
Contract Task Order No. 0200

Subject: Free Product Recovery Report  
Av Gas Pipeline Section E (Bldg. 2832)  
Naval Air Station Whiting Field  
Milton, Florida

Dear Mr. Cason:

Tetra Tech NUS, Inc. is pleased to submit for your review and approval this report documenting free product recovery activities at the Av Gas Pipeline Section E Site (Building 2832), at the Naval Air Station Whiting Field, Milton, Florida. This report is being submitted on behalf of the U.S. Navy Southern Division Naval Facilities Engineering Command (NAVFAC EFD SOUTH) under the Comprehensive Long-term Environmental Action Navy (CLEAN III) Contract Number N62467-94-D-0888.

**SITE HISTORY**

A closure assessment was conducted on the Av Gas Pipeline at NAS Whiting Field in October 2000. The closure assessment included the use of geophysical methods to locate the pipeline, headspace screening of soil samples, and confirmatory sampling of soil and groundwater. A Closure Assessment Report (CAR) was submitted to the Florida Department of Environmental Protection (FDEP) and the Escambia County Health Department in April 2001. The CAR indicated that an area of product-saturated soil was detected just east of Building 2832. The CAR recommended that a Site Assessment be conducted at the location where the product-saturated soil was detected. The site assessment field investigation was performed from April through November 2002 and included cone penetrometer testing (CPT) with a membrane interface probe (MIP), direct push technology (DPT) testing, headspace screening of soil samples, monitoring well installation, soil and groundwater sampling and analysis, and aquifer characterization testing. During the site assessment it was confirmed that free product was present in a perched water bearing zone near Building 2832. As a result, a source removal was initiated in October 2002 to recover free product from this area. A Site Assessment Report (SAR) was submitted in April 2003. The SAR

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recommended that a Remedial Action Plan be developed and that interim free product recovery continue until the RAP was approved and active remediation was initiated.

#### FREE PRODUCT MONITORING AND RECOVERY

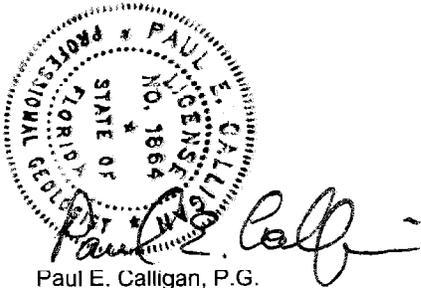
Interim free product monitoring and recovery was initiated on October 18, 2002. During each free product monitoring and recovery event, the thickness of product in monitoring well WHF-2832-MW1P was measured with an ORS oil/water interface probe. If the product thickness was greater than 0.01 feet, then the product was recovered from the well by manual bailing until the product thickness in the well was less than 0.01 feet. The recovered product was placed in a 55 gallon drum for later disposal. Free product monitoring and recovery was performed approximately every two weeks from October 18, 2002 through June 24, 2003. Free product monitoring and recovery was performed approximately every month from June 24, 2003 through March 1, 2004. The drummed product was disposed of by Base personnel at the Base oil/water separator. The free product thickness measurements for each event are provided in Table 1. The estimated volume of free product recovered during each event is provided in Table 2. A graph showing the free product thickness vs. the depth to water is provided on Figure 1.

#### CONCLUSIONS AND RECOMMENDATIONS

As of March 1, 2004, approximately 19.77 gallons of free product have been removed from monitoring well WHF-2832-MW1P (Table 2). Subsequent free product monitoring and recovery events indicate that free product is still present in monitoring well WHF-2832-MW1P. Therefore, interim free product recovery has resumed and will continue until active remediation is initiated at the site.

If you have any questions regarding the information provided in this report, please contact me by phone at (813) 806-0202, or via e-mail at calliganp@ttnus.com.

Sincerely,



Paul E. Calligan, P.G.  
Task Order Manager  
Florida License No. PG-0001864  
Date: August 27, 2004

/pc

Enclosures

c: Beverly Washington, NAVFAC EFD SOUTH (CD Only)  
Ron Joyner, NASWF (Hard Copy and CD)  
Debbie Wroblewski (Cover Letter Only)  
Mark Perry/File (Unbound)

## TABLES

**TABLE 1**

**FREE PRODUCT MEASUREMENTS  
MONITORING WELL WHF-2832-MW1P  
AV GAS PIPELINE SECTION E SITE (BLDG 2832)  
NAVAL AIR STATION WHITING FIELD  
MILTON, FLORIDA**

Date	Before Product Recovery			After Product Recovery		
	DTP (feet BTOC)	DTW (feet BTOC)	Product Thickness (feet)	DTP (feet BTOC)	DTW (feet BTOC)	Product Thickness (feet)
10/18/2002	13.30	19.77	6.47	19.60	19.66	0.06
11/1/2002	13.53	15.38	1.85	16.91	16.94	0.03
11/15/2002	13.32	14.05	0.73	15.68	15.72	0.04
12/8/2002	14.64	15.62	0.98	15.70	15.78	0.08
12/20/2002	14.33	14.94	0.61	15.11	15.20	0.09
1/6/2003	13.41	13.96	0.55	14.12	14.19	0.07
1/20/2003	14.06	14.91	0.85	15.09	15.17	0.08
2/2/2003	14.68	15.40	0.72	15.32	15.40	0.08
2/19/2003	15.36	16.10	0.74	16.45	16.51	0.06
3/1/2003	13.48	13.81	0.33	14.01	14.07	0.06
3/14/2003	11.98	12.24	0.26	12.45	12.47	0.02
3/28/2003	11.96	12.20	0.24	12.25	12.30	0.05
4/17/2003	12.32	12.56	0.24	12.87	12.91	0.04
5/3/2003	12.01	12.22	0.21	12.71	12.75	0.04
5/22/2003	13.37	13.80	0.43	14.03	14.09	0.06
6/8/2003	11.76	11.89	0.13	12.04	12.05	0.01
6/24/2003	11.21	11.26	0.05	11.47	11.48	0.01
7/22/2003	No Product	11.05	0.00	NA	NA	0.00
8/22/2003	No Product	10.97	0.00	NA	NA	0.00
9/19/2003	11.51	11.67	0.16	11.76	11.83	0.07
10/20/2003	12.88	13.50	0.62	13.91	13.98	0.07
11/21/2003	13.82	14.21	0.39	14.79	14.88	0.09
12/12/2003	13.37	13.51	0.14	13.96	13.98	0.02
1/29/2004	11.85	11.88	0.03	11.85	11.88	0.03
3/1/2004	No Product	11.92	0.00	NA	NA	0.00

DTP = Depth to Product  
 DTW = Depth to Water  
 BTOC = Below Top of Casing  
 NA = Not Applicable



## FIGURES

FIGURE 1

DEPTH TO WATER VS. PRODUCT THICKNESS  
MONITORING WELL WHF-2832-MW1P  
AV GAS PIPELINE SECTION E SITE (BLDG 2832)  
NAVAL AIR STATION WHITING FIELD  
MILTON, FLORIDA

