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May 3, 2004

Commander
Naval Facilities Engineering Command
Atlantic Division
6506 Hampton Blvd., Bldg. A, Room 1124
Norfolk, VA 23508

Attention: EV23JC, Mr. John D. Conway, P. G.

Re: **FINAL** - Letter Report of Findings and Request for "No Further Action"
Building 1323, Hydraulic Oil USTs
Marine Corps Base
Camp Lejeune, North Carolina
Navy Contract No. N62470-01-D-3009
Delivery Order No. 0102
CATLIN Project No. 203-117

Dear Mr. Conway:

The following letter report is submitted to document the recent sampling activities at the above referenced site. CATLIN Engineers and Scientists (CATLIN) was authorized to perform field activities and prepare the letter report by LANTDIV NAVFACENGCOM in accordance with Order for Supplies Contract Number N62470-01-D-3009 and Delivery Order Number 0102. Based on the recent investigation, this site appears to qualify for "Low Risk" classification and "No Further Action" status.

Background and Purpose of Investigation

The site contained two former 20-gallon hydraulic oil underground storage tanks (UST) connected to hydraulic lifts. The site location is shown on Figure 1. A 20-Day Report was prepared by IT Corporation and submitted December 1993. A Phase I Limited Site Assessment (LSA) and Recommendation for "No Further Action" was prepared and submitted by Law Engineering and Environmental Services, Inc. on December 20, 2000. Oil and grease soil contamination was revealed during UST closure greater than the North Carolina Department of Environment and Natural Resources (NCDENR) Action Levels; however, subsequent soil sampling, as part of the LSA, did not reveal any contaminants in excess of the lowest Maximum Soil Contaminant Concentrations (MSCCs). Groundwater samples from monitoring wells UST1323-MW01 and UST1323-MW02 revealed two hydrocarbon fractions (C₁₉-C₃₆ and C₁₁-C₂₂) in excess of the Interim Groundwater Quality Standards (GWQS). Based on the levels of groundwater contamination, the site is eligible for "No Further Action" status with issuance of a Notice of Residual Petroleum or Land Use Restrictions.

The purpose of this investigation was to complete fieldwork and reporting necessary for obtaining No Further Action status without Land Use Restriction. Groundwater samples were collected from monitoring wells UST1323-MW01 and UST1323-MW02 and analyzed per Massachusetts Department of Environmental Protection (MADEP) volatile petroleum hydrocarbons (VPH) and extractable petroleum hydrocarbons (EPH). The site plan and sample locations are illustrated on Figure 2.

Field Methods

On March 1, 2004, CATLIN personnel gauged monitoring wells UST1323-MW01 and UST1323-MW02 for depth to water, three well volumes were purged from each well and a groundwater sample was collected. New disposable latex gloves were worn and each groundwater sample was poured directly into the appropriately labeled glassware. The groundwater samples were placed on ice in an insulated cooler and transported following chain-of-custody protocol to Paradigm Analytical Laboratories, Inc. in Wilmington, North Carolina (NC Certification Number 481) for analysis per MADEP VPH/EPH. Chain-of-Custody documentation is included with the laboratory report.

Results

VPH and EPH concentrations were not revealed above the 100 µg/L laboratory quantitation limit in the UST1323-MW01 and UST1323-MW02 groundwater samples. Laboratory analytical results are attached.

Summary and Conclusions

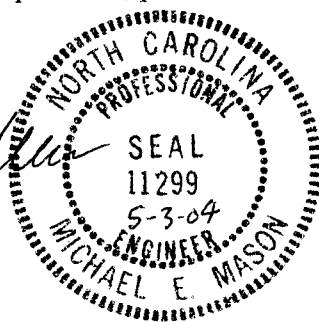
The hydrocarbon fractions above the Interim GWQS previously detected in groundwater samples collected from UST1323-MW01 and UST1323-MW02 have apparently naturally attenuated below laboratory quantitation limits. The site should qualify for "Low Risk" classification and "No Further Action" status is recommended.

Should you have any further questions, please feel free to contact us at your convenience.

Sincerely,



Michael E. Mason, P.E.
CATLIN Program Manager

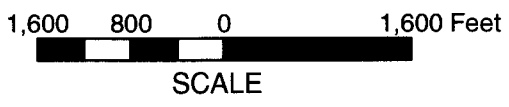


Attachments: Figures 1 and 2, laboratory analytical report

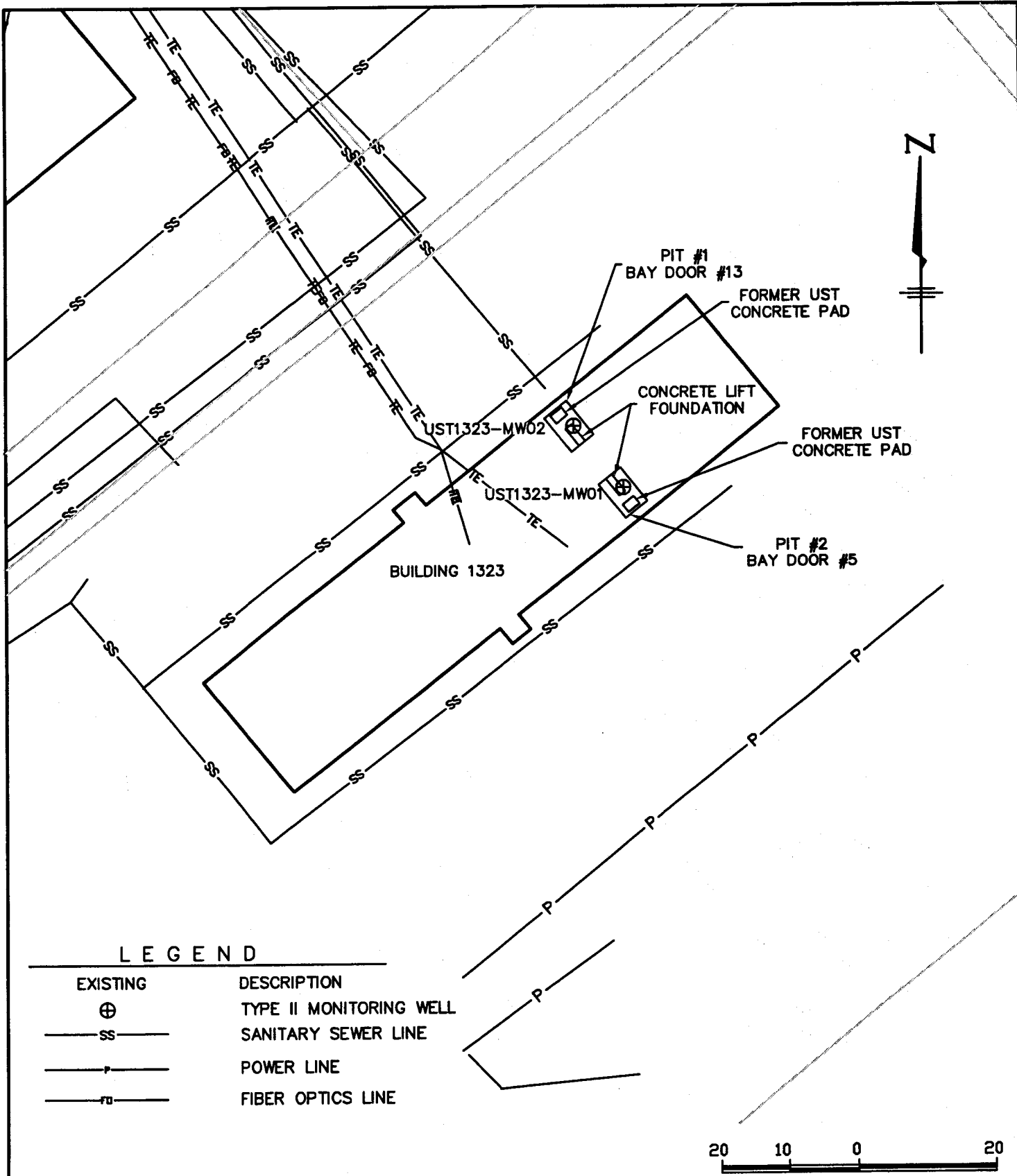
cc: Mr. Roger R. Marce, Jr. – Code AQ 135 Contracts, correspondence only
Commanding General, Attn: Director I&E, EMD, EQB



BUILDING 1323



	PROJECT BUILDING 1323 MARINE CORPS BASE CAMP LEJEUNE, NC	TITLE SITE VICINITY MAP	FIGURE 1
	JOB NO. 203-117 DATE MAR 2004	SCALE AS SHOWN DRAWN BY SAC CHECKED BY BA	



LEGEND

EXISTING	DESCRIPTION
⊕	TYPE II MONITORING WELL
—SS—	SANITARY SEWER LINE
—P—	POWER LINE
—FO—	FIBER OPTICS LINE



NOTE:
1. MAP ADAPTED FROM LAW ENGINEERING AND ENVIRONMENTAL SERVICES, INC.

<p>WILMINGTON, NORTH CAROLINA</p>	PROJECT BUILDING 1323 MARINE CORPS BASE CAMP LEJEUNE, NC	TITLE SITE PLAN	FIGURE 2
	JOB NO: 203-117	DATE: FEB 2004	SCALE: 1"=20'

EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Richard Catlin & Associates

Project Name: 7 funded site closures, Camp Lejeune

Sample Information and Analytical Results	
Sample Identification	UST1323-MW01
Sample Matrix	Water
Date Collected	03/01/04
Date Received	03/03/04
Date Extracted	03/04/04
Date Analyzed	03/10/04
Dry Weight	
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 100 (µg/L)
C ₁₉ -C ₃₆ Aliphatics*	< 100 (µg/L)
C ₁₁ -C ₂₂ Aromatics*	< 100 (µg/L)
Aliphatic Surrogate % Recovery	42
Aromatic Surrogate % Recovery	67

Comments:

- * = Excludes any surrogates or internal standards.
Sample did not require fractionation.

Lab info: G128-1268-2B

Reviewed By: 

EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Richard Catlin & Associates

Project Name: 7 funded site closures, Camp Lejeune

Sample Information and Analytical Results	
Sample Identification	UST1323-MW02
Sample Matrix	Water
Date Collected	03/01/04
Date Received	03/03/04
Date Extracted	03/08/04
Date Analyzed	03/10/04
Dry Weight	
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 100 (µg/L)
C ₁₉ -C ₃₆ Aliphatics*	< 100 (µg/L)
C ₁₁ -C ₂₂ Aromatics*	< 100 (µg/L)
Aliphatic Surrogate % Recovery	59
Aromatic Surrogate % Recovery	80

Comments:

* = Excludes any surrogates or internal standards.
 Sample did not require fractionation.

Lab info: G128-1268-3B

Reviewed By: 

PARADIGM ANALYTICAL LABORATORIES, INC.

5500 Business Drive, Wilmington, NC 28405

Phone: (910)-350-1903 FAX: (910)-350-1557

Chain-of Custody Record & Analytical Request

COC# 41594

Page 1 of 1

Client: Catlin Project ID: 7 Funded site closure, Camp Wayne Date: 3-3-04 Report To: Ben Ashba @ Catlin
 Address: 220 Old Dairy Rd. Contact: Ben Ashba Turnaround: Standard
 Address: Wilmington NC 28405 Phone: 910-452-5861 Job Number: 203-117
 Quote #: DOD 101 Fax: 910-452-7563 P.O. Number: 240115-1 Invoice To: Smile @ Catlin

Sample ID	Date	Time	Matrix	Preservatives			Analyses				Comments: Please specify any special reporting requirements	
				IC	HCl	Methanol	EPA 601	MDEP EPH	MDEP VPH	Time		Temperature
UST24-MW01	3-1	1:15p	GW	✓	✓		✓					← report only bromochloro methane, chloroform, dibromochloromethane
UST1323-MW01	3-1	11:56a	GW	✓	✓		✓					
UST1323-MW02	3-1	12:05	GW	✓	✓		✓					
USTA 5-605-MW01	3-2	10:45a	GW	✓	✓		✓					← report only bromodichloromethane, chloroform, dibromochloromethane
UST31-SB05 (1-3)	3-2	2:45p	soil	✓			✓					← report only chloroform
UST31-MW01	3-2	2:30p	GW	✓	✓		✓					
USTM167-MW01	3-2	12:55	GW	✓	✓		✓					
USTPP3363-SB02 (1-3-05)	3-2	1:50p	soil	✓			✓					

Relinquished By	Date	Time	Received By	Date	Time	Temperature	State Certification Requested
Tom [Signature]	3-3	12:45p	Janice [Signature]	3/3/04	0850	cool	NC <input checked="" type="checkbox"/> SC <input type="checkbox"/> Other <input type="checkbox"/>

SEE REVERSE FOR TERMS AND CONDITIONS

CLIENT COPY