

U.S. ARMY

Final Closure Report



Bulk Fuel Tank Farm , UST 117 Hunter Army Airfield, Bldg 7002 3<sup>rd</sup> Infantry Division Fort Stewart, Georgia

# August 2006

Prepared for Environmental Division Directorate of Public Works Fort Stewart, Georgia 31314 Thru Omaha COE

Prepared by: Cape Environmental, Inc. 91 Noll Street Waukegan, IL 60085

# Georgia Department of Natural Resources

**Environmental Protection Division** Underground Storage Tank Management Program 4244 International Parkway, Sulte 104, Atlanta, Georgia 30354 (404)362-2687

# NOTICE DATE:

GEORGIA UNDERGROUND STORAGE TÁNK (GUST) CLOSURE ACTIVITY FORM For underground storage tanks (USTs), which will be permanently closed by removal or in-place, this form should be completed and submitted to the address above at least 30 days prior to the proposed closure. USTs should be closed within ninety (90) days after the proposed closure date as reported to EPD.

#### I, FACILITY INFORMATION:

Facility Name: HUNTER ARMY	AINFIELD - B	ULK FUEL FARM
Contact Person:	- DPW	Telephone: (9/2) 767-4629
Address (location; P.O. Box not acceptable	:): BULK FUE	L FARM - HAAF
City: SAVANNAN, GA	County: CH647	
Facility ID: 9-025 113*1		······································

II.

#### UST INFORMATION: ("Contents" refer to last product contained in UST system)

Tank ID	Tank Size (gallons)	Contents	Type of	Closure (che	ck one)	Date Las	st Used
			Removal	In-Place	Piping		
117	550	GROUT	X			1	1996
			-			1	1
-						1	1
			10			1	1
						1	1

III.

UST OWNER: (Complete this section even if it is the same as Section I)

UST Owner Name: FORT STEWART - DIRECTORATE OF Public Works MailingAddress: 1550 FAMIK COCHAAN DA City: FORT STEWART State: GA Zip Code: 31314 BLDG. 1129

CONTRACTOR: (Company secured to actually close UST system) IV. CAPE, INC. Company or Organization Name: Contractor Representative Name: MICHAEL HEALY Telephone: (877) 422-735 Address: 91 NOLL Struct City: WALKEGAN State: IL Zip Code: 60085

#### v. **CLOSURE NOTIFICATION INFORMATION:**

As UST owner, I certify that the information concerning permanent closure of the UST system referenced on this form is true to the best of my belief and knowledge, and that the requirements of Subpart G of Title 40 CFR Part 280 and the Georgia Environmental Protection Division Closure Guidance (GUST-9, as revised) will be met. (Not valid without owner

ron neaded Divisim signature.) Name (Print): 1 NOMAS Title: ( Organization Name: US artTelephone: ( 9/2 UST Owner/Signature: Date:

GUST-29

7/99R

# Facility ID #: 9-025/13#1 USTMP CLOSURE REPORT FORM

Complete this form and provide documentation to substantiate information as outlined in the Underground Storage Tank (UST) Closure Guidance Document (GUST-9). Use a separate form for each tank excavation. I. GENERAL

A. UST OWNER Company Name (if applicable): Fort Stewart - Directorate of Public Works Mailing Address: 1550 FLANK Cochran DRIVE City: Fort Steward State: GA Zip: 31314

Owner's Name (printed): US Army /Hunter Army Air field Phone: 912-767-2010 I hereby certify that the information in this Closure Report and in all the attachments is true, accurate, and complete, and the Closure Report satisfies all criteria and requirements of Rule 391-3-15-.09 of the Georgia Rules for Underground Storage Tank Management.

Signature (of owner listed under "Name" above): Date:

<b>B. REMOVAL</b>	CONTRAC	<b>CTOR (Prime Contractor/Prime consu</b>	ltant)
Company:	CAPE	INC.	
12 IS DOLLAR IN			

 Mailing Address:
 91
 Noll Street
 City: Warkegan
 State:
 IL
 Zip:
 60085

 Name of Company Representative (printed):
 STEVE
 SCAVONE
 Phone:
 865-765-36

Phone: 865-765-365.3

I hereby certify that I have performed or supervised the work detailed in this report, and have examined and am familiar with the information submitted in this and all attached documents. The submitted information is, to the best of knowledge, true, accurate, complete, and in accordance with the Georgia Rules for Underground Storage Tank Management, revised February, 1995. CAPE Date: 8/106 Signature (of same contractor listed under "Name")

HAAF C. UST Site Facility Name: BULK Ful FARM County: CHATHAM Fac. I.D.#: 9-025113\*1

HAAF Street Address: BULK Ful FARM City: SAVANNAL State: GA Zip: 31409

#### II. TANKS AND PIPING CLOSURE DATA

#### A. LIST USTs THAT HAVE BEEN CLOSED (Use the same tank ID # as on the 7530-1):

TANK ID#	117	· /			
Product	JP-4	/ ·			
Size (gals)	550				
How Closed	XRemoved	Removed	Remøved	Reproved	Removed
(check one)	In Place	_In/Place	In Place	In Place	In Place
Date Last Use	d1996		_/	_/	_ /
Date Closed	5/06			7	7
(Date removed	from ground o	r filled in-place)	•	2	

#### LIST ANY USTS STILL IN USE AT THE FACILITY (Use same tank ID # as on 7530-1):

TANK ID# Product Size (gals)	$\angle \angle 2$	$\angle \angle$	$\leq$
<b>B. PIPING</b>		XRemovedEm	nptied, capped, left in place. nert material.
	piping was closed, give date:		day, year)
Piping	WAS previously Ren	NOVED. Not pri	sent At time of Removal.
		1211 (2012)	

November, 2001

#### **III. SAMPLING AND ANALYTICAL**

A. Soil/Groundwater Sampling: The quantity of samples taken should be in accordance with USTMP closure guideline (GUST-9) requirements and all samples must be collected in accordance with current EPA-approved sampling procedures.

B. Regulated Substance Released: Whenever free product is encountered and/or analytical results indicate that BTEX, PAH, or TPH contamination is present in the soil and/or groundwater, a release must be reported to EPD via telephone or fax by the next business day explaining what has been found and what steps were taken to eliminate any hazardous conditions and prevent the spread of contamination. Indicate here what substance, if any, was released:

X None \_\_Gasoline \_\_Diesel \_\_Kerosene \_\_Used Oil \_\_Other (Name): Date release reported to EPD: NO Release or evidence of release from UST. C. Laboratory Analytical Methods Used (check all that were used): 5035-8021B\_\_\_\_\_5035-8015\_X\_\_5035-8260\_X\_\_8100\_\_\_\_\_8310\_\_\_\_\_8270\_\_\_\_ Other If Method 5035 was used to sample, which method was used to collect and contain the samples? Encore™ Syringe/corer and field-preserved in 40 ml vial XTERRACORE SAmplers IV. TANK EXCAVATION SAMPLES (see #5 for piping trench samples) Size (capacity

in gallons) of UST	# of samples required per UST
<1,050	1
1,050 - 12,500	2
> of equal to 12,501	2 per UST + 1 per additional 10,000 gals
	(Collect 1 sample

per UST if a groundwater sample was collected within 2 feet of the excavation.)

A. Based on the total number of USTs closed as reported on this form, the total number of tank excavation samples taken for this site was:

B. If over-excavation is performed, take one confirmation sample every 30 linear feet along the base of the sides (within 1 ft of the bottom of the excavation) and one sample per 200 sq ft along the bottom of the excavated area.

Was over-excavation performed? Yes\_\_\_\_\_ No X
 If "yes", what was the area of the excavation in square feet? ~

3) Enter total number of over-excavation samples for this site here:

C. Site-Specific Hydrogeology: 1.) Was Groundwater encountered? Yes X No 2.) If encountered, at what depth: feet

- 3.) If Table B Threshold Levels are being used, how far is the nearest drinking water well or point of withdrawal for drinking water? ft.

D. Groundwater conditions: If more than one foot of groundwater covers more than 50% of the base of the excavation, a groundwater sample may be taken in lieu of soil samples from the base of the excavation. One soil sample per UST must still be collected at the fill-pipe end of each UST along the sidewalls at the soil-water interface.

Enter total number of soil-water interface samples for this site here:

#### V. PIPING SYSTEM EXCAVATION SAMPLES

No Piping present at time of Removal. A. PIPING TRENCH Distance from UST to nearest dispenser island:Less Than 25 ft  $\frac{1}{25}$ 25 feet or more# of samples required for each trench: $0^*$ 1 sample per 25 feet  $1^*$ # of samples required for each trench: What was the distance from the USTs along each piping trench to the nearest dispenser island? [ \_\_\_\_\_ (feet) \_\_\_\_\_ (feet) ( if more than one trench)] (feet) How many confirmation samples were collected from each piping trench? \_(piping trench 1) [ \_\_\_\_\_(piping trench 2) \_\_\_\_\_ (piping trench 3)] No Dispenser present at time of removal. **B. DISPENSER ISLAND** Number of dispenser islands X Length of each Dispenser Island (ft) / 25(ft) = # of Samples (Rounded up to nearest whole number) How many dispensers were present in the closed system(s)? How long was each dispenser island (ft)? How many dispenser samples were collected?  $-\Theta$ 

\* Although no piping trench samples are required if the piping length is <25 ft., dispenser samples are required. Exception: If the dispenser is directly above the tank excavation, no piping samples and no dispenser samples would be required.

\*\* This includes all fittings (couplings, elbows, flex hoses, etc.) between the tank and the dispenser island. Do not count fittings at the tank excavation and the islands. For straight piping runs, estimate 20 ft between couplings.

#### VI. EXCAVATED SOIL

#### A. Sampling:

How many cubic yards of material was excavated?	50
Based on one sample per 200 cubic yards of excavate	ed soil or fraction thereof,
the total number of excavated soil samples:	/

#### VII. CLOSURE SUMMARY

#### A. CONCLUSIONS

Soil or groundwater contamination exists in excess of the levels specified in the above situations and this closure report is being submitted within a certified CAP-Part A.

Clean Closure, No Further Action Required because analytical results indicate the condition marked below: BTEX and TPH Analyzed only dece to product stored, (JP-4),

- \_ BTEX, PAHs and TPH are below detection limits (BDL) in the soil.
- \_\_\_\_ BTEX and PAHs are BDL in the soil and TPH (and BTEX) is vertically delineated to BDL above the groundwater table.
  - \_ BTEX and PAHs are above detection limits in soil but below Table A Threshold Levels, and TPH, PAHs, and BTEX in soil is vertically delineated to BDL above the groundwater table.
- \_\_\_\_ BTEX and PAHs are above detection limits but below Table B Threshold Levels, a water supply survey indicates there are no potential receptors within the applicable radii, and <u>BTEX, PAHs, and TPH in soil is vertically delineated to BDL above the</u> groundwater table.
- \_\_\_\_ BTEX and PAHs are less than Table A Threshold Levels and BTEX, PAHs or TPH is not vertically delineated to BDL above the groundwater table because groundwater is encountered in the boring or the excavation, and the water sample does not contain BTEX or PAHs above Federal or State MCLs.
- BTEX and PAHs are less than Table B Threshold Levels and BTEX, PAHs, or TPH is not vertically delineated to BDL above the groundwater table because groundwater is encountered in the boring or excavation, and the water sample does not contain BTEX or PAHs above In-stream Water Quality Standards, and the water supply survey indicates that there are no water supplies within the applicable radii.

**B.** SITE MAP (Attach to report): The map must be to scale <u>OR</u>, as a minimum, distances between the tank pit area, piping trenches, dispenser islands, sewer, water, utility lines (or other preferential pathways), road and main buildings must be accurately indicated on the map. These listed features must be depicted on the map in order to accurately interpret the data. The map must also include a north (N) directional arrow. Tank ID's must correspond to EPA Form 7530-1 and sample locations, sample identification numbers and depths must also be shown. Sample numbers must correspond to attached laboratory analytical data. Although not mandatory, photos may be attached to help clarify the UST system layout.

#### SOIL/GROUNDWATER ANALYTICAL RESULTS SUMMARY

(Use additional pages as necessary)

Facility Name: Hunter Army Airfield - Bulk Fuel Farm - UST 117

Facility ID # 9-025 | 13 \* 1

### Volatile Organic Compounds

(Indicate S for Soil and GW for Groundwater. GW results must be in ug/l and soil results in mg/kg)

Sample ID	S/GW	Depth	Benzene	Toluene	Ethylbenz.	Xylenes	<b>Total BTEX</b>	TPH	Units	
HAAFTB-UST-01-A-08	S	8'	0.0008	ND	0.0014	0.0011	0.0033	3.08	mg/kg	
HAAFTB-SSW-01-A-XX	S	N/A	0.0009	0.0012	0.0024	0.0041	0.0087	28.9	mg/kg	

#### Polynuclear Aromatic Hydrocarbons (PAHs)

(Indicate S for Soil and GW for Groundwater. Report soil concentrations in mg.kg and groundwater in ug/l.)

Sample ID	S/GW	Depth	Detected PAH Compounds	Total PAHs	Units



		TRANSMITTAL LETTER Chemistry Services
TO:	Michael Healy mhealy@cape-inc.com	Date:May 22, 2006Project/TaskHunter Army Airfield
FROM:	Michael Houck mhouck@cape-inc.com	We are transmitting herewith the following:
CC:	Christelle Newsome cnewsome@cape-inc.com	<ul> <li>Data (hardcopy/CD)</li> <li>Report (QAR)</li> <li>Laboratory reports –</li> <li>X Annotated Form 1s</li> <li>SAP/QAPP</li> <li>only</li> <li>EDDs</li> <li>Cost Summary</li> </ul>
		<ul> <li>For your use</li> <li>Revise and resubmit</li> <li>No exception taken</li> <li>Make corrections needed</li> </ul>
# COPIES	DESCRIPTION	
1	Preliminary results for sampl GCAL Lab SDG 206005053	es collected at Hunter AAF on 5/03/2006

Comments: Results compared to GUST Tables A and B Soil Threshold Levels and GA EPD Chapter 391-3-

19 Hazardous Site Response Section 07 Risk Reduction Standards part 6(c), Appendix I Table 1 and Appendix III Table 2. There are no exceedances of screening criteria.

**GRO** detects in both samples ranging from 3.08 ppm to 28.9 ppm. Please see the attached data for your preliminary data use and review. Note, the data has not undergone the full CAPE comprehensive data quality assessment and is subject to change as a result of laboratory quality control exceptions applied during the validation process.

Enclosed Results are Approved for Quality Assurance Release by: Michael Houck 5/22/06.

Michael Houck

Project	Hunter AAF	
Number #:	40006.013.002.006	

302 Parklake Drive Atlanta, GA 30345-2907

NATIONALLY RECOGNIZED BY CLIENTS FOR SUPERIOR SERVICE

**NELAP CERTIFICATE NUMBER 01955** 

# **ANALYTICAL RESULTS**

#### PERFORMED BY

**GULF COAST ANALYTICAL LABORATORIES, INC.** 

Report Date 05/16/2006

GCAL Report 206050532

Deliver To	CAPE Environmental 2302 Parklake Dr Suite 200 Atlanta, GA 30345 678-287-1358	
	010 201 1000	
Attn	Christelle Newsome	

Customer CAPE Environmental

Project Hunter Army Air Field

# Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

#### Common Abbreviations Utilized in this Report

ND Indicates the result was Not Detected at the specified RDL

DO Indicates the result was Diluted Out

MI Indicates the result was subject to Matrix Interference

TNTC Indicates the result was Too Numerous To Count

SUBC Indicates the analysis was Sub-Contracted

FLD Indicates the analysis was performed in the Field

PQL Practical Quantitation Limit

MDL Method Detection Limit

**RDL** Reporting Detection Limit

00:00 Reported as a time equivalent to 12:00 AM

#### **Reporting Flags Utilized in this Report**

- J Indicates an estimated value
- U Indicates the compound was analyzed for but not detected
- B (ORGANICS) Indicates the analyte was detected in the associated Method Blank
- B (INORGANICS) Indicates the result is between the RDL and MDL.

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with ISO Guide 25 and NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

CURTIS EKKER DATA VALIDATION MANAGER GCAL REPORT 206050532

THIS REPORT CONTAINS \_\_\_\_\_ PAGES.

# Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	<b>Receive Date/Time</b>
20605053201	HAAFTB-UST-01-A-08	Solid	05/03/2006 16:00	05/05/2006 09:30
20605053202	HAAFTB-SSW-01-A-XX	Solid	05/03/2006 16:15	05/05/2006 09:30

GCAL Report 206050532



## GCALID Client ID 20605053201 HAAFTB-UST-01-A

Matrix Collect Date/Time Solid 05/03/2008 16:00 Receive Date/Line 05/05/2006 09:30

# 8260B, Volatiles

Prep Date	Prep Batch	Prep Method	Dilution 1	Analy 05/12	<b>/zed</b> /2006 15:33	<b>By</b> RJO	Analytical 322871	Batch
CAS#	Parameter		Result		RDL	5.	MDL	Units
71-43-2	Benzene		0,755J	J	4.87		0.101	ug/Kg
100-41-4	Ethylbenzene		1.37J	5	4.87		0.202	ug/Kg
108-88-3	Toluene		4.87U	ц	4.87		0.536	ug/Kg
1330-20-7	Xylene (total)		1.14J	I	9.74		0.557	ug/Kg
CAS#	Surrogate	Conc. Spiked	Conc. Rec		Units	% Rec	overy	<b>Rec Limits</b>
460-00-4	4-Bromofluorobenzene	39.9	43.3		ug/Kg		109	62 - 127
1868-53-7	Dibromofluoromethane	39.9	40.7		ug/Kg		102	65 - 130
2037-26-5	Toluene d8	39.9	44		ug/Kg		110	71 - 132
17060-07-0	1,2-Dichloroethane-d4	39.9	39.7		ug/Kg		100	62 - 125

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL Report 206050532

### GCALID Client ID 20605053201 HAAFTBUST-01

## SW-846 8015B, Gasoline

Prep Date	Prep Batch	Prep Method	Dilution 50		Analyzed 05/07/2006 00:35		Analytical 322368	Batch
CAS#	Parameter		Result		RDL		MDL	Units
8006-61-9	Gasoline Range Organics		3080J	1	5270		1950	ug/Kg
CAS#	Surrogate	Conc. Spiked	Conc. Rec		Units	% <b>Re</b>	covery	<b>Rec Limits</b>
106-39-8	Bromochlorobenzene	1290	1250		ug/Kg		97	47 - 164

Collect Date/Time 05/03/2006:16:00 Receive Date/Time 05/05/2006 09:30

Matrix

**RESULTS REPORTED ON A DRY WEIGHT BASIS** 

GCAL Report 206050532

5053201	Client ID. HAAFTBLUST-0/-A-08	Matrix Solid				e Date/Time 006 09 30	
40 G Tota	I Moisture - Solid					2	
Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/14/2006 11:15	By RLY	Analytical Batch 323034	
CAS#	Parameter		Result	RDL		MDL	Un
WET-037	Total Moisture	15.	18.1				

## IGCALID 20605053202 HAAFTB-SS

Prep Date	Prep Batch	Prep Method	Dilution 1	Analy 05/12	/zed /2006 15:54	<b>By</b> RJO	Analytical 322871	Batch
CAS#	Parameter		Result		RDL		MDL	Units
71-43-2	Benzene		0.947J	J	4.57		0.095	ug/Ko
100-41-4	Ethylbenzene		2.40J	J	4.57		0.189	ug/Kg
108-88-3	Toluene		1.17J	J	4.57		0.503	ug/Kg
1330-20-7	Xylene (total)		4.14J	J	9.14		0.523	ug/Kg
CAS#	Surrogate	Conc. Spiked	Conc. Rec		Units	% Re	covery	Rec Limite
460-00-4	4-Bromofluorobenzene	40.5	43.3		ug/Kg		107	62 - 127
1868-53-7	Dibromofluoromethane	40.5	43.6		ug/Kg		108	65 - 130
2037-26-5	Toluene d8	40.5	49		ug/Kg		121	71 - 132
17060-07-0	1,2-Dichloroethane-d4	40.5	40.8		ug/Kg		101	62 - 125

Matrix Solid Collect Date/Time 05/03/2008 15:15 Receive Date/Time 05/05/2006 09:30

# GCAL ID Client ID 20605053202 HAAFTB-SSW-01-A-XX

## SW-846 8015B, Gasoline

Prep Date	Prep Batch Prep Method		Dilution 50	Analyzed 05/07/2006 01:35	By PKB	Analytical 322368	Batch
CAS#	Parameter Gasoline Range Organics		Result	RDL		Units	
8006-61-9			28900	5410	2010		ug/Kg
CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Rec	overy	<b>Rec Limits</b>
106-39-8	Bromochlorobenzene	1440	1490	ug/Kg		104	47 - 164

Collect/Date/ITme/ 05/03/2006/16:15 Matrix Solid

# 2540 G Total Moisture - Solid

GCALID Client ID 20605053202 HAAFTB-S

Prep Date	Prep Batch	p Batch Prep Method		Analyzed 05/14/2006 11:15		<b>By</b> RLY	Analytical Batch 323034	
CAS#	Parameter		Result	2	RDL		MDL	Units
WET-037	Total Moisture		11.4				8	%

Collect 05/03/2 Receivo Date/Time 05/05/2006 09:30

Matrix Sold