

## 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, Suite 104, Atlanta, Georgia 30354 (404)362-2687

NOTICE DATE: 3/22/06

GEORGIA UNDERGROUND STORAGE TANK (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:** 

s .	Facility Name:	P.O. Box not a	cceptable): Be	W	Telepho	ne: (9/2) - HA	767-46		N
II.	UST INF	ORMATION: Tank Size	("Contents" refer						
	Tankab	(gallons)	Contents	Type of Closure (check one)  Removal In-Place Piping			Date Last Used		
	117	550	GROUT	X		r spine	1	11996	e
		1					/	1	
				10			,	,	
III.	UST OW	NER: (Complet	e this section eve	n if it is the s	ame as Section	on I)	/	1	
	UST Owner Name: MailingAddress: 15	FORT STE	WART - Di	LECTORAT	E OF P	ublic h	Jorks de: 31314	E.	
IV.	CONTRACTOR: Company or Organ Contractor Represe Address: 91 NO	(Company secunization Name: _entative Name: _	red to actually cle <u>CAPE</u> , <u>MICHAEL</u>	INC.	Telep	hone: ( <b>PTI</b> LL Zip Coo			
v. (	CLOSURE NOTI As UST owner, I ce to the best of my be Environmental Prote signature.) Name (Print): Organization Name UST Owner Signa	rtify that the info lief and knowled ection Division ( NOMAS ( S. V.S. Admo ture:	ormation concerninge, and that the reclosure Guidance	equirements o	t closure of the function of Subpart Grevised) will	he UST syst of Title 40 ( l be met. (No	em reference CFR Part 28	ced on this form 80 and the Geor thout owner	n is true gia N/S/M
GUST-	29		15					7/99R	

Facility ID #: 9-025113#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 FRANK Cochran Drive City: Foot Stewart State: GA Zip: 31314
Owner's Name (printed): US frmy Hunter frmy fire 13 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 391-3-1509 of the Georgia Rules for Underground Storage Tank Management.
Signature (of owner listed under "Name" above): Date:
B. REMOVAL CONTRACTOR (Prime Contractor/Prime consultant)  Company:
Mailing Address: 91 NOII Street City: Wankeyan State: IL Zip: 60085  Name of Company Representative (printed): STEVE SCAVONE Phone: 865-765-3653
Name of Company Representative (printed): STEVE SCAVONE Phone: 865-765-3653
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.  Signature (of same contractor listed under "Name")  C. UST Site Facility Name: Buck Full Facin County: Chartham Fac. I.D.#: 9-025113 * 1
Street HAAF Address: BULK FULL FARM City: SAVANNAh 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# //7 Product JP-4 Size (gals) 550 How Closed XRemoved Removed Removed Removed (check one) In Place In P
LIST ANY USTS STILL IN USE AT THE FACILITY (Use same tank ID # as on 7530-1):
TANK ID# Product Size (gals)

November, 2001

B. PIPING: How was Piping closed?

Removed. \_\_ Emptied, capped \_\_ Emptied, filled with inert material.

Emptied, capped, left in place.

## III. SAMPLING AND ANALYTICAL

	. Soil/Groundwater Sampling: The quantity of samples taken should be in accordance with STMP closure guideline (GUST-9) requirements and all samples must be collected in accordance ith current EPA-approved sampling procedures.
	Regulated Substance Released: Whenever free product is encountered and/or analytical results dicate that BTEX, PAH, or TPH contamination is present in the soil and/or groundwater, a release sust be reported to EPD via telephone or fax by the next business day explaining what has been bund and what steps were taken to eliminate any hazardous conditions and prevent the spread of contamination. Indicate here what substance, if any, was released:
	NoneGasolineDieselKeroseneUsed OilOther (Name):
ä	ate release reported to EPD: NO Release on evidence of release from US
	. Laboratory Analytical Methods Used (check all that were used):
	035-8021B 5035-8015_X 5035-8260_X 8100 8310 8270 ther
W T	Method 5035 was used to sample, which method was used to collect and contain the samples?  Syringe/corer and field-preserved in 40 ml vial X  Teens cone Samples  WENCE Y ATTION SAMPLES (see #5 for signing transles)
<u>IV. 17</u>	IK EXCAVATION SAMPLES (see #5 for piping trench samples)  Size (capacity
	# of samples required per UST 1,050 1
	50 - 12,500 2 qual to 12,501 2 per UST + 1 per additional 10,000 gals
	(Collect 1 sample ar UST if a groundwater sample was collected within 2 feet of the excavation.)
	Based on the total number of USTs closed as reported on this form, the total number of tank cavation samples taken for this site was:
	If over-excavation is performed, take one confirmation sample every 30 linear feet along the base the sides (within 1 ft of the bottom of the excavation) and one sample per 200 sq ft along the ottom of the excavated area.
	<ol> <li>Was over-excavation performed? Yes No X</li> <li>If "yes", what was the area of the excavation in square feet?</li> <li>Enter total number of over-excavation samples for this site here:</li> </ol>

	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. P.	IPING SYSTEM EXCAVATION SAMPLES
	A. PIPING TRENCH NO Piping present at time of Removal.
	Distance from UST to nearest dispenser island: Less Than 25 ft * 25 feet or more / 1 sample per 25 feet*
	What was the distance from the USTs along each piping trench to the nearest dispenser island?
	B. DISPENSER ISLAND NO Dispenser present at time of removal
	Number of dispenser islands X Length of each Dispenser Island (ft) $/ 25(ft) = \# \text{ of Samples}$ (Rounded <b>up</b> to nearest whole number)
	How many dispensers were present in the closed system(s)?
	How long was each dispenser island (ft)?
141	How many dispenser samples were collected?
	* 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. I	EXCAVATED SOIL
	A. Sampling:  How many cubic yards of material was excavated?  Based on one sample per 200 cubic yards of excavated 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 deer to product stoned, (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 BTEX, PAHs, and TPH in soil is vertically delineated to BDL above the 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	Total BTEX	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	-A Leader School School School

#### 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
		particular of the second			
	200				

FIGURE 5 HUNTER FT, STEMMYT, OEOROM HAMFTB-UST-01-A-08 (8'bgs) TANK 117 LOCAHON 20 September 2005 TEJ FIGURE 5 SITE LAYOUT MAP HUNTER ARMY AIRFIELD TANKS BOTTOMS 160 Meters 120 Bulk Fuel Farm 1:2,039 8 FUEL PITS-AREA OF INTRUSIVE WORK



# TRANSMITTAL LETTER Chemistry Services

TO:	Michael Healy mhealy@cape-inc.com		:	May 22, 2006			
	inneary@cape-inc.com	Proje	ect/Task	Hunter Army	/ Airf	ield	
FROM: CC:	Michael Houck mhouck@cape-inc.com  Christelle Newsome cnewsome@cape-inc.com	We a	Original Data (ha Laborato Annotato only EDDs For your Revise a No excep	itting herewit Analytical rdcopy/CD) ory reports – ed Form 1s  use nd resubmit ption taken rrections need		following:  Quality Assurance Report (QAR)  SAP/QAPP  Cost Summary	
# COPIES	DESCRIPTION  Preliminary results for samples coll  GCAL Lab SDG 2060050532	ected	at Hunter	AAF on 5/03	/2006	6 - 1	
19 Hazardou	Results compared to GUST Tables A and B as Site Response Section 07 Risk Reduction States are no exceedances of screening criter	tandar					
GRO detect	s in both samples ranging from 3.08 ppm to lata use and review. Note, the data has not use and is subject to change as a result of laborato	o <b>28.</b> 9 ndergo	ne the ful	1 CAPE comp	rehen	sive data quality	
Enclosed Res	sults are Approved for Quality Assurance Re	lease 1	by: Mich	ael Houck 5/2	2/06.		
Miel	al House	V	2 -	5			
<u>.</u>		D.			T.		
			oject umber#:	Hunter AA		200	
302 Parklake l Atlanta, GA 3		IN	uilloci #;	40006.013	.002.0	006	

## **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

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
В	(ORGANICS) Indicates the analyte was detected in the associated Method Blank
В	(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	
<b>GCAL REPORT 2</b> 06050532	
THIS REPORT CONTAINS	PAGES.

## Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
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

Gustody Seal Lab use only: Remarks: 15505051 Workorder # By Supplied hese samples, you agon to the lends and conditions to the lends and conditions in the second school in services. Analytical Requests & Method Charachar 4484 # trans CHAIN OF CUSTODY RECORD Cother. OSSO Properties | Properties | Time N Isodard 7557 Chert Marie 12 × Bill to: KAK-16-455-01-4-08 HAT TO - 520-01-11-15 I I week Lab see only 40006, 013, out., out Client Confact では大い Address. Phone: Carries C Jier Janost Sungle Description christer August August auch Rei 1973 (SRI Archa, Baht) Holge, Louistern 1982) 1402 Phiche (218,786,1938) + Pax 225,747,5717 1 Dickory Project Namerkumber thouck 24-48 hrs. Report to: Phone Charle MILE ed by (Signature) Time Lein Ascard Times. Date Sampled By: P.O. Number Contract Client Address: , Kill 1 ...

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## 8260B, Volatiles

Prep Date	Prep Batch	Prep Method	Dilution 1	Analy 05/12/	zed 2006 15:33	<b>By</b> RJO	Analytical Ba 322871	tch
CAS#	Parameter		Result		RDL		MDL	Unit
71-43-2	Benzene		0,755J	I	4.87		0.101	ug/K
100-41-4	Ethylbenzene		1.37J	3	4.87		0.202	ug/K
108-88-3	Toluene		4.87U	u	4.87		0.536	ug/K
1330-20-7	Xylene (total)		1.14J	I	9.74		0.557	ug/K
CAS#	Surrogate	Conc. Spiked	Conc. Rec		Units	% Reco	overy I	Rec Limit
460-00-4	4-Bromofluorobenzene	39.9	43.3		ug/Kg		109	62 - 12
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 - 13
17060-07-0	1.2-Dichloroethane-d4	39.9	39.7		ug/Kg		100	62 - 12

GCALID Client ID	Matrix Collect Date/Time	Receive Date Time
20805053201 HAAFTB-UST-01-A-08		

## SW-846 8015B, Gasoline

Prep Date	Prep Batch Prep Method Dilution Analyzed 50 05/07/2006 00:35			By PKB	Analytical 322368	al 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	% Re	covery	Rec Limits
106-39-8	Bromochlorobenzene	1290	1250		ug/Kg		97	47 - 164

GCALID Client ID Matrix Collect Date/Time Receive Date/Time 208050532011 HAAFTB-UST-01-A-98 Solid 05/03/2006 18:00 05/05/2006 09:30	

## 2540 G Total Moisture - Solid

Prep Date	Prep Batch	Prep Method	Dilution 1	Analyzed 05/14/2006 11:15	By RLY	Analytical Batch 323034	*
CAS#	Parameter	1	Result	RDL		MDL	Units
WET-037	Total Moisture	4	18.1				%

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GCALID Client ID Matrix Collect Date/Time Receive D	
20605053202 HAAFTP-SSW-01-A-XX Solid 05/03/2006 19:15 05/05/2006	209130 http://www.com/com/com/com/com/com/com/com/com/com/
	BEARIGE THE THE PROPERTY OF TH

## 8260B, Volatiles

Prep Date	Prep Batch	Prep Method	Dilution 1	Analy 05/12/	<b>zed</b> 2006 15:54	By RJO	Analytical 322871	Batch
CAS#	Parameter		Result		RDL		MDL	Units
71-43-2	Benzene		0.947J	7	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/K
CAS#	Surrogate	Conc. Spiked	Conc. Rec		Units	% Reco	very	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

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GCALID ClientID Ma	trix Collect Date/Time Receive Date/Time
20805053202 HAAFTBISSWOTAXX	EXIDERATION CONTRACTOR OF THE PROPERTY OF THE
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## 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	- N	Result	RDL		MDL	Units
8006-61-9	Gasoline Range Org	anics	28900	5410		2010	ug/Kg
.CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Red	overy	Rec Limits
106-39-8	Bromochlorobenzene	1440	1490	ug/Kg		104	47 - 164

GEAFID	
20605053202 HAAFTBISSW-01-A-XX	old 05/03/2008 18:15 05/05/2008 09:30

#### 2540 G Total Moisture - Solid

Prep Date	Date Prep Batch Prep Method Dilution Analyzed 1 05/14/2006			By RLY	Analytical Batc 323034	i Batch		
CAS#	Parameter		Result	÷	RDL		MDL	Units
WET-037	<b>Total Moisture</b>		11,4				€	%