U.S. ARMY CORPS OF ENGINEERS, SAVANNAH DISTRICT
CONTRACT DACA21-92-D-0002, DELIVERY ORDER #0101

CLOSURE REPORT

WASTE OIL TANK
BUILDING 232, TANK 207
FACILITY ID NUMBER: 9-089044
FT. STEWART, GEORGIA

PREPARED BY:

ANDERSON COLUMBIA ENVIRONMENTAL, INC.

NOVEMBER 1996

P.O. Box 1386, Lake City, Florida 32056-1386
Phone: (904) 755-1196 Fax: (904) 758-9050

US Army Corps of Engineers

Delivery Order 0101

Ft. Stewart, Hinesville, Georiga

Underground Storage Tank Removal and Closure

Table of Contents

Prepared by

Anderson Columbia Enviornmental, Inc.

TAB 1

GEORGIA CLOSURE REPORT FORMS

Georgia Department of Natural Resources

Environmental Protection Division
Underground Storage Tank Management Program
4244 International Parkeay, Suite 104, Atlanta, Georgia 30354
Lonice C. Barrett, Commissioner
Harold F. Reheis, Director
(404) 362-2687

CLOSURE REPORT FORM

Please complete the following form, include the listed items and check all of the boxes that apply. This form can be used as a Closure Report, provided documentation is attached when specified, to substantiate the information on this form, as outlined in the guidance document "So You Want to Close an UST?" (GUST-9). If one of the items does not apply to your tank closure, please provide a written explanation for the omission. If soil was excavated and disposed of, be sure to complete the applicable sections and attach the proper disposal documents.

1. Owner of UST System:

Name:	US Army/Ft. Stewart		
Phone Number:	(912) 767-2010/1234		
Company:	US Army		
Address:	Cdr. 3rd Inf. Div. (Mech.), Attn: AFZP-DEV, Bldg. 1139		
	Ft. Stewart	GA	31314-5000
	(city)	(state)	(zip code)

I hereby certify that the information contained 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: _____ Date: _____

2. UST System Site Location:

Facility Name:	Ft. Stewart, GA FAC 232		
Street Address:	FAC 232		
	Ft. Stewart	GA	31314-5000
	(city)	(state)	(zip code)
Facility ID#	9-089038		

3. Contract Certification:

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.

Name:	David F. Black		
Address:	PO Box 1386	Lake City, Florida	32056

Signature: DFB Date: 11/7/96

4. Site-specific Hydrogeology:

Depth to Groundwater _____ ft. if encountered

[X] Not Applicable

5. Site Map: Include the following items on an attached site map: **REFER TO TAB 5**

- Tank Pit Area
- Piping Trenches
- Dispensers
- Sewer Lines (if present)
- Water Lines
- Tanks with thier ID#s, corresponding to the Notification Form 7530-1
- Sample Locations (with sample numbers and depths)
- Scale: See Tab 5
- North Arrow

6. Tank Removal

- Date of Removal: 1-Aug-96
- Tank Information:

Tank #	Tank Size (gallons)	Tank Contents
207	500	Waste Oil

(This information should correspond to the 7530-1 Form.)

- Attach Amended Notification Form 7530-1 **REFER TO TAB 6**
- Describe Soil Sampling Procedures (and groundwater, if encountered):

REFER TO TAB 6

7. Laboratory Analytical Data: The following items must be included on attached copies **REFER TO TAB 7**

- Laboratory Method
- Date of Sampling
- Date of Analysis
- Dectection Limits
- Signed Chain of Custody
- Quality Control Data

8. Regulated Substance Released: Check the applicable box(es).

[ ] Gasoline [ ] Diesel [ ] Kerosene [X] Used Oil [ ] Other _____

9. Excavation and Treatment/Disposal of Contaminated Soil:

- Attach Soil Disposal Manifests
- Volume of Soil Excavated (less than 6 ft from USTs and 4 ft from piping or dispenser islands)

20.56 Tons OR _____ yd^3

[ ] Not Applicable

10. Local Water Resources: Attach documentation only if Table B Soil Threshold Values and/or in-Stream Water Quality Standards are proposed for soil disposal, or No Further Action Required status. Check the applicable box(es).

☐ Drinking water supplies are NOT located in:
High or average groundwater pollution susceptibility area:*
Public water systems within 2.0 miles and
Non-public water systems within 0.5 mile

OR

Low groundwater pollution susceptibility area:*
Public water systems within 1.0 mile and
Non-public water systems within 0.25 mile

* As defined by the Groundwater Pollution Susceptibility Map of Georgia

☐ Streams, Lakes, and Ponds:
Distance to closest surface water body:_____ mile(s) or _____ feet

☒ Not Applicable **SEE TAB 7, 10**

11. Conclusions or Recommendations: Choose one.

☐ Clean Closure, thus No Further Action is Required.

☐ Soil Excavated within the Limits Specified in Question 7 (GUST-9) and Transported to an EPD Treatment/Disposal Facility, Thus No Further Action is Required.

TAB 4

SITE PHOTOGRAPHS

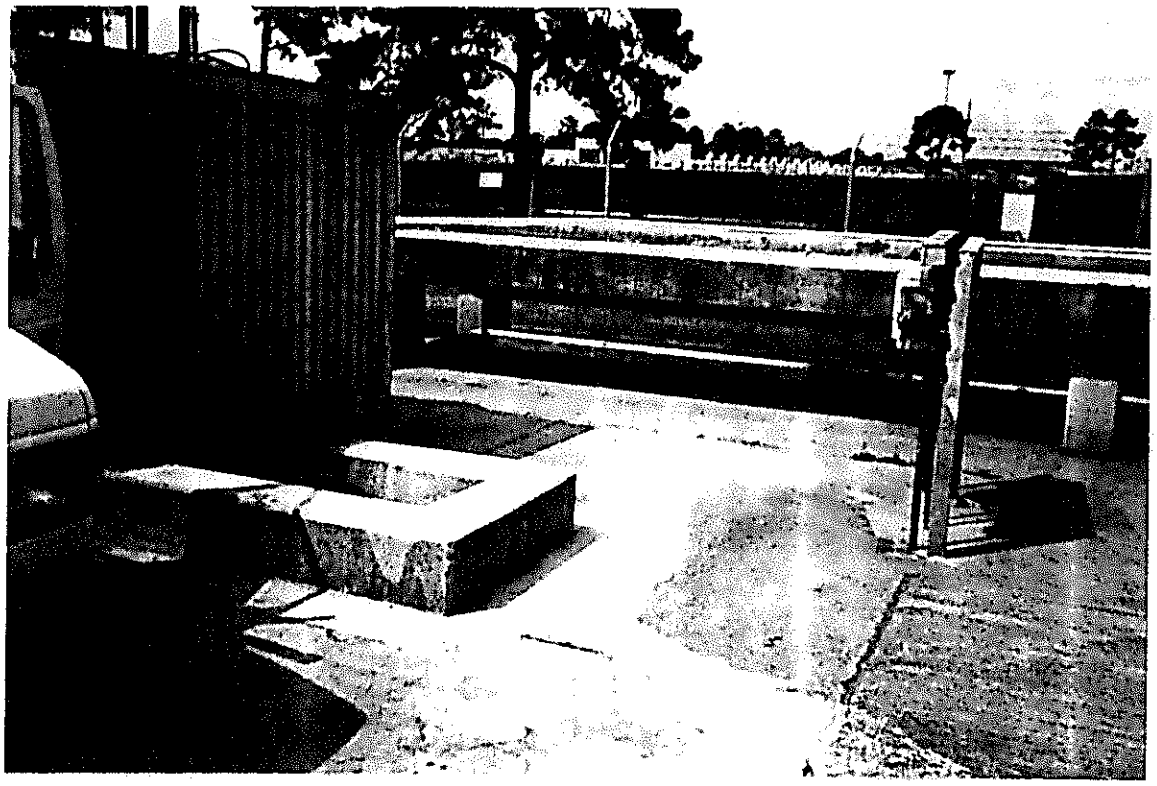


Photo 1. Tank 207 prior to removal.

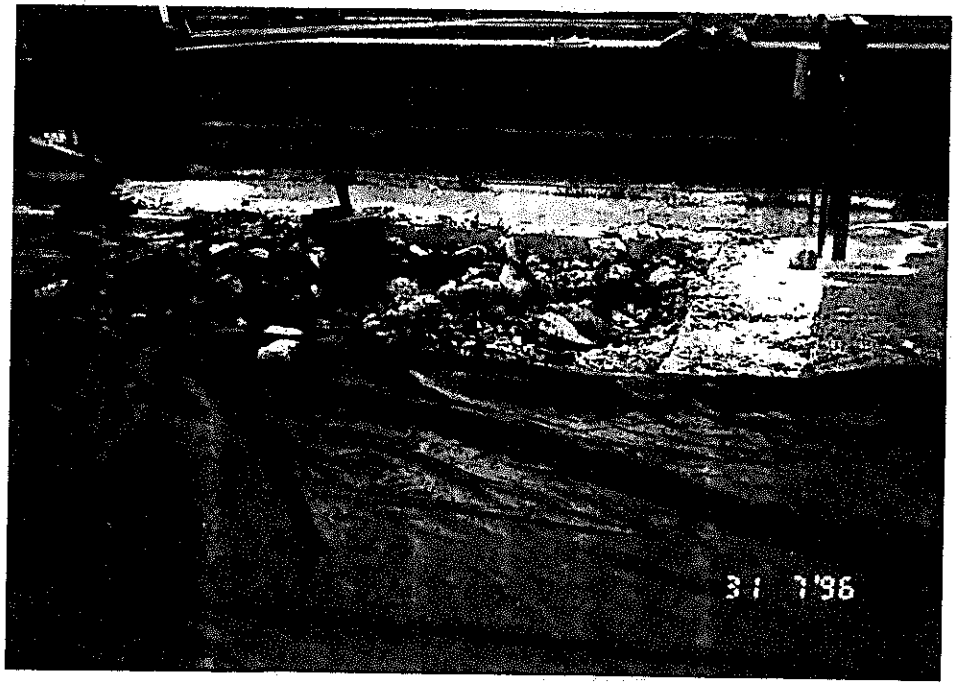


Photo 2. Tank 207 being prepared for removal.

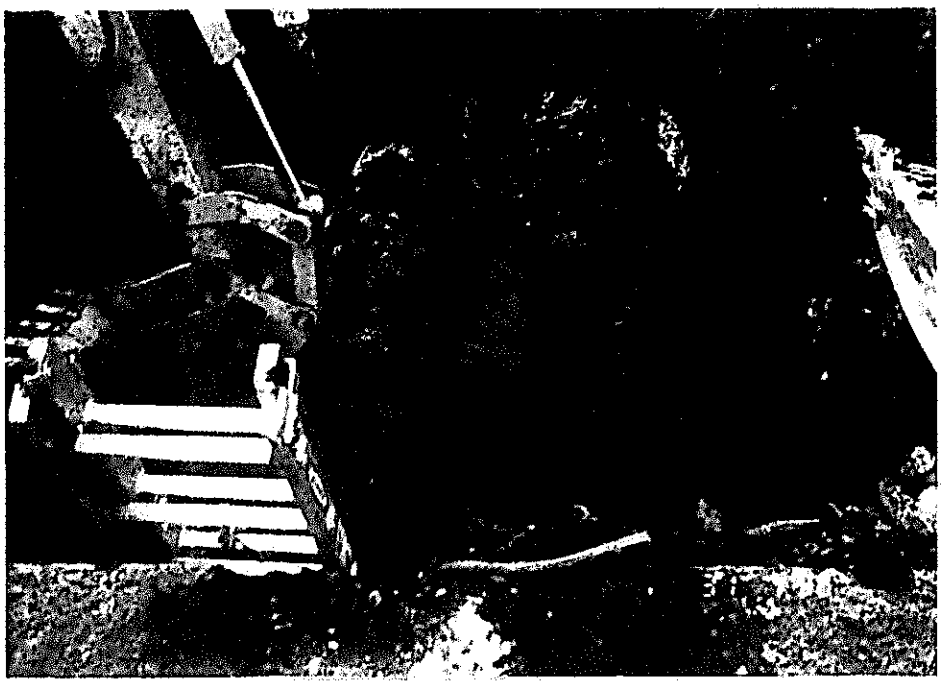


Photo 3. Tank 207 just prior to removal.

TAB 5

SITE MAPS

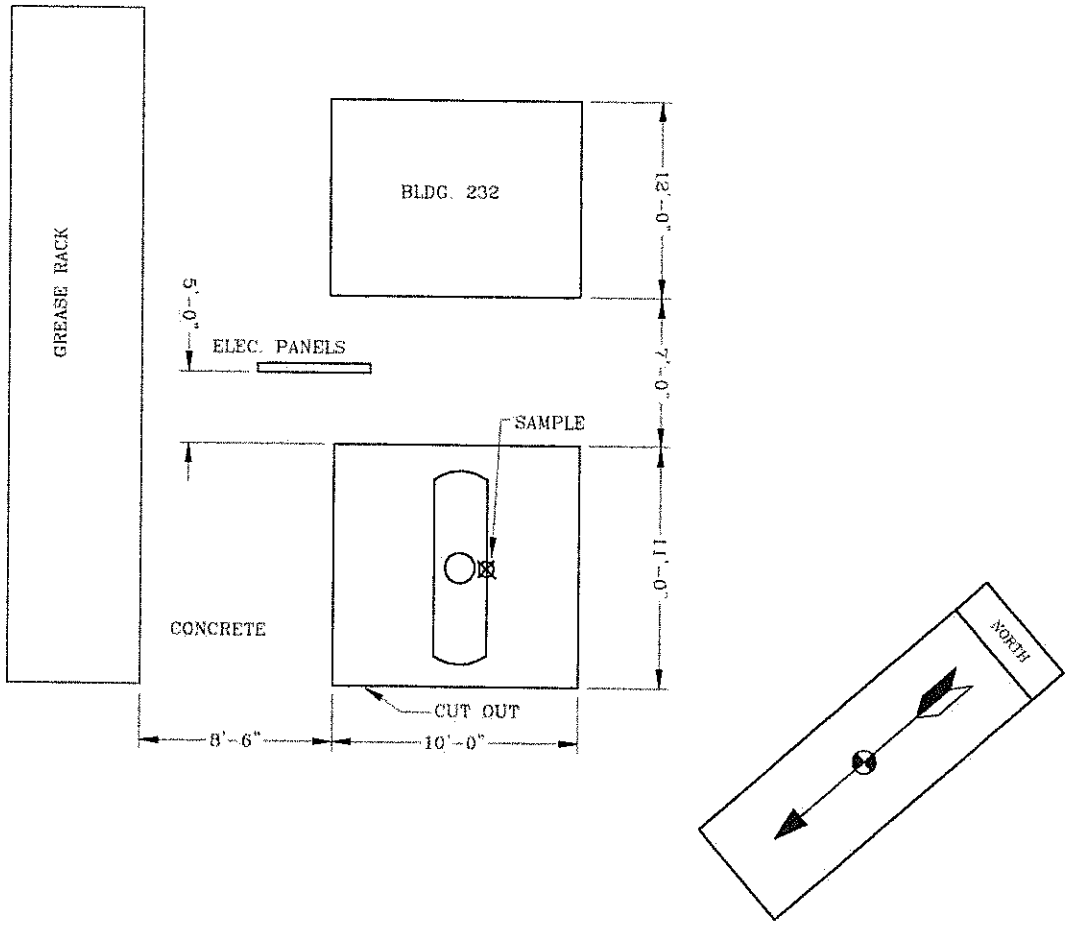
Headspace Analyses

Instrument: _____ Serial #: _____

Source: _____ Temp: _____

PID Correlation: 50 ppm

Sample	Depth	PID	FID	Methane	VOA



LEGEND/REF. DRWG.'S

ANDERSON COLUMBIA
EVIRONMENTAL, INC.
P.O. BOX 1386 LAKE CITY, FLORIDA 32056 (904) 755-1196

DR. N.A.M. CH'D _____ DR. APP. _____

ENGR. _____ ENGR.'S DEPT. _____

DATE 10-30-96 SCALE N.T.S.

JOB #8101 FT. STEWART, GA

LOCATION: BLDG. 232

TANK #207 500 GAL. WASTE OIL

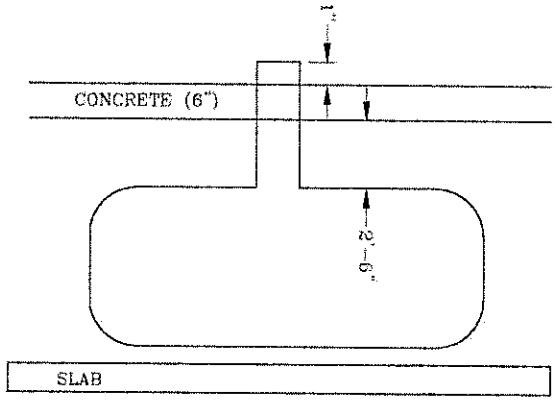
Headspace Analyses

Instrument: _____ Serial #: _____

Source: _____ Temp: _____

PID Correlation: 50 ppm

Sample	Depth	PID	FID	Methane	VOA



LEGEND/REF. DRWG.'S

CROSS SECTION

ANDERSON COLUMBIA
EVIRONMENTAL, INC.
P.O. BOX 1386 LAKE CITY, FLORIDA 32056 (904) 755-1196

DR. N.A.M. CH'D _____ DR. APP. _____

ENGR. _____ ENGR.'S DEPT. _____

DATE 10-30-96 SCALE N.T.S.

JOB #8101 FT. STEWART, GA

LOCATION: BLDG. 232

TANK #207 500 GAL. WASTE OIL

TAB 6

EPA FORM 7530-1
&
FIELD ASSESSMENT METHODS

STATE OF GEORGIA
NOTIFICATION DATA FOR UNDERGROUND STORAGE TANK

state use only

Part I: Facility Data

FACILITY ID NUMBER: 9-089044

OWNER'S ID: 197

INITIAL DATE RECEIVED: 12/18/92

DATE AMENDED LAST: _____

NOTIFICATION TYPE: [ ] New [X] Amended [X] Closure

OWNERSHIP OF TANK (S): **NUMBER OF TANK (S):** 1

Name : US ARMY/FT STEWART
Mailing Address : HQ 3RD INF DIV (M), AFZP-DEV/BLDG 1139
City : FT STEWART State: GEORGIA Zip Code: 31314-5000
Phone : 912-767-1071 County: LIBERTY

LOCATION OF TANK (S):

Name : FT STEWART/FAC 232
Street Address : FAC 232
City : FT STEWART State: GEORGIA Zip Code: 31314-5000
County : LIBERTY Latitude: _____ Longitude: _____
Phone : _____

OWNER TYPE: [X] Federal [ ] State [ ] Local [ ] Commercial [ ] Private

FACILITY TYPE (S):

[ ] Gas Station	[ ] Local Government	[ ] Contractor
[ ] Petroleum Dist	[ ] State Government	[ ] Truck/Transport
[ ] Air Tax (Airport)	[ ] Fed Non-Military	[ ] Utilities
[ ] Aircraft Owner	[X] Fed Military	[ ] Farm
[ ] Auto Dealership	[ ] Commercial	[ ] Residential
[ ] Railroad	[ ] Industrial	[ ] Other
[ ] Hospital	[ ] Educational	

CONTACT PERSON IN CHARGE OF TANK (S):

Name : US ARMY/FT STEWART Title: JOHN SPEAR/ENV ENG
Address : HQ 3RD INF DIV (M), AFZP-DEV/BLDG 1139
City : FT STEWART State: GEORGIA Zip Code: 31314-5000
Phone : 912-767-1071

STATE OF GEORGIA
NOTIFICATION DATA FOR UNDERGROUND STORAGE TANK

Part I: Facility Data

FINANCIAL RESPONSIBILITY: **FACILITY ID NUMBER:**

☐ I meet the financial responsibility requirements of SS12-13-9 Official Code of Georgia Annotated by providing or participating in one of the following financial assurance mechanisms.

Primary Financial Responsibility Mechanism (check one)

☐ GUST Trust Fund	☐ Insurance
☐ Surety Bond	☐ Guarantee
☐ Letter of Credit	☐ Trust Fund (other than GUST)
☐ Risk Retention Group	☒ Other Method
☐ Self-insured	☐ None

If a primary coverage mechanism other than GUST Trust Fund is checked, provide the following information pursuant to GUST Rule 391-3-15-.12 (1) :

Financial Responsibility Provider (primary):

Name: US Army

Address: HQ 3rd Inf. Div. (M) AFZP-DEV/BLDG 1139 City: Ft. Stewart State: GA

Mechanism Id Number: _____

Mechanism Anniversary Date: _____

Deductible Financial Responsibility, if any: (check one)

Note: If your primary Financial Responsibility Mechanism is provided through participation in the GUST Trust Fund by payment of Environmental Assurance Fees, as required under GUST Rule 391-3-15-.13, you must also check one of the following boxes indicating how coverage for the GUST Trust Fund $10,000 deductible is being provided.

If your Financial Responsibility Mechanism is other than GUST Trust Fund and it has a deductible, you must also check one of the following boxes indicating how coverage for the deductible is being provided.

☐ Surety Bond	☐ Insurance
☐ Letter of Credit	☐ Guarantee
☐ Risk Retention Group	☐ Trust Fund (other than GUST)
☐ Self-insured	☐ Other Method

Provide the name and address of Financial Responsibility Provider for Deductible pursuant to GUST Rule 391-15-.12 (1) :

Financial Responsibility Provider (deductible):

Name: _____

Address: _____ City: _____ State: _____

Mechanism Id Number: _____

Mechanism Anniversary Date: _____

STATE OF GEORGIA
NOTIFICATION DATA FOR UNDERGROUND STORAGE TANK

Part III: Certifications

OATH OF INSTALLATION: I certify the information concerning installation of the UST system, release detection, and spill/overflow protection specified in Part II-Tank Data is true to the best of my belief and knowledge.

Installer:

Company	Company Address
Authorized Representative	Signature Date
Title	Telephone Number (include Area Code)

RTIFICATION: I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Owner:

John H. Spears Owner Name	Chief, Environmental Branch Title
Owner's Signature	Date

STATE OF GEORGIA
NOTIFICATION DATA FOR UNDERGROUND STORAGE TANK

Part II: Tank Data

FACILITY ID	9-089038				
TANK ID	207				
Status of Tank					
Currently in Use	x				
Temp. Out of Use					
Perm. Out of Use	X				
Date of Installation	01-01-1985				
Age	11				
Est. Total Capacity	500				
MATERIAL OF CONSTRUCTION					
Asphalt or Bare Steel					
Cath. Protected Steel					
Epoxy Coated Steel					
Composite					
Fiberglass Reinf. Plas.	x				
Lined Interior					
Double Walled					
Poly. Tank Jacket					
Concrete					
Excavation Liner					
Unknown					
Other, Explanation					
Date Tank Repaired					
PIPING MATERIAL					
Bare Steel					
Galvanized Steel	x				
Fiberglass					
Copper					
Cathodically Protected					
Double Walled					
Secondary Containment					
Unknown					
Other, Explanation					
Date Piping Installed					
Piping Type					
Suction: No Valve					
Suction: Valve					
Pressure					
Gravity Fed					
Date Piping Repaired					
Substance Stored in Tank					
Gasoline					
Diesel					
Gasohol					
Kerosene					
Heating Oil					
Used Oil	x				
Propane					
Empty					
Other, Explanation					

STATE OF GEORGIA
NOTIFICATION DATA FOR UNDERGROUND STORAGE TANK

Part II: Tank Data

FACILITY ID	9-089038									
TANK ID	207									
Substance Stored in Tank										
Hazardous Substance										
CERCLA Name										
CAS Number										
Mixture										
Mixture, Specification										
Out of Use/Chg. Ser.	Tank	Piping	Tank	Piping	Tank	Piping	Tank	Piping	Tank	Piping
Est. Date Last Used	7-25-96	7-25-96								
Est. Date Closed	8-1-96	8-1-96								
Removed from Ground	Y									
Closed in Ground		Y								
Filled with Iner. Mat.		Y								
Change in Service										
Site Assessment Compl.										
Leak Detected										
Installation										
Certified by Manufac.										
Certified by Imple. Agn.										
Inspected by Engineer										
Checklists Completed										
Another Allowed Method										
Method Description										
Certified by Imple. Agn.										
Inspected by Engineer										
Checklists Completed										
Another Allowed Method										
Method Description										
Release Detection	Tank	Piping	Tank	Piping	Tank	Piping	Tank	Piping	Tank	Piping
Tank Tightness Testing										
Inventory Controls										
SIR										
Automatic Tank Guaging										
Inter. Mon./Double Wall										
Groundwater Monitoring										
Manual Tank Guaging										
Vapor Monitoring										
Inter. Mon./Sec. Cont.										
Auto. Line Leak Detect.										
Line Tightness Testing										
Other Method										
Other Description										
Spill and Overfill										
Date Overfill Device										
Date Spill Device										
Installer Certification										
Name										
Position										
Company										
Date										

TAB 6

FIELD ASSESSMENT METHODS

SOIL SAMPLES

Soil samples for analytical testing were collected by Anderson Columbia Environmental, Inc. (ACE) personnel two (2) feet below both end of the excavated tanks and from the side walls of the excavation. Soil samples were collected into precleaned, labeled laboratory sample bottles and immediately placed on ice. The samples were shipped under Chain of Custody to the Corps of Engineers contract laboratory, Ecosys Laboratory Services.

Soil samples for field screening were collected by ACE personnel from each side and bottom of the tank pit. Soil samples were collected at various intervals and soil vapors were withdrawn for volatile organic compounds (VOCs) with a Heath PORTA-FID II, Model No. 8000 Flame Ionization Detector (FID) fitted with a methane filter. Calibration was performed prior to field sampling with a 100 ppm methane/air mixture.

FID readings of soil samples were collected by filling a clean glass jar one-half full with soil, capping the jar with clean aluminum foil and allowing conditions in the jar to equilibrate for approximately 60 minutes. The tip of the FID was then carefully inserted through the aluminum foil and an air sample from the jar's headspace was analyzed for total VOCs.

GROUNDWATER SAMPLES

Groundwater samples were collected from the bottom of the tank pits only when groundwater invaded the excavation. Groundwater samples were collected from the excavation site with a disposable Teflon bailer and immediately placed in precleaned, labeled laboratory sample containers. Following collection, samples were immediately placed in a sample cooler with ice and were delivered, under Chain of Custody, to Ecosys Laboratory Services.

TAB 7

ANALYTICAL DATA

TAB 7 - Laboratory Analytical Data

Delivery Order #101
Fort Stewart, Georgia
Tank Number 207
Building Number 232

Method / **Sample ID** / *unit*	9073 **TRPH** ppm	418.1 **TPH** ppm	8020 **BTEX** ppb	8270B **Semi-Volatile Organics** ppb
8101-TK207-S1		6570	9.606	2499
bdl= below method detection limits				

**Fort Stewart is in an area of 'High or Average Groundwater pollution susceptibility' and this tank is approximately 3500 feet from a withdrawal point. Comparisons should be made to Table A for contaminants >500 feet from a withdrawal point.

20.56 tons of petroleum contaminated soil was removed from the Tank 207 pit.

Complete Data Package Follows

Table A

Petroleum Constituents and Soil Threshold Levels[a]

At UST corrective action sites where withdrawal points for public and non-public water supplies exist within distances defined in GUST Rule 391-3-15-.09(3):

CONSTITUENT	AVERAGE OR HIGHER GROUNDWATER POLLUTION SUSCEPTIBILITY AREA[b] (Where public water supplies exist within 2.0 miles and/or non-public supplies exist within 0.5 miles)		LOWER GROUNDWATER POLLUTION SUSCEPTIBILITY AREA[c] (Where public water supplies exist within 1.0 mile and/or non-public supplies exist within 0.25 mile)	
VOLATILE ORGANIC COMPOUNDS	≤500 feet to withdrawal point	>500 feet to withdrawal point	≤500 feet to withdrawal point	>500 feet to withdrawal point
Benzene[g]	0.005 mg/kg[d]	0.008 mg/kg	0.005 mg/kg[d]	0.71 mg/kg
Toluene	0.400 mg/kg	6.00 mg/kg	0.400 mg/kg	500.00 mg/kg
Ethylbenzene	0.370 mg/kg	10.00 mg/kg	0.500 mg/kg	140.00 mg/kg
Xylenes (total)	20.00 mg/kg	700.00 mg/kg	27.00 mg/kg	700.00 mg/kg
POLYNUCLEAR AROMATIC HYDROCARBONS				
Acenaphthene	N/A[e]	N/A[e]	N/A[e]	N/A[e]
Anthracene	N/A[e]	N/A[e]	N/A[e]	N/A[e]
Benz(a)anthracene	N/A[e]	N/A[e]	N/A[e]	N/A[e]
Benzo(a)pyrene	0.660 mg/kg[d]	N/A[e]	N/A[e]	N/A[e]
Benzo(b)fluoranthene	0.820 mg/kg[d,f]	N/A[e]	N/A[e]	N/A[e]
Benzo(g,h,I)perylene	N/A[e]	N/A[e]	N/A[e]	N/A[e]
Benzo(k)fluoranthene	1.60 mg/kg[d,f]	N/A[e]	N/A[e]	N/A[e]
Chrysene	0.660 mg/kg[d]	N/A[e]	N/A[e]	N/A[e]
Dibenz(a,h)anthracene	1.50 mg/kg[d,f]	N/A[e]	N/A[e]	N/A[e]
Fluoranthene	N/A[e]	N/A[e]	N/A[e]	N/A[e]
Fluorene	N/A[e]	N/A[e]	N/A[e]	N/A[e]
Indeno(1,2,3-c,d)pyrene	0.660 mg/kg[d]	N/A[e]	0.660 mg/kg[d]	N/A[e]
Naphthalene	N/A[e]	N/A[e]	N/A[e]	N/A[e]
Phenanthrene	N/A[e]	N/A[e]	N/A[e]	N/A[e]
Pyrene	N/A[e]	N/A[e]	N/A[e]	N/A[e]

a - Based on worst-case assumptions for one-dimensional vadose zone and groundwater contaminant fate and transport models.
b - Based on an assumed distance of 0.5 feet between contaminated soils and the water table.
c - Based on an assumed distance of 5.0 feet between contaminated soils and the water table.
d - Estimated Quantitation Limit. The health-based threshold level is less than the laboratory method limit of detection.
e - Not applicable. The health-based threshold level exceeds the expected soil concentration under free product condition.
f - In order to protect surface waters, the soil threshold level in Table B may supersede that found in Table A.
g - In the presence of other petroleum contaminants in concentrations exceeding 1.0 mg/kg, the Estimated Quantitation Limit, and hence the soil threshold level, may be substantially greater, as approved by EPD.

Table B

Petroleum Constituents and Soil Threshold[a] Levels

her UST corrective action sites where withdrawal points for public and non-public water supplies do not exist within distances defined in GUST Rule 391-3-15-.09(3):

CONSTITUENT	AVERAGE OR HIGHER GROUNDWATER POLLUTION SUSCEPTIBILITY AREA[b]		LOWER GROUNDWATER POLLUTION SUSCEPTIBILITY AREA[c]	
VOLATILE ORGANIC COMPOUNDS	≤500 feet to surface water body	>500 feet to surface water body	≤500 feet to surface water body	>500 feet to surface water body
Benzene[f]	0.017 mg/kg	0.120 mg/kg	0.020 mg/kg	11.30 mg/kg
Toluene	115.00 mg/kg	500.00 mg/kg	135.00 mg/kg	500.00 mg/kg
Ethylbenzene	18.00 mg/kg	140.00 mg/kg	28.00 mg/kg	140.00 mg/kg
Xylenes (total)	700.00 mg/kg	700.00 mg/kg	700.00 mg/kg	700.00 mg/kg
POLYNUCLEAR AROMATIC HYDROCARBONS				
Acenaphthene	N/A[e]	N/A[e]	N/A[e]	N/A[e]
Anthracene	N/A[e]	N/A[e]	N/A[e]	N/A[e]
Benz(a)anthracene	0.660 mg/kg[d]	N/A[e]	N/A[e]	N/A[e]
Benzo(a)pyrene	0.660 mg/kg[d]	N/A[e]	N/A[e]	N/A[e]
Benzo(b)fluoranthene	0.660 mg/kg[d]	N/A[e]	N/A[e]	N/A[e]
Benzo(g,h,i)perylene	N/A[e]	N/A[e]	N/A[e]	N/A[e]
Benzo(k)fluoranthene	0.660 mg/kg[d]	N/A[e]	N/A[e]	N/A[e]
Chrysene	0.660 mg/kg[d]	N/A[e]	N/A[e]	N/A[e]
Dibenz(a,h)anthracene	0.660 mg/kg[d]	N/A[e]	N/A[e]	N/A[e]
Fluoranthene	N/A[e]	N/A[e]	N/A[e]	N/A[e]
Fluorene	N/A[e]	N/A[e]	N/A[e]	N/A[e]
Indeno(1,2,3-c,d)pyrene	0.660 mg/kg[d]	N/A[e]	0.660 mg/kg[d]	N/A[e]
Naphthalene	N/A[e]	N/A[e]	N/A[e]	N/A[e]
Phenanthrene	N/A[e]	N/A[e]	N/A[e]	N/A[e]
Pyrene	N/A[e]	N/A[e]	N/A[e]	N/A[e]

a - ased on worst-case assumptions for one-dimensional vadose zone and groundwater contaminant fate and transport models.
b - ed on an assumed distance of 0.5 feet between contaminated soils and the water table.
c - ed on an assumed distance of 5.0 feet between contaminated soils and the water table.
d - Estimated Quantitation Limit. The health-based threshold level is less than the laboratory method limit of detection.
e - Not applicable. The health-based threshold level exceeds the expected soil concentration under free product condition.
f - In the presence of other petroleum contaminants in concentrations exceeding 1.0 mg/kg, the Estimated Quantitation Limit, and hence the soil threshold level, may be substantially greater, as approved by EPD.

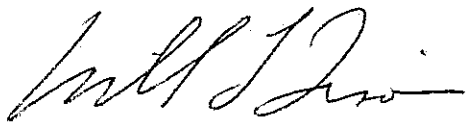
TRANSMITTAL OF SAD LABORATORY REPORT(S)

TO: Commander, Savannah District US Army Corps of Engineers ATTN: CESAS-PM-H Mr. Brent Rose P.O. Box 889 Savannah, GA 31402-0889	**FROM:** Director (CESAD-ET-EL) SAD Laboratory USACE 611 South Cobb Drive Marietta, GA 30060-3112
PROJECT: Ft. Stewart	**REQN NO:** PMS-96-109 **W.O. NO:** 7996

SUBJECT: Chemical Analysis

1. Enclosed is our report of analytical test results and chain of custody forms for one sample collected on 1 August 1996 from Ft. Stewart.

If you have any questions, please call Mr. Blaise Willis at 770-919-5295 or me at 770-919-3990.

SUBMITTED BY:	**SIGNATURE**	**DATE:**
WILLIAM L. TISON, P. E. Director, SAD Laboratory		20 Aug 1996

South Atlantic Division Laboratory
U. S. Army Corps of Engineers
611 South Cobb Drive
Marietta, Georgia 30060-3112

District - SAVANNAH
Date Received - 96/08/02
Date Reported - 96/08/16 10:38:30

FT. STEWART ARMY AF
Requisition - PMS-96-109
Work Order - 7996 Job Number - 4051

Lab #	Field ID	Date Sampled	Time Sampled
29682	8101-TK207-S1	96/08/01	12:15

Test Performed	Result	Units	Tested By	Test Date
TOTAL SOLIDS, % OF WET	86.80	%	SPA	96/08/05
AROMATIC VOLATILE ORGANICS	*		SPA	96/08/06
SEMIVOLATILE ORGANICS GC/MS	*		SPA	96/08/10
TRPH	6570.0	MG/KG	SPA	96/08/05

*NOTE: See Attached

Sampled by District Personnel

Checked by: JWS

Signed by:

Blaise Willis

Blaise Willis
Chemist

Sheet 1 of 1

4

SADD Labs

ANDERSON COLUMBIA ENVIRONMENTAL, INC.

CHAIN OF CUSTODY RECORD

Page 1 of 1

Project No.	Project Name
8101	Ft Stewart DO-0101

Samplers (Signature)

KP. Hall

Sample Number	Date	Time	Grab	Comp.	Sample Location	No. of Containers	Preservative	8020	8270	418.1					Remarks:
8101-TK207-S1	8-1-96	1215	–		Soil	3	Un	✓	✓	✓					Soil below UST-Waste Oil
Temp Vial															

Relinquished by:	Date / Time	Received by:	Relinquished by:	Date / Time	Received by:
KP. Hall	8/1/96 1430				
Relinquished by:	Date / Time	Received by:	Relinquished by:	Date / Time	Remarks:
Relinquished by:	Date / Time	Received by:	8/2/96 1100		

SOUTH ATLANTIC DIVISION LABORATORY
SAMPLE RECEIVING AND COOLER RECEIPT DATA SHEET
CHEMICAL SECTION - Sample Log-In

DATE: 960802

Number of coolers 1 Returned cooler(s) to: Anderson Columbia

PROJECT: Ft. Stewart DO -0101 W.O.# 7980 JOB# 29405.1

Coolers(s) opened by (print name) Jeff Smith (sign) [signature]

1. Did cooler come with shipping slip? [X] yes [ ] no
If yes, enter Tracking Number here 941896 2612

2. Were custody seals on out side of cooler? [X] yes [ ] no
How many? 1 Date on seal(s) 8-1-96 Name on seal(s) unreadable

3. Were custody seals unbroken upon receipt? [X] yes [ ] no

4. Did you screen sample(s) for "Radioactivity"? [X] yes [ ] no

5. Were custody papers filled out properly? (ink,signed,etc.,) [X] yes [ ] no

6. Temperature of sample(s) upon receipt: 4°C

7. Describe cooler packing: Bubble Wrap

8. Did all sample containers arrive unbroken? [X] yes [ ] no

9. Were the sample containers sealed in separate plastic bags? [X] yes [ ] no

10. Were labels on containers in good condition and agree with Custody paper? [X] yes [ ] no

11. Were correct containers used for the test(s) indicated? [X] yes [ ] no

12. Were correct preservatives added to sample(s)? [X] yes [ ] no [ ] unk

13. Was a sufficient amount of sample sent for test? [X] yes [ ] no

14. Were bubbles absent in Volatile sample(s)? [ ] yes [ ] no [X] N/A
If no, list field ID# _____

15. Numbers of days from sample date, samples received in Lab 1

16. Number of Samples: 1 Sample Type: [X]soil [ ]water [ ]other_____

SAMPLE ANALYSIS PERFORMED BY: SPA TAT 14 day / 19 Aug 96

COMMENTS: _____

17. Did you sign custody papers in the appropriate place? [X] yes [ ] no

LAB NUMBER(S): 29682

SIGNATURE: [signature]

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

DIRECTOR U.S. ARMY CORPS ENG. 5394
CESAD LABORATORY
611 SOUTH COBB DRIVE
MARIETTA, GA 30060-3172

Sample Location: 29682 8101-TK207-S1
FT. STEWART DO-0101

Lab Number: 96-A047534

Sampler: BOBBI THORN

Date Collected: 8/ 1/96

Date Received: 8/ 3/96

Time Collected: 12:15

Time Received: 8:30

Sample type: Soil

Organics Reference Data

BN Blank	57480SBB
GC/MS Tune, BNA	DF0809C
Calibration Check, BNA	CC0809C

Percent solids: 86.8

SEMIVOLATILE ORGANICS and PESTICIDE/PCB's

Analyte	Result	Flag	DF	Units	Date	Time	Analyst	Method
Acenaphthene	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Acenaphthylene	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Anthracene	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Benzo(a)anthracene	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Benzo(a)pyrene	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Benzo(b)fluoranthene	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Benzo(g,h,i)perylene	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Benzo(k)fluoranthene	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
4-Bromophenylphenylether	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Butylbenzylphthalate	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Carbazole	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
4-Chloro-3-methylphenol	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
4-Chloroaniline	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
bis(2-Chloroethoxy)methane	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
bis(2-Chloroethyl)ether	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
bis(2-Chloroisopropyl)ether	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
2-Chloronaphthalene	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B

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ANALYTICAL REPORT

DIRECTOR U.S. ARMY CORPS ENG. 5394
CESAD LABORATORY
611 SOUTH COBB DRIVE
MARIETTA, GA 30060-3172

Sample Location: 29682 8101-TK207-S1
FT. STEWART DO-0101

Lab Number: 96-A047534

Sampler: BOBBI THORN

Date Collected: 8/ 1/96

Date Received: 8/ 3/96

Time Collected: 12:15

Time Received: 8:30

Sample type: Soil

SEMIVOLATILE ORGANICS and PESTICIDE/PCB's

Analyte	Result	Flag	DF	Units	Date	Time	Analyst	Method
2-Chlorophenol	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
4-Chlorophenylphenylether	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Chrysene	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Dibenzofuran	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Dibenz(a,h)anthracene	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
1,2-Dichlorobenzene	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
1,3-Dichlorobenzene	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
1,4-Dichlorobenzene	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
3,3'-Dichlorobenzidine	2300	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
2,4-Dichlorophenol	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Diethylphthalate	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
2,4-Dimethylphenol	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Dimethylphthalate	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Di-n-butylphthalate	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
4,6-Dinitro-2-methylphenol	2880	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
2,4-Dinitrophenol	2880	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
2,4-dinitrotoluene	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
2,6-Dinitrotoluene	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Di-n-octylphthalate	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Fluoranthene	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Fluorene	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Hexachlorobenzene	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Hexachlorobutadiene	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Hexachlorocyclopentadiene	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Hexachloroethane	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B

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ANALYTICAL REPORT

DIRECTOR U.S. ARMY CORPS ENG. 5394
CESAD LABORATORY
611 SOUTH COBB DRIVE
MARIETTA, GA 30060-3172

Sample Location: 29682 8101-TK207-S1
FT. STEWART DO-0101

Lab Number: 96-A047534

Sampler: BOBBI THORN

Date Collected: 8/ 1/96

Date Received: 8/ 3/96

Time Collected: 12:15

Time Received: 8:30

Sample type: Soil

SEMIVOLATILE ORGANICS and PESTICIDE/PCB's

Analyte	Result	Flag	DF	Units	Date	Time	Analyst	Method
Indeno(1,2,3-cd)pyrene	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Isophorone	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
2-Methylnaphthalene	1220		1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
2-Methylphenol	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
m,p-Methylphenol	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Naphthalene	703.	J	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
2-Nitroaniline	2880	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
3-Nitroaniline	2880	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
4-Nitroaniline	2880	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Nitrobenzene	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
2-Nitrophenol	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
4-Nitrophenol	2880	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
N-nitrosodi-n-propylamine	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
N-nitrosodiphenylamine	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Pentachlorophenol	2880	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Phenanthrene	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Phenol	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Pyrene	576.	J	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Bis(2-ethylhexyl)phthalate	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
1,2,4-Trichlorobenzene	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
2,4,5-Trichlorophenol	2880	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
2,4,6-Trichlorophenol	1150	U	1	ug/kg	8/10/96	8:09	M.Goodrich	8270B
Extraction, BNA,s	Completed			ug/kg	8/ 5/96	14:44	C.Gerenser	3550

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ANALYTICAL REPORT

DIRECTOR U.S. ARMY CORPS ENG. 5394
CESAD LABORATORY
611 SOUTH COBB DRIVE
MARIETTA, GA 30060-3172

Sample Location: 29682 8101-TK207-S1
FT. STEWART DO-0101

Lab Number: 96-A047534

Sampler: BOBBI THORN

Date Collected: 8/ 1/96

Date Received: 8/ 3/96

Time Collected: 12:15

Time Received: 8:30

Sample type: Soil

UNDERGROUND STORAGE TANK RESULTS

Analyte	Result	Units	PQL	Dil Factor	Date	Time	Analyst	Method
Benzene	0.150	mg/kg	0.115	1	8/ 6/96	4:40	S. Wani	8020
Toluene	0.576	mg/kg	0.115	1	8/ 6/96	4:40	S. Wani	8020
Ethylbenzene	1.98	mg/kg	0.115	1	8/ 6/96	4:40	S. Wani	8020
Xylenes, total	6.90	mg/kg	0.115	1	8/ 6/96	4:40	S. Wani	8020
Petroleum Hydrocarbons,IR	6570	mg/kg	11.5	1	8/ 5/96	16:00	M.Himelick	418.1 M

Sample Extraction Data

BNA's Extracted 8/ 5/96 Wt extracted: 10.0 gm Extract Volume: 1.0 ml

** QUALITY CONTROL DATA **

Surrogate Recoveries

Surrogate	% Recovery	Target Range
GRO Surrogate, soil	122.	50 - 150
BNA Surrogate, Nitrobenzene	45.0	23 - 120
BNA Surr., 2-Fluorobiphenyl	63.0	30 - 115
BNA Surrogate, Terphenyl d14	62.0	18 - 140

SPECIALIZED ASSAYS, INC.

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ANALYTICAL REPORT

DIRECTOR U.S. ARMY CORPS ENG. 5394
CESAD LABORATORY
611 SOUTH COBB DRIVE
MARIETTA, GA 30060-3172

Lab Number: 96-A047534

Sample ID: 29682 8101-TK207-S1

Date Collected: 8/ 1/96

Project: CALL #125

Time Collected: 12:15

Project Name:

Date Received: 8/ 3/96

Sampler: BOBBI THORN

Time Received: 8:30

State Certification:

Sample Type: Soil

Site I.D.:

** QUALITY CONTROL DATA **

Surrogate Recoveries

Surrogate	% Recovery	Target Range
BNA Surrogate, Phenol d5	50.0	10 - 115
BNA Surrogate, 2-Fluorophenol	38.0	20 - 121
BNA Surrogate, 2,4,6-Tribromophenol	61.0	19 - 122

Report Approved By: Michael H. Dunn Report Date: 8/14/96

Theodore J. Duello, Ph.D.
Michael H. Dunn, M.S.
Danny B. Hale, M.S.

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
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PROJECT QUALITY CONTROL DATA

DIRECTOR U.S. ARMY CORPS ENG. 5394 — Report Number: 96-A047535

Sample I.D.: METHOD BLANK — Lab Project: 49230

Project: CALL #125 — Date Received: 8/ 3/96

****

** UST Spike/Duplicate Results **

Compound	%Recovery	Target Range	Precision RPD	Target Range
Benzene QC	110.	70 - 130	3.1	0 - 20
Toluene QC	106.	70 - 130	3.2	0 - 20
[illegible]yl benzene QC	106.	70 - 130	3.2	0 - 20
[illegible]ene QC	106.	70 - 130	0.0	0 - 20
TRPH, 418.1	108.	75 - 125	0.4	0 - 25.0

** Organics Spike/Duplicate Results **

Compound	%Recovery	Target Range	Precision RPD	Target Range
Phenol	64.	26 - 90	3.0	0 - 35
2-Chlorophenol	52.	25 - 102	4.0	0 - 50
1,4-Dichlorobenzene	58.	28 - 104	2.0	0 - 27
Nitroso-di-n-propylamine	74.	41 - 126	0.0	0 - 38
1,2,4-Trichlorobenzene	74.	38 - 107	1.0	0 - 23
4-Chloro-3-methylphenol	75.	26 - 103	3.0	0 - 33
Acenaphthene	78.	31 - 137	1.0	0 - 19
4-Nitrophenol	98.	11 - 114	3.0	0 - 50
2,4-Dinitrotoluene	78.	28 - 100	1.0	0 - 47
Pentachlorophenol	89.	17 - 109	2.0	0 - 47
Pyrene	73.	35 - 142	6.0	0 - 36

** Semi-Volatile Organics Method Blank Results ***

Compound	Result	Flag	Units	Method
Acenaphthene	330.	U	ug/kg	8270B
Acenaphthylene	330.	U	ug/kg	8270B

SPECIALIZED ASSAYS, INC.

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PROJECT QUALITY CONTROL DATA

DIRECTOR U.S. ARMY CORPS ENG. 5394 — Report Number: 96-A047535

Sample I.D.: METHOD BLANK — Lab Project: 49230

Project: CALL #125 — Date Received: 8/ 3/96

****

** Semi-Volatile Organics Method Blank Results ***

Compound	Result	Flag	Units	Method
Anthracene	330.	U	ug/kg	8270B
Benzo(a)anthracene	330.	U	ug/kg	8270B
Benzo(a)pyrene	330.	U	ug/kg	8270B
Benzo(b)fluoranthene	330.	U	ug/kg	8270B
Benzo(g,h,i)perylene	330.	U	ug/kg	8270B
Benzo(k)fluoranthene	330.	U	ug/kg	8270B
4-Bromophenylphenylether	330.	U	ug/kg	8270B
Butylbenzylphthalate	330.	U	ug/kg	8270B
Carbazole	330.	U	ug/kg	8270B
4-Chloro-3-methylphenol	330.	U	ug/kg	8270B
4-Chloroaniline	330.	U	ug/kg	8270B
bis(2-Chloroethoxy)methane	330.	U	ug/kg	8270B
bis(2-Chloroethyl)ether	330.	U	ug/kg	8270B
bis(2-Chloroisopropyl)ether	330.	U	ug/kg	8270B
2-Chloronaphthalene	330.	U	ug/kg	8270B
2-Chlorophenol	330.	U	ug/kg	8270B
4-Chlorophenylphenylether	330.	U	ug/kg	8270B
Chrysene	330.	U	ug/kg	8270B
Dibenzofuran	330.	U	ug/kg	8270B
Dibenz(a,h)anthracene	330.	U	ug/kg	8270B
1,2-Dichlorobenzene	330.	U	ug/kg	8270B
1,3-Dichlorobenzene	330.	U	ug/kg	8270B
1,4-Dichlorobenzene	330.	U	ug/kg	8270B
3,3'-Dichlorobenzidine	670.	U	ug/kg	8270B
2,4-Dichlorophenol	330.	U	ug/kg	8270B
Diethylphthalate	330.	U	ug/kg	8270B
2,4-Dimethylphenol	330.	U	ug/kg	8270B
Dimethylphthalate	330.	U	ug/kg	8270B
Di-n-butylphthalate	330.	U	ug/kg	8270B
4,6-Dinitro-2-methylphenol	830.	U	ug/kg	8270B
2,4-Dinitrophenol	830.	U	ug/kg	8270B
2,4-Dinitrotoluene	330.	U	ug/kg	8270B
2,6-Dinitrotoluene	330.	U	ug/kg	8270B
Di-n-octylphthalate	330.	U	ug/kg	8270B

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PROJECT QUALITY CONTROL DATA

DIRECTOR U.S. ARMY CORPS ENG. 5394 — Report Number: 96-A047535

Sample I.D.: METHOD BLANK — Lab Project: 49230

Project: CALL #125 — Date Received: 8/ 3/96

****

** Semi-Volatile Organics Method Blank Results ***

Compound	Result	Flag	Units	Method
Fluoranthene	330.	U	ug/kg	8270B
Fluorene	330.	U	ug/kg	8270B
Hexachlorobenzene	330.	U	ug/kg	8270B
Hexachlorobutadiene	330.	U	ug/kg	8270B
Hexachlorocyclopentadiene	330.	U	ug/kg	8270B
He[illegible]chloroethane	330.	U	ug/kg	8270B
In[illegible]no(1,2,3-cd)pyrene	330.	U	ug/kg	8270B
Isophorone	330.	U	ug/kg	8270B
2-Methylnaphthalene	330.	U	ug/kg	8270B
2-Methylphenol	330.	U	ug/kg	8270B
m,p-Methylphenol	330.	U	ug/kg	8270B
Naphthalene	330.	U	ug/kg	8270B
2-Nitroaniline	830.	U	ug/kg	8270B
3-Nitroaniline	830.	U	ug/kg	8270B
4-Nitroaniline	830.	U	ug/kg	8270B
Nitrobenzene	330.	U	ug/kg	8270B
2-Nitrophenol	330.	U	ug/kg	8270B
4-Nitrophenol	830.	U	ug/kg	8270B
N-nitrosodi-n-propylamine	330.	U	ug/kg	8270B
N-nitrosodiphenylamine	330.	U	ug/kg	8270B
Pentachlorophenol	830.	U	ug/kg	8270B
Phenanthrene	330.	U	ug/kg	8270B
Phenol	330.	U	ug/kg	8270B
Pyrene	330.	U	ug/kg	8270B
Bis(2-ethylhexyl)phthalate	330.	U	ug/kg	8270B
1,2,4-Trichlorobenzene	330.	U	ug/kg	8270B
2,4,5-Trichlorophenol	830.	U	ug/kg	8270B
2,4,6-Trichlorophenol	330.	U	ug/kg	8270B

Michael H. Dunn

SPECIALIZED ASSAYS, INC.

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P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

PROJECT QUALITY CONTROL DATA

DIRECTOR U.S. ARMY CORPS ENG. 5394 — Report Number: 96-A047535

Sample I.D.: METHOD BLANK — Lab Project: 49230

Project: CALL #125 — Date Received: 8/ 3/96

****

** Inorganics Method Blank Results ***

Compound	Result	Flag	Units	Method

DFTPP

Data File : C:\HPCHEM\1\DATA\DF0809C.D
Acq On : 10 Aug 96 6:57 am
Sample : tune
Misc :

Vial: 2
Operator: HP - 5
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270.M
Title : SW846 METHOD 8270

Scan Number 2837

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	49.3	2246	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	58.8	2679	PASS
70	69	0	2	0.1	3	PASS
127	198	30	60	43.5	1982	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	4556	PASS
199	198	5	9	6.7	303	PASS
275	198	10	30	25.9	1180	PASS
365	198	1	100	2.9	134	PASS
441	443	0	100	0.3	14	PASS
442	198	40	100	99.9	4551	PASS
443	442	17	23	18.7	853	PASS

DF0809C.D 8270.M Sat Aug 10 15:43:44 1996

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\CC0809C.D
Acq On : 10 Aug 96 7:33 am
Sample : 50 ppm con cal
Misc :

Vial: 3
Operator: HP - 5
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270.M
Title : SW846 METHOD 8270
Last Update : Tue Aug 06 16:17:22 1996
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 10% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	72	-0.05
2	T	Pyridine	0.202	0.149	26.3	54	0.00
3	T	N-Nitroso-dimethylamine	0.664	0.581	12.4	59	0.00
4	S	2-Fluorophenol	0.871	0.910	-4.4	62	-0.03
5		Aniline	1.190	1.072	9.9	57	-0.05
6		Bis-(2-Chloroethyl)ether	0.909	0.774	14.9	56	-0.05
7	S	Phenol-d5	1.004	0.901	10.3	53	-0.05
8	MC	Phenol	1.048	0.935	10.7	58	-0.05
9	M	2-Chlorophenol	0.789	0.788	0.1	66	-0.05
10		1,3-Dichlorobenzene	0.797	0.800	-0.4	65	-0.05
11	MC	1,4-Dichlorobenzene	0.833	0.824	1.1	61	-0.05
12		1,2-Dichlorobenzene	0.787	0.746	5.2	62	-0.05
13		Benzyl Alcohol	0.673	0.665	1.1	65	-0.07
14		Bis-(2-chloroisopropyl)ethe	0.100	0.094	5.8	61	-0.05
15		2-Methylphenol	0.678	0.630	7.1	61	-0.05
16		Hexachloroethane	0.321	0.308	4.2	62	-0.05
17	MP	N-Nitroso-di-n-propylamine	0.533	0.514	3.5	63	-0.06
18		3,4-Methylphenol	0.843	0.788	6.6	61	-0.06
19	I	Naphthalene-d8	1.000	1.000	0.0	66	-0.05
20	S	Nitrobenzene-d5	0.478	0.488	-2.1	66	-0.06
21		Nitrobenzene	0.411	0.433	-5.3	62	-0.06
22		Isophorone	0.920	0.875	4.9	58	-0.07
23	C	2-Nitrophenol	0.213	0.246	-15.7	67	-0.06
24		2,4-Dimethylphenol	0.372	0.397	-6.7	67	-0.07
25		Bis-(2-chloroethoxy)methane	0.525	0.483	7.8	58	-0.06
26	C	2,4-Dichlorophenol	0.308	0.324	-5.3	63	-0.06
27		Benzoic acid	0.153	0.221	-44.8	145	-0.10
28	M	1,2,4-Trichlorobenzene	0.325	0.333	-2.5	61	-0.05
29		Naphthalene	0.895	0.841	6.1	58	-0.06
30		4-chloroaniline	0.435	0.390	10.3	53	-0.06
31	C	Hexachlorobutadiene	0.175	0.198	-13.6	68	-0.06
32		4-Chloro-3-methylphenol	0.315	0.326	-3.6	65	-0.05
33		2-Methylnaphthalene	0.591	0.534	9.6	54	-0.06
34	I	Acenaphthene-d10	1.000	1.000	0.0	72	-0.05
35	P	Hexachlorocyclopentadiene	0.215	0.107	50.2	34	-0.05
36	C	2,4,6-Trichlorophenol	0.401	0.403	-0.5	65	-0.05
37		2,4,5-Trichlorophenol	0.378	0.392	-3.7	64	-0.06
38	S	2-fluorobiphenyl	1.257	1.073	14.6	62	-0.07
39		2-Chloronaphthalene	1.070	0.985	7.9	60	-0.06
40		2-Nitroaniline	0.453	0.432	4.7	59	-0.06
41		Acenaphthylene	1.521	1.313	13.7	57	-0.06
42		Dimethylphthalate	1.210	1.166	3.6	63	-0.06
43		2,6-Dinitrotoluene	0.324	0.340	-5.0	65	-0.07
44		3-Nitroaniline	0.310	0.247	20.2	53	-0.07

45	MC	Acenaphthene	0.954	0.857	10.2	62	-0.06
46	P	2,4-dinitrophenol	0.155	0.125	19.3	47	-0.07
47		Dibenzofuran	1.481	1.347	9.1	60	-0.07
48	M	2,4-Dinitrotoluene	0.410	0.420	-2.4	62	-0.07
49	MP	4-Nitrophenol	0.246	0.268	-8.6	67	-0.07
50		Fluorene	1.134	1.040	8.2	63	-0.07
51		4-Chlorophenyl phenylether	0.533	0.478	10.4	59	-0.07
52		Diethylphthalate	1.129	1.099	2.7	74	-0.07
53		4-Nitroaniline	0.365	0.321	12.1	54	-0.10
54		Azobenzene	1.125	1.346	-19.7	71	-0.07
55	I	Phenanthrene-d10	1.000	1.000	0.0	75	-0.07
56		4,6-Dinitro-2-methylphenol	0.110	0.091	17.1	46	-0.08
57	C	N-Nitroso-diphenylamine	0.423	0.362	14.5	60	-0.06
58	S	Tribromophenol	0.140	0.145	-3.6	61	-0.07
59		4-Bromophenyl phenyl ether	0.189	0.177	6.4	64	-0.07
60		Hexachlorobenzene	0.251	0.247	1.8	65	-0.07
61	MC	Pentachlorophenol	0.159	0.179	-12.8	71	-0.07
62		Phenanthrene	0.861	0.800	7.1	61	-0.16
63		Anthracene	0.861	0.815	5.3	62	-0.07
64		Carbazole	0.857	0.752	12.2	60	-0.08
65		Di-n-butyl phthalate	1.219	1.149	5.7	66	-0.07
66	C	Fluoranthene	0.947	0.927	2.2	66	-0.08
67	I	Chrysene-d12	1.000	1.000	0.0	73	-0.07
68		Benzidine	0.374	0.107	71.3	20	-0.09
69	M	Pyrene	1.139	1.134	0.4	64	-0.08
70	S	Terphenyl-d14	0.947	0.882	6.8	66	-0.08
71		Butylbenzylphthalate	0.699	0.685	2.1	66	-0.07
72		3,3'-Dichlorobenzidine	0.362	0.354	2.1	61	-0.08
73		Benzo(a)anthracene	1.087	0.859	20.9	51	0.04
74		Chrysene	0.911	0.825	9.4	63	-0.09
75		Bis-(2-ethylhexyl)phthalate	0.915	0.879	4.0	65	-0.07
76	I	Perylene-d12	1.000	1.000	0.0	64	-0.07
77	C	Di-n-octylphthalate	1.429	1.544	-8.1	65	-0.09
78		Benzo(b)fluoranthene	1.122	1.241	-10.6	81	-0.10
79		Benzo(k)fluoranthene	1.122	1.106	1.5	72	-0.03
80	C	Benzo(a)pyrene	0.948	0.970	-2.3	59	-0.09
81		Indeno(1,2,3-cd)pyrene	1.035	0.829	19.9	46	-0.10
82		Dibenz(a,h)anthracene	0.936	0.870	7.0	52	-0.10
83		Benzo(g,h,i)perylene	0.920	0.829	9.9	90	-0.10

(#) = Out of Range SPCC's out = 0 CCC's out = 0

0500805.D 8270.M Sat Aug 10 15:42:32 1996

U.S. Army Corps of Engineers Work Order # 7996 Job # 4051 Chain of Custody Record

(ER 1110-1-263)

Proj. No.	Project Name: Ft. Stewart DC - 8101					Number of Containers	8020	8270	418.1					TAT 19 Aug 96
Sampler: (Signature) 49230														
Date	Time	Pres.	Grab	Comp	Site Code/Sample Number									Remarks: SAD NO. / MATRIX
960801	1215		X		8101-TK207-S1	3	✓	✓	✓					296824753 4 soil
														A.W.

Sampler Relinquished by:	Date/Time 960802 1125	Received by: (Sig.)	Date/Time
Relinquished by: (Sig.)	Date/Time	Received by: (Sig.)	Date/Time
Relinquished by: (Sig)	Date/Time	Received for Laboratory by: (Sig.)	Date/Time 8/3/96 0836
Custody Seal No.		Lab case No.:	

Hazards Associated with Samples: 96-A047535

Remarks at time of receipt:

ENG Form 5[illegible]-R, Oct 90 Prop[illegible]t: CEMP-RT

TAB 9

MANIFESTS

50

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

Manifest Document No. . . . . | 1. Page 1 of 1

GENERATOR

2. Generator's Name and Mailing Address
Ft. Stewart
Hinesville, GA 31313

3. Generator's Phone (912) 234-6579

4. Transporter 1 Company Name
Hendricks Hauling

5. Transporter 2 Company Name

6. Designated Facility Name and Site Address
Triple R Management, Inc. C/O Reynolds Construction Co.
Rt. 84
Ludowici GA 31316

A. Transporter's Phone
B. Transporter's Phone 912-427-6758
C. Facility's Phone 912-756-3655

7. Waste Shipping Name and Description	8. Containers No.	8. Containers Type	9. Total Quantity	10. Unit Wt/Vol
a. Petroleum Contaminated Soil	1	TT	18.00	CY
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

11. Special Handling Instructions and Additional Information
8101
Tank#_____

12. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Tom Fry	Tom Fry	08	30	96

TRANSPORTER

13. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Ake Jay		8	30	96

14. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
		.	.	.

FACILITY

15. Discrepancy Indication Space

16. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Charles Pruitt		8	30	96

ORIGINAL – RETURN TO GENERATOR

REYNOLDS CONSTRUCTION COMPANY
Highway 84 • P. O. Box 749
Ludowici, Georgia 31316
Office (912) 368-7488 • Plant (912) 876-8085

Date _____ 19__ Load No. 53

Triple K Mart — PCS
Customer — Description

K K 104
Project Number

H Stewart — Liberty
Location — County

41120 lb Net
21740 lb Tare
62860 lb+ Gross
12:25 PM AU 30 96

Signature of Welgher

TONS: 20,56 TOTAL TONS: 977.55 ~~984.50~~

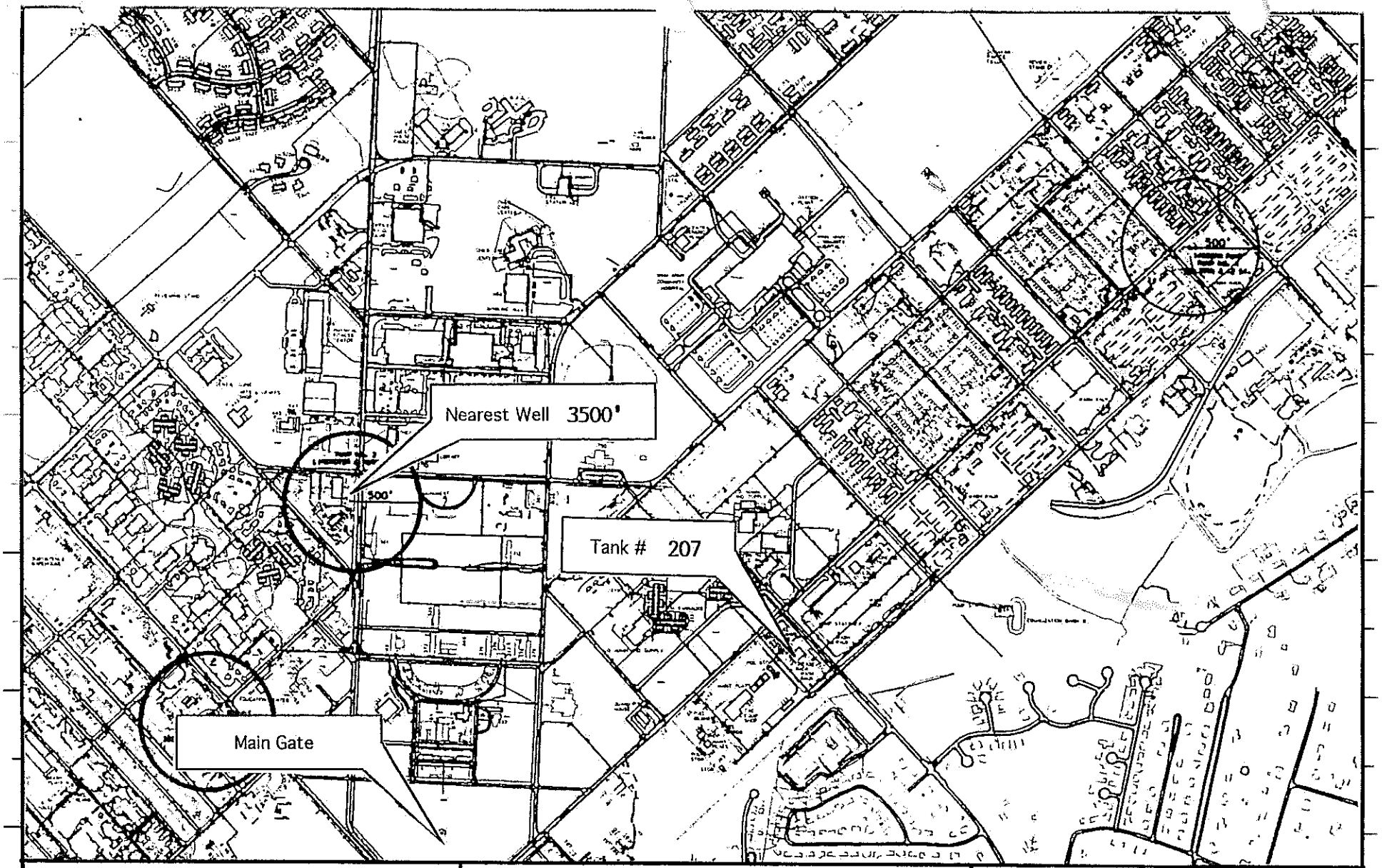
TRUCKER — TRUCK NO. 50

DRIVER — TICKET NO. 60165

VIP-1518-HV

TAB 10

FORT STEWART AREA MAP



LEGEND/REF. DRWG'S

Base map of Fort Stewart.

ANDERSON COLUMBIA
ENVIRONMENTAL, INC.
P. O. BOX 1386 LAKE CITY, FLORIDA 32056 (904) 755-1196

DR. AJR CH'D SRC DR. APP. DFB
ENGR. ENGR'G DEPT.
DATE 9 Oct 96 SCALE 1"=1000'

Area Map for Tank # 207
Fort Stewart
Hinesville, Georgia

DRAWING NO.: FIGURE 1