



UNITED STATES MARINE CORPS
MARINE CORPS BASE
PSC Box 20004
Camp Lejeune, North Carolina 28542-0004

IN REPLY REFER TO:

6286

BEMD

15 FEB 2001

Mr. Dave Holsinger
North Carolina Department of Environment
and Natural Resources
Wilmington Regional Office
127 Cardinal Drive Extension
Wilmington, North Carolina 28405

Dear Mr. Holsinger:

The enclosure concerns the permanent closure by removal of one regulated petroleum underground storage tank (UST) at Marine Corps Air Station, New River. The applicable tank information is provided below:

<u>Base ID</u>	<u>Facility ID</u>	<u>Operating Permit Certificate #</u>
AS142	S-002740	2001000340

The UST is located at the Campbell Street Fuel Farm, Marine Corps Air Station, New River. Currently, Campbell Street fuel farm is an active Camp Lejeune UST program site. A groundwater pump and treat system has been in operation since 1995. This system recovers groundwater via three recovery trenches, which are down gradient from the subject UST. Aggressive fluid vapor recovery is also performed at area monitoring wells. An assessment of the fuel farm area has been previously performed, which may be used as a reference, when determining the need for additional investigation.

Please refer any questions or comments to Ms. Glenee' Smith, Environmental Compliance Branch, Environmental Management Division, at telephone (910) 451-5837.

Sincerely,

Scott A. Brewer
Director, Environmental Management Division
By direction of
the Commanding General

Enclosure: GW/UST-12, Underground Storage Tank Closure Report

6286
BEMD

Copy to:
North Carolina Department of Environment
and Natural Resources
Underground Storage Tank Section
Division of Waste Management
Attn: Ms. Annette Parker
1637 Mail Service Center
Raleigh, North Carolina 27699-1637

GW/UST-12
UNDERGROUND STORAGE TANK CLOSURE REPORT

UST No. AS-142

Location: MCAS, New River, NC

The closure report should contain, at a minimum, the following information. Any other information that is pertinent to the site should be included.

I. General Information

A. Ownership of UST(s)

1. Name of UST owner:

Commanding General
Marine Corps Base, Camp Lejeune, North Carolina

2. Owner address and telephone number:

Commanding General
AC/S, Environmental Management Department
PSC 20004
MCB, Camp Lejeune, NC 28542
910-451-5837

B. Facility Information

1. Facility name:

AS-142

2. Facility ID #:

S-002740

3. Facility address, telephone number, and county:

Commanding General
AC/S, Environmental Management Department
PSC 20004
MCB, Camp Lejeune, NC 28542
910-451-5837
Onslow County

C. Contacts

1. Name, address, telephone number and job title of primary contact person:

Bruce Markwick – Engineering Technician
AC/S, EMD
PSC 20004
MCB, Camp Lejeune, NC 28542
910-451-5837

2. Name, address, and telephone number of closure contractor:

J.A. Jones Environmental Services Company
6135 Park South Drive, Suite 250
Charlotte, North Carolina 28210
704-553-3595

3. Name, address, and telephone number of primary consultant:

J.A. Jones Environmental Services Company
 6135 Park South Drive, Suite 250
 Charlotte, North Carolina 28210
 704-553-3595

4. Name, address, telephone number, and State certification number of laboratory:

Prism Laboratories, Inc.
 449 Springbrook Road
 Charlotte, NC 28217
 704-529-6364
 North Carolina certification #: 402

D. UST Information

Tank No.	Installation Date	Size in Gallon	Tank Dimension	Last Content
AS-142	11/1994	10,000	26'7" x 8'	Gasoline

E. Site Characteristics**1. Describe any past release at this site:**

No releases have been reported in conjunction with the UST. However, the tank is within an active remediation site under MCBCL's UST program (Campbell Street Fuel Farm site).

2. Is the facility active or inactive at this time? If the facility is inactive note the last time the USTs were in operation:

The facility is active but the UST was inactive. An AST has been built to replace the UST. The last time the UST was in operation was 28 March 2000.

3. Describe surrounding property use (for example, residential, commercial, farming, etc.):

The site is on a military base. The UST was located in a fuel farm which is surrounded on all directions by roads, open field. Therefore this site may fall into the commercial/industrial category.

4. Describe site geology/hydrogeology:

The area is located in the Outer Coastal Plain of North Carolina. The predominant soil type at the site is sandy silt, and clayey silt to clay. The depth to the underlain bedrock of Tertiary aged Belgrade Formation is unknown, but is estimated to be more than 50 feet. The depth-to-water, which was measured from groundwater monitoring wells next to the UST, is 4.3 feet from ground surface. The nearest surface water body is New River, which is approximately 6,000 feet from the site. Groundwater in the surficial aquifer flows south to southeast from the UST excavation. All buildings in this area are supplied by a public water supply system. There are two drinking water wells within 1,500 feet radius of this facility (AS131 & AS4140). However, these drinking water wells are under contract for removal.

II. Closure Procedures**A. Describe preparations for closure including the steps taken to notify authorities, permits obtained, and the steps taken to clean and purge the tanks:**

A GW/UST-3 form was submitted to the Environmental Management Department of the Base on 5/20/1999. A copy of the GW/UST-3 form is included in Appendix B. The UST was cleaned by using a high-pressure washer (confined space entry) on 12/5/2000.

B. Note the amount of residual material pumped from the tank(s):

There was no residual material in the tank and it was full of water on the day it was cleaned. The water was pumped into an oil/water separator next to the UST.

C. Describe the storage, sampling, and disposal of the residual material:

N/A

D. Excavation**1. Describe excavation procedures noting the condition of the soils and the dimensions of the excavation in relation to the tanks, piping and/or pumps:**

The majority of fuel supply pipes that were associated with the UST had been removed during the AST system construction activities.

The fiberglass UST was set in ABC gravel basin. After burden gravel was removed and the UST was exposed, further excavation was along the north and west sides of the tank to the depth of UST bottom. No discoloration of the surrounding soil, but a distinct petroleum odor was observed in the excavation pit. The final dimensions of the excavation were 34' (L) x 20' (W) x 13' (D).

2. Note the depth of tank burial(s) (from land surface to top of tank):

5 feet

3. Quantity of soil removed:

149.36 tons of soil/ABC gravel was excavated to expose the tank.

4. Describe soil type(s):

Based on field observation, the UST was covered in all direction by ABC gravel. At places where gravel was removed, it was observed that light blue clay was the dominant soil type that inter-layered by clayey or sandy silt.

5. Type and source of backfill used:

Common fill (sand) obtained from a borrow pit in the Base.

E. Contaminated Soil

The excavated 149.36 tons of soil/ABC gravel was stockpiled on-site (Photo 12) and a composite soil sample was taken from the stockpile. Upon receiving analytical results of the sample that indicate diesel range total petroleum hydrocarbon (TPH) concentration of 14 ppm, this material was transported off-base on 1/16/2001 and disposed of by Oak Hill Farms at its facility located in Autryville, North Carolina. A copy of the contaminated soil transportation manifest is included in Appendix D and a copy of the lab analytical report is included in Appendix F.

III. Site Investigation**A. Provide information on field screening and physical observations, including methods used to calibrate field screening instrument(s):**

No apparent soil discoloration was observed during the UST removal activities. However, slight gasoline odor was observed on the south sidewall of the tank.

B. Describe soil sampling points and sampling procedures used:

A total of 5 gravel samples were collected during the tank removal activities on 12/12/2000. Four of them (ID# AS142-1 through AS142-4) were collected from sides of the excavation, one at each side, at

approximately 10' below land surface (bls), right above groundwater level. Sample # AS142-5 was collected 4 inches below a 90° joint of the fuel supply pipes, where gasoline odor was strongest. On 12/27/2000, after the last section of fuel supply pipes associated with the UST was removed, sample # AS142-6 was collected at the fuel pipe trench, 2.5 feet bls and 20 feet away from where sample AS142-5 was taken. The samples were tested using EPA Methods 3550 for TPH-DRO, 5030 for TPH-GRO.

The location and the depth of these gravel samples are illustrated in the Site Drawing.

C. Describe groundwater or surface water sampling procedures used:

Groundwater was encountered during the UST removal. A temporary well was constructed during excavation backfilling. On 1/4/2001, one groundwater sample was collected from the well. The water sample was tested using EPA Methods 601/602, MADEP VPH petroleum hydrocarbons and 3030C for Pb.

D. Quality control measures;

Lab-provided containers and dedicated disposable gloves were used for sampling. Upon collection, the samples were stored in a cooler, chilled by ice, and sent to the laboratory through an over-night carrier.

E. Investigation results

During the tank cleaning activities, it was observed from within the tank that small air bubbles came from bottom of the tank. This occurrence suggested a possibility there may be holes or fractures on the bottom of the tank. However, upon examination of the UST after it was removed there was no sign of any hole or fracture. There was a slight gasoline odor observed in the ABC gravel at the south sidewall, no soil discoloration were observed in the excavation and no free product was observed on groundwater surface. This tank was a double wall fiberglass Owens Corning tank and was monitored with an automatic gauging system (veeder root). The system was equipped with CSLD software and performed interstitial monitoring. There had been no warnings or alarms that indicated a possibility of a leak. However, water was leaking into the tank. This may have been due to groundwater seeping in from the ancillary equipment sump. This was one of the reasons MCB Camp Lejeune decided to remove this tank.

As shown in Table 1, for ABC gravel samples collected on the sidewalls at 10 feet bls, TPH-GRO concentrations ranges from BDL to 160 ppm and no TPH-DRO contamination was detected. Neither TPH-GRO nor TPH-DRO was detected in sample #AS142-6 which was taken in the fuel pipe trench. In sample #AS142-5, TPH-DRO is 100 ppm and TPH-GRO is 430 ppm.

It is noted that contamination levels between samples #AS142-2 and AS142-5 are distinctively different, although they were collected at almost the same location but different levels, the former at 10 feet bls and the latter at 3 feet bls., as indicated on the Site Drawing. Field observation at the fuel pipe joint where AS142-5 was collected did not indicate any fractures or joint failure on the fuel supply pipes at that location. The elevated contamination level in sample AS142-5 may be attributed to a previous spill that is limited in ground surface.

In groundwater, as shown in Table 2, a number of volatile hydrocarbon compounds are detected at a level above the laboratory's Method Detection Limit. Among them, benzene, total xylenes, MTBE, C5-C8 aliphatics and C9-C10 aromatics are at concentration above North Carolina Groundwater Standards or Interim Groundwater Standards. Total Pb concentration is also above the standard level.

IV. Conclusions and Recommendations

Although holes or fractures on bottom of the UST were suspected by observation during the UST cleaning, no significant petroleum hydrocarbon contamination in soil/ABC gravel, which can be attributed to the subject UST system, has been observed. Groundwater contamination is evident, however, it may be not stem from the subject

UST system in aware of that the UST system was located within a groundwater contamination plume that was from other petroleum contamination sources.

The UST is within the coverage of the Campbell Street fuel farm pump and groundwater treatment system which is an actively undergoing remediation. The recovery trench of the system is located down gradient of the former tank pit and should therefore adequately capture contamination. Therefore, no further action is recommended.

V. Signature and Seal of Professional Engineer or Licensed Geologist

James X. Tan J.A. Jones Environmental Services Company

North Carolina Licensed Professional Geologist No. 1408

VI. Enclosures

A. Figures

1. Site Location Map
2. Site Drawing

B. Tables

1. Analytical Results of Soil Samples
2. Analytical Results of Groundwater Sample

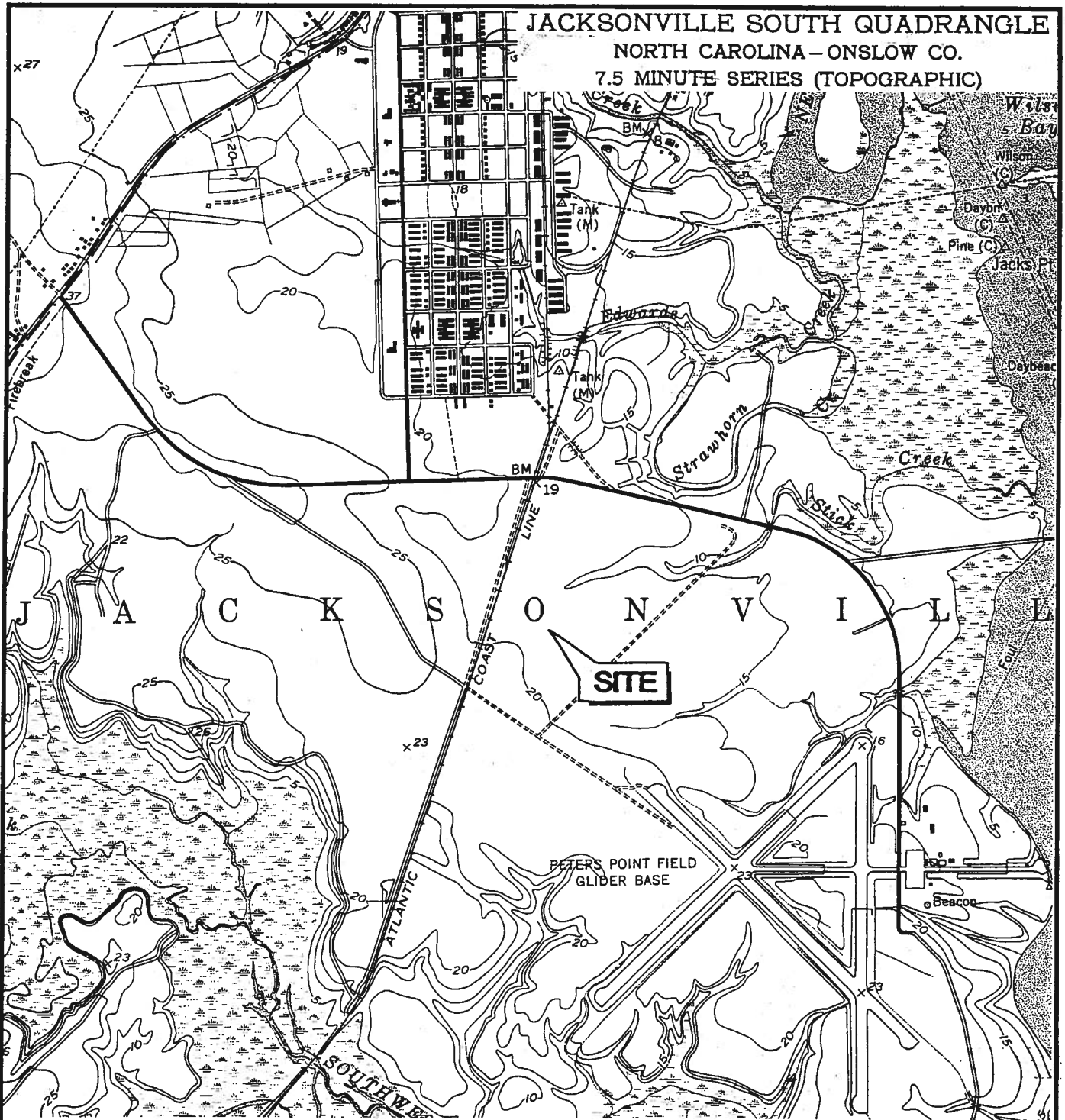
C. Appendices

- Appendix A: GW-UST-2 Form
Appendix B: Copy of GW-UST-3 Form
Appendix C: Certificate of UST Disposal
Appendix D: Contaminated Soil Transportation Manifests
Appendix E: Laboratory Analytical Report for Soil and Groundwater
Appendix F: Photographs of UST Closure Activities

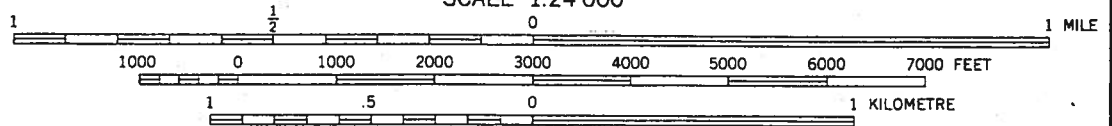
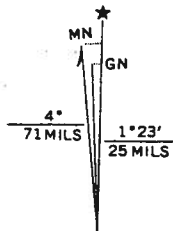
FIGURES

1. **Site Location Map**
2. **Site Drawing**

JACKSONVILLE SOUTH QUADRANGLE
 NORTH CAROLINA—ONSLOW CO.
 7.5 MINUTE SERIES (TOPOGRAPHIC)



SCALE 1:24 000



UTM GRID AND 1952 MAGNETIC NORTH
 DECLINATION AT CENTER OF SHEET

CONTOUR INTERVAL 5 FEET
 NATIONAL GEODETIC VERTICAL DATUM OF 1929
 DEPTH CURVES AND SOUNDINGS IN FEET—DATUM IS MEAN LOW WATER



J.A. JONES
 ENVIRONMENTAL
 SERVICES

MARINE CORPS AIR STATION

New River, North Carolina

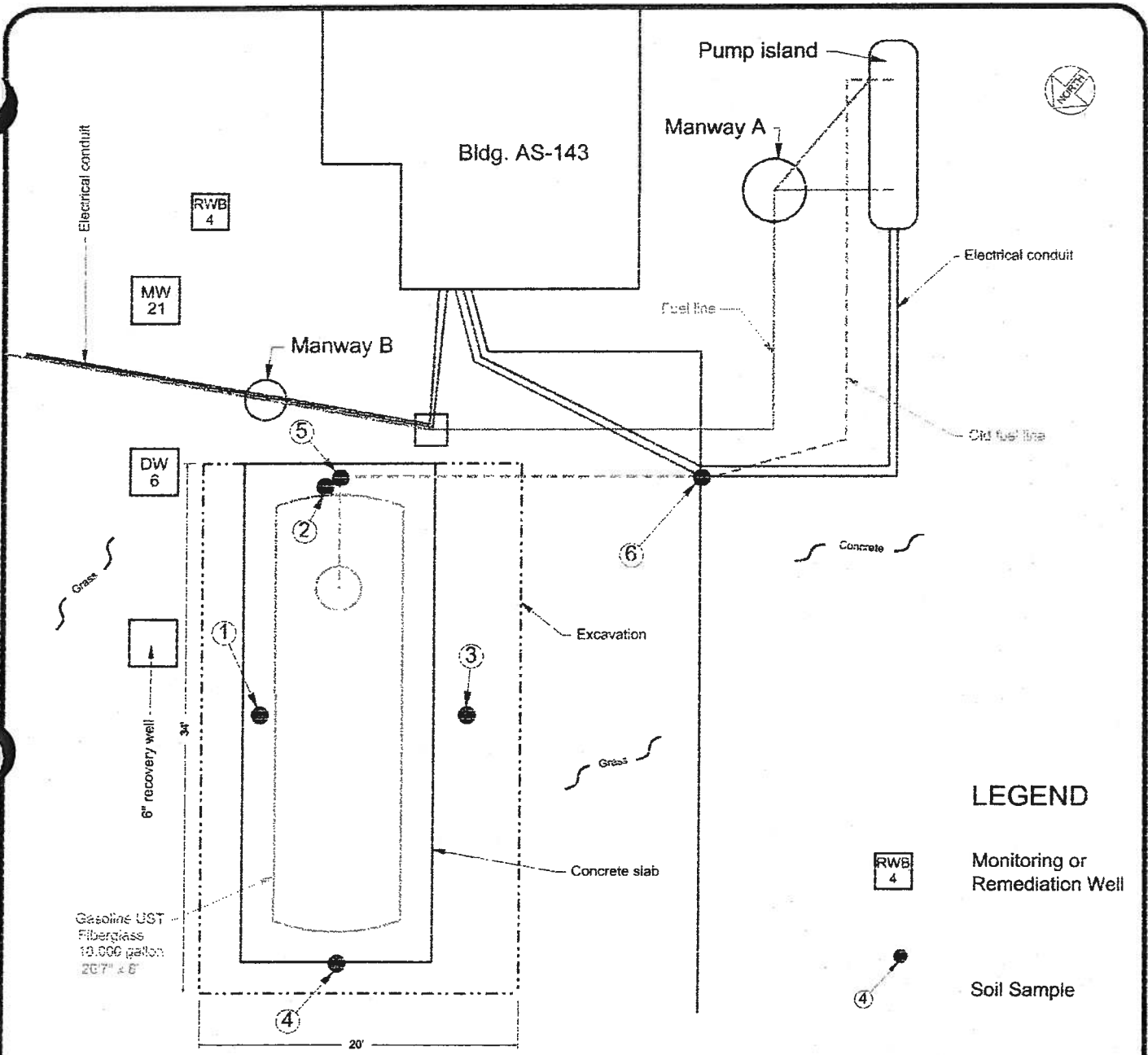
Remove UST AS-142

Contract No. N62470-93-D-3033, Task Order 053

Figure 1

Site

Location



LEGEND

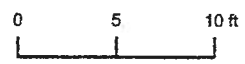


Monitoring or Remediation Well



Soil Sample

- Sample #1: 10' bls, TPH-DRO = BDL; TPH-GRO = BDL
- Sample #2: 10' bls, TPH-DRO = BDL; TPH-GRO = 6.5 ppm
- Sample #3: 10' bls, TPH-DRO = BDL; TPH-GRO = 160 ppm
- Sample #4: 10' bls, TPH-DRO = BDL; TPH-GRO = 39 ppm
- Sample #5: 3' bls, TPH-DRO = 100 ppm; TPH-GRO = 430 ppm
- Sample #6: 2.5' bls, TPH-DRO = BDL; TPH-GRO = BDL



Graphic Scale

Date	Revision	Initials



J.A. JONES
ENVIRONMENTAL SERVICES

CONTRACT #:	N62470-93-D-3033
PROJECT #:	TO 53
DATE:	1/19/2001
DRAWN BY:	J. X. T.
SCALE:	1" = 10'

UST REMOVAL
MARINE CORPS AIR STATION
NEW RIVER, NORTH CAROLINA

UST AS-142 SITE DRAWING

TABLES

Table 1. Analytical Results of Soil Samples

Sample ID	Date	Depth (bls)	Matrix	TPH-DRO (ppm)	TPH-GRO (ppm)
AS-142-1	12/12/00	10'	ABC gravel	BDL	BDL
AS-142-2	12/12/00	10'	ABC gravel	BDL	6.5
AS-142-3	12/12/00	10'	ABC gravel	BDL	160
AS-142-4	12/12/00	10'	ABC gravel	BDL	39
AS-142-5	12/12/00	3'	ABC gravel	100	430
AS-142-6	12/27/00	2.5'	ABC gravel	BDL	BDL
AS-142-pile	12/13/00		sand	14	BDL

Table 2. Analytical Result of Groundwater Sample

Sample ID: AS-142-W Sample Date: 1/4/01 Concentration in ppb

Compounds	Methods	Concentration	NC GW Standards or Interim GW Standards	NC GW Gross Contamination Level
Pb (total)	6010	132	15	15
benzene	601/602	530	1	5,000
toluene	601/602	810	1,000	257,500
ethylbenzene	601/602	11	29	29,000
total xylenes	601/602	1300	530	87,500
MTBE	601/602	420	200	200,000
C5-C8 aliphatics	VPH	2800	420	N/E
C9-C12 aliphatics	VPH	1800	4,200*	N/E
C9-C10 aromatics	VPH	1300	210**	N/E

Note:

N/E ---- Not established

* ---- set for petroleum aliphatic carbon fraction class C9-C18

** ---- set for petroleum aromatics carbon fraction class C9-C32

APPENDIX A

GW-UST-2 Form

FOR
TANKS
IN
NC

Return Completed Form To:
The appropriate DWQ Regional Office according to the county of the facility's
Location. [SEE REVERSE SIDE OF OWNER'S COPY (PINK) FOR REGIONAL
OFFICE ADDRESS].

State Use Only
I.D. Number _____
Date Received _____

INSTRUCTIONS

Complete and return within (30) days following completion of site investigation.

I. Ownership of Tank(s)

II. Location of Tank(s)

Owner Name: Commanding General, MCB
(Cooperation, Individual, Public Agency, or Other Entity)
Street Address: AC/S, EMD, MCB, PSC20004
County: Onslow
City: Camp Lejeune State: NC Zip Code: 28542
Tele. No. (Area Code): (910) 451-5837

Facility Name or Company: Building AS-142
Facility ID #: S-002740
Street Address or State Road: Campbell Road, MCAS
County: Onslow City: Jacksonville Zip Code: 28540
Tele. No. (Area Code): (910) 451-5837

III. Contact Person

Name: Mr. Bruce Markwick Job Title: Engineering Technician Tel. No.: (910) 451-5837
Closure Contractor: J.A. Jones Environmental Serv. Address: 6135 Park South Dr. Charlotte, NC Tel. No.: (704) 553-3595
Primary Consultant: Same Address: Same Tel. No.: Same
Lab: Prism Laboratories Address: 449 Springbrook Rd. Charlotte NC Tel. No.: (704) 529-6364

IV. U.S.T. Information

V. Excavation Condition

VI. Additional Information Required

Tank No.	Size in Gallons	Tank Dimensions	Last Contents	Water in Excavation		Free Product		Notable Odor or Visible Soil Contamination	
				Yes	No	Yes	No	Yes	No
AS-142	10,000	26' 7" x 8'	Gasoline	X			X		X

See reverse side of pink copy (owner's copy) for additional information required by N.C. - DWQ in the written report and sketch.

NOTE: If a release from the tank(s) has occurred, the site assessment portion of the tank closure must be conducted under the supervision of a P.E. or L.G., with all closure site assessment reports bearing the signature and seal of the P.E. or L.G.

VII. Check List (Check the activities completed)

PERMANENT CLOSURE (For Removing or Abandoning-in-place)

- Contact local fire marshal
- Notify DWQ Regional Office before abandonment.
- Drain & Flush piping into tank.
- Remove all product and residuals from tank.
- Excavate down to tank.
- Clean and inspect tank.
- Remove drop tube, fill pipe, gauge pipe, vapor recovery tank connections, submersible pumps and other tank fixtures.
- Cap or plug all lines except the vent and fill lines.
- Purge tank of all product & flammable vapors.
- Cut one or more large holes in the tanks.
- Backfill the area.

Date Tank(s) Permanently Closed: 12/12/2000

Date of Change-in-Service: _____

ABANDONMENT IN PLACE

- Fill tank until material overflows tank opening.
- Plug or cap all openings.
- Disconnect and cap or remove vent line.
- Solid inert material used - specify: _____

REMOVAL

- Create vent hole.
- Label tank.
- Dispose of tank in approved manner.

Final tank destination: Landfill

Marine Corps Base, Camp Lejeune, NC 28546

VIII. Certification (Read and Sign)

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.

Print name and official title of owner or owner's authorized representative

Signature:

Date Signed

James Tan

Project Geologist



12/14/00

APPENDIX B

Copy of GW-UST-3 Form

GW/UST-3 Notice of Intent: UST Permanent Closure or Change-In-Service

FOR TANKS IN NC	Return Completed Form To: The appropriate DWQ Regional Office according to the county of the facility's Location. [SEE REVERSE SIDE OF OWNER'S COPY (PINK) FOR REGIONAL OFFICE ADDRESS].	State Use Only I.D. Number _____ Date Received _____
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INSTRUCTIONS

Complete and return at least five (5) working days prior to closure or change-in-service if a Professional Engineer (P.E.) or a Licensed Geologist (L.G.) provides supervision for closure or change-in-service site assessment activities and signs and Seals all closure reports. Otherwise, thirty (30) days notice is required.

I. OWNERSHIP OF TANK(S)	II. LOCATION OF TANK(S)
Tank Owner Name: <u>Commanding General, MCB</u> <small>(Corporation, Individual, Public Agency, or Other Entity)</small> Street Address: <u>AC/S, EMD, MCB, PSC20004</u> County: <u>Onslow</u> City: <u>Camp Lejeune</u> State: <u>NC</u> Zip Code: <u>28542</u> Tele. No. (Area Code): <u>(910) 451-5837</u>	Facility Name or Company: <u>Building AS142, MCB</u> Facility ID # (if available): <u>S-002740</u> Street Address or State Road: <u>Camp Lejeune</u> County: <u>Onslow</u> City: <u>Camp Lejeune</u> Zip Code: <u>28542</u> Tele. No. (Area Code): <u>(910) 451-5837</u>

III. CONTACT PERSON

Name: Mr. Brian Marshburn Job Title: Environmental Engineer Telephone Number: (910) 451-5837

- IV. TANK REMOVAL, CLOSURE IN PLACE, CHANGE IN SERVICE**
- | | | |
|---|---|--|
| 1. Contact Local Fire Marshall.
2. Plan the entire closure event.
3. Conduct Site Soil Assessments.
4. If Removing Tanks or Closing in Place refer to API Publication 2015 "Cleaning Petroleum Storage Tanks" & 1604 "Removal & Disposal of Used Underground Petroleum Storage Tanks". | 5. Provide a sketch locating piping, tanks and soil sampling locations.
6. Submit a closure report in the format of GW/UST-12 and include the form GW/UST-2 within 30 days following the site investigation.
7. If a release from the tank(s) has occurred, the site assessment portion of the tank | Closure must be conducted under the Supervision of a P.E. or L.G., with all Closure site assessment reports bearing Signature and seal of the P.E. or L.G. If a release has not occurred, the Supervision, signature, or seal of a P.E. Or L.G. is not required.
8. Keep closure records for 3 years. |
|---|---|--|

V. WORK TO BE PERFORMED BY

(Contractor) Name: J.A. Jones Environmental Services, Company
 Address: 6135 Park South Drive Suite 250 Charlotte State: North Carolina Zip Code: 28210
 Contact: Bryan Steiner Phone: (704) 553-3618
 Primary Consultant: Jim Tan P.G. (J.A.J.E.S.) Phone: (704) 553-3379

VI. TANK(S) SCHEDULED FOR CLOSURE OR CHANGE IN SERVICE

TANK ID#	TANK CAPACITY	LAST CONTENTS	PROPOSED ACTIVITY		
			CLOSURE		CHANGE-IN-SERVICE
			Removal	Abandonment In Place	New Contents Stored
<u>AS-142-1</u>	<u>10,000 Gallons</u>	<u>Gasoline</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VII. OWNER OR OWNER'S AUTHORIZED REPRESENTATIVE

Print name and official title
Bryan Steiner Project Engineer
 Signature: _____
 * Scheduled Removal Date: 7/6/99
 Date Submitted: 5/20/99

* If scheduled work date changes, notify your appropriate DWQ Regional Office 48 hours prior to originally scheduled date.

APPENDIX C

Certificate of UST Disposal



J.A. JONES

ENVIRONMENTAL
SERVICES

6135 Park South Drive, Suite 250, Charlotte, NC 28210
(704) 553-3595 / (704) 553-3599

TANK DISPOSAL MANIFEST

1. Tank Owner:

Commanding General, Marine Corps Base, Camp Lejeune, North Carolina
AC/S, Environmental Management Division, MCB, Camp Lejeune, NC 28542

2. Tank Owner / Authorized Representative:

Contact: Mr. Gene Jones
Phone # (910) 451-1482

3. Description of Tanks:

<u>Tank ID No.</u>	<u>Capacity</u>	<u>Previous Content</u>	<u>Comments</u>
AS-142	10,000 Gallons	Gasoline	Fiberglass tank.

4. Tank Owner / Authorized Representative Certification:

The undersigned certifies that the above listed storage tank(s) have been removed from the premises of the tank owner.

EUGENE A JONES
Printed / Typed Name
E.A.J.

[Signature]
Signature

12-13-00
Month/Day/Year

5) Transporter:

The undersigned certifies that the above listed storage tank(s) have been demolished into debris and transported to the landfill, Marine Corps Base, Camp Lejeune, North Carolina.

PEARISLINE HODGES SR
Printed / Typed Name

[Signature]
Signature

12/14/00
Month/Day/Year

6) Disposal Certification:

The undersigned certifies that the above named storage tank(s) have been demolished into debris and accepted by the landfill facility.

Receiving Facility: Landfill, MCB, Camp Lejeune, NC

(910) 451-2946

Joe Powers
Printed / Typed Name

[Signature]
Signature

12/14/00
Month/Day/Year

APPENCIX D

Contaminated Soil Transportation Manifests

NON-HAZARDOUS WASTE MANIFEST

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

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. C E 3 0 G		Manifest Document No. 6 4 9 1 4	2. Page 1 of 1
3. Generator's Name and Mailing Address ACTS Old. 18 142 Campbell Road New River, NC 910-451-1482		4. Generator's Phone (910) 567-6138		5. Transporter 1 Company Name Carlisle Farms	
6. US EPA ID Number NONE		7. Transporter 2 Company Name		8. US EPA ID Number	
9. Designated Facility Name and Site Address Oak Hill Farms 9018 Rays Landing Road P.O. Box 220 Autryville, NC 28318		10. US EPA ID Number N/A		11. WASTE DESCRIPTION a) Non D.O.T. / RCRA Regulated Materials (Contains TPH Soil)	
12. Containers No. Type		13. Total Quantity		14. Unit Wt./Vol.	
		27.43			
15. Special Handling Instructions and Additional Information Emergency Contact (800) 535-5053 Infotrac - Caller Must Identify: Environmental Mgmt. Purchase Order #: 16480		16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.			
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name: Michael Stefka Signature: <i>Michael Stefka</i>		17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name: Sam Cox Signature: <i>Sam Cox</i>		Date: 01/16/01	
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name:		Signature:		Date:	
19. Discrepancy Indication Space		20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19. OAK HILL FARMS Printed/Typed Name: OAK HILL FARMS BY TOM HERGENY Signature: <i>Tom Hergeney</i>			
				Date: 1/16/01	

NON-HAZARDOUS WASTE GENERATOR



NON-HAZARDOUS WASTE MANIFEST

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

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. <i>C E 9 0 G</i>	Manifest Document No. <i>6 4 8 1 5</i>	2. Page 1 of 1
3. Generator's Name and Mailing Address <i>Commanding General ATTN: John Ruggs MARINE CORPS BASE</i>				
<i>Blid. 18-142 Campbell Road River, NC 28543-0004</i>				
4. Generator's Phone (<i>910-451-1482</i>) <i>PSC 20004 CAMP Lejeune NC 28543-0004</i>				
5. Transporter 1 Company Name <i>Carlisle Farms</i>		6. US EPA ID Number <i>NONE</i>	A. State Transporter's ID	
7. Transporter 2 Company Name		8. US EPA ID Number	B. Transporter 1 Phone <i>(910) 567-6128</i>	
9. Designated Facility Name and Site Address <i>Oak Hill Farms 9018 Rays Landing Road P.O. Box 220 Auntryville, NC 28318</i>		10. US EPA ID Number <i>N/A</i>	C. State Transporter's ID	
			D. Transporter 2 Phone	
			E. State Facility's ID	
			F. Facility's Phone <i>(910) 391-5700</i>	
11. WASTE DESCRIPTION		12. Containers No. Type	13. Total Quantity	14. Unit WL/Vol.
a. Non D.O.T. / RCRA Regulated Materials (Contains TPH Soil)			<i>27.00</i>	<i>T</i>
b.				
c.				
d.				
G. Additional Descriptions for Materials Listed Above <i>a) 3/- truck - 157 DL 5426419</i>		H. Handling Codes for Wastes Listed Above <i>a) 301</i>		
15. Special Handling Instructions and Additional Information <i>Emergency Contact (800) 535-5052 Infotrac - Caller Must Identify: Environmental Mgmt. Purchase Order #: 16480</i>				
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.				
Printed/Typed Name <i>Michael Stoffka</i>		Signature <i>Michael Stoffka</i>	Date <i>01/16/01</i>	
17. Transporter 1 Acknowledgement of Receipt of Materials		Signature <i>Lloyd Sessoms</i>	Date <i>01/16/01</i>	
Printed/Typed Name <i>Lloyd Sessoms</i>		Signature	Date	
18. Transporter 2 Acknowledgement of Receipt of Materials		Signature	Date	
Printed/Typed Name		Signature	Date	
19. Discrepancy Indication Space				
20. Facility Owner/Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.		Date		
<i>OAK HILL FARMS</i>				
Printed/Typed Name <i>TOM HERRING</i>		Signature <i>Tom Herring</i>	Date <i>1/16/01</i>	

NON-HAZARDOUS WASTE GENERATOR



NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

CE 509

Manifest Doc. No.

E.4.81.6

2. Page 1

of 1

3. Generator's Name and Mailing Address
 Commanding General
 ATT. John Riggs
 Marine Corps Base
 PSC 20064
 Camp Lejeune NC 28542-
 6. Generator's Phone (910) 451-1492 0004

4. Site: Physical Location

5. Owner of Contamination:

Name:
Address:

Phone #:

7. Transporter 1 Company Name
 Calisto Farms

8. US EPA ID Number

NONE

A. Transporter's Phone

910-567-6128

9. Designated Facility Name and Site Address

ES & J ENTERPRISES Oak Hill Farms
 1555 Holland Rd. 909 Buys Landing Rd. po Box 220 N/A
 Autryville, NC 28318 Autryville, NC 28318 S.R.0.6.0.0.0.3.5.

B. Facility's Phone

391-5700
 (910) 486-8207

11. Waste Shipping Name and Description

12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
	DT	16.00	lbs.
		22	ton minimum

a. Non DOT / RCRA Regulated Materials (Contains petroleum-contaminated soil TPH soil)

D. Additional Descriptions for Materials Listed Above

=) 5/- RWBZ DL 2620911 NC.

E. Handling Codes for Wastes Listed Above

=) S01

15. Special Handling Instructions and Additional Information

Emergency Contact (800) 535-5053 InFotrac - Caller must identify: Environmental Mgmt.
 Purchase order #: 16480

16. 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

Michael Stefka

Signature

Michael Stefka

Month Day Year

10/16/01

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Ronnie Bayles

Signature

Ronnie Bayles

Month Day Year

01/06/01

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

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

Printed/Typed Name

OAK HILL FARMS
 TOM HERRING

Signature

Tom Herring

Month Day Year

11/16/01

ORIGINAL - RETURN TO GENERATOR

GENERATOR

TRANSPORTER

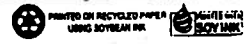
FACILITY

NON-HAZARDOUS WASTE MANIFEST

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

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. C E 3 0 G		Manifest Document No. 6 4 8 1 2	2. Page 1 of 1
3. Generator's Name and Mailing Address Cmd. 18 142 Campbell Road 910-451-1402 MARINE CORPS BASE PSC 20004 CAMP LEJEUNE NC 28542-0004		4. Generator's Phone (704) 559-3395		A. State Transporter's ID	
5. Transporter 1 Company Name Carlisle Farms		6. US EPA ID Number NONE		B. Transporter 1 Phone (910) 567-6138	
7. Transporter 2 Company Name		8. US EPA ID Number		C. State Transporter's ID	
9. Designated Facility Name and Site Address Oak Hill Farms 9018 Rays Landing Road P.O. Box 220 Autryville, NC 28318		10. US EPA ID Number N / A		D. Transporter 2 Phone	
				E. State Facility's ID	
				F. Facility's Phone (910) 391-5700	
11. WASTE DESCRIPTION			12. Containers	13. Total Quantity	14. Unit Wt./Vol.
a. Non D.O.T. / RCRA Regulated Materials (Contains TPH Soil)			No.	Type	
b.					
c.					
d.					
G. Additional Descriptions for Materials Listed Above a) S/-			H. Handling Codes for Wastes Listed Above a) 901		
15. Special Handling Instructions and Additional Information Emergency Contact (800) 535-5053 Infotrac - Caller Must Identify: Environmental Mgmt. Purchase Order #: 16480					
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.					
Printed/Typed Name Michael Stoffka				Signature <i>Michael Stoffka</i>	
17. Transporter 1 Acknowledgement of Receipt of Materials				Date 01 16 01	
Printed/Typed Name Johnny Tanner				Signature <i>Johnny Tanner</i>	
18. Transporter 2 Acknowledgement of Receipt of Materials				Date	
Printed/Typed Name				Signature	
19. Discrepancy Indication Space					
20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.				Date	
Printed/Typed Name OAK HILL FARMS BY TORR HERRING				Signature <i>Torr Herring</i>	
				Date 1 16 01	

NON-HAZARDOUS WASTE GENERATOR



RECEIVED: 1/29/01 2:58PM; -MPL LASHELF 3150; #387; PAGE 3

NON-HAZARDOUS WASTE MANIFEST

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

NON-HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No. <i>C.F. 306</i>	Manifest Document No. <i>54813</i>	2. Page 1 of 1
3. Generator's Name and Mailing Address <i>ATTN: John Riggs Maine Corps Base PSC 20004 CAMP LEJUNE NC 28547-0004</i>			
4. Generator's Phone <i>919-353-3545</i>	6. US EPA ID Number <i>NONE</i>	A. State Transporter's ID	
5. Transporter 1 Company Name <i>Carlisle Farms</i>	8. US EPA ID Number	B. Transporter 1 Phone <i>(010) 567-6128</i>	
7. Transporter 2 Company Name	10. US EPA ID Number <i>N/A</i>	C. State Transporter's ID	
9. Designated Facility Name and Site Address <i>Oak Hill Farms 9018 Rays Landing Road P.O. Box 220 Autryville, NC 28318</i>		D. Transporter 2 Phone	
		E. State Facility's ID	
		F. Facility's Phone <i>(910) 391-5700</i>	

11. WASTE DESCRIPTION	12. Containers		13. Total Quantity	14. Unit Wt./Vol.
	No.	Type		
a. Non D.O.T. / RCRA Regulated Materials (Contains TPH Soil)		D T	28.99	T
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above
a) S/-

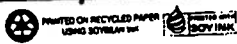
H. Handling Codes for Wastes Listed Above
a) S01

15. Special Handling instructions and Additional Information
Emergency Contact (800) 535-5053 Infotrac - Caller Must Identify: Environmental Mgmt.
Purchase Order #: 16480

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name <i>Michael Stoffka</i>	Signature <i>Michael Stoffka</i>	Date Month Day Year <i>01/16/01</i>
17. Transporter 1 Acknowledgement of Receipt of Materials	Signature <i>Joseph C. Carter</i>	Date Month Day Year <i>01/16/01</i>
18. Transporter 2 Acknowledgement of Receipt of Materials	Signature	Date
19. Discrepancy Indication Space		
20. Facility Owner or Operator, Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.		Date
Printed/Typed Name <i>Oak Hill Farms Tom HERRING</i>	Signature <i>Tom Herring</i>	Month Day Year <i>1/16/01</i>

NON-HAZARDOUS WASTE GENERATOR



NON-HAZARDOUS WASTE MANIFEST

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

Manifest Document No. **64811** 2. Page 1 of 1

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. **CESOG**

3. Generator's Name and Mailing Address

id. 18-142 Campbell Road

**Commanding General
ATTN: John Riggs**

910-451-1482

**MARINE CORPS BASE
PSC 20004
Camp Lejeune, NC 28542-0004**

5. Transporter 1 Company Name

Carlisle Farms

6. US EPA ID Number

NONE

7. Transporter 2 Company Name

8. US EPA ID Number

10. US EPA ID Number

9. Designated Facility Name and Site Address

Oak Hill Farms

**9018 Rays Landing Road P.O. Box 220
Auntryville, NC 28918**

N/A

A. State Transporter's ID

B. Transporter 1 Phone **(910) 567-6138**

C. State Transporter's ID

D. Transporter 2 Phone

E. State Facility's ID

F. Facility's Phone

(910) 391-5700

11. WASTE DESCRIPTION

a) Non D.O.T. / RCRA Regulated Materials (Contains TPH Soil)

12. Containers	13. Total Quantity	14. Unit Wt./Vol.
No. Type		
	23.27	T

D T

23.27

T

G. Additional Descriptions for Materials Listed Above

a) 3/-

H. Handling Codes for Wastes Listed Above

a) S01

15. Special Handling Instructions and Additional Information

**Emergency Contact (800) 535-5053 Infotrac - Caller Must Identify: Environmental Mgmt.
Purchase Order #: 16480**

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name

Michael Stoffka

Signature

Michael Stoffka

Date

01/16/01

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Lloyd Lockamy

Signature

Lloyd Lockamy

Date

01/16/01

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Date

19. Discrepancy Indication Space

20. Facility Owner or Operator, Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

OAK HILL FARMS

Printed/Typed Name

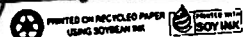
OAK HILL FARMS

Signature

Tom Heering

Date

1/16/01



APPENDIX E

Laboratory Analytical Report for Soil and Groundwater

Lab Report



12/27/00

Page 1 of 6

JA Jones Management Services
Mr. James Tan
6135 Park South Dr, Ste 250
Charlotte, NC 28210

Customer Project ID: 005-53-AS142
Customer Sample ID: AS142-1
Prism Sample ID: AB91801
Login Group: AOD22G6
Sample Collection Date/Time: 12/12/00 15:00
Lab Submittal Date/Time: 12/15/00 11:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
PREP. METHOD 3550	Completed			3550	12/20/00 19:00	JLW
TPH - DIESEL RANGE	Less than	mg/kg	10	8015MOD/3550	12/21/00 08:54	ESR
TPH-GASOLINE RANGE	Less than	mg/kg	1.0	8015MOD/5030	12/20/00 14:35	KC
CALCULATIONS BASED ON DRY WT.	94	% DRY WT.	0.01	SM 2540 G	12/20/00 18:10	JLW

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

Lab Report



12/27/00

Page 2 of 6

JA Jones Management Services
Mr. James Tan
6135 Park South Dr, Ste 250
Charlotte, NC 28210

Customer Project ID: 005-53-AS142
Customer Sample ID: AS142-2
Prism Sample ID: AB91802
Login Group: AOD22G6
Sample Collection Date/Time: 12/12/00 15:02
Lab Submittal Date/Time: 12/15/00 11:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
PREP. METHOD 3550	Completed			3550	12/20/00 19:00	JLW
TPH - DIESEL RANGE	Less than	mg/kg	10	8015MOD/3550	12/21/00 09:29	ESR
TPH-GASOLINE RANGE	6.5	mg/kg	1.0	8015MOD/5030	12/21/00 13:43	KC
CALCULATIONS BASED ON DRY WT.	85	% DRY WT.	0.01	SM 2540 G	12/20/00 18:10	JLW

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

Lab Report



12/27/00

Page 3 of 6

JA Jones Management Services
Mr. James Tan
6135 Park South Dr, Ste 250
Charlotte, NC 28210

Customer Project ID: 005-53-AS142
Customer Sample ID: AS142-3
Prism Sample ID: AB91803
Login Group: AOD22G6
Sample Collection Date/Time: 12/12/00 15:06
Lab Submittal Date/Time: 12/15/00 11:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
PREP. METHOD 3550	Completed			3550	12/20/00 19:00	JLW
TPH - DIESEL RANGE	Less than	mg/kg	10	8015MOD/3550	12/21/00 10:05	ESR
TPH-GASOLINE RANGE	160	mg/kg	100	8015MOD/5030	12/20/00 15:47	KC
CALCULATIONS BASED ON DRY WT.	79	% DRY WT.	0.01	SM 2540 G	12/20/00 18:10	JLW

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

Lab Report



12/27/00

Page 4 of 6

JA Jones Management Services
Mr. James Tan
6135 Park South Dr, Ste 250
Charlotte, NC 28210

Customer Project ID: 005-53-AS142
Customer Sample ID: AS142-4
Prism Sample ID: AB91804
Login Group: AOD22G6
Sample Collection Date/Time: 12/12/00 15:10
Lab Submittal Date/Time: 12/15/00 11:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
PREP. METHOD 3550	Completed			3550	12/20/00 19:00	JLW
TPH - DIESEL RANGE	Less than	mg/kg	10	8015MOD/3550	12/21/00 10:41	ESR
TPH-GASOLINE RANGE	39	mg/kg	25	8015MOD/5030	12/21/00 11:55	KC
CALCULATIONS BASED ON DRY WT.	85	% DRY WT.	0.01	SM 2540 G	12/20/00 18:10	JLW

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

Lab Report



12/27/00

Page 5 of 6

JA Jones Management Services
Mr. James Tan
6135 Park South Dr, Ste 250
Charlotte, NC 28210

Customer Project ID: 005-53-AS142
Customer Sample ID: AS142-5
Prism Sample ID: AB91805
Login Group: AOD22G6
Sample Collection Date/Time: 12/12/00 11:10
Lab Submittal Date/Time: 12/15/00 11:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
PREP. METHOD 3550	Completed			3550	12/20/00 19:00	JLW
TPH - DIESEL RANGE	100	mg/kg	10	8015MOD/3550	12/21/00 11:16	ESR
TPH-GASOLINE RANGE	430	mg/kg	100	8015MOD/5030	12/21/00 14:19	KC
CALCULATIONS BASED ON DRY WT.	94	% DRY WT.	0.01	SM 2540 G	12/20/00 18:10	JLW

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

Lab Report



12/27/00

Page 6 of 6

JA Jones Management Services
Mr. James Tan
6135 Park South Dr, Ste 250
Charlotte, NC 28210

Customer Project ID: 005-53-AS142
Customer Sample ID: AS142-PILE
Prism Sample ID: AB91806
Login Group: AOD22G6
Sample Collection Date/Time: 12/13/00 16:20
Lab Submittal Date/Time: 12/15/00 11:30

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TCLP EXTRACTION (METALS ONLY)	Completed			1311	12/15/00 17:30	PRF
PREP. METHOD 3550	Completed			3550	12/20/00 19:00	JLW
ARSENIC, LEACHABLE	Less than	mg/L	0.50	6010	12/18/00 15:54	MSP
SELENIUM, LEACHABLE	Less than	mg/L	0.10	6010	12/18/00 15:54	MSP
CADMIUM, LEACHABLE	Less than	mg/L	0.10	6010	12/18/00 15:54	MSP
CHROMIUM, LEACHABLE	Less than	mg/L	0.50	6010	12/18/00 15:54	MSP
LEAD, LEACHABLE	Less than	mg/L	0.50	6010	12/18/00 15:54	MSP
SILVER, LEACHABLE	Less than	mg/L	0.50	6010	12/18/00 15:54	MSP
BARIIUM, LEACHABLE	Less than	mg/L	10.00	6010	12/18/00 15:54	MSP
MERCURY, LEACHABLE	Less than	mg/L	0.02	7471	12/18/00 15:23	PRF
MERCURY DIGESTION	Completed			7471	12/18/00 12:15	PRF
TPH - DIESEL RANGE	14	mg/kg	10	8015MOD/3550	12/21/00 11:53	ESR
TPH-GASOLINE RANGE	Less than	mg/kg	10	8015MOD/5030	12/21/00 12:31	KC
METALS DIGESTION	Completed			EPA 3010	12/18/00 12:00	PRF
CALCULATIONS BASED ON DRY WT.	89	% DRY WT.	0.01	SM 2540 G	12/20/00 18:10	JLW

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1
 449 Springbrook Road ▲ Charlotte, NC 28217
 P.O. Box 240543 ▲ Charlotte, NC 28224-0543
 Phone: 704/529-6364 ▲ Fax: 704/525-0409

PRESS DOWN FIRMLY - 3 COPIES

Full Service Analytical & Environmental Solutions

Client J.A. James Environmental Services
 Physical Address 6135 Park South Dr. Ste. 250
Charlotte, NC 28210
 Phone 704-553-3595 Fax 704-553-3329
 P.O.#/Billing Reference
 Project Name 045-53-AS142

REPORT TO: Name James Tan
 Address Same
 BILL TO: Name J.A. Jones Environ.
 Address Same
 Requested Due Date Standard

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER		PRESERVATIVES	ANALYSES REQUESTED	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
				*TYPE SEE BELOW	NO. SIZE					
AS142-1	12/12/00	1500	S	1	402	None	5030 3550 TCR Metals			9180
AS142-2	12/12/00	1502	"	1		"				9180
AS142-3	"	1506	"	1		"				9180
AS142-4	"	1510	"	1		"				9180
AS142-5	"	1110	"	1		"				9180
AS142-pile	12/13/00	1620	"	2		"				9180

Sampler's Signature [Signature] Sampled By (Print Name) James Tan Affiliation _____

Relinquished By: (Signature) _____ Date _____ Military/Hours _____ Additional Comments: _____

Relinquished By: (Signature) _____ Date _____

Relinquished By: (Signature) _____ Date 12-13-00 Log-In Group No. 1130

Method of Shipment: ADDL

NPDES: NC _____ UST: _____ NC _____ GROUNDWATER: _____ DRINKING WATER: _____ SOLID WASTE: _____ OTHER: _____
 SC _____ SC _____ SC _____ OTHER: _____ OTHER: _____
 OTHER _____ OTHER _____ OTHER _____

LAB USE ONLY

Samples INTACT upon arrival? NO N/A
 Received ON WET ICE? Temp _____
 PROPER PRESERVATIVES Indicated?
 Received WITHIN HOLDING TIMES?
 CUSTODY SEALS INTACT?
 VOLATILES rec'd W/OUT HEADSPACE?
 PROPER CONTAINERS used?

State Certification Requested NC _____ SC _____ Other _____ NA _____
 Water Chlorinated Yes _____ No _____
 Sample Iced Upon Collection Yes _____ No _____

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

Lab Report

PRISM
LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

1/4/01

Page 1 of 1

JA Jones Management Services
Mr. James Tan
6135 Park South Dr, Ste 250
Charlotte, NC 28210

Customer Project ID: 05-53-AS142
Customer Sample ID: AS142-6
Prism Sample ID: AB93080
Login Group: AO14G1A
Sample Collection Date/Time: 12/27/00 09:45
Lab Submittal Date/Time: 12/28/00 10:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
PREP. METHOD 3550	Completed			3550	12/28/00 14:30	JMV
TPH - DIESEL RANGE	Less than	mg/kg	10	8015MOD/3550	1/2/01 18:22	ESR
TPH-GASOLINE RANGE	Less than	mg/kg	1.0	8015MOD/5030	1/2/01 23:30	KC
CALCULATIONS BASED ON DRY WT.	95	% DRY WT.	0.01	SM 2540 G	12/29/00 19:10	JLW

Sample Comments:



Angela D. Overcash, V.P. Laboratory Services

Lab Report



1/16/01

Page 1 of 4

JA Jones Management Services
Mr. James Tan
6135 Park South Dr, Ste 250
Charlotte, NC 28210

Customer Project ID: 05-53
Customer Sample ID: AS-142-W
Prism Sample ID: AB94113
Login Group: AO115G2
Sample Collection Date/Time: 1/4/01 15:40
Lab Submittal Date/Time: 1/10/01 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METALS DIGESTION/3030C	Completed			3030C	1/5/01	TAI
LEAD, TOTAL IN GROUNDWATER	0.132	mg/L	0.003	6010	1/6/01 15:09	TAI
BROMODICHLOROMETHANE	Not detected	ug/L	10	EPA 601/602	1/13/01 06:46	WAD
BROMOFORM	Not detected	ug/L	10	EPA 601/602	1/13/01 06:46	WAD
BROMOMETHANE	Not detected	ug/L	50	EPA 601/602	1/13/01 06:46	WAD
CARBON TETRACHLORIDE	Not detected	ug/L	10	EPA 601/602	1/13/01 06:46	WAD
CHLOROBENZENE	Not detected	ug/L	10	EPA 601/602	1/13/01 06:46	WAD
CHLOROETHANE	Not detected	ug/L	50	EPA 601/602	1/13/01 06:46	WAD
CHLOROFORM	Not detected	ug/L	10	EPA 601/602	1/13/01 06:46	WAD
CHLOROMETHANE	Not detected	ug/L	50	EPA 601/602	1/13/01 06:46	WAD
DIBROMOCHLOROMETHANE	Not detected	ug/L	10	EPA 601/602	1/13/01 06:46	WAD
1,2-DICHLOROENZENE	Not detected	ug/L	10	EPA 601/602	1/13/01 06:46	WAD
1,3-DICHLOROENZENE	Not detected	ug/L	10	EPA 601/602	1/13/01 06:46	WAD
1,4-DICHLOROENZENE	Not detected	ug/L	10	EPA 601/602	1/13/01 06:46	WAD
DICHLORODIFLUOROMETHANE	Not detected	ug/L	50	EPA 601/602	1/13/01 06:46	WAD
1,1-DICHLOROETHANE	Not detected	ug/L	10	EPA 601/602	1/13/01 06:46	WAD
1,2-DICHLOROETHANE	Not detected	ug/L	10	EPA 601/602	1/13/01 06:46	WAD
1,1-DICHLOROETHENE	Not detected	ug/L	10	EPA 601/602	1/13/01 06:46	WAD
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	10	EPA 601/602	1/13/01 06:46	WAD
1,2-DICHLOROPROPANE	Not detected	ug/L	10	EPA 601/602	1/13/01 06:46	WAD
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	10	EPA 601/602	1/13/01 06:46	WAD
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	50	EPA 601/602	1/13/01 06:46	WAD
EDB	Not detected	ug/L	10	EPA 601/602	1/13/01 06:46	WAD
METHYLENE CHLORIDE	Not detected	ug/L	50	EPA 601/602	1/13/01 06:46	WAD
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	10	EPA 601/602	1/13/01 06:46	WAD
TETRACHLOROETHENE	Not detected	ug/L	10	EPA 601/602	1/13/01 06:46	WAD
1,1,1-TRICHLOROETHANE	Not detected	ug/L	10	EPA 601/602	1/13/01 06:46	WAD
1,1,2-TRICHLOROETHANE	Not detected	ug/L	10	EPA 601/602	1/13/01 06:46	WAD
TRICHLOROETHENE	Not detected	ug/L	10	EPA 601/602	1/13/01 06:46	WAD
TRICHLOROFLUOROMETHANE	Not detected	ug/L	50	EPA 601/602	1/13/01 06:46	WAD

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

Lab Report



Full Service Analytical & Environmental Solutions

1/16/01

Page 2 of 4

JA Jones Management Services
Mr. James Tan
6135 Park South Dr, Ste 250
Charlotte, NC 28210

Customer Project ID: 05-53
Customer Sample ID: AS-142-W
Prism Sample ID: AB94113
Login Group: AO115G2
Sample Collection Date/Time: 1/4/01 15:40
Lab Submittal Date/Time: 1/10/01 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
VINYL CHLORIDE	Not detected	ug/L	50	EPA 601/602	1/13/01 06:46	WAD
BENZENE	530	ug/L	10	EPA 601/602	1/13/01 06:46	WAD
ETHYLBENZENE	11	ug/L	10	EPA 601/602	1/13/01 06:46	WAD
IPE	Not detected	ug/L	50	EPA 601/602	1/13/01 06:46	WAD
MTBE	420	ug/L	50	EPA 601/602	1/13/01 06:46	WAD
TOLUENE	810	ug/L	10	EPA 601/602	1/13/01 06:46	WAD
TOTAL XYLENES	1300	ug/L	30	EPA 601/602	1/13/01 06:46	WAD
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	10	EPA 601/602	1/13/01 06:46	WAD

C5-C8 Aliphatics	2800	ug/L	1500	MADEP VPH	1/11/01 08:40	KC
C9-C12 Aliphatics	1800	ug/L	1000	MADEP VPH	1/11/01 08:40	KC
C9-C10 Aromatics	1300	ug/L	500	MADEP VPH	1/11/01 08:40	KC
Surrogate % Recovery - PID	99	%	(70-130)	MADEP VPH	1/11/01 08:40	KC
Surrogate % Recovery - FID	123	%	(70-130)	MADEP VPH	1/11/01 08:40	KC
Dilution Factor	10	ug/L		MADEP VPH	1/11/01 08:40	KC

Sample Comments:

Sample for lead analysis subcontracted to NC certified lab #387.

Angela D. Overcash, V.P. Laboratory Services

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name J.A. Jones Management Service Laboratory Name Prism Laboratories, Inc.
 Project Name 05-53 NC Certification # (Lab) 402

Site Location UST A5-142, MCAS, New River, NC
INCLUDE APPROPRIATE UNITS

Sample Identification	AB94113	AB94114
Sample Matrix	Water	Water
Collection Option (for soil)*	N/A	N/A
Date Collected	1/4/01	1/4/01
Date Received	1/10/01	1/10/01
Date Extracted	N/A	N/A
Date Analyzed	1/11/01	1/10/00
Dry Weight	N/A	N/A
Dilution Factor	10	1
C5 - C8 Aliphatics**	2800 ug/L	<150 ug/L
C9 - C12 Aliphatics**	1800 ug/L	<100 ug/L
C9 - C10 Aromatics**	1300 ug/L	<50 ug/L
Surrogate % Recovery - PID	99%	92%
Surrogate % Recovery - FID	123%	93%

* Option 1 = Established fill line on vial Option 2 = Sampling Device (indicate brand, e.g. EnCore) Option 3 = Field weight of soil
 ** Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.

AB94113	AB94114	AB94113	AB94114
Percent Recovery - Fortified Blank (Spike) - PID	NA	NA	96%
Relative Percent Difference - PID Duplicate	NA	NA	5.0%
Percent Recovery - Fortified Blank (Spike) - FID	82%	88%	NA
Relative Percent Difference - FID Duplicate	1.0%	1.0%	NA

Attachment 2

VPH Laboratory Reporting Form

Initial Calibration Date 12/1/00

Calibration Ranges and Limits

Range	MDL	ML	RL
C5 -C8 Aliphatics	47 ug/L	150 ug/L	150 ug/L
C9 - C12 Aliphatics	28 ug/L	89 ug/L	100 ug/L
C9 -C10 Aromatics	10 ug/L	32 ug/L	50 ug/L

NOTE: Please include units as appropriate

Method of Quantitation (circle one): Curve or Average Response Factor

Calibration Concentration Levels

Range	Levels	%RSD or CCC
C5 - C8 Aliphatics	75 ug/L	18%
	187.5 ug/L	
	375 ug/L	
	750 ug/L	
	1125 ug/L	
C9 - C12 Aliphatics	55 ug/L	4.6%
	137.5 ug/L	
	275 ug/L	
	550 ug/L	
	825 ug/L	
C9 - C10 Aromatics	10 ug/L	9.4%
	25 ug/L	
	50 ug/L	
	100 ug/L	
	150 ug/L	

NOTE: Please indicate units as appropriate.

Calibration Check Date 1/10/01

Calibration Check

Range	Level	RPLD
C5-C8 Aliphatics	375 ug/L	13%
C9 - C12 Aliphatics	275 ug/L	16%
C9 -C10 Aromatics	50 ug/L	3.0%

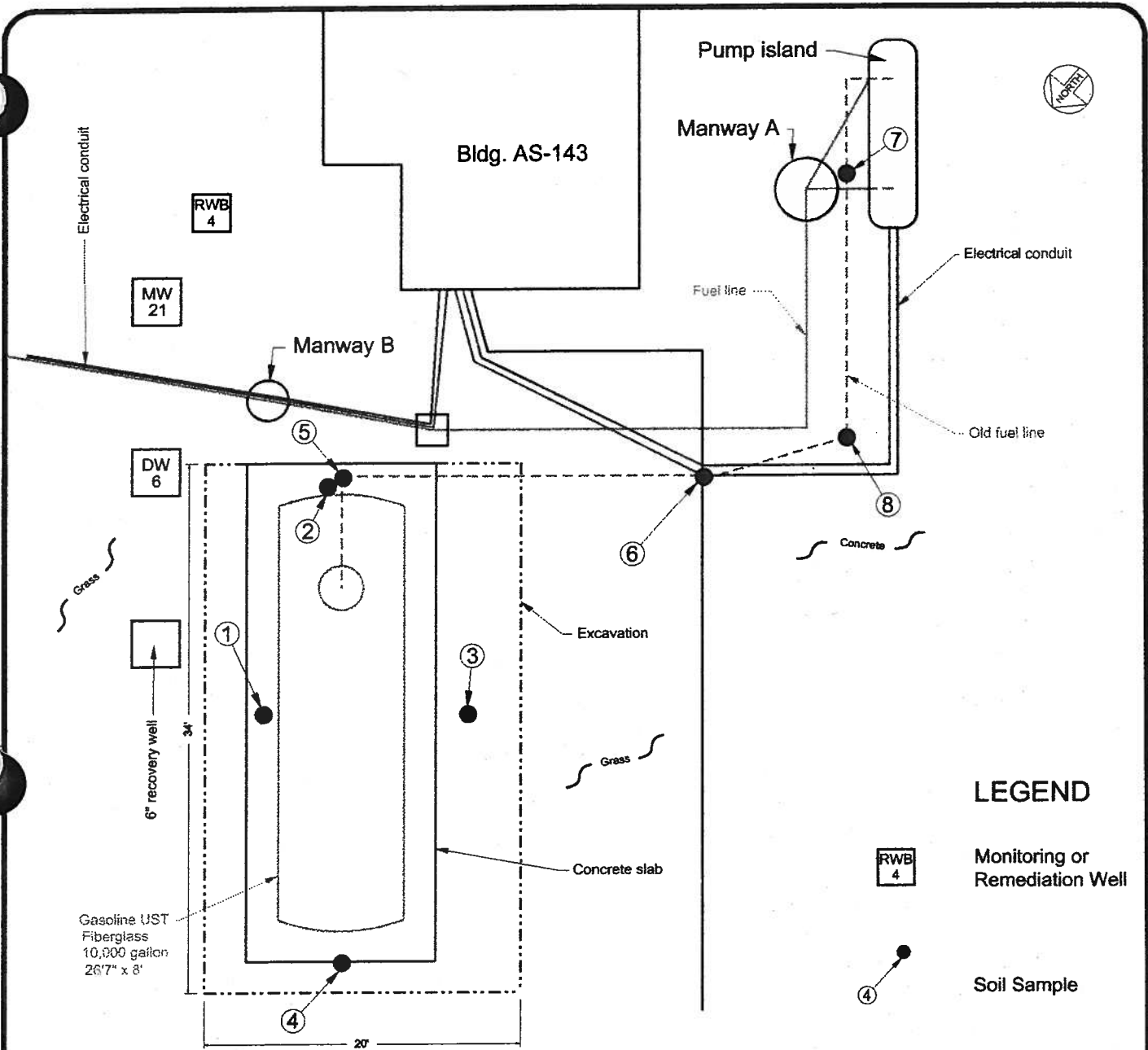
MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve



LEGEND

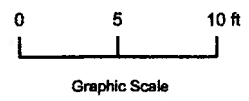


Monitoring or Remediation Well



Soil Sample

- Sample #1: 10' bls, TPH-DRO = BDL; TPH-GRO = BDL
- Sample #2: 10' bls, TPH-DRO = BDL; TPH-GRO = 6.5 ppm
- Sample #3: 10' bls, TPH-DRO = BDL; TPH-GRO = 160 ppm
- Sample #4: 10' bls, TPH-DRO = BDL; TPH-GRO = 39 ppm
- Sample #5: 3' bls, TPH-DRO = 100 ppm; TPH-GRO = 430 ppm
- Sample #6: 2.5' bls, TPH-DRO = BDL; TPH-GRO = BDL
- Sample #7: 2' bls, TPH-DRO = BDL; TPH-GRO = BDL
- Sample #8: 2' bls, TPH-DRO = BDL; TPH-GRO = BDL



Date	Revision	Initials



J.A. JONES
ENVIRONMENTAL SERVICES

CONTRACT #:	N62470-93-D-3033
PROJECT #:	TO 53
DATE:	1/19/2001
DRAWN BY:	J. X. T.
SCALE:	1" = 10'

UST REMOVAL	
MARINE CORPS AIR STATION	
NEW RIVER, NORTH CAROLINA	
UST AS-142	SITE DRAWING

Lab Report



Full Service Analytical & Environmental Solutions

4/23/01

Page 1 of 2

JA Jones Management Services
Mr. James Tan
6135 Park South Dr, Ste 250
Charlotte, NC 28210

Customer Project ID: 05-53
Customer Sample ID: AS142-7
Prism Sample ID: AC04752
Login Group: AO425G2
Sample Collection Date/Time: 4/16/01 09:45
Lab Submittal Date/Time: 4/18/01 10:50

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TPH - DIESEL RANGE	Less than	mg/kg	1.0	8015MOD/3550	4/20/01 01:13	GRR
TPH-GASOLINE RANGE	Less than	mg/kg	1.0	8015MOD/5030	4/19/01 22:35	KC
CALCULATIONS BASED ON DRY WT.	94	% DRY WT.	0.01	SM 2540 G	4/19/01 16:15	JLW
PREP. METHOD 3550	Completed			SW846-3550	4/19/01 13:15	JMV

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

LAB USE ONLY

Samples INTACT upon arrival?
 Received ON WET ICE? Temp _____
 PROPER PRESERVATIVES indicated?
 Received WITHIN HOLDING TIMES?
 CUSTODY SEALS INTACT?
 VOLATILES rec'd W/OUT HEADSPACE?
 PROPER CONTAINERS used?

State Certification: _____
 Requested FL: NC SC Other: NA
 Water Chlorinated: Yes No NA
 Sample Iced Upon Collection: Yes No No
 CMUD: NPDES

PRESS DOWN FIRMLY - 3 COPIES

449 Springbrook Road - Charlotte, NC 28217
 P.O. Box 240543 - Charlotte, NC 28224-0543
 Phone: 704/529-6364 - Fax: 704/525-0409

REPORT TO: Name James Tan

Address State

BILL TO: Name J. A. Jones

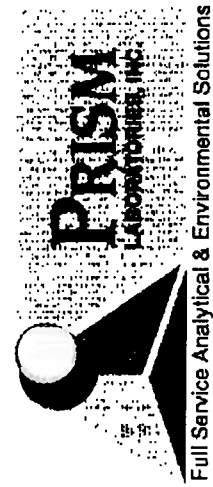
Address State

Requested Due Date 1 Day 2 Days 3 Days 4 Days 5 Days

6-9 Days Standard 10 days

Samples received after 15:00 will be processed the next business day. Turnaround time is based on business days, excluding weekends and holidays.

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)



Client J. A. Jones' Environ
 Physical Address 6135 Park South Dr. ste 250
Charlotte, NC 28210
 Phone 910-253-7746 Fax 910-577-3611
 P.O. Billing Reference
 Project Name 05-53

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER		PRESERVATIVES	ANALYSES REQUESTED	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
				TYPE SEE BELOW	NO. SIZE					
A5142-7	4/16/01	0945	S	1						04752
A5142-8	"	1034	S	1						04753

Sampled By (Print Name) James Tan

Affiliation

Additional Comments:

Sampler's Signature: _____ Date: _____
 Received By: (Signature) _____ Date: _____
 Received By: (Signature) _____ Date: 4/18/01 1050
 Received For Prism Subcontracted By: Stutney Manda
 Lg-In Group No. AO42563

PRISM USE ONLY	
Site Arrival Time:	
Site Departure Time:	
Field Tech Fee:	
Mileage:	

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

Method of Shipment: Fed Ex UPS Hand-delivered Other:

NPDES: NC NC SC OTHER OTHER
 NC NC SC OTHER OTHER
 SC SC OTHER OTHER

RCRA: NC SC OTHER OTHER
 NC SC OTHER OTHER
 SC OTHER OTHER

CERCLA: NC SC OTHER OTHER
 NC SC OTHER OTHER
 SC OTHER OTHER

Landfill: NC SC OTHER OTHER
 NC SC OTHER OTHER
 SC OTHER OTHER

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

APPENDIX F

Photographs of UST Closure Activities

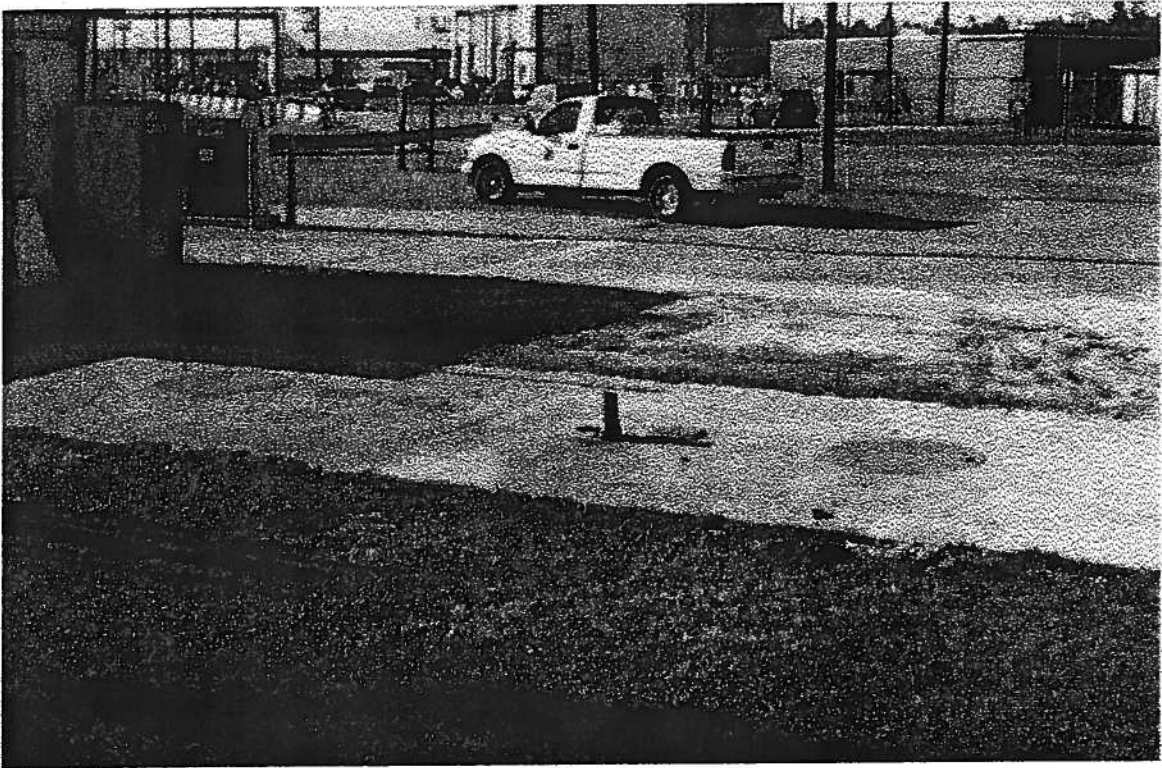


Photo 1 Site view prior to excavation activities

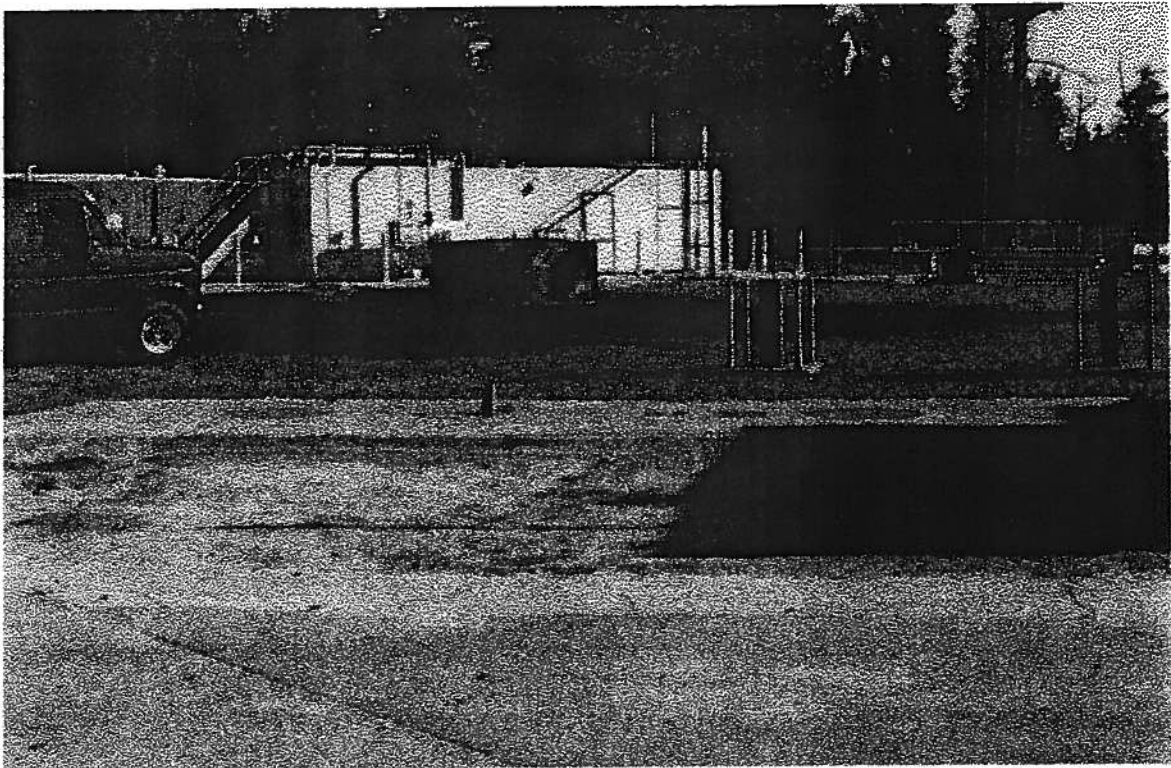


Photo 2 Site view prior to excavation activities



Photo 1 **Site view prior to excavation activities**

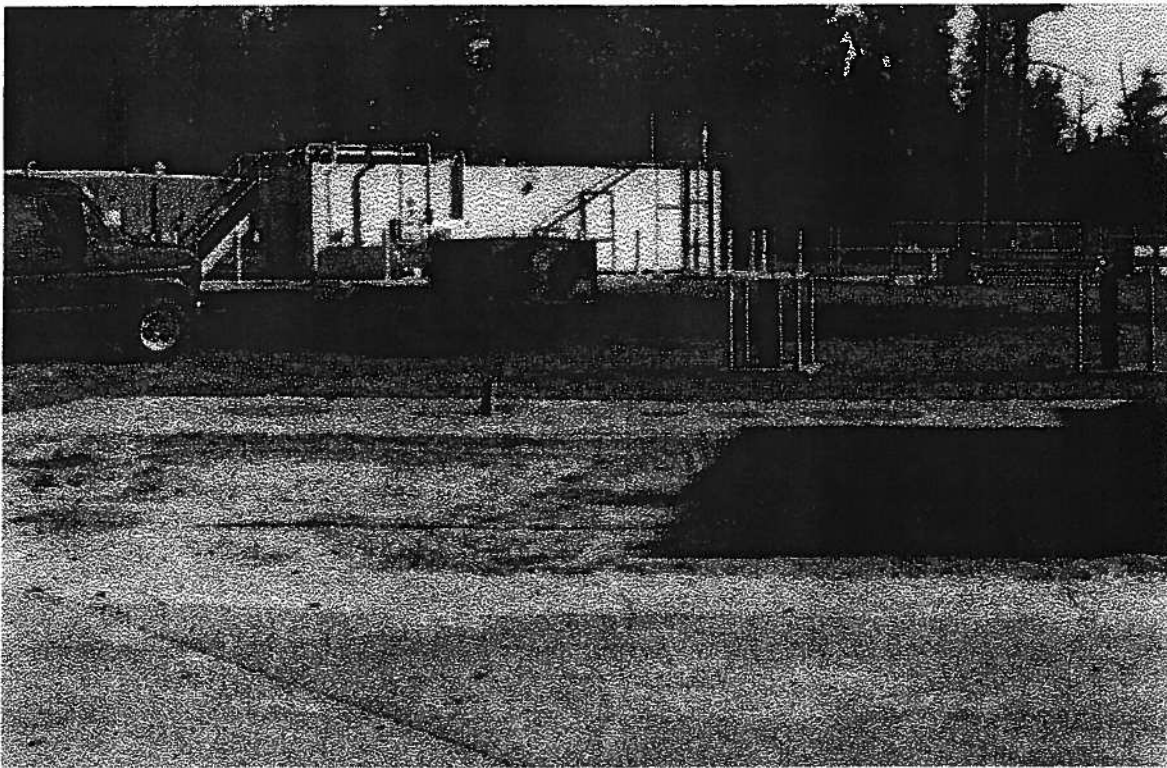


Photo 2 **Site view prior to excavation activities**



Photo 3 Site view prior to excavation activities

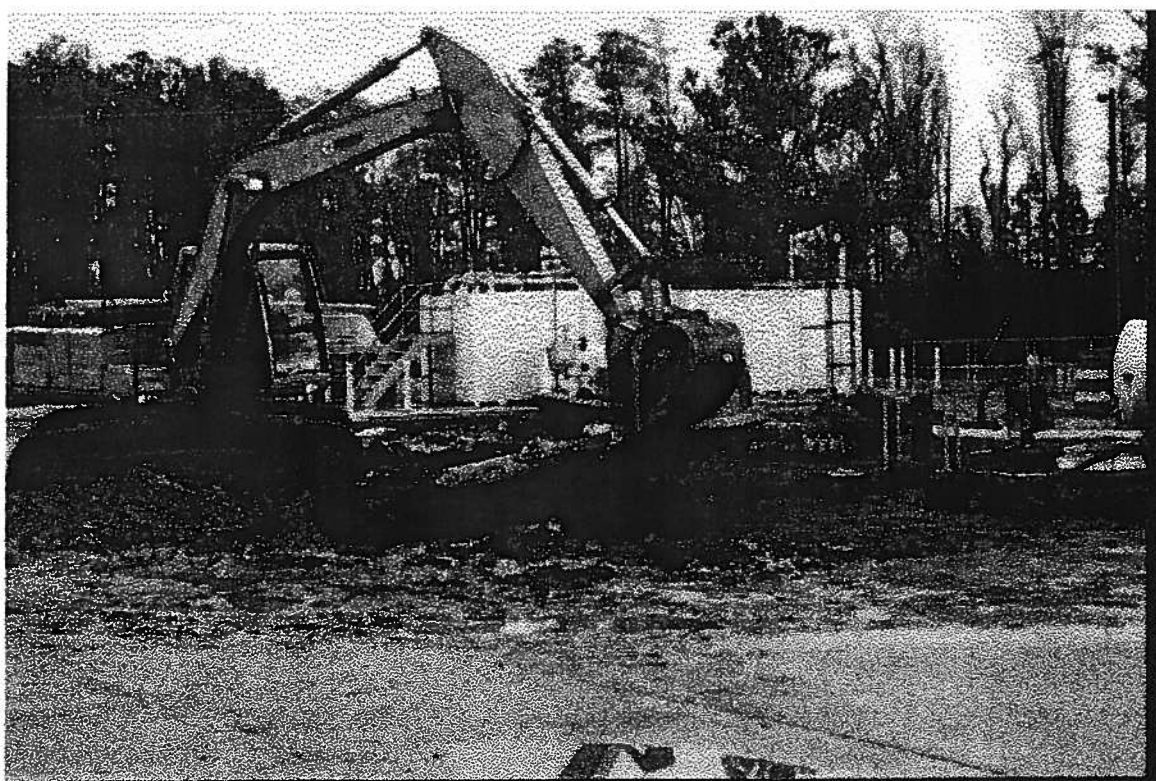


Photo 4 Removing concrete slab

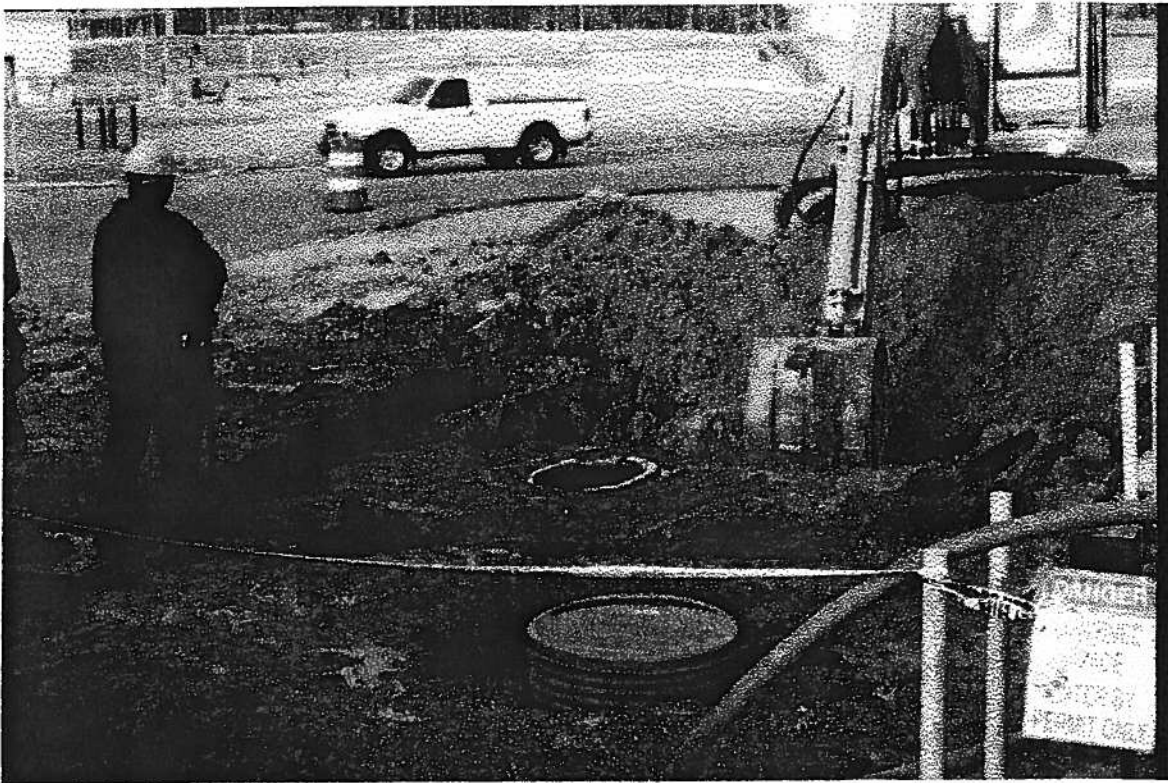


Photo 5 Excavating to expose UST



Photo 6 The fiberglass UST exposed. Note groundwater in excavation pit



Photo 7 The fiberglass UST exposed. Note ground water in excavation pit

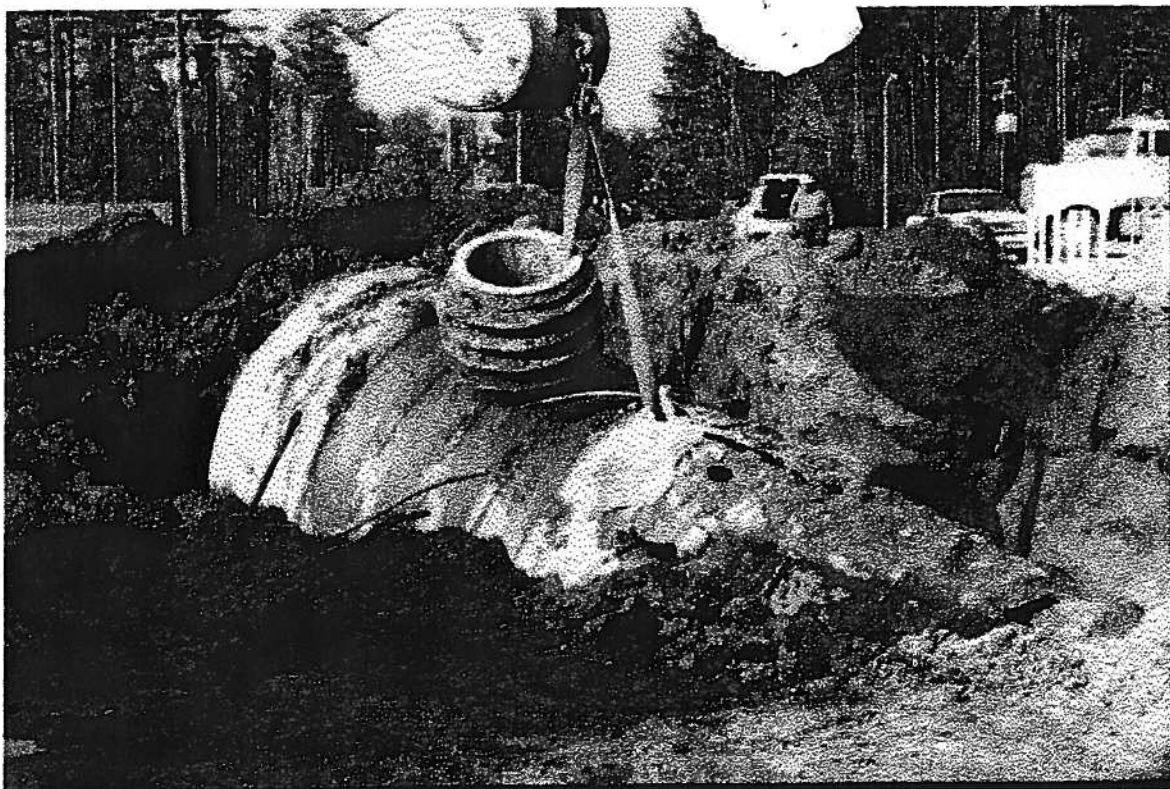


Photo 8 The fiberglass UST is removed out of ground



Photo 9 The excavation is backfilled with clean sand

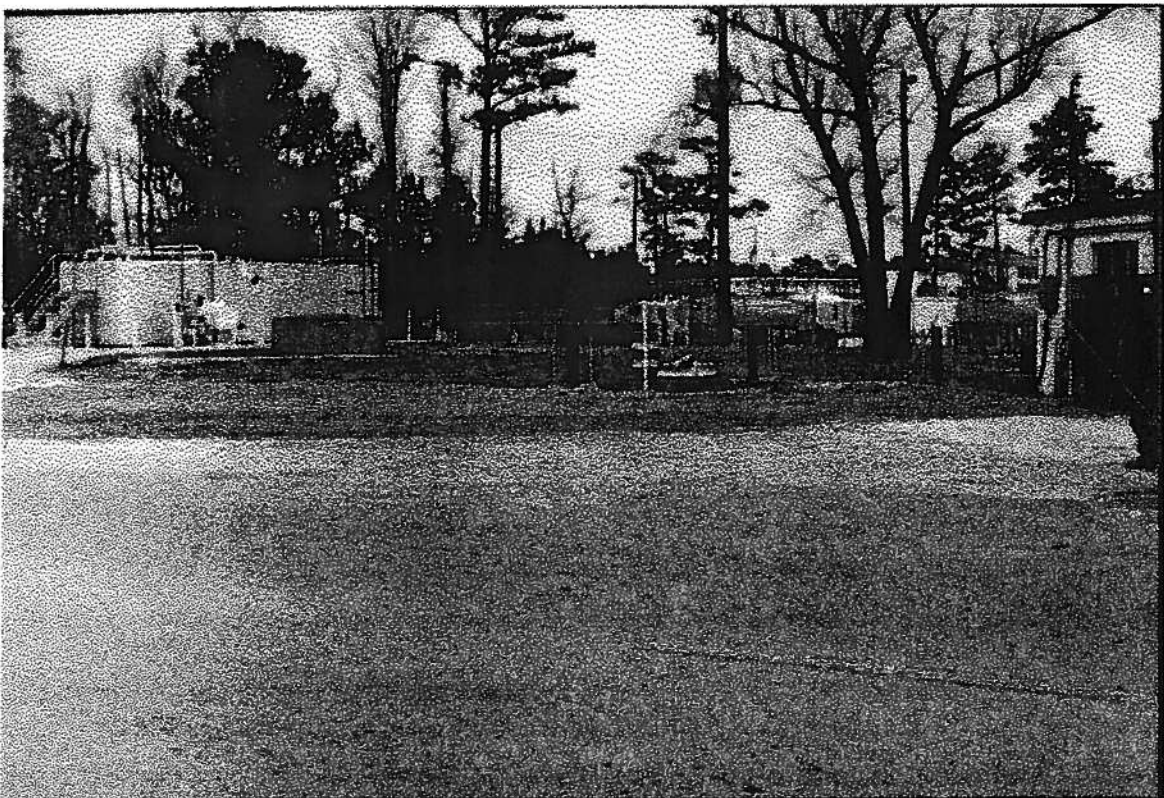


Photo 10 Site view after restoration



Photo 11 The UST is cut into pieces and ready to be transported to landfill



Photo 12 The soil excavated is properly stockpiled