

FOUR SEASONS



Four Seasons Industrial Services, Inc.
3107 South Elm-Eugene Street • P.O. Box 16590
Greensboro, North Carolina 27416-0590
(919) 273-2718 • Fax Number (919) 274-5798

June 16, 1992

P&R Trailer Repair
Post Office Box 7450
Greensboro, North Carolina 27417

Attention: Thurston Reader

Reference: Closure Report for P&R Trailer Repair
2229 Bishop Road
Guilford County, Greensboro, North Carolina

Dear Mr. Reader:

Four Seasons is pleased to provide this summary of the UST closure at the above referenced facility. The petroleum storage system was comprised of the following vessel:

<u>Tank Identification</u>	<u>Capacity (Gal.)</u>	<u>Previous Contents</u>
#1	10,000	Diesel Fuel

In summary, the tank closure methodology consisted of the following phases and includes references to the U.S. EPA's Underground Storage Tank Rules:

Phase I

Removal and proper disposal of all petroleum/sludge/water remaining in the tank (40 CFR 280.71).

Phase II

Excavation, removal, and proper disposal of the underground tank (40 CFR 280.71).

Phase III

Sample and analyze in-situ soils remaining in the excavated pit to assess the nature and extent of soil contamination, if any (40 CFR 280.72).

Phase IV

If soil sampling verifies the presence of contamination, select and implement a remedial action alternative to complete closure (EPA 40 CFR Part 280.72).

Phase V

Submit a project completion summary report documenting closure activities demonstrating compliance with closure requirements (EPA 40 CFR 280.74).

Closure Summary Report
P&R Trailer Repair
Greensboro, NC
Page 2

On March 30, 1992, Four Seasons mobilized the appropriate equipment and personnel to the referenced site to initiate the tank removal program. Prior to excavation, all residual petroleum contents were removed from the vessel utilizing a vacuum truck. A total of 80 gallons of the waste mixture was removed from the storage tank. The manifest document associated with the proper transportation and disposal of the waste is incorporated herein as Appendix A. The waste mixture was subsequently transported to Four Seasons' Patton Avenue facility in Greensboro, North Carolina. This non-hazardous petroleum mixture was subjected to the following treatment process:

- 1) The waste mixture was initially discharged into an oil/water separator.
- 2) The two phases were decanted following the physical separation.
- 3) The removed oils and sludges were blended with lighter distillates and subsequently incinerated in an US EPA approved industrial boiler permitted under number NCD053008926. Four Seasons used fuel program is conducted in compliance with regulations detailed in the Federal Register, Volume 50, No. 230, issued on November 28, 1985.
- 4) To remove the small amount of petroleum from the water phase the contaminated solution was passed through an air stripping column followed by carbon adsorption treatment.

The utilization of this treatment scheme reduced the contaminant levels in the water phase to the low parts per billion range, thereby allowing discharge into the Greensboro Metro Plant, Publicly Operated Treatment Works (POTW).

Following removal of the underground storage tank, the vessel was secured onto a trailer and transported to Four Seasons' Patton Avenue facility in Greensboro, N.C. At this point, the tank was subjected to appropriate decontamination procedures. A thorough inspection of the removed vessel revealed the following:

<u>Tank Identification</u>	<u>Material of Construction</u>	<u>Inspection Results</u>
#1	Carbon Steel	Good Condition

The tank was noted to have had minor corrosion present upon excavation, however, no pitting or holes were detected during the visual inspection.

Following completion of the cleaning and decontamination process, the tank was cut into scrap pieces and subsequently transported to a metal recycling facility. The "Tank Disposal Manifest", included in Appendix A, documents the final disposition of the scrap metal as D.H. Griffin Wrecking Company in Greensboro, NC.

Closure Summary Report
P&R Trailer Repair
Greensboro, NC
Page 3

The closure assessment report is included herein as Appendix B. Contained within this section is a summation of the field investigations, soil sampling, analytical results, recommendations and conclusions.

There is one additional copy of this closure summary report for submittal to the Guilford County Department of Emergency Services. P&R Trailer Repair should review this document then forward the additional copy to the following address:

Emergency Services
Post Office Box 18807
Greensboro, NC 27419
Attention: Kelly Gage

This report meets all the requirements for closure documentation as specified by 40 CFR 280.74. A copy should also be maintained by your office to document closure activities.

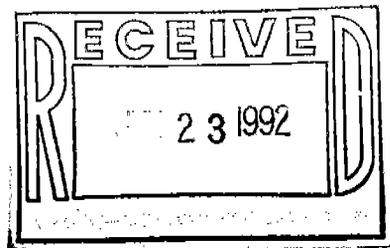
Mr. Reader, thank you for the opportunity to provide these environmental services for P&R Trailer Repair. If you should have any further questions or require additional information, please contact our office.

Sincerely,



Michael G. Stoneman
Corporate UST Program Manager / Staff Geologist

p&r-2
enclosures



**P&R TRAILER REPAIR
GREENSBORO, NORTH CAROLINA**

Summary of Underground Storage Tank Removal Performed
March 1992

Prepared by
Four Seasons Industrial Services, Incorporated

Underground Storage Tank Closure Assessment
P&R Trailer Repair
Greensboro, North Carolina

Field Investigation:

Four Seasons Industrial Services, Inc. was contracted by P&R Trailer Repair to perform the permanent closure of a single underground storage tank located at the Greensboro, NC facility.

The soils above and around the UST were excavated as the tank was removed from the pit. The location of the storage vessel is documented on the site diagram contained herein as Appendix C.

The technician, utilizing an organic vapor analyzer (OVA), screened the excavated soils for emissions of total Volatilized Organic Compounds (VOC's). Soil samples for screening were obtained by placing the soils into a clean container and sealing. The gases in the soils were allowed to equilibrate with the atmosphere in the container for approximately ten minutes. The OVA probe was then inserted into the container and a reading of total VOC's was obtained. OVA readings on soils collected from the overburden, pit walls and floor were negative for the presence of VOC's.

Soil Sampling:

Soil samples were collected from the floor of the pit to document conditions following tank removal. These samples collected from the in-situ soils underlying the vessel were labeled PR-1, PR-2 and PR-3.

Upon collection, all soil samples were placed into laboratory provided glassware, sealed, labeled with a tag identifying job name, job number, sample number, date, time, method of collection, analysis to be conducted, sampler's name, and remarks. All samples were then placed in a cooler and chilled to approximately 4 degrees Celsius before being transported to the laboratory utilizing EPA approved chain-of-custody procedures to ensure sample integrity.

Laboratory Results:

Soil samples that were collected upon removal of the storage tank had the following analytical results for Total Petroleum Hydrocarbons by Gas Chromatograph utilizing EPA Methods 3550 and 5030:

<u>Sample #</u>	<u>Depth</u>	<u>Result</u>
PR-1	15'	*BQL
PR-2	15'	*BQL
PR-3	15'	*BQL

*BQL = Below Quantitation Limit of 10 ug/kg

Recommendations:

Based upon the laboratory results of the three soil samples which were below the DEM action level of 10 mg/kg and the absence of any visual evidence of contamination or petroleum odors. Four Seasons recommends the excavation be considered for clean closure.

Closure Assessment
P&R Trailer Repair
Greensboro, NC
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Conclusions:

Appendix C contains a base map and site diagram whereby sampling locations and pertinent physical structures are documented. Also contained in the appendix is the completed site investigation report for permanent closure or change-in-service of UST.

The pit was backfilled and site restoration activities completed on March 30, 1992.

TEST REPORT NO. A82104

April 9, 1992

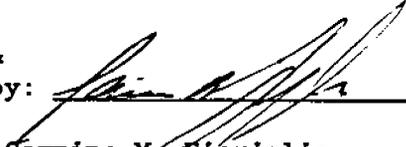
Prepared for:

Four Seasons
3107 South Elm-Eugene Street
Greensboro, NC 27416-0590

Attention: Michael Stoneman

Project: P & R Trailer 92-50084

Reviewed &
Approved by:

Name:  Carmine M. Fioriglio

Title: Technical Manager

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I. Certification

AnalytiKEM, Inc.
Current Certifications/Regulatory Approvals

Tabulated below are the current laboratory certifications that are held by each AnalytiKEM Laboratory. Analyses performed at multiple AnalytiKEM locations will be noted in the test report.

Cherry Hill, NJ		Rock Hill, SC		Houston Analytical, Tx	
State	Cert #	State	Cert #	State	Cert #
Arkansas	*	S. Carolina	46067	N. Dakota	R-006
Connecticut	PH-0715	N. Carolina	316	Oklahoma	8403
Florida	880985G	New Jersey	79795	Texas Water Commission *	
Massachusetts	NJ117			Louisiana *	
New Jersey	04012				
New York	10815				
N. Carolina	258				
N. Dakota	R-038				
Pennsylvania	68366				
S. Carolina	94004				
Tennessee	02908				
Vermont	*				

* No certification numbers are issued for these states.

II. Definition of Terms

<u>Term</u>	<u>Definition</u>
D	Detected; result must be greater than zero.
DI	Deionized Water
J	Compound was detected at levels below the practical quantitation limit. The level reported is approximate.
MS/MSD	Matrix Spike/Matrix Spike Duplicate.
NA	Analysis not applicable to the sample matrix.
ND	Not Detected
NR	Not Requested
NTU	Nephelometric Turbidity Units
RPD	Relative Percent Difference
RSD	Relative Standard Deviation
TON	Threshold Odor Number
U	Compound was analyzed for but not detected. The preceding number is the practical quantitation limit for the compound.
ppb	Parts-per-billion; may be converted to ppm by dividing by 1,000.
ppm	Parts-per-million; may be converted to ppb by multiplying by 1,000.
ug/l	Micrograms of constituent per liter of sample; equivalent to parts-per-billion.
ug/kg	Micrograms of constituent per kilogram of sample; equivalent to parts-per-billion.
ug/kg dw	Micrograms of constituent per kilogram of sample reported on a dry weight basis.
CCC	Calibration Check Compound; used to verify the precision of a GC/MS calibration curve.
SPCC	System Performance Check Compound; used to verify the correct operation of a GC/MS instrument.
PQL	Practical Quantitation Limit; the minimum level at which compounds can be dependably quantitated.
B	Analyte detected in associated blank as well as the sample. It indicates possible/probable blank contamination.

III. Sample Designations

<u>AnalytiKEM Designation</u>	<u>Client Designation</u>	<u>Matrix</u>	<u>Date Sampled</u>
A82104-1	PR-1	Nonaqueous	03/30/92
A82104-2	PR-2	Nonaqueous	03/30/92
A82104-3	PR-3	Nonaqueous	03/30/92

Note: Samples will be held for 30 days beyond the test report date unless otherwise requested.

IV. Methodology

General Gas Chromatography

Petroleum Hydrocarbons

Petroleum Hydrocarbons were analyzed by Gas Chromatography using flame ionization detection on a 6ft. x 2mm ID glass column packed with 10% SP2100 on 100/120 mesh Supelcoport programmed from 65°C to 225°C.

Method 3550, Sonication Extraction, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, Third Edition, USEPA 1986 with all promulgated revisions.

Method 5030, Purge and Trap, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, Third Edition, USEPA 1986 with all promulgated revisions.

V. Analytical Results**AnalytiKEM**General Gas ChromatographyPetroleum Hydrocarbons

<u>Parameter</u>	<u>Method</u> <u>Blank</u>	<u>Sample Designation</u>		
		<u>A82104-1</u> <u>PR-1</u>	<u>A82104-2</u> <u>PR-2</u>	<u>A82104-3</u> <u>PR-3</u>
Jet Fuel	< 10,000	< 10,000	< 10,000	< 10,000
#2 Fuel Oil/Diesel	< 10,000	< 10,000	< 10,000	< 10,000
Kerosene	< 10,000	< 10,000	< 10,000	< 10,000
Gasoline	< 10,000	< 10,000	< 10,000	< 10,000
Units	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)

Note: All compounds reported at levels exceeding the PQL have been confirmed by alternate column GC.

VI. Quality Control Data

AnalytiKEM

General Gas Chromatography

Petroleum Hydrocarbons

Nonaqueous Matrix Spike/Matrix Spike Duplicate Recovery Data

Sample Spiked A82104-2

<u>Parameter</u>	<u>Amount of Spike</u>	<u>Recovery</u>			<u>Control Limits</u>	
		<u>MS</u>	<u>MSD</u>	<u>RPD</u>	<u>Recovery</u>	<u>Max. RPD</u>
#2 Fuel Oil	4,000	109	123	12	75-130	30
Units	(ppb)	(%)	(%)	(%)	(%)	(%)

Sample Spiked A82101-3

<u>Parameter</u>	<u>Amount of Spike</u>	<u>Recovery</u>			<u>Control Limits</u>	
		<u>MS</u>	<u>MSD</u>	<u>RPD</u>	<u>Recovery</u>	<u>Max. RPD</u>
Gasoline	1,000	80	103	25	75-130	30
Units	(ppb)	(%)	(%)	(%)	(%)	(%)

Recovery: 0 out of 4 outside control limits

RPD: 0 out of 2 outside control limits

82104

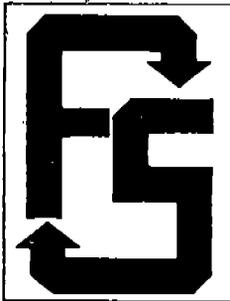
FOUR SEASONS INDUSTRIAL SERVICES, INC. CHAIN OF CUSTODY RECORD

Project Number: 92-50084 Project Name: P&R Trailer Samplers Names: Mike Smith

SAMPLE NUMBER	DATE TAKEN	TIME	LOCATION AREA	Comp Grab	Number of Containers	Requested Parameters	Tag Numbers / Remarks
PR-1	3-30-92	14:30	Pit Bottom	G	1	X	
PR-2	3-30-92	14:30	Pit Bottom	G	1	X	
PR-3	3-30-92	14:30	Pit Bottom	G	1	X	
<p>Send Results to Michael Stoneman</p>							
<p>Field Remarks: Standard Turnaround PO# 92-50084</p>							
						TRH-02 555075022	RESULTS a. Rush Standard b. Verbal Fax Written c. Normal Regulatory

Name: *[Signature]* Date: 3/29/92 Received By: *[Signature]* Date: 3/31/92 Chain Of Custody No. 01242

Name: *[Signature]* Date: Received By: *[Signature]* Date: Master Control Number:



FOUR SEASONS INDUSTRIAL SERVICES, INC.

Post Office Box 16590
Greensboro, North Carolina 27416-0590
(919)273-2718

TANK DISPOSAL MANIFEST

9250084

1)	Tank Owner/Authorized Representative: Name and Mailing Address <u>P.E.K. Trailer Repair</u> <u>2229 - Bishop Rd.</u> <u>Guilford Co.</u>			
2)	Tank Owner/Authorized Representative: Phone No. <u>(919) 855-6305</u>			
3)	Description of Tanks:			
	<u>Tank No.</u>	<u>Capacity</u>	<u>Previous Contents</u>	<u>Comments</u>
	<u>#1</u>	<u>10,000</u>	<u>Diesel fuel</u>	<u>Empty #97</u>
4)	Tank Owner/Authorized Representative Certification: The undersigned certifies that the above listed storage tanks have been removed from the premises of the tank Owner.			
	<u>Mike P Smith</u> Printed/Typed Name	<u>[Signature]</u> Signature	<u>3-30-92</u> Month Day Year	
5)	Transporter: The undersigned certifies that the above listed storage tanks have been transported to the Four Seasons Industrial Services facility at 519 Patton Ave. Greensboro, N.C.			
	<u>Tony Upchurch</u> Printed/Typed Name	<u>Tony Upchurch</u> Signature	<u>3-30-92</u> Month Day Year	
6)	Decontamination Manager: The undersigned certifies that the above listed storage tanks have been cleaned and scrapped.			
	<u>Waymon H. Artry Jr</u> Printed/Typed Name	<u>Waymon H. Artry Jr</u> Signature	<u>3-30-92</u> Month Day Year	
7)	Disposal Certification: The undersigned certifies that the above-named storage tank(s) have been cut into scrap pieces and accepted by the metal recycling facility.			
	Recycling Facility: <u>10 H. Suffer Wrecking Co.</u>			
	<u>Robert Fields</u> Printed/Typed Name	<u>[Signature]</u> Signature	<u>3-31-92</u> Month Day Year	



FOUR SEASONS INDUSTRIAL SERVICES, INC.

Post Office Box 16590
Greensboro, North Carolina 27416
(919) 273-2718

No 8071

NON-HAZARDOUS WASTE MANIFEST

Manifest #

F.S.I.S. JOB # 91-50084

Date: 3-30-92

Generator:

P E R Trailer Repair
2229 Bishop rd
Greensboro, NC 27406

Phone No.: 919 855-6305

EPA ID No.: N/A

Contact: Thurston Reader

Process which generated waste: vst Bottoms

I certify that the materials described below are properly described, classified, packaged, marked & labeled, and are in proper condition to be transported in commerce under the applicable regulations of the State, the Environmental Protection Agency and the Department of Transportation. I certify that the waste described below is non-hazardous. I certify that the specific waste was delivered to the carrier named below for legal treatment, storage, or disposal at the site indicated.

Date

3-30-92

Signature

John N. Reader

Description of waste	Circle Form	Quantity	Circle Units	Container	
				No.	Type
<u>Diesel fuel</u>	Circle Solid Gas Sludge	<u>80</u>	Galons Cu. Yds. Pounds Tons	<u>TT-</u>	<u>1</u>

Transporter:

Four Seasons Ind Ser.
3107 South Elm
Greensboro NC

Unit Number(s)

P-11

Phone No.:

273-2718

EPA ID No.:

NC092122232

Vehicle License Tag Number(s)

217778

Container:

VAC TRUCK

I certify that the specified waste was transferred in a registered (licensed) vehicle to the disposal treatment, storage, or disposal facility named below and was accepted.

Pick-up Driver's Signature

Date

Delivering Driver's Signature

Date

Tony D Bowen 3-30-92

Tony D Bowen 3-30-92

Facility:

Four Seasons Ind Ser.
519 Patton Ave
Greensboro NC

Phone No.

273-2718

Contact:

Wayne Autz

Handling Method:

PT5021

I certify that the transporter above delivered the specified material to this TSD facility and was accepted and properly handled in the above manner. We are authorized and qualified by the State of NC to handle this material.

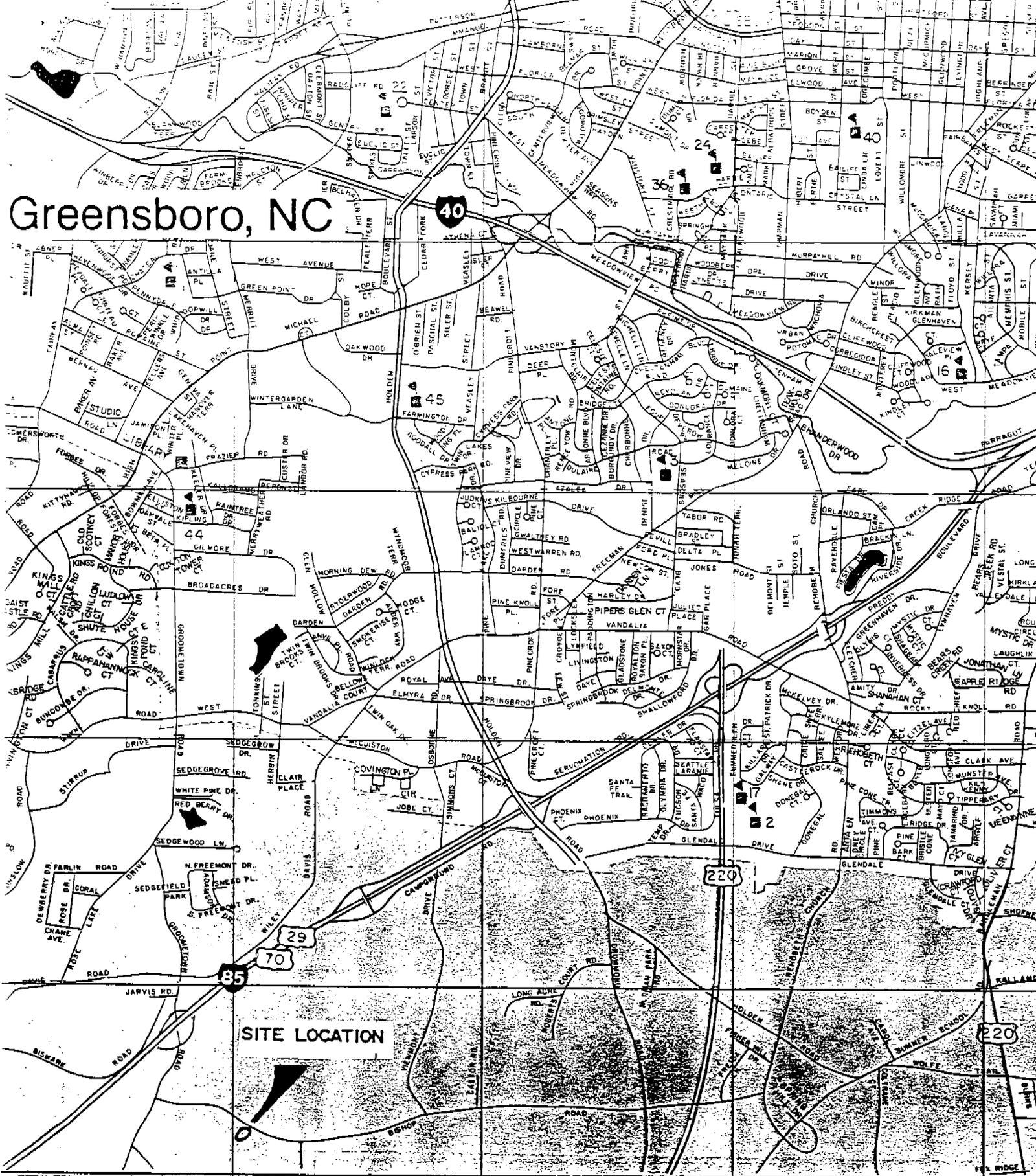
Date

3-30-92

Signature:

Wayne Autz

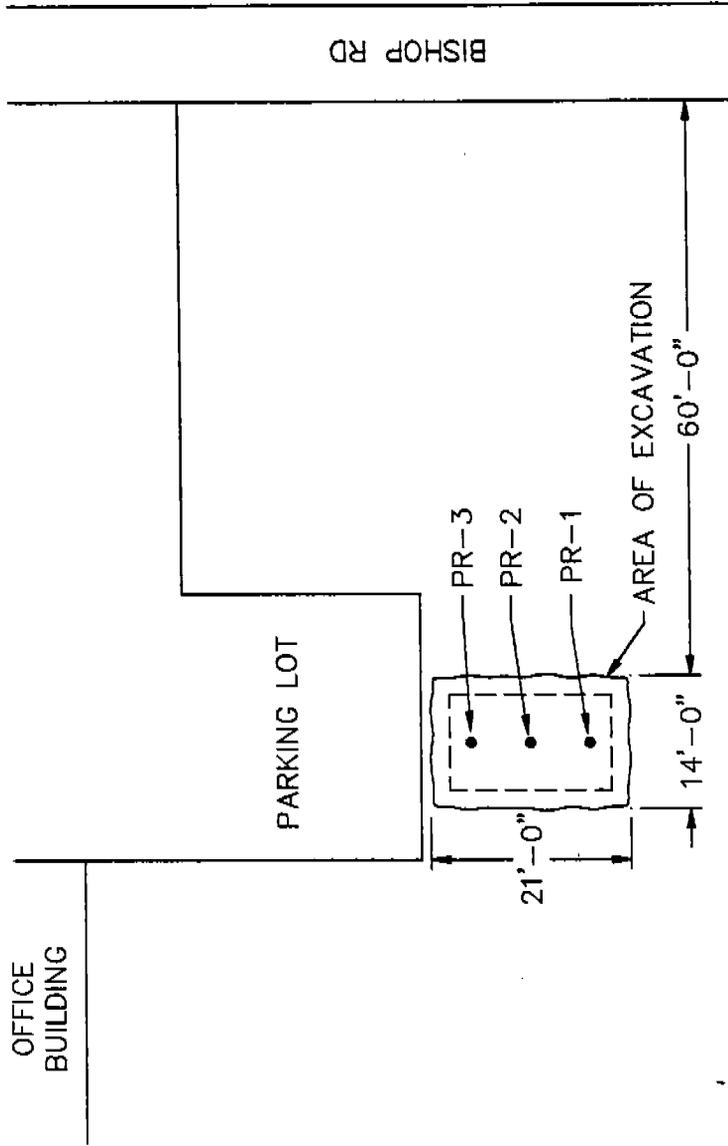
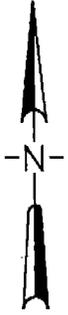
Greensboro, NC



TITLE: **SITE MAP**

CLIENT: **P & R TRAILER REPAIR
GREENSBORO, NC**

FOUR SEASONS
INDUSTRIAL SERVICES, INC.
GREENSBORO, NORTH CAROLINA



SCALE: 1"=20'
DATE: 6-18-92
DWN BY: DRY
DWG.# 3146

TITLE:
SITE PLAN
SOIL SAMPLE LOCATIONS

PROJECT: UST CLOSURE

CLIENT: P & R TRAILER REPAIR GREENSBORO, N.C.

**FOUR SEASONS**
INDUSTRIAL SERVICES, INC.
GREENSBORO, NORTH CAROLINA

(GW/UST-2) Site Investigation Report For Permanent Closure or Change-in-Service of U.S.T.

FOR
TANKS
IN
NC

Return Completed Form To:
The appropriate DEM Regional Office according to the county of the facility's location.
[SEE MAP ON 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)

P+R Trailer Repair
Owner Name (Corporation, Individual, Public Agency or Other Entity)
PO Box 7450
Street Address
Guilford County
County
Greensboro, NC 27417
City
(919) 855-6305 State NC Zip Code
Area Code Telephone Number

II. Location of Tank(s)

P+R Trailer Repair
Facility Name or Company
N/A
Facility ID # (if available)
2229 Bishop Road
Street Address or State Road
Guilford County Greensboro, NC
County
(919) 855-6305 City Zip Code
Area Code Telephone Number

III. Contact Person

Thurston Reader Name Owner Job Title 919-855-6305 Telephone No. (Area Code)
Closure Contractor Four Seasons Industrial Services - G50 (Name) (Address) Telephone No. (Area Code) 919-275-2718
Lab AnalytikEM (Name) 454 S. Anderson Rd Rock Hill, NC (Address) Telephone No. (Area Code) 803-329-9690 Telephone No. (Area Code)

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
#1	10,000	10' x 17'	Diesel Fuel		X		X		X

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

VII. Check List

Check the activities completed.

- Contact local fire marshal
 - Notify DEM 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: 3-30-92
Date of Change-in-Service: N/A

- 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: D.H. Griffin Wrecking Co - Greensboro, NC

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

Michael G. Stoneman (Corp UST Mgr)

Signature

Michael G. Stoneman FS151

Date Signed

6-16-92