

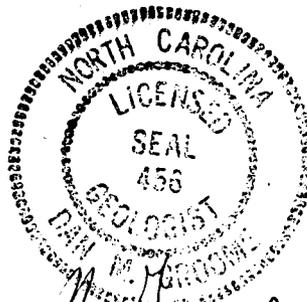
December 30, 1992

Closure Report
30,000 Gallon Fuel Oil UST
Draper Corporation
Hornaday Road
Greensboro, North Carolina

Prepared for:
Mr. Denny Walker
Draper Corporation
Hornaday Road
Greensboro, North Carolina 27419

Prepared By:
Dan M. Groome

Triad Environmental Consultants, Inc.
3519 Clemmons Road
Clemmons, North Carolina 27012



Dan M. Groome

Dan M. Groome, P.G.
(Seal)

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
2.0	PRODUCT REMOVAL PROCEDURES	1
3.0	SOIL REMEDIATION	2
4.0	LABORATORY ANALYSIS	3
5.0	CONCLUSIONS	4

FIGURES

FIGURE 1 - SITE LOCATION MAP

FIGURE 2 - GENERAL SITE PLAN

FIGURE 3 - SOIL SAMPLE LOCATIONS

APPENDICES

APPENDIX I - TANK DISPOSAL DOCUMENTATION

APPENDIX II - PRODUCT DISPOSAL DOCUMENTATION

APPENDIX III - TEC STANDARD EQUIPMENT DECONTAMINATION AND SAMPLE
HANDLING PROCEDURES

APPENDIX IV - LABORATORY RESULTS AND CHAIN OF CUSTODY

APPENDIX V - FORM GW/UST-2

1.0 INTRODUCTION

On December 16, 1992, a 30,000 gallon steel UST (Underground Storage Tank) was removed from the referenced site. A location map of the site is included in this report as Figure 1 and a general site sketch is included as Figure 2. The UST had been used to store #4 fuel oil. The dimensions of the tank were 10.5 feet in diameter by 46.5 feet in length. The top of the tank was approximately three feet below the ground surface. No evidence of perforations in the surface of the UST was visible. The tank was transported to an approved disposal facility and a certification of disposal is provided as Appendix I.

2.0 PRODUCT REMOVAL PROCEDURES

On November 13, 1992, a representative of Triad Environmental Consultants, Inc. checked the UST and discovered product present in the tank. On November 30, 1992, L & M Environmental removed approximately 5700 gallons of product from the tank; however, some product that was too viscous to pump remained in the UST. On December 9, 1992 approximately 300 gallons of diesel fuel was placed in the tank for the purpose of reducing the viscosity of the product. On December 10, 1992, approximately 1000 gallons of product was removed from the UST. On December 11, 1992, removal of the UST was attempted utilizing a 60 ton capacity crane; however, the weight of the tank prevented safe removal and operations were suspended. On December 15, 1992, approximately 450 gallons of diesel fuel were placed in the tank and mixed with the remaining product. Subsequently, approximately 1700 gallons of product were removed.

Disposal manifests for the removed product are included as Appendix II. Removal of the UST occurred on December 16, 1992.

3.0 SOIL REMEDIATION

Upon excavation of the soil surrounding the UST, evidence of product leakage was observed. The source of the leakage appeared to be from the product lines. It was elected to excavate as much impacted soil as possible in an attempt to remove the contamination. However, the presence of an underground natural gas line, underground fire protection lines, overhead power lines and a concrete anchor pad limited excavation. The excavated soils were stockpiled on site in containment areas constructed of polyethylene sheeting. Subsequent to soil excavation, soil samples were obtained from the sidewalls of the excavation. Safety considerations and restricted access limited soil sampling. New, disposable latex gloves were worn during sampling in order to reduce the risk of accidental contamination. Triad Environmental Consultants, Inc.'s standard equipment decontamination and sample handling procedures are included as Appendix III. The locations of the soil samples are shown on Figure 3. The samples were split into duplicates with one part evaluated with an Organic Vapor Analyzer (OVA) and the other part placed in a new, clean jar for laboratory analysis. The results of the OVA analyses are included in Table 1.

Table 1
Soil Sample OVA Analysis
Draper Corporation
Hornaday Road
Greensboro, North Carolina

Sample No.	Sample Depth (Ft.)	OVA Reading (ppm*)
RBS-1-13	13	7
RBS-2-13	13	22
RBS-3-13	13	ND**
RBS-4-13	13	1

* ppm = parts per million
** ND = No Detection

4.0 LABORATORY ANALYSIS

The soil samples were relinquished to a subcontract laboratory and analyzed for Total Petroleum Hydrocarbons (TPH) - EPA Method 3550 and for Oil and Grease - EPA Method 9071. The results of the analyses are summarized in Table 2. A copy of the laboratory results and the associated Chain of Custody are included in Appendix IV.

Table 2

Soil Sample Laboratory Analyses

Draper Corporation
Hornaday Road
Greensboro, North Carolina

Sample No.	Sample Depth (Ft.)	TPH* EPA Method 3550 (mg/kg)**	Oil & Grease EPA Method 9071 (mg/kg)
RBS-1-13	13	1151	1112
RBS-2-13	13	1056	1994
RBS-3-13	13	<10	110
RBS-4-13	13	100	132

* TPH - Total Petroleum Hydrocarbons

Laboratory Detection Limit = 10 mg/kg

** mg/kg = milligrams per kilogram = milligrams per Liter
(or ppm = parts per million)

5.0 CONCLUSIONS

The laboratory analyses indicate that petroleum hydrocarbons remain in place in the area where the UST was previously mounted. The concentrations indicated by the laboratory analyses are above the action levels currently established by the North Carolina Division of Environmental Management, and remedial action of some form is likely to be required.

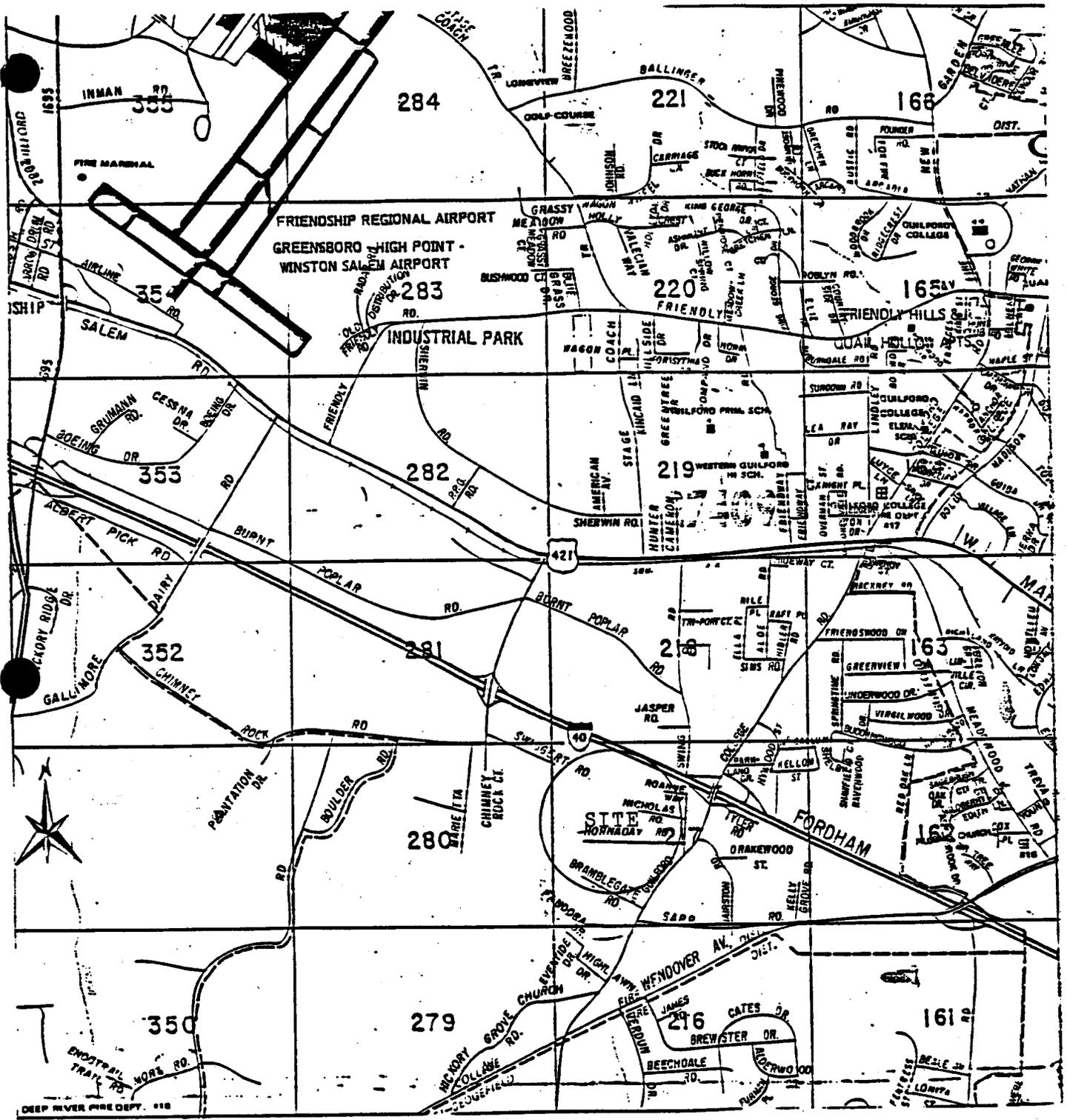


FIGURE 1 : LOCATION MAP

	3319 CLEMONS ROAD CLEMONS, N.C. 27012 TELEPHONE & FAX (919) 786-0810
	DRAPER CORPORATION GREENSBORO, NC
DATE:	DRAWN BY:

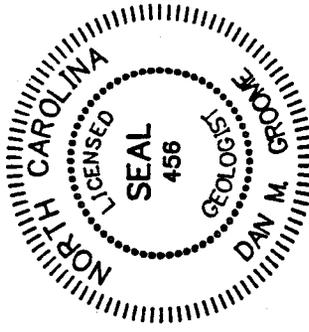
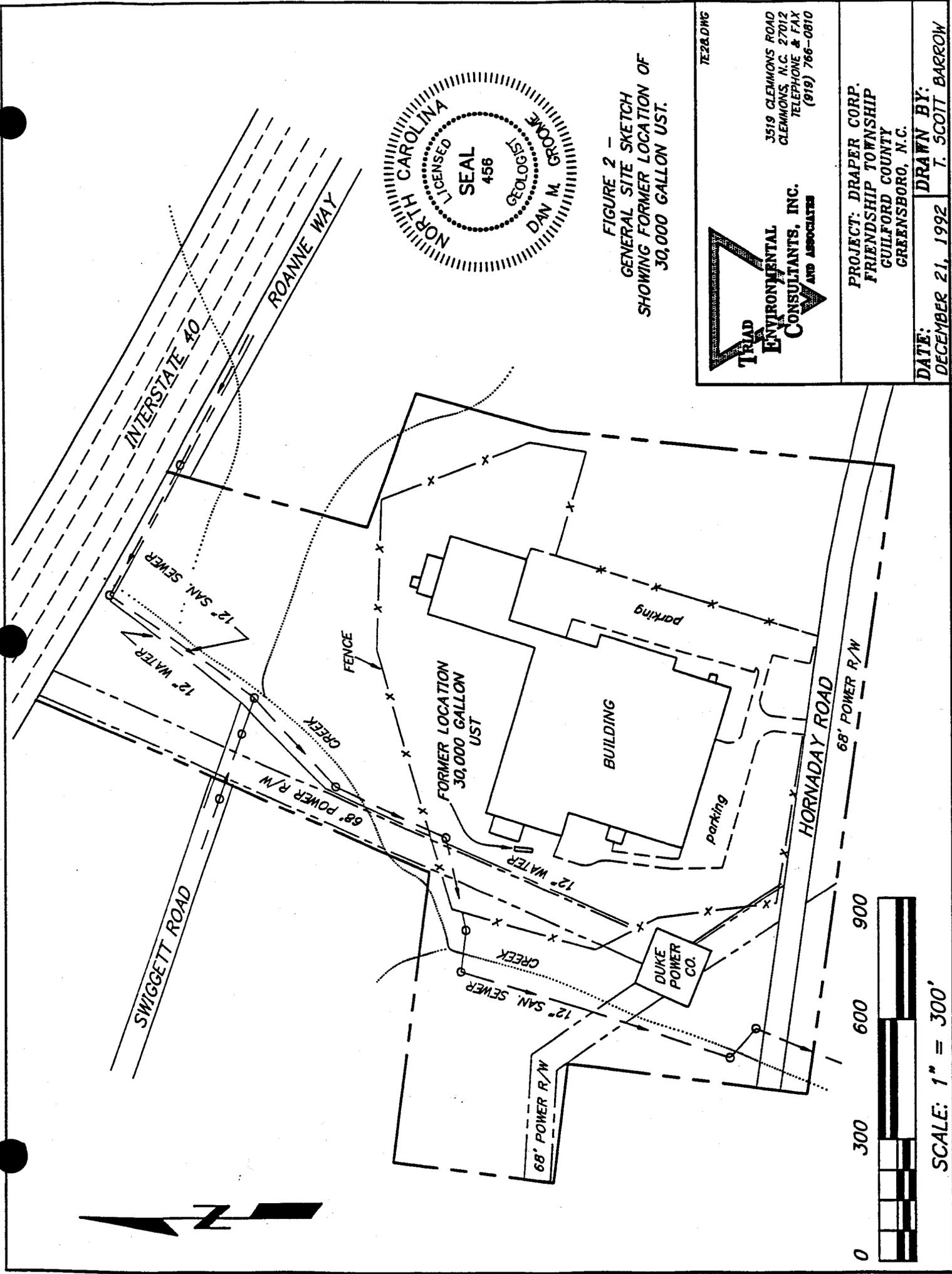


FIGURE 2 -
GENERAL SITE SKETCH OF
SHOWING FORMER LOCATION OF
30,000 GALLON UST.

TE2&D/NG

TRIAD ENVIRONMENTAL CONSULTANTS, INC. AND ASSOCIATES

3519 CLEMMONS ROAD
CLEMMONS, N.C. 27012
TELEPHONE & FAX
(919) 766-0810

PROJECT: DRAPER CORP.
FRIENDSHIP TOWNSHIP
GUILFORD COUNTY
GREENSBORO, N.C.

DATE: DECEMBER 21, 1992
DRAWN BY: T. SCOTT BARROW



SCALE: 1" = 300'

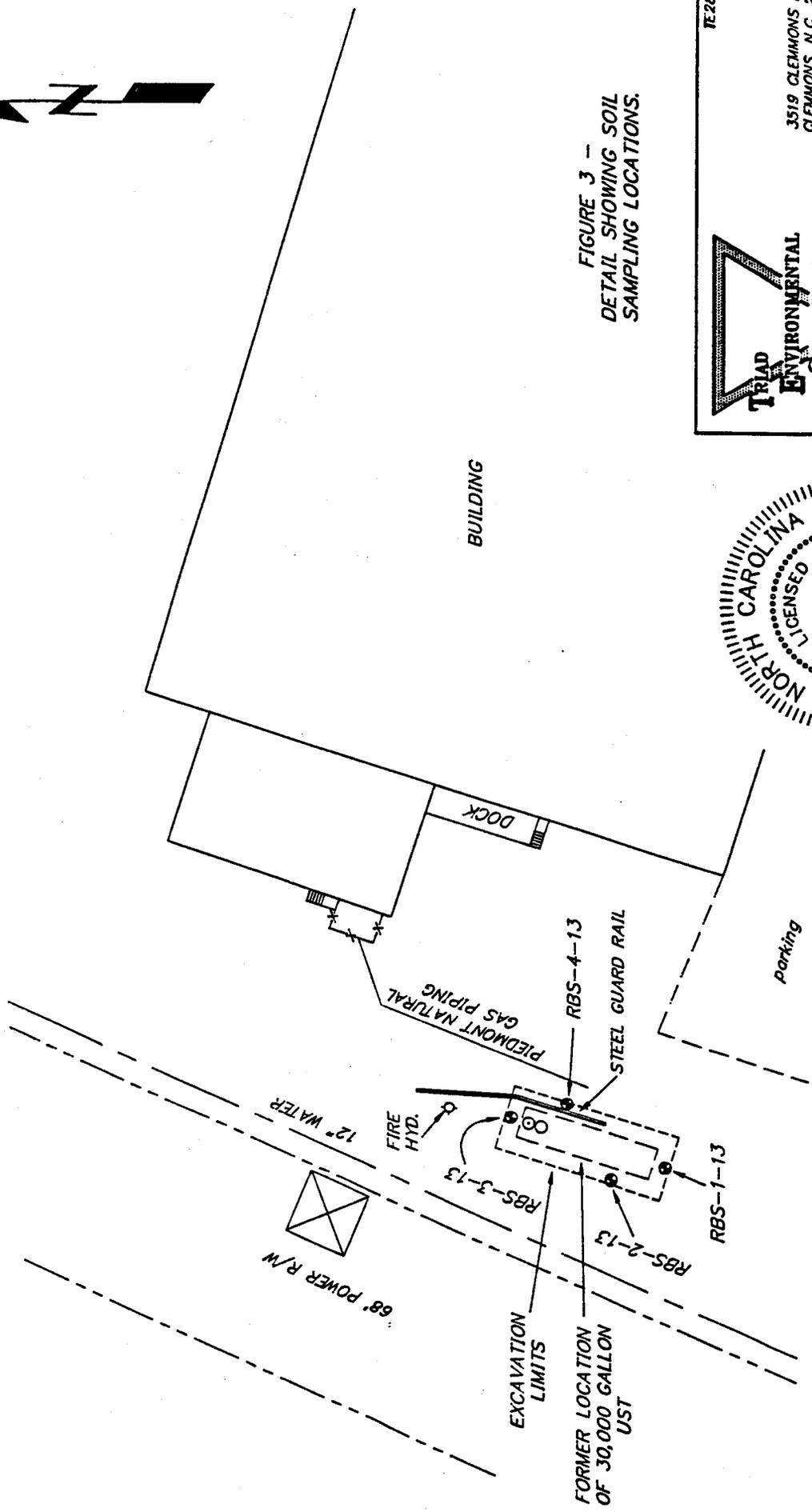
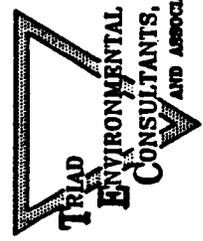


FIGURE 3 -
DETAIL SHOWING SOIL
SAMPLING LOCATIONS.

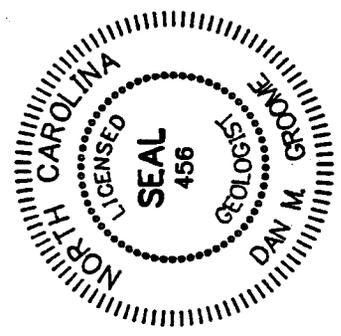
TE28.DWG

3519 CLEMMONS ROAD
CLEMMONS, N.C. 27012
TELEPHONE & FAX
(919) 766-0810



PROJECT: DRAPER CORP.
FRIENDSHIP TOWNSHIP
GUILFORD COUNTY
GREENSBORO, N.C.

DATE: DECEMBER 15, 1992
DRAWN BY: T. SCOTT BARROW



SCALE: 1" = 50'

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

3. Generator's Name and Mailing Address

DRAPER CORP.
P.O. BOX 17100

TRICED ENVIRONMENTAL
CLEMMONS N.C.

4. Generator's Phone ()

GREENSBORO N.C. 27419

5. Transporter 1 Company Name

LEW ENVIRONMENTAL SERV. INC.

6. US EPA ID Number

N.C.D.9.8.1.2.4.3.942

Anthony MAYNARD

7. Transporter 2 Company Name

EASTERN PETROLEUM CORP.

8. US EPA ID Number

G.A.D.9.8.4.2.9.8.1.8.2

9. Designated Facility Name and Site Address

SELLERS OIL CO.
INDUSTRIAL AIR PARK
BAINBRIDGE, GA.

10. US EPA ID Number

G.A.D.0.3.3.5.9.0.5.1.4

A. Transporter's Phone

B. Transporter's Phone (912) 922-9965

C. Facility's Phone

(912) 246-4341

11. Waste Shipping Name and Description

a. #4 #5 & #6 FUEL

12. Containers
No. Type

1
203

#4
FUEL

13. Total Quantity

8400 gal

14. Unit Wt/Vol

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

RECEIVED IN 23,000 TANK CAR LOAD

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

Signature

Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

ANTHONY MAYNARD

Signature

Anthony Maynard 12 15 92

Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

LANE BRYANT

Signature

L B J

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

JOHN STRICKLAND

Signature

John Strickland

Month Day Year

GENERATOR

TRANSPORTER

FACILITY

TRIAD ENVIRONMENTAL CONSULTANTS, INC.

STANDARD DECONTAMINATION AND SAMPLE HANDLING PROCEDURES

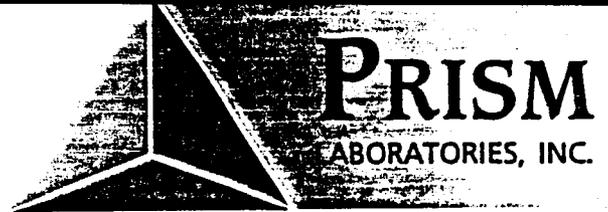
EQUIPMENT DECONTAMINATION, SOIL SAMPLE COLLECTION AND FIELD EVALUATION PROCEDURES

Soil samples for this project were collected using hand augers equipped with stainless steel buckets. The hand augers were either advanced into the native soil at each sampling location or advanced into the center of a bucket collected by the trackhoe excavator. Each sampling location was chosen by a Triad Environmental Consultants, Inc. geologist. The hand augers (the auger bucket and a portion of the lower auger extension) were decontaminated prior to and between each use by the following procedure: A soap and water wash, a tap water rinse, a deionized water rinse, a methanol alcohol rinse and a final rinse with deionized water.

Triad Environmental Consultants personnel wore new, disposable latex gloves during each transfer of soil from the hand auger bucket to the sample containers. Upon collection, each sample was split into two (2) representative portions. One (1) split was tightly packed into a new, laboratory supplied, 120 milliliter glass jar and securely sealed with a Teflon lined cap, labeled and stored in a chilled cooler. The other portion of the sample was placed into a ziplock bag for later field OVA evaluation. This portion of the sample remained sealed in the ziplock bag for at least ten (10) minutes prior to evaluation.

SOIL SAMPLE HANDLING PROCEDURES

To preserve any volatile organic compounds that may be present in soil samples, the samples are handled in the following manner: Immediately after collection, a label is affixed to each sample container. The sample identification number is then noted on the label along with the sampler's name, the time and date of sample collection and type of analysis requested. The samples are then stored in a chilled cooler with frozen reusable ice packs or slush ice for transport to the subcontract laboratory. If transport to laboratory is not immediate, the samples are stored under refrigeration at Triad Environmental Consultants' offices until shipment to the subcontract laboratory can be arranged. The samples are shipped to the laboratory in a chilled cooler to preserve sample integrity. A Chain of Custody record is kept to document sample handling from time of collection until delivery to the laboratory.



Full Service Analytical & Environmental Solutions

December 29, 1992

Triad Environmental
Attn: Steve Johnson
3519 Clemmons Road
Clemmons, NC 27012
Ref: Hornaday

RECEIVED
12/30/92

Draper RBS-1-13, RBS-2-13,
RBS-3-13, RBS-4-13,
M.W.2

Dear Mr. Johnson:

Below are results of analysis of 5 samples received for examination
on December 21, 1992:

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA13812 Prism ID Number 1809A5 Prism Customer Number 6671
Collection Date: 12/18/92 Collection Time: 10:35
Submittal Date: 12/21/92 Submittal Time: 11:05
Customer Sample I.D#: RBS-1-13

Table with 4 columns: TEST PARAMETER, UNITS, TEST RESULT, DETECTION LIMIT. Rows include PETROLEUM HYDROCARBONS #9071 (1112 mg/kg), #3550 (1151 mg/kg), and EPA METHOD 3550 GC FID (done).

Comments:
Project Name: Hornaday

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA13813 Prism ID Number 1809A5 Prism Customer Number 6671
Collection Date: 12/18/92 Collection Time: 10:40
Submittal Date: 12/21/92 Submittal Time: 11:05
Customer Sample I.D#: RBS-2-13

Table with 4 columns: TEST PARAMETER, UNITS, TEST RESULT, DETECTION LIMIT. Rows include PETROLEUM HYDROCARBONS #9071 (1994 mg/kg), #3550 (1056 mg/kg), and EPA METHOD 3550 GC FID (done).

Comments:
Project Name: Hornaday



Triad Environmental
 Page: 2
 December 29, 1992

Full Service Analytical & Environmental Solutions

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
 LAB I.D. AA13814 Prism ID Number 1809A5 Prism Customer Number 6671
 Collection Date: 12/18/92 Collection Time: 10:45
 Submittal Date: 12/21/92 Submittal Time: 11:05
 Customer Sample I.D#: RBS-3-13

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
PETROLEUM HYDROCARBONS, #9071	mg/kg	110.	10.
PETROLEUM HYDROCARBONS, #3550	mg/kg	< 10.	10.
EPA METHOD 3550, GC FID		done	

Comments:
 Project Name: Hornaday

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
 LAB I.D. AA13815 Prism ID Number 1809A5 Prism Customer Number 6671
 Collection Date: 12/18/92 Collection Time: 10:48
 Submittal Date: 12/21/92 Submittal Time: 11:05
 Customer Sample I.D#: RBS-4-13

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
PETROLEUM HYDROCARBONS, #9071	mg/kg	132.	10.
PETROLEUM HYDROCARBONS, #3550	mg/kg	100.	10.
EPA METHOD 3550, GC FID		done	

Comments:
 Project Name: Hornaday

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
 LAB I.D. AA13816 Prism ID Number 1809A5 Prism Customer Number 6671
 Collection Date: 12/18/92 Collection Time: 13:00
 Submittal Date: 12/21/92 Submittal Time: 11:05
 Customer Sample I.D#: MW-2

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
----------------	-------	-------------	-----------------

Multicomponent analysis: HALOGENATED VOLATILE ORGANICS

VINYL CHLORIDE	ug/L	Not Det	50
TRICHLOROFLUORO-METHANE	ug/L	Not Det	5
1,1-DICHLOROETHENE	ug/L	Not Det	1

Chain of Custody Record

TRIAD ENVIRONMENTAL CONSULTANTS, INC.
AND ASSOCIATES

3519 Clemmons Road
 Clemmons, NC 27012
 Telephone & FAX
 (919) 766-0810

PROJECT	SITE	ANALYSES	NO. OF CONTAINERS	SAMPLE MATRIX		DATE/TIME	REMARKS	SAM ID NO. (for lab use only)
				FIELD SAMPLE I.D.				
Drafter Corporation		EPA 9031 EPA 9560 EPA 9560 EPA 9560 EPA 9560		Soil	12-18-92/1035	✓		13812
Hornaday Road Greensboro, NC.				Soil	12-18-92/1040	✓		13813
COLLECTED BY (Signature) Dan M. Dutton				Soil	12-18-92/1045	✓		13814
				Soil	12-18-92/1048	✓		13815
				water	12-18-92/1200	✓		13816
REMARKS PRUSH RESULTS RECEIVED BY: <i>Kathleen Johnson</i> RELINQUISHED BY: <i>Don M. Dutton</i> DATE/TIME: 12/18/92 11:00 AM DATE/TIME: 12/18/92 1:00 PM RECEIVED BY: <i>Janet Williams, Sr.</i> RELINQUISHED BY: <i>Janet Williams, Sr.</i> DATE/TIME: 12/18/92 10:00 AM DATE/TIME: 12/18/92 10:00 AM								

RECEIVED FOR LABORATORY BY: <i>Janet Williams, Sr.</i>		DATE: 12/18/92	TIME: 10:00	AIRBILL NO.:	LAB USE ONLY
REMARKS:		DATE: 12/18/92	TIME: 10:00	SEAL:	CONCATION: GOOD

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):

II. Location of Tank(s):

Owner Name: Draper Corporation, Hornaday Road PO Box 18100, Guilford, Greensboro NC 27419, 919-852-4200

Facility Name or Company: Draper corporation, Hornaday Rd, Guilford Greensboro, NC 27419, 919-852-4200

III. Contact Person:

Mr. Denny Walker, Vice President, Administration, 919-852-4200, Triad Environmental Cons, Prism Laboratories PO Box 240543 Charlotte, NC 28224

IV. UST Information:

V. Excavation Conditions:

VI. Additional Information Required:

Table with columns: Tank No., Size in Gallons, Tank Dimensions, Last Contents, Water in Excavation, Free Product, Notable Odor or Visible Soil Contamination.

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.

- 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: Safeway Tank, Disposal Colfax, 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 information submitted is true, accurate, and complete.

Print name and official title of owner or owners authorized representative, Signature, Date Signed