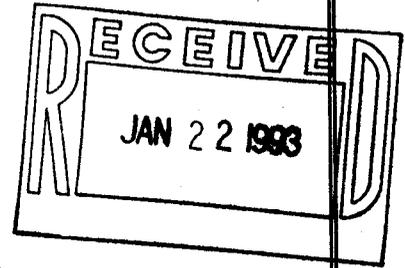


December 23, 1992.



Closure Report  
20,000 Gallon Diesel Fuel 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, P.G.  
(Seal)

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## 1.0 INTRODUCTION

A 20,000 gallon steel underground storage tank (UST) was removed from the subject site on December 11, 1992. The location of the site is shown on Figure 1. A general site sketch is shown on Figure 2. The UST had previously been utilized to store diesel fuel. The dimensions of the UST were 10.5 feet in diameter by 31 feet in length. The top of the tank was approximately four feet below the surface. The tank was inerted with dry ice and monitored with an Industrial Scientific Model MX241 oxygen monitor prior to removal. The tank was transported to an approved disposal facility and documentation of disposal is included in this report as Appendix I.

## 2.0 SOIL SAMPLING

Initial excavation was performed on December 9, 1992. During this time it was determined that the UST was mounted on top of a concrete pad. Three (3) soil samples (BS-1-14, BS-2-14 and BS-3-14) were obtained from the native soils adjacent to the edge of the concrete pad at the locations shown on Figure 3. The samples were obtained directly from the excavator bucket. Disposable latex gloves were worn during sampling to reduce the chances of cross contamination. Additionally, a hand auger was utilized to obtain a soil sample (HB-4-1) from the former location of the product dispenser. Three (3) additional soil samples (BS-8-14, BS-9-14 and BS-10-14) were obtained on

December 14, 1992. The soil samples were divided into representative duplicates with one part being evaluated with an Organic Vapor Analyzer (OVA) and the other part placed in new, clean jars for laboratory analysis. The OVA analysis indicated no detection of organic vapors on any of the samples. The soil samples were immediately placed in a chilled cooler after collection and refrigerated while being held at Triad Environmental Consultants, Inc.'s office. Triad Environmental Consultants, Inc.'s standard decontamination and sample handling procedures are included in this report as Appendix II.

### **3.0 Laboratory Analysis**

The soil samples were submitted to a subcontract laboratory and analyzed by EPA Method 3550 GC - Total Petroleum Hydrocarbons (TPH) and by EPA Method 5030 GC - Total Petroleum Fuel Hydrocarbons (TPFH). The results of the analyses are summarized in Table 1. A copy of the laboratory report as well as the associated Chain of Custody record is included in Appendix III.

**Table 1**  
**Soil Sample Laboratory Analyses**  
**20,000 Gallon Underground Storage Tank**

**Draper Corporation**  
**Hornaday Road**  
**Greensboro, North Carolina**

Sample No.	Sample Depth (Ft.)	TPH* EPA Method 3550 (mg/kg)**	TPFH+ EPA Method 5030 (mg/kg)
BS-1-14	14	<10	<1
BS-2-14	14	<10	<1
BS-3-14	14	60	<1
HB-4-1	1	46	<1
BS-8-14	14	<10	<1
BS-9-14	14	<10	<1
BS-10-14	14	<10	<1

\* TPH - Total Petroleum Hydrocarbons

Laboratory Detection Limit = 10 mg/kg

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

+ TPFH - Total Petroleum Fuel Hydrocarbons

Laboratory Detection Limit = 1 mg/kg

#### 4.0 Conclusions

The laboratory results indicate that there are petroleum hydrocarbons present in the areas where samples HA-4-1 and BS-3-14 were obtained. However, the concentrations are relatively low, and it does not appear that an extensive release has occurred. Remediation may or may not be required depending on the results of a site sensitivity evaluation. We understand that the guidelines for performing a site sensitivity evaluation and the resulting action levels determined by the site sensitivity evaluation are presently under review by the North Carolina Division of Environmental Management (NCDEM).

NEED SITE SENSITIVITY EVALUATION

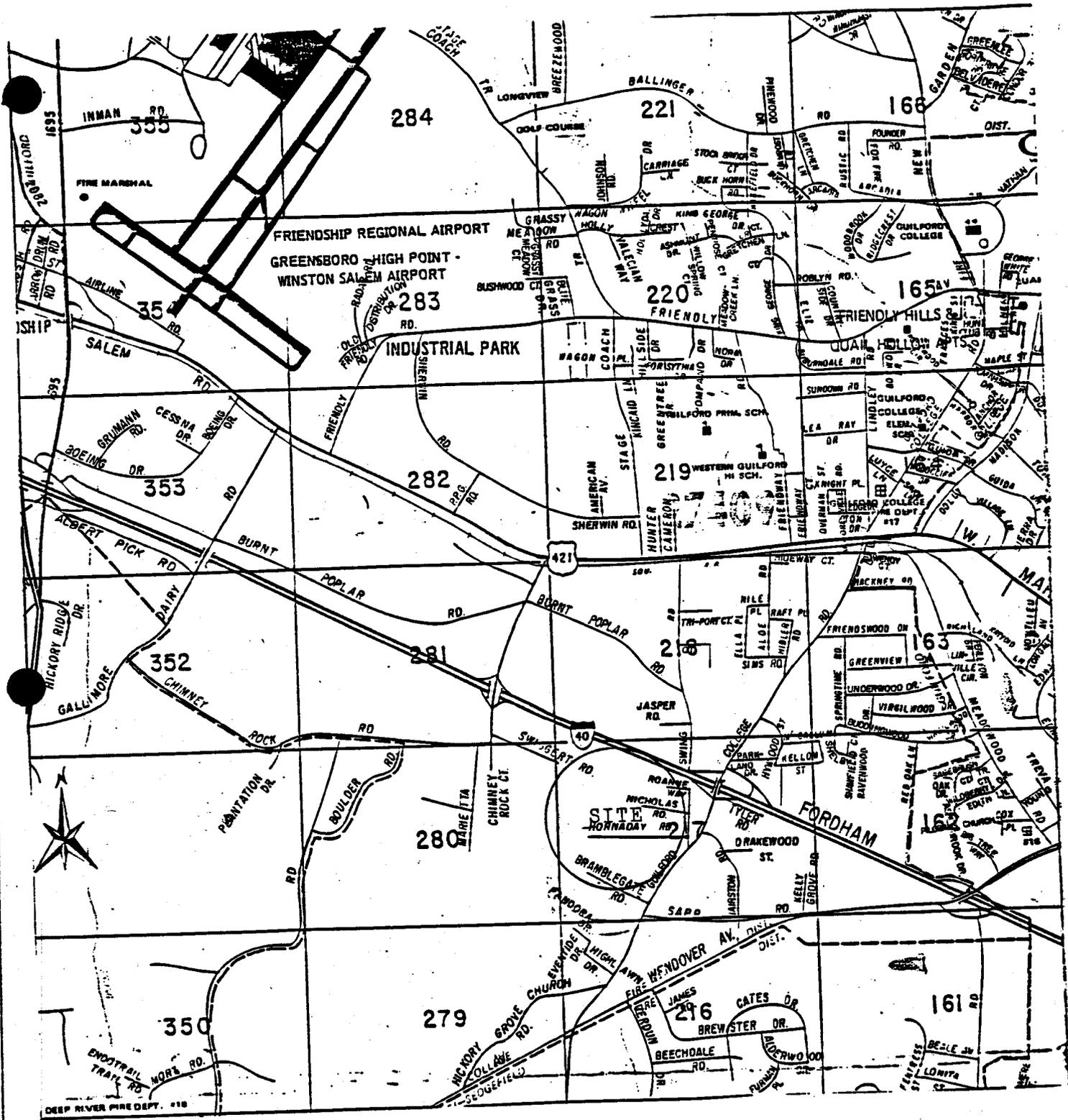


FIGURE 1 : LOCATION MAP



3319 CLEMONS ROAD  
 CLEMONS, N.C. 27012  
 TELEPHONE & FAX  
 (919) 786-0810

DRAPER CORPORATION  
 GREENSBORO, NC

DATE: \_\_\_\_\_ DRAWN BY: \_\_\_\_\_

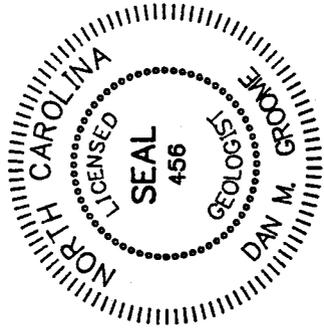
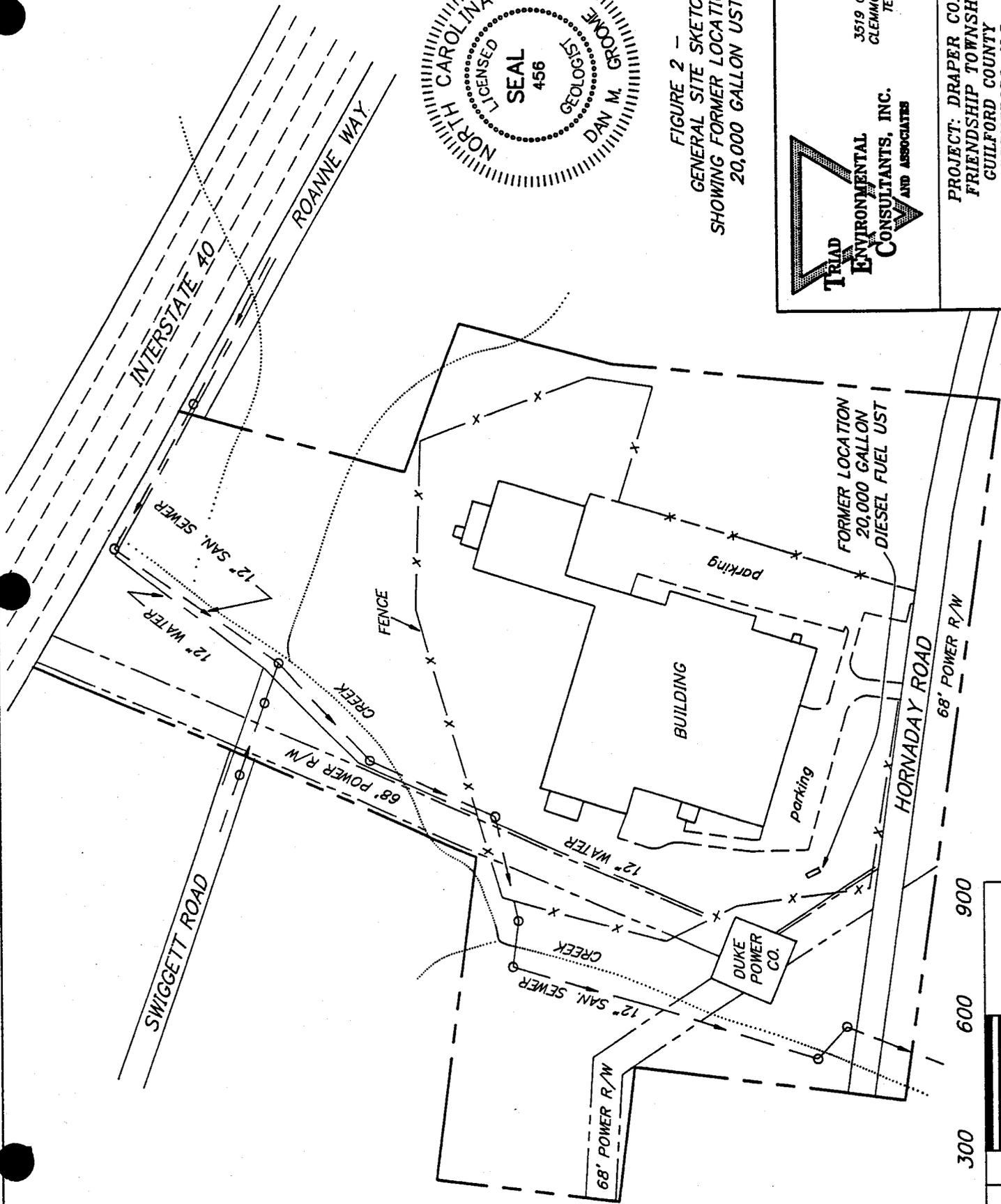


FIGURE 2 -  
GENERAL SITE SKETCH  
SHOWING FORMER LOCATION OF  
20,000 GALLON UST.

TE28.DWG

**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'

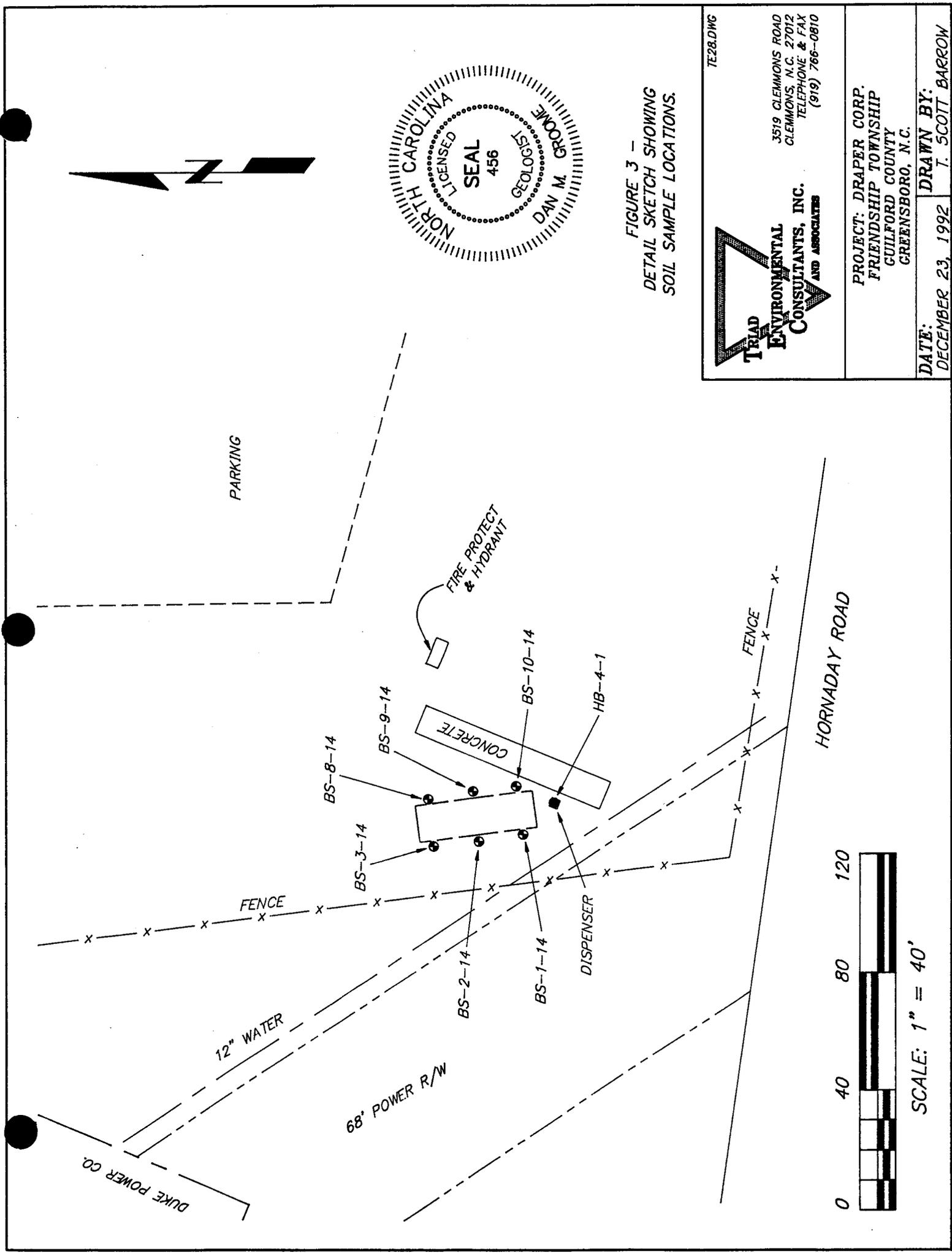


FIGURE 3 -  
DETAIL SKETCH SHOWING  
SOIL SAMPLE LOCATIONS.

TE28.DWG

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

**TRIAD ENVIRONMENTAL CONSULTANTS, INC. AND ASSOCIATES**

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

DATE: DECEMBER 23, 1992

DRAWN BY: T. SCOTT BARROW



SCALE: 1" = 40'



**TRIAD ENVIRONMENTAL CONSULTANTS, INC.**

**STANDARD DECONTAMINATION AND  
SAMPLE HANDLING PROCEDURES**

**EQUIPMENT DECONTAMINATION, SOIL SAMPLE COLLECTION AND FIELD  
EVALUATION PROCEDURES**

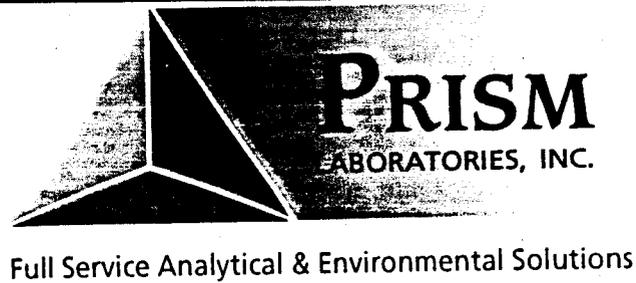
Soil samples for this project were collected using hand augers equipped with stainless steel buckets. The hand augers were either advanced into the native soil at each sampling location or advanced into the center of a bucket collected by the trackhoe excavator. Each sampling location was chosen by a 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.

# Lab Report



December 30, 1992

RECEIVED  
12 92

Triad Environmental  
Attn: Steve Johnson  
3519 Clemmons Road  
Clemmons, NC 27012  
Ref: Draper Corp.

Dear Mr. Johnson:

Below are results of analysis of 7 samples received for examination on December 17, 1992:

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810  
LAB I.D. AA13786 Prism ID Number 1802A7 Prism Customer Number 6671  
Collection Date: 12/09/92 Collection Time: 10:00  
Submittal Date: 12/17/92 Submittal Time: 12:00  
Customer Sample I.D#: BS-1-14

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
PETROLEUM HYDROCARBONS, #3550	mg/kg	< 10.	10.
PETROLEUM HYDROCARBONS, #5030	mg/kg	< 1.	1.
EPA METHOD 3550, GC FID		done	
EPA METHOD 5030, GC FID		done	

Comments:

Project Name: Draper Corporation

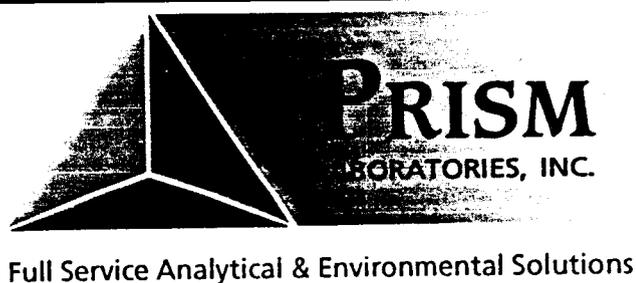
Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810  
LAB I.D. AA13787 Prism ID Number 1802A7 Prism Customer Number 6671  
Collection Date: 12/09/92 Collection Time: 10:15  
Submittal Date: 12/17/92 Submittal Time: 12:00  
Customer Sample I.D#: BS-2-14

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
PETROLEUM HYDROCARBONS, #3550	mg/kg	< 10.	10.
EPA METHOD 5030, GC FID		done	
EPA METHOD 3550, GC FID		done	
PETROLEUM HYDROCARBONS, #5030	mg/kg	< 1.	1.

Comments:

Project Name: Draper Corporation

# Lab Report



Triad Environmental  
Page: 2  
December 30, 1992

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810  
LAB I.D. AA13788 Prism ID Number 1802A7 Prism Customer Number 6671  
Collection Date: 12/09/92 Collection Time: 10:20  
Submittal Date: 12/17/92 Submittal Time: 12:00  
Customer Sample I.D#: BS-3-14

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
PETROLEUM HYDROCARBONS, #5030	mg/kg	< 1.	1.
PETROLEUM HYDROCARBONS, #3550	mg/kg	60.	10.
EPA METHOD 5030, GC FID		done	
EPA METHOD 3550, GC FID		done	

Comments:  
Project Name: Draper Corporation

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810  
LAB I.D. AA13789 Prism ID Number 1802A7 Prism Customer Number 6671  
Collection Date: 12/09/92 Collection Time: 10:50  
Submittal Date: 12/17/92 Submittal Time: 12:00  
Customer Sample I.D#: HB-4-1

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
PETROLEUM HYDROCARBONS, #3550	mg/kg	46.	10.
PETROLEUM HYDROCARBONS, #5030	mg/kg	< 1.	1.
EPA METHOD 5030, GC FID		done	
EPA METHOD 3550, GC FID		done	

Comments:  
Project Name: Draper Corporation

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810  
LAB I.D. AA13790 Prism ID Number 1802A7 Prism Customer Number 6671  
Collection Date: 12/14/92 Collection Time: 10:05  
Submittal Date: 12/17/92 Submittal Time: 12:00  
Customer Sample I.D#: BS-9-14

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
PETROLEUM HYDROCARBONS, #5030	mg/kg	< 1.	1.

# Lab Report



Triad Environmental  
Page: 3  
December 30, 1992

Sample AA13790 (continued)

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
PETROLEUM HYDROCARBONS, #3550	mg/kg	< 10.	10.
EPA METHOD 5030, GC FID		done	
EPA METHOD 3550, GC FID		done	

Comments:  
Project Name: Draper Corporation

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810  
LAB I.D. AA13791 Prism ID Number 1802A7 Prism Customer Number 6671  
Collection Date: 12/14/92 Collection Time: 10:15  
Submittal Date: 12/17/92 Submittal Time: 12:00  
Customer Sample I.D#: BS-10-14

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
PETROLEUM HYDROCARBONS, #3550	mg/kg	< 10.	10.
PETROLEUM HYDROCARBONS, #5030	mg/kg	< 1.	1.
EPA METHOD 5030, GC FID		done	
EPA METHOD 3550, GC FID		done	

Comments:  
Project Name: Draper Corporation

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810  
LAB I.D. AA13792 Prism ID Number 1802A7 Prism Customer Number 6671  
Collection Date: 12/14/92 Collection Time: 10:00  
Submittal Date: 12/17/92 Submittal Time: 12:00  
Customer Sample I.D#: BS-8-14

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
PETROLEUM HYDROCARBONS, #3550	mg/kg	< 10.	10.
PETROLEUM HYDROCARBONS, #5030	mg/kg	< 1.	1.
EPA METHOD 5030, GC FID		done	
EPA METHOD 3550, GC FID		done	

Comments:  
Project Name: Draper Corporation

# Lab Report



Triad Environmental  
Page: 4  
December 30, 1992

Full Service Analytical & Environmental Solutions

Please advise should you have questions concerning these data.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "A. Overcash", is written over the typed name.

Angela D. Overcash  
Laboratory Manager

PROJECT	SITE	NO. OF CONTAINERS	ANALYSES		REMARKS	SAM ID NO. (for lab use only)
			TRH-EPA 550	TRH-EPA 530		
FIELD SAMPLE I.D.	SAMPLE MATRIX	DATE/TIME	NO. OF CONTAINERS	ANALYSES	REMARKS	SAM ID NO.
BS-1-14	Soil	12-9-92/10:00	1	✓		13786
BS-2-14	Soil	12-9-92/10:15	1	✓		13787
BS-3-14	Soil	12-9-92/10:20	1	✓		13788
116-4-1	Soil	12-9-92/10:50	1	✓		13789
BS-9-14	Soil	12-14-92/10:05	1	✓		13790
BS-10-14	Soil	12-14-92/10:15	1	✓		13791
BS-8-14	Soil	12-14-92/10:15	1	✓		13792
REMARKS						
RECEIVED BY: <i>Anthony J. Lee</i>	DATE: 12/14/92	TIME: 9:00 AM	RECEIVED BY: <i>Janis D. Williams</i>	DATE: 12/14/92	TIME: 10:15 AM	RELINQUISHED BY: <i>Don M. Dillard</i>
RECEIVED FOR LABORATORY BY: <i>Richard Scott</i>	DATE: 12/17/92	TIME: 10:15 AM	RECEIVED BY: <i>Janis D. Williams</i>	DATE: 12/17/92	TIME: 10:15 AM	RELINQUISHED BY: <i>Janis D. Williams</i>

LAB USE ONLY

RECEIVED FOR LABORATORY BY: <i>Richard Scott</i>	DATE: 12/17/92	TIME: 10:15 AM	RECEIVED BY: <i>Janis D. Williams</i>	DATE: 12/17/92	TIME: 10:15 AM	RELINQUISHED BY: <i>Janis D. Williams</i>	DATE: 12/17/92	TIME: 10:15 AM	TEMP: C	SEAL: #	CONDITION
REMARKS:											

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)

Owner Name (Corporation, Individual, Public Agency, or Other Entity) Draper Corporation
Street Address Hornaday Road PO Box 18100
County Guilford
City Greensboro NC 27419
Area Code 919-852-4200 Telephone Number

II. Location of Tank(s)

Facility Name or Company Draper corporation
Facility ID # (if available)
Street Address or State Road Hornaday Rd.
County Guilford Greensboro, NC 27419
Area Code 919-852-4200 Telephone Number

III. Contact Person

Mr. Denny Walker Vice President, Administration 919-852-4200
Closure Contractor Triad Environmental Cons 3519 Clemmons Rd Clemmons NC 919-766-0810
Lab Prism Laboratories PO Box 240543 Charlotte, NC 28224 704-525-0409

IV. U.S.T. Information

V. Excavation Condition

VI. Additional Information Required

Table with columns: Tank No., Size in Gallons, Tank Dimensions, Last Contents, Water in Excavation (Yes/No), Free Product (Yes/No), Notable Odor or Visible Soil Contamination (Yes/No). Row 1: 20000, 10.5'x31', Diesel Fuel, No, No, No, 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.

- Checked items: 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.

- 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 submitted information is true, accurate, and complete.

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

Signature

Date Signed