TRIAD
ENVIRONMENTAL
CONSULTANTS, INC.
AND ASSOCIATES

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

RECEIVED
N.C. Dept. of EHNR
SEP 17 1993
Winston-Salem
Regional Office

September 17, 1993

Ms. Sherri V. Knight
Regional Groundwater Supervisor
NCDEHNR-NCDEM
8025 North Point Blvd., Suite 100
Winston-Salem, North Carolina 27106

Re: Comprehensive Site Assessment
Volatile Organic Compounds Contamination in Groundwater
Draper Corporation, 5644 Hornaday Road
Greensboro, North Carolina

Dear Ms. Knight:

Enclosed please find one (1) copy of the Comprehensive Site Assessment - Volatile Organic Compounds Contamination in Groundwater for the above reference facility. Triad Environmental Consultants, Inc. will be glad to provide your office with additional copies of the report if you desire.

If you have any questions or comments concerning this report, please give me a call at 766-0810.

Respectfully,

W. Steven Johnson /kjl

W. Steven Johnson
Triad Environmental Consultants, Inc.

WSJ/kjl
Encl

September 24, 1993

Proposed Corrective Action Plan
30,000 Gallon Fuel Oil UST Area

Draper Corporation
5644 Hornaday Road
Greensboro, North Carolina

Prepared for:

Mr. Denny Walker
Draper Corporation
Post Office Box 18100
Greensboro, North Carolina 27419

Prepared By:

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

Reviewed By:

Brooks, Pierce, McLendon, Humphrey and Leonard

RECEIVED
N.C. Dept. of EHNR
SEP 24 1993
Winston-Salem
Regional Office

TABLE OF CONTENTS

1.0 INTRODUCTION 1

1.1 Site Description 1
1.2 Purpose of the Corrective Action Plan 1
1.3 Summary of Initial Corrective Actions 2
1.4 Previous Reporting 3

2.0 OBJECTIVE OF THE CORRECTIVE ACTION PLAN 3

3.0 EXPOSURE ASSESSMENT 4

3.1 Analytical Data 4
3.2 Contaminant Characteristics 5
3.3 Potential Exposure Pathways 5

4.0 REMEDIAL ALTERNATIVES 6

5.0 PROPOSED CORRECTIVE ACTION PLAN 8

5.1 Overview 8
5.2 Conceptual Design 8
5.3 Basis for Selection 9
5.4 System Security 9
5.5 System Limitations 10
5.6 System Operation and Maintenance 10
5.7 Follow-up Monitoring and System Evaluation 10

FIGURES

FIGURE 1 - USGS TOPOGRAPHIC MAP

FIGURE 2 - COUNTY ROAD MAP

FIGURE 3 - APPROXIMATE HORIZONTAL EXTENT OF IMPACTED SOIL

FIGURE 4 - CROSS SECTION A-A'

FIGURE 5 - CROSS SECTION B-B'

FIGURE 6 - BASE MAP SHOWING STRUCTURES AND UTILITIES

FIGURE 7 - PROPOSED GROUNDWATER RECOVERY WELL LOCATIONS

FIGURE 8 - PROPOSED RECOVERY WELL CONSTRUCTION DIAGRAM

FIGURE 9 - PROCESS FLOW DIAGRAM

FIGURE 10 - PROPOSED SYSTEM LAYOUT

TABLES

TABLE 1 - TANK EXCAVATION SAMPLE RESULTS

TABLE 2 - SOILS INVESTIGATION SAMPLE RESULTS

APPENDICES

APPENDIX I - SOIL SAMPLE LABORATORY ANALYSES AND ASSOCIATED CHAIN OF CUSTODY RECORDS

APPENDIX II - WATER SAMPLE LABORATORY ANALYSES AND ASSOCIATED CHAIN OF CUSTODY RECORDS

APPENDIX III - EQUIPMENT SPECIFICATIONS

1.0 INTRODUCTION

On behalf of Draper Corporation, Triad Environmental Consultants, Inc. is submitting this Corrective Action Plan (CAP). This CAP is in response to a release of No. 4 fuel oil from an underground storage tank (UST) system that was located on the subject site. The UST system was removed from the site on December 16, 1992. This report details the proposed strategy for remediation of the resulting soil and groundwater contamination. To our knowledge, no incident number has yet been assigned for this site.

1.1 Site Description

The Draper Corporation facility is located at 5644 Hornaday Road in Greensboro, North Carolina. The site is located near the intersection of Interstate I-40 and Guilford College Road. A portion of the USGS topographic map (Guilford Quadrangle) including the site is included as Figure 1. Also, a portion of the Guilford county road map showing the site is included as Figure 2.

1.2 Purpose of the CAP

The purpose of the CAP is the remediation of soil and groundwater in the UST release area. Petroleum hydrocarbons exist in the soil in excess of the levels established by 15A NCAC 2N, Criteria and Standards Applicable to Underground Storage Tanks. Concentrations of certain organic compounds (2,4 Di-nitrophenol [31 ppb] and Naphthalene [470 ppb]), that exceed regulatory levels, were also discovered in the groundwater in the UST area. The cause and source of the contamination was leakage

of No. 4 fuel oil from a UST system.

1.3 Summary of Initial Corrective Actions

A 30,000 gallon No. 4 fuel oil tank was removed on December 16, 1992. No obvious perforations were observed. However, a release was discovered and appeared to be associated with the product lines of the tank. Petroleum impacted soils were removed and temporarily stockpiled on site. These soils were stockpiled on and covered with plastic sheeting as temporary containment. An attempt was made to excavate all of the impacted soils; however, excavation was limited by the presence of the concrete anchor pad (roughly 50 feet in length, 12 feet wide and 2 feet thick) in the floor of the excavation. Numerous underground and overhead utilities also interfered with the removal of the impacted soils. Figure 6 shows the former excavation area and the locations of the utilities and concrete anchor pad. All of the excavated soils, 581 tons, were transported to Cunningham Brick Company on March 8 and 9, 1993 for treatment and reclamation.

Additionally, during April of 1993, excavation was performed in the area of the UST product lines. The product lines were removed and excavation of petroleum contaminated soils was performed. The excavated soils were stockpiled on and covered with plastic sheeting as temporary containment. The excavated soils, approximately 276 tons, were transported to Cunningham Brick Company on August 16, 1993 for treatment and reclamation.

As was the case in previous remedial operations, excavation was limited by the presence of underground utilities. Three(3) soil samples (RPL-1-6.0, RPL-2-11.0 and RPL-3-8.0) were obtained from the base of the excavation and submitted for laboratory analysis by EPA Method 9071 (Oil and Grease). The locations of the samples are shown on Figure 3. Copies of the laboratory analysis and the associated chain of custody record are included in Appendix 1.

1.4 Previous Reporting

The following lists the previous reports submitted relating to this incident:

- Closure Report, December 30, 1992
- Report of Findings, March 8, 1993
- Comprehensive Site Assessment, May 10, 1993

Figures 3,4 and 5 show the approximate horizontal and vertical extent of soil contamination. These drawings are consistent with the information presented in the Comprehensive Site Assessment of May 10, 1993.

2.0 OBJECTIVE OF THE CAP

The objective of the CAP is the reduction of contaminant concentrations in soils and groundwater surrounding the 30,000 gallon UST excavation area. The proposed target cleanup concentration for soil associated with this release is the 250 ppm (parts per million), Oil and Grease - EPA Method 9071 action level established by the NCDEHNR-DEM, Groundwater Section for scenarios of this nature.

PROPOSED SCHEDULE OF ACTIVITIES

Initial Pilot (Aquifer) Testing	Within 120 days
System Installation	90 days after approval
System Activation	Within 120 days of Installation
System Evaluation (D.O., pH)	Monthly
System Evaluation (Meth. 625)	Monthly for 6 months, Quarterly thereafter
System Evaluation (Soils)	Annually
Groundwater Monitoring	Quarterly
Estimated Time to Clean-up	5 - 10 Years
Completion Date	To Be Determined

Target start-up and completion dates for corrective action will be finalized after DEM approval of the Correction Action Plan.

3.0 EXPOSURE ASSESSMENT

3.1 Analytical Data

Table 1 lists laboratory data for soil samples from the UST and product line excavations. Table 2 lists the results of laboratory analyses performed on soil samples obtained from the excavation and from borings located adjacent to the UST area. The laboratory reports and associated chain of custody records for all of the soil sampling are attached as Appendix I. Figure 3 shows the locations of the soil samples and borings. Monitoring wells were also installed adjacent to the excavation area. The well locations are also shown on Figure 3. Water samples have been collected from these wells on several occasions

and analyzed by EPA Method 625 - Acid/Base Neutral Extractables. A concentration of 31 parts per billion (ppb) 2,4-Dinitrophenol was detected in MW-6 during the first sampling event (January 8, 1993). Also, a concentration of 470 ppb Naphthalene was detected (July 8, 1993) in monitor well (AS-1). Well AS-1 was installed through the concrete anchor pad, prior to backfilling of the excavation area.

The laboratory reports and associated chain of custody records for the groundwater sampling are attached as Appendix II.

3.2 Contaminant Characteristics

The contaminant in this incident is No. 4 fuel oil. This fuel is relatively viscous and consists mainly of heavier fractions of petroleum. This grade of fuel generally contains relatively few volatile, water-soluble or mobile constituents. This fuel has an affinity to sorb to soil and because it contains relatively few volatile constituents it is less toxic in nature than lighter petroleum blends.

3.3 Potential Exposure Pathways

Based on the data gathered during tank removal and during the borings associated with the assessment of the release, the impacted soils appear to be confined to the area around the UST excavation. The release appeared to be associated with the piping at the top of the tank and was gradual in nature. The nature of No. 4 fuel oil is such that it is not very mobile within the soil strata. The former tank area is currently being used for parking by Draper employees.

Since the impacted soils lie beneath the ground surface, the risks of ingestion or inhalation of any impacted soil appear minimal. There appears to be minimal risk of exposure or other hazards due to vapors, because of the low concentrations of aromatic compounds in No. 4 fuel oil.

As was discussed in the Comprehensive Site Assessment (May 10, 1993), there appears to be little impact on the groundwater or to Long Branch Creek from this UST release. The groundwater underlying the tank excavation is the potential receptor at greatest risk. As the area is served by municipal water and no active supply wells are in the vicinity of the site, the groundwater does not seem to represent a significant exposure pathway.

4.0 REMEDIAL ALTERNATIVES

The remedial options that have been considered include:

1) Excavation

2) Remediation by groundwater recovery and recirculation

3) In Situ Bioremediation (Aeration)

As is outlined in the Comprehensive Site Assessment,

numerous underground and overhead utilities are present adjacent to the former UST area (Figure 6). Also, a concrete anchor pad is present at the base of the excavation. Additional excavation of the impacted soil from the tank area would require relocation of the underground utilities and demolition of the concrete pad. Due to the abundance of utilities, both overhead and underground, any further excavation appears cost-prohibitive.

A closed-loop groundwater pumping system has also been considered. Since much of the remaining contaminated soil is located at or below the groundwater table, it is likely that the circulation of oxygen-rich groundwater through the soils would promote the natural degradation of the petroleum. Additionally, dissolved petroleum constituents present in the groundwater are removed by this process.

The injection of air into the impacted soil has been considered as another type of remediation option. The primary goal in this strategy is to provide oxygen to naturally occurring bacteria in the soil to enhance the degradation of the petroleum compounds. The major disadvantage of this approach is that it is usually a slow process.

Costs associated with aeration would likely be in the range of $100,000. Annual sampling and overhead costs would be in the neighborhood of $15,000 to $20,000. Costs associated with excavation would be in the neighborhood of $ 100,000 to $150,000. Costs associated with the closed loop groundwater remediation system would be approximately $100,000. Annual sampling and

overhead costs would be in the neighborhood of $15,000 to $20,000. Based upon the aforementioned factors, it is recommended that the closed loop groundwater system be adopted as the primary remediation option. However, it is also recommended that if the most recent 2L groundwater standards are implemented in their current form, this UST release area be considered either for: A) remediation based upon natural processes of degradation and attenuation, or B) considered for the approval of a Corrective Action Plan that does not require groundwater remediation.

5.0 PROPOSED CORRECTIVE ACTION PLAN

5.1 Overview

The primary objective of the proposed remediation plan is to provide oxygen to the contaminated zone. The flow of oxygen-rich groundwater through the contaminated soil is expected to enhance biodegradation and remove any water soluble constituents. The proposed remediation system consists of a network of groundwater recovery wells located downgradient of the former UST system, a settling tank, a series of two (2) aeration basins and a reinfiltration gallery.

5.2 Conceptual Design

Initially, groundwater recovery is proposed to be accomplished through the existing wells MW-6, AS-1 and AS-2. Data collected during the initial pilot test will be utilized to evaluate the aquifer characteristics and adjust the location and number of recovery wells if necessary. For conceptual purposes,

the proposed locations of the groundwater recovery wells are shown on Figure 7. The new recovery wells are to be constructed as shown in the well construction diagram included as Figure 8. A description of remediation system is as follows: Recovered groundwater is to be routed through a settling tank, a series of two (2) aeration basins and returned to the upgradient side of the impacted area by means of a reinfiltration gallery. A process flow diagram is included as Figure 9. Also, a proposed system layout is included as Figure 10. PE?

5.3 System Monitoring

Influent samples from each recovery well will be collected monthly for the first six months after start up and quarterly thereafter. Additionally, effluent will be sampled on the same schedule. The groundwater samples are to analyzed for dissolved oxygen and for semi-volatile organic compounds (EPA Method 625). Groundwater level measurements are to be obtained at the adjacent monitor wells on the same schedule as proposed for sampling of the recovery wells. The resulting data can be utilized to evaluate the effectiveness of the system.

5.4 System Security

The above ground system components are to be housed in a locked enclosure. Connections to the recovery wells and infiltration gallery are to be routed in underground trenches. The recovery wells and inlet for the infiltration gallery are to equipped with locking well covers. All motors, conduit and electrical wiring will be constructed as intrinsically safe as

per National Electrical Code requirements. Automatic shutoffs will be installed in case of system malfunction.

5.5 System Limitations

Two (2) limitations of the system are the unpredictable rate of remediation and the difficulty inherent in gauging the effectiveness of the system. This limitation is mainly a function of the nature of the contaminant. Also, as aeration may cause oxidation of some metals, fouling of the system components by inorganic precipitation may occur. These limitations are to be dealt with by follow-up monitoring.

5.6 System Operation and Maintenance

The system will be monitored daily for the first five days after start up. Thereafter, system checks can be made on a weekly basis. Maintenance can be performed as necessary to service malfunctions. Because automatic controls are to be utilized, operation and maintenance should be minimal after initial start up.

As mentioned above, aeration may cause oxidation of some metals, fouling of the system components by inorganic precipitation can occur. The system will be checked for fouling, and additional pretreatment components may be added if necessary.

5.7 Follow-up Monitoring and System Evaluation

Follow-up monitoring is to include sampling of the adjacent groundwater monitoring wells (MW-2, MW-6, MW-13, and MW-14), influent from the recovery wells and system effluent. The proposed laboratory analyses are EPA Method 625, dissolved oxygen

and pH. Dissolved oxygen and pH measurements will be taken monthly at all of the above mentioned sampling points. To monitor system influent and effluent, water samples will be collected and analyzed (EPA Method 625) on a monthly basis for six (6) months and on a quarterly basis thereafter. The groundwater quality in the adjacent wells (MW-2, MW-6, MW-13, and MW-14), both upgradient and downgradient is proposed to be monitored quarterly, for at least four (4) consecutive quarters. After four (4) quarters, Draper Corporation may request a reduction in the frequency of the groundwater monitoring events. Additionally, future soil sampling is suggested to provide information as to the progress of remediation of the impacted soils. Soil sampling will require the performance of additional soil borings. It is proposed to perform soil testing and reporting on an annual basis.

FIGURE 1 - SITE MAP
GUILFORD QUADRANGLE
1951 - PHOTOREVISED 1968

0 2000 4000 6000
SCALE : 1" = 2000'

DRAPER CORPORATION
5644 HORNADAY ROAD
GREENSBORO, NC

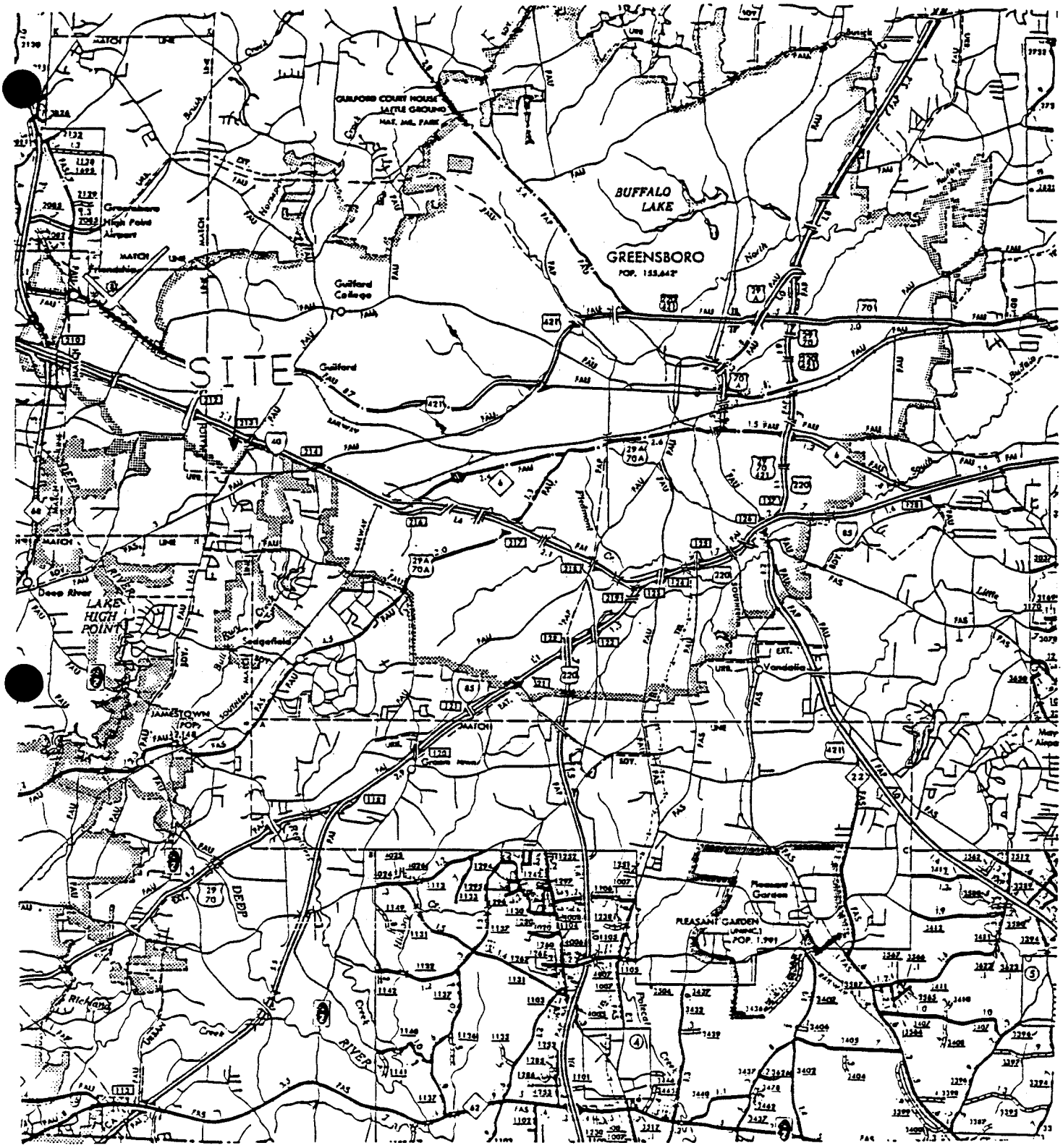


FIGURE 2 - COUNTY ROAD MAP

TRAD ENVIRONMENTAL CONSULTANTS, INC.

[illegible] CLEMMONS ROAD
CLEMMONS, NC 27012
TELEPHONE AND FAX
(919) 766-0610

DRAPER CORPORATION
5644 HORNADAY ROAD
GREENSBORO, NC

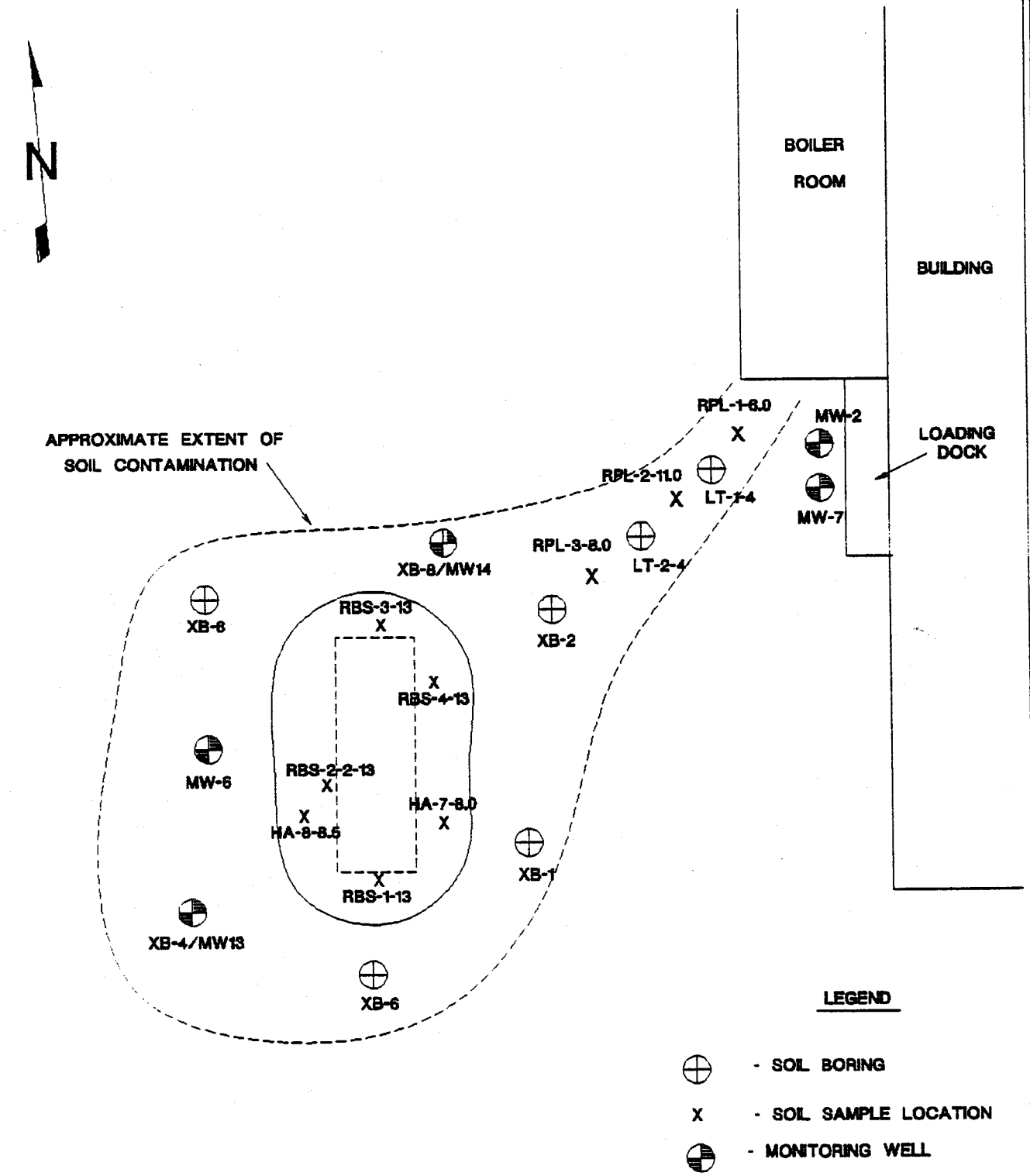
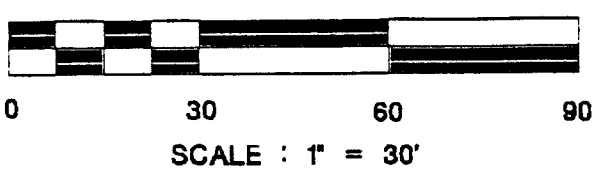


FIGURE 3 - APPROXIMATE HORIZONTAL EXTENT OF IMPACTED SOIL



TRIAD ENVIRONMENTAL CONSULTANTS, INC.
6810 CLEMMONS ROAD
CLEMMONS, NC 27012
TELEPHONE AND FAX
(919) 766-0810

DRAPER CORPORATION
5644 HORNADAY ROAD
GREENSBORO, N.C.

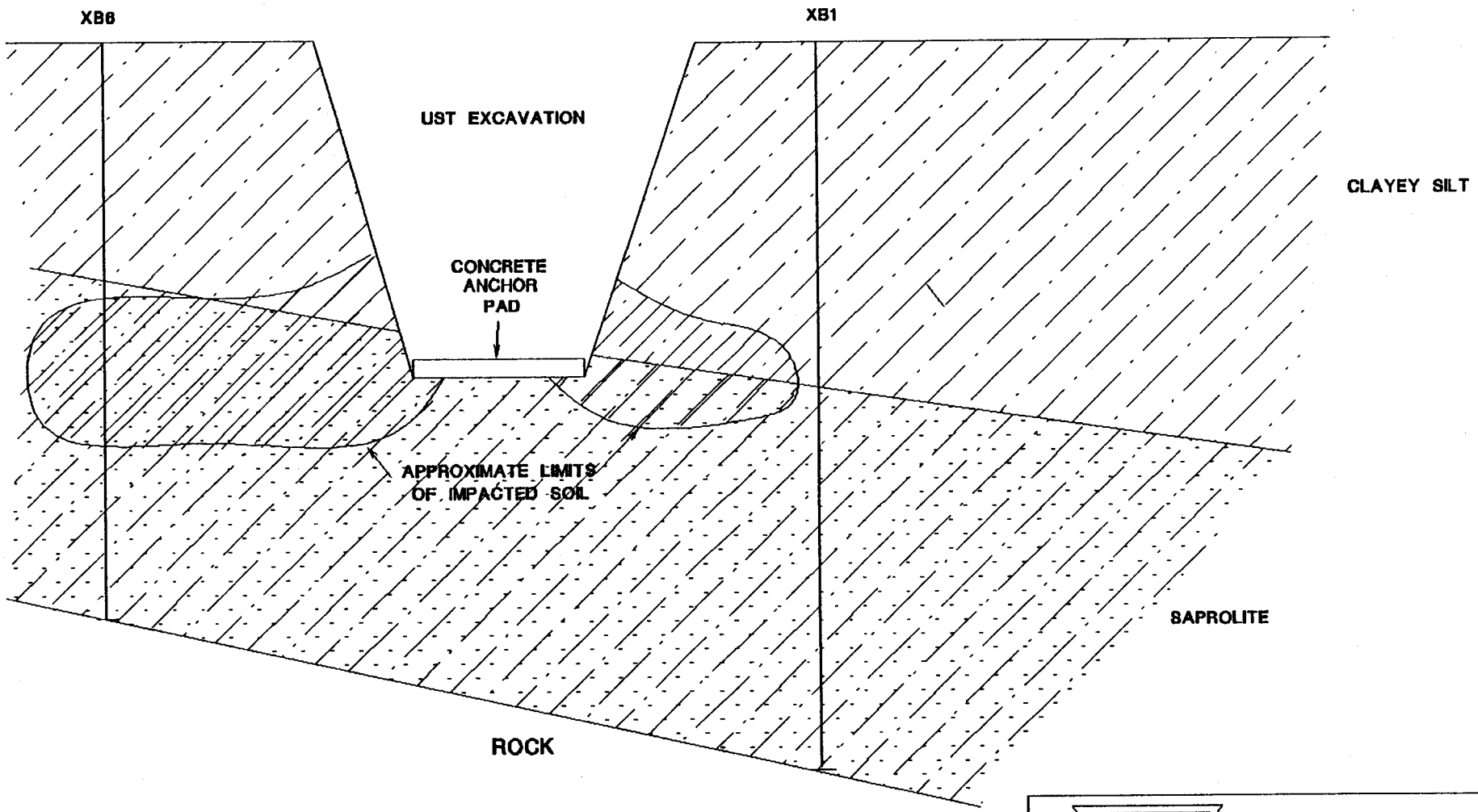


FIGURE 4 - CROSS SECTION A-A'

HORIZONTAL SCALE : 1" = 20'
VERTICAL SCALE 1" = 5'

Triad Environmental Consultants and Associates
3519 Clemmons Road
Clemmons, N.C. 27012
Telephone & Fax
(919) 766-0810

DRAPER CORPORATION
5644 HORNADAY ROAD
GREENSBORO, NC

DATE 5-4-93

DRAWN BY: DMG

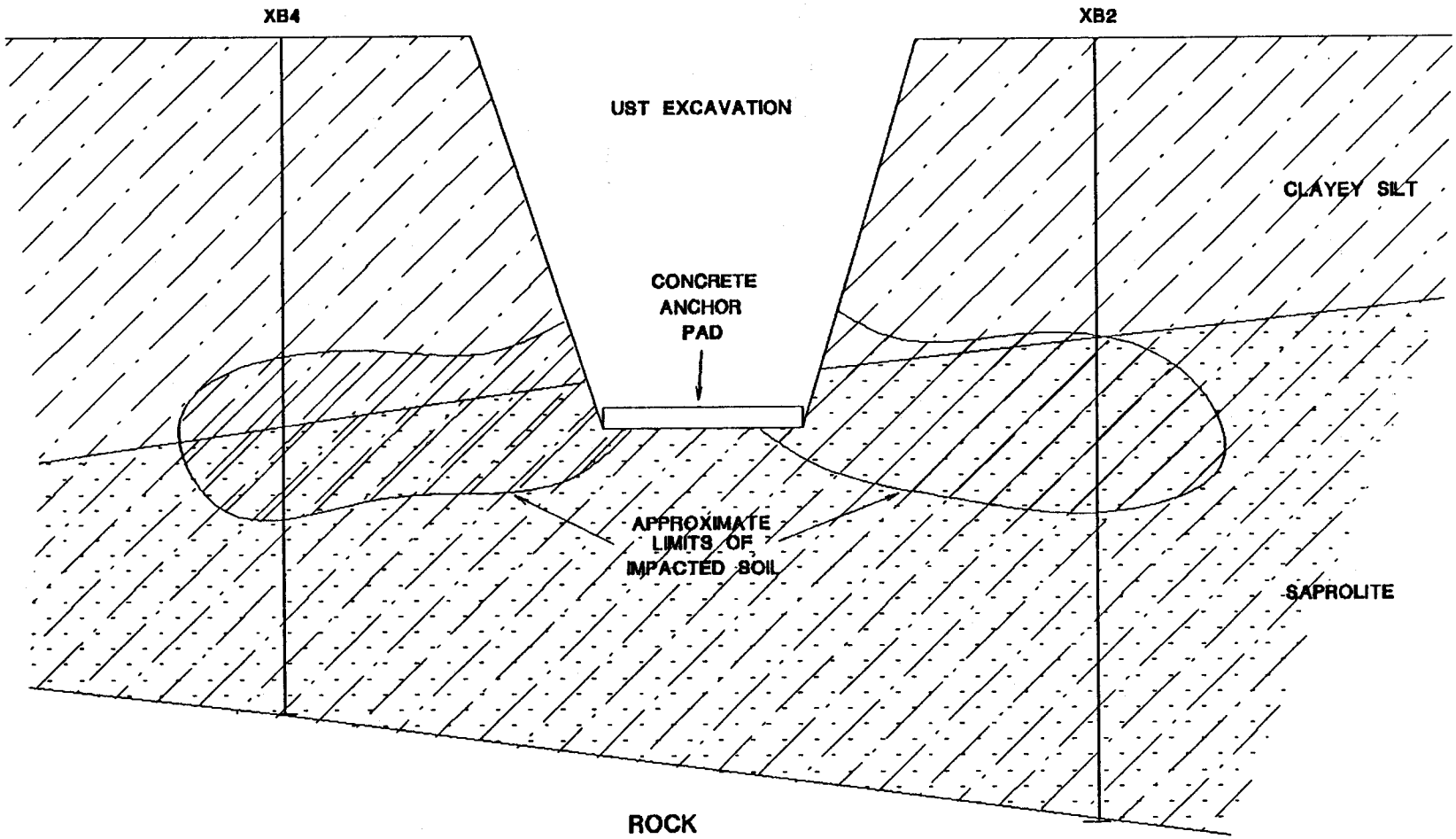


FIGURE 5 - CROSS SECTION B-B'

HORIZONTAL SCALE : 1" = 20'
VERTICAL SCALE : 1" = 5'

Triad Environmental Consultants and Associates
3519 Clemmons Road
Clemmons, N.C. 27012
Telephone & Fax
(919) 766-0810

DRAPER CORPORATION
5644 DRAPER CORPORATION
GREENSBORO, N.C.

DATE 5-5-93 | DRAWN BY: DMG

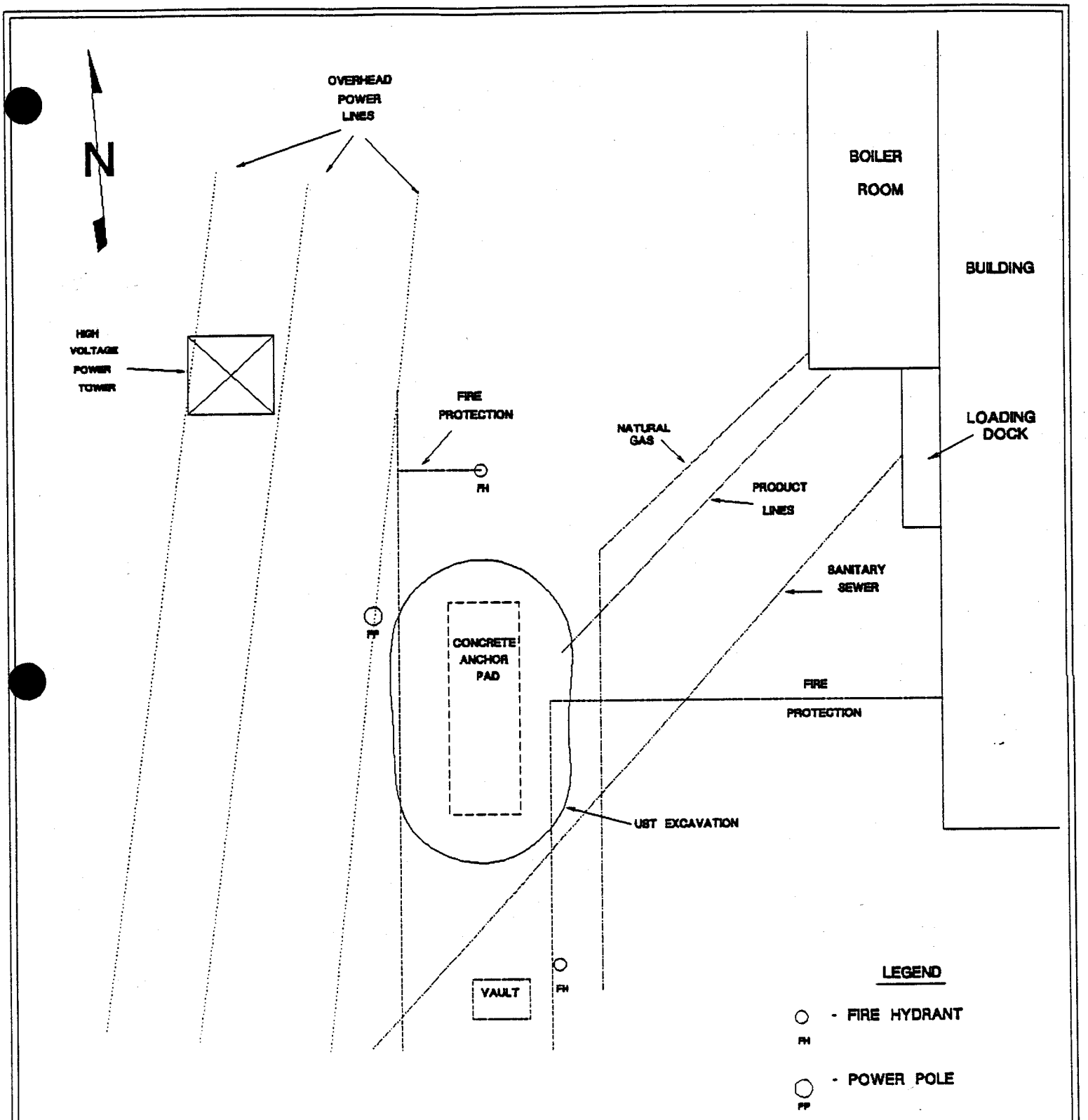


FIGURE 6 - BASE MAP SHOWING STRUCTURES AND UTILITIES

0 30 60 90

SCALE : 1" = 30'

THE ENVIRONMENTAL CONSULTANTS, INC.

DRAPER CORPORATION
5644 HORNADAY ROAD
GREENSBORO, N.C.

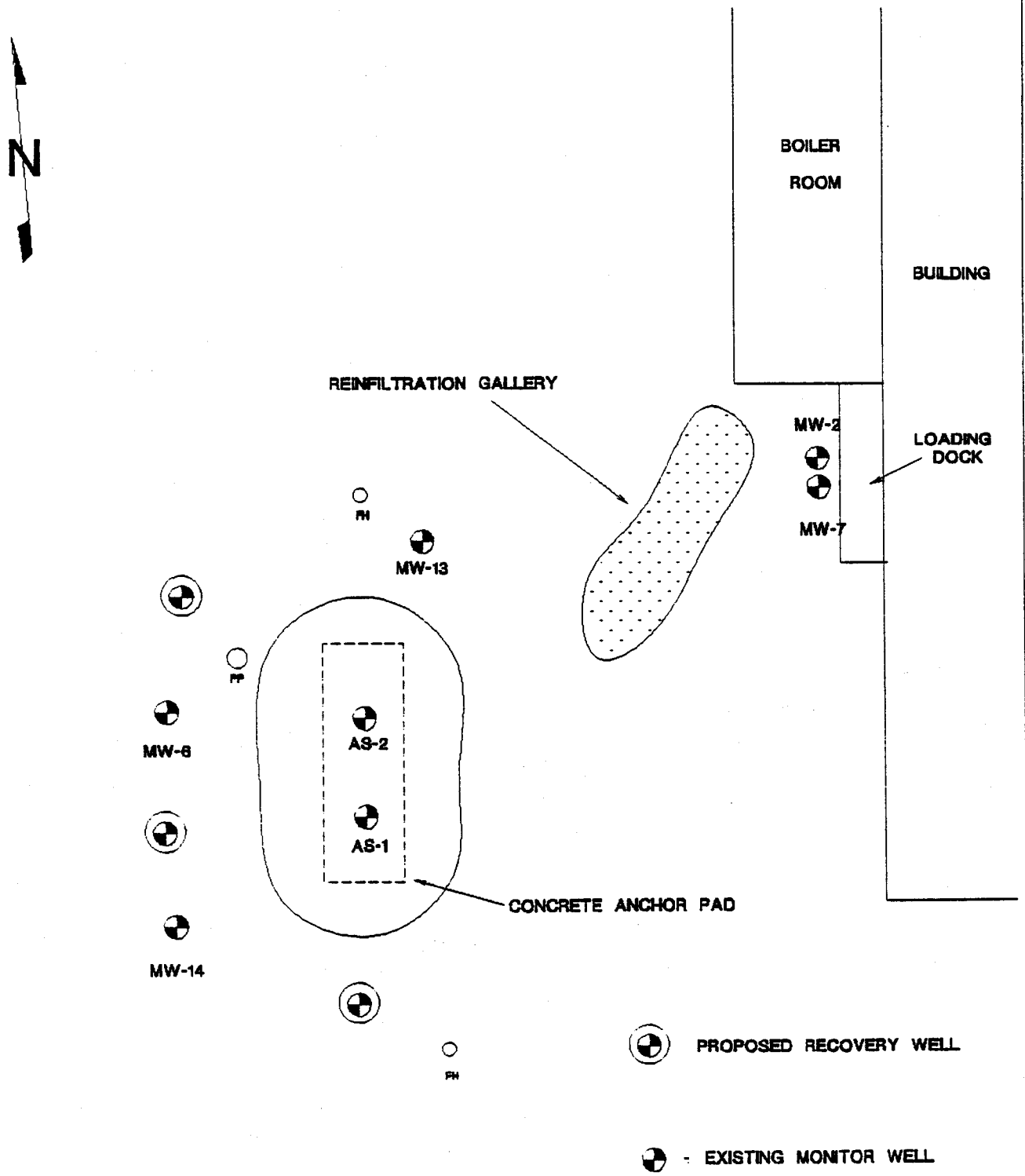
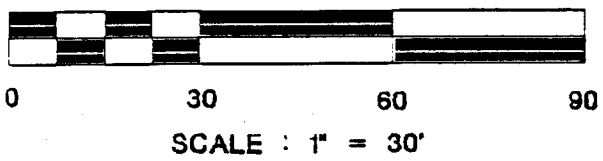


FIGURE 7 - PROPOSED RECOVERY WELL LOCATIONS



THE ENVIRONMENTAL CONSULTANTS, INC.
CLEMMONS, NC 27012
TELEPHONE AND FAX
(910) 766-0610

DRAPER CORPORATION
5844 HORNADAY ROAD
GREENSBORO, N.C.

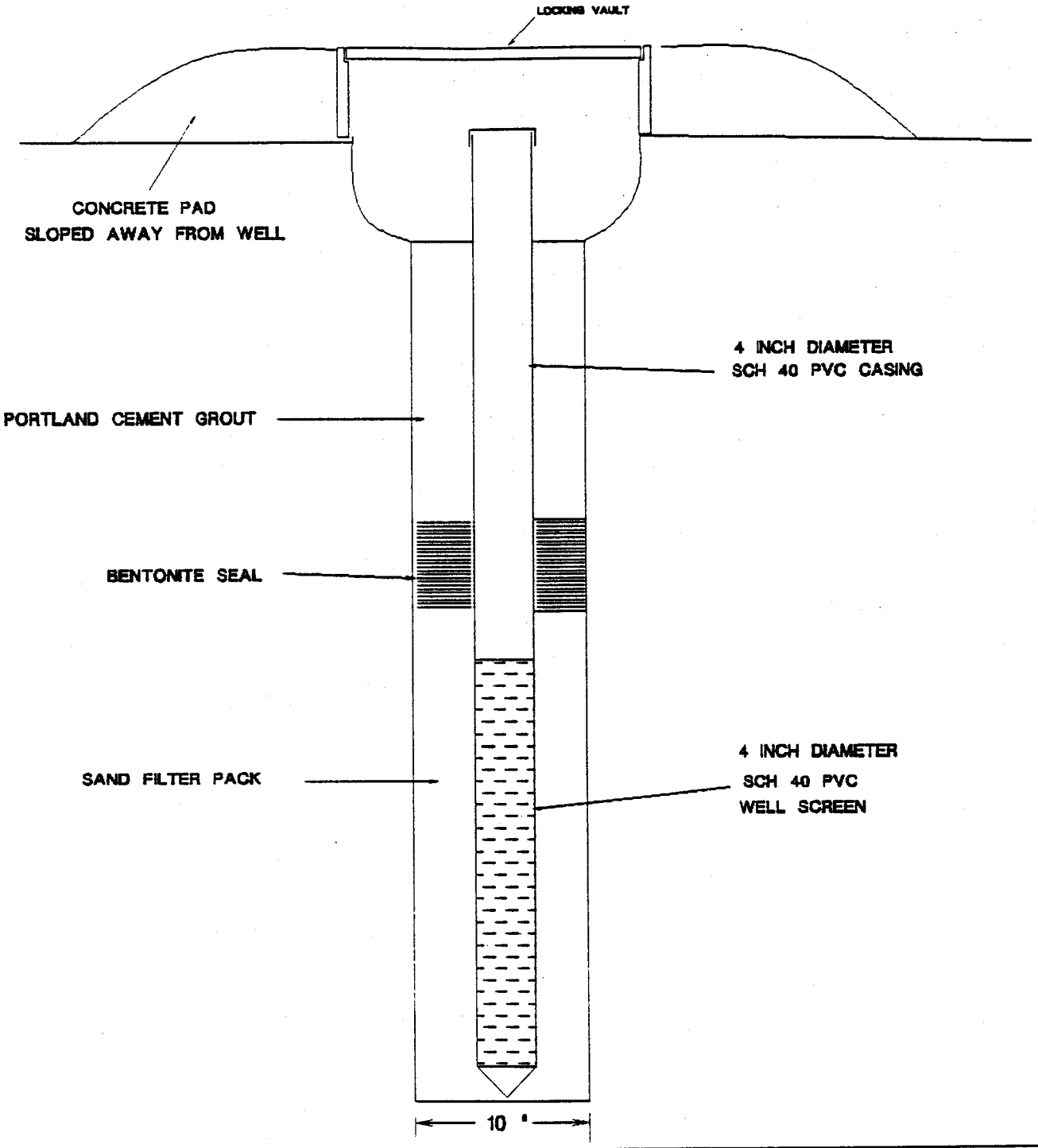


FIGURE 8 - PROPOSED RECOVERY WELL CONSTRUCTION DETAILS

TRIAD ENVIRONMENTAL CONSULTANTS, INC.
AND ASSOCIATES

3519 CLEMMONS ROAD
CLEMMONS, NC 27012
TELEPHONE AND FAX
(919) 768-0810

DRAPER CORPORATION
5644 HORNADAY ROAD
GREENSBORO, NC

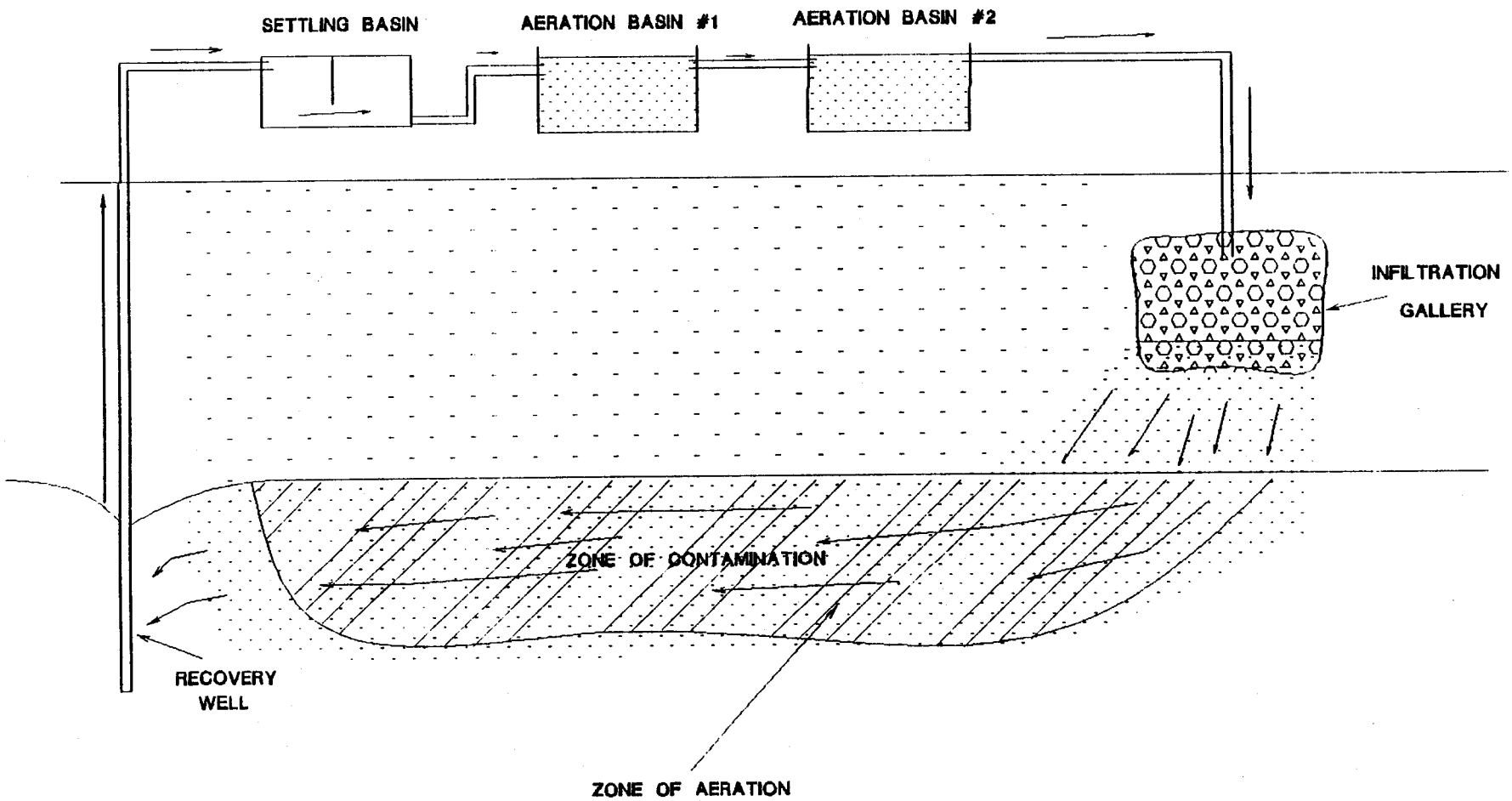


FIGURE 9 - PROCESS FLOW DIAGRAM

Triad Environmental Consultants and Associates
3519 Clemmons Road
Clemmons, N.C. 27012
Telephone & Fax
(919) 766-0810

DRAPER CORPORATION
5644 HORNADAY ROAD
GREENSBORO, NC

DATE 9-21-93

DRAWN BY: DMG

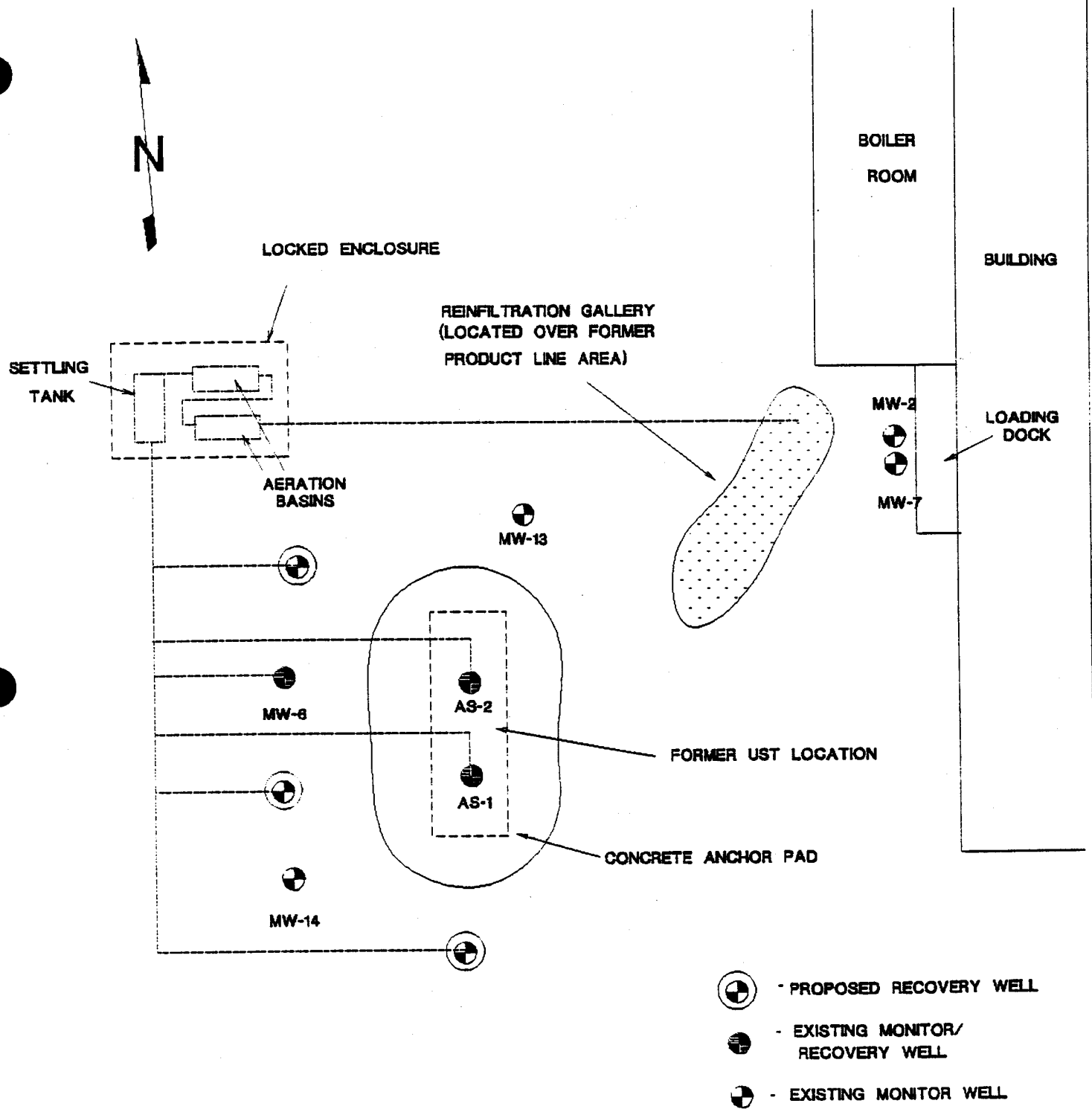
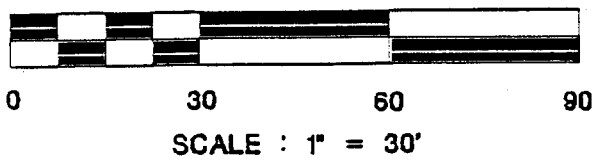


FIGURE 10 - PROPOSED SYSTEM LAYOUT



TRAD ENVIRONMENTAL CONSULTANTS, INC.
CLEMMONS ROAD
CLEMMONS, NC 27012
TELEPHONE AND FAX
(919) 766-0810

DRAPER CORPORATION
5644 HORNADAY ROAD
GREENSBORO, N.C.

TABLE 1

Soil Sample Laboratory Analyses
Draper Corporation
5644 Hornaday Road
Greensboro, North Carolina

Initial Tank Excavation Sample Results

Sample No.	Date Sampled	Sample Depth (Ft.)	TPH* EPA Method 3550 (mg/kg)**	Oil & Grease EPA Method 9071 (mg/kg)
RBS-1-13	12/18/92	13	1151	1112+
RBS-2-13	12/18/92	13	1056	1994+
RBS-3-13	12/18/92	13	<10	110
RBS-4-13	12/18/92	13	100	132

Additional Tank Excavation Sample Results

Sample No.	Date Sampled	Sample Depth (Ft.)	TPH* EPA Method 3550 (mg/kg)**	Oil & Grease EPA Method 9071 (mg/kg)
HA-7-8.0	4/28/93	8.0	<10	60
HA-8-5.5	4/28/93	5.5	<10	110

Product Line Removal Excavation Sample Results

Sample No.	Date Sampled	Sample Depth (Ft.)	Oil & Grease EPA Method 9071 (mg/kg)**
RPL-1-6.0	7/08/93	6.0	808+
RPL-2-11.0	7/09/93	11.0	12
RPL-3-8.0	7/09/93	8.0	2058+

* TPH - Total Petroleum Hydrocarbons

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

\+ Exceeds State Initial Action Level of 250 ppm Oil & Grease

TABLE 2

Soil Sample Laboratory Analyses
Draper Corporation
5644 Hornaday Road
Greensboro, North Carolina

Soils Investigation Sample Results

Sample No.	Date Sampled	Sample Interval (Ft.)	Oil & Grease EPA Method 9071 (mg/kg)*
XB1/10-12	4/29/93	10-12	70
XB1/15-17	4/29/93	15-17	370+
XB2/10-12	4/29/93	10-12	30
XB2/15-17	4/29/93	15-17	140
XB3/5-7	4/29/93	5-7	50
XB3/10-12	4/29/93	10-12	130
XB4/10-12	4/29/93	10-12	890+
XB5/15-17	4/30/93	15-17	670+
XB5/20-22	4/30/93	20-22	740+
XB6/5-7	4/30/93	5-7	560+
XB6/10-12	4/30/93	10-12	750+
XB6/15-17	4/30/93	15-17	790+

Piping Area Sample Results

Sample No.	Date Sampled	Sample Depth (Ft.)	Oil & Grease EPA Method 9071 (mg/kg)*
LT-1-4	4/30/93	4	10830+
LT-2-4	4/30/93	4	3800+

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

\+ Exceeds State Initial Action Level of 250 ppm Oil & Grease

Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

December 29, 1992

RECEIVED 12/30/92

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

Draper RBS-1-13, RBS-2-13, RBS-3-13, RBS-4-13, MW-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

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
PETROLEUM HYDROCARBONS, #9071	mg/kg	1112.	10.
PETROLEUM HYDROCARBONS, #3550	mg/kg	1151.	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. 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

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
PETROLEUM HYDROCARBONS, #9071	mg/kg	1994.	10.
PETROLEUM HYDROCARBONS, #3550	mg/kg	1056.	10.
EPA METHOD 3550, GC FID		done	

Comments:
Project Name: Hornaday

Main Office: 449 Springbrook Road P.O. Box 240543 Charlotte, NC 28224-0543 Phone: (704) 529-6364 Fax: (704) 525-0409
South Carolina Laboratory: 10471 Asheville Highway, P.O. Box 137, Inman, SC 29349 Phone: (803) 472-9046 Fax: (803) 472-5172
All Correspondences and Remittances to the Charlotte Office

Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

Triad Environmental
Page: 2
December 29, 1992

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

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

HALOGENATED VOLATILE ORGANICS (continued):

METHYLENE CHLORIDE	ug/L	5	5
TRANS-1,2-DICHLOROETHENE	ug/L	Not Det	1
1,1-DICHLOROETHANE	ug/L	Not Det	1
CHLOROFORM	ug/L	Not Det	1
1,1,1-TRICHLOROETHANE	ug/L	Not Det	1
CARBON TETRACHLORIDE	ug/L	Not Det	1
1,2-DICHLOROETHANE	ug/L	Not Det	1
TRICHLOROETHENE	ug/L	Not Det	1
1,2-DICHLOROPROPANE	ug/L	Not Det	1
BROMODICHLOROMETHANE	ug/L	Not Det	1
2-CHLOROETHYLVINYL ETHER	ug/L	Not Det	1
TRANS-1,3-DICHLOROPROPENE	ug/L	Not Det	1
CIS-1,3-DICHLOROPROPENE	ug/L	Not Det	1
1,1,2-TRICHLOROETHANE	ug/L	Not Det	1
TETRACHLOROETHENE	ug/L	49	1
DIBROMOCHLOROMETHANE	ug/L	Not Det	1
EDB	ug/L	Not Det	1
CHLOROBENZENE	ug/L	Not Det	1
BROMOFORM	ug/L	Not Det	1
1,1,2,2-TETRACHLOROETHANE	ug/L	Not Det	1
1,3-DICHLOROBENZENE	ug/L	Not Det	1
1,4-DICHLOROBENZENE	ug/L	Not Det	1
1,2-DICHLOROBENZENE	ug/L	Not Det	1
EPA METHOD 5030, GC FID		done	

Comments:
Project Name: Hornaday

Please advise should you have questions concerning these data.

Respectfully submitted,

Angela D. Overcash
Laboratory Manager

TRIAD ENVIRONMENTAL CONSULTANTS, INC. AND ASSOCIATES
3519 Clemmons Road
Clemmons, NC 27012
Telephone & FAX
(919) 766-0810

Chain of Custody Record

Page 1 of 1

PROJECT: Draper Corporation

SITE: Hornaday Road Greensboro, N.C.

COLLECTED BY (Signature): Dan M. Groome

FIELD SAMPLE I.D.	SAMPLE MATRIX	DATE/TIME	NO. OF CONTAINERS	EPA 9071 Oil & Grease	TPH EPA 3550	EPA METHOD 601						REMARKS	SAM ID NO. (for lab use only)
RBS-1-13	Soil	12-18-92/1035	1	✓	✓								13812
RBS-2-13	Soil	12-18-92/1040	1	✓	✓								13813
RBS-3-13	Soil	12-18-92/1045	1	✓	✓								13814
RBS-4-13	Soil	12-18-92/1048	1	✓	✓								13815
MW-2	water	12-18-92/1300	2			✓							13816

REMARKS: RUSH Results

RELINQUISHED BY:	DATE	TIME
Dan M. Groome	12-18-92	1600 hrs

RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME
Kathleen J. Lowe	12/18/92	1600 hrs	Kathleen J. Lowe	12/21/92	0810 hrs	Jim Nelligan Sr.	12/21/92	0910	Jim Nelligan	12/21/92	1000

LAB USE ONLY

RECEIVED FOR LABORATORY BY:	DATE	TIME	AIRBILL NO.	OPENED BY:	DATE	TIME	TEMP °C	SEAL #	CONDITION
Wendy A. Scott	12/21	10:00		Wendy Scott	12/21	10:00			Good

REMARKS:

Report

May 3, 1993

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

Triad Environmental
Attn: Mr. Steve Johnson
3519 Clemmons Road
Clemmons, NC 27012
Ref: Draper #049355A

Dear Mr. Johnson:

Below are results of analysis of 2 samples received for examination on April 30, 1993:

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA15237 Prism ID Number 2283A224 Prism Customer Number 6671
Collection Date: 04/28/93 Collection Time: 15:30
Submittal Date: 04/30/93 Submittal Time: 08:00
Customer Sample I.D#: HA-7-8.0

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
		done	
CALCULATIONS BASED ON DRY WEIGHT		done	
TPH - WASTE OIL RANGE	mg/kg	60.	10.
PREP. METHOD 3550		done	
TPH - DIESEL RANGE	mg/kg	< 10	10

Comments:
Project Name: Draper Corporation
Project Number: 049355A
** RUSH **

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA15238 Prism ID Number 2283A224 Prism Customer Number 6671
Collection Date: 04/28/93 Collection Time: 15:45
Submittal Date: 04/30/93 Submittal Time: 08:00
Customer Sample I.D#: HA-8-5.5

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
		done	
CALCULATIONS BASED ON DRY WEIGHT		done	
TPH - WASTE OIL RANGE	mg/kg	110.	10.

Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

Triad Environmental
Page: 2
May 3, 1993

Sample AA15238 (continued)

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
PREP. METHOD 3550		done	
TPH - DIESEL RANGE	mg/kg	< 10	10

Comments:
Project Name: Draper Corporation
Project Number: 049355A
** RUSH **

Please advise should you have questions concerning these data.

Respectfully submitted,

Angela D. Overcash
Laboratory Manager

Main Office: 449 Springbrook Road P.O. Box 240543 Charlotte, NC 28224-0543 Phone: (704) 529-6364 Fax:(704) 525-0409
South Carolina Laboratory: 10471 Asheville Highway, P.O. Box 137, Inman, SC 29349 Phone: (803) 472-9046 Fax: (803) 472-5172
All Correspondences and Remittances to the Charlotte Office

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

Main Office:
449 Springbrook Road
P.O. Box 240543
Charlotte, NC 28224-0543
Phone: (704) 529-6364
Fax: (704) 525-0409

STATEMENT OF DATA QUALIFICATIONS

on Analyses Performed by Prism Laboratories, Inc.

Client: Triad Laboratory Group ID No.: 228342

X All analyses have been validated and comply with our Quality Control Program. No qualifications required.

_____ The following analyses have been qualified for the reasons cited.

Sample No.(s): _____ Parameter: _____ *Reason: _____

Explanation: _____

Sample No.(s): _____ Parameter: _____ *Reason: _____

Explanation: _____

*REASON:

1. Sample integrity suspect upon receipt. (Explain)
2. Analysis performed beyond EPA established maximum allowable holding time.
3. Detection limit elevated due to matrix interference.
4. Laboratory control sample value outside established acceptable limits.
5. Matrix spike sample value outside established acceptable limits.
6. Duplicate analysis value outside established acceptable limits.
7. Surrogate/internal standard recoveries outside established acceptable limits.
8. Data point suspect due to potential laboratory contamination. (Explain)
9. Coelutes with the compound cited. Result may represent a combination of both compounds.
10. Other (Explain).

NOTE: This document is included as part of the Analytical Laboratory Report for the above referenced Laboratory ID No. and must be retained as a permanent record thereof.

PAYMENT TERMS: NET 10 DAYS
A 1.5% Interest Rate will be charged on account balances over 30 Days old.
We reserve the right to withhold lab test results on delinquent accounts over 60 days.

All Correspondences and Remittances to the Charlotte Office
South Carolina Laboratory: 10471 Asheville Highway, P.O. Box 137, Inman, SC 29349
Phone: (803) 472-9046 Fax: (803) 472-5172

ENVIRONMENTAL CONSULTANTS, INC. AND ASSOCIATES
3519 Clemmons Road
Clemmons, NC 27012
Telephone & FAX
(919) 766-0810

Chain of Custody

PROJECT: Draper Corporation #04 9355A

SITE: 5644 Hornaday Rd. Greensboro, N.C.

COLLECTED BY (Signature): Don M. Groome

FIELD SAMPLE I.D.	SAMPLE MATRIX	DATE/TIME	NO. OF CONTAINERS	ANALYSES: Oil & Grease EPA 9021	TPH-DR EPA 3550							REMARKS	SAM ID NO. (for lab use only)
HA-2-8.0	Soil	4-28-93/1530	1	✓	✓							ND	15237
HA-8-5.5	Soil	4-28-93/1545	1	✓	✓							ND	15238

REMARKS

RELINQUISHED BY:	DATE	TIME
Don M. Groome	4-29-93	1100

RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME
Jim Milligan	4/29/93	1100	Jim Milligan	4/30/93	800						

LAB USE ONLY

RECEIVED FOR LABORATORY BY:	DATE	TIME	AIRBILL NO.	OPENED BY:	DATE	TIME	TEMP°C	SEAL #	CONDITION
[illegible]	4/30	8:10							Good

REMARKS:

port

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

May 3, 1993

Triad Environmental
Attn: Mr. Steve Johnson
3519 Clemmons Road
Clemmons, NC 27012
Ref: Draper #049355B

Dear Mr. Johnson:

Below are results of analysis of 6 samples received for examination on April 30, 1993:

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA15239 Prism ID Number 2284A624 Prism Customer Number 6671
Collection Date: 04/29/93 Collection Time: 09:50
Submittal Date: 04/30/93 Submittal Time: 08:00
Customer Sample I.D#: XB1/10-12

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
CALCULATIONS BASED ON DRY WEIGHT		done done	
TPH - WASTE OIL RANGE	mg/kg	70.	10.

Comments:
Project Name: Draper Corporation
Project Number: 049355B
** RUSH **

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA15240 Prism ID Number 2284A624 Prism Customer Number 6671
Collection Date: 04/29/93 Collection Time: 10:00
Submittal Date: 04/30/93 Submittal Time: 08:00
Customer Sample I.D#: XB1/15-17

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
CALCULATIONS BASED ON DRY WEIGHT		done done	
TPH - WASTE OIL RANGE	mg/kg	370.	10.

Comments:
Project Name: Draper Corporation

Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

Triad Environmental
Page: 2
May 3, 1993

Project Number: 049355B
** RUSH **

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA15241 Prism ID Number 2284A624 Prism Customer Number 6671
Collection Date: 04/29/93 Collection Time: 11:10
Submittal Date: 04/30/93 Submittal Time: 08:00
Customer Sample I.D#: XB2/10-12

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
CALCULATIONS BASED ON DRY WEIGHT		done done	
TPH - WASTE OIL RANGE	mg/kg	30.	10.

Comments:
Project Name: Draper Corporation
Project Number: 049355B
** RUSH **

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA15242 Prism ID Number 2284A624 Prism Customer Number 6671
Collection Date: 04/29/93 Collection Time: 11:20
Submittal Date: 04/30/93 Submittal Time: 08:00
Customer Sample I.D#: XB2/15-17

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
CALCULATIONS BASED ON DRY WEIGHT		done done	
TPH - WASTE OIL RANGE	mg/kg	140.	10.

Comments:
Project Name: Draper Corporation
Project Number: 049355B
** RUSH **

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA15243 Prism ID Number 2284A624 Prism Customer Number 6671
Collection Date: 04/29/93 Collection Time: 13:15
Submittal Date: 04/30/93 Submittal Time: 08:00
Customer Sample I.D#: XB3/5-7

port

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

Triad Environmental
Page: 3
May 3, 1993

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
		done	
CALCULATIONS BASED ON DRY WEIGHT		done	
TPH - WASTE OIL RANGE	mg/kg	50.	10.

Comments:
Project Name: Draper Corporation
Project Number: 049355B
** RUSH **

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA15244 Prism ID Number 2284A624 Prism Customer Number 6671
Collection Date: 04/29/93 Collection Time: 13:40
Submittal Date: 04/30/93 Submittal Time: 08:00
Customer Sample I.D#: XB3/10-12

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
		done	
CALCULATIONS BASED ON DRY WEIGHT		done	
TPH - WASTE OIL RANGE	mg/kg	130.	10.

Comments:
Project Name: Draper Corporation
Project Number: 049355B
** RUSH **

Please advise should you have questions concerning these data.

Respectfully submitted,

Angela D. Overcash
Laboratory Manager

Main Office: 449 Springbrook Road P.O. Box 240543 Charlotte, NC 28224-0543 Phone: (704) 529-6364 Fax:(704) 525-0409
South Carolina Laboratory: 10471 Asheville Highway, P.O. Box 137, Inman, SC 29349 Phone: (803) 472-9046 Fax: (803) 472-5172
All Correspondences and Remittances to the Charlotte Office

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

Main Office:
449 Springbrook Road
P.O. Box 240543
Charlotte, NC 28224-0543
Phone: (704) 529-6364
Fax: (704) 525-0409

STATEMENT OF DATA QUALIFICATIONS

on Analyses Performed by Prism Laboratories, Inc.

Client: Triad Laboratory Group ID No.: 2284A624

X All analyses have been validated and comply with our Quality Control Program. No qualifications required.

_____ The following analyses have been qualified for the reasons cited.

Sample No.(s): _____ Parameter: _____ *Reason: _____

Explanation: _____

Sample No.(s): _____ Parameter: _____ *Reason: _____

Explanation: _____

*REASON:

1. Sample integrity suspect upon receipt. (Explain)
2. Analysis performed beyond EPA established maximum allowable holding time.
3. Detection limit elevated due to matrix interference.
4. Laboratory control sample value outside established acceptable limits.
5. Matrix spike sample value outside established acceptable limits.
6. Duplicate analysis value outside established acceptable limits.
7. Surrogate/internal standard recoveries outside established acceptable limits.
8. Data point suspect due to potential laboratory contamination. (Explain)
9. Coelutes with the compound cited. Result may represent a combination of both compounds.
10. Other (Explain).

NOTE: This document is included as part of the Analytical Laboratory Report for the above referenced Laboratory ID No. and must be retained as a permanent record thereof.

PAYMENT TERMS: NET 10 DAYS
A 1.5% Interest Rate will be charged on account balances over 30 Days old.
We reserve the right to withhold lab test results on delinquent accounts over 60 days.

All Correspondences and Remittances to the Charlotte Office
South Carolina Laboratory: 10471 Asheville Highway, P.O. Box 137, Inman, SC 29349
Phone: (803) 472-9046 Fax: (803) 472-5172

TRIAD ENVIRONMENTAL CONSULTANTS, INC. AND ASSOCIATES

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

Chain of Custody Reco

Page 1 of 1

PROJECT Draper Corporation #049355B

SITE Draper Facility
5644 Hornaday Rd., Greensboro, NC

COLLECTED BY (Signature) M. Alex McGlaney

FIELD SAMPLE I.D.	SAMPLE MATRIX	DATE/TIME	NO. OF CONTAINERS	ANALYSES: EPA Method 9071 Oil and Grease								REMARKS	SAM ID NO. (for lab use only)
XB1/10-12	SOIL	4-29-93/0950 hrs	1	x									15239
XB1/15-17		4-29-93/1000 hrs	1	x									15240
XB2/10-12		4-29-93/1110 hrs	1	x									15241
XB2/15-17		4-29-93/1120 hrs	1	x									15242
XB3/5-7		4-29-93/1315 hrs	1	x									15243
XB3/10-12		4-29-93/1340 hrs	1	x									15244

REMARKS Possible contaminant No 4 Fuel Oil

RELINQUISHED BY:	DATE	TIME
M. Alex McGlaney	4/29/93	1500 hrs

RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME
[signature]	4/29/93	1500	[signature]	4/29/93	3:50	[signature]	4/29/93	3500	[signature]	4/30/93	8004

LAB USE ONLY

RECEIVED FOR LABORATORY BY:	DATE	TIME	AIRBILL NO.	OPENED BY:	DATE	TIME	TEMP°C	SEAL #	CONDITION
[signature]	4/30/93	8:00							

REMARKS:

Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

May 3, 1993

Triad Environmental
Attn: Mr. Steve Johnson
3519 Clemmons Road
Clemmons, NC 27012
Ref: Draper #049355D

Dear Mr. Johnson:

Below are results of analysis of 8 samples received for examination on April 30, 1993:

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA15265 Prism ID Number 2295A8 Prism Customer Number 6671
Collection Date: 04/29/93 Collection Time: 15:55
Submittal Date: 04/30/93 Submittal Time: 15:42
Customer Sample I.D#: XB4/10-12

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
CALCULATIONS BASED ON DRY WEIGHT		done	
TPH - WASTE OIL RANGE	mg/kg	890.	10.

Comments:
Project Name: Draper
Project Number: 049355D

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA15266 Prism ID Number 2295A8 Prism Customer Number 6671
Collection Date: 04/29/93 Collection Time: 09:10
Submittal Date: 04/30/93 Submittal Time: 15:42
Customer Sample I.D#: XB5/15-17

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
CALCULATIONS BASED ON DRY WEIGHT		done	
TPH - WASTE OIL RANGE	mg/kg	670.	10.

Comments:
Project Name: Draper
Project Number: 049355D

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

Triad Environmental
Page: 2
May 4, 1993

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA15267 Prism ID Number 2295A8 Prism Customer Number 6671
Collection Date: 04/30/93 Collection Time: 09:20
Submittal Date: 04/30/93 Submittal Time: 15:42
Customer Sample I.D#: XB5/20-22

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
CALCULATIONS BASED ON DRY WEIGHT		done	
TPH - WASTE OIL RANGE	mg/kg	740.	10.

Comments:
Project Name: Draper
Project Number: 049355D

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA15268 Prism ID Number 2295A8 Prism Customer Number 6671
Collection Date: 04/30/93 Collection Time: 09:35
Submittal Date: 04/30/93 Submittal Time: 15:42
Customer Sample I.D#: XB6/5-7

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
CALCULATIONS BASED ON DRY WEIGHT		done	
TPH - WASTE OIL RANGE	mg/kg	560.	10.

Comments:
Project Name: Draper
Project Number: 049355D

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA15269 Prism ID Number 2295A8 Prism Customer Number 6671
Collection Date: 04/30/93 Collection Time: 09:50
Submittal Date: 04/30/93 Submittal Time: 15:42
Customer Sample I.D#: XB6/10-12

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
CALCULATIONS BASED ON DRY WEIGHT		done	
TPH - WASTE OIL RANGE	mg/kg	750.	10.

Comments:
Project Name: Draper

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

Triad Environmental
Page: 3
May 3, 1993

Project Number: 049355D

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA15270 Prism ID Number 2295A8 Prism Customer Number 6671
Collection Date: 04/29/93 Collection Time: 10:05
Submittal Date: 04/30/93 Submittal Time: 15:42
Customer Sample I.D#: XB6/15-17

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
CALCULATIONS BASED ON DRY WEIGHT		done	
TPH - WASTE OIL RANGE	mg/kg	790.	10.

Comments:
Project Name: Draper
Project Number: 049355D

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA15271 Prism ID Number 2295A8 Prism Customer Number 6671
Collection Date: 04/29/93 Collection Time: 11:00
Submittal Date: 04/30/93 Submittal Time: 15:42
Customer Sample I.D#: LT-1-4

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
CALCULATIONS BASED ON DRY WEIGHT		done	
TPH - WASTE OIL RANGE	mg/kg	10830.	10.

Comments:
Project Name: Draper
Project Number: 049355D

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA15272 Prism ID Number 2295A8 Prism Customer Number 6671
Collection Date: 04/29/93 Collection Time: 11:30
Submittal Date: 04/30/93 Submittal Time: 15:42
Customer Sample I.D#: LT-2-4

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
CALCULATIONS BASED ON DRY WEIGHT		done	

Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

Triad Environmental
Page: 4
May 3, 1993

Sample AA15272 (continued)

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
TPH - WASTE OIL RANGE	mg/kg	3800.	10.

Comments:
Project Name: Draper
Project Number: 049355D

Please advise should you have questions concerning these data.

Respectfully submitted,

Angela D. Overcash
Laboratory Manager

Main Office: 449 Springbrook Road P.O. Box 240543 Charlotte, NC 28224-0543 Phone: (704) 529-6364 Fax:(704) 525-0409
South Carolina Laboratory: 10471 Asheville Highway, P.O. Box 137, Inman, SC 29349 Phone: (803) 472-9046 Fax: (803) 472-5172
All Correspondences and Remittances to the Charlotte Office

Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

STATEMENT OF DATA QUALIFICATIONS

Client: Triad Laboratory Group ID No.: 229548

X All analyses have been validated and comply with our Quality Control Program. No qualifications required.

_____ The following analyses have been qualified for the reasons cited.

Sample No.(s): _____ Parameter: _____ *Reason: _____

Explanation: _____

Sample No.(s): _____ Parameter: _____ *Reason: _____

Explanation: _____

*REASON:

1. Sample integrity suspect upon receipt. (Explain)
2. Analysis performed beyond EPA established maximum allowable holding time.
3. Detection limit elevated due to matrix interference.
4. Laboratory control sample value outside established acceptable limits.
5. Matrix spike sample value outside established acceptable limits.
6. Duplicate analysis value outside established acceptable limits.
7. Surrogate/internal standard recoveries outside established acceptable limits.
8. Data point suspect due to potential laboratory contamination. (Explain)
9. Coelutes with the compound cited. Result may represent a combination of both compounds.
10. Other (Explain).

NOTE: This document is included as part of the Analytical Laboratory Report for the above referenced Laboratory ID No. and must be retained as a permanent record thereof.

Main Office: 449 Springbrook Road P.O. Box 240543 Charlotte, NC 28224-0543 Phone: (704) 529-6364 Fax:(704) 525-0409
South Carolina Laboratory: 10471 Asheville Highway, P.O. Box 137, Inman, SC 29349 Phone: (803) 472-9046 Fax: (803) 472-5172
All Correspondences and Remittances to the Charlotte Office

TRIAD ENVIRONMENTAL CONSULTANTS, INC. AND ASSOCIATES
3519 Clemmons Road
Clemmons, NC 27012
Telephone & FAX
(919) 766-0810

Chain of Custody Record

PROJECT: Draper J.b # 049355D

SITE: Draper Facility, 5644 Hornaday Rd, Greensboro, NC

COLLECTED BY (Signature): M. Alex McGilvary

ANALYSES: EPA Method 9071 Oil and Grease

FIELD SAMPLE I.D.	SAMPLE MATRIX	DATE/TIME	NO. OF CONTAINERS	EPA Method 9071 Oil and Grease	REMARKS	SAM ID NO. (for lab use only)
XB4/10-12	SOIL	4.29.93/1555 hrs	1	X		15265
XB5/15-17	↓	4.30.93/0910 hrs	1	X		15266
XB5/20-22		4.30.93/0920 hrs	1	X		15267
XB6/5-7		4.30.93/0935 hrs	1	X		15268
XB6/10-12		4.30.93/0950 hrs	1	X		15269
XB6/15-17		4.30.93/1005 hrs	1	X		15270
~~XB~~LT-1-4		4.30.93/1100 hrs	1	X		15271
LT-2-4		4.30.93/1150 hrs	1	X		15272

REMARKS: Possible contaminant No 4 Fuel Oil
Samples received on ice

RELINQUISHED BY:	DATE	TIME
M. Alex McGilvary	4/30/93	1405
RELINQUISHED BY:	DATE	TIME

RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
Kathy J. Lee	4/30/93	1405 hrs	Kathy J. Lee	4/30/93	1505 hrs	Jana Nelligan Jr.	4/30/93	1507 hrs

LAB USE ONLY

RECEIVED FOR LABORATORY BY:	DATE	TIME	AIRBILL NO.	OPENED BY:	DATE	TIME	TEMP °C	SEAL #	CONDITION

REMARKS:

eport

NC WW Cert. #402 NC DW Cert. #37735
SC Lab ID 42002-Organics Certification
SC WW Cert. #99012

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

July 23, 1993

RECEIVED 7/27/93

Triad Environmental
Attn: Mr. Alex McGilvary
3519 Clemmons Road
Clemmons, NC 27012
Draper Corp./079370

Dear Mr. McGilvary:

Below are results of analysis of 3 samples received for examination on July 16, 1993:

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA16258 Prism ID Number 2599A3 Prism Customer Number 6671
Collection Date: 07/08/93 Collection Time: 16:30
Submittal Date: 07/16/93 Submittal Time: 10:30
Customer Sample I.D#: RPL-1-6.0

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
CALCULATIONS BASED ON DRY WEIGHT		done	
TPH - WASTE OIL RANGE - 9071	mg/kg	808	10

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA16259 Prism ID Number 2599A3 Prism Customer Number 6671
Collection Date: 07/09/93 Collection Time: 08:30
Submittal Date: 07/16/93 Submittal Time: 10:30
Customer Sample I.D#: RPL-2-11.0

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
CALCULATIONS BASED ON DRY WEIGHT		done	
TPH - WASTE OIL RANGE - 9071	mg/kg	12	10

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA16260 Prism ID Number 2599A3 Prism Customer Number 6671
Collection Date: 07/09/93 Collection Time: 09:00
Submittal Date: 07/16/93 Submittal Time: 10:30
Customer Sample I.D#: RPL-3-8.0

Report

Triad Environmental
Page: 2
July 23, 1993

PRISM
LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
CALCULATIONS BASED ON DRY WEIGHT		done	
TPH - WASTE OIL RANGE - 9071	mg/kg	2058	10

Please advise should you have questions concerning these data.

Respectfully submitted,

Angela D. Overcash
Laboratory Manager

Main Office: 449 Springbrook Road P.O. Box 240543 Charlotte, NC 28224-0543 Phone: (704) 529-6364 Fax: (803) 525-0409
South Carolina Laboratory: 10471 Asheville Highway, P.O. Box 137, Inman, SC 29349 Phone (803) 472-9046 Fax: (803) 472-5172
All Correspondences and Remittances to the Charlotte Office

Lab Report

PRISM
LABORATORIES, INC.

Main Office:
449 Springbrook Road
P.O. Box 240543
Charlotte, NC 28224-0543
Phone: (704) 529-6364
Fax: (704) 525-0409

Full Service Analytical & Environmental Solutions

STATEMENT OF DATA QUALIFICATIONS

on Analyses Performed by Prism Laboratories, Inc.

Client: Trad Laboratory Group ID No.: 2599A3

X All analyses have been validated and comply with our Quality Control Program. No qualifications required.

_____ The following analyses have been qualified for the reasons cited.

Sample No.(s): _____ Parameter: _____ *Reason: _____

Explanation: _____

Sample No.(s): _____ Parameter: _____ *Reason: _____

Explanation: _____

*REASON:

1. Sample integrity suspect upon receipt. (Explain)
2. Analysis performed beyond EPA established maximum allowable holding time.
3. Detection limit elevated due to matrix interference.
4. Laboratory control sample value outside established acceptable limits.
5. Matrix spike sample value outside established acceptable limits.
6. Duplicate analysis value outside established acceptable limits.
7. Surrogate/internal standard recoveries outside established acceptable limits.
8. Data point suspect due to potential laboratory contamination. (Explain)
9. Coelutes with the compound cited. Result may represent a combination of both compounds.
10. Other (Explain).

NOTE: This document is included as part of the Analytical Laboratory Report for the above referenced Laboratory ID No. and must be retained as a permanent record thereof.

PAYMENT TERMS: NET 10 DAYS
A 1.5% Interest Rate will be charged on account balances over 30 Days old.
We reserve the right to withhold lab test results on delinquent accounts over 60 days.

All Correspondences and Remittances to the Charlotte Office
South Carolina Laboratory: 10471 Asheville Highway, P.O. Box 137, Inman, SC 29349
Phone: (803) 472-9046 Fax: (803) 472-5172

TRIAD ENVIRONMENTAL CONSULTANTS, INC. AND ASSOCIATES
3519 Clemmons Road
Clemmons, NC 27012
Telephone & FAX
(919) 766-0810

Chain of Custody Record

Prism

PROJECT: Draper Corporation #079370

SITE: Hornaday Road Greensboro, N.C.

COLLECTED BY (Signature): Dan M. Groome

FIELD SAMPLE I.D.	SAMPLE MATRIX	DATE/TIME	NO. OF CONTAINERS	Oil & Grease EPA 9071								REMARKS	SAM ID NO. (for lab use only)
RPL-1-6.0	Soil	7-8-93/1630	1	✓									16258
RPL-2-11.0	"	7-9-93/0830	1	✓									16259
RPL-3-8.0	"	7-9-93/0900	1	✓									16260

REMARKS

RELINQUISHED BY:	DATE	TIME
Dan M. Groome	7-16-93	1435

RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME
James Nelliger	7-16-93	1435	James Nelliger Jr.	7-17-93	10:00 A.M.	A. Mercier	7/17/93	10:00			

LAB USE ONLY

RECEIVED FOR LABORATORY BY:	DATE	TIME	AIRBILL NO.	OPENED BY:	DATE	TIME	TEMP°C	SEAL #	CONDITION

REMARKS:

Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

January 18, 1993

RECEIVED 1/20/93

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

Dear Mr. Johnson:

Below are results of analysis of 1 sample received for examination on January 8, 1993:

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA13996 Prism ID Number 1860A1 Prism Customer Number 6671
Collection Date: 01/08/93 Collection Time: 09:50
Submittal Date: 01/08/93 Submittal Time: 15:53
Customer Sample I.D#: MW-6

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Multicomponent analysis: ACID EXTRACTABLES BY GCMS			
4-NITROPHENOL	ug/l	Not Det	5
PENTACHLOROPHENOL	ug/l	Not Det	5
4,6-DINITRO-O-CRESOL	ug/l	Not Det	5
2,4-DINITROPHENOL	ug/l	31	5
4-CHLORO-3-METHYPHENOL	ug/l	Not Det	5
2,4,6-TRICHLOROPHENOL	ug/l	Not Det	5
2,4-DICHLOROPHENOL	ug/l	Not Det	5
2,4-DIMETHYLPHENOL	ug/l	Not Det	5
PHENOL	ug/l	Not Det	5
2-NITROPHENOL	ug/l	Not Det	5
2-CHLOROPHENOL	ug/l	Not Det	5
Multicomponent analysis: BASE-NEUTRALS BY GCMS			
N-NITROSODIMETHYLAMINE	ug/L	Not Det	5
BIS(2-CHLOROETHYL)ETHER	ug/L	Not Det	5
N-NITROSO-DI-N-PROPYLAMINE	ug/L	Not Det	5
NITROBENZENE	ug/L	Not Det	5
HEXACHLOROBUTADIENE	ug/L	Not Det	5
1,2,4-TRICHLOROBENZENE	ug/L	Not Det	5
ISOPHORONE	ug/L	Not Det	5
NAPHTHALENE	ug/L	Not Det	5
BIS(2-CHLOROETHOXY)METHANE	ug/L	Not Det	5
HEXACHLOROCYCLOPENTADIENE	ug/L	Not Det	5
2-CHLORONAPHTHALENE	ug/L	Not Det	5

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

Triad Environmental
Page: 2
January 18, 1993

BASE-NEUTRALS BY GCMS (continued):

ACENAPHTHYLENE	ug/L	Not Det	5
ACENAPHTHENE	ug/L	Not Det	5
DIMETHYL PHTHALATE	ug/L	Not Det	5
2,6-DINITROTOLUENE	ug/L	Not Det	5
FLUORENE	ug/L	Not Det	5
4-CHLOROPHENYL PHENYL ETHER	ug/L	Not Det	5
2,4-DINITROTOLUENE	ug/L	Not Det	5
DIETHYL PHTHALATE	ug/L	Not Det	5
N-NITROSODIPHENYLAMINE	ug/L	Not Det	5
1,2-DIPHENYL HYDRAZINE	ug/L	Not Det	5
HEXACHLOROBENZENE	ug/L	Not Det	5
4-BROMOPHENYL PHENYL ETHER	ug/L	Not Det	5
PHENANTHRENE	ug/L	Not Det	5
ANTHRACENE	ug/L	Not Det	5
DI-N-BUTYL-PHTHALATE	ug/L	Not Det	5
FLUORANTHENE	ug/L	Not Det	5
PYRENE	ug/L	Not Det	5
BENZIDINE	ug/L	Not Det	5
BUTYL BENZYL PHTHALATE	ug/L	Not Det	5
BIS(2-ETHYLHEXYL) PHTHALATE	ug/L	Not Det	5
BENZO (a) ANTHRACENE	ug/L	Not Det	5
CHRYSENE	ug/L	Not Det	5
3,3'-DICHLOROBENZIDINE	ug/L	Not Det	5
DI-N-OCTAL PHTHALATE	ug/L	Not Det	5
BENZO (b) FLUORANTHENE	ug/L	Not Det	5
BENZO (k) FLUORANTHENE	ug/L	Not Det	5
BENZO (a) PYRENE	ug/L	Not Det	5
INDENO (1,2,3-cd) PYRENE	ug/L	Not Det	5
DIBENZ (a,h) ANTHRACENE	ug/L	Not Det	5
BENZO (g,h,i) PERYLENE	ug/L	Not Det	5
2-METHYLNAPHTHALENE	ug/L	Not Det	5
BIS(2-CHLOROISOPROPYL) ETHER	ug/L	Not Det	5
4-CHLOROPHENYL PHENYL ETHER	ug/L	Not Det	5
HEXACHLOROETHANE	ug/L	Not Det	5
EPA METHOD 8270, GCMS		done	

Comments:
Project Name: Draper Corporation
MW-6

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

Please advise should you have questions concerning these data.

Respectfully submitted,

Angela D. Overcash
Laboratory Manager

Main Office: 449 Springbrook Road P.O. Box 240543 Charlotte, NC 28224-0543 Phone: (704) 529-6364 Fax:(704) 525-0409
South Carolina Laboratory: 10471 Asheville Highway, P.O. Box 137, Inman, SC 29349 Phone: (803) 472-9046 Fax: (803) 472-5172
All Correspondences and Remittances to the Charlotte Office

TRIAD ENVIRONMENTAL CONSULTANTS, INC. AND ASSOCIATES

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

Chain of Custody Record

Page _____ of _____

PROJECT: Draper Corporation

SITE: Hornaday Road Greensboro N.C.

COLLECTED BY (Signature): Don M. Groome

ANALYSES: EPA 625 only B/N

FIELD SAMPLE I.D.	SAMPLE MATRIX	DATE/TIME	NO. OF CONTAINERS	EPA 625 only B/N	REMARKS	SAM ID NO. (for lab use only)
MW-6	Water	1-8-93/0950	4	X		13996

REMARKS: Detection limit of 2.5 ppb if possible

RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
[illegible]	1-8-93	1413	James Nelly Jr.	1-8-93	3:45pm	Deidy Scott	1/8/93	3:45

RELINQUISHED BY:	DATE	TIME
Don M. Groome	1-8-93	1430
RELINQUISHED BY:	DATE	TIME

LAB USE ONLY

RECEIVED FOR LABORATORY BY:	DATE	TIME	AIRBILL NO.	OPENED BY:	DATE	TIME	TEMP °C	SEAL	CONDITION

REMARKS:

Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

Triad Environmental
Page: 2
February 4, 1993

EPA Method 624 (continued):

bromodichloromethane	ug/l	Not Det	5
dibromochloromethane	ug/l	Not Det	5
1,2-dichlorobenzene	ug/l	Not Det	5
tetrachloroethene	ug/l	Not Det	5
toluene	ug/l	Not Det	5
trichloroethene	ug/l	Not Det	5
vinyl chloride	ug/l	Not Det	5
1,4-dichlorobenzene	ug/l	Not Det	10
trichlorofluoromethane	ug/l	Not Det	5
cis-1,2-dichloroethene	ug/l	Not Det	5

Comments:
Project Name: Draper Corporation
Job Number: 019329

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA14253 Prism ID Number 1941A648 Prism Customer Number 6671
Collection Date: 01/29/93 Collection Time: 14:50
Submittal Date: 02/01/93 Submittal Time: 14:06
Customer Sample I.D#: MW-6

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Fax results		done	
Multicomponent analysis: EPA Method 624			
benzene	ug/l	Not Det	5
carbon tetrachloride	ug/l	Not Det	5
chlorobenzene	ug/l	Not Det	5
1,2-dichloroethane	ug/l	Not Det	5
1,1,1-trichloroethane	ug/l	Not Det	5
1,1-dichloroethane	ug/l	Not Det	5
1,1,2-trichloroethane	ug/l	Not Det	5
1,1,2,2-tetrachloroethane	ug/l	Not Det	5
chloroethane	ug/l	Not Det	5
1,3-dichlorobenzene	ug/l	Not Det	10
2-chloroethylvinyl ether	ug/l	Not Det	5
chloroform	ug/l	Not Det	10
1,1-dichloroethene	ug/l	Not Det	5
trans-1,2-dichloroethene	ug/l	Not Det	5
1,2-dichloropropane	ug/l	Not Det	5
cis-1,3-dichloropropene	ug/l	Not Det	5
trans-1,3-dichloropropene	ug/l	Not Det	5
ethylbenzene	ug/l	Not Det	5
methylene chloride	ug/l	Not Det	5

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

Triad Environmental
Page: 3
February 4, 1993

EPA Method 624 (continued):

chloromethane	ug/l	Not Det	10
bromomethane	ug/l	Not Det	10
bromoform	ug/l	Not Det	5
bromodichloromethane	ug/l	Not Det	5
dibromochloromethane	ug/l	Not Det	5
1,2-dichlorobenzene	ug/l	Not Det	5
tetrachloroethene	ug/l	Not Det	5
toluene	ug/l	Not Det	5
trichloroethene	ug/l	Not Det	5
vinyl chloride	ug/l	Not Det	10
1,4-dichlorobenzene	ug/l	Not Det	5
trichlorofluoromethane	ug/l	Not Det	5
cis-1,2-dichloroethene	ug/l	22	5

Multicomponent analysis: ACID EXTRACTABLES BY GCMS

4-NITROPHENOL	ug/l	Not Det	10
PENTACHLOROPHENOL	ug/l	Not Det	10
4,6-DINITRO-O-CRESOL	ug/l	Not Det	10
2,4-DINITROPHENOL	ug/l	Not Det	10
4-CHLORO-3-METHYPHENOL	ug/l	Not Det	10
2,4,6-TRICHLOROPHENOL	ug/l	Not Det	10
2,4-DICHLOROPHENOL	ug/l	Not Det	10
2,4-DIMETHYLPHENOL	ug/l	Not Det	10
PHENOL	ug/l	Not Det	10
2-NITROPHENOL	ug/l	Not Det	10
2-CHLOROPHENOL	ug/l	Not Det	10

Multicomponent analysis: BASE-NEUTRALS BY GCMS

N-NITROSODIMETHYLAMINE	ug/L	Not Det	10
BIS(2-CHLOROETHYL)ETHER	ug/L	Not Det	10
N-NITROSO-DI-N-PROPYLAMINE	ug/L	Not Det	10
NITROBENZENE	ug/L	Not Det	10
HEXACHLOROBUTADIENE	ug/L	Not Det	10
1,2,4-TRICHLOROBENZENE	ug/L	Not Det	10
ISOPHORONE	ug/L	Not Det	10
NAPHTHALENE	ug/L	Not Det	10
BIS(2-CHLOROETHOXY)METHANE	ug/L	Not Det	10
HEXACHLOROCYCLOPENTADIENE	ug/L	Not Det	10
2-CHLORONAPHTHALENE	ug/L	Not Det	10
ACENAPHTHYLENE	ug/L	Not Det	10
ACENAPHTHENE	ug/L	Not Det	10
DIMETHYL PHTHALATE	ug/L	Not Det	10
2,6-DINITROTOLUENE	ug/L	Not Det	10
FLUORENE	ug/L	Not Det	10
4-CHLOROPHENYL PHENYL ETHER	ug/L	Not Det	10
2,4-DINITROTOLUENE	ug/L	Not Det	10
DIETHYL PHTHALATE	ug/L	Not Det	10

Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

Triad Environmental
Page: 4
February 4, 1993

BASE-NEUTRALS BY GCMS (continued):

N-NITROSODIPHENYLAMINE	ug/L	Not Det	10
1,2-DIPHENYL HYDRAZINE	ug/L	Not Det	10
HEXACHLOROBENZENE	ug/L	Not Det	10
4-BROMOPHENYL PHENYL ETHER	ug/L	Not Det	10
PHENANTHRENE	ug/L	Not Det	10
ANTHRACENE	ug/L	Not Det	10
DI-N-BUTYL-PHTHALATE	ug/L	Not Det	10
FLUORANTHENE	ug/L	Not Det	10
PYRENE	ug/L	Not Det	10
BENZIDINE	ug/L	Not Det	10
BUTYL BENZYL PHTHALATE	ug/L	Not Det	10
BIS(2-ETHYLHEXYL) PHTHALATE	ug/L	Not Det	10
BENZO (a) ANTHRACENE	ug/L	Not Det	10
CHRYSENE	ug/L	Not Det	10
3,3'-DICHLOROBENZIDINE	ug/L	Not Det	10
DI-N-OCTAL PHTHALATE	ug/L	Not Det	10
BENZO (b) FLUORANTHENE	ug/L	Not Det	10
BENZO (k) FLUORANTHENE	ug/L	Not Det	10
BENZO (a) PYRENE	ug/L	Not Det	10
INDENO (1,2,3-cd) PYRENE	ug/L	Not Det	10
DIBENZ (a,h) ANTHRACENE	ug/L	Not Det	10
BENZO (g,h,i) PERYLENE	ug/L	Not Det	10
2-METHYLNAPHTHALENE	ug/L	Not Det	10
BIS(2-CHLOROISOPROPYL) ETHER	ug/L	Not Det	10
4-CHLOROPHENYL PHENYL ETHER	ug/L	Not Det	10
HEXACHLOROETHANE	ug/L	Not Det	10
EPA METHOD 8270, GCMS		done	

Comments:
Project Name: Draper Corporation
Job Number: 019329

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA14254 Prism ID Number 1941A648 Prism Customer Number 6671
Collection Date: 01/29/93 Collection Time: 15:50
Submittal Date: 02/01/93 Submittal Time: 14:06
Customer Sample I.D#: MW-8

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Fax results		done	
Multicomponent analysis: EPA Method 624			
benzene	ug/l	Not Det	5
carbon tetrachloride	ug/l	Not Det	5

TRIAD ENVIRONMENTAL CONSULTANTS, INC. AND ASSOCIATES

3519 Clemmons Road
Clemmons, NC 27012
Telephone & FAX
(919) 766-0819

Chain of Custody Record

Page 1 of 1

PROJECT: Draper Corporation

SITE: Hercules Rd. - Greensboro, NC.

COLLECTED BY (Signature): Don M. Greene

JOB #: 019329

FIELD SAMPLE I.D	SAMPLE MATRIX	DATE/TIME	NO. OF CONTAINERS	EPA 624	EPA 625 ABN								REMARKS	SAM ID NO. (for lab use only)
MW-4	WATER	1-29-93/1230	3	✓										14252
MW-6	↓	1-29-93/1450	8	✓	✓									14253
MW-8		1-29-93/1550	3	✓										14254
MW-9		1-31-93/1330	3	✓										14255
MW-10		1-31-93/1400	3	✓										14256
S-1		1-29-93/1240	3	✓										14257

ANALYSES

REMARKS: RUSH ASAP Results

RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME
Jean Kelly	2-1-93	9:55A	Jean Kelly	2-1-93	11:15	Heidi Scott	2/1/93	11:15A	Don M. Greene	2-1-93	9:55

LAB USE ONLY

RECEIVED FOR LABORATORY BY:	DATE	TIME	AIRBILL NO.	OPENED BY	DATE	TIME	TEMP°C	SEAL	CONDITION

REMARKS:

eport

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

May 3, 1993

Triad Environmental
Attn: Mr. Steve Johnson
3519 Clemmons Road
Clemmons, NC 27012
Ref: Draper #049355C

Dear Mr. Johnson:

Below are results of analysis of 3 samples received for examination on April 30, 1993:

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA15257 Prism ID Number 2289A3 Prism Customer Number 6671
Collection Date: 04/29/93 Collection Time: 17:50
Submittal Date: 04/30/93
Customer Sample I.D#: MW-13

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
		done	
PREP METHOD 3510		done	
Multicomponent analysis: EPA METHOD 625			
ACENAPHTHENE	ug/l	Not Det	10
ACENAPHTHYLENE	ug/l	Not Det	10
ANTHRACENE	ug/l	Not Det	10
BENZO(A)ANTHRACENE	ug/l	Not Det	10
BENZO(B)FLUORANTHENE	ug/l	Not Det	10
BENZO(K)FLUORANTHENE	ug/l	Not Det	10
BENZO(A)PYRENE	ug/l	Not Det	10
BENZO(GHI)PERYLENE	ug/l	Not Det	10
BIS(2-CHLOROETHOXY)METHANE	ug/l	Not Det	10
BIS(2-CHLOROETHYL)ETHER	ug/l	Not Det	10
BIS(2-CHLOROISOPROPYL)ETHER	ug/l	Not Det	10
BIS(2-ETHYLHEXYL)PHTHALATE	ug/l	Not Det	10
4-BROMOPHENYL PHENYL ETHER	ug/l	Not Det	10
BUTYL BENZYL PHTHALATE	ug/l	Not Det	10
CARBAZOLE	ug/l	Not Det	10
4-CHLORO-3-METHYLPHENOL	ug/l	Not Det	10
2-CHLORONAPHTHALENE	ug/l	Not Det	10
2-CHLOROPHENOL	ug/l	Not Det	10
4-CHLOROPHENYL PHENYL ETHER	ug/l	Not Det	10
CHRYSENE	ug/l	Not Det	10
DIBENZO(A,H)ANTHRACENE	ug/l	Not Det	10

Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

Triad Environmental
Page: 2
May 3, 1993

EPA METHOD 625 (continued):

DIBENZO FURAN	ug/l	Not Det	10
DI-N-BUTYLPHTHALATE	ug/l	Not Det	50
1,2-DICHLOROBENZENE	ug/l	Not Det	10
1,3-DICHLOROBENZENE	ug/l	Not Det	10
1,4-DICHLOROBENZENE	ug/l	Not Det	10
2,4-DICHLOROPHENOL	ug/l	Not Det	10
DIETHYL PHTHALATE	ug/l	Not Det	10
2,4-DIMETHYLPHENOL	ug/l	Not Det	10
DIMETHYL PHTHALATE	ug/l	Not Det	10
2,4-DINITROPHENOL	ug/l	Not Det	25
2,4-DINITROTOLUENE	ug/l	Not Det	10
2,6-DINITROTOLUENE	ug/l	Not Det	10
DI-N-OCTYLPHTHALATE	ug/l	Not Det	50
FLUORANTHENE	ug/l	Not Det	10
FLUORENE	ug/l	Not Det	10
HEXACHLOROBENZENE	ug/l	Not Det	10
HEXACHLOROBUTADIENE	ug/l	Not Det	10
HEXACHLOROCYCLOPENTADIENE	ug/l	Not Det	50
HEXACHLOROETHANE	ug/l	Not Det	10
INDENO(1,2,3-CD)PYRENE	ug/l	Not Det	10
ISOPHORONE	ug/l	Not Det	10
2-METHYL-4,6-DINITROPHENOL	ug/l	Not Det	50
2-METHYL NAPHTHALENE	ug/l	Not Det	10
2-METHYL-PHENOL	ug/l	Not Det	10
4-METHYL-PHENOL	ug/l	Not Det	10
NAPHTHALENE	ug/l	Not Det	10
NITROBENZENE	ug/l	Not Det	10
2-NITROPHENOL	ug/l	Not Det	10
4-NITROPHENOL	ug/l	Not Det	50
N-NITROSODIPHENYLAMINE	ug/l	Not Det	10
N-NITROSODI-N-PROPYLAMINE	ug/l	Not Det	10
PENTACHLOROPHENOL	ug/l	Not Det	50
PHENANTHRENE	ug/l	Not Det	10
PHENOL	ug/l	Not Det	10
PYRENE	ug/l	Not Det	10
1,2,4-TRICHLOROBENZENE	ug/l	Not Det	10
2,4,5-TRICHLOROPHENOL	ug/l	Not Det	10
2,4,6-TRICHLOROPHENOL	ug/l	Not Det	10

Comments:
Project Name: Draper
Project Number: 049355C

There were no unknown peaks to identify; however, the chromatograph showed presence of hydrocarbons at levels that require no action.

Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

Triad Environmental
Page: 3
May 3, 1993

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA15258 Prism ID Number 2289A3 Prism Customer Number 6671
Collection Date: 04/29/93 Collection Time: 18:15
Submittal Date: 04/30/93
Customer Sample I.D#: MW-6

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
		done	
PREP METHOD 3510		done	
Multicomponent analysis: EPA METHOD 625			
ACENAPHTHENE	ug/l	Not Det	10
ACENAPHTHYLENE	ug/l	Not Det	10
ANTHRACENE	ug/l	Not Det	10
BENZO(A)ANTHRACENE	ug/l	Not Det	10
BENZO(B)FLUORANTHENE	ug/l	Not Det	10
BENZO(K)FLUORANTHENE	ug/l	Not Det	10
BENZO(A)PYRENE	ug/l	Not Det	10
BENZO(GHI)PERYLENE	ug/l	Not Det	10
BIS(2-CHLOROETHOXY)METHANE	ug/l	Not Det	10
BIS(2-CHLOROETHYL)ETHER	ug/l	Not Det	10
BIS(2-CHLOROISOPROPYL)ETHER	ug/l	Not Det	10
BIS(2-ETHYLHEXYL)PHTHALATE	ug/l	Not Det	10
4-BROMOPHENYL PHENYL ETHER	ug/l	Not Det	10
BUTYL BENZYL PHTHALATE	ug/l	Not Det	10
CARBAZOLE	ug/l	Not Det	10
4-CHLORO-3-METHYLPHENOL	ug/l	Not Det	10
2-CHLORONAPHTHALENE	ug/l	Not Det	10
2-CHLOROPHENOL	ug/l	Not Det	10
4-CHLOROPHENYL PHENYL ETHER	ug/l	Not Det	10
CHRYSENE	ug/l	Not Det	10
DIBENZO(A,H)ANTHRACENE	ug/l	Not Det	10
DIBENZO FURAN	ug/l	Not Det	10
DI-N-BUTYLPHTHALATE	ug/l	Not Det	50
1,2-DICHLOROBENZENE	ug/l	Not Det	10
1,3-DICHLOROBENZENE	ug/l	Not Det	10
1,4-DICHLOROBENZENE	ug/l	Not Det	10
2,4-DICHLOROPHENOL	ug/l	Not Det	10
DIETHYL PHTHALATE	ug/l	Not Det	10
2,4-DIMETHYLPHENOL	ug/l	Not Det	10
DIMETHYL PHTHALATE	ug/l	Not Det	10
2,4-DINITROPHENOL	ug/l	Not Det	25
2,4-DINITROTOLUENE	ug/l	Not Det	10
2,6-DINITROTOLUENE	ug/l	Not Det	10
DI-N-OCTYLPHTHALATE	ug/l	Not Det	50
FLUORANTHENE	ug/l	Not Det	10

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

Triad Environmental
Page: 4
May 3, 1993

EPA METHOD 625 (continued):

FLUORENE	ug/l	Not Det	10
HEXACHLOROBENZENE	ug/l	Not Det	10
HEXACHLOROBUTADIENE	ug/l	Not Det	10
HEXACHLOROCYCLOPENTADIENE	ug/l	Not Det	50
HEXACHLOROETHANE	ug/l	Not Det	10
INDENO(1,2,3-CD)PYRENE	ug/l	Not Det	10
ISOPHORONE	ug/l	Not Det	10
2-METHYL-4,6-DINITROPHENOL	ug/l	Not Det	50
2-METHYL NAPHTHALENE	ug/l	Not Det	10
2-METHYL-PHENOL	ug/l	Not Det	10
4-METHYL-PHENOL	ug/l	Not Det	10
NAPHTHALENE	ug/l	Not Det	10
NITROBENZENE	ug/l	Not Det	10
2-NITROPHENOL	ug/l	Not Det	10
4-NITROPHENOL	ug/l	Not Det	50
N-NITROSODIPHENYLAMINE	ug/l	Not Det	10
N-NITROSODI-N-PROPYLAMINE	ug/l	Not Det	10
PENTACHLOROPHENOL	ug/l	Not Det	50
PHENANTHRENE	ug/l	Not Det	10
PHENOL	ug/l	Not Det	10
PYRENE	ug/l	Not Det	10
1,2,4-TRICHLOROBENZENE	ug/l	Not Det	10
2,4,5-TRICHLOROPHENOL	ug/l	Not Det	10
2,4,6-TRICHLOROPHENOL	ug/l	Not Det	10

Comments:
Project Name: Draper
Project Number: 049355C

There were no unknown peaks to identify.

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA15259 Prism ID Number 2289A3 Prism Customer Number 6671
Collection Date: 04/29/93 Collection Time: 19:16
Submittal Date: 04/30/93
Customer Sample I.D#: MW-14

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
		done	
PREP METHOD 3510		done	
Multicomponent analysis: EPA METHOD 625			
ACENAPHTHENE	ug/l	Not Det	10
ACENAPHTHYLENE	ug/l	Not Det	10

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

Triad Environmental
Page: 5
May 3, 1993

EPA METHOD 625 (continued):

ANTHRACENE	ug/l	Not Det	10
BENZO(A)ANTHRACENE	ug/l	Not Det	10
BENZO(B)FLUORANTHENE	ug/l	Not Det	10
BENZO(K)FLUORANTHENE	ug/l	Not Det	10
BENZO(A)PYRENE	ug/l	Not Det	10
BENZO(GHI)PERYLENE	ug/l	Not Det	10
BIS(2-CHLOROETHOXY)METHANE	ug/l	Not Det	10
BIS(2-CHLOROETHYL)ETHER	ug/l	Not Det	10
BIS(2-CHLOROISOPROPYL)ETHER	ug/l	Not Det	10
BIS(2-ETHYLHEXYL)PHTHALATE	ug/l	Not Det	10
4-BROMOPHENYL PHENYL ETHER	ug/l	Not Det	10
BUTYL BENZYL PHTHALATE	ug/l	Not Det	10
CARBAZOLE	ug/l	Not Det	10
4-CHLORO-3-METHYLPHENOL	ug/l	Not Det	10
2-CHLORONAPHTHALENE	ug/l	Not Det	10
2-CHLOROPHENOL	ug/l	Not Det	10
4-CHLOROPHENYL PHENYL ETHER	ug/l	Not Det	10
CHRYSENE	ug/l	Not Det	10
DIBENZO(A,H)ANTHRACENE	ug/l	Not Det	10
DIBENZO FURAN	ug/l	Not Det	10
DI-N-BUTYLPHTHALATE	ug/l	Not Det	50
1,2-DICHLOROBENZENE	ug/l	Not Det	10
1,3-DICHLOROBENZENE	ug/l	Not Det	10
1,4-DICHLOROBENZENE	ug/l	Not Det	10
2,4-DICHLOROPHENOL	ug/l	Not Det	10
DIETHYL PHTHALATE	ug/l	Not Det	10
2,4-DIMETHYLPHENOL	ug/l	Not Det	10
DIMETHYL PHTHALATE	ug/l	Not Det	10
2,4-DINITROPHENOL	ug/l	Not Det	25
2,4-DINITROTOLUENE	ug/l	Not Det	10
2,6-DINITROTOLUENE	ug/l	Not Det	10
DI-N-OCTYLPHTHALATE	ug/l	Not Det	50
FLUORANTHENE	ug/l	Not Det	10
FLUORENE	ug/l	Not Det	10
HEXACHLOROBENZENE	ug/l	Not Det	10
HEXACHLOROBUTADIENE	ug/l	Not Det	10
HEXACHLOROCYCLOPENTADIENE	ug/l	Not Det	50
HEXACHLOROETHANE	ug/l	Not Det	10
INDENO(1,2,3-CD)PYRENE	ug/l	Not Det	10
ISOPHORONE	ug/l	Not Det	10
2-METHYL-4,6-DINITROPHENOL	ug/l	Not Det	50
2-METHYL NAPHTHALENE	ug/l	Not Det	10
2-METHYL-PHENOL	ug/l	Not Det	10
4-METHYL-PHENOL	ug/l	Not Det	10
NAPHTHALENE	ug/l	Not Det	10
NITROBENZENE	ug/l	Not Det	10
2-NITROPHENOL	ug/l	Not Det	10

PRISM
LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

Triad Environmental
Page: 6
May 3, 1993

EPA METHOD 625 (continued):

4-NITROPHENOL	ug/l	Not Det	50
N-NITROSODIPHENYLAMINE	ug/l	Not Det	10
N-NITROSODI-N-PROPYLAMINE	ug/l	Not Det	10
PENTACHLOROPHENOL	ug/l	Not Det	50
PHENANTHRENE	ug/l	Not Det	10
PHENOL	ug/l	Not Det	10
PYRENE	ug/l	Not Det	10
1,2,4-TRICHLOROBENZENE	ug/l	Not Det	10
2,4,5-TRICHLOROPHENOL	ug/l	Not Det	10
2,4,6-TRICHLOROPHENOL	ug/l	Not Det	10

Comments:
Project Name: Draper
Project Number: 049355C

There were no unknown peaks to identify.

Please advise should you have questions concerning these data.

Respectfully submitted,

Angela D. Overcash
Laboratory Manager

Main Office: 449 Springbrook Road P.O. Box 240543 Charlotte, NC 28224-0543 Phone: (704) 529-6364 Fax:(704) 525-0409
South Carolina Laboratory: 10471 Asheville Highway, P.O. Box 137, Inman, SC 29349 Phone: (803) 472-9046 Fax: (803) 472-5172
All Correspondences and Remittances to the Charlotte Office

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

Main Office:
449 Springbrook Road
P.O. Box 240543
Charlotte, NC 28224-0543
Phone: (704) 529-6364
Fax: (704) 525-0409

STATEMENT OF DATA QUALIFICATIONS

on Analyses Performed by Prism Laboratories, Inc.

Client: Triad Laboratory Group ID No.: 2289A3

X All analyses have been validated and comply with our Quality Control Program. No qualifications required.

_____ The following analyses have been qualified for the reasons cited.

Sample No.(s): _____ Parameter: _____ *Reason: _____

Explanation: _____

Sample No.(s): _____ Parameter: _____ *Reason: _____

Explanation: _____

*REASON:

1. Sample integrity suspect upon receipt. (Explain)
2. Analysis performed beyond EPA established maximum allowable holding time.
3. Detection limit elevated due to matrix interference.
4. Laboratory control sample value outside established acceptable limits.
5. Matrix spike sample value outside established acceptable limits.
6. Duplicate analysis value outside established acceptable limits.
7. Surrogate/internal standard recoveries outside established acceptable limits.
8. Data point suspect due to potential laboratory contamination. (Explain)
9. Coelutes with the compound cited. Result may represent a combination of both compounds.
10. Other (Explain).

NOTE: This document is included as part of the Analytical Laboratory Report for the above referenced Laboratory ID No. and must be retained as a permanent record thereof.

PAYMENT TERMS: NET 10 DAYS
A 1.5% Interest Rate will be charged on account balances over 30 Days old.
We reserve the right to withhold lab test results on delinquent accounts over 60 days.

All Correspondences and Remittances to the Charlotte Office
South Carolina Laboratory: 10471 Asheville Highway, P.O. Box 137, Inman, SC 29349
Phone: (803) 472-[illegible]046 Fax: (803) 472-5172

IAD ENVIRONMENTAL CONSULTANTS, INC. AND ASSOCIATES
3519 Clemmons Road
Clemmons, NC 27012
Telephone & FAX
(919) 766-0810

Chain of Custod[illegible] Recor[illegible]

Page ____ of ____

PROJECT DRAPER #049355C

SITE HORNADAY ROAD, G.S.O.

COLLECTED BY (Signature) W. S. John

RUSH!!! RESULTS DUE BY MON-TUE (5-3-93) (5-4-93) PER ROBBIE

FIELD SAMPLE I.D.	SAMPLE MATRIX	DATE/TIME	NO. OF CONTAINERS	ANALYSES: EPA 625								REMARKS	SAM ID NO. (for lab use only)
mw-13	WATER	4/29/93 5:50 pm	2	✓								w/10 HIGHEST PEAKS	15257
mw-6	"	4/29/93 6:15 pm	2	✓									15258
mw-14	"	4/29/93 7:16 pm	2	✓									15259

REMARKS

RELINQUISHED BY:	DATE	TIME
W. S. John	4/30/93	8:00 AM

RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME
Kathy J. Lane	4/30/93	0800 hrs	Kathy J. Lane	4/30/93	0905 hrs	James Nillage Jr.	4/5/93	0901 hrs			

LAB USE ONLY

RECEIVED FOR LABORATORY BY:	DATE	TIME	AIRBILL NO.	OPENED BY:	DATE	TIME	TEMP°C	SEAL #	CONDITION
Nedy A. Scott	4/30	10:55							

REMARKS

eport

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

NC WW Cert. #402 NC DW Cert. #37735
SC Lab ID 42002-Organics Certification
SC WW Cert. #99012

July 23, 1993

Triad Environmental
Attn: Dan M. Groome
3519 Clemmons Road
Clemmons, NC 27012
Ref: Draper Corp.\49355-E

Dear Mr. Groome:

Below are results of analysis of 1 sample received for examination on July 8, 1993:

Customer Code: TRIAD Phone Number: (919)766-0810 (fax) 766-0810
LAB I.D. AA16091 Prism ID Number 2531A1 Prism Customer Number 6671
Collection Date: 07/08/93 Collection Time: 09:15
Submittal Date: 07/08/93 Submittal Time: 16:05
Customer Sample I.D#: AS-1

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
PREP METHOD 3510		done	
Multicomponent analysis: EPA METHOD 625			
ACENAPHTHENE	ug/l	Not Det	100
ACENAPHTHYLENE	ug/l	Not Det	100
ANTHRACENE	ug/l	Not Det	100
BENZO(A)ANTHRACENE	ug/l	Not Det	100
BENZO(B)FLUORANTHENE	ug/l	Not Det	100
BENZO(K)FLUORANTHENE	ug/l	Not Det	100
BENZO(A)PYRENE	ug/l	Not Det	100
BENZO(GHI)PERYLENE	ug/l	Not Det	100
BIS(2-CHLOROETHOXY)METHANE	ug/l	Not Det	100
BIS(2-CHLOROETHYL)ETHER	ug/l	Not Det	100
BIS(2-CHLOROISOPROPYL)ETHER	ug/l	Not Det	100
BIS(2-ETHYLHEXYL)PHTHALATE	ug/l	Not Det	100
4-BROMOPHENYL PHENYL ETHER	ug/l	Not Det	100
BUTYL BENZYL PHTHALATE	ug/l	Not Det	100
CARBAZOLE	ug/l	Not Det	100
4-CHLORO-3-METHYLPHENOL	ug/l	Not Det	100
2-CHLORONAPHTHALENE	ug/l	Not Det	100
2-CHLOROPHENOL	ug/l	Not Det	100
4-CHLOROPHENYL PHENYL ETHER	ug/l	Not Det	100
CHRYSENE	ug/l	Not Det	100
DIBENZO(A,H)ANTHRACENE	ug/l	Not Det	100
DIBENZO FURAN	ug/l	Not Det	100

PRISM
LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

Triad Environmental
Page: 2
July 23, 1993

EPA METHOD 625 (continued):

DI-N-BUTYLPHTHALATE	ug/l	Not Det	500
1,2-DICHLOROBENZENE	ug/l	Not Det	100
1,3-DICHLOROBENZENE	ug/l	Not Det	100
1,4-DICHLOROBENZENE	ug/l	Not Det	100
2,4-DICHLOROPHENOL	ug/l	Not Det	100
DIETHYL PHTHALATE	ug/l	Not Det	100
2,4-DIMETHYLPHENOL	ug/l	Not Det	100
DIMETHYL PHTHALATE	ug/l	Not Det	100
2,4-DINITROPHENOL	ug/l	Not Det	500
2,4-DINITROTOLUENE	ug/l	Not Det	100
2,6-DINITROTOLUENE	ug/l	Not Det	100
DI-N-OCTYLPHTHALATE	ug/l	Not Det	500
FLUORANTHENE	ug/l	Not Det	100
FLUORENE	ug/l	Not Det	100
HEXACHLOROBENZENE	ug/l	Not Det	100
HEXACHLOROBUTADIENE	ug/l	Not Det	100
HEXACHLOROCYCLOPENTADIENE	ug/l	Not Det	500
HEXACHLOROETHANE	ug/l	Not Det	100
INDENO(1,2,3-CD)PYRENE	ug/l	Not Det	100
ISOPHORONE	ug/l	Not Det	100
2-METHYL-4,6-DINITROPHENOL	ug/l	Not Det	100
2-METHYL NAPHTHALENE	ug/l	Not Det	100
2-METHYL-PHENOL	ug/l	Not Det	100
4-METHYL-PHENOL	ug/l	Not Det	100
NAPHTHALENE	ug/l	470	100
NITROBENZENE	ug/l	Not Det	100
2-NITROPHENOL	ug/l	Not Det	100
4-NITROPHENOL	ug/l	Not Det	500
N-NITROSODIPHENYLAMINE	ug/l	Not Det	100
N-NITROSODI-N-PROPYLAMINE	ug/l	Not Det	100
PENTACHLOROPHENOL	ug/l	Not Det	500
PHENANTHRENE	ug/l	Not Det	100
PHENOL	ug/l	Not Det	100
PYRENE	ug/l	Not Det	100
1,2,4-TRICHLOROBENZENE	ug/l	Not Det	100
2,4,5-TRICHLOROPHENOL	ug/l	Not Det	100
2,4,6-TRICHLOROPHENOL	ug/l	Not Det	100

PRISM
LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

Please advise should you have questions concerning these data.

Respectfully submitted,

Angela D. Overcash
Laboratory Manager

Main Office: 449 Springbrook Road P.O. Box 240543 Charlotte, NC 28224-0543 Phone: (704) 529-6364 Fax: (803) 525-0409
South Carolina Laboratory: 10471 Asheville Highway, P.O. Box 137, Inman, SC 29349 Phone (803) 472-9046 Fax: (803) 472-5172
All Correspondences and Remittances to the Charlotte Office

Lab Report

PRISM
LABORATORIES, INC.

Main Office:
449 Springbrook Road
P.O. Box 240543
Charlotte, NC 28224-0543
Phone: (704) 529-6364
Fax: (704) 525-0409

Full Service Analytical & Environmental Solutions

STATEMENT OF DATA QUALIFICATIONS

on Analyses Performed by Prism Laboratories, Inc.

Client: Triad Laboratory Group ID No.: 2531A1

X All analyses have been validated and comply with our Quality Control Program. No qualifications required.

_____ The following analyses have been qualified for the reasons cited.

Sample No.(s): _____ Parameter: _____ *Reason: _____

Explanation: _____

Sample No.(s): _____ Parameter: _____ *Reason: _____

Explanation: _____

*REASON:

1. Sample integrity suspect upon receipt. (Explain)
2. Analysis performed beyond EPA established maximum allowable holding time.
3. Detection limit elevated due to matrix interference.
4. Laboratory control sample value outside established acceptable limits.
5. Matrix spike sample value outside established acceptable limits.
6. Duplicate analysis value outside established acceptable limits.
7. Surrogate/internal standard recoveries outside established acceptable limits.
8. Data point suspect due to potential laboratory contamination. (Explain)
9. Coelutes with the compound cited. Result may represent a combination of both compounds.
10. Other (Explain).

NOTE: This document is included as part of the Analytical Laboratory Report for the above referenced Laboratory ID No. and must be retained as a permanent record thereof.

PAYMENT TERMS: NET 10 DAYS
A 1.5% Interest Rate will be charged on account balances over 30 Days old.
We reserve the right to withhold lab test results on delinquent accounts over 60 days.

All Correspondences and Remittances to the Charlotte Office
South Carolina Laboratory: 10471 Asheville Highway, P.O. Box 137, Inman, SC 29349
Phone: (803) 472-9046 Fax: (803) 472-5172

TRIAD ENVIRONMENTAL CONSULTANTS, INC. AND ASSOCIATES

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

Chain of Custody
PRISM

Page 1 of 1

PROJECT: Draper Corporation #049355-E

SITE: Hornaday Rd. Greensboro N.C.

COLLECTED BY (Signature): Don M. Groome

ANALYSES: EPA 625

FIELD SAMPLE I.D.	SAMPLE MATRIX	DATE/TIME	NO. OF CONTAINERS	EPA 625	REMARKS	SAM ID NO. (for lab use only)
AS-1	WATER	7/8/93-0915	1	+		16091

REMARKS

RELINQUISHED BY:	DATE	TIME
Don M. Groome	7-8-93	1700
James Kellogg Jr.	7-8-93	4:05 pm

RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
Kathryn J. Lee	7/8/93	1100 hrs	Kathryn J. Lee	7/8/93	1640 hrs	James Kellogg Jr.	7/8/93	15:40 hrs

LAB USE ONLY

RECEIVED FOR LABORATORY BY:	DATE	TIME	AIRBILL NO.	OPENED BY:	DATE	TIME	TEMP °C	SEAL	CONDITION
[illegible]	7/9	[illegible]							

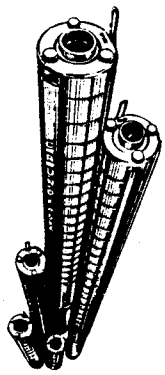
REMARKS:

GRUNDFOS

Redi-Flo Environmental Submersible Pumps

5E

Submittal Data 3450 RPM 60 Cycle



JOB or CUSTOMER:

ENGINEER:

CONTRACTOR:

SUBMITTED BY: DATE:

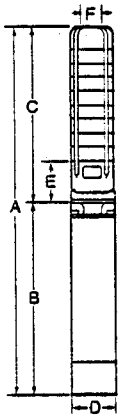
APPROVED BY: DATE:

ORDER NO.: DATE:

SPECIFICATION REF.:

QUANTITY	TAG NO.	MODEL NO.	GPM	FEET	VOLT	PHASE	COMMENT

Dimensions



Technical Data

FLOW RANGE: 1.2 to 7 US GPM

MOTORS: Grundfos MS402E Environmental Submersible Motor (Standard)
Maximum Operating Temperature: 104°F (40°C)
Maximum Operating Pressure: 220 PSI
Maximum Number of Starts Per Hour: 100
Minimum Recommended Flow Past Motor: 0.25 ft/sec
(NOTE: Franklin Pollution Recovery motor is optional.)

DISCHARGE SIZE: 1" NPT

PUMP END CONSTRUCTION MATERIALS: Stainless Steel and Teflon®

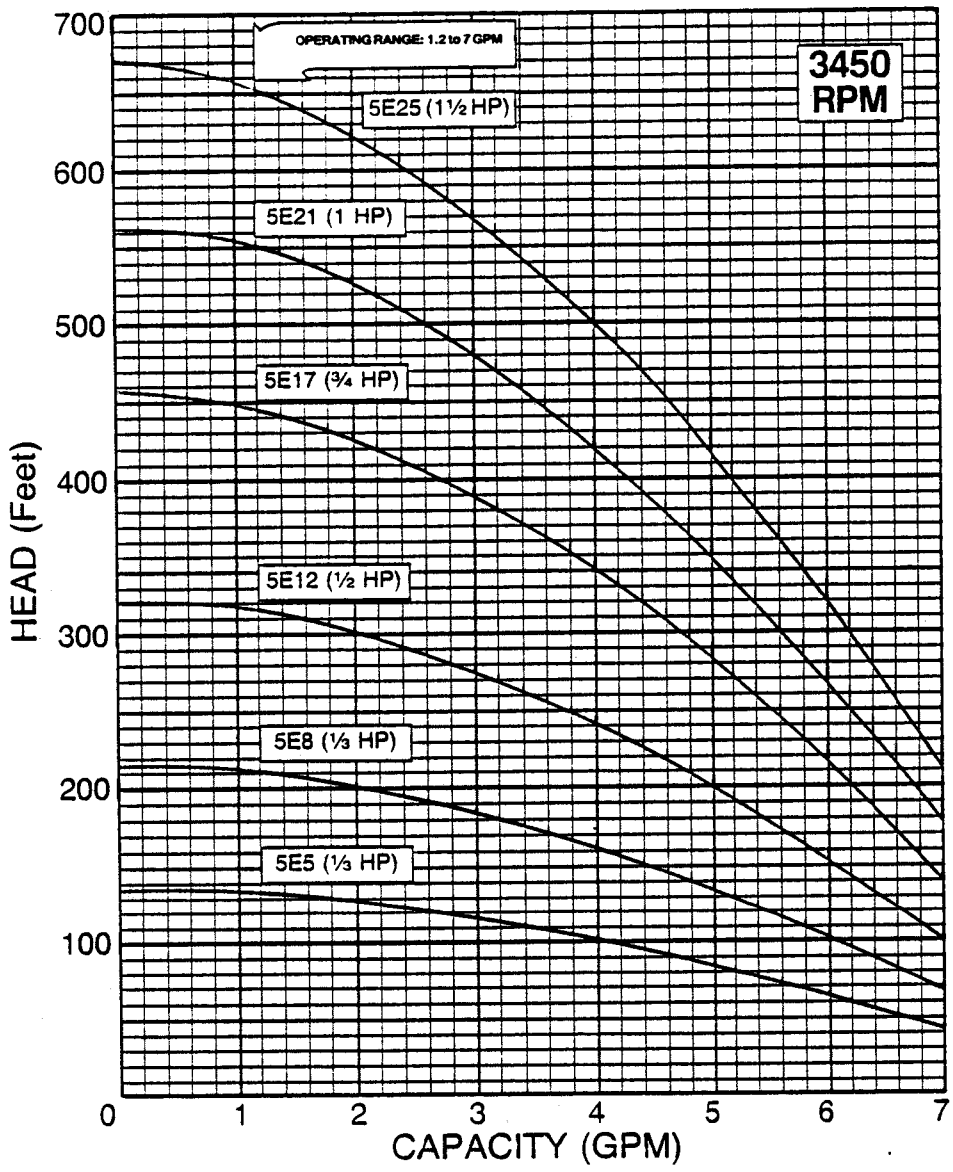
INSTALLATION: Unit to be installed vertically for submerged operation.

Electrical Data, Dimensions, and Weights ①

PUMP TYPE	MOTOR				DIMENSIONS (In Inches)						NET WEIGHT (LBS.)②	SHIP. WEIGHT (LBS.)②
	HP	SF	PH	VOLTS	OVERALL LENGTH A	MOTOR LENGTH B①	PUMP END LENGTH C	MAX. DIA. D	INLET E	DISCH. PIPE SIZE (NPT) F		
5E5	⅓	1.75	1	230	20 5/16	10	10 5/16	3 31/32	3 1/4	1	24	26
5E8	⅓	1.75	1	230	22 3/4	10	12 3/4	3 31/32	3 1/4	1	26	28
5E12	½	1.60	1	230	26 13/16	10 13/16	16	3 31/32	3 1/4	1	28	29
5E17	¾	1.50	1	230	31 7/16	11 3/8	20 3/16	3 31/32	3 1/4	1	31	32
5E21	1	1.40	1	230	35 7/16	12	23 7/16	3 31/32	3 1/4	1	33	35
5E25	1 ½	1.30	1	230	40 5/16	13 9/16	26 3/4	3 31/32	3 1/4	1	35	37

① Data for Grundfos MS402E motors. ② Does not include motor leads.

Performance Curves



Materials of Construction

REDI-FLO PUMP END	
Check Valve Housing	304 Stainless Steel
Check Valve	304 Stainless Steel
Check Valve Seat	304 Stainless Steel & Teflon®
Diffuser Chamber	304 Stainless Steel
Impeller Seal Ring	Teflon®
Impeller	304 Stainless Steel
Suction Interconnector	304 Stainless Steel
Inlet Screen	304 Stainless Steel
Pump Shaft	304 Stainless Steel
Coupling	329/420/431 Stainless Steel
Straps	304 Stainless Steel
Cable Guard	304 Stainless Steel
Priming Inducer	304 Stainless Steel
Intermediate Bearings	Teflon®

NOTE: Specifications are subject to change without notice.

GRUNDFOS ENVIRONMENTAL MOTOR	
Nema Top	304 Stainless Steel
Studs & Fasteners	304 Stainless Steel
Nuts	316 Stainless Steel
Sand Slinger	Viton®
Shaft Extension	431 Stainless Steel
Diaphragm	Viton®
Stator Housing	304 Stainless Steel
Fill Plug Screw	304 Stainless Steel
Fill Plug Washer	Teflon®

GRUNDFOS ENVIRONMENTAL MOTOR LEADS	
Connector Sleeve	304 Stainless Steel
Connector Potting	Scotch Cast #4® Epoxy w/Viton® Cap
Connector Plug	Viton®
Lead Insulation	Teflon®

GRUNDFOS

Redi-Flo2 2" Environmental Submersible Pumps

MP1

Submittal Data 2300-23000 RPM 46-400 Cycles

JOB or CUSTOMER:

ENGINEER:

CONTRACTOR:

SUBMITTED BY: DATE:

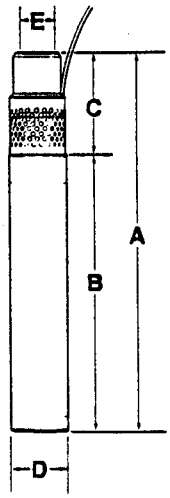
APPROVED BY: DATE:

ORDER NO.: DATE:

SPECIFICATION REF.:

QUANTITY	TAG NO.	MODEL NO.	GPM	FEET	LEAD LENGTH	COMMENTS

Dimensions



Technical Data

FLOW RANGE: Continuous/Variable (100 ml/min - 9 US GPM)

INTEGRAL PUMP/MOTOR UNIT

Motor Type: Water-filled, canned, variable speed submersible
Maximum Fluid Temperature: 86°F (30°C)
Minimum Fluid Temperature: 34°F (1°C)
Maximum Input Power: 1.5 KW (2 HP)
Maximum Motor Voltage: 3 PH X 220 Volts at 400 Hz
Maximum Motor Current: 5.5 Amps
Motor Protection: Thermal Overload – Thermik Geratebau, Series SY6
Disconnect Temperature: 176°F (80°C)
Rate Current: 5 Amps
Current Overload – Incorporated into MP1 Converter

DISCHARGE SIZE: ½" Female NPT

PUMP END CONSTRUCTION MATERIALS: Stainless Steel and Teflon® (See reverse side.)

INSTALLATION: Unit to be installed vertically for submerged operation.

AVAILABLE LEAD LENGTHS: 50 Ft., 75 Ft, 100 Ft., 125 Ft., 150 Ft., 175 Ft., 200 Ft., 250 Ft., and 300 Ft.

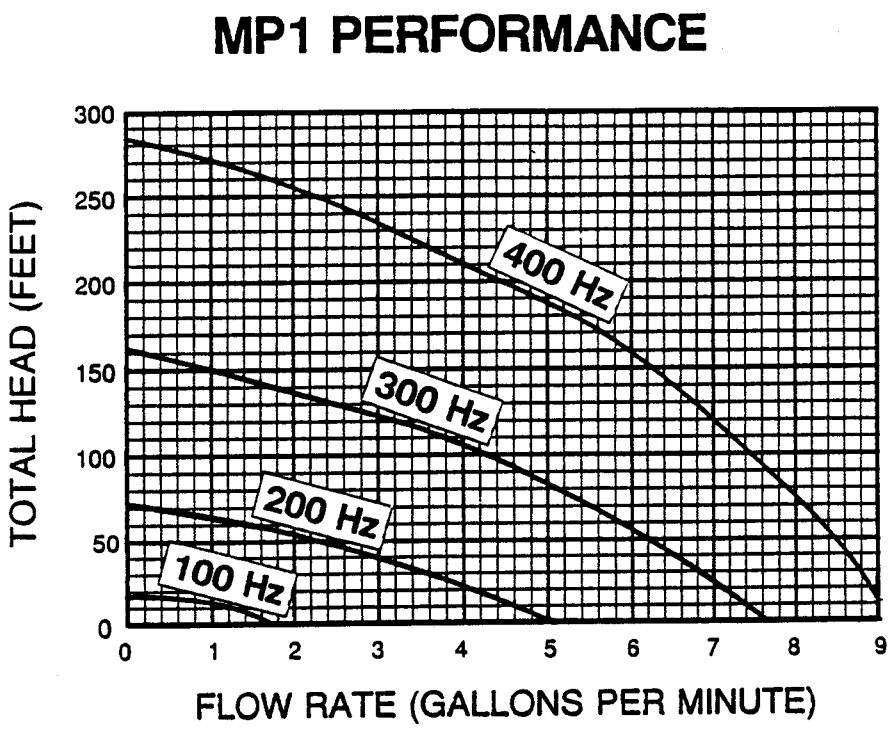
Dimensions and Weights

DIMENSIONS IN INCHES (mm)						
PUMP TYPE	OVERALL LENGTH (A)	MOTOR LENGTH (B)	PUMP END LENGTH (C)	MAX. DIA (D)	DISCH. PIPE SIZE (NPT) (E)	NET WEIGHT①
MP1	11.30" (287)	8.19" (208)	3.11" (79)	1.81" (46)	½"	5.5 LBS.

① Weight does not include motor lead.

Teflon® is a registered trademark of Dupont.

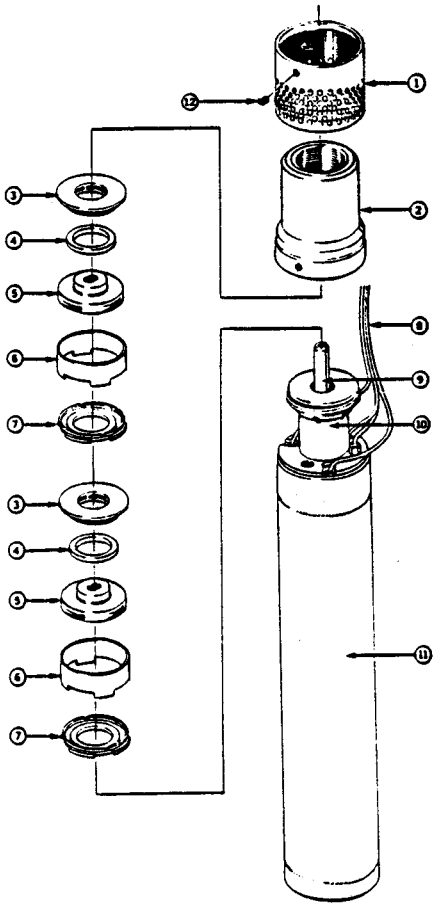
Performance Curves



Materials of Construction

POSITION NUMBER	DESCRIPTION	MATERIAL
1	Inlet Screen	316 Stainless Steel
2	Pump Housing	316 Stainless Steel
3	Guide Vane	316 Stainless Steel
4	Wear Ring	Teflon®
5	Impeller	316 Stainless Steel
6	Spacer Ring	316 Stainless Steel
7	Wear Plate	Teflon®
8	Motor Lead	Teflon®
9	Shaft	329 Stainless Steel
10	Suction Interconnector	316 Stainless Steel
11	Stator Housing	316 Stainless Steel
12	Allen Screw	18-8 Stainless Steel

NOTE: Specifications are subject to change without notice.
Teflon® is a registered trademark of Du Pont.

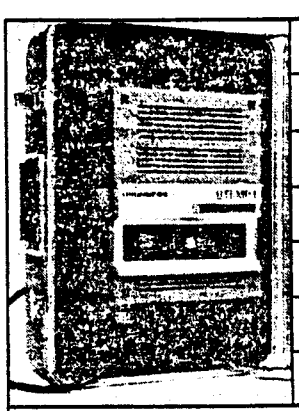


GRUNDFOS

Redi-Flo2 Converter

BTI/MP1

Submittal Data



JOB or CUSTOMER:	
ENGINEER:	
CONTRACTOR:	
SUBMITTED BY:	DATE:
APPROVED BY:	DATE:
ORDER NO.:	DATE:
SPECIFICATION REF.:	

Technical Data

ELECTRICAL:

INPUT

Voltage: 1 PH × 220 - 230 V ± 10%
Frequency: 50 - 60 Hz ± 2%
Maximum Current: 10 Amps

OUTPUT

Voltage: 3 PH × 25 V - 3 PH × 220 V
Frequency: 46 - 400 Hz
Maximum Current: 5.5 Amps
Power: 1.5 KW (2HP)

ACCELERATION TIME:
0 to 400 Hz: 10 seconds

DECELERATION TIME:
400 to 0 Hz: 10 seconds

INPUT LINE FUSE:
2 each T 30 A, type FERRAZ

MOTOR LEAD CONNECTOR:
AMP CPC Plug, Type 206429-1

POWER CABLE:
Type SJOW, 14 AWG, 10' long

OPERATING CONDITIONS:

AMBIENT TEMPERATURE:
32° F to 104° F (0° C to 40°C)

RELATIVE AIR HUMIDITY: Maximum 95%

NOTE (Radio Noise): When the converter is connected to public electrical supply, radio noise may occur. This can be eliminated by adding a Siemens filter type B 84112-B-A 120/20 A.

STORAGE CONDITIONS:

AMBIENT TEMPERATURE:
-13° F to 149° F (-25° C to 65° C)

RELATIVE AIR HUMIDITY:
Maximum 50% at 104° F (40° C) unlimited
Maximum 90% at 68° F (20° C) for periods not exceeding 30 days per year
75% annual average
Non-condensing

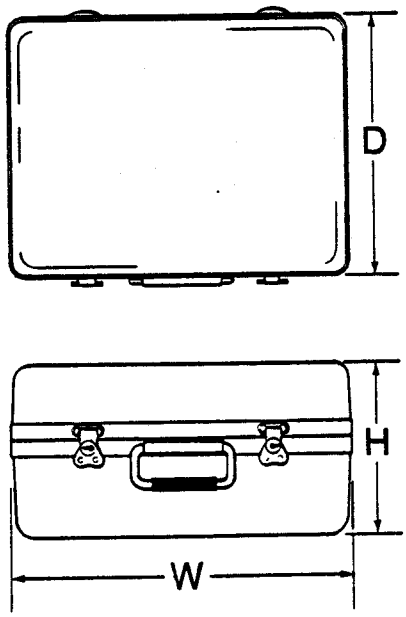
PROTECTIVE CASE CONTRUCTION:

CASE: High density polyethylene

TRIM: Aluminum

LOCK: Military twist-type – steel with zinc plating

Dimensions



Dimensions and Weights

DIMENSIONS IN INCHES (mm)				
TYPE	HEIGHT (H)	DEPTH (D)	WIDTH (W)	NET WEIGHT
BTI / MP1	9" (228.6)	14" (355.6)	18.5" (469.9)	25 LBS.

Teflon® is a registered trademark of Du Pont.

Converter Specifications

Power

Supplied By Generator/Power Supply

Voltage:	Single phase, 230 volt (+ or - 10%)
Frequency:	50-60 Hz (+ or - 2%)
Maximum Current:	10 amps

Produced By Converter

Output Voltage:	3 phase 25 volts to 3 phase 220 volt
Frequency:	46 - 400 Hz
Maximum Current:	5.5 amps
Internal Fuse:	2 each of T 30 A, type FERRAZ

Connections

Motor Lead Connector:	AMP CPC Plug, Type 206429-1
Power Cable:	Type SJOW, 14 AWG, 10" long

Dimensions and Weight

Dimensions:	Case is 9"x14"x18.5"
Net Weight:	25 lbs

Operating Conditions

Ambient Temperature:	32°F to 104°F (0° to 40° C)
Relative Air Humidity:	Maximum 95%
Radio Noise Filter:	Noise may occur when the converter is connected to the municipal electrical supply. It can be eliminated by adding a filter, such as a Siemens filter, type B 84112-B-A 120/20 A.

Storage Conditions

Ambient Temperature:	-13°F to 149°F (-25° to 65°C)
Relative Air Humidity:	Maximum 50% at 104°F (40°C) unlimited Maximum 90% at 68°F (20°C) for periods not exceeding 30 days per year. 75% annual average Non-condensing

Performance

Acceleration Time:	0 to 400 Hz in 10 seconds
Deceleration Time:	400 to 0 Hz in 10 seconds

Motor/Pump Specifications

Power

Input Power:	1.5 Kw (2 Horsepower)
Voltage:	3 phase, 220 volts at 400 Hz
Maximum Current:	5.5 amps
Motor Protection:	Thermal overload - Thermik Geratebau, Series SY6 Disconnect Temperature: 176°F (80°C) Rate Current: 5 amps Current Overload - Incorporated into converter

Connections

Discharge Port:	1/2" Female NPT
Net Weight:	5.5 lbs (includes pump)
Available Lead Lengths:	50, 75, 100, 125, 150, 175, 200, 250, and 300 feet

Operating Conditions

Max. Fluid Temp.:	86°F (30°C)
Min. Fluid Temp.:	34°F (1°C)

Dimensions and Weight

Dimensions:	(Including pump and motor) 11.3"x1.81" diameter
Net Weight:	5.5 lbs.