1R - 295

REPORTS

DATE:

1995

Environmental Management & Engineering, Inc.

437 Industrial Lane Post Office Box 19866 Birmingham, AL 35219

(205) 940-7700 Fax (205) 940-7701

August 30, 1995

VIA AIRBORNE EXPRESS

Mr. Lee DeNooyer
Senior Attorney-Environmental
Law Department
Dresser Industries, Inc.
2001 Ross Avenue
Dallas, TX 75201

RE: Axleson Project - Phase II Reports for Hobbs, New Mexico
DRS-94-E893

Dear Lee:

As per our discussions in the meeting to discuss the Axelson Project in your office on August 23, 1995, enclosed please find one (1) bound and one (1) unbound copy of the above captioned report. We reviewed all Hobbs site analytical data and subsequently made several minor corrections to the analytical tables contained therein.

Please let me know if you have any questions or need any additional information. We appreciate the opportunity to be of service to you and to Dresser.

Thank you for your kind consideration.

Sincerely,

Gene

Gene J. Gonsoulin, Ph.D.
President

GJG/jjf

Enclosures

cc: Mr. Tom Hoekstra - w/report copy

Houston Office:
5715 Northwest Central Drive Suite 104 Houston, TX 77092
(713) 939-7028 Fax: (713) 939-7029

PRIVILEGED & CONFIDENTIAL

SITE INVESTIGATION

Axelson, Inc.
Hobbs, New Mexico

April 13, 1995

Prepared For:

Dresser Industries, Inc.
2001 Ross Avenue
Dallas, Texas 75201

Prepared by:

Environmental Management and
Engineering, Inc.
437 Industrial Lane
Birmingham, Alabama 35211

(Revised August 30, 1995)

Environmental Management
& Engineering, Inc.

Specialists in Environmental Management

Environmental Management & Engineering (EME) is composed of a group of highly skilled professional environmental scientists, engineers, and businessmen dedicated to providing high quality basic and specialized consulting services. We take great care to insure that this operating philosophy permeates everything we do. Each member of our core group is a leader in his field whose reputation is that of handling tough assignments. These technical experts provide the foundation for a cost effective multi-disciplinary approach capable of handling complex projects in today's difficult business and regulatory climate, from concept to completion.

We maintain thorough, updated information files on sources of environmental, engineering and related business expertise including academic and government scientist and associate consulting firms. If we don't have the complete answer to your problem, we know where to find it and who to contact. In short, EME is designed and committed to being totally responsive to our clients' needs by providing accurate high quality service, in a timely manner, and for a reasonable fee.

EME offers the complete range of environmental services to the client, from preacquisition through site review, construction, plant operation, and final closure. All of these services are assisted by our extensive product and regulatory libraries, computer databases and our multi-disciplined staff to provide the following:

- Project Planning & Management
- Acquisition of Permits & Licenses
- General Regulatory Compliance Assistance
- Environmental Audits/Reviews and Impact Studies
- Risk & Liability Assessments
- Industrial Hygiene, OSHA, Safety & Right-to-Know Programs
- Asbestos Survey, Analysis & Abatement
- Hazardous/Toxic Waste Management
- Evaluations & Closure of Surface Impoundments
- Mitigation/Reclamation Technologies
- Geotechnical & Groundwater Services
- Underground Storage Tank Testing, Removal, & Remediation
- Laboratory Services

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Prepared For:

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Project No. DRS-94-E893

(Revised August 30, 1995)

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TABLE OF CONTENTS

		PAGE
I.	General Information	1
II.	Site Investigation	1
	A. Soil Investigation and Sampling	1
	1. Septic Tank/Leach Field	3
	2. Catch Basins/Sumps	5
	B. Groundwater Investigation and Sampling	5
	C. Norm Investigation and Sampling	6
III.	Investigation Results	6
	A. Soil Analytical	12
	1. Septic Tank/Leachfield	12
	2. Catch Basins/Sumps	12
	B. Groundwater Analytical	12
	C. NORM Analytical	13

LIST OF FIGURES

Figure	1	Site Location Map
Figure	2	Sample Location Plan
Figure	3	Area Radiation and Norm Survey Map

LIST OF TABLES

Table	1	Summary of Analytical Results TPH - Soil
Table	2	Summary of Analytical Results Metals -Soil
Table	3	Summary of Analytical Results VOC's - Soil
Table	4	Summary of Analytical Results Semi - VOC's
Table	5	Summary of Analytical Results TPH - Water
Table	6	Summary of Analytical Results Metals - Water
Table	7	Summary of Analytical Results VOC's - Water
Table	8	Summary of Analytical Results NORM

LIST OF ATTACHMENTS

Attachment	1	Boring Logs
Attachment	2	Analytical Reports
Attachment	3	Field Sample Logs and Chain-of-Custody Forms

SITE INVESTIGATION

Axelson, Inc.
Hobbs, NM

April 13, 1995

I. General Information

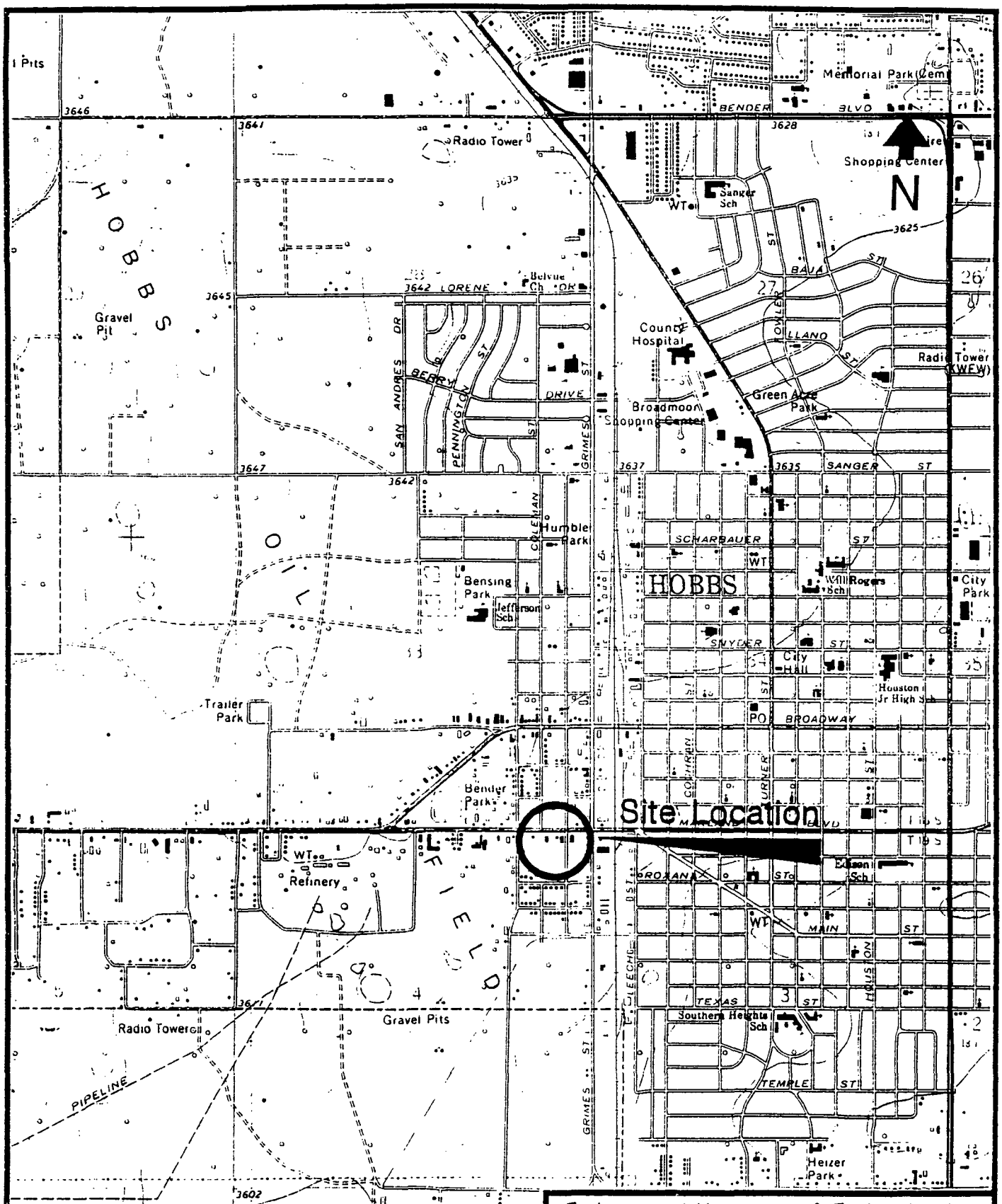
Environmental Management & Engineering, Inc. (EME) was retained by Dresser Industries, Inc. to conduct the site investigation of areas of environmental concern at the Axelson, Inc. facility located at 2703 W. Maryland, Hobbs, New Mexico (Figure 1). The facility operates as a sales and subsurface pump repair shop and has been in operation since 1980. The facility has six employees and is located on the property leased from Mr. Bill Staggs.

The facility occupies approximately 1.23 acres with approximately 6,755 square feet under roof. Environmental concerns were centered on two areas: the septic tank and its associated leach field, and catch basins/sumps in the shop building. In addition, since the facility washes pumps that contain Naturally Occurring Radioactive Material (NORM), a NORM survey was performed at the facility.

II. Site Investigation

A. Soil Investigation and Sampling

The soil investigation was conducted to determine if soil contamination was present. The main areas of environmental concern were the areas around the septic tank and its associated leach field and catch basins/sumps. Borings installed in these areas are described in the following section. All drill cuttings were placed in drums. Complete boring logs are presented in Attachment 1. All



Environmental Management & Engineering, Inc. Birmingham, Al Houston, Tx	
Description: Figure 1 - Site Location Map Axelson, Inc. Hobbs - NM	
Date: 4-13-95	Project No. DRS-94-E893
Drawn by: Staff	Scale: 1:24000

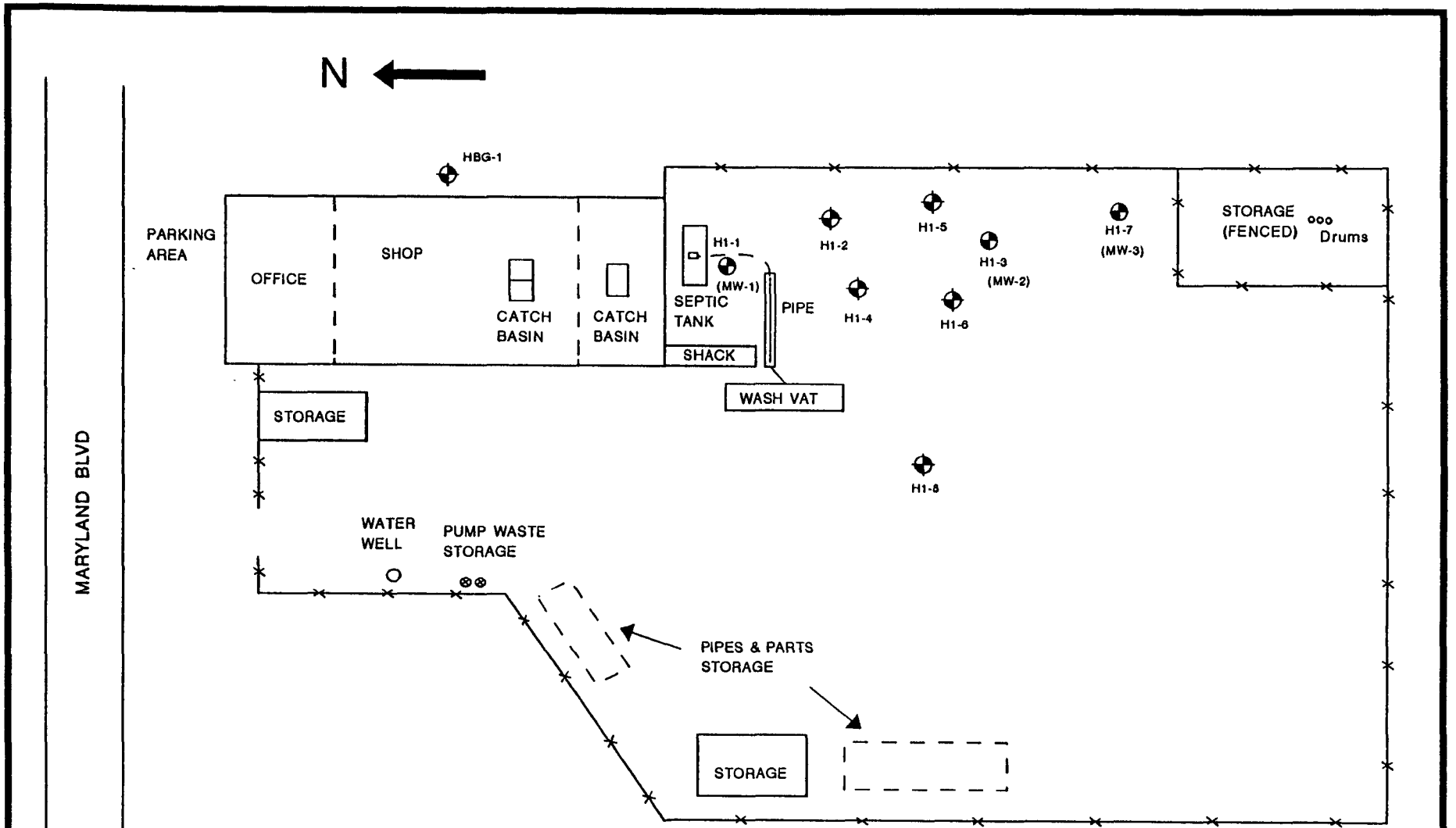
samples were field screened with a Photoionization Detector (PID) and Geiger-Mueller Survey Meter (GM) for volatile organic compounds and radioactive materials.

Sample collection equipment was decontaminated after each use with a non-phosphate soap and was rinsed twice with tap water, with distilled water as a final rinse, prior to collecting the next sample. All decon water was placed in drums. EME personnel wore latex gloves while sampling, with fresh gloves used before each sample was collected. Each sample was placed in clean glass containers with teflon lids. Samples were then placed on ice and sent to Analytical Systems, Inc. for analysis. Sample locations are presented in Figure 2.

1. <u>Septic Tank/Leachfield</u>

Eight soil borings were installed to investigate the septic tank and its associated leachfield located south of the office and shop building. Soil Samples H1-1E and H1-1L collected from boring H1-1 were analyzed for Total Petroleum Hydrocarbons (TPH), volatile organic compounds (VOC's), metals and semi-volatile organic compounds. Visibly stained soils were observed at a depth 15.0 feet. Boring H1-1 was installed adjacent to the septic tank to a depth of 33 feet.

Soil borings H1-2, H1-4, H1-5, and H1-6 were installed to sandstone bedrock. Borings H1-3, H1-7 and H1-8 were installed to groundwater. Soil samples collected from these borings were analyzed for TPH, metals, VOC's and semi-volatile organic compounds.



LEGEND

- Soil Boring Location
- Monitoring Well Location
- Fence

Environmental Management & Engineering, Inc. Birmingham, AL Houston, TX	
Description: Figure 2 - Sample Location Map Axelson, Inc., Hobbs - NM	
Date: 03-16-95	Project No.: DRS-94-E893
Drawn by: GP	Scale: 1" - 40'

2. Catch Basins/Sumps

The pumps at the facility are steam cleaned at the above ground exterior wash vat which has been used since January 1993. Prior to January 1993 the facility had an internal pump wash station. The water and sludge resulting from the steam cleaning operations of the pumps were collected in the catch basins. The sludge/water from the catch basins was pumped to the outside septic tank which in turn was drained into the leachfield.

Sludge samples were collected from the two catch basins inside the building, the septic tank located south of the building and the exterior wash vat to identify the contaminants of concern. The samples were analyzed for TPH, VOC's and metals.

B. Groundwater Investigations and Sampling

Three borings H1-1, H1-3 and H1-7 were converted into monitoring wells MW-1, MW-2 and MW-3 to determine the presence of contaminants in the groundwater. Boring H1-8 was advanced to groundwater which was encountered at a depth of 30.0 feet. All three wells were installed to a final depth of 35.0 feet. A sample, H2-1A, was also collected from the facilities abandoned water well.

The wells were constructed of 2.0 inch diameter PVC casing and screen. Ten (10) feet of 0.01 inch slotted screens was installed in each well and was positioned such that approximately five (5) feet of screened interval was below the water table at the time of installation. The well were sealed with bentonite followed by cement and capped with flush mounting locking caps.

Water samples were collected using a bottom valve PVC bailer. The bailer was washed with soap and water and rinsed with distilled water after each use prior to sampling the next well. EME personnel wore latex gloves during sampling, with fresh gloves used before each sample was collected. Samples were collected in order for VOC, TPH and metal analysis. All samples were placed in clean glass containers with teflon lids except for metals samples which were collected in plastic bottles. VOC samples were preserved with hydrochloric acid and metals were preserved with nitric acid.

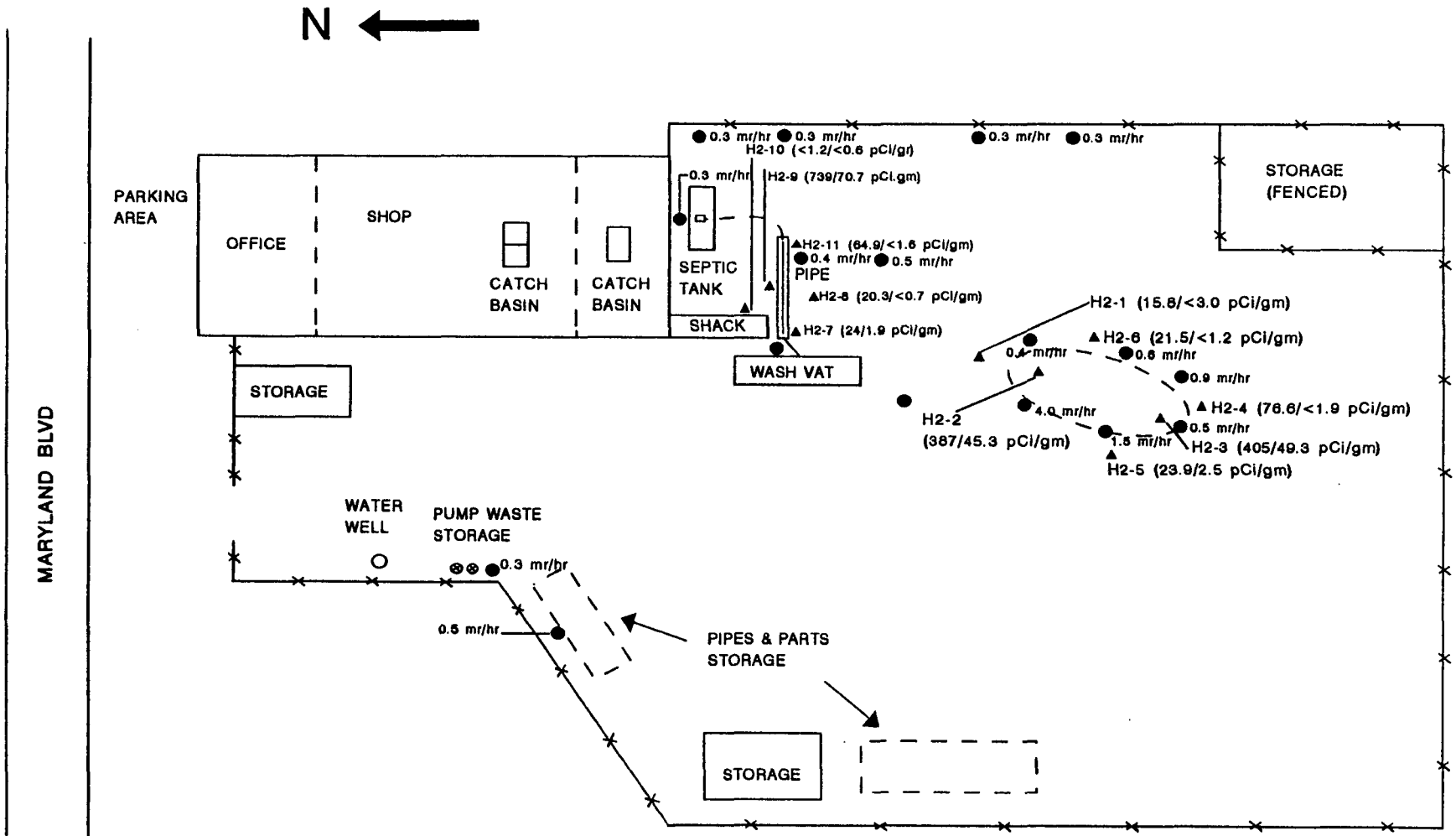
All water samples were field screened with photoionization detector and Geiger Mueller Survey meter for VOC and radioactive materials. The water samples collected from the borings were analyzed for TPH, Metals, VOC and semi-volatile organic compounds. All water samples had strong odor.

C. NORM Investigation and Sampling

An area radiation site survey was conducted to identify areas of radiation levels, which indicate elevated NORM concentrations. The radiation survey was conducted with a 2.0 inch thin window GM detector. The NORM survey map is presented in Figure 3. Eighteen soil and sludge samples were collected and analyzed for radium 226 and 228.

III. Investigation Results

Analyses were performed by Analytical Systems, Inc. (ASI), of Birmingham, Alabama. The constituents of concerns, TPH, VOC, semi-volatile organic compounds and heavy metals were analyzed according to EPA Standard Methods 481.1, 8260, 8270 and 3010/3020/7000 respectively. Summaries of analytical results are presented in Tables 1, 2, 3 and 4 respectively.



▲ Surface NORM concentrations in Ra 226/Ra 228 pCi/gm

● Area Radiation survey in mr/hr Readings over background

Site Background measured at 0.02 mr/hr

Environmental Management & Engineering, Inc. Birmingham, AL — Houston, TX	
Description: Figure 3- Area Radiation and Norm Survey Map Axelson,Inc. Hobbs, NM	
Date: 03-16-95	Project No.: DRS-94-E893
Drawn by: GP/LM	Scale: 1" - 40'

TABLE 1

SUMMARY OF ANALYTICAL RESULTS

TOTAL PETROLEUM HYDROCARBONS: EPA METHOD 418.1

AXELSON, INC.

HOBBS, NM FACILITY

SAMPLE NUMBER	DEPTH	CONCENTRATION	D.L.
H1-1E	6'-8'	1530	*1*
H1-1L	20'-22'	7558	*1*
H1-2E	8'-10'	5673	*1*
H1-2H	14'-16'	9760	*1*
H1-3I	16'-17'	12	*1*
H1-4F	12'-14'	22	*1*
H1-4H	16'-18'	6	*1*
H1-3K	29'-31'	835	*1*
H1-7D	29'-31'	BDL	*1*
H1-8C	14'-16'	4	*1*
H1-8D	29'-31'	120	*1*
HBG-1A	0"-6"	47	*1*
H1-5D	14'-16'	7	*1*
H3-1A	SLUDGE	6154	*1*
H3-2	SLUDGE	19222	*1*
H4-1	SLUDGE	10000	*1*
H5-1	SLUDGE	5490	*1*

BDL=Below Detection Limit

All concentrations reported are in Parts Per Million (PPM)

TABLE 2

SUMMARY OF ANALYTICAL RESULTS, SOIL

METALS: EPA Method 3010/3020/7000

AXELSON, INC.

HOBBS, NM FACILITY

SAMPLE NUMBER

ANALYTE	H1-1E 6'-8'	H1-1L 20'-22'	H1-2E 8'-10'	H1-2H 14'-16'	H1-3I 16'-17'	H1-3K 29'-31'	H1-8D 29'-31'	HGB-1A 0"-6"	H1-5D 14'-16'	H3-1A SLUDGE	H3-2 SLUDGE	H4-1 SLUDGE	H5-1 SLUDGE	Detect. Limit
ARSENIC	6.8	2.7	11	5.1	5.9	4.3	5.1	16	4.9	11	7.3	6.5	4.8	*0.1*
BARIUM	78	61	37	166	808	140	525	256	244	53	78	104	129	*1*
CADMIUM	1.3	0.5	0.9	0.8	1.1	0.3	1.1	1.1	1.1	6.8	5	10	9.9	*0.2*
CHROMIUM	12	7	8	9	10	4	11	6	12	12	124	86	206	*3*
LEAD	14	7	12	9	12	3	18	26	16	179	592	776	660	*3*
MERCURY	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*0.05*
SELENIUM	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	*0.1*
SILVER	2.3	1.2	1.5	1.7	1.7	BDL	1.9	BDL	2.5	1.3	BDL	0.9	BDL	*0.5*

BDL=Below Detection Limit

All results expressed in Parts Per Million (PPM)

TABLE 3

SUMMARY OF ANALYTICAL RESULTS, SOIL

VOLATILE ORGANIC COMPOUNDS: EPA Method 8260

AXELSON, INC.

HOBBS, NM FACILITY

ANALYTE	SAMPLE NUMBER H1-1E 6'-8'	H1-1L 20'-22'	H1-2E 8'-10'	H1-2H 14'-16'	H1-3I 16'-17'	H1-3K 29'-31'	H1-8D 29'-31'	Detect. Limit
n-BUTYLBENZENE	45	130	BDL	60	18	BDL	BDL	20
sec-BUTYLBENZENE	45	72	BDL	7	BDL	45	BDL	20
tert-BUTYLBENZENE	58	54	BDL	15	BDL	60	BDL	20
1,2-DICHLOROBENZENE	75	BDL	BDL	BDL	BDL	BDL	BDL	20
1,3-DICHLOROBENZENE	33	BDL	BDL	BDL	BDL	BDL	BDL	20
ETHYLBENZENE	BDL	57	BDL	35	BDL	BDL	BDL	20
4-ISOPROPYTOLUENE	90	180	BDL	BDL	BDL	105	BDL	20
NAPHTHALENE	600	750	470	250	120	225	BDL	20
n-PROPYLBENZENE	BDL	60	BDL	44	BDL	BDL	BDL	20
TOLUENE	BDL	30	BDL	BDL	BDL	BDL	BDL	20
1,2,4-TRIMETHYLBENZENE	30	1305	68	30	45	427	BDL	20
1,3,5-TRIMETHYLBENZENE	70	135	BDL	88	BDL	36	BDL	20
XYLENE, o,m,p	40	525	BDL	200	BDL	BDL	BDL	20

BDL = Below Detection Limit

All concentrations reported in Parts Per Billion (PPB)

Detection Limit is practical quatitation limit elevated due to matrix

TABLE 4

SUMMARY OF ANALYTICAL RESULTS, SOIL

SEMIVOLATILE ORGANIC COMPOUNDS: EPA Method 8270

AXELSON, INC.

HOBBS, NM FACILITY

	SAMPLE NUMBER							
ANALYTE	H1-1E 6'-8'	H1-1L 20'-22'	H1-2E 8'-10'	H1-2H 14'16'	H1-3I 16'-17'	H1-3K 29'-31'	H1-8D 29'-31'	Detect. Limit
2-METHYLNAPHTHALENE	2600	3150	BDL	1500	BDL	180	BDL	*100*
NAPHTHALENE	700	870	580	800	BDL	280	BDL	*100*

BDL=Below Detection Limit

All concentrations are reported in Parts Per Billion (PPB)

A. Soil Analytical

1. Septic Tank/Leachfield

Analysis of soil samples collected from borings H1-1 and H1-2 indicated high TPH concentrations ranging from 1,530 ppm to 9,760 ppm respectively. No elevated concentrations of VOC or semi-volatiles were noted. Soil samples collected from borings H1-3 to H1-8 exhibited TPH concentration ranging from 6 ppm at sample location H1-8C to 835 ppm at sample location H1-3K respectively. No elevated levels of metals were noted. With the exception of 2-methyl naphthalene (180 ppb) and naphthalene (280 ppb) semi-volatile organic compounds were not detected.

2. Catch Basins/Sumps

Sludge Samples H3-1A and H3-2 collected from the two sumps inside the shop building exhibited high TPH concentrations of 6,156 ppm and 19,222 ppm respectively. Sample H4-1 collected from the septic tank reported TPH concentration of 10,000 ppm and sample H5-1 collected from the exterior wash vat was found to contain 5,490 ppm TPH. The following metals were detected in the sludge samples: arsenic, barium, cadmium, chromium, lead and silver. Of these only chromium and lead was found at levels of concern. The results for VOC were reported below detection limits.

B. Groundwater Analytical

Water samples were collected from monitoring wells using a bottom valve PVC bailer and analyzed for TPH, metals, VOC's and semi-volatile organic compounds. The analytical results of groundwater for TPH, metals, and VOC's are presented in Tables 5, 6, and 7 respectively. Sample MW-1 (H1-1) reported

TPH concentration of 680 ppm. No elevated levels of metals were detected. The water in MW-1 was found to contain the following VOC's: benzene (240 ppb), 1,2,4-trimethylbenzene (4700 ppb), 1,3,5-trimethylbenzene (1500 ppb), xylene (1225 ppb), ethylbenzene (280 ppb), toluene (1200 ppb) and 4-isopropyltoluene (1000 ppb). MW-2 exhibits slightly elevated levels of VOC for toluene (65 ppb), 4-isopropyltoluene (145 ppb), 1,2,4-trimethylbenzene (140 ppb) and 1,3,5-trimethylbenzene (150 ppb). Sample MW-3 (H1-7) and water sample collected from boring H1-8 were found to contain some VOC's above detection limits. The analytical results indicate the concentration of VOC's in the groundwater is higher than Primary Drinking Water Standards. The results for semi-volatile organic compounds were reported below detection levels.

C. Norm Analytical

All NORM samples were analyzed for radium 226 and 228 per EPA Method 901.1 by Core Laboratories in Casper, Wyoming. Eleven surface soil samples and two sludge sample had radium 226 concentrations exceeding 5 pCi/gr. Six (6) surface soil samples and one sludge sample had radium 226 concentrations exceeding 30 pCi/gm, the proposed State of New Mexico NORM limit for soil. Table 8 is a summary of all radium 226 and 228 concentrations.

Please note the attached tables of analytical results contain only those samples for which an elevated concentration of a contaminant was reported. A copy of analytical results are presented in Attachments 2. A copy of Field Sample Logs and Chain of Custody Forms are presented in Attachment 3.

TABLE 5

SUMMARY OF ANALYTICAL RESULTS, WATER

TOTAL PETROLEUM HYDROCARBONS: EPA METHOD 8015 MODIFIED per CALIFORNIA DHS

AXELSON, INC.

HOBBS, NM FACILITY

SAMPLE NUMBER	CONCENTRATION	D.L.
H1-1 (MW-1)	680	*1*
H1-3 (MW-2)	25	*1*
H2-1A	BDL	*1*
H1-7 (MW-3)	1.2	*1*
H1-8	1.3	*1*

BDL = Below Detection Limit

All concentrations reported in Parts Per Million (PPM)

TABLE 6

SUMMARY OF ANALYTICAL RESULTS, WATER

METALS: EPA Method 3010/3020/7000

AXELSON, INC.

HOBBS, NM FACILITY

SAMPLE NUMBER

ANALYTE	H1-1 (MW-1)	H1-3 (MW-2)	H1-7 (MW-3)	H1-8	H2-1A	Detect. Limit
ARSENIC	0.08	0.09	0.06	0.06	BDL	*0.01*
BARIUM	0.14	0.08	0.07	0.08	0.16	*0.01*
CADMIUM	BDL	BDL	BDL	BDL	BDL	*0.02*
CHROMIUM	BDL	BDL	BDL	BDL	BDL	*0.3*
LEAD	BDL	BDL	BDL	BDL	BDL	*0.3*
MERCURY	BDL	BDL	BDL	BDL	BDL	*0.005*
SELENIUM	BDL	BDL	BDL	BDL	BDL	*0.01*
SILVER	BDL	BDL	BDL	BDL	BDL	*0.05*

All results reported in Parts Per Million (PPM)

TABLE 7

SUMMARY OF ANALYTICAL RESULTS, WATER

VOLATILE ORGANIC COMPOUNDS: EPA Method 8270

AXELSON, INC.

HOBBS, NM FACILITY

ANALYTE	SAMPLE NUMBER H1-1 (MW-1)	H1-3 (MW-2)	H2-1A	H1-7 (MW-3)	H1-8	Detect. Limit
BENZENE	240	BDL	BDL	BDL	BDL	5
n-BUTYLBENZENE	BDL	BDL	BDL	BDL	10	5
tert-BUTYLBENZENE	BDL	BDL	BDL	BDL	10	5
1,2-DICHLOROETHANE	BDL	BDL	BDL	10	BDL	5
ETHYLBENZENE	280	BDL	BDL	BDL	BDL	5
4-ISOPROPYLTOLUENE	1000	145	BDL	BDL	10	5
NAPHTHALENE	BDL	BDL	BDL	BDL	15	5
TETRACHLOROETHENE	BDL	BDL	BDL	7	BDL	5
TOLUENE	1200	65	BDL	BDL	BDL	5
1,2,4-TRIMETHYLBENZENE	4700	140	BDL	BDL	12	5
1,3,5-TRIMETHYLBENZENE	1500	150	BDL	BDL	BDL	5
XYLENE, o,m,p	1225	BDL	BDL	BDL	BDL	5

BDL = Below Detection Limit

All concentrations reported in Parts Per Billion (PPB)

TABLE 8

SUMMARY OF ANALYTICAL RESULTS

NATURAL OCCURING RADIOACTIVE MATERIAL

AXELSON, INC.

HOBBS, NM FACILITY

SAMPLE NUMBER	DEPTH	CONCENTRATION	
		RA 226 pCi/gm	RA 228 pCi/gm
H2-1A	0"-6"	15.8	<3.0
H2-2A	0"-6"	387	45.3
H2-3A	0"-6"	405	49.3
H2-4A	0"-6"	76.6	<1.9
H2-5A	0"-6"	23.9	2.5
H2-6A	0"-6"	21.5	<1.2
H2-7A	0"-6"	24	1.9
H2-8A	0"-6"	20.3	<0.7
H2-9A	0"-6"	739	70.7
H2-10A	0"-6"	<1.2	<0.6
H2-11A	0"-6"	64.9	<1.6
H1-1A	0"-6"	3.2	<1.2
H1-4A	0"-6"	35.3	<1.4
H1-5A	0"-6"	<1.5	<0.8
H3-2	SLUDGE	25.5	<0.7
H5-1	SLUDGE	7.1	<0.7
H3-1	SLUDGE	104	15
H4-1	SLUDGE	4.3	<0.4

ATTACHMENT 1 -- Boring Logs

SUBSURFACE EXPLORATION LOG

Client:	Dresser Axelson	Page:	1 of 4
Project Number:	DRS-94-E893	Date:	02-22-95
Project Location:	Hobbs, NM	Drilling Method:	HSA
		Sampling Method:	SS
Boring Number:	H1-1	**WELL COMPLETION INFORMATION**	
Logged By:	JT/GP		
Drilled By:	Anderson & Associates	Screen Dia: NA	Length: NA Type: NA
		Slot Size: NA	
		Riser Dia: NA	Length: NA Type: NA

Surface Elevation:

DEPTH	DESCRIPTION	INTERVAL	NUMBER	RECOVERY	BLOW COUNT	PID ppm	GRAPHIC	WELL COMP	WATER LVL	NORM
	Limestone Fragments		A			0				0.2
1	Silt, Dark Gray to Dark Brown, Slightly Cayey		B			0				0.2
2										
	Sand, Buff, Fine Grained, Silty									
3			C			0				0.2
4										
5			D			0				0.2
6										
7	Petroleum Odor		E			7				0.2
8										
9			F			11				
10										
11			G			19				

SAMPLE TYPE: SS DRIVEN SPLIT SPOON RC ROCK CORE BORING METHOD: HAS HOLLOW STEM AUGER
ST PRESSED SHELBY TUBE CT CONT. TUBE DC DRIVEN CASING

SUBSURFACE EXPLORATION LOG

Client:	Dresser Axelson	Page:	2 of 4
Project Number:	DRS-94-E893	Date:	02-22-95
Project Location:	Hobbs, NM	Drilling Method:	HSA
		Sampling Method:	SS
Boring Number:	H1-1 (Contd...)	WELL COMPLETION INFORMATION	
Logged By:	JT/GP		
Drilled By:	Anderson & Associates	Screen Dia: NA	Length: NA Type: NA
		Slot Size: NA	
		Riser Dia: NA	Length: NA Type: NA

DEPTH	DESCRIPTION	INTERVAL	NUMBER	RECOVERY	BLOW COUNT	PID ppm	GRAPHIC	WELL COMP	WATER LVL	NORM
	Surface Elevation:									
12	Petroleum odor									
13	Buff, Silty, Gray, Petroleum Odor		H			9				
14										
15	Sand, Silt, Light Gray, Petroluem Odor		I			35				
16										
17	Sand, Silt, Light Gray, Petroleum Odor		J			30				
18										
19	Petroleum Odor		K			13				
20										
21			L			40				
22										

SAMPLE TYPE: SS DRIVEN SPLIT SPOON RC ROCK CORE BORING METHOD: HAS HOLLOW STEM AUGER
ST PRESSED SHELBY TUBE CT CONT. TUBE DC DRIVEN CASING

SUBSURFACE EXPLORATION LOG

Client:	Dresser Axelson	Page:	3 of 4
Project Number:	DRS-94-E893	Date:	02-22-95
Project Location:	Hobbs, NM	Drilling Method:	HSA/AR
		Sampling Method:	SS
Boring Number:	H1-1 (Contd...)	WELL COMPLETION INFORMATION	
Logged By:	JT/GP		
Drilled By:	Anderson & Associates	Screen Dia: NA Length: NA Type: NA	
		Slot Size: NA	
		Riser Dia: NA Length: NA Type: NA	

DEPTH	DESCRIPTION	INTERVAL	NUMBER	RECOVERY	BLOW COUNT	PID ppm	GRAPHIC	WELL COMP	WATER LVL	NORM
	Surface Elevation:									
23	Sandstone, White to Brown (02-23-95 switched to Air Rotary with tricone bit)									
24										
25	Sand, Brown, Silty, Petroleum Odor									
26			M			10				
27										
28			N			12				
29										
30			O			8				
31	Sand, Brown, Silty, Petroleum odor									
32	Groundwater Black Organic		P			6				
33										

SAMPLE TYPE: SS DRIVEN SPLIT SPOON RC ROCK CORE BORING METHOD: HAS HOLLOW STEM AUGER
ST PRESSED SHELBY TUBE CT CONT. TUBE DC DRIVEN CASING

SUBSURFACE EXPLORATION LOG

Client:	Dresser Axelson	Page:	4 of 4
Project Number:	DRS-94-E893	Date:	02-23-95
Project Location:	Hobbs, NM	Drilling Method:	AR
		Sampling Method:	SS
Boring Number:	H1-1 (Contd...)	**WELL COMPLETION INFORMATION**	
Logged By:	JT/GP		
Drilled By:	Anderson & Associates	Screen Dia: NA Length: NA Type: NA	
		Slot Size: NA	
		Riser Dia: NA Length: NA Type: NA	

DEPTH	DESCRIPTION	INTERVAL	NUMBER	RECOVERY	BLOW COUNT	PID ppm	GRAPHIC	WELL COMP	WATER LVL	NORM
	Surface Elevation:									
34	Hole Adjusted to 37' Using Air Rotary Techniques									
	Set Screen from 25' to 35'									
35										
36										
37	Bottom									
38										
39										
40										
41										
42										
43										
44										

SAMPLE TYPE: SS DRIVEN SPLIT SPOON RC ROCK CORE BORING METHOD: HAS HOLLOW STEM AUGER
ST PRESSED SHELBY TUBE CT CONT. TUBE DC DRIVEN CASING

SUBSURFACE EXPLORATION LOG

Client:	Dresser Axelson	Page:	1 of 1
Project Number:	DRS-94-E893	Date:	02-22-95
Project Location:	Hobbs, NM	Drilling Method:	HSA
		Sampling Method:	SS
Boring Number:	H1-2		
Logged By:	JT/GP		
Drilled By:	Anderson & Associates		

WELL COMPLETION INFORMATION

Screen Dia: NA Length: NA Type: NA
Slot Size: NA
Riser Dia: NA Length: NA Type: NA

DEPTH	DESCRIPTION	INTERVAL	NUMBER	RECOVERY	BLOW COUNT	PID ppm	GRAPHIC	WELL COMP	WATER LVL	NORM
	Surface Elevation:									
	Sand, Some Stone		A			0				
2			B			0				
	Sand, White Silty		C			0				
4										
	Sand, White Silty, Some Limestone Rock		D			0				
6										
8										
	Sand, White Silty, Petroleum Odor		E			7				
10										
	Sand, Buff to White, Silty		F			11				
12										
	Odor		G			8				
14										
	Sand, White Buff Silty Odor (Solvents)		H			15				
16										
	Odor		I			14				
18										
	Sandstone									
20	Bottom									
22										

SAMPLE TYPE: SS DRIVEN SPLIT SPOON RC ROCK CORE BORING METHOD: HAS HOLLOW STEM AUGER
ST PRESSED SHELBY TUBE CT CONT. TUBE DC DRIVEN CASING

SUBSURFACE EXPLORATION LOG

Client:	Dresser Axelson	Page:	1 of 1
Project Number:	DRS-94-E893	Date:	02-23-95
Project Location:	Hobbs, NM	Drilling Method:	HSA
		Sampling Method:	SS
Boring Number:	H1-3	WELL COMPLETION INFORMATION	
Logged By:	JT/GP		
Drilled By:	Anderson & Associates	Screen Dia: NA Length: NA Type: NA	
		Slot Size: NA	
		Riser Dia: NA Length: NA Type: NA	

DEPTH	DESCRIPTION	INTERVAL	NUMBER	RECOVERY	BLOW COUNT	PID ppm	GRAPHIC	WELL COMP	WATER LVL	NORM
	Surface Elevation:									
	Sand, Some Stone		A			0				
	Sand, Silt, Clay		B			0				
4	Sand, Silt, Buff		C			0				
	Rock									
8	Sand, Silt, Buff		D			0				
	Sand, Silt,White Buff		E			0				
12	Sand, White Buffy Limestone		F			0				
	Sand, Silt, Tan		G			0				
16			H			0				
			I			2				
20	(02-23-95 Switched to Air Rotary with Tricone Bit) Rock									
24	Sand, Brown, Silty		J			4				
28										
			K			10				
32										
36										
	Bottom									
40										
44										

SAMPLE TYPE: SS DRIVEN SPLIT SPOON RC ROCK CORE BORING METHOD: HAS HOLLOW STEM AUGER
ST PRESSED SHELBY TUBE CT CONT. TUBE DC DRIVEN CASING

SUBSURFACE EXPLORATION LOG

Client:	Dresser Axelson	Page:	1 of 1
Project Number:	DRS-94-E893	Date:	02-22-95
Project Location:	Hobbs, NM	Drilling Method:	HSA
		Sampling Method:	SS
Boring Number:	H1-4		
Logged By:	JT/GP		
Drilled By:	Anderson & Associates		

WELL COMPLETION INFORMATION

Screen Dia: NA Length: NA Type: NA
Slot Size: NA
Riser Dia: NA Length: NA Type: NA

DEPTH	DESCRIPTION	INTERVAL	NUMBER	RECOVERY	BLOW COUNT	PID ppm	GRAPHIC	WELL COMP	WATER LVL	NORM
	Surface Elevation:									
0	Sand, Silty, Brown to gray		A			0				
2			B			0				
4			C			0				
6										
8										
8	Sand, Silt, White Buffy		D			0				
10			E			0				
12			F			0				
14			G			0				
16			H			0				
18	Bottom									
20										
22										

SAMPLE TYPE: SS DRIVEN SPLIT SPOON RC ROCK CORE BORING METHOD: HAS HOLLOW STEM AUGER
ST PRESSED SHELBY TUBE CT CONT. TUBE DC DRIVEN CASING

SUBSURFACE EXPLORATION LOG

Client:	Dresser Axelson	Page:	1 of 1
Project Number:	DRS-94-E893	Date:	02-22-95
Project Location:	Hobbs, NM	Drilling Method:	HSA
		Sampling Method:	SS
Boring Number:	H1-5	WELL COMPLETION INFORMATION	
Logged By:	JT/GP		
Drilled By:	Anderson & Associates	Screen Dia: NA Length: NA Type: NA	
		Slot Size: NA	
		Riser Dia: NA Length: NA Type: NA	

DEPTH	DESCRIPTION	INTERVAL	NUMBER	RECOVERY	BLOW COUNT	PID ppm	GRAPHIC	WELL COMP	WATER LVL	NORM
	Surface Elevation:									
	Sand and Gravel with Silt		A			0				0.2
1	Clay, Gray, Silty		B NORM							
2	Sand, White, Silty, Gravel									
3										
4										
5			B			0				0.2
6										
7										
8										
9										
10	Bottom		C			0				0.2
11										

SAMPLE TYPE: SS DRIVEN SPLIT SPOON RC ROCK CORE BORING METHOD: HAS HOLLOW STEM AUGER
ST PRESSED SHELBY TUBE CT CONT. TUBE DC DRIVEN CASING

SUBSURFACE EXPLORATION LOG

Client:	Dresser Axelson	Page:	1 of 1
Project Number:	DRS-94-E893	Date:	02-24-95
Project Location:	Hobbs, NM	Drilling Method:	HSA
		Sampling Method:	SS
Boring Number:	H1-6	**WELL COMPLETION INFORMATION**	
Logged By:	JT/GP		
Drilled By:	Anderson & Associates	Screen Dia: NA	Length: NA Type: NA
		Slot Size: NA	
		Riser Dia: NA	Length: NA Type: NA

DEPTH	DESCRIPTION	INTERVAL	NUMBER	RECOVERY	BLOW COUNT	PID ppm	GRAPHIC	WELL COMP	WATER LVL	NORM
	Surface Elevation:									
0	Sand and Gravel, White		A			0				0.2
2	Clay, dark Brown, Silty		B NORM							
	Sand, Buff, Gravel, Silty									
4										
6										
8										
10			B			0				0.2
			C							
12										
14										
			D			0				0.2
16										
	Bottom (Refusal)									
18										
20										
22										

SAMPLE TYPE: SS DRIVEN SPLIT SPOON RC ROCK CORE BORING METHOD: HAS HOLLOW STEM AUGER
ST PRESSED SHELBY TUBE CT CONT. TUBE DC DRIVEN CASING

SUBSURFACE EXPLORATION LOG

Client:	Dresser Axelson	Page:	1 of 1
Project Number:	DRS-94-E893	Date:	02-27-95
Project Location:	Hobbs, NM	Drilling Method:	HSA/AR
		Sampling Method:	SS
Boring Number:	H1-7	WELL COMPLETION INFORMATION	
Logged By:	JT/GP		
Drilled By:	Anderson & Associates	Screen Dia: NA Length: NA Type: NA	
		Slot Size: NA	
		Riser Dia: NA Length: NA Type: NA	

DEPTH	DESCRIPTION	INTERVAL	NUMBER	NORM #	BLOW COUNT	PID ppm	GRAPHIC	WELL COMP	WATER LVL	NORM
	Surface Elevation:									
	Sand and Gravel, White		A	A		0				0.2
	Clay,Brown to Gray, Silty, Sandy, Damp			B						
4										
	Rock in Spoon (No Samples)									
	Rock									
8										
	Clay, White, Moist, Plastic									
	Rock									
	Sand, Silt, White, Buffy		B			0				0.2
12	Sand,Buff to White Silty, Dry									
			C			0				0.2
16										
20	Rock (Switched to Air Rotary with Tricone Bit)									
	Rock, Sandstone									
24										
	Sand,Brown, Silty									
28										
			D			0				0.2
	Groundwater									
32										
36										
	Bottom									
40										
44										

SAMPLE TYPE: SS DRIVEN SPLIT SPOON RC ROCK CORE BORING METHOD: HAS HOLLOW STEM AUGER
ST PRESSED SHELBY TUBE CT CONT. TUBE DC DRIVEN CASING

SUBSURFACE EXPLORATION LOG

Client:	Dresser Axelson	Page:	1 of 1
Project Number:	DRS-94-E893	Date:	02-27-95
Project Location:	Hobbs, NM	Drilling Method:	HSA/AR
		Sampling Method:	SS
Boring Number:	H1-8		
Logged By:	JT/GP		
Drilled By:	Harrison		

WELL COMPLETION INFORMATION

Screen Dia: NA Length: NA Type: NA
Slot Size: NA
Riser Dia: NA Length: NA Type: NA

DEPTH	DESCRIPTION	INTERVAL	NUMBER	NORM #	BLOW COUNT	PID ppm	GRAPHIC	WELL COMP	WATER LVL	NORM
	Surface Elevation:									
	Sand and Gravel, White		A							
	Clay,Gray to Brown, Silty, Sandy			B						
4	Empty Spoon									
	Sand, Buff, Silty									
8			B							
	Clay, White, Moist									
12										
			C							
16	Sand, White, Silty, Fine Grained									
	Rock, Sandstone, Brown, Indurated									
20										
	Rock									
	Sandstone, Brown, Indurated, Very Hard									
24										
	Sand, Fine Grained, Brown, Silty									
28										
			D							
	Groundwater									
32										
36										
	Bottom									
40										
44										

SAMPLE TYPE: SS DRIVEN SPLIT SPOON RC ROCK CORE BORING METHOD: HAS HOLLOW STEM AUGER
ST PRESSED SHELBY TUBE CT CONT. TUBE DC DRIVEN CASING

ATTACHMENT 2 -- Analytical Reports

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
Birmingham, Alabama 35219
(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 7, 1995
Attention:	Carl Roppolo	Reference #	1809
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	soil	Analytical	
Date Received:	02/27/95	Analyst:	Kelly Hester
Date Collected:	02/22-23/95	Date of Analysis:	03/02/95
Sample Collector:	G.P. & J.T.	Method:	***EPA 418.1; Modified for solids***

TOTAL PETROLEUM HYDROCARBONS

FIELD ID	LAB ID	TPH, PPM	D.L., PPM
H1 -1E	5559	1,530	1
H1 -1L	5560	7,558	1
H1 -2E	5561	5,673	1
H1 -2H	5562	9,760	1
H1 -3I	5563	12	1
H1 -4F	5564	22	1
H1 -4H	5564H	6	1
H1 -3K	5565	835	1

BDL = Below detection Limit
D.L. = Detection Limit, Practical
All results expressed as PPM (mg/Kg)

Respectfully submitted,

John Sutherland
Analytical Chemist
Director, ASI

Quality Environmental Testing Services

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
Birmingham, Alabama 35219
(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 25, 1995
Attention:	Carl Roppolo	Reference #	1811
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	soil	Analytical	
Date Received:	02/27/95	Analyst:	Kelly Hester
Date Collected:	02/24/95	Date of Analysis:	03/03/95
Sample Collector:	G.P. & J.T.	Method:	***EPA 418.1; Modified for solids***

TOTAL PETROLEUM HYDROCARBONS

FIELD ID	LAB ID	TPH, PPM	D.L., PPM
HBG -1A	5572	47	1
H1 -5D	5573D	7	1
H3 -1A	5575	6,154	1
H3 -2	5576	19,222	1
H4 -1	5577	10,000	1
H5 -1	5578	5,490	1

BDL = Below detection Limit
D.L. = Detection Limit, Practical
All results expressed as PPM (mg/Kg)

Respectfully submitted,

John Sutherland
Analytical Chemist
Director, ASI

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
Birmingham, Alabama 35219
(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 7, 1995
Attention:	Carl Roppolo	Reference #	1824
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	soil	Analytical	
Date Received:	03/01/95	Analyst:	Kelly Hester
Date Collected:	02/27-28/95	Date of Analysis:	03/02/95
Sample Collector:	G.P. & J.T.	Method:	*EPA 418.1; Modified for solids*

TOTAL PETROLEUM HYDROCARBONS

FIELD ID	LAB ID	TPH, PPM	D.L., PPM
H1 -7D	5642	BDL	1
H1 -8D	5643	120	1

BDL = Below detection Limit
D.L. = Detection Limit, Practical
All results expressed as PPM (mg/Kg)

Respectfully submitted,

John Sutherland
Analytical Chemist
Director, ASI

Quality Environmental Testing Services

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
Birmingham, Alabama 35219
(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 27, 1995
Attention:	Carl Roppolo	Reference #	1824
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	water	Analytical	
Date Received:	03/01/95	Analyst:	John Sutherland
Date Collected:	02/27-28/95	Date of Analysis:	03/24/95
Sample Collector:	G.P. & J.T.	Method:	***SW 846 Method 8015; Modified per California DHS***

TOTAL PETROLEUM HYDROCARBONS

	FIELD ID	FIELD ID					
	H1-8	H1-7					
Total Petroleum	LAB ID	LAB ID					Detection
Hydrocarbons	5644	5645					Limit, ppm
TPH	1.3	1.2					1

BDL = Below Detection Limit
Detection Limit is Practical Quantitation Limit
All results expressed as ppm (mg/L) of analyte

Respectfully submitted,

John Sutherland
Analytical Chemist
Director, ASI

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
Birmingham, Alabama 35219
(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 28, 1995
Attention:	Carl Roppolo	Reference #	1811
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	water	Analytical	
Date Received:	02/27/95	Analyst:	John Sutherland
Date Collected:	02/24/95	Date of Analysis:	03/01/95
Sample Collector:	G.P. & J.T.	Method:	***SW 846 Method 8015; Modified per California DHS***

TOTAL PETROLEUM HYDROCARBONS

	FIELD ID	FIELD ID	FIELD ID				
	H1-1	H1-3	H2-1A				
Total Petroleum	LAB ID	LAB ID	LAB ID				Detection
Hydrocarbons	5570	5571	5580				Limit, ppm
TPH	680	25	BDL				1

BDL = Below Detection Limit
Detection Limit is Practical Quantitation Limit
All results expressed as ppm (mg/L) of analyte

Respectfully submitted,

John Sutherland
Analytical Chemist
Director, ASI

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
Birmingham, Alabama 35219
(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 27, 1995
Attention:	Carl Roppolo	Reference #	1811
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	soil & sludge	Analytical	
Date Received:	02/27/95	Analyst:	Kevin Doriety
Date Collected:	02/24/95	Date of Analysis:	03/14-24/95
Sample Collector:	G.P. & J.T.	Method:	***SW846 3010/3020/7000***

METALLIC ANALYTES

	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	
	HBG-1A	H1-5D	H3-1A	H3-2	H4-1	H5-1	
Analyte, mg/kg	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	Detection
as Total	5572	5573D	5575	5576	5577	5578	Limit, mg/kg
Arsenic	16.0	4.9	11.0	7.3	6.5	4.8	0.1
Barium	256	244	53	78	104	129	1
Cadmium	1.1	1.1	6.8	5.0	10.0	9.9	0.2
Chromium	6	12	12	124	86	206	3
Lead	26	16	179	592	776	660	3
Mercury	BDL	BDL	BDL	BDL	BDL	BDL	0.05
Selenium	BDL	BDL	BDL	BDL	BDL	BDL	0.1
Silver	BDL	2.5	1.3	BDL	0.9	BDL	0.5

BDL = Below Detection Limit
Detection Limit is Method Detection Limit
All results expressed as PPM mg/kg of total analyte

Respectfully submitted,

John Sutherland
Analytical Chemist
Director, ASI

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
Birmingham, Alabama 35219
(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 25, 1995
Attention:	Carl Roppolo	Reference #	1809
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	soil	Analytical	
Date Received:	02/27/95	Analyst:	Kevin Doriety
Date Collected:	02/22-23/95	Date of Analysis:	03/15-24/95
Sample Collector:	G.P. & J.T.	Method:	***SW846 3010/3020/7000***

METALLIC ANALYTES

	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	FIELD ID	
	H1-1E	H1-1L	H1-2E	H1-2H	H1-3I	H1-3K	
Analyte, mg/kg	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	Detection
as Total	5559	5560	5561	5562	5563	5565	Limit, mg/kg
Arsenic	6.8	2.7	11.0	5.1	5.9	4.3	0.1
Barium	78	61	37	166	808	140	1
Cadmium	1.3	0.5	0.9	0.8	1.1	0.3	0.2
Chromium	12	7	8	9	10	4	3
Lead	14	7	12	9	12	3	3
Mercury	BDL	BDL	BDL	BDL	BDL	BDL	0.05
Selenium	BDL	BDL	BDL	BDL	BDL	BDL	0.1
Silver	2.3	1.2	1.5	1.7	1.7	BDL	0.5

BDL = Below Detection Limit
Detection Limit is Method Detection Limit
All results expressed as PPM mg/kg of total analyte

Respectfully submitted,

John Sutherland
Analytical Chemist
Director, ASI

Quality Environmental Testing Services

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
Birmingham, Alabama 35219
(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 27, 1995
Attention:	Carl Roppolo	Reference #	1824
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	water	Analytical	
Date Received:	03/01/95	Analyst:	Kevin Doriety
Date Collected:	02/27-28/95	Date of Analysis:	03/14-24/95
Sample Collector:	G.P. & J.T.	Method:	***SW846 3010/3020/7000***

METALLIC ANALYTES

	FIELD ID	FIELD ID					
	H1-8	H1-7					
Analyte, mg/L	LAB ID	LAB ID					Detection
as Total	5644	5645					Limit, mg/L
Arsenic	0.06	0.06					0.01
Barium	0.08	0.07					0.01
Cadmium	BDL	BDL					0.02
Chromium	BDL	BDL					0.3
Lead	BDL	BDL					0.3
Mercury	BDL	BDL					0.005
Selenium	BDL	BDL					0.01
Silver	BDL	BDL					0.05

BDL = Below Detection Limit
Detection Limit is Method Detection Limit
All results expressed as PPM mg/L of total analyte

Respectfully submitted,

John Sutherland
Analytical Chemist
Director, ASI

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
Birmingham, Alabama 35219
(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 27, 1995
Attention:	Carl Roppolo	Reference #	1824
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	soil	Analytical	
Date Received:	03/01/95	Analyst:	Kevin Doriety
Date Collected:	02/27-28/95	Date of Analysis:	03/14-24/95
Sample Collector:	G.P. & J.T.	Method:	***SW846 3010/3020/7000***

METALLIC ANALYTES

	FIELD ID						
	H1-8D						
Analyte, mg/kg as Total	LAB ID						Detection Limit, mg/kg
	5643						
Arsenic	5.1						0.1
Barium	525						1
Cadmium	1.1						0.2
Chromium	11						3
Lead	18						3
Mercury	BDL						0.05
Selenium	BDL						0.1
Silver	1.9						0.5

BDL = Below Detection Limit
Detection Limit is Method Detection Limit
All results expressed as PPM mg/kg of total analyte

Respectfully submitted,

John Sutherland
Analytical Chemist
Director, ASI

Quality Environmental Testing Services

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
Birmingham, Alabama 35219
(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 27, 1995
Attention:	Carl Roppolo	Reference #	1811
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	water	Analytical	
Date Received:	02/27/95	Analyst:	Kevin Doriety
Date Collected:	02/24/95	Date of Analysis:	03/14-24/95
Sample Collector:	G.P. & J.T.	Method:	***SW846 3010/3020/7000***

METALLIC ANALYTES

	FIELD ID	FIELD ID	FIELD ID				
	H1-1	H1-3	H2-1A				
Analyte, mg/L	LAB ID	LAB ID	LAB ID				Detection
as Total	5570	5571	5580				Limit, mg/L
Arsenic	0.08	0.09	BDL				0.01
Barium	0.14	0.08	0.16				0.01
Cadmium	BDL	BDL	BDL				0.02
Chromium	BDL	BDL	BDL				0.3
Lead	BDL	BDL	BDL				0.3
Mercury	BDL	BDL	BDL				0.005
Selenium	BDL	BDL	BDL				0.01
Silver	BDL	BDL	BDL				0.05

BDL = Below Detection Limit
Detection Limit is Method Detection Limit
All results expressed as PPM mg/L of total analyte

Respectfully submitted,

John Sutherland
Analytical Chemist
Director, ASI

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
Birmingham, Alabama 35219
(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 27, 1995
Attention:	Carl Roppolo	Reference #	1824
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	soil	Analytical	
Date Received:	03/01/95	Analyst:	John Sutherland
Date Collected:	02/27-28/95	Date of Analysis:	03/09/95
Sample Collector:	G.P. & J.T.	Method:	*SW 846 Method 8260*

VOLATILE ORGANIC COMPOUNDS

VOLATILE ORGANIC COMPOUNDS, PPB	FIELD ID H1-8D LAB ID 5643					Practical Quantitation Limit PPB
Benzene	BDL					5
Bromobenzene	BDL					5
Bromochloromethane	BDL					5
Bromodichloromethane	BDL					5
Bromoform	BDL					5
Bromomethane	BDL					5
n-Butylbenzene	BDL					5
sec-Butylbenzene	BDL					5
tert-Butybenzene	BDL					5
Carbon Tetrachloride	BDL					5
Chlorobenzene	BDL					5
Chloroethane	BDL					5
Chloroform	BDL					5
Chloromethane	BDL					5
2-Chlorotoluene	BDL					5
4-Chlorotoluene	BDL					5
Dibromochloromethane	BDL					5
1,2-Dibromo-3-Chloropropane	BDL					5
1,2-Dibromoethane	BDL					5
Dibromomethane	BDL					5
1,2-Dichlorobenzene	BDL					5
1,3-Dichlorobenzene	BDL					5
1,4-Dichlorobenzene	BDL					5
Dichlorodifluoromethane	BDL					5
1-1,Dichloroethane	BDL					5
1,2-Dichloroethane	BDL					5

Compound List Continued next page

Detection Limit is Practical Quantitation Limit elevated due to matrix
BDL = Below Detection Limit
All results expressed as PPB (ug/Kg)

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
Birmingham, Alabama 35219
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Client:	E.M.E., Inc.	Report Date:	March 27, 1995
Attention:	Carl Roppolo	Reference #	1824
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	soil	Analytical	
Date Received:	03/01/95	Analyst:	John Sutherland
Date Collected:	02/27-28/95	Date of Analysis:	03/09/95
Sample Collector:	G.P. & J.T.	Method:	*SW 846 Method 8260*

VOLATILE ORGANIC COMPOUNDS

	FIELD ID					Practical
VOLATILE	H1-8D					Quantitation
ORGANIC	LAB ID					Limit
COMPOUNDS, PPB	5643					PPB
1,1-Dichloroethene	BDL					5
cis-1,2-Dichloroethene	BDL					5
trans-1,2-Dichloroethene	BDL					5
1,2-Dichloropropane	BDL					5
1,3- Dichloropropane	BDL					5
2,2-Dichloropropane	BDL					5
1,1-Dichloropropene	BDL					5
cis-1-3,Dichloropropene	BDL					5
trans-1,3-Dichloropropene	BDL					5
Ethylbenzene	BDL					5
Hexachlorobutadiene	BDL					5
Isopropylbenzene	BDL					5
4-Isopropyltoluene	BDL					5
Methylene Chloride	BDL					5
Naphthalene	BDL					5
n-Propylbenzene	BDL					5
Styrene	BDL					5
1,1,1,2-Tetrachloroethane	BDL					5
1,1,2,2-Tetrachloroethane	BDL					5
Tetrachloroethene	BDL					5
Toluene	BDL					5
1,2,3-Trichlorobenzene	BDL					5
1,2,4-Trichlorobenzene	BDL					5
1,1,1-Trichloroethane	BDL					5
1,1,2-Trichloroethane	BDL					5
Trichloroethene	BDL					5
Trichlorofluoromethane	BDL					5

Compound List Continued next page

Detection Limit is Practical Quantitation Limit elevated due to matrix
BDL = Below Detection Limit
All results expressed as PPB (ug/Kg)

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
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(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 27, 1995
Attention:	Carl Roppolo	Reference #	1824
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	soil	Analytical		Preparative	
Date received:	03/01/95	Analyst:	John Sutherland	Analyst:	KH
Date collected:	02/27-28/95	Date Analysis:	03/25/95	Date:	03/03/95
Sample Collector:	G.P. & J.T.	Method:	*SW 846 Method 8270*		

SEMIVOLATILE ORGANIC COMPOUNDS

ACID AND BASE NEUTRAL EXTRACTABLE ORGANIC COMPOUNDS, PPB	FIELD ID H1-8D LAB ID 5643					Practical Quantitation Limit PPB
Acenaphthene	BDL					100
Acenaphthylene	BDL					100
Anthracene	BDL					100
Aniline	BDL					100
Azobenzene	BDL					100
Benzidine	BDL					100
Benzoic Acid	BDL					500
Benzo(a)anthracene	BDL					100
Benzo(b)fluoranthene	BDL					100
Benzo(k)fluoranthene	BDL					100
Benzo(g,h,i)perylene	BDL					100
Benzo(a)pyrene	BDL					100
Benzyl alcohol	BDL					200
Bis(2-chloroethoxy)methane	BDL					100
Bis(2-chloroethyl)ether	BDL					100
Bis(2-chloroethoxy)ether	BDL					100
Bis(2-chloroisopropyl)ether	BDL					100
Bis(2-ethylhexyl)phthalate	BDL					100
4-bromophenyl phenyl ether	BDL					100
Butyl benzyl phthalate	BDL					100
4-Chloroaniline	BDL					200
1-Chloronaphthalene	BDL					100
2-Chloronaphthalene	BDL					100
4-Chloro-3-methylphenol	BDL					200
4-Chlorophenyl phenyl ether	BDL					100
Chrysene	BDL					100
Dibenz(a,h)anthracene	BDL					100
Dibenzofuran	BDL					100
Di-n-butylphthalate	BDL					100

Compound List Continued next page

BDL = Below detection Limit, Practical
All results expressed as PPB (ug/Kg)

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
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Client:	E.M.E., Inc.	Report Date:	March 27, 1995
Attention:	Carl Roppolo	Reference #	1824
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	soil	Analytical	
Date Received:	03/01/95	Analyst:	John Sutherland
Date Collected:	02/27-28/95	Date of Analysis:	03/09/95
Sample Collector:	G.P. & J.T.	Method:	*SW 846 Method 8260*

VOLATILE ORGANIC COMPOUNDS

	FIELD ID					Practical
VOLATILE	H1-8D					Quantitation
ORGANIC	LAB ID					Limit
COMPOUNDS, PPB	5643					PPB
1,2,3-Trichloropropane	BDL					5
1,2,4-Trimethylbenzene	BDL					5
1,3,5-Trimethylbenzene	BDL					5
Vinyl Chloride	BDL					5
Xylene, o,m,p	BDL					5

Detection Limit is Practical Quantitation Limit elevated due to matrix
BDL = Below Detection Limit
All results expressed as PPB (ug/Kg)

Respectfully submitted,

John Sutherland
Analytical Chemist
Director, ASI

Analytical Systems, Inc.

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Birmingham, Alabama 35219
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Client:	E.M.E., Inc.	Report Date:	March 27, 1995
Attention:	Carl Roppolo	Reference #	1824
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	water	Analytical	
Date received:	03/01/95	Analyst:	John Sutherland
Date collected:	02/27-28/95	Date Analysis:	03/09/95
Sample Collector:	G.P. & J.T.	Method:	*SW 846 Method 8260*

VOLATILE ORGANIC COMPOUNDS

VOLATILE ORGANIC COMPOUNDS, PPB	FIELD ID H1-8 LAB ID 5644	FIELD ID H1-7 LAB ID 5645				Practical Quantitation Limit, PPB
Benzene	BDL	BDL				5
Bromobenzene	BDL	BDL				5
Bromochloromethane	BDL	BDL				5
Bromodichloromethane	BDL	BDL				5
Bromoform	BDL	BDL				5
Bromomethane	BDL	BDL				5
n-Butylbenzene	10	BDL				5
sec-Butylbenzene	BDL	BDL				5
tert-Butybenzene	10	BDL				5
Carbon Tetrachloride	BDL	BDL				5
Chlorobenzene	BDL	BDL				5
Chloroethane	BDL	BDL				5
Chloroform	BDL	BDL				5
Chloromethane	BDL	BDL				5
2-Chlorotoluene	BDL	BDL				5
4-Chlorotoluene	BDL	BDL				5
Dibromochloromethane	BDL	BDL				5
1,2-Dibromo-3-Chloropropane	BDL	BDL				5
1,2-Dibromoethane	BDL	BDL				5
Dibromomethane	BDL	BDL				5
1,2-Dichlorobenzene	BDL	BDL				5
1,3-Dichlorobenzene	BDL	BDL				5
1,4-Dichlorobenzene	BDL	BDL				5
Dichlorodifluoromethane	BDL	BDL				5
1-1,Dichloroethane	BDL	BDL				5
1,2-Dichloroethane	BDL	10				5

Compound List Continued next page

BDL = Below detection Limit
Detection Limit is Practical Quantitation Limit
All results expressed as PPB (ug/L)

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
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Client:	E.M.E., Inc.	Report Date:	March 27, 1995
Attention:	Carl Roppolo	Reference #	1824
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	water	Analytical	
Date received:	03/01/95	Analyst:	John Sutherland
Date collected:	02/27-28/95	Date Analysis:	03/09/95
Sample Collector:	G.P. & J.T.	Method:	*SW 846 Method 8260*

VOLATILE ORGANIC COMPOUNDS

VOLATILE ORGANIC COMPOUNDS, PPB	FIELD ID H1-8 LAB ID 5644	FIELD ID H1-7 LAB ID 5645				Practical Quantitation Limit, PPB
1,1-Dichloroethene	BDL	BDL				5
cis-1,2-Dichloroethene	BDL	BDL				5
trans-1,2-Dichloroethene	BDL	BDL				5
1,2-Dichloropropane	BDL	BDL				5
1,3- Dichloropropane	BDL	BDL				5
2,2-Dichloropropane	BDL	BDL				5
1,1-Dichloropropene	BDL	BDL				5
cis-1-3,Dichloropropene	BDL	BDL				5
trans-1,3-Dichloropropene	BDL	BDL				5
Ethylbenzene	BDL	BDL				5
Hexachlorobutadiene	BDL	BDL				5
Isopropylbenzene	BDL	BDL				5
4-Isopropyltoluene	10	BDL				5
Methylene Chloride	BDL	BDL				5
Naphthalene	15	BDL				5
n-Propylbenzene	BDL	BDL				5
Styrene	BDL	BDL				5
1,1,1,2-Tetrachloroethane	BDL	BDL				5
1,1,2,2-Tetrachloroethane	BDL	BDL				5
Tetrachloroethene	BDL	7				5
Toluene	BDL	BDL				5
1,2,3-Trichlorobenzene	BDL	BDL				5
1,2,4-Trichlorobenzene	BDL	BDL				5
1,1,1-Trichloroethane	BDL	BDL				5
1,1,2-Trichloroethane	BDL	BDL				5
Trichloroethene	BDL	BDL				5
Trichlorofluoromethane	BDL	BDL				5

Compound List Continued next page

BDL = Below detection Limit
Detection Limit is Practical Quantitation Limit
All results expressed as PPB (ug/L)

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
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(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 27, 1995
Attention:	Carl Roppolo	Reference #	1824
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	water	Analytical	
Date received:	03/01/95	Analyst:	John Sutherland
Date collected:	02/27-28/95	Date Analysis:	03/09/95
Sample Collector:	G.P. & J.T.	Method:	***SW 846 Method 8260***

VOLATILE ORGANIC COMPOUNDS

VOLATILE ORGANIC COMPOUNDS, PPB	FIELD ID H1-8 LAB ID 5644	FIELD ID H1-7 LAB ID 5645				Practical Quantitation Limit, PPB
1,2,3-Trichloropropane	BDL	BDL				5
1,2,4-Trimethylbenzene	12	BDL				5
1,3,5-Trimethylbenzene	BDL	BDL				5
Vinyl Chloride	BDL	BDL				5
Xylenes, o,m,p	BDL	BDL				5

BDL = Below detection Limit
Detection Limit is Practical Quantitation Limit
All results expressed as PPB (ug/L)

Respectfully submitted,

John Sutherland
Analytical Chemist
Director, ASI

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
Birmingham, Alabama 35219
(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 28, 1995
Attention:	Carl Roppolo	Reference #	1811
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	sludge	Analytical	
Date Received:	02/27/95	Analyst:	John Sutherland
Date Collected:	02/24/95	Date of Analysis:	03/01/95
Sample Collector:	G.P. & J.T.	Method:	***SW 846 Method 8260***

VOLATILE ORGANIC COMPOUNDS

VOLATILE ORGANIC COMPOUNDS, PPB	FIELD ID **H3-1A** LAB ID 5575	FIELD ID **H3-2** LAB ID 5576	FIELD ID **H4-1** LAB ID 5577	FIELD ID **H5-1** LAB ID 5578		Practical Quantitation Limit PPB
Benzene	BDL	BDL	BDL	BDL		100
Bromobenzene	BDL	BDL	BDL	BDL		100
Bromochloromethane	BDL	BDL	BDL	BDL		100
Bromodichloromethane	BDL	BDL	BDL	BDL		100
Bromoform	BDL	BDL	BDL	BDL		100
Bromomethane	BDL	BDL	BDL	BDL		100
n-Butylbenzene	BDL	BDL	BDL	BDL		100
sec-Butylbenzene	BDL	BDL	BDL	BDL		100
tert-Butybenzene	BDL	BDL	BDL	BDL		100
Carbon Tetrachloride	BDL	BDL	BDL	BDL		100
Chlorobenzene	BDL	BDL	BDL	BDL		100
Chloroethane	BDL	BDL	BDL	BDL		100
Chloroform	BDL	BDL	BDL	BDL		100
Chloromethane	BDL	BDL	BDL	BDL		100
2-Chlorotoluene	BDL	BDL	BDL	BDL		100
4-Chlorotoluene	BDL	BDL	BDL	BDL		100
Dibromochloromethane	BDL	BDL	BDL	BDL		100
1,2-Dibromo-3-Chloropropane	BDL	BDL	BDL	BDL		100
1,2-Dibromoethane	BDL	BDL	BDL	BDL		100
Dibromomethane	BDL	BDL	BDL	BDL		100
1,2-Dichlorobenzene	BDL	BDL	BDL	BDL		100
1,3-Dichlorobenzene	BDL	BDL	BDL	BDL		100
1,4-Dichlorobenzene	BDL	BDL	BDL	BDL		100
Dichlorodifluoromethane	BDL	BDL	BDL	BDL		100
1-1,Dichloroethane	BDL	BDL	BDL	BDL		100
1,2-Dichloroethane	BDL	BDL	BDL	BDL		100

Compound List Continued next page

Detection Limit is Practical Quantitation Limit elevated due to matrix
BDL = Below Detection Limit
All results expressed as PPB (ug/Kg)

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
Birmingham, Alabama 35219
(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 28, 1995
Attention:	Carl Roppolo	Reference #	1811
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	sludge	Analytical	
Date Received:	02/27/95	Analyst:	John Sutherland
Date Collected:	02/24/95	Date of Analysis:	03/01/95
Sample Collector:	G.P. & J.T.	Method:	*SW 846 Method 8260*

VOLATILE ORGANIC COMPOUNDS

VOLATILE ORGANIC COMPOUNDS, PPB	FIELD ID H3-1A LAB ID 5575	FIELD ID H3-2 LAB ID 5576	FIELD ID H4-1 LAB ID 5577	FIELD ID H5-1 LAB ID 5578		Practical Quantitation Limit PPB
1,1-Dichloroethene	BDL	BDL	BDL	BDL		100
cis-1,2-Dichloroethene	BDL	BDL	BDL	BDL		100
trans-1,2-Dichloroethene	BDL	BDL	BDL	BDL		100
1,2-Dichloropropane	BDL	BDL	BDL	BDL		100
1,3- Dichloropropane	BDL	BDL	BDL	BDL		100
2,2-Dichloropropane	BDL	BDL	BDL	BDL		100
1,1-Dichloropropene	BDL	BDL	BDL	BDL		100
cis-1-3,Dichloropropene	BDL	BDL	BDL	BDL		100
trans-1,3-Dichloropropene	BDL	BDL	BDL	BDL		100
Ethylbenzene	BDL	BDL	BDL	BDL		100
Hexachlorobutadiene	BDL	BDL	BDL	BDL		100
Isopropylbenzene	BDL	BDL	BDL	BDL		100
4-Isopropyltoluene	BDL	BDL	BDL	BDL		100
Methylene Chloride	BDL	BDL	BDL	BDL		100
Naphthalene	BDL	BDL	BDL	BDL		100
n-Propylbenzene	BDL	BDL	BDL	BDL		100
Styrene	BDL	BDL	BDL	BDL		100
1,1,1,2-Tetrachloroethane	BDL	BDL	BDL	BDL		100
1,1,2,2-Tetrachloroethane	BDL	BDL	BDL	BDL		100
Tetrachloroethene	BDL	BDL	BDL	BDL		100
Toluene	BDL	BDL	BDL	BDL		100
1,2,3-Trichlorobenzene	BDL	BDL	BDL	BDL		100
1,2,4-Trichlorobenzene	BDL	BDL	BDL	BDL		100
1,1,1-Trichloroethane	BDL	BDL	BDL	BDL		100
1,1,2-Trichloroethane	BDL	BDL	BDL	BDL		100
Trichloroethene	BDL	BDL	BDL	BDL		100
Trichlorofluoromethane	BDL	BDL	BDL	BDL		100

Compound List Continued next page

Detection Limit is Practical Quantitation Limit elevated due to matrix
BDL = Below Detection Limit
All results expressed as PPB (ug/Kg)

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
Birmingham, Alabama 35219
(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 28, 1995
Attention:	Carl Roppolo	Reference #	1811
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	sludge	Analytical	
Date Received:	02/27/95	Analyst:	John Sutherland
Date Collected:	02/24/95	Date of Analysis:	03/01/95
Sample Collector:	G.P. & J.T.	Method:	*SW 846 Method 8260*

VOLATILE ORGANIC COMPOUNDS

	FIELD ID	FIELD ID	FIELD ID	FIELD ID		Practical
VOLATILE	H3-1A	H3-2	H4-1	H5-1		Quantitation
ORGANIC	LAB ID	LAB ID	LAB ID	LAB ID		Limit
COMPOUNDS, PPB	5575	5576	5577	5578		PPB
1,2,3-Trichloropropane	BDL	BDL	BDL	BDL		100
1,2,4-Trimethylbenzene	BDL	BDL	BDL	BDL		100
1,3,5-Trimethylbenzene	BDL	BDL	BDL	BDL		100
Vinyl Chloride	BDL	BDL	BDL	BDL		100
Xylene, o,m,p	BDL	BDL	BDL	BDL		100

Detection Limit is Practical Quantitation Limit elevated due to matrix
BDL = Below Detection Limit
All results expressed as PPB (ug/Kg)

Respectfully submitted,

John Sutherland
Analytical Chemist
Director, ASI

Analytical Systems, Inc.

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Attention:	Carl Roppolo	Reference #	1811
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	water	Analytical	
Date received:	02/27/95	Analyst:	John Sutherland
Date collected:	02/24/95	Date Analysis:	03/01/95
Sample Collector:	G.P. & J.T.	Method:	*SW 846 Method 8260*

VOLATILE ORGANIC COMPOUNDS

VOLATILE ORGANIC COMPOUNDS, PPB	FIELD ID H1-1 LAB ID 5570	FIELD ID H1-3 LAB ID 5571	FIELD ID H2-1A LAB ID 5580			Practical Quantitation Limit, PPB
Benzene	240	**BDL	BDL			5
Bromobenzene	*BDL	**BDL	BDL			5
Bromochloromethane	*BDL	**BDL	BDL			5
Bromodichloromethane	*BDL	**BDL	BDL			5
Bromoform	*BDL	**BDL	BDL			5
Bromomethane	*BDL	**BDL	BDL			5
n-Butylbenzene	*BDL	**BDL	BDL			5
sec-Butylbenzene	*BDL	**BDL	BDL			5
tert-Butybenzene	*BDL	**BDL	BDL			5
Carbon Tetrachloride	*BDL	**BDL	BDL			5
Chlorobenzene	*BDL	**BDL	BDL			5
Chloroethane	*BDL	**BDL	BDL			5
Chloroform	*BDL	**BDL	BDL			5
Chloromethane	*BDL	**BDL	BDL			5
2-Chlorotoluene	*BDL	**BDL	BDL			5
4-Chlorotoluene	*BDL	**BDL	BDL			5
Dibromochloromethane	*BDL	**BDL	BDL			5
1,2-Dibromo-3-Chloropropane	*BDL	**BDL	BDL			5
1,2-Dibromoethane	*BDL	**BDL	BDL			5
Dibromomethane	*BDL	**BDL	BDL			5
1,2-Dichlorobenzene	*BDL	**BDL	BDL			5
1,3-Dichlorobenzene	*BDL	**BDL	BDL			5
1,4-Dichlorobenzene	*BDL	**BDL	BDL			5
Dichlorodifluoromethane	*BDL	**BDL	BDL			5
1-1,Dichloroethane	*BDL	**BDL	BDL			5
1,2-Dichloroethane	*BDL	**BDL	BDL			5

BDL = Below detection Limit
Detection Limit is Practical Quantitation Limit
All results expressed as PPB (ug/L)

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
Birmingham, Alabama 35219
(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 28, 1995
Attention:	Carl Roppolo	Reference #	1811
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	water	Analytical	
Date received:	02/27/95	Analyst:	John Sutherland
Date collected:	02/24/95	Date Analysis:	03/01/95
Sample Collector:	G.P. & J.T.	Method:	*SW 846 Method 8260*

VOLATILE ORGANIC COMPOUNDS

VOLATILE ORGANIC COMPOUNDS, PPB	FIELD ID H1-1 LAB ID 5570	FIELD ID H1-3 LAB ID 5571	FIELD ID H2-1A LAB ID 5580			Practical Quantitation Limit, PPB
1,1-Dichloroethene	*BDL	**BDL	BDL			5
cis-1,2-Dichloroethene	*BDL	**BDL	BDL			5
trans-1,2-Dichloroethene	*BDL	**BDL	BDL			5
1,2-Dichloropropane	*BDL	**BDL	BDL			5
1,3- Dichloropropane	*BDL	**BDL	BDL			5
2,2-Dichloropropane	*BDL	**BDL	BDL			5
1,1-Dichloropropene	*BDL	**BDL	BDL			5
cis-1-3,Dichloropropene	*BDL	**BDL	BDL			5
trans-1,3-Dichloropropene	*BDL	**BDL	BDL			5
Ethylbenzene	280	**BDL	BDL			5
Hexachlorobutadiene	*BDL	**BDL	BDL			5
Isopropylbenzene	*BDL	**BDL	BDL			5
4-Isopropyltoluene	1,000	145	BDL			5
Methylene Chloride	*BDL	**BDL	BDL			5
Naphthalene	*BDL	**BDL	BDL			5
n-Propylbenzene	*BDL	**BDL	BDL			5
Styrene	*BDL	**BDL	BDL			5
1,1,1,2-Tetrachloroethane	*BDL	**BDL	BDL			5
1,1,2,2-Tetrachloroethane	*BDL	**BDL	BDL			5
Tetrachloroethene	*BDL	**BDL	BDL			5
Toluene	1,200	65	BDL			5
1,2,3-Trichlorobenzene	*BDL	**BDL	BDL			5
1,2,4-Trichlorobenzene	*BDL	**BDL	BDL			5
1,1,1-Trichloroethane	*BDL	**BDL	BDL			5
1,1,2-Trichloroethane	*BDL	**BDL	BDL			5
Trichloroethene	*BDL	**BDL	BDL			5
Trichlorofluoromethane	*BDL	**BDL	BDL			5

BDL = Below detection Limit
Detection Limit is Practical Quantitation Limit
All results expressed as PPB (ug/L)

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
Birmingham, Alabama 35219
(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 28, 1995
Attention:	Carl Roppolo	Reference #	1811
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	water	Analytical	
Date received:	02/27/95	Analyst:	John Sutherland
Date collected:	02/24/95	Date Analysis:	03/01/95
Sample Collector:	G.P. & J.T.	Method:	*SW 846 Method 8260*

VOLATILE ORGANIC COMPOUNDS

VOLATILE ORGANIC COMPOUNDS, PPB	FIELD ID / LAB ID H1-1 / 5570	FIELD ID / LAB ID H1-3 / 5571	FIELD ID / LAB ID H2-1A / 5580			Practical Quantitation Limit, PPB
1,2,3-Trichloropropane	*BDL	**BDL	BDL			5
1,2,4-Trimethylbenzene	4,700	140	BDL			5
1,3,5-Trimethylbenzene	1,500	150	BDL			5
Vinyl Chloride	*BDL	**BDL	BDL			5
Xylenes, o,m,p	1,225	**BDL	BDL			5

BDL = Below detection Limit
Detection Limit is Practical Quantitation Limit
*Multiply Practical Quantitation Limit by 40, elevated due to matrix
**Multiply Practical Quantitation Limit by 4, elevated due to matrix
All results expressed as PPB (ug/L)

Respectfully submitted,

John Sutherland
Analytical Chemist
Director, ASI

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
Birmingham, Alabama 35219
(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 25, 1995
Attention:	Carl Roppolo	Reference #	1809
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	soil	Analytical	
Date Received:	02/27/95	Analyst:	John Sutherland
Date Collected:	02/22-23/95	Date of Analysis:	03/07/95
Sample Collector:	G.P. & J.T.	Method:	*SW 846 Method 8260*

VOLATILE ORGANIC COMPOUNDS

VOLATILE ORGANIC COMPOUNDS, PPB	FIELD ID: H1-3K / LAB ID: 5565					Practical Quantitation Limit PPB
Benzene	BDL					20
Bromobenzene	BDL					20
Bromochloromethane	BDL					20
Bromodichloromethane	BDL					20
Bromoform	BDL					20
Bromomethane	BDL					20
n-Butylbenzene	BDL					20
sec-Butylbenzene	45					20
tert-Butybenzene	60					20
Carbon Tetrachloride	BDL					20
Chlorobenzene	BDL					20
Chloroethane	BDL					20
Chloroform	BDL					20
Chloromethane	BDL					20
2-Chlorotoluene	BDL					20
4-Chlorotoluene	BDL					20
Dibromochloromethane	BDL					20
1,2-Dibromo-3-Chloropropane	BDL					20
1,2-Dibromoethane	BDL					20
Dibromomethane	BDL					20
1,2-Dichlorobenzene	BDL					20
1,3-Dichlorobenzene	BDL					20
1,4-Dichlorobenzene	BDL					20
Dichlorodifluoromethane	BDL					20
1-1,Dichloroethane	BDL					20
1,2-Dichloroethane	BDL					20

Compound List Continued next page

Detection Limit is Practical Quantitation Limit elevated due to matrix
BDL = Below Detection Limit
All results expressed as PPB (ug/Kg)

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
Birmingham, Alabama 35219
(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 25, 1995
Attention:	Carl Roppolo	Reference #	1809
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	soil	Analytical	
Date Received:	02/27/95	Analyst:	John Sutherland
Date Collected:	02/22-23/95	Date of Analysis:	03/07/95
Sample Collector:	G.P. & J.T.	Method:	*SW 846 Method 8260*

VOLATILE ORGANIC COMPOUNDS

VOLATILE ORGANIC COMPOUNDS, PPB	FIELD ID H1-3K LAB ID 5565					Practical Quantitation Limit PPB
1,1-Dichloroethene	BDL					20
cis-1,2-Dichloroethene	BDL					20
trans-1,2-Dichloroethene	BDL					20
1,2-Dichloropropane	BDL					20
1,3- Dichloropropane	BDL					20
2,2-Dichloropropane	BDL					20
1,1-Dichloropropene	BDL					20
cis-1-3,Dichloropropene	BDL					20
trans-1,3-Dichloropropene	BDL					20
Ethylbenzene	BDL					20
Hexachlorobutadiene	BDL					20
Isopropylbenzene	BDL					20
4-Isopropyltoluene	105					20
Methylene Chloride	BDL					20
Naphthalene	225					20
n-Propylbenzene	BDL					20
Styrene	BDL					20
1,1,1,2-Tetrachloroethane	BDL					20
1,1,2,2-Tetrachloroethane	BDL					20
Tetrachloroethene	BDL					20
Toluene	BDL					20
1,2,3-Trichlorobenzene	BDL					20
1,2,4-Trichlorobenzene	BDL					20
1,1,1-Trichloroethane	BDL					20
1,1,2-Trichloroethane	BDL					20
Trichloroethene	BDL					20
Trichlorofluoromethane	BDL					20

Compound List Continued next page

Detection Limit is Practical Quantitation Limit elevated due to matrix
BDL = Below Detection Limit
All results expressed as PPB (ug/Kg)

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
Birmingham, Alabama 35219
(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 25, 1995
Attention:	Carl Roppolo	Reference #	1809
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	soil	Analytical	
Date Received:	02/27/95	Analyst:	John Sutherland
Date Collected:	02/22-23/95	Date of Analysis:	03/07/95
Sample Collector:	G.P. & J.T.	Method:	***SW 846 Method 8260***

VOLATILE ORGANIC COMPOUNDS

	FIELD ID					Practical Quantitation Limit PPB
VOLATILE ORGANIC COMPOUNDS, PPB	**H1-3K**					
	LAB ID					
	5565					
1,2,3-Trichloropropane	BDL					20
1,2,4-Trimethylbenzene	**427**					20
1,3,5-Trimethylbenzene	**36**					20
Vinyl Chloride	BDL					20
Xylene, o,m,p	BDL					20

Detection Limit is Practical Quantitation Limit elevated due to matrix
BDL = Below Detection Limit
All results expressed as PPB (ug/Kg)

Respectfully submitted,

John Sutherland
Analytical Chemist
Director, ASI

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
Birmingham, Alabama 35219
(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 25, 1995
Attention:	Carl Roppolo	Reference #	1809
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	soil	Analytical	
Date Received:	02/27/95	Analyst:	John Sutherland
Date Collected:	02/22-23/95	Date of Analysis:	03/07/95
Sample Collector:	G.P. & J.T.	Method:	***SW 846 Method 8260***

VOLATILE ORGANIC COMPOUNDS

VOLATILE ORGANIC COMPOUNDS, PPB	FIELD ID H1-1E LAB ID 5559	FIELD ID H1-1L LAB ID 5560	FIELD ID H1-2E LAB ID 5561	FIELD ID H1-2H LAB ID 5562	FIELD ID H1-3I LAB ID 5563	Practical Quantitation Limit PPB
Benzene	BDL	BDL	BDL	BDL	BDL	20
Bromobenzene	BDL	BDL	BDL	BDL	BDL	20
Bromochloromethane	BDL	BDL	BDL	BDL	BDL	20
Bromodichloromethane	BDL	BDL	BDL	BDL	BDL	20
Bromoform	BDL	BDL	BDL	BDL	BDL	20
Bromomethane	BDL	BDL	BDL	BDL	BDL	20
n-Butylbenzene	**45**	**130**	BDL	**60**	**18**	20
sec-Butylbenzene	**45**	**72**	BDL	**7**	BDL	20
tert-Butybenzene	**58**	**54**	BDL	**15**	BDL	20
Carbon Tetrachloride	BDL	BDL	BDL	BDL	BDL	20
Chlorobenzene	BDL	BDL	BDL	BDL	BDL	20
Chloroethane	BDL	BDL	BDL	BDL	BDL	20
Chloroform	BDL	BDL	BDL	BDL	BDL	20
Chloromethane	BDL	BDL	BDL	BDL	BDL	20
2-Chlorotoluene	BDL	BDL	BDL	BDL	BDL	20
4-Chlorotoluene	BDL	BDL	BDL	BDL	BDL	20
Dibromochloromethane	BDL	BDL	BDL	BDL	BDL	20
1,2-Dibromo-3-Chloropropane	BDL	BDL	BDL	BDL	BDL	20
1,2-Dibromoethane	BDL	BDL	BDL	BDL	BDL	20
Dibromomethane	BDL	BDL	BDL	BDL	BDL	20
1,2-Dichlorobenzene	**75**	BDL	BDL	BDL	BDL	20
1,3-Dichlorobenzene	BDL	BDL	BDL	BDL	BDL	20
1,4-Dichlorobenzene	**33**	BDL	BDL	BDL	BDL	20
Dichlorodifluoromethane	BDL	BDL	BDL	BDL	BDL	20
1-1,Dichloroethane	BDL	BDL	BDL	BDL	BDL	20
1,2-Dichloroethane	BDL	BDL	BDL	BDL	BDL	20

Compound List Continued next page

Detection Limit is Practical Quantitation Limit elevated due to matrix
BDL = Below Detection Limit
All results expressed as PPB (ug/Kg)

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
Birmingham, Alabama 35219
(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 25, 1995
Attention:	Carl Roppolo	Reference #	1809
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	soil	Analytical	
Date Received:	02/27/95	Analyst:	John Sutherland
Date Collected:	02/22-23/95	Date of Analysis:	03/07/95
Sample Collector:	G.P. & J.T.	Method:	*SW 846 Method 8260*

VOLATILE ORGANIC COMPOUNDS

VOLATILE ORGANIC COMPOUNDS, PPB	FIELD ID H1-1E LAB ID 5559	FIELD ID H1-1L LAB ID 5560	FIELD ID H1-2E LAB ID 5561	FIELD ID H1-2H LAB ID 5562	FIELD ID H1-3I LAB ID 5563	Practical Quantitation Limit PPB
1,1-Dichloroethene	BDL	BDL	BDL	BDL	BDL	20
cis-1,2-Dichloroethene	BDL	BDL	BDL	BDL	BDL	20
trans-1,2-Dichloroethene	BDL	BDL	BDL	BDL	BDL	20
1,2-Dichloropropane	BDL	BDL	BDL	BDL	BDL	20
1,3- Dichloropropane	BDL	BDL	BDL	BDL	BDL	20
2,2-Dichloropropane	BDL	BDL	BDL	BDL	BDL	20
1,1-Dichloropropene	BDL	BDL	BDL	BDL	BDL	20
cis-1-3,Dichloropropene	BDL	BDL	BDL	BDL	BDL	20
trans-1,3-Dichloropropene	BDL	BDL	BDL	BDL	BDL	20
Ethylbenzene	BDL	57	BDL	35	BDL	20
Hexachlorobutadiene	BDL	BDL	BDL	BDL	BDL	20
Isopropylbenzene	BDL	BDL	BDL	BDL	BDL	20
4-Isopropyltoluene	90	180	BDL	BDL	BDL	20
Methylene Chloride	BDL	BDL	BDL	BDL	BDL	20
Naphthalene	600	750	470	250	120	20
n-Propylbenzene	BDL	60	BDL	44	BDL	20
Styrene	BDL	BDL	BDL	BDL	BDL	20
1,1,1,2-Tetrachloroethane	BDL	BDL	BDL	BDL	BDL	20
1,1,2,2-Tetrachloroethane	BDL	BDL	BDL	BDL	BDL	20
Tetrachloroethene	BDL	BDL	BDL	BDL	BDL	20
Toluene	BDL	30	BDL	BDL	BDL	20
1,2,3-Trichlorobenzene	BDL	BDL	BDL	BDL	BDL	20
1,2,4-Trichlorobenzene	BDL	BDL	BDL	BDL	BDL	20
1,1,1-Trichloroethane	BDL	BDL	BDL	BDL	BDL	20
1,1,2-Trichloroethane	BDL	BDL	BDL	BDL	BDL	20
Trichloroethene	BDL	BDL	BDL	BDL	BDL	20
Trichlorofluoromethane	BDL	BDL	BDL	BDL	BDL	20

Compound List Continued next page

Detection Limit is Practical Quantitation Limit elevated due to matrix
BDL = Below Detection Limit
All results expressed as PPB (ug/Kg)

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
Birmingham, Alabama 35219
(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 25, 1995
Attention:	Carl Roppolo	Reference #	1809
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	soil	Analytical	
Date Received:	02/27/95	Analyst:	John Sutherland
Date Collected:	02/22-23/95	Date of Analysis:	03/07/95
Sample Collector:	G.P. & J.T.	Method:	*SW 846 Method 8260*

VOLATILE ORGANIC COMPOUNDS

VOLATILE ORGANIC COMPOUNDS, PPB	FIELD ID / LAB ID	FIELD ID / LAB ID	FIELD ID / LAB ID	FIELD ID / LAB ID	FIELD ID / LAB ID	Practical Quantitation Limit PPB
	H1-1E / 5559	H1-1L / 5560	H1-2E / 5561	H1-2H / 5562	H1-3I / 5563	
1,2,3-Trichloropropane	BDL	BDL	BDL	BDL	BDL	20
1,2,4-Trimethylbenzene	30	1,305	68	30	45	20
1,3,5-Trimethylbenzene	70	135	BDL	88	BDL	20
Vinyl Chloride	BDL	BDL	BDL	BDL	BDL	20
Xylene, o,m,p	40	525	BDL	200	BDL	20

Detection Limit is Practical Quantitation Limit elevated due to matrix
BDL = Below Detection Limit
All results expressed as PPB (ug/Kg)

Respectfully submitted,

John Sutherland
Analytical Chemist
Director, ASI

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
Birmingham, Alabama 35219
(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 25, 1995
Attention:	Carl Roppolo	Reference #	1809
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	soil	Analytical		Preparative	
Date received:	02/27/95	Analyst:	John Sutherland	Analyst:	KH
Date collected:	02/22-23/95	Date Analysis:	03/24/95	Date:	02/28/95
Sample Collector:	G.P. & J.T.	Method:	*SW 846 Method 8270*		

SEMIVOLATILE ORGANIC COMPOUNDS

ACID AND BASE NEUTRAL EXTRACTABLE ORGANIC COMPOUNDS, PPB	FIELD ID: H1-3K LAB ID: 5565					Practical Quantitation Limit PPB
Acenaphthene	BDL					100
Acenaphthylene	BDL					100
Anthracene	BDL					100
Aniline	BDL					100
Azobenzene	BDL					100
Benzidine	BDL					100
Benzoic Acid	BDL					500
Benzo(a)anthracene	BDL					100
Benzo(b)fluoranthene	BDL					100
Benzo(k)fluoranthene	BDL					100
Benzo(g,h,i)perylene	BDL					100
Benzo(a)pyrene	BDL					100
Benzyl alcohol	BDL					200
Bis(2-chloroethoxy)methane	BDL					100
Bis(2-chloroethyl)ether	BDL					100
Bis(2-chloroethoxy)ether	BDL					100
Bis(2-chloroisopropyl)ether	BDL					100
Bis(2-ethylhexyl)phthalate	BDL					100
4-bromophenyl phenyl ether	BDL					100
Butyl benzyl phthalate	BDL					100
4-Chloroaniline	BDL					200
1-Chloronaphthalene	BDL					100
2-Chloronaphthalene	BDL					100
4-Chloro-3-methylphenol	BDL					200
4-Chlorophenyl phenyl ether	BDL					100
Chrysene	BDL					100
Dibenz(a,h)anthracene	BDL					100
Dibenzofuran	BDL					100
Di-n-butylphthalate	BDL					100

Compound List Continued next page

BDL = Below detection Limit, Practical
All results expressed as PPB (ug/Kg)

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
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Client:	E.M.E., Inc.	Report Date:	March 25, 1995
Attention:	Carl Roppolo	Reference #	1809
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	soil	Analytical		Preparative	
Date received:	02/27/95	Analyst:	John Sutherland	Analyst:	KH
Date collected:	02/22-23/95	Date Analysis:	03/24/95	Date:	02/28/95
Sample Collector:	G.P. & J.T.	Method:	*SW 846 Method 8270*		

SEMIVOLATILE ORGANIC COMPOUNDS

ACID AND BASE NEUTRAL EXTRACTABLE ORGANIC COMPOUNDS, PPB	FIELD ID H1-3K LAB ID 5565					Practical Quantitation Limit PPB
1,3-Dichlorobenzene	BDL					100
1,4-Dichlorobenzene	BDL					100
1,2-Dichlorobenzene	BDL					100
3,3'-Dichlorobenzidine	BDL					200
2,4-Dichlorophenol	BDL					100
2,6-Dichlorophenol	BDL					100
Diethylphthalate	BDL					100
2,4-Dimethylphenol	BDL					100
Dimethylphthalate	BDL					100
4,6-Dinitro-2-methylphenol	BDL					100
2,4-Dinitrophenol	BDL					500
2,4-Dinitrotoluene	BDL					100
2,6-Dinitrotoluene	BDL					100
Di-n-octylphthalate	BDL					100
Fluoranthene	BDL					100
Fluorene	BDL					100
Hexachlorobenzene	BDL					100
Hexachlorobutadiene	BDL					100
Hexachlorocyclopentadiene	BDL					100
Hexachloroethane	BDL					100
Indeno(1,2,3-cd)pyrene	BDL					100
Isophorone	BDL					100
2-Methylnaphthalene	**180**					100
Methylphenols (o,m-cresol)	BDL					100
4-Methylphenol (p-cresol)	BDL					100
Naphthalene	**280**					100
2-Nitroaniline	BDL					500

Compound List Continued next page

BDL = Below detection Limit, Practical
All results expressed as PPB (ug/Kg)

Analytical Systems, Inc.

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Client:	E.M.E., Inc.	Report Date:	March 25, 1995
Attention:	Carl Roppolo	Reference #	1809
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	soil	Analytical		Preparative	
Date received:	02/27/95	Analyst:	John Sutherland	Analyst:	KH
Date collected:	02/22-23/95	Date Analysis:	03/24/95	Date:	02/28/95
Sample Collector:	G.P. & J.T.	Method:	***SW 846 Method 8270***		

SEMIVOLATILE ORGANIC COMPOUNDS

	FIELD ID					Practical
ACID AND BASE NEUTRAL	H1-3K					Quantitation
EXTRACTABLE ORGANICS	LAB ID					Limit
COMPOUNDS, PPB	5565					PPB
3-Nitroaniline	BDL					500
4-Nitroaniline	BDL					500
Nitrobenzene	BDL					100
2-Nitrophenol	BDL					500
4-Nitrophenol	BDL					500
N-Nitrosodimethylamine	BDL					100
N-Nitrosodi-n-propylamine	BDL					100
N-Nitrosodiphenylamine	BDL					100
Pentachlorophenol	BDL					500
Phenanthrene	BDL					100
Phenol	BDL					100
Pyrene	BDL					100
1,2,4-Trichlorobenzene	BDL					100
2,4,5-Trichlorophenol	BDL					200
2,4,6-Trichlorophenol	BDL					100

BDL = Below detection Limit, Practical
All results expressed as PPB (ug/Kg)

Respectfully submitted,

John Sutherland
Analytical Chemist
Director, ASI

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
Birmingham, Alabama 35219
(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 25, 1995
Attention:	Carl Roppolo	Reference #	1809
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	soil	Analytical		Preparative	
Date received:	02/27/95	Analyst:	John Sutherland	Analyst:	KH
Date collected:	02/22-23/95	Date Analysis:	03/24/95	Date:	02/28/95
Sample Collector:	G.P. & J.T.	Method:	*SW 846 Method 8270*		

SEMIVOLATILE ORGANIC COMPOUNDS

ACID AND BASE NEUTRAL EXTRACTABLE ORGANIC COMPOUNDS, PPB	FIELD ID H1-1E LAB ID 5559	FIELD ID H1-1L LAB ID 5560	FIELD ID H1-2E LAB ID 5561	FIELD ID H1-2H LAB ID 5562	FIELD ID H1-3I LAB ID 5563	Practical Quantitation Limit PPB
Acenaphthene	BDL	BDL	BDL	BDL	BDL	100
Acenaphthylene	BDL	BDL	BDL	BDL	BDL	100
Anthracene	BDL	BDL	BDL	BDL	BDL	100
Aniline	BDL	BDL	BDL	BDL	BDL	100
Azobenzene	BDL	BDL	BDL	BDL	BDL	100
Benzidine	BDL	BDL	BDL	BDL	BDL	100
Benzoic Acid	BDL	BDL	BDL	BDL	BDL	500
Benzo(a)anthracene	BDL	BDL	BDL	BDL	BDL	100
Benzo(b)fluoranthene	BDL	BDL	BDL	BDL	BDL	100
Benzo(k)fluoranthene	BDL	BDL	BDL	BDL	BDL	100
Benzo(g,h,i)perylene	BDL	BDL	BDL	BDL	BDL	100
Benzo(a)pyrene	BDL	BDL	BDL	BDL	BDL	100
Benzyl alcohol	BDL	BDL	BDL	BDL	BDL	200
Bis(2-chloroethoxy)methane	BDL	BDL	BDL	BDL	BDL	100
Bis(2-chloroethyl)ether	BDL	BDL	BDL	BDL	BDL	100
Bis(2-chloroethoxy)ether	BDL	BDL	BDL	BDL	BDL	100
Bis(2-chloroisopropyl)ether	BDL	BDL	BDL	BDL	BDL	100
Bis(2-ethylhexyl)phthalate	BDL	BDL	BDL	BDL	BDL	100
4-bromophenyl phenyl ether	BDL	BDL	BDL	BDL	BDL	100
Butyl benzyl phthalate	BDL	BDL	BDL	BDL	BDL	100
4-Chloroaniline	BDL	BDL	BDL	BDL	BDL	200
1-Chloronaphthalene	BDL	BDL	BDL	BDL	BDL	100
2-Chloronaphthalene	BDL	BDL	BDL	BDL	BDL	100
4-Chloro-3-methylphenol	BDL	BDL	BDL	BDL	BDL	200
4-Chlorophenyl phenyl ether	BDL	BDL	BDL	BDL	BDL	100
Chrysene	BDL	BDL	BDL	BDL	BDL	100
Dibenz(a,h)anthracene	BDL	BDL	BDL	BDL	BDL	100
Dibenzofuran	BDL	BDL	BDL	BDL	BDL	100
Di-n-butylphthalate	BDL	BDL	BDL	BDL	BDL	100

Compound List Continued next page

BDL = Below detection Limit, Practical
All results expressed as PPB (ug/Kg)

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Attention:	Carl Roppolo	Reference #	1809
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	soil	Analytical		Preparative	
Date received:	02/27/95	Analyst:	John Sutherland	Analyst:	KH
Date collected:	02/22-23/95	Date Analysis:	03/24/95	Date:	02/28/95
Sample Collector:	G.P. & J.T.	Method:	***SW 846 Method 8270***		

SEMIVOLATILE ORGANIC COMPOUNDS

ACID AND BASE NEUTRAL EXTRACTABLE ORGANIC COMPOUNDS, PPB	FIELD ID **H1-1E** LAB ID 5559	FIELD ID **H1-1L** LAB ID 5560	FIELD ID **H1-2E** LAB ID 5561	FIELD ID **H1-2H** LAB ID 5562	FIELD ID **H1-3I** LAB ID 5563	Practical Quantitation Limit PPB
1,3-Dichlorobenzene	BDL	BDL	BDL	BDL	BDL	100
1,4-Dichlorobenzene	BDL	BDL	BDL	BDL	BDL	100
1,2-Dichlorobenzene	BDL	BDL	BDL	BDL	BDL	100
3,3'-Dichlorobenzidine	BDL	BDL	BDL	BDL	BDL	200
2,4-Dichlorophenol	BDL	BDL	BDL	BDL	BDL	100
2,6-Dichlorophenol	BDL	BDL	BDL	BDL	BDL	100
Diethylphthalate	BDL	BDL	BDL	BDL	BDL	100
2,4-Dimethylphenol	BDL	BDL	BDL	BDL	BDL	100
Dimethylphthalate	BDL	BDL	BDL	BDL	BDL	100
4,6-Dinitro-2-methylphenol	BDL	BDL	BDL	BDL	BDL	100
2,4-Dinitrophenol	BDL	BDL	BDL	BDL	BDL	500
2,4-Dinitrotoluene	BDL	BDL	BDL	BDL	BDL	100
2,6-Dinitrotoluene	BDL	BDL	BDL	BDL	BDL	100
Di-n-octylphthalate	BDL	BDL	BDL	BDL	BDL	100
Fluoranthene	BDL	BDL	BDL	BDL	BDL	100
Fluorene	BDL	BDL	BDL	BDL	BDL	100
Hexachlorobenzene	BDL	BDL	BDL	BDL	BDL	100
Hexachlorobutadiene	BDL	BDL	BDL	BDL	BDL	100
Hexachlorocyclopentadiene	BDL	BDL	BDL	BDL	BDL	100
Hexachloroethane	BDL	BDL	BDL	BDL	BDL	100
Indeno(1,2,3-cd)pyrene	BDL	BDL	BDL	BDL	BDL	100
Isophorone	BDL	BDL	BDL	BDL	BDL	100
2-Methylnaphthalene	**2600**	**3150**	BDL	**1500**	BDL	100
Methylphenols (o,m-cresol)	BDL	BDL	BDL	BDL	BDL	100
4-Methylphenol (p-cresol)	BDL	BDL	BDL	BDL	BDL	100
Naphthalene	**700**	**870**	**580**	**800**	BDL	100
2-Nitroaniline	BDL	BDL	BDL	BDL	BDL	500

Compound List Continued next page

BDL = Below detection Limit, Practical
All results expressed as PPB (ug/Kg)

Analytical Systems, Inc.

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Attention:	Carl Roppolo	Reference #	1809
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	soil	Analytical		Preparative	
Date received:	02/27/95	Analyst:	John Sutherland	Analyst:	KH
Date collected:	02/22-23/95	Date Analysis:	03/24/95	Date:	02/28/95
Sample Collector:	G.P. & J.T.	Method:	*SW 846 Method 8270*		

SEMIVOLATILE ORGANIC COMPOUNDS

ACID AND BASE NEUTRAL EXTRACTABLE ORGANICS COMPOUNDS, PPB	FIELD ID H1-1E LAB ID 5559	FIELD ID H1-1L LAB ID 5560	FIELD ID H1-2E LAB ID 5561	FIELD ID H1-2H LAB ID 5562	FIELD ID H1-3I LAB ID 5563	Practical Quantitation Limit PPB
3-Nitroaniline	BDL	BDL	BDL	BDL	BDL	500
4-Nitroaniline	BDL	BDL	BDL	BDL	BDL	500
Nitrobenzene	BDL	BDL	BDL	BDL	BDL	100
2-Nitrophenol	BDL	BDL	BDL	BDL	BDL	500
4-Nitrophenol	BDL	BDL	BDL	BDL	BDL	500
N-Nitrosodimethylamine	BDL	BDL	BDL	BDL	BDL	100
N-Nitrosodi-n-propylamine	BDL	BDL	BDL	BDL	BDL	100
N-Nitrosodiphenylamine	BDL	BDL	BDL	BDL	BDL	100
Pentachlorophenol	BDL	BDL	BDL	BDL	BDL	500
Phenanthrene	BDL	BDL	BDL	BDL	BDL	100
Phenol	BDL	BDL	BDL	BDL	BDL	100
Pyrene	BDL	BDL	BDL	BDL	BDL	100
1,2,4-Trichlorobenzene	BDL	BDL	BDL	BDL	BDL	100
2,4,5-Trichlorophenol	BDL	BDL	BDL	BDL	BDL	200
2,4,6-Trichlorophenol	BDL	BDL	BDL	BDL	BDL	100

BDL = Below detection Limit, Practical
All results expressed as PPB (ug/Kg)

Respectfully submitted,

John Sutherland
Analytical Chemist
Director, ASI

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
Birmingham, Alabama 35219
(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 28, 1995
Attention:	Carl Roppolo	Reference #	1811
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	water	Analytical	
Date received:	02/27/95	Analyst:	John Sutherland
Date collected:	02/24/95	Date Analysis:	03/24/95
Sample Collector:	G.P. & J.T.	Method:	***SW 846 Method 8270***

SEMIVOLATILE ORGANIC COMPOUNDS

ACID AND BASE NEUTRAL EXTRACTABLE ORGANIC COMPOUNDS, PPB	FIELD ID H1-1 LAB ID 5570	FIELD ID H1-3 LAB ID 5571				PRACTICAL DETECTION LIMIT, PPB
Acenaphthene	*BDL	BDL				10
Acenaphthylene	*BDL	BDL				10
Anthracene	*BDL	BDL				10
Aniline	*BDL	BDL				10
Azobenzene	*BDL	BDL				10
Benzidine	*BDL	BDL				10
Benzoic Acid	*BDL	BDL				10
Benzo(a)anthracene	*BDL	BDL				10
Benzo(b)fluoranthene	*BDL	BDL				10
Benzo(k)fluoranthene	*BDL	BDL				10
Benzo(g,h,i)perylene	*BDL	BDL				10
Benzo(a)pyrene	*BDL	BDL				10
Benzyl alcohol	*BDL	BDL				10
Bis(2-chloroethoxy)methane	*BDL	BDL				10
Bis(2-chloroethyl)ether	*BDL	BDL				10
Bis(2-chloroethoxy)ether	*BDL	BDL				10
Bis(2-chloroisopropyl)ether	*BDL	BDL				10
Bis(2-ethylhexyl)phthalate	*BDL	BDL				10
4-Bromophenyl phenyl ether	*BDL	BDL				10
Butyl benzyl phthalate	*BDL	BDL				10
Carbazole	*BDL	BDL				10
4-Chloroaniline	*BDL	BDL				10
1-Chloronaphthalene	*BDL	BDL				10
2-Chloronaphthalene	*BDL	BDL				10
4-Chloro-3-methylphenol	*BDL	BDL				10
4-Chlorophenyl phenyl ether	*BDL	BDL				10
Chrysene	*BDL	BDL				10

Compound List Continued next page

BDL = Below detection Limit
Detection Limit is Practical Quantitation Limit
*Multiply Practical Quantitation Limit by 5, elevated due to matrix
All results expressed as PPB (ug/L)

Analytical Systems, Inc.

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Client:	E.M.E., Inc.	Report Date:	March 28, 1995
Attention:	Carl Roppolo	Reference #	1811
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	water	Analytical	
Date received:	02/27/95	Analyst:	John Sutherland
Date collected:	02/24/95	Date Analysis:	03/24/95
Sample Collector:	G.P. & J.T.	Method:	***SW 846 Method 8270***

SEMIVOLATILE ORGANIC COMPOUNDS

ACID AND BASE NEUTRAL EXTRACTABLE ORGANIC COMPOUNDS, PPB	FIELD ID H1-1 LAB ID 5570	FIELD ID H1-3 LAB ID 5571				PRACTICAL DETECTION LIMIT, PPB
Dibenz(a,h)anthracene	*BDL	BDL				10
Dibenzofuran	*BDL	BDL				10
Di-n-butylphthalate	*BDL	BDL				10
1,3-Dichlorobenzene	*BDL	BDL				10
1,4-Dichlorobenzene	*BDL	BDL				10
1,2-Dichlorobenzene	*BDL	BDL				10
3,3'-Dichlorobenzidine	*BDL	BDL				10
2,4-Dichlorophenol	*BDL	BDL				10
2,6-Dichlorophenol	*BDL	BDL				10
Diethylphthalate	*BDL	BDL				10
2,4-Dimethylphenol	*BDL	BDL				10
Dimethylphthalate	*BDL	BDL				10
4,6-Dinitro-2-methylphenol	*BDL	BDL				25
2,4-Dinitrophenol	*BDL	BDL				25
2,4-Dinitrotoluene	*BDL	BDL				10
2,6-Dinitrotoluene	*BDL	BDL				10
Di-n-octylphthalate	*BDL	BDL				10
Fluoranthene	*BDL	BDL				10
Fluorene	*BDL	BDL				10
Hexachlorobenzene	*BDL	BDL				10
Hexachlorobutadiene	*BDL	BDL				10
Hexachlorocyclopentadiene	*BDL	BDL				10
Hexachloroethane	*BDL	BDL				10
Indeno(1,2,3-cd)pyrene	*BDL	BDL				10
Isophorone	*BDL	BDL				10
2-Methylnaphthalene	*BDL	BDL				10

Compound List Continued next page

BDL = Below detection Limit
Detection Limit is Practical Quantitation Limit
*Multiply Practical Quantitation Limit by 5, elevated due to matrix
All results expressed as PPB (ug/L)

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	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	water	Analytical	
Date received:	02/27/95	Analyst:	John Sutherland
Date collected:	02/24/95	Date Analysis:	03/24/95
Sample Collector:	G.P. & J.T.	Method:	***SW 846 Method 8270***

SEMIVOLATILE ORGANIC COMPOUNDS

ACID AND BASE NEUTRAL EXTRACTABLE ORGANIC COMPOUNDS, PPB	FIELD ID H1-1 LAB ID 5570	FIELD ID H1-3 LAB ID 5571				PRACTICAL DETECTION LIMIT, PPB
Methylphenols (o,m-cresol)	*BDL	BDL				10
4-Methylphenol (p-cresol)	*BDL	BDL				10
Naphthalene	*BDL	BDL				10
2-Nitroaniline	*BDL	BDL				25
3-Nitroaniline	*BDL	BDL				25
4-Nitroaniline	*BDL	BDL				25
Nitrobenzene	*BDL	BDL				10
2-Nitrophenol	*BDL	BDL				10
4-Nitrophenol	*BDL	BDL				10
N-Nitrosodimethylamine	*BDL	BDL				10
N-Nitrosodi-n-propylamine	*BDL	BDL				10
N-Nitrosodiphenylamine	*BDL	BDL				10
Pentachlorophenol	*BDL	BDL				25
Phenanthrene	*BDL	BDL				10
Phenol	*BDL	BDL				10
Pyrene	*BDL	BDL				10
1,2,4-Trichlorobenzene	*BDL	BDL				10
2,4,5-Trichlorophenol	*BDL	BDL				25
2,4,6-Trichlorophenol	*BDL	BDL				25

BDL = Below detection Limit
Detection Limit is Practical Quantitation Limit
*Multiply Practical Quantitation Limit by 5, elevated due to matrix
All results expressed as PPB (ug/L)

Respectfully submitted,

John Sutherland
Analytical Chemist
Director, ASI

Analytical Systems, Inc.

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Client:	E.M.E., Inc.	Report Date:	March 27, 1995
Attention:	Carl Roppolo	Reference #	1824
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	soil	Analytical		Preparative	
Date received:	03/01/95	Analyst:	John Sutherland	Analyst:	KH
Date collected:	02/27-28/95	Date Analysis:	03/25/95	Date:	03/03/95
Sample Collector:	G.P. & J.T.	Method:	***SW 846 Method 8270***		

SEMIVOLATILE ORGANIC COMPOUNDS

ACID AND BASE NEUTRAL EXTRACTABLE ORGANIC COMPOUNDS, PPB	FIELD ID **H1-8D** LAB ID **5643**	Practical Quantitation Limit PPB
1,3-Dichlorobenzene	BDL	100
1,4-Dichlorobenzene	BDL	100
1,2-Dichlorobenzene	BDL	100
3,3'-Dichlorobenzidine	BDL	200
2,4-Dichlorophenol	BDL	100
2,6-Dichlorophenol	BDL	100
Diethylphthalate	BDL	100
2,4-Dimethylphenol	BDL	100
Dimethylphthalate	BDL	100
4,6-Dinitro-2-methylphenol	BDL	100
2,4-Dinitrophenol	BDL	500
2,4-Dinitrotoluene	BDL	100
2,6-Dinitrotoluene	BDL	100
Di-n-octylphthalate	BDL	100
Fluoranthene	BDL	100
Fluorene	BDL	100
Hexachlorobenzene	BDL	100
Hexachlorobutadiene	BDL	100
Hexachlorocyclopentadiene	BDL	100
Hexachloroethane	BDL	100
Indeno(1,2,3-cd)pyrene	BDL	100
Isophorone	BDL	100
2-Methylnaphthalene	BDL	100
Methylphenols (o,m-cresol)	BDL	100
4-Methylphenol (p-cresol)	BDL	100
Naphthalene	BDL	100
2-Nitroaniline	BDL	500

Compound List Continued next page

BDL = Below detection Limit, Practical
All results expressed as PPB (ug/Kg)

Analytical Systems, Inc.

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Date collected:	02/27-28/95	Date Analysis:	03/25/95	Date:	03/03/95
Sample Collector:	G.P. & J.T.	Method:	***SW 846 Method 8270***		

SEMIVOLATILE ORGANIC COMPOUNDS

ACID AND BASE NEUTRAL EXTRACTABLE ORGANICS COMPOUNDS, PPB	FIELD ID: H1-8D LAB ID: 5643					Practical Quantitation Limit PPB
3-Nitroaniline	BDL					500
4-Nitroaniline	BDL					500
Nitrobenzene	BDL					100
2-Nitrophenol	BDL					500
4-Nitrophenol	BDL					500
N-Nitrosodimethylamine	BDL					100
N-Nitrosodi-n-propylamine	BDL					100
N-Nitrosodiphenylamine	BDL					100
Pentachlorophenol	BDL					500
Phenanthrene	BDL					100
Phenol	BDL					100
Pyrene	BDL					100
1,2,4-Trichlorobenzene	BDL					100
2,4,5-Trichlorophenol	BDL					200
2,4,6-Trichlorophenol	BDL					100

BDL = Below detection Limit, Practical
All results expressed as PPB (ug/Kg)

Respectfully submitted,

John Sutherland
Analytical Chemist
Director, ASI

Analytical Systems, Inc.

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	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	water	Analytical	
Date received:	03/01/95	Analyst:	John Sutherland
Date collected:	02/27-28/95	Date Analysis:	03/24/95
Sample Collector:	G.P. & J.T.	Method:	***SW 846 Method 8270***

SEMIVOLATILE ORGANIC COMPOUNDS

ACID AND BASE NEUTRAL EXTRACTABLE ORGANIC COMPOUNDS, PPB	FIELD ID **H1-8** LAB ID **5644**	FIELD ID **H1-7** LAB ID **5645**				PRACTICAL DETECTION LIMIT, PPB
Acenaphthene	BDL	BDL				10
Acenaphthylene	BDL	BDL				10
Anthracene	BDL	BDL				10
Aniline	BDL	BDL				10
Azobenzene	BDL	BDL				10
Benzidine	BDL	BDL				10
Benzoic Acid	BDL	BDL				10
Benzo(a)anthracene	BDL	BDL				10
Benzo(b)fluoranthene	BDL	BDL				10
Benzo(k)fluoranthene	BDL	BDL				10
Benzo(g,h,i)perylene	BDL	BDL				10
Benzo(a)pyrene	BDL	BDL				10
Benzyl alcohol	BDL	BDL				10
Bis(2-chloroethoxy)methane	BDL	BDL				10
Bis(2-chloroethyl)ether	BDL	BDL				10
Bis(2-chloroethoxy)ether	BDL	BDL				10
Bis(2-chloroisopropyl)ether	BDL	BDL				10
Bis(2-ethylhexyl)phthalate	BDL	BDL				10
4-Bromophenyl phenyl ether	BDL	BDL				10
Butyl benzyl phthalate	BDL	BDL				10
Carbazole	BDL	BDL				10
4-Chloroaniline	BDL	BDL				10
1-Chloronaphthalene	BDL	BDL				10
2-Chloronaphthalene	BDL	BDL				10
4-Chloro-3-methylphenol	BDL	BDL				10
4-Chlorophenyl phenyl ether	BDL	BDL				10
Chrysene	BDL	BDL				10

Compound List Continued next page

BDL = Below detection Limit, Practical
All results expressed as PPB (ug/L)

Analytical Systems, Inc.

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Attention:	Carl Roppolo	Reference #	1824
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

Sample Matrix:	water	Analytical	
Date received:	03/01/95	Analyst:	John Sutherland
Date collected:	02/27-28/95	Date Analysis:	03/24/95
Sample Collector:	G.P. & J.T.	Method:	***SW 846 Method 8270***

SEMIVOLATILE ORGANIC COMPOUNDS

ACID AND BASE NEUTRAL EXTRACTABLE ORGANIC COMPOUNDS, PPB	FIELD ID **H1-8** LAB ID **5644**	FIELD ID **H1-7** LAB ID **5645**				PRACTICAL DETECTION LIMIT, PPB
Dibenz(a,h)anthracene	BDL	BDL				10
Dibenzofuran	BDL	BDL				10
Di-n-butylphthalate	BDL	BDL				10
1,3-Dichlorobenzene	BDL	BDL				10
1,4-Dichlorobenzene	BDL	BDL				10
1,2-Dichlorobenzene	BDL	BDL				10
3,3'-Dichlorobenzidine	BDL	BDL				10
2,4-Dichlorophenol	BDL	BDL				10
2,6-Dichlorophenol	BDL	BDL				10
Diethylphthalate	BDL	BDL				10
2,4-Dimethylphenol	BDL	BDL				10
Dimethylphthalate	BDL	BDL				10
4,6-Dinitro-2-methylphenol	BDL	BDL				10
2,4-Dinitrophenol	BDL	BDL				10
2,4-Dinitrotoluene	BDL	BDL				10
2,6-Dinitrotoluene	BDL	BDL				10
Di-n-octylphthalate	BDL	BDL				10
Fluoranthene	BDL	BDL				10
Fluorene	BDL	BDL				10
Hexachlorobenzene	BDL	BDL				10
Hexachlorobutadiene	BDL	BDL				10
Hexachlorocyclopentadiene	BDL	BDL				10
Hexachloroethane	BDL	BDL				10
Indeno(1,2,3-cd)pyrene	BDL	BDL				10
Isophorone	BDL	BDL				10
2-Methylnaphthalene	BDL	BDL				10

Compound List Continued next page

BDL = Below detection Limit, Practical
All results expressed as PPB (ug/L)

Analytical Systems, Inc.

439 Industrial Lane P.O. Box 19667
Birmingham, Alabama 35219
(205) 940-7724 Fax (205) 940-7701

Client:	E.M.E., Inc.	Report Date:	March 27, 1995
Attention:	Carl Roppolo	Reference #	1824
Address:	437 Industrial Lane	P.O. #	verbal
	Birmingham, AL 35211	Project ID:	DRS-94-E893 Hobbs

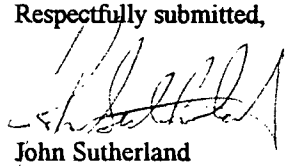
Sample Matrix:	water	Analytical	
Date received:	03/01/95	Analyst:	John Sutherland
Date collected:	02/27-28/95	Date Analysis:	03/24/95
Sample Collector:	G.P. & J.T.	Method:	***SW 846 Method 8270***

SEMIVOLATILE ORGANIC COMPOUNDS

ACID AND BASE NEUTRAL EXTRACTABLE ORGANIC COMPOUNDS, PPB	FIELD ID **H1-8** LAB ID **5644**	FIELD ID **H1-7** LAB ID **5645**				PRACTICAL DETECTION LIMIT, PPB
Methylphenols (o,m-cresol)	BDL	BDL				10
4-Methylphenol (p-cresol)	BDL	BDL				10
Naphthalene	BDL	BDL				10
2-Nitroaniline	BDL	BDL				10
3-Nitroaniline	BDL	BDL				10
4-Nitroaniline	BDL	BDL				10
Nitrobenzene	BDL	BDL				10
2-Nitrophenol	BDL	BDL				10
4-Nitrophenol	BDL	BDL				10
N-Nitrosodimethylamine	BDL	BDL				10
N-Nitrosodi-n-propylamine	BDL	BDL				10
N-Nitrosodiphenylamine	BDL	BDL				10
Pentachlorophenol	BDL	BDL				10
Phenanthrene	BDL	BDL				10
Phenol	BDL	BDL				10
Pyrene	BDL	BDL				10
1,2,4-Trichlorobenzene	BDL	BDL				10
2,4,5-Trichlorophenol	BDL	BDL				10
2,4,6-Trichlorophenol	BDL	BDL				10

BDL = Below detection Limit, Practical
All results expressed as PPB (ug/L)

Respectfully submitted,



John Sutherland
Analytical Chemist
Director, ASI

CORE LABORATORIES

CORE LABORATORIES
A N A L Y T I C A L R E P O R T

Job Number: 950419
Prepared For:

ENVIRONMENTAL MANAGEMENT & ENG.
CARL ROPPOLO
437 INDUSTRIAL LANE
BIRMINGHAM, AL 35211

Date: 03/03/95

Rondalynn Mull
Signature

3-03-95
Date:

Name: Rondalynn Mull

Core Laboratories, Inc.
420 West First Street
Casper, WY 82601

Title: Laboratory Supervisor

CORE LABORATORIES

LABORATORY TESTS RESULTS
03/08/95

JOB NUMBER: 950419 CUSTOMER: ENVIRONMENTAL MANAGEMENT & ENG. ATTN: CARL ROPPOLO

SAMPLE NUMBER: 1 DATE RECEIVED: 02/27/95 TIME RECEIVED: 08:40 SAMPLE DATE: 02/23/95 SAMPLE TIME: 14:50
PROJECT: DRS-94-E893 SAMPLE: H2-1A REM: SOLID

SAMPLE NUMBER: 2 DATE RECEIVED: 02/27/95 TIME RECEIVED: 08:40 SAMPLE DATE: 02/23/95 SAMPLE TIME: 15:05
PROJECT: DRS-94-E893 SAMPLE: H2-2A REM: SOLID

SAMPLE NUMBER: 3 DATE RECEIVED: 02/27/95 TIME RECEIVED: 08:40 SAMPLE DATE: 02/23/95 SAMPLE TIME: 15:15
PROJECT: DRS-94-E893 SAMPLE: H2-3A REM: SOLID

SAMPLE NUMBER: 4 DATE RECEIVED: 02/27/95 TIME RECEIVED: 08:40 SAMPLE DATE: 02/23/95 SAMPLE TIME: 15:25
PROJECT: DRS-94-E893 SAMPLE: H2-4A REM: SOLID

SAMPLE NUMBER: 5 DATE RECEIVED: 02/27/95 TIME RECEIVED: 08:40 SAMPLE DATE: 02/23/95 SAMPLE TIME: 15:35
PROJECT: DRS-94-E893 SAMPLE: H2-5A REM: SOLID

SAMPLE NUMBER: 6 DATE RECEIVED: 02/27/95 TIME RECEIVED: 08:40 SAMPLE DATE: 02/23/95 SAMPLE TIME: 15:45
PROJECT: DRS-94-E893 SAMPLE: H2-6A REM: SOLID

TEST DESCRIPTION	SAMPLE 1	SAMPLE 2	SAMPLE 3	SAMPLE 4	SAMPLE 5	SAMPLE 6	UNITS OF MEASURE
Radium 226, by HPGe gamma	15.8	387	405	76.6	23.9	21.5	pCi/g
Radium 226, HPGe,error, +/-	1.1	13.6	15.3	3.6	1.5	1.5	pCi/g
Radium 228, by HPGe gamma	<3.0	45.3	49.3	<1.9	2.5	<1.2	pCi/g
Radium 228, HPGe, error +/-		4.8	3.5		0.8		pCi/g

420 West First Street
Casper, WY 82601
(307) 235-5741

CORE LABORATORIES

LABORATORY TESTS RESULTS
03/08/95

JOB NUMBER: 950419 CUSTOMER: ENVIRONMENTAL MANAGEMENT & ENG. ATTN: CARL ROPPOLO

SAMPLE NUMBER: 7 DATE RECEIVED: 02/27/95 TIME RECEIVED: 08:40 SAMPLE DATE: 02/23/95 SAMPLE TIME: 15:55
PROJECT: DRS-94-E893 SAMPLE: H2-7A REM: SOLID

SAMPLE NUMBER: 8 DATE RECEIVED: 02/27/95 TIME RECEIVED: 08:40 SAMPLE DATE: 02/23/95 SAMPLE TIME: 16:05
PROJECT: DRS-94-E893 SAMPLE: H2-8A REM: SOLID

SAMPLE NUMBER: 9 DATE RECEIVED: 02/27/95 TIME RECEIVED: 08:40 SAMPLE DATE: 02/23/95 SAMPLE TIME: 16:15
PROJECT: DRS-94-E893 SAMPLE: H2-9A REM: SOLID

SAMPLE NUMBER: 10 DATE RECEIVED: 02/27/95 TIME RECEIVED: 08:40 SAMPLE DATE: 02/23/95 SAMPLE TIME: 16:25
PROJECT: DRS-94-E893 SAMPLE: H2-10A REM: SOLID

SAMPLE NUMBER: 11 DATE RECEIVED: 02/27/95 TIME RECEIVED: 08:40 SAMPLE DATE: 02/23/95 SAMPLE TIME: 16:35
PROJECT: DRS-94-E893 SAMPLE: H2-11A REM: SOLID

SAMPLE NUMBER: 12

* * THIS SAMPLE NUMBER WAS NOT ASSIGNED * *

TEST DESCRIPTION	SAMPLE 7	SAMPLE 8	SAMPLE 9	SAMPLE 10	SAMPLE 11	SAMPLE 12	UNITS OF MEASURE
Radium 226, by HPGe gamma	24.0	20.3	739	<1.2	64.9		pCi/g
Radium 226, HPGe,error, +/-	1.4	1.4	27.1		3.0		pCi/g
Radium 228, by HPGe gamma	1.9	<0.7	70.7	<0.6	<1.6		pCi/g
Radium 228, HPGe, error +/-	0.8		5.4				pCi/g

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(307) 235-5741

CORE LABORATORIES

QUALITY CONTROL REPORT
03/08/95

JOB NUMBER: 950419 CUSTOMER: ENVIRONMENTAL MANAGEMENT & ENG. ATTN: CARL ROPPOLO

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (|A-B|)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER:Radium 226, by HPGe gamma			DATE/TIME ANALYZED:03/01/95 10:34							QC BATCH NUMBER:163883
REPORTING LIMIT/DF:	UNITS:pCi/g		METHOD REFERENCE :EPA 901.1							TECHNICIAN:DF
STANDARD	STD (GMX)	RA226	104000			103000	101			
STANDARD	STD (GMX)	RA226	104000			103000	101			
DUPLICATE	MD	950419-9	739	732	1					
PARAMETER:Radium 228, by HPGe gamma			DATE/TIME ANALYZED:03/01/95 11:19							QC BATCH NUMBER:163885
REPORTING LIMIT/DF:	UNITS:pCi/g		METHOD REFERENCE :EPA 901.1							TECHNICIAN:DF
DUPLICATE	MD	950419-9	70.7	65.2	8					

420 West First Street
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(307) 235-5741

CORE LABORATORIES

QUALITY CONTROL FOOTER

METHOD REFERENCES

(1) EPA 600/4-79-020, Methods for Chemical Analysis of Water and Wastes, March 1983
(2) EPA SW-846, Test Methods for Evaluating Solid Waste, Third Edition, November 1990 and July 1992 update
(3) Standard Methods for the Examination of Water and Wastewater, 17th, 1989
(4) EPA 600/4-80-032, Prescribed Procedures for Measurement of Radioactivity in Drinking Water, August 1980
(5) Federal Register, Friday, October 26, 1984 (40 CFR Part 136)
(6) EPA 600/8-78-017, Microbiological Methods for Monitoring the Environment, December 1978

COMMENTS

(1) The data in the Laboratory Test Results Report may differ from the data in the QC Report due to calculations for sample preparation and/or dilutions.
(2) The "Time Analyzed" in the QC Report may not reflect the actual time of each analysis. The "Date Analyzed" is the actual date of analysis.
(3) Soil and sludge samples are reported on a wet basis or on an "as received" basis unless otherwise indicated.
(4) The data in this report are within the limits of uncertainty specified in the referenced method unless otherwise indicated.
(5) Analyses performed by a subcontract laboratory are indicated with an asterisk and associated code in the "Technician" data field.

Subcontract Laboratories	Code
Core Laboratories - Anaheim, CA	* AN
Core Laboratories - Aurora, CO	* AU
Core Laboratories - Casper, WY	* CA
Core Laboratories - Corpus Christi, TX	* CC
Core Laboratories - Houston, TX	* HP
Core Laboratories - Lake Charles, LA	* LC
Core Laboratories - Long Beach, CA	* LB
Other Subcontract Laboratories	* XX

DEFINITIONS

(1) NC = Not Calculable due to values lower than the reporting limit.
(2) ND = Not Detected above the reporting limit.

QC SAMPLE IDENTIFICATIONS

BLANKS

MB = Method Blank (also referred to as a preparation blank)
RB = Reagent Blank
IB = Instrument Blank
ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank
HB = Holding Blank (also referred to as as a storage blank)

DUPLICATES

MSD = Matrix Spike Duplicate
MD = Method Duplicate

SPIKES

MS = Matrix Spike
MSD = Matrix Spike Duplicate
PDS = Post Digestion Spike
BS = Blank Spike (also referred to as a method spike)
SS = Surrogate Spike

REFERENCE STANDARDS

CS = Calibration Standard
RS = Reference Standard(also referred to as an external reference standard)
ICV = Initial Calibration Verification
CCV = Continuing Calibration Calibration
LCS = Laboratory Control Sample

420 West First Street
Casper, WY 82601
(307) 235-5741

CORE LABORATORIES

FINAL REPORT DISTRIBUTION
03/08/95

JOB NUMBER: 950419

COMPANY NAME	COMPANY MAILING ADDRESS	COMPANY CITY	STATE	COMPANY ZIP CODE
ENVIRONMENTAL MANAGEMENT & ENG. CARL ROPPOLO	437 INDUSTRIAL LANE	BIRMINGHAM	AL	35211

CORE LABORATORIES

CORE LABORATORIES
A N A L Y T I C A L R E P O R T

Job Number: 950418
Prepared For:

ENVIRONMENTAL MANAGEMENT & ENG.
CARL ROPPOLO
437 INDUSTRIAL LANE
BIRMINGHAM, AL 35211

Date: 03/07/95

Rondalynn Mull
Signature

3-07-95
Date:

Name: Rondalynn Mull

Core Laboratories, Inc.
420 West First Street
Casper, WY 82601

Title: Laboratory Supervisor

CORE LABORATORIES

FINAL REPORT DISTRIBUTION
03/07/95

JOB NUMBER: 950418

COMPANY NAME	COMPANY MAILING ADDRESS	COMPANY CITY	STATE	COMPANY ZIP CODE
VIRONMENTAL MANAGEMENT & ENG. CARL ROPPOLO	437 INDUSTRIAL LANE	BIRMINGHAM	AL	35211

CORELAB

CORE LABORATORIES

LABORATORY TESTS RESULTS
03/07/95

JOB NUMBER: 950418 CUSTOMER: ENVIRONMENTAL MANAGEMENT & ENG. ATTN: CARL ROPPOLO

SAMPLE NUMBER: 1 DATE RECEIVED: 02/27/95 TIME RECEIVED: 08:40 SAMPLE DATE: 02/22/95 SAMPLE TIME: 07:50
PROJECT: DRS-94-E894 SAMPLE: H1-1A REM: SOLID

SAMPLE NUMBER: 2 DATE RECEIVED: 02/27/95 TIME RECEIVED: 08:40 SAMPLE DATE: 02/22/95 SAMPLE TIME: 17:10
PROJECT: DRS-94-E894 SAMPLE: H1-4A REM: SOLID

SAMPLE NUMBER: 3 DATE RECEIVED: 02/27/95 TIME RECEIVED: 08:40 SAMPLE DATE: 02/22/95 SAMPLE TIME: 15:25
PROJECT: DRS-94-E894 SAMPLE: H3-2 REM: SOLID

SAMPLE NUMBER: 4 DATE RECEIVED: 02/27/95 TIME RECEIVED: 08:40 SAMPLE DATE: 02/23/95 SAMPLE TIME: 14:55
PROJECT: DRS-94-E894 SAMPLE: H5-1 REM: SOLID

SAMPLE NUMBER: 5 DATE RECEIVED: 02/27/95 TIME RECEIVED: 08:40 SAMPLE DATE: 02/24/95 SAMPLE TIME: 10:45
PROJECT: DRS-94-E894 SAMPLE: H3-1 REM: SOLID

SAMPLE NUMBER: 6 DATE RECEIVED: 02/27/95 TIME RECEIVED: 08:40 SAMPLE DATE: 02/24/95 SAMPLE TIME: 11:50
PROJECT: DRS-94-E894 SAMPLE: H4-1 REM: SOLID

TEST DESCRIPTION	SAMPLE 1	SAMPLE 2	SAMPLE 3	SAMPLE 4	SAMPLE 5	SAMPLE 6	UNITS OF MEASURE
Radium 226, by HPGe gamma	3.2	35.3	25.5	7.1	104	4.3	pCi/g
Radium 226, HPGe,error, +/-	0.5	2.3	1.7	0.9	4.9	0.8	pCi/g
Radium 228, by HPGe gamma	<1.2	<1.4	<0.7	<0.7	15.0	<0.4	pCi/g
Radium 228, HPGe, error +/-					2.3		pCi/g

420 West First Street
Casper, WY 82601
(307) 235-5741

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CORE LABORATORIES

LABORATORY TESTS RESULTS
03/07/95

JOB NUMBER: 950418 CUSTOMER: ENVIRONMENTAL MANAGEMENT & ENG. ATTN: CARL ROPPOLO

SAMPLE NUMBER: 7 DATE RECEIVED: 02/27/95 TIME RECEIVED: 08:40 SAMPLE DATE: 02/24/95 SAMPLE TIME: 08:10
PROJECT: DRS-94-E894 SAMPLE: H1-5A REM: SOLID

SAMPLE NUMBER: 8 DATE RECEIVED: 02/27/95 TIME RECEIVED: 08:40 SAMPLE DATE: 02/23/95 SAMPLE TIME: 10:10
PROJECT: DRS-94-E894 SAMPLE: DC1-1 REM: SOLID

SAMPLE NUMBER: 9 DATE RECEIVED: 02/27/95 TIME RECEIVED: 08:40 SAMPLE DATE: 02/23/95 SAMPLE TIME: 11:05
PROJECT: DRS-94-E894 SAMPLE: DC1-4 REM: SOLID

SAMPLE NUMBER: 10 DATE RECEIVED: 02/27/95 TIME RECEIVED: 08:40 SAMPLE DATE: 02/21/95 SAMPLE TIME: 10:40
PROJECT: DRS-94-E894 SAMPLE: O6-1A REM: SOLID

SAMPLE NUMBER: 11 DATE RECEIVED: 02/27/95 TIME RECEIVED: 08:40 SAMPLE DATE: 02/21/95 SAMPLE TIME: 10:45
PROJECT: DRS-94-E894 SAMPLE: O6-2A REM: SOLID

TEST DESCRIPTION	SAMPLE 7	SAMPLE 8	SAMPLE 9	SAMPLE 10	SAMPLE 11		UNITS OF MEASURE
Radium 226, by HPGe gamma	<1.5	<0.3	<0.4	2.6	2.4		pCi/g
Radium 226, HPGe,error, +/-				0.4	0.5		pCi/g
Radium 228, by HPGe gamma	<0.8	<0.3	<0.1	<0.7	<0.3		pCi/g

420 West First Street
Casper, WY 82601
(307) 235-5741

CORE LABORATORIES

QUALITY CONTROL REPORT
03/07/95

JOB NUMBER: 950418 CUSTOMER: ENVIRONMENTAL MANAGEMENT & ENG. ATTN: CARL ROPPOLO

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (|A-B|)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
RAMETER:Radium 226, by HPGe gamma				DATE/TIME ANALYZED:03/03/95 08:05						QC BATCH NUMBER:163946
PORTING LIMIT/DF:	UNITS:pCi/g			METHOD REFERENCE :EPA 901.1						TECHNICIAN:DF
STANDARD	STD (GEM)	RA226 3/02	106000			103000	103			
STANDARD	STD (GEM)	RA226 3/03	105000			103000	102			
PLICATE	MD	950418-8	<0.3	<0.6	0					
PARAMETER:Radium 228, by HPGe gamma				DATE/TIME ANALYZED:03/03/95 09:31						QC BATCH NUMBER:163957
REPORTING LIMIT/DF:	UNITS:pCi/g			METHOD REFERENCE :EPA 901.1						TECHNICIAN:DF
PLICATE	MD	950418-8	<0.3	<0.3	0					

420 West First Street
Casper, WY 82601
(307) 235-5741

CORELAB

CORE LABORATORIES

QUALITY CONTROL FOOTER

METHOD REFERENCES

(1) EPA 600/4-79-020, Methods for Chemical Analysis of Water and Wastes, March 1983
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(5) Analyses performed by a subcontract laboratory are indicated with an asterisk and associated code in the "Technician" data field.

Subcontract Laboratories	Code
Core Laboratories - Anaheim, CA	* AN
Core Laboratories - Aurora, CO	* AU
Core Laboratories - Casper, WY	* CA
Core Laboratories - Corpus Christi, TX	* CC
Core Laboratories - Houston, TX	* HP
Core Laboratories - Lake Charles, LA	* LC
Core Laboratories - Long Beach, CA	* LB
Other Subcontract Laboratories	* XX

DEFINITIONS

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QC SAMPLE IDENTIFICATIONS

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RB = Reagent Blank
IB = Instrument Blank
ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank
HB = Holding Blank (also referred to as as a storage blank)

DUPLICATES

MSD = Matrix Spike Duplicate
MD = Method Duplicate

SPIKES

MS = Matrix Spike
MSD = Matrix Spike Duplicate
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BS = Blank Spike (also referred to as a method spike)
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REFERENCE STANDARDS

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RS = Reference Standard(also referred to as an external reference standard)
ICV = Initial Calibration Verification
CCV = Continuing Calibration Calibration
LCS = Laboratory Control Sample

420 West First Street
Casper, WY 82601
(307) 235-5741

ATTACHMENT 3 -- Field Sample Logs and Chain-of-Custody Forms

Environmental Management & Engineering, Inc.
Birmingham Office: (205) 940-7700 (205) 940-7701 Fax
Houston Office: (713) 939-7028 (205) 939-7029 Fax

CHAIN OF CUSTODY RECORD/ANALYSIS REQUEST

Client

Project: Dresser Anderson - Hobbs - NM
DRS - 96 - E893

Samplers, (Signature): Carol Pelia

Date Delivered

Send Report to: EMP

Phone

Remarks

Sample #	Date Sampled	Time Sampled	Sample Description	No. of Containers	TPH	Metals	VOC	Semi Volatiles			Remarks
HI-1A	2-22-95	7:50	Soil	1							
HI-1B	"	8:05	Soil	1							
HI-1C	"	8:15	Soil	1							
HI-1D	"	8:25	Soil	1							
HI-1E	"	840	Soil 5554	1	X	X	X	X	55	59	Contact Carl Ruppolo
HI-1F	"	850	SOIL	1							
HI-1G	"	9:10	Soil	1							
HI-1H	"	9:20	Soil	1							
HI-1I	"	9:30	Soil	1							
HI-1J	"	9:45	Soil	1							
HI-1K	"	10:00	Soil	1							
HI-1L	"	10 15	Soil 5560	1	X	X	X	X			
HI-1M	2-23-95	11 20	Soil	1							
HI-1N	"	11 40	Soil	1							
HI-1O	"	1150	Soil	1							
HI-1P	"	1250	Soil	1							

Relinquished by (Signature)	Date Time	Received by (Signature)	Relinquished by (Signature)	Date Time	Received by (Signature)
Carol Pelia	2/24/95 9:15				
Relinquished by (Signature)	Date Time	Received by (Signature)	Relinquished by (Signature)	Date Time	Received by (Signature)
Relinquished by (Signature)	Date Time	Received by Laboratory by (Signature)	Indicate Special Hazards Here		
	2-27-95				

FIELD SAMPLE LOG

Project Name: Dresser Andsm - Hobbs-NM Sheet No._____

Project No.: DRS-94-E893

Sample No.	Date	Location	Description	No. of Splits	Initials
HI-1A	2-22-95	Adjacent ~~to~~ (South of) Septic Tank 10'2" South of ~~Shop~~ bldg	Soil (0-6")	—	GP
HI-1B	"	16'3" West of East Prop line.	Soil (~~6~~"-2")	—	GP
HI-1C	"	"	Soil (2-4")	—	GP
HI-1D	"	"	Soil (4-6")	—	GP
HI-1E	"	"	Soil (~~4-6~~ 6-8')	—	GP
HI-1F	"	"	Soil (8-10')	—	GP
HI-1G	"	"	Soil (10-12')	—	GP
HI-1H	"	"	Soil (12-14')	—	GP
HI-1I	"	"	Soil (14-16')	—	GP
HI-1J	"	"	Soil (16-18')	—	GP
HI-1K	"	"	Soil (18-20')	—	GP
HI-1L	"	"	Soil (20-22')	—	GP
HI-1M	2-23-95	"	Soil (~~22-24~~ 25-27)	—	GP
HI-1N	"	"	Soil (27-29)	—	GP
HI-1O	"	"	Soil (29-31)	—	GP
HI-1P	"	"	Soil (31-33)	—	GP

En[redacted]nm[redacted] Ma[redacted]gem[redacted] E[redacted]eri[redacted]nc. [redacted]

Birmingham Office: (205) 940-7700 (205) 940-7701 Fax
Houston Office: (713) 939-7028 (205) 939-7029 Fax

CHAIN OF CUSTODY RECORD/ANALYSIS REQUEST

Client:

Project: Dresser Axelson-Hobbs-NM DRS-94-E893

Samplers, (Signature): Cropl Pein

Date Delivered:

Send Report to: EME

Phone:

Sample #	Date Sampled	Time Sampled	Sample Description		No. of Containers	TPH	Metals	VOC	Semivols.			Remarks
H1-2A	2/22/95	1055	Soil		1							
H1-2B	"	11.05	Soil		1							
~~H1~~-2C	"	11.20	Soil		1							
H1-2D	"	11.35	Soil		1							
H1-2E	"	12.00	Soil	5561	1	X	X	X	X			~~Cont~~
H1-2F	"	1215	Soil		1							Contact Carl [illegible]
H1-2G	"	1225	Soil		1							with analysis
H1-2H	"	1240	Soil	5562	1	X	X	X	X			
H1-2I	"	13.20	Soil		1							
~~H1-2J~~	~~"~~		~~Soil~~		~~1~~							
H1-												

Relinquished by (Signature)	Date Time	Received by (Signature)	Relinquished by (Signature)	Date Time	Received by (Signature)
Cropl Pein	2/24/95 9.15				
Relinquished by (Signature)	Date Time	Received by (Signature)	Relinquished by (Signature)	Date Time	Received by (Signature)
Relinquished by (Signature)	Date Time	Received by Laboratory by (Signature)	Indicate Special Hazards Here		

FIELD SAMPLE LOG

Project Name: Dresser Anderson - Hobbs-NM Sheet No. _____

Project No.: DRS-94-E893

Sample No.	Date	Location	Description	No. of Splits	Initials
H1-2A	2/22/95	South of septic tank 15'3" west of East Prop line	Soil (0-6")	—	GP
H1-2B	"	53'6" South of office Shop bldg	Soil (6"-2')	—	GP
H1-2C	"	"	Soil (2-4')	—	GP
H1-2D	"	"	Soil (4-6')	—	GP
H1-2E	"	"	Soil (8-10')	—	GP
H1-2F	"	"	Soil (10-12')	—	GP
H1-2G	"	"	Soil (12-14')	—	GP
H1-2H	"	"	Soil (14-16')	—	GP
H1-2I	"	"	Soil (16-18')	—	GP
~~H1-2J~~	~~"~~		~~Soil (18-20')~~		

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CHAIN OF CUSTODY RECORD/ANALYSIS REQUEST

Client

Project: Dresser Axelson - Hobbs - NM DRS-94-E893

Samplers, (Signature): Angel Pena

Date Delivered

Send Report to: EMF

Phone

Sample #	Date Sampled	Time Sampled	Sample Description	No. of Containers	TPH	Metals	VOC	SemiVolat			Remarks
H1-3A	2-22-95	1455	Soil	1							
H1-3B	"	15.10	Soil	1							
H1-3C	"	15.20	Soil	1							
H1-3D	"	15.40	Soil	1							
H1-3E	"	15.50	Soil	1							Contract Cost Report regarding previous analysis
H1-3F	"	16.00	Soil	1							
H1-3G	"	16.15	Soil	1							
H1-3H	"	16.30	Soil	1							
H1-3I	"	16.40	Soil 5563	1	X	X	X	X			
				1							
H1-4A	"	17.00	Soil	1	*						
H1-4B	"	17.15	Soil	1							
H1-4C	"	17.25	Soil	1							
H1-4D	"	1750	Soil	1							
H1-4E	"	18.05	Soil	1							
H1-4F	"	18.15	Soil 5564	1	X	X					
H1-4G	"	18.25	Soil	1							

Relinquished by (Signature)	Date Time	Received by (Signature)	Relinquished by (Signature)	Date Time	Received by (Signature)
Angel Pena	2/24/95 9.15				
Relinquished by (Signature)	Date Time	Received by (Signature)	Relinquished by (Signature)	Date Time	Received by (Signature)
Relinquished by (Signature)	Date Time	Received by Laboratory by (Signature)	Indicate Special Hazards Here		

FIELD SAMPLE LOG

Project Name: Dresser Anderson - Hobbs - NM Sheet No. _____

Project No.: DRS-94-E893

Sample No.	Date	Location	Description	No. of Splits	Initials
HI-3A	2-22-95	~~South~~ 15'2" West of east Prop line	Soil 0-6"		
HI-3B	"	89'9" South of shop & office bldg	Soil 6"-2"		
HI-3C	"	"	Soil (2-4')		
HI-3D	"	"	Soil (6-8')		
HI-3E	"	"	Soil (8-10')		
HI-3F	"	"	Soil (10-12')		
HI-3G	"	"	Soil (12-14')		
HI-3H	"	"	Soil (14-16')		
HI-3I	"	"	Soil (16-18')		
HI-4A	2/22/95	41' West of east Prop line 48'7" South of shop & office bldg	Soil (0-6")		
HI-4B	"	"	Soil (6"-2")		
HI-4C	"	"	Soil (2-4')		
HI-4D	"	"	Soil (8-10')		
HI-4E	"	"	Soil (10-12')		
HI-4F	"	"	Soil (12-14')		
HI-4G	"	"	Soil (14-16')		

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CHAIN OF CUSTODY RECORD/ANALYSIS REQUEST

Client

Project: Dresser Avlson - Hobbs-NM DRS-94-E893

Samplers, (Signature): Cheryl Perin

Date Delivered

Send Report to: EME

Phone

Remarks

Sample #	Date Sampled	Time Sampled	Sample Description	No. of Containers	TPH	Metals	VOC	Semi Vols			Remarks
H1-4H	2/22/95	18:35	Soil 5564 H	1	X						
H1-3J	2-22-95	16:15	Soil	1							
H1-3K	2-22-95	1640	Soil 5565	1	X	X	X	X			

Analyses Requested

Relinquished by (Signature)	Date Time	Received by (Signature)	Relinquished by (Signature)	Date Time	Received by (Signature)
Cheryl Perin	2/24/95 9:15				
Relinquished by (Signature)	Date Time	Received by (Signature)	Relinquished by (Signature)	Date Time	Received by (Signature)
Relinquished by (Signature)	Date Time	Received by Laboratory by (Signature)	Indicate Special Hazards Here		

FIELD SAMPLE LOG

Project Name: Dresser Axelson - Hobbs - NM Sheet No. _____

Project No.: DRS- 94- E893

Sample No.	Date	Location	Description	No. of Splits	Initials
H1-4H	2/22/95	41' West of east prop line 48'-11" South of shop & office bldg	Soil (16-18')		
H1-3J	2-23-95	15'-2" West of east prop line 99'-9" South of shop bldg	Soil (24-26')		
H1-3K	"	"	Soil (29-31')		

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CHAIN OF CUSTODY RECORD/ANALYSIS REQUEST

Client

Project: Dresser Axelson – Hobbs DRS-94-E893

Samplers, (Signature): Lloyd Penn

Date Delivered

Send Report to: EMG

Phone

Sample #	Date Sampled	Time Sampled	Sample Description	No. of Containers	TPH	Metals	VOC	Semi Volatile			Remarks
HI-7A	2/27/95	10:40	Soil	1							
HI-7B	"	11:15	Soil	1							
HI-7C	"	11:30	Soil	1							
HI-7D	"	12:55	Soil 5642	1	X	X	X				
HI-8A	"	14:10	Soil	1							
HI-8B	"	14:40	Soil	1							
HI-8C	"	16:50	Soil	1							
HI-8D	"	17:25	Soil 5643	1	X	X	X	X			
HI-8	"	17:45	Water 5644	5	X	X	X	X			
HI-7	2-28-95	7:45	Wat. 5645	5	X	X	X	X			

Relinquished by (Signature)	Date Time	Received by (Signature)	Relinquished by (Signature)	Date Time	Received by (Signature)
Lloyd Penn	2/28/95 805				
Relinquished by (Signature)	Date Time	Received by (Signature)	Relinquished by (Signature)	Date Time	Received by (Signature)
Relinquished by (Signature)	Date Time 3-1-95 4:00 pm	Received by Laboratory by (Signature) Kelly Hester	Indicate Special Hazards Here		

FIELD SAMPLE LOG

Project Name: Dresser Anelson- Hobbs Sheet No. _____

Project No.: DRS- 94- E893

Sample No.	Date	Location	Description	No. of Splits	Initials
H1-7A	2/27/95	79' South of H1-3 16' West of east Prop line	Soil (0-6")	—	GP.
H1-7B	"	19'6' North of Stone fence "	Soil (9-11')	—	GP.
H1-7C	"	"	Soil (14-16')	—	GP
H1-7D	"	"	Soil (29-31')	—	GP
H1-8A	"	83' from SW corner of main bldg.	Soil (0-6")	—	GP
H1-8B	"	63' west of east Prop line	Soil (9-11')	—	GP
H1-8C	"	"	Soil (14-16')	—	GP
H1-8D	"	"	Soil (29-31')	—	GP.
H1-8	"	"	Water	—	GP.
H1-7	2-28-95	79' South of H1-3 16' West of east Prop line	Water		GP

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CHAIN OF CUSTODY RECORD/ANALYSIS REQUEST

Client

Project Dresser Axelson – Hobbs
DRS-94-E 893

Samplers, (Signature) James Farmer

Date Delivered

Analyses Requested

Send Report to

Phone

Remarks

Sample #	Date Sampled	Time Sampled	Sample Description	No. of Containers	TPH	Metals	VOC	Asbestos		
H3-1A	2-22-95	1455	Sludge 5575	1	X	X	X			
H3-2	"	15:25	Sludge 5576	1	X	X	X			
H4-1	"	1540	Sludge 5577	1	X	X	X			
H5-1	2-23-95	1455	Sludge 5578	1	X	X	X			
H3-1D	2-22-95	1455	water 5579	4		X	X	X		
H2-1A	2-22-95	1410	water 5580	5	X	X	X			

Relinquished by (Signature)	Date Time	Received by (Signature)	Relinquished by (Signature)	Date Time	Received by (Signature)
James Farmer	1200 2-25-95				
Relinquished by (Signature)	Date Time	Received by (Signature)	Relinquished by (Signature)	Date Time	Received by (Signature)
Relinquished by (Signature)	Date Time	Received by Laboratory by (Signature)	Indicate Special Hazards Here		

FIELD SAMPLE LOG

Project Name: Dresser Axelson – Hobbs Sheet No. _____

Project No.: DRS-94-E893

Sample No.	Date	Location	Description	No. of Splits	Initials
H3-1A	2-22-95	North sump	sludge		
H3-2	2-22-95	South sump	sludge		
H4-1	2-22-95	Septic tank	sludge		
H5-1	2-23-95	exterior wash bay	sludge		
H2-1A	2-22-95	on sit. well	water		
H3-1B	"	North sump	water		

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HI-SA-

CHAIN OF CUSTODY RECORD/ANALYSIS REQUEST

Client

Project Dresser Axelson- Hobbs DRS- 94-E893

Samplers, (Signature) Capt Peiri

Date Delivered

Analyses Requested

Send Report to EMF

Phone

Sample #	Date Sampled	Time Sampled	Sample Description	No. of Containers	TPH	METALS	VOC	SEMI			Remarks
HBG-1A	2/24/95	9.05	Soil 5572	1	X	X					
HBG-1B	"	9.10	Soil	1							
HBG-1C	"	9.20	Soil	1							
HI-5A	"	8.10	Soil 5573	1	X	X					
HI-5B	"	8.25	Soil	1							
HI-5C	"	8.40	Soil	1							
HI-5D	"	8.55	Soil [illegible] D	1	X	X					
HI-6A	"	9.20	Soil 5574	1	X	X					
HI-6B	"	9.30	Soil	1							
HI-6C	"	9.50	Soil	1							

Relinquished by (Signature)	Date Time	Received by (Signature)	Relinquished by (Signature)	Date Time	Received by (Signature)
Capt Peiri	2/24/95 1200				
Relinquished by (Signature)	Date Time	Received by (Signature)	Relinquished by (Signature)	Date Time	Received by (Signature)
Relinquished by (Signature)	Date Time	Received by Laboratory by (Signature)	Indicate Special Hazards Here		

FIELD SAMPLE LOG

Project Name: Dresser Axelson – Hobbs Sheet No. _____

Project No.: DRS-94-E893

Sample No.	Date	Location	Description	No. of Splits	Initials
HBG-1A	2/24/95	East of office & shop bldg 60' NE Corner of bldg.	Soil (0-6") Backfill	—	GP
HBG-1B	"	"	Soil (2-3') "	—	GP
HBG-1C	"	"	Soil (3-4') "	—	GP
HI-5A	"	6'10" West of east Prop line 71'4" South of shop bldg	Soil (0-6')	—	GP
HI-5B	"	"	Soil (4-6')	—	GP
HI-5C	"	"	Soil (9-11')	—	GP
HI-5D	"	"	Soil (14-16')	—	GP
HI-6A	"	39'4" West of east Prop line 72'6" South of shop bldg	Soil (0-6')	—	GP
HI-6B	"	"	Soil (9-11')	—	GP
HI-6C	"	"	Soil (14-16')	—	GP

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CHAIN OF CUSTODY RECORD/ANALYSIS REQUEST

Client

Project: Dresser Anelson - Hobbs
DRS-94-E893

Samplers, (Signature): Carol Pein

Date Delivered

Send Report to: EMF

Phone

Remarks

Sample #	Date Sampled	Time Sampled	Sample Description	No. of Containers	TPH	Metals	VOC	Semi Vols		
H1-1	2/24/95	8:05	Water 5570	5	X	X	X	X		
H1-3	"	10:15	Water 5571	5	X	X	X	X		

Relinquished by (Signature)	Date Time	Received by (Signature)	Relinquished by (Signature)	Date Time	Received by (Signature)
Carol Pein	2/24/95 12:00				
Relinquished by (Signature)	Date Time	Received by (Signature)	Relinquished by (Signature)	Date Time	Received by (Signature)
Relinquished by (Signature)	Date Time	Received by Laboratory by (Signature)	Indicate Special Hazards Here		

FIELD SAMPLE LOG

Project Name: Dresser Axelson - Hobbs Sheet No. _____

Project No.: DRS-94-E893

Sample No.	Date	Location	Description	No. of Splits	Initials
H1-1	2/24/95	10' 2" South of shop bldg 16' 3" west of east Prop line	Water	—	GP.
H1-3	"	15' 2" west of east Propline 72' 6" South of bldg	Water	—	GP.

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CHAIN OF CUSTODY RECORD/ANALYSIS REQUEST

Client

Project: Dresser Hudson-Hobbs · DRS-94-E893

Samplers, (Signature): Carl Rempfer / Carl Penn

Date Delivered

Send Report to: EME

Phone

Remarks

Sample #	Date Sampled	Time Sampled	Sample Description	No. of Containers	Analyses Requested: NORM	Analyses Requested: Screen
112-9A	2/23/95	16:10	Soil	1	X	
112-9B	"	16:15	Soil	1		
112-10A	"	16:20	Soil	1	X	
112-10B	"	16:25	Soil	1		
112-11A	"	16:30	Soil	1	X	
112-11B	"	16:35	Soil	1		

Relinquished by (Signature)	Date Time	Received by (Signature)	Relinquished by (Signature)	Date Time	Received by (Signature)
Carl Rempfer	2/24/95 11:30				
Relinquished by (Signature)	Date Time	Received by (Signature)	Relinquished by (Signature)	Date Time	Received by (Signature)
Relinquished by (Signature)	Date Time 0845 2/27/95	Received by Laboratory by (Signature) Mark Enson	Indicate Special Hazards Here		

E[redacted]nm[redacted] M[redacted]em[redacted]& E[redacted]eeri[redacted]nc. [redacted]

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CHAIN OF CUSTODY RECORD/ANALYSIS REQUEST

Client:

Project: Dresser Ardson- Hobbs DRS- 94-E893 Corp/Rin

Samplers, (Signature): [signature]

Date Delivered:

Send Report to: EME

Phone:

Sample #	Date Sampled	Time Sampled	Sample Description	No. of Containers	NORM	Screen					Remarks
H2-1A	2/23/93	14:50	Soil	1	X						
H2-1B	"	14:55	Soil	1							
H2-2A	"	15:00	Soil	1	X						Following results
H2-2B	"	15:05	Soil	1							further analysis
H2-3A	"	15:10	Soil	1	X						MAY BE REQUIRE.
H2-3B	"	15:15	Soil								
H2-4A	"	15:20	Soil	1	X						
H2-4B	"	15:25	Soil	1							
H2-5A	"	15:30	Soil	1	X						
H2-5B	"	15:35	Soil	1							
H2-6A	"	15:40	Soil	1	X						
H2-6B	"	15:45	Soil	1							
H2-7A	"	15:50	Soil	1	X						
H2-7B	"	15:55	Soil	1							
H2-8A	"	16:00	Soil	1	X						
H2-8B	"	16:05	Soil	1							

Relinquished by (Signature)	Date Time	Received by (Signature)	Relinquished by (Signature)	Date Time	Received by (Signature)
[signature]	2/24/95 11:30				
Relinquished by (Signature)	Date Time	Received by (Signature)	Relinquished by (Signature)	Date Time	Received by (Signature)
Relinquished by (Signature)	Date Time	Received by Laboratory by (Signature)	Indicate Special Hazards Here		
	2/27/95 0845	Mark Ensor			

[redacted]al M[redacted]gement & [redacted]ngineering, Inc.
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CHAIN OF CUSTODY RECORD/ANALYSIS REQUEST

Client:

Project:

Samplers, (Signature): [illegible]

Dresser Arelson - Hobbs
DRS- 94-E893

Date Delivered:

Send Report to: EME

Phone:

Sample #	Date Sampled	Time Sampled	Sample Description	No. of Containers	NORM	Screen					Remarks
H2-1A	2/23/93	14:50	Soil -419-01 (H2-1A)	1	X						
H2-1B	"	14:55	Soil	1							
H2-2A	"	15:00	Soil	1	X						Following results
H2-2B	"	15:05	Soil	1							further analysis
H2-3A	"	15:10	Soil	1	X						MAY BE REQUIRE.
H2-3B	"	15:15	Soil								
H2-4A	"	15:20	Soil	1	X						
H2-4B	"	15:25	Soil	1							
H2-5A	"	15:30	Soil	1	X						
H2-5B	"	15:35	Soil	1							
H2-6A	"	15:40	Soil - 419-06	1	X						
H2-6B	"	15:45	Soil	1							
H2-7A	"	15:50	Soil 419-07 (H2-07A)	1	X						
H2-7B	"	15:55	Soil	1							
H2-8A	"	16:00	Soil	1	X						
H2-8B	"	16:05	Soil	1							

Relinquished by (Signature)	Date Time	Received by (Signature)	Relinquished by (Signature)	Date Time	Received by (Signature)
[illegible]	2/24/95 1130				
Relinquished by (Signature)	Date Time	Received by (Signature)	Relinquished by (Signature)	Date Time	Received by (Signature)
Relinquished by (Signature)	Date Time 2/27/95 0845	Received by Laboratory by (Signature) Mark Ensor	Indicate Special Hazards Here		

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- Chemical & Petrochemical
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- Financial Institutions
- Mining Industries
- And Many Others

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STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

DIVISION
1 8 52

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

March 17, 1995

RECEIVED
MAR 2 0 1995
Oil Conservation Division

Mr. Gary M. Kiper
District Sales Manager
Axelson, Inc.
2703 W. Marland
Hobbs, New Mexico 88240

Dear Mr. Kiper,

Please find enclosed a copy of my field inspection report for your facility located at 2703 W. Marland, Hobbs, New Mexico. Also, I have included the following documents for your future use and reference:

1. Service Company Facility Checklist.
2. Guidelines For The Preparation of Discharge Plans At Oil Field Service Facilities.
3. Rule 116-Notification of Fire, Breaks, Leaks, Spills and Blowouts and reporting form.

Please note that pursuant to the New Mexico Water Quality Control Commission (WQCC) Regulations part 1-203 requires notification of any ground water contamination at your facility. In order to assist you in making such determinations I have included a copy of the WQCC ground water standards.(attached)

As discussed during our meeting, your facility will probably be subject to obtaining a discharge plan sometime in the future. However, in the mean time, I have the following recommendations for your facility:

A. Obtain the information and analytical work previously completed for the monitor wells and make a determination if the WQCC ground water standards have been exceeded.

B. Sample and analyze the water in the open water well.

C. Contact the New Mexico State Engineers office to obtain the proper closure of the water well listed in item B. above.

D. Make a Waste determination on the Waste Water contained in the large vat on site and arrange for the proper disposal of this waste when operating conditions require it to be emptied.

E. Implement the engineering controls that would be applicable to your operations as listed in the "SERVICE COMPANY FACILITY CHECKLIST" enclosed.

In closing The New Mexico Oil Conservation Division would like to take this opportunity to express our appreciation for your environmental pro-active approach and please do not hesitate to call or write if you need any further assistance.

Sincerely yours,

Wayne Price

Wayne Price-Environmental Engineer

cc: Roger Anderson-Environmental Bureau Chief
Jerry Sexton-District I Supervisor

attachments-5

STATE OF NEW MEXICO
NMOCD District I

INTER-OFFICE MEMO

To file: Axelson Inc.
2703 W. Marland
Hobbs, NM
505-393-8619

Date: March 14, 1995
Time: 2:00 pm

Telephone call:____ Meeting:___ Other:_X___ site visit

Person called or attending:

Gary Kiper-Axelson
Larry Harper-Axelson
Wayne Price-NMOCD

REFERENCE: Request to review "waste water" waste stream

Subject: Waste water

Comments:

Mr. Kiper had called and requested information on how to properly dispose of the waste water generated on site.

Axelson is a company that supplies down hole rod pumps for the oil industry. They also perform routine service on these pumps. This consist of routine maintenance, repair, and cleaning. They presently have a large above ground open top vat (40'x8'x3') in which the pumps are cleaned out. They use steam and various cleaning agents, solvents, soaps, etc. to perform this task. The vat is presently located outside on a unpaved area and mounted on small I-beams.

Took a facility tour and noted the following waste streams:

1. Norm scale generated from dismantling pumps.
2. Common trash.
3. Waste water from pump cleaning operation.
4. Septic tank on site receives office bathroom waste water. This septic is connected to two shop floor drains.

5. Part washer solvent, make-up only no disposal.
6. Red rag service.
7. Miscellaneous pump parts etc.

Ground water issues:

1. There is three monitor wells located on site. An old gasoline tank had been removed between monitor wells # 2 & 3.

2. There is one old open hole water well on site. The depth to ground water is approximately 32 feet according to Axelson personnel. This water well has the casing cut off flush to the ground surface with only a piece of tin covering the hole. This is an open conduit to the ground water.

The following waste disposal issues were discussed in a closing meeting:

1. The proper procedure to use to dispose of the waste water if it is going to be disposed of at an NMOCD permitted facility.

2. Other approved options for disposal.

3. Prohibited disposal options, such as disposing of RCRA Non-Exempt waste into Class II disposal wells regulated under the Federal EPA UIC program.

4. Discharge plans for oilfield service companies.

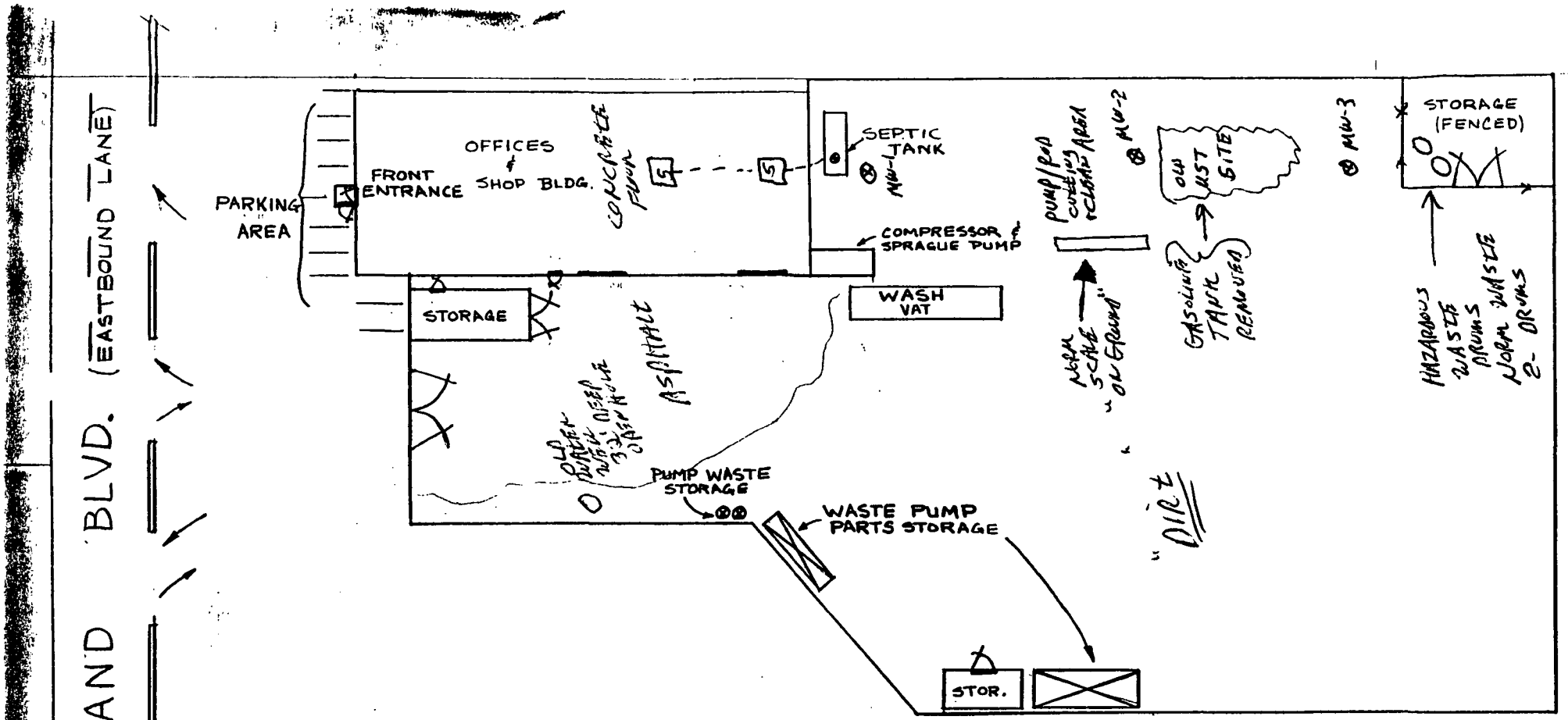
Conclusions and/or agreements:

Axelson indicated that they would get in touch with their corporate environmental people to assist them in making a hazardous waste determination on the waste water. Once that determination has been made then they could decide on how to dispose of the waste water.

Recommended to Mr. Kiper if they have regulated hazardous waste on site that they notify the New Mexico Hazardous Waste Division.

Axelson personnel provided Mr. Price with plot plans of the facility. The land is owned by a Mr. Bill Stages according to Axelson personnel.

Wayne Price
NMOCD Environmental Engineer-District I



RECEIVED
MAR 14 1995
OCD HOBBS OFFICE

AXELSON INC.

HOBBS, NEW MEXICO
DISTRICT 112
2703 W MARLAND

SCALE: 1/4" = 10'

Scale - 1" per 10'

Outside Dimensions - 50' WIDE X 120' LONG

DOOR