MINIMUM SITE ASSESSMENT
LEONARD'S CONOCO
603 PARKER
SANTA ROSA, NEW MEXICO

Prepared by:

Monteverde Inc.
6501 Americas Parkway NE
Suite 200
Albuquerque, New Mexico 87110

Monteverde Inc.
Environmental Services and Technologies

I hereby certify that the work described in this report was performed under my direct supervision, and that I am personally familiar with the nature of the work, the results of the investigation and the contents of this report. I further certify that I am familiar with all documents attached to the text of this report and referred to in the text, including all tables, figures and appendices listed on the proceeding pages.

Vanessa Price

Vanessa Price
Project Manager

TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY

On June 26, 1991, three 4000 gallon gasoline and one 560 gallon waste oil tanks were removed from Leonard's Conoco, 603 Parker, Santa Rosa, New Mexico. At that time soil contamination was detected. The contaminated soils were removed, the pits allowed to air and 13 loads of clean fill were brought in to replaced the contaminated soil. On December 1, 1994, the New Mexico Environment Department - Underground Storage Tank Bureau (NMED/USTB) wrote Mr. Gonzales (owner of Leonard's Conoco) and requested a Minimum Site Assessment (MSA) be performed. Monteverde Inc. was retained by Mr. Gonzales on February 25, 1995 to perform the MSA at the above mentioned site. This investigation included eight (8) boreholes with soil sampling occurring every five feet. Of the eight boreholes, four (4) were completed as monitor wells with groundwater sampling. The results of the investigation indicate:

1. The direction of groundwater flow in the site area is south-southwest at a gradient of 0.05;

2. Groundwater lies at depths of 17 to 27 feet in the site area and is hosted by fine grained sand, silt, clay, gravel and cliche;

3. The soils have been impacted in the areas of both the gasoline and waste oil tank pits. It appears reported clean fill has been recontaminated. The clay lens, downgradient, has been impacted with what appears to be aged gasoline;

4. The groundwater has been impacted in both tank pit areas and downgradient; and

5. The southern boundary of contamination appears to be migrating under Parker Street and the northern boundary may be migrating onto Southern Pacific Railroad property.

2.0 INTRODUCTION

This MSA describes the work performed by Monteverde Inc., Environmental Services and Technologies (Monteverde) for Mr. Leonard Gonzales, owner of the property once doing business as Leonard's Conoco, 603 Parker, Santa Rosa, New Mexico. The investigation was performed to fulfill the requirements of §1205-1206 of the New Mexico Underground Storage Tank Regulations (NMUSTR's).

2.1 LOCATION

Leonard's Conoco is located at 603 Parker, Santa Rosa, New Mexico. Santa Rosa lies in Guadalupe County. The site elevation is approximately 4595 feet above sea level. It is bordered on the north side by railroad property under the control of Southern Pacific Railway. It is bordered on the south by Parker Street, the east by a closed gas station and on the west by the Club Cafe.

2.2 BACKGROUND

Leonard's Conoco stopped doing business as Leonard's Conoco in June of 1991. At that time four (4) tanks were removed from the site - three (3) 4000 gallon gasoline tanks and one (1) 560 gallon waste oil tank. The pits were allowed to air for two weeks and were backfilled with clean fill. The site consists of one building with a double bay for car repair and an overhang where the pumps used to be. Currently the site is being leased and used as a car repair business.

2.3 PHYSIOGRAPHIC AND HYDROGEOLOGIC SETTING

The site lies in the Pecos River Valley and consists of hills, toes slopes and terraces of the Pecos River. It is 4/10 of a mile from the Pecos River. It is not located on the 100 year flood plain. Subsurface soils are composed of sands, gravel loam and clay. The parent materials are derived from redbed shale and sandstone. The topography is moderately steep hills.

Groundwater occurs at depths of 17 to 27 feet. Subsurface material is moderately permeable until the clay lens at approximately 10 feet. Groundwater flows to the south-southwest in the site area (Figure 2-1).

2.4 LOCAL GROUNDWATER USE

According to the City of Santa Rosa Water Department there are no city wells within a 1000 foot radius of the site. Businesses and residences in the area are served by the City's public water supply.

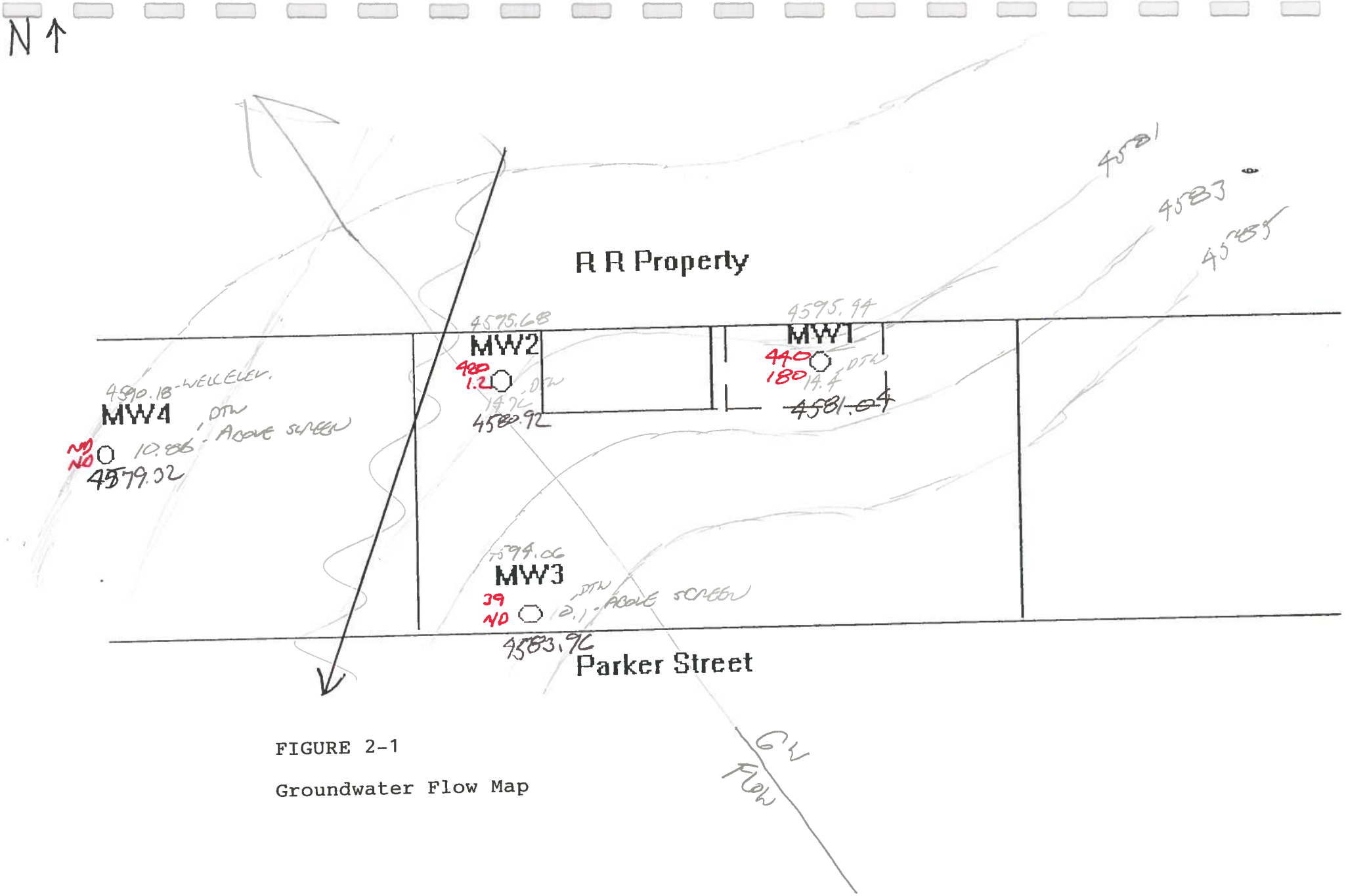


FIGURE 2-1

Groundwater Flow Map

2.5 SURFACE WATER

The Pecos River lies approximately 4/10 of a mile west of the site. No impacts to this or any other body of surface water from the release have been reported of observed.

2.6 UTILITIES

A map showing the location of structures and utilities is enclosed as Figure 2-2. Underground utility corridors were investigated and were not apparently affected by the release.

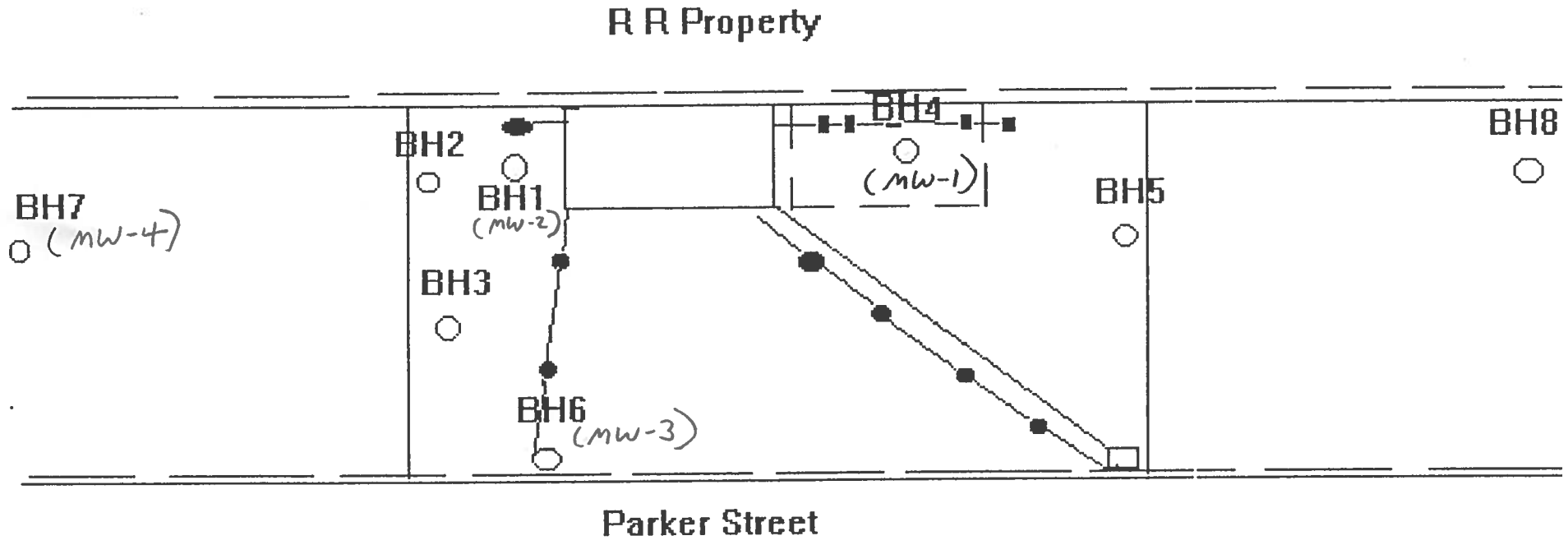


FIGURE 2-2

Utility Location Map

Above ground utility lines

Buried Sewer

Water line

Buried electric

Water meter

Propane tank

3.0 METHODS

The MSA was performed by drilling and sampling eight (8) boreholes and completing four (4) of the boreholes as monitor wells. Borehole locations were selected to determine the horizontal and vertical extent of hydrocarbon impacts to soils and to provide monitor well locations that would assist in determining hydrocarbon impacts to groundwater.

Monitor well locations and elevations were surveyed by Monteverde staff, and a site map was prepared showing the locations of soil borings (Figure 3-1) and monitor well locations (Figure 3-2). The project manager supervised the drilling, monitor well installation and soil and groundwater sampling. Logs of soil borings and monitor well completion diagrams are included as Appendix I.

3.1 SOIL SAMPLING AND ANALYSES

Soil borings and sampling was performed using a CME 75 hollow stem auger drill rig equipped with a split-spoon sampling device. Drilling and sampling equipment were steam cleaned prior to drilling each borehole. Sampling equipment was decontaminated between each collected soil sample by washing with detergent, water and rinsing three times with distilled water.

Soil borings were advanced to a total depth of 20 to 30 feet, and soil samples were collected for field headspace analysis in accordance with Chapter XII, Appendix C of the NMUSTRs, using an Environmental Instruments OVM-580B. Field headspace was conducted at approximately five (5) foot intervals.

Additional soil samples were collected for laboratory analysis from the eight (8) boreholes. These samples were collected from the interval showing the highest level of contamination on the OVM. All soil samples were analyzed for BTEX/MTBE by USEPA method 8020. Soil samples from Boreholes 1 and 4 were also analyzed for TPH using USEPA method 8015 Modified. The soil sample from borehole 4 was also analyzed for TCLP by USEPA method 1311 for metals and 8270 for semivolatile organic compounds. The laboratory soil samples were collected in accordance with Chapter XII, Appendix C of the NMUSTRs. Laboratory results are included as Appendix II.

3.2 MONITOR WELL INSTALLATION AND GROUNDWATER SAMPLING

Boreholes 4, 1, 6 and 7 were completed as monitor wells 1, 2, 3 and 4 respectively. Monitor wells were constructed of 2 inch flush joint polyvinyl chloride (PVC) casing. Monitor wells 2 and 3 have 15 feet of screen and monitor wells 1 and 4 have 10 feet of screen. Each monitor well was filter packed with 10-20 Colorado Silica Sand to a level approximately 2 feet above the screened interval. A bentonite seal was placed

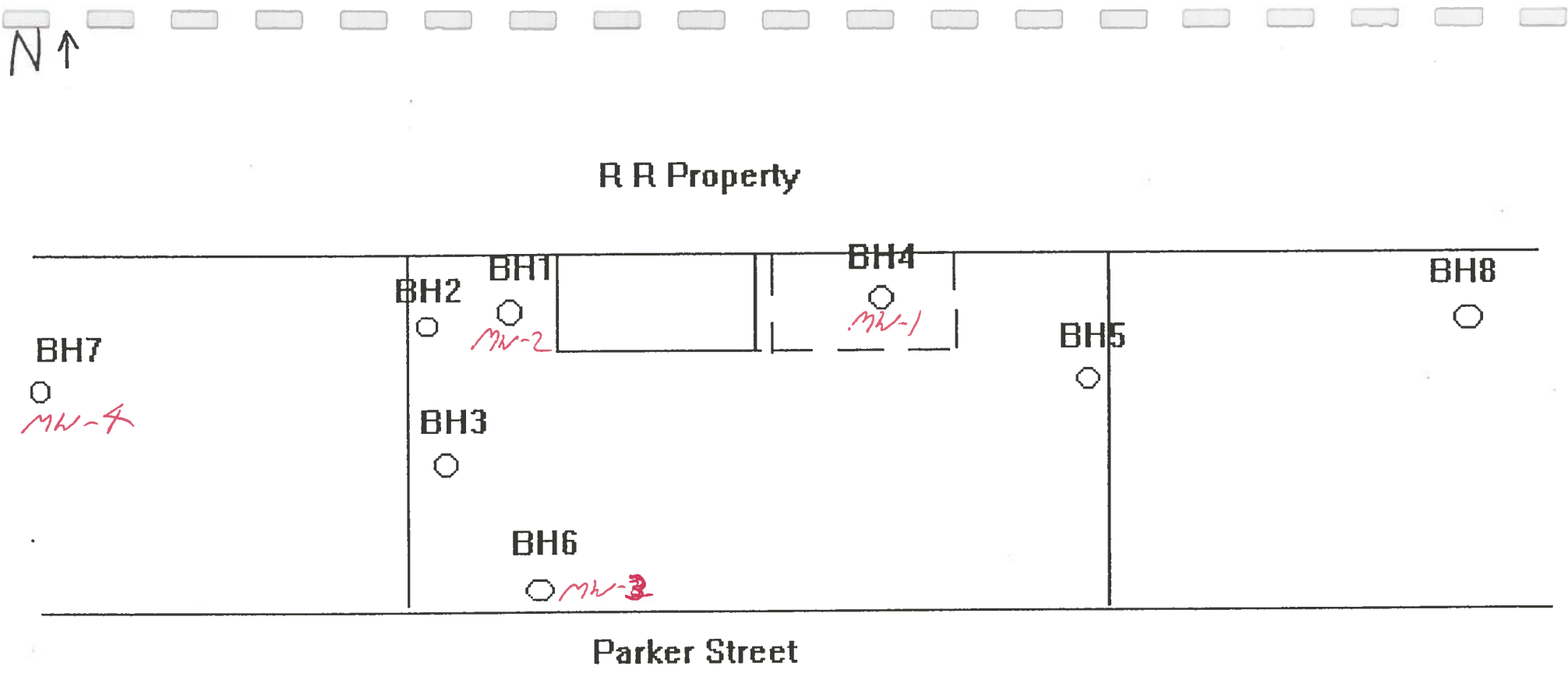


FIGURE 3-1

Borehole Location Map

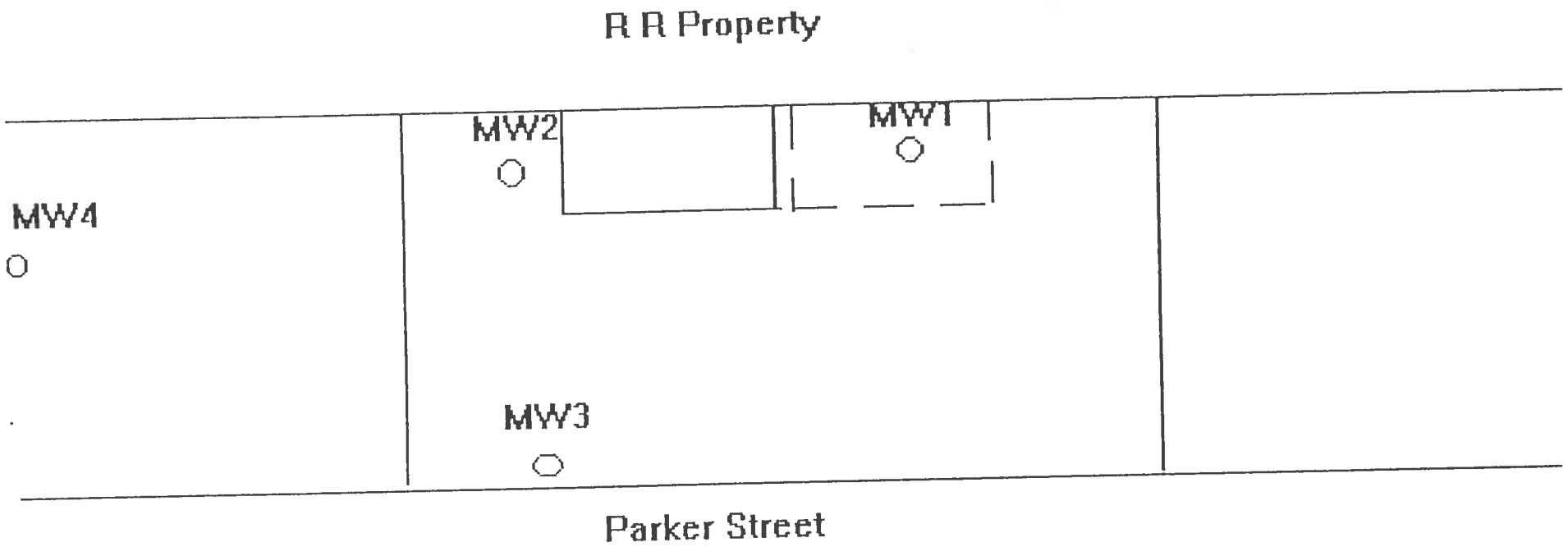


FIGURE 3-2

Monitor Well Location Map

above the screened interval and the wells were backfilled to within 2 feet of the surface. Wells heads were completed in concrete with steel meter boxes and secured with locking caps (see Appendix I for well specific diagrams).

Following monitor well completion, wells were developed by bailing until free of excess silt and sand. Groundwater samples were collected and analyzed for BTEX/MTBE by USEPA method 602. Groundwater elevations were measured in each monitor well to determine groundwater flow and gradient. Laboratory results are included as Appendix III.

Well Elevations

MW1	MW2	MW3	MW4
4595.44	4595.68	4594.06	4590.18

3.3 CHAIN-OF-CUSTODY

After each soil and groundwater sample was collected, they were preserved (as required), packed on ice and maintained at 4° Celsius until delivery to Hall Environmental Laboratory, Albuquerque, New Mexico under strict chain-of-custody.

4.0 RESULTS

4.1 SOIL ANALYSES

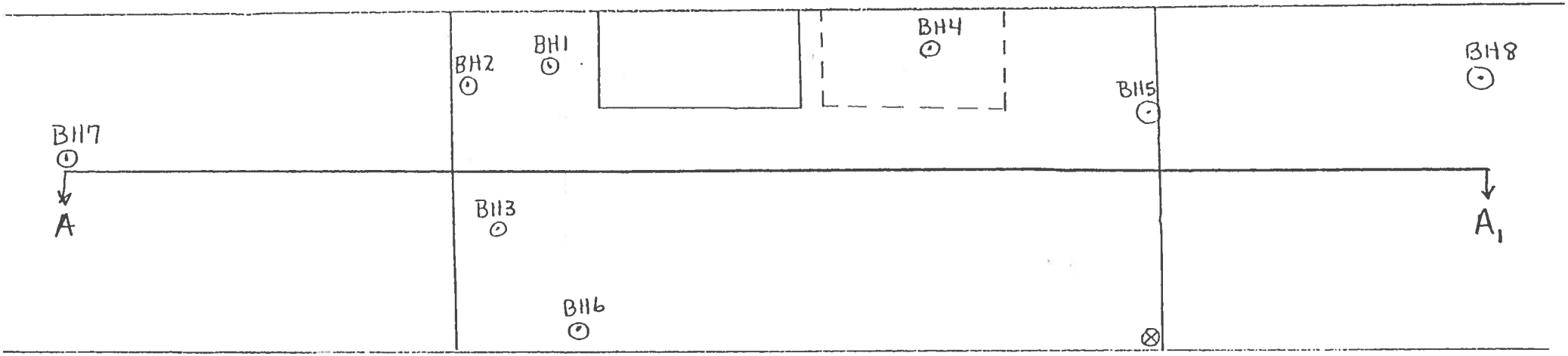
Results from the field analyses of soil samples indicates soil contamination above UST Standards of 100 ppm. Contamination is present from five (5) feet to 20 feet with the highest concentrations being 10 to 15 feet. The exceptions to this are BH3 where contamination begins at five (5) feet and BH5 where contamination extended into the groundwater table.

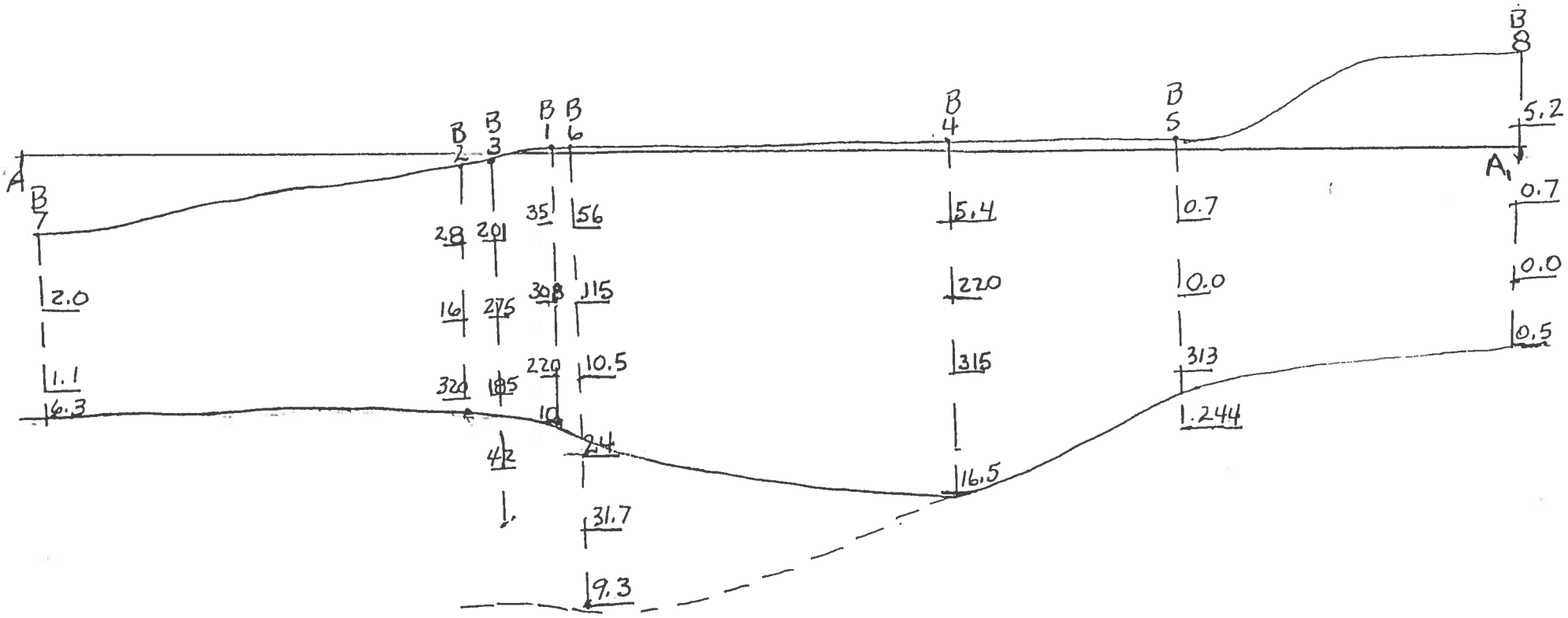
FIELD HEADSPACE ANALYSIS

	BH1	BH2	BH3	BH4	BH5	BH6	BH7	BH8
5 ft.	35	28	201	5.4	0.7	56	2.0	5.2
10 ft.	308	16	275	220	0.0	115	1.1	0.7
15 ft.	220	320	185	315	313	10.5	6.3	0.0
20 ft.	10		42	16.5	244	24		0.5
25 ft.						31.7		

All reading are in parts per million (ppm)

Laboratory soil analyses does not indicate heavy contaminant levels, however TPH analyses in the two tank pit areas and BH5 shows above standard levels for gasoline, kerosene and motor oil. There is some indication for diesel in BH5. The current owner has indicated that he never sold either diesel or kerosene.


BH4
BH1
BH2
BH8
B115
B117
A
B113
A1
B116


B 8
B 4
B 5
B 2
B 3
B 1
B 6
B 7
A
A1
5.2
0.7
0.0
0.5
5.4
0.7
0.0
220
315
313
1.244
16.5
2.0
1.1
16.3
28
20
16
27.5
35
56
30.8
115
32.0
18.5
22.0
10.5
10
24
42
31.7
9.3

SOIL ANALYSIS - BTEX/MTBE/TPH

Borehole	Benzene	Toluene	Ethyl-benzene	Xylene	MTBE	TPH
BH1	1.6	4.4	5.0	5.0	<0.4	1,100-G <20-D 4,400-M
BH2	<0.1	1.2	1.4	0.6	<0.2	
BH3	0.57	<0.05	0.62	<0.05	<0.1	
BH4	2.6	1.5	6.3	3.1	<0.5	790-G <20-D <100-M 520-K
BH5	<5.0	<5.0	5.1	<5.0	<10	<100-D 2,400-K <500-M
BH6	<0.05	<0.05	<0.05	<0.05	<0.1	
BH7	<0.05	<0.05	<0.05	<0.05	<0.1	
BH8	<0.05	<0.05	<0.05	<0.05	<0.1	

All analyses are in parts per million (MG/KG)
G - gasoline
D - diesel
K - kerosene
M - motor oil

SOIL ANALYSIS - TCLP

All analyses for TCLP were non-detect (ND) expect for naphthalene which was 91 ppb. This is consistent with gasoline contamination.

4.2 GROUNDWATER RESULTS

Groundwater analyses shows contamination levels above NMWQCC Standards for benzene in MW1, MW2 and MW3. MTBE is above Standards in MW1.

GROUNDWATER ANALYSIS - BTEX/MTBE

Well #	Benzene	Toluene	Ethyl-benzene	Xylene	MTBE
MW1	**440**	25	400	81	**320**
MW2	**420**	6.4	540	86	4.5
MW3	**39**	8.2	6.3	15	<2.5
MW4	<0.5	3.0	<0.5	2.9	<2.5
NMWQCC	**10**	**750**	**750**	**620**	**100**

All analyses are in parts per billion (µg/L)

5.0 DISCUSSION AND SUMMARY

Three (3) 4000 gallon gasoline tanks and one (1) 560 waste oil tank were removed in 1991. The two pits were allowed to air for two weeks before being backfilled with clean fill dirt. The contamination present, at that time, appeared to be caused from overfill since the tanks did not appear to be damaged. Contamination from this overfill had probably already migrated underneath the building and the concrete pad where the pumps were located. When the clean fill was added, it was recontaminated from the migrating plume.

The downgradient soils have the appearance of an aged plume (blue/gray coloration). The OVM readings are above soil standards for contamination (100 ppm) but laboratory analyses show nominal amounts of BTEX/MTBE. A substantial amount of contaminated soils are clay. Soil TPH are in excess of Standards for gasoline, motor oil and kerosene.

Groundwater at this site flows beneath a contaminated clay lens and appeared to be under pressure. As a result the gradient, 0.05 may be in error. When groundwater levels were measured in the PVC casing, they were many feet above original groundwater levels. This will probably correct itself as groundwater pressure normalizes. Groundwater flows south-southwest and has been impacted by the spill.

APPENDIX I

BOREHOLE LOGGING FORM

Project #: UST012	Client: Leonard's Conoco	Borehole # 1 Well # 2 Page 1 of 1
Site 603 Parker, Santa Rosa, New Mexico		

1/4 1/4 1/4, Sec. T. R.
Cty. State

Location Map

MVEC Rep. V. Price — Date 3/28/95

Contractor SHIB

Driller D. Brick

Method hollow stem auger — Eqpt. 3¼ inch

Elevation: Land surf. 4995 TOC

Depth (ft)	Lith	Run #	Rec %	From (ft)	To (ft)	Description of Lithology and Drilling Conditions
1				1	5	~~fill dirt~~
5						~~5 ft. OVM - 35 ppm~~
				5	9	fill dirt
				9	10	clay - heavy odor - lab sample 10 ft. - OVM 308 ppm
10				10	15	gravel/sand mixed with clay - heavy odor
15						15 ft. - OVM 220ppm
				15	17.5	~~light gravel/sand mixed with clay~~ ~~17.5 ft. - OVM 10ppm~~
20				17.5		groundwater
25						
30						
35						

BOREHOLE LOGGING FORM

Project #: UST012	Client: Leonard's Conoco	Borehole # 2 Well # Page 1 of 1
Site 603 Parker, Santa Rosa, New Mexico		

1/4 1/4 1/4, Sec. T. R.
Cty. State

Location Map

MVEC Rep. V. Price — Date 3/28/95

Contractor SHIB

Driller D. Brick

Method hollow stem auger — Eqpt. 3¼ inch

Elevation: Land surf. 4595 TOC

Depth (ft)	Lith	Run #	Rec %	From (ft)	To (ft)	Description of Lithology and Drilling Conditions
1				1	4	gravel and red/brown sand
				4	5	sand/clay
5						5 ft. - OVM 28ppm
				5	10	sand/silt/clay mix
10						10 ft. - OVM 16ppm
				10	15	silty clay
15						15 ft. lab sample OVM 320 ppm
				15	16	silty clay
				16		groundwater
20						
25						
30						
35						

BOREHOLE LOGGING FORM

Project #: UST012	Client: Leonard's Conoco	Borehole # 3 Well # Page 1 of 1
Site 603 Parker, Santa Rosa, New Mexico		

1/4 1/4 1/4, Sec. T. R.
Cty. State

Location Map

MVEC Rep. V. Price — Date 3/28/95

Contractor SHIB

Driller D. Brick

Method hollow stem auger — Eqpt. 3¼ inch

Elevation: Land surf. 4595 TOC

Depth (ft)	Lith	Run #	Rec %	From (ft)	To (ft)	Description of Lithology and Drilling Conditions
1				1	5	medium brown gravel/sand
				3.5		odor
5						5 ft. OVM 201 ppm
				5	10	silty clay metal blue/grey in color
						10 ft. OVM 275ppm
10				10	15	silty clay - metal blue/grey color
						15 ft. lab sample OVM 185 ppm
15				15	20	silty clay
						20 ft. OVM 42 ppm
20				20	23	clay/caliche mix
				23		wet caliche
25						
30						
35						

BOREHOLE LOGGING FORM

Project #: UST 012	Client: Leonard's Conoco	Borehole # 4 Well # 1 Page 1 of 1
Site 603 Parker, Santa Rosa, New Mexico		

1/4 1/4 1/4, Sec. T. R.
Cty. State

Location Map

MVEC Rep. V. Price — Date 3/28/95

Contractor SHIB

Driller D. Brick

Method hollow stem auger Eqpt. 3¼ inch

Elevation: Land surf. 4595 TOC

Depth (ft)	Lith	Run #	Rec %	From (ft)	To (ft)	Description of Lithology and Drilling Conditions
1				1	5	fill dirt
						5 ft. OVM 5.4 ppm
5				5	10	fill dirt
				8	10	black colored fill dirt
						10 ft. OVM 220 ppm
10				10	13	fill dirt - black colored
				13	15	sand/clay mix - black colored - oily rivulets
						15 ft. lab sample OVM 315 ppm
15				15	20	silty clay moist and metal blue/grey color
20				20	23	silty clay - blue grey colored
						23 ft. OVM 16.5 ppm
				23		groundwater
25						
30						
35						

BOREHOLE LOGGING FORM

Project #: UST012	Client: Leonard's Conoco	Borehole # 5 Well # Page 1 of 1
Site 603 Parker, Santa Rosa, New Mexico		

1/4 1/4 1/4, Sec. T. R.
Cty. State

Location Map

MVEC Rep. V. Price | Date 3/29/95

Contractor SHIB

Driller D. Brick

Method hollow stem auger Eqpt. 3¼ inch

Elevation: Land surf. 4595 TOC

Depth (ft)	Lith	Run #	Rec %	From (ft)	To (ft)	Description of Lithology and Drilling Conditions
1				1	4	gravel/sand
				4	5	silty clay 5 ft. OVM 0.7 ppm
5				5	10	silty clay 10 ft. OVM 0 ppm
10				10	15	silty clay blue grey color strong odor 15 ft. lab sample OVM 313 ppm
15				15	16	silty clay blue grey in color
				16		groundwater
				19		19 ft. OVM on sludge sample 244 ppm
20						
25						
30						
35						

BOREHOLE LOGGING FORM

Project #: Ust012	Client: Leonard's Conoco	Borehole # 6 Well # 3 Page 1 of 1
Site 603 Parker, Santa Rosa, New Mexico		

1/4 1/4 1/4, Sec. T. R.
Cty. State

Location Map

MVEC Rep. V. Price — Date 3/29/95

Contractor SHIB

Driller D. Brick

Method hollow stem auger Eqpt. 3¼ inch

Elevation: Land surf. 4595 TOC

Depth (ft)	Lith	Run #	Rec %	From (ft)	To (ft)	Description of Lithology and Drilling Conditions
1				1	5	asphalt/ silty clay
5						5 ft. OVM 56 ppm
				5	10	silty clay
10						10 ft OVM 115 ppm
				10	13	silty clay
				13	15	clay/caliche mix
15						15 ft. OVM 10.5 ppm lab sample
				15	20	clay/caliche mix
20						20 ft. OVM 24 ppm
				20	25	caliche/clay mix
25						25 ft. OVM 31.7 ppm
				25	30	caliche
30						30 ft. wet OVM 9.3 ppm
35						

BOREHOLE LOGGING FORM

Project #: UST012	Client: Leonard's Conoco	Borehole # 7 Well # 4 Page 1 of 1
Site 603 Parker, Santa Rosa, New Mexico		

1/4 1/4 1/4, Sec. T. R.
Cty. State

Location Map

MVEC Rep. V. Price | Date 3/29/95

Contractor SHIB

Driller D. Brick

Method hollow stem auger Eqpt. 3¼ inch

Elevation: Land surf. 4590 TOC

Depth (ft)	Lith	Run #	Rec %	From (ft)	To (ft)	Description of Lithology and Drilling Conditions
1				1	5	medium brown sand/gravel
5						5 ft. OVM 2.0 ppm
				5	10	silty clay
10						10 ft. OVM 1.1 ppm
				10	12	silty clay
						12 ft. lab sample OVM 6.3 ppm
				12		groundwater
15						
20						
25						
30						
35						

BOREHOLE LOGGING FORM

Project #: UST012	Client: Leonard's Conoco	Borehole # 8 Well # Page 1 of 1
Site 603 Parker, Santa Rosa, New Mexico		

1/4 1/4 1/4, Sec. T. R.
Cty. State

Location Map

MVEC Rep. V. Price | Date 3/29/95

Contractor SHIB

Driller D. Brick

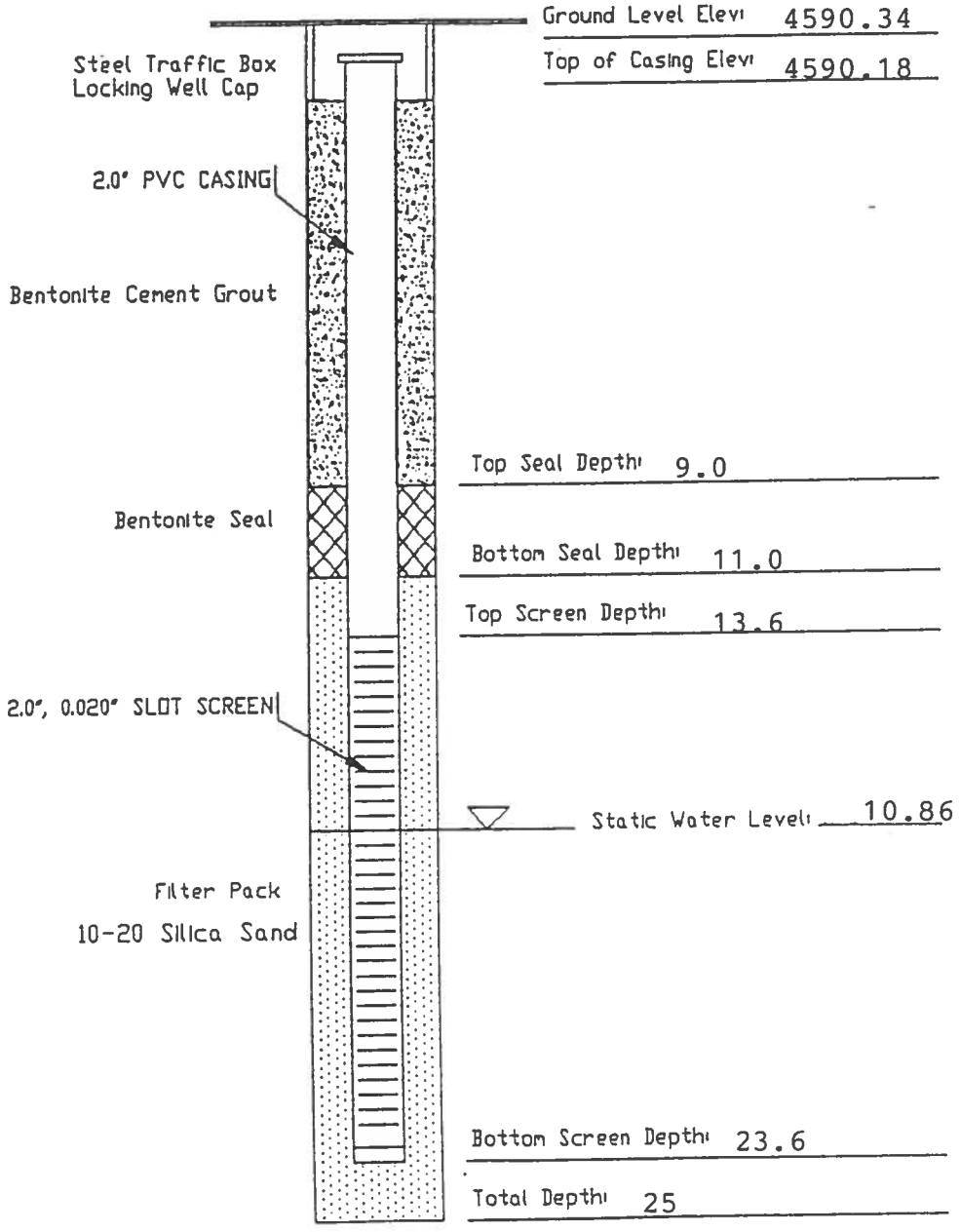
Method hollow stem auger Eqpt. 3¼ inch

Elevation: Land surf. 4595 TOC

Depth (ft)	Lith	Run #	Rec %	From (ft)	To (ft)	Description of Lithology and Drilling Conditions
1				1	5	~~fill dirt~~
5						5 ft. OVM 5.2 ppm
				5	10	fill dirt
10						10 ft. OVM 0.7 ppm
				10	15	silty clay
15						15 ft. OVM 0 ppm
				15	20	silty clay
				19		~~groundwater~~ 20 ft. lab sample OVM 0.5 ppm
20						
25						
30						
35						

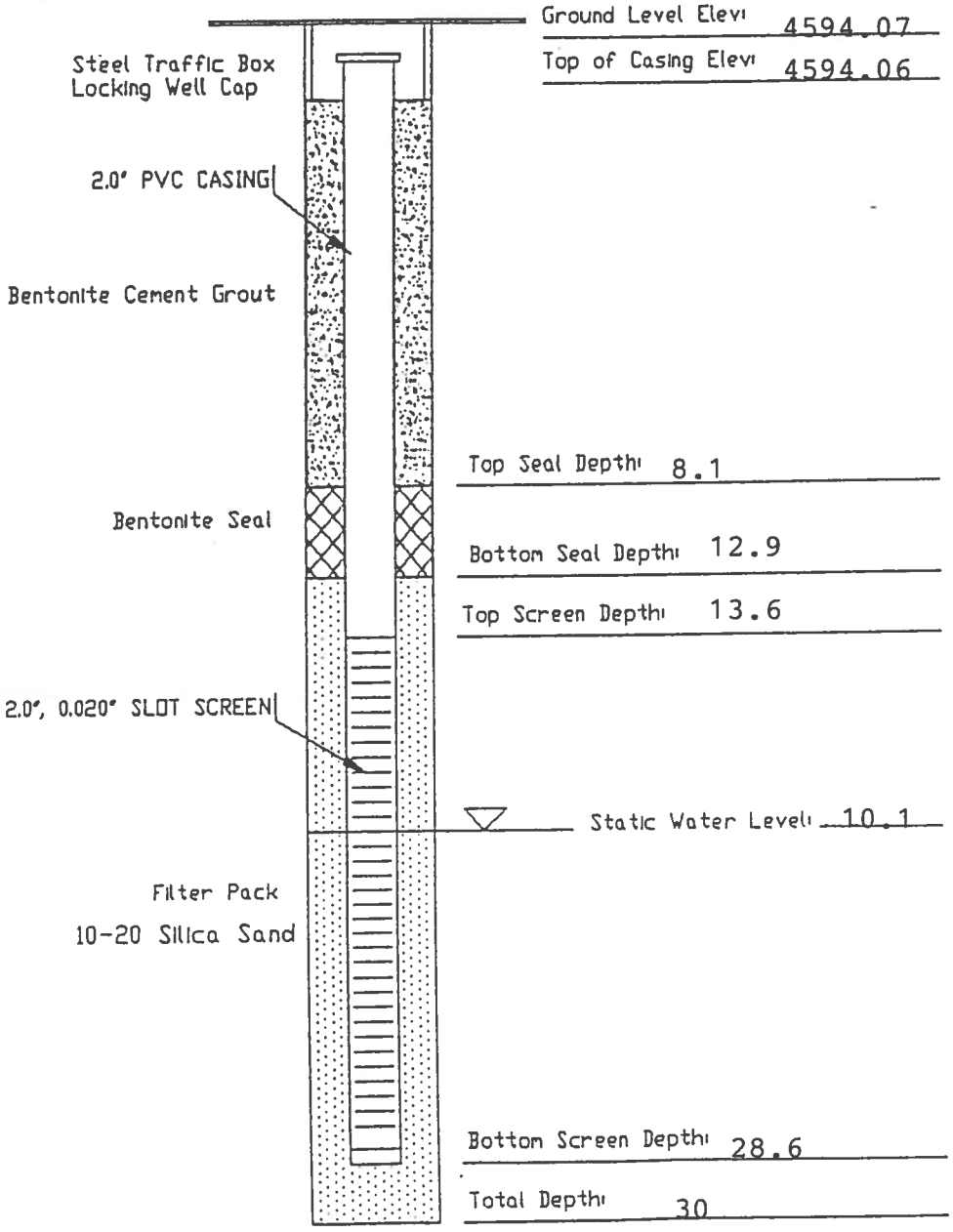
MONITOR WELL COMPLETION DIAGRAM

Client: Leonard's Conoco	Location: 603 Parker
Well Number: MW-4	Date Completed: 3/29/95



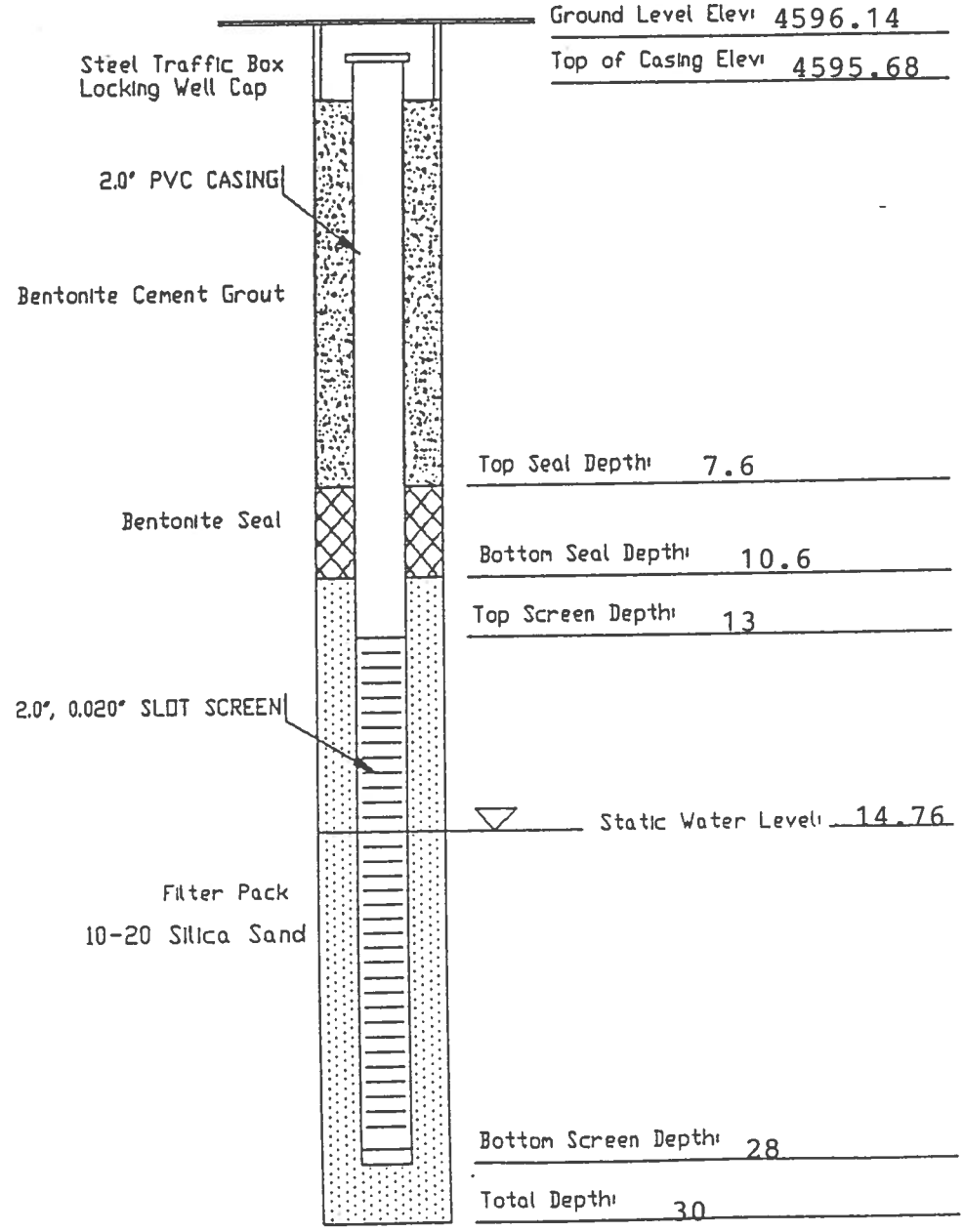
MONITOR WELL COMPLETION DIAGRAM

Client: Leonard's Conoco	Location: 603 Parker
Well Number: MW-3	Date Completed: 3/29/95



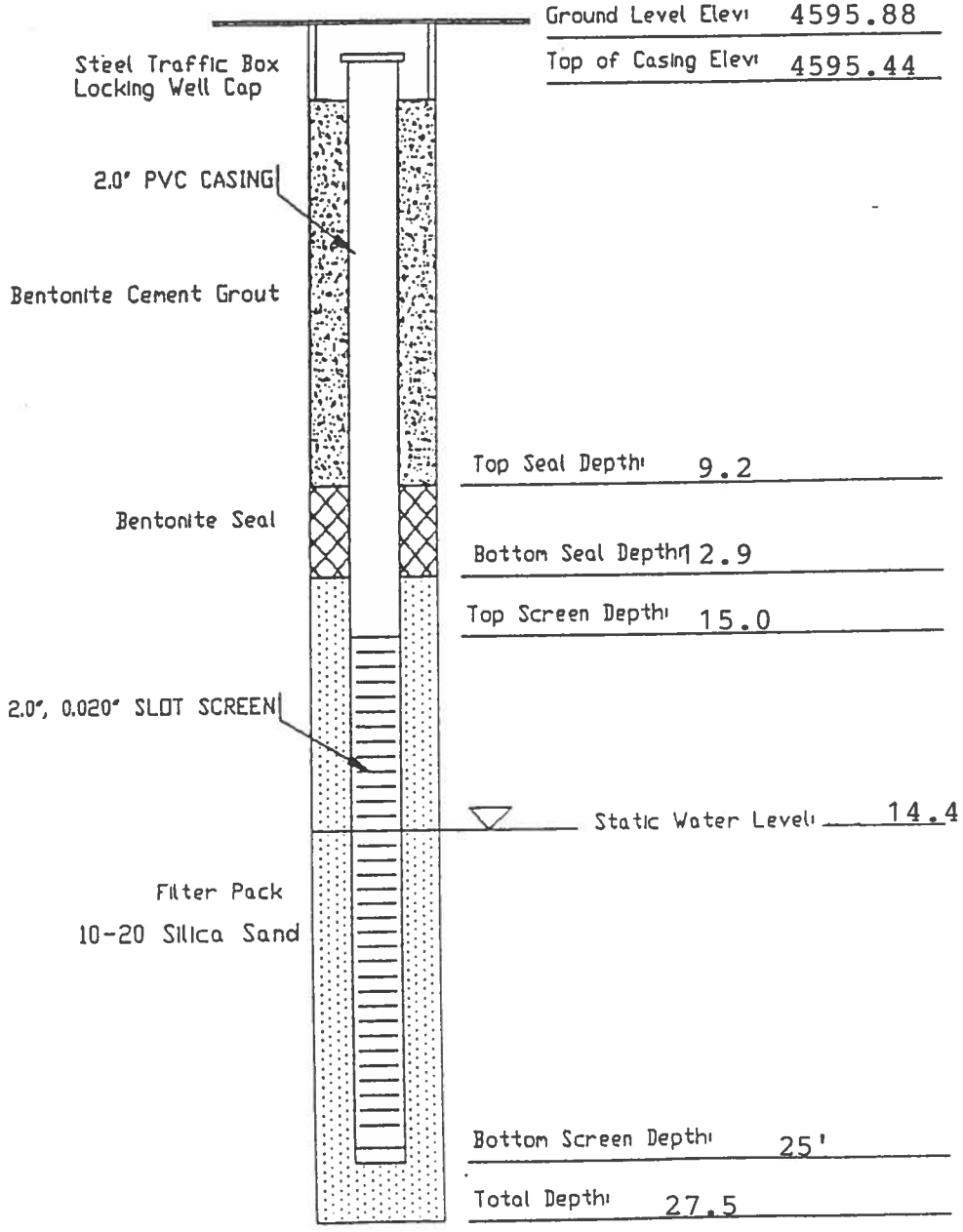
MONITOR WELL COMPLETION DIAGRAM

Client: Leonard's Conoco	Location: 603 Parker
Well Number: MW-2	Date Completed: 3/29/95



MONITOR WELL COMPLETION DIAGRAM

Client: Leonard's Conoco	Location: 603 Parker
Well Number: MW-1	Date Completed: 3/29/95



APPENDIX II

Results for sample: BH-1W01

Date collected: 3/28/95	Date received: 3/30/95
Date extracted: 3/31/95	Date analyzed: 4/1/95
Client: Monteverde, Inc.	
Project Name: Leonard's Conoco	HEAL #: 9503078-6
Project Manager: Vanessa Price	Sampled by: J. Lubbering
Matrix: Non-Aqueous	

Test: EPA 8020

Compound	Amount	Units
MTBE	<0.4	PPM (MG/KG)
Benzene	1.6	PPM (MG/KG)
Toluene	4.4	PPM (MG/KG)
Ethylbenzene	5.0	PPM (MG/KG)
Total Xylenes	6.5	PPM (MG/KG)

BFB (Surrogate) Recovery = 106 %

Dilution Factor = 4

Test: EPA 8015 Modified

Compound	Amount	Units
Gasoline	1,100	PPM (MG/KG)

BFB (Surrogate) Recovery = 108 %

Dilution Factor = 50

** Surrogate not recoverable due to matrix interference.

Results for sample: BH-1W01

Date collected: 3/28/95	Date received: 3/30/95
Date extracted: 4/3/95	Date analyzed: 4/5/95
Client: Monteverde, Inc.	
Project Name: Leonard's Conoco	HEAL #: 9503078-6
Project Manager: Vanessa Price	Sampled by: J. Lubbering
Matrix: Non-Aqueous	

Test: EPA 8015 Modified

Compound	Amount	Units
Diesel	<20	PPM (MG/KG)
Motor Oil Range Hydrocarbons	4,400	PPM (MG/KG)

DNOP (Surrogate) Recovery = ** %

Dilution Factor = 1

** Surrogate not recoverable due to matrix interference.

Results for sample: BH-2

Date collected: 3/28/95	Date received: 3/30/95
Date extracted: 3/31/95	Date analyzed: 4/1/95
Client: Monteverde, Inc.	
Project Name: Leonard's Conoco	HEAL #: 9503078-7
Project Manager: Vanessa Price	Sampled by: J. Lubbering
Matrix: Non-Aqueous	

Test: EPA 8020

Compound	Amount	Units
MTBE	<0.2	PPM (MG/KG)
Benzene	<0.1	PPM (MG/KG)
Toluene	1.2	PPM (MG/KG)
Ethylbenzene	1.4	PPM (MG/KG)
Total Xylenes	0.6	PPM (MG/KG)

BFB (Surrogate) Recovery = ** %

Dilution Factor = 2

** Surrogate non-recoverable due to matrix interference.

Results for sample: BH-31

Date collected: 3/28/95	Date received: 3/30/95
Date extracted: 3/31/95	Date analyzed: 4/1/95
Client: Monteverde, Inc.	
Project Name: Leonard's Conoco	HEAL #: 9503078-8
Project Manager: Vanessa Price	Sampled by: J. Lubbering
Matrix: Non-Aqueous	

Test: EPA 8020

Compound	Amount	Units
MTBE	<0.1	PPM (MG/KG)
Benzene	0.57	PPM (MG/KG)
Toluene	<0.05	PPM (MG/KG)
Ethylbenzene	0.62	PPM (MG/KG)
Total Xylenes	<0.05	PPM (MG/KG)

BFB (Surrogate) Recovery = 98 %

Dilution Factor = 1

Results for sample: BH-4

Date collected: 3/28/95	Date received: 3/30/95
Date extracted: 3/31/95	Date analyzed: 4/1/95
Client: Monteverde, Inc.	
Project Name: Leonard's Conoco	HEAL #: 9503078-9
Project Manager: Vanessa Price	Sampled by: J. Lubbering
Matrix: Non-Aqueous	

Test: EPA 8020

Compound	Amount	Units
MTBE	<0.5	PPM (MG/KG)
Benzene	2.6	PPM (MG/KG)
Toluene	1.5	PPM (MG/KG)
Ethylbenzene	6.3	PPM (MG/KG)
Total Xylenes	3.1	PPM (MG/KG)

BFB (Surrogate) Recovery = ** %

Dilution Factor = 5

Test: EPA 8015 Modified

Compound	Amount	Units
Gasoline	790	PPM (MG/KG)

BFB (Surrogate) Recovery = ** %

Dilution Factor = 5

**Surrogate non-recoverable due to matrix interference.

Results for sample: BH-4

Date collected: 3/28/95	Date received: 3/30/95
Date extracted: 4/3/95	Date analyzed: 4/5/95
Client: Monteverde, Inc.	
Project Name: Leonard's Conoco	HEAL #: 9503078-9
Project Manager: Vanessa Price	Sampled by: J. Lubbering
Matrix: Non-Aqueous	

Test: EPA 8015 Modified

Compound	Amount	Units
Diesel	<20	PPM (MG/KG)
Kerosene	520	PPM (MG/KG)
Motor Oil	<100	PPM (MG/KG)

DNOP (Surrogate) Recovery = 89 %

Dilution Factor = 1

Results for sample: BH-51

Date collected: 3/29/95	Date received: 3/30/95
Date extracted: 3/31/95	Date analyzed: 3/31/95
Client: Monteverde, Inc.	
Project Name: Leonard's Conoco	HEAL #: 9503078-10
Project Manager: Vanessa Price	Sampled by: J. Lubbering
Matrix: Non-Aqueous	

Test: EPA 8020

Compound	Amount	Units
MTBE	<10	PPM (MG/KG)
Benzene	<5.0	PPM (MG/KG)
Toluene	<5.0	PPM (MG/KG)
Ethylbenzene	5.1	PPM (MG/KG)
Total Xylenes	<5.0	PPM (MG/KG)

BFB (Surrogate) Recovery = ** %

Dilution Factor = 100

** Surrogate indeterminate due to dilution and matrix interference.

Results for sample: BH-51

Date collected: 3/29/95	Date received: 3/30/95
Date extracted: 4/3/95	Date analyzed: 4/5/95
Client: Monteverde, Inc.	
Project Name: Leonard's Conoco	HEAL #: 9503078-10
Project Manager: Vanessa Price	Sampled by: J. Lubbering
Matrix: Non-Aqueous	

Test: EPA 8015 Modified

Compound	Amount	Units
Diesel	<100	PPM (MG/KG)
Kerosene	2,400	PPM (MG/KG
Motor Oil	<500	PPM (MG/KG)

DNOP (Surrogate) Recovery = 63 %

Dilution Factor = 10

Results for sample: BH-61

Date collected: 3/29/95	Date received: 3/30/95
Date extracted: 3/31/95	Date analyzed: 4/1/95
Client: Monteverde, Inc.	
Project Name: Leonard's Conoco	HEAL #: 9503078-11
Project Manager: Vanessa Price	Sampled by: J. Lubbering
Matrix: Non-Aqueous	

Test: EPA 8020

Compound	Amount	Units
MTBE	<0.1	PPM (MG/KG)
Benzene	<0.05	PPM (MG/KG)
Toluene	<0.05	PPM (MG/KG)
Ethylbenzene	<0.05	PPM (MG/KG)
Total Xylenes	<0.05	PPM (MG/KG)

BFB (Surrogate) Recovery = 93 %

Dilution Factor = 1

Results for sample: BH-71

Date collected: 3/29/95	Date received: 3/30/95
Date extracted: 3/31/95	Date analyzed: 4/1/95
Client: Monteverde, Inc.	
Project Name: Leonard's Conoco	HEAL #: 9503078-12
Project Manager: Vanessa Price	Sampled by: J. Lubbering
Matrix: Non-Aqueous	

Test: EPA 8020

Compound	Amount	Units
MTBE	<0.1	PPM (MG/KG)
Benzene	<0.05	PPM (MG/KG)
Toluene	<0.05	PPM (MG/KG)
Ethylbenzene	<0.05	PPM (MG/KG)
Total Xylenes	<0.05	PPM (MG/KG)

BFB (Surrogate) Recovery = 91 %

Dilution Factor = 1

Results for sample: BH-81

Date collected: 3/29/95	Date received: 3/30/95
Date extracted: 3/31/95	Date analyzed: 4/1/95
Client: Monteverde, Inc.	
Project Name: Leonard's Conoco	HEAL #: 9503078-13
Project Manager: Vanessa Price	Sampled by: J. Lubbering
Matrix: Non-Aqueous	

Test: EPA 8020

Compound	Amount	Units
MTBE	<0.1	PPM (MG/KG)
Benzene	<0.05	PPM (MG/KG)
Toluene	<0.05	PPM (MG/KG)
Ethylbenzene	<0.05	PPM (MG/KG)
Total Xylenes	<0.05	PPM (MG/KG)

BFB (Surrogate) Recovery = 84 %

Dilution Factor = 1

Results for QC: Reagent Blank

Date extracted: NA	Date analyzed: 3/30/95
Client: Monteverde, Inc.	
Project Name: Leonard's Conoco	HEAL #: RB 3/30
Project Manager: Vanessa Price	
Matrix: Aqueous	

Test: EPA 602

Compound	Amount	Units
MTBE	<2.5	PPB (UG/L)
Benzene	<0.5	PPB (UG/L)
Toluene	<0.5	PPB (UG/L)
Ethylbenzene	<0.5	PPB (UG/L)
Total Xylenes	<0.5	PPB (UG/L)

BFB (Surrogate) Recovery = 89 %

Dilution Factor = 1

Results for QC: Reagent Blank

Date extracted: 3/31/95	Date analyzed: 3/31/95
Client: Monteverde, Inc.	
Project Name: Leonard's Conoco	HEAL #: RB 3/31
Project Manager: Vanessa Price	
Matrix: Aqueous	

Test: EPA 8020

Compound	Amount	Units
MTBE	<0.1	PPM (MG/KG)
Benzene	<0.05	PPM (MG/KG)
Toluene	<0.05	PPM (MG/KG)
Ethylbenzene	<0.05	PPM (MG/KG)
Total Xylenes	<0.05	PPM (MG/KG)

BFB (Surrogate) Recovery = 104 %

Dilution Factor = 1

Test: EPA 8015 Modified

Compound	Amount	Units
Gasoline	<5.0	PPM (MG/KG)

BFB (Surrogate) Recovery = 114 %

Dilution Factor = 1

Test: EPA 8015 Modified

Compound	Amount	Units
Diesel	<5.0	PPM (MG/KG)

DNOP (Surrogate) Recovery = 98 %

Dilution Factor = 1

Results for QC: Reagent Blank

Date extracted: 4/3/95	Date analyzed: 4/5/95
Client: Monteverde, Inc.	
Project Name: Leonard's Conoco	HEAL #: RB 4/3
Project Manager: Vanessa Price	
Matrix: Aqueous	

Test: EPA 8015 Modified

Compound	Amount	Units
Diesel	<5.0	PPM (MG/KG)

DNOP (Surrogate) Recovery = 98 %

Dilution Factor = 1

Results for QC: Reagent Blank

Date extracted: 4/11/95	Date analyzed: 4/11/95
Client: Monteverde, Inc.	
Project Name: Leonard's Conoco	HEAL #: RB 4/11
Project Manager: Vanessa Price	
Matrix: Aqueous	

Test: EPA 8015 Modified

Compound	Amount	Units
Diesel	<5.0	PPM (MG/KG)

DNOP (Surrogate) Recovery = 121 %

Dilution Factor = 1

Results for QC: Matrix Spike / Matrix Spike Dup

Date extracted: NA	Date analyzed: 3/31/95
Client: Monteverde, Inc.	
Project Name: Leonard's Conoco	HEAL #: 9503077-2 MS/MSD
Project Manager: Vanessa Price	
Matrix: Aqueous	Units: PPB (UG/L)

Test: EPA 602

Compound	Sample Result	Amount Added	Matrix Spike	MS %	MS Dup	MSD %	RPD
MTBE	<2.5	40.0	34.5	86	32.0	80	8
Benzene	<0.5	20.0	20.9	105	20.5	103	2
Toluene	<0.5	20.0	20.6	103	20.2	101	2
Ethylbenzene	<0.5	20.0	20.2	101	20.1	101	0
Total Xylenes	<0.5	60.0	59.8	100	59.9	100	0

Results for QC: Blank Spike / Blank Spike Dup

Date extracted: 3/31,4/3/95	Date analyzed: 3/31,4/3/95
Client: Monteverde, Inc.	
Project Name: Leonard's Conoco	HEAL #: BS/BSD 3/31,4/3
Project Manager: Vanessa Price	
Matrix: Non-Aqueous	Units: PPM (MG/KG)

Test: EPA 8020

Compound	Sample Result	Amount Added	Blank Spike	BS %	BS Dup	BSD %	RPD
MTBE	<0.1	2.00	1.87	93	1.83	92	2
Benzene	<0.05	1.00	0.98	98	0.97	97	1
Toluene	<0.05	1.00	0.96	96	0.96	96	0
Ethylbenzene	<0.05	1.00	0.96	96	0.96	96	0
Total Xylenes	<0.05	3.00	2.92	97	2.88	96	1

Test: EPA 8015 Modified

Compound	Sample Result	Amount Added	Blank Spike	BS %	BS Dup	BSD %	RPD
Gasoline	<5.0	50	43	86	44	88	2

Test: EPA 8015 Modified

Compound	Sample Result	Amount Added	Blank Spike	BS %	BS Dup	BSD %	RPD
Diesel	<5.0	54	60	111	57	106	5

APPENDIX III

Results for sample: BH-4 /mw1

Date collected: 3/29/95	Date received: 3/30/95
Date extracted: NA	Date analyzed: 3/31/95
Client: Monteverde, Inc.	
Project Name: Leonard's Conoco	HEAL #: 9503078-3
Project Manager: Vanessa Price	Sampled by: J. Lubbering
Matrix: Aqueous	

Test: EPA 602

Compound	Amount	Units
MTBE	320	PPB (UG/L)
Benzene	440	PPB (UG/L)
Toluene	25	PPB (UG/L)
Ethylbenzene	400	PPB (UG/L)
Total Xylenes	81	PPB (UG/L)

BFB (Surrogate) Recovery = 92 %

Dilution Factor = 5

Results for sample: BH-1 / MW2

Date collected: 3/29/95	Date received: 3/30/95
Date extracted: NA	Date analyzed: 3/31/95
Client: Monteverde, Inc.	
Project Name: Leonard's Conoco	HEAL #: 9503078-1
Project Manager: Vanessa Price	Sampled by: J. Lubbering
Matrix: Aqueous	

Test: EPA 602

Compound	Amount	Units
MTBE	4.5	PPB (UG/L)
Benzene	420	PPB (UG/L)
Toluene	6.4	PPB (UG/L)
Ethylbenzene	540	PPB (UG/L)
Total Xylenes	86	PPB (UG/L)

BFB (Surrogate) Recovery = 99 %

Dilution Factor = 2

Results for sample: BH-6 / MW3

Date collected: 3/29/95	Date received: 3/30/95
Date extracted: NA	Date analyzed: 3/30/95
Client: Monteverde, Inc.	
Project Name: Leonard's Conoco	HEAL #: 9503078-2
Project Manager: Vanessa Price	Sampled by: J. Lubbering
Matrix: Aqueous	

Test: EPA 602

Compound	Amount	Units
MTBE	<2.5	PPB (UG/L)
Benzene	39	PPB (UG/L)
Toluene	8.2	PPB (UG/L)
Ethylbenzene	6.3	PPB (UG/L)
Total Xylenes	15	PPB (UG/L)

BFB (Surrogate) Recovery = 94 %

Dilution Factor = 1

Results for sample: BH-7/mw4

Date collected: 3/29/95	Date received: 3/30/95
Date extracted: NA	Date analyzed: 3/31/95
Client: Monteverde, Inc.	
Project Name: Leonard's Conoco	HEAL #: 9503078-4
Project Manager: Vanessa Price	Sampled by: J. Lubbering
Matrix: Aqueous	

Test: EPA 602

Compound	Amount	Units
MTBE	<2.5	PPB (UG/L)
Benzene	<0.5	PPB (UG/L)
Toluene	3.0	PPB (UG/L)
Ethylbenzene	<0.5	PPB (UG/L)
Total Xylenes	2.9	PPB (UG/L)

BFB (Surrogate) Recovery = 97 %

Dilution Factor = 1

Results for sample: Trip Blank

Date collected: NA	Date received: 3/30/95
Date extracted: NA	Date analyzed: 3/30/95
Client: Monteverde, Inc.	
Project Name: Leonard's Conoco	HEAL #: 9503078-5
Project Manager: Vanessa Price	Sampled by: NA
Matrix: Aqueous	

Test: EPA 602

Compound	Amount	Units
MTBE	<2.5	PPB (UG/L)
Benzene	<0.5	PPB (UG/L)
Toluene	<0.5	PPB (UG/L)
Ethylbenzene	<0.5	PPB (UG/L)
Total Xylenes	<0.5	PPB (UG/L)

BFB (Surrogate) Recovery = 91 %

Dilution Factor = 1