April 22, 2003

Mark Larson
Larson & Associates, Inc.
507 North Marienfeld, Suite 202
Midland, TX 79701

Re: Texaco McKinley Lease
Site Location: UL-A, Sec 30-T18S-R38E
Dated: April 7, 2003

Dear Mr. Larson,

New Mexico Oil Conservation Division (OCD) received the closure proposal and request to backfill. The proposal is denied.

There is insufficient data presented as follows:

The borehole investigation data between 31ft and 50 ft. are required and the drilling log between 31 and 50 ft. is incomplete.

Sincerely,

Paul Sheeley-Environmental Engineer
Cc: Roger Anderson - Environmental Bureau Chief
Chris Williams - District II Supervisor
William Olson - OCD Hydrologist
Larry Johnson - Environmental Engineer

Larson & Associates, Inc.
Environmental Consultants

#732

April 7, 2003

VIA FACSIMILE: (505) 393-0720

Mr. Paul R. Sheeley
New Mexico Oil Conservation Division
1625 N. French Drive
Hobbs, New Mexico 88240

Re: Soil Sample Results, Former McKinley Lease Production Facility, UL A, Section 30, Township 18 South, Range 38 East, Lea County, New Mexico

Dear Mr. Sheeley:
ChevronTexaco Exploration and Production Company (ChevronTexaco), as successor to Texaco Exploration and Production Inc. (Texaco), has retained Larson and Associates, Inc. (LA) to supervise remediation of soil at a former oilfield production facility (Site) once operated by Texaco on the McKinley Lease in Unit Letter A (NE/4 NE/4), Section 30, Township 18 South, Range 38 East, Lea County, New Mexico. Figure 1 presents a location and topographic map.

A remediation work plan was submitted to the New Mexico Oil Conservation Division (NMOCD) on January 28, 2002, and proposed to excavate soil at three locations to achieve the NMOCD Recommended Remediation Action Level (RRAL) of 100 milligrams per kilogram (mg/kg) total petroleum hydrocarbon (TPH). Following excavation of approximately 7,288 cubic yards of soil from the three locations (Hole #1, Hole #2 and Hole #3), a Final Remediation Report was submitted to the NMOCD on June 11, 2002. The NMOCD denied closure since a soil sample from the bottom of Hole #3 was above the NMOCD recommended remediation action level (RRAL) of 100 mg/kg. The NMOCD also requested that Texaco investigate an area between the excavations (Hole #2 and Hole #3) since a sample from BH-3 from 20 to 21 feet below ground surface (BGS) reported TPH at 82 mg/kg (below the RRAL).

Results of additional sampling of Hole #3, which showed that TPH was below the RRAL of 100 mg/kg, were presented to the NMOCD in a letter dated September 20, 2002. The letter also stated that Holes #1, #2 and #3 would be filled with clean soil, and a soil boring would be drilled between BH-3 and BH-4, to a depth of approximately 25 feet below ground surface (bgs). The NMOCD approved the work plan in a letter dated October 9, 2002, with two requests as follows:

- The proposed boring depth be extended from 25 feet bgs, to a depth of approximately 40 – 45 feet bgs,
- The OCD be notified 48 hours in advance of any sampling event.

507 North Marienfeld, Suite 202 ◆ Midland, Texas 79701 ◆ Ph. (915) 687-0901 ◆ Fax (915) 687-0456

Appendix A provides copies of NMOCD correspondence.

Environmental Plus, Inc. (EPI) was retained to fill the excavations with clean soil, and began backfilling Hole #1 and Hole #2 on October 14, 2002. Backfilling was also stopped on that date, when NMOCD personnel visited the Site and observed additional soil staining at the north end of Hole #2. ChevronTexaco was required to investigate and remediate as necessary the soil staining north of Hole #2.

The NMOCD has established remediation action levels (RRAL) for benzene, total BTEX and TPH in soil ("Guidelines for Remediation of Leaks, Spills and Releases, August 13, 1993"). Remediation levels for benzene, total BTEX and TPH were calculated for the Site using the following NMOCD criteria:

Criteria	Result	Ranking Score
Depth-to-Groundwater	<50 feet	20
Wellhead Protection Area	No	0
Distance to Surface Water Body	>1000 Feet	0
		Total: 20

Based on the total ranking score above, the following RRALs were assigned to the Site based on NMOCD criteria:

Benzene	**10 mg/kg**
Total BTEX	**50 mg/kg**
TPH	**100 mg/kg**

Remediation Activities

On December 5, 2003, soil boring BH-13 was drilled between the two excavations (Hole #2 and Hole #3) and south of BH-3 and BH-4. The boring was drilled by Scarborough Drilling, Inc. of Lamesa, Texas, utilizing an air rotary drilling rig. Figure 2 shows the location of excavations (Holes #1, 2 and 3) and soil borings BH-1 through BH-13. BH-12 is located north of the Site and is not shown on Figure 2.

Soil samples were collected at ground surface, and approximately every five (5) feet bgs, thereafter, using a split-spoon sampler. The split-spoon sampler was thoroughly washed between sample events. Drill cuttings were placed on the ground adjacent to the boring. The soil samples were placed in clean glass sample jars, labeled, chilled in an ice chest, and delivered under chain-of-custody control to Environmental Lab of Texas I, Ltd., located in Odessa, Texas. A portion of each sample was also placed in a clean glass sample jar for headspace analysis. The headspace jars were filled approximately ¾ full,

and a layer of aluminum foil was placed over the opening of the jar before replacing the cap. The headspace samples were allowed to reach ambient temperature before a RAE Instruments, Model 2000 photoionization detector (PID) was used to measure the concentration of organic vapors in the headspace of the sample jars. The PID probe was inserted into the headspace of the sample jars (through the aluminum foil), and the concentration of organic vapors was displayed by the instrument in parts per million (ppm). The NMOCD allows a PID measurement of less than 100 ppm to be used as a substitute for laboratory analysis of benzene and total benzene, toluene, ethylbenzene and xylenes (collectively referred to as BTEX). However, the PID measurement cannot be used as a substitute for total petroleum hydrocarbon (TPH) analysis by a laboratory. Samples from the surface and approximately every ten (10) feet bgs were analyzed for TPH by EPA method SW-846-8015 for gasoline range organics (GRO) and diesel range organics (DRO).

On October 15, 2002, EPI began to excavate soil from the north end of Hole #2. As remediation activities progressed to the north, soil samples were taken from the bottom and sides of the excavation. Soil samples were collected on December 30, 2002, January 2, 2003, February 7, 2003, February 13, 2003 and March 31, 2003, until laboratory analyses of soil samples from the sides and bottom of the excavation reported TPH values below 100 mg/kg. The final excavation, extending from the north boundary of Hole #2, measured approximately 130 x 70 feet, and was excavated to a maximum depth of 29 feet bgs. The impacted soil was transported to ChevronTexaco's centralized waste management facility (landfarm) located northwest of Jal, New Mexico. The final soil samples from the bottom and sides of the excavation reported TPH (DRO and GRO) levels below 100 mg/kg. The sample results are presented on Table 2. Figures 3, 4 and 5 present Site drawings showing the excavation boundary, sample locations and TPH concentrations from each sampling event.

Soil Boring Results

All samples collected from BH-13 exhibited a total TPH of less than ten (<10.0) mg/kg except the sample from approximately 20-21 feet bgs, which resulted in a DRO concentration of 190 mg/kg. Table 1 presents a summary of headspace and TPH analyses of soil samples from BH-13. Figure 2 shows the location of BH-13. Appendix B provides the boring log. Appendix C provides laboratory and chain-of-custody documentation. Appendix D presents photographs of the soil boring installation. The boring was filled with bentonite chips and hydrated with potable water upon completion of drilling.

Remediation Results

Only one sample (SS-9, North Bottom, 9') exhibited PID readings above 100 ppm (381.0 ppm) and was analyzed for BTEX using EPA method SW-846-8021B. Referring to Table 2, benzene was reported below the detection limit of 0.025 mg/kg and total BTEX was reported at 8.864 mg/kg. The results were below the RRAL for benzene (10 mg/kg)

and total BTEX (50 mg/kg). All samples were analyzed for TPH by EPA method SW-846-8015 for gasoline range organics (GRO) and diesel range organics (DRO). The concentrations of TPH in the final samples from the bottom and sides of the excavation were below the RRAL for TPH of 100 mg/kg. Table 2 provides a summary of headspace and laboratory results following excavation. Figures 3, 4 and 5 present Site drawings showing the excavation boundary, sample locations and TPH concentrations from each sampling event. Appendix C provides laboratory and chain-of-custody documentation. Appendix D presents photographs of the excavation.

Approximately 8,156 cubic yards ($yd^{3)}$ of impacted soil was transferred to ChevronTexaco's landfarm since October 31, 2002. Approximately 9,892 yd^3 of clean soil was transported to the Site, and has been stockpiled. ChevronTexaco requests the NMOCD allow it to fill the excavations. The excavations will be filled with clean soil, and a final letter will be submitted to the NMOCD upon completion. Please call Mr. Scott Toner with ChevronTexaco at (915) 687-7318 or myself at (915) 687-0901 if you have questions.

Sincerely,
Larson and Associates, Inc.

Cindy K Crain
Geologist

Encl.

cc: Scott Toner, ChevronTexaco
William Olson, OCD Hydrologist

TABLES

Table 1: Summary of Headspace and Laboratory Analysis of Soil Samples
Texaco Exploration and Production Inc., McKinley Lease
NE/4, NE/4, Section 30, Township 18 South, Range 38 East
Lea County, New Mexico

Borehole Number	Sample Date	Sample Depth (feet BGS)	PID (ppm)	GRO C6-C12 mg/kg	DRO >C12-C35 mg/kg	TPH (C6-C35) mg/kg
RRAL						**100**
BH-13	**12/5/2002**	0-1	1	<10.0	<10.0	<10.0
		10-11	1	<10.0	<10.0	<10.0
		20-21	6.1	<10.0	190.0	190.0
		30-31	5.5	<10.0	<10.0	<10.0
		50-51	3.1	<10.0	<10.0	<10.0

Notes: All analyses performed by Environmental Lab of Texas, Inc., Midland, Texas
1. BGS: Depth in feet below ground surface
2. PID: Photoionization detector
3. ppm: Parts per million
4. GRO: Gasoline-range organics
5. DRO: Diesel-range organics
6. TPH: Total petroleum hydrocarbons (Sum of GRO + DRO)
7. mg/kg Milligrams per kilogram
8. ---: No data available
9. <: Below method detection limit
10. RRAL: NMOCD Recommended Remediation

Table 2: **Summary of Headspace and Laboratory Analysis of Soil Samples Following Excavation**
Texaco Exploration and Production Inc., McKinley Lease
NE/4, NE/4, Section 30, Township 18 South, Range 38 East
Lea County, New Mexico

Sample Number	Location of Sample	Sample Date	Sample Depth (feet BGS)	PID (ppm)	Benzene mg/kg	Total BTEX mg/kg	GRO C6-C12 mg/kg	DRO >C12-C35 mg/kg	TPH (C6-C35) mg/kg	Chloride (mg/kg)
RRAL					**10**	**50**			**100**	**250**
SS-1	**Bottom Center**	12/30/02	29	---	---	---	<10.0	<10.0	<10.0	---
SS-2	**East Wall**	01/02/03	8	0.1	---	---	<10.0	146.0	146.0	---
SS-3	**East Wall**	01/02/03	9	0.1	---	---	<10.0	<10.0	<10.0	---
SS-4	**East Wall**	01/02/03	8	0.1	---	---	<10.0	<10.0	<10.0	---
SS-5	**North Wall**	01/02/03	8	0.1	---	---	18.6	216.0	234.6	---
SS-6	**West Wall**	01/02/03	7	0.0	---	---	<10.0	199.0	199.0	---
SS-7	**West Wall**	01/02/03	7	0.0	---	---	<10.0	113.0	113.0	---
SS-8	**North Bottom**	01/02/03	9	17.4	---	---	128.0	4,050.0	4,178.0	---
SS-9	**North Bottom**	01/02/03	9	381.0	<0.025	8.864	1,530.0	12,800.0	14,330.0	---
SS-10	**North Bottom**	01/02/03	9	6.6	---	---	<100	1,740.0	1,740.0	---
SS-11	**West Wall**	01/02/03	16	0.9	---	---	<10.0	<10.0	<10.0	---
SS-12	**Bottom**	01/02/03	17	0.4	---	---	<100	900.0	900.0	---
SS-13	**East Wall**	01/02/03	16	0.0	---	---	<10.0	<10.0	<10.0	---
SS-14	**West Wall**	01/02/03	10	0.0	---	---	<10.0	176.0	176.0	---
SS-15	**West Wall**	01/02/03	19	22.1	---	---	52.3	264.0	316.3	---
SS-16	**West Wall**	01/02/03	27	3.8	---	---	<10.0	<10.0	<10.0	---
SS-17	**Bottom**	01/02/03	29	12.2	---	---	<10.0	<10.0	<10.0	---
SS-18	**Bottom**	01/02/03	29	1.1	---	---	<10.0	<10.0	<10.0	---
SS-19	**South Wall**	01/02/03	20	1.5	---	---	<10.0	<10.0	<10.0	---
SS-20	**South Wall**	01/02/03	26	6.9	---	---	<10.0	<10.0	<10.0	---
SS-21	**East Wall**	01/02/03	15	0.1	---	---	<10.0	<10.0	<10.0	---
SS-22	**East Wall**	01/02/03	27	2.1	---	---	<10.0	49.3	49.3	---
SS-23	**North Bottom**	01/02/03	10	15.4	---	---	<100	3,970.0	3,970.0	---

Table 2: Summary of Headspace and Laboratory Analysis of Soil Samples Following Excavation
Texaco Exploration and Production Inc., McKinley Lease
NE/4, NE/4, Section 30, Township 18 South, Range 38 East
Lea County, New Mexico

Sample Number	Location of Sample	Sample Date	Sample Depth (feet BGS)	PID (ppm)	Benzene mg/kg	Total BTEX mg/kg	GRO C6-C12 mg/kg	DRO >C12-C35 mg/kg	TPH (C6-C35) mg/kg	Chloride (mg/kg)
RRAL					10	50			100	250
SS-24	West Wall	02/07/03	10	1.2	---	---	<10.0	<10.0	<10.0	44.3
SS-25	West Wall	02/07/03	19	0.3	---	---	<10.0	<10.0	<10.0	324
SS-26	West Wall	02/07/03	7	1.7	---	---	<10.0	<10.0	<10.0	<20.0
SS-27	West Wall	02/07/03	7	1.5	---	---	<10.0	<10.0	<10.0	<20.0
SS-28	Bottom	02/07/03	20	1.3	---	---	<10.0	<10.0	<10.0	177
SS-29	Bottom	02/07/03	18	1.4	---	---	<10.0	<10.0	<10.0	<20.0
SS-30	Bottom	02/07/03	18	5.7	---	---	<10.0	85.1	85.1	88.6
SS-31	Bottom	02/07/03	15	3.8	---	---	<10.0	<10.0	<10.0	59.1
SS-32	North Wall	02/07/03	8	2.0	---	---	<10.0	430.0	430.0	103
SS-33	Bottom	02/07/03	11	16.3	---	---	<10.0	<10.0	<10.0	295
SS-34	East Wall	02/07/03	8	1.4	---	---	<10.0	159.0	159.0	59.1
SS-35	North Bottom	02/13/03	9.5	1.1	---	---	<10.0	<10.0	<10.0	73.8
SS-36	North Side	02/13/03	9	0.1	---	---	<10.0	<10.0	<10.0	88.6
SS-37	Northeast Side	02/13/03	9	0.1	---	---	<10.0	<10.0	<10.0	118
SS-38	East Wall	03/31/03	8	0.1	---	---	<10.0	<10.0	<10.0	---

Notes: All analyses performed by Environmental Lab of Texas, Inc., Midland, Texas

1. BGS: Depth in feet below ground surface
2. PID: Photoionization detector
3. ppm: Parts per million
4. GRO: Gasoline-range organics
5. DRO: Diesel-range organics
6. TPH: Total petroleum hydrocarbons (Sum of GRO + DRO)
7. mg/kg: Milligrams per kilogram
8. ---: No data available
9. <: Below method detection limit
10. RRAL: NMOCD Recommended Remediation Action Level

FIGURES

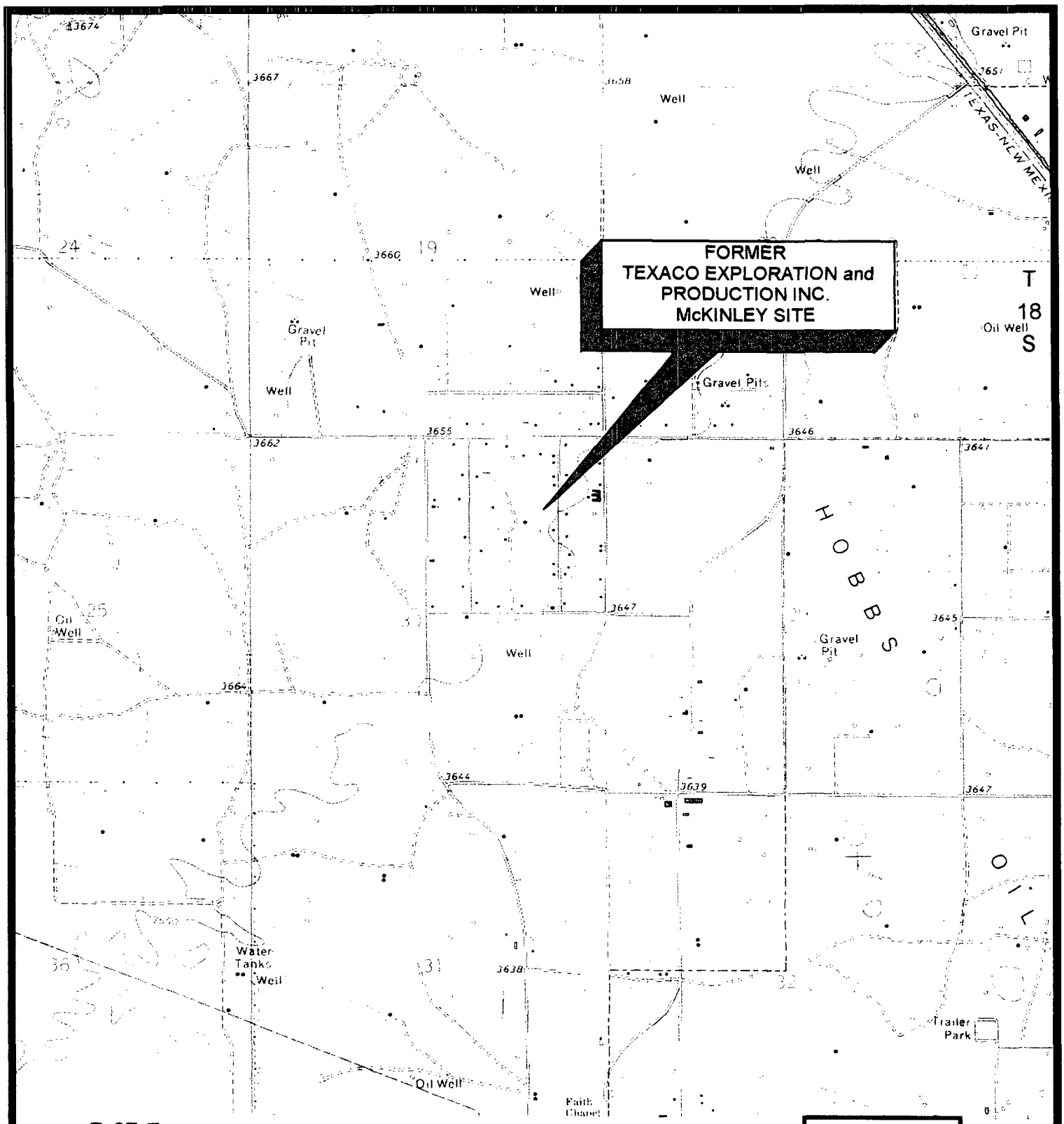


FIGURE #1

LEA COUNTY, NEW MEXICO

TEXACO EXPLORATION and PRODUCTION, INC.

McKINLEY LEASE

NW/4, SE/4, SECTION 30, T18S, R38E

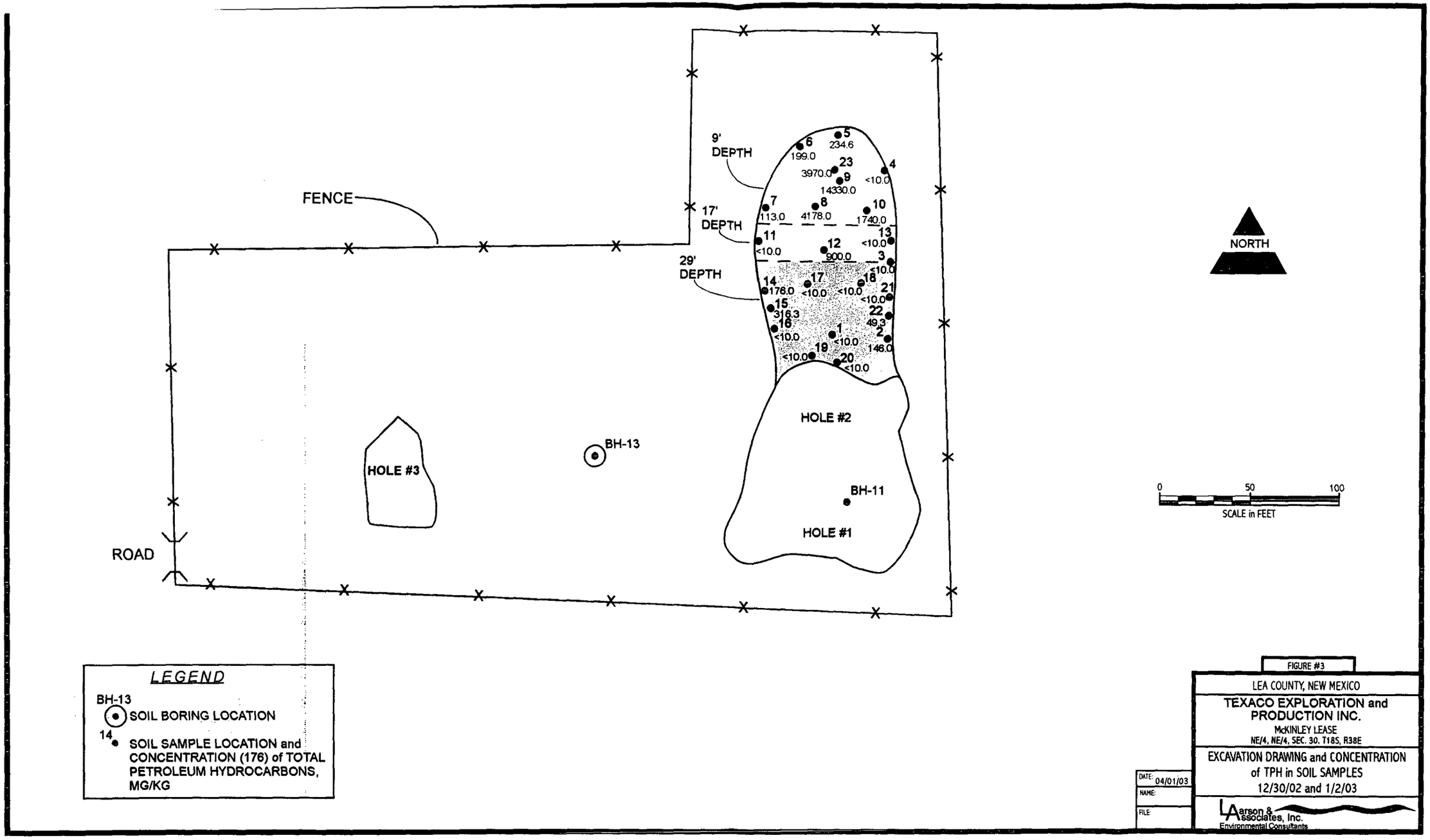
TOPOGRAPHIC MAP

TAKEN FROM U.S.G.S.
HOBBS WEST, N. MEX. 1979
7.5' QUADRANGLES

SCALE: 1"=2000'

DATE: 4/22/01
NAME:
FILE: 2-001

Larson & Associates, Inc.
Environmental Consultants



LEGEND

BH-13 ⊙ SOIL BORING LOCATION

14 ● SOIL SAMPLE LOCATION and CONCENTRATION (176) of TOTAL PETROLEUM HYDROCARBONS, MG/KG

FIGURE #3

LEA COUNTY, NEW MEXICO

TEXACO EXPLORATION and PRODUCTION INC.

McKINLEY LEASE

NE/4, NE/4, SEC. 30, T18S, R38E

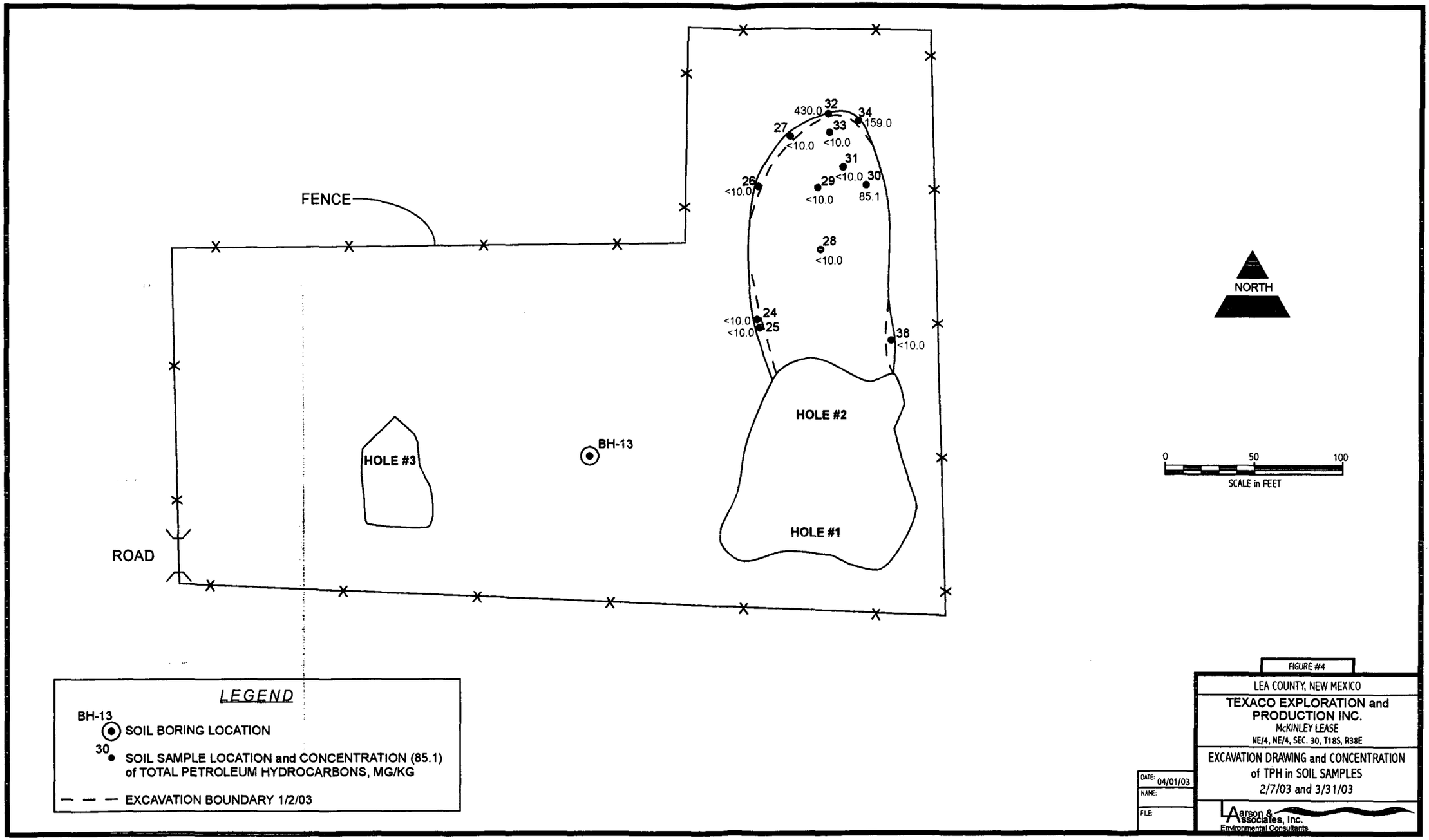
EXCAVATION DRAWING and CONCENTRATION of TPH in SOIL SAMPLES 12/30/02 and 1/2/03

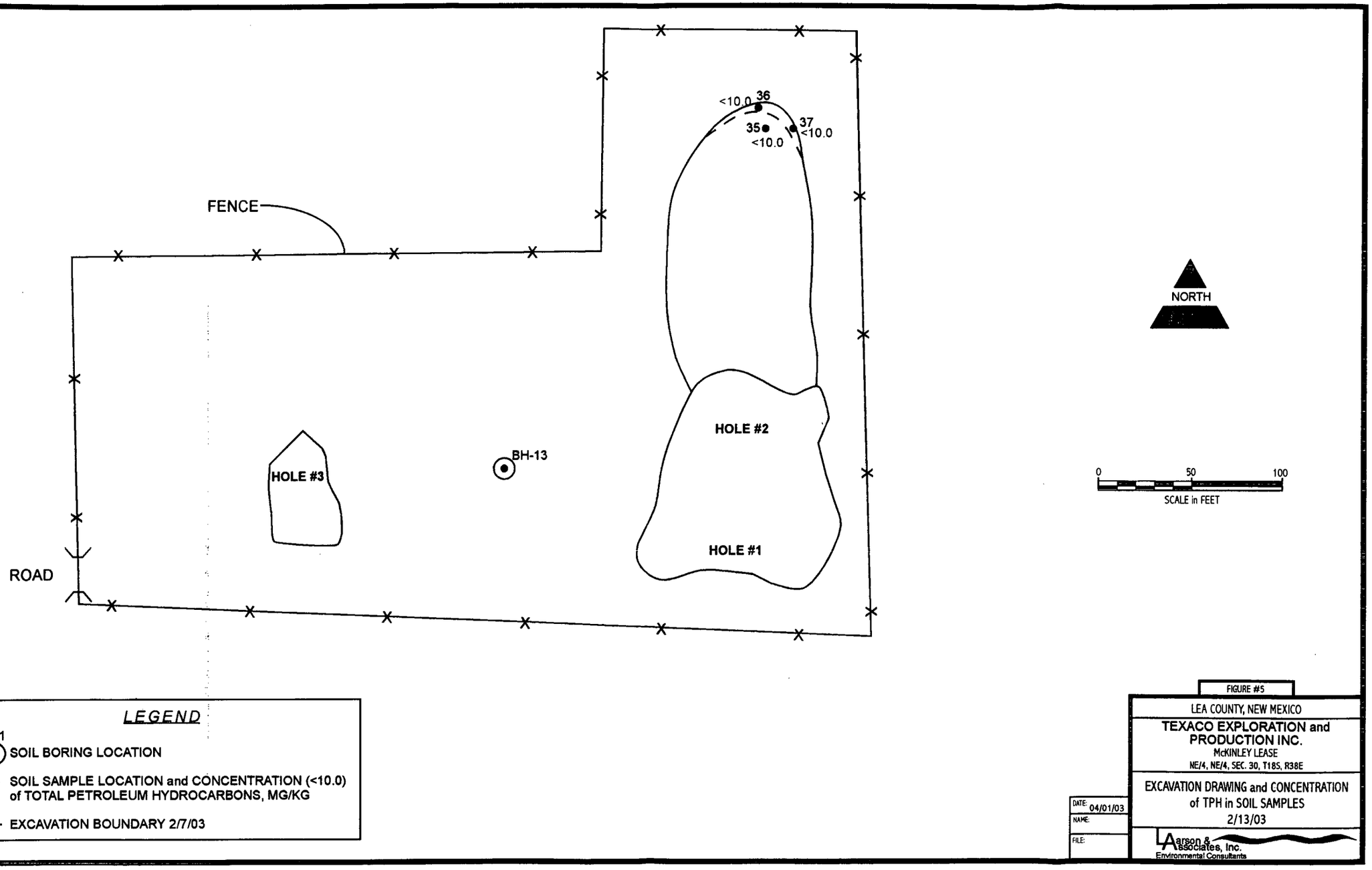
DATE: 04/01/03

NAME:

FILE:

Larson & Associates, Inc.
Environmental Consultants


FENCE
ROAD
HOLE #1
HOLE #2
HOLE #3
BH-13
430.0
32
34
159.0
27
<10.0
33
<10.0
31
<10.0
26
<10.0
29
<10.0
30
85.1
28
<10.0
24
<10.0
25
<10.0
38
<10.0
NORTH
0
50
100
SCALE in FEET
LEGEND
BH-13
SOIL BORING LOCATION
30
SOIL SAMPLE LOCATION and CONCENTRATION (85.1) of TOTAL PETROLEUM HYDROCARBONS, MG/KG
EXCAVATION BOUNDARY 1/2/03
FIGURE #4
LEA COUNTY, NEW MEXICO
TEXACO EXPLORATION and PRODUCTION INC.
McKINLEY LEASE
NE/4, NE/4, SEC. 30, T18S, R38E
EXCAVATION DRAWING and CONCENTRATION of TPH in SOIL SAMPLES
2/7/03 and 3/31/03
DATE: 04/01/03
NAME:
FILE:
Larson & Associates, Inc.
Environmental Consultants


FENCE
<10.0
36
35
<10.0
37
<10.0
HOLE #2
HOLE #3
BH-13
HOLE #1
ROAD
NORTH
0
50
100
SCALE in FEET
LEGEND
BH-11
SOIL BORING LOCATION
35
SOIL SAMPLE LOCATION and CONCENTRATION (<10.0) of TOTAL PETROLEUM HYDROCARBONS, MG/KG
EXCAVATION BOUNDARY 2/7/03
FIGURE #5
LEA COUNTY, NEW MEXICO
TEXACO EXPLORATION and PRODUCTION INC.
McKINLEY LEASE
NE/4, NE/4, SEC. 30, T18S, R38E
EXCAVATION DRAWING and CONCENTRATION of TPH in SOIL SAMPLES
2/13/03
DATE: 04/01/03
NAME:
FILE:
Larson & Associates, Inc.
Environmental Consultants

APPPENDIX A

NMOCD CORRESPONDENCE

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Betty Rivera
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

September 6, 2002

Mark Larson
Larson & Associates, Inc.
507 North Marienfeld, Suite 202
Midland, TX 79701

Re: Closure Proposal
Texaco McKinley Lease-(Jim Davis)
Site Location: UL-A, Sec 30-T18S-R38E
Dated: June 11, 2002, Supplement July 19, 2002

Dear Mr. Larson,

The New Mexico Oil Conservation Division (OCD) hereby denies your closure plan proposal referenced above. Samples from excavation hole #3 exceed OCD criteria of 100 ppm TPH.

Borehole #3 and #4 are located alone between excavations. #3 indicates TPH contamination, (Work Plan dated January 28, 2002). The lab sample for borehole #3 at 21 feet shows contamination. OCD requires Texaco to investigate in between excavation holes. .

If you have any questions or need any assistance please feel free to contact me at (505) 393-6161 x113 or email: psheeeley@state.nm.us

Sincerely,

Paul Sheeley-Environmental Engineer
Cc: Roger Anderson - Environmental Bureau Chief
Chris Williams - District I Supervisor
William Olson - OCD Hydrologist
Larry Johnson - Environmental Engineer

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Betty Rivera
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

October 9, 2002

Mark Larson
Larson & Associates, Inc.
507 North Marienfeld, Suite 202
Midland, TX 79701

Re: Texaco McKinley Lease-(Jim Davis)
Site Location: UL-A, Sec 30-T18S-R38E
Dated: September 20, 2002

Dear Mr. Larson,

New Mexico Oil Conservation Division (OCD) received your modified work plan letter including the August 27, 2002 bottom hole sample analysis data for the site referenced above. The OCD hereby approves the plan and includes the following:

1. ChevronTexaco shall extend the proposed 25 foot boring to approximately 40-45 feet below ground surface, to investigate the vadose zone between the existing excavations at the site and demonstrate that contaminants have not reached the groundwater.

2. ChevronTexaco shall notify the OCD 48 hours in advance of any sampling event to allow OCD the option to split samples and witness activities.

Please be advised that OCD approval of this plan does not relieve ChevronTexaco of liability should their operations fail to adequately investigate and remediate contaminants that threaten ground water, surface water, human health or the environment. In addition, OCD approval does not relieve ChevronTexaco of responsibility for compliance with any other federal, state, or local laws and/or regulations.

If you have any questions or need assistance please write or call: (505) 393-6161, ext. 113, or e-mail: psheeeley@state.nm.us

Sincerely,

Paul Sheeley-Environmental Engineer
Cc: Roger Anderson - Environmental Bureau Chief
Chris Williams - District I Supervisor
William Olson - OCD Hydrologist
Larry Johnson - Environmental Engineer

APPENDIX B

BORING LOG

Client: Texaco E&P

Project: Davis Property (McKinley Lease)

Project No: 2-0100

Location: SW/4, NE/4, Section 30, T18S, R38E, Lea Co., NM

Log of Borehole: BH-13

Geologist: Cindy K. Crain

Page: 1 of 1

Depth	Symbol	Description	Number	Type	Recovery	PID Measurement (PPM)	Lab Analysis
0		Ground Surface					
		Sandy, Clayey Silt 7.5 YR 7/4, pink quartz sand, very fine grained, very poorly sorted, medium density.	1			1.0	0 - 1' bgs GRO: <10.0 mg/kg DRO: <10.0 mg/kg Total TPH: <10.0 mg/kg
5			2			1.3	
		Silty Sand 5 YR 7/4 to 7/6, pink to reddish yellow quartz sand, very fine grained, poorly sorted, loose.	3			1.0	10 - 11' bgs GRO: <10.0 mg/kg DRO: <10.0 mg/kg Total TPH: <10.0 mg/kg
10							
15		***Caliche*** 10 YR 8/2, very pale brown quartz sand, very fine grained, very poorly sorted, indurated. Contains some quartzite.	4			0.8	
20			5			6.1	20 - 21' bgs GRO: <10.0 mg/kg DRO: 190 mg/kg Total TPH: 190 mg/kg
25							
30		***Silty Sand*** 7.5 YR 6/3, light brown quartz sand, very fine grained, poorly sorted, moderately loose.	6			5.5	30 - 31' bgs GRO: <10.0 mg/kg DRO: <10.0 mg/kg Total TPH: <10.0 mg/kg
35							
40			7			5.1	
45							
50			8			3.1	50 - 51' bgs GRO: <10.0 mg/kg DRO: <10.0 mg/kg Total TPH: <10.0 mg/kg
		End of Borehole at 51 ft					
55							
60							

Drilling Method: Air Rotary

Date Drilled: 12/5/02

Hole Size: 5 5/8"

Larson and Associates, Inc.
507 North Marienfeld St., Ste. 202
Midland, Texas 79701
(915) 687-0901

Checked by: CKC

Drilled by: Scarborough Drilling, Inc.

APPENDIX C

LABORATORY REPORT

ANALYTICAL REPORT

Prepared for:

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Project:	Texaco/ McKinley Lease
PO#:	
Order#:	G0205195
Report Date:	12/10/2002

Certificates
US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710
915-687-0456

Order#: G0205195
Project: 2-0100
Project Name: Texaco/ McKinley Lease
Location: None Given

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0205195-01	BH-13 (0-1')	SOIL	12/5/02 10:25	12/6/02 16:50	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** 4.0 C		
0205195-03	BH-13 (10-11')	SOIL	12/5/02 10:35	12/6/02 16:50	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** 4.0 C		
0205195-05	BH-13 (20-21')	SOIL	12/5/02 10:51	12/6/02 16:50	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** 4.0 C		
0205195-06	BH-13 (30-31')	SOIL	12/5/02 11:00	12/6/02 16:50	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** 4.0 C		
0205195-08	BH-13 (50-51')	SOIL	12/5/02 11:36	12/6/02 16:50	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** 4.0 C		

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0205195
Project: 2-0100
Project Name: Texaco/ McKinley Lease
Location: None Given

Lab ID: 0205195-01
Sample ID: BH-13 (0-1')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		12/9/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	86%	70	130
1-Chlorooctadecane	92%	70	130

Lab ID: 0205195-03
Sample ID: BH-13 (10-11')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		12/9/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	79%	70	130
1-Chlorooctadecane	81%	70	130

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0205195
Project: 2-0100
Project Name: Texaco/ McKinley Lease
Location: None Given

Lab ID: 0205195-05
Sample ID: BH-13 (20-21')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		12/9/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	190	10.0
TOTAL, C6-C35	190	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	89%	70	130
1-Chlorooctadecane	101%	70	130

Lab ID: 0205195-06
Sample ID: BH-13 (30-31')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		12/9/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	87%	70	130
1-Chlorooctadecane	93%	70	130

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0205195
Project: 2-0100
Project Name: Texaco/ McKinley Lease
Location: None Given

Lab ID: 0205195-08
Sample ID: BH-13 (50-51')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		12/9/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	84%	70	130
1-Chlorooctadecane	90%	70	130

Approval: Jeanne McMurrey 12-10-02
Raland K. Tuttle, Lab Director, QA Officer — Date
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0205195

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0004010-02			<10.0		
MS SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0205195-01	0	952	956	100.4%	
MSD SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0205195-01	0	952	1005	105.6%	5.%
SRM SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0004010-05		1000	900	90.%	

CHAIN—OF—CUSTODY RECORD

LArson & Associates, Inc. Environmental Consultants
Fax: 915-687-0456
915-687-0901
507 N. Marienfeld, Ste. 202 • Midland, TX 79701

CLIENT NAME: Texaco
SITE MANAGER: Cindy Crain
PROJECT NO.: 2-0100
PROJECT NAME: McKinley Lease
PAGE 1 OF 1
LAB. PO #

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	PARAMETERS/METHOD NUMBER: TPH 8015 Mod.	LAB. I.D. NUMBER (LAB USE ONLY)	REMARKS (I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB COMPOSITE)
12/5/02	1025		✓		BH-13 (0-1')	1	✓	0205195-01	
"	1028		✓		" (5-6')	1		02	
"	1035		✓		" (10-11')	1	✓	03	
"	1042		✓		" (15-16')	1		04	
"	1051		✓		" (20-21')	1	✓	05	
"	1100		✓		" (30-31')	1	✓	06	
"	1120		✓		" (40-41')	1		07	
"	1136		✓		" (50-51')	1	✓	08	

SAMPLED BY: (Signature) Cindy Crain — DATE: 12/5/02 TIME: 1140
RELINQUISHED BY: (Signature) — DATE: ____ TIME: ____
RECEIVED BY: (Signature) — DATE: ____ TIME: ____
RELINQUISHED BY: (Signature) Cindy Crain — DATE: 12/6/02 TIME: 1650
RECEIVED BY: (Signature) — DATE: ____ TIME: ____

SAMPLE SHIPPED BY: (Circle)
FEDEX BUS AIRBILL #: ____
HAND DELIVERED UPS OTHER: ____

COMMENTS:

TURNAROUND TIME NEEDED

WHITE – RECEIVING LAB
YELLOW – RECEIVING LAB (TO BE RETURNED TO LA AFTER RECEIPT)
PINK – PROJECT MANAGER
GOLD – QA/QC COORDINATOR

RECEIVING LABORATORY: ELOT
ADDRESS: 12600 W I-20 E
CITY: Odessa STATE: Tx ZIP: 79765
CONTACT: ____ PHONE: ____
RECEIVED BY: (Signature) Joanne McMurray
DATE: 12-06-02 TIME: 1650

SAMPLE CONDITION WHEN RECEIVED: 4.0°C

LA CONTACT PERSON:

SAMPLE TYPE: Soil

ANALYTICAL REPORT

Prepared for:

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Project:	Texaco / McKinley Lease
PO#:	
Order#:	G0205350
Report Date:	12/31/2002

Certificates
US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710
915-687-0456

Order#: G0205350
Project: 0-0100
Project Name: Texaco / McKinley Lease
Location: None Given

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0205350-01	SS-1 (Hole D) 29'	SOIL	12/30/02 10:50	12/30/02 15:15	4 oz Glass	Ice

Lab Testing: 8015M

Rejected: No **Temp:** 5 C

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0205350
Project: 0-0100
Project Name: Texaco / McKinley Lease
Location: None Given

Lab ID: 0205350-01
Sample ID: SS-1 (Hole D) 29'

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		12/30/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	70%	70	130
1-Chlorooctadecane	73%	70	130

Approval: Raland K Tuttle 12-31-02
Raland K. Tuttle, Lab Director, QA Officer Date
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0205350

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0004217-02			<10.0		
CONTROL SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0004217-03		952	909	95.5%	
CONTROL DUP SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0004217-04		952	823	86.4%	9.9%
SRM SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0004217-05		1000	809	80.9%	

CHAIN—OF—CUSTODY RECORD

LA arson & Associates, Inc. Environmental Consultants
Fax: 915-687-0456
915-687-0901
507 N. Marienfeld, Ste. 202 • Midland, TX 79701

CLIENT NAME: Texaco

SITE MANAGER: Cindy Crain

PROJECT NO.: 0-0100

PROJECT NAME: McKinley Lease

PAGE 1 OF 1

LAB. PO # 0205350

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	PARAMETERS/METHOD NUMBER: TPH 8015M	LAB. I.D. NUMBER (LAB USE ONLY)	REMARKS (I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB COMPOSITE)
12/30/02	1050		✓		SS-1 (Hole D) 29'0	1	✓		Rush

SAMPLED BY: (Signature) Cindy Crain
DATE: 12/30/02
TIME: 1100

RELINQUISHED BY: (Signature)
DATE:
TIME:

RECEIVED BY: (Signature)
DATE:
TIME:

RELINQUISHED BY: (Signature) Cindy Crain
DATE: 12/30/02
TIME: 1513

RECEIVED BY: (Signature)
DATE:
TIME:

SAMPLE SHIPPED BY: (Circle)
FEDEX BUS AIRBILL #:
HAND DELIVERED UPS OTHER:

COMMENTS: Rush - Please Call C. Crain w/ verbal results (556-8665)

TURNAROUND TIME NEEDED

WHITE – RECEIVING LAB
YELLOW – RECEIVING LAB (TO BE RETURNED TO LA AFTER RECEIPT)
PINK – PROJECT MANAGER
GOLD – QA/QC COORDINATOR

RECEIVING LABORATORY: ELAB
ADDRESS:
CITY: STATE: ZIP:
CONTACT: PHONE:

RECEIVED BY: (Signature) Dawn Landrum
DATE: 12/30/02 TIME: 1515

SAMPLE CONDITION WHEN RECEIVED: 5C 4oz GLASS

LA CONTACT PERSON:

SAMPLE TYPE: Soil

Called w/ verbals 12/30/02 5:00. ash

ANALYTICAL REPORT

Prepared for:

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Project: Texaco/ McKinley Lease

PO#:

Order#: G0305383

Report Date: 01/07/2003

Certificates
US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710
915-687-0456

Order#: G0305383
Project: 0-0100
Project Name: Texaco/ McKinley Lease
Location: None Given

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0305383-01	SS-2 (8')	SOIL	1/2/03 10:40	1/3/03 8:25	4 oz glass	Ice
	Lab Testing: 8015M	Rejected: No		Temp: -1.5 C		
0305383-02	SS-3 (9')	SOIL	1/2/03 10:42	1/3/03 8:25	4 oz glass	Ice
	Lab Testing: 8015M	Rejected: No		Temp: -1.5 C		
0305383-03	SS-4 (8')	SOIL	1/2/03 10:44	1/3/03 8:25	4 oz glass	Ice
	Lab Testing: 8015M	Rejected: No		Temp: -1.5 C		
0305383-04	SS-5 (8')	SOIL	1/2/03 10:57	1/3/03 8:25	4 oz glass	Ice
	Lab Testing: 8015M	Rejected: No		Temp: -1.5 C		
0305383-05	SS-6 (7')	SOIL	1/2/03 10:59	1/3/03 8:25	4 oz glass	Ice
	Lab Testing: 8015M	Rejected: No		Temp: -1.5 C		
0305383-06	SS-7 (7')	SOIL	1/2/03 11:02	1/3/03 8:25	4 oz glass	Ice
	Lab Testing: 8015M	Rejected: No		Temp: -1.5 C		
0305383-07	SS-8 (9')	SOIL	1/2/03 11:05	1/3/03 8:25	4 oz glass	Ice
	Lab Testing: 8015M	Rejected: No		Temp: -1.5 C		
0305383-08	SS-9 (9')	SOIL	1/2/03 11:07	1/3/03 8:25	4 oz glass	Ice
	Lab Testing: 8015M 8021B/5030 BTEX	Rejected: No		Temp: -1.5 C		

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710
915-687-0456

Order#: G0305383
Project: 0-0100
Project Name: Texaco/ McKinley Lease
Location: None Given

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0305383-09	SS-10 (9')	SOIL	1/2/03 11:10	1/3/03 8:25	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** -1.5 C		
0305383-10	SS-11 (16')	SOIL	1/2/03 11:30	1/3/03 8:25	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** -1.5 C		
0305383-11	SS-12 (17')	SOIL	1/2/03 11:35	1/3/03 8:25	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** -1.5 C		
0305383-12	SS-13 (16')	SOIL	1/2/03 11:38	1/3/03 8:25	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** -1.5 C		
0305383-13	SS-14 (10')	SOIL	1/2/03 11:40	1/3/03 8:25	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** -1.5 C		
0305383-14	SS-15 (19')	SOIL	1/2/03 11:42	1/3/03 8:25	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** -1.5 C		
0305383-15	SS-16 (27')	SOIL	1/2/03 11:45	1/3/03 8:25	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** -1.5 C		
0305383-16	SS-17 (29')	SOIL	1/2/03 12:40	1/3/03 8:25	4 oz glass	Ice
	Lab Testing: 8015M	**Rejected:** No		**Temp:** -1.5 C		

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710
915-687-0456

Order#: G0305383
Project: 0-0100
Project Name: Texaco/ McKinley Lease
Location: None Given

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0305383-17	SS-18 (29')	SOIL	1/2/03 12:45	1/3/03 8:25	4 oz glass	Ice
	Lab Testing: 8015M	Rejected: No		Temp: -1.5 C		
0305383-18	SS-19 (20')	SOIL	1/2/03 12:15	1/3/03 8:25	4 oz glass	Ice
	Lab Testing: 8015M	Rejected: No		Temp: -1.5 C		
0305383-19	SS-20 (26')	SOIL	1/2/03 12:20	1/3/03 8:25	4 oz glass	Ice
	Lab Testing: 8015M	Rejected: No		Temp: -1.5 C		
0305383-20	SS-21 (15')	SOIL	1/2/03 12:00	1/3/03 8:25	4 oz glass	Ice
	Lab Testing: 8015M	Rejected: No		Temp: -1.5 C		
0305383-21	SS-22 (27')	SOIL	1/2/03 12:10	1/3/03 8:25	4 oz glass	Ice
	Lab Testing: 8015M	Rejected: No		Temp: -1.5 C		
0305383-22	SS-23 (10')	SOIL	1/2/03 13:15	1/3/03 8:25	4 oz glass	Ice
	Lab Testing: 8015M	Rejected: No		Temp: -1.5 C		

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0305383
Project: 0-0100
Project Name: Texaco/ McKinley Lease
Location: None Given

Lab ID: 0305383-01
Sample ID: SS-2 (8')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/4/03	1	1	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	146	10.0
TOTAL, C6-C35	146	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	98%	70	130
1-Chlorooctadecane	98%	70	130

Lab ID: 0305383-02
Sample ID: SS-3 (9')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/4/03	1	1	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	92%	70	130
1-Chlorooctadecane	91%	70	130

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0305383
Project: 0-0100
Project Name: Texaco/ McKinley Lease
Location: None Given

Lab ID: 0305383-03
Sample ID: SS-4 (8')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/4/03	1	1	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	87%	70	130
1-Chlorooctadecane	85%	70	130

Lab ID: 0305383-04
Sample ID: SS-5 (8')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/4/03	1	1	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	18.6	10.0
DRO, >C12-C35	216	10.0
TOTAL, C6-C35	235	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	96%	70	130
1-Chlorooctadecane	95%	70	130

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0305383
Project: 0-0100
Project Name: Texaco/ McKinley Lease
Location: None Given

Lab ID: 0305383-05
Sample ID: SS-6 (7')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/4/03	1	1	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	199	10.0
TOTAL, C6-C35	199	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	75%	70	130
1-Chlorooctadecane	75%	70	130

Lab ID: 0305383-06
Sample ID: SS-7 (7')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/4/03	1	1	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	113	10.0
TOTAL, C6-C35	113	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	97%	70	130
1-Chlorooctadecane	97%	70	130

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0305383
Project: 0-0100
Project Name: Texaco/ McKinley Lease
Location: None Given

Lab ID: 0305383-07
Sample ID: SS-8 (9')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/4/03	1	5	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	128	50.0
DRO, >C12-C35	4050	50.0
TOTAL, C6-C35	4178	50.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	20%	70	130
1-Chlorooctadecane	21%	70	130

Lab ID: 0305383-08
Sample ID: SS-9 (9')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/4/03	1	10	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	1530	100
DRO, >C12-C35	12800	100
TOTAL, C6-C35	14330	100

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	20%	70	130
1-Chlorooctadecane	12%	70	130

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0305383
Project: 0-0100
Project Name: Texaco/ McKinley Lease
Location: None Given

Lab ID: 0305383-08
Sample ID: SS-9 (9')

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0004249-02		1/3/02	1	100	RKT	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.100
Toluene	0.195	0.100
Ethylbenzene	1.24	0.100
p/m-Xylene	6.50	0.100
o-Xylene	0.929	0.100

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	101%	80	120
Bromofluorobenzene	105%	80	120

Lab ID: 0305383-09
Sample ID: SS-10 (9')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/4/03	1	10	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	< 100	100
DRO, >C12-C35	1740	100
TOTAL, C6-C35	1740	100

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	11%	70	130
1-Chlorooctadecane	12%	70	130

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0305383
Project: 0-0100
Project Name: Texaco/ McKinley Lease
Location: None Given

Lab ID: 0305383-10
Sample ID: SS-11 (16')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/4/03	1	1	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	100%	70	130
1-Chlorooctadecane	101%	70	130

Lab ID: 0305383-11
Sample ID: SS-12 (17')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/4/03	1	10	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	< 100	100
DRO, >C12-C35	900	100
TOTAL, C6-C35	900	100

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	9%	70	130
1-Chlorooctadecane	9%	70	130

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0305383
Project: 0-0100
Project Name: Texaco/ McKinley Lease
Location: None Given

Lab ID: 0305383-12
Sample ID: SS-13 (16')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/6/03 18:04	1	1	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	108%	70	130
1-Chlorooctadecane	117%	70	130

Lab ID: 0305383-13
Sample ID: SS-14 (10')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/6/03 18:04	1	1	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	176	10.0
TOTAL, C6-C35	176	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	112%	70	130
1-Chlorooctadecane	114%	70	130

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0305383
Project: 0-0100
Project Name: Texaco/ McKinley Lease
Location: None Given

Lab ID: 0305383-14
Sample ID: SS-15 (19')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/6/03 18:04	1	1	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	52.3	10.0
DRO, >C12-C35	264	10.0
TOTAL, C6-C35	316	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	119%	70	130
1-Chlorooctadecane	126%	70	130

Lab ID: 0305383-15
Sample ID: SS-16 (27')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/6/03 18:04	1	1	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	121%	70	130
1-Chlorooctadecane	125%	70	130

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0305383
Project: 0-0100
Project Name: Texaco/ McKinley Lease
Location: None Given

Lab ID: 0305383-16
Sample ID: SS-17 (29')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/6/03 18:04	1	1	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	126%	70	130
1-Chlorooctadecane	127%	70	130

Lab ID: 0305383-17
Sample ID: SS-18 (29')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/6/03 18:04	1	1	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	119%	70	130
1-Chlorooctadecane	120%	70	130

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0305383
Project: 0-0100
Project Name: Texaco/ McKinley Lease
Location: None Given

Lab ID: 0305383-18
Sample ID: SS-19 (20')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/6/03 18:04	1	1	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	130%	70	130
1-Chlorooctadecane	120%	70	130

Lab ID: 0305383-19
Sample ID: SS-20 (26')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/6/03 18:04	1	1	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	122%	70	130
1-Chlorooctadecane	121%	70	130

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0305383
Project: 0-0100
Project Name: Texaco/ McKinley Lease
Location: None Given

Lab ID: 0305383-20
Sample ID: SS-21 (15')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/6/03 18:04	1	1	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	122%	70	130
1-Chlorooctadecane	117%	70	130

Lab ID: 0305383-21
Sample ID: SS-22 (27')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/6/03 18:04	1	1	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	49.3	10.0
TOTAL, C6-C35	49.3	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	84%	70	130
1-Chlorooctadecane	85%	70	130

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0305383
Project: 0-0100
Project Name: Texaco/ McKinley Lease
Location: None Given

Lab ID: 0305383-22
Sample ID: SS-23 (10')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		1/6/03 18:04	1	10	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	< 100	100
DRO, >C12-C35	3970	100
TOTAL, C6-C35	3970	100

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	11%	70	130
1-Chlorooctadecane	13%	70	130

Approval: Jeanne McMurrey 01-07-03
Raland K. Tuttle, Lab Director, QA Officer Date
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0305383

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0004256-02			<10.0		
TOTAL, C6-C35-mg/kg	0004257-02			<10.0		
CONTROL SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0004256-03		952	850	89.3%	
CONTROL DUP SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0004256-04		952	860	90.3%	1.2%
MS SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0305383-15	0	952	790	83.%	
MSD SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0305383-15	0	952	810	85.1%	2.5%
SRM SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0004256-05		1000	840	84.%	
TOTAL, C6-C35-mg/kg	0004257-05		1000	814	81.4%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0305383

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg	0004249-02			<0.025		
Toluene-mg/kg	0004249-02			<0.025		
Ethylbenzene-mg/kg	0004249-02			<0.025		
p/m-Xylene-mg/kg	0004249-02			<0.025		
o-Xylene-mg/kg	0004249-02			<0.025		
MS SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Benzene-mg/kg	0305380-06	0	0.1	0.105	105.%	
Toluene-mg/kg	0305380-06	0	0.1	0.112	112.%	
Ethylbenzene-mg/kg	0305380-06	0	0.1	0.113	113.%	
p/m-Xylene-mg/kg	0305380-06	0	0.2	0.225	112.5%	
o-Xylene-mg/kg	0305380-06	0	0.1	0.108	108.%	
MSD SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Benzene-mg/kg	0305380-06	0.105	0.1	0.102	102.%	2.9%
Toluene-mg/kg	0305380-06	0.112	0.1	0.105	105.%	6.5%
Ethylbenzene-mg/kg	0305380-06	0.113	0.1	0.104	104.%	8.3%
p/m-Xylene-mg/kg	0305380-06	0.225	0.2	0.210	105.%	6.9%
o-Xylene-mg/kg	0305380-06	0.108	0.1	0.102	102.%	5.7%
SRM SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Benzene-mg/kg	0004249-05		0.1	0.118	118.%	
Toluene-mg/kg	0004249-05		0.1	0.113	113.%	
Ethylbenzene-mg/kg	0004249-05		0.1	0.111	111.%	
p/m-Xylene-mg/kg	0004249-05		0.2	0.232	116.%	
o-Xylene-mg/kg	0004249-05		0.1	0.111	111.%	

CASE NARRATIVE

ENVIRONMENTAL LAB OF TEXAS

Prepared for:

LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: **G0305383**

Project: **Texaco/ McKinley Lease**

The following samples were received as indicated below and on the attached Chain of Custody record. All analyses were performed within the holding time and with acceptable quality control results unless otherwise noted.

SAMPLE ID	LAB ID	MATRIX	Date Collected	Date Received
SS-2 (8')	0305383-01	SOIL	01/02/2003	01/03/2003
SS-3 (9')	0305383-02	SOIL	01/02/2003	01/03/2003
SS-4 (8')	0305383-03	SOIL	01/02/2003	01/03/2003
SS-5 (8')	0305383-04	SOIL	01/02/2003	01/03/2003
SS-6 (7')	0305383-05	SOIL	01/02/2003	01/03/2003
SS-7 (7')	0305383-06	SOIL	01/02/2003	01/03/2003
SS-8 (9')	0305383-07	SOIL	01/02/2003	01/03/2003
SS-9 (9')	0305383-08	SOIL	01/02/2003	01/03/2003
SS-10 (9')	0305383-09	SOIL	01/02/2003	01/03/2003
SS-11 (16')	0305383-10	SOIL	01/02/2003	01/03/2003
SS-12 (17')	0305383-11	SOIL	01/02/2003	01/03/2003
SS-13 (16')	0305383-12	SOIL	01/02/2003	01/03/2003
SS-14 (10')	0305383-13	SOIL	01/02/2003	01/03/2003
SS-15 (19')	0305383-14	SOIL	01/02/2003	01/03/2003
SS-16 (27')	0305383-15	SOIL	01/02/2003	01/03/2003
SS-17 (29')	0305383-16	SOIL	01/02/2003	01/03/2003
SS-18 (29')	0305383-17	SOIL	01/02/2003	01/03/2003
SS-19 (20')	0305383-18	SOIL	01/02/2003	01/03/2003
SS-20 (26')	0305383-19	SOIL	01/02/2003	01/03/2003
SS-21 (15')	0305383-20	SOIL	01/02/2003	01/03/2003
SS-22 (27')	0305383-21	SOIL	01/02/2003	01/03/2003
SS-23 (10')	0305383-22	SOIL	01/02/2003	01/03/2003

Surrogate recoveries are outside the control limits because they were diluted out. (TPH) (0205383-07, 08, 09, 22)

CASE NARRATIVE

ENVIRONMENTAL LAB OF TEXAS

Prepared for:

LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: **G0305383**

Project: **Texaco/ McKinley Lease**

The following samples were received as indicated below and on the attached Chain of Custody record. All analyses were performed within the holding time and with acceptable quality control results unless otherwise noted.

The enclosed results of analyses are representative of the samples as received by the laboratory. Environmental Lab of Texas makes no representations or certifications as to the methods of sample collection, sample identification, or transportation handling procedures used prior to our receipt of samples. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved By: Jeanne McMurrey Date: 01-07-03

Environmental Lab of Texas I, Ltd.

CHAIN—OF—CUSTODY RECORD

Larson & Associates, Inc.
Environmental Consultants
Fax: 915-687-0456
915-687-0901
507 N. Marienfeld, Ste. 202 • Midland, TX 79701

CLIENT NAME: Texaco

SITE MANAGER: Cindy Crain

PROJECT NO.: 0.0100

PROJECT NAME: McKinley Lease

PAGE 1 OF 2

LAB. PO #

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS 40z glass	PARAMETERS/METHOD NUMBER: TPH 8015 M	PARAMETERS/METHOD NUMBER: BTEX 8021B	LAB. I.D. NUMBER (LAB USE ONLY)	REMARKS (I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB COMPOSITE)
1/2/03	1040		✓		SS-2 (8')	1	✓		0305383-01	
"	1042		✓		SS-3 (9')	1	✓		02	
"	1044		✓		SS-4 (8')	1	✓		03	
"	1057		✓		SS-5 (8')	1	✓		04	
"	1059		✓		SS-6 (7')	1	✓		05	
"	1102		✓		SS-7 (7')	1	✓		06	
"	1105		✓		SS-8 (9')	1	✓		07	
"	1107		✓		SS-9 (9')	1	✓	✓	08	
"	1110		✓		SS-10 (9')	1	✓		09	
"	1130		✓		SS-11 (16')	1	✓		10	
"	1135		✓		SS-12 (17')	1	✓		11	
"	1138		✓		SS-13 (16')	1	✓		12	
"	1140		✓		SS-14 (10')	1	✓		13	
"	1142		✓		SS-15 (19')	1	✓		14	
"	1145		✓		SS-16 (27')	1	✓		15	
"	1240		✓		SS-17 (29')	1	✓		16	
"	1245		✓		SS-18 (29')	1	✓		17	
"	1215		✓		SS-19 (20')	1	✓		18	

SAMPLED BY: (Signature) Cindy Crain — DATE: 1/2/03 TIME: 1300

RELINQUISHED BY: (Signature) — DATE: TIME:

RECEIVED BY: (Signature) — DATE: TIME:

RELINQUISHED BY: (Signature) Cindy Crain — DATE: 1/3/03 TIME: 0825

RECEIVED BY: (Signature) — DATE: TIME:

SAMPLE SHIPPED BY: (Circle)
FEDEX BUS AIRBILL #:
HAND DELIVERED UPS OTHER:

COMMENTS:

TURNAROUND TIME NEEDED

WHITE – RECEIVING LAB
YELLOW – RECEIVING LAB (TO BE RETURNED TO LA AFTER RECEIPT)
PINK – PROJECT MANAGER
GOLD – QA/QC COORDINATOR

RECEIVING LABORATORY: Environmental Lab of TX
ADDRESS: 12600 W I-20 E
CITY: Odessa STATE: TX ZIP: 79765
CONTACT: PHONE:

RECEIVED BY: (Signature) Jane McKinney
DATE: 01-03-03 TIME: 0825

SAMPLE CONDITION WHEN RECEIVED: -1.5°C

LA CONTACT PERSON: C. Crain

SAMPLE TYPE: Soil

CHAIN—OF—CUSTODY RECORD

LA Larson & Associates, Inc.
Environmental Consultants
Fax: 915-687-0456
915-687-0901
507 N. Marienfeld, Ste. 202 • Midland, TX 79701

CLIENT NAME: Texaco
SITE MANAGER: Cindy Crain
PROJECT NO.: 0-0100
PROJECT NAME: McKinley Lease
PAGE 2 OF 2
LAB. PO #

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS 4oz Glass	PARAMETERS/METHOD NUMBER: TPH 8015M	LAB. I.D. NUMBER (LAB USE ONLY)	REMARKS (I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB COMPOSITE)
1/2/03	1220		✓		SS-20 (26')	1	✓	0305383-19	
"	1200		✓		SS-21 (15')	1	✓	20	
"	1210		✓		SS-22 (27')	1	✓	21	
"	1315		✓		SS-23 (10')	1	✓	22	

SAMPLED BY: (Signature) Cindy Crain — DATE: 1/2/03 TIME: 1300
RELINQUISHED BY: (Signature) — DATE: TIME:
RECEIVED BY: (Signature) — DATE: TIME:

RELINQUISHED BY: (Signature) Cindy Crain — DATE: 1/3/03 TIME: 0825
RECEIVED BY: (Signature) — DATE: TIME:

SAMPLE SHIPPED BY: (Circle)
FEDEX BUS AIRBILL #:
HAND DELIVERED UPS OTHER:

COMMENTS:

TURNAROUND TIME NEEDED

WHITE – RECEIVING LAB
YELLOW – RECEIVING LAB (TO BE RETURNED TO LA AFTER RECEIPT)
PINK – PROJECT MANAGER
GOLD – QA/QC COORDINATOR

RECEIVING LABORATORY: Environmental Lab of Texas
ADDRESS: 12600 W I-20 E
CITY: Odessa STATE: TX ZIP: 79765
CONTACT: PHONE:
RECEIVED BY: (Signature)
DATE: 01-03-03 TIME: 0825

SAMPLE CONDITION WHEN RECEIVED: -1.5°C

LA CONTACT PERSON: C. Crain

SAMPLE TYPE: Soil

ANALYTICAL REPORT

Prepared for:

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Project:	Texaco / McKinley
PO#:	
Order#:	G0305663
Report Date:	02/11/2003

Certificates
US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710
915-687-0456

Order#: G0305663
Project: 2-0100
Project Name: Texaco / McKinley
Location: None Given

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0305663-01	SS-24 (10')	SOIL	2/7/03 10:15	2/7/03 16:55	4 oz Glass	None
	Lab Testing: 8015M Chloride	**Rejected:** No		**Temp:** 1.0 C		
0305663-02	SS-25 (19')	SOIL	2/7/03 10:20	2/7/03 16:55	4 oz Glass	None
	Lab Testing: 8015M Chloride	**Rejected:** No		**Temp:** 1.0 C		
0305663-03	SS-26 (7')	SOIL	2/7/03 10:25	2/7/03 16:55	4 oz Glass	None
	Lab Testing: 8015M Chloride	**Rejected:** No		**Temp:** 1.0 C		
0305663-04	SS-27 (7')	SOIL	2/7/03 10:30	2/7/03 16:55	4 oz Glass	None
	Lab Testing: 8015M Chloride	**Rejected:** No		**Temp:** 1.0 C		
0305663-05	SS-28 (20')	SOIL	2/7/03 10:35	2/7/03 16:55	4 oz Glass	None
	Lab Testing: 8015M Chloride	**Rejected:** No		**Temp:** 1.0 C		
0305663-06	SS-29 (18')	SOIL	2/7/03 10:40	2/7/03 16:55	4 oz Glass	None
	Lab Testing: 8015M Chloride	**Rejected:** No		**Temp:** 1.0 C		
0305663-07	SS-30 (18')	SOIL	2/7/03 10:50	2/7/03 16:55	4 oz Glass	None
	Lab Testing:	**Rejected:** No		**Temp:** 1.0 C		

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710
915-687-0456

Order#: G0305663
Project: 2-0100
Project Name: Texaco / McKinley
Location: None Given

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
	8015M Chloride					
0305663-08	SS-31 (15')	SOIL	2/7/03 11:00	2/7/03 16:55	4 oz Glass	None
	Lab Testing:	**Rejected:** No		**Temp:** 1.0 C		
	8015M Chloride					
0305663-09	SS-32 (8')	SOIL	2/7/03 11:05	2/7/03 16:55	4 oz Glass	None
	Lab Testing:	**Rejected:** No		**Temp:** 1.0 C		
	8015M Chloride					
0305663-10	SS-33 (11')	SOIL	2/7/03 10:45	2/7/03 16:55	4 oz Glass	None
	Lab Testing:	**Rejected:** No		**Temp:** 1.0 C		
	8015M Chloride					
0305663-11	SS-34 (8')	SOIL	2/7/03 11:10	2/7/03 16:55	4 oz Glass	None
	Lab Testing:	**Rejected:** No		**Temp:** 1.0 C		
	8015M Chloride					

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0305663
Project: 2-0100
Project Name: Texaco / McKinley
Location: None Given

Lab ID: 0305663-01
Sample ID: SS-24 (10')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		2/10/03	1	1	CDH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	104%	70	130
1-Chlorooctadecane	101%	70	130

Lab ID: 0305663-02
Sample ID: SS-25 (19')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		2/10/03	1	1	CDH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	101%	70	130
1-Chlorooctadecane	98%	70	130

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0305663
Project: 2-0100
Project Name: Texaco / McKinley
Location: None Given

Lab ID: 0305663-03
Sample ID: SS-26 (7')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		2/10/03	1	1	CDH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	110%	70	130
1-Chlorooctadecane	107%	70	130

Lab ID: 0305663-04
Sample ID: SS-27 (7')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		2/10/03	1	1	CDH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	103%	70	130
1-Chlorooctadecane	101%	70	130

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0305663
Project: 2-0100
Project Name: Texaco / McKinley
Location: None Given

Lab ID: 0305663-05
Sample ID: SS-28 (20')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		2/10/03	1	1	CDH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	102%	70	130
1-Chlorooctadecane	97%	70	130

Lab ID: 0305663-06
Sample ID: SS-29 (18')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		2/10/03	1	1	CDH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	104%	70	130
1-Chlorooctadecane	101%	70	130

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0305663
Project: 2-0100
Project Name: Texaco / McKinley
Location: None Given

Lab ID: 0305663-07
Sample ID: SS-30 (18')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		2/10/03	1	1	CDH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	85.1	10.0
TOTAL, C6-C35	85.1	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	103%	70	130
1-Chlorooctadecane	101%	70	130

Lab ID: 0305663-08
Sample ID: SS-31 (15')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		2/10/03	1	1	CDH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	112%	70	130
1-Chlorooctadecane	111%	70	130

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0305663
Project: 2-0100
Project Name: Texaco / McKinley
Location: None Given

Lab ID: 0305663-09
Sample ID: SS-32 (8')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		2/10/03	1	1	CDH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	430	10.0
TOTAL, C6-C35	430	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	107%	70	130
1-Chlorooctadecane	107%	70	130

Lab ID: 0305663-10
Sample ID: SS-33 (11')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		2/10/03	1	1	CDH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	90%	70	130
1-Chlorooctadecane	90%	70	130

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0305663
Project: 2-0100
Project Name: Texaco / McKinley
Location: None Given

Lab ID: 0305663-11
Sample ID: SS-34 (8')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		2/10/03	1	1	CDH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	159	10.0
TOTAL, C6-C35	159	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	83%	70	130
1-Chlorooctadecane	84%	70	130

Approval: Raland K Tuttle 2-11-03
Raland K. Tuttle, Lab Director, QA Officer Date
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0305663
Project: 2-0100
Project Name: Texaco / McKinley
Location: None Given

Lab ID: 0305663-01
Sample ID: SS-24 (10')

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	44.3	mg/kg	1	20.0	9253	2/10/03	CK

Lab ID: 0305663-02
Sample ID: SS-25 (19')

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	324	mg/kg	1	20.0	9253	2/10/03	CK

Lab ID: 0305663-03
Sample ID: SS-26 (7')

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	< 20.0	mg/kg	1	20.0	9253	2/10/03	CK

Lab ID: 0305663-04
Sample ID: SS-27 (7')

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	< 20.0	mg/kg	1	20.0	9253	2/10/03	CK

Lab ID: 0305663-05
Sample ID: SS-28 (20')

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	177	mg/kg	1	20.0	9253	2/10/03	CK

Lab ID: 0305663-06
Sample ID: SS-29 (18')

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	< 20.0	mg/kg	1	20.0	9253	2/10/03	CK

RL = Reporting Limit N/A = Not Applicable

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0305663
Project: 2-0100
Project Name: Texaco / McKinley
Location: None Given

Lab ID: 0305663-07
Sample ID: SS-30 (18')

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	88.6	mg/kg	1	20.0	9253	2/10/03	CK

Lab ID: 0305663-08
Sample ID: SS-31 (15')

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	59.1	mg/kg	1	20.0	9253	2/10/03	CK

Lab ID: 0305663-09
Sample ID: SS-32 (8')

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	103	mg/kg	1	20.0	9253	2/10/03	CK

Lab ID: 0305663-10
Sample ID: SS-33 (11')

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	295	mg/kg	1	20.0	9253	2/10/03	CK

Lab ID: 0305663-11
Sample ID: SS-34 (8')

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	59.1	mg/kg	1	20.0	9253	2/10/03	CK

Approval: Raland K Tuttle 2/10/03
Raland K. Tuttle, Lab Director, QA Officer — Date
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

RL = Reporting Limit N/A = Not Applicable

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0305663

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0004576-02			<10.0		
MS SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0305663-01	0	952	989	103.9%	
MSD SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0305663-01	0	952	998	104.8%	0.9%
SRM SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0004576-05		1000	1060	106.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0305663

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0004580-01			< 20.0		
MS SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Chloride-mg/kg	0305665-02	2350	834	3280	111.5%	
MSD SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Chloride-mg/kg	0305665-02	2350	834	3190	100.7%	2.8%
SRM SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Chloride-mg/kg	0004580-04		5000	5140	102.8%	

CHAIN—OF—CUSTODY RECORD

LA Larson & Associates, Inc. Environmental Consultants
Fax: 915-687-0456
915-687-0901
507 N. Marienfeld, Ste. 202 • Midland, TX 79701

CLIENT NAME: Texaco
SITE MANAGER: Cindy Crain
PROJECT NO.: 2-0100
PROJECT NAME: McKinley
PAGE 1 OF 1
LAB. PO #

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION 0305663	NUMBER OF CONTAINERS	PARAMETERS/METHOD NUMBER: TPH 8015M	PARAMETERS/METHOD NUMBER: Chloride	LAB. I.D. NUMBER (LAB USE ONLY)	REMARKS (I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB COMPOSITE)
2/7/03	1015		✓		SS-24 (10') 01	1	✓	✓		
"	1020		✓		SS-25 (19') 02	1	✓	✓		
"	1025		✓		SS-26 (7') 03	1	✓	✓		
"	1030		✓		SS-27 (7') 04	1	✓	✓		
"	1035		✓		SS-28 (20') 05	1	✓	✓		
"	1040		✓		SS-29 (18') 06	1	✓	✓		
"	1050		✓		SS-30 (18') 07	1	✓	✓		
"	1100		✓		SS-31 (15') 08	1	✓	✓		
"	1105		✓		SS-32 (8') 09	1	✓	✓		
"	1045		✓		SS-33 (11') 10	1	✓	✓		
"	1110		✓		SS-34 (8') 11	1	✓	✓		

SAMPLED BY: (Signature) Cindy Crain DATE: 2/7/03 TIME: 1115
RELINQUISHED BY: (Signature) DATE: TIME:
RECEIVED BY: (Signature) DATE: TIME:

RELINQUISHED BY: (Signature) Cindy Crain DATE: 2/7/03 TIME: 1650
RECEIVED BY: (Signature) DATE: TIME:
SAMPLE SHIPPED BY: (Circle)
FEDEX BUS AIRBILL #:
HAND DELIVERED UPS OTHER:

COMMENTS:
TURNAROUND TIME NEEDED

RECEIVING LABORATORY: ELOT
ADDRESS:
CITY: STATE: ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature) Dawn Caudill
DATE: 2/7/03 TIME: 1655

WHITE – RECEIVING LAB
YELLOW – RECEIVING LAB (TO BE RETURNED TO LA AFTER RECEIPT)
PINK – PROJECT MANAGER
GOLD – QA/QC COORDINATOR

SAMPLE CONDITION WHEN RECEIVED: 4oz Glass 1.0 C
LA CONTACT PERSON:
SAMPLE TYPE: Soil

ANALYTICAL REPORT

Prepared for:

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Project:	Texaco/ McKinley
PO#:	
Order#:	G0305714
Report Date:	02/18/2003

Certificates
US EPA Laboratory Code TX00158

Larson & Associates, Inc.
Environmental Consultants

April 7, 2003

Mr. Paul Sheeley
New Mexico Oil Conservation Division
1625 N. French Drive
Hobbs, New Mexico 88240

Re: Soil Sample Results, Former McKinley Lease Production Facility, UL A, Section 30, Township 18 South, Range 38 East, Lea County, New Mexico

Dear Mr. Sheeley:

Please find enclosed a copy of the above-referenced report. The report is submitted on behalf of ChevronTexaco Exploration and Production, and presents the results of soil remediation activities conducted by Larson and Associates, Inc. Please call Scott Toner at (915) 687-7318 or myself at (915) 687-0901 if you have questions.

Sincerely,
Larson and Associates, Inc.

Cindy K. Crain
Geologist

cc: Scott Toner - ChevronTexaco
William Olson, NMOCD

FAX

DATE: April 9, 2003

TO: Paul Sheeley

WITH: New Mexico Oil Conservation Division

FAX: (505) 393-0720

FROM: Cindy Crain

WITH: Larson and Associates, Inc.

PAGES (with cover): 16

RE: Soil Sample Results for Texaco Exploration and Production, Inc. McKinley Lease (Davis Property)

Larson and Associates, Inc.
507 N. Marienfeld Street
Suite 202
Midland, Texas 79701
(915) 687-0901

cindy@laenvironmental.com

Please call Cindy Crain at (915) 687-0901 if this transmittal is not legible.

Larson & Associates, Inc.
Environmental Consultants

April 7, 2003

Mr. Paul Sheeley
New Mexico Oil Conservation Division
1625 N. French Drive
Hobbs, New Mexico 88240

Re: Soil Sample Results, Former McKinley Lease Production Facility, UL A, Section 30, Township 18 South, Range 38 East, Lea County, New Mexico

Dear Mr. Sheeley:

Please find enclosed a copy of the above-referenced report. The report is submitted on behalf of ChevronTexaco Exploration and Production, and presents the results of soil remediation activities conducted by Larson and Associates, Inc. Please call Scott Toner at (915) 687-7318 or myself at (915) 687-0901 if you have questions.

Sincerely,
Larson and Associates, Inc.

Cindy K. Crain
Geologist

cc: Scott Toner - ChevronTexaco
William Olson, NMOCD

Larson & Associates, Inc.
Environmental Consultants

April 7, 2003

VIA FACSIMILE: (505) 393-0720

Mr. Paul R. Sheeley
New Mexico Oil Conservation Division
1625 N. French Drive
Hobbs, New Mexico 88240

Re: Soil Sample Results, Former M'Kinley Lease Production Facility, UL A, Section 30, Township 18 South, Range 38 East, Lea County, New Mexico

Dear Mr. Sheeley:
ChevronTexaco Exploration and Production Company (ChevronTexaco), as successor to Texaco Exploration and Production Inc. (Texaco), has retained Larson and Associates, Inc. (LA) to supervise remediation of soil at a former oilfield production facility (Site) once operated by Texaco on the McKinley Lease in Unit Letter A (NE/4 NE/4), Section 30, Township 18 South, Range 38 East, Lea County, New Mexico. Figure 1 presents a location and topographic map.

A remediation work plan was submitted to the New Mexico Oil Conservation Division (NMOCD) on January 28, 2002, and proposed to excavate soil at three locations to achieve the NMOCD Recommended Remediation Action Level (RRAL) of 100 milligrams per kilogram (mg/kg) total petroleum hydrocarbon (TPH). Following excavation of approximately 7,288 cubic yards of soil from the three locations (Hole #1, Hole #2 and Hole #3), a Final Remediation Report was submitted to the NMOCD on June 11, 2002. The NMOCD denied closure since a soil sample from the bottom of Hole #3 was above the NMOCD recommended remediation action level (RRAL) of 100 mg/kg. The NMOCD also requested that Texaco investigate an area between the excavations (Hole #2 and Hole #3) since a sample from BH-3 from 20 to 21 feet below ground surface (BGS) reported TPH at 82 mg/kg (below the RRAL).

Results of additional sampling of Hole #3, which showed that TPH was below the RRAL of 100 mg/kg, were presented to the NMOCD in a letter dated September 20, 2002. The letter also stated that Holes #1, #2 and #3 would be filled with clean soil, and a soil boring would be drilled between BH-3 and BH-4, to a depth of approximately 25 feet below ground surface (bgs). The NMOCD approved the work plan in a letter dated October 9, 2002, with two requests as follows:

- The proposed boring depth be extended from 25 feet bgs, to a depth of approximately 40 – 45 feet bgs,
- The OCD be notified 48 hours in advance of any sampling event.

Appendix A provides copies of NMOCD correspondence.

Environmental Plus, Inc. (EPI) was retained to fill the excavations with clean soil, and began backfilling Hole #1 and Hole #2 on October 14, 2002. Backfilling was also stopped on that date, when NMOCD personnel visited the Site and observed additional soil staining at the north end of Hole #2. ChevronTexaco was required to investigate and remediate as necessary the soil staining north of Hole #2.

The NMOCD has established remediation action levels (RRAL) for benzene, total BTEX and TPH in soil ("Guidelines for Remediation of Leaks, Spills and Releases, August 13, 1993"). Remediation levels for benzene, total BTEX and TPH were calculated for the Site using the following NMOCD criteria:

Criteria	Result	Ranking Score
Depth-to-Groundwater	<50 feet	20
Wellhead Protection Area	No	0
Distance to Surface Water Body	>1000 Feet	0
		Total: 20

Based on the total ranking score above, the following RRALs were assigned to the Site based on NMOCD criteria:

Benzene	**10 mg/kg**
Total BTEX	**50 mg/kg**
TPH	**100 mg/kg**

Remediation Activities

On December 5, 2003, soil boring BH-13 was drilled between the two excavations (Hole #2 and Hole #3) and south of BH-3 and BH-4. The boring was drilled by Scarborough Drilling, Inc. of Lamesa, Texas, utilizing an air rotary drilling rig. Figure 2 shows the location of excavations (Holes #1, 2 and 3) and soil borings BH-1 through BH-13. BH-12 is located north of the Site and is not shown on Figure 2.

Soil samples were collected at ground surface, and approximately every five (5) feet bgs, thereafter, using a split-spoon sampler. The split-spoon sampler was thoroughly washed between sample events. Drill cuttings were placed on the ground adjacent to the boring. The soil samples were placed in clean glass sample jars, labeled, chilled in an ice chest, and delivered under chain-of-custody control to Environmental Lab of Texas I, Ltd., located in Odessa, Texas. A portion of each sample was also placed in a clean glass sample jar for headspace analysis. The headspace jars were filled approximately ¾ full,

and a layer of aluminum foil was placed over the opening of the jar before replacing the cap. The headspace samples were allowed to reach ambient temperature before a RAE Instruments, Model 2000 photoionization detector (PID) was used to measure the concentration of organic vapors in the headspace of the sample jars. The PID probe was inserted into the headspace of the sample jars (through the aluminum foil), and the concentration of organic vapors was displayed by the instrument in parts per million (ppm). The NMOCD allows a PID measurement of less than 100 ppm to be used as a substitute for laboratory analysis of benzene and total benzene, toluene, ethylbenzene and xylenes (collectively referred to as BTEX). However, the PID measurement cannot be used as a substitute for total petroleum hydrocarbon (TPH) analysis by a laboratory. Samples from the surface and approximately every ten (10) feet bgs were analyzed for TPH by EPA method SW-846-8015 for gasoline range organics (GRO) and diesel range organics (DRO).

On October 15, 2002, EPI began to excavate soil from the north end of Hole #2. As remediation activities progressed to the north, soil samples were taken from the bottom and sides of the excavation. Soil samples were collected on December 30, 2002, January 2, 2003, February 7, 2003, February 13, 2003 and March 31, 2003, until laboratory analyses of soil samples from the sides and bottom of the excavation reported TPH values below 100 mg/kg. The final excavation, extending from the north boundary of Hole #2, measured approximately 130 x 70 feet, and was excavated to a maximum depth of 29 feet bgs. The impacted soil was transported to ChevronTexaco's centralized waste management facility (landfarm) located northwest of Jal, New Mexico. The final soil samples from the bottom and sides of the excavation reported TPH (DRO and GRO) levels below 100 mg/kg. The sample results are presented on Table 2. Figures 3, 4 and 5 present Site drawings showing the excavation boundary, sample locations and TPH concentrations from each sampling event.

Soil Boring Results

All samples collected from BH-13 exhibited a total TPH of less than ten (<10.0) mg/kg except the sample from approximately 20-21 feet bgs, which resulted in a DRO concentration of 190 mg/kg. Table 1 presents a summary of headspace and TPH analyses of soil samples from BH-13. Figure 2 shows the location of BH-13. Appendix B provides the boring log. Appendix C provides laboratory and chain-of-custody documentation. Appendix D presents photographs of the soil boring installation. The boring was filled with bentonite chips and hydrated with potable water upon completion of drilling.

Remediation Results

Only one sample (SS-9, North Bottom, 9') exhibited PID readings above 100 ppm (381.0 ppm) and was analyzed for BTEX using EPA method SW-846-8021B. Referring to Table 2, benzene was reported below the detection limit of 0.025 mg/kg and total BTEX was reported at 8.864 mg/kg. The results were below the RRAL for benzene (10 mg/kg)

and total BTEX (50 mg/kg). All samples were analyzed for TPH by EPA method SW-846-8015 for gasoline range organics (GRO) and diesel range organics (DRO). The concentrations of TPH in the final samples from the bottom and sides of the excavation were below the RRAL for TPH of 100 mg/kg. Table 2 provides a summary of headspace and laboratory results following excavation. Figures 3, 4 and 5 present Site drawings showing the excavation boundary, sample locations and TPH concentrations from each sampling event. Appendix C provides laboratory and chain-of-custody documentation. Appendix D presents photographs of the excavation.

Approximately 8,156 cubic yards ($yd^{3)}$ of impacted soil was transferred to ChevronTexaco's landfarm since October 31, 2002. Approximately 9,892 yd^3 of clean soil was transported to the Site, and has been stockpiled. ChevronTexaco requests the NMOCD allow it to fill the excavations. The excavations will be filled with clean soil, and a final letter will be submitted to the NMOCD upon completion. Please call Mr. Scott Toner with ChevronTexaco at (915) 687-7318 or myself at (915) 687-0901 if you have questions.

Sincerely,
Larson and Associates, Inc.

Cindy K. Crain

Cindy K Crain
Geologist

Encl.

cc: Scott Toner, ChevronTexaco
William Olson, OCD Hydrologist

TABLES

Table 1: Summary of Headspace and Laboratory Analysis of Soil Samples
Texaco Exploration and Production Inc., McKinley Lease
NE/4, NE/4, Section 30, Township 18 South, Range 38 East
Lea County, New Mexico

Borehole Number	Sample Date	Sample Depth (feet BGS)	PID (ppm)	GRO C6-C12 mg/kg	DRO >C12-C35 mg/kg	TPH (C6-C35) mg/kg
RRAL						100
BH-13	12/5/2002	0-1	1	<10.0	<10.0	<10.0
		10-11	1	<10.0	<10.0	<10.0
		20-21	6.1	<10.0	190.0	190.0
		30-31	5.5	<10.0	<10.0	<10.0
		50-51	3.1	<10.0	<10.0	<10.0

Notes: All analyses performed by Environmental Lab of Texas, Inc., Midland, Texas
1. BGS: Depth in feet below ground surface
2. PID: Photoionization detector
3. ppm: Parts per million
4. GRO: Gasoline-range organics
5. DRO: Diesel-range organics
6. TPH: Total petroleum hydrocarbons (Sum of GRO + DRO)
7. mg/kg Milligrams per kilogram
8. —: No data available
9. <: Below method detection limit
10. RRAL: NMOCD Recommended Remediation

Table 2: Summary of Headspace and Laboratory Analysis of Soil Samples Following Excavation
Texaco Exploration and Production Inc., McKinley Lease
NE/4, NE/4, Section 30, Township 18 South, Range 38 East
Lea County, New Mexico

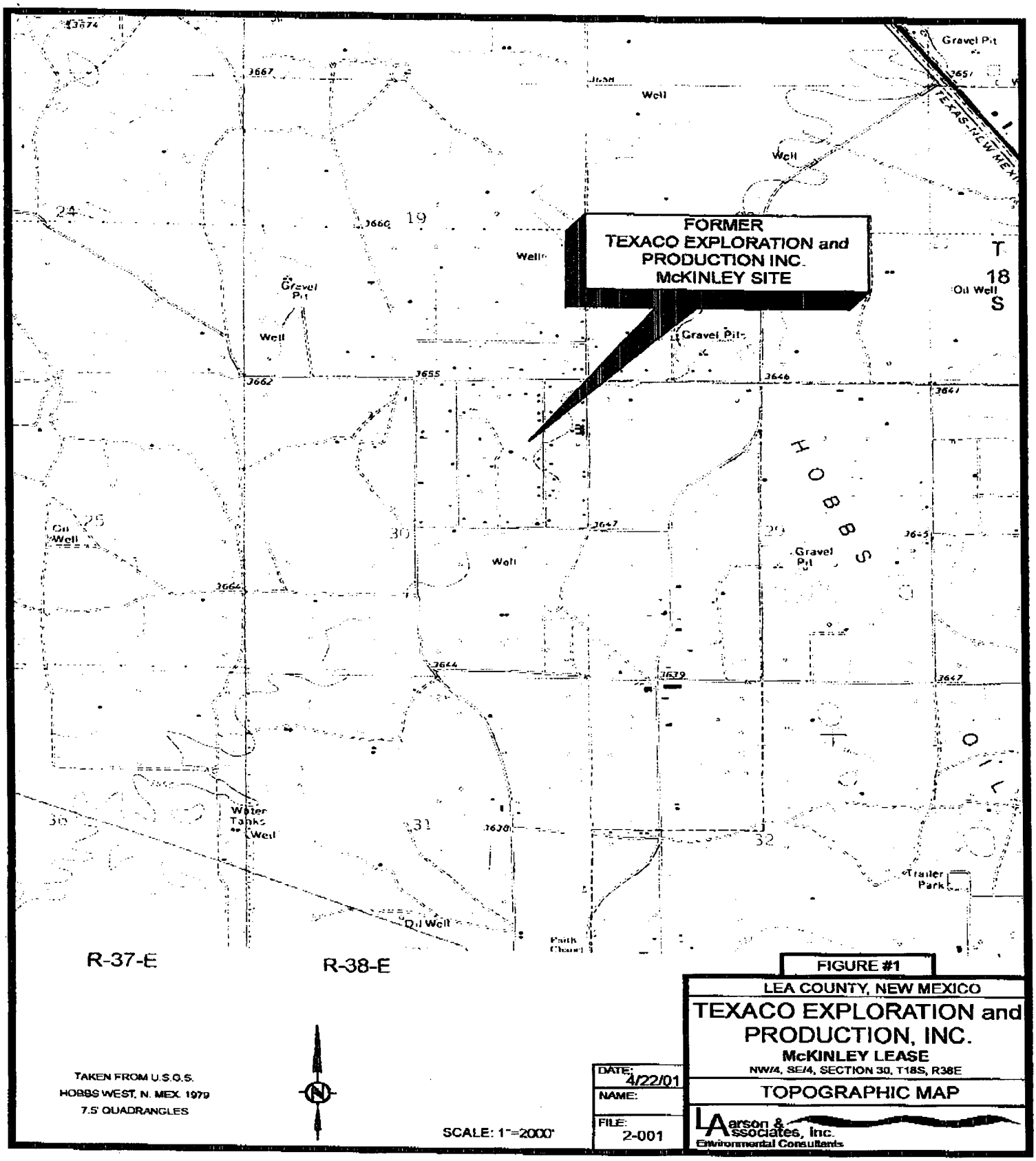
Sample Number	Location of Sample	Sample Date	Sample Depth (feet BGS)	PID (ppm)	Benzene mg/kg	Total BTEX mg/kg	GRO C6-C12 mg/kg	DRO >C12-C35 mg/kg	TPH (C6-C35) mg/kg	Chloride (mg/kg)
RRAL					10	50			100	250
SS-1	Bottom Center	12/30/02	29	---	---	---	<10.0	<10.0	<10.0	---
SS-2	East Wall	01/02/03	8	0.1	---	---	<10.0	146.0	146.0	---
SS-3	East Wall	01/02/03	9	0.1	---	---	<10.0	<10.0	<10.0	---
SS-4	East Wall	01/02/03	8	0.1	---	---	<10.0	<10.0	<10.0	---
SS-5	North Wall	01/02/03	8	0.1	---	---	18.6	216.0	234.6	---
SS-6	West Wall	01/02/03	7	0.0	---	---	<10.0	199.0	199.0	---
SS-7	West Wall	01/02/03	7	0.0	---	---	<10.0	113.0	113.0	---
SS-8	North Bottom	01/02/03	9	17.4	---	---	128.0	4,050.0	4,178.0	---
SS-9	North Bottom	01/02/03	9	381.0	<0.025	8.864	1,530.0	12,800.0	14,330.0	---
SS-10	North Bottom	01/02/03	9	6.6	---	---	<100	1,740.0	1,740.0	---
SS-11	West Wall	01/02/03	16	0.9	---	---	<10.0	<10.0	<10.0	---
SS-12	Bottom	01/02/03	17	0.4	---	---	<100	900.0	900.0	---
SS-13	East Wall	01/02/03	16	0.0	---	---	<10.0	<10.0	<10.0	---
SS-14	West Wall	01/02/03	10	0.0	---	---	<10.0	176.0	176.0	---
SS-15	West Wall	01/02/03	19	22.1	---	---	52.3	264.0	316.3	---
SS-16	West Wall	01/02/03	27	3.8	---	---	<10.0	<10.0	<10.0	---
SS-17	Bottom	01/02/03	29	12.2	---	---	<10.0	<10.0	<10.0	---
SS-18	Bottom	01/02/03	29	1.1	---	---	<10.0	<10.0	<10.0	---
SS-19	South Wall	01/02/03	20	1.5	---	---	<10.0	<10.0	<10.0	---
SS-20	South Wall	01/02/03	26	6.9	---	---	<10.0	<10.0	<10.0	---
SS-21	East Wall	01/02/03	15	0.1	---	---	<10.0	<10.0	<10.0	---
SS-22	East Wall	01/02/03	27	2.1	---	---	<10.0	49.3	49.3	---
SS-23	North Bottom	01/02/03	10	15.4	---	---	<100	3,970.0	3,970.0	---

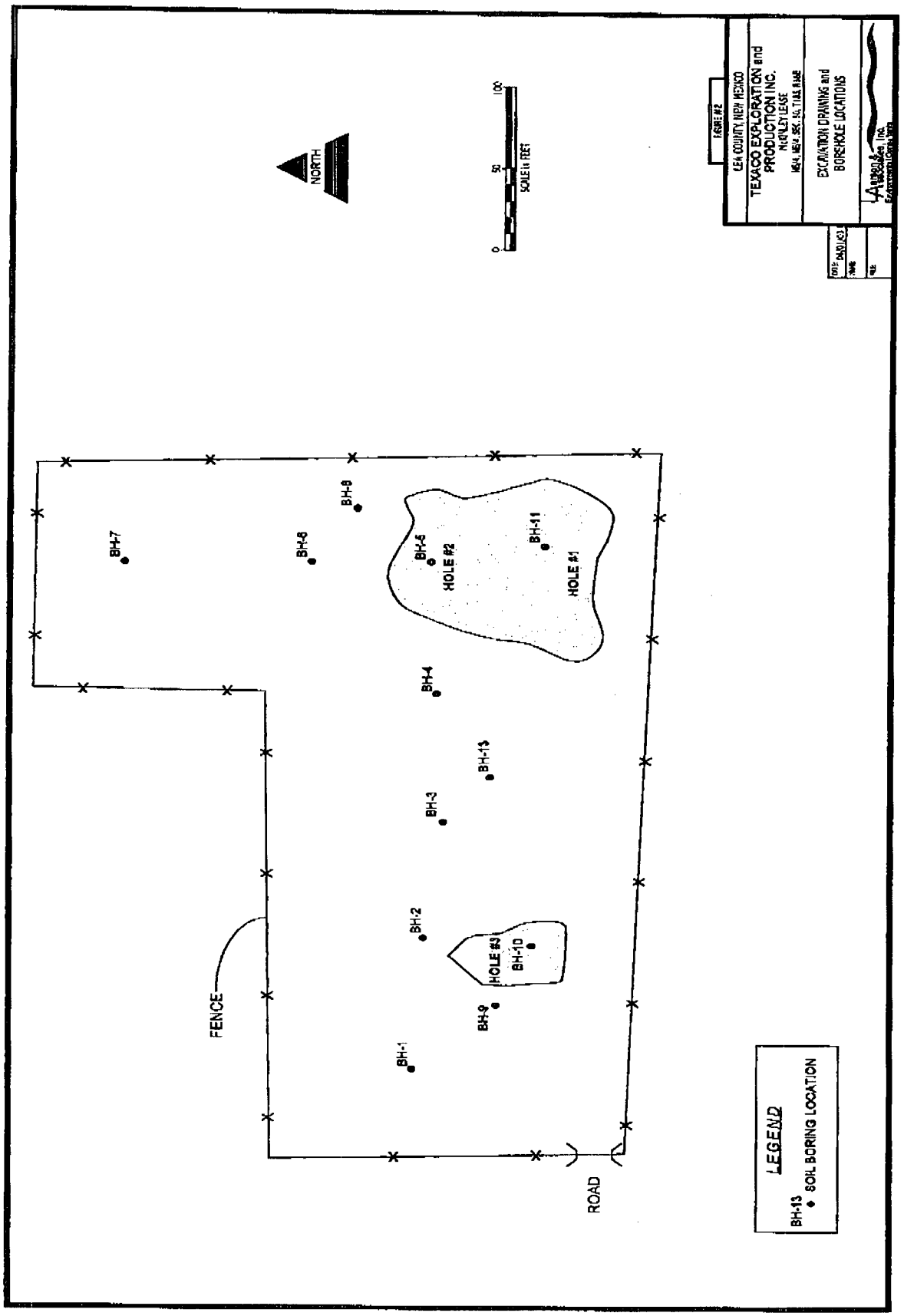
Table 2: Summary of Headspace and Laboratory Analysis of Soil Samples Following Excavation
Texaco Exploration and Production Inc., McKinley Lease
NE/4, NE/4, Section 30, Township 18 South, Range 38 East
Lea County, New Mexico

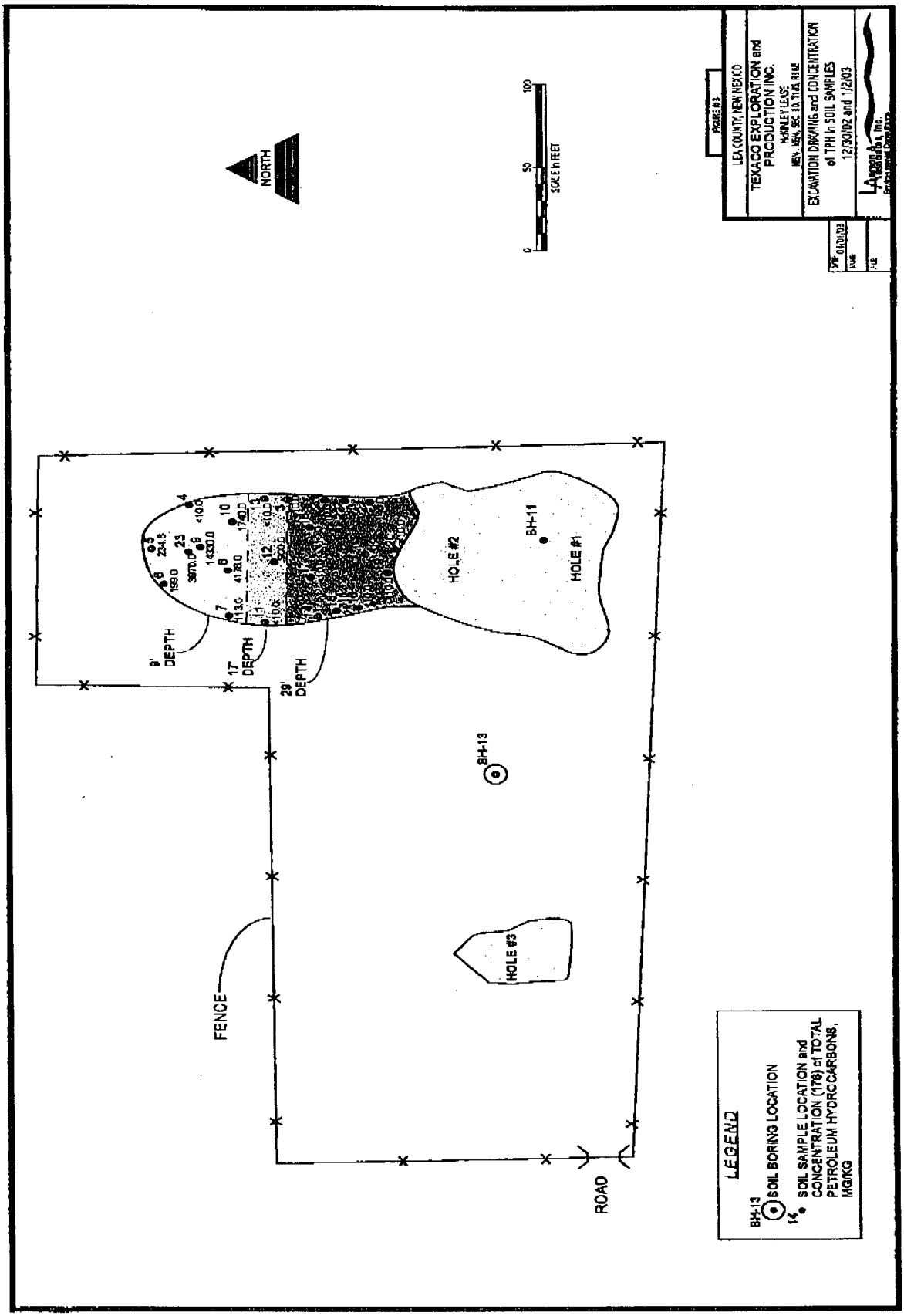
Sample Number	Location of Sample	Sample Date	Sample Depth (feet BGS)	PID (ppm)	Benzene mg/kg	Total BTEX mg/kg	GRO C6-C12 mg/kg	DRO >C12-C35 mg/kg	TPH (C6-C35) mg/kg	Chloride (mg/kg)
RRAL					10	50			100	250
SS-24	West Wall	02/07/03	10	1.2	—	—	<10.0	<10.0	<10.0	44.3
SS-25	West Wall	02/07/03	19	0.3	—	—	<10.0	<10.0	<10.0	324
SS-26	West Wall	02/07/03	7	1.7	—	—	<10.0	<10.0	<10.0	<20.0
SS-27	West Wall	02/07/03	7	1.5	—	—	<10.0	<10.0	<10.0	<20.0
SS-28	Bottom	02/07/03	20	1.3	—	—	<10.0	<10.0	<10.0	177
SS-29	Bottom	02/07/03	18	1.4	—	—	<10.0	<10.0	<10.0	<20.0
SS-30	Bottom	02/07/03	18	5.7	—	—	<10.0	85.1	85.1	88.6
SS-31	Bottom	02/07/03	15	3.8	—	—	<10.0	<10.0	<10.0	59.1
SS-32	North Wall	02/07/03	8	2.0	—	—	<10.0	430.0	430.0	103
SS-33	Bottom	02/07/03	11	16.3	—	—	<10.0	<10.0	<10.0	295
SS-34	East Wall	02/07/03	8	1.4	—	—	<10.0	159.0	159.0	59.1
SS-35	North Bottom	02/13/03	9.5	1.1	—	—	<10.0	<10.0	<10.0	73.8
SS-36	North Side	02/13/03	9	0.1	—	—	<10.0	<10.0	<10.0	88.6
SS-37	Northeast Side	02/13/03	9	0.1	—	—	<10.0	<10.0	<10.0	118
SS-38	East Wall	03/31/03	8	0.1	—	—	<10.0	<10.0	<10.0	—

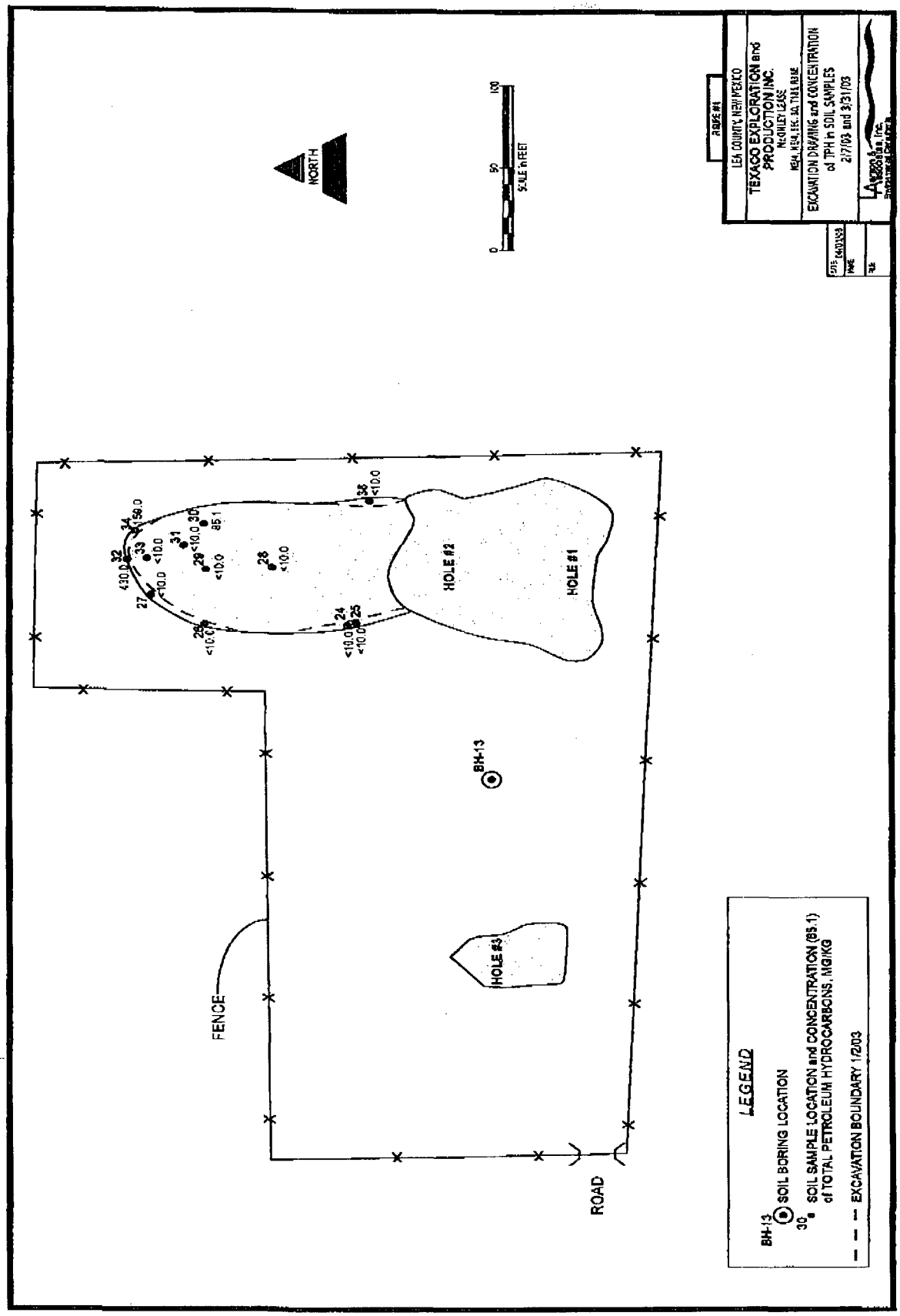
Notes: All analyses performed by Environmental Lab of Texas, Inc., Midland, Texas
1. BGS: Depth in feet below ground surface
2. PID: Photoionization detector
3. ppm: Parts per million
4. GRO: Gasoline-range organics
5. DRO: Diesel-range organics
6. TPH: Total petroleum hydrocarbons (Sum of GRO + DRO)
7. mg/kg: Milligrams per kilogram
8. —: No data available
9. <: Below method detection limit
10. RRAL: NMOCD Recommended Remediation Action Level

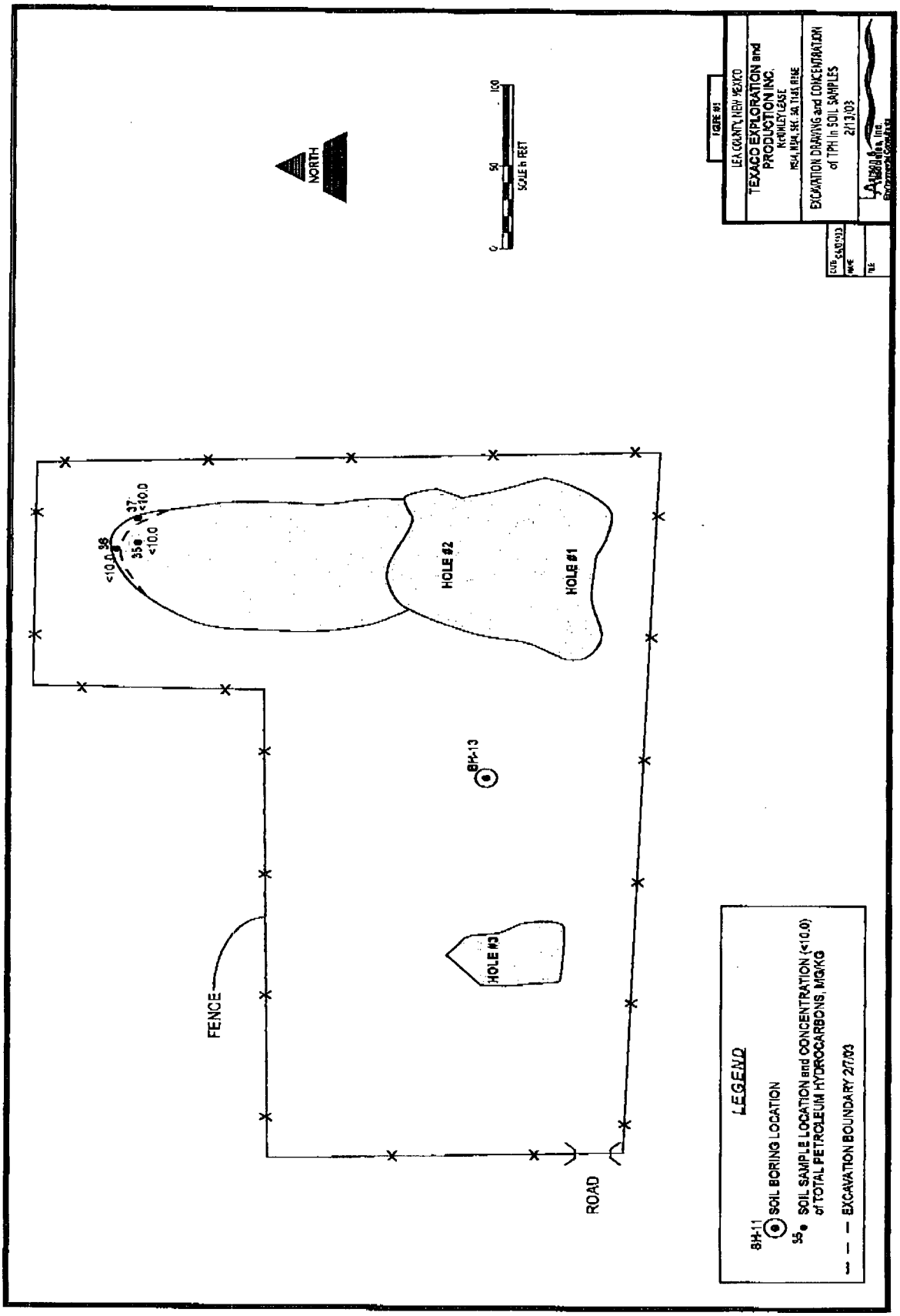
FIGURES


FORMER
TEXACO EXPLORATION and
PRODUCTION INC.
McKINLEY SITE
Gravel Pit
Well
Oil Well
T
18
S
HOBBS
OIL
Water Tanks
Trailer Park
Park Closed
R-37-E
R-38-E
TAKEN FROM U.S.G.S.
HOBBS WEST, N. MEX. 1979
7.5' QUADRANGLES
N
SCALE: 1"=2000'
FIGURE #1
LEA COUNTY, NEW MEXICO
TEXACO EXPLORATION and PRODUCTION, INC.
McKINLEY LEASE
NW/4, SE/4, SECTION 30, T18S, R38E
TOPOGRAPHIC MAP
DATE: 4/22/01
NAME:
FILE: 2-001
Larson & Associates, Inc.
Environmental Consultants


NORTH
SCALE in FEET
0
50
100
EXCAVATION DRAWING and BOREHOLE LOCATIONS
TEXACO EXPLORATION and PRODUCTION INC.
LEA COUNTY, NEW MEXICO
BH-1
BH-2
BH-3
BH-4
BH-5
BH-6
BH-7
BH-8
BH-9
BH-10
BH-11
BH-13
HOLE #1
HOLE #2
HOLE #3
FENCE
ROAD
LEGEND
BH-13
SOIL BORING LOCATION


NORTH
SCALE in FEET
0
50
100
FIGURE #3
LEA COUNTY, NEW MEXICO
TEXACO EXPLORATION and PRODUCTION INC.
MONUMENT LEASE
SEC. 15, T-19-S, R-36-E
EXCAVATION DRAWING and CONCENTRATION of TPH in SOIL SAMPLES
12/30/02 and 1/2/03
DATE 01/02/03
FILE
HOLE #1
HOLE #2
HOLE #3
BH-11
BH-13
8' DEPTH
17' DEPTH
29' DEPTH
FENCE
ROAD
LEGEND
BH-13
SOIL BORING LOCATION
14
SOIL SAMPLE LOCATION and CONCENTRATION (178) of TOTAL PETROLEUM HYDROCARBONS, MG/KG


NORTH
SCALE in FEET
0
50
100
LEA COUNTY, NEW MEXICO
TEXACO EXPLORATION and PRODUCTION INC.
McKINLEY LEASE
EXCAVATION DRAWING and CONCENTRATION of TPH in SOIL SAMPLES
2/7/03 and 3/31/03
HOLE #1
HOLE #2
HOLE #3
BH-13
FENCE
ROAD
LEGEND
BH-13 SOIL BORING LOCATION
30 SOIL SAMPLE LOCATION and CONCENTRATION (85.1) of TOTAL PETROLEUM HYDROCARBONS, MG/KG
EXCAVATION BOUNDARY 1/2/03


NORTH
0
50
100
SCALE in FEET
FIGURE #1
LEA COUNTY, NEW MEXICO
TEXACO EXPLORATION and PRODUCTION INC.
McKINLEY LEASE
EXCAVATION DRAWING and CONCENTRATION of TPH in SOIL SAMPLES
2/13/03
HOLE #1
HOLE #2
HOLE #3
<10.0
35
37
<10.0
<10.0
BH-13
FENCE
ROAD
LEGEND
BH-11
SOIL BORING LOCATION
55
SOIL SAMPLE LOCATION and CONCENTRATION (<10.0) of TOTAL PETROLEUM HYDROCARBONS, MG/KG
EXCAVATION BOUNDARY 2/7/03

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710
915-687-0456

Order#: G0305714
Project: 2-0100
Project Name: Texaco/ McKinley
Location: None Given

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0305714-01	SS-35 (9.5')	SOIL	2/13/03 11:35	2/13/03 16:55	4 oz glass	Ice
	Lab Testing: 8015M Chloride	**Rejected:** No		**Temp:** 4.5 C		
0305714-02	SS-36 (9')	SOIL	2/13/03 11:40	2/13/03 16:55	4 oz glass	Ice
	Lab Testing: 8015M Chloride	**Rejected:** No		**Temp:** 4.5 C		
0305714-03	SS-37 (9')	SOIL	2/13/03 11:45	2/13/03 16:55	4 oz glass	Ice
	Lab Testing: 8015M Chloride	**Rejected:** No		**Temp:** 4.5 C		

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0305714
Project: 2-0100
Project Name: Texaco/ McKinley
Location: None Given

Lab ID: 0305714-01
Sample ID: SS-35 (9.5')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		2/14/03	1	1	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	86%	70	130
1-Chlorooctadecane	84%	70	130

Lab ID: 0305714-02
Sample ID: SS-36 (9')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		2/14/03	1	1	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	97%	70	130
1-Chlorooctadecane	95%	70	130

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0305714
Project: 2-0100
Project Name: Texaco/ McKinley
Location: None Given

Lab ID: 0305714-03
Sample ID: SS-37 (9')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		2/14/03	1	1	RKT	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	96%	70	130
1-Chlorooctadecane	94%	70	130

Approval: Raland K. Tuttle 2-19-03
Raland K. Tuttle, Lab Director, QA Officer Date
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0305714
Project: 2-0100
Project Name: Texaco/ McKinley
Location: None Given

Lab ID: 0305714-01
Sample ID: SS-35 (9.5')

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	73.8	mg/kg	1	20.0	9253	2/14/03	CK

Lab ID: 0305714-02
Sample ID: SS-36 (9')

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	88.6	mg/kg	1	20.0	9253	2/14/03	CK

Lab ID: 0305714-03
Sample ID: SS-37 (9')

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	118	mg/kg	1	20.0	9253	2/14/03	CK

Approval: Raland K Tuttle 2-19-03
Raland K. Tuttle, Lab Director, QA Officer Date
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

RL = Reporting Limit N/A = Not Applicable

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0305714

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0004668-02			<10.0		
MS SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0305714-02	0	1070.05	792	74.%	
MSD SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0305714-02	792	1070.05	813	76.%	2.6%
SRM SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0004668-05		1000	800	80.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0305714

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0004640-01			<20.0		
MS SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0305697-01	3540	5000	8510	99.4%	
MSD SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0305697-01	3540	5000	8600	101.2%	1.1%
SRM SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0004640-04		5000	5230	104.6%	

CHAIN—OF—CUSTODY RECORD

Larson & Associates, Inc.
Environmental Consultants
Fax: 915-687-0456
915-687-0901
507 N. Marienfeld, Ste. 202 • Midland, TX 79701

CLIENT NAME: Texaco

SITE MANAGER: Cindy Crain

PROJECT NO.: 2-0100

PROJECT NAME: McKinley

PAGE 1 OF 1

LAB. PO #

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	PARAMETERS/METHOD NUMBER: TPH 8015M	PARAMETERS/METHOD NUMBER: Chloride	LAB. I.D. NUMBER (LAB USE ONLY)	REMARKS (I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB COMPOSITE)
2/13/03	1135		✓		SS-35 (9.5')	1	✓	✓	C305714-01	
"	1140		✓		SS-36 (9')	1	✓	✓	02	
"	1145		✓		SS-37 (9')	1	✓	✓	03	

SAMPLED BY: (Signature) Cindy Crain — DATE: 2/13/03 TIME: 1150

RELINQUISHED BY: (Signature) — DATE: ____ TIME: ____

RECEIVED BY: (Signature) — DATE: ____ TIME: ____

RELINQUISHED BY: (Signature) Cindy Crain — DATE: 2/13/03 TIME: 1655

RECEIVED BY: (Signature) — DATE: ____ TIME: ____

SAMPLE SHIPPED BY: (Circle)
FEDEX BUS AIRBILL #: ____
HAND DELIVERED UPS OTHER: ____

COMMENTS:

TURNAROUND TIME NEEDED

WHITE – RECEIVING LAB
YELLOW – RECEIVING LAB (TO BE RETURNED TO LA AFTER RECEIPT)
PINK – PROJECT MANAGER
GOLD – QA/QC COORDINATOR

RECEIVING LABORATORY: Env. Lab of TX
ADDRESS: 12600 W I-20 E
CITY: Odessa STATE: Tx ZIP: 79765
CONTACT: PHONE:

RECEIVED BY: (Signature) Jeanne McMurrey
DATE: 2-13-3 TIME: 1655

SAMPLE CONDITION WHEN RECEIVED: 4.5°C

LA CONTACT PERSON: Cindy Crain

SAMPLE TYPE: Soil

ANALYTICAL REPORT

Prepared for:

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Project:	Texaco/ McKinley
PO#:	
Order#:	G0306129
Report Date:	04/02/2003

Certificates
US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710
915-687-0456

Order#: G0306129
Project: 0-0100
Project Name: Texaco/ McKinley
Location: None Given

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0306129-01	SS-38 (8.5')	SOIL	3/31/03 10:55	3/31/03 16:50	4 oz glass	Ice

Lab Testing:
8015M

Rejected: No **Temp:** 6 C

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#:	G0306129
Project:	0-0100
Project Name:	Texaco/ McKinley
Location:	None Given

Lab ID: 0306129-01
Sample ID: SS-38 (8.5')

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		4/1/03	1	1	WL	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	102%	70	130
1-Chlorooctadecane	97%	70	130

Approval: Raland K Tuttle 4-02-03
Raland K. Tuttle, Lab Director, QA Officer — Date
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0306129

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0005102-02			<10.0		
MS SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0306116-01	0	952	898	94.3%	
MSD SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0306116-01	0	952	923	97.%	2.7%
SRM SOIL	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
TOTAL, C6-C35-mg/kg	0005102-05		1000	907	90.7%	

CHAIN—OF—CUSTODY RECORD

LA arson & Associates, Inc.
Environmental Consultants
Fax: 915-687-0456
915-687-0901
507 N. Marienfeld, Ste. 202 • Midland, TX 79701

CLIENT NAME: Texaco

SITE MANAGER: Cindy Crain

PROJECT NO.: 0-0100

PROJECT NAME: McKinley

PAGE 1 OF 1

LAB. PO #

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	PARAMETERS/METHOD NUMBER: TPH 8015M	LAB. I.D. NUMBER (LAB USE ONLY)	REMARKS (I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB COMPOSITE)
3/31/03	1055		✓		SS-38 (8.5')	1	✓	0306129-01	

SAMPLED BY: (Signature) Cindy Crain
DATE: 3/31/03
TIME: 1055

RELINQUISHED BY: (Signature) Cindy Crain
DATE: 3/31/03
TIME: 1450

RELINQUISHED BY: (Signature)
DATE:
TIME:

RECEIVED BY: (Signature)
DATE:
TIME:

RECEIVED BY: (Signature)
DATE:
TIME:

SAMPLE SHIPPED BY: (Circle)
FEDEX BUS AIRBILL #:
HAND DELIVERED UPS OTHER:

COMMENTS: 6C.

TURNAROUND TIME NEEDED

WHITE – RECEIVING LAB
YELLOW – RECEIVING LAB (TO BE RETURNED TO LA AFTER RECEIPT)
PINK – PROJECT MANAGER
GOLD – QA/QC COORDINATOR

RECEIVING LABORATORY: ECOT
ADDRESS:
CITY: STATE: ZIP:
CONTACT: PHONE:

RECEIVED BY: (Signature)
DATE: 3-31-03 TIME: 1650

SAMPLE CONDITION WHEN RECEIVED:

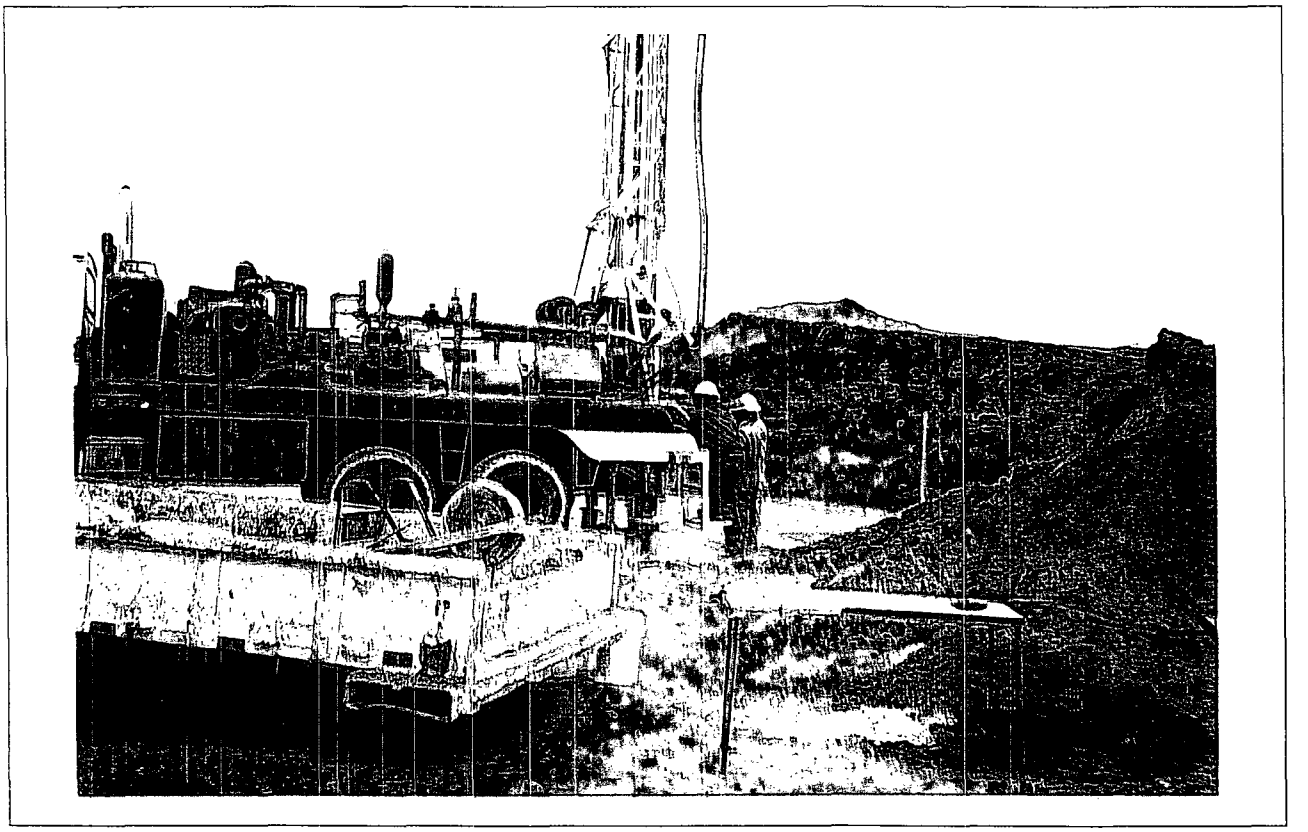
LA CONTACT PERSON:

SAMPLE TYPE: Soil

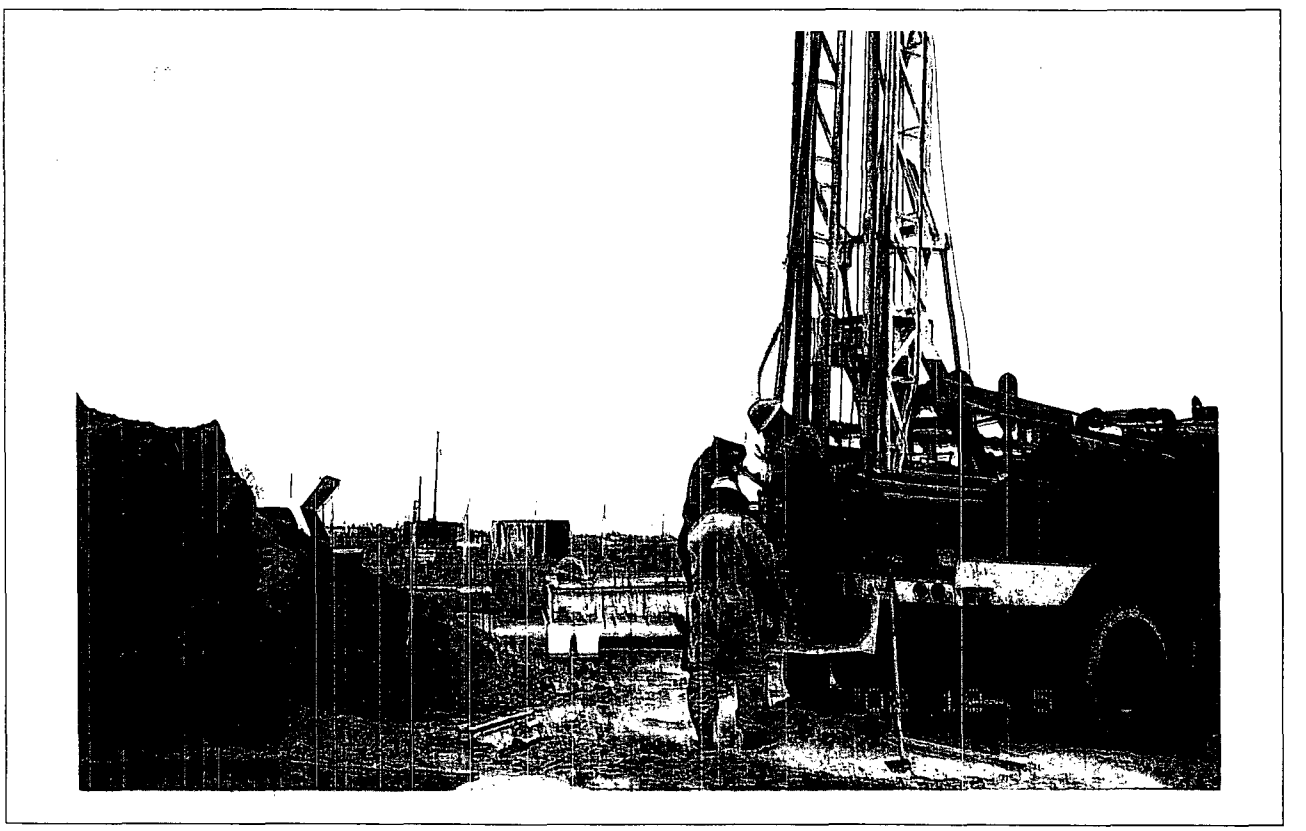
APPENDIX D

PHOTOGRAPHS

TEXACO EXPLORATION AND PRODUCTION, INC.
M[C]KINLEY LEASE, LEA COUNTY, NEW MEXICO
PHOTOGRAPHS

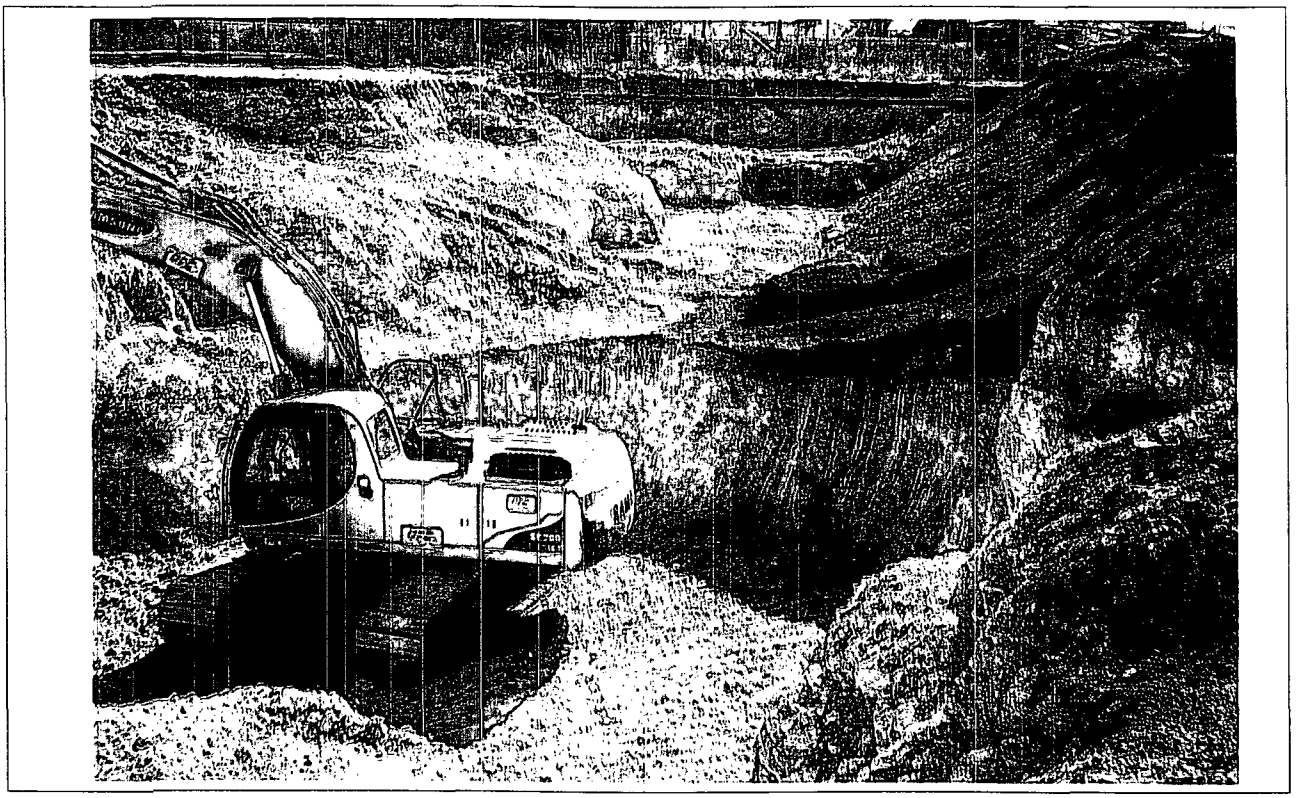


1. View to north. Installation of soil boring BH-13. Stockpiled soil to right in photo.



2. View to south. Installation of soil boring BH-13. Stockpiled soil to left in photo.

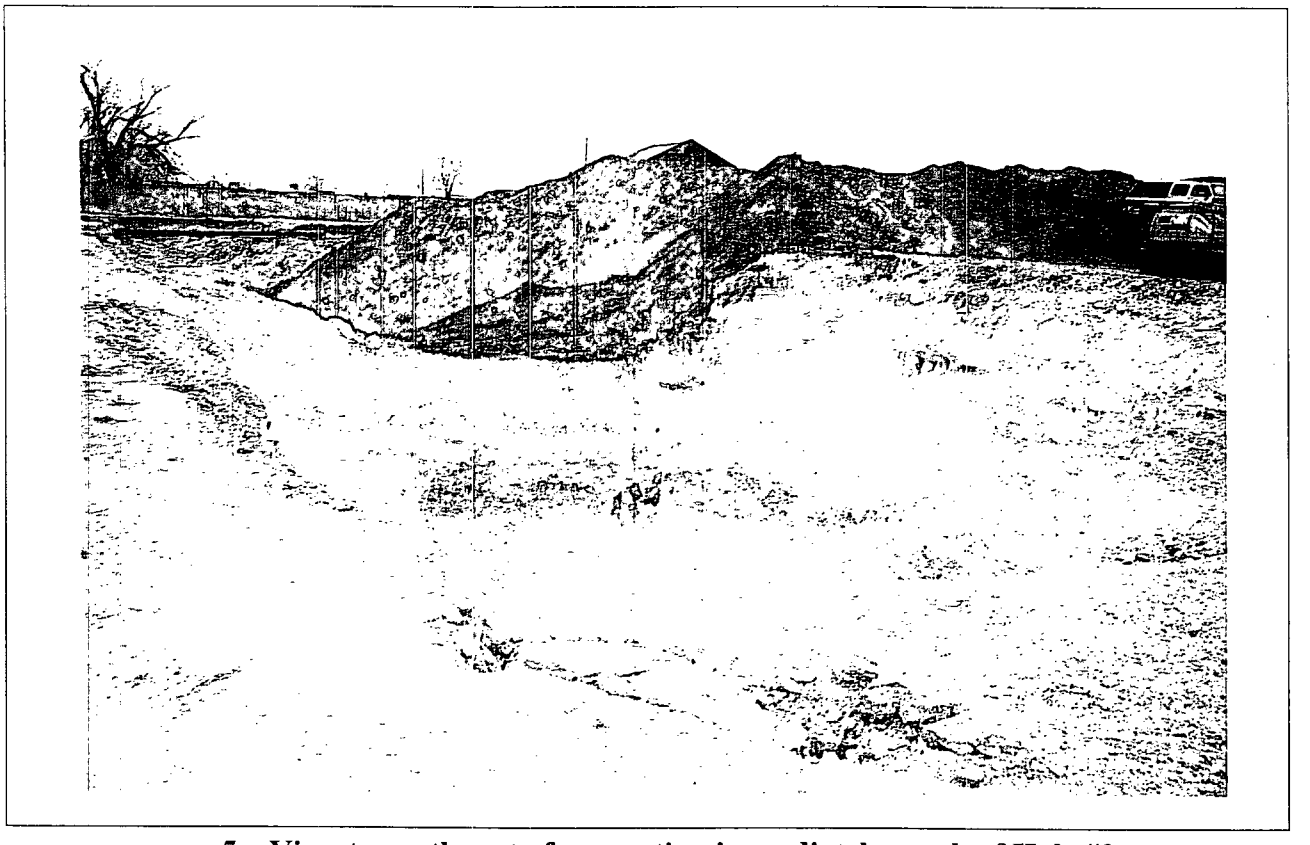
TEXACO EXPLORATION AND PRODUCTION, INC.
M[C]KINLEY LEASE, LEA COUNTY, NEW MEXICO
PHOTOGRAPHS



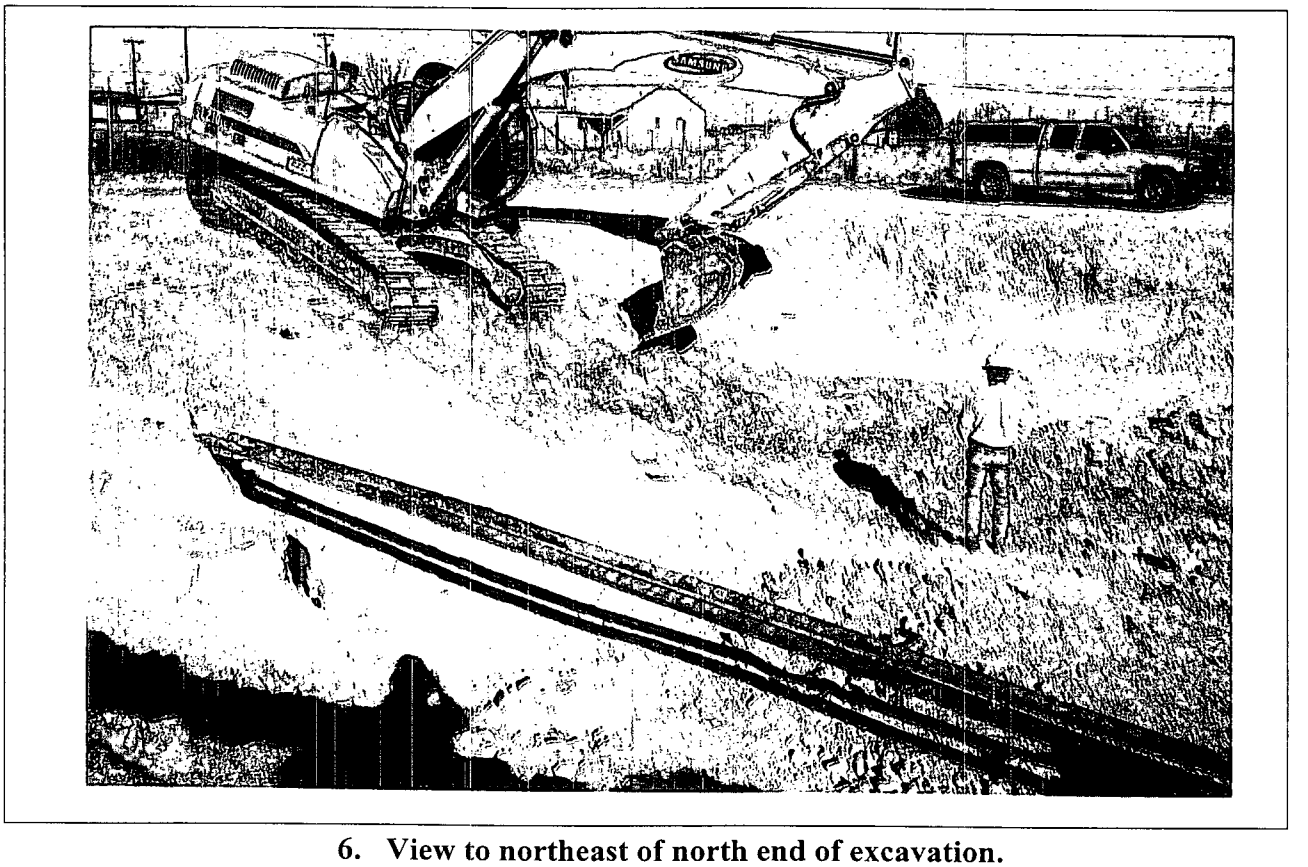
3. View to south of excavation immediately north of Hole #2.

4. View to southwest of excavation immediately north of Hole #2.

TEXACO EXPLORATION AND PRODUCTION, INC.
M^{C}KINLEY LEASE, LEA COUNTY, NEW MEXICO
PHOTOGRAPHS

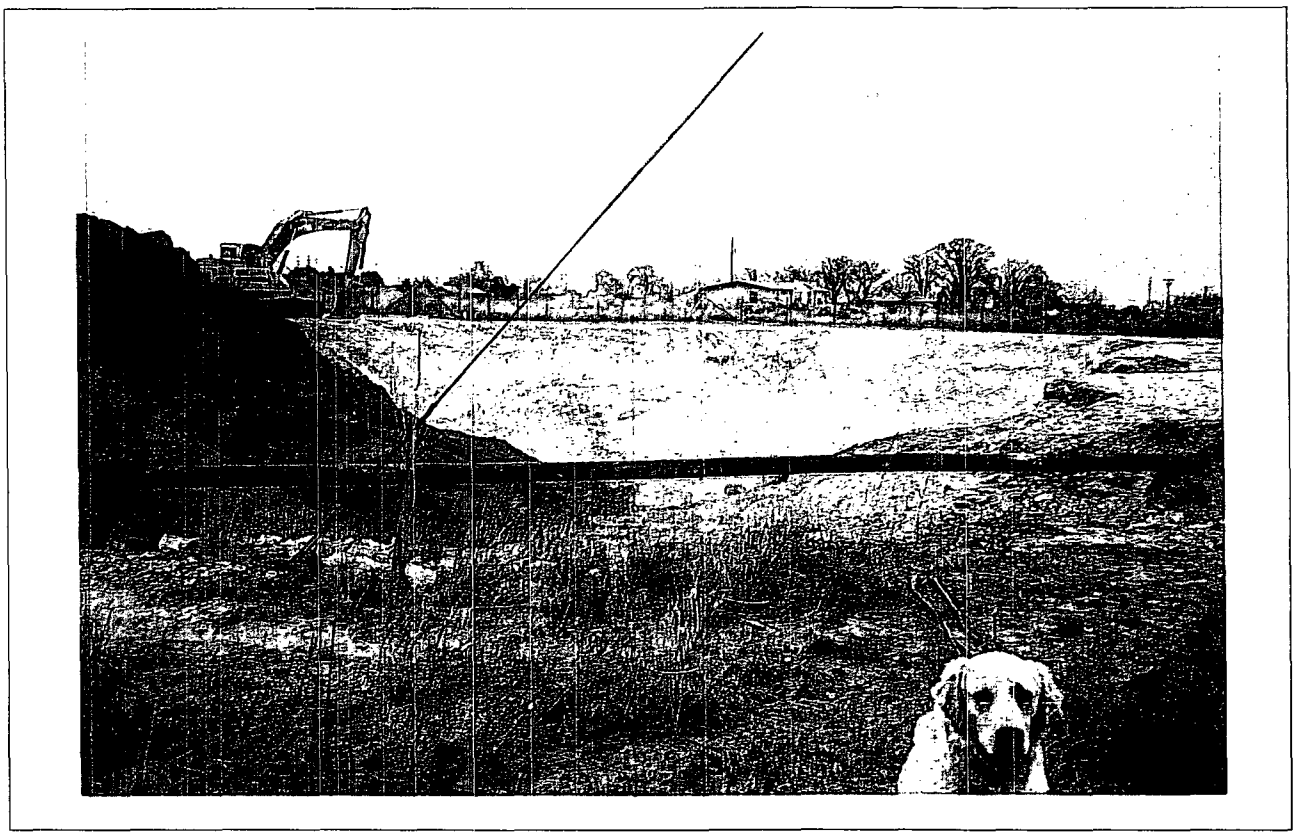


5. View to southwest of excavation immediately north of Hole #2.

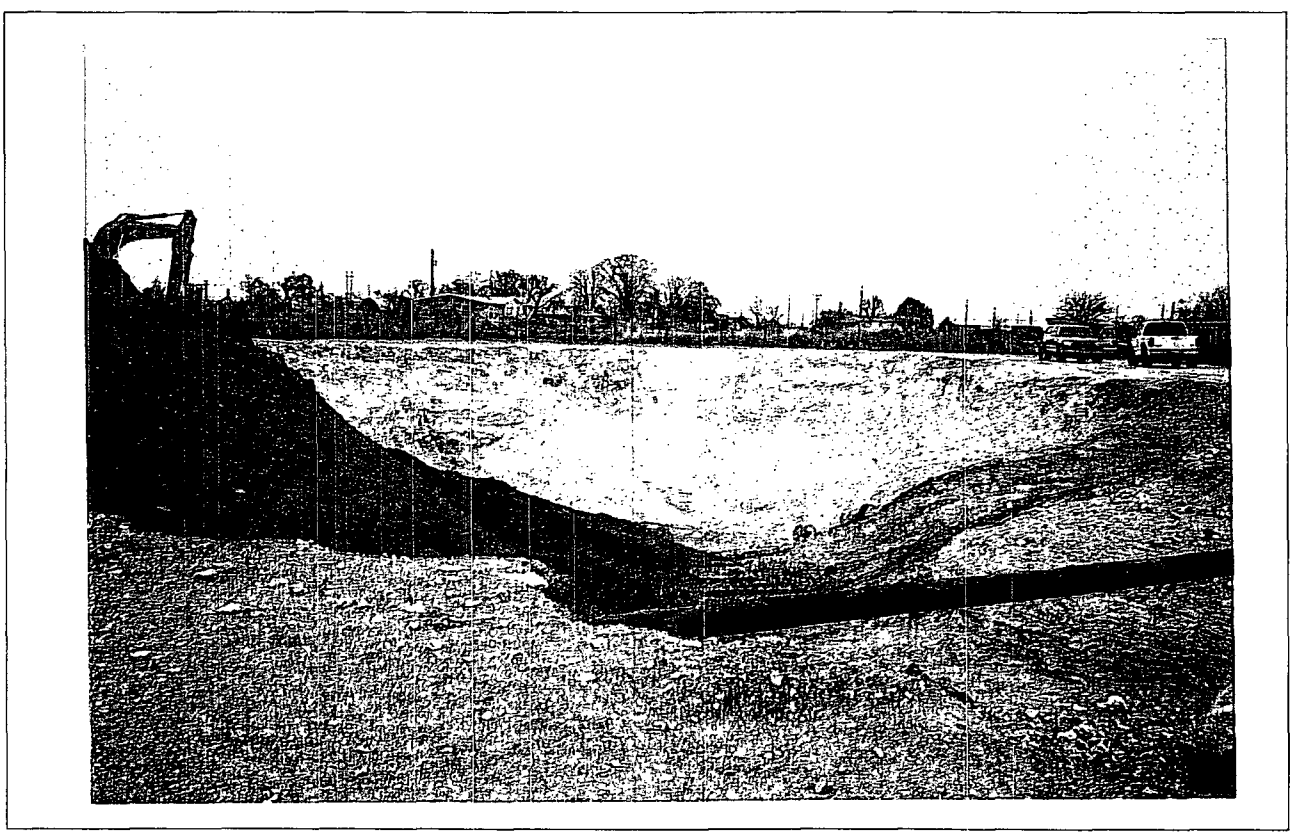


6. View to northeast of north end of excavation.

TEXACO EXPLORATION AND PRODUCTION, INC.
M^{C}KINLEY LEASE, LEA COUNTY, NEW MEXICO
PHOTOGRAPHS



7. View to north of Hole #1 and Hole #2 extended to the north.



8. View to north of Hole #1 and Hole #2 extended to the north.