

1R - 293

REPORTS

DATE:

2002



RECEIVED

June 11, 2002

AUG 27 2002

VIA FACSIMILE: (505) 393-0720

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

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

Re: Final Remediation Report, Former McKinley Lease Production Facility, Unit Letter A (NE/4, NE/4), Section 30, Township 18 South, Range 38 East, Lea County, New Mexico

Dear Mr. Sheeley:

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) that it once operated on the McKinley Lease in the northeast quarter (NE/4) of the northeast quarter (Unit Letter A), Section 30, Township 18 South, Range 38 East, Lea County, New Mexico. 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). Figure 1 presents a location and topographic map.

Background

In October 1999, Mr. Hugh L. (Jim) Davis requested Texaco to perform an investigation to determine if soil at the Site had been affected from the former production facility. Between October 19 and 22, 1999, e (12) borings (BH-1 through BH-12) were drilled at the Site to approximately 30 feet below ground surface (BGS) using a truck-mounted air rotary rig. A split-spoon sampler was used to collect soil samples that were field screened for organic contaminants using a photoionization detector (PID) in accordance with NMOCD procedures ("Guidelines for Remediation of Leaks, Spills and Releases, August 13, 1993"). The soil samples that exhibited headspace readings above 100 parts per million (ppm) were analyzed for benzene, toluene, ethylbenzene and xylenes (collectively referred to as BTEX) using EPA method SW-846-8021B. Method SW-846-8015B was used to analyze the sample that exhibited the highest contaminant level, based on the field screening measurements, as well as the deepest sample from each boring, and included gasoline range organics (GRO) and diesel range organics (DRO). The samples were also analyzed for chloride. Three (3) locations (BH-5, BH-10 and BH-11) reported TPH and BTEX in soil samples above the test method detection limits. No benzene and total BTEX concentrations exceeded the NMOCD RRAL of 10 mg/kg and 50 mg/kg, respectively. The highest chloride value (270 mg/kg) was reported in the sample from boring BH-8, 5 to 6 feet BGS. The laboratory analyses and a drawing showing the locations of the borings were included as attachments to the remediation work plan that was submitted to the NMOCD.

An agreement between Texaco, and the estate of Flo Davis, stated that Texaco would excavate soil from the three (3) locations (BH-5, BH-10 and BH-11) where TPH levels exceeded the RRAL (100 mg/kg).

Mr. Paul R. Sheeley
June 11, 2002
Page 2

Remediation Activities

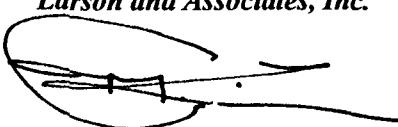
Environmental Plus, Inc. (EPI) was retained to excavate soil from the three areas (BH-5, BH-10 and BH-11) where TPH exceeded the RRAL. On January 31, 2002, remediation activities began at location BH-11 (Hole #1), progressing to location BH-5 (Hole #2) and location BH-10 (Hole #3). Soil was excavated from the areas until laboratory analysis of soil samples from the sides and bottom of the excavations reported TPH values below 100 mg/kg. Hole #1 and Hole #2 were joined together as the excavations extended south and east. Several out-of-service pipelines that belong to Shell Pipeline Company, Duke Energy Field Services and Rice Engineering were encountered near the southeast corner of Hole #1. Evidence of pipeline repairs suggested that leaks may have occurred from the pipelines. The area where pipelines had been made was excavated to remove impacted soil. The area around locations BH-5 and BH-11 (Hole #1 and Hole #2) was excavated to about 27 feet BGS. The final excavation measured approximately 100 x 100 feet. The contaminated soil was transported to Texaco's centralized waste management facility (landfarm) located northwest of Jal, New Mexico. The final soil samples from the bottom and sides of the excavations reported TPH (DRO and GRO) levels below 100 mg/kg. The sample results are presented in bold type on Table 1. Figure 2 presents a Site drawing showing the excavations, sample locations, and TPH concentrations. Appendix A presents the laboratory reports. Appendix B presents photographs of the Site.

Location BH-10 (Hole #3) was excavated to approximately 27 feet BGS, and the excavation measured approximately 40 x 65 feet. The concentrations of TPH in the final samples from the sides of the excavation were below 100 mg/kg. The TPH concentration in soil samples from the bottom of the excavation were from 126 to 184 mg/kg. Figure 2 presents a Site drawing showing the location of excavation #3, soil samples, and TPH concentrations. The sample results are presented in bold type on Table 1. Appendix A presents the laboratory reports. Appendix B presents photographs of the Site.

Approximately 7,288 cubic yards of contaminated soil was transferred to Texaco's landfarm. Clean soil was transported to the Site, and has been stockpiled. Texaco requests the NMOCD allow it to fill the excavations, and provide a closure letter for the Site. Please call Mr. Robert Patterson with ChevronTexaco at (915) 687-7100 or myself at (915) 687-0901 if you have questions.

Sincerely,

Larson and Associates, Inc.



Mark J. Larson, CPG, CGWP
President

Encl.

cc: Robert Patterson

TABLES

Table 1:

Summary of BTEX and TPH Analyses of Soil Samples
 Texaco Exploration and Production Inc., McKinley Lease
 Lea County, New Mexico

Page 1 of 3

Area (Excavation)	Sample Date	Sample Number	Location	DRO mg/kg	GRO mg/kg	TPH mg/kg	Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Xylene mg/kg	Total BTEX mg/kg
1	31-Jan-02	1	Bottom West	<10 <10	44 1590	44 1924	-- <10	-- --	-- --	-- --	-- --
		2	East	334							
		3	North	<10	30	30	--	--	--	--	--
		4	South	192	958	1150	--	--	--	--	--
		5	South	<10	186	186	--	--	--	--	--
06-Feb-02	6	East	124	905	1029	--	--	--	--	--	--
	7	South-West End	<10	92	92	--	--	--	--	--	--
26-Feb-02	8	South-East End	2460	6590	9050	--	--	--	--	--	--
	9	East End	<50	279	279	--	--	--	--	--	--
	10	North-East End	650	2810	3460	--	--	--	--	--	--
	11	Bottom-East End	1410	4930	6340	--	--	--	--	--	--
06-Mar-02	12	North-East End	100	684	784	--	--	--	--	--	--
	13	Bottom-East End	69	549	618	--	--	--	--	--	--
	14	East End	111	476	587	--	--	--	--	--	--
	15	South-East End	408	1560	1968	--	--	--	--	--	--
	16	Bench-East End	<10	39	39	--	--	--	--	--	--
	17	North-East End	<10	<10	<20	--	--	--	--	--	--
06-May-02	56	East End	37.8	<10	37.8	--	--	--	--	--	--
	57	South-East End	47.1	<10	47.1	--	--	--	--	--	--
	58	Southwest-Bottom	<10	<10	<20	--	--	--	--	--	--
10-May-02	59	Southeast-Bottom	<10	<10	<20	--	--	--	--	--	--
	60										

Notes:

1. mg/kg: Milligrams kilogram
2. <: Less than t method
3. ...: No data available

Table 1:
Summary of BTX and TPH Analysis of Soil Samples
Texaco Exploration and Production, Inc., Fuller Gas Plant
Scurry County, Texas

Location (Excavation)	Sample Date	Sample Number	Location	GRO mg/kg	DRO mg/kg	TPH mg/kg	Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Xylene mg/kg	Total BTX mg/kg
2	06-Feb-02	18	East	<10	33	33	--	--	--	--	--
		19	Bottom-East	<50	245	245	--	--	--	--	--
		20	South	<100	529	529	--	--	--	--	--
		21	West	<100	12700	12700	--	--	--	--	--
		22	West-Bottom	<100	3250	3250	--	--	--	--	--
	12-Feb-02	23	North	<10	25	25	--	--	--	--	--
		24	Northwest	<100	672	672	--	--	--	--	--
		25	West	<10	974	974	--	--	--	--	--
		26	Bottom-Southwest	286	2380	2666	--	--	--	--	--
		27	Southwest	1830	5760	7590	--	--	--	--	--
28	26-Feb-02	28	Northwest	<10	<10	<20	--	--	--	--	--
		29	Bottom-East	<50	1090	1090	--	--	--	--	--
		30	Bottom-East	<10	85.6	85.6	--	--	--	--	--
		31	West	333	5300	5633	--	--	--	--	--
		32	West-Southwest	<10	31.6	31.6	--	--	--	--	--
	06-Mar-02	33	End-Southwest	<10	17.4	17.4	--	--	--	--	--
		34	Bottom-Southwest	24.1	133	157.1	--	--	--	--	--
		35	East-Southwest	113	501	614	--	--	--	--	--
		36	West	962	4770	5732	--	--	--	--	--
		37	Bottom-Southwest	28	309	337	--	--	--	--	--
38	11-Mar-02		East-Southwest	1610	3100	4710	--	--	--	--	--
		39	West-North	354	3380	3734	--	--	--	--	--
		40	West	<10	68.5	68.5	--	--	--	--	--

Notes:

1. mg/kg: Milligrams kilogram
2. <: Less than t_c method
3. --: No data available

Table 1:
Summary of BTX and TPH Analysis of Soil Samples
Texaco Exploration and Production Inc., McKinley Lease

Lea County, New Mexico

Area (Excavation)	Sample Date	Sample Number	Location	GRO mg/kg	DRO mg/kg	TPH mg/kg	Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Xylene mg/kg	Total BTX mg/kg
(Cont.)	21-Mar-02	41	West-Southwest	<10	<10	<20	--	--	--	--	--
	28-Mar-02	42	East	<10	<10	<20	--	--	--	--	--
		43	Bottom-Northeast	<10	<10	<20	--	--	--	--	--
		44	Northwest	<10	<10	<20	--	--	--	--	--
3	06-Feb-02	45	North	916	4010	4926	<0.025	0.220	1.44	6.164	7.824
		46	East	<10	67	67	--	--	--	--	--
	06-Feb-02	47	South	70	524	594	--	--	--	--	--
		48	West	435	1960	2395	--	--	--	--	--
		49	Bottom	1090	2710	3800	--	--	--	--	--
	12-Feb-02	50	North	<10	75	75	--	--	--	--	--
		51	South	<10	<10	<20	--	--	--	--	--
		52	West	<10	<10	<20	--	--	--	--	--
		53	Bottom	<10	126	126	--	--	--	--	--
	26-Feb-02	54	Bottom	<10	184	184	167	167	--	--	--
	06-Mar-02	55	Bottom	<10	154	154	--	--	--	--	--

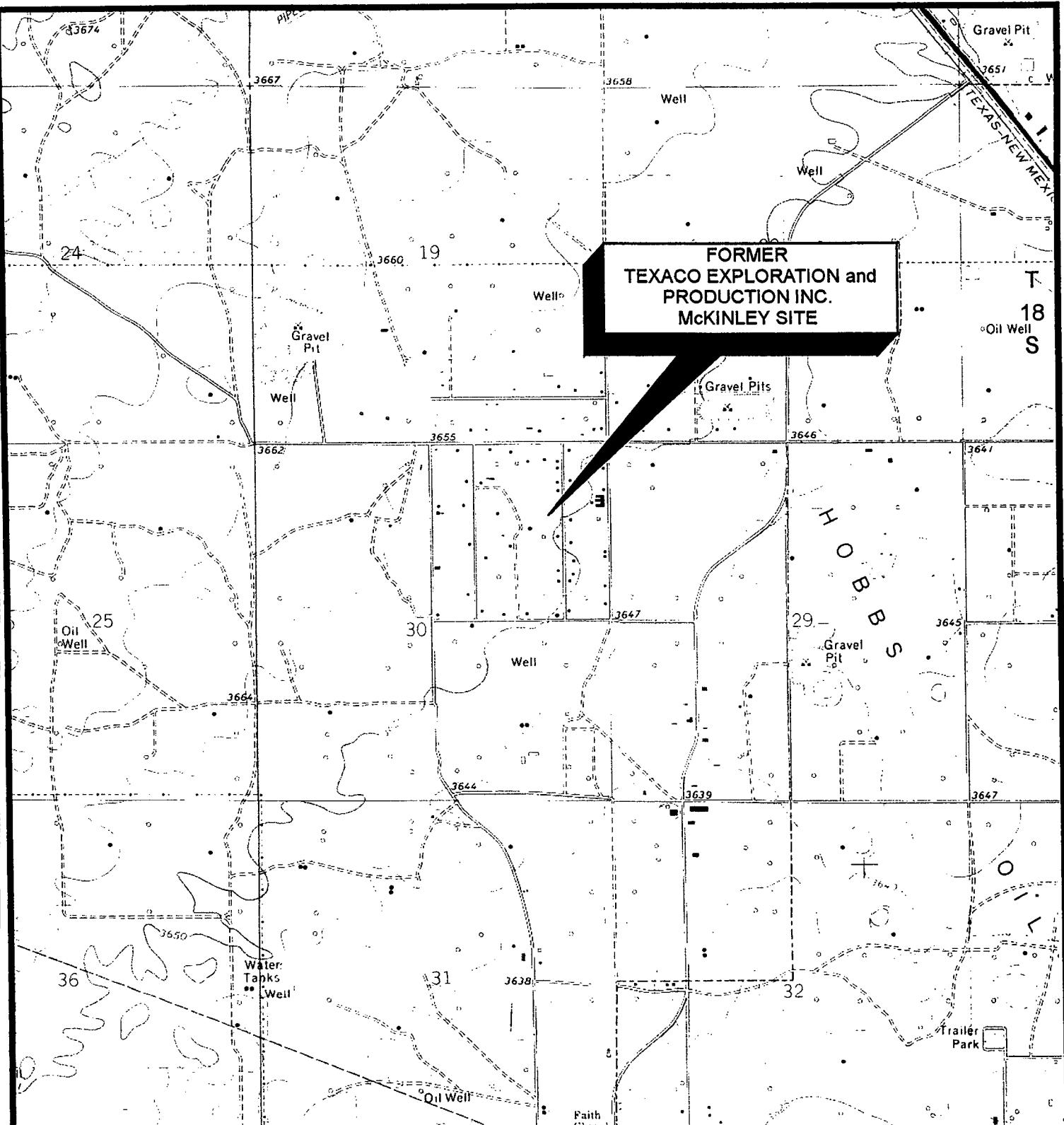
Notes:

1. mg/kg: Milligrams kilogram

2. <: Less than t method

3. --: No data available

FIGURES



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



SCALE: 1"=2000'

FIGURE #1

LEA COUNTY, NEW MEXICO

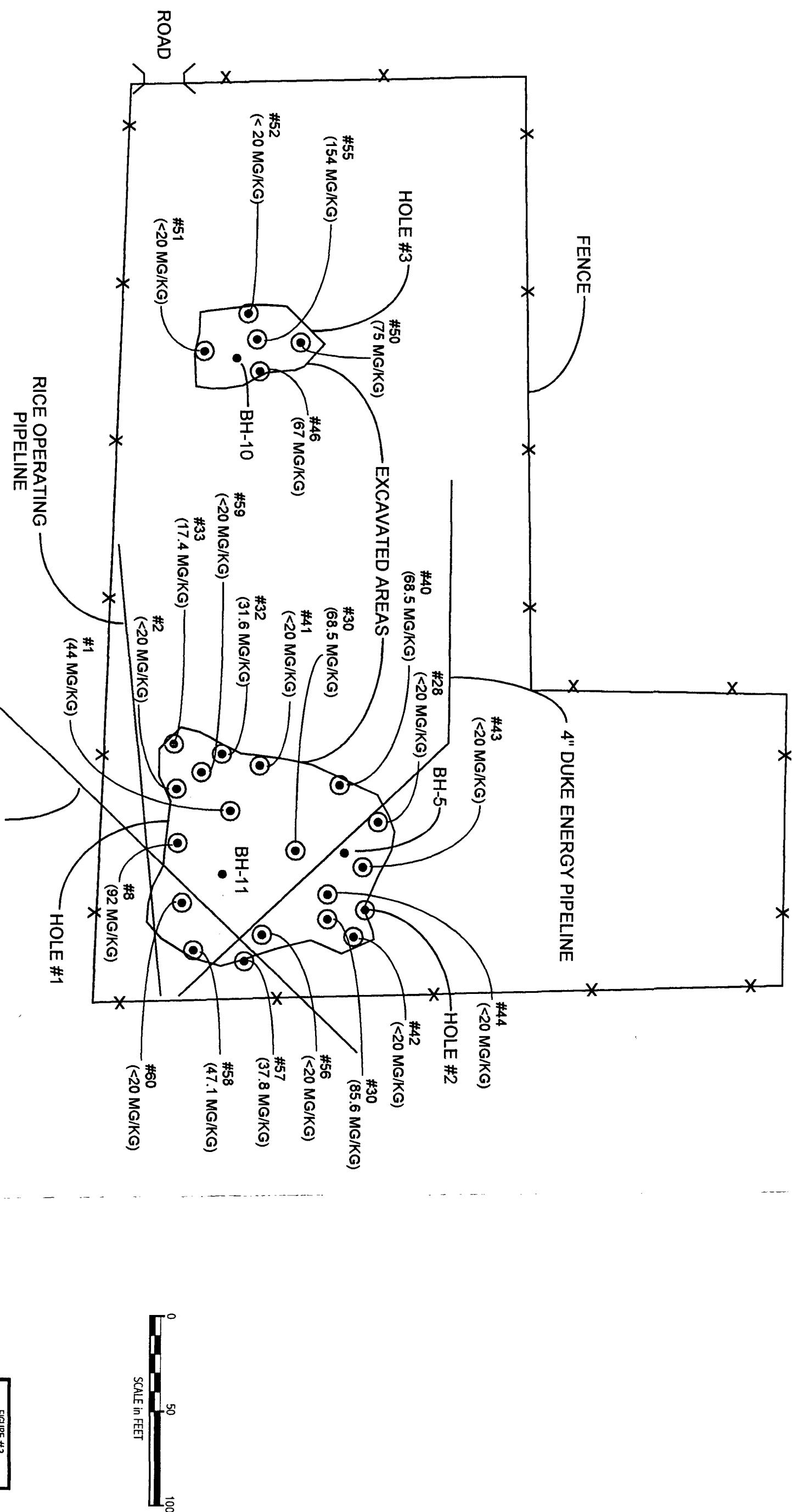
TEXACO EXPLORATION and PRODUCTION INC.

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

TOPOGRAPHIC MAP

DATE	4/22/01
NAME	
FILE	2-001

Larson & Associates, Inc.
Environmental Consultants



BH-1₁
• SOIL BORING LOCATION (APRIL 1999)
#60
○ SOIL SAMPLE LOCATION and CONCEN
(220 MG/KG) TOTAL PETROLEUM HYDROCARBONS

BH-11
● SOIL BORING LOCATION (APRIL 1999)
#60
○ SOIL SAMPLE LOCATION and CONCENTRATION of
(220 MG/KG) TOTAL PETROLEUM HYDROCARBONS, MG/KG

DATE:
04/11/01

PRODUCTION INC.	
MCKINLEY LEASE	
NE4, NE4, SEC. 30, T18S, R38E	
DATE:	04/11/01
NAME:	
FILE:	
EXCAVATION DRAWING and CONCENTRATION of TPH in SOIL SAMPLES	
<p>Assocation & Associates, Inc. Environmental Consultants</p>	

APPENDIX A

Laboratory Reports

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

LARSON & ASSOCIATES
ATTN: MARK LARSON
507 NORTH MARIENFELD, STE. #202
MIDLAND, TEXAS 79701
FAX: 687-0456

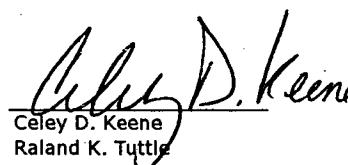
Sample Type: Soil
Sample Condition: Intact/ Iced/ 2.5 deg C
Project Name: Texaco-McKinley
Project #: 2-0100
Project Location: Lea County, NM

Sampling Date: 01/31/02
Receiving Date: 01/31/02
Analysis Date: 01/31/02

ELT#	FIELD CODE	GRO	DRO
		C6-C10 mg/kg	>C10-C28 mg/kg
0202519-01	Hole #1, Bottom	<10	44
0202519-02	Hole #1, West	<10	<10
0202519-03	Hole #1, East	334	1590
0202519-04	Hole #1, North	<10	30
0202519-05	Hole #1, South	192	958

QUALITY CONTROL	557	602
TRUE VALUE	500	500
% INSTRUMENT ACCURACY	111	120
SPIKED AMOUNT	476	476
ORIGINAL SAMPLE	<10	299
SPIKE	621	818
SPIKE DUP	680	830
% EXTRACTION ACCURACY	130	109
BLANK	<10	<10
RPD	9.07	1.46

Methods: SW 846-8015M

 02/01/02
Celey D. Keene Date
Raland K. Tuttle

Environmental Lab of Texas, Inc.

12600 West 120 East
Odessa, Texas 79763

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Phone: 915-563-1800
Fax: 915-563-1713

Project Manager: Mark Lanza
 Company Name: Lanza and Associates, Inc.
 Company Address: 507 H. Main Street, # 202
 City/State/Zip: Midland, TX 79701
 Telephone No: (915) 687-0701
 Sampler Signature: [Signature]

Fax No: (915) 687-0456

Project Name: Texas - MC Kinley
 Project #: 2-0100

Project Loc: Lea County, NM
 PO #: _____

Sampler Signature:

LAB# (Lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Other (Specify)	Soil	Analyze For:			RUSH TAT (Pre-Schedule)	Standard TAT	
							TCLP:	TOTAL:	Volatile			Semivolatiles
1222574	Hole #1, Bottom	1/3/02	11:15	1	>	>	>	>	>	>	>	
02	West	"	"	1	>	>	>	>	>	>	>	
03	East	"	"	1	>	>	>	>	>	>	>	
04	North	"	"	1	>	>	>	>	>	>	>	
05	South	"	"	1	>	>	>	>	>	>	>	
Preservative											Special Instructions:	
HCl											Sample Changes/Defect?	
HNO ₃											Temperature Upon Receipt	
NaOH											Storage/Comments	
H ₂ SO ₄											<u>N</u>	
None											<u>S</u>	
Water											<u>C</u>	
Sludge											<u>S</u>	
Other (Specify):												
TDS / CL / SAR / EC												
TPH 418.1												
TPH TX 1005/1006												
TPH 8015M GRO/DRO												
Metals: As Ag Ba Cd Cr Pb Hg Se												
BTX 8021B/5030												
Volatile												
Semivolatiles												
Metals: As Ag Ba Cd Cr Pb Hg Se												
TPH 8015M GRO/DRO												
TOTAL:												
Analyze For:												
RUSH TAT (Pre-Schedule)												
Standard TAT												
Date											Date	Date
Time											Time	Time
Received by:											Received by:	Received by:
Date											Date	Date
Time											Time	Time
Relinquished by:											Relinquished by:	Relinquished by:
Date											Date	Date
Time											Time	Time
Signature											Signature	Signature
Title											Title	Title
Comments											Comments	Comments

ENVIRONMENTAL LAB OF I, LTD.

"Don't Treat Your Soil Like Dirt!"

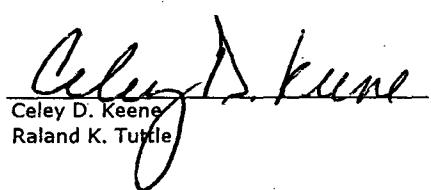
LARSON & ASSOCIATES, INC.
ATTN: MARK LARSON
507 N. MARIENFELD, STE. 202
MIDLAND, TEXAS 79701
FAX: 687-0456

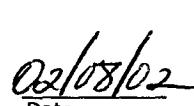
Sample Type: Soil
 Sample Condition: Intact/ Iced/ 0.0 deg C
 Project Name: Texaco-Davis Property
 Project #: 2-0100
 Project Location: Lea County, NM

Sampling Date: 02/06/02
 Receiving Date: 02/07/02
 Analysis Date: 02/07/02

ELT#	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C28 mg/kg
0202546-01	Hole #2, East Side	<10	33
0202546-02	Hole #2, Bottom (East)	<50	245
0202546-03	Hole #2, South Side	<100	529
0202546-04	Hole #2, West Side	<100	12700
0202546-05	Hole #2, Bottom (West)	<100	3250
0202546-06	Hole #2, North Side	<10	25
0202546-07	Hole #2, NW Corner	<100	672
0202546-08	Hole #1, South Side	<10	186
0202546-09	Hole #1, East Side	124	905
0202546-10	Hole #3, North Side	916	4010
0202546-11	Hole #3, East Side	<10	67
0202546-12	Hole #3, South Side	70	524
0202546-13	Hole #3, West Side	435	1960
0202546-14	Hole #3, Bottom	1090	2710
QUALITY CONTROL			
TRUE VALUE			
% INSTRUMENT ACCURACY			
SPIKED AMOUNT			
ORIGINAL SAMPLE			
SPIKE			
SPIKE DUP			
% EXTRACTION ACCURACY			
BLANK			
RPD			

METHODS: SW 846-8015M


Celey D. Keene
Raland K. Tuttle


Date

ENVIRONMENTAL LAB OF I, LTD.

"Don't Treat Your Soil Like Dirt!"

LARSON & ASSOCIATES, INC.
ATTN: MARK LARSON
507 N. MARIENFELD, STE. 202
MIDLAND, TEXAS 79701
FAX: 687-0456

Sample Type: Soil
Sample Condition: Intact/ Iced/ 0.0 deg C
Project Name: Texaco-Davis Property
Project #: 2-0100
Project Location: Lea County, NM

Sampling Date: 02/06/02
Receiving Date: 02/07/02
Analysis Date: 02/07/02

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg
0202546-10	Hole #3, North Side	<0.025	0.220	1.44	5.84	0.324

QUALITY CONTROL	0.113	0.111	0.109	0.225	0.106
TRUE VALUE	0.100	0.100	0.100	0.200	0.100
% IA	113	111	109	112	106
SPIKED AMOUNT	0.100	0.100	0.100	0.200	0.100
ORIGINAL SAMPLE	<0.025	<0.025	<0.025	<0.025	<0.025
SPIKE	0.111	0.111	0.105	0.223	0.100
SPIKE DUP	0.108	0.108	0.103	0.219	0.099
%EA	108	108	103	110	99
BLANK	<0.025	<0.025	<0.025	<0.025	<0.025
RPD	2.74	2.74	1.92	1.81	1.00

METHODS: EPA SW 846-8021B ,5030

Celey D. Keene
Raland K. Tuttle

02/08/02
Date

Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa, Texas 79763

Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Mark Larson

Company Name

Lanson and Associates, Inc.

Company Address:

507 N. Mainfield, Suite 202

City/State/Zip:

Midland, TX 79701

Telephone No: (915) 687-0901

Sampler Signature:

Project #: 2-0100

Project Loc: Lea County, NM

PO #:

Fax No: (915) 687-0901

Project Name: Texas - Davis Project

LAB #(Lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Other (Specify):	Matrix	Analyze For:												
							TCLP:	TOTAL:	TPH TX 1005/1006	TPH 418.1	TDS / CL / SAR / EC	Metals: As Ag Ba Cd Cr Pb Hg Se	BTEX 8021B/5030	Semivariabilis	Volatiles	TPH TX 1005M GR0/DRO	TPH 418.1	RUSH TAT (Pre-Schedule)	Standard TAT
020234-01	1401 " 2, East Side	2/6/02	1610	1		Soil	>	>	>	>	>	>	>	>	>	>	>	>	>
02	" Bottom (East)		1617	1		Sludge	>	>	>	>	>	>	>	>	>	>	>	>	>
03	" South Side		1623	1		Water	>	>	>	>	>	>	>	>	>	>	>	>	>
04	" West Side		1630	1		None	>	>	>	>	>	>	>	>	>	>	>	>	>
05	" Bottom (West)		1633	1		HNO ₃ , H ₂ SO ₄	>	>	>	>	>	>	>	>	>	>	>	>	
06	" North Side		1637	1		NaOH	>	>	>	>	>	>	>	>	>	>	>	>	>
07	" New Corner		1640	1		HCl	>	>	>	>	>	>	>	>	>	>	>	>	>
08	1401 " 1 South Side		1655	1		NaCl	>	>	>	>	>	>	>	>	>	>	>	>	>
09	" East Side		1652	1		Other	>	>	>	>	>	>	>	>	>	>	>	>	>
10	1401 " 3, North Side		1701	1		Other	>	>	>	>	>	>	>	>	>	>	>	>	>

Special Instructions:

Sample Containers intact? Yes No

Temperature Upon Receipt Yes No

Laboratory Comments: Crustal movement

Relinquished by: 	Date: <u>2/3/02</u>	Time: <u>0815</u>	Received by: 	Date: <u>2/7/02</u>	Time: <u>0810</u>
Relinquished by: 	Date: <u></u>	Time: <u></u>	Received by: 	Date: <u></u>	Time: <u></u>

Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa, Texas 79763

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Phone: 915-563-1800
Fax: 915-563-1713

Project Manager: Marcus Larson

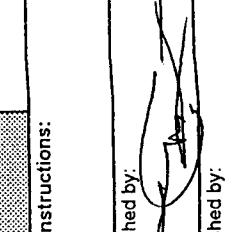
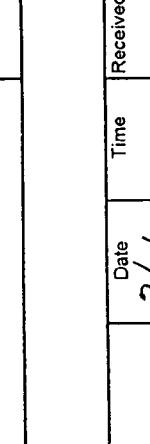
Company Name: Larson and Associates, Inc.

Company Address: 507 N. Mainfield, Suite 202
Kill Land, TX 79701

City/State/Zip: TX 79701
Telephone No: (915) 687-0901
Fax No: (915) 687-0456

Sampler Signature: 

Project Name: Texas - Davis Project
Project #: Z-0100
Project Loc: Los County, NM
PO #: _____

LAB# (Lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Other (Specify)	Preservative		Matrix		Analyze For:		RUSH TAT Pre-Schedule	Standard TAT	Sampled Container intact?	Temperature Upon Receipt:	Laboratory Comments:
						TCLP:	TOTAL:	Volatiles	Semivolatiles	TPH 8015M GR0/DRO	TPH TX 1005/1006					
0202C-1	Hole # 3 , East Side	2/6/02	1715	1												
	12	in	Bottom	1720												
	13	in	East Side	1725												
	14	in	Bottom	1730												
	15	Hole # 2	Dank	1640												
Special Instructions:																
Relinquished by:		Date	Time	Received by:	Date	Time	Relinquished by:		Date	Time			Date	Time		
		<u>2/8/02</u>	<u>0810</u>						<u>2-7-2</u>	<u>0810</u>						
Relinquished by:		Date	Time	Received by:	Date	Time	Relinquished by:		Date	Time			Date	Time		

ENVIRONMENTAL

LAB OF I, LTD.

"Don't Treat Your Soil Like Dirt!"

LARSON & ASSOCIATES, INC.
 ATTN: MARK LARSON
 507 N. MARIENFELD, #202
 MIDLAND, TEXAS 79701
 FAX: 687-0456

Sample Type: Soil
 Sample Condition: Intact/ Iced/ -1.0 deg C
 Project Name: Texaco-McKinley
 Project #: 2-0100
 Project Location: Lea County, NM

Sampling Date: 02/12/02
 Receiving Date: 02/13/02
 Analysis Date: 02/13/02

ELT#	FIELD CODE	GRO	DRO
		C6-C10 mg/kg	>C10-C28 mg/kg
0202589-01	Hole #3, North	<10	75
0202589-02	Hole #3, South	<10	<10
0202589-03	Hole #3, West	<10	<10
0202589-04	Hole #3, Bottom	<10	126
0202589-05	Hole #2, West	<10	974
0202589-06	Hole #2, Southwest (Bottom)	286	2380
0202589-07	Hole #2, Southwest	1830	5760
0202589-08	Hole #2, Northwest	<10	<10
0202589-09	Hole #2, East (Bottom)	<50	1090
0202589-10	Hole #1, South Side-West End	<10	92

QUALITY CONTROL	593	552
TRUE VALUE	500	500
% INSTRUMENT ACCURACY	119	110
SPIKED AMOUNT	476	476
ORIGINAL SAMPLE	<10	<10
SPIKE	518	555
SPIKE DUP	582	627
% EXTRACTION ACCURACY	109	116
BLANK	<10	<10
RPD	11.6	12.2

Methods: SW 846-8015M

Ral. at 700

Celey D. Keene
 Raland K. Tuttle

2-14-02

Date

Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Marcus Lemoem

Company Name: Larson and Associates, Inc.

Company Address: 507 N. Montemore, # 202

City/State/Zip: Midland, Tx 79701

Telephone No: (915) 487-0901

Sampler Signature: [Signature]

Project Name: Torres . McKinley

Project #: 2-0100

Project Loc: Lea County, NM

PO #:

Fax No: (915) 487-0456

LAB# (Leave only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Other (Specify)	Soil	Sludge	Water	None	H ₂ SO ₄	NaOH	HCl	HNO ₃	Iodine	Other (Specify)	TDS / CL / SAR / ECG	TPH 418.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	Metals: As Ag Ba Cd Cr Pb Hg Se	Semi-volatile	BTEX 8021B/5030	Analyze For:		RUSH TAT (Pre-Schedule)		Standard TAT			
																							Preservative	Matrix	TCLP:	TOTAL:	PO:	PP:		
265901	Hole # 3, North	7/2/02	1310	1																										
-02	" South		1300	1																										
-03	" West		1305	1																										
-04	" Bottom		1315	1																										
-05	Hole # 2, West		1320	1																										
-06	Northwest (Bottom)		1325	1																										
-07	Southwest		1330	1																										
-08	Northwest		1335	1																										
-09	East (Bottom)		1345	1																										
-10	Hole # 3 South - West Side		1350	1																										

Special Instructions: Jane McNamee

Retrived by: <u>[Signature]</u>	Date: <u>7/13/02</u>	Time: <u>0330</u>	Received by: <u>[Signature]</u>	Date: <u>7/13/02</u>	Time: <u>0830</u>
Relinquished by: <u>[Signature]</u>	Date: <u></u>	Time: <u></u>	Received by: <u>[Signature]</u>	Date: <u></u>	Time: <u></u>

Comments: Containers intact? N
temperature upon receipt: 75° F
laboratory comments:

ANALYTICAL REPORT

Prepared for:

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

**Project: Texaco-McKinley
Order#: G0202683
Report Date: 02/28/2002**

**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#: G0202683
 Project: 2-0100
 Project Name: Texaco-McKinley
 Location: Lea County, NM

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.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u>		<u>Date / Time</u>		<u>Preservative</u>
			<u>Collected</u>	<u>Received</u>	<u>Container</u>		
0202683-01	Hole #1, E. End, South	SOIL	02/26/2002 11:20	02/26/2002 16:20	4 oz glass		Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 C			
	8015M TPH GRO/DRO						
0202683-02	Hole #1, E. End	SOIL	02/26/2002 11:27	02/26/2002 16:20	4 oz glass		Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 C			
	8015M TPH GRO/DRO						
0202683-03	Hole #1, E. End, North	SOIL	02/26/2002 11:34	02/26/2002 16:20	4 oz glass		Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 C			
	8015M TPH GRO/DRO						
0202683-04	Hole #1, E. End, Bottom	SOIL	02/26/2002 11:50	02/26/2002 16:20	4 oz glass		Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 C			
	8015M TPH GRO/DRO						
0202683-05	Hole #2, E. Side, Bottom	SOIL	02/26/2002 12:00	02/26/2002 16:20	4 oz glass		Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 C			
	8015M TPH GRO/DRO						
0202683-06	Hole #2, W. Side	SOIL	02/26/2002 12:08	02/26/2002 16:20	4 oz glass		Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 C			
	8015M TPH GRO/DRO						
0202683-07	Hole #2, Southwest-West	SOIL	02/26/2002 12:12	02/26/2002 16:20	4 oz glass		Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 C			
	8015M TPH GRO/DRO						
0202683-08	Hole #2, Southwest-End	SOIL	02/26/2002 12:19	02/26/2002 16:20	4 oz glass		Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 C			
	8015M TPH GRO/DRO						

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

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

Order#: G0202683
Project: 2-0100
Project Name: Texaco-McKinley
Location: Lea County, NM

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.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u>		<u>Container</u>	<u>Preservative</u>
			<u>Collected</u>	<u>Received</u>		
0202683-09	Hole #2, Southwest Bottom	SOIL	02/26/2002 12:25	02/26/2002 16:20	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 C		
	8015M TPH GRO/DRO					
0202683-10	Hole #2, Southwest, East	SOIL	02/26/2002 12:30	02/26/2002 16:20	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 C		
	8015M TPH GRO/DRO					
0202683-11	Hole #3, Bottom	SOIL	02/26/2002 12:40	02/26/2002 16:20	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 C		
	8015M TPH GRO/DRO					

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0202683
Project: 2-0100
Project Name: Texaco-McKinley
Location: Lea County, NM

Lab ID: 0202683-01
Sample ID: Hole #1, E. End, South

8015M TPH GRO/DRO

<u>Method</u> <u>Blank</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Sample</u> <u>Amount</u>	<u>Dilution</u> <u>Factor</u>	<u>Analyst</u>	<u>Method</u>
0000717-01		2/27/02 17:27	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	2460	100
DRO, >C12-C28	6590	100

Lab ID: 0202683-02
Sample ID: Hole #1, E. End

8015M TPH GRO/DRO

<u>Method</u> <u>Blank</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Sample</u> <u>Amount</u>	<u>Dilution</u> <u>Factor</u>	<u>Analyst</u>	<u>Method</u>
0000717-01		2/27/02 17:39	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	<50	50
DRO, >C12-C28	279	50

Lab ID: 0202683-03
Sample ID: Hole #1, E. End, North

8015M TPH GRO/DRO

<u>Method</u> <u>Blank</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Sample</u> <u>Amount</u>	<u>Dilution</u> <u>Factor</u>	<u>Analyst</u>	<u>Method</u>
0000717-01		2/27/02 17:51	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	650	100
DRO, >C12-C28	2810	100

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0202683
Project: 2-0100
Project Name: Texaco-McKinley
Location: Lea County, NM

Lab ID: 0202683-04
Sample ID: Hole #1, E. End, Bottom

8015M TPH GRO/DRO

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		2/27/02 18:04	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	1410	100
DRO, >C12-C28	4930	100

Lab ID: 0202683-05
Sample ID: Hole #2, E. Side, Bottom

8015M TPH GRO/DRO

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		2/27/02 18:16	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	<10	10
DRO, >C12-C28	85.6	10

Lab ID: 0202683-06
Sample ID: Hole #2, W. Side

8015M TPH GRO/DRO

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		2/27/02 18:27	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	333	100
DRO, >C12-C28	5300	100

N/A = Not Applicable RL = Reporting Limit

Page 2 of 4

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0202683
Project: 2-0100
Project Name: Texaco-McKinley
Location: Lea County, NM

Lab ID: 0202683-07
Sample ID: Hole #2, Southwest-West

8015M TPH GRO/DRO

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		2/27/02 18:39	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	<10	10
DRO, >C12-C28	31.6	10

Lab ID: 0202683-08
Sample ID: Hole #2, Southwest-End

8015M TPH GRO/DRO

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		2/28/02 19:30	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	<10	10
DRO, >C12-C28	17.4	10

Lab ID: 0202683-09
Sample ID: Hole #2, Southwest Bottom

8015M TPH GRO/DRO

<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Sample Amount</u>	<u>Dilution Factor</u>	<u>Analyst</u>	<u>Method</u>
Blank		2/27/02 19:23	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	24.1	10
DRO, >C12-C28	133	10

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0202683
Project: 2-0100
Project Name: Texaco-McKinley
Location: Lea County, NM

Lab ID: 0202683-10
Sample ID: Hole #2, Southwest, East

8015M TPH GRO/DRO

<u>Method</u> <u>Blank</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Sample</u> <u>Amount</u>	<u>Dilution</u> <u>Factor</u>	<u>Analyst</u>	<u>Method</u>
0000717-01		2/27/02 19:34	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	113	10
DRO, >C12-C28	501	10

Lab ID: 0202683-11
Sample ID: Hole #3, Bottom

8015M TPH GRO/DRO

<u>Method</u> <u>Blank</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Sample</u> <u>Amount</u>	<u>Dilution</u> <u>Factor</u>	<u>Analyst</u>	<u>Method</u>
0000717-01		2/27/02 19:46	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	<10	10
DRO, >C12-C28	184	10

Approval: *Raland K. Tuttle*
Raland K. Tuttle, Lab Director, QA Officer
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Irene Perry, QA Assistant
Sandra Biezugbe, Lab Tech.
Curt Cowdrey, Lab Tech.
Sara Molina, Lab Tech.

3-01-02

Date

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M TPH GRO/DRO

Order#: G0202683

BLANK	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/L	0000717-01			<10		
DRO, >C12-C28-mg/L	0000717-01			<10		
MS	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/kg	0202676-01	0	480	540	113.4%	
DRO, >C12-C28-mg/kg	0202676-01	32	480	480	93.4%	
MSD	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/kg	0202676-01	0	480	600	125.%	9.7%
DRO, >C12-C28-mg/kg	0202676-01	32	480	510	100.8%	7.1%
SRM	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/L	0000717-04		500	520	104.4%	0.%
DRO, >C12-C28-mg/L	0000717-04		500	490	98.4%	0.%

Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa, Texas 79763

Phone: 915-563-1800
Fax: 915-563-1713

Project Manager:
Marcus Larson

Company Name:
Larson and Associates, Inc.

Company Address:
507 N. Marquardt St., Ste 202
Midland, Texas 79701

City/State/Zip:

Telephone No.: (915) 697-0901

Sampler Signature:


Fax No.: (915) 687-0456

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Name: **Texas - MC Kinley**

Project #: **2-0105**

Project Loc: **Lea County, NM**

PO #:

Page 1 of 2

LAB # (Not Use Only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Other (Specify):	Preservative	Matrix	Soil	Analyze For:			RUSH TAT (Pre-Schedule)	Standard TAT	
									TCLP:	Total:	Volatiles			Metals: As Ag Ba Cd Cr Pb Hg Se
02-02493-01	Hole #1, E. End, South	2/24/02	1120	1										
02	Hole #1, E. End		1127											
03	Hole #1, E. End, North		1134											
04	Hole #1, E. End, Bottom		1150											
05	Hole #2, E. Side, Bottom		1200											
06	Hole #2, W. Side		1208											
07	Hole #2, Southwest - West		1212											
08	Hole #2, Southwest - East		1215											
09	Hole #2, Southwest, Bottom		1225											
10	Hole #2, Southwest, East		1230											
<i>Special Instructions:</i>													Temp. Contain & Shipped	
Received by: <i>[Signature]</i> Relinquished by: <i>[Signature]</i>													Temperature Upon Receipt:	
													Laboratory Comments:	
													<i>15°C</i>	
													Date: <i>2/26/02</i>	Time: <i>1620</i>
													Date: <i>2/26/02</i>	Time: <i>1620</i>

Environmental Lab of Texas, Inc.

2600 West 1-20 East
Midland, Texas 79763

Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

卷之二

Project Name: Tenkara - The Kinten

Mark Lasson
Lasson and Associates, Inc.

Project Manager:

Project #: 2 - 0100
Project Loc: Lec County, N.Y.

City/State/Zip: Hudson Telephone No: (515) 487-9901 Fax No: (915) 687-0456

Sampler Signature:

ANALYTICAL REPORT

Prepared for:

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

Project: Texaco-McKinley

Order#: G0202752

Report Date: 03/12/2002

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#: G0202752
 Project: 2-0100
 Project Name: Texaco-McKinley
 Location: Lea County, NM

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.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time Collected</u>	<u>Date / Time Received</u>	<u>Container</u>	<u>Preservative</u>
0202752-01	Hole #2, West	SOIL	03/06/2002 14:50	03/07/2002 8:20	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 0.5 C		
		8015M TPH GRO/DRO				
0202752-02	Hole #2, SW-Bottom	SOIL	03/06/2002 15:05	03/07/2002 8:20	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 0.5 C		
		8015M TPH GRO/DRO				
0202752-03	Hole #2, SW-East	SOIL	03/06/2002 15:10	03/07/2002 8:20	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 0.5 C		
		8015M TPH GRO/DRO				
0202752-04	Hole #2, West Side-North	SOIL	03/06/2002 15:45	03/07/2002 8:20	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 0.5 C		
		8015M TPH GRO/DRO				
0202752-05	Hole #1, E. End-North	SOIL	03/06/2002 15:15	03/07/2002 8:20	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 0.5 C		
		8015M TPH GRO/DRO				
0202752-06	Hole #1, E. End-Bottom	SOIL	03/06/2002 15:17	03/07/2002 8:20	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 0.5 C		
		8015M TPH GRO/DRO				
0202752-07	Hole #1, E. End	SOIL	03/06/2002 15:25	03/07/2002 8:20	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 0.5 C		
		8015M TPH GRO/DRO				
0202752-08	Hole #1, E. End-South	SOIL	03/06/2002 15:30	03/07/2002 8:20	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 0.5 C		
		8015M TPH GRO/DRO				

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

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

Order#: G0202752
Project: 2-0100
Project Name: Texaco-McKinley
Location: Lea County, NM

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.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	Date / Time		Date / Time		<u>Preservative</u>
			<u>Collected</u>	<u>Received</u>	<u>Container</u>		
0202752-09	Hole #1, E. End-Bench	SOIL	03/06/2002 15:34	03/07/2002 8:20	4 oz glass		Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 0.5 C			
		8015M TPH GRO/DRO					
0202752-10	Hole #3-Bottom	SOIL	03/06/2002 15:40	03/07/2002 8:20	4 oz glass		Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 0.5 C			
		8015M TPH GRO/DRO					

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0202752
Project: 2-0100
Project Name: Texaco-McKinley
Location: Lea County, NM

Lab ID: 0202752-01
Sample ID: Hole #2, West

8015M TPH GRO/DRO

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
0000820-02		03/07/2002	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	962	10.0
DRO, >C12-C28	4770	10.0

Lab ID: 0202752-02
Sample ID: Hole #2, SW-Bottom

8015M TPH GRO/DRO

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
0000820-02		03/07/2002	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	28	10.0
DRO, >C12-C28	309	10.0

Lab ID: 0202752-03
Sample ID: Hole #2, SW-East

8015M TPH GRO/DRO

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
0000820-02		03/07/2002	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	1610	10.0
DRO, >C12-C28	3100	10.0

N/A = Not Applicable RL = Reporting Limit

Page 1 of 4

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0202752
Project: 2-0100
Project Name: Texaco-McKinley
Location: Lea County, NM

Lab ID: 0202752-04
Sample ID: Hole #2, West Side-North

8015M TPH GRO/DRO

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
0000820-02		03/07/2002	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	354	10.0
DRO, >C12-C28	3380	10.0

Lab ID: 0202752-05
Sample ID: Hole #1, E. End-North

8015M TPH GRO/DRO

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
0000820-02		03/07/2002	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	100	10.0
DRO, >C12-C28	684	10.0

Lab ID: 0202752-06
Sample ID: Hole #1, E. End-Bottom

8015M TPH GRO/DRO

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
0000820-02		03/07/2002	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	69	10.0
DRO, >C12-C28	549	10.0

N/A = Not Applicable RL = Reporting Limit

Page 2 of 4

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0202752
Project: 2-0100
Project Name: Texaco-McKinley
Location: Lea County, NM

Lab ID: 0202752-07
Sample ID: Hole #1, E. End

8015M TPH GRO/DRO

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
0000820-02		03/07/2002	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	111	10.0
DRO, >C12-C28	476	10.0

Lab ID: 0202752-08
Sample ID: Hole #1, E. End-South

8015M TPH GRO/DRO

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
0000820-02		03/07/2002	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	408	10.0
DRO, >C12-C28	1560	10.0

Lab ID: 0202752-09
Sample ID: Hole #1, E. End-Bench

8015M TPH GRO/DRO

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
0000820-02		03/07/2002	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C28	39	10.0

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0202752
Project: 2-0100
Project Name: Texaco-McKinley
Location: Lea County, NM

Lab ID: 0202752-10
Sample ID: Hole #3-Bottom

8015M TPH GRO/DRO

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
0000820-02		03/07/2002	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C28	154	10.0

Approval: *Raland K. Tuttle* 3-12-02

Raland K. Tuttle, Lab Director, QA Officer
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Irene Perry, QA Assistant
Sandra Biezugbe, Lab Tech.
Curt Cowdrey, Lab Tech.
Sara Molina, Lab Tech.

Date

N/A = Not Applicable RL = Reporting Limit

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ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M TPH GRO/DRO

Order#: G0202752

BLANK	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/kg	0000820-02			<10.0		
DRO, >C12-C28-mg/kg	0000820-02			<10		
MS	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/kg	0202753-01	0	476	583	122.5%	
DRO, >C12-C28-mg/kg	0202753-01	16	476	379	76.3%	
MSD	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/kg	0202753-01	0	476	608	127.7%	4.2%
DRO, >C12-C28-mg/kg	0202753-01	16	476	402	81.1%	5.9%
SRM	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/kg	0000820-05		500	520	104.%	0.%
DRO, >C12-C28-mg/kg	0000820-05		500	347	69.4%	0.%

Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa, Texas 79763

Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Mark Larson

Company Name Larson and Associates, Inc.

Company Address: 507 N. Marquardt, Suite 202

City/State/Zip: Midland, TX 79701

Telephone No.: (915) 687-0801
528-2178

Sampler Signature: [Signature]

Project Name: Texas - McKinley

Project #: 2-0100

Project Loc: Lea County, NM

PO #:

Fax No.: (915) 687-0456
528-2178

LAB# (If applicable)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Other (Specify)	Preservative	Matrix	Analyze For:																
								TCLP	TOTAL	Metals: As Ag Ba Cd Cr-Pb Hg Se			Volatile			Semivolatile			BTEX 8021B/5030			RUSH TAT (Pre-Schedule)		
0202152-01	1402 42, West	3/6/02	1450	1	-	H ₂ O,	Soil	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>
02	SW - Bottom			1505	-			>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>
03	Sur - East			1510	-			>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>
04	* West Side - North			1545	-			>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>
05	1402 41, E. End - North			1515	-			>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>
06	E. End - Bottom			1517	-			>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>
07	E. End			1525	-			>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>
08	E. End - South			1530	-			>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>
09	E. End - South			1534	-			>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>
10	1402 43, Bottom			1540	1			>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>

Special Instructions: 1st sample

Relinquished by: [Signature]

Date: 3/7/02 Time: 120 Received by: _____

Relinquished by: _____ Date: _____ Time: _____

Date: 3/7/2 Time: 1220

Comments: RUSH sample taken at 3:30 PM on 3/7/02

Sample Container intact? Yes
Temperature Upon Receipt: 65° F
Laboratory Comments: OS-C

ANALYTICAL REPORT

Prepared for:

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

Project: Texaco-Davis

Order#: G0202800

Report Date: 03/13/2002

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#: G0202800
Project: 2-0100
Project Name: Texaco-Davis
Location: Lea County, NM

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.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u>		<u>Date / Time</u>		<u>Preservative</u>
			<u>Collected</u>	<u>Received</u>	<u>Container</u>		
0202800-01	Hole #2, West	SOIL	03/11/2002 13:05	03/12/2002 8:00	4 oz glass		Ice
<u>Lab Testing:</u>			Rejected: No	Temp: -1.0 C			
8015M TPH GRO/DRO							

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0202800
Project: 2-0100
Project Name: Texaco-Davis
Location: Lea County, NM

Lab ID: 0202800-01
Sample ID: Hole #2, West

8015M TPH GRO/DRO

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
		03/12/2002 14:02	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	<10	10.0
DRO, >C12-C28	68.5	10.0
Total C6-C28	68.5	10.0

Approval: *Ral K. Tuttle* 3-13-02

Date

Raland K. Tuttle, Lab Director, QA Officer
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Irene Perry, QA Assistant
Sandra Biezugbe, Lab Tech.
Curt Cowdrey, Lab Tech.
Sara Molina, Lab Tech.

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M TPH GRO/DRO

Order#: G0202800

BLANK	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total C6-C28-mg/kg	0000832-02			<10		
MS	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total C6-C28-mg/kg	0202801-01	44.2	952	906	90.5%	
MSD	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total C6-C28-mg/kg	0202801-01	44.2	952	890	88.8%	1.8%
SRM	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total C6-C28-mg/kg	0000832-05		1000	881	88.1%	0.%

Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa, Texas 79763

Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY/RECORD AND ANALYSIS REQUEST

Project Manager: Lorraine, Mark
 Company Name: Lawson and Associates, Inc.
 Company Address: 507 N. Marquardt, Ste. 202
 City/State/Zip: Midland, Tx 79701
 Telephone No.: (915) 687-0510
 Sampler Signature: JL

Project Name: Texas - Davis
 Project #: 2-0100
 Project Loc: Lea County, NM
 PO #:
 Fax No.: (915) 687-0456

Sampler Signature:

Analyze For:		Standard TAT			RUSH TAT (Pre-Schedule)		
TCLP:	TOTAL:	Volatiles	Semivolatiles	BTEX 8021B/5030	Metals: As Ag Ba Cd Cr Pb Hg Se	TPH 8015M GRO/DRO	
		TDS / CL / SAR / EC	TPH 418.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	TPH 8015M GRO/DRO	
		Other (Specify):	Soil	Sludge	Water	Other (Specify)	
		Preservative	Matrix				
No. of Containers							
Date Sampled							
Time Sampled							
FIELD CODE							
<u>0202000-01</u>		<u>1401 " 2, West</u>	<u>3/11/02</u>	<u>1305</u>	<u>1</u>	<u></u>	
LAB & SAMPLE IDENTIFICATION							
Special Instructions:							
Relinquished by:	Date	Time	Received by:	Date	Time		
<u>JL</u>	<u>3/12/02</u>	<u>0800</u>	<u>Received by ELCI</u>	<u>3-12-02</u>	<u>0800</u>	<u></u>	
Relinquished by:	Date	Time		Date	Time		
<u>JL</u>	<u>3/12/02</u>	<u>0800</u>	<u></u>	<u>3-12-02</u>	<u>0800</u>	<u></u>	

Comments: None
 Temperature Upon Receipt: -10°C
 Laboratory Comments:

ANALYTICAL REPORT

Prepared for:

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

**Project: Texaco-McKinley
Order#: G0202899
Report Date: 03/26/2002**

**Certificates
US EPA Laboratory Code TX00158**

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

LARSON AND ASSOCIATES, INC. Order#: G0202899
P.O. BOX 50685 Project: 2-0100
MIDLAND, TX 79710 Project Name: Texaco-McKinley
915-687-0456 Location: Lea County, NM

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.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u>		<u>Date / Time</u>		<u>Preservative</u>
			<u>Collected</u>	<u>Received</u>	<u>Container</u>		
0202899-01	Hole #2, SW-West	SOIL	03/21/2002 14:00	03/22/2002 16:43	8 oz glass		Ice
	<u>Lab Testing:</u> 8015M		Rejected: No	Temp: 4.0 C			

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0202899
Project: 2-0100
Project Name: Texaco-McKinley
Location: Lea County, NM

Lab ID: 0202899-01
Sample ID: Hole #2, SW-West

8015M

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample Amount	Dilution Factor	Analyst	Method
		03/25/2002 21:40	1	1	CK	8015M

Parameter	Result mg/kg	RL
DRO, >C12-C35	<10	10.0
GRO, C6-C12	<10	10.0
TOTAL, C6-C35	<10	10.0

Approval: *Alma D. Keene* 3/28/02

Raland K. Tuttle, Lab Director, QA Officer

Date

Celey D. Keene, Org. Tech. Director

Jeanne McMurrey, Inorg. Tech. Director

Irene Perry, QA Assistant

Sandra Biezugbe, Lab Tech.

Curt Cowdrey, Lab Tech.

Sara Molina, Lab Tech.

N/A = Not Applicable RL = Reporting Limit

Page 1 of 1

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0202899

BLANK	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0000970-02			<10		
CONTROL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0000970-03		952	813	85.4%	
CONTROL DUP	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0000970-04		952	880	92.4%	7.9%
SRM	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0000970-05		1000	1053	105.3%	0.%

Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa, Texas 79763

Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager:	<u>Marcus Larson</u>	Project Name:	<u>Terraneo - McKinley</u>
Company Name	<u>Larson and Associates, Inc.</u>	Project #:	<u>2-9105</u>
Company Address:	<u>507 N. Main Street, Alz, 707</u>	Project Loc:	<u>Leson County, WY</u>
City/State/Zip:	<u>Hudson, TX 79451</u>	PO #:	

Telephone No: (915) 687-0901
Fax No: (915) 687-0436

Sammler-Signature:

Analyze For:		RUSH TAT (Pre-Schedule)		Standard TAT	
TCLP	TOTAL				
		BTX 8021B/5030			
		Services			
		Volatile			
		Metals: As Ag Ba Cd Cr Pb Hg Se			
		TPH 8015M GRO/DRD			
		TPH TX 1005/1006			
		TPH 4181			
		TDS / CL / SAR / EC			
		Other (Specify):			
Preservative	Matrix	Soil			
		Sludge			
		Water			
		Other (Specify)			
		None			
		H ₂ SO ₄			
		NaOH			
		HCl			
		HNO ₃			
		ice			
		No. of Containers			
		Time Sampled			
		Date Sampled	3/21/02	1400	1
		FIELD CODE	142, SW - West	1410	1
LAB # Lab use only	0202899-01	142	"	Ecol. Bench	
Special Instructions:					
Relinquished by:	3/22/02	1653	Received by:	Date	Time
Relinquished by:			Received by:	Date	Time
Sample Container intact temperature upon Receipt Laboratory Comments: <i>40°C</i>					

ANALYTICAL REPORT

Prepared for:

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

Project: Texaco-McKinley

Order#: G0202961

Report Date: 04/04/2002

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#: G0202961
Project: 2-0100
Project Name: Texaco-McKinley
Location: Lea County, NM

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.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	Date / Time		Date / Time		<u>Preservative</u>
			<u>Collected</u>	<u>Received</u>	<u>Container</u>		
0202961-01	Hole #2-East Side	SOIL	03/28/2002 15:20	03/29/2002 13:20	8 oz glass		Ice
	<u>Lab Testing:</u> 8015M		Rejected: No	Temp: 4.0 C			
0202961-02	Hole #2-NE Bottom	SOIL	03/28/2002 15:25	03/29/2002 13:20	8 oz glass		Ice
	<u>Lab Testing:</u> 8015M		Rejected: No	Temp: 4.0 C			
0202961-03	Hole #2-NE Side	SOIL	03/28/2002 15:35	03/29/2002 13:20	8 oz glass		Ice
	<u>Lab Testing:</u> 8015M		Rejected: No	Temp: 4.0 C			

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0202961
Project: 2-0100
Project Name: Texaco-McKinley
Location: Lea County, NM

Lab ID: 0202961-01
Sample ID: Hole #2-East Side

8015M

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
		04/03/2002	1	1	CK	8015M

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

Lab ID: 0202961-02
Sample ID: Hole #2-NE Bottom

8015M

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
		04/03/2002	1	1	CK	8015M

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

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0202961
Project: 2-0100
Project Name: Texaco-McKinley
Location: Lea County, NM

Lab ID: 0202961-03
Sample ID: Hole #2-NE Side

8015M

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
		04/03/2002	1	1	CK	8015M

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

Approval: *Raland K. Tuttle 4-04-02*
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.

N/A = Not Applicable RL = Reporting Limit

Page 2 of 2

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0202961

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0001055-02			<10.0		
CONTROL SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0001055-03		952	849	89.2%	
CONTROL DUP SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0001055-04		952	1090	114.5%	24.9%
SRM SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0001055-05		1000	1020	102.%	

Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa, Texas 79763

Phone: 915-563-1800
Fax: 915-563-1173

Mark Larson

Project Manager:

Company Name Larson and Associates, Inc.

Company Address: 507 N. Mainfield, Ste. 202

City/State/Zip: Midland, Texas 79701

Telephone No: (915) 687-0801

528-2778 (cell)
Call w/Verbal

Sampler Signature:

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Texaco - McKinley

Project #: 2-0100

Project Loc: Lea County, NM

PO #:

Fax No: (915) 687-0456

Analyze For:			
	TCLP:	Total:	
Volatile			
Metals: As Ag Ba Cd Cr Pb Hg Se			
TPH 8015M GRO/DRO			
TPH TX 1005/1006			
TPH 418.1			
TDS / CL / SAR / EC			
Other (Specify):			
Soil			
Sludge			
Water			
Other (Specify)			
None			
H ₂ SO ₄			
NaOH			
HCl			
HNO ₃			
Ice			
No. of Containers			
Date Sampled			
Time Sampled			
Preservative			
Matrix			
RUSH TAT (Pre-Schedule Standard TAT)			
Sample Contains Insect? _____			
Temperature Upon Receipt _____			
Laboratory Comments: <u>40°C</u>			
Special Instructions:			
Reinquished by:	Date: <u>3/29/02</u>	Time: <u>0700</u>	Received by:
Relinquished by:	Date:	Time:	Time:
			Date: <u>3/29/2</u> Time: <u>1320</u>

ANALYTICAL REPORT

Prepared for:

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

Project: McKinley Lease

Order#: G0203284

Report Date: 05/07/2002

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#: G0203284
Project: 2-0100
Project Name: McKinley Lease
Location: Hobbs, NM

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.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	Date / Time		Date / Time		<u>Preservative</u>
			<u>Collected</u>	<u>Received</u>	<u>Container</u>		
0203284-01	Hole #1 (NE)	SOIL	5/6/02 9:15	5/6/02 14:00	4 oz glass		Ice
	<u>Lab Testing:</u> 8015M		Rejected: No	Temp: 2.0 C			
0203284-02	Hole #1 (E)	SOIL	5/6/02 9:21	5/6/02 14:00	4 oz glass		Ice
	<u>Lab Testing:</u> 8015M		Rejected: No	Temp: 2.0 C			
0203284-03	Hole #1 (S)	SOIL	5/6/02 9:28	5/6/02 14:00	4 oz glass		Ice
	<u>Lab Testing:</u> 8015M		Rejected: No	Temp: 2.0 C			

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0203284
Project: 2-0100
Project Name: McKinley Lease
Location: Hobbs, NM

Lab ID: 0203284-01
Sample ID: Hole #1 (NE)

8015M

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
		5/6/02	1	1	CK	8015M

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

Lab ID: 0203284-02
Sample ID: Hole #1 (E)

8015M

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
		5/6/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
DRO, >C12-C35	37.8	10.0
GRO, C6-C12	<10.0	10.0
TOTAL, C6-C35	37.8	10.0

N/A = Not Applicable RL = Reporting Limit

Page 1 of 2

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0203284
Project: 2-0100
Project Name: McKinley Lease
Location: Hobbs, NM

Lab ID: 0203284-03
Sample ID: Hole #1 (S)

8015M

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
		5/6/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
DRO, >C12-C35	47.1	10.0
GRO, C6-C12	<10.0	10.0
TOTAL, C6-C35	47.1	10.0

Approval: *Raland K. Tuttle* 5-8-02
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.

N/A = Not Applicable RL = Reporting Limit

Page 2 of 2

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0203284

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0001595-02			<10.0		
CONTROL SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0001595-03		952	1230	129.2%	
CONTROL DUP SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0001595-04		952	1230	129.2%	0.%
SRM SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0001595-05		1000	1070	107.%	

ANALYTICAL REPORT

Prepared for:

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

Project: McKinley Lease

Order#: G0203339

Report Date: 05/14/2002

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#: G0203339
Project: 2-0100
Project Name: McKinley Lease
Location: Hobbs, NM

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.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u>		<u>Container</u>	<u>Preservative</u>
			<u>Collected</u>	<u>Received</u>		
0203339-01	Hole #1 SW Bottom	SOIL	5/10/02 13:35	5/13/02 8:25	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M			Temp: 4.0 C		
0203339-02	Hole #1SE Bottom	SOIL	5/10/02 13:50	5/13/02 8:25	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M			Temp: 4.0 C		

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0203339
 Project: 2-0100
 Project Name: McKinley Lease
 Location: Hobbs, NM

Lab ID: 0203339-01
 Sample ID: Hole #1 SW Bottom

8015M

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
		5/13/02	1	1	CK	8015M

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

Lab ID: 0203339-02
 Sample ID: Hole #1SE Bottom

8015M

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
		5/13/02	1	1	CK	8015M

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

Approval: *Raland K. Tuttle* 5-13-02
 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.

N/A = Not Applicable RL = Reporting Limit

Page 1 of 1

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0203339

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0001688-02			<10.0		
MS SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0203339-02	0	952	912	95.8%	
MSD SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0203339-02	0	952	793	83.3%	14.%
SRM SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0001688-05		1000	808	80.8%	

Environmental Lab of Texas I, Ltd.

12600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

Project Manager: Cindy Cain

Company Name Larson and Associates, Inc.

Company Address: 507 N. Marlenfeld, Suite 202

City/State/Zip: Midland, TX 79701

Telephone No: (915) 437-0901

Sampler Signature: Cindy Cain

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Name: McKinley Lease
Project #: 2-0100
Project Loc: Hobbs, NM
PO #: _____

Fax No: (915) 687-0454

Date Sampled: 5/13/02

No. of Containers:

AB # (Lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative	Matrix	Analyze For:		TOTAL:	TCLP:	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatile	Semivolatiles	RCI	BTEx 8021B/5030	RUSH TAT (Pre-Schedule)	Standard TAT	
							SAR / ESP / CEC	Aktions (Cl, SO ₄ , CO ₃ , HCO ₃)										
0203339-01	Hole #1 SW Bottom	5-10-02	1335	1	X	Soil	X	X										
02	Hole #1 SE Bottom	5-10-02	1350	1	X	Soil	X	X										
						Water												
						Sludge												
						None												
						H ₂ SO ₄												
						NaOH												
						HCl												
						HNO ₃												
						Ice												
						Other (Specify):												
						TPH: 418.16015M 1005 1006												
						Cations (Ca, Mg, Na, K)												
						Anions (Cl, SO ₄ , CO ₃ , HCO ₃)												
						SAR / ESP / CEC												
						Metals: As Ag Ba Cd Cr Pb Hg Se												
						Volatile												
						Semivolatiles												
						RCI												
						BTEx 8021B/5030												
						RUSH TAT (Pre-Schedule)												
						Standard TAT												

Special Instructions: Sample containers intact? Y N

Temperature Upon Receipt: 40°C

Laboratory Comments: Sample received in plastic containers

Relinquished by:	Date	Time	Received by:	Date	Time
<u>Cindy Cain</u>	5/13/02	8:25	Received by ELOT:	5-13-2	0825
Relinquished by:					

APPENDIX B

Photographs

TEXACO EXPLORATION AND PRODUCTION INC.
M'KINLEY LEASE PRODUCTION FACILITY (CLOSED)
HOBBS, NEW MEXICO



1. Hole #1 (Background) and Hole #2 (Foreground)



2. Hole #1 (Left) and Hole #2 (Right)

TEXACO EXPLORATION AND PRODUCTION INC.
M^cKINLEY LEASE PRODUCTION FACILITY (CLOSED)
HOBBS, NEW MEXICO



3. Hole #1 (Left) and Hole #2 (Right)



4. Hole #1 (Looking Northeast)

TEXACO EXPLORATION AND PRODUCTION INC.
M^cKINLEY LEASE PRODUCTION FACILITY (CLOSED)
HOBBS, NEW MEXICO



5. Hole #1 (Looking South)



6. Hole #1 (Looking Southeast)

TEXACO EXPLORATION AND PRODUCTION INC.
M'KINLEY LEASE PRODUCTION FACILITY (CLOSED)
HOBBS, NEW MEXICO



7. Hole #1 (Looking Southeast)



8. Hole #2 (Southeast Corner)

TEXACO EXPLORATION AND PRODUCTION INC.
M^cKINLEY LEASE PRODUCTION FACILITY (CLOSED)
HOBBS, NEW MEXICO



9. Hole #1 (Looking North)



10. Hole #1 (Pipeline Clamp)

TEXACO EXPLORATION AND PRODUCTION INC.
M^cKINLEY LEASE PRODUCTION FACILITY (CLOSED)
HOBBS, NEW MEXICO



11. Hole #1 and Hole #2 (Combined)



12. Hole #1 and Hole #2 (Looking North)

TEXACO EXPLORATION AND PRODUCTION INC.
M'KINLEY LEASE PRODUCTION FACILITY (CLOSED)
HOBBS, NEW MEXICO



13. Hole #1 and Hole #2 (Looking Northeast)

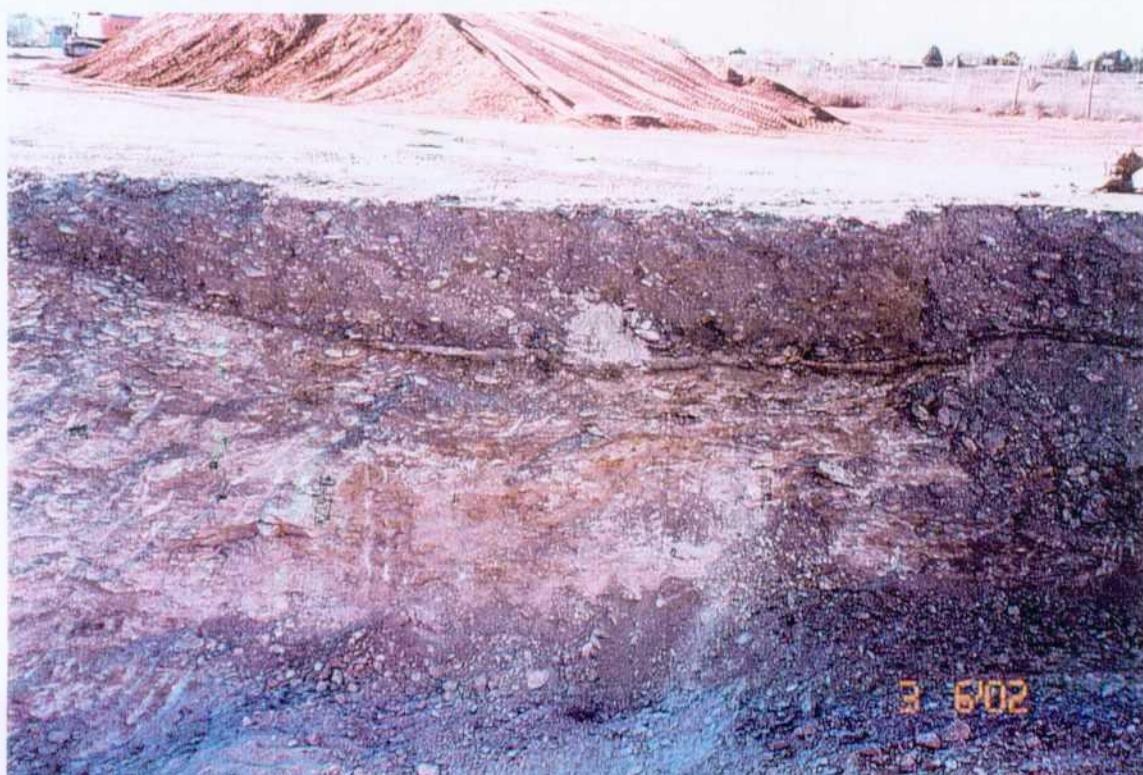


14. Hole #1 and Hole #2 (Looking East)

TEXACO EXPLORATION AND PRODUCTION INC.
MCKINLEY LEASE PRODUCTION FACILITY (CLOSED)
HOBBS, NEW MEXICO



15. Hole #1 and Hole #2 (Looking Southeast)



16. Hole #1 and Hole #2 - Looking East (After Removal of Piping)

TEXACO EXPLORATION AND PRODUCTION INC.
M'KINLEY LEASE PRODUCTION FACILITY (CLOSED)
HOBBS, NEW MEXICO



17. Hole #3 (Looking Southwest)



18. Hole #3 (Looking Southwest)

TEXACO EXPLORATION AND PRODUCTION INC.
M' KINLEY LEASE PRODUCTION FACILITY (CLOSED)
HOBBS, NEW MEXICO



19. Hole #3 (Looking South)



20. Hole #3 (Looking Southeast)

TEXACO EXPLORATION AND PRODUCTION INC.
M^cKINLEY LEASE PRODUCTION FACILITY (CLOSED)
HOBBS, NEW MEXICO



21. Hole #3 (Bottom)