

1R - 257

REPORTS

DATE:

2004

February 11, 2004

VIA FACSIMILE: (505) 476-3462

Mr. Wayne Price
New Mexico Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505

**Re: Pipeline Excavation Closure Report, D. F. Fergason Lease, U. L. H (SE/4, NE/4),
Section 30, Township 18 South, Range 39 East, Lea County New Mexico**

Dear Mr. Price:

On November 3 - 5, 2003, Larson and Associates, Inc. (LA) supervised excavation of soil from a pipeline right-of-way located on property owned by J.C. and Dona Turner in unit letter H (SE/4, NE/4), Section 30, Township 18 South, Range 39 East, Lea County, New Mexico. The work was performed on behalf of ChevronTexaco Exploration and Production Inc. (ChevronTexaco) in accordance with a work plan that was approved by the New Mexico Oil Conservation Division (NMOCD) on October 21, 2003. The work involved removing soil from pipeline right-of-way to complete excavation of a former emergency pit that was once associated with a tank battery on the D.F. Fergason Lease. Figure 1 presents a location and topographic map.

Background

Between April 14, 2003 and June 26, 2003, LA supervised excavation of a closed emergency pit that had been used in connection with the tank battery at the D.F. Fergason Lease. The emergency pit was located east of the tank battery, and was excavated to the edge of a right-of-way for a crude oil pipeline owned by Navajo Pipeline Company (Navajo). Navajo moved the pipeline to remove soil from the right-of-way. Soil contamination presumed to have originated from a previous pipeline leak was encountered, and the excavation was terminated. On August 28, 2003, the NMOCD granted ChevronTexaco approval to fill the emergency pit excavation to the west edge of a pipeline right-of-way. The pipeline excavation remained open until a report was submitted to the NMOCD on October 15, 2003 ("*Remediation Summary and Proposed Pipeline Excavation Work Plan, D.F. Fergason Lease, U.L. H (SE/4, NE/4), Section 30, Township 18 South, Range 39 East, Lea County, New Mexico*"). ChevronTexaco proposed to excavate additional soil from the pipeline-right-of-way, without claiming responsibility for the release, to reduce the TPH concentration below 2,000 mg/kg. Specifically, the existing excavation would be extended approximately 20 feet south unless the TPH concentration was reduced below 2,000 mg/kg, at which time digging would cease. On October 21, 2003, the NMOCD approved the work plan with the condition that soil samples from areas with TPH remaining at 2,000 mg/kg be tested using the synthetic precipitation leaching procedure (SPLP), and the leachate analyzed for BTEX (sum of benzene, toluene, ethylbenzene and xylene).

Current Investigation

On November 3 and 5, 2003, additional soil was removed from the pipeline right-of-way, and hauled to the ChevronTexaco centralized waste management facility located in Section 17, Township 24 South, Range 36 East, Lea County, New Mexico. The excavation was extended

Mr. Wayne Price
February 11, 2004
Page 2

about 20 feet south, and ten (10) soil samples (SS-165 through SS-174) were collected for laboratory analysis. The samples were collected using a stainless steel sample trowel, placed in clean glass sample jars, labeled, chilled in an ice chest and delivered under chain-of-custody control to Environmental Lab of Texas, Inc., located in Odessa, Texas. The laboratory analyzed the samples for TPH, BTEX and chloride. Sample SS-170, which displayed the highest TPH concentration, was analyzed for BTEX using the SPLP method (SW-846-1312). Table 1 presents a summary of the TPH, BTEX and chloride analysis. Table 2 presents the results of the SPLP analysis. Figure 2 presents a site drawing. Figure 3 presents sample locations. Appendix A presents the laboratory reports.

Referring to Table 1, no benzene was reported in the soil samples. The highest total BTEX was reported in sample SS-170 (1.832 mg/kg), and was below the maximum concentration allowed by the NMOCD (50 mg/kg). The highest TPH was also reported in soil sample SS-170 (738 mg/kg), and was well below 2,000 mg/kg. Sample SS-170 was leached using the SPLP method, and analyzed for BTEX. The laboratory reported no benzene in the sample. Toluene, ethylbenzene and xylene were reported at 0.002 milligrams per liter (mg/L), 0.010 mg/L and 0.025 mg/L, respectively. The toluene, ethylbenzene and xylene concentrations were well below the New Mexico Water Quality Control Commission (NMWQCC) human health standards of 0.75 mg/L (toluene and ethylbenzene) and 0.62 mg/L (xylene). The highest chloride (222 mg/kg) was reported in sample SS-170.

On November 10, 2003, LA submitted a summary report to the NMOCD, and requested approval to close the excavation, with the assurance that a final report would be submitted in the near future. The NMOCD granted approval, and the excavation was filled with clean soil and graded. Appendix B presents the NMOCD approval. Appendix C presents photographs of the emergency pit and pipeline areas following closure. Please call Mr. Scott Toner with ChevronTexaco at (432) 687-7318 or myself at (432) 687-0901. You may also contact us by email at stoner@chevrontexcaco.com or mark@LAenvironmental.com.

Sincerely,

Larson and Associates, Inc.



Mark J. Larson, CPG, CGWP
President
Encl.

cc: Scott Toner - ChevronTexaco
Paul Sheeley - NMOCD District I

Tables

Table 1
Summary of Laboratory Analyses of Soil Samples from Pipeline Excavation
ChevronTexaco Exploration and Production, Inc.
D. F. Ferguson Lease
UL-H (SE/4, NE/4), Section 30, Township 18 South, Range 39 East
Lea County, New Mexico

Sample Date	Sample Number	Sample Location	Depth (BGS)	GRO C6-C12 (mg/kg)	DRO >C12-C35 (mg/kg)	TPH C6-C35 (mg/kg)	Benzene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
03-Nov-03	SS-165	East	3	<20.0	<20.0	<40.0	<0.025	<0.125	<20
03-Nov-03	SS-166	East	3	<10.0	<10.0	<20.0	<0.025	<0.125	<20
05-Nov-03	SS-167	Bottom	20	21.7	77.8	99.5	<0.025	0.161	76
05-Nov-03	SS-168	South Side	18	<10.0	<10.0	<20.0	<0.025	<0.125	<20
05-Nov-03	SS-169	South Side	18	<10.0	<10.0	<20.0	<0.025	<0.125	<20
05-Nov-03	SS-170	Bottom	20	119	619	738	<0.025	1.832	222
05-Nov-03	SS-171	South Side	20	<10.0	<10.0	<20.0	<0.025	<0.125	<20
05-Nov-03	SS-172	South Side	20	<10.0	<10.0	<20.0	<0.025	<0.125	<20
05-Nov-03	SS-173	East Side	18	<10.0	33.8	33.8	<0.025	<0.125	53.2
05-Nov-03	SS-174	East Side	20	30.8	208	238.8	<0.025	0.049	106

Notes: Analysis performed by Environmental Lab of Texas I, Ltd., Odessa, Texas

1. BGS: Sample depth in feet below ground surface
2. TPH: Total petroleum hydrocarbons (Sum of DRO + GRO)
3. mg/kg: Milligrams per kilogram
4. <: Below method detection limit

Table 2
Summary of SPLP Analysis of Soil Sample from Pipeline Excavation
D.F. Fergason Lease
U. L. H(SE/4, NE/4), Section 30, Township 18 South, Range 39 East
Lea County, New Mexico

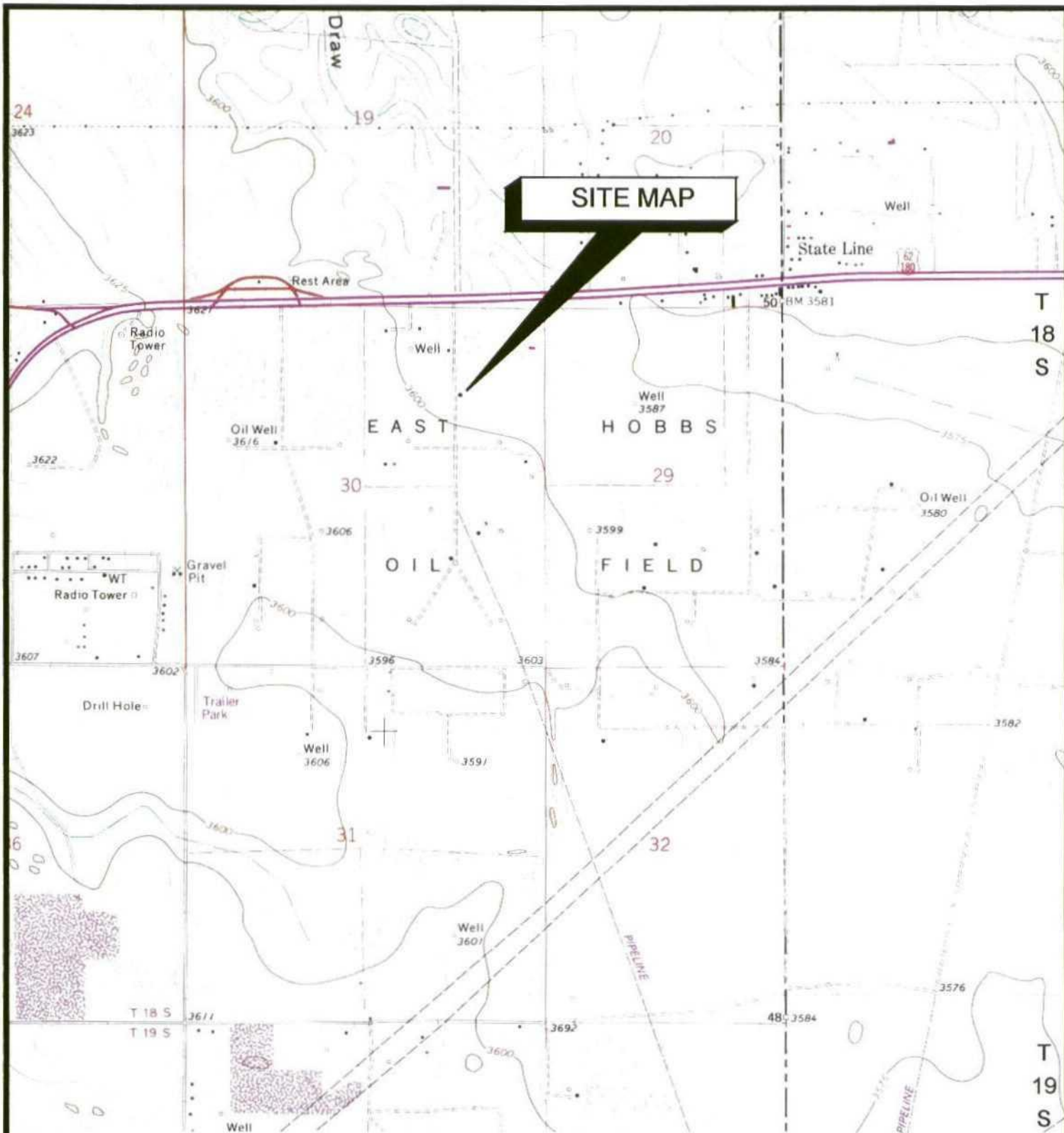
Sample Date	Sample Number	Sample Location	Depth (BGS)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)	BTEX (mg/L)
05-Nov-03	SS-170	Bottom	20	<0.001	0.002	0.010	0.025	0.037

Notes: Analysis performed by Environmental Lab of Texas, Inc., Odessa, Texas

1. BGS: Depth in feet below ground surface

2. mg/L: Milligrams per liter

Figures



SITE MAP

R-38-E

R-39-E

TAKEN FROM U.S.G.S.
HOBBS EAST, TEX.-N. MEX. 1969
7.5' QUADRANGLES



SCALE: 1"=2000'

FIGURE #1

LEA COUNTY, NEW MEXICO

CHEVRONTEXACO INC.

D.F. FERGASON
SE/4, NE/4, SEC. 30, T18S, R39E

TOPOGRAPHIC MAP

DATE: 4/11/01
NAME:
FILE:

Larson & Associates, Inc.
Environmental Consultants



Lina Rodriguez

(Tank Battery Site)
ChevronTexaco

PITS SHOWN on AERIAL
FEBRUARY 14 & MAY 12, 1967

Leah A. Pierce

Jimmy D. Roberts

W.A. Breeding

NAVAJO PIPELINE

PIPELINE EXCAVATION

PIPELINE REROUTED in this AREA

Garnice Land



FIGURE #2

LEA COUNTY, NEW MEXICO

CHEVRONTXACO INC.
D.F. FERGASON

SITE DRAWING

DWE: 06/04/03
NAME

FILE:

Larson &
Associates, Inc.
Environmental Consultants

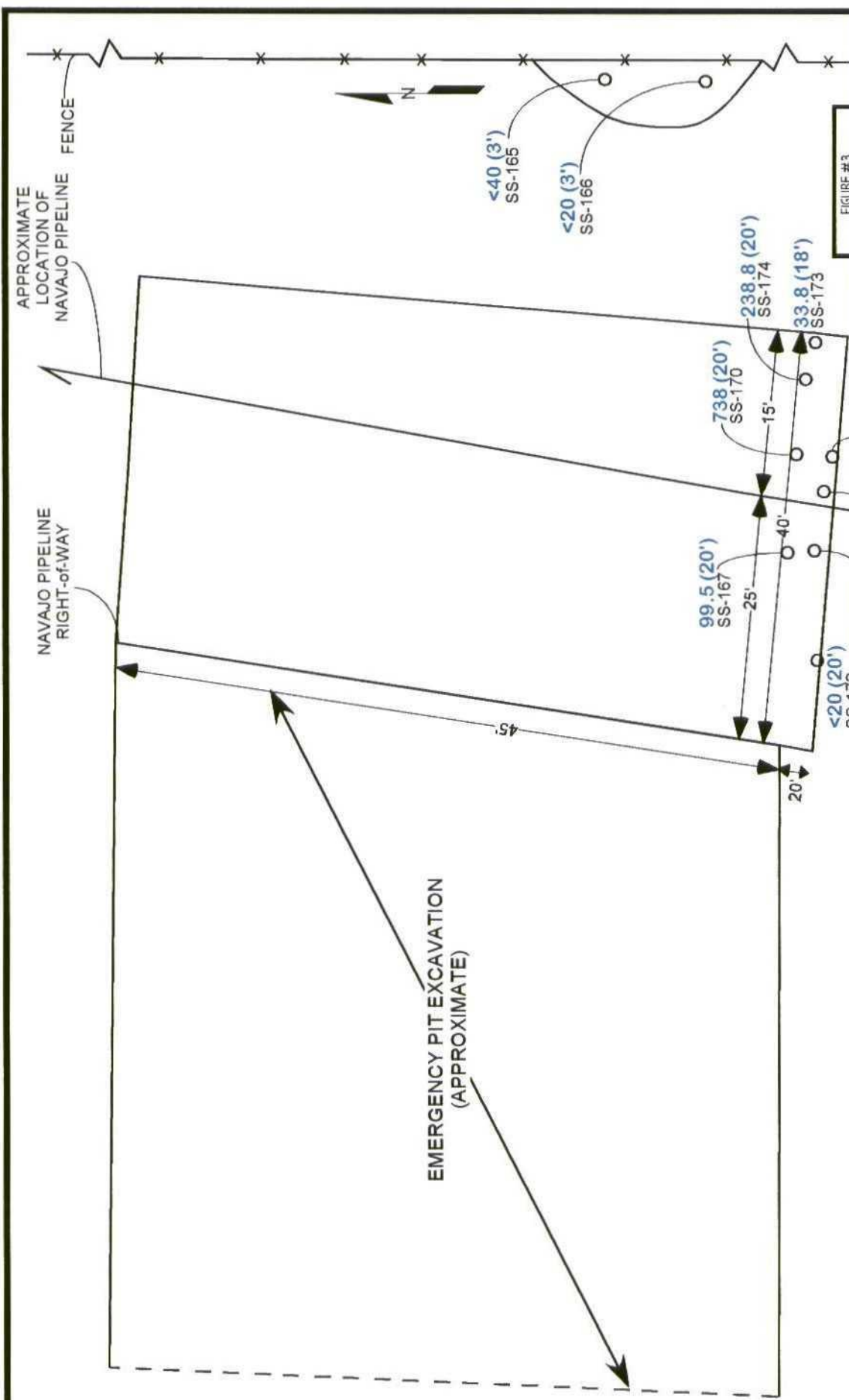


FIGURE #3

LEA COUNTY, NEW MEXICO

CHEVRONTExaco, INC.
PIPELINE EXCAVATION
SE/4, NE/4, SEC. 30, T18S, R39E

SOIL SAMPLE LOCATIONS and
TPH ANALYSIS 11/5/03

Laarson & Associates, Inc.
Environmental Consultants

DATE	08/01/03
NAME	
FILE	

LEGEND

○ **<20 (18')**
SS-168 SOIL SAMPLE LOCATION and TPH CONCENTRATION
(Mg/Kg) at SPECIFIED DEPTH FEET BGS, 10/5/03

SCALE as SHOWN

Appendix A
Laboratory Reports

ANALYTICAL REPORT

Prepared for:

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

Project: Chevron Texaco/ Turner

PO#:

Order#: G0307848

Report Date: 11/06/2003

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#: G0307848
Project: 0-0107
Project Name: Chevron Texaco/ Turner
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.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u> <u>Collected</u>	<u>Date / Time</u> <u>Received</u>	<u>Container</u>	<u>Preservative</u>
0307848-01	SS-165	SOIL	11/3/03	11/3/03 17:45	4 oz glass	None
	<u>Lab Testing:</u>	Rejected: No		Temp: 22.5 C		
	8015M					
	8021B/5030 BTEX					
	Chloride					
0307848-02	SS-166	SOIL	11/3/03	11/3/03 17:45	4 oz glass	None
	<u>Lab Testing:</u>	Rejected: No		Temp: 22.5 C		
	8015M					
	8021B/5030 BTEX					
	Chloride					

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0307848
Project: 0-0107
Project Name: Chevron Texaco/ Turner
Location: None Given

Lab ID: 0307848-01

Sample ID: SS-165

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		11/3/03	1	2	JLH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<20.0	20.0
DRO, >C12-C35	<20.0	20.0
TOTAL, C6-C35	<20.0	20.0

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

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0007342-02		11/4/03	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Toluene	<0.025	0.025
Ethylbenzene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	97%	80	120
Bromofluorobenzene	116%	80	120

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

Page 1 of 2

ENVIRONMENTAL LAB OF TEXAS I, LTD.

12600 West I-20 East, Odessa, TX 79765 Ph: 915-563-1800

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0307848
Project: 0-0107
Project Name: Chevron Texaco/ Turner
Location: None Given

Lab ID: 0307848-02
Sample ID: SS-166

8015M

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
		11/3/03	1	1	JLH	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	99%	70	130

8021B/5030 BTEX

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
0007342-02		11/4/03	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Toluene	<0.025	0.025
Ethylbenzene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	98%	80	120
Bromofluorobenzene	120%	80	120

Approval: Jeanne McMurrey 11-07-03
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

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ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0307848
Project: 0-0107
Project Name: Chevron Texaco/ Turner
Location: None Given

Lab ID: 0307848-01
Sample ID: SS-165

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	<20.0	mg/kg	1	20	9253	11/5/03	SB

Lab ID: 0307848-02
Sample ID: SS-166

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	<20.0	mg/kg	1	20	9253	11/5/03	SB

Approval: Jeanne McMurrey 11-07-03
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.

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0307848

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0007316-02			<10.0		
CONTROL	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0007316-03		952	923	97.0%	
CONTROL DUP	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0007316-04		952	909	95.5%	1.5%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0007316-05		1000	958	95.8%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0307848

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0007342-02			<0.025		
Toluene-mg/kg		0007342-02			<0.025		
Ethylbenzene-mg/kg		0007342-02			<0.025		
p/m-Xylene-mg/kg		0007342-02			<0.025		
o-Xylene-mg/kg		0007342-02			<0.025		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0307831-05	0	0.1	0.099	99.%	
Toluene-mg/kg		0307831-05	0	0.1	0.102	102.%	
Ethylbenzene-mg/kg		0307831-05	0	0.1	0.100	100.%	
p/m-Xylene-mg/kg		0307831-05	0	0.2	0.205	102.5%	
o-Xylene-mg/kg		0307831-05	0	0.1	0.101	101.%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0307831-05	0	0.1	0.095	95.%	4.1%
Toluene-mg/kg		0307831-05	0	0.1	0.097	97.%	5.%
Ethylbenzene-mg/kg		0307831-05	0	0.1	0.096	96.%	4.1%
p/m-Xylene-mg/kg		0307831-05	0	0.2	0.196	98.%	4.5%
o-Xylene-mg/kg		0307831-05	0	0.1	0.097	97.%	4.%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0007342-05		0.1	0.096	96.%	
Toluene-mg/kg		0007342-05		0.1	0.097	97.%	
Ethylbenzene-mg/kg		0007342-05		0.1	0.094	94.%	
p/m-Xylene-mg/kg		0007342-05		0.2	0.191	95.5%	
o-Xylene-mg/kg		0007342-05		0.1	0.095	95.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0307848

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0007344-01			<20.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0307842-01	5280	500	5740	92.2%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0307842-01	5280	500	5780	100.2%	0.7%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0007344-04		5000	4960	99.2%	

CHAIN—OF—CUSTODY RECORD

CLIENT NAME: **Cherrod Texaco**

SITE MANAGER: **John Stewart**

PROJECT NO.: **0-0107**

PROJECT NAME: **Turner**

LAB. PO #

LAB. I.D. NUMBER (LAB USE ONLY)

REMARKS (I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB COMPOSITE)

PAGE **1** OF **1**

NUMBER OF CONTAINERS

DATE

TIME

WATER

SOIL

OTHER

SAMPLE IDENTIFICATION

11/3

✓

55-165

✓

11/3

✓

55-166

✓

THH8015M
CH/6.165
67EX

TURNAROUND TIME NEEDED

RECEIVED BY: (Signature)

DATE: 11/3

TIME: 5:45

RECEIVING LABORATORY:

ADDRESS:

CITY:

STATE:

PHONE:

ZIP:

DATE:

RECEIVED BY: (Signature)

DATE: 11/3

TIME: 5:45

FEDEX

BUS

UPS

AIRBILL #:

OTHER:

WHITE - RECEIVING LAB

YELLOW - RECEIVING LAB (TO BE RETURNED TO LA AFTER RECEIPT)

PINK - PROJECT MANAGER

GOLD - QA/QC COORDINATOR

SAMPLE TYPE:

22.5°C

402 JAR

RECEIVED BY: (Signature)

DATE: 11/3

TIME: 5:45

RECEIVED BY: (Signature)

DATE: 11/3

TIME: 5:45

RECEIVED BY: (Signature)

DATE: 11/3

TIME: 5:45

RECEIVED BY: (Signature)

DATE: 11/3

TIME: 5:45

RECEIVED BY: (Signature)

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RECEIVED BY: (Signature)

DATE: 11/3

TIME: 5:45

RECEIVED BY: (Signature)

DATE: 11/3

TIME: 5:45

RECEIVED BY: (Signature)

DATE: 11/3

TIME: 5:45

RECEIVED BY: (Signature)

DATE: 11/3

TIME: 5:45

ANALYTICAL REPORT

Prepared for:

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

Project: Texaco/ Turner

PO#:

Order#: G0307861

Report Date: 11/06/2003

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#: G0307861
Project: 0-0107
Project Name: Texaco/ Turner
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.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u>	<u>Date / Time</u>	<u>Container</u>	<u>Preservative</u>
			<u>Collected</u>	<u>Received</u>		
0307861-01	SS-167	SOIL	11/5/03 10:59	11/5/03 16:10	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M 8021B/5030 BTEX Chloride	Rejected: No		Temp: 4.0 C		
0307861-02	SS-168	SOIL	11/5/03 11:02	11/5/03 16:10	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M 8021B/5030 BTEX Chloride	Rejected: No		Temp: 4.0 C		
0307861-03	SS-169	SOIL	11/5/03 11:04	11/5/03 16:10	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M 8021B/5030 BTEX Chloride	Rejected: No		Temp: 4.0 C		
0307861-04	SS-170	SOIL	11/5/03 11:06	11/5/03 16:10	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M 8021B/5030 BTEX Chloride	Rejected: No		Temp: 4.0 C		
0307861-05	SS-171	SOIL	11/5/03 11:25	11/5/03 16:10	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M 8021B/5030 BTEX Chloride	Rejected: No		Temp: 4.0 C		
0307861-06	SS-172	SOIL	11/5/03 11:28	11/5/03 16:10	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M	Rejected: No		Temp: 4.0 C		

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

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

Order#: G0307861
Project: 0-0107
Project Name: Texaco/ Turner
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.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u> <u>Collected</u>	<u>Date / Time</u> <u>Received</u>	<u>Container</u>	<u>Preservative</u>
	8021B/5030 BTEX Chloride					
0307861-07	SS-173	SOIL	11/5/03 12:30	11/5/03 16:10	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M 8021B/5030 BTEX Chloride	Rejected: No		Temp: 4.0 C		
0307861-08	SS-174	SOIL	11/5/03 12:31	11/5/03 16:10	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M 8021B/5030 BTEX Chloride	Rejected: No		Temp: 4.0 C		

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

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

Order#: G0307861
Project: 0-0107
Project Name: Texaco/ Turner
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.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u> <u>Collected</u>	<u>Date / Time</u> <u>Received</u>	<u>Container</u>	<u>Preservative</u>
0307861-01	SS-167	SOIL	11/5/03 10:59	11/5/03 16:10	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M 8021B/5030 BTEX Chloride	Rejected: No		Temp: 4.0 C		
0307861-02	SS-168	SOIL	11/5/03 11:02	11/5/03 16:10	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M 8021B/5030 BTEX Chloride	Rejected: No		Temp: 4.0 C		
0307861-03	SS-169	SOIL	11/5/03 11:04	11/5/03 16:10	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M 8021B/5030 BTEX Chloride	Rejected: No		Temp: 4.0 C		
0307861-04	SS-170	SOIL	11/5/03 11:06	11/5/03 16:10	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M 8021B/5030 BTEX Chloride	Rejected: No		Temp: 4.0 C		
0307861-05	SS-171	SOIL	11/5/03 11:25	11/5/03 16:10	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M 8021B/5030 BTEX Chloride	Rejected: No		Temp: 4.0 C		
0307861-06	SS-172	SOIL	11/5/03 11:28	11/5/03 16:10	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M	Rejected: No		Temp: 4.0 C		

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

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

Order#: G0307861
Project: 0-0107
Project Name: Texaco/ Turner
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.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u> <u>Collected</u>	<u>Date / Time</u> <u>Received</u>	<u>Container</u>	<u>Preservative</u>
0307861-07	8021B/5030 BTEX Chloride	SOIL	11/5/03 12:30	11/5/03 16:10	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M 8021B/5030 BTEX Chloride	Rejected: No		Temp: 4.0 C		
0307861-08	SS-174	SOIL	11/5/03 12:31	11/5/03 16:10	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M 8021B/5030 BTEX Chloride	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#: G0307861
Project: 0-0107
Project Name: Texaco/ Turner
Location: None Given

Lab ID: 0307861-01
Sample ID: SS-167

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		11/5/03	1	1	JLH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	21.7	10.0
DRO, >C12-C35	77.8	10.0
TOTAL, C6-C35	99.5	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	97%	70	130
1-Chlorooctadecane	103%	70	130

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0007342-02		11/5/03	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Toluene	<0.025	0.025
Ethylbenzene	0.040	0.025
p/m-Xylene	0.121	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	109%	80	120
Bromofluorobenzene	120%	80	120

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

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ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0307861
Project: 0-0107
Project Name: Texaco/ Turner
Location: None Given

Lab ID: 0307861-02
Sample ID: SS-168

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		11/5/03	1	1	JLH	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	94%	70	130

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0007342-02		11/5/03	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Toluene	<0.025	0.025
Ethylbenzene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	100%	80	120
Bromofluorobenzene	120%	80	120

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

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ENVIRONMENTAL LAB OF TEXAS I, LTD.

12600 West I-20 East, Odessa, TX 79765 Ph: 915-563-1800

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0307861
Project: 0-0107
Project Name: Texaco/ Turner
Location: None Given

Lab ID: 0307861-03

Sample ID: SS-169

8015M

<u>Method</u>	<u>Date</u>	<u>Date</u>	<u>Sample</u>	<u>Dilution</u>	<u>Analyst</u>	<u>Method</u>
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
		11/5/03	1	1	JLH	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	94%	70	130
1-Chlorooctadecane	130%	70	130

8021B/5030 BTEX

<u>Method</u>	<u>Date</u>	<u>Date</u>	<u>Sample</u>	<u>Dilution</u>	<u>Analyst</u>	<u>Method</u>
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
0007342-02		11/5/03	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Toluene	<0.025	0.025
Ethylbenzene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	108%	80	120
Bromofluorobenzene	120%	80	120

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ENVIRONMENTAL LAB OF TEXAS I, LTD.

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ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0307861
Project: 0-0107
Project Name: Texaco/ Turner
Location: None Given

Lab ID: 0307861-04

Sample ID: SS-170

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		11/5/03	1	1	JLH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	119	10.0
DRO, >C12-C35	619	10.0
TOTAL, C6-C35	738	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	98%	70	130
1-Chlorooctadecane	110%	70	130

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0007342-02		11/5/03	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Toluene	0.146	0.025
Ethylbenzene	0.507	0.025
p/m-Xylene	0.807	0.025
o-Xylene	0.372	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	115%	80	120
Bromofluorobenzene	132%	80	120

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ENVIRONMENTAL LAB OF TEXAS I, LTD.

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ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0307861
Project: 0-0107
Project Name: Texaco/ Turner
Location: None Given

Lab ID: 0307861-05
Sample ID: SS-171

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		11/5/03	1	1	JLH	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	94%	70	130
1-Chlorooctadecane	105%	70	130

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0007342-02		11/5/03	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Toluene	<0.025	0.025
Ethylbenzene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	107%	80	120
Bromofluorobenzene	116%	80	120

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

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ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0307861
Project: 0-0107
Project Name: Texaco/ Turner
Location: None Given

Lab ID: 0307861-06

Sample ID: SS-172

8015M

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
		11/5/03	1	1	JLH	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	93%	70	130
1-Chlorooctadecane	101%	70	130

8021B/5030 BTEX

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
0007342-02		11/5/03	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Toluene	<0.025	0.025
Ethylbenzene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	104%	80	120
Bromofluorobenzene	115%	80	120

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ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0307861
Project: 0-0107
Project Name: Texaco/ Turner
Location: None Given

Lab ID: 0307861-07

Sample ID: SS-173

8015M

<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>
		11/5/03	1	1	JLH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	33.8	10.0
TOTAL, C6-C35	33.8	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	89%	70	130
1-Chlorooctadecane	99%	70	130

8021B/5030 BTEX

<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>
0007342-02		11/5/03	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Toluene	<0.025	0.025
Ethylbenzene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	104%	80	120
Bromofluorobenzene	120%	80	120

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ENVIRONMENTAL LAB OF TEXAS I, LTD.

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ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0307861
Project: 0-0107
Project Name: Texaco/ Turner
Location: None Given

Lab ID: 0307861-08

Sample ID: SS-174

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		11/5/03	1	1	JLH	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	30.8	10.0
DRO, >C12-C35	208	10.0
TOTAL, C6-C35	238.8	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	90%	70	130
1-Chlorooctadecane	102%	70	130

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0007342-02		11/5/03	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Toluene	<0.025	0.025
Ethylbenzene	<0.025	0.025
p/m-Xylene	0.049	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	89%	80	120
Bromofluorobenzene	116%	80	120

Approval:

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

11-06-03
Date

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

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ENVIRONMENTAL LAB OF TEXAS I, LTD.

12600 West I-20 East, Odessa, TX 79765 Ph: 915-563-1800

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0307861
Project: 0-0107
Project Name: Texaco/ Turner
Location: None Given

Lab ID: 0307861-01
Sample ID: SS-167

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	76.0	mg/kg	1	20	9253	11/6/03	SB

Lab ID: 0307861-02
Sample ID: SS-168

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	<20.0	mg/kg	1	20	9253	11/6/03	SB

Lab ID: 0307861-03
Sample ID: SS-169

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	<20.0	mg/kg	1	20	9253	11/6/03	SB

Lab ID: 0307861-04
Sample ID: SS-170

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	222	mg/kg	1	20	9253	11/6/03	SB

Lab ID: 0307861-05
Sample ID: SS-171

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	<20.0	mg/kg	1	20	9253	11/6/03	SB

Lab ID: 0307861-06
Sample ID: SS-172

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	<20.0	mg/kg	1	20	9253	11/6/03	SB

RL = Reporting Limit N/A = Not Applicable

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ENVIRONMENTAL LAB OF TEXAS I, LTD.

12600 West I-20 East, Odessa, TX 79765 Ph: 915-563-1800

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0307861
Project: 0-0107
Project Name: Texaco/ Turner
Location: None Given

Lab ID: 0307861-07
Sample ID: SS-173

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	53.2	mg/kg	1	20	9253	11/6/03	SB

Lab ID: 0307861-08
Sample ID: SS-174

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	106	mg/kg	1	20	9253	11/6/03	SB

Approval: Raland K. Tuttle 11-06-03
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.

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0307861

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0007348-02			<10.0		
CONTROL	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0007348-03		952	895	94.0%	
CONTROL DUP	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0007348-04		952	828	87.0%	7.8%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0007348-05		1000	856	85.6%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0307861

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0007342-02			<0.025		
Toluene-mg/kg		0007342-02			<0.025		
Ethylbenzene-mg/kg		0007342-02			<0.025		
p/m-Xylene-mg/kg		0007342-02			<0.025		
o-Xylene-mg/kg		0007342-02			<0.025		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0307831-05	0	0.1	0.099	99.%	
Toluene-mg/kg		0307831-05	0	0.1	0.102	102.%	
Ethylbenzene-mg/kg		0307831-05	0	0.1	0.100	100.%	
p/m-Xylene-mg/kg		0307831-05	0	0.2	0.205	102.5%	
o-Xylene-mg/kg		0307831-05	0	0.1	0.101	101.%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0307831-05	0	0.1	0.095	95.%	4.1%
Toluene-mg/kg		0307831-05	0	0.1	0.097	97.%	5.%
Ethylbenzene-mg/kg		0307831-05	0	0.1	0.096	96.%	4.1%
p/m-Xylene-mg/kg		0307831-05	0	0.2	0.196	98.%	4.5%
o-Xylene-mg/kg		0307831-05	0	0.1	0.097	97.%	4.%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0007342-05		0.1	0.096	96.%	
Toluene-mg/kg		0007342-05		0.1	0.097	97.%	
Ethylbenzene-mg/kg		0007342-05		0.1	0.094	94.%	
p/m-Xylene-mg/kg		0007342-05		0.2	0.191	95.5%	
o-Xylene-mg/kg		0007342-05		0.1	0.095	95.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0307861

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0007345-01			<20.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0307861-01	76	500	582	101.2%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0307861-01	76	500	557	96.2%	4.4%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0007345-04		5000	4960	99.2%	

CASE NARRATIVE

ENVIRONMENTAL LAB OF TEXAS

Prepared for:

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

Order#: G0307861

Project: Texaco/ Turner

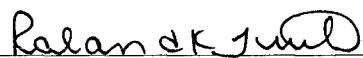
The following samples were received as indicated below and on the attached Chain of Custody record. All analyses were performed within the holding time and with acceptable quality control results unless otherwise noted.

SAMPLE ID	LAB ID	MATRIX	Date Collected	Date Received
SS-167	0307861-01	SOIL	11/05/2003	11/05/2003
SS-168	0307861-02	SOIL	11/05/2003	11/05/2003
SS-169	0307861-03	SOIL	11/05/2003	11/05/2003
SS-170	0307861-04	SOIL	11/05/2003	11/05/2003
SS-171	0307861-05	SOIL	11/05/2003	11/05/2003
SS-172	0307861-06	SOIL	11/05/2003	11/05/2003
SS-173	0307861-07	SOIL	11/05/2003	11/05/2003
SS-174	0307861-08	SOIL	11/05/2003	11/05/2003

Surrogate recoveries on the 8021B BTEX are outside control limits due to matrix interference.
(0307861-04)

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:


Environmental Lab of Texas I, Ltd.

Date:

11-06-03

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0307861
Project: 0-0107
Project Name: Texaco/ Turner
Location: None Given

Lab ID: 0307861-04

Sample ID: SS-170

SPLP BTEX 8021B,1312

<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>
0007357-02	11/6/03	11/7/03	1	1	CK	1312/8021B

Parameter	Result mg/L	RL
Benzene	<0.001	0.001
Toluene	0.002	0.001
Ethylbenzene	0.010	0.001
p/m-Xylene	0.017	0.001
o-Xylene	0.008	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	112%	80	120
Bromofluorobenzene	99%	80	120

Approval:

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

Date

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

Page 1 of 1

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

SPLP BTEX 8021B,1312

Order#: G0307861

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L		0007357-02			<0.001		
Toluene-mg/L		0007357-02			<0.001		
Ethylbenzene-mg/L		0007357-02			<0.001		
p/m-Xylene-mg/L		0007357-02			<0.001		
o-Xylene-mg/L		0007357-02			<0.001		
CONTROL	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L		0007357-03		0.1	0.085	85.0%	
Toluene-mg/L		0007357-03		0.1	0.085	85.0%	
Ethylbenzene-mg/L		0007357-03		0.1	0.082	82.0%	
p/m-Xylene-mg/L		0007357-03		0.2	0.164	82.0%	
o-Xylene-mg/L		0007357-03		0.1	0.085	85.0%	
CONTROL DUP	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L		0007357-04		0.1	0.088	88.0%	3.5%
Toluene-mg/L		0007357-04		0.1	0.087	87.0%	2.3%
Ethylbenzene-mg/L		0007357-04		0.1	0.084	84.0%	2.4%
p/m-Xylene-mg/L		0007357-04		0.2	0.169	84.5%	3.0%
o-Xylene-mg/L		0007357-04		0.1	0.089	89.0%	4.6%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L		0007357-05		0.1	0.088	88.0%	
Toluene-mg/L		0007357-05		0.1	0.088	88.0%	
Ethylbenzene-mg/L		0007357-05		0.1	0.085	85.0%	
p/m-Xylene-mg/L		0007357-05		0.2	0.173	86.5%	
o-Xylene-mg/L		0007357-05		0.1	0.091	91.0%	

Appendix B
NMOCD Correspondence
November 10, 2003

Mark Larson

From: Price, Wayne [WPrice@state.nm.us]
Sent: Tuesday, October 21, 2003 2:55 PM
To: 'Mark Larson'; Price, Wayne
Cc: Toner, Scott L (SToner)
Subject: RE: Remediation Summary and Proposed Pipeline Excavation Work Plan, D.F. Fergason Lease, U.L. H, Section 30, Township 18 South, Range 39 East, Lea County, NM

OCD Hereby approves of the work plan with the following condition:

Please collect samples of the areas that the TPH of the soil remains i.e. 2000 mg/kg and run an SPLP test to make sure that the BTEX is within OCD groundwater limits.

-----Original Message-----

From: Mark Larson [mailto:mark@laenvironmental.com]
Sent: Friday, October 17, 2003 8:33 AM
To: Price, Wayne
Cc: Toner, Scott L (SToner)
Subject: Re: Remediation Summary and Proposed Pipeline Excavation Work Plan, D.F. Fergason Lease, U.L. H, Section 30, Township 18 South, Range 39 East, Lea County, NM

Dear Mr. Price:

On October 16, 2003, the above-referenced report was faxed to your attention. ChevronTexaco is nearing completion of closing the emergency pit excavation at the D.F. Fergason Lease, and would like to complete work along the pipeline right-of-way located east of the excavation. The document contains the scope of work for the project, and it would greatly benefit ChevronTexaco to complete the work while equipment and access is available. Your approval of the work plan would be greatly appreciated.
Sincerely,

Mark J. Larson
Larson and Associates, Inc.
507 N. Marienfeld Street, Suite 202
Midland, Texas 79701
(432) 687-0901 (office)
(432) 687-0456 (fax)
(432) 556-8656 (mobile)
mark@LAenvironmental.com

Cindy Crain

From: Price, Wayne [WPrice@state.nm.us]
Sent: Monday, November 10, 2003 3:39 PM
To: 'Cindy Crain'; Price, Wayne
Cc: Scott Toner
Subject: RE: Remediation Summary and Proposed Pipeline Excavation Work Plan, D.F. Fergason Lease, U.L. H, Section 30, Township 18 South, Range 39 East, Lea County, NM (correct table)

APPROVED!

Please be advised that NMOCD approval does not relieve (Chevron-Texaco) of liability should their operations fail to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD approval does not relieve (Chevron-Texaco) of responsibility for compliance with any other federal, state, or local laws and/or regulations.

-----Original Message-----

From: Cindy Crain [mailto:cindy@laenvironmental.com]
Sent: Monday, November 10, 2003 2:36 PM
To: Price, Wayne
Cc: Scott Toner
Subject: RE: Remediation Summary and Proposed Pipeline Excavation Work Plan, D.F. Fergason Lease, U.L. H, Section 30, Township 18 South, Range 39 East, Lea County, NM (correct table)

Wayne,

As per our conversation earlier today, the total TPH concentrations for soil samples SS-167 and SS-170 were 99.5 mg/kg and 738 mg/kg, respectively. An SPLP analysis for benzene was run on sample SS-170. Laboratory results show a benzene concentration of <0.001 mg/kg and a total BTEX concentration of 0.037 mg/kg. The laboratory results are being faxed to you.

A complete report of the pipeline excavation activities will be sent to you in the very near future; however, ChevronTexaco would like to backfill the excavation while equipment and access is available. Your approval of the closure would be greatly appreciated. Please call if you have questions or need additional information.

Sincerely,

*Cindy Crain
Project Manager/Geologist
Larson and Associates, Inc.
507 N. Marienfeld, Suite 202
Midland, Texas 79702
office - (234)687-0901
mobile - (234)556-8665*

11/10/2003

Appendix C

Photographs

D.F. Fergason Lease Pipeline Excavation
U. L. H, Section 30, Township 18 South, Range 39 East
Lea County, New Mexico



1. Pipeline Excavation – Hydrocarbon Staining Near Center of South Wall Beneath Pipeline



2. Pipeline Excavation – Looking West

**D.F. Fergason Lease Pipeline Excavation
U. L. H, Section 30, Township 18 South, Range 39 East
Lea County, New Mexico**



3. Pipeline Excavation – Extending Excavation South