

October 15, 2003

**VIA FACSIMILE: (505) 476-3462**

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



**Re: 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**

Dear Mr. Price:

ChevronTexaco Exploration and Production, Inc. (Chevron Texaco), as successor to Texaco Exploration and Production, Inc. (Texaco), retained Larson and Associates, Inc. (LA) to supervise remediation of an emergency pit once associated with the D.F. Fergason Lease located in unit letter H (SE/4, NE/4), Section 30, Township 18 South, Range 39 East, Lea County, New Mexico. Remediation of the emergency pit was conducted between April 14, 2003 and June 26, 2003. On August 28, 2003, the New Mexico Oil Conservation Division (NMOCD) granted ChevronTexaco permission to fill the emergency pit excavation to the west edge of a pipeline right-of-way located near the east side of the excavation. The crude oil pipeline is owned by Navajo Pipeline (Navajo), and was temporarily relocated at the expense of ChevronTexaco to facilitate excavation of a portion of the emergency pit that extended into the pipeline right-of-way. Figure 1 presents a location and topographic map. Figure 2 presents a site drawing.

Soil samples were collected from the emergency pit excavation near the west edge of the pipeline right-of-way to assess the vertical extent of impact from the pit. Samples SS-97 and SS-98 were collected from the bottom of the excavation from about 20 and 22 feet below ground surface (bgs), respectively. Environmental Lab of Texas, Inc. (ELTI) received the samples under proper preservation and chain-of-custody, which were analyzed for benzene, toluene, ethylbenzene, xylene (collectively referred to as BTEX) using method SW-846-8021B, total petroleum hydrocarbons (TPH) for gasoline range organics (GRO) and diesel range organics (DRO) using method SW-846-8015, and chloride using method SW-846-9253. The laboratory reported no BTEX or TPH above the method detection limits (concluding that impact did not extend to 20 feet bgs). The chloride concentration in samples SS-97 and SS-98 was 195 milligrams per kilogram (mg/kg) and 70.9 mg/kg, respectively. The laboratory results conclude that impact from the emergency pit did not extend to 20 feet bgs near the pipeline right-of-way.

Between June 23, 2003 and June 26, 2003, the emergency pit was excavated into the pipeline right-of-way. Soil samples were collected daily as the excavation progressed, and were analyzed for TPH and chloride, using the above-described methods. Duplicate samples were periodically collected and analyzed for TPH using field instrumentation. Figures 3 through 6 present detailed drawings of the excavation for June 23, 2003 through June 26, 2003, respectively. The drawings present the excavation boundary and TPH concentration from soil samples. Table 1 presents a summary of the field and laboratory analysis. The laboratory reports

Mr. Wayne Price  
October 14, 2003  
Page 2


for samples SS-97, SS-98, SS-100 through SS-151 were included in the emergency pit closure report dated August 28, 2003 (*"Preliminary Report and Closure Request for Emergency Pit Excavation, D.F. Ferguson Lease, U.L. H (SE/4, NE/4), Section 30, Township 18 South, Range 39 East, Lea County, New Mexico"*). Appendix A presents the laboratory report for samples SS-152 through SS-164.

On June 23, 2003, the pipeline excavation measured approximately 30' x 36', and extended to about 8 feet bgs. Soil samples exhibited TPH concentrations from 28.3 mg/kg (SS-100) to 4810 mg/kg (SS-103). On June 24, 2003, the excavation measured approximately 40' x 45', and extended to about 10 to 13 feet bgs. Soil samples exhibited TPH concentrations from 1802 mg/kg (SS-106) to 15,961 mg/kg (SS-110). On June 25, 2003, the excavation measured approximately 55' x 45', and extended to about 17 to 18 feet bgs. The TPH concentrations ranged from less than the method detection limit (<10 mg/kg) in sample SS-147 to 2949 mg/kg (SS-150). On June 26, 2003, the excavation measured approximately 65' x 45', and extended to about 15 to 20 feet bgs. Soil samples contained TPH concentrations from less than the method detection limit (<10 mg/kg) in samples SS-153 (15'), SS-155 (15') and SS-156 (15') to 2845 mg/kg in sample SS-158 (15'). Sample SS-158 was collected from the south side of the excavation where hydrocarbon staining appeared to originate from a point south of the excavation (concluding that the source for the TPH is not the emergency pit).

ChevronTexaco claims no responsibility for historical impacts at this location that are not associated with the emergency pit, but it proposed to cooperate with the NMOCD to reduce the TPH to a reasonable concentration (2000 mg/kg). ChevronTexaco proposes to remove additional soil from the south end of this excavation. The additional excavation work will not exceed the current width (approximately 65 feet) and depth (approximately 20 feet) of the south end of the excavation, and will not be extended more than 20 feet past the current location. The new excavation work will be terminated when these limits have been reached, or the TPH concentration in soil samples reaches the proposed level of 2000 mg/kg, whichever occurs first. Soil samples will be collected from the sides and bottom of the new excavation to show that the soil has been remediated to 2000 mg/kg, or to document the level of TPH still in place if the limits of the proposed additional excavation are reached. A qualified laboratory will analyze the samples for BTEX, TPH and chloride using EPA approved methods. The excavation will be filled with clean soil, and crowned slightly to facilitate runoff. A final report will be submitted to the NMOCD upon completion of the work, and receipt of the laboratory analysis. Please call Mr. Scott Toner with ChevronTexaco at (432) 687-7318 or myself at (432) 687-0901, you can contact us by email at [stoner@chevrontexcaco.com](mailto:stoner@chevrontexcaco.com) or [mark@LAenvironmental.com](mailto: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 TPH and Chloride Analysis of Soil Samples 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 Number	Sample Location	Sample Date	Sample Depth (feet BGS)	Field TPH (mg/kg)	GRO C6-C12 mg/kg	DRO >C12-C35 mg/kg	TPH C6-C35 mg/kg	Chloride mg/kg
S-97	E Bottom Pit	05-Jun-03	20	---	<0.025	<0.125	<10.0	<10.0
S-98	E Bottom Pit	05-Jun-03	22	---	<0.025	<0.125	<10.0	<10.0
S-99	Pile in Pit	20-Jun-03	--	15.0	--	--	<10.0	40.4
S-100	Pit @ Pipeline	23-Jun-03	8	0.4	---	--	<10.0	28.3
S-101	Pit @ Pipeline	23-Jun-03	8	26.6	---	---	36.6	2150
S-102	Pit @ Pipeline	23-Jun-03	8	2.2	---	---	<10.0	35.8
S-103	Pit @ Pipeline	23-Jun-03	8	600	---	---	310	4500
S-104	Pit @ Pipeline	23-Jun-03	8	--	---	---	13.6	3570
S-105	Pit @ Pipeline	23-Jun-03	8	66.8	18.1	165	183	<20.0
S-106	Pit @ Pipeline	24-Jun-03	13	145	262	1540	1802	--
S-107	Pit @ Pipeline	24-Jun-03	13	548	482	2240	2722	---
S-108	Pit @ Pipeline	24-Jun-03	13	550	674	2450	3124	---
S-109	Pit @ Pipeline	24-Jun-03	10	308	289	2560	2849	---
S-110	Pit @ Pipeline	24-Jun-03	10	103	561	15400	15961	---
S-147	East End	24-Jun-03	18	114	<10.0	<10.0	<20.0	195
S-148	East End	24-Jun-03	18	175	11.0	159	170	266
S-149	East End	24-Jun-03	18	1466	382	1300	1682	158
S-150	East End	24-Jun-03	17	1703	729	2220	2949	236

**Notes:**

1. BGS: Laboratory analyses performed by Environmental Lab of Texas, Inc.
2. GRO: Depth in feet below ground surface
3. DRO: Gasoline-range organics by method SW-846-8015
4. TPH: Diesel-range organics by method SW-846-8015
5. mg/kg: Total petroleum hydrocarbons (Sum of GRO + DRO)
6. ---: Milligrams per kilogram
7. <: No data available  
Less than method detectic

Sample Number	Sample Location	Sample Date	Sample Depth (feet BGS)	Field TPH (mg/kg)	GRO C6-C12 mg/kg	DRO >C12-C35 mg/kg	TPH C6-C35 mg/kg	Chloride mg/kg
S-152	North Side	26-Jun-03	15	--	23.9	402	425.9	<20.0
S-153	North Side	26-Jun-03	15	--	<10.0	<10.0	<20.0	<20.0
S-154	East End	26-Jun-03	15	--	13.6	441	454.6	<20.0
S-155	East End	26-Jun-03	15	--	<10.0	<10.0	<20.0	<20.0
S-156	South Side	26-Jun-03	15	--	<10.0	<10.0	<20.0	248
S-157	South Side	26-Jun-03	15	--	85.0	559	644	53.2
S-158	South Side (Stain)	26-Jun-03	18	--	645	2200	2845	106
S-159	West End	26-Jun-03	22	--	50.3	416	466.3	195
S-160	West End	26-Jun-03	20	--	29.7	268	297.7	<20.0
S-161	West End	26-Jun-03	20	--	437	1500	1937	142
S-162	East End	26-Jun-03	17	--	<10.0	36.5	36.5	195
S-163	East End	26-Jun-03	17	--	266	1350	1616	53.2
S-164	East End	26-Jun-03	17	--	<10.0	45.8	45.8	53.2

Notes:

Laboratory analyses performed by Environmental Lab of Texas, Inc.

Depth in feet below ground surface

Gasoline-range organics by method SW-846-8015

Diesel-range organics by method SW-846-8015

Total petroleum hydrocarbons (Sum of GRO + DRO)

Milligrams per kilogram

No data available

Less than method detectic

1. BGS:

2. GRO:

3. DRO:

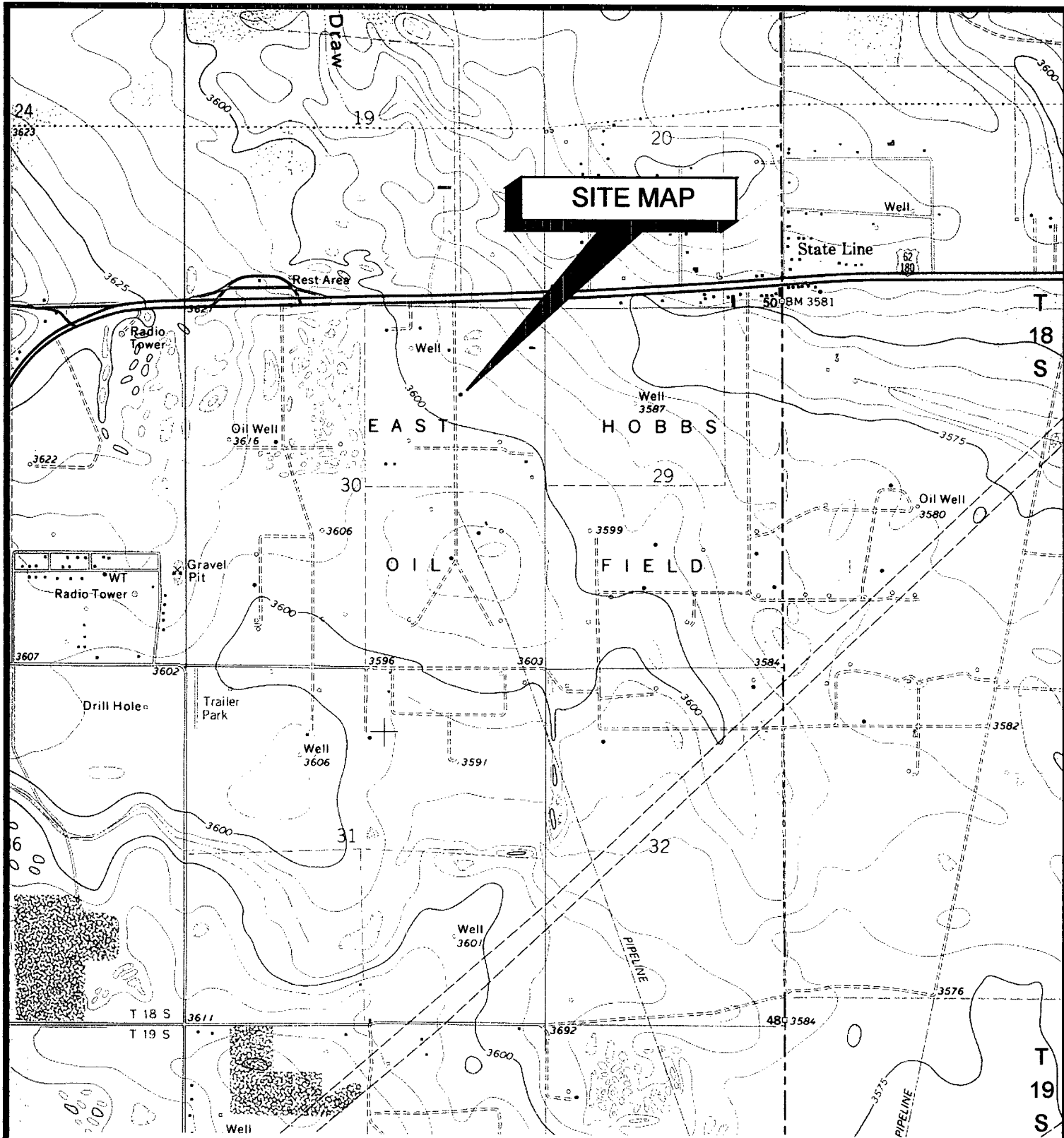
4. TPH:

5. mg/kg

6. ---:

7. <:

## Figures



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

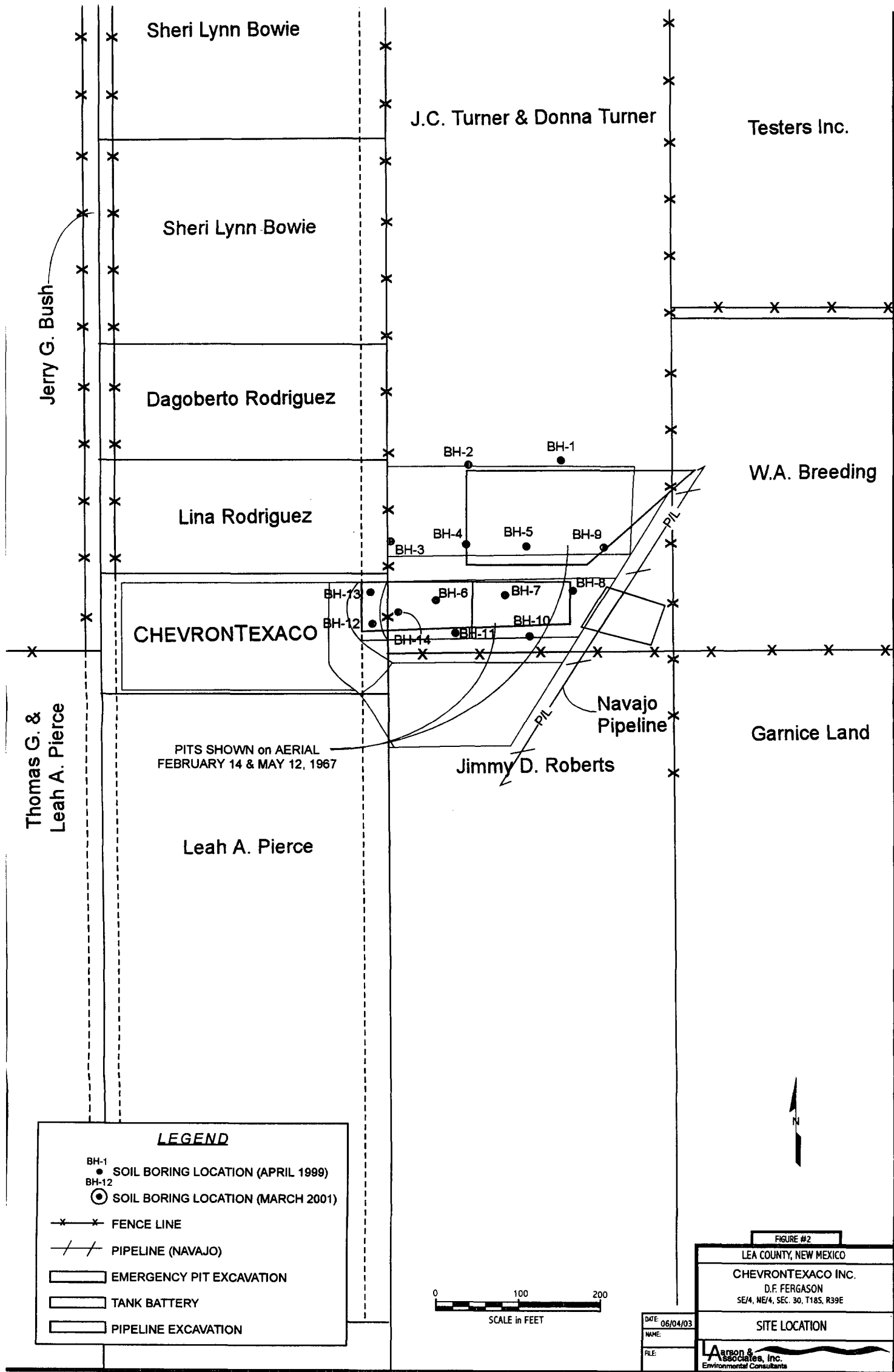
**CHEVRONTExaco INC.**

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

TOPOGRAPHIC MAP

DATE: 4/11/01  
NAME:  
FILE:

**Larson & Associates, Inc.**  
Environmental Consultants





APPROXIMATE  
LOCATION OF  
NAVAJO PIPELINE

3584 (8')  
SS-104

28.3 (8')  
SS-100

2187 (8')  
SS-101

4810 (8')  
SS-103

<10 (20')  
SS-97  
<10 (22')  
SS-98

35.8 (8')  
SS-102

183 (8')  
SS-105

NAVAJO PIPELINE  
RIGHT-OF-WAY

EMERGENCY PIT EXCAVATION  
(APPROXIMATE)

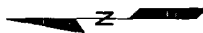


FIGURE #3

LEA COUNTY, NEW MEXICO

**CHEVRONTExaco, INC.**

PIPELINE EXCAVATION

SE/4, NE/4, SEC. 30, T18S, R39E

**SOIL SAMPLE LOCATION and  
TPH ANALYSIS 6/23/03**

**La arson &  
Associates, Inc.**  
Environmental Consultants

DATE: 08/01/03

NAME:

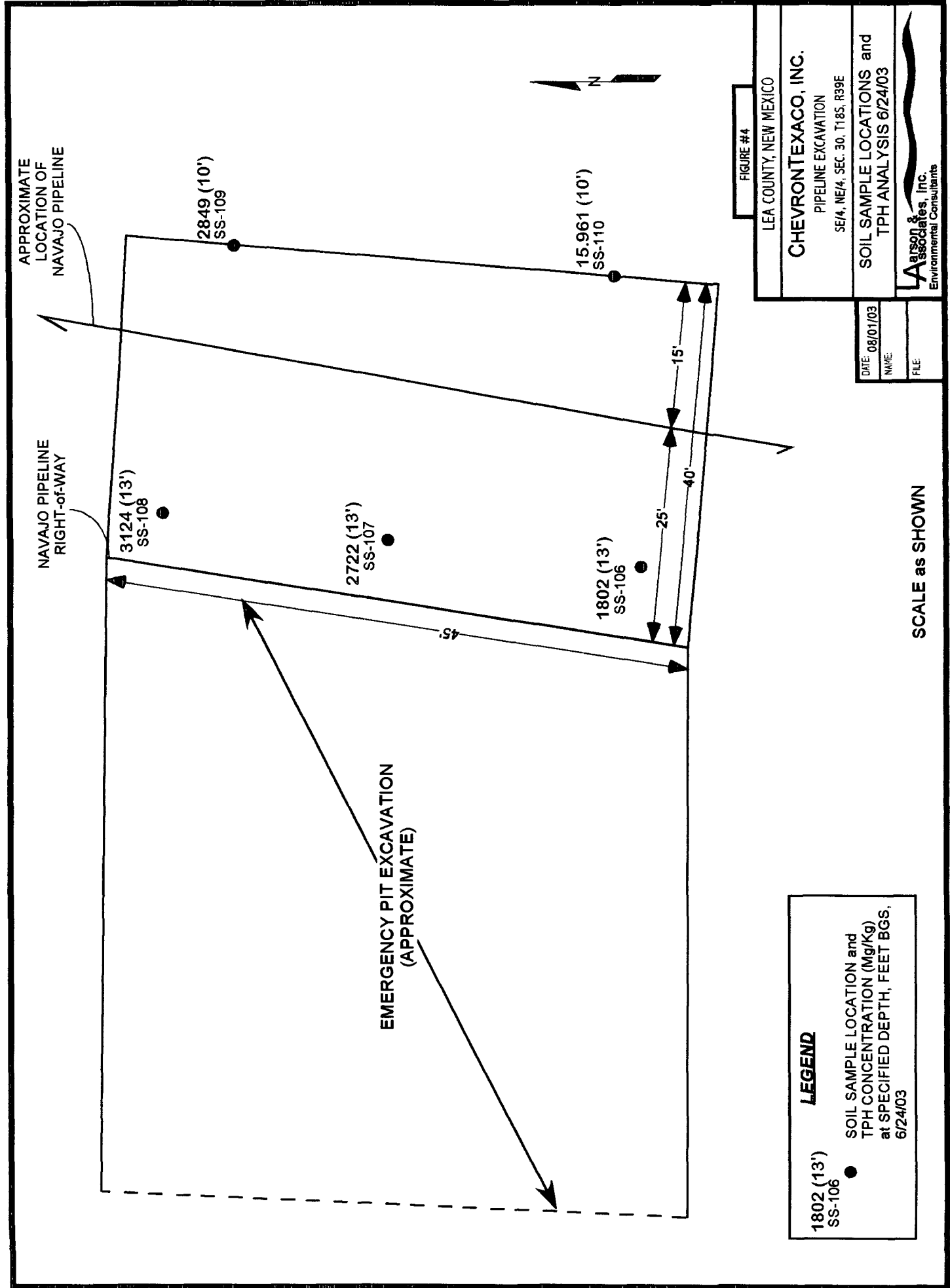
FILE:

SCALE as SHOWN

**LEGEND**

2187 (8')  
SS-101

● SOIL SAMPLE LOCATION and  
TPH CONCENTRATION (Mg/Kg)  
at SPECIFIED DEPTH, FEET BGS,  
6/23/03



APPROXIMATE  
LOCATION OF  
NAVAJO PIPELINE

NAVAJO PIPELINE  
RIGHT-OF-WAY

EMERGENCY PIT EXCAVATION  
(APPROXIMATE)

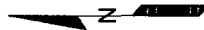
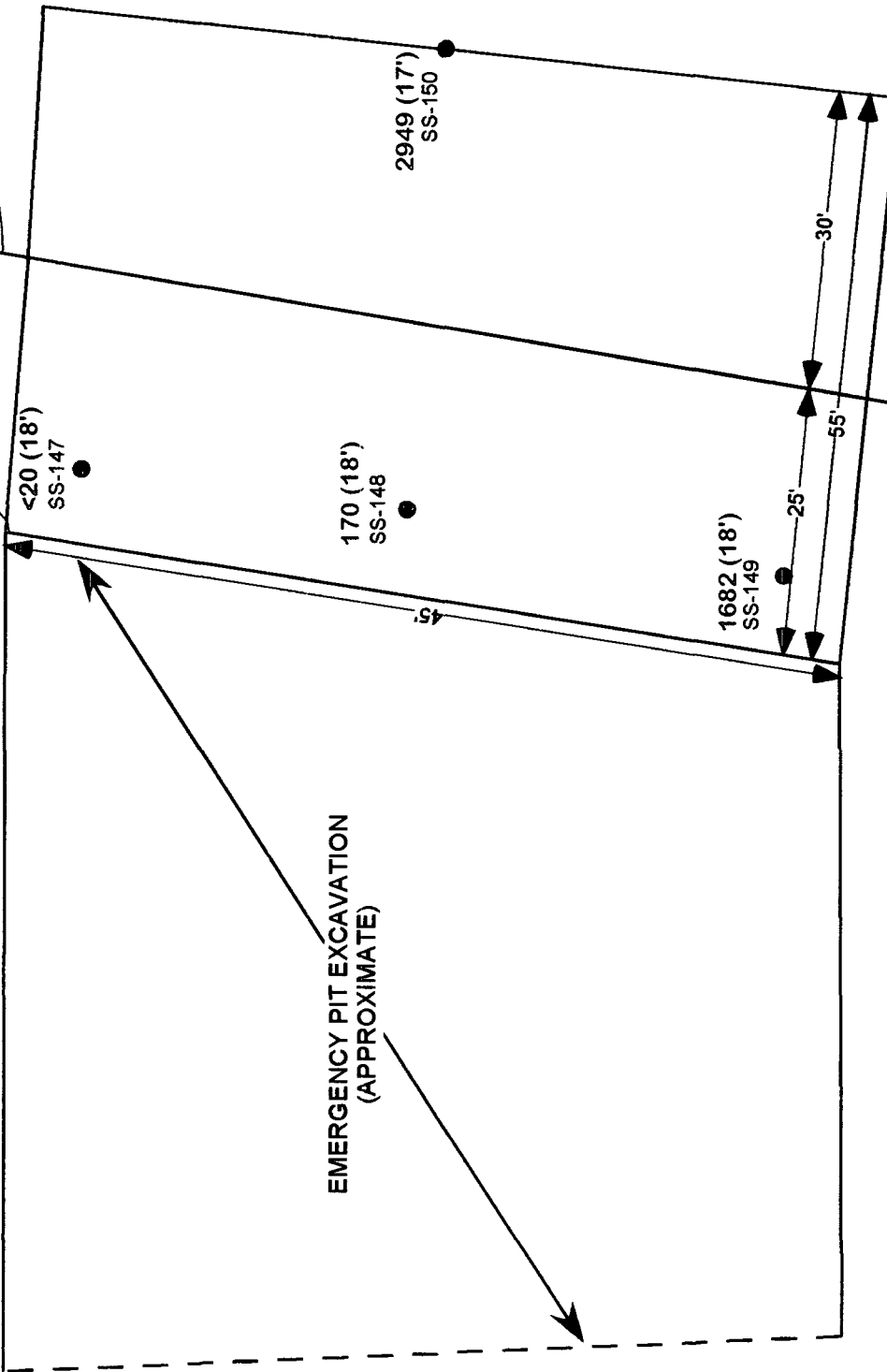


FIGURE #5

LEA COUNTY, NEW MEXICO

**CHEVRONTEXACO, INC.**

PIPELINE EXCAVATION

SE/4, NE/4, SEC. 30, T18S, R39E

SOIL SAMPLE LOCATIONS and  
TPH ANALYSIS 6/25/03

DATE: 08/01/03

NAME:

FILE:

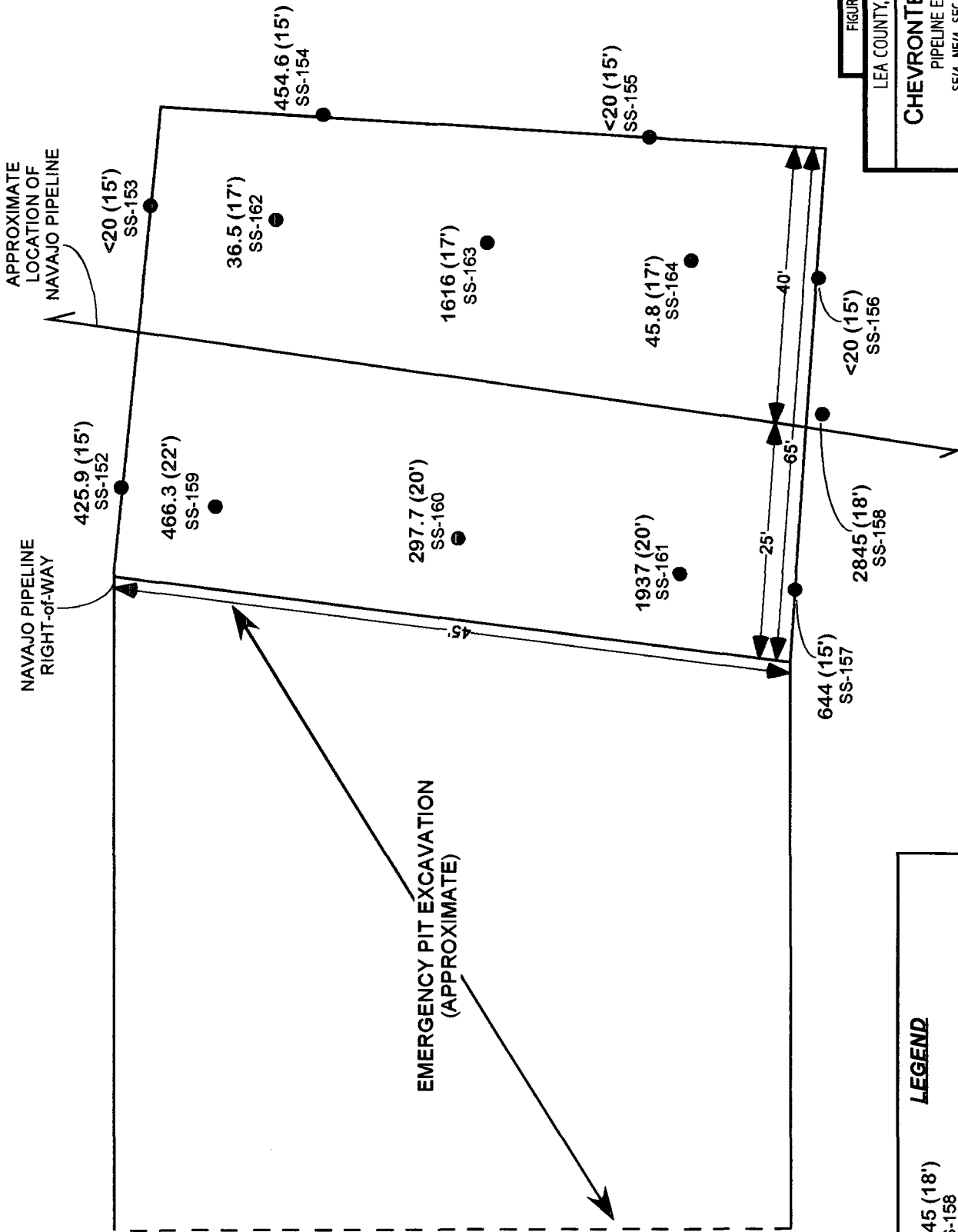
SCALE as SHOWN

**LEGEND**

1682 (18')  
SS-149

SOIL SAMPLE LOCATION and  
TPH CONCENTRATION (Mg/Kg)  
at SPECIFIED DEPTH, FEET BGS,  
6/25/03

**Latson & Associates, Inc.**  
Environmental Consultants



# **LEGEND**

- 2845 (18') SS-158 ● SOIL SAMPLE LOCATION and TPH CONCENTRATION (Mg/Kg) at SPECIFIED DEPTH, FEET BGS, 6/26/03

FIGURE #6

LEA COUNTY, NEW MEXICO

**CHEVRONTEXACO, INC.**  
PIPELINE EXCAVATION

SE/4, NE/4, SEC. 30, T18S, R39E

SOIL SAMPLE LOCATIONS and  
TPH ANALYSIS 6/26/03

DATE: 08/01/03

NAME:

FILE:

SCALE as SHOWN

**Laarson & Associates, Inc.**  
Environmental Consultants

**Appendix A**  
**Laboratory Reports**

# ANALYTICAL REPORT

## Prepared for:

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

Project: Texaco/ Turner

PO#:

Order#: G0306850

Report Date: 06/30/2003

## 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#: G0306850  
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>
0306850-01	SS-152	SOIL	6/26/03 14:00	6/26/03 16:50	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M Chloride	Rejected: No		Temp: 1.5 C		
0306850-02	SS-153	SOIL	6/26/03 14:05	6/26/03 16:50	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M Chloride	Rejected: No		Temp: 1.5 C		
0306850-03	SS-154	SOIL	6/26/03 14:07	6/26/03 16:50	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M Chloride	Rejected: No		Temp: 1.5 C		
0306850-04	SS-155	SOIL	6/26/03 14:10	6/26/03 16:50	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M Chloride	Rejected: No		Temp: 1.5 C		
0306850-05	SS-156	SOIL	6/26/03 14:13	6/26/03 16:50	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M Chloride	Rejected: No		Temp: 1.5 C		
0306850-06	SS-157	SOIL	6/26/03 14:15	6/26/03 16:50	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M Chloride	Rejected: No		Temp: 1.5 C		
0306850-07	SS-158	SOIL	6/26/03 14:17	6/26/03 16:50	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 C		

# ENVIRONMENTAL LAB OF TEXAS

## SAMPLE WORK LIST

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

Order#: G0306850  
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>
	8015M Chloride					
0306850-08	SS-159	SOIL	6/26/03 14:20	6/26/03 16:50	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M Chloride	Rejected: No		Temp: 1.5 C		
0306850-09	SS-160	SOIL	6/26/03 14:22	6/26/03 16:50	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M Chloride	Rejected: No		Temp: 1.5 C		
0306850-10	SS-161	SOIL	6/26/03 14:24	6/26/03 16:50	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M Chloride	Rejected: No		Temp: 1.5 C		
0306850-11	SS-162	SOIL	6/26/03 14:27	6/26/03 16:50	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M Chloride	Rejected: No		Temp: 1.5 C		
0306850-12	SS-163	SOIL	6/26/03 14:30	6/26/03 16:50	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M Chloride	Rejected: No		Temp: 1.5 C		
0306850-13	SS-164	SOIL	6/26/03 14:34	6/26/03 16:50	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M Chloride	Rejected: No		Temp: 1.5 C		



# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

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

Order#: G0306850  
Project: 0-0107  
Project Name: Texaco/ Turner  
Location: None Given

Lab ID: 0306850-01  
Sample ID: SS-152

**8015M**

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
		6/29/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	23.9	10.0
DRO, >C12-C35	402	10.0
TOTAL, C6-C35	426	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	93%	70	130
1-Chlorooctadecane	108%	70	130

Lab ID: 0306850-02  
Sample ID: SS-153

**8015M**

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
		6/29/03	1	1	CK	8015M

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

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	97%	70	130
1-Chlorooctadecane	111%	70	130

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

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

Order#: G0306850  
Project: 0-0107  
Project Name: Texaco/ Turner  
Location: None Given

Lab ID: 0306850-03  
Sample ID: SS-154

### 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>
		6/29/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	13.6	10.0
DRO, >C12-C35	441	10.0
TOTAL, C6-C35	455	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	99%	70	130
1-Chlorooctadecane	103%	70	130

Lab ID: 0306850-04  
Sample ID: SS-155

### 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>
		6/29/03	1	1	CK	8015M

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

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

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

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

Order#: G0306850  
Project: 0-0107  
Project Name: Texaco/ Turner  
Location: None Given

Lab ID: 0306850-05

Sample ID: SS-156

**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>
		6/29/03	1	1	CK	8015M

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

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	96%	70	130
1-Chlorooctadecane	99%	70	130

Lab ID: 0306850-06

Sample ID: SS-157

**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>
		6/29/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	85.0	10.0
DRO, >C12-C35	559	10.0
TOTAL, C6-C35	644	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	91%	70	130
1-Chlorooctadecane	96%	70	130

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

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

Order#: G0306850  
Project: 0-0107  
Project Name: Texaco/ Turner  
Location: None Given

Lab ID: 0306850-07  
Sample ID: SS-158

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		6/29/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	645	10.0
DRO, >C12-C35	2,200	10.0
TOTAL, C6-C35	2,845	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	98%	70	130
1-Chlorooctadecane	108%	70	130

Lab ID: 0306850-08  
Sample ID: SS-159

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		6/29/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	50.3	10.0
DRO, >C12-C35	416	10.0
TOTAL, C6-C35	466	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	109%	70	130
1-Chlorooctadecane	110%	70	130

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

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

Order#: G0306850  
Project: 0-0107  
Project Name: Texaco/ Turner  
Location: None Given

Lab ID: 0306850-09  
Sample ID: SS-160

### 8015M

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
		6/29/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	29.7	10.0
DRO, >C12-C35	268	10.0
TOTAL, C6-C35	298	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	92%	70	130
1-Chlorooctadecane	93%	70	130

Lab ID: 0306850-10  
Sample ID: SS-161

### 8015M

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
		6/29/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	437	10.0
DRO, >C12-C35	1,500	10.0
TOTAL, C6-C35	1,937	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	105%	70	130
1-Chlorooctadecane	111%	70	130

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

JOHN STEWART  
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P.O. BOX 50685  
MIDLAND, TX 79710

Order#: G0306850  
Project: 0-0107  
Project Name: Texaco/ Turner  
Location: None Given

Lab ID: 0306850-11  
Sample ID: SS-162

8015M

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
		6/29/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	36.5	10.0
TOTAL, C6-C35	36.5	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	92%	70	130
1-Chlorooctadecane	95%	70	130

Lab ID: 0306850-12  
Sample ID: SS-163

8015M

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
		6/29/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	266	10.0
DRO, >C12-C35	1,350	10.0
TOTAL, C6-C35	1,616	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	101%	70	130
1-Chlorooctadecane	112%	70	130

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

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P.O. BOX 50685  
MIDLAND, TX 79710

Order#: G0306850  
Project: 0-0107  
Project Name: Texaco/ Turner  
Location: None Given

Lab ID: 0306850-13  
Sample ID: SS-164

8015M

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
		6/29/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	45.8	10.0
TOTAL, C6-C35	45.8	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	91%	70	130
1-Chlorooctadecane	101%	70	130

Approval: Jeanne McMurrey 06-30-03  
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

## ANALYTICAL REPORT

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

Order#: G0306850  
Project: 0-0107  
Project Name: Texaco/ Turner  
Location: None Given

Lab ID: 0306850-01  
Sample ID: SS-152

### 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	6/27/03	SB

Lab ID: 0306850-02  
Sample ID: SS-153

### 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	6/27/03	SB

Lab ID: 0306850-03  
Sample ID: SS-154

### 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	6/27/03	SB

Lab ID: 0306850-04  
Sample ID: SS-155

### 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	6/27/03	SB

Lab ID: 0306850-05  
Sample ID: SS-156

### 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	248	mg/kg	1	20	9253	6/27/03	SB

Lab ID: 0306850-06  
Sample ID: SS-157

### 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	6/27/03	SB



# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

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

Order#: G0306850  
Project: 0-0107  
Project Name: Texaco/ Turner  
Location: None Given

Lab ID: 0306850-07

Sample ID: SS-158

### 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	6/27/03	SB

Lab ID: 0306850-08

Sample ID: SS-159

### 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	195	mg/kg	1	20	9253	6/27/03	SB

Lab ID: 0306850-09

Sample ID: SS-160

### 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	6/27/03	SB

Lab ID: 0306850-10

Sample ID: SS-161

### 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	142	mg/kg	1	20	9253	6/27/03	SB

Lab ID: 0306850-11

Sample ID: SS-162

### 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	195	mg/kg	1	20	9253	6/27/03	SB

Lab ID: 0306850-12

Sample ID: SS-163

### 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	6/27/03	SB

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

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

Order#: G0306850  
Project: 0-0107  
Project Name: Texaco/ Turner  
Location: None Given

Lab ID: 0306850-13

Sample ID: SS-164

### Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution</u> <u>Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date</u> <u>Analyzed</u>	<u>Analyst</u>
Chloride	53.2	mg/kg	1	20	9253	6/27/03	SB

Approval: Jeanne McMurrey 06-30-03  
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.

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

8015M

Order#: G0306850

<b>BLANK</b> SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0006028-02			<10.0		
<b>CONTROL</b> SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0006028-03		952	993	104.3%	
<b>CONTROL DUP</b> SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0006028-04		952	965	101.4%	2.9%
<b>SRM</b> SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0006028-05		1000	1080	108.%	

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

### Test Parameters

Order#: G0306850

<b>BLANK</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0006010-01			<20.0		
<b>MS</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0306840-01	6880	500	7410	106.0%	
<b>MSD</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0306840-01	6880	500	7440	112.0%	0.4%
<b>SRM</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0006010-04		5000	4960	99.2%	

# CHAIN—OF—CUSTODY RECORD

PARAMETERS/METHOD NUMBER

## SITE MANAGER:

**CLIENT NAME:**

PROJECT NAME:

PROJECT NO.:

PAGE / OF LAB. PO #

### SAMPLE IDENTIFICATION

TE ME AFTER ALL

6016	9/1/99	✓	55-153	1
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11	205	/	SS-13	1
"	"	"	SS-13	1

1	551-55	1	0116	11
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11	215	✓	✓	SS-157	1
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1	25	11/1	DEIC	11
1	25	11/1	DEIC	11

		1	091-SS	//	11/2
		1			

1	291-55	11	LEIT
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✓	11/12/16	✓	SS-1641	1
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[illegible][illegible][illegible]

TIME: \_\_\_\_\_

Mr. J. J. Stewart  
TIME: 5:50 PM

~~COMMENTS:~~

RECEIVING LABORATORY: \_\_\_\_\_ RECEIVED \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_ DATE: \_\_\_\_\_  
CONTACT: \_\_\_\_\_ PHONE: \_\_\_\_\_

SAFETY CONDITIONALITY RECEIVED:

[illegible]