



5309 Wurzbach, Suite 100  
San Antonio, Texas 78238  
(210) 680-3767  
(210) 680-3763 FAX

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December 10, 1998

Mr. Tony Savoie  
**TEXAS - NEW MEXICO PIPELINE COMPANY**  
P.O. Box 1030  
Jal, New Mexico 88252

Re: Closure Report  
Monument Site No. 4  
Monument, New Mexico  
Job No. 610057

Dear Mr. Savoie:

A copy of the Closure Report for the above reference site has been forwarded to the OCD offices in Hobbs and Sante Fe. Please contact me at (210) 680-3767 if you have any questions.

Respectfully,

A handwritten signature in cursive script that reads "Theresa Nix".

Theresa Nix  
Project Manager

Enclosure

cc: OCD, Hobbs ✓  
OCD, Sante Fe



IRP-99  
10.24.05

## **CLOSURE REPORT**

**TEXAS - NEW MEXICO PIPE LINE COMPANY  
MONUMENT SITE 4  
LEA COUNTY, NEW MEXICO**



5309 Wurzbach, Suite 100  
San Antonio, Texas 78238  
(210) 680-3767  
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## CLOSURE REPORT

**TEXAS - NEW MEXICO PIPE LINE COMPANY  
MONUMENT SITE 4  
LEA COUNTY, NEW MEXICO**

PREPARED FOR:

**TEXAS - NEW MEXICO PIPE LINE COMPANY**

P. O. Box 1030  
Jal, New Mexico 88252

Mr. Tony Savoie

PREPARED BY:

**KEI**

A handwritten signature in cursive script that reads "Theresa Nix".

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Theresa Nix  
Project Manager

---

J. Michael Hawthorne, P.G., REM  
Senior Geologist

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## EXECUTIVE SUMMARY

The Texas - New Mexico Pipe Line Company (TNMPL) alleged release site 4 is located approximately 2.8 miles west of Monument in Lea County, New Mexico. The site is specifically located in Section 36, Township 19 South, Range 36 East. A site location map is presented as FIG. 1. The site is owned by Mr. Jimmy Cooper. Specific site details are presented on FIG. 2. This report summarizes closure activities performed at the project site from March through April of 1997.

Closure activities performed included the following:

- collection of soil samples from the initial excavation to determine hydrocarbon concentration levels;
- excavation and stockpiling of additional soils which exceeded acceptable hydrocarbon concentration levels;
- collection of confirmation samples in the excavated source area to confirm removal of all impacted soils;
- characterization of stockpiled soils;
- transportation and off-site landfarming of stockpiled soils;
- backfilling the excavation with clean soils; and
- grading and seeding of disturbed areas.

The following conclusions have been made based on the field and laboratory data presented in this report:

- The closure standards at the site were determined to be as follows:

CONSTITUENT	CLOSURE CONCENTRATIONS (mg/kg)
BENZENE	10
BTEX	50
TPH	100 + Background Concentration

- Approximately 407 cubic yards of impacted soil was excavated, stockpiled, and landfarmed off-site. *1221*
- Confirmation soil samples at the site indicated TPH, benzene, and BTEX concentrations below closure standards.

From the conclusions presented above, we request the site be closed under New Mexico Oil Conservation Division (OCD) regulations.

## PURPOSE AND SCOPE

The objective of the site closure activities was to obtain closure for the site based on OCD regulations. The following activities were performed to achieve this objective:

- determination of closure standards;
- removal of impacted soil;
- characterization of removed impacted soil;
- confirmation sampling in the excavated source area to confirm all impacted soils were removed;
- transportation and off-site landfarming of impacted soil; and
- backfill clean soil in the excavated source area.

## BACKGROUND INFORMATION

A (hydrocarbon) release was identified at the subject site during (1995). The following activities were performed as part of the current release response activities:

- Clean overburden soils including topsoil were removed and stockpiled on-site
- Soils were excavated, stockpiled, and some soils were landfarmed off-site.
- One exploratory soil boring was advanced.
- Soil samples were collected from native soils during soil boring advancement.

## CLOSURE ACTIVITIES

### CLOSURE STANDARDS

The New Mexico OCD Guidelines for Remediation of Leaks, Spills, and Releases contains the standard criteria for remediation activities. A ranking analysis for the site was performed to determine appropriate soil remediation levels. The ranking analysis is as follows:

CRITERIA	APPLICABLE STANDARD	POINTS
Depth to Ground Water	Less Than 50 Feet	20 Points
Well Head Protection	Greater Than 1000 Feet to Water Source Greater Than 200 Feet to Private Water Source	0 Points
Surface Water Body	Greater Than 1000 Feet	0 Points
<b>Total Ranking Score</b>		<b>20 Points</b>

*Crude  
pipeline  
12/10/98*

Based on the total ranking score, the closure objectives for this site for concentrations of benzene, BTEX, and TPH are summarized below.

CONSTITUENT	CLOSURE CONCENTRATIONS (mg/kg)
BENZENE	10
BTEX	50
TPH	100 + Background Concentration

### SOIL REMOVAL

Additional soils were removed from the bottom and sidewalls of the existing excavation from March 3, 1997 through March 5, 1997. These soils included sediments which had washed into the excavation. An estimated 407 cubic yards were removed from the existing excavation and stockpiled on-site for characterization prior to off-site landfarming.

### SOIL CHARACTERIZATION

The soil stockpiles were characterized by collecting two composite soil samples for determination of TPH. Laboratory results indicated TPH concentrations of 672 mg/kg and 1,600 mg/kg. Laboratory results are presented in APPENDIX A.

### CONFIRMATION SAMPLING

Composite soil samples were collected from the excavation bottom and excavation sidewall and submitted for determination of TPH concentrations. Based on the laboratory results of the sidewall and excavation bottom soil samples, additional soils were excavated and the sidewall and excavation bottom resampled. The sample locations are presented on FIG. 3.

Laboratory results of the final composite soil samples indicated the following:

SAMPLE LOCATION	MAX. TPH	MAX. BTEX	MAX. BENZENE
Final Soil Sidewall (mg/kg)	160	0.205	0.205
Soil Bottom (mg/kg)	120	0.412	1.266

Previous soil samples collected during the advancement of exploratory soil boring B4-1 were submitted for determination of BTEX and TPH concentrations. All soil samples indicated BTEX concentrations below laboratory detection limits. However, excavation bottom and sidewall samples were also submitted for determination of BTEX concentrations.

A background sample was collected from the site on April 18, 1997. The background sample exhibited a TPH concentration of 104 mg/kg. Therefore, the TPH closure level at this site is 204 mg/kg.

Soil laboratory results are summarized on TABLE I and graphically presented on FIG. 3.

## **SOIL DISPOSAL**

Authorization to transport and off-site landfarm the impacted soils was obtained from OCD. The impacted soils were transported to C&C Landfarm Incorporated located approximately two miles south of Monument, New Mexico. Disposal documentation is presented in APPENDIX B.

## **BACKFILL AND RESTORATION**

Approximately 450 cubic yards of clean fill material was purchased from Mr. Cooper and placed in the excavation. The remaining non-impacted stockpiled soils from the initial release excavation activities were used to complete the backfilling operations. The area was graded and reseeded following backfilling.

## **QA/QC PROCEDURES**

The soil samples collected were placed in a sterile glass container equipped with a Teflon-lined lid furnished by the analytical laboratory. The container was filled to capacity with soil to limit the amount of head-space present. Each container was labeled and placed on ice in an insulated cooler. The cooler was sealed for shipment to Environmental Lab of Texas, Inc. in Odessa, Texas for determination of TPH concentrations using EPA Method 418.1. Selected soil samples were also submitted for determination of BTEX concentrations using EPA Method SW846-8020, 5030. Proper chain-of-custody documentation was maintained throughout the sampling process.

**MONUMENT NORTH QUADRANGLE**

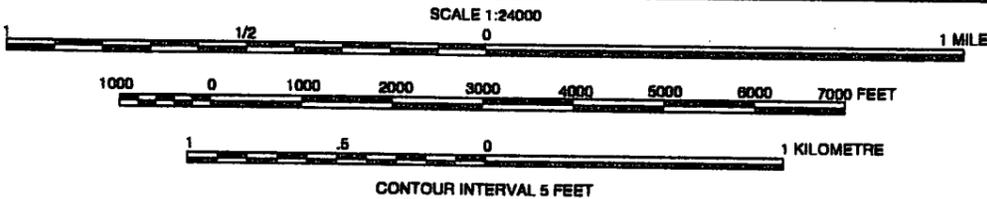
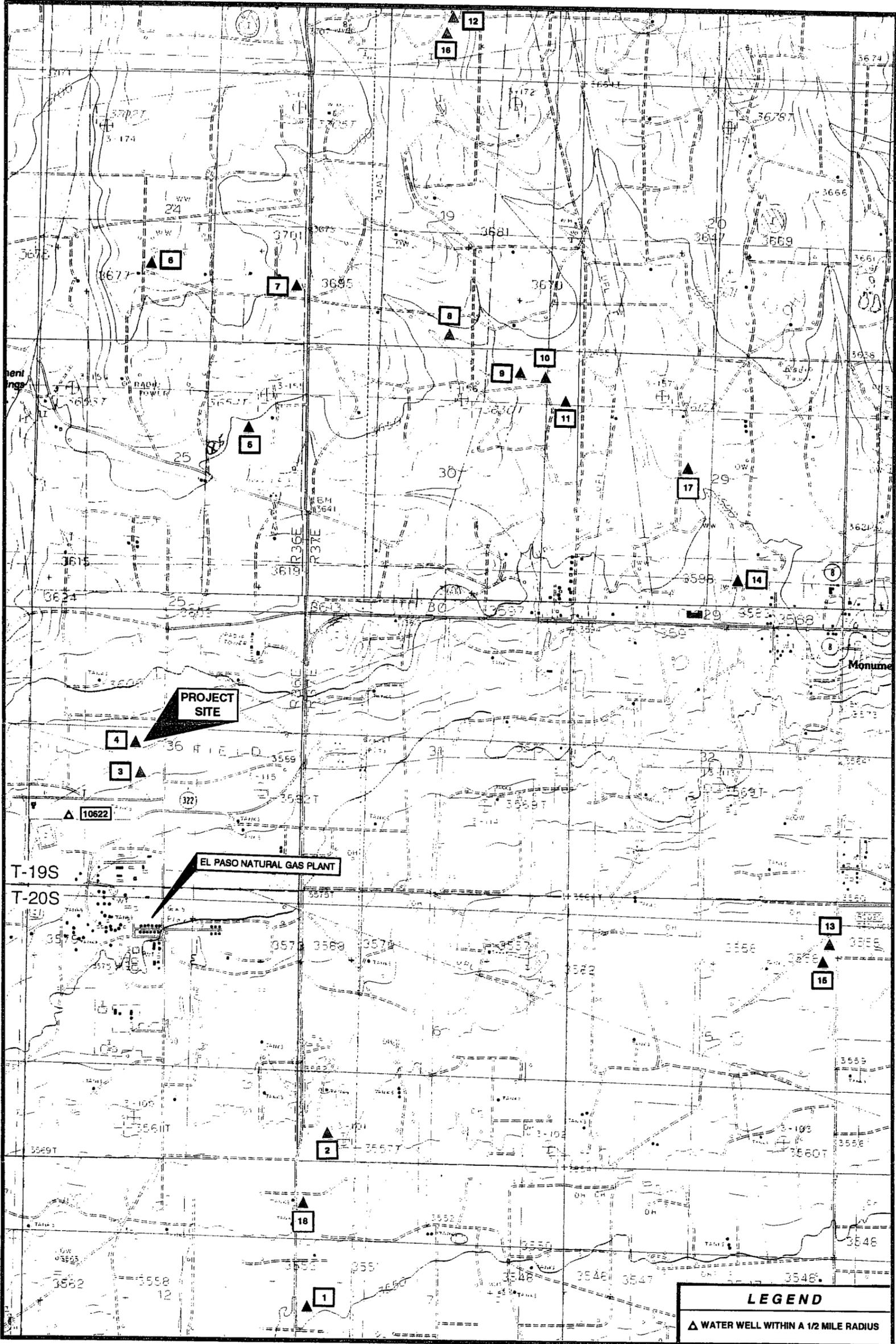
NEW MEXICO - LEA COUNTY

PRINTED 1985

**MONUMENT SOUTH QUADRANGLE**

NEW MEXICO - LEA COUNTY

PRINTED 1985



**SITE LOCATION MAP**

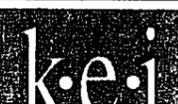
TEXAS - NEW MEXICO PIPE LINE CO.

MONUMENT SITE NO. 4

LEA COUNTY, NEW MEXICO

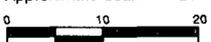
610057

Copyright © 1985





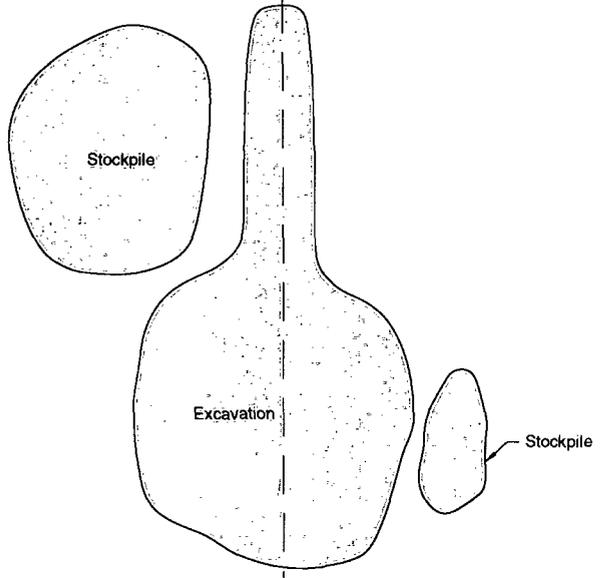
Approximate Scale: 1"=20'



NOTE: Adjacent properties are not to scale.

T-NMPL Underground Pipeline (Removed)

DIRT ROAD



**LEGEND**

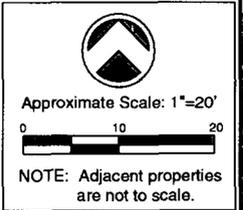
-  Excavation
-  Stockpile

03/10/99-RM (G:\610057SD)



<b>SITE DETAILS</b>		
TEXAS - NEW MEXICO PIPE LINE CO.	MONUMENT SITE NO. 4	LEA COUNTY, NEW MEXICO

610057
FIG 2



Approximate Scale: 1"=20'

0 10 20

NOTE: Adjacent properties are not to scale.

**Background**  
**TPH=104**

**Closure Level**  
**TPH=204**

T-NMPL Underground Pipeline (Removed)

**DIRT ROAD**

Stockpile

TPH=1600

TPH=152

TPH=24

TPH=88

**Bottom Hole**  
**TPH=120**

TPH=672

TPH=160

Excavation

Stockpile

**LEGEND**

-  Excavation
-  Stockpile

TPH = Total Petroleum Hydrocarbon Concentration (mg/kg)  
 Soil samples were obtained on April 18, 1997.

03/10/98 RM G:\0157TPH



**SAMPLING POINT LOCATIONS AND CONCENTRATIONS**

TEXAS - NEW MEXICO PIPE LINE CO. MONUMENT SITE NO. 4 LEA COUNTY, NEW MEXICO

610057

FIG 3

## GENERAL NOTES

- ND - Indicates constituent was not detected above the method detection limit.  
--- - Indicates sample was not submitted for determination of specified constituent.

### Method detection limits:

Soil:                   TPH - 10 mg/kg  
                          BTEX - 0.100 mg/kg

Laboratory test methods: BTEX - EPA Method SW846-8020, 8030  
                                  TPH - EPA Method 418.1

**TABLE I**  
**SUMMARY OF LABORATORY RESULTS - SOIL**  
**EXCAVATION ACTIVITIES**  
**MONUMENT SITE 4**  
**LEA COUNTY, NEW MEXICO**

SAMPLE LOCATION	SAMPLE DATE	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	XYLENES (mg/kg)	BTEX (mg/kg)	TPH (mg/kg)
<b>Excavation Sampling</b>							
Northwest Sidewall	04/07/97	---	---	---	---	---	4,440
Southwest Sidewall	04/07/97	---	---	---	---	---	3,260
Bottom Hole	04/07/97	---	---	---	---	---	1,980
Northeast Sidewall	04/07/97	---	---	---	---	---	860
Southeast Sidewall	04/07/97	---	---	---	---	---	1,330
<b>Soil Characterization Sampling</b>							
North Stockpile	04/18/97	---	---	---	---	---	1,600
South Stockpile	04/18/97	---	---	---	---	---	672
<b>Background Sampling</b>							
Background	04/18/97	---	---	---	---	---	104
<b>Confirmation Sampling</b>							
East Sidewall	04/18/97	0.183	ND	ND	ND	0.183	24 <sup>(1)</sup>
North Sidewall	04/18/97	ND	ND	ND	ND	ND	152 <sup>(1)</sup>
West Sidewall	04/18/97	0.205	ND	ND	ND	0.205	88 <sup>(1)</sup>
South Sidewall	04/18/97	0.130	ND	ND	ND	0.130	160 <sup>(1)</sup>
Bottom Hole	04/18/97	0.412	0.236	0.190	0.428	1.266	120 <sup>(1)</sup>

(1) Indicates the retest of excavation sidewall samples collected April 7, 1997, following overexcavation of additional soils.

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

TEXAS NEW MEXICO PIPE LINE COMPANY  
ATTN : MR. TONY SAVOIE  
P.O. BOX 1030  
JAL, NM 88252  
FAX: 915-395-2636

RECEIVING DATE: 04/08/97  
SAMPLE TYPE: SOIL  
PROJECT: TNMPL SITE #3A-3C-3B-4  
PROJECT NAME: NONE GIVEN  
PROJECT LOCATION: MONUMENT, NM.

ANALYSIS DATE: 04/08/97  
SAMPLING DATE: 04/07/97  
SAMPLE CONDITION: Intact/Iced

ELT#	FIELD CODE	TPH (mg/kg)
10679	3B - AREA 3 - NORTH SIDE WALL	130
10680	3B - AREA 3 - SOUTH SIDE WALL	550
10681	3B - AREA 3 - EAST SIDE WALL	140
10682	3B - AREA 2 - BOTTOM HOLE	<10
10683	3B - AREA 2 - NORTH SIDE WALL	40
10684	3B - AREA 2 - WEST SIDE WALL	160
10685	SITE 4 - NORTH WEST SIDE WALL	4,440
10686	SITE 4 - SOUTH WEST SIDE WALL	3,260
10687	SITE 4 - BOTTOM HOLE	1,980
10688	SITE 4 - NORTH EAST SIDE WALL	860
10689	SITE 4 - SOUTH EAST SIDE WALL	1,330
	QUALITY CONTROL	216
	TRUE VALUE	202
	% PRECISION	107

Methods: EPA 418.1

  
Michael R. Fowler

4-8-97  
Date



# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

TEXAS NEW MEXICO PIPE LINE  
ATTN: MR. TONY SAVOIE  
P.O. BOX 1030  
JAL, NEW MEXICO 88252  
FAX: 505-395-2636  
FAX: 915-682-4182

Receiving Date: 04/18/97  
Sample Type: SOIL  
Project #: SITE #4, 3B, 3A  
Project Name: TEXAS NEW MEXICO  
Project Location: LEA CO. NEW MEXICO

Analysis Date: 04/21/97  
Sampling Date: 04/18/97  
Sample Condition: Intact/lced

ELT#	FIELD CODE	TPH mg/kg
10871	970418, SITE 4 E. SIDE WALL	24
10872	970418, SITE 4 N. SIDE WALL	152
10873	970418, SITE 4 W. SIDE WALL	88
10874	970418, SITE 4 S. SIDE WALL	160
10875	970418, SITE 4 BOTTOM HOLE	120
10876	970418, N. DIRT PILE	1,600
10877	970418, S. DIRT PILE	672
10878	970418, BACKGROUND #4	104
10879	970418, BACKGROUND 3-B	24
10880	970418, 3-B N. DIRT PILE	2,872
10881	970418, 3-B S. DIRT PILE	25,120
10882	970418, 3-A BOTTOM HOLE	48
10883	970418, 3A-W. SIDE WALL	208
10884	970418, 3A-N. SIDE WALL	104
10885	970418, 3A-S. SIDE WALL	<10
10886	970418, 3A-E. DIRT PILE	3,640
10887	970418, 3A-W. DIRT PILE	200
10888	970418, 3A- BACKGROUND	56
	BLANK	<10
	% INSTRUMENT ACCURACY	109
	% EXTRACTION ACCURACY	90

METHOD: EPA 418.1

  
Michael R. Fowler

4-21-97  
Date



# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

TEXAS NEW MEXICO PIPE LINE COMPANY  
ATTN: MR. TONY SAVOIE  
P.O. BOX 1030  
JAL. NM 88252  
FAX: 915-682-4182  
FAX: 505-395-2636

Receiving Date: 04/18/97  
Sample Type: SOIL  
Project: SITE #4, 3B, 3A  
Project Location: LEA CO. NEW MEXICO

Analysis Date: 04/21/97  
Sampling Date: 04/18/97  
Sample Condition: Intact/Iced

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m.p.-XYLENE mg/kg	o-XYLENE mg/kg
10871	970418, SITE 4 E. SIDE WALL	0.183	<0.100	<0.100	<0.100	<0.100
10872	970418, SITE 4 N. SIDE WALL	<0.100	<0.100	<0.100	<0.100	<0.100
10873	970418, SITE 4 W. SIDE WALL	0.205	<0.100	<0.100	<0.100	<0.100
10874	970418, SITE 4 S. SIDE WALL	0.130	<0.100	<0.100	<0.100	<0.100
10875	970418, SITE 4 BOTTOM HOLE	0.412	0.236	0.190	0.271	0.157
10882	970418, 3-A BOTTOM HOLE	0.144	<0.100	<0.100	<0.100	<0.100
10883	970418, 3A-W. SIDE WALL	0.135	<0.100	<0.100	<0.100	<0.100
10884	970418, 3A-N. SIDE WALL	0.114	<0.100	<0.100	<0.100	<0.100
10885	970418, 3A-S. SIDE WALL	<0.100	<0.100	<0.100	<0.100	<0.100

% IA	104	105	110	109	110
% EA	93	97	100	98	98
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: SW 846-8020.5030

  
Michael R. Fowler

4-22-97  
Date



CERTIFICATE OF WASTE STATUS

NON-EXEMPT WASTE MATERIAL

Originating Location: TNM Sites 3, 3A, 3B, 3C + 4 Monument area, La County

Source: Crude Oil Pipeline SPILL

Disposal Location: C + C Land Farm Inc. 2 miles South of Monument NM

As a condition of acceptance for disposal, I hereby certify that this waste is a non-exempt waste as defined by the Environmental Protection Agency's July 1988 Regulatory Determination. To my knowledge, this waste will either be analyzed pursuant to the provisions of 40 CFR Part 261 to verify the nature as non-hazardous or has been verified non-hazardous due to "Knowledge of Process." I further certify that to my knowledge no "hazardous or listed wastes" pursuant to the provisions of 40 CFR Part 261, Subparts C and D, has been added or mixed with the waste so as to make the resultant mixture a "hazardous waste" pursuant to the provisions of 40 CFR, Section 261.3 (b).

I, the undersigned as the agent for the Texas New Mexico Pipeline Co.  
concur with the status of the waste from the subject site.

NAME John A. Savoie

TITLE/AGENCY Senior Tech

ADDRESS P.O. Box 1030

SIGNATURE John A. Savoie

DATE 4-23-97

OLD TUBBS  
OFFICE  
APR 23 1997  
RECEIVED

District I - (505) 393-6161  
 P. O. Box 1980  
 Hobbs, NM 88241-1980  
 District II - (505) 748-1283  
 811 S. First  
 Artesia, NM 88210  
 District III - (505) 334-6178  
 1000 Rio Brazos Road  
 Aztec, NM 87410  
 District IV - (505) 827-7131

New Mexico  
 Energy Minerals and Natural Resources Department  
 Oil Conservation Division  
 2040 South Pacheco Street  
 Santa Fe, New Mexico 87505  
 (505) 827-7131

Form C-13  
 Originated 8/8/97

Submit Origin  
 Plus 1 Co;  
 to appropria  
 District Offi

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/> <i>P.F.A. 20 P.P.C.F. - H.M.C. 4/23/97</i>	4. Generator <i>Texas N.M. Pipeline Company</i>
Verbal Approval Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	5. Originating Site <i>Cooper Sites 3, 3A, 3B, 3C &amp; 4</i>
2. Management Facility Destination <i>C+C Land Farm Inc.</i>	6. Transporter <i>Turner Trucking</i>
3. Address of Facility Operator <i>2 miles South of Monument</i>	8. State <i>New Mexico</i>
7. Location of Material (Street Address or ULSTR) <i>NE 1/4 SW 1/4 Sect. 36, T19S, R36E</i>	
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. (B.) All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

Crude oil Affected Soil

Non Hazardous By Knowledge of Process N.M.D.C.D.  
 Approved November, 1996

UCC HOBBS OFFICE  
 APR 23 1997  
 RECEIVED

Estimated Volume 3000 cy Known Volume (to be entered by the operator at the end of the haul) \_\_\_\_\_ cy

SIGNATURE: *Jimmy T. Cooper* TITLE: Pres. DATE: 4-15-97  
Waste Management Facility Authorized Agent  
 TYPE OR PRINT NAME: Jimmy T. Cooper TELEPHONE NO. \_\_\_\_\_

(This space for State Use)  
 APPROVED BY: *[Signature]* TITLE: Exec. Dir. DATE: 4/23/97  
 APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_