

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

December 9, 1998

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

Re: Closure Report TNM-97-11

Lea County, New Mexico

Job No. 710020

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,
Theresa Mix

Theresa Nix

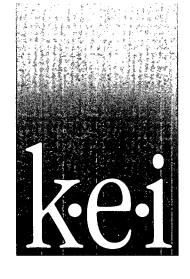
Project Manager

Enclosure

cc: OCD, Hobbs

OCD. Sante Fe

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CLOSURE REPORT

TEXAS - NEW MEXICO PIPE LINE COMPANY
TNM-97-11
LEA COUNTY, NEW MEXICO





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CLOSURE REPORT

TEXAS - NEW MEXICO PIPE LINE COMPANY TNM-97-11 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

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) release site TNM-97-11 is located approximately 1.3 miles southwest of Monument in Lea County, New Mexico. The site is specifically located in Section 5, Township 20 South, Range 37 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 during July of 1997.

Closure activities performed included the following:

- collection of soil samples from the initial excavation to determine hydrocarbon concentration levels:
- · characterization of stockpiled soils;
- backfilling the excavation; and
- grading and seeding of disturbed areas.

The following conclusions are made based on field and laboratory data:

• 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 82 cubic yards of impacted soil were excavated, stockpiled, and used to backfill the excavation.
- Confirmation soil samples at the site indicated TPH, benzene, and BTEX concentrations below closure standards.

Based on the attainment of closure levels, we recommend 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 area; and
- backfilling of the excavated area.

BACKGROUND INFORMATION

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A/hydrocarbon release was identified at the subject site on June 16, 1997. 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 used to backfill the excavation after receipt of laboratory results.

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:

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

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

Soils were removed from the bottom and sidewalls of the excavation during July of 1997. An estimated 82 cubic yards were removed from the existing excavation and stockpiled onsite for characterization prior to backfilling the excavation.

CONFIRMATION SAMPLING

Composite soil samples were collected from the excavation bottom and excavation sidewalls in Sections A through C and submitted for determination of TPH and BTEX concentrations using EPA Method SW846-8015M - Diesel Range Organics and SW846-8020, respectively. Based on the laboratory results of the sidewall and excavation bottom soil samples from each section, no additional soils were excavated. 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)	78	6.723	ND
Soil Bottom (mg/kg)	ND	0.110	ND

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

BACKFILL AND RESTORATION

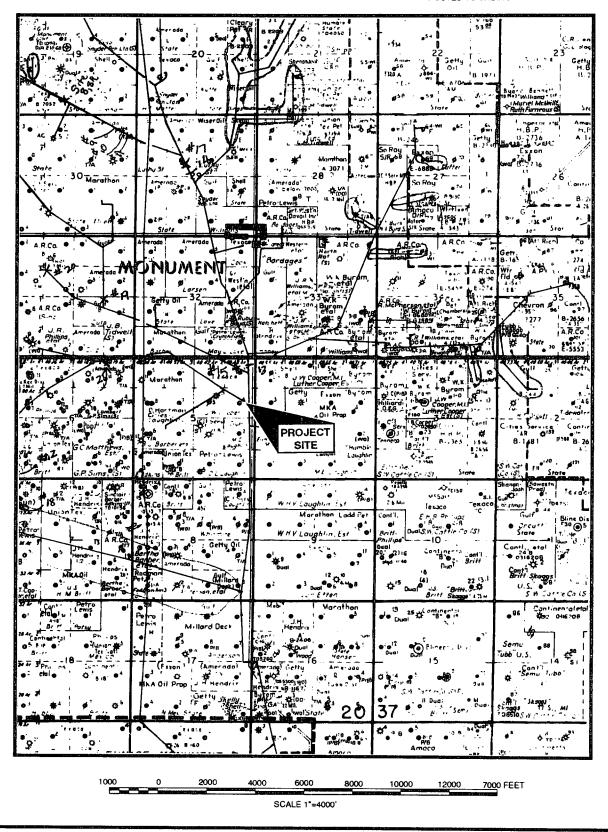
Stockpile analytical results indicated BTEX and TPH concentrations below closure levels. Therefore, the stockpiled soils from the release excavation activities were used to backfill the excavation. The area was graded and reseeded following backfilling.

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 BTEX and TPH concentrations using EPA Method SW846-8020, 5030 and SW846-8015M Diesel Range Organics, respectively. Proper chain-of-custody documentation was maintained throughout the sampling process.

OWNERSHIP MAP SOUTHEAST LEA COUNTY, NEW MEXICO

POSTED TO 07/21/79





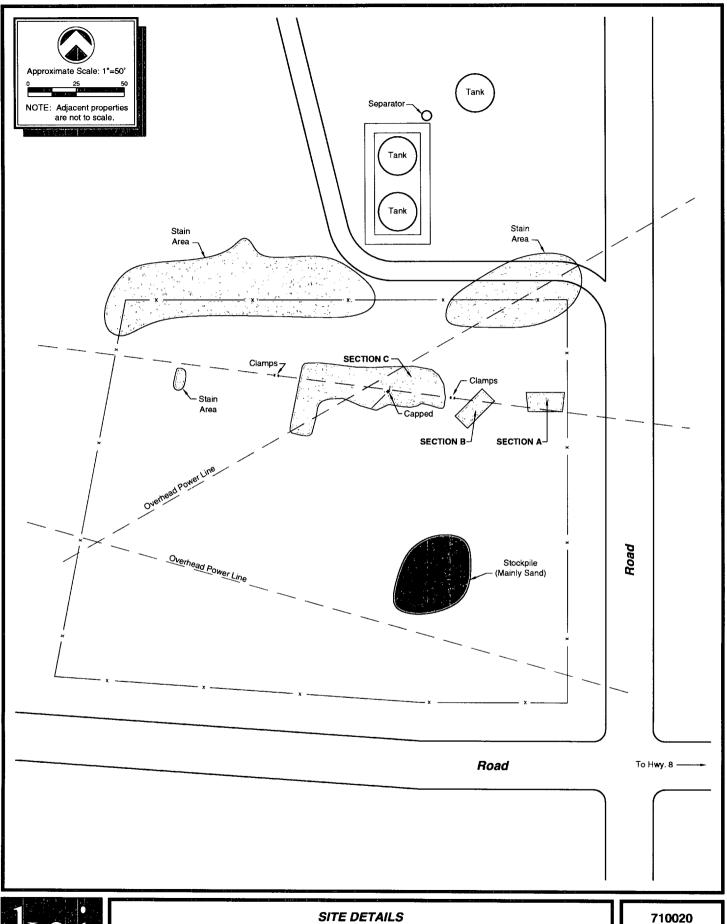
SITE LOCATION MAP

TNMPL TNM-97-11

LEA COUNTY, NEW MEXICO

710020

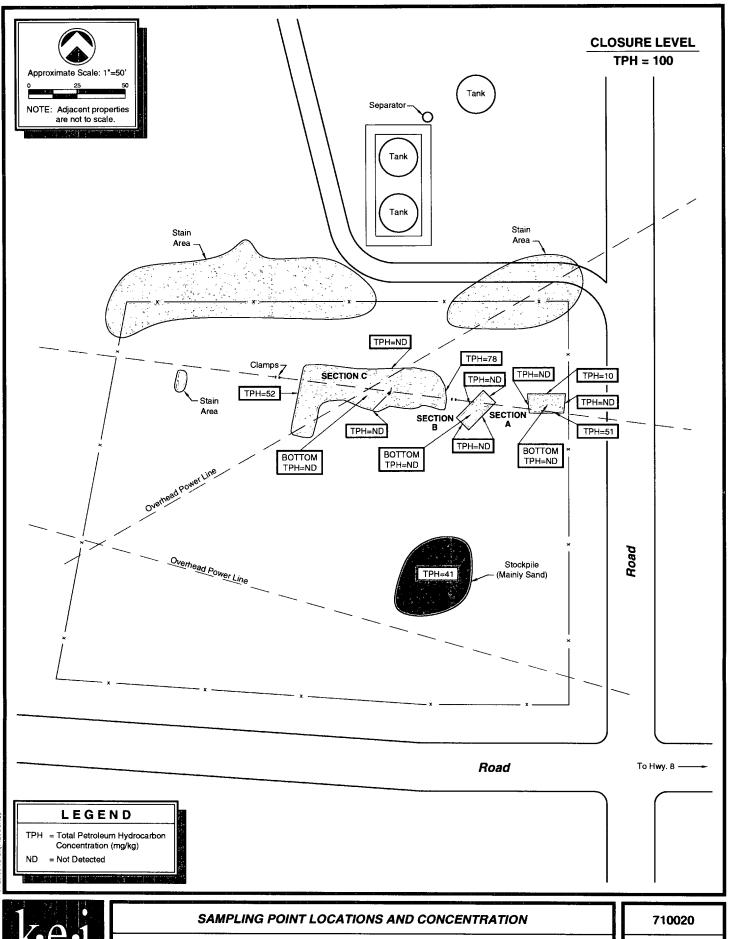
FIG 1



TNMPL TNM-97-11 LEA COUNTY, NEW MEXICO

710020

FIG 2



TNMPL TNM-97-11

LEA COUNTY, NEW MEXICO

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 - SW846-8015M Diesel Range Organics

TABLE I

SUMMARY OF LABORATORY RESULTS - SOIL EXCAVATION ACTIVITIES TNM-97-11 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)
Excavation Sampling		(()	(4.3.4.3)	(5 57	(() ()	(113113)	(**************************************
Section A Excavation Bottom	07/16/97	ND	ND	ND	ND	ND	ND
Section A West Sidewall	07/16/97	ND	ND	ND	0.203	0.203	ND
Section A East Sidewall	07/16/97	ND	ND	ND	ND	ND	ND
Section A North Sidewall	07/16/97	ND	0.118	ND	0.393	0.511	10
Section A South Sidewall	07/16/97	ND	ND	ND	ND	ND	51
Section B Excavation Bottom	07/16/97	ND	ND	ND	0.100	0.100	ND
Section B West Sidewall	07/16/97	ND	ND	ND	0.131	0.131	ND
Section B East Sidewall	07/16/97	ND	ND	ND	ND	ND	ND
Section B North Sidewall	07/16/97	ND	ND	ND	ND	ND	ND
Section B South Sidewall	07/16/97	ND	ND	ND	ND	ND	ND
Section C Excavation Bottom	07/16/97	ND	ND	ND	0.110	0.110	ND
Section C West Sidewall	07/16/97	ND	0.474	0.926	5.323	6.723	52
Section C East Sidewall	07/16/97	ND	0.162	ND	0.395	0.557	78
Section C North Sidewall	07/16/97	ND	ND	ND	ND	ND	ND
Section C South Sidewall	07/16/97	ND	ND	ND	0.102	0.102	ND
Soil Characterization Sampling							
Stockpile	07/16/97	ND	0.314	0.285	1.965	2.564	41

ENVIRONMENTAL

"Don't Treat Your Soil Like Dirt!"

KEI

ATTN: THERESA NIX 5309 WURZBACH SUITE 100 SAN ANTONIO, TEXAS 78238

FAX: 210-680-3763

Receiving Date: 07/17/97 Sample Type: SOIL Project #: 710020

Project Location: TNM 97-11

Analysis Date: DRO 07/17/97 Analysis Date: 07/18/97 Sampling Date: 07/16/97

Sample Condition: Intact/Iced

111 2 4 199

TPH DRO **TOLUENE ETHYLBENZENE** BENZENE m,p-XYLENE o-XYLENE C10-C28 ELT# FIELD CODE mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg 11784 Section A: Bottom Hole < 0.100 < 0.100 < 0.100 <.100 < 0.100 <10 11785 < 0.100 < 0.100 < 0.100 < 0.100 Section A; West Wall 0.203 <10 11786 < 0.100 < 0.100 < 0.100 <0.100 < 0.100 <10 Section A; East Wall 11787 < 0.100 0.118 Section A: North Wall < 0.100 0.252 0.141 10 11788 Section A; South Wall < 0.100 < 0.100 < 0.100 < 0.100 < 0.100 51 11789 < 0.100 < 0.100 < 0.100 0.100 < 0.100 Section B; Bottom Hole <10 11790 Section B; West Wall < 0.100 < 0.100 < 0.100 0.131 < 0.100 <10 11791 Section B: East Wall < 0.100 < 0.100 < 0.100 < 0.100 < 0.100 <10 11792 Section B; North Wall < 0.100 < 0.100 < 0.100 < 0.100 < 0.100 <10 11793 Section B: South Wall < 0.100 < 0.100 < 0.100 < 0.100 < 0.100 <10 11794 41 Stockpile 11795 < 0.100 < 0.100 < 0.100 0.110 < 0.100 <10 Section C; Bottom Hole 11796 Section C; West Wall < 0.100 0.474 0.926 3.600 1.723 52 11797 < 0.100 0.162 < 0.100 0.233 0.162 78 Section C: East Wall 11798 < 0.100 Section C: North Wall < 0.100 < 0.100 < 0.100 < 0.100 <10 11799 Section C; South Wall <0.100 < 0.100 < 0.100 0.102 < 0.100 <10 % IA 101 99 101 98 99 88 %EA 108 106 108 106 107 99 **BLANK** < 0.001 < 0.001 < 0.001 <0.001 < 0.001 0 RPD 6 7 7 7 6 <10

METHODS: SW 846-8020,5030, 8015M DRO

Michael R. Fowler



"Don't Treat Your Soil Like Dirt!"

KEI

ATTN: THERESA NIX 5309 WURZBACH SUITE 100 SAN ANTONIO, TEXAS 78238

FAX: 210-680-3763

Receiving Date: 07/17/97 Sample Type: SOIL Project #: 710020

Project Location: TNM 97-11

Analysis Date: 07/21/97 Sampling Date: 07/16/97 Sample Condition: Intact/Iced

•		BENZENE	TOLUENE	ETHYLBENZENE	m,p-XYLENE	o-XYLENE	
ELT#	FIELD CODE	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
11794	Stockpile	<.100	0.314	0,285	1.254	0.711	

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% IA	95	93	91	87	91
% EA	84	85	81	79	83
BLANK	< 0.001	<0.001	<0.001	< 0.001	< 0.001
RPD	0	4	3	2	6

METHODS: SW 846-8020,5030

Michael R. Fowler

Date

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11780 Section A; east wall	1 402	7-16-47							
11787 Section A: NorTh Wall	1 402	7-16-67	\mathcal{M}						
11788 Section A, Southwall	1 402	7-647	\mathcal{L}						
11789 Section B : bottom hole	1 402 /	7-16-47							
1790 Section B: West wall	1 407	7-697							
11791 Seithor B. east wall	1 402	7-18-67	ИППИПП						
117 92 Section B. norTh wall	1 402	7-16-97							
11793 Section B. Southwall	1 402	7-160-97.							
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