CORRESPONDENCE

MISC.

RB 1115

ANNUAL MONITORING REPORT

EOTT PIPELINE COMPANY
TNM 97-14
LEA COUNTY, NEW MEXICO

1R 96

RECEIVED
MAY 09 2001
ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

PREPARED FOR:

EOTT PIPELINE COMPANY
5805 EAST HIGHWAY 80
MIDLAND, TEXAS 79701

PREPARED BY:

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
2540 WEST MARLAND
HOBBS, NEW MEXICO 88240

April 2001

TABLE OF CONTENTS

INTRODUCTION

Environmental Technology Group, Inc. (ETGI), on behalf of EOTT Energy Corp. (EOTT), prepared this annual report in compliance with the New Mexico Oil Conservation Division (OCD) letter of May 1998, requiring submittal of an annual report by April 1 of each year. The report presents the results of the quarterly ground water monitoring events only. For reference, the Site Location Map is provided as Figure 1.

Ground water monitoring was conducted during one quarterly event in calendar year 1999 and three quarterly events in calendar year 2000 to assess the levels and extent of dissolved phase constituents. The ground water monitoring events consisted of measuring static water levels in the monitoring wells, and purging and sampling of each well exhibiting sufficient recharge.

FIELD ACTIVITIES

The site monitoring wells were gauged and sampled on November 9, 1999, January 11, April 5, and August 29, 2000. During each sampling event, the monitoring wells, designated to be sampled, were purged of approximately 3 well volumes of water or until the wells were dry using a PVC bailer or electrical Grundfos Pump. Ground water was allowed to recharge and samples were obtained using disposable Teflon samplers. Water samples were stored in clean, glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a polystyrene tank and disposed of by Pate Trucking, Hobbs, New Mexico, utilizing a licensed disposal facility (OCD AO SWD-730).

ETGI submitted a Request For Closure of the site dated, January 5, 2000, and OCD approved the request in a letter dated, April 12, 2000. The monitoring wells, MW-1 and MW-2 were plugged and abandoned by Eades Drilling Company of Hobbs, New Mexico, supervised by ETGI, in accordance with OCD guidelines on January 8, 2001.

GROUND WATER GRADIENT

Locations of the monitoring wells, as measured on November 4, 2000, are depicted on Figure 2, the Site Ground Water Gradient Map. The ground water elevation data are provided as Table 1. Ground water elevation contours are unknown due to the existence of two monitoring wells on-site which preludes the data necessary for measurement of ground water elevation. The depth to ground water, as measured from the top of the well casing, ranged between 30.90 to 33.97 feet for the shallow alluvial aquifer.

LABORATORY RESULTS

Ground water samples obtained during the sampling events were hand delivered to Environmental Laboratory of Texas, Midland, Texas, for determination of benzene, toluene,

INTRODUCTION

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LABORATORY RESULTS

Ground water samples obtained during the sampling events were hand delivered to Environmental Laboratory of Texas, Midland, Texas, Midland, Texas, for determination of

benzene, toluene, ethyl benzene and total xylenes (BTEX) concentrations by EPA Method SW846-8021B. The ground water chemistry data are provided as Table 2 and the Laboratory Reports are provided as Appendix A.

Laboratory results for all of the site ground water samples, obtained during the calendar year 1999 and 2000 monitoring period, indicated that Benzene and BTEX concentrations were below method detection limits.

SUMMARY

This report presents the results of monitoring activities for the annual monitoring period of calendar year 1999 and 2000. Ground water elevation contours are unknown due to the existence of two monitoring wells on-site which preludes the data necessary for measurement of groundwater elevation.

Laboratory results for all of the site ground water samples, obtained during the calendar year 1999 and 2000 monitoring period, indicated that Benzene and BTEX concentrations were below method detection limits.

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FIGURES

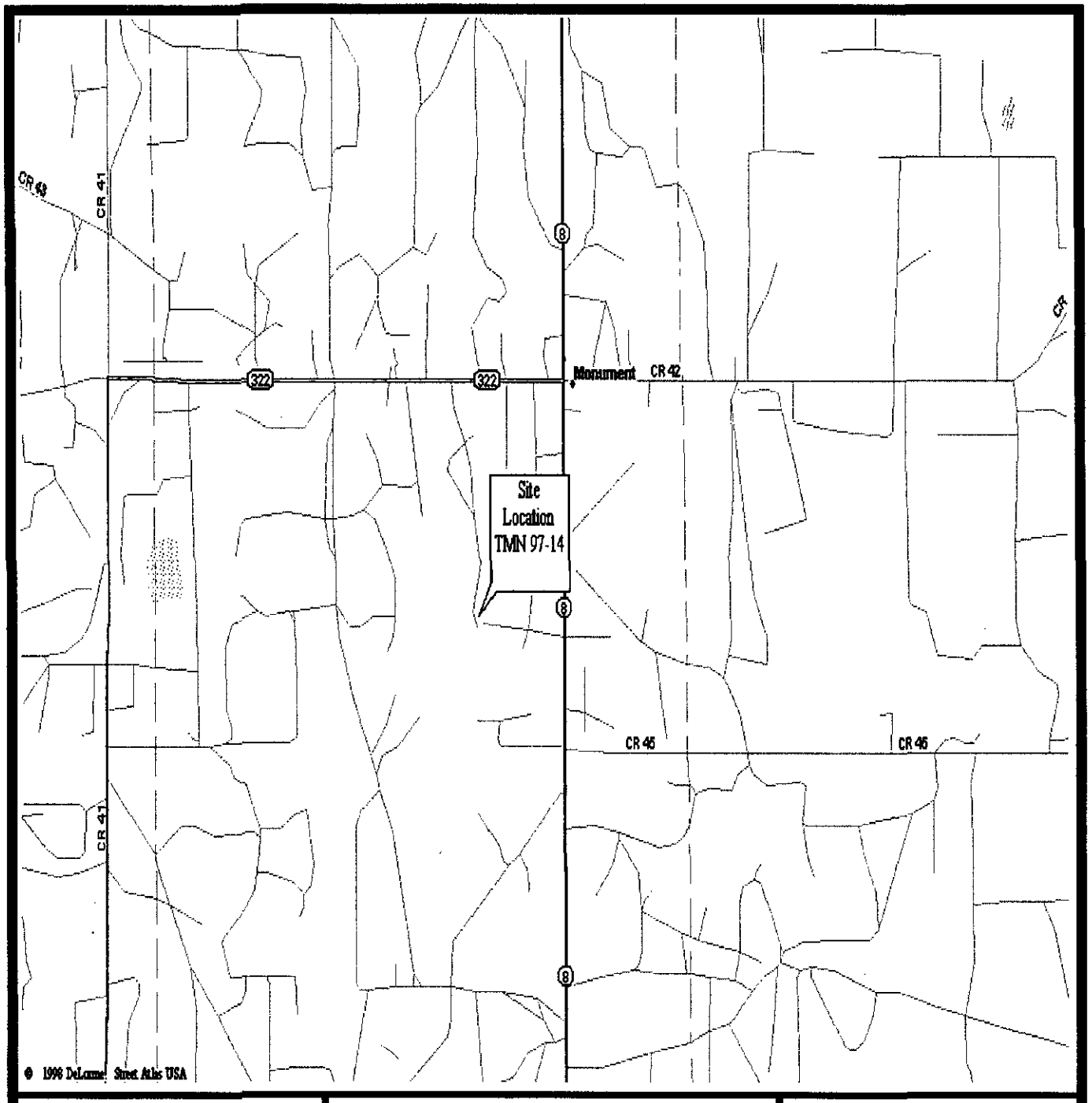
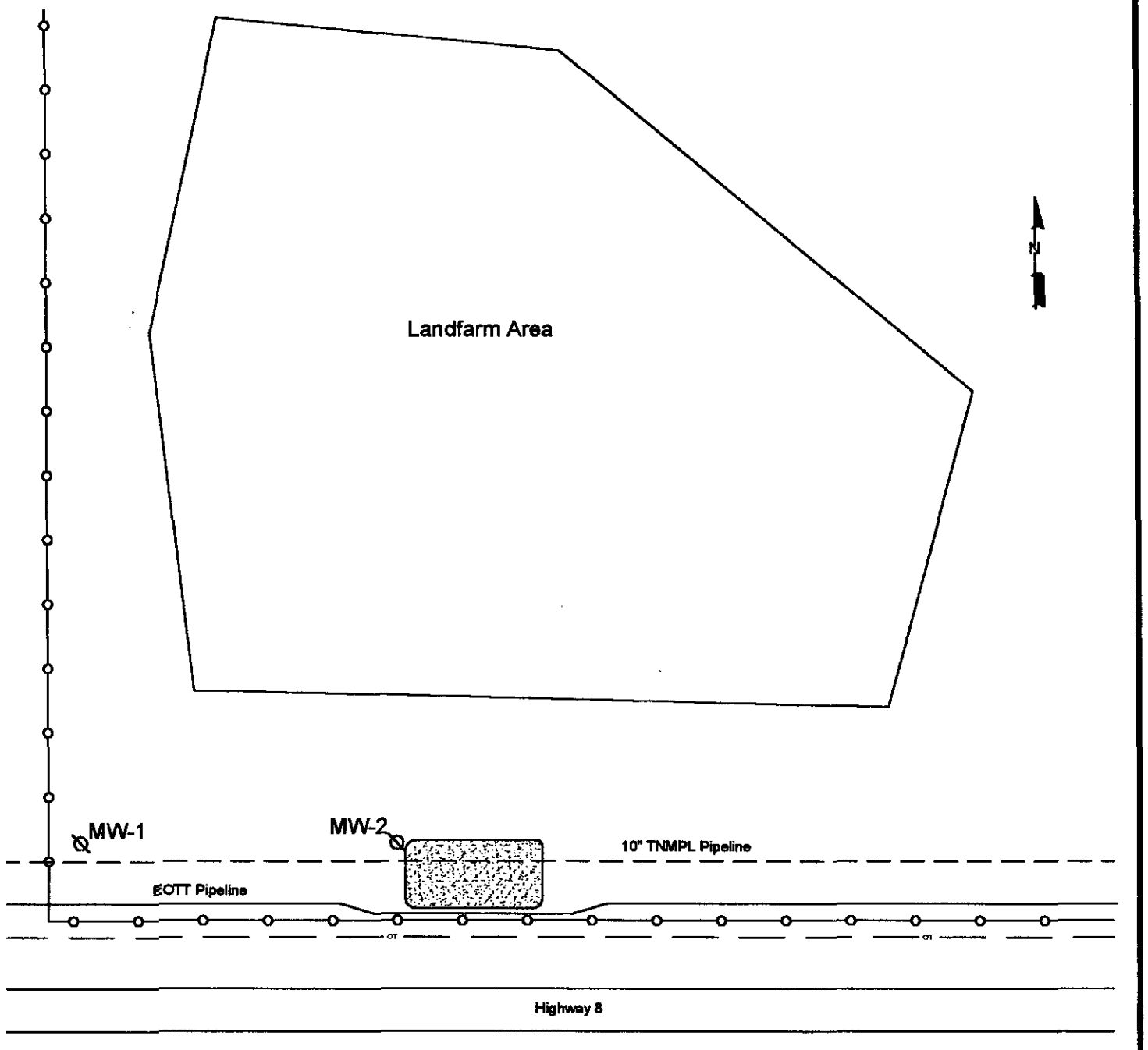


FIGURE 1	Site Location Map	Environmental Technology Group, Inc.
Not To Scale	EOTT Energy Corp. TNM-97-14 Lea County, NM	11 - 22 - 99 RS
		ETGI Project #: EOT2023C



LEGEND:

- Plugged and Abandoned Monitor Well
- Fence Line
- Overhead Telephone Line
- Excavated Area
- Possible Ground Water Flow Direction

Figure 2
Site Groundwater Gradient Map (8/29/00)

TNM 97-14
Lea County, NM

Environmental Technology Group, Inc.

Scale: 1" = 140'	Prep By: RS	Checked By: CR
August 29, 2000	ETGI Project #: EOT2023C	

TABLES

TABLE 1

GROUND WATER ELEVATION
ANNUAL REPORT

EOTT ENERGY CORPORATION
TNM 97-14
LEA COUNTY, NEW MEXICO
ETGI PROJECT # EOT2023C

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW - 1	11/09/99	3,553.60	-	30.90	0.00	3,522.70
	01/11/00	3,553.60	-	30.91	0.00	3,522.69
	04/05/00	3,553.60	-	30.90	0.00	3,522.70
	08/29/00	3,553.60	-	31.31	0.00	3,522.29
MW - 2	11/09/99	3,556.38	-	33.60	0.00	3,522.78
	01/11/00	3,556.38	-	33.56	0.00	3,522.82
	04/05/00	3,556.38	-	33.53	0.00	3,522.85
	08/29/00	3,556.38	-	33.97	0.00	3,522.41

TABLE 2

GROUND WATER CHEMISTRY

EOTT ENERGY CORPORATION
TNM 97-14
LEA COUNTY, NEW MEXICO
ETGI PROJECT # EOT 2023C

All concentrations are in mg/L

SAMPLE LOCATION	SAMPLE DATE	SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL-BENZENE	M,P-XYLENES	O-XYLENES
MW - 1	11/09/99	<0.001	<0.001	<0.001	<0.001	<0.001
	01/11/00	<0.001	<0.001	<0.001	<0.001	<0.001
	04/05/00	<0.001	<0.001	<0.001	<0.001	<0.001
	08/29/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW-2	11/09/99	<0.001	<0.001	<0.001	<0.001	<0.001
	01/11/00	<0.001	<0.001	<0.001	<0.001	<0.001
	04/05/00	<0.001	<0.001	<0.001	<0.001	<0.001
	08/29/00	<0.001	<0.001	<0.001	<0.001	<0.001

APPENDIX

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ETGI
ATTN: MR. JESSE TAYLOR
P.O. BOX 4845
MIDLAND, TEXAS 79704
FAX: 505-392-3760(Ken Dutton)

Sample Type: Water
Sample Condition: Intact/Iced/HCl
Project #: TNM 97-14
Project Name: EOT 1015C
Project Location: Lea County, N.M.

Sampling Date: 11/09/99
Receiving Date: 11/11/99
Analysis Date: 11/12/99

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
21553	MW-1	<0.001	<0.001	<0.001	<0.001	<0.001
21554	MW-2	<0.001	<0.001	<0.001	<0.001	<0.001
	% IA	94	91	94	96	94
	% EA	100	98	101	104	100
	BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: SW 846-8021,5030

Raland K. Tuttle

11-22-99
Date

Environmental Lab of Texas, Inc.

12600 West I-20 East Odessa, Texas 79763
(915) 563-1800 FAX (915) 563-1713

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

COC: 40

Project Manager: Jesse Taylor

Phone #: (915) 664-9166

FAX #: (505) 392-3760

Company Name & Address: ETGI

P.O. Box 4845 Midland Tx 79704

Project #: TNM 97-14

Project Name: EOT 1015C

Project Location: Lea County, NM

Sampler Signature: Simon Casas

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	OTHER	SAMPLING: DATE	TIME	BTEX 8021 (8260)	TPH 418.1	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	TDS 160.1	RCI	Cations 6010	Anions 300.0	PAH (8100) or (8270)	Hexavalent Cr (EP Step) 6010
21553	MW 1	2	✓	X					X		X			11-9	1142	X											
21554	MW 2	5	12.5 ✓	X					X	X	X			11-9	1238	X						X		X	X	X	X

Relinquished by:	Date:	Times:	Received by:
Simon Casas	11-11-99	1405	
Relinquished by:	Date:	Times:	Received by:
Relinquished by:	Date:	Times:	Received by Laboratory:

REMARKS

Mail Results:

K Dutton

Invoice: Lennah Frost 1015M

ENVIRONMENTAL LAB OF TEXAS, INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: MR. JESSE TAYLOR
P.O. BOX 4845
MIDLAND, TEXAS 79704
FAX: 505-392-3760

Sample Type: Water
Sample Condition: Intact/Iced/HCl
Project #: EOT1015C
Project Name: TNM 97-14
Project Location: Lea County

Sampling Date: 01/11/00
Receiving Date: 01/14/00
Analysis Date: 01/18 & 01/19/00

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
22843	MW-1	<0.001	<0.001	<0.001	<0.001	<0.001
22844	MW-2	<0.001	<0.001	<0.001	<0.001	<0.001
% IA		94	91	89	91	88
% EA		93	90	87	88	87
BLANK		<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: EPA SW 846-8021B,5030

Roland K. Tuttle

Roland K. Tuttle

1-20-00

Date

Environmental Lab of Texas, Inc.

12600 West I-20 East Odessa, Texas 79763
(915) 563-1800 FAX (915) 563-1713

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

COC 068

Project Manager: Jesse Taylor

Phone #: (915) 664-9166
FAX #: (505) 392-3760

Company Name & Address: ETGI P.O. Box 4845 Midland TX 79704

Project #: EOT 1015C

Project Name: TNM 97-14

Project Location: LEA County

Sampler Signature:

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	OTHER	SAMPLING: DATE	TIME	BTEX 8021B	TPH 418.1	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	TDS	RCI
	MW 1	2	V	X					X		X			1/11	1035	X							
	MW 2	2	V	X					X		X			1/11	1100	X							

Relinquished by:	Date:	Time:	Received by:
	1/14/00	1430	
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by Laboratory:

REMARKS

Mail Results: K. Dutton

Invoice: Lennah Frost 1015M

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: MR. JESSE TAYLOR
P.O. BOX 4845
MIDLAND, TEXAS 79704
FAX: 915-520-4310
FAX: 505-392-3760

SampleType: Water
Sample Condition: Intact/ Iced/HCl
Project #: EOT 1015C
Project Name: TNM 97-14
Project Location: Lea County, N.M.

Sampling Date: 04/05/00
Receiving Date: 04/06/00
Analysis Date: 4/10/00

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
24645	MW-1	<0.001	<0.001	<0.001	<0.001	<0.001
24646	MW-2	<0.001	<0.001	<0.001	<0.001	<0.001
% IA		91	90	92	95	88
% EA		94	92	94	97	90
BLANK		<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: SW 846-8021B,5030

Raland K. Tuttle

4-12-00
Date

Environmental Lab of Texas, Inc.

12600 West I-20 East Odessa, Texas 79763
(915) 563-1800 FAX (915) 563-1713

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

COC # 118

Project Manager: JESSE TAYLOR

Phone #: (915) 664-9161

FAX #: (505) 392-3760

Company Name & Address: ETGI

P.O. BOX 4845 MIDLAND TX 79704

Project #: EOT 1015C

Project Name: TNM 97-14

Project Location: LEA COUNTY, NM

Sampler Signature: Simon Casas

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	OTHER	SAMPLING: DATE	TIME	BTEX 8021 (8260)	TPH 418.1	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	TDS	RCI
	MW 1	2	V	X					X		X			4-5	1215	X							
	MW 2	2	✓	X					X		X			4-5	1150	X							

ANALYSIS REQUEST

Relinquished by:	Date:	Times:	Received by:
Simon Casas	4-6-00	1200	
Relinquished by:	Date:	Times:	Received by:
Relinquished by:	Date:	Times:	Received by Laboratory:

REMARKS

MAIL RESULTS: K. DUTTON

INVOICE: LENNOX FEAST 1015M

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: BETH ALDRICH
P.O. BOX 4845
MIDLAND, TEXAS 79704
FAX: 915-520-4310

SampleType: Water
Sample Condition: Intact/ Iced/ HCl/ 27 deg. F
Project #: EOT 2023C
Project Name: TNM 97-14
Project Location: Monument, N.M.

Sampling Date: 08/29/00
Receiving Date: 08/30/00
Analysis Date: 09/05/00

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L	TOTAL BTEX mg/L
30253	MW 1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
30254	MW 2	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
% IA		103	100	103	106	99	
% EA		104	104	106	110	102	
BLANK		<0.001	<0.001	<0.001	<0.001	<0.001	

METHODS: SW 846-8021B,5030

Raland K. Tuttle

9-6-00
Date

For Use On **EOTT ENERGY CORP.** Projects Only

4600 West Wall
Midland, TX 79703
Tel (915) 522-1139
Fax (915) 520-4310

2540 West Marland
Hobbs, NM 88242
Tel (505) 397-4882
Fax (505) 397-4701

EOTT ENERGY CORP.
5805 East Business 20
Midland, TX 79702
Tel (915) 687-3400
Fax (915) 582-2781

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ANALYSIS REQUEST (Circle or Specify Method No.) 210

Project Manager: BETH ALDRICH

Project Name: TNM 97-14

Project Number: EOT 2023C

Project Location: MONUMENT NM

Sampler Signature: Simon Casas

LAB # (Lab Use Only)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATION METHOD: HCL	HNO_3	$NaHSO_4$	ICE	NONE	SAMPLING: DATE [illegible]	TIME	BTEX 8021B	TPH 418.1/TX 1005	TPH 8015M GRO/DRO	PAH 8270C (8100 New Mexico only)	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/7470	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	Volatiles 8260B	Semi Volatiles 8270C	TDS 160.1	Cations/Anions 375.4/325.3
	mw 1	2	V	X				X			X		8-29	1015	X											
	mw 2	2	V	X				X			X		8-29	1035	X											

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Simon Casas	8/30/00	0900			
Relinquished by:	Date:	Time:	Received at Lab by:	Date:	Time:
[illegible signature]	8-30-00	1:30	J McMurray	08-30-00	1330

REMARKS: Rec 27°F
MAIL RESULTS: EOTT
FAX RESULTS: HOBBS OFFICE
INVOICE: EOTT

January 18, 2001

Mr. Bill Olson
New Mexico Oil Conservation Division
Environmental Bureau
2040 South Pacheco
Santa Fe, NM 87505

RE: EOTT TNM 97-14 Site, Lea County, New Mexico

Mr. Olson

On behalf of EOTT Energy Pipeline, Environmental Technology Group, Inc. (ETGI) submits the following closure report for EOTT TNM 97-14 leak site in Section 8, Township 20 South, Range 37 East, in Lea County, New Mexico. As per Additional Subsurface Investigation Report and Abatement Completion Report (Final Report) submitted and dated December 1998 by ETGI, we have completed the four consecutive quarters of ground water sampling at the site, with no analysis above the New Mexico Water Quality Control Commission (NMWQCC) standards for the monitored contaminates of concern (COC).

Per your Certified Mail, Return Receipt No. Z-559-572-914, dated April 12, 2000, approval for site closure, the following conditions for site closure are submitted for your approval:

1. On January 8, 2001, Eades Drilling Company, Hobbs, NM, supervised by ETGI, cut the casing at the surface and filled the remaining annulus with a 3-5% bentonite cement grout solution.

2. Copies of the laboratory analytical data sheets are attached as Table 1. The following procedures were adhered to during all quarterly samplings events:

   Personnel wearing clean, disposable gloves collected groundwater samples from the monitor well with disposable Teflon sampler and polyethylene line. Groundwater samples, collected for BTEX analysis, were placed in 40 ml glass VOA vials equipped with Teflon-lined caps. The containers were provided by the analytical laboratory. The vials were filled to a positive meniscus, sealed, and visually checked to ensure the absence of air bubbles. The filled containers were labeled and placed on ice in an insulated cooler. The cooler was sealed for transportation to the analytical laboratory. Proper chain-of-custody documentation was maintained throughout the sampling process.

Sincerely,

Ken Dutton
New Mexico Operations Manager

attachments

cc: Chris Williams, OCD Hobbs District Office

Midland, TX ■ P. O. Box 4845, 79704 ■ Office 915-522-1139 ■ Fax 915-520-4310
The Woodlands, TX ■ P. O. Box 131150, 77393 ■ Office 281-362-8571 ■ Fax 281-362-8932
Hobbs, NM ■ 2540 W. Marland, 88240 ■ Office 505-397-4882 ■ Fax 505-397-4701

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

April 12, 2000

CERTIFIED MAIL
RETURN RECEIPT NO. Z-559-572-914

Mr. Glen Waldrop
EOTT Energy Pipeline Limited Partnership
P.O. Box 1660
Midland, Texas 79702

RE: TNM-97-14 SITE
LEA COUNTY, NEW MEXICO

Dear Mr. Waldrop:

The New Mexico Oil Conservation Division (OCD) has reviewed EOTT Energy Pipeline Limited Partnership's (EOTT) January 5, 2000 "TNM-97-14, GROUND WATER INVESTIGATIONS, LEA COUNTY, NEW MEXICO". This document contains the results of EOTT's investigation and remediation of a crude oil pipeline spill site at the TNM-97-14 site located south of Monument, New Mexico in Section 8, Township 20 South, Range 37 East. The document also recommends closure of the site remedial actions.

The investigation and remedial actions at the site are satisfactory and the OCD **approves** of the above referenced closure request. Please be advised that OCD approval does not relieve EOTT of liability should remaining contaminants pose a future threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve EOTT of responsibility for compliance with any other federal, state or local laws and regulations.

If you have any questions or comments, please contact me at (505) 827-7154.

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

xc: Chris Williams, OCD Hobbs District Office

January 18, 2001

Mr. Bill Olson
New Mexico Oil Conservation Division
Environmental Bureau
2040 South Pacheco
Santa Fe, NM 87505

RE: EOTT TNM 97-14 Site, Lea County, New Mexico

Mr. Olson

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Sincerely,

Ken Dutton
New Mexico Operations Manager

attachments

cc: Chris Williams, OCD Hobbs District Office

Table 1

GROUND WATER CHEMISTRY

EOTT ENERGY PIPELINE LIMITED PARTNERSHIP
TNM 97-14
LEA COUNTY, NEW MEXICO
ETGI Project # EOT 2023C

All concentrations are in mg/L

SAMPLE LOCATION	SAMPLE DATE	SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL-BENZENE	M,P-XYLENES	O-XYLENES
MW - 1	11/9/99	<0.001	<0.001	<0.001	<0.001	<0.001
	1/11/00	<0.001	<0.001	<0.001	<0.001	<0.001
	4/5/00	<0.001	<0.001	<0.001	<0.001	<0.001
	8/29/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW-2	11/9/99	<0.001	<0.001	<0.001	<0.001	<0.001
	1/11/00	<0.001	<0.001	<0.001	<0.001	<0.001
	4/5/00	<0.001	<0.001	<0.001	<0.001	<0.001
	8/29/00	<0.001	<0.001	<0.001	<0.001	<0.001

ANNUAL MONITORING REPORT

EOTT PIPELINE COMPANY
TNM 97-14
LEA COUNTY, NEW MEXICO

PREPARED FOR:

EOTT PIPELINE COMPANY
P. O. BOX
MIDLAND, TEXAS 79704

Ms. Lennah Frost

PREPARED BY:

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
4600 WEST WALL STREET
MIDLAND, TEXAS 79704

March 2000

TABLE OF CONTENTS

INTRODUCTION

Environmental Technology Group, Inc. (ETGI), on behalf of EOTT Energy Corp. (EOTT), prepared this annual report in compliance with the New Mexico Oil Conservation Division (OCD) letter of May 1998, requiring submittal of an annual report by April 1 of each year. The report presents the results of the quarterly ground water monitoring events only. For reference, a site location map is provided as Figure 1.

Ground water monitoring was conducted during four quarterly events in 1999 to assess the levels and extent of dissolved phase and free phase petroleum hydrocarbon constituents. The groundwater monitoring events consisted of measuring static water levels in the monitoring wells, checking for the presence of phase-separated hydrocarbons (PSH), and purging and sampling of each well exhibiting sufficient recharge. Monitoring wells containing measurable levels of PSH were not sampled.

FIELD ACTIVITIES

The site monitoring wells were gauged and sampled on February 5, May 12, August 24, and November 9, 1999. During each sampling event, the monitoring wells, designated to be sampled, were purged of approximately 3 well volumes of water or until the wells were dry using a PVC bailer or electrical Grundfos Pump. Groundwater was allowed to recharge and samples were obtained using disposable Teflon samplers. Monitoring wells with a measurable presence of PSH were not sampled. Water samples were stored in clean, glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a polystyrene tank and disposed of by Pate Trucking, Hobbs, New Mexico, utilizing a licensed disposal facility (OCD AO SWD-730).

GROUNDWATER GRADIENT

Locations of the monitoring wells and the available ground water elevations, as measured on November 9, 1999, are depicted on Figure 2. Since there are only two wells at the site, a ground water gradient is impossible to determine. The depth to groundwater, as measured from the top of the well casing, ranged between 30.42 to 33.60 feet for the shallow alluvial aquifer.

LABORATORY RESULTS

Ground water samples obtained during the first and second sampling events were mailed to Xenco Laboratories in San Antonio, Texas. Ground water samples collected during the third and fourth event were hand delivered to Environmental Laboratory of Texas, Midland, Texas for determination of benzene, toluene, ethyl benzene and total xylenes (BTEX) concentrations by EPA Method SW846-8020 and 8021B. The ground water chemistry data are provided as Table 2 and the Laboratory Reports are provided as Appendix A.

Laboratory results for all of the site ground water samples, obtained during the 1999 annual period, indicated that BTEX concentrations were below detection limits.

SUMMARY

This report presents the results of monitoring activities for the monitoring period of calendar year 1999. No PSH was detected in the site wells during the four monitoring events. Dissolved phase concentrations of BTEX were non-detect in the monitoring well.

FIGURES

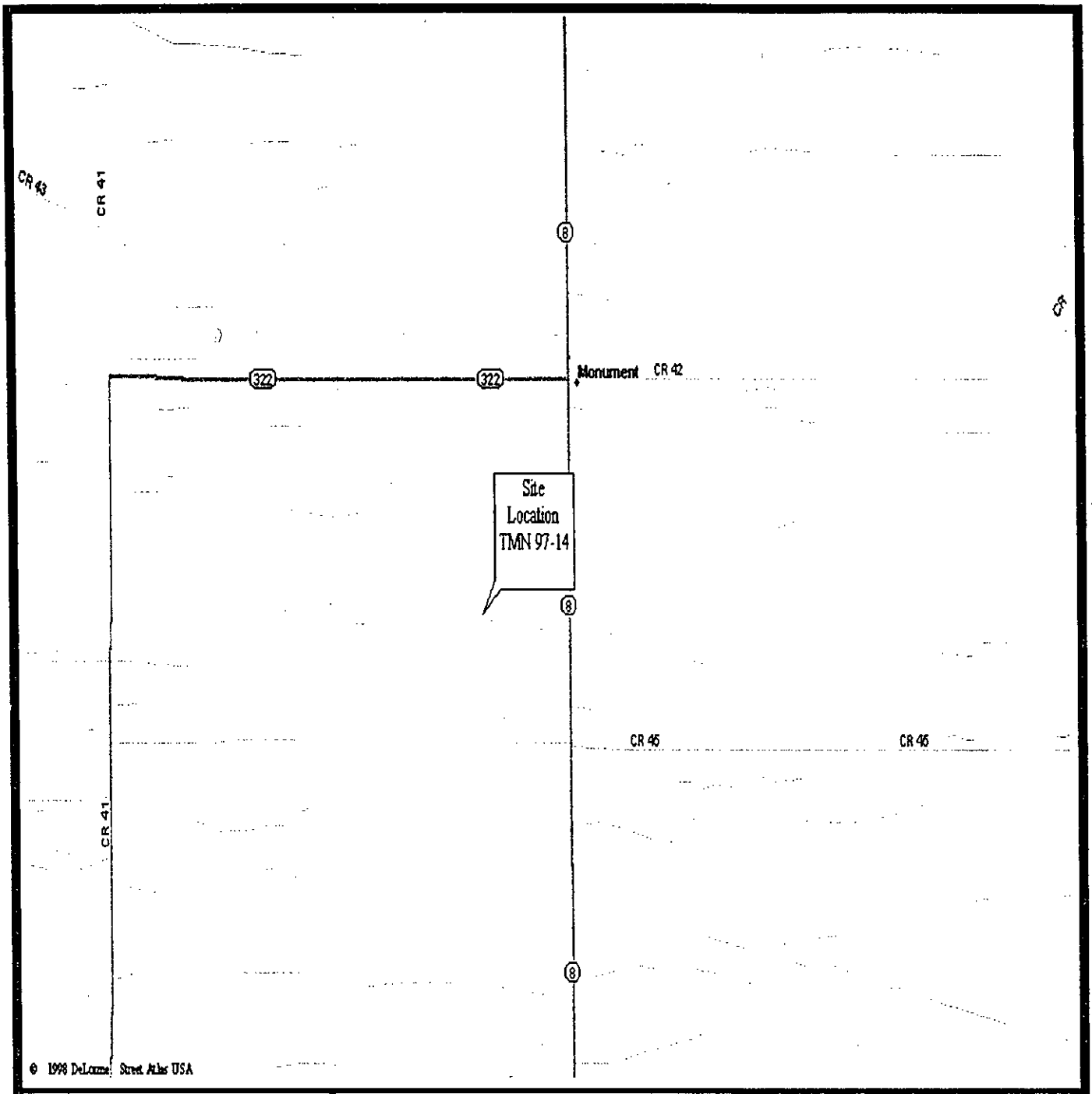
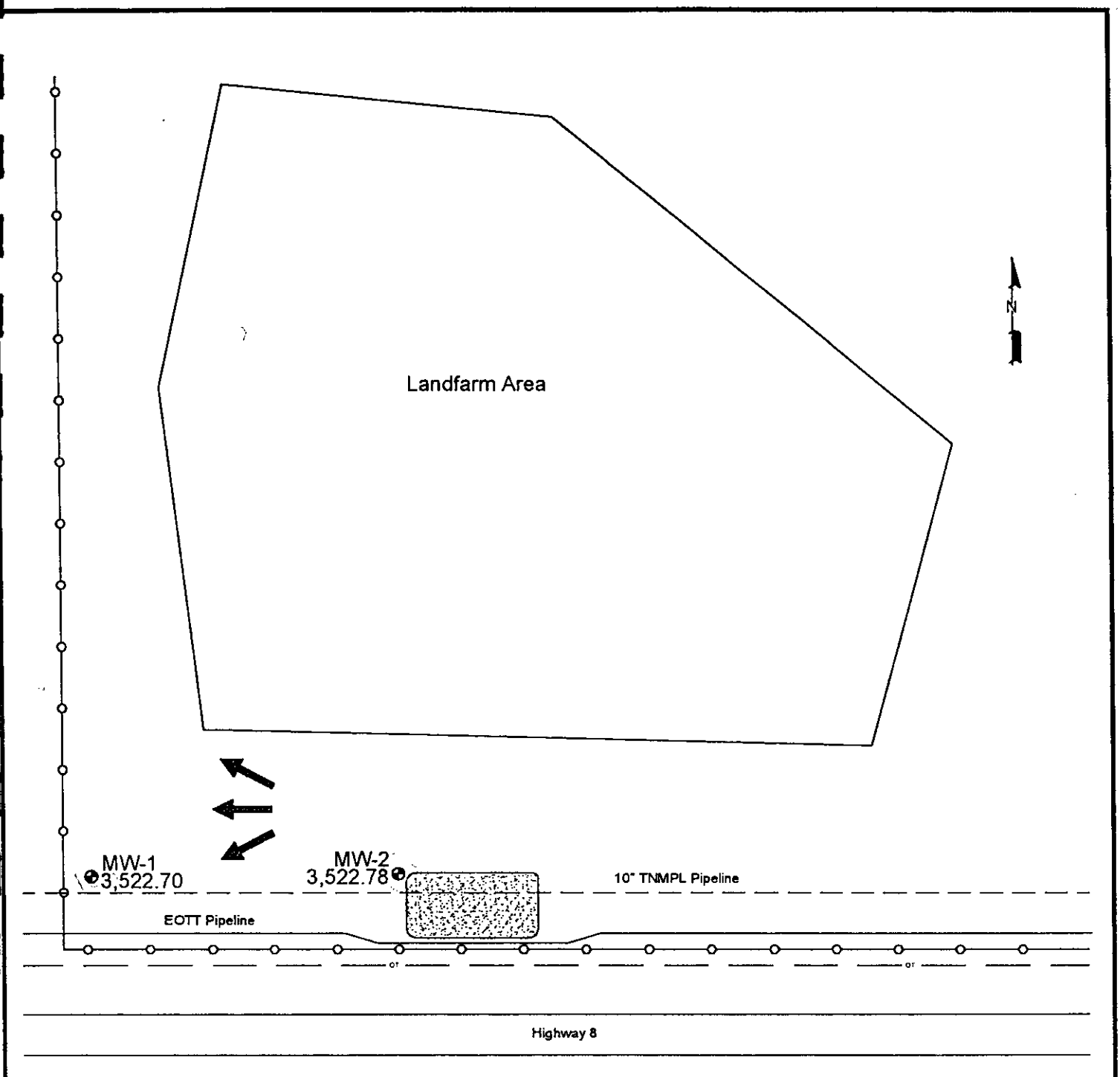


FIGURE 1	Site Location Map	Environmental Technology Group, Inc.
Not To Scale	EOTT Energy Corp. TNM-97-14 Lea County, NM	11 - 22 - 99 RS
		ETGI Project # EOT 1023C



LEGEND:

- Existing Monitoring Well
- Fence Line
- Overhead Telephone Line
- Excavated Area
- Possible Ground Water Flow Direction

Figure 2
Ground Water Elevation Map
11/09/99

TNM 97-14
Lea County, NM

Environmental Technology Group, Inc.

Scale: 1" = 140'	Prep By: RS	Checked By: JN
September 30, 1999	ETGI Project # EOT 1023C	

TABLES

TABLE 1
GROUNDWATER ELEVATION TABLE
TNM 97-14
LEA COUNTY, NM
ETGI PROJECT# EOT1015C

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUNDWATER ELEVATION
MW-1	02/05/99	3,553.60	-	30.42	0.00	3,523.18
MW-1	05/12/99	3,553.60	-	30.90	0.00	3,522.70
MW-1	08/24/99	3,553.60	-	30.73	0.00	3,522.87
MW-1	11/09/99	3,553.60	-	30.90	0.00	3,522.70
MW-2	11/0[illegible]/99	3,556.38	-	33.60	0.00	3,522.78

TABLE 2
GROUND WATER CHEMISTRY
TNM 97-14
LEA COUNTY, NEW MEXICO
ETGI PROJECT # EOT1015C

SAMPLE	SAMPLE DATE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYLBENZENE (mg/L)	mp-XYLENE (mg/L)	o-XYLENE (mg/L)
MW-1	02/05/99	<0.001	<0.001	<0.001	<0.002	<0.001
MW-1	05/12/99	<0.001	<0.001	<0.001	<0.002	<0.001
MW-1	08/24/99	<0.001	<0.001	<0.001	<0.001	<0.001
MW-1	11/09/99	<0.001	<0.001	<0.001	<0.001	<0.001
MW-2	11/09/99	<0.001	<0.001	<0.001	<0.001	<0.001

NOTE: Monitor Well 2 was installed during 4Q99.

Methods: EPA SW 846-8020, 5030

APPENDIX A

XENCO Laboratories
11381 Meadowglen Suite L
Houston, Texas 77082-2647
(281) 589-0692 Fax: (281) 589-0695
Houston · Dallas · San Antonio · Latin America

February 12, 1999

Project Manager: S. Grover/T. Nix
KEI Consultants, Inc.
5309 Wurzbach Rd. Suite 100
San Antonio, TX 78238

Reference: XENCO Report No.: -90524
Project Name: TNMPL
Project ID: 710028-1-0
Project Address: Lea Co., NM

Dear S. Grover/T. Nix:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with XENCO Chain of Custody Number -90524.r All results being reported to you apply only to the samples analyzed, properly identified with a Laboratory ID number. This letter documents the official transmission of the contents of the report and validates the information contained within.

All the results for the quality control samples passed thorough examination. Also, all parameters for data reduction and validation checked satisfactorily. In view of this, we are able to release the analytical data for this report within acceptance criteria for accuracy, precision, completeness or properly flagged.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 3 years in our archives and after that time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in COC No. -90524r will be filed for 60 days, and after that time they will be properly disposed of without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

XENCO operates under the A2LA guidelines. Our Quality System meets ISO/IEC Guide 25 requirements which is strictly implemented and enforced through our standard QA/QC procedures.

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Sincerely,

Eddie L. Clemons, II
QA/QC Manager

ANALYTICAL CHAIN (CUSTODY REPORT
CHRONOLOGY OF SAMPLES

KEI Consultants, Inc.

Project ID: 710028-1-0
Project Manager: S. Grover/T. Nix
Project Location: Lea Co., NM

Project Name: TNMPL

XENCO COC#: -90524
Date Received in Lab: Feb 9, 1999 10:20 by DA
XENCO contact : Carlos Castro/Karen Olson

	Field ID	Lab. ID	Method Name	Method ID	Units	Turn Around	Date and Time: Sample Collected	Date and Time: Addition Requested	Date and Time: Extraction	Date and Time: Analysis
1	MW-1	90524-001	BTEX	SW-846	ppm	10 days	Feb 5, 1999 00:00		Feb 11, 1999 by MGC	Feb 11, 1999 19:51 by MGC

XENCO Laboratories

CERTIFICATE OF ANALYSIS SUMMARY -90524

KEI Consultants, Inc.

Project Name: TNMPL

Project ID: 710028-1-0

Project Manager: S. Grover/T. Nix

Project Location: Lea Co., NM

Date Received in Lab : Feb 9, 1999 10:20

Date Report Faxed: Feb 12, 1999

XENCO contact : Carlos Castro/Karen Olson

Analysis Requested	*Lab ID:*	90524 001			
	Field ID:	MW-1			
	Depth:				
	Matrix:	Liquid			
	Sampled:	02/05/99 09:00			
BTEX EPA 8021B	*Analyzed:* *Units:*	02/11/99 ppm	R.L.		
Benzene		< 0.001	(0.001)		
Toluene		< 0.001	(0.001)		
Ethylbenzene		< 0.001	(0.001)		
m,p-Xylene		< 0.002	(0.002)		
o-Xylene		< 0.001	(0.001)		
Total BTEX		N.D.			

Eddie L. Clemons, II
QA/QC Manager

XENCO Laboratories

Certificate Of Quality Control for Batch : 19A03A66

SW- 846 5030/8021B BTEX

Date Validated: Feb 12, 1999 10:30
Date Analyzed: Feb 11, 1999 13:05

Analyst: MGC
Matrix: Liquid

BLANK SPIKE / BLANK SPIKE DUPLICATE AND RECOVERY

Parameter	[A] Blank Result ppm	[B] Blank Spike Result ppm	[C] Blank Spike Duplicate Result ppm	[D] Blank Spike Amount ppm	[E] Detection Limit ppm	Blank Limit Relative Difference %	[F] QC Spike Relative Difference %	[G] QC Blank Spike Recovery %	[H] QC B.S.D. Recovery %	[I] Blank Spike Recovery Range %	[J] Qualifier
Benzene	< 0.0010	0.1090	0.1090	0.1000	0.0010	20.0	0.0	108.9	108.9	65-135	
Toluene	< 0.0010	0.1110	0.1110	0.1000	0.0010	20.0	0.0	110.9	110.9	65-135	
Ethylbenzene	< 0.0010	0.1140	0.1140	0.1000	0.0010	20.0	0.0	113.9	113.9	65-135	
m,p-Xylene	< 0.0020	0.2220	0.2220	0.2000	0.0020	20.0	0.0	111.0	111.0	65-135	
o-Xylene	< 0.0010	0.1080	0.1080	0.1000	0.0010	20.0	0.0	107.9	107.9	65-135	

Spike Relative Difference [F] = 200*(B-C)/(B+C)
Blank Spike Recovery [G] = 100*(B-A)/[D]
B.S.D. = Blank Spike Duplicate
B.S.D. Recovery [H] = 100*(C-A)/[D]
N.D. = Below detection limit or not detected
All results are based on MDL and validated for QC purposes

Eddie L. Clemons, II
QA/QC Manager

XENCO Laboratories

☐ 11381 Meadowglen, Suite L, Houston TX 77082 281-589-0692
☒ 5309 Wurzbach Road, Suite 104, San Antonio, TX 78238 210-509-3334
☐ 11078 Morrison Road, Suite D, Dallas, TX 75229 972-481-9999

ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD

On-LINE Help & Technical Services at XENCO.com

602

Company COC No: 257 Work Order No: 710028-1-Φ Page 1 of 1

Company	KET
Phone	(210) 680-3767
Project Name	TNMPL ☒ Previously done at XENCO
Project ID	710028-1-Φ
Location	LEA CO NM
Project Manager (PM)	S. GRAVES / T. NIX
Project Director (PD)	M. HAWTHORNE
Fax Results to	☒ PM and / or (210) 680-3763 / (512) 364-3556
Invoice to	☐ Accounting ☐ Include Invoice with Final Report Attn PM ☐ Invoice must have a P.O Bill to: 710028-1-Φ
Quote No.	P.O No ☐ Call for a P.O.
Special DLs	(RRT RR II DW QAPP See Lab PM Call Proj. PM)
Specifications	
Sampler Name	Ron Dunn Signature

Lab Only: 90524-88

TAT: 5h 12h 20h 24h 48h 3d 5d 7d 14d 21d Standard TAT is 10 Working Days unless otherwise agreed in writing. But often reported in 5-7 Working Days

Sample ID	Sampling Date	Time	Depth ft / in / m	Matrix A P S W	Composite	Grab	# Containers	Container Size	Type	Preservatives	BTEX by 8020	BTEX-MTBE by 8020 8021 8260	TPH by TX1005 418.1 8015GRO 8015DRO 8015Jetf	PAHs by 8270 8100 8310	METALS by 6010 8RCRA Tot Pb TCLP 8 13PP 23TAL See List	VOAs by 8260 624 BTEX MTBE PPs TCL See List Call PM	SVOAs by 8270 625 PAHs BN&A TCL PPs See List Call PM	TAT 5h 12h 20h 24h 48h 3d 5d 7d 10d 14d 21d	Addn: PAH above mg/L W. mg/Kg S Highest Hit	Hold Analysis
1 MW-1	5 FEB 99	0900				X	2	V	GA	HCl	X									
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				

N240 1475 62 1 EXPORT 2

Remarks

Lab Only Additions: From: / Rcv by: / Date

Relinquished by (Initials and Signature)	Relinquished to (Initials and Signature)	Date & Time
1 Ron Dunn RD		
2		
3	Lab: D. ANTOSH via UPS	2/9/99 1020

Total Containers per COC: 2

Rush TATs Fax Due: Final Fax Due:

Final Report Data Package Due Date:

Rush Charges are Pre-Approved upon Requesting them. All Terms Apply

Preservatives - Various (V), HCl pH<2 (H), H2SO4 pH<2 (S), HNO4 pH<2 (N), NaOH+Asbc Acid (NAA), ZnAc+NaOH (ZA), (Cool,<4C) (C4), None (N), See Label (SL), Other (O) _____

SIZE: 4oz (4), 8oz (8), 32oz (32), 40ml VOA (V), 1L (1), 500ml (.5), Tedlar Bag (B), Wipe (W), Other _____ TYPE Glass Amb (GA), Glass Clear (GC), Plastic (P), Other (O) _____

XENCO Laboratories
11381 Meadowglen Suite L
Houston, Texas 77082-2647
(281) 589-0692 Fax: (281) 589-0695
Houston - Dallas - San Antonio - Latin America

May 20, 1999

Project Manager: Stanley Grover
KEI Consultants, Ltd.
5309 Wurzbach Rd. Suite 100
San Antonio, TX 78238

Reference: **XENCO Report No.: -91910**
Project Name: EOTT
Project ID: 710028-1-0
Project Address: Lea County, NM

Dear Stanley Grover:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with XENCO Chain of Custody Number -91910.G All results being reported to you apply only to the samples analyzed, properly identified with a Laboratory ID number. This letter documents the official transmission of the contents of the report and validates the information contained within.

All the results for the quality control samples passed thorough examination. Also, all parameters for data reduction and validation checked satisfactorily. In view of this, we are able to release the analytical data for this report within acceptance criteria for accuracy, precision, completeness or properly flagged.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 3 years in our archives and after that time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in COC No. -91910G will be filed for 60 days, and after that time they will be properly disposed of without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

XENCO operates under the A2LA guidelines. Our Quality System meets ISO/IEC Guide 25 requirements which is strictly implemented and enforced through our standard QA/QC procedures.

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Sincerely,

Eddie L. Clemons, II
QA/QC Manager

ANALYTICAL CHAIN O. CUSTODY REPORT
CHRONOLOGY OF SAMPLES

KEI Consultants, Ltd.

Project ID: *710028-1-0*
Project Manager: *Stanley Grover*
Project Location: *Lea County, NM*

Project Name: EOTT

XENCO COC#: **-91910**
Date Received in Lab: *May 13, 1999 12:57 by DA*
XENCO contact : *Carlos Castro/Debbie Simmons*

	Field ID	Lab. ID	Method Name	Method ID	Units	Turn Around	Date and Time: Sample Collected	Date and Time: Addition Requested	Date and Time: Extraction	Date and Time: Analysis
1	MW-1	91910-001	BTEX	SW-846	ppm	7 days	May 12, 1999 12:50		May 18, 1999 by MGC	May 18, 1999 13:53 by MG

XENCO Laboratories

CERTIFICATE OF ANALYSIS SUMMARY -91910

KEI Consultants, Ltd.

Project Name: EOTT

Project ID: *710028-1-0*
Project Manager: *Stanley Grover*
Project Location: *Lea County, NM*

Date Received in Lab : *May 13, 1999 12:57*
Date Report Faxed: *May 20, 1999*
XENCO contact : *Carlos Castro/Debbie Simmons*

Analysis Requested	Lab ID: / Field ID: / Depth: / Matrix: / Sampled:	91910 001 / MW-1 / Liquid / 05/12/99 12:50			
BTEX EPA 8021B	Analyzed: / Units:	05/18/99 ppm	R.L.		
Benzene		< 0.001	(0.001)		
Toluene		< 0.001	(0.001)		
Ethylbenzene		< 0.001	(0.001)		
m,p-Xylene		< 0.002	(0.002)		
o-Xylene		< 0.001	(0.001)		
Total BTEX		N.D.			

Eddie L. Clemons, II
QA/QC Manager

EXEN Laboratories

Certificate Of Quality Control for Batch : 19A03C11

SW- 846 5030/802IB BTEX

Date Validated: May 19, 1999 14:00
Date Analyzed: May 18, 1999 12:23

Analyst: MG
Matrix: Liquid

BLANK SPIKE / BLANK SPIKE DUPLICATE AND RECOVERY

Parameter	[A] Blank Result ppm	[B] Blank Spike Result ppm	[C] Blank Spike Duplicate Result ppm	[D] Blank Spike Amount ppm	[E] Detection Limit ppm	Blank Limit Relative Difference %	[F] QC Spike Relative Difference %	[G] QC Blank Spike Recovery %	[H] QC B.S.D. Recovery %	[I] Blank Spike Recovery Range %	[J] Qualifier
Benzene	< 0.0010	0.0961	0.0933	0.1000	0.0010	20.0	3.0	96.1	93.3	65-135	
Toluene	< 0.0010	0.0947	0.0920	0.1000	0.0010	20.0	2.9	94.7	92.0	65-135	
Ethylbenzene	< 0.0010	0.1030	0.1001	0.1000	0.0010	20.0	2.9	103.0	100.1	65-135	
m,p-Xylene	< 0.0020	0.1958	0.1907	0.2000	0.0020	20.0	2.6	97.9	95.4	65-135	
o-Xylene	< 0.0010	0.0922	0.0900	0.1000	0.0010	20.0	2.4	92.2	90.0	65-135	

Spike Relative Difference [F] = 200*(B-C)/(B+C)
Blank Spike Recovery [G] = 100*(B-A)/[D]
B.S.D. = Blank Spike Duplicate
B.S.D. Recovery [H] = 100*(C-A)/[D]
N.D. = Below detection limit or not detected
All results are based on MDL and validated for QC purposes

Eddie L. Clemons, II
QA/QC Manager

XENCO Laboratories

11381 Meadowglen, Suite E, Houston TX 77082 281-589-0692

☒ 5309 Wurzbach Road, Suite 104, San Antonio, TX 78238 210-509-3334

☐ 11078 Morrison Road, Suite D, Dallas, TX 75229 972-481-9999

ANALYSIS REQUEST CHAIN CUST REC

On-LINE Help & Technical Services at XENCO.com

.0810

Company COC No: 334 Work Order No: Page 1 of 1

Company: IEI	Phone: 210-640-3767
Project Name: Eott ☒ Previously done at XENCO	Project ID: 710028-1-0
Location: Lea County, NM	
Project Manager (PM): S. Grover	Project Director (PD): M. Hawthorne
Fax Results to ☐ PM and / or: 210-680-3763	Fax:
Invoice to ☐ Accounting ☐ Include Invoice with Final Report Attn PM ☐ Invoice must have a P.O Bill to:	
Quote No.	P.O No ☒ Call for a P.O.
Special DLs (RR I RR II DW QAPP See Lab PM Call Proj. PM)	
Specifications	
Sampler Name: John Savoie	Signature: John Savoie

Lab Only: # 91910-011

TAT: 5h 12h 20h 24h 48h 3d 5d 7d 14d 21d Standard TAT is 10 Working Days unless otherwise agreed in writing. But often reported in 5-7 Working Days

Remarks: Questions S. Grover 210-640-3767

Lab Only Additions: From: / Rcv by: / Date

	Sample ID	Sampling Date	Time	Depth ft In m	Matrix A P S W	Composite	Grab	# Containers	Container Size	Type	Preservatives	BTEX by 8020 8021 8260 602 624 Other	BTEX-MTBE by 8020 8021 8260 602 624 Other	TPH by TX1005 418.1 8015GRO 8015DRO 8015Ext	PAHs by 8270 8100 8310	METALS by 6010 6RCRA Tot Pb TCLP 13PP 25TAL See List	VOAs by 8260 624 BTEX MTBE PPs TCL See List Call PM	SVOAs by 8270 625 PAHs BNA TCL PPs See List Call PM	TAT 5h 12h 20h 24h 48h 3d 5d 7d (10d) 14d 21d	Addn: PAH above mg/L W, mg/Kg S Highest Hit	Hold Analysis
1	MW-1	5-12-99	1250		W		X	2	V	GA	C4 H	X									
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					

UPS # A315 490 0585

Relinquished by (Initials and Signature)	Relinquished to (Initials and Signature)	Date & Time
1 JS JH Savoie		5-12-99 1600
2		
3	Lab: D. ANTOSH VIA	5/13/99 12:57

Total Containers per COC: 2

Rush TATs Fax Due: Final Fax Due:

Final Report Data Package Due Date:

Rush Charges are Pre-Approved upon Requesting them. All Terms Apply

Preservatives - Various (V), HCl pH<2 (H), H2SO4 pH<2 (S), HNO4 pH<2 (N), NaOH+Asbc Acid (NAA), ZnAc+NaOH (ZA), (Cool,<4C) (C4), None (N), See Label (SL), Other (O) _____

SIZE: 4oz (4), 8oz (8), 32oz (32), 40ml VOA (V), 1L (1), 500ml (.5), Tedlar Bag (B), Wipe (W), Other _____ TYPE Glass Amb (GA), Glass Clear (GC), Plastic (P), Other (O) _____

(28)

GROUND WATER MONITORING AND SAMPLING DATA

JOB NO.: TNM 97-14 FIELD TECHNICIAN: KD DATE: 24 Aug-99

WELL NO.	TIME WELL PURGED	TOTAL WELL DEPTH (feet) 1	DEPTH TO WATER (feet) 2	HEIGHT WATER COLUMN (feet) (1-2)=3	WELL FACTOR 2"=.16 4"=.65 6"=1.5 4	CALC. WELL VOLUME (gal) (3x4)=5	TOTAL WATER PURGED (gal) 6	ESTIMATED NO. WELL VOLUMES PURGED 6/5	1999 TIME SAMPLE TAKEN/DATE	DEPTH TO PSH (feet)	PSH THICKNESS (feet)	SAMPLE CHARACTERISTIC
MW1	1515	41.65	30.73	10.92	.16	1.74	5.24	3.0	1535 8-24-		pH 7.18 T 19.1	O -261mv C 2968us
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad.						
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
CONDITION:		Cover:	Cap.	Casing:	Lock:	Manway/Pad:						
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
CONDITION.		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						

Total Removed: 5.24 gal.

DRUMS ON SITE: _____

CARBON DRUM TRAILER: (yes/no) _____

DISCHARGE SAMPLE (time/date): _____

pH: _____

COMMENTS: COC: 003

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: MR. JESSE TAYLOR
P.O. BOX 4845
MIDLAND, TEXAS 79704
FAX: 915-520-4310

Sample Type: Water
Sample Condition: Intact/ Iced/HCl
Project #: TNM 97-14
Project Name: None Given
Project Location: Lea County, N.M.

Sampling Date: 08/24/99
Receiving Date: 08/27/99
Analysis Date: 08/27/99

ELT#	FIELD CODE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYLBENZENE (mg/L)	m,p-XYLENE (mg/L)	o-XYLENE (mg/L)
19621	MW-1	<0.001	<0.001	<0.001	<0.001	<0.001
	% IA	97	92	93	91	92
	% EA	97	89	85	86	86
	BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: EPA SW 846-8020,5030

Raland K. Tuttle

9-2-99
Date

COC: 003

Environmental Lab of Texas, Inc.

12600 West I-20 East Odessa, Texas 79763
(915) 563-1800 FAX (915) 563-1713

PAGE 01 of 01

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: JESSE TAYLOR

Phone #: (915) 664-9166

FAX #: —

Company Name & Address: ETGI
P.O. BOX 4845
MIDLAND, TX 79704

Project #: TNM 97-14

Project Name :

Project Location: LEA COUNTY NM

Sampler Signature: Ken Dutton

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	PRESERVATIVE METHOD: HCL	HNO3	ICE	HONE	OTHER	SAMPLING: DATE	TIME	ANALYSIS REQUEST: BTEX 8021B/5030	TPH 418.1	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	TDS	RCI
														1999									
19621	MW-1	2	V	X					X		X			8-24	1535	X							

Relinquished by:	Date:	Times:	Received by:
Ken Dutton	26 Aug 99	0845	
Relinquished by:	Date:	Times:	Received by:
Relinquished by:	Date:	Times:	Received by Laboratory:
	8/27/99	10:30	Celia Keene

REMARKS

MAIL RESULTS: KEN DUTTON
1606 W. CALLE SUR, HPT
HOBBS, NM 88240-

INVOICE TO: LUNNAH FROST
PO # 1015

GROUND WATER MONITORING AND SAMPLING DATA

JOB NO.: TNM 97-14 FIELD TECHNICIAN: SC DATE: 11-9-99

WELL NO.	TIME WELL PURGED	TOTAL WELL DEPTH (feet) 1	DEPTH TO WATER (feet) 2	HEIGHT WATER COLUMN (feet) (1-2)=3	WELL FACTOR 2"=.16 4"=.65 6"=1.5 4	CALC. WELL VOLUME (gal) (3x4)=5	TOTAL WATER PURGED (gal) 6	ESTIMATED NO. WELL VOLUMES PURGED 6/5	1999 TIME SAMPLE TAKEN/DATE	DEPTH TO PSH (feet)	PSH THICKNESS (feet)	SAMPLE CHARACTERISTIC
MW1	1130	41.30	30.90	10.40	.16	1.66	4.99	3.0	11-9		T 19.1	C 2737 us
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:			1142		ph 6.89	O 106 mv
MW2	1225	41.35	33.60	7.75	.16	1.24	3.72	3.0	11-9		T 21.2	C 2344 us
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:			1238		ph 7.37	O 96 mv ✓
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						

Total Removed: 8.71 gal.

DRUMS ON SITE: ____

CARBON DRUM TRAILER: (yes/no) ____

DISCHARGE SAMPLE (time/date): ____

IT: ____

COMMENTS: ____

GROUND WATER MONITORING AND SAMPLING DATA

JOB NO.: TNM 97-14 FIELD TECHNICIAN: SC DATE: 11-9-99

WELL NO.	TIME WELL PURGED	TOTAL WELL DEPTH (feet) 1	DEPTH TO WATER (feet) 2	HEIGHT WATER COLUMN (feet) (1-2)=3	WELL FACTOR 2"=.16 4"=.65 6"=1.5 4	CALC. WELL VOLUME (gal) (3x4)=5	TOTAL WATER PURGED (gal) 6	ESTIMATED NO. WELL VOLUMES PURGED 6/5	1999 TIME SAMPLE TAKEN/DATE	DEPTH TO PSH (feet)	PSH THICKNESS (feet)	SAMPLE CHARACTERISTIC
MW1	1130	41.30	30.90	10.40	.16	1.66	4.99	3.0	11-9 1142		T 19.1 ph 6.89	C 2737 us O 106 mv
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
MW2	1225	41.35	33.60	7.75	.16	1.24	3.72	3.0	11-9 1238		T 21.2 ph 7.37	C 2344 us O 96 mv
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						

Total Removed: 8.71 gal.

UMS ON SITE: ________

COMMENTS: ________

RBON DRUM TRAILER. (yes/no) ________

CHARGE SAMPLE (time/date): ________

GROUND WATER MONITORING AND SAMPLING DATA

JOB NO.: TNM 97-14 FIELD TECHNICIAN: KD/SC DATE: 11/8/99

WELL NO.	TIME WELL PURGED	TOTAL WELL DEPTH (feet) 1	DEPTH TO WATER (feet) 2	HEIGHT WATER COLUMN (feet) (1-2)=3	WELL FACTOR 2"=.16 4"=.65 6"=1.5 4	CALC. WELL VOLUME (gal) (3x4)=5	TOTAL WATER PURGED (gal) 6	ESTIMATED NO. WELL VOLUMES PURGED 6/5	TIME SAMPLE TAKEN/DATE	DEPTH TO PSH (feet)	PSH THICKNESS (feet)	SAMPLE CHARACTERISTIC
MW2		41.35	33.55	7.8	.16	1.24	11.2	9.0				
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						
CONDITION:		Cover:	Cap:	Casing:	Lock:	Manway/Pad:						

Total Removed: ______ gal.

UMS ON SITE: ______

RBON DRUM TRAILER: (yes/no) ______

CHARGE SAMPLE (time/date): ______

COMMENTS: well development

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ETGI
ATTN: MR. JESSE TAYLOR
P.O. BOX 4845
MIDLAND, TEXAS 79704
FAX: 505-392-3760(Ken Dutton)

Sample Type: Water
Sample Condition: Intact/Iced/HCl
Project #: TNM 97-14
Project Name: EOT 1015C
Project Location: Lea County, N.M.

Sampling Date: 11/09/99
Receiving Date: 11/11/99
Analysis Date: 11/12/99

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
21553	MW-1	<0.001	<0.001	<0.001	<0.001	<0.001
21554	MW-2	<0.001	<0.001	<0.001	<0.001	<0.001
% IA		94	91	94	96	94
% EA		100	98	101	104	100
BLANK		<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: SW 846-8021,5030

Raland K. Tuttle

11-22-99
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

T-2

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: MR. JESSE TAYLOR
P.O. BOX 4845
MIDLAND, TEXAS 79704
FAX: 505-392-3760

Sample Type: Water
Sample Condition: Intact/ Iced
Project #: TNM 97-14
Project Name: EOT 1015C
Project Location: Lea County,N.M.

Sampling Date: 11/09/99
Receiving Date: 11/11/99
Analysis Date: See Below

ELT#	FIELD CODE	Sulfate mg/L	Chloride mg/L	Carbonate mg/L	Bicarbonate mg/L	TDS mg/L
21554	MW-2	354	478	0	375	1464
	QUALITY CONTROL	44.3	4674	*	*	*
	TRUE VALUE	50.0	5000	*	*	*
	% PRECISION	89	97	*	*	*
	ANALYSIS DATE	11/12/99	11/15/99	11/12/99	11/12/99	11/12/99

METHODS: EPA 375.4, 325.3, 310, 160.1

Roland K. Tuttle

11-22-99
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

1-3

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: MR. JESSE TAYLOR
P.O. BOX 4845
MIDLAND, TEXAS 79704
FAX: 505-392-3760

Sample Type: Water
Sample Condition: Intact/Iced/HCl
Project #: EOT 1015C
Project Name: TNM 97-16 14
Project Location: Lea County, N.M.

Sample Date: 11/09/99
Receiving Date: 11/11/99
Analysis Date: 11/19/99
Analysis Date: Hg 11/15/99

Analyte (mg/L)	MW-4 2 21554	Reporting Limit	%IA	%EA	BLANK	RPD
Aluminum	24.80	0.0500	97	92	<0.0500	4.75
Arsenic	0.0200	0.0050	106	104	<0.0050	8.00
Barium	1.040	0.0100	97	96	<0.0100	4.80
Beryllium	ND	0.0040	104	106	<0.0040	5.83
Cadmium	ND	0.0010	104	112	<0.0010	3.64
Calcium	477.0	1.000	98	*	<1.000	3.75
Chromium	0.0360	0.0050	102	98	<0.0050	4.74
Cobalt	0.0200	0.0200	100	103	<0.0200	5.16
Copper	0.0170	0.0100	97	93	<0.0100	4.10
Iron	20.90	0.0500	99	96	<0.0500	1.39
Lead	0.0120	0.0030	104	110	<0.0030	5.61
Magnesium	72.30	1.000	98	*	<1.000	1.37
Manganese	0.3510	0.0150	101	102	<0.0150	5.02
Mercury	ND	0.00020	106	83	<0.00020	17.58
Molybdenum	ND	0.050	100	100	<0.050	5.13
Nickel	0.0130	0.0100	102	103	<0.0100	5.77
Potassium	23.10	1.000	83	*	<1.000	3.81
Selenium	ND	0.0050	106	104	<0.0050	3.92
Silver	0.0120	0.0050	110	94	<0.0050	4.72
Sodium	487.0	1.000	110	*	<1.000	3.05
Tin	0.0500	0.0500	105	*	<0.0500	*
Vanadium	0.2240	0.0200	99	100	<0.0200	5.15
Zinc	0.0480	0.0200	94	95	<0.0200	4.95
Boron	0.740	0.050	107	110	<0.050	3.70
Strontium	3.82	0.050	108	108	<0.050	5.71

ND = Below Reporting Limit
METHOD: EPA SW846-6010B, 7470

Raland K. Tuttle

11-22-99
Date

12600 West I-20 East • Odessa, Texas 79765 • (915) 563-1800 • Fax (915) 563-1713

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: MR. JESSE TAYLOR
P.O. BOX 4845
MIDLAND, TEXAS 79704
FAX: 505-392-3760

Sample Type: Water
Sample Condition: Intact/ Iced
Project #: TNM 97-14
Project Name: EOT 1015C
Project Location: Lea County, N.M.
Field Code: MW-2

Sampling Date: 11/09/99
Receiving Date: 11/11/99
Extraction Date: 11/15/99
Analysis Date: 11/18/99

EPA SW846 8270 (mg/l)	REPORT LIMIT	ELT# 21554	RPD	%EA	%IA
Naphthalene	0.005	ND			70
Acenaphthylene	0.005	ND			82
Acenaphthene	0.005	ND	1.55	65	82
Fluorene	0.005	ND			86
Phenanthrene	0.005	ND			92
Anthracene	0.005	ND			90
Fluoranthene	0.005	ND			94
Pyrene	0.005	ND	1.38	73	98
Benzo[a]anthracene	0.005	ND			94
Chrysene	0.005	ND			96
Benzo[b]fluoranthene	0.005	ND			68
Benzo[k]fluoranthene	0.005	ND			152
Benzo [a]pyrene	0.005	ND			94
Indeno[1,2,3-cd]pyrene	0.005	ND			92
Dibenz[a,h]anthracene	0.005	ND			90
Benzo[g,h,i]perylene	0.005	ND			88

	% RECOVERY
Nitrobenzene-d5 SURR	50
2-Fluorobiphenyl SURR	49
Terphenyl-d14 SURR	43

ND= NOT DETECTED

Method: EPA SW 846 8270C, 3510

Raland K. Tuttle

11-22-99
Date

Environmental Lab of Texas, Inc.

12600 West I-20 East Odessa, Texas 79763
(915) 563-1800 FAX (915) 563-1713

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

COC: 40

Project Manager: Jesse Taylor

Phone #: (915) 664-9166

FAX #: (505) 392-3760

Company Name & Address: ETGI
P.O. Box 4845 Midland Tx 79704

Project #: TNM 97-14

Project Name: EOT 1015C

Project Location: Lea County, NM

Sampler Signature: Simon Casas

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	OTHER	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	OTHER	SAMPLING: DATE (1999)	TIME	BTEX 8020/~~8260~~	TPH 418.1	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	TDS 160.1	RCI	Cations 6010	Anions 300.0	PAH (8100) or (8270)	Heavy Metals (ICP Scan) 6010
21553	MW 1	2	V	X					X		X			11-9	1142	X											
21554	MW 2	~~5~~ 2	12 .5L ✓	X					X	X	X			11-9	1238	X						X		X	X	X	X

Relinquished by:	Date:	Times:	Received by:
Simon Casas	11-11-99	1405	
Relinquished by:	Date:	Times:	Received by:
Relinquished by:	Date:	Times:	Received by Laboratory:

REMARKS

MAIL RESULTS:
K DUTTON

INVOICE: LENNAH FROST 1015M

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: MR. JESSE TAYLOR
P.O. BOX 4845
MIDLAND, TEXAS 79704
FAX: 505-392-3760

Sample Type: Water
Sample Condition: Intact/ Iced
Project #: TNM 97-14
Project Name: EOT 1015C
Project Location: Lea County, N.M.
Field Code: MW-2

Sampling Date: 11/09/99
Receiving Date: 11/11/99
Extraction Date: 11/15/99
Analysis Date: 11/16/99

EPA SW846 8270 (mg/l)	REPORT LIMIT	ELT# 21554	RPD	%EA	%IA
Naphthalene	0.005	ND			70
Acenaphthylene	0.005	ND			82
Acenaphthene	0.005	ND	1.55	65	82
Fluorene	0.005	ND			86
Phenanthrene	0.005	ND			92
Anthracene	0.005	ND			90
Fluoranthene	0.005	ND			94
Pyrene	0.005	ND	1.38	73	98
Benzo[a]anthracene	0.005	ND			94
Chrysene	0.005	ND			96
Benzo[b]fluoranthene	0.005	ND			68
Benzo[k]fluoranthene	0.005	ND			152
Benzo [a]pyrene	0.005	ND			94
Indeno[1,2,3-cd]pyrene	0.005	ND			92
Dibenz[a,h]anthracene	0.005	ND			90
Benzo[g,h,i]perylene	0.005	ND			88

	% RECOVERY
Nitrobenzene-d5 SURR	50
2-Fluorobiphenyl SURR	49
Terphenyl-d14 SURR	43

ND= NOT DETECTED

Method: EPA SW 846 8270C, 3510

Raland K. Tuttle

11-22-99
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ETGI
ATTN: MR. JESSE TAYLOR
P.O. BOX 4845
MIDLAND, TEXAS 79704
FAX: 505-392-3760(Ken Dutton)

Sample Type: Water
Sample Condition: Intact/Iced/HCl
Project #: TNM 97-14
Project Name: EOT 1015C
Project Location: Lea County, N.M.

Sampling Date: 11/09/99
Receiving Date: 11/11/99
Analysis Date: 11/12/99

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
21553	MW-1	<0.001	<0.001	<0.001	<0.001	<0.001
21554	MW-2	<0.001	<0.001	<0.001	<0.001	<0.001
	% IA	94	91	94	96	94
	% EA	100	98	101	104	100
	BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: SW 846-8021,5030

Raland K. Tuttle

11-22-99
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: MR. JESSE TAYLOR
P.O. BOX 4845
MIDLAND, TEXAS 79704
FAX: 505-392-3760

Sample Type: Water
Sample Condition: Intact/Iced/HCl
Project #: EOT 1015C
Project Name: TNM 97-16 14 D
Project Location: Lea County, N.M.

Sample Date: 11/09/99
Receiving Date: 11/11/99
Analysis Date: 11/19/99
Analysis Date: Hg 11/15/99

Analyte (mg/L)	MW-4 2 D 21554	Reporting Limit	%IA	%EA	BLANK	RPD
Aluminum	24.80	0.0500	97	92	<0.0500	4.75
Arsenic	0.0200	0.0050	106	104	<0.0050	8.00
Barium	1.040	0.0100	97	96	<0.0100	4.80
Beryllium	ND	0.0040	104	106	<0.0040	5.83
Cadmium	ND	0.0010	104	112	<0.0010	3.64
Calcium	477.0	1.000	98	*	<1.000	3.75
Chromium	0.0360	0.0050	102	98	<0.0050	4.74
Cobalt	0.0200	0.0200	100	103	<0.0200	5.16
Copper	0.0170	0.0100	97	93	<0.0100	4.10
Iron	20.90	0.0500	99	96	<0.0500	1.39
Lead	0.0120	0.0030	104	110	<0.0030	5.61
Magnesium	72.30	1.000	98	*	<1.000	1.37
Manganese	0.3510	0.0150	101	102	<0.0150	5.02
Mercury	ND	0.00020	106	83	<0.00020	17.58
Molybdenum	ND	0.050	100	100	<0.050	5.13
Nickel	0.0130	0.0100	102	103	<0.0100	5.77
Potassium	23.10	1.000	83	*	<1.000	3.81
Selenium	ND	0.0050	106	104	<0.0050	3.92
Silver	0.0120	0.0050	110	94	<0.0050	4.72
Sodium	487.0	1.000	110	*	<1.000	3.05
Tin	0.0500	0.0500	105	*	<0.0500	*
Vanadium	0.2240	0.0200	99	100	<0.0200	5.15
Zinc	0.0480	0.0200	94	95	<0.0200	4.95
Boron	0.740	0.050	107	110	<0.050	3.70
Strontium	3.82	0.050	108	108	<0.050	5.71

ND = Below Reporting Limit
METHOD: EPA SW846-6010B, 7470

Raland K. Tuttle

11-22-99
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: MR. JESSE TAYLOR
P.O. BOX 4845
MIDLAND, TEXAS 79704
FAX: 505-392-3760

Sample Type: Water
Sample Condition: Intact/ Iced
Project #: TNM 97-14
Project Name: EOT 1015C
Project Location: Lea County,N.M.

Sampling Date: 11/09/99
Receiving Date: 11/11/99
Analysis Date: See Below

ELT#	FIELD CODE	Sulfate mg/L	Chloride mg/L	Carbonate mg/L	Bicarbonate mg/L	TDS mg/L
21554	MW-2	354	478	0	375	1464
	QUALITY CONTROL	44.3	4874	*	*	*
	TRUE VALUE	50.0	5000	*	*	*
	% PRECISION	89	97	*	*	*
	ANALYSIS DATE	11/12/99	11/15/99	11/12/99	11/12/99	11/12/99

METHODS: EPA 375.4, 325.3, 310, 160.1

Raland K. Tuttle

11-22-99
Date

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

April 12, 2000

CERTIFIED MAIL
RETURN RECEIPT NO. Z-559-572-914

Mr. Glen Waldrop
EOTT Energy Pipeline Limited Partnership
P.O. Box 1660
Midland, Texas 79702

RE: TNM-97-14 SITE
LEA COUNTY, NEW MEXICO

Dear Mr. Waldrop:

The New Mexico Oil Conservation Division (OCD) has reviewed EOTT Energy Pipeline Limited Partnership's (EOTT) January 5, 2000 "TNM-97-14, GROUND WATER INVESTIGATIONS, LEA COUNTY, NEW MEXICO". This document contains the results of EOTT's investigation and remediation of a crude oil pipeline spill site at the TNM-97-14 site located south of Monument, New Mexico in Section 8, Township 20 South, Range 37 East. The document also recommends closure of the site remedial actions.

The investigation and remedial actions at the site are satisfactory and the OCD **approves** of the above referenced closure request. Please be advised that OCD approval does not relieve EOTT of liability should remaining contaminants pose a future threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve EOTT of responsibility for compliance with any other federal, state or local laws and regulations.

If you have any questions or comments, please contact me at (505) 827-7154.

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

xc: Chris Williams, OCD Hobbs District Office

EOTT ENERGY Pipeline Limited Partnership

P.O. BOX 1660
5805 E. BUSINESS 20
MIDLAND, TEXAS 79702
(915) 682-3761

FEDERAL EXPRESS
AIR BILL # 8170 0342 3660

March 30, 2000

State of New Mexico
Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505
Attn: William Olson

RE: **ANNUAL GROUND WATER MONITORING REPORTS**

Dear Mr. Olson:

Attached please find the 2000 Annual Groundwater Monitoring Reports for the following sites:

Monument #18	Monument #10
Monument #17	TNM-97-16 (Becky Jo Doom site)
Monument #2	HDO-90-23
Monument #15	SPS-11
TNM-97-17	TNM-98-02
TNM-97-18	TNM-98-S01
TNM-98-05A	TNM-97-23
TNM-96-16	TNM-95-10 (Saunders)
TNM-97-14	TNM-97-04 (Townsend)

I hope all meets with OCD requirements for closure of the site but if you have any questions, please don't hesitate to call me at 915/684-3467.

Sincerely,

Lennah Frost
Sr. Environmental Engineer

cc: Environmental File

EOTT ENERGY Pipeline Limited Partnership

P.O. BOX 1660
5805 E. BUSINESS 20
MIDLAND, TEXAS 79702
(915) 682-3761

January 5, 2000

State of New Mexico
Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505
Attn: William Olson

RE: **TNM-97-14 GROUND WATER INVESTIGATIONS**
LEA CO., NM

Dear Mr. Olson:

As per your letter dated December 22, 1999, attached please find EOTT's additional Subsurface Investigation Report and Abatement Completion Report. This should meet and/or exceed the requirements set out in your letter.

Based upon the finding in this report, EOTT request closure on this site. I hope all meets with OCD approval but if you have any questions, please don't hesitate to call.

Sincerely,

Lennah Frost

Lennah Frost
Sr. Environmental Engineer

/attachments

cc: NMOCD - Hobbs

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

December 22, 1999

CERTIFIED MAIL
RETURN RECEIPT NO. Z-274-520-745

Ms. Lennah Frost
EOTT Energy Pipeline Limited Partnership
P.O. Box 1660
Midland, Texas 79702

RE: TNM-97-14 GROUND WATER INVESTIGATIONS
LEA COUNTY, NEW MEXICO

Dear Ms. Frost:

The New Mexico Oil Conservation Division (OCD) has reviewed EOTT Energy Pipeline Limited Partnership's (EOTT) October 4, 1999 "ADDITIONAL DATA REQUIRED TO COMPLETE STAGE 1 ABATEMENT PLANS FOR THE FOLLOWING SITES: SPS-11 LEA COUNTY, NEW MEXICO; TNM-98-05A LEA COUNTY, NEW MEXICO; TNM-97-14 LEA COUNTY, NEW MEXICO; TNM-97-16 LEA COUNTY, NEW MEXICO; TNM-97-17 LEA COUNTY, NEW MEXICO; TNM-97-18 LEA COUNTY, NEW MEXICO". This document, which was submitted on behalf of EOTT by their consultant Environmental Technology Group, Inc., contains EOTT's work plans for installation of additional monitor wells at a number of EOTT crude oil pipeline spill sites.

The above referenced work plan for the TNM-97-14 site **is approved with the following conditions**:

1. EOTT shall complete new monitor wells as follows:

   a. At least 15 feet of well screen shall be placed across the water table interface with 5 feet of the well screen above the water table and 10 feet of the well screen below the water table.

   b. An appropriately sized gravel pack shall be set in the annulus around the well screen from the bottom of the hole to 2-3 feet above the top of the well screen.

c. A 2-3 foot bentonite plug shall be placed in the annulus above the gravel pack.

d. The remainder of the annulus shall be grouted to the surface with cement containing 3-5% bentonite.

e. A concrete pad and locking well cover shall be placed at the surface.

f. The well shall be developed after construction using EPA approved procedures.

2. EOTT shall wait a minimum of 24 hours after the monitor wells have been developed to purge and sample ground water from the monitor wells.

3. All soil and ground water samples shall be sampled and analyzed using EPA approved methods and quality assurance/quality control (QA/QC) procedures.

4. All wastes generated during the investigation and remediation activities shall be disposed of at an OCD approved facility.

5. EOTT shall submit a report which contains the results of the investigation activities. The report shall be submitted to the OCD Santa Fe Office by February 25, 2000 with a copy provided to the OCD Hobbs District Office and shall include the following information:

   a. A description of all investigation activities which occurred including conclusions and recommendations.

   b. A geologic/lithologic log and well completion diagram for each monitor well and soil boring.

   c. A water table potentiometric map showing the location of spills, excavated areas, monitor wells, soil borings, and any other pertinent site features as well as the direction and magnitude of the hydraulic gradient.

   d. Isopleth maps for contaminants of concern which were observed during the investigations.

   e. Summary tables of all soil and ground water quality sampling results obtained during the investigation and copies of all laboratory analytical data sheets and associated QA/QC data.

   f. The disposition of all wastes generated.

Please be advised that OCD approval does not relieve EOTT of liability should the work plan fail to adequately determine the extent of contamination related to EOTT, or if contamination exists which is outside the scope of the work plan. In addition, OCD approval does not relieve EOTT of responsibility for compliance with any other federal, state or local laws and regulations.

The OCD requires that in the future EOTT submit separate work plans and reports for each site since some of the sites are being remediated under different rules and regulations.

If you have any questions or comments, please contact me at (505) 827-7154.

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

xc: Chris Williams, OCD Hobbs District Office
Jesse Taylor, Environmental Technology Group, Inc.

EOTT ENERGY Pipeline Limited Partnership

P.O. BOX 1660
5805 E. BUSINESS 20
MIDLAND, TEXAS 79702
(915) 682-2761 → 684-3400

October 15, 1999

RECEIVED
OCT 25 1999
ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

State of New Mexico
Oil Conservation Division - Hobbs District Office
1625 N. French Dr.
Hobbs, NM 88240
Attn: Donna Williams

RE: Installation of Additional Monitor Wells in Lea County, NM

Dear Ms. Williams:

Below is a list of old Texas-New Mexico Pipeline sites that require additional monitor wells to be installed. Also on this list are 3 EOTT sites that require additional and/or new monitor wells.

TNM - SPS-11	TNM - 98-05A
TNM - 97-14	TNM - 97-16
TNM - 97-17	TNM - 97-18
EOTT - Darr Angell site #1	
EOTT - Darr Angell site #2	
EOTT - leak #TNM-LF-59	

We will begin drilling these wells on Monday, October 25, 1999 and will proceed from site to site on a geographic basis. The SPS-11 site is scheduled first. I will be out of town that week but Wayne Brunette will be coordinating drilling activity with our contractor Jerry Nickell and Allan Eades of Eades Drilling. Wayne's number is 915/556-0190. If you would like to be present at any of these installations, please contact Wayne to verify time and locations for each day's drilling.

Donna, I hope this meets with your approval but if you have any questions or need additional information, please don't hesitate to call me.

Sincerely,

Lennah Frost
Sr. Environmental Engineer

cc: William Olson - NMOCD - Santa Fe
Wayne Brunette
Glenn Waldrop

October 4, 1999

State of New Mexico
Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505

BY CERTIFIED MAIL
RETURN RECEIPT NO.
Z 203 735 137

Attn: William Olson

RE: Additional Data Required to Complete Stage 1 Abatement Plans for the Following Sites:

- **SPS-11 Lea County, New Mexico**
- **TNM-98-05A Lea County, New Mexico**
- **TNM-97-14 Lea County, New Mexico**
- **TNM-97-16 Lea County, New Mexico**
- **TNM-97-17 Lea County, New Mexico**
- **TNM-97-18 Lea county, New Mexico**

Dear Mr. Olson:

EOTT Energy Corporation (EOTT) has requested that Environmental Technology Group, Incorporated (ETGI) assist them in field activities and the acquisition of additional data at the referenced sites. The additional field activities consist primarily in the completion of additional soil borings and/or ground water monitoring wells at these sites to either document soil and ground water conditions at the release point or define the lateral extent of ground water impact. In order to minimize cost and maximize efficiency, ETGI would like to conduct these similar tasks in sequence.

As such, on the behalf of EOTT, ETGI request the approval for the following work plans for each site. The work plans are designed to allow for the collection data required to complete a Stage 1 Abatement Plan for each site. In addition, a generalized summary of our Quality Assurance/Quality Control (QA/QC) Plan is provided as Attachment A. These protocol will be applicable to all the referenced sites.

Once the following work plans are approved, ETGI will initiate field activities within 14 days and complete the field work within 14 days subsequent to initiation. Individual Stage 1 Abatement Plans will be submitted to your agency within 60 days of the completion of the field work. Subsequent to your approval of each Stage 1 Abatement Plan, a Stage 2 Abatement Plan will be completed for each site within 60 days, or 120 days with good cause. Quarterly ground water monitoring, at all of the referenced sites, will continue as previously approved by your agency.

All of the sites are located in Lea County, New Mexico, which is situated in the southeast portion of the state. The area is located in the geologic province commonly known as the Permian Sedimentary Basin from which oil and gas are produced from various Permian and Pennsylvanian age Formations. Generally, all of the sites are located in sparsely populated, semi-arid terrain common to the basin. Topographically, the area ranges from flat to rolling hills or draws containing intermittent streams. Ground water at the sites range from 40 to 60 feet below the ground surface (bgs). The site locations are depicted on Figure 1 and individual site maps are provided in the subsequent figures, all of which are in Attachment B.

SPS-11

A review of the file for this site indicates that ground water samples, collected from down gradient monitoring well, MW-17, have contained benzene in excess of regulatory limits for several monitoring events. The soil and groundwater data indicate the possibility of multiple release events and locations. Regardless of the site's past release history, the down gradient extent of impacted ground water is currently not defined.

ETGI recommends the installation of an estimated three to five additional wells, located down gradient to monitoring well MW-17. The initial well will be placed approximately 200 feet southeast of monitoring well MW-17 and subsequent well locations will be based on field data collected from the initial well. The stated goal of the well placement selection will be to define the cross gradient and down gradient extent of the plume associated with monitoring well MW-17. A site map is provided as Figure 2.

TNM-98-05A

A review of the file for this site indicates that the four existing monitoring wells do not adequately define the extent of impacted soil, free phase product or dissolved phase hydrocarbons in the ground water. As much as 3.36 feet of product has been measured in monitoring well MW-2, which represents the most down gradient well in the western portion of the site. In addition, impacted soil was collected from the boring advanced for the well. Dissolved phase benzene concentrations, in excess of regulatory standards, have been detected in samples collected from monitoring well MW-4. This well represents the most down gradient well in the eastern portion of the site.

ETGI recommends that approximately eight geoprobe borings be advanced around the release point to more completely characterize the extent of impacted soil remaining subsequent to the excavation. An estimated minimum of five monitoring wells will be required to define the lateral extent of impacted ground water. These include:

- One - up gradient well, north of monitoring well MW-1;
- Two - cross gradient wells, west of monitoring well MW-2 and east of monitoring well MW-4; and

- Two - downgradient wells, south of monitoring well MW-2 and south of monitoring well MW-4.

Field data from the initial proposed wells may modify the exact locations, however, the stated purpose of the well location selection is to define the lateral extent of impacted ground water associated with the release. The proposed monitoring well points are depicted on Figure 3

TNM-97-14

A review of the file for this site indicates that there is no monitoring well located near the release point. ETGI recommends that one monitoring well be installed within 20 feet of the southwest corner of the excavation. If highly impacted soil is present in the boring, approximately four geoprobe borings will be installed in the area to determine the lateral extent of impacted soil remaining subsequent to the excavation. The proposed monitoring well location is depicted on Figure 4.

TNM 97-16

A geoprobe survey is under way at the site to determine the extent of impacted soil remaining subsequent to the excavation has been determined. ETGI recommends that one additional monitoring well be installed near the release point. In addition, a representative soil sample, from each 2,000 cubic yards of the land farm soil has been collected in order to characterize the present condition of the soil. The location of the proposed monitoring well is depicted on Figure-5.

TNM 97-17

A review of the file for this site indicates that there is no ground water monitoring well installed near the release point. ETGI recommends that one ground water monitoring well should be installed between soil boring SB-1 and the release point as depicted on Figure 6.

TNM 97-18

A review of the file for this site indicates that there is no ground water monitoring well installed near the release area and that ground water samples collected from down gradient well MW-3 exceed regulatory standards for dissolved phase benzene. ETGI recommends that one well should be installed in the release area and that two wells should be installed down gradient of monitoring well MW-3 as depicted on Figure 7.

If you have any questions or concerning any of the activities or scheduling proposed in this letter, please contact Lennah Frost, of EOTT Energy Corp. at (915) 684-3467.

Sincerely:

ENVIRONMENTAL TECHNOLOGY GROUP, INC.

Jesse Taylor
Principal Geologist

cc: Lennah Frost - EOTT Energy Corporation

Attachment

ATTACHMENT A

ETGI QA/QC PROCEDURES

Soil Sampling

Samples of subsurface soils will be obtained utilizing either a split spoon sampler (air rotary drilling rig) or a two inch, continuous sampling tube with a clean polybuterate liner (geoprobe). Representative soil samples will be divided into two separate portions using clean, disposable gloves and clean sampling tools. One portion of the soil sample will be placed in a disposable sample bag. The bag will be labeled and sealed for head-space analysis using a photo-ionization detector (PID) calibrated to a 100 ppm isobutylene standard. Each sample will be allowed to volatilize for approximately thirty minutes at ambient temperature prior to conducting the analysis.

The other portion of the soil sample will be placed in a sterile glass container equipped with a Teflon-lined lid furnished by the analytical laboratory. The container will be filled to capacity to limit the amount of head-space present. Each container will be labeled and placed on ice in an insulated cooler. Upon selection of samples for analysis, the cooler will be sealed for shipment to the laboratory. Proper chain-of-custody documentation will be maintained throughout the sampling process.

Soil samples will be delivered to Environmental Lab of Texas, Inc. in Midland, Texas for BTEX and TPH analyses using the methods described below. Soil samples will be analyzed for BTEX and TPH-DRO within fourteen days following the collection date.

The soil samples will be analyzed as follows:

- BTEX concentrations in accordance with EPA Method 8020, 5030
- TPH concentrations in accordance with modified EPA Method 8015-GRO/DRO

Ground Water Sampling

Monitoring wells will be developed and purged with a clean PVC bailer. The bailer will be cleaned prior to each use with Liqui-Nox detergent and rinsed with distilled water. Monitoring wells with sufficient recharge will be purged by removing a minimum of three
well volumes. Monitoring wells that do not recharge sufficiently will be purged until no additional ground water can be obtained.

After purging the wells, ground water samples will be collected with a disposable Teflon sampler and polyethylene line by personnel wearing clean, disposable gloves. Ground water sample containers will be filled in the order of decreasing volatilization sensitivity (i.e., BTEX containers will be filled first and PAH containers second).

Ground water samples collected for BTEX analysis will be placed in 40 ml glass VOA vials equipped with Teflon-lined caps. The containers will be provided by the analytical laboratory. The vials will be filled to a positive meniscus, sealed, and visually checked to ensure the absence of air bubbles.

Ground water samples collected for PAH analysis will be filled to capacity in sterile, 1 liter glass containers equipped with Teflon-lined caps. Ground water samples collected for metals analysis will be filled to capacity in sterile, 1 liter plastic containers equipped with Teflon-lined caps. The containers will be provided by the analytical laboratory.

The filled containers will be labeled and placed on ice in an insulated cooler. The cooler will be sealed for transportation to the analytical laboratory. Proper chain-of-custody documentation will be maintained throughout the sampling process.

The ground water samples will be analyzed as follows:

- BTEX concentrations in accordance with EPA Method 8020, 5030
- TPH concentrations in accordance with modified EPA Method 8015-GRO/DRO

Decontamination Of Equipment

Cleaning of drilling equipment will be the responsibility of the drilling company. In general, the cleaning procedures will consist of using high pressure steam to wash the drilling and sampling equipment prior to drilling and prior to starting each hole. Prior to use, the sampling equipment will be cleaned with Liqui-Nox detergent and rinsed with distilled water.

Laboratory Protocol

The laboratory will be responsible for proper QA/QC procedures. These procedures will either be transmitted with the laboratory reports or on file at the laboratory.

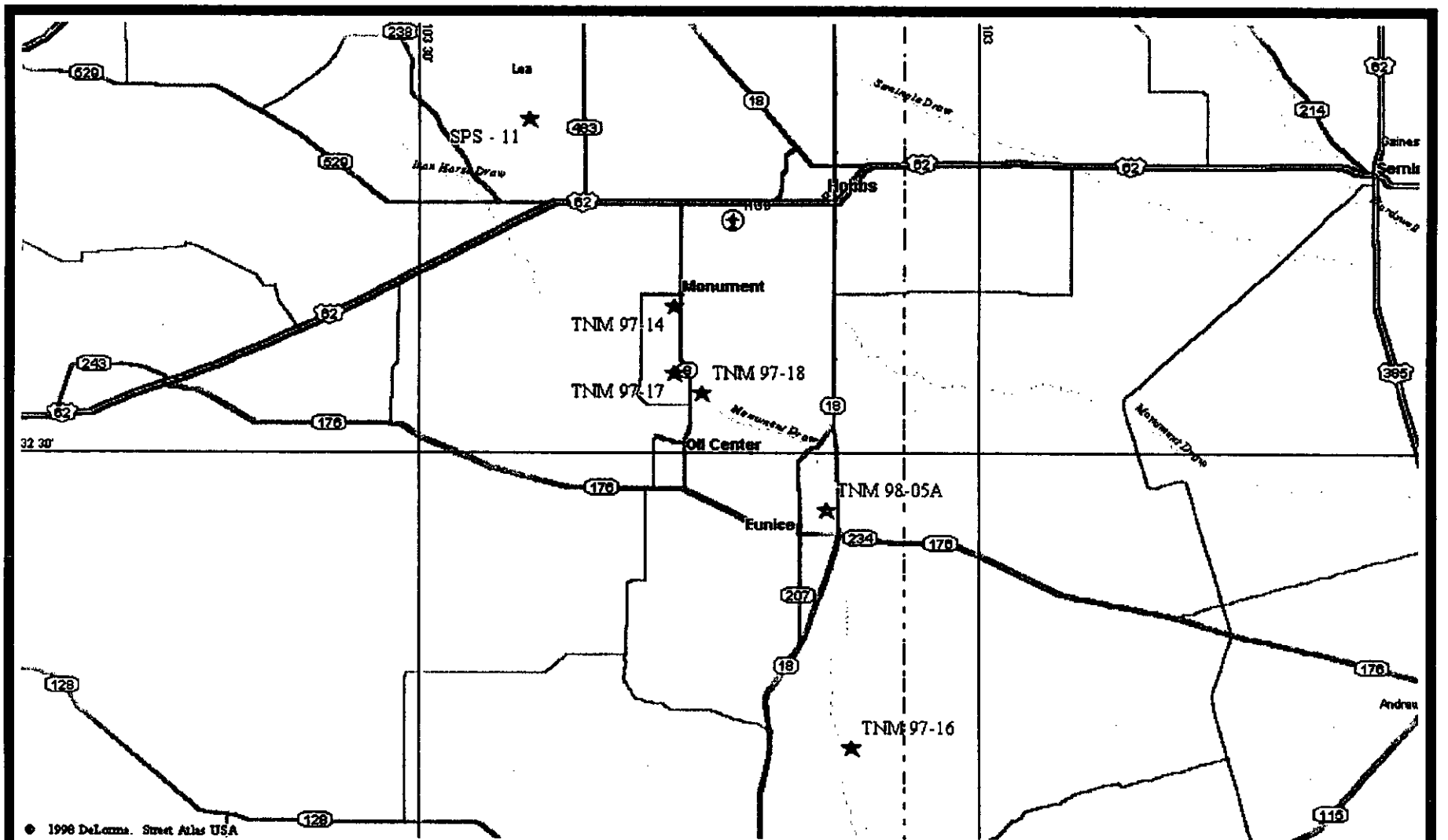
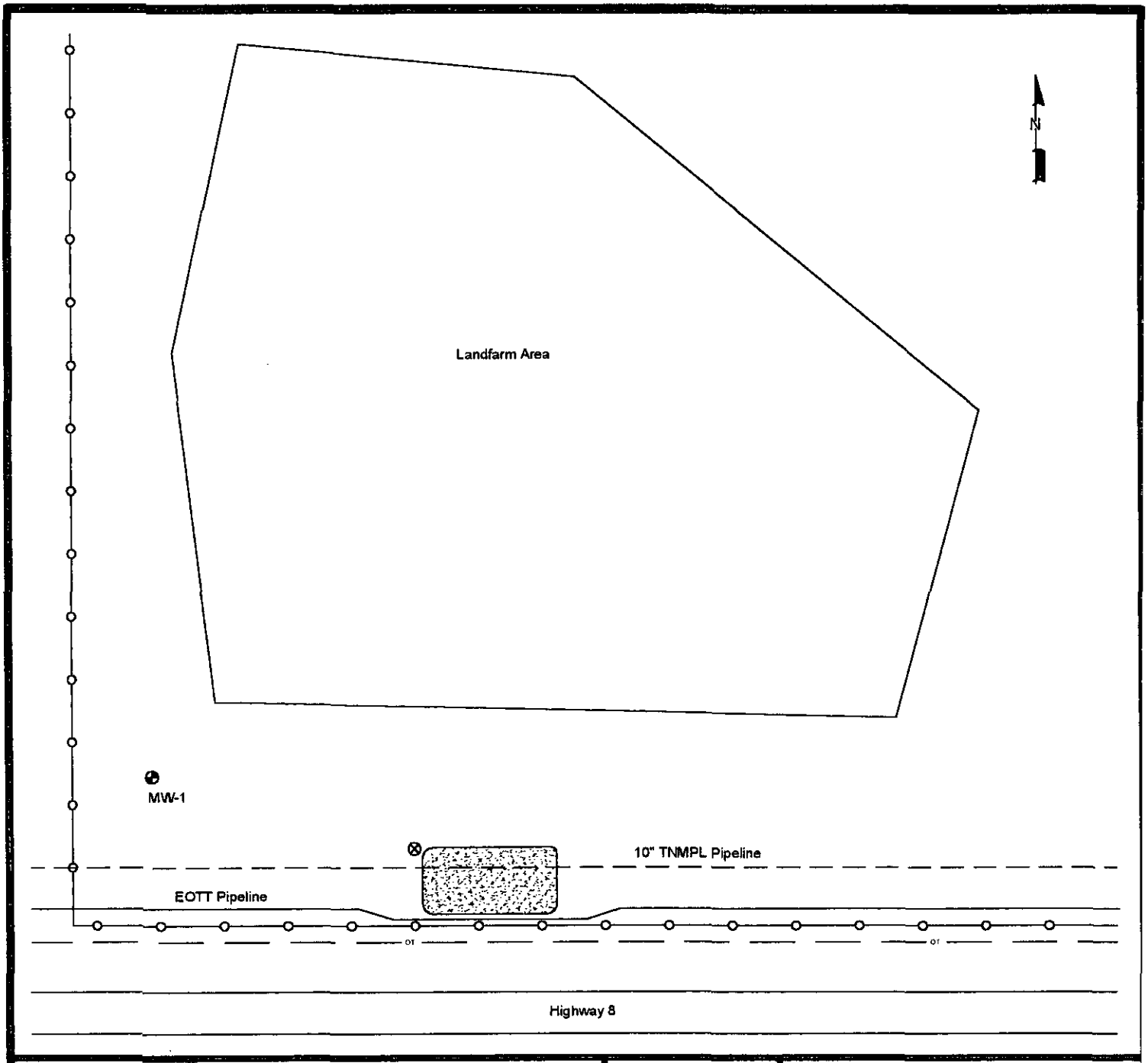


FIGURE 1	Referenced Site Locations	Environmental Technology Group, INC.
Not To Scale	Lea County, NM	9 - 28 - 99 RS



LEGEND:

- Existing Monitoring Well
- Proposed Ground Water Monitoring Well Location
- Fence Line
- Overhead Telephone Line
- Excavated Area

Figure 4
Site Map

TNM 97-14
LEa County, NM

Environmental Technology Group, INC.

Scale: 1" = 140'	Prep By: RS	Checked By:
September 30, 1999	ETGI Project #	

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

May 11, 1999

CERTIFIED MAIL
RETURN RECEIPT NO. Z-274-520-653

Ms. Lennah Frost
EOTT Energy Pipeline Limited Partnership
P.O. Box 1660
Midland, Texas 79702

RE: TNM-97-14 SITE
LEA COUNTY, NEW MEXICO

Dear Ms. Frost:

The New Mexico Oil Conservation Division (OCD) understands that the EOTT Energy Pipeline Limited Partnership (EOTT) is the current operator of the above referenced pipeline site which was previously operated by the Texas-New Mexico Pipe Line Company (TNMPLC). The OCD has reviewed TNMPLC's March 4, 1999 "MONITORING WELL MW-1, TNM-97-14, UNIT A, SECTION 8, TOWNSHIP 20 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO, KEI JOB NO. 710028-1" which was submitted on behalf of TNMPLC by their consultant KEI. This document contains the results of TNMPLC's installation of a ground water monitoring well downgradient of a crude oil pipeline spill at the TNM-97-14 Site.

A review of the above referenced report shows that the monitor well was not installed at the location proposed in TNMPLC's October 29, 1998 "REVISED REMEDIATION PLAN, TNM-97-14, UNIT A, SECTION 8, TOWNSHIP 20 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO, KEI JOB NO. 710028-1" which was approved by the OCD on November 30, 1998. The monitor well was proposed to be located directly adjacent and downgradient of the source of the contamination. The March 4, 1999 report shows that the monitor well was installed approximately 250 feet downgradient of the source area.

Therefore, the OCD requires that EOTT install a source area monitor well and sample and analyze ground water pursuant to TNMPLC's October 29, 1998 work plan and OCD's November 30, 1998 approval. EOTT shall submit a comprehensive report on the monitor well installation and quarterly ground water monitoring on June 1, 2000. The report shall be submitted to the OCD Santa Fe Office with a copy provided to the OCD Hobbs Office and shall contain:

1. A comprehensive description of all investigation and remediation activities which occurred including the procedures used during the investigation and conclusions and recommendations.

2. A site map showing the locations of all soil borings, monitor wells and excavated and remediated areas in relation to other pertinent site features.

3. A tabular summary of all laboratory analytic results of soil and water quality sampling including copies of the laboratory analyses and associated quality assurance/quality control data.

4. A quarterly water table elevation map created using the water table elevation of the ground water in all site monitor wells.

5. A geologic log and well completion diagram for each monitor well or borehole.

6. The volume and disposition of all wastes generated at the site

If you have any questions or comments, please contact me at (505) 827-7154.

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

xc: Chris Williams, OCD Hobbs District Office
Monica Slentz, KEI

Z 274 520 653

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STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

November 30, 1998

CERTIFIED MAIL
RETURN RECEIPT NO: Z-274-520-578

Mr. Tony Savoie
Texas-New Mexico Pipe Line Company
P.O. Box 1030
Jal, New Mexico 88252

RE: STAGE 1 ABATEMENT PLAN (AP-3)
TNM-97-14 SPILL SITE

Dear Mr. Savoie:

The New Mexico Oil Conservation Division (OCD) has reviewed Texas-New Mexico Pipe Line Company's (TNMPLC) October 29, 1998 "REVISED REMEDIATION PLAN, TNM-97-14, UNIT A, SECTION 8, TOWNSHIP 20 NORTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO, JOB NO. 710028-1" which was submitted on behalf of TNMPLC by their consultant KEI. This document contains the results of TNMPLC's recent investigation and remediation of ground water contamination at the TNM-97-14 pipe line spill site located in Unit A, Section 8, T20N, R37E, Lea County, New Mexico. The document also contains a proposal for installation and monitoring of a source area monitor well and a request that the formal abatement plan (AP-3) be retracted.

Since ground water at the source is below New Mexico Water Quality Control Commission (WQCC) standards, the above referenced request to retract abatement plan (AP-3) **is approved**. In addition, the proposed ground water monitoring plan **is approved** with the following conditions.

1. Ground water from the monitor well will be sampled and analyzed on a quarterly basis for concentrations of benzene, toluene, ethylbenzene, xylene using EPA approved methods and quality assurance/quality control (QA/QC) procedures.

2. Closure of ground water remedial actions will not be considered until ground water from all compliance points is below **WQCC ground water standards** for 4 consecutive quarters.

NOTE: **A number of TNMPLC site reports reference remediation of ground water to New Mexico Environment Department (NMED) Drinking Water Standards. NMED Drinking Water Standards are drinking standards for public water supplies and are not applicable as ground water remediation standards.**

3. TNMPLC will submit a comprehensive report on the monitor well installation and ground water monitoring on December 1, 1999. The report will contain:

   a. A comprehensive description of all investigation and remediation activities which occurred including the procedures used during the investigation and conclusions and recommendations.

   b. A site map showing the locations of all soil borings, monitor wells and excavated and remediated areas in relation to other pertinent site features.

   c. A summary of all laboratory analytic results of soil and water quality sampling including copies of the laboratory analyses and associated quality assurance/quality control data.

   d. A water table elevation map using the water table elevation of the ground water in all site monitor wells.

   e. A geologic log and well completion diagram for each monitor well or borehole.

   f. The volume and disposition of all wastes generated at the site

4. TNMPLC will notify the OCD at least 48 hours in advance of scheduled activities such that the OCD has the opportunity to witness the events and split samples.

Please be advised that OCD approval does not relieve TNMPLC of liability if the investigation fails to adequately define and remediate contamination related to TNMPLC's activities or, if contamination exists which is outside the scope of the work plan. In addition, OCD approval does not relieve TNMPLC of responsibility for compliance with any other federal, state or local laws and regulations.

If you have any questions, please contact Bill Olson of my staff at (505) 827-7154.

Sincerely,

Roger C. Anderson
Environmental Bureau Chief

xc: Chris Williams, OCD Hobbs District Office
Theresa Nix, KEI

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

October 29, 1998

Mr. William Olson
OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, New Mexico 87505

RE: Revised Remediation Plan
TNM-97-14
Unit A, Section 8, Township 20 North, Range 37 East
Lea County, New Mexico
KEI Job No. 710028-1

Dear Mr. Olson:

Transmitted with this letter is a revised remediation plan for the above referenced site. TNMPL would like to retract the Stage 1 abatement plan submitted on July 16, 1998 because TNMPL expects to reach closure within one year.

The proposed monitoring well location presented in the attached plan is believed to be downgradient from the source area based on the gradient direction of Monument Site 15 located north of the TNM-97-14 site.

Please contact me at (210) 680-3767 if you have any questions or need additional information.

Respectfully,

Kevin A. Talleton

for Theresa Nix
Project Manager

cc: OCD Hobbs
Mr. Tony Savoie
Mr. Marc Oler

p:\tnmpl\710028\stage1\rrrvwkpln.doc

SITE BACKGROUND

PREVIOUS SOIL INVESTIGATIONS

KEI conducted a subsurface investigation at TNM-97-14 during October 1997 and the results are presented in a report dated March 5, 1998. The investigation was conducted to:

- identify the distribution of subsurface hydrocarbon across the site
- collect soil samples for analysis of hydrocarbon concentrations
- install temporary monitoring wells for sampling of ground water, if encountered, during drilling

The subsurface investigation included installation of 2 temporary monitoring wells (designated TMW-1 and TMW-2), collecting native soil samples and submitting selected samples for determination of total petroleum hydrocarbons (TPH) and benzene, toluene, ethylbenzene, and xylenes (BTEX) concentrations. Ground water was encountered during drilling at approximately 31 and 32 feet below ground surface. Well locations are presented on FIG. 1.

Laboratory concentrations for soil samples obtained during the subsurface investigation were as follows:

CONSTITUENT	CONCENTRATIONS (mg/L)
BENZENE	ND
BTEX	ND to 0.001
PAHs	ND

The source was excavated, stockpiled, and landfarmed on-site. Approximately 9,200 cubic yards of soil in-place were excavated. Samples were collected from the excavation walls and bottom in September, October, and November 1997. Soil samples were collected from the landfarm during June and July 1998. Excavation samples were submitted for determination of BTEX and TPH concentrations and the landfarm samples were submitted for determination of TPH concentrations. The landfarm sample exhibiting the highest TPH concentration was also submitted for SPLP semi-volatile organic compounds (SPLP - SVOC), SPLP volatile organic compounds (SPLP - VOC), and SPLP TPH concentrations.

Laboratory concentrations for the excavation and landfarm samples were as follows:

CONSTITUENT	CONCENTRATION RANGE (mg/kg)
BENZENE	ND
BTEX	ND to 0.451
TPH	ND to 38

The landfarm SPLP results were all ND. Soil results are summarized in TABLE I.

Based on assumptions presented in the March 5, 1998, report, the calculated State of New Mexico Oil Conservation Division (OCD) closure levels for soil impact are as follows:

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

Rain water began collecting in the excavation. Soils from the landfarm which were below 100 mg/kg were used to partially backfill the excavation. Prior to backfilling the excavation, a recovery trench was installed. The recovery trench location is presented on FIG. 1 and recovery trench details are presented on FIG. 2.

GROUND WATER INVESTIGATION

The 2 temporary monitoring wells were sampled during the subsurface investigation. The samples were submitted for determination of BTEX, metals, cations/anions, total dissolved solids (TDS), and polycyclic aromatic hydrocarbon (PAH) concentrations.

Ground water laboratory BTEX and PAH concentrations were as follows:

CONSTITUENT	CONCENTRATIONS (mg/L)
BENZENE	ND
BTEX	ND to 0.001
PAHs	ND

Water samples collected from the excavation in October and November 1997 and in June 1998 were submitted for determination of BTEX concentrations. Laboratory concentrations for the excavation sample were as follows:

CONSTITUENT	CONCENTRATION RANGE (mg/L)
BENZENE	ND to 0.377
BTEX	ND to 1.261

The last water sample was obtained on June 18, 1998, and all BTEX concentrations were ND. All ground water laboratory results are summarized in TABLE II.

On September 29, 1997, phase-separate hydrocarbons (PSH) was noticed on the water within the excavation. The PSH was skimmed from the water periodically. PSH was not on the excavation water prior to installing the recovery trench and partially backfilling the excavation.

PROPOSED REMEDIATION ACTIVITIES

LANDFARM SOILS

A grid system will be established for the landfarm area to allow for more controlled sampling and evaluation. The landfarmed soils will be tested at a rate of approximately 1 for each 1000 cubic yards to determine the effectiveness of the landfarming efforts. Landfarmed soils exhibiting TPH concentrations below 100 mg/kg will be used to backfill the excavation. The remaining soils will continue to be landfarmed until suitable results area obtained.

GROUND WATER

A monitoring well is scheduled to be installed during November 1998 at the approximate location is presented on FIG. 1.

During drilling, a minimum of 2 soil samples will be obtained based on the following criteria:

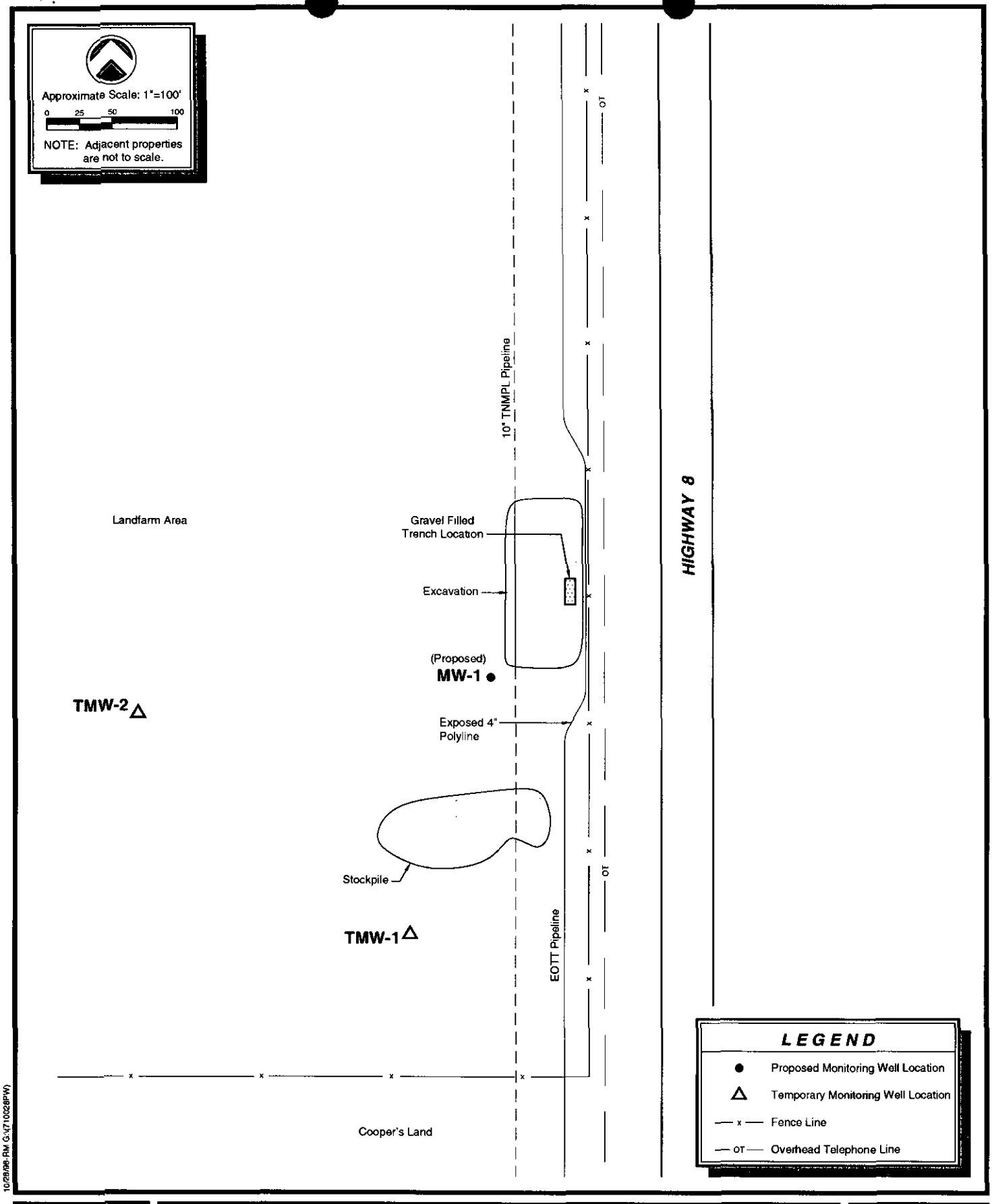
- The sample with the highest head-space reading,
- The sample directly above the ground water level measured at the time of drilling, and/or
- The sample at the bottom of each boring.

The samples will be submitted for determination of the following potential parameters:

- Total Petroleum Hydrocarbons (TPH) by EPA Method modified 8015 - DRO.
- Benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method SW846-8020.
- (Optional) - the sample exhibiting the highest TPH concentration (if any) may also be analyzed for SPLP TPH by EPA Method 1312/418.1 or 1312/8015, SPLP Volatiles (VOC) by EPA Method SW846-1312/8260, and SPLP Semi-volatiles (SVOC) by EPA Method SW846-1312/8270.

The monitoring well will be installed to approximately 10 feet into ground water as observed during drilling. The well materials will consist of 2 inch internal diameter, threaded connection, Schedule 40 PVC solid pipe, and 10 feet of either 0.010 or 0.020 inch slotted PVC well screen. A graded, clean silica sand will be placed in the annulus of the screened interval. A minimum 2 foot bentonite seal will be placed above the sand packing and either a stick-up or flush mount, steel protective cover will then be concreted in place. The well will be protected with a locked cap. A typical well installation is presented as FIG. 3.

The well will be gauged and sampled on a quarterly basis for 4 quarters to insure ground water concentrations are below New Mexico Environment Department (NMED) Drinking Water Standards. Updated ground water laboratory tables, contour/concentration maps, laboratory reports, and chain-of-custody documentation will be submitted on a quarterly basis.



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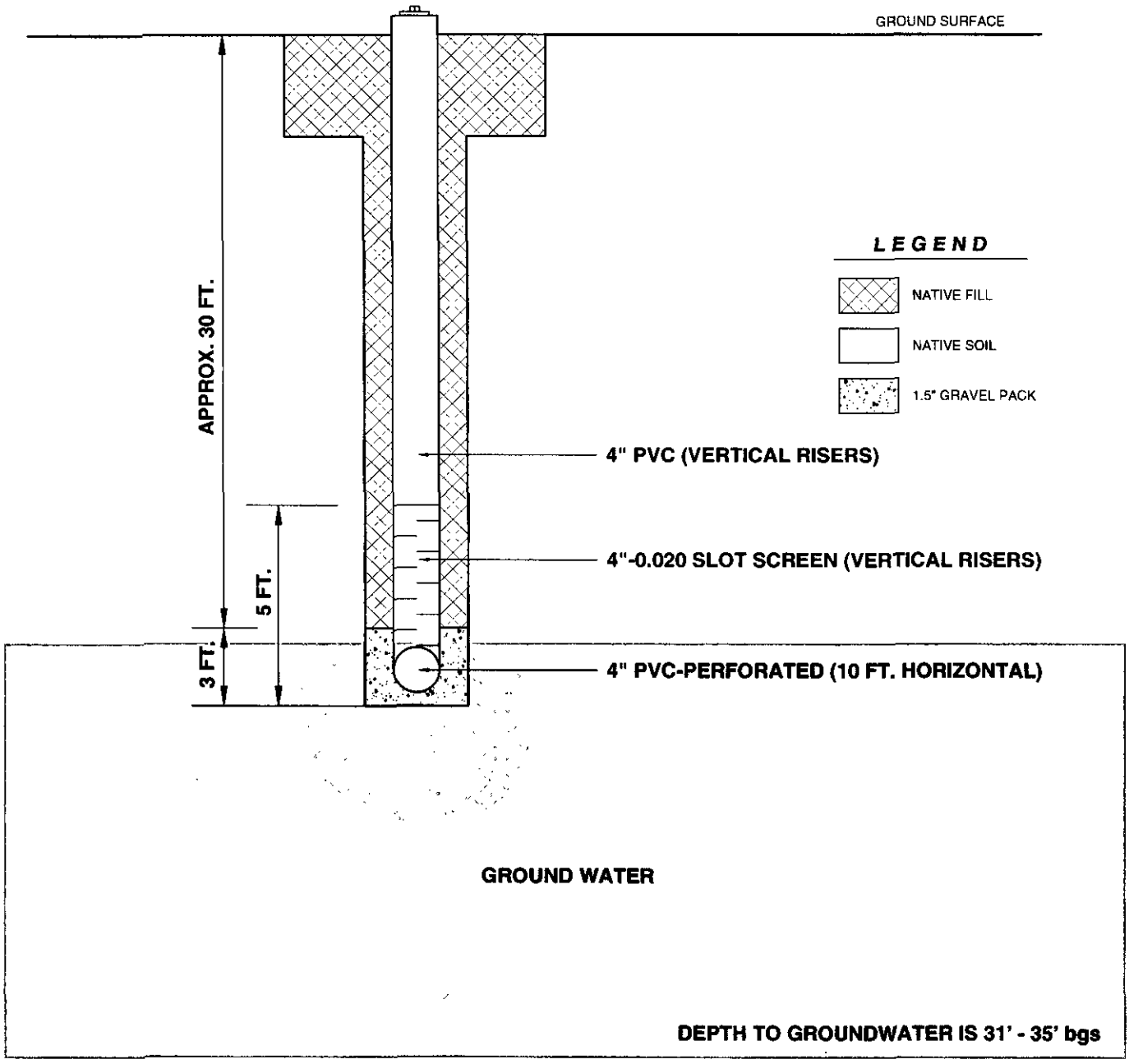
k·e·i	*SITE DETAILS*	710028 - 1
	TNMPL TNM-97-14 LEA COUNTY, NEW MEXICO	FIG 1



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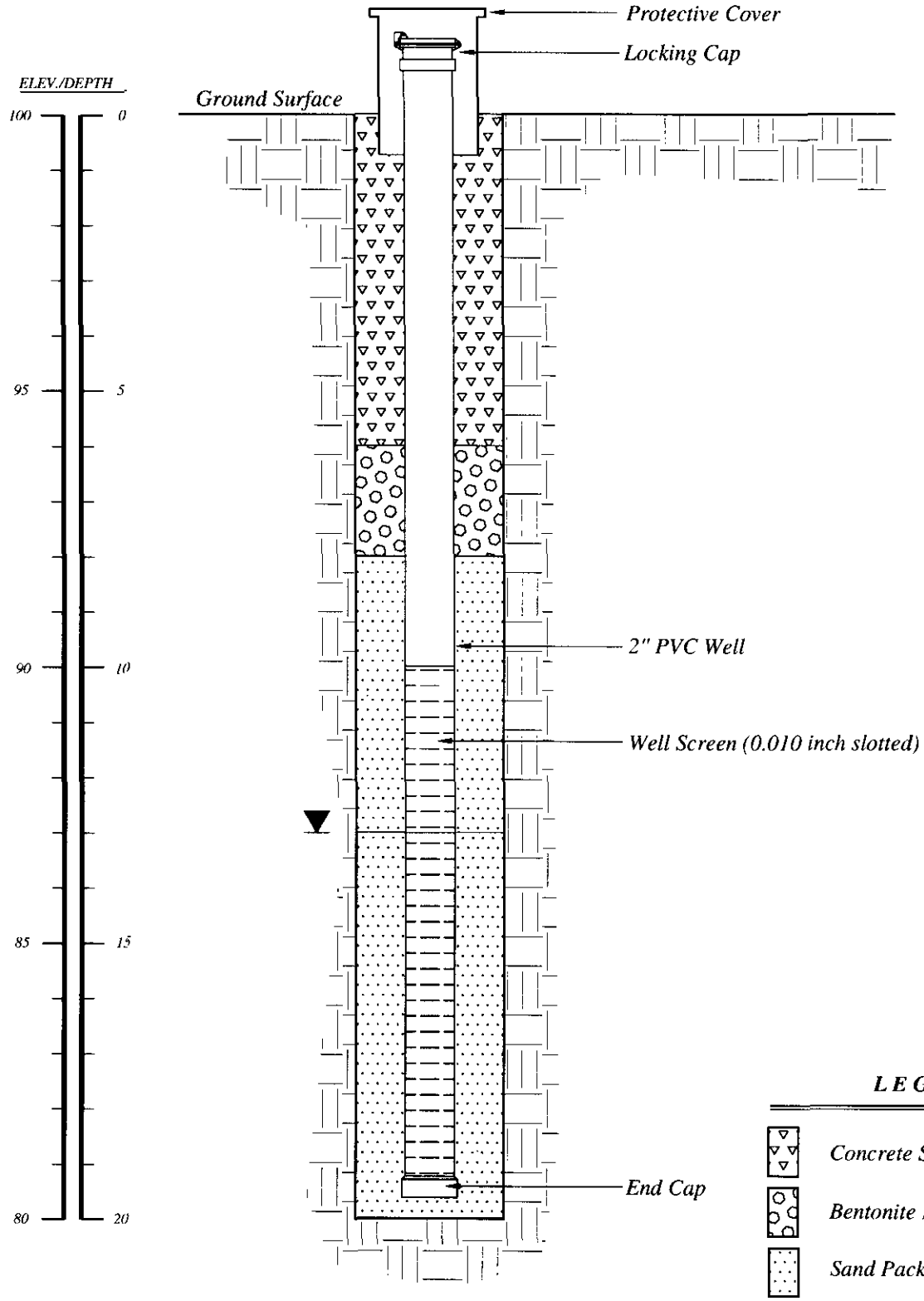
k·e·i	*TYPICAL RECOVERY TRENCH RISER DETAILS*	710028
	TEXAS-NEW MEXICO PIPE LINE COMPANY TMN-97-14 LEA COUNTY, NEW MEXICO	FIG 2



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k·e·i

TYPICAL MONITORING WELL SCHEMATIC

710028 - 1

FIG 3

GENERAL NOTES

ND - Indicates constituent was not detected above the method detection or reporting limit.
--- - Indicates a depth was not applicable or the constituent was not analyzed (TABLE I).
PSH - Phase-separate hydrocarbons.

Method detection or reporting limits:

Soil:	BTEX	- 0.050 to 0.300 mg/kg
	TPH	- 10 mg/kg
Water:	BTEX	- 0.001 to 0.006 mg/l
	PAH	- 0.002 mg/l

Laboratory test methods:

Soil:	BTEX	- EPA Method SW846-8020
	TPH	- Modified EPA Method 8015 Diesel Range Organics
Water:	BTEX	- EPA Method SW846-8020
	TPH	- Modified EPA Method 8015 Diesel Range Organics
	PAH	- EPA Method 8100
	Metals	- EPA ICP Method 6010
	Cations	- SM4500CO2D
	Anions	- EPA Method 300.0
	TDS	- EPA Method 160.1

TABLE I

SUMMARY OF SOIL RESULTS - BTEX AND TPH
TEXAS - NEW MEXICO PIPE LINE COMPANY
TNM-97-14
LEA COUNTY, NEW MEXICO

SAMPLE LOCATION	DATE SAMPLED	SAMPLE DEPTH (feet)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	XYLENES (mg/kg)	BTEX (mg/kg)	TPH (mg/kg)
TEMPORARY MONITORING WELLS:								
TMW-1	10/17/97	10 - 12	0.052	0.051	0.050	0.162	0.315	17.3
TMW-1	10/17/97	28 - 30	ND	ND	ND	ND	ND	16.6
TMW-2	10/17/97	10 - 12	ND	ND	ND	ND	ND	19.8
TMW-2	10/17/97	28 - 30	ND	ND	ND	0.118	0.118	16.9
EXCAVATION:								
Section A - Bottom Hole	09/22/97	—	ND	ND	ND	0.169	0.169	ND
Section A - South Sidewall	09/22/97	—	ND	ND	ND	ND	ND	ND
Section A - West Sidewall	09/22/97	—	ND	ND	ND	0.174	0.174	ND
Section A - East Sidewall	09/22/97	—	ND	ND	ND	0.148	0.148	ND
Section B - Bottom Hole	09/22/97	—	ND	ND	ND	0.157	0.157	ND
Section B - East Sidewall	09/22/97	—	ND	ND	ND	ND	ND	ND
Section B - West Sidewall	09/22/97	—	ND	ND	ND	0.129	0.129	ND
Section C - Bottom Hole	09/24/97	—	ND	ND	0.110	0.258	0.368	30
Section C - East Sidewall	09/24/97	—	ND	ND	ND	ND	ND	ND
Section C - West Sidewall	09/24/97	—	ND	ND	ND	ND	ND	26
Bottom Hole	10/07/97	—	ND	ND	0.111	0.340	0.451	ND
Bottom Hole	10/13/97	—	ND	ND	ND	ND	ND	ND
Sidewall	10/13/97	—	ND	ND	ND	0.279	0.279	ND

TABLE I
(continued)

SUMMARY OF SOIL RESULTS - BTEX AND TPH
TEXAS - NEW MEXICO PIPE LINE COMPANY
TNM-97-14
LEA COUNTY, NEW MEXICO

SAMPLE LOCATION	DATE SAMPLED	SAMPLE DEPTH (feet)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	XYLENES (mg/kg)	BTEX (mg/kg)	TPH (mg/kg)
Bottom Hole	10/15/97	—	ND	ND	ND	ND	ND	33
Sidewall	10/15/97	—	ND	ND	ND	ND	ND	ND
Bottom Hole	10/22/97	—	ND	ND	ND	ND	ND	38
Sidewall	10/22/97	—	ND	ND	ND	ND	ND	ND
Section I - Bottom Hole	11/07/97	—	ND	ND	ND	ND	ND	ND
Section I - Sidewall	11/07/97	—	ND	ND	ND	0.266	0.266	ND
LANDFARM:								
Section A	06/03/98	—	—	—	—	—	—	91
Section B	06/03/98	—	—	—	—	—	—	26
Section C	06/03/98	—	—	—	—	—	—	152
Section C	07/31/98	—	—	—	—	—	—	561
Section D	06/03/98	—	—	—	—	—	—	124

TABLE II

SUMMARY OF GROUND WATER RESULTS - BTEX
TEXAS - NEW MEXICO PIPE LINE COMPANY
TNM-97-14
LEA COUNTY, NEW MEXICO

MONITORING WELL NO.	DATE SAMPLED	BENZENE (mg/l)	TOLUENE (mg/l)	ETHYL-BENZENE (mg/l)	XYLENES (mg/l)	BTEX (mg/l)
TMW-1	10/17/97	ND	ND	ND	ND	ND
TMW-2	10/17/97	ND	0.001	ND	ND	0.001
Excavation Water	10/07/97	0.002	ND	ND	0.009	0.011
Excavation Water	10/13/97	0.377	0.487	0.155	0.242	1.261
Excavation Water	10/22/97	0.023	0.020	0.006	0.009	0.058
Excavation Water	11/07/97	0.021	0.010	0.005	0.008	0.044
Excavation Water	06/03/98	0.019	0.003	ND	0.013	0.035
Excavation Water	06/18/98	ND	ND	ND	ND	ND

k·e·i

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

FAX TRANSMITTAL

To: Bill Olson From: Theresa Nix

Fax Number: 505-827-8177 Date: 10/29/98

Subject: INM-97-14, Unit A, Section 8, Township 20 S, Range 37 E

Job Number: 710028-1-0

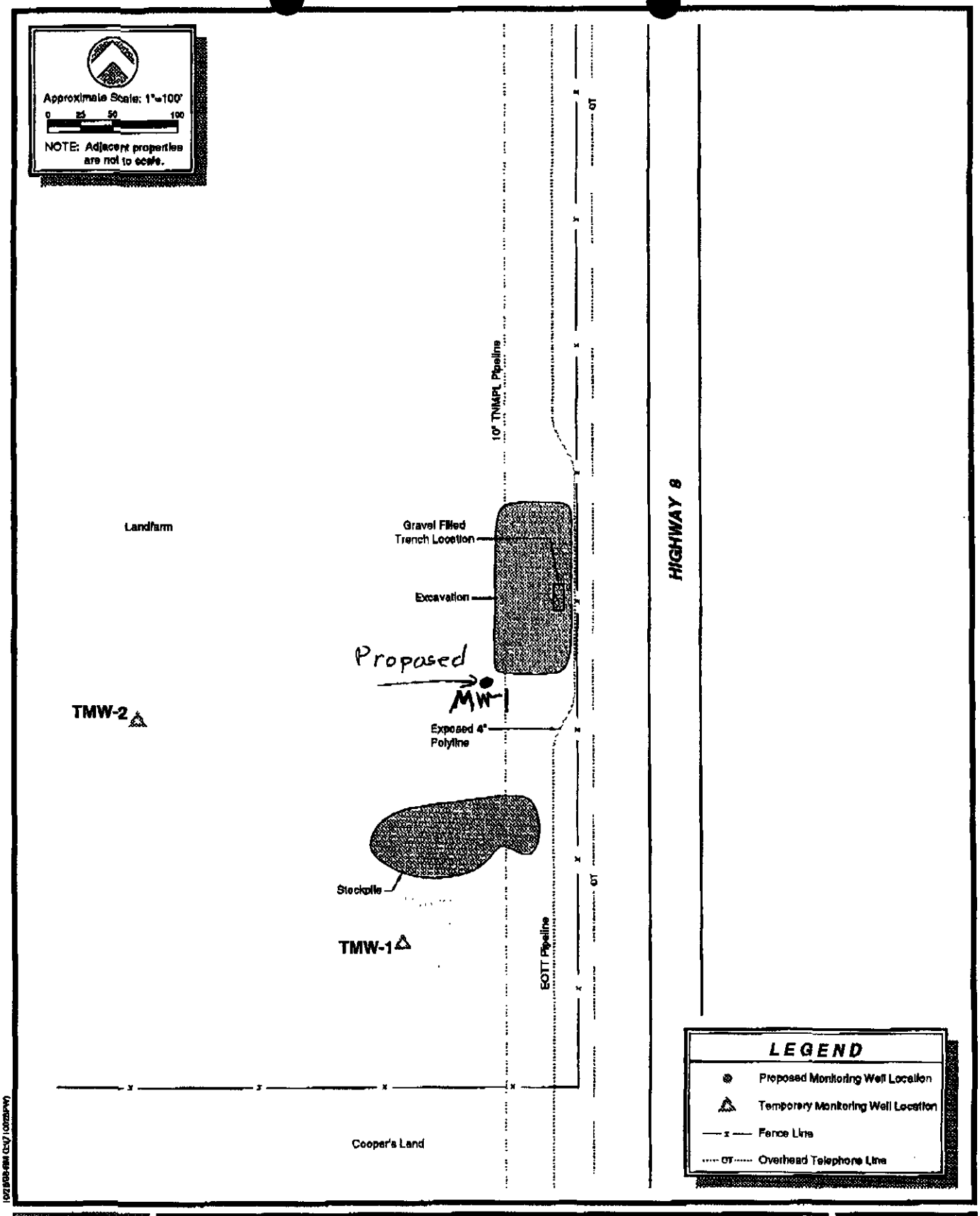
Total number of pages including cover sheet : 2

Special Instructions/Comments: Please look over the proposed MW-1 well location and call me (800-253-0507). We are scheduled to begin drilling next week.

Thanks!

Theresa

ljb\c:\wp61\faxtrans



k·e·i	SITE DETAILS	710026
	TNMPL TNM-97-14 LEA COUNTY, NEW MEXICO	FIG 1

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

July 16, 1998

Mr. Roger Anderson
OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, New Mexico 87505

RE: Stage 1 Abatement Plan
TNM-97-14
Unit A, Section 8, Township 20 North, Range 37 East
Lea County, New Mexico
KEI Job No. 710028-1

Dear Mr. Anderson:

Transmitted with this letter is the Stage 1 Abatement Plan required by your letter dated June 16, 1998. I have also attached a draft Notice of Publication. Within 15 days after the OCD determines that the Stage 1 Abatement Plan is complete, TNMPL plans to issue public notice in a form approved by the OCD in a newspaper of general circulation in the county in which the release occurred, and in a newspaper of general circulation in the State. Prior to public notice, TNMPL shall give written notice, as approved by the OCD, of this Stage 1 abatement plan to the following persons:

- surface owners of record within 1 mile of the perimeter of the geographic area where the standards and requirements are exceeded
- the county commission where the geographic area where the standards and requirements are exceeded is located
- the appropriate city official(s) if the geographic area where the standards and requirements are exceeded is located
- those persons, as identified by the Director, who have requested notification, who shall be notified by mail
- the New Mexico Trustee for Natural Resources, and any other local, state, or federal governmental agency affected, as identified by the Director, which shall be notified by certified mail
- the appropriate Governor or President of any Indian Tribe, Pueblo or Nation if the geographic area where the standards and requirements set forth are exceed is located or is partially located within tribal boundaries or within 1 mile of the tribal boundaries, who shall be notified by certified mail.

Please contact Mike Hawthorne at (972) 484-4197 or me at (210) 680-3767 with your comments or suggested changes.

Respectfully,

Theresa Nix

Theresa Nix
Project Manager

cc: OCD Hobbs, Wayne Price
Mr. Tony Savoie
Mr. Marc Oler
J. Michael Hawthorne

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SITE DESCRIPTION

In October of 1997 two temporary wells were installed to collect soil and ground water samples at the site. The soil samples were submitted for determination of benzene, toluene, ethylbenzene, and xylenes (BTEX) and total petroleum hydrocarbons - diesel range organics (TPH-DRO) concentrations. The water samples were submitted for determination of BTEX and polycyclic aromatic hydrocarbon (PAH) concentrations. The results of this investigation are presented in the KEI report dated March 5, 1998. A site map is presented as FIG. 1.

Light Non-Aqueous Phase Liquid (LNAPL) was observed on ground water within the excavation and reported to OCD in a letter dated September 29, 1997. TNMPL personnel periodically skimmed the LNAPL off the water. LNAPL currently is not on the ground water within the excavation. A sample was collected from the excavation water on June 11, 1998, and submitted for determination of metals, BTEX, PAH, cations/anions, and total dissolved solids (TDS) concentrations. All metals, BTEX, and PAH concentrations were below New Mexico Water Quality Control Commission Ground Water Standards. The results are summarized in TABLE I.

PROPOSED STAGE 1 ABATEMENT PLAN ACTIVITIES

Stage 1 abatement plan activities will consist of the following:

- conduct a records research for the area to determine site geology and hydrogeology, subsurface hydraulic conductivity, transmissivity, and storativity information
- conduct a registered water well search within a 1 mile radius of the site
- collect a composite soil sample from the area of the landfarm last exhibiting the highest TPH concentration
- submit the landfarm soil sample for determination of TPH-DRO, SPLP TPH, SPLP Volatile Organic Compounds (SPLP-VOC), and SPLP Semi-volatile Compounds (SPLP-SVOC) concentrations
- determine if the on-site excavation can be backfilled using the landfarmed soils
- if the landfarm soil concentrations are below cleanup standards, backfill the excavation with the soils
- install a gravel-filled trench within the excavation prior to backfilling for ground water monitoring
- prepare a report summarizing field activities and laboratory results

SCOPE OF WORK

A generalized scope of work is presented below. The final scope may be adjusted in the field based upon conditions encountered.

A composite soil sample will be collected from the section of the landfarm exhibiting the highest TPH concentration. The sample will be analyzed for TPH-DRO, SPLP TPH, SPLP-VOC, and SPLP-SVOC concentrations. If the soil results indicate the TPH concentrations are below closure level (100 mg/l), the excavation will be backfilled using the landfarmed

soils. If the soil results indicate the TPH concentrations are above closure level, the landfarm will continue to be operated until concentration levels are below closure requirements.

Prior to backfilling the excavation, a gravel-filled trench will be installed where the LNAPL was previously observed. This trench will be constructed utilizing 4 inch perforated PVC pipe. Two 4-inch risers will be installed within the trench in order to monitor ground water within the excavated area. The proposed location of the trench is identified on FIG. 1. A typical trench riser detail is presented on FIG. 2.

GROUND WATER SAMPLING AND ANALYTICAL

A ground water sample was obtained on June 11, 1998, from water collected within the excavation and submitted for determination of BTEX, PAH, metals, cations/anions, and TDS concentrations. All constituents of concern were below New Mexico Water Quality Control Commission Ground Water Standards.

SURFACE WATER MONITORING

Records will be searched to determine the surface water body nearest to the site. Upon determination of the nearest surface body, it will be determined if any research or investigation activities are necessary.

MONITORING PROGRAM

Ground water samples will be collected from the gravel-filled trench on a quarterly basis. The samples will be analyzed in the field for natural attenuation parameters, including oxidation reduction potential, dissolved oxygen, nitrates, ferrous iron, sulfates, and pH. Samples will also be submitted to an approved laboratory for determination of BTEX concentrations. A quarterly report will be submitted within 45 days of the sampling event.

QA/QC PROCEDURES

Ground Water Sampling

A ground water sample will be collected from the trench risers with a disposable Teflon sampler and polyethylene line by personnel wearing clean, disposable gloves. Ground water sample containers will be filled in the order of decreasing volatilization sensitivity (i.e., BTEX containers will be filled first and PAH containers second, if necessary).

Ground water samples collected for BTEX analysis will be placed in 40 ml glass VOA vials equipped with Teflon-lined caps. The containers will be provided by the analytical laboratory. The vials will be filled to a positive meniscus, sealed, and visually checked to ensure the absence of air bubbles.

Ground water samples collected for PAH analysis will be filled to capacity in sterile, 1 liter glass containers equipped with Teflon-lined caps. Ground water samples collected for

metals analysis will be filled to capacity in sterile, 1 liter plastic containers equipped with Teflon-lined caps. The containers will be provided by the analytical laboratory.

The filled containers will be labeled and placed on ice in an insulated cooler. The cooler will be sealed for transportation to the analytical laboratory. Proper chain-of-custody documentation will be maintained throughout the sampling process.

The ground water samples will be analyzed as follows:

- BTEX concentrations in accordance with EPA Method SW846-8020
- PAH concentrations in accordance with EPA Method 8100 or 8270

Laboratory Protocol

The laboratory will be responsible for proper QA/QC procedures. These procedures will either be transmitted with the laboratory reports or on file at the laboratory.

SCHEDULE OF ACTIVITIES

The activities outlined above will be conducted upon approval of this plan. Following completion of the landfarm sampling and records research, the developed data will be compiled and analyzed to determine whether the excavation can be backfilled using the landfarmed soils.

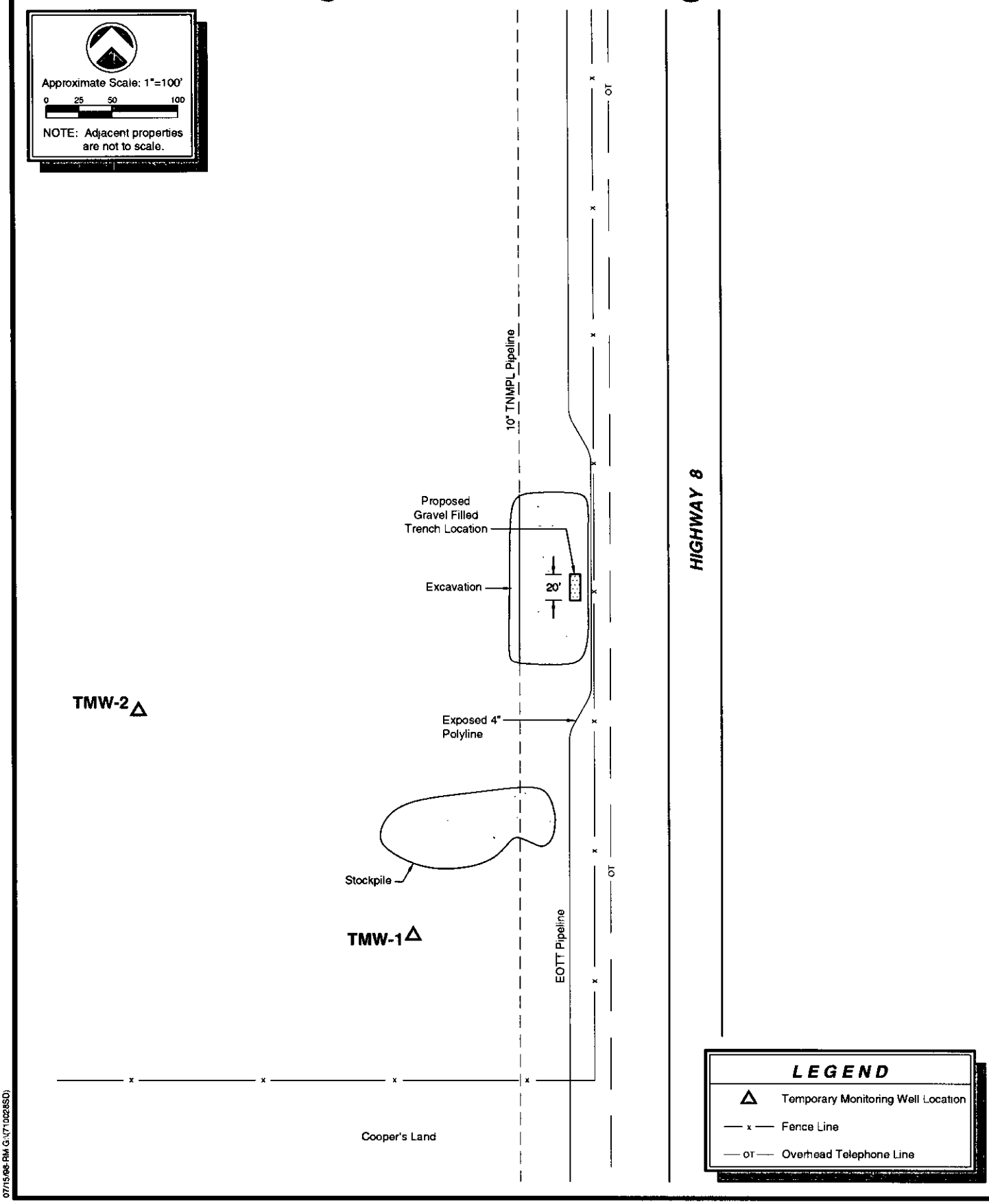
NOTICE OF PUBLICATION

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to New Mexico Oil Conservation Division Regulations, the following Stage 1 abatement plan has been submitted to the Director of the Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131:

> Texas - New Mexico Pipe Line Company, Tony Savoie, (505) 395-2705, P. O. Box 1030, Jal, New Mexico 88252 has submitted a Stage 1 Abatement Plan for the site TNM-97-14, 5 miles south of Monument, New Mexico in the NE/4, of Section 8, Township 20 North, Range 37 East, Lea County, New Mexico. Light Non-Aqueous Phase Liquid (LNAPL) has been observed on the ground water. The Stage 1 abatement plan presents the following subsurface investigation activities: determine site geology and hydrogeology, subsurface hydraulic conductivity, transmissivity, and storativity information; conduct a registered water well search within a 1 mile radius of the site; collect a soil sample from the landfarm and submit for laboratory analyses, install a gravel-filled trench within the excavation prior to backfilling, and prepare a report summarizing field activities and laboratory results.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The Stage 1 abatement plan may be viewed at the above address or at the Oil Conservation Division District Office, 1000 West Broadway, Hobbs, New Mexico 88240, Telephone (505) 392-4046, between 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed Stage 1 abatement plan, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him.



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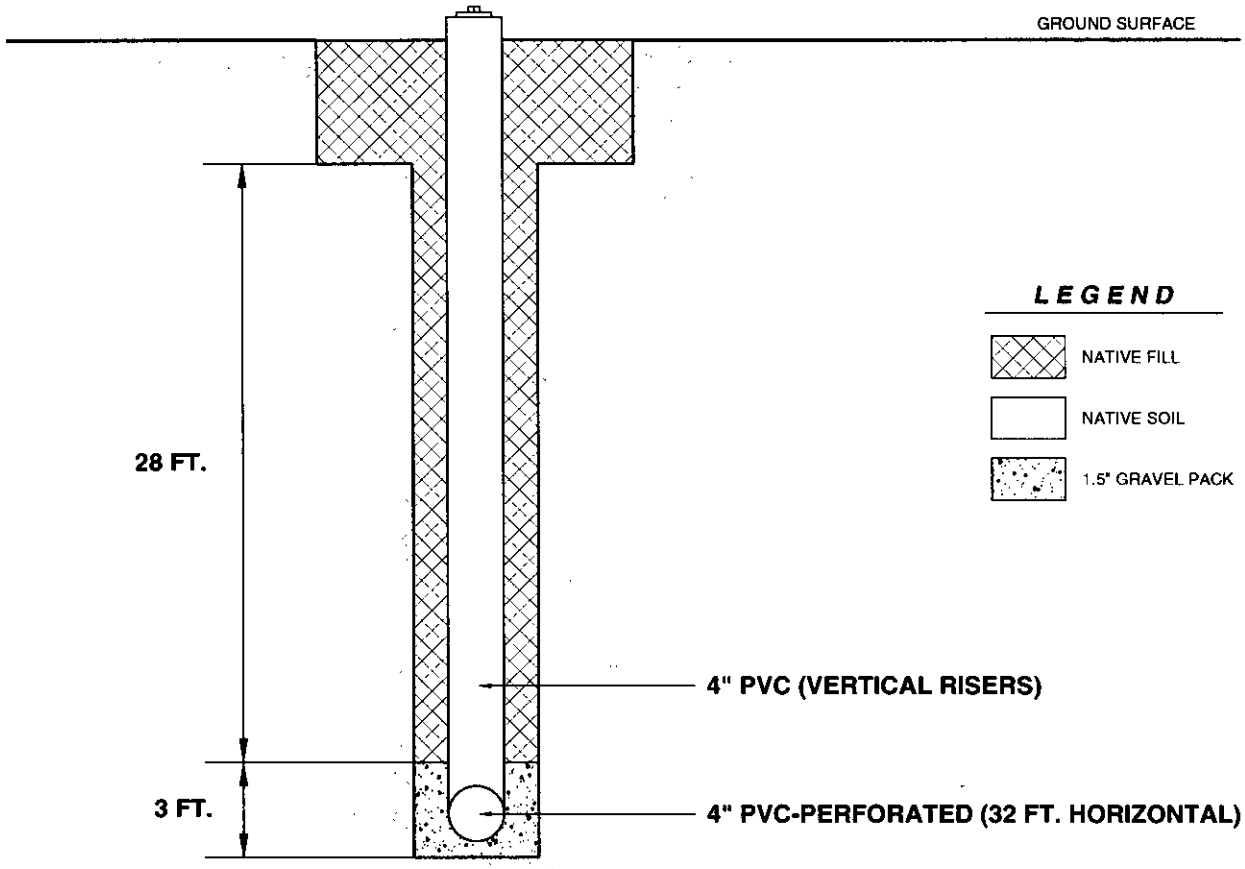
k·e·i	*SITE DETAILS*	710028
	TNMPL TNM-97-14 LEA COUNTY, NEW MEXICO	FIG 1



DEPTH TO GROUNDWATER IS 31' - 35' bgs

GROUND WATER

NOT TO SCALE

07/16/98-JB G:\SADFT\PROJECTS\TNMPL\710028\[7128INFL]

k·e·i	*TYPICAL RECOVERY TRENCH RISER DETAILS*	710028
	TEXAS-NEW MEXICO PIPE LINE COMPANY TMN-97-14 LEA COUNTY, NEW MEXICO	FIG 2

GENERAL NOTES

ND - Indicates constituent was not detected above the method detection/reporting limit.

Method detection limits:

BTEX	-	0.001 to 0.002 mg/l
Metals	-	0.0011 to 1.11 mg/l
PAH	-	0.002 mg/l
Cations	-	1.0 to 4.0 mg/l
Anions	-	4.00 mg/l
TDS	-	15.0 mg/l

Laboratory test methods:

BTEX	-	EPA Method SW846-8020
Metals	-	EPA Method 6010
PAH	-	EPA Method 82701
Cations	-	SM 4500CO2D
Anions	-	EPA Method 300.0
TDS	-	EPA Method 160.1

TABLE I

SUMMARY OF GROUND WATER RESULTS
TEXAS - NEW MEXICO PIPE LINE COMPANY
TNM-97-14
LEA COUNTY, NEW MEXICO

PARAMETER	CONCENTRATION (mg/L)
Benzene	ND
BTEX	ND
Metals:	
Barium	0.09
Boron	0.37
Calcium	94.5
Magnesium	51.6
Potassium	8.49
Silicon	33.6
Sodium	480
Strontium	2.50
Cations/Anions:	
Bicarbonate	258
TDS	1,830
Sulfate	256
Chloride	838

NOTES:

1. The excavation water sample was collected on 06/18/98.
2. All constituents not listed above were

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

July 9, 1998

Mr. William Olson
OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, New Mexico 87505

Re: Stage 1 Abatement Plan Deadline Extension
TNM-97-14
Unit A, Section 8, Township 20 North, Range 37 East
Lea County, New Mexico
Job No. 710028-1

Dear Mr. Olson:

Per our telephone conversation this morning, a Stage 1 Abatement Plan is due to OCD by July 10, 1998, for the above referenced site. KEI requests a one week extension for this plan. KEI will submit the stage 1 abatement plan to OCD by July 17, 1998.

Please contact me at (210) 680-3767 if you have any questions.

Respectfully,

Theresa Nix

Theresa Nix
Project Manager

Enclosure

cc: OCD Hobbs, New Mexico
Tony Savoie, TNMPL
Marc Oler; TTTI

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STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

June 16, 1998

CERTIFIED MAIL
RETURN RECEIPT NO: Z-235-437-292

Mr. Tony Savoie
Texas-New Mexico Pipe Line Company
P.O. Box 1030
Jal, New Mexico 88252

RE: STAGE 1 ABATEMENT PLAN (AP-3)
TNM-97-14 SPILL SITE

Dear Mr. Savoie:

The New Mexico Oil Conservation Division (OCD) has reviewed Texas-New Mexico Pipe Line Company's (TNMPLC) March 5, 1998 "SUBSURFACE INVESTIGATION REPORT, TNM-97-14, LEA COUNTY, NEW MEXICO, JOB NO. 710028" and April 30, 1998 "REVISED FIGURES, TNM-97-14, LEA COUNTY, NEW MEXICO, JOB NO. 710028-1" which were submitted on behalf of TNMPLC by their consultant KEI. These documents contain the results of TNMPLC's recent investigation of ground water contamination at the TNM-97-14 pipe line spill site located in Unit A, Section 8, T20N, R37E, Lea County, New Mexico.

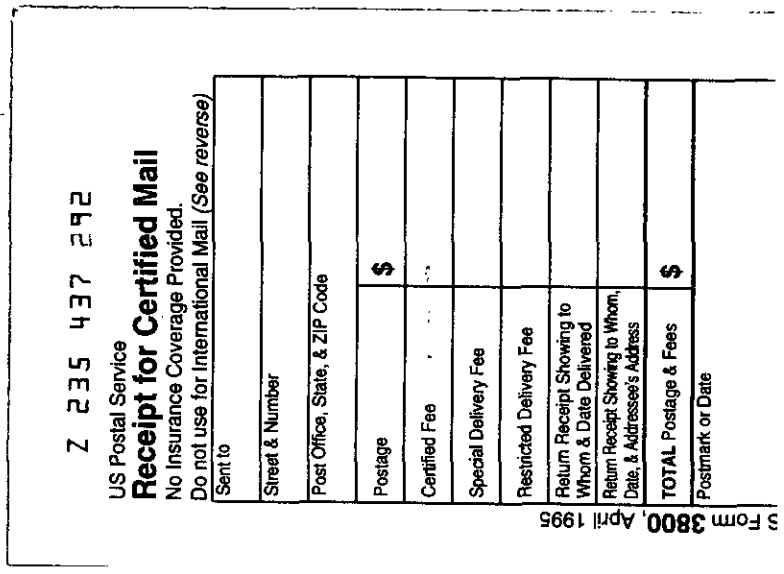
The above document does not contain a Stage 1 Abatement Plan Proposal as required by the OCD on January 12, 1998. In order to rectify this matter, the OCD requires that TNMPLC submit to the OCD by July 10, 1998 a Stage 1 abatement plan proposal pursuant to Rule 19.E.1. and 3.

If you have any questions, please contact Bill Olson of my staff at (505) 827-7154.

Sincerely,

Roger C. Anderson
Environmental Bureau Chief

xc: Wayne Price, OCD Aztec Office
Michael Hawthorne, KEI



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

March 5, 1998

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

Re: Subsurface Investigation Report
TNM-97-14
Lea County, New Mexico
Job No. 710028

Dear Mr. Savoie:

Transmitted with this letter is the subsurface investigation report for TNM-97-14 located in Lea County, New Mexico. This report addresses field activities conducted in October of 1997 and provides the Stage 1 Abatement Plan for the site.

Please contact me at (210) 680-3767 if you have any questions.

Respectfully,

J. Michael Hawthorne, PG, REM
Senior Geologist

Enclosure

cc: OCD Hobbs, New Mexico
OCD Santa Fe, New Mexico
Marc Oler; TTTI

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

April 30, 1998

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

Re: Revised Figures
TNM-97-14
Lea County, New Mexico
Job No. 710028-1

Dear Mr. Savoie:

Transmitted with this letter are revised FIGs. 2, 3, and 5 for the subsurface investigation report dated March 5, 1998 for the above referenced site. The north arrow on the figures in the original report was incorrect.

Please contact me at (210) 680-3767 if you have any questions.

Respectfully,

Theresa Nix

Theresa Nix
Project Manager

Enclosure

cc: OCD Hobbs, New Mexico
OCD Santa Fe, New Mexico ✓
Marc Oler; TTTI

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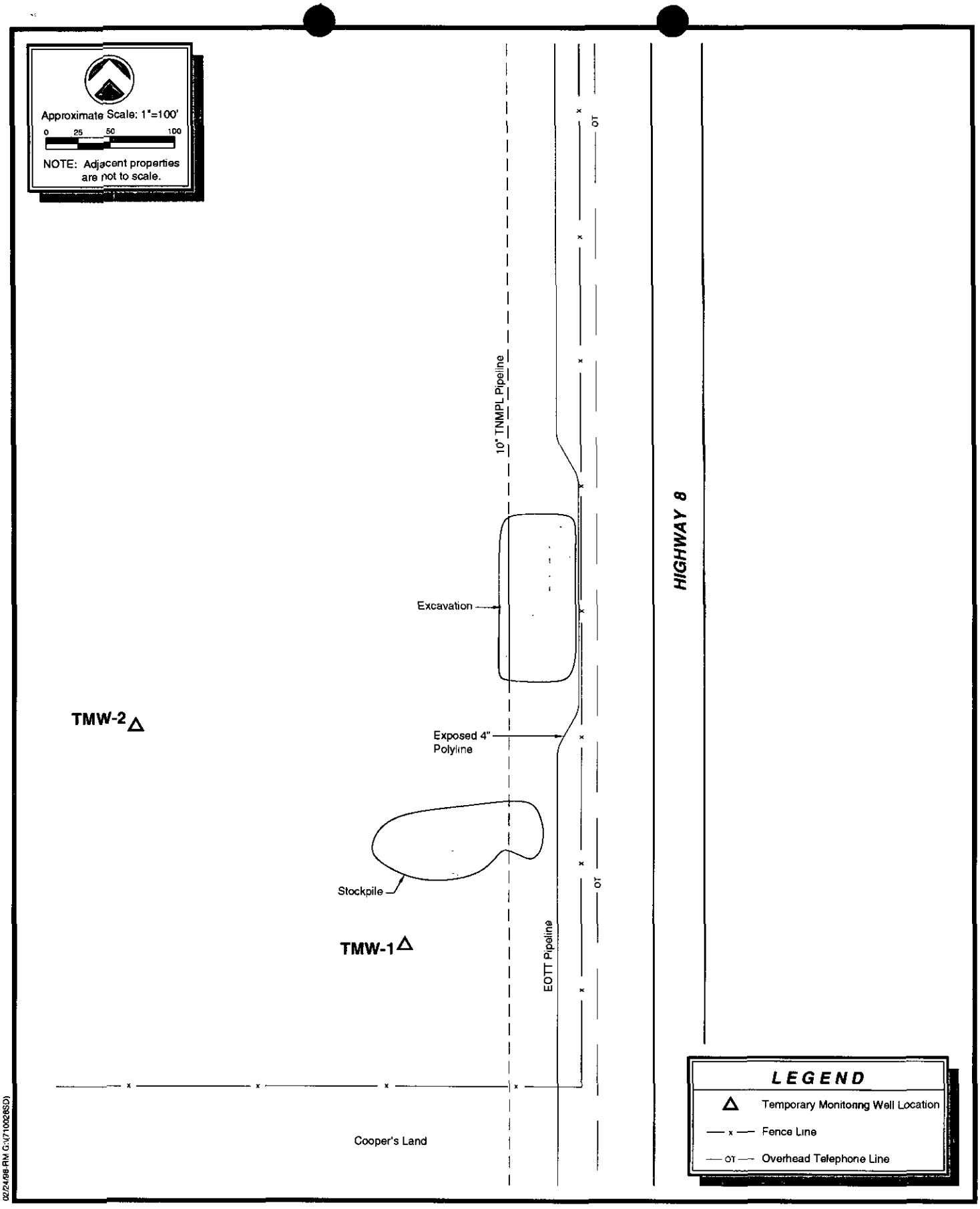

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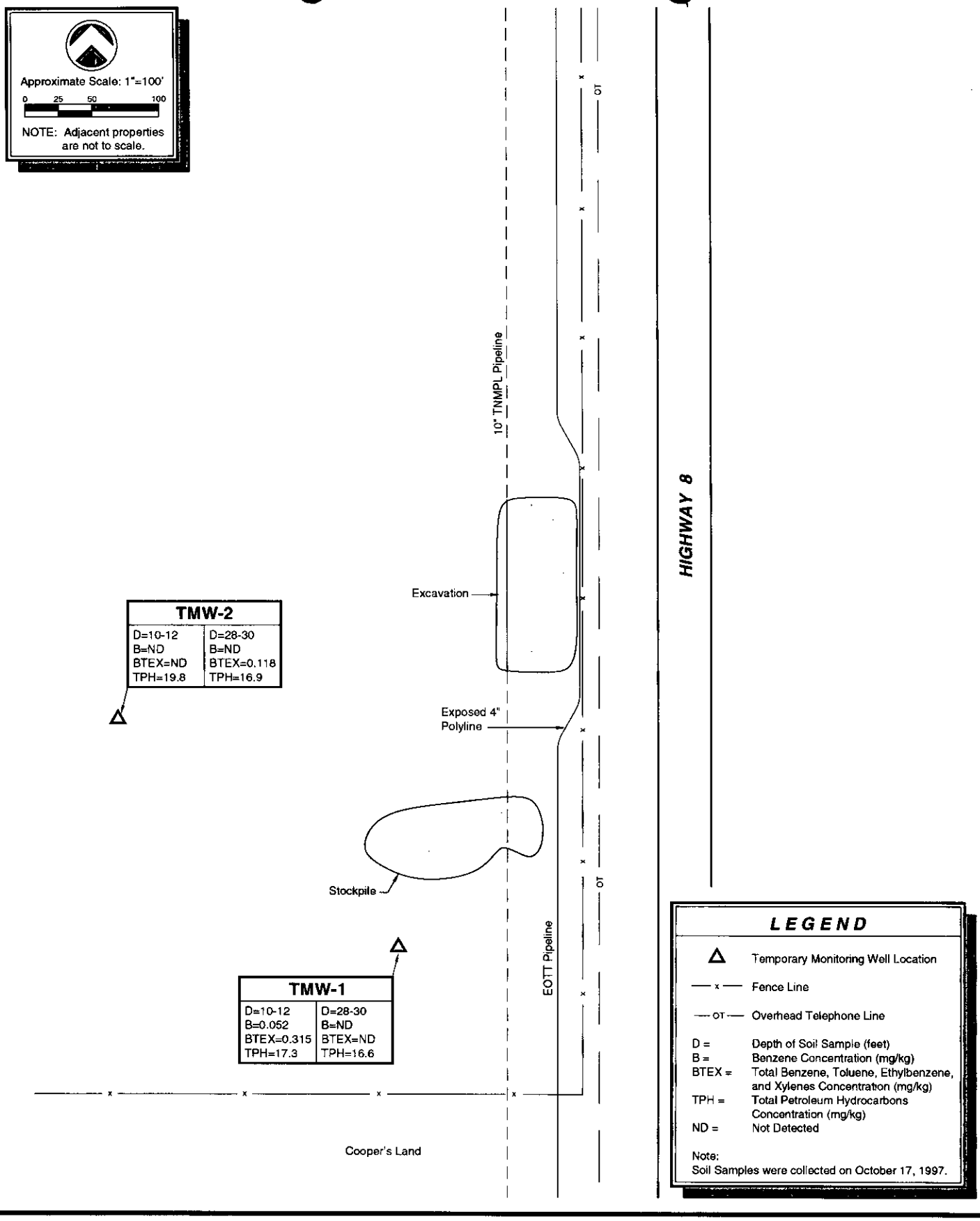
k·e·i	SITE DETAILS		710028
	TNMPL	TNM-97-14 LEA COUNTY, NEW MEXICO	FIG 2



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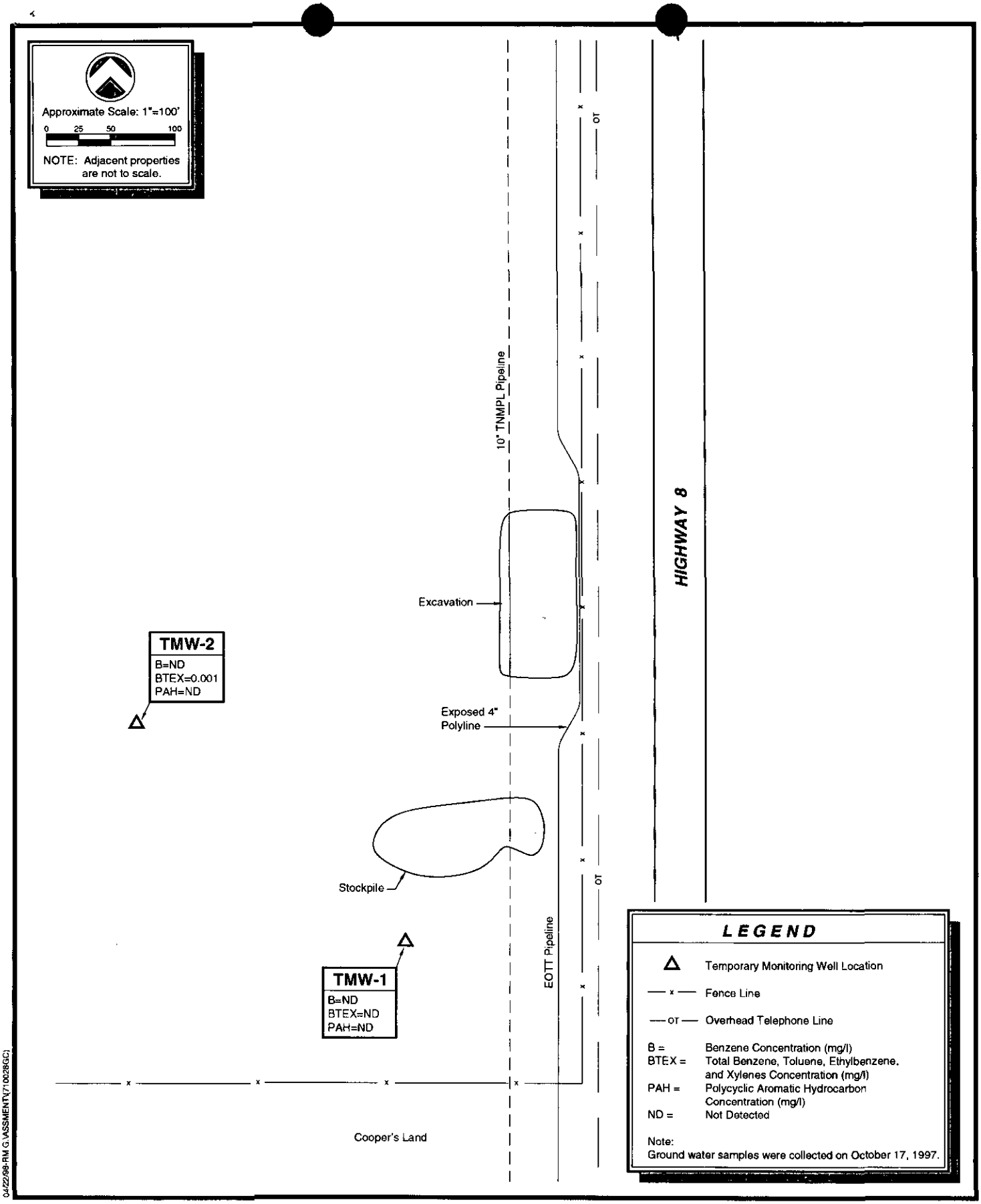
SOIL CONCENTRATION MAP - OCTOBER 1997			710028
TNMPL	TNM-97-14	LEA COUNTY, NEW MEXICO	FIG 3



04/22/98-RM G:\ASSMENT\710028GC)

k·e·i	GROUND WATER CONCENTRATION MAP - OCTOBER 1997	710028
	TNMPL TNM-97-14 LEA COUNTY, NEW MEXICO	FIG 5

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

January 12, 1998

CERTIFIED MAIL
RETURN RECEIPT NO: Z-235-437-214

Mr. Tony Savoie
Texas-New Mexico Pipe Line Company
P.O. Box 1030
Jal, New Mexico 88252

RE: GROUND WATER ABATEMENT PLAN (AP-3)
TNM-97-14 SPILL SITE

Dear Mr. Savoie:

The New Mexico Oil Conservation Division (OCD) has reviewed Texas-New Mexico Pipe Line Company's (TNMPLC) September 29, 1997 "TEXAS-NEW MEXICO PIPE LINE COMPANY, PIPE LINE RELEASE SITE NO. TNM-97-14, LEA COUNTY, NEW MEXICO, KEI PROJECT NO. 710028" which was submitted on behalf of TNMPLC by their consultant KEI. This document contains TNMPLC's notification of ground water contamination at the TNM-97-14 pipe line spill site located in Unit A, Section 8, T20N, R37E, Lea County, New Mexico.

Pursuant to OCD Rule 19 (19 NMAC 15.A.19), the OCD requires an abatement plan for the Lovington site to abate ground water pollution. To initiate the abatement plan process, the OCD requires that TNMPLC submit to the OCD by March 9, 1998 a Stage 1 abatement plan proposal pursuant to Rule 19.E.1. and 3.

If you have any questions, please contact Bill Olson of my staff at (505) 827-7154.

Sincerely,

Roger C. Anderson
Environmental Bureau Chief

xc: Wayne Price, OCD Aztec Office
Michael Hawthorne, KEI

Z 235 437 214

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

September 29, 1997

Mr. Roger Anderson
STATE OF NEW MEXICO
Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Re: Texas-New Mexico Pipe Line Company
Pipe Line Release Site No. TNM-97-14
Lea County, New Mexico
Job No. 710028

Dear Mr. Anderson:

This letter provides written notification of the discovery of Phase-Separate Hydrocarbon (PSH) on ground water at the above referenced site during soil remediation activities.

On September 29, 1997, PSH on ground water was observed during excavation of hydrocarbon-impacted soil at the referenced site, which is located in the NE/4, NE/4 Section 8, Township 20 South, Range 37 East in Lea County, New Mexico. Mr. Tony Savoie of Texas – New Mexico Pipeline Co. (TNMPL) notified Wayne Price of the OCD Hobbs office by phone on September 29, 1997, of this discovery.

TNMPL plans to install monitoring wells at the site to further characterize the nature and extent of hydrocarbon impact to ground water. A report summarizing this additional work will be provided to OCD upon its completion.

If you have any questions please contact me at (210) 680-3767.

Respectfully,

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

cc: TNMPL, Tony Savoie
OCD Hobbs District Office, Wayne Price

jmh\p:\tnmpl\710028\cpshnot.doc