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REPORTS

DATE:

05-09-2001

11/5 PR

ANNUAL MONITORING REPORT

EOTT PIPELINE COMPANY
MONUMENT 18
LEA COUNTY, NEW MEXICO

1R 124

RECEIVED
MAY 0 9 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 four quarterly events in calendar year 2000 to assess the levels and extent of dissolved phase and phase-separated petroleum hydrocarbon (PSH) constituents. The ground water monitoring events consisted of measuring static water levels in the monitoring wells, checking for the presence of 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 January 24, June 7, September 14, and December 6, 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).

GROUND WATER GRADIENT

Locations of the monitoring wells and the inferred ground water gradient, as measured on December 6, 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, generated from the final quarterly event of calendar year 2000 water level measurements, indicated a general gradient of approximately 0.002 ft/ft to the southeast as measured between ground water monitoring wells MW-3 and MW-5. The depth to ground water, as measured from the top of the well casing, ranged between 31.34 to 35.78 feet for the shallow alluvial aquifer.

A measurable thickness of PSH was detected in monitoring wells MW-1, MW-3, and MW-4 during the annual sampling period. A maximum thickness of 3.17 feet in monitoring well MW-1, 2.53 feet in monitoring well MW-3, and 1.64 feet in monitoring well MW-4 was measured and is shown on Table 1.

LABORATORY RESULTS

Ground water samples collected during the sampling events 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 SW846-8021B. 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 2000 monitoring period, indicated that the Benzene and BTEX concentrations were below regulatory standards for all of the on-site monitoring wells.

SUMMARY

This report presents the results of monitoring activities for the annual monitoring period of calendar year 2000. A measurable thickness of PSH was detected in monitoring wells MW-1, MW-3, and MW-4 during the quarterly sampling events. A maximum thickness of 3.17 feet in monitoring well MW-1, 2.53 feet in monitoring well MW-3, and 1.64 feet in monitoring well MW-4 was measured in the monitoring wells.

Ground water elevation contours, generated from the final quarterly event of calendar year 2000 water level measurements, indicated a general gradient of approximately 0.002 ft/ft to the southeast as measured between ground water monitoring wells MW-3 and MW-5.

Laboratory results for all of the site ground water samples, obtained during the calendar year 2000 monitoring period, indicated that the Benzene and BTEX concentrations were below regulatory standards for all of the on-site monitoring wells.

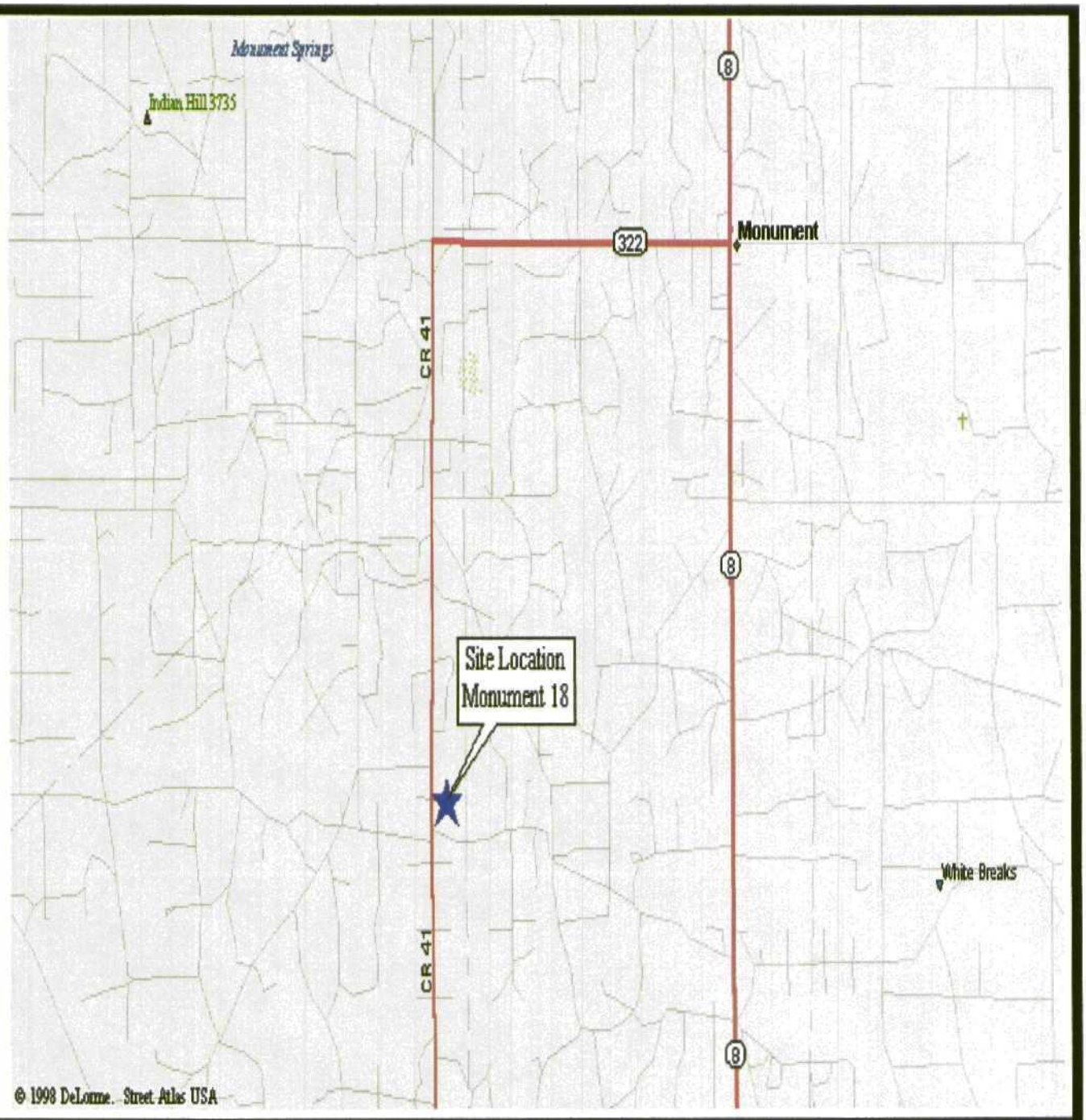
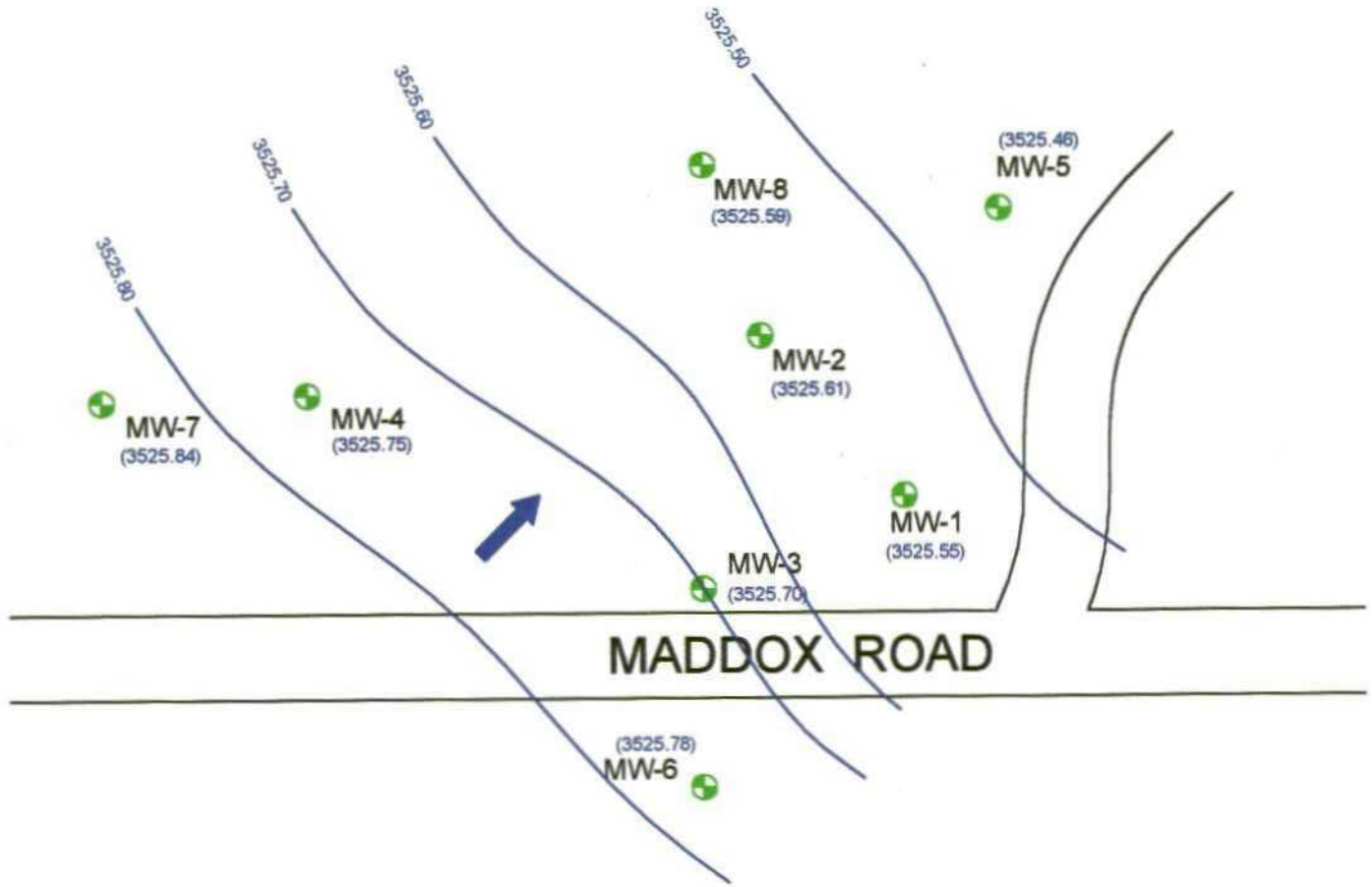


FIGURE 1	Site Location Map	Environmental Technology Group, Inc.
Not To Scale	EOTT Energy Corp. Monument 18 Lea County NM	02 - 8 - 00 RS
		ETGI Project # EOT2065C



LEGEND:

- Monitoring Well Locations
- Groundwater Contour Lines
- (3525.78) Groundwater Elevation (in feet)

Figure 2
Site Groundwater Gradient Map (12/16/00)

E.O.T.T. Energy
Monument 18

Lea County, NM

Environmental Technology Group, Inc.

Scale: 1"=55'	Prepared By: JDJ	Checked By: CR
December 16, 2000	ETGI Project #: EOT2065C	

TABLE 1

GROUND WATER ELEVATION
ANNUAL REPORT

EOTT ENERGY CORPORATION
MONUMENT 18
LEA COUNTY, NEW MEXICO
ETGI PROJECT # EOT2065C

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW - 1	01/24/00	3,558.71	32.20	35.57	3.07	3,525.75
	06/07/00	3,558.71	32.22	35.13	2.91	3,526.05
	09/14/00	3,558.71	32.51	35.68	3.17	3,525.72
	12/06/00	3,558.71	32.70	35.78	3.08	3,525.55
MW - 2	01/24/00	3,559.64	-	34.03	0.00	3,525.61
	06/07/00	3,559.64	-	33.55	0.00	3,526.09
	09/06/00	3,559.64	-	33.83	0.00	3,525.81
	12/06/00	3,559.64	-	34.03	0.00	3,525.61
MW - 3	01/24/00	3,558.53	31.99	34.52	2.53	3,526.16
	06/07/00	3,558.53	32.05	34.38	2.33	3,526.13
	09/14/00	3,558.53	32.32	34.84	2.52	3,525.83
	12/06/00	3,558.53	32.48	34.80	2.32	3,525.70
MW - 4	01/24/00	3,558.14	31.73	32.96	1.23	3,526.23
	06/07/00	3,558.14	31.75	33.30	1.55	3,526.16
	09/14/00	3,558.14	32.03	33.67	1.64	3,525.86
	12/06/00	3,558.14	32.26	33.16	0.90	3,525.75
MW - 5	01/24/00	3,560.07	-	34.10	0.00	3,525.97
	06/07/00	3,560.07	-	34.12	0.00	3,525.95
	09/06/00	3,560.07	-	34.41	0.00	3,525.66
	12/06/00	3,560.07	-	34.61	0.00	3,525.46
MW - 6	01/24/00	3,557.64	-	31.34	0.00	3,526.30
	06/07/00	3,557.64	-	31.35	0.00	3,526.29
	09/06/00	3,557.64	-	31.65	0.00	3,525.99
	12/06/00	3,557.64	-	31.86	0.00	3,525.78
MW - 7	01/24/00	3,558.65	-	32.30	0.00	3,526.35
	06/07/00	3,558.65	-	32.38	0.00	3,526.27
Pipeline leak/ could not enter location due to high H2S						
	12/06/00	3,558.65	-	32.81	0.00	3,525.84
MW - 8	01/24/00	3,559.30	-	33.21	0.00	3,526.09
	09/06/00	3,559.30	-	33.51	0.00	3,525.79
	12/06/00	3,559.30	-	33.71	0.00	3,525.59

TABLE 2

GROUND WATER CHEMISTRY
ANNUAL REPORT

EOTT ENERGY CORPORATION
MONUMENT 18
LEA COUNTY, NEW MEXICO
ETGI PROJECT # EOT 2065C

All concentrations are in mg/L

SAMPLE LOCATION	SAMPLE DATE	SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL-BENZENE	M,P-XYLENES	O-XYLENES
MW - 2	01/24/00	0.002	<0.001	0.001	<0.001	0.001
	06/07/00	0.002	<0.001	<0.001	<0.001	<0.001
	09/06/00	0.002	<0.001	<0.001	<0.001	<0.001
	12/06/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 5	01/24/00	0.002	0.002	0.002	<0.001	<0.001
	06/07/00	0.003	0.002	<0.001	<0.001	0.001
	09/06/00	0.004	0.001	0.002	<0.001	0.001
	12/06/00	<0.001	0.002	<0.001	<0.001	<0.001
MW - 6	01/24/00	0.002	<0.001	<0.001	0.002	<0.001
	06/07/00	0.002	0.001	<0.001	0.002	<0.001
	09/06/00	0.002	<0.001	<0.001	<0.001	<0.001
	12/06/00	0.001	<0.001	<0.001	<0.001	<0.001
MW - 7	01/24/00	0.002	0.001	0.002	<0.001	0.001
	06/07/00	0.001	0.002	<0.001	<0.001	<0.001
Pipeline leak/could not enter location due to high H2S						
	12/06/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 8	01/24/00	0.002	<0.001	0.002	<0.001	0.001
	09/06/00	0.002	<0.001	<0.001	<0.001	<0.001
	12/06/00	<0.001	<0.001	<0.001	<0.001	<0.001

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: Monument 18
Project Location: Monument, N.M.

Sampling Date: 01/24/00
Receiving Date: 01/26/00
Analysis Date: 1/26 - 1/27/00

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
23114	MW-2	0.002	<0.001	0.001	<0.001	0.001
23115	MW-5	0.002	0.002	0.002	<0.001	<0.001
23116	MW-6	0.002	<0.001	<0.001	0.002	<0.001
23117	MW-7	0.002	0.001	0.002	<0.001	0.001
23118	MW-8	0.002	<0.001	0.002	<0.001	0.001
% IA		92	90	88	90	88
% EA		105	87	86	88	85
BLANK		<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: EPA SW 846-8021B,5030

Raland K. Tuttle

1-28-00
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

073

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 1015 C
Project Name: Monument 18

Project Location: Monument NM
Sampler Signature: Jesse 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 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
	MW 2	2	✓	X					X		X			1-24	1133	X							
	MW 5														1240								
	MW 6														1305								
	MW 7														1155								
	MW 8	✓	✓	✓					✓		✓			✓	1215	↓							

Relinquished by:	Date:	Time:	Received by:
Jesse Casas			
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by Laboratory:

REMARKS
Mail Result: K. Dutton

Invoice: Lennah Frost

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: 915-520-4310
FAX: 505-392-3760

Sample Type: Water
Sample Condition: Intact/ Iced/HCl/ 32 deg. F
Project #: EOT 2015C
Project Name: Monument 18
Project Location: Monument, N.M.

Sampling Date: 06/07/00
Receiving Date: 06/10/00
Analysis Date: 06/12/00

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
26565	MW 2	0.002	<0.001	<0.001	<0.001	0.001
26566	MW 5	0.003	0.002	<0.001	<0.001	0.001
26567	MW 6	0.002	0.001	<0.001	0.002	<0.001
26568	MW 7	0.001	0.002	<0.001	<0.001	<0.001
% IA		99	87	89	96	88
% EA		96	95	98	106	97
BLANK		<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: SW 846-8021 B,5030

Umesh Rao

Umesh Rao, Ph. D.

6/14/00
Date

Environmental Lab of Texas, Inc.

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

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

COC # 156

Project Manager: Jesse Taylor
Phone #: (505) 392-8731
FAX #: (505) 392-3760

Company Name & Address: ETGI
P.O. Box 4625 Midland TX 79704

Project #: EOT 2015C
Project Name: Monument 1B

Project Location: Monument 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 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 2	2	V	X					X		X			6-7	1020	X							
	MW 5														0933								
	MW 6														1105								
	MW 7														1040								

Relinquished by:	Date:	Times:	Received by:
Simon Casas	10 Jun 09	1100	Robert Jack
Relinquished by:	Date:	Times:	Received by:
Relinquished by:	Date:	Times:	Received by Laboratory:

REMARKS
Fax Results: Hobbs office
32 °F
Invoice: EOTT 10SM

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
FAX: 505-397-4701

SampleType: Water
Sample Condition: Intact/ Iced/ HCl/ 0 deg. C
Project #: EOT 2065C
Project Name: Monument 18
Project Location: Monument, N.M.

Sampling Date: 09/06/00
Receiving Date: 09/08/00
Analysis Date: 09/13/00

ELT#	FIELD CODE/ SAMPLE DATE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L	TOTAL BTEX mg/L
30528	MW 2	0.002	<0.001	0.002	<0.001	<0.001	0.004
30529	MW 5	0.004	0.001	0.002	<0.001	0.001	0.008
30530	MW 6	0.002	<0.001	<0.001	<0.001	<0.001	0.002
30531	MW 8	0.002	<0.001	<0.001	<0.001	<0.001	0.002
	% IA	98	99	101	105	97	
	% EA	96	100	98	102	97	
	BLANK	<0.001	<0.001	<0.001	<0.001	<0.001	

METHODS: SW 846-8021B,5030

Raland K. Tuttle

9-15-00
Date

Environmental Lab of Texas, Inc.

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

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

COC 224

Project Manager: BETH ALDRICH
Phone #: (505) 397-4882
FAX #: (505) 397-4701

Company Name & Address: ETGT
2540 W MARLAND HOBBS NM 88240

Project #: EOT 2065C
Project Name: MONUMENT 18

Project Location: MONUMENT NM
Sampler Signature: Lemon 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 8112	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 2	2	✓	X					X		X			9-6	1245	X							
	MW 5	↓	↓	↓					↓		↓			↓	1225	↓							
	MW 6														1330								
	MW 8														1440								

Relinquished by:	Date:	Times:	Received by:
Lemon Casas	9-8-00	1650	
Relinquished by:	Date:	Times:	Received by:
Relinquished by:	Date:	Times:	Received by Laboratory:

REMARKS

FAX RESULTS: HOBBS OFFICE
MAIL RESULTS: EOTT
INVOICE EOTT

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
FAX: 505-397-4701

Sample Type: Water
Sample Condition: Intact/ Iced/ HCl/ -2.0 deg. C
Project #: EOT 2065C
Project Name: Monument 18
Project Location: Monument, N.M.

Sampling Date: 12/06/00
Receiving Date: 12/09/00
Analysis Date: 12/10/00

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
35161	MW 2	<0.001	<0.001	<0.001	<0.001	<0.001
35162	MW 5	<0.001	0.002	<0.001	<0.001	<0.001
35163	MW 6	0.001	<0.001	<0.001	<0.001	<0.001
35164	MW 7	<0.001	<0.001	<0.001	<0.001	<0.001
35165	MW 8	<0.001	<0.001	<0.001	<0.001	<0.001
35166	EB 1	<0.001	<0.001	<0.001	<0.001	<0.001
	%IA	99	104	102	106	100
	%EA	88	91	93	99	96
	BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: EPA SW 846-8021B ,5030

Raland K. Tuttle

12-11-00
Date

Environmental Technology Group, Inc
Environmental Consulting & Remediation Services

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

Project Manager: BETH ALDRICH

Project Name: MONUMENT 18

Project Number: EOT 2065C

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	TIME	BTEX 8021B/5030	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 2	2	✓	X				X			X		12-6	1205	X											
	MW 5													1100												
	MW 6													1229												
	MW 7													1138												
	MW 8													1117												
	EB 1	↓	↓	↓				↓			↓		↓	1248	↓											

Relinquished by: Simon Casas Date: 12-3-00 Time: 1500

Received by: Date: 12-9-00 Time: 12:30

Relinquished by: Date: 12-9-00 Time: 12:30

Received at Lab by: J McMurrey Date: 12-09-00 Time: 1230

REMARKS: Rec -2.0°C

FAX RESULTS: HOBBS
MAIL RESULTS: EOTT
INVOICE: EOTT

TEXAS - NEW MEXICO
PIPE LINE COMPANY

RECEIVED

APR 1 5 1998

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

GROUND WATER MONITORING REPORT

MONUMENT SITE NO. 18
MONUMENT, NEW MEXICO

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

GROUND WATER MONITORING REPORT

TEXAS - NEW MEXICO PIPE LINE COMPANY
MONUMENT SITE NO. 18
MONUMENT, NEW MEXICO

PREPARED FOR:

TEXAS - NEW MEXICO PIPE LINE COMPANY
P. O. BOX 1030
JAL, NEW MEXICO 88252

MR. TONY SAVOIE

PREPARED BY:

KEI

Theresa Nix
Project Manager

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

KEI Job No. 610057

December 1, 1997

TABLE OF CONTENTS

INTRODUCTION

This binder presents results of ground water monitoring events conducted for Texas - New Mexico Pipe Line Company (TNMPL) Monument Site No. 18 located near Monument, New Mexico from the second quarter of 1997 to present. Ground water monitoring is conducted to assess the concentrations and extent of petroleum hydrocarbon constituents in ground water. The monitoring events consist of some or all of the following:

- measuring static water levels in the monitoring wells;
- checking for the presence of phase-separate hydrocarbons (PSH); and
- purging and sampling each well exhibiting sufficient recharge.

PURPOSE AND SCOPE

This binder presents results of ground water events conducted for TNMPL Site No. 18. The scope of this binder includes all sampling events conducted at this site since the second quarter of 1997, and historical ground water levels and PSH thicknesses. Site details are presented on FIG. 1.

FIELD AND REPORTING PROTOCOLS

GROUND WATER MONITORING AND SAMPLING

During sampling events monitoring wells that do not contain PSH are purged of approximately three well volumes of water. Purging equipment is cleaned prior to each use with Liqui-Nox detergent and rinsed with water. After purging the wells, ground water sample containers are filled in the order of decreasing volatility (i.e., benzene, toluene, ethylbenzene, and xylenes (BTEX) containers are filled first and other containers which may be required are filled second).

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

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

Purged water collected during each event is stored in drums on-site pending disposal.

LABORATORY RESULTS

Laboratory results for ground water samples obtained during each event are delivered to a qualified environmental analytical laboratory for determination of BTEX concentrations by EPA Method SW846-8020. The ground water samples obtained during the second quarter of 1997 were also submitted for determination of metals concentrations by EPA Method 6010, polycyclic aromatic hydrocarbon (PAH) concentrations by EPA Method 8100, Total Dissolved Solids (TDS) concentrations by EPA Method 160.1, bicarbonate and carbonate

concentrations by SM4500CO2D, anions concentrations by EPA Method 300.0, and total inorganic carbon (TIC) concentrations by Modified EPA Method 415.1.
Laboratory BTEX results for each event are summarized in TABLE I and graphically presented on FIG. 1. Copies of certified laboratory reports and chain-of-custody documentation are also attached. TABLE I is presented behind the TABLES tab. The figures and the certified laboratory reports and chain-of-custody documentation for each event are presented behind the corresponding dated tabs.

GROUND WATER GRADIENT

Ground water elevation contours generated from the water level measurements collected from each event are presented on FIG. 1. Historical ground water measurements are summarized in TABLE II. TABLE II is presented behind the TABLES tab and FIG. 1 is presented behind the corresponding dated tab.

PSH MONITORING

PSH thickness is gauged regularly. PSH thickness across the site for each gauging event is graphically presented on FIG. 2.

GENERAL NOTES

ND - Indicates constituent was not detected above the method detection limit.
PSH - Phase-separated hydrocarbons.
SHEEN - Indicates a visible phase separation with a thickness less than 0.01 feet.

Depth to water is referenced from the top of PVC elevation.

Ground water elevations in monitoring wells containing PSH have been corrected for PSH density. (Correction Factor = 0.85)

Method detection limits: BTEX - 0.001 to 0.006 mg/l

Laboratory test methods: BTEX - EPA Method SW846-8020, 5030

TABLE I

SUMMARY OF LABORATORY RESULTS - GROUND WATER
TEXAS - NEW MEXICO PIPE LINE COMPANY
MONUMENT SITE NO. 18
LEA COUNTY, NEW MEXICO

MONITORING WELL NO.	DATE SAMPLED	BENZENE (mg/l)	TOLUENE (mg/l)	ETHYLBENZENE (mg/l)	XYLENES (mg/l)	BTEX (mg/l)
MW18-2	05/02/97	0.010	ND	0.060	0.022	0.092
MW18-2	08/15/97	ND	ND	ND	ND	ND
MW18-2	11/02/97	0.002	ND	0.004	ND	0.006
MW18-3	05/02/97	0.006	ND	ND	ND	0.006
MW18-5	09/19/97	ND	ND	ND	ND	ND
MW18-5	11/02/97	ND	ND	ND	ND	ND
MW18-6	09/19/97	ND	ND	ND	ND	ND
MW18-6	11/02/97	ND	ND	ND	ND	ND

TABLE II

MONITORING WELL MW18-1
SUMMARY OF GROUND WATER MONITORING
TEXAS - NEW MEXICO PIPE LINE COMPANY
MONUMENT SITE NO. 18
LEA COUNTY, NEW MEXICO

DATE MEASURED	PVC ELEVATION (feet)	DEPTH TO WATER (feet)	GROUND WATER ELEVATION		PSH THICKNESS (feet)
			Actual	Corrected	
04/30/97	3,557.59	32.07	3525.52	3526.10	0.68
07/23/97	3,557.59	19.99	3537.60	—	—
08/15/97	3,557.59	33.86	3523.73	3525.96	2.62
10/23/97	3,557.59	34.47	3523.12	3525.82	3.18
11/02/97	3,557.59	34.55	3523.04	3525.79	3.24

TABLE II
(continued)

MONITORING WELL MW18-2
SUMMARY OF GROUND WATER MONITORING
TEXAS - NEW MEXICO PIPE LINE COMPANY
MONUMENT SITE NO. 18
LEA COUNTY, NEW MEXICO

DATE MEASURED	PVC ELEVATION (feet)	DEPTH TO WATER (feet)	GROUND WATER ELEVATION		PSH THICKNESS (feet)
			Actual	Corrected	
04/30/97	3,558.54	32.67	3525.87	---	---
07/23/97	3,558.54	21.60	3536.94	---	---
08/15/97	3,558.54	32.52	3526.02	---	---
10/23/97	3,558.54	32.60	3525.94	---	---
11/02/97	3,558.54	32.63	3525.91	---	---

TABLE II
(continued)

MONITORING WELL MW18-3
SUMMARY OF GROUND WATER MONITORING
TEXAS - NEW MEXICO PIPE LINE COMPANY
MONUMENT SITE NO. 18
LEA COUNTY, NEW MEXICO

DATE MEASURED	PVC ELEVATION (feet)	DEPTH TO WATER (feet)	GROUND WATER ELEVATION		PSH THICKNESS (feet)
			Actual	Corrected	
04/30/97	3,557.43	31.26	3526.17	3526.36	0.22
07/23/97	3,557.43	21.78	3535.65	3535.66	0.01
08/15/97	3,557.43	33.65	3523.78	3526.08	2.70
10/23/97	3,557.43	33.80	3523.63	3525.97	2.75
11/02/97	3,557.43	33.80	3523.63	3525.95	2.73

TABLE II
(continued)

MONITORING WELL MW18-4
SUMMARY OF GROUND WATER MONITORING
TEXAS - NEW MEXICO PIPE LINE COMPANY
MONUMENT SITE NO. 18
LEA COUNTY, NEW MEXICO

DATE MEASURED	PVC ELEVATION (feet)	DEPTH TO WATER (feet)	GROUND WATER ELEVATION		PSH THICKNESS (feet)
			Actual	Corrected	
09/19/97	3,557.06	30.90	3526.16	3526.17	0.01
10/23/97	3,557.06	30.92	3526.14	---	---
11/02/97	3,557.06	30.94	3526.12	3526.13	0.01

TABLE II
(continued)

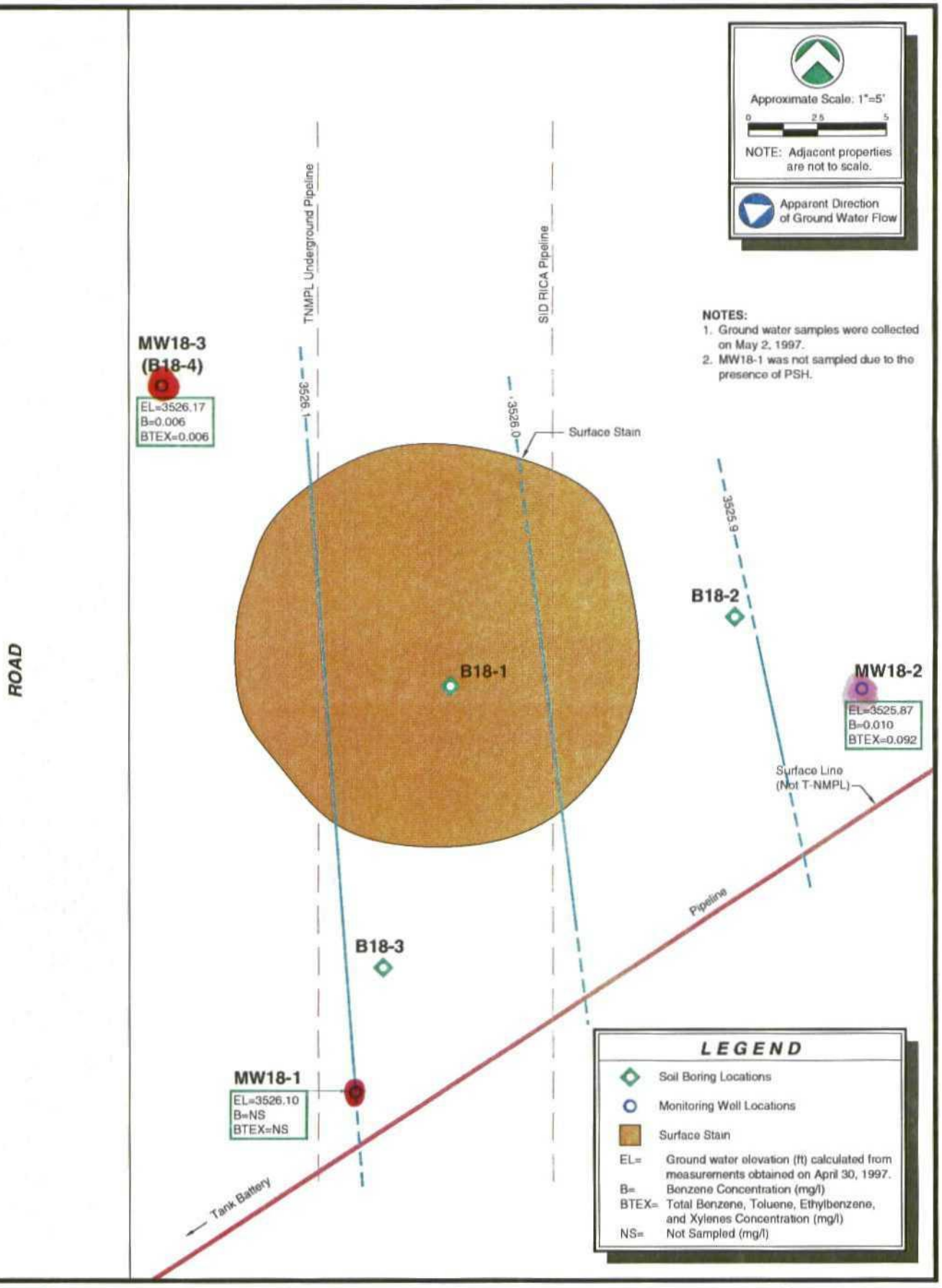
MONITORING WELL MW18-5
SUMMARY OF GROUND WATER MONITORING
TEXAS - NEW MEXICO PIPE LINE COMPANY
MONUMENT SITE NO. 18
LEA COUNTY, NEW MEXICO

DATE MEASURED	PVC ELEVATION (feet)	DEPTH TO WATER (feet)	GROUND WATER ELEVATION		PSH THICKNESS (feet)
			Actual	Corrected	
09/19/97	3,558.98	33.19	3525.79	—	—
10/23/97	3,558.98	33.20	3525.78	—	—
11/02/97	3,558.98	33.23	3525.75	—	—

TABLE II
(continued)

MONITORING WELL MW18-6
SUMMARY OF GROUND WATER MONITORING
TEXAS - NEW MEXICO PIPE LINE COMPANY
MONUMENT SITE 18
LEA COUNTY, NEW MEXICO

DATE MEASURED	PVC ELEVATION (feet)	DEPTH TO WATER (feet)	GROUND WATER ELEVATION		PSH THICKNESS (feet)
			Actual	Corrected	
09/19/97	3,556.55	30.41	3526.14	---	---
10/23/97	3,556.55	30.44	3526.11	---	---
11/02/97	3,556.55	30.46	3526.09	---	---



2/97 RM G:\GWCM-2\

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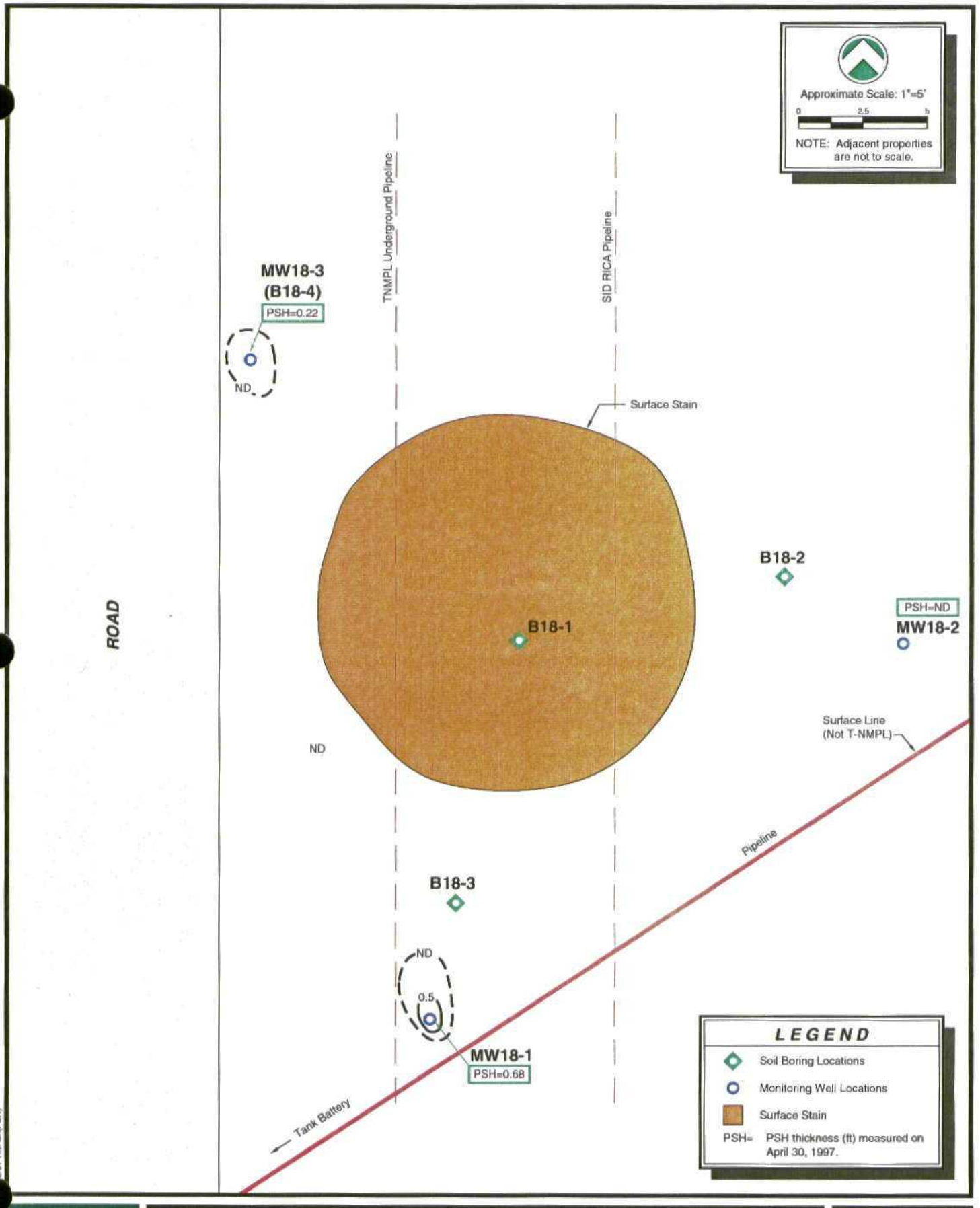
GROUND WATER CONTOURS / CONCENTRATION MAP - APRIL AND MAY 1997	610057
TEXAS - NEW MEXICO PIPE LINE CO. MONUMENT SITE NO. 18 LEA COUNTY, NEW MEXICO	FIG 1



2/97 RM G:\(PSH)

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PSH THICKNESS MAP - APRIL 1997			610057
TEXAS - NEW MEXICO PIPE LINE CO.	MONUMENT SITE NO. 18	LEA COUNTY, NEW MEXICO	FIG 2