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

1RP-225
11.2.05

September 10, 1998

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

Re: Closure Report
Monument Site No. 5
Unit G, Section 25, Township 19 South, Range 36 East
Lea County, New Mexico
Job No. 610057-2-5

Dear Mr. Savoie:

Transmitted with this letter is the final Closure Report for Monument Site No. 5 located in Lea County, New Mexico. One copy has been forwarded to OCD Sante Fe and one to OCD Hobbs.

Please contact me at (210) 680-3767 with any questions or comments.

Respectfully,

for

Theresa Nix
Project Manager

Enclosure

cc: Marc Oler; TTTI
Wayne Price, OCD Hobbs
William Olson, OCD Sante Fe

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CLOSURE REPORT

TEXAS - NEW MEXICO PIPE LINE COMPANY
MONUMENT SITE NO. 5
UNIT G, SECTION 25, TOWNSHIP 19 SOUTH,
RANGE 36 EAST
LEA COUNTY, NEW MEXICO

5309 Wurzbach, Suite 100
San Antonio, Texas 78238
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CLOSURE REPORT

TEXAS - NEW MEXICO PIPE LINE COMPANY
MONUMENT SITE NO. 5
UNIT G, SECTION 25, TOWNSHIP 19 SOUTH, RANGE 36 EAST
LEA COUNTY, NEW MEXICO

PREPARED FOR:

TEXAS - NEW MEXICO PIPE LINE COMPANY
P. O. Box 1030
Jal, New Mexico 88252

Mr. Tony Savoie

PREPARED BY:

KEI

Daryl Stacey
Project Manager

Theresa Nix
Project Manager

Pat Bullinger, P.E.

KEI Job No. 610057-2-5

September 10, 1998

TABLE OF CONTENTS

PURPOSE AND SCOPE

The objective of the site activities was to obtain closure based on New Mexico Oil Conservation Division (OCD) regulations. The following activities were performed to achieve this objective:

- determination of closure standards
- excavation of impacted soil
- characterization of excavated soil
- confirmation sampling in the excavated area
- on-site shredding and blending of impacted soil with clean soil, then backfilling with blended soil in the excavated area

Ground water wells were installed as part of a previous investigation. Soil excavation demonstrated that ground water contamination was not a result of TNMPL activities.

PREVIOUS INVESTIGATIONS

The Texas - New Mexico Pipe Line Company (TNMPL) Monument Site No. 5 is located in Unit G, Section 25, Township 19 South, Range 36 East as presented on FIG. 1. A subsurface investigation was conducted by KEI at the site. The results of this investigation are summarized in the Subsurface Investigation Report dated September 9, 1997. The following activities were performed as part of the subsurface investigation:

- sensitive receptor survey, migration pathway evaluation, and registered water well search
- installation of 6 soil borings on March 14 and 26, 1997
- installation of 3 monitoring wells on March 26 and 27, 1997
- collection of soil samples from native soils during soil boring and monitoring well installation

Soil samples collected during the advancement of soil borings and monitoring wells were submitted for determination of benzene, toluene, ethylbenzene, and xylene (BTEX), and total petroleum hydrocarbon diesel range organics (TPH-DRO) concentrations. The soil sample with the highest TPH-DRO concentration was submitted for SPLP TPH, SPLP Volatile Organic Compounds (VOCs) and SPLP Semi-Volatile Organic Compounds (SVOCs). Analytical results indicated the following concentration ranges:

CONSTITUENT	CONCENTRATION RANGES
BENZENE	ND to 0.82 mg/kg
BTEX	ND to 4.42 mg/kg
TPH	ND to 46,600 mg/kg
SPLP TPH	ND
SPLP VOCs	ND
SPLP SVOCs	ND

Analytical results from the soil samples are summarized in TABLE I. Quality assurance/quality control methods used during sampling activities are presented in APPENDIX C.

CLOSURE ACTIVITIES

CLOSURE STANDARDS

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

Depth to Ground Water	Less Than 50 Feet	20 Points
	Greater Than 1000 Feet to Water Source	
Well Head Protection	Greater Than 200 Feet to Private Water Source	0 Points
Surface Water Body	Greater Than 1000 Feet	0 Points
	Total Ranking Score	**20 Points**

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

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

EXCAVATION, TREATMENT, AND BACKFILL

Impacted soils were excavated and placed on plastic on-site. The soils and rock were processed through a soil shredder to separate rock from soil and reduce TPH concentrations. Approximately 320 yd^3 of rock and 440 yd^3 of soil were stockpiled separately on-site. The stockpiled rock was transported off-site to backfill an existing caliche pit. Approximately 210 yd^3 of clean fill material was purchased and blended with the excavated soil stockpile and used to backfill the excavation. Disposal and backfill documentation is presented in APPENDIX B. 2240'

CONFIRMATION SAMPLING

Confirmation soil samples were collected on May 27, 1998, from the excavation sidewalls and floor. Composite samples were also collected from the soil stockpile prior to blending with clean soil on May 27, 1998, and after blending with clean soil on June 4, 1998. The samples were submitted for determination of BTEX and TPH concentrations. The concentration ranges are presented below:

SOIL CONSTITUENT	BENZENE (mg/kg)	BTEX (mg/kg)	TPH (mg/kg)
Sidewall	ND	0.632 and 0.956	ND
Bottom	ND	ND and 4.737	34 and 99
Stockpile (prior to blending)	ND	3.821	1,950
Stockpile (after blending)	ND	1.157	561

During a previous investigation, soil boring B5-1 was advanced within the stained area, which is now the excavation area. The soil sample from this boring with the highest TPH concentration (46,600 mg/kg) was also tested for SPLP VOC, SPLP SVOC, and SPLP TPH concentrations. These concentrations were all below detection limits.

Analytical results from the soil samples are summarized in TABLE I. Soil analytical reports are presented in APPENDIX A. The soil sample locations and results are presented on FIG. 2.

CLOSURE SUMMARY

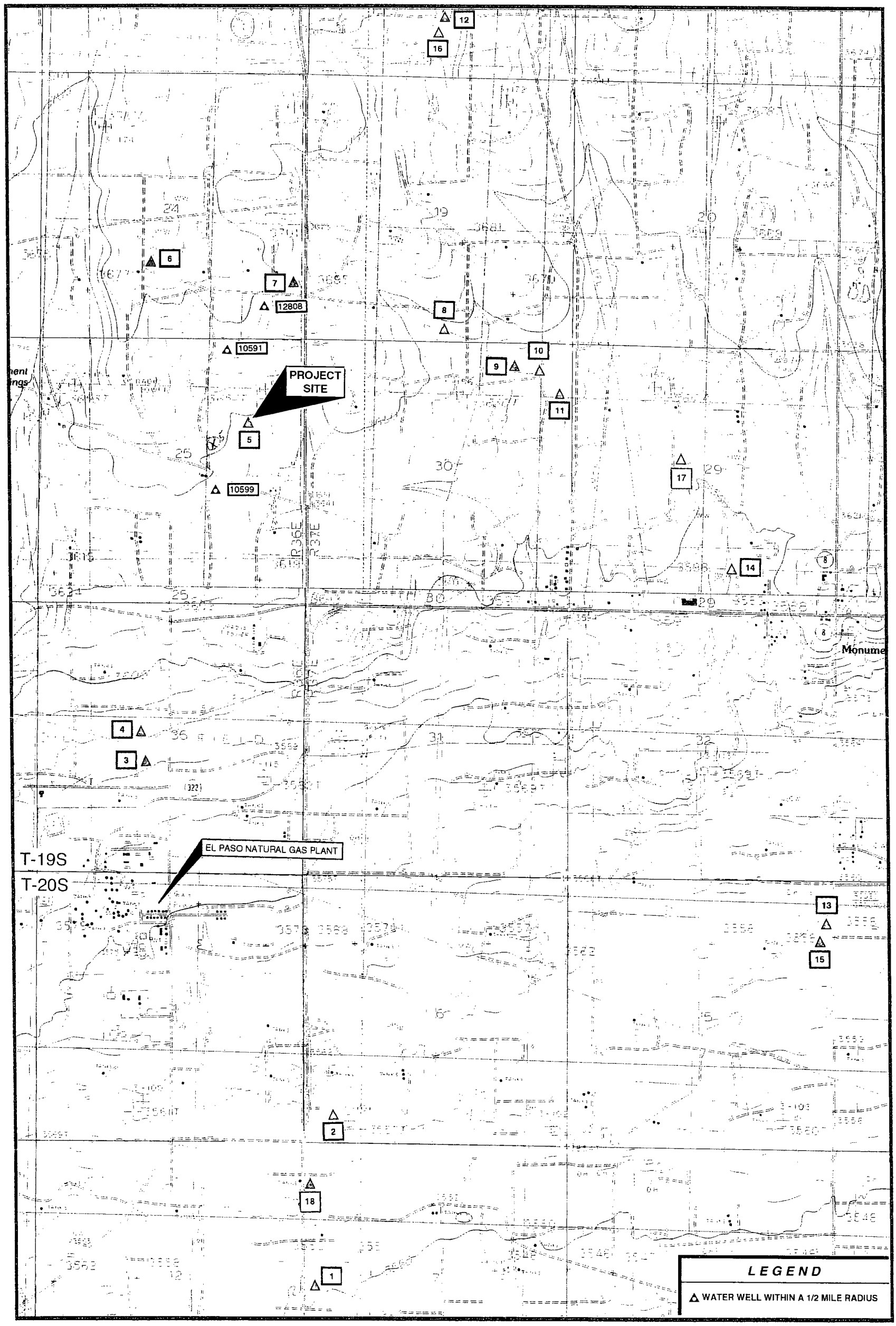
The following can be summarized from field and analytical data:

- Confirmation samples taken from the bottom hole and sidewalls of the excavation indicated BTEX and TPH concentrations below OCD closure standards.
- Approximately 320 yd^3 of rock was transported off-site to backfill an existing caliche pit.
- Approximately 440 yd^3 of impacted soil was blended with approximately 210 yd^3 of clean soil and backfilled in the excavation.
- A sample taken from the excavation area during a previous investigation with a TPH concentration of 46,600 mg/kg exhibited no detectable concentrations of SPLP VOC, SPLP SVOC, and SPLP TPH.
- Ground water impact at the site is apparently not related to TNMPL activities.

Based on activities completed at the site and analytical results from selected soil samples, we request the site be closed under OCD regulations governing releases impacting soils only.

MONUMENT NORTH QUADRANGLE
NEW MEXICO - LEA COUNTY
PRINTED 1985

MONUMENT SOUTH QUADRANGLE
NEW MEXICO - LEA COUNTY
PRINTED 1985



SCALE 1:24000

1 0 1/2 1 MILE

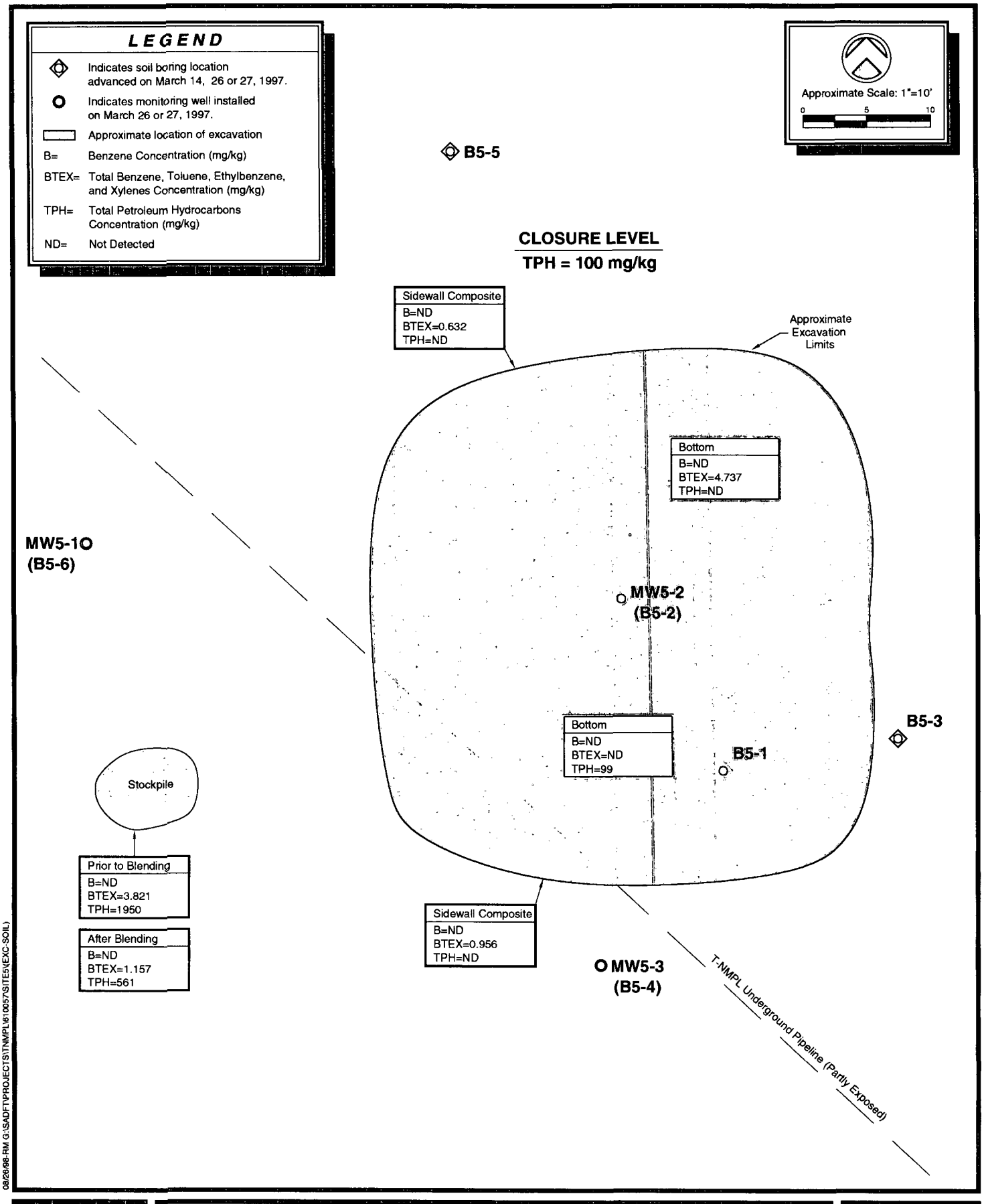
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETRE

CONTOUR INTERVAL 5 FEET

05/21/96-JB (610057SL)

k·e·i	*SITE LOCATION MAP*	610057
	TEXAS - NEW MEXICO PIPE LINE CO. MONUMENT SITE NO. 5 LEA COUNTY, NEW MEXICO	FIG 1



08/26/98-RM G:\SADFT\PROJECTS\TNMPL\610057\SITE5\EXC-SOIL)

k·e·i	APPROXIMATE EXCAVATION AREA AND SAMPLE LOCATIONS	610057
	TEXAS - NEW MEXICO PIPE LINE CO. MONUMENT SITE NO. 5 LEA COUNTY, NEW MEXICO	FIG 2

GENERAL NOTES

ND - Indicates constituent was not detected above the method detection or laboratory reporting limit.
--- - Indicates no depth was referenced on the chain-of-custody (TABLE I)

Method detection/reporting limits:

Soil:	TPH	-	10 mg/kg
	Benzene	-	0.020 to 0.050 mg/kg
	Toluene	-	0.020 to 0.050 mg/kg
	Ethylbenzene	-	0.020 to 0.050 mg/kg
	Xylene	-	0.060 to 0.150 mg/kg
	BTEX	-	0.120 to 0.300 mg/kg
	SPLP TPH	-	1.2 mg/L
	SPLP VOCs	-	0.025 to 0.050 mg/L
	SPLP SVOCs	-	0.010 to 0.025 mg/L

Laboratory test methods:

Soil:	TPH (by TNMPL)	-	Modified EPA Method 8015 DRO
	TPH (by KEI)	-	EPA Method 418.1
	BTEX	-	EPA Method SW846-8020
	SPLP TPH	-	EPA Method 1312/418.1
	SPLP VOCs	-	EPA Method 1312/8260
	SPLP SVOCs	-	EPA Method 1312/8270

TABLE I

SUMMARY OF SOIL RESULTS - BTEX AND TPH
MONUMENT SITE NO. 5
LEA COUNTY, NEW MEXICO

SAMPLE LOCATION	SAMPLE DATE	DEPTH (feet)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	XYLENES (mg/kg)	TOTAL BTEX (mg/kg)	TPH (mg/kg)
B5-1	3/14/97	1 - 2	ND	ND	ND	0.108	0.108	19,000
B5-1	3/26/97	5 - 6	0.82	1.01	0.65	1.94	4.42	46,600
B5-1	3/26/97	15 - 16	NT	NT	NT	NT	NT	46.0
B5-1	3/26/97	21 - 22	ND	ND	ND	ND	ND	14.5
B5-2	3/14/97	0 - 1	ND	ND	ND	ND	ND	43.0
B5-2	3/26/97	5 - 6	ND	ND	ND	ND	ND	ND
B5-2	3/26/97	21 - 22	ND	ND	ND	ND	ND	ND
B5-3	3/14/97	0.5 - 1	ND	ND	ND	ND	ND	41.0
B5-4	3/14/97	1 - 2	ND	ND	ND	ND	ND	54.0
B5-4	3/14/97	5 - 6	ND	ND	ND	ND	ND	30.5
B5-4	3/14/97	21 - 22	ND	ND	ND	ND	ND	22.0
B5-5	3/26/97	--	NT	NT	NT	NT	NT	NT
B5-6	3/26/97	5 - 6	ND	ND	ND	ND	ND	10.5
B5-6	3/26/97	19 - 20	ND	ND	ND	ND	ND	11.5
BOTTOM HOLE COMPOSITE								
SECTION A	5/27/98	—	ND	ND	ND	ND	ND	99
SECTION B	5/27/98	—	ND	0.950	1.014	2.773	4.737	34
SIDEWALL COMPOSITE								
SECTION A	5/27/98	—	ND	0.247	0.160	0.549	0.956	ND
SECTION B	5/27/98	—	ND	0.172	ND	0.460	0.632	ND
STOCKPILE PRIOR TO BLENDING	5/27/98	—	ND	0.532	0.653	2.636	3.821	1,950
STOCKPILE AFTER BLENDING	6/4/98	—	ND	0.182	0.171	0.804	1.157	561

NOTES:

1. Sample B5-1 (1-2) was sampled on 03/26/97 and analyzed for SPLP volatiles, semivolatiles and TPH concentrations. Lab results indicated no constituent was detected above the method detection limit.

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

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

Receiving Date: 05/28/98
Sample Type: SOIL
Project #: TNM SITE 5
Project Name: NONE GIVEN
Project Location: MONUMENT, NM LEA CO.

Analysis Date: 05/28/98
Sampling Date: 05/27/98
Sample Condition: Intact/Iced

ELT#	FIELD CODE	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYLBENZENE (mg/kg)	m,p-XYLENE (mg/kg)	o-XYLENE (mg/kg)	TPH (DRO) >C10-C28 (mg/kg)
14486	05-27-98 SEC A BH COMP	<0.100	<0.100	<0.100	<0.100	<0.100	99
14487	05-27-98 SEC A SW COMP	<0.100	0.247	0.160	0.398	0.151	<10
14488	05-27-98 BH SEC B COMP	<0.100	0.950	1.014	0.867	1.906	34
14489	05-27-98 SW SEC B COMP	<0.100	0.172	<0.100	0.181	0.279	<10
14490	05-27-98 Particlized Soil Comp	<0.100	0.532	0.653	1.471	1.165	1,950
	% IA	111	112	111	109	114	110
	% EA	95	97	96	95	99	93
	BLANK	<0.001	<0.001	<0.001	<0.001	<0.001	<10

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

Michael R. Fowler

5-29-98
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

Project Manager: Clayton A. McDonald
Phone #: 915/682-3547
FAX #: 915/682-4182

Company Name & Address: ALLLSTATE SERVICES ENVIRONMENTAL, MIDLAND, TEXAS

Project #: TNM Site 5
Project Name:

Project Location: Monument NM
Sampler Signature: Leo Co. CA McDonald

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	DRO 8015
14486	05-22-98 BH Comp Sec A	1			X						X			May 27, 98	14:15	X								X
14487	05-22-98 SW Comp Sec A	1			X						X			May 27, 98	14:00	X								X
14488	05-22-98 BH Comp Sec B	1			X						X			May 27, 98	14:30	X								X
14489	05-22-98 SW Comp Sec B	1			X						X			May 27, 98	14:45	X								X
14490	05-22-98 Pentrated Soil Comp	1			X						X			May 27, 98	15:00	X								X

Relinquished by:	Date:	Time:	Received by:
CA McDonald	5-28-98	07:10	
	5-28-98	0835	

REMARKS

Relinquished by:
Date:
Time:
Received by Laboratory:

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

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

Receiving Date: 06/04/98
Sample Type: Soil
Project #: TNM Site 5
Project Name: None Given
Project Location: Monument, N.M.

Analysis Date: 06/04/98
Sampling Date: 06/04/98
Sample Condition: Intact/Iced

ELT#	FIELD CODE	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYLBENZENE (mg/kg)	m,p-XYLENE (mg/kg)	o-XYLENE (mg/kg)	TPH (DRO) >C10-C28 (mg/kg)
14533	06-04-98 Blended Pile Comp.	<0.100	0.182	0.171	0.480	0.324	561
	% IA	95	97	97	95	100	106
	% EA	94	99	96	94	97	95
	BLANK	<0.001	<0.001	<0.001	<0.001	<0.001	<10

1.157

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

Michael R. Fowler

6-5-98
Date