

1R - 133

---

# REPORTS

DATE:

1996

---

Submit 3 Copies  
to Appropriate  
District Office

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-103  
Revised 1-1-89

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

**OIL CONSERVATION DIVISION**  
310 Old Santa Fe Trail, Room 206  
Santa Fe, New Mexico 87503

WELL API NO.
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Ref # TNM-96-21
8. Well No.
9. Pool name or Wildcat

**SUNDRY NOTICES AND REPORTS ON WELLS**  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: OIL WELL  GAS WELL  OTHER Pipeline

2. Name of Operator  
Texas-New Mexico Pipeline Co.

3. Address of Operator  
P.O. Box 60028 San Angelo Tx.

4. Well Location  
Unit Letter \_\_\_\_\_ : \_\_\_\_\_ Feet From The \_\_\_\_\_ Line and \_\_\_\_\_ Feet From The \_\_\_\_\_ Line  
NW/4 NW/4 Section 18 Township 25 S Range 36 E NMPM Lea County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

<b>NOTICE OF INTENTION TO:</b>	<b>SUBSEQUENT REPORT OF:</b>
PERFORM REMEDIAL WORK <input checked="" type="checkbox"/>	REMEDIAL WORK <input checked="" type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>
OTHER: _____ <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
	CASING TEST AND CEMENT JOB <input type="checkbox"/>
	OTHER: _____ <input type="checkbox"/>

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.  
See Attachments

**RECEIVED**  
DEC 02 1996

Environmental Bureau  
Oil Conservation Division

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE John A. Savoie TITLE Senior Tech DATE 11/22/96

NAME OR PRINT NAME John A. Savoie TELEPHONE NO. 505-395-2705

(This space for State Use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

TEXAS-NEW MEXICO PIPE LINE COMPANY  
CLOSURE SUMMARY

LEGAL DESCRIPTION SEC.18, T-25-S, R-36-E  
TNM SPILL REFERENCE NO. TNM-96-21  
DATE OF LOSS 6-6-96

SURFACE AREA AFFECTED 8208 Square feet.

EXCAVATION DEPTH 10 ft. to 16 ft.

CUBIC YARDS EXCAVATED 4,256

HAZARDOUS WASTE DETERMINATION 6-10 AND 6-19-96

TCLP METALS (PPM)

AG	AS	BA	CD	CR	HG	PB	SE
.04	<.002	1.2	<.005	<.05	<.002	<.10	<.002

IGNITABILITY (DEG F)

>140 F

TOXICITY (MG/KG)

BENZENE	TOLUENE	EHYLBENZENE	M.P.-XYLENE	O-XYLENE	TPH
<.100	.189	1.750	5.428	3.365	15,700

DEPTH TO GROUND WATER 180.90 FT.

DISTANCE TO SURFACE WATER GREATER THAN 1 MILE

DISTANCE TO WATER WELL GREATER THAN 1 MILE

TOTAL RANKING 0

BOTTOM HOLE SAMPLES

DEPTHS COMPOSITE AT 10 TO 16 FT.

TOXICITY (MG/KG)

BENZENE	TOLUENE	EHYLBENZENE	M.P.-XYLENE	O-XYLENE	TPH
<.100	<.100	<.100	<.100	<.100	<10

SIDE WALL SAMPLES

TOXICITY (MG/KG)

BENZENE	TOLUENE	EHYLBENZENE	M.P.-XYLENE	O-XYLENE	TPH
<.100	<.100	<.100	<.100	<.100	50

BACKFILL MATERIAL

SAMPLE I.D.	DATE	TPH (PPM)
J1	7/12/96	11,200
J2	"	11,450
J3	"	12,450
J4	"	8,140
J5	"	8,540
J6	"	3,460
J7	"	4,590
J8	"	5,100
J9	"	4,160

TOTAL AREA INVOLVED IN BLENDING AND REMEDIATION 65,000 SQ. FT.

SAMPLE I.D.	DATE 7/19/96	TPH (PPM)	DATE 7/23/96	
A-1		4,740		
B-1		7,210		
C-1		4,440		X PLACED BACK INTO EXCAVATION
D-1		8,800	3,120	X PLACED BACK INTO EXCAVATION
E-1		650		X PLACED BACK INTO EXCAVATION
F-1		8,270	4,220	X PLACED BACK INTO EXCAVATION
G-1		1,030		
H-1		7,700		
I-1		1,090		X PLACED BACK INTO EXCAVATION
J-1		920		X PLACED BACK INTO EXCAVATION
K-1		3,020		X PLACED BACK INTO EXCAVATION

TOTAL AREA INVOLVED 96,180 SQ. FT.

A-1, B-1, G-1, H,1 BECAME QUAD 1,2,3,4

SMAPLE I.D.	DATE 8/5/96	TPH(PPM)	DATE 8/8/96	8/12/96	8/13/96
QUAD 1-B		7,210	5,730	6,660	4,830
QUAD 2-B		5,720	5,900	1,990	
QUAD 3-B		6,150	5,540	3,070	
QUAD 4-B		5,680	6,220		

ALL THE SOIL WAS THEN PLACED BACK INTO THE EXCAVATED AREA AND THE AREA BROUGHT BACK TO A NATURAL GRADE.

*J. A. Savoie*

John A. Savoie  
November 22, 1996  
TNMPLCO.

NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

POST OFFICE BOX 1980  
HOBBS, NEW MEXICO 88241-1980  
(505) 393-6161

NMOCD INTER-OFFICE CORRESPONDENCE

TO: Tony Savoie-Texas NM Pipeline  
From: Wayne Price-Environmental Engineer *Wayne Price*  
Date: July 1, 1996  
Reference: TNMPL 96-21 crude oil pipeline spill  
sec 13-Ts 25s-R36e .75 mi NW of Jal, NM.  
Subject: Request for verbal permission to start remedial  
actions due to possible rain.

Comments:

Tony Savoie supplied analyticals to verify stock piles are non-hazardous. TNMPL is planning to clean-up per NMOCD guidelines and will submit a final closure report per the guidelines on a C-103 upon completion of job.

cc: Jerry Sexton-NMOCD District I Supervisor  
Bill Olson-NMOCD Hydrogeologist-Environmental Bureau

attachments=yes in file

JAN 07, 1975 223.77      MAR 26, 1981 189.50      MAR 18, 1986 185.10

June 4, 1991 180.90

HIGHEST 185.10 MAR 18, 1986  
LOWEST 223.77 JAN 07, 1975

IDATE: 12/04/95

PROVISIONAL GROUNDWATER DATA LEA COUNTY.

PAGE1186

SITE ID: 320834103132501  
LOCATION: 25S.36E.12.123142  
OTHER ID: 11609  
ELEVATION: 3207.50  
USE: U  
DEPTH: 80  
GEO. UNIT: 110AVMB

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL MS						
NOV 30, 1964	57.37	NOV 30, 1965	57.37	MAR 27, 1968	56.22	DEC 09, 1970	58.56
	HIGHEST	56.22	MAR 27, 1968				
	LOWEST	58.56	DEC 09, 1970				

SITE ID: 320756103124801  
LOCATION: 25S.36E.13.241312  
OTHER ID: 13630  
ELEVATION: 3186.40  
USE: H  
DEPTH: 524  
GEO. UNIT: 2315NRS

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL MS
MAR 30, 1981	270.43

SITE ID: 320727103134601  
LOCATION: 25S.36E.14.42141  
OTHER ID: 11610  
ELEVATION: 3096.80  
USE: U  
DEPTH: 500  
GEO. UNIT: 2315NRS

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL MS
OCT 14, 1965	293.30

IDATE: 12/04/95

PROVISIONAL GROUNDWATER DATA LEA COUNTY.

PAGE1187

SITE ID: 320752103153501

State Of New Mexico  
Energy, Minerals and Natural Resources Department

**OIL CONSERVATION DIVISION**  
**Form C-103**  
**Item 12. Proposed or Completed Operations**  
**TNM 96-21**

In accordance with NMOCD Guidelines for Remediation of Leaks, Spills and Releases, Section VI.A.1. Soil Remediation, Texas-New Mexico Pipeline has excavated subject soil from the ground and field sampled for degree of contamination both in the excavated area and in the stockpiled material taken from the area of the release. Prior to excavation on 6-10-96, the following laboratory analyses were performed in order to characterize the site: BTEX & TPH SW 846-8020; EPA 418.1, TCLP Metals EPA SW 846-1131, 7061, 7760, 7130, 7190, 7420, 7471, 7741; Ignitability EPA SW 846-1010 (see accompanying copies of lab reports).

Field screening for TPH was accomplished on 6-19-96 (after excavation) which indicated the bottom hole results at below 100 ppm. Samples were composited for laboratory confirmatories and are presently being run. Sidewalls were sampled and composited for lab confirmatories. Results to follow.

Stockpiles were also analyzed on site using a Mega TPH analyzer for TPH content. It was determined from field screening of representative samples that TPH levels range from 620 ppm to 13,040 ppm.

In accordance with NMOCD Guidelines for Remediation of Leaks, Spills and Releases, Section VI A.2.b.iii Alternative Methods, Texas-New Mexico Pipeline proposes in-situ remediation utilizing dozers and backhoes to push the contaminated material from the stockpiles to begin the aeration process in order to reduce BTEX levels. As material is moved and aerated it shall be taken to a staging area to be blended with clean soil on site to reduce TPH and BTEX values.

Samples shall be collected from the treated soil to determine when recommended soil remediation action levels have been reached. Laboratory confirmatory samples will follow.

When appropriate levels are established, the remediated soil will be placed back into the original excavated area and the site shall be contoured, dressed and reseeded for closure.



## ALLSTATE SERVICES

P.O. BOX 11322  
MIDLAND, TEXAS 79702  
OFFICE: (915) 682-3547  
FAX: (915) 682-4182  
October 4, 1996



Texas New Mexico Pipeline  
P.O. Box 1018  
Eunice, New Mexico 88210

**RE: TNM 96-21  
T-25-S, R-36-E, Sec. 18  
Lea County, New Mexico**

Gentlemen:

Allstate Services Environmental has completed excavation and remediation operations at the above indicated site on August 16, 1996. The purpose of this operation was to define and identify the hydrocarbon affected soils and to remediate said material in accordance with the provisions of the New Mexico Oil Conservation Division and the plan of action selected by the client.

### HISTORICAL DATA

This site is located near Jal, New Mexico on privately owned land. A pipeline release apparently occurred on location and migrated Eastward from the point of origination in a pattern approximately 84' wide and 26' long near the pipeline, narrowing to about 12' wide and traveling another 102' to the East where it ponded, spreading out in an area about 50' X 96'.

### FIELD SCREENING METHOD

The field screening method for TPH analyses was utilized in this investigation based on infrared absorption. Most materials have characteristic infrared spectra. It is possible to compute the concentration of each of the materials by measuring the intensity of the characteristic infrared absorption bands based on the Beer-Lambert law. The field screening procedure utilizes the EPA 418.1 method for TPH analysis and was accomplished with a Mega TPH analyzer. This was used for a qualitative check to determine the presence or absence of petroleum hydrocarbons in the subject soil.

### REMEDICATION ACTIVITIES

On 6-10-96 the New Mexico One Call was made with a request for spotting underground pipelines and utilities. The Field Team and equipment were moved in on 6-11-96, lines were spotted and hand digging accomplished to expose subject pipelines and excavation began on 6-12-96.

Excavation was initiated at the origin of the release and continued to the East, following the migration of the material. The resulting contaminated soil was staged on site and on 6 mil plastic for later remediation. The excavated aperture measured approximately eleven to sixteen feet in depth overall. Surface dimensions varied over the site (see Appendix "A", Figure 1).

Once the contamination was removed, field screening was employed to identify the spots requiring additional excavation and those which would not exceed regulatory levels for petroleum hydrocarbon content in both the aperture and the stockpiles. See Appendix "A", Figures 2a & 2b.

Composite samples were gathered from the sidewalls and bottom hole as enumerated in NMOCD Guidelines for Remediation of Leaks, Spills and Releases; VI. Remediation, A. Soil Remediation, 1. Contaminated Soils, paragraph a). Laboratory analysis revealed TPH and BTEX levels well below regulatory requirements. See Appendix "A", Figure 3.

With excavation complete, the staged material was prepared for in situ remediation utilizing dozers and backhoes to push the contaminated soil from the stockpiles to begin the aeration process in order to reduce BTEX levels. As the material was moved and aerated it was blended with clean soil to reduce TPH and BTEX values.

On 7-11-96, composite soil samples were collected from the remediation area immediately to the Northeast of the pipeline and submitted for laboratory analysis. See Appendix "A", Figures 4a & 4b.

Laboratory results indicated some areas were below the 5000 ppm TPH requirements and some were above. High concentration areas J-1, J-2, J-3, J-4 and J-5 were again aerated, blended and applied in a lift of approximately 12"-24" over additional space adjacent to the excavated hole.

Again composite samples were gathered from the enlarged remediation site and submitted for laboratory analyses on 7-19-96. Map and lab results may be found in Appendix "A", Figures 5a & 5b. The areas of higher concentration were continuously aerated, blended and applied in a lift of approximately 12" to 18". On 7-23-96, composite sample were collected from D-2 and F-2 for lab analysis (see Appendix "A", Figure 5c). The material which was below action levels was used to start backfilling the excavated cavity (Segments C, D, E, F, I, J and K).

**Page Three**  
**TNM 96-21**

The remaining material was applied in a 12" lift over the remediation site, then aerated, blended and windrowed over a period of approximately 3-4 days. The area was divided into four quadrants and sampled on 8-5-96 (see Appendix "A", Figures 6a & 6b). Composite samples consisted of 24 aliquots per quad. Laboratory results were obtained on 8-6-96, indicating additional remediation was necessary.

Remediation activities on subject material subsequently continued for two days when composite samples were collected for laboratory analyses on 8-8-96. See Appendix "A", Figure 7. Remediation continued and composite sampling was done again on 8-12-96, see Figures 8a & 8b. Of the three areas sampled, two were below regulatory limits, Quads 2 & 3. The one remaining segment, Quad 1, was reworked and composite sampled on 8-13-96 when laboratory analysis resulted in acceptable levels of TPH in the remainder of the remediated material (Figure 9).

The remediated material was leveled and the site contoured to the surrounding topography. TNM-96-21 is considered remediated and closed as of 8-16-96.

A handwritten signature in black ink, consisting of several overlapping, stylized loops and lines, positioned below the main text.

**APPENDIX "A"**

FIGURE 1

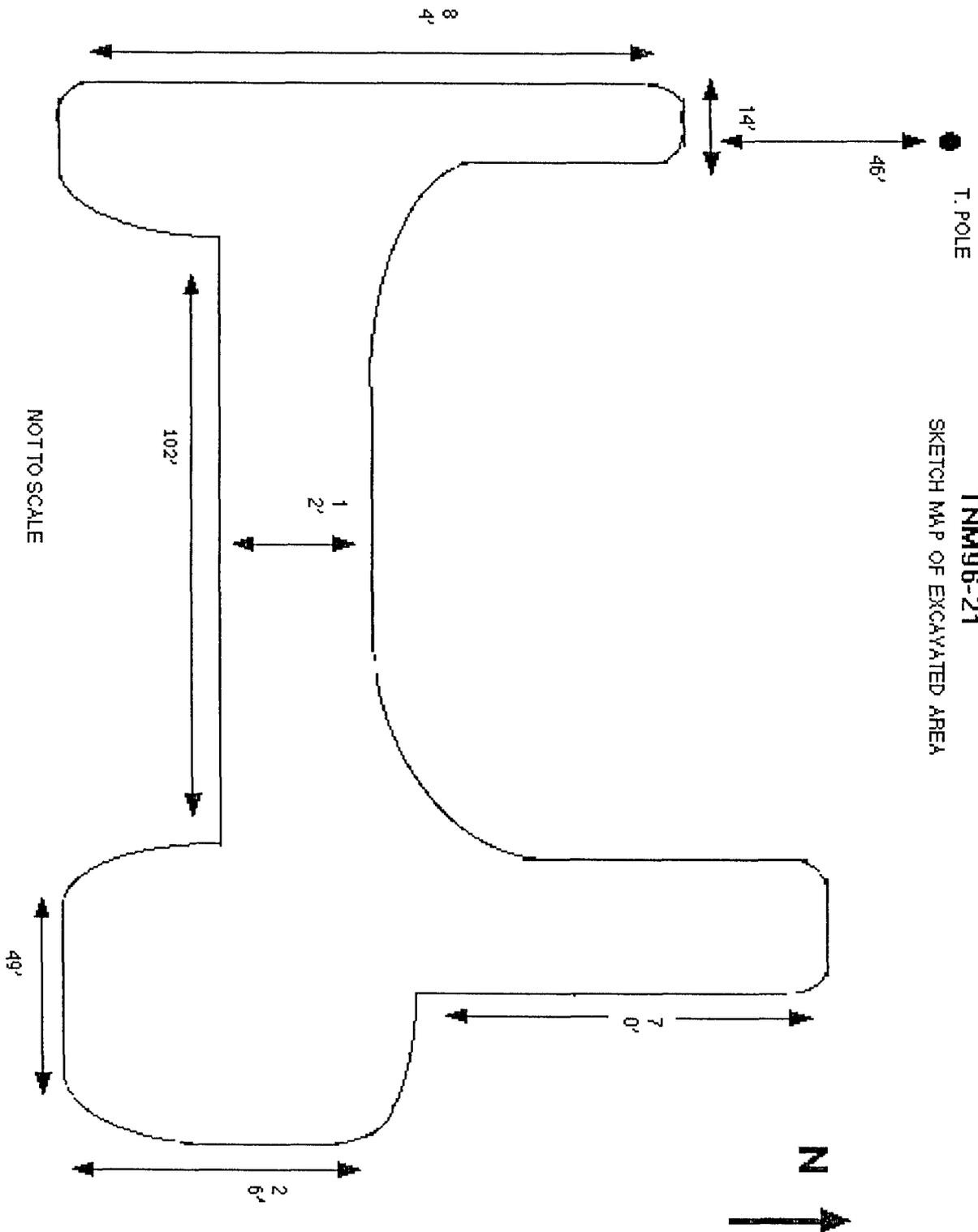
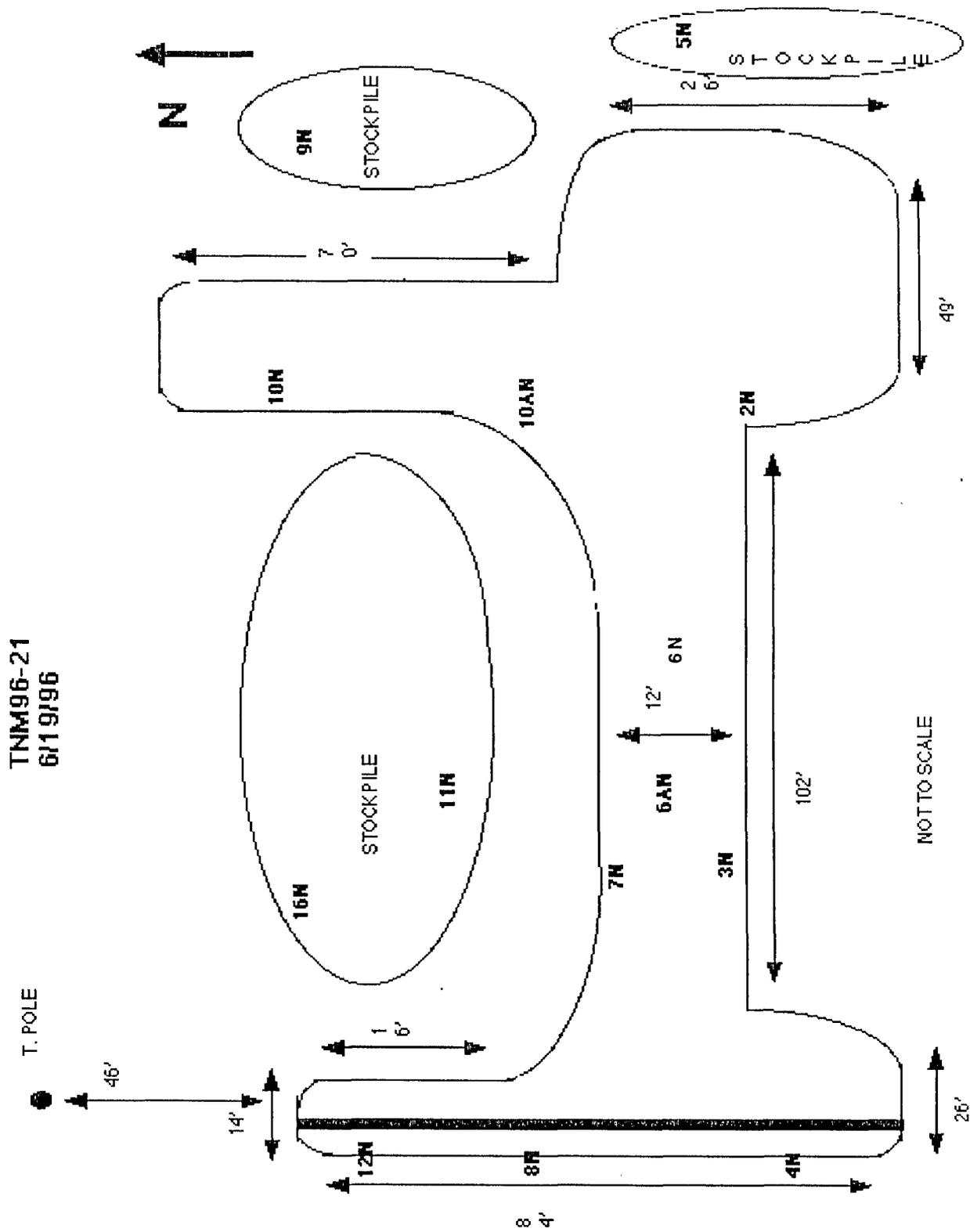


FIGURE 2a



**TNM96-21**  
FIELD SCREENING  
6/19/96

2N	Sidewall - 2:25 p.m.	13,590 ppm
3N	S. Sidewall 10' FS - 3:05 p.m.	60 ppm
5N	Stockpile E. - 2:29 p.m.	10,000 ppm
6N	Bottom Hole 16' FS - 2:35 p.m.	20 ppm
6AN	Center Trench BH - 3:06 p.m.	20 ppm
7N	N. Sidewall - 3:04 p.m.	50 ppm
8N	W. of PPL 8 1/2' FS - 3:01 p.m.	80 ppm
9N	Stockpile E. - 2:30 p.m.	6,070 ppm
10N	Sidewall - 2:33 p.m.	30 ppm
10AN	Sidewall of Hot Material & Stockpile - 2:39 p.m.	10,080 ppm
11N	Stockpile N. - 2:40 p.m.	13,040 ppm
16N	Stockpile N.W. - 3:00 p.m.	620 ppm

FIGURE 3

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

TEXAS NEW MEXICO PIPE LINE COMPANY  
ATTN: MR. JOHNNY CHAPMAN  
P.O. BOX 1018  
EUNICE, NM 88231  
FAX: 505-394-2591  
FAX: 915-682-4182

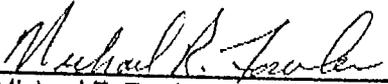
Receiving Date: 06/21/96  
Sample Type: SOIL  
Project: TNM 96-21  
Project Location: LEA CO. N.M.

Analysis Date: 06/24/96  
Sampling Date: 06/21/96  
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 (mg/kg)
7781	TNM 96-21-96621-1S	<0.100	<0.100	<0.100	<0.100	<0.100	50
7782	TNM 96-21-96621-2B	<0.100	<0.100	<0.100	<0.100	<0.100	<10

% IA	93	98	101	100	100	108
% EA	85	83	93	97	97	105
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001	<10

METHODS: SW 846-8020,5030 , EPA 418.1

  
Michael R. Fowler

6-24-96  
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

Allstate Services Environmental  
 P.O. Box 11322  
 Midland, Texas 79702  
 Phone #: (915) 682-3547  
 FAX #: (915) 682-4182

ANALYSIS REQUEST

Project Name: TMM96-21

Project #:

Project Location:

Lea Co., N. M.

Sampler Signature:

*[Signature]*

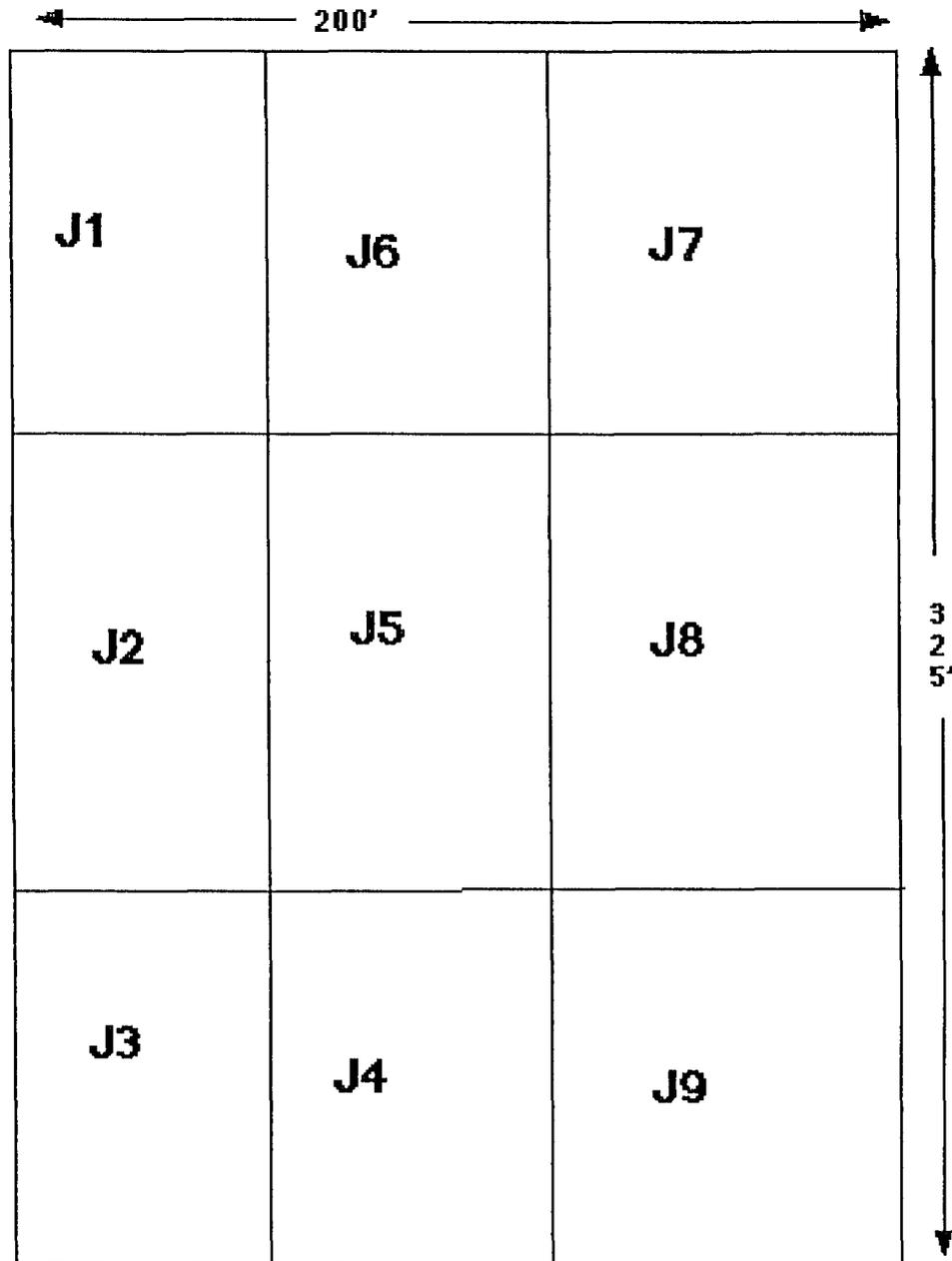
LAB # (LAB USE ONLY)	FIELD CODE (Sample Site)	# CONTAINERS	Volume/Amount	MATRIX						DATE	TIME		
				WATER	SOIL	AIR	SLUDGE	OTHER	HCL				
				PRESERVATIVE METHOD			SAMPLING						
7781	TMM96-21-96621-1S												
7782	TMM96-21-96621-2B												

BTEX 8020/5030
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
Field Elec. Cond. (FEC)
ELEC. Cond (EC)
SAR
Total Chlorides
Moisture
N/P/K
PH
PAH

Relinquished by:	Date:	Times:	Received by:	REMARKS
<i>[Signature]</i>	<u>6/21/96</u>	<u>4:30</u>	<i>[Signature]</i>	
Relinquished by:	Date:	Times:	Received by:	

FIGURE 4a

TNM96-21  
7/11/96



# ENVIRONMENTAL LAB OF , INC.

FIGURE 4b

"Don't Treat Your Soil Like Dirt!"

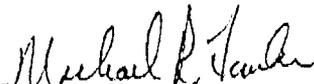
TEXAS NEW MEXICO PIPE LINE COMPANY  
MR. JOHNNY CHAPMAN  
P.O. BOX 1018  
EUNICE, NM 88231  
FAX: 505-394-2591

RECEIVING DATE: 07/12/96  
SAMPLE TYPE: SOIL  
PROJECT #: TNM 96-21  
PROJECT NAME: TNM 96-21  
PROJECT LOCATION: JAL, NM

ANALYSIS DATE: 07/15/96  
SAMPLING DATE: 07/12/96  
SAMPLE CONDITION: INTACT/ICED

ELT#	FIELD CODE	TPH (mg/kg)
7929	J1	11,200
7930	J2	11,450
7931	J3	12,450
7932	J4	8,140
7933	J5	8,540
7934	J6	3,460
7935	J7	4,590
7936	J8	5,100
7937	J9	4,160
QUALITY CONTROL		808
TRUE VALUE		880
% PRECISION		92

Methods: EPA 418.1

  
Michael R. Fowler

7-15-96  
Date

# Environmental Lab of Texas, Inc. 12600 West 1-20 East Odessa, Texas 79763

(915) 563-1800 FAX (915) 563-1713

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

**Allstate Services Environmental**  
 Phone #: (915) 682-5547  
 P.O. Box 11322  
 Midland, Texas 79702  
 FAX #: (915) 682-4182

ANALYSIS REQUEST

Project Name: TMM 920-21

Project #:

Project Location: Jal, N.V.

Sampler Signature: *[Signature]*

LAB # (LAB USE ONLY)	FIELD CODE (Sample Site)	# CONTAINERS	Volume/Amount	MATRIX						PRESERVATIVE METHOD				DATE	TIME	REMARKS
				WATER	SOIL	AIR	SLUDGE	OTHER	HCL	HNO3	ICE	NONE	OTHER			
7929	J1	1	4oz	✓										7-12-92		✓
7930	J2	1		✓												✓
7931	J3	1		✓												✓
7932	J4	1		✓												✓
7933	J5	1		✓												✓
7934	J6	1		✓												✓
7935	J7	1		✓												✓
7936	J8	1		✓												✓
7937	J9	1		✓												✓

Relinquished by: *[Signature]* Date: 9/12/92 Time: 1030  
 Received by: *[Signature]* Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Received by Laboratory: \_\_\_\_\_

REMARKS

- BTEX 8020/5030
- 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
- Field Elec. Cond. (FEC)
- Elec. Cond. (EC)
- SAR
- Total Chlorides
- Moisture
- N/P/K
- PH
- PAH

# ENVIRONMENTAL

# LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

FIGURE 5a

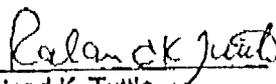
TEXAS NEW MEXICO PIPE LINE COMPANY  
MR. JOHNNY CHAPMAN  
P.O. BOX 1018  
EUNICE, NM 88231  
FAX: 505-394-2591

RECEIVING DATE: 07/19/96  
SAMPLE TYPE: SOIL  
PROJECT #: TNM 96-21  
PROJECT NAME: TNM 96-21  
PROJECT LOCATION: LEA CTY. NEW MEXICO

ANALYSIS DATE: 07/22/96  
SAMPLING DATE: 07/19/96  
SAMPLE CONDITION: INTACT/ICED

ELT#	FIELD CODE	TPH (mg/kg)
8022	960719 A-1	4,740
8023	960719 B-1	7,210
8024	960719 C-1	4,440
8025	960719 D-1	8,800
8026	960719 E-1	850
8027	960719 F-1	8,270
8028	960719 G-1	1,030
8029	960719 H-1	7,700
8030	960719 I-1	1,090
8031	960719 J-1	920
8032	960719 K-1	3,020
	QUALITY CONTROL	336
	TRUE VALUE	306
	% PRECISION	110

Methods: EPA 418.1

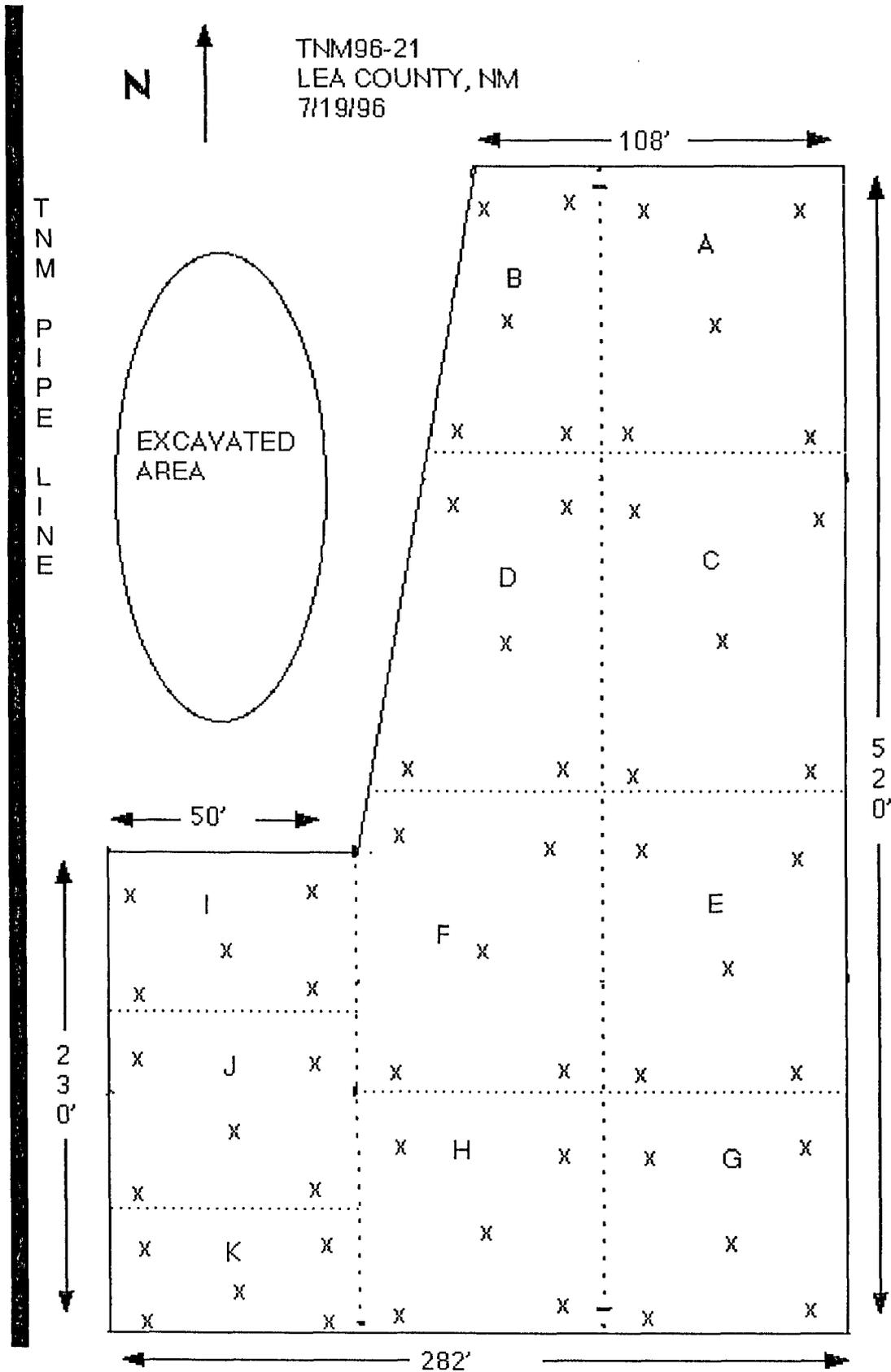
  
Raland K. Tuttle

7-22-96  
Date

COC 7



FIGURE 5b



# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

Figure 5C

TEXAS NEW MEXICO PIPE LINE COMPANY  
MR. JOHNNY CHAPMAN  
P.O. BOX 1018  
EUNICE, NM 88231  
FAX: 505-394-2591

RECEIVING DATE: 07/23/96  
SAMPLE TYPE: SOIL  
PROJECT #: TNM 96-21  
PROJECT NAME: TNM 96-21  
PROJECT LOCATION: LEA COUNTY, NM

ANALYSIS DATE: 07/23/96  
SAMPLING DATE: 07/23/96  
SAMPLE CONDITION: INTACT/ICED

ELT#	FIELD CODE	TPH (mg/kg)
8089	960723 D-2	3,120
8090	960723 F-2	4,220

QUALITY CONTROL	312
TRUE VALUE	306
% PRECISION	102

Methods: EPA 418.1

Raland K Tuttle  
Raland K. Tuttle

7-23-96  
Date



# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

Figure 6a

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

RECEIVING DATE: 08/06/96  
SAMPLE TYPE: SOIL  
PROJECT #: TNM 96-21  
PROJECT NAME: TNM 96-21  
PROJECT LOCATION: NEAR JAL, NM

ANALYSIS DATE: 08/06/96  
SAMPLING DATE: 08/05/96  
SAMPLE CONDITION: INTACT/ICED

ELT#	FIELD CODE	TPH (mg/kg)
8285	960805 QUAD 1-B	7,210
8286	960805 QUAD 2-B	5,720
8287	960805 QUAD 3-B	6,150
8288	960805 QUAD 4-B	5,680
	QUALITY CONTROL	854
	TRUE VALUE	888
	% PRECISION	96

Methods: EPA 418.1, 3550

  
Michael R. Fowler

8-6-96  
Date

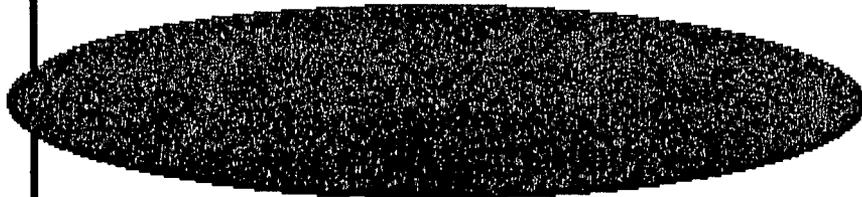


FIGURE 6b



**TNM 96-21 Sketch Map of Remediation Area**

<b>24 Aliquots per composite in each quad</b>	
QUAD 1	
QUAD 2	
QUAD 3	
QUAD 4	



**EXCAVATED CAVITY**

P  
I  
P  
E  
L  
I  
N  
E

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

Figure 7

TEXAS NEW MEXICO PIPE LINE COMPANY  
MR. JOHN A. SAVOIE  
P.O. BOX 1030  
JAL, NM 88252  
FAX: 505-395-2636

Receiving Date: 08/08/96  
Sample Type: SOIL  
Project :TNM 96-21  
Project Location: JAL, NM

Analysis Date: 08/08/96  
Sampling Date: 08/08/96  
Sample Condition: Intact/Iced

ELT#	FIELD CODE	TPH (mg/kg)
8409	960808-2C	5,900
8410	960808-3C	5,540
8411	960808-1C	5,730
8412	960808-4C	6,220

QUALITY CONTROL	225
TRUE VALUE	220
% PRECISION	102

METHODS: EPA 418.1

  
Michael R. Fowler

8-9-96  
Date



# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

Figure 8 A

TEXAS NEW MEXICO PIPE LINE COMPANY  
MR. JOHN A. SAVOIE  
P.O. BOX 1030  
JAL, NM 88252  
FAX: 505-395-2636

Receiving Date: 08/12/96  
Sample Type: SOIL  
Project : TNM 96021  
Project Location: LEA COUNTY N. MEXICO

Analysis Date: 08/12/96  
Sampling Date: 08/12/96  
Sample Condition: Intact/Iced

ELT#	FIELD CODE	TPH (mg/kg)
8453	QUAD 1 960812 COMP	6,660
8454	QUAD 2 960812 COMP	1,990
8455	QUAD 3 960812 COMP	3,070

QUALITY CONTROL	220
TRUE VALUE	220
% PRECISION	104

METHODS: EPA 418.1

  
Michael R. Fowler

8-13-96  
Date

# Environmental Lab of Texas, Inc. 12600 West 120 East Odessa, Texas 79763

(915) 563-1800 FAX (915) 563-1713

## CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: *ALSTON SERVICES ENV.*  
 Phone #:   
 FAX #:   
 Company Name & Address: *TARRANT*

### ANALYSIS REQUEST

Project #: *TMM 96-81*  
 Project Name:   
 Project Location: *LEA COUNTY W. MEXICO*  
 Sampler Signature: *Paul O. Phillips*

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX						DATE	TIME	BTX #020/5030	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
				WATER	SOIL	AIR	SLUDGE	OTHER	HCL										
8453	QUAD 1 960812 COMP	1		<input checked="" type="checkbox"/>							5-12	1000							
8454	QUAD 2 960812 COMP	1		<input checked="" type="checkbox"/>							5-12	1015							
8455	QUAD 3 960812 COMP	1		<input checked="" type="checkbox"/>							5-12	1030							

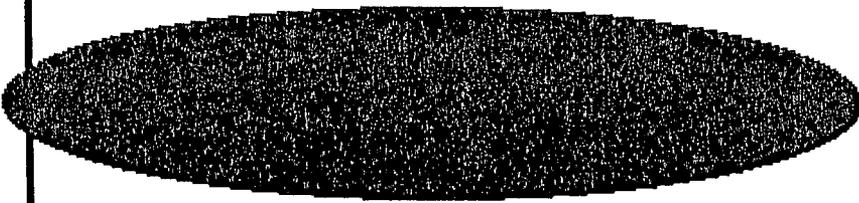
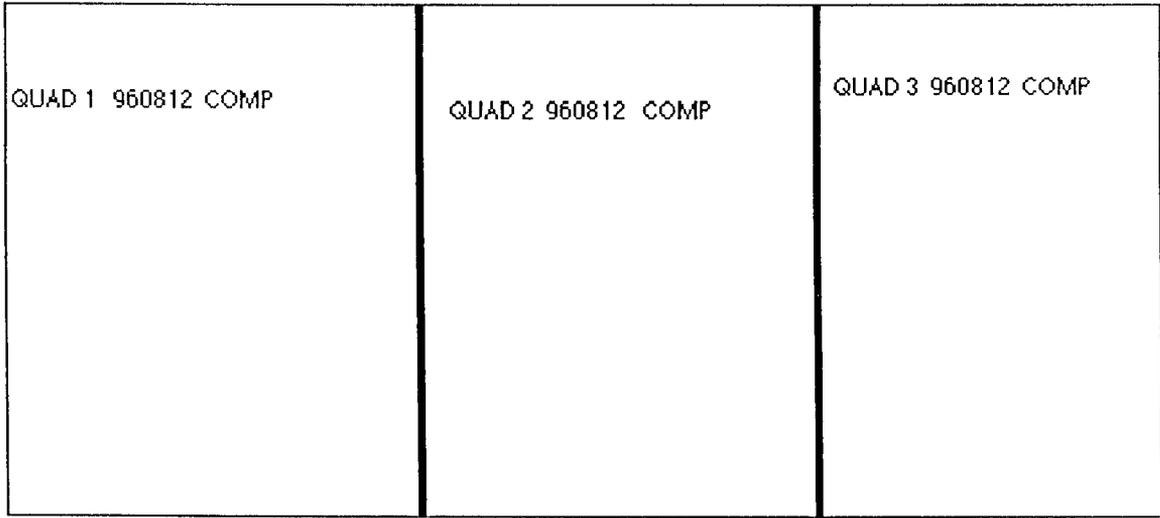
Relinquished by: *P. O. Phillips* Date: *5-12-96* Time: *1435* Received by: *Michelle Fancher*  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_

REMARKS: *80 SAMPLES AIR - COMP.*

FIGURE 8b



**TNM 96-21 Sketch Map of Remediation Area**



**EXCAVATED CAVITY**

P  
I  
P  
E  
L  
I  
N  
E

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

Figure 9

TEXAS NEW MEXICO PIPE LINE COMPANY  
MR. JOHN A. SAVOIE  
P.O. BOX 1030  
JAL, NM 88252  
FAX: 505-395-2636

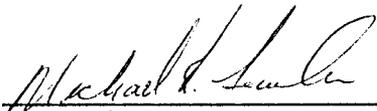
Receiving Date: 08/14/96  
Sample Type: SOIL  
Project : TNM 96-21  
Project Location: JAL, NM

Analysis Date: 08/14/96  
Sampling Date: 08/13/96  
Sample Condition: Intact /Iced

ELT#	FIELD CODE	TPH (mg/kg)
8471	960813-QUAD 1-E	4,830

QUALITY CONTROL	302
TRUE VALUE	302
% PRECISION	100

METHODS: EPA 418.1

  
\_\_\_\_\_  
Michael R. Fowler

8-14-96  
Date



# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

TEXAS NEW MEXICO PIPE LINE COMPANY  
 ATTN: MR. JOHNNY CHAPMAN  
 P.O. BOX 1018  
 EUNICE, NM 88231  
 FAX: 505-394-2591  
 FAX: 915-682-4182

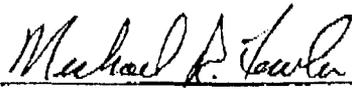
Receiving Date: 06/26/96  
 Sample Type: SOIL  
 Project: TNM 96-21 N.  
 Project #: TNM 96-21 N.

Analysis Date: 06/26/96  
 Sampling Date: 06/19/96  
 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 (mg/kg)
7798	TNM 96-21-COMP. PILE	<0.100	0.189	1.750	5.428	3.365	15.700

% IA	103	100	104	104	106	105
% EA	101	98	108	100	96	--
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001	<10

METHODS: SW 846-8020.5030, EPA 418.1

  
 Michael R. Fowler

6-27-96  
 Date

*Stack Pile Samples*

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

TEXAS NEW MEXICO PIPE LINE COMPANY  
ATTN: MR. JOHNNY CHAPMAN  
P.O. BOX 1018  
EUNICE, NM 88231  
FAX: 505-394-2591  
FAX: 915-682-4182

Receiving Date: 06/26/96  
Sample Type: SOIL  
Project: TNM 96-21 N.  
Project #: TNM 96-21 N.

Analysis Date: 06/26/96  
Sampling Date: 06/19/96  
Sample Condition: Intact/Iced

ELT#	FIELD CODE	IGNITABILITY (deg F)
7798	TNM 96-21-COMP. PILE	>140 F

RPD 0

Method: EPA SW 846-1010

Michael R. Fowler  
Michael R. Fowler

6.27.96  
Date

Stock pile sample

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

TEXAS NEW MEXICO PIPE LINE COMPANY  
ATTN: MR. JOHNNY CHAPMAN  
P.O. BOX 1018  
EUNICE, NM 88231  
FAX: 505-394-2591

Receiving Date: 06/10/96  
Sample Type: SOIL  
Project: NORTH TNM 98-21 & SOUTH 98-20  
Project Location: LEA COUNTY, N. MEX

Analysis Date: 06/13/96  
Sampling Date: 06/10/96  
Sample Condition: Intact/Iced

TCLP METALS (ppm)

ELT#	Field Code EPA LIMIT	Ag	As	Ba	Cd	Cr	Hg	Pb	Se
7684	N. TNM 98-21	0.04	<0.002	1.2	<0.005	<0.05	<0.002	<0.10	<0.002
7685	S. TNM 98-20	0.08	<0.002	0.7	0.017	0.05	<0.002	0.18	<0.002
MDL		0.02	0.002	0.50	0.005	0.05	0.002	0.10	0.002
% IA		98	93	97	99	109	101	103	92
% EA		98	99	79	98	80	120	100	86

METHODS: EPA SW 846-1311, 7061, 7080, 7760, 7130, 7190, 7420, 7471, 7741

  
Michael R. Fowler

6-14-96  
Date

Environmental Lab of Texas, Inc. 12600 West 120 East Odessa, Texas 79763  
 (915) 563-1800 FAX (915) 563-1713

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Allstate Services Environmental  
 P.O. Box 11322  
 Midland, Texas 79702  
 Phone #: (915) 682-3547  
 Fax #: (915) 682-4182

ANALYSIS REQUEST

Project Name: *TRM 96-21-N*

Project Location: *Lea County N. Mexico*  
 Sample Signature: *[Signature]*

LAB # (LAB USE ONLY)	FIELD CODE (Sample Site)	# CONTAINERS	Volume/Amount	MATRIX						PRESERVATIVE METHOD			SAMPLING	
				WATER	SOIL	AIR	SLUDGE	OTHER	HCL	HNO3	ICE	NONE	OTHER	DATE

7798 *TRM 96-21-Comp. Rte 1*  *2-19*

<input checked="" type="checkbox"/>	BTEX 8020/5030
<input checked="" type="checkbox"/>	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
<input checked="" type="checkbox"/>	<i>IGNITABILITY</i>
	Field Elec. Cond. (FEC)
	ELEC. COND (EC)
	SAR
	Total Chlorides
	Moisture
	N/P/K
	PH
	PAH

Relinquished by: *[Signature]* Date: *6-26-96* Times: *1500*

Relinquished by: *[Signature]* Date: \_\_\_\_\_ Times: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Times: \_\_\_\_\_

REMARKS: *Soil Pile Samples Composite North Release*

Received by: *[Signature]*  
 Received by Laboratory: \_\_\_\_\_

