CLOSURE REPORT



RECEIVED

APR 1 5 1998

ENVIRONMENTAL BUREAU OIL CONSERVATION DIVISION

CLOSURE REPORT

TEXAS - NEW MEXICO PIPE LINE COMPANY MONUMENT SITE 8 AND 8A LEA COUNTY, NEW MEXICO



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

CLOSURE REPORT

TEXAS - NEW MEXICO PIPE LINE COMPANY
MONUMENT SITE 8 AND 8A
LEA COUNTY, NEW MEXICO

PREPARED FOR:

TEXAS - NEW MEXICO PIPE LINE COMPANY

P. O. Box 1030 Jal, New Mexico 88252

Mr. Tony Savoie

PREPARED BY:

KEI

Theresa Nix Project Manager

Michael Hawthorne, P.G., REM

Senior Geologist

TABLE	OF	CONTENTS

EXECUTIVE SUMMARY	1
PURPOSE AND SCOPE	2
BACKGROUND INFORMATION	2
CLOSURE ACTIVITIES CLOSURE STANDARDS SOIL REMOVAL SOIL CHARACTERIZATION CONFIRMATION SAMPLING SOIL DISPOSAL BACKFILL AND RESTORATION	2
QA/QC PROCEDURES SOIL WATER	4
FIGURES FIG. 1 - SITE LOCATION MAP FIG. 2 - SITE DETAILS FIG. 3 - SAMPLING POINT LOCATIONS AND CONCENTRATIONS	
TABLES GENERAL NOTES TABLE I - SUMMARY OF LABORATORY RESULTS - SOIL TABLE II - SUMMARY OF LABORATORY RESULTS - WATER	
APPENDICES APPENDIX A - LABORATORY REPORTS CHAIN-OF-CUSTODY DOCUMENTATION APPENDIX B - DISPOSAL DOCUMENTATION	

EXECUTIVE SUMMARY

The Texas - New Mexico Pipe Line Company (TNMPL) alleged release sites 8 and 8A are located approximately 1.8 miles west of Monument in Lea County, New Mexico. The sites are specifically located in Section 5, Township 26 South, Range 37 East. A site location map is presented as FIG. 1. The sites are owned by the State of New Mexico and leased to Mr. Jimmy Cooper. Specific site details are presented on FIG. 2. This report summarizes closure activities performed at the project site from June through October of 1997.

Closure activities performed included the following:

- collection of soil samples from the initial excavation to determine hydrocarbon concentration levels;
- · excavation and stockpiling of additional soils which exceeded closure levels;
- collection of confirmation samples in the excavated area;
- · characterization of stockpiled soils;
- transportation and off-site landfarming of stockpiled soils; and
- · backfilling the excavation with clean soils.

The following conclusions are based on field and laboratory data:

The closure standards at the site were determined to be as follows:

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

- Approximately 833 cubic yards of impacted soil was excavated, stockpiled, and landfarmed off-site.
- Confirmation soil samples at the site indicated TPH, benzene, and BTEX concentrations below closure standards.

From the conclusions presented above, we request the site be closed under New Mexico Oil Conservation Division (OCD) regulations.

PURPOSE AND SCOPE

The objective of the site closure activities was to obtain closure for the site based on OCD regulations. The following activities were performed to achieve this objective:

- determination of closure standards;
- · removal of impacted soil;
- characterization of removed impacted soil;
- confirmation sampling in the excavated area;
- transportation and off-site landfarming of impacted soil; and
- backfilling with clean soil in the excavated area.

BACKGROUND INFORMATION

A hydrocarbon release was identified at the subject site during 1997. The following activities were performed as part of the current release response activities:

- Clean overburden soils including topsoil were removed and stockpiled on-site.
- Soils were excavated, stockpiled, and some soils were landfarmed off-site.
- Five exploratory soil borings were advanced at Site 8.
- Soil samples were collected from native soils during soil boring advancement.
- A water sample was collected from water which had accumulated in the excavation bottom at Site 8A.

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:

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

On June 6, 1997, exploratory soil boring B8-4 was re-entered and extended to the depth of ground water, at approximately 16.5 feet below ground surface.

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

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

SOIL REMOVAL

Additional soils were removed from the bottom and sidewalls of the existing excavation from June 6, 1997 through June 25, 1997. These soils included sediments which had washed into the excavation. An estimated 833 cubic yards were removed from the existing excavation and stockpiled on-site for characterization prior to off-site landfarming.

SOIL CHARACTERIZATION

The soil stockpiles were characterized by collecting two composite soil samples for determination of TPH. Laboratory results indicated TPH concentrations of 280 mg/kg and 3,500 mg/kg. Laboratory results are presented in APPENDIX A.

CONFIRMATION SAMPLING

Composite soil samples were collected from the excavation bottom and excavation sidewall and submitted for determination of TPH concentrations. Based on the laboratory results of the excavation bottom soil sample, additional soils were excavated and the bottom resampled. The sample locations are presented on FIG. 3.

A water sample was collected on June 12, 1997 from ground water which had accumulated in the excavation bottom at Site 8A and submitted for determination of BTEX and TPH concentrations. Laboratory results indicated BTEX and TPH concentrations of 0.006 mg/l and 6 mg/l, respectively.

Laboratory results of the final composite soil samples indicated the following:

SAMPLE LOCATION	MAX.TPH	MAX. BTEX	MAX. BENZENE
Final Soil Sidewall (mg/kg)	190*	1.277	0.183
Soil Bottom (mg/kg)	130*	ND	ND

^{*} Background level was 192 mg/kg. Closure level was 292 mg/kg.

Previous soil samples collected during the advancement of soil borings B8-1 through B8-5 were submitted for determination of BTEX and TPH concentrations. Soil samples obtained from borings B8-1 and B8-2 indicated BTEX concentrations ranging from 1.58 to 18.45 mg/kg. Therefore, excavation bottom and sidewall samples were also submitted for determination of BTEX concentrations.

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

SOIL DISPOSAL

Authorization to transport and landfarm the impacted soils off-site was obtained from OCD. The impacted soils were transported to C&C Landfarm Incorporated located approximately two miles south of Monument, New Mexico. Disposal documentation is presented in APPENDIX B.

BACKFILL AND RESTORATION

Approximately 210 cubic yards of clay was placed into the excavation to a depth of approximately six feet below ground surface. Approximately 460 cubic yards of clean fill material was purchased from Mr. Cooper. An estimated 210 cubic yards of the clean fill material was rock which was placed above the clay layer in the excavation. The remaining 250 cubic yards of clean soil was placed over the rock in the excavation to complete the backfilling operations. The area was graded and reseeded following backfilling.

QA/QC PROCEDURES

SOIL

The soil samples collected were placed in a sterile glass container equipped with a Teflon-lined lid furnished by the analytical laboratory. The container was filled to capacity with soil to limit the amount of head-space present. Each container was labeled and placed on ice in an insulated cooler. The cooler was sealed for shipment to Environmental Lab of Texas, Inc. in Odessa, Texas for determination of TPH concentrations using EPA Method 418.1 and BTEX concentrations using EPA Method SW846-8020, 5030. Proper chain-of-custody documentation was maintained throughout the sampling process.

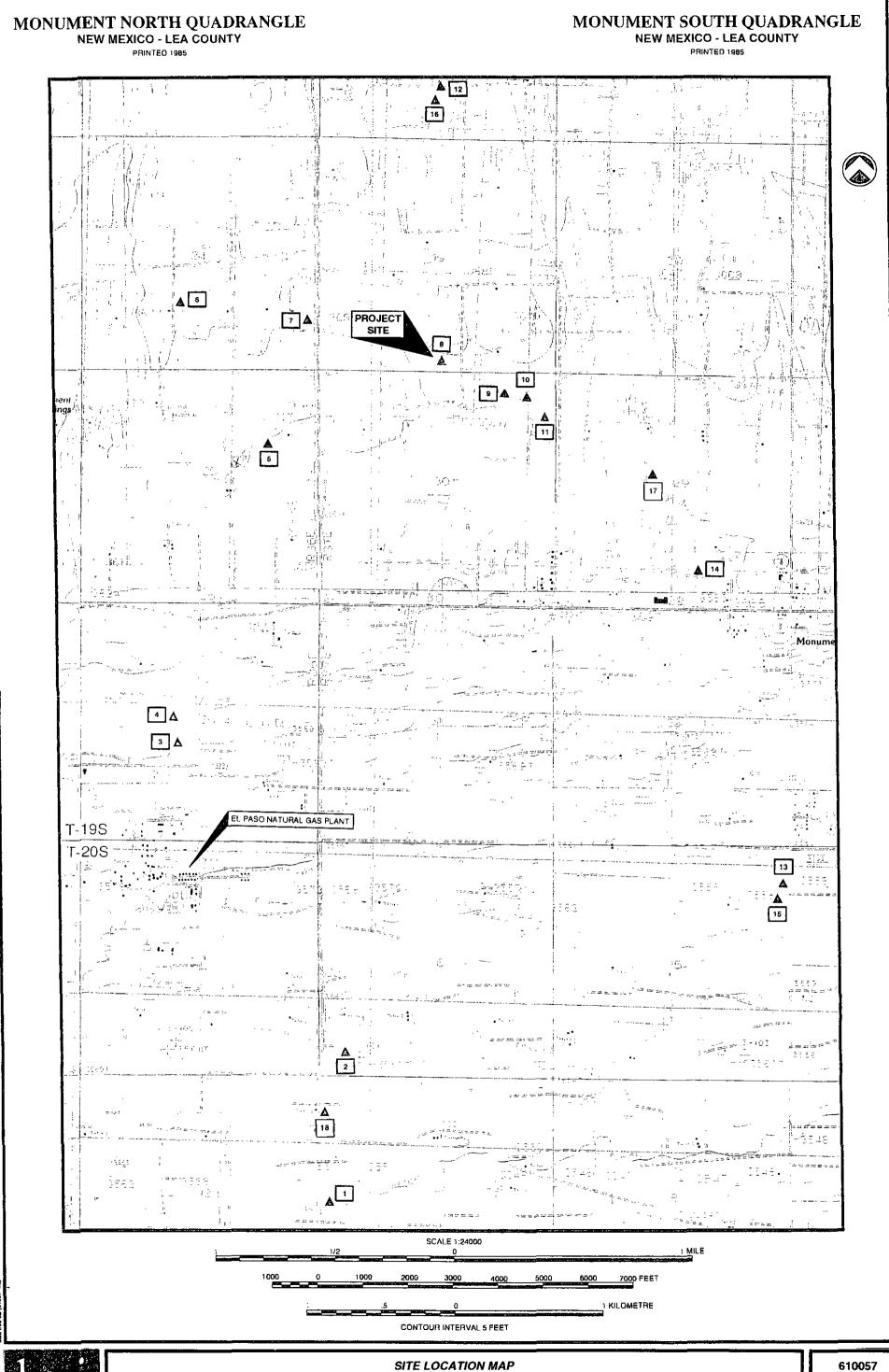
WATER

A sample was collected of water which had seeped into the excavation bottom. The excavation water sample was collected with a disposable Teflon bailer and polyethylene line. Water sample containers were filled in the order of decreasing volatility (i.e., BTEX containers were filled first and TPH containers second).

Water samples collected for BTEX analyses were placed in sterile, 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 for the presence of air bubbles.

Water samples collected for TPH analysis were filled to capacity in sterile, one liter glass containers equipped with Teflon-lined caps. The containers were provided by the analytical laboratory.

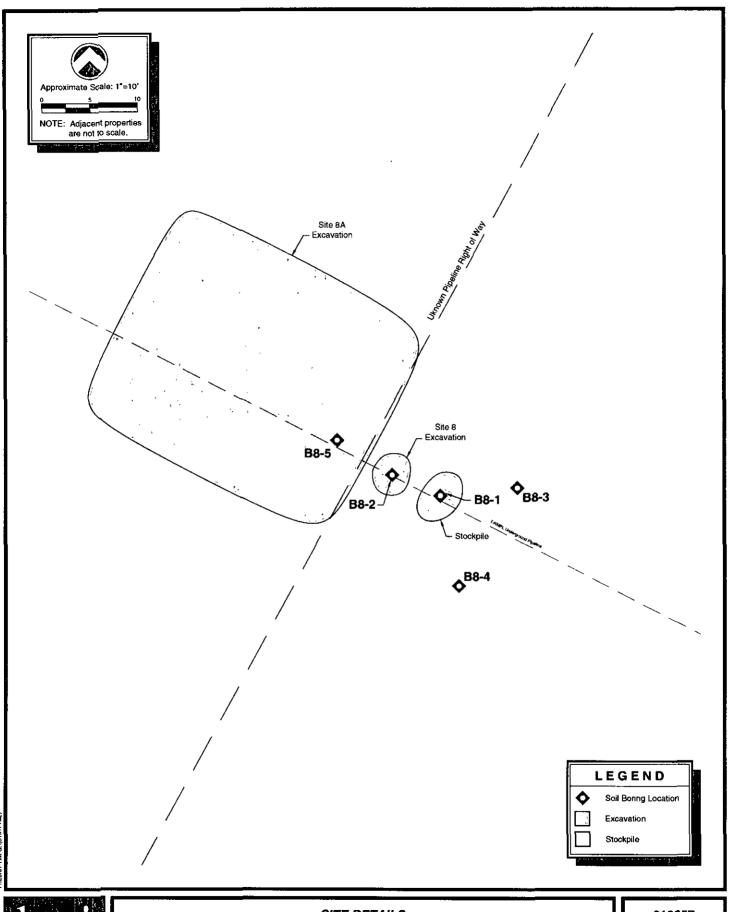
The filled containers were labeled and placed on ice in an insulated cooler. The cooler was sealed for shipment to Environmental Lab of Texas, Inc. in Odessa, Texas for determination of BTEX and TPH concentrations using EPA Method SW846-8020 and EPA Method 418.1, respectively. Proper chain-of-custody documentation was maintained throughout the sampling process.



TEXAS - NEW MEXICO PIPE LINE CO. MONUMENT SITE No. 8 AND 8A

LEA COUNTY, NEW MEXICO

FIG 1



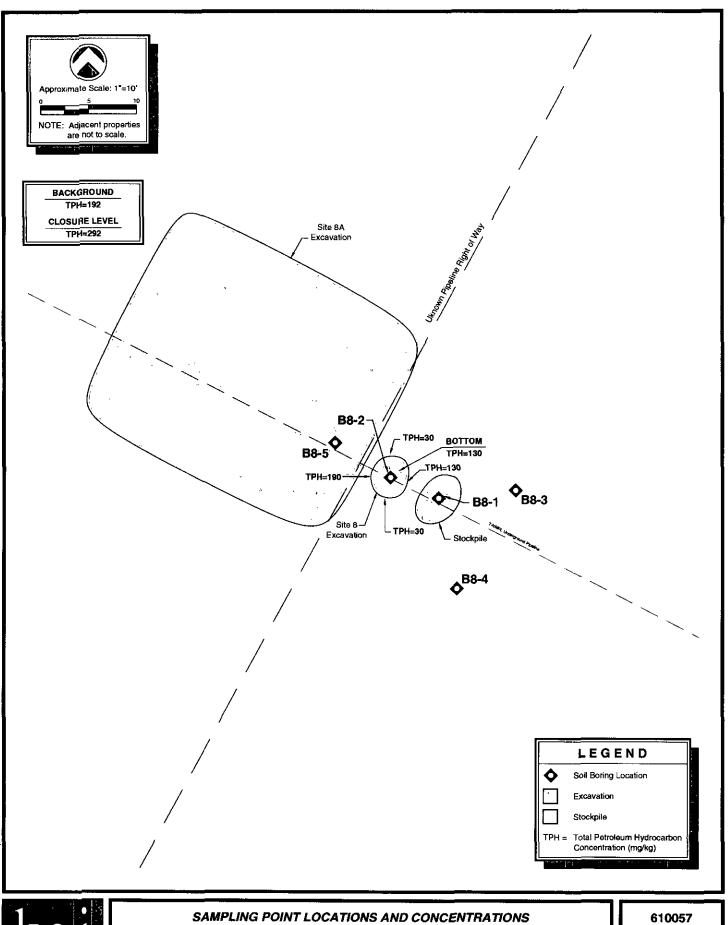


SITE DETAILS

610057

TEXAS - NEW MEXICO PIPE LINE CO. MONUMENT SITE No. 8 AND 8A LEA COUNTY, NEW MEXICO

FIG 2





TEXAS - NEW MEXICO PIPE LINE CO. MONUMENT SITE No. 8 AND 8A LEA COUNTY, NEW MEXICO

610057

FIG 3

GENERAL NOTES

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

Method detection limits:

Soil: BTEX - 0.001 mg/kg

TPH - 10 mg/kg

Water: BTEX - 0.001 mg/l

TPH - 1 mg/l

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

TPH - EPA Method 418.1

TABLE I

SUMMARY OF LABORATORY RESULTS - SOIL EXCAVATION ACTIVITIES - MONUMENT SITE 8 LEA COUNTY, NEW MEXICO

SAMPLE LOCATION	SAMPLE DATE	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL- BENZENE (mg/kg)	XYLENES (mg/kg)	BTEX (mg/kg)	TPH (mg/kg)
Boring Installation							
B8-1 at 1 - 2 feet	03/06/97	8.20	3.40	1.33	5.52	18.45	17,500
B8-1 at 5 - 6 feet	04/08/97	ND	ND	ND	ND	ND	DN
B8-1 at 10 - 11 feet	04/08/97	ND	ND	ND	ND	ND	15.5
B8-2 at 1 - 2 feet	04/08/97	ND	0.12	0.14	1.32	1.58	18,300
B8-2 at 10 - 11 feet	04/08/97	ND	ND	ND	ND	ND	ND
B8-3 at 5 - 6 feet	04/08/97	ND	ND	ND	ND	ND	ND
B8-3 at 10 - 11 feet	04/08/97	ND	ND	ND	ND	ND	ND
B8-4 at 5 - 6 feet	04/08/97	ND	ND	ND	ND	ND	11.0
B8-4 at 10 - 11 feet	04/08/97	ND	ND	ND	ND	ND	ND
B8-5 at 5 - 6 feet	04/08/97	ND	ND	ND	ND	ND	24.0
B8-5 at 10 - 11 feet	04/08/97	ND	ND	ND	ND	ND	160
Excavation Sampling						_	
Excavation Bottom	02/24/97	ND	ND	ND	ND	ND	190
East Sidewall	06/12/97	0.183	0.163	ND	0.137	0.483	130
South Sidewall	06/12/97	ND	ND	ND	ND	ND	30
North Sidewall	06/12/97	ND	0.493	0.127	0.657	1.277	30
West Sidewall	06/12/97	ND	ND	ND	ND	ND	190
Soil Characterization Sampling		-					
Stockpile	02/24/97	ND	ND	ND	ND	ND	280
Stockpile	06/25/97						3,500
Background Sampling			-	•	-	-	
Background	05/28/97						192
Confirmation Sampling							
Excavation Bottom ⁽¹⁾	06/12/97	ND	ND	ND	ND	ND	130

NOTES:

1. Indicates the retest of excavation sample collected February 24, 1997, following overexcavation of additional soils.

TABLE II

SUMMARY OF LABORATORY RESULTS - WATER EXCAVATION ACTIVITIES - MONUMENT SITE 8A LEA COUNTY, NEW MEXICO

SAMPLE LOCATION	SAMPLE DATE	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL- BENZENE (mg/kg)	XYLENES (mg/kg)	BTEX (mg/kg)	TPH (mg/kg)
Excavation Bottom	06/12/97	ND	0.003	ND	0.003	0.006	6
Excavation Bottom	00/12/9/	I NO	0.003	ND	0.003	0.006	6

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ΚEI

ATTN: MR. PAUL HARTNETT 5309 WURZBACH SUITE 100 SAN ANTONIO, TEXAS 78238

FAX: 9210-680-3763

Receiving Date: 02/25/97 Sample Type: SOIL Project: 610057.02.08A

Project Location: MONUMENT, NM

Analysis Date: TPH 02/26/97 Analysis Date: BTEX: 02/25/97 Sampling Date: 02/24/97 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
10293	STOCKPILE	<0.100	<0.100	<0.100	<0.100	<0.100	280
10294	HOLE	<0.100	<0.100	<0.100	<0.100	<0.100	190
9	% IA	85	83	84	96	85	99
9	%EA	100	94	89	100	91	102
E	BLANK	<0.001	<0.001	<0.001	<0.001	<0.001	<1

METHODS: SW 846-8020,5030 , EPA 418.1

Michael D. Emulas

Date

MAR 2 2 1997

Phone #: 505 395 733 ANALYSIS REQUEST FAX#: 505 395 733 ANALYSIS REQUEST ANALYSIS REQUEST FAX#: 505 395 733 ANALYSIS REQUEST ANALYSIS	Project Name: 610057.02.08.M Sumpler Signature:	# CONTAINERS # CONTAINERS # CONTAINER # C	2.2 1 40cl X		Date: Received by: REMARKS	7 OCOO	Date: Times: Received by Laborators
Project Manger:	Company Name & Address: KEL/TNMDL Froject #: C10057 Project Location: WUNUMUMENT	LAB# FIELD CODE GO CO CONLY CONTY CONLY CONTY CONLY CONTY CONLY CONTY CONLY CONTY CO	10293 STOCKPILE 1		Relinquished by:	Relinquished by: Date:	Relinquished by: Date:



CERTIFICATE OF ANALYSIS SUMMARY 1-70562

K.E.I. Consultants, Inc.

Project Name: TNMPL Monument

Project ID: 610057-2-8

Project Manager: Ann Baker

Project Location: Site 8

Date Received in Lab: Mar 7, 1997 10:10 by CB

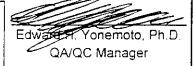
Date Report Faxed: Mar 11, 1997

XENCO contact: Carlos Castro/Edward Yonemoto

	Lab ID:	170562-001				
Analysis Requested	Field ID:	B8-1				
	Depth:	1-2'				
STEX Analyzed by EPA 8020		Da	te Analyzed	- Analytical Re	sults ppm (r	ng/L - mg/Kg)
•		Mar 10, 1997				
Benzene		8.20				
Toluene		3.40				
Ethylbenzene		1.33			İ	
m,p-Xylenes		4.32				
o-Xylene		1.20		<u> </u>		
Total BTEX		18.45				
PH Analyzed by EPA 418.1		Dat	e Analyzed	- Analytical Re	suits ppm (n	ng/L - mg/Kg)
• • • • • • • • • • • • • • • • • • • •	i	Mar 11, 1997				
Total Petroleum Hydrocarbons		17500		j		

This report summary, and the entire report it represents, has been made for the exclusive and confidential use of K.E.I. Consultants, Inc...

The interpretations and results expressed through this analytical report represent the best judgment of XENCO Laboratories. Xenco Laboratories, however, assumes no responsibility and makes no warranty to the end-use of the data hereby presented.



ANALYTICAL CHAIN OF CUSTODY REPORT CHRONOLOGY OF SAMPLES

K.E.1. Consultants, Inc.

Project Name: TNMPL Monument

XENCO COC#: 1-70562

Date Received in Lab: Mar 7, 1997 10:10 by CB

XENCO contact: Carlos Castro/Edward Yonemoto

Project ID: 610057-2-8

Project Manager: Ann Baker

Project Location; Site 8							X	INCO contact : Cal	XENCO CONTACT: Carlos Castro/Edward Yonemoto
						,	Date	Date and Time	
Eiold ID	1 4c	Method	Method	11260	Turn	Sample	Addition		
	Lais	Name	Q	9110	Around	Collected	Requested	Around Collected Requested Extraction	Analysis
8-1	170562-001 BTEX	втех	SW-846	шdd	Standard	ppm Standard Mar 6, 1997 10:35		Mar 10, 1997 by CB	Mar 10, 1997 by CB Mar 10, 1997 13:59 by CB
		ТРН	EPA 418.1	mdd	Standard	Standard Mar 6, 1997 10:35		Mar 11, 1997 by HL	Mar 11, 1997 by Ht. Mar 11, 1997 09:37 by HL

11381 Meadowgen Suite L. Houston, Texas 77082 (713) 589-0692 Fax (713) 589-0695

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST FORM

Page of

Lab Batch # 170562-84

Contractor	Contractor	101		1	Phone (.		1,70		1	No conference of the						ן ארן ארן ארן ארן ארן ארן ארן ארן ארן אר	ر ا
	127 COMPU			5	יעני	8	1915-000,	2	140 00000		pment		5	ractor (S S	
Address	-				`	,			Carrier					Quote *:	ï		
22.2	SOR Wordpich Ste 100	<u>8</u>	V 1	∑.A	H	78238	%		Airbill No.	ď				PO No:	× 7238	\sim	
Project Name	ASSESSMENT TO MOL MONUMENT	กปพยา		Poper	Project Dispetor		Hartnett	1									þæ
Project Location	Project Location S. & O.			Project	Project Menager	1	ANON		icos.	<u></u>	_	_	_		Tum-around] {
Sempler Signature	Sampler Signature TS-16.0% Sugar Co. E.	ودرا		Project	1 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	Project No. (10657 - 2-8	2-6-7	<	œœ								S X
	SAMPLE CHARACTERIZATION	NOIL		<u> </u>	Preservative	Ac Utal Dica	Ker Unknown		CEO	_	_	_	_	PIC	•		
Field ID	Date Time P	><-	G Container A Sm. Too		Jeddo -	Waste Oil PTT No:	Tank No:		S) XEIT PH (4BL)				_	H esee	Standard		**
ļ	- I	<u>مـ</u> ن ۵۲	}	2 0	D, q.		Sample Description		8					/#/	Remarks		
12-1	3/6 97 1035 1-2	>	12	<u> </u>		88-1	,2-1,		X								F
								-									N
c																	6
•																	4
,																	တ
																	9
																	_
										-							6
																	o.
•																	ρ
Relinquished b	Relinquished by: (Signature)	DATE	DATE TIME		Repaired by:		Signature	DATE		TIME	Remarks	2					
(元) (元) (元)	Back Suchard	3/4/97 1600	11sch		(Jr.)	100	Surver	3/7	3/1/27	1005							
(1000	S. Both 31797 1010	3/7/47	101		Marked For	Laborators, by		,			· · · · ·						
				4		LO Ory Bia	MA	5	Z Z	99							
Pink (Contrac	Prik (Contractor), Yellow & White (Lab.)	%				 - -	Pre-scheduling is recommended	is re	comn	nende	ಇ			_	Precision Analytical Services	ytical So	ervices

CERTIFICATE OF ANALYSIS SUMMARY 1-70867

K.E.I. Consultants, Inc.

Project Name: TNMPL

Project ID: 610057-2-8

Project Manager: Ann Baker Project Location: Site 8

Date Received in Lab: Apr 14, 1997 10:50 by CMC

XENCO contact: Carlos Castro/Edward Yonemoto

Date Report Faxed: Apr 16, 1997

	Cap ID:	170867-001	170867-002	170867-003	170867-004	170867-005	170867-006	170867-007	170867-008	170867-009
Analysis Requested	Field ID:	B8-1	B8-1	B8-2	B8-2	B8-3	B8-3	B8-4	B8-4	B8-5
	Depth:	52	10,	-1-	10,	Ş	10,	5.	10,	2, 5
BTEX by EPA 8020				Date Analyzed		- Analytical Results		ppm (mg/L - mg/Kg)	/Kg)	
		Apr 14, 1997	Apr 14, 1997	Apr 14, 1997	Apr 14, 1997	Apr 14, 1997	Apr 14, 1997	Apr 14, 1997	Apr 14, 1997	Anr 14 1997
Benzene		< 0.020	< 0.020	< 0.10	< 0.020	< 0.020	< 0.020	< 0.020	0	< 0.020
Toluene		< 0.020	< 0.020	0.12	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Ethylbenzene		< 0.020	< 0.020	0.14	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
m,p-Xylenes		< 0.040	< 0.040	0.89	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040	< 0.040
o-Xylene		< 0.020	< 0.020	0.43	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Total BTEX		< 0.120	< 0.120	1.58	< 0.120	< 0.120	< 0.120	< 0.120	< 0.120	< 0.120
Total Petroleum Hydrocarbons by EPA 418.1	PA 418.1			Date Analyzed	4	Analytical Results		ppm (mg/L - mg/Kg)	/Kg)	
7/3/1		Apr 15, 1997	Apr 15, 1997	Apr 15, 1997	Apr 15, 1997	Apr 15, 1997	Apr 15, 1997	Apr 15, 1997	Apr 15, 1997	Apr 15 1997
Total Petroleum Hydrocarbons		< 10.0	15.5	18300	< 10.0	< 10.0	< 10.0	11.0	1	24.0

K.E.I. Consultants, Inc.. This report summary, and the entire report it represents, has been made for the exclusive and confidential use of K.E.I. Cor The interpretations and results expressed through this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories, Nowever, assumes no responsibility and makes no warranty to the end use of the data hereby presented.





OF ANALYSIS SUMMARY 1-70867 CERTIFICATE

K.E.I. Consultants, Inc.

Project Name: TNMPL

Project ID: 610057-2-8

Project Manager: Ann Baker Project Location: Site 8

Date Received in Lab: Apr 14, 1997 10:50 by CMC

XENCO contact: Carlos Castro/Edward Yonemoto Date Report Faxed: Apr 16, 1997

	Lab ID:	170867-010		
Analysis Requested	Field ID:	B8-5		
	Depth:	10,		
BTEX by EPA 8020			Date Analyzed - Analytical Results ppn	ppm (mg/L - mg/Kg)
		Apr 14, 1997		_
Benzene		< 0.020		
Toluene		< 0.020		
Ethylbenzene		< 0.020		
m.p-Xylenes	:	< 0.040		
o-Xylene	:	< 0.020		
Total BTEX		< 0.120		
Total Petroleum Hydrocarbons by EPA 418.1	PA 418.1		Date Analyzed - Analytical Results ppn	ppm (mg/L - mg/Kg)
		Apr 15, 1997		_
Total Petroleum Hydrocarbons		160		
			_	

This report summary, and the entire report it represents, has been made for the exclusive and confidential use of K.E.I. Consultants, Inc.. The interpretations and results expressed through this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories, however, assumes no responsibility and makes no warranty to the end use of the data hereby presented.





ANALYTICAL CHAIN OF CUSTODY REPORT CHRONOLOGY OF SAMPLES

K.E.I. Consultants, Inc.

Project Name: TNMPL

Project ID: 610057-2-8

Project Manager: Ann Baker

Project Location: Site 8

XENCO COC#: 1-70867

Date Received in Lab: Apr 14, 1997 10:50 by CMC

XENCO contact: Carlos Castro/Edward Yonemoto

							Date	Date and Time	
Field ID	Lab. ID	Lab. ID Method	Method	Sinite	Turn	Sample	Addition		
		Name			Around	Collected	Requested	Extraction	Analysis
1 B8-1 (5') Soil	170867-001 BTEX	втех	SW-846	mdd	Standard	Apr 8, 1997 12:30		Apr 14, 1997 by Hi	Apr 14 1997 14 06 hv UI
2		ТРН	EPA 418.1	bbm	Standard	Apr 8, 1997 12:30		Apr 15, 1997 by OL	Apr 15 1997 14-36 by Ol
3 B8-1 (10') Soil	170867-002 BTEX	втех	SW-846	. wdd		Apr 8, 1997 12:58		Apr 14, 1997 by HL	Apr 14 1997 14:23 by HI
4	:	ТРН	EPA 418.1	mdd	Standard	Apr 8, 1997 12:58		Apr 15, 1997 by OL	Apr 15 1997 14:39 hv Ol
5 B8-2 (1') Soil	170867-003 BTEX	втех	SW-846	ррш	Standard	Apr 8, 1597 13:27		Apr 14, 1997 by HL	Apr 14, 1997 16:57 by HL
		ТРН	EPA 418.1	: mdd	Standard	Apr 8, 1997 13:27		Apr 15, 1997 by OL	Apr 15, 1997, 14:42 by Ot
B8-2 (10') Soll	170867-004 BTEX	втех	SW-846	mdd	Standard	Apr 8, 1997 13:49	:	Apr 14, 1997 by HL	Apr 14, 1997 14:40 by Hi
		ТРН	EPA 418.1	mad	Standard	Apr 8, 1997 13:49		Apr 15, 1997 by OL	Apr 15 1997 14:45 by Ol
9 B8-3 (5) Soil	170867-005 BTEX	втех	SW-846	wdd	Standard	Apr 8, 1997 14:02		Apr 14, 1997 by HI	April 1997 44:57 h. Li
10		ТРН	EPA 418.1	Брт	Standard	Apr 8, 1997 14:02		Anr 15, 1997 by OI	April 4007 44.40 to 0
11 B8-3 (10') Soil	170867-006 BTEX	втех	SW-846	wad	:	Apr 8, 1997 14:27		Apr 14 1997 by UI	Apr. 12, 1337, 14:40 by OL
12		ТРН	EPA 418.1	Had d	_	Apr 8 1997 14:27		Apr. 14, 1997 by DL	Apr 14, 1997 10:15 by HL
13 B8-4 (5') Soil	170867-007	втех	SW-846	;	1	Apr 8, 1997 15:06	:	Apr 14, 1997 by UL	Apr 15, 1937 14:51 by OL
14		ТРН	EPA 418.1	mdd	:	Apr 8, 1997 15:06		Apr 15, 1997 by OI	Apr 45, 1997, 19,34 by ML
B8-4 (10') Soil	170867-008 BTEX	втех	SW-846	mdd	Standard	Apr 8, 1997 15:38		Apr 14, 1997 by HL	Apr 14, 1997 15:49 by H2
:	,	ТРН	EPA 418.1	mdd	Standard	Apr 8, 1997 15:38		Apr 15, 1997 by OL	Apr 15, 1997, 14:57 by Oi
B8-5 (5') Soil	170867-009 BTEX	втех	SW-846	mdd	Standard	Apr 8, 1997 15:58		Apr 14, 1997 by HL	Apr 14, 1997 16:06 by HL
		ТРН	EPA 418.1	mdd	:	Apr 8, 1997 15:58		Apr 15, 1997 by OL	Apr 15, 1997 15:20 by OL
H8-5 (10) Soil	170867-010 BTEX	ВТЕХ	SW-846	mdd	Standard	Apr 8, 1997 16:09	1	Apr 14, 1997 by HL	Apr 14, 1997 16:40 by HL
707		ТРН	EPA 418.1	mod	Standard	Apr 8, 1997 16:09		Apr 15, 1997 by OL	Apr 15, 1997 15:23 by OL

T381 Meadowgen Suite L Houston, Texas 77082 (713) 589-0692 Fax (713) 589-0695

CHAIN OF CUSTODY RECORD
AND ANALYSIS REQUEST FORM

Lab. Batch #170867584

Page / of /

,	KET				à.	onor	Phone (2 _(⊂))	, 650-3767	2	No coolers this shipment	ment	Contract	Contractor COC #		
Address 5309		WURZBACH	#	N A		, ,	Sulte	3	্ব	Carrier: Airbill No		호 ^포	Quoto *: P.O. No:		
Project Name	Thomp				æ 🕆	Project Director	ofor the	HAGINET	ပ ဝ						<u> </u>
Project Location	STERNS	w			2	Project Menage	3 7	7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7	Z H <	2000		<i></i>		Turn-around] ∢ ¤
Sempler Signature	N				£	Project No.	l g	2-2-2	ı z	0206		<u></u>	•	ASA	\ <u>\</u>
SAMP	SAMPLE CHARACTERIZATION	TERIZAT	No.) L 2	Preservative			2000	<u> </u>	_	+	E N	
Field ID Date	e Time	OWEFE	2<-max 00≥=	⊙ π < υ	Container Size Type P, G	8	Other	Waste Oil PIT No: Tsuk No: Sample Description	S Total	BIEX (SK)		**************************************	H eseed	Standard Standard	*
188-1 46	466, 1230	N	X	<u> </u>	1:4-21 1:8-22 5-23	بلا		الحك		ママ		X	25	45	-
188-1 48G7	17 1258	Ò.	×	¥ ? X	1.4.1.6.1.6.1.6.1.1.1.1.1.1.1.1.1.1.1.1.	৪		221		スタ		X			a
186-2 He	4/6/51 1727		- کر	: ? ×	1.tz 1.622 6	৪		Soil		· X		人			6
RB-2 4/8/	4/8/57 1349	<u>, o</u>	پ	1. X 1. 6. X	1.62 6	৪		Soll				\ \\ \\ \			4
18-3 +/6/	7/6/51 1402	N	7	ж . ;	1.422 1.822 G	へ		Sic		Q A		. 옷			ro.
136-3 4/eKn	7 HZ7	メ つ	v	1.55 1.75 1.75 1.75 1.75 1.75 1.75 1.75	1.6.2 6	义		Sort		X R					9
18-4 4/6/	4/6/57 1506	V	·	<u> </u>	1.42 1.621 6	入		Sal		2		X			^
18-4 4/8/	46/57 153E	5	义	<u> </u>	2/22	ર		Sol		义 义					B
138-5 46/	46/57 15SE	S,	え	× 7, ×	1.503 (ᆺ		Soil		メ え	_		又		a
DE-5 1/6/	46/57/1609	<i>S</i> ,	<u>२</u>	[? }	7/.6.7	ス		Soil		٧ ٩			\(\frac{1}{\times}\)	\rightarrow	٥
Relinquished 1997	Signatura		# / P / P / P / P / P / P / P / P / P /			32	ik 19 19 19 19	Signatural	<u>a</u>	DATR TRAG	Remarks			•	
				 	 	Sept.	Regarded For Laboratory	Conday by	7	1497 1051					
Pirk (Contracted Velow & White (Lah)	olow & Whi	(4e l) a							.	~~~					



ALLSTATE SERVICES MR. RANDY OFFIELD P.O. BOX 11322 MIDLAND, TEXAS 79702 FAX: 915-682-4182

RECEIVING DATE: 05/28/97

SAMPLE TYPE: SOIL

PROJECT #: TNMPL-SITE 8 & 8A

PROJECT LOCATION: MONUMEN, N.M.

ANALYSIS DATE: 05/28/97 SAMPLING DATE: 05/28/97 SAMPLE CONDITION: Intact/Iced

TPH

ELT# FIELD CODE

(mg/kg)

11263

05-28-97 COMP BACKGROUND

192

QUALITY CONTROL TRUE VALUE % PRECISION 265 256 104

Methods: EPA 418.1

Michael R. Fowler

Date

Envi	Environmental Lab of Texas, Inc. 12600 West 1.20 East Odessa, Texas 79763 , (915) 563-1800 FAX (915) 563-1713	rexas,	Inc	, 126	600 W.) West I-20 East (915) 563-1800	20 E3 F180	o H	dess: AX (Odessa, Texas 79763 FAX (915) 563-1713		CHAI		CUST	λαο	ECC)RD A	Z P	MLYS	IS RE(CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST	•	
Proper Masser.	or offield				Phone #: FAX #:		915/682- 915/682-	682 682	-3547 -4182	47 82					NAL	YSIS	analysis request	EST					[
Company Na AL1	Company Name & Address: ALLLSTATE SERVICES ENV	ENVIRONMENTAL	ITAL,	, MID	DLA	LAND,		TEXAS										-		ž.			
Project#:	1- 51te	N 8 + 8		 	Projec	Project Name	 <u>:</u> :		ŀ					6 gH a4		· · · · · · · · ·					 -		-
Project Location	h				Sampler Signature	er Sign	ature 6							io po i									·
	03(1)3(1)	H		NA A	MATRIX	1/2	1 /5	PRESERVATIVE	ΛĒ	 _	CANTOT INC	020		A SA	asili								·
	-	ЕВ	June	§ -		-	~ -	METHOD	e												•		
LAB USE	FIELD CODE	СОИТАІИ	omAlamulo	SOIL SOIL	 มอดบา	Mair	ICL	DE INO3	IONE	язнт Эта	aw:	.814 Ha	CLP Metal	otal Metals CLP Volati	CLP Semi	CI D2					<u>:</u>		·
11263	05-78:97 comp BAL	Brick CRJ /	- 		-1	-		_}		16	(2				L	-}		-			-	1	7
						·—·								_							-		
																	_				-		
																							ļ .
													_	•					·				
																<u> </u>							
												<u> </u>									 		
	els a																						
																							_
												_											<u> </u>
				_																			
Relinquished by:	m Date: 5-77-9-7	. 6	Tlmes:	130	300		Recei	Received by:	Q K	Lude by.	REMARKS	<u> </u>				İ	}					1	T .
Relinguished by	ya. Dales		Times:				Recel	Received by:	}								,						•
Relinquished by:	y. Date:	-	Tent				Recel	id by	Labor	Received by Laboratory:												•	i

-



TEXAS NEW MEXICO PIPE LINE ATTN: MR. TONY SAVOIE

P.O. BOX 1030

JAL, NEW MEXICO 88252

FAX: 505-395-2636

Receiving Date: 06/13/97 Sample Type: WATER Project #: TNM SITE #8

Project Location: MONUMENT, NEW MEXICO

Analysis Date: 06/13/97
Analysis Date: BTEX 6/17/97
Sampling Date: 06/12/97
Sample Condition: Intact/Iced

ELT#	FIELD CODE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYLBENZENE (mg/L)	m,p-XYLENE (mg/L)	o-XYLENE (mg/L)	TPH (mg/L)
11487 11488	06-12-97 VOA WATER 06-12-97 1 LITER WATER	<0.001	0.003	<0.001	0,003	<0.001	6
		·					
	% IA	94	88	86	85	86	100
	% EA BLANK	109 <0.001	103 <0.001	99 <0.001	99 <0.001	100 <0.001	<1

METHODS: EPA 418.1, SW 846-8020,5030

Michael R Fowler

Date



TEXAS NEW MEXICO PIPE LINE ATTN: MR. TONY SAVOIE P.O. BOX 1030

JAL, NEW MEXICO 88252 FAX: 505-395-2636

Receiving Date: 06/13/97 Sample Type: SOIL Project #: TNM SITE #8

Project Location: MONUMENT, NEW MEXICO

Analysis Date: 06/13/97 Analysis Date: BTEX 6/16/97 Sampling Date: 06/12/97 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)
44400		40.400		-2.400			440
11482	06-12-97-BH COMP	<0.100	<0.100	<0.100	<0.100	<0.100	130
11483	06-12-97-E.S. WALL COMP	0.183	0.163	<0.100	0.137	<0.100	130
11484	06-12-97 S. SIDEWALL	<0.100	<0.100	<0.100	<0.100	<0.100	30
11485	06-12-97 N. SIDEWALL	<0.100	0.493	0.127	0.433	0.224	30
11486	06-12-97 W. SIDEWALL	<0.100	<0.100	<0.100	<0.100	<0.100	190
	% IA % EA BLANK	99 98 <0.001	95 91 <0.001	92 89 <0.001	92 88 <0.001	91 88 <0.001	100 116 <10

METHODS: EPA 418.1, SW 846-8020,5030

Michael R. Fowler

Date

Environmental Lab of Texas, Inc. 12600	ntal Lab of	f Texa:	s, Ir	٦.	12		Vest 15)) West 1-20 East (915) 563-1800	E35 800		lessa X (3	Odessa, Texas 79763 FAX (915) 563-1713		8	Z M		UŠT	λας	REC	SOR B	CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST	ANAL	LYSE	S RE(OUES	·	
						Phone #:	obe #:	91	5/6	682	-3547	47					*	MAL	XSK	, REQ	ANALYSIS REQUEST			<u></u>			1
Kandy Oft	OffiElo					3		- 1		70	-	70	1	ŀ	-	ļ		ľ	ł	ŀ		ŀ	}	_[ł	ļ
Company Name & Address:	SEDVICES F		J-N-U		Σ	MTDI	AND		TEXAS	AS			<u></u>							-			<u> </u>	•	<u> </u>		
HLL JIHIL	- 1						1	- 1 4						-	-2 u												
÷	1					2	Project Name	ğ					_		rn 4												 .
Twm Sir	is one of														ia i												
Project Location				'		3	퍨	Sampler Signatures	H						J P.					-							
Monument	7. M. A. A.	٥			1	P		8	13	6			-		J = U			1								·	
			-	\vdash	3	MATRI	۱	M	ES		PRESERVATIVE	_	SANIDI ING	000	-4			səlli	-								
-				<u></u>	-		. -	+	× -	METHOD	ᆰ		Т													_	
LAB#	FIELD CODE							31	. <u>.</u>						811					<u> </u>					<u> </u>		
(LAB USE)			NOD #	emuloV araw	SOIL	ЯIA	วดการ	HCL	НИОЗ	ICE	NON	OTHE	BMIT	X3T8	TPH TOT	TOLP Total I	PLOL	TCLP	SOT	เวย							
11482 06-1297	77 - BH COMP	d	_		7				<u> -</u>	Z		2,19	7535	2	7				-	-		 -				-	
8-21-70 EBhii	06-12-97 - E. S. wall comp	Camp								7		₹1-7	15/5/	2	$ \mathbf{t} $												
C6-27-79 68511	97 5. Sidewall	1 774		_	<u>−7</u>					<u>7</u>		417	1520	2	$\overline{}$	—											_
46-21-70 SBAIL	`	77.0			7			\dashv	_	7		4.12	1530	2	T												
11486 -6-12-87	87 W. Sincustl	77	_		7					. 3		۲۱۶	1523	7	+		•										
23-21-70 LBhil	_~	4		-	a			-		Z		2/-9	1540	2	7					_						_	
4-21.70 BOHI)	ן י	OTER !	1 475		7					7		< 177	1545/	ě	7												
				_									-			_			-								
											-				\vdash	 						$\vdash \vdash$				_	
													·							<u>.</u>					_	_	
											\vdash							·									
Relinquished by:	Date: 6-13- 6	3.47	F ,	Timer:	30	٥		A	Received by:	4	2	Hered by:	REMARKS	-	20	G BALK C.	BALK CKOAL	4			26	11/2	۱ '	1	Subrance	1 3 €	
Relinquished by:	Dafe		 	Times:				 	Received by:	3 5	<u>ځ</u>])	lean le	Kung		137.e.X	X	3	•		`	Į.,	¥ .	'	•	~//ee/		
									٠		.																
Relinquished by:	Dates		4	Times				*	celm	& by I	abor	Received by Laboratory:	:										•				:
			$\ \ $					41																			-



ΚEI

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

FAX: 210-680-3763 FAX: 505-397-5125

Receiving Date: 06/26/97 Sample Type: SOIL Project #: 610057 Project Location: SITE 8

Analysis Date: 06/26/97 Sampling Date: 06/25/97 Sample Condition: Intact/Iced

ELT#	FIELD CODE	TPH (mg/kg)
11592	STOCKPILE	3,500

% IA % EA BLANK

METHODS: EPA 418.1

Michael R. Fowler

Date

100

98

<10

CRAIN-OF-CLUSTODY RECORD AND ANALYSIS REQUEST	ANALYSIS REQUEST			9 Cd Cr P	94 BY	TCLP Metals A Total Metals A TCLP Semi V TCS TCI									
					0C05/	1 (0208 X3T8 (1.814 H9T	/1 IV	 	 				REMARKS		
Environmental Lab of Texas, Inc. 12600 West 120 East Oders, Texas 79763 (915) 563-1800 FAX (915) 563-1713	FASE CUC 680 3763	Stc 100 SA Tx 78238	Project Kame :	Sampler Signalpress	 	WONTER WONTER WONTER HINGS HICE HINGS HICE HICE HINGS HICE HINGS HICE HINGS HICE HINGS HICE HINGS HICE HINGS HINE	Mg 12:55 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						Times: Received by: REM	These Received by Relation of 1110	Tunes: Received by Laboratory:
Environmental Lab of Texa	Traject Menger:	Address.	L	Froject Location Sixte X		LAB # FELD CODE (LAB USE)	11592 Stockpule.						Relaying to the Desire C-2C-67	3	Retheputshed by: Date:

٠.

District I - (505) 393-6161 P. O. Box 1980 Hoobs, NM 88241-1980 District II - (505) 748-1283 811 S. First

Artesia, NM 88210 <u>District III</u> - (505) 334-6178 1000 Rio Brazos Road Aztec, NM 87410 <u>District IV</u> - (505) 827-7131

New Mexico

Energy Minerals and Natural Resources Department

Oil Conservation Division

2040 South Pacheco Street Santa Fe, New Mexico 87505 • (505) 827-7131 cc: BOLSON

Form C-12 Originated 8/8/

Submit Origin
Plus 1 Ce
to appropri:
District Off.

REQUEST FOR APPR		SOLID WASTE
1. RCRA Exempt: Non-Exempt: 1	Y ON PRIZE	4. Generator TWM PLCO.
Verbal Approval Received: Yes	No 🔲	5. Originating Site 8
2. Management Facility Destination	Ferm Inc.	6. Transporter Turner
3. Address of Facility Operator 7.6. Pox 55	NIA + NOMEO	8. State N. M.
7. Location of Material (Street Address or ULSTR)	SITE &	
9. <u>Circle One</u> :		
A. All requests for approval to accept oilfield exergence of the control of the c	npt wastes must be acco e Generator's certification	ompanied by necessary chemical analysis to n of origin. No waste classified hazardous by
All transporters must certify the wastes delivered a	tre only those consigned	ior transport.
BRIEF DESCRIPTION OF MATERIAL:		
Hydrocarbon Affected Soil Non Hazardous / Knowledge	DERROS	
•		4 30
TUMBL MONE	what Are 5	JUN 2 4 1997
SIEGS 1	(-21	JUN 2 4 1997
76	.,	AECEIVED
		TAEL
Estimated Volume Cy Known Volum	e (to be entered by the ope	rator at the end of the haul) ————— cy
SIGNATURE: Waste Management Pacility (Authorized Agent	ITTLE President	DATE: 6-18-97
TYPE OR PRINT NAME: J. m T. Cooper	TELI	EPHONE NO.
(This space for State Use)		1
APPROVED BY: 10 Miles 126 3	TITLE FRANCE	DATE: 6/14/17
APPROVED BY:	TTTLE:	DATE: