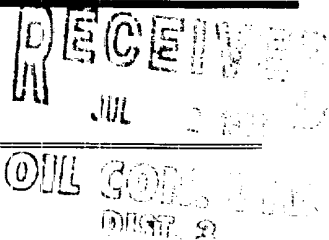


EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE

DEPUTY OIL & GAS INSPECTOR

DEC 2 1998

SAN JUAN 28-5 #85
Meter/Line ID - 87246



SITE DETAILS

Legals - Twn: 28 Rng: 05
NMOCD Hazard Ranking: 10
Operator: MERIDIAN OIL INC

Sec: 08 Unit: B
Land Type: 2 - Federal
Pit Closure Date: 07/01/94

RATIONALE FOR RISK-BASED CLOSURE:

The above mentioned production pit was assessed and ranked according to the criteria in the New Mexico Conservation Division's Unlined Surface Impoundment Closure Guidelines.

The primary source, discharge to the pit, has been removed. There has been no discharge to the production pit for at least five years and the pit has been closed for at least three years.

The production pit has been remediated to the practical extent of the trackhoe or to the top of bedrock. Initial laboratory analysis has indicated that the soil remaining at the bottom of the excavation is above standards based on the hazard ranking score. Contaminated soil was removed and transported to an approved landfarm for disposal. The initial excavation was backfilled with clean soil and graded in a manner to divert precipitation away from the excavated area. Any rainfall that does infiltrate the ground surface must migrate through clean backfill before reaching any residual hydrocarbons remaining in the soil. Therefore, further mobility of residual hydrocarbons is unlikely.

Since the soil samples from the initial excavation were above standards, a test boring was drilled and a sample was collected to evaluate the vertical extent of impact to soils. Test boring sample results indicated soils below standards beneath the original excavation.

El Paso Field Services Company (EPFS) requests closure of the above mentioned production pit location for the following reasons:

- Discharge to the pit has not occurred in over five years and the pit has been closed for over three years.
- The bulk of the impacted soil was removed during the initial excavation.
- The excavation was backfilled with clean soil and graded to divert precipitation away from the excavation area.
- All source material has been removed from the ground surface, eliminating potential direct contact with livestock and the general public.
- Groundwater was not encountered in the initial excavation or test boring; therefore, impact to groundwater is unlikely.
- Soil samples collected beneath the initial excavation were below standards.
- No potential receptors are within 1,000 feet of the site.
- Residual hydrocarbons remaining in the soil at the bottom of the initial excavation will naturally degrade in time with minimal risk to the environment.

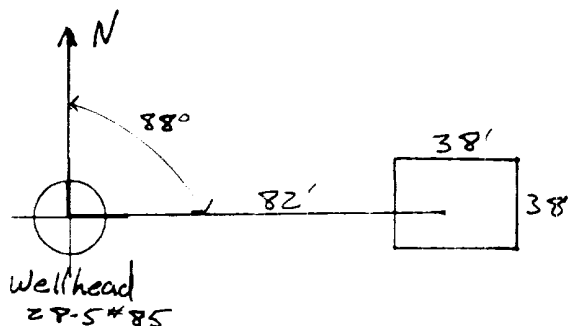
FIELD PIT SITE ASSESSMENT FORM

GENERAL	Meter: <u>87246</u> Location: <u>Santa Ana 28-5 #85</u> Operator #: <u>2999</u> Operator Name: <u>Meridian Oil</u> P/L District: <u>Bloomfield</u> Coordinates: Letter: ^{K6W 6-3-94} <u>B</u> Section <u>8</u> Township: <u>28N</u> Range: <u>5W</u> Or Latitude _____ Longitude _____ Pit Type: Dehydrator ☒ Location Drip: _____ Line Drip: _____ Other: _____ Site Assessment Date: <u>6-3-94</u> Area: <u>10</u> Run: <u>71</u>
SITE ASSESSMENT	NMOCD Zone: (From NMOCD Maps) Inside ☒ (1) Outside ☒ (2) ^{K6W 6-3-94} Land Type: BLM ☒ (1) State ☐ (2) Fee ☐ (3) Indian _____ Depth to Groundwater Less Than 50 Feet (20 points) ☐ (1) 50 Ft to 99 Ft (10 points) ☒ (2) Greater Than 100 Ft (0 points) ☐ (3) Wellhead Protection Area : Is it less than 1000 ft from wells, springs, or other sources of fresh water extraction? , or ; Is it less than 200 ft from a private domestic water source? ☐ (1) YES (20 points) ☒ (2) NO (0 points) Horizontal Distance to Surface Water Body Less Than 200 Ft (20 points) ☐ (1) 200 Ft to 1000 Ft (10 points) ☐ (2) Greater Than 1000 Ft (0 points) ☒ (3) Name of Surface Water Body _____ (Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds) Distance to Nearest Ephemeral Stream ☐ (1) < 100' (Navajo Pits Only) ☐ (2) > 100' TOTAL HAZARD RANKING SCORE: _____ POINTS
REMARKS	Remarks : <u>Two pits on location. one pit in use (line) other pit is dry. location is just inside VZ on Redline map. (on line) and outside on Topo map</u>

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 88 Footage from Wellhead 82
b) Length : 38 Width : 38 Depth : 5



REMARKS

Remarks :

6-3-94
KGW
Photos - Roll 1-6-3-94 # 1-45 ~ 1015 hrs
Dump Truck

Completed By:

Ken Walter

Signature

6-3-94

Date

PHASE I EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	Meter: <u>87246</u> Location: <u>SAN JUAN 28-S #85</u> Coordinates: Letter: <u>B</u> Section <u>8</u> Township: <u>28</u> Range: <u>5</u> Or Latitude _____ Longitude _____ Date Started : <u>7-1-94</u> Area: <u>10</u> Run: <u>71</u>
FIELD OBSERVATIONS	Sample Number(s): <u>KP 115</u> Sample Depth: <u>12'</u> Feet Final PID Reading <u>085</u> PID Reading Depth <u>12'</u> Feet Yes No Groundwater Encountered ☐ (1) ☒ (2) Approximate Depth _____ Feet
CLOSURE	Remediation Method : Excavation ☒ (1) Approx. Cubic Yards <u>250</u> Onsite Bioremediation ☐ (2) Backfill Pit Without Excavation ☐ (3) Soil Disposition: Envirotech ☐ (1) ☒ (3) Tierra Other Facility ☐ (2) Name: _____ Pit Closure Date: <u>7-1-94</u> Pit Closed By: <u>BEI</u>
REMARKS	Remarks : <u>Some Line markers. Started Remediating to 12'</u> <u>Soil Looked DARK gray And Black. with A small. AREA</u> <u>Big Pit. Pit size 38x38</u> Signature of Specialist: <u>Kelly Padilla</u>



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	16P 115	945576
MTR CODE SITE NAME:	87246	N/A
SAMPLE DATE TIME (Hrs):	7-1-94	1320
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	7/7/94	7/7/94
DATE OF BTEX EXT. ANAL.:	7/12/94	7/12/94
TYPE DESCRIPTION:	VC	DK Brown Sand/clay

REMARKS: split

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS				ATI Result
			DF	Q	M(g)	V(ml)	
BENZENE	20.10	MG/KG					20.1
TOLUENE	1.17	MG/KG					20.2
ETHYL BENZENE	0.50	MG/KG					20.2
TOTAL XYLENES	40.77	MG/KG					2.3
TOTAL BTEX	2.54	MG/KG	0.040		0.50	20	3.1
TPH (418.1)	3670	MG/KG			2.02	28	7000
HEADSPACE PID	84	PPM					7/11
PERCENT SOLIDS	81.4	%					

— TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 —

The Surrogate Recovery was at 91.5 % for this sample All QA/QC was acceptable.

Narrative:

ATI results attached. Surrogate recovery was outside
ATI QC limits due to matrix interference.

DF = Dilution Factor Used

Approved By:

Date:

8/8/94

 Test Method for
 Oil and Grease and Petroleum Hydrocarbons
 in Water and Soil
 Perkin-Elmer Model 1600 FT-IR
 Analysis Report

99-12427-1970

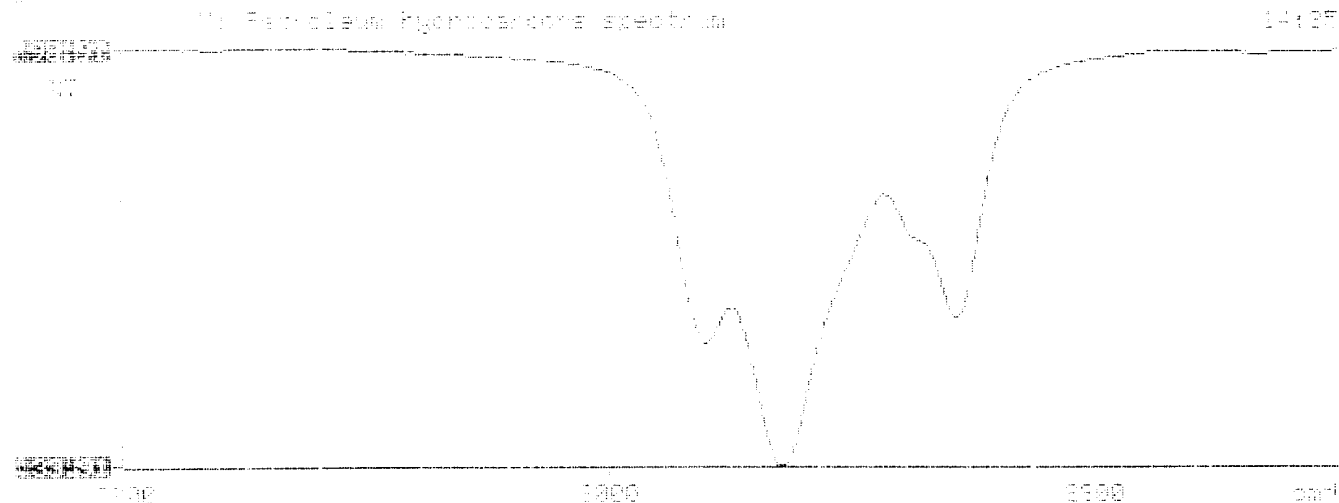
Sample Identification
 007574

Initial mass of sample, g
 7.070

Volume of sample after extraction, ml
 15.00

Petroleum hydrocarbons, ppm
 7677.096

Absorbance of hydrocarbons (2930 cm⁻¹)
 0.444



Collection : 15:01:04 Jul 12 1994 Meth(A): BETX [11:35:40 Jul 12 1994]
 Integration: 15:01:04 Jul 12 1994 Meth(A): BETX [11:35:40 Jul 12 1994]
 Report : 15:27:15 Jul 12 1994 Meth(A): BETX [11:35:40 Jul 12 1994]

Sample Amt : 1.000000e+0 Dilution: 2.000000e+1

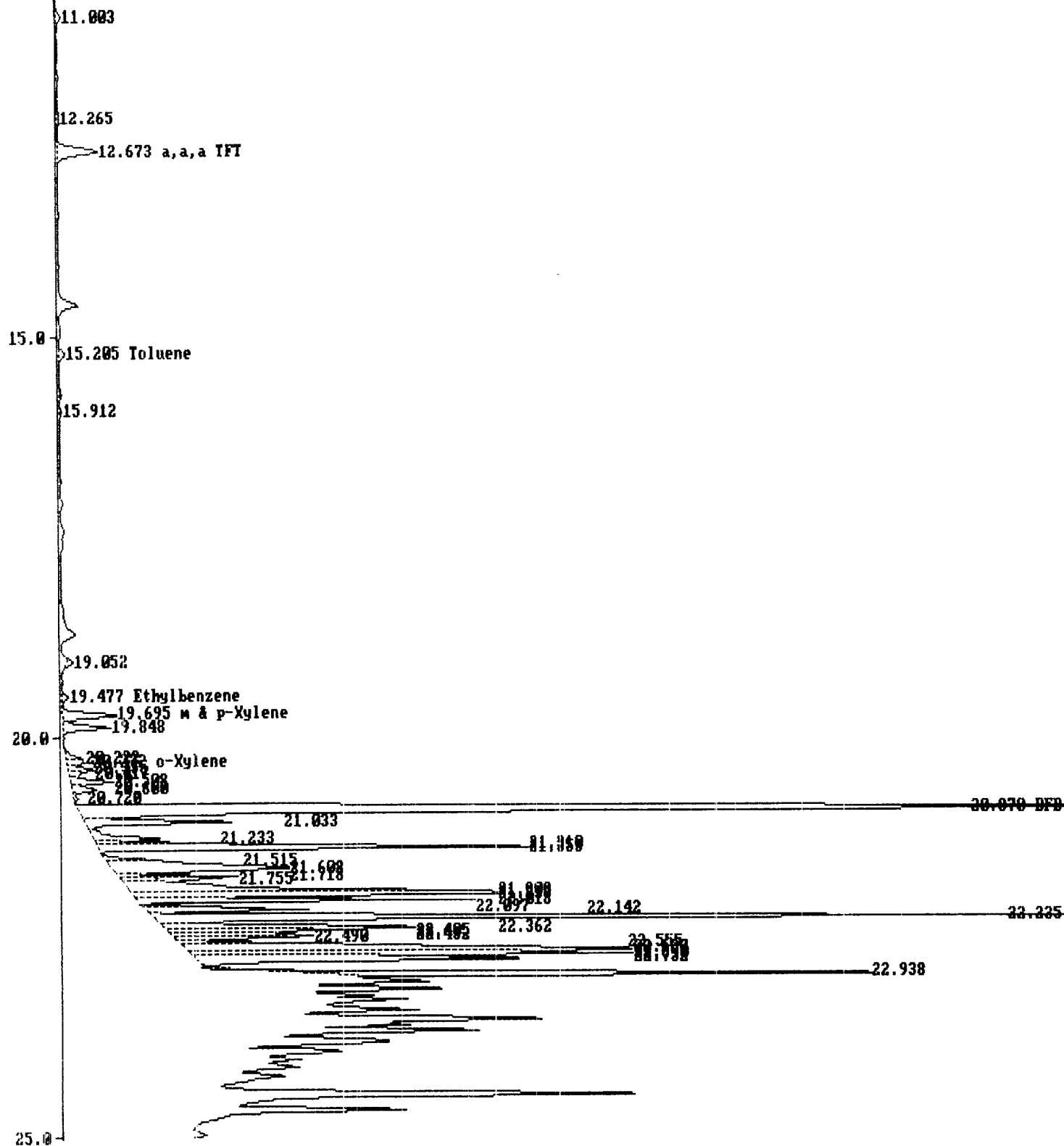
EXTERNAL STANDARD (AREA)

RT	Area	BC	ExpRT	RF	ug/L	Name
			10.302	8.44764e-6	22.5 ug/L	Benzene
11.003	52820	T		0.00000e+0	0.0000	Unknown
12.265	53952	T		0.00000e+0	0.0000	Unknown
12.673	557260	T	12.673	1.53284e-4	85.4 1708.3848	R a,a,a TFT
15.205	72394	T	15.204	2.02395e-5	1.47 29.3046	Toluene
15.912	32429	V		0.00000e+0	0.0000	Unknown
19.052	47901	V		0.00000e+0	0.0000	Unknown
19.477	62026	T	19.485	1.01762e-5	0.63 12.6238	Ethylbenzene
19.695	458585	T	19.718	-1.99129e-6	22.5 ug/L 18.2635	m & p-Xylene
19.848	371993	V		0.00000e+0	0.0000	Unknown
20.221	126708	T		0.00000e+0	0.0000	Unknown
20.272	126691	T	20.293	6.60097e-6	0.84 16.7257	o-Xylene
20.355	171334	T		0.00000e+0	0.0000	Unknown
20.416	82092	T		0.00000e+0	0.0000	Unknown
20.508	282369	T		0.00000e+0	0.0000	Unknown
20.600	201650	T		0.00000e+0	0.0000	Unknown
20.720	37742	V		0.00000e+0	0.0000	Unknown
20.870	19428180	T	20.911	4.71098e-6	91.5 1830.5161	BFB
21.033	955101	T		0.00000e+0	0.0000	Unknown
21.233	454659	T		0.00000e+0	0.0000	Unknown
21.310	511027	T		0.00000e+0	0.0000	Unknown
21.355	2108239	V		0.00000e+0	0.0000	Unknown
21.515	280239	T		0.00000e+0	0.0000	Unknown
21.608	2041565	T		0.00000e+0	0.0000	Unknown
21.718	611808	T		0.00000e+0	0.0000	Unknown
21.755	367448	T		0.00000e+0	0.0000	Unknown
21.908	2365172	T		0.00000e+0	0.0000	Unknown
21.936	2326467	T		0.00000e+0	0.0000	Unknown
22.018	1489421	V		0.00000e+0	0.0000	Unknown
22.096	304722	T		0.00000e+0	0.0000	Unknown
22.142	692727	T		0.00000e+0	0.0000	Unknown
22.235	6489842	T		0.00000e+0	0.0000	Unknown
22.361	1660760	T		0.00000e+0	0.0000	Unknown
22.405	524323	T		0.00000e+0	0.0000	Unknown
22.451	681210	T		0.00000e+0	0.0000	Unknown
22.490	487341	T		0.00000e+0	0.0000	Unknown
22.555	464893	T		0.00000e+0	0.0000	Unknown
22.637	3454039	T		0.00000e+0	0.0000	Unknown
22.690	2544154	T		0.00000e+0	0.0000	Unknown
22.752	2100074	V		0.00000e+0	0.0000	Unknown
22.938	2388649	V		0.00000e+0	0.0000	Unknown

Handwritten signature
 7/13/94

(BETX_10.D01) MU

0.0
 200.0
 400.0
 600.0
 800.0
 1000.0
 1200.0
 1400.0
 1600.0
 1800.0

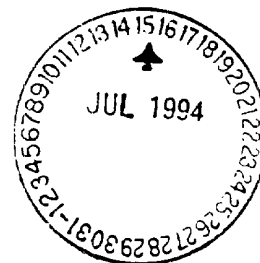




Analytical **Technologies**, Inc.

2709-D Pan American Freeway, NE Albuquerque, NM 87107
Phone (505) 344-3777 FAX (505) 344-4413

ATI I.D. **407327**



July 14, 1994

El Paso Natural Gas Company
P.O. Box 4990
Farmington, NM 87499

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 07/08/94, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

Due to background interference in the sample the MS/MSD values were evaluated just outside ATI Quality Control (QC) limits.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Letitia Krakowski, Ph.D.
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure



GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 407327
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	945574	NON-AQ	07/01/94	07/08/94	07/11/94	50
05	945575	NON-AQ	07/01/94	07/08/94	07/10/94	10
06	945576	NON-AQ	07/01/94	07/08/94	07/10/94	2
PARAMETER			UNITS	04	05	06
BENZENE			MG/KG	1.5	<0.25	<0.25
TOLUENE			MG/KG	110	6.4	<0.25
ETHYLBENZENE			MG/KG	<1.3	<0.25	<0.25
TOTAL XYLENES			MG/KG	590	26	2.3

SURROGATE:

BROMOFLUOROBENZENE (%) 220* 67 58*

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

Split Sample



GENERAL CHEMISTRY RESULTS

CLIENT : EL PASO NATURAL GAS CO. . ATI I.D. : 407327
PROJECT # : 24324 DATE RECEIVED : 07/08/94
PROJECT NAME : PIT CLOSURE DATE ANALYZED : 07/11/94

PARAMETER	UNITS	06
PETROLEUM HYDROCARBONS, IR	MG/KG	7000

Split Sample
EPNG Sample # 945576

PHASE II

$$p(x) = \frac{1}{\sqrt{2\pi}} e^{-\frac{1}{2}x^2} \quad \text{and} \quad p(x) = \frac{1}{\sqrt{2\pi}} e^{-\frac{1}{2}x^2} \quad \text{and} \quad p(x) = \frac{1}{\sqrt{2\pi}} e^{-\frac{1}{2}x^2}$$

gives a full picture of the data and the results of the analysis. The results of the analysis are given in the table below.

1

2

3

4

$$p(x) = \frac{1}{\sqrt{2\pi}} e^{-\frac{1}{2}x^2} \quad \text{and} \quad p(x) = \frac{1}{\sqrt{2\pi}} e^{-\frac{1}{2}x^2} \quad \text{and} \quad p(x) = \frac{1}{\sqrt{2\pi}} e^{-\frac{1}{2}x^2}$$

RECORD OF SUBSURFACE EXPLORATION

Philip Environmental Services Corp.

4000 Monroe Road

Farmington, New Mexico 87401

(505) 326-2262 FAX (505) 326-2388

Borehole # BH-1
Well # _____
Page 1 of 1

Elevation _____
Borehole Location T28N, R5W, S. 8, F
GWL Depth _____
Logged By S. Kelly
Drilled By K. Padilla
Date/Time Started 7/10/95, 1200
Date/Time Completed 7/10/95, 1255

Project Name EPNG Pits
Project Number 14509 Phase 601
Project Location San Juan 28-5 #85
87246
Well Logged By S. Kelly
Personnel On-Site K. Padilla, F. Rivera, D. Char
Contractors On-Site _____
Client Personnel On-Site _____
Drilling Method 4 1/4" ID HSH
Air Monitoring Method CGI, PID

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDUS/H BZ BH S			Drilling Conditions & Blow Counts
0				Back fill to 12'						
5										
10										
15	1	7/10/95 15-16.5'	9' 1.5'	clayey SILT, gray, trace fine sand, loose, damp.			0	0	0	1210
20				Bot - 16.5'						
25										
30										
35										
40										

Comments: 15'-16.5' sample (SEK 29) sent to lab for BTEX and TPH. Sample was bagged and iced prior to being put in jar. BH grouted to surface.

Geologist Signature Josh Kelly



Phase II

FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	SEK 32	Lab ID	946966
MTR CODE SITE NAME:	San Juan 28-5 #13, 21551		N/A
SAMPLE DATE TIME (Hrs):	7-10-95		15:20
SAMPLED BY:	N/A		
DATE OF TPH EXT. ANAL:	7-12-95		7-12-95
DATE OF BTEX EXT. ANAL:	07-17-95		07-17-95
TYPE DESCRIPTION:	VG		fine Brown sand w/ clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	20.025	MG/KG	1			
TOLUENE	20.025	MG/KG	1			
ETHYL BENZENE	20.025	MG/KG	1			
TOTAL XYLENES	20.025	MG/KG	1			
TOTAL BTEX	20.10	MG/KG				
TPH (418.1)	139	MG/KG			2.00	28
HEADSPACE PID	7	PPM				
PERCENT SOLIDS	95.5%	%				

-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 97 % for this sample All QA/QC was acceptable.

Narrative:

ATI Results for BTEX and modified 8015 attached.

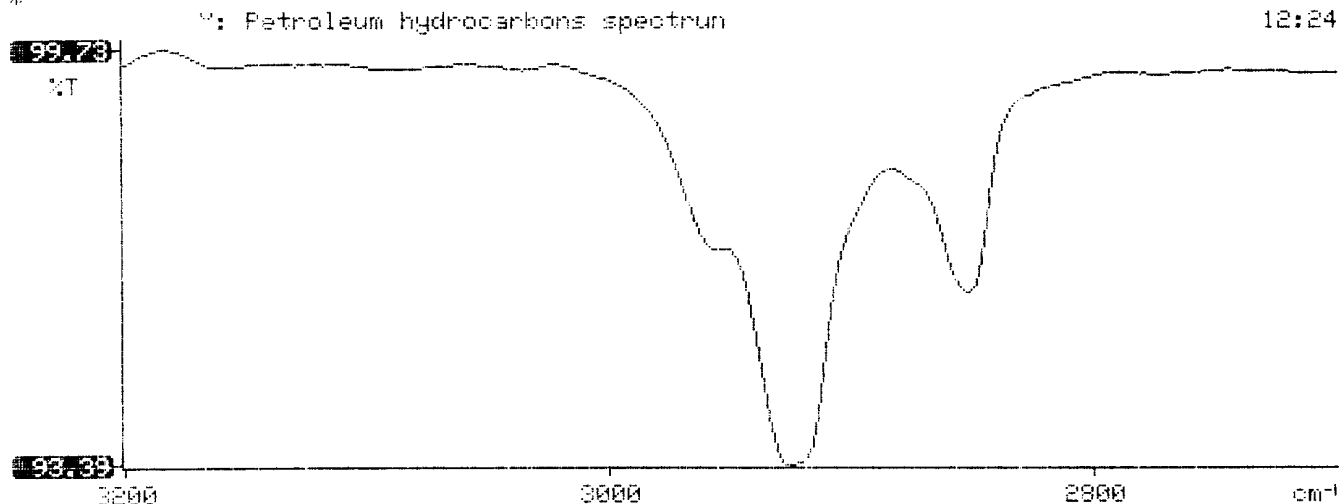
DF = Dilution Factor Used

Approved By:

Date:

 * Test Method for *
 * Oil and Grease and Petroleum Hydrocarbons *
 * in Water and Soil *
 *
 * Perkin-Elmer Model 1600 FT-IR *
 * Analysis Report *

* 95/07/12 12:24
 *
 * Sample identification
 * 946966
 *
 * Initial mass of sample, g
 * 2.000
 *
 * Volume of sample after extraction, ml
 * 28.000
 *
 * Petroleum hydrocarbons, ppm
 * 139.146
 * Net absorbance of hydrocarbons (2930 cm⁻¹)
 * 0.027
 *
 *
 *





Analytical **Technologies**, Inc.

2709-D Pan American Freeway, NE Albuquerque, NM 87107
Phone (505) 344-3777 FAX (505) 344-4413

ATTN I.D. **507340**

July 20, 1995

El Paso Natural Gas Co.
P.O. Box 4990
Farmington, NM 87499

Project Name/Number: PIT CLOSURE/PHASE I PHASE II 24324

Attention: John Lambdin

On 07/14/95, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure



GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 507340
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE/PHASE I PHASE II

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	946965	NON-AQ	07/10/95	07/17/95	07/17/95	1
05	946966	NON-AQ	07/10/95	07/17/95	07/17/95	1
06	946969	NON-AQ	07/07/95	07/17/95	07/17/94	1
PARAMETER			UNITS	04	05	06
BENZENE			MG/KG	<0.025	<0.025	<0.025
TOLUENE			MG/KG	<0.025	<0.025	<0.025
ETHYLBENZENE			MG/KG	<0.025	<0.025	<0.025
TOTAL XYLENES			MG/KG	<0.025	<0.025	<0.025

SURROGATE:

BROMOFLUOROBENZENE (%) 98 97 96



GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 507340
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE/PHASE I PHASE II

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
02	946963	NON-AQ	07/10/95	07/14/95	07/14/95	1
05	946966	NON-AQ	07/10/95	07/14/95	07/14/95	1
10	946973	NON-AQ	07/11/95	07/14/95	07/14/95	1
PARAMETER			UNITS	02	05	10
FUEL HYDROCARBONS			MG/KG	15	7	<5
HYDROCARBON RANGE				C10-C18	C6-C10	-
HYDROCARBONS QUANTITATED USING				DIESEL	GASOLINE	-

SURROGATE:

O-TERPHENYL (%) 116 100 121