

EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE

DEC 21 1998

CM MORRIS #4
Meter/Line ID - 74051

RECEIVED
JUL 1 1998

SITE DETAILS

Legals - Twn: 27 Rng: 10
NMOCD Hazard Ranking: 40
Operator: MERIDIAN OIL INC

Sec: 13 Unit: L
Land Type: 2 - Federal
Pit Closure Date: 10/13/94

OIL CON. DIV.
DIST. 2

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.

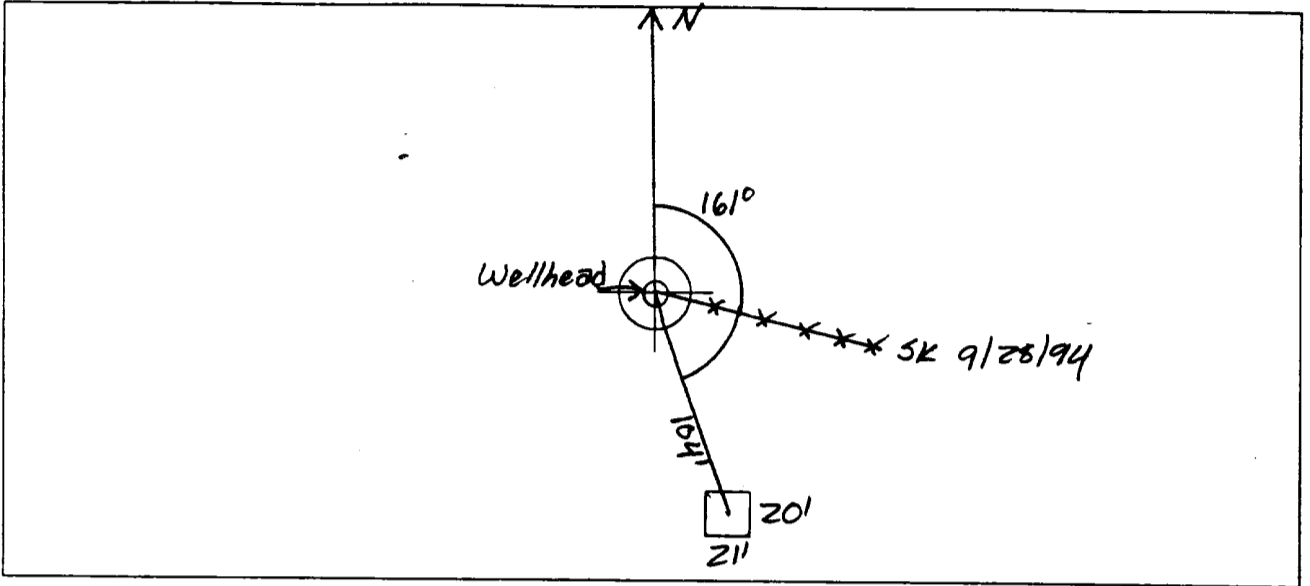
El Paso Field Services Company (EPFS) requests closure of the above mentioned production pit location for the following reasons:

- 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.

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 161° Footage from Wellhead 104'
b) Length : 21' Width : 20' Depth : 3'

ORIGINAL PIT LOCATION



REMARKS

Remarks :

Pictures at 1515 (1-4, Roll 12)
Dump Truck

Completed By:

Sarah Kelly

Signature

9/28/94

Date

PHASE I EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	Meter: <u>74051</u> Location: <u>CM Morris #4</u> Coordinates: Letter: <u>L</u> Section <u>13</u> Township: <u>27</u> Range: <u>10</u> Or Latitude _____ Longitude _____ Date Started : <u>10-13-94</u> Run: <u>01</u> <u>52</u>
FIELD OBSERVATIONS	Sample Number(s): <u>VW410</u> Sample Depth: <u>12'</u> Feet Final PID Reading <u>2</u> PID Reading Depth <u>12'</u> Feet Yes No Groundwater Encountered <input type="checkbox"/> <input checked="" type="checkbox"/> Approximate Depth _____ Feet
CLOSURE	Remediation Method : Excavation <input checked="" type="checkbox"/> Approx. Cubic Yards <u>100</u> Onsite Bioremediation <input type="checkbox"/> Backfill Pit Without Excavation <input type="checkbox"/> Soil Disposition: Envirotech <input checked="" type="checkbox"/> <input type="checkbox"/> Tierra Other Facility <input type="checkbox"/> Name: _____ Pit Closure Date: <u>10-13-94</u> ^{WOK 10/14/94} Pit Closed By: <u>REI</u>
REMARKS	Remarks : <u>Pit cleaned up at 12'</u> <u>VW 10-13</u> <u>90</u> <u>100 yds fill</u> _____ _____ Signature of Specialist: <u>Vale Wilson</u>



**FIELD SERVICES LABORATORY
ANALYTICAL REPORT**

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	VW410	946419
MTR CODE SITE NAME:	74051	N/A
SAMPLE DATE TIME (Hrs):	10-13-94	1130
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	10-17-94	10-17-94
DATE OF BTEX EXT. ANAL.:	10-19-94	10-21-94
TYPE DESCRIPTION:	VC	Brown Sand + clay

REMARKS: _____

RESULTS

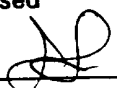
PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	20.025	MG/KG	1			
TOLUENE	20.025	MG/KG	1			
ETHYL BENZENE	20.025	MG/KG	1			
TOTAL XYLENES	20.025	MG/KG	1			
TOTAL BTEX	20.10	MG/KG				
TPH (418.1)	294	MG/KG			2.03	28
HEADSPACE PID	2	PPM				
PERCENT SOLIDS	93.8	%				

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

The Surrogate Recovery was at 94 % for this sample All QA/QC was acceptable.
Narrative:

ATI Results attached.

DF = Dilution Factor Used

Approved By: 

Date: 11/3/94

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

* 94/10/17 11:48

* Sample Identification
* 946419

* Initial mass of sample, g
* 2.030

* Volume of sample after extraction, ml
* 28.000

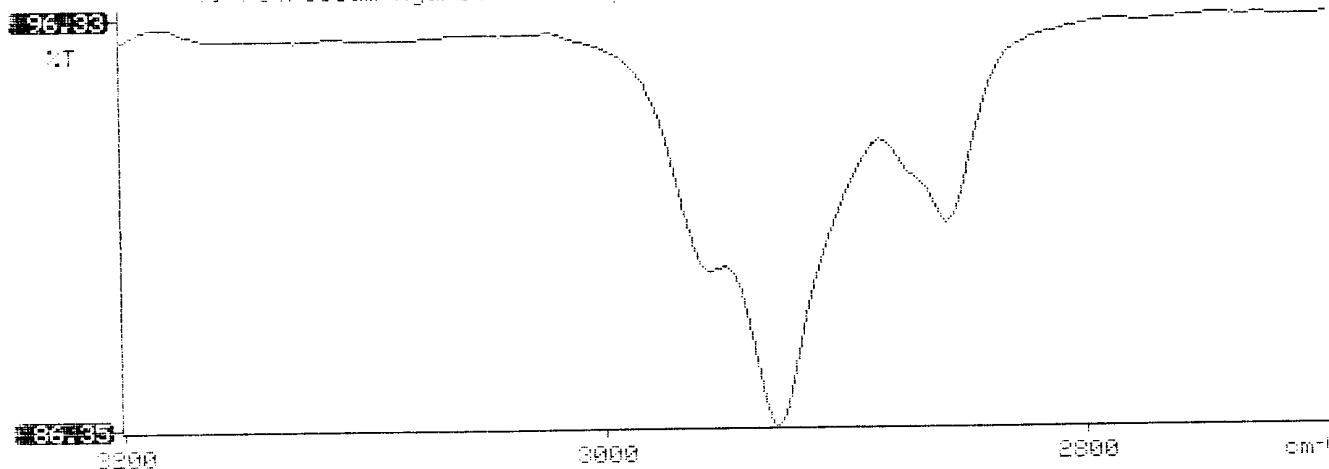
* Petroleum hydrocarbons, ppm
* 294.225

* Net absorbance of hydrocarbons (2930 cm⁻¹)
* 0.046

*
*
*

V: Petroleum hydrocarbons spectrum

11:48





Analytical **Technologies**, Inc.

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

ATI I.D. 410405

October 26, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 10/18/94, 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.

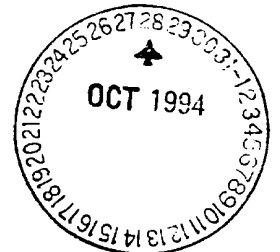
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

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.: 410405
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
28	946419	NON-AQ	10/13/94	10/19/94	10/21/94	1
29	946421	NON-AQ	10/14/94	10/19/94	10/21/94	20
30	946422	NON-AQ	10/14/94	10/19/94	10/20/94	1

PARAMETER	UNITS	28	29	30
BENZENE	MG/KG	<0.025	<0.5	<0.025
TOLUENE	MG/KG	<0.025	<0.5	<0.025
ETHYLBENZENE	MG/KG	<0.025	1.0	<0.025
TOTAL XYLENES	MG/KG	<0.025	26	<0.025

SURROGATE:

BROMOFLUOROBENZENE (%) 94 95 102

PHASE II

PHASE III

RECORD OF SUBSURFACE EXPLORATION

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

PHILIP ENVIRONMENTAL
 4000 Monroe Road
 Farmington, New Mexico 87401
 (505) 326-2262 FAX (505) 326-2388

Project Name EPNG Pits
 Project Number 14509 Phase 6000.77
 Project Location CM Morris #4 79051

Elevation _____
 Borehole Location T27, R10, S13, L
 GWL Depth _____
 Logged By Jeff W. Kindley
 Drilled By G. Sudduth
 Date/Time Started 08/28/95 1100
 Date/Time Completed 08/28/95 1257

Well Logged By Jeff W. Kindley
 Personnel On-Site D. Roberts, H. Keil, G. Sudduth
 Contractors On-Site _____
 Client Personnel On-Site _____
 Drilling Method 4 1/4 ID HSA
 Air Monitoring Method PID, CGI

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: PPM			Drilling Conditions & Blow Counts
							BZ	BH	S	
0				Back Fill material to 12'						
5										
10										
15										
20	1	18-20	1.0 2.0	SW, BR SAND, medium grained, dry, very dense, no odor Boring terminated at 20'					0%	1230 53 blows per FOOT
25										
30										
35										
40										

Comments: Sample collected from 18 to 20 feet. Sample number JWK 49. BH
resisted to surface. Had to work on starter on truck (drill rig) for
45 minutes

Geologist Signature Jeffrey Kindley



**FIELD SERVICES LABORATORY
ANALYTICAL REPORT**

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	9- ^{08/28/95} JWK49	947345
MTR CODE SITE NAME:	74051	C M Morris #4
SAMPLE DATE TIME (Hrs):	08-28-95	1230
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. ANAL.:	6/29/95	
DATE OF BTEX EXT. ANAL.:	8/30/95	9/3/95
TYPE DESCRIPTION:	V6	Brown sand & clay

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< .5	MG/KG				
TOLUENE	< .5	MG/KG				
ETHYL BENZENE	< .5	MG/KG				
TOTAL XYLENES	< 1.5	MG/KG				
TOTAL BTEX	< 3	MG/KG				
TPH (418.1)	75.1	MG/KG			2.0	28
HEADSPACE PID	0	PPM				
PERCENT SOLIDS	100	%				

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

The Surrogate Recovery was at 92% for this sample All QA/QC was acceptable.
Narrative: _____

DF = Dilution Factor Used

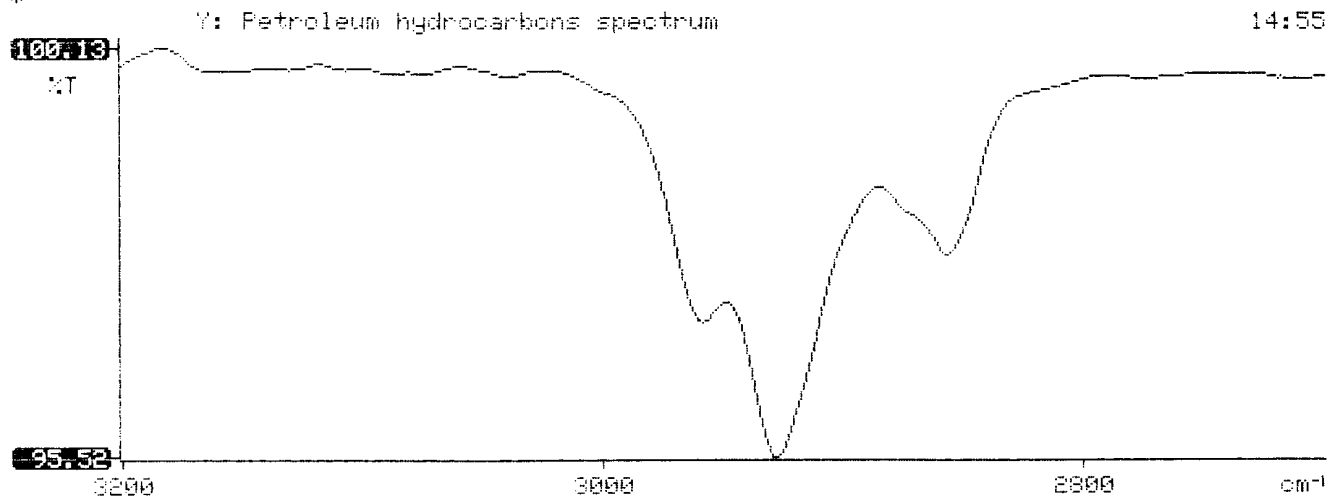
Approved By: [Signature]

Date: 9-7-95

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

95/08/29 14:55

* Sample identification
947345
* Initial mass of sample, g
2.000
* Volume of sample after extraction, ml
28.000
* Petroleum hydrocarbons, ppm
75.088
* Net absorbance of hydrocarbons (2930 cm⁻¹)
0.019
*
*
*



BTEX SOIL SAMPLE WORKSHEET

File	:	947345	Date Printed	:	9/6/95
Soil Mass (g)	:	5.08	Multiplier (L/g)	:	0.00098
Extraction vol. (mL)	:	20	DF (Analytical)	:	200
Shot Volume (uL)	:	100	DF (Report)	:	0.19685

				Det. Limit
Benzene (ug/L)	:	0.00	Benzene (mg/Kg):	0.000 0.492
Toluene (ug/L)	:	0.22	Toluene (mg/Kg):	0.043 0.492
Ethylbenzene (ug/L)	:	0.00	Ethylbenzene (mg/Kg):	0.000 0.492
p & m-xylene (ug/L)	:	0.00	p & m-xylene (mg/Kg):	0.000 0.984
o-xylene (ug/L)	:	0.00	o-xylene (mg/Kg):	0.000 0.492
			Total xylenes (mg/Kg):	0.000 1.476
			Total BTEX (mg/Kg):	0.043

EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\090395-1.008
 Method : C:\LABQUEST\METHODS\9001.MET
 Sample ID : 947345,5.08G,100U
 Acquired : Sep 02, 1995 19:16:13
 Printed : Sep 04, 1995 08:37:43
 User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	3.390	0	0.0000
a,a,a TFT	4.907	2105295	88.4612
TOLUENE	6.737	279706	0.2223
ETHYLBENZENE	10.517	0	0.0000
M & P XYLENE	10.867	367563	-2.1756
O XYLENE	11.950	0	0.0000
BFB	13.130	32229720	91.7580

