

Denny E. Foust
EL PASO FIELD SERVICES
DEPUTY OIL & GAS INSPECTOR
PRODUCTION PIT CLOSURE

DEC 21 1998

Approved

SAN JUAN 28-6 UNIT 195
Meter/Line ID - 89149

RECEIVED
JUL 2 1998

OIL CON. DEPT.
DIST. 7

SITE DETAILS

Legals - Twn: 27 Rng: 06
NMOCD Hazard Ranking: 40
Operator: MERIDIAN OIL INC

Sec: 13 Unit: 0
Land Type: 4 - Fee
Pit Closure Date: 07/07/94

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	<p>Meter: <u>89149</u> Location: <u>San Juan 28-6 Unit 195</u></p> <p>Operator #: <u>2999</u> Operator Name: <u>MOI</u> P/L District: <u>Blanco</u></p> <p>Coordinates: Letter: <u>0</u> Section <u>13</u> Township: <u>27</u> Range: <u>6</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator <input checked="" type="checkbox"/> Location Drip: _____ Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>6/3/94</u> Area: <u>03</u> Run: <u>51</u></p>
SITE ASSESSMENT	<p>NMOCD Zone: (From NMOCD Maps)</p> <p>Inside <input checked="" type="checkbox"/> (1) Outside <input type="checkbox"/> (2)</p> <p>Land Type: BLM <input type="checkbox"/> (1) State <input type="checkbox"/> (2) Fee <input type="checkbox"/> (3) Indian _____ <u>Patented Land</u></p> <p>Depth to Groundwater</p> <p>Less Than 50 Feet (20 points) <input checked="" type="checkbox"/> (1) 50 Ft to 99 Ft (10 points) <input type="checkbox"/> (2) Greater Than 100 Ft (0 points) <input type="checkbox"/> (3)</p> <p>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? <input type="checkbox"/> (1) YES (20 points) <input checked="" type="checkbox"/> (2) NO (0 points)</p> <p>Horizontal Distance to Surface Water Body</p> <p>Less Than 200 Ft (20 points) <input checked="" type="checkbox"/> (1) 200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2) Greater Than 1000 Ft (0 points) <input type="checkbox"/> (3)</p> <p>Name of Surface Water Body <u>Cereza Canyon</u> (Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)</p> <p>Distance to Nearest Ephemeral Stream <input type="checkbox"/> (1) < 100' (Navajo Pits Only) <input type="checkbox"/> (2) > 100'</p> <p>TOTAL HAZARD RANKING SCORE: <u>40</u> POINTS</p>
REMARKS	<p>Remarks : <u>Redline & Veln-Inside</u> <u>1 pit-Willclose Pit Dry</u></p> <p><u>DIG+HAUL</u></p>

ORIGINAL PIT LOCATION	<div data-bbox="636 308 1082 350" data-label="Section-Header"><p>ORIGINAL PIT LOCATION</p></div> <div data-bbox="206 364 1528 475" data-label="Text"><p>Original Pit : a) Degrees from North <u>202°</u> Footage from Wellhead <u>20'</u> b) Length : <u>17'</u> Width : <u>17'</u> Depth : <u>3'</u></p></div> <div data-bbox="214 518 1528 1106" data-label="Diagram"></div>
REMARKS	<div data-bbox="206 1162 421 1204" data-label="Section-Header"><p>Remarks :</p></div> <div data-bbox="223 1204 883 1302" data-label="Text"><p><u>Pictures @ 1530 (1-4) roll 4</u> <u>Dump Truck</u></p></div>
	<div data-bbox="206 1764 479 1805" data-label="Text"><p>Completed By:</p></div> <div data-bbox="305 1833 826 1973" data-label="Text"><p><u>Cory Chase</u> Signature</p></div> <div data-bbox="1065 1833 1239 1973" data-label="Text"><p><u>6/3/94</u> Date</p></div>

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PHASE I EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	<p>Meter: <u>89149</u> Location: <u>SAN JUAN 28-6 unit #195</u></p> <p>Coordinates: Letter: <u>0</u> Section <u>13</u> Township: <u>27</u> Range: <u>6</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>7/7/94</u> Run: <u>03</u> <u>51</u></p>
FIELD OBSERVATIONS	<p>Sample Number(s): <u>KD 135</u></p> <p>Sample Depth: <u>5'</u> Feet</p> <p>Final PID Reading <u>527 ppm</u> PID Reading Depth <u>5'</u> Feet</p> <p style="text-align: center;">Yes No</p> <p>Groundwater Encountered <input type="checkbox"/> <input checked="" type="checkbox"/> Approximate Depth _____ Feet</p>
CLOSURE	<p>Remediation Method :</p> <p>Excavation <input checked="" type="checkbox"/> Approx. Cubic Yards <u>30</u></p> <p>Onsite Bioremediation <input type="checkbox"/></p> <p>Backfill Pit Without Excavation <input type="checkbox"/></p> <p>Soil Disposition:</p> <p>Envirotech <input type="checkbox"/> <input checked="" type="checkbox"/> Tierra</p> <p>Other Facility <input type="checkbox"/> Name: _____</p> <p>Pit Closure Date: <u>7/7/94</u> Pit Closed By: <u>BET</u></p>
REMARKS	<p>Remarks : <u>Excavated pit to 5', Hit Hard Layer of rock, Took</u></p> <p><u>PID Sample, closed pit.</u></p>
	<p>Signature of Specialist: <u>Henry Dan</u></p>



FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KD 135	945607
MTR CODE SITE NAME:	89149	N/A
SAMPLE DATE TIME (Hrs):	7/7/94	1500
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	7-12-94	7/12/94
DATE OF BTEX EXT. ANAL.:	7/14/94	7/16/94
TYPE DESCRIPTION:	✓	Brown/grey clay & sand

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.13	MG/KG	S			
TOLUENE	3.4	MG/KG	S			
ETHYL BENZENE	1.0	MG/KG	S			
TOTAL XYLENES	19	MG/KG	S			
TOTAL BTEX	24	MG/KG				
TPH (418.1)	768	MG/KG			2.14	28
HEADSPACE PID	527	PPM				
PERCENT SOLIDS	89.6	%				

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

The Surrogate Recovery was at 140 % for this sample All QA/QC was acceptable.

Narrative:

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

DF = Dilution Factor Used

Approved By:

Date:

8/8/94

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

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04/07/12 08:52

1. Sample Identification
04360

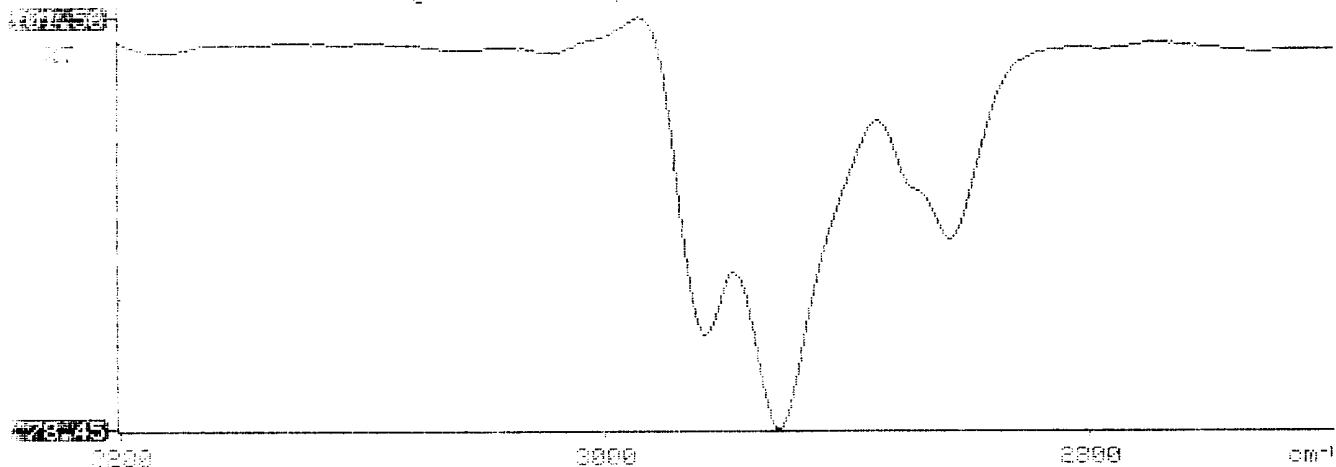
2. Initial mass of sample, g
0.140

3. Volume of sample after extraction, ml
10.000

4. Petroleum hydrocarbons, ppm
767.531

5. Net absorbance of hydrocarbons (2930 cm⁻¹)
0.105

Y: Petroleum hydrocarbons spectrum 08:52





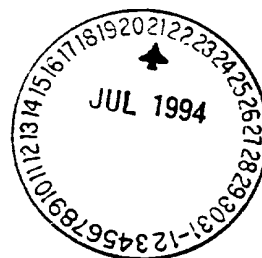
Analytical **Technologies**, Inc.

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

ATI I.D. 407346

July 20, 1994

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



Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 07/13/94, 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.

Samples were run by either internal or external surrogate method. The following samples were run by internal surrogate method: 02, 03, 05, 08, 09, 10, and 12.

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.: 407346
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	945606	NON-AQ	07/07/94	07/14/94	07/16/94	10
05	945607	NON-AQ	07/07/94	07/14/94	07/16/94	5
06	945608	NON-AQ	07/07/94	07/14/94	07/16/94	10
PARAMETER			UNITS	04	05	06
BENZENE			MG/KG	<0.25	<0.13	2.0
TOLUENE			MG/KG	70	3.4	47
ETHYLBENZENE			MG/KG	0.37	1.0	31
TOTAL XYLENES			MG/KG	130	19	360

SURROGATE:

BROMOFLUOROBENZENE (%) 170* 140* 220*

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

PHASE II

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

Project Name EPNG Pits
Project Number 14509 Phase 601 GDOO
Project Location San Juan 28-6, Unit 195, 89149

Well Logged By S.Kelly
Personnel On-Site M. Dambur, J. O'Keefe, F. Rivera
Contractors On-Site _____
Client Personnel On-Site _____

Drilling Method 4 1/4" ID HSA
Air Monitoring Method CGI, PID

Elevation _____
Borehole Location T27, R6, S.13, 0
GWL Depth _____
Logged By S.Kelly
Drilled By M. Dambur
Date/Time Started 9/18/95 1125
Date/Time Completed 9/18/95 1210

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU <u>5/15</u>			Drilling Conditions & Blow Counts
							BZ	BH	S	
0				Backfill to 5'						
5										
10										
15	13-15	5'-15'	5/20	SILT, tan, dense, dry						
20				TOB - 15.0'						
25										
30										
35										
40										

Drilling is
very hard-
rock.

0/5 1410

Comments:

13'-15' sample (SEK 84) sent to lab (BTEX & TPH) Sample was bagged and iced prior to being put in jar. BH grouted to surface.

Geologist Signature

Sarah Kelly



FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	SEK 84	947485
MTR CODE SITE NAME:	89149	San Juan 28-6 Unit 195
SAMPLE DATE TIME (Hrs):	09-18-95	1140
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. ANAL.:	9-20-95	
DATE OF BTEX EXT. ANAL.:	9/19/95	9/21/95
TYPE DESCRIPTION:	V6	Light grey sand and sand stone

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< 0.5	MG/KG				
TOLUENE	< 0.5	MG/KG				
ETHYL BENZENE	< 0.5	MG/KG				
TOTAL XYLENES	< 1.5	MG/KG				
TOTAL BTEX	< 3	MG/KG				
TPH (418.1)	4.8 < 10	MG/KG			2.11	28
HEADSPACE PID	5	PPM				
PERCENT SOLIDS	93.3	%				

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

The Surrogate Recovery was at 103 % for this sample All QA/QC was acceptable.
Narrative:

DF = Dilution Factor Used

Approved By: J.P.

Date: 9-22-95

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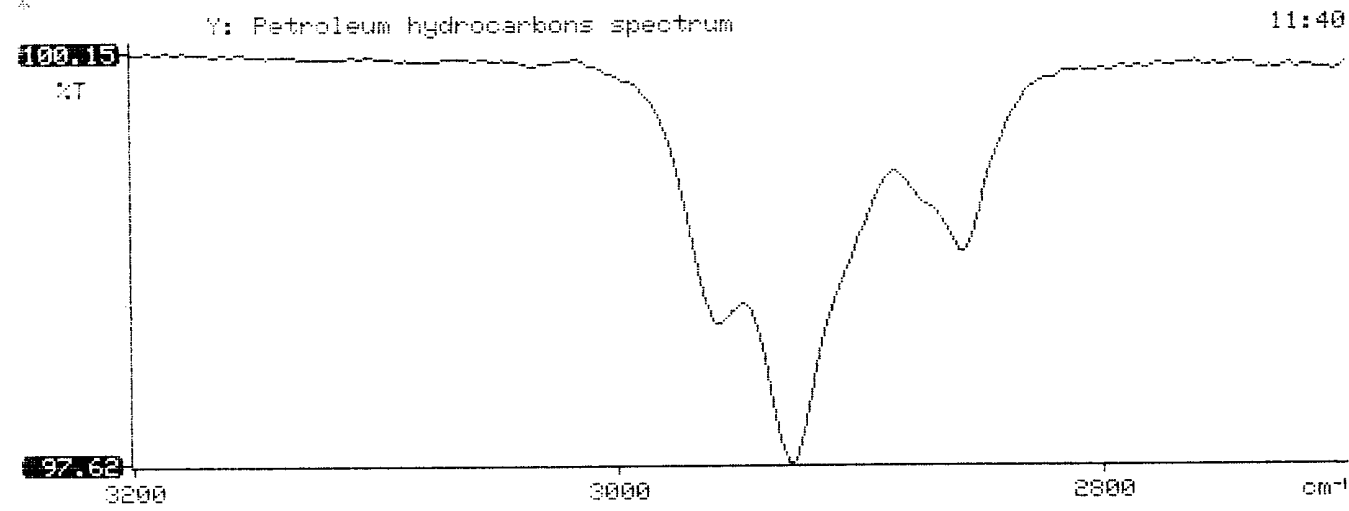
*****
*                               *
*      Test Method for          *
*      Oil and Grease and Petroleum Hydrocarbons      *
*      in Water and Soil        *
*                               *
*      Perkin-Elmer Model 1600 FT-IR                    *
*      Analysis Report                      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

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95/09/20  11:40
*
* Sample identification
947485
*
* Initial mass of sample, g
2.110
*
* Volume of sample after extraction, ml
28.000
*
* Petroleum hydrocarbons, ppm
4.799
* Net absorbance of hydrocarbons (2930 cm-1)
0.011
*
*
*

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BTEX SOIL SAMPLE WORKSHEET

File	:	947485	Date Printed	:	9/22/95
Soil Mass (g)	:	5.00	Multiplier (L/g)	:	0.00100
Extraction vol. (mL)	:	20	DF (Analytical)	:	200
Shot Volume (uL)	:	100	DF (Report)	:	0.20000

				Det. Limit
Benzene (ug/L)	:	0.00	Benzene (mg/Kg):	0.000 0.500
Toluene (ug/L)	:	0.54	Toluene (mg/Kg):	0.108 0.500
Ethylbenzene (ug/L)	:	0.21	Ethylbenzene (mg/Kg):	0.042 0.500
p & m-xylene (ug/L)	:	0.91	p & m-xylene (mg/Kg):	0.182 1.000
o-xylene (ug/L)	:	0.00	o-xylene (mg/Kg):	0.000 0.500
			Total xylenes (mg/Kg):	0.182 1.500
			Total BTEX (mg/Kg):	0.332

EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\092195-1.003
 Method : C:\LABQUEST\METHODS\9001.MET
 Sample ID : 947485,5.00G,100U
 Acquired : Sep 21, 1995 15:25:55
 Printed : Sep 21, 1995 15:52:21
 User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	4.917	0	0.0000
a,a,a TFT	6.693	4716334	102.1575
TOLUENE	8.743	149697	0.5390
ETHYLBENZENE	12.780	53705	0.2101
M & P XYLENE	13.147	301081	0.9087
O XYLENE	14.200	0	0.0000
BFB	15.833	74608504	102.9236

