

EL PASO FIELD SERVICES
DEPUTY OPERATIONS
PRODUCTION PIT CLOSURE

DEC 21 1998

SAN JUAN 28-5 UNIT #13
Meter/Line ID - 71551

RECEIVED
JUL 2 1993

OIL CON. DIV.
DIST. 3

SITE DETAILS M
Legals - Twn: 28 Rng: 05 Sec: 09 Unit: E
NMOCD Hazard Ranking: 20 Land Type: 2 - Federal
Operator: MERIDIAN OIL INC Pit Closure Date: 06/30/94

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.

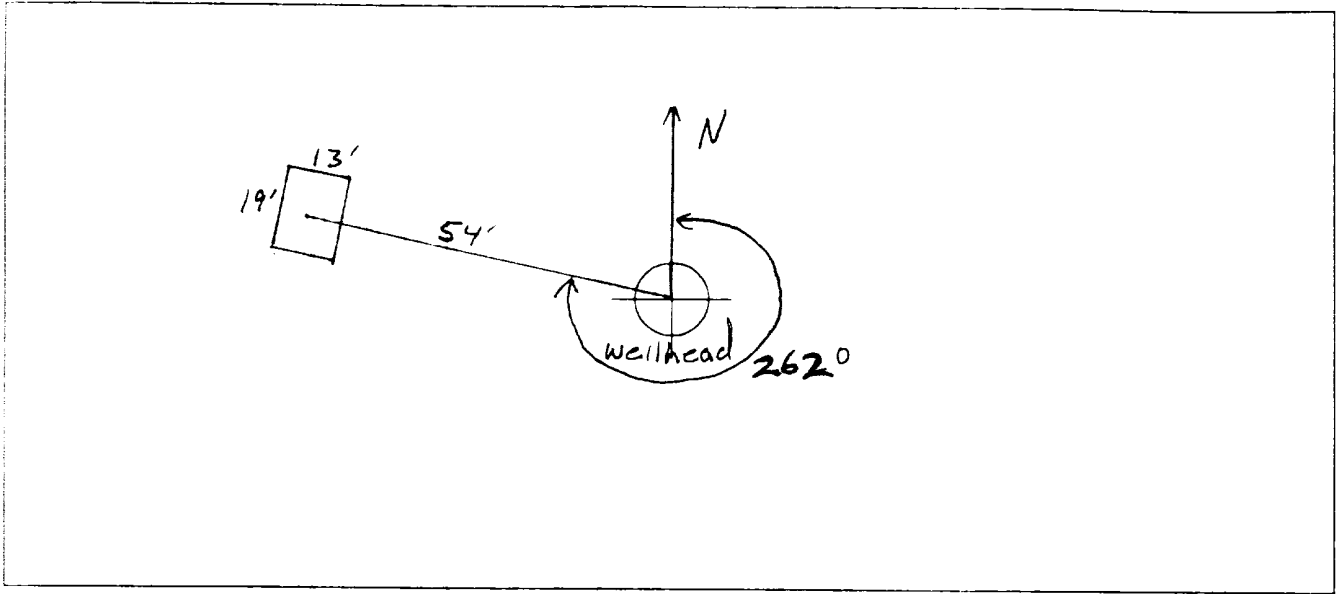
FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>Meter: <u>71551</u> Location: <u>San Juan 28-5 unit #13</u> Operator #: <u>2999</u> Operator Name: <u>Merridan P/L</u> District: <u>Bloomfield</u> Coordinates: Letter: ^{K6W 6-3-94} AAE Section <u>9</u> Township: <u>28</u> Range: <u>5</u> Or Latitude _____ Longitude _____ Pit Type: Dehydrator <input checked="" type="checkbox"/> Location Drip: _____ Line Drip: _____ Other: _____ Site Assessment Date: <u>6-3-94</u> Area: <u>10</u> Run: <u>71</u></p>
SITE ASSESSMENT	<p>NMOCD Zone: (From NMOCD Maps) Inside <input checked="" type="checkbox"/> (1) Outside <input type="checkbox"/> (2)</p> <p>Land Type: BLM <input checked="" type="checkbox"/> (1) State <input type="checkbox"/> (2) Fee <input type="checkbox"/> (3) Indian _____</p> <p>Depth to Groundwater 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 Less Than 200 Ft (20 points) <input type="checkbox"/> (1) 200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2) Greater Than 1000 Ft (0 points) <input checked="" type="checkbox"/> (3)</p> <p>Name of Surface Water Body _____ (Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds) 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>20</u> POINTS</p>
REMARKS	<p>Remarks : <u>Two pits on location. one is dry, one in use with tank/liner</u> <u>located on north side of SW terminus of Gobernador Cyn.</u> <u>location inside V.Z. on Red line, outside V.Z. on TOPO</u></p>

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 262 Footage from Wellhead 54
b) Length : 19 Width : 13 Depth : 3

ORIGINAL PIT LOCATION



REMARKS

Remarks : KGW 6-3-94
~~Photos - Roll 1-6394 26-29 @ 1603 hrs~~
dump truck

Photos Roll 2-6394 #1-4 @ 1605 hrs

Completed By:

Ken Walter
Ken Walter Signature

6-3-94

Date

PHASE I

EXCAVATION



FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	Meter: <u>71551</u> Location: <u>SAN JUAN 28-5 UNIT # 13</u> Coordinates: Letter: <u>E</u> Section <u>9</u> Township: <u>28</u> Range: <u>5</u> Or Latitude _____ Longitude _____ Date Started : <u>6-30-94</u> Area: <u>10</u> Run: <u>71</u>
FIELD OBSERVATIONS	Sample Number(s): <u>KP 114</u> Sample Depth: <u>12'</u> Feet Final PID Reading <u>276</u> PID Reading Depth <u>12'</u> Feet Yes No Groundwater Encountered <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (2) Approximate Depth _____ Feet
CLOSURE	Remediation Method : Excavation <input checked="" type="checkbox"/> (1) Approx. Cubic Yards <u>60</u> Onsite Bioremediation <input type="checkbox"/> (2) Backfill Pit Without Excavation <input type="checkbox"/> (3) Soil Disposition: Envirotech <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (3) Tierra Other Facility <input type="checkbox"/> (2) Name: _____ Pit Closure Date: <u>6-30-94</u> Pit Closed By: <u>B.E.F</u>
REMARKS	Remarks : <u>Some Live markers. There is A pipe next To pit.</u> <u>Soil DARK Brown. With A Smell. At 12 Soil Still the</u> <u>Same.</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:	KP 114	945563
MTR CODE SITE NAME:	71551	N/A
SAMPLE DATE TIME (Hrs):	6-30-94	1145
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	7/7/94	7/7/94
DATE OF BTEX EXT. ANAL.:	7/8/94	7/10/94
TYPE DESCRIPTION:	YC	Fine Brown Sand

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	2.4	MG/KG	20			
TOLUENE	180	MG/KG	20			
ETHYL BENZENE	19	MG/KG	20			
TOTAL XYLENES	270	MG/KG	20			
TOTAL BTEX	471	MG/KG				
TPH (418.1)	2550	MG/KG			2.03	28
HEADSPACE PID	276	PPM				
PERCENT SOLIDS	87.6	%				

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

The Surrogate Recovery was at 218 % for this sample All QA/QC was acceptable.

Narrative:

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

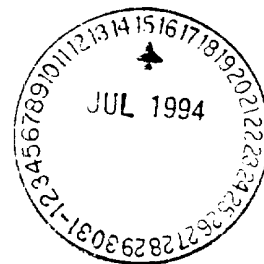
DF = Dilution Factor Used

Approved By: JS

Date: 8/8/94



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

E. 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
01	945561	NON-AQ	06/30/94	07/08/94	07/11/94	50
02	945562	NON-AQ	06/30/94	07/08/94	07/10/94	1
03	945563	NON-AQ	06/30/94	07/08/94	07/10/94	20
PARAMETER			UNITS	01	02	03
BENZENE			MG/KG	4.5	<0.025	2.4
TOLUENE			MG/KG	200	0.055	180
ETHYLBENZENE			MG/KG	30	<0.025	19
TOTAL XYLENES			MG/KG	320	0.49	270

SURROGATE:

BROMOFLUOROBENZENE (%) 180* 112 218*

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

PHASE II

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RECORD OF SUBSURFACE EXPLORATION

Philip Environmental Services Corp.
 4000 Monroe Road
 Farmington, New Mexico 37401
 (606) 326-2262 FAX (606) 326-2388

71551 Borehole # BH-1
 Well # _____
 Page 1 of 2

Project Name EPNG Pits
 Project Number 14509 Phase 001 2000
 Project Location SAN JUAN 285, UNIT #13

Elevation _____
 Borehole Location T28, R5, S.9, E
 GWL Depth _____
 Logged By S. Kelly
 Drilled By R. Padilla
 Date/Time Started 7/10/95, 1300 1310 2K 7/10/95
 Date/Time Completed 7/10/95, 1645

Well Logged By S. Kelly
 Personnel On-Site R. Padilla, F. Rivera, D. Charri
 Contractors On-Site _____
 Client Personnel On-Site _____
 Drilling Method 4 1/4" ID H5A
 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		Drilling Conditions & Blow Counts
							Units: NDU	S	
0				Backfill to 12'					
15	1	15-16.5	1 1/2' / 1.5'	sandy SILT, brown, 5-15% fine sand, trace clay, very loose, damp.			204	1330	198 524 2K 7/10/95
20	2	20-22	2' / 2.0'	SAA			157	1335	300
25	3	25-26.5	1.2' / 1.5'	SAA - grading to 20-35% fine sand toward 26.5'. loose			80	1340	445
30	4	30-32	.85' / 2.0'	SAA			51	1355	294
35	5	35-36.5	1.5' / 1.5'	SAA with 5-15% clay			33	1410	420

Comments: _____

Geologist Signature _____

Sarah Kelly

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 2 of 2

Project Name EPNG Pits
 Project Number 14509 Phase 601
 Project Location SAN JUAN 28-5, unit #13

Elevation _____
 Borehole Location _____
 GWL Depth _____
 Logged By S.Kelly
 Drilled By _____
 Date/Time Started _____
 Date/Time Completed _____

Well Logged By S.Kelly
 Personnel On-Site _____
 Contractors On-Site _____
 Client Personnel On-Site _____
 Drilling Method _____
 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		Drilling Conditions & Blow Counts
							Units: NDU	BZ BH	
AK 71095 4 ⁰	6	40-41.5	1.2' / 1.5'	SAA, w/ less clay, intervals of med sand 1"-2" thick.			93 / 392	1425	
AK 71095 4 ⁵	7	45-46.5	1.2' / 1.5'	SAA		47	110 / 507	1445	
AK 71095 50 ¹⁰	8	50-51.5	1.1' / 1.5'	silty SAND, light brown, 5-15% silt, fine sand, loose, damp.			85 / 263	1500	
AK 71095 55 ¹⁵	9	55-56.5	1.0' / 1.5'	SAA			2 / 7	1520	
				BOH- 56.5					

Comments: 55-56.5' sample and dup (SEK31 & SEK32) sent to lab (BTEX & TPH). Sample was bagged and iced prior to being put in jar. BH grouted to surface.

Geologist Signature Sush Kelly



Phase II

FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

SAMPLE NUMBER:	71551 812/95 ^{8/3/95} Field ID	Lab ID	946963
MTR CODE SITE NAME:	ROBERTS San Juan 285 # 85-812/95	N/A	
SAMPLE DATE TIME (Hrs):	7-10-95		12:10
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		Gray clay w/sand

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)	214 213 Kov	MG/KG			2.00	28
HEADSPACE PID	25	PPM				
PERCENT SOLIDS	91.3%	%				

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

The Surrogate Recovery was at 104 % for this sample All QA/QC was acceptable.

Narrative:

ATI Results for BTEX and Modified 8015 attached.

DF = Dilution Factor Used

Approved By:

Date:

8/3/95

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

95/07/12 12:16

* Sample identification

946963

* Initial mass of sample, g

2.000

* Volume of sample after extraction, ml

28.000

* Petroleum hydrocarbons, ppm

213.926

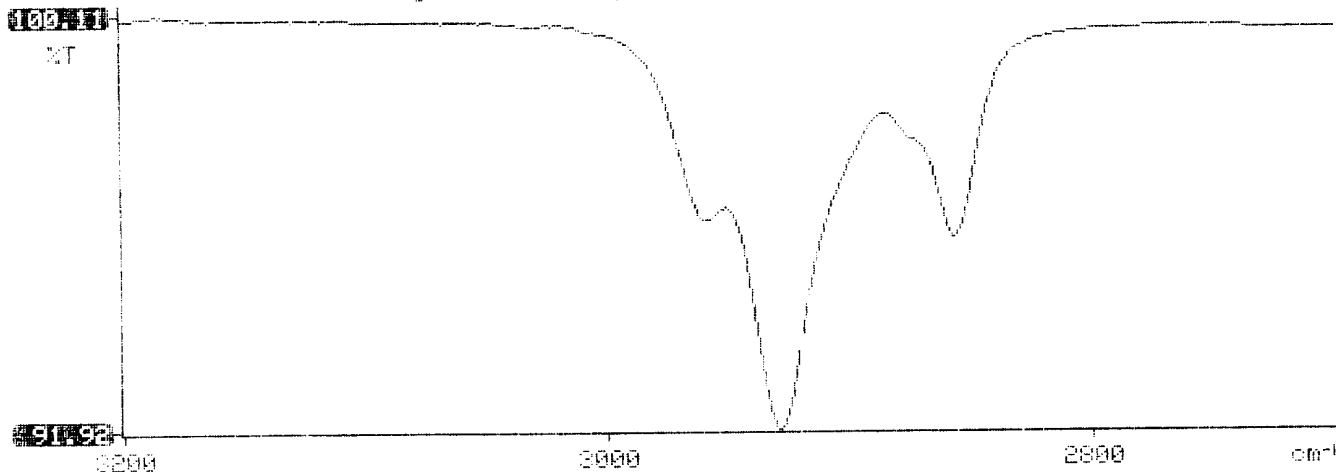
* Net absorbance of hydrocarbons (2930 cm⁻¹)

0.036

*
*
*

Y: Petroleum hydrocarbons spectrum

12:16





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
01	946962	NON-AQ	07/10/95	07/17/95	07/17/95	1
02	946963	NON-AQ	07/10/95	07/17/95	07/17/95	1
03	946964	NON-AQ	07/10/95	07/17/95	07/17/95	1

PARAMETER	UNITS	01	02	03
BENZENE	MG/KG	<0.025	<0.025	<0.025
TOLUENE	MG/KG	<0.025	<0.025	0.070
ETHYLBENZENE	MG/KG	<0.025	<0.025	<0.025
TOTAL XYLENES	MG/KG	<0.025	<0.025	<0.025

SURROGATE:

BROMOFLUOROBENZENE (%) 100 104 99



ATI 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 : 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