Denny G. Foust
DEPUTY OIL & GAS INSPECTOR

EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE

DEC 21 1998

RECEIVED
JUL 2 1998
OIL CON. DIV.
DIST. 3

Approved

PAN AMERICAN C #2E
Meter/Line ID - 93162

SITE DETAILS

Legals - Twn: 30 **Rng:** 12 **Sec:** 19 **Unit:** D
NMOCD Hazard Ranking: 30 **Land Type:** 2 - Federal
Operator: AMOCO PRODUCTION COMPANY **Pit Closure Date: 05/04/94**

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: 93162 Location: PAN AMERICAN C #2E

Operator #: 0203 Operator Name: AMOCO P/L District: KUTZ

Coordinates: Letter: D Section 19 Township: 30 Range: 12

Or Latitude _____ Longitude _____

Pit Type: Dehydrator X Location Drip: ___ Line Drip: ___ Other: _____

Site Visit Date: 3.22.94 Run: 02 22.

SITE ASSESSMENT

NMOCD Zone: (From NMOCD Maps)
- Inside Vulnerable Zone ☒
- Outside ☐

Land Type:
- BLM ☒
- State ☐
- Fee ☐
- Indian _____

Depth to Groundwater
- Less Than 50 Feet (20 points) ☐
- 50 Ft to 99 Ft (10 points) ☐
- Greater Than 100 Ft (0 points) ☒

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? 3.22.94 RT ☐ YES (20 points) ☒ NO (0 points)

Horizontal Distance to Surface Water Body
- Less Than 200 Ft (20 points) ☐
- 200 Ft to 1000 Ft (10 points) ☐
- Greater Than 1000 Ft (0 points) ☒

Name of Surface Water Body _____

(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)

TOTAL HAZARD RANKING SCORE: 0 **POINTS**

REMARKS

Remarks : LOCATION IS FENCED OFF. PIT TO CLOSE IS OUTSIDE FENCE. PIT IS DRY.

ORIGINAL PIT LOCATION

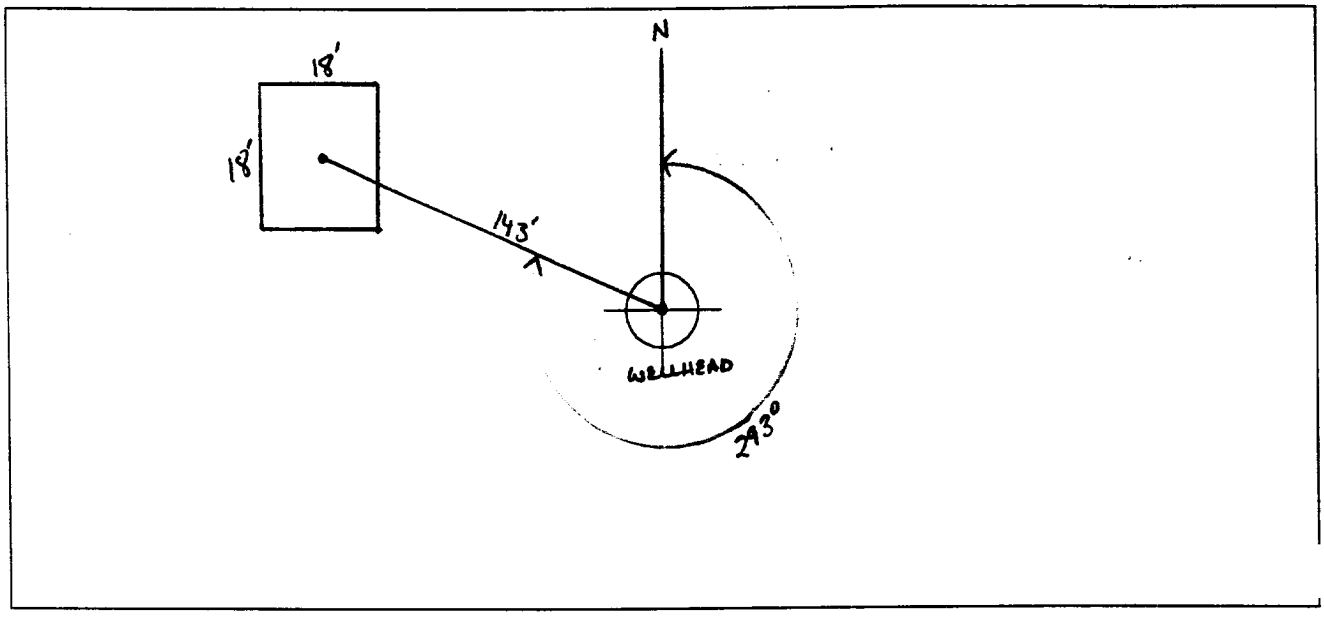
ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 293° Footage to Wellhead 143'

b) Degrees from North _____ Footage to Dogleg _____

Dogleg Name _____

c) Length : 18' Width : 18' Depth : 4'



REMARKS

Remarks :

STARTED TAKING PICTURES AT 3:14 P.M.

END DUMP

Completed By:

Robert Thompson
Signature

3.22.94
Date

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 73162 Location: SAN JUAN C #2E

Operator #: _____ Operator Name: _____ P/L District: _____

Coordinates: Letter: ___ Section ___ Township ___ Range ___

Or Latitude _____ Longitude _____

Pit Type: Dehydrator ___ Location Drip ___ Line Drip ___ Other ___

Site Assessment Date: _____ Area ___ Run ___

SITE ASSESSMENT

NMOCD Zone: _____ Land Type: BLM ___ (1)

(From NMOCD Maps) State ___ (2)

Inside ___ (1) Fee ___ (3)

Outside ___ (2) 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 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 Boot Arroyo

(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: 30 **POINTS**

REMARKS

Remarks: _____

PHASE I
EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 93162 Location: PAN AMERICAN C #~~73~~ #2E sub 5/16/94 per S. Pope BEI

Coordinates: Letter: D Section 19 Township: 30 Range: 12

Or Latitude _____ Longitude _____

Date Started : 5-4-94 Area: 02 Run: 22

FIELD OBSERVATIONS

Sample Number(s): 945073 # K.P. 19 _____ _____ _____

Sample Depth: 6' Feet

Final PID Reading 541 PID Reading Depth 6' Feet

Groundwater Encountered Yes ☐ (1) No ☒ (2) Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation ☒ (1) Approx. Cubic Yards 10

Onsite Bioremediation ☐ (2)

Backfill Pit Without Excavation ☐ (3)

Soil Disposition:

Envirotech ☐ (1) ☒ (3) Tierra

Other Facility ☐ (2) Name: _____

Pit Closure Date: 5-4-94 Pit Closed By: B.E.F

REMARKS

Remarks : ON LOCATION NO LINE MARKERS STARTED REMEDIATING PIT HIT SAND STONE SOIL SANDY. PID 541

Signature of Specialist: Kelly Padilla

(SP3191) 04/07/94

El Paso Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP 19	945073
MTR CODE SITE NAME:	93162	N/A
SAMPLE DATE TIME (Hrs):	5/4/94	1425
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	5/5/94	5/5/94
DATE OF BTEX EXT. ANAL.:	5/6/94	5/13/94
TYPE DESCRIPTION:	VC	Brown Coarse Sand

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	1.2	MG/KG	25			
TOLUENE	42	MG/KG	25			
ETHYL BENZENE	16	MG/KG	25			
TOTAL XYLENES	170	MG/KG	25			
TOTAL BTEX	229	MG/KG				
TPH (418.1)	940	MG/KG			2.10	28
HEADSPACE PID	541	PPM				
PERCENT SOLIDS	92.1	%				

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

The Surrogate Recovery was at 50 % 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: John Fold Date: 7/14/94

Test Method for
[illegible] and Grease and Petroleum Hydrocarbons
in Water and Soil

Perkin-Elmer Model 1600 FT-IR
Analysis Report

[illegible] 13:50

Sample identification
[illegible]45077

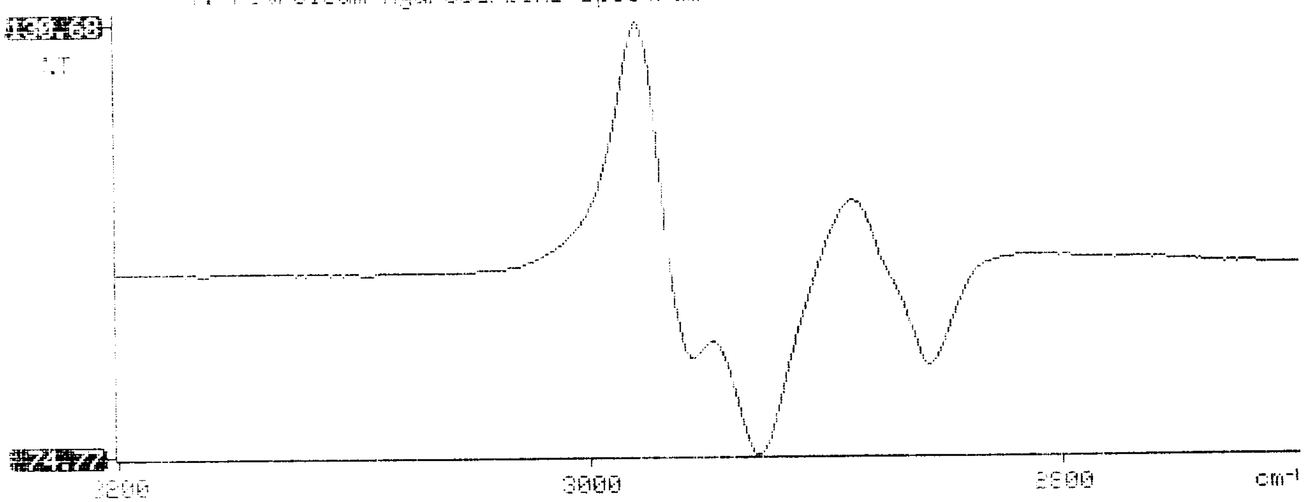
Initial mass of sample, g
[illegible].100

Volume of sample after extraction, ml
[illegible]8.000

Petroleum hydrocarbons, ppm
[illegible]40.112

Net absorbance of hydrocarbons (2930 cm-1)
[illegible].121

/: Petroleum hydrocarbons spectrum 13:50



Analytical Technologies, Inc.

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

ATI I.D. **405331**

May 19, 1994

El Paso Natural Gas Company
770 W. Navajo
Farmington, NM 87401

Project Name/Number: PIT PROJECT 24324

Attention: John Lambdin

On **05/06/94**, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **aqueous** and **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.

Upon arrival, it was noted that sample 945055 contained headspace. The client was notified and the sample was analyzed "as is."

The laboratory was instructed to correct the sampling data for sample 945075 to 05/04/94.

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

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jd

Enclosure

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 405331
PROJECT # : 24324
PROJECT NAME : PIT PROJECT

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
23	945072	NON-AQ	05/04/94	05/09/94	05/14/94	5
24	945073	NON-AQ	05/04/94	05/09/94	05/13/94	25
25	945074	NON-AQ	05/04/94	05/09/94	05/13/94	10

PARAMETER	UNITS	23	24	25
BENZENE	MG/KG	0.43	1.2	<0.25
TOLUENE	MG/KG	3.2	42	0.60
ETHYLBENZENE	MG/KG	0.7	16	2.8
TOTAL XYLENES	MG/KG	7.8	170	55
SURROGATE:				
BROMOFLUOROBENZENE (%)		130*	50*	110

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

PHASE II

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 San American C#2E 93162

Elevation
Borehole Location T 30, R 12, S 19, D
GWL Depth
Logged By Jeff W. Kindley
Drilled By S. Sneiden
Date/Time Started 09/25/95 0935
Date/Time Completed 09/25/95 1111

Well Logged By Jeff W. Kindley
Personnel On-Site D. Charley, D. Roberts, S. Sne
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 BZ	BH	S	Drilling Conditions & Blow Counts
0				Backfill material to 12 feet.						
5										
10										
15	1	15-17	12/24	SW, BR SAND, Coarse-grained, very dense, hydrocarbon odor dry					44/75	1010 836 blows per Foot
20	2	20-22	16/24	S.A.A					74/63	1017 546 blows per Foot
25	3	25-27	4/24	S.A.A Boring terminated at 27 feet					0/24	1030 44 blows per Foot
30										
35										
40										

Comments: B.H grouted to the surface. Sample collected From 25 to 27 feet (WRK 83).

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:	JWK83	947541
MTR CODE | SITE NAME:	93162	Pan American C #2E
SAMPLE DATE | TIME (Hrs):	09-26-95	1030
PROJECT:	Rose II Drilling	
DATE OF TPH EXT. | ANAL.:	9-27-95	
DATE OF BTEX EXT. | ANAL.:	9/27/95	9/27/95
TYPE | DESCRIPTION:	VG	Light brown course Sand

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS* DF	Q	M(g)	V(ml)
BENZENE	< 0.5	MG/KG				
TOLUENE	1.1	MG/KG				
ETHYL BENZENE	< 0.5	MG/KG				
TOTAL XYLENES	3.6	MG/KG				
TOTAL BTEX	4.7	MG/KG				
TPH (418.1)	RJB ~~X~~ 30	MG/KG			1.98	28
HEADSPACE PID	24	PPM				
PERCENT SOLIDS	91.0	%				

-- 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:

DF = Dilution Factor Used

Approved By: ~~9-29-95~~ _____ Date: 9-29-95

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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                     *
**********************************************************
*
 95/09/27  14:08
*
*  Sample identification
 947541
*
*  Initial mass of sample, g
 1.980
*
*  Volume of sample after extraction, ml
 28.000
*
*  Petroleum hydrocarbons, ppm
 29.006
*  Net absorbance of hydrocarbons (2930 cm-1)
 0.014
*
*
*
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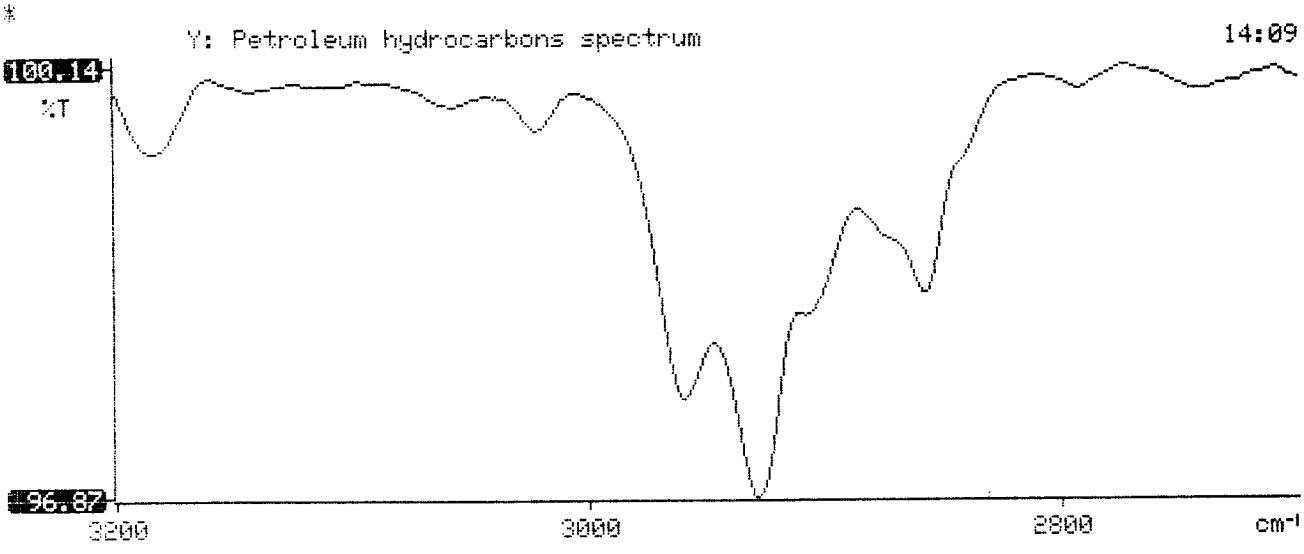

BTEX SOIL SAMPLE WORKSHEET

File	947541	**Date Printed**	9/28/95
Soil Mass (g)	5.12	**Multiplier (L/g)**	0.00098
Extraction vol. (mL)	10	**DF (Analytical)**	200
Shot Volume (uL)	50	**DF (Report)**	0.19531

			Det. Limit
Benzene (ug/L)	0.22	**Benzene (mg/Kg):**	**0.043**	0.488
Toluene (ug/L)	5.75	**Toluene (mg/Kg):**	**1.123**	0.488
Ethylbenzene (ug/L)	1.94	**Ethylbenzene (mg/Kg):**	**0.379**	0.488
p & m-xylene (ug/L)	15.00	p & m-xylene (mg/Kg):	2.930	0.977
o-xylene (ug/L)	3.65	o-xylene (mg/Kg):	0.713	0.488
		Total xylenes (mg/Kg):	**3.643**	1.465
		Total BTEX (mg/Kg):	**5.188**	

EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM000\092795-0.015
Method : C:\LABQUEST\METHODS\9000.MET
Sample ID : 947541,5.12G,50U
Acquired : Sep 27, 1995 23:44:45
Printed : Sep 28, 1995 00:15:13
User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	8.110	82830	0.2214
a,a,a-TFT	10.470	9388778	107.3177
TOLUENE	12.887	2055508	5.7489
ETHYLBENZENE	17.227	653491	1.9412
M,P-XYLENES	17.607	5867822	15.0364
O-XYLENE	18.777	1177602	3.6590
BFB	19.860	52841964	96.9433