EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE

DEC 2 1 1998

BREECH 89 E
Meter/Line ID - 95677

RECEIVED
JUL

SITE DETAILS

Legals - Twn: 26 **Rng:** 06 **Sec:** 03 **Unit:** E
NMOCD Hazard Ranking: 60 **Land Type:** 2 - Federal
Operator: CAULKINS OIL CO **Pit Closure Date:** 07/05/94

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.
- 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

95677 KDK 10/18/94

Meter: ~~95677~~ Location: Breech 89E

Operator #: 1220 Operator Name: Caulkins Oil P/L District: Blanco

Coordinates: Letter: ~~M~~E Section ~~4~~3 KDK 10/18/94 Township: 26 Range: 6

Or Latitude _____ Longitude _____

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

Site Assessment Date: 6/7/94 Area: 03 Run: 62

SITE ASSESSMENT

NMOCD Zone: (From NMOCD Maps)

Inside ☒ (1)

Outside ☐ (2)

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 Ice Canyon

(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: 60 **POINTS**

REMARKS

Remarks : Site not located on Redline map, Site Approximated on Vulnerable Zonemap & is Inside 1pit. Will Close. Pit Dry

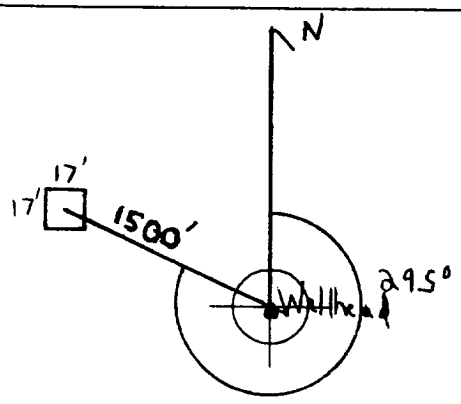
DIG+HAUL

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 295° Footage from Wellhead 1500'

b) Length : 17' Width : 17' Depth : 3'



REMARKS

Remarks :

Pictures @ 1509 (16-20)

End Dump

Wellhead is ~1500' uphill from the pit.

Completed By:

Cory Chase
Signature

6/7/94
Date

PHASE I
EXCAVATION

FIF PIT REMEDIATION/CLOSURE FORM

GENERAL

95677 KDK 10/18/94

Meter: 95567 Location: Breech 89E

Coordinates: Letter: H E KDK 10/18/94 Section 4 3 KDK Township: 26 Range: 6

Or Latitude _____ Longitude _____

Date Started : 7-5-94 Area: 03 Run: 62

FIELD OBSERVATIONS

Sample Number(s): KP 116 _____ _____ _____

Sample Depth: 12' Feet

Final PID Reading 537 PID Reading Depth 12' Feet

	Yes	No
Groundwater Encountered	☐ (1)	☒ (2)

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation	☒ (1)	Approx. Cubic Yards 90
Onsite Bioremediation	☐ (2)	
Backfill Pit Without Excavation	☐ (3)	

Soil Disposition:

Envirotech	☐ (1)	☒ (3)	Tierra
Other Facility	☐ (2)	Name:	_____

Pit Closure Date: 7-5-94 Pit Closed By: B.E.I.

REMARKS

Remarks : Some Line markers. started Remediating to 12'. Soil Turned Light gray with A smell. At 12' soil still the same Pid 537. closed Pit.

Signature of Specialist: Kelly Padilla

(SP3191) 04/07/9

El Paso Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP 116	9455-9
MTR CODE | SITE NAME:	KDK 10/198/94 95577 95677	N/A
SAMPLE DATE | TIME (Hrs):	7-5-94	1040
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:	VC	DK Brown Sand/Clay

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	2.3	MG/KG	10			
TOLUENE	34	MG/KG	10			
ETHYL BENZENE	17	MG/KG	10			
TOTAL XYLENES	190	MG/KG	10			
TOTAL BTEX	243	MG/KG				
TPH (418.1)	15,600	MG/KG			0.50	28
HEADSPACE PID	537	PPM				
PERCENT SOLIDS	88.0	%				

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

The Surrogate Recovery was at 109 % for this sample All QA/QC was acceptable.

Narrative: ATI results attached.

DF = Dilution Factor Used

AP 7/8/94

Test Method for
Grease and Petroleum Hydrocarbons
in Water and Soil

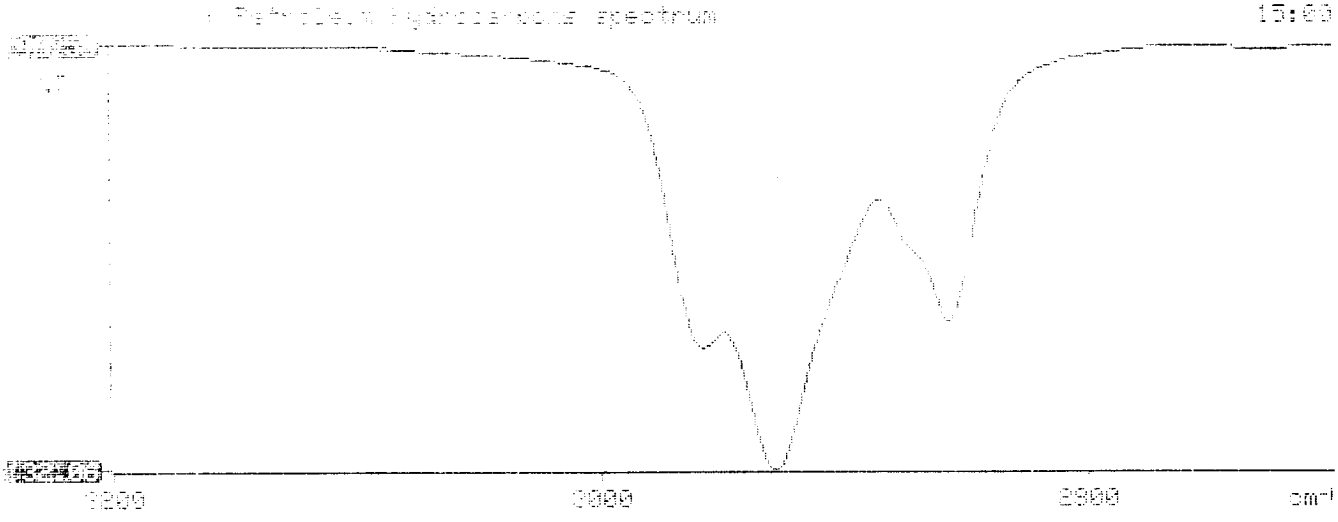
Perkin-Elmer Model 1600 FT-IR
Analysis Report

Sample Identification

Initial mass of sample, g

Volume of sample after extraction, ml

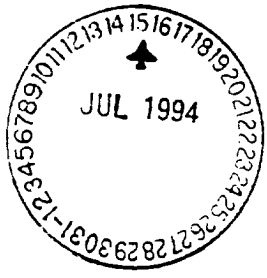
Petroleum hydrocarbons, ppm
17557.046
Net absorbance of hydrocarbons (2930 cm-1)



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 evaluted 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

Analytical Technologies, Inc.

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
07	945578	NON-AQ	07/05/94	07/08/94	07/10/94	10
08	945579	NON-AQ	07/05/94	07/08/94	07/10/94	10
09	945588	NON-AQ	07/06/94	07/08/94	07/10/94	10

PARAMETER	UNITS	07	08	09
BENZENE	MG/KG	1.7	2.3	<0.25
TOLUENE	MG/KG	93	34	<0.25
ETHYLBENZENE	MG/KG	8.3	17	1.6
TOTAL XYLENES	MG/KG	92	190	27
SURROGATE:				
BROMOFLUOROBENZENE (%)		77	109	122*

*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 Services Corp.
4000 Monroe Road
Farmington, New Mexico 87401
(606) 326-2262 FAX (606) 326-2388

Project Name EPNG Pits
Project Number 14509 Phase ~~601~~ 6000
Project Location Breech 89E, 95677

Elevation
Borehole Location T26, R6, S.3, E
GWL Depth
Logged By S.Kelly
Drilled By M. Donohue
Date/Time Started 9/18/95, 1240
Date/Time Completed 9/18/95, 1340

Well Logged By S.Kelly
Personnel On-Site M. Donohue, J. O'Keefe, F. Rivera
Contractors On-Site
Client Personnel On-Site
Drilling Method 4¼" ID HSA
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: NDU EZ	BH	S/HS	Drilling Conditions & Blow Counts
0				Backfill to 12'						
5										
10										
15										
20	1	18-20	1.6'/2.0'	silty SAND, grey, loose, 5-20% silt, fine sand, dry.		22'			58/712	1253
25	2	23-25	1.2'/2.0'	silty SAND, brown, loose, 5-20% silt, fine sand, dry					32/161	1300
30	3	28-30	1.0'/2.0'	SAA					2/1	1305
				TOB- 30.0'						
35										
40										

Comments: 28'-30' sample (SEK 85) sent to lab. (BTEX & TPH) Sample was bagged and iced prior to being put in jar. BH grouted to surface.

Geologist Signature Sarah Kelly

El Paso Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	SEK85	947486
MTR CODE | SITE NAME:	95677	Breech 89E
SAMPLE DATE | TIME (Hrs):	09-18-95	1305
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:	VG	Dark brown sand and clay

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)	4.5 <10	MG/KG			2.12	28
HEADSPACE PID	1	PPM				
PERCENT SOLIDS	93.5	%				

-- 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: _____ 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                      *
************************************************************
*
 95/09/20  11:43
*
*  Sample identification
 947486
*
*  Initial mass of sample, g
 2.120
*
*  Volume of sample after extraction, ml
 28.000
*
*  Petroleum hydrocarbons, ppm
 4.299
*  Net absorbance of hydrocarbons (2930 cm-1)
 0.011
*
*
*
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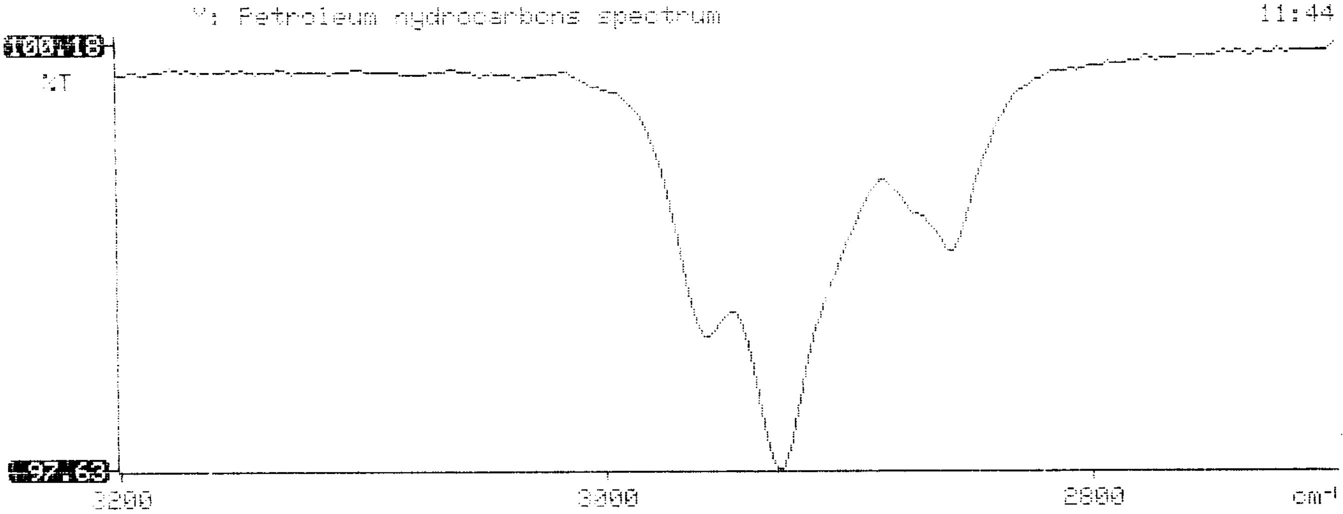
Y: Petroleum hydrocarbons spectrum 11:44



BTEX SOIL SAMPLE WORKSHEET

File :	947486	**Date Printed** :	9/22/95
Soil Mass (g) :	5.05	**Multiplier (L/g)** :	0.00099
Extraction vol. (mL) :	20	**DF (Analytical)** :	200
Shot Volume (uL) :	100	**DF (Report)** :	0.19802

				Det. Limit
Benzene (ug/L) :	0.00	**Benzene (mg/Kg):**	**0.000**	0.495
Toluene (ug/L) :	0.00	**Toluene (mg/Kg):**	**0.000**	0.495
Ethylbenzene (ug/L) :	0.00	**Ethylbenzene (mg/Kg):**	**0.000**	0.495
p & m-xylene (ug/L) :	0.00	p & m-xylene (mg/Kg):	0.000	0.990
o-xylene (ug/L) :	0.00	o-xylene (mg/Kg):	0.000	0.495
		Total xylenes (mg/Kg):	**0.000**	1.485
		Total BTEX (mg/Kg):	**0.000**	

EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\092195-1.004
Method : C:\LABQUEST\METHODS\9001.MET
Sample ID : 947486,5.05G,100U
Acquired : Sep 21, 1995 16:02:00
Printed : Sep 21, 1995 16:28:28
User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	4.917	0	0.0000
a,a,a TFT	6.687	4720142	102.2399
TOLUENE	8.707	0	0.0000
ETHYLBENZENE	12.743	0	0.0000
M & P XYLENE	13.000	0	0.0000
O XYLENE	14.200	0	0.0000
BFB	15.840	74809080	103.2003