EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE

Dennis L. Foust
DEPUTY ~~OIL & GAS INSPECTOR~~

DEC 2 1 1998

RECEIVED
JUL 2 1999
OIL CON. DIV.

AZTEC #2E
Meter/Line ID - 93110

SITE DETAILS

Legals - Twn: 30 **Rng:** 14 **Sec:** 35 **Unit:** G
NMOCD Hazard Ranking: 30 **Land Type:** 4 - Fee
Operator: QUESTAR ENERGY CORP. **Pit Closure Date: 01/25/95**

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: 93110 Location: AZTEC #2E
Operator #: _____ Operator Name: AMAX P/L District: KUTZ
Coordinates: Letter: G Section 35 Township: 30 Range: 14
Or Latitude _____ Longitude _____
Pit Type: Dehydrator X Location Drip: ___ Line Drip: ___ Other: _____
Site Assessment Date: 1.11.95 Area: 02 Run: 23

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 LOCKE 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 : REDLINE & TOPO SHOW LOCATION INSIDE V.Z.S PITS ON LOCATION. UNLINED DEHY PIT BELONGS TO EPNG. WILL CLOSE PIT.

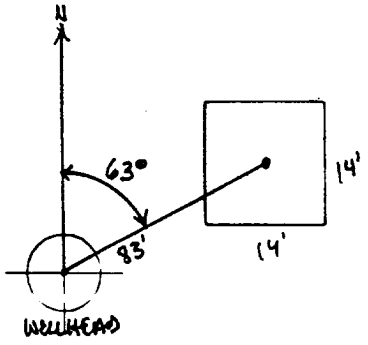
D.C. & WAM

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 63° Footage from Wellhead 83'

b) Length : 14' Width : 14' Depth : 2'



REMARKS

Remarks :

PHOTOS - 1016

Completed By:

Robert Thompson
Signature

1.11.95
Date

PHASE I
EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 93110 Location: Aztec #2E

Coordinates: Letter: G Section 35 Township: 30 Range: 14

Or Latitude _____ Longitude _____

Date Started : 1-25-95 Run: 02 23

FIELD OBSERVATIONS

Sample Number(s): KP 394 _____ _____ _____

Sample Depth: 12' Feet

Final PID Reading 457 PID Reading Depth 12' Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation	☒	Approx. Cubic Yards 50
Onsite Bioremediation	☐	
Backfill Pit Without Excavation	☐	

Soil Disposition:

Envirotech	☐	☒	Tierra
Other Facility	☐	Name:	_____

Pit Closure Date: 1-25-95 Pit Closed By: B.EI

REMARKS

Remarks : No Line markers. Started Remediating to 12' soil Dark gray with Hydrocarbon odor. At 12' Soil Still the same.

Signature of Specialist: Kelly Padilla

(SP3191) 03/16/94

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:	KP 392	96598
MTR CODE | SITE NAME:	93110	N/A
SAMPLE DATE | TIME (Hrs):	1-25-95	1700
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	1-28-95	1-28-95
DATE OF BTEX EXT. | ANAL.:	1/26/95	1/31/95
TYPE | DESCRIPTION:	VC	Brown fine sand and clay

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<1.96	MG/KG	0.39216		2.55	20
TOLUENE	26.7	MG/KG				
ETHYL BENZENE	12.3	MG/KG				
TOTAL XYLENES	121	MG/KG				
TOTAL BTEX	161	MG/KG				
TPH (418.1)	4660	MG/KG			0.300	28
HEADSPACE PID	457	PPM				
PERCENT SOLIDS	87.1	%				

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

The Surrogate Recovery was at 96.0 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: _____ Date: 2-22-95

Test Method for
Oil and Grease and Petroleum Hydrocarbons
in Water and Soil

Perkin-Elmer Model 1600 FT-IR
Analysis Report

[illegible] 93 07:58

Sample Identification
[illegible]

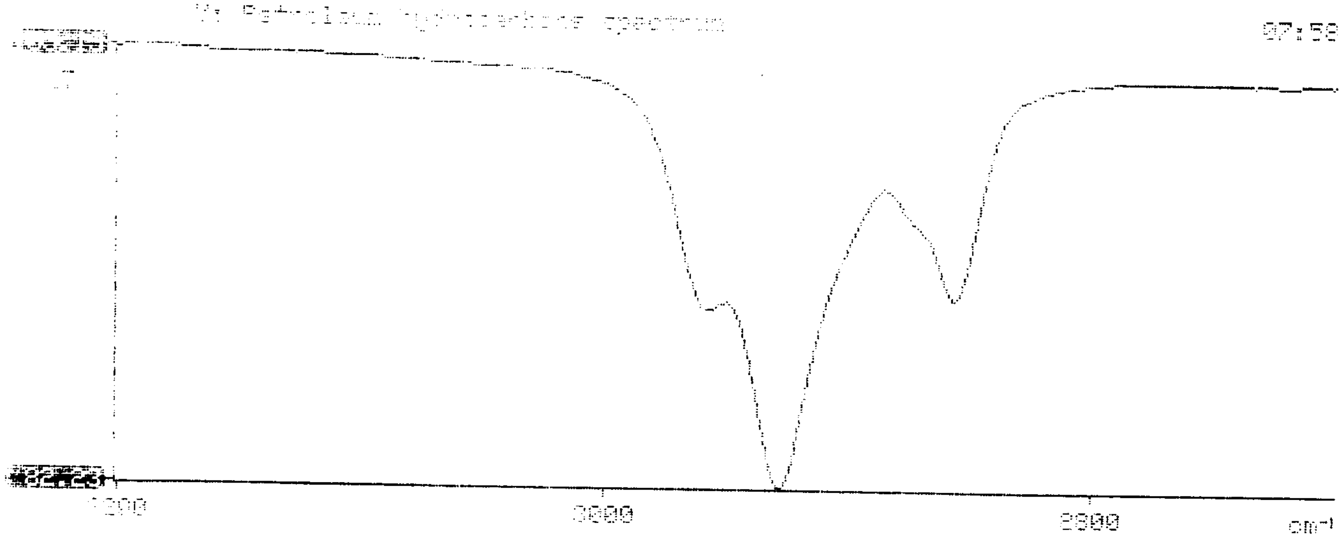
Initial mass of sample, g
[illegible]

Volume of sample after extraction, ml
[illegible]

Petroleum hydrocarbons, ppm
[illegible]458.740

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

[illegible] Petroleum hydrocarbons spectrum



BTEX SOIL SAMPLE WORKSHEET

File	946598B	**Date Printed**	2/1/95
Soil Mass (g)	2.55	**Multiplier (L/g)**	0.00196
Extraction vol. (mL)	20	**DF (Analytical)**	200
Shot Volume (uL)	100	**DF (Report)**	0.39216

			Det. Limit
Benzene (ug/L)	1.53	**Benzene (mg/Kg):**	**0.600**	1.961
Toluene (ug/L)	68.12	**Toluene (mg/Kg):**	**26.714**	1.961
Ethylbenzene (ug/L)	31.24	**Ethylbenzene (mg/Kg):**	**12.251**	1.961
p & m-xylene (ug/L)	220.98	p & m-xylene (mg/Kg):	86.659	3.922
o-xylene (ug/L)	87.83	o-xylene (mg/Kg):	34.443	1.961
		Total xylenes (mg/Kg):	**121.102**	5.882
		Total BTEX (mg/Kg):	**160.667**	

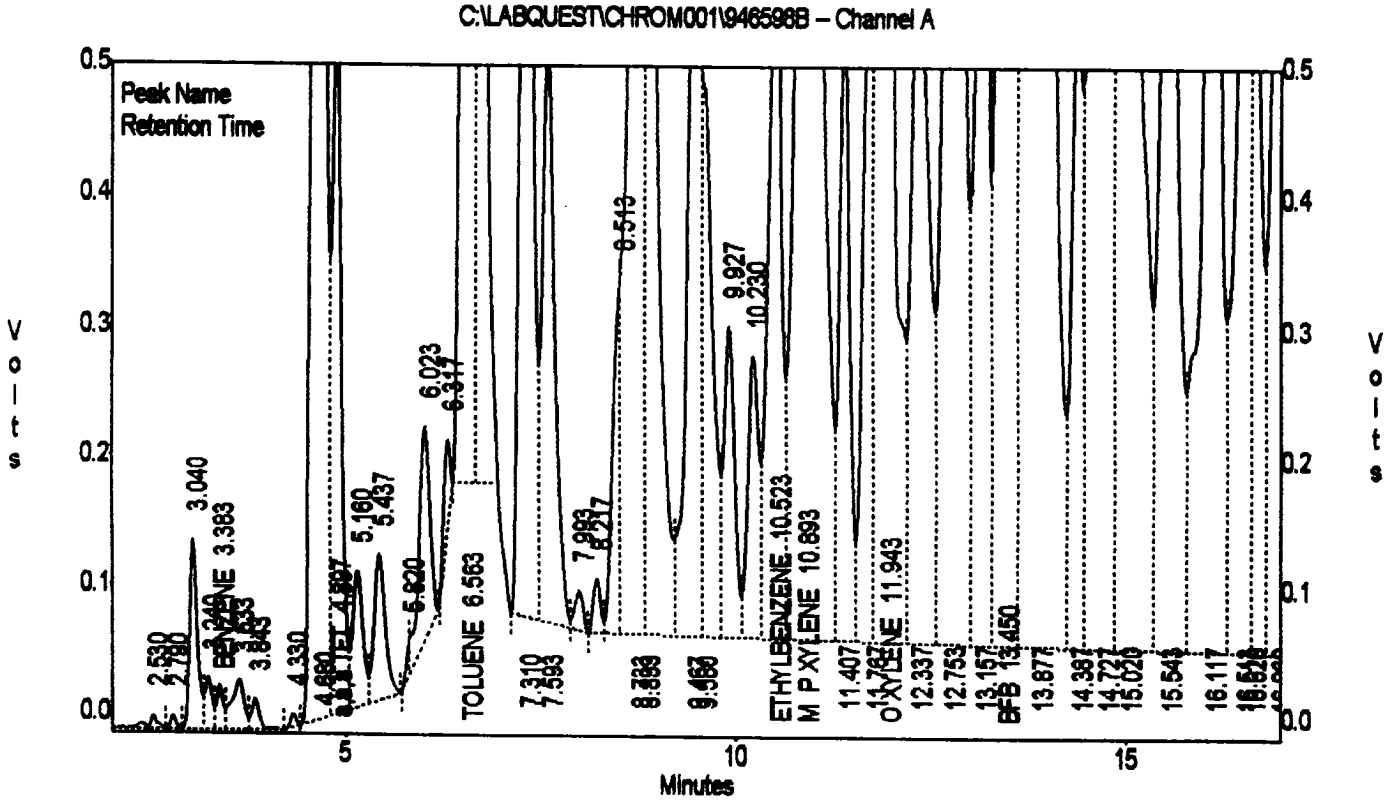
EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\946598B
Method : C:\LABQUEST\METHODS\CALCBTEX.MET
Sample ID : 946598,2.55G/100uL
Acquired : Feb 01, 1995 06:40:15
Printed : Feb 01, 1995 12:34:25
User : Tony

Channel A Results

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	3.383	196723	121531.74219	1.5272
a,a,a TFT	4.897	4480546	32055.68359	137.5100
TOLUENE	6.563	16834868	314479.71875	68.1226
ETHYLBENZENE	10.523	7043588	228573.29688	31.2394
M & P XYLENE	10.893	55632780	316768.40625	220.9843
O XYLENE	11.943	19356154	221087.17188	87.8341
BFB	13.450	91512352	944778.31250	95.9657
Totals :		195057008		643.1832



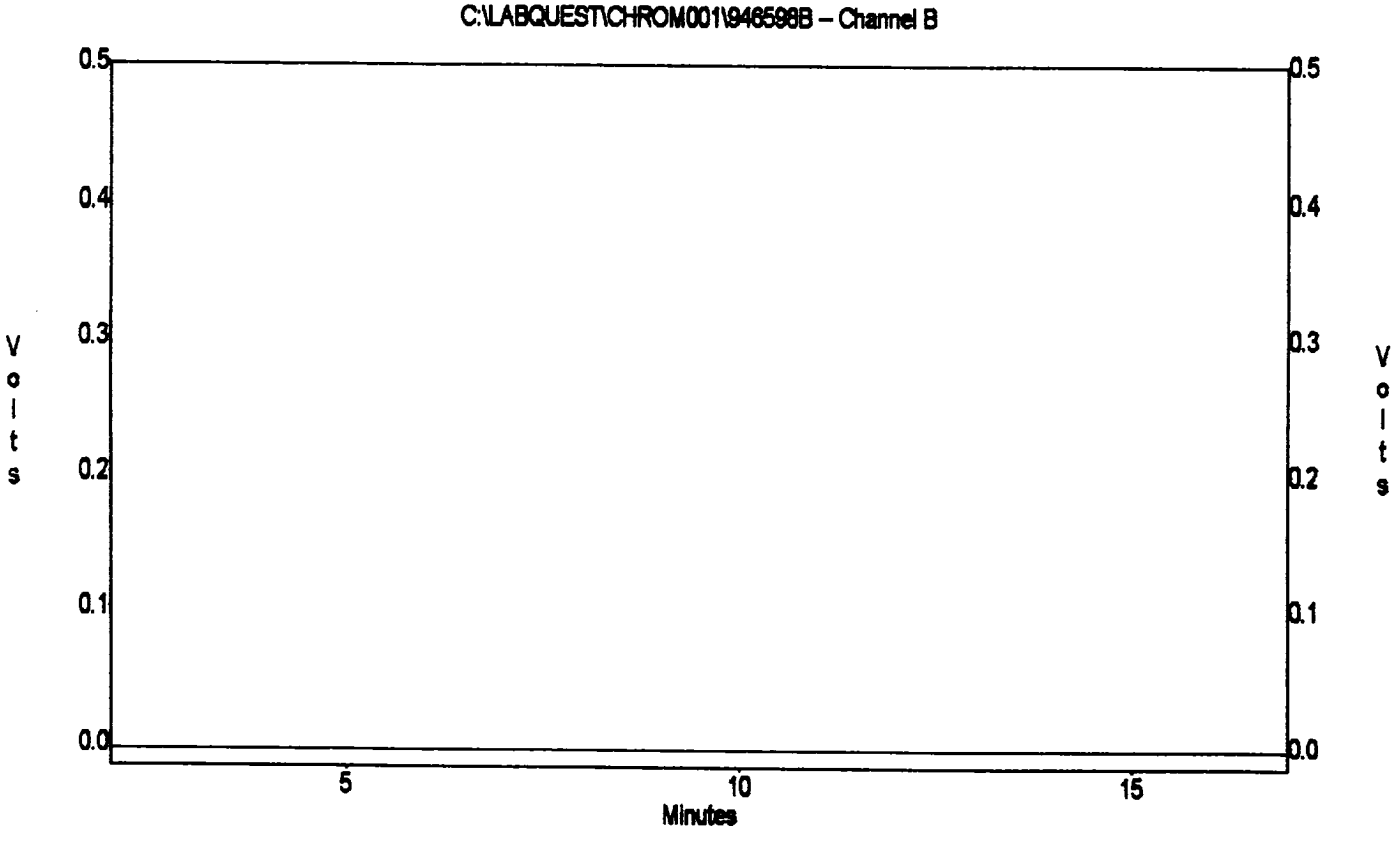
EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\946598B
Method : C:\LABQUEST\METHODS\CALCBTEX.MET
Sample ID : 946598,2.55G/100uL
Acquired : Feb 01, 1995 06:40:15
Printed : Feb 01, 1995 12:34:34
User : Tony

Channel B Results

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	3.367	0	0.00000	0.0000
a,a,a TFT	4.883	0	0.00000	0.0000
TOLUENE	6.700	0	0.00000	0.0000
ETHYLBENZENE	10.480	0	0.00000	0.0000
M & P XYLENE	10.833	0	0.00000	0.0000
O XYLENE	11.900	0	0.00000	0.0000
BFB	13.400	0	0.00000	0.0000
Totals :		0		0.0000



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 Aztec #2E 93110

Elevation
Borehole Location T30, R14, S 35, G
GWL Depth
Logged By Jeff W. Kindley
Drilled By Steve Snaiden
Date/Time Started 09/26/95 0920
Date/Time Completed 09/26/95 1030

Well Logged By Jeff W. Kindley
Personnel On-Site S. Snaiden, D. Roberts
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				Back Fill material to 12'						
15	1	15-17	1.5/2.0	SW, BI, BR SAND, FINE-GRAINED, moist, loose, hydrocarbon odor					142/147	0933 8 Blows per Foot
20	2	20-22	.6/2.0	SW, BR SAND, FINE GRAINED, dry, very dense, hydrocarbon odors					112/149	0940 61 Blows per Foot
25	3	25-27	.4/2.0	S.A.A.					35/81	0953 50 blows per Foot
30	4	30-32	.8/2.0	CL, BR CLAY, DRY, hard, low plasticity, no odor, Boring terminated at 32'					4/9	1000 75 blows per Foot
35										
40										

Comments: Sample collected From 30 to 32' (JWK 87), Sample analyzed For BTEX and TPH. BH grouted to the surface

Geologist Signature Jeff W. Kindley

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:	JWK87	947545
MTR CODE | SITE NAME:	93110	Aztec #2E
SAMPLE DATE | TIME (Hrs):	09-26-95	1000
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. | ANAL.:	9-27-95	
DATE OF BTEX EXT. | ANAL.:	9/27/95	9/27/95
TYPE | DESCRIPTION:	VG	Brown Sand & Sandstone

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)	43	MG/KG			1.98	28
HEADSPACE PID	9	PPM				
PERCENT SOLIDS	89.3	%				

-- 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: _____ Date: 9-29-95

Test Method for
Oil and Grease and Petroleum Hydrocarbons
in Water and Soil

Perkin-Elmer Model 1600 FT-IR
Analysis Report

[illegible]/04/27 14:22

Sample identification
[illegible]

Initial mass of sample, g
[illegible]30

Volume of sample after extraction, ml
[illegible].000

Petroleum hydrocarbons, ppm
[illegible]781

Net absorbance of hydrocarbons (2930 cm-1)
[illegible].016