EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE

SAN JUAN UNIT 190
Meter/Line ID - 87689

SITE DETAILS

Legals - Twn: 28 **Rng:** 07 **Sec:** 27 **Unit:** A
NMOCD Hazard Ranking: 40 **Land Type:** 2 - Federal
Operator: CONOCO - MESA OPERATING L **Pit Closure Date:** 06/15/94

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: 87689 Location: San Juan 28-7 Unit 190
Operator #: 0203 Operator Name: Amoco P/L District: Blanco
Coordinates: Letter: A Section 27 Township: 28 Range: 7
Or Latitude _____ Longitude _____
Pit Type: Dehydrator √ Location Drip: ___ Line Drip: ___ Other: _____
Site Assessment Date: 6/2/94 Area: 03 Run: 41

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 Salado Canyon (Off Carrizo)
(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: 40 **POINTS**

REMARKS

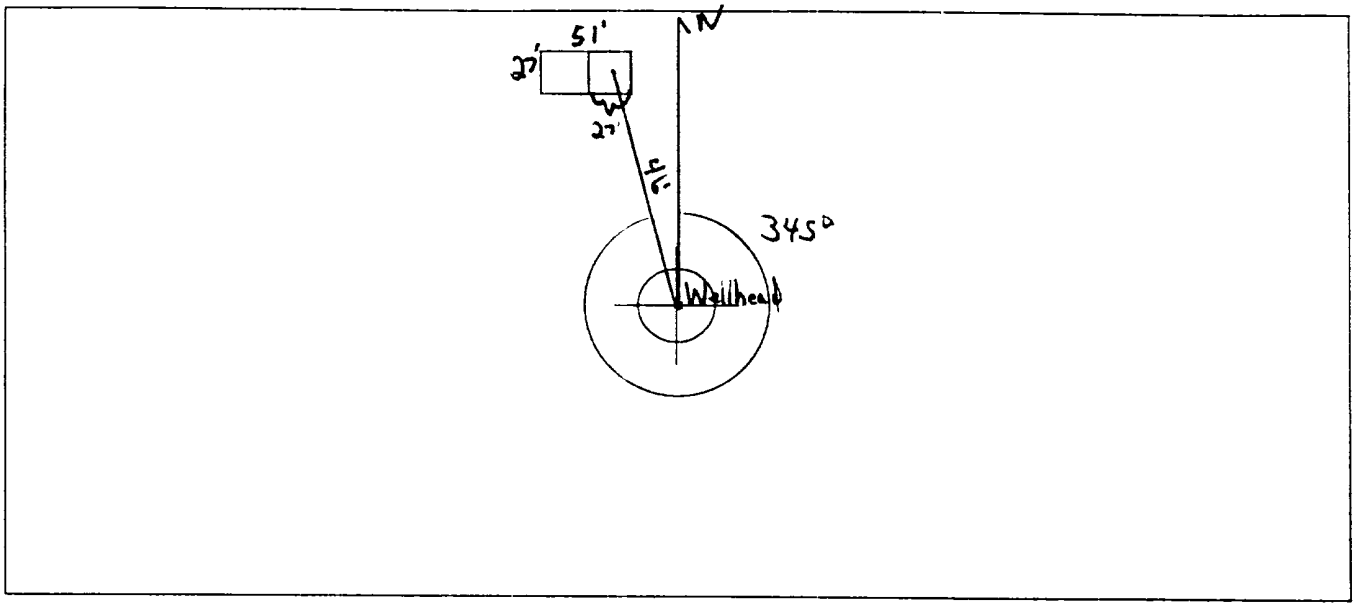
Remarks : Redline & Vol. - Inside
4 pits. Will close I. Pit Dry
DIG & HAUL

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 345° Footage from Wellhead 46'

b) Length : 51' Width : 27' Depth : 3'



REMARKS

Remarks :

Pictures @ 1158 (19-22)

Dump Truck

Bermed & Fenced area of Pit is 51'x27'. Actual pit is 27'x27'x3'

Completed By:

Corey Chase
Signature

6/2/94
Date

PHASE I
EXCAVATION

FIEL PIT REMEDIATION/CLOSU[illegible] FORM

GENERAL

Meter: 87689 Location: SAN JUAN 28-7 UNIT 190

Coordinates: Letter: A Section 27 Township: 28 Range: 7

Or Latitude _____ Longitude _____

Date Started : 6-15-94 Area: 03 Run: 41

FIELD OBSERVATIONS

Sample Number(s): KP #104 _____ _____ _____

Sample Depth: 9' Feet

Final PID Reading 098 PID Reading Depth 9' Feet

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

CLOSURE

Remediation Method :

Excavation	☒ (1)	Approx. Cubic Yards 130
Onsite Bioremediation	☐ (2)	
Backfill Pit Without Excavation	☐ (3)	

Soil Disposition:

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

Pit Closure Date: 6-15-94 Pit Closed By: BLT

REMARKS

Remarks : Some Line markers. Started Remediating TO 12'
Gone down 9' Hit SAND STONE

Signature of Specialist: Kelly Padilla

(SP3191) 04/07/94

40

El Paso Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP104	945454
MTR CODE | SITE NAME:	87689	N/A
SAMPLE DATE | TIME (Hrs):	6-15-94	1700
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	6/16/94	6/16/94
DATE OF BTEX EXT. | ANAL.:	6/17/94	6/20/94
TYPE | DESCRIPTION:	VC	Grey Sandstone/Clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< 0.025	MG/KG	1			
TOLUENE	< 0.025	MG/KG	1			
ETHYL BENZENE	< 0.063	MG/KG	1			
TOTAL XYLENES	1.1	MG/KG	1			
TOTAL BTEX	1.2	MG/KG				
TPH (418.1)	399	MG/KG			2.00	28
HEADSPACE PID	98 ~~98~~ 7/1/94	PPM				
PERCENT SOLIDS	87.6	%				

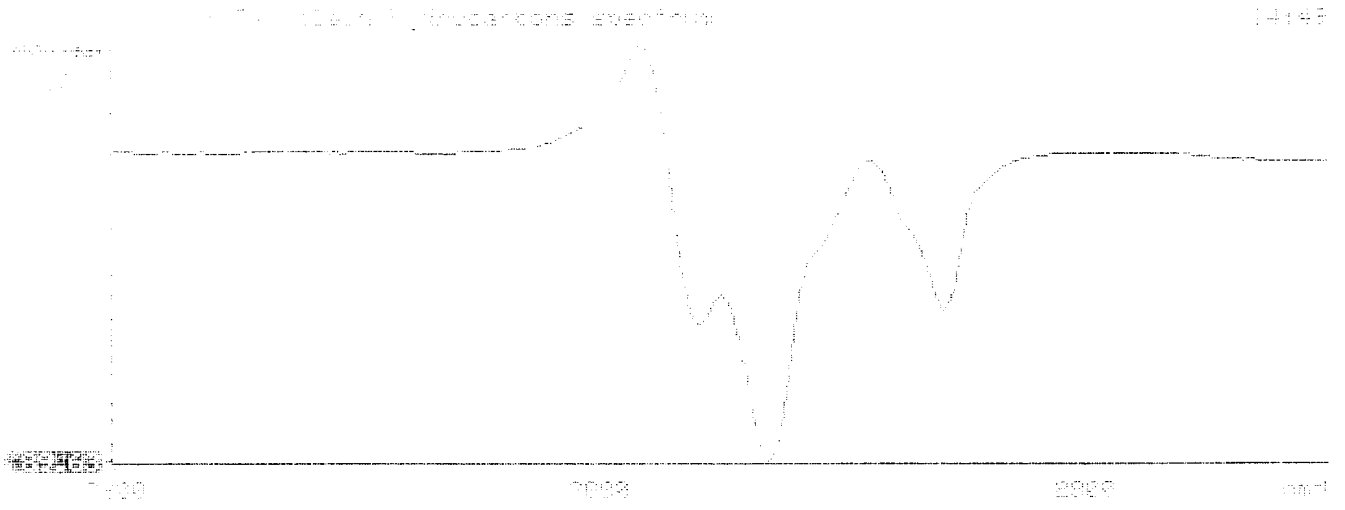
– TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 –

The Surrogate Recovery was at 147 % 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

Date: 7/14/94

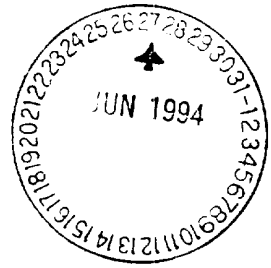


ILLEGIBLE

Analytical **Technologies,** Inc.

3709-D Pan American Freeway, NE Albuquerque, NM 87107
Phone (505) 344-3777 FAX (505) 344-4413

ATI I.D. **406367**



June 24, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **06/17/94**, 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.

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:jd

Enclosure

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)

CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 406367

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	945446	NON-AQ	06/14/94	06/17/94	06/20/94	20
08	945453	NON-AQ	06/15/94	06/17/94	06/20/94	1
09	945454	NON-AQ	06/15/94	06/17/94	06/20/94	1

PARAMETER	UNITS	07	08	09
BENZENE	MG/KG	1.9	<0.025	<0.025
TOLUENE	MG/KG	130	<0.025	<0.025
ETHYLBENZENE	MG/KG	20	<0.025	0.063
TOTAL XYLENES	MG/KG	390	0.046	1.1
SURROGATE:				
BROMOFLUOROBENZENE (%)		145*	95	147*

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

PHASE II

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1
Well #
Page (of 1

Burlington Environmental Inc.
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 Juan 29-7 Unit 190 SE 26

Elevation
Borehole Location QH - SE - T29 - R7
GWL Depth
Logged By Phillip Moss
Drilled By L. Padilla
Date/Time Started 4-8-95 / 10:38
Date/Time Completed 4-5-95 / 11:14

Well Logged By Phillip Moss
Personnel On-Site L. Padilla, F. Rivera, R. Hache, P. Moss
Contractors On-Site
Client Personnel On-Site

Drilling Method 4 1/4 I.D. 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 to 9'.						
5										
10										
	1	13-15	SS 10"	Mudstone, poorly-cemented, thin-bedded, grayish green.			0	0	0.4 / 1	10:51
15				TD = 15'						
20										
25										
30										
35										
40										

Comments: PLM 2 (13-15) sent to lab (BTEX, TPH). BH grouted to surface.

Geologist Signature Phillip J Moss

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:	PLM 12	947431
MTR CODE | SITE NAME:	87689	San Juan 28-7 Unit 190
SAMPLE DATE | TIME (Hrs):	09-08-95	1051
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. | ANAL.:	9-11-95	09-11-95
DATE OF BTEX EXT. | ANAL.:	9/12/95	9/14/95
TYPE | DESCRIPTION:	VG	Light grey sand & 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)	~~95~~ 94.6	MG/KG			2.01	28
HEADSPACE PID	1.0	PPM				
PERCENT SOLIDS	94.1	%				

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

The Surrogate Recovery was at 100% for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: _____ Date: 9-15-95

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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                     *
**********************************************************

 95/09/11   13:29

 Sample identification
 947431

 Initial mass of sample, g
 2.010

 Volume of sample after extraction, ml
 20.000

 Petroleum hydrocarbons, ppm
 94.153

 Net absorbance of hydrocarbons (2930 cm-1)
 0.012
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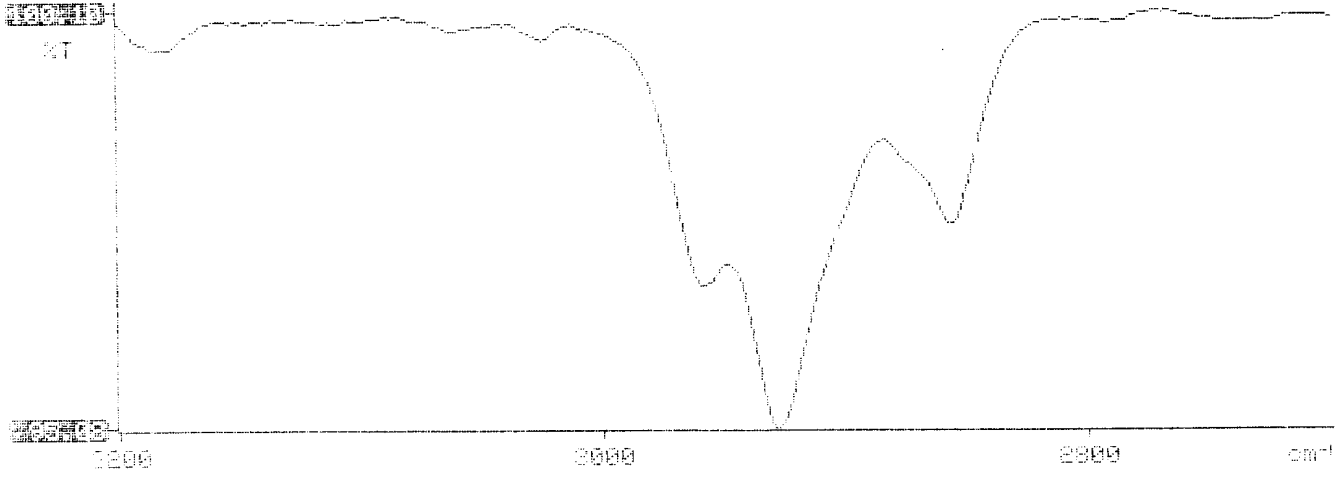
Y: Petroleum hydrocarbons spectrum 13:29



BTEX SOIL SAMPLE WORKSHEET

File	947431	**Date Printed**	9/15/95
Soil Mass (g)	4.96	**Multiplier (L/g)**	0.00101
Extraction vol. (mL)	20	**DF (Analytical)**	200
Shot Volume (uL)	100	**DF (Report)**	0.20161

				Det. Limit
Benzene (ug/L)	0.00	**Benzene (mg/Kg):**	**0.000**	0.504
Toluene (ug/L)	0.00	**Toluene (mg/Kg):**	**0.000**	0.504
Ethylbenzene (ug/L)	0.00	**Ethylbenzene (mg/Kg):**	**0.000**	0.504
p & m-xylene (ug/L)	0.00	p & m-xylene (mg/Kg):	0.000	1.008
o-xylene (ug/L)	0.00	o-xylene (mg/Kg):	0.000	0.504
		Total xylenes (mg/Kg):	**0.000**	1.512
		Total BTEX (mg/Kg):	**0.000**	

EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM000\091495-0.004
Method : C:\LABQUEST\METHODS\9000.MET
Sample ID : 947431,4.96G,100U
Acquired : Sep 14, 1995 13:21:04
Printed : Sep 14, 1995 13:51:27
User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	7.903	58601	-1.1090
a,a,a-TFT	11.333	13595008	105.3354
TOLUENE	14.370	0	0.0000
ETHYLBENZENE	19.387	128975	-1.1806
M,P-XYLENES	19.810	0	0.0000
O-XYLENE	21.083	0	0.0000
BFB	22.823	114250800	100.2306