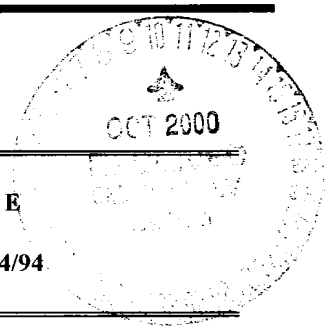
Inside RISK
BTEX-TPH

EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE



San Juan 28-7 Unit 134E
Meter/Line ID – 94221

SITE DETAILS

Legals - Twn: 28N **Rng: 7W** **Sec: 21** **Unit: E**
NMOCD Hazard Ranking: 40 **Land Type: BLM**
Operator: Amoco **Pit Closure Date: 06/14/94**

RATIONALE FOR RISK-BASED CLOSURE

The pit noted above was assessed and ranked according to the criteria in the New Mexico Oil Conservation Division's (NMOCD) Unlined Surface Impoundment Closure Guidelines.

A Phase I excavation was conducted on June 14, 1994, to 12 feet below ground surface and a soil sample was collected for field headspace analysis and laboratory analysis for benzene, total BTEX, and TPH. Groundwater was not encountered in the test pit. Approximately 140 cubic yards of excavated material was removed for landfarming and sent to an OCD approved centralized site. The pit was backfilled and graded in a manner to direct surface runoff away from the pit area. Headspace analysis indicated an organic vapor content of 327 ppm; laboratory analysis indicated a benzene concentration of 1.9 mg/kg, a total BTEX concentration of 542 mg/kg, and a TPH concentration of 4740 mg/kg. TPH and total BTEX were above required remediation levels for the Hazard Ranking Score.

On September 7, 1995, a Phase II borehole was conducted to 35 feet below ground surface where bedrock was encountered with auger refusal. Groundwater was not encountered in the borehole. The borehole was grouted to the surface in a manner to direct surface runoff away from the pit area.

El Paso Field Services Company (EPFS) requests closure of the above mentioned production pit location for the following reasons:

- The primary source, discharge to the pit, has been removed for six years.
- The pit was backfilled and the former pit area graded to direct surface runoff away from the former pit.
- Groundwater was not encountered in the excavations or borehole.
- Bedrock was encountered at 35 feet below ground surface; consequently, impact to groundwater is unlikely.
- Residual hydrocarbons in the soil will degrade naturally with minimal risk to the environment.
- Excavated material has been removed from the pit eliminating potential direct contact with livestock and the public.
- There are no water supply wells or other sources of fresh water extraction within 1,000 feet of the site.
- The pit was excavated to the practical extent of the equipment, according to EPNG's pit closure plan.

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 94221 Location: San Juan 28-7 Unit 134E
Operator #: 0203 Operator Name: Amoco P/L District: Blanco
Coordinates: Letter: E Section 21 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 Delgadita 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 + Vuln: Inside
3 pits. Will close 1. Pit Dry

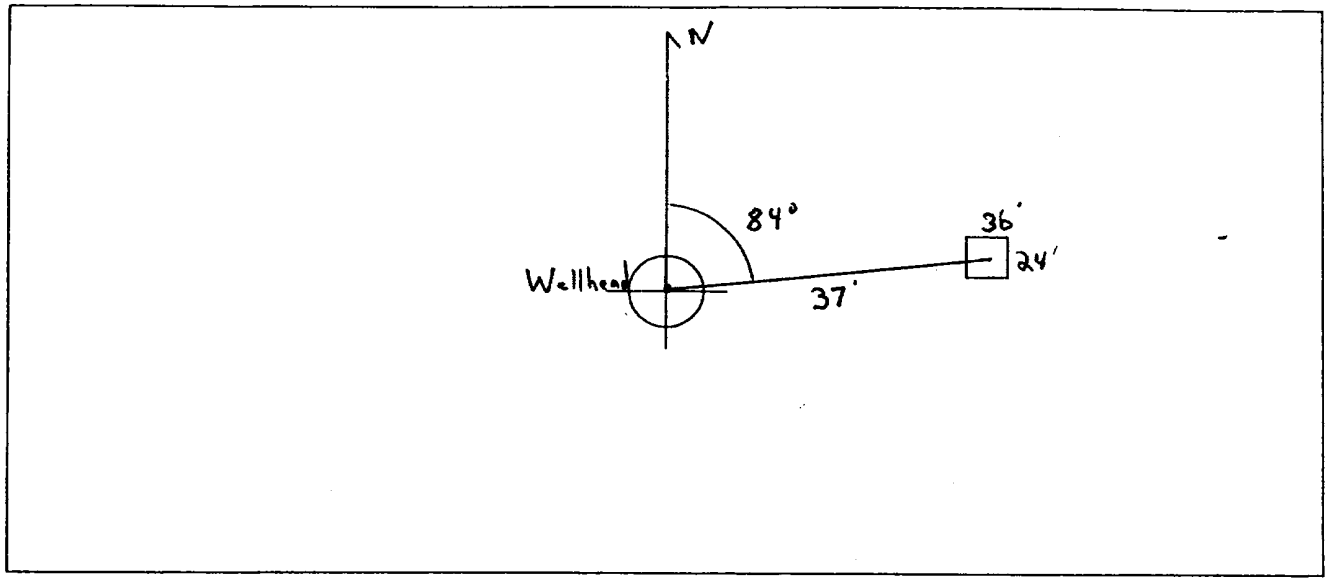
DIG + HAUL

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 84° Footage from Wellhead 37'

b) Length : 36' Width : 24' Depth : 5'



REMARKS

Remarks :

Pictures @ 1526 (22-25)

Dump Truck

Completed By:

Cory Chase
Signature

6/2/94
Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 94221 Location: SAN JUAN 28-7 UNIT 134E

Coordinates: Letter: E Section 21 Township: 28 Range: 7

Or Latitude _____ Longitude _____

Date Started : 6-14-94 Area: 03 Run: 41

FIELD OBSERVATIONS

Sample Number(s): KP#102 _____ _____ _____

Sample Depth: 12' Feet

Final PID Reading 327 PID Reading Depth 12' Feet

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

CLOSURE

Remediation Method :

Excavation	☑ (1)	Approx. Cubic Yards 140
Onsite Bioremediation	☐ (2)	
Backfill Pit Without Excavation	☐ (3)	

Soil Disposition:

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

Pit Closure Date: 6-14-94 Pit Closed By: B.E.I

REMARKS

Remarks : Some Line markers. Started Remediating to 12' Soil Turned Black Smells Bad. it is A Real Big Pit, Soil Still Real Black. At 12' Soil Still Same.

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:	KD 102	94546
MTR CODE | SITE NAME:	94221	N/A
SAMPLE DATE | TIME (Hrs):	6-14-94	1521
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	Blank Canvas Sand

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	1.9	MG/KG	20			
TOLUENE	130	MG/KG	20			
ETHYL BENZENE	20	MG/KG	20			
TOTAL XYLENES	390	MG/KG	20			
TOTAL BTEX	542	MG/KG				
TPH (418.1)	4740	MG/KG			1.04	28
HEADSPACE PID	327	PPM				
PERCENT SOLIDS	88.5	%				

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

The Surrogate Recovery was at 145 % 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

7/07/94

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

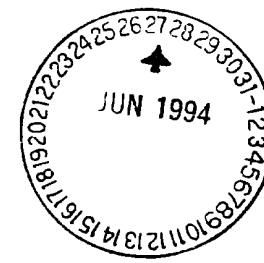
PARAMETER	UNITS	07	08	09
BENZENE	MG/KG	1.9	<0.025	<0.025
TOLUENE	MG/KG	130	<0.025	<0.025
THYLBENZENE	MG/KG	20	<0.025	0.063
TOTAL XYLENES	MG/KG	390	0.046	1.1
SURROGATE:				
BROMOFLUOROBENZENE (%)		145*	95	147*

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

Analytical Technologies, Inc.

2709-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

EL PASO Natural Gas Company

CHAIN OF CUSTODY RECORD

Page _____ of _____

PROJECT NUMBER	PROJECT NAME
11957	Pit Closure Project # 24324

SAMPLERS: (Signature) Kelly Padilla

DATE: 6-14-94

LAB ID	DATE	TIME	MATRIX	SAMPLE NUMBER	TOTAL NUMBER OF CONTAINERS	SAMPLE TYPE	REQUESTED ANALYSIS: TPH EPA 418.1	BTEX EPA 8020		SCA			REMARKS
94 5446	6-14-94	1521	Soil	KPU 102	1	VC	X	X		92			

CONTRACT LABORATORY P. O. NUMBER

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
Kelly Padilla	6-14-94 1910	Brenda Liess	Brenda Liess	6/15/94 0845	
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED OF LABORATORY BY: (Signature)

REQUESTED TURNAROUND TIME:
☐ ROUTINE ☐ RUSH _____

CARRIER CO.

BILL NO.:

SAMPLE RECEIPT REMARKS

CHARGE CODE

RESULTS & INVOICES TO:

FIELD SERVICES LABORATORY
EL PASO NATURAL GAS COMPANY
P. O. BOX 4990
FARMINGTON, NEW MEXICO 87499
505-599-2144 FAX: 505-599-2261

White - *Testing Laboratory* Canary - *EPNG Lab* Pink - *Field Sampler*

FM-08-0565A (Rev. 03-94)

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1
Well #
Page 1 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 28-7 Unit 134E 94221

Elevation
Borehole Location QE-S21-T28-R7
GWL Depth
Logged By Phillip Moss
Drilled By K. Padilla
Date/Time Started 9-7-95 / 09:38
Date/Time Completed 9-7-95 / 10:40

Well Logged By Phillip Moss
Personnel On-Site K. Padilla, F. Rivera, D. Charley, 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				Backfill to 12'.						
5										
10										
15	1	15-17	SS 11"	clayey SAND, f.g., very loose, black, strong hydrocarbon odor, moist	SC		0	8.1	457/194	09:47
20	2	20-22	SS 6"	SAND, f.g., vf loose, grayish green, strong hydrocarbon odor, moist	SP		0	24	374/329	09:51
25	3	25-27	SS 12"	AA			0	111	407/198	09:59
30	4	30-32	SS 8"	Sandstone, f.g., poorly-cemented, massive, black, strong hydrocarbon odor			302	256	417/343	10:05
35	5	35-37	SS	35' Auger and split spoon Refusal — TD			140	570	NA	10:23
40										

Comments: No sample submitted: Sandstone discolored (black, high PID readings, and strong hydrocarbon odor). Auger refusal at 35'. BH grouted to the surface.

Geologist Signature Phillip L. Moss