

EL PASO FIELD SERVICES PRODUCTION PIT CLOSURE

Risk
Bed-rock

Stewart LS 4
Meter/Line ID – 71375

SITE DETAILS

Legals - Twn: 30N	Rng: 10W	Sec: 28	Unit: K
NMOCD Hazard Ranking: 10		Land Type: BLM	
Operator: Amoco		Pit Closure Date: 05/12/94	

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 May 12, 1994, to 4 feet below ground surface where bedrock was encountered 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 pit. Approximately 30 cubic yards of 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 663 ppm; laboratory analysis indicated a benzene concentration of 2.6 mg/kg, a total BTEX concentration of 149 mg/kg, and a TPH concentration of 298 mg/kg.

On June 22, 1995, a Phase II borehole was conducted to 15.5 feet below ground surface where bedrock was encountered. 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 over 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 excavation or the borehole.
- Residual hydrocarbons in the soil will degrade naturally with minimal risk to the environment.
- Bedrock was encountered at 15.5 feet below ground surface; consequently, impact to groundwater is unlikely.
- 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 site.
- Based on the Hazard Ranking Score, benzene and TPH were below required remediation levels.

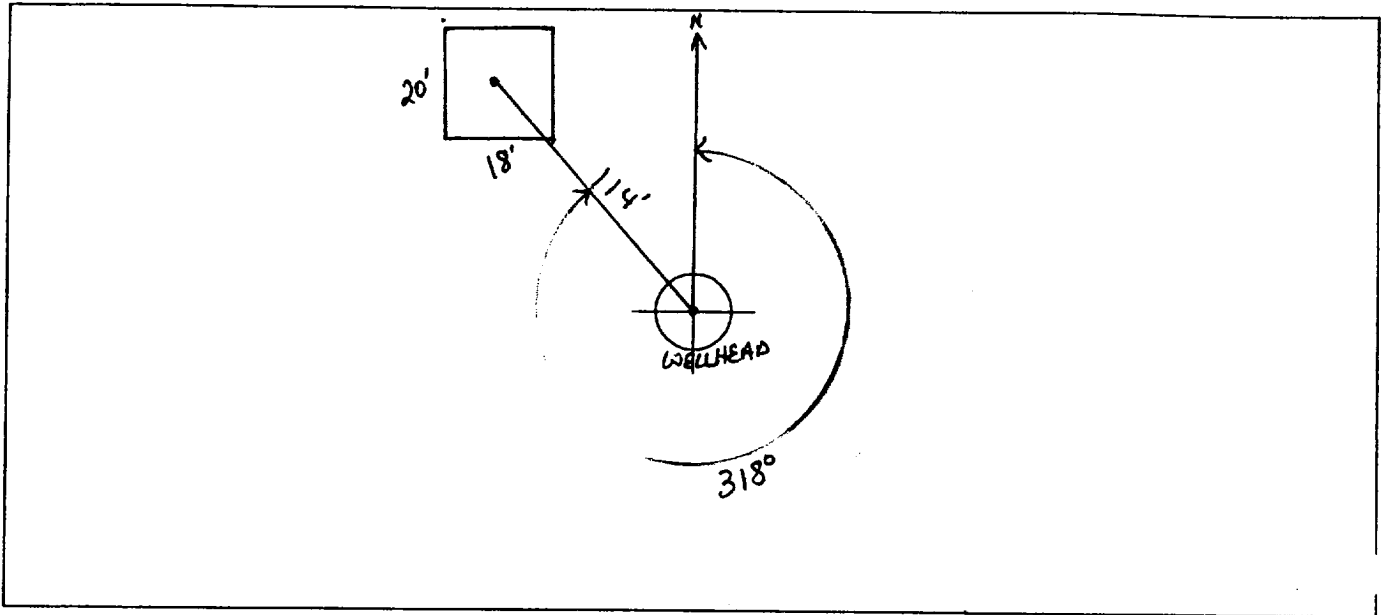
FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>Meter: <u>71375</u> Location: <u>STEWART LS #4</u></p> <p>Operator #: <u>0203</u> Operator Name: <u>AMOCO</u> P/L District: <u>BLOOMFIELD</u></p> <p>Coordinates: Letter: <u>K</u> Section <u>28</u> Township: <u>30</u> Range: <u>10</u> Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator <input checked="" type="checkbox"/> Location Drip: _____ Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>5.3.94</u> Area: <u>10</u> Run: <u>73</u></p>								
SITE ASSESSMENT	<p>NMOCD Zone: (From NMOCD Maps)</p> <p style="margin-left: 100px;">Inside <input checked="" type="checkbox"/> (1) Outside <input type="checkbox"/> (2)</p> <p>Land Type:</p> <table style="margin-left: 100px;"> <tr><td>BLM</td><td><input checked="" type="checkbox"/> (1)</td></tr> <tr><td>State</td><td><input type="checkbox"/> (2)</td></tr> <tr><td>Fee</td><td><input type="checkbox"/> (3)</td></tr> <tr><td>Indian</td><td>_____</td></tr> </table> <p>Depth to Groundwater</p> <p>Less Than 50 Feet (20 points) <input type="checkbox"/> (1)</p> <p>50 Ft to 99 Ft (10 points) <input checked="" type="checkbox"/> (2)</p> <p>Greater Than 100 Ft (0 points) <input type="checkbox"/> (3)</p> <p>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? <input type="checkbox"/> (1) YES (20 points) <input checked="" type="checkbox"/> (2) NO (0 points)</p> <p>Horizontal Distance to Surface Water Body</p> <p>Less Than 200 Ft (20 points) <input type="checkbox"/> (1)</p> <p>200 Ft to 1000 Ft (10 points) ^{53' W} <input checked="" type="checkbox"/> (2)</p> <p>Greater Than 1000 Ft (0 points) <input checked="" type="checkbox"/> (3)</p> <p>Name of Surface Water Body _____</p> <p>(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)</p> <p>Distance to Nearest Ephemeral Stream <input type="checkbox"/> (1) < 100' (Navajo Pits Only) <input type="checkbox"/> (2) > 100'</p> <p>TOTAL HAZARD RANKING SCORE: <u>10</u> POINTS</p>	BLM	<input checked="" type="checkbox"/> (1)	State	<input type="checkbox"/> (2)	Fee	<input type="checkbox"/> (3)	Indian	_____
BLM	<input checked="" type="checkbox"/> (1)								
State	<input type="checkbox"/> (2)								
Fee	<input type="checkbox"/> (3)								
Indian	_____								
REMARKS	<p>Remarks : <u>THREE PITS ON LOCATION. WILL CLOSE ONLY ONE. PIT IS DRY. REDLINE AND TOPO CONFIRMED LOCATION IS INSIDE THE V.Z.</u></p>								

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 318° Footage from Wellhead 114'
b) Length : 20' Width : 18' Depth : 2'



REMARKS

Remarks :

TOOK PICTURES AT 11:14 A.M.

END DUMP

Completed By:

Bob Champion

Signature

5.3.94

Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	Meter: <u>71375</u> Location: <u>Stewart LS #4</u> Coordinates: Letter: <u>K</u> Section <u>28</u> Township: <u>30</u> Range: <u>10</u> Or Latitude _____ Longitude _____ Date Started : <u>5-12-94</u> Area: <u>10</u> Run: <u>73</u>
OBSERVATIONS	Sample Number(s): <u>KD54</u> Sample Depth: <u>4</u> Feet Final PID Reading <u>663 ppm</u> PID Reading Depth <u>4</u> Feet Yes No Groundwater Encountered <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (2) Approximate Depth _____ Feet
CLOSURE	Remediation Method : Excavation <input checked="" type="checkbox"/> (1) Approx. Cubic Yards <u>30</u> Onsite Bioremediation <input type="checkbox"/> (2) Backfill Pit Without Excavation <input type="checkbox"/> (3) Soil Disposition: Envirotech <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (3) Tierra Other Facility <input type="checkbox"/> (2) Name: _____ Pit Closure Date: <u>5-12-94</u> Pit Closed By: <u>BEI</u>
REMARKS	Remarks : <u>Hit Sandstone At 4' At this Depth PID Sample WAS TAKEN, Closed Pit</u>
SIGNATURE	Signature of Specialist: <u>Kenny Deaver</u>



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**FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil**

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KD54	945151
MTR CODE SITE NAME:	^{KDK} 71267 71375	N/A
SAMPLE DATE TIME (Hrs):	5-12-94	1200
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	5/16/94	5/16/94
DATE OF BTEX EXT. ANAL.:	5/19/94 N/A	5/19/94
TYPE DESCRIPTION:	VC	Brown/grey coarse sand

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	2.6	MG/KG	50			
TOLUENE	32	MG/KG	50			
ETHYL BENZENE	4.4	MG/KG	50			
TOTAL XYLENES	110	MG/KG	50			
TOTAL BTEX	149	MG/KG				
TPH (418.1)	300 298	MG/KG			2.08	28
HEADSPACE PID	663	PPM				
PERCENT SOLIDS	93.5	%				

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

TPH Surrogate Recovery was at 62 % for this sample All QA/QC was acceptable.

e: ATI results attached. Surrogate recovery was outside ATI QC limits due to matrix interference.

DF = Dilution Factor Used

Approved By:

John Jacob

Date:

7/14/94



GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
 CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 405378
 PROJECT # : 24324
 PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	945150	NON-AQ	05/12/94	05/19/94	05/19/94	50
02	945151	NON-AQ	05/12/94	05/19/94	05/19/94	50
03	945152	NON-AQ	05/12/94	05/19/94	05/19/94	50

PARAMETER	UNITS	01	02	03
BENZENE	MG/KG	<1.2	2.6	<1.2
TOLUENE	MG/KG	1.9	32	3.8
ETHYLBENZENE	MG/KG	2.5	4.4	2.2
TOTAL XYLENES	MG/KG	35	110	26

SURROGATE:
 BROMOFLUOROBENZENE (%) 65 62* 39*

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

Acceptable.

 6/6/94



Analytical **Technologies**, Inc.

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

ATI I.D. 405378

June 2, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin


On 05/18/94, 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.

Client samples 945004 and 945007 were submitted to Analytical Technologies' Albuquerque laboratory past the recommended EPA holding time.

NOTED
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6/6/94

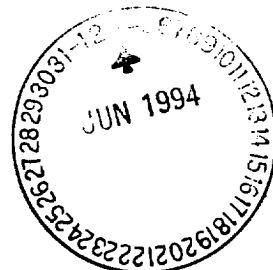
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.


Letitia Krakowski, Ph.D.
Project Manager


H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jd

Enclosure





CHAIN OF CUSTODY RECORD

PROJECT NUMBER		PROJECT NAME		PROJECT ANALYSIS		TOTAL NUMBERS OF CONTAINERS		SAMPLE TYPE		REQUESTED ANALYSIS		REMARKS	
LAB ID	DATE	TIME	MATRIX	SAMPLE NUMBER	DATE	SAMPLE NUMBER	TPH EPA 418.1	BTEX EPA 8020					
S150	5-12-94	0950	Soil	KD 53	5-12-94	KD 53	X	X	VC	1			47
S151	5-12-94	1200	Soil	KD 54	5-12-94	KD 54	X	X	VC	1			48
S152	5-12-94	1420	Soil	KD 55	5-12-94	KD 55	X	X	VC	1			49
S153	5-12-94	1630	Soil	KD 56	5-12-94	KD 56	X	X	VC	1			50

RELINQUISHED BY: (Signature)		RECEIVED BY: (Signature)		DATE/TIME		DATE/TIME		RELINQUISHED BY: (Signature)		RECEIVED BY: (Signature)		DATE/TIME	
<i>Kenny Deaver</i>		<i>Steve T. Pore</i>		5-12-94 16:15		5/16/94 16:20		<i>Steve T. Pore</i>		<i>Steve T. Pore</i>		5/16/94 16:20	
RELINQUISHED BY: (Signature)		RECEIVED BY: (Signature)		DATE/TIME		DATE/TIME		RELINQUISHED BY: (Signature)		RECEIVED BY: (Signature)		DATE/TIME	
												<i>Kenny Deaver</i>	
REQUESTED TURNAROUND TIME:				SAMPLE RECEIPT REMARKS				RESULTS & INVOICES TO:					
<input type="checkbox"/> ROUTINE <input type="checkbox"/> RUSH								FIELD SERVICES LABORATORY EL PASO NATURAL GAS COMPANY P. O. BOX 4990 FARMINGTON, NEW MEXICO 87499					
CARRIER CO.				CHARGE CODE				505-599-2144					
BILL NO.:				505-599-2144				FAX: 505-599-2261					

Project Name EPNG Pits
 Project Number 14509 Phase 601
 Project Location Stewart LS #4, 71375

Elevation _____
 Borehole Location _____
 GWL Depth _____
 Logged By S.Kelly
 Drilled By K. Padilla
 Date/Time Started 6/22/95, 0915
 Date/Time Completed 6/22/95, 0915

Well Logged By S.Kelly
 Personnel On-Site K. Padilla, F. Rivera, J. Tipton
 Contractors On-Site _____
 Client Personnel On-Site _____
 Drilling Method 4 1/4" 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			Drilling Conditions & Blow Counts
							Units: NDU	BZ	BH	
0				Backfill to 4'						
5				SAND, grey black, fine to coarse, well graded, dense dry, & looks like weathered rock.						
10	1	10-12	.5'						756 1302	-0955 spoon only beaten .5' 31 blows
15	2	15-17	.7'	SAND, with less coarse sand.					113 704	-0910 - spoon only beaten .5' 31 blows
20				BOH - 15.5' Refusal at 15.5'						
25										
30										
35										
40										

Comments: No sample ^{AK} due to high headspace readings at refusal. BH grouted to surface.

Geologist Signature Sarah Kelly