

EL PASO FIELD SERVICES PRODUCTION PIT CLOSURE

RISK
TPH
BTEX

Stewart LS 5
Meter/Line ID – 71373

SITE DETAILS

Legals - Twn: 30N	Rng: 10W	Sec: 20	Unit: L
NMOCD Hazard Ranking: 40		Land Type: BLM	
Operator: Amoco		Pit Closure Date: 09/13/94	

RATIONALE FOR 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 September 13, 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 pit. Approximately 40 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 1131 ppm; laboratory analysis indicated a benzene concentration of <0.5 mg/kg, a total BTEX concentration of 301 mg/kg, and a TPH concentration of 2090 mg/kg. TPH and BTEX were above required remediation levels for the Hazard Ranking Score.

On August 1, 1995, a Phase II borehole was conducted to 50 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 almost 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 50 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.

ATTACHMENT

Field Pit Assessment Form

Phase II Geologic Log

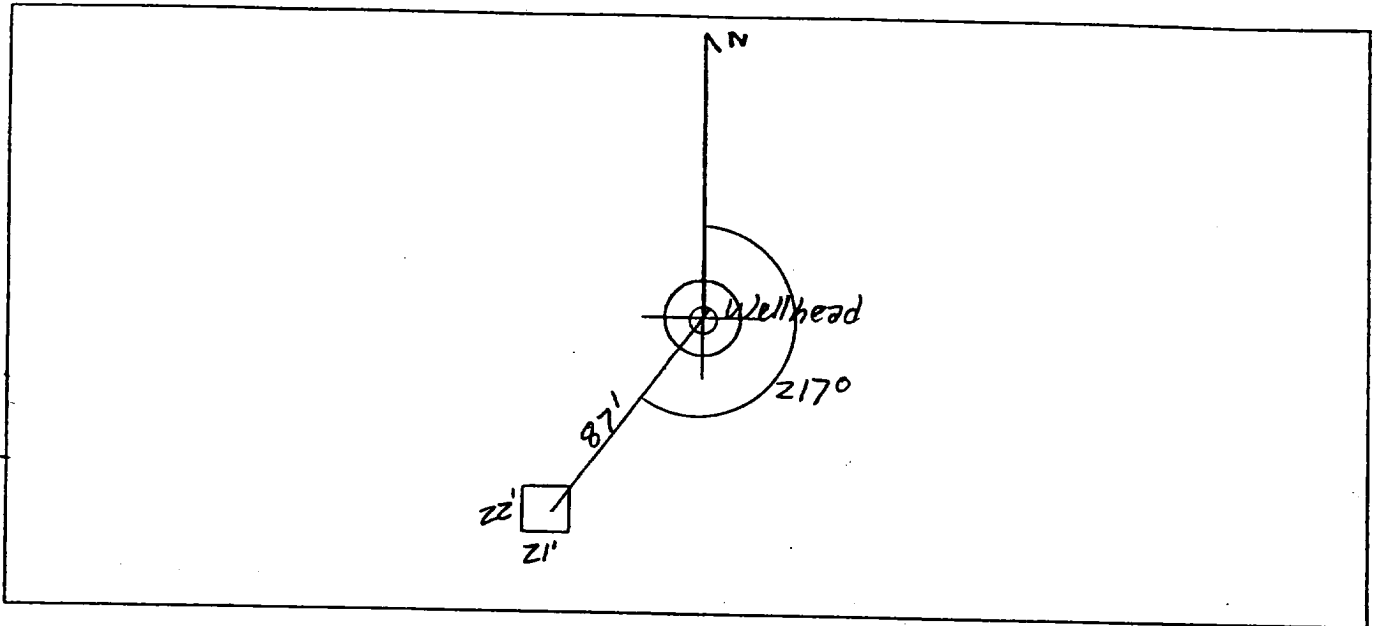
FIELD PIT SITE ASSESSMENT FORM

GENERAL	Meter: <u>71-373</u> Location: <u>Stewart LS 5</u> Operator #: <u>0203</u> Operator Name: <u>Amoco Production P/L</u> District: <u>Aztec</u> Coordinates: Letter: <u>L</u> Section <u>20</u> Township: <u>30</u> Range: <u>10</u> Or Latitude _____ Longitude _____ Pit Type: Dehydrator _____ Location Drip: <u>X</u> Line Drip: _____ Other: _____ Site Assessment Date: <u>8/4/94</u> Area: <u>04</u> Run: <u>21</u>								
SITE ASSESSMENT	NMOCD Zone: (From NMOCD Maps)								
	Land Type: <table border="0"> <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>		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	Depth to Groundwater Less Than 50 Feet (20 points) <input checked="" type="checkbox"/> (1) 50 Ft to 99 Ft (10 points) <input type="checkbox"/> (2) Greater Than 100 Ft (0 points) <input type="checkbox"/> (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? <input type="checkbox"/> (1) YES (20 points) <input checked="" type="checkbox"/> (2) NO (0 points)								
Horizontal Distance to Surface Water Body Less Than 200 Ft (20 points) <input checked="" type="checkbox"/> (1) 200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2) Greater Than 1000 Ft (0 points) <input type="checkbox"/> (3)									
Name of Surface Water Body <u>Potter Canyon</u> (Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds) Distance to Nearest Ephemeral Stream <input type="checkbox"/> (1) < 100' (Navajo Pits Only) <input type="checkbox"/> (2) > 100'									
TOTAL HAZARD RANKING SCORE: <u>40</u> POINTS									
Remarks : <u>Redline Book - Inside Vulnerable Zone Tap - Inside</u> <u>Two pits on site, location drip pit is dry, will close one pit</u>									

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 217° Footage from Wellhead 87'
 b) Length : 22' Width : 21' Depth : 3'

ORIGINAL PIT LOCATION



REMARKS

Remarks :

Pictures @ 1457 (1-4, Roll 12)
Dump Truck

Completed By:

Samuel Kelly

Signature

8/4/94

Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 71373 Location: Stewart LS 5
 Coordinates: Letter: L Section 20 Township: 30 Range: 10
 Or Latitude _____ Longitude _____
 Date Started : 9/13/94 Run: 04 21

FIELD OBSERVATIONS

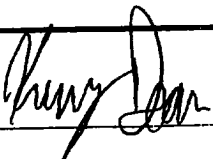
Sample Number(s): KD 253
 Sample Depth: 12' Feet
 Final PID Reading 1131 PID Reading Depth 12' Feet
 Groundwater Encountered ☐ Yes ☒ No
 Approximate Depth _____ Feet

CLOSURE

Remediation Method :
 Excavation ☒ Approx. Cubic Yards 40
 Onsite Bioremediation ☐
 Backfill Pit Without Excavation ☐
 Soil Disposition: K.D. 9/13/94
 Envirotech ☒ ☒ Tierra
 Other Facility ☐ Name: _____
 Pit Closure Date: 9/13/94 Pit Closed By: BEI

REMARKS

Remarks : Excavated pit 12', Took pid Sample, Closed pit

Signature of Specialist: 

Company
FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KD 253	946112
MTR CODE SITE NAME:	71373	N/A
SAMPLE DATE TIME (Hrs):	9-13-94	0913
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	9-15-94	9-15-94
DATE OF BTEX EXT. ANAL.:	9-19-94	9/19/94
TYPE DESCRIPTION:	VC	Brown / grey sand & clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	40.5	MG/KG	20			
TOLUENE	5.0	MG/KG	20			
ETHYL BENZENE	15	MG/KG	20			
TOTAL XYLENES	280	MG/KG	20			
TOTAL BTEX	301	MG/KG				
TPH (418.1)	2090	MG/KG			2.09	28
HEADSPACE PID	1131	PPM				
PERCENT SOLIDS	89.6	%				

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

The Surrogate Recovery was at 168 % for this sample All QA/QC was acceptable.
 Narrative:

TL Results attached. surrogate recovery was outside ATL QC limits
due to matrix interference

DF = Dilution Factor Used

Approved By: JR

Date: 10/23/94



Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 409367
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	946111	NON-AQ	09/13/94	09/19/94	09/19/94	10
05	946112	NON-AQ	09/13/94	09/19/94	09/19/94	20
06	946113	NON-AQ	09/13/94	09/19/94	09/19/94	20
PARAMETER			UNITS	04	05	06
BENZENE			MG/KG	<0.25	<0.5	9.6
TOLUENE			MG/KG	1.3	5.0	230 D(50)
ETHYLBENZENE			MG/KG	2.7	15	33
TOTAL XYLENES			MG/KG	55	280	410

SURROGATE:

BROMOFLUOROBENZENE (%) 91 168* 113

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

D(50)=DILUTED 50X, ANALYZED 09/21/94



Analytical **Technologies**, Inc.

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

ATI I.D. 409367

September 22, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

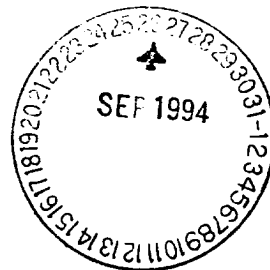
On 09/16/94, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

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

Letitia Krakowski, Ph.D.
Project Manager

MR:jt

Enclosure





CHAIN OF CUSTODY RECORD

Page _____ of _____

[illegible]

RECORD OF SUBSURFACE EXPLORATION

Philip Environmental Services Corp.

4000 Monroe Road

Farmington, New Mexico 87401

(505) 326-2262 FAX (505) 326-2388

Borehole # BH-1
Well # 1 of 2
Page

Project Name EPNG Pits
Project Number 14509 Phase 604 6000
Project Location Stewart 655, 71373

Elevation _____
Borehole Location T30, R10, S20, L
GWL Depth _____
Logged By S. Kelly J. Kindley
Drilled By M. Donahue
Date/Time Started 8/1/95 1015
Date/Time Completed 8/1/95 1235

Well Logged By S. Kelly J. Kindley
Personnel On-Site M. Donahue, J. O'Kette, D. Gatto
Contractors On-Site _____
Client Personnel On-Site _____

Drilling Method _____
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			Drilling Conditions & Blow Counts
							BZ	BH	S	
0				Backfill to 12 Feet						
5										
10										
15										
20	1	18-20	1.2 2	SAND, dark gray, coarse grain, loose, moist				204/ 536		1030
25	2	23-25	1.5 1.5	S.A.A.				209/ 225		1040
30	3	28-30	1.6 2	CLAY, dark gray, stiff, moist				304/ 311		1046
35	4	33-35	1.0 1.5	S.A.A with sand seams (tan)				191/ 244		1055
40	5	38-40	1.6 2	SILT with clay (20%) dry				149/ 238		1105

Comments:

Geologist Signature

Jeffrey Kindley

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1
 Well # _____
 Page 2 of 2

Philip Environmental Services Corp.

4000 Monroe Road
 Farmington, New Mexico 87401
 (505) 326-2262 FAX (505) 326-2388

Project Name EPNG Pits
 Project Number 14509 Phase 601
 Project Location Stewart LS5, 71373

Elevation _____
 Borehole Location _____
 GWL Depth _____
 Logged By S.Kelly
 Drilled By _____
 Date/Time Started _____
 Date/Time Completed _____

Well Logged By S.Kelly J. Kindley
 Personnel On-Site _____
 Contractors On-Site _____
 Client Personnel On-Site _____

Drilling Method _____
 Air Monitoring Method CGI, PID

2K

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 <u>5/11/5</u>			Drilling Conditions & Blow Counts
							BZ	BH	S	
40										
43	6	43-45	0.6 2	S.A.A.					194 280	1125
45										
50	7	48-50	1.7 1.5	Sandstone (gray/known). Hard dry					198 280	1155
50				Boring terminated at 50'						Refusal at 50'
15										
20										
25										
30										
35										
40										

Comments:

No sample due to high headspace readings at refusal.
BH grouted to surface.

Geologist Signature

Jeffery Kindley