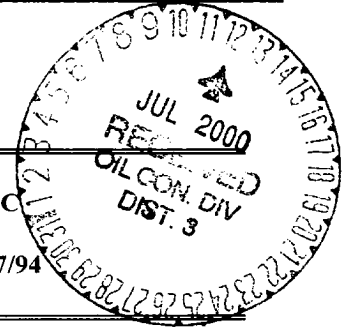


EL PASO FIELD SERVICES PRODUCTION PIT CLOSURE

OV

Likins Gas Com C#1
Meter/Line ID – 72413



SITE DETAILS

Legals - Twn: 29N
NMOCD Hazard Ranking: 10
Operator: Amoco

Rng: 9W

Sec: 9

Unit: C

Land Type: FEE

Pit Closure Date: 05/17/94

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 May 17, 1994, to twelve feet below ground surface and a soil sample was collected for field headspace analysis and laboratory analysis for TPH and BTEX. Groundwater was not encountered in the test pit. Approximately 50 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 299 ppm; laboratory analysis indicated a TPH concentration of 4360 mg/kg, benzene concentration of <1.2 mg/kg, and a total BTEX concentration of 98 mg/kg. Total BTEX and TPH were above required remediation levels for the Hazard Ranking Score.

A Phase II drill borehole was conducted on June 23, 1995, and elevated headspace readings were encountered at the bedrock interface at 15 feet below ground surface. A soil sample was not collected for laboratory analysis.

On December 12, 1995, a Phase III excavation was conducted to 19 feet and a soil sample was collected for field headspace analysis and laboratory analysis for TPH and BTEX. Groundwater was not encountered in the test pit. Following the boring, approximately 170 cubic yards of excavated material was removed for landfarming and sent to an OCD approved centralized site. The pit was sprayed with 50 pounds of fertilizer, backfilled, and graded in a manner to direct surface runoff away from the pit area. Headspace analysis indicated an organic vapor content of 1,585 ppm; laboratory analysis indicated a TPH concentration of 162 mg/kg, benzene concentration of <0.5 mg/kg, and a Total BTEX concentration of <3 mg/kg.

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

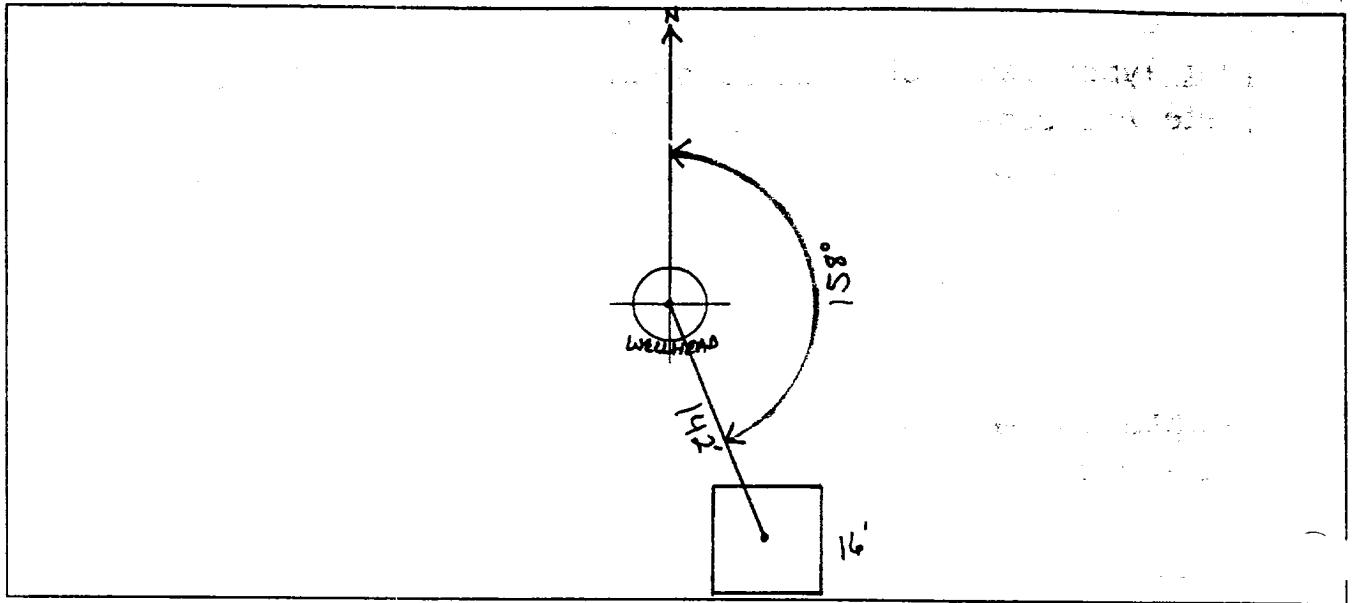
- The primary source, discharge to the pit, has been removed for almost six years.
- Bedrock was encountered in the test excavation at 19 feet below ground surface making further remediation impractical; therefore, impact to groundwater is unlikely.
- The test pit was backfilled and the former pit area graded to direct surface runoff away from the former pit.

FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>Meter: <u>72413</u> Location: <u>LIKINS GAS COM C#1</u></p> <p>Operator #: <u>0203</u> Operator Name: <u>AMOCO</u> P/L District: <u>BLOOMFIELD</u></p> <p>Coordinates: Letter: <u>C</u> Section <u>9</u> Township: <u>29</u> Range: <u>9</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator _____ Location Drip: <u>X</u> Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>5-7-94</u> Area: <u>10</u> Run: <u>53</u></p>
SITE ASSESSMENT	<p>NMOCD Zone: (From NMOCD Maps)</p> <p>Inside <input checked="" type="checkbox"/> (1) Outside <input type="checkbox"/> (2)</p> <p>Land Type: BLM <input type="checkbox"/> (1) State <input type="checkbox"/> (2) Fee <input checked="" type="checkbox"/> (3) Indian _____</p> <p>Depth to Groundwater</p> <p>Less Than 50 Feet (20 points) <input type="checkbox"/> (1) 50 Ft to 99 Ft (10 points) <input checked="" type="checkbox"/> (2) Greater Than 100 Ft (0 points) <input type="checkbox"/> (3)</p> <p>Wellhead Protection Area :</p> <p>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) 200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2) 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>
REMARKS	<p>Remarks : <u>ONLY PIT ON LOCATION. PIT IS DRY. LOCATION IS ON A HILL ABOVE THE SAN JUAN RIVER. REDLINE AND TOPO CONFIRMED LOCATION TO BE INSIDE THE U.Z.</u></p> <p style="text-align: right;"><u>DIG & HALL</u></p>

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 158° Footage from Wellhead 142'
 b) Length : 16' Width : 14' Depth : 10' 15"



Remarks :

TOOK PICTURES AT

END DUMP

Completed By:

Robert Champion

Signature

5.7.94

Date

GENERAL	Meter: <u>72413</u> Location: <u>Likins Gas Com C#1</u> Coordinates: Letter: <u>C</u> Section <u>9</u> Township: <u>29</u> Range: <u>9</u> Or Latitude _____ Longitude _____ Date Started : <u>5-17-94</u> Area: <u>10</u> Run: <u>53</u>
FIELD OBSERVATIONS	Sample Number(s): <u>KP#56</u> Sample Depth: <u>12'</u> Feet Final PID Reading <u>299</u> PID Reading Depth <u>12'</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>50</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>5-17-94</u> Pit Closed By: <u>B.E.I</u>
REMARKS	Remarks : <u>markers ON LOCATION small pit started Remediating</u> <u>12' Real SANDS Gray looking soil P.D 299</u>
	Signature of Specialist: <u>Kelly Padilla</u>



CHAIN OF CUSTODY RECORD

[illegible]



FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP56	945194
MTR CODE SITE NAME:	72413	N/A
SAMPLE DATE TIME (Hrs):	5-17-94	1409
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	5-18-94	5/18/94
DATE OF BTEX EXT. ANAL.:	5/23/94	5/26/94
TYPE DESCRIPTION:	VC	fine coarse sand

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<1.2	MG/KG	50			
TOLUENE	4.3	MG/KG	50			
ETHYL BENZENE	3.9	MG/KG	50			
TOTAL XYLENES	89	MG/KG	50			
TOTAL BTEX	98	MG/KG				
TPH (418.1)	4360	MG/KG			2.37	28
HEADSPACE PID	299	PPM				
PERCENT SOLIDS	87.0	%				

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

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

ATI results attached. Surrogate recovery not obtainable due to sample dilution.

DF = Dilution Factor Used

Approved By:

John Fadden

Date:

7/14/94



Analytical **Technologies**, Inc.

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

ATI I.D. 405389

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 05/20/94, 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.

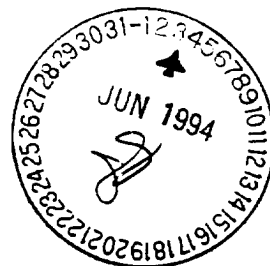
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

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.: 405389
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	945192	NON-AQ	05/17/94	05/23/94	05/26/94	1
02	945193	NON-AQ	05/17/94	05/23/94	05/26/94	50
03	945194	NON-AQ	05/17/94	05/23/94	05/26/94	50
PARAMETER			UNITS	01	02	03
BENZENE			MG/KG	<0.025	<1.2	<1.2
TOLUENE			MG/KG	<0.025	43	4.3
METHYLBENZENE			MG/KG	<0.025	13	3.9
TOTAL XYLENES			MG/KG	0.40	210	89

SURROGATE:

BROMOFLUOROBENZENE (%)	94	NA*	NA*
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*SURROGATE RECOVERY NOT OBTAINABLE DUE TO SAMPLE DILUTION

RECORD OF SUBSURFACE EXPLORATION

Philip Environmental Services Corp.

4000 Monroe Road

Farmington, New Mexico 87401

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

Borehole #

BH1

Well #

Page 1 of 1

Project Name

EPNG Pits

Project Number

14509

Phase

60V

Project Location

Lkins Gas Com C#1, 72413

Elevation

Borehole Location

GWL Depth

Logged By

S.Kelly

Drilled By

R. Padilla

Date/Time Started

6/23/95, 1035

Date/Time Completed

6/23/95, 1105

Well Logged By

S.Kelly

Personnel On-Site

R. Padilla, F. Rivera, D. Tso

Contractors On-Site

Client Personnel On-Site

Drilling Method

4x4" ID #5A

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 515 BZ BH S			Drilling Conditions & Blow Counts
0				Backfill to 12'						
5										
10										
15	1	14.5-16.5	1.0'	silty GRAVEL, dk. gray, with trace med. to coarse sand and trace clay. sub-rounded gravel. med. dense, damp.			0	7	342/766	Hit cobble at 14.5'
20				BOH 16.5						
25				Auger refusal at 15.0'						
30										
35										
40										

Comments:

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

Geologist Signature

Sarah Kelly

FIELD PIT REMEDIATION/CLOSURE FORM/PHASE I

GENERAL

Meter: 72413 Location: Likins Gas Com C#1

Coordinates: Letter: C Section 09 Township: 29 Range: 09

Or Latitude _____ Longitude _____

Date Started : 12-5-95 Area: 10 Run: 53

ELD OBSERVATIONS

Sample Number(s): 4P101

Sample Depth: 19 Feet

Final PID Reading 1585 PID Reading Depth 19 Feet
Yes No

Groundwater Encountered ☐ (1) ☒ (2) Approximate Depth _____ Feet

Final Dimensions: Length 26 Width 25 Depth 19

CLOSURE

Remediation Method :

Excavation

☒ (1) Approx. Cubic Yards 170 ^{12/6/95} LT

Onsite Bioremediation

☐ (2)

Backfill Pit Without Excavation

☐ (3)

Overburden Cubic Yards 8 ^{12/6/95} LT

Soil Disposition:

Envirotech

☒ (1)

☐ (3)

Tierra

Other Facility

☐ (2)

Name: _____

Pit Closure Date: 12-5-95

Pit Closed By: Philips Env.

Phact

REMARKS

Remarks : Dug to 19 Ft, Took PID readings N wall 02 ppm
Small 01 ppm E wall 31 ppm W wall 1580 ppm Bot 1595 ppm
Comp 1585 ppm Could not dig west wall due to
Drip riser Used 50 lbs Fertilizer

Signature of Specialist: _____

James P. Jones



FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JP 101	947832
MTR CODE SITE NAME:	72413	Likins Gas Com C #1
SAMPLE DATE TIME (Hrs):	12-5-95	1310
PROJECT:	Phase III Excavation	
DATE OF TPH EXT. ANAL.:	12/6/95	
DATE OF BTEX EXT. ANAL.:	12/6/95	12/6/95
TYPE DESCRIPTION:	VC	light brown sand & clay

Field Remarks: (N - 02)(S - 01)(E - 31)(W - 1580)

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	2.5	MG/KG				
TOTAL BTEX	< 3	MG/KG				
TPH (418.1)	162	MG/KG			1.96	28
HEADSPACE PID	1585	PPM				
PERCENT SOLIDS	96.5	%				

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

The Surrogate Recovery was at
Narrative:

899% for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Approved By:

Date:

12/7/95