

EL PASO FIELD SERVICES PRODUCTION PIT CLOSURE

OK

Ada Candelario Well #1
Meter/Line ID - 71801

SITE DETAILS

Legals - Twn: 28N
NMOCD Hazard Ranking: 30
Operator: Amoco

Rng: 9W

Sec: 36 Unit: O
Land Type: Navajo
Pit Closure Date: 11/18/95

Federal

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 August 16, 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 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 573 ppm; laboratory analysis indicated a benzene concentration of 20.5 mg/kg, a total BTEX concentration of 117 mg/kg, and a TPH concentration of 1580 mg/kg. TPH was above required remediation levels for the Hazard Ranking Score.

On November 15, 1995, a Phase II excavation was conducted to 19 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 326 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 429 ppm; laboratory analysis indicated a benzene concentration of <0.5 mg/kg, a total BTEX concentration of <3 mg/kg, and a TPH concentration of 52 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 five years.
- The test 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.
- Residual hydrocarbons in the soil will degrade naturally with minimal risk to the environment.
- Based on the Hazard Ranking Score, benzene, total BTEX, and TPH were below required remediation levels for the Hazard Ranking Score.
- Excavated material has been removed from the pit eliminating potential direct contact with livestock and the public.

FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>7-14-94 KGW</p> <p>Meter: <u>71801</u> Location: <u>Ada Candellario Well #1</u></p> <p>Operator #: <u>0203</u> Operator Name: <u>Amoco</u> P/L District: <u>Ballard</u></p> <p>Coordinates: Letter: <u>Q</u> Section <u>36</u> Township: <u>28</u> Range: <u>9W</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator <u>X</u> Location Drip: <u>X</u> Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>6-9-94</u> Area: <u>11</u> Run: <u>92</u></p>								
	<table border="0"> <tr> <td data-bbox="82 683 180 1868" rowspan="4">SITE ASSESSMENT</td> <td data-bbox="180 683 860 904"> <p>NMOCD Zone:</p> <p>(From NMOCD Maps)</p> <p>Inside <input checked="" type="checkbox"/> (1)</p> <p>Outside <input type="checkbox"/> (2)</p> </td> <td data-bbox="860 683 1583 904"> <p>Land Type:</p> <p>BLM <input type="checkbox"/> (1)</p> <p>State <input type="checkbox"/> (2)</p> <p>Fee <input type="checkbox"/> (3)</p> <p><input checked="" type="checkbox"/> Indian <u>NAVAJO LAND</u></p> </td> </tr> <tr> <td colspan="2" data-bbox="180 904 1583 1117"> <p>Depth to Groundwater</p> <p>Less Than 50 Feet (20 points) <input checked="" type="checkbox"/> (1)</p> <p>50 Ft to 99 Ft (10 points) <input type="checkbox"/> (2)</p> <p>Greater Than 100 Ft (0 points) <input type="checkbox"/> (3)</p> </td> </tr> <tr> <td colspan="2" data-bbox="180 1117 1583 1351"> <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> </td> </tr> <tr> <td colspan="2" data-bbox="180 1351 1583 1868"> <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) <input checked="" type="checkbox"/> (2)</p> <p>Greater Than 1000 Ft (0 points) <input checked="" type="checkbox"/> (3) <u>KGW</u></p> <p>Name of Surface Water Body <u>Blanco Canyon</u></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)</p> <p><input checked="" type="checkbox"/> (2) > 100'</p> <p>TOTAL HAZARD RANKING SCORE: <u>30</u> POINTS</p> </td> </tr> </table>	SITE ASSESSMENT	<p>NMOCD Zone:</p> <p>(From NMOCD Maps)</p> <p>Inside <input checked="" type="checkbox"/> (1)</p> <p>Outside <input type="checkbox"/> (2)</p>	<p>Land Type:</p> <p>BLM <input type="checkbox"/> (1)</p> <p>State <input type="checkbox"/> (2)</p> <p>Fee <input type="checkbox"/> (3)</p> <p><input checked="" type="checkbox"/> Indian <u>NAVAJO LAND</u></p>	<p>Depth to Groundwater</p> <p>Less Than 50 Feet (20 points) <input checked="" type="checkbox"/> (1)</p> <p>50 Ft to 99 Ft (10 points) <input type="checkbox"/> (2)</p> <p>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)</p> <p>200 Ft to 1000 Ft (10 points) <input checked="" type="checkbox"/> (2)</p> <p>Greater Than 1000 Ft (0 points) <input checked="" type="checkbox"/> (3) <u>KGW</u></p> <p>Name of Surface Water Body <u>Blanco Canyon</u></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)</p> <p><input checked="" type="checkbox"/> (2) > 100'</p> <p>TOTAL HAZARD RANKING SCORE: <u>30</u> POINTS</p>
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REMARKS	<p>Remarks : _____</p> <p><u>inside v.z. on Redline & Topo</u></p>								

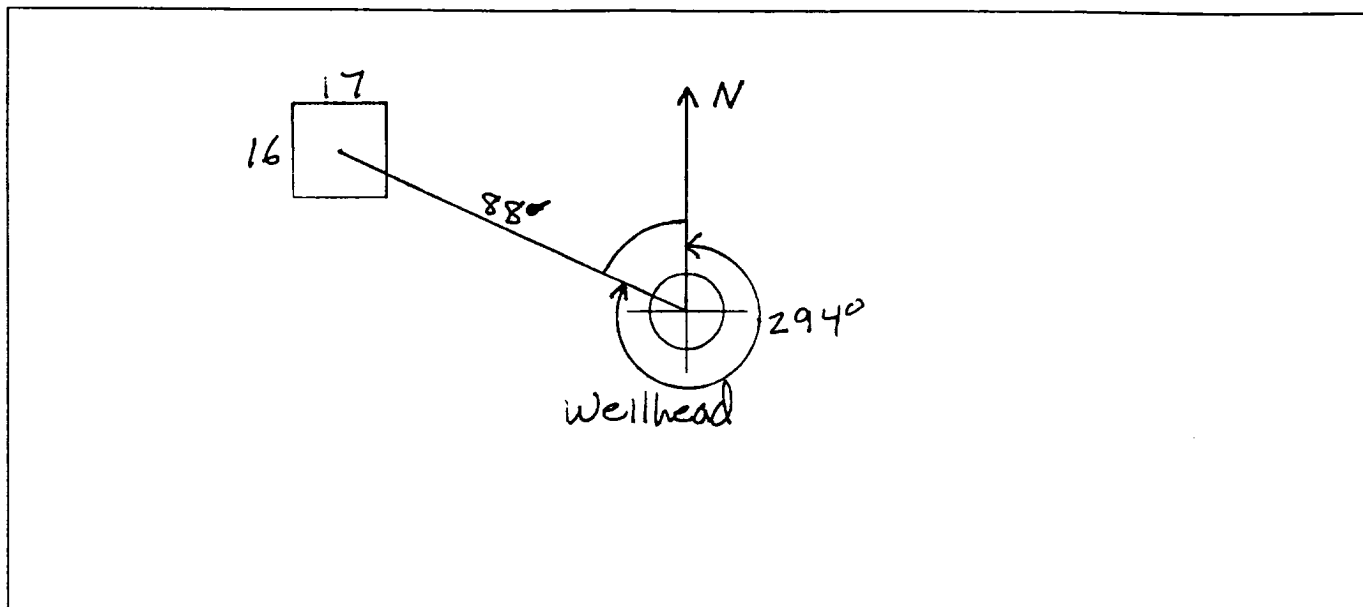
DIG & HAUL

(SP3190) 04/08/94

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 294 Footage from Wellhead 88
b) Length : 17 Width : 16 Depth : 4



REMARKS

Remarks :

Photos - 1539Bobtail

Completed By:

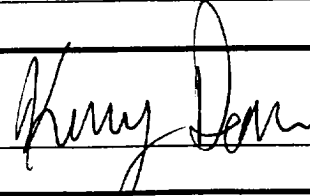
A handwritten signature in dark ink, appearing to be 'J. H. Smith' or similar, written over a horizontal line.

Signature

6-9-94

Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	<p>Meter: <u>71801</u> Location: <u>ADA Candelario Well #1</u></p> <p>Coordinates: Letter: <u>0</u> Section <u>36</u> Township: <u>28</u> Range: <u>9w</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>8/16/94</u> Run: <u>11</u> <u>92</u></p>
FIELD OBSERVATIONS	<p>Sample Number(s): <u>KD 217</u></p> <p>Sample Depth: <u>12</u> Feet</p> <p>Final PID Reading <u>573 ppm</u> PID Reading Depth <u>12</u> Feet</p> <p style="text-align: center;">Yes No</p> <p>Groundwater Encountered <input type="checkbox"/> <input checked="" type="checkbox"/> Approximate Depth _____ Feet</p>
CLOSURE	<p>Remediation Method :</p> <p>Excavation <input checked="" type="checkbox"/> Approx. Cubic Yards <u>50</u></p> <p>Onsite Bioremediation <input type="checkbox"/></p> <p>Backfill Pit Without Excavation <input type="checkbox"/></p> <p>Soil Disposition:</p> <p>Envirotech <input checked="" type="checkbox"/> Tierra <input type="checkbox"/></p> <p>Other Facility <input type="checkbox"/> Name: _____</p> <p>Pit Closure Date: <u>8/16/94</u> Pit Closed By: <u>BEI</u></p>
REMARKS	<p>Remarks : <u>Excavated pit to 12', TOOK p.i.D Sample,</u> <u>Closed pit.</u></p>
	<p>Signature of Specialist: <u></u></p>



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KD 217	945946
MTR CODE SITE NAME:	71801	N/A
SAMPLE DATE TIME (Hrs):	8-16-94	1145
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	8-18-94	8-18-94
DATE OF BTEX EXT. ANAL.:	8/22/94	8/22/94
TYPE DESCRIPTION:	VC	Grey Fine Sand

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	20.5	MG/KG	20			
TOLUENE	15	MG/KG	20			
ETHYL BENZENE	8.4	MG/KG	20			
TOTAL XYLENES	9.3	MG/KG	20			
TOTAL BTEX	117	MG/KG				
TPH (418.1)	1580	MG/KG			207	28
HEADSPACE PID	573	PPM				
PERCENT SOLIDS	88.8	91.1 %				

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

The Surrogate Recovery was at 74 % for this sample All QA/QC was acceptable.

Narrative:

ATT results attached.

DF = Dilution Factor Used

Approved By:

Date:

9/2/94



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

August 24, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

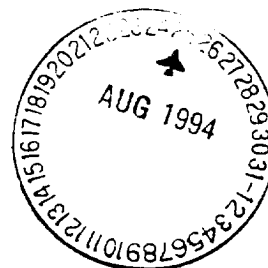
On 08/19/94, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

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

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure



GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
 CLIENT : El PASO NATURAL GAS CO. ATI I.D.: 408380
 PROJECT # : 24324
 PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	945945	NON-AQ	08/16/94	08/22/94	08/22/94	10
02	945946	NON-AQ	08/16/94	08/22/94	08/22/94	20
03	945949	NON-AQ	08/17/94	08/22/94	08/22/94	20
PARAMETER			UNITS	01	02	03
BENZENE			MG/KG	4.5	<0.5	<0.5
TOLUENE			MG/KG	22	15	42
ETHYLBENZENE			MG/KG	1.6	6.4	4.9
TOTAL XYLENES			MG/KG	52	93	52

SURROGATE:

BROMOFLUOROBENZENE (%) 65* 74 135*

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

FIELD PIT REMEDIATION/CLOSURE FORM/PHASE II

GENERAL

Meter: 71801 Location: ADA Candenario well #1
 Coordinates: Letter: 2 Section 36 Township: 28 Range: 9W
 Or Latitude _____ Longitude _____
 Date Started : 11/15/95 Area: 11 Run: 92

FIELD OBSERVATIONS

Sample Number(s): 138
 Sample Depth: 19 Feet
 Final PID Reading 429.0 PID Reading Depth 19' Feet
 Yes No
 Groundwater Encountered ☐ (1) ☒ (2) Approximate Depth _____ Feet
 Final Dimensions: Length 21 Width 21 Depth 19'

CLOSURE

Remediation Method :
 Excavation ☒ (1) Approx. Cubic Yards 326 LT ^{12/1/95}
 Onsite Bioremediation ☐ (2)
 Backfill Pit Without Excavation ☐ (3)
 Overburden Cubic Yards 40 yds
 Soil Disposition:
 Envirotech ☒ (1) ☐ (3) Tierra
 Other Facility ☐ (2) Name: _____
 Pit Closure Date: 11-18-95 Pit Closed By: Philip

REMARKS

Remarks : Pit pid readings (N-39.7)(S-20.3)(E-10.0)(W-30.1)
More Than 100' From Ephemeral stream
No fence No EPIG ON site

Signature of Specialist: James L. Kirby



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JK138	947787
MTR CODE SITE NAME:	71801	Ada Condellario Well #1
SAMPLE DATE TIME (Hrs):	11-15-95	1230
PROJECT:	Phase I Navajo	
DATE OF TPH EXT. ANAL.:	11/17/95	
DATE OF BTEX EXT. ANAL.:	11/16/95	11/16/95
TYPE DESCRIPTION:	V6	gray/brown sand & clay

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< 0.5	MG/KG				
TOLUENE	1.7	MG/KG				
ETHYL BENZENE	0.6	MG/KG				
TOTAL XYLENES	5.9	MG/KG				
TOTAL BTEX	8.2	MG/KG				
TPH (418.1)	52	MG/KG			2.05	28
HEADSPACE PID	429.0	PPM				
PERCENT SOLIDS	86.6	%				

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

The Surrogate Recovery was at 86% for this sample All QA/QC was acceptable.
Narrative:

DF = Dilution Factor Used

Approved By: Date: 11/21/95

BTEX SOIL SAMPLE WORKSHEET

File	:	947787	Date Printed	:	11/20/95
Soil Mass (g)	:	5.04	Multiplier (L/g)	:	0.00099
Extraction vol. (mL)	:	10	CAL FACTOR (Analytical):		200
Shot Volume (uL)	:	50	CAL FACTOR (Report):		0.19841
			DILUTION FACTOR:	1	Det. Limit
Benzene (ug/L)	:	0.00	Benzene (mg/Kg):	0.000	0.496
Toluene (ug/L)	:	8.42	Toluene (mg/Kg):	1.671	0.496
Ethylbenzene (ug/L)	:	2.97	Ethylbenzene (mg/Kg):	0.589	0.496
p & m-xylene (ug/L)	:	24.35	p & m-xylene (mg/Kg):	4.831	0.992
o-xylene (ug/L)	:	5.63	o-xylene (mg/Kg):	1.117	0.496
			Total xylenes (mg/Kg):	5.948	1.488
			Total BTEX (mg/Kg):	8.208	