

# EL PASO FIELD SERVICES PRODUCTION PIT CLOSURE

Navajo Indian No. 6 MV  
Meter/Line ID - 75052

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*Fel Suf / Nong*

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## SITE DETAILS

Legals - Twn: 26N	Rng: 8W	Sec: 6	Unit: E
NMOCD Hazard Ranking: 40		Land Type: Eastern Navajo Agency	
Operator: Meridian		Pit Closure Date: 08/09/94	

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## 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 9, 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 100 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 313 ppm; laboratory analysis indicated a benzene concentration of 2.4 mg/kg, a total BTEX concentration of 593 mg/kg, and a TPH concentration of 22,600 mg/kg. TPH and BTEX concentrations were above required remediation levels for the Hazard Ranking Score.

On November 10, 1995, a Phase II excavation was conducted to 15 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 and bedrock was encountered at fifteen feet below ground surface. Approximately 586 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 170.8 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 128 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.
- 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.
- Bedrock was encountered at fifteen feet below ground surface making further remediation impractical; therefore, impact to groundwater is unlikely.
- Residual hydrocarbons in the soil will degrade naturally with minimal risk to the environment.
- Based on the Hazard Ranking Score, benzene and total BTEX were below required remediation levels for the Hazard Ranking Score.

## **EL PASO FIELD SERVICES**

### **PRODUCTION PIT CLOSURE**

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- 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.

#### **ATTACHMENT**

Field Pit Assessment Form

Field Pit Remediation/Closure Form Phase I

Field Pit Remediation/Closure Form Phase II

Laboratory Analytical Results

# FIELD PIT SITE ASSESSMENT FORM

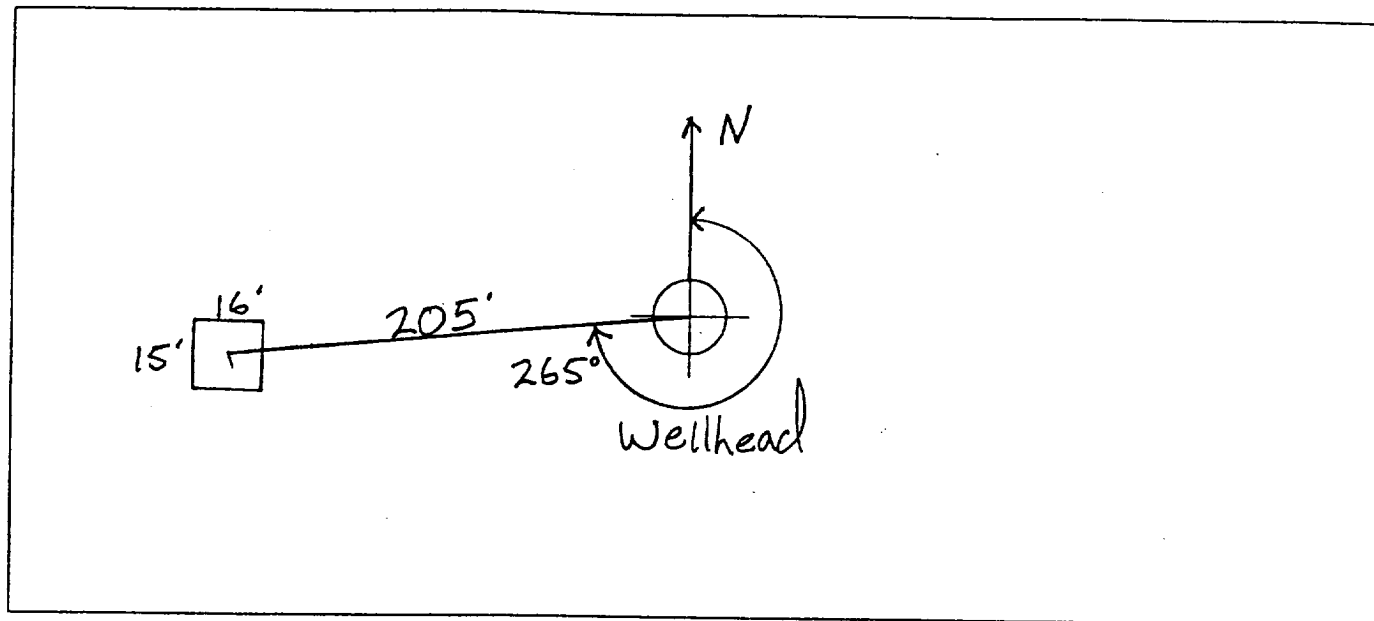
7

GENERAL	<p>Meter: <u>15052</u> Location: <u>Navajo Indian No. 6 MV</u></p> <p>Operator #: <u>2999</u> Operator Name: <u>Meridian</u> P/L District: <u>Ballard</u></p> <p>Coordinates: Letter: <u>E</u> Section <u>6</u> Township: <u>26N</u> Range: <u>8W</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator <input checked="" type="checkbox"/> Location Drip: _____ Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>6-22-94</u> Area: <u>11</u> Run: <u>91</u></p>
SITE ASSESSMENT	<p><b>NMOCD Zone:</b> (From NMOCD Maps)</p> <p>Inside <input checked="" type="checkbox"/> (1) Outside <input type="checkbox"/> (2)</p> <p><b>Land Type:</b> BLM <input type="checkbox"/> (1) State <input type="checkbox"/> (2) Fee <input type="checkbox"/> (3) Indian <u>Eastern Navajo's Agency</u></p> <p><b>Depth to Groundwater</b> 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)</p> <p><b>Wellhead Protection Area :</b> 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><b>Horizontal Distance to Surface Water Body</b> 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)</p> <p>Name of Surface Water Body <u>Reed Canyon/Blanco Wash</u> (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) &lt; 100' (Navajo Pits Only) <input checked="" type="checkbox"/> (2) &gt; 100'</p> <p><b>TOTAL HAZARD RANKING SCORE:</b> <u>40</u> POINTS</p>
REMARKS	<p>Remarks : <u>Two pits on location, Two Meter houses (DK &amp; MV)</u> <u>MV dehy pit has oil in it</u></p>

ORIGINAL PIT LOCATION

### ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 265 Footage from Wellhead 205  
b) Length : 16 Width : 15 Depth : 5



REMARKS

Remarks :

Photos- 1351

End dump

Completed By:

*[Signature]*

Signature

6-22-94

Date



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP 174	945874
MTR CODE   SITE NAME:	75052	N/A
SAMPLE DATE   TIME (Hrs):	8-9-94	1515
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	8/11/94	8/11/94
DATE OF BTEX EXT.   ANAL.:	8/15/94	8/18/94
TYPE   DESCRIPTION:	NC	Brown/grey sand & clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	24	MG/KG	20			
TOLUENE	130	MG/KG	20			
ETHYL BENZENE	41	MG/KG	20			
TOTAL XYLENES	420	MG/KG	20			
TOTAL BTEX	593	MG/KG				
TPH (418.1) 22,600	22,588	MG/KG			0.25	28
HEADSPACE PID	313	PPM				
PERCENT SOLIDS	87.2	%				

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

The Surrogate Recovery was at 55 % 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

Approved By:

J.P.

Date:

9/2/94

# GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)  
 CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 408346  
 PROJECT # : 24324  
 PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	945873	NON-AQ	08/09/94	08/15/94	08/17/94	1
02	945874	NON-AQ	08/09/94	08/15/94	08/18/94	20
03	945875	NON-AQ	08/09/94	08/15/94	08/17/94	10

PARAMETER	UNITS	01	02	03
BENZENE	MG/KG	<0.025	2.4	1.2
TOLUENE	MG/KG	0.058	130	33
ETHYLBENZENE	MG/KG	0.041	41	7.2
TOTAL XYLENES	MG/KG	0.48	420	100

SURROGATE:

BROMOFLUOROBENZENE (%) 85 55\* 115

\*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. **408346**

August 23, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

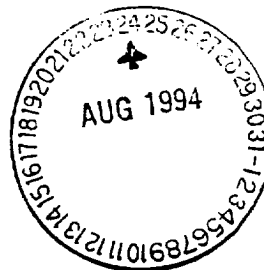
On 08/12/94, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

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

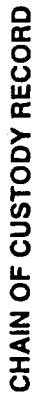
Enclosure



# FIELD PIT REMEDIATION/CLOSURE FORM

<b>GENERAL</b>	Meter: <u>75052</u> Location: <u>NAYATO INDIAN NO.6 MV</u> Coordinates: Letter: <u>E</u> Section <u>6</u> Township: <u>26</u> Range: <u>8</u> Or Latitude _____ Longitude _____ Date Started : <u>8-9-94</u> Run: <u>11</u> <u>91</u>
<b>FIELD OBSERVATIONS</b>	Sample Number(s): <u>KP.174</u> Sample Depth: <u>12</u> Feet Final PID Reading <u>313</u> PID Reading Depth <u>12</u> Feet <div style="text-align: center;">Yes      No</div> Groundwater Encountered <input type="checkbox"/> <input checked="" type="checkbox"/> Approximate Depth _____ Feet
<b>CLOSURE</b>	Remediation Method : <div style="display: flex; justify-content: space-between;"> <div>           Excavation            Onsite Bioremediation            Backfill Pit Without Excavation         </div> <div style="text-align: right;"> <input checked="" type="checkbox"/> Approx. Cubic Yards <u>100</u>  <input type="checkbox"/>  <input type="checkbox"/> </div> </div> Soil Disposition: <div style="display: flex; justify-content: space-between;"> <div>           Envirotech <input checked="" type="checkbox"/>            Other Facility <input type="checkbox"/> </div> <div> <input type="checkbox"/> Tierra            Name: _____         </div> </div> Pit Closure Date: <u>8-9-94</u> Pit Closed By: <u>B.E.I</u>
<b>REMARKS</b>	Remarks : <u>SOME LINE MARKERS ON LOCATION. STARTED</u> <u>REMEDATING TO 12' SOIL TURNED GRAY LOOKING WITH A SMELL</u> <u>AT 12' SOIL STILL THE SAME. DUAL LOCATION.</u> <u>SOUTH WALL STILL DARK GRAY.</u>
	Signature of Specialist: <u>Kelly Padden</u>



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

GENERAL

FIELD OBSERVATIONS

CLOSURE

REMARKS

ILLEGIBLE

Signature of Specialist

*[Handwritten Signature]*



CHAIN OF CUSTODY RECORD

Page 1 of 1

PROJECT NUMBER # 24324		PROJECT NAME Pit Closure Project		CONTRACT LABORATORY P. O. NUMBER	
SAMPLERS: (Signature) James K. Kirby		DATE 11/10/95			
LAB ID	DATE	TIME	MATRIX	FID ID	
	11/10/95	10:00	Soil	JK131	
	11/10/95	11:30	Soil	JK132	
[Diagonal line across remaining rows]					
RECEIVED BY: (Signature) James K. Kirby DATE/TIME 11/13/95 8:35 RECEIVED BY: (Signature) [Signature]					
RECEIVED BY: (Signature) [Signature] DATE/TIME 11/13/95 8:35 RECEIVED BY: (Signature) [Signature]					

REQUESTED ANALYSIS		TOTAL NUMBERS OF CONTAINERS		SAMPLE TYPE		SEQUENCE #		REMARKS	
TPH	EPA 418.1	BTEX	EPA 8020	LAB PID					
X	X	X	X	4.5	1	6	117	Ge-Elec-Gu-Litl-E No. 1	
X	X	X	X	10.8	1	6	118	Meter 74440 Navajo Indian No. 6 MV meter 75053	

REQUESTED TURNAROUND TIME: <input type="checkbox"/> ROUTINE <input type="checkbox"/> RUSH		SAMPLE RECEIPT REMARKS		RESULTS & INVOICES TO:	
CARRIER CO.		CHARGE CODE		FIELD SERVICES LABORATORY EL PASO NATURAL GAS COMPANY P. O. BOX 4990 FARMINGTON, NEW MEXICO 87499	
BILL NO.:		505-599-2144		FAX: 505-599-2261	



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JK132	947773
MTR CODE   SITE NAME:	75052	Navajo Indian No. 6 MV
SAMPLE DATE   TIME (Hrs):	11-10-95	1130
PROJECT:	Phase I Navajo	
DATE OF TPH EXT.   ANAL.:	11/15/95	
DATE OF BTEX EXT.   ANAL.:	11/15/95	11/15/95
TYPE   DESCRIPTION:	V6	Light grey sand & clay

Field Remarks:

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	< 1.5	MG/KG				
TOTAL BTEX	< 3	MG/KG				
TPH (418.1)	128	MG/KG			2.02	28
HEADSPACE PID	170.8	PPM				
PERCENT SOLIDS	90.4	%				

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

The Surrogate Recovery was at 97% for this sample All QA/QC was acceptable.  
Narrative:

DF = Dilution Factor Used

Approved By:

Date:

11/15/95

### BTEX SOIL SAMPLE WORKSHEET

<b>File</b>	<b>:</b>	<b>947773</b>	<b>Date Printed</b>	<b>:</b>	<b>11/16/95</b>
<b>Soil Mass (g)</b>	<b>:</b>	<b>5.04</b>	<b>Multiplier (L/g)</b>	<b>:</b>	<b>0.00099</b>
<b>Extraction vol. (mL)</b>	<b>:</b>	<b>10</b>	<b>CAL FACTOR (Analytical):</b>		<b>200</b>
<b>Shot Volume (uL)</b>	<b>:</b>	<b>50</b>	<b>CAL FACTOR (Report):</b>		<b>0.19841</b>
			<b>DILUTION FACTOR:</b>	<b>1</b>	<b>Det. Limit</b>
<b>Benzene (ug/L)</b>	<b>:</b>	<b>0.14</b>	<b>Benzene (mg/Kg):</b>	<b>0.028</b>	<b>0.496</b>
<b>Toluene (ug/L)</b>	<b>:</b>	<b>0.68</b>	<b>Toluene (mg/Kg):</b>	<b>0.135</b>	<b>0.496</b>
<b>Ethylbenzene (ug/L)</b>	<b>:</b>	<b>0.37</b>	<b>Ethylbenzene (mg/Kg):</b>	<b>0.073</b>	<b>0.496</b>
<b>p &amp; m-xylene (ug/L)</b>	<b>:</b>	<b>3.34</b>	<b>p &amp; m-xylene (mg/Kg):</b>	<b>0.663</b>	<b>0.992</b>
<b>o-xylene (ug/L)</b>	<b>:</b>	<b>1.19</b>	<b>o-xylene (mg/Kg):</b>	<b>0.236</b>	<b>0.496</b>
			<b>Total xylenes (mg/Kg):</b>	<b>0.899</b>	<b>1.488</b>
			<b>Total BTEX (mg/Kg):</b>	<b>1.135</b>	