

**EL PASO FIELD SERVICES**  
**PRODUCTION PIT CLOSURE**  
**DEPUTY OIL & GAS INSPECTOR**

DEC 21 1998

**SKELLY GAS COM #1E**  
**Meter/Line ID - 93559**

**RECEIVED**  
JUL 2 1999

*Approved*

**Legals - Twn: 29**  
**NMOCD Hazard Ranking: 40**  
**Operator: AMOCO PRODUCTION COMPANY**

**Rng: 10**

**SITE DETAILS**

**Sec: 32**

**Unit: O**

**Land Type: 1 - State**

**OIL CON. DIV.**  
**DIST. 3**

**Pit Closure Date: 09/26/94**

**RATIONALE FOR RISK-BASED CLOSURE:**

The above mentioned production pit was assessed and ranked according to the criteria in the New Mexico Conservation Division's Unlined Surface Impoundment Closure Guidelines.

The primary source, discharge to the pit, has been removed. There has been no discharge to the production pit for at least five years and the pit has been closed for at least three years.

The production pit has been remediated to the practical extent of the trackhoe or to the top of bedrock. Initial laboratory analysis has indicated that the soil remaining at the bottom of the excavation is above standards based on the hazard ranking score. Contaminated soil was removed and transported to an approved landfarm for disposal. The initial excavation was backfilled with clean soil and graded in a manner to divert precipitation away from the excavated area. Any rainfall that does infiltrate the ground surface must migrate through clean backfill before reaching any residual hydrocarbons remaining in the soil. Therefore, further mobility of residual hydrocarbons is unlikely.

Since the soil samples from the initial excavation were above standards, a test boring was drilled and a sample was collected to evaluate the vertical extent of impact to soils. Test boring sample results indicated soils below standards beneath the original excavation.

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

- Discharge to the pit has not occurred in over five years and the pit has been closed for over three years.
- The bulk of the impacted soil was removed during the initial excavation.
- The excavation was backfilled with clean soil and graded to divert precipitation away from the excavation area.
- All source material has been removed from the ground surface, eliminating potential direct contact with livestock and the general public.
- Groundwater was not encountered in the initial excavation or test boring; therefore, impact to groundwater is unlikely.
- Soil samples collected beneath the initial excavation were below standards.
- No potential receptors are within 1,000 feet of the site.
- Residual hydrocarbons remaining in the soil at the bottom of the initial excavation will naturally degrade in time with minimal risk to the environment.

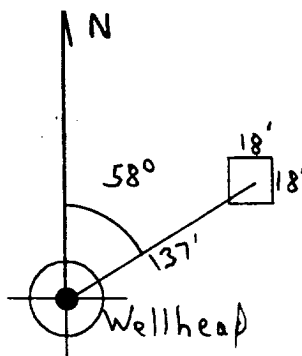
# FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>Meter: <u>93559</u> Location: <u>Skelly Gas Com No 1E</u>          Operator #: <u>0203</u> Operator Name: <u>Amoco</u> P/L District: <u>Angel Peak</u>          Coordinates: Letter: <u>0</u> Section <u>32</u> Township: <u>29</u> Range: <u>10</u>          Or Latitude _____ Longitude _____          Pit Type: Dehydrator <input checked="" type="checkbox"/> Location Drip: _____ Line Drip: _____ Other: _____          Site Assessment Date: <u>9/12/94</u> Area: <u>01</u> Run: <u>23</u></p>																
SITE ASSESSMENT	<p><b>NMOCD Zone:</b>          (From NMOCD Maps)</p> <p><b>Land Type:</b></p> <table border="0"> <tr> <td>Inside</td><td><input checked="" type="checkbox"/> (1)</td> <td>BLM</td><td><input type="checkbox"/> (1)</td> </tr> <tr> <td>Outside</td><td><input type="checkbox"/> (2)</td> <td>State</td><td><input checked="" type="checkbox"/> (2)</td> </tr> <tr> <td></td><td></td> <td>Fee</td><td><input type="checkbox"/> (3)</td> </tr> <tr> <td></td><td></td> <td>Indian</td><td>_____</td> </tr> </table> <p><b>Depth to Groundwater</b></p> <p>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></p> <p>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>Creighton Canyon (off of San Juan R.)</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 type="checkbox"/> (2) &gt; 100'</p> <p><b>TOTAL HAZARD RANKING SCORE:</b> <u>40</u> <b>POINTS</b></p>	Inside	<input checked="" type="checkbox"/> (1)	BLM	<input type="checkbox"/> (1)	Outside	<input type="checkbox"/> (2)	State	<input checked="" type="checkbox"/> (2)			Fee	<input type="checkbox"/> (3)			Indian	_____
Inside	<input checked="" type="checkbox"/> (1)	BLM	<input type="checkbox"/> (1)														
Outside	<input type="checkbox"/> (2)	State	<input checked="" type="checkbox"/> (2)														
		Fee	<input type="checkbox"/> (3)														
		Indian	_____														
REMARKS	<p>Remarks : <u>Redline Book - Inside</u> , <u>Vulnerable Zone Topo - Inside</u>  <u>3 pits. Will close. Pit dry</u></p> <p style="text-align: right;"><u>DIG &amp; HAUL</u></p>																

## ORIGINAL PIT LOCATION

## ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 58° Footage from Wellhead 137'  
b) Length : 18' Width : 18' Depth : 4'



## REMARKS

## Remarks :

Pictures @ 1707 hr

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Completed By:

Cory Chase  
Signature

9/12/94  
Date

# **PHASE I EXCAVATION**

# FIELD PIT REMEDIATION/CLOSURE FORM

<b>GENERAL</b>	<p>Meter: <u>93559</u> Location: <u>SKelly Gas Com No 1E</u></p> <p>Coordinates: Letter: <u>0</u> Section <u>32</u> Township: <u>29</u> Range: <u>10</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>9-26-94</u> Run: <u>01</u> <u>23</u></p>
<b>FIELD OBSERVATIONS</b>	<p>Sample Number(s): <u>KP251</u></p> <p>Sample Depth: <u>12'</u> Feet</p> <p>Final PID Reading <u>424</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>
<b>CLOSURE</b>	<p>Remediation Method :</p> <p>Excavation <input checked="" type="checkbox"/> Approx. Cubic Yards <u>70</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"/> <input type="checkbox"/> Tierra</p> <p>Other Facility <input type="checkbox"/> Name: _____</p> <p>Pit Closure Date: <u>9-26-94</u> Pit Closed By: <u>B.E.I</u></p>
<b>REMARKS</b>	<p><b>Remarks :</b> <u>Some Line markers started Remediating to 12' At 12' soil gray looking with A smell.</u></p>
	<p>Signature of Specialist: <u>Kelly Padilla</u></p>



## FIELD SERVICES LABORATORY

### ANALYTICAL REPORT

#### PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

#### SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP 251	9416212
MTR CODE   SITE NAME:	93559	N/A
SAMPLE DATE   TIME (Hrs):	9-26-94	110-1
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	9-27-94	9-27-94
DATE OF BTEX EXT.   ANAL.:	9-29-94	10-2-94
TYPE   DESCRIPTION:	VC	Dark brown Sand & Clay

REMARKS:

#### RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	1.1	MG/KG	20			
TOLUENE	22	MG/KG	20			
ETHYL BENZENE	3.5	MG/KG	20			
TOTAL XYLENES	64	MG/KG	20			
TOTAL BTEX	90.6	MG/KG				
TPH (418.1)	591	MG/KG			2.12	28
HEADSPACE PID	424	PPM				
PERCENT SOLIDS	88.6	%				

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

The Surrogate Recovery was at 78 % for this sample All QA/QC was acceptable.

Narrative:

ATL Results attached.

DF = Dilution Factor Used

Approved By: 

Date: 10/23/94

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*                                     *
*      Test Method for               *
*      Oil and Grease and Petroleum Hydrocarbons      *
*      in Water and Soil             *
*                                     *
*      Perkin-Elmer Model 1600 FT-IR      *
*      Analysis Report                   *
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94/09/27 14:12

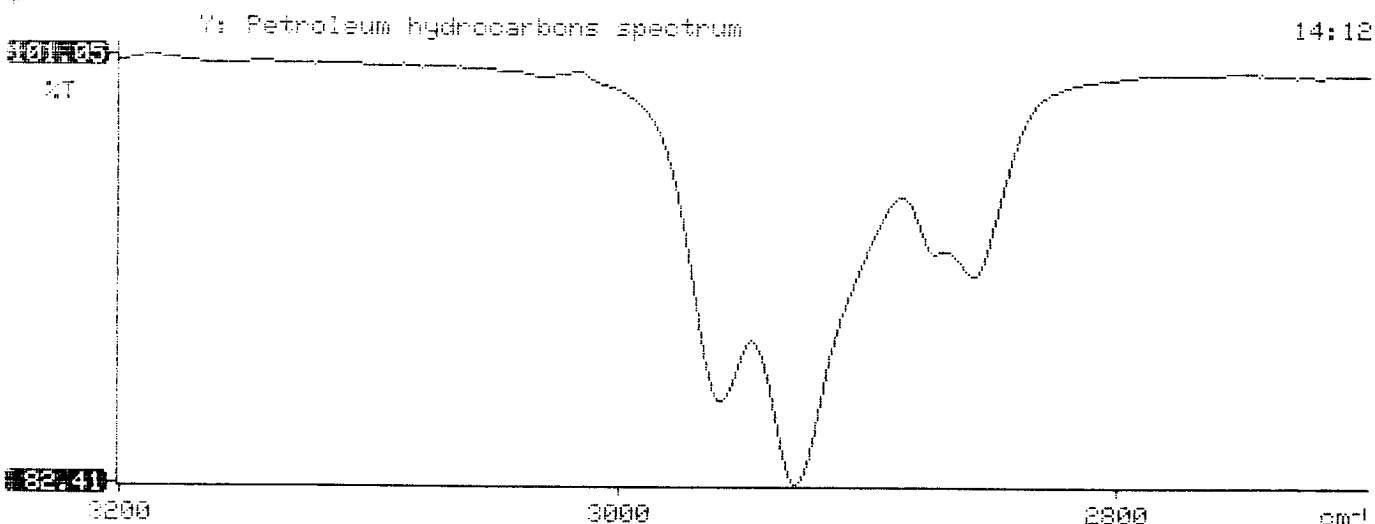
\* Sample identification  
946212

\* Initial mass of sample, g  
2.120

\* Volume of sample after extraction, ml  
28.000

\* Petroleum hydrocarbons, ppm  
590.716

\* Net absorbance of hydrocarbons (2930 cm<sup>-1</sup>)  
0.086





Analytical **Technologies**, Inc.

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

ATI I.D. **409425**

October 7, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **09/28/94**, 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:jt

Enclosure





# GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)  
 CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 409425  
 PROJECT # : 24324  
 PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
13	946211	NON-AQ	09/26/94	09/29/94	10/02/94	20
14	946212	NON-AQ	09/26/94	09/29/94	10/02/94	20
15	946213	NON-AQ	09/26/94	09/29/94	10/02/94	1
PARAMETER			UNITS	13	14	15
BENZENE			MG/KG	<0.5	1.1	<0.025
TOLUENE			MG/KG	1.3	22	<0.025
ETHYLBENZENE			MG/KG	<0.5	3.5	<0.025
TOTAL XYLENES			MG/KG	18	64	<0.025

## SURROGATE:

BROMOFLUOROBENZENE (%)	72	78	94
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# PHASE II

# RECORD OF SUBSURFACE EXPLORATION

## PHILIP ENVIRONMENTAL

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

Borehole # BH-1  
Well # \_\_\_\_\_  
Page 1 of 2

Project Name EPNG Pits  
Project Number 14509 Phase 6000.77  
Project Location Skelly Gas Com N 1 E 9355

Elevation \_\_\_\_\_  
Borehole Location T29, R10, S32, O  
GWL Depth \_\_\_\_\_  
Logged By Jeff W. Kindley  
Drilled By G. Sudduth  
Date/Time Started 08/22/95 1400  
Date/Time Completed 08/22/95 1550

Well Logged By Jeff W. Kindley  
Personnel On-Site G. Sudduth, H. Keil, D. Roberts  
Contractors On-Site \_\_\_\_\_  
Client Personnel On-Site \_\_\_\_\_

Drilling Method 4 1/4 ID HSA  
Air Monitoring Method PID, CGI

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: PPM BZ BH S/H			Drilling Conditions & Blow Counts
0				Backfill material to 12'						
5										
10										
15										
20	1	18-20'	.8 2.0	CL, LT GR CLAY, dry, hard, low plasticity, hydrocarbon odor					165/ 134	1415 100 blows per Foot
25	2	23-25'	.9 2.0	S.A.A.					149/ 116	1424 100 blows per Foot
30	3	28-30'	.9 2.0	S.A.A.					146/ 125	1433 100 blows per Foot
35	4	33-35'	.7 2.0	S.A.A.					120/ 115	1442 100 blows per Foot
40	5	38-40'	.8 2.0	S.A.A.					39/ 57	1456 100 blows per Foot

Comments: \_\_\_\_\_

Geologist Signature

*Jeff W. Kindley*

# RECORD OF SUBSURFACE EXPLORATION

## PHILIP ENVIRONMENTAL

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

Borehole # BH-1  
Well # \_\_\_\_\_  
Page 2 of 2

Project Name EPNG Pits  
Project Number 14509 Phase 6000.77  
Project Location SKelly Gas Com No 1 E 93559

Elevation \_\_\_\_\_  
Borehole Location T29, R10, S32, 0  
GWL Depth \_\_\_\_\_  
Logged By Jeff W. Kindley  
Drilled By G. Sudduth  
Date/Time Started 08/22/95 1400  
Date/Time Completed 08/22/95 1550

Well Logged By Jeff W. Kindley  
Personnel On-Site G. Sudduth, H Kent, D Roberts  
Contractors On-Site \_\_\_\_\_  
Client Personnel On-Site \_\_\_\_\_

Drilling Method 4 1/4 ID HSA  
Air Monitoring Method PID, CGI

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: PPM			Drilling Conditions & Blow Counts
							BZ	BH	S/AS	
40										
45	6	43-45	.9 2.0	S.A.A Boring terminated at 45'					20/4	1512 100 blows per Foot
10										
15										
20										
25										
30										
35										
40										

Comments:

Sample collected from 43 to 45 feet and submitted for analysis  
of OTEX and TPH. BH grouted to the surface

Geologist Signature

Jeffery Kindley



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JWK 39	947307
MTR CODE   SITE NAME:	93559	Skelly Gas Com No. 1E
SAMPLE DATE   TIME (Hrs):	08-22-95	15:12
PROJECT:	Phase II Drilling	
DATE OF TPH EXT.   ANAL.:	8/23/95	
DATE OF BTEX EXT.   ANAL.:	8/24/95	
TYPE   DESCRIPTION:	VG	Light grey sand & sand stones

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< .5	MG/KG				
TOLUENE	< .5	MG/KG				
ETHYL BENZENE	< .5	MG/KG				
TOTAL XYLENES	< 1.5	MG/KG				
TOTAL BTEX	< 3	MG/KG				
TPH (418.1)	RB 8/24/95 44 40.7	MG/KG				28
HEADSPACE PID	4	PPM				
PERCENT SOLIDS	91.6	%				

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

The Surrogate Recovery was at 95% for this sample All QA/QC was acceptable.  
Narrative:

DF = Dilution Factor Used

Approved by

Date

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*                                     *
*      Test Method for               *
*      Oil and Grease and Petroleum Hydrocarbons      *
*      in Water and Soil             *
*                                     *
*      Perkin-Elmer Model 1600 FT-IR      *
*      Analysis Report                   *
*****

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95/08/23 14:38

\* Sample identification  
947307

\* Initial mass of sample, g  
1.990

\* Volume of sample after extraction, ml  
28.000

\* Petroleum hydrocarbons, ppm  
40.732

\* Net absorbance of hydrocarbons (2930 cm<sup>-1</sup>)  
0.015

