

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

*Edge of Vulnerable Area*  
Submit 1 copy to appropriate District Office and 1 copy to the Santa Fe Office  
(Revised 3/9/94)  
*Risk*  
*Bedrock not containing water*  
*defined plume*

PIT REMEDIATION AND CLOSURE REPORT

30-045-08933

Operator: Amoco (Site Closed by El Paso Field Services)

Telephone: \_\_\_\_\_

Address: \_\_\_\_\_

Facility Or: Likins Gas Com A#3, Meter 75139

Well Name \_\_\_\_\_

Location: Unit or Qtr/Qtr Sec      M      Sec 34 T 30 R 9 County San Juan

Pit Type: Separator      Dehydrator X Other     

Land Type: BLM     , State     , Fee X Other     

Pit Location: Pit dimensions: length 13', width 13', depth 1'

(Attach diagram)

Reference: wellhead X, other     

Footage from reference: 150'

Direction from reference: 314 Degrees X East North     

of

     West South     

Depth To Ground Water	Less than 50 feet	(20 points)
(Vertical distance from	50 feet to 99 feet	(10 points)
contaminants to seasonal	Greater than 100 feet	( 0 points) <u>10</u>
high water elevation of		
ground water.)		

Wellhead Protection Area:	Yes (20 points)
(Less than 200 feet from a private	No ( 0 points) <u>0</u>
domestic water source, or; less than	
1000 feet from all other water sources.)	

Distance To Surface Water:	Less than 200 feet	(20 points)
(Horizontal distance to perennial	200 feet to 1000 feet	(10 points)
lakes, ponds, rivers, streams, creeks,	Greater than 1000 feet	( 0 points) <u>0</u>
irrigation canals and ditches.)		

RANKING SCORE (TOTAL POINTS): 10

Date Remediation Started: 05/31/94 Date completed: 05/31/94

Remediation Method: Excavation \_\_\_\_\_ Approx. cubic yards \_\_\_\_\_

(Check all appropriate sections.)

Landfarmed \_\_\_\_\_ Insitu Bioremediation \_\_\_\_\_

Other Backfill pit without excavation

Remediation Location: Onsite N/A Offsite N/A

(i.e. landfarmed onsite, name and location of offsite facility)

General Description of Remedial Action: Line markers on location.

Ground Water Encountered: No X Yes \_\_\_\_\_ Depth \_\_\_\_\_

Final Pit:  
Closure Sampling:  
(if multiple samples, attach sample results and diagram of sample locations and depths)

Sample location Four walls and center of pit composite

Sample depth 12'

Sample Date 05/31/94 Sample time 09:00

Sample Results

Benzene(ppm) Not reported.

Total BTEX(ppm) Not reported.

Field headspace(ppm) 401

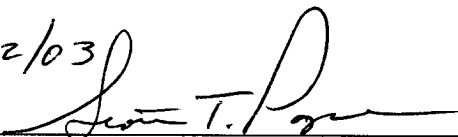
TPH 2190

Ground Water Sample: Yes \_\_\_\_\_ No X (If yes, attach sample results)

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Date 4/22/03

Signature



Printed Name

and Title

Scott Pope, Senior Environmental Scientist



## PIT CLOSURE REQUEST

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Likins Gas Com A #3  
Meter/Line ID 75139

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### SITE DETAILS

Legals - Twn: 30N	Rng: 9W	Sec: 34	Unit: M
NMOCD Hazard Ranking: 10		Land Type: Fee	
Operator: Amoco Production Company		Pit Closure Date: 5/31/94	

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### RATIONALE FOR RISK-BASED CLOSURE

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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 test pit was excavated to 12 feet (ft) below ground surface (bgs) and a soil sample was collected for field headspace and laboratory analysis for TPH. Groundwater was not encountered in the test pit. Headspace analysis indicated an organic vapor content of 401 ppm, laboratory analysis indicated a TPH concentration of 2,190 mg/kg. The TPH measurement exceeded recommended remediation levels for the Hazard Ranking Score.

No soil was disposed of offsite. The pit was backfilled with site soil, topped with clean soil from the surrounding berms, and graded in a manner to direct surface runoff away from the pit area.

A Phase II boring was completed with auger refusal (hard sandstone) at 53 ft bgs. No groundwater was encountered in the soil boring. One laboratory sample was collected at 52-53 ft bgs. Headspace analysis was not taken due to poor sample recovery, laboratory analysis indicated a benzene concentration of <0.5 mg/kg, a total BTEX concentration of <3 mg/kg, and a TPH concentration of 12 mg/kg. The benzene, total BTEX and TPH concentrations were below recommended remediation levels for the Hazard Ranking Score.

No Phase III activities were performed.

El Paso Field Services requests closure of the above mentioned pit location for the following reasons:

- The primary source, discharge to the pit, has been removed for over eight years.
- The test pit was backfilled and the former pit area graded to direct surface runoff away from the former pit.
- Hard sandstone was encountered in the Phase II soil boring at 53 feet bgs making further downward migration of contaminants unlikely.
- Groundwater was not encountered in either the test pit or Phase II soil boring to 53 feet bgs.
- There are no water supply wells or other sources of fresh water extraction within 1,000 feet of the site.
- Benzene, total BTEX and TPH concentrations at the base of the Phase II boring were below recommended remediation levels for the Hazard Ranking Score.

**REVISED**  
**FIELD PIT SITE ASSESSMENT FORM**

<b>GENERAL</b>	<p>Meter: <u>75139</u> Location: <u>LiKins Gas Com A #3</u></p> <p>Operator #: _____ Operator Name: _____ P/L District: _____</p> <p>Coordinates: Letter: <u>M</u> Section <u>34</u> Township: <u>30</u> Range: <u>9</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator _____ Location Drip: _____ Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>4/8/98</u> Area: _____ Run: _____</p>
<b>SITE ASSESSMENT</b>	<p><b>NMOCD Zone:</b> (From NMOCD Maps)</p> <p style="margin-left: 150px;">Inside <input type="checkbox"/> (1)</p> <p style="margin-left: 150px;">Outside <input checked="" type="checkbox"/> (2)</p> <p><b>Land Type:</b></p> <p style="margin-left: 150px;">BLM <input type="checkbox"/> (1)</p> <p style="margin-left: 150px;">State <input type="checkbox"/> (2)</p> <p style="margin-left: 150px;">Fee <input checked="" type="checkbox"/> (3)</p> <p style="margin-left: 150px;">Indian _____</p> <p><b>Depth to Groundwater</b></p> <p>Less Than 50 Feet (20 points) <input type="checkbox"/> (1)</p> <p>50 Ft to 99 Ft (10 points) <input checked="" type="checkbox"/> (2)</p> <p>Greater Than 100 Ft (0 points) <input type="checkbox"/> (3)</p> <p><b>Wellhead Protection Area</b></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?</p> <p style="text-align: center;"><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 type="checkbox"/> (1)</p> <p>200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2)</p> <p>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, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)</p> <p>Distance to Nearest Ephemeral Stream <input type="checkbox"/> (1) &lt; 100' (Navajo Pits Only)</p> <p style="margin-left: 350px;"><input type="checkbox"/> (2) &gt; 100'</p> <p><b>TOTAL HAZARD RANKING SCORE:</b> <u>10</u> POINTS</p>
<b>REMARKS</b>	<p>Remarks : <u>Site has been re-assessed, due to initial assessment including washes as a Surface Water Body. Site is &lt; 100' vertical from center of San Juan R.</u></p>

# FIELD PIT SITE ASSESSMENT FORM

<b>GENERAL</b>	<p>Meter: <u>75139</u> Location: <u>LIKINS GAS COM A #3</u></p> <p>Operator #: <u>0203</u> Operator Name: <u>AMOCO</u> P/L District: <u>BLOOMFIELD</u></p> <p>Coordinates: Letter: <u>M</u> Section <u>34</u> Township: <u>30</u> Range: <u>90</u> <sup>56.74</sup> <u>RT</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>5-6-94</u> Area: <u>10</u> Run: <u>43</u></p>
<b>SITE ASSESSMENT</b>	<p><b>NMOCD Zone:</b> (From NMOCD Maps)</p> <p style="margin-left: 150px;">Inside <input type="checkbox"/> (1)</p> <p style="margin-left: 150px;">Outside <input checked="" type="checkbox"/> (2)</p> <p><b>Land Type:</b></p> <p style="margin-left: 100px;">BLM <input type="checkbox"/> (1)</p> <p style="margin-left: 100px;">State <input type="checkbox"/> (2)</p> <p style="margin-left: 100px;">Fee <input checked="" type="checkbox"/> (3)</p> <p style="margin-left: 100px;">Indian _____</p> <p><b>Depth to Groundwater</b></p> <p>Less Than 50 Feet (20 points) <input type="checkbox"/> (1)</p> <p>50 Ft to 99 Ft (10 points) <input checked="" type="checkbox"/> (2)</p> <p>Greater Than 100 Ft (0 points) <input type="checkbox"/> (3)</p> <p><b>Wellhead Protection Area :</b></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><b>Horizontal Distance to Surface Water Body</b></p> <p>Less Than 200 Ft (20 points) <input type="checkbox"/> (1)</p> <p>200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2)</p> <p>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) &lt; 100' (Navajo Pits Only)</p> <p style="margin-left: 150px;"><input type="checkbox"/> (2) &gt; 100'</p> <p><b>TOTAL HAZARD RANKING SCORE:</b> <u>10</u> POINTS</p>
<b>REMARKS</b>	<p>Remarks : <u>ONLY PIT ON LOCATION. PIT IS DRY. LOCATION IS ON A SLIGHT HILL. REDLINE SHOWS LOCATION IS INSIDE THE U.Z. BUT TOPO SHOWS THAT IT IS OUTSIDE THE U.Z.</u></p> <p style="text-align: right;"><u>PUSH IN</u></p>



## FIELD SERVICES LABORATORY

## ANALYTICAL REPORT

## PIT CLOSURE PROJECT - Soil

## SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	VW 148	945305
MTR CODE   SITE NAME:	75139	N/A
SAMPLE DATE   TIME (Hrs):	5-31-94	0900
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL:	6-2-94	6/2/94
DATE OF BTEX EXT.   ANAL:	N/A	N/A
TYPE   DESCRIPTION:	VG	Fine Brown Sand/Clay

REMARKS:

## RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE		MG/KG				
TOLUENE		MG/KG				
ETHYL BENZENE		MG/KG				
TOTAL XYLENES		MG/KG				
TOTAL BTEX		MG/KG				
TPH (418.1)	2190	MG/KG			2.01	28
HEADSPACE PID	401	PPM				
PERCENT SOLIDS	91.2	%				

- 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:

DF = Dilution Factor Used

Approved By: John LardiDate: 6/6/94

# RECORD OF SUBSURFACE EXPLORATION

WILLIP SERVICES CORP.

Monroe Road  
 El Paso, New Mexico 87401  
 (505) 326-2262 FAX (505) 326-2388

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

Project Number 19643 Phase 1001.77  
 Project Name EPFS PITS >10  
 Project Location LIKENS GAS COM AH3 75139

Elevation \_\_\_\_\_  
 Borehole Location LTR: M S: 34 T: 30 R: 9  
 GWL Depth \_\_\_\_\_  
 Drilled By K. PADILLA  
 Well Logged By H. BRADBURY  
 Date Started 9/18/98  
 Date Completed \_\_\_\_\_

Drilling Method 4 1/4 ID HSA  
 Air Monitoring Method 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: PPM			Drilling Conditions & Blow Counts
							BZ	BH	S/HS	
0										BZ=Breathing Zone BH=Borehole S/HS=Sample/Headspace
5										
10				EXCAVATION SAMPLE COLLECTED AT 12'						
15	1	15-17	24	LT GR SANDY CLAY, FINE SAND. Soft, low plasticity, dry			0	11	345 340	1332 hrs
20	2	20-22	24	LT BR SAND, FINE SAND loose, dry	SW		1	358	244 331	1339 hrs
25	3	25-27	24	LT BR silty SAND, FINE SAND, loose, dry	SM		2	304	301	1346 hrs
30	4	30-32	24	LT BR silty SAND, FINE SAND, loose, moist	SM		2	225	88 278	1353 hrs
35	5	35-37	12	LT BR silty SAND, FINE SAND, loose, dry	SM		1	286	76 237	1402 hrs
40	6	40-42	24	LT BR silty SAND, FINE SAND loose dry	SM		1	106	35 33	1415 hrs

Comments:

HAB43 52-53' SENT TO LAB FOR TPH, BTEX. GW NOT  
 ENCOUNTERED AUGER REFUSAL AT 52'  
 BH GROUTED TO SURFACE

Geologist Signature

Holly Bradbury

## CE EXPLORATION

Borehole # BH- 1

Well #

Page 2 of

Project Number 19643 Phase 1001.77

Project Name EPFS PITS &gt;10

Project Location LIKENS GAS COM A #3 75139

H. BRADBURY

Date Started

9/18/98

Date Completed

Drilling Method 4 1/4 ID HSA

Air Monitoring Method 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: PPM			Drilling Conditions & Blow Counts
							BZ	BH	S/HS	
0										BZ=Breathing Zone BH=Borehole S/HS=Sample/Headspace
45	7	45-47	12	LT BR SAND, FINE SAND, LOOSE, dry	SW		2	46	220 315	1435 hrs
50	8	50-52	12	LT BR SANDY CLAY, FINE SAND, low plasticity, soft dry			0	10	86 2	1502 hrs
55	9 #8	52-53		LT BR SANDSTONE, HARD TOB 53'			0	55	0	1516 hrs
20										POOR SAMPLE RECOVERY HEADSPACE NOT TAKEN
25										
30										
35										
40										

Comments:

HABY3 52-53' SENT TO LAB FOR BTEX, TPH, ANGER REFUSAL  
 GUN NOT ENCOUNTERED  
 BH GROUTED TO SURFACE

Geologist Signature

Holly Brackley