

*Lenny S. Faust*  
DEPUTY OIL & GAS INSPECTOR

AUG 09 1999

*Approved*

Jicarilla Apache Tribe  
Environmental Protection Office  
P.O. Box 507  
Dulce, New Mexico 87528

OK  
**RECEIVED**  
JUN 24 1999

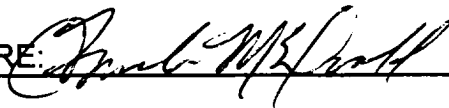

**OIL CON. DIV.**  
**DIST. 3**

Pit Remediation and Closure Report

Operator:	Taurus Exploration U.S.A., Inc			Telephone:	(505) 325-6800
Address:	2198 Bloomfield Hwy, Farmington, NM 87401				
Facility or Well Name:	Jicarilla West # 8A				
Location:	Unit or Qtr/QTR	Sec "J"	Sec 6, T 26 N, R 5 W	County	Rio Arriba
Pit Type:	Separator:	Dehydrator:	Other: X - Abandoned Separator Pit		
Land Type:	Range				
Pit Location:	Pit dimensions:	length: 15 ft	width: 20 ft	depth: 3 ft	
(Attach Diagram)					
	Reference:	wellhead: X	other:		
	Footage from reference:	90 feet			
	Direction from reference:	20	Degrees	X East	North
					of
				West	South X
Depth To Groundwater:	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)	0		
high water elevations of					
groundwater)					
Distance to an Ephemeral Stream:	Less than 100 feet	(10 points)			
(Downgradient dry wash greater than	Greater than 100 feet	(0 points)	0		
ten feet in width)					
Distance to Nearest Lake, Playa, or Watering	Less than 100 feet	(10 points)			
Pond: (Downgradient lakes, playas, and	Greater Than 100 feet	(0 points)	0		
livestock or wildlife watering ponds)					
Wellhead Protection Area:	Yes	(20 points)			
(Less than 200 feet from a private	No	(0 points)	0		
domestic water source, or less than					
1000 feet from all other water sources)					
Distance To Surface Water:	Less than 100 feet	(20 points)			
(Horizontal distance to perennial	100 feet to 1000 feet	(10 points)			
lakes, ponds, rivers, streams, creeks,	Greater than 1000 feet	(0 points)	0		
irrigation canals and ditches.)					
RANKING SCORE (TOTAL SCORE):					0

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Pit Remediation and Closure Report

Date Remediation Started: 9/14/98		Date Completed 9/14/98	
Remediation Method: (Check all appropriate sections)	Excavation:	<u>X</u>	Approx. cubic yards: 30
	Landfarmed:	<u>X</u>	Insitu Bioremediation:
	Other:		
Remediation Location: (I.e. landfarmed on site, name and location of off site location)	On-site:	<u>X</u>	Off-site:
General Description of Remedial Action:		Soil was excavated and landfarmed on location.	
Groundwater Encountered: No: <u>X</u> Yes: _____ Depth: _____			
Final Pit		Sample location: Center Bottom @ 3 feet below surface . Pit	
Closure Sampling: (If multiple samples, attach sample results and diagram of sample locations and depths.)		walls were analyzed for Headspace (see attachment).	
		Sample depth:	<u>3 feet</u>
		Sample date:	<u>9/14/98</u> Sample time: <u>13:50</u>
Sample Results:			
<u>Soil:</u>		<u>Water:</u>	
Benzene (ppm)	<u>0.571</u>	Benzene (ppb)	_____
Total BTEX (ppm)	<u>16.4</u>	Toluene (ppb)	_____
Field Headspace (ppm)	<u>413</u>	Ethylbenzene (ppb)	_____
TPH (ppm)	<u>35</u>	Total Xylenes (ppb)	_____
Groundwater Sample: (If yes, attach sample results.)	Yes: _____	No: <u>X</u>	
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF			
DATE: 10/16/98		Frank McDonald	
SIGNATURE: 		AND TITLE: Env. Division Manager	
AFTER REVIEW OF THE PIT CLOSURE INFORMATION PIT CLOSURE IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE			
APPROVED: Yes: <u>X</u> No: _____ (Reason)			
SIGNED: 		DATE: 10/27/98	

Client : Taurus Exploration, U.S.A. Inc.

Date Started : September 14, 1998 Date Completed : September 14, 1998

<p>Location : <u>Jicarilla West # 8A</u></p> <p>Quad : <u>J</u> Section : <u>6</u></p> <p>Range : <u>SW</u> Township: <u>28 N</u></p> <p>Pit: Abandoned Separator Pit Reference : 90° S 20° E from wellhead</p> <p>Initial Size : 10' x 10' x 1' deep Final Size : 15' x 20' x 3' deep Yds. Excavated : 30 cy</p> <p>Depth to Groundwater: <u>&gt;100'</u></p> <p>Nearest Water Source: <u>&gt;1000'</u></p> <p>Nearest Surface Water: <u>&gt;1000'</u></p> <p>Nearest Ephemeral Stream: <u>&gt;1000'</u></p> <p>EFO Ranking Score: <u>0</u></p> <p>TPH Closure Standard: <u>5000</u></p> <p>Comments : Top soil - 3' Soil is moist grey, clay with some staining and a strong H/C odor. 3' Bedrock Entire pit was sprayed with liquid fertilizer.</p> <p>A sample from the center bottom @ 3' was sent to IML for GRC/DRO and BTEX analysis.</p> <p>Pit Profile : North to South :</p> <div style="text-align: center;"> </div>		<p>Overview of Location and Sampling :</p> <div style="text-align: center;"> </div>	
<p>Pit Profile : East to West :</p> <div style="text-align: center;"> </div>		<p>Pit Profile : East to West :</p> <div style="text-align: center;"> </div>	

Environmental Specialist : YC

Omarron Offfield Services

**GASOLINE RANGE ORGANICS - GRO****Taurus Exploration U.S.A., Inc.**

Project ID:	Jicarilla West 8A Sep. Pit	Report Date:	10/01/98
Sample ID:	C. Bottom @ 3'	Date Sampled:	09/14/98
Lab ID:	0398G05384	Date Received:	09/15/98
Sample Matrix:	Soil	Date Analyzed:	09/30/98
Condition:	Cool/Intact		

TPH GAS-RANGE (MOD EPA 8015)	RESULT	DETECTION LIMIT
Gasoline-Range Petroleum Hydrocarbons	117	5.0 mg/kg
Total Purgeable Hydrocarbons	113	5.0 mg/kg

ND - Analyte not detected at the stated detection limit.

Reference:

Comments:

  
Reported By:  
Reviewed By

## DIESEL RANGE ORGANICS - DRO

### Taurus Exploration U.S.A., Inc.

Project ID:	Jicarilla West 8A Sep. Pit	Report Date:	10/01/98
Sample ID:	C. Bottom @ 3'	Date Sampled:	09/14/98
Lab ID:	0398G05384	Date Received:	09/15/98
Sample Matrix:	Soil	Date Analyzed:	09/30/98
Condition:	Cool/Intact		


TPH DIESEL-RANGE (MOD EPA 8015)	RESULT	DETECTION LIMIT
Diesel-Range Petroleum Hydrocarbons	<5.0	5.0 mg/kg
Total Purgeable Hydrocarbons	<5.0	5.0 mg/kg

ND - Analyte not detected at the stated detection limit.

Reference:

Comments:

  
Reported By:

  
Reviewed By

**VOLATILE AROMATIC HYDROCARBONS****Taurus Exploration U.S.A., Inc.**

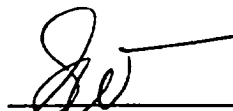

Project ID:	Jicarilla West 8A Separator Pit	Report Date:	10/01/98
Sample ID:	C. Bottom @3'	Date Sampled:	09/14/98
Lab ID:	0398G05384	Time Sampled:	1:50pm
Sample Matrix:	Soil	Date Received:	09/15/98
Condition:	Cool/Intact	Date Extracted:	NA
		Date Analyzed:	09/30/98

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	571	10.0
Toluene	401	50.0
Ethylbenzene	813	50.0
m,p-Xylenes	13,827	50.0
o-Xylene	801	50.0

ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Bromofluorobenzene	104%	70%-130%

**Reference:** Method 5030, Purge and Trap; Method 8021B, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, Revision 2, December, 1996.

**Comments:**  
\_\_\_\_\_  
Analyst  
\_\_\_\_\_  
Review:

## ANALYSES / PARAMETERS

Project Location: Treacilla, 11/10/17

+

PU

**Remarks**

*[Signature]*

## Matrix

5011

1

8015  
CRO/

8020  
B7EX

600/- In fact

Relinquished by: (Signature)

**Signed by:** (Signature)

**Relinquished by: (Signature)**

Time

Received by: (Signature)

Time

Time

Received by: (Signature)

Time

Time

**Received by laboratory: (Signature)**

Time


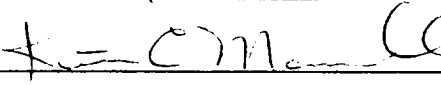
**Inter-Mountain Laboratories, Inc.**

11183 State Hwy. 30  
College Station, TX 77845  
Telephone (409) 776-8945

54133

**JICARILLA APACHE TRIBE  
ENVIRONMENTAL PROTECTION OFFICE  
P.O. BOX 507  
DULCE, NEW MEXICO 87528**

**ON-SITE SOIL REMEDIATION REPORT**

Operator: <u>Taurus Exploration USA Inc.</u> Telephone: <u>(505) 325 - 6800</u>	
Address: <u>2198 Bloomfield Hwy, Farmington N.M. 87401</u>	
Facility or Well Name: <u>Jicarilla West 8A</u>	
Location: Unit or Qtr/Qtr Sec <u>J</u> Sec <u>6</u> T <u>26 N</u> R <u>5 W</u> County <u>Rio Arriba</u>	
Land Type: <u>Range</u>	
Date Remediation Started: <u>9/14/98</u> Date Completed: <u>12/3/98</u>	
Remediation Method: Landfarmed <u>X</u> Approx. cubic yards <u>30</u>	
Composted <u>      </u>	
Other <u>      </u>	
<div>Depth to Groundwater: (pts) <u>0</u></div> <div>Distance to an Ephemeral Stream (pts) <u>0</u></div> <div>Distance to Nearest Lake, Playa, or Watering Pond (pts) <u>0</u></div> <div>Wellhead Protection Area (pts) <u>0</u></div> <div>Distance to Surface Water (pts) <u>0</u></div> <div><b>RANKING SCORE (TOTAL POINTS):</b> <u>0</u></div>	<div style="text-align: center;"><b>Final Closure Sampling:</b></div> <div>Sampling Date: <u>12/3/98</u> Time: <u>13:00</u></div> <div>Sample Results:</div> <div>Field Headspace (ppm) <u>3.0</u></div> <div>TPH (ppm) <u>&lt;21</u> Method <u>8015</u></div> <div>Other: <u>      </u></div>
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF	
DATE: <u>1/6/99</u> PRINTED NAME <u>VIRGIL CHAVEZ</u>	
SIGNATURE <u></u> AND TITLE <u>ENV. SPECIALIST</u>	
AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION. ON-SITE SOIL REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.	
APPROVED: YES <u>X</u> NO <u>      </u> (REASON) <u>use as Backfill</u>	
SIGNED: <u></u> DATE: <u>1-7-99</u>	







## GASOLINE RANGE ORGANICS - GRO

### ENERGEN RESOURCES


Project ID:	Jicarilla West 8A - Sep. Pit	Report Date:	12/31/98
Sample ID:	Landfarm Comp #1	Date Sampled:	12/03/98
Lab ID:	0398G07049	Date Received:	12/07/98
Sample Matrix:	Soil	Date Analyzed:	12/24/98*
Condition:	Cool/Intact		

TPH GAS-RANGE (MOD EPA 8015)	RESULT	DETECTION LIMIT
Gasoline-Range Petroleum Hydrocarbons	<5.0	5.0 mg/Kg

ND - Analyte not detected at the stated detection limit.

**Reference:****Comments:**

\*Sample was analyzed within the holding times, however, due to instrument problems and QC failure, the sample was re-analyzed to verify results.

  
\_\_\_\_\_  
Reported By:

  
\_\_\_\_\_  
Reviewed By:



Phone (505) 326-4737 Fax (505) 325-4182

Inter-Mountain Laboratories, Inc.

2506 West Main Street, Farmington, NM 87401

## DIESEL RANGE ORGANICS - DRO

### ENERGEN RESOURCES


Project ID:	Jicarilla West 8A - Sep. Pit	Report Date:	12/29/98
Sample ID:	Landfarm Comp #1	Date Sampled:	12/03/98
Lab ID:	0398G07049	Date Received:	12/07/98
Sample Matrix:	Soil	Date Analyzed:	12/17/98
Condition:	Cool/Intact		

TPH DIESEL-RANGE (MOD EPA 8015)	RESULT	DETECTION LIMIT
Diesel-Range Petroleum Hydrocarbons	16	5.0 mg/Kg

ND - Analyte not detected at the stated detection limit.

Reference:

Comments:

  
Reported By:

  
Reviewed By:



## CHAIN OF CUSTODY RECORD

[illegible]