

*Donna R. Faust*  
DEPUTY OIL & GAS INSPECTOR

AUG 09 1999

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

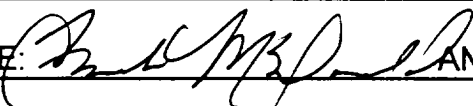

*OK*  
**RECEIVED**  
JUN 24 1999  
**OIL CON. DIV.**  
**Dist. 3**

Pit Remediation and Closure Report

Operator:	Taurus Exploration U.S.A., Inc		Telephone:	(505) 825-6800	
Address:	2198 Bloomfield Hwy, Farmington, NM 87401				
Facility or Well Name:	Jicarilla 107 F # 7				
Location:	Unit or Qtr/QTR		Sec "K"	Sec 28, T 26 N, R 4 W	County Rio Arriba
Pit Type:	Separator:	Dehydrator:	Other: X - Separator/Production Tank Pit		
Land Type:	Range				
Pit Location:	Pit dimensions: length: 30 ft width: 20 ft depth: 5 ft				
(Attach Diagram)	Reference: wellhead: X other:				
	Footage from reference: 90 feet				
	Direction from reference: 90 Degrees East North X				
	X West South				
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

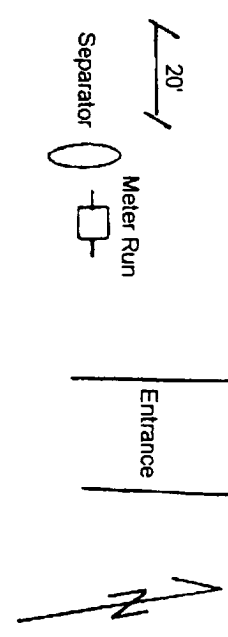
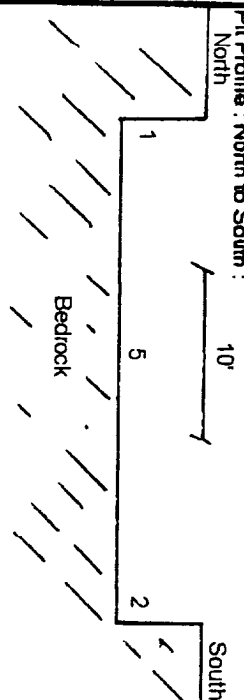
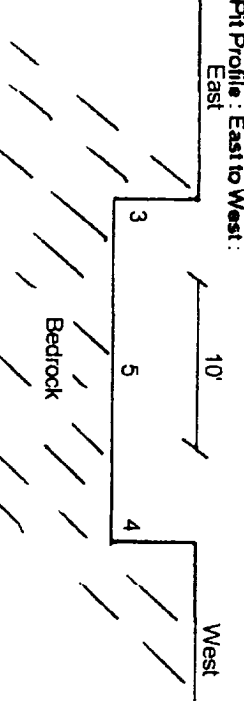
Jicarilla Apache Tribe  
Environmental Protection Office  
P.O. Box 507  
Dulce, New Mexico 87528

Pit Remediation and Closure Report

Date Remediation Started: 11/4/98		Date Completed 11/10/98	
Remediation Method: (Check all appropriate sections)	Excavation:	<u>X</u>	Approx. cubic yards: 65
	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: Pit east wall @ 4 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>4 feet</u>	
	Sample date:	<u>11/10/98</u>	Sample time: <u>13:45</u>
Sample Results:			
<b>Soil:</b>		<b>Water:</b>	
Benzene (ppm)	<u>ND</u>	Benzene (ppb)	
Total BTEX (ppm)	<u>ND</u>	Toluene (ppb)	
Field Headspace (ppm)	<u>685</u>	Ethylbenzene (ppb)	
TPH (ppm)	<u>&lt;10</u>	Total Xylenes (ppb)	
Groundwater Sample: (If yes, attach sample results.)	Yes: <u></u>	No: <u>X</u>	
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF			
DATE: 12/4/98		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: <u></u> (Reason)			
SIGNED: 		DATE: 12-8-98	

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

Date Started : November 4, 1998 Date Completed : November 10, 1998

Location : <u>Jicarilla 107 F # 7</u>		<b>Overview of Location and Sampling :</b> 																			
Quad : <u>K</u> Section : <u>28</u>																					
Range : <u>4 W</u> Township : <u>28 N</u>																					
Pit : <u>Separator/ Production Tank Pit</u> Reference : <u>90' N 90 W</u> Initial Size : <u>15' x 15' x 3' deep</u> Final Size : <u>30' x 20' x 5' deep</u> Yds. Excavated : <u>85 cy</u>																					
Depth to Groundwater: <u>&gt;100'</u>		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Sample #</th> <th style="width: 40%;">Location</th> <th style="width: 50%;">OVM</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>N. Wall @ 4'</td> <td>591</td> </tr> <tr> <td>2</td> <td>S. Wall @ 4'</td> <td>467</td> </tr> <tr> <td>3</td> <td>E. Wall @ 4'</td> <td>685</td> </tr> <tr> <td>4</td> <td>W. Wall @ 4'</td> <td>136</td> </tr> <tr> <td>5</td> <td>Bottom @ 5'</td> <td>111</td> </tr> </tbody> </table>		Sample #	Location	OVM	1	N. Wall @ 4'	591	2	S. Wall @ 4'	467	3	E. Wall @ 4'	685	4	W. Wall @ 4'	136	5	Bottom @ 5'	111
Sample #	Location	OVM																			
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2	S. Wall @ 4'	467																			
3	E. Wall @ 4'	685																			
4	W. Wall @ 4'	136																			
5	Bottom @ 5'	111																			
Nearest Water Source: <u>&gt;1000'</u>		Nearest Surface Water: <u>&gt;1000'</u>																			
Nearest Ephemeral Stream: <u>&gt;1000'</u>		EPO Ranking Score: <u>0</u>																			
TPH Closure Standard: <u>5000</u>		TPH Closure Standard: <u>1</u>																			
Comments : Top soil - 5' Soil is moist, sandy/loam, with a moderate hydrocarbon odor, and dark gray staining. 5' - Bedrock encountered. Note: Entire pit is encased in bedrock. A sample from the east wall @ 4' was sent to IML for GRO/DRO and BTEx analysis.																					
Pit Profile : North to South : 		Pit Profile : East to West : 																			

Environmental Specialist : YC

Cimarron Oilfield Services


**GASOLINE RANGE ORGANICS - GRO****TAURUS EXPLORATION U.S.A., INC.**

Project ID:	Jicarilla 107-7 Sep. Pit	Report Date:	11/20/98
Sample ID:	E. Wall @ 5'	Date Sampled:	11/10/98
Lab ID:	0398G06650	Date Received:	11/11/98
Sample Matrix:	Soil	Date Analyzed:	11/11/98
Condition:	Cool/Intact		

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

QUALITY CONTROL - SURROGATE RECOVERY	% Recovery	QC limits
Bromofluorobenzene	113%	70-130%

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 107-7 Sep. Pit	Report Date:	11/20/98
Sample ID:	E. Wall @ 5'	Date Sampled:	11/10/98
Lab ID:	0398G06650	Date Received:	11/11/98
Sample Matrix:	Soil	Date Analyzed:	11/18/98
Condition:	Cool/Intact		

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

QUALITY CONTROL - SURROGATE RECOVERY	%Recovery	QC Limits
o-Terphenyl	59%*	70-130%

ND - Analyte not detected at the stated detection limit.

**Reference:****Comments:** \*Surrogate recovery failed to meet established QC limits due to matrix interferences.  
Reported By:  
Reviewed By:

# VOLATILE AROMATIC HYDROCARBONS

## Taurus Exploration

Project ID: Jicarilla 107-7 Sep. Pit  
Sample ID: E. Wall @ 5'  
Lab ID: 0398G06650  
Sample Matrix: Soil  
Condition: Cool/Intact

Report Date: 11/20/98  
Date Sampled: 11/10/98  
Time Sampled: 1:45pm  
Date Received: 11/11/98  
Date Extracted: NA  
Date Analyzed: 11/11/98

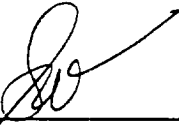
Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	ND	10.0
Toluene	ND	50.0
Ethylbenzene	ND	50.0
m,p-Xylenes	ND	50.0
o-Xylene	ND	50.0

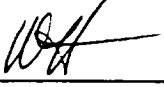
ND - Analyte not detected at the stated detection limit.

<b>Quality Control:</b>	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Bromofluorobenzene	113%	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

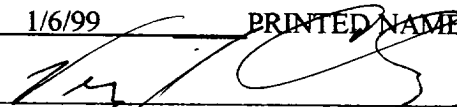
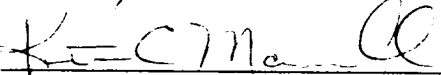


# CHAIN OF CUSTODY RECORD

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**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 107 F 7</u>	
Location: Unit or Qtr/Qtr Sec <u>K</u> Sec <u>28</u> T <u>26 N</u> R <u>4 W</u> County <u>Rio Arriba</u>	
Land Type: <u>Range</u>	
Date Remediation Started: <u>11/4/98</u> Date Completed: <u>12/14/98</u>	
Remediation Method: Landfarmed <u>X</u> Approx. cubic yards <u>65</u>	
Composted <u>      </u>	
Other <u>      </u>	
<p>Depth to Groundwater: (pts) <u>0</u></p> <p>Distance to an Ephemeral Stream (pts) <u>0</u></p> <p>Distance to Nearest Lake, Playa, or Watering Pond (pts) <u>0</u></p> <p>Wellhead Protection Area (pts) <u>0</u></p> <p>Distance to Surface Water (pts) <u>0</u></p> <p><b>RANKING SCORE (TOTAL POINTS):</b> <u>0</u></p>	<p style="text-align: center;"><b>Final Closure Sampling:</b></p> <p>Sampling Date: <u>12/14/98</u> Time: <u>10:35</u></p> <p>Sample Results:</p> <p>Field Headspace (ppm) <u>1.6</u></p> <p>TPH (ppm) <u>&lt;10</u> Method <u>8015</u></p> <p>Other: <u>      </u></p>
<p>I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF</p> <p>DATE: <u>1/6/99</u> PRINTED NAME <u>VIRGIL CHAVEZ</u></p> <p>SIGNATURE <u></u> AND TITLE <u>ENV. SPECIALIST</u></p>	
<p>AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION. ON-SITE SOIL REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.</p> <p>APPROVED: YES <u>X</u> NO <u>      </u> (REASON) <u>was on Backfill</u></p> <p>SIGNED: <u></u> DATE: <u>1-7-99</u></p>	



Date Started : November 4, 1998 Date Completed : December 14, 1998

Page 1 of 1.



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

Inter-Mountain Laboratories, Inc.

2506 West Main Street, Farmington, NM 87401

## GASOLINE RANGE ORGANICS - GRO

### ENERGEN RESOURCES


Project ID:	Jicarilla 107 F7 Landfarm	Report Date:	12/31/98
Sample ID:	Comp #1	Date Sampled:	12/14/98
Lab ID:	0398G07314	Date Received:	12/15/98
Sample Matrix:	Soil	Date Analyzed:	12/30/98*
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 had to be re-analyzed to verify results.

  
Reported By:

  
Reviewed By:



## DIESEL RANGE ORGANICS - DRO

### ENERGEN RESOURCES


Project ID:	Jicarilla 107 F7 Landfarm	Report Date:	12/31/98
Sample ID:	Comp #1	Date Sampled:	12/14/98
Lab ID:	0398G07314	Date Received:	12/15/98
Sample Matrix:	Soil	Date Analyzed:	12/30/98
Condition:	Cool/Intact		

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

ND - Analyte not detected at the stated detection limit.

Reference:

Comments:

  
Reported By:

  
Reviewed By:



## CHAIN OF CUSTODY RECORD

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