

*Denny & 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

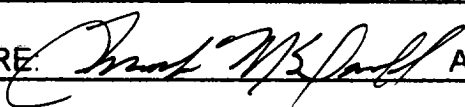

*ENV. DIV.*

Pit Remediation and Closure Report

Operator:	Taurus Exploration U.S.A., Inc		Telephone:	(505) 325-6800	
Address:	2198 Brookfield Hwy, Farmington, NM 87401				
Facility or Well Name:	Jicarilla 107 F # 1				
Location:	Unit or Qtr/QTR		Sec "P"	Sec 27, T 26 N, R 4 W	County Rio Arriba
Pit Type:	Separator:	Dehydrator:	Other: X - Production Tank Pit		
Land Type:	Range				
Pit Location:	Pit dimensions:	length: 20 ft	width: 20 ft	depth: 3 ft	
(Attach Diagram)					
	Reference:	wellhead: X	other:		
	Footage from reference:	63 feet			
	Direction from reference:	70	Degrees	X	East North X
					of 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.)					

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

Pit Remediation and Closure Report

Date Remediation Started: <u>7/9/98</u>		Date Completed: <u>7/17/98</u>	
Remediation Method: (Check all appropriate sections)	Excavation:	<u>X</u>	Approx. cubic yds: <u>27</u>
	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: <u>Soil was excavated and landfarmed on location.</u>			
Groundwater Encountered:		No: <u>X</u>	Yes: <u>        </u> Depth: <u>        </u>
Final Pit Closure Sampling: (If multiple samples, attach sample results and diagram of sample locations and depths.)	Sample location: <u>Pit Bottom @ 3 feet below surface (Bedrock). Pit walls were analyzed for Headspace (see attachment).</u>		
	Sample depth:	<u>3 feet (Bedrock)</u>	
	Sample date:	<u>7/20/98</u>	Sample time: <u>1020</u>
Sample Results:			
<u>Soil:</u>		<u>Water:</u>	
Benzene (ppm)	<u>        </u>	Benzene (ppb)	<u>        </u>
Total BTEX (ppm)	<u>        </u>	Toluene (ppb)	<u>        </u>
Field Headspace (ppm)	<u>3</u>	Ethylbenzene (ppb)	<u>        </u>
TPH (ppm)	<u>&lt;30</u>	Total Xylenes (ppb)	<u>        </u>
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: <u>8/25/98</u>		Frank McDonald	
SIGNATURE: 		AND TITLE: <u>Env. Division Manager</u>	
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) <u>        </u>			
SIGNED: 		DATE: <u>9-2-98</u>	

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

Date Started : July 9, 1998 Date Completed : July 17, 1998

<p>Location : <u>Jicantilla 107 F # 1</u></p> <p>Quad : <u>P</u> Section : <u>27</u></p> <p>Range : <u>41S</u> Township : <u>26N</u></p> <p>Range : <u>3W</u> Township : <u>27N</u></p> <p>Pit : Production Tank Pit Reference : 83° N 70° E from wellhead</p> <p>Initial Size : 15' x 15' x 2' deep Final Size : 20' x 20' x 3' deep Yds. Excavated : 27 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>EPO Ranking Score: <u>0</u></p> <p>TPH Closure Standard: <u>5000</u></p> <p>Sample # Location OVM</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>1</td><td>N. Wall @ 2'</td><td>1.3</td></tr> <tr><td>2</td><td>S. Wall @ 2'</td><td>0.8</td></tr> <tr><td>3</td><td>E. Wall @ 2'</td><td>1</td></tr> <tr><td>4</td><td>W. Wall @ 2'</td><td>0.3</td></tr> <tr><td>5</td><td>Bottom @ 3'</td><td>3</td></tr> <tr><td>6</td><td></td><td></td></tr> <tr><td>7</td><td></td><td></td></tr> <tr><td>8</td><td></td><td></td></tr> <tr><td>9</td><td></td><td></td></tr> <tr><td>10</td><td></td><td></td></tr> <tr><td>11</td><td></td><td></td></tr> <tr><td>12</td><td></td><td></td></tr> </table> <p>Comments : Top soil - 3' Soil is moist, sandy/loam, with a slight hydrocarbon odor, and no visible staining. 3' - Bedrock encountered. A sample from the center bottom @ 3' was sent to IML for GRO/DRO analysis.</p>		1	N. Wall @ 2'	1.3	2	S. Wall @ 2'	0.8	3	E. Wall @ 2'	1	4	W. Wall @ 2'	0.3	5	Bottom @ 3'	3	6			7			8			9			10			11			12			<p>Overview of Location and Sampling :</p> <p>120 ft</p> <p>Surface Gradient</p> <p>Wellhead</p> <p>Earthen Pit</p>	
1	N. Wall @ 2'	1.3																																					
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6																																							
7																																							
8																																							
9																																							
10																																							
11																																							
12																																							
<p>Pit Profile : North to South :</p> <p>North</p> <p>South</p> <p>10 ft</p>	<p>Pit Profile : East to West :</p> <p>East</p> <p>West</p> <p>10 ft</p>																																						

Environmental Specialist : VC

Cimarron Oilfield Services

**DIESEL RANGE ORGANICS - DRO****Taurus Exploration U.S.A., Inc.**

Project ID:	Jicarilla 107F #1 Prod. Tank Pit	Report Date:	07/30/98
Sample ID:	C. Bottom @ 3'	Date Sampled:	07/17/98
Lab ID:	0398G04067	Date Received:	07/21/98
Sample Matrix:	Soil	Date Analyzed:	07/29/98
Condition:	Cool/Intact		

**TPH DIESEL-RANGE (MOD EPA 8015)****RESULT****DETECTION LIMIT**

Diesel-Range Petroleum Hydrocarbons

&lt; 5.0

5.0 mg/kg

ND - Analyte not detected at the stated detection limit.

**Reference:****Comments:**  
Reported By:  
Reviewed By:

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

Project ID:	Jicarilla 107F #1 Prod. Tank Pit	Report Date:	07/30/98
Sample ID:	C. Bottom @ 3'	Date Sampled:	07/17/98
Lab ID:	0398G04067	Date Received:	07/21/98
Sample Matrix:	Soil	Date Analyzed:	07/29/98
Condition:	Cool/Intact		

**TPH GAS-RANGE (MOD EPA 8015)****RESULT****DETECTION LIMIT**

Gasoline-Range Petroleum Hydrocarbons

25

5.0 mg/kg

Total Volatile Petroleum Hydrocarbons

43

5.0 mg/kg

ND - Analyte not detected at the stated detection limit.

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

Reported By:


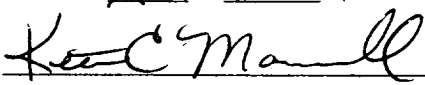


Reviewed By:



**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 # 1</u>	
Location: Unit or Qtr/Qtr Sec <u>P</u> Sec <u>27</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>July 9, 1998</u> Date Completed: <u>November 5, 1998</u>	
Remediation Method: Landfarmed <u>X</u> Approx. cubic yards <u>27</u>	
Composed <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</b> <b>(TOTAL POINTS):</b> <u>0</u></p>	<p style="text-align: center;"><b>Final Closure Sampling:</b></p> <p>Sampling Date: <u>11/5/98</u> Time: <u>11:45</u></p> <p>Sample Results:</p> <p>Field Headspace (ppm) <u>.8</u></p> <p>TPH (ppm) <u>63</u> Method <u>8015</u></p> <p>Other: <u>      </u></p>
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF	
DATE: <u>12/7/98</u> PRINTED NAME <u>FRANK MCDONALD</u>	
SIGNATURE <u></u> AND TITLE <u>ENV. DIVISION MANAGER</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>12-9-98</u>	





# DIESEL RANGE ORGANICS - DRO

## TAURUS EXPLORATION

Project ID:	Jicarilla 107-1 Landfarm	Report Date:	11/20/98
Sample ID:	5-Point Composite	Date Sampled:	11/05/98
Lab ID:	0398G06598	Date Received:	11/06/98
Sample Matrix:	Soil	Date Analyzed:	11/17/98
Condition:	Cool/Intact		

TPH DIESEL-RANGE (MOD EPA 8015)	RESULT	DETECTION LIMIT
Diesel-Range Petroleum Hydrocarbons	8	5.0 mg/Kg
Total Extractable Hydrocarbons	8	5.0 mg/Kg

Surrogate	% Recovery	Limits
o-Terphenyl	59%*	70-130%

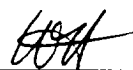
ND - Analyte not detected at the stated detection limit.

**Reference:**

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



Reported By:



Reviewed By:

# GASOLINE RANGE ORGANICS - GRO

## TAURUS EXPLORATION


Project ID:	Jicarilla 107-1 Landfarm	Report Date:	11/20/98
Sample ID:	5-Point Composite	Date Sampled:	11/05/98
Lab ID:	0398G06598	Date Received:	11/06/98
Sample Matrix:	Soil	Date Analyzed:	11/11/98
Condition:	Cool/Intact		

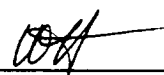
TPH GAS-RANGE (MOD EPA 8015)	RESULT	DETECTION LIMIT
Gasoline-Range Petroleum Hydrocarbons	55	5.0 mg/Kg
Total Purgeable Hydrocarbons	55	5.0 mg/Kg

Surrogate	% Recovery	Limits
Bromofluorobenzene	104%	70-130%

ND - Analyte not detected at the stated detection limit.

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

  
Reported By:

  
Reviewed By:



## CHAIN OF CUSTODY RECORD

765