

*Denny R. Fort*  
DEPUTY OIL & GAS INSPECTOR

AUG 09 1999

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

**RECEIVED**  
JUN 24 1999


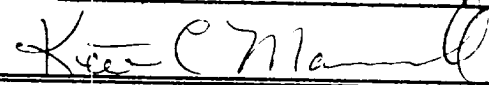
OIL CON. DIV.  
DIST. 3

**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 95-3 A						
Location:	Unit or Qtr/QTR			Sec "D"	Sec 35, T 27 N, R 3 W	County	Rio Arriba
Pit Type:	Separator:	Dehydrator:	Other: X - Abandoned Separator Pit				
Land Type:	Range						
Pit Location:	Pit dimensions: length: 60 ft width: 40 ft depth: 9 ft						
(Attach Diagram)	Reference: wellhead: X other:						
	Footage from reference: 120 feet						
	Direction from reference: Degrees East North						
	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	

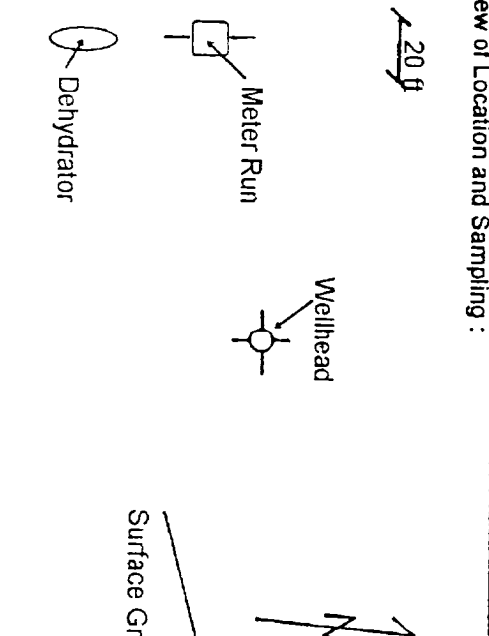
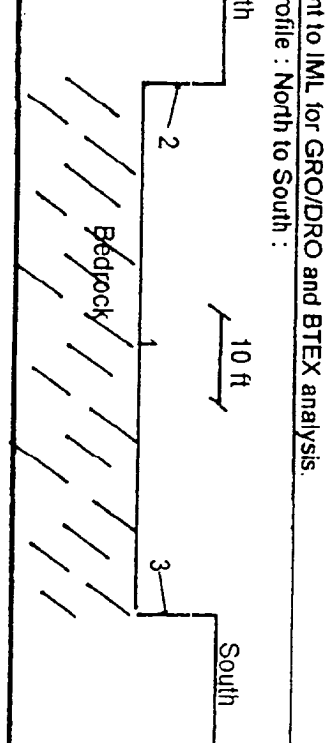
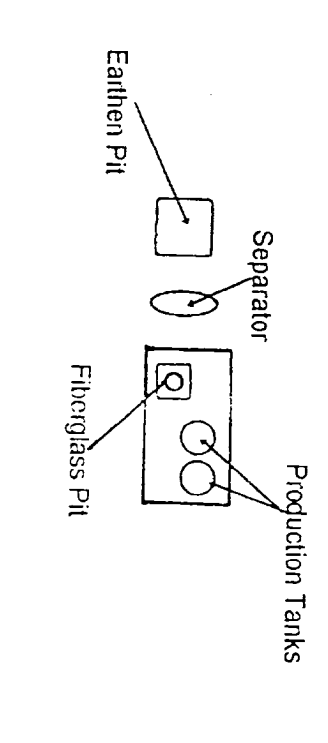
Jicarilla Apache Tribe  
Environmental Protection Office  
P.O. Box 507  
Dulce, New Mexico 87528

Pit Remediation and Closure Report

Date Remediation Started: 6/22/98		Date Completed: 7/10/98	
Remediation Method: (Check all appropriate sections)	Excavation:	<input checked="" type="checkbox"/>	Approx. cubic yd: 750
	Landfarmed:	<input checked="" type="checkbox"/>	In situ Bioremediation:
	Other:		
Remediation Location: (I.e. landfarmed on site, name and location of off site location)	On-site:	<input checked="" type="checkbox"/>	Off-site:
General Description of Remedial Action: Soil was excavated and landfarmed on location.			
Groundwater Encountered: No: <input checked="" type="checkbox"/> Yes: _____ Depth: _____			
Final Pit		Sample location: Pit bottom @ 9 feet below surface. Pit walls were analyzed for Headspace (see attachment).	
Closure Sampling: (If multiple samples, attach sample results and diagram of sample locations and depths.)			
	Sample depth:	9 feet	
	Sample date:	7/10/98	Sample time: 1200
Sample Results:			
<b>Soil:</b>		<b>Water:</b>	
Benzene (ppm)	ND	Benzene (ppb)	
Total BTEX (ppm)	ND	Toluene (ppb)	
Field Headspace (ppm)	275	Ethylbenzene (ppb)	
TPH (ppm)	514	Total Xylenes (ppb)	
Groundwater Sample: (If yes, attach sample results.)	Yes: _____	No: <input checked="" type="checkbox"/>	
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF			
DATE: 8/26/98		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: <input checked="" type="checkbox"/> No: _____ (Reason)			
SIGNED: 		DATE: 9-2-98	

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

Date Started : June 22, 1998 Date Completed : July 10, 1998

Location : <u>Jicarilla 95-3A</u>		Overview of Location and Sampling :  																																								
Quad : <u>D</u> Section : <u>35</u>																																										
Range : <u>3 W</u> Township : <u>27 N</u>																																										
Pit : Abandoned Separator Pit Reference : 120' South from wellhead Initial Size : 18' x 18' x 4' deep Final Size : 60' x 40' x 9' deep Yds. Excavated : 750 cy Depth to Groundwater : >100' Nearest Water Source : >1000' Nearest Surface Water : >1000' Nearest Ephemeral Stream : >1000' EPO Ranking Score : 0 TPH Closure Standard : 5000		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Sample #</th> <th style="width: 35%;">Location</th> <th style="width: 15%;">OVM</th> </tr> </thead> <tbody> <tr><td>1</td><td>Bottom @ 9'</td><td>275</td></tr> <tr><td>2</td><td>N. Wall @ 6'</td><td>8.4</td></tr> <tr><td>3</td><td>S. Wall @ 6'</td><td>3.1</td></tr> <tr><td>4</td><td>E. Wall @ 8'</td><td>17.4</td></tr> <tr><td>5</td><td>W. Wall @ 6'</td><td>165</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> </tbody> </table>		Sample #	Location	OVM	1	Bottom @ 9'	275	2	N. Wall @ 6'	8.4	3	S. Wall @ 6'	3.1	4	E. Wall @ 8'	17.4	5	W. Wall @ 6'	165	6			7			8			9			10			11			12		
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12																																										
Comments : Top soil - 4' Soil is moist, brown, sandy loam with some hydrocarbon staining and a strong odor. 4' - 7' - Soil is moist, dark-brown shale with gray staining and a strong odor. 7' - 9' - Soil is brown, sandy/clay with a strong odor and staining. 9' - Bedrock. Excavation limited westward due to lease boundary and a steep drop off bordering pit. A sample from the center bottom at 9' was sent to IML for GRO/DRO and BTEX analysis.  Pit Profile : North to South :		Pit Profile : East to West :																																								
																																										

Environmental Specialist : VC

Cimarron Oilfield Services

## GASOLINE RANGE ORGANICS - GRO

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


Project ID:	Jicarilla 95-3A Sep. Pit	Report Date:	07/30/98
Sample ID:	C Bottom @9'	Date Sampled:	07/10/98
Lab ID:	0398G03978	Date Received:	07/13/98
Sample Matrix:	Soil	Date Analyzed:	07/28/98
Condition:	Cool/Intact		

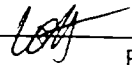
TPH GAS-RANGE (MOD EPA 8015)	RESULT	DETECTION LIMIT
Gasoline-Range Petroleum Hydrocarbons	324	5.0 mg/kg
Total Volatile Petroleum Hydrocarbons	395	5.0 mg/kg

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 95-3A Sep. Pit	Report Date:	07/15/98
Sample ID:	C Bottom @ 9'	Date Sampled:	07/10/98
Lab ID:	0398G03978	Date Received:	07/13/98
Sample Matrix:	Soil	Date Analyzed:	07/15/98
Condition:	Cool/Intact		

TPH DIESEL-RANGE (MOD EPA 8015)	RESULT	DETECTION LIMIT
Diesel-Range Petroleum Hydrocarbons	190	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 95-3A Sep. Pit	Report Date:	07/30/98
Sample ID:	C Blotom @ 9'	Date Sampled:	07/10/98
Lab ID:	0398G03978	Time Sampled:	12:00
Sample Matrix:	Soil	Date Received:	07/13/98
Condition:	Cool/Intact	Date Extracted:	NA
		Date Analyzed:	07/28/98

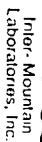
Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	ND	10.0
Toluene	ND	50.0
Ethylbenzene	ND	50.0
m,p-Xylenes	ND	50.0
o-Xylene	ND	50.0

ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Bromofluorobenzene	76%	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

[illegible]

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 95-3A</u>	
Location: Unit or Qtr/Qtr Sec <u>D</u> Sec <u>35</u> T <u>27 N</u> R <u>3 W</u> County <u>Rio Arriba</u>	
Land Type: <u>Range</u>	
Date Remediation Started: <u>6/22/98</u> Date Completed: <u>12/15/98</u>	
Remediation Method: Landfarmed <u>X</u> Approx. cubic yards <u>750</u> Composted _____ Other _____	
Depth to Groundwater: (pts) <u>0</u> Distance to an Ephemeral Stream (pts) <u>0</u> Distance to Nearest Lake, Playa, or Watering Pond (pts) <u>0</u> Wellhead Protection Area (pts) <u>0</u> Distance to Surface Water (pts) <u>0</u>  <b>RANKING SCORE</b> <b>(TOTAL POINTS):</b> <u>0</u>	<b>Final Closure Sampling:</b>  Sampling Date: <u>12/15/98</u> Time: <u>10:00</u>  Sample Results:  Field Headspace (ppm) <u>1.1</u>  TPH (ppm) <u>&lt;31</u> Method <u>8015</u>  Other: _____
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>[Signature]</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 _____ (REASON) <u>we are Backfill</u>	
SIGNED: <u>[Signature]</u> DATE: <u>1-7-99</u>	



Client : Taurus Exploration USA Inc.

Date Started : June 22, 1998 Date Completed : December 15, 1998

Location : <u>Jicarilla 95 - 3A</u>		Overview of Landfarm and Sampling :																																						
Quad : <u>D</u>	Section : <u>35</u>	<div style="text-align: center;"><p>meter run</p><p>separator</p><p>production tank</p><p>well head</p><p>surface gradient</p><p>land farm</p><p>north</p></div>																																						
Township: <u>27 N</u> Range: <u>3 W</u>																																								
Pit : <u>Separator Pit</u>																																								
Reference <u>40' N 45' W</u> from wellhead.																																								
Size: <u>100' x 80' x 2.5'</u>	<table border="1"><thead><tr><th>Sample #</th><th>Location</th><th>OVM</th></tr></thead><tbody><tr><td>1</td><td>Comp 1</td><td>1.1</td></tr><tr><td>2</td><td>Comp 2</td><td>1</td></tr><tr><td>3</td><td>Comp 3</td><td>1</td></tr><tr><td>4</td><td>Comp 4</td><td>0.6</td></tr><tr><td>5</td><td></td><td></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></tbody></table>	Sample #	Location	OVM	1	Comp 1	1.1	2	Comp 2	1	3	Comp 3	1	4	Comp 4	0.6	5			6			7			8			9			10			11			12		
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Yds : <u>750</u>																																								
<u>4</u> <u>5 - Point Composites</u>																																								
Comments : <u>Soil is moist, pale brown, sandy/loam, with minor visible staining and no detectable hydrocarbon odor.</u>																																								
<u>A sample from composite # 1 was sent to IML for GRO/DRO analysis.</u>																																								
Environmental Specialist : <u>JE</u>																																								

Ranking Score : 0 Closure Standard : 5000 ppm

Cimarron Oilfield Services



Phone (505) 326-4737 Fax (505) 325-4112

Inter-Mountain Laboratories, Inc.

2506 West Main Street, Farmington NM 87401

## GASOLINE RANGE ORGANICS - GRO

### ENERGEN RESOURCES


Project ID:	Jicarilla 95-3A	Report Date:	12/31/98
Sample ID:	Landfarm Comp #1	Date Sampled:	12/15/98
Lab ID:	0398G07600	Date Received:	12/18/98
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:

  
Reported By:

  
Reviewed By:



## DIESEL RANGE ORGANICS - DRO

### ENERGEN RESOURCES


Project ID:	Jicarilla 95-3A	Report Date:	12/31/98
Sample ID:	Landfarm Comp #1	Date Sampled:	12/15/98
Lab ID:	0398G07600	Date Received:	12/18/98
Sample Matrix:	Soil	Date Analyzed:	12/30/98
Condition:	Cool/Intact		

TPH DIESEL-RANGE (MOD EPA 8015)	RESULT	DETECTION LIMIT
Diesel-Range Petroleum Hydrocarbons	26	5.0 mg/Kg

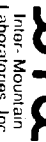
ND - Analyte not detected at the stated detection limit.

Reference:

Comments:

  
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## CHAIN OF CUSTODY RECORD

[illegible]