

*Denny L. 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

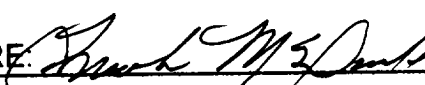

**OIL CON. DIV.**  
DIST. 3

Pit Remediation and Closure Report

Operator:	Taurus Exploration U.S.A., Inc	Telephone:	(505) 325-6800
Address:	2198 Bloomfield Hwy, Farmington, NM 87401		
Facility or Well Name:	Jicarilla 94-6		
Location:	Unit or Qtr/QTR Sec "A" Sec 27, T 27 N, R 3 W County	Rio Arriba	
Pit Type:	Separator:	Dehydrator:	Other: X - Production Pit
Land Type:	Range		
Pit Location:	Pit dimensions: length: 50 ft width: 40 ft depth: 8 ft		
(Attach Diagram)	Reference: wellhead: X other:		
	Footage from reference: 180 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

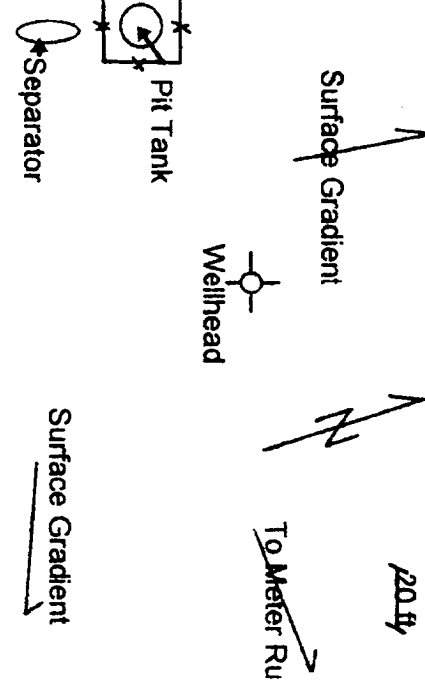
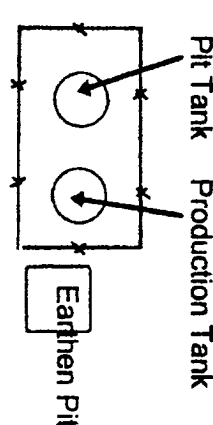
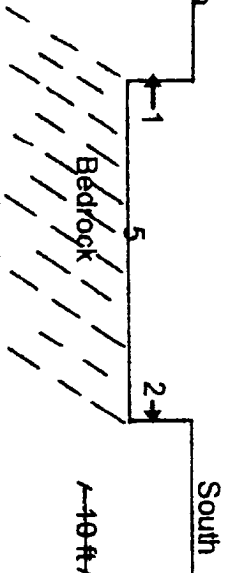
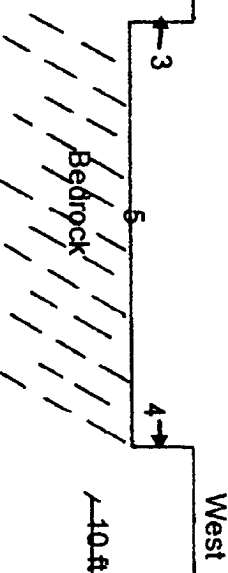
Jicarilla Apache Tribe  
Environmental Protection Office  
P.O. Box 507  
Dulce, New Mexico 87528

Pit Remediation and Closure Report

Date Remediation Started: 7/20/98		Date Completed 7/22/98	
Remediation Method: (Check all appropriate sections)	Excavation:	<input checked="" type="checkbox"/>	Approx. cubic yd 580
	Landfarmed:	<input checked="" type="checkbox"/>	Insitu 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 Closure Sampling: (If multiple samples, attach sample results and diagram of sample locations and depths.)	Sample location: West Wall @ 6 feet below surface. Pit bottom and walls were analyzed for Headspace (see attachment).		
	Sample depth:	6 feet	
	Sample date:	7/22/98	Sample time: 1200
Sample Results:			
<u>Soil:</u>		<u>Water:</u>	
Benzene (ppm)	ND	Benzene (ppb)	
Total BTEX (ppm)	ND	Toluene (ppb)	
Field Headspace (ppm)	207	Ethylbenzene (ppb)	
TPH (ppm)	15	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 : July 20, 1998 Date Completed : July 22, 1998

<p>Location : <u>Jicarilla 94 #6</u></p> <p>Quad : <u>A</u> Section : <u>27</u></p> <p>Range : <u>3 W</u> Township : <u>27 N</u></p>		<p>Overview of Location and Sampling :</p> 																																								
<p>Pit : <u>Production Pit</u></p> <p>Reference : <u>180' South from wellhead</u></p> <p>Initial Size : <u>20' x 20' x 1' deep</u></p> <p>Final Size : <u>50' x 40' x 8' deep</u></p> <p>Yds. Excavated : <u>580 cy</u></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>		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Sample #</th> <th>Location</th> <th>OVM</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>N. Wall @ 6'</td> <td>177</td> </tr> <tr> <td>2</td> <td>S. Wall @ 6'</td> <td>74</td> </tr> <tr> <td>3</td> <td>E. Wall @ 6'</td> <td>191</td> </tr> <tr> <td>4</td> <td>W. Wall @ 6'</td> <td>207</td> </tr> <tr> <td>5</td> <td>C. Bottom @ 8'</td> <td>15</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	N. Wall @ 6'	177	2	S. Wall @ 6'	74	3	E. Wall @ 6'	191	4	W. Wall @ 6'	207	5	C. Bottom @ 8'	15	6			7			8			9			10			11			12		
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<p>Comments : <u>Top soil - 3' Soil is moist, sandy/loam, with a slight hydrocarbon odor, and slight gray staining.</u></p> <p><u>3' - 8' Soil is light brown, tightly packed shale with gray staining and a strong odor.</u></p> <p><u>8' - Bedrock encountered.</u></p> <p><u>A sample from the west wall @ 6' was sent to IML for GRO/DRO and BTEX analysis.</u></p>		<p>Pit Profile : East to West :</p> 																																								
<p>Pit Profile : North to South :</p> 		<p>Pit Profile : East to West :</p> 																																								

Environmental Specialist : VC

Cimarron Oilfield Services

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## GASOLINE RANGE ORGANICS - GRO

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

Project ID: Jicarilla 94-6 Prod. Tank Pit  
Sample ID: W. Wall @ 6'  
Lab ID: 0398G04146  
Sample Matrix: Soil  
Condition: Cool/Intact


Report Date: 07/31/98  
Date Sampled: 07/22/98  
Date Received: 07/23/98  
Date Analyzed: 07/29/98

TPH GAS-RANGE (MOD EPA 8015)	RESULT	DETECTION LIMIT
Gasoline-Range Petroleum Hydrocarbons	9.3	5.0 mg/kg
Total Volatile Petroleum Hydrocarbons	19.7	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 94-6 Prod. Tank Pit  
Sample ID: W. Wall @ 6'  
Lab ID: 0398G04146  
Sample Matrix: Soil  
Condition: Cool/Intact

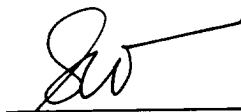
Report Date: 07/31/98  
Date Sampled: 07/22/98  
Date Received: 07/23/98  
Date Analyzed: 07/29/98


TPH DIESEL-RANGE (MOD EPA 8015)	RESULT	DETECTION LIMIT
Diesel-Range Petroleum Hydrocarbons	5.6	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 94-6 Prod. Tank Pit	Report Date:	07/31/98
Sample ID:	W. Wall @ 6'	Date Sampled:	07/22/98
Lab ID:	0398G04146	Time Sampled:	12:00
Sample Matrix:	Soil	Date Received:	07/23/98
Condition:	Cool/Intact	Date Extracted:	NA
		Date Analyzed:	07/29/98


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

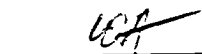
ND - Analyte not detected at the stated detection limit.

<b>Quality Control:</b>	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Bromofluorobenzene	N/A	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:** N/A=Data not available.

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Review



# CHAIN OF CUSTODY RECORD

Client/Project Name <b>Turnus. E x ploration USPA Inc</b>				Project Location <b>Tecilla 94-6</b>		Production Task <b>Pit</b>		<b>ANALYSES / PARAMETERS</b>	
Sampler: (Signature) <i>[Signature]</i>				Chain of Custody Tape No.					
Sample No./ Identification	Date	Time	Lab Number	Matrix	No. of Containers	Remarks			
Jic 94-6 6.66/1166'	7/23/98	12:00		Soil	2				
						<i>Intact, good preserved</i>			
Relinquished by: (Signature) <i>[Signature]</i>				Date 7/23/98	Time 07:20	Received by: (Signature) <i>[Signature]</i>		Date 7/23/98	Time 12:00
Relinquished by: (Signature) <i>[Signature]</i>				Date 7/23/98	Time 11:06	Received by: (Signature) <i>[Signature]</i>		Date 7-13-98	Time 11:06
Relinquished by: (Signature)				Date	Time	Received by Laboratory: (Signature)		Date	Time

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

**ON-SITE SOIL REMEDIATION REPORT**

Operator: Taurus Exploration USA Inc. Telephone: (505) 325 - 6800

Address: 2198 Bloomfield Hwy, Farmington N.M. 87401

Facility or Well Name: Jicarilla 94-6

Location: Unit or Qtr/Qtr Sec A Sec 27 T 27 N R 3 W County Rio Arriba

Land Type: Range

Date Remediation Started: July 20, 1998 Date Completed: November 13, 1998

Remediation Method: Landfarmed X Approx. cubic yards 580

Composted       

Other       

Depth to Groundwater: (pts) 0

Distance to an Ephemeral Stream (pts) 0

Distance to Nearest Lake, Playa, or Watering Pond (pts) 0

Wellhead Protection Area (pts) 0

Distance to Surface Water (pts) 0

**RANKING SCORE  
(TOTAL POINTS):** 0

**Final Closure Sampling:**

Sampling Date: 11/13/98 Time: 0800

Sample Results:

Field Headspace (ppm) 1.6

TPH (ppm) <10 Method 8015

Other:       

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE: 12/8/98 PRINTED NAME FRANK MCDONALD

SIGNATURE  AND TITLE ENV. DIVISION MANAGER

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 X NO        (REASON) use as Backfill

SIGNED:  DATE: 12-28-98



Client : Taurus Exploration USA Inc.Date Started : 11/13/98Date Completed : 11/13/98

Location : Jicarilla 94 #6			Overview of Landfarm and Sampling :		
Quad : A Section : 27			Surface Gradient		
Township: 27 N Range: 3 W			Well head		
Pit : Production Tank			North		
Reference: 80 ft S 30 E from wellhead			Pit Tank		
Size : 120' X 50' X 2.5'			Separator		
Yds : 580 cubic yards			Pit Tank		
3 - 5 Point Composites			Production Tank		
			Earthen Pit		
Comments : Soil is light brown - Sandy loam			1 3 3 3		
No staining or odor			2 2 2 2		
3 - 5 point composite samples analyzed by headspace. Sample # 2 sent to IML for 8015 analysis			1 1 1 1		
Environmental Specialist : JE					

Ranking Score : 0 Closure Standard : 5000 ppm

Cimarron Oilfield Services

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

Project ID:	Jicarilla 94-6	Report Date:	11/23/98
Sample ID:	Land Farm Comp. #2	Date Sampled:	11/13/98
Lab ID:	0398G06697	Date Received:	11/16/98
Sample Matrix:	Soil	Date Analyzed:	11/18/98
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	81%	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.**

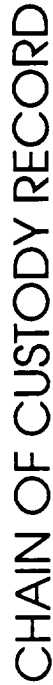
Project ID:	Jicarilla 94-6	Report Date:	11/23/98
Sample ID:	Land Farm Comp. #2	Date Sampled:	11/13/98
Lab ID:	0398G06697	Date Received:	11/16/98
Sample Matrix:	Soil	Date Analyzed:	11/18/98
Condition:	Cool/Intact		

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	90%	70-130

ND - Analyte not detected at the stated detection limit.

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

[illegible]