

Kenneth E. Faust
DEPUTY OIL & GAS INSPECTOR

AUG 09 1999

Approved

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

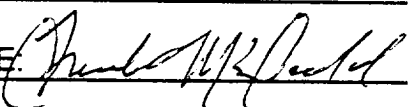
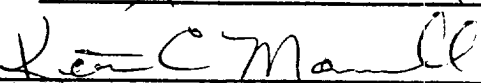
OK
RECEIVED
JUN 24 1999
OIL CON. DIV.
DIST. 3

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 126 S # 2		
Location:	Unit or Qtr/QTR	Sec "C" Sec 1, T 24 N, R 4 W	County Rio Arriba
Pit Type:	Separator:	Dehydrator:	Other: X - Abandoned Separator Pit
Land Type:	Range		
Pit Location:	Pit dimensions:	length: 22 ft	width: 22 ft depth: 15 ft
(Attach Diagram)			
	Reference:	wellhead: X	other:
	Footage from reference:	13 feet	
	Direction from reference:	45	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.)			
RANKING SCORE (TOTAL SCORE):			0

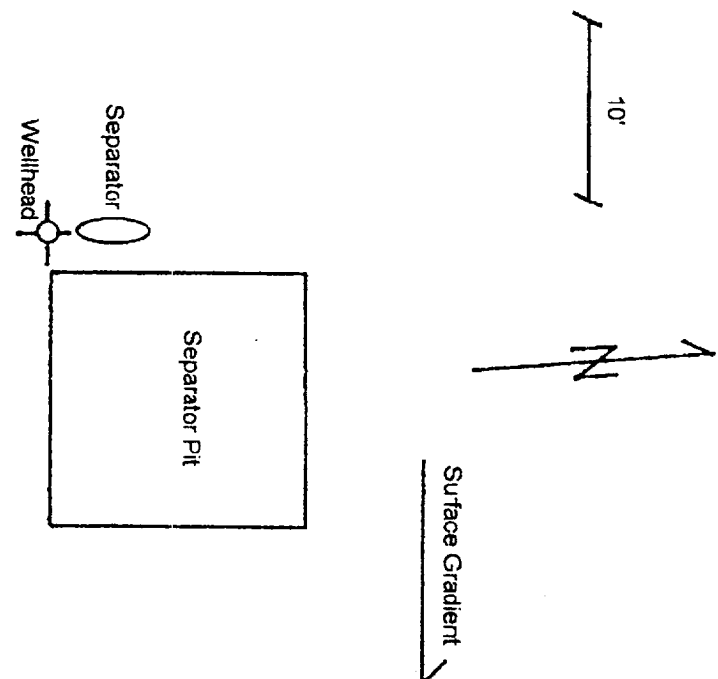
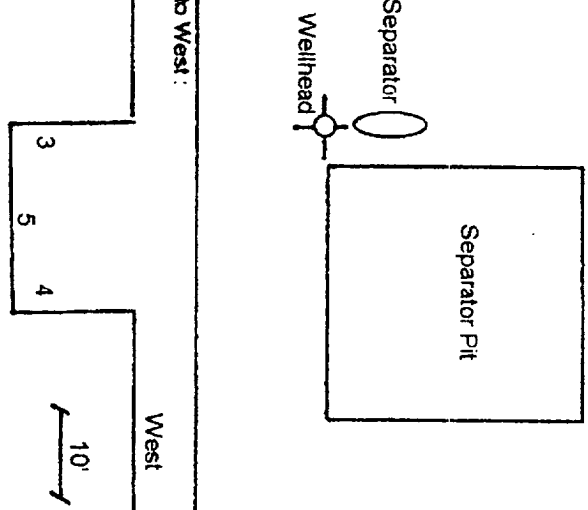
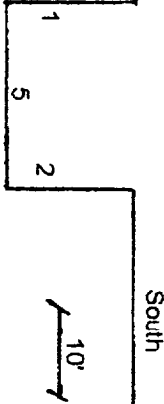
Jicarilla Apache Tribe
Environmental Protection Office
P.O. Box 507
Dulce, New Mexico 87528

Pit Remediation and Closure Report

Date Remediation Started: 9/23/98		Date Completed 9/24/98	
Remediation Method: (Check all appropriate sections)	Excavation:	<input checked="" type="checkbox"/>	Approx. cubic yards: 260
	Landfarmed:	<input checked="" type="checkbox"/>	Insitu Bioremediation:
	Other:		
Remediation Location:	On-site:	<input checked="" type="checkbox"/>	Off-site:
(I.e. landfarmed on site, name and location of off site location)			
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 @ 13 feet below surface . Pit Bottom & walls were analyzed for Headspace (see attachment).		
	Sample depth:	13 feet	
	Sample date:	9/24/98	Sample time: 1510
Sample Results:			
Soil:		Water:	
Benzene (ppm)	ND	Benzene (ppb)	
Total BTEX (ppm)	ND	Toluene (ppb)	
Field Headspace (ppm)	190	Ethylbenzene (ppb)	
TPH (ppm)	35	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: 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: <input checked="" type="checkbox"/> No: (Reason)			
SIGNED: 		DATE: 10/27/98	

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

Date Started : September 23, 1998 Date Completed : September 24, 1998

Location : <u>Jicarilla 126 S # 2</u>		Overview of Location and Sampling : 																																								
Quad : <u>C</u> Section : <u>1</u>																																										
Range : <u>4W</u> Township : <u>24 N</u>																																										
Pit : <u>Abandoned Separator Pit</u> Reference : <u>13' N 45 E</u> Initial Size : <u>15' x 15' x 1' deep</u> Final Size : <u>22' x 22' x 15' deep</u> Yds. Excavated : <u>280 cy</u> Depth to Groundwater : <u>>100'</u> Nearest Water Source : <u>>1000'</u> Nearest Surface Water : <u>>1000'</u> Nearest Ephemeral Stream : <u>150'</u> EPO Ranking Score : <u>0</u> TPH Closure Standard : <u>5000</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 Well @ 13'</td> <td>7</td> </tr> <tr> <td>2</td> <td>S Well @ 13'</td> <td>14.4</td> </tr> <tr> <td>3</td> <td>E Well @ 13'</td> <td>30.6</td> </tr> <tr> <td>4</td> <td>W Well @ 13'</td> <td>190</td> </tr> <tr> <td>5</td> <td>Bottom @ 15'</td> <td>82</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 Well @ 13'	7	2	S Well @ 13'	14.4	3	E Well @ 13'	30.6	4	W Well @ 13'	190	5	Bottom @ 15'	82	6			7			8			9			10			11			12			Pit Profile : East to West : 	
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12																																										
Comments : <u>Top soil - 15' Soil is moist dark brown, loam with dark hydrocarbon staining and a strong odor.</u> <u>Excavation of west wall was limited due to separator.</u> <u>The entire pit was sprayed with liquid fertilizer.</u> <u>A sample from the west wall @ 13' was sent to IML for GRO/DRO and BTEX analysis.</u>																																										
Pit Profile : North to South : 																																										
Pit Profile : <u>North to South :</u> North South																																										

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

Project ID:	Jicarilla 126S #2 Sep. Pit	Report Date:	10/13/98
Sample ID:	W. Wall @ 13'	Date Sampled:	09/24/98
Lab ID:	0398G05607	Date Received:	09/25/98
Sample Matrix:	Soil	Date Analyzed:	10/08/98
Condition:	Cool/Intact		

TPH DIESEL-RANGE (MOD EPA 8015)	RESULT	DETECTION LIMIT
Diesel-Range Petroleum Hydrocarbons	30	5.0 mg/kg

ND - Analyte not detected at the stated detection limit.

Reference:

Comments:

COPY


Reported By:
Reviewed By

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

Project ID:	Jicarilla 126S #2 Sep. Pit	Report Date:	10/13/98
Sample ID:	W. Wall @ 13'	Date Sampled:	09/24/98
Lab ID:	0398G05607	Date Received:	09/25/98
Sample Matrix:	Soil	Date Analyzed:	10/06/98
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:

COPY

Reported By:

Reviewed By:

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

Project ID: Jicarilla 126S #2 Sep. Pit
Sample ID: W. Wall @ 13'
Lab ID: 0398G05607
Sample Matrix: Soil
Condition: Cool/Intact

Report Date: 10/07/98
Date Sampled: 09/24/98
Time Sampled: 3:10pm
Date Received: 09/25/98
Date Extracted: NA
Date Analyzed: 10/06/98

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	85%	70%-130%

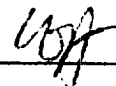
Reference: Method 5030, Purge and Trap; Method 8021B, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, Revision 2, December, 1996.

Comments:

COPY



Analyst



Review



COPY

Client/Project Name				Project Location		ANALYSES / PARAMETERS	
Taurus Exploration HSP Inc				Tucilla 1265#2 Sep. D-1			
Sampler: (Signature)		Chain of Custody Tape No.					
Sample No./ Identification	Date	Time	Lab Number	Matrix	No. of Containers	Remarks	
Jic 1265#2 Waller's	9/24/88	15:10		Soil	1	8015 6201 DPO 8020 BTEX	
				<div style="border: 1px solid black; padding: 5px; width: fit-content;"> 54072 </div>			
Relinquished by: (Signature)				Date	Time	Received by: (Signature)	
				9/24/88	08:10	Jic 1265#2 Waller's	
Relinquished by: (Signature)				Date	Time	Received by: (Signature)	
				9/24/88	9:55	Jic 1265#2 Waller's	
Relinquished by: (Signature)				Date	Time	Received by laboratory: (Signature)	
				9/24/88	9:55	Jic 1265#2 Waller's	

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 126S # 2</u>	
Location: Unit or Qtr/Qtr Sec <u>C</u> Sec <u>1</u> T <u>24 N</u> R <u>4 W</u> County <u>Rio Arriba</u>	
Land Type: <u>Range</u>	
Date Remediation Started: <u>9/23/98</u> Date Completed: <u>12/1/98</u>	
Remediation Method: Landfarmed <u>X</u> Approx. cubic yards <u>260</u>	
Composted <u> </u>	
Other <u> </u>	
Depth to Groundwater: (pts) <u>0</u>	Final Closure Sampling: Sampling Date: <u>12/1/98</u> Time: <u>14:40</u> Sample Results: Field Headspace (ppm) <u>10.1</u> TPH (ppm) <u><10</u> Method <u>8015</u> Other: <u> </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>	
RANKING SCORE (TOTAL POINTS): <u>0</u>	
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 <u> </u> (REASON) <u>see as Backfill</u>	
SIGNED: <u>[Signature]</u> DATE: <u>1-7-99</u>	

Client : Taurus Exploration USA Inc.

Date Started : September 23, 1998 Date Completed : December 1, 1998

Location : Jicarilla 126 S # 2			Overview of Landfarm and Sampling :																																									
Quad : C Section : 1																																												
Township: 24 N Range: 4 W																																												
Pit :	Separator Pit	<table border="1"><thead><tr><th>Sample #</th><th>Location</th><th>OV</th></tr></thead><tbody><tr><td>1</td><td>Comp 1</td><td>3.1</td></tr><tr><td>2</td><td>Comp 2</td><td>10.1</td></tr><tr><td>3</td><td></td><td></td></tr><tr><td>4</td><td></td><td></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	OV	1	Comp 1	3.1	2	Comp 2	10.1	3			4			5			6			7			8			9			10			11			12					
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Reference	35' S 80 W from wellhead.																																											
Size:	60' x 40' x 1.5' deep																																											
Yds :	260																																											
2	5 - Point Composites																																											
Comments : Soil is moist, dark brown, sandy/loam, with no visible staining or detectable hydrocarbon odor. A sample from composite # 2 was sent to IML for GRO/DRO analysis.			<p>The diagram illustrates the layout of the landfarm. At the top, a north arrow points upwards. Below it, a meter run is indicated. To the right, an entrance is marked with a diagonal line. A surface gradient is shown with a diagonal line. In the center, a separator is depicted as a horizontal oval, and a well head is shown as a small circle. To the right of the separator is a pit, represented by a rectangle. At the bottom left, a cluster of sampling points is marked with numbers 1 and 2. The entire area is labeled 'land farm'.</p>																																									
Environmental Specialist : JE																																												

Ranking Score : 0 Closure Standard : 5000 ppm

Cimarron Oilfield Services



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 126S #2 Landfarm	Report Date:	12/31/98
Sample ID:	Composite #2	Date Sampled:	12/01/98
Lab ID:	0398G06961	Date Received:	12/02/98
Sample Matrix:	Soil	Date Analyzed:	12/29/98*
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:



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 126S #2 Landfarm
Sample ID: Composite #2
Lab ID: 0398G06961
Sample Matrix: Soil
Condition: Cool/Intact


Report Date: 12/22/98
Date Sampled: 12/02/98
Date Received: 12/02/98
Date Analyzed: 12/16/98

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

Client/Project Name		Project Location		ANALYSES / PARAMETERS	
Emerald Resources Taurus Explor.		Jicarilla Labs #01000			
Sampler: (Signature)		Chain of Custody Tape No.			
Sample No./ Identification	Date	Time	Lab Number	Matrix	No. of Containers
1663 Terra Avenue	12/18/98	14:00	1	X	5471
Sheridan, Wyoming 82801					1220
Telephone (307) 672-8945					
Relinquished by: (Signature)					
Relinquished by: (Signature)					
Relinquished by: (Signature)					
Received by laboratory: (Signature)					
Date					
Time					
Remarks					
intact, hand delivered					