

Denny L. Fort
DEPUTY OIL & GAS INSPECTOR

AUG 09 1999

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

RECEIVED
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OIL CON. DIV.
DIST. 3


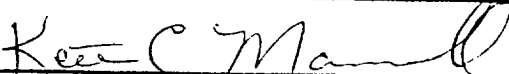
Approved

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 99-1		
Location:	Unit or Qtr/QTR	Sec "N" Sec 24, T 26 N, R 3 W County	Rio Arriba
Pit Type:	Separator:	Dehydrator:	Other: X - Abandoned Separator Pit
Land Type:	Range		
Pit Location:	Pit dimensions: length: 14 ft width: 14 ft depth: 9 ft		
(Attach Diagram)	Reference: wellhead: X other:		
	Footage from reference: 120 feet		
	Direction from reference: 60 Degrees East North		
	X West South X		
Depth To Groundwater: (Vertical distance from contaminants to seasonal high water elevations of groundwater)	Less than 50 feet 50 feet to 99 feet Greater than 100 feet	(20 points) (10 points) (0 points)	 0
Distance to an Ephemeral Stream: (Downgradient dry wash greater than ten feet in width)	Less than 100 feet Greater than 100 feet	(10 points) (0 points)	 0
Distance to Nearest Lake, Playa, or Watering Pond: (Downgradient lakes, playas, and livestock or wildlife watering ponds)	Less than 100 feet Greater Than 100 feet	(10 points) (0 points)	 0
Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources)	Yes No	(20 points) (0 points)	 0
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches.)	Less than 100 feet 100 feet to 1000 feet Greater than 1000 feet	(20 points) (10 points) (0 points)	 0
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: <u>5/28/98</u>		Date Completed: <u>5/28/98</u>	
Remediation Method: (Check all appropriate sections)	Excavation:	<u>X</u>	Approx. cubic yd: <u>50</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: _____ Depth: _____
Final Pit Closure Sampling: (If multiple samples, attach sample results and diagram of sample locations and depths.)	Sample location: <u>Pit bottom @ 9 feet below surface. Pit walls were analyzed for Headspace (see attachment).</u>		
	Sample depth:	<u>9 feet</u>	
	Sample date:	<u>5/28/98</u>	Sample time: <u>1415</u>
Sample Results:			
<u>Soil:</u>		<u>Water:</u>	
Benzene (ppm)	_____	Benzene (ppb)	_____
Total BTEX (ppm)	_____	Toluene (ppb)	_____
Field Headspace (ppm)	<u>4</u>	Ethylbenzene (ppb)	_____
TPH (ppm)	<u>49</u>	Total Xylenes (ppb)	_____
Groundwater Sample: (If yes, attach sample results.)	Yes: _____	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>8/27/98</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: _____ (Reason) _____			
SIGNED: 		DATE: <u>9-2-98</u>	

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

Date Started : May 28, 1998 Date Completed : May 28, 1998

Location : Jicarilla 99 # 1

Quad : N Section : 24

Range : 3 W Township: 26 N

Pit : Abandoned Separator Pit
Reference : 120' S 60 W

from wellhead

Initial Size : 12' x 12' x 3'

Final Size : 14' x 14' x 9' deep

Yds. Excavated : 50 cy

Depth to Groundwater:

Nearest Water Source:

Nearest Surface Water:

Nearest Ephemeral Stream:

EPO Ranking Score:

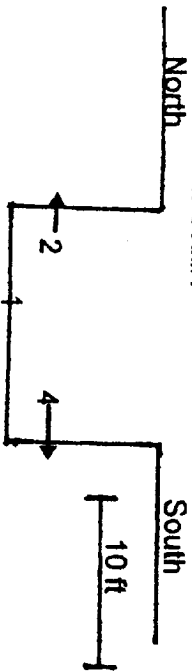
TPH Closure Standard:

Sample #	Location	OVM
1	Bottom @ 9'	4
2	N. Wall @ 6'	ND
3	E. Wall @ 6'	ND
4	S. Wall @ 6'	2
5	W. Wall @ 6'	2
6		
7		
8		
9		
10		
11		
12		

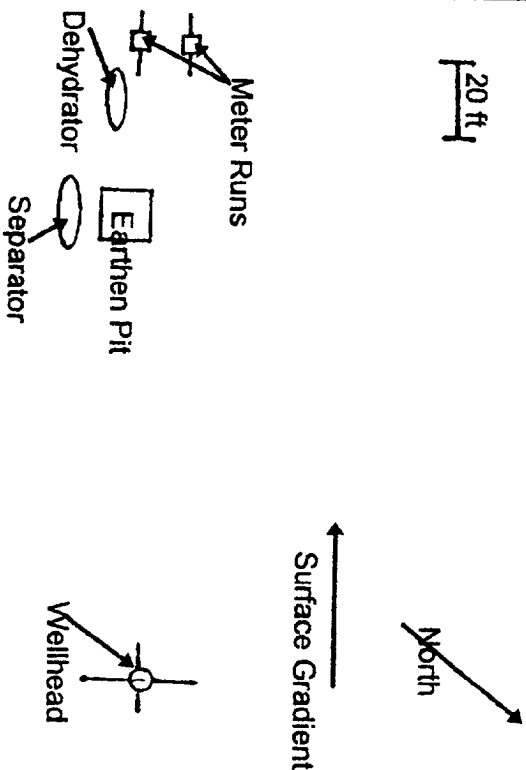
Comments :

Top soil is sandy loam, hydrocarbon odor and staining is present. 1' to bottom, soil is clay loam, brown in color. Gray Staining occurred from 3' to 6' with a diameter of approximately 8'.
Sample from bottom, sent to IML for GRO/DRO analysis,

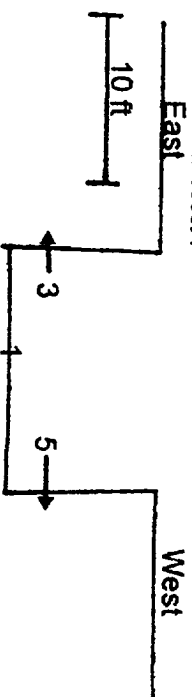
Pit Profile : North to South :



Overview of Location and Sampling :



Pit Profile : East to West :



GASOLINE RANGE ORGANICS - GRO**TAURUS EXPLORATION**

Project ID:	Jicarilla 99 #1	Report Date:	06/30/98
Sample ID:	Abandoned Sep Pit-Center Btm @9'	Date Sampled:	05/28/98
Lab ID:	0398G03011	Date Received:	05/29/98
Sample Matrix:	Soil	Date Analyzed:	06/29/98
Condition:	Cool/Intact		

TPH GAS-RANGE (MOD EPA 8015)	RESULT	DETECTION LIMIT
Gasoline-Range Petroleum Hydrocarbons	5.8	5.0 mg/kg
Gasoline Range Organics as Gasoline	ND	5.0 mg/kg
Total Volatile Hydrocarbons	6.3	5.0 mg/kg

Quality Control - Surrogate Recovery	%	QC Limits
a,a,a-Trifluorotoluene (SUR-8020)	84	50-150

ND - Analyte not detected at the stated detection limit.

Reference:

Comments:


Reported By:
Reviewed By

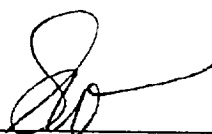

DIESEL RANGE ORGANICS - DRO**TAURUS EXPLORATION**

Project ID:	Jicarilla 99 #1	Report Date:	06/30/98
Sample ID:	Abandoned Sep Pit-Center Btm @9'	Date Sampled:	05/28/98
Lab ID:	0398G03011	Date Received:	05/29/98
Sample Matrix:	Soil	Date Analyzed:	06/29/98
Condition:	Cool/Intact		

DIESEL RANGE (MOD EPA 8015)	RESULT	DETECTION LIMIT
Diesel Range Organics as Diesel	43	5.0 mg/kg
Diesel Range Organics	43	5.0 mg/kg
Total Extractable Hydrocarbons	49	5.0 mg/kg

Quality Control - Surrogate Recovery	%	QC Limits
0-Terphenyl (SUR-DRO)	71	50-150

ND - Analyte not detected at the stated detection limit.

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



COPY

5400

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 99 - 1

Location: Unit or Qtr/Qtr Sec N Sec 24 T 26 N R 3 W County Rio Arriba

Land Type: Range

Date Remediation Started: 5/28/98 Date Completed: 11/25/98

Remediation Method: Landfarmed X Approx. cubic yards 100

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: 11/25/98 Time: 11:00

Sample Results:

Field Headspace (ppm) 2.8

TPH (ppm) <30 Method 8015

Other:

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

DATE: 1/7/99 PRINTED NAME VIRGIL CHAVEZ

SIGNATURE [Signature] AND TITLE ENV. SPECIALIST

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: [Signature] DATE: 1-20-99

Client : Taurus Exploration USA Inc.

Date Started : May 28, 1998 Date Completed : November 25, 1998

<div style="border-bottom: 1px solid black; padding-bottom: 5px;">Location : Jicarilla 99-1</div> <div style="border-bottom: 1px solid black; padding-bottom: 5px;">Quad : N Section : 24</div> <div style="border-bottom: 1px solid black; padding-bottom: 5px;">Township: 26 N Range: 3 W</div> <div style="border-bottom: 1px solid black; padding-bottom: 5px;">Pit : Separator Pit</div> <div style="border-bottom: 1px solid black; padding-bottom: 5px;">Reference 190' N 42' W from wellhead.</div> <div style="border-bottom: 1px solid black; padding-bottom: 5px;">Size: 15' x 30' x 1'</div> <div style="border-bottom: 1px solid black; padding-bottom: 5px;">Yds : 100</div> <div style="border-bottom: 1px solid black; padding-bottom: 5px;">1 5 - Point Composites</div> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"><thead><tr><th style="width: 15%;">Sample #</th><th style="width: 35%;">Location</th><th style="width: 50%;">OVM</th></tr></thead><tbody><tr><td>1</td><td>Comp 1</td><td>2.8</td></tr><tr><td>2</td><td></td><td></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	OVM	1	Comp 1	2.8	2			3			4			5			6			7			8			9			10			11			12			<div style="border-bottom: 1px solid black; padding-bottom: 5px;">Overview of Landfarm and Sampling :</div> <div style="text-align: center; padding: 10px;"><p style="text-align: center;">meter runs</p><p style="text-align: center;">seperator</p><p style="text-align: center;">pit</p><p style="text-align: center;">well head</p><p style="text-align: center;">land farm</p><p style="text-align: center;">north</p><p style="text-align: center;">road</p><p style="text-align: center;">surface gradient</p></div>	
Sample #	Location	OVM																																									
1	Comp 1	2.8																																									
2																																											
3																																											
4																																											
5																																											
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7																																											
8																																											
9																																											
10																																											
11																																											
12																																											
Comments : Soil is moist, dark brown, sandy/loam, with no visible staining and a slight hydrocarbon odor.																																											
A sample from composite # 1 was sent to IML for GRO/DRO analysis.																																											
Environmental Specialist : JE																																											



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 99-1
Sample ID: Landfarm Sep. Pit Comp #1
Lab ID: 0398G06936
Sample Matrix: Soil
Condition: Cool/Intact

Report Date: 12/31/98
Date Sampled: 11/25/98
Date Received: 12/02/98
Date Analyzed: 12/29/98*


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 with the holding times, however, due to instrument problems and QC failure, the sample was 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 99-1
Sample ID: Landfarm Sep. Pit Comp #1
Lab ID: 0398G06936
Sample Matrix: Soil
Condition: Cool/Intact


Report Date: 12/22/98
Date Sampled: 11/25/98
Date Received: 12/01/98
Date Analyzed: 12/16/98

TPH DIESEL RANGE (MOD EPA 8015)	RESULT	DETECTION LIMIT
Diesel-Range Petroleum Hydrocarbons	25	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			
Sampler: (Signature)				Chain of Custody Tape No.		Remarks			
Sample No./ Identification				Date	Time	Lab Number	Matrix	No. of Containers	
1633 Terra Avenue				11-25-98	1100		Coal	1	
Sheridan, Wyoming 82801									
Telephone (307) 672-8945									
1701 Phillips Circle									
Gillette, Wyoming 82718									
Telephone (307) 682-8945									
2506 West Main Street									
Farmington, NM 87401									
Telephone (505) 326-4737									
1160 Research Drive									
Bozeman, Montana 59718									
Telephone (406) 586-8450									
11183 State Hwy. 30									
College Station, TX 77845									
Telephone (409) 776-8945									
Relinquished by: (Signature)				Date	Time	Received by: (Signature)		Date	Time
Relinquished by: (Signature)				Date	Time	Received by: (Signature)		Date	Time
Relinquished by: (Signature)				Date	Time	Received by: (Signature)		Date	Time