

Denny E. Faust
DEPUTY OIL & GAS INSPECTOR

AUG 09 1999

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

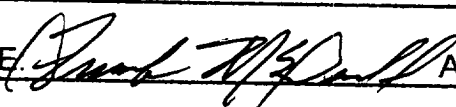
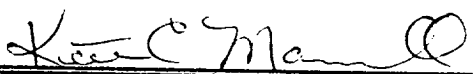
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JUN 24 1999
OIL CON. DIV.
DIST. 3

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 99-10		
Location:	Unit or Qtr/QTR	Sec "D" Sec 24, T 26 N, R 3 W County	Rio Arriba
Pit Type:	Separator:	Dehydrator:	Other: X - Abandoned Blow Pit
Land Type:	Range		
Pit Location:	Pit dimensions: length: 15 ft width: 15 ft depth: 9 ft		
(Attach Diagram)			
Reference:	wellhead: X	other:	
Footage from reference:	90 feet		
Direction from reference:	30	Degrees	East North X
			of
		X 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

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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>5/29/98</u>	
Remediation Method: (Check all appropriate sections)	Excavation:	<u>X</u>	Approx. cubic yd: <u>74</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>5/29/98</u>
		Sample time:	<u>1456</u>
Sample Results:			
<u>Soil:</u>		<u>Water:</u>	
Benzene (ppm)	<u>ND</u>	Benzene (ppb)	_____
Total BTEX (ppm)	<u>1,858</u>	Toluene (ppb)	_____
Field Headspace (ppm)	<u>221</u>	Ethylbenzene (ppb)	_____
TPH (ppm)	<u>1,809</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 29, 1998

Location : <u>Jicarilla 89 # 10</u>		<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>Overview of Location and Sampling :</p> </div> <div style="text-align: center;"> <p>Earth Pit</p> <p>2 inch riser</p> <p>Wellhead</p> </div> </div>																																								
Quad : <u>D</u> Section : <u>24</u>																																										
Range : <u>3 W</u> Township : <u>28 N</u>																																										
Pit : Abandoned Blow Pit Reference : 90° N 30 W Initial Size : 5' x 5' x 1' Final Size : 15' x 15' x 8' deep Yds. Excavated : 74 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; text-align: center;"> <thead> <tr> <th>Sample #</th> <th>Location</th> <th>QVM</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Bottom @ 9'</td> <td>221</td> </tr> <tr> <td>2</td> <td>N. Wall @ 6'</td> <td>16</td> </tr> <tr> <td>3</td> <td>E. Wall @ 6'</td> <td>8</td> </tr> <tr> <td>4</td> <td>S. Wall @ 6'</td> <td>182</td> </tr> <tr> <td>5</td> <td>W. Wall @ 6'</td> <td>88</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	QVM	1	Bottom @ 9'	221	2	N. Wall @ 6'	16	3	E. Wall @ 6'	8	4	S. Wall @ 6'	182	5	W. Wall @ 6'	88	6			7			8			9			10			11			12		
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Comments : Top soil is sandy loam, hydrocarbon odor and staining is present. 1' to bottom, soil is clay loam, brown in color. Gray Staining to a depth of 5 feet. Sample from bottom, sent to IML for GRO/DRO and BTEX analysis.		<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>Pit Profile : East to West :</p> </div> <div style="text-align: center;"> <p>West</p> </div> </div>																																								
Pit Profile : North to South :				<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>Pit Profile : North to South :</p> </div> <div style="text-align: center;"> <p>South</p> </div> </div>																																						

Environmental Specialist : FM

Cimarron Oilfield Services

GASOLINE RANGE ORGANICS - GRO**TAURUS EXPLORATION**

Project ID: Jicarilla 99 #10
Sample ID: Abandoned Blow Pit- Btm @ 9'
Lab ID: 0398G03024
Sample Matrix: Soil
Condition: Cool/Intact


Report Date: 06/30/98
Date Sampled: 05/29/98
Date Received: 06/01/98
Date Analyzed: 06/29/98


TPH GAS-RANGE (MOD EPA 8015)	RESULT	DETECTION LIMIT
Gasoline-Range Petroleum Hydrocarbons	8.8	5.0 mg/kg
Gasoline Range Organics as Gasoline	ND	5.0 mg/kg
Total Volatile Hydrocarbons	33	5.0 mg/kg

Quality Control - Surrogate Recovery	%	QC Limits
a,a,a-Trifluorotoluene (SUR-8020)	81	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 #10	Report Date:	06/30/98
Sample ID:	Abandoned Blow Pit- Btm @ 9'	Date Sampled:	05/28/98
Lab ID:	0398G03024	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	1800	5.0 mg/kg
Diesel Range Organics	ND	5.0 mg/kg
Total Extractable Hydrocarbons	2100	5.0 mg/kg

Quality Control - Surrogate Recovery	%	QC Limits
0-Terphenyl (SUR-DRO)	60	50-150

ND - Analyte not detected at the stated detection limit.

Reference:

Comments:


Reported By:
Reviewed By:

VOLATILE AROMATIC HYDROCARBONS

Taurus Exploration USA, Inc.

Project ID:	Jicarilla 99 #10	Report Date:	06/18/98
Sample ID:	Abandoned Blow Pit; Bottom @ 9'	Date Sampled:	05/29/98
Lab ID:	0398G03024	Time Sampled:	1456
Sample Matrix:	Soil	Date Received:	06/01/98
Condition:	Cool/Intact	Date Extracted:	06/01/98
		Date Analyzed:	06/12/98


Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	ND	10.0
Toluene	ND	10.0
Ethylbenzene	181	10.0
m,p-Xylenes	1,040	10.0
o-Xylene	637	10.0


ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Bromofluorobenzene	229%	70%-130%

Reference: Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

Comments: Surrogate failed to meet acceptance limits due to matrix affect.



Analyst

Review



COPIES

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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 99-10

Location: Unit or Qtr/Qtr Sec D 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 74

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: 11:50

Sample Results:

Field Headspace (ppm) 12.2

TPH (ppm) <45 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) was as Backfill

SIGNED: [Signature] DATE: 1-20-99



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 99-10
Sample ID: Landfarm Sep. Pit Comp #1
Lab ID: 0398G06935
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 within 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 99-10
Sample ID: Landfarm Sep. Pit Comp #1
Lab ID: 0398G06935
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	40	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	Remarks	
16633 Terra Avenue	11-20-96	11:50		Cell	1	16633 Terra Avenue	
<div>Relinquished by: (Signature) <i>[Signature]</i> Date <i>11-20-96</i> Time <i>0735</i> Received by: (Signature) <i>[Signature]</i> Date <i>11-20-96</i> Time <i>1025</i></div> <div>Relinquished by: (Signature) <i>[Signature]</i> Date <i>11-20-96</i> Time <i>1025</i> Received by: (Signature) <i>[Signature]</i> Date <i>11-20-96</i> Time <i>1025</i></div> <div>Relinquished by: (Signature) <i>[Signature]</i> Date <i>11-20-96</i> Time <i>1025</i> Received by: (Signature) <i>[Signature]</i> Date <i>11-20-96</i> Time <i>1025</i></div>							

Inter-Mountain Laboratories, Inc.

☐ 1633 Terra Avenue
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57717