

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

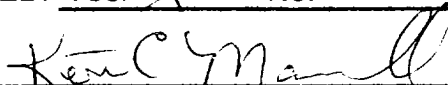
OIL CON. DIV.
DIST. 3

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 89-3A		
Location:	Unit or Qtr/QTR	Sec "I"	Sec 15, 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: 35 ft width: 20 ft depth: 18 ft		
(Attach Diagram)			
Reference:	wellhead: X other:		
Footage from reference:	165 feet		
Direction from reference:	20	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

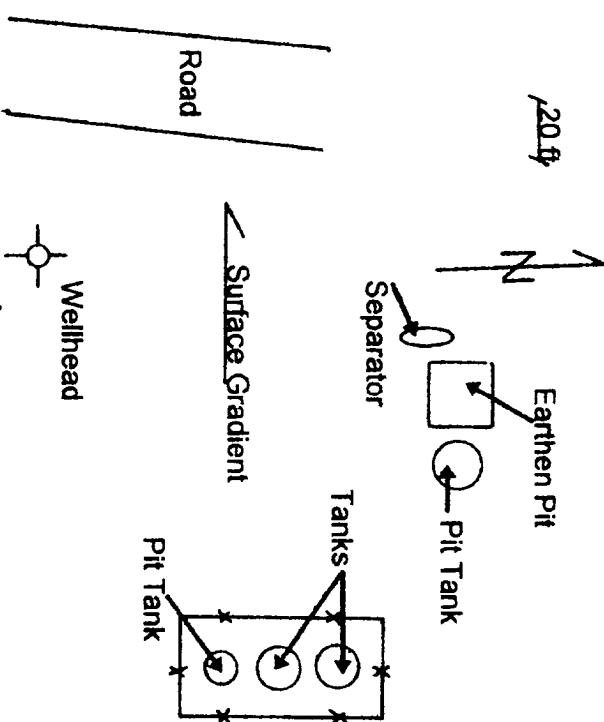
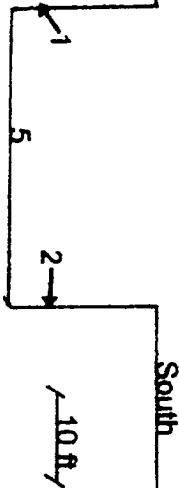
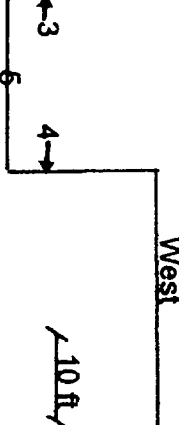
Jicarilla Apache Tribe
Environmental Protection Office
P.O. Box 507
Dulce, New Mexico 87528

Pit Remediation and Closure Report

Date Remediation Started: <u>7/27/98</u>		Date Completed: <u>7/28/98</u>	
Remediation Method:	Excavation: <u>X</u>	Approx. cubic yds:	<u>422</u>
(Check all appropriate sections)	Landfarmed: <u>X</u>	Insitu Bioremediation: _____	
	Other: _____		
Remediation Location:	On-site: <u>X</u>	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: <u>X</u>	Yes: _____	Depth: _____
Final Pit Closure Sampling:	Sample location: <u>East Wall @ 15 feet below surface. Pit bottom & walls were analyzed for Headspace (see attachment).</u>		
(If multiple samples, attach sample results and diagram of sample locations and depths.)			
	Sample depth: <u>15 feet</u>		
	Sample date: <u>7/28/98</u>	Sample time: <u>1209</u>	
Sample Results:			
<u>Soil:</u>		<u>Water:</u>	
Benzene (ppm)	<u>ND</u>	Benzene (ppb)	_____
Total BTEX (ppm)	<u>0.258</u>	Toluene (ppb)	_____
Field Headspace (ppm)	<u>429</u>	Ethylbenzene (ppb)	_____
TPH (ppm)	<u><10</u>	Total Xylenes (ppb)	_____
Groundwater Sample:	Yes: _____	No: <u>X</u>	_____
(If yes, attach sample results.)			
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF			
DATE: <u>8/25/98</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 : July 27, 1998 Date Completed : July 28, 1998

Location : <u>Jicarilla 89 - 3A</u>		Overview of Location and Sampling : 																																								
Quad : <u>1</u> Section : <u>15</u>																																										
Range : <u>3 W</u> Township: <u>27 N</u>																																										
Pit : <u>Abandoned Separator Pit</u> Reference : <u>165' N 20 E</u> from wellhead Initial Size : <u>20' x 20' x 3' deep</u> Final Size : <u>35' x 20' x 16' deep</u> Yds. Excavated : <u>422 cy</u>		<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Sample #</th> <th>Location</th> <th>OVM</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>N. Wall @ 15'</td> <td>1.2</td> </tr> <tr> <td>2</td> <td>S. Wall @ 15'</td> <td>307</td> </tr> <tr> <td>3</td> <td>E. Wall @ 15'</td> <td>429</td> </tr> <tr> <td>4</td> <td>W. Wall @ 15'</td> <td>109</td> </tr> <tr> <td>5</td> <td>C. Bm. @ 16'</td> <td>12.5</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 @ 15'	1.2	2	S. Wall @ 15'	307	3	E. Wall @ 15'	429	4	W. Wall @ 15'	109	5	C. Bm. @ 16'	12.5	6			7			8			9			10			11			12		
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12																																										
Depth to Groundwater: <u>>100'</u> Nearest Water Source: <u>>1000'</u> Nearest Surface Water: <u>>1000'</u> Nearest Ephemeral Stream: <u>>1000'</u> EPO Ranking Score: <u>0</u> TPH Closure Standard: <u>5000</u>		Comments : <u>Top soil - 18" Soil is moist, dark brown, clay/loam with dark staining, and a strong hydrocarbon odor.</u> <u>18" Soil is moist, light brown, clay, with no apparent odor or staining. Excavation was limited on south and east walls due to active gas lines and surface equipment.</u> <u>A sample from the east wall at 15' was sent to IML for GRO/DRO and BTEX analysis.</u>																																								
Pit Profile : North to South :																																										
																																										
Pit Profile : East to West :																																										

Environmental Specialist : VC

Cimarron Oilfield Services

Page 1 of 1

GASOLINE RANGE ORGANICS - GRO

Taurus Exploration U.S.A., Inc.

Project ID:	Jicarilla 89-3A Sep. Pit	Report Date:	08/12/98
Sample ID:	E. Wall @ 15'	Date Sampled:	07/28/98
Lab ID:	0398G04280	Date Received:	07/31/98
Sample Matrix:	Soil	Date Analyzed:	08/06/98
Condition:	Cool/Intact		

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

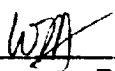
ND - Analyte not detected at the stated detection limit.

Reference:

COPY

Comments:


Reported By:


Reviewed By

DIESEL RANGE ORGANICS - DRO

Taurus Exploration U.S.A., Inc.

Project ID:	Jicarilla 89-3A Sep. Pit	Report Date:	08/17/98
Sample ID:	E. Wall @ 15'	Date Sampled:	07/28/98
Lab ID:	0398G04280	Date Received:	07/30/98
Sample Matrix:	Soil	Date Analyzed:	08/03/98
Condition:	Cool/Intact		

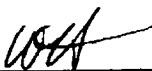
TPH DIESEL-RANGE (MOD EPA 8015)	RESULT	DETECTION LIMIT
Diesel-Range Petroleum Hydrocarbons	<5.0	5.0 mg/kg

ND - Analyte not detected at the stated detection limit.

Reference:

Comments:


Reported By:


Reviewed By:

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

Project ID:	Jicarilla 89-3A Sep. Pit	Report Date:	08/13/98
Sample ID:	E. Wall @ 15'	Date Sampled:	07/27/98
Lab ID:	0398G04280	Time Sampled:	12:09pm
Sample Matrix:	Soil	Date Received:	07/31/98
Condition:	Cool/Intact	Date Extracted:	NA
		Date Analyzed:	08/06/98

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	ND	10.0
Toluene	258	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	103%	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

COPY



CHAIN OF CUSTODY RECORD

Client/Project Name		Project Location		ANALYSES / PARAMETERS						
Tanner Exploration 11514 Inc		Treas. 115 89-314		Sep 16 1998						
Sampler: (Signature)		Chain of Custody Tape No.		Remarks						
[Signature]										
Sample No./ Identification	Date	Time	Lab Number	Matrix	No. of Containers					
IR 89-314 E. Williams'	7/28/98	12:09		Soil	1					
COPY										
						[Signature]				
						[Signature]				
						[Signature]				
						[Signature]				
						[Signature]				
						[Signature]				
						[Signature]				
						[Signature]				
						[Signature]				
Relinquished by: (Signature)	Date	Time	Received by: (Signature)		Date					
[Signature]	7/28/98	2:15	[Signature]		7/28/98					
Relinquished by: (Signature)	Date	Time	Received by: (Signature)		Date					
[Signature]	7/28/98	8:05	[Signature]		7/28/98					
Relinquished by: (Signature)	Date	Time	Received by Laboratory: (Signature)		Date					
[Signature]			[Signature]		7/28/98					
Inter-Mountain Laboratories, Inc.										
1633 Terra Avenue 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						
☐		☐		☐						
11183 State Hwy. 30 College Station, TX 77845 Telephone (409) 776-8945		54831								

**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 89 - 3 A

Location: Unit or Qtr/Qtr Sec I Sec 15 T 27 N R 3 W County Rio Arriba

Land Type: Range

Date Remediation Started: July 27, 1998 Date Completed: November 12, 1998

Remediation Method: Landfarmed X Approx. cubic yards 422

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: 11/12/98 Time: 830

Sample Results:

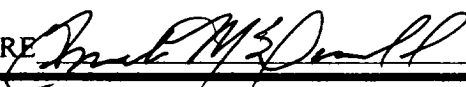
Field Headspace (ppm) 2.4

TPH (ppm) <10 Method 8015

Other:

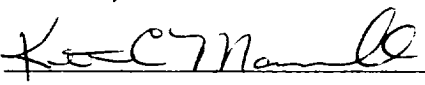
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

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

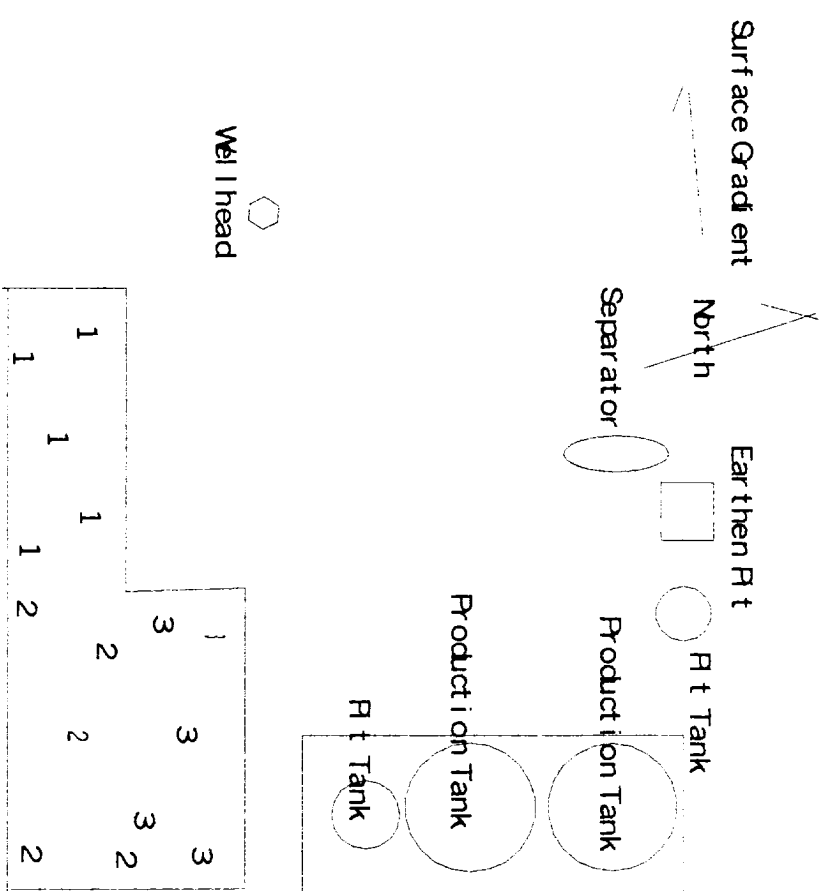
APPROVED: YES X NO (REASON) use as Backfill

SIGNED:  DATE: 12-28-98

Client : Taurus Exploration USA Inc.

Date Started : 11/12/98

Date Completed : 11/12/98

Location : <u>Jicarilla 89 # 3 A</u>			Overview of Landfarm and Sampling :																																						
Quad : <u>I</u>	Section : <u>15</u>																																								
Township: <u>27 N</u> Range: <u>3 W</u>																																									
Pit : <u>Separator</u>																																									
Reference: <u>120 ft S 80 E from wellhead</u>																																									
Size : <u>80' X 60' 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>0.8</td></tr><tr><td>2</td><td>Comp 2</td><td>2.4</td></tr><tr><td>3</td><td>Comp 3</td><td>1.8</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	0.8	2	Comp 2	2.4	3	Comp 3	1.8	4			5			6			7			8			9			10			11			12			
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7																																									
8																																									
9																																									
10																																									
11																																									
12																																									
Yds : <u>422 cubic yards</u>																																									
<u>3</u> - <u>5 Point Composites</u>																																									
Comments : <u>Soil is light brown - Clay loam</u>																																									
<u>No staining or odor</u>																																									
<u>3 - 5 point composite samples analyzed by headspace. Sample # 2 sent to IML for 8015 analysis</u>																																									
Environmental Specialist : <u>JE</u>																																									

Ranking Score : 0 Closure Standard : 5000 ppm

Cimarron Oilfield Services

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

Project ID:	Licarilla 89-3A	Report Date:	11/23/98
Sample ID:	Land Farm Comp. #2	Date Sampled:	11/12/98
Lab ID:	0398G06699	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	79%	70-130

ND - Analyte not detected at the stated detection limit.

Reference:**Comments:**

Reported By:



Reviewed By:

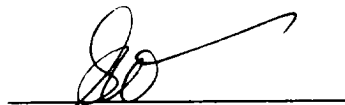
DIESEL RANGE ORGANICS - DRO**TAURUS EXPLORATION U.S.A., INC.**

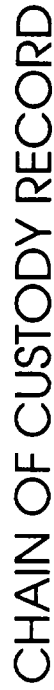
Project ID:	Jicarilla 89-3A	Report Date:	11/23/98
Sample ID:	Land Farm Comp. #2	Date Sampled:	11/12/98
Lab ID:	0398G06699	Date Received:	11/16/98
Sample Matrix:	Soil	Date Analyzed:	11/18/98
Condition:	Cool/Intact		

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	81%	70-130

ND - Analyte not detected at the stated detection limit.

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

[illegible]