DEPUTY OIL & GAS INSPECTOR

AUG 0 9 1999

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



OIL CON. DIV. DIST. 3

And a laga	<i>'</i>	P.O	. Box 507		~~	JUN 2	4 1889
	/	Dulce, Nev	w Mexico 8752	28		rood l	a n
2000 OUC			- - -	-		S GOOK DIST.	
<i></i>	PIL		n and Closure F	Report			
	Taurus Explorati			(505)) 325-6800		
Address:	2198 Bloomfield		···				
Facility or Wel		Jicarilla West			 		
Location:			5, T 26 N, R 5 W			Rio Arrib	oa
Pit Type:	Separator:	Dehydrator:	Other: X - Aba	andoned	Separator	<u>Pit</u>	
Land Type:	Range						
Pit Location:	Pit dimensions:	length: 15 ft	width: 20 ft	depth	h: 3 ft		
Attach Diagra			***	··············	· · ·	-	
	Reference:	wellhead: X	other:				
Foota	age from reference:	: 90 feet				-	
Directi	tion from reference:	20	Degrees	X East	North		<u></u>
				_	of		
				West	t South	X	
Depth To Grou			Less than 50 fe		(20 points)	•	
(Vertical distan		0.	50 feet to 99 fe		(10 points)	_	-
contaminants to		Gr	reater than 100 fe	et	(0 points))	<u>) </u>
nigh water elev groundwater)	/ations or						
Jroundwater,							
Distance to an	n Ephemeral Stream	n:	Less than 100 fe	et	(10 points))	
	t dry wash greater t		reater than 100 fe		(0 points)	•	כ
en feet in widti	•				V 1		
n'itana ta Na	Dieve	tal-tasing	* 400 64		110 t-man'		
	earest Lake, Playa,	=			(10 points)	-	_
	radient lakes, playa	•	ater Than 100 te	et	(0 points))0)
IVESTOCK OF WIN	Idlife watering pond	is)					
Wellhead Prote	ection Area:		Yı	es	(20 points))	
Less than 200	o feet from a private	a		No.	(0 points))
domestic water	r source, or less tha	an			• -		
1000 feet from	all other water sou	ırces)					
Distance To Su	urface Water:		Less than 100 fee	·ot	(20 points)	١	
	stance to perennial		00 feet to 1000 fee		(10 points)	•	
•	rivers, streams, cree		ater than 1000 fe		(0 points)	•	1
· · · · · · · · · · · · · · · · · · ·	ils and ditches.)	J	ator court is a second		(G P - ,		
	,	F	RANKING SCORE	E (TOTA	L SCORE):	: 0)

Jicarilla Apache Tribe Environmental Protection Office P.O. Box 507

Dulce, New Mexico 87528

Pit Remediation and Closure Report

Date Remediation Started:	9/14/98	Date Completed	9/14/98							
Remediation Method:	Excavation:	X	Approx. cubic yards: 30							
(Check all appropriate	Landfarmed:	X	Insitu Bioremediation:							
sections)	Other:									
Remediation Location:	On-site:	X	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: X	Yes:	Depth:							
Final Pit	Sample location:	: Center Bottom @	3 feet below surface . Pit							
Closure Sampling:	walls were analy	zed for Headspac	ce (see attachment).							
(If multiple samples,										
attach sample results										
and diagram of sample	Sample depth:	3 feet								
locations and depths.)	Sample date:	9/14/98	Sample time: 13:50							
Sample Results:										
<u>Soil:</u>			<u>Water:</u>							
Benzene (ppm)	0.571	Benzene (ppb)								
Total BTEX (ppm)	16.4	•	Toluene (ppb)							
Field Headspace (ppm)	413	. Eth	hylbenzene (ppb)							
TPH (ppm)	35	. To	tal Xylenes (ppb)							
Groundwater Sample:	Yes:		No: X							
(If yes, attach sample results.)		·								
I HEREBY CERTIFY THAT TH			RUE AND COMPLETE TO							
THE BEST OF MY KNOWLED	GE AND BELIE	≘F								
DATE: 10/16/98		<u></u>	Frank McDonald							
100 100	2011: 11	, , , =								
SIGNATURE:	12/2011	AND TITLE:	Env. Division Manager							
		<u> </u>								
AFTER REVIEW OF THE PIT										
IN ACCORDANCE TO THE JI	CARILLA APAC	CHE TRIBE PIT	CLOSURE ORDINANCE							
APPROVED: Yes: X	No:	(Reason)								
1/ ()	, Or	-)								
SIGNED: Lie C M	Jame L		DATE: 10 27 98							

Range: GRO/DRO and BTEX analysis.
Pit Profile: North to South: Comments: Top soil - 3' Soil is moist gray, day with some staining Quad EFO Ranking Score: Nearest Ephemeral Stream: >1000 Nearest Surface Water. Final Size: 15'x 20'x 3' deep Reference: 90' S 20 E Pit: Abendoned Separator Pit TPH Closure Standard Depth to Groundwater: Initial Size: 10'x 10'x1' deep Yds. Excavated: 30 cy pcation: A sample from the center bottom @ 3 was sent to IML to: earest Water Source: North 5 ₹ from wellhead Jicarilla West # 8A Entire pitwas sprayed with liquid fertilizer. 3º Bedrock and a strong HC odor Section: Township: >1000 ×1000 8 >100' 0 Sample # 26 26 2 ō Ø = 00 Ø 12 @ IPP. A. E. WOU @ 2" S. Well @ 2" N. West @ ? Location C.Bm.@ 3' South ġ 413 23 52 Pit Profile: East to West: Overview of Location and Sampling East Abandoned Separator Pit Surface Gradient Separator Wellhead Entrance West ą

Environmental Specialist: VC

Amarron Offlield Services

Page 1 of 1

2506 W. Main Street Farmington, New Mexico 87401

GASOLINE RANGE ORGANICS - GRO

Taurus Exploration U.S.A., Inc.

Project ID:

Jicarilla West 8A Sep. Pit

10/01/98

Sample ID:

C. Bottom @ 3'

09/14/98

Lab ID:

0398G05384

Date Sampled:

Date Received:

Report Date:

Sample Matrix: Condition:

Cool/Intact

Soil

Date Received: 09/15/98 Date Analyzed: 09/30/98

TPH GAS-RANGE (MOD EPA 8015)	RESULT	DETECTION LIMIT
Gasoline-Range Petroleum Hydrocarbons	117	5.0 mg/kg
Total Purgeable Hydrocarbons	113	5.0 mg/kg

ND - Analyte not detected at the stated detection limit.

Reference:

Comments:

Reported By:

Reviewed By

2506 W. Main Street Fermington, New Mexico 87401

DIESEL RANGE ORGANICS - DRO

Taurus Exploration U.S.A., Inc.

Project ID:

Jicarilla West 8A Sep. Pit

Report Date:
Date Sampled:

10/01/98

Sample ID:

C. Bottom @ 3' 0398G05384

Date Received:

09/14/98 09/15/98

Lab ID: Sample Matrix:

Soil

Date Analyzed:

09/30/98

Condition:

Cool/Intact

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

Sample ID:

Lab ID:

C. Bottom @3' 0398G05384

Cool/Intact

Soil

Sample Matrix:

Condition:

Jicarilla West 8A Separator Pit

Report Date:

10/01/98 09/14/98

Date Sampled: Time Sampled:

1:50pm

Date Received: Date Extracted: 09/15/98 NA

Date Analyzed:

09/30/98

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	571	10.0
Toluene	401	50.0
Ethylbenzene	813	50.0
m,p-Xylenes	13,827	50.0
o-Xylene	801	50.0

ND - Analyte not detected at the stated detection limit.

Quality Control:

Surrogate

Percent Recovery

Acceptance Limits

Bromofluorobenzene

104%

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:

Client/Project Name Taurus Exploration 115H Inc	Project Location	Sepurater / ANALYSES / PARAMETERS	ARAMETERS
ignatures C	~	ors	Remarks
Sample No./ Identification Date Time Lab Number	nber Matrix	No. of Containe 8015 CKO 802 B1E)	
Jie. West 8ACBMES 5/4/88 13:50	1:05	1 / /	-
			Copl- Zatact
-			
Relinquished by: (Signature)		Received by: (Signature)	Date Time
Paul C	9/15/8 07:35	Line Hay Kinduson	9115198 735
Adinquished by: (Signature)	Date Time	Received by: (Sighature)	Date
Relinquished by: (Signature)	Date Time	Received by laboratory: (Signature)	Date Time
Inter-Mo	Inter-Mountain Laboratories,	es, Inc.	, , , , , , , , , , , , , , , , , , , ,
1633 Terra Avenue 1701 Phillips Circle Sheridan, Wyoming 82801 Gillette, Wyoming 82718 Telephone (307) 672-8945 Telephone (307) 682-8945	∑I 2506 West Main Street Farmington, NM 87401 Telephone (505) 326-4737	1160 Research Drive 11183 State Hwy. 30 Bozeman, Montana 59718 College Station, TX 77845 Telephone (406) 586-8450 Telephone (409) 776-8945	w. 30 1, TX 77845 1) 776-8945

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, Farming	ton N.M. 87401								
Facility or Well Name: <u>Jicarilla West 8A</u>									
Location: Unit or Qtr/Qtr Sec_J_Sec_6	T 26 N R 5 W County Rio Arriba								
Land Type: Range									
Date Remediation Started: 9/14/98 Da	te Completed: 12/3/98								
Remediation Method: Landfarmed X Approx. cubic yards 30									
Composted									
Other									
Depth to Groundwater: (pts) 0 Final Closure Sampling:									
Distance to an Ephemeral Stream (pts) 0	Sampling Date: <u>12/3/98</u> Time: <u>13:00</u>								
Distance to Nearest Lake, Sample Results:									
Playa, or Watering Pond (pts) 0	Field Headspace (ppm) 3.0								
Distance to Surface Water (pts)0	Other:								
RANKING SCORE (TOTAL POINTS): 0	Other.								
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF DATE: 1/6/99 PRINTED NAME VIRGIL CHAVEZ									
SIGNATURE // S	AND TITLE ENV. SPECIALIST								
AFTER REVIEW OF THE SOIL REMEDIATION INFOR APPROVED IN ACCORDANCE TO THE JICARILLA A APPROVED: YESNO (REASON)									
SIGNED: DA	TE: 1-7-99								

Environmental Specialist : JE Comments: Soil is moist,dark brown,clay/loam, with mild staining and a slight hydrocarbon odor.

A sample from composite # 1 was sent to IML for GRO/DRO analysis. Size: ₽i Yds: Reference 27' N 15 E from wellhead. Quad Township: Location: Jicarilla West 8A 5 - Point Composites မ Separator Pit 30' x 20' x 1' 26 N Range: Section: Sample # 5 W 2 1 6 ဖ α တ G တ Comp 1 Location MVO Overview of Landfarm and Sampling: meter run meter run surface gradient dehydrator dehydrator well head land farm surface gradient seperator pit tank

Client: Taurus Exploration USA Inc.

Date Started: September 14, 1998 Date Completed: December 3, 1998

Ranking Score: 0_Closure Standard: 5000 ppm

Cimarron Oilfield Services

Page 1 of 1



Phone (505) 326-4737 Fax (505) 325-4182

2506 West Main Street, Farmington, NM 87401

GASOLINE RANGE ORGANICS - GRO

ENERGEN RESOURCES

Project ID:

Jicarilla West 8A - Sep. Pit

Sample ID:

Landfarm Comp #1

12/31/98

Lab ID:

0398G07049

12/03/98

Sample Matrix:

Soil

Date Received: Date Analyzed:

Report Date:

Date Sampled:

12/07/98 12/24/98*

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 was re-analyzed to verify results.

Phone (505) 326-4737 Fax (505) 325-4182

2506 West Main Street, Farmington, NM 87401

DIESEL RANGE ORGANICS - DRO

ENERGEN RESOURCES

Project ID:

Jicarilla West 8A - Sep. Pit

12/29/98

Sample ID:

Landfarm Comp #1

12/03/98

Lab ID:

0398G07049

12/03/98

Sample Matrix:

Soil

Date Received:
Date Analyzed:

Report Date:

Date Sampled:

12/17/98

Condition:

Cool/Intact

TPH DIESEL-RANGE (MOD EPA 8015)	RESULT	DETECTION LIMIT
Diesel-Range Petroleum Hydrocarbons	16	5.0 mg/Kg

ND - Analyte not detected at the stated detection limit.

Reference:

Comments:

Reported By:

Reviewed By



CHAIN OF CUSTODY RECORD

1633 Terra Avenue Sheridan, Wyoming 82801 Telephone (307) 672-8945			Relinquished by: (Signature)	Helinquished by: (Signature)		Relinquished by: (Signature)											Landage Comp#1 12	Sample No./	Sampler: (Signature)	7	Client/Project Name
1701 Phillips Circle Gillette, Wyoming 82718 Telephone (307) 682-8945	_			Y			3										12/2/18 12/00	Date Time		urus)	
e 2506 82718 Farmi 82-8945 Telepi	Inter-Mountain Laboratories Inc										and the second							Lab Number	Chain of Cu	[-) [-]	Proj
2506 West Main Street Farmington, NM 87401 Telephone (505) 326-4737	ain Labors		Date	Date	25/8 0												10.	2	Chain of Custody Tape No.	10013A-50	Project Location
1160 Rese Bozeman, Telephone	tories Inc	177	Time Received	Time Received	09:00	Time Received											-	Matrix	-	- Sep. P.+	
1160 Research Drive Bozeman, Montana 59718		1. 11. 14	d by laboratory: (Signature)	d by: (Signature)		d by: (Signature)	•								\ \ \		- X	No. of Contain			
-	•		Signature)		- 										1					ANALYSES /	/
11183 State Hwy. 30 College Station, TX 77845 Telephone (409) 776-8945	,												ار در ار در ا	Jos.		-			Ren	ANALYSES / PARAMETERS	
57694			Date	 Date		Date							1101	14110					Remarks	Š	
74		1001	Time	Time		Time			.			}	717	<u>ر</u> د	-				-		