DEPUTY OIL & GAS INSPECTOR

AUG 0 9 1999

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



ONL CON. DIV. DIST. 3

Pit Remediation and Closure Report

Operator:	Taurus Explorat	ion U.S.A., Ir	nc Telephone	e:	(505)	325-6800		
Address:	2198 Bloomfield							
Facility or Well		Jicarilla 95-						
Location:	Jnit or Qtr/QTR	Sec "M" Se	ec 35, T 27 N,	R3W	Count	Υ	Rio A	Arriba
Pit Type:	Separator:	Dehydrator:						
Land Type:	Range					<u> </u>		
	-							
Pit Location:	Pit dimensions:	length: 40 ft	width: 35 f	t	depth:	10 ft		
(Attach Diagram	·						•	
	Reference:	wellhead: X	other:					
N	e from reference:	63 feet					-	
Directio	n from reference:	50	Degrees		East	North	X	
						of		
				Х	West	South		
Depth To Groun			Less than 5	0 feet	(20 points)	<u></u>	
(Vertical distance			50 feet to 9	9 feet	(10 points)		
contaminants to		(Greater than 10	0 feet		(0 points)		0
high water eleva	ations of						_	
groundwater)								
Distance to an E	naamaral Straam							
	pnemeral Stream fry wash greater ti		Less than 100		(10 points)		
ten feet in width		nan (Greater than 100	0 feet		(0 points)		0
CONTROCT IN WIGHT	1							
Distance to Near	rest Lake, Playa,	or Motosina	1 ann thua 400					
	dient lakes, playa,		Less than 100		(10 points)		_
	ife watering pond		reater Than 100	J feet		(0 points)		0
Wildi	no watering portu	?)						
Wellhead Protec	tion Area			V	41	20		
4	eet from a private			Yes		20 points)		•
}	ource, or less that	n		No		(0 points)_		0
	Il other water sour							
		000)						
Distance To Surf	ace Water:		Less than 100) feet	,,	20 points)		
(Horizontal distar		1	100 feet to 1000			10 points)		
•	ers, streams, cree		eater than 1000			•		0
irrigation canals		, 3.		1001		(0 points) _	 -	<u> </u>
			RANKING SCO	RE (T	OTAL	SCORE)		0

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

Dulce, New Mexico 87528

Pit Remediation and Closure Report

Date Remediation Started:	7/7/98	Date Completed	7/16/98							
Remediation Method:	Excavation:	X	Approx. cubic yai	480						
(Check all appropriate	Landfarmed:	X	Insitu Bioremediatio	on:						
sections)	Other:		,							
Remediation Location:	On-site:	X	Off-site:							
(Le. landfarmed on site,										
name and location of										
off site location)										
General Description of Remedial	Action:	Soil was excavat	ted and landfarmed	on location						
				3.1.700417011.						
Groundwater Encountered:	No: X	Yes:	Depth:							
Final Pit	Sample location	: West wall @ 7 fe		it hottom and						
Closure Sampling:	Sample location: West wall @ 7 feet below surface. Pit bottom and walls were analyzed for Headspace (see attachment).									
(If multiple samples,			to (too diagoninoni).							
attach sample results										
and diagram of sample	Sample depth:	7 feet								
locations and depths.)	Sample date:		Sample time:	1123						
Sample Results:	•	7710700	oumple time.	1123						
Soil:			Water:							
Benzene (ppm)	ND	-								
Tctal BTEX (ppm)		-	Benzene (ppb)	 -						
Field Headspace (ppm)		C+h	Toluene (ppb)							
TPH (ppm)			nylbenzene (ppb)							
Groundwater Sample:	Yes:		tal Xylenes (ppb)	·						
(If yes, attach sample results.)	103.		No: X							
, v , s = 1 = 1 = 1 = 1 = 1										
I HEREBY CERTIFY THAT TH	E INICODMATI		DUE AND COME							
THE BEST OF MY KNOWLED	E INFORMATION	IN ABOVE IS II	RUE AND COMPL	ETE TO						
THE BEST OF IMPRINOVEED	GE AND BELIE	:r								
DATE: 8/26/98			Frank M. D							
0/20/90			Frank McDonald							
SIGNATURE SIGNATURE	15/1	ZND TITLE	C D							
Janet a	14/2000	AND TILE:	Env. Division Ma	nager						
AETER REVIEW OF THE RE	01.001105.015									
AFTER REVIEW OF THE PIT	CLOSURE INFO	ORMATION PIT	CLOSURE IS API	PROVED						
IN ACCORDANCE TO THE JIC	JARILLA APAC	HE TRIBE PIT (CLOSURE ORDIN	ANCE						
ADDDOVED, V \	N. 1									
APPROVED: Yes: 🔀	No:	(Reason)		· · · · · · · · · · · · · · · · · · ·						
SIGNED: Let C 7	n (1)		- · O O	90						
SIGNED. TO	10-4		DATE: 9-2	· / \(\delta\)						

Overview of Location and Sampling

Pit Profile : North to South : Comments: Top soil - 10' Soil is dry, clay/shale, with a moderate EPO Ranking Score: Nearest Ephemeral Stream: >1000 Nearest Water Source: Depth to Groundwater: Final Size: 40' x 35' x 10' deep Pit: Abandoned Separator Pit Reference: 63' N 50 W TPH Closure Standard: Nearest Surface Water: Initial Size: 18' x 18' x 3' deep Range: Quad: Yds. Excavated: 480 cy ocation : 3 ¥ from wellhead ₹ Jicarilla 95 - 3 for GRO/DRO and BTEX analysis A sample from the west wall @ 7' was sent to IML and active gas lines. Excavation was limited in all directions due to equipment, hydrocarbon odor, and maroon and gray staining. 10' Bedrock encountered. Section Township: >1000 >1000 >100' 5000 0 Sample # Location 27 N 10 9 35 8 Q Bottom @ 10' W. Wall @ 7 S. Wall @ 7 E. Wall @ 7 N Wall @ 7 MYO 382 359 325 **6**0 463 Pit Profile : East to West : Entrance 1 20#1 Dehydrator < Production Tank Separator Meter Run Earther Pit $\overline{\mathsf{O}}$ Fiberglass Pit Dehydrator Surface Gradient Wellhead West

Environmental Specialist VC

Page 으

Cimarron Oilfield Services

2506 W. Main Street Farmington, New Mexico 87401

GASOLINE RANGE ORGANICS - GRO

Taurus Exploration U.S.A., Inc.

Project ID: Sample ID:

Jicarilla 95-3

Lab ID:

W. Wall @ 7' 0398G04028

Sample Matrix:

Condition:

Soi

Report Date:

07/29/98

Date Sampled:

Date Received:

07/16/98 07/17/98

Date Analyzed:

07/23/98

Cool/Intact

TPH GAS-RANGE (MOD EPA 8015)	RESULT	DETECTION LIMIT
Gasoline-Range Petroleum Hydrocarbons Total Purgeable Hydrocarbons	40.6 58.7	5.0 mg/kg 5.0 mg/kg

ND - Analyte not detected at the stated detection limit.

Reference:

Comments:

2506 W. Main Street Farmington, New Mexico 87401

DIESEL RANGE ORGANICS - DRO

Taurus Exploration U.S.A., Inc.

Project ID: Sample ID:

Jicarilla 95-3 W. Wall @ 7'

Report Date: 07/29/98 Date Sampled: 07/16/98

Lab ID:

0398G04028

Date Received: 07/17/98 Date Analyzed: 07/23/98

Sample Matrix: Condition:

Cool/Intact

Soil

TPH GAS-RANGE (MOD EPA 8015)	RESULT	DETECTION LIMIT
Diesel-Range Petroleum Hydrocarbons	F 0	

5.3

5.0 mg/kg

ND - Analyte not detected at the stated detection limit.

Reference:

Comments:

Repórted By:

VOLATILE AROMATIC HYDROCARBONS

Taurus Exploration U.S.A., Inc.

Project ID:

Sample ID: Lab ID:

Sample Matrix:

Condition:

Jlcarilla 95-3 Sep. Pit

W. 'Wall @ 7'

0398G04028 Soil

Cocl/Intact

Report Date:

07/29/98

Date Sampled:

07/16/98 11:23am

Time Sampled: Date Received:

07/17/98

Date Extracted:

NA

Date Analyzed:

07/17/98

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:

Surrogate

Percent Recovery

Acceptance Limits

Bromofluorobenzene

87%

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:

affing



CHAIN OF CUSTODY RECORD

1633 Terra Avenue 1701 Phillips Circle Sheridan, Wyoming 82801 Gillette, Wyoming 82718 Telephone (307) 672-8945 Telephone (307) 682-8945	inter-Mo		Relinquished by: (Signature)	neinquisited by: i-signature)		telinquished by: (Signature)						/		Se 35-3 (1.6 m. 7 2761) 11-5	Identification Date	Sample No.	Sampler: (Signature)	Towns Explication 1811 Tike	Cilant/Droinet Name
Telephone (505) 326-4737 TICE - WICH LAIT LADOI ALOTTES, ITIC. (A) (1) (2) (3) (4) (5) (4) (6) (6) (6) (6) (6) (6) (6) (6) (6) (6	Printain Laboratorios Lab	Tale lime Heceived by	108 2	Time	"	Time								Soul	umber Matrix		Chain of Custody Tape No.	Junith 15-3 Symiater P.	
☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	July 110 mon	y laboratory: (Signature)		Received by: (Signature)	and broken on the	Received by: (Signature)								1 1 1	No. c Cont			+ / ANALYSES / PARAMETERS	
54538 45	7-17-808.21	Date Time		9	11/11/08 72/	_	1. Mindred	minct hand		-			The state of the s				 	METERS	

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>	T-11 (505)								
T .									
Address: 2193 Bloomfield Hwy, Farmin	gton N.M. 87401								
Facility or Well Name: <u>Jicarilla 95 – 3</u>									
Location: Unit or Otr/Otr Sec M Sec	35 T 27 N R 3 W County Rio Arriba								
	23 1 27 IV R 3 W County Rio Arriba								
Land Type: Range									
Date Remediation Started: 7/7/98 Date	te Completed: 12/11/09								
3									
Remediation Method: Landfarmed X	Approx. cubic yards 480								
Composted									
Composied									
Other	_								
Depth to Groundwater: (pts) 0	Final Clarum Co								
	Final Closure Sampling:								
Distance to an Ephemeral Stream (nts) 0									
Stream (pts) 0	Sampling Date: <u>12/11/98</u> Time: <u>08:30</u>								
Distance to Neares: Lake,	Sample Results:								
Playa, or Watering Pond (pts) 0	sumple results.								
Wellhand Protection Av. (1)	Field Headspace (ppm) 21.7								
Wellhead Protection Area (pts)0									
Distance to Surface Water (pts)0	TPH (ppm) <28 Method 8015								
	Other:								
RANKING SCORE									
(TOTAL POINTS): 0									
I HEREBY CERTIFY THAT THE INFORMATION ABO KNOWLEDGE AND BELIEF	VE IS TRUE AND COMPLETE TO THE BEST OF MY								
DATE: 1/6/99 PRINTED NAI	ME VIDOU CHANDS								
	MEVIRGIL CHAVEZ								
SIGNATURE Juji	AND TITLE ENV. SPECIALIST								
AFTER REVIEW OF THE SOIL REMEDIATION INFOR	MATION. ON-SITE SOIL REMEDIATION IS								
ADDROVED IN ACCORDANCE TO THE JICARILLA A	PACHE TRIBE PIT CLOSURE ORDINANCE.								
APPROVED: YES NO (REASON) LONG CONDITION OF THE PROPERTY OF TH									
SIGNED DA	TE: 1-7-99								

Environmental Specialist : JE Comments: Soil is moist,pale brown,sandy/loam, with no visible staining or detectable hydrocarbon odor.

A sample from composite # 1 was sent to IML for GRO/DRO analysis. Sample # Location 3 ₩ 12 5 9 œ 35 Comp 2 Comp 3 Comp 1 OVM 15.6 11.6 21.7 Overview of Landfarm and Sampling Surface Gradient North well head meter run ယ seperator production tank 헟. land farm meter run () dehy N N 2 N

Date Started: July 7, 1998_Date Completed: ___December 11, 1998__

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

2506 West Main Street, Farmington. NM 87401

GASOLINE RANGE ORGANICS - GRO

ENERGEN RESOURCES

Project ID: Sample ID:

Jicarilla 95-3

0398G07295

Lab ID:

Landfarm Comp #1

Sample Matrix:

Soil

Condition:

Cool/Intact

Report Date:

12/31/98

Date Sampled:

12/11/98

Date Received:

12/11/98

Date Analyzed:

12/30/98*

15	'n GA	9-KA	NOE	(IV	IUL) t:	1	۱8	01	5}	
				-					4 30 1	33333	

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 holding times, however, due to instrument problems and

QC failure, the sample had to be re-analyzed to verify results.

Reported By

Reviewed Bv

Phone (505) 326-4737 Fax (505) 325-4132

2506 West Main Street, Farmington, NM 87401

DIESEL RANGE ORGANICS - DRO ENERGEN RESOURCES

Project ID: Sample ID: Jicarilla 95-3

Landfarm Comp #1

Lab ID:

0398G07295

Ccol/Intact

Sample Matrix:

Scil

Condition:

Report Date:

12/31/98

Date Sampled:

12/11/98

Date Received:

12/11/98

Date Analyzed:

12/23/98

TPH DIESEL-RANGE (MOD EPA 8015)	RESULT	DETECTION LIMIT
Diesel-Range Petroleum Hydrocarbons	23	5.0 mg/Kg

ND - Analyte not detected at the stated detection limit.

Reference:

Comments:

Reported By:



CHAIN OF CUSTODY RECORD

1633 Terra Avenue Sheridan, Wyoming 82801 Telephone (307) 672-8945	Reinquished by: (Signature)		Relinquished by: (Signature)	Relinquished by: (Signature)							CONV H /	sample No./ lentification	Sampler: (Signature)	EDecise.	Client/Project Name
Inter-I			1/sta								1311.42 0830	Time	128	Resources	
Inter-Mountain Laboratories, Inc. Classification Captures, In	Date Time	emi	18/	_		F)					8	Lab Number Matrix	Chain of Custody Tape No.	Sic 95.3	Project Location
es, inc. 1160 Research Drive 1160 Research Drive Bozeman, Montana 59718 College Station, TX 77845 Telephone (406) 586-8450 Telephone (409) 776-8945	Received by laboratory: (Signature)	Received by: (Cignature)	Received by: (Signature)								×	No. of Contain		ANALYSES / PARAMETERS	
	Date Time	Daie	Date Time				Winci Mana Challan	2011	j				Remarks	RAMETERS	