Denny S. Fout

epoly oil & GAS INSPECTO

AUG 0 9 1999

Jicarilla Apache Tribe
Environmental Protection Office

P.O. Box 507

Dulce, New Mexico 87528



OIL CON. DIV.

Approved

Pit Remediation and Closure Report

Operator:	Taurus Explorat	on Ø.S.A., Inc	Telephone:	(505)	325-6800		
Address:	2198 Bloomfield			1000/	-20-0000		
Facility or Wel	l Name:	Jicarilla 99-1		····			
Location:	Unit or Qtr/QTR	Sec "N" Sec	24, T 26 N, R 3 W	V Count	v	Rio A	rriha
Pit Type:	Separator:	Dehydrator:	Other: X - Abar				iriba
Land Type:	Range				- Parator		······································
					<del></del>		<del></del>
Pit Location:	Pit dimensions:	length: 14 ft	width: 14 ft	depth:	9 ft		
(Attach Diagrai	n)				<u> </u>	-	
	Reference:	wellhead: X	other:				
Foota	ge from reference:	120 feet	<del></del>	<del></del>		-	
Direction	on from reference:	60	Degrees	- East	North		
	•			_	of		
,			. X	West	South	Х	
				-	••••	<del></del>	
Depth To Grou			Less than 50 feet	(	20 points)		
(Vertical distan			50 feet to 99 feet		10 points)		
contaminants to	seasonal	Gre	eater than 100 feet		(0 points)		0
high water elevi	ations of				(		
groundwater)							
	Ephemeral Stream:	ŧ	ess than 100 feet	(*	(10 points)		
	dry wash greater th	an Gre	ater than 100 feet		(0 points)		0
ten feet in width	)				•		
Distance							
Distance to Nea	rest Lake, Playa, o		ess than 100 feet	(1	0 points)		
Pond: (Downgra	dient lakes, playas	, and Grea	iter Than 100 feet	(	(0 points)		0
iivestock or wild	life watering ponds	)			_		
Mollhood Dasks							
Wellhead Protect			Yes	(2	0 points)		
	eet from a private		No	(	0 points)_		0
	source, or less than						1
TOOU TEEL TOM A	Il other water source	es)					
Distance To Surf	ace Water				_		
	nce to perennial		ess than 100 feet		0 points)		
	ars, streams, creek		feet to 1000 feet		0 points)		ļ
rrigation canals		s, Great	er than 1000 feet	((	opoints)_		0
Garratt Garratt	aria ditories.)	D.4	NVINO COORE (=	.~~			
		KA	NKING SCORE (T	OTALS	CORF		∩ I

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

## Pit Remediation and Closure Report

Date Remediation Started:	5/28/98	Date Completed	d 5/28/98	
Remediation Method:	Excavation:	X	Approx. cubic yai	50
(Check all appropriate	Landfarmed:	X	Insitu Bioremediation	
sections)	Other:		•	<u>''</u>
Remediation Location:	On-site:	X	Off-site:	
(l.e. landfarmed on site,		<del> </del>		
name and location of				
off site location)				
General Description of Remedial	Action:	Soil was excava	ated and landfarmed or	n location
			Total Services Commence of	H IOOGROM.
Groundwater Encountered:	No: X	Yes:	Depth:	
Final Pit	Sample location		feet below surface. Pit	<del></del>
Closure Sampling:			ice (see attachment).	
(If multiple samples,	<del></del>	1	be (see alleening.	<del></del>
attach sample results	<del></del>			
and diagram of sample	Sample depth:	9 feet		
locations and depths.)	Sample date:		Sample time:	1415
Sample Results:	•	0,40,00	, oampie time.	1410
Soil:			Water:	
Benzene (ppm)		-	Benzene (ppb)	
Total BTEX (ppm)		-	Toluene (ppb)	
Field Headspace (ppm)		- F#	hylbenzene (ppb)	<del></del>
TPH (ppm)			ital Xylenes (ppb)	<del></del>
Groundwater Sample:	Yes:		No: X	
(If yes, attach sample results.)	100.		NO. A	
,				
HEREBY CERTIFY THAT TH	E INFORMATIO	ON ABOVE IS T	DUE AND COMPLE	<del></del>
THE BEST OF MY KNOWLED	E IM ONWALL	JN ADUVE 10 11 Fe	RUE AND COMPLE	ITE TO
The same of the factory manager	GE AIND DELLE	ir.		
DATE: 8/27/98			The of Market and	
27(1L. 0/2/100			Frank McDonald	
SIGNATURE Sund	7/1/1 1	AND TITLE.		
JOHA TORE A por	1/2/11/1	AND TITLE:	Env. Division Mana	ager
AETED DEVIEW OF THE DIT				
AFTER REVIEW OF THE PIT (	SEUSUKE INFO	DRMATION PIL	CLOSURE IS APPI	ROVED
N ACCORDANCE TO THE JIC	SARILLA APAU	HE TRIBE PIT (	CLOSURE ORDINA	NCE.
APPROVED: Yes: 🔀	<b>N1</b> .	· <del>-</del>		
APPROVED. 165.	No:	(Reason)		
SIGNED: Keer ( 7	$\gamma \Lambda$		$G = G \circ G$	01
SIGNED Lee /	VIam	4	DATE: 9-2-7	7

Pit Profile : North to South : Comments: EPO Ranking Score: Nearest Ephemeral Stream: >1000 Nearest Surface Water: Pit: Abandoned Separator Pit Reference: 120' S 60 W TPH Closure Standard: Nearest Water Source: Depth to Groundwater: Final Size: 14'x 14'x 9'deep Range: Initial Size: 12' x 12' x 3' Quad: rds. Excavated: 50 cy ocation : appoximately 8". is present. 1' to bottom, soll is clay loam, brown in color. Gray Staining occurred from 3' to 6' with a diameter of Sample from bottom, sent to IML for GRO/DRO analysis Top soil is sandy loam, hydrocarbon odor and staining 3 W from wellhead Z Jicarilla 99 # 1 Section: Township: ×1000 >1000 ×100' 8 Sample # 26 N おコ 5 24 South E. Wall @ 6" 10 # W. Wall @ 6" N. Wall @ 6' Location Bottom @ 9' 88 Pit Profile : East to West : Overview of Location and Sampling Dehydrator <u>10</u># Meter Runs Separator Earthen Pit Road ယ် Surface Gradient West Wellhead

Taurus Exploration U.S.A. Inc.

Date Started :

May 28, 1998 Date Completed :

May 28, 1998

Environmental Specialist : FM

Cimarron Oilfield Services

Page

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**GASOLINE RANGE ORGANICS - GRO** 

### **TAURUS EXPLORATION**

Project ID:

Jicarilla 99 #1

0398G03011

Sample ID:

Abandoned Sep Pit-Center Btm @9'

Lab ID: Sample Matrix:

Soil

Condition:

Cool/Intact

Report Date:

06/30/98

Date Sampled: Date Received: 05/28/98

05/29/98

Date Analyzed:

06/29/98

		***************************************
TOU OAS DANGE WAS		
TPH GAS-RANGE (MOD EPA 8015)	RESULT	DETECTION TO THE
	M-SGC1	DETECTION LIMIT
Gasoline-Range Petroleum Hydrocarbons		
Cabolino range renoleum nyurocarbons	5.8	5.0 mg/kg
Canalia B. C		o.o mg/kg
Gasoline Range Organics as Gasoline	ND	F 0 "
	ND	5.0 mg/kg
Total Volatile Hydrocarbons		0 0
Total Velatile Hydrocarbolis	6.3	5.0 mg/kg
		J.O 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:

2506 W. Main Street Farmington, New Mexico 87401

# **DIESEL RANGE ORGANICS - DRO**

### **TAURUS EXPLORATION**

Project ID: Sample ID:

Lab ID:

Jicarilla 99 #1

Abandoned Sep Pit-Center Btm @9' 0398G03011

Sample Matrix:

Soil

Condition

Report Date:

06/30/98

Date Sampled: Date Received:

05/28/98

05/29/98

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:





1633 Terra Avenue Sheridan, Wyoming 82801 Telephone (307) 672-8945			neinquisited by: (algnature)	decourse of Confinence)	Frank Mal) mal	relinquished by: (Signature)								10 0 C	Trake to the	Alundarda Joseph		Sumple No	That Ma Dre	Sampler (Signature)	Cilent/Project Name
1701 Phillips Circle Gillette, Wyoming 82718 Telephone (307) 682-8945	Inte		A THE REAL PROPERTY OF THE PRO		2	)								1415 J415			Date Time L			Wolaston	
2506 Wes 8 Farmingto 945 Telephone	r-Mountain				¥1												Lab Number		Chain of Custody Tape No.	Je	Project
2506 West Main Street Farmington, NM 87401 Telephone (505) 326-4737	Inter-Mountain Laboratories, Inc		Date Time	Date Time	3	Date Time					50			\$ <u>`</u>			Matrix		ody Tape No.	Marilla 99	Project Location
1160 Research Drive Bozeman, Montana 59718 Telephone (406) 586-8450	ies, Inc. $U = U$	Bully Jan	Received by laboratory: (Signature)	Received by: (Signature)		Received by: (Signature)			/					\ \ \			No. Con			9#//	
11183 State Hwy. 30 18 College Station, TX 77845 Telephone (409) 776-8945			(Signature)			)  -  -  -				(00	have									ANALYSES / PARAMETERS	
54038	ı	5-29-98 18:43	Date Time	Date Time		Date Time				د الد	Ed Toliving								Remarks	ETERS	1

### 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	gton N.M. 87401
Facility or Well Name: <u>Jicarilla 99 - 1</u>	
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	ate Completed: 11/25/98
Remediation Method: Landfarmed X	Approx. cubic yards100
Composted	
Other	- -
Depth to Groundwater: (pts) 0	Final Closure Sampling:
Distance to an Ephemeral Stream (pts) 0	Sampling Date: <u>11/25/98</u> Time: <u>11:00</u>
Distance to Nearest Lake, Playa, or Watering Pond (pts)0	Sample Results:
Wellhead Protection Area (pts)0	Field Headspace (ppm) 2.8
Distance to Surface Water (pts)0	TPH (ppm) <30 Method 8015 Other:
RANKING SCORE (TOTAL POINTS): 0	Other
I HEREBY CERTIFY THAT THE INFORMATION ABO KNOWLEDGE AND BELIEF DATE: 1/7/99 PRINTED N	
SIGNATURE They	AND TITLE ENV. SPECIALIST
AFTER REVIEW OF THE SOIL REMEDIATION DEFOR APPROVED IN ACCORDANCE TO THE JIGARILLA A APPROVED: YES X NO (REASON)	PACHE TRIBE PIT CLOSURE ORDINANCE/
1/ 10	

Environmental Specialist : JE 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. Overview of Landfarm and Sampling o well head meter runs seperator ρį surface gradient land farm north

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

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 withing 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 99-1

Sample ID:

Landfarm Sep. Pit Comp #1

Lab ID:

0398G06936

Cool/Intact

Sample Matrix:

Condition:

Soil

Report Date:

12/22/98

Date Sampled:

11/25/98

Date Received:

12/01/98

Date Analyzed:

12/16/98

TPH DIESEL-RANGE (MO	

RESULT

**DETECTION LIMIT** 

Diesel-Range Petroleum Hydrocarbons

25

5.0 mg/Kg

ND - Analyte not detected at the stated detection limit.

Reference:

Comments:



# CHAIN OF CUSTODY RECORD

	(	College Station, TX 77845 Telephone (409) 776-8945	Telephone (406) 586-8450		Telephone (505) 326-4737	Telephone (307) 682-8945	Telepho	Telephone (307) 672-8945	
7	57718	11183 State Hwy. 30	1160 Research Drive		2506 West Main	☐ 1701 Phillips Circle Gillette, Wvomina 82718	1701 P Gillette,	1633 Terra Avenue Sheridan, Wyoming 82801	
			s, Inc.	oratories	Inter-Mountain Laboratories, Inc.	Inter-M	)	ם	
167	12/10:	Ć	1 William.						
Time	Date	ature)	Received by laboratory: (Signature)	Time	Date		***		
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			No. of Contain	Matrix	Lab Number		Date	Sample No./	
	Remarks	/ / Ren	ers	Pe No.	Chair of Castody Tape No.		7	war Cherry	
	7			DO NIS	hain of Custody Ta			Sampler: (Signature)	
	ñ	ANALYSES / PARAMETERS		40.4 100	Troject Focation		() () () ()		
				#   	Droinet I one			Client/Project Name	

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