District I
P.O. Box 1980, Hobbs, NM
District II
P.O. Drawer DD, Artesia, NM 88211
District III
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico Energy, Minerals and Natural Resources Department

SUBMIT I COPY TO APPROPRIATE DISTRICT OFFICE AND I COPY TO SANTA FE OFFICE

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

PIT REMEDIATION AND CLOSURE REPORT

Operator: Er	nergen Resources (Taurus	Exploration)	Telephone: _	(505) 326-6131	_
Address: 21	98 Bloomfield Highway	Farmington, NM 87401			
Facility Or: Number 1	McCroden A #2				
Location: Unit or Qtr	Otr Sec O Sec 9	T <u>25N</u> R <u>3W</u>	_CountyRi	o Arriba	_ _
Pit Type: Separator	Dehydrator_	Other Blow Pit			
Land Type: BLM	, State	, Fee <u>X</u> ,	Other	1315	A SOL
Pit Location: (Attach diagram)	Pit dimensions: Length Reference: wellhead			JAN 200 RECEIV OILCON.	ED 12
	Footage from reference:		ast North of /est South	X	19/3
Depth to Ground Wa (vertical distance fro contaminants to seas highwater elevation ground water)	m onal	Less than 50 ft to 9 X Greater		(20 points) (10 points) (0 points)	0
Wellhead Protection (less than 200 feet fr domestic water sour 1000 feet from all or	rom a private ce, or: less than	<u>X</u>	Yes No	(20 points) (0 points)	0
Distance to Surface (Horizontal distance lakes, ponds, rivers, irrigation canals and	e to perennial streams, creeks,	200 fee	an 200 feet t to 1000 feet than 1000 feet	(20 points) (10 points) (0 points)	0
P:\pits\PrrC@.WK3		RANKING S	CORE (TOT	AL POINTS):	0

Date Remediation Started:	8/21/98	Date Completed:	1/27/99
	Excavation X	Approx. cut	pic yards15
	Landfarmed X	Insitu Biore	mediation
	Other		
Remediation Method:	Onsite X	Offsite	
(Check all appropriate			
sections)			
General Description of Remedial	Action: On 8/24/98, tl	he pit was excavated to	a depth of 5 feet where
		-	est wall of the pit at
			GRO/DRO analysis.
	re landfarmed on site. C		
provided concentrat	tions below NMOCD gu	idelines.	
 			· · · · · · · · · · · · · · · · · · ·
			
Ground Water Encountered	i: No X	Yes	Depth
Ground Water Encountered	. 10	103	
Closure Sampling: (if multiple samples,	mple location West Wal	11	
attach sample results and diagram of sample Sa	mple depth 4 feet (Bedro	ck at 5')	
locations and depths)	mple date <u>8/24/98</u>		Sample time 13:05
San	mple Results		
	Benzene(ppm)		
	Total BTEX (PPM)		
	Field Headspace (ppm)	90.3	
	-10		
	трн <u><10</u>		
Ground Water Sample: Yes	NoX	(if yes, attach sample	e results)
I HEREBY CERTIFY THAT TO OF MY KNOWLEDGE AND	THE INFORMATION ABOVE IS BELIEF.	S TRUE AND COMPLETED TO	O THE BEST
12/22	199	TTED MANGE Virgil Char	107
DATE 12/22/	PRIN and I	NTED NAME <u>Virgil Chav</u>	
SIGNATURE MIG	and I	TITLE <u>Environme</u>	ntal Specialist

1/Bedrock////////////////////////////////////	//////////////////////////////////////			5 //Bedrock////////	5 5	
4	ω		<u>N</u>			
West	East		South		North	
	Pit Profile : East to West :				Pit Profile : North to South :	Pit Profile
-			A sample from the west wall at 4' was sent to IML for GRO/DRO and BTEX analysis.	the west wall at and BTEX analy	A sample from the west wall at 4'vector GRO/DRO and BTEX analysis	
	Blow Pit					••••
Pit#2				olid sandstone	5' Bedrock - Solid sandstone	
		on odor.	with no visible staining and a strong hydrocarbon odor.	staining and a s	with no visible s	
		•	own, sandy/loam	l is dry, dark bro	!	Comments:
!				12	, ,	
Entrance	Gradient			5000 11	-	TPH Clos
				0 10	:* 	NMOCD F
				>1000' 9	1	Nearest S
				>1000' 8	1	Nearest W
				>100' 7	Depth to Groundwater:	Depth to G
Tank	Condensate Tank			6		
		70.2	C.Bottom@5	5		Yds Exca
	The second secon	90.3	W. Wall @4"	4		Final Size
Production One	Pit#1	30.1	E. Wall @ 4"	ω		Initial Size
		35.1	S. Wall @ 4"	2	from wellhead	
	Production Unit / Tank Pit	23.3	N Wall @ 4		Reference : 55' N 10 E	Reference
		MVO	le # Location	Sample #	Pit: Blow Pit (pit # 2)	Pit: Blow
North			12	Township: 25 N	3W Tov	Range
	Meter Run			Section: 9	O Sec	Quad:
					McCroden A # 2	Location:
	Overview of Location and Sampling	7-				
	Campling:					

GASOLINE RANGE ORGANICS - GRO

Taurus Exploration U.S.A., Inc.

Project ID:

McCroden A#2 Blow Pit

Sample ID: Lab ID:

W. Wall @ 4' 0398G04869

Sample Matrix:

Soil

Condition:

Report Date:

09/01/98 08/24/98

Date Sampled: Date Received:

Date Analyzed:

08/25/98 08/28/98

Cool/Intact

	RESULT DETECTION LIMIT
TPH GAS-RANGE (MOD EPA 8015)	

Gasoline-Range Petroleum Hydrocarbons

<5.0

5.0 mg/kg

ND - Analyte not detected at the stated detection limit.

Reference:

Comments:

Diesel Range Organic - DRO

Taurus Exploration U.S.A., Inc.

Project ID:

McCroden A#2 Blow Pit

Report Date:

08/31/98

Sample ID:

Mc. A#2 B.P.W. Wall @ 4'

Date Sampled:

08/24/98

Lab ID:

0398G04869

Date Received:

08/25/98

Sample Matrix:

Soil

Date Analyzed:

08/28/98

Condition:

Cool/Intact

		CTION LIMIT
TPH DIESEL-RANGE (MOD EPA 8015) RESULT		
	_	

Diesel-Range Petroleum Hydrocarbons

< 5.0

5.0 mg/kg

Total Extractable Petroleum Hydrocarbons

<5.0

5.0 mg/kg

Quality Control:

Surrogate

Percent Recovery Acceptance Limits

O-Terphenyl

<u>116%</u>

70-130%

Comments:

Reference:

USEPA Manual SW-846, Methods, 3510,3550a, 8015Mod, Revision 2, 1996.

Hydrocarbons in Soil - 8015AZ, Revision 0, 1998.



CHAIN OF CUSTODY RECORD

54066	11183 State Hwy. 30 College Station, TX 77845 Telephone (409) 776-8945	☐ 1160 Research Drive Bozeman, Montana 59718 Telephone (406) 586-8450	et 1160 F 01 Bozerr -4737 Teleph	Solution (505) 326-4737	\text{\bar{\chi}} \text{Sle} \text{250} \text{\$\gamma 82718} \text{Far} \text{\$682-8945} \text{Tele}	1701 Phillips Circle Gillette, Wyoming 82718 Telephone (307) 682-8945		(1) 1633 Terra Avenue Sheridan, Wyoming 82801 Telephone (307) 672-8945	
		ic.	atories, Ir	tain Labor	Inter-Mountain Laboratories, Inc.				
-2	To salvas	Chrin		Caro			:	Relinquished by: (Signature)	
	ature)	Received by laboratory: (Signature)	Time Recei	6					
		Received by: (Signature)	,					Relinquished by: (Signature)	
		ma lange of the la	07.42	1				111111111111111111111111111111111111111	
	/	Received by: (Signature)	Time Receiv	Date		-		Relinquished byx(Signature)	
-1	<u>Z</u>								
3		<i> </i>							
4	COOL								
1									
ı									
- 1									
- 1									
1									
1						/			
- 1									-
1									
1								,	
- 1							_	, h e'	
1		- X	, /	50.1		8 13:05	8/24/18	McCurlind BEHANDER	
1		No. Con	Matrix	2	Lab Number	Time	Date	Sample No./	
					-	X	\		
· 3.	Remarks	ers DRO	·	Chain of Custody Tape No.	Chain of C			Sampler: (Signature)	
1	ANALYSES / PARAMETERS		A#2 Bbw Pi+	Mc Croden h	140 M	11511	Malion	Client/Project Name	
- 1								Laboratories, Inc.	_

Size Yds: Environmental Specialist : JE Reference 30' S 10 E from Pit: Prod. Unit/Tank/Blow Pit Comments Township: Quad Location: McCroden A # 2 ω 428 5 - Point Composites 100' x 60' x 2' wellhead. Soil is moist, pale brown, sandy/loam, with minor staining and a slight hydrocarbon odor. A sample from composite # 2 was sent to IML for GRO/DRO analysis. 25 N 0 Range Section Sample # ა ▼ 10 œ တ ဖ ဖ Ç 4 ω 11 Comp 1 Comp 2 Comp 3 Location Ø M 3.3 36 1.1 Overview of Landfarm and Sampling: Gradient ω N ω N Production Unit / Tank Pit ω N ω Pit # 1 Landfarm N Meter Run N Wellhead Condensate Tank Pit # 2 Production Unit North Entrance



Inter-Mountain Laboratories, Inc.

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

Energen Resources

Project:

McGroden A #2

Sample ID:

Landfarm Comp 1 0399W00620

Lab ID: Matrix:

Condition:

Soil

Warm

2506 West Main Street, Farmington, NM 87401

Date Reported: 02/02/99

Date Sampled: 01/27/99

Date Received: 01/27/99

Date Analyzed: 01/28/99

Parameter	Analytical Result	PQL	Units
METHOD 8015-GASOLINE RANGE ORGANICS			
Gasoline Range Organics Gasoline Range Organics as Gasoline	<5 <5	5 5	mg/Kg mg/Kg

Reference: GRO - USEPA Method for Determination of Gasoline Range Organics, Revision 5, February 1992.

WTPH-G Total Petroleum Hydrocarbons Analytical Methods for Soil, Washington State Department of Ecology, Revision 3, October 1991.

Reviewed By:

Sharon Willams, Organic Lab Supervisor



Inter-Mountain Laboratories, Inc.

McGroden A #2

Project: Sample ID: Landfarm Comp 1

Lab ID:

0399W00620

Matrix: Soil Condition: Warm 2506 West Main Street, Farmington, NM 87401

Date Reported: 02/02/99 Date Sampled: 01/27/99

Date Received: 01/27/99

Date Analyzed: 02/01/99

Parameter	Analytical Result	PQL	Units
METHOD 8015 - DIESEL RANGE ORGANICS			
Diesel Range Organics	<5	5	mg/Kg
Diesel Range Organics as Diesel	<5	5	mg/Kg
Quality Control - Surrogate Recovery	%	QC Li	mits
o-Terphenyl(SUR-8015)	71	70 -	130

Reference: DRO - USEPA Method for Determination of Diesel Range Organics. Revision 2, February 1992.

WTPH-D Total Petroleum Hydrocarbons Analytical Methods for Soil, Washington State Department of Ecology, Revision 3,

October 1991.

Reviewed By:

Sharon Willams, Organic Lab Supervisor



CHAIN OF CUSTODY RECORD

46009	11183 State Hwy. 30 College Station, TX 77845 Telephone (409) 776-8945	ive a 59718 36-8450	1160 Research Drive Bozeman, Montana 59718 Telephone (406) 586-8450	737	2506 West Main Street Farmington, NM 87401 Telephone (505) 326-4737	ζ'n	1701 Phillips Circle Gillette, Wyoming 82718 Telephone (307) 682-8945	1633 Terra Avenue Sheridan, Wyoming 82801 Telephone (307) 672-8945
•			s, Inc.	ratories	tain Labo	Inter-Mountain Laboratories, (nc.	=	ì
12/14/14/D	Chrys	KINY	Husti					
Date Time	ture)	atory: (Şignat	Received by laboratory: (Signature)	Time	Date			Relinquished by: (Signature)
Care		(Signature)	Received by: (Sign	Time	Date			Relinquished by: (Signature)
		,		1430	199			WWiall
Date Time		nature)	Received by: (Signature)	Time	Date		124	Relinquished by: (Signature)
_				-				
				,				
								A DOLD THE STATE OF THE STATE O
								Comp 1
7	*大uS	X			50:1		0000 PB-FG-	Conclain 1-2
		beo	No Co	Matrix		Lab Number	Date Time	Identification D
		2108	o. of					Cample No.
ırks	Remarks				Chain of Custody Tape No.	Chain of C	12th	Sampler: (Signature)
	ANALYSES / PARAMETERS	AN	AH2 /		McGroden	N	SON	Ther
					Project Location	Pro		Client/Project Name
			; ; ; ((·* (Laboralories, Inc.