UK

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

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

SUBMIT 1 COPY TO APPROPRIATE DISTRICT OFFICE AND 1 COPY TO SANTA FE OFFICE

PIT REMEDIATION AND CLOSURE REPORT

Operator : Energen Resources (Taurus Exploration) Telephone: (505) 326-6131

Address: 2198 Bloomfield Highway Farmington, NM 87401

Facility Or: Cullins Federal #3
Well Name

Location: Unit or Qtr/Qtr Sec D Sec 4 T 24N R 3W County Rio Arriba

Pit Type: Separator _____ Dehydrator _____ Other Separator/Production Tank

Land Type: BLM _____, State X, Fee _____, Other _____

JAN 2000
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OIL CON. DIV
DIST. 3

Pit Location: (Attach diagram)
Pit dimensions: Length 25 ft, width 25 ft, depth 11 ft

Reference: wellhead X other _____

Footage from reference: 125 ft

Direction from reference: 10 Degrees _____ East North _____ of
X West South X

Depth to Ground Water: (vertical distance from contaminants to seasonal highwater elevation of ground water) >100 feet	_____	Less than 50 feet	(20 points)
	_____	50 ft to 99 feet	(10 points)
	X	Greater than 100 feet	(0 points) 0
Wellhead Protection Area: (less than 200 feet from a private domestic water source, or: less than 1000 feet from all other water sources).	_____	Yes	(20 points)
	X	No	(0 points) 0
Distance to Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches.)	_____	Less than 200 feet	(20 points)
	_____	200 feet to 1000 feet	(10 points)
	X	Greater than 1000 feet	(0 points) 0

P:\pits\PrrC@.WK3

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: 2/25/99 Date Completed: 10/22/99

Excavation X Approx. cubic yards 230

Landfarmed X Insitu Bioremediation _____

Other _____

Remediation Method: Onsite X Offsite _____

(Check all appropriate sections)

General Description of Remedial Action : On 2/26/99, the pit was excavated to a depth of 11 feet where bedrock was encountered. A soil sample was obtained from the center bottom of the pit at a depth of 11 feet utilizing U.S.E.P.A. protocol and evaluated for GRO/DRO analysis. Excavated soils were landfarmed on site. The landfarm was tested and provided concentrations below NMOCD guidelines.

Ground Water Encountered: No X Yes _____ Depth _____

Final Pit:
Closure Sampling:
(if multiple samples, attach sample results and diagram of sample locations and depths)

Sample location Center Bottom

Sample depth 11 feet (Bedrock)

Sample date 2/26/99 Sample time 13:10

Sample Results

Benzene(ppm) _____

Total BTEX (PPM) _____

Field Headspace (ppm) 79.1

TPH <10

Ground Water Sample: Yes _____ No X (if yes, attach sample results)

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

DATE 12/22/99 PRINTED NAME Virgil Chavez

SIGNATURE Virgil Chavez and TITLE Environmental Specialist

Client : Energen Resources (Taurus Exploration) Date Started : February 25, 1999 Date Completed : February 26, 1999

Location : Cullins Federal # 3

Quad : D Section : 4

Range : 3 W Township: 24 N

Pit : Separator/Production Tank
Reference : 125' S 10 W from wellhead
Initial Size : 15' x 15' x 3' deep
Final Size : 25' x 25' x 11' deep
Yds. Excavated : 230 cy

Depth to Groundwater:	>100'
Nearest Water Source:	>1000'
Nearest Surface Water:	>1000'
NMOCD Ranking Score:	0
TPH Closure Standard:	5000

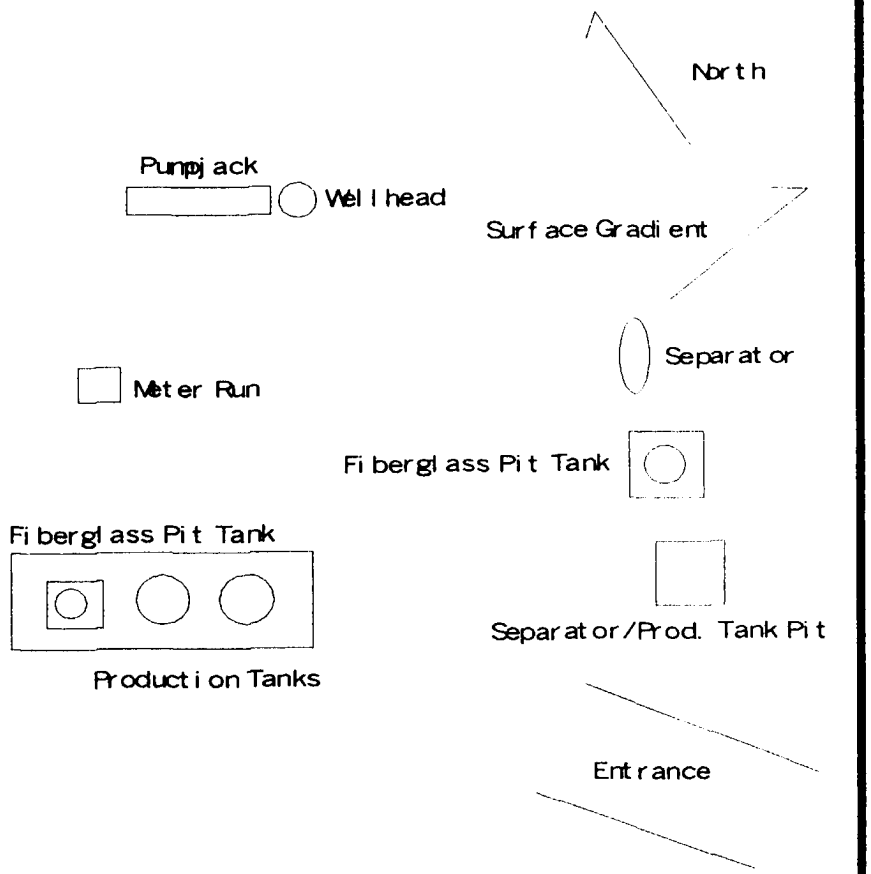
Sample #	Location	OVM
1	N. Wall @ 9'	0.8
2	S. Wall @ 9'	0.2
3	E. Wall @ 9'	23.5
4	W. Wall @9'	11.6
5	C.Bottom@11'	79.1
6		
7		
8		
9		
10		
11		
12		

Comments : Top soil - 11' Soil is moist, medium brown, sandy/loam with gray staining and a strong hydrocarbon odor.

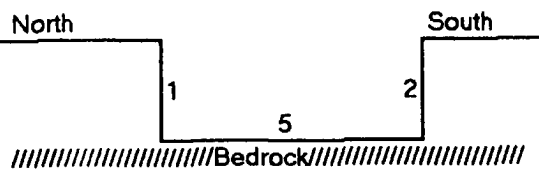
11' Bedrock - solid sandstone

A sample from the center bottom at 11' was sent to IML for GRO/DRO analysis.

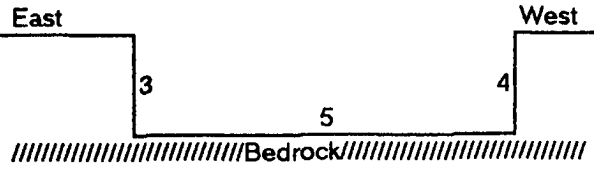
Overview of Location and Sampling :



Pit Profile : North to South :



Pit Profile : East to West :



Environmental Specialist : VEC

Cimarron Oilfield Services

jml

Inter-Mountain Laboratories, Inc.

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

2506 West Main Street, Farmington, NM 87401

Client:	**Energen Resources**		
Project:	**Cullins #3**	**Date Reported:**	03/04/99
Sample ID:	Cullins #3 C. Btm @ 11'	**Date Sampled:**	02/26/99
Lab ID:	0399W01182	**Date Received:**	03/01/99
Matrix:	Soil		
Condition:	Cool/Intact	**Date Analyzed:**	03/02/99

Parameter	Analytical Result	PQL	Units
DRO - METHOD 8015			
Diesel Range Organics	<5	5	mg/Kg
Diesel Range Organics as Diesel	<5	5	mg/Kg

Quality Control - Surrogate Recovery	%	QC Limits
o-Terphenyl(SUR-8015)	0 **	70 - 130

GRO - METHOD 8015			
Gasoline Range Organics	<5	5	mg/Kg
Gasoline Range Organics as Gasoline	<5	5	mg/Kg

Quality Control - Surrogate Recovery	%	QC Limits
a,a,a-Trifluorotoluene(SUR-8015)	111	70 - 130

** - Surrogate Recovery failed QC Limits due to matrix interference.

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 Williams

Sharon Willams, Organic Lab Supervisor

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Inter-Mountain Laboratories, Inc.

CHAIN OF CUSTODY RECORD

Client/Project Name	Project Location	ANALYSES / PARAMETERS
Energen Resources	Collins #3 Separator / Prod Tank Pit	
Sampler: (Signature)	**Chain of Custody Tape No.**	
Lloyd Chavez		

Sample No./ Identification	Date	Time	Lab Number	Matrix	No. of Containers	BTEX 8015 + GRO + DRO				Remarks
Collins #3 C.Bttm@11'	2/26/99	13:10		Soil	1	X				Bed not intact hand dug pit

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	3/1/99	07:15			
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by laboratory: (Signature)	Date	Time
			Kristi Hutchings	3/1/99	1150

Inter-Mountain Laboratories, Inc.

☐ 1633 Terra Avenue
Sheridan, Wyoming 82801
Telephone (307) 672-8945

☐ 1701 Phillips Circle
Gillette, Wyoming 82718
Telephone (307) 682-8945

☒ 2596 West Main Street
Farmington, NM 87401
Telephone (505) 326-4737

☐ 1160 Research Drive
Bozeman, Montana 59718
Telephone (406) 586-8450

☐ 11183 State Hwy. 30
College Station, TX 77845
Telephone (409) 776-8945

58097

Client : Energen Resources Inc.

Date Started : February 25, 1999 Date Completed : October 22, 1999

Location : Cullins Federal # 3

Quad : D Section : 4

Township: 24 N Range: 3 W

Pit : Separator/Production Tank

Reference 50' North from wellhead.

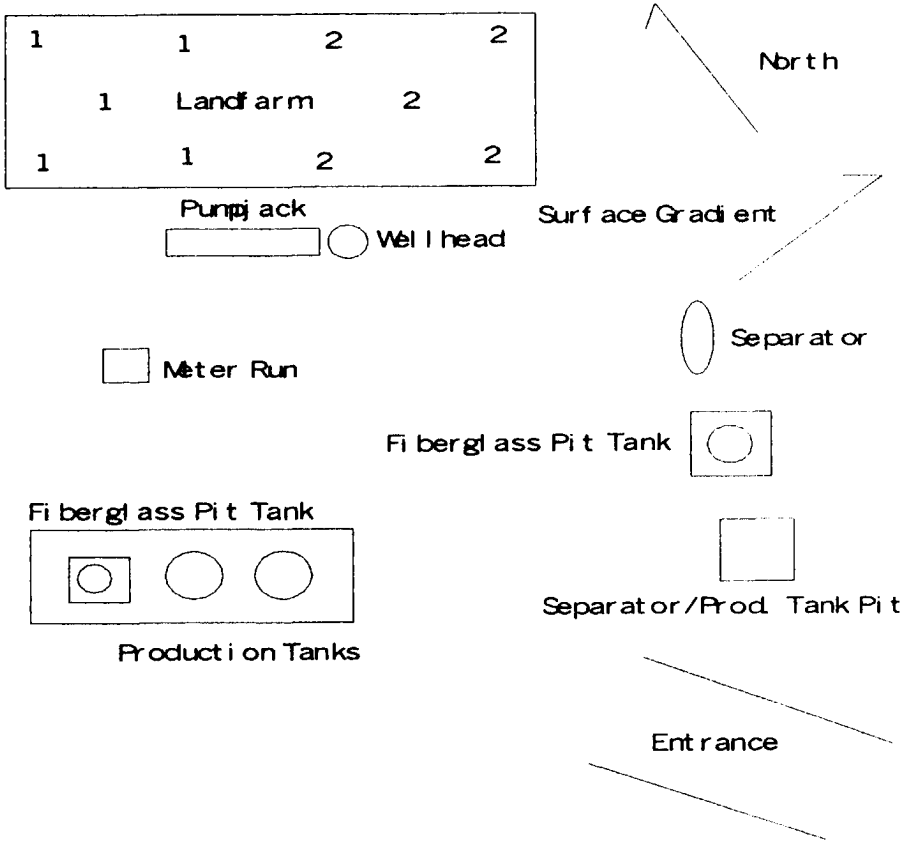
Size: 150' x 60' x .75'

Yds : 230

2 5 - Point Composites

Sample #	Location	OVM
1	Comp 1	10.2
2	Comp 2	N.D.
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

Overview of Landfarm and Sampling :



Comments : Soil is dry, medium brown, sandy/loam, with minor black staining but no detectable hydrocarbon odor.
A sample from composite # 1 was sent to IML for GRO/DRO analysis.

Environmental Specialist : VEC

Ranking Score : 0 Closure Standard : 5000 ppm

Cimarron Oilfield Services

imL

Inter-Mountain Laboratories, Inc.

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

2506 West Main Street, Farmington, NM 87401

Client: Energen Resources
Project: Cullins Federal #3
Sample ID: Landfarm Comp #1
Lab ID: 0399W05386
Matrix: Water
Condition: Cool/Intact

Date Reported: 11/04/99
Date Sampled: 10/22/99
Date Received: 10/25/99
Date Analyzed: 10/27/99

Parameter	Analytical Result	PQL	Units
GRO - Method 8015M			
Gasoline Range Organics	<5	5	mg/Kg
Gasoline Range Organics as Gasoline	<5	5	mg/Kg

Quality Control - Surrogate Recovery	%	QC Limits
4-Bromofluorobenzene(SUR-8015)	103	70 - 130
a,a,a-Trifluorotoluene(SUR-8015)	125	70 - 130

Reference: Method 8015AZ, C10 - C32 Hydrocarbons in Soil, Arizona Department of Health Services, Revision - 1.0, 09/25/98.

Reviewed By: _____
William Lipps

imL

Inter-Mountain Laboratories, Inc.

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

2506 West Main Street, Farmington, NM 87401

Client: Energen Resources
Project: Cullins Federal #3
Sample ID: Landfarm Comp #1
Lab ID: 0399W05386
Matrix: Water
Condition: Cool/Intact

Date Reported: 11/19/99
Date Sampled: 10/22/99
Date Received: 10/25/99

Date Analyzed: 11/03/99

Parameter	Analytical Result	PQL	Units
DRO - Method 8015M			
Diesel Range Organics (C10 - C22)	1,602	5	mg/Kg

Quality Control - Surrogate Recovery	%	QC Limits
o-Terphenyl(SUR-8015)	94	70 - 130

Reference: Method 8015AZ, C10 - C32 Hydrocarbons in Soil, Arizona Department of Health Services, Revision - 1.0, 09/25/98.

Reviewed By: _____
William Lipps

imi
Inter- Mountain
Laboratories, Inc.

CHAIN OF CUSTODY RECORD

Client/Project Name	Project Location	ANALYSES / PARAMETERS
Energen Resources	Cullins Federal #3	
Sampler: (Signature)	**Chain of Custody Tape No.**	

Sample No./ Identification	Date	Time	Lab Number	Matrix	No. of Containers	TPH 8015 GRO / DRO				Remarks
Landfarm Comp #1	10/22/99	08:53	9944W05586	Soil	1	X				

	Date	Time		Date	Time
Relinquished by: (Signature)	10/25/99	08:32	Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by laboratory: (Signature) Sharon L Williams	10/25/99	8:32

Inter-Mountain Laboratories, Inc.

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