

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

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OIL CONSERVATION
DIVISION

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

PIT REMEDIATION AND CLOSURE REPORT

Operator: Energen Resources Telephone: (505) 325-6800

Address: 2198 Bloomfield Highway Farmington, NM 87401

Facility Or: Locke # 2

Well Name

Location: Unit or Qtr/Qtr Sec G Sec 10 T 29N R 14W County San Juan

Pit Type: Separator _____ Dehydrator _____ Other Production Tank

Land Type: BLM X State _____ Fee _____ Other _____

Pit Location: Pit dimensions: Length 16 ft, width 16 ft, depth 3 ft

(Attach diagram)

Reference: wellhead X other _____

Footage from reference: 105 ft

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

Depth to Ground Water: (vertical distance from contaminants to seasonal highwater elevation of ground water)	<u>>100 feet</u>	Less than 50 feet	(20 points)	
		50 ft to 99 feet	(10 points)	
	<u>X</u>	Greater than 100 feet	(0 points)	<u>0</u>

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)	
	<u>X</u>	No	(0 points)	<u>0</u>

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)	
	<u>X</u>	Greater than 1000 feet	(0 points)	<u>0</u>

P:\pits\PrrC@.WK3

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: 8/24/99 Date Completed: 8/24/99

Excavation _____ Approx. cubic yards 0
Landfarmed _____ Insitu Bioremediation _____
Other _____

Remediation Method: Onsite _____ Offsite _____

(Check all appropriate
sections)

General Description of Remedial Action : On 8/24/99, the pit was sampled at a depth of 3 feet below pit bottom. A soil sample was obtained from the center bottom of the pit at 3 feet below pit bottom utilizing U.S.E.P.A. protocol and sent to Inter-Mountain Labs for GRO/DRO analysis. Results 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 3 feet below pit bottom

Sample date 8/24/99

Sample time 10:30

Sample Results

Benzene(ppm) _____

Total BTEX (PPM) _____

Field Headspace (ppm) ND

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 8/16/99

PRINTED NAME Gary Brink

SIGNATURE [Signature]

and TITLE Production Superintendent

Location : <u>Locke # 2</u> Quad : <u>C</u> Section : <u>10</u> Township : <u>29N</u> Range : <u>14W</u>		Overview of Location and Sampling :																																								
Pit : <u>Production Tank</u> Reference : <u>105' North 10° East of wellhead</u> Initial Size : <u>16' x 16' x 3' deep</u> Final Size : <u>16' x 16' x 3' deep</u> Yds. Excavated : <u>0 cubic yards</u> Depth to Groundwater: <u>>100'</u> Nearest Water Source: <u>>1000'</u> Nearest Surface Water: <u>>1000'</u> NMOCD Ranking Score: <u>0</u> TPH Closure Standard: <u>5000</u>		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Sample #</th> <th>Location</th> <th>OVM</th> </tr> </thead> <tbody> <tr><td>1</td><td>Center at 3'</td><td>ND</td></tr> <tr><td>2</td><td>below pit</td><td></td></tr> <tr><td>3</td><td>bottom</td><td></td></tr> <tr><td>4</td><td></td><td></td></tr> <tr><td>5</td><td></td><td></td></tr> <tr><td>6</td><td></td><td></td></tr> <tr><td>7</td><td></td><td></td></tr> <tr><td>8</td><td></td><td></td></tr> <tr><td>9</td><td></td><td></td></tr> <tr><td>10</td><td></td><td></td></tr> <tr><td>11</td><td></td><td></td></tr> <tr><td>12</td><td></td><td></td></tr> </tbody> </table>		Sample #	Location	OVM	1	Center at 3'	ND	2	below pit		3	bottom		4			5			6			7			8			9			10			11			12		
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Comments : <u>Sent sample #1 to Inter-Mountain Labs for GRO/DRO analysis.</u>		Pit Profile : North to South :																																								
Pit Profile : East to West :		Pit Profile : East to West :																																								



Frank McDonald
Cimarron Oilfield Service Co.
P. O. Box 3235
Farmington, NM 87401

September 8, 1999

Mr. McDonald:

Enclosed please find the reports for the sample submitted for Energen Resources to our laboratory for analysis on August 30, 1999.

If you have any questions about the results of these analyses, please don't hesitate to call at your convenience.

Thank you for choosing IML for your analytical needs!

Sincerely,

A handwritten signature in cursive script that reads 'Sharon Williams'.

Sharon Williams
Organics Lab Supervisor

Enclosure

xc: File



ENERGEN RESOURCES

Case Narrative

On August 30, 1999, one soil sample was submitted to Inter-Mountain Laboratories - Farmington for analysis. The sample was received intact. Total Petroleum Hydrocarbons as Diesel Range Organics (8015 DRO); Gasoline Range Organics (8015 GRO) was performed on the sample as per the accompanying Chain of Custody form.

It is the policy of this laboratory to employ, whenever possible, preparatory and analytical methods which have been approved by regulatory agencies. The methods used in the analyses of the sample reported herein are found in "Test Methods for Evaluation of Solid Waste: Physical/Chemical Methods", SW-846, USEPA, November, 1986.

Quality control data appear on the analytical report and may be identified by title. If there are any questions regarding the information presented in this package, please feel free to call at your convenience.

Sincerely,

A handwritten signature in cursive script that reads "Sharon Williams".

Sharon Williams

Organic Analyst / IML- Farmington



Inter-Mountain Laboratories, Inc.

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

2506 West Main Street, Farmington, NM 87401

Client: Energen Resources

Project: Locke #2

Sample ID: Pit #2 BTM @ 3'

Lab ID: 0399W04529

Matrix: Soil

Condition: Warm

Date Reported: 09/08/99

Date Sampled: 08/24/99

Date Received: 08/30/99

Date Analyzed: 09/07/99

Parameter	Analytical Result	PQL	Units
Diesel Range Organics-EPA Method 8015			
Diesel Range Organics	<5	5	mg/Kg
Diesel Range Organics as Diesel	<5	5	mg/Kg
Total Extractable Hydrocarbons	<5	5	mg/Kg

Quality Control - Surrogate Recovery	%	QC Limits
o-Terphenyl(SUR-8015)	104	70 - 130

Reference: SW-846 - "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", United States Environmental Protection Agency, November, 1986.

Reviewed By:

Sharon Williams, Organic Lab Supervisor



Client: Energen Resources
Project: Locke #2
Sample ID: Pit #2 BTM @ 3'
Lab ID: 0399W04529
Matrix: Soil
Condition: Warm

Date Reported: 09/07/99
Date Sampled: 08/24/99
Date Received: 08/30/99
Date Analyzed: 09/03/99

Parameter	Analytical Result	PQL	Units
GRO - EPA Method 8015			
Gasoline Range Organics	<5	5	mg/Kg
Gasoline Range Organics as Gasoline	<5	5	mg/Kg
Total Purgeable Hydrocarbons	<5	5	mg/Kg

Quality Control - Surrogate Recovery	%	QC Limits
a,a,a-Trifluorotoluene(SUR-8015)	117	70 - 130
4-Bromofluorobenzene(SUR-8015)	115	70 - 130

Reference: SW-846 - "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", United States Environmental Protection Agency, November, 1986.

Reviewed By:

Sharon Williams, Organic Lab Supervisor



CHAIN OF CUSTODY RECORD

Client/Project Name		Project Location		ANALYSES / PARAMETERS			
Sampler: (Signature)		Chain of Custody Tape No.		No. of Containers		Remarks	
Sample No./ Identification	Date	Time	Lab Number	Matrix			
AT # 3 B1M Q3	8/24/99	1030		Sol	1	X	APR 100
<i>[Large diagonal signature across the table]</i>							
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time
<i>[Signature]</i>		8/25/99	700	<i>[Signature]</i>		8/25/99	701
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time
Relinquished by: (Signature)		Date	Time	Received by laboratory: (Signature)		Date	Time
				<i>[Signature]</i>		8/30/99	1346
Inter-Mountain Laboratories, Inc. ☐ 555 Absaraka Sheridan, Wyoming 82801 Telephone (307) 674-7506 ☒ 1633 Terra Avenue Sheridan, Wyoming 82801 Telephone (307) 672-8945 ☐ 2506 West Main Street Farmington, NM 87401 Telephone (505) 326-4737 ☐ 11183 State Hwy. 30 College Station, TX 77845 Telephone (409) 776-8945							

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