

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

OK
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: Hughes Fed. Com. # 1
Well Name

Location: Unit or Qtr/Qtr Sec O Sec 7 T 24N R 3W County Rio Arriba

Pit Type: Separator X Dehydrator _____ Other _____

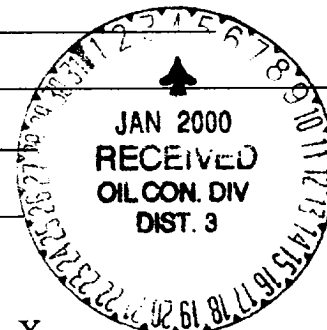
Land Type: BLM _____ State _____ Fee X Other _____

Pit Location: Pit dimensions: Length 20 ft width 20 ft depth 12 ft
(Attach diagram)

Reference: wellhead X other _____

Footage from reference: 180 ft

Direction from reference: 60 Degrees X East North X
of
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\PrnC@.WK3

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: 3/29/99 Date Completed: 10/22/99

Excavation X Approx. cubic yards 167

Landfarmed X Insitu Bioremediation _____

Other _____

Remediation Method: Onsite X Offsite _____

(Check all appropriate
sections)

General Description of Remedial Action : On 3/29/99, the pit was excavated to a depth of 12 feet.

A soil sample was obtained from the center bottom of the pit at a depth of 12 feet utilizing
U.S.E.P.A. protocol and sent to IML 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 12 feet

Sample date 3/29/99

Sample time 11:50

Sample Results

Benzene(ppm) _____

Total BTEX (PPM) _____

Field Headspace (ppm) 89

TPH <15

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

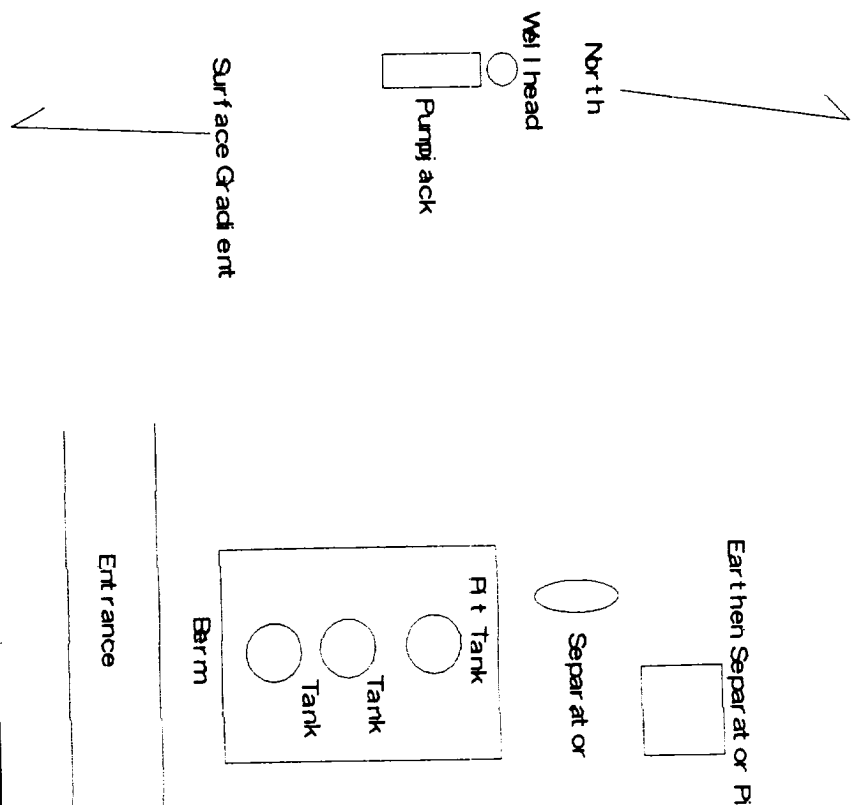
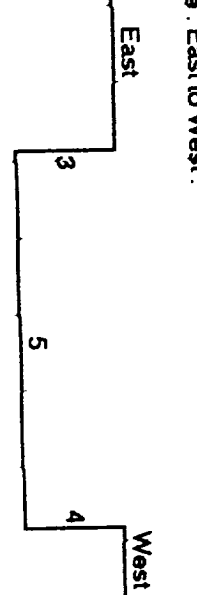
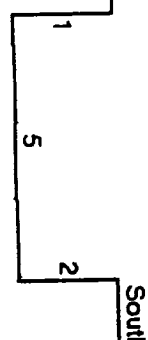
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETED TO THE BEST
OF MY KNOWLEDGE AND BELIEF.

DATE 12/22/99 PRINTED NAME Virgil Chavez

SIGNATURE Virgil Chavez and TITLE Environmental Specialist

Client : Energen Resources (Taurus Exploration)

Date Started : March 29, 1999 Date Completed : March 29, 1999

Location : <u>Hughes Fed. Com. # 1</u>			Overview of Location and Sampling : 																																									
Quad : <u>O</u> Section : <u>7</u>																																												
Range : <u>3 W</u> Township: <u>24 N</u>																																												
Pit : Separator Reference : <u>180° N 60 E</u> from wellhead Initial Size : <u>12' x 12' x 2' deep</u> Final Size : <u>20' x 20' x 12' deep</u> Yds. Excavated : <u>167 cy</u>																																												
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Sample #</th> <th style="width: 40%;">Location</th> <th style="width: 50%;">OVM</th> </tr> </thead> <tbody> <tr><td>1</td><td>N. Well @ 9'</td><td>1.7</td></tr> <tr><td>2</td><td>S. Well @ 9'</td><td>8</td></tr> <tr><td>3</td><td>E. Well @ 9'</td><td>12</td></tr> <tr><td>4</td><td>W. Well @ 9'</td><td>21</td></tr> <tr><td>5</td><td>C. Bottom @ 12'</td><td>89</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	N. Well @ 9'	1.7	2	S. Well @ 9'	8	3	E. Well @ 9'	12	4	W. Well @ 9'	21	5	C. Bottom @ 12'	89	6			7			8			9			10			11			12			Pit Profile : East to West : 		
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Depth to Groundwater: <u>>100'</u> Nearest Water Source: <u>>1000'</u> Nearest Surface Water: <u>>1000'</u> NMOCD Ranking Score: <u>0</u> TPFH Closure Standard: <u>5000</u>																																												
Comments : <u>Top soil - 11' Soil is moist, dark brown, clay/loam with black staining and a strong hydrocarbon odor.</u> <u>11' - 12' Soil is moist, light brown, clay with no staining and a mild hydrocarbon odor.</u> <u>A sample from the center bottom at 12' was sent to IML for GRO/DRO analysis.</u>																																												
Pit Profile : North to South : 																																												



Inter-Mountain Laboratories, Inc.

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

2506 West Main Street, Farmington, NM 87401

Client: Energen Resources
Project: Hughes Com Fed #1
Sample ID: Sep. Pit C. Btm @12'
Lab ID: 0399W01642
Matrix: Soil
Condition: Cool/Intact

Date Reported: 04/15/99
Date Sampled: 03/29/99
Date Received: 03/30/99
Date Analyzed: 04/14/99

Parameter	Analytical Result	PQL	Units
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DRO - Method 8015

Diesel Range Organics	<10	10	mg/Kg
Diesel Range Organics as Diesel	<10	10	mg/Kg

Quality Control - Surrogate Recovery	%	QC Limits
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o-Terphenyl(SUR-8015)	73	70 - 130
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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
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4-Bromofluorobenzene(SUR-8015)	54 **	70 - 130
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** - 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, Organic Lab Supervisor



CHAIN OF CUSTODY RECORD

[illegible]

Overview of Landfarm and Sampling :																																										
Location : <u>Hughes Fed. Com. # 1</u> Quad : <u>0</u> Section : <u>7</u> Township: <u>24 N</u> Range: <u>3 W</u>																																										
Pit : Separator Reference 35' East from wellhead. Size: 150' x 40' x .5' Yds : 167 1 5 - Point Composites	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Sample #</th> <th>Location</th> <th>OVM</th> </tr> <tr><td>1</td><td>Comp 1</td><td>1.9</td></tr> <tr><td>2</td><td></td><td></td></tr> <tr><td>3</td><td></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> </table>	Sample #	Location	OVM	1	Comp 1	1.9	2			3			4			5			6			7			8			9			10			11			12			Comments : Soil is dry, medium brown, clay/loam, with no visible staining and no detectable hydrocarbon odor. A sample from composite # 1 was sent to IML for GRO/DRO analysis.	
Sample #	Location	OVM																																								
1	Comp 1	1.9																																								
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Environmental Specialist : <u>VEC</u>																																										



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2506 West Main Street, Farmington, NM 87401

Client: Energen Resources

Project: Hughes Com Fed #1

Sample ID: Landfarm Comp #1

Lab ID: 0399W05385

Matrix: Soil

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
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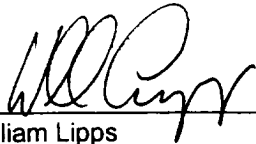
GRO - Method 8015M

Gasoline Range Organics	<5	5	mg/Kg
Gasoline Range Organics as Gasoline	<5	5	mg/Kg

Quality Control - Surrogate Recovery	%	QC Limits
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4-Bromofluorobenzene(SUR-8015)	103	70 - 130
a,a,a-Trifluorotoluene(SUR-8015)	99	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



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2506 West Main Street, Farmington, NM 87401

Client: Energen Resources
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Sample ID: Landfarm Comp #1
Lab ID: 0399W05385
Matrix: Soil
Condition: Cool/Intact

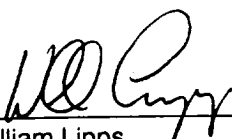
Date Reported: 11/19/99
Date Sampled: 10/22/99
Date Received: 10/25/99
Date Analyzed: 11/03/99

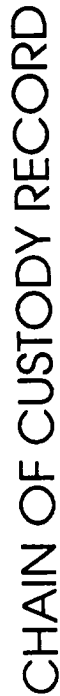
Parameter	Analytical Result	PQL	Units
DRO - Method 8015M			
Diesel Range Organics (C10 - C22)	266	5	mg/Kg

Quality Control - Surrogate Recovery	%	QC Limits
o-Terphenyl(SUR-8015)	116	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



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