

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 CON. DIV.
Dist. 3

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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: McWhorter-Duncan # 1

Well Name

Location: Unit or Qtr/Qtr Sec K 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: 90 ft

Direction from reference: 20 Degrees X East North _____
of
_____ West South X

| | | | | |
|--|---------------------|--------------------------------|-------------|----------|
| 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\PrC@.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 Yes _____ Depth _____

Final Pit: Sample location Center Bottom

Closure Sampling:
(if multiple samples,
attach sample results

and diagram of sample
locations and depths)

Sample depth 3 feet below pit bottom

Sample date 8/24/99 Sample time 10:45

Sample Results

Benzene(ppm) _____

Total BTEX (PPM) _____

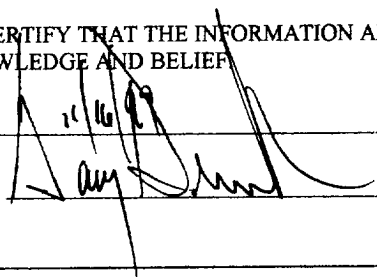
Field Headspace (ppm) ND

TPH <10

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

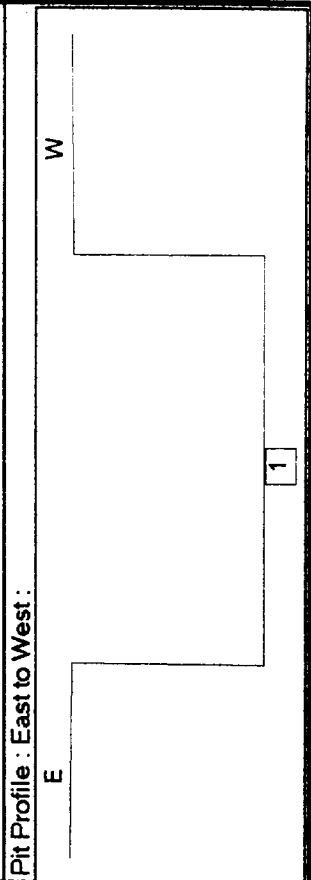
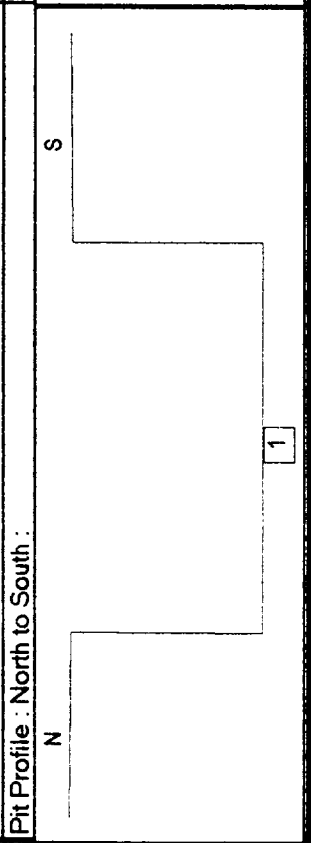
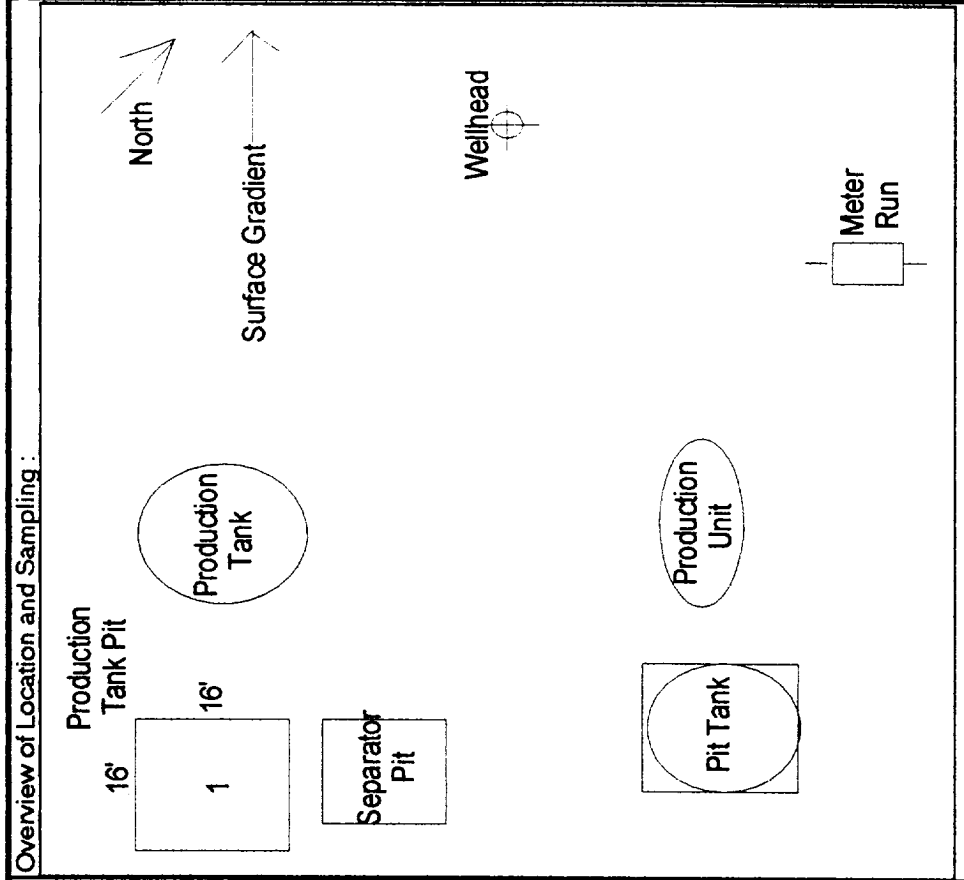
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETED TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE 8/24/99 PRINTED NAME Gary Brink

SIGNATURE  and TITLE Production Superintendent

| | | | |
|--|--------------------------------|-----------|------------|
| Location : McWhorter - Duncun # 1 | | | |
| Quad : | K | Section : | 10 |
| Township : | 29N | Range : | 14W |
| Pit : | Production Tank | | |
| Reference : | 90' South 20° East of wellhead | | |
| Initial Size : | 16' x 16' x 3' deep | | |
| Final Size : | 16' x 16' x 3' deep | | |
| Yds. Excavated : | 0 cubic yards | | |
| Depth to Groundwater: | >100' | | |
| Nearest Water Source: | >1000' | | |
| Nearest Surface Water: | >1000' | | |
| NMOCD Ranking Score: | 0 | | |
| TPH Closure Standard: | 5000 | | |
| Sample # | Location | OVM | |
| 1 | Center at 3' | ND | |
| 2 | below pit | | |
| 3 | bottom | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |
| 11 | | | |
| 12 | | | |

Comments :
 Sent sample #1 to Inter Mountain Labs for GRO/DRO analysis.





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

September 8, 1999

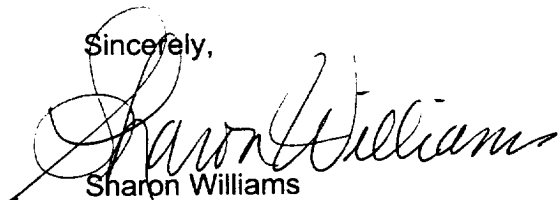
Mr. McDonald:

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,



Sharon Williams
Organics Lab Supervisor

Enclosure

xc: File

ENERGEN RESOURCES

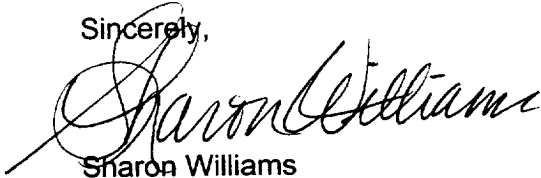
Case Narrative

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,



Sharon Williams
Organic Analyst / IML- Farmington

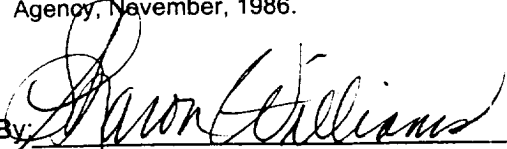


Client: Energen Resources
Project: McWhorter-Duncan #1
Sample ID: Pit #2 @ 3'
Lab ID: 0399W04530
Matrix: Soil
Condition: Warm

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) | 87 | 70 - 130 | |

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

Reviewed By: 
 Sharon Willams, Organic Lab Supervisor



Client: Energen Resources
Project: McWhorter-Duncan #1
Sample ID: Pit #2 @ 3'
Lab ID: 0399W04530
Matrix: Soil
Condition: Warm

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

Table with 4 columns: Parameter, Analytical Result, PQL, Units. Rows include GRO - EPA Method 8015, Gasoline Range Organics, Gasoline Range Organics as Gasoline, and Total Purgeable Hydrocarbons.

Table with 3 columns: Quality Control - Surrogate Recovery, %, QC Limits. Rows include a,a,a-Trifluorotoluene(SUR-8015) and 4-Bromofluorobenzene(SUR-8015).

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

Reviewed By: [Signature]
Sharon Williams, Organic Lab Supervisor

