

**UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT**

FORM APPROVED  
 Budget Bureau No. 1004-0135  
 Expires: September 30, 1990

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill, deepen or reentry to a different reservoir.  
 Use 'APPLICATION FOR PERMIT' for such proposals

**SUBMIT IN TRIPLICATE**

1. Type of Well: oil well gas well  other

2. Name of Operator: **Energen Resources**

3. Address of Operator: **2198 Bloomfield Hwy. Farmington, NM 87401**

4. Location of Well: (Footage, Sec., T., R., M., or Survey Description)

**1016' FSL & 834' FEL                      Sec. 28                      T 30 N                      R 13 W**

5. Lease Designation and Serial No.  
**SF-078214**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agmt. Design.:

8. Well Name and No.:  
**McCord 8E**

9. API Well No.:  
**30-045-26161**

10. Field & Pool/Exploratory Area:  
**Basin Dakota**

11. County or Parish, State:  
**San Juan, New Mexico**

12. CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

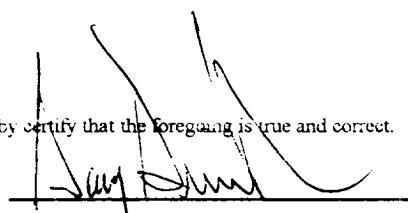
TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other: <b>Production Tank Spill</b>

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

**On 9/8/98, a production tank spill occurred due to vandalism (the load valve had been opened). The spill area was excavated to a depth of 25 feet. A depth of 42 feet was reached utilizing a Geoprobe, where bedrock was encountered. Soil samples were taken at 12 feet, 25 feet, and 40 to 42 feet, which provided BTEX and TPH concentrations below NMOCD and BLM guidelines. Soils were landfarmed on location and also on the McCord 13E location. The landfarm was tested on 8/27/99, and a composite sample provided a TPH concentration below NMOCD and BLM guidelines. See the attached for complete details.**

14. I hereby certify that the foregoing is true and correct.

Signed:  **Gary Brink** Title: **Production Superintendent** Date: 10/21/99

(This space for Federal or State office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
 Conditions of approval, if any:

Energen Resources Inc.  
 McCord # 8 E  
 September 98 Spill  
 1850' FSL & 790' FEL  
 Unit Letter "P" of Section 28, T-30-N, R-13-W  
 NMPM, San Juan County, New Mexico

A 190-bbl spill of produced hydrocarbons was estimated to have occurred on September 8, 1998 and was reported on September 10, 1998. The spill is attributed to vandalism (load valve removed from production tank). Liquid hydrocarbons escaped through the removed load valve and migrated towards the existing lined pit tank and south-southeast. Liquid hydrocarbons exited the existing bermed area and migrated on location and along the access road. Liquid hydrocarbons did not reach any waterways.

On September 16, 1998 Cimarron Environmental Services began excavation of the spill area. Excavation of the spill area continued until practical extent was achieved. Quality Assurance/Quality Control (QA/QC) was conducted utilizing continual headspace analysis during excavation. All hydrocarbon staining was removed and landfarmed on-site. During removal of the lined fiberglass pit, black heavy staining occurred. The heavy black staining was not believed to be associated with the recent spill, but was excavated to a depth of 25 feet to achieve closure. The site was assessed utilizing a Geoprobe mounted on a one-ton pickup. Test holes were drilled to bedrock. Test hole # 1 was drilled within the immediate spill area. Test holes # 2, and # 3 were drilled between the spill area and an adjacent ephemeral stream (see attached diagram). Each test hole was analyzed utilizing headspace protocol. Results of the sampling follows:

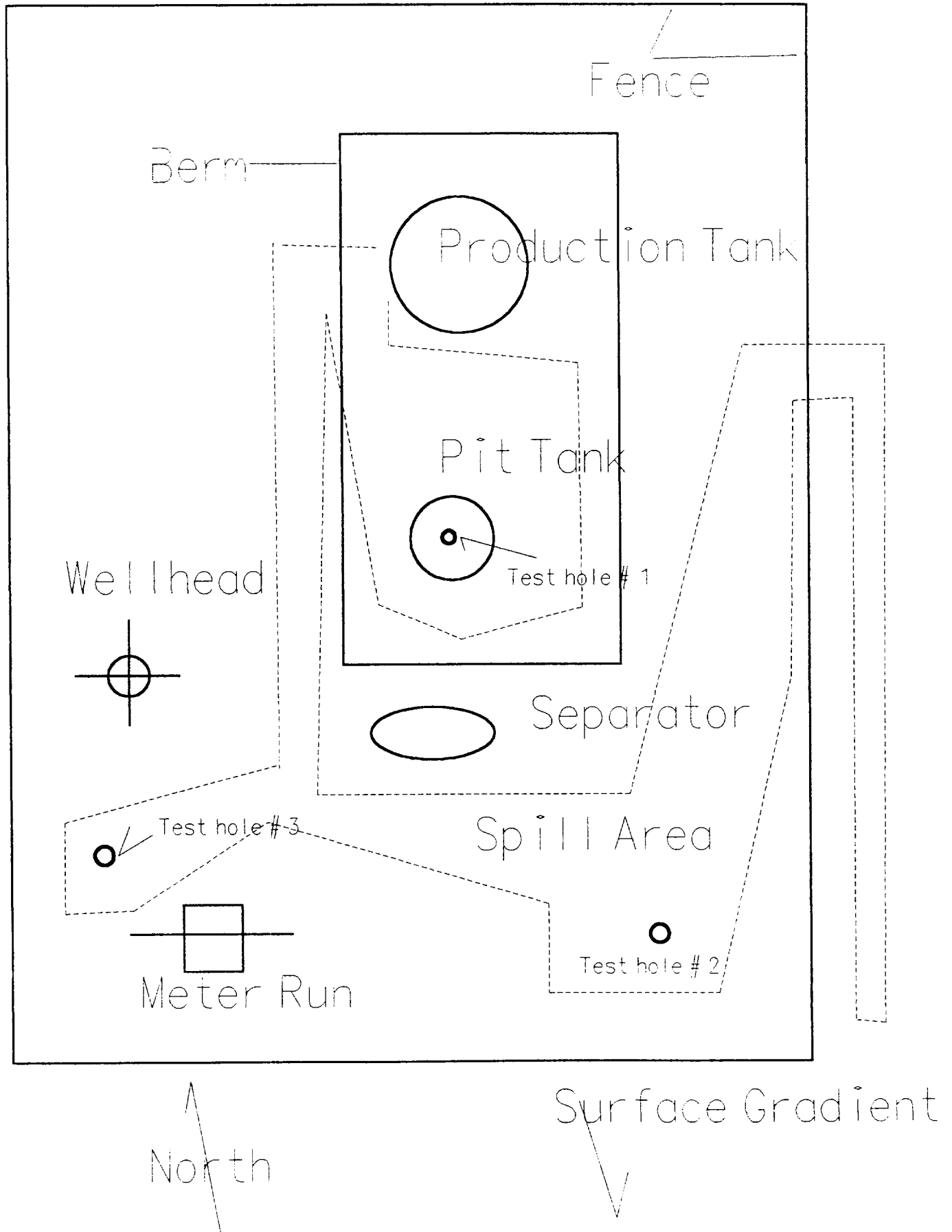
Test Hole	# 1	Test Hole	# 2	Test Hole	# 3
Depth (feet)	Results (ppm)	Depth (feet)	Results (ppm)	Depth (feet)	Results (ppm)
5	2.2	5	25	5	1.7
10	1.8	10	21	10	8.6
15	Non-detect	15	35	15	Non-detect
20	5.4	20	79	20 (bedrock)	22
25	348	25	4		
30	372	30 (bedrock)	Non-detect		
35	276				
42 (bedrock)	156				

A sample from test hole # 1 at bedrock was submitted to Inter-Mountain Laboratories (IML) for Gasoline Range Organics (GRO)/Diesel Range Organics (DRO) analysis (USEPA Method 8015) and Benzene, Toluene, ethyl-Benzene, and Xylenes (BTEX) analysis (USEPA Method 8020). Results of the analysis are attached.

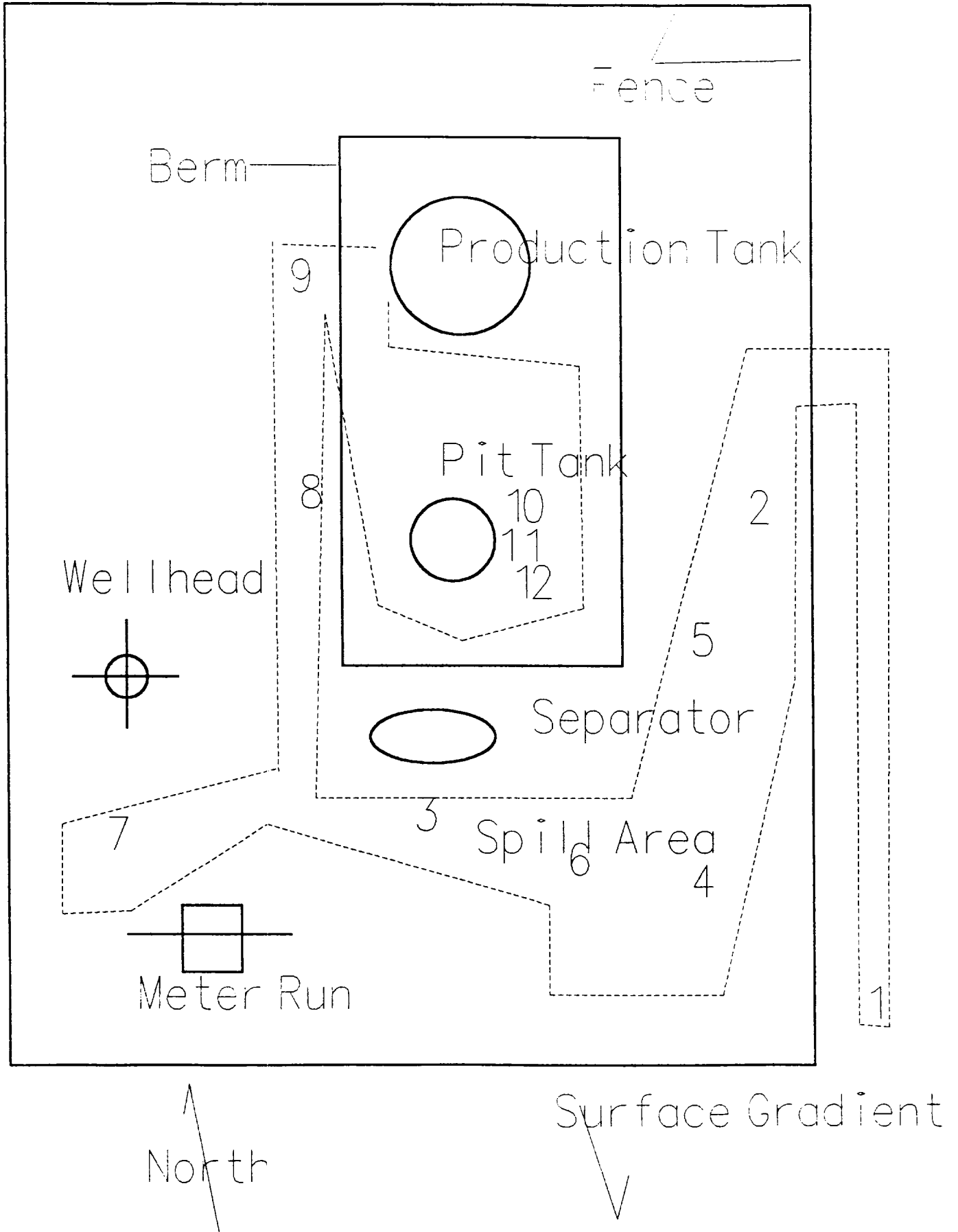
Landfarm sampling was provided by Cimarron Environmental Services on August 27, 1999. Nine 5-point samples were extracted and analyzed. Results of Sample 15

provided a GRO/DRO concentration of <161 parts per million (ppm) and a Headspace concentration of 12 ppm.

Having determined lateral and vertical extent as well as achieving action levels below NMOCD and BLM requirements, this area should be considered to have reached “final closure”. Energen Resources Inc. has removed and remediated all soils to the extent practical. By filling the excavation, and installation of a permanent liner, the driving force created by additional fluids will be eliminated. Based on this information and the physical location of the original spill, there is little to no risk to human health and environment.







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

October 27, 1998

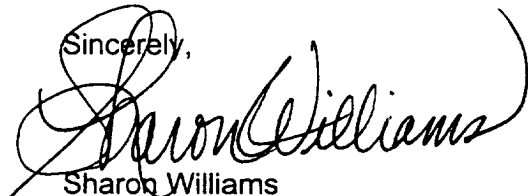
Mr. McDonald:

Enclosed, please find the reports for the samples submitted for Taurus Exploration to our laboratory for analysis on October 14, 1998.

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

We appreciate your business!

Sincerely,

A handwritten signature in cursive script that reads "Sharon Williams". The signature is written in black ink and is positioned above the printed name and title.

Sharon Williams  
Organics Lab Supervisor

Enclosure

xc: File

## Taurus Exploration U.S.A., Inc.

### Case Narrative

On October 14, 1998, one soil sample was submitted to Inter-Mountain Laboratories - Farmington for analysis. The sample was received intact. The sample was identified by project "McCord 8E-Spill". Total Petroleum Hydrocarbons as Diesel Range Organics (DRO); Gasoline Range Organics (GRO); Benzene-Toluene-Ethylbenzene-Xylenes (BTEX) was performed on the sample as per the accompanying Chain of Custody form.


DRO analysis on the sample was performed by Method DRO - USEPA Method for Determination of Diesel Range Organics, Revision 3, 05/08/92. WTPH - D Total Petroleum Hydrocarbons Analytical Methods for Soil, Washington State Department of Ecology, Revision 3, October 1991.

GRO analysis on the sample was performed by Method GRO-USEPA Method for Determination of Gasoline Range Organics, Rev.5, Feb. 1992. WTPH-G Total Petroleum Hydrocarbons Analytical Methods for Soil, Washington State Dept. of Ecology, Rev. 6, 1991.

BTEX analysis on the sample was performed by EPA method 5030B, Purge and Trap, and EPA Method 8021B, Aromatic Volatile Hydrocarbons, using and OI Analytical 4560 Purge and Trap and a Hewlett Packard 5890 Gas Chromatograph, equipped with a photoionization detector.

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, SW-846, USEPA, 1986 and Methods for Chemical Analysis of Water and Waste, EPA-600/4-79-020, USEPA, 1983.

Quality control reports appear at the end of the analytical package 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



## GASOLINE RANGE ORGANICS - GRO

### Taurus Exploration U.S.A., Inc.

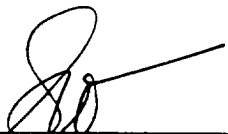
Project ID:	McCord 8E-Spill	Report Date:	10/27/98
Sample ID:	Center Bottom @ 40-42'	Date Sampled:	10/13/98
Lab ID:	0398G06047	Date Received:	10/14/98
Sample Matrix:	Soil	Date Analyzed:	10/15/98
Condition:	Cool/Intact		

TPH GAS-RANGE (MOD EPA 8015)	RESULT	DETECTION LIMIT
Gasoline-Range Petroleum Hydrocarbons	110	5.0 mg/kg

ND - Analyte not detected at the stated detection limit.

Reference:

Comments:

  
\_\_\_\_\_  
Reported By:

  
\_\_\_\_\_  
Reviewed By:

## DIESEL RANGE ORGANICS - DRO

### Taurus Exploration U.S.A., Inc.


Project ID:	McCord 8E-Spill	Report Date:	10/27/98
Sample ID:	Center Bottom @ 40-42'	Date Sampled:	10/13/98
Lab ID:	0398G06047	Date Received:	10/14/98
Sample Matrix:	Soil	Date Analyzed:	10/20/98
Condition:	Cool/Intact		

TPH DIESEL RANGE (MOD EPA 8015)	RESULT	DETECTION LIMIT
Diesel-Range Petroleum Hydrocarbons	1,085	5.0 mg/kg

ND - Analyte not detected at the stated detection limit.

Reference:

Comments:

  
\_\_\_\_\_  
Reported By:

  
\_\_\_\_\_  
Reviewed By:

**VOLATILE AROMATIC HYDROCARBONS****Taurus Exploration U.S.A., Inc.**

Project ID:	McCord 8E-Spill	Report Date:	10/16/98
Sample ID:	Center @ 40-42'	Date Sampled:	10/13/98
Lab ID:	0398G06047	Time Sampled:	9:50am
Sample Matrix:	Soil	Date Received:	10/14/98
Condition:	Cool/Intact	Date Extracted:	NA
		Date Analyzed:	10/15/98

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	1,252	10.0
Toluene	4,152	50.0
Ethylbenzene	2,913	50.0
m,p-Xylenes	26,342	50.0
o-Xylene	9,468	50.0

ND - Analyte not detected at the stated detection limit.

<b>Quality Control:</b>	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Bromofluorobenzene	100%	70%-130%

**Reference:** Method 5030, Purge and Trap; Method 8021B, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, Revision 2, December, 1996.

**Comments:**
  
 \_\_\_\_\_  
 Analyst

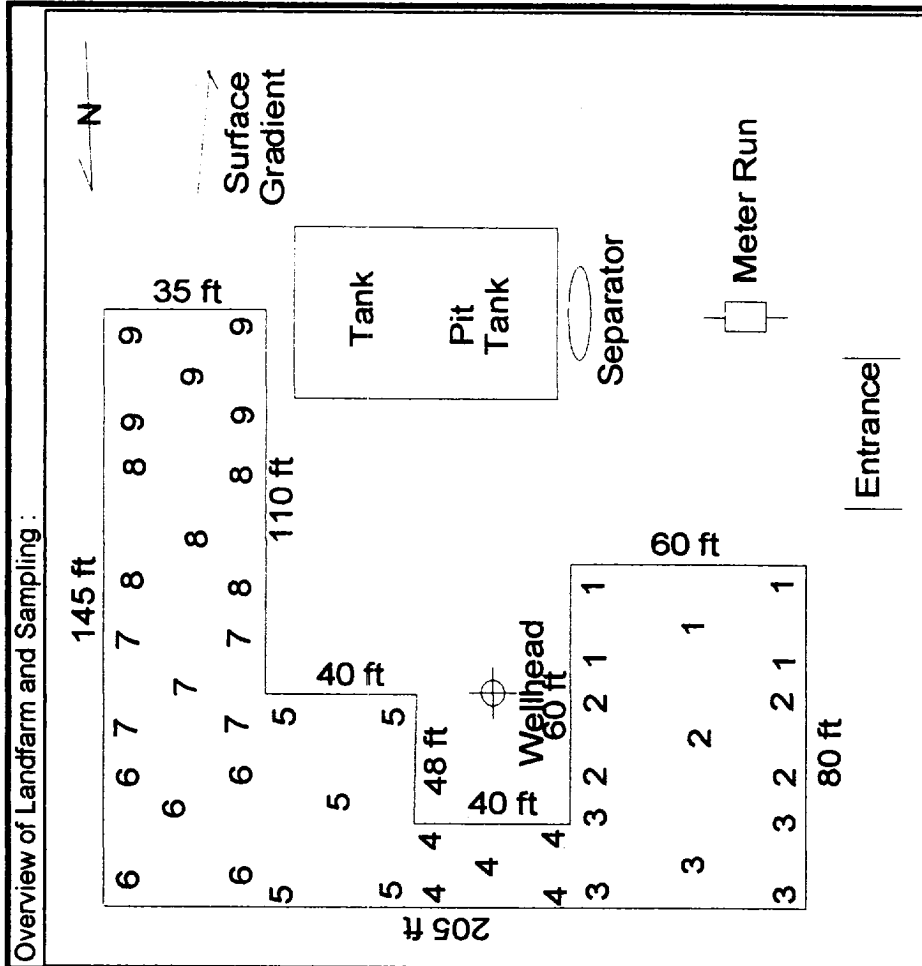
  
 \_\_\_\_\_  
 Review



Client : Energen Resources, Inc.

Date Started : June 22, 1999 Date Completed : August 27, 1999

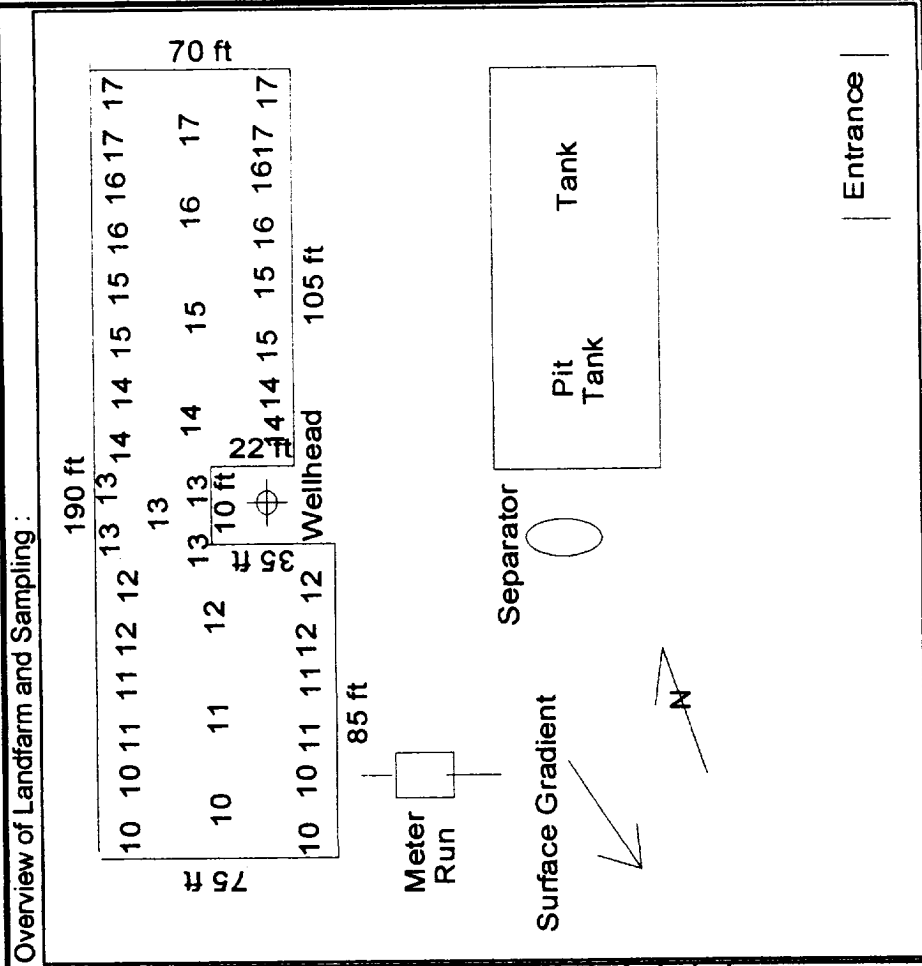
Location: <b>McCord 8E (Soils landfarmed on McCord 13E)</b>	
Quad: <b>P</b>	Section: <b>28</b>
Township: <b>30N</b>	Range: <b>13W</b>
Pit: <b>Production Tank Spill</b>	Sample #
Reference: <b>30 feet N 30 degrees E of wellhead</b>	Location
Size: <b>Approximately 80' x 205' x 3' deep</b>	Comp. 1
Cubic Yds: <b>1,800</b>	Comp. 2
<b>9</b>	Comp. 3
<b>5 - Point Composites</b>	Comp. 4
	Comp. 5
	Comp. 6
	Comp. 7
	Comp. 8
	Comp. 9
	10
	11
	12
	OVM
	ND
	3.7
	ND
	3
	10.5
	8.6
	6.1
	ND
	9.9



Comments : Soil is moist and sandy.

Environmental Specialist : RB

Location:	McCord 8E	
Quad:	P Section: 28	
Township:	30N Range: 13W	
Pit:	Production Tank Spill	
Reference:	25 feet N 68 degrees W of wellhead	
Size:	Approximately 75' x 190' x 3' deep	
Cubic Yds:	1,500	
8	5 - Point Composites	
Sample #	Location	OVM
1	Comp. 10	ND
2	Comp. 11	ND
3	Comp. 12	1.8
4	Comp. 13	4.9
5	Comp. 14	2.4
6	Comp. 15	11.7
7	Comp. 16	6.1
8	Comp. 17	8.6
9		
10		
11		
12		



Comments : Soil is moist and sandy.

A soil sample from Composite 15 was sent to Inter-Mountain Labs for DRO/GRO analysis.

Environmental Specialist : RB



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





# Inter-Mountain Laboratories, Inc.

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

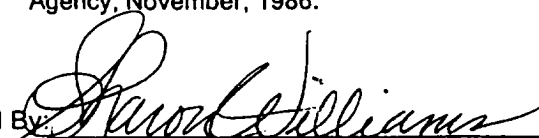
2506 West Main Street, Farmington, NM 87401

**Client:** Energen Resources  
**Project:** McCord 8E  
**Sample ID:** Sample #15  
**Lab ID:** 0399W04526  
**Matrix:** Soil  
**Condition:** Warm

**Date Reported:** 09/08/99  
**Date Sampled:** 07/27/99  
**Date Received:** 08/30/99  
**Date Analyzed:** 09/07/99

Parameter	Analytical Result	PQL	Units
<b>Diesel Range Organics - EPA Method 80</b>			
Diesel Range Organics	156	5	mg/Kg
Diesel Range Organics as Diesel	156	5	mg/Kg
Total Extractable Hydrocarbons	172	5	mg/Kg
<b>Quality Control - Surrogate Recovery</b>			
	<b>%</b>	<b>QC Limits</b>	
o-Terphenyl(SUR-8015)	128	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



# Inter-Mountain Laboratories, Inc.

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

2506 West Main Street, Farmington, NM 87401

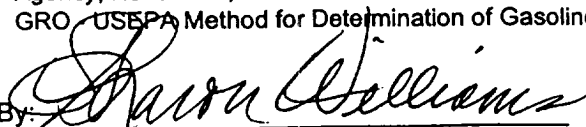
**Client:** Energen Resources  
**Project:** McCord 8E  
**Sample ID:** Sample #15  
**Lab ID:** 0399W04526  
**Matrix:** Soil  
**Condition:** Warm

**Date Reported:** 09/07/99  
**Date Sampled:** 07/27/99  
**Date Received:** 08/30/99  
  
**Date Analyzed:** 09/03/99

Parameter	Analytical Result	PQL	Units
<b>GASOLINE RANGE ORGANICS-METHOD 8015</b>			
Gasoline Range Organics	<5	5	mg/Kg
Gasoline Range Organics as Gasoline	<5	5	mg/Kg
Total Purgeable Hydrocarbons	<5	5	mg/Kg
<b>Quality Control - Surrogate Recovery</b>		<b>%</b>	<b>QC Limits</b>
a,a,a-Trifluorotoluene(SUR-8015)		125	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.  
 GRO USEPA Method for Determination of Gasoline Range Organics, Revision 5, February 1992.

Reviewed By:

  
 Sharon Williams, Organic Lab Supervisor

