

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-144  
June 1, 2004

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

For drilling and production facilities, submit to appropriate NMOCD District Office.  
For downstream facilities, submit to Santa Fe office

**Pit or Below-Grade Tank Registration or Closure**

Is pit or below-grade tank covered by a "general plan"? Yes ☒ No ☐

Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: Merrion Oil & Gas Telephone: (505) 324-5326 e-mail address: cdinning@merrion.bz

Address: 610 Reilly Ave. Farmington, NM 87401

Facility or well name: Osborn # 1 API #: 30-045-09297 U/L or Qtr/Qtr Sec 22 T 30N R 12W

County: San Juan Latitude \_\_\_\_\_ Longitude \_\_\_\_\_ NAD: 1927 ☐ 1983 ☐ Surface Owner Federal ☐ State ☐ Private ☒ Indian ☐

**Pit**

Type: Drilling ☐ Production ☒ Disposal ☐

Workover ☐ Emergency ☐

Lined ☐ Unlined ☒

Liner type: Synthetic ☐ Thickness \_\_\_\_\_ mil Clay ☐

Pit Volume \_\_\_\_\_ bbl

**Below-grade tank**

Volume: \_\_\_\_\_ bbl Type of fluid: \_\_\_\_\_

Construction material: \_\_\_\_\_

Double-walled, with leak detection? Yes ☐ If not, explain why not. \_\_\_\_\_

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)

Less than 50 feet	(20 points)	20
50 feet or more, but less than 100 feet	(10 points)	
100 feet or more	( 0 points)	

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)	
No	( 0 points)	20

Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)

Less than 200 feet	(20 points)	20
200 feet or more, but less than 1000 feet	(10 points)	
1000 feet or more	( 0 points)	

<b>Ranking Score (Total Points)</b>		<b>60</b>
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**If this is a pit closure:** (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if you are burying in place) onsite ☐ offsite ☒ If offsite, name of facility Environmental Protection Services. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☒ If yes, show depth below ground surface ±10 ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments:

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Date: 8/30/04

Printed Name/Title Connie Dinning/Production Engineer

Signature 

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval: **DEPUTY OIL & GAS INSPECTOR, DIST. 4**

Printed Name/Title \_\_\_\_\_

Signature 

Date: DEC - 9 2004

# MERRION

OIL & GAS

**Date:** 8/27/04

**Lease Name:** Osborn # 1

## Case Narrative:

In July 1994 the production pit on the Osborn # 1 was excavated and treated in place with fertilizer and PVC vent pipes. On April 12, 2004 the pit was partially excavated. The soil in the excavation was dark in color and had a hydrocarbon odor. According to OVM readings, remediation was not complete. Merriion Oil & Gas (MOG) elected to remove the remaining contaminated soil due to the slow remediation process.

Denny Foust of the Aztec NMOCD office was notified that excavation and removal of the contaminated soil to an offsite disposal facility was planned. He agreed with our approach and we requested that he visit the site prior to our backfilling the excavation.

JFT Pit excavation continued. Contaminated soil was hauled to ~~Environmental Protection Services~~ <sup>Land Farm</sup> yard on Crouch Mesa. When clean dirt was exposed, a composite soil sample was taken from the sides and bottom as indicated in the attached diagram. A sample of groundwater was collected from the lowest point in the excavation (closest to the irrigation return water ditch). The samples were placed on ice and taken to the lab the same day. The attached Laboratory analyses indicate that the soil samples had no hydrocarbon contamination. Both gasoline and diesel range organics were below the detection limits of the laboratory equipment. The water samples complied with groundwater standards for BTEX.

The south wall of the pit had some visible contamination at a depth of approximately 12'. There were structures belonging to the landowner on the surface directly above the contaminated area, so the area could not be excavated. The contamination had thinned considerably and appeared to be "pinching out". Denny Foust visited the location and agreed that we could collect samples from an auger to the south and slightly west of the excavation wall to see if the contamination continued in that direction.

Terracon Environmental Services collected auger samples through the depth of contamination and beyond to about 3' below the contamination showing on the excavation wall. All the auger samples were clean, indicating that the contamination did not continue beyond the excavation wall toward the irrigation return water ditch.

The groundwater in the excavation was pumped out and hauled to a water disposal facility offsite. (This was an added precaution in case any water had come into contact with contaminated soil prior to its removal.)

The excavation was backfilled with clean fill from offsite.

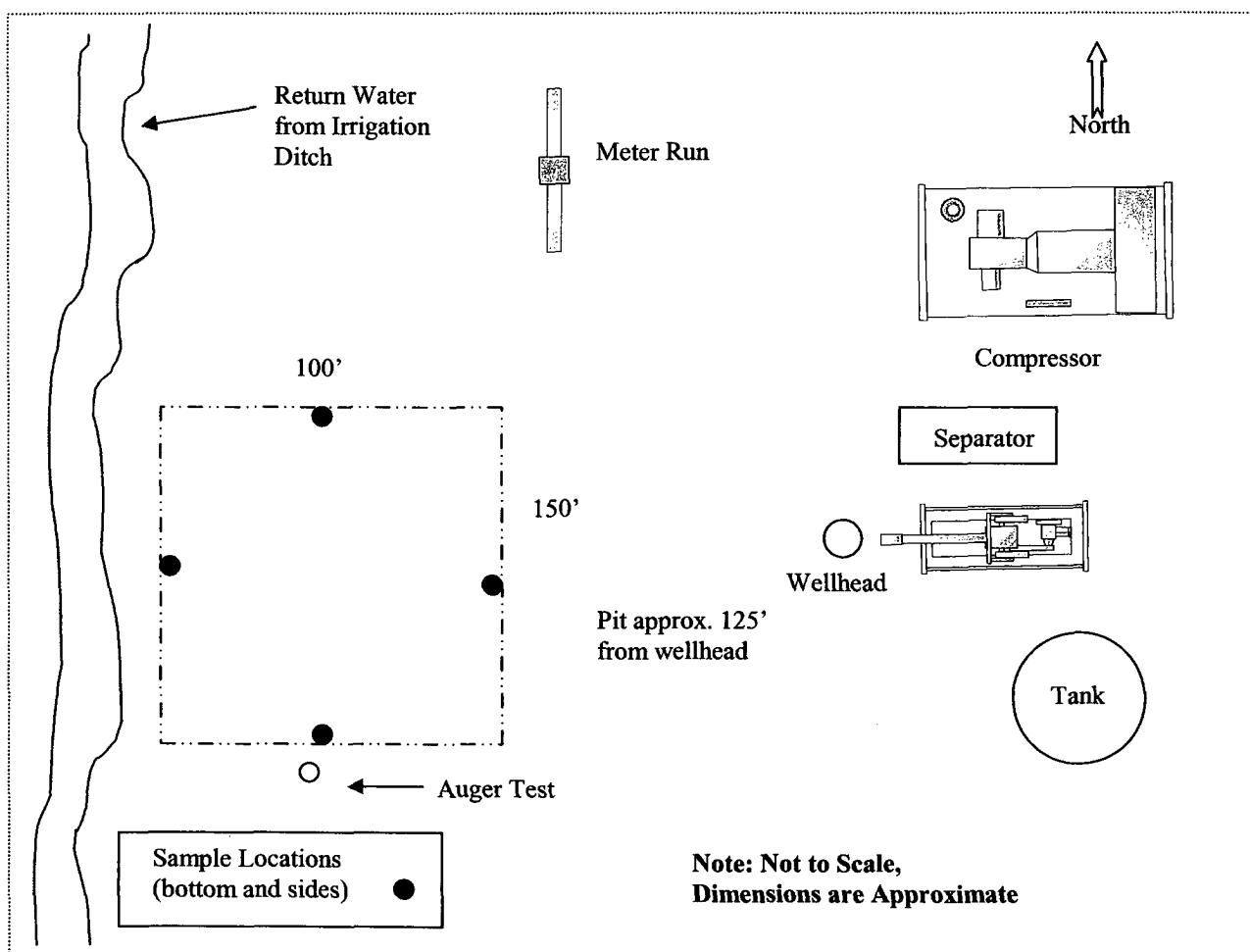
# MERRION

OIL & GAS

**Date:** 8/3/04

**Lease Name:** Osborn # 1

## Sample Locator Diagram



612 E. Murray Drive  
Farmington, NM 87499

Off: (505) 327-1072  
FAX: (505) 327-1496

*iiná bá*

P.O. Box 3788  
Shiprock, NM 87420

Off: (505) 368-4065

## ANALYTICAL REPORT

Date: 29-Apr-04

**CLIENT:** Merrion Oil and Gas Corporation  
**Work Order:** 0404030  
**Project:** Osborn 1  
**Lab ID:** 0404030-001A

**Client Sample Info:** Osborn 1  
**Client Sample ID:** Osborn #1 & #2  
**Collection Date:** 4/19/2004 3:55:00 PM  
**Matrix:** SOIL

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>DIESEL RANGE ORGANICS</b>		<b>SW8015B</b>				Analyst: JEM
T/R Hydrocarbons: C10-C28	ND	25.0		mg/Kg	1	4/26/2004
<b>GASOLINE RANGE ORGANICS</b>		<b>SW8015B</b>				Analyst: JEM
T/R Hydrocarbons: C6-C10	ND	4.50		mg/Kg	25	4/27/2004
<b>AROMATIC VOLATILES BY GC/PID</b>		<b>SW8021B</b>				Analyst: JEM
Benzene	ND	25		µg/Kg	25	4/28/2004
Ethylbenzene	ND	25		µg/Kg	25	4/28/2004
m,p-Xylene	ND	50		µg/Kg	25	4/28/2004
o-Xylene	ND	25		µg/Kg	25	4/28/2004
Toluene	ND	50		µg/Kg	25	4/28/2004

**Qualifiers:** ND - Not Detected at the Practical Quantitation Limit  
J - Analyte detected below Practical Quantitation Limit  
B - Analyte detected in the associated Method Blank  
H - Parameter exceeded Maximum Allowable Holding Time  
S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted precision limits  
E - Value above Upper Quantitation Limit - UQL

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MAINTAINING HARMONY BETWEEN MAN AND HIS ENVIRONMENT

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P.O. Box 3788  
Shiprock, NM 87420

Off: (505) 368-4065

## ANALYTICAL REPORT

Date: 29-Apr-04

**CLIENT:** Merrion Oil and Gas Corporation  
**Work Order:** 0404030  
**Project:** Osborn 1  
**Lab ID:** 0404030-002A

**Client Sample Info:** Osborn 1  
**Client Sample ID:** Osborn #3W  
**Collection Date:** 4/19/2004 3:45:00 PM  
**Matrix:** AQUEOUS

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>DIESEL RANGE ORGANICS</b>		<b>SW8015B</b>		<b>(SW3510B)</b>		Analyst: JEM
T/R Hydrocarbons: C10-C28	0.38	0.25		mg/L	1	4/23/2004

**Qualifiers:** ND - Not Detected at the Practical Quantitation Limit  
J - Analyte detected below Practical Quantitation Limit  
B - Analyte detected in the associated Method Blank  
H - Parameter exceeded Maximum Allowable Holding Time  
S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted precision limits  
E - Value above Upper Quantitation Limit - UQL

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## ANALYTICAL REPORT

Date: 29-Apr-04

**CLIENT:** Merrion Oil and Gas Corporation

**Client Sample Info:** Osborn 1

**Work Order:** 0404030

**Client Sample ID:** Osborn #1W & #2W

**Project:** Osborn 1

**Collection Date:** 4/19/2004 3:45:00 PM

**Lab ID:** 0404030-003A

**Matrix:** AQUEOUS

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B				Analyst: JEM
Benzene	ND	0.5		µg/L	1	4/19/2004
Ethylbenzene	2.2	0.5		µg/L	1	4/19/2004
m,p-Xylene	22	1.0		µg/L	1	4/19/2004
o-Xylene	8.2	0.5		µg/L	1	4/19/2004
Toluene	0.6	0.5		µg/L	1	4/19/2004

**Qualifiers:**  
ND - Not Detected at the Practical Quantitation Limit  
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## ANALYTICAL REPORT

Date: 18-May-04

CLIENT:	Terracon <i>AUGER SAMPLE</i>	Client Sample Info:	Old Aztec Highway
Work Order:	0405009	Client Sample ID:	Pit Closure
Project:	Old Aztec Highway, Flora Vista	Collection Date:	5/11/2004 8:45:00 AM
Lab ID:	0405009-001A	Matrix:	SOIL

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
<b>DIESEL RANGE ORGANICS</b>		<b>SW8015B</b>		Analyst: <b>JEM</b>		
T/R Hydrocarbons: C10-C28	ND	25.0		mg/Kg	1	5/17/2004
<b>AROMATIC VOLATILES BY GC/PID</b>		<b>SW8021B</b>		Analyst: <b>JEM</b>		
Benzene	ND	25		µg/Kg	25	5/14/2004
Ethylbenzene	ND	25		µg/Kg	25	5/14/2004
m,p-Xylene	ND	50		µg/Kg	25	5/14/2004
o-Xylene	ND	25		µg/Kg	25	5/14/2004
Toluene	ND	50		µg/Kg	25	5/14/2004

Qualifiers:	ND - Not Detected at the Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
	J - Analyte detected below Practical Quantitation Limit	R - RPD outside accepted precision limits
	B - Analyte detected in the associated Method Blank	E - Value above Upper Quantitation Limit - UQL
	H - Parameter exceeded Maximum Allowable Holding Time	

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