# Hobbs, NM 88240

#### State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 2040 South Pacheco Santa Fe, NM 87505 Form C-141 Revised March 17, 1999

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

os Road, Aztec, NM 87410 outh Pacheco, Santa Fe, NM 87505

			Relea	s <del>e Netifi</del> ca	tion a	and Cor	rective Act	tion		
<sup>*</sup> 30-0	D45-	2990k		se Notifica	<b>PER</b>	TOR		☐ Init	ial Rep	ort X Final Report
Name of Co		<del></del>	- A	200		Contact	<del></del> _			
Merrion O	il & Gas		( <del>-</del>	OCT 2000	3	Connie D				<del></del>
Address 610 Reilly	Venue		878 <b>P</b>	EOEIV DIV	~]	Telephone 327-9801				l
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U-Da-Well			No. S. C.		077		duction Well			
Surface Ow	ner		400, 470	C2 Minara	Owner				Lease	o No
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				NATU	JRE O	F RELEA	ASE			
Type of Relea						Volume of				e Recovered
Produced W Source of Re						Estimated	120 Bbls.  Iour of Occurrence		0 Bbls.	nd Hour of Discovery
		Water Conta	inment				Determine	.6	Aug 1,	
Was Immedia	ate Notice (	Given?	🖼			If YES, To	Whom?	<b>-</b>		
<u> </u>			Yes LX	No Not Req	luired	NA				•
By Whom?						Date and H	lour			
Was a Watero	course Read			1		If YES, Vo	lume Impacting t	he Waterco	ourse.	
			Yes 🗀			Estimated	120 Bbls.			
If a Watercou										
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location bei	ow the pr	ow-pit ioi a	ii estiiia	ted distance of	~1200	icci. A wa	ier analysis is a	ittacheu.		
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Please see at	tachment									
Describe Are	a Affected	and Cleanup A	Action Tak	cen.*			4 /	<del>-</del>	Was .	
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Signature:		$\Rightarrow$		<del></del>		Approved	Der	ng	10	wy
Printed Name	: Connie	Dinning				District Su		- tu	unk	Chavez
Title: Engin	eer					Approval I	Date: 10/5/1	00 1	Expiration	on Date:
Date: Octob	er 3, 2000		Phone: 3	327-9801 x. 126		Conditions	of Approval:	ile soi	1	Attached
* Attach Ad	ditional S	heets If Nece	essary	GF 002624	7401	scomple	vesults, es	tablish	Inter	ra/
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						men	covandun			

#### Merrion Oil & Gas

# U-Da-Well No. 1 Release Notification Additional Information

#### September 22, 2000

#### • Describe Cause of Problem and Remedial Action Taken -

Water from the well leaked through what we now believe is a crack in sandstone beneath the blow-pit.

When the leak was discovered, Merrion took the following steps to stop the seepage:

August 1, 2000 - Reinforce the berm sides of the blow-pit to eliminate any potential seepage loss through the walls of the pit.

August 3, 2000 - Install a pit liner to seal the pit bottom

August 3, 2000 - Build a second small pit down-gradient to capture any leakage from the blow-pit.

These steps reduced the leakage to a trickle and we continued operations.

There is no acceptable reason for not reporting the leak. It should have been reported.

This event has brought to our attention the need for an internal policy regarding the reporting of any future spill. The attached memo outlines that policy and it will be distributed to all employees and certain contract personnel.

#### • Describe Area Affected and Cleanup Action Taken -

The area affected was the bottom of a small, natural, ephemeral drainage extending from the south side of location below the blow-pit for an estimated distance of  $\sim$ 1200 feet.

The discharge to the pit has ceased. The produced water was pumped out of the blow-pit and the reserve pit. The blow-pit bottom was leveled and a steel tank was installed to collect the produced water from the workover operation that has been completed.

The sample of produced water that ran down the drainage was analyzed (a copy of the analysis is attached). The water was relatively fresh and the level of hydrocarbons in the water was extremely low.

We propose to leave the drainage area as it is. The low level of contaminants in the produced water will be naturally remediated. Attempts to remove the soil contacted by the produced water or to aerate the soil by turning it to accelerate remediation will contribute to erosion and harm vegetation.

If the local New Mexico Oil and Gas Conservation Division (NMOCD) requires further action, we will comply, but natural remediation appears to be the least invasive, most practical solution.

We will collect soil samples from the drainage to assure that no further action is necessary. These will be filed with the local NMOCD office as an addendum to this report as soon as they are available.

#### **MEMORANDUM**

From: T. Greg Merrion

To: All Merrion Oil & Gas Employees and Contract Personnel

RE: Spills, Merrion Oil & Gas Reporting Policy

CC: New Mexico Oil Conservation Division, Aztec Office (NMOCD)

Merrion Oil and Gas is committed to complying with all Federal, State and Local regulations. We strive to be good stewards of the environment in which we operate. I ask that all our employees and contractors join in that effort by reporting to their supervisors any activity that might be harmful to the environment.

#### Effective this date, the policy regarding the reporting of spills is as follows:

- Any unauthorized release of produced water, produced hydrocarbons or other chemical substance produced or used in Merrion Oil & Gas' (MOG) operations shall be immediately reported to Carl Merilatt, Production Foreman (Cell phone 320-1404, Pager 599-7989). Upon discovery, if the Production Foreman is not available, spills may be reported to Steve Dunn, Drilling and Production Manager, or Connie Dinning, Engineer at the MOG office 327-9801.
- This policy refers to reporting procedures only. It should not conflict with standard procedures for stopping leaks or immediate cleanup in order to prevent further contamination.
- The Production Foreman, in consultation with the Drilling and Production Manager (Steve Dunn), will determine the course of action required. Reporting requirements will depend on the type and quantity of the substance released and the area affected by the release.
- If verbal or written notice is required, the Production Foreman will be the single point contact
  with the NMOCD. (If the Production Foreman is unavailable, the NMOCD will be contacted
  by one of the parties listed above.)
- Failure to report any unauthorized release to the Production Foreman in accordance with this policy may result in termination of employment.

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

### **MERRION OIL & GAS**

#### Case Narrative

On September 22, 2000, two water sample were submitted to Inter-Mountain Laboratories - Farmington for rush analysis. The parameters performed on the samples are indicated on the accompanying Chain of Custody.

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 analysis of the samples reported herein are found in: EPA: "Methods for Chemical Analysis of Water and Wastes (MCAWW)" – EPA/600/4-79-020-March,1983, SM- "Standard Methods for the Examination of Water and Wastewater", APHA-AWWA-WEF, 19<sup>th</sup> Edition, 1995.

DRO analysis were performed by U.S.E.P.A.: "<u>Test Method for the Determination of Diesel Range Organics</u>", Revision 2, February 1992, GRO – U.S.E.P.A.: "<u>Test Methods for the Determination of Gasoline Range Organics</u>", Revision 5, February 1992, BTEX – U.S.E.P.A.: Method 5030, Purge and Trap, EPA Method 8021B, Aromatic Volatile Hydrocarbons.

If there are any questions regarding the information presented in this report package, please feel free to contact us at your convenience.

Organic Analyst/IML-Farmington

Sincere



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

2506 West Main Street, Farmington, NM 87401

Client:

Merrion Oil & Gas

Project:

U-DA-Well #1

Sample ID:

Seep

Lab ID:

0300W03923

Matrix:

Water

Condition:

Intact

Date Received: 09/20/00

Date Reported: 09/22/00

Date Sampled: 09/20/00

Time Sampled: 1446

	Analytical	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		it (Bay)	Sign of	ta Kirila da Taran T	Analysis	,
Parameter ?	Result	Units		Units	PQL	Method	Date: Time	Init.
General Parameters								
PH	8.8	s.u.			0.1	EPA 150.1	09/20/00 1600	WL
Electrical Conductivity	13,100	µmhos/cm			10	EPA 120.1	09/20/00 1600	WL
Alkalinity as CaCO3	6,820	mg/L			1	EPA 310.1	09/20/00 1700	WL
Resistivity	0.076	ohm/m			0.001	Calculation	09/22/00 0837	WL.
Specific Gravity	1.009	g/cc			0.001	SM 2710F	09/21/00 1700	WL
Hardness as CaCO3	194	mg/L			1	EPA 200.7	09/20/00 1730	WL.
Solids - Total Dissolved	11,300	mg/L			10	EPA 160.1	09/21/00 0930	JP
Sodium Absorbtion Ratio	130	ratio			0.01	Calculation	09/20/00 1730	WL
Major Cations								
Calcium	16.4	mg/L	0.82	meq/L	0.2	EPA 200.7	09/20/00 1730	WL
Magnesium	37.1	mg/L	3.05	meq/L	0.2	EPA 200.7	09/20/00 1730	WL
Potassium	18.7	mg/L	0.48	meq/L	0.2	EPA 200.7	09/20/00 1730	WL
Sodium	4,190	mg/L	182.12	meq/L	0.2	EPA 200.7	09/20/00 1730	WL
Major Anions								
Bicarbonate as HCO3	7,130	mg/L	116.87	meq/L	1	EPA 310.1	09/20/00 1700	WL
Carbonate as CO3	584	mg/L	19.45	meq/L	1	EPA 310.1	09/20/00 1700	WL.
Chloride	1,250	mg/L	35.23	meq/L	1	EPA 325.3	09/14/00 1340	WL
Hydroxide as OH	<1	mg/L	<0.01	meq/L	1	EPA 310.1	09/20/00 1700	WL
Sulfate	173	mg/L	3.60	meq/L	5	EPA 375.3	09/14/00 1340	WL
Anion/Cation Balance QC Inform	ation							
Anion Sum			175.15	meq/L	0.01	SM 1030	09/20/00 1730	WL
Cation Sum			186.47	meq/L	0.01	SM 1030	09/20/00 1730	WL
Cation/Anion Balance			3.13	%	N/A	N/A	09/20/00 1730	WL

Reference: EPA - "Methods for Chemical Analysis of Water and Wastes (MCAWW)" - EPA/600/4-79-020 - March, 1983.

SM - "Standard Methods for the Examination of Water and Wastewater", APHA-AWWA-WEF,19th Edition, 1995.

EPA - "Methods for the Determination of Metals in Environmental Samples" - Supplement 1 - 600/R-94-111 - May, 1994.



2506 West Main Street, Farmington, NM 87401

- Client:

Phone (505) 326-4737 Fax (505) 325-4182 Merrion Oil & Gas

Project:

Sample ID:

U-DA-Well #1

Lab ID:

Reserve Pit

0300W03924

Matrix:

Water

Condition: Intact Date Received: 09/20/00 Date Reported: 09/22/00

Date Sampled: 09/20/00

Time Sampled: 1448

	Analytical						Ar	nalysis	
Parameter 6 %	Result	Units		Units	. PQL	Method	Date	Time	lnit.
General Parameters									
PH	8.7	s.u.			0.1	EPA 150.1	09/20/0	0 1600	WL.
Electrical Conductivity	13,100	µmhos/cm			10	EPA 120.1	09/20/0	0 1600	WL
Alkalinity as CaCO3	7,560	mg/L			1	EPA 310.1	09/20/0	0 1700	WL
Resistivity	0.076	ohm/m			0.001	Calculation	09/22/0	0 0837	WL
Specific Gravity	1.007	g/cc			0.001	SM 2710F	09/21/0	0 1700	WL
Hardness as CaCO3	122	mg/L			1	EPA 200.7	09/20/0	0 1730	WL
Solids - Total Dissolved	10,600	mg/L			10	EPA 160.1	09/21/0	0 0930	JP
Sodium Absorbtion Ratio	160	ratio			0.01	Calculation	09/20/0	0 1730	WL
Major Cations									
Calcium	18.0	mg/L	0.90	meq/L	0.2	EPA 200.7	09/20/0	0 1730	WL
Magnesium	18.6	mg/L	1.53	meq/L	0.2	EPA 200.7	09/20/0	0 1730	WL
Potassium	30.6	mg/L	0.78	meq/L	0.2	EPA 200.7	09/20/0	0 1730	WL
Sodium	4,080	mg/L	177.25	meq/L	0.2	EPA 200.7	09/20/0	0 1730	WL
Major Anions									
Bicarbonate as HCO3	7,760	mg/L	127.16	meq/L	1	EPA 310.1	09/20/0	0 1700	WL
Carbonate as CO3	718	mg/L	23.94	meq/L	1	EPA 310.1	09/20/0	0 1700	WL
Chloride	1,240	mg/L	35.04	meq/L	1	EPA 325.3	09/14/0	0 1340	WL
Hydroxide as OH	<1	mg/L	<0.01	meq/L	1	EPA 310.1	09/20/0	0 1700	WL
Sulfate	120	mg/L	2.50	meq/L	5	EPA 375.3	09/14/0	0 1340	WL
Anion/Cation Balance QC Inform	ation								
Anion Sum			188.64	meq/L	0.01	SM 1030	09/20/0	0 1730	WL
Cation Sum			180.46	meq/L	0.01	SM 1030	09/20/0	0 1730	WL
Cation/Anion Balance			2.22	%	N/A	N/A	09/20/0	0 1730	WL

Reference: EPA - "Methods for Chemical Analysis of Water and Wastes (MCAWW)" - EPA/600/4-79-020 - March, 1983.

SM - "Standard Methods for the Examination of Water and Wastewater", APHA-AWWA-WEF, 19th Edition, 1995.

EPA - "Methodis 10] the Dete mination of Metals in Environmental Samples" - Supplement I - 600/R-94-111 - May, 1994.



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

Client:

Merrion Oil & Gas

Project:

U-DA-Well #1

Sample ID:

Lab ID:

Matrix:

0300W03923

Seep

Water Condition: Intact

Date Reported: 09/22/00

2506 West Main Street, Farmington, NM 87401

Date Sampled: 09/20/00

Date Received: 09/20/00

Parameter	Analytical Result	PQL	Units
GRO - Method 8015AZ			
Gasoline Range Organics(C6-C10)	<20	20	mg/L
Gasoline Range Organics as Gasoline	<20	20	mg/L
Quality Control - Surrogate Recovery	%	QC Lir	mits
4-Bromofluorobenzene(SUR-8015B)	1170	70 - 1	130

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



2506 West Main Street, Farmington, NM 87401

Date Reported: 09/22/00

Project: U-DA-Well #1

Phone (505) 326-4737 Fax (505) 325-4182 Client: Merrion C Merrion Oil & Gas

Sample ID: Lab ID:

Reserve Pit

Date Sampled: 09/20/00 Date Received: 09/20/00

Matrix:

0300W03924

Water Condition: intact

Parameter	Analytical Result	PQL	Units
GRO - Method 8015AZ			
Gasoline Range Organics(C6-C10)	<20	20	mg/L
Gasoline Range Organics as Gasoline	<20	20	mg/L
Quality Control - Surrogate Recovery	%	QC Lii	mits
4-Bromofluorobenzene(SUR-8015B)	89	70 - 1	130

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

Reviewed By:



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

· Client:

Merrion Oil & Gas

Project:

U-DA-Well #1

Sample ID:

Seep

Lab ID:

0300W03923

Matrix:

Water

Condition:

Intact

2506 West Main Street, Farmington, NM 87401

Date Reported: 09/22/00

Date Sampled: 09/20/00

Date Received: 09/20/00

Date Analyzed: 09/21/00

Parameter	Analytical Result	PQL	Units
DRO - Method 8015AZ			
Diesel Range Organics (C10 - C22)	115	20	mg/L
Diesel Range Organics as Diesel	115	20	mg/L
Quality Control - Surrogate Recovery	%	QC Lir	nits
o-Terphenyl(SUR-8015)	77	70 - 1	30

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

Reviewed By:



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

Client:

Merrion Oil & Gas

Project:

U-DA-Well #1

Sample ID:

Reserve Pit

Lab ID:

0300W03924

Matrix:

Water

Condition: Intact

2506 West Main Street, Farmington, NM 87401

Date Reported: 09/22/00

Date Sampled: 09/20/00

Date Received: 09/20/00

Date Analyzed: 09/21/00

Parameter	Analytical Result	PQL	Units
DRO - Method 8015AZ			
Diesel Range Organics (C10 - C22)	76	20	mg/L
Diesel Range Organics as Diesel	76	20	mg/L
Quality Control - Surrogate Recovery	%	QC Lir	nits
o-Terphenyl(SUR-8015)	76	70 - 1	30

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

Reviewed By:



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

Client:

Merrion Oil & Gas

Project:

U-DA-Well #1

Sample ID:

Seep

Lab ID:

0300W03923

Matrix:

Water

Condition:

Intact

2506 West Main Street, Farmington, NM 87401

Date Reported: 09/21/00

Date Sampled: 09/20/00

Date Received: 09/20/00

Date Analyzed: 09/21/00

Parameter	Analytical Result	PQL	Units	
BTEX - 8021B	ppb			
Benzene	<100 +	100	μg/L	
Toluene	155 +	100	μg/L	
Ethylbenzene	195+	100	μg/L	
Xylenes (total)	547 +	300	μg/L	
Quality Control - Surrogate Recovery	%	QC Liı	mits	
a,a,a-Trifluorotoluene(SUR-8021B)	114	70 - 1	130	
4-Bromofluorobenzene(SUR-8021B)	89	70 - 1	130	

+ - High PQL due to matrix interference

Reference:

Method 8021, Volatile Organic Compounds, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, United States Environmental

Protection Agency, SW-846, Volume IB, December 1987.

Reviewed By:

William Lipps, Asst. Vab Manager



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

Client:

Merrion Oil & Gas

Project:

U-DA-Well #1

Sample ID:

Lab ID:

Reserve Pit 0300W03924

Matrix:

Water

Condition:

Intact

2506 West Main Street, Farmington, NM 87401

Date Reported: 09/21/00

Date Sampled: 09/20/00

Date Received: 09/20/00

Date Analyzed: 09/21/00

Parameter	Analytical Result	PQL	Units
BTEX - 8021B	ppb		· · · · · · · · · · · · · · · · · · ·
Benzene	<100 +	100	µg/L
Toluene	<100 +	100	μg/L
Ethylbenzene	<100+	100	μg/L
Xylenes (total)	<300 +	300	μg/L

Quality Control - Surrogate Recovery	%	QC Limits
a,a,a-Trifluorotoluene(SUR-8021B)	129	70 - 130
4-Bromofluorobenzene(SUR-8021B)	117	70 - 130

+ - High PQL due to matrix interference

Reference: Method 8021, Volatile Organic Compounds, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, United States Environmental

Protection Agency, SW-846, Volume IB, December 1987.

Reviewed By:

William Lipps, Asst Lab Manager



# CHAIN OF CUSTODY RECORD

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Sample No./ Identification	Date	Time	Lab Num	ber		Matrix		No. of Containers							•
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Sheridan, Wyoming 82801 Telephone (307) 674-7506	1 Sheri	dan, Wyomii hone (307)	ng 82801	Gillette	, Wyoming 8 one (307) 68	32718	Farmingtor Telephone	n, NM 87	401	Co	llege St	ation, T	X 77845 76-8945		

#### MERRION

Oil & Gas

November 13, 2000

Denny Foust NMOCD 1000 Rio Brazos Aztec, NM 87410



RE: U-Da-Well No. 1, Addendum to C-141 Report

Dear Mr. Foust

2-31N-08W

Enclosed please find laboratory analyses for soil samples collected by Carl Merilatt and I near the U-Da-Well on October 10, 2000. We did not observe any soil staining or salts on the surface of the ground. The samples were tested for BTEX, Gasoline Range Organics and Diesel Range Organics. All samples showed a non-detect level for all constituents in question.

The attached map shows the sample collection locations. The first sample, labeled Drainage No. 1 was collected directly downstream of the release about 30 yards from the edge of location. The sample labeled Drainage No. 2 was collected about 200 yards downslope from the location just before a larger wash joins the drainage from the location. There were some black flecks on the soil indicating that the water from the location had traveled to this point. The control sample was taken in the wash about a quarter of a mile downstream. There was no sign that any water from the location had traveled to this point.

If you need further information, please call me at 327-9801 ext. 126.

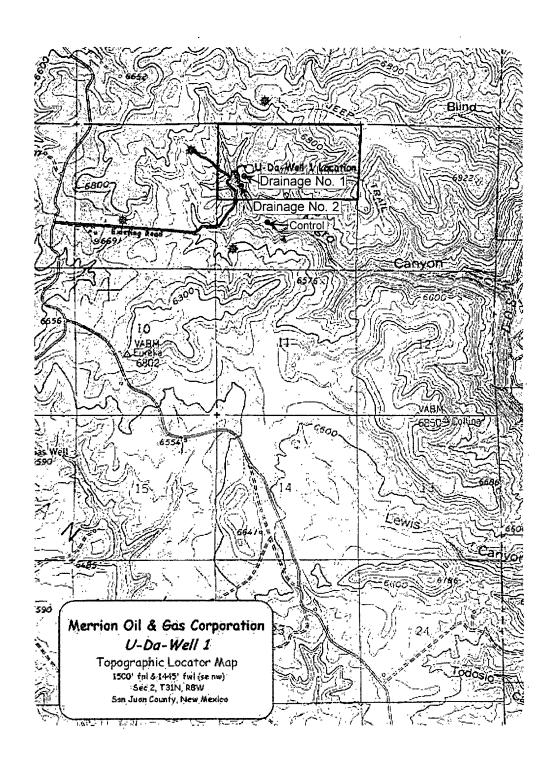
Sincerely

Connie Dinning

Engineer

n DGF0026242496

9/18/200



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

## **MERRION OIL & GAS**

On October 10, 2000, three soil samples were submitted to Inter-Mountain Laboratories Farmington for analysis. The samples were received intact. Total Petroleum Hydrocarbons as Diesel Range Organics (8015AZ DRO) and Gasoline Range Organics (8015AZ GRO) and BTEX (8021B) were performed on the samples as per the accompanying Chain of Custody form. The samples were analyzed within the required holding times.

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 samples reported herein are found in: DRO – USEPA: "Test Method for the Determination of Diesel Range Organics", Revision 2, February 1992. GRO – USEPA: "Test Method for the Determination of Gasoline Range Organics", Revision 5, February 1992. BTEX analysis were performed by EPA Method 5030, Purge and Trap and EPA Method 8021B, Aromatic Volatile Hydrocarbons, using a Tekmar ALS 2016 and a Hewlett Packard 5890 Gas Chromatograph, equipped with a photoionization detector.

If there any questions regarding the information presented in this package, please feel free to call at your convenience.

Sharon Williams

Organic Analyst/IML-Farmington



2506 West Main Street, Farmington, NM 87401

Client:

Phone (505) 326-4737 Fax (505) 325-4182 Merrion Oil & Gas

Project:

Sample ID:

U-DA-Well #1

Lab ID:

Control

0300W04431

Matrix:

Soil

Condition:

Intact

Date Reported: 11/08/00

Date Sampled: 10/10/00

Date Received: 10/10/00

Parameter	Analytical Result	PQL	Units
BTEX - 8021B			
Benzene	<1	1	ug/Kg
Foluene <sup>°</sup>	<1	1	ug/Kg
Ethylbenzene	<1	1	ug/Kg
(ylenes (total)	<3	3	ug/Kg

Quality Control - Surrogate Recovery	%	QC Limits
a,a,a-Trifluorotoluene(SUR-8021B)	76	70 - 130
4-Bromofluorobenzene(SUR-8021B)	77	70 - 130

Method 8021, Volatile Organic Compounds, Test Methods for Evaluating

Solid Waste, Physical/Chemical Methods, United States Environmental

Protection Agency, SW-846, Volume IB, December 1987.

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

Client:

Merrion Oil & Gas

Project:

U-DA-Well #1

Sample ID:

Control

Lab ID:

Matrix:

Soil

Condition:

0300W04431

Date Reported: 11/08/00 Date Sampled: 10/10/00 Date Received: 10/10/00

2506 West Main Street, Farmington, NM 87401

Intact

Parameter	Analytical Result	PQL	Units	
DRO - Method 8015AZ	•		· · · · · · · · · · · · · · · · · · ·	
Diesel Range Organics (C10 - C22)	<20	20	mg/Kg	
Diesel Range Organics (C10 - C22) Diesel Range Organics as Diesel	<20	20	mg/Kg	
Quality Control - Surrogate Recovery	%	QC Limits		
o-Terphenyl(SUR-8015)	74	70 - 130		

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

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

Client:

Merrion Oil & Gas

Project:

U-DA-Well #1

Sample ID:

Control

Lab ID:

0300W04431

Matrix:

0-1

Condition:

Soil

Intact

2506 West Main Street, Farmington, NM 87401

Date Reported: 11/08/00

**Date Sampled:** 10/10/00 **Date Received:** 10/10/00

Parameter	Analytical Result	PQL	Units	
GRO - Method 8015AZ				
Gasoline Range Organics(C6-C10)	<5	5	mg/Kg	
Gasoline Range Organics (Co-CTO)  Gasoline Range Organics as Gasoline	<5	5	mg/Kg	
Quality Control - Surrogate Recovery	%	QC Li		
4-Bromofluorobenzene(SUR-8015B)	77	70 - 130		

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

Reviewed By:

Project:

U-DA-Well #1

Sample ID:

Drainage #1

Lab ID:

0300W04432

Matrix:

Soil

a,a,a-Trifluorotoluene(SUR-8021B)

4-Bromofluorobenzene(SUR-8021B)

Condition:

Intact

2506 West Main Street, Farmington, NM 87401

Date Reported: 11/08/00

70 - 130

70 - 130

Date Sampled: 10/10/00

Date Received: 10/10/00

Parameter	Analytical Result	PQL	Units	
BTEX - 8021B	· · · · · · · · · · · · · · · · · · ·			
Benzene	<1	1	ug/Kg	
Toluene	<1	1	ug/Kg ug/Kg	
Ethylbenzene	<1	1		
Xylenes (total)	<3	3	ug/Kg	
Quality Control - Surrogate Recovery	%	QC Li	mits	

103

83

Reference:	Method 8021, Volatile Organic Compounds, Test Methods for Evaluating
	Solid Waste, Physical/Chemical Methods, United States Environmental

Protection, Agency, SW-8#6, Volume IB, December 1987.

Reviewed By:

Phone (505) 326-4737 Fax (505) 325-4182 Client: Merrion Oil & Gas

Project:

U-DA-Well #1

Sample ID: Lab ID:

Drainage #1 0300W04432

Matrix: Soil Condition: Intact 2506 West Main Street, Farmington, NM 87401

Date Reported: 11/08/00 Date Sampled: 10/10/00

Date Received: 10/10/00

Parameter	Analytical Result	PQL	Units	
DRO - Method 8015AZ		T		
Diesel Range Organics (C10 - C22)	<20	20	mg/Kg	
Diesel Range Organics as Diesel	<20	20	mg/Kg	
Quality Control - Surrogate Recovery	%	QC Limits		
o-Terphenyl(SUR-8015)	77	70 - 130		

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

Reviewed By:

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

Client: Merrion Oil & Gas

Project:

U-DA-Well #1

Sample ID:

Drainage #1

Lab ID:

0300W04432

Matrix:

Soil

Condition:

Date Reported: 11/08/00 Date Sampled: 10/10/00 Date Received: 10/10/00

2506 West Main Street, Farmington, NM 87401

Intact

Parameter	Analytical Result	PQL	Units	
GRO - Method 8015AZ				
Gasoline Range Organics(C6-C10)	<5	5	mg/Kg	
Gasoline Range Organics(C6-C10) Gasoline Range Organics as Gasoline	<5	5	mg/Kg	
Quality Control - Surrogate Recovery	%	QC Limits		
4-Bromofluorobenzene(SUR-8015B)	82	70 -	130	

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

Reviewed By:

Phone (505) 326-4737 Fax (505) 325-4182 Client: Merrion C

Merrion Oil & Gas

Project:

U-DA-Well #1

Sample ID:

Drainage #2

Lab ID:

0300W04433

Matrix:

Soil

Condition:

Intact

2506 West Main Street, Farmington, NM 87401

Date Reported: 11/08/00

Date Sampled: 10/10/00

Date Received: 10/10/00

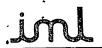
Parameter	Analytical Result	PQL	Units	
BTEX - 8021B				
Benzene	<1	1	ug/Kg	
Toluene	<1	1	ug/Kg	
Ethylbenzene	<1	1	ug/Kg	
Xylenes (total)	<3	3	ug/Kg	

Quality Control - Surrogate Recovery	%	QC Limits
a,a,a-Trifluorotoluene(SUR-8021B)	125	70 - 130
4-Bromofluorobenzene(SUR-8021B)	96	70 - 130

Reference: Method 8021, Volatile Organic Compounds, Test Methods for Evaluating

Solid Waste, Physical/Chemical Methods, United States Environmental

Protection Agency, SW-846, Volume IB, December 1987.



Project:

U-DA-Well #1

Sample ID: Lab ID:

Drainage #2

0300W04433

Matrix:

Soil

Condition:

Intact

2506 West Main Street, Farmington, NM 87401

Date Reported: 11/08/00

Date Sampled: 10/10/00

Date Received: 10/10/00

Parameter	Analytical Result	PQL	Units	
DRO - Method 8015AZ				
Diesel Range Organics (C10 - C22)	<20	20	mg/Kg	
Diesel Range Organics as Diesel	<20	20	mg/Kg	
Quality Control - Surrogate Recovery	%	QC Limits		
o-Terphenyl(SUR-8015)	70	70 -	30	

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

Phone (505) 326-4737 Fax (505) 325-4182 Client: Merrion (

Merrion Oil & Gas

Project:

U-DA-Well #1

Sample ID:

Drainage #2

Lab ID:

0300W04433

Matrix:

Soil

Intact

Condition:

Date Reported: 11/08/00 Date Sampled: 10/10/00

Date Received: 10/10/00

2506 West Main Street, Farmington, NM 87401

Parameter	Analytical Result	PQL	Units	
GRO - Method 8015AZ				
Gasoline Range Organics(C6-C10)	<5	5	mg/Kg	
Gasoline Range Organics as Gasoline	<5	5	mg/Kg	
Quality Control - Surrogate Recovery	%	<b>QC Limits</b> 70 - 130		
4-Bromofluorobenzene(SUR-8015B)	96			

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

Reviewed By:

Inter- Mountain Laboratories, Inc	1 ERRÍO	N Q:	/ CH <i>i</i>	AIN	OF C	USTO[	DY RE	COI	RD					•	· .
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555 Absaraka Sheridan, Wyoming 82801 Telephone (307) 674-7506

1633 Terra Avenue Sheridan, Wyoming 82801 Telephone (307) 672-8945 1701 Phillips Circle Gillette, Wyoming 82718 Telephone (307) 682-8945 2506 West Main Street Farmington, NM 87401 Telephone (505) 326-4737 11183 State Hwy. 30 College Station, TX 77845 Telephone (979) 776-8945

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