

3R - 291

**GENERAL  
CORRESPONDENCE**

**YEAR(S):**

1994



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION



BRUCE KING  
GOVERNOR

August 23, 1994

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-5800

ANITA LOCKWOOD  
CABINET SECRETARY

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. P-111-334-157**

Ms. Rachel Dunn  
Merrion Oil & Gas  
P.O. Box 840  
Farmington, New Mexico 87499

**RE: GROUND WATER CONTAMINATION  
OSBORN #1, FAWKES #1, CLU #302, CANADA MESA #3 WELL SITES  
SAN JUAN COUNTY, NEW MEXICO**

Dear Ms. Dunn:

The New Mexico Oil Conservation Division (OCD) is in the process of reviewing Merrion Oil & Gas' (MOG) June 20, 1994 and April 28, 1994 correspondence. These documents present the results of water quality sampling of ground water during the closure of unlined pits at the Osborn #1, Fawkes #1, CLU #302 and Canada Mesa #3 well sites which are operated by MOG.

In order to complete a review of the above referenced documents, the OCD requests that MOG provide the following information:

1. A map for each well site showing the locations of all soil and ground water sampling points.
2. The ground water sampling procedures used at each site.
3. An explanation for the discrepancy in ground water analytical sampling results between different sampling events at the Osborn #1 and Fawkes #1 well sites.

Submission of the above information will allow the OCD to complete a review of these documents.

If you have any questions, please call me at (505) 827-5885.

Sincerely,

William C. Olson  
Hydrogeologist  
Environmental Bureau

xc: OCD Aztec District Office

# MERRION

OIL & GAS

WATER DIVISION

35

JUN 20 1994

June 20, 1994

Mr. Bill Olson  
NMOCD  
PO Box 2088  
Santa Fe, NM 87504

Dear Mr. Olson:

As you requested, I am sending you a list of wells that we have encountered ground water on along with the laboratory results.

1. **Osborn #1:** The first water samples taken were analyzed by Envirotech. We feel that these samples are not accurate due to improper sampling procedures. (Dirt in the sample jars.) The second set of samples were taken to Intermountain Lab, these show a small amount of contamination.
2. **Fawkes #1:** The first set of samples on this well were also taken to Envirotech and we feel are not accurate due to sampling procedures. The second set of samples taken to Intermountain Lab show no contamination in the ground water. We have already submitted a closure report for this well.
3. **CLU #302:** One ground water sample was taken from the center of the pit, this shows contamination. A second ground water sample was taken from the center of the pit which shows slight contamination and a third water sample taken approx. 10' down gradient shows no contamination.
4. **Canada Mesa #3:** (See attached location diagram). Over 800 cubic yards of stained soil was excavated from the large pit and composted on location. Ground water sample at location #1 showed a small amount of contamination and sample #2 showed no contamination. We estimated that the hydrocarbons hit the ground water and moved along the water surface approx. 30' in all directions from the pit. Since the water samples were not overly contaminated we feel that the water itself did not absorb the heavy hydrocarbons.

Sincerely,



Margi Sullivan  
Engineering Technician

Cc: Denny Foust

Attachments

**TOTAL PETROLEUM HYDROCARBONS  
EPA METHOD 418.1**

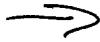
*Fawkes #1  
File*

**Merrion Oil and Glass**

Project: Osborn #1 and Fawkes #1  
Matrix: Water  
Condition: Intact/Cool

Date Reported: 05/17/94  
Date Sampled: 05/03/94  
Date Received: 05/03/94  
Date Extracted: 05/17/94  
Date Analyzed: 05/17/94

Sample ID	Lab ID	Result (mg/L)	Detection Limit
Osborn #1	G00337	ND	1
Osborn #2	G00338	161	50
Osborn #3	G00339	ND	1
Fawkes #1	G00340	ND	1
Fawkes #2	G00341	ND	1



ND - Analyte not detected at stated detection level.

References:

**Method 418.1:** Petroleum Hydrocarbons, Total Recoverable, USEPA Chemical Analysis of Water and Waste, 1978.

**Method 3510:** Separatory Funnel Liquid - Liquid Extraction, USEPA SW-846, Test Methods for Evaluating Solid Waste, Rev. 1, July, 1992.

Analyst: *Austin*

Reviewed: *mk*

## VOLATILE AROMATIC HYDROCARBONS

Merrion Oil and Gas

Project ID:	Osborn 1 and Fawkes 1	Report Date:	05/17/94
Sample ID:	Fawkes 1	Date Sampled:	05/03/94
Lab ID:	G00340 Pond NE of pit	Date Received:	05/03/94
Sample Matrix:	Water	Date Extracted:	NA
Condition:	Cool/Intact	Date Analyzed:	05/07/94

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	ND	0.2
Toluene	ND	0.2
Ethylbenzene	ND	0.2
m,p-Xylenes	ND	0.2
o-Xylene	ND	0.2

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	95.9	86 -115%

**Reference:** Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

**Comments:**

Austin Wal  
Analyst

mh  
Review

**VOLATILE AROMATIC HYDROCARBONS**

Merrion Oil and Gas

Project ID:	Osborn 1 and Fawkes 1	Report Date:	05/17/94
Sample ID:	Fawkes 2 <i>Pond NW</i>	Date Sampled:	05/03/94
Lab ID:	G00341	Date Received:	05/03/94
Sample Matrix:	Water <i>of pit</i>	Date Extracted:	NA
Condition:	Cool/Intact	Date Analyzed:	05/07/94

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	ND	0.2
Toluene	ND	0.2
Ethylbenzene	ND	0.2
m,p-Xylenes	ND	0.2
o-Xylene	ND	0.2

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	99.3	86 -115%

**Reference:** Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

**Comments:**

*Antoni...*  
\_\_\_\_\_  
Analyst

*mh*  
\_\_\_\_\_  
Review

**TOTAL PETROLEUM HYDROCARBONS  
EPA METHOD 418.1****Merrion Oil and Gas**Project: Fawkes 1  
Matrix: Water/Soil  
Condition: Cool/IntactDate Reported: 05/24/94  
Date Sampled: 05/03/94  
Date Received: 05/03/94  
Date Extracted: 05/18/94  
Date Analyzed: 05/18/94

Sample ID	Lab ID	Result (mg/L.)	Detection Limit
Fawkes 3	G00347	ND	1
Fawkes 4	G00348	ND	1
Fawkes 5	G00349	ND	1
Fawkes 6	G00350	ND	1
Fawkes 7	G00351	ND	6
Fawkes 8	G00352	ND	8
Fawkes 9	G00353	ND	8

ND - Analyte not detected at stated detection level.

## References:

**Method 418.1:** Petroleum Hydrocarbons, Total Recoverable, USEPA Chemical Analysis of Water and Waste, 1978.**Method 3510:** Separatory Funnel Liquid - Liquid Extraction, USEPA SW-846, Test Methods for Evaluating Solid Waste, Rev. 1, July 1992.Analyst: Austin GalReviewed: mh

Ground water sample 20' West of pit

**VOLATILE AROMATIC HYDROCARBONS**

Merrion Oil and Gas

Project ID: Fawkes 1  
Sample ID: Fawkes 3  
Lab ID: G00347  
Sample Matrix: Water  
Condition: Cool/Intact

Report Date: 05/24/94  
Date Sampled: 05/03/94  
Date Received: 05/03/94  
Date Extracted: NA  
Date Analyzed: 05/06/94

clean

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	ND	0.2
Toluene	0.2	0.2
Ethylbenzene	ND	0.2
m,p-Xylenes	1.3	0.2
o-Xylene	1.6	0.2

ND - Analyte not detected at the stated detection limit.

**Quality Control:**      Surrogate                      Percent Recovery                      Acceptance Limits

Bromofluorobenzene                      102.4                      86 -115%

**Reference:**                      Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

**Comments:**

Austin Wal-  
Analyst

mh  
Review

Ground water sample center at p. -

## VOLATILE AROMATIC HYDROCARBONS

Merrion Oil and Gas

Project ID:	Fawkes 1	Report Date:	05/24/94
Sample ID:	Fawkes 4	Date Sampled:	05/03/94
Lab ID:	G00348	Date Received:	05/03/94
Sample Matrix:	Water	Date Extracted:	05/03/94
Condition:	Cool/Intact	Date Analyzed:	05/06/94

clean

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	1.4	0.2
Toluene	0.9	0.2
Ethylbenzene	4.1	0.2
m,p-Xylenes	12.6	0.2
o-Xylene	32.0	0.2

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	130.2	86 -115%

**Reference:** Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

**Comments:** \* Surrogate high due to matrix interference

Austin Lutz  
Analyst

mh  
Review

*Water sample 20' east of pit*

**VOLATILE AROMATIC HYDROCARBONS**

Merrion Oil and Gas

Project ID: Fawkes 1  
Sample ID: Fawkes 5  
Lab ID: G00349  
Sample Matrix: Water  
Condition: Cool/Intact

*Clean*

Report Date: 05/24/94  
Date Sampled: 05/03/94  
Date Received: 05/03/94  
Date Extracted: NA  
Date Analyzed: 05/12/94

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	ND	0.2
Toluene	ND	0.2
Ethylbenzene	ND	0.2
m,p-Xylenes	ND	0.2
o-Xylene	ND	0.2

ND - Analyte not detected at the stated detection limit.

**Quality Control:**      Surrogate                      Percent Recovery                      Acceptance Limits

Bromofluorobenzene                      92.6                      86 -115%

**Reference:**                      Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

**Comments:**

*Antoin Wal*  
\_\_\_\_\_  
Analyst

*mh*  
\_\_\_\_\_  
Review

Water 40' North of pit (Downgradient)

**VOLATILE AROMATIC HYDROCARBONS**

Merrion Oil and Gas

Project ID: Fawkes 1  
Sample ID: Fawkes 6  
Lab ID: G00350  
Sample Matrix: Water  
Condition: Cool/Intact

Report Date: 05/24/94  
Date Sampled: 05/03/94  
Date Received: 05/03/94  
Date Extracted: NA  
Date Analyzed: 05/07/94

Clean

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	ND	0.2
Toluene	ND	0.2
Ethylbenzene	ND	0.2
m,p-Xylenes	ND	0.2
o-Xylene	ND	0.2

ND - Analyte not detected at the stated detection limit.

**Quality Control:**      Surrogate                      Percent Recovery                      Acceptance Limits  
Bromofluorobenzene                      90.4    86 -115%

**Reference:**                      Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

**Comments:**

Austin Leaf  
Analyst

mh  
Review

## VOLATILE AROMATIC HYDROCARBONS

Merrion Oil and Gas

Project ID: Fawkes 1  
 Sample ID: Fawkes 7  
 Lab ID: G00351  
 Sample Matrix: Soil  
 Condition: Cool/Intact

Report Date: 05/24/94  
 Date Sampled: 05/03/94  
 Date Received: 05/03/94  
 Date Extracted: 05/17/94  
 Date Analyzed: 05/17/94

Clean

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	34.7 <i>sk</i>	8.9
Toluene	64.2	8.9
Ethylbenzene	11.8	8.9
m,p-Xylenes	73.0	8.9
o-Xylene	34.2	8.9

ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Bromofluorobenzene	110.7	74 -121%

**Reference:** Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

**Comments:**

*Antoni Cal*  
Analyst

*mh*  
Review

## VOLATILE AROMATIC HYDROCARBONS

Merrion Oil and Gas

Project ID: Fawkes 1  
 Sample ID: Fawkes 8  
 Lab ID: G00352  
 Sample Matrix: Soil  
 Condition: Cool/Intact

Report Date: 05/24/94  
 Date Sampled: 05/03/94  
 Date Received: 05/03/94  
 Date Extracted: 05/17/94  
 Date Analyzed: 05/17/94

*clean*

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	ND <i>ok</i>	9.4
Toluene	26.9	9.4
Ethylbenzene	ND	9.4
m,p-Xylenes	31.0	9.4
o-Xylene	10.4	9.4

ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Bromofluorobenzene	110.8	74 -121%

**Reference:** Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

**Comments:**

*Austin*  
 Analyst

*mh*  
 Review

**VOLATILE AROMATIC HYDROCARBONS**

Merrion Oil and Gas

Project ID: Fawkes 1  
 Sample ID: Fawkes 9  
 Lab ID: G00353  
 Sample Matrix: Soil  
 Condition: Cool/Intact

Report Date: 05/24/94  
 Date Sampled: 05/03/94  
 Date Received: 05/03/94  
 Date Extracted: 05/17/94  
 Date Analyzed: 05/17/94

*clean*

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	ND <i>sk</i>	9.8
Toluene	90.8	9.8
Ethylbenzene	ND	9.8
m,p-Xylenes	71.9	9.8
o-Xylene	22.9	9.8

ND - Analyte not detected at the stated detection limit.

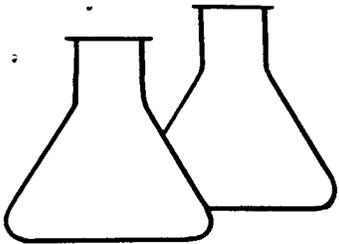
**Quality Control:**      Surrogate                      Percent Recovery                      Acceptance Limits  
 Bromofluorobenzene                      104.2    74 -121%

**Reference:**                      Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

**Comments:**

*Austin Lee*  
 Analyst

*mh*  
 Review



# ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401  
PHONE: (505) 632-0615 • FAX: (505) 632-1865

*Water sample taken at 10' down  
center of pit*

## EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Merrion Oil & Gas	Project #:	92127
Sample ID:	1	Date Reported:	04-19-94
Laboratory Number:	7236	Date Sampled:	04-18-94
Sample Matrix:	Water	Date Received:	04-18-94
Preservative:	HgCl & Cool	Date Analyzed:	04-19-94
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/L) - ppb	Det. Limit (ug/L)
Benzene	ND	1.0
Toluene	52 - ok	3.0
Ethylbenzene	730 - ok	1.0
p,m-Xylene	4,020	1.5
o-Xylene	3,860	1.0

*high  
possibly  
bad sample*

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	99 %
	Bromofluorobenzene	99 %

Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

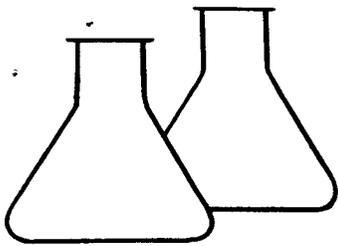
Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

ND - Parameter not detected at the stated detection limit.

Comments: Fawkes #1 Sec.18 29N, 13W

*Kevin L. Jensen*  
Analyst

*Maris D. Young*  
Review



# ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401  
PHONE: (505) 632-0615 • FAX: (505) 632-1865

## MODIFIED EPA METHOD 8015 NONHALOGENATED VOLATILE ORGANICS

Client:	Merrion Oil & Gas	Project #:	92127
Sample ID:	1	Date Reported:	04-20-94
Laboratory Number:	7236	Date Sampled:	04-18-94
Sample Matrix:	Water	Date Received:	04-18-94
Preservative:	Cool - HCl	Date Analyzed:	04-20-94
Condition:	Cool and Intact	Analysis Requested:	TPH

Parameter	Concentration (mg/L)	Det. Limit (mg/L)
-----	-----	-----
Gasoline Range (C5 - C10)	353	0.1
Diesel Range (C10 - C28)	158	0.1
C28 - C44 Range	ND	0.1
Total Petroleum Hydrocarbons	510 high	0.1

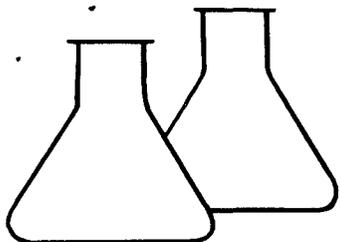
Method: Method 8015, Nonhalogenated Volatile Organics,  
Test Methods for Evaluating Solid Waste, SW-846, USEPA  
July 1992.

ND - Parameter not detected at the stated detection limit.

Comments: Fawkes #1 Sec.18 29N, 13W

Kevin L. Jensen  
Analyst

Morris D. Young  
Review



# ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401  
PHONE: (505) 632-0615 • FAX: (505) 632-1865

Water sample taken at 10' center of pit

## EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Merrion Oil & Gas	Project #:	92127
Sample ID:	2	Date Reported:	04-19-94
Laboratory Number:	7237	Date Sampled:	04-18-94
Sample Matrix:	Water	Date Received:	04-18-94
Preservative:	HgCl & Cool	Date Analyzed:	04-19-94
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	ND	1.0
Toluene	79 - ok	3.0
Ethylbenzene	830 - high	1.0
p,m-Xylene	4.980	1.5
o-Xylene	4.680	1.0

possibly bad sample

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	100 %
	Bromofluorobenzene	102 %

Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

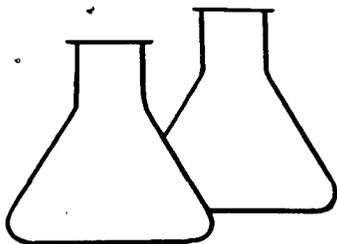
Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

ND - Parameter not detected at the stated detection limit.

Comments: Fawkes #1 Sec.18 29N, 13W

*Kevin L. Jensen*  
Analyst

*Marian D. Young*  
Review



# ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401  
PHONE: (505) 632-0615 • FAX: (505) 632-1865

## MODIFIED EPA METHOD 8015 NONHALOGENATED VOLATILE ORGANICS

Client:	Merrion Oil & Gas	Project #:	92127
Sample ID:	2	Date Reported:	04-20-94
Laboratory Number:	7237	Date Sampled:	04-18-94
Sample Matrix:	Water	Date Received:	04-18-94
Preservative:	Cool - HCl	Date Analyzed:	04-20-94
Condition:	Cool and Intact	Analysis Requested:	TPH

Parameter	Concentration (mg/L)	Det. Limit (mg/L)
-----	-----	-----
Gasoline Range (C5 - C10)	1,000	0.1
Diesel Range (C10 - C28)	228	0.1
C28 - C44 Range	ND	0.1
Total Petroleum Hydrocarbons	1,230 <i>high</i>	0.1

Method: Method 8015, Nonhalogenated Volatile Organics,  
Test Methods for Evaluating Solid Waste, SW-846, USEPA  
July 1992.

ND - Parameter not detected at the stated detection limit.

Comments: Fawkes #1 Sec.18 29N, 13W

*Kevin L. Jensen*  
Analyst

*Merrill Young*  
Review

Santa Fe

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

SUBMIT 1 COPY TO  
APPROPRIATE  
DISTRICT OFFICE  
AND 1 COPY TO  
SANTA FE OFFICE

RECEIVED

JUN 15 1994

OIL CONSERVATION DIV.  
SANTA FE

PIT REMEDIATION AND CLOSURE REPORT

**Operator:** Merrion Oil & Gas Corporation **Telephone:** (505) 327-9801

**Address:** P.O. Box 840, Farmington, NM 87499

**Facility Or:** Fawkes #1  
**Well Name**

**Location:** Unit or Qtr/Qtr Sec P Sec 18 T 29N R 13W County San Juan

**Pit Type:** Separator      Dehydrator      Other Blow off pit

**Land Type:** BLM     , State     , Fee X, Other     

---

**Pit Location:** Pit dimensions: length 10', width 10', depth 4'  
(Attach diagram)

**Reference:** wellhead X, other     

**Footage from reference:** 20'

**Direction from reference:** 45 Degrees X East North X  
of  
     West South     

---

<b>Depth To Ground Water:</b> (Vertical distance from contaminants to seasonal high water elevation of ground water)	Less than 50 feet (20 points)	
	50 feet to 99 feet (10 points)	
	Greater than 100 feet (0 Points)	<u>20</u>

<b>Wellhead Protection Area:</b> (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)	<u>0</u>

<b>Distance To Surface Water:</b> 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)	
	Greater than 1000 feet (0 points)	<u>20</u>

**RANKING SCORE (TOTAL POINTS):** 40

Date Remediation Started: 4-18-94 Dated Completed: 5-3-94

Remediation Method: Excavation      Approx. cubic yards       
(Check all appropriate sections) Landfarmed      Insitu Bioremediation       
Other     

Remediation Location: Onsite      Offsite       
(ie. landfarmed onsite, name and location of offsite facility)

General Description Of Remedial Action: Sampled soil and ground water for closure.

Ground Water Encountered: No      Yes   X   Depth   10'  

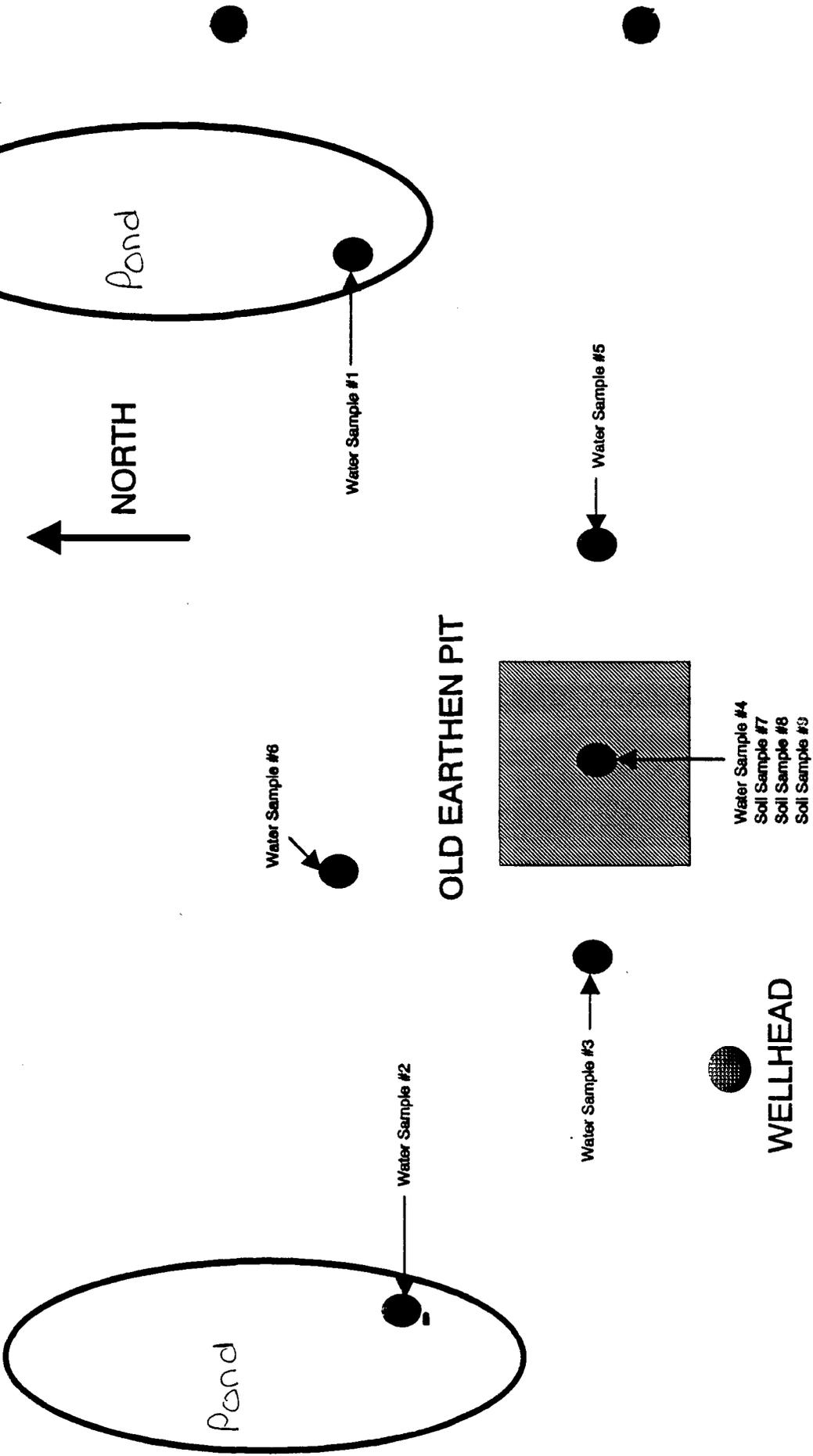
Final Pit: Sample location   See Attached    
Closure Sampling:       
(if multiple samples, attach sample results and diagram of sample locations and depths)  
Sample depth       
Sample date      Sample time       
Sample Results  
Benzene (ppm)       
Total BTEX (ppm)       
Field headspace (ppm)       
TPH     

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

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

DATE   6-13-94    
SIGNATURE   Margi Sullivan   PRINTED NAME   Margi Sullivan    
AND TITLE   Engr. Tech.

# FAWKES #1 LOCATION DIAGRAM



**TOTAL PETROLEUM HYDROCARBONS  
EPA METHOD 418.1**

*Fawkes #1  
File*

**Merrion Oil and Glass**

Project: Osborn #1 and Fawkes #1  
Matrix: Water  
Condition: Intact/Cool

Date Reported: 05/17/94  
Date Sampled: 05/03/94  
Date Received: 05/03/94  
Date Extracted: 05/17/94  
Date Analyzed: 05/17/94

Sample ID	Lab ID	Result (mg/L)	Detection Limit
Osborn #1	G00337	ND	1
Osborn #2	G00338	161	50
Osborn #3	G00339	ND	1
→ Fawkes #1	G00340	ND	1
Fawkes #2	G00341	ND	1

ND - Analyte not detected at stated detection level.

References:

**Method 418.1:** Petroleum Hydrocarbons, Total Recoverable, USEPA Chemical Analysis of Water and Waste, 1978.

**Method 3510:** Separatory Funnel Liquid - Liquid Extraction, USEPA SW-846, Test Methods for Evaluating Solid Waste, Rev. 1, July, 1992.

Analyst: *Antoni...*

Reviewed: *mn*

## VOLATILE AROMATIC HYDROCARBONS

Merrion Oil and Gas

Project ID:	Osborn 1 and Fawkes 1	Report Date:	05/17/94
Sample ID:	Fawkes 1	Date Sampled:	05/03/94
Lab ID:	G00340 Pond NE of pit	Date Received:	05/03/94
Sample Matrix:	Water	Date Extracted:	NA
Condition:	Cool/Intact	Date Analyzed:	05/07/94

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	ND	0.2
Toluene	ND	0.2
Ethylbenzene	ND	0.2
m,p-Xylenes	ND	0.2
o-Xylene	ND	0.2

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	95.9	86 -115%

**Reference:** Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

**Comments:**

Austin Wal  
Analyst

mh  
Review

## VOLATILE AROMATIC HYDROCARBONS

Merrion Oil and Gas

Project ID:	Osborn 1 and Fawkes 1	Report Date:	05/17/94
Sample ID:	Fawkes 2	Date Sampled:	05/03/94
Lab ID:	G00341	Date Received:	05/03/94
Sample Matrix:	Water	Date Extracted:	NA
Condition:	Cool/Intact	Date Analyzed:	05/07/94

*Pond NW of pit*

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	ND	0.2
Toluene	ND	0.2
Ethylbenzene	ND	0.2
m,p-Xylenes	ND	0.2
o-Xylene	ND	0.2

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	99.3	86 -115%

**Reference:** Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

**Comments:**

*Austin*  
Analyst

*m*  
Review

TOTAL PETROLEUM HYDROCARBONS  
EPA METHOD 418.1Merrion Oil and GasProject: Fawkes 1  
Matrix: Water/Soil  
Condition: Cool/IntactDate Reported: 05/24/94  
Date Sampled: 05/03/94  
Date Received: 05/03/94  
Date Extracted: 05/18/94  
Date Analyzed: 05/18/94

Sample ID	Lab ID	Result (mg/L)	Detection Limit
Fawkes 3	G00347	ND	1
Fawkes 4	G00348	ND	1
Fawkes 5	G00349	ND	1
Fawkes 6	G00350	ND	1
Fawkes 7	G00351	ND	6
Fawkes 8	G00352	ND	8
Fawkes 9	G00353	ND	8

ND - Analyte not detected at stated detection level.

## References:

**Method 418.1:** Petroleum Hydrocarbons, Total Recoverable, USEPA Chemical Analysis of Water and Waste, 1978.**Method 3510:** Separatory Funnel Liquid - Liquid Extraction, USEPA SW-846, Test Methods for Evaluating Solid Waste, Rev. 1, July 1992.Analyst: Austin [Signature]Reviewed: mh

Ground water sample 20 1000 01 p.

**VOLATILE AROMATIC HYDROCARBONS**

Merrion Oil and Gas

Project ID:	Fawkes 1	Report Date:	05/24/94
Sample ID:	Fawkes 3	Date Sampled:	05/03/94
Lab ID:	G00347	Date Received:	05/03/94
Sample Matrix:	Water	Date Extracted:	NA
Condition:	Cool/Intact	Date Analyzed:	05/06/94

clear

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	ND	0.2
Toluene	0.2	0.2
Ethylbenzene	ND	0.2
m,p-Xylenes	1.3	0.2
o-Xylene	1.6	0.2

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	102.4	86 -115%

**Reference:** Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

**Comments:**

Austin Wal  
Analyst

mh  
Review

Ground water sample container # 1 -

**VOLATILE AROMATIC HYDROCARBONS**

Merrion Oil and Gas

Project ID: Fawkes 1  
Sample ID: Fawkes 4  
Lab ID: G00348  
Sample Matrix: Water  
Condition: Cool/Intact

*clean*

Report Date: 05/24/94  
Date Sampled: 05/03/94  
Date Received: 05/03/94  
Date Extracted: 05/03/94  
Date Analyzed: 05/06/94

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	1.4	0.2
Toluene	0.9	0.2
Ethylbenzene	4.1	0.2
m,p-Xylenes	12.6	0.2
o-Xylene	32.0	0.2

ND - Analyte not detected at the stated detection limit.

**Quality Control:**      Surrogate                      Percent Recovery                      Acceptance Limits  
\*Bromofluorobenzene                      130.2    86 -115%

**Reference:**                      Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

**Comments:**                      \* Surrogate high due to matrix interference

*Asimic*  
Analyst

*mh*  
Review

*Water Sample of the*

**VOLATILE AROMATIC HYDROCARBONS**

Merrion Oil and Gas

Project ID: Fawkes 1  
Sample ID: Fawkes 5  
Lab ID: G00349  
Sample Matrix: Water  
Condition: Cool/Intact

*Clean*

Report Date: 05/24/94  
Date Sampled: 05/03/94  
Date Received: 05/03/94  
Date Extracted: NA  
Date Analyzed: 05/12/94

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	ND	0.2
Toluene	ND	0.2
Ethylbenzene	ND	0.2
m,p-Xylenes	ND	0.2
o-Xylene	ND	0.2

ND - Analyte not detected at the stated detection limit.

**Quality Control:**      Surrogate                      Percent Recovery                      Acceptance Limits  
Bromofluorobenzene                      92.6    86 -115%

**Reference:**                      Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

**Comments:**

*Austin*  
\_\_\_\_\_  
Analyst

*mh*  
\_\_\_\_\_  
Review

*Water 40 mg/l of p-Paracetamol*

**VOLATILE AROMATIC HYDROCARBONS**

Merrion Oil and Gas

Project ID:	Fawkes 1	Report Date:	05/24/94
Sample ID:	Fawkes 6	Date Sampled:	05/03/94
Lab ID:	G00350	Date Received:	05/03/94
Sample Matrix:	Water	Date Extracted:	NA
Condition:	Cool/Intact	Date Analyzed:	05/07/94

*Clean*

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	ND	0.2
Toluene	ND	0.2
Ethylbenzene	ND	0.2
m,p-Xylenes	ND	0.2
o-Xylene	ND	0.2

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	90.4	86 -115%

**Reference:** Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

**Comments:**

*Mustai Lal*  
Analyst

*mh*  
Review

## VOLATILE AROMATIC HYDROCARBONS

Merrion Oil and Gas

Project ID:	Fawkes 1	Report Date:	05/24/94
Sample ID:	Fawkes 7	Date Sampled:	05/03/94
Lab ID:	G00351	Date Received:	05/03/94
Sample Matrix:	Soil	Date Extracted:	05/17/94
Condition:	Cool/Intact	Date Analyzed:	05/17/94

*Clear*

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	34.7 <i>slc</i>	8.9
Toluene	64.2	8.9
Ethylbenzene	11.8	8.9
m,p-Xylenes	73.0	8.9
o-Xylene	34.2	8.9

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	110.7	74 -121%

**Reference:** Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

**Comments:**

*Antonio Gal*  
Analyst

*mh*  
Review

**VOLATILE AROMATIC HYDROCARBONS**

Merrion Oil and Gas

Project ID: Fawkes 1  
 Sample ID: Fawkes 8  
 Lab ID: G00352  
 Sample Matrix: Soil  
 Condition: Cool/Intact

Report Date: 05/24/94  
 Date Sampled: 05/03/94  
 Date Received: 05/03/94  
 Date Extracted: 05/17/94  
 Date Analyzed: 05/17/94

*stagn*

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	ND <i>OK</i>	9.4
Toluene	26.9	9.4
Ethylbenzene	ND	9.4
m,p-Xylenes	31.0	9.4
o-Xylene	10.4	9.4

ND - Analyte not detected at the stated detection limit.

**Quality Control:**      Surrogate                      Percent Recovery                      Acceptance Limits  
 Bromofluorobenzene                      110.8    74 -121%

**Reference:**                      Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

**Comments:**

*[Signature]*  
 Analyst

*mh*  
 Review



## MERRION OIL &amp; GAS CORPORATION

610 REILLY AVE. • P. O. BOX 840  
FARMINGTON, NEW MEXICO 87499OIL CONSERVATION DIVISION  
RECEIVED

APR 28 7 AM 8 50

April 28, 1994

Mr. Denny Foust  
Oil Conservation Division  
1000 Rio Brazos Rd.  
Aztec, NM 87410

Dear Mr. Foust:

As you requested during our phone conversation today, I am sending you a copy of the laboratory analysis of the water samples taken on the Osborne #1 and the Fawkes #1. These samples were taken on April 18, 1994 and preserved in ice prior to being taken to Envirotech Lab.

The Osborne #1 is located in Flora Vista, Sec. 22, T30N, R12W, 790 fsl, 900 fwl. Two water samples were taken once ground water was reached (around 6'). Both samples exceeded the limit on Benzene and one sample exceeded the limit on Xylene. We feel that more sampling needs to be done to verify the ground water contamination, and try to determine the extent of contamination before deciding what remediation method to use. We plan to take these samples on Tuesday, May 3, 1994 and if ground water contamination exists a closure plan will be submitted within 90 days of the sampling.

The Fawkes #1 is located just south of Farmington along the San Juan River, Sec. 18, T29N, R13W, 740 fsl, 790 fel. Two water samples were taken once ground water was encountered (approximately 10'). These samples gave an unusually high level of Xylene which may be due to the manor in which the samples were taken. We plan to conduct more sampling, on May 3rd or 4th, to verify the water contamination, and determine the extent of contamination. A background water sample will also be taken. Once the extent of contamination is determined a closure plan will be submitted within 90 days of the sampling.

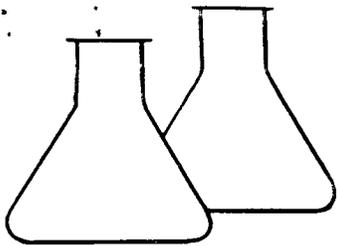
Thank you for your cooperation on this matter. If you have any questions regarding these samples please contact me at (505) 327-9801.

Sincerely,

Margi Sullivan  
Engineering Technician

attachment: Laboratory analysis of water samples

cc: Bill Olson



# ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401  
PHONE: (505) 632-0615 • FAX: (505) 632-1865

## EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Merrion Oil & Gas	Project #:	92127
Sample ID:	3	Date Reported:	04-19-94
Laboratory Number:	7240	Date Sampled:	04-18-94
Sample Matrix:	Water	Date Received:	04-18-94
Preservative:	HgCl & Cool	Date Analyzed:	04-19-94
Condition:	Cool & Intact	Analysis Requested:	3TEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
-----	-----	-----
Benzene	11.4	1.0
Toluene	0.3	0.0
Ethylbenzene	1.2	1.0
p,m-Xylene	11.4	1.0
o-Xylene	12.1	1.0

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	-----	-----
	Trifluorotoluene	99 %
	Bromofluorobenzene	99 %

Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

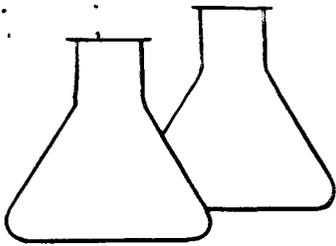
Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

ND - Parameter not detected at the stated detection limit.

Comments: Osborne #1 Sec. 12, #30N, #127

*David L. Gomez*  
Analyst

*Mavis De Young*  
Reviewer



# ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401  
PHONE: (505) 632-0615 • FAX: (505) 632-1865

## MODIFIED EPA METHOD 8015 NONHALOGENATED VOLATILE ORGANICS

Client:	Merrion Oil & Gas	Project #:	92127
Sample ID:	3	Date Reported:	04-20-94
Laboratory Number:	7240	Date Sampled:	04-18-94
Sample Matrix:	Water	Date Received:	04-18-94
Preservative:	Cool - HCL	Date Analyzed:	04-20-94
Condition:	Cool and Intact	Analysis Requested:	TPH

Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Gasoline Range (C5 - C10)	35	0.1
Diesel Range (C10 - C28)	32	0.1
C28 - C44 Range	ND	0.1
Total Petroleum Hydrocarbons	137	0.1

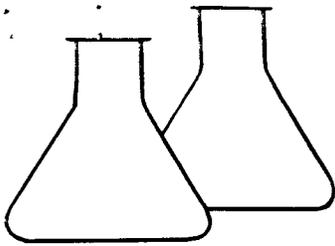
Method: Method 8015, Nonhalogenated Volatile Organics,  
Test Methods for Evaluating Solid Waste, SW-846, USEPA  
July 1992.

ND - Parameter not detected at the stated detection limit.

Comments: Osborne #1 Sec. 12. 120N, 112W

Kevin L. Jensen  
Analyst

Merrin D. Young  
review



# ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401  
PHONE: (505) 632-0615 • FAX: (505) 632-1865

## EPA METHOD 3020 AROMATIC VOLATILE ORGANICS

Client:	Merrion Oil & Gas	Project #:	92127
Sample ID:	4	Date Reported:	04-19-94
Laboratory Number:	7241	Date Sampled:	04-18-94
Sample Matrix:	Water	Date Received:	04-18-94
Preservative:	HgCl & Cool	Date Analyzed:	04-19-94
Condition:	Cool & Intact	Analysis Requested:	3TEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
-----	-----	-----
Benzene	10.3	1.0
Toluene	37.7	1.0
Ethylbenzene	263	1.0
p,m-Xylene	464	1.5
o-Xylene	370	1.0

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	-----	-----
	Trifluorotoluene	99 %
	Bromofluorobenzene	99 %

Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

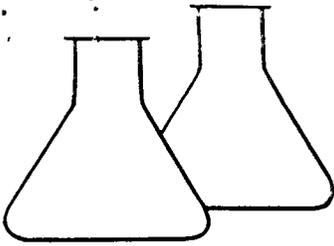
Method 2020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

ND - Parameter not detected at the stated detection limit.

Comments: Osborne #1 Sec. 12, 130N, R12W

Dennis L. Cramer  
Analyst

Marisela Young  
Review



# ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401  
PHONE: (505) 632-0615 • FAX: (505) 632-1865

## MODIFIED EPA METHOD 8015 NONHALOGENATED VOLATILE ORGANICS

Client:	Merrion Oil & Gas	Project #:	92127
Sample ID:	4	Date Reported:	04-20-94
Laboratory Number:	7241	Date Sampled:	04-18-94
Sample Matrix:	Water	Date Received:	04-18-94
Preservative:	Cool - HCl	Date Analyzed:	04-20-94
Condition:	Cool and Intact	Analysis Requested:	TPH

Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Gasoline Range (C5 - C10)	15.7	0.1
Diesel Range (C10 - C28)	2.9	0.1
C28 - C44 Range	ND	0.1
Total Petroleum Hydrocarbons	18.5	0.1

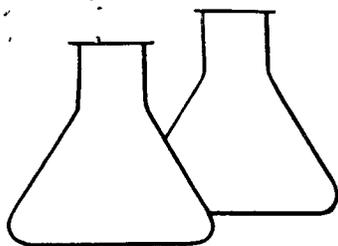
Method: Method 8015, Nonhalogenated Volatile Organics,  
Test Methods for Evaluating Solid Waste, SW-846, USEPA  
July 1992.

ND - Parameter not detected at the stated detection limit.

Comments: Osborne #1 Sec. 10, 130N, R12W

Louis L. Jensen  
Analyst

Mavis D. Young  
Review



# ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401  
PHONE: (505) 632-0615 • FAX: (505) 632-1865

## EPA METHOD 3020 AROMATIC VOLATILE ORGANICS

Client:	Merrion Oil & Gas	Project #:	92127
Sample ID:	1	Date Reported:	04-19-94
Laboratory Number:	7236	Date Sampled:	04-18-94
Sample Matrix:	Water	Date Received:	04-18-94
Preservative:	HgCl & Cool	Date Analyzed:	04-19-94
Condition:	Cool & Intact	Analysis Requested:	3TEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	ND	1.0
Toluene	52	0.9
Ethylbenzene	730	1.0
p,m-Xylene	4,020	1.5
o-Xylene	3,360	1.0

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	99 %
	Bromofluorobenzene	99 %

Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

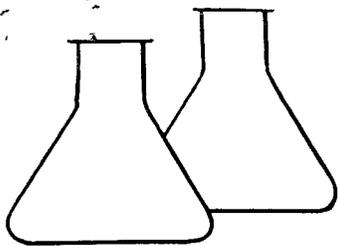
Method 3020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

ND - Parameter not detected at the stated detection limit.

Comments: Pawkes #1 Sec. 13 19M, 10W

*Kevin L. Cramer*  
Analyst

*Morris B. Young*  
Review



# ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401  
PHONE: (505) 632-0615 • FAX: (505) 632-1865

## MODIFIED EPA METHOD 8015 NONHALOGENATED VOLATILE ORGANICS

Client:	Merrion Oil & Gas	Project #:	92127
Sample ID:	1	Date Reported:	04-20-94
Laboratory Number:	7236	Date Sampled:	04-18-94
Sample Matrix:	Water	Date Received:	04-18-94
Preservative:	Cool - HCl	Date Analyzed:	04-20-94
Condition:	Cool and Intact	Analysis Requested:	TPH

Parameter	Concentration (mg/L)	Det. Limit (mg/L)
-----	-----	-----
Gasoline Range (C5 - C10)	353	0.1
Diesel Range (C10 - C28)	158	0.1
C28 - C44 Range	ID	0.1
Total Petroleum Hydrocarbons	510	0.1

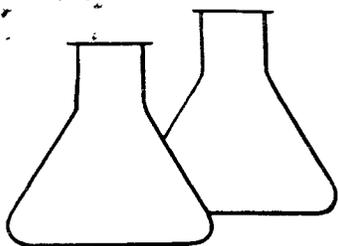
Method: Method 8015, Nonhalogenated Volatile Organics,  
Test Methods for Evaluating Solid Waste, SW-846, USEPA  
July 1992.

ND - Parameter not detected at the stated detection limit.

Comments: Fawkes #1 Sec. 13 BBN, 10W

Shirley L. Jensen  
Analyst

Morris D. Young  
Review



# ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401  
PHONE: (505) 632-0615 • FAX: (505) 632-1865

## EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Merrion Oil & Gas	Project #:	92127
Sample ID:	2	Date Reported:	04-19-94
Laboratory Number:	7237	Date Sampled:	04-18-94
Sample Matrix:	Water	Date Received:	04-18-94
Preservative:	HgCl & Cool	Date Analyzed:	04-19-94
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	ND	1.0
Toluene	79	3.0
Ethylbenzene	330	1.0
p,m-Xylene	4,980	1.5
o-Xylene	4,680	1.0

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	100 %
	Bromofluorobenzene	102 %

Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

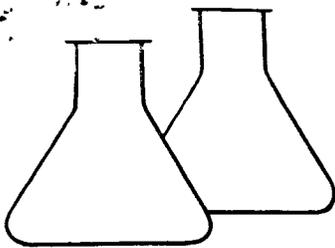
Method 5020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

ND - Parameter not detected at the stated detection limit.

Comments: Pawkes #1 Sec. 13 19N, 13W

Kevin L. Jensen  
Analyst

Merrill D. Young  
Review



# ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401  
PHONE: (505) 632-0615 • FAX: (505) 632-1865

## MODIFIED EPA METHOD 3015 NONHALOGENATED VOLATILE ORGANICS

Client:	Merrion Oil & Gas	Project #:	92127
Sample ID:	2	Date Reported:	04-20-94
Laboratory Number:	7237	Date Sampled:	04-18-94
Sample Matrix:	Water	Date Received:	04-18-94
Preservative:	Cool - HCl	Date Analyzed:	04-20-94
Condition:	Cool and Intact	Analysis Requested:	TPH

Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Gasoline Range (C5 - C10)	1,000	0.1
Diesel Range (C10 - C28)	ND	0.1
C28 - C44 Range	ND	0.1
Total Petroleum Hydrocarbons	1,000	0.1

Method: Method 3015, Nonhalogenated Volatile Organics,  
Test Methods for Evaluating Solid Waste, SW-846, USEPA  
July 1992.

ND - Parameter not detected at the stated detection limit.

Comments: Fawkes #1 Dec. 23 1994. LW

*Dennis L. Jensen*  
Analyst

*Merrion Young*  
Review