



4000 Monroe Road
Farmington, New Mexico 87401
PH: (505) 326-2262 • FAX: (505) 326-2388

DATE: Thursday, November 19, 1998 TIME: 9:08 AM

TO: Ed Hasely PHONE:
COMPANY: Burlington Resources FAX: (505) 983-6043

FROM: Robert Thompson PHONE: (505) 326-2262
FAX: (505) 326-2388

RE: Analytical Results

PROJECT NO: Number of pages including cover: 7

☐ Hard copy **WILL NOT** follow ☐ Hard copy **WILL** follow

MESSAGE

Ed,

Here are the results you needed. Call if you need anything else.

Thanks, Robert

BEFORE THE
OIL CONSERVATION DIVISION
Santa Fe, New Mexico

Case No. 12033 Exhibit No. 4

Submitted by: Burlington Resources Oil & Gas Company

Hearing Date: November 19, 1998

CONFIDENTIALITY CAUTION

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TRANSMISSION

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Certificate of Analysis No. 9811090-01a

807 S. CARLTON AVE.
FARMINGTON, NEW MEXICO 87401
PHONE (505) 326-2555
FAX (505) 326-2575

Philip Environmental Services

4000 Monroe Road

Farmington, NM 87401

Attn: Robert Thompson

Date: 11/18/98

Project: BR Hampton Drill 98

Project No: NA

Site: Farmington

Matrix: Water

Sampled By: H. Bradbury

Date Sampled: 11/13/98

Sample ID: HAB 1

Date Received: 11/16/98

Analytical Data

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
Benzene	ND	1.0 (P)	µg/L
Toluene	ND	1.0 (P)	µg/L
Ethylbenzene	ND	1.0 (P)	µg/L
Total Xylene	ND	1.0 (P)	µg/L
Total Volatile Aromatic Hydrocarbons	ND		µg/L

Surrogate

% Recovery

1,4-Difluorobenzene

103

4-Bromofluorobenzene

97

Method 8020A***

Analyzed by: CJ

Date: 11/17/98

ND-Not Detected

MI-Matrix Interference

(P)-Practical Quantitation Limit

Notes:

*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA

**Ref: Standard Methods for Examination of Water & Wastewater, 18th Ed

***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

Billy G. Rich, Lab Director

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Certificate of Analysis No. 9811090-01b

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FAX (505) 328-2878

Philip Environmental Services

4000 Monroe Road

Farmington, NM 87401

Attn: Robert Thompson

Date: 11/18/98

Project: BR Hampton Drill 98

Project No: NA

Site: Farmington

Matrix: Water

Sampled By: H. Bradbury

Date Sampled: 11/13/98

Sample ID: HAB 1

Date Received: 11/18/98

Analytical Data

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
Gasoline Range Organics	ND	0.1 (P)	mg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	70		
4-Bromofluorobenzene	90		
Method 8015B*** for Gasoline			
Analyzed by: CJ			
Date: 11/17/98			

MI-Matrix Interference

(P)-Practical Quantitation Limit

D-Diluted, limits not applicable

Notes:

*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA

**Ref: Standard Methods for Examination of Water & Wastewater, 18th Ed

***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

Billy G. Rich, Lab Director

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® Certificate of Analysis No. 9811088-01a

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Philip Environmental Services

4000 Monroe Road

Farmington, NM 87401

Attn: Robert Thompson

Date: 11/18/98

Project: BR Hampton 98

Project No: 20484

Site: Farmington

Matrix: Soil

Sampled By: R. Thompson

Date Sampled: 11/11/98

Sample ID: North 34-18

Date Received: 11/16/98

Analytical Data

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
Benzene	3400	500 (P)	µg/Kg
Toluene	ND	500 (P)	µg/Kg
Ethylbenzene	12000	500 (P)	µg/Kg
Total Xylene	87000	500 (P)	µg/Kg
Total Volatile Aromatic Hydrocarbons	102400		µg/Kg

Surrogate

% Recovery

1,4-Difluorobenzene

100

4-Bromofluorobenzene

263Ml

Method 8020A***

Analyzed by: GT

Date: 11/17/98

ND-Not Detected

MI-Matrix Interference

(P)-Practical Quantitation Limit

Notes:

*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA

**Ref: Standard Methods for Examination of Water & Wastewater, 18th Ed

***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

Billy G. Rich, Lab Director

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Certificate of Analysis No. 9811086-01b

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PHONE (505) 326-2666
FAX (505) 326-2675

Philip Environmental Services
4000 Monroe Road
Farmington, NM 87401
Attn: Robert Thompson

Date: 11/18/98

Project: BR Hampton 98
Site: Farmington
Sampled By: R. Thompson
Sample ID: North 34-18

Project No: 20484

Matrix: Soil

Date Sampled: 11/11/98

Date Received: 11/18/98

Analytical Data

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
Gasoline Range Organics	1900	100 (P)	mg/kg
Surrogate	% Recovery		
1,4-Difluorobenzene	143		
4-Bromofluorobenzene	500MI		
Method 8015B*** for Gasoline			
Analyzed by: FAB			
Date: 11/18/98			
Total Petroleum Hydrocarbons-Diesel	610	10 (P)	mg/kg
Surrogate	% Recovery		
n-Pentacosane	130		
Method 8015B*** for Diesel			
Analyzed by: RR			
Date: 11/18/98			

Mi-Matrix Interference (P)-Practical Quantitation Limit D-Diluted, limits not applicable

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th Ed
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

Comments: Sample contains petroleum hydrocarbons from C10 - C24 that do not resemble a diesel pattern. (C10 - C24) RR

Billy G. Rich, Lab Director

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Certificate of Analysis No. 9811088-02a

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FARMINGTON, NEW MEXICO 87401
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Philip Environmental Services
4000 Monroe Road
Farmington, NM 87401
Attn: Robert Thompson

Date: 11/18/98

Project: BR Hampton 98

Project No: 20484

Site: Farmington

Matrix: Soil

Sampled By: R. Thompson

Date Sampled: 11/12/98

Sample ID: Northwest 43 - 21

Date Received: 11/16/98

Analytical Data

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
Benzene	15000	1000 (P)	µg/Kg
Toluene	140000	1000 (P)	µg/Kg
Ethylbenzene	27000	1000 (P)	µg/Kg
Total Xylene	230000	1000 (P)	µg/Kg
Total Volatile Aromatic Hydrocarbons	412000		µg/Kg

Surrogate

% Recovery

1,4-Difluorobenzene

117

4-Bromofluorobenzene

227MI

Method 8020A***

Analyzed by: GT

Date: 11/17/98

ND-Not Detected

MI-Matrix Interference

(P)-Practical Quantitation Limit

Notes:

*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA

**Ref: Standard Methods for Examination of Water & Wastewater, 18th Ed

***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

Billy G. Rich, Lab Director

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Certificate of Analysis No. 9811088-02b

607 S. CARLTON AVE.
FARMINGTON, NEW MEXICO 87401
PHONE (505) 326-2888
FAX (505) 326-2876

Philip Environmental Services
4000 Monroe Road
Farmington, NM 87401
Attn: Robert Thompson

Date: 11/18/98

Project: BR Hampton 98
Site: Farmington
Sampled By: R. Thompson
Sample ID: Northwest 43 - 21

Project No: 20484

Matrix: Soil

Date Sampled: 11/12/98

Date Received: 11/18/98

Analytical Data

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
Gasoline Range Organics	3800	100 (P)	mg/kg
Surrogate	% Recovery		
1,4-Difluorobenzene	180		
4-Bromofluorobenzene	600MI		
Method 8015B*** for Gasoline			
Analyzed by: FAB			
Date: 11/18/98			
Total Petroleum Hydrocarbons-Diesel	500	50 (P)	mg/kg
Surrogate	% Recovery		
n-Pentacosane	154		
Method 8015B*** for Diesel			
Analyzed by: RR			
Date: 11/18/98			

MI-Matrix Interference (P)-Practical Quantitation Limit C-Diluted, limits not applicable

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th Ed
***Ref: Test Methods for Evaluating Solid Waste, EPA 8W846, 3rd Ed.

Comments: Sample contains petroleum hydrocarbons from C10 - C24 that do not resemble a diesel pattern. (C10 - C24) RR

Billy G. Rich, Lab Director