



**NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT**

Mark S.
OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

RECEIVED
MAY 07 1999

May 5, 1999

Mr. Ed Hasely
Burlington Resources
P.O. Box 4289
Farmington, New Mexico 87499-4289

**RE: GROUND WATER ANALYSES
HAMPTON 4M WELL SITE**

Dear Mr. Hasely:

On April 14, 1999, the New Mexico Oil Conservation Division (OCD) met with you at the Burlington Resources (BR) Hampton 4M well site near Aztec, New Mexico to review the recent remedial actions taken at the site. After you left, the OCD inspected the ground water seep on the west side of the well pad and observed a sheen on the water. Subsequently, the OCD obtained a sample of the water. The analyses show that benzene is present in the seep ground water at concentrations in excess of New Mexico Water Quality Control Commission ground water standards. Enclosed you will find copies of the analyses for your information.

If you have any questions or comments, please call me at (505) 827-7154.

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

xc w/enclosure: Denny Foust, OCD Aztec District Office
Maureen Gannon, PNM
J. Burton Everett

690039

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

PINNACLE
LABORATORIES

APR 22 1999

Pinnacle Lab ID number 904068
April 20, 1999

NMOCD
2040 S. PACHECO
SANTA FE, NM 87505

Project Name HAMPTON 4M
Project Number (none)

Attention: BILL OLSON

On 4/15/99 Pinnacle Laboratories, Inc. Inc., (ADHS License No. AZ0592), received a request to analyze aqueous samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

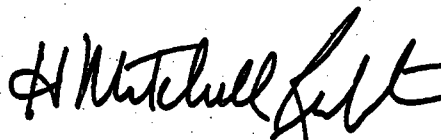
If you have any questions or comments, please do not hesitate to contact us at (505)344-3777.



Kimberly D. McNeill
Project Manager

MR: mt

Enclosure



H. Mitchell Rubenstein, Ph. D.
General Manager

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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021 MODIFIED
CLIENT : NMOCD
PROJECT # : (none)
PROJECT NAME : HAMPTON 4M

PINNACLE I.D.: 904068

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	9904141130 (SEEP)	AQUEOUS	4/14/99	NA	4/16/99	1
02	TRIP BLANK	AQUEOUS	4/13/99	NA	4/16/99	1

PARAMETER	DET. LIMIT	UNITS	9904141130 (SEEP)	TRIP BLANK
BENZENE	0.5	UG/L	40	< 0.5
TOLUENE	0.5	UG/L	2.2	< 0.5
ETHYLBENZENE	0.5	UG/L	2.1	< 0.5
TOTAL XYLENES	0.5	UG/L	19	< 0.5
METHYL-t-BUTYL ETHER	2.5	UG/L	< 2.5	< 2.5

SURROGATE:
BROMOFLUOROBENZENE (%) 98 99
SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:
N/A

BEFORE THE OIL CONSERVATION COMMISSION Santa Fe, New Mexico	
Case No. <u>12033</u>	Exhibit No. <u>18 A</u>
Submitted by <u>PNM</u>	
Hearing Date <u>8/27/99</u>	

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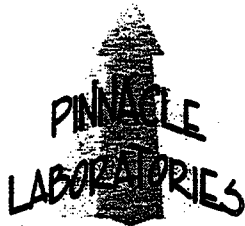
PINNACLE
LABORATORIES

CLIENT : NMOCD
PROJECT # : (none)
PROJECT NAME : HAMPTON 4M

PINNACLE ID : 904068
DATE RECEIVED : 4/15/99
REPORT DATE : 4/20/99

PIN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	9904141130 (SEEP)	AQUEOUS	4/14/99
02	TRIP BLANK	AQUEOUS	4/13/99

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GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 904068
BLANK I. D.	: 041699	DATE EXTRACTED	: N/A
CLIENT	: NMOCD	DATE ANALYZED	: 4/16/99
PROJECT #	: (none)	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: HAMPTON 4M		

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5
METHYL- t BUTYL ETHER	UG/L	<2.5

SURROGATE:

BROMOFLUOROBENZENE (%)

97

SURROGATE LIMITS: (80 - 120)

CHEMIST NOTES:

N/A

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GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

TEST : EPA 8021 MODIFIED
MSMSD # : 041699
CLIENT : NMOCD
PROJECT # : (none)
PROJECT NAME : HAMPTON 4M

PINNACLE I.D. : 904068
DATE EXTRACTED : N/A
DATE ANALYZED : 4/16/99
SAMPLE MATRIX : AQUEOUS
UNITS : UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20	20.7	104	19.4	97	6	(80 - 120)	20
TOLUENE	<0.5	20	21.0	105	20.5	103	2	(80 - 120)	20
ETHYLBENZENE	<0.5	20	21.4	107	20.8	104	3	(80 - 120)	20
TOTAL XYLENES	<0.5	60	64.7	108	62.7	105	3	(80 - 120)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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