

BURLINGTON RESOURCES

SAN JUAN DIVISION

February 13, 1998

Denny Foust
New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM 87410

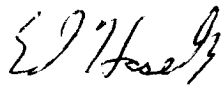
RECEIVED
FEB 19 1998
OIL CON. DIV.
DIST. 3

**Re: Wilmuth #1
Water Testing Information**

Mr. Foust:

Per your request, attached is a copy of the information we found on the testing of the water from the residence near our Wilmuth #1 well location. If you have any questions concerning this, please contact me at 326-9841.

Sincerely,



Ed Hasely
Sr. Staff Environmental Representative

Attachments

cc: Correspondence

March 21, 1997

Mr. Gary Osborne
Burlington Resources
P.O. Box 4289
Farmington, NM 87499-4289

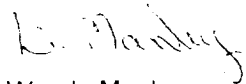
Dear Mr. Osborne:

Enclosed are the analytical results for the water samples sampled by Todd Hillaker and Wanda Manley of Inter-Mountain Labs-Farmington, New Mexico, and submitted for analyses to Inter-Mountain Labs - Farmington, New Mexico, on March 14, 1997. The samples were analyzed for Cation/Anion balance, fecal coliform, and sulfide, as indicated on the accompanying Chain of Custody document # 46325.

Tests were performed in accordance with 40 CFR 136, "Guidelines Establishing Test Procedures for Analysis," as amended.

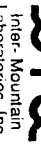
Please call me if you have any questions or comments concerning the analyses.

Sincerely,



Wanda Manley
Water Lab Supervisor
IML - Farmington

Enclosure: Analytical Report



CHAIN OF CUSTODY RECORD

[illegible]

Client: **BURLINGTON RESOURCES**
 Project Location: 63 Country Road 2800
 Sample ID: Kitchen Sink
 Laboratory ID: 0397W00379
 Sample Matrix: Water
 Condition: Cool/Intact

Date Reported: 03/21/97
 Date Sampled: 03/14/97
 Time Sampled: 2:01 PM
 Date Received: 03/14/97

Parameter	Analytical Result	Units		Units
Lab pH.....	7.3	s.u.		
Lab Conductivity @ 25° C.....	1,070	umhos/cm		
Total Dissolved Solids @ 180°C.....	724	mg/L		
Total Dissolved Solids (Calc).....	691	mg/L		
Total Alkalinity as CaCO ₃	345	mg/L		
Total Hardness as CaCO ₃	461	mg/L		
Sodium Absorption Ratio (SAR).....	1.35	Ratio		
Fecal Coliform Bacteria.....	3	colonies/100 mL		
Sulfide.....	1.06	mg/L		
Bicarbonate as HCO ₃	421	mg/L	6.90	meq/L
Carbonate as CO ₃	<1.00	mg/L	<0.01	meq/L
Hydroxide as OH.....	<1.00	mg/L	<0.01	meq/L
Chloride.....	19.3	mg/L	0.54	meq/L
Sulfate.....	228	mg/L	4.74	meq/L
Calcium.....	146	mg/L	7.30	meq/L
Magnesium.....	23.3	mg/L	1.92	meq/L
Potassium.....	1.21	mg/L	0.03	meq/L
Sodium.....	66.6	mg/L	2.90	meq/L
Cations.....			12.1	meq/L
Anions.....			12.2	meq/L
Cation/Anion Difference.....			0.17	%

Reference: U.S.E.P.A. 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
 "Standard Methods For The Examination Of Water And Waste Water", 18th ed., 1992.

Comments:

Reported by LB

Reviewed by SB

Client: **BURLINGTON RESOURCES**
 Project Location: 63 Country Road 2800
 Sample ID: Llama Pen
 Laboratory ID: 0397W00378
 Sample Matrix: Water
 Condition: Cool/Intact

Date Reported: 03/21/97
 Date Sampled: 03/14/97
 Time Sampled: 1:58 PM
 Date Received: 03/14/97

Parameter	Analytical Result	Units		Units
Lab pH.....	7.2	s.u.		
Lab Conductivity @ 25° C.....	1,060	umhos/cm		
Total Dissolved Solids @ 180°C.....	726	mg/L		
Total Dissolved Solids (Calc).....	692	mg/L		
Total Alkalinity as CaCO ₃	335	mg/L		
Total Hardness as CaCO ₃	465	mg/L		
Sodium Absorption Ratio (SAR).....	1.34	Ratio		
Fecal Coliform Bacteria.....	20	colonies/100 mL		
Sulfide.....	<0.01	mg/L		
Bicarbonate as HCO ₃	409	mg/L	6.70	meq/L
Carbonate as CO ₃	<1.00	mg/L	<0.01	meq/L
Hydroxide as OH.....	<1.00	mg/L	<0.01	meq/L
Chloride.....	20.3	mg/L	0.57	meq/L
Sulfate.....	233	mg/L	4.84	meq/L
Calcium.....	148	mg/L	7.39	meq/L
Magnesium.....	23.2	mg/L	1.91	meq/L
Potassium.....	1.24	mg/L	0.03	meq/L
Sodium.....	66.2	mg/L	2.88	meq/L
Cations.....			12.2	meq/L
Anions.....			12.1	meq/L
Cation/Anion Difference.....			0.35	%

Reference: U.S.E.P.A. 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
 "Standard Methods For The Examination Of Water And Waste Water", 18th ed., 1992.

Comments:

Reported by JB

Reviewed by JB

On March 10, 1997 Dean Mathews and myself returned a phone call to Barbara Burns. She told us that she was concerned about an odor from her well water. She described this odor as a "swap water" smell. She said that the odor was noticed about the same time that we started to pump the Wilmath #1 well that is near her water well. At that time we agreed to have the water from her well analysed to determine the source of the odor.

Dean Mathews contacted the County Extension Service. He was told that they could not provide an analyses at this time and recommended that we contact Inter-Mountain Laboratories Inc. Dean then contacted Wanda Mantley, Water Lab Supervisor for Inter-Mountain. An appointment was made to have Inter-Mountain technicians sample the water at the Burns residence at 63 County Road 2800. On March 14, 1997, I accompanied Wanda Mantley and Todd Hillaker from Inter-Mountain Lab. to the Burns residence. We met Mr. Burns and he showed us to the water well. At this time it was determined that samples would be taken from the stock pen water line, which comes directly from the water well, and from inside the house. The water to the house has a filtering system in line. After the samples were taken Mrs. Burns asked if we could smell the odor. When the water was run from the hot faucet, I could smell a swap-water odor. We told the Burns that a report would be sent to this when the analyses was complete and we left.

On March 18, 1997, I returned a phone call to Wanda Manley. She told me that the analyses show 20 colonies/100 mL of Fecal Coliform Bacteria in the water from the stock pen and 3 colonies/100 mL in the water from the house. The analyses also showed 1.06 mg/L Sulfide in the water from the house and less than .01 mg/L from the stock pens. At this time I ask Wanda if she would call the Burns and give them the results of the test. She attempted to contact them. That afternoon she call me to let me know she had not been able to contact the Burns. Later that same afternoon I talked to Mrs. Burns on the phone and ask her to call Inter-Mountain Labs to get the preliminary results, which she agreed to do.

I call Mrs Burns on March 25, 1997 to follow-up on the information that she recieved from Inter-Mountain Labs. She told me that they had chlorinated their water system and that this had helped.

API Suite **Burlington Resources, Inc.**

Project ID:	Wilmuth	Date Reported:	03/20/97
Sample ID:	Wilmuth 1	Date Sampled:	03/05/97
Laboratory ID:	6335	Time Sampled:	NA
Sample Matrix:	Water	Date Received:	03/06/97

Parameter		Analytical Result	Units
General	Lab pH.....	8.5	s.u.
	Lab Conductivity @ 25° C.....	34,900	µmhos/cm
	Total Dissolved Solids @ 180°C.....	24,800	mg/L
	Total Dissolved Solids (Calc).....	23,000	mg/L
	Specific Gravity.....	1.021	***
Anions	Total Alkalinity as CaCO ₃	1,330	mg/L
	Bicarbonate Alkalinity as CaCO ₃	1,080	mg/L
	Carbonate Alkalinity as CaCO ₃	250	mg/L
	Hydroxide Alkalinity as CaCO ₃	NA	mg/L
	Chloride.....	7,250	mg/L
	Sulfate.....	6,530	mg/L
	Sulfide.....	28.0	mg/L
	Nitrate + Nitrite - N.....	NA	
	Nitrate - N.....	NA	
	Nitrite - N.....	NA	
Cations	Total Hardness as CaCO ₃	380	mg/L
	Calcium.....	115	mg/L
	Magnesium.....	22.5	mg/L
	Potassium.....	150	mg/L
	Sodium.....	8,100	mg/L
	Iron.....	48.3	mg/L
Data Validation			Acceptance Level
Cation/Anion Difference.....		0.43	+/- 5 %
TDS (180):TDS (calculated).....		1.1	1.0 - 1.2

Reference U.S.E.P.A. 600/4-79-020, Methods for Chemical Analysis of Water and Wastes, 1983.
Standard Methods For The Examination Of Water And Wastewater, 18th ed., 1992.

[Signature]
 Review

API Suite
Burlington Resources, Inc.

Project ID:	Wilmuth	Date Reported:	03/20/97
Sample ID:	Wilmuth 2	Date Sampled:	03/05/97
Laboratory ID:	6336	Time Sampled:	NA
Sample Matrix:	Water	Date Received:	03/06/97

Parameter	Analytical Result	Units
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Anions

Sulfide.....	75.0	mg/L
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Reference U.S.E.P.A. 600/4-79-020, Methods for Chemical Analysis of Water and Wastes, 1983.
Standard Methods For The Examination Of Water And Wastewater, 18th ed., 1992.



Review

API Suite
Quality Control Report

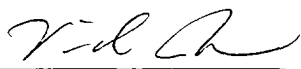
Burlington Resources, Inc.

Report Date: 03/20/97

Parameter	Analytical Result	Certified Value	Acceptance Range	Units
Laboratory pH	9.19	9.08	8.88 - 9.28	s.u.
Conductivity	1166	1280	1000 - 1470	µmhos/cm
Total Dissolved Solid	990	959	834 - 1080	mg/L
Total Alkalinity	225	209	186 - 232	mg/L
Chloride	95.0	95.0	88.4 - 102	mg/L
Sulfate	155	149	128 - 170	mg/L
Total Hardness	280	278	239 - 317	mg/L
Calcium	64.1	60.6	52.1 - 69.1	mg/L
Magnesium	NA	NA	NA	mg/L
Potassium	140	146	124 - 168	mg/L
Sodium	150	158	134 - 182	mg/L
Iron	0.503	0.5	0.425 - 0.611	mg/L

Reference: U.S.E.P.A. 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes",
1983. Standard Methods For The Examination Of Water And Wastewater, 18th ed.,
1992.

Comments:



Review

