

1R - 426-98

REPORTS

DATE:

9-13-10

L. Peter Galusky, Jr. Ph.D., P.G.

Texerra

**75 Wuthering Hts Drive Colorado Springs, CO 80921
Tel: 917-339-6791 E-mail: lpg@texerra.com**

September 13th, 2010

Mr. Edward Hansen
New Mexico Energy, Minerals, & Natural Resources
Oil Conservation Division, Environmental Bureau
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505

Re: **Notification of Groundwater Impact**
Rice Operating Company – BD SWD System
BD O-23-1 Junction Box UL O, Sect 23, Township 21S, Range 37E
NMOCD Case Number 1R426-98

Sent Via E-mail and U.S. Mail Certified, Return Receipt No. 7007 2560 0001 9712

Mr. Hansen:

Please be advised that groundwater samples taken as prescribed in the Investigation and Characterization Plan (ICP) for Rice Operating Company's BD O-23-1 Junction Box project (Figure 1) indicate elevated levels of chlorides. Groundwater samples taken from a near-source down-gradient monitor well tested 5,200 ppm and 5,400 ppm Cl⁻ on April 20th and July 26th, respectively; (see attached laboratory data). Dissolved hydrocarbons (as BTEX) were not detected in either sampling event.

ROC will install a monitor well up-gradient of the site and to sample this for chlorides to determine if the elevated levels observed are due to historical, up-gradient impacts or if they have been caused or exacerbated by past operation of this junction box. Once we have this data we will compile groundwater and soil bore analysis data and prepare and submit an ICP report. A Corrective Action Plan will also be submitted if our findings warrant this.

ROC is the service provider (agent) for the BD SWD System and has no ownership of any portion of the pipeline, well, or facility. The System is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis. Please call either myself or Hack Conder of Rice Operating Company if you have any questions or wish to discuss this matter.

Thank you for your consideration.

Sincerely,



L. Peter Galusky, Jr. Ph.D., P.G.

Copy: Rice Operating Company

Copy: Rice Operating Company

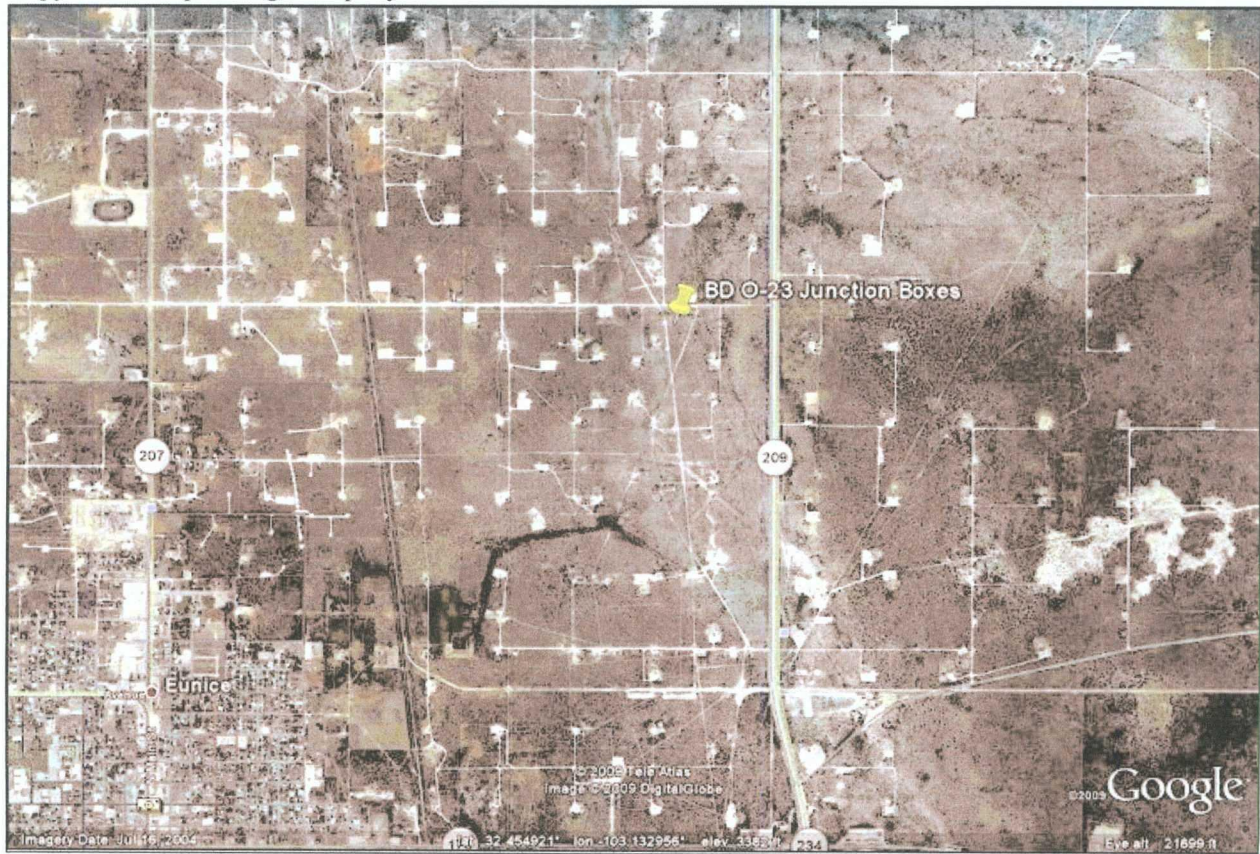


Figure 1 – BD O-23-1 location. The general topographic gradient and presumed water table gradient is toward the southeast.



ARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

August 2, 2010

Hack Conder
Rice Operating Company
112 West Taylor
Hobbs, NM 88240

Re: BD O-23-1 Vent

Enclosed are the results of analyses for sample number H20413, received by the laboratory on 07/26/10 at 1:50 pm.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited though the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.2	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 4 (includes Chain of Custody)

Sincerely,

Celey D. Keene
Laboratory Director

This report conforms with NELAP requirements.



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ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: HACK CONDER
112 WEST TAYLOR
HOBBS, NM 88240
FAX TO: (575) 397-1471

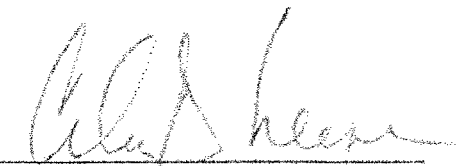
Receiving Date: 07/26/10
Reporting Date: 07/29/10
Project Number: NOT GIVEN
Project Name: BD O-23-1 VENT
Project Location: T21S R37E SEC23 O~ LEA COUNTY, NM

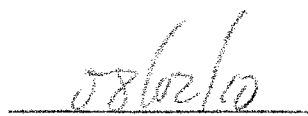
Sampling Date: 07/26/10
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: JH
Analyzed By: HM

LAB NO.	SAMPLE ID	Cl ⁻ (mg/L)	SO ₄ (mg/L)	TDS (mg/L)
Analysis Date:		07/27/10	07/29/10	07/27/10
H20413-1	MONITOR WELL #1	5,400	294	9,650
Quality Control		510	39.6	NR
True Value QC		500	40.0	NR
% Recovery		102	99.1	NR
Relative Percent Difference		3.8	2.5	0.9

METHOD: Standard Methods, EPA	4500-ClB	375.4	160.1
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Not accredited for Chloride, Sulfate and TDS.


Chemist


Date

H20413 RICE

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ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: HACK CONDER
112 W. TAYLOR
HOBBS, NM 88240
FAX TO: (575) 397-1471


Receiving Date: 07/26/10
Reporting Date: 07/28/10
Project Number: NOT GIVEN
Project Name: BD O-23-1 VENT
Project Location: T21S-R37E-SEC23 O~ LEA CO., NM

Sampling Date: 07/26/10
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: JH
Analyzed By: ZL

LAB NUMBER	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		07/28/10	07/28/10	07/28/10	07/28/10
H20413-1	MONITOR WELL #1	<0.001	<0.001	<0.001	<0.003
Quality Control		0.010	0.009	0.009	0.027
True Value QC		0.010	0.010	0.010	0.030
% Recovery		100	90.0	90.0	90.0
Relative Percent Difference		3.6	9.5	9.5	5.6

METHOD: EPA SW-846 8021B

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE,
AND TOTAL XYLENES.


Chemist


Date

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CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

April 29, 2010

Hack Conder
Rice Operating Company
112 West Taylor
Hobbs, NM 88240

Re: BD O-23-1 Vent

Enclosed are the results of analyses for sample number H19747, received by the laboratory on 04/23/10 at 2:00 pm.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.2	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 4 (includes Chain of Custody)

Sincerely,

Celey D. Keene
Laboratory Director

This report conforms with NELAP requirements.



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ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: HACK CONDER
112 W. TAYLOR
HOBBS, NM 88240
FAX TO: (575) 397-1471

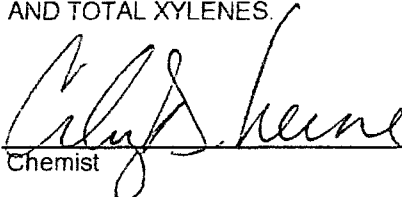
Receiving Date: 04/23/10
Reporting Date: 04/27/10
Project Number: NOT GIVEN
Project Name: BD O-23-1 VENT
Project Location: T21S-R37E-SEC23 O~ LEA CO., NM

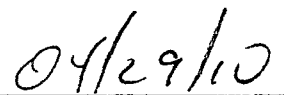
Sampling Date: 04/20/10
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: JH
Analyzed By: ZL

LAB NUMBER SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE	04/26/10	04/26/10	04/26/10	04/26/10
H19747-1 MONITOR WELL #1	<0.001	<0.001	<0.001	<0.003
Quality Control	0.050	0.051	0.051	0.152
True Value QC	0.050	0.050	0.050	0.150
% Recovery	100	102	102	101
Relative Percent Difference	12.5	12.8	13.0	14.4

METHOD: EPA SW-846 8021B

TEXAS NELAP CERTIFICATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE,
AND TOTAL XYLENES.


Chemist


Date

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ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: HACK CONDER
112 WEST TAYLOR
HOBBS, NM 88240
FAX TO: (575) 397-1471


Receiving Date: 04/23/10
Reporting Date: 04/28/10
Project Number: NOT GIVEN
Project Name: BD O-23-1 VENT
Project Location: T21S R37E SEC23 O ~ LEA COUNTY, NM

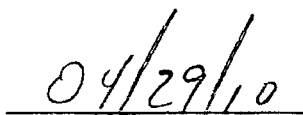
Sampling Date: 04/20/10
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: JH
Analyzed By: SJ/HM

LAB NO.	SAMPLE ID	Cl ⁻ (mg/L)	SO ₄ (mg/L)	TDS (mg/L)
Analysis Date:		04/28/10	04/28/10	04/27/10
H19747-1	MONITOR WELL #1	5,200	329	9,100
Quality Control		500	44.6	NR
True Value QC		500	40.0	NR
% Recovery		100	112	NR
Relative Percent Difference		2.0	2.0	3.7

METHOD: Standard Methods, EPA	4500-Cl ⁻ B	375.4	160.1
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Not accredited for Chloride, Sulfate and TDS.


Chemist


Date

H19747 RICE

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Cardinal Laboratories, Inc. 101 East Mariand - Hobbs, New Mexico 88240 Tel (575) 393-2326 Fax (575) 393-2476		CHAIN-OF-CUSTODY AND ANALYSIS REQUEST LAB Order ID # _____	
Company Name: RICE Operating Company Project Manager: Hack Conder Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240 Phone #: (575) 393-9174 Fax #: (575) 397-1471 Project #: (575) 393-9174 Project Name: BD O-23-1 Vent		ANALYSIS REQUEST (Circle or Specify Method No.) Turn Around Time ~ 24 Hours	
Project Location: T21S R37E Sec23 O ~ Lea County New Mexico Sampler Signature: Rozanne Johnson (575) 631-9310 rozanne@valornet.com		ANALYSIS REQUEST (Circle or Specify Method No.) Turn Around Time ~ 24 Hours	
Matrix WATER <input checked="" type="checkbox"/> SLUDGE <input type="checkbox"/> AIR <input type="checkbox"/> SOIL <input type="checkbox"/> CONTAINERS <input type="checkbox"/>		ANALYSIS REQUEST (Circle or Specify Method No.) Turn Around Time ~ 24 Hours	
Field Code 119747-1 Monitor Well #1		ANALYSIS REQUEST (Circle or Specify Method No.) Turn Around Time ~ 24 Hours	
LAB # (LAB USE ONLY)		ANALYSIS REQUEST (Circle or Specify Method No.) Turn Around Time ~ 24 Hours	
Relinquished by: Rozanne Johnson Date: 4-23-2010 Time: 13:54		ANALYSIS REQUEST (Circle or Specify Method No.) Turn Around Time ~ 24 Hours	
Relinquished by: Date: Time:		ANALYSIS REQUEST (Circle or Specify Method No.) Turn Around Time ~ 24 Hours	
Delivered By: (Circle One) UPS - Bus - Other:		ANALYSIS REQUEST (Circle or Specify Method No.) Turn Around Time ~ 24 Hours	
Sample Condition Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Intact <input checked="" type="checkbox"/> No <input type="checkbox"/>		ANALYSIS REQUEST (Circle or Specify Method No.) Turn Around Time ~ 24 Hours	
Checked By: Rozanne Johnson Date: 4/23/10 Time: 2:00		ANALYSIS REQUEST (Circle or Specify Method No.) Turn Around Time ~ 24 Hours	
Received by: Date: Time:		ANALYSIS REQUEST (Circle or Specify Method No.) Turn Around Time ~ 24 Hours	
Received By: (Laboratory Staff) Date: Time:		ANALYSIS REQUEST (Circle or Specify Method No.) Turn Around Time ~ 24 Hours	
Remarks:		ANALYSIS REQUEST (Circle or Specify Method No.) Turn Around Time ~ 24 Hours	
Em Email Results to: hconder@riceswd.com lweinheimer@riceswd.com kionies@riceswd.com rozanne@valornet.com		ANALYSIS REQUEST (Circle or Specify Method No.) Turn Around Time ~ 24 Hours	

#260