

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

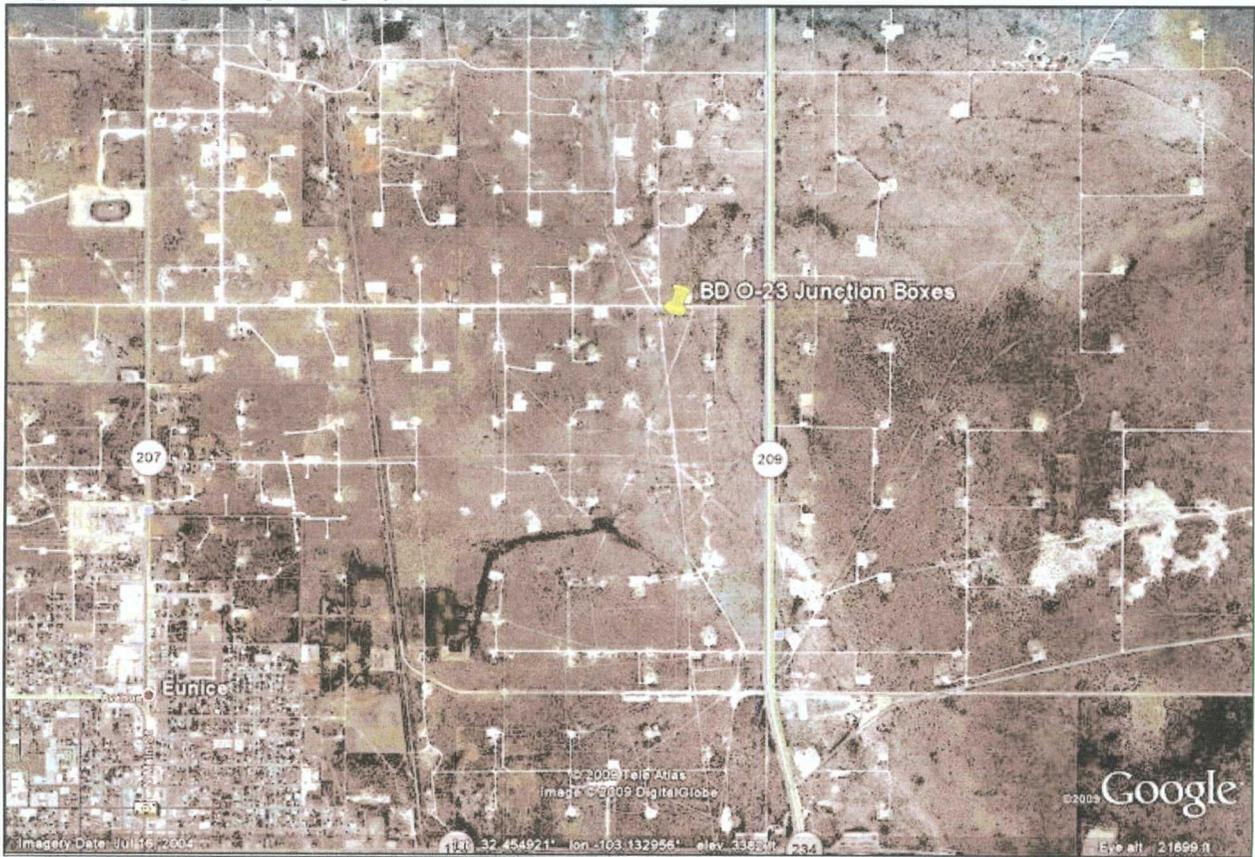


Figure 1 – BD O-23-1 location. The general topographic gradient and presumed water table gradient is toward the southeast.



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

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

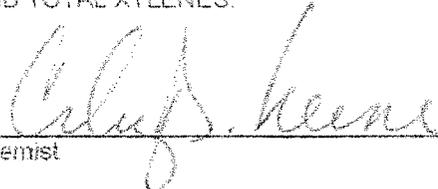
Receiving Date: 07/26/10
Reporting Date: 07/28/10
Project Number: NOT GIVEN
Project Name: BD O-23-1 VENT
Project Location: T21S-R37E-SEC23 O~ LEA CO., NM

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

PLEASE NOTE: **Liability and Damages.** Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # _____

ANALYSIS REQUEST
(Circle or Specify Method No.)

Turn Around Time - 24 Hours	
Chlorides	X
Total Dissolved Solids	X
Sulfates (SO4)	X
Cations (Ca, Mg, Na, K)	
Anions (Cl, SO4, CO3, HCO3)	
Moisture Content	
BOD, TSS, pH	
Pesticides 8081A/808	
PCBs 8082/608	
GC/MS Semi. Vol. 8270C/625	
GC/MS Vol. 8260B/624	
RCI	
TCLP Pesticides	
TCLP Semi Volatiles	
TCLP Volatiles	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	
PAH 8270C	
TPH 418.1/7X1005 / TX1005 Extended (C35)	
BTEX 8021B/602	X
MTBE 8021B/602	

Cardinal Laboratories, Inc.
101 East Mainland - Hobbs, New Mexico 88240
Tel (575) 393-2326 Fax (575) 393-2478

BILL TO Company:
RICE Operating Company
Address: 122 W Taylor Street - Hobbs, New Mexico 88240
Phone#: (575) 393-9174 Fax#: (575) 397-1471

Project Manager:
Hack Conder
Address: 122 W Taylor Street - Hobbs, New Mexico 88240
Phone #: (575) 393-9174 Fax #: (575) 397-1471

Project Name:
BD O-23-1 Vent

Project Location:
T21S R37E Sec23 O ~ Lea County New Mexico

Sampler Signature: Rozanne Johnson (575) 531-5310
rozanne@valornet.com

LAB #	FIELD CODE	(Grab or (Comp)	# CONTAINERS	MATRIX			PRESERVATIVE METHOD				DATE (2010)	TIME
				WATER	AIR	SLUDGE	HCL (2.4M VOA)	HNO3	NaHSO4	H2SO4		
A-6	Monitor Well #1	G	3	X			2			1	7-26	7:30

LAB USE ONLY

Reinquisitioned by: _____ Date: _____ Time: _____
Rozanne Johnson 7/26/10 13:49

Received by: _____ Date: _____ Time: _____

Reinquisitioned by: _____ Date: _____ Time: _____

Received By: (Laboratory Staff) _____ Date: _____ Time: _____
Rozanne Johnson 7/26/10 13:49

Delivered By: (Circle One) _____

Sampler: UPS - Bus - Other: _____

Phone Results: Yes No

Fax Results: Yes No

Additional Fax Number: _____

REMARKS:

Em Email Results to: hconder@riceswd.com
iweinheimer@riceswd.com
hjohn@riceswd.com
rozanne@valornet.com

Checked By: _____ (Initials) *AK*

Sample Condition:

Cool	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Intact	Yes <input type="checkbox"/>	No <input type="checkbox"/>

#216



**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.



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

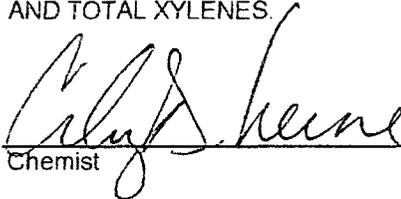
Receiving Date: 04/23/10
 Reporting Date: 04/27/10
 Project Number: NOT GIVEN
 Project Name: BD O-23-1 VENT
 Project Location: T21S-R37E-SEC23 O~ LEA CO., NM

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

04/29/10
 Date

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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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

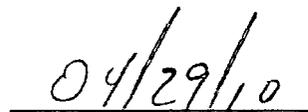
Sampling Date: 04/20/10
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: JH
Analyzed By: SJ/HM

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-ClB	375.4	160.1
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Not accredited for Chloride, Sulfate and TDS.


Chemist


Date

H19747 RICE

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland - Hobbs, New Mexico 88240
Tel (575) 393-2326 Fax (575) 393-2476

Cardinal Laboratories, Inc.

Company Name: **RICE Operating Company** PO# _____
Project Manager: **Hack Conder** (Street, City, Zip) _____
Address: 122 W Taylor Street ~ Hobbs, New Mexico 88240
Phone #: (575) 393-9174 Fax #: (575) 397-1471
Project Name: **BD O-23-1 Vent**

Project Location: **T21S R37E Sec23 O ~ Lea County New Mexico**

Sampler Signature: *Rozanne Johnson* (575) 631-9310
rozanne@valornet.com

LAB #	FIELD CODE	(G)rab or (C)omp	MATRIX		PRESERVATIVE METHOD				DATE (2010)	TIME	
			WATER	AIR	SLUDGE	HCL (2.40ml VOA)	HNO ₃	NaHSO ₄			H ₂ SO ₄
119747-1	Monitor Well #1	G	X				2		1	4-20	9:30

Relinquished by: *Rozanne Johnson* Date: 4-23-2010 13:59

Relinquished by: _____ Date: _____

Received by: _____ Date: _____

Received By: (Laboratory Staff) *Rozanne Johnson* Date: 4/23/10 2:00

Sample Condition: Cool Yes No Intact Yes No

Delivered By: (Circle One) Sampler UPS - Bus - Other: _____

CHECKED BY: *Rozanne Johnson* (Initials) *RA*

ANALYSIS REQUEST (Circle or Specify Method No.)	Yes	No
TPH 418, 1/TX1005 / TX1005 Extended (C35)		
PAH 8270C		
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7		
TCLP Metals Ag As Ba Cd Cr Pb Se Hg		
TCLP Volatiles		
TCLP Semi Volatiles		
TCLP Pesticides		
RCI		
GC/MS Vol. 8260B/624		
GC/MS Semi. Vol. 8270C/625		
PCBs 8082/608		
Pesticides 8081A/608		
BOD, TSS, pH		
Moisture Content		
Anions (Cl, SO ₄ , CO ₃ , HCO ₃)		
Cations (Ca, Mg, Na, K)		
Sulfates (SO ₄)	X	
Total Dissolved Solids	X	
Chlorides	X	
Turn Around Time ~ 24 Hours		

Phone Results: Yes No

Fax Results: Yes No

Additional Fax Number: _____

REMARKS:

Em Email Results to hconder@riceswd.com
lweinheimer@riceswd.com
kiones@riceswd.com
rozanne@valornet.com

#260