

1R - 426-169

Annual GW Mon. REPORTS

DATE:

2010

R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Fax: 505.266-0745

March 16, 2011

Edward J. Hansen
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

RECEIVED

MAR 16 2011

RE: 2010 Annual Ground Water Monitoring Report
BD B-29, Sec 29, T21S, R37E, Unit "B"
NMOCD Case #: 1R0426-169

Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505

Mr. Hansen,

R.T. Hicks Consultants, Ltd. is pleased to submit this 2010 Annual Ground Water Monitoring Report for the B-29 site located in the BD Salt Water Disposal System (SWD). This report contains:

1. A table presenting all laboratory results and depth to ground water for each well at the site.
2. Graphs showing the concentration of chloride and TDS in ground water over time.
3. A figure presenting the location of the monitoring wells and the most recent ground water sampling results.
4. The laboratory analysis from the most recent ground water sampling event.

An Investigation and Characterization Report was submitted to NMOCD on September 21, 2010. An up-gradient well was drilled at this site in November of 2010. Quarterly ground water monitoring will continue through 2011.

ROC is the service provider (agent) for the BD Salt Water Disposal System and has no ownership of any portion of pipeline, well or facility. A consortium of oil producers who own the BD SWD System (System Parties) provide all operating capital on a percentage ownership/usage basis. Major projects require System Parties' authorization for expenditures (AFE); approval and work begins as funds are received.

Thank you for your consideration. If you have any questions, please contact us at 505-266-5004, or Hack Conder at Rice Operating Company, 575-393-9174.

Sincerely,
R.T. Hicks Consultants



Katie Lee
Project Scientist

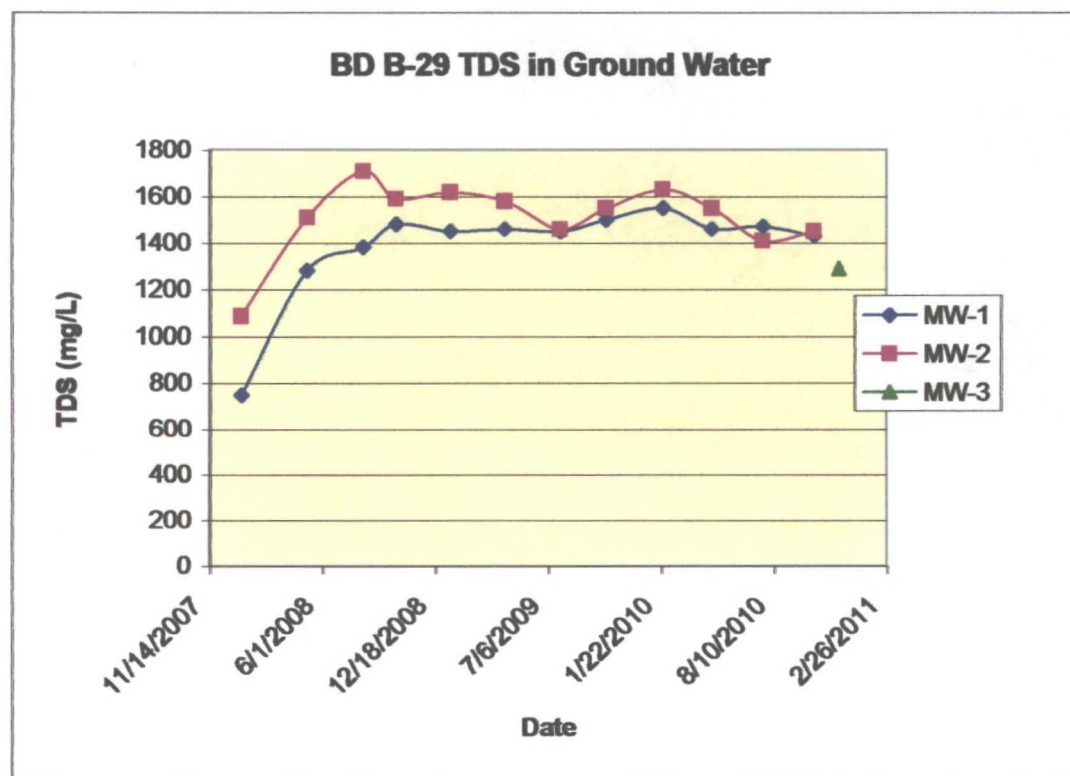
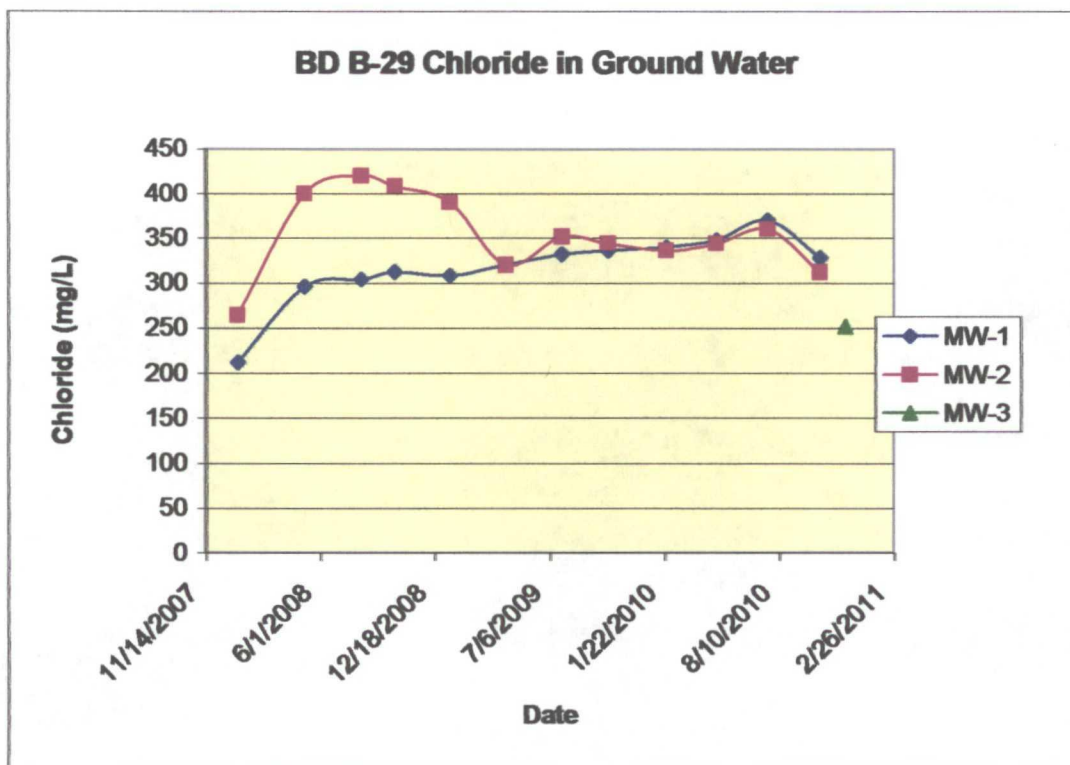
Copy: Hack Conder, Rice Operating Company

ROC BD B-29 NMOC D Case #: 1R0426-169

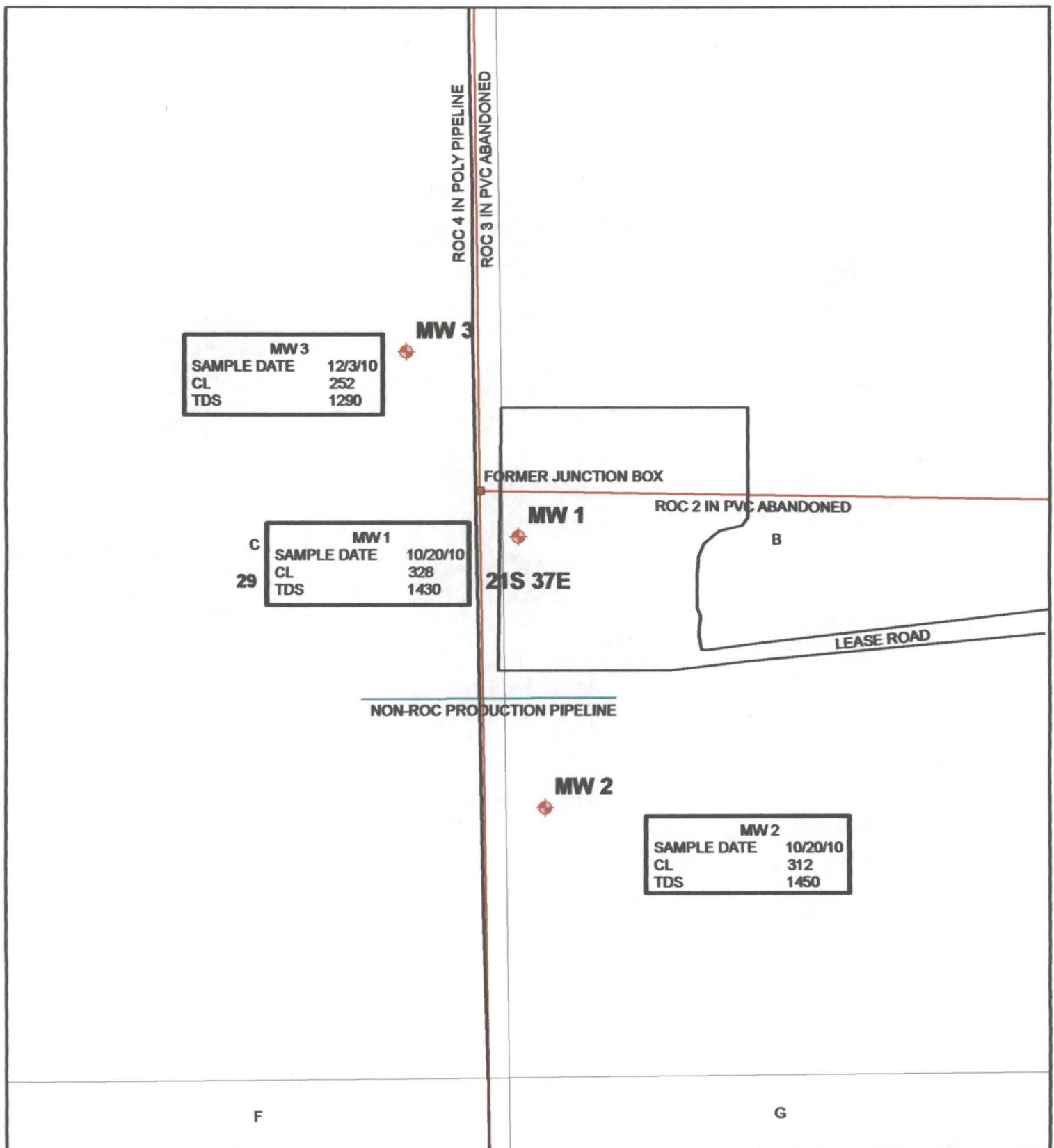
MW #	Depth to Water (ft)	Sample Date	CI	TDS	Benzene	Toluene	Ethyl Benzene (mg/L)	Total Xylenes	Sulfate
1	90.07	1/9/2008	212	749	<0.001	<0.001	<0.001	<0.003	128
1	90.13	5/5/2008	296	1280	<0.002	<0.002	<0.002	<0.006	462
1	90.35	8/12/2008	304	1380	<0.001	<0.001	<0.001	<0.003	456
1	90.24	10/9/2008	312	1480	<0.001	<0.001	<0.001	<0.003	393
1	90.21	1/13/2009	308	1450	<0.001	<0.001	<0.001	<0.003	479
1	90.26	4/20/2009	320	1460	<0.001	<0.001	<0.001	<0.003	518
1	90.29	7/27/2009	332	1450	<0.001	<0.001	<0.001	<0.003	444
1	90.32	10/16/2009	336	1500	<0.001	<0.001	<0.001	<0.003	437
1	90.35	1/25/2010	340	1550	<0.001	<0.001	<0.001	<0.003	502
1	90.34	4/22/2010	348	1460	<0.001	<0.001	<0.001	<0.003	539
1	90.32	7/21/2010	370	1470	<0.001	<0.001	<0.001	<0.003	494
1	90.29	10/20/2010	328	1430	<0.001	<0.001	<0.001	<0.003	467

MW #	Depth to Water (ft)	Sample Date	CI	TDS	Benzene	Toluene	Ethyl Benzene (mg/L)	Total Xylenes	Sulfate
2	89.38	1/9/2008	264	1085	<0.001	<0.001	0.002	<0.003	257
2	89.31	5/5/2008	400	1510	<0.002	<0.002	<0.002	<0.006	502
2	89.55	8/12/2008	420	1710	<0.001	<0.001	<0.001	<0.003	432
2	89.51	10/9/2008	408	1590	<0.001	<0.001	<0.001	<0.003	421
2	89.48	1/13/2009	390	1620	<0.001	<0.001	<0.001	<0.003	488
2	89.5	4/20/2009	320	1580	<0.001	<0.001	<0.001	<0.003	497
2	89.52	7/27/2009	352	1460	<0.001	<0.001	<0.001	<0.003	444
2	89.49	10/16/2009	344	1550	<0.001	<0.001	<0.001	<0.003	416
2	89.56	1/25/2010	336	1630	<0.001	<0.001	<0.001	<0.003	510
2	89.48	4/22/2010	344	1550	<0.001	<0.001	<0.001	<0.003	488
2	89.45	7/21/2010	360	1410	<0.001	<0.001	<0.001	<0.003	473
2	89.47	10/20/2010	312	1450	<0.001	<0.001	<0.001	<0.003	455

MW #	Depth to Water (ft)	Sample Date	CI	TDS	Benzene	Toluene	Ethyl Benzene (mg/L)	Total Xylenes	Sulfate
3	89.96	12/3/2010	252	1290	<0.001	<0.001	<0.001	<0.003	459



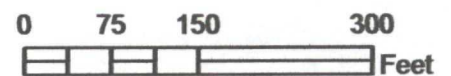
MONITOR WELL SAMPLING DATA



BD B-29

**Legals: UL's B&C SEC. 29
T-21-S R-37-E**

Case #: 1R426-169



Drawing date: 3/9/11

October 28, 2010

Hack Conder

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: BD B-29 LEAK

Enclosed are the results of analyses for samples received by the laboratory on 10/22/10 12:50.

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 524.4	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 Rice Operating Company
 Hack Conder
 112 W. Taylor
 Hobbs NM, 88240
 Fax To: (575) 397-1471

 Received: 10/22/2010
 Reported: 10/28/2010
 Project Name: BD B-29 LEAK
 Project Number: NONE GIVEN
 Project Location: T21S R37E SEC29 B - LEA CTY., NM

 Sampling Date: 10/20/2010
 Sampling Type: Water
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: MONITOR WELL #1 (H021130-01)

BTX 8021B		mg/L	Analyzed By: cms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	10/27/2010	ND	0.027	109	0.0250		
Toluene*	<0.001	0.001	10/27/2010	ND	0.027	110	0.0250		
Ethylbenzene*	<0.001	0.001	10/27/2010	ND	0.028	113	0.0250		
Total Xylenes*	<0.003	0.003	10/27/2010	ND	0.083	111	0.0750		

Surrogate: 4-Bromofluorobenzene (PIL) 104 % 80-120

Chloride, SM4500Cl-B		mg/L	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	328	4.00	10/26/2010	ND	100	100	100	0.00	

Sulfate 375.4		mg/L	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate	467	10.0	10/26/2010	ND	36.8	92.0	40.0	0.319	

TDS 160.1		mg/L	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS	1430	5.00	10/25/2010	ND				1.46	

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Rice Operating Company
 Hack Conder
 112 W. Taylor
 Hobbs NM, 88240
 Fax To: (575) 397-1471

 Received: 10/22/2010
 Reported: 10/28/2010
 Project Name: BD B-29 LEAK
 Project Number: NONE GIVEN
 Project Location: T21S R37E SEC29 B - LEA CTY., NM

 Sampling Date: 10/20/2010
 Sampling Type: Water
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: MONITOR WELL #2 (H021130-02)

BTEX 8021B		mg/L		Analyzed By: cms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	10/28/2010	ND	0.027	109	0.0250		
Toluene*	<0.001	0.001	10/28/2010	ND	0.027	110	0.0250		
Ethylbenzene*	<0.001	0.001	10/28/2010	ND	0.028	113	0.0250		
Total Xylenes*	<0.003	0.003	10/28/2010	ND	0.083	111	0.0750		

Surrogate: 4-Bromofluorobenzene (PIL) 113 % 80-120

Chloride, SM4500Cl-B		mg/L		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	312	4.00	10/26/2010	ND	100	100	100	0.00	

Sulfate 375.4		mg/L		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate	455	10.0	10/26/2010	ND	36.8	92.0	40.0	0.319	

TDS 160.1		mg/L		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS	1450	5.00	10/25/2010	ND				1.46	

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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*=Accredited Analyte

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Celestine D. Keene, Lab Director/Quality Manager

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

LAB Order ID #

22#



December 15, 2010

Hack Conder

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: BD B-29 LEAK

Enclosed are the results of analyses for samples received by the laboratory on 12/07/10 11:50.

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

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Sincerely,

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

Rice Operating Company
Hack Conder
112 W. Taylor
Hobbs NM, 88240
Fax To: (575) 397-1471

Received: 12/07/2010
Reported: 12/15/2010
Project Name: BD B-29 LEAK
Project Number: NONE GIVEN
Project Location: T21S R37E SEC29 B - LEA CTY., NM

Sampling Date: 12/03/2010
Sampling Type: Water
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: MONITOR WELL #3 (H021466-01)

BTX 8021B		mg/L		Analyzed By: CMS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	12/14/2010	ND	0.025	101	0.0250	23.9	
Toluene*	<0.001	0.001	12/14/2010	ND	0.025	99.7	0.0250	23.8	
Ethylbenzene*	<0.001	0.001	12/14/2010	ND	0.025	99.1	0.0250	21.5	
Total Xylenes*	<0.003	0.003	12/14/2010	ND	0.072	96.7	0.0750	21.0	

Surrogate: 4-Bromofluorobenzene (PIL) 101 % 80-120

Chloride, SM4500Cl-B		mg/L		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	252	4.00	12/09/2010	ND	112	112	100	3.64	

Sulfate 375.4		mg/L		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate	459	10.0	12/09/2010	ND	43.2	108	40.0	0.922	

TDS 160.1		mg/L		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS	1290	5.00	12/08/2010	ND				2.86	

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Cardinal Laboratories, Inc.



101 East Marland - Hobbs, New
Mexico 88240
Tel (575) 393-2328
Fax (575) 393-2476

Company Name:	RICE Operating Company		BILL TO Company:	RICE Operating Company	PO#:
Project Manager:	Hack Conder		Address:	122 W Taylor Street ~ Hobbs, New Mexico 88240	(Street, City, Zip)
Address:	(Street, City, Zip)		Phone#:	(575) 393-9174	Fax#:
122 W Taylor Street ~ Hobbs, New Mexico 88240				(575) 397-1471	
Phone #:	(575) 393-9174		Fax #:	(575) 397-1471	

Project #:	Project Name:	Sampler Signatures:	Rozanne Johnson (575)631-9310
	BD B-29 Leak		
Project Location:	T21S R37E Sec29 B ~ Lea County New Mexico		
			LEA@NHC@GMAIL.COM

[illegible]

Relinquished by: Rozanne Johnson	Date: 12-7-2010	Time: 11:50	Received by: Lodi Benson	Date: 12/10	Time: 11:50
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff)	Date:	Time:

Delivered By: (Circle One)	Sample Condition Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Cool: <input checked="" type="checkbox"/> <input type="checkbox"/> Intact: <input type="checkbox"/> <input checked="" type="checkbox"/>	CHECKED BY: (Initials) 
Delivered By: (Circle One)	Sample Condition Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Cool: <input checked="" type="checkbox"/> <input type="checkbox"/> Intact: <input type="checkbox"/> <input checked="" type="checkbox"/>	CHECKED BY: (Initials) 

#26

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #

ANALYSIS REQUEST

(Circle or Specify Method No.)

	Phone Results	Yes	No	Fax Results	Yes	No	Additional Fax Number:
MTBE 8021B/602	X						
BTEX 8021B/602							
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							
GCM/S Vol. 8260B/624							
GCM/S Semi. Vol. 8270C/625							
PCBs 8082/608							
Pesticides 8081A/608							
BOD, TSS, pH							
Moisture Content							
Cations (Ca, Mg, Na, K)							
Anions (Cl, SO ₄ , CO ₃ , HCO ₃)							
Sulfates	X						
Total Dissolved Solids	X						
Chlorides	X						
Turn Around Time ~ 24 Hours							

REMARKS:

Email Results to:

hconder@riceswd.com

Freinheimer Direct-est.com

kkkiones@prices.ro.com

rozanne@valornet.com