



2012 SEP 24 P 12: 49

Sent Certified Mail Return Receipt No. 7002 2410 0001 5813 4033

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

Subject:

Termination Request Blinebry-Drinkard (BD) H-14 T22S, R37E, Section 14, Unit H, Eunice, Lea County, New Mexico NMOCD Case # 1R426-101

Mr. Hansen:

On behalf of Rice Operating Company (ROC), ARCADIS U.S., Inc. (ARCADIS) respectfully submits this Termination Request for the above-referenced site.

NMOCD approved ROC's Corrective Action Plan (CAP) and subsequent addendums on April 4, 2011. The CAP called for soil removal to a depth of five to six feet below ground surface, backfilling with clean soil and seeding of the site. It also proposed an estimation of the chloride mass that may have contributed to groundwater impact at the former junction box location, and a plan for the removal of that chloride mass. The approved chloride mass estimation and plan for removal is as follows:

ROC proposed, and NMOCD approved, utilizing the existing groundwater recovery system located at the BD O-23 and BD O-23-1 vent locations to recover an estimated 1,941 kilograms (kg) of chloride mass. Removed groundwater would be utilized for pipeline and well maintenance.

As of September 17, 2012, a total of 2,065 barrels of groundwater and 2,109 kg of chloride had been recovered from the four recovery wells located at the BD O-23 vent and BD O-23-1 vent locations. A total of 865 barrels of groundwater and 1,169 kg of chloride were recovered from BD O-23 vent (432.5 barrels were removed from MW-1R and 432.5 barrels were removed RW-2). With a chloride concentration of 7,100 mg/L in MW-1R, approximately 488 kg of chloride were removed and with a chloride concentration of 9,900 mg/L in RW-2, approximately 681 kg were removed. A total of 1,200 barrels of groundwater and 940 kg of chloride were recovered from BD O-23-1 vent (600 barrels were removed from MW-1R and 600 barrels were removed RW-2). With a chloride concentration of 4,350 mg/L in MW-1R, approximately 415 kg of chloride were removed and with a chloride concentration of 5,500 mg/L in RW-2, approximately 525 kg were removed. (See attached laboratory reports and chloride mass removal record.)

ARCADIS U.S. 1004 North Big Spring Street Suite 300 Midland Texas 79701 Tel 432 687 5400 Fax 432 687 5401 www.arcadis-us.com

Environmental

Date: September 20, 2012

Contact: Sharon E. Hall

Phone: 432 687-5400

Email: sharon.hall@arcadis-us.com

Our ref: MT000914.0001

## Ed Hansen September 20, 2012

Site soils were excavated according to the CAP and a 58x84 ft clay barrier was installed from 7 to 6 ft bgs. The excavation was backfilled with clean soil and the site was then seeded with native vegetation. An Initial CAP Report was submitted to NMOCD on August 1, 2011 and approved by NMOCD on September 20, 2011, which granted soil closure.

Upon NMOCD approval of this Termination Request, monitoring wells MW-1 and MW-3 will be plugged using a cement grout with 1 to 3% bentonite and a 3 ft cap of cement. The up-gradient well (MW-2) will remain open to monitor up-gradient background concentrations in the area.

ROC has met all abatement requirements in accordance with 19.15.29 NMAC, and respectfully requests termination of the regulatory file for this site.

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. The BD SWD System is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis.

Thank you for your consideration concerning this request for site termination. If you have any questions please contact Hack Conder at (575) 393-9174.

Sincerely, ARCADIS

Sham E. Hall

Sharon E. Hall Associate Vice President

Copies: Hack Conder, ROC

Attachments: Laboratory Report Chloride Mass Removal Record



August 22, 2012

Hack Conder Rice Operating Company 112 W. Taylor Hobbs, NM 88240

RE: BD O-23 VENT

Enclosed are the results of analyses for samples received by the laboratory on 08/16/12 15:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceg.texas.gov/field/ga/lab</a> accredited retrift.

Cardinal Laboratories is accreditated 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 (V1, 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,

Celez Di Keine

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:	08/16/2012	Sampling Date:	08/16/2012
Reported:	08/22/2012	Sampling Type:	Water
Project Name:	BD O-23 VENT	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	T21S R37E SEC23 O-LEA CTY., NM		

### Sample ID: MONITOR WELL 1-R (H201922-01)

Chloride, SM4500CI-B	mg/L			d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD ·	Qualifier
Chloride*	7100	4.00	08/17/2012	ND	100	100	100	8.33	

### Sample ID: RECOVERY WELL 2 (H201922-02)

Chloride, SM4500CI-B	mg	/L	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	9900	4.00	08/17/2012	ND	100	100	100	8.33	

#### Cardinal Laboratories

#### \*=Accredited Analyte

PLEASE NOTE: Liability and Demages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or bort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whethere 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 lable for incidential or consequential damoges, including, without finitation, business interruptions, loss of use, or loss of profits incurred by clerk, its subsidiaries, affiliates or successor arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim based in function in third whethers.

Celez Di Keena

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 SM4500CI-B does not require samples be received at or below $6^{\circ}\text{C}$
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Celez Di Kuno

Celey D. Keene, Lab Director/Quality Manager

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603 (505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020 Company Name: BILL TO ANALYSIS REQUEST Rive Project Manager: Hack Conder P.O. #: Address: Company Complete Cations/Anions City: Hobbs State: NM Zip: 88240 Attn: Phone #: Address: Fax #: TPH 8015 M Project #: Project Owner: City: Texas TPH Chlorides Project Name: State: Zip: BTEX TDS Project Location: 30023 Phone #: 1.1.1 Sampler Name: Kyle Norman Fax #: FOR LAB USE ONO PRESERV SAMPLING MATRI GIRAE OR (C)OMP GROUNDWATER AINERS VASTEWATER Lab I.D. ACID/SASE: ICE / COOL Sample I.D. SLUDGE OTHER THER Sol H201922 đ DATE | TIME MUNIR 8-16-12 1660 įľ. RW 2 Č. SHE 12 10:65 ŝ 2 PLCASE NOTE: Ushibiy and Dometres, Cardonal's kability and plant's sych-Analyses, All closes including an orange of comparison service, it in a creat shall Cardball be lable for it a arkives at successors arrange of of a related to t Rolinguishord By: ban of Dia i subskilasies Phone Result: Fax Result: REMARKS: Date; 7572 Received By C) Yes C) Yes Add'l Phone #: Add'l Fax #: k∕iNo k∕iNo ----™<u>3:40</u> E.A.M Ø MD 07 iquistied By: Date email results: zconder@rice-ecs.com Knorman@rice-ecs.com; lpena@riceswd.com Time Kjones@riceswd.com; Bbaker@rice-ecs.com; Delivered By: (Circle One) Sample Condition HEAKED BY hconder@rice-ecs.com; Lweinheimer@rice-ecs.com Cool Intact Sampler - UPS - Bus - Other: + Cardinal cannot accept verbal changes. Please fax viritten changes to 505-393-2476 # 26

ARDINAL LABORATORIES

Page 4 of 4

# **CARDINAL** Laboratories

August 22, 2012

Hack Conder Rice Operating Company 112 W. Taylor Hobbs, NM 88240

RE: BD 0-23-1

Enclosed are the results of analyses for samples received by the laboratory on 08/16/12 15:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.qov/field/qa/lab">www.tceq.texas.qov/field/qa/lab</a> accred certif.html.

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Sincerely,

Celez Di Keine

Celey D. Keene Lab Director/Quality Manager

# **CARDINAL** Laboratories

5500

4.00

### Analytical Results For:

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

Received:	08/16/2012	Sampling Date:	08/16/2012
Reported:	08/22/2012	Sampling Type:	Water
Project Name:	BD 0-23-1	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	T21S R37E SEC23 O-LEA CTY., NM		

### Sample ID: MW 1-R (H201923-01)

Chloride\*

Chloride, SM4500Cl-B	mg	/L	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	4350	4.00	08/17/2012	ND	100	100	100	8.33	
Sample ID: RW-2 (H2019	23-02)								
Chloride, SM4500CI-B	mg	/L	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier

ND

100

100

100

8.33

08/17/2012

Cardinal Laboratories

\*=Accredited Analyte

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Celez Di Keene

Celey D. Keene, Lab Director/Quality Manager

# **CARDINAL** Laboratories

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

### **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 SM4500CI-B does not require samples be received at or below $6^{\circ}C$
	Samples reported on an as received basis (wet) unless otherwise noted on report

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#### \*=Accredited Analyte

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Celez Di Keena

Celey D. Keene, Lab Director/Quality Manager

Page 3 of 4

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilenc, TX 79603

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# Record of Groundwater Withdrawal Site Name: BD H-14 (1R426-101)

# O-23 vent

Date	Fluid Hauled (bbis)	and the second	Lab	Comments	Date	Fluid Hauled (bbls)	1990au - politika u koleka (h. 1997). 1990au - Politika U	Lab	Comments
8/16/2012			7,100	MW-1R	8/16/2012			9,900	RW-2
8/20/2012	40		, S	tarted Pumping	8/20/2012	40		St	tarted Pumping
8/23/2012	50				8/23/2012	50			
8/24/2012	12.5		<b>N</b> .		8/24/2012	- 12.5		•	
8/27/2012	45				8/27/2012	45			
8/30/2012	65				8/30/2012	65			
8/31/2012	15				8/31/2012	15			
Total for August	227.5	bbls	Total kg of Chloride	256.8042281	Total for August	227.5	bbls	Total kg of Chloride	358.079135
	9555	gallons	removed			9555	gallons	removed	•
9/4/2012	65				9/4/2012	65			
9/6/2012	25				9/6/2012	25			
9/7/2012	20				9/7/2012	20			
9/10/2012	30				9/10/2012	30			
9/11/2012	30				9/11/2012	30			
9/17/2012	35				9/17/2012	35			
Total for September	205	bbls	Total kg of Chloride	231.4060078	Total for September	205	bbls	Total kg of Chloride	322.6647151
	8610	gallons	removed	·		8610	gallons	removed	
Total for MW-1R	432.5 18165	bbls	Total kg of Chloride removed from MW-1R	488.2102359	Total for Project RW-2	432.5 18165	bbls	Total kg of Chloride removed from RW-2	680.7438501
Total Removed	865	bbls	Total kg of Chloride	1168.954086					

from O-23 vent

removed from O-23 vent

# Record of Groundwater Withdrawal Site Name: BD H-14 (1R426-101)

# 0-23-1 vent

Date	Fluid Hauled (bbls)		Lab	Comments	Date	Fluid Haulec (bbls)	3	Lab
8/16/2012			4,350	MW-1R	8/16/2012			5,500
8/20/2012	65		S	tarted Pumping	8/20/2012	65		
8/23/2012	65				8/23/2012	65		
8/24/2012	20				8/24/2012	20		
8/27/2012	65		•		8/27/2012	65		
8/30/2012	60				8/30/2012	60		
8/31/2012	30				8/31/2012	30		
Total for August	305	bbis <sup>.</sup>	Total kg of Chloride	210.9363935	Total for August	305	bbls	Total kg of Chloride
	12810	gallons	removed	l		12810	gallons	removed
9/4/2012	65			1	9/4/2012	65		
9/6/2012	40				9/6/2012	40		
9/7/2012	40				9/7/2012	40		
9/10/2012	60				9/10/2012	60		`
9/11/2012	35	:			9/11/2012	35		
9/17/2012	55				9/17/2012	55		
Total for September	295	bbis	Total kg of Chloride	204.0204462	Total for September	295	bbls	Total kg of Chloride
	12390	gallons	removed			12390	gallons	removed
Total for Project	600 25200	bbls	Total kg of Chloride removed from MW-1R	414.9568398	Total for Project	600 25200	bbls	Total kg of Chloride removed from RW-2
Total Removed from O-23-1 vent	1200	bbls	Total kg of Chloride removed from O-23-1 vent	939.614913				
Total for BD H-14	2065	5 bbls	Total kg of Chloride removed	2108.569				

# Record of Groundwater Withdrawal Site Name: BD H-14 (1R426-101)

### Comments

# RW-2

# Started Pumping

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# 266.7011872

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# 257.956886

# 524.6580733

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