1R - 425-38

REPORTS

DATE:

3-28-13

Texerra LLC

20055 Laredo Lane Monument, CO 80132
Tel: 719-339-6791 E-mail: lpg@texerra.com

March 28th, 2013

Mr. Edward Hansen
New Mexico Oil Conservation Division, Environmental Bureau
1220 S. St. Francis Drive
Santa Fe, New Mexico 87504

RE: **Annual Report and Remediation Termination Request**
Rice Operating Company, Vacuum M-5 Junction Box, Unit M Sec 5 T18S R35E
NMOCD Case Number - 1R425-38

Sent via Email and U.S. Certified Mail Return Receipt No. 7007 2560 0001 9727 8896

Mr. Hansen,

This letter summarizes the present status of Rice Operating Company's (ROC's) Vacuum M-5 Junction Box project (location given in Appendix - Figure 1) with respect to remedial actions and groundwater monitoring.

ROC completed the remedial work for the Vacuum Jct M-5 project in December 2010 as described in our Corrective Action Plan (CAP) Report and Remediation Termination Request of March 1st, 2011:

1) Removed the upper (approximately) four feet of chloride impacted soils (Appendix – Figure 2) across the area affected by past operations of the M-5 junction box (approximately 80x40 ft) and disposed of these in an NMOCD approved facility.
2) Installed and properly seated a 20-mil plastic infiltration barrier at this depth encompassing the area impacted by the former junction box and backfilled with clean fill dirt with a chloride concentration below 500 mg/kg and a PID (field) reading below 100 ppm.
3) Prepared the surface soils over and surrounding the site and seeded to a native vegetation mix.

A photographic record of this work is given in the Appendix - Figure 3, and PID readings of imported and backfilled (blended) soil are given in the Appendix - Figures 4 & 5.

NMOCD granted soil closure on March 31st, 2011 (APPENDIX Figure 6) and asked ROC to continue monitoring groundwater until chloride concentrations fell below 250 mg/l for eight (8) consecutive quarters. ROC has thus continued sampling the near-source monitor well on a quarterly basis.

A summary of groundwater monitoring data for a near-source monitor well is given in the Appendix - Table 1 and Figure 7. Groundwater chlorides have declined substantially since the installation of the infiltration barrier in December 2011, having remained below the WQCC groundwater standard of 250 mg/l since early 2011for the past two years (eight sampling quarters). The laboratory analytical result for the most recent sampling event is included in Appendix - Figure 8.

The remedial measures taken by ROC have restored the surface to productive, natural use and have affected the protection of groundwater quality. We thus respectfully request that this project be granted remediation termination or similar closure status, to include the plugging and abandonment of the monitor well (MW-1) at this location.

ROC is the service provider (agent) for the Vacuum Salt Water Disposal System and has no ownership of any portion of pipeline, well or facility. The Vacuum SWD System is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis.

We appreciate your consideration of this request.

Sincerely,

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

Copy: Rice Operating Company

Attachments: Appendix

Rice Operating Company
Vacuum Jct M-5
NMOCD Case Number - 1R425-38
2012 Annual Report & Remediation Termination Rewquest

APPENDIX

Figure 1 - Location map.

Figure 2 – NMOCD approved soil infiltration barrier, soil bore and monitor well locations, soil analysis summary.

Figure 3 - Photographic record of work performed in December 2010.

Figure 4 - PID field measurement values for imported soil material.

Figure 5 - PID field measurement values for blended backfill soil material installed above liner.

Figure 6 – NMOCD e-mail letter granting remediation termination status of vadose (soil) zone

Table 1 - Summary of laboratory analyses of groundwater data from near-source, down-gradient monitor well (MW-1).

Figure 7 - Groundwater chloride concentrations from a down-gradient monitor well (MW-1).

Figure 8 - Laboratory analysis report – February, 2013

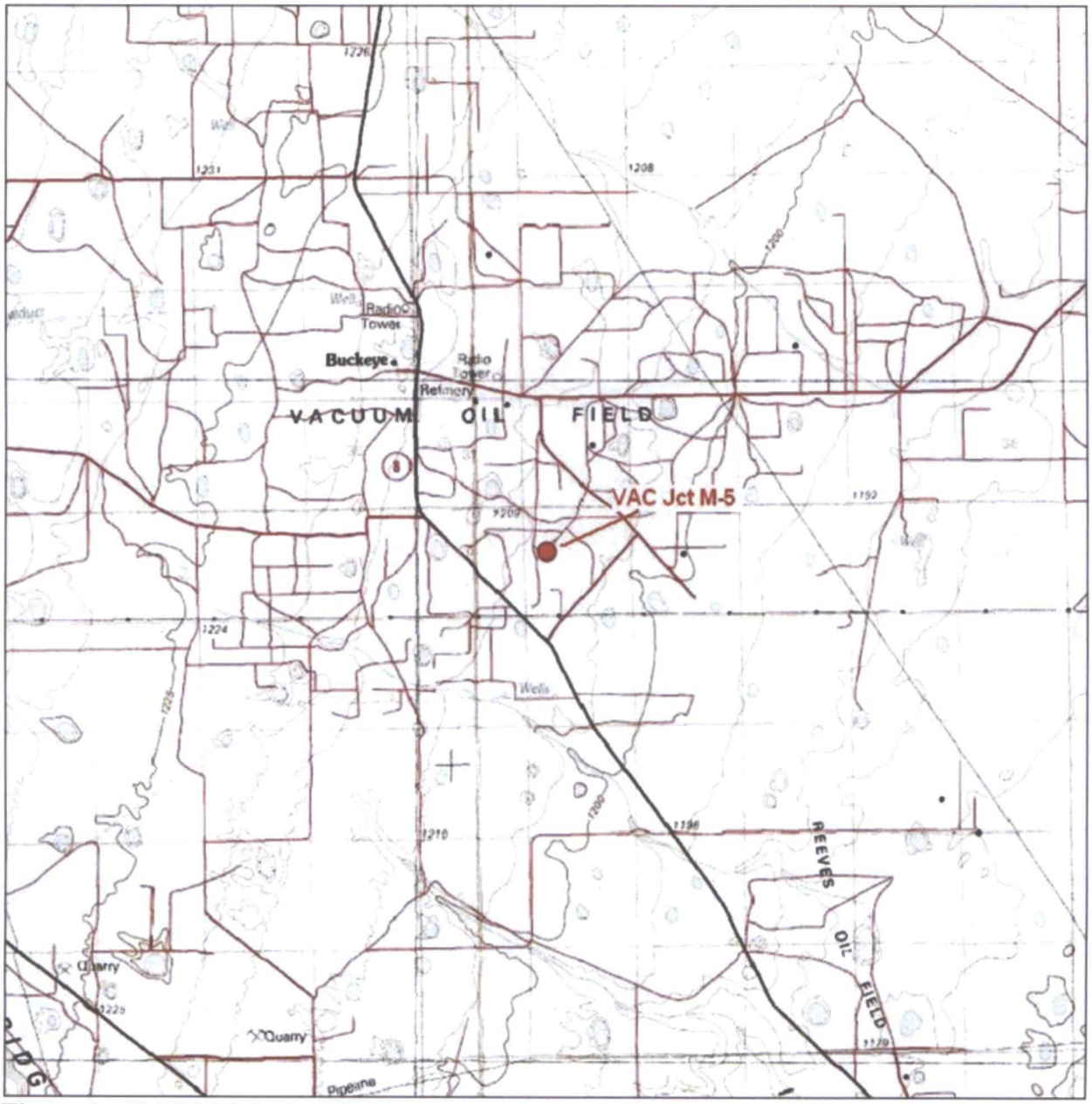


Figure 1 – VAC M-5 Jct location.

APPENDIX

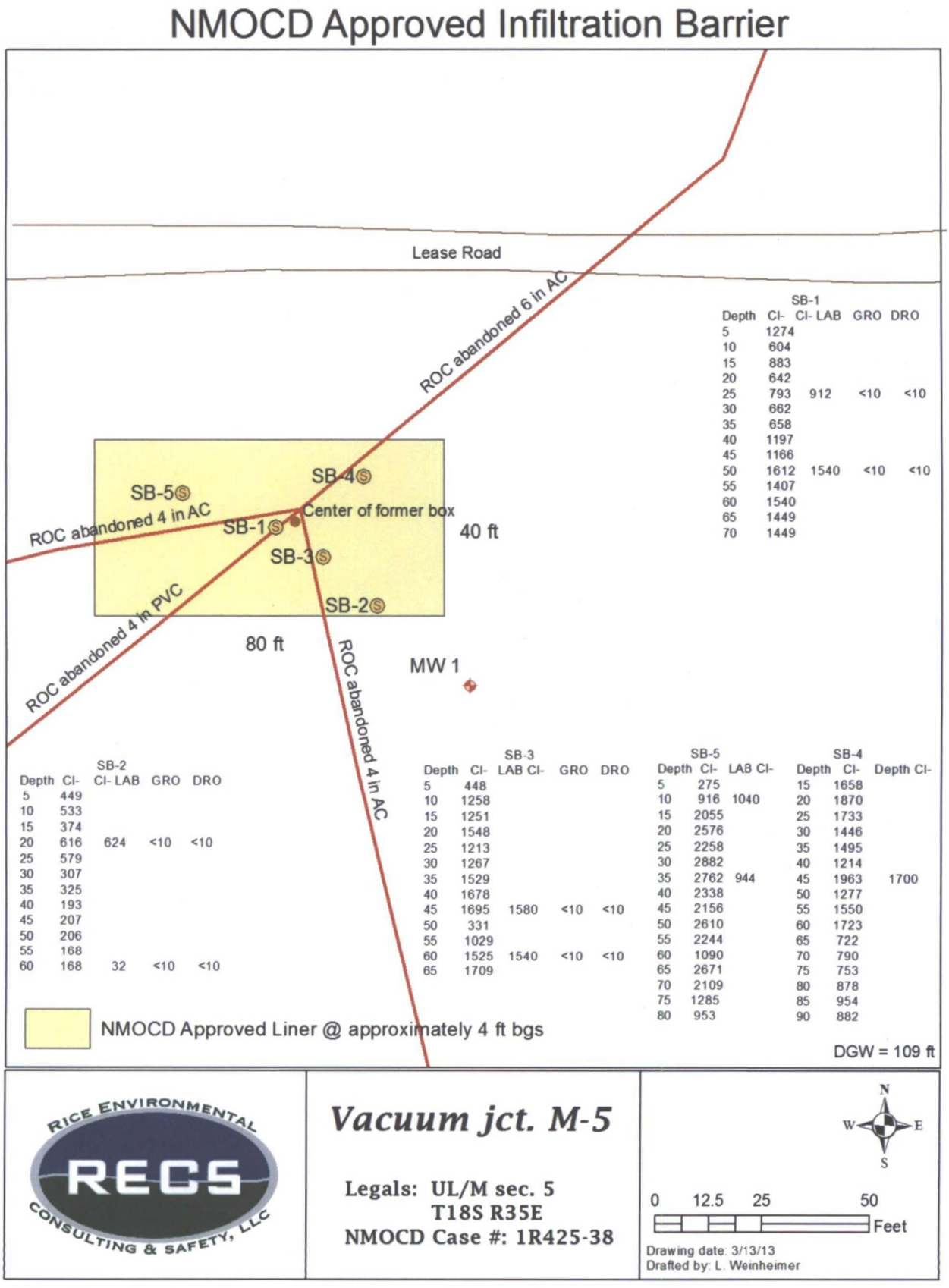


Figure 2 – NMOCD approved soil infiltration barrier plan view, soil bore and monitor well locations, soil analysis summary.

APPENDIX

Vacuum Jct. M-5 (1R425-38)
Unit M, Section 5, T18S, R35E

excavating the south side of the site, facing west 12/8/2010

screening the excavated material, facing east 12/8/2010

hauling in blow sand 12/16/2010

hauling off contaminated soil 12/16/2010

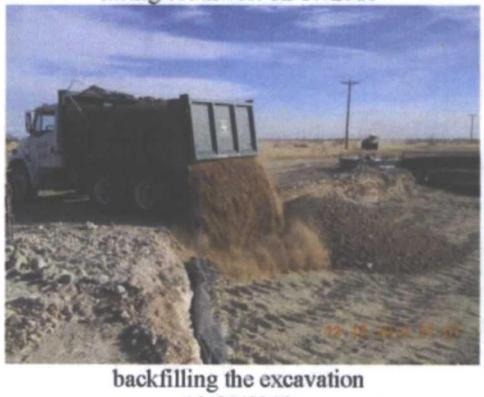
final 80x40x4.5-ft deep excavation, facing southwest 12/10/2010

excavation padded with 6 inches of imported soil, facing southwest 12/17/2010

Figure 3 – Photographic record of work performed in December 2010.

80x40-ft liner being installed,
facing southwest 12/17/2010

liner padded with 6 inches of imported soil,
facing southwest 12/17/2010



backfilling the excavation
12/20/2010

disking the backfilled excavation
2/15/2011

seeding the backfilled excavation
2/15/2011

site complete
2/15/2011

Figure 3 (continued) – Photographic record of work performed in December 2010 and February 2011.

RICE OPERATING COMPANY

122 West Tayor Hobbs, NM 88240
PHONE: (575) 393-9174 FAX: (575) 397-1471
PID METER CALIBRATION & FIELD REPORT FORM

Check Model Number:

	Model: PGM 7300	Serial No: 590-000183		Model: PGM 7600	Serial No: 110-023920
✓	Model: PGM 7300	Serial No: 590-000508		Model: PGM 7600	Serial No: 110-013744
	Model: PGM 7300	Serial No: 590-000504		Model: PGM 7600	Serial No: 110-013676

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO: 930737	EXPIRATION DATE: 6/16/13
METER READING ACCURACY: 100.0	

ACCURACY : +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
VAC	M-5	M	5	18S	35E

SAMPLE ID	PID	SAMPLE ID	PID
IMPORTED SOIL #1	0.1		
#2	0.0		

I verify that I have calibrated the above instrument in accordance to the manufacture operation manual.

SIGNATUE: [signature] DATE: 12/15/10

Figure 4 – PID field measurement values for imported soil material.

RICE OPERATING COMPANY

122 West Tayor Hobbs, NM 88240
PHONE: (575) 393-9174 FAX: (575) 397-1471
PID METER CALIBRATION & FIELD REPORT FORM

Check Model Number:

	Model: PGM 7300	Serial No: 590-000183		Model: PGM 7600	Serial No: 110-023920
✓	Model: PGM 7300	Serial No: 590-000508		Model: PGM 7600	Serial No: 110-013744
	Model: PGM 7300	Serial No: 590-000504		Model: PGM 7600	Serial No: 110-013676

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO : 930737	EXPIRATION DATE: 6/16/13
METER READING ACCURACY: 100.0	

ACCURACY : +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
VAC	M-5	M	5	18S	35E

SAMPLE ID	PID	SAMPLE ID	PID
BLENDED BACKFILL	4.3		

I verify that I have calibrated the above instrument in accordance to the manufacture operation manual.

SIGNATUE: [signature] DATE: 12/20/10

Figure 5 – PID field measurement values for blended backfill soil material installed above liner.

Soil Closure Approval (1R425-38) - ROC Vacuum Jct M-5 Site
From: Hansen, Edward J., EMNRD
Sent: Thu, Mar 31, 2011 at 2:19 pm
To: Hack Conder
Cc: Leking, Geoffrey R, EMNRD, Katie Jones, lpg@texerra.com

RE: "Corrective Action Plan Report and Remediation Termination Request"
for the Rice Operating Company's
Vacuum Jct M-5 Site (1R425-38)
Unit Letter M, Section 5, T18S, R35E, NMPM, Lea County, New Mexico
Soil Closure Approval

Dear Mr. Conder:

The New Mexico Oil Conservation Division (OCD) has received the Rice Operating Company's (ROC) report and request for closure of the above-referenced site (dated March 1, 2011). The above-referenced report, submitted in fulfillment of 19.15.29 NMAC (Part 29, formally, Rule 116), indicates that Rice Operating Company (ROC) has partially met the requirements of 19.15.29 NMAC for this site. Therefore, the OCD hereby conditionally approves the soil closure for the Vacuum Jct M-5 Site and no further soil remediation is required for this site.

The Vacuum Jct M-5 Site is still active under Remediation Plan, 1R425-38, and groundwater monitoring must continue at the Vacuum Jct M-5 Site.

Please be advised that OCD partial approval of this request does not relieve the owner/operator of responsibility should operations pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the owner/operator of responsibility for compliance with any OCD, federal, state, or local laws and/or regulations.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact at 505-476-3489.

Edward J. Hansen
Hydrologist
Environmental Bureau

Figure 6 – NMOCD letter granting remediation termination status to vadose (soil) zone.

Table 1 – Summary of laboratory analyses of groundwater data from near-source, down-gradient monitor well (MW-1).

Sample Date	Cl	WQCC standard	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate
3/3/09	352	250	972	<0.001	<0.001	<0.001	<0.003	47
4/29/09	368	250	851	<0.001	<0.001	<0.001	<0.003	44
8/7/09	416	250	1,090	<0.001	<0.001	<0.001	<0.003	47
10/22/09	380	250	1,030	<0.001	<0.001	<0.001	<0.003	45
2/11/10	332	250	929	<0.001	<0.001	<0.001	<0.003	54
4/26/10	344	250	1,020	<0.001	<0.001	<0.001	<0.003	56
8/5/10	336	250	945	<0.001	<0.001	<0.001	<0.003	51
10/28/10	340	250	897	<0.001	<0.001	<0.001	<0.003	50
2/21/11	288	250	781	<0.001	<0.001	<0.001	<0.003	51
6/6/11	152	250	553	<0.001	<0.001	<0.001	<0.003	47
9/2/11	108	250	347	<0.001	<0.001	<0.001	<0.003	45
12/3/11	204	250	572	<0.001	<0.001	<0.001	<0.003	44
2/24/12	228	250	517	<0.001	<0.001	<0.001	<0.003	39
6/1/12	196	250	796	<0.001	<0.001	<0.001	<0.003	48
8/29/12	160	250	622	<0.001	<0.001	<0.001	<0.003	46
11/16/12	220	250	655	<0.001	<0.001	<0.001	<0.003	77
2/14/13	188	250	579	<0.001	<0.001	<0.001	<0.003	50

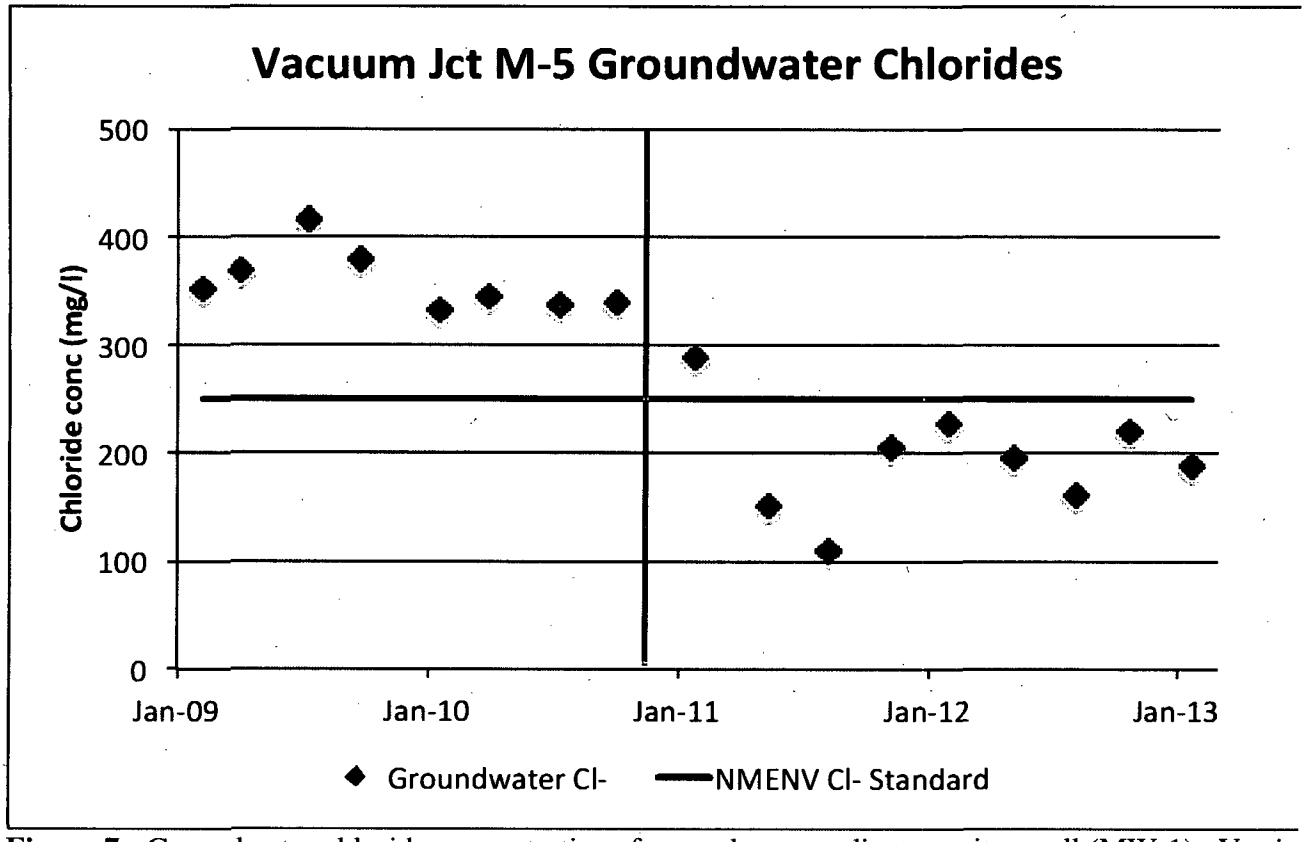


Figure 7 - Groundwater chloride concentrations from a down-gradient monitor well (MW-1). Vertical line indicates the installation of infiltration barrier in December, 2010. **Groundwater chlorides have been below 250 mg/l for the last eight (8) quarterly samples.**

CARDINAL Laboratories

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

February 22, 2013

Hack Conder

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM JUNCTION M-5

Enclosed are the results of analyses for samples received by the laboratory on 02/15/13 11:01.

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 www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	02/15/2013	Sampling Date:	02/14/2013
Reported:	02/22/2013	Sampling Type:	Water
Project Name:	VACUUM JUNCTION M-5	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	T18S-R35E-SEC5 M-LEA CTY., NM		

Sample ID: MONITOR WELL #1 (H300435-01)

BTEX 8021B mg/kg Analyzed By: AP

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	02/20/2013	ND	0.047	93.0	0.0500	4.23	
Toluene*	<0.001	0.001	02/20/2013	ND	0.047	93.7	0.0500	4.16	
Ethylbenzene*	<0.001	0.001	02/20/2013	ND	0.044	88.7	0.0500	3.98	
Total Xylenes*	<0.003	0.003	02/20/2013	ND	0.139	92.5	0.150	3.87	
Total BTEX	<0.006	0.006	02/20/2013	ND					

Surrogate: 4-Bromofluorobenzene (PIL *107 %* *89.4-126*

Chloride, SM4500Cl-B mg/L Analyzed By: DW

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**188**	4.00	02/18/2013	ND	432	108	400	0.00	

Sulfate 375.4 mg/L Analyzed By: AP

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**49.8**	10.0	02/15/2013	ND	21.3	106	20.0	1.21	

TDS 160.1 mg/L Analyzed By: AP

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**579**	5.00	02/20/2013	ND	223	92.9	240	1.36	

Cardinal Laboratories

*=Accredited Analyte

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 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

Celey D. Keene, Lab Director/Quality Manager

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

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # _____

Company Name: RICE Operating Company	BILL TO Company: RICE Operating Company — PO#
Project Manager: Hack Conder	Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240
Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240	Phone#: (575) 393-9174 — Fax#: (575)397-1471
Phone #: (575) 393-9174	Fax #: (575) 397-1471
Project #:	Project Name: Vacuum Junction M-5
Project Location: T18S-R35E-Sec5 M ~ Lea County New Mexico	Sampler Signature: Rozanne Johnson (575)631-9310 rozanne@valornet.com

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY) 130043	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (2 40ml VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1-1Liter HDPE)	NONE	SAMPLING: DATE (2013)	TIME	MTBE 8021B/602	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	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Sulfates	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours
1	Monitor Well #1	G	3	X				2				1		2-14	14:20		X																X	X	X	

Relinquished by: Rozanne Johnson	Date: 2-15-2013	Time: 11:00	Received by:
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff) Jodi Henson
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition: Cool: Yes / No; Intact: Yes / No	CHECKED BY: (Initials)	Date: 2-15-2013 Time: 11:01

Phone Results		Yes		No
Fax Results		Yes		No Additional Fax Number:

REMARKS:

Email Results to: hconder@riceswd.com
lweinheimer@rice-eos.com
klones@riceswd.com
rozanne@valornet.com

#26

Hansen, Edward J., EMNRD

From: Hack Conder <hconder@riceswd.com>
Sent: Tuesday, April 23, 2013 4:19 PM
To: Hansen, Edward J., EMNRD
Attachments: Vacuum jct. M-5 LAB 11.16.12.pdf; Vacuum jct. M-5 LAB 2.24.12.pdf; Vacuum jct. M-5 LAB 6.1.12.pdf; Vacuum jct. M-5 LAB 8.29.12.pdf

Mr. Hansen

Attached is the MW analytical data for 2012 .

Thanks
Hack

CARDINAL Laboratories

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

November 30, 2012

Hack Conder

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM JUNCTION M-5

Enclosed are the results of analyses for samples received by the laboratory on 11/19/12 14:12.

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 www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	11/19/2012	Sampling Date:	11/16/2012
Reported:	11/30/2012	Sampling Type:	Water
Project Name:	VACUUM JUNCTION M-5	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	T18S-R35E-SEC5 M-LEA CTY., NM		

Sample ID: MONITOR WELL #1 (H202815-01)

BTEX 8021B mg/L **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	11/20/2012	ND	0.048	95.7	0.0500	1.37	
Toluene*	<0.001	0.001	11/20/2012	ND	0.052	103	0.0500	0.765	
Ethylbenzene*	<0.001	0.001	11/20/2012	ND	0.051	101	0.0500	0.899	
Total Xylenes*	<0.003	0.003	11/20/2012	ND	0.153	102	0.150	1.12	
Total BTEX	<0.006	0.006	11/20/2012	ND					

Surrogate: 4-Bromofluorobenzene (PID *120 %* *89.5-126*

Chloride, SM4500Cl-B mg/L **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**220**	4.00	11/26/2012	ND	104	104	100	0.00	

Sulfate 375.4 mg/L **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**76.9**	10.0	11/27/2012	ND	16.9	84.6	20.0	13.8	

TDS 160.1 mg/L **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**655**	5.00	11/21/2012	ND	239	99.6	240	6.21	

Cardinal Laboratories

*=Accredited Analyte

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 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

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

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

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #: _____

Company Name: RICE Operating Company	BILL TO Company: RICE Operating Company PO#:
Project Manager: Hack Conder	Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240
Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240	Phone#: (575) 393-9174 Fax#: (575)397-1471
Phone #: (575) 393-9174	Fax #: (575) 397-1471
Project #:	Project Name: Vacuum Junction M-5
Project Location: T18S-R35E-Sec5 M ~ Lea County New Mexico	Sampler Signature: Rozanne Johnson (575)631-9310 rozanne@valornet.com

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (2 40ml VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1-1 Liter HDPE)	NONE	SAMPLING: DATE (2012)	TIME	MTBE 8021B/602	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	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Sulfates	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours
H202615	Monitor Well #1	G	3	X				2				1		11-16	8:50		X																X	X	X	

Relinquished by: Rozanne Johnson	Date: 11-19-2012	Time: 13:40	Received by: [signature]
Relinquished by: [signature]	Date: 11/19/12	Time: 14:12	Received By: (Laboratory Staff) [signature]
Delivered By: (Circle One) [signature] Sampler - UPS - Bus - Other:	Sample Condition: Cool: Yes / No; Intact: Yes / No	CHECKED BY: (Initials) [signature]	

Phone Results		Yes		No
Fax Results		Yes		No Additional Fax Number:

REMARKS:

Email Results to: hconder@riceswd.com
lweinheimer@riceswd.com
klones@riceswd.com
rozanne@valornet.com

CARDINAL Laboratories

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

September 11, 2012

Hack Conder

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM JUNCTION M-5

Enclosed are the results of analyses for samples received by the laboratory on 08/30/12 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 www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	08/30/2012	Sampling Date:	08/29/2012
Reported:	09/11/2012	Sampling Type:	Water
Project Name:	VACUUM JUNCTION M-5	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	T18S-R35E-SEC5 M-LEA CTY., NM		

Sample ID: MONITOR WELL #1 (H202098-01)

BTEX 8260B mg/L Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	08/31/2012	ND	0.019	93.6	0.0200	1.24	
Toluene*	<0.001	0.001	08/31/2012	ND	0.020	101	0.0200	1.77	
Ethylbenzene*	<0.001	0.001	08/31/2012	ND	0.021	105	0.0200	3.23	
Total Xylenes*	<0.003	0.003	08/31/2012	ND	0.059	98.0	0.0600	2.80	

Surrogate: Dibromofluoromethane	*89.5 %*	*59.8-161*
Surrogate: Toluene-d8	*103 %*	*75.2-115*
Surrogate: 4-Bromofluorobenzene	*110 %*	*53.7-120*

Chloride, SM4500Cl-B mg/L Analyzed By: AP

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**160**	4.00	09/07/2012	ND	100	100	100	3.92	

Sulfate 375.4 mg/L Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**45.6**	10.0	09/10/2012	ND	19.2	96.0	20.0	3.58	

TDS 160.1 mg/L Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**622**	5.00	08/31/2012	ND	231	96.2	240	0.322	

Cardinal Laboratories

*=Accredited Analyte

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 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

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

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

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # _____

Company Name: RICE Operating Company	BILL TO Company: RICE Operating Company — P.O.#
Project Manager: Hack Conder	Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240
Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240	Phone#: (575) 393-9174 — Fax#: (575)397-1471
Phone #: (575) 393-9174	Fax #: (575) 397-1471
Project #:	Project Name: Vacuum Junction M-5
Project Location: T18S-R35E-Sec5 M ~ Lea County New Mexico	Sampler Signature: Rozanne Johnson (575)631-9310 rozanne@valornet.com

LAB # (LAB USE ONLY) H202098	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (2-40ml VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1-Liter HDPE)	NONE	SAMPLING: DATE (2012)	TIME
1	Monitor Well #1	G	3	X				2				1		8-29	9:15

MTBE 8021B/602	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	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Sulfates	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours
	X																	X	X	X	

ANALYSIS REQUEST
(Circle or Specify Method No.)

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Rozanne Johnson	8/30/2012	15:38			
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff)	Date:	Time:
			Jodi Henson	8/30/12	3:40

Phone Results	Yes	No	
Fax Results	Yes	No	Additional Fax Number:

REMARKS:

Email Results to: hconder@riceswd.com
lweinheimer@riceswd.com
kjones@riceswd.com
rozanne@valornet.com

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

Sample Condition: Cool: Yes [✓] No [ ] — Intact: Yes [✓] No [ ]

CHECKED BY: (Initials) GH

#26

CARDINAL Laboratories

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

June 12, 2012

Hack Conder

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM JUNCTION M-5

Enclosed are the results of analyses for samples received by the laboratory on 06/06/12 12:06.

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 www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	06/06/2012	Sampling Date:	06/01/2012
Reported:	06/12/2012	Sampling Type:	Water
Project Name:	VACUUM JUNCTION M-5	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	T18S-R35E-SEC5 M-LEA CTY., NM		

Sample ID: MONITOR WELL #1 (H201263-01)

BTEX 8021B mg/L Analyzed By: ZZZ

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	06/11/2012	ND	0.057	114	0.0500	2.22	
Toluene*	<0.001	0.001	06/11/2012	ND	0.050	100	0.0500	2.48	
Ethylbenzene*	<0.001	0.001	06/11/2012	ND	0.048	95.5	0.0500	1.89	
Total Xylenes*	<0.003	0.003	06/11/2012	ND	0.142	94.5	0.150	1.96	

Surrogate: 4-Bromofluorobenzene (PIL *104 %* *89.5-126*

Chloride, SM4500Cl-B mg/L Analyzed By: AP

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**196**	4.00	06/07/2012	ND	104	104	100	0.00	

Sulfate 375.4 mg/L Analyzed By: AP

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**47.9**	10.0	06/06/2012	ND	22.0	110	20.0	1.28	

TDS 160.1 mg/L Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**796**	5.00	06/06/2012	ND	221	92.1	240	0.892	

Cardinal Laboratories

*=Accredited Analyte

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 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

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

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

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # _____

Company Name: RICE Operating Company	BILL TO Company: RICE Operating Company PO#
Project Manager: Hack Conder	Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240
Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240	Phone#: (575) 393-9174 Fax#: (575)397-1471
Phone #: (575) 393-9174	Fax #: (575) 397-1471
Project #:	Project Name: Vacuum Junction M-5
Project Location: T18S-R35E-Sec5 M ~ Lea County New Mexico	Sampler Signature: Rozanne Johnson (575)631-9310 rozanne@valornet.com

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (2 40ml VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1-1 Liter HDPE)	NONE	SAMPLING: DATE (2012)	TIME
H201271	Monitor Well #1	G	3	X				2				1		6-1	13:40

MTBE 8021B/602	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	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Sulfates	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours
	X																	X	X	X	

ANALYSIS REQUEST
(Circle or Specify Method No.)

Relinquished by: Rozanne Johnson	Date: 6-6-2012	Time: 12:05	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff) Hope S. Morrow	Date: 6-6-2012	Time: 12:06

Phone Results		Yes		No	
Fax Results		Yes		No	Additional Fax Number:

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

Sample Condition: Cool: Yes / No; Intact: Yes / No

CHECKED BY: (Initials)

REMARKS:

Email Results to: hconder@riceswd.com
~~kweinheimer@rice-ops.com~~
~~rjones@riceswd.com~~
rozanne@valornet.com

CARDINAL Laboratories

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

March 05, 2012

Hack Conder

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM JUNCTION M-5

Enclosed are the results of analyses for samples received by the laboratory on 02/27/12 12:10.

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 www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	02/27/2012	Sampling Date:	02/24/2012
Reported:	03/05/2012	Sampling Type:	Water
Project Name:	VACUUM JUNCTION M-5	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	T18S-R35E-SEC5 M-LEA CTY., NM		

Sample ID: MONITOR WELL #1 (H200504-01)

BTEX 8021B mg/L **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	03/01/2012	ND	0.047	93.5	0.0500	1.74	
Toluene*	<0.001	0.001	03/01/2012	ND	0.049	97.3	0.0500	1.51	
Ethylbenzene*	<0.001	0.001	03/01/2012	ND	0.050	99.2	0.0500	2.45	
Total Xylenes*	<0.003	0.003	03/01/2012	ND	0.153	102	0.150	2.42	

Surrogate: 4-Bromofluorobenzene (PIL *105 %* *70.7-118*

Chloride, SM4500Cl-B mg/L **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**228**	4.00	02/28/2012	ND	100	100	100	3.92	

Sulfate 375.4 mg/L **Analyzed By: CK**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**39.4**	10.0	03/05/2012	ND	17.5	87.4	20.0	22.5	

TDS 160.1 mg/L **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**517**	5.00	02/28/2012	ND	239	99.6	240	2.59	

Cardinal Laboratories

*=Accredited Analyte

Celey D. 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 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

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

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

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # _____

Company Name: RICE Operating Company	BILL TO Company: RICE Operating Company PO#
Project Manager: Hack Conder	Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240
Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240	Phone#: (575) 393-9174 Fax#: (575)397-1471
Phone #: (575) 393-9174	Fax #: (575) 397-1471
Project #:	Project Name: Vacuum Junction M-5
Project Location: T18S-R35E-Sec5 M ~ Lea County New Mexico	Sampler Signature: Rozanne Johnson (575)631-9310 rozanne@valornet.com

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (2 40ml VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1-1Liter HDPE)	NONE	SAMPLING: DATE (2012)	TIME	MTBE 8021B/602	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	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Sulfates	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours
H200504-01	Monitor Well #1	G	3	X				2				1		2-24	15:35		X																X	X	X	

ANALYSIS REQUEST
(Circle or Specify Method No.)

Relinquished by: Rozanne Johnson	Date: 2/27/12	Time: 12:09	Received by:	Date:	Time:	Phone Results: Yes / No
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff)	Date: 02/27/12	Time: 12:10	Fax Results: Yes / No Additional Fax Number:

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

Sample Condition: Cool: Yes ☑ / No ☐ Intact: Yes ☑ / No ☐

CHECKED BY: (Initials) CDK

REMARKS:

Email Results to: hconder@riceswd.com, lweinheimer@rice-ecs.com, kjones@riceswd.com, rozanne@valornet.com

#26

CARDINAL Laboratories

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

December 09, 2011

Hack Conder

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM JUNCTION M-5

Enclosed are the results of analyses for samples received by the laboratory on 12/06/11 16:00.

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 Hydorcarbons

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

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 (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

Celey D. Keene

Lab Director/Quality Manager

Hansen, Edward J., EMNRD

From: Hack Conder <hconder@riceswd.com>
Sent: Tuesday, April 23, 2013 4:44 PM
To: Hansen, Edward J., EMNRD
Subject: lab
Attachments: Vacuum jct. M-5 LAB 9.2.11.pdf; Vacuum jct. M-5 LAB 12.3.11.pdf; Vacuum jct. M-5 LAB 6.6.11.pdf; Vacuum jct. M-5 LAB 2.21.11.pdf

Mr. Hansen,

Attached is the 2011 Lab Data for M-5.

Thanks Hack

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	12/06/2011	Sampling Date:	12/03/2011
Reported:	12/09/2011	Sampling Type:	Water
Project Name:	VACUUM JUNCTION M-5	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	T18S-R35E-SEC5 M-LEA CTY., NM		

Sample ID: MONITOR WELL #1 (H102606-01)

BTEX 8021B mg/L Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	12/07/2011	ND	0.048	95.6	0.0500	0.725	
Toluene*	<0.001	0.001	12/07/2011	ND	0.046	91.7	0.0500	0.131	
Ethylbenzene*	<0.001	0.001	12/07/2011	ND	0.053	106	0.0500	0.246	
Total Xylenes*	<0.003	0.003	12/07/2011	ND	0.153	102	0.150	0.368	

Surrogate: 4-Bromofluorobenzene (PIL *108 %* *70.7-118*

Chloride, SM4500Cl-B mg/L Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**204**	4.00	12/07/2011	ND	104	104	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*	**43.7**	10.0	12/07/2011	ND	18.8	94.0	20.0	2.70	

TDS 160.1 mg/L Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**572**	5.00	12/09/2011	ND	241	100	240	1.43	

Cardinal Laboratories

*=Accredited Analyte

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 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

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

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

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #: _____

Company Name: RICE Operating Company	BILL TO Company: RICE Operating Company — PO#:
Project Manager: Hack Conder	Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240
Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240	Phone#: (575) 393-9174 — Fax#: (575)397-1471
Phone #: (575) 393-9174	Fax #: (575) 397-1471
Project #: — Project Name: Vacuum Junction M-5	
Project Location: T18S-R35E-Sec5 M ~ Lea County New Mexico	Sampler Signature: Rozanne Johnson (575)631-9310 rozanne@valornet.com

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY) 110266	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (2 40ml VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1-1 Liter HDPE)	NONE	SAMPLING: DATE (2011)	TIME	MTBE 8021B/602	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	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Sulfates	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours
1	Monitor Well #1	G	3	X				2				1		12-3	14:00		X																	X	X	X	

Relinquished by: Rozanne Johnson	Date: 12-6-2011	Time: 15:45	Received by: Jamie Johnson
Relinquished by: Jamie Johnson 12-6-2011 16:00	Date:	Time:	Received By: (Laboratory Staff) Kelli Henderson 12/6/11 16:00

Date: — Time: —

Phone Results: [ ] Yes [ ] No
Fax Results: [ ] Yes [ ] No — Additional Fax Number:

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

Sample Condition: Cool: Yes [✓] No [ ] — Intact: Yes [✓] No [ ]

CHECKED BY: (Initials) JH

REMARKS:

Email Results to: hconder@riceswd.com
lweinheimer@rice-ecs.com
kjones@riceswd.com
rozanne@valornet.com

#26

CARDINAL Laboratories

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

September 09, 2011

Hack Conder

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM JUNCTION M-5

Enclosed are the results of analyses for samples received by the laboratory on 09/06/11 9:50.

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 Hydorcarbons

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

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 (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

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	09/06/2011	Sampling Date:	09/02/2011
Reported:	09/09/2011	Sampling Type:	Water
Project Name:	VACUUM JUNCTION M-5	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	T18S-R35E-SEC5 M-LEA CTY., NM		

Sample ID: MONITOR WELL #1 (H101888-01)

BTEX 8260B mg/L Analyzed By: CMS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	09/07/2011	ND	0.020	98.8	0.0200	2.46	
Toluene*	<0.001	0.001	09/07/2011	ND	0.020	99.4	0.0200	1.47	
Ethylbenzene*	<0.001	0.001	09/07/2011	ND	0.021	105	0.0200	2.31	
Total Xylenes*	<0.003	0.003	09/07/2011	ND	0.055	92.2	0.0600	1.68	

Surrogate: Dibromofluoromethane	*126 %*	*59.8-161*
Surrogate: Toluene-d8	*95.2 %*	*75.2-115*
Surrogate: 4-Bromofluorobenzene	*78.3 %*	*53.7-120*

Chloride, SM4500Cl-B mg/L Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**108**	4.00	09/08/2011	ND	104	104	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	**44.5**	10.0	09/08/2011	ND	19.7	98.5	20.0	6.86	

TDS 160.1 mg/L Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS	**347**	5.00	09/07/2011	ND	223	92.9	240	12.1	

Cardinal Laboratories

*=Accredited Analyte

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 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

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

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

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # _____

Company Name: RICE Operating Company	BILL TO Company: RICE Operating Company PO#
Project Manager: Hack Conder	Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240
Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240	Phone#: (575) 393-9174 Fax#: (575)397-1471
Phone #: (575) 393-9174	Fax #: (575) 397-1471
Project #:	Project Name: Vacuum Junction M-5
Project Location: T18S-R35E-Sec5 M ~ Lea County New Mexico	Sampler Signature: Rozanne Johnson (575)631-9310 rozanne@valornet.com

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY) H10986	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (2 40ml VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1-1Liter HDPE)	NONE	SAMPLING: DATE (2011)	TIME	MTBE 8021B/602	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	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Sulfates	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours
A-C 1	Monitor Well #1	G	3	X				2				1		9-2	13:50		X																X	X	X	

Relinquished by: Rozanne Johnson	Date: 9-2-11	Time: 7:11	Received by: [signature] Date: 9-2-11 Time: 7:11
Relinquished by: Courtney Stevens	Date:	Time:	Received By (Laboratory Staff): Jodi Henson Date: 9/6/11 Time: 9:50
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition: Cool: Yes / No; Intact: Yes / No		CHECKED BY: (Initials)

Phone Results: Yes / No
Fax Results: Yes / No Additional Fax Number:

REMARKS:

Email Results to: hconder@riceswd.com
lweinheimer@rice-ecs.com
kjones@riceswd.com
rozanne@valornet.com

#26

CARDINAL Laboratories

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

June 13, 2011

Hack Conder

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM JUNCTION M-5

Enclosed are the results of analyses for samples received by the laboratory on 06/09/11 12:36.

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 Hydorcarbons

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

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 (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

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	06/09/2011	Sampling Date:	06/06/2011
Reported:	06/13/2011	Sampling Type:	Water
Project Name:	VACUUM JUNCTION M-5	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	T18S-R35E-SEC5 M-LEA CTY., NM		

Sample ID: MONITOR WELL #1 (H101198-01)

BTEX 8260B mg/L **Analyzed By: CMS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	06/10/2011	ND	0.021	107	0.0200	2.07	
Toluene*	<0.001	0.001	06/10/2011	ND	0.023	115	0.0200	2.03	
Ethylbenzene*	<0.001	0.001	06/10/2011	ND	0.023	113	0.0200	1.97	
Total Xylenes*	<0.003	0.003	06/10/2011	ND	0.071	118	0.0600	2.10	

Surrogate: Dibromofluoromethane	*133 %*	*80-120*
Surrogate: Toluene-d8	*102 %*	*80-120*
Surrogate: 4-Bromofluorobenzene	*84.2 %*	*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	**152**	4.00	06/10/2011	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	**46.5**	10.0	06/10/2011	ND	42.4	2.65	1600	1.68	

TDS 160.1 mg/L **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS	**553**	5.00	06/10/2011	ND	213	88.8	240	3.02	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

A-01	1 Surrogate failed QC limits, high, but there are no hits above PQL in the sample so reanalysis is not required.
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

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

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

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # _____

Company Name: RICE Operating Company	BILL TO Company: RICE Operating Company PO#
Project Manager: Hack Conder	Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240
Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240	Phone#: (575) 393-9174 Fax#: (575)397-1471
Phone #: (575) 393-9174	Fax #: (575) 397-1471
Project #:	Project Name: Vacuum Junction M-5
Project Location: T18S-R35E-Sec5 M ~ Lea County New Mexico	Sampler Signature: Rozanne Johnson (575)631-9310 rozanne@valornet.com

LAB # (LAB USE ONLY) H10198-	FIELD CODE	(G)rab or (C)omp.	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (2 40ml VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1-1Liter HDPE)	NONE	SAMPLING: DATE (2011)	TIME
01	Monitor Well #1	G	3	X				2				1		6-6	13:10

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B/602	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	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Sulfates	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours
	X																	X	X	X	

Relinquished by: Rozanne Johnson	Date: 6-9-2011	Time: 12:35	Received by:	Date: 6-9-2011	Time: 12:36
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff)	Date:	Time:

Phone Results	Yes	No	
Fax Results	Yes	No	Additional Fax Number:

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

Sample Condition: Cool: Yes ✓ / No; Intact: Yes ✓ / No

CHECKED BY: (Initials) CDL

REMARKS:

Email Results to: hconder@riceswd.com
weinheimer@riceswd.com
rjones@riceswd.com
rozanne@valornet.com

#26

CARDINAL Laboratories

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

September 11, 2012

Hack Conder

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM JUNCTION M-5

Enclosed are the results of analyses for samples received by the laboratory on 08/30/12 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 www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	08/30/2012	Sampling Date:	08/29/2012
Reported:	09/11/2012	Sampling Type:	Water
Project Name:	VACUUM JUNCTION M-5	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	T18S-R35E-SEC5 M-LEA CTY., NM		

Sample ID: MONITOR WELL #1 (H202098-01)

BTEX 8260B mg/L Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	08/31/2012	ND	0.019	93.6	0.0200	1.24	
Toluene*	<0.001	0.001	08/31/2012	ND	0.020	101	0.0200	1.77	
Ethylbenzene*	<0.001	0.001	08/31/2012	ND	0.021	105	0.0200	3.23	
Total Xylenes*	<0.003	0.003	08/31/2012	ND	0.059	98.0	0.0600	2.80	

Surrogate: Dibromofluoromethane	*89.5 %*	*59.8-161*
Surrogate: Toluene-d8	*103 %*	*75.2-115*
Surrogate: 4-Bromofluorobenzene	*110 %*	*53.7-120*

Chloride, SM4500Cl-B mg/L Analyzed By: AP

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**160**	4.00	09/07/2012	ND	100	100	100	3.92	

Sulfate 375.4 mg/L Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**45.6**	10.0	09/10/2012	ND	19.2	96.0	20.0	3.58	

TDS 160.1 mg/L Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**622**	5.00	08/31/2012	ND	231	96.2	240	0.322	

Cardinal Laboratories

*=Accredited Analyte

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 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

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

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

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # _____

Company Name: RICE Operating Company	BILL TO Company: RICE Operating Company PO#
Project Manager: Hack Conder	Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240
Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240	Phone#: (575) 393-9174 Fax#: (575)397-1471
Phone #: (575) 393-9174	Fax #: (575) 397-1471
Project #:	Project Name: Vacuum Junction M-5
Project Location: T18S-R35E-Sec5 M ~ Lea County New Mexico	Sampler Signature: Rozanne Johnson (575)631-9310 rozanne@valornet.com

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (2 40ml VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1-1 Liter HDPE)	NONE	SAMPLING: DATE (2012)	TIME	MTBE 8021B/602	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	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Sulfates	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours
H2D2098																																				
1	Monitor Well #1	G	3	X				2				1		8-29	9:15		X																	X	X	X	

Relinquished by: Rozanne Johnson	Date: 8/30/2012	Time: 15:38	Received by:
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff) Jodi Henson 8/30/12 3:40

Phone Results: Yes No
Fax Results: Yes No Additional Fax Number:

REMARKS:

Email Results to: hconder@riceswd.com
lweinheimer@rice-ecs.com
klopez@riceswd.com
rozanne@valornet.com

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

Sample Condition: Cool: Yes / Intact: Yes
CHECKED BY: (Initials)

#26