

APPROVED

RICE *Operating Company*

112 West Taylor • Hobbs, New Mexico 88240

Phone: (575) 393-9174 • Fax: (575) 397-1471

Review of 2020 Annual
Groundwater Report: **Content**
satisfactory

Termination request is hereby
approved.

April 1, 2021

Bradford Billings

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

RE: 2020 Annual Groundwater Report
Rice Operating Company – Vacuum SWD System
Vacuum Jct. A-36 (1R425-83): UL/A, Sec. 36, T17S, R34E

Mr. Billings:

ROC is the service provider (agent) for the Vacuum 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. The Vacuum system is now abandoned.

Background and Previous Work

The site is located approximately ¼ mile SSE of Buckeye, New Mexico at UL/A, Sec. 36, T17S, R34E as shown on the Geographical Location Map. Groundwater sampling at the site indicated the depth to groundwater is approximately 130 feet below ground surface (bgs).

In 2009, ROC initiated work on the former Vacuum A-36 junction box as part of the system abandonment. The former junction box and surrounding soil was removed from an excavation of approximately dimensions 10x10x12-ft deep. Soils samples were field analyzed at regular intervals for chloride and hydrocarbon. Representative samples were sent to a commercial laboratory for analysis, resulting in elevated chloride concentrations and hydrocarbon concentrations below detectable limits. The excavated soil was blended and returned to the excavation. A 1-ft thick compacted clay barrier was installed from 4 to 5 ft bgs. Clean, imported soil was installed above the clay barrier and the surface was returned to the natural contour and seeded. NMOCD was notified of potential groundwater impact on March 12th, 2010 and a Junction Box Disclosure Report was submitted with all the 2009 junction box closures and disclosures.

ROC initiated soil sampling and analysis as indicated in our Investigation and Characterization Plan (ICP) of February 15th, 2013. As part of the ICP, personnel were on site to conduct soil bore installations. Three soils bore were installed at the site with soil samples collected at regular intervals. Each bore was plugged with bentonite to ground surface. Three verticals were

excavated on March 24th, 2014, and representative samples were sent to a commercial laboratory for analysis.

A Corrective Action Plan (CAP) summarizing the soil sampling was submitted to NMOCD and approved on May 15th, 2015. The CAP proposed installing a modified 70x42-ft, 20-mil reinforced liner at a depth of 3.5 ft bgs due to the presence of hard rock in the area. In June 2015, the area was excavated, and a 20-mil reinforced liner was installed and properly seat at a depth of 3.5 ft bgs. The excavation was backfilled to ground surface and the site was contoured to the surrounding area. The disturbed area was then seeded with a blend of native vegetation.

On December 9th and 10th, 2015, a near-source monitoring well (MW-1) and an up-gradient monitoring well (MW-2) were installed at the site. The wells were developed and have been sampled quarterly since installation. Chloride concentrations in MW-1 and MW-2 have remained below WQCC standards for eight consecutive quarters. BTEX concentrations have remained below detectable limits since the wells were installed. In 2020, ROC received NMOCD approval to cease BTEX sampling.

Based on the eight consecutive quarters of monitoring well data being below WQCC standards, ROC requests termination of the regulatory file. A formal Termination Request will be submitted to NMOCD.

Attached is the Appendix, which contains:

1. A Geographical Location Map.
2. A map showing well locations.
3. A table presenting all laboratory results and depth to groundwater for each well at the site, and a graph showing recent laboratory results.
4. The laboratory analytical results for 2020.

Rice Operating Company appreciates the opportunity to work with you on this project. Please contact me at (575) 393-9174 or Edward Hansen at (505) 920-4965 if you have any questions or wish to further discuss this site. Thank you for your time and consideration.

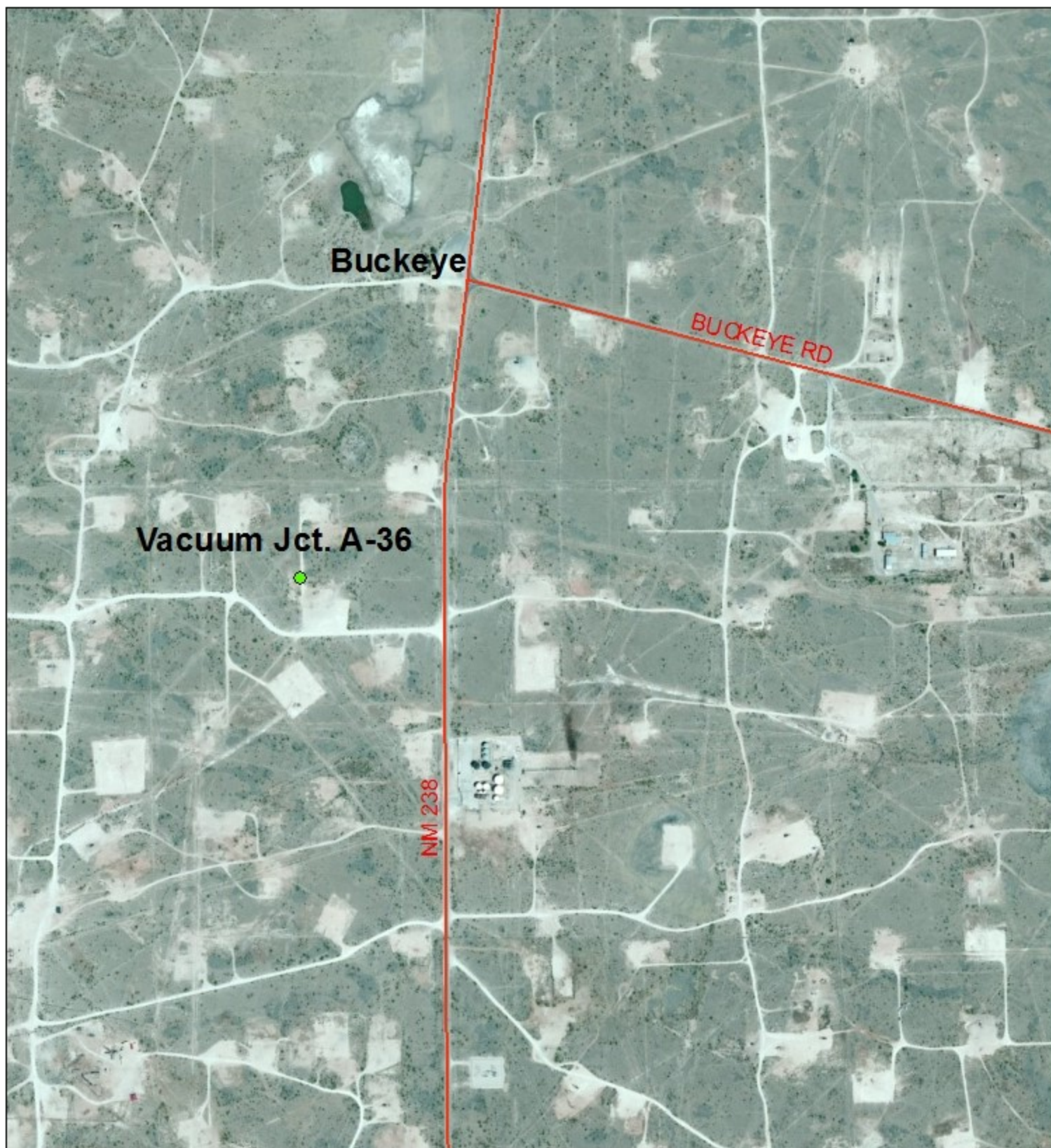
Sincerely,



Katie Davis
Environmental Manager
RICE Operating Company (ROC)

Cc – Edward J. Hansen (ROC)

appendix

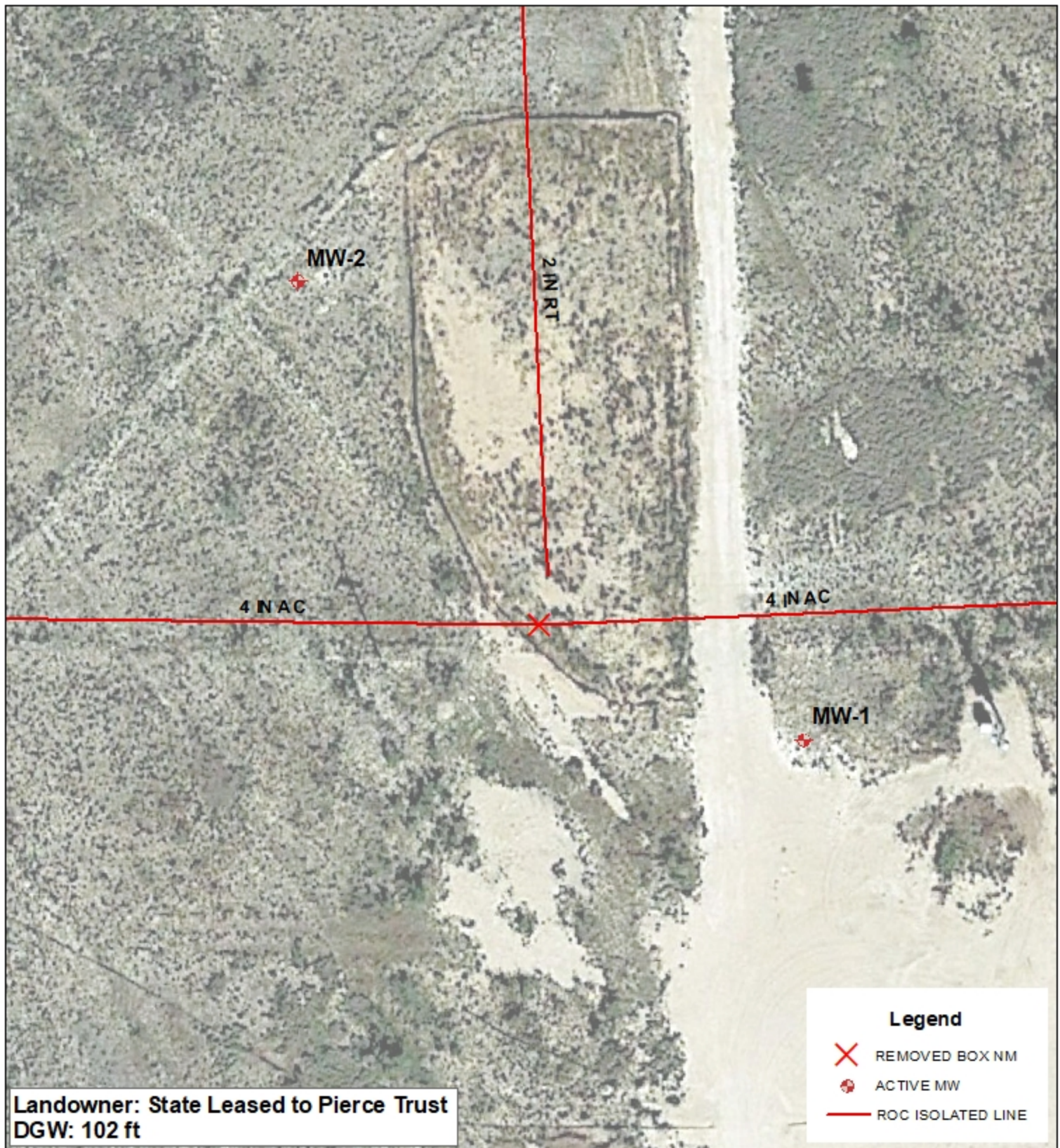


Vacuum Jct. A-36
Unit A, Section 36, T17S, R34E
NMOCD Case #: 1R425-83



0 300 600 1,200
Feet

Drawing date: 2-8-13

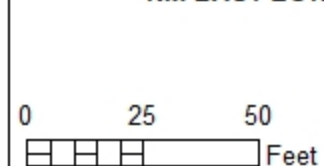


**VACUUM
A-36 JCT**

1R425-83

UL A SECTION 36
T-17-S R-34-E
LEA COUNTY, NM

GPS: 32.797418 -103.508247
NAD 83 STATE PLANE PROJECTION
NM EAST ZONE



Drawing date: 8/7/19
Drafted by: T. Grieco



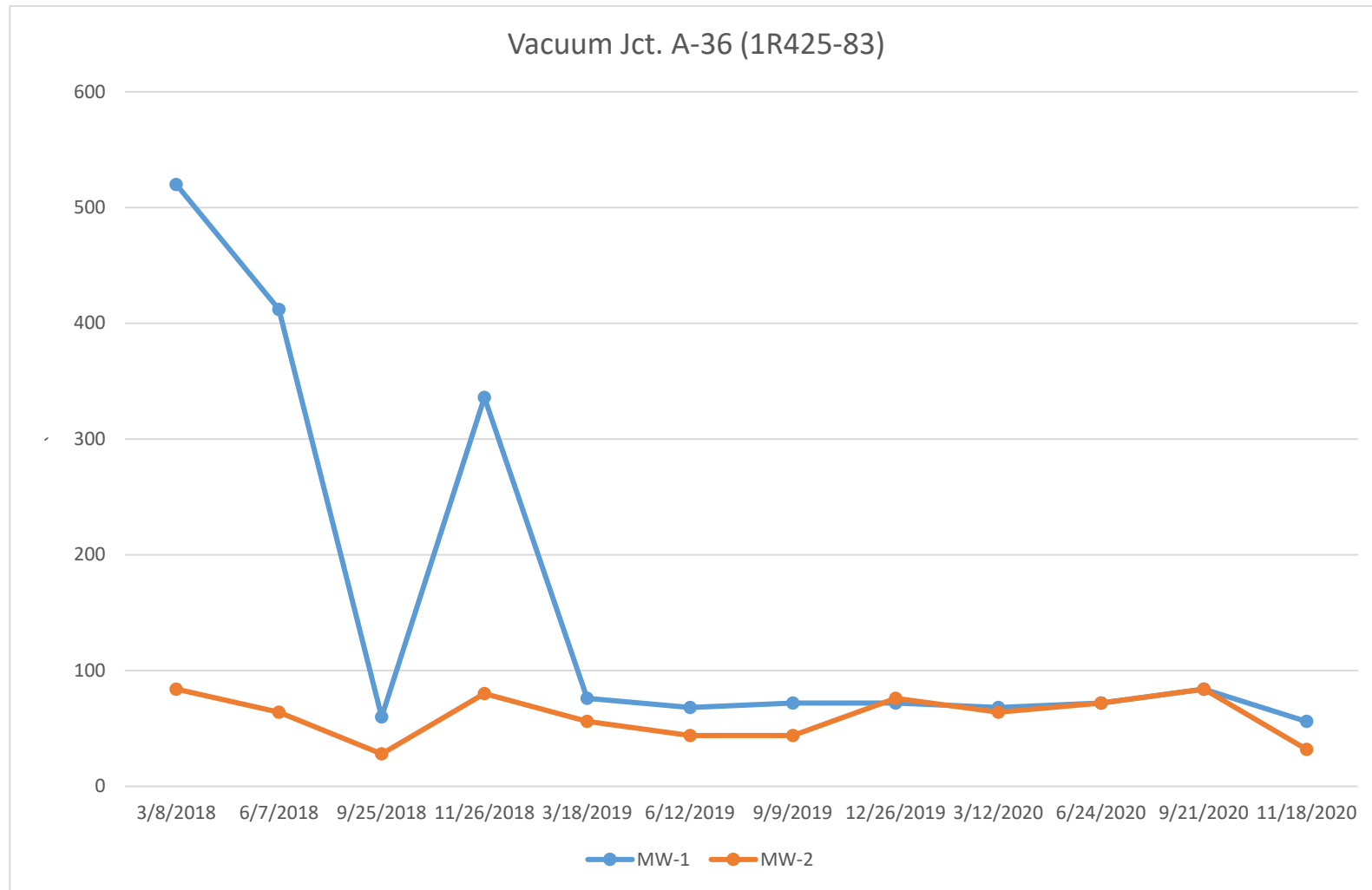
ROC - Vacuum Jct. A-36 (1R425-83)**Unit Letter A, Section 36, T17S, R34E**

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
1	128.05	168	26	100	3/18/2016	332	900	<0.001	<0.001	<0.001	<0.003	62.4	Clear No odor
1	128.41	168	25.7	100	6/2/2016	420	1,080	<0.001	<0.001	<0.001	<0.003	45.4	Clear No odor
1	128.05	168	26	100	3/18/2016	332	900	<0.001	<0.001	<0.001	<0.003	62.4	Clear No odor
1	128.5	168	26	100	9/19/2016	470	1,070	<0.001	<0.001	<0.001	<0.003	33	Clear No odor
1	128.54	168	26	100	11/22/2016	288	1,020	<0.001	<0.001	<0.001	<0.003	53	Clear No odor
1	128.37	168	26	100	3/7/2017	380	860	<0.001	<0.001	<0.001	<0.003	126	Clear No odor
1	128.46	168	26	100	6/9/2017	480	1,110	<0.001	<0.001	<0.001	<0.003	63	Clear No odor
1	128.24	168	26	100	9/18/2017	500	1,320	<0.001	<0.001	<0.001	<0.003	69	Clear No odor
1	127.93	168	26	100	12/8/2017	332	958	<0.001	<0.001	<0.001	<0.003	36	Clear No odor
1	127.94	168	26	100	3/8/2018	520	1,240	<0.001	<0.001	<0.001	<0.003	79	Clear No odor
1	128.37	168	25	100	6/7/2018	412	942	<0.001	<0.001	<0.001	<0.003	78	Clear No odor
1	128.53	168	25	100	9/25/2018	60	292	<0.001	<0.001	<0.001	<0.003	45	Clear No odor
1	128.65	168	25	100	11/26/2018	336	844	<0.001	<0.001	<0.001	<0.003	34	Clear No odor
1	128.52	168	25	100	3/18/2019	76	345	<0.001	<0.001	<0.001	<0.003	10	Clear No odor
1	128.21	168	25	100	6/12/2019	68	425	<0.001	<0.001	<0.001	<0.003	42	Clear No odor
1	129.62	168	25	100	9/9/2019	72	372	<0.001	<0.001	<0.001	<0.003	32	Clear No odor
1	130.2	168	25	100	12/26/2019	72	392	<0.001	<0.001	<0.001	<0.003	54	Clear No odor
1	131.6	168	24	100	3/12/2020	68	387	<0.001	<0.001	<0.001	<0.003	48.6	Clear No odor
1	131.68	168	24	100	6/24/2020	72	394	XXX	XXX	XXX	XXX	36.4	Clear No odor
1	131.51	168	24	100	9/21/2020	84	357	XXX	XXX	XXX	XXX	20.8	Clear No odor
1	131.52	168	24	100	11/18/2020	56	379	XXX	XXX	XXX	XXX	52	Clear No odor

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
2	127.26	140	2	10	3/18/2016	72	452	<0.001	<0.001	<0.001	<0.003	47	Clear No odor
2	127.71	140	2	10	6/2/2016	96	560	<0.001	<0.001	<0.001	<0.003	33.6	Clear No odor
2	127.81	140	2	10	9/19/2016	112	416	<0.001	<0.001	<0.001	<0.003	27	Clear No odor
2	127.85	140	2	10	11/22/2016	60	398	<0.001	<0.001	<0.001	<0.003	79	Clear No odor
2	127.68	140	2	10	3/7/2017	64	404	<0.001	<0.001	<0.001	<0.003	74	Clear No odor

ROC - Vacuum Jct. A-36 (1R425-83)**Unit Letter A, Section 36, T17S, R34E**

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
2	127.77	140	2	10	6/9/2017	128	558	<0.001	<0.001	<0.001	<0.003	45	Clear No odor
2	127.53	140	2	10	9/18/2017	132	526	<0.001	<0.001	<0.001	<0.003	48	Clear No odor
2	127.25	140	2	10	12/8/2017	60	330	<0.001	<0.001	<0.001	<0.003	47	Clear No odor
2	127.57	140	2	10	3/8/2018	84	274	<0.001	<0.001	<0.001	<0.003	46	Clear No odor
2	127.7	140	2	10	6/7/2018	64	428	<0.001	<0.001	<0.001	<0.003	68	Clear No odor
2	127.85	140	1.9	8	9/25/2018	28	218	<0.001	<0.001	<0.001	<0.003	44	Clear No odor
2	127.98	140	1.9	8	11/26/2018	80	338	<0.001	<0.001	<0.001	<0.003	46	Clear No odor
2	127.83	140	2	10	3/18/2019	56	194	<0.001	<0.001	<0.001	<0.003	48	Clear No odor
2	128.52	140	1.8	10	6/12/2019	44	544	<0.001	<0.001	<0.001	<0.003	53	Clear No odor
2	128.71	140	1.8	10	9/10/2019	44	417	<0.001	<0.001	<0.001	<0.003	41	Clear No odor
2	129.67	140	1.7	10	12/26/2019	76	418	<0.001	<0.001	<0.001	<0.003	52	Clear No odor
2	130.78	140	1.5	8	3/12/2020	64	241	<0.001	<0.001	<0.001	<0.003	47.9	Clear No odor
2	130.9	140	1.5	8	6/24/2020	72	401	XXX	XXX	XXX	XXX	43.2	Clear No odor
2	130.96	140	1.4	8	9/21/2020	84	300	XXX	XXX	XXX	XXX	11.1	Clear No odor
2	130.98	140	1.4	8	11/18/2020	32	259	XXX	XXX	XXX	XXX	32.6	Clear No odor





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

March 23, 2020

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM JUNCTION A-36

Enclosed are the results of analyses for samples received by the laboratory on 03/18/20 15:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. 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 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 (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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	03/18/2020	Sampling Date:	03/12/2020
Reported:	03/23/2020	Sampling Type:	Water
Project Name:	VACUUM JUNCTION A-36	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T18S-R35E-SEC36 A-LEA CTY., NM		

Sample ID: MONITOR WELL #1 (H000845-01)

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	03/20/2020	ND	0.020	102	0.0200	0.694		
Toluene*	<0.001	0.001	03/20/2020	ND	0.020	99.6	0.0200	1.42		
Ethylbenzene*	<0.001	0.001	03/20/2020	ND	0.020	101	0.0200	1.17		
Total Xylenes*	<0.003	0.003	03/20/2020	ND	0.059	98.4	0.0600	0.916		
Total BTEX	<0.006	0.006	03/20/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 58.2-133

Chloride, SM4500Cl-B		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	68.0	4.00	03/19/2020	ND	100	100	100	0.00		

Sulfate 375.4		mg/L		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Sulfate*	48.6	10.0	03/19/2020	ND	21.6	108	20.0	10.1		

TDS 160.1		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS*	387	5.00	03/23/2020	ND	547	109	500	2.80		

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	03/18/2020	Sampling Date:	03/12/2020
Reported:	03/23/2020	Sampling Type:	Water
Project Name:	VACUUM JUNCTION A-36	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T18S-R35E-SEC36 A-LEA CTY., NM		

Sample ID: MONITOR WELL #2 (H000845-02)

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	03/20/2020	ND	0.020	102	0.0200	0.694		
Toluene*	<0.001	0.001	03/20/2020	ND	0.020	99.6	0.0200	1.42		
Ethylbenzene*	<0.001	0.001	03/20/2020	ND	0.020	101	0.0200	1.17		
Total Xylenes*	<0.003	0.003	03/20/2020	ND	0.059	98.4	0.0600	0.916		
Total BTEX	<0.006	0.006	03/20/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 58.2-133

Chloride, SM4500Cl-B		mg/L		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	64.0	4.00	03/19/2020	ND	100	100	100	0.00	

Sulfate 375.4		mg/L		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	47.9	10.0	03/19/2020	ND	21.6	108	20.0	10.1	

TDS 160.1		mg/L		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	241	5.00	03/23/2020	ND	547	109	500	2.80	

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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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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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # _____



ANALYSIS REQUEST
(Circle or Specify Method No.)

[illegible]

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

REMARKS:

Email Results: kjones@riceswd.com
rozanne11@windstream.net

Delivered By: (Circle One)  Sampler - UPS - Bus - Other:	Sample Condition <table border="1"> <thead> <tr> <th></th> <th>Cool</th> <th>Intact</th> </tr> </thead> <tbody> <tr> <td>Yes</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>No</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table>		Cool	Intact	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	<input type="checkbox"/>	CHECKED BY: (Initials) 
	Cool	Intact									
Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									
No	<input type="checkbox"/>	<input type="checkbox"/>									



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

July 07, 2020

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM JUNCTION A-36

Enclosed are the results of analyses for samples received by the laboratory on 06/29/20 16:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. 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.

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Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

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Sincerely,

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Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	06/29/2020	Sampling Date:	06/24/2020
Reported:	07/07/2020	Sampling Type:	Water
Project Name:	VACUUM JUNCTION A-36	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T18S-R35E-SEC36 A-LEA CTY., NM		

Sample ID: MONITOR WELL #1 (H001695-01)

Chloride, SM4500Cl-B		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	72.0	4.00	06/30/2020	ND	104	104	100	0.00		
Sulfate 375.4		mg/L		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Sulfate*	36.4	10.0	06/30/2020	ND	19.8	98.8	20.0	8.58		
TDS 160.1		mg/L		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS*	394	5.00	07/01/2020	ND	519	104	500	3.05		

Sample ID: MONITOR WELL #2 (H001695-02)

Chloride, SM4500Cl-B		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	72.0	4.00	06/30/2020	ND	104	104	100	0.00		
Sulfate 375.4		mg/L		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Sulfate*	43.2	10.0	06/30/2020	ND	19.8	98.8	20.0	8.58		
TDS 160.1		mg/L		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS*	401	5.00	07/01/2020	ND	519	104	500	3.05		

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



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

October 01, 2020

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM JUNCTION A-36

Enclosed are the results of analyses for samples received by the laboratory on 09/25/20 15:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. 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 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 (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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	09/25/2020	Sampling Date:	09/21/2020
Reported:	10/01/2020	Sampling Type:	Water
Project Name:	VACUUM JUNCTION A-36	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T18S-R35E-SEC36 A-LEA CTY., NM		

Sample ID: MONITOR WELL #1 (H002552-01)

Chloride, SM4500Cl-B		mg/L		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	84.0	4.00	09/28/2020	ND	100	100	100	0.00		
Sulfate 375.4		mg/L		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Sulfate*	20.8	10.0	09/30/2020	ND	18.4	92.2	20.0	11.6		
TDS 160.1		mg/L		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS*	357	5.00	09/30/2020	ND	535	107	500	1.08		

Sample ID: MONITOR WELL #2 (H002552-02)

Chloride, SM4500Cl-B		mg/L		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	84.0	4.00	09/28/2020	ND	100	100	100	0.00		
Sulfate 375.4		mg/L		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Sulfate*	11.1	10.0	09/30/2020	ND	18.4	92.2	20.0	11.6		
TDS 160.1		mg/L		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS*	300	5.00	09/30/2020	ND	535	107	500	1.08		

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager

Cardinal Laboratories, Inc.

Page 4 of 4

Company Name: RICE Operating Company		BILL TO Company: RICE Operating Company		PO#
Project Manager: Katie Jones		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 A-36		
Project Location: T18S-R35E-Sec36 A ~ Lea County New Mexico		Sampler Signature:  Rozanne Johnson (575)631-9310		

(Circle or Specify Method No.)

Received by *OCD*: 4/15/2021 3:20:43 PM



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

December 10, 2020

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM JUNCTION A-36

Enclosed are the results of analyses for samples received by the laboratory on 11/20/20 16:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. 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 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 (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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	11/20/2020	Sampling Date:	11/18/2020
Reported:	12/10/2020	Sampling Type:	Water
Project Name:	VACUUM JUNCTION A-36	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T18S-R35E-SEC36 A-LEA CTY., NM		

Sample ID: MONITOR WELL #1 (H003087-01)

Chloride, SM4500Cl-B		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	56.0	4.00	11/23/2020	ND	100	100	100	0.00		
Sulfate 375.4		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Sulfate*	52.0	10.0	11/23/2020	ND	23.4	117	20.0	2.07		
TDS 160.1		mg/L		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS*	379	5.00	11/24/2020	ND	494	98.8	500	0.971		

Sample ID: MONITOR WELL #2 (H003087-02)

Chloride, SM4500Cl-B		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	32.0	4.00	11/23/2020	ND	100	100	100	0.00		
Sulfate 375.4		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Sulfate*	32.6	10.0	11/23/2020	ND	23.4	117	20.0	2.07		
TDS 160.1		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS*	259	5.00	11/24/2020	ND	494	98.8	500	0.971		

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Celey D. Keene, Lab Director/Quality Manager



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

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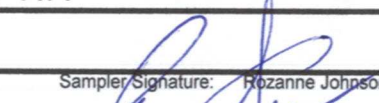
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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager

Cardinal Laboratories, Inc.

LAB Order ID

Company Name: RICE Operating Company		BILL TO Company: RICE Operating Company		PO#
Project Manager: Katie Jones		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 A-36		
Project Location: T18S-R35E-Sec36 A ~ Lea County New Mexico		Sampler Signature:  Rozanne Johnson (575)631-9310		

(Circle or Specify Method No.)

[illegible]

Relinquished by: <u>Rozanne Johnson</u>	Date: <u>11/20/20</u>	Time: <u>06:05</u>	Received by: <u>Jessica D. [Signature]</u>	Date: <u>11-20-20</u>	Time: <u>1605</u>
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff)	Date:	Time:

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

Relinquished by: <u> </u> Date: <u> </u> Time: <u> </u>	Received By: (Laboratory Staff) <u> </u> Date: <u> </u> Time: <u> </u>													
Delivered By: (Circle One) <u> </u> - UPS - Bus - Other: <u> </u>	Sample Condition <table style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td style="text-align: center;">Cool</td> <td></td> <td style="text-align: center;">Intact</td> </tr> <tr> <td style="text-align: center;">Yes</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;">Yes</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td style="text-align: center;">No</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;">No</td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table>		Cool		Intact	Yes	<input checked="" type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	No	<input type="checkbox"/>	CHECKED BY: (Initials) <u> </u>
	Cool		Intact											
Yes	<input checked="" type="checkbox"/>	Yes	<input checked="" type="checkbox"/>											
No	<input type="checkbox"/>	No	<input type="checkbox"/>											

REMARKS:

Email Results: kjones@riceswd.com
rozanne@sdacres.com

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 24243

CONDITIONS

Operator: RICE OPERATING COMPANY 122 W Taylor Hobbs, NM 88240	OGRID: 19174
	Action Number: 24243
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	1/25/2022