

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  $12^{th}$ , 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 15<sup>th</sup>, 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  $24^{th}$ , 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 15<sup>th</sup>, 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 9<sup>th</sup> and 10<sup>th</sup>, 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

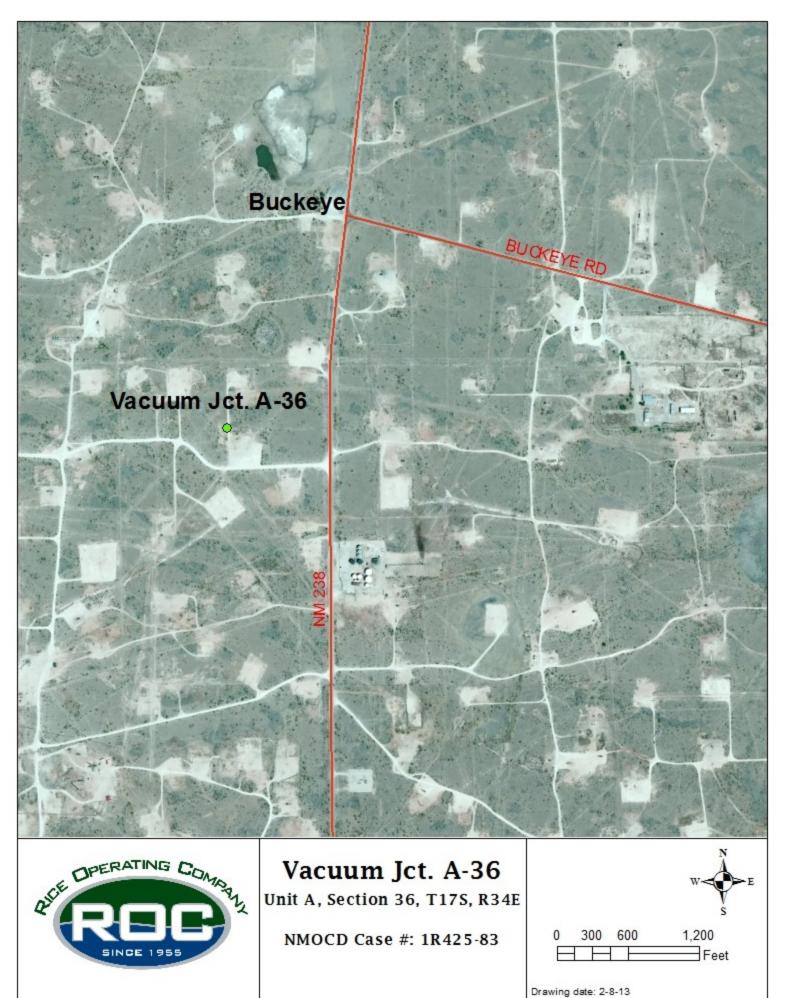
**Environmental Manager** 

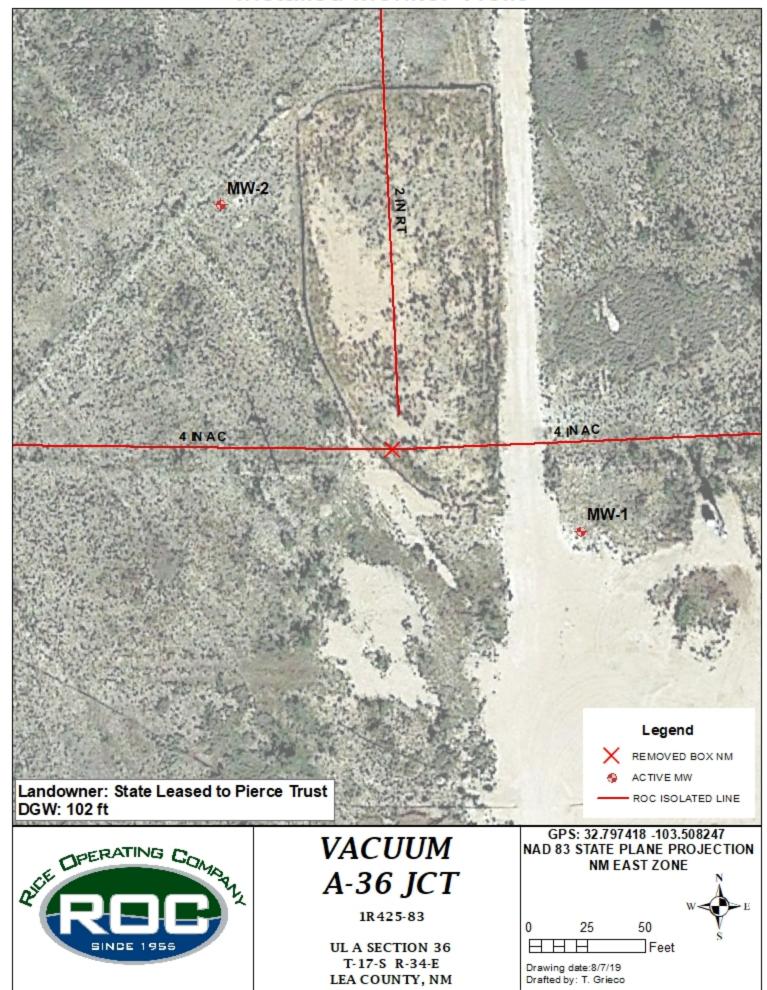
Katy Davis

RICE Operating Company (ROC)

Cc – Edward J. Hansen (ROC)

appendix





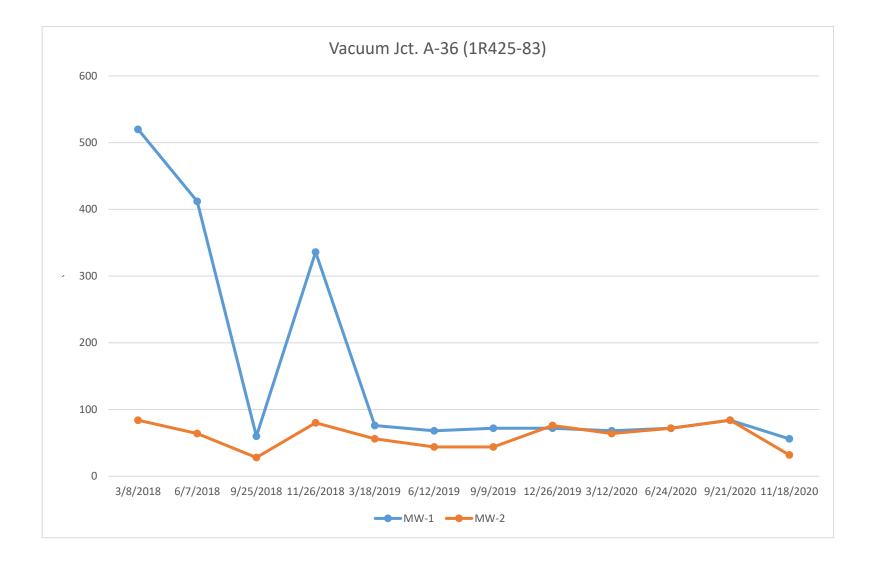
ROC - Vacuum Jct. A-36 (1R425-83) Unit Letter A, Section 36, T17S, R34E

MW	Depth to	Total	Well	Volume	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl	Total	Sulfate	Comments
	Water	Depth	Volume	Purged						Benzene	Xylenes		
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	Total	Well	Volume	Sample Date	CI	TDS	Benzene	Toluene	Ethyl	Total	Sulfate	Comments
10100	Water	Depth	Volume	Purged	Sample Date	Ci	103	Delizerie	Toluelle	Benzene	Xylenes	Juliate	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





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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> 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)

Celey D. Keine

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



### 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

A .. . l. ... . d D. .. MC

Project Location: T18S-R35E-SEC36 A-LEA CTY., NM

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

DTEV 0021D

mg/	L	Analyze	d By: MS					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<0.001	0.001	03/20/2020	ND	0.020	102	0.0200	0.694	
<0.001	0.001	03/20/2020	ND	0.020	99.6	0.0200	1.42	
<0.001	0.001	03/20/2020	ND	0.020	101	0.0200	1.17	
<0.003	0.003	03/20/2020	ND	0.059	98.4	0.0600	0.916	
<0.006	0.006	03/20/2020	ND					
103 %	6 58.2-13	3						
mg/	L	Analyze	d By: AC					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
68.0	4.00	03/19/2020	ND	100	100	100	0.00	
mg/	L	Analyze	d By: GM					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
48.6	10.0	03/19/2020	ND	21.6	108	20.0	10.1	
mg/	L	Analyze	d By: AC					
mg/ Result	Reporting Limit	<b>Analyze</b> Analyzed	d By: AC  Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
	Result <0.001 <0.001 <0.001 <0.003 <0.006 103 % mg/l	<0.001	Result         Reporting Limit         Analyzed           <0.001	Result         Reporting Limit         Analyzed         Method Blank           <0.001	Result         Reporting Limit         Analyzed         Method Blank         BS           <0.001	Result         Reporting Limit         Analyzed         Method Blank         BS         % Recovery           <0.001	Result         Reporting Limit         Analyzed         Method Blank         BS         % Recovery         True Value QC           <0.001	Result         Reporting Limit         Analyzed         Method Blank         BS         % Recovery         True Value QC         RPD           <0.001

Cardinal Laboratories \*=Accredited Analyte

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Celey D. Keene



### 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: Sampling Type: Water 03/23/2020 Project Name: **VACUUM JUNCTION A-36** Sampling Condition: Cool & Intact Project Number: Sample Received By: NONE GIVEN Tamara Oldaker

Project Location: T18S-R35E-SEC36 A-LEA CTY., NM

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

RTFY 8021R

BIEX 8021B	mg/	<u> </u>	Anaiyze	а ву: м5					
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 %	6 58.2-13	3						
Chloride, SM4500CI-B	mg/	L	Analyze	d 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	Analyze	d 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	Analyze	d 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	

Analyzed By: MC

Cardinal Laboratories \*=Accredited Analyte

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Celey D. Keene



### **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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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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> 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)

Celey D. Keine

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



### 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	Analyze	d 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	Analyze	d 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	Analyze	d 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, SM4500CI-B	mg	/L	Analyze	d 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	Analyze	d 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	Analyze	d 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 & Freene



### **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  $6^{\circ}\text{C}$ 

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories \*=Accredited Analyte

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Celeg D. Keene

Page 1 of 1

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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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> 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.

Celey D. Keene

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



### Analytical Results For:

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

Received:09/25/2020Sampling Date:09/21/2020Reported:10/01/2020Sampling Type:WaterProject Name:VACUUM JUNCTION A-36Sampling 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	Analyze	d 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	Analyze	d 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	Analyze	d 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, SM4500CI-B	mg	/L	Analyze	d 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	Analyze	d 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	Analyze	d 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	

Cardinal Laboratories \*=Accredited Analyte

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Celey D. Keene



#### **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 \*=Accredited Analyte

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Celeg D. Freene

Released to Imaging: 1/31/2022 2:33:01 PM

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( LAB USE ONLY )	(G)rab or (C)omp	# CONTAINERS	WATER	SOIL	AIR	SLUDGE	i Jon	HCL (2 40ml VOA)	NaHSO <sub>4</sub>	H <sub>2</sub> SO <sub>4</sub>	ICE (1-1Liter HDPE)	NONE	DATE (2020)	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 418	PAH 8270C	Total Met	TCLP Volatiles	TCLP Se	TCLP Pesticides	RCI	GC/MS \	GC/MS	PCB's 8082/608	Pesticide	BOD, TSS, pH	Moisture	Cations	_	_		+
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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 <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

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.

Celey D. Keene

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



### 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	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, SM4500CI-B	mg	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		/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	

Cardinal Laboratories \*=Accredited Analyte

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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

Cardinal Laboratories \*=Accredited Analyte

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Celeg D. Freene

Released to Imaging: 1/31/2022 2:33:01 P

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

#### CONDITIONS

Created By		Condition Date
nvelez	None	1/25/2022