

RICE *Operating Company*

112 West Taylor • Hobbs, New Mexico 88240

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

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: Termination Request**Rice Operating Company – EME 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 and Area 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. Soil 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 the Investigation and Characterization Plan (ICP) of February 15th, 2013, approved by NMOCD on March 5th, 2013. As part of the ICP, personnel were on site on May 7th, 2013, to conduct soil bore installation. One soil bore was installed at the closest possible distance, 30 feet north of the source, due to safety concerns. There are numerous safety hazards surrounding this site, including overhead power lines directly over the source and underground non-ROC pipelines. The overhead power line in combination with the non-ROC pipeline prevented a bore from being drilled south or east of the site. ROC was required to

remain at least 30 ft away from the overhead power line as well as a safe distance away from the non-ROC line (at least 10 ft). As the bore was advanced, samples were field tested for chloride and hydrocarbon. Representative samples from the bore were taken to a commercial laboratory for analysis of chloride and hydrocarbon. SB-1 returned laboratory chloride readings of 3,280 mg/kg at 30 ft bgs and decreased to 1,180 mg/kg at 95 ft bgs. GRO and DRO results were non-detect throughout the bore. The soil bore was plugged with bentonite to the ground surface.

An ICP Report was submitted to OCD on June 3rd, 2013 which summarized the soil bore installation results. Two additional soils were drilled in July and November 2014. As the bores were advanced, samples were field tested for chloride and hydrocarbon. Representative samples from each bore were sent to a commercial laboratory for analysis of chloride and hydrocarbon. SB-2 returned laboratory chloride readings of 64 mg/kg at the surface, 1,180 mg/kg at 25 ft bgs, which decreased to 80 mg/kg at 50 ft bgs. SB-3 returned laboratory chloride readings of 2,680 mg/kg at 15 ft bgs and 944 mg/kg at 95 ft bgs. GRO and DRO results were non-detect throughout each bore. The soil bores were plugged with bentonite to the ground surface.

Three verticals were excavated on March 24th, 2014. The 15 ft north vertical returned laboratory chloride reading below 250 mg/kg at a depth of 3 ft bgs. GRO and DRO results were below detectable limits. The 15 ft east vertical returned a laboratory chloride reading of 5,920 mg/kg at the surface, 3,440 mg/kg at 2 ft bgs, and 1,840 mg/kg at 8 ft bgs. GRO laboratory readings resulted in a concentration of 286 mg/kg at the surface, below detectable limits at 2 ft bgs, and 198 mg/kg at 8 ft bgs. DRO laboratory readings were below detectable limits. The 15 ft south vertical returned a laboratory chloride reading of 240 mg/kg at the surface, 1,470 mg/kg at 1 ft bgs, 528 mg/kg at 2 ft bgs, and 416 mg/kg at 3 ft bgs. GRO laboratory readings resulted in 300 mg/kg at 1 ft bgs, 15.1 mg/kg at 2 ft, and below detectable limits at the surface and 3 ft bgs. These verticals could not be excavated any deeper due to the presence of hard rock. A surface sample was collected to the west of the former junction box, resulting in a laboratory chloride, GRO, and DRO readings below detectable limits. To further delineate the area to the west, an additional vertical was excavated on March 22nd, 2015, resulting in laboratory chloride reading below detectable limit in the surface, 512 mg/kg at 1 ft bgs, and 80 mg/kg at 2 ft bgs. GRO and DRO results were below detectable limits throughout this vertical.

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 to a depth of 3.5 ft bgs and the excavation was padded with 6 inches of imported blow sand. A 20-mil reinforced liner was installed and properly seated at a depth of 3 ft bgs. The top of the liner was padded with an additional 6 inches of imported blow sand. Approximately 282 cubic yards of excavated soil were exported to a NMOCD approved facility. The remaining excavated soil was returned to the excavation and imported soil was used to contour the site 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 have generally remained low, with concentrations decreasing to below 250 mg/L in 2019 and have remained below WQCC standards for eight consecutive quarters. Concentrations in MW-2 have remained below 250 mg/L since

installation. BTEX concentrations have remained below detectable limits in both wells since installation.

Recommendations

Based on the low concentrations observed in both monitoring wells, the liner installation approved by NMOCD in the CAP, and recovered vegetation, ROC respectfully requests remediation termination or similar closure status for this site. Once NMOCD grants termination, the both monitoring wells (MW-1 and MW-2) will be plugged and abandoned using Portland slurry and a three-foot cap of concrete at the surface. ROC acknowledges they have met the requirements of 19.15.29 NMAC and a final C-141 is attached.

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 at if you have any questions or wish to further discuss this site. Thank you for your time and consideration.

Sincerely,

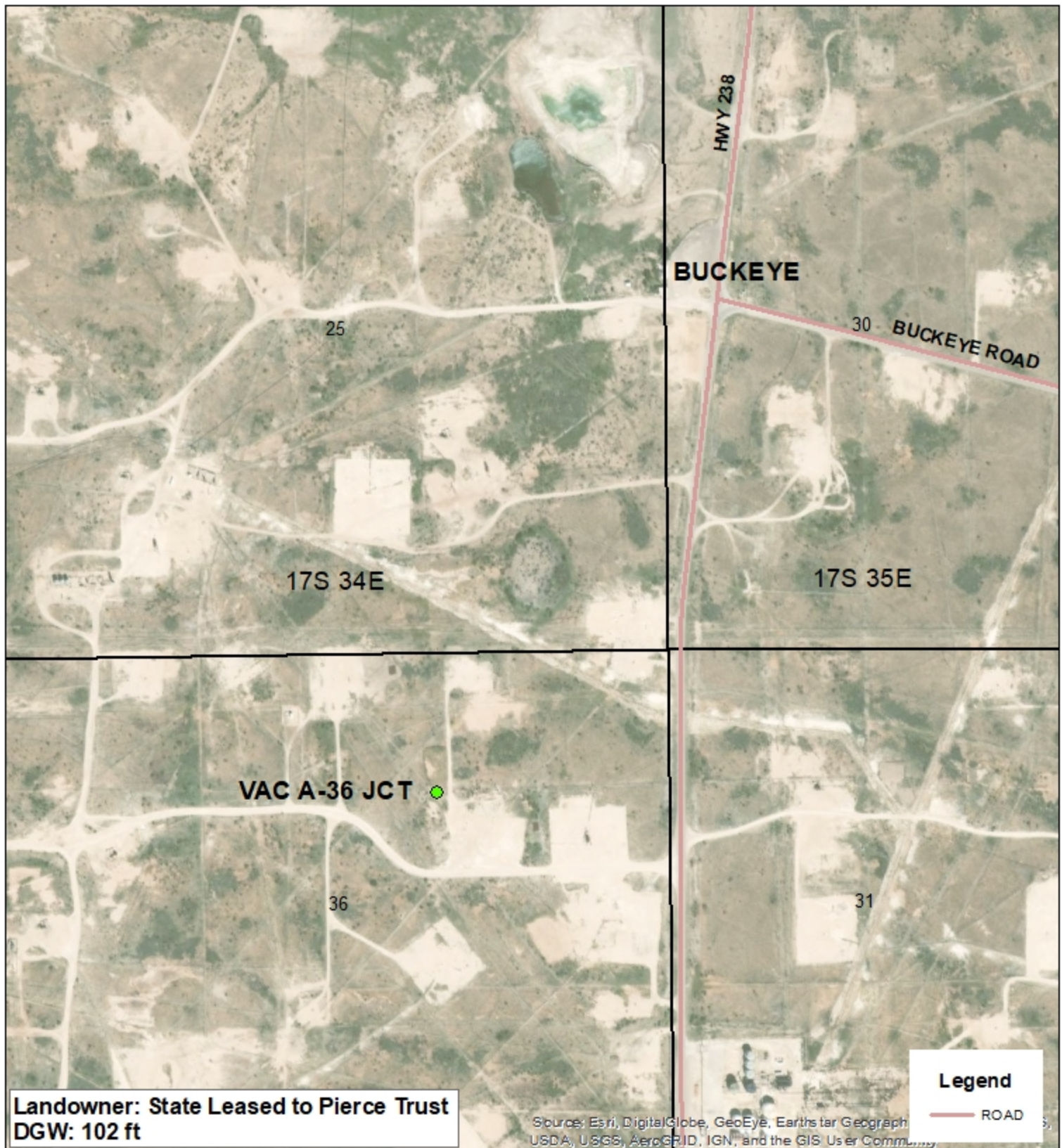
A handwritten signature in black ink that reads "Katie Davis". The signature is written in a cursive, flowing style.

Katie Davis
Environmental Manager
RICE Operating Company

Appendix

Figures

RICE Operating Company
112 West Taylor, Hobbs, NM 88240
Phone 575.393.9174



VACUUM A-36 JCT

1R425-83

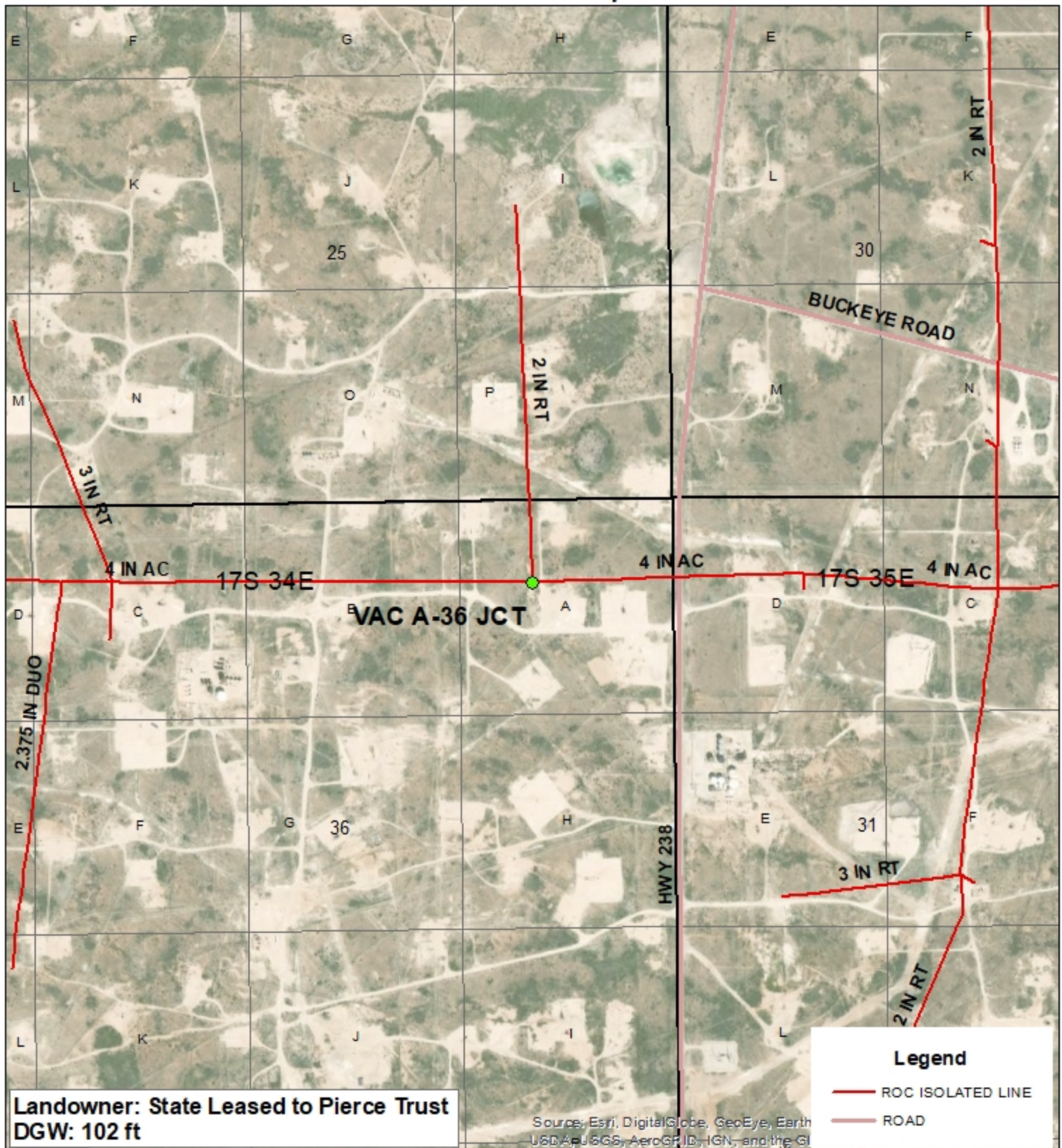
UL A SECTION 36
T-17-S R-34-E
LEA COUNTY, NM

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

0 250 500
Feet

Drawing date: 1/7/21
Drafted by: T. Grieco



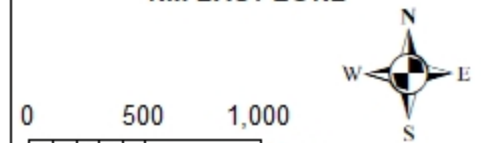


VACUUM A-36 JCT

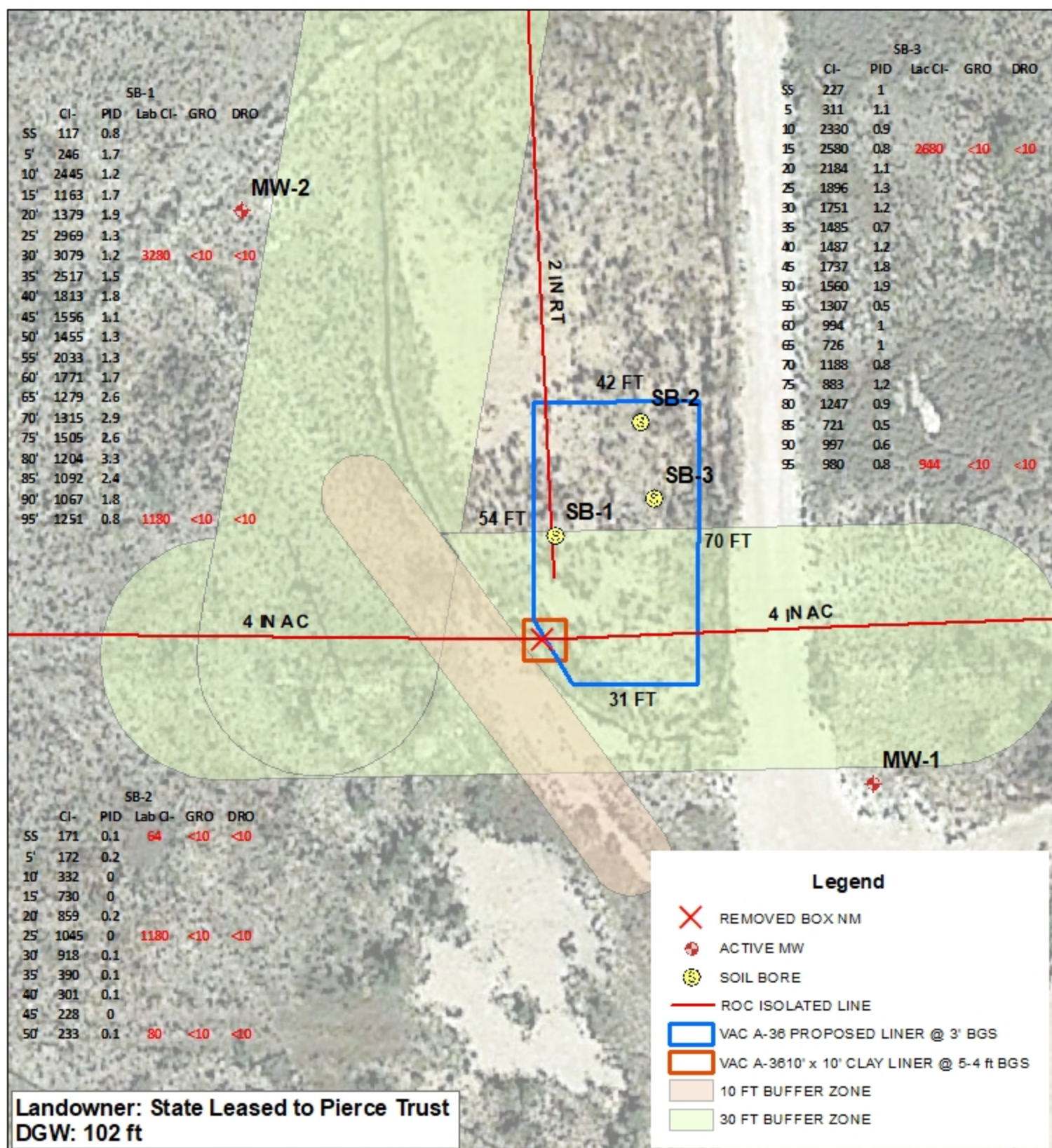
1R425-83

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

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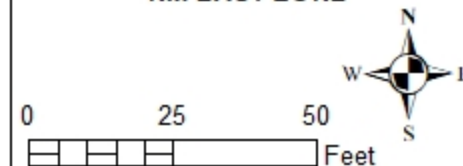


VACUUM
A-36 JCT

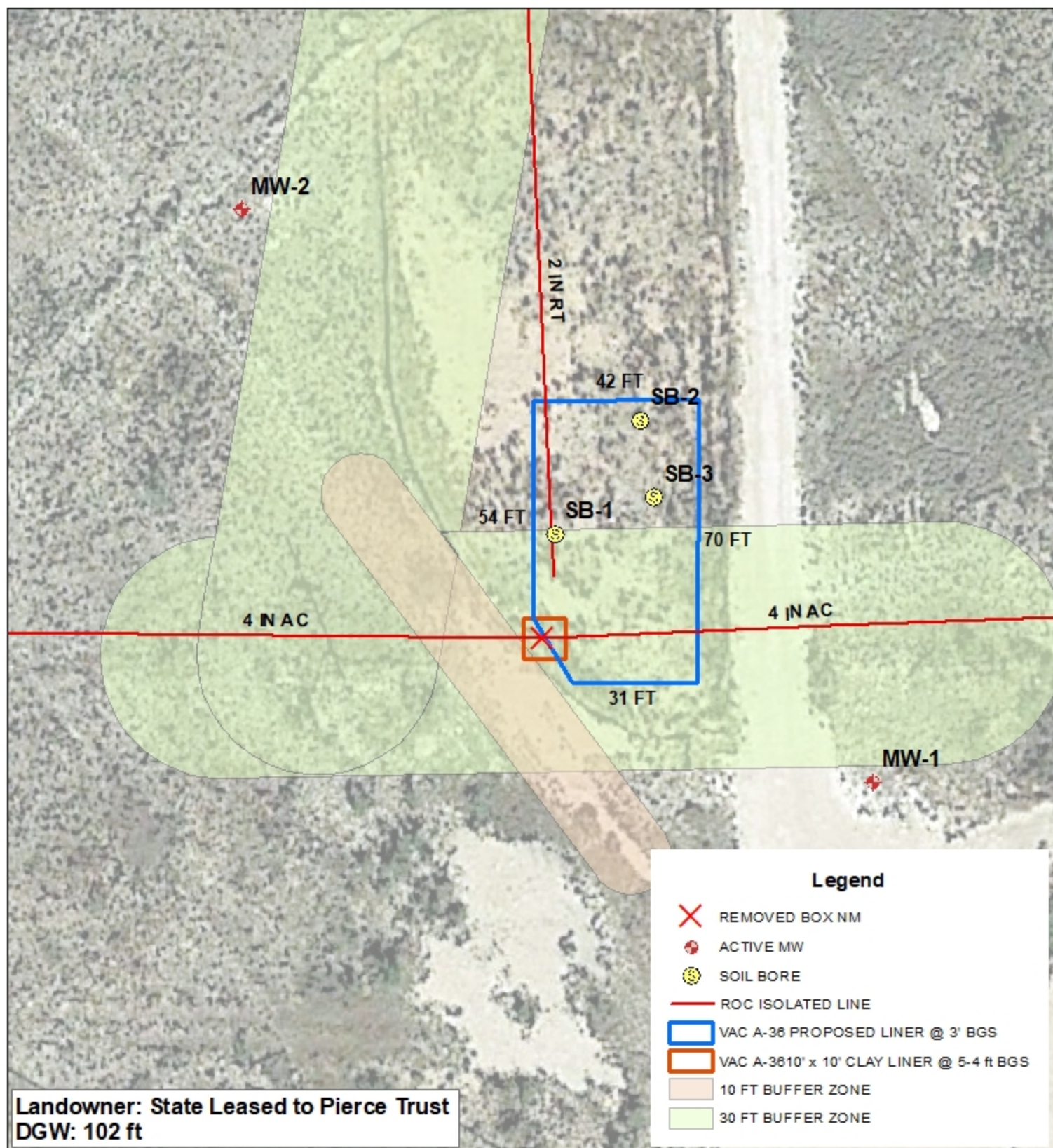
1R425-83

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: 1/7/21
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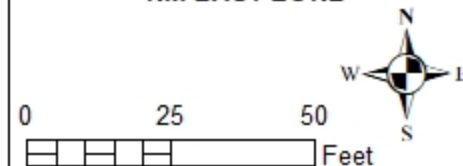


**VACUUM
A-36 JCT**

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: 1/7/21
Drafted by: T. Grieco

Monitoring Well Sampling

RICE Operating Company
112 West Taylor, Hobbs, NM 88240
Phone 575.393.9174

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

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
2	127.68	140	2	10	3/7/2017	64	404	<0.001	<0.001	<0.001	<0.003	74	Clear No odor
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

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, flowing style.

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		

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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 # _____

ANALYSIS REQUEST
(Circle or Specify Method No.)

[illegible][illegible]

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

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

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



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,

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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:	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		

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

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

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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.

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

Sampler Signature: Rozanne Johnson (575)631-9310

Sampler Signature: Rozanne Johnson (575)631-9310

[illegible]

Received by: Samira Aldaker Date: 9-25-20 Time: 1545
Received By: (Laboratory Staff) Date: _____ Time: _____

Sample Condition	Cool	Intact	CHECKED BY:
Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(Initials) V.O.
No	<input type="checkbox"/>	<input type="checkbox"/>	

Sampler - UPS - Bus - Other:

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

REMARKS:

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

Page 4 of 4

Released to Imaging: 12/8/2021 10:24:12 AM



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.

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, flowing style.

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	

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*=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", is written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #

Project #: _____ Project Name: _____
 _____ Vacuum Junction A-36
 Project Location: _____ Sampler Signature: _____ Rozanne Johnson (575) 631-9310
 T18S-R35E-Sec36 A ~ Lea County New Mexico

ANALYSIS REQUEST

(Circle or Specify Method No.)

Relinquished by: <u>Rozanne Johnson</u>	Date: <u>6/29/2020</u>	Time: <u>11:35</u>	Received by: <u>Jamara Olatokun</u>	Date: <u>6/29/20</u>	Time: <u>1635</u>
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff)	Date:	Time:
Delivered By: (Circle One)			Sample Condition		
Sampler - UPS - Bus - Other:			CHECKED BY:		
			(Initials) <u>JO</u>		
			Cool Intact		
			Yes Yes		
			No No		

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

REMARKS:

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



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, flowing style.

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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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 #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, SM4500CI-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		

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 cursive script, 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 # _____

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				
<div style="text-align: right;">  Sampler Signature: Rozanne Johnson (575)631-9310 </div>				

ANALYSIS REQUEST

(Circle or Specify Method No.)

[illegible]

Relinquished by: <i>[Signature]</i> Bozanne Johnson	Date: <i>3/18/2020</i> Time:	Received by: <i>[Signature]</i> Munara Olsabon	Date: <i>3-18-20</i> Time: <i>1540</i>
Relinquished by:	Date: Time:	Received By: (Laboratory Staff)	Date: Time:

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

REMARKS:

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

Delivered By: (Circle One)

Sample Condition

CHECKED BY:

Sampler - UPS - Bus - Other:

	Cool	Intact
Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>	<input type="checkbox"/>

(Initials)



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

January 02, 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 12/27/19 11:25.

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:	12/27/2019	Sampling Date:	12/26/2019
Reported:	01/02/2020	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 (H904300-01)

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	12/31/2019	ND	0.019	94.3	0.0200	0.980	
Toluene*	<0.001	0.001	12/31/2019	ND	0.018	92.4	0.0200	1.90	
Ethylbenzene*	<0.001	0.001	12/31/2019	ND	0.018	89.4	0.0200	1.53	
Total Xylenes*	<0.003	0.003	12/31/2019	ND	0.053	88.6	0.0600	1.83	
Total BTEX	<0.006	0.006	12/31/2019	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*	72.0	4.00	12/27/2019	ND	104	104	100	3.77	

Sulfate 375.4		mg/L		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	54.5	10.0	12/30/2019	ND	20.6	103	20.0	2.49	

TDS 160.1		mg/L		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	392	5.00	12/31/2019	ND	534	101	527	0.611	

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

Analytical Results For:

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

Received:	12/27/2019	Sampling Date:	12/26/2019
Reported:	01/02/2020	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 (H904300-02)

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	12/31/2019	ND	0.019	94.3	0.0200	0.980	
Toluene*	<0.001	0.001	12/31/2019	ND	0.018	92.4	0.0200	1.90	
Ethylbenzene*	<0.001	0.001	12/31/2019	ND	0.018	89.4	0.0200	1.53	
Total Xylenes*	<0.003	0.003	12/31/2019	ND	0.053	88.6	0.0600	1.83	
Total BTEX	<0.006	0.006	12/31/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 80.5 % 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*	76.0	4.00	12/27/2019	ND	104	104	100	3.77	

Sulfate 375.4		mg/L		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	52.4	10.0	12/30/2019	ND	20.6	103	20.0	2.49	

TDS 160.1		mg/L		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	418	5.00	12/30/2019	ND	534	101	527	0.611	

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 cursive script, appearing to read "C. D. Keene", written in black ink.

Celey D. Keene, Lab Director/Quality Manager

101 East Marland - Hobbs, NM 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:	PO#
RICE Operating Company	

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#:	Fax#:
(575) 393-9174	(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

[illegible]

Relinquished by: Rozanne Johnson Date: 12/27/2019 Time: 11:25

Received by: Amara Odeh Date: 12-27-19 Time: 11:25

Relinquished by: [Signature] Date: _____ Time: _____

Received By: (Laboratory Staff) Date: Time:

Delivered By: (Circle One)

Sample Condition

CHECKED BY:

Sampler - UPS - Bus - Other:

(Initials)

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

REMARKS:

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



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

September 17, 2019

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 09/11/19 15:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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:	09/11/2019	Sampling Date:	09/10/2019
Reported:	09/17/2019	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 (H903145-01)

BTEX 8021B		mg/L		Analyzed By: BF					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	09/12/2019	ND	0.021	104	0.0200	1.81	
Toluene*	<0.001	0.001	09/12/2019	ND	0.021	104	0.0200	0.145	
Ethylbenzene*	<0.001	0.001	09/12/2019	ND	0.021	107	0.0200	0.975	
Total Xylenes*	<0.003	0.003	09/12/2019	ND	0.065	108	0.0600	1.24	
Total BTEX	<0.006	0.006	09/12/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 89.9 % 81.3-128

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	09/13/2019	ND	104	104	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*	32.5	10.0	09/13/2019	ND	21.2	106	20.0	0.950	

TDS 160.1		mg/L		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	372	5.00	09/16/2019	ND	532	101	527	0.269	

Cardinal Laboratories

*=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:	09/11/2019	Sampling Date:	09/10/2019
Reported:	09/17/2019	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 (H903145-02)

BTEX 8021B		mg/L		Analyzed By: BF						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.001	0.001	09/12/2019	ND	0.021	104	0.0200	1.81		
Toluene*	<0.001	0.001	09/12/2019	ND	0.021	104	0.0200	0.145		
Ethylbenzene*	<0.001	0.001	09/12/2019	ND	0.021	107	0.0200	0.975		
Total Xylenes*	<0.003	0.003	09/12/2019	ND	0.065	108	0.0600	1.24		
Total BTEX	<0.006	0.006	09/12/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 89.2 % 81.3-128

Chloride, SM4500Cl-B		mg/L		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	44.0	4.00	09/13/2019	ND	104	104	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*	41.5	10.0	09/13/2019	ND	21.2	106	20.0	0.950	

TDS 160.1		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS*	417	5.00	09/16/2019	ND	532	101	527	0.269		

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

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

Cardinal Laboratories, Inc.

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:	Sampler Signature: Rozanne Johnson (575) 831-9310
T18S-R35E-Sec36 A ~ Lea County New Mexico	

[illegible]

Relinquished by: <i>Rozanne Johnson</i>	Date: <i>9/11/19</i>	Time: <i>15:40</i>	Received by: <i>Jamara Blake</i>	Date: <i>9-11-19</i>	Time: <i>15:50</i>
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff)	Date:	Time:
Delivered By: (Circle One)	Cooler <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No UPS <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Bus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Other:		Sample Condition	CHECKED BY: (Initials) <i>T.O.</i>	

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



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

June 20, 2019

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 06/13/19 15:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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:	06/13/2019	Sampling Date:	06/12/2019
Reported:	06/20/2019	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 (H902063-01)

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	06/18/2019	ND	0.021	107	0.0200	0.889	
Toluene*	<0.001	0.001	06/18/2019	ND	0.022	109	0.0200	0.536	
Ethylbenzene*	<0.001	0.001	06/18/2019	ND	0.020	99.9	0.0200	1.37	
Total Xylenes*	<0.003	0.003	06/18/2019	ND	0.061	101	0.0600	0.642	
Total BTEX	<0.006	0.006	06/18/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 81.3-128

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	06/18/2019	ND	100	100	100	4.08	

Sulfate 375.4		mg/L		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	42.6	10.0	06/19/2019	ND	20.8	104	20.0	2.43	

TDS 160.1		mg/L		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	425	5.00	06/20/2019	ND	523	99.2	527	11.3	

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

Analytical Results For:

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

Received:	06/13/2019	Sampling Date:	06/12/2019
Reported:	06/20/2019	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 (H902063-02)

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	06/18/2019	ND	0.021	107	0.0200	0.889	
Toluene*	<0.001	0.001	06/18/2019	ND	0.022	109	0.0200	0.536	
Ethylbenzene*	<0.001	0.001	06/18/2019	ND	0.020	99.9	0.0200	1.37	
Total Xylenes*	<0.003	0.003	06/18/2019	ND	0.061	101	0.0600	0.642	
Total BTEX	<0.006	0.006	06/18/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 81.3-128

Chloride, SM4500CI-B		mg/L		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	44.0	4.00	06/18/2019	ND	100	100	100	4.08	

Sulfate 375.4		mg/L		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	53.8	10.0	06/19/2019	ND	20.8	104	20.0	2.43	

TDS 160.1		mg/L		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	544	5.00	06/19/2019	ND	523	99.2	527	11.3	

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", is written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager

101 East Marland - Hobbs, NM 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: 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		

ANALYSIS REQUEST

(Circle or Specify Method No.)

[illegible]

Relinquished by: <i>Rozanne Johnson</i>	Date: <i>6-13-2019</i>	Time: <i>15:15</i>	Received by: <i>Jamara Black</i>	Date: <i>6-13-19</i>	Time: <i>15:15</i>
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff)	Date:	Time:

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

REMARKS:

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

Delivered By: (Circle One)

Sample Condition

CHECKED BY:

	Cool	Intact
Yes	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes
No	<input type="checkbox"/> No	<input type="checkbox"/> No

(Initials)

Sampler - UPS - Bus - Other:



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

March 26, 2019

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 03/18/19 15:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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 "Mike Snyder". The signature is fluid and cursive, with the first name "Mike" and last name "Snyder" clearly distinguishable.

Mike Snyder For 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:	03/18/2019	Sampling Date:	03/18/2019
Reported:	03/26/2019	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 (H901041-01)

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	03/20/2019	ND	0.020	102	0.0200	2.30	
Toluene*	<0.001	0.001	03/20/2019	ND	0.020	98.8	0.0200	2.51	
Ethylbenzene*	<0.001	0.001	03/20/2019	ND	0.020	97.5	0.0200	0.470	
Total Xylenes*	<0.003	0.003	03/20/2019	ND	0.063	105	0.0600	1.28	
Total BTEX	<0.006	0.006	03/20/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 81.3-128

Chloride, SM4500Cl-B		mg/L		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	76.0	4.00	03/19/2019	ND	100	100	100	3.92	

Sulfate 375.4		mg/L		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	<10.0	10.0	03/19/2019	ND	22.7	113	20.0	1.31	

TDS 160.1		mg/L		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	345	5.00	03/22/2019	ND	524	99.4	527	24.2	

Cardinal Laboratories

*=Accredited Analyte

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Mike Snyder For 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:	03/18/2019	Sampling Date:	03/18/2019
Reported:	03/26/2019	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 (H901041-02)

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	03/20/2019	ND	0.020	102	0.0200	2.30	
Toluene*	<0.001	0.001	03/20/2019	ND	0.020	98.8	0.0200	2.51	
Ethylbenzene*	<0.001	0.001	03/20/2019	ND	0.020	97.5	0.0200	0.470	
Total Xylenes*	<0.003	0.003	03/20/2019	ND	0.063	105	0.0600	1.28	
Total BTEX	<0.006	0.006	03/20/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 81.3-128

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	03/19/2019	ND	100	100	100	3.92	

Sulfate 375.4		mg/L		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	48.7	10.0	03/19/2019	ND	22.7	113	20.0	1.31	

TDS 160.1		mg/L		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	194	5.00	03/22/2019	ND	524	99.4	527	24.2	

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Mike Snyder For 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

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A handwritten signature in black ink, appearing to read "Mike Snyder", is written over a horizontal line.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

101 East Marland - Hobbs, NM 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: PO# RICE Operating Company	
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#: Fax#: (575) 393-9174 (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	

ANALYSIS REQUEST

(Circle or Specify Method No.)

[illegible]

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Rozanne Johnson	3/18/2019	15:15	Benara D. Baker	3-18-19	15:15
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 <table border="1"> <tr> <td></td> <td>Cool</td> <td></td> <td>Intact</td> </tr> <tr> <td>Yes</td> <td><input checked="" type="checkbox"/></td> <td>Yes</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>No</td> <td><input type="checkbox"/></td> <td>No</td> <td><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)
	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 rozanne11@windstream.net

Excavation and Liner Installation

RICE Operating Company
112 West Taylor, Hobbs, NM 88240
Phone 575.393.9174

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



Site prior, facing south 2/12/2014



Excavating the site, facing north 6/3/2015



Exporting excavated soil, facing north 6/4/2015



Importing blow sand, facing east 6/4/2015



Padding excavation, facing north 6/8/2015



Installing 20-mil, reinforced liner, facing southwest 6/10/2015



Liner is installed at 3.5 ft bgs, facing north 6/10/2015



Padding the top of liner, facing north 6/10/2015



Backfilling with the excavation with imported blow sand, facing northeast 6/12/2015



Seeding the backfilled site, facing southeast 10/12/2015



Site complete, facing southeast 10/12/2015



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

June 11, 2015

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM JCT A-36

Enclosed are the results of analyses for samples received by the laboratory on 06/04/15 16:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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, flowing style.

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:	06/04/2015	Sampling Date:	06/04/2015
Reported:	06/11/2015	Sampling Type:	Soil
Project Name:	VACUUM JCT A-36	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	T-17S R-34E		

Sample ID: IMPORTED BLOW SAND (H501449-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	06/09/2015	ND	416	104	400	3.92		

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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

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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

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325) 673-7020

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]

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Relinquished By: Karanja Lewis		Date: 6-4-15	Received By: Jodi Hunter	Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Phone #:
Relinquished By:		Date:	Received By:	Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Time: 4:00	Time:	REMARKS: email results: hconder@basinenv.com; knorman@basinenv.com; jkamplain@basinenv; lflores@basinenv; lweinheimer@basinenv; cursanic@basinenv; sedwards@basinenv environmental tech: klewis company: kjones@riceswd.com	
3.60		Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No	CHECKED BY: (Initials) JH	@basinenv	

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

RICE ENVIRONMENTAL CONSULTING & SAFETY

122 West Taylor Hobbs, NM 88240
 PHONE: (505) 393-9174 FAX: (505) 397-1471
 PID METER CALIBRATION & FIELD REPORT FORM

CK.	<input type="checkbox"/>	MODEL: PGM 7300	SERIAL NO: 590-000508
MODEL	<input checked="" type="checkbox"/>	MODEL: PGM 7300	SERIAL NO: 590-000504
NO.	<input type="checkbox"/>	MODEL: PGM 7320	SERIAL NO: 592-903318
	<input type="checkbox"/>	MODEL: PGM _____	SERIAL NO: _____ 590-902124

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO: IAM-248-100-6	EXPIRATION DATE: 8-15-16
METER READING ACCURACY: 100.0	

ACCURACY : +/- 2%

COMPANY
ROC

SITE	UNIT	SECTION	TOWN SHIP	RANGE
Vacuum Jct. A-36	A	36	17S	34E

SAMPLE ID	PID	SAMPLE ID	PID
Imported Blow Sand	0.4		

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

SIGNATURE:



DATE: 6/4/2015



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

June 12, 2015

Hack Conder

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM JCT. A-36

Enclosed are the results of analyses for samples received by the laboratory on 06/11/15 16:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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
 Hack Conder
 112 W. Taylor
 Hobbs NM, 88240
 Fax To: (575) 397-1471

Received: 06/11/2015
 Reported: 06/12/2015
 Project Name: VACUUM JCT. A-36
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 06/11/2015
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: BLENDED BACKFILL (H501525-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	06/12/2015	ND	432	108	400	3.77	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/12/2015	ND	175	87.4	200	1.24	
DRO >C10-C28	21.6	10.0	06/12/2015	ND	191	95.7	200	0.512	

Surrogate: 1-Chlorooctane 97.4 % 47.2-157

Surrogate: 1-Chlorooctadecane 124 % 52.1-176

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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

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A handwritten signature in black ink, appearing to read "Celey D. Keene", is written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager



CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325) 673-7020

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

RUSH

[illegible]

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Relinquished By:		Date:	Received By:	Phone Result:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Phone #:
Karanja Lewis		6-11-15	Jodi Hanson	Fax Result:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Fax #:
Relinquished By:		Date:	Received By:	REMARKS:		
		Time:		TPH Added 6/12/15		
Delivered By: (Circle One)		Time:		email results:		
Sampler - UPS - Bus - Other:		4.40		hconder@basinenv.com; knorman@basinenv.com; jkamplain@basinenv;		
				lflores@basinenv; lweinheimer@basinenv; cursanic@basinenv;		
				sedwards@basinenv		
				environmental tech: klewis		
				company: kjones@riceswd.com		
				@basinenv		

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

#54

RUSH

RICE ENVIRONMENTAL CONSULTING & SAFETY

122 West Taylor Hobbs, NM 88240
 PHONE: (505) 393-9174 FAX: (505) 397-1471
 PID METER CALIBRATION & FIELD REPORT FORM

CK.	<input type="checkbox"/>	MODEL: PGM 7300	SERIAL NO: 590-000508
MODEL	<input checked="" type="checkbox"/>	MODEL: PGM 7300	SERIAL NO: 590-000504
NO.	<input type="checkbox"/>	MODEL: PGM 7320	SERIAL NO: 592-903318
	<input type="checkbox"/>	MODEL: PGM _____	SERIAL NO: _____ 590-902124

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO: IAM-248-100-6	EXPIRATION DATE: 8-15-16
METER READING ACCURACY: 100.0	

ACCURACY : +/- 2%

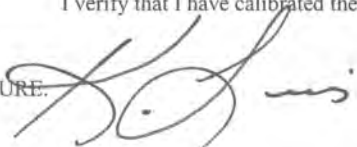
COMPANY
ROC

SITE	UNIT	SECTION	TOWN SHIP	RANGE
Vacuum Jct. A-36	A	36	17S	34E

SAMPLE ID	PID	SAMPLE ID	PID
Blended Backfill	0.4		

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

SIGNATURE.



DATE: 6/11/2015



PO Box 5630
Hobbs, NM 88241
Phone: (575) 393-4411
Fax: (575) 393-0293

VEGETATION FORM

1. General Information

Site name: Vacuum Jct A-36						
U/L A	Section 36	Township 17S	Range 34E	County Lea	Latitude 32.405257	Longitude -103.176614
Contact Name: Katie Jones Davis				Ben J. Arguijo		
Email: kjones@riceswd.com				bjarguijo@basinenv.com		
Site size: 75'x86'		6447 sq ft				

2. Soils

**Do not rip caliche subsoils; caliche rocks brought to the surface by ripping shall be removed.*

Salvaged from site	<input type="checkbox"/>	Bioremediated	<input type="checkbox"/>	Imported	<input checked="" type="checkbox"/>	Blended	<input type="checkbox"/>	Depth (in)	<input type="text"/>
Texture:	Top Soil		Describe soil & subsoil:				Top Soil		
Soil prep methods:	<input type="checkbox"/>	Rip	<input type="checkbox"/>	Depth (in)	<input type="text"/>	Disc	<input checked="" type="checkbox"/>	Depth (in)	6"
Date completed:	7/14/2015								

3. Bioremediation

Fertilizer	<input type="checkbox"/>	Hay	<input type="checkbox"/>	Other	<input checked="" type="checkbox"/>
Type:				Describe: 14 bags of custom mix.	
Lbs/acre:					

4. Seeding

**Attach seed bag tags to this form. Seed bag tags shall contain the site name and S-T-R.*

Custom Seed Mix	<input checked="" type="checkbox"/>	Prescribed Mix	<input type="checkbox"/>	Seed Mix Name:	7 lbs of Warm Season, 7 lbs of Blue Grama	Date:	7/14/2015
Broadcast	<input checked="" type="checkbox"/>				Method:	Drop Seeder	
Soil conditions during seed:	Dry	<input checked="" type="checkbox"/>	Damp	<input type="checkbox"/>	Wet		
Observations:	Tilled into soil						

5. Certification

I hereby certify that the information in this form and attachments is true and complete to the best of my knowledge and belief.

Name:	Abe Redecop	Title:	Environmental Tech	Date:	7/14/2015
Signature:					

Final C-141

RICE Operating Company
112 West Taylor, Hobbs, NM 88240
Phone 575.393.9174

Incident ID	
District RP	1R425-83
Facility ID	
Application ID	pEJH1015950593

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Katie Davis Title: Environmental Manager

Signature: Katie Davis Date: 4/1/2021

email: kjones@riceswd.com Telephone: 575-393-9174

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Bradford Billings Date: 12/08/2021

Printed Name: Bradford Billings Title: Envi. Spec. A

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



Facing North

11/10/2020

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 24463

CONDITIONS

Operator: RICE OPERATING COMPANY 122 W Taylor Hobbs, NM 88240	OGRID: 19174
	Action Number: 24463
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bbillings	P&A monitor wells as per OSE regulations.	12/8/2021