L Peter Galusky, Jr PE

5935 Exeter Circle Norcross, GA 30071 | 470 955-5335 | peter@terra.us

April 1st, 2025

Michael Buchanan
New Mexico Energy, Minerals, & Natural Resources
Oil Conservation Division, Environmental Bureau
1220 S. St. Francis Drive
Santa Fe, New Mexico 87504

RE: **2024 Annual Report**
Rice Operating Company – Vacuum SWD System
Vacuum K-35-1 Boot (1R425-03): UL K, Sec 35, T17S, R35E
NMOCD Application ID: pLWP0513334313, Incident ID: nAPP2110349616

Sent by E-mail

Mr. Buchanan:

This letter summarizes remediation history and progress made for this project over the past calendar year. Site location, site schematic and groundwater flow maps are given in the Appendix, Figures 1, 2 and 3, respectively. Groundwater data are summarized in the Appendix, Figure 4 and Table 1. The complete groundwater dataset for this site is given in the Appendix, Table 2. The groundwater depth at the site is approximately 62 ft below ground surface.

OCD granted termination of soil remediation requirements (soil closure) on October 13th, 2011, allowing for the cessation of groundwater withdrawals, and stipulating that groundwater monitoring must continue semi-annually at wells MW-2, MW-3, and MW-4.

A Groundwater Recovery Notification was submitted to the NMOCD on September 4th, 2013, and NMOCD approved the notification on September 5th, 2013. Groundwater recovery continued from RW-1 on September 13th, 2013. According to the NMOCD approved Groundwater Recovery Notification, ROC began sampling all the wells (MW-1, MW-2, MW-3, MW-4, and RW-1) on a semi-annual (twice a year) basis in 2013, and on a quarterly basis in 2014. In 2020, NMOCD granted approval to temporarily cease groundwater recovery and reduce the sampling interval to semi-annual. ROC subsequently resumed groundwater recovery and quarterly sampling in 2021.

A summary of results for our work in 2024 is given below.

- Approximately 42,234 barrels of chloride-affected groundwater have been withdrawn from a near-source recovery well (RW-1) from 2008 through 2024 resulting in the removal of an estimated 2,524 kg of chlorides. Recovered groundwater has been used for a beneficial use.

- The average annual groundwater chloride concentration in the near/at-source monitor well, MW-4, measured 76 mg/l in 2023 and 129 mg/l in 2024.

- The average annual groundwater chloride concentration in the down-gradient monitor well, MW-2 measured 60 mg/l in 2023 versus 96 mg/l in 2024.

- The average annual groundwater chloride concentration in the down-gradient recovery well, RW-1, dropped from 136 mg/l in 2023 to 108 mg/l in 2024.

- The average annual groundwater chloride concentration in the up-gradient monitor well (MW-3) measured 98 mg/l in 2023 vs 117 mg/l in 2024.

ROC submitted a Termination Request to NMOCD for this project on October 9th, 2023, based on eight consecutive quarters of monitoring well data below WQCC standards. We understand that this project is presently under consideration for regulatory closure per NMOCD correspondence of 2024 and this year (Appendix, Exhibits 1, 2 and 3). NMOCD granted approval of the 2023 Annual Report on February 26th, 2025. In that approval, OCD requested ROC submit an official Completion and Termination Report for this site. ROC will compile the previous Termination Request submitted on October 9th, 2023, NMOCD partial approval of that Termination Request granted on March 27th, 2024, NMOCD's soil closure approval granted on October 13th, 2011, all of the quarterly monitoring well data, and all recent communication with NMOCD. ROC will submit the compiled data requesting termination of the regulatory file. ROC will also continue quarterly groundwater sampling and groundwater recovery during 2025, as we await a reply from NMOCD to our request.

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

Please do not hesitate to contact either myself or Rice Operating Company if you have any questions or need additional information.

Sincerely,

L. Peter Galusky, Jr. P.E.
NM Prof. Engineer No. 22561

Copy: Rice Operating Company. Attachments: as noted above.

Exhibit 1

From: OCDOnline@state.nm.us
To: Katie Jones
Subject: The Oil Conservation Division (OCD) has approved the application, Application ID: 327875
Date: Wednesday, February 26, 2025 9:25:26 AM

To whom it may concern (c/o Katie Davis for RICE OPERATING COMPANY),

The OCD has approved the submitted *Ground Water Abatement* (GROUND WATER ABATEMENT), for incident ID (n#) nAPP2110349616,
with the following conditions:

- **Review of the 2023 Annual Report for Rice Operating Company (ROC)--Vacuum-K35-1: content is satisfactory. 1. Seeking closure will require ROC to submit an official Completion and Termination Report--if that hasn't already been submitted. The report will need to demonstrate all requirements in 19.15.30.19 NMAC paragraphs (A) and (B). 2. Include the most up-to-date groundwater data and all relevant data for the site to demonstrate closure status. 3. Please submit the report within sixty (60) days from receipt of this notification.**

The signed GROUND WATER ABATEMENT can be found in the OCD Online: Imaging under the incident ID (n#).

If you have any questions regarding this application, please contact me.

Thank you,
Michael Buchanan
Environmental Specialist
505-490-0798
Michael.Buchanan@emnrd.nm.gov

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

Exhibit 2

From: Buchanan, Michael, EMNRD
To: Katie Jones
Subject: Termination Request for ROC Vacuum K-35-1 Boot
Date: Wednesday, March 27, 2024 2:39:57 PM

Katie, good afternoon

I've been in review of ROC's Termination Request for the above-mentioned release site, case no. 1R425-03, and the groundwater monitoring results are In compliance with the eight (8) consecutive quarterly monitoring events and analysis for chlorides. Please continue to conduct groundwater monitoring, in the meantime. There will be a one-time sampling to complete in the vadose zone per rule 19.15.30.9 , and that is in paragraph D, " The division shall consider abatement of water contaminants measured in solid-matrix samples of the vadose zone complete after one-time sampling from compliance stations the director approves."

I will get some more guidance on this procedure and I'll let you know so that ROC can plan on completing this to demonstrate the final portion to meet compliance.

Thank you,

Mike Buchanan ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
8801 Horizon Blvd. NE, Suite 260 | Albuquerque, NM 87113
505.490.0798 | michael.buchanan@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd

Exhibit 3

From: Katie Jones
To: Buchanan, Michael, EMNRD
Subject: RE: [EXTERNAL] FW: Termination Request for ROC Vacuum K-35-1 Boot
Date: Tuesday, January 28, 2025 9:26:00 AM

Thank you for your help! I did upload the 2024 quarterly groundwater sampling lab results to the portal. Please let me know if you have any questions or require any additional information.

Thank you,
Katie

From: Buchanan, Michael, EMNRD <Michael.Buchanan@emnrd.nm.gov>
Sent: Friday, January 24, 2025 8:42 AM
To: Katie Jones <kjones@riceswd.com>
Subject: RE: [EXTERNAL] FW: Termination Request for ROC Vacuum K-35-1 Boot

Hi, Katie

Good morning. I did find the file that you referenced (1R425-03). Perfect. No need to upload anything that's already in here. I will be taking a look for my final review. If you want to go ahead and upload anything pertinent for 2024, including lab results or other reports, that would be helpful for the record.

Thank you,

From: Katie Jones <kjones@riceswd.com>
Sent: Thursday, January 23, 2025 11:03 AM
To: Buchanan, Michael, EMNRD <Michael.Buchanan@emnrd.nm.gov>
Subject: RE: [EXTERNAL] FW: Termination Request for ROC Vacuum K-35-1 Boot

Good Morning Mr. Buchanan,

The NMOCD "Soil Closure" approval from October 13th, 2011, along with the report are in the NMOCD database. Both can be viewed on the OCD Online: Imaging database in the Administrative/Environmental Order search category when searched by the NMOCD case number 1R425-03. Do these need to be uploaded to the other portal too? The 2024 quarterly lab reports have not been uploaded yet but will be included in the 2024 Annual Report. I will be happy to upload those lab results now or upload those older reports again, especially if will expedite a response. Please let me know what is best for you.

Thank you,

Katie Davis
Environmental Manager
RICE Operating Company

From: Buchanan, Michael, EMNRD <Michael.Buchanan@emnrd.nm.gov>

Exhibit 3

Sent: Tuesday, January 21, 2025 11:23 AM
To: Katie Jones <kjones@riceswd.com>
Subject: RE: [EXTERNAL] FW: Termination Request for ROC Vacuum K-35-1 Boot

Good morning, Katie

Thank you for the information on the status of these sites. I will be reviewing them individually and drafting letters for management approval if all criteria are met. Are each of these requests and reports in the groundwater abatement online portal? If so, I will get to them for review as no paper copy will follow nor are they reviewed by email. If you need assistance with that process, please let me know.

Thank you,

From: Katie Jones <kjones@riceswd.com>
Sent: Tuesday, January 7, 2025 2:29 PM
To: Buchanan, Michael, EMNRD <Michael.Buchanan@emnrd.nm.gov>
Subject: [EXTERNAL] FW: Termination Request for ROC Vacuum K-35-1 Boot

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Hello Mr. Buchanan,

Just following up on the update on Vacuum K-35-1 (nAPP2110349616, 1R425-03) soil closure submitted on July 9, 2024 (below). NMOCD granted 'Soil Closure' on October 13th, 2011. I have attached the report along with the approval from NMOCD granting no further soil remediation required. I believe this will satisfy the requirement listed in rule 19.15.30.9 (D). We also have observed over eight (8) consecutive quarters of monitoring well data below WQCC standards as detailed in the Termination Request submitted to NMOCD on October 9th, 2023. An additional four (4) quarters of monitoring well data below WQCC standards were observed in 2024, for a total of fourteen (14) quarters of monitoring well data below WQCC standards. As such, ROC is requesting Termination or similar closure status. Upon NMOCD approved, the groundwater recovery system will be dismantled, and the monitoring wells will be plugged and abandoned using a cement grout with 1 to 3% bentonite and a 3-ft cap of cement at the surface.

Thank you,

Katie Davis
Environmental Manager
RICE Operating Company

From: Katie Jones
Sent: Monday, August 12, 2024 2:04 PM
To: Buchanan, Michael, EMNRD <Michael.Buchanan@emnrd.nm.gov>
Subject: FW: Termination Request for ROC Vacuum K-35-1 Boot

Hello Mr. Buchanan,

Exhibit 3

Just following up on the update on Vacuum K-35-1 (nAPP2110349616, 1R425-03) soil closure submitted on July 9, 2024 (below). Please let me know if you have any questions or require any additional information.

Thank you,

Katie Davis
Environmental Manager
RICE Operating Company

From: Katie Jones
Sent: Tuesday, July 9, 2024 2:23 PM
To: Buchanan, Michael, EMNRD <Michael.Buchanan@emnrd.nm.gov>
Subject: RE: Termination Request for ROC Vacuum K-35-1 Boot

Good afternoon Mr. Buchanan,

Just wanted to touch base on the Vacuum K-35-1 (nAPP2110349616, 1R425-03). NMOCD granted 'Soil Closure' on October 13th, 2011. I have attached the report along with the approval from NMOCD granting no further soil remediation required. I believe this will satisfy the requirement listed in rule 19.15.30.9 (D). We also have observed eight (8) consecutive quarters of monitoring well data below WQCC standards. As such, ROC is requesting Termination or similar closure status. Upon NMOCD approved, the groundwater recovery system will be dismantled, the monitoring wells will be plugged and abandoned using a cement grout with 1 to 3% bentonite and a 3-ft cap of cement at the surface.

Thank you,

Katie Davis
Environmental Manager
RICE Operating Company

From: Buchanan, Michael, EMNRD <Michael.Buchanan@emnrd.nm.gov>
Sent: Wednesday, March 27, 2024 2:40 PM
To: Katie Jones <kjones@riceswd.com>
Subject: Termination Request for ROC Vacuum K-35-1 Boot

Katie, good afternoon

I've been in review of ROC's Termination Request for the above-mentioned release site, case no. 1R425-03, and the groundwater monitoring results are In compliance with the eight (8) consecutive quarterly monitoring events and analysis for chlorides. Please continue to conduct groundwater monitoring, in the meantime. There will be a one-time sampling to complete in the vadose zone per rule 19.15.30.9 , and that is in paragraph D, " The division shall consider abatement of water contaminants measured in solid-matrix samples of the vadose zone complete after one-time sampling from compliance stations the director approves."

Exhibit 3

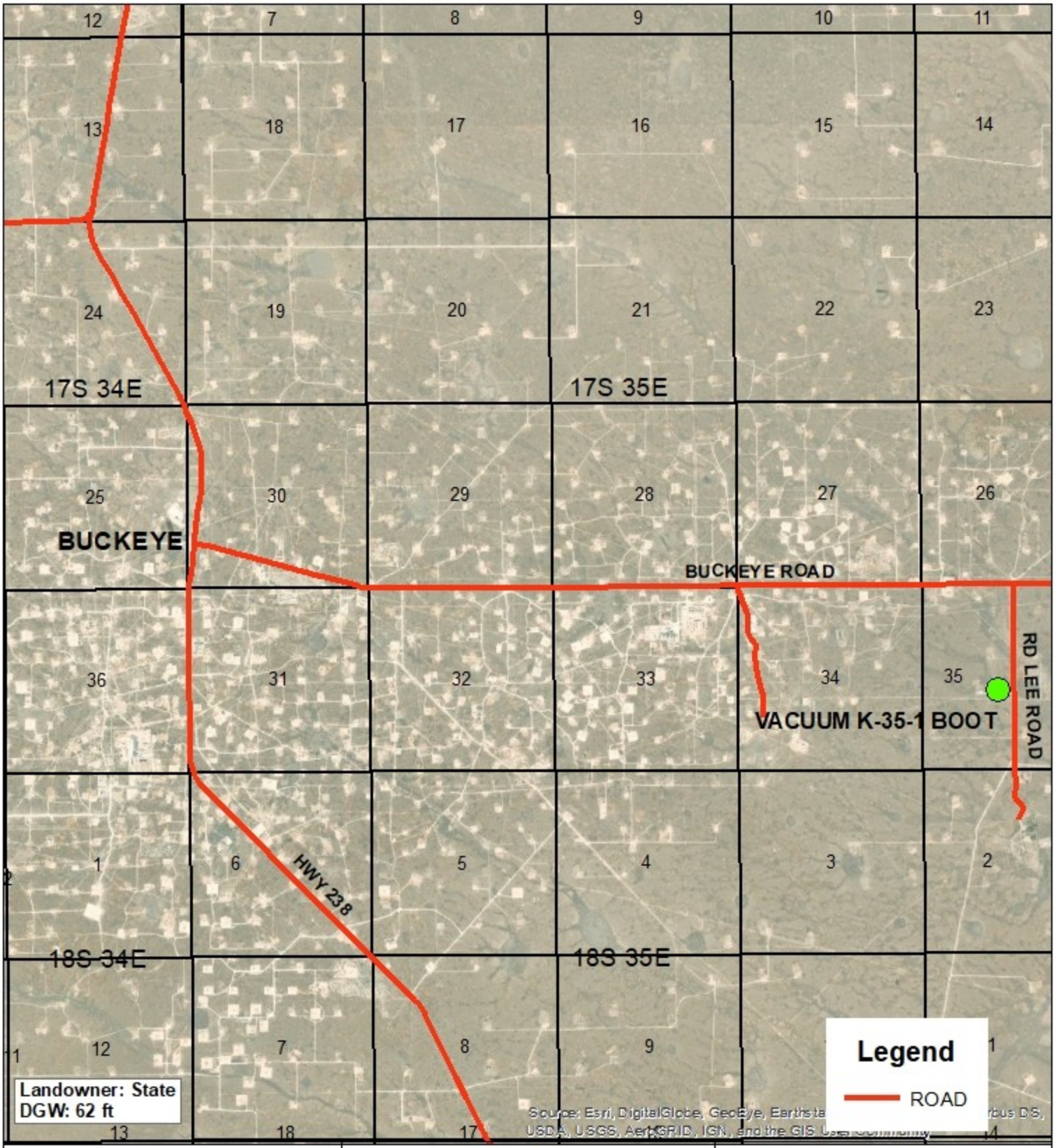
I will get some more guidance on this procedure and I'll let you know so that ROC can plan on completing this to demonstrate the final portion to meet compliance.

Thank you,

Mike Buchanan ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
8801 Horizon Blvd. NE, Suite 260 | Albuquerque, NM 87113
505.490.0798 | michael.buchanan@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd

Geographic Location

Figure 1



RICE OPERATING COMPANY
ROC
SINCE 1955

VACUUM K-35-1 JCT BOOT

1R425-03

UL K SECTION 35
T-17-S R-35-E
LEA COUNTY, NM

GPS: 32.790071 -103.429898
NAD83 STATE PLANE PROJ
NM EAST ZONE

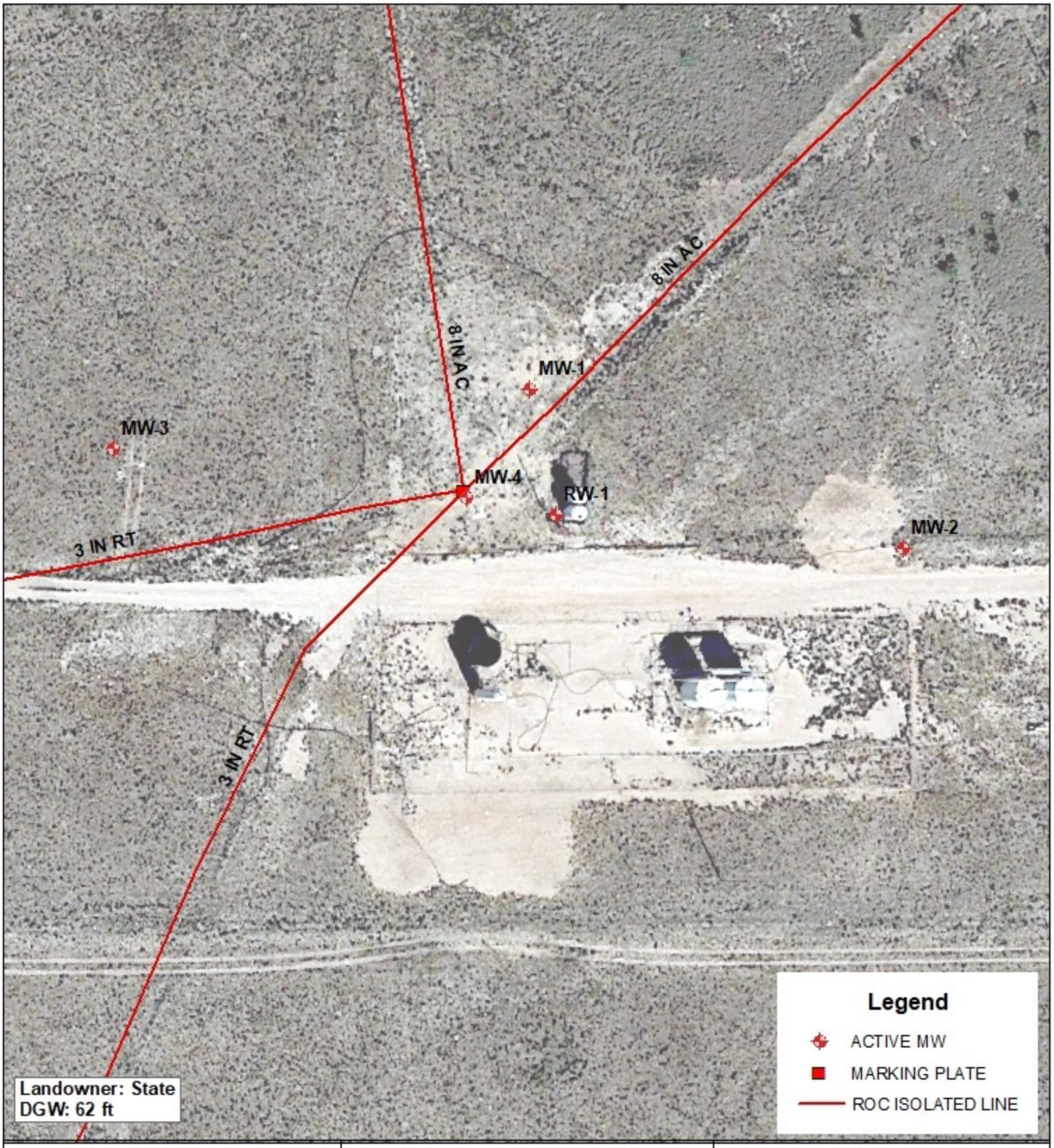
0 0.5 1 Miles

N
W E
S

Drawing date: 2/5/20
Drafted by: T. Grieco

Site Map

Figure 2



RICE OPERATING COMPANY
ROC
SINCE 1955

VACUUM
K-35-1 JCT BOOT

1R425-03

UL K SECTION 35
T-17-S R-35-E
LEA COUNTY, NM

GPS: 32.790071 -103.429898
NAD83 STATE PLANE PROJ
NM EAST ZONE

0 50 100
Feet

N
W E
S

Drawing date: 1/27/25
Drafted by: T. Grieco

Figure 3

Groundwater Elevation

RICE OPERATING COMPANY
ROC
SINCE 1955

VACUUM
K-35-1 JCT BOOT
1R425-03

UL K SECTION 35
T-17-S R-35-E
LEA COUNTY, NM

GPS: 32.790071 -103.429898
NAD83 STATE PLANE PROJ
NM EAST ZONE

0 50 100
Feet

Drawing date: 1/27/25
Drafted by: T. Grieco

N W E S

Figure 4

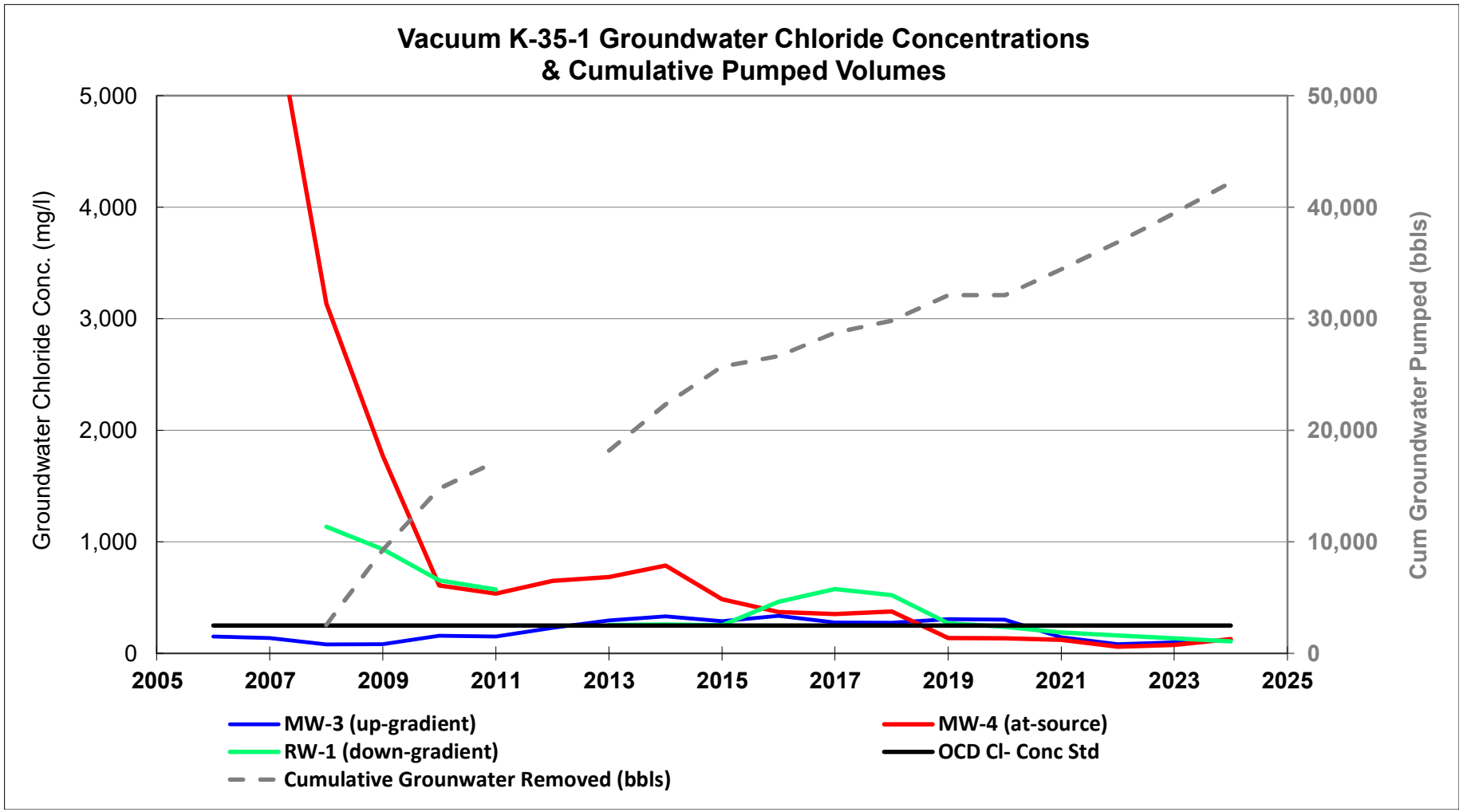

Vacuum K-35-1 Groundwater Chloride Concentrations
& Cumulative Pumped Volumes
Groundwater Chloride Conc. (mg/l)
Cum Groundwater Pumped (bbls)
5,000
4,000
3,000
2,000
1,000
0
50,000
40,000
30,000
20,000
10,000
0
2005
2007
2009
2011
2013
2015
2017
2019
2021
2023
2025
MW-3 (up-gradient)
MW-4 (at-source)
RW-1 (down-gradient)
OCD Cl- Conc Std
Cumulative Grounwater Removed (bbls)

Table 1

Vacuum K-35-1 Groundwater Data

Average Annual Groundwater Chloride Concentrations (mg/l)
and Cumulative Groundwater Volume (bbls) **and Chloride Mass Removed** (kg)

year	MW-1 (downgradient well)	MW-2 (down-gradient well)	MW-3 (up-gradient)	MW-4 (at-source)	RW-1 (down-gradient)	OCD Cl- Conc Std	Cumulative Grounwater Removed (bbls)	Cumulative Groundwater Chloride Mass Removed (kg)
2006	684	26	153			250		
2007	1,138	27	138	5,988		250		
2008	1,330	43	81	3,135	1,135	250	2,551	467
2009	1,210	28	83	1,770	935	250	9,286	1,262
2010	795	32	157	608	653	250	14,779	1,651
2011	662	34	152	535	572	250	17,185	1,834
2012		36	228	650		250		
2013	1,040	36	294	685	256	250	18,185	1,884
2014	733	36	333	788	260	250	22,320	2,058
2015	423	44	288	486	251	250	25,720	2,196
2016	630	46	337	372	463	250	26,660	2,238
2017	968	54	279	352	577	250	28,750	2,297
2018	1,305	39	274	376	523	250	29,820	2,317
2019	748	50	307	137	269	250	32,110	2,359
2020	358	40	304	136	238	250	32,110	
2021	314	58	145	122	189	250	34,445	2,405
2022	182	59	83	60	159	250	36,862	2,448
2023	174	60	98	76	136	250	39,468	2,489
2024	156	96	117	129	108	250	42,234	2,524

Table 2

ROC - Vacuum K-35-1 boot (1R425-03)
Unit Letter K, Section 35, T17S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
1	55.06	66.95	1.9	10	6/28/2006	508		1,101	<0.002	<0.002	<0.002	<0.006	54.3	
1	55.15	66.95	1.9	10	10/19/2006	859	684	1,650	<0.001	<0.001	<0.001	<0.001	59.3	Silt to clear with no odor. Field conductivity results have increased since last sampling
1	55.4	66.85	1.8	8	2/21/2007	1,080		2,160	<0.001	<0.001	<0.001	<0.001	77.9	Silt to clear No odor
1	55.51	66.85	1.8	8	5/22/2007	923		2,330	<0.001	<0.001	<0.001	<0.001	79.8	Silt to clear No odor
1	55.74	66.85	1.8	8	8/7/2007	1,150		2,980	<0.001	<0.001	<0.001	<0.002	57.8	Silt to clear No odor
1	55.75	66.85	1.8	8	10/16/2007	1,400	1,138	2,634	<0.001	<0.001	<0.001	<0.001	70	Silt to clear No odor
1	55.92	66.8	1.7	8	1/30/2008	1,300		2,540	<0.001	<0.001	<0.001	<0.003	69.8	Silt to clear No odor
1	55.91	66.8	1.7	8	4/30/2008	1,440		2,800	<0.002	<0.002	<0.002	<0.006	78.6	Silt to clear No odor
1	56.21	66.8	1.7	8	7/30/2008	1,360		2,680	<0.001	<0.001	<0.001	<0.003	39	Silt to clear No odor
1	56.36	66.8	1.7	8	11/10/2008	1,220	1,330	2,400	<0.001	<0.001	<0.001	<0.003	74.8	Silt to clear No odor
1	55.92	66.85	1.7	8	1/30/2009	1,280		2,580	<0.001	<0.001	<0.001	<0.003	74	Silt to clear No odor
1	56.44	67.18	1.7	8	5/1/2009	1,420		2,170	<0.001	<0.001	<0.001	<0.003	68.8	Silt to clear No odor
1	56.61	67.18	1.7	6	8/4/2009	940		2,250	<0.001	<0.001	<0.001	<0.003	70.1	Silt to clear No odor
1	56.84	67.18	1.7	6	10/20/2009	1,200	1,210	2,520	<0.001	<0.001	<0.001	<0.003	70.1	Silt to clear No odor
1	56.92	67.09	1.6	6	1/27/2010	1,180		2,430	<0.001	<0.001	<0.001	<0.003	77.8	Silt to clear No odor
1	56.95	67.09	1.6	6	4/28/2010	460		1,050	<0.001	<0.001	<0.001	<0.003	64.1	Silt to clear No odor
1	57.13	67.09	1.6	6	7/29/2010	980		1,840	<0.001	<0.001	<0.001	<0.003	73.9	Silt to clear No odor
1	57.28	67.09	1.6	6	10/26/2010	560	795	1,330	<0.001	<0.001	<0.001	<0.003	81.2	Silt to clear No odor
1	57.24	67.12	1.6	6	2/16/2011	800		1,750	<0.001	<0.001	<0.001	<0.003	68	Silt to clear No odor
1	57.15	67.12	1.6	6	6/1/2011	396		965	<0.001	<0.001	<0.001	<0.003	69.4	Silt to clear No odor
1	57.21	67.12	1.6	6	8/30/2011	352		888	<0.001	<0.001	<0.001	<0.003	75.7	Silt to clear No odor
1	57.19	67.12	1.6	6	12/1/2011	1,100	662	2,310	<0.001	<0.001	<0.001	<0.003	76.3	Silt to clear No odor
1	57.89	67.12	1.5	6	11/15/2013	1,040	1,040	2,250	XXX	XXX	XXX	XXX	69.4	Silt to clear No odor
1	57.98	67.12	1.5	6	3/4/2014	920		2,030	XXX	XXX	XXX	XXX	79.9	Silt to clear No odor
1	58.08	67.12	1.4	6	6/3/2014	800		1,720	XXX	XXX	XXX	XXX	55.2	Silt to clear No odor
1	58.16	67.12	1.4	6	8/28/2014	750		1,840	XXX	XXX	XXX	XXX	73.3	Silt to clear No odor

Table 2

ROC - Vacuum K-35-1 boot (1R425-03)
Unit Letter K, Section 35, T17S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
1	57.75	67.12	1.5	6	11/21/2014	460	733	1,070	XXX	XXX	XXX	XXX	43.3	Silt to clear No odor
1	57.67	67.12	1.5	6	3/3/2015	499		1,230	XXX	XXX	XXX	XXX	74.6	Silt to clear No odor
1	58.21	67.12	1.4	6	6/3/2015	470		1,250	XXX	XXX	XXX	XXX	75.6	Silt to clear No odor
1	58.43	67.12	1.4	6	8/22/2015	292		1,090	XXX	XXX	XXX	XXX	42.6	Silt to clear No odor
1	58.54	67.12	1.37	6	11/8/2015	432	423	1,210	XXX	XXX	XXX	XXX	76.3	Silt to clear No odor
1	58.53	67.12	1.4	6	2/26/2016	830		1,660	XXX	XXX	XXX	XXX	74	Silt to clear No odor
1	58.58	67.12	1.4	6	5/21/2016	740		2,040	XXX	XXX	XXX	XXX	68	Silt to clear No odor
1	58.51	67.12	1.4	6	9/10/2016	520		1,560	XXX	XXX	XXX	XXX	71	Silt to clear No odor
1	58.74	67.12	1.3	6	11/10/2016	430	630	1,030	XXX	XXX	XXX	XXX	73	Silt to clear No odor
1	58.77	67.12	1.3	6	2/22/2017	850		1,840	XXX	XXX	XXX	XXX	79	Silt to clear No odor
1	58.77	67.12	1.3	6	5/25/2017	960		2,490	XXX	XXX	XXX	XXX	76	Silt to clear No odor
1	58.86	67.12	1.3	6	9/16/2017	1,040		2,330	XXX	XXX	XXX	XXX	76	Silt to clear No odor
1	58.91	67.12	1.3	6	12/2/2017	1,020	968	2,240	XXX	XXX	XXX	XXX	77	Silt to clear No odor
1	58.94	67.12	1.3	6	2/28/2018	1,300		2,310	XXX	XXX	XXX	XXX	77.8	Silt to clear No odor
1	59.05	67.12	1.3	6	5/15/2018	1,300		2,670	XXX	XXX	XXX	XXX	94	Silt to clear No odor
1	59.28	67.12	1.3	6	9/8/2018	1,120		2,640	XXX	XXX	XXX	XXX	77.5	Silt to clear No odor
1	59.58	67.12	1.2	6	11/13/2018	1,500	1,305	2,340	XXX	XXX	XXX	XXX	73	Silt to clear No odor
1	59.95	67.12	1.1	6	3/6/2019	870		1,840	XXX	XXX	XXX	XXX	72	Silt to clear No odor
1	59.93	67.12	1.2	6	5/29/2019	900		2,270	XXX	XXX	XXX	XXX	69	Silt to clear No odor
1	60.28	67.12	1.1	6	9/6/2019	640		1,660	XXX	XXX	XXX	XXX	73	Silt to clear No odor
1	60.26	67.12	1.1	6	11/16/2019	580	748	1,230	XXX	XXX	XXX	XXX	66	Silt to clear No odor
1	60.28	67.12	1.1	6	3/7/2020	328		824	XXX	XXX	XXX	XXX	71.8	Silt to clear No odor
1	60.43	67.12	1.1	6	9/12/2020	388	358	982	XXX	XXX	XXX	XXX	57.8	Silt to clear No odor
1	61.12	67.12	1	6	3/13/2021	352		909	XXX	XXX	XXX	XXX	61.4	Silt to clear No odor
1	61.65	67.12	0.9	6	6/19/2021	660		1,430	XXX	XXX	XXX	XXX	75.8	Silt to clear No odor
1	62.12	67.12	0.8	6	9/11/2021	88		474	XXX	XXX	XXX	XXX	72	Silt to clear No odor
1	62.12	67.12	0.8	6	11/15/2021	156	314	523	XXX	XXX	XXX	XXX	77.5	Silt to clear No odor
1	61.74	67.12	0.9	6	3/11/2022	192		570	XXX	XXX	XXX	XXX	56.2	Silt to clear No odor
1	61.63	67.12	0.9	6	6/8/2022	168		542	XXX	XXX	XXX	XXX	64.2	Silt to clear No odor

Table 2

ROC - Vacuum K-35-1 boot (1R425-03)
Unit Letter K, Section 35, T17S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
1	61.76	67.12	0.9	6	9/12/2022	156		535	XXX	XXX	XXX	XXX	63.2	Silt to clear No odor
1	62.24	67.12	0.8	6	12/5/2022	212	182	632	XXX	XXX	XXX	XXX	31	Silt to clear No odor
1	62.34	67.12	0.8	6	3/15/2023	144		616	XXX	XXX	XXX	XXX	63.8	Silt to clear No odor
1	62.39	67.12	0.8	6	6/7/2023	220		702	XXX	XXX	XXX	XXX	62.8	Silt to clear No odor
1	62.19	67.12	0.8	5	9/13/2023	156		604	XXX	XXX	XXX	XXX	71.5	Silt to clear No odor
1	62.09	67.12	0.8	6	10/14/2023	176	174	684	XXX	XXX	XXX	XXX	71.3	Silt to clear No odor
1	62.05	67.12	0.8	6	3/11/2024	192		512	XXX	XXX	XXX	XXX	72.1	Silt to clear No odor
1	62.13	67.12	0.8	5	6/4/2024	140		581	XXX	XXX	XXX	XXX	72.2	Silt to clear No odor
1	62.2	67.12	0.8	6	8/13/2024	152		586	XXX	XXX	XXX	XXX	54.3	Silt to clear No odor
1	62.22	67.12	0.8	5	10/29/2024	140	156	586	XXX	XXX	XXX	XXX	55.9	Silt to clear No odor

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
2	54.51	65.2	1.7	10	10/19/2006	26	26	354	<0.001	<0.001	<0.001	<0.001	61.9	Clear some sand No odor
2	54.75	65.45	1.7	8	2/21/2007	29		348	<0.001	<0.001	<0.001	<0.001	59.2	Clear some sand No odor
2	54.86	65.45	1.7	8	5/22/2007	25		376	<0.001	<0.001	<0.001	<0.001	47.9	Clear some sand No odor
2	55.12	65.45	1.7	8	8/7/2007	27		354	<0.001	<0.001	<0.001	<0.002	54.2	Clear Some Sand No Odor
2	XXX	XXX	XXX	8	10/16/2007	28	27	382	<0.001	<0.001	<0.001	<0.003	59.4	RISER AND PAD DISPLACED DEPTH READINGS NOT ACCURATE Clear some sand No odor
2	XXX	XXX	XXX	8	1/30/2008	80		418	<0.001	<0.001	<0.001	<0.003	72.9	Clear some sand No odor Well casing has been displaced
2	56.1	65.45	1.5	8	4/30/2008	32		417	<0.002	<0.002	<0.002	<0.006	64.7	Clear some sand No odor Well casing is displaced
2	56.34	65.45	1.5	8	7/30/2008	32		336	<0.001	<0.001	<0.001	<0.003	67	Clear some sand No odor
2	56.59	64.45	1.4	8	11/10/2008	28	43	397	<0.001	<0.001	<0.001	<0.003	69.4	Clear some sand No odor

Table 2

ROC - Vacuum K-35-1 boot (1R425-03)
Unit Letter K, Section 35, T17S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
2	56.58	65.39	1.4	8	1/30/2009	28		379	<0.001	<0.001	<0.001	<0.003	60	Clear some sand No odor
2	56.57	65.61	1.4	8	5/1/2009	28		299	<0.001	<0.001	<0.001	<0.003	60.5	Clear some sand No odor
2	56.84	65.61	1.4	6	8/4/2009	28		411	<0.001	<0.001	<0.001	<0.003	58.6	Clear some sand No odor
2	56.99	65.61	1.4	6	10/20/2009	28	28	406	<0.001	<0.001	<0.001	<0.003	58.6	Clear some sand No odor
2	57.1	65.6	1.4	6	1/27/2010	32		372	<0.001	<0.001	<0.001	<0.003	74.1	Clear some sand No odor
2	57.13	65.6	1.4	6	4/28/2010	32		396	<0.001	<0.001	<0.001	<0.003	75.8	Clear some sand No odor
2	57.22	65.6	1.3	6	7/29/2010	32		423	<0.001	<0.001	<0.001	<0.003	64.2	Clear some sand No odor
2	57.36	65.6	1.3	6	10/26/2010	32	32	386	<0.001	<0.001	<0.001	<0.003	69.1	Clear some sand No odor
2	57.44	65.85	1.3	6	2/16/2011	32		407	<0.001	<0.001	<0.001	<0.003	57	Clear some sand No odor
2	57.38	65.85	1.4	6	6/1/2011	32		383	<0.001	<0.001	<0.001	<0.003	61.6	Clear some sand No odor
2	57.41	65.85	1.4	6	8/30/2011	32		362	<0.001	<0.001	<0.001	<0.003	59.2	Clear some sand No odor
2	57.51	65.85	1.3	6	12/1/2011	40	34	391	<0.001	<0.001	<0.001	<0.003	70.3	Clear some sand No odor
2	57.74	65.85	1.3	6	5/29/2012	36		434	XXX	XXX	XXX	XXX	65.7	Clear some sand No odor
2	57.92	65.85	1.3	6	11/15/2012	36	36	389	XXX	XXX	XXX	XXX	60.5	Clear some sand No odor
2	57.9	65.85	1.3	6	5/28/2013	36		424	XXX	XXX	XXX	XXX	66.1	Clear some sand No odor
2	58.09	65.85	1.2	6	11/15/2013	36	36	408	XXX	XXX	XXX	XXX	62.2	Clear some sand No odor
2	58.19	65.85	1.2	6	3/4/2014	32		520	XXX	XXX	XXX	XXX	36.6	Clear some sand No odor
2	58.26	65.85	1.2	6	6/3/2014	36		280	XXX	XXX	XXX	XXX	53.2	Clear some sand No odor
2	58.34	65.85	1.2	6	8/28/2014	44		432	XXX	XXX	XXX	XXX	56.1	Clear some sand No odor
2	57.95	65.85	1.3	6	11/21/2014	32	36	346	XXX	XXX	XXX	XXX	47.8	Clear some sand No odor
2	57.9	65.85	1.3	6	3/3/2015	40		372	XXX	XXX	XXX	XXX	45.4	Clear some sand No odor
2	58.28	65.85	1.2	6	6/3/2015	60		450	XXX	XXX	XXX	XXX	29.8	Clear some sand No odor
2	58.59	65.85	1.2	6	8/22/2015	36		436	XXX	XXX	XXX	XXX	41.2	Clear some sand No odor
2	58.66	65.85	1.15	6	11/8/2015	40	44	436	XXX	XXX	XXX	XXX	57.1	Clear some sand No odor
2	58.75	65.85	1.1	6	2/26/2016	48		450	XXX	XXX	XXX	XXX	60.6	Clear some sand No odor
2	58.79	65.85	1.4	6	5/21/2016	32		354	XXX	XXX	XXX	XXX	56.6	Clear some sand No odor
2	58.78	65.85	1.4	6	9/10/2016	36		420	XXX	XXX	XXX	XXX	50	Clear some sand No odor
2	58.95	65.85	1.1	6	11/10/2016	68	46	444	XXX	XXX	XXX	XXX	32	Clear some sand No odor
2	58.98	65.85	1.1	6	2/22/2017	40		414	XXX	XXX	XXX	XXX	59	Clear some sand No odor

Table 2

ROC - Vacuum K-35-1 boot (1R425-03)
Unit Letter K, Section 35, T17S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
2	58.97	65.85	1.1	6	5/25/2017	84		586	XXX	XXX	XXX	XXX	53	Clear some sand No odor
2	59.1	65.85	1.1	6	9/16/2017	60		458	XXX	XXX	XXX	XXX	75	Clear some sand No odor
2	59.14	65.85	1.1	6	12/2/2017	32	54	390	XXX	XXX	XXX	XXX	59	Clear some sand No odor
2	59.2	65.85	1.1	6	2/28/2018	44		228	XXX	XXX	XXX	XXX	62.5	Clear some sand No odor
2	59.3	65.85	1	6	5/15/2018	36		208	XXX	XXX	XXX	XXX	68.4	Clear some sand No odor
2	59.45	65.85	1	6	9/8/2018	36		376	XXX	XXX	XXX	XXX	63.2	Clear some sand No odor
2	59.72	65.85	1	6	11/13/2018	40	39	258	XXX	XXX	XXX	XXX	57.6	Clear some sand No odor
2	60.1	65.85	0.9	6	3/6/2019	44		436	XXX	XXX	XXX	XXX	62	Clear some sand No odor
2	60.11	65.85	0.9	6	5/29/2019	32		453	XXX	XXX	XXX	XXX	63	Clear some sand No odor
2	60.31	65.85	0.9	6	9/6/2019	48		504	XXX	XXX	XXX	XXX	53	Clear some sand No odor
2	60.44	65.85	0.9	6	11/16/2019	76	50	485	XXX	XXX	XXX	XXX	71	Clear some sand No odor
2	60.42	65.85	0.9	6	3/7/2020	40		422	XXX	XXX	XXX	XXX	57.1	Clear some sand No odor
2	60.6	65.85	0.8	6	9/12/2020	40	40	414	XXX	XXX	XXX	XXX	49.7	Clear some sand No odor
2	61.2	65.85	0.7	6	3/13/2021	76		431	XXX	XXX	XXX	XXX	62.1	Clear some sand No odor
2	61.69	65.85	0.7	6	6/19/2021	56		416	XXX	XXX	XXX	XXX	51.4	Clear some sand No odor
2	62.06	65.85	0.6	6	9/11/2021	52		467	XXX	XXX	XXX	XXX	50.8	Clear some sand No odor
2	62.06	65.85	0.6	6	11/15/2021	48	58	382	XXX	XXX	XXX	XXX	84.5	Clear some sand No odor
2	61.79	65.85	0.6	6	3/11/2022	56		384	XXX	XXX	XXX	XXX	68.2	Clear some sand No odor
2	61.76	65.85	0.7	6	6/8/2022	52		436	XXX	XXX	XXX	XXX	71.4	Clear some sand No odor
2	61.81	65.85	0.6	6	9/12/2022	60		408	XXX	XXX	XXX	XXX	49.5	Clear some sand No odor
2	62.3	65.85	0.6	6	12/5/2022	68	59	431	XXX	XXX	XXX	XXX	66.7	Clear some sand No odor
2	62.45	65.85	0.5	6	3/15/2023	60		363	XXX	XXX	XXX	XXX	64.6	Clear some sand No odor
2	62.51	65.85	0.5	6	6/7/2023	60		434	XXX	XXX	XXX	XXX	71.8	Clear some sand No odor
2	62.3	65.85	0.6	5	9/13/2023	60		375	XXX	XXX	XXX	XXX	68.6	Clear some sand No odor
2	62.2	65.85	0.6	5	10/14/2023	60	60	408	XXX	XXX	XXX	XXX	71.2	Clear some sand No odor
2	62.25	65.85	0.6	6	3/11/2024	84		317	XXX	XXX	XXX	XXX	68.7	Clear some sand No odor
2	62.32	65.85	0.6	6	6/4/2024	84		449	XXX	XXX	XXX	XXX	69.7	Clear some sand No odor
2	62.37	65.85	0.6	6	8/13/2024	116		489	XXX	XXX	XXX	XXX	55.7	Clear some sand No odor
2	62.4	65.85	0.6	6	10/29/2024	100	96	470	XXX	XXX	XXX	XXX	52.9	Clear some sand No odor

Table 2

ROC - Vacuum K-35-1 boot (1R425-03)
Unit Letter K, Section 35, T17S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
3	57.05	67.6	1.7	10	6/28/2006	140		540	<0.002	<0.002	<0.002	<0.002	117	
3	57.12	67.6	1.7	10	10/19/2006	165	153	570	<0.001	<0.001	<0.001	<0.001	75.8	Clear some sand No odor
3	57.35	66.72	1.5	8	2/21/2007	178		550	<0.001	<0.001	<0.001	<0.001	82	Clear some sand No odor
3	57.46	66.72	1.5	8	5/22/2007	128		530	<0.001	<0.001	<0.001	<0.001	61.4	Clear some sand No odor
3	57.75	66.72	1.4	8	8/7/2007	134		536	<0.001	<0.001	<0.001	<0.001	69	Clear some sand No odor
3	57.76	66.72	1.4	8	10/16/2007	112	138	537	<0.001	<0.001	<0.001	<0.003	83.1	Clear some sand No odor
3	57.92	66.75	1.4	8	1/30/2008	88		510	<0.001	<0.001	<0.001	<0.003	79.2	Clear some sand No odor
3	57.88	66.75	1.4	8	4/30/2008	84		543	<0.002	<0.002	<0.002	<0.006	88.4	Clear some sand No odor
3	58.17	66.75	1.4	8	7/30/2008	76		418	<0.001	<0.001	<0.001	<0.003	77	Clear some sand No odor
3	58.4	66.75	1.3	8	11/10/2008	76	81	448	<0.001	<0.001	<0.001	<0.003	81.4	Clear some sand No odor
3	58.46	66.42	1.3	8	1/30/2009	76		442	<0.001	<0.001	<0.001	<0.003	68.7	Clear some sand No odor
3	58.45	66.42	1.3	8	5/1/2009	84		477	<0.001	<0.001	<0.001	<0.003	64	Clear some sand No odor
3	58.6	66.42	1.3	8	8/4/2009	72		424	<0.001	<0.001	<0.001	<0.003	63.8	Clear some sand No odor
3	58.88	66.42	1.2	8	10/20/2009	100	83	466	<0.001	<0.001	<0.001	<0.003	59.5	Clear some sand No odor
3	58.93	66.41	1.2	8	4/28/2010	152		534	<0.001	<0.001	<0.001	<0.003	74.7	Clear some sand No odor
3	58.92	66.41	1.2	8	3/27/2010	128		469	<0.001	<0.001	<0.001	<0.003	68	Clear some sand No odor
3	59.18	66.41	1.2	8	7/29/2010	184		608	<0.001	<0.001	<0.001	<0.003	84.5	Clear some sand No odor
3	59.35	66.41	1.1	8	10/26/2010	164	157	621	<0.001	<0.001	<0.001	<0.003	95.4	Clear some sand No odor
3	59.24	66.83	1.2	8	2/16/2011	128		522	<0.001	<0.001	<0.001	<0.003	63.7	Clear some sand No odor
3	59.12	66.83	1.2	8	6/1/2011	148		539	<0.001	<0.001	<0.001	<0.003	91.1	Clear some sand No odor
3	59.19	66.83	1.2	8	8/30/2011	156		560	<0.001	<0.001	<0.001	<0.003	91.7	Clear some sand No odor
3	59.2	66.83	1.2	8	12/1/2011	176	152	595	<0.001	<0.001	<0.001	<0.003	92.4	Clear some sand No odor
3	59.55	66.83	1.2	8	5/29/2012	204		676	XXX	XXX	XXX	XXX	71.9	Clear some sand No odor
3	59.63	66.83	1.2	8	11/15/2012	252	228	742	XXX	XXX	XXX	XXX	91.2	Clear some sand No odor
3	59.68	66.83	1.1	8	5/28/2013	280		823	XXX	XXX	XXX	XXX	81.7	Clear some sand No odor
3	59.82	66.83	1.1	8	11/15/2013	308	294	856	XXX	XXX	XXX	XXX	74	Clear some sand No odor
3	59.98	66.83	1.1	8	3/4/2014	312		790	XXX	XXX	XXX	XXX	96	Clear some sand No odor
3	60.07	66.83	1.1	8	6/3/2014	356		910	XXX	XXX	XXX	XXX	96.6	Clear some sand No odor
3	60.08	66.83	1.1	8	8/28/2014	328		926	XXX	XXX	XXX	XXX	84	Clear some sand No odor

Table 2

ROC - Vacuum K-35-1 boot (1R425-03)
Unit Letter K, Section 35, T17S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
3	59.74	66.83	1.1	8	11/21/2014	336	333	764	XXX	XXX	XXX	XXX	74.4	Clear some sand No odor
3	59.67	66.83	1.1	8	3/3/2015	304		848	XXX	XXX	XXX	XXX	89	Clear some sand No odor
3	60.2	66.83	1.1	8	6/3/2015	244		1,040	XXX	XXX	XXX	XXX	42.5	Clear some sand No odor
3	60.44	66.83	1	8	8/22/2015	284		964	XXX	XXX	XXX	XXX	41.8	Clear some sand No odor
3	60.62	66.83	0.99	8	11/8/2015	320	288	1,090	XXX	XXX	XXX	XXX	48.1	Clear some sand No odor
3	60.58	66.83	1	8	2/26/2016	430		1,110	XXX	XXX	XXX	XXX	76	Clear some sand No odor
3	60.62	66.83	1	8	5/21/2016	284		1,110	XXX	XXX	XXX	XXX	30.4	Clear some sand No odor
3	60.64	66.83	1	8	9/10/2016	332		964	XXX	XXX	XXX	XXX	64	Clear some sand No odor
3	60.78	66.83	1	8	11/10/2016	300	337	852	XXX	XXX	XXX	XXX	93	Clear some sand No odor
3	60.74	66.83	1	8	2/22/2017	280		1,110	XXX	XXX	XXX	XXX	71	Clear some sand No odor
3	60.75	66.83	1	8	5/25/2017	296		886	XXX	XXX	XXX	XXX	84	Clear some sand No odor
3	60.85	66.83	1	8	9/16/2017	320		898	XXX	XXX	XXX	XXX	99	Clear some sand No odor
3	60.89	66.83	1	8	12/2/2017	220	279	926	XXX	XXX	XXX	XXX	56	Clear some sand No odor
3	60.92	66.83	0.9	8	2/28/2018	328		700	XXX	XXX	XXX	XXX	123	Clear some sand No odor
3	61.03	66.83	0.9	8	5/15/2018	180		468	XXX	XXX	XXX	XXX	56.2	Clear some sand No odor
3	61.23	66.83	0.9	8	9/8/2018	288		816	XXX	XXX	XXX	XXX	118	Clear some sand No odor
3	61.64	66.83	0.8	8	11/13/2018	300	274	697	XXX	XXX	XXX	XXX	126	Clear some sand No odor
3	62.02	66.83	0.8	6	3/6/2019	324		906	XXX	XXX	XXX	XXX	115	Clear some sand No odor
3	61.95	66.83	0.8	6	5/29/2019	312		889	XXX	XXX	XXX	XXX	114	Clear some sand No odor
3	62.32	66.83	0.7	6	9/6/2019	320		942	XXX	XXX	XXX	XXX	93	Clear some sand No odor
3	62.27	66.83	0.7	6	11/16/2019	272	307	833	XXX	XXX	XXX	XXX	162	Clear some sand No odor
3	60.23	66.83	1.1	6	3/7/2020	312		810	XXX	XXX	XXX	XXX	97.8	Clear some sand No odor
3	62.51	66.83	0.7	6	9/12/2020	296	304	703	XXX	XXX	XXX	XXX	76.7	Clear some sand No odor
3	63.28	66.83	0.6	6	3/13/2021	224		698	XXX	XXX	XXX	XXX	79.4	Clear some sand No odor
3	63.82	66.83	0.6	6	6/19/2021	148		579	XXX	XXX	XXX	XXX	83.2	Clear some sand No odor
3	64.33	66.83	0.4	6	9/11/2021	116		526	XXX	XXX	XXX	XXX	77.5	Clear some sand No odor
3	64.33	66.83	0.4	6	11/15/2021	92	145	459	XXX	XXX	XXX	XXX	88.2	Clear some sand No odor
3	63.78	66.83	0.5	6	3/11/2022	96		445	XXX	XXX	XXX	XXX	70.1	Clear some sand No odor
3	63.6	66.83	0.5	6	6/8/2022	88		428	XXX	XXX	XXX	XXX	74.2	Clear some sand No odor

Table 2

ROC - Vacuum K-35-1 boot (1R425-03)
Unit Letter K, Section 35, T17S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
3	63.77	66.83	0.5	6	9/12/2022	96		467	XXX	XXX	XXX	XXX	68.2	Clear some sand No odor
3	64.26	66.83	0.4	6	12/5/2022	52	83	462	XXX	XXX	XXX	XXX	54.5	Clear some sand No odor
3	64.43	66.83	0.4	6	3/15/2023	68		378	XXX	XXX	XXX	XXX	59.1	Clear some sand No odor
3	64.49	66.83	0.4	6	6/7/2023	96		519	XXX	XXX	XXX	XXX	69.8	Clear some sand No odor
3	64.22	66.83	0.4	5	9/13/2023	132		527	XXX	XXX	XXX	XXX	77.4	Clear some sand No odor
3	64.12	66.83	0.4	5	10/14/2023	96	98	557	XXX	XXX	XXX	XXX	59	Clear some sand No odor
3	64.02	66.83	0.4	6	3/11/2024	132		504	XXX	XXX	XXX	XXX	60.2	Clear some sand No odor
3	64.05	66.83	0.4	6	6/4/2024	124		533	XXX	XXX	XXX	XXX	70.7	Clear some sand No odor
3	64.12	66.83	0.4	6	8/13/2024	112		539	XXX	XXX	XXX	XXX	57.2	Clear some sand No odor
3	64.15	66.83	0.4	6	10/29/2024	100	117	481	XXX	XXX	XXX	XXX	45.7	Clear some sand No odor

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
4	57.59	68.33	1.7	8	2/21/2007	6,770		9,320	<0.001	<0.001	<0.001	<0.001	178	Clear some sand No odor
4	58.16	68.33	1.6	10	5/22/2007	6,390		10,400	<0.001	<0.001	<0.001	<0.001	183	Clear some sand No odor
4	58.39	68.33	1.6	8	8/7/2007	6,790		13,000	<0.001	<0.001	<0.001	<0.002	89.5	Clear some sand No odor
4	58.41	68.33	1.6	8	10/16/2007	4,000	5,988	7,420	<0.001	<0.001	<0.001	<0.003	91.4	Clear some sand No odor
4	58.56	68.35	1.6	8	1/30/2008	4,550		8,260	<0.001	<0.001	<0.001	<0.003	89.9	Clear some sand No odor
4	58.08	68.35	1.6	8	4/30/2008	3,450		6,430	<0.002	<0.002	<0.002	<0.006	99.2	Clear some sand No odor
4	58.36	68.35	1.6	8	7/30/2008	2,580		4,990	<0.001	<0.001	<0.001	<0.003	109	Clear some sand No odor
4	58.47	68.35	1.6	8	11/10/2008	1,960	3,135	3,860	<0.001	<0.001	<0.001	<0.003	81.8	Clear some sand No odor
4	58.49	68.27	1.6	8	1/30/2009	2,080		3,540	<0.001	<0.001	<0.001	<0.003	88.9	Clear some sand No odor
4	58.59	68.27	1.5	8	5/1/2009	2,300		4,600	<0.001	<0.001	<0.001	<0.003	74.5	Clear some sand No odor
4	58.73	68.27	1.5	6	8/4/2009	1,500		2,960	<0.001	<0.001	<0.001	<0.003	75.8	Clear some sand No odor
4	58.89	68.27	1.5	6	10/20/2009	1,200	1,770	2,540	<0.001	<0.001	<0.001	<0.003	72.7	Clear some sand No odor
4	59.08	68.16	1.5	8	4/28/2010	460		1,250	<0.001	<0.001	<0.001	<0.003	69.9	Clear some sand No odor
4	59.04	68.16	1.5	8	1/27/2010	800		1,800	<0.001	<0.001	<0.001	<0.003	86	Clear some sand No odor

Table 2

ROC - Vacuum K-35-1 boot (1R425-03)
Unit Letter K, Section 35, T17S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
4	59.27	66.16	1.4	8	7/29/2010	650		1,430	<0.001	<0.001	<0.001	<0.003	76.9	Clear some sand No odor
4	59.42	68.16	1.4	8	10/26/2010	520	608	1,300	<0.001	<0.001	<0.001	<0.003	75	Clear some sand No odor
4	59.15	68.15	1.4	8	2/16/2011	680		1,600	<0.001	<0.001	<0.001	<0.003	72	Clear some sand No odor
4	59.19	68.15	1.4	8	6/1/2011	380		941	<0.001	<0.001	<0.001	<0.003	69.1	Clear some sand No odor
4	59.35	68.15	1.4	8	8/30/2011	380		908	<0.001	<0.001	<0.001	<0.003	71.8	Clear some sand No odor
4	59.32	68.15	1.4	8	12/1/2011	700	535	1,470	<0.001	<0.001	<0.001	<0.003	78.3	Clear some sand No odor
4	59.64	68.15	1.4	8	5/29/2012	610		1,560	XXX	XXX	XXX	XXX	81.5	Clear some sand No odor
4	59.72	68.15	1.3	8	11/15/2012	690	650	1,660	XXX	XXX	XXX	XXX	80.6	Clear some sand No odor
4	59.83	68.15	1.3	8	5/28/2013	650		1,550	XXX	XXX	XXX	XXX	71	Clear some sand No odor
4	59.99	68.15	1.3	8	11/15/2013	720	685	1,630	XXX	XXX	XXX	XXX	75.5	Clear some sand No odor
4	60.07	68.15	1.3	8	3/4/2014	870		1,560	XXX	XXX	XXX	XXX	81.8	Clear some sand No odor
4	60.23	68.15	1.3	8	6/3/2014	810		1,730	XXX	XXX	XXX	XXX	78.8	Clear some sand No odor
4	60.31	68.15	1.3	8	8/28/2014	830		1,840	XXX	XXX	XXX	XXX	75.5	Clear some sand No odor
4	59.87	68.15	1.3	8	11/21/2014	640	788	1,350	XXX	XXX	XXX	XXX	67.5	Clear some sand No odor
4	59.79	68.15	1.3	8	3/3/2015	750		1,770	XXX	XXX	XXX	XXX	50	Clear some sand No odor
4	60.35	68.15	1.2	8	6/3/2015	510		1,210	XXX	XXX	XXX	XXX	71.6	Clear some sand No odor
4	60.55	68.15	1.2	8	8/22/2015	340		1,220	XXX	XXX	XXX	XXX	49.4	Clear some sand No odor
4	60.68	68.15	1.2	8	11/8/2015	344	486	1,210	XXX	XXX	XXX	XXX	59.6	Clear some sand No odor
4	60.72	68.15	1.2	8	2/26/2016	440		1,050	XXX	XXX	XXX	XXX	82	Clear some sand No odor
4	60.78	68.15	1.2	8	5/21/2016	280		1,100	XXX	XXX	XXX	XXX	34.1	Clear some sand No odor
4	60.67	68.15	1.2	8	9/10/2016	336		980	XXX	XXX	XXX	XXX	77	Clear some sand No odor
4	60.91	68.15	1.2	8	11/10/2016	430	372	1,150	XXX	XXX	XXX	XXX	69	Clear some sand No odor
4	60.9	68.15	1.2	8	2/22/2017	256		1,010	XXX	XXX	XXX	XXX	56	Clear some sand No odor
4	60.91	68.15	1.2	8	5/25/2017	392		974	XXX	XXX	XXX	XXX	63	Clear some sand No odor
4	61.01	68.15	1.1	8	9/16/2017	460		1,240	XXX	XXX	XXX	XXX	79	Clear some sand No odor
4	61.05	68.15	1.1	8	12/2/2017	300	352	836	XXX	XXX	XXX	XXX	74	Clear some sand No odor
4	61.07	68.15	1.1	8	2/28/2018	320		892	XXX	XXX	XXX	XXX	132	Clear some sand No odor
4	61.17	68.15	1.1	8	5/15/2018	228		868	XXX	XXX	XXX	XXX	57.9	Clear some sand No odor
4	61.4	68.15	1.1	6	9/8/2018	610		1,260	XXX	XXX	XXX	XXX	74	Clear some sand No odor

Table 2

ROC - Vacuum K-35-1 boot (1R425-03)
Unit Letter K, Section 35, T17S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
4	61.69	68.15	1	6	11/13/2018	344	376	713	XXX	XXX	XXX	XXX	76	Clear some sand No odor
4	62.07	68.15	1	6	3/6/2019	128		496	XXX	XXX	XXX	XXX	74	Clear some sand No odor
4	62.08	68.15	1	6	5/29/2019	132		599	XXX	XXX	XXX	XXX	72	Clear some sand No odor
4	62.41	68.15	0.9	6	9/6/2019	148		572	XXX	XXX	XXX	XXX	68	Clear some sand No odor
4	62.37	64.15	0.9	6	11/16/2019	140	137	564	XXX	XXX	XXX	XXX	74	Clear some sand No odor
4	62.36	68.15	0.9	6	3/7/2020	132		543	XXX	XXX	XXX	XXX	77.6	Clear some sand No odor
4	62.57	68.15	0.9	6	9/12/2020	140	136	514	XXX	XXX	XXX	XXX	71.4	Clear some sand No odor
4	63.27	68.15	0.8	6	3/13/2021	156		594	XXX	XXX	XXX	XXX	66.1	Clear some sand No odor
4	63.81	68.15	0.7	6	6/19/2021	96		492	XXX	XXX	XXX	XXX	69.5	Clear some sand No odor
4	63.79	68.15	0.7	6	9/11/2021	84		457	XXX	XXX	XXX	XXX	70.1	Clear some sand No odor
4	64.79	68.15	0.5	6	11/15/2021	152	122	536	XXX	XXX	XXX	XXX	79	Clear some sand No odor
4	63.85	68.15	0.7	6	3/11/2022	36		344	XXX	XXX	XXX	XXX	60.6	Clear some sand No odor
4	63.75	68.15	0.7	6	6/8/2022	52		382	XXX	XXX	XXX	XXX	70.2	Clear some sand No odor
4	63.87	68.15	0.7	6	9/12/2022	72		430	XXX	XXX	XXX	XXX	62	Clear some sand No odor
4	64.36	68.15	0.8	6	12/5/2022	80	60	421	XXX	XXX	XXX	XXX	63	Clear some sand No odor
4	64.47	68.15	0.6	6	3/15/2023	56		375	XXX	XXX	XXX	XXX	59.6	Clear some sand No odor
4	64.55	68.15	0.6	6	6/7/2023	64		402	XXX	XXX	XXX	XXX	69.2	Clear some sand No odor
4	64.3	68.15	0.6	5	9/13/2023	104		498	XXX	XXX	XXX	XXX	96.8	Clear some sand No odor
4	64.2	68.15	0.6	5	10/14/2023	80	76	542	XXX	XXX	XXX	XXX	66.3	Clear some sand No odor
4	64.15	68.15	0.6	6	3/11/2024	132		508	XXX	XXX	XXX	XXX	63.6	Clear some sand No odor
4	64.26	68.15	0.6	6	6/4/2024	164		674	XXX	XXX	XXX	XXX	74.4	Clear some sand No odor
4	64.31	68.15	0.6	6	8/13/2024	120		494	XXX	XXX	XXX	XXX	56.8	Clear some sand No odor
4	64.34	68.15	0.6	6	10/29/2024	100	129	493	XXX	XXX	XXX	XXX	49	Clear some sand No odor

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
RW-1	XXX	92.9	XXX	XXX	7/30/2008	1,070		2,200	<0.001	<0.001	<0.001	<0.003	61	Clear some sand No odor

Table 2

ROC - Vacuum K-35-1 boot (1R425-03)
Unit Letter K, Section 35, T17S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
RW-1	XXX	92.9	XXX	XXX	11/10/2008	1,200	1,135	2,360	<0.001	<0.001	<0.001	<0.003	57.9	Clear some sand No odor
RW-1	XXX	92.9	XXX	XXX	1/30/2009	1,680		3,170	<0.001	<0.001	<0.001	<0.003	103	Clear No odor
RW-1	XXX	92.9	XXX	50	5/1/2009	750		1,570	<0.001	<0.001	<0.001	<0.003	54.3	Clear No odor
RW-1	XXX	92.9	XXX	50	8/4/2009	580		1,290	<0.001	<0.001	<0.001	<0.003	60.5	Clear No odor
RW-1	XXX	92.2	XXX	50	10/20/2009	730	935	1,620	<0.001	<0.001	<0.001	<0.003	59	Clear No odor
RW-1	XXX	92.9	XXX	XXX	4/28/2010	490		1,160	<0.001	<0.001	<0.001	<0.003	72.1	Clear No odor
RW-1	XXX	92.9	XXX	100	1/27/2010	1,220		2,360	<0.001	<0.001	<0.001	<0.003	82.8	Clear No odor
RW-1	XXX	92.9	XXX	Pumping	7/29/2010	570		1,330	<0.001	<0.001	<0.001	<0.003	65.2	Clear No odor
RW-1	XXX	92..90	XXX	Pumping	10/26/2010	332	653	888	<0.001	<0.001	<0.001	<0.003	58.5	Clear No odor
RW-1	XXX	92.9	XXX	100	2/16/2011	750		1,670	<0.001	<0.001	<0.001	<0.003	71.3	Clear No odor
RW-1	XXX	92.9	XXX	100	6/1/2011	476		1,130	<0.001	<0.001	<0.001	<0.003	60.5	Clear No odor
RW-1	XXX	92.9	XXX	100	8/30/2011	490		1,090	<0.001	<0.001	<0.001	<0.003	63.1	Clear No odor
RW-1	XXX	92.9	XXX	100	12/1/2011	XXX	572	XXX	XXX	XXX	XXX	XXX	XXX	Well not sampled Solar pump down
RW-1	XXX	XXX	XXX	XXX	9/6/2013	212		645	XXX	XXX	XXX	XXX	XXX	XXX
RW-1	XXX	92.9	XXX	100	11/15/2013	300	256	779	XXX	XXX	XXX	XXX	65.5	Clear No odor
RW-1	XXX	92.9	XXX	100	3/4/2014	364		902	XXX	XXX	XXX	XXX	85	Clear No odor
RW-1	XXX	92.9	XXX	Running	6/3/2014	300		838	XXX	XXX	XXX	XXX	60	Clear No odor
RW-1	XXX	92.9	XXX	Running	8/28/2014	292		762	XXX	XXX	XXX	XXX	58.6	Clear No odor
RW-1	XXX	92.9	XXX	100	11/21/2014	84	260	376	XXX	XXX	XXX	XXX	51.2	Clear No odor
RW-1	XXX	92.9	XXX	100	3/3/2015	252		1,040	XXX	XXX	XXX	XXX	45.9	Clear No odor
RW-1	XXX	92.9	XXX	Running	6/3/2015	240		1,010	XXX	XXX	XXX	XXX	49.1	Clear No odor
RW-1	XXX	92.9	XXX	Running	8/22/2015	292		812	XXX	XXX	XXX	XXX	59.7	Clear No odor
RW-1	XXX	92.9	0	Running	11/8/2015	220	251	636	XXX	XXX	XXX	XXX	60.2	Clear No odor
RW-1	XXX	92.9	XXX	100	2/26/2016	570		1,200	XXX	XXX	XXX	XXX	72	Clear No odor
RW-1	XXX	92.9	XXX	100	5/21/2016	620		1,580	XXX	XXX	XXX	XXX	57	Clear No odor
RW-1	XXX	92.9	XXX	Running	9/10/2016	368		1,060	XXX	XXX	XXX	XXX	65	Clear No odor
RW-1	XXX	92.9	XXX	100	11/10/2016	292	463	1,040	XXX	XXX	XXX	XXX	49	Clear No odor
RW-1	XXX	92.9	XXX	100	2/22/2017	690		1,610	XXX	XXX	XXX	XXX	68	Clear No odor

Table 2

ROC - Vacuum K-35-1 boot (1R425-03)
Unit Letter K, Section 35, T17S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
RW-1	XXX	92.9	XXX	Running	5/25/2017	810		2,020	XXX	XXX	XXX	XXX	76	Clear No odor
RW-1	XXX	92.9	XXX	Running	9/16/2017	156		558	XXX	XXX	XXX	XXX	61	Clear No odor
RW-1	XXX	92.9	XXX	100	12/2/2017	652	577	1,610	XXX	XXX	XXX	XXX	77	Clear No odor
RW-1	XXX	92.9	XXX	100	2/28/2018	680		1,500	XXX	XXX	XXX	XXX	102	Clear No odor
RW-1	XXX	92.9	XXX	100	5/15/2018	820		1,270	XXX	XXX	XXX	XXX	78.1	Clear No odor
RW-1	XXX	92.9	XXX	100	9/8/2018	112		452	XXX	XXX	XXX	XXX	56	Clear No odor
RW-1	XXX	92.9	XXX	100	11/13/2018	480	523	970	XXX	XXX	XXX	XXX	80.2	Clear No odor
RW-1	XXX	92.9	XXX	100	3/6/2019	820		1,840	XXX	XXX	XXX	XXX	73	Clear No odor
RW-1	XXX	92.9	XXX	Running	5/29/2019	108		465	XXX	XXX	XXX	XXX	56	Clear No odor
RW-1	XXX	92.9	XXX	Running	9/6/2019	108		490	XXX	XXX	XXX	XXX	53	Clear No odor
RW-1	XXX	92.9	XXX	100	11/16/2019	40	269	428	XXX	XXX	XXX	XXX	155	Clear No odor
RW-1	XXX	92.9	XXX	100	3/7/2020	212		642	XXX	XXX	XXX	XXX	68.6	Clear No odor
RW-1	XXX	92.9	XXX	100	9/12/2020	264	238	764	XXX	XXX	XXX	XXX	78.4	Clear No odor
RW-1	XXX	92.9	XXX	100	3/13/2021	328		791	XXX	XXX	XXX	XXX	62.6	Clear No odor
RW-1	XXX	92.9	XXX	Running	6/19/2021	120		473	XXX	XXX	XXX	XXX	66.2	Clear No odor
RW-1	XXX	92.9	XXX	Running	9/11/2021	148		564	XXX	XXX	XXX	XXX	53.5	Clear No odor
RW-1	XXX	92.9	XXX	100	11/15/2021	160	189	538	XXX	XXX	XXX	XXX	74.7	Clear No odor
RW-1	XXX	92.9	XXX	100	3/11/2022	224		649	XXX	XXX	XXX	XXX	55.4	Clear No odor
RW-1	XXX	92.9	XXX	Running	6/8/2022	80		404	XXX	XXX	XXX	XXX	79.3	Clear No odor
RW-1	XXX	92.9	XXX	Running	9/12/2022	176		622	XXX	XXX	XXX	XXX	60.1	Clear No odor
RW-1	XXX	92.9	XXX	100	12/5/2022	156	159	772	XXX	XXX	XXX	XXX	32.3	Clear No odor
RW-1	XXX	92.9	XXX	100	3/15/2023	236		563	XXX	XXX	XXX	XXX	69.5	Clear No odor
RW-1	XXX	92.9	XXX	Running	6/7/2023	140		568	XXX	XXX	XXX	XXX	61.9	Clear No odor
RW-1	XXX	92.9	XXX	Running	9/13/2023	120		490	XXX	XXX	XXX	XXX	63.8	Clear No odor
RW-1	XXX	92.9	XXX	Running	10/14/2023	48	136	394	XXX	XXX	XXX	XXX	66.5	Clear No odor
RW-1	XXX	92.9	XXX	100	3/11/2024	188		650	XXX	XXX	XXX	XXX	66	Clear No odor
RW-1	XXX	92.9	XXX	Running	6/4/2024	80		417	XXX	XXX	XXX	XXX	70.8	Clear No odor
RW-1	XXX	92.9	XXX	Running	8/13/2024	76		389	XXX	XXX	XXX	XXX	56.9	Clear No odor
RW-1	XXX	92.9	XXX	Running	10/29/2024	88	108	425	XXX	XXX	XXX	XXX	47.2	Clear No odor

CARDINAL Laboratories

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

March 20, 2024

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM JUNCTION K-35-1

Enclosed are the results of analyses for samples received by the laboratory on 03/13/24 11:37.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	03/13/2024	Sampling Date:	03/11/2024
Reported:	03/20/2024	Sampling Type:	Water
Project Name:	VACUUM JUNCTION K-35-1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T17S-R35E-SEC35 K LEA COUNTY, NM		

Sample ID: MONITOR WELL #1 (H241284-01)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**192**	4.00	03/13/2024	ND	108	108	100	3.77	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**72.1**	10.0	03/14/2024	ND	18.0	90.0	20.0	0.829	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**512**	5.00	03/18/2024	ND	804	80.4	1000	8.08	

Sample ID: MONITOR WELL #2 (H241284-02)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**84.0**	4.00	03/13/2024	ND	108	108	100	3.77	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**68.7**	10.0	03/14/2024	ND	18.0	90.0	20.0	0.829	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**317**	5.00	03/18/2024	ND	804	80.4	1000	8.08	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	03/13/2024	Sampling Date:	03/11/2024
Reported:	03/20/2024	Sampling Type:	Water
Project Name:	VACUUM JUNCTION K-35-1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T17S-R35E-SEC35 K LEA COUNTY, NM		

Sample ID: MONITOR WELL #3 (H241284-03)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**132**	4.00	03/13/2024	ND	108	108	100	3.77	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**60.2**	10.0	03/14/2024	ND	18.0	90.0	20.0	0.829	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**504**	5.00	03/18/2024	ND	804	80.4	1000	8.08	

Sample ID: MONITOR WELL #4 (H241284-04)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**132**	4.00	03/13/2024	ND	108	108	100	3.77	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**63.6**	10.0	03/14/2024	ND	18.0	90.0	20.0	0.829	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**508**	5.00	03/18/2024	ND	804	80.4	1000	8.08	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Lab Reports

CARDINAL Laboratories

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:	03/13/2024	Sampling Date:	03/11/2024
Reported:	03/20/2024	Sampling Type:	Water
Project Name:	VACUUM JUNCTION K-35-1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T17S-R35E-SEC35 K LEA COUNTY, NM		

Sample ID: RECOVERY WELL #1 (H241284-05)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**188**	4.00	03/13/2024	ND	108	108	100	3.77	

Sulfate 375.4 mg/L Analyzed By: CT

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**66.0**	10.0	03/14/2024	ND	18.0	90.0	20.0	0.829	

TDS 160.1 mg/L Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**650**	5.00	03/18/2024	ND	804	80.4	1000	8.08	

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

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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 K-35-1
Project Location: T17S-R35E-Sec35 K ~ Lea County New Mexico	Sampler Signature: Rozanne Johnson (575)631-9310

H241284

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (4 40ml VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1-1Liter HDPE)	NONE	SAMPLING: DATE (2024)	TIME
1	Monitor Well #1	G	1	X								1		3/11	13:20
2	Monitor Well #2	G	1	X								1		3/11	9:05
3	Monitor Well #3	G	1	X								1		3/11	10:20
4	Monitor Well #4	G	1	X								1		3/11	11:50
5	Recovery Well #1	G	1	X								1		3/11	16:10

ANALYSIS REQUEST
(Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005 / TX1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Sulfates	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours
																		X	X	X	
																		X	X	X	
																		X	X	X	
																		X	X	X	
																		X	X	X	

Relinquished by: Rozanne Johnson Date: 3/13/2024 Time: 7:10

Received by: Date: 3/13/2024 Time: 7:11

Relinquished by: Date: 3/13/2024 Time: 10:40

Received By: (Laboratory Staff) Date: 3-13-24 Time: 1137

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

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

CHECKED BY: (Initials)

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

REMARKS:

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

CARDINAL Laboratories

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

June 17, 2024

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM JUNCTION K-35-1

Enclosed are the results of analyses for samples received by the laboratory on 06/11/24 9:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	06/11/2024	Sampling Date:	06/04/2024
Reported:	06/17/2024	Sampling Type:	Water
Project Name:	VACUUM JUNCTION K-35-1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	T17S-R35E-SEC35 K LEA COUNTY, NM		

Sample ID: MONITOR WELL #1 (H243327-01)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**140**	4.00	06/13/2024	ND	100	100	100	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**72.2**	10.0	06/12/2024	ND	19.2	96.2	20.0	0.0520	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**581**	5.00	06/13/2024	ND	466	93.2	500	1.11	

Sample ID: MONITOR WELL #2 (H243327-02)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**84.0**	4.00	06/13/2024	ND	100	100	100	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**69.7**	10.0	06/12/2024	ND	19.2	96.2	20.0	0.0520	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**449**	5.00	06/13/2024	ND	466	93.2	500	1.11	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Lab Reports

CARDINAL Laboratories

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:	06/11/2024	Sampling Date:	06/04/2024
Reported:	06/17/2024	Sampling Type:	Water
Project Name:	VACUUM JUNCTION K-35-1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	T17S-R35E-SEC35 K LEA COUNTY, NM		

Sample ID: MONITOR WELL #3 (H243327-03)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**124**	4.00	06/13/2024	ND	100	100	100	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**70.7**	10.0	06/12/2024	ND	19.2	96.2	20.0	0.0520	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**533**	5.00	06/13/2024	ND	466	93.2	500	1.11	

Sample ID: MONITOR WELL #4 (H243327-04)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**164**	4.00	06/13/2024	ND	100	100	100	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**74.4**	10.0	06/12/2024	ND	19.2	96.2	20.0	0.0520	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**674**	5.00	06/13/2024	ND	466	93.2	500	1.11	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Lab Reports

CARDINAL Laboratories

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:	06/11/2024	Sampling Date:	06/04/2024
Reported:	06/17/2024	Sampling Type:	Water
Project Name:	VACUUM JUNCTION K-35-1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	T17S-R35E-SEC35 K LEA COUNTY, NM		

Sample ID: RECOVERY WELL #1 (H243327-05)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**80.0**	4.00	06/13/2024	ND	100	100	100	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**70.8**	10.0	06/12/2024	ND	19.2	96.2	20.0	0.0520	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**417**	5.00	06/13/2024	ND	466	93.2	500	1.11	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Lab Reports

CARDINAL Laboratories

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

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

101 East Marland - Hobbs, 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 K-35-1
Project Location: T17S-R35E-Sec35 K ~ Lea County New Mexico	Sampler Signature: Rozanne Johnson (575)631-9310

H243327

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (4 40ml VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1-1Liter HDPE)	NONE	SAMPLING: DATE (2024)	TIME
1	Monitor Well #1	G	1	X								1		6/4	14:35
2	Monitor Well #2	G	1	X								1		6/4	11:45
3	Monitor Well #3	G	1	X								1		6/4	13:00
4	Monitor Well #4	G	1	X								1		6/4	16:05
5	Recovery Well #1	G	1	X								1		6/4	16:15

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB #	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005 / TX1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Sulfates	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours
1																			X	X	X	
2																			X	X	X	
3																			X	X	X	
4																			X	X	X	
5																			X	X	X	

Relinquished by: Rozanne Johnson	Date: 6/11/2024 Time: 8:00	Received by:	Date: 6/4/2024 Time: 8:01
Relinquished by:	Date: 6/11/2024 Time:	Received By: (Laboratory Staff)	Date: 6.11.24 Time: 0940
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Sample Condition: Cool Yes / No; Intact Yes / No	CHECKED BY: (Initials) SR

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

REMARKS:

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

CARDINAL Laboratories

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

August 27, 2024

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM JUNCTION K-35-1

Enclosed are the results of analyses for samples received by the laboratory on 08/15/24 14:24.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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:	08/15/2024	Sampling Date:	08/13/2024
Reported:	08/27/2024	Sampling Type:	Water
Project Name:	VACUUM JUNCTION K-35-1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Alyssa Parras
Project Location:	T17S-R35E-SEC35 K LEA COUNTY, NM		

Sample ID: MONITOR WELL #1 (H244965-01)

Chloride, SM4500Cl-B (Water) **mg/L** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**152**	4.00	08/19/2024	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*	**54.3**	10.0	08/27/2024	ND	21.6	108	20.0	0.922	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**586**	5.00	08/19/2024	9.00	525	105	500	1.20	

Sample ID: MONITOR WELL #2 (H244965-02)

Chloride, SM4500Cl-B (Water) **mg/L** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**116**	4.00	08/19/2024	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*	**55.7**	10.0	08/27/2024	ND	21.6	108	20.0	0.922	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**489**	5.00	08/20/2024	9.00	525	105	500	1.20	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	08/15/2024	Sampling Date:	08/13/2024
Reported:	08/27/2024	Sampling Type:	Water
Project Name:	VACUUM JUNCTION K-35-1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Alyssa Parras
Project Location:	T17S-R35E-SEC35 K LEA COUNTY, NM		

Sample ID: MONITOR WELL #3 (H244965-03)

Chloride, SM4500Cl-B (Water) mg/L **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**112**	4.00	08/19/2024	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*	**57.2**	10.0	08/27/2024	ND	21.6	108	20.0	0.922	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**539**	5.00	08/16/2024	9.00	525	105	500	1.20	

Sample ID: MONITOR WELL #4 (H244965-04)

Chloride, SM4500Cl-B (Water) mg/L **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**120**	4.00	08/19/2024	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*	**56.8**	10.0	08/27/2024	ND	21.6	108	20.0	0.922	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**494**	5.00	08/19/2024	9.00	525	105	500	1.20	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Lab Reports

CARDINAL Laboratories

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:	08/15/2024	Sampling Date:	08/13/2024
Reported:	08/27/2024	Sampling Type:	Water
Project Name:	VACUUM JUNCTION K-35-1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Alyssa Parras
Project Location:	T17S-R35E-SEC35 K LEA COUNTY, NM		

Sample ID: RECOVERY WELL #1 (H244965-05)

Chloride, SM4500Cl-B (Water) mg/L Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**76.0**	4.00	08/19/2024	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*	**56.9**	10.0	08/27/2024	ND	21.6	108	20.0	0.922	

TDS 160.1 mg/L Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**389**	5.00	08/19/2024	9.00	525	105	500	1.20	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

101 East Marland - Hobbs, 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 K-35-1	
Project Location: T17S-R35E-Sec35 K ~ Lea County New Mexico	Sampler Signature: Rozanne Johnson (575)631-9310

H244965

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (4 40ml VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1-1Liter HDPE)	NONE	SAMPLING: DATE (2024)	TIME
1	Monitor Well #1	G	1	X								1		8/13	14:00
2	Monitor Well #2	G	1	X								1		8/13	9:45
3	Monitor Well #3	G	1	X								1		8/13	11:00
4	Monitor Well #4	G	1	X								1		8/13	12:25
5	Recovery Well #1	G	1	X								1		8/13	14:20

ANALYSIS REQUEST

(Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005 / TX1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Sulfates	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours
																		X	X	X	
																		X	X	X	
																		X	X	X	
																		X	X	X	
																		X	X	X	

Relinquished by: Rozanne Johnson Date: 8/15/2024 Time: 13:00

Received by: Date: 8/15/2024 Time: 13:01

Relinquished by: Date: 8/15/24 Time:

Received By: (Laboratory Staff) Date: 8:15:24 Time: 1424

Delivered By: (Circle One)

Sampler - UPS - Bus - Other

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

CHECKED BY: AD (Initials)

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

REMARKS:

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

CARDINAL Laboratories

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

November 13, 2024

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM JUNCTION K-35-1

Enclosed are the results of analyses for samples received by the laboratory on 10/31/24 14:19.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	10/31/2024	Sampling Date:	10/29/2024
Reported:	11/13/2024	Sampling Type:	Water
Project Name:	VACUUM JUNCTION K-35-1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Alyssa Parras
Project Location:	T17S-R35E-SEC35 K LEA COUNTY, NM		

Sample ID: MONITOR WELL #1 (H246653-01)

Chloride, SM4500Cl-B (Water) mg/L **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**140**	4.00	11/01/2024	ND	100	100	100	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**55.9**	10.0	11/01/2024	ND	18.6	92.8	20.0	11.9	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**586**	5.00	11/08/2024	8.00	834	83.4	1000	0.184	

Sample ID: MONITOR WELL #2 (H246653-02)

Chloride, SM4500Cl-B (Water) mg/L **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**100**	4.00	11/01/2024	ND	100	100	100	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**52.9**	10.0	11/07/2024	ND	16.0	80.2	20.0	3.91	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**470**	5.00	11/08/2024	8.00	834	83.4	1000	0.184	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Lab Reports

CARDINAL Laboratories

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:	10/31/2024	Sampling Date:	10/29/2024
Reported:	11/13/2024	Sampling Type:	Water
Project Name:	VACUUM JUNCTION K-35-1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Alyssa Parras
Project Location:	T17S-R35E-SEC35 K LEA COUNTY, NM		

Sample ID: MONITOR WELL #3 (H246653-03)

Chloride, SM4500Cl-B (Water) mg/L **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**100**	4.00	11/01/2024	ND	100	100	100	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**45.7**	10.0	11/07/2024	ND	16.0	80.2	20.0	3.91	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**481**	5.00	11/08/2024	8.00	834	83.4	1000	0.184	

Sample ID: MONITOR WELL #4 (H246653-04)

Chloride, SM4500Cl-B (Water) mg/L **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**100**	4.00	11/01/2024	ND	100	100	100	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**49.0**	10.0	11/07/2024	ND	16.0	80.2	20.0	3.91	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**493**	5.00	11/08/2024	8.00	834	83.4	1000	0.184	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Lab Reports

CARDINAL Laboratories

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:	10/31/2024	Sampling Date:	10/29/2024
Reported:	11/13/2024	Sampling Type:	Water
Project Name:	VACUUM JUNCTION K-35-1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Alyssa Parras
Project Location:	T17S-R35E-SEC35 K LEA COUNTY, NM		

Sample ID: RECOVERY WELL #1 (H246653-05)

Chloride, SM4500Cl-B (Water) mg/L Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**88.0**	4.00	11/01/2024	ND	100	100	100	3.92	

Sulfate 375.4 mg/L Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**47.2**	10.0	11/07/2024	ND	16.0	80.2	20.0	3.91	

TDS 160.1 mg/L Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**425**	5.00	11/08/2024	8.00	834	83.4	1000	0.184	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

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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 K-35-1	
Project Location: T17S-R35E-Sec35 K ~ Lea County New Mexico	Sampler Signature: Rozanne Johnson (575)631-9310

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (4 40ml VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1-1Liter HDPE)	NONE	SAMPLING: DATE (2024)	TIME
H24[illegible]53															
1	Monitor Well #1	G	1	X								1		10/29	13:40
2	Monitor Well #2	G	1	X								1		10/29	9:20
3	Monitor Well #3	G	1	X								1		10/29	10:50
4	Monitor Well #4	G	1	X								1		10/29	12:05
5	Recovery Well #1	G	1	X								1		10/29	14:00

ANALYSIS REQUEST

(Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005 / TX1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Sulfates	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours
																		X	X	X	
																		X	X	X	
																		X	X	X	
																		X	X	X	
																		X	X	X	

Relinquished by: Rozanne Johnson Date: 10/31/2024 Time: 8:00

Received by: Date: 10/31/24 Time: 8:01

Relinquished by: Date: 10/31/24 Time:

Received By: (Laboratory Staff) Date: 10:31:24 Time: 1419

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

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

CHECKED BY: (Initials) AD

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

REMARKS:

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

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

CONDITIONS

Operator: RICE OPERATING COMPANY PO Box 5630 Hobbs, NM 88241	OGRID: 19174
	Action Number: 447158
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
shanna.smith	Update tables to include Top of Casing	9/4/2025
shanna.smith	Continue quarterly groundwater monitoring and sampling of all monitor wells	9/4/2025