

L Peter Galusky, Jr PE

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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 F-34 Vent Boot (1R425-67): UL F, Section 34, Township 17S, Range 35E

NMOCD Application ID pEJH0935760781, Incident ID: nAPP2110338866

Sent via E-mail

Mr. Buchanan:

This Annual Report is submitted to NMOCD for Rice Operating Company's (ROC) Vacuum F-34 Vent Boot project in Lea County, New Mexico pursuant to NMOCD's approval email letter of September 17th, 2024 (Appendix, Exhibit 1).

Background and Brief Project History

The site is located approximately 2.5 miles east-southeast of Buckeye, New Mexico (Appendix, Figure 1). The regional topography slopes gently toward the southeast. Groundwater is encountered at a depth of approximately 75+/- ft below ground surface in the Ogallala Formation and flows toward the southeast (Appendix, Figures 2 and 3).

The junction box at this location was removed during the Vacuum SWD system abandonment and conducted an initial soils evaluation in 2008. The results of an NMOCD approved Investigation and Characterization Plan (ICP) indicated elevated levels of soil and groundwater chlorides, and a Notification of Groundwater Impact was submitted to NMOCD on October 26th, 2010. ROC installed a double synthetic subsurface soil liner and completed surface restoration in May 2011 and NMOCD granted vadose zone remediation termination status, or 'soil closure,' on September 15th, 2011. A Project Update was submitted to NMOCD on August 8th, 2013 which

Rice Operating Company – Vacuum F-34 Vent Boot Annual Report

proposed continued groundwater monitoring and limited groundwater withdrawal from the near-source well (MW-1) to determine if this would effectively reduce groundwater chloride mass. NMOCD approved this work on August 13th, 2013. Monitor well locations are shown in the Appendix, Figures 2 & 3.

Past Year and Current Status

ROC began groundwater recovery from MW-1 in April of 2014. A total of 19,163 bbls of groundwater and approximately 1,324 kg of chloride have been removed through 2024. The removed groundwater has been hauled to off-site locations for beneficial use.

Groundwater chloride concentrations in the near-source, down-gradient monitor well (MW-1) dropped significantly from 401 mg/l in 2023 to 287 mg/l in 2024 (Appendix Figure 4, Table 1). Chlorides in the up-gradient monitor well (MW-2) rose from 64 mg/l in 2023 to 91 mg/l in 2024 (Appendix Figure 4, Table 1). BTEX has not been sampled since March 2020 per NMOCD granted approval, due to the consistent absence of BTEX in groundwater samples taken during prior years. The full dataset of groundwater results is given in Table 2 of the Appendix.

ROC will continue quarterly groundwater sampling and groundwater recovery during 2025.

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. We thus submit this report for your review and consideration.

Rice Operating Company – Vacuum F-34 Vent Boot Annual Report

Please contact either Katie Davis at Rice Operating Company or me if you have any questions or need additional information.

Thank you.

Sincerely,



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

Copy: Rice Operating Company
Attachments: ... as noted in text

From: OCDOnline@state.nm.us
To: [Katie Jones](#)
Subject: The Oil Conservation Division (OCD) has approved the application, Application ID: 327877
Date: Tuesday, September 17, 2024 10:34:15 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#) nAPP2110338866, with the following conditions:

- **Review of the 2023 Annual Report for Vacuum F-34 Vent Boot (1R425-67): content satisfactory 1. Continue to conduct groundwater monitoring on a quarterly basis as prescribed. 2. Continue groundwater recovery for the site as planned. 3. Submit the 2024 Annual Groundwater Report to OCD by April 1, 2025.**

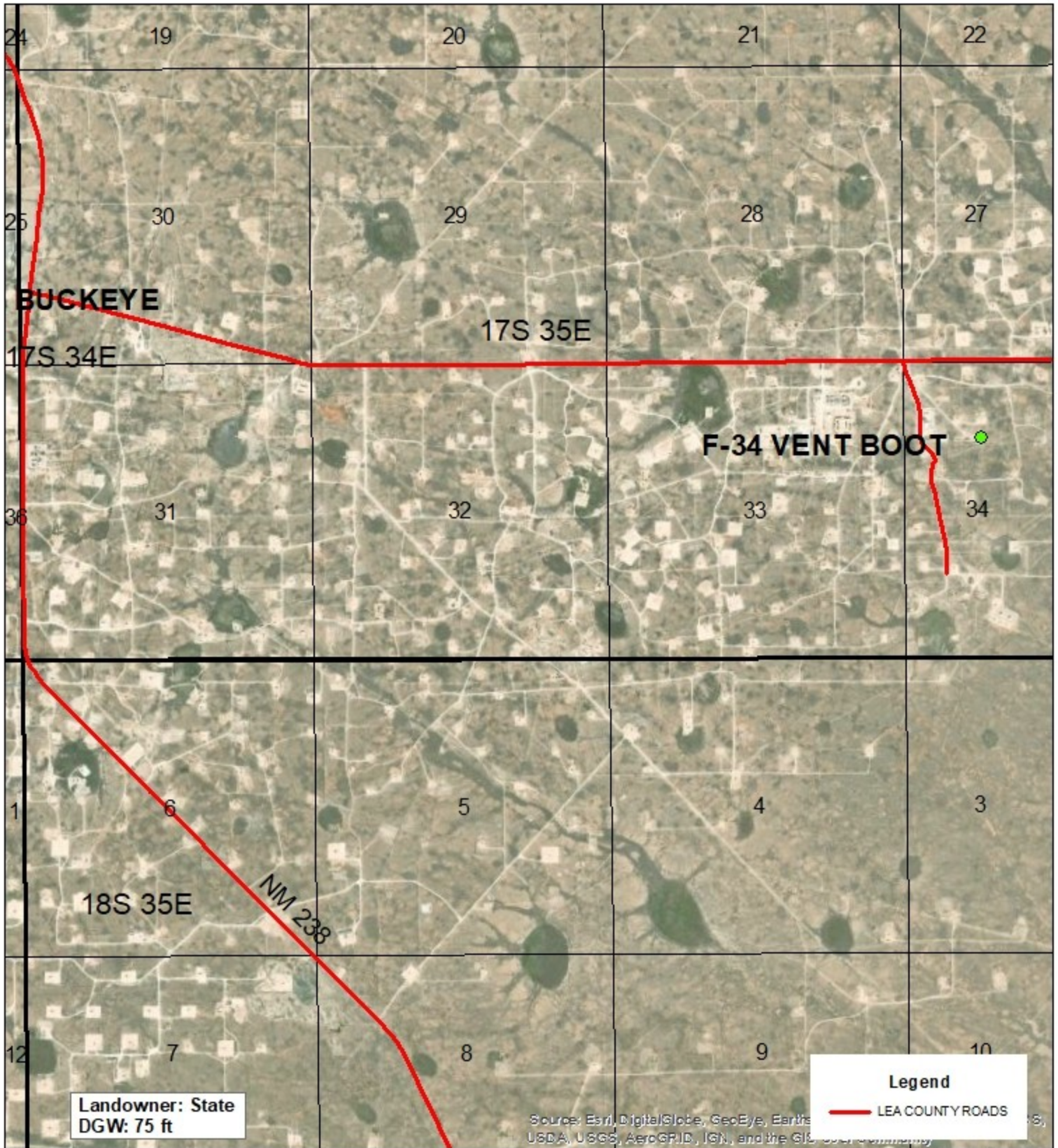
The signed GROUND WATER ABATEMENT can be found in the OCD Online: Imaging under the incident ID (n#).



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

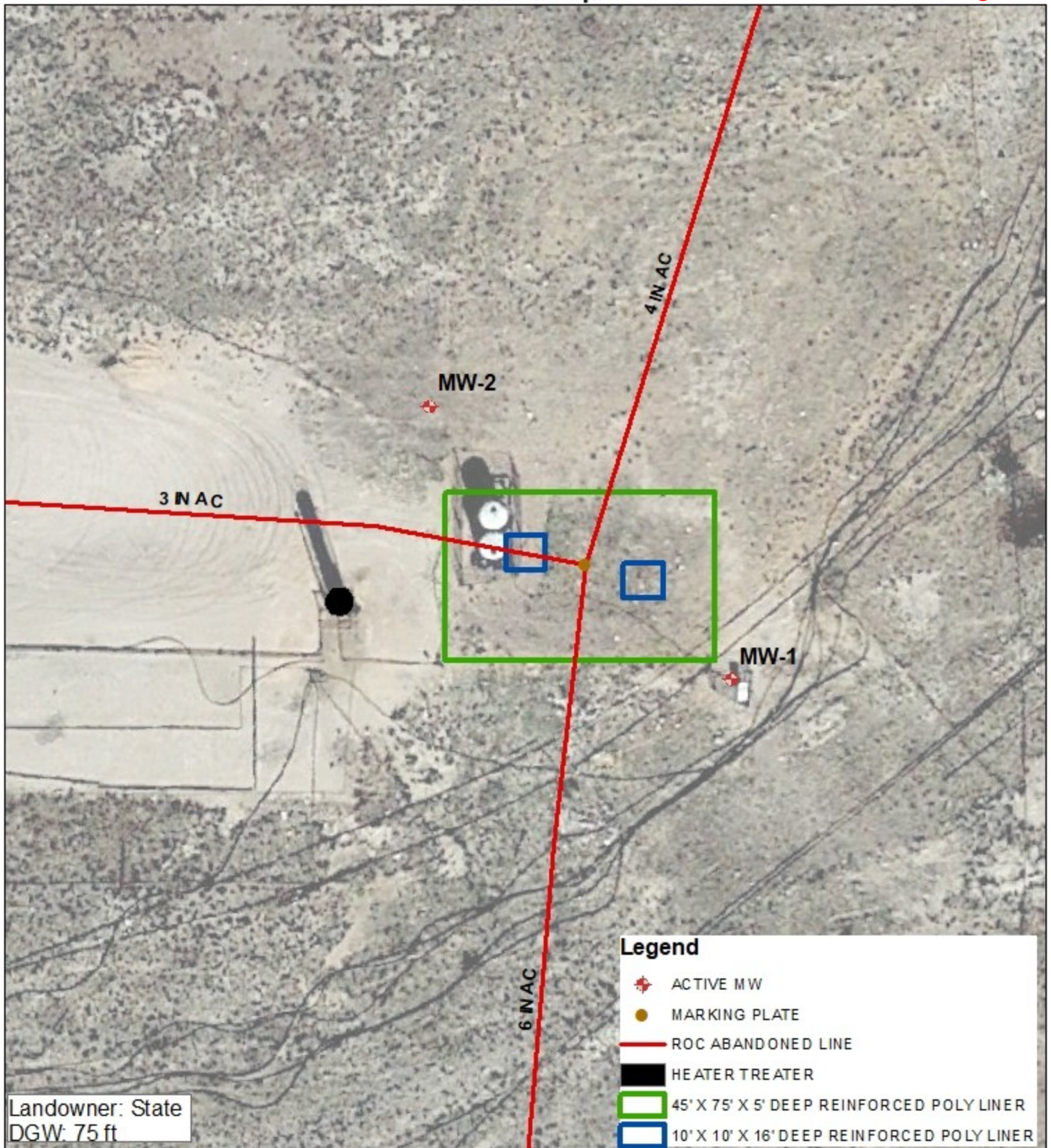
New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

Geographic Location



	<p>VACUUM F-34 VENT BOOT 1R425-67</p> <p>UL F SECTION 34 T17S R35E LEA COUNTY, NM</p>	<p>GPS: 32.794820 -103.449485 NAD83 STATE PLANE PROJ NM EAST ZONE</p> <p>0 1,000 2,000 Feet</p> <p>Drawing date: 1/21/25 Drawn by: T. Grieco</p> 
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Site Map



**VACUUM
F-34 VENT BOOT**
1R425-67

UL F SECTION 34
T17S R35E
LEA COUNTY, NM

GPS: 32.794820 -103.449485
NAD83 STATE PLANE PROJ
NM EAST ZONE

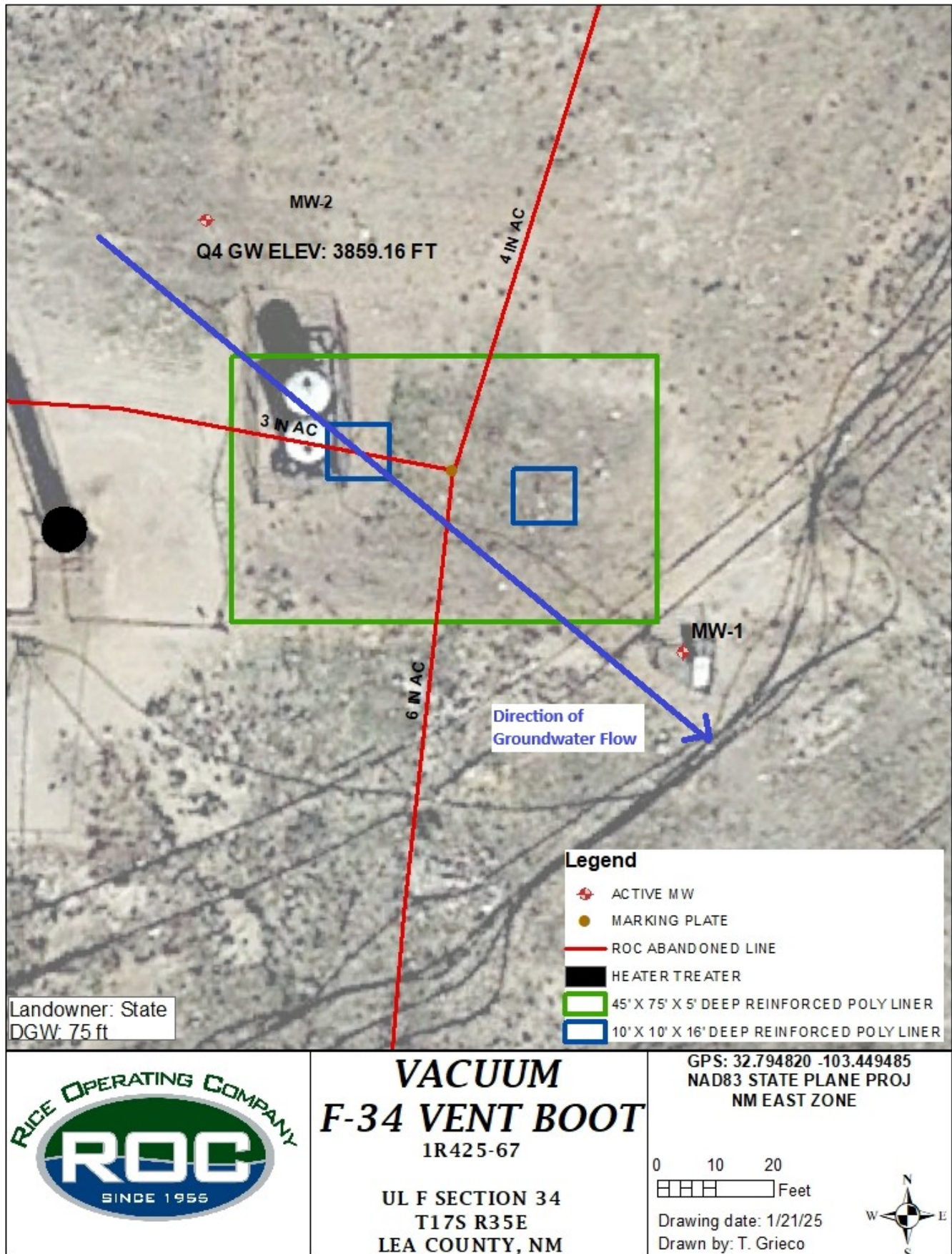
0 25 50
Feet

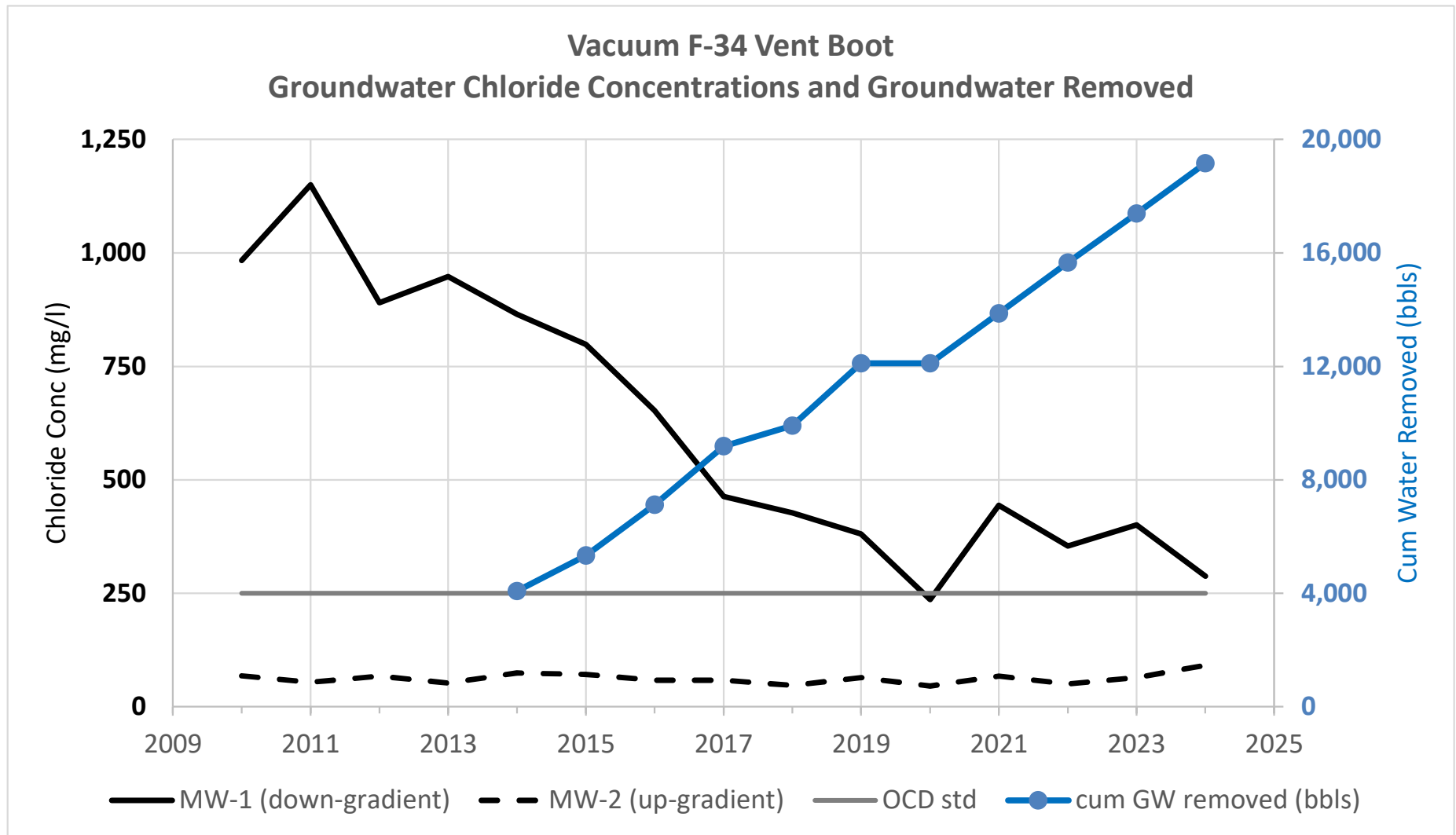
Drawing date: 1/21/25

Drawn by: T. Grieco



Groundwater Elevation Q4 2024





ROC - Vacuum F-34 vent boot (1R425-67)**Annual Average Groundwater Chloride Concentrations (mg/l)
and Groundwater Volume (bbls) and Chloride Mass (kg) Removal**

	MW-1	MW-2	OCD std	cum GW	cum Cl-
year	(down-gradient)	(up-gradient)	(mg/l)	removed	removed
				(bbls)	(kg)
2010	983	68	250		
2011	1,150	54	250		
2012	890	67	250		
2013	948	52	250		
2014	865	74	250	4,077	396
2015	798	71	250	5,327	486
2016	653	58	250	7,117	642
2017	463	58	250	9,187	800
2018	427	47	250	9,907	850
2019	381	64	250	12,107	965
2020	236	45	250	12,107	965
2021	444	67	250	13,873	1,066
2022	354	50	250	15,664	1,161
2023	401	64	250	17,387	1,249
2024	287	91	250	19,163	1,324

ROC - Vacuum F-34 vent boot (1R425-67)

Unit Letter F, Section 34, T17S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	CI	ann. avg CI	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
1	69.91	118.36	31.5	100	5/28/2010	940		2,030	<0.001	<0.001	<0.001	<0.003	91	Clear No odor
1	69.74	118.36	31.6	100	7/27/2010	1,040		2,130	<0.001	<0.001	<0.001	<0.003	99.1	Clear No odor
1	69.75	118.36	31.6	100	10/27/2010	970	983	2,300	<0.001	<0.001	<0.001	<0.003	94.9	Clear No odor
1	69.87	118.36	31.5	100	2/18/2011	1,030		2,010	<0.001	<0.001	<0.001	<0.003	85.6	Clear No odor
1	70.06	118.36	31.4	100	6/3/2011	1,150		2,160	<0.001	<0.001	<0.001	<0.003	89.7	Clear No odor
1	70.08	118.36	31.4	100	9/1/2011	1,160		2,380	<0.001	<0.001	<0.001	<0.003	87.3	Clear No odor
1	70.09	118.36	31.4	100	12/3/2011	1,260	1,150	2,470	<0.001	<0.001	<0.001	<0.003	86.6	Clear No odor
1	70.22	118.36	31.3	100	2/23/2012	1,060		2,360	<0.001	<0.001	<0.001	<0.003	98.4	Clear No odor
1	70.26	118.36	31.3	100	5/31/2012	930		2,130	<0.001	<0.001	<0.001	<0.003	81.2	Clear No odor
1	70.02	118.36	31.4	100	8/24/2012	980		2,060	<0.001	<0.001	<0.001	<0.003	80.8	Clear No odor
1	70.06	118.36	31.4	100	11/19/2012	590	890	1,320	<0.001	<0.001	<0.001	<0.003	77.7	Clear No odor
1	70.24	118.36	31.3	100	2/13/2013	960		1,990	<0.001	<0.001	<0.001	<0.003	76	Clear No odor
1	70.56	118.36	31.1	100	5/29/2013	1,020		2,320	<0.001	<0.001	<0.001	<0.003	71	Clear No odor
1	70.83	118.36	30.9	100	9/5/2013	920		2,150	<0.001	<0.001	<0.001	<0.003	289	Clear No odor
1	XXX	118.36	XXX	100	11/14/2013	890	948	2,040	<0.001	<0.001	<0.001	<0.003	59.7	Clear No odor
1	XXX	118.36	XXX	100	3/6/2014	1,040		2,080	<0.001	<0.001	<0.001	<0.003	55.2	Clear No odor
1	XXX	118.36	XXX	running	6/4/2014	769		1,490	<0.001	<0.001	<0.001	<0.003	82	Clear No odor
1	XXX	118.36	XXX	running	8/23/2014	630		1,570	<0.001	<0.001	<0.001	<0.003	80	Clear No odor
1	XXX	118.36	XXX	100	12/4/2014	1,020	865	2,170	<0.001	<0.001	<0.001	<0.003	78.3	Clear No odor
1	XXX	118.36	XXX	100	3/5/2015	810		1,850	<0.001	<0.001	<0.001	<0.003	53.4	Clear No odor
1	XXX	118.36	XXX	running	6/4/2015	432		1,140	<0.001	<0.001	<0.001	<0.003	65.5	Clear No odor
1	70.64	118.36	31	100	8/24/2015	1,060		1,950	<0.001	<0.001	<0.001	<0.003	34.8	Clear No odor
1	XXX	118.36	0	200	11/13/2015	890	798	1,770	<0.001	<0.001	<0.001	<0.003	32.4	Clear No odor
1	XXX	118.36	XXX	200	2/29/2016	810		1,700	<0.001	<0.001	<0.001	<0.003	68.4	Clear No odor
1	XXX	118.36	XXX	200	5/20/2016	620		1,530	<0.001	<0.001	<0.001	<0.003	64	Clear No odor
1	XXX	118.36	XXX	running	9/13/2016	710		1,930	<0.001	<0.001	<0.001	<0.003	73	Clear No odor
1	XXX	118.36	XXX	100	11/16/2016	470	653	1,110	<0.001	<0.001	<0.001	<0.003	79	Clear No odor
1	XXX	118.36	XXX	100	2/23/2017	400		1,470	<0.001	<0.001	<0.001	<0.003	193	Clear No odor
1	XXX	118.36	XXX	Running	5/26/2017	400		1,060	<0.001	<0.001	<0.001	<0.003	66	Clear No odor

ROC - Vacuum F-34 vent boot (1R425-67)

Unit Letter F, Section 34, T17S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	CI	ann. avg CI	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
1	XXX	118.36	XXX	Running	9/11/2017	490		1,120	<0.001	<0.001	<0.001	<0.003	79	Clear No odor
1	XXX	118.36	XXX	100	11/30/2017	560	463	1,310	<0.001	<0.001	<0.001	<0.003	75	Clear No odor
1	XXX	118.36	XXX	100	3/1/2018	550		1,260	<0.001	<0.001	<0.001	<0.003	110	Clear No odor
1	XXX	118.36	XXX	100	6/1/2018	470		1,100	<0.001	<0.001	<0.001	<0.003	39	Clear No odor
1	XXX	118.36	XXX	100	9/7/2018	400		840	<0.001	<0.001	<0.001	<0.003	65.6	Clear No odor
1	XXX	118.36	XXX	100	11/15/2018	288	427	452	<0.001	<0.001	<0.001	<0.003	129	Clear No odor
1	XXX	118.36	XXX	100	3/7/2019	530		1,160	<0.001	<0.001	<0.001	<0.003	74	Clear No odor
1	XXX	118.36	XXX	Running	5/30/2019	336		881	<0.001	<0.001	<0.001	<0.003	61	Clear No odor
1	XXX	118.36	XXX	Running	8/30/2019	380		932	<0.001	<0.001	<0.001	<0.003	61	Clear No odor
1	XXX	118.36	XXX	100	11/20/2019	276	381	737	<0.001	<0.001	<0.001	<0.003	56	Clear No odor
1	XXX	118.36	XXX	100	3/6/2020	228		592	<0.001	<0.001	<0.001	<0.003	52.7	Clear No odor
1	XXX	118.36	XXX	100	9/11/2020	204		740	XXX	XXX	XXX	XXX	71.9	Clear No odor
1	XXX	118.36	XXX	100	11/9/2020	276	236	977	XXX	XXX	XXX	XXX	69.3	Clear No odor
1	XXX	118.36	XXX	100	3/11/2021	720		1,550	XXX	XXX	XXX	XXX	69.4	Clear No odor
1	XXX	118.36	XXX	100	6/11/2021	356		912	XXX	XXX	XXX	XXX	63.4	Clear No odor
1	XXX	118.36	XXX	100	9/8/2021	360		926	XXX	XXX	XXX	XXX	78.3	Clear No odor
1	XXX	118.36	XXX	100	11/10/2021	340	444	866	XXX	XXX	XXX	XXX	83.1	Clear No odor
1	XXX	118.36	XXX	100	3/2/2022	344		1,160	XXX	XXX	XXX	XXX	68.7	Clear No odor
1	XXX	118.36	XXX	Running	6/13/2022	332		836	XXX	XXX	XXX	XXX	63.8	Clear No odor
1	XXX	118.36	XXX	Running	9/7/2022	444		1,070	XXX	XXX	XXX	XXX	65.4	Clear No odor
1	XXX	118.36	XXX	100	12/1/2022	296	354	1,040	XXX	XXX	XXX	XXX	53.3	Clear No odor
1	XXX	118.36	XXX	100	3/17/2023	480		1,070	XXX	XXX	XXX	XXX	57.6	Clear No odor
1	XXX	118.36	XXX	Running	6/8/2023	300		788	XXX	XXX	XXX	XXX	61.8	Clear No odor
1	XXX	118.36	XXX	Running	8/17/2023	332		889	XXX	XXX	XXX	XXX	61.8	Clear No odor
1	XXX	118.36	XXX	Running	10/11/2023	490	401	1,180	XXX	XXX	XXX	XXX	72.9	Clear No odor
1	XXX	118.36	XXX	100	3/12/2024	264		835	XXX	XXX	XXX	XXX	66.2	Clear No odor
1	XXX	118.36	XXX	Running	5/30/2024	140		540	XXX	XXX	XXX	XXX	68	Clear No odor
1	XXX	118.36	XXX	Running	8/14/2024	368		981	XXX	XXX	XXX	XXX	72.3	Clear No odor
1	XXX	118.36	XXX	Running	11/1/2024	376	287	1,090	XXX	XXX	XXX	XXX	64.2	Clear No odor

ROC - Vacuum F-34 vent boot (1R425-67)

Unit Letter F, Section 34, 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	70.48	84.22	2.2	10	11/22/2010	68	68	340	<0.001	<0.001	<0.001	<0.003	71.7	Clear No odor
2	70.57	84.32	2.2	10	2/18/2011	60		403	<0.001	<0.001	<0.001	<0.003	50.5	Clear No odor
2	70.72	84.32	2.2	10	6/3/2011	56		384	<0.001	<0.001	<0.001	<0.003	56.9	Clear No odor
2	70.73	84.32	2.2	10	9/1/2011	56		407	<0.001	<0.001	<0.001	<0.003	58.6	Clear No odor
2	70.75	84.32	2.2	10	12/3/2011	44	54	350	<0.001	<0.001	<0.001	<0.003	54.1	Clear No odor
2	70.89	84.32	2.1	10	2/23/2012	116		448	<0.001	<0.001	<0.001	<0.003	61.8	Clear No odor
2	70.94	84.32	2.1	10	5/31/2012	40		422	<0.001	<0.001	<0.001	<0.003	64	Clear No odor
2	71.12	84.32	2.1	10	8/24/2012	60		399	<0.001	<0.001	<0.001	<0.003	50.8	Clear No odor
2	71.18	84.32	2.1	10	11/19/2012	52	67	398	<0.001	<0.001	<0.001	<0.003	47.6	Clear No odor
2	71.37	84.32	2.1	10	2/13/2013	60		380	<0.001	<0.001	<0.001	<0.003	54.5	Clear No odor
2	71.71	84.32	2	10	5/29/2013	32		595	<0.001	<0.001	<0.001	<0.003	43	Clear No odor
2	71.88	84.32	2	10	9/5/2013	56		419	<0.001	<0.001	<0.001	<0.003	53.7	Clear No odor
2	71.84	84.32	2	10	11/14/2013	60	52	419	<0.001	<0.001	<0.001	<0.003	56.8	Clear No odor
2	71.92	84.32	2	10	3/6/2014	64		292	<0.001	<0.001	<0.001	<0.003	56.6	Clear No odor
2	71.82	84.32	2	10	6/4/2014	68		406	<0.001	<0.001	<0.001	<0.003	54.4	Clear No odor
2	71.85	84.32	2	10	8/23/2014	72		414	<0.001	<0.001	<0.001	<0.003	49.7	Clear No odor
2	71.11	84.32	2.1	10	12/4/2014	92	74	456	<0.001	<0.001	<0.001	<0.003	41.2	Clear No odor
2	71.05	84.32	2.1	10	3/5/2015	100		500	<0.001	<0.001	<0.001	<0.003	44.2	Clear No odor
2	71.17	84.32	2.1	10	6/4/2015	64		446	<0.001	<0.001	<0.001	<0.003	48.4	Clear No odor
2	71.73	84.32	2	10	8/24/2015	36		470	<0.001	<0.001	<0.001	<0.003	39.2	Clear No odor
2	71.87	84.32	1.99	10	11/13/2015	84	71	346	<0.001	<0.001	<0.001	<0.003	61.7	Clear No odor
2	71.85	84.32	2	10	2/29/2016	40		436	<0.001	<0.001	<0.001	<0.003	63	Clear No odor
2	71.84	84.32	2	10	5/20/2016	40		356	<0.001	<0.001	<0.001	<0.003	65.2	Clear No odor
2	71.89	84.32	2	10	9/13/2016	56		392	<0.001	<0.001	<0.001	<0.003	79	Clear No odor
2	71.98	84.32	2	10	11/16/2016	96	58	466	<0.001	<0.001	<0.001	<0.003	32	Clear No odor
2	72.03	84.32	2	10	2/23/2017	52		424	<0.001	<0.001	<0.001	<0.003	60	Clear No odor
2	71.1	84.32	2	10	5/26/2017	92		522	<0.001	<0.001	<0.001	<0.003	52	Clear No odor
2	72.22	84.32	1.9	10	9/11/2017	40		278	<0.001	<0.001	<0.001	<0.003	64	Clear No odor
2	72.18	84.32	1.9	10	11/30/2017	48	58	444	<0.001	<0.001	<0.001	<0.003	62	Clear No odor

ROC - Vacuum F-34 vent boot (1R425-67)

Unit Letter F, Section 34, T17S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	CI	ann. avg CI	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
2	72.21	84.32	1.9	10	3/1/2018	40		230	<0.001	<0.001	<0.001	<0.003	64	Clear No odor
2	72.27	84.32	1.9	10	6/1/2018	68		402	<0.001	<0.001	<0.001	<0.003	78.6	Clear No odor
2	72.39	84.32	1.9	8	9/7/2018	40		482	<0.001	<0.001	<0.001	<0.003	58.7	Clear No odor
2	72.54	84.32	1.9	8	11/15/2018	40	47	196	<0.001	<0.001	<0.001	<0.003	63.9	Clear No odor
2	72.63	84.32	1.9	10	3/7/2019	96		546	<0.001	<0.001	<0.001	<0.003	61	Clear No odor
2	72.74	84.32	1.9	10	5/30/2019	36		445	<0.001	<0.001	<0.001	<0.003	62	Clear No odor
2	72.78	84.32	1.8	10	8/30/2019	60		456	<0.001	<0.001	<0.001	<0.003	57	Clear No odor
2	73.12	84.32	1.8	8	11/20/2019	64	64	407	<0.001	<0.001	<0.001	<0.003	55	Clear No odor
2	73.18	84.32	1.8	8	3/6/2020	60		457	<0.001	<0.001	<0.001	<0.003	63.4	Clear No odor
2	73.33	84.32	1.8	8	9/11/2020	40		338	XXX	XXX	XXX	XXX	46.1	Clear No odor
2	73.4	84.32	1.7	8	11/9/2020	36	45	496	XXX	XXX	XXX	XXX	73	Clear No odor
2	73.52	84.32	1.7	10	3/11/2021	52		362	XXX	XXX	XXX	XXX	48.5	Clear No odor
2	73.55	84.32	1.7	10	6/11/2021	40		588	XXX	XXX	XXX	XXX	54.8	Clear No odor
2	73.59	84.32	1.7	10	9/8/2021	140		552	XXX	XXX	XXX	XXX	75.8	Clear No odor
2	73.66	84.32	1.7	10	11/10/2021	36	67	615	XXX	XXX	XXX	XXX	60.7	Clear No odor
2	74.28	84.32	1.6	10	3/2/2022	44		262	XXX	XXX	XXX	XXX	57.6	Clear No odor
2	74.38	84.32	1.6	10	6/13/2022	56		336	XXX	XXX	XXX	XXX	58.3	Clear No odor
2	74.46	84.32	1.6	10	9/7/2022	44		364	XXX	XXX	XXX	XXX	61.3	Clear No odor
2	74.53	84.32	1.6	10	12/1/2022	56	50	341	XXX	XXX	XXX	XXX	51.4	Clear No odor
2	74.72	84.32	1.5	6	3/17/2023	64		295	XXX	XXX	XXX	XXX	57.6	Clear No odor
2	74.83	84.32	1.5	6	6/8/2023	68		432	XXX	XXX	XXX	XXX	70.5	Clear No odor
2	75.02	84.32	1.5	6	8/17/2023	60		396	XXX	XXX	XXX	XXX	64.2	Clear No odor
2	75.18	84.32	1.5	6	10/11/2023	64	64	382	XXX	XXX	XXX	XXX	72.5	Clear No odor
2	75.28	84.32	1.4	6	3/12/2024	68		329	XXX	XXX	XXX	XXX	71.1	Clear No odor
2	75.21	84.32	1.5	6	5/30/2024	60		441	XXX	XXX	XXX	XXX	72	Clear No odor
2	75.22	84.32	1.5	6	8/14/2024	128		527	XXX	XXX	XXX	XXX	55.5	Clear No odor
2	75.24	84.32	1.5	6	11/1/2024	108	91	513	XXX	XXX	XXX	XXX	56.4	Clear No odor



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 F-34 VENT

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 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:	03/13/2024	Sampling Date:	03/12/2024
Reported:	03/20/2024	Sampling Type:	Water
Project Name:	VACUUM F-34 VENT	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T17S-R35E-SEC34 F - LEA CTY, NM		

Sample ID: MONITOR WELL #1 (H241286-01)

Chloride, SM4500Cl-B		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	264	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*	66.2	10.0	03/15/2024	ND	20.4	102	20.0	6.98		
TDS 160.1		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS*	835	5.00	03/18/2024	ND	804	80.4	1000	8.08		

Sample ID: MONITOR WELL #2 (H241286-02)

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	03/13/2024	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*	71.1	10.0	03/15/2024	ND	20.4	102	20.0	6.98		
TDS 160.1		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS*	329	5.00	03/18/2024	ND	804	80.4	1000	8.08		

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

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.

Fax (313) 333-2470		PO#	
Company Name: RICE Operating Company		BILL TO Company: 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#: (575) 393-9174	Fax#: (575)397-1471
Phone #: (575) 393-9174		Fax #: (575) 397-1471	

Project #: Vacuum F-34 Vent

Project Location: T17S-R35E-Sec34 F ~ Lea County New Mexico

[illegible]

Relinquished by: Rozanne Johnson	Date: 3/13/2024	Time: 7:10	Received by: James Johnson	Date: 3/13/2024	Time: 7:11
Relinquished by: James Johnson	Date: 3/13/2024	Time: 10:40	Received By: (Laboratory Staff) Barbara Walker	Date: 3-13-24	Time: 11:37
Delivered By: (Circle One)			Sample Condition	CHECKED BY:	
Sampler - UPS - Bus - Other:			Cool Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Intact Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	(Initials) J.D.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # _____

ANALYSIS REQUEST

(Circle or Specify Method No.)

[illegible]

Phone Results	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
Fax Results	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No Additional Fax Number:
REMARKS:				
<p>Email Results: kjones@riceswd.com rozanne@sdacres.com</p>				



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

June 10, 2024

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM F-34 VENT

Enclosed are the results of analyses for samples received by the laboratory on 06/03/24 9:05.

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 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".

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:	06/03/2024	Sampling Date:	05/30/2024
Reported:	06/10/2024	Sampling Type:	Water
Project Name:	VACUUM F-34 VENT	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Alyssa Parras
Project Location:	T17S-R35E-SEC34 F - LEA CTY, NM		

Sample ID: MONITOR WELL #1 (H243105-01)

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	06/05/2024	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*	68.0	10.0	06/05/2024	ND	18.5	92.4	20.0	1.09		
TDS 160.1		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS*	540	5.00	06/07/2024	ND	805	80.5	1000	0.317		

Sample ID: MONITOR WELL #2 (H243105-02)

Chloride, SM4500Cl-B (Water)		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	60.0	4.00	06/05/2024	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*	72.0	10.0	06/05/2024	ND	18.5	92.4	20.0	1.09		
TDS 160.1		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS*	441	5.00	06/07/2024	ND	805	80.5	1000	0.317		

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", written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager

Cardinal Laboratories, Inc.

LAB Order ID

Company Name: RICE Operating Company		BILL TO Company: RICE Operating Company		PO#
Project Manager: Katie Jones		Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240		
Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240		Phone#: (575) 393-9174		Fax#: (575)397-1471
Phone #: (575) 393-9174		Fax #: (575) 397-1471		
Project #:		Project Name: Vacuum F-34 Vent		
Project Location: T17S-R35E-Sec34 F ~ Lea County New Mexico		Sampler Signature: Rozanne Johnson (575)631-9310		

(Circle or Specify Method No.)

[illegible]

Relinquished by: <u>Rozanne Johnson</u>	Date: <u>6/3/24</u>	Time: <u>7:30</u>	Received by: <u>James Johnson</u>	Date: <u>6/3/24</u>	Time: <u>7:30</u>						
Relinquished by: <u>[Signature]</u>	Date: <u>6/3/24</u>	Time: <u>7:30</u>	Received By: (Laboratory Staff) <u>APAW</u>	Date: <u>6/3/24</u>	Time: <u>9:05</u>						
Delivered By: (Circle One) <u>UPS</u>			Sample Condition	CHECKED BY:							
			<table border="1"> <tr> <td>Cool</td> <td>Intact</td> </tr> <tr> <td>Yes <input checked="" type="checkbox"/></td> <td>Yes <input checked="" type="checkbox"/></td> </tr> <tr> <td>No <input type="checkbox"/></td> <td>No <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) <u>AP</u>	
Cool	Intact										
Yes <input checked="" type="checkbox"/>	Yes <input checked="" type="checkbox"/>										
No <input type="checkbox"/>	No <input type="checkbox"/>										

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

REMARKS:

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



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 F-34 VENT

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 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".

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:	08/15/2024	Sampling Date:	08/14/2024
Reported:	08/27/2024	Sampling Type:	Water
Project Name:	VACUUM F-34 VENT	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Alyssa Parras
Project Location:	T17S-R35E-SEC34 F - LEA CTY, NM		

Sample ID: MONITOR WELL #1 (H244966-01)

Chloride, SM4500Cl-B (Water)		mg/L		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	368	4.00	08/16/2024	ND	108	108	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*	72.3	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*	981	5.00	08/21/2024	9.00	525	105	500	1.20		

Sample ID: MONITOR WELL #2 (H244966-02)

Chloride, SM4500Cl-B (Water)		mg/L		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	128	4.00	08/16/2024	ND	108	108	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*	55.5	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*	527	5.00	08/21/2024	9.00	525	105	500	1.20		

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.


CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # _____

ANALYSIS REQUEST

(Circle or Specify Method No.)

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

Project #: _____ Project Name: Vacuum F-34 Vent
Project Location: T17S-R35E-Sec34 F ~ Lea County New Mexico
Sampler Signature:  Rozanne Johnson (575) 631-9310

[illegible]

Relinquished by: <i>[Signature]</i>	Date: <i>8/15/2024</i>	Time: <i>13:00</i>	Received by: <i>[Signature]</i>	Date: <i>8/15/2024</i>	Time: <i>13:01</i>
ozanne Johnson			Received By: (Laboratory Staff)	Date: <i>8-15-24</i>	Time: <i>1420</i>
Relinquished by: <i>[Signature]</i>	Date: <i>8/15/2024</i>	Time: <i>1420</i>	Sample Condition	CHECKED BY: <i>AP</i>	
Delivered By: (Circle One)			Cool <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	(Initials)	
Sampler - UPS - Bus - <u>Other</u>					

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

REMARKS:

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

Received by *OCD*: 3/31/2025 10:23:26 AM

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

November 14, 2024

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM F-34 VENT

Enclosed are the results of analyses for samples received by the laboratory on 11/05/24 8:28.

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/ga/lab_accred_certif.html.

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

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

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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



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

Analytical Results For:Rice Operating Company
112 W. Taylor
Hobbs NM, 88240Project: VACUUM F-34 VENT
Project Number: NOT GIVEN
Project Manager: KATIE JONES
Fax To: (575) 397-1471Reported:
14-Nov-24 14:45

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MONITOR WELL #1	H246718-01	Water	01-Nov-24 09:30	05-Nov-24 08:28
MONITOR WELL #2	H246718-02	Water	01-Nov-24 11:00	05-Nov-24 08:28

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
112 W. Taylor
Hobbs NM, 88240

Project: VACUUM F-34 VENT
Project Number: NOT GIVEN
Project Manager: KATIE JONES
Fax To: (575) 397-1471

Reported:
14-Nov-24 14:45

MONITOR WELL #1
H246718-01 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride*	376		4.00	mg/L	1	4110837	AC	11-Nov-24	4500-Cl-B	
Sulfate*	64.2		10.0	mg/L	1	4110620	HM	07-Nov-24	375.4	
TDS*	1090		5.00	mg/L	1	4110733	HM	08-Nov-24	160.1	

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Reported:
14-Nov-24 14:45

MONITOR WELL #2**H246718-02 (Water)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride*	108		4.00	mg/L	1	4110837	AC	11-Nov-24	4500-Cl-B	
Sulfate*	56.4		10.0	mg/L	1	4110620	HM	07-Nov-24	375.4	
TDS*	513		5.00	mg/L	1	4110733	HM	08-Nov-24	160.1	

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Rice Operating Company
112 W. Taylor
Hobbs NM, 88240

Project: VACUUM F-34 VENT
Project Number: NOT GIVEN
Project Manager: KATIE JONES
Fax To: (575) 397-1471

Reported:
14-Nov-24 14:45

Inorganic Compounds - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4110620 - General Prep - Wet Chem										
Blank (4110620-BLK1)				Prepared & Analyzed: 07-Nov-24						
Sulfate	ND	10.0	mg/L							
LCS (4110620-BS1)				Prepared & Analyzed: 07-Nov-24						
Sulfate	16.7	10.0	mg/L	20.0		83.6	80-120			
LCS Dup (4110620-BSD1)				Prepared & Analyzed: 07-Nov-24						
Sulfate	16.0	10.0	mg/L	20.0		80.2	80-120	4.09	20	
Duplicate (4110620-DUP1)				Source: H246717-05		Prepared & Analyzed: 07-Nov-24				
Sulfate	54.9	10.0	mg/L		55.3			0.726	20	
Matrix Spike (4110620-MS1)				Source: H246717-05		Prepared & Analyzed: 07-Nov-24				
Sulfate	89.7	25.0	mg/L	50.0	55.3	68.8	70-130			QM-07
Batch 4110733 - Filtration										
Blank (4110733-BLK1)				Prepared: 11-Nov-24 Analyzed: 13-Nov-24						
TDS	ND	5.00	mg/L							
LCS (4110733-BS1)				Prepared: 07-Nov-24 Analyzed: 08-Nov-24						
TDS	817		mg/L	1000		81.7	80-120			
Duplicate (4110733-DUP1)				Source: H246717-01		Prepared: 06-Nov-24 Analyzed: 08-Nov-24				
TDS	458	5.00	mg/L		447			2.43	20	
Batch 4110837 - General Prep - Wet Chem										
Blank (4110837-BLK1)				Prepared: 08-Nov-24 Analyzed: 11-Nov-24						
Chloride	ND	4.00	mg/L							

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Celey D. Keene, Lab Director/Quality Manager



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Rice Operating Company
112 W. Taylor
Hobbs NM, 88240

Project: VACUUM F-34 VENT
Project Number: NOT GIVEN
Project Manager: KATIE JONES
Fax To: (575) 397-1471

Reported:
14-Nov-24 14:45

Inorganic Compounds - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4110837 - General Prep - Wet Chem**LCS (4110837-BS1)**

Prepared: 08-Nov-24 Analyzed: 11-Nov-24

Chloride	112	4.00	mg/L	100		112	80-120			
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LCS Dup (4110837-BSD1)

Prepared: 08-Nov-24 Analyzed: 11-Nov-24

Chloride	108	4.00	mg/L	100		108	80-120	3.64	20	
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Duplicate (4110837-DUP1)

Source: H246717-01

Prepared: 08-Nov-24 Analyzed: 11-Nov-24

Chloride	92.0	4.00	mg/L		84.0			9.09	20	
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Matrix Spike (4110837-MS1)

Source: H246717-01

Prepared: 08-Nov-24 Analyzed: 11-Nov-24

Chloride	180	4.00	mg/L	100	84.0	96.0	80-120			
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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

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

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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.

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

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 F-34 Vent		
Project Location: T17S-R35E-Sec34 F ~ Lea County New Mexico		Sampler Signature: <i>Rozanne Johnson</i> (575) 631-9310		

ANALYSIS REQUEST

(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX				PRESERVATIVE METHOD				SAMPLING		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				
				WATER	SOIL	AIR	SLUDGE	HCL (4 40ml VOA)	HNO3	NaHSO4	H2SO4	ICE (1 liter HDPE)	NONE																							DATE (2024)	TIME		
1	Monitor Well #1	G	1	X								1	11/1	9:30																									
2	Monitor Well #2	G	1	X								1	11/1	11:00																									

Relinquished by: <i>Rozanne Johnson</i>	Date: 11/5/2024	Time: 8:00	Received by: <i>[Signature]</i>	Date: 11/5/2024	Time: 8:01
Relinquished by: <i>[Signature]</i>	Date: 11/5/2024	Time:	Received By: (Laboratory Staff) <i>[Signature]</i>	Date: 11-5-24	Time: 8:28
Delivered By: (Circle One) UPS	Sample Condition Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		CHECKED BY: (Initials) AP		

Phone Results	Yes	No
Fax Results	Yes	No

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

Action 447151

CONDITIONS

Operator: RICE OPERATING COMPANY PO Box 5630 Hobbs, NM 88241	OGRID: 19174
	Action Number: 447151
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	Report accepted for record.	7/3/2025
amaxwell	Continue quarterly groundwater sampling and groundwater recovery.	7/3/2025
amaxwell	Submit a C-141N prior to all monitoring/sampling events.	7/3/2025