L Peter Galusky, Jr PE

5935 Exeter Cir Norcross, GA 30071 | 470 955-5335 | peter@bluerock.pro

April 1st, 2024

REVIEWED
By Mike Buchanan at 10:14 am, Sep 17, 2024

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 Repor to OCD by April 1, 2025.

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

Re: **2023 Annual Report**
Rice Operating Company – Vacuum SWD System
Vacuum F-34 Vent Boot (1R425-67): UL F, Section 34, Town
NMOCD Application ID 202298, Incident ID: nAPP211033886

Sent via E-mail

Mr. Velez:

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 June 21st, 2023 (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 74+/- ft below ground surface in the Ogallala Formation and flows toward the southeast (Appendix, Figures 2a & 2b).

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

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 2a & 2b.

Past Year and Current Status

ROC began groundwater recovery from MW-1 in April of 2014. A total of 17,387 bbls of groundwater and approximately 1,249 kg of chloride have been removed through 2023. 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) rose slightly from 354 mg/l in 2022 to 401 mg/l in 2023 (Appendix Figure 3, Table 1). Chlorides in the up-gradient monitor well (MW-2) remained below 75 mg/l in 2023 as they have since groundwater sampling in this well began in 2010 (Appendix Figure 3, 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 recovery during 2024.

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.

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

Thank you.

Sincerely,

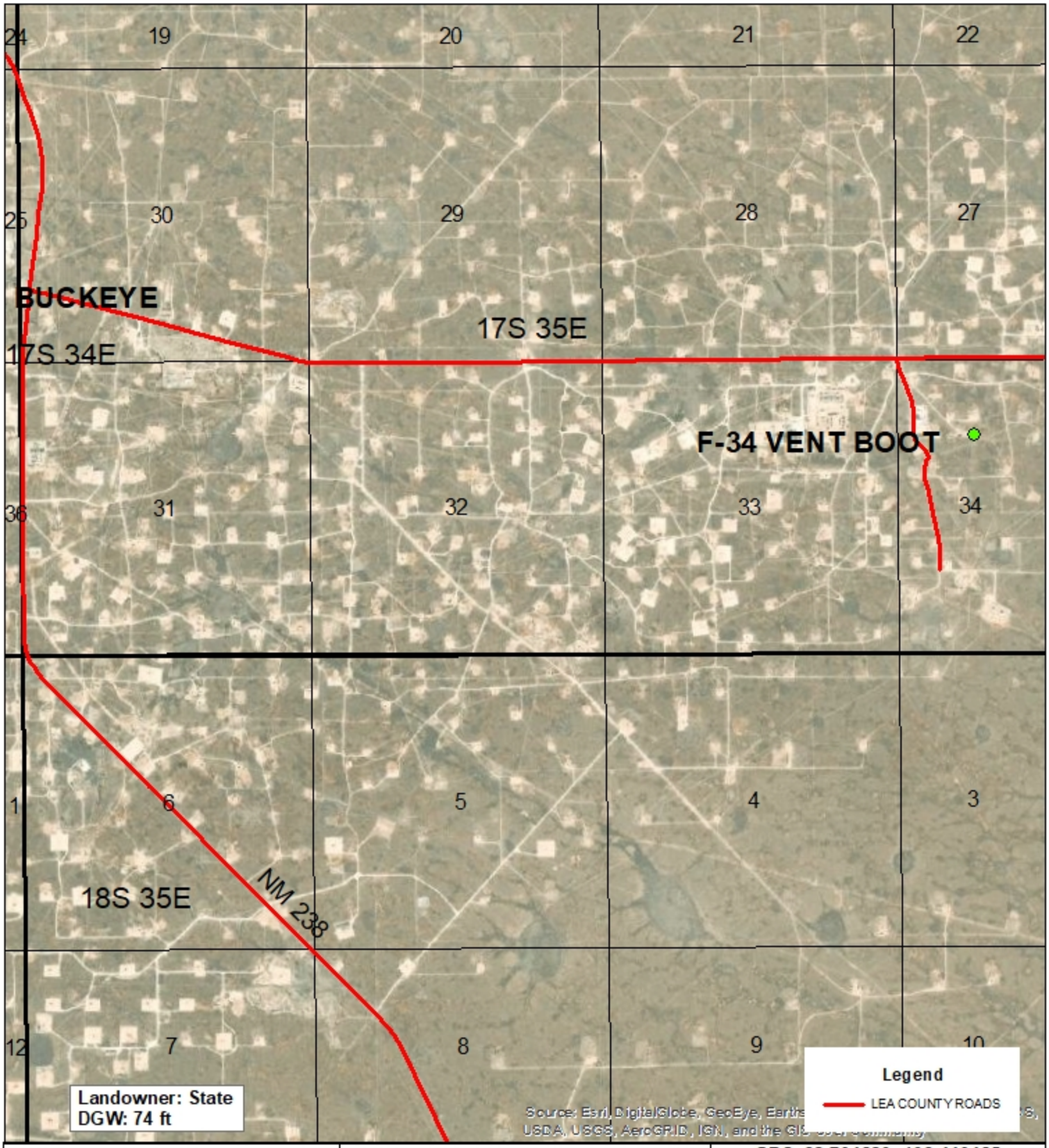
L. Peter Galusky, Jr. P.E.
NM Prof. Engineer No. 22561

Copy: Rice Operating Company

Attachments: … as noted in text

Geographic Location

Figure 1



RICE OPERATING COMPANY
ROC
SINCE 1955

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 1,000 2,000
Feet

N
W E
S

Drawing date: 2/4/20
Drawn by: T. Grieco

Site Map

Figure 2a

RICE OPERATING COMPANY
ROC
SINCE 1955

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

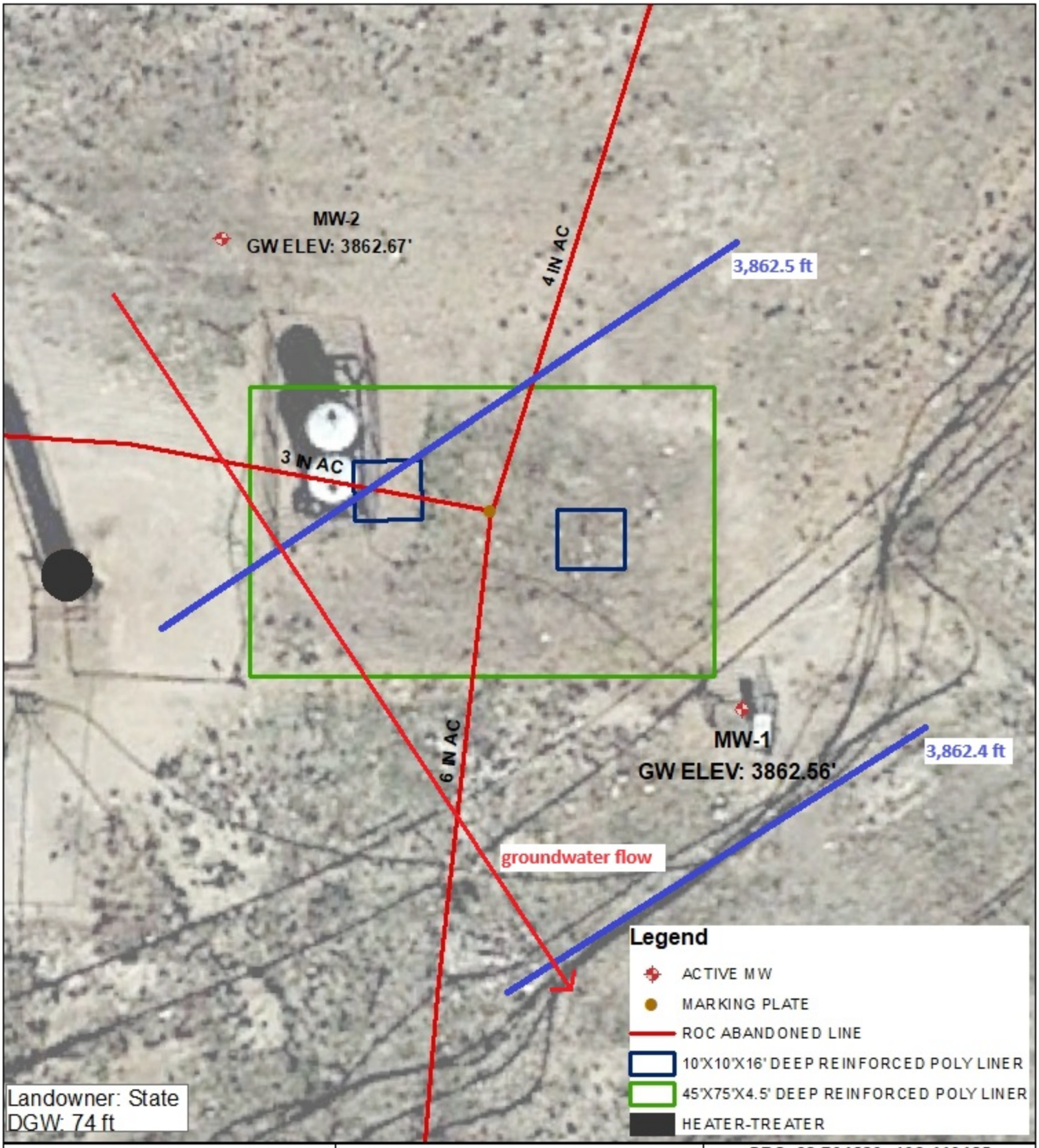
0 10 20
Feet

Drawing date: 2/4/20
Drawn by: T. Grieco

N
W E
S

Groundwater Elevation 3/5/15

Figure 2b



RICE OPERATING COMPANY
ROC
SINCE 1955

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 10 20
Feet

Drawing date: 3/11/24
Drawn by: T. Grieco

N W E S

Figure 3

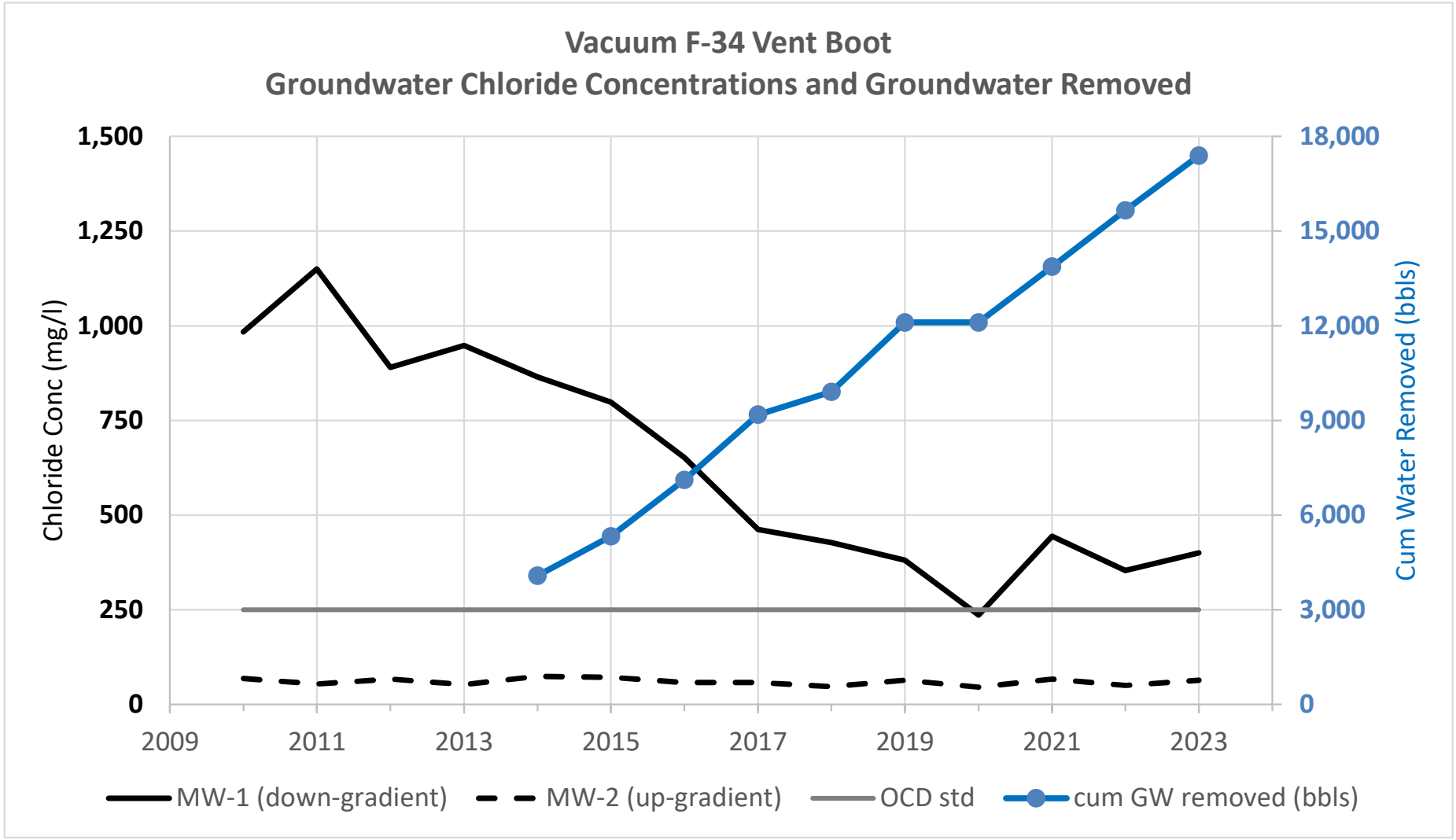

Vacuum F-34 Vent Boot
Groundwater Chloride Concentrations and Groundwater Removed
Chloride Conc (mg/l)
1,500
1,250
1,000
750
500
250
0
Cum Water Removed (bbls)
18,000
15,000
12,000
9,000
6,000
3,000
0
2009
2011
2013
2015
2017
2019
2021
2023
MW-1 (down-gradient)
MW-2 (up-gradient)
OCD std
cum GW removed (bbls)

Table 1

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

year	MW-1 (down-gradient)	MW-2 (up-gradient)	OCD std (mg/l)	cum GW removed (bbls)	cum Cl- removed (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

Table 2

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
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

Table 2

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
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

Table 2

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

Table 2

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	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

Laboratory Reports

CARDINAL Laboratories

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

March 28, 2023

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 03/20/23 16:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. 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

Laboratory 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:	03/20/2023	Sampling Date:	03/17/2023
Reported:	03/28/2023	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 (H231255-01)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**480**	4.00	03/21/2023	ND	100	100	100	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**57.6**	10.0	03/21/2023	ND	23.0	115	20.0	3.59	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**1070**	5.00	03/27/2023	ND	833	83.3	1000	9.95	

Sample ID: MONITOR WELL #2 (H231255-02)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**64.0**	4.00	03/21/2023	ND	100	100	100	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**57.6**	10.0	03/21/2023	ND	23.0	115	20.0	3.59	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**295**	5.00	03/27/2023	ND	833	83.3	1000	9.95	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

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

LAB # H231255 (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 (2023)	TIME
1	Monitor Well #1	G	1	X								1		3/17	13:00
2	Monitor Well #2	G	1	X								1		3/17	10:00

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	

Relinquished by: Rozanne Johnson Date: 3/20/2023 Time: 14:00

Received by: Date: 3/20/2023 Time: 14:41

Relinquished by: Date: 3/20/2023 Time:

Received By: (Laboratory Staff) Date: Time: 1000

Delivered By: (Circle One) Sampler - UPS - Bus - Other:

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

CHECKED BY: (Initials) TO

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

REMARKS:

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

Laboratory Reports

CARDINAL Laboratories

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

June 14, 2023

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 06/08/23 16:32.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. 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:	06/08/2023	Sampling Date:	06/08/2023
Reported:	06/14/2023	Sampling Type:	Water
Project Name:	VACUUM F-34 VENT	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	T17S-R35E-SEC34 F - LEA CTY, NM		

Sample ID: MONITOR WELL #1 (H232955-01)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**300**	4.00	06/09/2023	ND	108	108	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*	**61.8**	10.0	06/12/2023	ND	20.0	99.8	20.0	2.28	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**788**	5.00	06/13/2023	ND	835	83.5	1000	1.52	

Sample ID: MONITOR WELL #2 (H232955-02)

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	06/09/2023	ND	108	108	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*	**70.5**	10.0	06/12/2023	ND	20.0	99.8	20.0	2.28	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**432**	5.00	06/13/2023	ND	835	83.5	1000	1.52	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Laboratory 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 # H232955

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

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 (2023)	TIME
1	Monitor Well #1	G	1	X								1		6/8	10:35
2	Monitor Well #2	G	1	X								1		6/8	10:15

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
1																			X	X	X	
2																			X	X	X	

Relinquished by: Rozanne Johnson	Date: 6/8/2023	Time: 16:35	Received by: Rodriguez	Date: 6/8/23 Time: 1632
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff)	Date: Time:

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

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

Sample Condition: Cool — Yes; Intact — Yes

CHECKED BY: (Initials) SR

REMARKS:

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

Laboratory Reports

CARDINAL Laboratories

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

August 28, 2023

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 08/21/23 9:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. 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:	08/21/2023	Sampling Date:	08/17/2023
Reported:	08/28/2023	Sampling Type:	Water
Project Name:	VACUUM F-34 VENT	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	T17S-R35E-SEC34 F - LEA CTY, NM		

Sample ID: MONITOR WELL #1 (H234523-01)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**332**	4.00	08/21/2023	ND	100	100	100	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**61.8**	10.0	08/23/2023	ND	19.1	95.6	20.0	7.01	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**889**	5.00	08/25/2023	ND	543	109	500	1.59	

Sample ID: MONITOR WELL #2 (H234523-02)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**60.0**	4.00	08/21/2023	ND	100	100	100	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**64.2**	10.0	08/23/2023	ND	19.1	95.6	20.0	7.01	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**396**	5.00	08/25/2023	ND	543	109	500	1.59	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Laboratory 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 # H234523

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

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 (2023)	TIME
1	Monitor Well #1	G	1	X								1		8/17	10:20
2	Monitor Well #2	G	1	X								1		8/17	10:00

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
1																			X	X	X	
2																			X	X	X	

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

Relinquished by: Rozanne Johnson	Date: 8/21/2023	Time: 7:10
Relinquished by:	Date: 8/21/2023	Time:
Received by:	Date: 8/21/2023	Time: 7:11
Received By: (Lab Staff) S Rodriguez	Date: 8-21-23	Time: 0935

Delivered By: (Circle One) Sampler - UPS - Bus - Other:

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

CHECKED BY: (Initials) SR

REMARKS:

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

Laboratory Reports

CARDINAL Laboratories

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

October 20, 2023

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 10/16/23 15:12.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. 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

Laboratory 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:	10/16/2023	Sampling Date:	10/11/2023
Reported:	10/20/2023	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 (H235627-01)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**490**	4.00	10/17/2023	ND	112	112	100	11.3	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**72.9**	10.0	10/17/2023	ND	17.4	86.8	20.0	1.74	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**1180**	5.00	10/19/2023	ND	490	98.0	500	1.48	

Sample ID: MONITOR WELL #2 (H235627-02)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**64.0**	4.00	10/17/2023	ND	112	112	100	11.3	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**72.5**	10.0	10/17/2023	ND	17.4	86.8	20.0	1.74	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**382**	5.00	10/19/2023	ND	490	98.0	500	1.48	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Laboratory Reports

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

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

H235627

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 (2023)	TIME
1	Monitor Well #1	G	1	X								1		10/11	10:30
2	Monitor Well #2	G	1	X								1		10/11	10:05

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	

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

Relinquished by: Rozanne Johnson	Date: 10/16/2023	Time: 15:10
Relinquished by:	Date:	Time:
Received by:	Date: 10-16-23	Time: 1512
Received By: (Laboratory Staff)	Date:	Time:

REMARKS:

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

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

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

CHECKED BY: (Initials)

Exhibit 1

From: OCDOnline@state.nm.us
To: Katie Jones
Subject: The Oil Conservation Division (OCD) has approved the application, Application ID: 202298
Date: Wednesday, June 21, 2023 4:32:37 PM

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 2022 Annual Report for Vacuum F-34 Vent Boot on behalf of RICE: Content Satisfactory 1. Continue to groundwater monitor quarterly for sampling and recovery. 2. Submit the 2023 Annual Report no later than April 1, 2024.**

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
505-476-3441
Michael.Buchanan@emnrd.nm.gov

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

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 327877

CONDITIONS

Operator: RICE OPERATING COMPANY 122 W Taylor Hobbs, NM 88240	OGRID: 19174
	Action Number: 327877
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	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.	9/17/2024