

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 87505

RE: **2024 Annual Report**

Rice Operating Company

Vacuum N-6-1 Jct (1R0479): UL N, Sec 6, T18S, R35E

NMOCD Application ID: pEJH0633344309, Incident ID: nAPP2110350805

Sent by E-mail

Mr. Buchanan:

This letter summarizes progress made over the past calendar year pursuant to the NMOCD's approval e-mail letter of September 17th, 2024 for this site which is operated by Rice Operating Company (ROC). Geographic location and site maps are given in the Appendix, Figure 1 and 2, respectively. A groundwater flow map is given in the Appendix, Figure 3. The groundwater depth near the site is approximately 125 ft.

ROC submitted a Vadose Zone Corrective Action Plan (CAP) Update to NMOCD on November 8th, 2013, and approved on November 20th, 2013, which entailed the removal of high-chloride soils to 3 ft bgs and the installation of an impermeable, 20-mil reinforced synthetic liner to reduce the potential downward migration of residual soil chlorides (Appendix - Figure 2). This work was completed in 2014 and is summarized in the Vadose Zone CAP Report & Soil Closure Request dated and submitted to NMOCD on August 12th, 2014. NMOCD approved the report and granted 'Soil Closure' on September 18th, 2014.

ROC continued to monitor groundwater chloride concentrations during 2024. Please see the Appendix, Figure 4 and Table 1 (dataset summary), Table 2 (full dataset) and Lab Reports. In brief,

- Approximately 49,160 barrels of chloride-affected groundwater have been removed from the source area from 2007 through 2024. The removed groundwater was hauled to an off-site location and utilized for a beneficial use.
- Average annual groundwater chloride concentrations in the near-source monitor well (MW-1) dropped from 21,400 mg/l in 2006 to 5,100 mg/l in 2014 (Figure 4, Tables 1&2). This well was replaced in summer 2014 with a new monitor well, MW-1R, after being damaged during the installation of the sub-surface soil liner. Average annual groundwater chloride concentrations in MW-1R increased slightly from 437 mg/l in 2023 to 499 mg/l in 2024.

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- Groundwater chloride concentrations in up and down gradient monitor wells (MW-2, MW-3 and MW-4) were not sampled in 2024 as there was insufficient water in them to obtain a sample.
- Average annual groundwater chloride concentrations in the (down-gradient) recovery well (RW-1) was little changed, dropping from 334 mg/l in 2023 to 330 mg/l in 2024.

Water-soluble petroleum hydrocarbons (BTEX) were not detected in any of the groundwater samples taken in 2020 nor in any prior years. In 2020, NMOCD granted approval to cease BTEX sampling and analysis.

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

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. The Vacuum system is now abandoned.

Please contact either Katie Davis of Rice Operating Company or me 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.

From: OCDOnline@state.nm.us
To: [Katie Jones](#)
Subject: The Oil Conservation Division (OCD) has approved the application, Application ID: 327871
Date: Tuesday, September 17, 2024 11:24:44 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#) nAPP2110350805, with the following conditions:

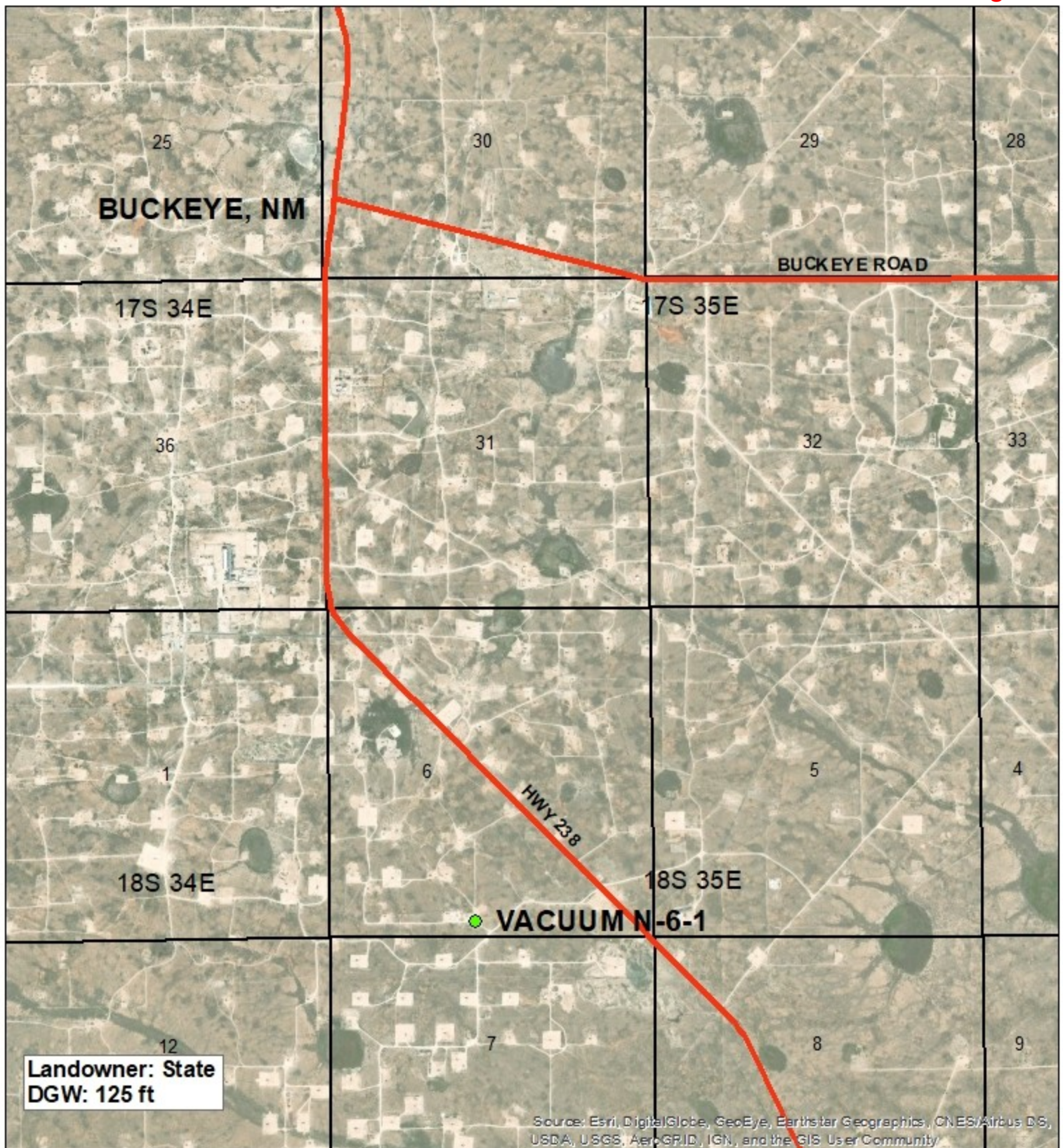
- **Review of the 2023 Annual Report for Vacuum N-6-1 Jct (1R0479): content satisfactory 1. Continue to conduct groundwater recovery as prescribed in the report. 2. Conduct groundwater sampling on a quarterly schedule for the 2024 calendar year. 3. Submit the 2024 annual report to OCD by April 1, 2025.**

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



**VACUUM
N-6-1**

1R0479

UL N SECTION 6
T-18-S R-35-E
LEA COUNTY, NM

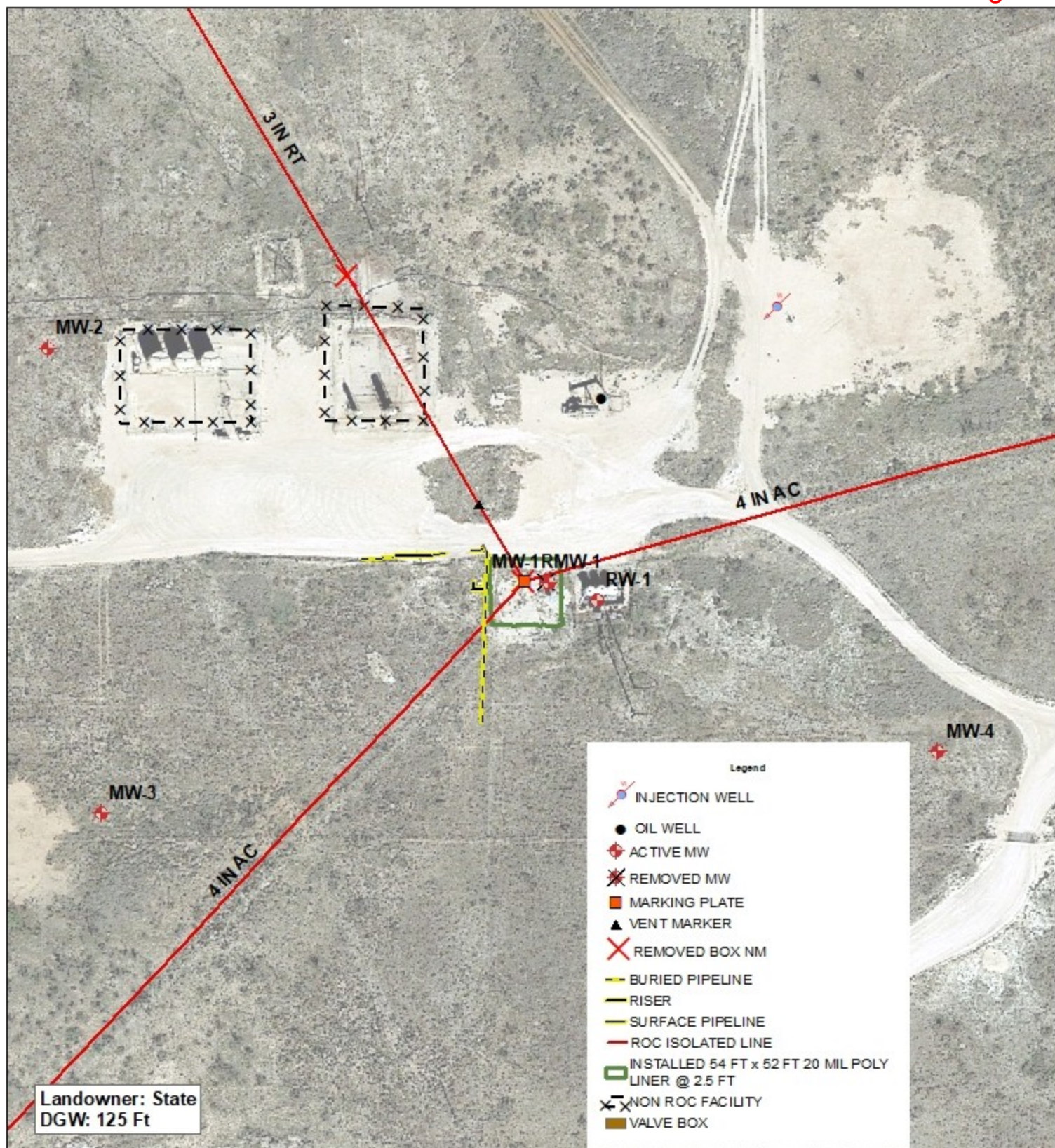
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NAD83 STATE PLANE PROJ
NM EAST ZONE

0 0.25 0.5
Miles

Drawing date: 1/28/25
Drafted by: T. Grieco



Site Map



VACUUM
N-6-1
1R0479

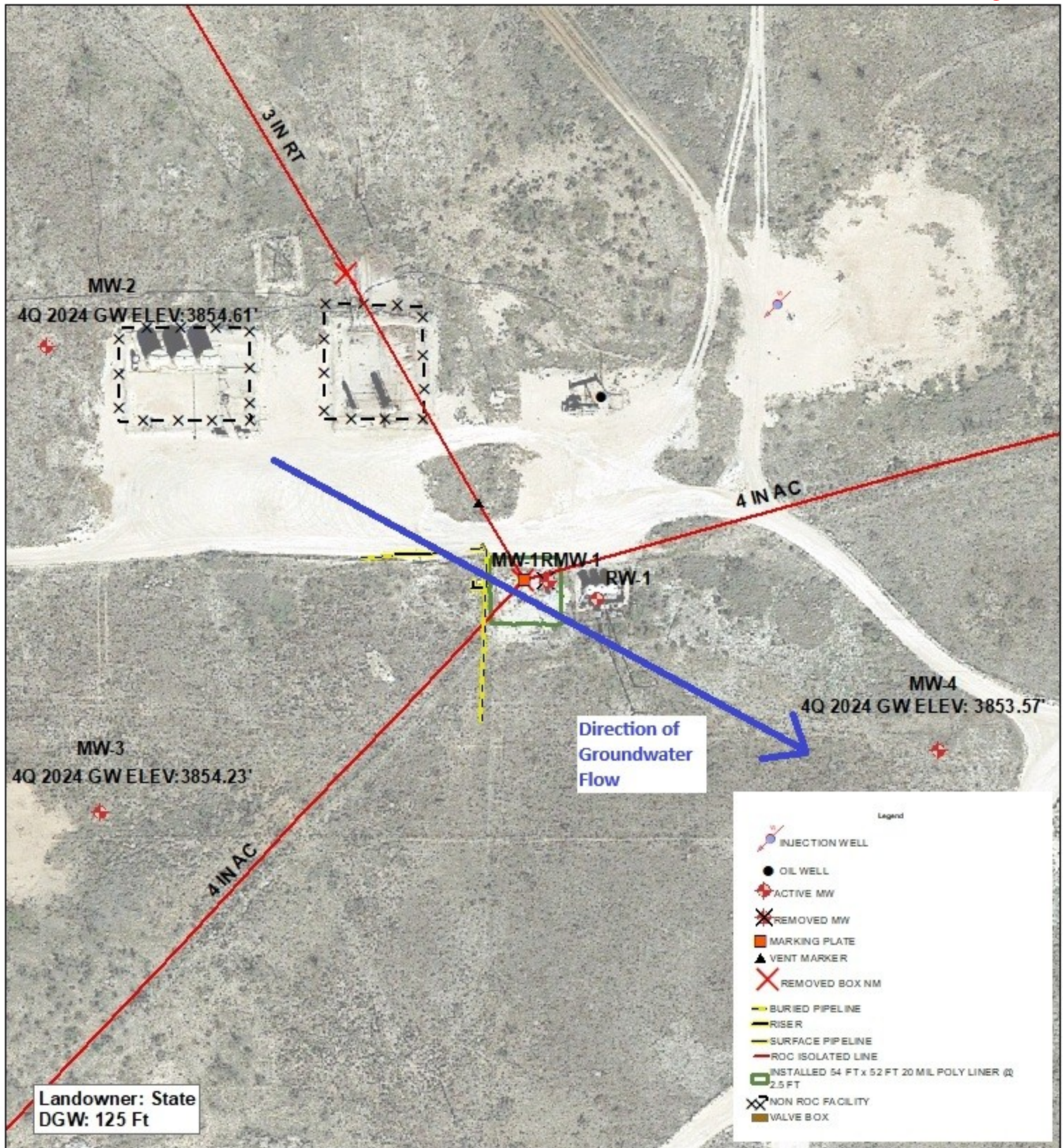
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T-18-S R-35-E
LEA COUNTY, NM

GPS: 32.770216 -103.498268
NAD83 STATE PLANE PROJ
NM EAST ZONE

0 50 100
Feet



Drawing date: 1/28/25
Drafted by: T. Grieco



VACUUM
N-6-1
1R0479

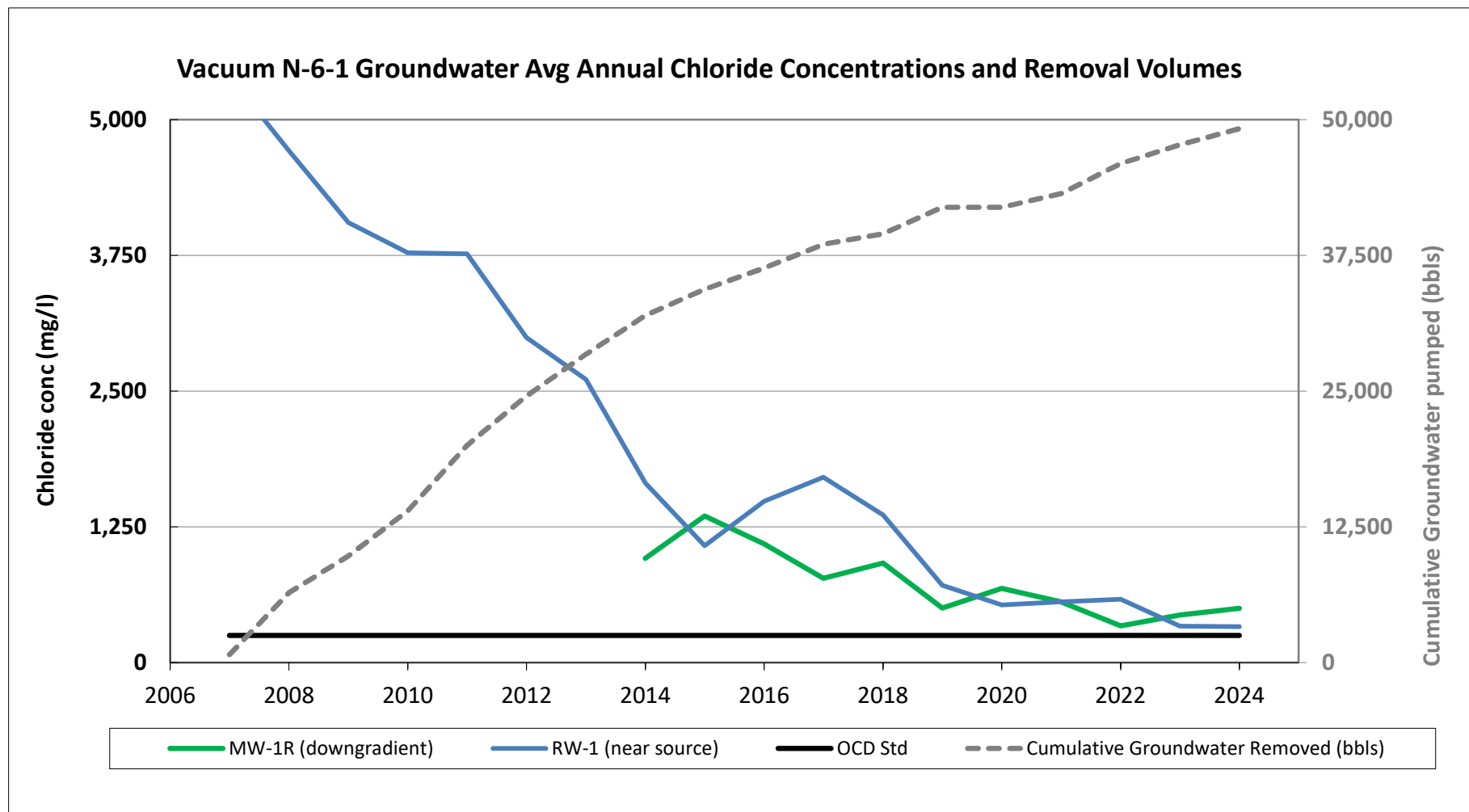
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NAD83 STATE PLANE PROJ
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0 50 100
Feet



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ROC - Vacuum N-6-1 (1R0479)**Annual Average Groundwater Chloride Concentrations (mg/l)
and Groundwater Volume (bbls) and Chloride Mass (kg) Removal**

Year	MW-2 (upgradient northwest)	MW-3 (upgradient, southwest)	MW-4 (downgradient, southeast)	RW-1 (down gradient	MW-1R (nearsources)	OCD Std	Cumulative Groundwater Removed (bbls)	Cumulative Chloride Mass Removed (kg)
2006								
2007	24	23	41	5,399		250	738	480
2008	32	27	41	4,713		250	6,438	4,371
2009	30	27	34	4,050		250	9,819	6,491
2010	27	23	38	3,775		250	13,957	9,269
2011	27	25	37	3,763		250	20,003	12,627
2012	31	24	38	2,993		250	24,560	14,449
2013	30	28	31	2,608		250	28,390	15,899
2014	64	28	37	1,653	960	250	31,972	16,910
2015	37	27	30	1,075	1,350	250	34,372	17,326
2016	47	24	43	1,485	1,093	250	36,322	17,560
2017	39	34	37	1,708	776	250	38,517	17,774
2018	51	37	41	1,360	915	250	39,497	17,860
2019	33	34	32	713	503	250	41,927	18,039
2020	32	28	50	530	684	250	41,927	18,039
2021	59	33	42	560	560	250	43,173	18,148
2022	56	38	38	583	338	250	45,943	18,325
2023	66	39	36	334	437	250	47,685	18,409
2024				330	499	250	49,160	18,446

Table 2

ROC - Vacuum N-6-1 (1R0479)

Unit Letter N, Section 6, T18S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
1	116.43	125.8	1.5	10	10/18/2006	21,400	40,100	<0.001	<0.001	<0.001	<0.001	475	Silt to clear
1	116.66	125.1	1.4	10	3/7/2007	20,200	28,100	<0.001	<0.001	<0.001	<0.001	584	Silt to clear Slight odor
1	116.61	125.1	1.4	10	5/29/2007	18,500	35,900	<0.001	<0.001	<0.001	<0.001	449	Silt to clear Slight odor
1	116.95	125.1	1.3	5	9/25/2007	15,795	27,714	<0.002	<0.002	<0.002	<0.006	152	Silt to clear Slight odor
1	116.98	125.1	1.3	5	10/17/2007	16,400	27,927	<0.001	0.004	<0.001	<0.001	143	Silt to clear Slight odor
1	117.02	125.1	1.3	5	1/31/2008	15,400	28,300	<0.001	<0.001	<0.001	<0.003	148	Silt to clear Slight odor
1	117.22	125.1	1.3	5	4/24/2008	14,300	24,800	<0.001	<0.001	<0.001	<0.003	128	Silt to clear Slight odor
1	117.67	125.1	1.2	5	8/7/2008	14,000	24,900	<0.001	<0.001	<0.001	<0.003	158	Silt to clear Slight odor
1	117.62	125.1	1.2	5	10/30/2008	14,000	28,200	<0.001	<0.001	<0.001	<0.003	126	Silt to clear Slight odor
1	117.78	125	1.1	5	1/23/2009	13,600	24,200	<0.001	<0.001	<0.001	<0.003	109	Silt to clear Slight odor
1	118.09	125	1.1	5	4/29/2009	14,200	22,800	<0.001	<0.001	<0.001	<0.003	110	Silt to clear Slight odor
1	118.08	125	1.1	5	8/7/2009	12,800	21,200	<0.001	<0.001	<0.001	<0.003	102	Silt to clear Slight odor
1	118.43	125	1	5	10/22/2009	12,200	19,700	<0.001	<0.001	<0.001	<0.003	76.4	Silt to clear Slight odor
1	118.78	125	1	5	4/26/2010	10,700	18,400	<0.001	<0.001	<0.001	<0.003	96	Silt to clear Slight odor
1	118.28	125	1.1	5	2/11/2010	12,100	20,700	<0.001	<0.001	<0.001	<0.003	94.4	Silt to clear Slight odor
1	118.6	125	1	5	8/5/2010	9,800	15,600	<0.001	<0.001	<0.001	<0.003	79.4	Silt to clear Slight odor
1	118.96	125	1	5	10/28/2010	8,900	16,800	<0.001	<0.001	<0.001	<0.003	81.7	Silt to clear Slight odor
1	118.89	125.2	1	5	2/21/2011	7,730	13,200	<0.001	0.001	<0.001	<0.003	60.3	Silt to clear Slight odor
1	119.35	125.2	0.9	5	6/6/2011	9,800	13,700	<0.001	<0.001	<0.001	<0.003	77.8	Silt to clear Slight odor
1	120.17	125.2	0.8	5	9/2/2011	9,300	11,800	<0.001	<0.001	<0.001	<0.003	94.9	Silt to clear Slight odor
1	119.72	125.2	0.9	5	12/4/2011	6,900	11,500	<0.001	<0.001	<0.001	<0.003	81	Silt to clear Slight odor
1	119.76	125.2	0.9	5	2/24/2012	6,000	10,400	<0.001	<0.001	<0.001	<0.003	77.5	Silt to clear Slight odor
1	119.78	125.2	0.9	5	6/1/2012	5,700	10,100	<0.001	<0.001	<0.001	<0.003	77.2	Silt to clear Slight odor
1	119.83	125.2	0.9	5	8/31/2012	5,700	9,330	<0.001	<0.001	<0.001	<0.003	66.3	Silt to clear Slight odor
1	119.98	125.2	0.8	5	11/16/2012	5,400	9,240	<0.001	<0.001	<0.001	<0.003	71.8	Silt to clear Slight odor
1	120.03	125.2	0.8	5	2/14/2013	4,850	8,110	<0.001	<0.001	<0.001	<0.003	65	Silt to clear Slight odor
1	120.4	125.2	0.8	5	5/23/2013	5,100	8,230	<0.001	<0.001	<0.001	<0.003	74	Silt to clear Slight odor
1	120.6	125.2	0.7	5	9/4/2013	4,100	7,160	<0.001	<0.001	<0.001	<0.003	55.2	Silt to clear Slight odor
1	120.61	125.2	0.7	5	11/13/2013	3,130	6,910	<0.001	<0.001	<0.001	<0.003	60.9	Silt to clear Slight odor
1	120.64	125.2	0.7	5	3/14/2014	5,100	7,250	<0.001	<0.001	<0.001	<0.003	72.8	Silt to clear Slight odor
MW-1R installed 7/17/2014													

Table 2

ROC - Vacuum N-6-1 (1R0479)

Unit Letter N, Section 6, T18S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
1R	XXX	XXX	0	Running	8/22/2014	1,300	2,770	<0.001	<0.001	<0.001	<0.003	45.7	Silt to clear Slight odor
1R	XXX	168.3	0	100	12/13/2014	620	1,360	<0.001	<0.001	<0.001	<0.003	37.1	Silt to clear Slight odor
1R	XXX	168.3	0	100	3/9/2015	2,270	5,920	<0.001	<0.001	<0.001	<0.003	180	Silt to clear Slight odor
1R	XXX	168	0	Running	6/8/2015	1,110	2,670	<0.001	<0.001	<0.001	<0.003	48	Silt to clear Slight odor
1R	XXX	168	0	Running	8/25/2015	1,100	1,970	<0.001	<0.001	<0.001	<0.003	36.1	Silt to clear Slight odor
1R	XXX	168	0	Running	11/17/2015	920	1,780	<0.001	<0.001	<0.001	<0.003	40.2	Silt to clear Slight odor
1R	XXX	168.3	XXX	100	3/21/2016	1,300	2,880	<0.001	<0.001	<0.001	<0.003	209	Silt to clear Slight odor
1R	XXX	168.3	XXX	100	6/3/2016	1,300	2,750	<0.001	<0.001	<0.001	<0.003	71.8	Silt to clear Slight odor
1R	XXX	168.3	XXX	Running	9/21/2016	710	1,500	<0.001	<0.001	<0.001	<0.003	40	Silt to clear Slight odor
1R	XXX	168.3	XXX	100	11/28/2016	1,060	2,040	<0.001	<0.001	<0.001	<0.003	43	Silt to clear Slight odor
1R	XXX	168.3	XXX	100	3/8/2017	1,340	2,790	<0.001	<0.001	<0.001	<0.003	204	Silt to clear Slight odor
1R	XXX	168.3	XXX	Running	6/8/2017	32	320	<0.001	<0.001	<0.001	<0.003	43	Silt to clear Slight odor
1R	XXX	168.3	XXX	Running	9/20/2017	570	1,470	<0.001	<0.001	<0.001	<0.003	42	Silt to clear Slight odor
1R	XXX	168.3	XXX	100	12/11/2017	1,160	2,310	<0.001	<0.001	<0.001	<0.003	80	Silt to clear Slight odor
1R	XXX	168	XXX	100	3/13/2018	1,520	2,830	<0.001	<0.001	<0.001	<0.003	74	Silt to clear Slight odor
1R	XXX	168	XXX	100	6/8/2018	570	1,190	<0.001	<0.001	<0.001	<0.003	38.9	Silt to clear Slight odor
1R	XXX	168.3	XXX	Running	9/17/2018	510	1030	<0.001	<0.001	<0.001	<0.003	40	Silt to clear Slight odor
1R	XXX	168	XXX	100	11/29/2018	1,060	1,760	<0.001	<0.001	<0.001	<0.003	52.5	Silt to clear Slight odor

Table 2

ROC - Vacuum N-6-1 (1R0479)

Unit Letter N, Section 6, T18S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
1R	XXX	168.3	XXX	100	3/19/2019	730	1,540	<0.001	<0.001	<0.001	<0.003	70	Silt to clear Slight odor
1R	XXX	168.3	XXX	Running	6/14/2019	450	1,030	<0.001	<0.001	<0.001	<0.003	38	Silt to clear Slight odor
1R	XXX	168.3	XXX	Running	9/18/2019	428	966	<0.001	<0.001	<0.001	<0.003	40	Silt to clear Slight odor
1R	XXX	168.3	XXX	100	12/3/2019	404	828	<0.001	<0.001	<0.001	<0.003	40	Silt to clear Slight odor
1R	XXX	168	XXX	100	3/23/2020	860	1,650	<0.001	<0.001	<0.001	<0.003	47.4	Silt to clear Slight odor
1R	XXX	168	XXX	100	9/22/2020	508	1,100	XXX	XXX	XXX	XXX	63.8	Silt to clear Slight odor
1R	XXX	168	XXX	100	3/19/2021	440	1,030	XXX	XXX	XXX	XXX	57.6	Silt to clear Slight odor
1R	XXX	168	XXX	Running	6/18/2021	780	1,580	XXX	XXX	XXX	XXX	60.9	Silt to clear Slight odor
1R	XXX	168	XXX	Running	9/20/2021	320	840	XXX	XXX	XXX	XXX	44.9	Silt to clear Slight odor
1R	XXX	168	XXX	100	11/20/2021	700	1,520	XXX	XXX	XXX	XXX	56.4	Silt to clear Slight odor
1R	XXX	168	XXX	100	3/21/2022	470	1,050	XXX	XXX	XXX	XXX	71.9	Silt to clear Slight odor
1R	XXX	168	XXX	Running	6/17/2022	288	776	XXX	XXX	XXX	XXX	32.2	Silt to clear Slight odor
1R	XXX	168	XXX	Running	9/9/2022	408	1,010	XXX	XXX	XXX	XXX	36.2	Silt to clear Slight odor
1R	XXX	168	XXX	100	12/7/2022	184	910	XXX	XXX	XXX	XXX	27.8	Silt to clear Slight odor
1R	XXX	168	XXX	100	3/21/2023	324	728	XXX	XXX	XXX	XXX	42.4	Silt to clear Slight odor
1R	XXX	168	XXX	100	6/9/2023	700	1,550	XXX	XXX	XXX	XXX	40.7	Silt to clear Slight odor
1R	XXX	168	XXX	Running	9/14/2023	224	670	XXX	XXX	XXX	XXX	35.9	Silt to clear Slight odor
1R	XXX	168	XXX	Running	10/10/2023	500	1,090	XXX	XXX	XXX	XXX	49.8	Silt to clear Slight odor
1R	XXX	168	XXX	100	3/14/2024	720	1,440	XXX	XXX	XXX	XXX	42.2	Silt to clear Slight odor
1R	XXX	168	XXX	Running	5/28/2024	720	1,150	XXX	XXX	XXX	XXX	43.1	Silt to clear Slight odor
1R	XXX	168	XXX	Running	8/16/2024	336	1,130	XXX	XXX	XXX	XXX	63.9	Silt to clear Slight odor
1R	XXX	168	XXX	Running	11/5/2024	220	640	XXX	XXX	XXX	XXX	25.4	Silt to clear Slight odor

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
2	117.56	126.9	1.5	8	3/7/2007	21	278	<0.001	<0.001	<0.001	<0.001	30.5	Sand to clear No odor
2	117.61	126.9	1.5	2	5/29/2007	24	296	<0.001	<0.001	<0.001	<0.001	34.2	Sand to clear No odor

Table 2

ROC - Vacuum N-6-1 (1R0479)

Unit Letter N, Section 6, T18S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
2	117.89	126.9	1.4	6	9/25/2007	24	319	<0.002	<0.002	<0.002	<0.006	38	Sand to clear No odor
2	117.92	126.9	1.4	6	10/17/2007	28	289	<0.001	0.005	<0.001	0.004	37.8	Sand to clear No odor
2	117.96	126.6	1.4	6	1/31/2008	28	325	<0.001	<0.001	<0.001	<0.003	36.4	Sand to clear No odor
2	118.11	126.6	1.4	6	4/24/2008	28	286	<0.001	<0.001	<0.001	<0.003	30.7	Sand to clear No odor
2	118.35	126.6	1.3	6	8/7/2008	32	324	<0.001	<0.001	<0.001	<0.003	48	Sand to clear No odor
2	118.53	126.6	1.3	6	10/30/2008	40	342	<0.001	<0.001	<0.001	<0.003	47.3	Sand to clear No odor
2	118.65	126.6	1.3	6	1/23/2009	36	365	<0.001	<0.001	<0.001	<0.003	44.6	Sand to clear No odor
2	118.81	126.6	1.2	6	4/29/2009	24	346	<0.001	<0.001	<0.001	<0.003	34.2	Sand to clear No odor
2	118.96	126.6	1.2	6	8/7/2009	36	24	<0.001	<0.001	<0.001	<0.003	302	Silt to clear No odor
2	119.11	126.6	1.2	6	10/22/2009	24	314	<0.001	<0.001	<0.001	<0.003	32.8	Sand to clear No odor
2	119.49	126.5	1.1	6	4/26/2010	28	324	<0.001	<0.001	<0.001	<0.003	42.4	Sand to clear No odor
2	119.25	126.5	1.2	6	2/11/2010	28	343	<0.001	<0.001	<0.001	<0.003	42.6	Sand to clear No odor
2	119.55	126.5	1.1	6	8/5/2010	28	316	<0.001	<0.001	<0.001	<0.003	35	Sand to clear No odor
2	119.71	126.5	1.1	6	10/28/2010	24	336	<0.001	<0.001	<0.001	<0.003	39	Sand to clear No odor
2	119.96	127	1.1	6	2/21/2011	24	311	<0.001	<0.001	<0.001	<0.003	34.8	Sand to clear No odor
2	120.08	127	1.1	6	6/6/2011	28	309	<0.001	<0.001	<0.001	<0.003	39.3	Sand to clear No odor
2	120.31	127	1.1	6	9/2/2011	32	270	<0.001	<0.001	<0.001	<0.003	49	Sand to clear No odor
2	120.47	127	1	6	12/4/2011	24	303	<0.001	<0.001	<0.001	<0.003	40.1	Sand to clear No odor
2	120.56	127	1	6	2/24/2012	24	343	<0.001	<0.001	<0.001	<0.003	37.9	Sand to clear No odor
2	120.67	127	1	6	6/1/2012	32	311	<0.001	<0.001	<0.001	<0.003	40.2	Sand to clear No odor
2	120.93	127	1	6	8/31/2012	40	320	<0.001	<0.001	<0.001	<0.003	36.4	Sand to clear No odor
2	121.08	127	0.9	6	11/16/2012	28	303	<0.001	<0.001	<0.001	<0.003	30.4	Sand to clear No odor
2	121.11	127	0.9	6	2/14/2013	36	326	<0.001	<0.001	<0.001	<0.003	55.6	Sand to clear No odor
2	121.27	127	0.9	6	5/23/2013	24	255	<0.001	<0.001	<0.001	<0.003	43.5	Sand to clear No odor
2	121.54	127	0.9	6	9/4/2013	28	290	<0.001	<0.001	<0.001	<0.003	33.1	Sand to clear No odor
2	121.52	127	0.9	6	11/13/2013	32	300	<0.001	<0.001	<0.001	<0.003	46.6	Sand to clear No odor
2	121.65	127	0.9	6	3/14/2014	68	336	<0.001	<0.001	<0.001	<0.003	36.8	Sand to clear No odor
2	121.78	127	0.8	6	6/24/2014	60	368	<0.001	<0.001	<0.001	<0.003	57.6	Sand to clear No odor
2	121.89	127	0.8	6	8/22/2014	60	426	<0.001	<0.001	<0.001	<0.003	31.8	Sand to clear No odor
2	121.29	127	0.9	6	12/12/2014	68	370	<0.001	<0.001	<0.001	<0.003	28.1	Sand to clear No odor
2	122.04	127	0.8	6	3/9/2015	24	284	<0.001	<0.001	<0.001	<0.003	26.9	Sand to clear No odor

Table 2

ROC - Vacuum N-6-1 (1R0479)

Unit Letter N, Section 6, T18S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
2	122.09	127	0.8	6	6/8/2015	48	276	<0.001	<0.001	<0.001	<0.003	34.3	Sand to clear No odor
2	122.27	127	4.73	6	8/25/2015	36	390	<0.001	<0.001	<0.001	<0.003	40.2	Sand to clear No odor
2	122.41	127	0.73	6	11/17/2015	40	356	<0.001	<0.001	<0.001	<0.003	43.5	Sand to clear No odor
2	122.44	127	0.7	6	3/21/2016	60	362	<0.001	<0.001	<0.001	<0.003	39	Sand to clear No odor
2	122.51	127	0.7	6	6/3/2016	44	320	<0.001	<0.001	<0.001	<0.003	37.5	Sand to clear No odor
2	122.97	127	0.6	6	9/21/2016	28	288	<0.001	<0.001	<0.001	<0.003	40	Sand to clear No odor
2	123.02	127	0.6	6	11/28/2016	56	376	<0.001	<0.001	<0.001	<0.003	46	Sand to clear No odor
2	123.2	127	0.6	5	3/8/2017	32	320	<0.001	<0.001	<0.001	<0.003	43	Sand to clear No odor
2	123.3	127	0.6	5	6/8/2017	36	332	<0.001	<0.001	<0.001	<0.003	42	Sand to clear No odor
2	123.21	127	0.6	6	9/20/2017	32	340	<0.001	<0.001	<0.001	<0.003	45	Sand to clear No odor
2	123.22	127	0.6	6	12/11/2017	56	396	<0.001	<0.001	<0.001	<0.003	54	Sand to clear No odor
2	123.4	127	0.6	5	3/13/2018	80	386	<0.001	<0.001	<0.001	<0.003	40	Sand to clear No odor
2	123.6	127	0.5	5	6/8/2018	64	312	<0.001	<0.001	<0.001	<0.003	45.4	Sand to clear No odor
2	123.72	127	0.5	5	9/17/2018	32	250	<0.001	<0.001	<0.001	<0.003	42	Sand to clear No odor
2	123.83	127	0.5	3	11/29/2018	28	299	<0.001	<0.001	<0.001	<0.003	41.3	Sand to clear No odor
2	123.87	127	0.5	3	3/19/2019	44	338	<0.001	<0.001	<0.001	<0.003	47	Sand to clear No odor
2	123.81	127	0.5	3	6/14/2019	28	330	<0.001	<0.001	<0.001	<0.003	44	Sand to clear No odor
2	124.03	127	0.5	3	9/18/2019	28	266	<0.001	<0.001	<0.001	<0.003	42	Sand to clear No odor
2	124.18	127	0.5	3	12/3/2019	32	311	<0.001	<0.001	<0.001	<0.003	43	Sand to clear No odor
2	124.41	127	0.4	3	3/23/2020	32	281	<0.001	<0.001	<0.001	<0.003	50	Sand to clear No odor
2	124.61	127	0.4	3	9/22/2020	32	267	XXX	XXX	XXX	XXX	42.5	Sand to clear No odor
2	124.79	127	0.4	3	3/19/2021	48	338	XXX	XXX	XXX	XXX	70.5	Sand to clear No odor
2	124.96	127	0.4	3	6/18/2021	28	264	XXX	XXX	XXX	XXX	36.5	Sand to clear No odor
2	125.15	127	0.3	3	9/20/2021	68	373	XXX	XXX	XXX	XXX	37.7	Sand to clear No odor
2	125.2	127	0.4	3	11/20/2021	92	392	XXX	XXX	XXX	XXX	39.9	Sand to clear No odor
2	125.26	127	0.3	2	3/21/2022	68	401	XXX	XXX	XXX	XXX	69.7	Sand to clear No odor
2	125.3	127	0.3	2	6/17/2022	52	314	XXX	XXX	XXX	XXX	53.1	Sand to clear No odor
2	125.38	127	0.3	2	9/9/2022	64	419	XXX	XXX	XXX	XXX	63.5	Sand to clear No odor
2	125.38	127	0.3	2	12/7/2022	40	383	XXX	XXX	XXX	XXX	79.5	Sand to clear No odor
2	125.46	127	0.2	2	3/21/2023	76	265	XXX	XXX	XXX	XXX	61.5	Sand to clear No odor
2	125.69	127	0.2	2	6/9/2023	48	343	XXX	XXX	XXX	XXX	58.4	Sand to clear No odor

Table 2

ROC - Vacuum N-6-1 (1R0479)

Unit Letter N, Section 6, T18S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
2	125.78	127	0.2	2	9/14/2023	64	375	XXX	XXX	XXX	XXX	69.8	Sand to clear No odor
2	126.01	127	0.2	2	10/10/2023	76	409	XXX	XXX	XXX	XXX	64.2	Sand to clear No odor
2	126.25	127	0.1	XXX	3/14/2024	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No sample collected
2	126.25	127	0.1	XXX	5/28/2024	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No sample collected
2	126.53	127	0.1	XXX	8/16/2024	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No sample collected
2	126.58	127	0.1	XXX	11/5/2024	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No sample collected

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
3	117.35	127.6	1.6	8	3/7/2007	20	236	<0.001	<0.001	<0.001	<0.001	33.9	Sand to clear No odor
3	117.4	127.6	1.6	8	5/29/2007	24	290	<0.001	<0.001	<0.001	<0.001	40.2	Sand to clear No odor
3	117.71	127.6	1.6	6	9/25/2007	24	332	<0.002	<0.002	<0.002	<0.006	40.7	Sand to clear No odor
3	117.76	127.6	1.6	6	10/17/2007	24	281	<0.001	0.004	<0.001	0.004	39.5	Sand to clear No odor
3	117.88	127.6	1.6	6	1/31/2008	24	291	<0.001	<0.001	<0.001	<0.003	38.3	Sand to clear No odor
3	118	127.6	1.5	6	4/24/2008	24	306	<0.001	<0.001	<0.001	<0.003	38	Sand to clear No odor
3	118.18	127.6	1.5	6	8/7/2008	24	264	<0.001	<0.001	<0.001	<0.003	51	Sand to clear No odor
3	118.31	127.6	1.5	6	10/30/2008	36	325	<0.001	<0.001	<0.001	<0.003	48	Sand to clear No odor
3	118.46	127.5	1.4	6	1/23/2009	36	328	<0.001	<0.001	<0.001	<0.003	46.3	Sand to clear No odor
3	118.46	127.5	1.4	6	4/29/2009	24	229	<0.001	<0.001	<0.001	<0.003	36.1	Sand to clear No odor
3	118.77	127.5	1.4	6	8/7/2009	24	313	<0.001	<0.001	<0.001	<0.003	37.5	Sand to clear No odor
3	119.02	127.5	1.4	6	10/22/2009	24	319	<0.001	<0.001	<0.001	<0.003	34.5	Sand to clear No odor
3	119.38	127.6	1.3	6	4/26/2010	24	312	<0.001	<0.001	<0.001	<0.003	42	Sand to clear No odor
3	119.09	127.6	1.4	6	2/11/2010	24	297	<0.001	<0.001	<0.001	<0.003	45.2	Sand to clear No odor
3	119.43	127.6	1.3	6	8/5/2010	24	257	<0.001	<0.001	<0.001	<0.003	34.2	Sand to clear No odor
3	119.55	127.6	1.3	6	10/28/2010	20	289	<0.001	<0.001	<0.001	<0.003	32.9	Sand to clear No odor
3	119.21	127.7	1.4	6	2/21/2011	24	294	<0.001	<0.001	<0.001	<0.003	33.5	Sand to clear No odor
3	119.93	127.7	1.2	6	6/6/2011	32	291	<0.001	<0.001	<0.001	<0.003	41.2	Sand to clear No odor
3	120.17	127.7	1.2	6	9/2/2011	20	263	<0.001	<0.001	<0.001	<0.003	46.4	Sand to clear No odor
3	120.36	127.7	1.2	6	12/4/2011	24	275	<0.001	<0.001	<0.001	<0.003	40.9	Sand to clear No odor
3	120.39	127.4	1.2	6	2/24/2012	24	294	<0.001	<0.001	<0.001	<0.003	37.5	Sand to clear No odor

Table 2

ROC - Vacuum N-6-1 (1R0479)

Unit Letter N, Section 6, T18S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
3	120.5	127.7	1.1	6	6/1/2012	20	307	<0.001	<0.001	<0.001	<0.003	32.4	Sand to clear No odor
3	120.75	127.7	1.1	6	8/31/2012	28	289	<0.001	<0.001	<0.001	<0.003	41.8	Sand to clear No odor
3	120.81	127.7	1.1	6	11/16/2012	24	296	<0.001	<0.001	<0.001	<0.003	32.2	Sand to clear No odor
3	120.87	127.7	1.1	6	2/14/2013	28	278	<0.001	<0.001	<0.001	<0.003	38.4	Sand to clear No odor
3	121.04	127.7	1.1	6	5/23/2013	28	287	<0.001	<0.001	<0.001	<0.003	43.8	Sand to clear No odor
3	121.3	127.7	1	6	9/4/2013	24	305	<0.001	<0.001	<0.001	<0.003	34.8	Sand to clear No odor
3	121.26	127.7	1	6	11/13/2013	32	316	<0.001	<0.001	<0.001	<0.003	45.2	Sand to clear No odor
3	121.53	127.7	1	6	3/14/2014	40	138	<0.001	<0.001	<0.001	<0.003	46.8	Sand to clear No odor
3	121.67	127.7	1	6	6/24/2014	24	286	<0.001	<0.001	<0.001	<0.003	37.9	Sand to clear No odor
3	121.78	127.7	0.9	6	8/22/2014	24	300	<0.001	<0.001	<0.001	<0.003	33.8	Silt to clear No odor
3	121.18	127.7	1	6	12/12/2014	24	266	<0.001	<0.001	<0.001	<0.003	32.5	Sand to clear No odor
3	122.02	127.7	0.9	6	3/9/2015	24	296	<0.001	<0.001	<0.001	<0.003	30.4	Sand to clear No odor
3	122.06	127.7	0.9	6	6/8/2015	28	266	<0.001	<0.001	<0.001	<0.003	43.3	Sand to clear No odor
3	122.23	127.7	0.9	6	8/25/2015	28	270	<0.001	<0.001	<0.001	<0.003	26	Sand to clear No odor
3	122.36	127.7	0.85	6	11/17/2015	28	330	<0.001	<0.001	<0.001	<0.003	37	Sand to clear No odor
3	122.39	127.7	0.8	6	3/21/2016	28	272	<0.001	<0.001	<0.001	<0.003	19.2	Sand to clear No odor
3	122.47	127.7	0.8	6	6/3/2016	4	180	<0.001	<0.001	<0.001	<0.003	16.9	Sand to clear No odor
3	122.9	127.7	0.8	6	9/21/2016	28	294	<0.001	<0.001	<0.001	<0.003	38	Sand to clear No odor
3	122.97	127.7	0.7	6	11/28/2016	36	286	<0.001	<0.001	<0.001	<0.003	42	Sand to clear No odor
3	123.14	127.7	0.7	5	3/8/2017	32	292	<0.001	<0.001	<0.001	<0.003	41	Sand to clear No odor
3	123.22	127.7	0.7	5	6/8/2017	32	312	<0.001	<0.001	<0.001	<0.003	40	Sand to clear No odor
3	123.1	127.7	0.7	6	9/20/2017	28	310	<0.001	<0.001	<0.001	<0.003	47	Sand to clear No odor
3	123.15	127.7	0.7	6	12/11/2017	44	334	<0.001	<0.001	<0.001	<0.003	47	Sand to clear No odor
3	123.44	127.7	0.7	5	3/13/2018	44	330	<0.001	<0.001	<0.001	<0.003	43	Sand to clear No odor
3	123.64	127.7	0.6	5	6/8/2018	44	168	<0.001	<0.001	<0.001	<0.003	46	Sand to clear No odor
3	123.74	127.7	0.6	3	9/17/2018	28	276	<0.001	<0.001	<0.001	<0.003	41	Sand to clear No odor
3	123.86	127.7	0.6	3	11/29/2018	32	285	<0.001	<0.001	<0.001	<0.003	45.3	Sand to clear No odor
3	123.84	127.7	0.6	3	3/19/2019	48	261	<0.001	<0.001	<0.001	<0.003	37	Sand to clear No odor
3	123.84	127.7	0.6	3	6/14/2019	28	303	<0.001	<0.001	<0.001	<0.003	40	Sand to clear No odor
3	124.07	127.7	0.6	3	9/18/2019	28	266	<0.001	<0.001	<0.001	<0.003	42	Sand to clear No odor
3	124.21	127.7	0.6	3	12/3/2019	32	160	<0.001	<0.001	<0.001	<0.003	43	Sand to clear No odor

Table 2

ROC - Vacuum N-6-1 (1R0479)

Unit Letter N, Section 6, T18S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
3	124.44	127.7	0.5	3	3/23/2020	28	285	<0.001	<0.001	<0.001	<0.003	64.7	Sand to clear No odor
3	124.64	127.7	0.5	3	9/22/2020	28	291	XXX	XXX	XXX	XXX	36	Sand to clear No odor
3	124.83	127.7	0.5	3	3/19/2021	44	320	XXX	XXX	XXX	XXX	67.2	Sand to clear No odor
3	125.01	127.7	0.5	3	6/18/2021	28	282	XXX	XXX	XXX	XXX	39.3	Sand to clear No odor
3	125.2	127.7	0.4	3	9/20/2021	28	348	XXX	XXX	XXX	XXX	54	Sand to clear No odor
3	125.26	127.7	0.4	3	11/19/2021	32	328	XXX	XXX	XXX	XXX	50.5	Sand to clear No odor
3	125.29	127.7	0.5	3	3/22/2022	32	349	XXX	XXX	XXX	XXX	61.2	Sand to clear No odor
3	125.31	127.7	0.4	2	6/17/2022	40	318	XXX	XXX	XXX	XXX	67.1	Sand to clear No odor
3	125.35	127.7	0.4	2	9/9/2022	36	282	XXX	XXX	XXX	XXX	53.5	Sand to clear No odor
3	125.43	127.7	0.4	2	12/6/2022	44	370	XXX	XXX	XXX	XXX	74.1	Sand to clear No odor
3	125.52	127.7	0.3	2	3/21/2023	32	278	XXX	XXX	XXX	XXX	44.7	Sand to clear No odor
3	125.65	127.7	0.3	2	6/9/2023	40	342	XXX	XXX	XXX	XXX	61.3	Sand to clear No odor
3	125.84	127.7	0.3	2	9/14/2023	40	339	XXX	XXX	XXX	XXX	59.2	Sand to clear No odor
3	126.08	127.7	0.3	2	10/10/2023	44	340	XXX	XXX	XXX	XXX	61.4	Sand to clear No odor
3	126.3	127.7	0.2	XXX	3/14/2024	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No sample collected
3	126.3	127.7	0.2	XXX	5/28/2024	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No sample collected
3	126.5	127.7	0.2	XXX	8/16/2024	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No sample collected
3	126.55	127.7	0.2	XXX	11/5/2024	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No sample collected

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
4	115.79	125.3	1.5	8	3/7/2007	39	296	<0.001	<0.001	<0.001	<0.001	42.7	Silt to clear No odor
4	115.85	125.2	1.5	8	5/29/2007	37	316	<0.001	<0.001	<0.001	<0.001	40.4	Silt to clear No odor
4	116.1	125.2	1.5	6	9/25/2007	44	358	<0.002	<0.002	<0.002	<0.006	54.1	Silt to clear No odor
4	116.11	125.2	1.5	6	10/17/2007	44	337	<0.001	0.004	<0.001	<0.003	48.3	Silt to clear No odor
4	116.23	125	1.4	6	1/31/2008	40	326	<0.001	<0.001	<0.001	<0.003	50	Silt to clear No odor
4	116.4	125	1.4	6	4/24/2008	40	297	<0.001	<0.001	<0.001	<0.003	40.2	Silt to clear No odor
4	116.62	125	1.3	6	8/7/2008	44	357	<0.001	<0.001	<0.001	<0.003	52	Silt to clear No odor
4	116.76	125	1.3	6	10/30/2008	40	358	<0.001	<0.001	<0.001	<0.003	49.3	Silt to clear No odor
4	116.87	124.5	1.2	6	1/23/2009	36	354	<0.001	<0.001	<0.001	<0.003	45.4	Silt to clear No odor

Table 2

ROC - Vacuum N-6-1 (1R0479)

Unit Letter N, Section 6, T18S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
4	117.08	124.5	1.2	6	4/29/2009	40	247	<0.001	<0.001	<0.001	<0.003	44.6	Silt to clear No odor
4	117.28	124.5	1.2	6	8/7/2009	24	351	<0.001	<0.001	<0.001	<0.003	37.3	Silt to clear No odor
4	117.24	124.5	1.2	6	10/22/2009	36	362	<0.001	<0.001	<0.001	<0.003	42.3	Silt to clear No odor
4	117.76	125	1.2	6	4/26/2010	36	330	<0.001	<0.001	<0.001	<0.003	71.4	Silt to clear No odor
4	117.54	125	1.2	6	2/11/2010	36	325	<0.001	<0.001	<0.001	<0.003	49.8	Silt to clear No odor
4	117.88	125	1.1	6	8/5/2010	40	284	<0.001	<0.001	<0.001	<0.003	43.7	Silt to clear No odor
4	117.96	125	1.1	6	10/28/2010	40	246	<0.001	<0.001	<0.001	<0.003	41.1	Silt to clear No odor
4	118.22	125.9	1.2	6	2/21/2011	40	338	<0.001	<0.001	<0.001	<0.003	40.8	Silt to clear No odor
4	118.36	125.9	1.2	6	6/6/2011	40	321	<0.001	<0.001	<0.001	<0.003	49.7	Silt to clear No odor
4	118.62	125.9	1.2	6	9/2/2011	24	268	<0.001	<0.001	<0.001	<0.003	44.2	Silt to clear No odor
4	118.81	125.9	1.1	6	12/4/2011	44	304	<0.001	<0.001	<0.001	<0.003	63.2	Silt to clear No odor
4	118.82	125.9	1.1	6	2/24/2012	36	323	<0.001	<0.001	<0.001	<0.003	38.6	Silt to clear No odor
4	118.94	125.9	1.1	6	6/1/2012	40	349	<0.001	<0.001	<0.001	<0.003	51.4	Silt to clear No odor
4	119.22	125.9	1.1	6	8/31/2012	36	302	<0.001	<0.001	<0.001	<0.003	42.8	Silt to clear No odor
4	119.33	125.9	1	6	11/16/2012	40	340	<0.001	<0.001	<0.001	<0.003	43.1	Silt to clear No odor
4	119.35	125.9	1	6	2/14/2013	44	317	<0.001	<0.001	<0.001	<0.003	52.4	Silt to clear No odor
4	119.54	125.9	1	6	5/23/2013	28	265	<0.001	<0.001	<0.001	<0.003	43.2	Silt to clear No odor
4	119.78	125.9	1	6	9/4/2013	24	296	<0.001	<0.001	<0.001	<0.003	33.4	Silt to clear No odor
4	119.75	125.9	1	6	11/13/2013	28	283	<0.001	<0.001	<0.001	<0.003	43.7	Silt to clear No odor
4	119.98	125.9	0.9	6	3/14/2014	40	316	<0.001	<0.001	<0.001	<0.003	45.7	Silt to clear No odor
4	120.12	125.9	0.9	6	6/24/2014	20	216	<0.001	<0.001	<0.001	<0.003	38	Silt to clear No odor
4	120.22	125.9	0.9	6	8/22/2014	28	294	<0.001	<0.001	<0.001	<0.003	34.2	Silt to clear No odor
4	119.62	125.9	1	6	12/12/2014	60	400	<0.001	<0.001	<0.001	<0.003	27.3	Silt to clear No odor
4	120.35	125.9	0.9	6	3/9/2015	36	338	<0.001	<0.001	<0.001	<0.003	25.3	Silt to clear No odor
4	120.38	125.9	0.9	6	6/8/2015	32	264	<0.001	<0.001	<0.001	<0.003	36.3	Silt to clear No odor
4	120.54	125.9	0.9	6	8/25/2015	24	318	<0.001	<0.001	<0.001	<0.003	35.8	Silt to clear No odor
4	120.73	125.9	0.83	6	11/17/2015	28	210	<0.001	<0.001	<0.001	<0.003	35.7	Silt to clear No odor
4	120.77	125.9	0.8	6	3/21/2016	60	356	<0.001	<0.001	<0.001	<0.003	43.3	Silt to clear No odor
4	120.85	125.9	0.8	5	6/3/2016	40	286	<0.001	<0.001	<0.001	<0.003	20	Silt to clear No odor
4	121.31	125.9	0.7	6	9/21/2016	32	250	<0.001	<0.001	<0.001	<0.003	59	Silt to clear No odor
4	121.36	125.9	0.7	6	11/28/2016	40	336	<0.001	<0.001	<0.001	<0.003	44	Silt to clear No odor

Table 2

ROC - Vacuum N-6-1 (1R0479)

Unit Letter N, Section 6, T18S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
4	121.59	125.9	0.7	5	3/8/2017	32	314	<0.001	<0.001	<0.001	<0.003	41	Silt to clear No odor
4	121.74	125.9	0.7	5	6/8/2017	36	338	<0.001	<0.001	<0.001	<0.003	39	Silt to clear No odor
4	121.63	125.9	0.7	5	9/20/2017	24	472	<0.001	<0.001	<0.001	<0.003	54	Silt to clear No odor
4	121.61	125.9	0.7	5	12/11/2017	56	332	<0.001	<0.001	<0.001	<0.003	49	Silt to clear No odor
4	121.79	125.9	0.7	5	3/13/2018	60	348	<0.001	<0.001	<0.001	<0.003	44	Silt to clear No odor
4	121.95	125.9	0.6	5	6/8/2018	44	286	<0.001	<0.001	<0.001	<0.003	40.9	Silt to clear No odor
4	122.25	125.9	0.6	3	9/17/2018	28	244	<0.001	<0.001	<0.001	<0.003	40	Silt to clear No odor
4	122.28	125.9	0.6	3	11/29/2018	32	253	<0.001	<0.001	<0.001	<0.003	41.7	Silt to clear No odor
4	122.3	125.9	0.6	3	3/19/2019	48	333	<0.001	<0.001	<0.001	<0.003	48	Silt to clear No odor
4	122.25	125.9	0.6	3	6/14/2019	24	311	<0.001	<0.001	<0.001	<0.003	43	Silt to clear No odor
4	122.47	125.9	0.6	3	9/18/2019	28	308	<0.001	<0.001	<0.001	<0.003	41	Silt to clear No odor
4	123.7	125.9	0.4	3	12/3/2019	28	283	<0.001	<0.001	<0.001	<0.003	42	Silt to clear No odor
4	122.93	125.9	0.5	3	3/23/2020	72	310	<0.001	<0.001	<0.001	<0.003	88.6	Silt to clear No odor
4	123.11	125.9	0.4	3	9/22/2020	28	137	XXX	XXX	XXX	XXX	38.8	Silt to clear No odor
4	123.3	125.9	0.4	3	3/19/2021	40	349	XXX	XXX	XXX	XXX	63.2	Silt to clear No odor
4	123.58	125.9	0.4	3	6/18/2021	28	278	XXX	XXX	XXX	XXX	40.7	Silt to clear No odor
4	123.67	125.9	0.4	3	9/20/2021	64	343	XXX	XXX	XXX	XXX	39.3	Silt to clear No odor
4	123.73	125.9	0.3	3	11/19/2021	36	311	XXX	XXX	XXX	XXX	48.4	Silt to clear No odor
4	123.81	125.9	0.4	3	3/22/2022	28	289	XXX	XXX	XXX	XXX	60.1	Silt to clear No odor
4	123.85	125.9	0.3	2	6/17/2022	40	358	XXX	XXX	XXX	XXX	62.3	Silt to clear No odor
4	123.87	125.9	0.3	2	9/9/2022	40	345	XXX	XXX	XXX	XXX	89.1	Silt to clear No odor
4	123.92	125.9	0.3	2	12/6/2022	44	375	XXX	XXX	XXX	XXX	73.3	Silt to clear No odor
4	124	125.9	0.3	2	3/21/2023	28	247	XXX	XXX	XXX	XXX	44.7	Silt to clear No odor
4	124.15	125.9	0.3	2	6/9/2023	36	262	XXX	XXX	XXX	XXX	67.4	Silt to clear No odor
4	124.38	125.9	0.2	2	9/14/2023	40	329	XXX	XXX	XXX	XXX	77.6	Silt to clear No odor
4	124.61	125.9	0.2	2	10/10/2023	40	343	XXX	XXX	XXX	XXX	79.2	Silt to clear No odor
4	124.81	125.9	0.2	XXX	3/14/2024	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No sample collected
4	124.9	125.9	0.2	XXX	5/28/2024	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No sample collected
4	125.15	125.9	0.1	XXX	8/16/2024	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No sample collected
4	125.21	125.9	0.1	XXX	11/5/2024	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No sample collected

Table 2

ROC - Vacuum N-6-1 (1R0479)

Unit Letter N, Section 6, T18S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
RW-1	116.25	143.3	17.6	60	9/25/2007	5,398	9,775	<0.002	<0.002	<0.002	<0.006	67.2	Silt to clear Slight odor
RW-1	XXX	XXX	XXX	60	10/17/2007	5,400	9,071	<0.001	0.004	<0.001	<0.003	56.5	Clear Slight odor
RW-1	XXX	XXX	XXX	XXX	1/31/2008	5,300	9,320	<0.001	<0.001	<0.001	<0.003	55.4	Clear Slight odor
RW-1	XXX	XXX	XXX	XXX	4/24/2008	3,900	6,870	<0.001	<0.001	<0.001	<0.003	44.9	Clear Slight odor
RW-1	XXX	XXX	XXX	XXX	8/7/2008	3,800	7,180	<0.001	<0.001	<0.001	<0.003	68	Clear Slight odor
RW-1	XXX	XXX	XXX	XXX	10/30/2008	5,850	13,700	<0.001	<0.001	<0.001	<0.003	82.8	Clear Slight odor
RW-1	XXX	XXX	XXX	XXX	1/26/2009	5,600	10,700	<0.001	<0.001	<0.001	<0.003	83.3	Clear Slight odor
RW-1	XXX	XXX	XXX	XXX	4/29/2009	4,050	7,700	<0.001	<0.001	<0.001	<0.003	54.3	Clear Slight odor
RW-1	XXX	XXX	XXX	XXX	8/7/2009	3,000	5,450	<0.001	<0.001	<0.001	<0.003	53.8	Clear Slight odor
RW-1	XXX	XXX	XXX	XXX	10/22/2009	3,550	5,820	<0.001	<0.001	<0.001	<0.003	55.8	Clear Slight odor
RW-1	XXX	XXX	XXX	XXX	4/26/2010	4,200	7,240	<0.001	<0.001	<0.001	<0.003	71.4	Clear Slight odor
RW-1	XXX	XXX	XXX	80	2/11/2010	3,900	6,600	<0.001	<0.001	<0.001	<0.003	88.5	Clear Slight odor
RW-1	XXX	XXX	XXX	Running	8/5/2010	3,800	6,480	<0.001	<0.001	<0.001	<0.003	62.2	Clear Slight odor
RW-1	XXX	XXX	XXX	Running	10/28/2010	3,200	6,970	<0.001	<0.001	<0.001	<0.003	53.7	Clear Slight odor
RW-1	XXX	XXX	XXX	80	2/21/2011	4,800	8,430	<0.001	<0.001	<0.001	<0.003	77.6	Clear Slight odor
RW-1	XXX	XXX	XXX	80	6/6/2011	4,200	5,850	<0.001	<0.001	<0.001	<0.003	62.1	Clear Slight odor
RW-1	XXX	XXX	XXX	Running	9/2/2011	3,250	4,850	<0.001	<0.001	<0.001	<0.003	63.3	Clear Slight odor
RW-1	XXX	XXX	XXX	Running	12/4/2011	2,800	4,790	<0.001	<0.001	<0.001	<0.003	62.1	Clear Slight odor
RW-1	XXX	XXX	XXX	Running	2/24/2012	3,250	5,170	<0.001	<0.001	<0.001	<0.003	59.7	Clear Slight odor
RW-1	XXX	XXX	XXX	Running	6/1/2012	2,550	4,960	<0.001	<0.001	<0.001	<0.003	59.5	Purged with Solar Pump Clear Slight odor
RW-1	XXX	XXX	XXX	Running	8/31/2012	2,270	4,150	<0.001	<0.001	<0.001	<0.003	58.6	Purged with Solar Pump Clear Slight odor
RW-1	XXX	XXX	XXX	Running	11/16/2012	3,900	6,800	<0.001	<0.001	<0.001	<0.003	77.5	Purged with Solar Pump Clear Slight odor
RW-1	Pump in Well	XXX	XXX	100	2/14/2013	4,200	6,840	<0.001	<0.001	<0.001	<0.003	72	Purged with Solar Pump Clear Slight odor
RW-1	XXX	XXX	XXX	Running	5/23/2013	2,550	4,480	<0.001	<0.001	<0.001	<0.003	66.6	Purged with Solar Pump Clear Slight odor
RW-1	XXX	XXX	XXX	Running	9/4/2013	1,880	3,730	<0.001	<0.001	<0.001	<0.003	65.2	Purged with Solar Pump Clear Slight odor
RW-1	XXX	XXX	XXX	Running	11/13/2013	1,800	3,550	<0.001	<0.001	<0.001	<0.003	60.2	Purged with Solar Pump Clear Slight odor

Table 2

ROC - Vacuum N-6-1 (1R0479)

Unit Letter N, Section 6, T18S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
RW-1	XXX	XXX	XXX	100	3/14/2014	2,070	3,900	<0.001	<0.001	<0.001	<0.003	67.1	Purged with Solar Pump
RW-1	XXX	XXX	XXX	Running	6/24/2014	1,640	3,730	<0.001	<0.001	<0.001	<0.003	59.8	Purged with Solar Pump
RW-1	XXX	XXX	XXX	Running	8/22/2014	1,400	3,180	<0.001	<0.001	<0.001	<0.003	51.8	Purged with Solar Pump Clear Slight odor
RW-1	120.33	143.3	14.9	60	12/12/2014	1,500	3,140	<0.001	<0.001	<0.001	<0.003	54.3	Clear Slight odor
RW-1	120.44	143.3	14.9	60	3/10/2015	1,300	2,960	<0.001	<0.001	<0.001	<0.003	60.9	Clear Slight odor
RW-1	120.52	143.3	14.8	50	6/8/2015	1,020	2,670	<0.001	<0.001	<0.001	<0.003	49.4	Clear Slight odor
RW-1	120.69	143.5	14.7	50	8/25/2015	1,100	2,070	<0.001	<0.001	<0.001	<0.003	36.7	Clear Slight odor
RW-1	120.87	143.3	14.58	50	11/17/2015	880	1,780	<0.001	<0.001	<0.001	<0.003	52.6	Clear Slight odor
RW-1	XXX	143.3	XXX	50	3/21/2016	840	1,690	<0.001	<0.001	<0.001	<0.003	39.2	Clear Slight odor
RW-1	XXX	143.3	XXX	50	6/3/2016	1,040	2,100	<0.001	<0.001	<0.001	<0.003	57	Clear Slight odor
RW-1	XXX	143.3	XXX	50	9/21/2016	2,130	4,110	<0.001	<0.001	<0.001	<0.003	77	Clear Slight odor
RW-1	XXX	143.3	XXX	50	11/28/2016	1,930	3,690	<0.001	<0.001	<0.001	<0.003	75	Clear Slight odor
RW-1	XXX	143.3	XXX	50	3/8/2017	1,930	3,680	<0.001	<0.001	<0.001	<0.003	78	Clear Slight odor
RW-1	XXX	143.3	XXX	50	6/8/2017	1,740	3,560	<0.001	<0.001	<0.001	<0.003	70	Clear Slight odor
RW-1	XXX	143.3	XXX	50	9/20/2017	1,580	3,850	<0.001	<0.001	<0.001	<0.003	88	Clear Slight odor
RW-1	XXX	143.3	XXX	50	12/11/2017	1,580	2,740	<0.001	<0.001	<0.001	<0.003	72	Clear Slight odor
RW-1	XXX	143.3	XXX	100	3/12/2018	1,580	2,700	<0.001	<0.001	<0.001	<0.003	71.1	Clear Slight odor
RW-1	XXX	143.3	XXX	100	6/8/2018	1,480	2,740	<0.001	<0.001	<0.001	<0.003	68.9	Clear Slight odor
RW-1	XXX	143.3	XXX	50	9/17/2018	1,500	2370	<0.001	<0.001	<0.001	<0.003	63	Clear Slight odor
RW-1	XXX	143.3	XXX	100	11/30/2018	880	1,870	<0.001	<0.001	<0.001	<0.003	92.6	Clear Slight odor
RW-1	XXX	143.3	XXX	100	3/20/2019	870	1,770	<0.001	<0.001	<0.001	<0.003	76	Clear Slight odor
RW-1	XXX	143.3	XXX	100	6/14/2019	710	1,410	<0.001	<0.001	<0.001	<0.003	79	Clear Slight odor
RW-1	XXX	143.3	XXX	100	9/18/2019	650	1,450	<0.001	<0.001	<0.001	<0.003	74	Clear Slight odor
RW-1	XXX	143.3	XXX	100	12/4/2019	620	1,420	<0.001	<0.001	<0.001	<0.003	72	Clear Slight odor
RW-1	XXX	143.3	XXX	100	3/24/2020	550	1,260	<0.001	<0.001	<0.001	<0.003	69.3	Clear Slight odor
RW-1	XXX	143.3	XXX	100	9/21/2020	510	1,300	XXX	XXX	XXX	XXX	62.6	Clear Slight odor
RW-1	XXX	143.3	XXX	100	3/19/2021	430	1,160	XXX	XXX	XXX	XXX	53	Clear Slight odor
RW-1	XXX	143.3	XXX	100	6/18/2021	760	1,610	XXX	XXX	XXX	XXX	56.5	Clear Slight odor
RW-1	XXX	143.3	XXX	100	9/20/2021	720	1,520	XXX	XXX	XXX	XXX	66.9	Clear Slight odor

Table 2

ROC - Vacuum N-6-1 (1R0479)**Unit Letter N, Section 6, T18S, R35E**

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
RW-1	XXX	143.3	XXX	100	11/19/2021	328	808	XXX	XXX	XXX	XXX	42.1	Clear Slight odor
RW-1	XXX	143.3	XXX	100	3/22/2022	292	808	XXX	XXX	XXX	XXX	47.2	Clear Slight odor
RW-1	XXX	143.3	XXX	100	6/17/2022	780	1,580	XXX	XXX	XXX	XXX	47.4	Clear Slight odor
RW-1	XXX	143.3	XXX	100	9/9/2022	590	1,240	XXX	XXX	XXX	XXX	46.7	Clear Slight odor
RW-1	XXX	143.3	XXX	100	12/6/2022	670	1,360	XXX	XXX	XXX	XXX	43.2	Clear Slight odor
RW-1	XXX	143.3	XXX	100	3/20/2023	300	820	XXX	XXX	XXX	XXX	35.2	Clear Slight odor
RW-1	XXX	143.3	XXX	100	6/9/2023	304	582	XXX	XXX	XXX	XXX	35.4	Clear Slight odor
RW-1	XXX	143.3	XXX	Running	9/14/2023	520	1,110	XXX	XXX	XXX	XXX	45	Clear Slight odor
RW-1	XXX	143.3	XXX	Running	10/10/2023	212	602	XXX	XXX	XXX	XXX	35	Clear Slight odor
RW-1	XXX	143.3	XXX	100	3/14/2024	268	607	XXX	XXX	XXX	XXX	20.1	Clear Slight odor
RW-1	XXX	143.3	XXX	Running	5/28/2024	364	887	XXX	XXX	XXX	XXX	37.2	Clear Slight odor
RW-1	XXX	143.3	XXX	Running	8/16/2024	284	790	XXX	XXX	XXX	XXX	25.3	Clear Slight odor
RW-1	XXX	143.3	XXX	Running	11/5/2024	404	976	XXX	XXX	XXX	XXX	32.2	Clear Slight odor



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

March 22, 2024

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM N-6-1

Enclosed are the results of analyses for samples received by the laboratory on 03/18/24 8:58.

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:	03/18/2024	Sampling Date:	03/14/2024
Reported:	03/22/2024	Sampling Type:	Water
Project Name:	VACUUM N-6-1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Dionica Hinojos
Project Location:	T17S-R35E-SEC6 N-LEA CTY., NM		

Sample ID: MONITOR WELL # 1R (H241371-01)

Chloride, SM4500Cl-B (Water)		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	720	4.00	03/19/2024	ND	104	104	100	0.00		
Sulfate 375.4		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Sulfate*	42.2	10.0	03/18/2024	ND	16.9	84.6	20.0	13.5		
TDS 160.1		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS*	1440	5.00	03/21/2024	ND	804	80.4	1000	8.08		

Sample ID: RECOVERY WELL # 1 (H241371-02)

Chloride, SM4500Cl-B		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	268	4.00	03/19/2024	ND	104	104	100	0.00		
Sulfate 375.4		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Sulfate*	20.1	10.0	03/18/2024	ND	16.9	84.6	20.0	13.5		
TDS 160.1		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS*	607	5.00	03/21/2024	ND	804	80.4	1000	8.08		

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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", written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager

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.)

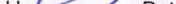
Company Name: RICE Operating Company	BILL TO Company: PO# RICE Operating Company
Project Manager: Katie Jones	Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240
Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240	Phone#: Fax#: (575) 393-9174 (575)397-1471

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

Project #: _____ Project Name: Vacuum N-6-1

Project Location: T17S-R35E-Sec 6 N ~ Lea County New Mexico

[illegible]

Relinquished by:  Rozanne Johnson	Date: 3/18/2024 Time: 7:08	Received by:  James Lane	Date: 3/18/2024 Time: 7:01
---	-------------------------------	--	-------------------------------

Relinquished by:	Date:	Time:	Received By: (Laboratory Staff)	Date:	Time:
<i>[Signature]</i>			<i>[Signature]</i>		

Delivered By: <u>[Signature]</u> 3/18/2024 (Circle One)	Sample Condition <u>[Signature]</u> 3-18-24 8:10K
--	---

Cooler - ☒ Yes ☐ No
 Cooler - ☒ Yes ☐ No
 (Initials)

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

REMARKS:

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

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



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

June 05, 2024

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM N-6-1

Enclosed are the results of analyses for samples received by the laboratory on 05/29/24 9:58.

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 "Mike Snyder". The signature is fluid and cursive, with the first name "Mike" and last name "Snyder" clearly distinguishable.

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	05/29/2024	Sampling Date:	05/28/2024
Reported:	06/05/2024	Sampling Type:	Water
Project Name:	VACUUM N-6-1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T17S-R35E-SEC6 N-LEA CTY., NM		

Sample ID: MONITOR WELL #1R (H242966-01)

Chloride, SM4500Cl-B (Water)			mg/L		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	720	4.00	05/30/2024	ND	112	112	100	3.64	
Sulfate 375.4			mg/L		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	43.1	10.0	05/31/2024	ND	18.2	90.8	20.0	9.85	
TDS 160.1			mg/L		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	1150	5.00	06/04/2024	8.00	843	84.3	1000	0.716	

Sample ID: RECOVERY WELL # 1 (H242966-02)

Chloride, SM4500Cl-B (Water)			mg/L		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	364	4.00	05/30/2024	ND	112	112	100	3.64	
Sulfate 375.4			mg/L		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	37.2	10.0	05/31/2024	ND	18.2	90.8	20.0	9.85	
TDS 160.1			mg/L		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	887	5.00	06/04/2024	8.00	843	84.3	1000	0.716	

Cardinal Laboratories

*=Accredited Analyte

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

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

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 "Mike Snyder".

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

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

Project Location: Vacuum N-6-1
T17S-R35E-Sec 6 N ~ Lea County New Mexico

Sampler Signature: Rozanne Johnson (575)631-9310

[illegible]

Relinquished by: <u>Rozanne Johnson</u> Date: <u>5/29/2024</u> Time: <u>7:00</u>	Received by: <u>[Signature]</u> Date: <u>5/29/2024</u> Time: <u>7:01</u>
Relinquished by: <u>[Signature]</u> Date: <u>5/29/24</u> Time: <u>9:55</u>	Received By: (Laboratory Staff) <u>[Signature]</u> Date: <u>5/29/24</u> Time: <u>0955</u>
Delivered By: (Circle One) <u>UPS</u> <u>Bus</u> <u>Other</u>	Sample Condition Cool Intact Yes Yes No No CHECKED BY: <u>[Signature]</u> (Initials)

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								

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 30, 2024

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM N-6-1

Enclosed are the results of analyses for samples received by the laboratory on 08/21/24 10:02.

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". The signature is fluid and cursive, with the first name "Celey" and last name "Keene" clearly distinguishable.

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:	08/21/2024	Sampling Date:	08/16/2024
Reported:	08/30/2024	Sampling Type:	Water
Project Name:	VACUUM N-6-1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T17S-R35E-SEC6 N-LEA CTY., NM		

Sample ID: MONITOR WELL #1R (H245078-01)

Chloride, SM4500Cl-B (Water)		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	336	4.00	08/21/2024	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*	63.9	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*	1130	5.00	08/26/2024	ND	503	101	500	3.44		

Sample ID: RECOVERY WELL # 1 (H245078-02)

Chloride, SM4500Cl-B (Water)		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	284	4.00	08/21/2024	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*	25.3	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*	790	5.00	08/29/2024	ND	503	101	500	3.44		

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

Cardinal Laboratories, Inc.

LAB Order ID # _____

Project #:	Project Name:	
	Vacuum N-6-1	
Project Location:	Sampler Signature: Rozanne Johnson (575)631-9310	
T17S-R35E-Sec 6 N ~ Lea County New Mexico		

(Circle or Specify Method No.)

[illegible]

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

November 14, 2024

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM N-6-1

Enclosed are the results of analyses for samples received by the laboratory on 11/07/24 15:27.

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". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	11/07/2024	Sampling Date:	11/05/2024
Reported:	11/14/2024	Sampling Type:	Water
Project Name:	VACUUM N-6-1	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Alyssa Parras
Project Location:	T17S-R35E-SEC6 N-LEA CTY., NM		

Sample ID: MONITOR WELL #1R (H246818-01)

Chloride, SM4500Cl-B (Water)		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	220	4.00	11/11/2024	ND	112	112	100	3.64		
Sulfate 375.4		mg/L		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Sulfate*	25.4	10.0	11/11/2024	ND	16.6	83.0	20.0	9.85		
TDS 160.1		mg/L		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS*	640	5.00	11/12/2024	ND	829	82.9	1000	1.85		

Sample ID: RECOVERY WELL #1 (H246818-02)

Chloride, SM4500Cl-B (Water)		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	404	4.00	11/11/2024	ND	112	112	100	3.64		
Sulfate 375.4		mg/L		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Sulfate*	32.2	10.0	11/11/2024	ND	16.6	83.0	20.0	9.85		
TDS 160.1		mg/L		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS*	976	5.00	11/12/2024	ND	829	82.9	1000	1.85		

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # _____

ANALYSIS REQUEST

(Circle or Specify Method No.)

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

Project #:	Project Name:	
	Vacuum N-6-1	
Project Location:	Sampler Signature: Rozanne Johnson (575)631-9310	
T17S-R35E-Sec 6 N ~ Lea County New Mexico		

[illegible]

Relinquished by: <u>Rozanne Johnson</u>	Date: <u>11/7/2024</u>	Time: <u>8:00</u>	Received by: <u>[Signature]</u>	Date: <u>11/7/2024</u>	Time: <u>8:01</u>
Relinquished by: <u>[Signature]</u>	Date: <u>11/7/2024</u>	Time: <u></u>	Received By: (Laboratory Staff)	Date: <u>11-7-24</u>	Time: <u>1527</u>
Delivered By: (Circle One) <u>UPS</u>	Sampler - <u>UPS</u> - Bus - (Other: <u></u>)		Sample Condition Cool ☒ Yes ☐ No ☐ Intact ☐ Yes ☒ No ☐	CHECKED BY: (Initials) <u>AD</u>	

[illegible]

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

Action 447163

CONDITIONS

Operator: RICE OPERATING COMPANY PO Box 5630 Hobbs, NM 88241	OGRID: 19174
	Action Number: 447163
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	Report excepted 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