# L Peter Galusky, Jr PE

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

April 1st, 2024

## **REVIEWED**

By Mike Buchanan at 10:49 am, Sep 17, 2024

Nelson Velez

New Mexico Energy, Minerals, & Natural Resources Oil Conservation Division, Environmental Bureau 1220 S. St. Francis Drive Santa Fe, New Mexico 87505

RE: 2023 Annual Report

Rice Operating Company

**Vacuum N-6-1 Jct** (1R0479): UL N, Sec 6, T18S, R35E NMOCD Application ID: 202397, Incident ID: nAPP21103.

Sent by E-mail

Mr. Velez:

Review of the 2023 Annual Report for Vacuum N-6-1 Jct (1R0479): content satisfactory

 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

This letter summarizes progress made over the past calendar year pulby April 1, 2025. Is approval email letter of May 23<sup>rd</sup>, 2023 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 elevation and flow map is given in the Appendix, Figure 3. The groundwater depth near the site of the release is approximately 120 ft.

ROC submitted a Vadose Zone Corrective Action Plan (CAP) Update to NMOCD on November 8<sup>th</sup>, 2013, and approved on November 20<sup>th</sup>, 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 12<sup>th</sup>, 2014. NMOCD approved the report and granted 'Soil Closure' on September 18<sup>th</sup>, 2014.

ROC continued to monitor groundwater chloride concentrations during 2023. Please see the Appendix, Figure 4 and Table 1 (dataset summary) & Table 2 (full dataset). In brief,

- Approximately 47,685 barrels of chloride-affected groundwater have been removed from the source area from 2008 through 2023. 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 21,700 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

L Peter Galusky, Jr PE

Page 1

sub-surface soil liner. Average annual groundwater chloride concentrations in MW-1R increased slightly from 338 mg/l in 2022 to 437 mg/l in 2023.

- Groundwater chloride concentrations in up and down gradient monitor wells (MW-2, MW-3 and MW-4) have continued to remain low throughout 2023 with concentrations at or below 66 mg/l.
- Average annual groundwater chloride concentrations in the (down-gradient) recovery well (RW-1) dropped from 583 mg/l in 2022 to 334 mg/l in 2023.

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 2024.

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.

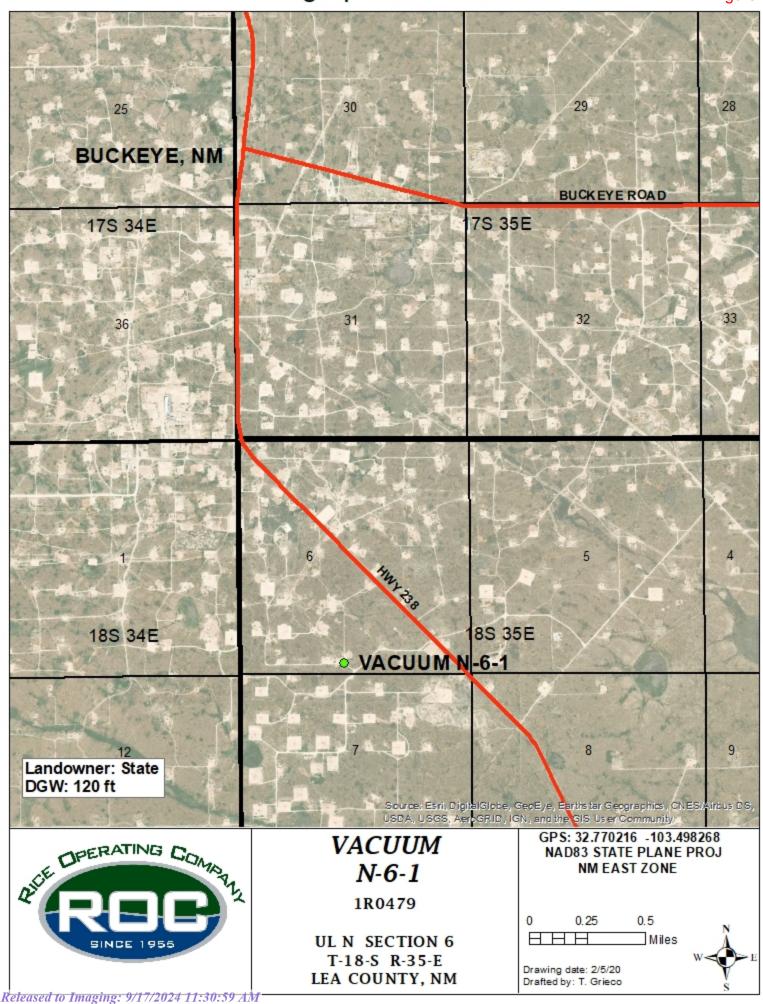
Please contact either Katie Davis of Rice Operating Company or me if you have any questions or need additional information.

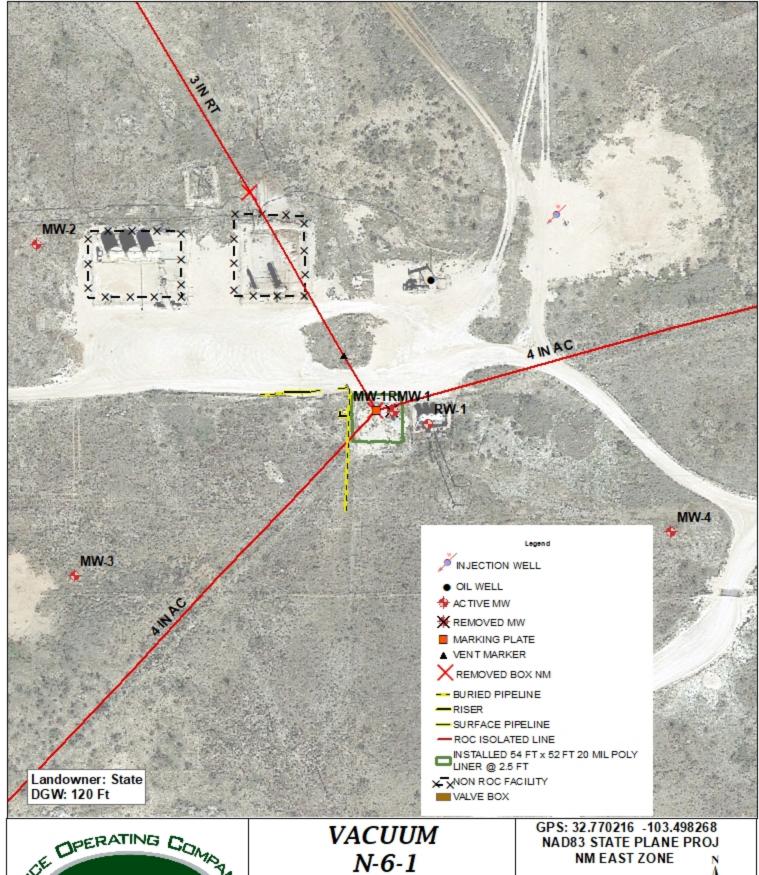
Sincerely,

L. Peter Galusky, Jr. P.E.

NM Prof. Engineer No. 22561

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

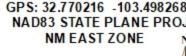


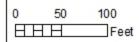




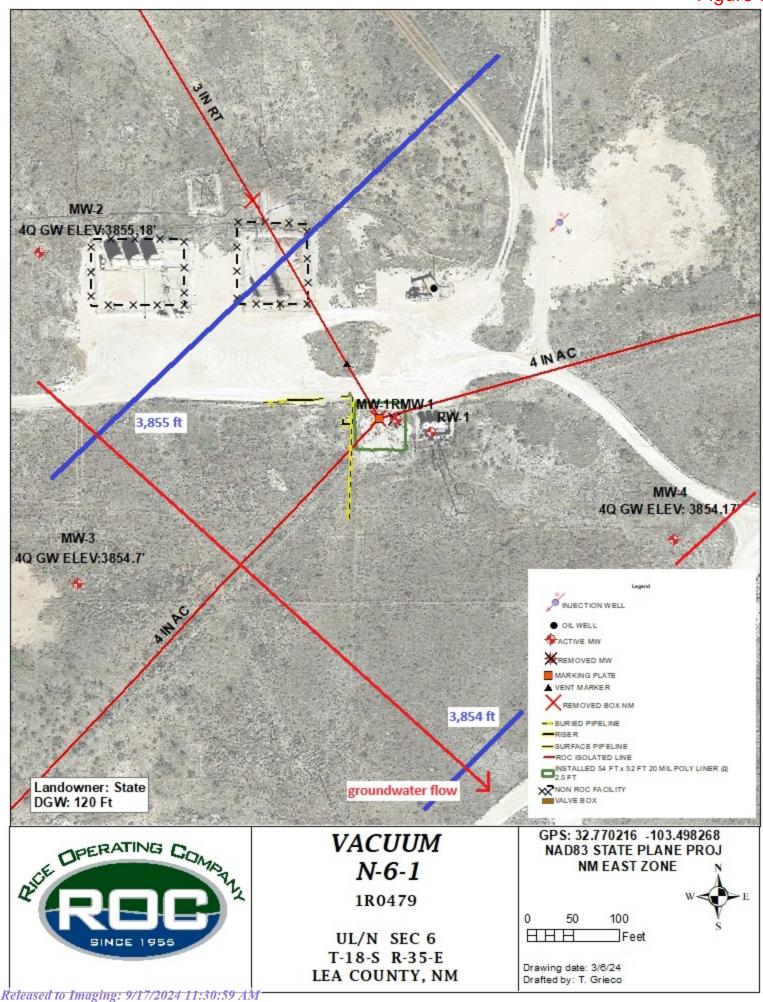
1R0479

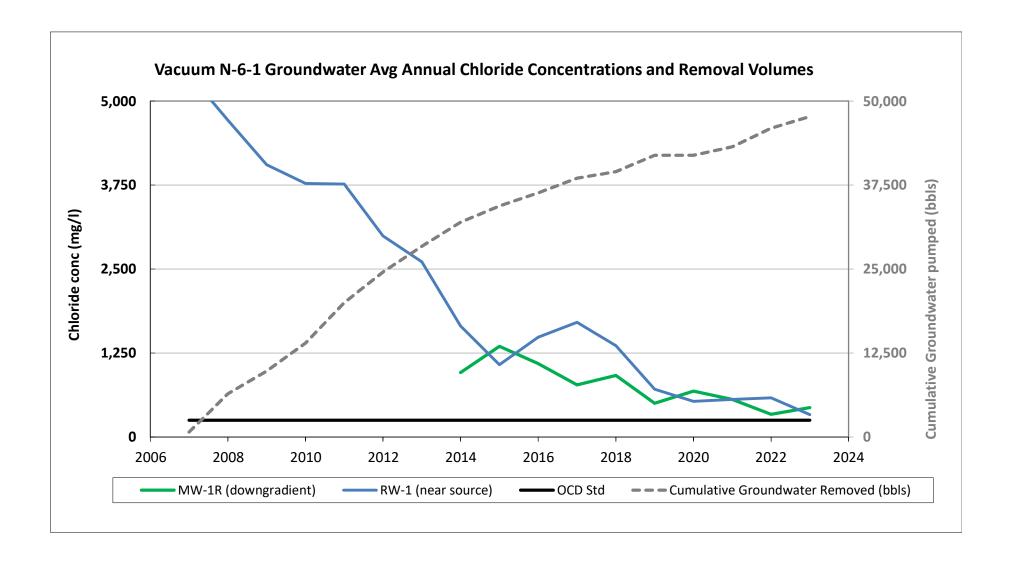
UL/N SEC 6 T-18-S R-35-E LEA COUNTY, NM





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





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

Annual Average Groundwater Chloride Concentrations (mg/l)

and Groundwater Volume (bbls) and Chloride Mass (kg) Removal

		,		( ),			Cumulative	Cumulative Chloride
	MW-2	MW-3	MW-4				Groundwater	Mass
	(upgradient	(upgradient,	(downgradient,	RW-1 (near	MW-1R		Removed	Removed
Year	northwest)	southwest)	southeast)	source)	(downgradient)	OCD Std	(bbls)	(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	
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

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

MW	Depth to Water	Total Depth	Well Volume	Volume	Sample Date	Cl	ann.	TDS	Benzene	Toluene	Ethyl	Total	Sulfate	Comments
1	116.43	125.8	1.5	Purged 10		21,400	avg Cl 21,400	40,100	<0.001	<0.001	Benzene <0.001	Xylenes <0.001	475	Silt to clear
1	116.43	125.8	1.4	10		20,200	21,400	28,100	<0.001	<0.001	<0.001	<0.001	584	Silt to clear Silt to clear Slight odor
-														_
1	116.61	125.1	1.4	10		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	, ,	15,795	47.704	27,714	<0.002	<0.002	<0.002	<0.006	152	Silt to clear Slight odor
1	116.98	125.1	1.3	5		16,400	1/,/24	27,927	<0.001	0.004	<0.001	<0.001	143	Silt to clear Slight odor
1	117.02	125.1	1.3	5		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		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		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		14,000	14,425	28,200	<0.001	<0.001	<0.001	<0.003	126	Silt to clear Slight odor
1	117.78	125	1.1	5		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	13,200	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	10,375	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	8,433	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	5,700	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	4,295	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

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

	Depth to	Total	Well	Volume	Sample	CI.	ann.	TDC	_	<b>-</b> .	Ethyl	Total	C 1C 1	
MW	Water	Depth	Volume	Purged	Date	Cl	avg Cl	TDS	Benzene	Toluene	Benzene	Xylenes	Sulfate	Comments
			<u>L</u>			N		nstalled	7/17/2014				<u>.</u>	
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	2,340	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	1,350	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	1,093	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	776	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	915	1,760	<0.001	<0.001	<0.001	<0.003	52.5	Silt to clear Slight odor
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	503	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	684	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	560	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	338	910	XXX	XXX	XXX	XXX	27.8	Silt to clear Slight odor

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	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
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	437	1,090	XXX	XXX	XXX	XXX	49.8	Silt to clear Slight odor

	5									1				
MW	Depth to	Total	Well	Volume	Sample	Cl	ann.	TDS	Benzene	Toluene	Ethyl	Total	Sulfate	Comments
	Water	Depth	Volume	Purged	Date		avg Cl				Benzene	Xylenes		
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
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	24	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	32	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	30	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	27	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	27	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	31	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

Page 11 of 44

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

MW	Depth to	Total	Well	Volume	Sample	Cl	ann.	TDS	Benzene	Toluene	Ethyl	Total	Sulfate	Comments
10100	Water	Depth	Volume	Purged	Date	Ci	avg Cl	103	Delizene	Toluchic	Benzene	Xylenes	Juliate	Comments
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	30	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	64	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
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	37	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	47	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	39	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	51	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	33	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	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	59	392	XXX	XXX	XXX	XXX	39.9	Sand to clear No odor

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	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
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	56	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
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	66	409	XXX	XXX	XXX	XXX	64.2	Sand to clear No odor

MW	Depth to	Total	Well	Volume	Sample	Cl	ann.	TDS	Benzene	Toluene	Ethyl	Total	Sulfate	Comments
	Water	Depth	Volume	Purged	Date	<u> </u>	avg Cl		Denizerie	Toruciic	Benzene	Xylenes	Junate	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	23	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	27	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	27	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	23	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	25	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

Page 13 of 44

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	ann. avg 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	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	28	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	28	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	27	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	24	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	34	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	37	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	34	160	<0.001	<0.001	<0.001	<0.003	43	Sand to clear No odor
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	28	291	XXX	XXX	XXX	XXX	36	Sand to clear No odor

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	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
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	33	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	38	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	39	340	XXX	XXX	XXX	XXX	61.4	Sand to clear No odor

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
4	115.79	125.3	1.5	8	3/7/2007	39	uvg ci	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	41	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	41	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
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	34	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	38	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

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	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
4	118.36	125.9	1.2	6	6/6/2011	40	avg Ci	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	37	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	38	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	31	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	37	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	30	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	43	336	<0.001	<0.001	<0.001	<0.003	44	Silt to clear No odor
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	37	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	41	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

Page 16 of 44

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	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
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	32	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	50	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	42	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	38	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	36	343	XXX	XXX	XXX	XXX	79.2	Silt to clear No odor

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
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	5,399	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	4,713	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	4,050	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

Page 17 of 44

## 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	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
RW-1	XXX	XXX	XXX	Running	10/28/2010	3,200	3,775	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	3,763	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	2,993	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	2,608	3,550	<0.001	<0.001	<0.001	<0.003	60.2	Purged with Solar Pump Clear Slight odor
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	1,653	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	1,075	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	1,485	3,690	<0.001	<0.001	<0.001	<0.003	75	Clear Slight odor

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

MW	Depth to Water	Total	Well Volume	Volume	Sample Date	Cl	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total	Sulfate	Comments
RW-1	XXX	Depth 143.3	XXX	Purged 50	3/8/2017	1,930	avg Ci	3,680	<0.001	<0.001	<0.001	Xylenes <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		50	12/11/2017	1,580	1,708	2,740	<0.001	<0.001		<0.003	72	_
-			XXX				1,708				<0.001			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	1,360	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	713	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	530	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
RW-1	XXX	143.3	XXX	100	11/19/2021	328	560	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	583	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	334	602	XXX	XXX	XXX	XXX	35	Clear Slight odor



April 01, 2021

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 03/24/21 15:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> 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.

Celey D. Keine

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



## Analytical Results For:

Rice Operating Company KATIE JONES 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-14

Fax To: (575) 397-1471

Received: 03/24/2021 Sampling Date: 03/19/2021 Reported: 04/01/2021 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 (H210744-01)

Chloride, SM4500Cl-B	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	440	4.00	03/25/2021	ND	92.0	92.0	100	0.00	
Sulfate 375.4	mg,	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	57.6	10.0	03/26/2021	ND	23.3	116	20.0	1.54	
TDS 160.1	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	1030	5.00	03/29/2021	ND	475	95.0	500	16.3	

## Sample ID: MONITOR WELL #2 (H210744-02)

Chloride, SM4500CI-B	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	48.0	4.00	03/25/2021	ND	92.0	92.0	100	0.00	
Sulfate 375.4	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	70.5	10.0	03/26/2021	ND	23.3	116	20.0	1.54	
TDS 160.1	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	338	5.00	03/29/2021	ND	475	95.0	500	16.3	

Cardinal Laboratories \*=Accredited Analyte

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

Celey D. Keine



## Analytical Results For:

Rice Operating Company KATIE JONES 112 W. Taylor Hobbs NM, 88240

Fax To: (575) 397-1471

Received: 03/24/2021 Sampling Date: 03/19/2021 Reported: 04/01/2021 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 #3 (H210744-03)

Chloride, SM4500Cl-B	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	44.0	4.00	03/25/2021	ND	92.0	92.0	100	0.00	
Sulfate 375.4	mg,	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	67.2	10.0	03/26/2021	ND	23.3	116	20.0	1.54	
TDS 160.1	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	320	5.00	03/29/2021	ND	475	95.0	500	16.3	

#### Sample ID: MONITOR WELL #4 (H210744-04)

Chloride, SM4500Cl-B	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	40.0	4.00	03/25/2021	ND	92.0	92.0	100	0.00	
Sulfate 375.4	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	63.2	10.0	03/26/2021	ND	23.3	116	20.0	1.54	
TDS 160.1	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	349	5.00	03/29/2021	ND	475	95.0	500	16.3	

Cardinal Laboratories \*=Accredited Analyte

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

Celey D. Keene



## Analytical Results For:

Rice Operating Company KATIE JONES 112 W. Taylor Hobbs NM, 88240

Fax To: (575) 397-1471

Received: 03/24/2021 Sampling Date: 03/19/2021 Reported: 04/01/2021 Sampling Type: Water Project Name: VACUUM N-6-1 Sampling Condition: Cool & Intact Sample Received By: Project Number: NOT GIVEN Tamara Oldaker

Project Location: T17S-R35E-SEC6 N-LEA CTY., NM

#### Sample ID: RECOVERY WELL #1 (H210744-05)

Chloride, SM4500CI-B	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	430	4.00	03/25/2021	ND	92.0	92.0	100	0.00	
Sulfate 375.4	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	53.0	10.0	03/26/2021	ND	23.3	116	20.0	1.54	
TDS 160.1	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	1160	5.00	03/29/2021	ND	475	95.0	500	16.3	

Cardinal Laboratories \*=Accredited Analyte

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

Celey D. Keene



#### **Notes and Definitions**

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

\*\* Samples not received at proper temperature of 6°C or below.

\*\*\* Insufficient time to reach temperature.

- Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories \*=Accredited Analyte

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

Celey D. Keene

٦	4	
	N	
۹	4	L
	N	
t		
3	١,	
	-	
	v	٥.
		_
٧		
	A	۳.
ä	ď	L
۲	7	4
		•
	0	
	ч	٠
	ь	
	v	w
	>	a.
	,	•
c	٩	
r	۰,	w
		7

L
2
7
0
50
7.4
9
~
17.0
-
4
Ci
0
0
8
$\overline{}$
6
•
1.5
20
Prince
20:
20
2
. 5
-
_
5
-
2
Se
=
8
~~
e
~

45											1000					T		-	-			-	and the last name of						Page	_	_	UI	- 1	_
1 East Marland - Tel (575) : Fax (575) :		ina	ıl I		b	0	ra	ıt	01	i	es		Ir	ıc.		-		С	HAI		2 - 2 - 2	ALC: UNKNOWN		DY	AN	D A	NA	LY	SIS	RE	QU	EST	Γ	
npany Name:			BILL													$\perp$				LAE	3 Ord	ler l	D#_				_			_				
RICE Oper	rating Company		RIC					om	nan	W		P	0#								AI	IAN	LYS	IS I	REC	) I IE	ST.							
ect Manager:			1110			ress		OIII	pall		Stree	et, Cit	v Zir	2/		4							or Sp											
atie Jone	S		122 V	V Tay	lor St	reet	~ Hal	hho	Now				.y, <i>_</i> .ı <sub>j</sub>	,		1	1	1 1		1	1 1	1	1	1	ı	ı	1	,						,
ess:	(Street, City, Zip)		-	· ray	ASSESSMENT OF	ne#:	STATE OF THE PERSON NAMED IN	DDS,	IVEW	MEX	100 0	STREET, SQUARE,	ax#:			4					Н													
2 W Taylor S	Street ~ Hobbs, New Mexico 88240		(575	5) 39										397-	1471	1			2		П											1		
ne #:		Fax#		, -		-						10	77 0	1331-	14/1	-			B/2(															
75) 393-9	9174	(575	397	-14	71			1								1		335	1010															
ct #:	Project Name:				Section 2		1				1	The same				-		p	9	g														
ct Location:	Vacuum N-6-1						1	/			1	1						pue	I	Se F		1												
	Soo 6 N - Loo Court N - M				Sam	pler	Sign	ature	: F	Roza	nne J	Johns	on (5	75)631	-9310	1		Exte	Sq	90	П	1								1				
70-1133	Sec 6 N ~ Lea County New M	exico	_	_		1	1/		7		11	_						902	5	ö					525					3	3			onus
210744	A .				M	ATR	ix		块	RES	ERV	ATIV	/E	SAM	PLING			TPH 418.1/TX1005 / TX1005 Extended (C35)	PO	TCLP Metals Ag As Ba Cd Cr Pb Se Hg				-	8270C/625				-  ,	Anions (CL SO4 CO3 HCO3)				24 Hours
	1		S	$\vdash$			V	+	V	ME	THO	OD	_	-		1		5/1	Ba	Ba		2		GC/MS Vol. 8260B/624	827		80			3 9	3	ids		~ 24
LAB#	FIELD ASSE	(G)rab or (C)omp	# CONTAINERS						8			PE)				302	02	100	As	3 As	TCLP Volatiles	all a	0	80B		00	Pesticides 8081A/608		= 2	6	2	Total Dissolved Solids		
	FIELD CODE	(Ĉ	₹					- 1	HCL (4 40ml VOA)	1		ICE (1-1Liter HDPE)		£		18/6	B/6	Ě	N S	s Ac	les			82	>	/608	081	포	and s	E C		ved		Ë
AB USE \	N .	ō	ΙĘ	2			B	- 1	404	10	5 .	1Life		202		302	3021	8.1	stals	etal	olati	1	2000	10	Sem	082	ss 8	S	0	3 2	5	sol	co.	oun.
ONLY	4	rab	Į į	WATER	SOIL	~	9	- 1	وايّ	2 2	2 00	5	H	E	ш	Щ	×	4	82 ₩	Z	> 0			18	AS S	s s	cide	TS	ture	000	tes	Dis	ide	Aro
,		0	#	3	SC	AIR	SL	1	되	NaHoo	H,SO,	S	NONE	DATE (2021)	TIME	MTBE 8021B/602	BTEX 8021B/602	H	PAH 8270C Total Metals	힏	힏	TCI P Poeticides	S S	5	GC/MS Semi. Vol.	PCB's 8082/608	esti	BOD, TSS, pH	Moisture Content	nioi	Sulfates	otal	Chlorides	Turn Around Time
	Monitor Well #1R	G	1	Х				Т	T	T	T	1		3/19	15:00	-		1	-		7	+	1	10	0	п.	п.	-	210	7	_	+		-
2	Monitor Well #2	G	1	Х				T		$\top$	$\top$	1	П		12:40	-	$\dashv$	+	+	H	+	+	+	$\vdash$		Н		+	+	+	X	$\overline{}$	Х	
3	Monitor Well #3	G	1	Х			$\forall$	$\top$	$\top$	+	+	1	Н	3/19	11:00		$\dashv$	+	+	Н	+	+	+	-	$\vdash$	Н	-	+	+	+	X	$\overline{}$	Х	
4	Monitor Well #4	G	1	х			$\top$	+	+	+	+	1	$\vdash$			-	+	+	+	Н	+	+	+	-			_	+	+	$\perp$	X	-	Χ	
Š	Recovery Well #1	G	1	X		$\dashv$	+	+	+	+	+	+	Н	3/19	9:45	-	+	+	+	Н	+	$\perp$	+	_	Ш			_	_	$\perp$	X	Х	Χ	
		-	<u>'</u>	1	$\dashv$	+	+	+	+	+	+	1	$\vdash$	3/20	11:05		4	_	$\perp$	Ц	$\perp$	$\perp$									X	X	X	
		-		H	$\dashv$	+	+	+	+	+	$\perp$	$\vdash$	Н			$\sqcup$														T	Г	П		
		-		Н	-	-	+	4	+	1	$\perp$	Ш	Ц															T	T			П		
				Ш		_	_	1	1								T					T					$\dashv$	$\top$	+	1	1	$\vdash$		$\neg$
																					1	T				1	+	+	+	+	1	H	$\dashv$	$\neg$
	) /										Г						T	$\top$		$\top$	+	$\vdash$				+	+	+	+	+		$\forall$	-	$\dashv$
/						T	T		T	T	T	П					+	+	$\forall$	+	+	+			$\dashv$	+	+	+	+	+	$\vdash$	$\vdash$	-	$\dashv$
uished by:	Date: Time: 75.15 Date: Time:	Receiv	ed by:					11	1	Date	):	Ti	me:			Phor	ne Ri	esult	2		es	⊢	No			_	_		_	_				-
ne Johnson	1/ 3/24/2021 15		hu	UA.	60	1	1//2	h	K	in	1 7	7/	1.5	1 15		Fax	No. of Concession, Name of Street, or other Designation, Name of Street, or other Designation, Name of Street,	-		+		⊢	+				-			-				$\dashv$
uished by	Date: Time:	Receiv	ed By:	(La	borat	orv	Staff			ate			ne:	10						1	'es		No		Addi	tion	al Fa	ix Ni	umbe	er:				
0	V		,	(			Otali	, L		Jaic		1 11	ne.			REM	AK	15:																П
ered By: (	Circle One)	Sample	Conditio	on		and the latest terminal termin	_	0	JEON	(ED	DV-					E	mai	il Re	sults				Dric											- 1
		Janpio		Cool	In	tact		Ch	HECK	ED	BY:									r	oza	nne	@s	dac	res	.co	m_							
		,	Yes			1	+																											-
oler - II	PS - Bus - Other:		No No	-	es lo	4		(in	itials)	9																								



June 25, 2021

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 06/22/21 12:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> 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.

Celey D. Keene

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager





## Analytical Results For:

Rice Operating Company KATIE JONES 112 W. Taylor Hobbs NM, 88240

Fax To: (575) 397-1471

Received:06/22/2021Sampling Date:06/18/2021Reported:06/25/2021Sampling 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 (H211611-01)

Chloride, SM4500Cl-B	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	780	4.00	06/22/2021	ND	104	104	100	0.00	
Sulfate 375.4	mg,	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	60.9	10.0	06/23/2021	ND	19.4	97.2	20.0	8.04	
TDS 160.1	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	1580	5.00	06/24/2021	ND	515	103	500	0.0280	

## Sample ID: MONITOR WELL #2 (H211611-02)

Chloride, SM4500Cl-B	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	28.0	4.00	06/22/2021	ND	104	104	100	0.00	
Sulfate 375.4	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	36.5	10.0	06/23/2021	ND	19.4	97.2	20.0	8.04	
TDS 160.1	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	264	5.00	06/24/2021	ND	515	103	500	0.0280	

Cardinal Laboratories \*=Accredited Analyte

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

Celey D. Kune



## Analytical Results For:

Rice Operating Company KATIE JONES 112 W. Taylor Hobbs NM, 88240

Fax To: (575) 397-1471

Received: 06/22/2021 Sampling Date: 06/18/2021 Reported: 06/25/2021 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 #3 (H211611-03)

Chloride, SM4500Cl-B	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	28.0	4.00	06/22/2021	ND	104	104	100	0.00	
Sulfate 375.4	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	39.3	10.0	06/23/2021	ND	19.4	97.2	20.0	8.04	
TDS 160.1	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	282	5.00	06/24/2021	ND	515	103	500	0.0280	

#### Sample ID: MONITOR WELL #4 (H211611-04)

Chloride, SM4500CI-B	mg,	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	28.0	4.00	06/22/2021	ND	104	104	100	0.00	
Sulfate 375.4	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	40.7	10.0	06/23/2021	ND	19.4	97.2	20.0	8.04	
TDS 160.1	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	278	5.00	06/24/2021	ND	515	103	500	0.0280	

Cardinal Laboratories \*=Accredited Analyte

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

Celey D. Keine



## Analytical Results For:

Rice Operating Company KATIE JONES 112 W. Taylor Hobbs NM, 88240

Fax To: (575) 397-1471

Received: 06/22/2021 Sampling Date: 06/18/2021 Reported: 06/25/2021 Sampling Type: Water Project Name: VACUUM N-6-1 Sampling Condition: Cool & Intact Sample Received By: Project Number: NOT GIVEN Tamara Oldaker

Project Location: T17S-R35E-SEC6 N-LEA CTY., NM

#### Sample ID: RECOVERY WELL #1 (H211611-05)

Chloride, SM4500Cl-B	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	760	4.00	06/22/2021	ND	104	104	100	0.00	
Sulfate 375.4	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	56.5	10.0	06/23/2021	ND	19.4	97.2	20.0	8.04	
TDS 160.1	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	1610	5.00	06/24/2021	ND	515	103	500	0.0280	

Cardinal Laboratories \*=Accredited Analyte

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

Celey D. Keine



## **Notes and Definitions**

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

\*\* Samples not received at proper temperature of 6°C or below.

\*\*\* Insufficient time to reach temperature.

Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories \*=Accredited Analyte

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

Celeg D. Freene

ige 1 of Lab Reports

Released to Imaging: 9/17/2024 11:30:59 AM

			-							_		_	_			П			CH	IAI	N-C	F-	CU	ST	OD'	Y A	ND	AN	IAL	YS	IS	REC	QUE	EST		
101 East Marland - Hol Tel (575) 393 Fax (575) 393	-2326 Caluli	nal	L	a	bo	or	a	to	r	ie	S,	, ]	ln	C.							LAE	3 Oı	rder	ID#	_					_			_			$\Box$
Company Name:			BILL TO									P	0#									A	NA	LY	SIS	RI	EQ	UES	ST							
RICE Operat	ting Company		RICE	_	PROPERTY AND ADDRESS	NAME OF TAXABLE PARTY.	Co	mp	any			04				-						(Ci	ircle	or S	Spec	ify N	/leth	od N	10.)							- 1
Project Manager:					Addr								ty, Zip	)		- 1	1	1	1	1	1	1	1								-	1		1		1
Katie Jones			122 W	NAME OF TAXABLE PARTY.	THE REAL PROPERTY.	THE REAL PROPERTY.	Hobb	os, N	ew N	lexic	0 88					$\dashv$	- 1	- 1	- 1													1				
Address: (S	treet, City, Zip)				Phon								ax#:	207	147	74		- 1		8	3	1														
	eet ~ Hobbs, New Mexico 88240		(575)	39	3-9	174			-			(;	5/5)	391	-147	-				2	70															
Phone #: (575) 393-91	74	Fax #: (575)	397-	147	1														d (C35	0040	000	20														
Project #:	Project Name: Vacuum N-6-1							7	1	/	>								xtende	1	Seng															
Project Location:	Sec 6 N ~ Lea County New Me	xico		_	Sam	pler	Signa	ture	R	ozar	nne J	ohn	ison (	575)6	31-93	310			005 E	d							3/625					- 6	3			Hours
1170-11002	COO O II Zou County		1	P	M	ATR	X		PR		ERV		VE	SA	MPL	ING			1/X1	0	Ba Cd	000	SS			3/624	8270C/625		809			Na, K	33	olids		e ~ 24
Hallell LAB#	FIELD CODE	(G)rab or (C)omp	CONTAINERS	R			GE		HCL (4 40ml VOA)		70	4000 H	1Liter HDPE)	(2024)	(404.)		MTBE 8021B/602	8021B/602	TPH 418.1/TX1005 / TX1005 Extended (C35)	3270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 60106/2003	Volatiles	Semi Volatile	TCLP Pesticides		GC/MS Vol. 8260B/624	GC/MS Semi. Vol.	PCB's 8082/608	ides 8081A/	BOD, TSS, pH	ure Content	Cations (Ca, Mg, Na, K)	s (Cl, sO4,	Total Dissolved Solids	ides	Tum Around Time ~ 24 Hours
( LAB USE ONLY )		(G)rab	# CON	WATER	SOIL	AIR	SLUD	1	T C	TINO3	H.SO.	100	NONE (3-1	and the real Party lies	THE OWNER WHEN	-	_	BTEX	трн 4	PAH 8270C	Total N	7 2	TCLP	TCLP	RCI	GC/M	GC/MS	PCB's	Pestic	BOD,	Moist	Cation	_	_	_	_
1	Monitor Well #1R	G	1	Х								1	1	6/	18 1	5:20				4	_	+	$\perp$	-	-	-	-	-	-	$\vdash$	H	+	_	XX	+-	_
	Monitor Well #2	G	1	Х		П						1	1	6/	18 1	2:10				_	1	_	1	_	_	1	-	-	$\vdash$	-	H	$\dashv$	-	X X	+	_
	Monitor Well #3	G	1	х			П	Т		T		1	1	6/	18 1	0:25						1	1	_		_	_	_	1	1	Н	$\dashv$	-	X X	+-	_
	Monitor Well #4	G	1	X			П	Т	T	T		T	1	6/	18 8	8:50					$\perp$						_	_	$\perp$	$\vdash$	Ш	$\dashv$	-	X X	+	$\overline{}$
	Recovery Well #1	G	1	x			П	$\neg$	T	T	T	T	1	6/	18 1	5:45												L			Ш	$\Box$	1	X X	X	4
3	Recovery well #1	-	<u> </u>	1		$\vdash$	$\forall$	7	$\top$	$\top$	$\top$	T		T																					_	
		$\vdash$	+-	+		$\vdash$	H	+	+	+	+	$^{\dagger}$	+	T	$\neg$						T	T	Τ	Т	Г	Г										
		-	-	$\vdash$	$\vdash$	$\vdash$	H	+	+	+	+	+	+	+	$\dashv$						T	1	T	T	T	T	Г									
		-	-	+	-	$\vdash$	H	$\dashv$	+	+	+	+	+	+	+						1	T	$\top$					T		T			T	T		
		_	-	$\vdash$	$\vdash$	-	H	$\dashv$	+	+	+	+	+	+	+						+	$^{\dagger}$	+		T		T	$\top$	Т	T		П	T	T	T	
	/	_	-	$\vdash$	-	$\vdash$	H	+	+	+	+	+	+	+	+	_				$\forall$	+	+	+	T	+	T	T	T	$\vdash$	$\top$		П	T	T		
								Ļ	_	7	101	_	Time			_	Ph	one	Res	ults	+	Y	'es	+	No	)	-	_	-	_						
Relinquished by:	Date: Time:	Recei	ved by:		n	6	M	al	//	Da	-	22	2/2		120	35	-	-	sults	200	1	+	'es	T	No	100	Ad	lditio	nal	Fax	Nun	nber	:			
Rozanne connso Relinquished by:	Date: Time:	Recei	ved By	: (L	abor	ator	y Sta	iff)	1	Da			Time				RE	MA	RKS	:																
									01.15	OLC	D 20	<i>/</i> ·						Em	nail I	Resi	ults:							.cor	m com	1						
Delivered By:	(Circle One)	Sampl	e Condi	Coo	ol .	Intac	t				D BY	1										-	020	A(1) I		,340	201		JIII	_						
Sampler - I	JPS - Bus - Other:		Yes	1	Yes No	F	1		(Initia	als)																										



September 28, 2021

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 09/22/21 16:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. 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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> 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.

Celey D. Keine

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



## Analytical Results For:

Rice Operating Company KATIE JONES 112 W. Taylor Hobbs NM, 88240

Fax To: (575) 397-1471

Received:09/22/2021Sampling Date:09/20/2021Reported:09/28/2021Sampling 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 (H212640-01)

Chloride, SM4500Cl-B	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	320	4.00	09/23/2021	ND	100	100	100	3.92	
Sulfate 375.4	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	44.9	10.0	09/24/2021	ND	20.0	100	20.0	1.10	
TDS 160.1	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	840	5.00	09/27/2021	ND	268	89.3	300	2.79	

## Sample ID: MONITOR WELL #2 (H212640-02)

Chloride, SM4500CI-B	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	68.0	4.00	09/23/2021	ND	100	100	100	3.92	
Sulfate 375.4	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	37.7	10.0	09/24/2021	ND	20.0	100	20.0	1.10	
TDS 160.1	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	373	5.00	09/27/2021	ND	268	89.3	300	2.79	

Cardinal Laboratories \*=Accredited Analyte

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

Celey D. Keine



## Analytical Results For:

Rice Operating Company KATIE JONES 112 W. Taylor Hobbs NM, 88240

Fax To: (575) 397-1471

Received: 09/22/2021 Sampling Date: 09/20/2021 Reported: 09/28/2021 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 #3 (H212640-03)

Chloride, SM4500Cl-B	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	28.0	4.00	09/23/2021	ND	100	100	100	3.92	
Sulfate 375.4	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	54.0	10.0	09/24/2021	ND	20.0	100	20.0	1.10	
TDS 160.1	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	348	5.00	09/27/2021	ND	268	89.3	300	2.79	

#### Sample ID: MONITOR WELL #4 (H212640-04)

Chloride, SM4500Cl-B	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	64.0	4.00	09/23/2021	ND	100	100	100	3.92	
Sulfate 375.4	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	39.3	10.0	09/24/2021	ND	20.0	100	20.0	1.10	
TDS 160.1	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	343	5.00	09/27/2021	ND	268	89.3	300	2.79	

Cardinal Laboratories \*=Accredited Analyte

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

Celey D. Keine



## Analytical Results For:

Rice Operating Company KATIE JONES 112 W. Taylor Hobbs NM, 88240

Fax To: (575) 397-1471

Received: 09/22/2021 Sampling Date: 09/20/2021 Reported: 09/28/2021 Sampling Type: Water Project Name: VACUUM N-6-1 Sampling Condition: Cool & Intact Sample Received By: Project Number: NOT GIVEN Tamara Oldaker

Project Location: T17S-R35E-SEC6 N-LEA CTY., NM

#### Sample ID: RECOVERY WELL #1 (H212640-05)

Chloride, SM4500CI-B	mg,	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	720	4.00	09/23/2021	ND	100	100	100	3.92	
Sulfate 375.4	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	66.9	10.0	09/24/2021	ND	20.0	100	20.0	1.10	
TDS 160.1	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	1520	5.00	09/27/2021	ND	268	89.3	300	2.79	

Cardinal Laboratories \*=Accredited Analyte

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

Celey D. Keene



#### **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

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

Celey D. Keine

Tol (675) 393-2328 Fax (575) 393-2476  Cardinal Laboratories, Inc.  CHAIN-OF-CUSTODY AND ANALYSIS REQUEST  Tol (575) 393-2328 Fax (575) 393-2476  Chair-Of-Custody And Analysis Request  LAB Order ID #	T																_														age		1_	of	1	Re	epo o
Seminary   Property   RICE Operating Company	Tel (575) :	Hobbs, NM 88240 393-2326 393-2476 Card	lina	al l	La	ıb	01	ra	to	r	ie	S	.I	n	c.		-		(	CHA	THE PARTY NAMED IN	Sept. In	F- 10 10	Carlot State		YA	ND	) Al	NAL	YS	IS	RE	QU	EST	Г		) jo 9
ANALYSIS REQUEST   Cordison Specific Methods No.   Cordison Specific Methods No.	Company Name:			Contraction of the last	-						_			_			丄				LA	AB C	rder	ID#	_								-				l eg
Carcle or Specify Method No.	RICE Oper	rating Company							mn	anv	,		PO	#									ANZ	IV	212	PI	=0	IIE	ет							-	Pa
122 W Trylor Street - Hobbs, New Mexico 88240 (575) 393-9174 (57	Project Manager:			-					пр	arry		treet	. City.	Zip)			4																				
Phonesis	AND DESCRIPTION OF THE PARTY OF			122 \	W Tay	ylor St	reet ~	- Hobb	os. N	ew M							1	1	1	1	1	1	1	1		1	1	1	1	- 1	1	1	1	1	ı	7	Н
First   Control   First   Firs				$\top$		THE RESERVE OF THE PERSON NAMED IN	1000		-,			0 00.	ASSESSED FOR	#:			-								- 1		-										
Monitor Well #1R  Q 1 X  Monitor Well #2  G 1 X  Monitor Well #3  G 1 X  Monitor Well #3  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #4  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #2  Monitor Well #4  Monitor Well #2  Monitor Well #4  Monit		treet ~ Hobbs, New Mexico 88240		(57	5) 3	93-9	174	Į.							397-	1471					8					1											
Monitor Well #1R  Q 1 X  Monitor Well #2  G 1 X  Monitor Well #3  G 1 X  Monitor Well #3  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #4  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #2  Monitor Well #4  Monitor Well #2  Monitor Well #4  Monit		0474										-	10.	-,-			+		100		18/2		П								+	1					
Monitor Well #1R  Q 1 X  Monitor Well #2  G 1 X  Monitor Well #3  G 1 X  Monitor Well #3  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #4  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #2  Monitor Well #4  Monitor Well #2  Monitor Well #4  Monit	(373) 393-3		(57	5) 397	7-14	71													(3)		20							- 1		-							
Monitor Well #1R  Q 1 X  Monitor Well #2  G 1 X  Monitor Well #3  G 1 X  Monitor Well #3  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #4  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #2  Monitor Well #4  Monitor Well #2  Monitor Well #4  Monit	,								7		1						1		per		P F	2	П	- 1	-	- 1	1										
Monitor Well #1R  Q 1 X  Monitor Well #2  G 1 X  Monitor Well #3  G 1 X  Monitor Well #3  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #4  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #2  Monitor Well #4  Monitor Well #2  Monitor Well #4  Monit	roject Location:	Vacaum 14-0-1				Sam	plan	Vanak		/			_				J		tenc		9 8	3		- 1		1											
Monitor Well #1R  Q 1 X  Monitor Well #2  G 1 X  Monitor Well #3  G 1 X  Monitor Well #3  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #4  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #2  Monitor Well #4  Monitor Well #2  Monitor Well #4  Monit	T17S-R35E	Sec 6 N ~ Lea County New N	/lexico	_	_	Sani	pier	aignati	ure:	KO	zanr	ne Jo	hnsor	n (57	5)631	-9310	1		EX	1	2 6	2	П	1			2					3	5			ço	
Monitor Well #1R  Q 1 X  Monitor Well #2  G 1 X  Monitor Well #3  G 1 X  Monitor Well #3  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #4  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #2  Monitor Well #4  Monitor Well #2  Monitor Well #4  Monit			T	T		1	1	(	1	PRE	SE	RVA	TIVE	_			4		100				П		-		7,62	- 1				18				lour	
Monitor Well #1R  Q 1 X  Monitor Well #2  G 1 X  Monitor Well #3  G 1 X  Monitor Well #3  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #4  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #2  Monitor Well #4  Monitor Well #2  Monitor Well #4  Monit	1612040	1		6	Ł	MA	ATRI	X	Y					1	SAM	PLING	1		X	9	2 2		П		-	77	2	- 1	_		2	3.		S		24 F	
Monitor Well #1R  Q 1 X  Monitor Well #2  G 1 X  Monitor Well #3  G 1 X  Monitor Well #3  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #4  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #2  Monitor Well #4  Monitor Well #2  Monitor Well #4  Monit	LAB#		윤	RS	Г			9	T	T	Т	T		す			N	2	05/	10	As E		les						760		N	18		olid		1	
Monitor Well #1R  Q 1 X  Monitor Well #2  G 1 X  Monitor Well #3  G 1 X  Monitor Well #3  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #4  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #2  Monitor Well #4  Monitor Well #2  Monitor Well #4  Monit		FIELD CODE	Š	l E	1				Š				P P P	-	_		3/60	3/60	X 10	13	A B	S	olat	les		3260	0	8	814	_ 3	No.	9		Sp		Lime	
Monitor Well #1R  Q 1 X  Monitor Well #2  G 1 X  Monitor Well #3  G 1 X  Monitor Well #3  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #4  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #2  Monitor Well #4  Monitor Well #2  Monitor Well #4  Monit	LAB USE	J	ě	¥	2	П		Щ	40m		4		iter	-	021		3216	21E	1	00	tals	atile	<u>=</u>	ticic		-	Ē	82/6	8	ا ا	3 0	S		l o		pu	
Monitor Well #1R  Q 1 X  Monitor Well #2  G 1 X  Monitor Well #3  G 1 X  Monitor Well #3  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #4  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #2  Monitor Well #4  Monitor Well #2  Monitor Well #4  Monit	ONLY	)	ap	O	끧				4	150	SC	0	1-1	y	E (2		86	8	418	827	Me	00	Ser	Pes		5 6	2	8	des	2 8	0	10	SS	)iss	les	ron	
Monitor Well #1R  Q 1 X  Monitor Well #2  G 1 X  Monitor Well #3  G 1 X  Monitor Well #3  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #4  G 1 X  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #4  Monitor Well #2  Monitor Well #4  Monitor Well #2  Monitor Well #4  Monit			Ō	0 #	\X	100 I	AH.	긺	豆	Ĭ	la l	125	핑	٥l	AT	ME	TBE	E	표	AH S	는 는	H	믯		5	Ž į	Ž	S.B.	stic	Z   \$	tion	ions	Ifate	tal	loric	E A	
Monitor Well #2   G   1   X	1	Monitor Well #1R	-	1	_	92	7		屵	-	-	-		_	THE PERSON NAMED IN	-		B	F	C F	F	F	F	= 1	2	5 0	5 1	2	a la	리홀	ြိ	F	Su	2	5	Ē	
Monitor Well #3  G 1 X	2	Monitor Well #2	_	1	_	$\vdash$	+	+	+			H	-	_	_		-	$\vdash$	$\dashv$	+	+	$\vdash$	1	+	+	+	+	4	1	$\perp$	$\perp$	L	X	X	X		
Monitor Well #4  G 1 X 1 9/20 19:55  Recovery Well #1  G 1 X 1 9/20 13:20  Inquished by:  Date: Time:  Phone Results  Fax Results  Phone Results  Fax Results  Phone Results  Fax Results  Phone Results  Fax Results	3	Monitor Well #3	_	1	_	$\vdash$	+	+	+	$\vdash$	$\vdash$	H				_		$\Box$	-	+	$\perp$	Н		1	1	_							X	X	X		
Recovery Well #1  G 1 X 1 9/20 13:20  Date: Time: Phone Results Yes No Additional Fax Number:  Received by: Date: Time: Received by: Date: Time: Phone Results Yes No Additional Fax Number: Remarks:  Received By: (Circle One)  Sample Condition CHECKED BY: Checked By: (Initials)	4		_	_	_	$\vdash$	+	+	+	$\vdash$	Н	H		_			Н		1	+	+	Ш	4	_	1	_	1						X	X	Х		
nquished by:  Date: Time:  Phone Results  Phone Results  Phone Results  Phone Results  Pered By: (Circle One)  Sample Condition  CHECKED BY:  (Initials)  CHECKED BY:  (Initials)  Received by:  CHECKED BY:  (Initials)  Received by:  CHECKED BY:  (Initials)			_	+	_	$\vdash$	+	+	+	$\vdash$	H	Н	-	_			Н		4	1	_	Ш	_		$\perp$								X	X	Х		
Anytic Johnson 9 22 201 5:55  Additional Fax Number:  Phone Results Yes No  Fax Results Yes No Additional Fax Number:  Received By: (Circle One)  Sample Condition  Cool Intact Yes Other:  (Initials)			1 6	1	1	$\vdash$	+	+	⊢	H			1	9	9/20	13:20	Ш		_	_				$\perp$							T	П	Х	X	х		
Anytic Johnson 9 22 201 5:55  Additional Fax Number:  Phone Results Yes No  Fax Results Yes No Additional Fax Number:  Received By: (Circle One)  Sample Condition  Cool Intact Yes Other:  (Initials)			+	-	H		+	+	⊢	Н			4	1	_		Ш											T	T	T	T			$\sqcap$	$\neg$	$\neg$	
Anytic Johnson 9 22 201 5:55  Additional Fax Number:  Phone Results Yes No  Fax Results Yes No Additional Fax Number:  Received By: (Circle One)  Sample Condition  Cool Intact Yes Other:  (Initials)			+	-	H	-	+	+	┡	Ш			1	$\perp$											T	T	T	T	T	T	T	П	П	$\sqcap$	7	$\dashv$	
Anytic Johnson 9 22 201 5:55  Additional Fax Number:  Phone Results Yes No  Fax Results Yes No Additional Fax Number:  Received By: (Circle One)  Sample Condition  Cool Intact Yes Other:  (Initials)			-	-	Н	-	4	_	L	Ш				$\perp$								П	T	T	T	T	T	T	$\top$	T		Н	$\Box$	$\top$	$\dashv$	$\dashv$	
Anytic Johnson 9 22 201 5:55  Additional Fax Number:  Phone Results Yes No  Fax Results Yes No Additional Fax Number:  Received By: (Circle One)  Sample Condition  Cool Intact Yes Other:  (Initials)	1	1	-		Н	$\perp$	4	$\perp$	L											T		П	T		T	T	T	T	$\top$	+	+	Н	$\Box$	$\top$		$\dashv$	
Anytic Johnson 9 22 201 5:55  Additional Fax Number:  Phone Results Yes No  Fax Results Yes No Additional Fax Number:  Received By: (Circle One)  Sample Condition  Cool Intact Yes Other:  (Initials)		<del> </del>	-		Н		1												T	T		П	T		T	1	T	T	$\top$	+	1	H	H	+	+	$\dashv$	
Anytic Johnson 9 22 201 5:55  Additional Fax Number:  Phone Results Yes No  Fax Results Yes No Additional Fax Number:  Received By: (Circle One)  Sample Condition  Cool Intact Yes Other:  (Initials)	linguished by	Date: Time	-															T	T	T			$\top$	$\top$	T	T	$^{\dagger}$	+	+	+	1	H	$\vdash$	+	+	$\dashv$	
Fax Results  Fax Results  Yes  No Additional Fax Number:  Received By: (Laboratory Staff)  Date: Time:  Received By: (Circle One)  Sample Condition  CHECKED BY:  (Initials)  CHECKED BY:  (Initials)	/ //						11	1/	11								Phor	ne R	esul	ts	П	Yes	T	N			_	_	_	_	_					$\dashv$	
vered By: (Circle One)  Sample Condition  CHECKED BY:  (Initials)  REMARKS:    Remail Results:   kjones@riceswd.com   rozanne@sdacres.com				alle	240	2 de	la	al	Sen	10	3-3	22	-2	1	11d	00	Fax	Resi	ults		П	Vac	T	N		Λ.	lditi.	2001	<b>F</b>	. Nive						$\dashv$	
Sample Condition CHECKED BY:  Cool Intact Yes Uses U (Initials)	unquisned by:	Date: Time:	Receiv	red By:	(La	borate	ory S	Staff)		Da	te:				100		-				_	103	_	140	_	A	KILIK	onai	rax	Nui	npe					4	
Sample Condition CHECKED BY:  Cool Intact Yes Uses U (Initials)																																				1	
Sample Condition CHECKED BY:  Cool Intact Yes Uses U (Initials)	ivered Pr.: //	Circle O															E	Emai	il Re	sulte	8:	kio	200	2	000	أميدا	00										
mpler - LIPS - Rue Other: Yes Ves V (Initials)	iiverea By: (	Circle One)	Sample	Conditio	on	716-10		T	CHE	CKE	D BY	Y:		and the same	The state of	$\neg$		ruli		June		roz	ann	e@	sde	wd	CO	III									
noler /- IIPS - Bug Other					Cool	Int	act	1													-		M1111		Juc	1010	0.0	/UII	_								
No No No No	mpler - III	PS - Bus - Othor			4	Yes L	1		(Initia	als)																											
	//	O Dus - Other:		No	N	lo	L	L	A.																												



December 01, 2021

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 11/23/21 14:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. 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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> 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.

Celey D. Keene

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager





## Analytical Results For:

Rice Operating Company KATIE JONES 112 W. Taylor Hobbs NM, 88240

Fax To: (575) 397-1471

Received: 11/23/2021 Sampling Date: 11/20/2021 Reported: 12/01/2021 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 (H213377-01)

Chloride, SM4500Cl-B	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	700	4.00	11/30/2021	ND	100	100	100	0.00	
Sulfate 375.4	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	56.4	10.0	11/24/2021	ND	23.5	117	20.0	1.20	
TDS 160.1	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	1520	5.00	11/29/2021	ND	528	106	500	2.46	

#### Sample ID: MONITOR WELL #2 (H213377-02)

Chloride, SM4500CI-B	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	92.0	4.00	11/30/2021	ND	100	100	100	0.00	
Sulfate 375.4	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	39.9	10.0	11/24/2021	ND	23.5	117	20.0	1.20	
TDS 160.1	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	392	5.00	11/29/2021	ND	528	106	500	2.46	

Cardinal Laboratories \*=Accredited Analyte

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

Celey D. Keene



## Analytical Results For:

Rice Operating Company KATIE JONES 112 W. Taylor Hobbs NM, 88240

Fax To: (575) 397-1471

Received: 11/23/2021 Sampling Date: 11/19/2021 Reported: 12/01/2021 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 #3 (H213377-03)

Chloride, SM4500Cl-B	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	32.0	4.00	11/30/2021	ND	100	100	100	0.00	
Sulfate 375.4	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	50.5	10.0	11/24/2021	ND	23.5	117	20.0	1.20	
TDS 160.1	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	328	5.00	11/29/2021	ND	528	106	500	2.46	

#### Sample ID: MONITOR WELL #4 (H213377-04)

Chloride, SM4500CI-B	mg	/L	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	36.0	4.00	11/30/2021	ND	100	100	100	0.00	
Sulfate 375.4	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	48.4	10.0	11/24/2021	ND	23.5	117	20.0	1.20	
TDS 160.1	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	311	5.00	11/29/2021	ND	528	106	500	2.46	

Cardinal Laboratories \*=Accredited Analyte

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

Celey D. Keine





## Analytical Results For:

Rice Operating Company KATIE JONES 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-14

Fax To: (575) 397-1471

Received: 11/23/2021 Sampling Date: 11/19/2021 Reported: 12/01/2021 Sampling Type: Water Project Name: VACUUM N-6-1 Sampling Condition: Cool & Intact Project Number: Sample Received By: NOT GIVEN Tamara Oldaker

Project Location: T17S-R35E-SEC6 N-LEA CTY., NM

#### Sample ID: RECOVERY WELL #1 (H213377-05)

Chloride, SM4500Cl-B	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	328	4.00	11/30/2021	ND	100	100	100	0.00	
Sulfate 375.4	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	42.1	10.0	11/24/2021	ND	23.5	117	20.0	1.20	
TDS 160.1	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	808	5.00	11/30/2021	ND	528	106	500	2.46	

Cardinal Laboratories \*=Accredited Analyte

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

Celey D. Keene



#### **Notes and Definitions**

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

\*\* Samples not received at proper temperature of 6°C or below.

\*\*\* Insufficient time to reach temperature.

- Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories \*=Accredited Analyte

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

Celey D. Keene

4	
4	
0	
C	
4	
0	
0.0	
- 6	
2	

	₹
	0
	5
	٠.
	9
	$\ddot{x}$
	-
	-
	4
	N
	0
	S
	1
	ð
	٠.
	01
	2
	-
	04
	2
	E
	-
	_
	9
1	_
	3
	36
	ĕ
	ē
1	3
	ಎ

																												Pa	ge_	1	0	La f 1	b R	eport
101 East Marland - Ho Tel (575) 393	3-2326 <b>Card</b>	na	IL	a	bo	or	at	to	ri	e	<b>S</b> ,	I	n	c.		_		CI	-	-	F-CI Orde			Y A	ND	AN	IAL	YSI	SR	EQ	UES	Т	_	6 of 6
Fax (575) 39: Company Name: RICE Opera	ting Company		BILL 1					mpa	anv		_	PO#					(See eas)				AN	AL'	/SIS							_				Page
Project Manager:	ang company		Tuo		Addre		, 001	пре	arry .	(Str	eet, (	City, Z	Zip)			١.					(Circl	e or	Spe	cify N	Meth	od N	No.)						,	Ш
Katie Jones			122 W	/ Tayl	CHARLES TO	-	Hobbs	s, Ne	w Me	exico	No. of Concession,									Ш														
	Street, City, Zip)		(575	7 30	Phon							Fax#:		397-1	171				00.7	П														1
Phone #:	eet ~ Hobbs, New Mexico 88240	Fax #:	(3/3	) 38	3-9	1/4		-			-	(37.	3)3	91-1	4/1			2	0B/2	Н	+				Н			+	+	H		+	+	
(575) 393-91	174	(575	397-	-147	71													3	601															1
Project #:	Project Name: Vacuum N-6-1			74	1			A	7	)						Н		ded	무	e Hg	-	H		H	H	$\exists$		+	+	$\vdash$	H	+	+	
Project Location:	Vacuum N-6-1			100	Samp	er:	Signati	ire.	Roz	zanne	Joh	nson	1 (57	5)631-	9310			Extended (C35)	b Se	Pb Se Hg										33)			SILS	
T178-R35E-	Sec 6 N ~ Lea County New Me	xico	-		100		X	4			-	190	a de	-	12.20	H		8	-	10		F			/625			+	+		Ħ	+	- 6	-
11				$\prod$	MA	TR	K	T		SEF			П	SAME	LING			X	ပိ	Š		L		54	8270C/6				2	CO3, HO		0	24 H	
H213377		٩	SS SS	H			T	+	T	MET		T	+			2	2	TPH 418.1/TX1005 / TX10	As Ba	TCLP Metals Ag As Ba Cd	TCLP Volatiles			GC/MS Vol. 8260B/624			Pesticides 8081A/608	+	Cations (Ca, Mg, Na, K)	8	100	Lotal Dissolved Solids Chlorides	ne ~	
LAB#	FIELD CODE	or (C)omp	# CONTAINERS	ı				HCL (4 40ml VOA)				ICE (1-1Liter HDPE)	1	=		MTBE 8021B/602	BTEX 8021B/602	žΙ	Ag	s Ag	les	TCLP Pesticides		826	GC/MS Semi. Vol.	PCB's 8082/608	3081	BOD, TSS, pH Moisture Content	Σ	Anions (CI, SO4,	1	200	Turn Around Time	1
/ LAB USE \	TILLD GODE	0) 10	ΙĒ	2			띯	40ml		0		Liter		DATE (2021)		3021	3021	8.1/	PAH 8270C Total Metals	letals	olatil	estic		Vol.	Sem	8082	es 8	BOD, TSS, pH	ျှင်	D)	8	SSC	I I	1
ONLY		(G)rab	Ö	WATER	닐	AIR	ğ	1	HNO3	HSC	H <sub>2</sub> SO <sub>4</sub>	=	NONE	TE (	ш	BE 8	×	4	al Me	P	7 0	PP	_	MIS	/MS	B's	sticid	D, T	ions	ons	Sulfates	Chlorides	Į.	1
,		9	#	⋛	SOIL	Ā	SL	일	壬	Sa	H <sub>2</sub>	<u></u>	2	DA	TIME	Σ	BT	直	Tot To	<sup>2</sup>	2 5	1 2	RC	SC	ဗ္ဗ	P.	Pes	M BO	Sal	Aii	Sul	5 5	Ē	1
	Monitor Well #1R	G	1	X				L				1	1	11/20	11:40	Ш	_	_	+	Ц	1	1			Ш		4	+	$\perp$	$\sqcup$	_	x >	_	-
	Monitor Well #2	G	1	X			_	┸	$\perp$	Ш	$\perp$	1	1	11/19	12:55	Н		$\dashv$	+	Н	+	1	$\vdash$	Н	Н		-	+	+	$\sqcup$	-	X >	_	-
	Monitor Well #3	G	1	X	Ш		_	1	-	Н	_	1	-		11:20	Н	-	$\perp$	+	Н	+	+	-	Н	Н	$\dashv$	+	+	+	$\vdash$	_	X >	_	-
-	Monitor Well #4	G	1	X	$\vdash$	$\dashv$	+	╀	$\vdash$	Н	$\dashv$	1	-	11/19		H	$\dashv$	+	+	Н	+	+	$\vdash$	Н	Н	$\dashv$	+	+	+	$\vdash$	_	X >	_	1
5	Recovery Well #1	G	1	X	$\vdash$	$\dashv$	+	╀	$\vdash$	Н	+	1	-1	11/19	15:15	Н	$\dashv$	+	+	Н	+	+	$\vdash$	Н	Н	$\dashv$	+	+	+	$\vdash$	X X	X >	+	1
		$\vdash$	-	-	H	$\dashv$	+	╀	$\vdash$	Н	+	+	+			H	$\dashv$	+	+	Н	+	+	$\vdash$	Н	Н	$\dashv$	+	+	+	H	+	+	+	1
		-		$\vdash$	$\vdash$	$\dashv$	+	+	+	Н	-	+	+			H	$\dashv$	+	+	Н	+	+		Н	Н	$\dashv$	+	+	+	H	+	+	+	1
		$\vdash$	$\vdash$	$\vdash$	$\vdash$	$\dashv$	+	+	$\vdash$	Н	+	+	+			H	+	+	+	Н	+	+			Н		+	+	+	$\forall$	+	+	+	1
	71			$\vdash$	$\forall$	1	+	+	$\vdash$	Н	1	+	+			H	1	1	+	H	+	+					$\dashv$	+	+	$\vdash$		+	+	1
							_	t		Н	$\dashv$	$\top$	1			Н	1		+	П	$\top$	T						+	T	$\vdash$	$\sqcap$	$\top$		1
Relinguished by:	Date: Time:	Recei	ved by:			7	1///	11	- 0	ate:		Tim	ne:			Pho	ne F	Resu	lts		Yes	T	No											1
Rozanne Johnson	11/23/2021 14:15	1	MUL	04	a K		No	30	1	11	- 2	3-	21	14	15	Fax	Res	ults		П	Yes	Γ	No		Add	ition	al Fa	ax Nu	ımbo	er:				
Relinquished by:	Date: Time:	Recei	ved By:	(L	abora	tory	Staff)	1	D	ate:		Tim	THE REAL PROPERTY.			REN	AR	KS:																1
Delivered By: (	Circle One)	Commi	Candi	ior			_	CI	ECK	ED	V-						Ema	ail R	esult		kjor													
Delivered By: (	Circle One)	Sample	e Condit	Cool	li	ntact		CH	IECK	ED B	Υ.										roza	inne	<b>(a)</b> S	gad	cres	s.CO	OIT1							
			Yes		Yes	7	1	(Ini	itials)	,																								
Sampler - U	IPS - Bus - Other:		No	Н	No	Н		9	itials)	-																								1



From: OCDOnline@state.nm.us

To: <u>Katie Jones</u>

**Subject:** The Oil Conservation Division (OCD) has approved the application, Application ID: 202307

**Date:** Tuesday, May 23, 2023 8:26:29 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 2022 Annual Groundwater Report: Content satisfactory 1. Continue sampling on a quarterly schedule 2. Continue groundwater recovery 3. Submit next 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, Nelson Velez Environmental Specialist - Advanced 505-469-6146 Nelson.Velez@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

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 327871

## **CONDITIONS**

Operator:	OGRID:
RICE OPERATING COMPANY	19174
122 W Taylor	Action Number:
Hobbs, NM 88240	327871
	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 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.	9/17/2024