RICE Operating Company

112 West Taylor • Hobbs, New Mexico 88240 Phone: (575) 393-9174 • Fax: (575) 397-1471

April 1, 2024

REVIEWED

By Mike Buchanan at 3:44 pm, Aug 19, 2024

Nelson Velez

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

RE: 2023 Annual Groundwater Report Rice Operating Company – BD SWD System BD Jct. N-20 (1R426-215): UL/N, Sec. 20, T21S, R37E NMOCD Incident ID: nAPP2109651236

Mr. Velez:

ROC is the service provider (agent) for the BD SWD System and has n gradient to portion of the pipeline, well, or facility. The system is owned by a constrate natural System Parties, who provide all operating capital on a percentage owne area.

Background and Previous Work

The site is located approximately 2 miles northwest of Eunice, New Mexico at UL/N, Sec. 20, T21S, R37E as shown on the Geographical Location Map. Groundwater sampling at the site indicated the depth to groundwater is approximately 99 feet below ground surface (bgs).

An Investigation and Characterization Plan (ICP) was submitted to NMOCD on August 5th, 2013, and approved on August 21st, 2013. According to the ICP, the site was investigated through soil bore installation resulting in elevated chloride concentrations that decreased with depth. Based on the soil bore installation, a Corrective Action Plan (CAP) was submitted and approved by NMOCD on October 30th, 2013. According to the NMOCD approved CAP, a 71x103-ft, 20-mil reinforced liner was installed and properly seated at 4.5 ft bgs. The site was backfilled and seeded with a blend of native vegetation. A CAP Report and Soil Closure Request detailing this work was submitted to the NMOCD on August 1st, 2014. The report also requested a near-source monitor well (MW-1) and an up-gradient well (MW-2) to determine groundwater quality. NMOCD approved this report and granted 'Soil Closure' on September 18th, 2014.

On May 14th, 2015, MW-1 was installed, and lithology soil samples were collected at regular intervals. The up-gradient well (MW-2) was installed November 15th, 2019, and the down-gradient well (MW-3) was installed on December 20th, 2019. The wells have been sampled regularly since installation. The most recent sampling event resulted in a chloride concentration of 2,540 mg/L in MW-1, 1,040 mg/L in MW-2, and 770 mg/L in MW-3. BTEX concentrations have remained below detectable limit in each well since installation. The samples collected from

Review of the 2023 Annual Groundwater Report for ROC--BD SWD System BD Jct. N-20: content satisfactory 1. Continue to conduct quarterly groundwater monitoring for the site. 2. A meeting may need to be scheduled with OCD in order to discuss possible sources that ROC is claiming could be contributing to the site, or a background well may be installed up

3. Please submit the

2024 annual report to OCD by April 1, 2025.

the up-gradient well (MW-2) suggest a non-ROC, up-gradient source has contributed to the degradation of groundwater quality. On October 5th, 2022, NMOCD granted approval to eliminate BTEX and sulfate analyses from MW-2 and MW-3.

ROC reviewed historical aerial photos and quarterly monitoring well sampling data. Chloride concentrations in the up-gradient well (MW-2) have been elevated since installation with an average concentration of 1,476 mg/L. The peak chloride concentration observed in the up-gradient well resulted in a concentration of 2,070 mg/L, collected on August 27th, 2021. Based on the elevated concentrations in the up-gradient well and the historical aerial photos, ROC submitted a Termination Request to NMOCD on March 30th, 2023.

ROC will continue quarterly sampling in 2024.

Attached is the Appendix, which contains:

- 1. A Geographical Location Map.
- 2. A map showing well locations and groundwater gradient.
- 3. A table presenting all laboratory results and depth to groundwater for each well at the site, and a graph showing recent laboratory results.
- 4. The laboratory analytical results for 2023.

Rice Operating Company appreciates the opportunity to work with you on this project. Please contact me at (575) 393-9174 if you have any questions or wish to further discuss this site. Thank you for your time and consideration.

Sincerely,

Katil Davis

Katie Davis Environmental Manager RICE Operating Company (ROC)

appendix

Received by OCD: 3/28/2024 12:15:47 Received by OCD: 3/28/2024 12:15:47 Received by OCD: 3/28/2024 12:15:47

Page 3 of 33



Released to Imaging: 8/19/2024 3:52:48 PM



Released to Imaging: 8/19/2024 3:52:48 PM



ROC - BD Jct. N-20 (1R426-215) Unit Letter N, Section 20, T21S, R37E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
1	100.09	146.9	30.4	100	6/22/2015	640	2,600	< 0.001	<0.001	<0.001	<0.003	240	Clear No odor
1	100.23	146.9	30.34	100	8/7/2015	1,100	2,950	<0.001	<0.001	<0.001	<0.003	112	Clear No odor
1	100.22	146.9	30.34	100	10/29/2015	1,260	3,740	<0.001	<0.001	<0.001	<0.003	94	Clear No odor
1	100.14	146.9	30.4	100	2/5/2016	1,530	2,710	<0.001	<0.001	<0.001	<0.003	85	Clear No odor
1	100.14	146.9	30.4	100	4/28/2016	1,530	3,050	<0.001	<0.001	<0.001	<0.003	240	Clear No odor
1	100.21	146.9	30	100	7/28/2016	2,660	5,220	<0.001	<0.001	<0.001	<0.003	16	Clear No odor
1	100.07	146.9	30	100	10/25/2016	2,470	6,460	<0.001	<0.001	<0.001	<0.003	18	Clear No odor
1	100.04	146.9	30.5	100	2/13/2017	1,600	2,970	<0.001	<0.001	<0.001	<0.003	38	Clear No odor
1	99.95	146.9	30.5	100	4/25/2017	1,770	3,160	<0.001	<0.001	<0.001	<0.003	67	Clear No odor
1	99.94	146.9	30.5	100	9/1/2017	1,370	3,170	<0.001	<0.001	<0.001	<0.003	198	Clear No odor
1	99.93	146.9	30.5	100	11/1/2017	1,300	2,780	<0.001	<0.001	<0.001	<0.003	272	Clear No odor
1	99.94	146.9	30.5	100	2/8/2018	1,940	3,310	<0.001	<0.001	<0.001	<0.003	119	Clear No odor
1	100.02	146.9	30.5	100	5/3/2018	2,800	4,850	<0.001	<0.001	<0.001	<0.003	110	Clear No odor
1	100.03	146.9	30.5	100	8/24/2018	2,000	5,040	<0.001	<0.001	<0.001	<0.003	107	Clear No odor
1	100.01	146.9	30.5	100	11/7/2018	2,000	3,510	<0.001	<0.001	<0.001	<0.003	110	Clear No odor
1	100.02	146.9	30.5	100	2/22/2019	1,670	2,740	<0.001	<0.001	<0.001	<0.003	140	Clear No odor
1	100.03	146.9	30.5	100	5/2/2019	2,070	3,370	<0.001	<0.001	<0.001	<0.003	107	Clear No odor
1	100.01	146.9	30.5	100	8/6/2019	1,840	4,240	<0.001	<0.001	<0.001	<0.003	111	Clear No odor
1	100.09	146.9	30	100	11/5/2019	2,830	5,240	<0.001	<0.001	<0.001	<0.003	127	Clear No odor
1	100.1	146.9	30.4	100	2/24/2020	1,820	3,050	<0.001	<0.001	< 0.001	<0.003	113	Clear No odor
1	110.16	146.9	23.9	100	8/27/2020	4,450	6,960	<0.001	<0.001	<0.001	<0.003	77.6	Clear No odor
1	100.18	146.9	30	100	3/1/2021	3,550	6,180	<0.001	<0.001	<0.001	<0.003	148	Clear No odor
1	100.19	146.9	30	100	5/27/2021	3,450	6,640	<0.001	<0.001	<0.001	<0.003	168	Clear No odor
1	100.18	146.9	30	100	8/27/2021	4,700	8,690	<0.001	<0.001	<0.001	<0.003	125	Clear No odor
1	100.14	146.9	30	100	10/29/2021	4,600	7,970	<0.001	<0.001	<0.001	<0.003	122	Clear No odor
1	100.11	146.9	30	100	2/18/2022	1,860	3,200	<0.001	<0.001	<0.001	<0.003	168	Clear No odor
1	100.12	146.9	30	100	5/19/2022	2,630	4,850	<0.001	<0.001	<0.001	<0.003	273	Clear No odor
1	100.13	146.9	30	100	8/22/2022	2,780	5,800	<0.001	<0.001	<0.001	<0.003	201	Clear No odor

Page 7 of 33

ROC - BD Jct. N-20 (1R426-215) Unit Letter N, Section 20, T21S, R37E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
1	100.15	146.9	30	100	11/7/2022	2,340	4,410	<0.001	<0.001	<0.001	<0.003	200	Clear No odor
1	100.14	146.92	30.4	100	3/3/2023	2,130	3,590	<0.001	<0.001	<0.001	<0.003	223	Clear No odor
1	100.1	146.9	30.4	100	5/15/2023	2,400	4,500	<0.001	<0.001	<0.001	<0.003	239	Clear No odor
1	100.18	146.9	30.4	100	8/4/2023	1,480	3,070	<0.001	<0.001	<0.001	<0.003	175	Clear No odor
1	100.23	146.9	30.3	100	10/16/2023	2,540	4,870	<0.001	<0.001	<0.001	<0.003	269	Clear No odor
мw	Depth to	Total	Well	Volume	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl	Total	Sulfate	Comments
10100	Water	Depth	Volume	Purged	Sample Date	U	103	Denzene	Toluelle	Benzene	Xylenes	Junale	comments
~	00.00	446.4	2.6	10	12/22/2010	4 000	2 4 2 2	0.001	0.001	0.001		24.0	

MW			VVCII	volume	Sample Date	Cl	TDS	Benzene	Toluene			Sulfate	Comments
	Water	Depth	Volume	Purged						Benzene	Xylenes		
2	99.96	116.4	2.6	10	12/23/2019	1,880	3,420	<0.001	<0.001	<0.001	<0.003	218	Clear No odor
2	99.92	116.4	2.6	10	2/24/2020	1,620	3,230	<0.001	<0.001	<0.001	<0.003	190	Clear No odor
2	99.98	116.4	2.6	10	8/27/2020	1,580	3,180	<0.001	<0.001	<0.001	<0.003	183	Clear No odor
2	99.97	116.4	2.6	10	3/1/2021	1,580	3,140	<0.001	<0.001	<0.001	<0.003	225	Clear No odor
2	100.01	116.4	2.6	10	5/27/2021	1,730	3,120	<0.001	<0.001	<0.001	<0.003	172	Clear No odor
2	100	116.4	2.6	10	8/27/2021	2,070	3,660	<0.001	<0.001	<0.001	<0.003	283	Clear No odor
2	99.96	116.4	2.6	10	10/29/2021	1,400	2,540	<0.001	<0.001	<0.001	<0.003	192	Clear No odor
2	99.94	116.4	2.6	10	2/18/2022	1,520	2,900	<0.001	<0.001	<0.001	<0.003	226	Clear No odor
2	99.95	116.4	2.6	10	5/19/2022	1,340	2,410	<0.001	<0.001	<0.001	<0.003	128	Clear No odor
2	99.98	116.4	2.6	10	8/22/2022	1,580	3,390	<0.001	<0.001	<0.001	<0.003	159	Clear No odor
2	99.99	116.4	2.6	10	11/7/2022	1,260	2,550	<0.001	<0.001	<0.001	<0.003	143	Clear No odor
2	99.98	116.4	2.6	10	3/3/2023	1,580	2,860	<0.001	<0.001	<0.001	<0.003	173	Clear No odor
2	99.94	116.4	2.6	10	5/15/2023	1,200	2,390	<0.001	<0.001	<0.001	<0.003	139	Clear No odor
2	100.02	116.4	2.6	10	8/4/2023	760	1,720	<0.001	<0.001	<0.001	<0.003	99.1	Clear No odor
2	100.04	116.4	2.6	10	10/16/2023	1,040	2,290	<0.001	<0.001	<0.001	<0.003	153	Clear No odor

ROC - BD Jct. N-20 (1R426-215) Unit Letter N, Section 20, T21S, R37E

мw	Depth to	Total	Well	Volume	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl	Total	Sulfate	Comments
	Water	Depth	Volume	Purged	Sample Date	C	103	Delizene	Toluelle	Benzene	Xylenes	Sunate	comments
3	99.12	116.35	2.8	10	12/23/2019	980	1,880	<0.001	<0.001	<0.001	<0.003	152	Clear No odor
3	99.08	116.35	2.8	10	2/24/2020	920	1,800	<0.001	<0.001	<0.001	<0.003	117	Clear No odor
3	99.1	116.35	2.8	10	8/27/2020	1,200	2,560	<0.001	<0.001	<0.001	<0.003	92.1	Clear No odor
3	99.13	116.35	2.8	10	3/1/2021	900	1,890	<0.001	<0.001	<0.001	<0.003	117	Clear No odor
3	99.18	116.35	2.8	10	5/27/2021	980	1,920	<0.001	<0.001	<0.001	<0.003	103	Clear No odor
3	99.17	116.35	2.7	10	8/27/2021	870	1,850	<0.001	<0.001	<0.001	<0.003	151	Clear No odor
3	99.12	116.35	2.7	10	10/29/2021	880	1,740	<0.001	<0.001	<0.001	<0.003	126	Clear No odor
3	99.06	116.35	2.6	10	2/18/2022	860	1,640	<0.001	< 0.001	<0.001	<0.003	133	Clear No odor
3	99.13	116.35	2.8	10	5/19/2022	800	1,760	<0.001	< 0.001	< 0.001	<0.003	136	Clear No odor
3	99.15	116.35	2.8	10	8/22/2022	820	2,240	<0.001	< 0.001	< 0.001	<0.003	92.8	Clear No odor
3	99.16	116.35	2.8	10	11/7/2022	900	1,690	<0.001	<0.001	<0.001	<0.003	95	Clear No odor
3	99.15	116.35	2.8	10	3/3/2023	820	1,620	<0.001	<0.001	<0.001	<0.003	102	Clear No odor
3	99.09	116.35	2.8	10	5/15/2023	760	1,670	<0.001	<0.001	<0.001	<0.003	104	Clear No odor
3	99.22	116.35	2.7	10	8/4/2023	750	1,760	<0.001	<0.001	<0.001	<0.003	112	Clear No odor
3	99.22	116.35	2.7	10	10/16/2023	770	1,700	<0.001	<0.001	<0.001	<0.003	134	Clear No odor



March 20, 2023

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

RE: BD JUNCTION N-20

Enclosed are the results of analyses for samples received by the laboratory on 03/08/23 15:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	03/08/2023	Sampling Date:	03/03/2023
Reported:	03/20/2023	Sampling Type:	Water
Project Name:	BD JUNCTION N-20	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T21S R37E SEC20 N-LEA CTY., NM		

Sample ID: MONITOR WELL #1 (H231058-01)

BTEX 8021B	mg/	L	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	03/15/2023	ND	0.019	93.6	0.0200	0.0160	
Toluene*	<0.001	0.001	03/15/2023	ND	0.018	89.4	0.0200	0.516	
Ethylbenzene*	<0.001	0.001	03/15/2023	ND	0.017	86.6	0.0200	0.121	
Total Xylenes*	<0.003	0.003	03/15/2023	ND	0.055	91.7	0.0600	0.327	
Total BTEX	<0.006	0.006	03/15/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 9	% 77.5-12	5						
Chloride, SM4500Cl-B	mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	2130	4.00	03/09/2023	ND	100	100	100	3.92	
Sulfate 375.4	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	223	50.0	03/20/2023	ND	18.2	91.0	20.0	16.5	
TDS 160.1	mg/	L	Analyze	d By: GM					
Analyte				Mathad Blank	DC	% Recovery	True Value QC	RPD	Qualifier
, and jee	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery		RPD	Qualifier

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/08/2023	Sampling Date:	03/03/2023
Reported:	03/20/2023	Sampling Type:	Water
Project Name:	BD JUNCTION N-20	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T21S R37E SEC20 N-LEA CTY., NM		

Sample ID: MONITOR WELL #2 (H231058-02)

mg/	L	Analyze	d By: JH					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<0.001	0.001	03/15/2023	ND	0.019	93.6	0.0200	0.0160	
<0.001	0.001	03/15/2023	ND	0.018	89.4	0.0200	0.516	
<0.001	0.001	03/15/2023	ND	0.017	86.6	0.0200	0.121	
<0.003	0.003	03/15/2023	ND	0.055	91.7	0.0600	0.327	
<0.006	0.006	03/15/2023	ND					
102 9	6 77.5-12	5						
mg/	L	Analyze	d By: AC					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
1580	4.00	03/09/2023	ND	100	100	100	3.92	
mg/	L	Analyze	d By: AC					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
173	50.0	03/20/2023	ND	18.2	91.0	20.0	16.5	
mg/	L	Analyze	d By: GM					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
	Result <0.001 <0.001 <0.003 <0.006 <i>102 %</i> mg/ Result 1580 mg/ Result 173	 <0.001 0.001 <0.001 0.001 <0.003 <0.006 0.006 0.006 77.5-12 mg/L Result Result 4.00 mg/L Result 	Result Reporting Limit Analyzed <0.001	Result Reporting Limit Analyzed Method Blank <0.001	Result Reporting Limit Analyzed Method Blank BS <0.001	Result Reporting Limit Analyzed Method Blank BS % Recovery <0.001	Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC <0.001	Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD <0.001

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/08/2023	Sampling Date:	03/03/2023
Reported:	03/20/2023	Sampling Type:	Water
Project Name:	BD JUNCTION N-20	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T21S R37E SEC20 N-LEA CTY., NM		

Sample ID: MONITOR WELL #3 (H231058-03)

BTEX 8021B	mg/	L	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	03/15/2023	ND	0.019	93.6	0.0200	0.0160	
Toluene*	<0.001	0.001	03/15/2023	ND	0.018	89.4	0.0200	0.516	
Ethylbenzene*	<0.001	0.001	03/15/2023	ND	0.017	86.6	0.0200	0.121	
Total Xylenes*	<0.003	0.003	03/15/2023	ND	0.055	91.7	0.0600	0.327	
Total BTEX	<0.006	0.006	03/15/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 %	6 77.5-12	5						
Chloride, SM4500Cl-B	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	820	4.00	03/09/2023	ND	100	100	100	3.92	
Sulfate 375.4	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	102	50.0	03/20/2023	ND	18.2	91.0	20.0	16.5	
TDS 160.1	mg/	L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	1620	5.00	03/14/2023	ND	806	80.6	1000	0.00	

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

1 of 33																											-		1	-	-	_
101 East Mariand - Hobbs, NM 88240 Tel (575) 393-2326 Fax (575) 393-2476	na	IT	<i>"</i> Я	b	or	. 81	to	ri	ie	S.	h	IC.		F		С	HAI	Contraction of	-	-	-	-	AN	D A	NA	LY	SIS	RE	QU	ESI	Г	of 6
Pax (5/5) 393-24/6							~~~			~,			,					LA	B Or	der	ID #								_			Page 6
Company Name:		BILL T			pany:						PO#			Г					۵	NΔ	1 19	SIS	RE		=ST							
RICE Operating Company Project Manager:		RICE	= 0) Co	mpa	any	101					(Circle or Specify Method No.)																		
				Addr							City, Zi	p)			1		1	1	1		1	1	1	1	1	1		1	1	ł		1
Katie Jones		122 W	Tayle	-	No. of Concession, Name	Hobb	s, Ne	w Me	exico		and the second second																					
Address: (Street, City, Zip)				Phor							Fax#:							2														
122 W Taylor Street ~ Hobbs, New Mexico 88240 Phone #:	Fax #:	(575) 39	3-9	1/4	-					(5/5)397	-1471	1				/20(
(575) 393-9174	(575)	397-	147	1		/	\neg									35)		6010B/200														
Project #: Project Name:	(010)	001	1 11		/	-	-	1		-	7			-		0) p		90														
BD Junction N-20				/		/	H		2-	/	/					ende		Set														
Project Location:				Sám	pler S	Signat	dre	Ro	zann	e Joh	inson (575)63	1-9310	1		Ext		P a										ŝ	(n)			S
T21S R37E Sec20 N ~ Lea County New Me	XICO		1	7	14	54	1/	000	0=		TH / 25		_	1		005		Cd Cr Pb Se Hg					(acal						HCO3)			24 Hours
H231058		S	4	MA	ATRI	XX	1			HOL	-	SA	MPLING			TPH 418.1/TX1005 / TX1005 Extended (C35)		Ba		se		CCMAC Vol 020001024	8270C1625		608			Cations (Ca, Mg, Na, K)	CO3, 1	Total Dissolved Solids		1 2 1
LAB #	(G)rab or (C)omp	CONTAINERS					(VA)				ICE (1-1Liter HDPE) NONE			MTBE 8021B/602	602	100	ŀ	Ag As		TCLP Semi Volatiles	es	1000	GCMS Semi Vol	8	Pesticides 8081A/608		Moisture Content	B I		S pe		Turn Around Time
FIELD CODE	Û	AIN					HCL (4-40ml VOA)				H	DATE (2023)		21B	BTEX 8021B/602	Ê	Q I	als /	TCLP Volatiles	Š	TCLP Pesticides			PCB's 8082/608	80	BOD, TSS, pH	5	8	Anions (Cl, SO4, Sulfates	No		P
LAB USE	D OL	Ł	ШШ			ğ	(4-40		0	4	ΞL	1 N		80	803	118.	3270	Met	Vols	Sen	Pes			8	des	rss	lie	s) (C) se	Diss	des	rou
ONLY)rat	8	WATER	SOIL	AIR	SLUDGE	1	HNO3	NaHSO ₄	H ₂ SO ₄	NONF (1-1	E	TIME	B	Ш	I	PAH 8270C	TCLP Metals	P	4	E.			B's	stici	í.	listu	tion	Sulfates	tal	Chlorides	A E
		#		õ	A	0	-	-	Ž	Ĩ		-		Σ	-	F	2	<u> </u>	F	2	21		5 C	10	P	M	ž	ő	A N	P	ð	2
Monitor Well #1	G	5	X			_	4	-		\square	1	3/3			X		$ \rightarrow $	\perp				\perp	\perp	\perp					X	X	X	
2 Monitor Well #2	G	5	X			\perp	4				1	3/3	9:15		X														X	X	X	
3 Monitor Well #3	G	5	X				4				1	3/3	10:3	5	X														X	X	X	
														Γ			Τ	T	Π	Τ		Т	Т	Т	Γ				T			
					Π	Τ	Т	Γ						Γ				Τ	Π				T	T	T			T	T			
							Т	T									\top	T	П		\top	1	T	\top				1	\top	\square		
			\square			1	T	\top			+			\vdash			+	+	Ħ	+	+	+	+	+	\vdash	Η		+	+	\square		
			\square			+	+	\top			-		1	\vdash			+	+	H	+	+	+	+	+	\vdash	\square		+	+	+		
			\square			+	+	\top			+		+	\vdash			+	+	H	+	+	+	+	+	+	Η		+	+	H		
Relinquished by: Date: Time:	Receiv	ed by:				20	1	P	ate:		Time	15	10	Pho	one F	Resu	Its	+	Yes		N	0	-	1	-		-	-				\neg
Rezanne Johnson 30 2073 16:40	1	his	IAL	1			2L	6	0			-8-		Fax	Res	sults			Var		-		A.	ditio	nall	Eav	Jum	hor				-
Relinquished by: Date: Time:	Receiv	ed By:	(La	bora	itory	Staff					Time	the local division in which the local division in which the local division in the local	25		MAR		-	_	Yes		N	0	A		nan	axi	Num	ber.			1.11.1	\neg
		,-	(,		-	-	are.		11110			1																		
							_								Ema	ail R	esul	ts:			s@r											
	Sample	Conditio			ntant			C	HEC	KED	BY:								roz	an	ne@	0sd	acre	S.C	om							
		Yes	Cool	Yes	ntact	1			(Initi	als)																						
Sampler - UPS - Bus - Other:		No		No	-			V	0																							
\$(//						_		1-						L						Capital P			-		000400							
ea ea																																
Received by																																
No. 1																																

Released to Imaging: 8/19/2024 3:52:48 PM

•



May 26, 2023

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

RE: BD JUNCTION N-20

Enclosed are the results of analyses for samples received by the laboratory on 05/18/23 16:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	05/18/2023	Sampling Date:	05/15/2023
Reported:	05/26/2023	Sampling Type:	Water
Project Name:	BD JUNCTION N-20	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T21S R37E SEC20 N-LEA CTY., NM		

Sample ID: MONITOR WELL #1 (H232538-01)

BTEX 8021B	mg/	L	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	< 0.001	0.001	05/22/2023	ND	0.019	93.6	0.0200	1.42	
Toluene*	<0.001	0.001	05/22/2023	ND	0.020	98.7	0.0200	2.56	
Ethylbenzene*	<0.001	0.001	05/22/2023	ND	0.019	95.4	0.0200	3.78	
Total Xylenes*	<0.003	0.003	05/22/2023	ND	0.060	99.3	0.0600	2.35	
Total BTEX	<0.006	0.006	05/22/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.4 %	% 77.5-12	5						
Chloride, SM4500Cl-B	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	2400	4.00	05/19/2023	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*	239	50.0	05/22/2023	ND	19.2	96.1	20.0	2.69	
TDS 160.1	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	4500	5.00	05/24/2023	ND	809	80.9	1000	1.74	

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	05/18/2023	Sampling Date:	05/15/2023
Reported:	05/26/2023	Sampling Type:	Water
Project Name:	BD JUNCTION N-20	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T21S R37E SEC20 N-LEA CTY., NM		

Sample ID: MONITOR WELL #2 (H232538-02)

BTEX 8021B	mg/	L	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	05/22/2023	ND	0.019	93.6	0.0200	1.42	
Toluene*	<0.001	0.001	05/22/2023	ND	0.020	98.7	0.0200	2.56	
Ethylbenzene*	<0.001	0.001	05/22/2023	ND	0.019	95.4	0.0200	3.78	
Total Xylenes*	<0.003	0.003	05/22/2023	ND	0.060	99.3	0.0600	2.35	
Total BTEX	<0.006	0.006	05/22/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	100 %	6 77.5-12	5						
Chloride, SM4500Cl-B	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	1200	4.00	05/19/2023	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*	139	25.0	05/22/2023	ND	19.2	96.1	20.0	2.69	
TDS 160.1	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	2390	5.00	05/24/2023	ND	809	80.9	1000	1.74	

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	05/18/2023	Sampling Date:	05/15/2023
Reported:	05/26/2023	Sampling Type:	Water
Project Name:	BD JUNCTION N-20	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T21S R37E SEC20 N-LEA CTY., NM		

Sample ID: MONITOR WELL #3 (H232538-03)

BTEX 8021B	mg/	L	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	05/22/2023	ND	0.019	93.6	0.0200	1.42	
Toluene*	<0.001	0.001	05/22/2023	ND	0.020	98.7	0.0200	2.56	
Ethylbenzene*	<0.001	0.001	05/22/2023	ND	0.019	95.4	0.0200	3.78	
Total Xylenes*	<0.003	0.003	05/22/2023	ND	0.060	99.3	0.0600	2.35	
Total BTEX	<0.006	0.006	05/22/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 %	6 77.5-12	5						
Chloride, SM4500Cl-B	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	760	4.00	05/19/2023	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*	104	25.0	05/22/2023	ND	19.2	96.1	20.0	2.69	
TDS 160.1	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	1670	5.00	05/24/2023	ND	809	80.9	1000	1.74	

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager

01 East Marland - Hobbs, NM 88240 Tel (575) 393-2326 Eav (575) 393-2476	na	IT	18	h	01	rя	t	01	·i	es		In	IC.		L		C	HA	Concerning of the	-					NE	A	NA	LYS	SIS	RE	QUI	ST	
Fax (575) 393-2476									-		-						- AV		LA	BO	rder	ID a	#	-							_		
RICE Operating Company		BILL RIC		pera	atin	g C	om	pan	y		٢	PO#											SIS										
oject Manager: Katie Jones	2 [×]	122 W	/ Tav		ress:		obs	Newl				ity, Zip)		1	1		1	I	1			Spec	l	vietr		NO.)		I	I	I		1
Idress: (Street, City, Zip)				Pho	ne#:				-		F	ax#:			1				-														
122 W Taylor Street ~ Hobbs, New Mexico 88240	Fax #:	(575	o) 39	93-9	174	1					((575)	397-	1471					Se Hg 6010B/200.7														
(575) 393-9174 oject #: Project Name:	(575) 397	-147	71	_	_	21										(C35)		6010														
oject #: Project Name: BD Junction N-20			/	/		1	4	/	2	-	_	_					nded		e Hg	BL a													
oject Location: T21S R37E Sec20 N ~ Lea County New Me	avico	1		Safr	pler	Sign	ature		Roza	nne J	John	nson (5	75)631	-9310	1		5 Exte		PbS						2					13	2		
		1	V		ATR	N _×		PF	RES	ERV	AT	IVE	SAM	PLING			X100		S S S						0C/62					ACO3			
232538	K	S	F				+		M	ETHO	-	-	SAIN				5/T		s Ba (es			B/624	827(608			Na, K	3	olids	
LAB # FIELD CODE	fmo(;	NER						(NOA)				HDPE	â		B/602	3/602	X100		Ag As	Se se	/olatil	des		8260	. Vol.	608	081A		ntent	SOA , Mg,	5	/ed S	
LABUSE	or (C	ITAI	щ			В		1-40ml		5.		1Liter	(202		8021	3021E	18.1/1	270C	etals	olatile	emi /	estici		Vol.	Semi	3082/	es 8(SS, p	S C	Ca,	5l	ssolv	se
ONLY	(G)rab or (C)omp	# CONTAINERS	WATER	SOIL	AIR	SLUDGE		HCL (4-40ml VOA)	Mouso Mouso	CLIP CS		NONE (1-1	DATE (2023)	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005 / TX1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Cations (Ci	Sulfates	Total Dissolved Solids	Chlorides
/ Monitor Well #1	G	#	X	0)	A	0)	+	4			-	1	Concession in such	⊢ 13:45		x	FI		FF	F	F	F	R	O	O	đ	ď	m	20		x x	⊢ X	U X
A Monitor Well #2	G	5	X					4			1	1	5/15	9:00		X													+	\dagger	X	x	x
3 Monitor Well #3	G	5	X					4	_		1	1	5/15	10:15		х															X	х	х
	<u> </u>		\vdash	-	\mathbb{H}	-	+	+	+	+	+	+			Н		+	+	+	+	\square			_					+	+	-	\square	-+
			\square	-	Η		╉	+	+	+	+	+	-		Η	\vdash	+	+	+	+	$\left \right $						-	+	+	+	+	\vdash	+
									1		T						1	+	+	+	Η								+	+	+	\vdash	+
							_																										
			\vdash		\square	+	+	+	+	+	+	+					-	+	+	+	\square		-				_		+	+		\square	\rightarrow
linquished by: Date: Time:	Receiv	ved by				_	1	11	Date	e:/	-	Time:	Ita	20	Pho	one F	Resul	ts	+	Ye	s		No										
Tinquisheet by: Date: Time: Johnson 2102013 16.05	1	10	U	0H	1	Û	1/3	A	H	X	1	5	-18	23				-	t	Ye	s		No		Add	ition	al F	ax N	lumb	er:			
linguished by Date: Time:	Receiv	ed By:	(La	abora	atory	Stat	ff)		Date	e:	٦	Time:			RE	MAR	KS:			-	_	_											
livered By: (Circle One)						_		Destanting								Ema	ail Re	sul	lts:				rice										
livered By: (Circle One)	Sample	Conditi	on Cool	/	Intact	1	/		CH	ECK	EDE	BY:								ro	zar	ne	<u>@s</u>	dac	res	6.CO	m						
		Yes	V	Yes	V	1	0	-	e lu	nitials	3)																						
ampler - UPS - Bus - Other:		No		No				Y	-	Acretate													and a state										

•



August 16, 2023

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

RE: BD JUNCTION N-20

Enclosed are the results of analyses for samples received by the laboratory on 08/09/23 13:51.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	08/09/2023	Sampling Date:	08/04/2023
Reported:	08/16/2023	Sampling Type:	Water
Project Name:	BD JUNCTION N-20	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	T21S R37E SEC20 N-LEA CTY., NM		

Sample ID: MONITOR WELL #1 (H234263-01)

BTEX 8021B	mg/	L	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	08/15/2023	ND	0.019	94.9	0.0200	3.76	
Toluene*	<0.001	0.001	08/15/2023	ND	0.018	91.2	0.0200	5.97	
Ethylbenzene*	<0.001	0.001	08/15/2023	ND	0.019	92.6	0.0200	4.77	
Total Xylenes*	<0.003	0.003	08/15/2023	ND	0.056	93.9	0.0600	3.36	
Total BTEX	<0.006	0.006	08/15/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	95.6 9	77.5-12	5						
Chloride, SM4500Cl-B	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	1480	4.00	08/10/2023	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*	175	50.0	08/11/2023	ND	21.3	107	20.0	0.235	
TDS 160.1	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	08/09/2023	Sampling Date:	08/04/2023
Reported:	08/16/2023	Sampling Type:	Water
Project Name:	BD JUNCTION N-20	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	T21S R37E SEC20 N-LEA CTY., NM		

Sample ID: MONITOR WELL #2 (H234263-02)

BTEX 8021B	mg/	L	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	< 0.001	0.001	08/15/2023	ND	0.019	94.9	0.0200	3.76	
Toluene*	<0.001	0.001	08/15/2023	ND	0.018	91.2	0.0200	5.97	
Ethylbenzene*	<0.001	0.001	08/15/2023	ND	0.019	92.6	0.0200	4.77	
Total Xylenes*	<0.003	0.003	08/15/2023	ND	0.056	93.9	0.0600	3.36	
Total BTEX	<0.006	0.006	08/15/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.6	% 77.5-12	5						
Chloride, SM4500Cl-B	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	760	4.00	08/10/2023	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*	99.1	25.0	08/11/2023	ND	21.3	107	20.0	0.235	
TDS 160.1	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	1720	5.00	08/10/2023	ND	816	81.6	1000	12.4	

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	08/09/2023	Sampling Date:	08/04/2023
Reported:	08/16/2023	Sampling Type:	Water
Project Name:	BD JUNCTION N-20	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	T21S R37E SEC20 N-LEA CTY., NM		

Sample ID: MONITOR WELL #3 (H234263-03)

BTEX 8021B	mg/	L	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	08/15/2023	ND	0.019	94.9	0.0200	3.76	
Toluene*	<0.001	0.001	08/15/2023	ND	0.018	91.2	0.0200	5.97	
Ethylbenzene*	<0.001	0.001	08/15/2023	ND	0.019	92.6	0.0200	4.77	
Total Xylenes*	<0.003	0.003	08/15/2023	ND	0.056	93.9	0.0600	3.36	
Total BTEX	<0.006	0.006	08/15/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.3 9	% 77.5-12	5						
Chloride, SM4500Cl-B	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	750	4.00	08/10/2023	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*	112	25.0	08/11/2023	ND	21.3	107	20.0	0.235	
TDS 160.1	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	1760	5.00	08/10/2023	ND	816	81.6	1000	12.4	

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

										•		т						СН	AIN	1-0	F-C	US	то	DY	' Al	ND /	AN	AL	SIS	SR	EQL	JES	Т	
01 East Marland - Ho Tel (575) 39 Fax (575) 39	3-2326 Caru	na	L	a	b	or	'a	to	r	10	s,	11	1	c.						LAB	Ord	ler II	D#.	HE	23	46	10	3						
ompany Name:			BILL T			pany:						PO#									A	IAI	YS	sis	RE	QU	ES	т						
RICE Opera	ting Company		RICE	= 0		ess:	g Co	omp	any		reet, (City, Z	ip)								(Cir	cle o	or Sp	beci	fy M	etho	d No	o.)						-
Katie Jones			122 W	Taylo	or Str	eet ~	Hobb	os, N	ew M	exico	8824	10																						
	Street, City, Zip)				Pho							Fax#:	-12	07.4	474				20															
122 W Taylor Stroone #:	eet ~ Hobbs, New Mexico 88240	Fax #:	(575) 39	13-9	1/4			-			(5/5	5)3	97-1	4/1				B/20															
(575) 393-9	174) 397-	-147	71			2										2	6010															
ject #:	Project Name:					/	/	7		/	1							nded	PH	e Hg														
ject Location:	BD Junction N-20				Sam	pler s	Signa	ture:	R	ozann	é Joh	nnson	(57	5)631-	9310			Exter	Ph Se	Pb S											<u>(</u>)			
	Sec20 N ~ Lea County New Me	exico		1	A	-	S	4/	\frown				_					900	5	5 b						2/625					HCO3)			
			1	V	M	ATR	IX	V	PR		RVA THO	TIVE		SAM	LING			418.1/1X1005 / 1X1005 Extended (C35)	a Co	TCLP Metals Ag As Ba Cd Cr Pb Se Hg					624	8270C/625		8		Na, K)	CO3,	1	spilos	
		9	RS	F				+	2	T	Γ		1			8	8	900	Ac P	Asl		TCLP Semi Volatiles	s		GC/MS Vol. 8260B/624	(ol. 8		Pesticides 8081A/608	ent	Va, N	4,0	0	I otal Dissolved Solids	
LAB #	FIELD CODE	C)or	N.						NOV I			r HDP		23)		8021B/602	8021B/602	XI.		ls Ag	tiles	i Voli	icide		1. 82	mi. V	2/60	808	E Lo	Ca, N	SC 1		olve	
LAB USE		or ((ATA	1 E			빙		4-40m	04	4	-1Lite		(20:		802	802	118.1	Actal Actal	Meta	Vola	Sem	Pest		s <	S Se	808	ides	nre (us (s (C	es	UISS	luco
ONLY		(G)rab or (C)omp	# CONTAINERS	WATER	SOIL	AIR	SLUDGE		HCL (4-40ml VOA)	NaHSO4	H ₂ SO ₄	ICE (1-1Liter HDPE)	NONE	DATE (2023)	TIME	MTBE	BTEX	Hdu	Total Metals	CLP	TCLP Volatiles	CLP	TCLP Pesticides	RCI	CM	GC/MS Semi. Vol.	PCB's 8082/608	estic	Moisture Cont	Cations (Ca, Mg, N	Anions (Cl, SO4,	Sulfates	Chloridae	inin'
		-	-	and in case of the local division in which the local division in t	-	A	S	-		z	Ŧ		딕	8/4	F 14:05		X	F	<u>r</u> F	F	F	F	-	<u></u>	0					10		-	_	x
1	Monitor Well #1	G	5	X		\square	\vdash	-	4	+	+	1	╉	8/4	9:45		x	+	+	+	Η	+	+	+	+	+	+	+	+	+	Ħ	-	-	x
à	Monitor Well #2 Monitor Well #3	G	5	Îx		\square	\vdash	-+	4	+	+		+	8/4	11:00		x	+	+	+	Н	1	+	1	1		+	1		\top	\square	X	x	X
2	Monitor well #5	Ť	1	ŕ	\vdash	Η	\vdash	+	+	+	+	H+	1				1	+	\uparrow	\top														
				\top	\square	\square		1					1																					_
																										_	\downarrow	-	+	+	\square	+	_	_
												\square					-	+	+	+	\square		+	-	-	+	+	+	+	+	+	+	+	_
	1	L	-				\square	4	+	+	-	\square	4			\vdash	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	_
				+	\vdash		\square	+	+	+	+	\vdash	+			\mathbb{H}	+	+	+	+	\vdash	+	+	+	+	+	+	+	+	+	+	+	+	-
elinquished by	Date: Time:	Recei	ived by	-				_		Date	<u> </u>	Tim	e:			Pho	ne R	esu	lts	+	Ye	s	+	No			-	-	_	_				
F T	11 15-1	<	20	\sim	V	ù (n	10	14		8	19:12	23	3 13	351	Fax	Res	ults		t	Ye	s		No		Addi	tion	al Fa	ax Nu	umbe	er:			
elinquished by		Rece	ived By	/: (L	abo	ratory	y Sta	iff)	C	Date		Tim				RE	IAR	KS:			-													
																	Ema	il R	esul	lts:	kj	one	sa	ric	esv	vd.c	om							
elivered By:	(Circle One)	Sampl	e Cond	ition			Т			CHE	ECKE	D BY:				1					ro	zar	ne	<u>@s</u>	dad	cres	.co	m						
			Vec	Cod	1	Intac	#			/1=	nitials			0																				
ampler -	UPS - Bus - Other:		Yes	F	Ye: No	F	11			(11	nuald)	8	5	L																				
ampier -		1		_		_										-	-																	

Released to Imaging: 8/19/2024 3:52:48 PM

•



October 31, 2023

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

RE: BD JUNCTION N-20

Enclosed are the results of analyses for samples received by the laboratory on 10/19/23 16:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	10/19/2023	Sampling Date:	10/16/2023
Reported:	10/31/2023	Sampling Type:	Water
Project Name:	BD JUNCTION N-20	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T21S R37E SEC20 N-LEA CTY., NM		

Sample ID: MONITOR WELL #1 (H235743-01)

BTEX 8021B	mg/	L	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	10/25/2023	ND	0.020	102	0.0200	0.367	
Toluene*	<0.001	0.001	10/25/2023	ND	0.020	102	0.0200	0.720	
Ethylbenzene*	<0.001	0.001	10/25/2023	ND	0.020	102	0.0200	1.49	
Total Xylenes*	<0.003	0.003	10/25/2023	ND	0.064	107	0.0600	1.65	
Total BTEX	<0.006	0.006	10/25/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.5 9	77.5-12	5						
Chloride, SM4500Cl-B	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	2540	4.00	10/20/2023	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*	269	50.0	10/20/2023	ND	21.6	108	20.0	9.71	
TDS 160.1	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	4870	5.00	10/27/2023	ND	824	82.4	1000	1.30	

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	10/19/2023	Sampling Date:	10/16/2023
Reported:	10/31/2023	Sampling Type:	Water
Project Name:	BD JUNCTION N-20	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T21S R37E SEC20 N-LEA CTY., NM		

Sample ID: MONITOR WELL #2 (H235743-02)

BTEX 8021B	mg/	L	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	10/25/2023	ND	0.020	102	0.0200	0.367	
Toluene*	<0.001	0.001	10/25/2023	ND	0.020	102	0.0200	0.720	
Ethylbenzene*	<0.001	0.001	10/25/2023	ND	0.020	102	0.0200	1.49	
Total Xylenes*	<0.003	0.003	10/25/2023	ND	0.064	107	0.0600	1.65	
Total BTEX	<0.006	0.006	10/25/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.0 9	77.5-12	5						
Chloride, SM4500Cl-B	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	1040	4.00	10/20/2023	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*	153	25.0	10/20/2023	ND	21.6	108	20.0	9.71	
TDS 160.1	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	2290	5.00	10/27/2023	ND	824	82.4	1000	1.30	

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	10/19/2023	Sampling Date:	10/16/2023
Reported:	10/31/2023	Sampling Type:	Water
Project Name:	BD JUNCTION N-20	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T21S R37E SEC20 N-LEA CTY., NM		

Sample ID: MONITOR WELL #3 (H235743-03)

BTEX 8021B	mg/	L	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	< 0.001	0.001	10/25/2023	ND	0.020	102	0.0200	0.367	
Toluene*	<0.001	0.001	10/25/2023	ND	0.020	102	0.0200	0.720	
Ethylbenzene*	< 0.001	0.001	10/25/2023	ND	0.020	102	0.0200	1.49	
Total Xylenes*	<0.003	0.003	10/25/2023	ND	0.064	107	0.0600	1.65	
Total BTEX	<0.006	0.006	10/25/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	99 .7 9	77.5-12	5						
Chloride, SM4500Cl-B	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	770	4.00	10/20/2023	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*	134	25.0	10/20/2023	ND	21.6	108	20.0	9.71	
TDS 160.1	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	1700	5.00	10/27/2023	ND	824	82.4	1000	1.30	

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

			,						,		T						CI	AI	N-C)F-	CU	ST	OD	YA	ND	AN	AL	YS	IS	REC	QUI	EST		
01 East Marland - Hobbs, NM 88240 Tel (575) 393-2326 Fax (575) 393-2476	na	L	a	b	or	a	to	r	e	s,	I	n	c.						LA	BO	rder	ID #	ŧ								-			
ompany Name:		BILL T			-	~					PO#	¥								A	NA	ALY	SIS	R	EQ	UE	ST							
RICE Operating Company roject Manager:		RICE		Addr	-	Co	mpa	any	(St	reet, (City,	Zip)		_	(Circle or Specify Method No.)													1						
Katie Jones		122 W	-	and the second se	A ROAD AND A	Hobb	s, Ne	w Me	xico	the second s	Second States																							
ddress: (Street, City, Zip)		(575		Phon 3_Q							Fax		97-1	471					00.7															
122 W Taylor Street ~ Hobbs, New Mexico 88240 hone #:	Fax #:		-		114						101	/ -					35)		6010B/200.					-					-					
(575) 393-9174 roject #: Project Name:	(575)) 397-	147	'1				7	1								q (C		09 6	2														
roject #: Project Name: BD Junction N-20					/		/	4	1	7	>						tende		SeH	200														
Project Location:	evice	_	-	Sam	pler S	ignat	ure:	Ro	zanr	ne Jol	hnso	m (57	5)631-	9310			5 Ext		r Pb						25					Na, K)				Suite
T21S R37E Sec20 N ~ Lea County New M	exico		É	-	1	X	A	PRE	SE	RVA	TIV	E	SAM	PLING			X100		000	3				4	8270C/625					Ω,	Ĕ ő	s		24 Hours
1/2257112		S		M	ATRI		+	-	ME	THO			SAM				418.1/TX1005 / TX1005 Extended (C35)		Total Metals Ag As Ba Cd Cr Pb Se Hg	PD St	les			GC/MS Vol. 8260B/624	. 827		Pesticides 8081A/608		=	Cations (Ca, Mg, Na, K)	3	Total Dissolved Solids		1
4235743 LAB#	dwo	ER.									HDPE)		(B/602	3/602	TX10		AgA	Se sa	Volati	ides		8260	ii. Vol	/608	3081/	F	Content	a, Mg,	50	lved		I F
FIELD CODE	or (C)	TAIL	Ω2			삥		HOH-	0		1Liter		202		8021	30211	18.1/	270C	etals	/olatil	Semi	estic		Vol.	Ser	8082	des 8	SS,	G O	s (C	<u>ה</u> כ	Disso	les	
ONLY	(G)rab or (C)omp	CONTAINERS	WATER	SOIL		SLUDGE		HNO3	NaHSO	H ₂ SO ₄	ICE (1-1Liter HDPE)	NONE	DATE (2023)	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 4	PAH 8270C	tal M	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides		CMS	GC/MS Semi. Vol.	PCB's 8082/608	esticio	BOD, TSS, pH	Moisture (ation	Sulfates	otal	Chlorides	Time Assund Time
	-	#	-	ŝ	AIR	5	_	-	Ž	Ĩ	-	ž		-	-	-	Ħ	8	24	1	P	F	RCI	ŏ	Ö	ď	ď	B	Σ	ů <	X V	+	X	+-
/ Monitor Well #1	G	5	X	-	\square	+	-	4	+	+	1	Н		13:45 9:30	-	X		+	+	+	+	+	\vdash		\vdash	\vdash	\vdash	Η	\vdash	+	ť	-	x	+
3 Monitor Well #2	G	5	X		\mathbb{H}	+	-	4	+	+	1	Η		10:50	-	X			+	$^{+}$	$^{+}$	\top	\square								,	+		+
5 Monitor Weir#3	Ť		1		\square	+	$^{+}$	1	t	\top										T														
																			_	+	-								Н	+	+	+	-	+
			\perp		\square	-	+	+	+	+	\vdash	Н		-	╞	-			+	+	+	+	-	\vdash	\vdash	\vdash	-	\vdash	H	+	+	+	-	+
			+	-	$\left \right $	+	+	+	+	+	\vdash	Н		-	┢	+	\vdash	-	+	+	+	+	\vdash	\vdash	\vdash	\vdash	\vdash	\vdash	H	+	+	+	\vdash	+
	+	-	+	\vdash	H	+	+	+	+	+	+	Η		\vdash	┢	+			+	+	$^{+}$	+	\mathbf{t}	\vdash	\vdash	\vdash	\vdash				+	1		T
11	+		+				\dagger	\top	\uparrow						L																			
Relinquished by: Date: Time:	Recei	ived by	r.			Λ	1	1)	Date	3			16		-		Res			Y	es	┝	No											
Rozanne Johnson 10 19 2073	K	ΛŮ	UA	MA	14		ĽA	K	Ý	1			19-0	23	-	-	RKS	-		Y	es		No		Ad	ditio	nal	Fax	Num	nber:		-		
Relinquished by Date: Time:	Rece	ived By	/: (L	.abor	atory	Sta	π))	Date	9:		ime:								L	ion	000	Priv	200	wd	cor	m							
		. 0				_	-		CHI	ECKE	ED R	v.				En	nail F	(es	ults:	-						es.c								
Delivered By: (Circle One)	Sampl	e Cond	Coc	H	Intac	1	-													-														
		Yes	-				C	7	S	nitials	;)																							
Sampler - UPS - Bus - Other:		No		No			-	•	-				-		_		-			-														
Y																																		

Released to Imaging: 8/19/2024 3:52:48 PM

•

District I 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3470 Fax: (505) 476-3462

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

CONDITIONS

Action 327832

	CONDITIONS
Operator:	OGRID:
RICE OPERATING COMPANY	19174
122 W Taylor	Action Number:
Hobbs, NM 88240	327832
	Action Type:
	[UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS		
Created By	Condition	Condition Date
michael.buchanan	Review of the 2023 Annual Groundwater Report for ROCBD SWD System BD Jct. N-20: content satisfactory 1. Continue to conduct quarterly groundwater monitoring for the site. 2. A meeting may need to be scheduled with OCD in order to discuss possible sources that ROC is claiming could be contributing to the site, or a background well may be installed up gradient to demonstrate natural salinity and TDS in the area. 3. Please submit the 2024 annual report to OCD by April 1, 2025.	8/19/2024