

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 no portion of the pipeline, well, or facility. The system is owned by a consortium of System Parties, who provide all operating capital on a percentage ownership basis.

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 gradient to demonstrate natural salinity and TDS in the area.
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.

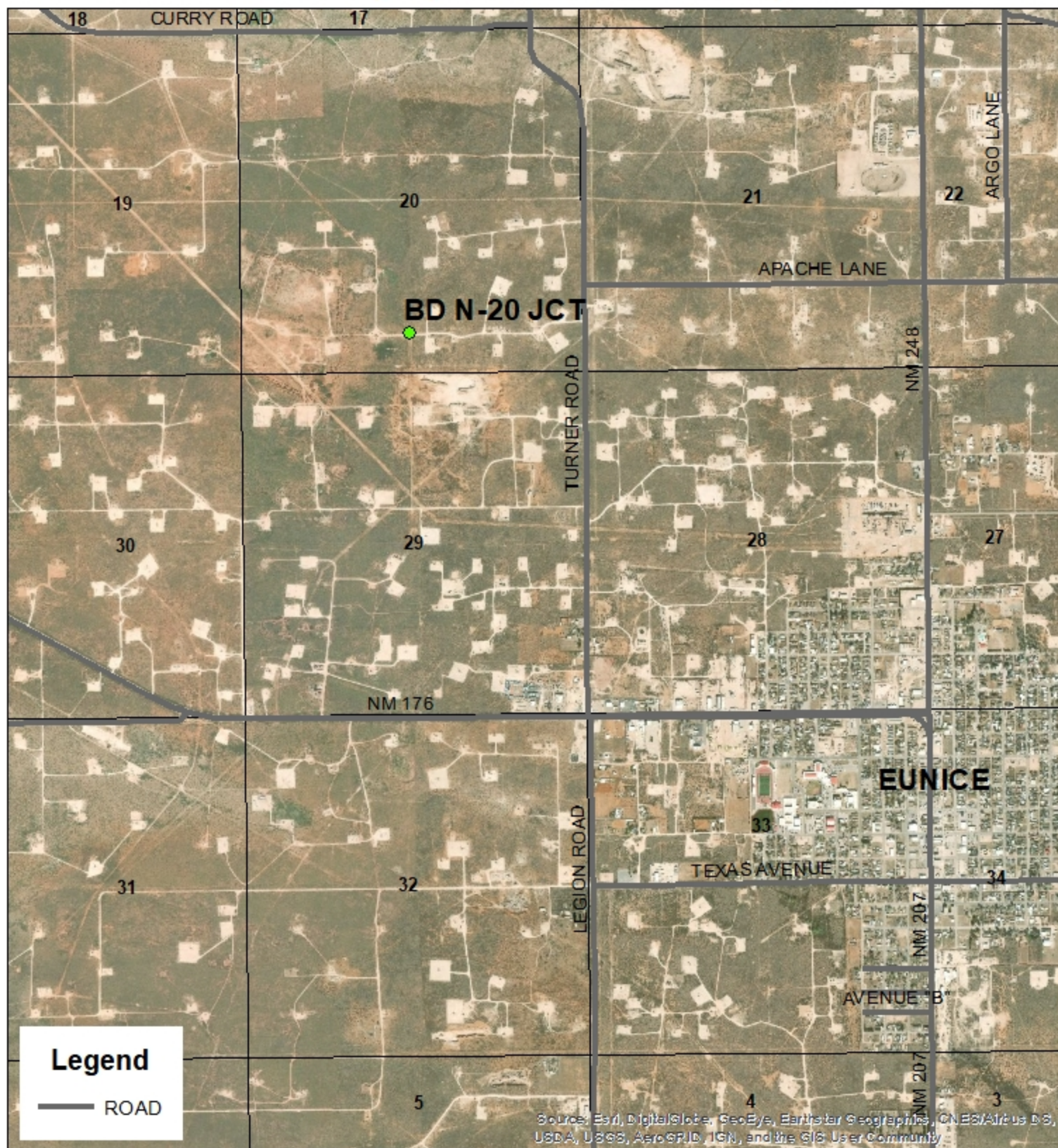
Rice Operating Company appreciates the opportunity to work with you on this project. Please contact me at (575) 393-9174 if you have any questions or wish to further discuss this site. Thank you for your time and consideration.

Sincerely,



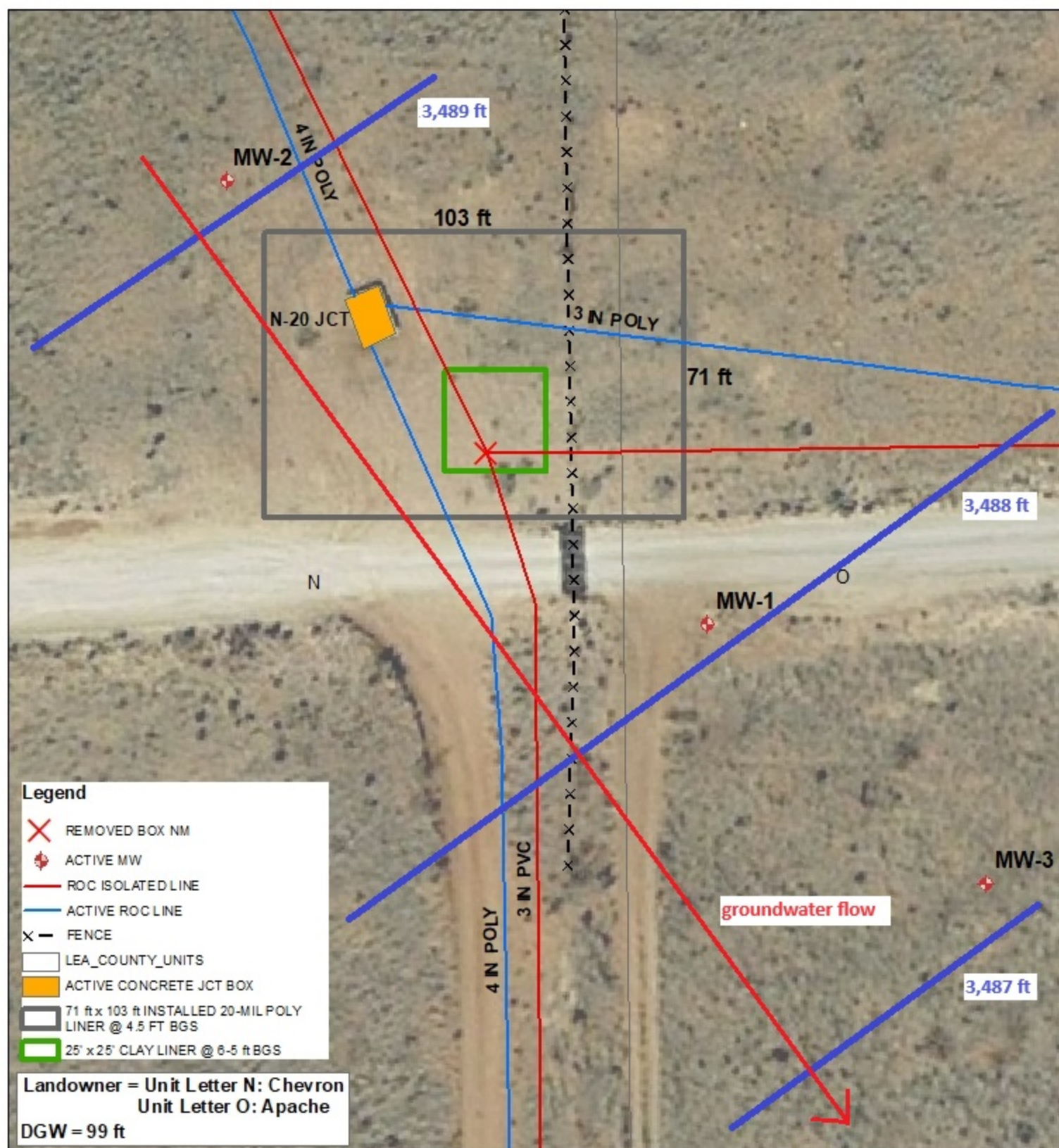
Katie Davis
Environmental Manager
RICE Operating Company (ROC)

appendix

***BD N-20 JCT***

1R426-215

UL N SECTION 20
T-21-S R-37-E
LEA COUNTY, NMGPS: 32.458925 -103.185315
NAD 83 STATE PLANE PROJ
NM EAST ZONE0 2,000 4,000
FeetDrawing date: 1/28/20
Drafted by: T. Grieco



BD N-20 JCT

1R426-215

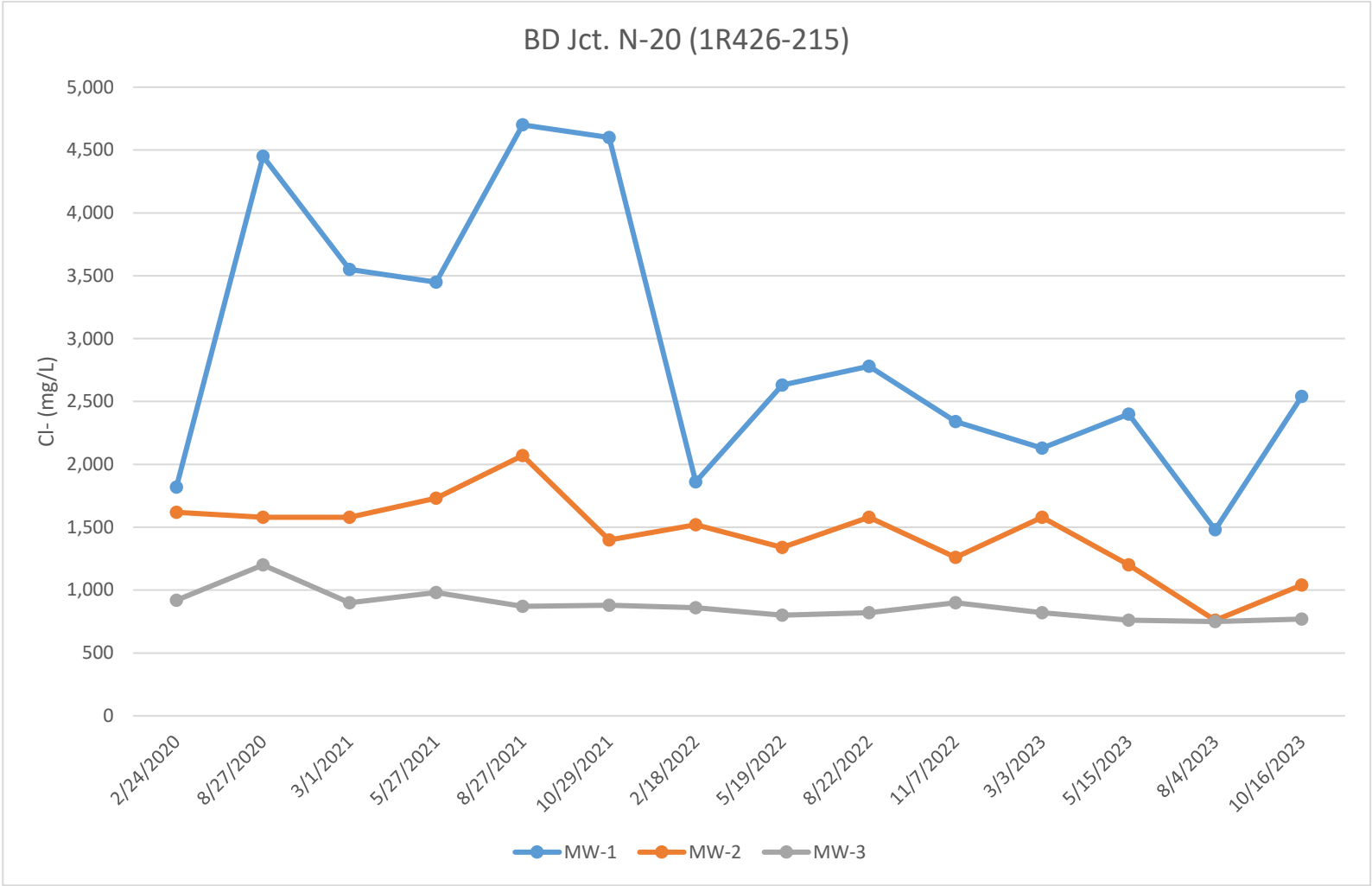
UL N SECTION 20
T-21-S R-37-E
LEA COUNTY, NM

GPS: 32.458925 -103.185315
NAD 83 STATE PLANE PROJ
NM EAST ZONE

0 25 50
Feet

Drawing date: 3/21/24
Drafted by: T. Grieco





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

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

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
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**

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	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



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

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/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	03/08/2023	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		Analyzed 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 % 77.5-125

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		Analyzed 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		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS*	3590	5.00	03/14/2023	ND	806	80.6	1000	0.00		

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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)

BTEX 8021B		mg/L		Analyzed 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) 102 % 77.5-125

Chloride, SM4500Cl-B		mg/L		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	1580	4.00	03/09/2023	ND	100	100	100	3.92	

Sulfate 375.4		mg/L		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	173	50.0	03/20/2023	ND	18.2	91.0	20.0	16.5	

TDS 160.1		mg/L		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	2860	5.00	03/14/2023	ND	806	80.6	1000	0.00	

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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		Analyzed 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 % 77.5-125

Chloride, SM4500Cl-B		mg/L		Analyzed 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		Analyzed 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		Analyzed 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		

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

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

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

Celey D. Keene, Lab Director/Quality Manager

Cardinal Laboratories, Inc.

Page 6 of 6

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

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

Project #:	Project Name:
	BD Junction N-20

Project Location: T21S R37E Sec20 N ~ Lea County New Mexico

(Circle or Specify Method No.)

[illegible]

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Rozanne Johnson	3/8/2023	15:40	<i>[Signature]</i>	3-8-23	1540
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff)	Date:	Time:

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

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

Delivered By: (Circle One)

[illegible]

CHECKED BY:

Sampler - UPS - Bus - Other:

Yes

100

No

Cool	Intact
<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes
<input type="checkbox"/> No	<input type="checkbox"/> No

(Initials)

②

9.

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



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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is fluid and cursive, with the first name "Celey" and last name "Keene" clearly distinguishable.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	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		Analyzed 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 % 77.5-125

Chloride, SM4500Cl-B		mg/L		Analyzed 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		Analyzed 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		Analyzed 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		

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

Rice Operating Company
 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		Analyzed 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 % 77.5-125

Chloride, SM4500Cl-B		mg/L		Analyzed 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		Analyzed 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		Analyzed 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		

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

Rice Operating Company
 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		Analyzed 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 % 77.5-125

Chloride, SM4500CI-B		mg/L		Analyzed 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		Analyzed 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		Analyzed 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		

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Celey D. Keene, Lab Director/Quality Manager

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Notes and Definitions

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

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

Celey D. Keene, Lab Director/Quality Manager

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

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # _____

Company Name: RICE Operating Company		BILL TO Company: RICE Operating Company		PO#	
Project Manager: Katie Jones		Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240			
Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240		Phone#: (575) 393-9174		Fax#: (575) 397-1471	
Phone #: (575) 393-9174		Fax #: (575) 397-1471			
Project #:		Project Name: BD Junction N-20			
Project Location: T21S R37E Sec20 N ~ Lea County New Mexico					
Sampler Signature: <i>Rozanne Johnson</i> (575) 631-9310					

ANALYSIS REQUEST

(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX				PRESERVATIVE METHOD					SAMPLING		MTBE 8021B/602	BTX 8021B/602	TPH 418.1/TX1005 / TX1005 Extended (C36)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Sulfates	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours	
				WATER	SOIL	AIR	SLUDGE	HCL (4-40ml VOA)	HNO3	NaHSO4	H2SO4	ICE (1-1Liter HDPE)	NONE	DATE (2023)																							TIME
H232538																																					
1	Monitor Well #1	G	5	X				4				1		5/15	13:45	X																					
2	Monitor Well #2	G	5	X				4				1		5/15	9:00	X																					
3	Monitor Well #3	G	5	X				4				1		5/15	10:15	X																					

Relinquished by: <i>Rozanne Johnson</i>	Date: <i>4/16/23</i>	Time: <i>16:05</i>	Received by: <i>Rozanne Johnson</i>	Date: <i>5-18-23</i>	Time: <i>16:05</i>
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff)	Date:	Time:
Delivered By: (Circle One)	Sample Condition		CHECKED BY:		
Sampler - UPS - Bus - Other:	Cool Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Intact Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<i>gjs</i> (Initials)		

Phone Results	Yes	No
Fax Results	Yes	No
Additional Fax Number:		
REMARKS:		
Email Results: kjones@riceswd.com rozanne@sdacres.com		



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

August 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/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	08/09/2023	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		Analyzed 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 % 77.5-125

Chloride, SM4500Cl-B		mg/L		Analyzed 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		Analyzed 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		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS*	3070	5.00	08/10/2023	ND	816	81.6	1000	12.4		

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

Rice Operating Company
 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		Analyzed 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 % 77.5-125

Chloride, SM4500CI-B		mg/L		Analyzed 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		Analyzed 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		Analyzed 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		

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

Rice Operating Company
 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		Analyzed 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 % 77.5-125

Chloride, SM4500CI-B		mg/L		Analyzed 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		Analyzed 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		Analyzed 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		

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Celey D. Keene, Lab Director/Quality Manager

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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

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

Celey D. Keene, Lab Director/Quality Manager

Cardinal Laboratories, Inc.

Page 6 of 6

Company Name: RICE Operating Company		BILL TO Company: RICE Operating Company		PO#	
Project Manager: Katie Jones		Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240			
Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240		Phone#: (575) 393-9174		Fax#: (575) 397-1471	
Phone #: (575) 393-9174		Fax #: (575) 397-1471			
Project #:		Project Name: BD Junction N-20			
Project Location: T21S R37E Sec20 N ~ Lea County New Mexico		Sampler Signature:  Rozanne Johnson (575) 831-9310			

(Circle or Specify Method No.)

Turn Around Time ~ 24 Hours

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

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

(Initials) 



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

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/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	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		Analyzed 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 % 77.5-125

Chloride, SM4500Cl-B		mg/L		Analyzed 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		Analyzed 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		Analyzed 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		

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

Rice Operating Company
 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		Analyzed 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 % 77.5-125

Chloride, SM4500Cl-B		mg/L		Analyzed 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		Analyzed 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		Analyzed 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		

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

Rice Operating Company
 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		Analyzed 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 % 77.5-125

Chloride, SM4500CI-B		mg/L		Analyzed 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		Analyzed 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		Analyzed 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		

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Celey D. Keene, Lab Director/Quality Manager

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

Notes and Definitions

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

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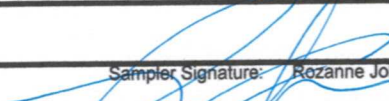
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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager

Cardinal Laboratories, Inc.

Page 6 of 6

Company Name: RICE Operating Company		BILL TO Company: RICE Operating Company		PO#
Project Manager: Katie Jones		Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240		
Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240		Phone#: (575) 393-9174		Fax#: (575) 397-1471
Phone #: (575) 393-9174		Fax #: (575) 397-1471		
Project #:		Project Name: BD Junction N-20		
Project Location: T21S R37E Sec20 N ~ Lea County New Mexico		Sampler Signature:  Rozanne Johnson (575) 631-9310		

(Circle or Specify Method No.)

Relinquished by: <i>[Signature]</i>	Date: <i>10/19/2013</i>	Time:	Received by: <i>[Signature]</i>	Date: <i>10-19-23</i>	Time:
Rozanne Johnson			Received By: (Laboratory Staff)		
Relinquished by:	Date:	Time:		Date:	Time:
Delivered By: (Circle One)			Sample Condition	CHECKED BY:	
<input checked="" type="radio"/> Cool <input type="radio"/> Intact	Yes	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	<i>[Signature]</i> (Initials)
	No	<input type="checkbox"/>	No	<input type="checkbox"/>	
Sampler - UPS - Bus - Other:					

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

REMARKS:

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

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: RICE OPERATING COMPANY 122 W Taylor Hobbs, NM 88240	OGRID:
	19174
	Action Number: 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 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 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