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

April 1, 2020

Bradford Billings

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

> RE: 2019 Annual Groundwater Report Rice Operating Company – BD SWD System BD F-29 (1R426-16) and F-29-1 (1R426-15): UL/F, Sec. 29, T21S, R37E

Mr. Billings:

ROC is the service provider (agent) for the BD SWD System and has no ownership of any portion of the pipeline, well, or facility. The system is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis.

Background and Previous Work

The BD F-29 site is located 25 ft south from the BD F-29-1 site. These sites are located approximately 1.5 miles northwest of Eunice, New Mexico at UL/F, Sec. 29, 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).

BD F-29 Backhoe Delineation

In 2003, ROC initiated work on the former BD F-29 junction box. The site was delineated using a backhoe to form a 25x10x14-ft deep excavation and soil samples were screened at regular intervals for both hydrocarbon and chloride. From the excavation, the four-wall composite and the bottom composite were taken to a commercial laboratory for analysis. Laboratory tests of the four-wall composite and the bottom composite resulted in elevated chloride concentrations. TPH concentrations were low and BTEX concentrations were below detectable limits. The site was backfilled, the area was contoured to the surrounding area, and an identification plate was placed on the surface of the site to mark its location for future environmental considerations. NMOCD was notified of potential groundwater impact on March 26th, 2003 and a junction box disclosure report was submitted to NMOCD with all the 2003 junction box closures and disclosures.

BD F-29-1 Backhoe Delineation

In 2003, ROC initiated work on the former BD F-29-1 junction. The site was delineated using a backhoe to form a 20x10x6-ft deep excavation and soil samples were screened at regular intervals for both hydrocarbon and chloride. From the excavation, the bottom composite was

taken to a commercial laboratory for analysis. Laboratory testing on the bottom composite showed a chloride laboratory reading of 1,060 mg/kg, a GRO reading of non-detect and a DRO reading of 26.6 mg/kg. BTEX readings returned a result of non-detect. The site was backfilled, the area was contoured to the surrounding area, and an identification plate was placed on the surface of the site to mark its location for future environmental considerations. NMOCD was notified of potential groundwater impact on March 26th, 2003 and a junction box closure report was submitted to NMOCD with all the 2003 junction box closures and disclosures.

An Investigation and Characterization Plan (ICP) was submitted to NMOCD September 30th, 2013. According to the ICP, a total of 18 soil bores were drilled at the two sites. As the bores were advanced, soil samples were taken at regular intervals and field tested for chloride and hydrocarbon. Representative samples from each bore were taken to a commercial laboratory for analysis. The interior bores (SB 1-9, 11 and 14-16) located close to the former boxes, showed evidence of elevated chlorides throughout each bore. Although the laboratory chloride readings decrease with depth in each bore, the bottom samples at 95 ft bgs are still above 250 mg/kg. The most outer bores (SB 12, 13, 17 and SB-18) showed laboratory chloride readings that decrease to below 250 mg/kg before reaching the capillary fringe. GRO and DRO readings were non-detect in all bores at all depths.

According to a Corrective Action Plan (CAP) approved by the NMOCD on October 30th, 2013, ROC installed a 20-mil reinforced liner measuring 247x106-ft at a depth of 4.5 ft bgs. The liner extended 5 ft beyond the furthest soil bores and will provide a barrier that will inhibit the downward migration of chlorides to the groundwater. The soils placed above the liner had a laboratory chloride reading of 240 mg/kg and 320 mg/kg, and field PID readings of 0.4 ppm and 1.2 ppm. Upon completion of backfilling, the site was seeded with a native vegetative mix and soil amendments. A CAP Report and Soil Closure Request summarizing this work was submitted to NMOCD on July 23rd, 2014, and NMOCD granted Soil Closure on September 18th, 2014.

On November 13th, 2018, a near-source monitor well (MW-1) was installed approximately 70 ft southeast of the former junction boxes. On December 10, 2018, an up-gradient well (MW-2) was installed approximately 133 ft northwest and a down-gradient well (MW-3) was installed approximately 170 ft southeast of the former junction boxes. These wells were developed and have been sampled quarterly. The most recent sampling event resulted in a chloride concentration of 400 mg/L in MW-1, 116 mg/L in MW-2, and 264 mg/L in MW-3. BTEX concentrations have remained below detectable limits since the wells were installed.

Given that BTEX concentrations have been below detectable limits since installation, ROC requests to suspend BTEX sampling in all three wells (MW-1, MW-2 and MW-3). Further, due to the current climate, and in the interest of safety, ROC proposes to reduce groundwater monitoring from quarterly to semi-annually beginning this year. This request is only temporary and regularly scheduled groundwater monitoring will commence as soon as possible.

Attached is the Appendix, which contains:

- 1. A Geographical Location Map.
- 2. A map showing well locations.

- 3. Monitoring well installation logs and photos.
- 4. A table presenting all laboratory results and depth to groundwater for each well at the site, and a graph showing recent laboratory results.
- 5. The laboratory analytical results for 2019.

Rice Operating Company appreciates the opportunity to work with you on this project. Please contact me at (575) 393-9174 or Edward Hansen at (505) 920-4965 if you have any questions or wish to further discuss this site. Thank you for your time and consideration.

Sincerely,

Katie Davis

Environmental Manager

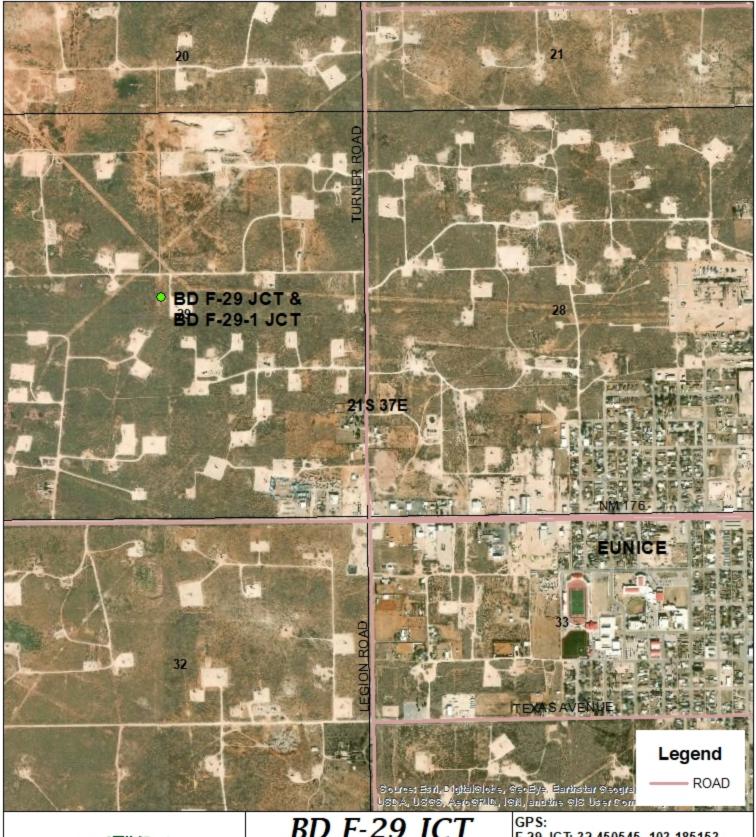
Katy Davis

RICE Operating Company (ROC)

Cc – Edward J. Hansen (ROC)

appendix

Geographical Location Map

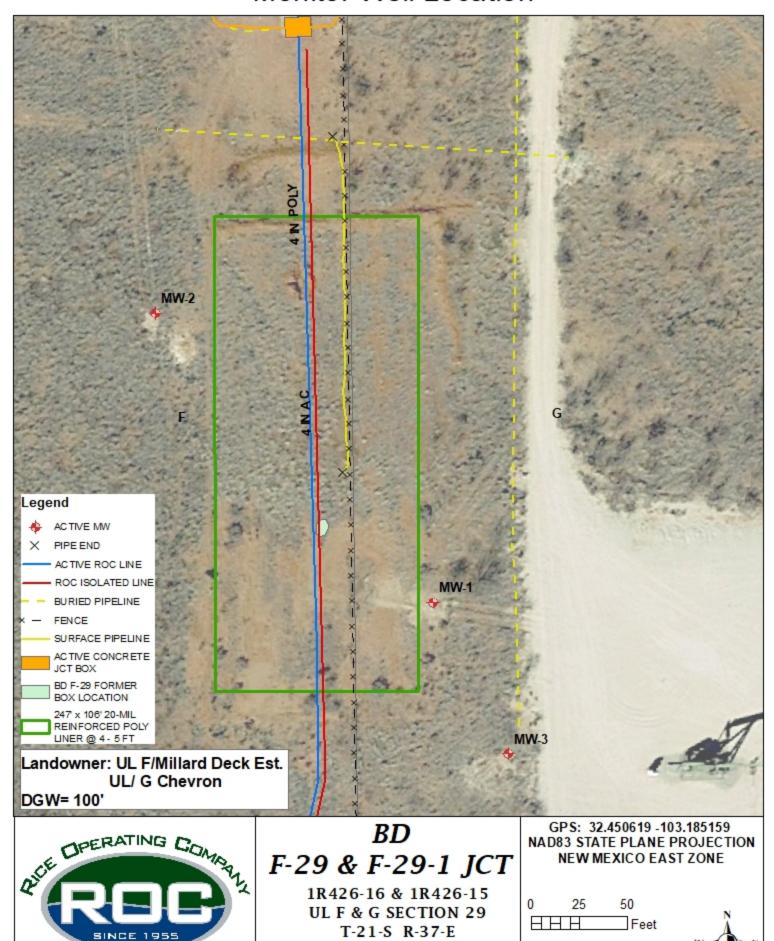




BD F-29 JCT BD F-29-1 JCT

1R426-15 UL F SECTION 29 T-21-S R-37-E LEA COUNTY, NM GPS: F-29 JCT: 32.450545 -103.185153 F-29-1 JCT: 32.450619 -103.185157 NAD 83 STATE PLANE PROJ. NM EAST ZONE

Monitor Well Location



LEA COUNTY, NM

Drawing date: 6/25/19 Drafted by: T. Grieco

Logger:	Nick Kopiasz	N N N N N N N N N N N N N N N N N N N
Driller:	HCI Drilling	MW-1
Drilling Method:	Air rotary	
Start Date:	11/13/2018	MW-3
End Date:	11/16/2018	Feet

Comments: Located approximately 70 ft southeast of the former junction boxes. Soil samples were collected from drill cuttings at specified intervals.

DRAFTED BY: N.Kopiasz

TD = 116 ft GW = 99 ft



Project Name: Well ID:
BD F-29/F-29-1 MW-1

Project Consultant: Tasman

Location:

Unit F, Section 29, T21S, R37E

	TD = 116	o II c		GW = 99 ft	Long: -103.18496	60 (NAD83) State: NM
Depth (feet)	Chloride field tests	LAB	PID	Description	Lithology	Well Construction
SS				SM-dark red, silty sand		Concrete
5 ft				SC-dark red, clayey silt		
10 ft				SM-tan, silty sand, caliche		
15 ft				SM-reddish tan, silty sand, occasional caliche		4 in. PVC
20 ft				SM-reddish tan, silty sand		Bentonite Seal
25 ft				SM-tan, silty sand		
				SM-tan, silty sand, caliche		
30 ft				SM-Same As Above (SAA)		
35 ft						

Depth (feet)	Chloride field tests	LAB	PID	Description	Lithology	Well Construction
40 ft				SM-SAA		
				SM-SAA		
45 ft				SM-tan, silty sand		Bentonite Seal
50 ft				SM-SAA		
55 ft				SM-SAA		
60 ft						
65 ft				SM-tan, silty sand, sandstone		
				SM-SAA		
70 ft				SM-SAA		Sand Pack
75 ft						
80 ft				SM-SAA		
				SM-reddish tan, silty sand, sandstone, slight moisture		
85 ft						

Depth (feet)	Chloride field tests	LAB	PID	Description	Lithology	Well Construction
90 ft				SM-reddish tan, silty sand, sandstone, moist		
95 ft				SM-reddish tan, silty sand, moist		
100 ft				SM-SAA		Sand
105 ft				SM-SAA		Pack
110 ft				SM-SAA		10' Sump
115 ft				SM-SAA		

Logger:	Nick Kopiasz	MW-2	
Driller:	HCI Drilling		
Drilling Method:	Air Rotary		MW-1
Start Date:	12/10/2018	0 25 50	MW-3
End Date:	12/10/2018	Feet	•

Comments: Located approximately 133 ft northwest of the former junction boxes. Soil samples were collected from drill cuttings at specified intervals.

DRAFTED BY: N.Kopiasz



Project Name: Well ID: BD F-29/F-29-1 MW-2

Project Consultant: Tasman

Location:

Unit F, Section 29, T21S, R37E

Lat: 32.450860 County: Lea

	TD = 102			GW = 99 ft	Lo	ng: - 103.18542	24 (1	NAD83)	State: NM
Depth (feet)	Chloride field tests	LAB	PID	Description		Lithology		Well (Construction
ss				SM-reddish brown, silty sand					Concrete
				SC-reddish brown, clayey silt					<i>)</i>
5 ft 10 ft				SC-Same As Above (SAA)					
15 ft				GM-light tan, gravelly silt, caliche				2 in. PVC	
20 ft				SM-light tan, silty sand, occasional caliche					Bentonite
25 ft				SM-SAA					
30 ft				GM-light tan, gravelly silt, caliche					
				GM-SAA					
35 ft									<i>J</i>

Depth (feet)	Chloride field tests	LAB	PID	Description	Lithology	Well Construction
40 ft				SM-light tan, silty sand, occasional caliche		
45 ft				SM-SAA		
				SM-SAA		
50 ft				SM-tan, silty sand, occasional caliche		
55 ft				SM-SAA		Bentonite
60 ft				GM-tan, gravelly silt, caliche		
65 ft				SM-tan, silty sand, occasional		
70 ft				caliche		
75 ft				SM-reddish tan, silty sand, occasional caliche and sandstone		
80 ft				SM-SAA		
85 ft				SM-SAA		Sand

Depth (feet)	Chloride field tests	LAB	PID	Description	Lithology	Well Construction
				SM-tan, silty sand		
90 ft						
				Not Sampled (NS)		Sand
95 ft						Pack
				NS		
100 ft						
				NS		
105 ft						

Logger:	Nick Kopiasz	MW-2 ◆	
Driller:	HCI Drilling		
Drilling Method:	Air Rotary		MW-1
Start Date:	12/10/2018	0 25 50	MW-3
End Date:	12/11/2018	Feet	*

BD F-29/F-29-1 Project Consultant: Tasman

Project Name:

TASMAN GEOSCIENCES

Well ID:

MW-3

Location:

Unit G, Section 29, T21S, R37E

Lat: 32.450223 County: Lea

Comments: Located approximately 170 ft southeast of the former junction boxes. Soil samples were collected from drill cuttings at specified intervals.

DRAFTED BY: N.Kopiasz

	TD = 108	3 ft		GW = 99 ft	Long: -103.184836 (NAD83) State: NM
Depth (feet)	Chloride field tests	LAB	PID	Description	Lithology Well Construction
ss				SM-dark red, silty sand	Concrete
F 64				SC-dark red, clayey silt	
5 ft 10 ft				SM-tan , silty sand	
15 ft				SM-Same As Above (SAA)	2 in. PVC
20 ft				SM-tan, silty sand, occasional caliche	Bentonite Seal
25 ft				GM-light tan, gravelly silt, caliche	
				GM-SAA	
30 ft 35 ft				GM-SAA	

Depth (feet)	Chloride field tests	LAB	PID	Description	Lithology	Well Construction
40 ft				SM-light tan, silty sand		
45 ft				SM-tan, silty sand, occasional sandstone		
				SM-reddish tan, silty sand		
50 ft				SM-tan, silty sand		
55 ft				SM-tan, silty sand, occasional caliche		Bentonite
60 ft				GM-tan , gravelly silt, caliche		Seal
65 ft				SM-reddish tan, silty sand, occasional caliche		
70 ft				SM-SAA		
75 ft				SIVI-SAA		
80 ft				SM-SAA		
85 ft				SM-reddish tan, silty sand, occasional sandstone		Sand Pack

Depth (feet)	Chloride field tests	LAB	PID	Description	Lithology	Well Construction
				SM-tan, silty sand		
90 ft						
				Not Sampled (NS)		
95 ft						
						Sand
				NS		Pack
100 ft						
				NS		
105 ft						
				NS		
110 ft						









MW-2 overview



MW-2 setting well



MW-3 overview



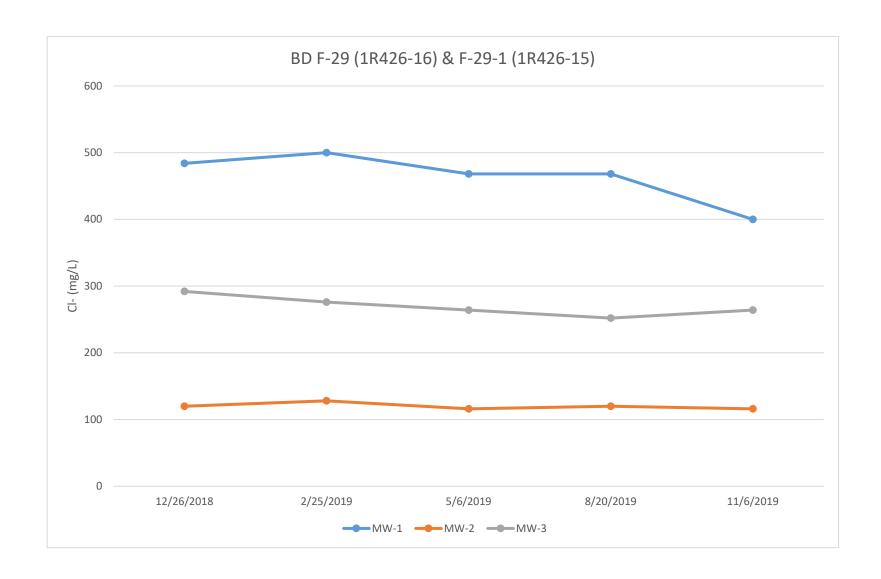


ROC - BD F-29 (1R426-16) & F-29-1 (1R426-15) Unit Letter F, Section 29, T21S, R37E

MW	Depth to Water	Total Depth	Well Volume	Volume	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xvlenes	Sulfate	Comments
		- 1		Purged							,		
1	99.48	116.2	11	35	12/26/2018	484	1,300	<0.001	<0.001	<0.001	<0.003	278	Clear No odor
1	99.45	116.2	11	35	2/25/2019	500	1,230	<0.001	<0.001	<0.001	<0.003	251	Clear No odor
1	99.44	116.2	11	35	5/6/2019	468	976	<0.001	<0.001	<0.001	<0.003	238	Clear No odor
1	99.42	116.2	11	35	8/20/2019	468	1,300	<0.001	<0.001	<0.001	<0.003	211	Clear No odor
1	99.44	116.2	11	35	11/6/2019	400	1,200	<0.001	<0.001	<0.001	<0.003	208	Clear No odor

MW	Depth to	Total	Well	Volume	Sample	CI	TDS	Benzene	Toluene	Ethyl	Total	Sulfate	Comments
10100	Water	Depth	Volume	Purged	Date	Ci	103	Denzene	Totactic	Benzene	Xylenes	Sanate	Comments
2	98.22	103	0.7	3	12/26/2018	120	550	<0.001	<0.001	<0.001	<0.003	153	Clear No odor
2	98.2	103	0.7	3	2/25/2019	128	470	<0.001	<0.001	<0.001	<0.003	134	Clear No odor
2	98.18	103	0.7	3	5/6/2019	116	616	<0.001	<0.001	<0.001	<0.003	116	Clear No odor
2	98.13	103	0.7	3	8/20/2019	120	570	<0.001	<0.001	<0.001	<0.003	119	Clear No odor
2	98.19	103	0.7	3	11/6/2019	116	596	<0.001	<0.001	<0.001	<0.003	121	Clear No odor

MW	Depth to	Total	Well	Volume	Sample	CI	TDS	Benzene	Toluene	Ethyl	Total	Sulfate	Comments
IVIVV	Water	Depth	Volume	Purged	Date	Ci	103	Delizelle	Toluelle	Benzene	Xylenes	Juliate	Comments
3	99.88	108.8	1.4	5	12/26/2018	292	978	<0.001	<0.001	<0.001	<0.003	298	Clear No odor
3	99.87	108.8	1.4	5	2/25/2019	276	991	<0.001	<0.001	<0.001	<0.003	245	Clear No odor
3	99.88	108.8	1.4	5	5/6/2019	264	936	<0.001	<0.001	<0.001	<0.003	240	Clear No odor
3	99.9	108.8	1.4	5	8/20/2019	252	964	<0.001	<0.001	<0.001	<0.003	227	Clear No odor
3	100.03	108.8	1.4	3	11/6/2019	264	871	<0.001	<0.001	<0.001	<0.003	238	Clear No odor





March 08, 2019

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: BD JUNCTION F-29 & F-29-1

Enclosed are the results of analyses for samples received by the laboratory on 02/27/19 13:41.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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)

Celey D. Keine

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



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

Fax To: (575) 397-1471

Received: 02/27/2019 Reported: 03/08/2019

Project Name: BD JUNCTION F-29 & F-29-1

Project Number: NONE GIVEN

Project Location: T21S R37E SEC 29 F ~ LEA COUNTY, NM

Sampling Date: 02/25/2019

Sampling Type: Water

Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: MONITOR WELL #1 (H900743-01)

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	03/05/2019	ND	0.021	106	0.0200	0.538	
Toluene*	<0.001	0.001	03/05/2019	ND	0.019	97.0	0.0200	0.862	
Ethylbenzene*	<0.001	0.001	03/05/2019	ND	0.020	102	0.0200	1.06	
Total Xylenes*	<0.003	0.003	03/05/2019	ND	0.064	106	0.0600	1.06	
Total BTEX	<0.006	0.006	03/05/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	96.6	% 81.3-12	8						
Chloride, SM4500CI-B	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	500	4.00	02/28/2019	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*	251	50.0	02/28/2019	ND	22.9	114	20.0	0.263	
TDS 160.1	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	1230	5.00	03/01/2019	ND	528	100	527	1.80	

Cardinal Laboratories *=Accredited Analyte

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



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

,

Received: 02/27/2019 Reported: 03/08/2019

Project Name: BD JUNCTION F-29 & F-29-1

Project Number: NONE GIVEN

Project Location: T21S R37E SEC 29 F ~ LEA COUNTY, NM

Sampling Date: 02/25/2019

Sampling Type: Water
Sampling Condition: Cool & Intact

Sample Received By: Jodi Henson

Sample ID: MONITOR WELL #2 (H900743-02)

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	03/05/2019	ND	0.021	106	0.0200	0.538	
Toluene*	<0.001	0.001	03/05/2019	ND	0.019	97.0	0.0200	0.862	
Ethylbenzene*	< 0.001	0.001	03/05/2019	ND	0.020	102	0.0200	1.06	
Total Xylenes*	< 0.003	0.003	03/05/2019	ND	0.064	106	0.0600	1.06	
Total BTEX	<0.006	0.006	03/05/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.6	% 81.3-12	8						
Chloride, SM4500Cl-B	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	128	4.00	02/28/2019	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*	134	25.0	02/28/2019	ND	22.9	114	20.0	0.263	
TDS 160.1	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	470	5.00	03/04/2019	ND	514	97.5	527	0.847	

Cardinal Laboratories *=Accredited Analyte

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



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

Received: 02/27/2019 Reported: 03/08/2019

Project Name:

BD JUNCTION F-29 & F-29-1

Project Number: NONE GIVEN

Project Location: T21S R37E SEC 29 F ~ LEA COUNTY, NM

Sampling Date: 02/25/2019

Sampling Type: Water Sampling Condition: Cool &

Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: MONITOR WELL #3 (H900743-03)

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	03/05/2019	ND	0.021	106	0.0200	0.538	
Toluene*	<0.001	0.001	03/05/2019	ND	0.019	97.0	0.0200	0.862	
Ethylbenzene*	<0.001	0.001	03/05/2019	ND	0.020	102	0.0200	1.06	
Total Xylenes*	<0.003	0.003	03/05/2019	ND	0.064	106	0.0600	1.06	
Total BTEX	<0.006	0.006	03/05/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	96.0	% 81.3-12	8						
Chloride, SM4500Cl-B	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	276	4.00	02/28/2019	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*	245	50.0	02/28/2019	ND	22.9	114	20.0	0.263	
TDS 160.1	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	991	5.00	03/04/2019	ND	514	97.5	527	0.847	

Cardinal Laboratories *=Accredited Analyte

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



Notes and Definitions

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS

recovery.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

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

*** Insufficient time to reach temperature.

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

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

Cardinal Laboratories *=Accredited Analyte

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

101 East Mariand - He		ท๑	IT	9	h		en f	•	ri		0	T	m	Λ		L		C	IAF	N-C	F-	CU	ST	יםכ	Y A	ND	AN	IAL	YS	IS	REC	QUE	ST		
Tel (575) 39 Fax (575) 39	3-2326 3-2476	II a		a	יעו	UI	aı	U.			9	I	Ш	C.						LAE	3 Or	der	ID#												
Company Name:			BILL 1									PO#	#								A	AIA	ıv	CIC	D	EQL	III	-T							
RICE Opera	ating Company		RICE	<u> </u>			g Cor	npa	ny																	letho									
Project Manager: Katie Jones					Addı		1070 - 701/21			10	reet,	- BB	Zip)					ı	1	1	ı	l I	or c	pec I	iiy iv I	I	Ju IN	.U.)		ı	F	1	1 1		,
	Street, City, Zip)		122 W	Tayl			Hobbs	, Nev	v Me	xico								- 1	- 1		1								- 1				П		
	-0 5.2 - 6.30		1575	1 20	Phor							Fax		07.4	1.474				1	3									-						
Phone #:	eet ~ Hobbs, New Mexico 88240	Fax #:	(575) 38	13-9	1/4	•	_				(5/	(5)3	397-1	14/1				3	3									-	1					
(575) 393-9	174		397-	147	71													335)	15																
Project #:	Project Name:							_								1		9	1		,														
	BD Junction F29 & F	-29-1																ag	15																
Project Location:		(WV)			Sam	pler S	Signatu	re:	Roz	zann	e Jor	nnsor	n (57	5)631-	9310			<u> </u>	١	ျွန်											3				s
T21S R37E	Sec29 F~ Lea County New Mex	xico															Ш	202	[3 5				- 1		625					Ö				lour
			200		M	ATR	IX				RVA HOI		E	SAMI	PLING			TPH 418.1/TX1005 / TX1005 Extended (C35)	3	TCLP Metals Ag As Ba Cd Cr Pb Se Hg TCLP Metals Ag As Ba Cd Cr Pb Se Hg					324	GC/MS Semi. Vol. 8270C/625		8		2	Anions (CI, SO4, CO3, HCO3)		spi		Turn Around Time ~ 24 Hours
LAB#		욘	RS						Г		П	E	T			22	2	305	12	As		tiles		- 1	8	<u>~</u>		Age	7	= 7	Z O		Sol		ie
LAD#	FIELD CODE	Š	빌	1		Ш		0			Ш	맆		6		8021B/602	3/60	Ž١	2		es es	/ola	des		826	>	809	18	ェ ·		30 K		ved		Ė
/ LAB USE \	South Toward Made Title - Young Tiber - White	١١	ΙZ	1		Ш	띴	40ml		4	П	Liter		201		021	0211	£	8270C	als als	latil	in]	stic		ᅙ	Sem	082	8 8	S, p	ဒီ မြ	2 5		loss	s	oun
		ap ap	8	凹			ğ	(2	3	150	0	1-1	삙	E ()		В Ш	×	4	82	ž ž	S	Se	g		18	18.8	s 8	용 S	2		SI (SI	tes	ă	ride	Aro
1900743		(G)rab or (C)omp	# CONTAINERS	WATER	SOIL	AIR	SLUDGE	HCL (2 40ml VOA)	HNO ₃	NaHSO ₄	H ₂ SO ₄	ICE (1-1Liter HDPE)	NONE	DATE (2019)	TIME	MTBE	BTEX 8021B/602	됩	PAH		2	TCLP Semi Volatiles	TCLP Pesticides	2 2	GC/MS Vol. 8260B/624	§	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Anior	Sulfates	Total Dissolved Solids	Chlorides	L.n
1	Monitor Well #1	G	3	X		Ì		2	_	F		1			15:15	_	x		+	T	۲	H					<u> </u>	-	7	=	7	X		X	
2	Monitor Well #2	G	3	Х		П		2				1			10:05	-	х		\top	1		П		\neg		\dashv		\top	十	\top	+	X		X	
3	Monitor Well #3	G	3	х				2			П	1			12:10	-	х		\top	+		П	\neg	\dashv		\dashv	7	十	十	+	+	X		X	
						П					П	П		and of the second		T		\neg	\top	\top	T	Н	\neg	7		7		7	7	†	1	1	^		\Box
								T			П	\Box				T	Н	\dashv	+	+	\vdash			\dashv	\dashv	\dashv	\dashv	+	+	+	+	\vdash	\vdash		\vdash
						Н		╁	\vdash	\vdash	Н	H	\vdash				Н	\dashv	+	+	┢	\vdash	-	\dashv	-	\dashv	\dashv	+	+	+	+	\vdash	Н		\vdash
			_	+		Н	-	┢		-	Н	Н	\dashv	-		\vdash	Н	-	+	+	\vdash	+	\dashv	\dashv	-	+	\dashv	+	+	+	+	\vdash	\vdash		\blacksquare
		_	-	+		Н		-	-		Н	\vdash	\dashv			-		-	+	+	⊢	\blacksquare	_	\dashv	\dashv	4	4	+	_	+	_	\vdash	Ш		Ш
			-	-		Н	+		-	_	Н	Н	\dashv				\square	4	+	+	┝			-	\dashv	_	4	\dashv	+	+	_	L			
		_		\vdash		Н	-		⊢		Н	Ш	_				\sqcup	_	\perp	\perp	L	Щ	4	_	_	_	_	4	4	_		\perp			
Polinguishadhur	Date: Time:	D							Ļ	<u> </u>		<u> </u>	Ш							_	L	Щ													
Relinquished by:	Date: Time:	Receiv	ved by:						D	ate:		Tin	ne:			Pho	one F	Resu	lts	_	Ye	s		No											
Rozanne Johnson																Fax	Res	ults			Ye	s		No		Addi	tion	al Fa	ax N	umb	er:				
Relinquished by	Date: Time:	Receiv	ved By	(L	abpr	atory	Staff))))	D	ate:		Tin	ne:			RE	MAR	KS:				T													
		419	Mu	-	MU	N	WO	12	_	2	2/2	121	110	7 13	3:41		Ema	il R	esul	ts:	kj	one	s@	rice	esw	/d.c	om								
Delivered By:	(Circle One)	Sample	e Condit	ion					C		CKE					1					ro	zar	ne	110	Dwi	nds	tre	am.	ne	t					
	400		V	Coo		Intact				1	1	4	_			4					110	T													
Complex	IDS Bus Others		Yes	-	Yes	-				(+11)	uals)	1																							
Sampler - U	JPS - Bus - Other:		No		No	Ш			(1	V	,																							
									/	4																									



May 21, 2019

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: BD JUNCTION F-29 & F-29-1

Enclosed are the results of analyses for samples received by the laboratory on 05/09/19 14:16.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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)

Celey D. Keine

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



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

Received: 05/09/2019

Reported: 05/21/2019
Project Name: BD JUNCTION F-29 & F-29-1

Project Number: NONE GIVEN

Project Location: T21S R37E SEC 29 F ~ LEA COUNTY, NM

Sampling Date: 05/06/2019

Sampling Type: Water

Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: MONITOR WELL #1 (H901708-01)

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	05/09/2019	ND	0.022	111	0.0200	0.838	
Toluene*	< 0.001	0.001	05/09/2019	ND	0.023	115	0.0200	1.16	
Ethylbenzene*	< 0.001	0.001	05/09/2019	ND	0.024	120	0.0200	1.86	
Total Xylenes*	<0.003	0.003	05/09/2019	ND	0.074	123	0.0600	0.994	
Total BTEX	<0.006	0.006	05/09/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	117 %	6 81.3-12	18						
Chloride, SM4500Cl-B	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	468	4.00	05/20/2019	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*	238	50.0	05/15/2019	ND	22.8	114	20.0	2.22	
TDS 160.1	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	976	5.00	05/16/2019	ND	580	110	527	8.00	

Cardinal Laboratories *=Accredited Analyte

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



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

Fax To: (575) 397-1471

Received: 05/09/2019 Reported: 05/21/2019

BD JUNCTION F-29 & F-29-1

Project Name: Project Number: NONE GIVEN

Project Location: T21S R37E SEC 29 F ~ LEA COUNTY, NM Sampling Date: 05/06/2019 Sampling Type: Water

Sampling Condition: Cool & Intact Sample Received By: Jodi Henson

Sample ID: MONITOR WELL #2 (H901708-02)

BTEX 8021B	mg/	, I	Δnalyze	d By: MS					
	9/		Anaryze	u by. 1-15					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	< 0.001	0.001	05/09/2019	ND	0.022	111	0.0200	0.838	
Toluene*	< 0.001	0.001	05/09/2019	ND	0.023	115	0.0200	1.16	
Ethylbenzene*	< 0.001	0.001	05/09/2019	ND	0.024	120	0.0200	1.86	
Total Xylenes*	<0.003	0.003	05/09/2019	ND	0.074	123	0.0600	0.994	
Total BTEX	<0.006	0.006	05/09/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	92.7 %	% 81.3-12	8						
Chloride, SM4500Cl-B	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	116	4.00	05/20/2019	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*	116	25.0	05/15/2019	ND	22.8	114	20.0	2.22	
TDS 160.1	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	616	5.00	05/16/2019	ND	580	110	527	8.00	

Cardinal Laboratories *=Accredited Analyte

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



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

Fax To: (575) 397-1471

Received: 05/09/2019 Reported: 05/21/2019

Project Name:

BD JUNCTION F-29 & F-29-1

Project Number: NONE GIVEN

Project Location: T21S R37E SEC 29 F ~ LEA COUNTY, NM

Sampling Date: 05/06/2019 Sampling Type: Water

Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: MONITOR WELL #3 (H901708-03)

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	05/09/2019	ND	0.022	111	0.0200	0.838	
Toluene*	< 0.001	0.001	05/09/2019	ND	0.023	115	0.0200	1.16	
Ethylbenzene*	< 0.001	0.001	05/09/2019	ND	0.024	120	0.0200	1.86	
Total Xylenes*	<0.003	0.003	05/09/2019	ND	0.074	123	0.0600	0.994	
Total BTEX	<0.006	0.006	05/09/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	91.3	% 81.3-12	18						
Chloride, SM4500CI-B	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	264	4.00	05/20/2019	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*	240	50.0	05/15/2019	ND	22.8	114	20.0	2.22	
TDS 160.1	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	636	5.00	05/16/2019	ND	580	110	527	8.00	

Cardinal Laboratories *=Accredited Analyte

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



Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

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

*** Insufficient time to reach temperature.

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

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

Cardinal Laboratories *=Accredited Analyte

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

01 East Marland - Hobbs, NM 88240 Tel (575) 393-2326 Fax (575) 393-2476	dina	al l	L	ab	or	a	to	r	ie	s.	I	nc		-			CHA						AN	ND.	AN/	ALY	SIS	R	QU	EST	
mpany Name:		-	-										•					LA	AB C	rder	ID#										
RICE Operating Company		RIC		Oper	npany: ating	Со	mp	any			PO#			T						ANA											
Katie Jones					ress:					eet, (Zip)		┪					(C	ircle	or S	pecif	у Ме	ethod	d No	.)					
dress: (Street, City, Zip)		122 \	N Ta		reet ~	Hobb	s, Ne	w Me	exico	88240	0			1						11	1	1	1	1	1	1	1 1	1	1	1 1	7
122 W Taylor Street ~ Hobbs, New Mexico 88240		(57	5) 3	93-9	ne#:						Fax#:			7			П	~													
one #:	Fax #		2/12/20		174						(5/:	5)39	'-1471	4			Н	7200		Ш											
575) 393-9174 ect #: Project Name:	(57	5) 397	-14	71			2							1		335)	П	9108		П											
BD Junction F2	9 & F_20_	1			/	/	A)					┪		pa pa		9 5 5	20	П	-									П	
ect Location;		'		Sam	eler Si	gnátu	re:	Roz	zanne	John	nson	(575)6	31-9310	4		tend		Sel	3	П											
21S R37E Sec29 F~ Lea County Nev	v Mexico		1	1	5	1		_				(0,0)0	71-3310	ı		5 E	i			П			52					Í	3	П	
90170%		1	1	(M/	ATRIX					VAT		SA	MPLING	3		TPH 418.1/TX1005 / TX1005 Extended (C35)		TCLP Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7				4	GC/MS Semi. Vol. 8270C/625			П		Anions (Cl. SOA CO3 LICES)			
LAB # FIELD CODE	(G)rab or (C)omp	CONTAINERS				T	OA)			_	_	T	T	788	05	1005/	2	AS B		TCLP Semi Volatiles		GC/MS Vol. 8260B/624	ol. 82		Pesticides 8081A/608	П	<u>ا</u> ۽	, Na,		Total Dissolved Solids	- 1
LAB USE) r	Į.	 ~		l lu	,	HCL (2 40ml VOA)	П	4		NONE	DATE (2019)		MTBE 8021B/602	BTEX 8021B/602	ΧĽ	0	als Ac	tiles	TCLP Semi Volat	enco	826	j.	PCB's 8082/608	8081	BOD, TSS, pH	onte	M. M.	5	Ved	Chlorides
ONLY	ap o	NO NO	臣		2	3	(24	3	SO,	7 3		2		80%	802	118.	3270	Meta	Vola	Sem	20		Ser	808	les	SS,	Ö	ع اق		sso	Se
1	(<u>G</u>	Ü #	WATER	SOIL	AIR		덛	HNO3	NaHSO4	H ₂ SO ₄	NONE 3	A	TIME	置	Ĭ	핆	PAH 8270C		J.	9		. WS	/WS	B's	sticio	D, T	stur	Suous	Sulfates	al D	Chlorides
Monitor Well #1	G	3	х			+	2		-	1	_	5/6		_		F	<u>a F</u>	IF	F	일 F	2 2	100	8	5	Pe	8	§ E	Ani	Sul	Tot	5
2 Monitor Well #2	G	3	х		\top		2	Н	+	1	_	5/6	_	-	X	\dashv	+	+	Н	+	+	\perp	_						X	X	X
Monitor Well #3	G	3	х		\top		2	\vdash	+	1	+	5/6	_	+	Х	\dashv	+	+	Н	+	\perp	\perp							X	X	X
					\top			+	+	+	+	5/6	12:25	1	Х	\dashv	+	\vdash	H	+	+	\perp							X	X	x
			П		\top	\vdash	Н	\dashv	+	+	+	\vdash	+-	⊢	Н	\dashv	+	Н	\vdash	+	\perp	\perp									T
			\Box	\neg	+	Н	\forall	\dashv	+	+	+	⊢	+	⊢	Н	+	+	Н	1	+	\perp								П		T
			\Box	\neg	+	Н	\dashv	+	+	+	+	\vdash	+-	H	Н	+	+	Н	\perp	\perp	\perp								П	T	T
			\Box	\dashv	+	Н	\dashv	+	+	+	+	\vdash	-	\vdash	\vdash	+	+	Н	\perp	\perp	\perp								П	T	T
			\vdash	\dashv	+	Н	\dashv	+	+	+	+	\vdash	-	Н	-	+	+	Н	\perp	\perp	┖								П		\top
			+	+	+	H	+	+	+	+	+	<u> </u>		Н	-	+	\perp	Н	4	\perp							T		П	\top	+
uished by Date Time:	Receiv	ed by:			_			Dat	٥.		ime:					Ц,		Н													+
ine Johnson 59209 14:16								Dat	О.	. "	iiie.				ne R	-	s	Ц	Yes	L	No										_
uished by: Date: Time:	Regeive	ed Bv:	(Lal	odrato	nv Sta	off)	_	Date	٥.	Ti	me:	-			Resi				Yes		No		Addi	ition	al Fa	ax Nu	mbe	er:			
V	100	<i>61</i> •	1	7	111	M) 1	1							REN	IAR	(S:															_
red By: (Circle One)	DESCRIPTION OF THE PERSON.	_	1	fle	/US	07				119		14	16	-	Ema	il Re	sults	: 1	kjor	ies@	Dric	esw	d.c	om							
(onclo one)	Sample		n Cool	Inta				СН	ECKE	ED BY	Y:									nne						net					
Y		_	_	es F				/1-	nitials	1	, /	-													A111.	HOL					
pler - UPS - Bus - Other:	- 1	No F	N	-	11			(ii	illais	1/1	H	-	- 1																		
			- 11		ш					W	V																				
										U																-	_				_



August 28, 2019

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: BD JUNCTION F-29 & F-29-1

Enclosed are the results of analyses for samples received by the laboratory on 08/23/19 16:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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)

Celey D. Keine

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



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

Fax To: (575) 397-1471

Received: 08/23/2019 Reported: 08/28/2019

Project Name:

BD JUNCTION F-29 & F-29-1

Project Number: NONE GIVEN

Project Location: T21S R37E SEC 29 F \sim LEA COUNTY, NM

Sampling Date: 08/20/2019

Sampling Type: Water

Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: MONITOR WELL #1 (H902919-01)

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	08/27/2019	ND	0.021	103	0.0200	1.14	
Toluene*	< 0.001	0.001	08/27/2019	ND	0.020	100	0.0200	2.16	
Ethylbenzene*	< 0.001	0.001	08/27/2019	ND	0.021	103	0.0200	0.500	
Total Xylenes*	<0.003	0.003	08/27/2019	ND	0.062	104	0.0600	0.453	
Total BTEX	<0.006	0.006	08/27/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	91.7	% 81.3-12	8						
Chloride, SM4500CI-B	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	468	4.00	08/27/2019	ND	104	104	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*	211	50.0	08/27/2019	ND	21.4	107	20.0	0.937	
TDS 160.1	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	1300	5.00	08/28/2019	ND	528	100	527	0.724	

Cardinal Laboratories *=Accredited Analyte

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



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

Fax To: (575) 397-1471

Received: 08/23/2019 Reported: 08/28/2019

BD JUNCTION F-29 & F-29-1

Project Number: NONE GIVEN

Project Name:

Project Location: T21S R37E SEC 29 F ~ LEA COUNTY, NM

Sampling Date: 08/20/2019
Sampling Type: Water

Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: MONITOR WELL #2 (H902919-02)

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	08/27/2019	ND	0.021	103	0.0200	1.14	
Toluene*	<0.001	0.001	08/27/2019	ND	0.020	100	0.0200	2.16	
Ethylbenzene*	<0.001	0.001	08/27/2019	ND	0.021	103	0.0200	0.500	
Total Xylenes*	<0.003	0.003	08/27/2019	ND	0.062	104	0.0600	0.453	
Total BTEX	<0.006	0.006	08/27/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	4-Bromofluorobenzene (PID 91.2 % 81.3-128								
Chloride, SM4500Cl-B	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	120	4.00	08/27/2019	ND	104	104	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*	119	25.0	08/27/2019	ND	21.4	107	20.0	0.937	
TDS 160.1	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	570	5.00	08/27/2019	ND	528	100	527	0.724	

Cardinal Laboratories *=Accredited Analyte

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



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

Received: 08/23/2019 Reported: 08/28/2019

BD JUNCTION F-29 & F-29-1

Project Name: BD JUNCTION Project Number: NONE GIVEN

Project Location: T21S R37E SEC 29 F ~ LEA COUNTY, NM

Sampling Date: 08/20/2019 Sampling Type: Water

Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: MONITOR WELL #3 (H902919-03)

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	08/27/2019	ND	0.021	103	0.0200	1.14	
Toluene*	< 0.001	0.001	08/27/2019	ND	0.020	100	0.0200	2.16	
Ethylbenzene*	< 0.001	0.001	08/27/2019	ND	0.021	103	0.0200	0.500	
Total Xylenes*	<0.003	0.003	08/27/2019	ND	0.062	104	0.0600	0.453	
Total BTEX	<0.006	0.006	08/27/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	93.2 9	% 81.3-12	18						
Chloride, SM4500CI-B	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	252	4.00	08/27/2019	ND	104	104	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*	227	50.0	08/27/2019	ND	21.4	107	20.0	0.937	
TDS 160.1	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	964	5.00	08/27/2019	ND	528	100	527	0.724	

Cardinal Laboratories *=Accredited Analyte

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



Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

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

*** Insufficient time to reach temperature.

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

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

Cardinal Laboratories *=Accredited Analyte

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

	Tel (575) 393-2326												CHAIN-OF-CUSTODY AND ANALYSIS REQUEST																						
Tel (575) 393 Fax (575) 393	3-2326 3-2476 Caru i	IIa.		a	U	UI	al	lU		le	5,	1	П	C.						LA	во	rder	ID#	¥					_			_			
Company Name:			BILL T			52						PO	#									NA	NI V	212	R R	ΕO	UES								
	ting Company		RICE	0			Co	mpa	any	(2)		-															od N								
Project Manager:					Addr					85	- 10		Zip)			1	1	î	1	1	1	1	1	I	ı, .		1 1	١٠.,	1	1	ï	1	i	1	1
Katie Jones			122 W	Taylo			Hobb:	s, Ne	w Me	exico	8824					l			- 1												1				
PRODUCTION OF THE	Street, City, Zip)		1575		Phor	0.57417990						Fax				L				27															
122 W Taylor Stre	eet ~ Hobbs, New Mexico 88240	Fax#:	(575	38	3-9	1/4						(5)	(5)	397-1	14/1	4				[2														1	
(575) 393-9	174	NA PERSONAL PROPERTY.	397-	147	1											1		32)		틹		1													
Project #:	Project Name:	(010)	001-	177	1	/		>	•	_						-		9		وا و	5														
	BD Junction F29 & F	-29-1			/		/	1	4							1		apu		뛺															
Project Location:		100		/	Sam	plens	ignati	uré:	Ro	zánn	ne Joi	hnso	n (57	5)631-	9310	1		Exte		S G	Ž					.					6	5			S
T21S R37E	Sec29 F~ Lea County New Mex	xico		1	/	1	A	1		_								900		5 3	5					1625		- 25			0	3			nop
10 0010					N/	ATRI	8				RVA THO		E	SAM	PLING			TPH 418.1/TX1005 / TX1005 Extended (C35)		Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	Da	8			GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625		8		15	Cations (Ca, Mg, Na, K)	3	Total Dissolved Solids		Turn Around Time ~ 24 Hours
H902919		윹	# CONTAINERS					a				PE)				02	05	002		As S	2	TCLP Semi Volatiles	l s		60B	ol.		Pesticides 8081A/608		듩.	2 0	<i>;</i>	S		me
	FIELD CODE	(G)rab or (C)omp						HCI (2 40ml VOA)		1		ICE (1-1Liter HDPE)		(6)		MTBE 8021B/602	8021B/602	X			les la	20	TCLP Pesticides		82	i.	09/3	808	됩		E C	3	Kec		ΙÞ
/ LAB USE \		or (ΙĚ	2		П	삥	404		0		1Lite	V. 25	DATE (2019)		802	3021	8.1	PAH 8270C	etal s	TCLP Volatiles	emi	esti		Vol	Sen	308	es	SS,	9	<u>ي</u> 5	ارَّ	isso	es	uno
(ONLY)	*	rab	ő		=	~	ĕΙ	2	ő	일	304	5	빙	Ψ̈	ш	끯	×	141	8	Ž Z	≥ ≥	PS	РР		MS	MS	S'S	licid	Ľ,	stri	ons	ate		orid	٦Ar
,		<u> </u>	*	WATER	SOIL	AIR	SLUDGE	5	HNO3	NaHSO ₄	H ₂ SO ₄	S	NONE	DA.	TIME	E	BTEX	直	<u></u>	칠	칠	덛	덛	RCI	GC/	GC/	PCB's 8082/608	Pest	BOD, TSS, pH	Moisture Content	Cati	Sulfates	Total	Chlorides	ĮĮ.
l	Monitor Well #1	G	3	X				2	_	T		1		8/20			x				Ť	Ė					\Box	\neg		\top		X	_	$\overline{}$	_
2	Monitor Well #2	G	3	х		П		2		T		1	П	8/20	10:10		х				T									\exists	\top	x	_	-	
3	Monitor Well #3	G	3	X		П	\neg	2				1	П	8/20	11:30		x				T						\Box	\Box	\Box	1		1 _x	_	-	
						П			T	Т			П			Г				\neg	T	T					\Box			\top	\top	1			
						П			\top	1			П			Т				\neg	T	Т					\sqcap	\neg	\Box	\top	\top	\top			
							\neg	1	\top	T			П			Т		П		\top	1	T					\Box			\exists	\top	\top	\top	\vdash	
						П														\neg	T	T					\sqcap		\Box	\top	\top	\top	\top		
									T				П								1						\Box			T					П
																					T						\Box				\top	T			
																					I														
Relinquished by:	Date: Time:	Recei	ved by:		/	1	11	11	, [ate	:	Tir	me:			Ph	one	Resi	ults		Y	es		No											
Rozanne Johnson	16:05	L	ema	ra	6	la.	ak	50	0	8-0	23-	19		16.	:05	Fa	x Re	sults			Y	es		No		Add	dition	al F	ax N	lum	ber:				
Relinquished by:	/ Date: Time:	Recei	ved By:	(L	abora	atory	Staff	ノ	Γ)ate	:	Tir	me:			RE	MAF	KS:	S.																
																ı	Em	ail F	Resu	ılts:	k	one	es@	Dric	esv	vd.	com	1							
Delivered By: ((Circle One)	Sample	Condit	on			1			CHE	CKE	D BY	Y:			1											stre		ne	et .					
		Part of Part of		Cool		Intact						- According									-									=					
			Yes		Yes	_			1	(Ini	itials)																								
Sampler - L	JPS - Bus - Other:		No		No)	0																										



November 19, 2019

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: BD JUNCTION F-29 & F-29-1

Enclosed are the results of analyses for samples received by the laboratory on 11/11/19 15:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. 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)

Celey D. Keine

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



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

Fax To: (575) 397-1471

Received: 11/11/2019 Sampling Date: 11/06/2019
Reported: 11/19/2019 Sampling Type: Water

Project Name: BD JUNCTION F-29 & F-29-1 Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Tamara Oldaker

Project Location: T21S R37E SEC 29 F ~ LEA COUNTY, NM

Sample ID: MONITOR WELL #1 (H903823-01)

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	11/13/2019	ND	0.020	99.3	0.0200	1.96	
Toluene*	< 0.001	0.001	11/13/2019	ND	0.020	99.5	0.0200	3.37	
Ethylbenzene*	<0.001	0.001	11/13/2019	ND	0.021	103	0.0200	3.11	
Total Xylenes*	<0.003	0.003	11/13/2019	ND	0.060	101	0.0600	3.25	
Total BTEX	<0.006	0.006	11/13/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIL	99.9 9	% 74-98							
Chloride, SM4500Cl-B	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	400	4.00	11/13/2019	ND	104	104	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*	208	50.0	11/13/2019	ND	19.5	97.4	20.0	1.60	
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

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



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

Fax To: (575) 397-1471

Received: 11/11/2019 Reported: 11/19/2019

Project Name:

BD JUNCTION F-29 & F-29-1

Project Number: NONE GIVEN

Project Location: T21S R37E SEC 29 F ~ LEA COUNTY, NM

Sampling Date: 11/06/2019 Sampling Type: Water

Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: MONITOR WELL #2 (H903823-02)

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	11/13/2019	ND	0.020	99.3	0.0200	1.96	
Toluene*	<0.001	0.001	11/13/2019	ND	0.020	99.5	0.0200	3.37	
Ethylbenzene*	<0.001	0.001	11/13/2019	ND	0.021	103	0.0200	3.11	
Total Xylenes*	<0.003	0.003	11/13/2019	ND	0.060	101	0.0600	3.25	
Total BTEX	<0.006	<0.006 0.006		ND					
Surrogate: 4-Bromofluorobenzene (PID	omofluorobenzene (PID 98.8 % 74-98								
Chloride, SM4500CI-B	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	116	4.00	11/13/2019	ND	104	104	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*	121	25.0	11/13/2019	ND	19.5	97.4	20.0	1.60	
TDS 160.1	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	596	5.00	11/14/2019	ND	564	107	527	0.964	

Cardinal Laboratories *=Accredited Analyte

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



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

Received: 11/11/2019 Reported: 11/19/2019

BD JUNCTION F-29 & F-29-1

Project Name: BD JUNCTION Project Number: NONE GIVEN

Project Location: T21S R37E SEC 29 F \sim LEA COUNTY, NM

Sampling Date: 11/06/2019 Sampling Type: Water

Sampling Condition: Cool & Intact

Sample Received By:

Tamara Oldaker

Sample ID: MONITOR WELL #3 (H903823-03)

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	11/13/2019	ND	0.020	99.3	0.0200	1.96	
Toluene*	< 0.001	0.001	11/13/2019	ND	0.020	99.5	0.0200	3.37	
Ethylbenzene*	< 0.001	0.001	11/13/2019	ND	0.021	103	0.0200	3.11	
Total Xylenes*	<0.003	0.003	11/13/2019	ND	0.060	101	0.0600	3.25	
Total BTEX	<0.006 0.006		11/13/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	PID 100 % 74-								
Chloride, SM4500CI-B	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	264	4.00	11/13/2019	ND	104	104	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*	238	50.0	11/13/2019	ND	19.5	97.4	20.0	1.60	
TDS 160.1	S 160.1 mg/L								
Analyte	Result Reporting Limit		Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	871	5.00	11/14/2019	ND	564	107	527	0.964	

Cardinal Laboratories *=Accredited Analyte

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



Notes and Definitions

QR-02 The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC

batch were accepted based on percent recoveries and completeness of QC data.

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS

ecovery.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

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

*** Insufficient time to reach temperature.

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

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

Cardinal Laboratories *=Accredited Analyte

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

Page 1 of 1

101 East Marland - H Tel (575) 39	lobbs, NM 88240 03-2326 Card i	ina	l Laboratories, Inc.												CHAIN-OF-CUSTODY AND ANALYSIS REQUEST																			
Fax (575) 39 Company Name:	93-2476							U			9		IC						LA	B C	rdei	r ID	#											
DESCRIPTION OF THE PROPERTY.	ating Company		BILL									PO#			T					- 1	N N I	A I \	/61	c D	<u></u>			_	_					
Project Manager:	ating company		RIC	= 0		ess:	Cor	mpa	iny	/Stre	ort (City, Zi			4									S R cify I										
Katie Jones	F		122 W	Tavl			Uabba	NI.					p)			1	1	1 1	1	1	ı	1	I	l I	l I	ı	10.) I	6 1	T T	8 F	1	170	ī	7
Address: (3	Street, City, Zip)		122 00	Tayı	Phor		HODDS	s, ne	v ivie	XICO &		Fax#:			4					1								П				1		
122 W Taylor Str	eet ~ Hobbs, New Mexico 88240		(575) 39	S 5000								1307	-1471	1				0.7									П						
Phone #:		Fax #:	χ	,							-	(070)551	-14/1	-				3/20			1	l					ı				1		
(575) 393-9		(575) 397-	147	1						1						335)		100				1											
Project #:	Project Name:							/		//	1				1) p		9 5	2														
Project Location:	BD Junction F29 &	F-29-1					/								1		and a		e I	200														
	Sec29 F~ Lea County New Me	vice	Sampler Signature: Rozange Johnson (575)631-9310														EXT		Sac	á								. 1		6	2	1		w
TETOROTE	Lea County New Me	XICO		_	/	-	4	/	K	1	D						900		خ ای	5					625					Š	3			onu
				1	M	TRIX		P		SER /IETH		TIVE)	SA	MPLING	3		TPH 418.1/TX1005 / TX1005 Extended (C35)		Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200. TCI P Metals An As Ba Cd Cr Pb So La	200				24	GC/MS Semi. Vol. 8270C/625				5	Cations (Ca, Mg, Na, K)	5	ds		Turn Around Time ~ 24 Hours
LAB#		g.	# CONTAINERS		/			7			T	ũ			2	2	305		As B	2	TCLP Semi Volatiles			GC/MS Vol. 8260B/624	. 8		Pesticides 8081A/608		_ ;	ž Z	5	Total Dissolved Solids		° ≥
CIRCIP/AGEA	FIELD CODE	G)rab or (C)omp	\ <u>2</u> (HCL (2 40ml VOA)				ICE (1-1Liter HDPE) NONE	l @	is.	8021B/602	8021B/602	Ιž		g 8	TCLP Volatiles	/olat	TCLP Pesticides		826	8	308	81/	-	Moisture Content	₽ S		ed (Ę.
/ LAB USE \		5	ΙĔ	22		Ļ	빙	40m		4		Liter	20		021	021	13.	8270C	tals specials	atile	Ē	stici		<u>9</u>	emi	982/	86	S, pl	8/8	Sal	<u>{</u>	solv		Pur
ONLY		lab g	ő	WATER	=	_ [SLUDGE	L (2	ဝိ	ड्रि इ	O ₄	티빌	(i	m	B B	8	14	82	M M		Se	Pe		15 \	ISS	8	side	TS	nre	ns (i se	Dis	ides	Arou
H903823		9	#	\$	SOIL	AIR	7	오	HNO ₃	NaHSO ₄	H ₂ SO ₄	ICE (3-	DATE (2019)	TIME	MTBE	BTEX	PH	PAH	e E	티	5	CLF	RCI	CN	S	PCB's 8082/608	estic	BOD, TSS, pH	oist	atio	Sulfates	otal	Chlorides	E
1	Monitor Well #1	G	3	Х				2				1	11/			X	F	-	+	+	H	_	<u>«</u>	9	9	-	-	B :	<u>≥ c</u>) <u>4</u>	_	-		F
	Monitor Well #2	G	3	х			\top	2		7	_	1	11/		_	X		\dashv	+	+	Н		-		\dashv	\dashv	\dashv	+	+	+	_	Х	Х	\vdash
3	Monitor Well #3	G	3	x		\neg	\top	2		\dashv	_	1	11/		_	X	\vdash	\dashv	+	+	Н			-	\dashv	-	-	+	+	+	X	-	Х	\square
							+	ŕ		\dashv	+	+	11/	0 11:18	1	1	Н	\dashv	+	╀	Н		-	\vdash	-	-	\dashv	\dashv	\perp	+	X	Х	Х	\square
				Н		+	+	\vdash	\dashv	+	+	+	-	+-	-	+-	Н	\dashv	+	+	Н		-	_	\dashv	_	\dashv	\downarrow	_	\bot	\perp	Ш		
		_		Н	\dashv	+	+	\vdash	-1	+	+	+		+	-	⊢	Н	4	+	+	\sqcup				_	_	\dashv	_	\perp					
				Н	\dashv	+	+		-	+	+	+		+	_	_	Ш	_	_	_														
				Н	-1	-	+	┢	-	+	4	-		+		_	Ш	\perp	\perp	\perp	Ш													100
		-		\vdash	\dashv	-	+	Н	-	+	\perp	\perp			_						Ш													Ġ
	1	-		\vdash	\dashv	_	+	Н		4	1	\perp							\perp															
Relinquished by:	Date: Time:				_																					П	\top	\top	\top		\Box			
/// h		Receiv	ea by:	/	1	1				ite:	1	Time:			Pho	one	Resu	lts	L	Ye	s		No									_		
Rozenne Johnson		40	ne	J	AN/	m	1			11/1	11/2	2019	11:	01	Fax	Re	sults			Ye	s		No	,	Addi	tion	al Fa	AY N	umb	er.				\neg
Relinquished by:	Date: Time:	Receiv	ed By.	(La	bora	tory S	taff	,	Da	te:		Time:			RE	MAF	KS:							_			2110	DX TV	arrib	CI.		-		-
James of	Jun 11/11/2019 15:0	5	1/0/	ua	ka	WA	de	K	20	11.	-11	1-19	15	5.05	Ī	Em	ail R	0011	to .	Vic	no	c@	rio	esw	d 0	0.000								
Delivered By: (Circle One)		Conditio	on			Ť			HECK					-	- 111	an iX	coul	ເວ.	Charles and							i,							
		2.5	- 500	Cool	Iı	ntact				0										10	an	ne	11(0	υWI	nas	trea	am.	net						
Camala :	DO D		Yes	-	Yes	-	1		(Initial	s)																							
sampier - U	PS - Bus - Other:		No No Tes-																															
																			_	_		_	_											