RICE Operating Company
112 West Taylor • Hobbs, New Mexico 88240
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REVIEWED
By Mike Buchanan at 3:44 pm, Jun 27, 2023

April 1, 2023

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

Review of the 2022 Annual GW Report for ROC, K-29 Boot: **Content Satisfactory**
1. Continue to sample MW-2 as needed
2. Submit 2023 Annual Report by April 1, 2024.

RE: **2022 Annual Groundwater Report**
Rice Operating Company – Hobbs SWD System
Hobbs K-29 EOL Boot (1R428-50): UL/K, Sec. 29, T18S, R38E

Mr. Velez:

ROC is the service provider (agent) for the Hobbs 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. The system is now abandoned.

The site is located approximately 2.37 miles west of Hobbs, New Mexico at UL/K, Sec. 29, T18S, R38E as shown on the Geographical Location Map. Groundwater sampling at the site indicates that the depth to groundwater is located at approximately 67 feet below ground surface (bgs).

An Investigation and Characterization Plan (ICP) was submitted to NMOCD on April 4th, 2008 and approved on May 21st, 2008. According to the ICP, the site was investigated through vertical and soil bore installation, resulting in elevated chloride concentrations that decreased with depth. Based on the investigation, two monitoring wells were installed to determine groundwater quality and the wells have been sampled regularly since installation.

A Corrective Action Plan (CAP) was submitted and approved by NMOCD on February 5th, 2015. According to the NMOCD approved CAP, a 63x53-ft 20-mil reinforced liner was installed and properly seated at 4 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 September 8th, 2015. The report also requested an additional monitoring well (MW-3) be installed down-gradient of the site. NMOCD approved this report and granted 'Soil Closure' on September 15th, 2015. On October 2nd, 2015, the down-gradient well (MW-3) was installed, and lithology soil samples were collected at regular intervals.

ROC submitted the 2018 Annual Report and Addendum with a request to plug and abandon MW-1 and replace it with a 4-inch well to be used for groundwater recovery. NMOCD approved the request on September 5th, 2019. On November 12th, 2019, the well was plugged using a cement grout with 1-3% bentonite and a three ft cap of cement at the surface. A 4-inch

well (MW-1R) was installed approximately 10 ft southeast of the former well and lithology samples were collected at regular intervals.

All wells have been sampled regularly per NMOCD guidelines since installation. The attached table summarizes the analytical results from groundwater samples collected from the monitor wells at the site. The most recent sampling event resulted in a chloride concentration of 284 mg/L in MW-1, 76 mg/L in MW-2, and 152 mg/L in MW-3. BTEX concentrations have remained below detectable limit in each well since installation. In 2020, ROC received NMOCD approval to cease BTEX sampling. On January 31st, 2022, NMOCD granted approval to cease further sampling of MW-2 and MW-3. ROC will continue to grab samples from MW-2, as needed, to ensure there are no non-ROC, up-gradient sources contributing to the degradation of groundwater quality. ROC will continue quarterly sampling in 2023.

Attached is the Appendix, which contains:

1. A Geographical Location Map.
2. A map showing well locations.
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 2022.

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.

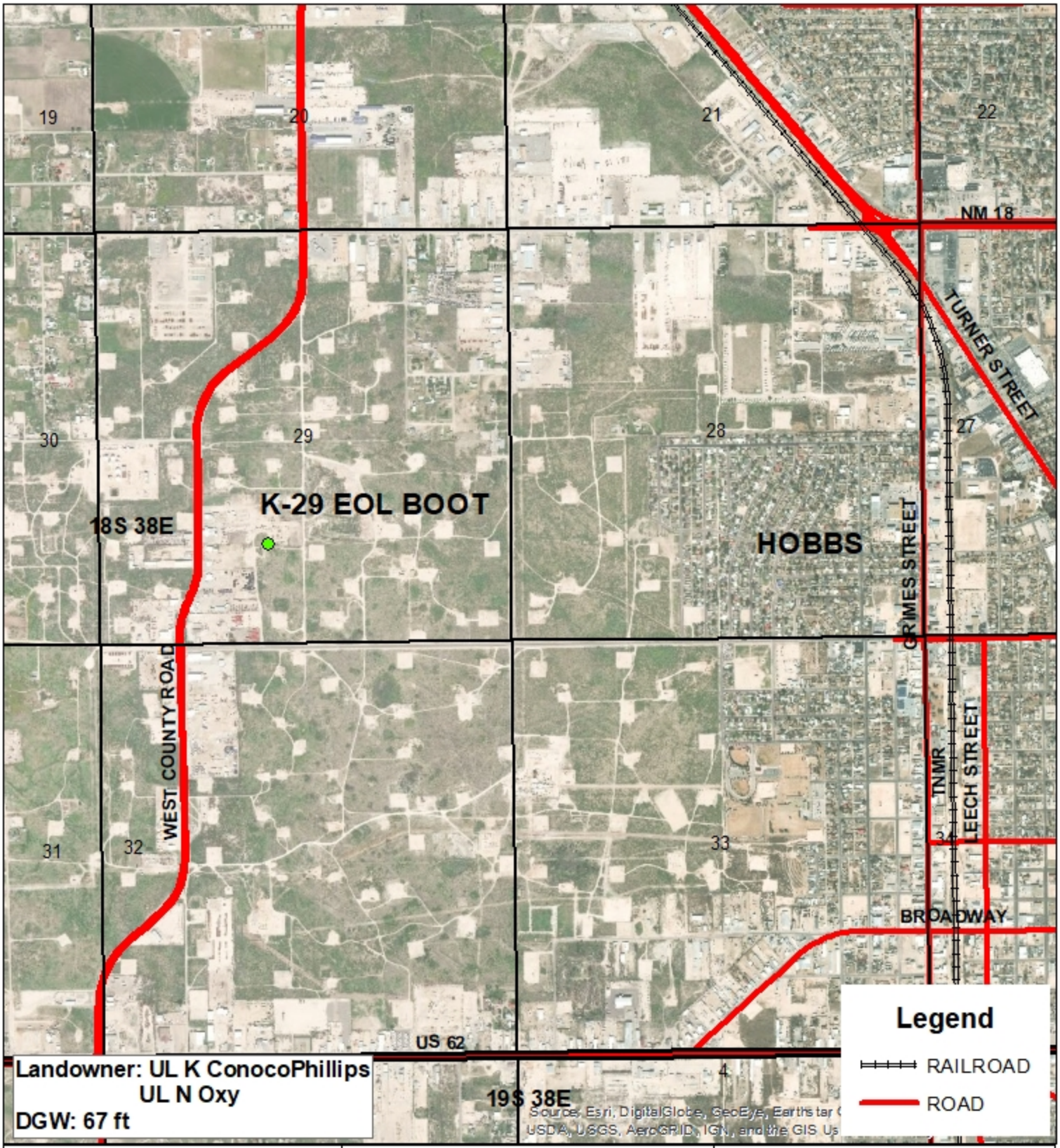
Sincerely,

Katie Davis

Katie Davis
Environmental Manager
RICE Operating Company (ROC)

appendix

Geographical Location Map



RICE OPERATING COMPANY
ROC
SINCE 1955

HOBBS
K-29 BOOT & EOL

1R428-50

UL K & N SECTION 29
T-18-S R-38-E
LEA COUNTY, NM

GPS: 32.714915 -103.172174
NAD83 STATE PLANE PROJ
NM EAST ZONE

0 1,000 2,000
Feet

Drawing date: 2/4/20
Drafted by: T. Grieco

N
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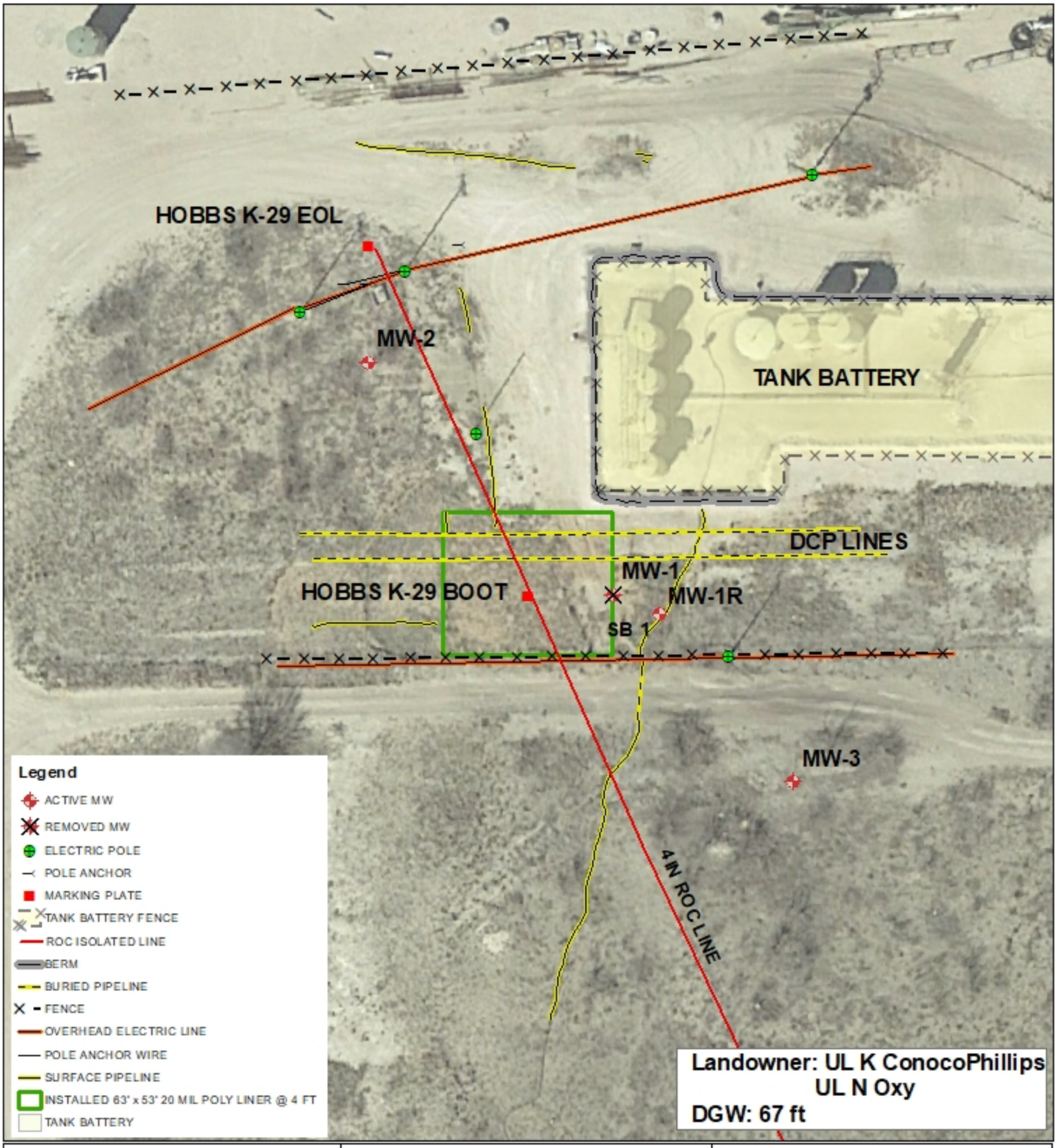
Site Map



RICE OPERATING COMPANY
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HOBBS K-29 BOOT & EOL

1R428-50

UL K & N SECTION 29
T-18-S R-38-E
LEA COUNTY, NM

GPS: 32.714915 -103.172174
NAD83 STATE PLANE PROJ
NM EAST ZONE

0 25 50
Feet

GPS date: 11/03/14 TG
Drawing date: 2/4/20
Drafted by: T. Grieco

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ROC - Hobbs K-29 EOL (1R428-50)
Unit Letter K, Section 29, T18S, R38E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
1	62.34	73.6	1.8	6	7/14/2009	520	1,310	<0.001	<0.001	<0.001	<0.003	57	Silt to clear Slight odor
1	62.43	73.6	1.8	6	10/27/2009	332	757	0.001	<0.001	0.002	<0.003	59.5	Silt to clear Slight odor
1	62.72	73.62	1.7	6	3/15/2010	476	1,170	<0.001	<0.001	<0.001	<0.003	71.5	Silt to clear Slight odor
1	62.81	73.62	1.7	6	6/4/2010	432	1,320	<0.001	<0.001	<0.001	<0.003	78	Silt to clear Slight odor
1	62.56	73.62	1.8	6	8/30/2010	540	1,400	<0.001	<0.001	<0.001	<0.003	51.7	Silt to clear Slight odor
1	62.91	73.62	1.7	6	12/10/2010	560	1,280	<0.001	<0.001	<0.001	<0.003	67.9	Silt to clear Slight odor
1	63.05	73.62	1.7	6	3/23/2011	610	1,620	<0.001	<0.001	<0.001	<0.003	76.9	Silt to clear Slight odor
1	63.22	73.62	1.7	6	6/20/2011	540	1,280	<0.001	<0.001	<0.001	<0.003	71.9	Silt to clear Slight odor
1	63.44	73.62	1.6	6	9/20/2011	610	1,470	<0.001	<0.001	<0.001	<0.003	82.1	Silt to clear Slight odor
1	63.62	73.62	1.6	6	12/15/2011	540	1,320	<0.001	<0.001	<0.001	<0.003	87.2	Silt to clear Slight odor
1	63.78	73.62	1.6	6	3/13/2012	570	1,360	0.003	<0.001	<0.001	<0.003	74.2	Silt to clear Slight odor
1	63.93	73.62	1.6	6	6/11/2012	500	1,410	<0.001	<0.001	<0.001	<0.003	85.5	Silt to clear Slight odor
1	64.14	73.62	1.5	6	9/6/2012	500	1,280	<0.001	<0.001	<0.001	<0.003	77.6	Silt to clear Slight odor
1	64.3	73.62	1.5	6	11/29/2012	550	1,340	<0.001	<0.001	<0.001	<0.003	71.5	Silt to clear Slight odor
1	64.48	73.62	1.5	6	3/7/2013	492	1,220	<0.001	<0.001	<0.001	<0.003	88	Silt to clear Slight odor
1	64.69	73.62	1.4	6	6/24/2013	344	1,060	<0.001	<0.001	<0.001	<0.003	63	Silt to clear Slight odor
1	64.95	73.62	1.4	8	9/16/2013	336	987	<0.001	<0.001	<0.001	<0.003	88	Silt to clear Slight odor
1	65.15	73.62	1.4	6	12/12/2013	352	1,130	<0.001	<0.001	<0.001	<0.003	194	Silt to clear Slight odor
1	65.29	73.62	1.3	6	3/19/2014	352	1,080	<0.001	<0.001	<0.001	<0.003	112	Silt to clear Slight odor
1	65.49	73.62	1.3	6	6/16/2014	264	864	<0.001	<0.001	<0.001	<0.003	64.2	Silt to clear Slight odor
1	65.78	73.62	1.3	6	9/10/2014	352	1,150	<0.001	<0.001	<0.001	<0.003	250	Silt to clear Slight odor
1	65.63	73.62	1.3	6	12/17/2014	300	904	<0.001	<0.001	<0.001	<0.003	158	Silt to clear Slight odor
1	65.78	73.62	1.3	6	3/17/2015	264	904	<0.001	<0.001	<0.001	<0.003	73	Silt to clear Slight odor
1	65.88	73.62	1.2	6	6/16/2015	320	1,020	<0.001	<0.001	<0.001	<0.003	86	Silt to clear Slight odor
1	65.93	73.65	1.2	6	9/17/2015	316	1,050	<0.001	<0.001	<0.001	<0.003	144	Silt to clear Slight odor
1	65.65	73.65	1.2	6	12/1/2015	252	764	<0.001	<0.001	<0.001	<0.003	79.9	Silt to clear Slight odor
1	65.9	73.65	1.2	6	3/28/2016	416	1,120	<0.001	<0.001	<0.001	<0.003	58.7	Silt to clear Slight odor
1	66.05	73.65	1.2	6	6/23/2016	490	1,430	<0.001	<0.001	<0.001	<0.003	62.4	Silt to clear Slight odor
1	65.93	73.65	1.2	6	9/26/2016	640	1,940	<0.001	<0.001	<0.001	<0.003	73	Silt to clear Slight odor

ROC - Hobbs K-29 EOL (1R428-50)
Unit Letter K, Section 29, T18S, R38E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
1	65.67	73.65	1.3	6	12/5/2016	500	1,420	<0.001	<0.001	<0.001	<0.003	72	Silt to clear Slight odor
1	65.91	73.65	1.2	6	3/20/2017	610	1,520	<0.001	<0.001	<0.001	<0.003	78	Silt to clear Slight odor
1	66.26	73.65	1.2	6	6/22/2017	620	1,690	<0.001	<0.001	<0.001	<0.003	81	Silt to clear Slight odor
1	66.28	73.65	1.2	6	9/25/2017	460	1,780	<0.001	<0.001	<0.001	<0.003	74	Silt to clear Slight odor
1	66.32	73.65	1.2	6	12/21/2017	510	1,290	<0.001	<0.001	<0.001	<0.003	80	Silt to clear Slight odor
1	66.46	73.62	1.1	6	3/20/2018	550	1,410	<0.001	<0.001	<0.001	<0.003	70.9	Silt to clear Slight odor
1	66.62	73.62	1.1	6	6/26/2018	550	1,380	<0.001	<0.001	<0.001	<0.003	67.8	Silt to clear Slight odor
1	66.77	73.62	1.1	6	9/18/2018	500	1,240	<0.001	<0.001	<0.001	<0.003	71.6	Silt to clear Slight odor
1	66.81	73.62	1.1	6	12/20/2018	500	1,310	<0.001	<0.001	<0.001	<0.003	89.8	Silt to clear Slight odor
1	66.94	73.65	1.1	6	3/25/2019	660	1,620	<0.001	<0.001	<0.001	<0.003	67	Silt to clear Slight odor
1	67.08	73.65	1	6	6/24/2019	620	1,610	<0.001	<0.001	<0.001	<0.003	66	Silt to clear Slight odor
1	67.15	73.65	1	6	9/23/2019	640	1,670	<0.001	<0.001	<0.001	<0.003	62	Silt to clear Slight odor
1R	67.46	112.78	29	100	12/9/2019	200	730	<0.001	<0.001	<0.001	<0.003	70.7	Silt to clear Slight odor
1R	67.63	112.78	29.3	100	3/19/2020	264	822	<0.001	<0.001	<0.001	<0.003	73.5	Silt to clear Slight odor
1R	67.88	112.78	29.2	100	9/28/2020	284	674	XXX	XXX	XXX	XXX	62	Silt to clear Slight odor
1R	68.15	112.78	29	100	3/25/2021	292	913	XXX	XXX	XXX	XXX	75.5	Silt to clear Slight odor
1R	68.33	112.78	29	100	6/25/2021	236	927	XXX	XXX	XXX	XXX	126	Silt to clear Slight odor
1R	68.27	112.78	29	100	9/24/2021	288	939	XXX	XXX	XXX	XXX	79.3	Silt to clear Slight odor
1R	68.17	112.78	29	100	12/1/2021	300	955	XXX	XXX	XXX	XXX	78	Silt to clear Slight odor
1R	68.58	112.78	29	100	3/28/2022	352	889	XXX	XXX	XXX	XXX	54.6	Silt to clear Slight odor
1R	68.72	112.78	29	100	6/27/2022	368	1,160	XXX	XXX	XXX	XXX	64.2	Silt to clear Slight odor
1R	68.84	112.78	29	100	9/23/2022	352	1,060	XXX	XXX	XXX	XXX	63.6	Silt to clear Slight odor
1R	69.02	112.78	29	100	12/13/2022	284	880	XXX	XXX	XXX	XXX	90.8	Silt to clear Slight odor

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
2	63.67	77.41	2.2	8	3/13/2012	68	522	<0.001	<0.001	<0.001	<0.003	83.2	Silt to clear Slight odor
2	63.87	77.41	2.2	8	6/11/2012	68	474	<0.001	<0.001	<0.001	<0.003	86.4	Silt to clear Slight odor

ROC - Hobbs K-29 EOL (1R428-50)
Unit Letter K, Section 29, T18S, R38E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
2	64.02	77.41	2.1	8	9/6/2012	64	500	<0.001	<0.001	<0.001	<0.003	88.2	Silt to clear Slight odor
2	64.22	77.41	2.1	8	11/29/2012	68	521	<0.001	<0.001	<0.001	<0.003	88.5	Silt to clear Slight odor
2	64.41	77.41	2.1	8	3/7/2013	72	478	<0.001	<0.001	<0.001	<0.003	95	Silt to clear Slight odor
2	64.65	77.41	2	8	6/24/2013	68	504	<0.001	<0.001	<0.001	<0.003	83	Silt to clear Slight odor
2	64.86	77.41	2	8	9/16/2013	64	485	<0.001	<0.001	<0.001	<0.003	75.3	Silt to clear Slight odor
2	65.04	77.41	2	8	12/12/2013	64	473	<0.001	<0.001	<0.001	<0.003	93.4	Silt to clear Slight odor
2	65.24	77.41	1.9	8	3/19/2014	68	426	<0.001	<0.001	<0.001	<0.003	88.2	Silt to clear Slight odor
2	65.51	77.41	1.9	8	6/16/2014	68	572	<0.001	<0.001	<0.001	<0.003	82.5	Silt to clear Slight odor
2	65.74	77.41	1.9	8	9/10/2014	64	512	<0.001	<0.001	<0.001	<0.003	98.1	Silt to clear Slight odor
2	65.57	77.41	1.9	8	12/17/2014	68	482	<0.001	<0.001	<0.001	<0.003	87	Silt to clear Slight odor
2	65.72	77.41	1.9	8	3/17/2015	52	452	<0.001	<0.001	<0.001	<0.003	77	Silt to clear Slight odor
2	65.84	77.41	1.9	8	6/16/2015	72	518	<0.001	<0.001	<0.001	<0.003	70	Silt to clear Slight odor
2	65.88	77.41	1.9	8	9/17/2015	72	546	<0.001	<0.001	<0.001	<0.003	63.3	Silt to clear Slight odor
2	65.57	77.41	1.9	8	12/1/2015	72	558	<0.001	<0.001	<0.001	<0.003	87	Silt to clear Slight odor
2	65.84	77.41	1.9	8	3/28/2016	68	556	<0.001	<0.001	<0.001	<0.003	76.8	Silt to clear Slight odor
2	65.96	77.41	1.8	8	6/23/2016	76	506	<0.001	<0.001	<0.001	<0.003	110	Silt to clear Slight odor
2	65.86	77.41	1.8	8	9/26/2016	68	544	<0.001	<0.001	<0.001	<0.003	95	Silt to clear Slight odor
2	65.6	77.41	1.9	8	12/5/2016	92	560	<0.001	<0.001	<0.001	<0.003	107	Silt to clear Slight odor
2	65.84	77.41	1.9	8	3/20/2017	68	540	<0.001	<0.001	<0.001	<0.003	72	Silt to clear Slight odor
2	66.18	77.41	1.8	8	6/22/2017	72	532	<0.001	<0.001	<0.001	<0.003	82	Silt to clear Slight odor
2	66.21	77.41	1.8	8	9/25/2017	72	714	<0.001	<0.001	<0.001	<0.003	92	Silt to clear Slight odor
2	66.28	77.41	1.8	8	12/21/2017	92	526	<0.001	<0.001	<0.001	<0.003	98	Silt to clear Slight odor
2	66.41	77.41	1.8	8	3/20/2018	64	404	<0.001	<0.001	<0.001	<0.003	94.7	Silt to clear Slight odor
2	66.55	77.41	1.7	8	6/26/2018	72	638	<0.001	<0.001	<0.001	<0.003	71.6	Silt to clear Slight odor
2	66.71	77.41	1.7	8	9/18/2018	64	520	<0.001	<0.001	<0.001	<0.003	86.2	Silt to clear Slight odor
2	66.74	77.41	1.7	8	12/20/2018	64	510	<0.001	<0.001	<0.001	<0.003	121	Silt to clear Slight odor
2	66.89	77.41	1.7	8	3/25/2019	76	543	<0.001	<0.001	<0.001	<0.003	94	Silt to clear Slight odor
2	67.02	77.41	1.7	8	6/24/2019	68	603	<0.001	<0.001	<0.001	<0.003	34	Silt to clear Slight odor
2	67.09	77.41	1.7	8	9/23/2019	68	496	<0.001	<0.001	<0.001	<0.003	103	Silt to clear Slight odor

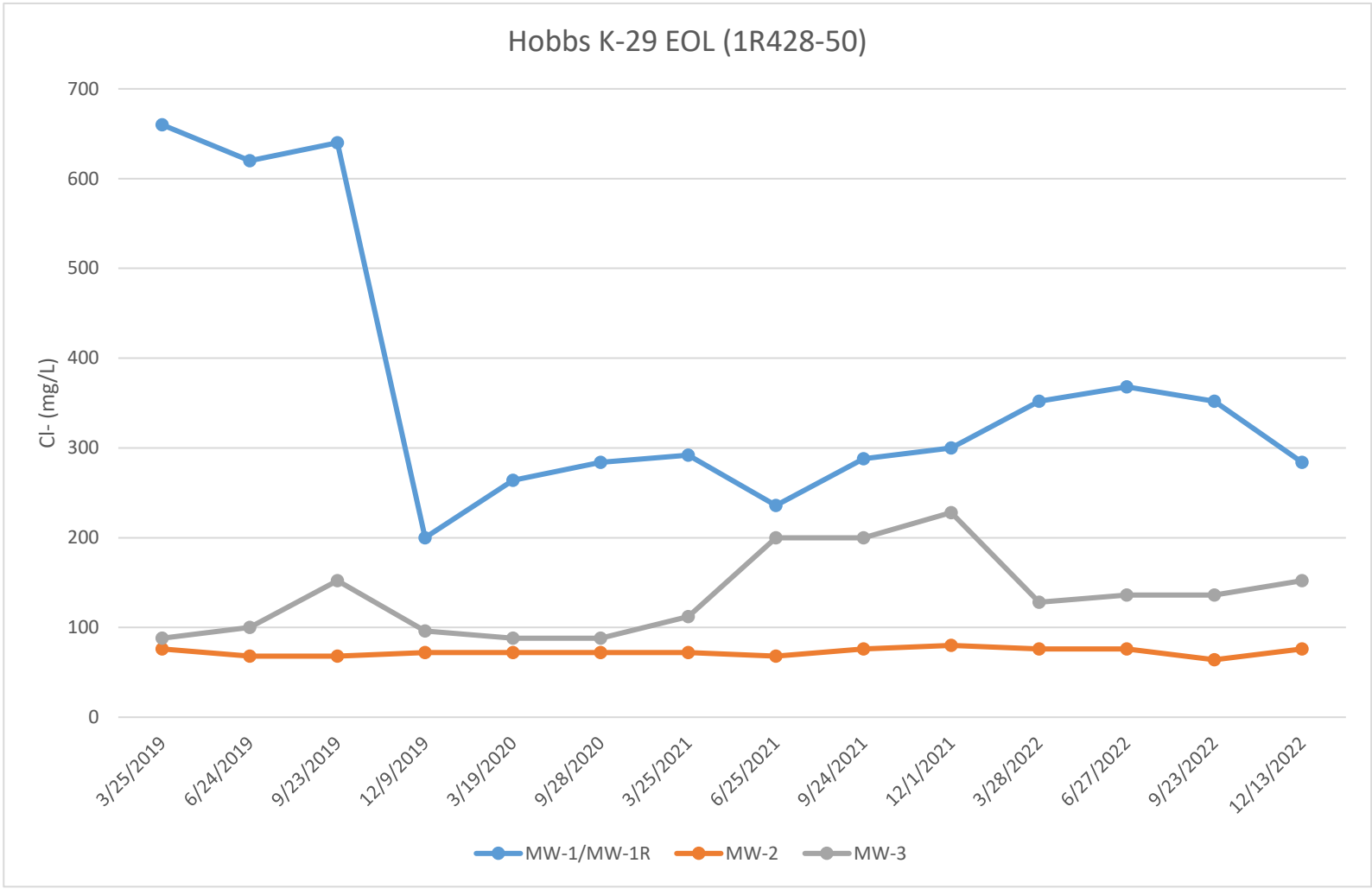
ROC - Hobbs K-29 EOL (1R428-50)
Unit Letter K, Section 29, T18S, R38E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
2	67.28	77.41	1.6	8	12/9/2019	72	561	<0.001	<0.001	<0.001	<0.003	85	Silt to clear Slight odor
2	67.45	77.41	1.6	8	3/19/2020	72	526	<0.001	<0.001	<0.001	<0.003	72	Silt to clear Slight odor
2	67.72	77.41	1.6	8	9/28/2020	72	460	XXX	XXX	XXX	XXX	79	Silt to clear Slight odor
2	68	77.41	1.5	8	3/25/2021	72	517	XXX	XXX	XXX	XXX	99.6	Silt to clear Slight odor
2	68.18	77.41	1.5	8	6/25/2021	68	539	XXX	XXX	XXX	XXX	91.6	Silt to clear Slight odor
2	68.18	77.41	1.5	8	9/24/2021	76	542	XXX	XXX	XXX	XXX	103	Silt to clear Slight odor
2	68.03	77.41	1.5	8	12/1/2021	80	572	XXX	XXX	XXX	XXX	91	Silt to clear Slight odor
2	68.41	77.41	1.4	8	3/28/2022	76	501	XXX	XXX	XXX	XXX	74.6	Silt to clear Slight odor
2	68.54	77.41	1.4	8	6/27/2022	76	538	XXX	XXX	XXX	XXX	87.1	Silt to clear Slight odor
2	68.69	77.41	1.4	8	9/23/2022	64	450	XXX	XXX	XXX	XXX	76	Silt to clear Slight odor
2	68.83	77.41	1.4	6	12/13/2022	76	526	XXX	XXX	XXX	XXX	80.6	Silt to clear Slight odor

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
3	64.23	110.22	29.9	120	12/1/2015	220	784	<0.001	<0.001	<0.001	<0.003	65	Silt to clear Slight odor
3	64.18	110.22	30	100	3/28/2016	296	960	<0.001	<0.001	<0.001	<0.003	65	Silt to clear Slight odor
3	64.6	110.22	30	100	6/23/2016	510	1,240	<0.001	<0.001	<0.001	<0.003	62	Silt to clear Slight odor
3	64.45	110.22	30	100	9/26/2016	540	1,600	<0.001	<0.001	<0.001	<0.003	67	Silt to clear Slight odor
3	64.18	110.22	30	100	12/5/2016	560	1,400	<0.001	<0.001	<0.001	<0.003	71	Silt to clear Slight odor
3	64.5	110.22	30	100	3/20/2017	570	1,520	<0.001	<0.001	<0.001	<0.003	96	Silt to clear Slight odor
3	64.83	110.22	30	100	6/22/2017	510	1,560	<0.001	<0.001	<0.001	<0.003	78	Silt to clear Slight odor
3	64.85	110.22	30	100	9/25/2017	540	1,800	<0.001	<0.001	<0.001	<0.003	71	Silt to clear Slight odor
3	64.88	110.22	30	100	12/21/2017	300	980	<0.001	<0.001	<0.001	<0.003	45	Silt to clear Slight odor
3	65.02	110.22	29.4	100	3/20/2018	164	662	<0.001	<0.001	<0.001	<0.003	77.2	Silt to clear Slight odor
3	65.11	110.22	29.3	100	6/26/2018	268	984	<0.001	<0.001	<0.001	<0.003	130	Silt to clear Slight odor
3	65.26	110.22	29.2	100	9/18/2018	236	584	<0.001	<0.001	<0.001	<0.003	91.1	Silt to clear Slight odor
3	65.28	110.22	29.2	100	12/20/2018	108	474	<0.001	<0.001	<0.001	<0.003	60.9	Silt to clear Slight odor
3	65.49	110.22	29	100	3/25/2019	88	614	<0.001	<0.001	<0.001	<0.003	88	Silt to clear Slight odor

ROC - Hobbs K-29 EOL (1R428-50)
Unit Letter K, Section 29, T18S, R38E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
3	65.63	110.22	29	100	6/24/2019	100	627	<0.001	<0.001	<0.001	<0.003	55	Silt to clear Slight odor
3	65.7	110.22	29	100	9/23/2019	152	634	<0.001	<0.001	<0.001	<0.003	92	Silt to clear Slight odor
3	65.88	110.22	29	100	12/9/2019	96	628	<0.001	<0.001	<0.001	<0.003	58	Silt to clear Slight odor
3	66.03	110.22	28.7	100	3/19/2020	88	616	<0.001	<0.001	<0.001	<0.003	88	Silt to clear Slight odor
3	66.31	110.22	28.5	100	9/28/2020	88	544	XXX	XXX	XXX	XXX	79.8	Silt to clear Slight odor
3	66.57	110.22	28	100	3/25/2021	112	698	XXX	XXX	XXX	XXX	99.2	Silt to clear Slight odor
3	66.62	110.22	28	100	6/25/2021	200	781	XXX	XXX	XXX	XXX	87.6	Silt to clear Slight odor
3	66.69	110.22	28	100	9/24/2021	200	760	XXX	XXX	XXX	XXX	88.2	Silt to clear Slight odor
3	66.55	110.22	28	100	12/1/2021	228	776	XXX	XXX	XXX	XXX	74.4	Silt to clear Slight odor
3	67.01	110.22	28	100	3/28/2022	128	620	XXX	XXX	XXX	XXX	64.4	Silt to clear Slight odor
3	67.08	110.22	28	100	6/27/2022	136	675	XXX	XXX	XXX	XXX	105	Silt to clear Slight odor
3	67.23	110.22	28	100	9/23/2022	136	678	XXX	XXX	XXX	XXX	69.1	Silt to clear Slight odor
3	67.42	110.22	28	100	12/13/2022	152	655	XXX	XXX	XXX	XXX	75.9	Silt to clear Slight odor


Hobbs K-29 EOL (1R428-50)
Cl- (mg/L)
700
600
500
400
300
200
100
0
3/25/2019
6/24/2019
9/23/2019
12/9/2019
3/19/2020
9/28/2020
3/25/2021
6/25/2021
9/24/2021
12/1/2021
3/28/2022
6/27/2022
9/23/2022
12/13/2022
MW-1/MW-1R
MW-2
MW-3

CARDINAL Laboratories

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

December 20, 2022

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: HOBBS K-29 BOOT

Enclosed are the results of analyses for samples received by the laboratory on 12/14/22 15:00.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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:	12/14/2022	Sampling Date:	12/13/2022
Reported:	12/20/2022	Sampling Type:	Water
Project Name:	HOBBS K-29 BOOT	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T18S-R38E-SEC29 K-LEA CTY., NM		

Sample ID: MONITOR WELL # 1R (H225905-01)

Chloride, SM4500Cl-B mg/L Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**284**	4.00	12/15/2022	ND	104	104	100	0.00	

Sulfate 375.4 mg/L Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**90.8**	25.0	12/19/2022	ND	20.7	103	20.0	5.36	

TDS 160.1 mg/L Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**880**	5.00	12/16/2022	ND	582	118	495	1.36	

Sample ID: MONITOR WELL # 2 (H225905-02)

Chloride, SM4500Cl-B mg/L Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**76.0**	4.00	12/15/2022	ND	104	104	100	0.00	

Sulfate 375.4 mg/L Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**80.6**	25.0	12/19/2022	ND	20.7	103	20.0	5.36	

TDS 160.1 mg/L Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**526**	5.00	12/16/2022	ND	582	118	495	1.36	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	12/14/2022	Sampling Date:	12/13/2022
Reported:	12/20/2022	Sampling Type:	Water
Project Name:	HOBBS K-29 BOOT	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T18S-R38E-SEC29 K-LEA CTY., NM		

Sample ID: MONITOR WELL # 3 (H225905-03)

Chloride, SM4500Cl-B mg/L Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**152**	4.00	12/15/2022	ND	104	104	100	0.00	

Sulfate 375.4 mg/L Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**75.9**	25.0	12/19/2022	ND	20.7	103	20.0	5.36	

TDS 160.1 mg/L Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**655**	5.00	12/16/2022	ND	582	118	495	1.36	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories *=Accredited Analyte

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: Hobbs K-29 Boot
Project Location: T18S-R38E-Sec29 K ~ Lea County - New Mexico	Sampler Signature: Rozanne Johnson (575)631-9310

H225905

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (4 40ml VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1-1Liter HDPE)	NONE	SAMPLING: DATE (2022)	TIME
1	Monitor Well #1R	G	1	X								1		12/13	13:20
2	Monitor Well #2	G	1	X								1		12/13	10:00
3	Monitor Well #3	G	1	X								1		12/13	16:25

ANALYSIS REQUEST

(Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005 / TX1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Sulfates	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours
																		X	X	X	
																		X	X	X	
																		X	X	X	

Relinquished by: Rozanne Johnson — Date: 12/14/2022 Time: 15:00

Received by: Date: Time: 1500

Relinquished by: Date: Time:

Received By: (Laboratory Staff) Date: 12-14-22 Time:

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

Sample Condition: Cool: Yes ☑ / No ☐ — Intact: Yes ☑ / No ☐

CHECKED BY: (Initials) YO

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

REMARKS:

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

CARDINAL Laboratories

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

October 03, 2022

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: HOBBS K-29 BOOT

Enclosed are the results of analyses for samples received by the laboratory on 09/28/22 13:25.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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:	09/28/2022	Sampling Date:	09/23/2022
Reported:	10/03/2022	Sampling Type:	Water
Project Name:	HOBBS K-29 BOOT	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T18S-R38E-SEC29 K-LEA CTY., NM		

Sample ID: MONITOR WELL # 1R (H224513-01)

Chloride, SM4500Cl-B mg/L Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**352**	4.00	09/29/2022	ND	104	104	100	0.00	

Sulfate 375.4 mg/L Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**63.6**	25.0	09/30/2022	ND	21.5	108	20.0	1.84	

TDS 160.1 mg/L Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**1060**	5.00	09/30/2022	ND	525	105	500	3.42	

Sample ID: MONITOR WELL # 2 (H224513-02)

Chloride, SM4500Cl-B mg/L Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**64.0**	4.00	09/29/2022	ND	104	104	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*	**76.0**	25.0	09/30/2022	ND	21.5	108	20.0	1.84	

TDS 160.1 mg/L Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**450**	5.00	09/30/2022	ND	525	105	500	3.42	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	09/28/2022	Sampling Date:	09/23/2022
Reported:	10/03/2022	Sampling Type:	Water
Project Name:	HOBBS K-29 BOOT	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T18S-R38E-SEC29 K-LEA CTY., NM		

Sample ID: MONITOR WELL # 3 (H224513-03)

Chloride, SM4500Cl-B mg/L Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**136**	4.00	09/29/2022	ND	104	104	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*	**69.1**	25.0	09/30/2022	ND	21.5	108	20.0	1.84	

TDS 160.1 mg/L Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**678**	5.00	09/30/2022	ND	525	105	500	3.42	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories *=Accredited Analyte

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: Hobbs K-29 Boot
Project Location: T18S-R38E-Sec29 K ~ Lea County - New Mexico	Sampler Signature: Rozanne Johnson (575)631-9310

H224513

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (4 40ml VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1-1Liter HDPE)	NONE	SAMPLING: DATE (2022)	TIME
1	Monitor Well #1R	G	1	X								1		9/23	12:40
2	Monitor Well #2	G	1	X								1		9/23	10:15
3	Monitor Well #3	G	1	X								1		9/23	15:30

ANALYSIS REQUEST

(Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005 / TX1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Sulfates	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours
																		X	X	X	
																		X	X	X	
																		X	X	X	

Relinquished by: Rozanne Johnson	Date: 9/28/22	Time: 13:25	Received by: [signature]
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff)

Date: 9-28-22 Time: 1325

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

REMARKS:

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

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

Sample Condition: Cool: Yes ✓ / No; Intact: Yes ✓ / No

CHECKED BY: (Initials) TO

CARDINAL Laboratories

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

July 06, 2022

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: HOBBS K-29 BOOT

Enclosed are the results of analyses for samples received by the laboratory on 06/30/22 15:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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:	06/30/2022	Sampling Date:	06/27/2022
Reported:	07/06/2022	Sampling Type:	Water
Project Name:	HOBBS K-29 BOOT	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	T18S-R38E-SEC29 K-LEA CTY., NM		

Sample ID: MONITOR WELL # 1R (H222814-01)

Chloride, SM4500Cl-B mg/L Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**368**	4.00	06/30/2022	ND	100	100	100	0.00	

Sulfate 375.4 mg/L Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**64.2**	25.0	07/06/2022	ND	20.4	102	20.0	3.74	

TDS 160.1 mg/L Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**1160**	5.00	07/01/2022	ND	561	112	500	0.558	

Sample ID: MONITOR WELL # 2 (H222814-02)

Chloride, SM4500Cl-B mg/L Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**76.0**	4.00	06/30/2022	ND	100	100	100	0.00	

Sulfate 375.4 mg/L Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**87.1**	25.0	07/06/2022	ND	20.4	102	20.0	3.74	

TDS 160.1 mg/L Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**538**	5.00	07/01/2022	ND	561	112	500	0.558	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	06/30/2022	Sampling Date:	06/27/2022
Reported:	07/06/2022	Sampling Type:	Water
Project Name:	HOBBS K-29 BOOT	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	T18S-R38E-SEC29 K-LEA CTY., NM		

Sample ID: MONITOR WELL # 3 (H222814-03)

Chloride, SM4500Cl-B mg/L **Analyzed By: GM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**136**	4.00	06/30/2022	ND	100	100	100	0.00	

Sulfate 375.4 mg/L **Analyzed By: GM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**105**	25.0	07/06/2022	ND	20.4	102	20.0	3.74	

TDS 160.1 mg/L **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**675**	5.00	07/01/2022	ND	561	112	500	0.558	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories *=Accredited Analyte

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 # H22514-1-3

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: Hobbs K-29 Boot
Project Location: T18S-R38E-Sec29 K ~ Lea County - New Mexico	Sampler Signature: Rozanne Johnson (575)631-9310

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (4 40ml VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1-1Liter HDPE)	NONE	SAMPLING: DATE (2022)	TIME
1	Monitor Well #1R	G	1	X								1		6/27	11:50
2	Monitor Well #2	G	1	X								1		6/27	9:05
3	Monitor Well #3	G	1	X								1		6/27	15:15

ANALYSIS REQUEST

(Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005 / TX1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Sulfates	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours
																		X	X	X	
																		X	X	X	
																		X	X	X	

Relinquished by: Rozanne Johnson	Date: 6/30/2022	Time: 15:00	Received by: [signature]
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff)

Date: 6.30.22 Time: 1500

Phone Results: [ ] Yes [ ] No

Fax Results: [ ] Yes [ ] No Additional Fax Number:

REMARKS:

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

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

Sample Condition: Cool: Yes [ ] No [ ] Intact: Yes [ ] No [ ]

CHECKED BY: (Initials)

CARDINAL Laboratories

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

April 06, 2022

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: HOBBS K-29 BOOT

Enclosed are the results of analyses for samples received by the laboratory on 03/31/22 16:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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:	03/31/2022	Sampling Date:	03/28/2022
Reported:	04/06/2022	Sampling Type:	Water
Project Name:	HOBBS K-29 BOOT	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T18S-R38E-SEC29 K-LEA CTY., NM		

Sample ID: MONITOR WELL # 1R (H221301-01)

Chloride, SM4500Cl-B mg/L **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**352**	4.00	04/01/2022	ND	104	104	100	0.00	

Sulfate 375.4 mg/L **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**54.6**	25.0	04/01/2022	ND	19.8	99.0	20.0	3.33	

TDS 160.1 mg/L **Analyzed By: GM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**889**	5.00	04/04/2022	ND	520	104	500	0.360	

Sample ID: MONITOR WELL # 2 (H221301-02)

Chloride, SM4500Cl-B mg/L **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**76.0**	4.00	04/01/2022	ND	104	104	100	0.00	

Sulfate 375.4 mg/L **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**74.6**	25.0	04/01/2022	ND	19.8	99.0	20.0	3.33	

TDS 160.1 mg/L **Analyzed By: GM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**501**	5.00	04/05/2022	ND	532	106	500	5.81	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	03/31/2022	Sampling Date:	03/28/2022
Reported:	04/06/2022	Sampling Type:	Water
Project Name:	HOBBS K-29 BOOT	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T18S-R38E-SEC29 K-LEA CTY., NM		

Sample ID: MONITOR WELL # 3 (H221301-03)

Chloride, SM4500Cl-B mg/L **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**128**	4.00	04/01/2022	ND	104	104	100	0.00	

Sulfate 375.4 mg/L **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**64.4**	25.0	04/01/2022	ND	19.8	99.0	20.0	3.33	

TDS 160.1 mg/L **Analyzed By: GM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**620**	5.00	04/04/2022	ND	532	106	500	5.81	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories *=Accredited Analyte

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

Project Manager: Katie Jones

Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240

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

Project #: Project Name: Hobbs K-29 Boot

Project Location: T18S-R38E-Sec29 K ~ Lea County - New Mexico

BILL TO Company: RICE Operating Company PO#

Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240

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

Sampler Signature: Rozanne Johnson (575)631-9310

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (4 40ml VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1-1Liter HDPE)	NONE	SAMPLING: DATE (2022)	TIME
H221301-1	Monitor Well #1R	G	1	X								1		3/28	13:00
2	Monitor Well #2	G	1	X								1		3/28	9:45
3	Monitor Well #3	G	1	X								1		3/28	16:50

ANALYSIS REQUEST
(Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005 / TX1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Sulfates	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours
																		X	X	X	
																		X	X	X	
																		X	X	X	

Relinquished by: Rozanne Johnson Date: 3/31/2022 Time: 16:10

Received by: Tamara Oldaker 3-31-22 1610

Relinquished by: Date: Time:

Received By: (Laboratory Staff) Date: Time:

Delivered By: (Circle One) Sampler - UPS - Bus - Other:

Sample Condition: Cool: Yes / No; Intact: Yes / No

CHECKED BY: (Initials)

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 202265

CONDITIONS

Operator: RICE OPERATING COMPANY 122 W Taylor Hobbs, NM 88240	OGRID: 19174
	Action Number: 202265
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the 2022 Annual GW Report for ROC, K-29 Boot: Content Satisfactory 1. Continue to sample MW-2 as needed 2. Submit 2023 Annual Report by April 1, 2024.	6/27/2023