L Peter Galusky, Jr PE

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April 1st, 2024

REVIEWED
By Mike Buchanan at 3:23 pm, Sep 13, 2024

Review of the 2023 Annual Report for the ROC--Vacuum SWD System: content satisfactory
1. Continue groundwater recovery and sampling events as prescribed.
2. Submit the 2024 annual report to OCD by April 1, 2025.

Nelson Velez
New Mexico Energy, Minerals, & Natural Resources
Oil Conservation Division, Environmental Bureau
1220 S. St. Francis Drive
Santa Fe, New Mexico 87504

Re: **2023 Annual Report**
Rice Operating Company – Vacuum SWD System
Vacuum F-33 Boot (1R425-37): UL/F, Sec. 33, T17S, R35E
NMOCD Application ID: 202296, Incident ID: nAPP2110337215

Sent via E-mail

Mr. Velez:

This letter summarizes progress made at this site over the past calendar year pursuant to the NMOCD's approval email letter of June 22nd, 2023 (Appendix, Exhibit 1). This site is operated by Rice Operating Company (ROC). The site is located approximately 2.5 miles east of Buckeye, New Mexico at UL/F, Sec. 33, T17S, R35E as shown on the Geographic Location Map (Appendix, Figure 1). A site schematic is given in Appendix, Figure 2. The depth to the water table averaged approximately 84 ft bgs in the up-gradient monitor well, MW-2; the direction of groundwater flow is toward the southeast (Appendix, Figure 3).

Background and Previous Work

In 2007, ROC initiated work on the former Vacuum F-33 boot junction box and a junction box disclosure report was submitted to NMOCD. An NMOCD approved Investigation and Characterization Plan (ICP) was implemented in 2009 to delineate residual soil chlorides and hydrocarbons and to evaluate groundwater quality beneath the site. The results of this work were reported to NMOCD in July 2013, along with a Corrective Action Plan (CAP), which proposed the installation of a 20-mil reinforced synthetic liner and an up-gradient groundwater monitor well. The CAP was approved by NMOCD on August 14th, 2013.

ROC completed the installation of the liner and restored the ground surface as specified in the CAP in early 2014. The results of this work were summarized and reported to NMOCD as an "Initial CAP Report and Soil Closure Request" on February 10th, 2014 and this was approved on March 28th, 2014. Following continued groundwater monitoring through 2014, ROC submitted a summary report "Proposed Groundwater Recover and Project Update" to NMOCD which proposed limited groundwater removal from the near-source monitor well (MW-1) to reduce groundwater

chloride mass. NMOCD approved this work on April 2nd, 2015. ROC subsequently began groundwater pumping in May 2015.

Groundwater Chlorides & BTEX

Results of groundwater sampling from March 2009 through December 2023 are given in the Appendix Figure 4, Table 1 (annual averages) and Table 2 (full dataset). Average annual groundwater chloride concentrations in the down-gradient monitor well (MW-1) dropped from 566 mg/l in 2022 to 522 mg/l in 2023. Average annual groundwater chloride concentrations in the up-gradient monitor well (MW-2) increased from 59 mg/l in 2022 to 73 mg/l in 2023. NMOCD granted approval to cease BTEX sampling in 2020 since these had not been detected in groundwater samples from the beginning of sampling in 2009 through the first quarter of 2020.

A total of approximately 14,577 bbls of high-chloride groundwater were pumped from the near-source monitor well (MW-1) from 2015 through 2023, resulting in the removal of an estimated 1,707 kg of chlorides. The removed groundwater was hauled to an off-site location and utilized for beneficial use.

ROC will continue groundwater recovery and quarterly monitoring well sampling in 2024.

ROC is the service provider (agent) for the Vacuum 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 Vacuum system is now abandoned. We thus submit this report for your review and consideration. Please call Rice Operating Company or me if you have any questions or need additional information.

Thank you.

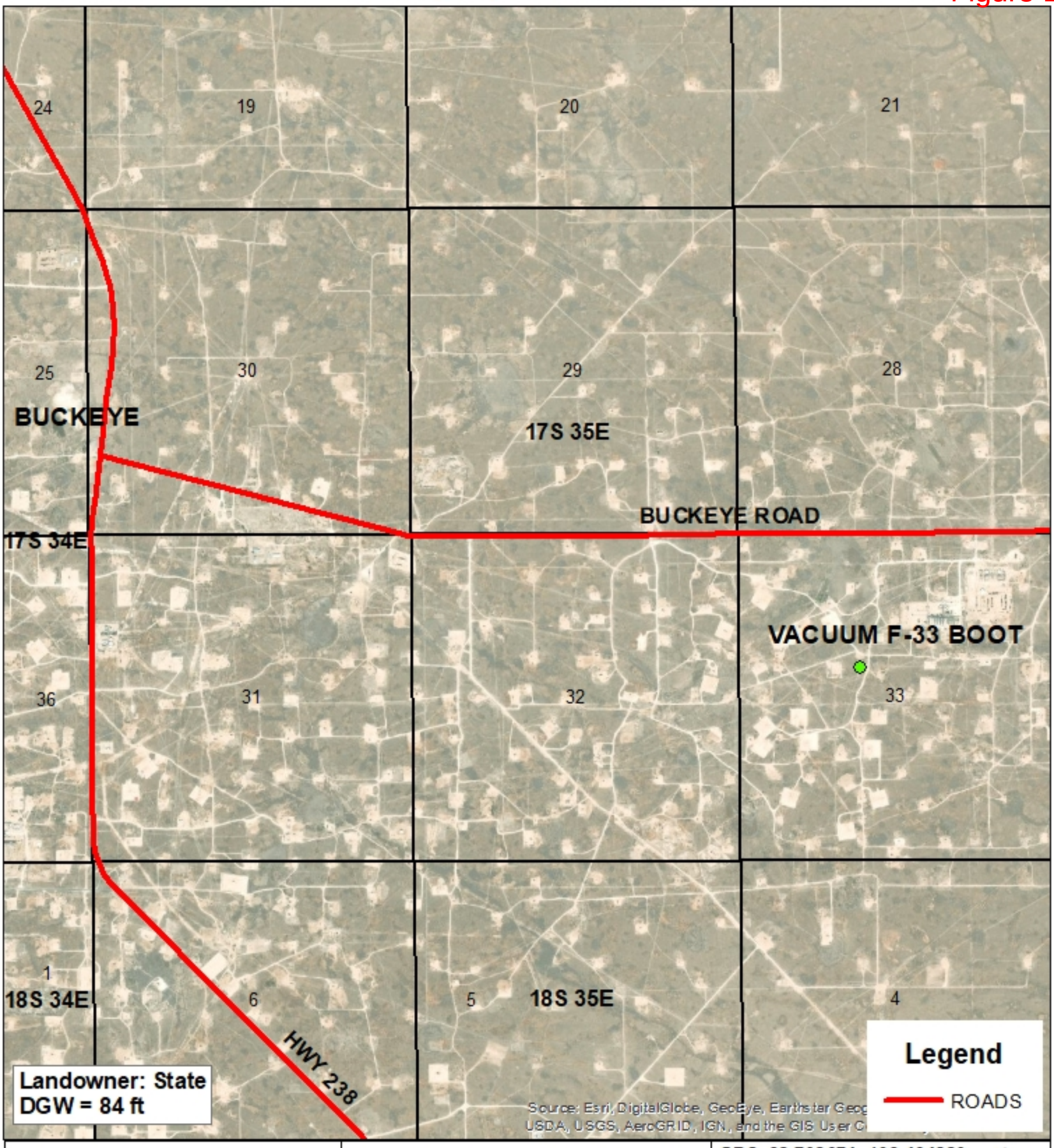
Sincerely,

L. Peter Galusky, Jr. P.E.
NM Prof. Engineer No. 22561

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

Geographic Location

Figure 1



RICE OPERATING COMPANY
ROC
SINCE 1955

VACUUM F-33 BOOT

1R425-37

UL/F SECTION 33
T-17-S R-35-E
LEA COUNTY, NM

GPS: 32.792674 -103.464829
NAD 83 STATE PLANE PROJ
NM EAST ZONE

N
W E
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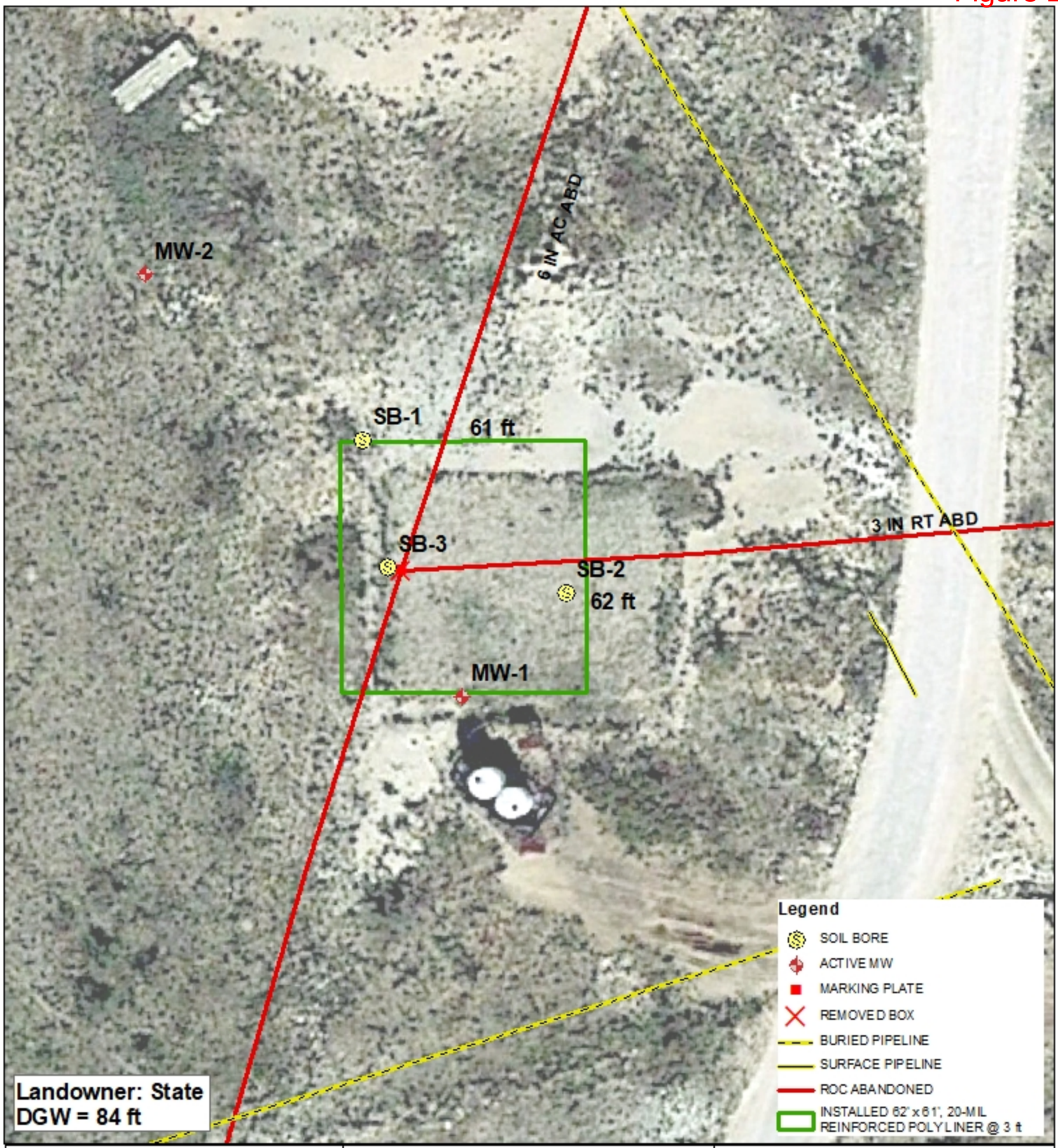
0 0.25 0.5
Miles

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

Site Map

Figure 2



RICE OPERATING COMPANY
ROC
SINCE 1955

VACUUM F-33 BOOT

1R425-37

UL F SECTION 33
T-17-S R-35-E
LEA COUNTY, NM

GPS: 32.792674 -103.464829
NAD 83 STATE PLANE PROJ
NM EAST ZONE

0 25 50
Feet

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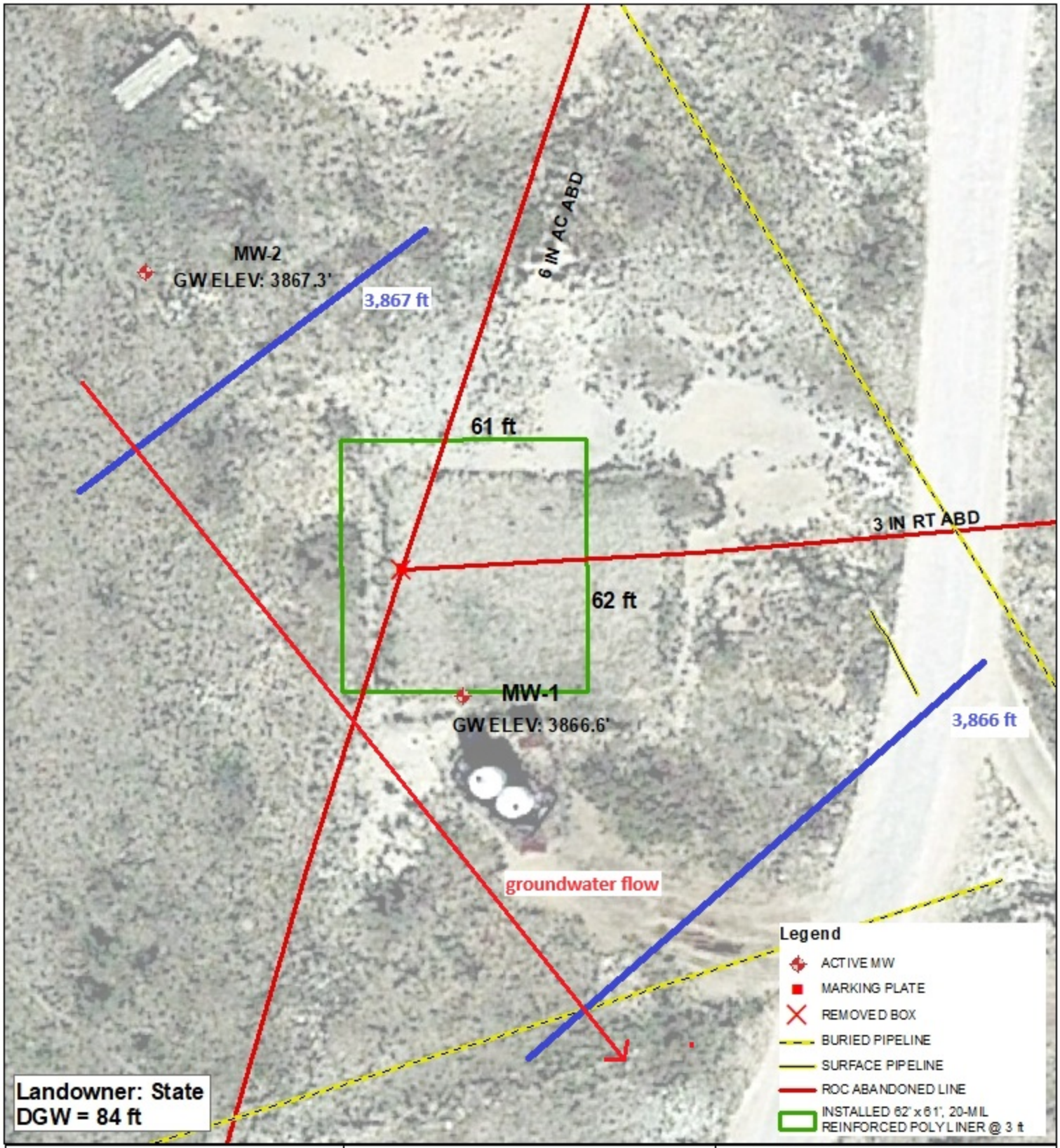
Drawing date: 2/4/20
Drafted by: T. Grieco

Groundwater Elevation 3/5/15

Figure 3



RICE OPERATING COMPANY
ROC
SINCE 1955

VACUUM F-33 BOOT

1R425-37

UL F SECTION 33
T-17-S R-35-E
LEA COUNTY, NM

GPS: 32.792674 -103.464829
NAD 83 STATE PLANE PROJ
NM EAST ZONE

0 25 50
Feet

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W E
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Drawing date: 3/11/24
Drafted by: T. Grieco

Figure 4

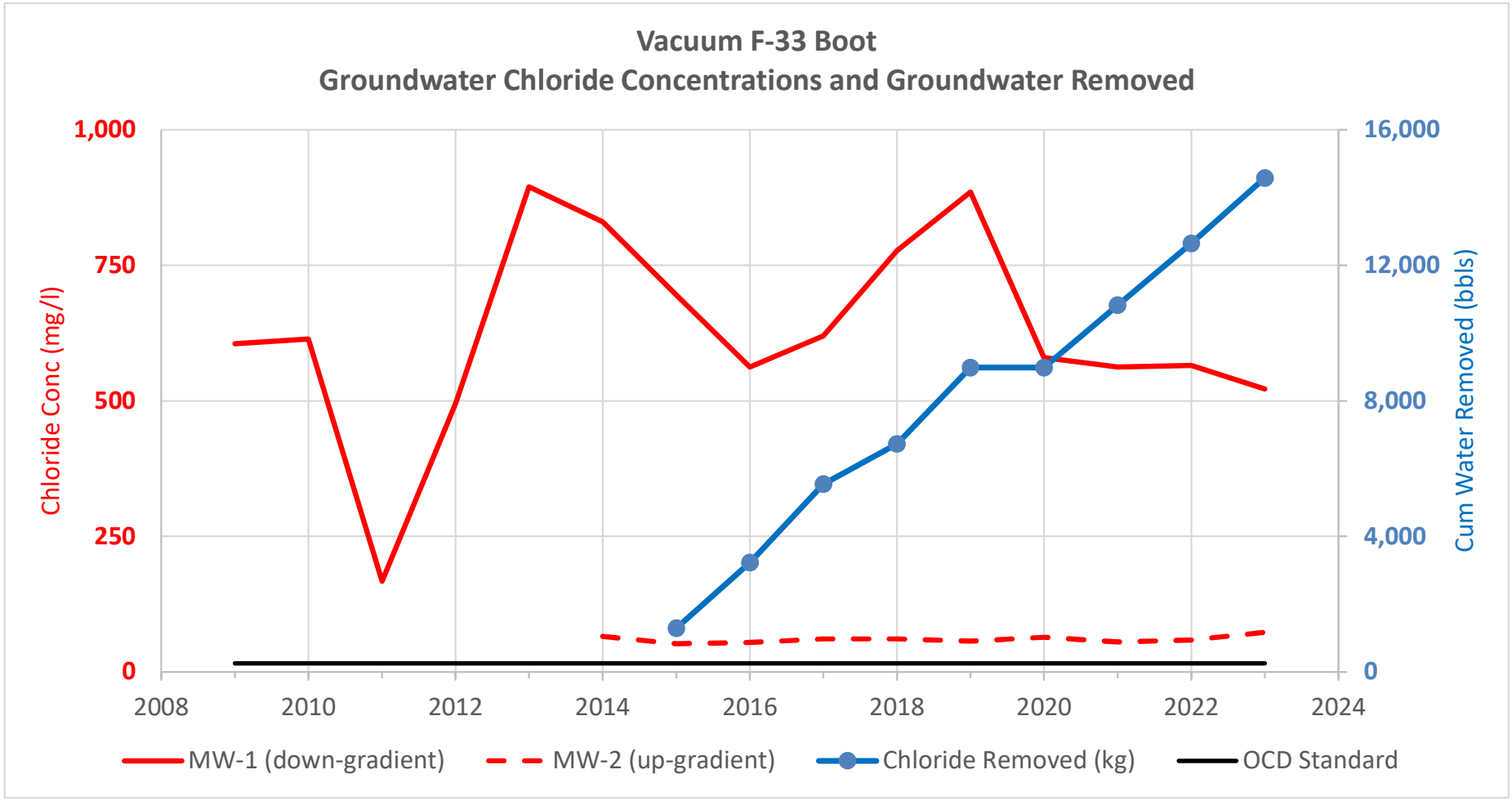
Vacuum F-33 Boot
Groundwater Chloride Concentrations and Groundwater Removed
Chloride Conc (mg/l)
Cum Water Removed (bbls)
1,000
750
500
250
0
16,000
12,000
8,000
4,000
0
2008
2010
2012
2014
2016
2018
2020
2022
2024
MW-1 (down-gradient)
MW-2 (up-gradient)
Chloride Removed (kg)
OCD Standard

Table 1

Rice Operating Company
Vacuum F-33 Boot
Groundwater Chlorides - Annual Average Concentrations (mg/l)

Year	MW-1 (downgradient) mg/l	MW-2 (upgradient) mg/l	NMOCD Standard mg/l	Groundwater Removed (bbls)	Chloride Removed (kg)
2009	605		250		
2010	614		250		
2011	167		250		
2012	495		250		
2013	895		250		
2014	830	65	250		
2015	695	52	250	1,285	113
2016	563	54	250	3,225	299
2017	620	61	250	5,545	666
2018	778	61	250	6,725	884
2019	885	57	250	8,985	1,172
2020	580	64	250	8,985	1,172
2021	563	55	250	10,821	1,361
2022	566	59	250	12,646	1,537
2023	522	73	250	14,577	1,707

Table 2

ROC - Vacuum F-33 boot (1R425-37)
Unit Letter F, Section 33, T17S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
1	80.63	126.5	29.8	300	3/2/2009	432		1,070	<0.001	<0.001	<0.001	<0.003	56	Clear No odor
1	80.73	126.5	29.8	150	4/28/2009	600		1,330	<0.001	<0.001	<0.001	<0.003	38.3	Clear No odor
1	80.85	126.5	29.7	150	8/5/2009	308		845	<0.001	<0.001	<0.001	<0.003	25.2	Clear No odor
1	80.98	126.5	29.6	150	11/23/2009	1,080	605	2,340	<0.001	<0.001	<0.001	<0.003	34.2	Clear No odor
1	81.11	126.5	29.5	150	2/9/2010	1,160		2,240	<0.001	<0.001	<0.001	<0.003	54.6	Clear No odor
1	81.29	126.5	29.4	150	5/28/2010	510		1,190	<0.001	<0.001	<0.001	<0.003	29	Clear No odor
1	81.33	126.5	29.4	150	7/27/2010	710		1,500	<0.001	<0.001	<0.001	<0.003	40.8	Clear No odor
1	81.4	126.5	29.3	250	10/27/2010	76	614	454	<0.001	<0.001	<0.001	<0.003	17.6	Clear No odor
1	81.53	126.5	29.2	250	2/20/2011	68		365	<0.001	<0.001	<0.001	<0.003	17.2	Clear No odor
1	81.66	126.5	29.2	400	6/3/2011	240		707	<0.001	<0.001	<0.001	<0.003	45.9	Clear No odor
1	81.74	126.5	29.1	400	9/1/2011	308		825	<0.001	<0.001	<0.001	<0.003	56.6	Clear No odor
1	81.78	126.5	29.1	400	12/12/2011	52	167	395	<0.001	<0.001	<0.001	<0.003	28.6	Clear No odor
1	81.9	126.5	29	500	2/23/2012	188		605	<0.001	<0.001	<0.001	<0.003	45.2	Clear No odor
1	81.82	126.5	29	500	5/30/2012	730		1,740	<0.001	<0.001	<0.001	<0.003	84.9	Clear No odor
1	81.85	126.5	29	500	8/23/2012	580		1,280	<0.001	<0.001	<0.001	<0.003	81.2	Clear No odor
1	81.89	126.5	29	500	11/19/2012	480	495	1,170	<0.001	<0.001	<0.001	<0.003	50.4	Clear No odor
1	81.96	126.5	29	500	2/13/2013	870		1,680	<0.001	<0.001	<0.001	<0.003	59.7	Clear No odor
1	82.03	126.5	28.9	500	5/29/2013	860		1,940	<0.001	<0.001	<0.001	<0.003	79.3	Clear No odor
1	82.1	126.5	28.9	500	9/6/2013	840		2,000	<0.001	<0.001	<0.001	<0.003	227	Clear No odor
1	82.18	126.5	28.8	500	11/14/2013	1,010	895	2,080	<0.001	<0.001	<0.001	<0.003	61.5	Clear No odor
1	82.28	126.5	28.7	500	3/7/2014	550		1,390	<0.001	<0.001	<0.001	<0.003	63.4	Clear No odor
1	82.29	126.5	28.7	500	6/4/2014	980		2,170	<0.001	<0.001	<0.001	<0.003	53.8	Clear No odor
1	82.46	126.5	28.6	500	8/20/2014	910		2,220	<0.001	<0.001	<0.001	<0.003	50.9	Clear No odor
1	82.16	126.5	28.8	250	12/5/2014	880	830	2,050	<0.001	<0.001	<0.001	<0.003	53.6	Clear No odor
1	82.33	126.5	28.7	250	3/5/2015	940		2,010	<0.001	<0.001	<0.001	<0.003	50.3	Clear No odor
1	XXX	126.5	XXX	Running	6/4/2015	540		1,360	<0.001	<0.001	<0.001	<0.003	55.5	Clear No odor
1	XXX	126.5	XXX	Running	8/21/2015	670		1,480	<0.001	<0.001	<0.001	<0.003	51	Clear No odor
1	XXX	126.5	0	200	11/13/2015	630	695	1,500	<0.001	<0.001	<0.001	<0.003	71.4	Clear No odor
1	XXX	126.5	XXX	200	3/14/2016	590		1,370	<0.001	<0.001	<0.001	<0.003	65.3	Clear No odor

Table 2

ROC - Vacuum F-33 boot (1R425-37)
Unit Letter F, Section 33, T17S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
1	XXX	126.5	XXX	200	5/25/2016	620		1,730	<0.001	<0.001	<0.001	<0.003	68.1	Clear No odor
1	XXX	126.5	XXX	Running	9/13/2016	460		1,140	<0.001	<0.001	<0.001	<0.003	71	Clear No odor
1	XXX	126.5	XXX	200	11/17/2016	580	563	1,370	<0.001	<0.001	<0.001	<0.003	63	Clear No odor
1	XXX	126.5	XXX	200	3/2/2017	380		1,230	<0.001	<0.001	<0.001	<0.003	143	Clear No odor
1	XXX	126.5	XXX	Running	6/1/2017	440		1,180	<0.001	<0.001	<0.001	<0.003	68	Clear No odor
1	XXX	126.5	XXX	Running	9/11/2017	820		2,110	<0.001	<0.001	<0.001	<0.003	97	Clear No odor
1	XXX	126.5	XXX	100	12/1/2017	840	620	1,740	<0.001	<0.001	<0.001	<0.003	81	Clear No odor
1	XXX	126.5	XXX	200	3/5/2018	870		1,870	<0.001	<0.001	<0.001	<0.003	96	Clear No odor
1	XXX	126.5	XXX	200	6/4/2018	480		1,200	<0.001	<0.001	<0.001	<0.003	69.4	Clear No odor
1	XXX	126.5	XXX	200	9/10/2018	1,180		2,310	<0.001	<0.001	<0.001	<0.003	82.7	Clear No odor
1	XXX	126.5	XXX	200	11/16/2018	580	778	1,120	<0.001	<0.001	<0.001	<0.003	57.2	Clear No odor
1	XXX	126.5	XXX	100	3/11/2019	770		1,610	<0.001	<0.001	<0.001	<0.003	57	Clear No odor
1	XXX	126.5	XXX	Running	5/31/2019	990		1,940	<0.001	<0.001	<0.001	<0.003	66	Clear No odor
1	XXX	126.5	XXX	Running	8/30/2019	720		1,740	<0.001	<0.001	<0.001	<0.003	66	Clear No odor
1	XXX	126.5	XXX	100	11/21/2019	1,060	885	1,900	<0.001	<0.001	<0.001	<0.003	66	Clear No odor
1	XXX	126.5	XXX	Running	3/9/2020	500		1,160	<0.001	<0.001	<0.001	<0.003	52.7	Clear No odor
1	XXX	126.5	XXX	Running	9/14/2020	660	580	1,770	XXX	XXX	XXX	XXX	51.1	Clear No odor
1	XXX	126.5	XXX	100	3/12/2021	500		1,170	XXX	XXX	XXX	XXX	43.9	Clear No odor
1	XXX	126.5	XXX	Running	6/14/2021	700		1,630	XXX	XXX	XXX	XXX	57.1	Clear No odor
1	XXX	126.5	XXX	Running	9/9/2021	550		1,300	XXX	XXX	XXX	XXX	75.4	Clear No odor
1	XXX	126.5	XXX	100	11/11/2021	500	563	1,160	XXX	XXX	XXX	XXX	73.7	Clear No odor
1	XXX	126.5	XXX	100	3/3/2022	352		1,220	XXX	XXX	XXX	XXX	62.5	Clear No odor
1	XXX	126.5	XXX	Running	6/14/2022	750		1,590	XXX	XXX	XXX	XXX	64.5	Clear No odor
1	XXX	126.5	XXX	Running	9/8/2022	550		1,220	XXX	XXX	XXX	XXX	63.6	Clear No odor
1	XXX	126.5	XXX	100	12/2/2022	610	566	1,360	XXX	XXX	XXX	XXX	48.7	Clear No odor
1	XXX	126.5	XXX	100	3/20/2023	670		1,340	XXX	XXX	XXX	XXX	67	Clear No odor
1	XXX	126.5	XXX	Running	6/8/2023	530		1,430	XXX	XXX	XXX	XXX	63.8	Clear No odor

Table 2

ROC - Vacuum F-33 boot (1R425-37)
Unit Letter F, Section 33, T17S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
1	XXX	126.5	XXX	Running	8/18/2023	600		1,410	XXX	XXX	XXX	XXX	65.7	Clear No odor
1	XXX	126.5	XXX	Running	10/11/2023	288	522	794	XXX	XXX	XXX	XXX	72	Clear No odor

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
2	81.99	95.05	2.1	10	6/4/2014	64		378	<0.001	<0.001	<0.001	<0.003	39.6	Clear No odor
2	82.13	95.05	2.1	10	8/20/2014	64		400	<0.001	<0.001	<0.001	<0.003	37.7	Clear No odor
2	81.74	95.05	2.1	10	12/5/2014	68	65	370	<0.001	<0.001	<0.001	<0.003	30.7	Clear No odor
2	81.93	95.05	2.1	10	3/5/2015	36		400	<0.001	<0.001	<0.001	<0.003	59.8	Clear No odor
2	82.14	95.05	2.1	10	6/4/2015	64		422	<0.001	<0.001	<0.001	<0.003	31.3	Clear No odor
2	82.29	95.05	2	10	8/21/2015	40		398	<0.001	<0.001	<0.001	<0.003	45.1	Clear No odor
2	82.28	95.05	2.04	10	11/13/2015	68	52	440	<0.001	<0.001	<0.001	<0.003	34.6	Clear No odor
2	82.36	95.05	2	10	3/14/2016	68		436	<0.001	<0.001	<0.001	<0.003	45.7	Clear No odor
2	82.37	95.05	2	10	5/25/2016	32		406	<0.001	<0.001	<0.001	<0.003	58.8	Clear No odor
2	82.4	95.05	2	10	9/13/2016	56		402	<0.001	<0.001	<0.001	<0.003	77	Clear No odor
2	82.46	95.05	2	10	11/17/2016	60	54	202	<0.001	<0.001	<0.001	<0.003	64	Clear No odor
2	82.62	95.05	2	10	3/2/2017	60		446	<0.001	<0.001	<0.001	<0.003	76	Clear No odor
2	82.71	95.05	2	10	6/1/2017	84		486	<0.001	<0.001	<0.001	<0.003	57	Clear No odor
2	82.87	95.05	1.9	10	9/11/2017	68		424	<0.001	<0.001	<0.001	<0.003	80	Clear No odor
2	82.83	95.05	2	10	12/1/2017	32	61	396	<0.001	<0.001	<0.001	<0.003	59	Clear No odor
2	82.94	95.05	1.9	10	3/5/2018	56		424	<0.001	<0.001	<0.001	<0.003	67.2	Clear No odor
2	82.96	95.05	1.9	10	6/4/2018	64		448	<0.001	<0.001	<0.001	<0.003	72.4	Clear No odor
2	83.1	95.05	1.9	8	9/10/2018	60		302	<0.001	<0.001	<0.001	<0.003	69.2	Clear No odor
2	83.35	95.05	1.9	10	11/16/2018	64	61	452	<0.001	<0.001	<0.001	<0.003	66.6	Clear No odor
2	83.5	95.05	1.8	10	3/11/2019	60		368	<0.001	<0.001	<0.001	<0.003	66	Clear No odor
2	83.57	95.05	1.8	10	5/31/2019	56		413	<0.001	<0.001	<0.001	<0.003	62	Clear No odor
2	83.62	95.05	1.8	10	8/30/2019	56		422	<0.001	<0.001	<0.001	<0.003	56	Clear No odor

Table 2

ROC - Vacuum F-33 boot (1R425-37)
Unit Letter F, Section 33, T17S, R35E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	ann. avg Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
2	83.66	95.05	1.8	10	11/21/2019	56	57	241	<0.001	<0.001	<0.001	<0.003	60	Clear No odor
2	83.68	95.05	1.8	10	3/9/2020	60		424	<0.001	<0.001	<0.001	<0.003	61.9	Clear No odor
2	83.8	95.05	1.8	10	9/14/2020	68	64	353	XXX	XXX	XXX	XXX	55.1	Clear No odor
2	84.29	95.05	1.7	10	3/12/2021	52		193	XXX	XXX	XXX	XXX	56.3	Clear No odor
2	84.33	95.05	1.7	10	6/14/2021	60		430	XXX	XXX	XXX	XXX	56.9	Clear No odor
2	84.37	95.05	1.7	10	9/9/2021	56		403	XXX	XXX	XXX	XXX	67.6	Clear No odor
2	84.4	95.05	1.7	10	11/11/2021	52	55	419	XXX	XXX	XXX	XXX	71.3	Clear No odor
2	84.26	95.05	1.7	10	3/3/2022	56		390	XXX	XXX	XXX	XXX	78.4	Clear No odor
2	84.78	95.05	1.6	10	6/14/2022	60		399	XXX	XXX	XXX	XXX	79.4	Clear No odor
2	84.87	95.05	1.6	10	9/8/2022	60		417	XXX	XXX	XXX	XXX	64.5	Clear No odor
2	84.98	95.05	1.6	10	12/2/2022	60	59	412	XXX	XXX	XXX	XXX	56.2	Clear No odor
2	84.94	95.05	1.6	6	3/20/2023	60		391	XXX	XXX	XXX	XXX	60.6	Clear No odor
2	85.13	95.05	1.6	6	6/8/2023	72		446	XXX	XXX	XXX	XXX	73.4	Clear No odor
2	85.22	95.05	1.6	6	8/18/2023	96		490	XXX	XXX	XXX	XXX	64.8	Clear No odor
2	85.38	95.05	1.5	6	10/11/2023	64	73	335	XXX	XXX	XXX	XXX	72.8	Clear No odor

Lab Reports

CARDINAL Laboratories

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

March 28, 2023

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM F-33 BOOT

Enclosed are the results of analyses for samples received by the laboratory on 03/20/23 16:00.

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

Lab Reports

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:	03/20/2023	Sampling Date:	03/20/2023
Reported:	03/28/2023	Sampling Type:	Water
Project Name:	VACUUM F-33 BOOT	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T17S-R35E-SEC33 F - LEA CTY, NM		

Sample ID: MONITOR WELL #1 (H231256-01)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**670**	4.00	03/21/2023	ND	100	100	100	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**67.0**	10.0	03/21/2023	ND	23.0	115	20.0	3.59	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**1340**	5.00	03/27/2023	ND	833	83.3	1000	9.95	

Sample ID: MONITOR WELL #2 (H231256-02)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**60.0**	4.00	03/21/2023	ND	100	100	100	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**60.6**	10.0	03/21/2023	ND	23.0	115	20.0	3.59	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**391**	5.00	03/27/2023	ND	833	83.3	1000	9.95	

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: Vacuum F-33 Boot
Project Location: T17S-R35E-Sec33 F ~ Lea County New Mexico	Sampler Signature: Rozanne Johnson (575)631-9310

H23125[illegible]

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 (2023)	TIME
1	Monitor Well #1	G	1	X								1		3/20	13:00
2	Monitor Well #2	G	1	X								1		3/20	9:15

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
1																			X	X	X	
2																			X	X	X	

Relinquished by: Rozanne Johnson	Date: 3/20/2023	Time: 14:40	Received by:	Date: 3/20/2023	Time: 14:41
Relinquished by: James Johns	Date: 3/20/2023	Time:	Received By: (Laboratory Staff)	Date:	Time: 1600

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

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

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

CHECKED BY: (Initials) V.O.

REMARKS:

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

CARDINAL Laboratories

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

June 15, 2023

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM F-33 BOOT

Enclosed are the results of analyses for samples received by the laboratory on 06/08/23 16:32.

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

Lab Reports

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:	06/08/2023	Sampling Date:	06/08/2023
Reported:	06/15/2023	Sampling Type:	Water
Project Name:	VACUUM F-33 BOOT	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	T17S-R35E-SEC33 F - LEA CTY, NM		

Sample ID: MONITOR WELL #1 (H232954-01)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**530**	4.00	06/09/2023	ND	108	108	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*	**63.8**	10.0	06/12/2023	ND	20.0	99.8	20.0	2.28	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**1430**	5.00	06/13/2023	ND	835	83.5	1000	1.52	

Sample ID: MONITOR WELL #2 (H232954-02)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**72.0**	4.00	06/09/2023	ND	108	108	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*	**73.4**	10.0	06/12/2023	ND	20.0	99.8	20.0	2.28	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**446**	5.00	06/13/2023	ND	835	83.5	1000	1.52	

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 # H23954

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: Vacuum F-33 Boot	
Project Location: T17S-R35E-Sec33 F ~ 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 (2023)	TIME
1	Monitor Well #1	G	1	X								1		6/8	12:40
2	Monitor Well #2	G	1	X								1		6/8	12:20

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	

Relinquished by: Rozanne Johnson Date: 6/8/2023 Time: 16:35

Relinquished by: Date: Time:

Received by: SRodriguez 6/8/23 1632

Received By: (Laboratory Staff) Date: Time:

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 / Intact: Yes

CHECKED BY: (Initials) SR

Lab Reports

CARDINAL Laboratories

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

August 28, 2023

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM F-33 BOOT

Enclosed are the results of analyses for samples received by the laboratory on 08/21/23 9:35.

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

Lab Reports

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:	08/21/2023	Sampling Date:	08/18/2023
Reported:	08/28/2023	Sampling Type:	Water
Project Name:	VACUUM F-33 BOOT	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	T17S-R35E-SEC33 F - LEA CTY, NM		

Sample ID: MONITOR WELL #1 (H234522-01)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**600**	4.00	08/21/2023	ND	100	100	100	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**65.7**	10.0	08/23/2023	ND	19.1	95.6	20.0	7.01	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**1410**	5.00	08/25/2023	ND	247	82.3	300	2.41	

Sample ID: MONITOR WELL #2 (H234522-02)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**96.0**	4.00	08/21/2023	ND	100	100	100	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**64.8**	10.0	08/23/2023	ND	19.1	95.6	20.0	7.01	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**490**	5.00	08/25/2023	ND	247	82.3	300	2.41	

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 # H234522

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: Vacuum F-33 Boot
Project Location: T17S-R35E-Sec33 F ~ 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 (2023)	TIME
1	Monitor Well #1	G	1	X								1		8/18	10:05
2	Monitor Well #2	G	1	X								1		8/18	9:40

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	

Relinquished by: Rozanne Johnson	Date: 8/21/2023	Time: 7:10	Received by:	Date: 8/21/2023 Time: 7:11
Relinquished by:	Date: 8/21/2023	Time:	Received By: (Laboratory Staff)	Date: Time: 8.21.23 0935

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

CARDINAL Laboratories

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

October 20, 2023

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: VACUUM F-33 BOOT

Enclosed are the results of analyses for samples received by the laboratory on 10/16/23 15:12.

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:	10/16/2023	Sampling Date:	10/11/2023
Reported:	10/20/2023	Sampling Type:	Water
Project Name:	VACUUM F-33 BOOT	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T17S-R35E-SEC33 F - LEA CTY, NM		

Sample ID: MONITOR WELL #1 (H235628-01)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**288**	4.00	10/17/2023	ND	112	112	100	11.3	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**72.0**	10.0	10/17/2023	ND	17.4	86.8	20.0	1.74	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**794**	5.00	10/19/2023	ND	490	98.0	500	1.48	

Sample ID: MONITOR WELL #2 (H235628-02)

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	10/17/2023	ND	112	112	100	11.3	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**72.8**	10.0	10/17/2023	ND	17.4	86.8	20.0	1.74	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**335**	5.00	10/19/2023	ND	490	98.0	500	1.48	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Lab Reports

CARDINAL Laboratories

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

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

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: Vacuum F-33 Boot
Project Location: T17S-R35E-Sec33 F ~ Lea County New Mexico	Sampler Signature: Rozanne Johnson (575)631-9310

H235628

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 (2023)	TIME
1	Monitor Well #1	G	1	X								1		10/11	13:30
2	Monitor Well #2	G	1	X								1		10/11	13:00

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	

Relinquished by: Rozanne Johnson Date: 10/16/2023 Time: 15:10

Received by: Tamara Oldaker Date: 10-16-23 Time: 1512

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) JD

Phone Results: Yes / No

Fax Results: Yes / No Additional Fax Number:

REMARKS:

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

Exhibit 1

From: OCDOnline@state.nm.us
To: Katie Jones
Subject: The Oil Conservation Division (OCD) has approved the application, Application ID: 202296
Date: Thursday, June 22, 2023 3:35:34 PM

To whom it may concern (c/o Katie Davis for RICE OPERATING COMPANY),

The OCD has approved the submitted *Ground Water Abatement* (GROUND WATER ABATEMENT), for incident ID (n#) nAPP2110337215,
with the following conditions:

- **Review of the 2022 Annual Groundwater Report for RICE Vaccum F-33 Boot: Content Satisfactory 1. Continue groundwater recovery and groundwater monitoring on a quarterly basis. 2. Submit the 2023 Annual Groundwater Report by April 1, 2024.**

The signed GROUND WATER ABATEMENT can be found in the OCD Online: Imaging under the incident ID (n#).

If you have any questions regarding this application, please contact me.

Thank you,
Michael Buchanan
Environmental Specialist
505-476-3441
Michael.Buchanan@emnrd.nm.gov

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
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 327879

CONDITIONS

Operator:	OGRID:
RICE OPERATING COMPANY 122 W Taylor Hobbs, NM 88240	19174
	Action Number: 327879
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the 2023 Annual Report for the ROC--Vacuum SWD System: content satisfactory 1. Continue groundwater recovery and sampling events as prescribed. 2. Submit the 2024 annual report to OCD by April 1, 2025.	9/13/2024