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

April 1, 2024

REVIEWED
By Mike Buchanan at 9:21 am, Sep 06, 2024

Review of the 2023 Annual Groundwater Report for the Hobbs SWD System F-29: content is satisfactory
1. If MW-2 and MW-3 continue to remain dry, a contingency plan may be an option for the 2 wells. For example, purging the 3 casing volumes one day and returning within 24 hours to collect a sample OR drill well deeper or replace well, use a Hydrasleeve sampling method which doesn't involve purging water, etc. RICE will need to propose an option for wells continuing to convey insufficient groundwater volume.
2. Continue determinig DTW for all wells not P&Ad.
3. Continue evaluation for additional groundwater removal and propose in recommendation section of next annual report.
4. Continue to conduct sampling on a semi-annual schedule.
5. Submit the 2024 annual report to OCD by April 1, 2025.

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

RE: **2023 Annual Groundwater Report**
Rice Operating Company – Hobbs SWD System
Hobbs F-29 SWD (AP-64): UL/F, Sec. 29, T18S, R38E
NMOCD Incident ID: nAPP2110352318

Mr. Velez:

ROC is the service provider (agent) for the Hobbs SWD System and h
portion of the pipeline, well, or facility. The system is owned by a con rs,
System Parties, who provide all operating capital on a percentage own e
Hobbs system is now abandoned.

Background and Previous Work

The site is located in Hobbs, New Mexico at UL/F, Sec. 29, T18S, R3
Geographic Location Map. Groundwater sampling at the site indicated
groundwater is located at approximately 65 feet below ground surface

On July 6th, 2012, groundwater recovery began from RW-1. Duri stem
removed over 13,597 bbls, which equated to over 545 kg of chloride. T ping
program was to determine if groundwater may be restored within a sho ssist
in the evaluation of groundwater restoration methods.

Depth to groundwater in MW-2 and MW-3 has dropped from a depth c 51.2
ft in 2001 to currently no groundwater at the total depth of the wel 5 ft,
respectively. Therefore, samples could not be collected during either will
continue to gauge the wells for groundwater during 2024. Chlorid ined
consistent in 2023 with a concentration of 510 mg/L in MW-4R, 35 490
mg/L in RW-1. Since the sampling data are inconclusive, ROC nual
sampling in 2024 and evaluate the need for additional groundwater re

Attached is the Appendix, which contains:
1. A Geographic Location Map.

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

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

Sincerely,

Katie Davis

Katie Davis
Environmental Manager
RICE Operating Company (ROC)

appendix

Geographic Location

RICE OPERATING COMPANY
ROC
SINCE 1955

HOBBS
F-29 SWD
AP-64

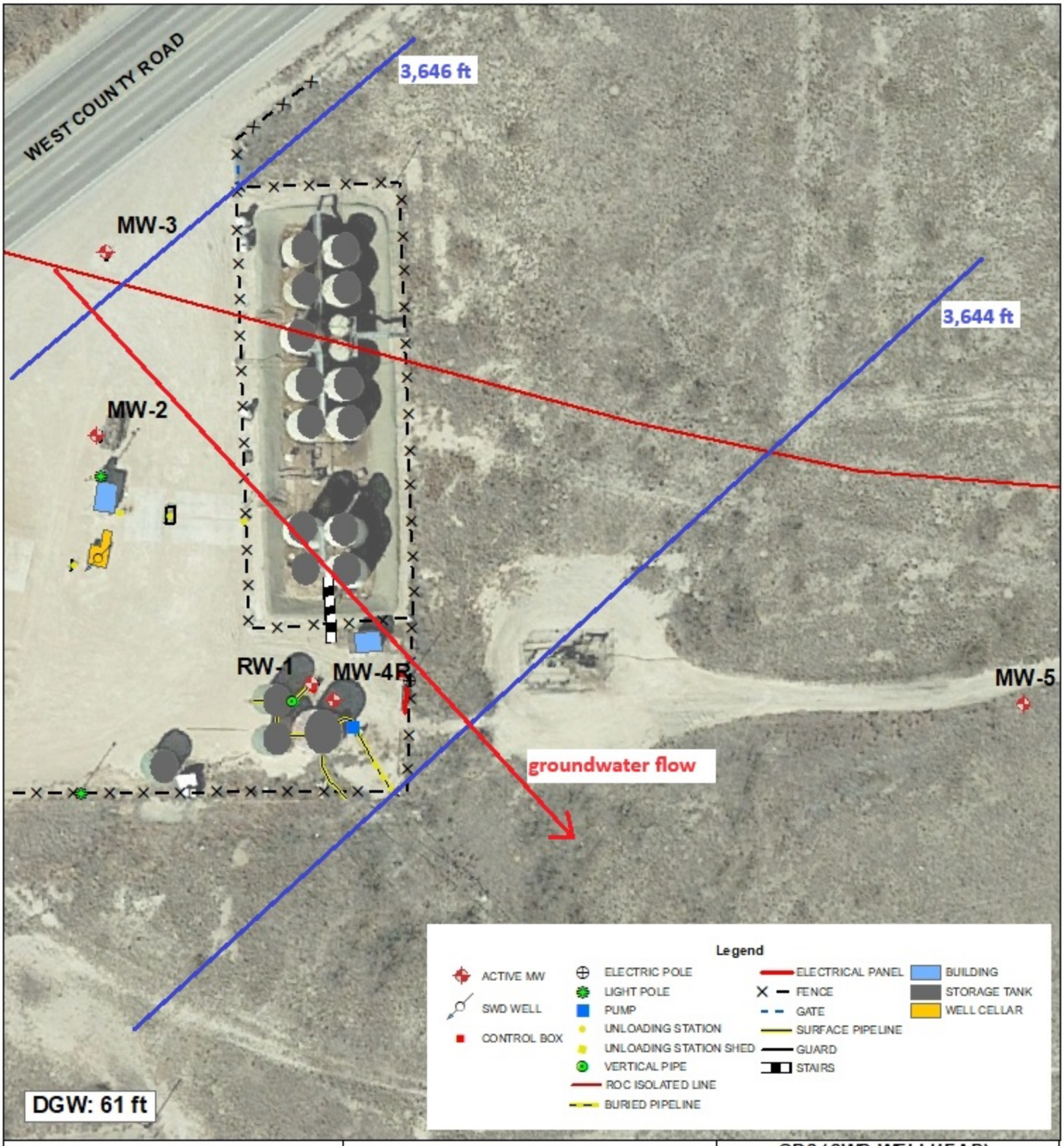
UL F SECTION 29
T-18-S R-38-E
LEA COUNTY, NM

GPS: 32.720389 -103.173578
NAD83 STATE PLANE PROJ
NM EAST ZONE

N
W E
S

0 1,000 2,000
Feet

Drawing date: 2/3/20
Drafted by: T. Grieco



RICE OPERATING COMPANY
ROC
SINCE 1955

HOBBS F-29 SWD

AP-64

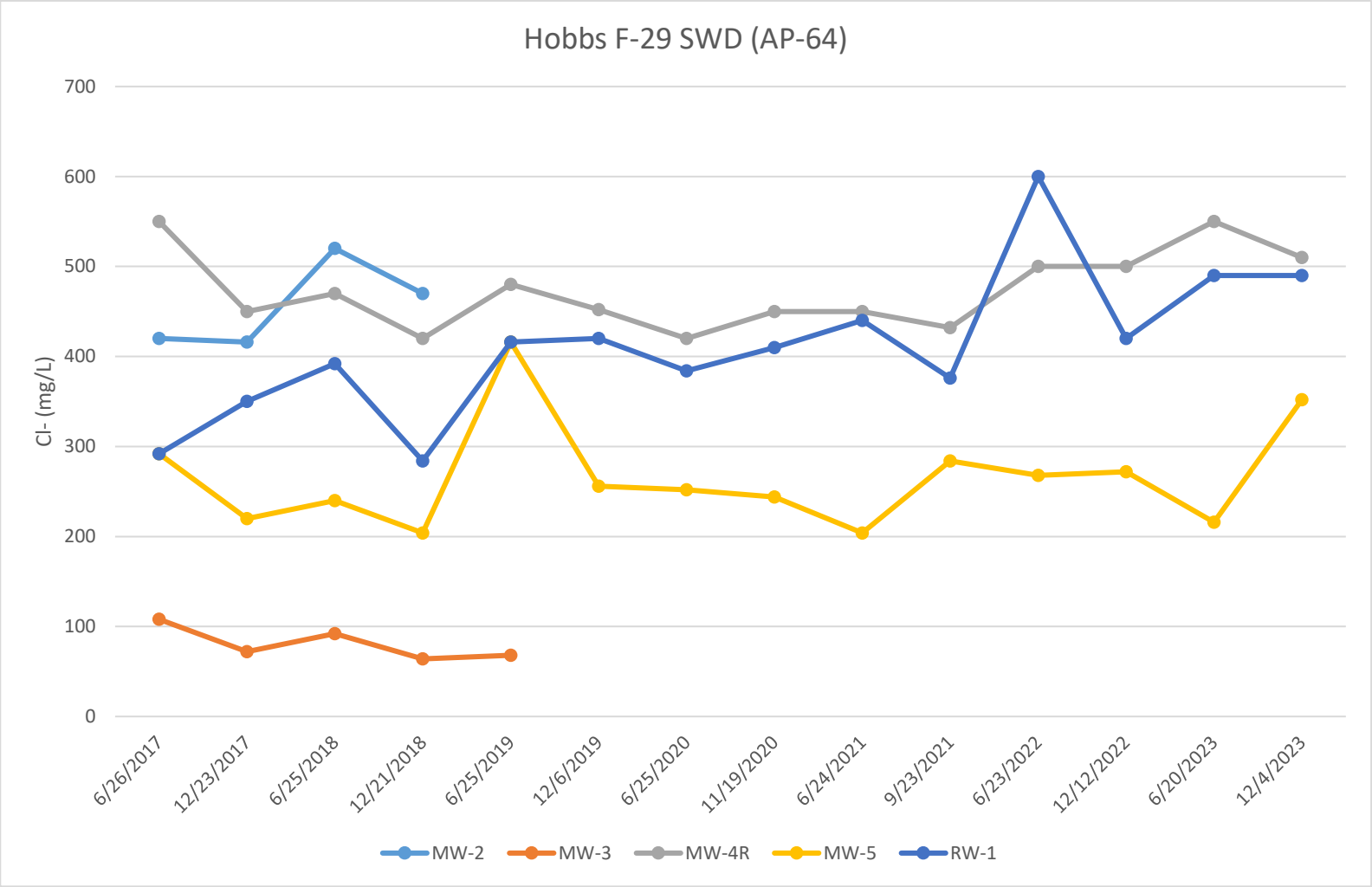
UL F SECTION 29
T-18-S R-38-E
LEA COUNTY, NM

GPS (SWD WELLHEAD):
32.720388 -103.173576
NAD83 STATE PLANE PROJ.
NMEA ST ZONE

0 50 100 Feet

GPS date: 10/8/14 TG
Drawing date: 3/21/24
Drafted by: T. Grieco

N W E S


Hobbs F-29 SWD (AP-64)
Cl- (mg/L)
700
600
500
400
300
200
100
0
6/26/2017
12/23/2017
6/25/2018
12/21/2018
6/25/2019
12/6/2019
6/25/2020
11/19/2020
6/24/2021
9/23/2021
6/23/2022
12/12/2022
6/20/2023
12/4/2023
MW-2
MW-3
MW-4R
MW-5
RW-1

ROC - Hobbs F-29 SWD (AP-64)
Unit Letter F, 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	XXX	XXX	XXX	XXX	3/21/2000	2,564	6,660	XXX	XXX	XXX	XXX	XXX	
2	49	XXX	XXX	XXX	7/10/2000	1,829	3,470	<0.002	<0.002	<0.002	<0.006	XXX	
2	49.26	XXX	XXX	XXX	9/27/2000	1,748	3,032	<0.002	<0.002	<0.002	<0.006	XXX	
2	49.61	XXX	XXX	XXX	12/12/2000	1,027	2,586	<0.002	<0.002	<0.002	<0.006	XXX	
2	XXX	XXX	XXX	XXX	1/4/2001	308	1,114	XXX	XXX	XXX	XXX	XXX	
2	XXX	XXX	XXX	XXX	3/16/2001	396	1,373	XXX	XXX	XXX	XXX	XXX	
2	XXX	XXX	XXX	XXX	3/23/2001	368	1,312	XXX	XXX	XXX	XXX	XXX	
2	XXX	XXX	XXX	XXX	5/7/2001	365	1,272	XXX	XXX	XXX	XXX	XXX	
2	XXX	XXX	XXX	XXX	6/8/2001	513	1,796	XXX	XXX	XXX	XXX	XXX	
2	XXX	XXX	XXX	XXX	8/14/2001	340	1,385	XXX	XXX	XXX	XXX	XXX	
2	51.13	59.41	XXX	XXX	12/29/2001	XXX	XXX	XXX	XXX	XXX	XXX	XXX	
2	51.16	59.15	XXX	XXX	1/4/2002	308	1,114	XXX	XXX	XXX	XXX	XXX	
2	XXX	XXX	XXX	XXX	6/6/2002	221	XXX	<0.001	<0.001	<0.001	<0.001	135	
2	52.07	59.93	XXX	20.5	8/14/2002	186	806	<0.001	<0.001	<0.001	<0.001	144	
2	52.58	59.82	4.71	14.12	12/11/2002	172	738	<0.002	<0.002	<0.002	<0.006	106	
2	52.94	59.76	4.43	13.29	3/21/2003	230	XXX	<0.001	<0.001	<0.001	<0.001	140	
2	53.15	59.74	4.28	12.85	5/28/2003	257	804	<0.001	<0.001	<0.001	<0.001	138	
2	53.71	69.77	10.48	31.46	9/22/2003	151	700	<0.001	<0.001	<0.001	<0.001	173	
2	54.1	59.86	3.76	11.28	12/18/2003	208	815	<0.002	0.003	<0.002	0.014	71	
2	54.33	59.89	3.63	10.89	3/15/2004	186	607	<0.001	<0.001	<0.001	<0.001	103	
2	XXX	XXX	XXX	XXX	5/27/2004	213	830	<0.001	<0.001	<0.001	<0.001	138	
2	54.6	59.8	3.38	10.14	9/8/2004	248	946	0.00464	0.000412	0.000979	0.001199	129	Clear No odor
2	54.2	59.8	3.64	10.9	11/23/2004	139	888	0.00448	<0.001	<0.001	0.000714	125	Clear No odor
2	53.39	59.8	4.17	12.5	3/22/2005	214	914	<0.001	<0.001	<0.001	<0.001	196	Clear No odor
2	53.35	59.8	4.19	12.6	5/18/2005	223	930	<0.001	<0.001	<0.001	<0.001	131	
2	53.55	59.8	4.06	12.2	8/8/2005	210	799	<0.001	<0.001	<0.001	<0.001	130	
2	53.81	59.8	5.99	12	10/31/2005	185	762	<0.001	<0.001	<0.001	<0.001	100	Clear No odor
2	53.89	59.8	3.8	15	1/30/2006	198	904	<0.001	<0.001	<0.001	<0.001	89.4	Clear No odor
2	53.91	59.8	3.8	15	5/1/2006	212	904	<0.001	<0.001	<0.001	<0.001	91.3	

ROC - Hobbs F-29 SWD (AP-64)
Unit Letter F, 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	54.13	59.8	3.7	15	10/16/2006	258	1,040	<0.001	j[0.000790]	j[0.000356]	j[0.000940]	116	Clear
2	54.08	60.05	3.9	15	2/5/2007	299	908	<0.001	<0.001	<0.001	<0.001	112	Clear No odor
2	54.17	60.05	3.8	15	5/16/2007	236	898	<0.001	<0.001	<0.001	<0.001	102	Clear No odor
2	54.37	60.05	3.7	15	7/31/2007	272	1,040	<0.001	<0.001	<0.001	0.0033	41.9	Clear No odor
2	54.43	60.05	3.7	15	10/18/2007	292	1,047	<0.001	<0.001	<0.001	<0.003	113	Clear No odor
2	54.19	60.05	3.8	15	2/18/2008	300	1,040	<0.002	<0.002	<0.002	<0.006	132	Clear No odor
2	54.53	60.05	3.6	15	4/25/2008	320	1,070	<0.002	<0.002	<0.002	<0.006	185	Clear No odor
2	54.69	60.05	3.5	15	7/24/2008	172	773	<0.001	<0.001	<0.001	<0.003	104	Clear No odor
2	54.89	60.05	3.4	15	11/12/2008	296	1,130	<0.001	<0.001	<0.001	<0.003	131	Clear No odor
2	54.97	59.98	3.3	15	2/3/2009	248	1,100	XXX	XXX	XXX	XXX	109	Clear No odor
2	55.05	59.98	3.2	15	5/4/2009	344	1,330	XXX	XXX	XXX	XXX	120	Clear No odor
2	55.21	59.98	3.1	15	8/28/2009	280	1,220	XXX	XXX	XXX	XXX	102	Clear No odor
2	55.33	59.98	3	15	10/27/2009	240	1,000	XXX	XXX	XXX	XXX	105	Clear No odor
2	55.53	59.98	2.9	15	3/12/2010	312	1,290	XXX	XXX	XXX	XXX	132	Clear No odor
2	55.52	59.98	2.9	15	6/10/2010	260	1,100	XXX	XXX	XXX	XXX	111	Clear No odor
2	55.55	59.98	2.9	15	8/31/2010	288	1,080	XXX	XXX	XXX	XXX	115	Clear No odor
2	55.68	59.98	2.8	15	12/6/2010	240	1,010	XXX	XXX	XXX	XXX	104	Clear No odor
2	55.76	59.98	2.7	15	3/11/2011	256	1,080	XXX	XXX	XXX	XXX	109	Clear No odor
2	55.89	59.98	2.7	15	6/17/2011	404	1,350	XXX	XXX	XXX	XXX	121	Clear No odor
2	55.89	59.98	2.7	15	9/19/2011	560	1,720	XXX	XXX	XXX	XXX	143	Clear No odor
2	56.26	59.98	2.4	15	12/16/2011	480	1,350	XXX	XXX	XXX	XXX	226	Clear No odor
2	56.39	59.98	2.3	15	3/16/2012	308	1,100	XXX	XXX	XXX	XXX	47.7	Clear No odor
2	56.67	59.98	2.2	15	6/18/2012	148	886	XXX	XXX	XXX	XXX	94	Clear No odor
2	56.98	59.98	2	15	9/7/2012	200	1,130	XXX	XXX	XXX	XXX	130	Clear No odor
2	56.56	59.98	2.2	15	12/11/2012	408	1,350	XXX	XXX	XXX	XXX	217	Clear No odor
2	56.68	59.98	2.1	15	3/8/2013	512	1,300	XXX	XXX	XXX	XXX	67	Clear No odor
2	56.96	59.98	2	10	6/18/2013	164	1,010	XXX	XXX	XXX	XXX	114	Clear No odor
2	57.74	59.98	1.5	10	9/17/2013	356	1,060	XXX	XXX	XXX	XXX	68.2	Clear No odor
2	57.93	59.98	1.3	10	12/13/2013	440	1,380	XXX	XXX	XXX	XXX	187	Clear No odor

ROC - Hobbs F-29 SWD (AP-64)
Unit Letter F, 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	57.93	59.98	1.3	10	3/19/2014	412	1,270	XXX	XXX	XXX	XXX	162	Clear No odor
2	58.06	59.98	1.2	5	6/23/2014	372	1,370	XXX	XXX	XXX	XXX	170	Clear No odor
2	58.44	59.98	1	5	9/25/2014	410	1,440	XXX	XXX	XXX	XXX	201	Clear No odor
2	58.53	59.98	0.9	5	12/19/2014	450	1,370	XXX	XXX	XXX	XXX	176	Clear No odor
2	58.64	59.98	0.9	5	3/16/2015	510	1,460	XXX	XXX	XXX	XXX	128	Clear No odor
2	58.66	59.98	1	5	9/24/2015	530	1,730	XXX	XXX	XXX	XXX	228	Clear No odor
2	58.43	59.98	1	5	3/25/2016	391	1,460	XXX	XXX	XXX	XXX	172	Clear No odor
2	59.08	59.98	0.6	5	9/25/2016	368	1,180	XXX	XXX	XXX	XXX	77	Clear No odor
2	59.21	59.98	0.5	3	6/26/2017	420	1,330	XXX	XXX	XXX	XXX	108	Clear No odor
2	59.48	59.98	0.3	3	12/23/2017	416	1,220	XXX	XXX	XXX	XXX	111	Clear No odor
2	59.62	59.98	0.2	3	6/25/2018	520	1,280	XXX	XXX	XXX	XXX	72.8	Clear No odor
2	59.87	59.98	0.1	2	12/21/2018	470	930	XXX	XXX	XXX	XXX	326	Clear No odor
2	59.98	59.98	0.0	0	6/25/2019	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No samples collected Well dry
2	59.98	59.98	0.0	0	12/6/2019	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No samples collected Well dry
2	XXX	XXX	XXX	XXX	6/25/2020	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No samples collected
2	XXX	XXX	XXX	XXX	11/19/2020	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No samples collected
2	XXX	XXX	XXX	XXX	6/24/2021	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No samples collected
2	XXX	XXX	XXX	XXX	9/23/2021	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No samples collected
2	XXX	XXX	XXX	XXX	6/23/2022	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No samples collected

ROC - Hobbs F-29 SWD (AP-64)
Unit Letter F, 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	XXX	XXX	XXX	XXX	12/12/2022	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No samples collected
2	XXX	59.98	XXX	XXX	6/20/2023	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No samples collected Well dry
2	XXX	59.98	XXX	XXX	12/4/2023	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No samples collected Well dry

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
3	XXX	XXX	XXX	XXX	1/4/2001	136	1,013	XXX	XXX	XXX	XXX	XXX	
3	51.2	60.95	XXX	XXX	12/29/2001	XXX	XXX	XXX	XXX	XXX	XXX	XXX	
3	51.24	53.5	XXX	XXX	1/4/2002	136	1,013	XXX	XXX	XXX	XXX	XXX	
3	XXX	XXX	XXX	XXX	5/24/2002	137	917	<0.001	<0.001	<0.001	<0.001	158	
3	52.12	66.33	XXX	9	8/14/2002	151	998	<0.001	<0.001	<0.001	<0.001	284	
3	52.64	64.65	1.92	5.76	12/11/2002	136	1,069	0.005	<0.002	<0.002	<0.006	201	
3	52.98	64.47	1.83	5.51	3/21/2003	133	XXX	<0.001	<0.001	<0.001	<0.001	266	
3	53.7	62.58	1.42	4.26	5/28/2003	301	1,120	<0.001	<0.001	<0.001	<0.001	240	
3	53.74	63.15	1.53	4.6	9/22/2003	120	881	<0.001	<0.001	<0.001	<0.001	238	
3	54.59	62.43	1.27	3.83	12/18/2004	124	852	<0.002	<0.002	<0.002	<0.006	73	
3	54.35	63.08	1.42	4.26	3/15/2004	115	1,140	<0.001	<0.001	<0.001	<0.001	248	
3	XXX	XXX	XXX	XXX	5/27/2004	111	810	<0.001	<0.001	<0.001	<0.001	171	
3	54.6	62.7	1.3	3.89	9/8/2004	230	937	<0.001	<0.001	<0.001	<0.001	186	Clear No odor; retreived bailer
3	54.4	62.7	1.33	4	11/23/2004	115	925	<0.001	<0.001	<0.001	<0.001	183	Clear No odor
3	53.4	62.7	1.49	4.5	3/22/2005	162	796	<0.001	<0.001	<0.001	<0.001	126	Clear No odor
3	53.38	62.7	1.29	4.5	5/18/2005	272	1,050	<0.001	<0.001	<0.001	<0.001	92	

ROC - Hobbs F-29 SWD (AP-64)
Unit Letter F, 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	53.9	62.7	1.46	4.4	8/8/2005	203	945	<0.001	<0.001	<0.001	<0.001	122	
3	53.57	62.7	1.5	5	10/31/2005	113	732	<0.001	<0.001	<0.001	<0.001	116	Clear No odor
3	53.92	62.7	1.4	5	1/30/2006	97	650	<0.001	<0.001	<0.001	j[0.000562]	120	Clear No odor
3	53.98	62.7	1.4	15	5/1/2006	85	704	<0.001	<0.001	<0.001	<0.001	111	
3	54.18	62.7	1.4	8	10/16/2006	89	616	<0.001	j[0.000950]	j[0.000404]	0.00105	135	Clear
3	54.1	63.1	1.4	6	2/5/2007	98	572	<0.001	<0.001	<0.001	<0.001	128	Clear
3	54.2	63.1	1.4	6	5/16/2007	91	542	<0.001	<0.001	<0.001	<0.001	111	Clear No odor
3	54.23	63.1	1.4	6	7/31/2007	105	590	<0.001	<0.001	<0.001	<0.002	76.5	Clear No odor
3	54.48	63.1	1.4	6	10/18/2007	100	611	<0.001	<0.001	<0.001	<0.003	120	Clear No odor
3	54.23	63.07	1.4	6	2/18/2008	104	607	<0.002	<0.002	<0.002	<0.006	144	Clear No odor
3	54.55	63.07	1.4	6	4/25/2008	244	918	<0.002	<0.002	<0.002	<0.006	172	Clear No odor
3	54.86	63.07	1.3	6	7/24/2008	80	584	<0.001	<0.001	<0.001	<0.003	104	Clear No odor
3	54.93	63.07	1.3	6	11/12/2008	104	708	<0.001	<0.001	<0.001	<0.003	143	Clear No odor
3	54.99	62.65	1.2	6	2/3/2009	104	744	XXX	XXX	XXX	XXX	127	Clear No odor
3	55.08	62.65	1.2	6	5/4/2009	108	705	XXX	XXX	XXX	XXX	135	Clear No odor
3	55.24	62.65	1.2	6	8/28/2009	108	703	XXX	XXX	XXX	XXX	120	Clear No odor
3	55.3	62.65	1.2	6	10/27/2009	108	623	XXX	XXX	XXX	XXX	118	Clear No odor
3	55.57	62.65	1.1	5	3/12/2010	112	653	XXX	XXX	XXX	XXX	140	Clear No odor
3	55.54	62.65	1.1	5	6/10/2010	112	718	XXX	XXX	XXX	XXX	133	Clear No odor
3	55.58	62.65	1.1	5	8/31/2010	112	657	XXX	XXX	XXX	XXX	115	Clear No odor
3	55.69	62.65	1.1	5	12/6/2010	116	687	XXX	XXX	XXX	XXX	130	Clear No odor
3	55.77	62.65	1.1	5	3/21/2011	116	582	XXX	XXX	XXX	XXX	114	Clear No odor
3	55.85	62.65	1.1	5	6/17/2011	124	609	XXX	XXX	XXX	XXX	125	Clear No odor
3	55.87	62.65	1.1	5	9/19/2011	116	622	XXX	XXX	XXX	XXX	146	Clear No odor
3	56.05	62.65	1.1	5	12/16/2011	168	647	XXX	XXX	XXX	XXX	89.1	Clear No odor
3	56.18	62.65	1	5	3/16/2012	168	767	XXX	XXX	XXX	XXX	67.9	Clear No odor
3	56.42	62.65	1	5	6/18/2012	120	686	XXX	XXX	XXX	XXX	120	Clear No odor
3	56.73	62.65	0.9	5	9/7/2012	120	771	XXX	XXX	XXX	XXX	137	Clear No odor
3	56.39	62.65	1	5	12/11/2012	276	863	XXX	XXX	XXX	XXX	137	Clear No odor

ROC - Hobbs F-29 SWD (AP-64)
Unit Letter F, 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	56.51	62.65	1	5	3/8/2013	152	858	XXX	XXX	XXX	XXX	198	Clear No odor
3	57.29	62.65	0.9	5	6/18/2013	124	827	XXX	XXX	XXX	XXX	146	Clear No odor
3	57.59	62.65	0.8	5	9/17/2013	56	531	XXX	XXX	XXX	XXX	128	Clear No odor
3	57.8	62.65	0.8	5	12/13/2013	188	722	XXX	XXX	XXX	XXX	102	Clear No odor
3	57.94	62.65	0.8	5	3/19/2014	220	826	XXX	XXX	XXX	XXX	174	Clear No odor
3	58.09	62.65	0.7	5	6/23/2014	256	894	XXX	XXX	XXX	XXX	66	Clear No odor
3	58.31	62.65	0.7	5	9/25/2014	212	826	XXX	XXX	XXX	XXX	160	Clear No odor
3	58.39	62.65	0.7	5	12/19/2014	196	704	XXX	XXX	XXX	XXX	170	Clear No odor
3	58.51	62.65	0.7	5	3/16/2015	212	746	XXX	XXX	XXX	XXX	70.3	Clear No odor
3	58.27	60.55	0.7	5	9/24/2015	84	587	XXX	XXX	XXX	XXX	67	Clear No odor
3	58.35	60.55	0.7	5	3/25/2016	120	638	XXX	XXX	XXX	XXX	75.6	Clear No odor
3	58.82	60.55	0.7	5	9/25/2016	76	532	XXX	XXX	XXX	XXX	87	Clear No odor
3	58.94	60.55	0.7	5	6/26/2017	108	630	XXX	XXX	XXX	XXX	113	Clear No odor
3	59.18	60.55	0.6	3	12/23/2017	72	514	XXX	XXX	XXX	XXX	98	Clear No odor
3	59.36	62.65	0.5	3	6/25/2018	92	282	XXX	XXX	XXX	XXX	76.6	Clear No odor
3	59.63	62.65	0.5	3	12/21/2018	64	369	XXX	XXX	XXX	XXX	127	Clear No odor
3	59.82	60.55	0.5	2	6/25/2019	68	588	XXX	XXX	XXX	XXX	91	Clear No odor
3	60.22	60.55	0.1	0	12/6/2019	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No samples collected
3	XXX	XXX	XXX	XXX	6/25/2020	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No samples collected
3	XXX	XXX	XXX	XXX	11/19/2020	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No samples collected
3	XXX	XXX	XXX	XXX	6/24/2021	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No samples collected
3	XXX	XXX	XXX	XXX	9/23/2021	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No samples collected
3	XXX	XXX	XXX	XXX	6/23/2022	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No samples collected

ROC - Hobbs F-29 SWD (AP-64)
Unit Letter F, 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	XXX	XXX	XXX	XXX	12/12/2022	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No samples collected
3	XXX	62.65	XXX	XXX	6/20/2023	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No samples collected Insufficent Fluid
3	XXX	62.65	XXX	XXX	12/4/2023	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No samples collected Insufficent Fluid

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
4	XXX	XXX	XXX	XXX	1/4/2001	464	1,781	XXX	XXX	XXX	XXX	XXX	
4	51.51	57.91	XXX	XXX	12/29/2001	XXX	XXX	XXX	XXX	XXX	XXX	XXX	
4	51.56	53.74	XXX	XXX	1/4/2002	464	1,781	XXX	XXX	XXX	XXX	XXX	
4	XXX	XXX	XXX	XXX	5/24/2002	461	1,520	<0.001	<0.001	<0.001	<0.001	286	
4	52.5	65.3	XXX	8.5	8/14/2002	416	1,660	<0.001	<0.001	<0.001	<0.001	303	
4	53	63.59	1.69	5.08	12/11/2002	336	1,302	0.003	<0.002	<0.002	<0.006	170	
4	53.41	63.31	1.58	4.75	3/21/2003	346	XXX	<0.001	<0.001	<0.001	<0.001	289	
4	53.25	63.78	1.68	5.5	5/28/2003	124	742	<0.001	<0.001	<0.001	<0.001	269	
4	54.21	62.46	1.34	4.03	9/22/2003	425	1,640	<0.001	<0.001	<0.001	<0.001	271	
4	54.12	63.11	1.46	4.39	12/18/2003	660	1,902	<0.002	<0.002	<0.002	<0.006	123	
4	54.84	62.55	1.25	3.77	3/15/2004	452	1,510	<0.001	<0.001	<0.001	<0.001	290	
4	XXX	XXX	XXX	XXX	5/27/2004	461	1,600	<0.001	<0.001	<0.001	<0.001	174	
4	54.8	62.3	1.2	3.6	9/8/2004	372	1,300	<0.001	<0.001	<0.001	<0.001	260	clear; no odor; no lock (replaced)
4	54.4	62.3	1.26	3.8	11/23/2004	401	1,550	<0.001	<0.001	<0.001	<0.001	217	Clear No odor
4	53.76	62.3	1.37	4.1	3/22/2005	392	1,220	<0.001	<0.001	<0.001	<0.001	196	Clear No odor
4	53.78	62.3	1.36	4.1	5/18/2005	336	1,230	<0.001	<0.001	<0.001	<0.001	169	

ROC - Hobbs F-29 SWD (AP-64)
Unit Letter F, 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
4	53.98	62.3	1.33	4	8/8/2005	370	1,230	<0.001	<0.001	<0.001	<0.001	171	
4	53.82	62.3	1.4	5	10/31/2005	411	1,560	<0.001	J[0.000774]	J[0.000385	j[0.000842]	156	Clear No odor Slow to recover from bailing
4	54.31	62.3	1.3	4	1/30/2006	523	1,780	<0.001	<0.001	j[0.000332]	j[0.001064]	182	Clear No odor Slow to recover from bailing
4	54.36	62.3	1.3	5	5/1/2006	501	1,800	<0.001	<0.001	<0.001	<0.001	144	Clear No odor Slow to recover from bailing
4	54.53	57.52	0.5	2	10/16/2006	683	2,570	<0.001	<0.001	<0.001	<0.001	284	No odor/Sandy well was slow to recover from bailing
4	54.52	57.43	0.5	2	2/5/2007	653	1,750	<0.001	<0.001	<0.001	<0.001	289	
4	54.68	61.05	1	3	6/1/2007	668	2,060	<0.001	<0.001	<0.001	<0.001	254	No odor Sandy well Pumps off
4	54.83	61.05	1	3	7/31/2007	548	2,380	<0.001	<0.001	<0.001	<0.002	248	No odor Sandy well Pumps off
4	54.9	61.05	1	3	10/18/2007	440	1,394	<0.001	<0.001	<0.001	<0.003	211	No odor Sandy well Pumps off
4	54.71	61.02	1	3	2/18/2008	508	1,680	<0.002	<0.002	<0.002	<0.002	186	No odor Sandy well Pumps off
4R	57.57	72.3	2.4	3	4/25/2008	670	1,960	<0.002	<0.002	<0.002	<0.006	304	Clear No odor - replaced with 4 inch
4R	57.88	72.3	2.3	3	7/24/2008	590	1,950	<0.001	<0.001	<0.001	<0.003	350	Clear No odor
4R	58.11	72.3	2.3	3	11/12/2008	476	1,570	<0.001	<0.001	<0.001	<0.003	289	Clear No odor
4R	58.25	72.01	2.2	7	2/3/2009	610	2,110	XXX	XXX	XXX	XXX	283	Clear No odor

ROC - Hobbs F-29 SWD (AP-64)
Unit Letter F, 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
4R	58.31	72.01	2.2	7	5/4/2009	640	2,060	XXX	XXX	XXX	XXX	280	Clear No odor
4R	58.46	72.01	2.2	7	8/28/2009	780	2,500	XXX	XXX	XXX	XXX	276	Clear No odor
4R	58.56	72.01	2.2	7	10/27/2009	800	2,530	XXX	XXX	XXX	XXX	318	Clear No odor
4R	58.76	72.01	2.1	7	3/12/2010	580	1,680	XXX	XXX	XXX	XXX	240	Clear No odor
4R	58.77	72.01	2.1	7	6/10/2010	470	1,440	XXX	XXX	XXX	XXX	160	Clear No odor
4R	58.78	72.01	2.1	7	8/31/2010	840	2,350	XXX	XXX	XXX	XXX	310	Clear No odor
4R	58.91	72.01	2.1	7	12/6/2010	730	2,280	XXX	XXX	XXX	XXX	317	Clear No odor
4R	58.98	72.02	2.1	7	3/11/2011	700	2,310	XXX	XXX	XXX	XXX	281	Clear No odor
4R	59.14	72.02	2.1	7	6/17/2011	700	2,350	XXX	XXX	XXX	XXX	303	Clear No odor
4R	59.35	72.02	2	7	9/19/2011	540	1,960	XXX	XXX	XXX	XXX	252	Clear No odor
4R	59.52	72.02	2	7	12/16/2011	580	1,960	XXX	XXX	XXX	XXX	260	Clear No odor
4R	59.68	72.02	2	7	3/16/2012	610	2,050	XXX	XXX	XXX	XXX	327	Clear No odor
4R	59.91	72.02	1.9	7	6/18/2012	550	1,940	XXX	XXX	XXX	XXX	245	Clear No odor
4R	60.88	72.02	1.8	7	9/7/2012	550	2,090	XXX	XXX	XXX	XXX	229	Clear No odor
4R	60.41	72.02	1.9	7	12/10/2012	568	1,970	XXX	XXX	XXX	XXX	242	Clear No odor
4R	60.54	72.02	1.8	7	3/8/2013	600	1,980	XXX	XXX	XXX	XXX	276	Clear No odor
4R	60.77	72.02	1.8	7	6/18/2013	410	1,750	XXX	XXX	XXX	XXX	273	Clear No odor
4R	61.12	72.02	1.7	7	9/17/2013	530	1,870	XXX	XXX	XXX	XXX	208	Clear No odor
4R	61.32	72.02	1.7	7	12/13/2013	530	1,480	XXX	XXX	XXX	XXX	192	Clear No odor
4R	61.47	72.02	1.7	7	3/19/2014	680	1,910	XXX	XXX	XXX	XXX	254	Clear No odor
4R	61.62	72.02	1.7	7	6/23/2014	450	1,650	XXX	XXX	XXX	XXX	184	Clear No odor
4R	61.89	72.02	1.6	7	9/25/2014	470	1,610	XXX	XXX	XXX	XXX	208	Clear No odor
4R	61.96	72.02	1.6	7	12/19/2014	470	1,640	XXX	XXX	XXX	XXX	198	Clear No odor
4R	62.06	72.02	1.6	7	3/16/2015	432	1,530	XXX	XXX	XXX	XXX	166	Clear No odor
4R	62.12	72.02	1.6	10	9/24/2015	730	2,090	XXX	XXX	XXX	XXX	291	Clear No odor
4R	61.89	72.02	1.6	7	3/25/2016	360	1,420	XXX	XXX	XXX	XXX	153	Clear No odor
4R	62.38	72.02	1.6	7	9/25/2016	570	1,640	XXX	XXX	XXX	XXX	73	Clear No odor
4R	62.48	72.02	1.5	7	6/26/2017	550	1,460	XXX	XXX	XXX	XXX	78	Clear No odor
4R	62.64	72.02	1.5	7	12/23/2017	450	1,590	XXX	XXX	XXX	XXX	229	Clear No odor

ROC - Hobbs F-29 SWD (AP-64)
Unit Letter F, 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
4R	62.91	72.02	1.5	7	6/25/2018	470	1,460	XXX	XXX	XXX	XXX	232	Clear No odor
4R	63.19	72.02	1.4	7	12/21/2018	420	1,270	XXX	XXX	XXX	XXX	323	Clear No odor
4R	63.44	72.02	1.4	7	6/25/2019	480	1,610	XXX	XXX	XXX	XXX	250	Clear No odor
4R	63.71	72.02	1.3	7	12/6/2019	452	XXX	XXX	XXX	XXX	XXX	XXX	Clear No odor
4R	63.47	72.02	1.4	7	6/25/2020	420	1,480	XXX	XXX	XXX	XXX	243	Clear No odor
4R	64.39	72.02	1.2	7	11/19/2020	450	1,490	XXX	XXX	XXX	XXX	210	Clear No odor
4R	64.91	72.02	1.1	7	6/24/2021	450	1,650	XXX	XXX	XXX	XXX	201	Clear No odor
4R	64.91	72.02	1.1	7	9/23/2021	432	1,550	XXX	XXX	XXX	XXX	284	Clear No odor
4R	65.19	72.02	1.1	7	6/23/2022	500	1,680	XXX	XXX	XXX	XXX	240	Clear No odor
4R	65.45	72.02	1.1	4	12/12/2022	500	1,440	XXX	XXX	XXX	XXX	163	Clear No odor
4R	65.74	72.02	1	3	6/20/2023	550	1,510	XXX	XXX	XXX	XXX	162	Clear No odor
4R	66	72.02	1	3	12/4/2023	510	1,540	XXX	XXX	XXX	XXX	200	Clear No odor

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
5	57.02	74.4	11.3	35	10/18/2007	268	983	<0.001	<0.001	<0.001	<0.003	138	Clear No odor
5	56.54	74.4	11.6	35	2/18/2008	316	1,110	<0.002	<0.002	<0.002	<0.006	168	Clear No odor
5	56.9	74.4	11.4	35	4/25/2008	484	1,530	<0.002	<0.002	<0.002	<0.006	262	Clear No odor
5	57.28	74.4	11.1	35	7/24/2008	356	1,250	<0.001	<0.001	<0.001	<0.003	172	Clear No odor
5	57.46	74.4	11	35	11/12/2008	324	1,190	<0.001	<0.001	<0.001	<0.003	186	Clear No odor
5	57.53	75.27	11.5	40	2/3/2009	312	1,080	XXX	XXX	XXX	XXX	164	Clear No odor
5	57.61	75.27	11.5	40	5/4/2009	328	1,180	XXX	XXX	XXX	XXX	172	Clear No odor
5	57.79	75.27	11.4	40	8/28/2009	308	1,080	XXX	XXX	XXX	XXX	138	Clear No odor
5	57.91	75.27	11.3	40	10/27/2009	320	1,040	XXX	XXX	XXX	XXX	160	Clear No odor
5	58.06	75.27	11.2	40	3/12/2010	328	1,040	XXX	XXX	XXX	XXX	180	Clear No odor
5	58.09	75.27	11.2	40	6/10/2010	332	1,090	XXX	XXX	XXX	XXX	168	Clear No odor
5	58.11	75.27	11.2	40	8/31/2010	272	1,070	XXX	XXX	XXX	XXX	172	Clear No odor
5	58.21	75.27	11.1	40	12/6/2010	296	944	XXX	XXX	XXX	XXX	179	Clear No odor

ROC - Hobbs F-29 SWD (AP-64)
Unit Letter F, 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
5	58.28	75.27	11	40	3/11/2011	308	952	XXX	XXX	XXX	XXX	156	Clear No odor
5	58.42	75.27	11	40	6/17/2011	244	843	XXX	XXX	XXX	XXX	154	Clear No odor
5	58.64	75.27	10.8	40	9/19/2011	240	802	XXX	XXX	XXX	XXX	159	Clear No odor
5	58.8	75.27	10.7	40	12/16/2011	220	771	XXX	XXX	XXX	XXX	166	Clear No odor
5	58.93	75.27	10.6	40	3/16/2012	252	1,010	XXX	XXX	XXX	XXX	55.4	Clear No odor
5	59.17	75.27	10.5	40	6/18/2012	224	828	XXX	XXX	XXX	XXX	115	Clear No odor
5	59.4	75.27	10.3	40	9/7/2012	216	807	XXX	XXX	XXX	XXX	111	Clear No odor
5	59.4	75.27	10.3	40	9/7/2012	216	807	XXX	XXX	XXX	XXX	111	Clear No odor
5	59.62	75.27	10.2	40	12/10/2012	292	970	XXX	XXX	XXX	XXX	136	Clear No odor
5	59.73	75.27	10.1	40	3/8/2013	172	904	XXX	XXX	XXX	XXX	204	Clear No odor
5	59.96	75.27	10	40	6/18/2013	308	1,210	XXX	XXX	XXX	XXX	164	Clear No odor
5	60.18	75.27	9.8	40	9/17/2013	232	842	XXX	XXX	XXX	XXX	115	Clear No odor
5	60.52	75.27	9.6	40	12/12/2013	380	1,190	XXX	XXX	XXX	XXX	192	Clear No odor
5	60.67	75.27	9.5	40	3/19/2014	256	860	XXX	XXX	XXX	XXX	150	Clear No odor
5	60.82	75.27	9.4	40	6/23/2014	236	834	XXX	XXX	XXX	XXX	165	Clear No odor
5	61.04	75.27	9.2	40	9/25/2014	264	960	XXX	XXX	XXX	XXX	183	Clear No odor
5	61.12	75.27	9.2	40	12/19/2014	180	816	XXX	XXX	XXX	XXX	185	Clear No odor
5	61.23	75.27	9.1	40	3/16/2015	216	790	XXX	XXX	XXX	XXX	138	Clear No odor
5	61.3	75.27	9.2	35	9/24/2015	280	956	XXX	XXX	XXX	XXX	182	Clear No odor
5	61.08	75.27	9.3	35	3/25/2016	308	976	XXX	XXX	XXX	XXX	72.1	Clear No odor
5	61.58	75.27	98.9	40	9/25/2016	256	986	XXX	XXX	XXX	XXX	178	Clear No odor
5	61.69	75.27	8.8	40	6/26/2017	292	1,210	XXX	XXX	XXX	XXX	189	Clear No odor
5	61.9	75.27	8.7	40	12/23/2017	220	828	XXX	XXX	XXX	XXX	178	Clear No odor
5	62.08	75.27	8.6	40	6/25/2018	240	816	XXX	XXX	XXX	XXX	115	Clear No odor
5	62.42	75.27	8.4	30	12/21/2018	204	628	XXX	XXX	XXX	XXX	157	Clear No odor
5	62.62	75.27	8.2	30	6/25/2019	416	1,370	XXX	XXX	XXX	XXX	186	Clear No odor
5	62.95	75.27	8	30	12/6/2019	256	XXX	XXX	XXX	XXX	XXX	XXX	Clear No odor
5	62.66	75.27	8.2	30	6/25/2020	252	908	XXX	XXX	XXX	XXX	151	Clear No odor
5	63.58	75.27	7.6	25	11/19/2020	244	669	XXX	XXX	XXX	XXX	150	Clear No odor

ROC - Hobbs F-29 SWD (AP-64)
Unit Letter F, 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
5	64.02	75.27	7.3	30	6/24/2021	204	840	XXX	XXX	XXX	XXX	123	Clear No odor
5	64.18	75.27	7.2	30	9/23/2021	284	1,020	XXX	XXX	XXX	XXX	128	Clear No odor
5	64.35	75.27	7.1	30	6/23/2022	268	1,010	XXX	XXX	XXX	XXX	114	Clear No odor
5	64.66	75.27	6.9	25	12/12/2022	272	854	XXX	XXX	XXX	XXX	88.4	Clear No odor
5	64.96	75.27	6.7	20	6/20/2023	216	760	XXX	XXX	XXX	XXX	90.3	Clear No odor
5	65.25	75.27	6.5	20	12/4/2023	352	1,110	XXX	XXX	XXX	XXX	114	Clear No odor

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
RW-1	59.52	105.4	29.8	90	3/16/2012	376	1,460	XXX	XXX	XXX	XXX	212	Clear No odor
RW-1	Pump	105.4		90	6/18/2012	540	1,950	XXX	XXX	XXX	XXX	230	Clear No odor
RW-1	Pump	105.4		90	9/7/2012	264	1,010	XXX	XXX	XXX	XXX	113	Clear No odor
RW-1	Pump	105.4	XXX	90	12/10/2012	296	938	XXX	XXX	XXX	XXX	132	Clear No odor
RW-1	Pump	105.4	XXX	90	3/8/2013	460	1,260	XXX	XXX	XXX	XXX	108	Clear No odor
RW-1	XXX	105.4	XXX	90	6/18/2013	248	915	XXX	XXX	XXX	XXX	119	Clear No odor
RW-1	XXX	105.4	XXX	Running	9/18/2013	204	797	XXX	XXX	XXX	XXX	112	Clear No odor
RW-1	XXX	105.4	XXX	Running	12/13/2013	252	751	XXX	XXX	XXX	XXX	140	Clear No odor
RW-1	XXX	105.4	XXX	Running	3/20/2014	276	930	XXX	XXX	XXX	XXX	160	Clear No odor
RW-1	XXX	105.4	XXX	500	6/23/2014	224	918	XXX	XXX	XXX	XXX	128	Clear No odor
RW-1	XXX	105.4	XXX	500	9/25/2014	196	822	XXX	XXX	XXX	XXX	108	Clear No odor
RW-1	XXX	105.4	XXX	500	12/19/2014	212	792	XXX	XXX	XXX	XXX	184	Clear No odor
RW-1	XXX	105.4	XXX	500	3/16/2015	244	804	XXX	XXX	XXX	XXX	51	Clear No odor
RW-1	XXX	105.4	XXX	100	9/24/2015	364	1,020	XXX	XXX	XXX	XXX	197	Clear No odor
RW-1	XXX	105.4	XXX	100	3/25/2016	364	1,030	XXX	XXX	XXX	XXX	60.8	Clear No odor
RW-1	XXX	105.4	XXX	100	9/25/2016	344	1,150	XXX	XXX	XXX	XXX	82	Clear No odor
RW-1	XXX	105.4	XXX	100	6/26/2017	292	1,160	XXX	XXX	XXX	XXX	149	Clear No odor
RW-1	XXX	105.4	XXX	100	12/23/2017	350	1,110	XXX	XXX	XXX	XXX	116	Clear No odor
RW-1	XXX	105.4	XXX	100	6/25/2018	392	1,010	XXX	XXX	XXX	XXX	66.6	Clear No odor

ROC - Hobbs F-29 SWD (AP-64)
Unit Letter F, 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
RW-1	XXX	105.4	XXX	100	12/21/2018	284	943	XXX	XXX	XXX	XXX	237	Clear No odor
RW-1	XXX	105.4	XXX	100	6/25/2019	416	1,370	XXX	XXX	XXX	XXX	186	Clear No odor
RW-1	XXX	105.4	XXX	100	12/6/2019	420	XXX	XXX	XXX	XXX	XXX	XXX	Clear No odor
RW-1	XXX	105.4	XXX	100	6/25/2020	384	1,390	XXX	XXX	XXX	XXX	228	Clear No odor
RW-1	XXX	105.4	XXX	100	11/19/2020	410	1,350	XXX	XXX	XXX	XXX	187	Clear No odor
RW-1	XXX	105.4	XXX	100	6/24/2021	440	1,510	XXX	XXX	XXX	XXX	199	Clear No odor
RW-1	XXX	105.4	XXX	100	9/23/2021	376	1,350	XXX	XXX	XXX	XXX	215	Clear No odor
RW-1	XXX	105.4	XXX	100	6/23/2022	600	1,850	XXX	XXX	XXX	XXX	114	Clear No odor
RW-1	XXX	105.4	XXX	100	12/12/2022	420	1,230	XXX	XXX	XXX	XXX	185	Clear No odor
RW-1	XXX	105.4	XXX	100	6/20/2023	490	1,500	XXX	XXX	XXX	XXX	178	Clear No odor
RW-1	XXX	105.4	XXX	100	12/4/2023	490	1,470	XXX	XXX	XXX	XXX	248	Clear No odor

CARDINAL Laboratories

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

June 30, 2023

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: HOBBS F-29 SWD

Enclosed are the results of analyses for samples received by the laboratory on 06/23/23 9:55.

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

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:	06/23/2023	Sampling Date:	06/20/2023
Reported:	06/30/2023	Sampling Type:	Water
Project Name:	HOBBS F-29 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T18S-R38E-SEC29 F-LEA CTY., NM		

Sample ID: MONITOR WELL #4R (H233256-01)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**550**	4.00	06/26/2023	ND	104	104	100	3.77	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**162**	50.0	06/27/2023	ND	22.9	114	20.0	8.09	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**1510**	5.00	06/26/2023	10.0	276	92.0	300	0.753	

Sample ID: MONITOR WELL #5 (H233256-02)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**216**	4.00	06/26/2023	ND	104	104	100	3.77	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**90.3**	25.0	06/27/2023	ND	22.9	114	20.0	8.09	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**760**	5.00	06/28/2023	ND	271	90.3	300	4.44	

Cardinal Laboratories *=Accredited Analyte

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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:	06/23/2023	Sampling Date:	06/20/2023
Reported:	06/30/2023	Sampling Type:	Water
Project Name:	HOBBS F-29 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T18S-R38E-SEC29 F-LEA CTY., NM		

Sample ID: RECOVERY WELL #1 (H233256-03)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**490**	4.00	06/26/2023	ND	104	104	100	3.77	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**178**	50.0	06/27/2023	ND	22.9	114	20.0	8.09	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**1500**	5.00	06/28/2023	ND	271	90.3	300	4.44	

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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

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Celey D. Keene, Lab Director/Quality Manager

Page 23 of 29

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 F-29 SWD

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

Sampler Signature: Rozanne Johnson (575)631-9310

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE		PRESERVATIVE METHOD: HCL (2 40ml VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1-1Liter HDPE)	NONE	SAMPLING: DATE (2023)	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005 / TX1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 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
H233256 1	Monitor Well #4R	G	1	X									1		6/20	11:20																			X	X	X	
2	Monitor Well #5	G	1	X									1		6/20	10:00																			X	X	X	
3	Recovery Well #1	G	1	X									1		6/20	13:15																			X	X	X	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Rozanne Johnson	6/23/23	7:10	James L Johnson	6/23/23	7:11
James Johnson	6/23/23	0955	Samantha Robertson		0955

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) YO

Received by OCD: 3/28/2024 12:35:43 PM

Released to Imaging: 9/6/2024 9:35:23 AM

CARDINAL Laboratories

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

December 15, 2023

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: HOBBS F-29 SWD

Enclosed are the results of analyses for samples received by the laboratory on 12/06/23 12:05.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. 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:	12/06/2023	Sampling Date:	12/04/2023
Reported:	12/15/2023	Sampling Type:	Water
Project Name:	HOBBS F-29 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T18S-R38E-SEC29 F-LEA CTY., NM		

Sample ID: MONITOR WELL #4R (H236544-01)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**510**	4.00	12/07/2023	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*	**200**	50.0	12/07/2023	ND	22.9	114	20.0	9.97	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**1540**	5.00	12/08/2023	ND	529	106	500	3.27	

Sample ID: MONITOR WELL #5 (H236544-02)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**352**	4.00	12/07/2023	ND	100	100	100	0.00	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**114**	25.0	12/07/2023	ND	22.9	114	20.0	9.97	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**1110**	5.00	12/08/2023	ND	529	106	500	3.27	

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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:	12/06/2023	Sampling Date:	12/04/2023
Reported:	12/15/2023	Sampling Type:	Water
Project Name:	HOBBS F-29 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T18S-R38E-SEC29 F-LEA CTY., NM		

Sample ID: RECOVERY WELL #1 (H236544-03)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**490**	4.00	12/07/2023	ND	100	100	100	0.00	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**248**	50.0	12/07/2023	ND	22.9	114	20.0	9.97	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**1470**	5.00	12/15/2023	ND	488	97.6	500	0.684	

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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

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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 F-29 SWD

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

Sampler Signature: Rozanne Johnson (575)631-9310

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (2 40ml VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1-1Liter HDPE)	NONE	SAMPLING: DATE (2023)	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005 / TX1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 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
H236544 1	Monitor Well #4R	G	1	X								1		12/4	11:30																			X	X	X	
2	Monitor Well #5	G	1	X								1		12/4	10:15																			X	X	X	
3	Recovery Well #1	G	1	X								1		12/4	13:10																			X	X	X	

Relinquished by: Rozanne Johnson Date: 12/6/2023 Time: 12:05

Received by: Date: Time: 12:05 12-6-23

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

Received by OCD: 3/28/2024 12:35:43 PM

Released to Imaging: 9/6/2024 9:35:23 AM

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 327854

CONDITIONS

Operator: RICE OPERATING COMPANY 122 W Taylor Hobbs, NM 88240	OGRID: 19174
	Action Number: 327854
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the 2023 Annual Groundwater Report for the Hobbs SWD System F-29: content is satisfactory 1. If MW-2 and MW-3 continue to remain dry, a contingency plan may be an option for the 2 wells. For example, purging the 3 casing volumes one day and returning within 24 hours to collect a sample OR drill well deeper or replace well, use a Hydrasleeve sampling method which doesn't involve purging water, etc. RICE will need to propose an option for wells continuing to convey insufficient groundwater volume. 2. Continue determinig DTW for all wells not P&Ad. 3. Continue evaluation for additional groundwater removal and propose in recommendation section of next annual report. 4. Continue to conduct sampling on a semi-annual schedule. 5. Submit the 2024 annual report to OCD by April 1, 2025.	9/6/2024