RICE Operating Company
112 West Taylor • Hobbs, New Mexico 88240
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REVIEWED
By Mike Buchanan at 4:04 pm, Jun 30, 2023

Review of the BD Santa Rita EOL Release Site 2022 Annual Groundwater Report: **Content Satisfactory**
1. Continue to collect groundwater samples and monitor per plan in report.
2. Continue groundwater recovery
3. Submit the 2023 Annual Groundwater Report by April 1, 2024.

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

RE: **2022 Annual Groundwater Report**
Rice Operating Company – BD SWD System
BD Santa Rita EOL Release Site (AP-58): UL/A, Sec. 27, T22S, R37E

Mr. Velez:

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

Background and Previous Work

The site is located approximately 4.5 miles southeast of Eunice, New Mexico at UL/A, Sec. 27, T22S, R37E as shown on the Geographic Location Map. Groundwater sampling at the site indicated that the depth to groundwater is located at approximately 54 feet below ground surface (bgs).

On November 22nd, 2003, ROC discovered a leak from a 2-inch PVC compression coupling. After initial backhoe characterization, the site was disclosed to NMOCD as a potential groundwater impact site on January 6th, 2004. Since groundwater impact was suspected, MW-1 was installed on August 30th, 2005. On October 30th, 2007, an up-gradient well, MW-2, and a down-gradient well, MW-3, were installed to fully delineate groundwater quality. NMOCD approved the Amended Stage 2 Abatement Plan on February 4th, 2009. As a result, MW-1 was plugged and abandoned on February 27th, 2009, and the excavation for liner installation commenced on March 24th, 2009. Two, one ft thick clay liners, one with dimensions of 40x20 ft at 30 ft bgs and one with dimensions of 40x50 ft at 12 ft bgs, were installed and a 20-mil plastic liner of equal size was placed above both clay layers. Each plastic liner was padded with a foot of blow sand. The site was backfilled with clean soil, contoured to the surrounding location, and seeded with a native vegetative mix. On June 16th and 17th, 2009, MW-4 and RW-1 were installed at the site. On October 10th, 2012, ROC submitted a Soil Closure Request which was approved by NMOCD on the same day.

Groundwater recovery began on June 22nd, 2010 from RW-1. Since that time, approximately 60,371 barrels of groundwater have been removed. The most recent sampling event resulted in a chloride concentration of 76 mg/L in MW-2, 680 mg/L in MW-3, 372 mg/L in MW-4, and 396

mg/L in RW-1. BTEX concentrations have remained below detectable limit in each well since installation. On February 4th, 2022, NMOCD granted approval to cease sampling in MW-2 and approval to cease BTEX and sulfate sampling in MW-3 and MW-4. ROC will continue to grab samples from MW-2, as need, to ensure there are no non-ROC, up-gradient sources contributing to the degradation of groundwater quality. ROC will also continue quarterly sampling and groundwater recovery in 2023.

Attached is the Appendix, which contains:

1. A Geographic 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.

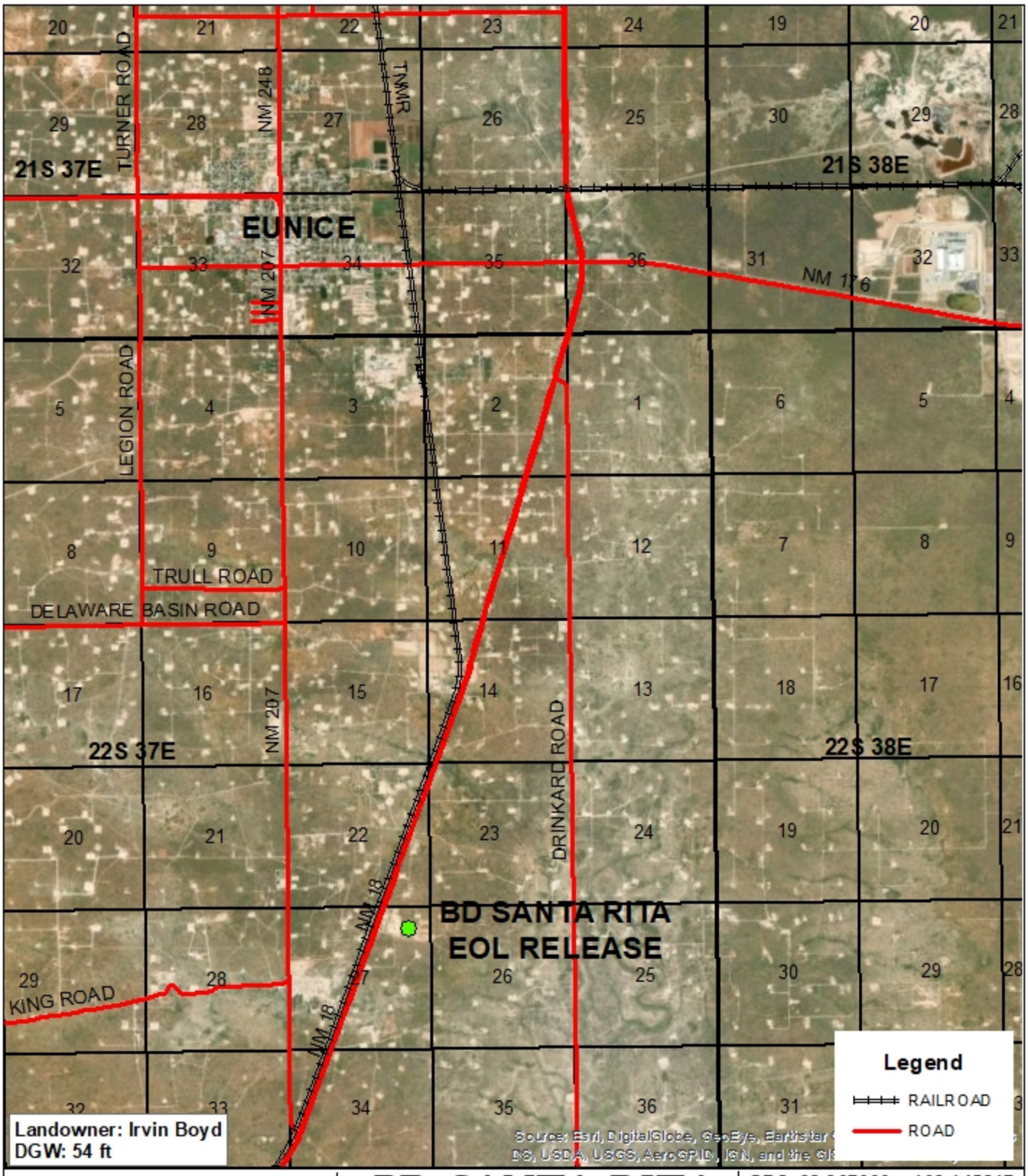
Sincerely,

Katie Davis

Katie Davis
Environmental Manager
RICE Operating Company (ROC)

appendix

Geographic Location Map



RICE OPERATING COMPANY
ROC
SINCE 1955

BD SANTA RITA EOL RELEASE

AP-58

UL A SECTION 27
T22S, R37E
LEA COUNTY, NM

GPS: 32.367966 -103.145217
NAD 83 STATE PLANE PROJ.
NEW MEXICO EAST ZONE

N
W E
S

0 0.5 1 Miles

Drawing date: 3/6/19
Drafted by: T. Grieco

Site Map

RICE OPERATING COMPANY
ROC
SINCE 1955

BD SANTA RITA EOL RELEASE

AP-58

UL A SECTION 27
T22S, R37E
LEA COUNTY, NM

GPS: 32.367966 -103.145217
NAD 83 STATE PLANE PROJ.
NEW MEXICO EAST ZONE

N
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S

0 25 50
Feet

Drawing date: 3/6/19
Drafted by: T. Grieco

ROC - BD Santa Rita EOL (AP-58)
Unit Letter A, Section 27, T22S, R37E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
1	54.04	63.58	1.53	4.752	9/2/2005	4,480	7,600	<0.001	<0.001	<0.001	<0.001	1,380	red & silty
1	53.85	63.58	1.6	5	10/24/2005	7,170	16,400	<0.001	<0.001	<0.001	<0.001	726	red & silty
1	53.98	63.58	1.5	5	1/23/2006	7,450	14,300	<0.001	<0.001	<0.001	<0.001	723	red & silty
1	54.07	63.58	1.5	6	4/24/2006	7,100	14,300	<0.001	<0.001	<0.001	<0.001	675	
1	54.08	63.58	1.5	10	7/19/2006	6,180	14,000	<0.001	<0.001	<0.001	<0.001	583	
1	53.99	63.58	1.5	15	10/11/2006	2,100	4,560	<0.001	<0.001	<0.001	<0.001	408	Clear
1	54.1	63.58	1.5	5	1/25/2007	2,740	4,560	<0.001	<0.001	<0.001	<0.001	449	
1	54.11	63.58	1.5	5.5	4/4/2007	2,610	5,720	<0.001	<0.001	<0.001	<0.003	314	Clear No odor
1	53.8	63.58	1.6	6	7/9/2007	363	1,470	<0.001	<0.001	<0.001	<0.003	267	Clear No odor
1	53.87	63.58	1.6	6	11/12/2007	356	1,398	<0.001	<0.001	<0.001	<0.003	331	Clear No odor
1	53.88	63.58	1.6	6	1/15/2008	408	1,499	<0.001	<0.001	<0.001	<0.003	232	Clear No odor
1	53.98	63.58	1.5	6	4/7/2008	420	1,460	<0.001	<0.001	<0.001	<0.003	346	Sand to clear No odor
1	54.06	63.58	1.5	6	7/22/2008	440	1,460	<0.002	<0.002	<0.002	<0.006	271	Sand to clear No odor
1	54.11	63.58	1.5	6	10/2/2008	392	1,390	<0.001	<0.001	<0.001	<0.003	281	Sand to clear No odor
1	54.08	63.2	1.5	6	1/14/2009	352	1,250	<0.001	<0.001	<0.001	<0.003	250	Sand to clear No odor
MW-1 Plugged 2/27/2009													

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
2	54.55	62.58	1.3	6	11/12/2007	160	930	<0.001	<0.001	<0.001	<0.003	257	Clear No odor
2	54.57	63.7	1.5	6	1/15/2008	128	1,001	<0.001	<0.001	<0.001	<0.003	340	Clear No odor
2	54.65	63.7	1.4	6	4/7/2008	100	982	<0.001	<0.001	<0.001	<0.003	411	Sand to clear No odor
2	54.74	63.7	1.4	6	7/22/2008	92	931	<0.002	<0.002	<0.002	<0.006	377	Sand to clear No odor
2	54.81	63.7	1.4	6	10/2/2008	88	902	<0.001	<0.001	<0.001	<0.003	333	Sand to clear No odor
2	54.78	64.2	1.5	6	1/14/2009	84	850	<0.001	<0.001	<0.001	<0.003	309	Sand to clear No odor
2	54.82	64.2	1.5	6	4/14/2009	80	858	<0.001	<0.001	<0.001	<0.003	319	Sand to clear No odor
2	54.79	64.43	1.5	6	7/13/2009	76	802	<0.001	<0.001	<0.001	<0.003	279	Sand to clear No odor
2	54.79	64.43	1.5	6	10/8/2009	64	776	<0.001	<0.001	<0.001	<0.003	244	Sand to clear No odor

ROC - BD Santa Rita EOL (AP-58)
Unit Letter A, Section 27, T22S, R37E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
2	54.83	64.42	1.5	6	1/6/2010	60	726	<0.001	<0.001	<0.001	<0.003	268	Sand to clear No odor
2	54.85	64.42	1.5	6	4/9/2010	52	710	<0.001	<0.001	<0.001	<0.003	250	Sand to clear No odor
2	55.1	64.42	1.5	6	7/9/2010	52	644	<0.001	<0.001	<0.001	<0.003	201	Sand to clear No odor
2	55.05	64.42	1.5	6	10/6/2010	40	530	<0.001	<0.001	<0.001	<0.003	115	Sand to clear No odor
2	54.82	64.42	1.5	6	2/11/2011	88	601	<0.001	<0.001	<0.001	<0.003	123	Sand to clear No odor
2	54.92	64.42	1.5	6	4/12/2011	40	470	<0.001	<0.001	<0.001	<0.003	117	Sand to clear No odor
2	55.23	64.42	1.5	6	7/18/2011	36	491	<0.001	<0.001	<0.001	<0.003	106	Sand to clear No odor
2	55.33	64.42	1.5	6	10/13/2011	44	496	<0.001	<0.001	<0.001	<0.003	121	Sand to clear No odor
2	54.98	64.42	1.5	6	1/18/2012	40	414	<0.001	<0.001	<0.001	<0.003	116	Sand to clear No odor
2	55.34	64.42	1.5	6	4/17/2012	32	458	<0.001	<0.001	<0.001	<0.003	94.6	Sand to clear No odor
2	55.06	64.42	1.5	6	7/16/2012	80	613	<0.001	<0.001	<0.001	<0.003	327	Sand to clear No odor
2	55.33	64.42	1.5	6	10/5/2012	40	510	<0.001	<0.001	<0.001	<0.003	108	Sand to clear No odor
2	55.03	64.42	1.5	6	1/8/2013	40	456	<0.001	<0.001	<0.001	<0.003	94	Sand to clear No odor
2	55.03	64.42	1.5	6	4/19/2013	44	428	<0.001	<0.001	<0.001	<0.003	83	Sand to clear No odor
2	55.07	64.42	1.5	6	7/16/2013	44	424	<0.001	<0.001	<0.001	<0.003	99	Sand to clear No odor
2	55.14	64.42	1.5	6	10/17/2013	40	437	<0.001	<0.001	<0.001	<0.003	85.2	Sand to clear No odor
2	54.92	64.42	1.5	6	1/17/2014	36	406	<0.001	<0.001	<0.001	<0.003	82.3	Sand to clear No odor
2	55.02	64.42	1.5	6	4/7/2014	44	456	<0.001	<0.001	<0.001	<0.003	111	Sand to clear No odor
2	55.05	64.42	1.5	6	7/16/2014	40	472	<0.001	<0.001	<0.001	<0.003	77.4	Sand to clear No odor
2	54.01	64.42	1.7	6	10/23/2014	52	454	<0.001	<0.001	<0.001	<0.003	116	Sand to clear No odor
2	53.83	64.42	1.7	6	2/2/2015	56	438	<0.001	<0.001	<0.001	<0.003	117	Sand to clear No odor
2	54.05	64.42	1.7	6	4/21/2015	40	434	<0.001	<0.001	<0.001	<0.003	89.7	Sand to clear No odor
2	54.32	64.42	1.62	6	7/21/2015	60	480	<0.001	<0.001	<0.001	<0.003	83	Sand to clear No odor
2	54.34	64.42	1.61	6	11/18/2015	76	626	<0.001	<0.001	<0.001	<0.003	135	Sand to clear No odor
2	53.84	64.42	1.7	6	1/28/2016	68	608	<0.001	<0.001	<0.001	<0.003	161	Sand to clear No odor
2	54.15	64.42	1.6	6	4/21/2016	112	518	<0.001	<0.001	<0.001	<0.003	95.8	Sand to clear No odor
2	54.21	64.42	1.6	6	7/21/2016	60	652	<0.001	<0.001	<0.001	<0.003	172	Sand to clear No odor
2	53.64	64.42	1.7	6	10/21/2016	68	658	<0.001	<0.001	<0.001	<0.003	184	Sand to clear No odor
2	53.72	64.42	1.7	6	2/3/2017	60	572	<0.001	<0.001	<0.001	<0.003	139	Sand to clear No odor

ROC - BD Santa Rita EOL (AP-58)
Unit Letter A, Section 27, T22S, R37E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
2	53.91	64.42	1.7	6	4/6/2017	52	534	<0.001	<0.001	<0.001	<0.003	128	Sand to clear No odor
2	53.82	64.42	1.7	6	7/28/2017	48	538	<0.001	<0.001	<0.001	<0.003	103	Sand to clear No odor
2	53.74	64.42	1.7	6	10/20/2017	44	532	<0.001	<0.001	<0.001	<0.003	118	Sand to clear No odor
2	53.7	64.42	1.7	6	1/16/2018	36	436	<0.001	<0.001	<0.001	<0.003	108	Sand to clear No odor
2	53.78	64.42	1.7	6	4/26/2018	44	464	<0.001	<0.001	<0.001	<0.003	121	Sand to clear No odor
2	54.05	64.42	1.7	6	8/2/2018	56	474	<0.001	<0.001	<0.001	<0.003	96.8	Sand to clear No odor
2	54.07	64.42	1.7	6	10/30/2018	48	476	<0.001	<0.001	<0.001	<0.003	102	Sand to clear No odor
2	53.68	64.42	1.7	6	2/4/2019	52	460	<0.001	<0.001	<0.001	<0.003	98	Sand to clear No odor
2	53.78	64.42	1.7	6	4/22/2019	44	360	<0.001	<0.001	<0.001	<0.003	88	Sand to clear No odor
2	54.1	64.42	1.7	6	7/19/2019	48	444	<0.001	<0.001	<0.001	<0.003	101	Sand to clear No odor
2	53.94	64.42	1.7	6	10/23/2019	40	416	<0.001	<0.001	<0.001	<0.003	87	Sand to clear No odor
2	53.7	64.42	1.7	6	3/16/2020	28	244	<0.001	<0.001	<0.001	<0.003	107	Sand to clear No odor
2	53.79	64.42	1.7	6	7/30/2020	36	370	XXX	XXX	XXX	XXX	74	Sand to clear No odor
2	53.82	64.42	1.7	6	2/8/2021	52	369	XXX	XXX	XXX	XXX	102	Sand to clear No odor
2	53.91	64.42	1.7	6	5/10/2021	32	392	<0.001	<0.001	<0.001	<0.003	80.7	Sand to clear No odor
2	53.93	64.42	1.7	6	8/16/2021	32	381	<0.001	<0.001	<0.001	<0.003	74.4	Sand to clear No odor
2	53.66	64.42	1.7	6	10/21/2021	36	399	<0.001	<0.001	<0.001	<0.003	63	Sand to clear No odor
2	53.71	64.42	1.7	6	2/8/2022	32	386	<0.001	<0.001	<0.001	<0.003	62.7	Sand to clear No odor
2	53.88	64.42	1.7	6	4/28/2022	32	380	XXX	XXX	XXX	XXX	XXX	Sand to clear No odor
2	54.04	64.42	1.7	6	8/12/2022	36	355	XXX	XXX	XXX	XXX	XXX	Sand to clear No odor
2	53.72	64.42	1.7	6	10/26/2022	76	423	XXX	XXX	XXX	XXX	XXX	Sand to 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
3	53.86	65.44	1.9	6	10/2/2008	1,020	2,830	<0.001	<0.001	<0.001	<0.003	280	Sand to clear No odor
3	53.83	65.42	1.9	6	1/14/2009	1,050	2,670	<0.001	<0.001	<0.001	<0.003	280	Sand to clear No odor
3	53.9	65.42	1.8	6	4/14/2009	960	2,200	<0.001	<0.001	<0.001	<0.003	294	Sand to clear No odor
3	53.88	65.45	1.9	6	7/13/2009	900	2,080	<0.001	<0.001	<0.001	<0.003	270	Sand to clear No odor

ROC - BD Santa Rita EOL (AP-58)
Unit Letter A, Section 27, T22S, R37E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
3	53.85	65.45	1.9	6	10/8/2009	900	2,340	<0.001	<0.001	<0.001	<0.003	254	Sand to clear No odor
3	54.04	65.45	1.8	6	1/6/2010	910	2,170	<0.001	<0.001	<0.001	<0.003	254	Sand to clear No odor
3	53.94	65.45	1.8	6	4/9/2010	1,110	2,150	<0.001	<0.001	<0.001	<0.003	181	Sand to clear No odor
3	54.94	65.45	1.7	6	7/9/2010	780	1,840	<0.001	<0.001	<0.001	<0.003	276	Sand to clear No odor
3	54.98	65.45	1.7	6	10/6/2010	1,000	2,360	<0.001	<0.001	<0.001	<0.003	266	Sand to clear No odor
3	54.38	65.43	1.8	6	2/11/2011	780	1,560	<0.001	<0.001	<0.001	<0.003	192	Sand to clear No odor
3	55.03	65.43	1.7	6	4/12/2011	1,080	2,350	<0.001	<0.001	<0.001	<0.003	274	Sand to clear No odor
3	54.61	65.43	1.7	6	7/18/2011	720	1,740	<0.001	<0.001	<0.001	<0.003	234	Sand to clear No odor
3	54.7	65.43	1.7	6	10/13/2011	670	1,590	<0.001	<0.001	<0.001	<0.003	247	Sand to clear No odor
3	54.18	65.43	1.8	6	1/18/2012	630	1,520	<0.001	<0.001	<0.001	<0.003	244	Sand to clear No odor
3	54.69	65.43	1.7	6	4/17/2012	520	1,410	<0.001	<0.001	<0.001	<0.003	208	Sand to clear No odor
3	54.48	65.43	1.8	6	7/16/2012	520	1,460	<0.001	<0.001	<0.001	<0.003	267	Sand to clear No odor
3	54.64	65.43	1.7	6	10/5/2012	520	1,520	<0.001	<0.001	<0.001	<0.003	226	Sand to clear No odor
3	54.06	65.43	1.8	6	1/8/2013	730	1,520	<0.001	<0.001	<0.001	<0.003	177	Sand to clear No odor
3	54.42	65.43	1.8	6	4/19/2013	750	1,620	<0.001	<0.001	<0.001	<0.003	202	Sand to clear No odor
3	54.26	65.43	1.8	6	7/16/2013	448	1,280	<0.001	<0.001	<0.001	<0.003	220	Sand to clear No odor
3	54.28	65.43	1.8	6	10/17/2013	600	1,490	<0.001	<0.001	<0.001	<0.003	174	Sand to clear No odor
3	54.02	65.43	1.8	6	1/17/2014	540	1,320	<0.001	<0.001	<0.001	<0.003	176	Sand to clear No odor
3	54.22	65.43	1.8	6	4/7/2014	580	1,510	<0.001	<0.001	<0.001	<0.003	251	Sand to clear No odor
3	54.24	65.43	1.8	6	7/16/2014	460	1,400	<0.001	<0.001	<0.001	<0.003	215	Sand to clear No odor
3	53.82	65.43	1.9	6	10/23/2014	490	1,420	<0.001	<0.001	<0.001	<0.003	206	Sand to clear No odor
3	53.39	65.43	1.9	6	2/2/2015	520	1,520	<0.001	<0.001	<0.001	<0.003	349	Sand to clear No odor
3	53.49	65.43	1.9	6	4/21/2015	580	1,560	<0.001	<0.001	<0.001	<0.003	219	Sand to clear No odor
3	53.88	65.43	1.85	6	7/21/2015	500	1,430	<0.001	<0.001	<0.001	<0.003	185	Sand to clear No odor
3	53.85	65.43	1.85	6	11/18/2015	540	1,420	<0.001	<0.001	<0.001	<0.003	190	Sand to clear No odor
3	53.37	65.43	1.9	6	1/28/2016	830	1,990	<0.001	<0.001	<0.001	<0.003	356	Sand to clear No odor
3	53.7	65.43	1.9	6	4/21/2016	560	1,500	<0.001	<0.001	<0.001	<0.003	248	Sand to clear No odor
3	53.81	65.43	1.9	6	7/21/2016	530	1,300	<0.001	<0.001	<0.001	<0.003	222	Sand to clear No odor
3	53.68	65.43	1.9	6	10/21/2016	388	1,240	<0.001	<0.001	<0.001	<0.003	208	Sand to clear No odor

ROC - BD Santa Rita EOL (AP-58)
Unit Letter A, Section 27, T22S, R37E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
3	53.39	65.43	1.9	6	2/3/2017	780	1,710	<0.001	<0.001	<0.001	<0.003	132	Sand to clear No odor
3	53.49	65.43	1.9	6	4/6/2017	660	1,590	<0.001	<0.001	<0.001	<0.003	241	Sand to clear No odor
3	53.55	65.43	1.9	6	7/28/2017	500	1,520	<0.001	<0.001	<0.001	<0.003	201	Sand to clear No odor
3	53.46	65.43	1.9	6	10/20/2017	530	1,370	<0.001	<0.001	<0.001	<0.003	241	Sand to clear No odor
3	53.51	65.43	1.9	6	1/16/2018	640	1,330	<0.001	<0.001	<0.001	<0.003	230	Sand to clear No odor
3	53.56	65.43	1.9	6	4/26/2018	590	1,560	<0.001	<0.001	<0.001	<0.003	233	Sand to clear No odor
3	53.94	65.43	1.8	6	8/2/2018	540	1,290	<0.001	<0.001	<0.001	<0.003	224	Sand to clear No odor
3	54.01	65.43	1.8	6	10/30/2018	790	1,720	<0.001	<0.001	<0.001	<0.003	207	Sand to clear No odor
3	53.48	65.43	1.9	6	2/4/2019	440	1,200	<0.001	<0.001	<0.001	<0.003	220	Sand to clear No odor
3	53.37	65.43	1.9	6	4/22/2019	528	1,510	<0.001	<0.001	<0.001	<0.003	243	Sand to clear No odor
3	53.89	65.43	1.9	6	7/19/2019	428	1,340	<0.001	<0.001	<0.001	<0.003	227	Sand to clear No odor
3	53.74	65.43	1.9	6	10/23/2019	396	1,200	<0.001	<0.001	<0.001	<0.003	205	Sand to clear No odor
3	53.5	65.43	1.9	6	3/16/2020	416	997	<0.001	<0.001	<0.001	<0.003	258	Sand to clear No odor
3	53.52	65.43	1.9	6	7/30/2020	890	1,910	XXX	XXX	XXX	XXX	204	Sand to clear No odor
3	53.55	65.43	1.9	6	2/8/2021	424	1,280	XXX	XXX	XXX	XXX	271	Sand to clear No odor
3	53.64	65.43	1.9	6	5/10/2021	460	1,420	<0.001	<0.001	<0.001	<0.003	244	Sand to clear No odor
3	53.69	65.43	1.9	6	8/16/2021	650	1,610	<0.001	<0.001	<0.001	<0.003	196	Sand to clear No odor
3	53.42	65.43	1.9	6	10/21/2021	660	1,620	<0.001	<0.001	<0.001	<0.003	198	Sand to clear No odor
3	53.48	65.43	1.9	6	2/8/2022	860	1,890	<0.001	<0.001	<0.001	<0.003	246	Sand to clear No odor
3	53.67	65.43	1.9	6	4/28/2022	420	1,270	XXX	XXX	XXX	XXX	XXX	Sand to clear No odor
3	53.82	65.43	1.9	6	8/12/2022	432	1,220	XXX	XXX	XXX	XXX	XXX	Sand to clear No odor
3	53.5	65.43	1.9	6	10/26/2022	680	1,580	XXX	XXX	XXX	XXX	XXX	Sand to 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
4	52.28	64.4	1.9	6	7/13/2009	1,040	2,260	<0.001	<0.001	<0.001	<0.003	230	Sand to clear No odor
4	52.23	64.4	1.9	6	10/8/2009	1,240	3,320	<0.001	<0.001	<0.001	<0.003	233	Sand to clear No odor
4	52.23	64.29	1.9	6	1/6/2010	1,200	2,750	<0.001	<0.001	<0.001	<0.003	209	Sand to clear No odor

ROC - BD Santa Rita EOL (AP-58)
Unit Letter A, Section 27, T22S, R37E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
4	52.24	64.29	1.9	6	4/9/2010	900	2,100	<0.001	<0.001	<0.001	<0.003	313	Sand to clear No odor
4	52.76	64.29	1.8	6	7/9/2010	1,450	2,810	<0.001	<0.001	<0.001	<0.003	280	Sand to clear No odor
4	52.83	64.29	1.8	6	10/6/2010	1,040	2,320	<0.001	<0.001	<0.001	<0.003	251	Sand to clear No odor
4	52.22	65.2	2.1	8	2/11/2011	610	1,490	<0.001	<0.001	<0.001	<0.003	208	Sand to clear No odor
4	52.92	65.2	2	8	4/12/2011	640	1,580	<0.001	<0.001	<0.001	<0.003	238	Sand to clear No odor
4	52.95	65.2	2	8	7/18/2011	640	1,530	<0.001	<0.001	<0.001	<0.003	232	Sand to clear No odor
4	52.91	65.2	2	8	10/13/2011	450	1,160	<0.001	<0.001	<0.001	<0.003	235	Sand to clear No odor
4	52.32	65.2	2.1	8	1/18/2012	380	915	<0.001	<0.001	<0.001	<0.003	216	Sand to clear No odor
4	52.81	65.2	2	8	4/17/2012	344	1,110	<0.001	<0.001	<0.001	<0.003	207	Sand to clear No odor
4	52.64	65.2	2	8	7/16/2012	344	1,190	<0.001	<0.001	<0.001	<0.003	244	Sand to clear No odor
4	52.79	65.2	2	8	10/5/2012	352	1,180	<0.001	<0.001	<0.001	<0.003	218	Sand to clear No odor
4	52.41	65.2	2	8	1/8/2013	380	980	<0.001	<0.001	<0.001	<0.003	149	Sand to clear No odor
4	52.73	65.2	2	8	4/19/2013	410	1,140	<0.001	<0.001	<0.001	<0.003	213	Sand to clear No odor
4	52.57	65.2	2	8	7/16/2013	388	1,140	<0.001	<0.001	<0.001	<0.003	202	Sand to clear No odor
4	52.57	65.2	2	8	10/17/2013	368	1,100	<0.001	<0.001	<0.001	<0.003	197	Sand to clear No odor
4	52.34	65.2	2.1	8	1/17/2014	360	1,070	<0.001	<0.001	<0.001	<0.003	192	Sand to clear No odor
4	52.58	65.2	2	8	4/7/2014	448	1,200	<0.001	<0.001	<0.001	<0.003	204	Sand to clear No odor
4	52.59	65.2	2	8	7/16/2014	384	1,140	<0.001	<0.001	<0.001	<0.003	174	Sand to clear No odor
4	51.97	65.2	2.1	8	10/23/2014	360	1,100	<0.001	<0.001	<0.001	<0.003	157	Sand to clear No odor
4	51.52	65.2	2.2	8	2/2/2015	460	1,310	<0.001	<0.001	<0.001	<0.003	188	Sand to clear No odor
4	51.58	65.2	2.2	8	4/21/2015	500	1,350	<0.001	<0.001	<0.001	<0.003	207	Sand to clear No odor
4	51.89	65.2	2.13	8	7/21/2015	550	1,450	<0.001	<0.001	<0.001	<0.003	190	Sand to clear No odor
4	51.88	65.2	2.13	8	11/18/2015	500	1,350	<0.001	<0.001	<0.001	<0.003	228	Sand to clear No odor
4	51.42	65.2	2.2	8	1/28/2016	490	1,240	<0.001	<0.001	<0.001	<0.003	223	Sand to clear No odor
4	51.72	65.2	2.2	8	4/21/2016	450	1,360	<0.001	<0.001	<0.001	<0.003	224	Sand to clear No odor
4	51.64	65.2	2.2	8	7/21/2016	400	1,200	<0.001	<0.001	<0.001	<0.003	208	Sand to clear No odor
4	51.52	65.2	2.2	8	10/21/2016	420	1,160	<0.001	<0.001	<0.001	<0.003	111	Sand to clear No odor
4	51.24	65.2	2.2	8	2/3/2017	430	1,240	<0.001	<0.001	<0.001	<0.003	219	Sand to clear No odor
4	51.32	65.2	2.2	8	4/6/2017	440	1,410	<0.001	<0.001	<0.001	<0.003	208	Sand to clear No odor

ROC - BD Santa Rita EOL (AP-58)
Unit Letter A, Section 27, T22S, R37E

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
4	51.38	65.2	2.2	8	7/28/2017	510	1,440	<0.001	<0.001	<0.001	<0.003	218	Sand to clear No odor
4	51.27	65.2	2.2	8	10/20/2017	520	1,330	<0.001	<0.001	<0.001	<0.003	206	Sand to clear No odor
4	51.12	65.2	2.3	8	1/16/2018	540	1,420	<0.001	<0.001	<0.001	<0.003	242	Sand to clear No odor
4	51.15	65.2	2.2	8	4/26/2018	500	1,460	<0.001	<0.001	<0.001	<0.003	247	Sand to clear No odor
4	51.55	65.2	2.2	8	8/2/2018	436	1,070	<0.001	<0.001	<0.001	<0.003	208	Sand to clear No odor
4	51.62	65.2	2.2	8	10/30/2018	450	1,190	<0.001	<0.001	<0.001	<0.003	206	Sand to clear No odor
4	51.14	65.2	2.2	8	2/4/2019	620	1,500	<0.001	<0.001	<0.001	<0.003	235	Sand to clear No odor
4	51.61	65.2	2.2	8	4/22/2019	432	1,210	<0.001	<0.001	<0.001	<0.003	246	Sand to clear No odor
4	51.61	65.2	2.2	8	7/19/2019	448	1,330	<0.001	<0.001	<0.001	<0.003	228	Sand to clear No odor
4	51.55	65.2	2.2	8	10/23/2019	380	1,210	<0.001	<0.001	<0.001	<0.003	214	Sand to clear No odor
4	51.12	65.2	2.3	8	3/16/2020	400	1,120	<0.001	<0.001	<0.001	<0.003	258	Sand to clear No odor
4	51.15	65.2	2.2	8	7/30/2020	480	1,350	XXX	XXX	XXX	XXX	207	Sand to clear No odor
4	51.18	65.2	2.2	8	2/8/2021	430	1,150	XXX	XXX	XXX	XXX	256	Sand to clear No odor
4	51.25	65.2	2.2	8	5/10/2021	470	1,370	<0.001	<0.001	<0.001	<0.003	242	Sand to clear No odor
4	51.29	65.2	2.2	8	8/16/2021	420	1,290	<0.001	<0.001	<0.001	<0.003	188	Sand to clear No odor
4	51.14	65.2	2.2	8	10/21/2021	488	1,360	<0.001	<0.001	<0.001	<0.003	239	Sand to clear No odor
4	51.09	65.2	2.3	8	2/8/2022	416	1,260	<0.001	<0.001	<0.001	<0.003	270	Sand to clear No odor
4	51.38	65.2	2.2	8	4/28/2022	380	1,210	XXX	XXX	XXX	XXX	XXX	Sand to clear No odor
4	51.53	65.2	2.2	8	8/12/2022	480	1,360	XXX	XXX	XXX	XXX	XXX	Sand to clear No odor
4	51.22	65.2	2.2	8	10/26/2022	372	1,190	XXX	XXX	XXX	XXX	XXX	Sand to 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	53.02	98.85	29.8	90	7/13/2009	1,340	2,750	<0.001	<0.001	<0.001	<0.003	288	Sand to clear No odor
RW-1	53.01	98.85	29.8	90	10/8/2009	1,520	2,970	<0.001	<0.001	<0.001	<0.003	251	Sand to clear No odor
RW-1	53.04	98.85	29.8	90	1/6/2010	1,480	2,880	<0.001	<0.001	<0.001	<0.003	224	Sand to clear No odor
RW-1	53.06	98.85	29.8	90	4/9/2010	1,300	2,620	<0.001	<0.001	<0.001	<0.003	290	Sand to clear No odor

ROC - BD Santa Rita EOL (AP-58)
Unit Letter A, Section 27, T22S, R37E

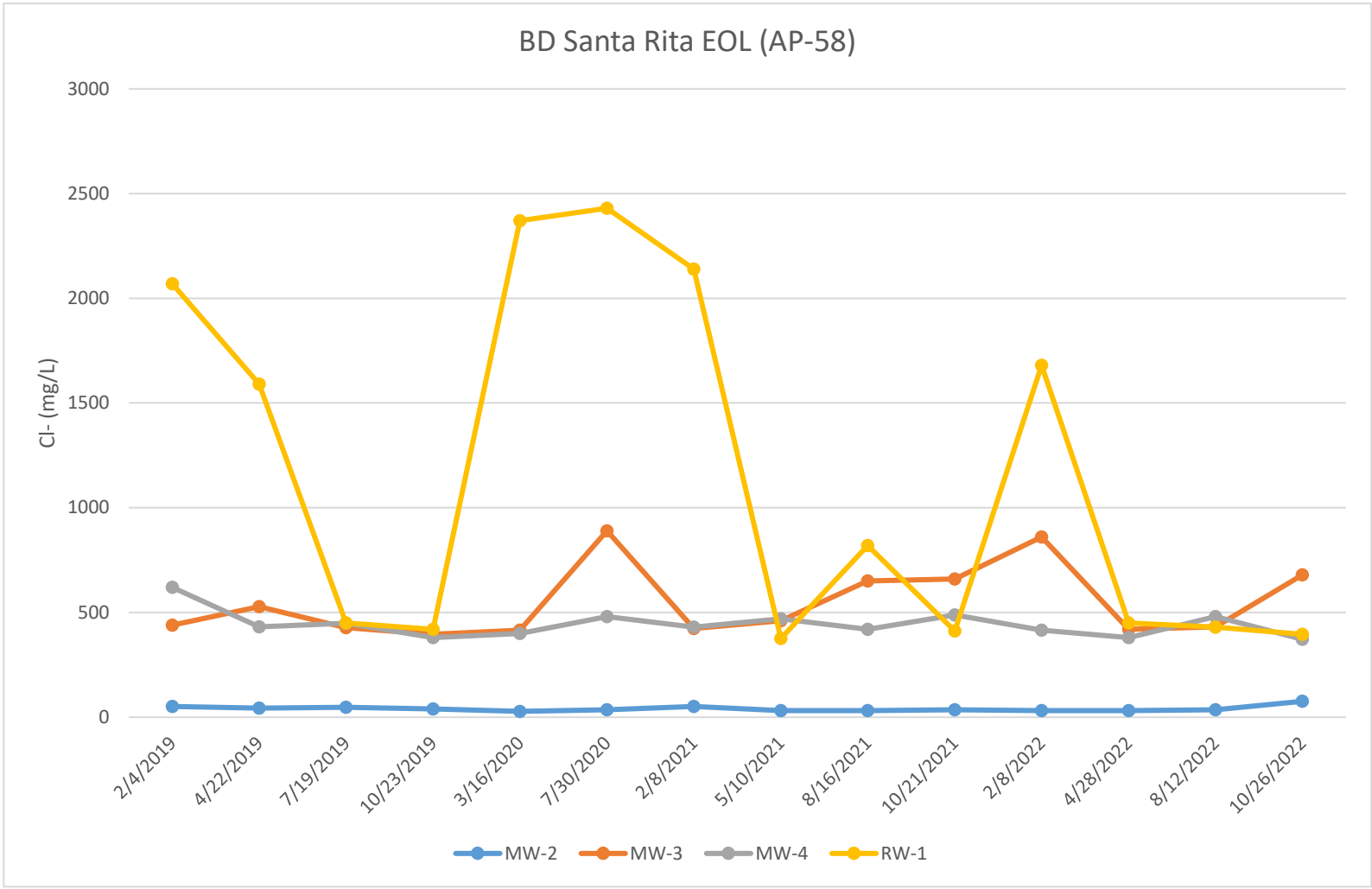
MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
RW-1	XXX	98.85	XXX	XXX	7/9/2010	1,260	2,750	<0.001	<0.001	<0.001	<0.003	291	Solar pump used to purge
RW-1	XXX	98.85	XXX	XXX	10/6/2010	930	2,360	<0.001	<0.001	<0.001	<0.003	298	Solar pump used to purge
RW-1	XXX	98.85	XXX	90	2/11/2011	850	1,800	<0.001	<0.001	<0.001	<0.003	180	Solar pump used to purge
RW-1	XXX	98.85	XXX	XXX	4/12/2011	1,000	2,190	<0.001	<0.001	<0.001	<0.003	298	Solar pump used to purge
RW-1	XXX	98.85	XXX	XXX	7/18/2011	740	1,740	<0.001	<0.001	<0.001	<0.001	255	Solar pump used to purge
RW-1	XXX	98.85	XXX	pumping	10/13/2011	680	1,630	<0.001	<0.001	<0.001	<0.003	199	Solar pump used to purge
RW-1	XXX	98.85	XXX	pumping	1/18/2012	630	1,500	<0.001	<0.001	<0.001	<0.003	244	Solar pump used to purge
RW-1	XXX	98.85	XXX	pumping	4/17/2012	580	1,490	<0.001	<0.001	<0.001	<0.003	277	Solar pump used to purge
RW-1	XXX	98.85	XXX	pumping	7/16/2012	650	1,710	<0.001	<0.001	<0.001	<0.003	250	Solar pump used to purge
RW-1	XXX	98.85	XXX	pumping	10/5/2012	680	1,760	<0.001	<0.001	<0.001	<0.003	218	Solar pump used to purge
RW-1	XXX	98.85	XXX	pumping	1/7/2013	750	1,600	<0.001	<0.001	<0.001	<0.003	188	Solar pump used to purge
RW-1	XXX	98.85	XXX	pumping	4/19/2013	570	1,480	<0.001	<0.001	<0.001	<0.003	224	Solar pump used to purge
RW-1	XXX	98.85	XXX	pumping	7/16/2013	540	1,480	<0.001	<0.001	<0.001	<0.003	247	Solar pump used to purge
RW-1	XXX	98.85	XXX	pumping	10/17/2013	520	1,430	<0.001	<0.001	<0.001	<0.003	195	Solar pump used to purge
RW-1	XXX	98.85	XXX	pumping	1/17/2014	570	1,300	<0.001	<0.001	<0.001	<0.003	188	Solar pump used to purge
RW-1	XXX	98.85	XXX	pumping	4/7/2014	770	1,800	<0.001	<0.001	<0.001	<0.003	258	Solar pump used to purge
RW-1	XXX	98.85	XXX	pumping	7/16/2014	470	1,410	<0.001	<0.001	<0.001	<0.003	210	Solar pump used to purge

ROC - BD Santa Rita EOL (AP-58)
Unit Letter A, Section 27, T22S, R37E

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	98.85	XXX	pumping	10/23/2014	440	1,430	<0.001	<0.001	<0.001	<0.003	200	Solar pump used to purge
RW-1	XXX	98.85	XXX	100	2/2/2015	550	1,450	<0.001	<0.001	<0.001	<0.003	220	Solar pump used to purge
RW-1	XXX	98.85	XXX	100	4/21/2015	890	2,030	<0.001	<0.001	<0.001	<0.003	198	Solar pump used to purge
RW-1	XXX	98.85	XXX	100	7/21/2015	520	1,430	<0.001	<0.001	<0.001	<0.003	195	Solar pump used to purge
RW-1	XXX	98.85	XXX	pumping	11/18/2015	520	1,380	<0.001	<0.001	<0.001	<0.003	259	Solar pump used to purge
RW-1	XXX	98.85	XXX	100	1/28/2016	800	1,730	<0.001	<0.001	<0.001	<0.003	332	Solar pump used to purge
RW-1	XXX	98.85	XXX	running	4/21/2016	480	1,480	<0.001	<0.001	<0.001	<0.003	221	Solar pump used to purge
RW-1	XXX	98.85	XXX	running	7/21/2016	540	1,220	<0.001	<0.001	<0.001	<0.003	224	Solar pump used to purge
RW-1	XXX	98.85	XXX	running	10/21/2016	490	962	<0.001	<0.001	<0.001	<0.003	226	Solar pump used to purge
RW-1	XXX	98.85	XXX	100	2/3/2017	800	1,500	<0.001	<0.001	<0.001	<0.003	194	Solar Pump Used to Purge
RW-1	XXX	98.85	XXX	100	4/6/2017	920	1,990	<0.001	<0.001	<0.001	<0.003	242	Solar Pump Used to Purge
RW-1	XXX	98.85	XXX	Running	7/28/2017	830	2,150	<0.001	<0.001	<0.001	<0.003	212	Solar Pump Used to Purge
RW-1	XXX	98.85	XXX	Running	10/20/2017	520	1,320	<0.001	<0.001	<0.001	<0.003	229	Solar Pump Used to Purge
RW-1	XXX	98.85	XXX	100	1/16/2018	1,060	2,450	<0.001	<0.001	<0.001	<0.003	227	Solar pump used to purge
RW-1	XXX	98.85	XXX	100	4/26/2018	980	2,250	<0.001	<0.001	<0.001	<0.003	185	Solar pump used to purge
RW-1	XXX	98.85	XXX	100	8/2/2018	470	1,380	<0.001	<0.001	<0.001	<0.003	232	Solar pump used to purge
RW-1	XXX	98.85	XXX	100	10/30/2018	510	1,300	<0.001	<0.001	<0.001	<0.003	210	Solar pump used to purge

ROC - BD Santa Rita EOL (AP-58)
Unit Letter A, Section 27, T22S, R37E

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	98.85	XXX	100	2/4/2019	2,070	3,230	<0.001	<0.001	<0.001	<0.003	263	Solar pump used to purge
RW-1	XXX	98.85	XXX	100	4/22/2019	1,590	3,220	<0.001	<0.001	<0.001	<0.003	238	Solar pump used to purge
RW-1	XXX	98.85	XXX	Running	7/19/2019	450	1,350	<0.001	<0.001	<0.001	<0.003	196	Solar pump used to purge
RW-1	XXX	98.85	XXX	Running	10/23/2019	420	1,170	<0.001	<0.001	<0.001	<0.003	204	Solar pump used to purge
RW-1	XXX	98.85	XXX	100	3/16/2020	2,370	3,500	<0.001	<0.001	<0.001	<0.003	257	Solar pump used to purge
RW-1	XXX	98.85	XXX	100	7/30/2020	2,430	4,090	XXX	XXX	XXX	XXX	197	Solar pump used to purge
RW-1	XXX	98.85	XXX	100	2/8/2021	2,140	3,550	XXX	XXX	XXX	XXX	217	Solar pump used to purge
RW-1	XXX	98.85	XXX	Running	5/10/2021	376	1,280	<0.001	<0.001	<0.001	<0.003	264	Solar pump used to purge
RW-1	XXX	98.85	XXX	Running	8/16/2021	820	1,780	<0.001	<0.001	<0.001	<0.003	157	Solar pump used to purge
RW-1	XXX	98.85	XXX	Running	10/21/2021	412	1,300	<0.001	<0.001	<0.001	<0.003	204	Solar pump used to purge
RW-1	XXX	98.85	XXX	100	2/8/2022	1,680	3,040	<0.001	<0.001	<0.001	<0.003	213	Solar pump used to purge
RW-1	XXX	98.85	XXX	Running	4/28/2022	450	1,320	XXX	XXX	XXX	XXX	295	Solar pump used to purge
RW-1	XXX	98.85	XXX	Running	8/12/2022	430	1,210	XXX	XXX	XXX	XXX	170	Solar pump used to purge
RW-1	XXX	98.85	XXX	Running	10/26/2022	396	1,240	XXX	XXX	XXX	XXX	188	Solar pump used to purge


BD Santa Rita EOL (AP-58)
Cl- (mg/L)
3000
2500
2000
1500
1000
500
0
2/4/2019
4/22/2019
7/19/2019
10/23/2019
3/16/2020
7/30/2020
2/8/2021
5/10/2021
8/16/2021
10/21/2021
2/8/2022
4/28/2022
8/12/2022
10/26/2022
MW-2
MW-3
MW-4
RW-1

CARDINAL Laboratories

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

November 07, 2022

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: BD SANTA RITA LEAK

Enclosed are the results of analyses for samples received by the laboratory on 10/31/22 8:55.

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.

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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
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Received:	10/31/2022	Sampling Date:	10/26/2022
Reported:	11/07/2022	Sampling Type:	Water
Project Name:	BD SANTA RITA LEAK	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T22S R37E SEC27 A-LEA CTY., NM		

Sample ID: MONITOR WELL #2 (H225109-01)

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	10/31/2022	ND	100	100	100	0.00	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**423**	5.00	11/04/2022	5.00	563	113	500	3.50	

Sample ID: MONITOR WELL #3 (H225109-02)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**680**	4.00	10/31/2022	ND	100	100	100	0.00	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**1580**	5.00	11/04/2022	5.00	563	113	500	3.50	

Sample ID: MONITOR WELL #4 (H225109-03)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**372**	4.00	10/31/2022	ND	100	100	100	0.00	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**1190**	5.00	11/04/2022	5.00	563	113	500	3.50	

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:	10/31/2022	Sampling Date:	10/26/2022
Reported:	11/07/2022	Sampling Type:	Water
Project Name:	BD SANTA RITA LEAK	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T22S R37E SEC27 A-LEA CTY., NM		

Sample ID: RECOVERY WELL #1 (H225109-04)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**396**	4.00	10/31/2022	ND	104	104	100	3.92	

Sulfate 375.4 mg/L Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	**188**	50.0	10/31/2022	ND	20.5	103	20.0	5.98	

TDS 160.1 mg/L Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**1240**	5.00	11/04/2022	5.00	563	113	500	3.50	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

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: BD Santa Rita Leak
Project Location: T22S R37E Sec27 A ~ Lea County New Mexico	Sampler Signature: Rozanne Johnson (575)631-9310

H225109

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 #2	G	1	X								1		10/26	9:05
2	Monitor Well #3	G	1	X								1		10/26	10:45
3	Monitor Well #4	G	1	X								1		10/26	12:15
4	Recovery Well #1	G	1	X								1		10/26	12:40

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	Anions (Cl, SO4, CO3, HCO3)	Cations (Ca, Mg, Na, K)	Sulfates (SO4)	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours
																		X	X	X	

Relinquished by: Rozanne Johnson	Date: 10/31/2022	Time: 7:15	Received by:	Date: 10/31/2022	Time: 7:15
Relinquished by:	Date: 10/31/2022	Time:	Received By: (Laboratory Staff) Tamara Oldaker	Date: 10-31-22	Time: 0855

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

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

Sample Condition: Cool: Yes / Intact: Yes

CHECKED BY: (Initials) TO

REMARKS:

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

CARDINAL Laboratories

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

August 19, 2022

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: BD SANTA RITA LEAK

Enclosed are the results of analyses for samples received by the laboratory on 08/15/22 15:10.

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:	08/15/2022	Sampling Date:	08/12/2022
Reported:	08/19/2022	Sampling Type:	Water
Project Name:	BD SANTA RITA LEAK	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	T22S R37E SEC27 A-LEA CTY., NM		

Sample ID: MONITOR WELL #2 (H223720-01)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**36.0**	4.00	08/17/2022	ND	100	100	100	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**355**	5.00	08/18/2022	ND	833	83.3	1000	2.21	

Sample ID: MONITOR WELL #3 (H223720-02)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**432**	4.00	08/17/2022	ND	100	100	100	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**1220**	5.00	08/19/2022	ND	833	83.3	1000	2.21	

Sample ID: MONITOR WELL #4 (H223720-03)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**480**	4.00	08/17/2022	ND	100	100	100	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**1360**	5.00	08/19/2022	ND	833	83.3	1000	2.21	

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:	08/15/2022	Sampling Date:	08/12/2022
Reported:	08/19/2022	Sampling Type:	Water
Project Name:	BD SANTA RITA LEAK	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	T22S R37E SEC27 A-LEA CTY., NM		

Sample ID: RECOVERY WELL #1 (H223720-04)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**430**	4.00	08/17/2022	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*	**170**	50.0	08/17/2022	ND	22.2	111	20.0	2.93	

TDS 160.1 mg/L Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**1210**	5.00	08/18/2022	ND	833	83.3	1000	2.21	

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 # H223720

Company Name: RICE Operating Company	BILL TO Company: RICE Operating Company PO#
Project Manager: Katie Jones	Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240
Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240	Phone#: (575) 393-9174 Fax#: (575)397-1471
Phone #: (575) 393-9174	Fax #: (575) 397-1471
Project #:	Project Name: BD Santa Rita Leak
Project Location: T22S R37E Sec27 A ~ 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 #2	G	1	X								1		8/12	9:40
2	Monitor Well #3	G	1	X								1		8/12	11:05
3	Monitor Well #4	G	1	X								1		8/12	12:50
4	Recovery Well #1	G	1	X								1		8/12	12:30

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	Anions (Cl, SO4, CO3, HCO3)	Cations (Ca, Mg, Na, K)	Sulfates (SO4)	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours
																			X	X	
																			X	X	
																			X	X	
																		X	X	X	

Relinquished by: Rozanne Johnson	Date: 8/15/2022	Time: 15:10	Received by:	Date: 8/15/22	Time: 1510
Relinquished by:	Date:	Time:	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 / No; Intact: Yes / No

CHECKED BY: (Initials)

CARDINAL Laboratories

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

May 09, 2022

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: BD SANTA RITA LEAK

Enclosed are the results of analyses for samples received by the laboratory on 05/03/22 15:45.

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

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:	05/03/2022	Sampling Date:	04/28/2022
Reported:	05/09/2022	Sampling Type:	Water
Project Name:	BD SANTA RITA LEAK	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T22S R37E SEC27 A-LEA CTY., NM		

Sample ID: MONITOR WELL #2 (H221840-01)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**32.0**	4.00	05/04/2022	ND	100	100	100	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**380**	5.00	05/05/2022	ND	536	107	500	2.53	

Sample ID: MONITOR WELL #3 (H221840-02)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**420**	4.00	05/04/2022	ND	100	100	100	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**1270**	5.00	05/06/2022	ND	536	107	500	2.53	

Sample ID: MONITOR WELL #4 (H221840-03)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**380**	4.00	05/04/2022	ND	100	100	100	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**1210**	5.00	05/06/2022	ND	536	107	500	2.53	

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:	05/03/2022	Sampling Date:	04/28/2022
Reported:	05/09/2022	Sampling Type:	Water
Project Name:	BD SANTA RITA LEAK	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T22S R37E SEC27 A-LEA CTY., NM		

Sample ID: RECOVERY WELL #1 (H221840-04)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**450**	4.00	05/04/2022	ND	104	104	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*	**295**	50.0	05/04/2022	ND	19.6	97.9	20.0	4.54	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**1320**	5.00	05/05/2022	ND	536	107	500	2.53	

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

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: BD Santa Rita Leak
Project Location: T22S R37E Sec27 A ~ Lea County New Mexico	Sampler Signature: Rozanne Johnson (575)631-9310

H221840 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 #2	G	1	X								1		4/28	9:30
2	Monitor Well #3	G	1	X								1		4/28	11:00
3	Monitor Well #4	G	1	X								1		4/28	12:10
4	Recovery Well #1	G	1	X								1		4/28	12:30

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	Anions (Cl, SO4, CO3, HCO3)	Cations (Ca, Mg, Na, K)	Sulfates (SO4)	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours
1																				X	X	
2																				X	X	
3																				X	X	
4																			X	X	X	

Relinquished by: Rozanne Johnson Date: 5/3/2022 Time: 15:45

Received by: Date: 5-3-22 Time: 1545

Relinquished by: Date: Time:

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 ✓ No | Intact: Yes ✓ No

CHECKED BY: (Initials) TO

CARDINAL Laboratories

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

February 15, 2022

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: BD SANTA RITA LEAK

Enclosed are the results of analyses for samples received by the laboratory on 02/10/22 15:09.

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

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:	02/10/2022	Sampling Date:	02/08/2022
Reported:	02/15/2022	Sampling Type:	Water
Project Name:	BD SANTA RITA LEAK	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	T22S R37E SEC27 A-LEA CTY., NM		

Sample ID: MONITOR WELL #2 (H220535-01)

BTEX 8021B mg/L Analyzed By: MS/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	02/14/2022	ND	0.021	104	0.0200	2.60	
Toluene*	<0.001	0.001	02/14/2022	ND	0.020	101	0.0200	2.26	
Ethylbenzene*	<0.001	0.001	02/14/2022	ND	0.020	100	0.0200	2.93	
Total Xylenes*	<0.003	0.003	02/14/2022	ND	0.063	105	0.0600	2.79	
Total BTEX	<0.006	0.006	02/14/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *77.1-124*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**32.0**	4.00	02/12/2022	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*	**62.7**	25.0	02/14/2022	ND	18.5	92.6	20.0	1.61	

TDS 160.1 mg/L Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**386**	5.00	02/14/2022	ND	524	105	500	1.73	

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:	02/10/2022	Sampling Date:	02/08/2022
Reported:	02/15/2022	Sampling Type:	Water
Project Name:	BD SANTA RITA LEAK	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	T22S R37E SEC27 A-LEA CTY., NM		

Sample ID: MONITOR WELL #3 (H220535-02)

BTEX 8021B mg/L Analyzed By: MS/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	02/14/2022	ND	0.021	104	0.0200	2.60	
Toluene*	<0.001	0.001	02/14/2022	ND	0.020	101	0.0200	2.26	
Ethylbenzene*	<0.001	0.001	02/14/2022	ND	0.020	100	0.0200	2.93	
Total Xylenes*	<0.003	0.003	02/14/2022	ND	0.063	105	0.0600	2.79	
Total BTEX	<0.006	0.006	02/14/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *77.1-124*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**860**	4.00	02/12/2022	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*	**246**	50.0	02/14/2022	ND	18.5	92.6	20.0	1.61	

TDS 160.1 mg/L Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**1890**	5.00	02/14/2022	ND	524	105	500	1.73	

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

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

Received:	02/10/2022	Sampling Date:	02/08/2022
Reported:	02/15/2022	Sampling Type:	Water
Project Name:	BD SANTA RITA LEAK	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	T22S R37E SEC27 A-LEA CTY., NM		

Sample ID: MONITOR WELL #4 (H220535-03)

BTEX 8021B mg/L Analyzed By: MS/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	02/14/2022	ND	0.021	104	0.0200	2.60	
Toluene*	<0.001	0.001	02/14/2022	ND	0.020	101	0.0200	2.26	
Ethylbenzene*	<0.001	0.001	02/14/2022	ND	0.020	100	0.0200	2.93	
Total Xylenes*	<0.003	0.003	02/14/2022	ND	0.063	105	0.0600	2.79	
Total BTEX	<0.006	0.006	02/14/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *77.1-124*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**416**	4.00	02/12/2022	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*	**270**	50.0	02/14/2022	ND	18.5	92.6	20.0	1.61	

TDS 160.1 mg/L Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**1260**	5.00	02/14/2022	ND	524	105	500	1.73	

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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:	02/10/2022	Sampling Date:	02/08/2022
Reported:	02/15/2022	Sampling Type:	Water
Project Name:	BD SANTA RITA LEAK	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	T22S R37E SEC27 A-LEA CTY., NM		

Sample ID: RECOVERY WELL #1 (H220535-04)

BTEX 8021B mg/L Analyzed By: MS/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	02/14/2022	ND	0.021	104	0.0200	2.60	
Toluene*	<0.001	0.001	02/14/2022	ND	0.020	101	0.0200	2.26	
Ethylbenzene*	<0.001	0.001	02/14/2022	ND	0.020	100	0.0200	2.93	
Total Xylenes*	<0.003	0.003	02/14/2022	ND	0.063	105	0.0600	2.79	
Total BTEX	<0.006	0.006	02/14/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *77.1-124*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**1680**	4.00	02/12/2022	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*	**213**	50.0	02/14/2022	ND	18.5	92.6	20.0	1.61	

TDS 160.1 mg/L Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	**3040**	5.00	02/14/2022	ND	524	105	500	1.73	

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Celey D. Keene

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: BD Santa Rita Leak
Project Location: T22S R37E Sec27 A ~ Lea County New Mexico	Sampler Signature: Rozanne Johnson (575)631-9310

HL20535

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 #2	G	5	X				4				1		2/8	9:05
2	Monitor Well #3	G	5	X				4				1		2/8	10:45
3	Monitor Well #4	G	5	X				4				1		2/8	12:00
4	Recovery Well #1	G	5	X				4				1		2/8	15:25

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	Anions (Cl, SO4, CO3, HCO3)	Cations (Ca, Mg, Na, K)	Sulfates (SO4)	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours
	X																	X	X	X	
	X																	X	X	X	
	X																	X	X	X	
	X																	X	X	X	
	X																	X	X	X	

Relinquished by: Rozanne Johnson Date: 2/10/2022 Time: 15:08

Received by: Date: Time:

Relinquished by: Date: Time:

Received By: (Laboratory Staff) Jodi Henson Date: 2/10/22 Time: 15:09

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 202253

CONDITIONS

Operator: RICE OPERATING COMPANY 122 W Taylor Hobbs, NM 88240	OGRID: 19174
	Action Number: 202253
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the BD Santa Rita EOL Release Site 2022 Annual Groundwater Report: Content Satisfactory 1. Continue to collect groundwater samples and monitor per plan in report. 2. Continue groundwater recovery 3. Submit the 2023 Annual Groundwater Report by April 1, 2024.	6/30/2023