

**Appendix A.**  
**February/March 2022 Site-Wide Sampling Event**

**Appendix A. February/March 2022 Site-Wide Sampling Event  
Water Sampling Field Activities Verification**

<b>Sampling Event/RIN</b>	Site-Wide Sampling Event RIN 2202134	<b>Date(s) of Water Sampling</b>	Feb. 8 – Mar. 8, 2022
<b>Date(s) of Verification</b>	October 24, 2022	<b>Name of Verifier</b>	James Ritchey
	<b>Response (Yes, No, NA)</b>	<b>Comments</b>	
1. Is the Sampling Analysis Plan (SAP) the primary document directing field procedures?	Yes		
2. List other documents, standard operating procedures, instructions.	NA		
3. Were the sampling locations specified in the planning documents sampled?	Yes		
4. Was a pre-trip calibration conducted as specified in the aforementioned documents?	Yes		
5. Was an operational check of the field equipment conducted in accordance with the SAP?	Yes		
6. Did the operational checks meet criteria?	Yes		
7. Were the number and types (alkalinity, temperature, electrical conductivity, pH, turbidity, oxidation reduction potential) of field measurements taken as specified?	Yes	Field measurements for temperature, pH, turbidity, oxidation reduction potential, and conductivity were collected.	
8. Was the category of the well documented?	Yes		
9. Were the following conditions met when purging a Category I well: Was one pump/tubing volume purged before sampling?	Yes		
Did the water level stabilize before sampling?	Yes		
Did pH, specific conductance, and turbidity measurements stabilize before sampling?	Yes		
Was the flow rate less than 500 milliliters per minute?	Yes		
If a portable pump was used, was there a 4-hour delay between pump installation and sampling?	N/A		
10. Were the following conditions met when purging a Category II well: Was the flow rate less than 500 milliliters per minute?	NA		
Was one pump/tubing volume removed before sampling?	NA		
11. Were duplicates taken at a frequency of one per 20 samples?	Yes	Four duplicates were collected of the 67 locations sampled.	

**Appendix A. February/March 2022 Site-Wide Sampling Event (continued)**

**Appendix A. February/March 2022 Site-Wide Sampling Event (continued)**

**Water Sampling Field Activities Verification (continued)**

<b>Sampling Event/RIN</b>	<u>Site-Wide Sampling Event RIN 2202134</u>	<b>Date(s) of Water Sampling</b>	<u>Feb. 8 – Mar. 8, 2022</u>
<b>Date(s) of Verification</b>	<u>October 24, 2022</u>	<b>Name of Verifier</b>	<u>James Ritchey</u>
		<b>Response (Yes, No, NA)</b>	<b>Comments</b>
12. Were EBs taken at a frequency of one per 20 samples that were collected with non-dedicated equipment?	<u>Y</u>	<u>One equipment blank was collected, 2004.</u>	
13. Were trip blanks prepared and included with each shipment of volatile organic compound samples?	<u>NA</u>		
14. Were quality-control samples assigned a fictitious site identification number?	<u>Yes</u>		
Was the true identity of the samples recorded on the quality assurance sample log?	<u>Yes</u>		
15. Were samples collected in the containers specified?	<u>Yes</u>		
16. Were samples filtered and preserved as specified?	<u>Yes</u>		
17. Were the number and types of samples collected as specified?	<u>Yes</u>		
18. Were COC records completed, and was sample custody maintained?	<u>Yes</u>		
19. Are field data sheets signed and dated by both team members?	<u>Yes</u>		
20. Was all other pertinent information documented on the field data sheets?	<u>NA</u>		
21. Was the presence or absence of ice in the cooler documented at every sample location?	<u>Yes</u>		
22. Were water levels measured at the locations specified in the planning documents?	<u>Yes</u>		

## Appendix A. February/March 2022 Site-Wide Sampling Event (*continued*)

## Appendix A. February/March 2022 Site-Wide Sampling Event (continued)

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE MOA01, Moab Site

REPORT DATE: 10/24/2022 12:49 PM

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMPLE:		DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS:			DETECTION LIMIT	UN-CERTAINTY
				DATE	ID			LAB	DATA	QA		
Ammonia Total as N	mg/L	0201	SL, RIV	03/08/2022	0001	0.00 - 0.00	0.2	U			0.2	-
	mg/L	0218	SL, RIV	03/07/2022	0001	0.00 - 0.00	0.2	U			0.2	-
	mg/L	0226	SL, RIV	03/08/2022	0001	0.00 - 0.00	0.2	U			0.2	-
	mg/L	0401	WL	03/08/2022	0001	18.00	250				20	-
	mg/L	0401	WL	03/08/2022	0002	13.00 - 17.90	220				40	-
	mg/L	0403	WL	02/28/2022	0001	18.00	18				5	-
	mg/L	0404	WL	02/24/2022	0001	18.00	250				20	-
	mg/L	0406	WL	02/24/2022	0001	18.00	92				10	-
	mg/L	0407	WL	02/24/2022	0001	17.00	180				10	-
	mg/L	0413	WL	02/14/2022	0001	10.50	51				5	-
	mg/L	0414	WL	02/08/2022	0001	7.50	36				5	-
	mg/L	0430	WL	02/15/2022	0001	101.00	0.2	U			0.2	-
	mg/L	0431	WL	02/28/2022	0001	91.00	0.2	U			0.2	-
	mg/L	0432	WL	02/15/2022	0001	55.00	0.2	U			0.2	-
	mg/L	0433	WL	02/28/2022	0001	99.00	0.2	U			0.2	-
	mg/L	0434	WL	02/15/2022	0001	35.00	0.44	N			0.2	-
	mg/L	0435	WL	02/15/2022	0001	173.00	1.6				0.2	-
	mg/L	0436	WL	02/22/2022	0001	197.00	2.6				0.2	-
	mg/L	0437	WL	03/01/2022	0001	97.00	0.2	U			0.2	-
	mg/L	0439	WL	03/01/2022	0001	118.00	0.2	U			0.2	-
	mg/L	0440	WL	03/01/2022	0001	117.00	0.2	U			0.2	-
	mg/L	0441	WL	02/23/2022	0001	53.00	0.2	U			0.2	-
	mg/L	0443	WL	02/28/2022	0001	73.00	2.5				0.2	-
	mg/L	0444	WL	02/15/2022	0001	116.00	1.8				0.2	-

**Appendix A. February/March 2022 Site-Wide Sampling Event (continued)**

mg/L	0454	WL	02/14/2022	0001	13.00	180		10	-
mg/L	0455	WL	02/28/2022	0001	46.00	0.2	U	0.2	-
mg/L	0456	WL	02/15/2022	0001	53.00	0.2	U	0.2	-
mg/L	0457	WL	02/15/2022	0001	29.00	0.2	U	0.2	-
mg/L	0492	WL	03/07/2022	0001	18.00	200		20	-
mg/L	AMM-1-19	WL	02/08/2022	0001	19.00	0.2	U	0.2	-
mg/L	AMM-2	WL	02/10/2022	0001	48.00	430		20	-
mg/L	AMM-2	WL	02/10/2022	0002	10.00 - 49.75	430		20	-
mg/L	AMM-3	WL	02/10/2022	0001	48.00	290		20	-
mg/L	ATP-2-D	WL, PZ	02/09/2022	0001	88.00	350		20	-
mg/L	ATP-2-S	WL, PZ	02/09/2022	0001	25.00	300		20	-
mg/L	ATP-3	WL	02/15/2022	0001	51.00	0.2	U	0.2	-
mg/L	CR1	SL, RIV	03/07/2022	0001	0.00 - 0.00	0.2	U	0.2	-
mg/L	CR2	SL, RIV	03/07/2022	0001	0.00 - 0.00	0.2	U	0.2	-
mg/L	CR3	SL, RIV	03/07/2022	0001	0.00 - 0.00	1.2		0.2	-
mg/L	CR5	SL, RIV	03/08/2022	0001	0.00 - 0.00	0.2	U	0.2	-
mg/L	MW-3	WL	02/14/2022	0001	44.00	340		20	-
mg/L	SMI-MW01	WL	02/08/2022	0001	16.00	1.2		0.2	-
mg/L	SMI-PW01	WL	02/14/2022	0001	40.00	330		20	-
mg/L	SMI-PW03	WL	02/22/2022	0001	60.00	27		2	-
mg/L	SMI-PZ1D	BH	02/14/2022	0001	0.00 - 0.00	1400		100	-
mg/L	SMI-PZ1M	WL	02/14/2022	0001	57.00	460		20	-
mg/L	SMI-PZ1S	WL	02/14/2022	0001	18.00	7.6		1	-
mg/L	SMI-PZ2D	WL	02/10/2022	0001	75.00	400	N	20	-
mg/L	SMI-PZ2M2	WL	02/10/2022	0001	56.00	450		40	-
mg/L	SMI-PZ3D2	WL	02/22/2022	0001	78.00	300		20	-
mg/L	SMI-PZ3M	WL	02/22/2022	0001	59.00	18		2	-
mg/L	SMI-PZ3M	WL	02/22/2022	0002	54.80 - 59.80	18		2	-
mg/L	SMI-PZ3S	WL	02/22/2022	0001	25.00	1.9		0.2	-

**Appendix A. February/March 2022 Site-Wide Sampling Event (continued)**

	mg/L	TP-01	WL	02/08/2022	0001	22.00	0.56		0.2	-
	mg/L	TP-11	WL	02/08/2022	0001	30.00	0.74		0.2	-
	mg/L	TP-17	WL	03/08/2022	0001	28.00	2.6		0.2	-
	mg/L	TP-20	WL	02/09/2022	0001	32.00	2.6		0.2	-
	mg/L	TP-22	WL	02/09/2022	0001	17.00	0.2	U	0.2	-
	mg/L	TP-23	WL	02/09/2022	0001	25.00	220		20	-
	mg/L	UPD-17	WL	02/22/2022	0001	14.50	180		10	-
	mg/L	UPD-18	WL	02/22/2022	0001	13.00	180		10	-
	mg/L	UPD-20	WL	02/22/2022	0001	17.00	0.2	U	0.2	-
	mg/L	UPD-21	WL	03/02/2022	0001	25.00	0.2	U	0.2	-
	mg/L	UPD-22	WL	02/14/2022	0001	9.00	6.7		1	-
	mg/L	UPD-23	WL	03/08/2022	0001	26.00	5		0.2	-
	mg/L	UPD-24	WL	03/02/2022	0001	27.00	1.2		0.2	-
	mg/L	UPD-24	WL	03/02/2022	0002		1.4		0.2	-
Arsenic	mg/L	0201	SL, RIV	03/08/2022	0001	0.00 - 0.00	0.001	J	0.00012	-
	mg/L	0218	SL, RIV	03/07/2022	0001	0.00 - 0.00	0.00098	J	0.00012	-
	mg/L	0226	SL, RIV	03/08/2022	0001	0.00 - 0.00	0.00092	J	0.00012	-
	mg/L	0401	WL	03/08/2022	0001	18.00	0.0014	J	0.00012	-
	mg/L	0401	WL	03/08/2022	0002	13.00 - 17.90	0.0014	J	0.00012	-
	mg/L	0403	WL	02/28/2022	0001	18.00	0.0012	J	0.00012	-
	mg/L	0404	WL	02/24/2022	0001	18.00	0.0026		0.00012	-
	mg/L	0406	WL	02/24/2022	0001	18.00	0.016		0.00012	-
	mg/L	0407	WL	02/24/2022	0001	17.00	0.0012	J	0.00012	-
	mg/L	0412	WL	02/08/2022	0001	9.50	0.014		0.00012	-
	mg/L	0413	WL	02/14/2022	0001	10.50	0.031		0.00012	-
	mg/L	0414	WL	02/08/2022	0001	7.50	0.016		0.00012	-
	mg/L	0430	WL	02/15/2022	0001	101.00	0.00012	J	0.00012	-
	mg/L	0431	WL	02/28/2022	0001	91.00	0.00012	U	0.00012	-
	mg/L	0432	WL	02/15/2022	0001	55.00	0.00019	J	0.00012	-

**Appendix A. February/March 2022 Site-Wide Sampling Event (continued)**

mg/L	0433	WL	02/28/2022	0001	99.00	0.00014	J	0.00012	-
mg/L	0434	WL	02/15/2022	0001	35.00	0.00074	J	0.00012	-
mg/L	0435	WL	02/15/2022	0001	173.00	0.00086	J	0.00012	-
mg/L	0436	WL	02/22/2022	0001	197.00	0.0016	J	0.00012	-
mg/L	0437	WL	03/01/2022	0001	97.00	0.0029		0.00012	-
mg/L	0439	WL	03/01/2022	0001	118.00	0.00054	J	0.00012	-
mg/L	0440	WL	03/01/2022	0001	117.00	0.00041	J	0.00012	-
mg/L	0441	WL	02/23/2022	0001	53.00	0.00068	J	0.00012	-
mg/L	0443	WL	02/28/2022	0001	73.00	0.00055	J	0.00012	-
mg/L	0444	WL	02/15/2022	0001	116.00	0.0023		0.00012	-
mg/L	0454	WL	02/14/2022	0001	13.00	0.00075	J	0.00012	-
mg/L	0455	WL	02/28/2022	0001	46.00	0.00059	J	0.00012	-
mg/L	0456	WL	02/15/2022	0001	53.00	0.00057	J	0.00012	-
mg/L	0457	WL	02/15/2022	0001	29.00	0.006		0.00012	-
mg/L	0492	WL	03/07/2022	0001	18.00	0.00069	J	0.00012	-
mg/L	AMM-1-19	WL	02/08/2022	0001	19.00	0.00074	J	0.00012	-
mg/L	AMM-2	WL	02/10/2022	0001	48.00	0.0014	J	0.00012	-
mg/L	AMM-2	WL	02/10/2022	0002	10.00 - 49.75	0.0015	J	0.00012	-
mg/L	AMM-3	WL	02/10/2022	0001	48.00	0.0024		0.00012	-
mg/L	ATP-2-D	WL, PZ	02/09/2022	0001	88.00	0.00029	J	0.00012	-
mg/L	ATP-2-S	WL, PZ	02/09/2022	0001	25.00	0.0033		0.00012	-
mg/L	ATP-3	WL	02/15/2022	0001	51.00	0.0024		0.00012	-
mg/L	CR1	SL, RIV	03/07/2022	0001	0.00 - 0.00	0.00086	J	0.00012	-
mg/L	CR2	SL, RIV	03/07/2022	0001	0.00 - 0.00	0.0011	J	0.00012	-
mg/L	CR3	SL, RIV	03/07/2022	0001	0.00 - 0.00	0.00095	J	0.00012	-
mg/L	CR5	SL, RIV	03/08/2022	0001	0.00 - 0.00	0.00082	J	0.00012	-
mg/L	MW-3	WL	02/14/2022	0001	44.00	0.001	J	0.00012	-
mg/L	SMI-MW01	WL	02/08/2022	0001	16.00	0.0024		0.00012	-
mg/L	SMI-PW01	WL	02/14/2022	0001	40.00	0.0061		0.00012	-



**Appendix A. February/March 2022 Site-Wide Sampling Event (continued)**

	mg/L	SMI-PW03	WL	02/22/2022	0001	60.00	0.0017	J	0.00012	-
	mg/L	SMI-PZ1D	BH	02/14/2022	0001	0.00 - 0.00	0.00088	J	0.00012	-
	mg/L	SMI-PZ1M	WL	02/14/2022	0001	57.00	0.0023		0.00012	-
	mg/L	SMI-PZ1S	WL	02/14/2022	0001	18.00	0.0029		0.00012	-
	mg/L	SMI-PZ2D	WL	02/10/2022	0001	75.00	0.00079	J	0.00012	-
	mg/L	SMI-PZ2M2	WL	02/10/2022	0001	56.00	0.0012	J	0.00012	-
	mg/L	SMI-PZ3D2	WL	02/22/2022	0001	78.00	0.00067	J	0.00012	-
	mg/L	SMI-PZ3M	WL	02/22/2022	0001	59.00	0.0012	J	0.00012	-
	mg/L	SMI-PZ3M	WL	02/22/2022	0002	54.80 - 59.80	0.0011	J	0.00012	-
	mg/L	SMI-PZ3S	WL	02/22/2022	0001	25.00	0.022		0.00012	-
	mg/L	TP-01	WL	02/08/2022	0001	22.00	0.0026		0.00012	-
	mg/L	TP-11	WL	02/08/2022	0001	30.00	0.00015	J	0.00012	-
	mg/L	TP-17	WL	03/08/2022	0001	28.00	0.0036		0.00012	-
	mg/L	TP-20	WL	02/09/2022	0001	32.00	0.00025	J	0.00012	-
	mg/L	TP-22	WL	02/09/2022	0001	17.00	0.00058	J	0.00012	-
	mg/L	TP-23	WL	02/09/2022	0001	25.00	0.0016	J	0.00012	-
	mg/L	UPD-17	WL	02/22/2022	0001	14.50	0.016		0.00012	-
	mg/L	UPD-18	WL	02/22/2022	0001	13.00	0.016		0.00012	-
	mg/L	UPD-20	WL	02/22/2022	0001	17.00	0.00047	J	0.00012	-
	mg/L	UPD-21	WL	03/02/2022	0001	25.00	0.0013	J	0.00012	-
	mg/L	UPD-22	WL	02/14/2022	0001	9.00	0.0033		0.00012	-
	mg/L	UPD-23	WL	03/08/2022	0001	26.00	0.0022		0.00012	-
	mg/L	UPD-24	WL	03/02/2022	0001	27.00	0.190		0.00012	-
	mg/L	UPD-24	WL	03/02/2022	0002		0.190		0.00012	-
Copper	mg/L	0201	SL, RIV	03/08/2022	0001	0.00 - 0.00	0.001	J	0.00066	-
	mg/L	0218	SL, RIV	03/07/2022	0001	0.00 - 0.00	0.00087	J	0.00066	-
	mg/L	0226	SL, RIV	03/08/2022	0001	0.00 - 0.00	0.00098	J	0.00066	-
	mg/L	0401	WL	03/08/2022	0001	18.00	0.0024	J	0.00066	-
	mg/L	0401	WL	03/08/2022	0002	13.00 - 17.90	0.0022	J	0.00066	-

**Appendix A. February/March 2022 Site-Wide Sampling Event (continued)**

mg/L	0403	WL	02/28/2022	0001	18.00	0.0042	J	0.00066	-
mg/L	0404	WL	02/24/2022	0001	18.00	0.0041	J	0.00066	-
mg/L	0406	WL	02/24/2022	0001	18.00	0.0036	J	0.00066	-
mg/L	0407	WL	02/24/2022	0001	17.00	0.0049	J	0.00066	-
mg/L	0412	WL	02/08/2022	0001	9.50	0.0023	J	0.00066	-
mg/L	0413	WL	02/14/2022	0001	10.50	0.0018	J	0.00066	-
mg/L	0414	WL	02/08/2022	0001	7.50	0.00076	J	0.00066	-
mg/L	0430	WL	02/15/2022	0001	101.00	0.00066	U	0.00066	-
mg/L	0431	WL	02/28/2022	0001	91.00	0.0012	J	0.00066	-
mg/L	0432	WL	02/15/2022	0001	55.00	0.00076	J	0.00066	-
mg/L	0433	WL	02/28/2022	0001	99.00	0.00066	U	0.00066	-
mg/L	0434	WL	02/15/2022	0001	35.00	0.00066	U	0.00066	-
mg/L	0435	WL	02/15/2022	0001	173.00	0.0014	J	0.00066	-
mg/L	0436	WL	02/22/2022	0001	197.00	0.002	J	0.00066	-
mg/L	0437	WL	03/01/2022	0001	97.00	0.0026	J	0.00066	-
mg/L	0439	WL	03/01/2022	0001	118.00	0.0018	J	0.00066	-
mg/L	0440	WL	03/01/2022	0001	117.00	0.0014	J	0.00066	-
mg/L	0441	WL	02/23/2022	0001	53.00	0.0044	J	0.00066	-
mg/L	0443	WL	02/28/2022	0001	73.00	0.00066	U	0.00066	-
mg/L	0444	WL	02/15/2022	0001	116.00	0.0022	J	0.00066	-
mg/L	0454	WL	02/14/2022	0001	13.00	0.0012	J	0.00066	-
mg/L	0455	WL	02/28/2022	0001	46.00	0.0015	J	0.00066	-
mg/L	0456	WL	02/15/2022	0001	53.00	0.0015	J	0.00066	-
mg/L	0457	WL	02/15/2022	0001	29.00	0.00078	J	0.00066	-
mg/L	0492	WL	03/07/2022	0001	18.00	0.00086	J	0.00066	-
mg/L	AMM-1-19	WL	02/08/2022	0001	19.00	0.00094	J	0.00066	-
mg/L	AMM-2	WL	02/10/2022	0001	48.00	0.004	J	0.00066	-
mg/L	AMM-2	WL	02/10/2022	0002	10.00 - 49.75	0.0037	J	0.00066	-
mg/L	AMM-3	WL	02/10/2022	0001	48.00	0.00066	U	0.00066	-

**Appendix A. February/March 2022 Site-Wide Sampling Event (continued)**

mg/L	ATP-2-D	WL, PZ	02/09/2022	0001	88.00	0.00071	J	0.00066	-
mg/L	ATP-2-S	WL, PZ	02/09/2022	0001	25.00	0.00066	U	0.00066	-
mg/L	ATP-3	WL	02/15/2022	0001	51.00	0.00075	J	0.00066	-
mg/L	CR1	SL, RIV	03/07/2022	0001	0.00 - 0.00	0.001	J	0.00066	-
mg/L	CR2	SL, RIV	03/07/2022	0001	0.00 - 0.00	0.00085	J	0.00066	-
mg/L	CR3	SL, RIV	03/07/2022	0001	0.00 - 0.00	0.0012	J	0.00066	-
mg/L	CR5	SL, RIV	03/08/2022	0001	0.00 - 0.00	0.00077	J	0.00066	-
mg/L	MW-3	WL	02/14/2022	0001	44.00	0.003	J	0.00066	-
mg/L	SMI-MW01	WL	02/08/2022	0001	16.00	0.0013	J	0.00066	-
mg/L	SMI-PW01	WL	02/14/2022	0001	40.00	0.0024	J	0.00066	-
mg/L	SMI-PW03	WL	02/22/2022	0001	60.00	0.0021	J	0.00066	-
mg/L	SMI-PZ1D	BH	02/14/2022	0001	0.00 - 0.00	0.0036	J	0.00066	-
mg/L	SMI-PZ1M	WL	02/14/2022	0001	57.00	0.0031	J	0.00066	-
mg/L	SMI-PZ1S	WL	02/14/2022	0001	18.00	0.0024	J	0.00066	-
mg/L	SMI-PZ2D	WL	02/10/2022	0001	75.00	0.049		0.00066	-
mg/L	SMI-PZ2M2	WL	02/10/2022	0001	56.00	0.045		0.00066	-
mg/L	SMI-PZ3D2	WL	02/22/2022	0001	78.00	0.0025	J	0.00066	-
mg/L	SMI-PZ3M	WL	02/22/2022	0001	59.00	0.0062	J	0.00066	-
mg/L	SMI-PZ3M	WL	02/22/2022	0002	54.80 - 59.80	0.0013	J	0.00066	-
mg/L	SMI-PZ3S	WL	02/22/2022	0001	25.00	0.0016	J	0.00066	-
mg/L	TP-01	WL	02/08/2022	0001	22.00	0.0031	J	0.00066	-
mg/L	TP-11	WL	02/08/2022	0001	30.00	0.00066	U	0.00066	-
mg/L	TP-17	WL	03/08/2022	0001	28.00	0.00097	J	0.00066	-
mg/L	TP-20	WL	02/09/2022	0001	32.00	0.0012	J	0.00066	-
mg/L	TP-22	WL	02/09/2022	0001	17.00	0.0074	J	0.00066	-
mg/L	TP-23	WL	02/09/2022	0001	25.00	0.010	J	0.00066	-
mg/L	UPD-17	WL	02/22/2022	0001	14.50	0.0056	J	0.00066	-
mg/L	UPD-18	WL	02/22/2022	0001	13.00	0.0021	J	0.00066	-
mg/L	UPD-20	WL	02/22/2022	0001	17.00	0.0012	J	0.00066	-

**Appendix A. February/March 2022 Site-Wide Sampling Event (continued)**

	mg/L	UPD-21	WL	03/02/2022	0001	25.00	0.0017	J	0.00066	-
	mg/L	UPD-22	WL	02/14/2022	0001	9.00	0.0013	J	0.00066	-
	mg/L	UPD-23	WL	03/08/2022	0001	26.00	0.0042	J	0.00066	-
	mg/L	UPD-24	WL	03/02/2022	0001	27.00	0.00081	J	0.00066	-
	mg/L	UPD-24	WL	03/02/2022	0002		0.00078	J	0.00066	-
Manganese	mg/L	0201	SL, RIV	03/08/2022	0001	0.00 - 0.00	0.013		0.00016	-
	mg/L	0218	SL, RIV	03/07/2022	0001	0.00 - 0.00	0.0095	J	0.00016	-
	mg/L	0226	SL, RIV	03/08/2022	0001	0.00 - 0.00	0.014		0.00016	-
	mg/L	0401	WL	03/08/2022	0001	18.00	4.200		0.00016	-
	mg/L	0401	WL	03/08/2022	0002	13.00 - 17.90	4.200		0.00016	-
	mg/L	0403	WL	02/28/2022	0001	18.00	4.000		0.00016	-
	mg/L	0404	WL	02/24/2022	0001	18.00	0.026		0.00016	-
	mg/L	0406	WL	02/24/2022	0001	18.00	0.030		0.00016	-
	mg/L	0407	WL	02/24/2022	0001	17.00	4.200		0.00016	-
	mg/L	0412	WL	02/08/2022	0001	9.50	0.00035	J	0.00016	-
	mg/L	0413	WL	02/14/2022	0001	10.50	0.037		0.00016	-
	mg/L	0414	WL	02/08/2022	0001	7.50	0.099		0.00016	-
	mg/L	0430	WL	02/15/2022	0001	101.00	0.0018	J	0.00016	-
	mg/L	0431	WL	02/28/2022	0001	91.00	0.230		0.00016	-
	mg/L	0432	WL	02/15/2022	0001	55.00	0.00016	U	0.00016	-
	mg/L	0433	WL	02/28/2022	0001	99.00	0.00041	J	0.00016	-
	mg/L	0434	WL	02/15/2022	0001	35.00	0.440		0.00016	-
	mg/L	0435	WL	02/15/2022	0001	173.00	0.540		0.00016	-
	mg/L	0436	WL	02/22/2022	0001	197.00	4.600		0.00016	-
	mg/L	0437	WL	03/01/2022	0001	97.00	0.220		0.00016	-
	mg/L	0439	WL	03/01/2022	0001	118.00	0.280		0.00016	-
	mg/L	0440	WL	03/01/2022	0001	117.00	0.00055	J	0.00016	-
	mg/L	0441	WL	02/23/2022	0001	53.00	0.0024	J	0.00016	-
	mg/L	0443	WL	02/28/2022	0001	73.00	0.00031	J	0.00016	-

**Appendix A. February/March 2022 Site-Wide Sampling Event (continued)**

mg/L	0444	WL	02/15/2022	0001	116.00	2.400	0.00016	-
mg/L	0454	WL	02/14/2022	0001	13.00	1.900	0.00016	-
mg/L	0455	WL	02/28/2022	0001	46.00	0.072	0.00016	-
mg/L	0456	WL	02/15/2022	0001	53.00	0.00054 J	0.00016	-
mg/L	0457	WL	02/15/2022	0001	29.00	0.640	0.00016	-
mg/L	0492	WL	03/07/2022	0001	18.00	3.600	0.00016	-
mg/L	AMM-1-19	WL	02/08/2022	0001	19.00	0.00049 J	0.00016	-
mg/L	AMM-2	WL	02/10/2022	0001	48.00	0.800	0.00016	-
mg/L	AMM-2	WL	02/10/2022	0002	10.00 - 49.75	0.800	0.00016	-
mg/L	AMM-3	WL	02/10/2022	0001	48.00	3.100	0.00016	-
mg/L	ATP-2-D	WL, PZ	02/09/2022	0001	88.00	1.900	0.00016	-
mg/L	ATP-2-S	WL, PZ	02/09/2022	0001	25.00	0.027	0.00016	-
mg/L	ATP-3	WL	02/15/2022	0001	51.00	0.430	0.00016	-
mg/L	CR1	SL, RIV	03/07/2022	0001	0.00 - 0.00	0.011	0.00016	-
mg/L	CR2	SL, RIV	03/07/2022	0001	0.00 - 0.00	0.014	0.00016	-
mg/L	CR3	SL, RIV	03/07/2022	0001	0.00 - 0.00	0.018	0.00016	-
mg/L	CR5	SL, RIV	03/08/2022	0001	0.00 - 0.00	0.032	0.00016	-
mg/L	MW-3	WL	02/14/2022	0001	44.00	7.800	0.00016	-
mg/L	SMI-MW01	WL	02/08/2022	0001	16.00	0.540	0.00016	-
mg/L	SMI-PW01	WL	02/14/2022	0001	40.00	0.012	0.00016	-
mg/L	SMI-PW03	WL	02/22/2022	0001	60.00	1.200	0.00016	-
mg/L	SMI-PZ1D	BH	02/14/2022	0001	0.00 - 0.00	11.000	0.00016	-
mg/L	SMI-PZ1M	WL	02/14/2022	0001	57.00	6.100	0.00016	-
mg/L	SMI-PZ1S	WL	02/14/2022	0001	18.00	0.580	0.00016	-
mg/L	SMI-PZ2D	WL	02/10/2022	0001	75.00	7.700	0.00016	-
mg/L	SMI-PZ2M2	WL	02/10/2022	0001	56.00	7.400	0.00016	-
mg/L	SMI-PZ3D2	WL	02/22/2022	0001	78.00	0.180	0.00016	-
mg/L	SMI-PZ3M	WL	02/22/2022	0001	59.00	1.300	0.00016	-
mg/L	SMI-PZ3M	WL	02/22/2022	0002	54.80 - 59.80	1.300	0.00016	-

**Appendix A. February/March 2022 Site-Wide Sampling Event (continued)**

	mg/L	SMI-PZ3S	WL	02/22/2022	0001	25.00	0.036		0.00016	-
	mg/L	TP-01	WL	02/08/2022	0001	22.00	0.610		0.00016	-
	mg/L	TP-11	WL	02/08/2022	0001	30.00	1.800		0.00016	-
	mg/L	TP-17	WL	03/08/2022	0001	28.00	2.800		0.00016	-
	mg/L	TP-20	WL	02/09/2022	0001	32.00	0.200		0.00016	-
	mg/L	TP-22	WL	02/09/2022	0001	17.00	0.0034	J	0.00016	-
	mg/L	TP-23	WL	02/09/2022	0001	25.00	4.300		0.00016	-
	mg/L	UPD-17	WL	02/22/2022	0001	14.50	1.100		0.00016	-
	mg/L	UPD-18	WL	02/22/2022	0001	13.00	0.023		0.00016	-
	mg/L	UPD-20	WL	02/22/2022	0001	17.00	0.930		0.00016	-
	mg/L	UPD-21	WL	03/02/2022	0001	25.00	0.029		0.00016	-
	mg/L	UPD-22	WL	02/14/2022	0001	9.00	0.054		0.00016	-
	mg/L	UPD-23	WL	03/08/2022	0001	26.00	0.056		0.00016	-
	mg/L	UPD-24	WL	03/02/2022	0001	27.00	0.100		0.00016	-
	mg/L	UPD-24	WL	03/02/2022	0002		0.100		0.00016	-
Selenium	mg/L	0201	SL, RIV	03/08/2022	0001	0.00 - 0.00	0.0026	J	0.00066	-
	mg/L	0218	SL, RIV	03/07/2022	0001	0.00 - 0.00	0.0029	J	0.00066	-
	mg/L	0226	SL, RIV	03/08/2022	0001	0.00 - 0.00	0.0032	J	0.00066	-
	mg/L	0401	WL	03/08/2022	0001	18.00	0.011		0.00066	-
	mg/L	0401	WL	03/08/2022	0002	13.00 - 17.90	0.011		0.00066	-
	mg/L	0403	WL	02/28/2022	0001	18.00	0.027		0.00066	-
	mg/L	0404	WL	02/24/2022	0001	18.00	0.012		0.00066	-
	mg/L	0406	WL	02/24/2022	0001	18.00	0.200		0.00066	-
	mg/L	0407	WL	02/24/2022	0001	17.00	0.0022	J	0.00066	-
	mg/L	0412	WL	02/08/2022	0001	9.50	0.015		0.00066	-
	mg/L	0413	WL	02/14/2022	0001	10.50	0.072		0.00066	-
	mg/L	0414	WL	02/08/2022	0001	7.50	0.037		0.00066	-
	mg/L	0430	WL	02/15/2022	0001	101.00	0.001	J	0.00066	-
	mg/L	0431	WL	02/28/2022	0001	91.00	0.0022	J	0.00066	-

**Appendix A. February/March 2022 Site-Wide Sampling Event (continued)**

mg/L	0432	WL	02/15/2022	0001	55.00	0.0016	J	0.00066	-
mg/L	0433	WL	02/28/2022	0001	99.00	0.0017	J	0.00066	-
mg/L	0434	WL	02/15/2022	0001	35.00	0.00066	U	0.00066	-
mg/L	0435	WL	02/15/2022	0001	173.00	0.00097	J	0.00066	-
mg/L	0436	WL	02/22/2022	0001	197.00	0.0011	J	0.00066	-
mg/L	0437	WL	03/01/2022	0001	97.00	0.080		0.00066	-
mg/L	0439	WL	03/01/2022	0001	118.00	0.0022	J	0.00066	-
mg/L	0440	WL	03/01/2022	0001	117.00	0.060		0.00066	-
mg/L	0441	WL	02/23/2022	0001	53.00	0.560		0.00066	-
mg/L	0443	WL	02/28/2022	0001	73.00	0.011		0.00066	-
mg/L	0444	WL	02/15/2022	0001	116.00	0.00088	J	0.00066	-
mg/L	0454	WL	02/14/2022	0001	13.00	0.020		0.00066	-
mg/L	0455	WL	02/28/2022	0001	46.00	0.0016	J	0.00066	-
mg/L	0456	WL	02/15/2022	0001	53.00	0.016		0.00066	-
mg/L	0457	WL	02/15/2022	0001	29.00	0.00066	U	0.00066	-
mg/L	0492	WL	03/07/2022	0001	18.00	0.00066	U	0.00066	-
mg/L	AMM-1-19	WL	02/08/2022	0001	19.00	0.012		0.00066	-
mg/L	AMM-2	WL	02/10/2022	0001	48.00	0.0084	J	0.00066	-
mg/L	AMM-2	WL	02/10/2022	0002	10.00 - 49.75	0.0076	J	0.00066	-
mg/L	AMM-3	WL	02/10/2022	0001	48.00	0.00066	U	0.00066	-
mg/L	ATP-2-D	WL, PZ	02/09/2022	0001	88.00	0.0011	J	0.00066	-
mg/L	ATP-2-S	WL, PZ	02/09/2022	0001	25.00	0.0016	J	0.00066	-
mg/L	ATP-3	WL	02/15/2022	0001	51.00	0.00066	U	0.00066	-
mg/L	CR1	SL, RIV	03/07/2022	0001	0.00 - 0.00	0.0023	J	0.00066	-
mg/L	CR2	SL, RIV	03/07/2022	0001	0.00 - 0.00	0.0026	J	0.00066	-
mg/L	CR3	SL, RIV	03/07/2022	0001	0.00 - 0.00	0.0026	J	0.00066	-
mg/L	CR5	SL, RIV	03/08/2022	0001	0.00 - 0.00	0.0022	J	0.00066	-
mg/L	MW-3	WL	02/14/2022	0001	44.00	0.0038	J	0.00066	-
mg/L	SMI-MW01	WL	02/08/2022	0001	16.00	0.024		0.00066	-

**Appendix A. February/March 2022 Site-Wide Sampling Event (continued)**

mg/L	SMI-PW01	WL	02/14/2022	0001	40.00	0.120		0.00066	-
mg/L	SMI-PW03	WL	02/22/2022	0001	60.00	0.0021	J	0.00066	-
mg/L	SMI-PZ1D	BH	02/14/2022	0001	0.00 - 0.00	0.0022	J	0.00066	-
mg/L	SMI-PZ1M	WL	02/14/2022	0001	57.00	0.0055	J	0.00066	-
mg/L	SMI-PZ1S	WL	02/14/2022	0001	18.00	0.004	J	0.00066	-
mg/L	SMI-PZ2D	WL	02/10/2022	0001	75.00	0.0021	J	0.00066	-
mg/L	SMI-PZ2M2	WL	02/10/2022	0001	56.00	0.0027	J	0.00066	-
mg/L	SMI-PZ3D2	WL	02/22/2022	0001	78.00	0.063		0.00066	-
mg/L	SMI-PZ3M	WL	02/22/2022	0001	59.00	0.0015	J	0.00066	-
mg/L	SMI-PZ3M	WL	02/22/2022	0002	54.80 - 59.80	0.0012	J	0.00066	-
mg/L	SMI-PZ3S	WL	02/22/2022	0001	25.00	0.038		0.00066	-
mg/L	TP-01	WL	02/08/2022	0001	22.00	0.0015	J	0.00066	-
mg/L	TP-11	WL	02/08/2022	0001	30.00	0.00066	U	0.00066	-
mg/L	TP-17	WL	03/08/2022	0001	28.00	0.00076	J	0.00066	-
mg/L	TP-20	WL	02/09/2022	0001	32.00	0.0013	J	0.00066	-
mg/L	TP-22	WL	02/09/2022	0001	17.00	0.0068	J	0.00066	-
mg/L	TP-23	WL	02/09/2022	0001	25.00	0.016		0.00066	-
mg/L	UPD-17	WL	02/22/2022	0001	14.50	0.094		0.00066	-
mg/L	UPD-18	WL	02/22/2022	0001	13.00	0.058		0.00066	-
mg/L	UPD-20	WL	02/22/2022	0001	17.00	0.0037	J	0.00066	-
mg/L	UPD-21	WL	03/02/2022	0001	25.00	0.120		0.00066	-
mg/L	UPD-22	WL	02/14/2022	0001	9.00	0.031		0.00066	-
mg/L	UPD-23	WL	03/08/2022	0001	26.00	0.062		0.00066	-
mg/L	UPD-24	WL	03/02/2022	0001	27.00	0.090		0.00066	-
mg/L	UPD-24	WL	03/02/2022	0002		0.089		0.00066	-
Sulfate	mg/L	0201	SL, RIV	03/08/2022	0001	0.00 - 0.00	280	5	-
	mg/L	0218	SL, RIV	03/07/2022	0001	0.00 - 0.00	270	5	-
	mg/L	0226	SL, RIV	03/08/2022	0001	0.00 - 0.00	280	5	-
	mg/L	0401	WL	03/08/2022	0001	18.00	7700	100	-



**Appendix A. February/March 2022 Site-Wide Sampling Event (continued)**

mg/L	0401	WL	03/08/2022	0002	13.00 - 17.90	7600	100	-
mg/L	0403	WL	02/28/2022	0001	18.00	5200	100	-
mg/L	0404	WL	02/24/2022	0001	18.00	7400	100	-
mg/L	0406	WL	02/24/2022	0001	18.00	2300	50	-
mg/L	0407	WL	02/24/2022	0001	17.00	7400	100	-
mg/L	0413	WL	02/14/2022	0001	10.50	2100	100	-
mg/L	0414	WL	02/08/2022	0001	7.50	5500	1000	-
mg/L	0430	WL	02/15/2022	0001	101.00	140	100	-
mg/L	0431	WL	02/28/2022	0001	91.00	2200	50	-
mg/L	0432	WL	02/15/2022	0001	55.00	340	100	-
mg/L	0433	WL	02/28/2022	0001	99.00	380	10	-
mg/L	0434	WL	02/15/2022	0001	35.00	1700	100	-
mg/L	0435	WL	02/15/2022	0001	173.00	3700	250	-
mg/L	0436	WL	02/22/2022	0001	197.00	4900	200	-
mg/L	0437	WL	03/01/2022	0001	97.00	4700	100	-
mg/L	0439	WL	03/01/2022	0001	118.00	5600	100	-
mg/L	0440	WL	03/01/2022	0001	117.00	2700	50	-
mg/L	0441	WL	02/23/2022	0001	53.00	1800	25	-
mg/L	0443	WL	02/28/2022	0001	73.00	500	10	-
mg/L	0444	WL	02/15/2022	0001	116.00	3900	250	-
mg/L	0454	WL	02/14/2022	0001	13.00	5700	250	-
mg/L	0455	WL	02/28/2022	0001	46.00	370	5	-
mg/L	0456	WL	02/15/2022	0001	53.00	870	100	-
mg/L	0457	WL	02/15/2022	0001	29.00	560	100	-
mg/L	0492	WL	03/07/2022	0001	18.00	6100	100	-
mg/L	AMM-1-19	WL	02/08/2022	0001	19.00	880	200	-
mg/L	AMM-2	WL	02/10/2022	0001	48.00	9000	2000	-
mg/L	AMM-2	WL	02/10/2022	0002	10.00 - 49.75	8800	2500	-
mg/L	AMM-3	WL	02/10/2022	0001	48.00	11000	2500	-

**Appendix A. February/March 2022 Site-Wide Sampling Event (continued)**

mg/L	ATP-2-D	WL, PZ	02/09/2022	0001	88.00	3700	1000	-
mg/L	ATP-2-S	WL, PZ	02/09/2022	0001	25.00	8100	1000	-
mg/L	ATP-3	WL	02/15/2022	0001	51.00	240	100	-
mg/L	CR1	SL, RIV	03/07/2022	0001	0.00 - 0.00	270	5	-
mg/L	CR2	SL, RIV	03/07/2022	0001	0.00 - 0.00	270	5	-
mg/L	CR3	SL, RIV	03/07/2022	0001	0.00 - 0.00	320	5	-
mg/L	CR5	SL, RIV	03/08/2022	0001	0.00 - 0.00	270	5	-
mg/L	MW-3	WL	02/14/2022	0001	44.00	21000	500	-
mg/L	SMI-MW01	WL	02/08/2022	0001	16.00	830	250	-
mg/L	SMI-PW01	WL	02/14/2022	0001	40.00	7300	250	-
mg/L	SMI-PW03	WL	02/22/2022	0001	60.00	990	25	-
mg/L	SMI-PZ1D	BH	02/14/2022	0001	0.00 - 0.00	9100	250	-
mg/L	SMI-PZ1M	WL	02/14/2022	0001	57.00	16000	500	-
mg/L	SMI-PZ1S	WL	02/14/2022	0001	18.00	400	100	-
mg/L	SMI-PZ2D	WL	02/10/2022	0001	75.00	10000	1000	-
mg/L	SMI-PZ2M2	WL	02/10/2022	0001	56.00	10000	250	-
mg/L	SMI-PZ3D2	WL	02/22/2022	0001	78.00	4100	50	-
mg/L	SMI-PZ3M	WL	02/22/2022	0001	59.00	820	20	-
mg/L	SMI-PZ3M	WL	02/22/2022	0002	54.80 - 59.80	810	20	-
mg/L	SMI-PZ3S	WL	02/22/2022	0001	25.00	800	20	-
mg/L	TP-01	WL	02/08/2022	0001	22.00	840	25	-
mg/L	TP-11	WL	02/08/2022	0001	30.00	1900	50	-
mg/L	TP-17	WL	03/08/2022	0001	28.00	6700	100	-
mg/L	TP-20	WL	02/09/2022	0001	32.00	4800	100	-
mg/L	TP-22	WL	02/09/2022	0001	17.00	8500	250	-
mg/L	TP-23	WL	02/09/2022	0001	25.00	8900	200	-
mg/L	UPD-17	WL	02/22/2022	0001	14.50	4800	50	-
mg/L	UPD-18	WL	02/22/2022	0001	13.00	3300	50	-
mg/L	UPD-20	WL	02/22/2022	0001	17.00	950	20	-

**Appendix A. February/March 2022 Site-Wide Sampling Event (continued)**

	mg/L	UPD-21	WL	03/02/2022	0001	25.00	830	20	-
	mg/L	UPD-22	WL	02/14/2022	0001	9.00	590	100	-
	mg/L	UPD-24	WL	03/02/2022	0001	27.00	880	20	-
	mg/L	UPD-24	WL	03/02/2022	0002		910	20	-
Total Dissolved Solids	mg/L	0201	SL, RIV	03/08/2022	0001	0.00 - 0.00	440	20	-
	mg/L	0218	SL, RIV	03/07/2022	0001	0.00 - 0.00	580	40	-
	mg/L	0226	SL, RIV	03/08/2022	0001	0.00 - 0.00	540	40	-
	mg/L	0401	WL	03/08/2022	0001	18.00	10000	400	-
	mg/L	0401	WL	03/08/2022	0002	13.00 - 17.90	9500	400	-
	mg/L	0403	WL	02/28/2022	0001	18.00	8100	200	-
	mg/L	0404	WL	02/24/2022	0001	18.00	9700	400	-
	mg/L	0406	WL	02/24/2022	0001	18.00	3700	80	-
	mg/L	0407	WL	02/24/2022	0001	17.00	10000	400	-
	mg/L	0413	WL	02/14/2022	0001	10.50	4400	400	-
	mg/L	0414	WL	02/08/2022	0001	7.50	7600	200	-
	mg/L	0430	WL	02/15/2022	0001	101.00	3600	400	-
	mg/L	0431	WL	02/28/2022	0001	91.00	16000	1000	-
	mg/L	0432	WL	02/15/2022	0001	55.00	7500	400	-
	mg/L	0433	WL	02/28/2022	0001	99.00	2400	80	-
	mg/L	0434	WL	02/15/2022	0001	35.00	19000	1000	-
	mg/L	0435	WL	02/15/2022	0001	173.00	58000	1000	-
	mg/L	0436	WL	02/22/2022	0001	197.00	63000	1000	-
	mg/L	0437	WL	03/01/2022	0001	97.00	7000	200	-
	mg/L	0439	WL	03/01/2022	0001	118.00	8800	200	-
	mg/L	0440	WL	03/01/2022	0001	117.00	4200	200	-
	mg/L	0441	WL	02/23/2022	0001	53.00	12000	400	-
	mg/L	0443	WL	02/28/2022	0001	73.00	2800	200	-
	mg/L	0444	WL	02/15/2022	0001	116.00	58000	1000	-
	mg/L	0454	WL	02/14/2022	0001	13.00	41000	1000	-

**Appendix A. February/March 2022 Site-Wide Sampling Event (continued)**

mg/L	0455	WL	02/28/2022	0001	46.00	1700	40	-
mg/L	0456	WL	02/15/2022	0001	53.00	3500	400	-
mg/L	0457	WL	02/15/2022	0001	29.00	4800	400	-
mg/L	0492	WL	03/07/2022	0001	18.00	3900	200	-
mg/L	AMM-1-19	WL	02/08/2022	0001	19.00	4900	400	-
mg/L	AMM-2	WL	02/10/2022	0001	48.00	6500	400	-
mg/L	AMM-2	WL	02/10/2022	0002	10.00 - 49.75	11000	400	-
mg/L	AMM-3	WL	02/10/2022	0001	48.00	12000	400	-
mg/L	ATP-2-D	WL, PZ	02/09/2022	0001	88.00	52000	1000	-
mg/L	ATP-2-S	WL, PZ	02/09/2022	0001	25.00	6500	400	-
mg/L	ATP-3	WL	02/15/2022	0001	51.00	2600	400	-
mg/L	CR1	SL, RIV	03/07/2022	0001	0.00 - 0.00	780	40	-
mg/L	CR2	SL, RIV	03/07/2022	0001	0.00 - 0.00	640	40	-
mg/L	CR3	SL, RIV	03/07/2022	0001	0.00 - 0.00	770	40	-
mg/L	CR5	SL, RIV	03/08/2022	0001	0.00 - 0.00	520	40	-
mg/L	MW-3	WL	02/14/2022	0001	44.00	15000	1000	-
mg/L	SMI-MW01	WL	02/08/2022	0001	16.00	3000	80	-
mg/L	SMI-PW01	WL	02/14/2022	0001	40.00	16000	400	-
mg/L	SMI-PW03	WL	02/22/2022	0001	60.00	4300	200	-
mg/L	SMI-PZ1D	BH	02/14/2022	0001	0.00 - 0.00	48000	1000	-
mg/L	SMI-PZ1M	WL	02/14/2022	0001	57.00	20000	400	-
mg/L	SMI-PZ1S	WL	02/14/2022	0001	18.00	1200	400	-
mg/L	SMI-PZ2D	WL	02/10/2022	0001	75.00	45000	1000	-
mg/L	SMI-PZ2M2	WL	02/10/2022	0001	56.00	43000	1000	-
mg/L	SMI-PZ3D2	WL	02/22/2022	0001	78.00	12000	400	-
mg/L	SMI-PZ3M	WL	02/22/2022	0001	59.00	3800	200	-
mg/L	SMI-PZ3M	WL	02/22/2022	0002	54.80 - 59.80	4800	200	-
mg/L	SMI-PZ3S	WL	02/22/2022	0001	25.00	2600	80	-
mg/L	TP-01	WL	02/08/2022	0001	22.00	3100	200	-

**Appendix A. February/March 2022 Site-Wide Sampling Event (continued)**

	mg/L	TP-11	WL	02/08/2022	0001	30.00	8900	400	-
	mg/L	TP-17	WL	03/08/2022	0001	28.00	38000	1000	-
	mg/L	TP-20	WL	02/09/2022	0001	32.00	77000	1000	-
	mg/L	TP-22	WL	02/09/2022	0001	17.00	19000	400	-
	mg/L	TP-23	WL	02/09/2022	0001	25.00	38000	80	-
	mg/L	UPD-17	WL	02/22/2022	0001	14.50	6400	200	-
	mg/L	UPD-18	WL	02/22/2022	0001	13.00	5400	200	-
	mg/L	UPD-20	WL	02/22/2022	0001	17.00	2500	80	-
	mg/L	UPD-21	WL	03/02/2022	0001	25.00	1900	80	-
	mg/L	UPD-22	WL	02/14/2022	0001	9.00	4200	400	-
	mg/L	UPD-24	WL	03/02/2022	0001	27.00	1800	80	-
	mg/L	UPD-24	WL	03/02/2022	0002		1800	80	-
Uranium	mg/L	0201	SL, RIV	03/08/2022	0001	0.00 - 0.00	0.0053	1.2E-05	-
	mg/L	0218	SL, RIV	03/07/2022	0001	0.00 - 0.00	0.0053	1.2E-05	-
	mg/L	0226	SL, RIV	03/08/2022	0001	0.00 - 0.00	0.0062	1.2E-05	-
	mg/L	0401	WL	03/08/2022	0001	18.00	1.900	0.00012	-
	mg/L	0401	WL	03/08/2022	0002	13.00 - 17.90	1.800	0.00012	-
	mg/L	0403	WL	02/28/2022	0001	18.00	0.960	1.2E-05	-
	mg/L	0404	WL	02/24/2022	0001	18.00	1.800	1.2E-05	-
	mg/L	0406	WL	02/24/2022	0001	18.00	0.670	1.2E-05	-
	mg/L	0407	WL	02/24/2022	0001	17.00	1.800	1.2E-05	-
	mg/L	0412	WL	02/08/2022	0001	9.50	3.000	0.00012	-
	mg/L	0413	WL	02/14/2022	0001	10.50	1.900	1.2E-05	-
	mg/L	0414	WL	02/08/2022	0001	7.50	2.800	0.00012	-
	mg/L	0430	WL	02/15/2022	0001	101.00	0.011	1.2E-05	-
	mg/L	0431	WL	02/28/2022	0001	91.00	0.0098	1.2E-05	-
	mg/L	0432	WL	02/15/2022	0001	55.00	0.0019	1.2E-05	-
	mg/L	0433	WL	02/28/2022	0001	99.00	0.0019	1.2E-05	-
	mg/L	0434	WL	02/15/2022	0001	35.00	0.024	1.2E-05	-

**Appendix A. February/March 2022 Site-Wide Sampling Event (continued)**

mg/L	0435	WL	02/15/2022	0001	173.00	0.027	1.2E-05	-
mg/L	0436	WL	02/22/2022	0001	197.00	0.011	1.2E-05	-
mg/L	0437	WL	03/01/2022	0001	97.00	2.300	0.00012	-
mg/L	0439	WL	03/01/2022	0001	118.00	1.500	1.2E-05	-
mg/L	0440	WL	03/01/2022	0001	117.00	0.029	1.2E-05	-
mg/L	0441	WL	02/23/2022	0001	53.00	0.053	1.2E-05	-
mg/L	0443	WL	02/28/2022	0001	73.00	0.011	1.2E-05	-
mg/L	0444	WL	02/15/2022	0001	116.00	0.014	1.2E-05	-
mg/L	0454	WL	02/14/2022	0001	13.00	1.100	1.2E-05	-
mg/L	0455	WL	02/28/2022	0001	46.00	0.0027	1.2E-05	-
mg/L	0456	WL	02/15/2022	0001	53.00	0.027	1.2E-05	-
mg/L	0457	WL	02/15/2022	0001	29.00	0.0023	1.2E-05	-
mg/L	0492	WL	03/07/2022	0001	18.00	1.900	1.2E-05	-
mg/L	AMM-1-19	WL	02/08/2022	0001	19.00	0.0089	1.2E-05	-
mg/L	AMM-2	WL	02/10/2022	0001	48.00	2.000	0.00012	-
mg/L	AMM-2	WL	02/10/2022	0002	10.00 - 49.75	2.000	0.00012	-
mg/L	AMM-3	WL	02/10/2022	0001	48.00	2.000	0.00012	-
mg/L	ATP-2-D	WL, PZ	02/09/2022	0001	88.00	0.0016	1.2E-05	-
mg/L	ATP-2-S	WL, PZ	02/09/2022	0001	25.00	0.0012	1.2E-05	-
mg/L	ATP-3	WL	02/15/2022	0001	51.00	0.0024	1.2E-05	-
mg/L	CR1	SL, RIV	03/07/2022	0001	0.00 - 0.00	0.005	1.2E-05	-
mg/L	CR2	SL, RIV	03/07/2022	0001	0.00 - 0.00	0.0065	1.2E-05	-
mg/L	CR3	SL, RIV	03/07/2022	0001	0.00 - 0.00	0.014	1.2E-05	-
mg/L	CR5	SL, RIV	03/08/2022	0001	0.00 - 0.00	0.0057	1.2E-05	-
mg/L	MW-3	WL	02/14/2022	0001	44.00	2.700	0.00012	-
mg/L	SMI-MW01	WL	02/08/2022	0001	16.00	2.400	0.00012	-
mg/L	SMI-PW01	WL	02/14/2022	0001	40.00	1.500	1.2E-05	-
mg/L	SMI-PW03	WL	02/22/2022	0001	60.00	0.340	1.2E-05	-
mg/L	SMI-PZ1D	BH	02/14/2022	0001	0.00 - 0.00	1.400	1.2E-05	-

**Appendix A. February/March 2022 Site-Wide Sampling Event (continued)**

mg/L	SMI-PZ1M	WL	02/14/2022	0001	57.00	2.600	0.00012	-
mg/L	SMI-PZ1S	WL	02/14/2022	0001	18.00	0.120	1.2E-05	-
mg/L	SMI-PZ2D	WL	02/10/2022	0001	75.00	0.670	1.2E-05	-
mg/L	SMI-PZ2M2	WL	02/10/2022	0001	56.00	2.600	0.00012	-
mg/L	SMI-PZ3D2	WL	02/22/2022	0001	78.00	0.690	1.2E-05	-
mg/L	SMI-PZ3M	WL	02/22/2022	0001	59.00	0.280	1.2E-05	-
mg/L	SMI-PZ3M	WL	02/22/2022	0002	54.80 - 59.80	0.270	1.2E-05	-
mg/L	SMI-PZ3S	WL	02/22/2022	0001	25.00	0.780	1.2E-05	-
mg/L	TP-01	WL	02/08/2022	0001	22.00	0.041	1.2E-05	-
mg/L	TP-11	WL	02/08/2022	0001	30.00	0.00063	1.2E-05	-
mg/L	TP-17	WL	03/08/2022	0001	28.00	0.023	0.00012	-
mg/L	TP-20	WL	02/09/2022	0001	32.00	0.0078	1.2E-05	-
mg/L	TP-22	WL	02/09/2022	0001	17.00	0.260	1.2E-05	-
mg/L	TP-23	WL	02/09/2022	0001	25.00	2.400	0.00012	-
mg/L	UPD-17	WL	02/22/2022	0001	14.50	1.200	1.2E-05	-
mg/L	UPD-18	WL	02/22/2022	0001	13.00	0.700	1.2E-05	-
mg/L	UPD-20	WL	02/22/2022	0001	17.00	0.069	1.2E-05	-
mg/L	UPD-21	WL	03/02/2022	0001	25.00	7.400	0.00012	-
mg/L	UPD-22	WL	02/14/2022	0001	9.00	2.500	0.00012	-
mg/L	UPD-23	WL	03/08/2022	0001	26.00	0.820	1.2E-05	-
mg/L	UPD-24	WL	03/02/2022	0001	27.00	6.800	0.00012	-
mg/L	UPD-24	WL	03/02/2022	0002		6.800	0.00012	-

SELECTED FROM USEE205 WHERE RIN = '2202134' AND (DataValidationQualifiers IS NULL OR (DataValidationQualifiers NOT LIKE '%N%' AND DataValidationQualifiers NOT LIKE '%R%' AND DataValidationQualifiers NOT LIKE '%X%')) AND Analyte in ('Ammonia Total as N','Arsenic','Copper','Manganese','Selenium','Sulfate','Total Dissolved Solids','Uranium')

SAMPLE ID CODES: 000X = Filtered sample (0.45 µm). N00X = Unfiltered sample. X = replicate number.

LAB QUALIFIERS:

- \* Replicate analysis not within control limits.
- + Correlation coefficient for MSA < 0.995.
- > Result above upper detection limit.

## Appendix A. February/March 2022 Site-Wide Sampling Event (continued)

- A TIC is a suspected aldol-condensation product.
- B Inorganic: Result is between the IDL and CRDL. Organic & Radiochemistry: Analyte also found in method blank.
- C Pesticide result confirmed by GC-MS.
- D Analyte determined in diluted sample.
- E Inorganic: Estimate value because of interference, see case narrative. Organic: Analyte exceeded calibration range of the GC-MS.
- H Holding time expired, value suspect.
- I Increased detection limit due to required dilution.
- J Estimated
- M GFAA duplicate injection precision not met.
- N Inorganic or radiochemical: Spike sample recovery not within control limits. Organic: Tentatively identified compound (TIC).
- P > 25% difference in detected pesticide or Arochlor concentrations between 2 columns.
- S Result determined by method of standard addition (MSA).
- U Analytical result below detection limit.
- W Post-digestion spike outside control limits while sample absorbance < 50% of analytical spike absorbance.
- X Laboratory defined (USEPA CLP organic) qualifier, see case narrative.
- Y Laboratory defined (USEPA CLP organic) qualifier, see case narrative.
- Z Laboratory defined (USEPA CLP organic) qualifier, see case narrative.

### DATA QUALIFIERS:

- |                                                      |                                                                                          |                                                |
|------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------|
| F Low flow sampling method used.                     | G Possible grout contamination, pH > 9.                                                  | J Estimated value.                             |
| L Less than 3 bore volumes purged prior to sampling. | N Presumptive evidence that analyte is present. The analyte is "tentatively identified". | Q Qualitative result due to sampling technique |
| R Unusable result.                                   | U Parameter analyzed for but was not detected.                                           | X Location is undefined.                       |

QA QUALIFIER: # = validated according to Quality Assurance guidelines.



## Appendix A. February/March 2022 Site-Wide Sampling Event (continued)

### BLANKS REPORT

LAB: ALS

RIN: 2202134

Report Date: 10/31/2022 2:00 PM

Parameter	Site	Location	Sample				Qualifiers		Detection	Sample Type	
	Code	Code	Date	ID	Units	Result	Lab	Data	Limit		Uncertainty
Ammonia Total as N	MOA01	0999	03/08/2022	0002	mg/L	0.2	UN		0.2		E
Arsenic	MOA01	0999	03/08/2022	0002	mg/L	0.00012	U		0.00012		E
Copper	MOA01	0999	03/08/2022	0002	mg/L	0.00066	U		0.00066		E
Manganese	MOA01	0999	03/08/2022	0002	mg/L	0.00032	J		0.00016		E
Selenium	MOA01	0999	03/08/2022	0002	mg/L	0.00066	U		0.00066		E
Sulfate	MOA01	0999	03/08/2022	0002	mg/L	1.1			1		E
Total Dissolved Solids	MOA01	0999	03/08/2022	0002	mg/L	20	U		20		E
Uranium	MOA01	0999	03/08/2022	0002	mg/L	0.00039			1.2E-05		E

SAMPLE ID CODES: 000X = Filtered sample (0.45 µm). N00X = Unfiltered sample. X = replicate number.

#### LAB QUALIFIERS:

- \* Replicate analysis not within control limits.
- + Correlation coefficient for MSA < 0.995.
- > Result above upper detection limit.
- A TIC is a suspected aldol-condensation product.
- B Inorganic: Result is between the IDL and CRDL. Organic & Radiochemistry: Analyte also found in method blank.
- C Pesticide result confirmed by GC-MS.
- D Analyte determined in diluted sample.
- E Inorganic: Estimate value because of interference, see case narrative. Organic: Analyte exceeded calibration range of the GC-MS.
- H Holding time expired, value suspect.
- I Increased detection limit due to required dilution.
- J Estimated
- M GFAA duplicate injection precision not met.
- N Inorganic or radiochemical: Spike sample recovery not within control limits. Organic: Tentatively identified compound (TIC).
- P > 25% difference in detected pesticide or Arochlor concentrations between 2 columns.
- S Result determined by method of standard addition (MSA).

## Appendix A. February/March 2022 Site-Wide Sampling Event *(continued)*

- U Analytical result below detection limit.
- W Post-digestion spike outside control limits while sample absorbance < 50% of analytical spike absorbance.
- X Laboratory defined (USEPA CLP organic) qualifier, see case narrative.
- Y Laboratory defined (USEPA CLP organic) qualifier, see case narrative.
- Z Laboratory defined (USEPA CLP organic) qualifier, see case narrative.

### DATA QUALIFIERS:

- |                                                      |                                                                                          |                                                |
|------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------|
| F Low flow sampling method used.                     | G Possible grout contamination, pH > 9.                                                  | J Estimated value.                             |
| L Less than 3 bore volumes purged prior to sampling. | N Presumptive evidence that analyte is present. The analyte is "tentatively identified". | Q Qualitative result due to sampling technique |
| R Unusable result.                                   | U Parameter analyzed for but was not detected.                                           | X Location is undefined.                       |

### SAMPLE TYPES:

- E EQUIPMENT BLANK

Appendix A. February/March 2022 Site-Wide Sampling Event (continued)



Date: March 16, 2022  
To: Liz Moran  
From: Thomas Prichard  
Subject: February/March 2022 Site-Wide Sampling Event

**Site:** Moab – Site-Wide Sampling Event – February/March 2022

**Date of Sampling Event:** February 8 – March 8, 2022

**Team Members:** T. Prichard and J. Ritchey

**RIN Number Assigned:** All samples were assigned to RIN 2202134.

**Sample Shipment:** Five coolers were shipped overnight UPS to ALS Laboratory from Moab, Utah, on Feb 10, Feb 16, Feb 24, Mar 3, and Mar 9 of 2022 (Tracking numbers: 1Z5W1Y5101931671, 1Z5W1Y510197719460, 1Z5W1Y510195973475, 1Z5W1Y510198397888, and 1Z5W1Y510199261905).

**Number of Locations Sampled:** The purpose of the Site-Wide Sampling Event is to update contaminant plume maps. A total of 64 locations (seven surface samples and 57 monitoring wells) were sampled during this event. Including four duplicates and an equipment blank, a total of 69 samples were collected during the Feb 2022 Site-Wide Sampling Event.

**Locations Not Sampled/Reason:** Well 0410 did not provide enough water to sample. Well 0411 was dry. In well 0453, the pump was not sufficiently submerged to draw water.

**Field Variance:** Well UPD-23 dewatered quickly and a sample was collected the following week.

**Quality Control Sample Cross Reference:** The sample for well 0401 was labelled as well 0410. The laboratory noticed the discrepancy between location ID and sample number and the error was corrected. Following are the false identifications assigned to the quality control samples:

False ID	True ID	Sample Type	Associated matrix
2000	AMM-2	Duplicate from 48 ft bgs	Ground Water
2001	SMI-PZ3M	Duplicate from 59 ft bgs	Ground Water
2002	UPD-24	Duplicate from 27 ft bgs	Ground Water
2003	0401	Duplicate from 18 ft bgs	Ground Water
2004	NA	Equipment blank	DI Water

## Appendix A. February/March 2022 Site-Wide Sampling Event (*continued*)

**Location Specific Information:** All the observation wells were sampled using a peristaltic pump and dedicated tubing unless otherwise noted. The surface water samples were collected with dedicated surface water tubing that was decontaminated with Alconox® and de-ionized water between locations. The table below provides additional information:

Location	Date	Sample Depth (ft bgs)	Comments
0201	03/08/22	NA	3 ft out. 2 ft deep
0218	03/07/22	NA	10 ft out. 2 ft deep
0226	03/08/22	NA	3 ft out. 2 ft deep
0401	03/08/22	18	
0403	02/28/22	18	Water level indicator inconsistent
0404	02/24/22	18	
0406	02/24/22	18	
0407	02/24/22	17	
0412	02/08/22	9.5	Dewatered. Returned the next day.
0413	02/14/22	10.5	
0414	02/08/22	7.5	
0430	02/15/22	101	Bladder pump
0431	02/28/22	91	Bladder pump
0432	02/15/22	99	
0433	02/28/22	99	
0434	02/15/22	35	Bladder pump
0435	02/15/22	173	
0436	02/22/22	197	Smells. Gray water.
0437	03/01/22	97	Bladder pump. * Sample depth consistent w/ historical samples
0439	03/01/22	118	Bladder pump. * Sample depth consistent w/ historical samples
0440	03/01/22	117	Bladder pump. Turbidity stabilized above 10.
0441	02/23/22	53	Bladder pump. Slow recharge
0443	02/28/22	73	Bladder pump
0444	02/15/22	116	
0454	02/14/22	13	Sulfur smell. Sampled 2 ft from bottom
0455	02/28/22	46	Inertia pump
0456	02/15/22	53	Sample filtered in lab.
0457	02/15/22	29	
0492	03/07/22	18	
AMM-1-19	02/08/22	19	
AMM-2	02/10/22	48	
AMM-3	02/10/22	48	

**Appendix A. February/March 2022 Site-Wide Sampling Event (continued)**

Location	Date	Sample Depth (ft bgs)	Comments
ATP-2-D	02/09/22	88	
ATP-2-S	02/09/22	25	
ATP-3	02/15/22	51	
CR1	03/07/22	NA	3 ft out. 2 ft deep
CR2	03/07/22	NA	15 ft out. 2 ft deep
CR3	03/07/22	NA	30 ft out. 6 in deep
CR5	03/08/22	NA	5 ft out. 2 ft deep
MW-3	02/14/22	44	
SMI-MW01	02/08/22	16	Paused sampling to get a fully charged pump.
SMI-PW01	02/14/22	40	
SMI-PW03	02/22/22	60	
SMI-PZ1D	02/14/22	88	
SMI-PZ1M	02/14/22	57	
SMI-PZ1S	02/14/22	18	
SMI-PZ2D	02/10/22	75	
SMI-PZ2M2	02/10/22	56	
SMI-PZ3D2	02/22/22	78	
SMI-PZ3M	02/22/22	59	
SMI-PZ3S	02/22/22	25	
TP-01	02/08/22	22	Sulfur smell
TP-11	02/08/22	30	Sulfur smell
TP-17	03/08/22	28	Lots of black floaties. Tried to clear tubing. Very black water came out with a strong smell.
TP-20	02/09/22	32	
TP-22	02/09/22	17	Dewatered at 2.5 liters. Returned to collect sample.
TP-23	02/9/22	25	
UPD-17	02/22/22	14.5	
UPD-18	02/22/22	13	Sampled near bottom. Slow recharge. Water level below indicator
UPD-20	02/22/22	17	
UPD-21	03/02/22	25	Peristaltic pump could not pull water by itself. Tubing was drawn up and let down repeatedly to aid pump in drawing water.
UPD-22	02/14/22	9	
UPD-23	03/08/22	26	Tested 02/28/22. Dewatered at 0.6L. Sampled 03/08/22, filtered in lab. Only recorded a single complete set of parameters
UPD-24	03/02/22	27	

Notes: ft bgs = feet below ground surface

**Water Level Measurements:** Water level data are provided in the table below. These data represent depth to water (ft btoc) measurements.

**Appendix A. February/March 2022 Site-Wide Sampling Event (continued)**

<b>Location Code</b>	<b>Date</b>	<b>Depth To Water (ft bgs)</b>
0401	03/08/22	13.96
0403	02/28/22	16.48
0404	02/24/22	15.12
0406	02/24/22	11.08
0407	02/24/22	16.85
0412	02/08/22	8.44
0413	02/14/22	9.01
0414	02/08/22	5.41
0430	02/15/22	61.64
0431	02/28/22	48.99
0432	02/15/22	43.41
0433	02/28/22	32.97
0434	02/15/22	35.34
0435	02/15/22	15.51
0436	02/22/22	11.39
0437	03/01/22	49.26
0439	03/01/22	18.24
0440	03/01/22	113.02
0441	02/23/22	50.38
0443	02/28/22	48.22
0444	02/15/22	15.93
0454	02/14/22	13.44
0455	02/28/22	33.36
0456	02/15/22	35.95
0457	02/15/22	16.58
0492	03/07/22	16.49
AMM-1-19	02/08/22	17.7
AMM-2	02/10/22	10.79
AMM-3	02/10/22	9.45
ATP-2-D	02/9/22	7.22
ATP-2-S	02/9/22	10.63
ATP-3	02/15/22	40.98
MW-3	02/14/22	12.32

**Appendix A. February/March 2022 Site-Wide Sampling Event (continued)**

SMI-MW01	02/08/22	6.72
SMI-PW01	02/14/22	10.45
Location Code	Date	Depth To Water
SMI-PW03	02/22/22	20.21
SMI-PZ1D2	02/14/22	10.18
SMI-PZ1M	02/14/22	9.4
SMI-PZ1S	02/14/22	10.62
SMI-PZ2D	02/10/22	15.93
SMI-PZ2M2	02/10/22	14.73
SMI-PZ3D2	02/22/22	20.45
SMI-PZ3M	02/22/22	20.42
SMI-PZ3S	02/22/22	20.3
TP-01	02/08/22	14.18
TP-11	02/8/22	12.96
TP-17	03/8/22	12.48
TP-20	02/9/22	15.52
TP-22	02/9/22	14.39
TP-23	02/9/22	9.85
UPD-17	02/22/22	14.04
UPD-18	02/22/22	13.72
UPD-20	02/22/22	22.32
UPD-21	03/02/22	26.28
UPD-22	02/14/22	11.7
UPD-23	03/08/22	27.49
UPD-24	03/02/22	22.18

\*Water level could not be obtained.

**Well Inspection Summary:** A well inspection was not conducted.

**Equipment:** None.

**Regulatory:** None.

**Site Issues:** According to the USGS Cisco Gaging Station (Station No. 09180500), the mean daily Colorado River flow during this sampling event is provided below:

Date	Daily Mean Flow (cfs)
02/07/22	Ice
02/08/22	Ice

## Appendix A. February/March 2022 Site-Wide Sampling Event (*continued*)

02/09/22	Ice
02/10/22	2,180
02/11/22	2,170
02/12/22	2,240
<b>Date</b>	<b>Daily Mean Flow (cfs)</b>
02/13/22	2,190
02/14/22	2,210
02/15/22	2,100
02/16/22	2,090
02/17/22	2,120
02/18/22	2,130
02/19/22	2,070
02/20/22	2,010
02/21/22	2,030
02/22/22	2,140
02/23/22	2,190
02/24/22	2,180
02/25/22	2,160
02/26/22	2,110
02/27/22	2,060
02/28/22	2,030
03/01/22	2,010
03/02/22	2,050
03/03/22	2,220
03/04/22	2,390
03/05/22	2,350
03/06/22	2,580
03/07/22	2,590
03/08/22	2,390
03/09/22	2,230

**Corrective Action Required/Taken:** None.



**Appendix A. February/March 2022 Site-Wide Sampling Event (*continued*)**