

STATE OF
COLORADO

Eschberger - DNR, Amy <amy.eschberger@state.co.us>

Schwartzwalder Mine Second Quarter 2021 Sampling Results

Evan Valencia <evalencia@ensero.com>

Mon, Sep 27, 2021 at 6:05 PM

To: "Eschberger - DNR, Amy" <amy.eschberger@state.co.us>

Cc: Paul Newman <paul@coloradolegacy.land>, Eric Williams <eric@coloradolegacy.land>, Jim Harrington <jimharrington@ensero.com>, Billy Ray <bray@ensero.com>, Evelyn Rhodes <erhodes@arvada.org>, Elizabeth Busby <ebusby@ensero.com>, "eric.mink@state.co.us" <eric.mink@state.co.us>, Allan Steckelberg <asteckelberg@ensero.com>, "daniel.arnold@denverwater.org" <daniel.arnold@denverwater.org>, "bwyant@arvada.org" <bwyant@arvada.org>

Dear Ms. Eschberger,

On behalf of Colorado Legacy Land, I am pleased to submit the 2021 Second Quarter Sampling Results for the Former Schwartzwalder Mine located in Golden, Colorado. A hard copy has been sent to your office via overnight courier (FedEx Tracking No: 284257644010). Due to the size of this deliverable, electronic copies of the report and lab reports are available for download from the following SharePoint link:

Link:  [DRMS-CLL_Shared_Folder](#)**Expiration Date:** This link is active until October 27th, 2021.

You can also access this link through the automatic SharePoint email that is sent when I share the folder with you. If you have any issues access this deliverable please contact me directly by phone or email, I am happy to help.

Best,

Evan Valencia, EIT

Environmental Engineer I



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September 27, 2021

Ms. Amy Eschberger
Colorado Division of Reclamation, Mining, and Safety
Department of Natural Resources
1313 Sherman Street, Room 215
Denver, CO 80203

Subject: Second Quarter 2021 Sampling Results,
Schwartzwalder Mine, Golden Colorado,
Mine Land Reclamation Permit No. M-1977-300.

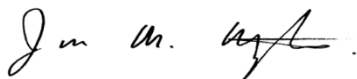
Dear Ms. Eschberger:

The second quarter sampling event at the Schwartzwalder Mine was conducted by Ensero Solutions US, Inc. (Ensero) field staff from June 1 to June 15, 2021. In addition to presenting sample data, Colorado Legacy Land (CLL) is including the Schwartzwalder Mine Schematic Q2 2021 to illustrate the groundwater divide between the mine pool and Ralston Creek. During the second quarter sampling event, all surface water samples taken from Ralston Creek within the permit boundary were below the Colorado drinking water standard for Uranium, 30 µg/L. Samples were analyzed by a subcontract laboratory, ACZ. As previously discussed with DRMS, the radionuclide analysis of these samples delayed the reporting period. A letter from ACZ explaining the delay is attached.

- **Surface Water Data:** There are 13 quarterly surface water (SW) sampling locations. Figure 1 shows the location of each surface water sample locations along Ralston Creek. Table 2a summarizes surface water field parameters. Table 2b summarizes the analytical data results.
- **Groundwater Data:** There are 13 quarterly groundwater monitoring well (MW) locations. Table 1 shows the monitoring well elevations. Figure 2 shows the location of each MW. Table 3a summarizes groundwater field parameters. Table 3b summarizes the analytical data results.
- **Mine Pool Elevations:** Table 4 summarizes the mine pool elevations for the quarter. Pumping of the mine pool has consistently maintained the mine pool elevation below the regulatory limit of 150 feet (ft) below the Steve Level. Maintaining the mine pool below the regulatory limit has established a hydraulic gradient away from Ralston Creek, preventing mine water from entering the creek in the permit area.

If you have any questions regarding this letter, please do not hesitate to contact me.

Sincerely,

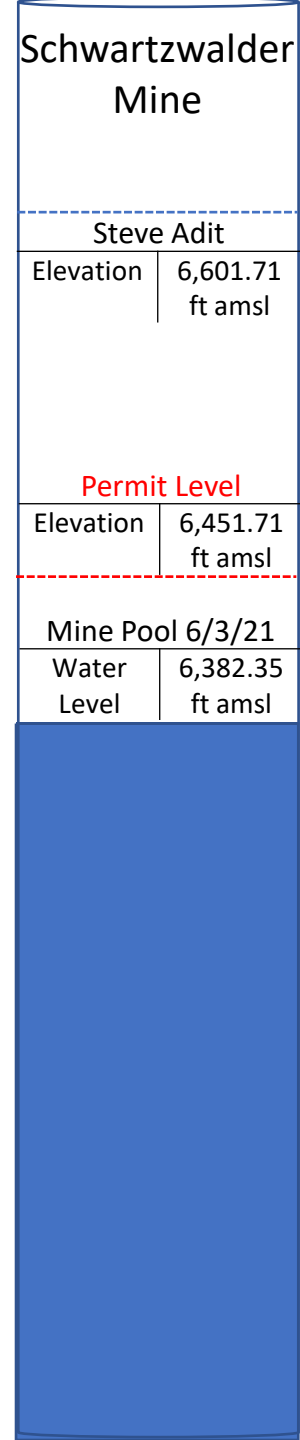


Jim Harrington, Managing Director
COLORADO LEGACY LAND

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Eric Mink – CDPHE, WQCD, eric.mink@state.co.us
Evelyn Rhodes – City of Arvada, Water Quality Administrator, erhodes@arvada.org
Brad Wyant – City of Arvada, Water Treatment Manager, bwyant@arvada.org



MW-15 Top of Casing	
Elevation	6,899.33 ft amsl

SW-AWD (6/15/21)	
Elevation	6,636.37 ft amsl
Flow	12 cfs
Total U	0.001 mg/L

SW-NWRP (6/15/21)	
Elevation	6,626.91 ft amsl
Flow	4.9 CFS
Total U	0.00251 mg/L

MW-15 (6/9/21)	
Water Level	6,789.94 ft amsl
Total U	0.0319 mg/L

SW-BPL (6/15/21)	
Elevation	6,522.53 ft amsl
Flow	29 CFS
Total U	0.0107 mg/L

SW-FBRG (6/3/21)	
Elevation	6,489.65 ft amsl
Flow	80 CFS
Total U	0.0132 mg/L

SW-ARH (6/3/21)	
Elevation	6,364.04 ft amsl
Flow	26 CFS
Total U	0.0125mg/L

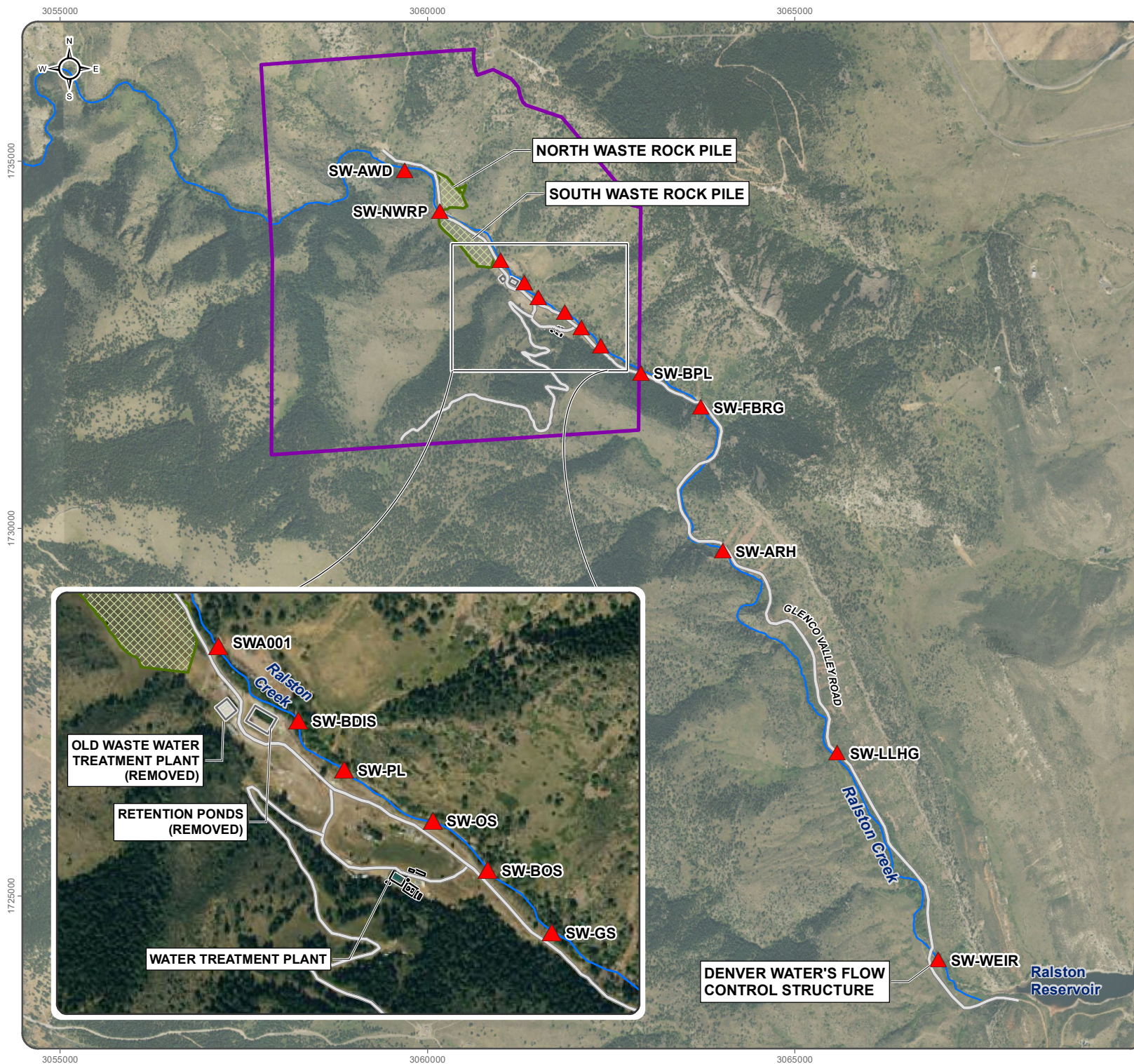
SW-LLHG (6/3/21)	
Elevation	6,158.46 ft amsl
Flow	NA
Total U	0.012 mg/L

SW-WEIR (6/3/21)	
Elevation	6,069.11 ft amsl
Flow	13 CFS
Total U	0.0149 mg/L

MW-15 Screened Interval	
Range	5,937.53 ft amsl - 5,897.53 ft amsl

Schwartzwalder Mine Schematic – Q2 2021

Total U = Total Uranium Concentration
Ft amsl = Feet above mean sea level (elevation)
CFS = cubic feet per second



COLORADO LEGACY LAND SCHWARTZWALDER MINE

FIGURE 1

SURFACE WATER QUALITY MONITORING LOCATIONS

SEPTEMBER 2020



- ▲ Surface Water Quality Monitoring Station
- CLL Property Boundary
- Building, Existing
- Reclaimed Mine Feature
- Waste Rock Dump
- Road
- Watercourse

1:22,000 when printed on 8x11 inch paper

0 500 1,000 1,500 2,000 Feet

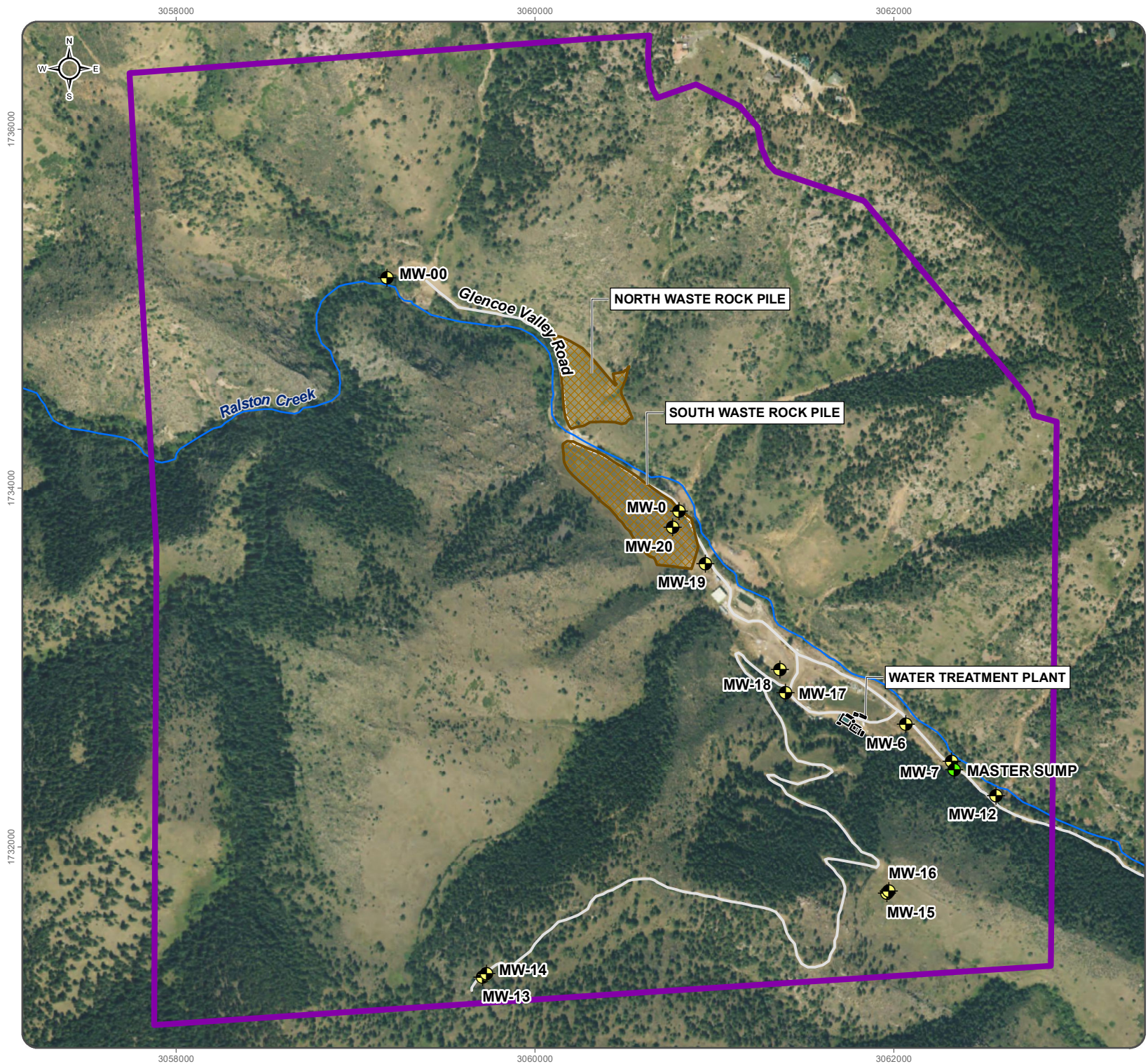


Satellite imagery obtained from ArcGIS on services.arcgis.com on September 2020

Datum: NAD 1983 (CORS96) StatePlane Colorado Central FIPS 0502 (US Feet)

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COLORADO LEGACY LAND SCHWARTZWALDER MINE

FIGURE 2
**GROUNDWATER MONITORING
LOCATIONS**

OCTOBER 2020



- GW Monitoring Well
- Pumpback Sump
- CLL Property Boundary
- Waste Rock Dump
- Existing Mine Feature Footprint
- Glencoe Valley Road
- Ralston Creek

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0502 (US Feet)

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Groundwater\GWQ_Location_Letter_20201013.mxd

TABLE 1: GROUNDWATER SAMPLE LOCATIONS

Location ID / Sample ID	Installation Date	Northing (feet) ^{1,2}	Easting (feet) ^{1,2}	Ground Surface Elevation ¹ (ft amsl)	Casing Elevation ¹ (ft amsl)	Total Depth (ft bgs)	Well Construction Details	Screened Interval (ft bgs)	Notes
MW-00	10/29/1998	1,733,874.25	3,060,802.43	6,608.26	6,610.26	27.5	4-inch PVC, 0.03-in slot.	16.9-26.9	Screened interval interpreted from field boring log.
MW-0	Unknown, construction paper filed on 11/20/1992	1,735,174.35	3,059,175.16	6,666.64	6,667.64	23.0	2.5-inch PVC	15.0-20.0	No information exists for this boring log. Screened interval is taken from MW permit application. 15.0-20.0 is listed as the proposed screened interval.
MW-6	06/20/1989	1,732,682.94	3,062,066.36	6,556.52	6,557.67	15.0	2-in Sch 40 PVC, 0.03-in slot	5.0-15.0	
MW-7	06/20/1989	1,732,478.75	3,062,321.26	6,546.02	6,547.62	11.0	2-in Sch 40 PVC	5.0-10.0	
MW-12	November 2008 (According to EPP)	1,732,287.92	3,062,569.09	6,545.46	6,547.58	17.0	2-in PVC	12.0-17.0	Missing boring log and construction form. Was drilled to the be “downgradient alluvium compliance well”.
MW-13	09/06/2012	1,731,272.17	3,059,706.76	7,401.87	7,403.32	500.8	2-in Sch 40 PVC, 0.04-in slot	459.76-499.76	Nitrogen. Bladder pump in well.
MW-14	09/04/2012	1,731,293.55	3,059,730.06	7,401.32	7,402.39	154.3	2.375-in Sch 80 PVC, 0.02-in slot	134.34-154.34	Nitrogen. Bladder pump in well. Installed Dry.
MW-15	11/03/2012	1,731,742.41	3,061,962.60	6,897.53	6,899.33	1,007.13	3-in Sch 40 PVC, 0.04-in slot	960.0-1,000.0	Nitrogen. Bladder pump in well.
MW-16	10/19/2012	1,731,756.51	3,061,972.30	6,898.42	6,900.32	324.7	2.375-in Sch 80 PVC, 0.02-in slot	300.0-320.0	No pump in well. Installed dry.
MW-17	09/22/2012	1,732,861.21	3,061,398.57	6,600.86	6,602.57	119.0	2.375-in Sch 80 PVC, 0.02-in slot	95.0-115.0	Nitrogen.
MW-18	10/11/2012	1,732,989.50	3,061,365.66	6,575.34	6,576.88	239.9	2.375-in Sch 80 PVC, 0.02-in slot	215.0-235.0	
MW-19	09/28/2012	1,733,579.59	3,060,949.50	6,603.93	6,606.07	21.6	2.375-in Sch 80 PVC, 0.02-in slot	10.0-20.0	
MW-20	11/06/2012	1,733,782.66	3,060,767.07	6,645.28	6,647.37	50.0	2.375-in Sch 80 PVC, 0.02-in slot	40.0-50.0	Installed dry.
Raw Feed	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Spigot – inside water treatment plant. Mine pool water influent to Water Treatment Plant. Raw Feed use to be called “Mine Refill”.
Sumps (Master Sump)	10/08/2010	1,732,431.06	3,062,337.59	6,544.66	6,547.21	6.0	N/A	N/A	Sample collected from Master Sump, commissioned 10/2020, previously Sump 1.

Citation:
¹ Locations surveyed by Lambert Land Consulting on 7/23/2020.

Notes:
² Coordinates: NAD 1983. Colorado State Plane Colorado Central (Feet).

N/A = not applicable

amsl = above mean sea level

bgs = below ground surface

ft = feet

in= inch

TABLE 2A. SURFACE WATER SAMPLE FIELD PARAMETERS									
Location ID / Sample ID	Elevation ¹ (ft above mean sea level)	Sample Date	Field Parameters						Notes / Location Description
			Flowrate (ft ³ /s)	pH (unitless)	Temperature (°C)	Conductivity (µS/cm)	ORP (mV)	Dissolved Oxygen (mg/L)	
SW-AWD	6,638.37	06/15/2021	12	8.31	14.8	228.1	106	11.14	Upstream sample location. Above waste dump (AWD). Onsite.
SW-NWRP	6,626.91	06/15/2021	4.9	7.33	14.2	225.1	78.2	10.84	Downstream of the North Waster Rock Pile (NWRP).
SW-A001	6,603.98	Not Sampled ²	--	--	--	--	--	--	Above former discharge point. Onsite. Directly below the west waste rock pile.
SW-BDIS	6,592.67	Not Sampled ²	--	--	--	--	--	--	Below former discharge (BDIS). Onsite. Below former concrete containment structure.
SW-PL	6,583.53	Not Sampled ²	--	--	--	--	--	--	Former parking lot (PL) location. Onsite.
SW-OS	6,562.51	Not Sampled ²	--	--	--	--	--	--	Former ore sorter (OS) location. Onsite.
SW-BOS	6,556.19	Not Sampled ²	--	--	--	--	--	--	Below former ore sorter (BOS) location. Onsite.
SW-GS	6,545.54	Not Sampled ²	--	--	--	--	--	--	Former guard shack (GS) location. Onsite.
SW-BPL	6,524.53	06/15/2021	29	6.76	13.6	219.8	172	11.3	Below property line (BPL). Downstream sample location, just below entrance gate. Offsite.
SW-FBRG	6,489.65	06/03/2021	80	8.04	11.3	198.6	152	15.08	First bridge (FBRG) after leaving site. Offsite.
SW-ARH	6,364.04	06/03/2021	26	8.06	10.9	271.6	165	17.24	Above red hill (ARH). Near the large red boulders in the creek bed. Offsite.
SW-LLHG	6,158.46	06/03/2021	-- ³	7.84	10.6	272.2	168	17.23	Long lake head gate (LLHG). Just above head gate. Offsite.
SW-WEIR	6,069.11	06/03/2021	13	7.49	10.5	202.2	206	22.03	Weir structure before Ralston Reservoir Offsite.

Citation:
¹ Locations surveyed by Lambert Land Consulting on 7/23/2020.

Notes:
² Location was dry.
³Flow was unable to be estimated because creek was too deep and fast to enter.
µS/cm = microSiemens per centimeter
°C = degrees Celsius
ft³/s= cubic feet per second
kg / day = kilogram per day
mg/L = milligrams per liter
mV =millivolts
ORP = Oxidization Reduction Potential

TABLE 2B: SUMMARY OF SURFACE WATER ANALYTICAL DATA

Parameter	Units	Surface Water Quality Standards		Sample Location						
		Segment 17b, Ralston Creek (CDPHE 2019) ¹								
		Acute	Chronic	06/03/2021	06/15/2021	06/15/2021	06/03/2021	06/03/2021	06/15/2021	06/03/2021
Physical Properties										
TDS - Total Dissolved Solids	mg/L	-	-	168	216	206	180	182	220	184
TSS - Total Suspended Solids	mg/L	-	-	<5	<5 H	<5 H	5 B	6 B	<5 H	<5
Major Ions										
Alkalinity as CaCO ₃	mg/L	-	-	41.1	48.5	55.2	40.2	41.9	50.5	44.4
Bicarbonate as CaCO ₃	mg/L	-	-	41.1	48.5	55.2	40.2	41.9	50.5	44.4
Calcium - Dissolved	mg/L	-	-	23.6	27.2	26.2	23.5	23.7	27.5	24.4
Carbonate as CaCO ₃	mg/L	-	-	<2	<2	<2	<2	<2	<2	<2
Chloride	mg/L	-	250	47.3	52.3	48.4	47.4	48.5	51.5	46.6
Fluoride	mg/L	-	-	0.3 B	0.31 B	0.27 B	0.35	0.3 B	0.31 B	0.31 B
Hydroxide as CaCO ₃	mg/L	-	-	<2	<2	<2	<2	<2	<2	<2
Magnesium - Dissolved	mg/L	-	-	6.91	7.46	7.43	6.84	6.93	7.67	7.19
Potassium - Dissolved	mg/L	-	-	1.7	1.76	1.71	1.71	1.72	1.83	1.86
Sodium - Dissolved	mg/L	-	-	14.2	15.3	16.1	13.8	14.7	15.2	14.6
Sulfate	mg/L	-	250	<1	12.2	15	<1	<1	13	<1
Nutrients										
Cyanide - Weak Acid Dissociable	mg/L	0.005	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Nitrate+Nitrite as N	mg/L	NO ₃ =10	NO ₂ =0.05	0.229	0.477	0.047 B	0.088 B	0.078 B	0.062 B	0.065 B
Phosphate - Total	mg/L	-	-	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Phosphorus - Total	mg/L	-	0.11	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metals – Dissolved										
Aluminum	mg/L	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.063 B
Antimony	mg/L	-	-	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Arsenic	mg/L	0.34	-	<0.0002	<0.0002	0.00021 B	<0.0002	0.00026 B	<0.0002	<0.0002
Boron	mg/L	-	0.75	<0.03	<0.03	0.036 B	<0.03	<0.03	<0.03	<0.03
Chromium	mg/L	-	Chromium III=0.11	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
		Chromium VI = 0.016	Chromium VI = 0.011							
Copper	mg/L	0.0213	0.0136	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Iron	mg/L	-	0.3	<0.06	<0.06	<0.06	<0.06	0.067 B	<0.06	0.118 B
Lead	mg/L	0.109	0.0043	<0.0001	<0.0001	<0.0001	<0.0001	0.00089	<0.0001	0.00012 B
Manganese	mg/L	3.51	1.94	<0.01	<0.01	<0.01	<0.01	<0.01	0.019 B	0.017 B
Mercury	mg/L	-	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	mg/L	-	-	0.00143	0.00048 B	0.00098	0.00129	0.00145	0.00066	0.00206
Silver	mg/L	0.0047	0.00017	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Thallium	mg/L	-	-	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Uranium	mg/L	-	-	0.0115	0.0009	0.0101	0.0122	0.0109	0.00219	0.0135

TABLE 2B: SUMMARY OF SURFACE WATER ANALYTICAL DATA

Parameter	Units	Surface Water Quality Standards		Sample Location						
		Segment 17b, Ralston Creek (CDPHE 2019) ¹		SW-ARH	SW-AWD	SW-BPL	SW-FBRG	SW-LLHG	SW-NWRP	SW-Weir
		Acute	Chronic	06/03/2021	06/15/2021	06/15/2021	06/03/2021	06/03/2021	06/15/2021	06/03/2021
Zinc	mg/L	0.249	0.188	<0.02	<0.02	0.021 B	<0.02	<0.02	<0.02	<0.02
Metals – Total										
Aluminum	mg/L	-	-	0.267	0.107 B	0.104 B	0.254	0.257	0.104 B	0.248 B
Antimony	mg/L	-	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Arsenic	mg/L	-	0.00002	0.00024 B	0.00041 B	0.00024 B	0.00021 B	0.00024 B	<0.0002	0.00028 B
Boron	mg/L	-	0.75	0.039 B	<0.03	0.032 B	0.036 B	0.038 B	<0.03	0.04 B
Chromium	mg/L	Chromium III = 0.005	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
		Chromium VI = 0.016	Chromium VI = 0.011							
Copper	mg/L	0.0213	0.0136	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Iron	mg/L	-	1	0.323	0.17	0.169	0.302	0.328	0.175	0.328
Lead	mg/L	0.05	-	0.00018 B	<0.0001	<0.0001	0.00015 B	0.0002 B	<0.0001	0.00024 B
Manganese	mg/L	0.05	-	<0.01	0.017 B	0.022 B	<0.01	0.01 B	0.022 B	0.014 B
Mercury	mg/L	3.513	1.941	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	mg/L	-	0.15	0.00143	0.00051	0.00096	0.00137	0.00149	0.00068	0.00226
Silver	mg/L	0.0047	0.00017	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Thallium	mg/L	-	-	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Uranium	mg/L	-	-	0.0125	0.001	0.0107	0.0132	0.012	0.00251	0.0149
Zinc	mg/L	0.249	0.188	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Radionuclides										
Gross Alpha	pCi/L	-	-	12	1.2	6.6	6.6	10	4.3	9.2
Gross Beta	pCi/L	-	-	3.6	3.3	3.2	4.6	6.9	3	8.8
Radium 226 - Dissolved	pCi/L	-	-	0.09	0.2	-0.04	0.27	0.17	0.02	0.32
Radium 226 - Total	pCi/L	-	-	0.3	0.14	0.14	0.27	0.23	0.22	0.22
Radium 228 - Total	pCi/L	-	-	1.3	-0.76	0.44	1.8	1.6	0.21	-0.17
Radium 226 + Radium 228 - Total	pCi/L	-	-	0.3	0.14	0	0.27	0.23	0.22	0.22

Notes:

¹ Acute and chronic standards for cadmium, chromium III, copper, lead, manganese, nickel, silver, uranium and zinc are calculated using an average hardness value of 163 mg/L as CaCO₃.

Bold and grey-shaded analytical results are detected above the criteria.

B = Estimated concentration

H = Analysis exceeded method hold time

NO₃= Nitrate

NO₂= Nitrite

CaCO₃= Calcium Carbonate

mg/L= milligrams per Liter

pCi/L= picocuries per Liter

Chromium III = Trivalent Chromium

Chromium IV = Tetravalent Chromium

Source:

CDPHE. 2019. Regulation No. 38 Stream Classification and Water Quality Standards, Clear Creek Basin, Segment 17b. Mainstem of Ralston Creek Including all Tributaries and Wetlands from the Source to the Inlet of Arvada Reservoir. June

TABLE 3A: GROUNDWATER SAMPLE FIELD PARAMETERS								
Location ID / Sample ID ³	Sample Date	Field Parameters						Notes / Location Description
		Static Depth to Water (ft btoc)	pH (unitless)	Temperature (°C)	Conductivity (µS/cm)	ORP (mV)	Dissolved Oxygen (mg/L)	
MW-00	06/16/2021	8.17	6.91	6.6	246.6	109.2	6.74	Alluvial well. Above waste dumps, upstream of site.
MW-0	06/16/2021	8.01	6.84	8.3	274.7	104.4	3.37	Alluvial well. Toe of south waste rock pile.
MW-6	06/01/2021	2.9	7.32	10	527	94.7	5.61	Alluvial well. Near former Sump #2.
MW-7	06/01/2021	6.1	6.84	11	734	170.7	4.35	Alluvial well. Near Sump #1. This sample was a grab sample was taken 24 hours after the first attempt to sample during which the well ran dry while purging.
MW-12	06/01/2021	15	6.96	9.8	360.1	185.1	5.34	Below Sump #1. Alluvial well.
MW-13	06/09/2021	443.55	7.94	9.4	310.5	-16.8	2.47	Nitrogen purge. Replaced MW-10. Previous Sample ID = L1. Background well.
MW-14	06/09/2021	74.73	7.53	9.5	192.2	-121.9	1.05	Nitrogen purge. Replaced MW-11. Previous Sample ID = L2. Background well.
MW-15	06/09/2021	109.1	8.64	11.5	741	-313.7	0.91	Nitrogen purge. Previous Sample ID = L3. Bedrock well.
MW-16	Not Sampled ¹	--	--	--	--	--	--	Previous Sample ID = L4. Bedrock well. No sample required.
MW-17	Not Sampled ¹	--	--	--	--	--	--	Nitrogen purge. Previous Sample ID = L5.
MW-18	06/08/2021	182.13	7.86	11.9	715	-128	1.23	Previous Sample ID = L6. Bedrock well, installation targeted Illinois fault zone in alluvial valley.
MW-19	06/01/2021	12.98	6.82	8.9	354.6	116.1	3.12	Toe of south waste rock pile. Previous Sample ID = L7.
MW-20	Not Sampled ¹	--	--	--	--	--	--	Usually dry. Top of south waste rock pile.
Raw Feed	06/01/2021	--	6.84	19.1	3351	-157.9	2.46	Sample collected from spigot inside water treatment plant. This is the water treatment plant intake from the mine pool. Previous Sample ID = Mine Refill.
Sumps	06/01/2021	--	6.67	12.9	860	91.5	5.41	Sample collected from sump water from Sump #1 (Master Sump).

Notes:

- ¹Water present in well was dry or insufficient volume to collect sample.
- ²Well was not accessible.
- ³MW-1, MW-2, MW-3A, and MW-8 were removed in 2019; MW-4 and MW-5 were removed in 2008. MW-8 was replaced with MW-12. MW-10 and MW-11 were fouled (bentonite in screened interval) and replaced with MW-13 and MW-14.
- µS/cm = microSemiens per centimeter
- °C = degrees Celsius
- ft btoc = feet below top of casing
- ID = Identifier
- mg/L = milligrams per liter
- mV =millivolts
- MW = Monitoring Well
- ORP = Oxidization Reduction Potential

TABLE 3B: SUMMARY OF GROUND WATER ANALYTICAL DATA

Table 3B: Summary Of Ground Water Analytical Data														
Parameter	Units	Domestic Water Supply - Drinking Water Standards (CDPHE 2018)	Sample Location											
			MW-0	MW-00	MW-6	MW-7	MW-12	MW-13	MW-14	MW-15	MW-18	MW-19	Raw Feed	Sumps
			06/02/2021	06/02/2021	06/01/2021	06/01/2021	06/01/2021	06/09/2021	06/09/2021	06/09/2021	06/08/2021	06/01/2021	06/01/2021	06/01/2021
Physical Properties														
TDS - Total Dissolved Solids	mg/L	-	244	224	462	698	320	268	184	730	732	304	3470	778
TSS - Total Suspended Solids	mg/L	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	24	<5
Major Ions														
Alkalinity as CaCO ₃	mg/L	-	74.2	131	115	128	76.8	179	100	230	185	88.7	814	120
Bicarbonate as CaCO ₃	mg/L	-	74.2	131	115	128	76.8	179	100	230	185	88.7	814	120
Calcium - Dissolved	mg/L	-	41.1	44.8	75.4	113	54	49	25.4	23.2	97.3	39.5	338	122
Carbonate as CaCO ₃	mg/L	-	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Chloride	mg/L	250	41.5	26.4	34.7	32.3	38.7	5.9	3.87	21.9	18.1	38.4	50.2	31.8
Fluoride	mg/L	4	0.31 B	0.27 B	0.46	0.56	0.52	0.52	0.33 B	1.76	0.42	0.45	1.42	0.49
Hydroxide as CaCO ₃	mg/L	-	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Magnesium - Dissolved	mg/L	-	16.9	13.3	35.8	53.2	22	16.2	6.3	11.2	37.3	29.2	266	60.3
Potassium - Dissolved	mg/L	-	3.56	2.01	5.13	7.02	4.29	5.86	4.29	7.73	6.43	3.79	29.6	7.44
Sodium - Dissolved	mg/L	-	12.2	15.3	19	21.1	15.3	22.9	24.6	199	75.7	15.1	276	20.9
Sulfate	mg/L	250	55.9 H	12.2	212	356	122	70.8	38.3	286	344	98	1770	418
Nutrients														
Cyanide - Weak Acid Dissociable	mg/L	0.2	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Nitrate+Nitrite as N	mg/L	10	0.47	0.225	1.18	1.3	0.344	<0.02	<0.02	2.59	0.112	0.48	<0.02	1.35
Phosphate - Total	mg/L	-	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.21	<0.03
Phosphorus - Total	mg/L	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.067	<0.01
Metals – Dissolved														
Aluminum	mg/L	5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05
Antimony	mg/L	0.006	<0.0004	<0.0004	0.00044 B	0.00082 B	0.00052 B	<0.0004	0.00042 B	<0.0004	0.00055 B	<0.0004	<0.08	0.00092 B
Arsenic	mg/L	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00037 B	0.00474	0.00076 B	<0.0002	0.0237	0.00026 B
Boron	mg/L	0.75	0.033 B	<0.03	0.046 B	0.05 B	0.036 B	<0.03	<0.03	0.196	0.106	0.041 B	0.324	0.054 B
Chromium	mg/L	0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.04	<0.02
Copper	mg/L	1	<0.01	0.012 B	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.021 B	<0.01
Iron	mg/L	0.3	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.21	0.156	<0.06	<0.06	9.73	0.084 B
Lead	mg/L	0.1	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00015 B	<0.0001	<0.0002	<0.0001
Manganese	mg/L	0.05	<0.01	0.017 B	<0.01	<0.01	<0.01	0.528	0.618	0.02 B	0.129	<0.01	0.861	<0.01
Mercury	mg/L	0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	mg/L	0.21	0.0313	0.00047 B	0.0406	0.0543	0.0295	0.0844	0.00517	0.016	0.0314	0.07	1.12	0.0504
Silver	mg/L	0.05	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0001
Thallium	mg/L	0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	0.00013 B

TABLE 3B: SUMMARY OF GROUND WATER ANALYTICAL DATA

Parameter	Units	Domestic Water Supply - Drinking Water Standards (CDPHE 2018)	Sample Location											
			MW-0	MW-00	MW-6	MW-7	MW-12	MW-13	MW-14	MW-15	MW-18	MW-19	Raw Feed	Sumps
			06/02/2021	06/02/2021	06/01/2021	06/01/2021	06/01/2021	06/09/2021	06/09/2021	06/09/2021	06/08/2021	06/01/2021	06/01/2021	06/01/2021
Uranium	mg/L	0.03	0.164	0.00981	0.786	1.06	0.218	0.0231	0.002	0.0319	0.496	0.378	20.9	1.05
Zinc	mg/L	5	<0.02	0.093	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.04	0.097
Metals – Total														
Aluminum	mg/L	5	<0.05	<0.05	<0.05	<0.05	<0.05	0.07 B	0.074 B	0.077 B	0.092 B	<0.05	<0.1	<0.05
Antimony	mg/L	0.006	<0.0002	<0.0002	0.00042 B	0.0007 B	0.00049 B	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	0.00086 B
Arsenic	mg/L	0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00044 B	0.00506	0.00074 B	0.00023 B	0.024	0.00026 B
Boron	mg/L	0.75	0.033 B	<0.03	0.043 B	0.055 B	0.038 B	<0.03	<0.03	0.232	0.127	0.045 B	0.352	0.052 B
Chromium	mg/L	0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.04	<0.02
Copper	mg/L	1	<0.01	<0.01	<0.01	<0.01	<0.01	0.015 B	0.012 B	0.015 B	0.013 B	<0.01	0.024 B	<0.01
Iron	mg/L	0.3	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.06 B	0.261	0.129 B	<0.06	11	0.096 B
Lead	mg/L	0.05	0.0001 B	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00012 B	<0.0001	0.00031 B	<0.0001
Manganese	mg/L	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	0.585	0.583	0.038 B	0.149	<0.01	0.932	<0.01
Mercury	mg/L	0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	mg/L	0.21	0.0311	0.00056	0.0393	0.0512	0.0287	0.092	0.00578	0.017	0.0331	0.0683	0.986	0.0458
Silver	mg/L	0.05	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0001
Thallium	mg/L	0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	0.00012 B
Uranium	mg/L	0.03	0.161	0.00913	0.712	0.959	0.2	0.0252	0.00195	0.0335	0.506	0.372	20.4	0.972
Zinc	mg/L	5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.04	0.102
Radionuclides														
Gross Alpha	pCi/L	15	130	11	540	540	120	25	3	210	230	240	12000	530
Gross Beta	pCi/L	-	55	9.3	150	200	40	9.5	4.4	77	140	110	4700	200
Radium 226 - Dissolved	pCi/L	-	0.14	0.19	0.85	0.51	0.46	0.2	0.09	39	3.2	1	140	0.15
Radium 226 - Total	pCi/L	-	0.13	0.14	1	0.25	0.53	0.53	0.23	37	3.3	1.2	150	6.4
Radium 228 - Total	pCi/L	-	1.3	0.43	0.68	0.17	0.34	0.36	0.6	1	3.4	0.45	1	1.1
Radium 226 + Radium 228 - Total	pCi/L	5	0.13	0	1	0.25	0.53	0.53	0.23	37	6.7	1.2	150	6.4

Notes:

Bold and grey shaded analytical results are detected above the criteria.

B = Estimated concentration

H = Analysis exceeded method hold time

CaCO₃= Calcium Carbonate

mg/L= milligrams per Liter

pCi/L= picocuries per Liter

Chromium III = Trivalent Chromium

Chromium IV = Tetravalent Chromium

NO₂= Nitrite

NO₃= Nitrate

N/A= Standard not Defined

Source: CDPHE. 2018. Regulation No. 41 – The Basic Standards for Ground Water (5 CCR 1002-41). Water Quality Control Commission. December.

TABLE 4: DAILY AVERAGE MINE POOL ELEVATIONS

Date	Distance Below Steve Level (feet)	Elevation of Water Level
4/1/2021	220.00	6,381.71
4/2/2021	219.25	6,382.46
4/3/2021	218.72	6,382.99
4/4/2021	218.09	6,383.62
4/5/2021	217.89	6,383.82
4/6/2021	217.01	6,384.70
4/7/2021	216.38	6,385.33
4/8/2021	215.94	6,385.77
4/9/2021	215.41	6,386.30
4/10/2021	214.97	6,386.74
4/11/2021	213.83	6,387.88
4/12/2021	213.50	6,388.21
4/13/2021	213.46	6,388.25
4/14/2021	212.59	6,389.12
4/15/2021	211.66	6,390.05
4/16/2021	210.75	6,390.96
4/17/2021	209.98	6,391.73
4/18/2021	209.58	6,392.13
4/19/2021	208.44	6,393.27
4/20/2021	207.57	6,394.14
4/21/2021	207.13	6,394.58
4/22/2021	206.63	6,395.08
4/23/2021	205.66	6,396.05
4/24/2021	205.05	6,396.66
4/25/2021	204.32	6,397.39
4/26/2021	203.58	6,398.13
4/27/2021	202.57	6,399.14
4/28/2021	201.77	6,399.94
4/29/2021	200.58	6,401.13
4/30/2021	199.22	6,402.49
5/1/2021	198.45	6,403.26
5/2/2021	197.14	6,404.57
5/3/2021	195.98	6,405.73
5/4/2021	194.77	6,406.94
5/5/2021	193.36	6,408.35
5/6/2021	192.36	6,409.35
5/7/2021	191.11	6,410.60
5/8/2021	189.27	6,412.44
5/9/2021	188.60	6,413.11
5/10/2021	188.64	6,413.07

TABLE 4: DAILY AVERAGE MINE POOL ELEVATIONS

Date	Distance Below Steve Level (feet)	Elevation of Water Level
5/11/2021	189.64	6,412.07
5/12/2021	190.95	6,410.76
5/13/2021	192.52	6,409.19
5/14/2021	193.50	6,408.21
5/15/2021	195.27	6,406.44
5/16/2021	196.24	6,405.47
5/17/2021	197.75	6,403.96
5/18/2021	198.92	6,402.79
5/19/2021	200.90	6,400.81
5/20/2021	202.01	6,399.70
5/21/2021	203.37	6,398.34
5/22/2021	204.82	6,396.89
5/23/2021	206.16	6,395.55
5/24/2021	207.06	6,394.65
5/25/2021	208.44	6,393.27
5/26/2021	210.25	6,391.46
5/27/2021	211.49	6,390.22
5/28/2021	212.39	6,389.32
5/29/2021	213.47	6,388.24
5/30/2021	215.13	6,386.58
5/31/2021	216.08	6,385.63
6/1/2021	217.35	6,384.36
6/2/2021	218.07	6,383.64
6/3/2021	219.36	6,382.35
6/4/2021	220.70	6,381.01
6/5/2021	222.11	6,379.60
6/6/2021	223.24	6,378.47
6/7/2021	224.45	6,377.26
6/8/2021	226.03	6,375.68
6/9/2021	227.40	6,374.31
6/10/2021	228.87	6,372.84
6/11/2021	230.21	6,371.50
6/12/2021	232.09	6,369.62
6/13/2021	233.57	6,368.14
6/14/2021	235.17	6,366.54
6/15/2021	236.74	6,364.97
6/16/2021	237.34	6,364.37
6/17/2021	236.31	6,365.40
6/18/2021	235.07	6,366.64
6/19/2021	233.80	6,367.91

TABLE 4: DAILY AVERAGE MINE POOL ELEVATIONS		
Date	Distance Below Steve Level (feet)	Elevation of Water Level
6/20/2021	232.26	6,369.45
6/21/2021	232.63	6,369.08
6/22/2021	233.50	6,368.21
6/23/2021	234.63	6,367.08
6/24/2021	235.64	6,366.07
6/25/2021	237.62	6,364.09
6/26/2021	239.09	6,362.62
6/27/2021	240.77	6,360.94
6/28/2021	241.81	6,359.90
6/29/2021	243.07	6,358.64
6/30/2021	244.15	6,357.56

Notes:

The elevation of the Steve Adit is 6601.71 feet above mean sea level. This was surveyed by Lambert Land Consulting on 7/23/2020.



sales@acz.com
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(800) 334-5493
2773 Downhill Drive
Steamboat Springs,
CO 80487

August 12, 2021

Ensero Solutions
12150 E. Briarwood Ave., Suite 135
Centennial, CO 80112

To Ensero Solutions,

This letter is regarding the Radium-228 analysis requested on Ensero samples collected on 6/3/2021 and 6/4/2021 and logged into ACZ's Laboratory Information Management as project L66280 (eight samples total). These samples will be reported late due to required reanalysis after failing method-specific quality control parameters in its initial workgroup.

The original Radium-228 analysis for these samples was completed through the counting stage on the instrument, however, it failed one of the main quality control checks for this method. Yttrium and Barium are both used as carriers through a co-precipitation procedure used to create a purified extract that is counted in a low background gas proportional counter. These carriers are added to all samples to determine the amount of analyte (Radium-228) lost, if any, during the prep procedure. Like an internal standard, the recovery of the carriers is used to adjust the observed results. The preparation batches containing the aforementioned Ensero sample(s) had carrier recoveries outside of ACZ's acceptance limits, and the resulting data is deemed too deficient to report with qualification.

Our policy in this situation is to perform reanalysis, which has been started for this sample. Unfortunately, the Ra-228 method requires multiple days of labor and an ingrow period. To further complicate matters, the laboratory received an unusual amount of radiochemistry work in June and July of 2021, and this has impacted our ability to respond to quality control failures quickly. We are actively securing and re-allocating resources to improve this dynamic.

If desired, we can call or email your contact at the State of Colorado to explain the reasons for the delay in receiving your final report.

Please let me know if I can provide further details or any other assistance.

Best Regards,

Matt Sowards
Co-President

ACZ Laboratories, Inc.

Steamboat Springs, CO 80487

Work: (970) 879-6590 x531

Email: matts@acz.com

July 27, 2021

Report to:

Christie Brizinski
Ensero Solutions
131 E. Lincoln Ave Ste. 200
Fort Collins, CO 80524

Bill to:

Pauline Wong
Ensero Solutions
131 E. Lincoln Ave Ste. 200
Fort Collins, CO 80524

cc: Ensero/Alexco Importer, Evan Valencia

Project ID: 3100-PO205

ACZ Project ID: L66440

Christie Brizinski:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on June 11, 2021. This project has been assigned to ACZ's project number, L66440. Please reference this number in all future inquiries.

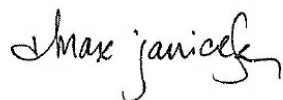
All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L66440. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after August 26, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically \$11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.



Max Janicek has reviewed and
approved this report.



Ensero Solutions

July 27, 2021

Project ID: 3100-PO205

ACZ Project ID: L66440

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 4 miscellaneous samples from Ensero Solutions on June 11, 2021. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L66440. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

All analyses were performed within EPA recommended holding times.

Sample Analysis

These samples were analyzed for inorganic, radiochemistry parameters. The individual methods are referenced on both the ACZ invoice and the analytical reports. The extended qualifier reports may contain footnotes qualifying specific elements due to QC failures. In addition, the following has been noted with this specific project:

The below is from WG522569

Qualifier: N1

Applies to:

L66440-01/RADIUM 228

L66440-02/RADIUM 228

L66440-03/RADIUM 228

L66440-04/RADIUM 228

Barium recovery outside standard acceptance limits (failing high) for all samples in workgroup. Data qualification/comparison to historical data may be necessary. If client deems necessary, retesting is available if supplied with additional sample volume.

Ensero Solutions

Project ID: 3100-PO205
Sample ID: MW-18

ACZ Sample ID: **L66440-01**
Date Sampled: 06/08/21 14:11
Date Received: 06/11/21
Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD	SM4500-CN I- distillation								06/18/21 13:56	md
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								06/24/21 11:10	emh
Total Hot Plate Digestion	M200.2 ICP-MS								06/24/21 10:45	mfm
Total Hot Plate Digestion	M200.2 ICP								06/24/21 14:56	kja

Ensero Solutions

Project ID: 3100-PO205

Sample ID: MW-18

ACZ Sample ID: **L66440-01**

Date Sampled: 06/08/21 14:11

Date Received: 06/11/21

Sample Matrix: Surface Water

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/23/21 21:13	kja
Aluminum, total	M200.7 ICP	1	0.092	B		mg/L	0.05	0.25	06/28/21 21:26	aeh
Antimony, dissolved	M200.8 ICP-MS	1	0.00055	B		mg/L	0.0004	0.002	07/02/21 16:18	mfm
Antimony, total	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	06/28/21 19:21	enb
Arsenic, dissolved	M200.8 ICP-MS	1	0.00076	B		mg/L	0.0002	0.001	07/01/21 17:41	mfm
Arsenic, total	M200.8 ICP-MS	1	0.00074	B		mg/L	0.0002	0.001	06/28/21 19:21	enb
Boron, dissolved	M200.7 ICP	1	0.106			mg/L	0.03	0.1	06/23/21 21:13	kja
Boron, total	M200.7 ICP	1	0.127			mg/L	0.03	0.1	06/29/21 12:56	kja
Calcium, dissolved	M200.7 ICP	1	97.3			mg/L	0.1	0.5	06/23/21 21:13	kja
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/23/21 21:13	kja
Chromium, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/29/21 12:56	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/23/21 21:13	kja
Copper, total	M200.7 ICP	1	0.013	B		mg/L	0.01	0.05	06/28/21 21:26	aeh
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	06/23/21 21:13	kja
Iron, total	M200.7 ICP	1	0.129	B		mg/L	0.06	0.15	06/28/21 21:26	aeh
Lead, dissolved	M200.8 ICP-MS	1	0.00015	B		mg/L	0.0001	0.0005	07/01/21 17:41	mfm
Lead, total	M200.8 ICP-MS	1	0.00012	B		mg/L	0.0001	0.0005	06/28/21 19:21	enb
Magnesium, dissolved	M200.7 ICP	1	37.3			mg/L	0.2	1	06/23/21 21:13	kja
Manganese, dissolved	M200.7 ICP	1	0.129			mg/L	0.01	0.05	06/23/21 21:13	kja
Manganese, total	M200.7 ICP	1	0.149			mg/L	0.01	0.05	06/28/21 21:26	aeh
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/17/21 17:29	mlh
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/17/21 15:59	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0314			mg/L	0.0002	0.0005	07/01/21 17:41	mfm
Molybdenum, total	M200.8 ICP-MS	1	0.0331			mg/L	0.0002	0.0005	06/28/21 19:21	enb
Potassium, dissolved	M200.7 ICP	1	6.43			mg/L	0.2	1	06/23/21 21:13	kja
Selenium, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.00025	07/01/21 17:41	mfm
Selenium, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.00025	06/28/21 19:21	enb
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/01/21 17:41	mfm
Silver, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/28/21 19:21	enb
Sodium, dissolved	M200.7 ICP	1	75.7			mg/L	0.2	1	06/23/21 21:13	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/01/21 17:41	mfm
Thallium, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/28/21 19:21	enb
Uranium, dissolved	M200.8 ICP-MS	1	0.496			mg/L	0.0001	0.0005	07/01/21 17:41	mfm
Uranium, total	M200.8 ICP-MS	1	0.506			mg/L	0.0001	0.0005	06/28/21 19:21	enb
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/23/21 21:13	kja
Zinc, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/29/21 12:56	kja

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Project ID: 3100-PO205

Sample ID: MW-18

ACZ Sample ID: **L66440-01**

Date Sampled: 06/08/21 14:11

Date Received: 06/11/21

Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	185			mg/L	2	20	06/17/21 0:00	eep
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	06/17/21 0:00	eep
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	06/17/21 0:00	eep
Total Alkalinity		1	185		*	mg/L	2	20	06/17/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-4.3			%			07/27/21 0:00	calc
Sum of Anions			12			meq/L			07/27/21 0:00	calc
Sum of Cations			11			meq/L			07/27/21 0:00	calc
Chloride	SM4500Cl-E	1	18.1			mg/L	0.5	2	06/25/21 10:24	wtc
Cyanide, WAD	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	06/19/21 4:56	pjb
Fluoride	SM4500F-C	1	0.42			mg/L	0.15	0.35	06/16/21 15:53	emk
Nitrate/Nitrite as N	M353.2 - H ₂ SO ₄ preserved	1	0.112		*	mg/L	0.02	0.1	06/30/21 0:22	pjb
Phosphate, total	Calculation based on total Phosphorus		<0.03	U		mg/L	0.03	0.2	07/27/21 0:00	calc
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	06/26/21 1:23	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	732			mg/L	20	40	06/14/21 20:17	jck
Residue, Non-Filterable (TSS) @105C	SM2540D	1	<5	U	*	mg/L	5	20	06/11/21 18:14	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	25	344			mg/L	25	125	06/23/21 15:26	wtc
TDS (calculated)	Calculation		692			mg/L			07/27/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.06						07/27/21 0:00	calc

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Project ID: 3100-PO205
Sample ID: MW-14

ACZ Sample ID: **L66440-02**
Date Sampled: 06/09/21 11:28
Date Received: 06/11/21
Sample Matrix: *Surface Water*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD	SM4500-CN I- distillation								06/18/21 14:04	md
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								06/24/21 11:25	emh
Total Hot Plate Digestion	M200.2 ICP-MS								06/24/21 10:45	mfm
Total Hot Plate Digestion	M200.2 ICP								06/24/21 15:23	kja

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Project ID: 3100-PO205

Sample ID: MW-14

ACZ Sample ID: **L66440-02**

Date Sampled: 06/09/21 11:28

Date Received: 06/11/21

Sample Matrix: Surface Water

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/23/21 21:16	kja
Aluminum, total	M200.7 ICP	1	0.074	B		mg/L	0.05	0.25	06/28/21 21:29	aeh
Antimony, dissolved	M200.8 ICP-MS	1	0.00042	B		mg/L	0.0004	0.002	07/02/21 16:20	mfm
Antimony, total	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	06/28/21 19:23	enb
Arsenic, dissolved	M200.8 ICP-MS	1	0.00037	B		mg/L	0.0002	0.001	07/01/21 17:43	mfm
Arsenic, total	M200.8 ICP-MS	1	0.00044	B		mg/L	0.0002	0.001	06/28/21 19:23	enb
Boron, dissolved	M200.7 ICP	1	<0.03	U		mg/L	0.03	0.1	06/23/21 21:16	kja
Boron, total	M200.7 ICP	1	<0.03	U		mg/L	0.03	0.1	06/29/21 12:59	kja
Calcium, dissolved	M200.7 ICP	1	25.4			mg/L	0.1	0.5	06/23/21 21:16	kja
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/23/21 21:16	kja
Chromium, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/29/21 12:59	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/23/21 21:16	kja
Copper, total	M200.7 ICP	1	0.012	B		mg/L	0.01	0.05	06/28/21 21:29	aeh
Iron, dissolved	M200.7 ICP	1	0.210		*	mg/L	0.06	0.15	06/23/21 21:16	kja
Iron, total	M200.7 ICP	1	0.060	B		mg/L	0.06	0.15	06/28/21 21:29	aeh
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/01/21 17:43	mfm
Lead, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/28/21 19:23	enb
Magnesium, dissolved	M200.7 ICP	1	6.30			mg/L	0.2	1	06/23/21 21:16	kja
Manganese, dissolved	M200.7 ICP	1	0.618			mg/L	0.01	0.05	06/23/21 21:16	kja
Manganese, total	M200.7 ICP	1	0.583			mg/L	0.01	0.05	06/28/21 21:29	aeh
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/17/21 17:31	mlh
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/17/21 16:00	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00517			mg/L	0.0002	0.0005	07/01/21 17:43	mfm
Molybdenum, total	M200.8 ICP-MS	1	0.00578			mg/L	0.0002	0.0005	06/28/21 19:23	enb
Potassium, dissolved	M200.7 ICP	1	4.29			mg/L	0.2	1	06/23/21 21:16	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00017	B		mg/L	0.0001	0.00025	07/01/21 17:43	mfm
Selenium, total	M200.8 ICP-MS	1	0.00013	B		mg/L	0.0001	0.00025	06/28/21 19:23	enb
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/01/21 17:43	mfm
Silver, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/28/21 19:23	enb
Sodium, dissolved	M200.7 ICP	1	24.6			mg/L	0.2	1	06/23/21 21:16	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/01/21 17:43	mfm
Thallium, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/28/21 19:23	enb
Uranium, dissolved	M200.8 ICP-MS	1	0.00200			mg/L	0.0001	0.0005	07/01/21 17:43	mfm
Uranium, total	M200.8 ICP-MS	1	0.00195			mg/L	0.0001	0.0005	06/28/21 19:23	enb
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/23/21 21:16	kja
Zinc, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/29/21 12:59	kja

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Project ID: 3100-PO205
Sample ID: MW-14

ACZ Sample ID: **L66440-02**
Date Sampled: 06/09/21 11:28
Date Received: 06/11/21
Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	100.0			mg/L	2	20	06/17/21 0:00	eep
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	06/17/21 0:00	eep
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	06/17/21 0:00	eep
Total Alkalinity		1	100.0		*	mg/L	2	20	06/17/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			1.7			%			07/27/21 0:00	calc
Sum of Anions			2.9			meq/L			07/27/21 0:00	calc
Sum of Cations			3.0			meq/L			07/27/21 0:00	calc
Chloride	SM4500Cl-E	1	3.87			mg/L	0.5	2	06/25/21 10:24	wtc
Cyanide, WAD	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	06/19/21 4:59	pjb
Fluoride	SM4500F-C	1	0.33	B		mg/L	0.15	0.35	06/16/21 15:56	emk
Nitrate/Nitrite as N	M353.2 - H ₂ SO ₄ preserved	1	<0.02	U	*	mg/L	0.02	0.1	06/30/21 0:24	pjb
Phosphate, total	Calculation based on total Phosphorus		<0.03	U		mg/L	0.03	0.2	07/27/21 0:00	calc
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	06/26/21 1:26	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	184		*	mg/L	40	80	06/15/21 11:56	scd
Residue, Non-Filterable (TSS) @105C	SM2540D	1	<5	U	*	mg/L	5	20	06/11/21 18:16	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	38.3			mg/L	5	25	06/23/21 15:23	wtc
TDS (calculated)	Calculation		165			mg/L			07/27/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.12						07/27/21 0:00	calc

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Project ID: 3100-PO205
Sample ID: MW-13

ACZ Sample ID: **L66440-03**
Date Sampled: 06/09/21 12:50
Date Received: 06/11/21
Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD	SM4500-CN I- distillation								06/18/21 14:13	md
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								06/24/21 11:40	emh
Total Hot Plate Digestion	M200.2 ICP-MS								06/24/21 10:45	mfm
Total Hot Plate Digestion	M200.2 ICP								06/24/21 15:50	kja

Ensero Solutions

Project ID: 3100-PO205

Sample ID: MW-13

ACZ Sample ID: **L66440-03**

Date Sampled: 06/09/21 12:50

Date Received: 06/11/21

Sample Matrix: Surface Water

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/23/21 21:25	kja
Aluminum, total	M200.7 ICP	1	0.070	B		mg/L	0.05	0.25	06/28/21 21:32	aeh
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	07/02/21 16:22	mfm
Antimony, total	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	06/28/21 19:28	enb
Arsenic, dissolved	M200.8 ICP-MS	1	<0.0002	U		mg/L	0.0002	0.001	07/01/21 17:45	mfm
Arsenic, total	M200.8 ICP-MS	1	<0.0002	U		mg/L	0.0002	0.001	06/28/21 19:28	enb
Boron, dissolved	M200.7 ICP	1	<0.03	U		mg/L	0.03	0.1	06/23/21 21:25	kja
Boron, total	M200.7 ICP	1	<0.03	U		mg/L	0.03	0.1	06/29/21 13:02	kja
Calcium, dissolved	M200.7 ICP	1	49.0			mg/L	0.1	0.5	06/23/21 21:25	kja
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/23/21 21:25	kja
Chromium, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/29/21 13:02	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/23/21 21:25	kja
Copper, total	M200.7 ICP	1	0.015	B		mg/L	0.01	0.05	06/28/21 21:32	aeh
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	06/23/21 21:25	kja
Iron, total	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	06/28/21 21:32	aeh
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/01/21 17:45	mfm
Lead, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/28/21 19:28	enb
Magnesium, dissolved	M200.7 ICP	1	16.2			mg/L	0.2	1	06/23/21 21:25	kja
Manganese, dissolved	M200.7 ICP	1	0.528			mg/L	0.01	0.05	06/23/21 21:25	kja
Manganese, total	M200.7 ICP	1	0.585			mg/L	0.01	0.05	06/28/21 21:32	aeh
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/17/21 17:32	mlh
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/17/21 16:01	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0844			mg/L	0.0002	0.0005	07/01/21 17:45	mfm
Molybdenum, total	M200.8 ICP-MS	1	0.0920			mg/L	0.0002	0.0005	06/28/21 19:28	enb
Potassium, dissolved	M200.7 ICP	1	5.86			mg/L	0.2	1	06/23/21 21:25	kja
Selenium, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.00025	07/01/21 17:45	mfm
Selenium, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.00025	06/28/21 19:28	enb
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/01/21 17:45	mfm
Silver, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/28/21 19:28	enb
Sodium, dissolved	M200.7 ICP	1	22.9			mg/L	0.2	1	06/23/21 21:25	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/01/21 17:45	mfm
Thallium, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/28/21 19:28	enb
Uranium, dissolved	M200.8 ICP-MS	1	0.0231			mg/L	0.0001	0.0005	07/01/21 17:45	mfm
Uranium, total	M200.8 ICP-MS	1	0.0252			mg/L	0.0001	0.0005	06/28/21 19:28	enb
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/23/21 21:25	kja
Zinc, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/29/21 13:02	kja

Ensero Solutions

Project ID: 3100-PO205

Sample ID: MW-13

ACZ Sample ID: **L66440-03**

Date Sampled: 06/09/21 12:50

Date Received: 06/11/21

Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	179			mg/L	2	20	06/17/21 0:00	eep
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	06/17/21 0:00	eep
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	06/17/21 0:00	eep
Total Alkalinity		1	179		*	mg/L	2	20	06/17/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-2.9			%			07/27/21 0:00	calc
Sum of Anions			5.3			meq/L			07/27/21 0:00	calc
Sum of Cations			5			meq/L			07/27/21 0:00	calc
Chloride	SM4500Cl-E	1	5.90			mg/L	0.5	2	06/25/21 10:24	wtc
Cyanide, WAD	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	06/19/21 5:00	pjb
Fluoride	SM4500F-C	1	0.52			mg/L	0.15	0.35	06/16/21 16:01	emk
Nitrate/Nitrite as N	M353.2 - H ₂ SO ₄ preserved	1	<0.02	U	*	mg/L	0.02	0.1	06/30/21 0:27	pjb
Phosphate, total	Calculation based on total Phosphorus		<0.03	U		mg/L	0.03	0.2	07/27/21 0:00	calc
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	06/26/21 1:28	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	268		*	mg/L	40	80	06/15/21 11:59	scd
Residue, Non-Filterable (TSS) @105C	SM2540D	1	<5	U	*	mg/L	5	20	06/11/21 18:17	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	70.8			mg/L	5	25	06/23/21 15:23	wtc
TDS (calculated)	Calculation		281			mg/L			07/27/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.95						07/27/21 0:00	calc

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Project ID: 3100-PO205

Sample ID: MW-15

ACZ Sample ID: **L66440-04**

Date Sampled: 06/09/21 16:31

Date Received: 06/11/21

Sample Matrix: *Surface Water*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD	SM4500-CN I- distillation								06/23/21 13:55	syw
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								06/24/21 11:48	emh
Total Hot Plate Digestion	M200.2 ICP-MS								06/24/21 10:45	mfm
Total Hot Plate Digestion	M200.2 ICP								06/24/21 16:17	kja

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Project ID: 3100-PO205

Sample ID: MW-15

ACZ Sample ID: **L66440-04**

Date Sampled: 06/09/21 16:31

Date Received: 06/11/21

Sample Matrix: Surface Water

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/23/21 21:28	kja
Aluminum, total	M200.7 ICP	1	0.077	B		mg/L	0.05	0.25	06/28/21 21:35	aeh
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	07/02/21 16:27	mfm
Antimony, total	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	06/28/21 19:30	enb
Arsenic, dissolved	M200.8 ICP-MS	1	0.00474			mg/L	0.0002	0.001	07/01/21 17:50	mfm
Arsenic, total	M200.8 ICP-MS	1	0.00506			mg/L	0.0002	0.001	06/28/21 19:30	enb
Boron, dissolved	M200.7 ICP	1	0.196			mg/L	0.03	0.1	06/23/21 21:28	kja
Boron, total	M200.7 ICP	1	0.232			mg/L	0.03	0.1	06/29/21 13:05	kja
Calcium, dissolved	M200.7 ICP	1	23.2			mg/L	0.1	0.5	06/23/21 21:28	kja
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/23/21 21:28	kja
Chromium, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/29/21 13:05	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/23/21 21:28	kja
Copper, total	M200.7 ICP	1	0.015	B		mg/L	0.01	0.05	06/28/21 21:35	aeh
Iron, dissolved	M200.7 ICP	1	0.156		*	mg/L	0.06	0.15	06/23/21 21:28	kja
Iron, total	M200.7 ICP	1	0.261			mg/L	0.06	0.15	06/28/21 21:35	aeh
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/01/21 17:50	mfm
Lead, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/28/21 19:30	enb
Magnesium, dissolved	M200.7 ICP	1	11.2			mg/L	0.2	1	06/23/21 21:28	kja
Manganese, dissolved	M200.7 ICP	1	0.020	B		mg/L	0.01	0.05	06/23/21 21:28	kja
Manganese, total	M200.7 ICP	1	0.038	B		mg/L	0.01	0.05	06/28/21 21:35	aeh
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/23/21 10:08	mlh
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/17/21 16:02	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0160			mg/L	0.0002	0.0005	07/01/21 17:50	mfm
Molybdenum, total	M200.8 ICP-MS	1	0.0170			mg/L	0.0002	0.0005	06/28/21 19:30	enb
Potassium, dissolved	M200.7 ICP	1	7.73			mg/L	0.2	1	06/23/21 21:28	kja
Selenium, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.00025	07/01/21 17:50	mfm
Selenium, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.00025	06/28/21 19:30	enb
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/01/21 17:50	mfm
Silver, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/28/21 19:30	enb
Sodium, dissolved	M200.7 ICP	1	199			mg/L	0.2	1	06/23/21 21:28	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/01/21 17:50	mfm
Thallium, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/28/21 19:30	enb
Uranium, dissolved	M200.8 ICP-MS	1	0.0319			mg/L	0.0001	0.0005	07/01/21 17:50	mfm
Uranium, total	M200.8 ICP-MS	1	0.0335			mg/L	0.0001	0.0005	06/28/21 19:30	enb
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/23/21 21:28	kja
Zinc, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/29/21 13:05	kja

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Project ID: 3100-PO205
Sample ID: MW-15

ACZ Sample ID: **L66440-04**
Date Sampled: 06/09/21 16:31
Date Received: 06/11/21
Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	230			mg/L	2	20	06/17/21 0:00	eep
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	06/17/21 0:00	eep
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	06/17/21 0:00	eep
Total Alkalinity		1	230		*	mg/L	2	20	06/17/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			07/27/21 0:00	calc
Sum of Anions			11			meq/L			07/27/21 0:00	calc
Sum of Cations			11.0			meq/L			07/27/21 0:00	calc
Chloride	SM4500Cl-E	1	21.9			mg/L	0.5	2	06/25/21 11:39	wtc
Cyanide, WAD	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	06/23/21 23:54	pjb
Fluoride	SM4500F-C	1	1.76			mg/L	0.15	0.35	06/23/21 12:20	emk
Nitrate/Nitrite as N	M353.2 - H ₂ SO ₄ preserved	1	2.59		*	mg/L	0.02	0.1	06/30/21 0:28	pjb
Phosphate, total	Calculation based on total Phosphorus		<0.03	U		mg/L	0.03	0.2	07/27/21 0:00	calc
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	06/26/21 1:29	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	730		*	mg/L	20	40	06/15/21 12:01	scd
Residue, Non-Filterable (TSS) @105C	SM2540D	1	<5	U	*	mg/L	5	20	06/11/21 18:19	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	25	286		*	mg/L	25	125	06/23/21 15:27	wtc
TDS (calculated)	Calculation		691			mg/L			07/27/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.06						07/27/21 0:00	calc

Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

QC Sample Types

<i>AS</i>	Analytical Spike (Post Digestion)	<i>LCSWD</i>	Laboratory Control Sample - Water Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LFB</i>	Laboratory Fortified Blank
<i>CCB</i>	Continuing Calibration Blank	<i>LFM</i>	Laboratory Fortified Matrix
<i>CCV</i>	Continuing Calibration Verification standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>ICB</i>	Initial Calibration Blank	<i>MS</i>	Matrix Spike
<i>ICV</i>	Initial Calibration Verification standard	<i>MSD</i>	Matrix Spike Duplicate
<i>ICSAB</i>	Inter-element Correction Standard - A plus B solutions	<i>PBS</i>	Prep Blank - Soil
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBW</i>	Prep Blank - Water
<i>LCSSD</i>	Laboratory Control Sample - Soil Duplicate	<i>PQV</i>	Practical Quantitation Verification standard
<i>LCSW</i>	Laboratory Control Sample - Water	<i>SDL</i>	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1)	EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2)	EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3)	EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4)	EPA SW-846. Test Methods for Evaluating Solid Waste.
(5)	Standard Methods for the Examination of Water and Wastewater.

Comments

(1)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2)	Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3)	Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4)	An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5)	If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:

<https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf>

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ACZ Project ID: **L66440**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521319													
WG521319PBW1	PBW	06/17/21 19:41				U	mg/L		-20	20			
WG521319LCSW3	LCSW	06/17/21 19:59	WC210604-7	820.0001		780	mg/L	95	90	110			
L66464-01DUP	DUP	06/17/21 21:17			13.2	12.9	mg/L				2	20	RA
WG521319LCSW6	LCSW	06/17/21 23:13	WC210604-7	820.0001		781.7	mg/L	95	90	110			
WG521319PBW2	PBW	06/17/21 23:21				U	mg/L		-20	20			
WG521319LCSW9	LCSW	06/18/21 2:24	WC210604-7	820.0001		816.9	mg/L	100	90	110			
WG521319PBW3	PBW	06/18/21 2:31				U	mg/L		-20	20			
WG521319LCSW12	LCSW	06/18/21 5:34	WC210604-7	820.0001		802.9	mg/L	98	90	110			
WG521319PBW4	PBW	06/18/21 5:40				U	mg/L		-20	20			
WG521319LCSW15	LCSW	06/18/21 8:58	WC210604-7	820.0001		793.7	mg/L	97	90	110			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521715													
WG521715ICV	ICV	06/23/21 20:30	II210608-1	2		1.956	mg/L	98	95	105			
WG521715ICB	ICB	06/23/21 20:36				U	mg/L		-0.15	0.15			
WG521715PQV	PQV	06/23/21 20:39	II210603-2	.250325		.224	mg/L	89	70	130			
WG521715SIC	SIC	06/23/21 20:42	II210602-1	200.410325		206.9	mg/L	103	1	200			
WG521715LFB	LFB	06/23/21 20:49	II210622-2	1.0013		.962	mg/L	96	85	115			
L65996-06AS	AS	06/23/21 21:07	II210622-2	10.013	14.1	23.56	mg/L	94	85	115			
L65996-06ASD	ASD	06/23/21 21:10	II210622-2	10.013	14.1	23.44	mg/L	93	85	115	1	20	
WG521715CCV1	CCV	06/23/21 21:19	II210609-1	1		.933	mg/L	93	90	110			
WG521715CCB1	CCB	06/23/21 21:22				U	mg/L		-0.15	0.15			
WG521715CCV2	CCV	06/23/21 21:56	II210609-1	1		.978	mg/L	98	90	110			
WG521715CCB2	CCB	06/23/21 21:59				U	mg/L		-0.15	0.15			
WG521715CCV3	CCV	06/23/21 22:14	II210609-1	1		.937	mg/L	94	90	110			
WG521715CCB3	CCB	06/23/21 22:17				U	mg/L		-0.15	0.15			

Aluminum, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521947													
WG521947ICV	ICV	06/28/21 21:02	II210620-2	2		2.026	mg/L	101	95	105			
WG521947ICB	ICB	06/28/21 21:07				.059	mg/L		-0.15	0.15			
WG521947PQV	PQV	06/28/21 21:11	II210603-2	.250325		.31	mg/L	124	70	130			
WG521947SIC	SIC	06/28/21 21:14	II210518-2	200.510325		200.5	mg/L	100	1	200			
WG521813LRB	LRB	06/28/21 21:20				.063	mg/L		-0.11	0.11			
WG521813LFB	LFB	06/28/21 21:23	II210622-2	1.0013		1.105	mg/L	110	85	115			
L66593-03LFM	LFM	06/28/21 21:48	II210622-2	1.0013	.114	1.231	mg/L	112	70	130			
WG521947CCV1	CCV	06/28/21 21:51	II210607-1	1		1.052	mg/L	105	90	110			
WG521947CCB1	CCB	06/28/21 21:54				.058	mg/L		-0.15	0.15			
L66593-03LFMD	LFMD	06/28/21 21:57	II210622-2	1.0013	.114	1.246	mg/L	113	70	130	1	20	
WG521947CCV2	CCV	06/28/21 22:10	II210607-1	1		1.057	mg/L	106	90	110			
WG521947CCB2	CCB	06/28/21 22:13				.059	mg/L		-0.15	0.15			

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ACZ Project ID: **L66440**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Antimony, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522467													
WG522467ICV	ICV	07/02/21 16:13	MS210630-2	.0201		.02065	mg/L	103	90	110			
WG522467ICB	ICB	07/02/21 16:15				.00057	mg/L		-0.00088	0.00088			
WG522467LFB	LFB	07/02/21 16:17	MS210610-2	.01		.00857	mg/L	86	85	115			
L66440-03AS	AS	07/02/21 16:24	MS210610-2	.01	U	.00863	mg/L	86	70	130			
L66440-03ASD	ASD	07/02/21 16:26	MS210610-2	.01	U	.00869	mg/L	87	70	130	1	20	
WG522467CCV1	CCV	07/02/21 16:35	MS210521-8	.0125		.01236	mg/L	99	90	110			
WG522467CCB1	CCB	07/02/21 16:36				U	mg/L		-0.0012	0.0012			
WG522467CCV2	CCV	07/02/21 16:56	MS210521-8	.0125		.01281	mg/L	102	90	110			
WG522467CCB2	CCB	07/02/21 16:58				U	mg/L		-0.0012	0.0012			
WG522467CCV3	CCV	07/02/21 17:09	MS210521-8	.0125		.01255	mg/L	100	90	110			
WG522467CCB3	CCB	07/02/21 17:10				U	mg/L		-0.0012	0.0012			

Antimony, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521993													
WG521993ICV	ICV	06/28/21 19:13	MS210503-1	.0201		.01858	mg/L	92	90	110			
WG521993ICB	ICB	06/28/21 19:15				U	mg/L		-0.0012	0.0012			
WG521809LRB	LRB	06/28/21 19:17				U	mg/L		-0.00088	0.00088			
WG521809LFB	LFB	06/28/21 19:19	MS210610-2	.01		.01032	mg/L	103	85	115			
L66440-02LFM	LFM	06/28/21 19:24	MS210610-2	.01	U	.01068	mg/L	107	70	130			
L66440-02LFMD	LFMD	06/28/21 19:26	MS210610-2	.01	U	.01071	mg/L	107	70	130	0	20	
WG521993CCV1	CCV	06/28/21 19:32	MS210521-8	.0125		.01274	mg/L	102	90	110			
WG521993CCB1	CCB	06/28/21 19:34				U	mg/L		-0.0012	0.0012			

Arsenic, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522399													
WG522399ICV	ICV	07/01/21 17:36	MS210630-2	.05		.05103	mg/L	102	90	110			
WG522399ICB	ICB	07/01/21 17:38				U	mg/L		-0.00044	0.00044			
WG522399LFB	LFB	07/01/21 17:40	MS210610-2	.05005		.04578	mg/L	91	85	115			
L66440-03AS	AS	07/01/21 17:47	MS210610-2	.05005	U	.05055	mg/L	101	70	130			
L66440-03ASD	ASD	07/01/21 17:49	MS210610-2	.05005	U	.0494	mg/L	99	70	130	2	20	
WG522399CCV1	CCV	07/01/21 17:58	MS210521-8	.1001		.09962	mg/L	100	90	110			
WG522399CCB1	CCB	07/01/21 17:59				U	mg/L		-0.0006	0.0006			
WG522399CCV2	CCV	07/01/21 18:19	MS210521-8	.1001		.09899	mg/L	99	90	110			
WG522399CCB2	CCB	07/01/21 18:21				U	mg/L		-0.0006	0.0006			
WG522399CCV3	CCV	07/01/21 18:32	MS210521-8	.1001		.09882	mg/L	99	90	110			
WG522399CCB3	CCB	07/01/21 18:34				U	mg/L		-0.0006	0.0006			

Ensero Solutions

ACZ Project ID: **L66440**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Arsenic, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521993													
WG521993ICV	ICV	06/28/21 19:13	MS210503-1	.05		.0488	mg/L	98	90	110			
WG521993ICB	ICB	06/28/21 19:15				U	mg/L		-0.0006	0.0006			
WG521809LRB	LRB	06/28/21 19:17				U	mg/L		-0.00044	0.00044			
WG521809LFB	LFB	06/28/21 19:19	MS210610-2	.05005		.05094	mg/L	102	85	115			
L66440-02LFM	LFM	06/28/21 19:24	MS210610-2	.05005	.00044	.05141	mg/L	102	70	130			
L66440-02LFMD	LFMD	06/28/21 19:26	MS210610-2	.05005	.00044	.05101	mg/L	101	70	130	1	20	
WG521993CCV1	CCV	06/28/21 19:32	MS210521-8	.1001		.09935	mg/L	99	90	110			
WG521993CCB1	CCB	06/28/21 19:34				U	mg/L		-0.0006	0.0006			
WG521993CCV2	CCV	06/28/21 19:54	MS210521-8	.1001		.10266	mg/L	103	90	110			
WG521993CCB2	CCB	06/28/21 19:56				U	mg/L		-0.0006	0.0006			
WG521993CCV3	CCV	06/28/21 20:13	MS210521-8	.1001		.10483	mg/L	105	90	110			
WG521993CCB3	CCB	06/28/21 20:14				U	mg/L		-0.0006	0.0006			

Boron, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521715													
WG521715ICV	ICV	06/23/21 20:30	II210608-1	2		2.002	mg/L	100	95	105			
WG521715ICB	ICB	06/23/21 20:36				U	mg/L		-0.09	0.09			
WG521715PQV	PQV	06/23/21 20:39	II210603-2	.1001		.099	mg/L	99	70	130			
WG521715SIC	SIC	06/23/21 20:42	II210602-1	.1001		.092	mg/L	92	80	120			
WG521715LFB	LFB	06/23/21 20:49	II210622-2	.5005		.488	mg/L	98	85	115			
L65996-06AS	AS	06/23/21 21:07	II210622-2	5.005	U	4.93	mg/L	99	85	115			
L65996-06ASD	ASD	06/23/21 21:10	II210622-2	5.005	U	4.885	mg/L	98	85	115	1	20	
WG521715CCV1	CCV	06/23/21 21:19	II210609-1	1		.976	mg/L	98	90	110			
WG521715CCB1	CCB	06/23/21 21:22				U	mg/L		-0.09	0.09			
WG521715CCV2	CCV	06/23/21 21:56	II210609-1	1		1.008	mg/L	101	90	110			
WG521715CCB2	CCB	06/23/21 21:59				U	mg/L		-0.09	0.09			
WG521715CCV3	CCV	06/23/21 22:14	II210609-1	1		.989	mg/L	99	90	110			
WG521715CCB3	CCB	06/23/21 22:17				U	mg/L		-0.09	0.09			

Boron, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522113													
WG522113ICV	ICV	06/29/21 12:31	II210620-2	2		2.025	mg/L	101	95	105			
WG522113ICB	ICB	06/29/21 12:37				U	mg/L		-0.09	0.09			
WG522113PQV	PQV	06/29/21 12:40	II210603-2	.1001		.113	mg/L	113	70	130			
WG522113SIC	SIC	06/29/21 12:43	II210518-2	.1001		.103	mg/L	103	80	120			
WG521813LRB	LRB	06/29/21 12:50				U	mg/L		-0.066	0.066			
WG521813LFB	LFB	06/29/21 12:53	II210622-2	.5005		.517	mg/L	103	85	115			
L66593-03LFM	LFM	06/29/21 13:18	II210622-2	.5005	.247	.784	mg/L	107	70	130			
WG522113CCV1	CCV	06/29/21 13:21	II210607-1	1		.989	mg/L	99	90	110			
WG522113CCB1	CCB	06/29/21 13:24				U	mg/L		-0.09	0.09			
L66593-03LFMD	LFMD	06/29/21 13:27	II210622-2	.5005	.247	.78	mg/L	106	70	130	1	20	
WG522113CCV2	CCV	06/29/21 13:40	II210607-1	1		.966	mg/L	97	90	110			
WG522113CCB2	CCB	06/29/21 13:42				U	mg/L		-0.09	0.09			

Ensero Solutions

ACZ Project ID: **L66440**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Calcium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521715													
WG521715ICV	ICV	06/23/21 20:30	II210608-1	100		99	mg/L	99	95	105			
WG521715ICB	ICB	06/23/21 20:36				.11	mg/L		-0.3	0.3			
WG521715PQV	PQV	06/23/21 20:39	II210603-2	.5006		.49	mg/L	98	70	130			
WG521715SIC	SIC	06/23/21 20:42	II210602-1	200.5606		199.8	mg/L	100	1	200			
WG521715LFB	LFB	06/23/21 20:49	II210622-2	67.98753		66.94	mg/L	98	85	115			
L65996-06AS	AS	06/23/21 21:07	II210622-2	679.8753	10.1	679.7	mg/L	98	85	115			
L65996-06ASD	ASD	06/23/21 21:10	II210622-2	679.8753	10.1	679.9	mg/L	99	85	115	0	20	
WG521715CCV1	CCV	06/23/21 21:19	II210609-1	50		48.4	mg/L	97	90	110			
WG521715CCB1	CCB	06/23/21 21:22				U	mg/L		-0.3	0.3			
WG521715CCV2	CCV	06/23/21 21:56	II210609-1	50		50.07	mg/L	100	90	110			
WG521715CCB2	CCB	06/23/21 21:59				U	mg/L		-0.3	0.3			
WG521715CCV3	CCV	06/23/21 22:14	II210609-1	50		48.63	mg/L	97	90	110			
WG521715CCB3	CCB	06/23/21 22:17				.11	mg/L		-0.3	0.3			

Ensero Solutions

ACZ Project ID: **L66440**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Chloride

SM4500Cl-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521911													
WG521911ICB	ICB	06/25/21 8:32				U	mg/L		-1.5	1.5			
WG521911ICV	ICV	06/25/21 8:32	WI210503-1	54.89		56.51	mg/L	103	90	110			
WG521911CCV1	CCV	06/25/21 10:14	WI210203-7	50.05		49.4	mg/L	99	90	110			
WG521911CCB1	CCB	06/25/21 10:14				U	mg/L		-1.5	1.5			
WG521911LFB1	LFB	06/25/21 10:14	WI200327-3	30.03		30.56	mg/L	102	90	110			
WG521911CCV2	CCV	06/25/21 10:16	WI210203-7	50.05		49.3	mg/L	99	90	110			
WG521911CCB2	CCB	06/25/21 10:16				U	mg/L		-1.5	1.5			
WG521911CCV3	CCV	06/25/21 10:18	WI210203-7	50.05		49.43	mg/L	99	90	110			
WG521911CCB3	CCB	06/25/21 10:18				U	mg/L		-1.5	1.5			
WG521911LFB2	LFB	06/25/21 10:18	WI200327-3	30.03		30.17	mg/L	100	90	110			
WG521911CCV4	CCV	06/25/21 10:24	WI210203-7	50.05		49.56	mg/L	99	90	110			
WG521911CCB4	CCB	06/25/21 10:24				U	mg/L		-1.5	1.5			
L66440-02AS	AS	06/25/21 10:24	WI200327-3	30.03	3.87	34.23	mg/L	101	90	110			
L66440-03DUP	DUP	06/25/21 10:24			5.9	5.84	mg/L				1	20	
WG521911CCV5	CCV	06/25/21 10:24	WI210203-7	50.05		49.48	mg/L	99	90	110			
WG521911CCB5	CCB	06/25/21 10:24				U	mg/L		-1.5	1.5			
WG521946													
WG521946ICB	ICB	06/25/21 8:32				U	mg/L		-1.5	1.5			
WG521946ICV	ICV	06/25/21 8:32	WI210503-1	54.89		56.51	mg/L	103	90	110			
WG521946CCV1	CCV	06/25/21 11:39	WI210203-7	50.05		49.2	mg/L	98	90	110			
WG521946CCB1	CCB	06/25/21 11:39				U	mg/L		-1.5	1.5			
WG521946LFB1	LFB	06/25/21 11:39	WI200327-3	30.03		30.35	mg/L	101	90	110			
L66440-04DUP	DUP	06/25/21 11:39			21.9	21.63	mg/L				1	20	
L66493-01AS	AS	06/25/21 11:39	WI200327-3	30.03	15	44.75	mg/L	99	90	110			
WG521946CCV2	CCV	06/25/21 11:41	WI210203-7	50.05		49.38	mg/L	99	90	110			
WG521946CCB2	CCB	06/25/21 11:41				U	mg/L		-1.5	1.5			
WG521946CCV3	CCV	06/25/21 11:43	WI210203-7	50.05		49.34	mg/L	99	90	110			
WG521946CCB3	CCB	06/25/21 11:43				U	mg/L		-1.5	1.5			
WG521946LFB2	LFB	06/25/21 11:43	WI200327-3	30.03		30.95	mg/L	103	90	110			
WG521946CCV4	CCV	06/25/21 11:49	WI210203-7	50.05		49.07	mg/L	98	90	110			
WG521946CCB4	CCB	06/25/21 11:49				U	mg/L		-1.5	1.5			
WG521946CCV5	CCV	06/25/21 11:49	WI210203-7	50.05		49.28	mg/L	98	90	110			
WG521946CCB5	CCB	06/25/21 11:49				U	mg/L		-1.5	1.5			
WG521946CCV6	CCV	06/25/21 12:03	WI210203-7	50.05		49.44	mg/L	99	90	110			
WG521946CCB6	CCB	06/25/21 12:03				U	mg/L		-1.5	1.5			
WG521946CCV7	CCV	06/25/21 12:17	WI210203-7	50.05		49.3	mg/L	99	90	110			
WG521946CCB7	CCB	06/25/21 12:17				U	mg/L		-1.5	1.5			
WG521946CCV8	CCV	06/25/21 12:18	WI210203-7	50.05		49.57	mg/L	99	90	110			
WG521946CCB8	CCB	06/25/21 12:18				U	mg/L		-1.5	1.5			

Ensero Solutions

ACZ Project ID: **L66440**

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Chromium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521715													
WG521715ICV	ICV	06/23/21 20:30	II210608-1	2		1.944	mg/L	97	95	105			
WG521715ICB	ICB	06/23/21 20:36				U	mg/L		-0.06	0.06			
WG521715PQV	PQV	06/23/21 20:39	II210603-2	.0502		.036	mg/L	72	70	130			
WG521715SIC	SIC	06/23/21 20:42	II210602-1	.1004		.096	mg/L	96	80	120			
WG521715LFB	LFB	06/23/21 20:49	II210622-2	.502		.466	mg/L	93	85	115			
L65996-06AS	AS	06/23/21 21:07	II210622-2	5.02	U	4.659	mg/L	93	85	115			
L65996-06ASD	ASD	06/23/21 21:10	II210622-2	5.02	U	4.664	mg/L	93	85	115	0	20	
WG521715CCV1	CCV	06/23/21 21:19	II210609-1	1		.943	mg/L	94	90	110			
WG521715CCB1	CCB	06/23/21 21:22				U	mg/L		-0.06	0.06			
WG521715CCV2	CCV	06/23/21 21:56	II210609-1	1		.971	mg/L	97	90	110			
WG521715CCB2	CCB	06/23/21 21:59				U	mg/L		-0.06	0.06			
WG521715CCV3	CCV	06/23/21 22:14	II210609-1	1		.945	mg/L	95	90	110			
WG521715CCB3	CCB	06/23/21 22:17				U	mg/L		-0.06	0.06			

Chromium, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522113													
WG522113ICV	ICV	06/29/21 12:31	II210620-2	2		1.985	mg/L	99	95	105			
WG522113ICB	ICB	06/29/21 12:37				U	mg/L		-0.06	0.06			
WG522113PQV	PQV	06/29/21 12:40	II210603-2	.0502		.061	mg/L	122	70	130			
WG522113SIC	SIC	06/29/21 12:43	II210518-2	.1004		.113	mg/L	113	80	120			
WG521813LRB	LRB	06/29/21 12:50				U	mg/L		-0.044	0.044			
WG521813LFB	LFB	06/29/21 12:53	II210622-2	.502		.505	mg/L	101	85	115			
L66593-03LFM	LFM	06/29/21 13:18	II210622-2	.502	U	.52	mg/L	104	70	130			
WG522113CCV1	CCV	06/29/21 13:21	II210607-1	1		.961	mg/L	96	90	110			
WG522113CCB1	CCB	06/29/21 13:24				U	mg/L		-0.06	0.06			
L66593-03LFMD	LFMD	06/29/21 13:27	II210622-2	.502	U	.512	mg/L	102	70	130	2	20	
WG522113CCV2	CCV	06/29/21 13:40	II210607-1	1		.927	mg/L	93	90	110			
WG522113CCB2	CCB	06/29/21 13:42				U	mg/L		-0.06	0.06			

Copper, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521715													
WG521715ICV	ICV	06/23/21 20:30	II210608-1	2		1.953	mg/L	98	95	105			
WG521715ICB	ICB	06/23/21 20:36				U	mg/L		-0.03	0.03			
WG521715PQV	PQV	06/23/21 20:39	II210603-2	.0502		.047	mg/L	94	70	130			
WG521715SIC	SIC	06/23/21 20:42	II210602-1	.1004		.094	mg/L	94	80	120			
WG521715LFB	LFB	06/23/21 20:49	II210622-2	.502		.479	mg/L	95	85	115			
L65996-06AS	AS	06/23/21 21:07	II210622-2	5.02	4.25	8.977	mg/L	94	85	115			
L65996-06ASD	ASD	06/23/21 21:10	II210622-2	5.02	4.25	8.892	mg/L	92	85	115	1	20	
WG521715CCV1	CCV	06/23/21 21:19	II210609-1	1		.95	mg/L	95	90	110			
WG521715CCB1	CCB	06/23/21 21:22				U	mg/L		-0.03	0.03			
WG521715CCV2	CCV	06/23/21 21:56	II210609-1	1		.981	mg/L	98	90	110			
WG521715CCB2	CCB	06/23/21 21:59				U	mg/L		-0.03	0.03			
WG521715CCV3	CCV	06/23/21 22:14	II210609-1	1		.955	mg/L	96	90	110			
WG521715CCB3	CCB	06/23/21 22:17				U	mg/L		-0.03	0.03			

Ensero Solutions

ACZ Project ID: **L66440**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Copper, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521947													
WG521947ICV	ICV	06/28/21 21:02	II210620-2	2		1.962	mg/L	98	95	105			
WG521947ICB	ICB	06/28/21 21:07				.013	mg/L		-0.03	0.03			
WG521947PQV	PQV	06/28/21 21:11	II210603-2	.0502		.062	mg/L	124	70	130			
WG521947SIC	SIC	06/28/21 21:14	II210518-2	.1004		.109	mg/L	109	80	120			
WG521813LRB	LRB	06/28/21 21:20				.013	mg/L		-0.022	0.022			
WG521813LFB	LFB	06/28/21 21:23	II210622-2	.502		.52	mg/L	104	85	115			
L66593-03LFM	LFM	06/28/21 21:48	II210622-2	.502	.015	.546	mg/L	106	70	130			
WG521947CCV1	CCV	06/28/21 21:51	II210607-1	1		1	mg/L	100	90	110			
WG521947CCB1	CCB	06/28/21 21:54				.014	mg/L		-0.03	0.03			
L66593-03LFMD	LFMD	06/28/21 21:57	II210622-2	.502	.015	.567	mg/L	110	70	130	4	20	
WG521947CCV2	CCV	06/28/21 22:10	II210607-1	1		1.004	mg/L	100	90	110			
WG521947CCB2	CCB	06/28/21 22:13				.012	mg/L		-0.03	0.03			

Cyanide, WAD

SM4500-CN I,E-Colorimetric w/ distillation

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521425													
WG521425ICV	ICV	06/19/21 1:50	WI210616-7	.3		.3009	mg/L	100	90	110			
WG521425ICB	ICB	06/19/21 1:51				U	mg/L		-0.003	0.003			
WG521428													
WG521428CCV1	CCV	06/19/21 4:36	WI210616-8	.25		.2647	mg/L	106	90	110			
WG521428CCB1	CCB	06/19/21 4:37				U	mg/L		-0.003	0.003			
WG521348LRB	LRB	06/19/21 4:38				U	mg/L		-0.003	0.003			
WG521348LFB	LFB	06/19/21 4:39	WI210616-6	.2		.2073	mg/L	104	90	110			
WG521428CCV2	CCV	06/19/21 4:46	WI210616-8	.25		.2513	mg/L	101	90	110			
WG521428CCB2	CCB	06/19/21 4:47				U	mg/L		-0.003	0.003			
WG521428CCV3	CCV	06/19/21 4:57	WI210616-8	.25		.2487	mg/L	99	90	110			
WG521428CCB3	CCB	06/19/21 4:58				U	mg/L		-0.003	0.003			
L66440-03DUP	DUP	06/19/21 5:01			U	U	mg/L				0	20	RA
L66533-01LFM	LFM	06/19/21 5:02	WI210616-6	.2	.0051	.2069	mg/L	101	90	110			
WG521428CCV4	CCV	06/19/21 5:05	WI210616-8	.25		.2527	mg/L	101	90	110			
WG521428CCB4	CCB	06/19/21 5:06				U	mg/L		-0.003	0.003			
WG521779													
WG521779ICV	ICV	06/23/21 23:47	WI210616-7	.3		.2969	mg/L	99	90	110			
WG521779ICB	ICB	06/23/21 23:49				U	mg/L		-0.003	0.003			
WG521737LRB	LRB	06/23/21 23:50				U	mg/L		-0.003	0.003			
WG521737LFB	LFB	06/23/21 23:51	WI210616-6	.2		.1916	mg/L	96	90	110			
L66383-04DUP	DUP	06/23/21 23:53			U	U	mg/L				0	20	RA
L66440-04LFM	LFM	06/23/21 23:55	WI210616-6	.2	U	.1991	mg/L	100	90	110			
WG521779CCV1	CCV	06/23/21 23:59	WI210616-8	.25		.2437	mg/L	97	90	110			
WG521779CCB1	CCB	06/24/21 0:00				U	mg/L		-0.003	0.003			
WG521779CCV2	CCV	06/24/21 0:10	WI210616-8	.25		.2445	mg/L	98	90	110			
WG521779CCB2	CCB	06/24/21 0:11				U	mg/L		-0.003	0.003			
WG521779CCV3	CCV	06/24/21 0:18	WI210616-8	.25		.2493	mg/L	100	90	110			
WG521779CCB3	CCB	06/24/21 0:19				U	mg/L		-0.003	0.003			

Ensero Solutions

ACZ Project ID: **L66440**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Fluoride

SM4500F-C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521180													
WG521180ICV	ICV	06/16/21 12:22	WC210609-3	2.002		2.12	mg/L	106	90	110			
WG521180ICB	ICB	06/16/21 12:27				U	mg/L		-0.3	0.3			
WG521180PQV	PQV	06/16/21 12:31	WC210528-8	.35105		.4	mg/L	114	70	130			
WG521180LFB1	LFB	06/16/21 12:35	WC201221-2	5.015		5.09	mg/L	101	90	110			
WG521180CCV1	CCV	06/16/21 13:08	WC210609-3	2.002		2.1	mg/L	105	90	110			
WG521180CCB1	CCB	06/16/21 13:16				U	mg/L		-0.3	0.3			
WG521180CCV2	CCV	06/16/21 13:58	WC210609-3	2.002		2.11	mg/L	105	90	110			
WG521180CCB2	CCB	06/16/21 14:05				U	mg/L		-0.3	0.3			
WG521180LFB2	LFB	06/16/21 14:27	WC201221-2	5.015		5.14	mg/L	102	90	110			
WG521180CCV3	CCV	06/16/21 14:46	WC210609-3	2.002		2.14	mg/L	107	90	110			
WG521180CCB3	CCB	06/16/21 14:54				U	mg/L		-0.3	0.3			
L66439-03AS	AS	06/16/21 15:28	WC201221-2	5.015	.55	5.48	mg/L	98	90	110			
WG521180CCV4	CCV	06/16/21 15:32	WC210609-3	2.002		2.13	mg/L	106	90	110			
WG521180CCB4	CCB	06/16/21 15:40				U	mg/L		-0.3	0.3			
L66439-03ASD	ASD	06/16/21 15:43	WC201221-2	5.015	.55	5.38	mg/L	96	90	110	2	20	
WG521180CCV5	CCV	06/16/21 16:39	WC210609-3	2.002		2.11	mg/L	105	90	110			
WG521180CCB5	CCB	06/16/21 16:47				U	mg/L		-0.3	0.3			
WG521694													
WG521694ICV	ICV	06/23/21 10:28	WC210623-1	2.002		2.09	mg/L	104	90	110			
WG521694ICB	ICB	06/23/21 10:33				U	mg/L		-0.3	0.3			
WG521694PQV	PQV	06/23/21 10:36	WC210528-8	.35105		.4	mg/L	114	70	130			
WG521694LFB1	LFB	06/23/21 10:39	WC201221-2	5.015		5.12	mg/L	102	90	110			
WG521694CCV1	CCV	06/23/21 11:41	WC210623-1	2.002		2.06	mg/L	103	90	110			
WG521694CCB1	CCB	06/23/21 11:49				U	mg/L		-0.3	0.3			
L66440-04AS	AS	06/23/21 12:28	WC201221-2	5.015	1.76	6.69	mg/L	98	90	110			
L66440-04ASD	ASD	06/23/21 12:36	WC201221-2	5.015	1.76	6.94	mg/L	103	90	110	4	20	
WG521694CCV2	CCV	06/23/21 13:09	WC210623-1	2.002		2.09	mg/L	104	90	110			
WG521694CCB2	CCB	06/23/21 13:17				U	mg/L		-0.3	0.3			
WG521694LFB2	LFB	06/23/21 14:01	WC201221-2	5.015		5.16	mg/L	103	90	110			
WG521694CCV3	CCV	06/23/21 14:28	WC210623-1	2.002		2.05	mg/L	102	90	110			
WG521694CCB3	CCB	06/23/21 14:35				U	mg/L		-0.3	0.3			
WG521694CCV4	CCV	06/23/21 15:48	WC210623-1	2.002		2.15	mg/L	107	90	110			
WG521694CCB4	CCB	06/23/21 15:56				U	mg/L		-0.3	0.3			
WG521694CCV5	CCV	06/23/21 17:17	WC210623-1	2.002		2.07	mg/L	103	90	110			
WG521694CCB5	CCB	06/23/21 17:25				U	mg/L		-0.3	0.3			

Ensero Solutions

ACZ Project ID: **L66440**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Iron, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521715													
WG521715ICV	ICV	06/23/21 20:30	II210608-1	2		1.954	mg/L	98	95	105			
WG521715ICB	ICB	06/23/21 20:36				U	mg/L		-0.18	0.18			
WG521715PQV	PQV	06/23/21 20:39	II210603-2	.15027		.142	mg/L	94	70	130			
WG521715SIC	SIC	06/23/21 20:42	II210602-1	200.17027		193	mg/L	96	1	200			
WG521715LFB	LFB	06/23/21 20:49	II210622-2	1.0018		.974	mg/L	97	85	115			
L65996-06AS	AS	06/23/21 21:07	II210622-2	10.018	837	819.7	mg/L	-173	85	115			M3
L65996-06ASD	ASD	06/23/21 21:10	II210622-2	10.018	837	811.4	mg/L	-256	85	115	1	20	M3
WG521715CCV1	CCV	06/23/21 21:19	II210609-1	1		.969	mg/L	97	90	110			
WG521715CCB1	CCB	06/23/21 21:22				U	mg/L		-0.18	0.18			
WG521715CCV2	CCV	06/23/21 21:56	II210609-1	1		1.002	mg/L	100	90	110			
WG521715CCB2	CCB	06/23/21 21:59				U	mg/L		-0.18	0.18			
WG521715CCV3	CCV	06/23/21 22:14	II210609-1	1		.974	mg/L	97	90	110			
WG521715CCB3	CCB	06/23/21 22:17				U	mg/L		-0.18	0.18			

Iron, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521947													
WG521947ICV	ICV	06/28/21 21:02	II210620-2	2		2.059	mg/L	103	95	105			
WG521947ICB	ICB	06/28/21 21:07				U	mg/L		-0.18	0.18			
WG521947PQV	PQV	06/28/21 21:11	II210603-2	.15027		.196	mg/L	130	70	130			
WG521947SIC	SIC	06/28/21 21:14	II210518-2	200.17027		201.7	mg/L	101	1	200			
WG521813LRB	LRB	06/28/21 21:20				U	mg/L		-0.132	0.132			
WG521813LFB	LFB	06/28/21 21:23	II210622-2	1.0018		1.118	mg/L	112	85	115			
L66593-03LFM	LFM	06/28/21 21:48	II210622-2	1.0018	.096	1.179	mg/L	108	70	130			
WG521947CCV1	CCV	06/28/21 21:51	II210607-1	1		1.06	mg/L	106	90	110			
WG521947CCB1	CCB	06/28/21 21:54				U	mg/L		-0.18	0.18			
L66593-03LFMD	LFMD	06/28/21 21:57	II210622-2	1.0018	.096	1.258	mg/L	116	70	130	6	20	
WG521947CCV2	CCV	06/28/21 22:10	II210607-1	1		1.072	mg/L	107	90	110			
WG521947CCB2	CCB	06/28/21 22:13				U	mg/L		-0.18	0.18			

Lead, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522399													
WG522399ICV	ICV	07/01/21 17:36	MS210630-2	.05		.05208	mg/L	104	90	110			
WG522399ICB	ICB	07/01/21 17:38				U	mg/L		-0.00022	0.00022			
WG522399LFB	LFB	07/01/21 17:40	MS210610-2	.05005		.04653	mg/L	93	85	115			
L66440-03AS	AS	07/01/21 17:47	MS210610-2	.05005	U	.04843	mg/L	97	70	130			
L66440-03ASD	ASD	07/01/21 17:49	MS210610-2	.05005	U	.04761	mg/L	95	70	130	2	20	
WG522399CCV1	CCV	07/01/21 17:58	MS210521-8	.25025		.23839	mg/L	95	90	110			
WG522399CCB1	CCB	07/01/21 17:59				U	mg/L		-0.0003	0.0003			
WG522399CCV2	CCV	07/01/21 18:19	MS210521-8	.25025		.23924	mg/L	96	90	110			
WG522399CCB2	CCB	07/01/21 18:21				U	mg/L		-0.0003	0.0003			
WG522399CCV3	CCV	07/01/21 18:32	MS210521-8	.25025		.24202	mg/L	97	90	110			
WG522399CCB3	CCB	07/01/21 18:34				U	mg/L		-0.0003	0.0003			

Ensero Solutions

ACZ Project ID: **L66440**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Lead, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521993													
WG521993ICV	ICV	06/28/21 19:13	MS210503-1	.05		.04875	mg/L	98	90	110			
WG521993ICB	ICB	06/28/21 19:15				U	mg/L		-0.0003	0.0003			
WG521809LRB	LRB	06/28/21 19:17				U	mg/L		-0.00022	0.00022			
WG521809LFB	LFB	06/28/21 19:19	MS210610-2	.05005		.04969	mg/L	99	85	115			
L66440-02LFM	LFM	06/28/21 19:24	MS210610-2	.05005	U	.04972	mg/L	99	70	130			
L66440-02LFMD	LFMD	06/28/21 19:26	MS210610-2	.05005	U	.04962	mg/L	99	70	130	0	20	
WG521993CCV1	CCV	06/28/21 19:32	MS210521-8	.25025		.25287	mg/L	101	90	110			
WG521993CCB1	CCB	06/28/21 19:34				U	mg/L		-0.0003	0.0003			
WG521993CCV2	CCV	06/28/21 19:54	MS210521-8	.25025		.25538	mg/L	102	90	110			
WG521993CCB2	CCB	06/28/21 19:56				U	mg/L		-0.0003	0.0003			
WG521993CCV3	CCV	06/28/21 20:13	MS210521-8	.25025		.25434	mg/L	102	90	110			
WG521993CCB3	CCB	06/28/21 20:14				U	mg/L		-0.0003	0.0003			

Magnesium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521715													
WG521715ICV	ICV	06/23/21 20:30	II210608-1	100		98.18	mg/L	98	95	105			
WG521715ICB	ICB	06/23/21 20:36				U	mg/L		-0.6	0.6			
WG521715PQV	PQV	06/23/21 20:39	II210603-2	1.0001		.87	mg/L	87	70	130			
WG521715SIC	SIC	06/23/21 20:42	II210602-1	201.0201		205	mg/L	102	1	200			
WG521715LFB	LFB	06/23/21 20:49	II210622-2	50.00302		48.26	mg/L	97	85	115			
L65996-06AS	AS	06/23/21 21:07	II210622-2	500.0302	3.43	482.5	mg/L	96	85	115			
L65996-06ASD	ASD	06/23/21 21:10	II210622-2	500.0302	3.43	482.9	mg/L	96	85	115	0	20	
WG521715CCV1	CCV	06/23/21 21:19	II210609-1	50		47.59	mg/L	95	90	110			
WG521715CCB1	CCB	06/23/21 21:22				U	mg/L		-0.6	0.6			
WG521715CCV2	CCV	06/23/21 21:56	II210609-1	50		49.22	mg/L	98	90	110			
WG521715CCB2	CCB	06/23/21 21:59				U	mg/L		-0.6	0.6			
WG521715CCV3	CCV	06/23/21 22:14	II210609-1	50		47.67	mg/L	95	90	110			
WG521715CCB3	CCB	06/23/21 22:17				U	mg/L		-0.6	0.6			

Manganese, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521715													
WG521715ICV	ICV	06/23/21 20:30	II210608-1	2		1.935	mg/L	97	95	105			
WG521715ICB	ICB	06/23/21 20:36				U	mg/L		-0.03	0.03			
WG521715PQV	PQV	06/23/21 20:39	II210603-2	.05005		.044	mg/L	88	70	130			
WG521715SIC	SIC	06/23/21 20:42	II210602-1	50.10005		47.23	mg/L	94	1	200			
WG521715LFB	LFB	06/23/21 20:49	II210622-2	.5005		.468	mg/L	94	85	115			
L65996-06AS	AS	06/23/21 21:07	II210622-2	5.005	U	4.876	mg/L	97	85	115			
L65996-06ASD	ASD	06/23/21 21:10	II210622-2	5.005	U	4.875	mg/L	97	85	115	0	20	
WG521715CCV1	CCV	06/23/21 21:19	II210609-1	1		.948	mg/L	95	90	110			
WG521715CCB1	CCB	06/23/21 21:22				U	mg/L		-0.03	0.03			
WG521715CCV2	CCV	06/23/21 21:56	II210609-1	1		.981	mg/L	98	90	110			
WG521715CCB2	CCB	06/23/21 21:59				U	mg/L		-0.03	0.03			
WG521715CCV3	CCV	06/23/21 22:14	II210609-1	1		.952	mg/L	95	90	110			
WG521715CCB3	CCB	06/23/21 22:17				U	mg/L		-0.03	0.03			

Ensero Solutions

ACZ Project ID: **L66440**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Manganese, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521947													
WG521947ICV	ICV	06/28/21 21:02	II210620-2	2		1.95	mg/L	98	95	105			
WG521947ICB	ICB	06/28/21 21:07				.013	mg/L		-0.03	0.03			
WG521947PQV	PQV	06/28/21 21:11	II210603-2	.05005		.063	mg/L	126	70	130			
WG521947SIC	SIC	06/28/21 21:14	II210518-2	50.10005		47.1	mg/L	94	1	200			
WG521813LRB	LRB	06/28/21 21:20				.013	mg/L		-0.022	0.022			
WG521813LFB	LFB	06/28/21 21:23	II210622-2	.5005		.514	mg/L	103	85	115			
L66593-03LFM	LFM	06/28/21 21:48	II210622-2	.5005	.203	.707	mg/L	101	70	130			
WG521947CCV1	CCV	06/28/21 21:51	II210607-1	1		1.001	mg/L	100	90	110			
WG521947CCB1	CCB	06/28/21 21:54				.013	mg/L		-0.03	0.03			
L66593-03LFMD	LFMD	06/28/21 21:57	II210622-2	.5005	.203	.736	mg/L	106	70	130	4	20	
WG521947CCV2	CCV	06/28/21 22:10	II210607-1	1		1.006	mg/L	101	90	110			
WG521947CCB2	CCB	06/28/21 22:13				.013	mg/L		-0.03	0.03			

Mercury, dissolved

M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521060													
WG521060ICV1	ICV	06/17/21 13:47	HG210601-3	.00501		.00506	mg/L	101	95	105			
WG521060ICB	ICB	06/17/21 13:48				U	mg/L		-0.0002	0.0002			
WG521294													
WG521294CCV1	CCV	06/17/21 17:22	HG210601-3	.00501		.00506	mg/L	101	90	110			
WG521294CCB1	CCB	06/17/21 17:23				U	mg/L		-0.0002	0.0002			
WG521294PQV	PQV	06/17/21 17:24	HG210601-5	.001001		.00098	mg/L	98	70	130			
WG521294LRB	LRB	06/17/21 17:25				U	mg/L		-0.00044	0.00044			
WG521294LFB	LFB	06/17/21 17:26	HG210601-6	.002002		.00208	mg/L	104	85	115			
L66440-01LFM	LFM	06/17/21 17:30	HG210601-6	.002002	U	.00207	mg/L	103	85	115			
L66440-01LFMD	LFMD	06/17/21 17:30	HG210601-6	.002002	U	.00202	mg/L	101	85	115	2	20	
WG521294CCV2	CCV	06/17/21 17:33	HG210601-3	.00501		.00522	mg/L	104	90	110			
WG521294CCB2	CCB	06/17/21 17:34				U	mg/L		-0.0002	0.0002			
WG521294CCV3	CCV	06/17/21 17:45	HG210601-3	.00501		.00533	mg/L	106	90	110			
WG521294CCB3	CCB	06/17/21 17:46				U	mg/L		-0.0002	0.0002			
WG521294CCV4	CCV	06/17/21 17:53	HG210601-3	.00501		.00525	mg/L	105	90	110			
WG521294CCB4	CCB	06/17/21 17:54				U	mg/L		-0.0002	0.0002			
WG521581													
WG521581ICV	ICV	06/23/21 10:03	HG210601-3	.00501		.00507	mg/L	101	95	105			
WG521581ICB	ICB	06/23/21 10:04				U	mg/L		-0.0002	0.0002			
WG521581PQV	PQV	06/23/21 10:05	HG210601-5	.001001		.00089	mg/L	89	70	130			
WG521581LRB	LRB	06/23/21 10:06				U	mg/L		-0.00044	0.00044			
WG521581LFB	LFB	06/23/21 10:07	HG210601-6	.002002		.00176	mg/L	88	85	115			
L66440-04LFM	LFM	06/23/21 10:09	HG210601-6	.002002	U	.00174	mg/L	87	85	115			
L66440-04LFMD	LFMD	06/23/21 10:10	HG210601-6	.002002	U	.00175	mg/L	87	85	115	1	20	
WG521581CCV1	CCV	06/23/21 10:14	HG210601-3	.00501		.00524	mg/L	105	90	110			
WG521581CCB1	CCB	06/23/21 10:15				U	mg/L		-0.0002	0.0002			
WG521581CCV2	CCV	06/23/21 10:26	HG210601-3	.00501		.00516	mg/L	103	90	110			
WG521581CCB2	CCB	06/23/21 10:27				U	mg/L		-0.0002	0.0002			
WG521581CCV3	CCV	06/23/21 10:34	HG210601-3	.00501		.00514	mg/L	103	90	110			
WG521581CCB3	CCB	06/23/21 10:35				U	mg/L		-0.0002	0.0002			

Ensero Solutions

ACZ Project ID: **L66440**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury, total

M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521060													
WG521060ICV1	ICV	06/17/21 13:47	HG210601-3	.00501		.00506	mg/L	101	95	105			
WG521060ICB	ICB	06/17/21 13:48				U	mg/L		-0.0002	0.0002			
WG521062													
WG521062CCV1	CCV	06/17/21 15:35	HG210601-3	.00501		.00494	mg/L	99	90	110			
WG521062CCB1	CCB	06/17/21 15:36				U	mg/L		-0.0002	0.0002			
WG521062PQV	PQV	06/17/21 15:37	HG210601-5	.001001		.00093	mg/L	93	70	130			
WG521062LRB	LRB	06/17/21 15:38				U	mg/L		-0.00044	0.00044			
WG521062LFB	LFB	06/17/21 15:39	HG210601-6	.002002		.00188	mg/L	94	85	115			
WG521062CCV2	CCV	06/17/21 15:46	HG210601-3	.00501		.00519	mg/L	104	90	110			
WG521062CCB2	CCB	06/17/21 15:47				U	mg/L		-0.0002	0.0002			
L66431-06LFM	LFM	06/17/21 15:54	HG210601-6	.002002	U	.00189	mg/L	94	85	115			
L66431-06LFMD	LFMD	06/17/21 15:55	HG210601-6	.002002	U	.00188	mg/L	94	85	115	1	20	
WG521062CCV3	CCV	06/17/21 15:58	HG210601-3	.00501		.00507	mg/L	101	90	110			
WG521062CCB3	CCB	06/17/21 15:58				U	mg/L		-0.0002	0.0002			
WG521062CCV4	CCV	06/17/21 16:06	HG210601-3	.00501		.00532	mg/L	106	90	110			
WG521062CCB4	CCB	06/17/21 16:07				U	mg/L		-0.0002	0.0002			

Molybdenum, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522399													
WG522399ICV	ICV	07/01/21 17:36	MS210630-2	.01992		.01946	mg/L	98	90	110			
WG522399ICB	ICB	07/01/21 17:38				U	mg/L		-0.00044	0.00044			
WG522399LFB	LFB	07/01/21 17:40	MS210610-2	.0501		.04506	mg/L	90	85	115			
L66440-03AS	AS	07/01/21 17:47	MS210610-2	.0501	.0844	.13147	mg/L	94	70	130			
L66440-03ASD	ASD	07/01/21 17:49	MS210610-2	.0501	.0844	.13218	mg/L	95	70	130	1	20	
WG522399CCV1	CCV	07/01/21 17:58	MS210521-8	.1002		.09616	mg/L	96	90	110			
WG522399CCB1	CCB	07/01/21 17:59				U	mg/L		-0.0006	0.0006			
WG522399CCV2	CCV	07/01/21 18:19	MS210521-8	.1002		.09564	mg/L	95	90	110			
WG522399CCB2	CCB	07/01/21 18:21				U	mg/L		-0.0006	0.0006			
WG522399CCV3	CCV	07/01/21 18:32	MS210521-8	.1002		.09533	mg/L	95	90	110			
WG522399CCB3	CCB	07/01/21 18:34				U	mg/L		-0.0006	0.0006			

Molybdenum, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521993													
WG521993ICV	ICV	06/28/21 19:13	MS210503-1	.01992		.01943	mg/L	98	90	110			
WG521993ICB	ICB	06/28/21 19:15				U	mg/L		-0.0006	0.0006			
WG521809LRB	LRB	06/28/21 19:17				U	mg/L		-0.00044	0.00044			
WG521809LFB	LFB	06/28/21 19:19	MS210610-2	.0501		.04995	mg/L	100	85	115			
L66440-02LFM	LFM	06/28/21 19:24	MS210610-2	.0501	.00578	.05637	mg/L	101	70	130			
L66440-02LFMD	LFMD	06/28/21 19:26	MS210610-2	.0501	.00578	.05572	mg/L	100	70	130	1	20	
WG521993CCV1	CCV	06/28/21 19:32	MS210521-8	.1002		.10089	mg/L	101	90	110			
WG521993CCB1	CCB	06/28/21 19:34				U	mg/L		-0.0006	0.0006			

Ensero Solutions

ACZ Project ID: **L66440**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nitrate/Nitrite as N

M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522197													
WG522197ICV	ICV	06/29/21 23:17	WI210603-7	2.416		2.397	mg/L	99	90	110			
WG522197ICB	ICB	06/29/21 23:18				U	mg/L		-0.02	0.02			
WG522200													
WG522200CCV1	CCV	06/30/21 0:16	WI210623-1	2		1.99	mg/L	100	90	110			
WG522200CCB1	CCB	06/30/21 0:19				U	mg/L		-0.02	0.02			
WG522200LFB1	LFB	06/30/21 0:20	WI210331-13	2		2.031	mg/L	102	90	110			
L66440-01AS	AS	06/30/21 0:23	WI210331-13	2	.112	2.182	mg/L	104	90	110			
L66440-02DUP	DUP	06/30/21 0:25			U	U	mg/L				0	20	RA
WG522200CCV2	CCV	06/30/21 0:33	WI210623-1	2		2.005	mg/L	100	90	110			
WG522200CCB2	CCB	06/30/21 0:36				U	mg/L		-0.02	0.02			
WG522200CCV3	CCV	06/30/21 0:50	WI210623-1	2		2.029	mg/L	101	90	110			
WG522200CCB3	CCB	06/30/21 0:53				U	mg/L		-0.02	0.02			
WG522200LFB2	LFB	06/30/21 1:02	WI210331-13	2		2.073	mg/L	104	90	110			
WG522200CCV4	CCV	06/30/21 1:07	WI210623-1	2		2.058	mg/L	103	90	110			
WG522200CCB4	CCB	06/30/21 1:10				U	mg/L		-0.02	0.02			
WG522200CCV5	CCV	06/30/21 1:14	WI210623-1	2		2.047	mg/L	102	90	110			
WG522200CCB5	CCB	06/30/21 1:17				U	mg/L		-0.02	0.02			

Phosphorus, total

M365.1 - Auto Ascorbic Acid (digest)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521983													
WG521983ICV	ICV	06/26/21 0:34	WI210603-3	.65228		.691	mg/L	106	90	110			
WG521983ICB	ICB	06/26/21 0:36				U	mg/L		-0.01	0.01			
WG521985													
WG521985CCV1	CCV	06/26/21 1:19	WI210603-4	.5		.493	mg/L	99	90	110			
WG521985CCB1	CCB	06/26/21 1:20				U	mg/L		-0.01	0.01			
WG521830LRB	LRB	06/26/21 1:21				U	mg/L		-0.01	0.01			
WG521830LFB	LFB	06/26/21 1:22	WI210617-5	.5		.484	mg/L	97	90	110			
L66440-01LFM	LFM	06/26/21 1:24	WI210617-5	.5	U	.491	mg/L	98	90	110			
L66440-02DUP	DUP	06/26/21 1:27			U	U	mg/L				0	20	RA
WG521985CCV2	CCV	06/26/21 1:32	WI210603-4	.5		.493	mg/L	99	90	110			
WG521985CCB2	CCB	06/26/21 1:34				U	mg/L		-0.01	0.01			
WG521985CCV3	CCV	06/26/21 1:46	WI210603-4	.5		.49	mg/L	98	90	110			
WG521985CCB3	CCB	06/26/21 1:47				U	mg/L		-0.01	0.01			
WG521985CCV4	CCV	06/26/21 2:00	WI210603-4	.5		.494	mg/L	99	90	110			
WG521985CCB4	CCB	06/26/21 2:01				U	mg/L		-0.01	0.01			

Ensero Solutions

ACZ Project ID: **L66440**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Potassium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521715													
WG521715ICV	ICV	06/23/21 20:30	II210608-1	20		19.69	mg/L	98	95	105			
WG521715ICB	ICB	06/23/21 20:36				U	mg/L		-0.6	0.6			
WG521715PQV	PQV	06/23/21 20:39	II210603-2	1.004		.99	mg/L	99	70	130			
WG521715SIC	SIC	06/23/21 20:42	II210602-1	1.004		1.03	mg/L	103	80	120			
WG521715LFB	LFB	06/23/21 20:49	II210622-2	100.0157		96.52	mg/L	97	85	115			
L65996-06AS	AS	06/23/21 21:07	II210622-2	1000.157	U	968.7	mg/L	97	85	115			
L65996-06ASD	ASD	06/23/21 21:10	II210622-2	1000.157	U	967.5	mg/L	97	85	115	0	20	
WG521715CCV1	CCV	06/23/21 21:19	II210609-1	10		9.54	mg/L	95	90	110			
WG521715CCB1	CCB	06/23/21 21:22				U	mg/L		-0.6	0.6			
WG521715CCV2	CCV	06/23/21 21:56	II210609-1	10		9.86	mg/L	99	90	110			
WG521715CCB2	CCB	06/23/21 21:59				U	mg/L		-0.6	0.6			
WG521715CCV3	CCV	06/23/21 22:14	II210609-1	10		9.57	mg/L	96	90	110			
WG521715CCB3	CCB	06/23/21 22:17				U	mg/L		-0.6	0.6			

Residue, Filterable (TDS) @180C

SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521030													
WG521030PBW	PBW	06/14/21 19:20				U	mg/L		-20	20			
WG521030LCSW	LCSW	06/14/21 19:22	PCN63550	1000		990	mg/L	99	80	120			
L66440-01DUP	DUP	06/14/21 20:20			732	742	mg/L				1	10	
WG521064													
WG521064PBW	PBW	06/15/21 11:20				U	mg/L		-20	20			
WG521064LCSW	LCSW	06/15/21 11:22	PCN63550	1000		994	mg/L	99	80	120			
L66443-02DUP	DUP	06/15/21 12:09			94	94	mg/L				0	10	RA

Residue, Non-Filterable (TSS) @105C

SM2540D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG520918													
WG520918PBW	PBW	06/11/21 17:50				U	mg/L		-5	5			
WG520918LCSW	LCSW	06/11/21 17:51	PCN63549	100		97	mg/L	97	80	120			
L66454-05DUP	DUP	06/11/21 18:29			10	12	mg/L				18	10	RA

Selenium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522399													
WG522399ICV	ICV	07/01/21 17:36	MS210630-2	.05		.05182	mg/L	104	90	110			
WG522399ICB	ICB	07/01/21 17:38				U	mg/L		-0.00022	0.00022			
WG522399LFB	LFB	07/01/21 17:40	MS210610-2	.05		.04621	mg/L	92	85	115			
L66440-03AS	AS	07/01/21 17:47	MS210610-2	.05	U	.05304	mg/L	106	70	130			
L66440-03ASD	ASD	07/01/21 17:49	MS210610-2	.05	U	.05266	mg/L	105	70	130	1	20	
WG522399CCV1	CCV	07/01/21 17:58	MS210521-8	.25		.24357	mg/L	97	90	110			
WG522399CCB1	CCB	07/01/21 17:59				.00013	mg/L		-0.0003	0.0003			
WG522399CCV2	CCV	07/01/21 18:19	MS210521-8	.25		.24524	mg/L	98	90	110			
WG522399CCB2	CCB	07/01/21 18:21				.00013	mg/L		-0.0003	0.0003			
WG522399CCV3	CCV	07/01/21 18:32	MS210521-8	.25		.25436	mg/L	102	90	110			
WG522399CCB3	CCB	07/01/21 18:34				.00014	mg/L		-0.0003	0.0003			

Ensero Solutions

ACZ Project ID: **L66440**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Selenium, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521993													
WG521993ICV	ICV	06/28/21 19:13	MS210503-1	.05		.04804	mg/L	96	90	110			
WG521993ICB	ICB	06/28/21 19:15				U	mg/L		-0.0003	0.0003			
WG521809LRB	LRB	06/28/21 19:17				U	mg/L		-0.00022	0.00022			
WG521809LFB	LFB	06/28/21 19:19	MS210610-2	.05		.0509	mg/L	102	85	115			
L66440-02LFM	LFM	06/28/21 19:24	MS210610-2	.05	.00013	.05045	mg/L	101	70	130			
L66440-02LFMD	LFMD	06/28/21 19:26	MS210610-2	.05	.00013	.05065	mg/L	101	70	130	0	20	
WG521993CCV1	CCV	06/28/21 19:32	MS210521-8	.25		.25013	mg/L	100	90	110			
WG521993CCB1	CCB	06/28/21 19:34				U	mg/L		-0.0003	0.0003			

Silver, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522399													
WG522399ICV	ICV	07/01/21 17:36	MS210630-2	.02		.02129	mg/L	106	90	110			
WG522399ICB	ICB	07/01/21 17:38				U	mg/L		-0.00022	0.00022			
WG522399LFB	LFB	07/01/21 17:40	MS210610-2	.01002		.00941	mg/L	94	85	115			
L66440-03AS	AS	07/01/21 17:47	MS210610-2	.01002	U	.00904	mg/L	90	70	130			
L66440-03ASD	ASD	07/01/21 17:49	MS210610-2	.01002	U	.00843	mg/L	84	70	130	7	20	
WG522399CCV1	CCV	07/01/21 17:58	MS210521-8	.02505		.02425	mg/L	97	90	110			
WG522399CCB1	CCB	07/01/21 17:59				U	mg/L		-0.0003	0.0003			
WG522399CCV2	CCV	07/01/21 18:19	MS210521-8	.02505		.02402	mg/L	96	90	110			
WG522399CCB2	CCB	07/01/21 18:21				U	mg/L		-0.0003	0.0003			
WG522399CCV3	CCV	07/01/21 18:32	MS210521-8	.02505		.02435	mg/L	97	90	110			
WG522399CCB3	CCB	07/01/21 18:34				U	mg/L		-0.0003	0.0003			

Silver, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521993													
WG521993ICV	ICV	06/28/21 19:13	MS210503-1	.02		.01984	mg/L	99	90	110			
WG521993ICB	ICB	06/28/21 19:15				U	mg/L		-0.0003	0.0003			
WG521809LRB	LRB	06/28/21 19:17				U	mg/L		-0.00022	0.00022			
WG521809LFB	LFB	06/28/21 19:19	MS210610-2	.01002		.01065	mg/L	106	85	115			
L66440-02LFM	LFM	06/28/21 19:24	MS210610-2	.01002	U	.01049	mg/L	105	70	130			
L66440-02LFMD	LFMD	06/28/21 19:26	MS210610-2	.01002	U	.01035	mg/L	103	70	130	1	20	
WG521993CCV1	CCV	06/28/21 19:32	MS210521-8	.02505		.02588	mg/L	103	90	110			
WG521993CCB1	CCB	06/28/21 19:34				U	mg/L		-0.0003	0.0003			

Ensero Solutions

ACZ Project ID: **L66440**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sodium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521715													
WG521715ICV	ICV	06/23/21 20:30	II210608-1	100		98.08	mg/L	98	95	105			
WG521715ICB	ICB	06/23/21 20:36				U	mg/L		-0.6	0.6			
WG521715PQV	PQV	06/23/21 20:39	II210603-2	.998		.95	mg/L	95	70	130			
WG521715SIC	SIC	06/23/21 20:42	II210602-1	.998		1.03	mg/L	103	80	120			
WG521715LFB	LFB	06/23/21 20:49	II210622-2	100.0605		95.08	mg/L	95	85	115			
L65996-06AS	AS	06/23/21 21:07	II210622-2	1000.605	U	964.1	mg/L	96	85	115			
L65996-06ASD	ASD	06/23/21 21:10	II210622-2	1000.605	U	964.7	mg/L	96	85	115	0	20	
WG521715CCV1	CCV	06/23/21 21:19	II210609-1	50		47.78	mg/L	96	90	110			
WG521715CCB1	CCB	06/23/21 21:22				U	mg/L		-0.6	0.6			
WG521715CCV2	CCV	06/23/21 21:56	II210609-1	50		49.67	mg/L	99	90	110			
WG521715CCB2	CCB	06/23/21 21:59				U	mg/L		-0.6	0.6			
WG521715CCV3	CCV	06/23/21 22:14	II210609-1	50		48.16	mg/L	96	90	110			
WG521715CCB3	CCB	06/23/21 22:17				U	mg/L		-0.6	0.6			

Sulfate

D516-02/-07/-11 - TURBIDIMETRIC

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521696													
WG521696ICB	ICB	06/23/21 7:44				U	mg/L		-3	3			
WG521696ICV	ICV	06/23/21 7:44	WI210615-1	20.46		20.3	mg/L	99	90	110			
WG521696CCV1	CCV	06/23/21 14:55	WI210615-2	25		25.1	mg/L	100	90	110			
WG521696CCB1	CCB	06/23/21 14:55				U	mg/L		-3	3			
WG521696LFB	LFB	06/23/21 14:55	WI210105-3	10		9.6	mg/L	96	90	110			
WG521696CCV2	CCV	06/23/21 14:57	WI210615-2	25		25	mg/L	100	90	110			
WG521696CCB2	CCB	06/23/21 14:57				U	mg/L		-3	3			
WG521696CCV3	CCV	06/23/21 14:59	WI210615-2	25		25.8	mg/L	103	90	110			
WG521696CCB3	CCB	06/23/21 14:59				U	mg/L		-3	3			
WG521696CCV4	CCV	06/23/21 15:06	WI210615-2	25		24.9	mg/L	100	90	110			
WG521696CCB4	CCB	06/23/21 15:06				U	mg/L		-3	3			
WG521696CCV5	CCV	06/23/21 15:21	WI210615-2	25		25.3	mg/L	101	90	110			
WG521696CCB5	CCB	06/23/21 15:21				U	mg/L		-3	3			
L66437-04DUP	DUP	06/23/21 15:21			171	169.8	mg/L				1	20	
L66438-01AS	AS	06/23/21 15:21	SO4TURB5X	10	86.1	95.6	mg/L	95	90	110			
WG521696CCV6	CCV	06/23/21 15:23	WI210615-2	25		24.8	mg/L	99	90	110			
WG521696CCB6	CCB	06/23/21 15:23				U	mg/L		-3	3			
WG521696CCV7	CCV	06/23/21 15:27	WI210615-2	25		25	mg/L	100	90	110			
WG521696CCB7	CCB	06/23/21 15:27				U	mg/L		-3	3			
WG521696CCV8	CCV	06/23/21 15:35	WI210615-2	25		25.4	mg/L	102	90	110			
WG521696CCB8	CCB	06/23/21 15:35				U	mg/L		-3	3			
L66448-02AS	AS	06/23/21 15:35	SO4TURB	10	1190	1172.9	mg/L	-171	90	110			M3
L66448-03DUP	DUP	06/23/21 15:36			1180	1197.8	mg/L				1	20	
WG521696CCV9	CCV	06/23/21 15:36	WI210615-2	25		25	mg/L	100	90	110			
WG521696CCB9	CCB	06/23/21 15:37				U	mg/L		-3	3			

Ensero Solutions

ACZ Project ID: **L66440**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Thallium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522399													
WG522399ICV	ICV	07/01/21 17:36	MS210630-2	.05		.05125	mg/L	103	90	110			
WG522399ICB	ICB	07/01/21 17:38				U	mg/L		-0.00022	0.00022			
WG522399LFB	LFB	07/01/21 17:40	MS210610-2	.05		.04605	mg/L	92	85	115			
L66440-03AS	AS	07/01/21 17:47	MS210610-2	.05	U	.04828	mg/L	97	70	130			
L66440-03ASD	ASD	07/01/21 17:49	MS210610-2	.05	U	.04727	mg/L	95	70	130	2	20	
WG522399CCV1	CCV	07/01/21 17:58	MS210521-8	.1		.09502	mg/L	95	90	110			
WG522399CCB1	CCB	07/01/21 17:59				U	mg/L		-0.0003	0.0003			
WG522399CCV2	CCV	07/01/21 18:19	MS210521-8	.1		.09435	mg/L	94	90	110			
WG522399CCB2	CCB	07/01/21 18:21				U	mg/L		-0.0003	0.0003			
WG522399CCV3	CCV	07/01/21 18:32	MS210521-8	.1		.09673	mg/L	97	90	110			
WG522399CCB3	CCB	07/01/21 18:34				U	mg/L		-0.0003	0.0003			

Thallium, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521993													
WG521993ICV	ICV	06/28/21 19:13	MS210503-1	.05		.04966	mg/L	99	90	110			
WG521993ICB	ICB	06/28/21 19:15				U	mg/L		-0.0003	0.0003			
WG521809LRB	LRB	06/28/21 19:17				U	mg/L		-0.00022	0.00022			
WG521809LFB	LFB	06/28/21 19:19	MS210610-2	.05		.04927	mg/L	99	85	115			
L66440-02LFM	LFM	06/28/21 19:24	MS210610-2	.05	U	.0493	mg/L	99	70	130			
L66440-02LFMD	LFMD	06/28/21 19:26	MS210610-2	.05	U	.04911	mg/L	98	70	130	0	20	
WG521993CCV1	CCV	06/28/21 19:32	MS210521-8	.1		.10285	mg/L	103	90	110			
WG521993CCB1	CCB	06/28/21 19:34				U	mg/L		-0.0003	0.0003			

Uranium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522399													
WG522399ICV	ICV	07/01/21 17:36	MS210630-2	.05		.05013	mg/L	100	90	110			
WG522399ICB	ICB	07/01/21 17:38				U	mg/L		-0.00022	0.00022			
WG522399LFB	LFB	07/01/21 17:40	MS210610-2	.05		.04501	mg/L	90	85	115			
L66440-03AS	AS	07/01/21 17:47	MS210610-2	.05	.0231	.07115	mg/L	96	70	130			
L66440-03ASD	ASD	07/01/21 17:49	MS210610-2	.05	.0231	.07155	mg/L	97	70	130	1	20	
WG522399CCV1	CCV	07/01/21 17:58	MS210521-8	.1		.09484	mg/L	95	90	110			
WG522399CCB1	CCB	07/01/21 17:59				U	mg/L		-0.0003	0.0003			
WG522399CCV2	CCV	07/01/21 18:19	MS210521-8	.1		.09397	mg/L	94	90	110			
WG522399CCB2	CCB	07/01/21 18:21				U	mg/L		-0.0003	0.0003			
WG522399CCV3	CCV	07/01/21 18:32	MS210521-8	.1		.09438	mg/L	94	90	110			
WG522399CCB3	CCB	07/01/21 18:34				U	mg/L		-0.0003	0.0003			

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ACZ Project ID: **L66440**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Uranium, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521993													
WG521993ICV	ICV	06/28/21 19:13	MS210503-1	.05		.04811	mg/L	96	90	110			
WG521993ICB	ICB	06/28/21 19:15				U	mg/L		-0.0003	0.0003			
WG521809LRB	LRB	06/28/21 19:17				U	mg/L		-0.00022	0.00022			
WG521809LFB	LFB	06/28/21 19:19	MS210610-2	.05		.04891	mg/L	98	85	115			
L66440-02LFM	LFM	06/28/21 19:24	MS210610-2	.05	.00195	.05201	mg/L	100	70	130			
L66440-02LFMD	LFMD	06/28/21 19:26	MS210610-2	.05	.00195	.05213	mg/L	100	70	130	0	20	
WG521993CCV1	CCV	06/28/21 19:32	MS210521-8	.1		.1022	mg/L	102	90	110			
WG521993CCB1	CCB	06/28/21 19:34				U	mg/L		-0.0003	0.0003			

Zinc, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521715													
WG521715ICV	ICV	06/23/21 20:30	II210608-1	2		1.965	mg/L	98	95	105			
WG521715ICB	ICB	06/23/21 20:36				U	mg/L		-0.06	0.06			
WG521715PQV	PQV	06/23/21 20:39	II210603-2	.05015		.045	mg/L	90	70	130			
WG521715SIC	SIC	06/23/21 20:42	II210602-1	.1003		.103	mg/L	103	80	120			
WG521715LFB	LFB	06/23/21 20:49	II210622-2	.50075		.48	mg/L	96	85	115			
L65996-06AS	AS	06/23/21 21:07	II210622-2	5.0075	1.57	6.223	mg/L	93	85	115			
L65996-06ASD	ASD	06/23/21 21:10	II210622-2	5.0075	1.57	6.192	mg/L	92	85	115	0	20	
WG521715CCV1	CCV	06/23/21 21:19	II210609-1	1		.959	mg/L	96	90	110			
WG521715CCB1	CCB	06/23/21 21:22				U	mg/L		-0.06	0.06			
WG521715CCV2	CCV	06/23/21 21:56	II210609-1	1		.992	mg/L	99	90	110			
WG521715CCB2	CCB	06/23/21 21:59				U	mg/L		-0.06	0.06			
WG521715CCV3	CCV	06/23/21 22:14	II210609-1	1		.973	mg/L	97	90	110			
WG521715CCB3	CCB	06/23/21 22:17				U	mg/L		-0.06	0.06			

Zinc, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522113													
WG522113ICV	ICV	06/29/21 12:31	II210620-2	2		1.964	mg/L	98	95	105			
WG522113ICB	ICB	06/29/21 12:37				U	mg/L		-0.06	0.06			
WG522113PQV	PQV	06/29/21 12:40	II210603-2	.05015		.052	mg/L	104	70	130			
WG522113SIC	SIC	06/29/21 12:43	II210518-2	.1003		.094	mg/L	94	80	120			
WG521813LRB	LRB	06/29/21 12:50				U	mg/L		-0.044	0.044			
WG521813LFB	LFB	06/29/21 12:53	II210622-2	.50075		.504	mg/L	101	85	115			
L66593-03LFM	LFM	06/29/21 13:18	II210622-2	.50075	U	.527	mg/L	105	70	130			
WG522113CCV1	CCV	06/29/21 13:21	II210607-1	1		.948	mg/L	95	90	110			
WG522113CCB1	CCB	06/29/21 13:24				U	mg/L		-0.06	0.06			
L66593-03LFMD	LFMD	06/29/21 13:27	II210622-2	.50075	U	.504	mg/L	101	70	130	4	20	
WG522113CCV2	CCV	06/29/21 13:40	II210607-1	1		.914	mg/L	91	90	110			
WG522113CCB2	CCB	06/29/21 13:42				U	mg/L		-0.06	0.06			

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ACZ Project ID: **L66440**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L66440-01	WG521428	Cyanide, WAD	SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521715	Iron, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG522200	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521985	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG520918	Residue, Non-Filterable (TSS) @105C	SM2540D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			SM2540D	Z3	Sample volume yielded a residue less than 2.5 mg
	WG521319	Total Alkalinity	SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L66440-02	WG521428	Cyanide, WAD	SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521715	Iron, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG522200	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521985	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521064	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG520918	Residue, Non-Filterable (TSS) @105C	SM2540D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			SM2540D	Z3	Sample volume yielded a residue less than 2.5 mg
	WG521319	Total Alkalinity	SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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ACZ Project ID: **L66440**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L66440-03	WG521428	Cyanide, WAD	SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521715	Iron, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG522200	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521985	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521064	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG520918	Residue, Non-Filterable (TSS) @105C	SM2540D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521319	Total Alkalinity	SM2540D SM2320B - Titration	Z3 RA	Sample volume yielded a residue less than 2.5 mg Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L66440-04	WG521779	Cyanide, WAD	SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521715	Iron, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG522200	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521985	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521064	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG520918	Residue, Non-Filterable (TSS) @105C	SM2540D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521696	Sulfate	SM2540D D516-02/-07/-11 - TURBIDIMETRIC	Z3 M3	Sample volume yielded a residue less than 2.5 mg The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG521319	Total Alkalinity	SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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Project ID: 3100-PO205

Sample ID: MW-18

Locator:

ACZ Sample ID: **L66440-01**

Date Sampled: 06/08/21 14:11

Date Received: 06/11/21

Sample Matrix: Surface Water

Combined Radium (total)

Prep Method:

Calculation (RA226 + RA228)

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	07/27/21 13:50		6.7			pCi/L		calc

Gross Alpha & Beta, total

Prep Method:

M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	06/30/21 0:21		230	18	7.3	pCi/L	*	ess
Gross Beta	06/30/21 0:21		140	7.5	9.5	pCi/L		ess

Radium 226, dissolved

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	07/07/21 0:15		3.2	0.26	0.08	pCi/L	*	djc

Radium 226, total

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	07/07/21 0:14		3.3	0.32	0.15	pCi/L	*	djc

Radium 228, total

Prep Method:

M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, total	07/20/21 17:11		3.4	0.79	1.6	pCi/L	*	cer

Ensero Solutions

Project ID: 3100-PO205

Sample ID: MW-14

Locator:

ACZ Sample ID: **L66440-02**

Date Sampled: 06/09/21 11:28

Date Received: 06/11/21

Sample Matrix: Surface Water

Combined Radium (total)

Prep Method:

Calculation (RA226 + RA228)

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	07/27/21 13:50		0.23			pCi/L		calc

Gross Alpha & Beta, total

Prep Method:

M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	06/30/21 0:23		3	2	6.6	pCi/L	*	ess
Gross Beta	06/30/21 0:23		4.4	2.8	6.7	pCi/L		ess

Radium 226, dissolved

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	07/07/21 0:18		0.09	0.1	0.12	pCi/L	*	djc

Radium 226, total

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	07/07/21 0:17		0.23	0.12	0.12	pCi/L	*	djc

Radium 228, total

Prep Method:

M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, total	07/20/21 17:11		0.6	0.62	1.5	pCi/L	*	cer

Ensero Solutions

Project ID: 3100-PO205

Sample ID: MW-13

Locator:

ACZ Sample ID: **L66440-03**

Date Sampled: 06/09/21 12:50

Date Received: 06/11/21

Sample Matrix: Surface Water

Combined Radium (total)

Prep Method:

Calculation (RA226 + RA228)

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	07/27/21 13:50		0.53			pCi/L		calc

Gross Alpha & Beta, total

Prep Method:

M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	06/30/21 0:24		25	5.5	7.4	pCi/L	*	ess
Gross Beta	06/30/21 0:24		9.5	3.3	8.4	pCi/L		ess

Radium 226, dissolved

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	07/07/21 0:21		0.2	0.11	0.42	pCi/L	*	djc

Radium 226, total

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	07/07/21 0:20		0.53	0.16	0.17	pCi/L	*	djc

Radium 228, total

Prep Method:

M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, total	07/20/21 17:11		0.36	0.75	1.8	pCi/L	*	cer

Ensero Solutions

Project ID: 3100-PO205

Sample ID: MW-15

Locator:

ACZ Sample ID: **L66440-04**

Date Sampled: 06/09/21 16:31

Date Received: 06/11/21

Sample Matrix: Surface Water

Combined Radium (total)

Prep Method:

Calculation (RA226 + RA228)

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	07/27/21 13:50		37			pCi/L		calc

Gross Alpha & Beta, total

Prep Method:

M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	06/30/21 0:25		210	17	21	pCi/L	*	ess
Gross Beta	06/30/21 0:25		77	6	19	pCi/L		ess

Radium 226, dissolved

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	07/07/21 0:24		39	0.9	0.12	pCi/L	*	djc

Radium 226, total

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	07/07/21 0:23		37	0.84	0.09	pCi/L	*	djc

Radium 228, total

Prep Method:

M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, total	07/20/21 17:11		1	1	2.2	pCi/L	*	cer

Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Error(+/-)</i>	Calculated sample specific uncertainty
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>LCL</i>	Lower Control Limit, in % (except for LCSS, mg/Kg)
<i>LLD</i>	Calculated sample specific Lower Limit of Detection
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
<i>RER</i>	Relative Error Ratio, calculation used for Dup. QC taking into account the error factor.
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>UCL</i>	Upper Control Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

QC Sample Types

<i>DUP</i>	Sample Duplicate	<i>MS/MSD</i>	Matrix Spike/Matrix Spike Duplicate
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBS</i>	Prep Blank - Soil
<i>LCSW</i>	Laboratory Control Sample - Water	<i>PBW</i>	Prep Blank - Water

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Matrix Spikes	Determines sample matrix interferences, if any.

ACZ Qualifiers (Qual)

H	Analysis exceeded method hold time.
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Method Prefix Reference

M	EPA methodology, including those under SDWA, CWA, and RCRA
SM	Standard Methods for the Examination of Water and Wastewater.
D	ASTM
RP	DOE
ESM	DOE/ESM

Comments

- (1) Solid matrices are reported on a dry weight basis.
- (2) Preparation method: "Method" indicates preparation defined in analytical method.
- (3) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.

For a complete list of ACZ's Extended Qualifiers, please click:

<https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf>

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ACZ Project ID: **L66440**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alpha		M900.0										Units: pCi/L				
ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG521650																
WG521650PBW	PBW	06/30/21						-14	0.38	0.75			1.5			
WG521650LCSWA	LCSW	06/30/21	PCN62436	100				120	9.2	1.3	120	67	144			
L66324-01MSA	MS	06/30/21	PCN62436	68.49	1.1	1.3	1.4	47	6.6	1.6	67	67	144			
L66324-01DUP	DUP-RPD	06/30/21			1.1	1.3	1.4	2	1.7	1.5				58	20	RG
L66324-01DUP	DUP-RER	06/30/21			1.1	1.3	1.4	2	1.7	1.5				0.42	2	
L66484-01DUP	DUP-RER	06/30/21			1	1.4	1.6	1.5	1.5	1.5				0.24	2	
L66484-01DUP	DUP-RPD	06/30/21			1	1.4	1.6	1.5	1.5	1.5				40	20	RG

Beta		M900.0										Units: pCi/L				
ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG521650																
WG521650PBW	PBW	06/30/21						-1.1	1.6	1.8			3.6			
WG521650LCSWB	LCSW	06/30/21	RC210621-11	49.9				43	4.5	2.5	86	82	122			
L66324-01DUP	DUP-RPD	06/30/21			0.95	1.9	2	2.8	1.8	1.8				99	20	RG
L66324-01DUP	DUP-RER	06/30/21			0.95	1.9	2	2.8	1.8	1.8				0.71	2	
L66484-01DUP	DUP-RPD	06/30/21			1.4	1.8	1.8	1.4	1.7	1.7				0	20	
L66484-01MSB	MS	06/30/21	RC210621-11	33.27	1.4	1.8	1.8	34	3.3	1.8	98	82	122			

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ACZ Project ID: **L66440**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Radium 226, total

M903.1

Units: pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG522251																
WG522251PBW	PBW	07/07/21						-08	0.14	0.16			0.32			
WG522251LCSW	LCSW	07/07/21	PCN62879	20				19	0.67	0.16	95	43	148			
L66481-01DUP1	DUP-RER	07/07/21			-0.04	0.13	0.15	-07	0.29	0.44				0.09	2	
L66481-01DUP1	DUP-RPD	07/07/21			-0.04	0.13	0.15	-07	0.29	0.44				55	20	RG
L66481-02DUP2	DUP-RER	07/07/21			0.12	0.09	0.14	.05	0.13	0.65				0.44	2	
L66481-02DUP2	DUP-RPD	07/07/21			0.12	0.09	0.14	.05	0.13	0.65				82	20	RG
L66482-01MS	MS	07/07/21	PCN62879	40	0.16	0.1	0.24	37	1.2	0.54	92	43	148			

Radium 228, total

M904.0

Units: pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG522569																
WG522569LCSW	LCSW	07/20/21	PCN63356	9.64				6.9	1	0.76	72	47	123			N1
WG522569PBW	PBW	07/20/21						.02	0.56	0.59			1.18			N1
L66553-01DUP	DUP-RPD	07/20/21			-0.25	0.99	2.2	.32	0.68	1.6				1629	20	RG
L66383-04DUP	DUP-RER	07/20/21			0.3	0.76	1.9	1.2	0.67	1.7				0.89	2	N1
L66440-04MS	MS	07/20/21	PCN63356	9.63	1	1	2.2	12	1.3	2	114	47	123			N1
L66553-01DUP	DUP-RER	07/20/21			-0.25	0.99	2.2	.32	0.68	1.6				0.47	2	N1
L66383-04DUP	DUP-RPD	07/20/21			0.3	0.76	1.9	1.2	0.67	1.7				120	20	RG

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ACZ Project ID: **L66440**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L66440-01	WG521650	Gross Alpha	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG522251	Radium 226, dissolved	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Radium 226, total	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG522569	Radium 228, total	M904.0	N1	See Case Narrative.
			M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L66440-02	WG521650	Gross Alpha	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG522251	Radium 226, dissolved	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Radium 226, total	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG522569	Radium 228, total	M904.0	N1	See Case Narrative.
			M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L66440-03	WG521650	Gross Alpha	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG522251	Radium 226, dissolved	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Radium 226, total	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG522569	Radium 228, total	M904.0	N1	See Case Narrative.
			M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L66440-04	WG521650	Gross Alpha	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG522251	Radium 226, dissolved	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Radium 226, total	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG522569	Radium 228, total	M904.0	N1	See Case Narrative.
			M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.

Ensero Solutions

ACZ Project ID: **L66440**

No certification qualifiers associated with this analysis

Ensero Solutions
3100-PO205

ACZ Project ID: L66440
Date Received: 06/11/2021 11:13
Received By:
Date Printed: 6/14/2021

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?	☐	☐	☒
2) Is the Chain of Custody form or other directive shipping papers present?	☒	☐	☐
3) Does this project require special handling procedures such as CLP protocol?	☐	☒	☐
4) Are any samples NRC licensable material?	☐	☐	☒
5) If samples are received past hold time, proceed with requested short hold time analyses?	☒	☐	☐
6) Is the Chain of Custody form complete and accurate?	☒	☐	☐
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?	☐	☒	☐

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	☒	☐	☐
9) Are all labels on containers and are they intact and legible?	☒	☐	☐
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	☒	☐	☐
11) For preserved bottle types, was the pH checked and within limits? ¹	☒	☐	☐
12) Is there sufficient sample volume to perform all requested work?	☒	☐	☐
13) Is the custody seal intact on all containers?	☐	☐	☒
14) Are samples that require zero headspace acceptable?	☐	☐	☒
15) Are all sample containers appropriate for analytical requirements?	☒	☐	☐
16) Is there an Hg-1631 trip blank present?	☐	☐	☒
17) Is there a VOA trip blank present?	☐	☐	☒
18) Were all samples received within hold time?	☒	☐	☐

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp (°C)	Temp Criteria (°C)	Rad (µR/Hr)	Custody Seal Intact?
6848	4.9	<=6.0	15	N/A
6634	5.6	<=6.0	15	N/A
4328	5.3	<=6.0	15	Yes
6150	2.6	<=6.0	15	N/A

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

Ensero Solutions
3100-PO205

ACZ Project ID: L66440

Date Received: 06/11/2021 11:13

Received By:

Date Printed: 6/14/2021

¹ The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na₂S₂O₃ preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

**Laboratories, Inc.****L66440**

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

CHAIN of CUSTODY**Report to:**

Name: Christie Brizinski

Company: Ensero Solutions

E-mail: cbrizinski@ensero.com

Address: 131 E. Lincoln Ave Ste. 200

Fort Collins, CO 80524

Telephone: 867-668-6463, ext 229

Copy of Report to:

Name: Evan Valencia

Company: Ensero Solutions

E-mail: evalencia@ensero.com

Telephone: 818-688-1839

Invoice to:

Name: Pauline Wong

Company: Ensero Solutions

E-mail: ap@ensero.com

Address: 131 E. Lincoln Ave Ste. 200

Fort Collins, CO 80524

Telephone: 778-404-1182

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses?

YES



NO



If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

Are samples for SDWA Compliance Monitoring?

Yes



No



If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: EV

Sampler's Site Information

State CO

Zip code 80401

Time Zone MTN

*Sampler's Signature:

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

ANALYSES REQUESTED (attach list or use quote number)

Quote #: Ensero-2020

PO#: 3100-PO205

Reporting state for compliance testing: CO

Check box if samples include NRC licensed material?



SAMPLE IDENTIFICATION			DATE:TIME	Matrix	# of Containers	TSS	Sample suite #1	Sample suite #2	COD	LLHG trip blank	Sample suite #3	TDS
MW-18			6-8-2021:14:11	GW	9	☐	☐	☐	☐	☐	☒	☐
MW-14			6-9-2021: 11:28	GW	9	☐	☐	☐	☐	☐	☒	☐
MW-13			6-9-2021: 12:50	GW	9	☐	☐	☐	☐	☐	☒	☐
MW-15			6-9-2021: 16:31	GW	9	☐	☐	☐	☐	☐	☒	☐
						☐	☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐	☐

Matrix SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

36 containers accounted for by this COC. 1 of 4 coolers

Please also send reports to importer@alexco.ehsdata.com

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:

DATE:TIME

RECEIVED BY:

DATE:TIME

E. Valencia

6/10/21 1430

6/1/21 1174

FRMAD050.06.14.14

White - Return with sample.

Yellow - Retain for your records.



66440-2107271416

July 08, 2021

Report to:

Christie Brizinski
Ensero Solutions
131 E. Lincoln Ave Ste. 200
Fort Collins, CO 80524

Bill to:

Pauline Wong
Ensero Solutions
131 E. Lincoln Ave Ste. 200
Fort Collins, CO 80524

cc: Ensero/Alexco Importer, Evan Valencia

Project ID: 3100-PO205

ACZ Project ID: L66284

Christie Brizinski:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on June 04, 2021. This project has been assigned to ACZ's project number, L66284. Please reference this number in all future inquiries.

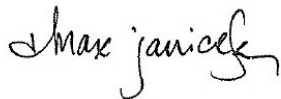
All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L66284. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after August 07, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically \$11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.



Max Janicek has reviewed and
approved this report.



Ensero Solutions

Project ID: 3100-PO205

Sample ID: SW-WEIR

ACZ Sample ID: **L66284-01**

Date Sampled: 06/03/21 10:00

Date Received: 06/04/21

Sample Matrix: *Surface Water*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD	SM4500-CN I- distillation								06/11/21 13:52	md
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								06/21/21 11:03	emh
Total Hot Plate Digestion	M200.2 ICP-MS								06/17/21 13:18	bsu
Total Hot Plate Digestion	M200.2 ICP								06/21/21 11:25	jlw

Ensero Solutions

Project ID: 3100-PO205

Sample ID: SW-WEIR

ACZ Sample ID: **L66284-01**

Date Sampled: 06/03/21 10:00

Date Received: 06/04/21

Sample Matrix: Surface Water

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.063	B		mg/L	0.05	0.25	06/17/21 17:02	jlw
Aluminum, total	M200.7 ICP	1	0.248	B	*	mg/L	0.05	0.25	06/22/21 10:42	jlw
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	06/22/21 19:52	bsu
Antimony, total	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	06/22/21 17:20	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	<0.0002	U		mg/L	0.0002	0.001	06/22/21 19:52	bsu
Arsenic, total	M200.8 ICP-MS	1	0.00028	B		mg/L	0.0002	0.001	06/22/21 17:20	bsu
Boron, dissolved	M200.7 ICP	1	<0.03	U		mg/L	0.03	0.1	06/17/21 17:02	jlw
Boron, total	M200.7 ICP	1	0.040	B		mg/L	0.03	0.1	06/22/21 10:42	jlw
Calcium, dissolved	M200.7 ICP	1	24.4			mg/L	0.1	0.5	06/17/21 17:02	jlw
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/17/21 17:02	jlw
Chromium, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/22/21 10:42	jlw
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/17/21 17:02	jlw
Copper, total	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/22/21 10:42	jlw
Iron, dissolved	M200.7 ICP	1	0.118	B		mg/L	0.06	0.15	06/17/21 17:02	jlw
Iron, total	M200.7 ICP	1	0.328		*	mg/L	0.06	0.15	06/22/21 10:42	jlw
Lead, dissolved	M200.8 ICP-MS	1	0.00012	B		mg/L	0.0001	0.0005	06/22/21 19:52	bsu
Lead, total	M200.8 ICP-MS	1	0.00024	B		mg/L	0.0001	0.0005	06/22/21 17:20	bsu
Magnesium, dissolved	M200.7 ICP	1	7.19			mg/L	0.2	1	06/17/21 17:02	jlw
Manganese, dissolved	M200.7 ICP	1	0.017	B		mg/L	0.01	0.05	06/17/21 17:02	jlw
Manganese, total	M200.7 ICP	1	0.014	B		mg/L	0.01	0.05	06/22/21 10:42	jlw
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/09/21 8:15	mlh
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/09/21 11:38	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00206			mg/L	0.0002	0.0005	06/22/21 19:52	bsu
Molybdenum, total	M200.8 ICP-MS	1	0.00226			mg/L	0.0002	0.0005	06/22/21 17:20	bsu
Potassium, dissolved	M200.7 ICP	1	1.86			mg/L	0.2	1	06/17/21 17:02	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00016	B		mg/L	0.0001	0.00025	06/22/21 19:52	bsu
Selenium, total	M200.8 ICP-MS	1	0.00020	B		mg/L	0.0001	0.00025	06/22/21 17:20	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/22/21 19:52	bsu
Silver, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/22/21 17:20	bsu
Sodium, dissolved	M200.7 ICP	1	14.6			mg/L	0.2	1	06/17/21 17:02	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/22/21 19:52	bsu
Thallium, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/22/21 17:20	bsu
Uranium, dissolved	M200.8 ICP-MS	1	0.0135			mg/L	0.0001	0.0005	06/22/21 19:52	bsu
Uranium, total	M200.8 ICP-MS	1	0.0149			mg/L	0.0001	0.0005	06/22/21 17:20	bsu
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/17/21 17:02	jlw
Zinc, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/22/21 10:42	jlw

Ensero Solutions

Project ID: 3100-PO205
Sample ID: SW-WEIR

ACZ Sample ID: **L66284-01**
Date Sampled: 06/03/21 10:00
Date Received: 06/04/21
Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	44.4			mg/L	2	20	06/09/21 0:00	eep
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	06/09/21 0:00	eep
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	06/09/21 0:00	eep
Total Alkalinity		1	44.4			mg/L	2	20	06/09/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			6.4			%			07/08/21 0:00	calc
Sum of Anions			2.2			meq/L			07/08/21 0:00	calc
Sum of Cations			2.5			meq/L			07/08/21 0:00	calc
Chloride	SM4500Cl-E	1	46.6			mg/L	0.5	2	06/20/21 21:11	syw
Cyanide, WAD	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	06/12/21 0:05	pjb
Fluoride	SM4500F-C	1	0.31	B		mg/L	0.15	0.35	06/16/21 13:22	emk
Nitrate/Nitrite as N	M353.2 - H ₂ SO ₄ preserved	1	0.065	B	*	mg/L	0.02	0.1	06/23/21 1:13	pjb
Phosphate, total	Calculation based on total Phosphorus		<0.03	U		mg/L	0.03	0.2	07/08/21 0:00	calc
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	06/24/21 23:38	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	184			mg/L	20	40	06/09/21 15:55	jck
Residue, Non-Filterable (TSS) @105C	SM2540D	1	<5	U	*	mg/L	5	20	06/08/21 18:01	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	<1	U	*	mg/L	1	5	06/21/21 11:34	syw
TDS (calculated)	Calculation		122			mg/L			07/08/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.51						07/08/21 0:00	calc

Ensero Solutions

Project ID: 3100-PO205
 Sample ID: SW-LLHG

ACZ Sample ID: **L66284-02**
 Date Sampled: 06/03/21 10:25
 Date Received: 06/04/21
 Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD	SM4500-CN I- distillation								06/11/21 13:47	md
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								06/21/21 11:21	emh
Total Hot Plate Digestion	M200.2 ICP-MS								06/17/21 14:20	bsu
Total Hot Plate Digestion	M200.2 ICP								06/21/21 11:39	jlw

Ensero Solutions

Project ID: 3100-PO205

Sample ID: SW-LLHG

ACZ Sample ID: **L66284-02**

Date Sampled: 06/03/21 10:25

Date Received: 06/04/21

Sample Matrix: Surface Water

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/17/21 17:05	jlw
Aluminum, total	M200.7 ICP	1	0.257		*	mg/L	0.05	0.25	06/22/21 10:45	jlw
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	06/22/21 19:54	bsu
Antimony, total	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	06/22/21 17:22	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00026	B		mg/L	0.0002	0.001	06/22/21 19:54	bsu
Arsenic, total	M200.8 ICP-MS	1	0.00024	B		mg/L	0.0002	0.001	06/22/21 17:22	bsu
Boron, dissolved	M200.7 ICP	1	<0.03	U		mg/L	0.03	0.1	06/17/21 17:05	jlw
Boron, total	M200.7 ICP	1	0.038	B		mg/L	0.03	0.1	06/22/21 10:45	jlw
Calcium, dissolved	M200.7 ICP	1	23.7			mg/L	0.1	0.5	06/17/21 17:05	jlw
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/17/21 17:05	jlw
Chromium, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/22/21 10:45	jlw
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/17/21 17:05	jlw
Copper, total	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/22/21 10:45	jlw
Iron, dissolved	M200.7 ICP	1	0.067	B		mg/L	0.06	0.15	06/17/21 17:05	jlw
Iron, total	M200.7 ICP	1	0.328		*	mg/L	0.06	0.15	06/22/21 10:45	jlw
Lead, dissolved	M200.8 ICP-MS	1	0.00089			mg/L	0.0001	0.0005	06/22/21 19:54	bsu
Lead, total	M200.8 ICP-MS	1	0.00020	B		mg/L	0.0001	0.0005	06/22/21 17:22	bsu
Magnesium, dissolved	M200.7 ICP	1	6.93			mg/L	0.2	1	06/17/21 17:05	jlw
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/17/21 17:05	jlw
Manganese, total	M200.7 ICP	1	0.010	B		mg/L	0.01	0.05	06/22/21 10:45	jlw
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/09/21 8:16	mlh
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/09/21 13:39	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00145			mg/L	0.0002	0.0005	06/22/21 19:54	bsu
Molybdenum, total	M200.8 ICP-MS	1	0.00149			mg/L	0.0002	0.0005	06/22/21 17:22	bsu
Potassium, dissolved	M200.7 ICP	1	1.72			mg/L	0.2	1	06/17/21 17:05	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00015	B		mg/L	0.0001	0.00025	06/22/21 19:54	bsu
Selenium, total	M200.8 ICP-MS	1	0.00018	B		mg/L	0.0001	0.00025	06/22/21 17:22	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/22/21 19:54	bsu
Silver, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/22/21 17:22	bsu
Sodium, dissolved	M200.7 ICP	1	14.7			mg/L	0.2	1	06/17/21 17:05	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/22/21 19:54	bsu
Thallium, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/22/21 17:22	bsu
Uranium, dissolved	M200.8 ICP-MS	1	0.0109			mg/L	0.0001	0.0005	06/22/21 19:54	bsu
Uranium, total	M200.8 ICP-MS	1	0.0120			mg/L	0.0001	0.0005	06/22/21 17:22	bsu
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/17/21 17:05	jlw
Zinc, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/22/21 10:45	jlw

Ensero Solutions

Project ID: 3100-PO205

Sample ID: SW-LLHG

ACZ Sample ID: **L66284-02**

Date Sampled: 06/03/21 10:25

Date Received: 06/04/21

Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	41.9			mg/L	2	20	06/09/21 0:00	eep
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	06/09/21 0:00	eep
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	06/09/21 0:00	eep
Total Alkalinity		1	41.9			mg/L	2	20	06/09/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			6.4			%			07/08/21 0:00	calc
Sum of Anions			2.2			meq/L			07/08/21 0:00	calc
Sum of Cations			2.5			meq/L			07/08/21 0:00	calc
Chloride	SM4500Cl-E	1	48.5		*	mg/L	0.5	2	06/14/21 15:07	syw
Cyanide, WAD	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	06/12/21 0:28	pjb
Fluoride	SM4500F-C	1	0.30	B		mg/L	0.15	0.35	06/16/21 13:26	emk
Nitrate/Nitrite as N	M353.2 - H ₂ SO ₄ preserved	1	0.078	B	*	mg/L	0.02	0.1	06/23/21 1:15	pjb
Phosphate, total	Calculation based on total Phosphorus		<0.03	U		mg/L	0.03	0.2	07/08/21 0:00	calc
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	06/24/21 23:41	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	182			mg/L	20	40	06/09/21 15:58	jck
Residue, Non-Filterable (TSS) @105C	SM2540D	1	6.0	B	*	mg/L	5	20	06/08/21 18:02	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	<1	U	*	mg/L	1	5	06/21/21 11:34	syw
TDS (calculated)	Calculation		121			mg/L			07/08/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.50						07/08/21 0:00	calc

Ensero Solutions

Project ID: 3100-PO205
 Sample ID: SW-ARH

ACZ Sample ID: **L66284-03**
 Date Sampled: 06/03/21 11:00
 Date Received: 06/04/21
 Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD	SM4500-CN I- distillation								06/11/21 13:55	md
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								06/21/21 11:39	emh
Total Hot Plate Digestion	M200.2 ICP-MS								06/17/21 15:22	bsu
Total Hot Plate Digestion	M200.2 ICP								06/21/21 11:52	jlw

Ensero Solutions

Project ID: 3100-PO205

Sample ID: SW-ARH

ACZ Sample ID: **L66284-03**

Date Sampled: 06/03/21 11:00

Date Received: 06/04/21

Sample Matrix: Surface Water

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/17/21 17:08	jlw
Aluminum, total	M200.7 ICP	1	0.267		*	mg/L	0.05	0.25	06/22/21 10:49	jlw
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	06/22/21 20:00	bsu
Antimony, total	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	06/22/21 17:24	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	<0.0002	U		mg/L	0.0002	0.001	06/22/21 20:00	bsu
Arsenic, total	M200.8 ICP-MS	1	0.00024	B		mg/L	0.0002	0.001	06/22/21 17:24	bsu
Boron, dissolved	M200.7 ICP	1	<0.03	U		mg/L	0.03	0.1	06/17/21 17:08	jlw
Boron, total	M200.7 ICP	1	0.039	B		mg/L	0.03	0.1	06/22/21 10:49	jlw
Calcium, dissolved	M200.7 ICP	1	23.6			mg/L	0.1	0.5	06/17/21 17:08	jlw
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/17/21 17:08	jlw
Chromium, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/22/21 10:49	jlw
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/17/21 17:08	jlw
Copper, total	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/22/21 10:49	jlw
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	06/17/21 17:08	jlw
Iron, total	M200.7 ICP	1	0.323		*	mg/L	0.06	0.15	06/22/21 10:49	jlw
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/22/21 20:00	bsu
Lead, total	M200.8 ICP-MS	1	0.00018	B		mg/L	0.0001	0.0005	06/22/21 17:24	bsu
Magnesium, dissolved	M200.7 ICP	1	6.91			mg/L	0.2	1	06/17/21 17:08	jlw
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/17/21 17:08	jlw
Manganese, total	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/22/21 10:49	jlw
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/09/21 8:17	mlh
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/09/21 13:42	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00143			mg/L	0.0002	0.0005	06/22/21 20:00	bsu
Molybdenum, total	M200.8 ICP-MS	1	0.00143			mg/L	0.0002	0.0005	06/22/21 17:24	bsu
Potassium, dissolved	M200.7 ICP	1	1.70			mg/L	0.2	1	06/17/21 17:08	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00013	B		mg/L	0.0001	0.00025	06/22/21 20:00	bsu
Selenium, total	M200.8 ICP-MS	1	0.00015	B		mg/L	0.0001	0.00025	06/22/21 17:24	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/22/21 20:00	bsu
Silver, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/22/21 17:24	bsu
Sodium, dissolved	M200.7 ICP	1	14.2			mg/L	0.2	1	06/17/21 17:08	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/22/21 20:00	bsu
Thallium, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/22/21 17:24	bsu
Uranium, dissolved	M200.8 ICP-MS	1	0.0115			mg/L	0.0001	0.0005	06/22/21 20:00	bsu
Uranium, total	M200.8 ICP-MS	1	0.0125			mg/L	0.0001	0.0005	06/22/21 17:24	bsu
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/17/21 17:08	jlw
Zinc, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/22/21 10:49	jlw

Ensero Solutions

Project ID: 3100-PO205
Sample ID: SW-ARH

ACZ Sample ID: **L66284-03**
Date Sampled: 06/03/21 11:00
Date Received: 06/04/21
Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	41.1		*	mg/L	2	20	06/09/21 0:00	eep
Carbonate as CaCO ₃		1	<2	U	*	mg/L	2	20	06/09/21 0:00	eep
Hydroxide as CaCO ₃		1	<2	U	*	mg/L	2	20	06/09/21 0:00	eep
Total Alkalinity		1	41.1		*	mg/L	2	20	06/09/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			4.3			%			07/08/21 0:00	calc
Sum of Anions			2.2			meq/L			07/08/21 0:00	calc
Sum of Cations			2.4			meq/L			07/08/21 0:00	calc
Chloride	SM4500Cl-E	1	47.3		*	mg/L	0.5	2	06/14/21 15:08	syw
Cyanide, WAD	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	06/12/21 0:28	pjb
Fluoride	SM4500F-C	1	0.30	B	*	mg/L	0.15	0.35	06/16/21 13:30	emk
Nitrate/Nitrite as N	M353.2 - H ₂ SO ₄ preserved	1	0.229		*	mg/L	0.02	0.1	06/23/21 1:18	pjb
Phosphate, total	Calculation based on total Phosphorus		<0.03	U		mg/L	0.03	0.2	07/08/21 0:00	calc
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	06/24/21 23:43	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	168		*	mg/L	20	40	06/09/21 16:00	jck
Residue, Non-Filterable (TSS) @105C	SM2540D	1	<5	U	*	mg/L	5	20	06/08/21 18:04	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	<1	U	*	mg/L	1	5	06/21/21 11:34	syw
TDS (calculated)	Calculation		119			mg/L			07/08/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.41						07/08/21 0:00	calc

Ensero Solutions

Project ID: 3100-PO205
 Sample ID: SW-FBRG

ACZ Sample ID: **L66284-04**
 Date Sampled: 06/03/21 11:30
 Date Received: 06/04/21
 Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD	SM4500-CN I- distillation								06/11/21 14:04	md
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								06/21/21 11:48	emh
Total Hot Plate Digestion	M200.2 ICP-MS								06/17/21 16:24	bsu
Total Hot Plate Digestion	M200.2 ICP								06/21/21 12:06	jlw

Ensero Solutions

Project ID: 3100-PO205

Sample ID: SW-FBRG

ACZ Sample ID: **L66284-04**

Date Sampled: 06/03/21 11:30

Date Received: 06/04/21

Sample Matrix: Surface Water

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/17/21 17:11	jlw
Aluminum, total	M200.7 ICP	1	0.254		*	mg/L	0.05	0.25	06/22/21 10:52	jlw
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	06/22/21 20:01	bsu
Antimony, total	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	06/22/21 17:26	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	<0.0002	U		mg/L	0.0002	0.001	06/22/21 20:01	bsu
Arsenic, total	M200.8 ICP-MS	1	0.00021	B		mg/L	0.0002	0.001	06/22/21 17:26	bsu
Boron, dissolved	M200.7 ICP	1	<0.03	U		mg/L	0.03	0.1	06/17/21 17:11	jlw
Boron, total	M200.7 ICP	1	0.036	B		mg/L	0.03	0.1	06/22/21 10:52	jlw
Calcium, dissolved	M200.7 ICP	1	23.5			mg/L	0.1	0.5	06/17/21 17:11	jlw
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/17/21 17:11	jlw
Chromium, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/22/21 10:52	jlw
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/17/21 17:11	jlw
Copper, total	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/22/21 10:52	jlw
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	06/17/21 17:11	jlw
Iron, total	M200.7 ICP	1	0.302		*	mg/L	0.06	0.15	06/22/21 10:52	jlw
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/22/21 20:01	bsu
Lead, total	M200.8 ICP-MS	1	0.00015	B		mg/L	0.0001	0.0005	06/22/21 17:26	bsu
Magnesium, dissolved	M200.7 ICP	1	6.84			mg/L	0.2	1	06/17/21 17:11	jlw
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/17/21 17:11	jlw
Manganese, total	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/22/21 10:52	jlw
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/09/21 8:18	mlh
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/09/21 13:43	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00129			mg/L	0.0002	0.0005	06/22/21 20:01	bsu
Molybdenum, total	M200.8 ICP-MS	1	0.00137			mg/L	0.0002	0.0005	06/22/21 17:26	bsu
Potassium, dissolved	M200.7 ICP	1	1.71			mg/L	0.2	1	06/17/21 17:11	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00011	B		mg/L	0.0001	0.00025	06/22/21 20:01	bsu
Selenium, total	M200.8 ICP-MS	1	0.00018	B		mg/L	0.0001	0.00025	06/22/21 17:26	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/22/21 20:01	bsu
Silver, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/22/21 17:26	bsu
Sodium, dissolved	M200.7 ICP	1	13.8			mg/L	0.2	1	06/17/21 17:11	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/22/21 20:01	bsu
Thallium, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/22/21 17:26	bsu
Uranium, dissolved	M200.8 ICP-MS	1	0.0122			mg/L	0.0001	0.0005	06/22/21 20:01	bsu
Uranium, total	M200.8 ICP-MS	1	0.0132			mg/L	0.0001	0.0005	06/22/21 17:26	bsu
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/17/21 17:11	jlw
Zinc, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/22/21 10:52	jlw

Ensero Solutions

Project ID: 3100-PO205

Sample ID: SW-FBRG

ACZ Sample ID: **L66284-04**

Date Sampled: 06/03/21 11:30

Date Received: 06/04/21

Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	40.2		*	mg/L	2	20	06/09/21 0:00	eep
Carbonate as CaCO ₃		1	<2	U	*	mg/L	2	20	06/09/21 0:00	eep
Hydroxide as CaCO ₃		1	<2	U	*	mg/L	2	20	06/09/21 0:00	eep
Total Alkalinity		1	40.2		*	mg/L	2	20	06/09/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			4.3			%			07/08/21 0:00	calc
Sum of Anions			2.2			meq/L			07/08/21 0:00	calc
Sum of Cations			2.4			meq/L			07/08/21 0:00	calc
Chloride	SM4500Cl-E	1	47.4		*	mg/L	0.5	2	06/14/21 16:16	syw
Cyanide, WAD	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	06/12/21 0:29	pjb
Fluoride	SM4500F-C	1	0.35		*	mg/L	0.15	0.35	06/16/21 13:42	emk
Nitrate/Nitrite as N	M353.2 - H ₂ SO ₄ preserved	1	0.088	B	*	mg/L	0.02	0.1	06/23/21 1:19	pjb
Phosphate, total	Calculation based on total Phosphorus		<0.03	U		mg/L	0.03	0.2	07/08/21 0:00	calc
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	06/24/21 23:44	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	180		*	mg/L	20	40	06/09/21 16:03	jck
Residue, Non-Filterable (TSS) @105C	SM2540D	1	5.0	B	*	mg/L	5	20	06/08/21 18:05	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	<1	U	*	mg/L	1	5	06/21/21 11:34	syw
TDS (calculated)	Calculation		118			mg/L			07/08/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.53						07/08/21 0:00	calc

Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

QC Sample Types

<i>AS</i>	Analytical Spike (Post Digestion)	<i>LCSWD</i>	Laboratory Control Sample - Water Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LFB</i>	Laboratory Fortified Blank
<i>CCB</i>	Continuing Calibration Blank	<i>LFM</i>	Laboratory Fortified Matrix
<i>CCV</i>	Continuing Calibration Verification standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>ICB</i>	Initial Calibration Blank	<i>MS</i>	Matrix Spike
<i>ICV</i>	Initial Calibration Verification standard	<i>MSD</i>	Matrix Spike Duplicate
<i>ICSAB</i>	Inter-element Correction Standard - A plus B solutions	<i>PBS</i>	Prep Blank - Soil
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBW</i>	Prep Blank - Water
<i>LCSSD</i>	Laboratory Control Sample - Soil Duplicate	<i>PQV</i>	Practical Quantitation Verification standard
<i>LCSW</i>	Laboratory Control Sample - Water	<i>SDL</i>	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1)	EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2)	EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3)	EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4)	EPA SW-846. Test Methods for Evaluating Solid Waste.
(5)	Standard Methods for the Examination of Water and Wastewater.

Comments

(1)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2)	Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3)	Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4)	An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5)	If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:

<https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf>

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ACZ Project ID: **L66284**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG520620													
WG520620PBW1	PBW	06/08/21 20:19				5.7	mg/L		-20	20			
WG520620LCSW3	LCSW	06/08/21 20:36	WC210604-7	820.0001		786.6	mg/L	96	90	110			
WG520620LCSW6	LCSW	06/08/21 23:32	WC210604-7	820.0001		782.4	mg/L	95	90	110			
WG520620PBW2	PBW	06/08/21 23:38				U	mg/L		-20	20			
WG520620LCSW9	LCSW	06/09/21 3:07	WC210604-7	820.0001		801.3	mg/L	98	90	110			
WG520620PBW3	PBW	06/09/21 3:14				U	mg/L		-20	20			
L66284-03DUP	DUP	06/09/21 6:10			41.1	38.9	mg/L				6	20	
WG520620LCSW12	LCSW	06/09/21 6:29	WC210604-7	820.0001		807.8	mg/L	99	90	110			
WG520620PBW4	PBW	06/09/21 6:35				U	mg/L		-20	20			
L66287-01DUP	DUP	06/09/21 7:23			51.1	51.3	mg/L				0	20	
WG520620LCSW15	LCSW	06/09/21 9:35	WC210604-7	820.0001		813.6	mg/L	99	90	110			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521306													
WG521306ICV	ICV	06/17/21 16:39	II210608-1	2		1.948	mg/L	97	95	105			
WG521306ICB	ICB	06/17/21 16:45				U	mg/L		-0.15	0.15			
WG521306PQV	PQV	06/17/21 16:49	II210603-2	.250325		.226	mg/L	90	70	130			
WG521306SIC	SIC	06/17/21 16:52	II210602-1	200.410325		204	mg/L	102	1	200			
WG521306LFB	LFB	06/17/21 16:59	II210614-2	1.0013		.977	mg/L	98	85	115			
L66402-03AS	AS	06/17/21 17:27	II210614-2	1.0013	.244	1.227	mg/L	98	85	115			
WG521306CCV1	CCV	06/17/21 17:31	II210609-1	1		.972	mg/L	97	90	110			
WG521306CCB1	CCB	06/17/21 17:34				U	mg/L		-0.15	0.15			
L66402-03ASD	ASD	06/17/21 17:37	II210614-2	1.0013	.244	1.23	mg/L	98	85	115	0	20	
WG521306CCV2	CCV	06/17/21 18:09	II210609-1	1		.966	mg/L	97	90	110			
WG521306CCB2	CCB	06/17/21 18:13				U	mg/L		-0.15	0.15			
WG521306CCV3	CCV	06/17/21 18:22	II210609-1	1		.959	mg/L	96	90	110			
WG521306CCB3	CCB	06/17/21 18:25				U	mg/L		-0.15	0.15			

Aluminum, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521574													
WG521574ICV	ICV	06/22/21 10:13	II210620-2	2		1.968	mg/L	98	95	105			
WG521574ICB	ICB	06/22/21 10:20				U	mg/L		-0.15	0.15			
WG521574PQV	PQV	06/22/21 10:23	II210603-2	.250325		.247	mg/L	99	70	130			
WG521574SIC	SIC	06/22/21 10:26	II210518-2	200.510325		193.6	mg/L	97	1	200			
WG521471LRB	LRB	06/22/21 10:36				U	mg/L		-0.11	0.11			
WG521471LFB	LFB	06/22/21 10:39	II210614-2	1.0013		.956	mg/L	95	85	115			
WG521574CCV1	CCV	06/22/21 11:05	II210607-1	1		.941	mg/L	94	90	110			
WG521574CCB1	CCB	06/22/21 11:08				U	mg/L		-0.15	0.15			
L66492-03LFM	LFM	06/22/21 11:17	II2XWATER	2.0038	3.95	10.19	mg/L	311	70	130			M1
L66492-03LFMD	LFMD	06/22/21 11:21	II2XWATER	2.0038	3.95	10.286	mg/L	316	70	130	1	20	M1
WG521574CCV2	CCV	06/22/21 11:43	II210607-1	1		.931	mg/L	93	90	110			
WG521574CCB2	CCB	06/22/21 11:46				U	mg/L		-0.15	0.15			
WG521574CCV3	CCV	06/22/21 12:12	II210607-1	1		1.023	mg/L	102	90	110			
WG521574CCB3	CCB	06/22/21 12:15				.063	mg/L		-0.15	0.15			

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ACZ Project ID: **L66284**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Antimony, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521623													
WG521623ICV	ICV	06/22/21 19:47	MS210503-1	.0201		.01979	mg/L	98	90	110			
WG521623ICB	ICB	06/22/21 19:48				U	mg/L		-0.00088	0.00088			
WG521623LFB	LFB	06/22/21 19:50	MS210610-2	.01		.00846	mg/L	85	85	115			
L66284-02AS	AS	06/22/21 19:56	MS210610-2	.01	U	.00815	mg/L	82	70	130			
L66284-02ASD	ASD	06/22/21 19:58	MS210610-2	.01	U	.00828	mg/L	83	70	130	2	20	
WG521623CCV1	CCV	06/22/21 20:05	MS210521-8	.0125		.0128	mg/L	102	90	110			
WG521623CCB1	CCB	06/22/21 20:07				U	mg/L		-0.0012	0.0012			
WG521623CCV2	CCV	06/22/21 20:27	MS210521-8	.0125		.01266	mg/L	101	90	110			
WG521623CCB2	CCB	06/22/21 20:29				U	mg/L		-0.0012	0.0012			
WG521623CCV3	CCV	06/22/21 20:44	MS210521-8	.0125		.01299	mg/L	104	90	110			
WG521623CCB3	CCB	06/22/21 20:46				.00058	mg/L		-0.0012	0.0012			

Antimony, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521634													
WG521634ICV	ICV	06/22/21 17:02	MS210503-1	.0201		.01924	mg/L	96	90	110			
WG521634ICB	ICB	06/22/21 17:04				U	mg/L		-0.0012	0.0012			
WG521280LRB	LRB	06/22/21 17:06				U	mg/L		-0.00088	0.00088			
WG521280LFB	LFB	06/22/21 17:08	MS210610-2	.01		.0097	mg/L	97	85	115			
WG521634CCV1	CCV	06/22/21 17:17	MS210521-8	.0125		.01245	mg/L	100	90	110			
WG521634CCB1	CCB	06/22/21 17:19				U	mg/L		-0.0012	0.0012			
L66284-04LFM	LFM	06/22/21 17:28	MS210610-2	.01	U	.00971	mg/L	97	70	130			
L66284-04LFMD	LFMD	06/22/21 17:29	MS210610-2	.01	U	.00981	mg/L	98	70	130	1	20	
WG521634CCV2	CCV	06/22/21 17:38	MS210521-8	.0125		.01233	mg/L	99	90	110			
WG521634CCB2	CCB	06/22/21 17:40				U	mg/L		-0.0012	0.0012			
WG521634CCV3	CCV	06/22/21 18:00	MS210521-8	.0125		.01245	mg/L	100	90	110			
WG521634CCB3	CCB	06/22/21 18:02				U	mg/L		-0.0012	0.0012			

Arsenic, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521623													
WG521623ICV	ICV	06/22/21 19:47	MS210503-1	.05		.05153	mg/L	103	90	110			
WG521623ICB	ICB	06/22/21 19:48				U	mg/L		-0.00044	0.00044			
WG521623LFB	LFB	06/22/21 19:50	MS210610-2	.05005		.04462	mg/L	89	85	115			
L66284-02AS	AS	06/22/21 19:56	MS210610-2	.05005	.00026	.05054	mg/L	100	70	130			
L66284-02ASD	ASD	06/22/21 19:58	MS210610-2	.05005	.00026	.05102	mg/L	101	70	130	1	20	
WG521623CCV1	CCV	06/22/21 20:05	MS210521-8	.1001		.10369	mg/L	104	90	110			
WG521623CCB1	CCB	06/22/21 20:07				U	mg/L		-0.0006	0.0006			
WG521623CCV2	CCV	06/22/21 20:27	MS210521-8	.1001		.10078	mg/L	101	90	110			
WG521623CCB2	CCB	06/22/21 20:29				U	mg/L		-0.0006	0.0006			
WG521623CCV3	CCV	06/22/21 20:44	MS210521-8	.1001		.09583	mg/L	96	90	110			
WG521623CCB3	CCB	06/22/21 20:46				U	mg/L		-0.0006	0.0006			

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ACZ Project ID: **L66284**

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Arsenic, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521634													
WG521634ICV	ICV	06/22/21 17:02	MS210503-1	.05		.0513	mg/L	103	90	110			
WG521634ICB	ICB	06/22/21 17:04				U	mg/L		-0.0006	0.0006			
WG521280LRB	LRB	06/22/21 17:06				U	mg/L		-0.00044	0.00044			
WG521280LFB	LFB	06/22/21 17:08	MS210610-2	.05005		.04845	mg/L	97	85	115			
WG521634CCV1	CCV	06/22/21 17:17	MS210521-8	.1001		.10011	mg/L	100	90	110			
WG521634CCB1	CCB	06/22/21 17:19				U	mg/L		-0.0006	0.0006			
L66284-04LFM	LFM	06/22/21 17:28	MS210610-2	.05005	.00021	.04868	mg/L	97	70	130			
L66284-04LFMD	LFMD	06/22/21 17:29	MS210610-2	.05005	.00021	.04907	mg/L	98	70	130	1	20	
WG521634CCV2	CCV	06/22/21 17:38	MS210521-8	.1001		.09786	mg/L	98	90	110			
WG521634CCB2	CCB	06/22/21 17:40				U	mg/L		-0.0006	0.0006			
WG521634CCV3	CCV	06/22/21 18:00	MS210521-8	.1001		.09724	mg/L	97	90	110			
WG521634CCB3	CCB	06/22/21 18:02				U	mg/L		-0.0006	0.0006			

Boron, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521306													
WG521306ICV	ICV	06/17/21 16:39	II210608-1	2		2.003	mg/L	100	95	105			
WG521306ICB	ICB	06/17/21 16:45				U	mg/L		-0.09	0.09			
WG521306PQV	PQV	06/17/21 16:49	II210603-2	.1001		.102	mg/L	102	70	130			
WG521306SIC	SIC	06/17/21 16:52	II210602-1	.1001		.091	mg/L	91	80	120			
WG521306LFB	LFB	06/17/21 16:59	II210614-2	.5005		.495	mg/L	99	85	115			
L66402-03AS	AS	06/17/21 17:27	II210614-2	.5005	U	.505	mg/L	101	85	115			
WG521306CCV1	CCV	06/17/21 17:31	II210609-1	1		.997	mg/L	100	90	110			
WG521306CCB1	CCB	06/17/21 17:34				U	mg/L		-0.09	0.09			
L66402-03ASD	ASD	06/17/21 17:37	II210614-2	.5005	U	.5	mg/L	100	85	115	1	20	
WG521306CCV2	CCV	06/17/21 18:09	II210609-1	1		.995	mg/L	100	90	110			
WG521306CCB2	CCB	06/17/21 18:13				U	mg/L		-0.09	0.09			
WG521306CCV3	CCV	06/17/21 18:22	II210609-1	1		1	mg/L	100	90	110			
WG521306CCB3	CCB	06/17/21 18:25				U	mg/L		-0.09	0.09			

Boron, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521574													
WG521574ICV	ICV	06/22/21 10:13	II210620-2	2		2.013	mg/L	101	95	105			
WG521574ICB	ICB	06/22/21 10:20				U	mg/L		-0.09	0.09			
WG521574PQV	PQV	06/22/21 10:23	II210603-2	.1001		.117	mg/L	117	70	130			
WG521574SIC	SIC	06/22/21 10:26	II210518-2	.1001		.116	mg/L	116	80	120			
WG521471LRB	LRB	06/22/21 10:36				U	mg/L		-0.066	0.066			
WG521471LFB	LFB	06/22/21 10:39	II210614-2	.5005		.501	mg/L	100	85	115			
WG521574CCV1	CCV	06/22/21 11:05	II210607-1	1		.993	mg/L	99	90	110			
WG521574CCB1	CCB	06/22/21 11:08				U	mg/L		-0.09	0.09			
L66492-03LFM	LFM	06/22/21 11:17	II2XWATER	1.001	.085	1.055	mg/L	97	70	130			
L66492-03LFMD	LFMD	06/22/21 11:21	II2XWATER	1.001	.085	1.029	mg/L	94	70	130	2	20	
WG521574CCV2	CCV	06/22/21 11:43	II210607-1	1		.977	mg/L	98	90	110			
WG521574CCB2	CCB	06/22/21 11:46				U	mg/L		-0.09	0.09			
WG521574CCV3	CCV	06/22/21 12:12	II210607-1	1		.975	mg/L	98	90	110			
WG521574CCB3	CCB	06/22/21 12:15				U	mg/L		-0.09	0.09			

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ACZ Project ID: **L66284**

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Calcium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521306													
WG521306ICV	ICV	06/17/21 16:39	II210608-1	100		99.54	mg/L	100	95	105			
WG521306ICB	ICB	06/17/21 16:45				U	mg/L		-0.3	0.3			
WG521306PQV	PQV	06/17/21 16:49	II210603-2	.5006		.45	mg/L	90	70	130			
WG521306SIC	SIC	06/17/21 16:52	II210602-1	200.5606		199.1	mg/L	99	1	200			
WG521306LFB	LFB	06/17/21 16:59	II210614-2	67.98753		67.32	mg/L	99	85	115			
L66402-03AS	AS	06/17/21 17:27	II210614-2	67.98753	110	173.1	mg/L	93	85	115			
WG521306CCV1	CCV	06/17/21 17:31	II210609-1	50		50.23	mg/L	100	90	110			
WG521306CCB1	CCB	06/17/21 17:34				U	mg/L		-0.3	0.3			
L66402-03ASD	ASD	06/17/21 17:37	II210614-2	67.98753	110	171.4	mg/L	90	85	115	1	20	
WG521306CCV2	CCV	06/17/21 18:09	II210609-1	50		50.04	mg/L	100	90	110			
WG521306CCB2	CCB	06/17/21 18:13				U	mg/L		-0.3	0.3			
WG521306CCV3	CCV	06/17/21 18:22	II210609-1	50		49.55	mg/L	99	90	110			
WG521306CCB3	CCB	06/17/21 18:25				U	mg/L		-0.3	0.3			

Ensero Solutions

ACZ Project ID: **L66284**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Chloride

SM4500Cl-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521002													
WG521002ICB	ICB	06/14/21 8:58				U	mg/L		-1.5	1.5			
WG521002ICV	ICV	06/14/21 8:58	WI210503-1	54.89		53.79	mg/L	98	90	110			
WG521002CCV1	CCV	06/14/21 15:05	WI210203-7	50.05		48.52	mg/L	97	90	110			
WG521002CCB1	CCB	06/14/21 15:05				U	mg/L		-1.5	1.5			
WG521002LFB1	LFB	06/14/21 15:05	WI200327-3	30.03		31.77	mg/L	106	90	110			
WG521002CCV2	CCV	06/14/21 15:07	WI210203-7	50.05		48.25	mg/L	96	90	110			
WG521002CCB2	CCB	06/14/21 15:07				U	mg/L		-1.5	1.5			
WG521002LFB2	LFB	06/14/21 15:07	WI200327-3	30.03		31.58	mg/L	105	90	110			
WG521002CCV3	CCV	06/14/21 15:13	WI210203-7	50.05		48.35	mg/L	97	90	110			
WG521002CCB3	CCB	06/14/21 15:13				U	mg/L		-1.5	1.5			
L66317-05AS	AS	06/14/21 15:13	WI200327-3	30.03	7.71	38.42	mg/L	102	90	110			
L66328-01DUP	DUP	06/14/21 15:13			U	U	mg/L				0	20	RA
WG521002CCV4	CCV	06/14/21 15:14	WI210203-7	50.05		48.43	mg/L	97	90	110			
WG521002CCB4	CCB	06/14/21 15:14				U	mg/L		-1.5	1.5			
WG521002CCV5	CCV	06/14/21 15:19	WI210203-7	50.05		48.3	mg/L	97	90	110			
WG521002CCB5	CCB	06/14/21 15:19				U	mg/L		-1.5	1.5			
WG521002CCV6	CCV	06/14/21 15:23	WI210203-7	50.05		48.29	mg/L	96	90	110			
WG521002CCB6	CCB	06/14/21 15:23				U	mg/L		-1.5	1.5			
WG521002CCV7	CCV	06/14/21 15:25	WI210203-7	50.05		48.5	mg/L	97	90	110			
WG521002CCB7	CCB	06/14/21 15:25				U	mg/L		-1.5	1.5			
WG521002CCV8	CCV	06/14/21 15:30	WI210203-7	50.05		48.21	mg/L	96	90	110			
WG521002CCB8	CCB	06/14/21 15:30				U	mg/L		-1.5	1.5			
WG521002CCV9	CCV	06/14/21 15:36	WI210203-7	50.05		48.3	mg/L	97	90	110			
WG521002CCB9	CCB	06/14/21 15:36				U	mg/L		-1.5	1.5			
WG521009													
WG521009ICB	ICB	06/14/21 8:58				U	mg/L		-1.5	1.5			
WG521009ICV	ICV	06/14/21 8:58	WI210503-1	54.89		53.79	mg/L	98	90	110			
WG521009CCV1	CCV	06/14/21 16:16	WI210203-7	50.05		48.34	mg/L	97	90	110			
WG521009CCB1	CCB	06/14/21 16:16				U	mg/L		-1.5	1.5			
WG521009LFB1	LFB	06/14/21 16:16	WI200327-3	30.03		31.67	mg/L	105	90	110			
L66181-02AS	AS	06/14/21 16:16	WI200327-3	30.03	U	31.42	mg/L	105	90	110			
L66182-02DUP	DUP	06/14/21 16:16			1.34	1.36	mg/L				1	20	RA
WG521009CCV2	CCV	06/14/21 16:18	WI210203-7	50.05		48.55	mg/L	97	90	110			
WG521009CCB2	CCB	06/14/21 16:18				U	mg/L		-1.5	1.5			
WG521009CCV3	CCV	06/14/21 16:19	WI210203-7	50.05		48.56	mg/L	97	90	110			
WG521009CCB3	CCB	06/14/21 16:19				U	mg/L		-1.5	1.5			
WG521009LFB2	LFB	06/14/21 16:19	WI200327-3	30.03		31.81	mg/L	106	90	110			
WG521009CCV4	CCV	06/14/21 16:31	WI210203-7	50.05		48.41	mg/L	97	90	110			
WG521009CCB4	CCB	06/14/21 16:31				U	mg/L		-1.5	1.5			
WG521009CCV5	CCV	06/14/21 16:33	WI210203-7	50.05		48.35	mg/L	97	90	110			
WG521009CCB5	CCB	06/14/21 16:33				U	mg/L		-1.5	1.5			
WG521009CCV6	CCV	06/14/21 16:33	WI210203-7	50.05		48.4	mg/L	97	90	110			
WG521009CCB6	CCB	06/14/21 16:33				U	mg/L		-1.5	1.5			
WG521009CCV7	CCV	06/14/21 16:40	WI210203-7	50.05		48.61	mg/L	97	90	110			
WG521009CCB7	CCB	06/14/21 16:40				U	mg/L		-1.5	1.5			
WG521456													
WG521456ICB	ICB	06/20/21 16:37				U	mg/L		-1.5	1.5			
WG521456ICV	ICV	06/20/21 16:37	WI210503-1	54.89		54.19	mg/L	99	90	110			
WG521456CCV1	CCV	06/20/21 21:11	WI210203-7	50.05		49.54	mg/L	99	90	110			

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ACZ Project ID: **L66284**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

WG521456CCB1	CCB	06/20/21 21:11				U	mg/L	-1.5	1.5				
WG521456LFB1	LFB	06/20/21 21:11	WI200327-3	30.03		31.57	mg/L	105	90	110			
L66284-01AS	AS	06/20/21 21:11	WI200327-3	30.03	46.6	74.22	mg/L	92	90	110			
L66384-03DUP	DUP	06/20/21 21:11			31.6	31.68	mg/L				0	20	
WG521456CCV2	CCV	06/20/21 21:13	WI210203-7	50.05		49.79	mg/L	99	90	110			
WG521456CCB2	CCB	06/20/21 21:13				U	mg/L	-1.5	1.5				
WG521456CCV3	CCV	06/20/21 21:15	WI210203-7	50.05		49.69	mg/L	99	90	110			
WG521456CCB3	CCB	06/20/21 21:15				U	mg/L	-1.5	1.5				
WG521456LFB2	LFB	06/20/21 21:15	WI200327-3	30.03		31.69	mg/L	106	90	110			
WG521456CCV4	CCV	06/20/21 21:20	WI210203-7	50.05		49.57	mg/L	99	90	110			
WG521456CCB4	CCB	06/20/21 21:20				U	mg/L	-1.5	1.5				
WG521456CCV5	CCV	06/20/21 21:22	WI210203-7	50.05		49.61	mg/L	99	90	110			
WG521456CCB5	CCB	06/20/21 21:22				U	mg/L	-1.5	1.5				
WG521456CCV6	CCV	06/20/21 21:22	WI210203-7	50.05		49.34	mg/L	99	90	110			
WG521456CCB6	CCB	06/20/21 21:22				U	mg/L	-1.5	1.5				

Chromium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521306													
WG521306ICV	ICV	06/17/21 16:39	II210608-1	2		1.968	mg/L	98	95	105			
WG521306ICB	ICB	06/17/21 16:45				U	mg/L		-0.06	0.06			
WG521306PQV	PQV	06/17/21 16:49	II210603-2	.0502		.052	mg/L	104	70	130			
WG521306SIC	SIC	06/17/21 16:52	II210602-1	.1004		.092	mg/L	92	80	120			
WG521306LFB	LFB	06/17/21 16:59	II210614-2	.502		.484	mg/L	96	85	115			
L66402-03AS	AS	06/17/21 17:27	II210614-2	.502	U	.484	mg/L	96	85	115			
WG521306CCV1	CCV	06/17/21 17:31	II210609-1	1		.993	mg/L	99	90	110			
WG521306CCB1	CCB	06/17/21 17:34				U	mg/L		-0.06	0.06			
L66402-03ASD	ASD	06/17/21 17:37	II210614-2	.502	U	.479	mg/L	95	85	115	1	20	
WG521306CCV2	CCV	06/17/21 18:09	II210609-1	1		.99	mg/L	99	90	110			
WG521306CCB2	CCB	06/17/21 18:13				U	mg/L		-0.06	0.06			
WG521306CCV3	CCV	06/17/21 18:22	II210609-1	1		.978	mg/L	98	90	110			
WG521306CCB3	CCB	06/17/21 18:25				U	mg/L		-0.06	0.06			

Chromium, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521574													
WG521574ICV	ICV	06/22/21 10:13	II210620-2	2		1.931	mg/L	97	95	105			
WG521574ICB	ICB	06/22/21 10:20				U	mg/L		-0.06	0.06			
WG521574PQV	PQV	06/22/21 10:23	II210603-2	.0502		.054	mg/L	108	70	130			
WG521574SIC	SIC	06/22/21 10:26	II210518-2	.1004		.093	mg/L	93	80	120			
WG521471LRB	LRB	06/22/21 10:36				U	mg/L		-0.044	0.044			
WG521471LFB	LFB	06/22/21 10:39	II210614-2	.502		.461	mg/L	92	85	115			
WG521574CCV1	CCV	06/22/21 11:05	II210607-1	1		.922	mg/L	92	90	110			
WG521574CCB1	CCB	06/22/21 11:08				U	mg/L		-0.06	0.06			
L66492-03LFM	LFM	06/22/21 11:17	II2XWATER	.996	U	.923	mg/L	93	70	130			
L66492-03LFMD	LFMD	06/22/21 11:21	II2XWATER	.996	U	.921	mg/L	92	70	130	0	20	
WG521574CCV2	CCV	06/22/21 11:43	II210607-1	1		.912	mg/L	91	90	110			
WG521574CCB2	CCB	06/22/21 11:46				U	mg/L		-0.06	0.06			
WG521574CCV3	CCV	06/22/21 12:12	II210607-1	1		.911	mg/L	91	90	110			
WG521574CCB3	CCB	06/22/21 12:15				U	mg/L		-0.06	0.06			

Ensero Solutions

ACZ Project ID: **L66284**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Copper, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521306													
WG521306ICV	ICV	06/17/21 16:39	II210608-1	2		1.927	mg/L	96	95	105			
WG521306ICB	ICB	06/17/21 16:45				U	mg/L		-0.03	0.03			
WG521306PQV	PQV	06/17/21 16:49	II210603-2	.0502		.047	mg/L	94	70	130			
WG521306SIC	SIC	06/17/21 16:52	II210602-1	.1004		.099	mg/L	99	80	120			
WG521306LFB	LFB	06/17/21 16:59	II210614-2	.502		.479	mg/L	95	85	115			
L66402-03AS	AS	06/17/21 17:27	II210614-2	.502	U	.484	mg/L	96	85	115			
WG521306CCV1	CCV	06/17/21 17:31	II210609-1	1		.974	mg/L	97	90	110			
WG521306CCB1	CCB	06/17/21 17:34				U	mg/L		-0.03	0.03			
L66402-03ASD	ASD	06/17/21 17:37	II210614-2	.502	U	.483	mg/L	96	85	115	0	20	
WG521306CCV2	CCV	06/17/21 18:09	II210609-1	1		.971	mg/L	97	90	110			
WG521306CCB2	CCB	06/17/21 18:13				U	mg/L		-0.03	0.03			
WG521306CCV3	CCV	06/17/21 18:22	II210609-1	1		.957	mg/L	96	90	110			
WG521306CCB3	CCB	06/17/21 18:25				U	mg/L		-0.03	0.03			

Copper, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521574													
WG521574ICV	ICV	06/22/21 10:13	II210620-2	2		1.919	mg/L	96	95	105			
WG521574ICB	ICB	06/22/21 10:20				U	mg/L		-0.03	0.03			
WG521574PQV	PQV	06/22/21 10:23	II210603-2	.0502		.05	mg/L	100	70	130			
WG521574SIC	SIC	06/22/21 10:26	II210518-2	.1004		.101	mg/L	101	80	120			
WG521471LRB	LRB	06/22/21 10:36				U	mg/L		-0.022	0.022			
WG521471LFB	LFB	06/22/21 10:39	II210614-2	.502		.462	mg/L	92	85	115			
WG521574CCV1	CCV	06/22/21 11:05	II210607-1	1		.904	mg/L	90	90	110			
WG521574CCB1	CCB	06/22/21 11:08				U	mg/L		-0.03	0.03			
L66492-03LFM	LFM	06/22/21 11:17	II2XWATER	1	.988	1.917	mg/L	93	70	130			
L66492-03LFMD	LFMD	06/22/21 11:21	II2XWATER	1	.988	1.905	mg/L	92	70	130	1	20	
WG521574CCB2	CCB	06/22/21 11:46				U	mg/L		-0.03	0.03			
WG521574CCV3	CCV	06/22/21 12:12	II210607-1	1		.913	mg/L	91	90	110			
WG521574CCB3	CCB	06/22/21 12:15				.017	mg/L		-0.03	0.03			

Ensero Solutions

ACZ Project ID: **L66284**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cyanide, WAD

SM4500-CN I,E-Colorimetric w/ distillation

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG520920													
WG520920ICV	ICV	06/11/21 23:02	WI210601-6	.3		.2995	mg/L	100	90	110			
WG520920ICB	ICB	06/11/21 23:02				U	mg/L		-0.003	0.003			
WG520922													
WG520922CCV1	CCV	06/11/21 23:49	WI210601-7	.25		.2479	mg/L	99	90	110			
WG520922CCB1	CCB	06/11/21 23:50				U	mg/L		-0.003	0.003			
WG520745LRB	LRB	06/11/21 23:51				U	mg/L		-0.003	0.003			
WG520745LFB	LFB	06/11/21 23:52	WI210601-3	.2		.1935	mg/L	97	90	110			
WG520922CCV2	CCV	06/12/21 0:00	WI210601-7	.25		.2548	mg/L	102	90	110			
WG520922CCB2	CCB	06/12/21 0:01				U	mg/L		-0.003	0.003			
WG520922CCV3	CCV	06/12/21 0:11	WI210601-7	.25		.2524	mg/L	101	90	110			
WG520922CCB3	CCB	06/12/21 0:12				U	mg/L		-0.003	0.003			
L66315-04DUP	DUP	06/12/21 0:15			.0034	U	mg/L				200	20	RA
L66333-02LFM	LFM	06/12/21 0:17	WI210601-3	.2	U	.1998	mg/L	100	90	110			
WG520922CCV4	CCV	06/12/21 0:19	WI210601-7	.25		.2492	mg/L	100	90	110			
WG520922CCB4	CCB	06/12/21 0:20				U	mg/L		-0.003	0.003			
WG520923													
WG520923CCV1	CCV	06/12/21 0:24	WI210601-7	.25		.2507	mg/L	100	90	110			
WG520923CCB1	CCB	06/12/21 0:25				U	mg/L		-0.003	0.003			
WG520904LRB	LRB	06/12/21 0:26				U	mg/L		-0.003	0.003			
WG520904LFB	LFB	06/12/21 0:27	WI210601-3	.2		.1936	mg/L	97	90	110			
WG520923CCV2	CCV	06/12/21 0:35	WI210601-7	.25		.2507	mg/L	100	90	110			
WG520923CCB2	CCB	06/12/21 0:36				U	mg/L		-0.003	0.003			
L66328-05DUP	DUP	06/12/21 0:37			U	U	mg/L				0	20	RA
L66359-01LFM	LFM	06/12/21 0:39	WI210601-3	.2	U	.1952	mg/L	98	90	110			
WG520923CCV3	CCV	06/12/21 0:45	WI210601-7	.25		.2544	mg/L	102	90	110			
WG520923CCB3	CCB	06/12/21 0:46				U	mg/L		-0.003	0.003			
WG520923CCV4	CCV	06/12/21 0:54	WI210601-7	.25		.2544	mg/L	102	90	110			
WG520923CCB4	CCB	06/12/21 0:55				U	mg/L		-0.003	0.003			

Ensero Solutions

ACZ Project ID: **L66284**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Fluoride

SM4500F-C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521180													
WG521180ICV	ICV	06/16/21 12:22	WC210609-3	2.002		2.12	mg/L	106	90	110			
WG521180ICB	ICB	06/16/21 12:27				U	mg/L		-0.3	0.3			
WG521180PQV	PQV	06/16/21 12:31	WC210528-8	.35105		.4	mg/L	114	70	130			
WG521180LFB1	LFB	06/16/21 12:35	WC201221-2	5.015		5.09	mg/L	101	90	110			
L66280-01AS	AS	06/16/21 12:42	WC201221-2	5.015	.52	5.26	mg/L	95	90	110			
L66280-01ASD	ASD	06/16/21 12:45	WC201221-2	5.015	.52	5.33	mg/L	96	90	110	1	20	
WG521180CCV1	CCV	06/16/21 13:08	WC210609-3	2.002		2.1	mg/L	105	90	110			
WG521180CCB1	CCB	06/16/21 13:16				U	mg/L		-0.3	0.3			
L66284-03AS	AS	06/16/21 13:33	WC201221-2	5.015	.3	5.35	mg/L	101	90	110			
L66284-03ASD	ASD	06/16/21 13:36	WC201221-2	5.015	.3	5.33	mg/L	100	90	110	0	20	
WG521180CCV2	CCV	06/16/21 13:58	WC210609-3	2.002		2.11	mg/L	105	90	110			
WG521180CCB2	CCB	06/16/21 14:05				U	mg/L		-0.3	0.3			
WG521180LFB2	LFB	06/16/21 14:27	WC201221-2	5.015		5.14	mg/L	102	90	110			
WG521180CCV3	CCV	06/16/21 14:46	WC210609-3	2.002		2.14	mg/L	107	90	110			
WG521180CCB3	CCB	06/16/21 14:54				U	mg/L		-0.3	0.3			
WG521180CCV4	CCV	06/16/21 15:32	WC210609-3	2.002		2.13	mg/L	106	90	110			
WG521180CCB4	CCB	06/16/21 15:40				U	mg/L		-0.3	0.3			
WG521180CCV5	CCV	06/16/21 16:39	WC210609-3	2.002		2.11	mg/L	105	90	110			
WG521180CCB5	CCB	06/16/21 16:47				U	mg/L		-0.3	0.3			

Iron, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521306													
WG521306ICV	ICV	06/17/21 16:39	II210608-1	2		1.941	mg/L	97	95	105			
WG521306ICB	ICB	06/17/21 16:45				U	mg/L		-0.18	0.18			
WG521306PQV	PQV	06/17/21 16:49	II210603-2	.15027		.141	mg/L	94	70	130			
WG521306SIC	SIC	06/17/21 16:52	II210602-1	200.17027		198.7	mg/L	99	1	200			
WG521306LFB	LFB	06/17/21 16:59	II210614-2	1.0018		.99	mg/L	99	85	115			
L66402-03AS	AS	06/17/21 17:27	II210614-2	1.0018	U	.994	mg/L	99	85	115			
WG521306CCV1	CCV	06/17/21 17:31	II210609-1	1		.987	mg/L	99	90	110			
WG521306CCB1	CCB	06/17/21 17:34				U	mg/L		-0.18	0.18			
L66402-03ASD	ASD	06/17/21 17:37	II210614-2	1.0018	U	.981	mg/L	98	85	115	1	20	
WG521306CCV2	CCV	06/17/21 18:09	II210609-1	1		.979	mg/L	98	90	110			
WG521306CCB2	CCB	06/17/21 18:13				U	mg/L		-0.18	0.18			
WG521306CCV3	CCV	06/17/21 18:22	II210609-1	1		.974	mg/L	97	90	110			
WG521306CCB3	CCB	06/17/21 18:25				U	mg/L		-0.18	0.18			

Ensero Solutions

ACZ Project ID: **L66284**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Iron, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521574													
WG521574ICV	ICV	06/22/21 10:13	II210620-2	2		1.973	mg/L	99	95	105			
WG521574ICB	ICB	06/22/21 10:20				U	mg/L		-0.18	0.18			
WG521574PQV	PQV	06/22/21 10:23	II210603-2	.15027		.149	mg/L	99	70	130			
WG521574SIC	SIC	06/22/21 10:26	II210518-2	200.17027		192	mg/L	96	1	200			
WG521471LRB	LRB	06/22/21 10:36				U	mg/L		-0.132	0.132			
WG521471LFB	LFB	06/22/21 10:39	II210614-2	1.0018		.969	mg/L	97	85	115			
WG521574CCV1	CCV	06/22/21 11:05	II210607-1	1		.956	mg/L	96	90	110			
WG521574CCB1	CCB	06/22/21 11:08				U	mg/L		-0.18	0.18			
L66492-03LFM	LFM	06/22/21 11:17	II2XWATER	2.0022	9.17	11.802	mg/L	131	70	130			M3
L66492-03LFMD	LFMD	06/22/21 11:21	II2XWATER	2.0022	9.17	11.8	mg/L	131	70	130	0	20	M3
WG521574CCV2	CCV	06/22/21 11:43	II210607-1	1		.946	mg/L	95	90	110			
WG521574CCB2	CCB	06/22/21 11:46				U	mg/L		-0.18	0.18			
WG521574CCV3	CCV	06/22/21 12:12	II210607-1	1		1.005	mg/L	101	90	110			
WG521574CCB3	CCB	06/22/21 12:15				U	mg/L		-0.18	0.18			

Lead, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521623													
WG521623ICV	ICV	06/22/21 19:47	MS210503-1	.05		.05178	mg/L	104	90	110			
WG521623ICB	ICB	06/22/21 19:48				U	mg/L		-0.00022	0.00022			
WG521623LFB	LFB	06/22/21 19:50	MS210610-2	.05005		.04422	mg/L	88	85	115			
L66284-02AS	AS	06/22/21 19:56	MS210610-2	.05005	.00089	.04997	mg/L	98	70	130			
L66284-02ASD	ASD	06/22/21 19:58	MS210610-2	.05005	.00089	.05101	mg/L	100	70	130	2	20	
WG521623CCV1	CCV	06/22/21 20:05	MS210521-8	.25025		.25902	mg/L	104	90	110			
WG521623CCB1	CCB	06/22/21 20:07				U	mg/L		-0.0003	0.0003			
WG521623CCV2	CCV	06/22/21 20:27	MS210521-8	.25025		.26008	mg/L	104	90	110			
WG521623CCB2	CCB	06/22/21 20:29				U	mg/L		-0.0003	0.0003			
WG521623CCV3	CCV	06/22/21 20:44	MS210521-8	.25025		.25972	mg/L	104	90	110			
WG521623CCB3	CCB	06/22/21 20:46				U	mg/L		-0.0003	0.0003			

Lead, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521634													
WG521634ICV	ICV	06/22/21 17:02	MS210503-1	.05		.05233	mg/L	105	90	110			
WG521634ICB	ICB	06/22/21 17:04				U	mg/L		-0.0003	0.0003			
WG521280LRB	LRB	06/22/21 17:06				U	mg/L		-0.00022	0.00022			
WG521280LFB	LFB	06/22/21 17:08	MS210610-2	.05005		.04828	mg/L	96	85	115			
WG521634CCV1	CCV	06/22/21 17:17	MS210521-8	.25025		.25222	mg/L	101	90	110			
WG521634CCB1	CCB	06/22/21 17:19				U	mg/L		-0.0003	0.0003			
L66284-04LFM	LFM	06/22/21 17:28	MS210610-2	.05005	.00015	.04828	mg/L	96	70	130			
L66284-04LFMD	LFMD	06/22/21 17:29	MS210610-2	.05005	.00015	.04845	mg/L	97	70	130	0	20	
WG521634CCV2	CCV	06/22/21 17:38	MS210521-8	.25025		.25004	mg/L	100	90	110			
WG521634CCB2	CCB	06/22/21 17:40				U	mg/L		-0.0003	0.0003			
WG521634CCV3	CCV	06/22/21 18:00	MS210521-8	.25025		.25233	mg/L	101	90	110			
WG521634CCB3	CCB	06/22/21 18:02				U	mg/L		-0.0003	0.0003			

Ensero Solutions

ACZ Project ID: **L66284**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Magnesium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521306													
WG521306ICV	ICV	06/17/21 16:39	II210608-1	100		97.95	mg/L	98	95	105			
WG521306ICB	ICB	06/17/21 16:45				U	mg/L		-0.6	0.6			
WG521306PQV	PQV	06/17/21 16:49	II210603-2	1.0001		.95	mg/L	95	70	130			
WG521306SIC	SIC	06/17/21 16:52	II210602-1	201.0201		201.7	mg/L	100	1	200			
WG521306LFB	LFB	06/17/21 16:59	II210614-2	50.00302		48.29	mg/L	97	85	115			
L66402-03AS	AS	06/17/21 17:27	II210614-2	50.00302	10.4	58.78	mg/L	97	85	115			
WG521306CCV1	CCV	06/17/21 17:31	II210609-1	50		49.12	mg/L	98	90	110			
WG521306CCB1	CCB	06/17/21 17:34				U	mg/L		-0.6	0.6			
L66402-03ASD	ASD	06/17/21 17:37	II210614-2	50.00302	10.4	58.21	mg/L	96	85	115	1	20	
WG521306CCV2	CCV	06/17/21 18:09	II210609-1	50		48.97	mg/L	98	90	110			
WG521306CCB2	CCB	06/17/21 18:13				U	mg/L		-0.6	0.6			
WG521306CCV3	CCV	06/17/21 18:22	II210609-1	50		48.7	mg/L	97	90	110			
WG521306CCB3	CCB	06/17/21 18:25				U	mg/L		-0.6	0.6			

Manganese, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521306													
WG521306ICV	ICV	06/17/21 16:39	II210608-1	2		1.939	mg/L	97	95	105			
WG521306ICB	ICB	06/17/21 16:45				U	mg/L		-0.03	0.03			
WG521306PQV	PQV	06/17/21 16:49	II210603-2	.05005		.048	mg/L	96	70	130			
WG521306SIC	SIC	06/17/21 16:52	II210602-1	50.10005		47.92	mg/L	96	1	200			
WG521306LFB	LFB	06/17/21 16:59	II210614-2	.5005		.476	mg/L	95	85	115			
L66402-03AS	AS	06/17/21 17:27	II210614-2	.5005	.339	.796	mg/L	91	85	115			
WG521306CCV1	CCV	06/17/21 17:31	II210609-1	1		.986	mg/L	99	90	110			
WG521306CCB1	CCB	06/17/21 17:34				U	mg/L		-0.03	0.03			
L66402-03ASD	ASD	06/17/21 17:37	II210614-2	.5005	.339	.789	mg/L	90	85	115	1	20	
WG521306CCV2	CCV	06/17/21 18:09	II210609-1	1		.985	mg/L	99	90	110			
WG521306CCB2	CCB	06/17/21 18:13				U	mg/L		-0.03	0.03			
WG521306CCV3	CCV	06/17/21 18:22	II210609-1	1		.974	mg/L	97	90	110			
WG521306CCB3	CCB	06/17/21 18:25				U	mg/L		-0.03	0.03			

Manganese, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521574													
WG521574ICV	ICV	06/22/21 10:13	II210620-2	2		1.934	mg/L	97	95	105			
WG521574ICB	ICB	06/22/21 10:20				U	mg/L		-0.03	0.03			
WG521574PQV	PQV	06/22/21 10:23	II210603-2	.05005		.036	mg/L	72	70	130			
WG521574SIC	SIC	06/22/21 10:26	II210518-2	50.10005		46.9	mg/L	94	1	200			
WG521471LRB	LRB	06/22/21 10:36				U	mg/L		-0.022	0.022			
WG521471LFB	LFB	06/22/21 10:39	II210614-2	.5005		.452	mg/L	90	85	115			
WG521574CCV1	CCV	06/22/21 11:05	II210607-1	1		.95	mg/L	95	90	110			
WG521574CCB1	CCB	06/22/21 11:08				U	mg/L		-0.03	0.03			
L66492-03LFM	LFM	06/22/21 11:17	II2XWATER	1	.712	1.631	mg/L	92	70	130			
L66492-03LFMD	LFMD	06/22/21 11:21	II2XWATER	1	.712	1.623	mg/L	91	70	130	0	20	
WG521574CCV2	CCV	06/22/21 11:43	II210607-1	1		.942	mg/L	94	90	110			
WG521574CCB2	CCB	06/22/21 11:46				U	mg/L		-0.03	0.03			
WG521574CCV3	CCV	06/22/21 12:12	II210607-1	1		.936	mg/L	94	90	110			
WG521574CCB3	CCB	06/22/21 12:15				U	mg/L		-0.03	0.03			

Ensero Solutions

ACZ Project ID: **L66284**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury, dissolved

M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG520573													
WG520573ICV	ICV	06/09/21 7:50	HG210601-3	.00501		.00516	mg/L	103	95	105			
WG520573ICB	ICB	06/09/21 7:51				U	mg/L		-0.0002	0.0002			
WG520573PQV	PQV	06/09/21 7:52	HG210601-5	.001001		.00096	mg/L	96	70	130			
WG520573LRB	LRB	06/09/21 7:53				U	mg/L		-0.00044	0.00044			
WG520573LFB	LFB	06/09/21 7:54	HG210601-6	.002002		.00192	mg/L	96	85	115			
WG520573CCV1	CCV	06/09/21 8:02	HG210601-3	.00501		.00534	mg/L	107	90	110			
WG520573CCB1	CCB	06/09/21 8:03				U	mg/L		-0.0002	0.0002			
L66280-07LFM	LFM	06/09/21 8:10	HG210601-6	.002002	U	.00194	mg/L	97	85	115			
L66280-07LFMD	LFMD	06/09/21 8:11	HG210601-6	.002002	U	.0019	mg/L	95	85	115	2	20	
WG520573CCV2	CCV	06/09/21 8:13	HG210601-3	.00501		.00523	mg/L	104	90	110			
WG520573CCB2	CCB	06/09/21 8:14				U	mg/L		-0.0002	0.0002			
WG520573CCV3	CCV	06/09/21 8:22	HG210601-3	.00501		.00543	mg/L	108	90	110			
WG520573CCB3	CCB	06/09/21 8:22				U	mg/L		-0.0002	0.0002			

Ensero Solutions

ACZ Project ID: **L66284**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury, total

M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG520574													
WG520574ICV	ICV	06/09/21 9:37	HG210601-3	.00501		.00526	mg/L	105	95	105			
WG520574ICB	ICB	06/09/21 9:38				U	mg/L		-0.0002	0.0002			
WG520575													
WG520575CCV1	CCV	06/09/21 11:19	HG210601-3	.00501		.00515	mg/L	103	90	110			
WG520575CCB1	CCB	06/09/21 11:20				U	mg/L		-0.0002	0.0002			
WG520575PQV	PQV	06/09/21 11:21	HG210601-5	.001001		.00098	mg/L	98	70	130			
WG520575LRB	LRB	06/09/21 11:22				U	mg/L		-0.00044	0.00044			
WG520575LFB	LFB	06/09/21 11:23	HG210601-6	.002002		.00197	mg/L	98	85	115			
WG520575CCV2	CCV	06/09/21 11:30	HG210601-3	.00501		.00538	mg/L	107	90	110			
WG520575CCB2	CCB	06/09/21 11:31				U	mg/L		-0.0002	0.0002			
WG520575CCV3	CCV	06/09/21 11:42	HG210601-3	.00501		.00532	mg/L	106	90	110			
WG520575CCB3	CCB	06/09/21 11:43				U	mg/L		-0.0002	0.0002			
L66327-01LFM	LFM	06/09/21 11:46	HG210601-6	.002002	U	.00199	mg/L	99	85	115			
L66327-01LFMD	LFMD	06/09/21 11:47	HG210601-6	.002002	U	.00188	mg/L	94	85	115	6	20	
WG520575CCV4	CCV	06/09/21 11:48	HG210601-3	.00501		.0052	mg/L	104	90	110			
WG520575CCB4	CCB	06/09/21 11:49				U	mg/L		-0.0002	0.0002			
WG520632													
WG520632CCV1	CCV	06/09/21 13:16	HG210601-3	.00501		.00553	mg/L	110	90	110			
WG520632CCV2	CCV	06/09/21 13:18	HG210601-3	.00501		.00488	mg/L	97	90	110			
WG520632CCB1	CCB	06/09/21 13:19				U	mg/L		-0.0002	0.0002			
WG520632PQV	PQV	06/09/21 13:20	HG210601-5	.001001		.00104	mg/L	104	70	130			
WG520632LRB	LRB	06/09/21 13:21				U	mg/L		-0.00044	0.00044			
WG520632LFB	LFB	06/09/21 13:22	HG210601-6	.002002		.00197	mg/L	98	85	115			
WG520632CCV3	CCV	06/09/21 13:29	HG210601-3	.00501		.00524	mg/L	105	90	110			
WG520632CCB2	CCB	06/09/21 13:30				U	mg/L		-0.0002	0.0002			
L66284-02LFM	LFM	06/09/21 13:40	HG210601-6	.002002	U	.00208	mg/L	104	85	115			
L66284-02LFMD	LFMD	06/09/21 13:41	HG210601-6	.002002	U	.00201	mg/L	100	85	115	3	20	
L66284-04LFM	LFM	06/09/21 13:44	HG210601-6	.002002	U	.00205	mg/L	102	85	115			
WG520632CCV4	CCV	06/09/21 13:45	HG210601-3	.00501		.00546	mg/L	109	90	110			
WG520632CCB3	CCB	06/09/21 13:46				U	mg/L		-0.0002	0.0002			
WG520632CCV6	CCV	06/09/21 13:50	HG210601-3	.00501		.00533	mg/L	106	90	110			
WG520632CCB4	CCB	06/09/21 13:51				U	mg/L		-0.0002	0.0002			
L66284-04LFMD	LFMD	06/09/21 13:52	HG210601-6	.002002	U	.00194	mg/L	97	85	115	6	20	
WG520632CCV7	CCV	06/09/21 13:53	HG210601-3	.00501		.00536	mg/L	107	90	110			
WG520632CCB5	CCB	06/09/21 13:54				U	mg/L		-0.0002	0.0002			

Ensero Solutions

ACZ Project ID: **L66284**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Molybdenum, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521623													
WG521623ICV	ICV	06/22/21 19:47	MS210503-1	.01992		.01982	mg/L	99	90	110			
WG521623ICB	ICB	06/22/21 19:48				U	mg/L		-0.00044	0.00044			
WG521623LFB	LFB	06/22/21 19:50	MS210610-2	.0501		.04493	mg/L	90	85	115			
L66284-02AS	AS	06/22/21 19:56	MS210610-2	.0501	.00145	.04985	mg/L	97	70	130			
L66284-02ASD	ASD	06/22/21 19:58	MS210610-2	.0501	.00145	.05097	mg/L	99	70	130	2	20	
WG521623CCV1	CCV	06/22/21 20:05	MS210521-8	.1002		.10262	mg/L	102	90	110			
WG521623CCB1	CCB	06/22/21 20:07				U	mg/L		-0.0006	0.0006			
WG521623CCV2	CCV	06/22/21 20:27	MS210521-8	.1002		.10365	mg/L	103	90	110			
WG521623CCB2	CCB	06/22/21 20:29				U	mg/L		-0.0006	0.0006			
WG521623CCV3	CCV	06/22/21 20:44	MS210521-8	.1002		.10532	mg/L	105	90	110			
WG521623CCB3	CCB	06/22/21 20:46				U	mg/L		-0.0006	0.0006			

Molybdenum, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521634													
WG521634ICV	ICV	06/22/21 17:02	MS210503-1	.01992		.02011	mg/L	101	90	110			
WG521634ICB	ICB	06/22/21 17:04				U	mg/L		-0.0006	0.0006			
WG521280LRB	LRB	06/22/21 17:06				U	mg/L		-0.00044	0.00044			
WG521280LFB	LFB	06/22/21 17:08	MS210610-2	.0501		.04751	mg/L	95	85	115			
WG521634CCV1	CCV	06/22/21 17:17	MS210521-8	.1002		.09965	mg/L	99	90	110			
WG521634CCB1	CCB	06/22/21 17:19				U	mg/L		-0.0006	0.0006			
L66284-04LFM	LFM	06/22/21 17:28	MS210610-2	.0501	.00137	.04912	mg/L	95	70	130			
L66284-04LFMD	LFMD	06/22/21 17:29	MS210610-2	.0501	.00137	.04953	mg/L	96	70	130	1	20	
WG521634CCV2	CCV	06/22/21 17:38	MS210521-8	.1002		.09968	mg/L	99	90	110			
WG521634CCB2	CCB	06/22/21 17:40				U	mg/L		-0.0006	0.0006			
WG521634CCV3	CCV	06/22/21 18:00	MS210521-8	.1002		.10056	mg/L	100	90	110			
WG521634CCB3	CCB	06/22/21 18:02				U	mg/L		-0.0006	0.0006			

Nitrate/Nitrite as N

M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521666													
WG521666ICV	ICV	06/22/21 23:55	WI210603-7	2.416		2.378	mg/L	98	90	110			
WG521666ICB	ICB	06/22/21 23:56				U	mg/L		-0.02	0.02			
WG521669													
WG521669CCV1	CCV	06/23/21 1:07	WI210623-1	2		2.069	mg/L	103	90	110			
WG521669CCB1	CCB	06/23/21 1:10				U	mg/L		-0.02	0.02			
WG521669LFB	LFB	06/23/21 1:11	WI210331-13	2		1.985	mg/L	99	90	110			
L66284-01AS	AS	06/23/21 1:14	WI210331-13	2	.065	2.156	mg/L	105	90	110			
L66284-02DUP	DUP	06/23/21 1:16			.078	.078	mg/L				0	20	RA
WG521669CCV2	CCV	06/23/21 1:24	WI210623-1	2		2.067	mg/L	103	90	110			
WG521669CCB2	CCB	06/23/21 1:27				U	mg/L		-0.02	0.02			
WG521669CCV3	CCV	06/23/21 1:41	WI210623-1	2		2.058	mg/L	103	90	110			
WG521669CCB3	CCB	06/23/21 1:44				U	mg/L		-0.02	0.02			
WG521669CCV4	CCV	06/23/21 1:56	WI210623-1	2		2.056	mg/L	103	90	110			
WG521669CCB4	CCB	06/23/21 1:59				U	mg/L		-0.02	0.02			

Ensero Solutions

ACZ Project ID: **L66284**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Phosphorus, total M365.1 - Auto Ascorbic Acid (digest)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521897													
WG521897ICV	ICV	06/24/21 23:32	WI210603-3	.65228		.681	mg/L	104	90	110			
WG521897ICB	ICB	06/24/21 23:35				U	mg/L		-0.01	0.01			
WG521488LRB	LRB	06/24/21 23:36				U	mg/L		-0.01	0.01			
WG521488LFB	LFB	06/24/21 23:37	WI210617-5	.5		.476	mg/L	95	90	110			
L66284-01LFM	LFM	06/24/21 23:39	WI210617-5	.5	U	.466	mg/L	93	90	110			
L66284-02DUP	DUP	06/24/21 23:42			U	U	mg/L				0	20	RA
WG521897CCV1	CCV	06/24/21 23:47	WI210603-4	.5		.489	mg/L	98	90	110			
WG521897CCB1	CCB	06/24/21 23:48				U	mg/L		-0.01	0.01			
WG521897CCV2	CCV	06/25/21 0:01	WI210603-4	.5		.485	mg/L	97	90	110			
WG521897CCB2	CCB	06/25/21 0:02				U	mg/L		-0.01	0.01			
WG521897CCV3	CCV	06/25/21 0:16	WI210603-4	.5		.489	mg/L	98	90	110			
WG521897CCB3	CCB	06/25/21 0:17				U	mg/L		-0.01	0.01			

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521306													
WG521306ICV	ICV	06/17/21 16:39	II210608-1	20		19.78	mg/L	99	95	105			
WG521306ICB	ICB	06/17/21 16:45				U	mg/L		-0.6	0.6			
WG521306PQV	PQV	06/17/21 16:49	II210603-2	1.004		1.05	mg/L	105	70	130			
WG521306SIC	SIC	06/17/21 16:52	II210602-1	1.004		.99	mg/L	99	80	120			
WG521306LFB	LFB	06/17/21 16:59	II210614-2	100.0157		97.08	mg/L	97	85	115			
L66402-03AS	AS	06/17/21 17:27	II210614-2	100.0157	1.5	100.4	mg/L	99	85	115			
WG521306CCV1	CCV	06/17/21 17:31	II210609-1	10		9.91	mg/L	99	90	110			
WG521306CCB1	CCB	06/17/21 17:34				U	mg/L		-0.6	0.6			
L66402-03ASD	ASD	06/17/21 17:37	II210614-2	100.0157	1.5	99.81	mg/L	98	85	115	1	20	
WG521306CCV2	CCV	06/17/21 18:09	II210609-1	10		10.06	mg/L	101	90	110			
WG521306CCB2	CCB	06/17/21 18:13				U	mg/L		-0.6	0.6			
WG521306CCV3	CCV	06/17/21 18:22	II210609-1	10		9.8	mg/L	98	90	110			
WG521306CCB3	CCB	06/17/21 18:25				U	mg/L		-0.6	0.6			

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG520703													
WG520703PBW	PBW	06/09/21 15:45				U	mg/L		-20	20			
WG520703LCSW	LCSW	06/09/21 15:47	PCN63556	1000		1000	mg/L	100	80	120			
L66301-01DUP	DUP	06/09/21 16:16			1080	1066	mg/L				1	10	

Residue, Non-Filterable (TSS) @105C SM2540D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG520619													
WG520619PBW	PBW	06/08/21 17:55				U	mg/L		-5	5			
WG520619LCSW	LCSW	06/08/21 17:56	PCN63556	100		87	mg/L	87	80	120			
L66287-03DUP	DUP	06/08/21 18:08			26	29	mg/L				11	10	RA

Ensero Solutions

ACZ Project ID: **L66284**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Selenium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521623													
WG521623ICV	ICV	06/22/21 19:47	MS210503-1	.05		.05096	mg/L	102	90	110			
WG521623ICB	ICB	06/22/21 19:48				U	mg/L		-0.00022	0.00022			
WG521623LFB	LFB	06/22/21 19:50	MS210610-2	.05		.04416	mg/L	88	85	115			
L66284-02AS	AS	06/22/21 19:56	MS210610-2	.05	.00015	.0505	mg/L	101	70	130			
L66284-02ASD	ASD	06/22/21 19:58	MS210610-2	.05	.00015	.05205	mg/L	104	70	130	3	20	
WG521623CCV1	CCV	06/22/21 20:05	MS210521-8	.25		.2573	mg/L	103	90	110			
WG521623CCB1	CCB	06/22/21 20:07				U	mg/L		-0.0003	0.0003			
WG521623CCV2	CCV	06/22/21 20:27	MS210521-8	.25		.24726	mg/L	99	90	110			
WG521623CCB2	CCB	06/22/21 20:29				U	mg/L		-0.0003	0.0003			
WG521623CCV3	CCV	06/22/21 20:44	MS210521-8	.25		.23891	mg/L	96	90	110			
WG521623CCB3	CCB	06/22/21 20:46				U	mg/L		-0.0003	0.0003			

Selenium, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521634													
WG521634ICV	ICV	06/22/21 17:02	MS210503-1	.05		.05178	mg/L	104	90	110			
WG521634ICB	ICB	06/22/21 17:04				U	mg/L		-0.0003	0.0003			
WG521280LRB	LRB	06/22/21 17:06				U	mg/L		-0.00022	0.00022			
WG521280LFB	LFB	06/22/21 17:08	MS210610-2	.05		.04959	mg/L	99	85	115			
WG521634CCV1	CCV	06/22/21 17:17	MS210521-8	.25		.25562	mg/L	102	90	110			
WG521634CCB1	CCB	06/22/21 17:19				U	mg/L		-0.0003	0.0003			
L66284-04LFM	LFM	06/22/21 17:28	MS210610-2	.05	.00018	.04997	mg/L	100	70	130			
L66284-04LFMD	LFMD	06/22/21 17:29	MS210610-2	.05	.00018	.0504	mg/L	100	70	130	1	20	
WG521634CCV2	CCV	06/22/21 17:38	MS210521-8	.25		.2473	mg/L	99	90	110			
WG521634CCB2	CCB	06/22/21 17:40				U	mg/L		-0.0003	0.0003			
WG521634CCV3	CCV	06/22/21 18:00	MS210521-8	.25		.24318	mg/L	97	90	110			
WG521634CCB3	CCB	06/22/21 18:02				U	mg/L		-0.0003	0.0003			

Silver, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521623													
WG521623ICV	ICV	06/22/21 19:47	MS210503-1	.02		.02026	mg/L	101	90	110			
WG521623ICB	ICB	06/22/21 19:48				U	mg/L		-0.00022	0.00022			
WG521623LFB	LFB	06/22/21 19:50	MS210610-2	.01002		.00952	mg/L	95	85	115			
L66284-02AS	AS	06/22/21 19:56	MS210610-2	.01002	U	.00985	mg/L	98	70	130			
L66284-02ASD	ASD	06/22/21 19:58	MS210610-2	.01002	U	.01005	mg/L	100	70	130	2	20	
WG521623CCV1	CCV	06/22/21 20:05	MS210521-8	.02505		.02591	mg/L	103	90	110			
WG521623CCB1	CCB	06/22/21 20:07				U	mg/L		-0.0003	0.0003			
WG521623CCV2	CCV	06/22/21 20:27	MS210521-8	.02505		.02595	mg/L	104	90	110			
WG521623CCB2	CCB	06/22/21 20:29				U	mg/L		-0.0003	0.0003			
WG521623CCV3	CCV	06/22/21 20:44	MS210521-8	.02505		.02596	mg/L	104	90	110			
WG521623CCB3	CCB	06/22/21 20:46				U	mg/L		-0.0003	0.0003			

Ensero Solutions

ACZ Project ID: **L66284**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Silver, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521634													
WG521634ICV	ICV	06/22/21 17:02	MS210503-1	.02		.02016	mg/L	101	90	110			
WG521634ICB	ICB	06/22/21 17:04				U	mg/L		-0.0003	0.0003			
WG521280LRB	LRB	06/22/21 17:06				U	mg/L		-0.00022	0.00022			
WG521280LFB	LFB	06/22/21 17:08	MS210610-2	.01002		.01007	mg/L	100	85	115			
WG521634CCV1	CCV	06/22/21 17:17	MS210521-8	.02505		.02549	mg/L	102	90	110			
WG521634CCB1	CCB	06/22/21 17:19				U	mg/L		-0.0003	0.0003			
L66284-04LFM	LFM	06/22/21 17:28	MS210610-2	.01002	U	.00987	mg/L	99	70	130			
L66284-04LFMD	LFMD	06/22/21 17:29	MS210610-2	.01002	U	.00992	mg/L	99	70	130	1	20	
WG521634CCV2	CCV	06/22/21 17:38	MS210521-8	.02505		.02548	mg/L	102	90	110			
WG521634CCB2	CCB	06/22/21 17:40				U	mg/L		-0.0003	0.0003			
WG521634CCV3	CCV	06/22/21 18:00	MS210521-8	.02505		.02561	mg/L	102	90	110			
WG521634CCB3	CCB	06/22/21 18:02				U	mg/L		-0.0003	0.0003			

Sodium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521306													
WG521306ICV	ICV	06/17/21 16:39	II210608-1	100		97.74	mg/L	98	95	105			
WG521306ICB	ICB	06/17/21 16:45				U	mg/L		-0.6	0.6			
WG521306PQV	PQV	06/17/21 16:49	II210603-2	.998		1.06	mg/L	106	70	130			
WG521306SIC	SIC	06/17/21 16:52	II210602-1	.998		1.07	mg/L	107	80	120			
WG521306LFB	LFB	06/17/21 16:59	II210614-2	100.0605		96.01	mg/L	96	85	115			
L66402-03AS	AS	06/17/21 17:27	II210614-2	100.0605	7.72	104.8	mg/L	97	85	115			
WG521306CCV1	CCV	06/17/21 17:31	II210609-1	50		48.72	mg/L	97	90	110			
WG521306CCB1	CCB	06/17/21 17:34				U	mg/L		-0.6	0.6			
L66402-03ASD	ASD	06/17/21 17:37	II210614-2	100.0605	7.72	104.5	mg/L	97	85	115	0	20	
WG521306CCV2	CCV	06/17/21 18:09	II210609-1	50		48.79	mg/L	98	90	110			
WG521306CCB2	CCB	06/17/21 18:13				U	mg/L		-0.6	0.6			
WG521306CCV3	CCV	06/17/21 18:22	II210609-1	50		48.25	mg/L	97	90	110			
WG521306CCB3	CCB	06/17/21 18:25				U	mg/L		-0.6	0.6			

Ensero Solutions

ACZ Project ID: **L66284**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sulfate

D516-02/-07/-11 - TURBIDIMETRIC

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521502													
WG521502ICB	ICB	06/21/21 9:51				U	mg/L		-3	3			
WG521502ICV	ICV	06/21/21 9:51	WI210615-1	20.46		20.1	mg/L	98	90	110			
WG521502CCV1	CCV	06/21/21 11:33	WI210615-2	25		25.8	mg/L	103	90	110			
WG521502CCB1	CCB	06/21/21 11:33				U	mg/L		-3	3			
WG521502LFB	LFB	06/21/21 11:34	WI210105-3	10		9.7	mg/L	97	90	110			
L66284-01DUP	DUP	06/21/21 11:34			U	U	mg/L				0	20	RA
L66284-02AS	AS	06/21/21 11:34	WI210105-3	10	U	U	mg/L	0	90	110			M2
WG521502CCV2	CCV	06/21/21 11:36	WI210615-2	25		25.3	mg/L	101	90	110			
WG521502CCB2	CCB	06/21/21 11:36				U	mg/L		-3	3			
WG521502CCV3	CCV	06/21/21 11:37	WI210615-2	25		24.9	mg/L	100	90	110			
WG521502CCB3	CCB	06/21/21 11:37				U	mg/L		-3	3			
WG521502CCV4	CCV	06/21/21 11:39	WI210615-2	25		24.9	mg/L	100	90	110			
WG521502CCB4	CCB	06/21/21 11:39				U	mg/L		-3	3			
WG521502CCV5	CCV	06/21/21 11:43	WI210615-2	25		24.9	mg/L	100	90	110			
WG521502CCB5	CCB	06/21/21 11:43				U	mg/L		-3	3			
WG521502CCV6	CCV	06/21/21 11:45	WI210615-2	25		25	mg/L	100	90	110			
WG521502CCB6	CCB	06/21/21 11:45				U	mg/L		-3	3			
WG521502CCV7	CCV	06/21/21 12:26	WI210615-2	25		25.3	mg/L	101	90	110			
WG521502CCB7	CCB	06/21/21 12:26				U	mg/L		-3	3			
WG521502CCV8	CCV	06/21/21 12:27	WI210615-2	25		25	mg/L	100	90	110			
WG521502CCB8	CCB	06/21/21 12:27				U	mg/L		-3	3			
WG521502CCV9	CCV	06/21/21 12:36	WI210615-2	25		25.2	mg/L	101	90	110			
WG521502CCB9	CCB	06/21/21 12:36				U	mg/L		-3	3			
WG521502CCV10	CCV	06/21/21 12:38	WI210615-2	25		24.8	mg/L	99	90	110			
WG521502CCB10	CCB	06/21/21 12:38				U	mg/L		-3	3			
WG521502CCV11	CCV	06/21/21 12:59	WI210615-2	25		24.9	mg/L	100	90	110			
WG521502CCB11	CCB	06/21/21 12:59				U	mg/L		-3	3			
WG521502CCV12	CCV	06/21/21 13:00	WI210615-2	25		25	mg/L	100	90	110			
WG521502CCB12	CCB	06/21/21 13:00				U	mg/L		-3	3			
WG521502CCV13	CCV	06/21/21 13:13	WI210615-2	25		24.9	mg/L	100	90	110			
WG521502CCB13	CCB	06/21/21 13:13				U	mg/L		-3	3			
WG521502CCV14	CCV	06/21/21 13:14	WI210615-2	25		24.8	mg/L	99	90	110			
WG521502CCB14	CCB	06/21/21 13:14				U	mg/L		-3	3			

Thallium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521623													
WG521623ICV	ICV	06/22/21 19:47	MS210503-1	.05		.05248	mg/L	105	90	110			
WG521623ICB	ICB	06/22/21 19:48				U	mg/L		-0.00022	0.00022			
WG521623LFB	LFB	06/22/21 19:50	MS210610-2	.05		.04344	mg/L	87	85	115			
L66284-02AS	AS	06/22/21 19:56	MS210610-2	.05	U	.04889	mg/L	98	70	130			
L66284-02ASD	ASD	06/22/21 19:58	MS210610-2	.05	U	.04984	mg/L	100	70	130	2	20	
WG521623CCV1	CCV	06/22/21 20:05	MS210521-8	.1		.1029	mg/L	103	90	110			
WG521623CCB1	CCB	06/22/21 20:07				U	mg/L		-0.0003	0.0003			
WG521623CCV2	CCV	06/22/21 20:27	MS210521-8	.1		.10357	mg/L	104	90	110			
WG521623CCB2	CCB	06/22/21 20:29				U	mg/L		-0.0003	0.0003			
WG521623CCV3	CCV	06/22/21 20:44	MS210521-8	.1		.10379	mg/L	104	90	110			
WG521623CCB3	CCB	06/22/21 20:46				U	mg/L		-0.0003	0.0003			

Ensero Solutions

ACZ Project ID: **L66284**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Thallium, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521634													
WG521634ICV	ICV	06/22/21 17:02	MS210503-1	.05		.05359	mg/L	107	90	110			
WG521634ICB	ICB	06/22/21 17:04				U	mg/L		-0.0003	0.0003			
WG521280LRB	LRB	06/22/21 17:06				U	mg/L		-0.00022	0.00022			
WG521280LFB	LFB	06/22/21 17:08	MS210610-2	.05		.04804	mg/L	96	85	115			
WG521634CCV1	CCV	06/22/21 17:17	MS210521-8	.1		.10117	mg/L	101	90	110			
WG521634CCB1	CCB	06/22/21 17:19				U	mg/L		-0.0003	0.0003			
L66284-04LFM	LFM	06/22/21 17:28	MS210610-2	.05	U	.0479	mg/L	96	70	130			
L66284-04LFMD	LFMD	06/22/21 17:29	MS210610-2	.05	U	.04803	mg/L	96	70	130	0	20	
WG521634CCV2	CCV	06/22/21 17:38	MS210521-8	.1		.1014	mg/L	101	90	110			
WG521634CCB2	CCB	06/22/21 17:40				U	mg/L		-0.0003	0.0003			
WG521634CCV3	CCV	06/22/21 18:00	MS210521-8	.1		.10141	mg/L	101	90	110			
WG521634CCB3	CCB	06/22/21 18:02				U	mg/L		-0.0003	0.0003			

Uranium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521623													
WG521623ICV	ICV	06/22/21 19:47	MS210503-1	.05		.05128	mg/L	103	90	110			
WG521623ICB	ICB	06/22/21 19:48				U	mg/L		-0.00022	0.00022			
WG521623LFB	LFB	06/22/21 19:50	MS210610-2	.05		.0435	mg/L	87	85	115			
L66284-02AS	AS	06/22/21 19:56	MS210610-2	.05	.0109	.05982	mg/L	98	70	130			
L66284-02ASD	ASD	06/22/21 19:58	MS210610-2	.05	.0109	.0609	mg/L	100	70	130	2	20	
WG521623CCV1	CCV	06/22/21 20:05	MS210521-8	.1		.10267	mg/L	103	90	110			
WG521623CCB1	CCB	06/22/21 20:07				U	mg/L		-0.0003	0.0003			
WG521623CCV2	CCV	06/22/21 20:27	MS210521-8	.1		.10237	mg/L	102	90	110			
WG521623CCB2	CCB	06/22/21 20:29				U	mg/L		-0.0003	0.0003			
WG521623CCV3	CCV	06/22/21 20:44	MS210521-8	.1		.10142	mg/L	101	90	110			
WG521623CCB3	CCB	06/22/21 20:46				U	mg/L		-0.0003	0.0003			

Uranium, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521634													
WG521634ICV	ICV	06/22/21 17:02	MS210503-1	.05		.05208	mg/L	104	90	110			
WG521634ICB	ICB	06/22/21 17:04				U	mg/L		-0.0003	0.0003			
WG521280LRB	LRB	06/22/21 17:06				U	mg/L		-0.00022	0.00022			
WG521280LFB	LFB	06/22/21 17:08	MS210610-2	.05		.04814	mg/L	96	85	115			
WG521634CCV1	CCV	06/22/21 17:17	MS210521-8	.1		.10054	mg/L	101	90	110			
WG521634CCB1	CCB	06/22/21 17:19				U	mg/L		-0.0003	0.0003			
L66284-04LFM	LFM	06/22/21 17:28	MS210610-2	.05	.0132	.06214	mg/L	98	70	130			
L66284-04LFMD	LFMD	06/22/21 17:29	MS210610-2	.05	.0132	.06218	mg/L	98	70	130	0	20	
WG521634CCV2	CCV	06/22/21 17:38	MS210521-8	.1		.10005	mg/L	100	90	110			
WG521634CCB2	CCB	06/22/21 17:40				U	mg/L		-0.0003	0.0003			
WG521634CCV3	CCV	06/22/21 18:00	MS210521-8	.1		.1003	mg/L	100	90	110			
WG521634CCB3	CCB	06/22/21 18:02				U	mg/L		-0.0003	0.0003			

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ACZ Project ID: **L66284**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Zinc, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521306													
WG521306ICV	ICV	06/17/21 16:39	II210608-1	2		1.966	mg/L	98	95	105			
WG521306ICB	ICB	06/17/21 16:45				U	mg/L		-0.06	0.06			
WG521306PQV	PQV	06/17/21 16:49	II210603-2	.05015		.049	mg/L	98	70	130			
WG521306SIC	SIC	06/17/21 16:52	II210602-1	.1003		.093	mg/L	93	80	120			
WG521306LFB	LFB	06/17/21 16:59	II210614-2	.50075		.478	mg/L	95	85	115			
L66402-03AS	AS	06/17/21 17:27	II210614-2	.50075	U	.492	mg/L	98	85	115			
WG521306CCV1	CCV	06/17/21 17:31	II210609-1	1		.983	mg/L	98	90	110			
WG521306CCB1	CCB	06/17/21 17:34				U	mg/L		-0.06	0.06			
L66402-03ASD	ASD	06/17/21 17:37	II210614-2	.50075	U	.491	mg/L	98	85	115	0	20	
WG521306CCV2	CCV	06/17/21 18:09	II210609-1	1		.982	mg/L	98	90	110			
WG521306CCB2	CCB	06/17/21 18:13				U	mg/L		-0.06	0.06			
WG521306CCV3	CCV	06/17/21 18:22	II210609-1	1		.978	mg/L	98	90	110			
WG521306CCB3	CCB	06/17/21 18:25				U	mg/L		-0.06	0.06			

Zinc, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521574													
WG521574ICV	ICV	06/22/21 10:13	II210620-2	2		1.915	mg/L	96	95	105			
WG521574ICB	ICB	06/22/21 10:20				U	mg/L		-0.06	0.06			
WG521574PQV	PQV	06/22/21 10:23	II210603-2	.05015		.053	mg/L	106	70	130			
WG521574SIC	SIC	06/22/21 10:26	II210518-2	.1003		.098	mg/L	98	80	120			
WG521471LRB	LRB	06/22/21 10:36				U	mg/L		-0.044	0.044			
WG521471LFB	LFB	06/22/21 10:39	II210614-2	.50075		.468	mg/L	93	85	115			
WG521574CCV1	CCV	06/22/21 11:05	II210607-1	1		.929	mg/L	93	90	110			
WG521574CCB1	CCB	06/22/21 11:08				U	mg/L		-0.06	0.06			
L66492-03LFM	LFM	06/22/21 11:17	II2XWATER	.9884	.103	1.004	mg/L	91	70	130			
L66492-03LFMD	LFMD	06/22/21 11:21	II2XWATER	.9884	.103	1.01	mg/L	92	70	130	1	20	
WG521574CCV2	CCV	06/22/21 11:43	II210607-1	1		.916	mg/L	92	90	110			
WG521574CCB2	CCB	06/22/21 11:46				U	mg/L		-0.06	0.06			
WG521574CCV3	CCV	06/22/21 12:12	II210607-1	1		.923	mg/L	92	90	110			
WG521574CCB3	CCB	06/22/21 12:15				U	mg/L		-0.06	0.06			

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ACZ Project ID: **L66284**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L66284-01	WG521574	Aluminum, total	M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG520922	Cyanide, WAD	SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521574	Iron, total	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG521669	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521897	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG520619	Residue, Non-Filterable (TSS) @105C	SM2540D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			SM2540D	Z3	Sample volume yielded a residue less than 2.5 mg
			D516-02/-07/-11 - TURBIDIMETRIC D516-02/-07/-11 - TURBIDIMETRIC	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
L66284-02	WG521574	Aluminum, total	M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG521002	Chloride	SM4500Cl-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG520923	Cyanide, WAD	SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521574	Iron, total	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG521669	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521897	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG520619	Residue, Non-Filterable (TSS) @105C	SM2540D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			SM2540D	Z3	Sample volume yielded a residue less than 2.5 mg
			D516-02/-07/-11 - TURBIDIMETRIC D516-02/-07/-11 - TURBIDIMETRIC	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG521502	Sulfate		RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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ACZ Project ID: **L66284**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L66284-03	WG521574	Aluminum, total	M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG520620	Bicarbonate as CaCO ₃	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO ₃	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG521002	Chloride	SM4500Cl-E	Q6	Sample was received above recommended temperature.
			SM4500Cl-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG520923	Cyanide, WAD	SM4500-CN I,E-Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521180	Fluoride	SM4500F-C	Q6	Sample was received above recommended temperature.
	WG520620	Hydroxide as CaCO ₃	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG521574	Iron, total	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG521669	Nitrate/Nitrite as N	M353.2 - H ₂ SO ₄ preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H ₂ SO ₄ preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521897	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG520703	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG520619	Residue, Non-Filterable (TSS) @105C	SM2540D	Q6	Sample was received above recommended temperature.
			SM2540D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			SM2540D	Z3	Sample volume yielded a residue less than 2.5 mg
	WG521502	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG520620	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Ensero Solutions

ACZ Project ID: **L66284**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L66284-04	WG521574	Aluminum, total	M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG520620	Bicarbonate as CaCO ₃	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO ₃	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG521009	Chloride	SM4500Cl-E	Q6	Sample was received above recommended temperature.
			SM4500Cl-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG520923	Cyanide, WAD	SM4500-CN I,E-Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521180	Fluoride	SM4500F-C	Q6	Sample was received above recommended temperature.
	WG520620	Hydroxide as CaCO ₃	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG521574	Iron, total	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG521669	Nitrate/Nitrite as N	M353.2 - H ₂ SO ₄ preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H ₂ SO ₄ preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521897	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG520703	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG520619	Residue, Non-Filterable (TSS) @105C	SM2540D	Q6	Sample was received above recommended temperature.
			SM2540D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			SM2540D	Z3	Sample volume yielded a residue less than 2.5 mg
	WG521502	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG520620	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Ensero Solutions

Project ID: 3100-PO205

Sample ID: SW-WEIR

Locator:

ACZ Sample ID: **L66284-01**

Date Sampled: 06/03/21 10:00

Date Received: 06/04/21

Sample Matrix: Surface Water

Combined Radium (total)

Prep Method:

Calculation (RA226 + RA228)

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	07/08/21 12:32		0.22			pCi/L		calc

Gross Alpha & Beta, total

Prep Method:

M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	06/29/21 0:21		9.2	3.1	4.9	pCi/L	*	ess/amk
Gross Beta	06/29/21 0:21		8.8	3	9.2	pCi/L	*	ess/amk

Radium 226, dissolved

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	06/23/21 0:14		0.32	0.13	0.19	pCi/L	*	djc

Radium 226, total

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	06/23/21 0:12		0.22	0.11	0.13	pCi/L	*	djc

Radium 228, total

Prep Method:

M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, total	07/06/21 13:21		-0.17	0.98	2.4	pCi/L	*	fdw

Ensero Solutions

Project ID: 3100-PO205

Sample ID: SW-LLHG

Locator:

ACZ Sample ID: **L66284-02**

Date Sampled: 06/03/21 10:25

Date Received: 06/04/21

Sample Matrix: Surface Water

Combined Radium (total)

Prep Method:

Calculation (RA226 + RA228)

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	07/08/21 12:32		0.23			pCi/L		calc

Gross Alpha & Beta, total

Prep Method:

M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	06/29/21 0:23		10	3.2	6.2	pCi/L	*	ess/amk
Gross Beta	06/29/21 0:23		6.9	2.9	6.7	pCi/L	*	ess/amk

Radium 226, dissolved

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	06/23/21 0:17		0.17	0.1	0.21	pCi/L	*	djc

Radium 226, total

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	06/23/21 0:15		0.23	0.11	0.12	pCi/L	*	djc

Radium 228, total

Prep Method:

M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, total	07/06/21 15:44		1.6	0.93	2.3	pCi/L	*	fdw

Ensero Solutions

Project ID: 3100-PO205

Sample ID: SW-ARH

Locator:

ACZ Sample ID: **L66284-03**

Date Sampled: 06/03/21 11:00

Date Received: 06/04/21

Sample Matrix: Surface Water

Combined Radium (total)

Prep Method:

Calculation (RA226 + RA228)

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	07/08/21 12:32		0.30			pCi/L		calc

Gross Alpha & Beta, total

Prep Method:

M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	06/29/21 0:24		12	3.4	5.8	pCi/L	*	ess/amk
Gross Beta	06/29/21 0:24		3.6	2.9	8.2	pCi/L	*	ess/amk

Radium 226, dissolved

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	06/23/21 0:20		0.09	0.1	0.09	pCi/L		djc

Radium 226, total

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	06/23/21 0:18		0.3	0.14	0.22	pCi/L	*	djc

Radium 228, total

Prep Method:

M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, total	07/06/21 15:44		1.3	0.9	2.1	pCi/L	*	fdw

Ensero Solutions

Project ID: 3100-PO205

Sample ID: SW-FBRG

Locator:

ACZ Sample ID: **L66284-04**

Date Sampled: 06/03/21 11:30

Date Received: 06/04/21

Sample Matrix: Surface Water

Combined Radium (total)

Prep Method:

Calculation (RA226 + RA228)

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	07/08/21 12:32		0.27			pCi/L		calc

Gross Alpha & Beta, total

Prep Method:

M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	06/29/21 0:27		6.6	2.8	15	pCi/L	*	ess/amk
Gross Beta	06/29/21 0:27		4.6	2.7	19	pCi/L	*	ess/amk

Radium 226, dissolved

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	06/23/21 0:23		0.27	0.13	0.15	pCi/L		djc

Radium 226, total

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	06/23/21 0:21		0.27	0.11	0.13	pCi/L		djc

Radium 228, total

Prep Method:

M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, total	07/06/21 15:44		1.8	0.84	1.9	pCi/L	*	fdw

Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Error(+/-)</i>	Calculated sample specific uncertainty
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>LCL</i>	Lower Control Limit, in % (except for LCSS, mg/Kg)
<i>LLD</i>	Calculated sample specific Lower Limit of Detection
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
<i>RER</i>	Relative Error Ratio, calculation used for Dup. QC taking into account the error factor.
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>UCL</i>	Upper Control Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

QC Sample Types

<i>DUP</i>	Sample Duplicate	<i>MS/MSD</i>	Matrix Spike/Matrix Spike Duplicate
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBS</i>	Prep Blank - Soil
<i>LCSW</i>	Laboratory Control Sample - Water	<i>PBW</i>	Prep Blank - Water

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Matrix Spikes	Determines sample matrix interferences, if any.

ACZ Qualifiers (Qual)

H	Analysis exceeded method hold time.
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Method Prefix Reference

M	EPA methodology, including those under SDWA, CWA, and RCRA
SM	Standard Methods for the Examination of Water and Wastewater.
D	ASTM
RP	DOE
ESM	DOE/ESM

Comments

- (1) Solid matrices are reported on a dry weight basis.
- (2) Preparation method: "Method" indicates preparation defined in analytical method.
- (3) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.

For a complete list of ACZ's Extended Qualifiers, please click:

<https://aczk.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf>

Ensero Solutions

ACZ Project ID: **L66284**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alpha

M900.0

Units: pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG521507																
WG521507PBW	PBW	06/29/21						.96	0.81	0.75			1.5			
WG521507LCSWA	LCSW	06/29/21	PCN62436	100				120	9.3	1.3	120	67	144			
L66163-01DUP	DUP-RPD	06/29/21			2	1.4	1.3	3.3	1.7	1.2				49	20	RG
L66163-01DUP	DUP-RER	06/29/21			2	1.4	1.3	3.3	1.7	1.2				0.59	2	
L66163-01MSA	MS	06/29/21	PCN62436	66.67	2	1.4	1.3	72	6.9	1.1	105	67	144			
L66423-01DUP	DUP-RPD	06/29/21			2.9	1.9	1.6	1.2	1.5	1.5				83	20	RG
L66423-01DUP	DUP-RER	06/29/21			2.9	1.9	1.6	1.2	1.5	1.5				0.7	2	

Beta

M900.0

Units: pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG521507																
WG521507PBW	PBW	06/29/21						.16	1.7	1.8			3.6			
WG521507LCSWB	LCSW	06/29/21	RC210621-11	49.9				42	4.4	2.5	84	82	122			
L66163-01DUP	DUP-RPD	06/29/21			4.5	2.1	2	4.2	1.9	1.8				7	20	
L66284-03MSB	MS	06/29/21	RC210621-11	49.9	3.6	2.9	8.2	50	4.9	17	93	82	122			
L66423-01DUP	DUP-RPD	06/29/21			2.7	1.9	1.8	1.1	1.8	1.9				84	20	RG
L66423-01DUP	DUP-RER	06/29/21			2.7	1.9	1.8	1.1	1.8	1.9				0.61	2	

Radium 226, dissolved

M903.1

Units: pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG520986																
WG520986PBW	PBW	06/23/21						-.02	0.11	0.12			0.24			
WG520986LCSW	LCSW	06/23/21	PCN62879	20				18	0.67	0.17	90	43	148			
L66173-02DUP1	DUP-RPD	06/23/21			0	0.15	0.23	.08	0.14	0.11				200	20	RG
L66173-02DUP1	DUP-RER	06/23/21			0	0.15	0.23	.08	0.14	0.11				0.39	2	
L66173-03MS	MS	06/23/21	PCN62879	20	0.13	0.17	0.29	21	0.73	0.26	104	43	148			
L66313-01DUP2	DUP-RPD	06/23/21			1.3	0.22	0.17	1.3	0.17	0.26				0	20	

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ACZ Project ID: **L66284**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Radium 228, total

M904.0

Units: pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG521520																
L66280-01DUP	DUP-RER	07/06/21			0.34	0.88	2.3	-44	0.86	2.2				0.63	2	
WG521520LCSW	LCSW	07/06/21	PCN63356	9.68				8.7	1	0.71	90	47	123			
WG521520PBW	PBW	07/06/21						.73	0.49	0.48			0.96			
L66280-01DUP	DUP-RPD	07/06/21			0.34	0.88	2.3	-44	0.86	2.2				1560	20	RG
L66538-01DUP	DUP-RPD	07/06/21			-0.15	0.73	1.8	1.6	0.72	1.6				241	20	RG
L66284-03MS	MS	07/06/21	PCN63356	9.68	1.3	0.9	2.1	9.6	1.1	1.9	86	47	123			
L66538-01DUP	DUP-RER	07/06/21			-0.15	0.73	1.8	1.6	0.72	1.6				1.71	2	

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ACZ Project ID: **L66284**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L66284-01	WG521507	Gross Alpha	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Gross Beta	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG520986	Radium 226, dissolved	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Radium 226, total	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG521520	Radium 228, total	M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L66284-02	WG521507	Gross Alpha	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Gross Beta	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG520986	Radium 226, dissolved	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Radium 226, total	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG521520	Radium 228, total	M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L66284-03	WG521507	Gross Alpha	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Gross Beta	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG520986	Radium 226, total	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG521520	Radium 228, total	M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L66284-04	WG521507	Gross Alpha	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Gross Beta	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG521520	Radium 228, total	M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.

Ensero Solutions

ACZ Project ID: **L66284**

No certification qualifiers associated with this analysis

Ensero Solutions
3100-PO205

ACZ Project ID: L66284
Date Received: 06/04/2021 11:57
Received By:
Date Printed: 6/7/2021

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?	☐	☐	☒
2) Is the Chain of Custody form or other directive shipping papers present?	☒	☐	☐
3) Does this project require special handling procedures such as CLP protocol?	☐	☒	☐
4) Are any samples NRC licensable material?	☐	☐	☒
5) If samples are received past hold time, proceed with requested short hold time analyses?	☒	☐	☐
6) Is the Chain of Custody form complete and accurate?	☒	☐	☐
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?	☐	☒	☐

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	☒	☐	☐
9) Are all labels on containers and are they intact and legible?	☒	☐	☐
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	☒	☐	☐
11) For preserved bottle types, was the pH checked and within limits? ¹	☒	☐	☐
12) Is there sufficient sample volume to perform all requested work?	☒	☐	☐
13) Is the custody seal intact on all containers?	☐	☐	☒
14) Are samples that require zero headspace acceptable?	☐	☐	☒
15) Are all sample containers appropriate for analytical requirements?	☒	☐	☐
16) Is there an Hg-1631 trip blank present?	☐	☐	☒
17) Is there a VOA trip blank present?	☐	☐	☒
18) Were all samples received within hold time?	☒	☐	☐

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp (°C)	Temp Criteria (°C)	Rad (µR/Hr)	Custody Seal Intact?
-----	-----	-----	-----	-----
6638	8.8	<=6.0	15	N/A
6820	4.7	<=6.0	15	N/A
4934	8.3	<=6.0	15	N/A

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

Ensero Solutions
3100-PO205

ACZ Project ID: L66284

Date Received: 06/04/2021 11:57

Received By:

Date Printed: 6/7/2021

¹ The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na₂S₂O₃ preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).



Laboratories, Inc. *L66284*

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

CHAIN of CUSTODY

Report to:

Name: Christie Brizinski
Company: Ensero Solutions
E-mail: cbrizinski@ensero.com

Address: 131 E. Lincoln Ave Ste. 200
Fort Collins, CO 80524
Telephone: 867-668-6463, ext 229

Copy of Report to:

Name: Evan Valencia
Company: Ensero Solutions

E-mail: evalencia@ensero.com
Telephone: 818-688-1839

Invoice to:

Name: Pauline Wong
Company: Ensero Solutions
E-mail: ap@ensero.com

Address: 131 E. Lincoln Ave Ste. 200
Fort Collins, CO 80524
Telephone: 778-404-1182

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses?

YES ☒
NO ☐

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring?

Yes ☐ No ☒

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: EV

Sampler's Site Information

State CO

Zip code 80401

Time Zone MTN

*Sampler's Signature: *[Signature]*

I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

ANALYSES REQUESTED (attach list or use quote number)

Quote #: Ensero-2020

PO#: 3100-PO205

Reporting state for compliance testing: CO

Check box if samples include NRC licensed material? ☐

SAMPLE IDENTIFICATION			DATE:TIME	Matrix	# of Containers	TSS	Sample suite #1	Sample suite #2	COD	LLHG trip blank	Sample suite #3	TDS	
SW-WEIR			6-3-2021: 10:00	GW	9	☐	☐	☐	☐	☐	☒	☐	☐
SW-LLHG			6-3-2021: 10:25	GW	9	☐	☐	☐	☐	☐	☒	☐	☐
SW-ARH			6-3-2021: 11:00	GW	9	☐	☐	☐	☐	☐	☒	☐	☐
SW-FBRG			6-3-2021: 11:30	GW	9	☐	☐	☐	☐	☐	☒	☐	☐
						☐	☐	☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐	☐	☐

Matrix SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

36 containers accounted for by this COC. *Shipped 6/3/21*

Please also send reports to importer@alexco.ehsdata.com

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:

DATE:TIME

RECEIVED BY:

DATE:TIME

<i>Evan Valencia</i>	<i>6/3/21:1530</i>	<i>[Signature]</i>	<i>6/4/21</i>	<i>11:57</i>

FRMAD050.06.14.14

White - Return with sample. Yellow - Retain for your records.

July 12, 2021

Report to:

Christie Brizinski
Ensero Solutions
131 E. Lincoln Ave Ste. 200
Fort Collins, CO 80524

Bill to:

Pauline Wong
Ensero Solutions
131 E. Lincoln Ave Ste. 200
Fort Collins, CO 80524

cc: Ensero/Alexco Importer, Evan Valencia

Project ID: 3100-PO205

ACZ Project ID: L66280

Christie Brizinski:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on June 03, 2021. This project has been assigned to ACZ's project number, L66280. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L66280. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after August 11, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically \$11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.



Bill Lane has reviewed and
approved this report



Ensero Solutions

Project ID: 3100-PO205

Sample ID: MW-12

ACZ Sample ID: **L66280-01**

Date Sampled: 06/01/21 10:35

Date Received: 06/03/21

Sample Matrix: *Surface Water*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD	SM4500-CN I- distillation								06/09/21 14:31	md
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								06/18/21 10:52	emh
Total Hot Plate Digestion	M200.2 ICP-MS								06/16/21 8:50	mfm
Total Hot Plate Digestion	M200.2 ICP								06/18/21 10:08	kja

Ensero Solutions

Project ID: 3100-PO205

Sample ID: MW-12

ACZ Sample ID: **L66280-01**

Date Sampled: 06/01/21 10:35

Date Received: 06/03/21

Sample Matrix: Surface Water

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/16/21 16:07	kja
Aluminum, total	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/20/21 11:59	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00052	B		mg/L	0.0004	0.002	06/23/21 20:50	bsu
Antimony, total	M200.8 ICP-MS	1	0.00049	B		mg/L	0.0004	0.002	06/17/21 22:08	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	<0.0002	U		mg/L	0.0002	0.001	06/21/21 17:27	mfm
Arsenic, total	M200.8 ICP-MS	1	<0.0002	U		mg/L	0.0002	0.001	06/17/21 22:08	bsu
Boron, dissolved	M200.7 ICP	1	0.036	B		mg/L	0.03	0.1	06/16/21 16:07	kja
Boron, total	M200.7 ICP	1	0.038	B		mg/L	0.03	0.1	06/20/21 11:59	kja
Calcium, dissolved	M200.7 ICP	1	54.0			mg/L	0.1	0.5	06/16/21 16:07	kja
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/16/21 16:07	kja
Chromium, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/20/21 11:59	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/16/21 16:07	kja
Copper, total	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/20/21 11:59	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	06/16/21 16:07	kja
Iron, total	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	06/20/21 11:59	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/21/21 17:27	mfm
Lead, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/17/21 22:08	bsu
Magnesium, dissolved	M200.7 ICP	1	22.0			mg/L	0.2	1	06/16/21 16:07	kja
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/16/21 16:07	kja
Manganese, total	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/20/21 11:59	kja
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/09/21 8:04	mlh
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/09/21 11:27	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0295			mg/L	0.0002	0.0005	06/21/21 17:27	mfm
Molybdenum, total	M200.8 ICP-MS	1	0.0287			mg/L	0.0002	0.0005	06/17/21 22:08	bsu
Potassium, dissolved	M200.7 ICP	1	4.29			mg/L	0.2	1	06/16/21 16:07	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00037			mg/L	0.0001	0.00025	06/21/21 17:27	mfm
Selenium, total	M200.8 ICP-MS	1	0.00032			mg/L	0.0001	0.00025	06/17/21 22:08	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/23/21 20:50	bsu
Silver, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/17/21 22:08	bsu
Sodium, dissolved	M200.7 ICP	1	15.3			mg/L	0.2	1	06/16/21 16:07	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/21/21 17:27	mfm
Thallium, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/17/21 22:08	bsu
Uranium, dissolved	M200.8 ICP-MS	1	0.218		*	mg/L	0.0001	0.0005	06/21/21 17:27	mfm
Uranium, total	M200.8 ICP-MS	1	0.200		*	mg/L	0.0001	0.0005	06/17/21 22:08	bsu
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/16/21 16:07	kja
Zinc, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/20/21 11:59	kja

Ensero Solutions

Project ID: 3100-PO205
Sample ID: MW-12

ACZ Sample ID: **L66280-01**
Date Sampled: 06/01/21 10:35
Date Received: 06/03/21
Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	76.8			mg/L	2	20	06/09/21 0:00	eep
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	06/09/21 0:00	eep
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	06/09/21 0:00	eep
Total Alkalinity		1	76.8			mg/L	2	20	06/09/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			1.0			%			07/12/21 0:00	calc
Sum of Anions			5.2			meq/L			07/12/21 0:00	calc
Sum of Cations			5.3			meq/L			07/12/21 0:00	calc
Chloride	SM4500Cl-E	1	38.7		*	mg/L	0.5	2	06/14/21 12:03	syw
Cyanide, WAD	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	06/11/21 17:20	md
Fluoride	SM4500F-C	1	0.52			mg/L	0.15	0.35	06/16/21 12:38	emk
Nitrate/Nitrite as N	M353.2 - H ₂ SO ₄ preserved	1	0.344		*	mg/L	0.02	0.1	06/19/21 2:17	pjb
Phosphate, total	Calculation based on total Phosphorus		<0.03	U		mg/L	0.03	0.2	07/12/21 0:00	calc
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	06/19/21 0:42	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	320			mg/L	20	40	06/08/21 15:40	cgm
Residue, Non-Filterable (TSS) @105C	SM2540D	1	<5	U	*	mg/L	5	20	06/07/21 9:33	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	122		*	mg/L	5	25	06/21/21 10:21	syw
TDS (calculated)	Calculation		304			mg/L			07/12/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.05						07/12/21 0:00	calc

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Project ID: 3100-PO205
 Sample ID: MW-07

ACZ Sample ID: **L66280-02**
 Date Sampled: 06/01/21 11:33
 Date Received: 06/03/21
 Sample Matrix: *Surface Water*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD	SM4500-CN I- distillation								06/11/21 12:40	md
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								06/18/21 11:10	emh
Total Hot Plate Digestion	M200.2 ICP-MS								06/16/21 8:50	mfm
Total Hot Plate Digestion	M200.2 ICP								06/18/21 10:22	kja

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Project ID: 3100-PO205

Sample ID: MW-07

ACZ Sample ID: **L66280-02**

Date Sampled: 06/01/21 11:33

Date Received: 06/03/21

Sample Matrix: Surface Water

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/16/21 16:10	kja
Aluminum, total	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/20/21 12:02	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00082	B		mg/L	0.0004	0.002	06/23/21 20:56	bsu
Antimony, total	M200.8 ICP-MS	1	0.00070	B		mg/L	0.0004	0.002	06/17/21 22:10	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	<0.0002	U		mg/L	0.0002	0.001	06/21/21 17:29	mfm
Arsenic, total	M200.8 ICP-MS	1	<0.0002	U		mg/L	0.0002	0.001	06/17/21 22:10	bsu
Boron, dissolved	M200.7 ICP	1	0.050	B		mg/L	0.03	0.1	06/16/21 16:10	kja
Boron, total	M200.7 ICP	1	0.055	B		mg/L	0.03	0.1	06/20/21 12:02	kja
Calcium, dissolved	M200.7 ICP	1	113			mg/L	0.1	0.5	06/16/21 16:10	kja
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/16/21 16:10	kja
Chromium, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/20/21 12:02	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/16/21 16:10	kja
Copper, total	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/20/21 12:02	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	06/16/21 16:10	kja
Iron, total	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	06/20/21 12:02	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/21/21 17:29	mfm
Lead, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/17/21 22:10	bsu
Magnesium, dissolved	M200.7 ICP	1	53.2			mg/L	0.2	1	06/16/21 16:10	kja
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/16/21 16:10	kja
Manganese, total	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/20/21 12:02	kja
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/09/21 8:05	mlh
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/09/21 11:28	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0543			mg/L	0.0002	0.0005	06/21/21 17:29	mfm
Molybdenum, total	M200.8 ICP-MS	1	0.0512			mg/L	0.0002	0.0005	06/17/21 22:10	bsu
Potassium, dissolved	M200.7 ICP	1	7.02			mg/L	0.2	1	06/16/21 16:10	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00092			mg/L	0.0001	0.00025	06/21/21 17:29	mfm
Selenium, total	M200.8 ICP-MS	1	0.00094			mg/L	0.0001	0.00025	06/17/21 22:10	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/23/21 20:56	bsu
Silver, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/17/21 22:10	bsu
Sodium, dissolved	M200.7 ICP	1	21.1			mg/L	0.2	1	06/16/21 16:10	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/21/21 17:29	mfm
Thallium, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/17/21 22:10	bsu
Uranium, dissolved	M200.8 ICP-MS	1	1.06		*	mg/L	0.0001	0.0005	06/21/21 17:29	mfm
Uranium, total	M200.8 ICP-MS	1	0.959		*	mg/L	0.0001	0.0005	06/17/21 22:10	bsu
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/16/21 16:10	kja
Zinc, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/20/21 12:02	kja

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Project ID: 3100-PO205
Sample ID: MW-07

ACZ Sample ID: **L66280-02**
Date Sampled: 06/01/21 11:33
Date Received: 06/03/21
Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	128			mg/L	2	20	06/09/21 0:00	eep
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	06/09/21 0:00	eep
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	06/09/21 0:00	eep
Total Alkalinity		1	128			mg/L	2	20	06/09/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			07/12/21 0:00	calc
Sum of Anions			11.0			meq/L			07/12/21 0:00	calc
Sum of Cations			11			meq/L			07/12/21 0:00	calc
Chloride	SM4500Cl-E	1	32.3		*	mg/L	0.5	2	06/14/21 12:03	syw
Cyanide, WAD	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	06/11/21 23:55	pjb
Fluoride	SM4500F-C	1	0.56			mg/L	0.15	0.35	06/16/21 12:49	emk
Nitrate/Nitrite as N	M353.2 - H ₂ SO ₄ preserved	1	1.30		*	mg/L	0.02	0.1	06/19/21 2:18	pjb
Phosphate, total	Calculation based on total Phosphorus		<0.03	U		mg/L	0.03	0.2	07/12/21 0:00	calc
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	06/19/21 0:45	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	698			mg/L	20	40	06/08/21 15:43	cgm
Residue, Non-Filterable (TSS) @105C	SM2540D	1	<5	U	*	mg/L	5	20	06/07/21 9:38	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	10	356		*	mg/L	10	50	06/21/21 10:40	syw
TDS (calculated)	Calculation		661			mg/L			07/12/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.06						07/12/21 0:00	calc

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Project ID: 3100-PO205
Sample ID: MW-06

ACZ Sample ID: **L66280-03**
Date Sampled: 06/01/21 12:29
Date Received: 06/03/21
Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD	SM4500-CN I- distillation								06/11/21 12:48	md
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								06/18/21 11:27	emh
Total Hot Plate Digestion	M200.2 ICP-MS								06/16/21 8:50	mfm
Total Hot Plate Digestion	M200.2 ICP								06/18/21 10:36	kja

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Project ID: 3100-PO205

Sample ID: MW-06

ACZ Sample ID: **L66280-03**

Date Sampled: 06/01/21 12:29

Date Received: 06/03/21

Sample Matrix: Surface Water

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/16/21 16:19	kja
Aluminum, total	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/20/21 12:05	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00044	B		mg/L	0.0004	0.002	06/23/21 20:57	bsu
Antimony, total	M200.8 ICP-MS	1	0.00042	B		mg/L	0.0004	0.002	06/17/21 22:12	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	<0.0002	U		mg/L	0.0002	0.001	06/21/21 17:31	mfm
Arsenic, total	M200.8 ICP-MS	1	<0.0002	U		mg/L	0.0002	0.001	06/17/21 22:12	bsu
Boron, dissolved	M200.7 ICP	1	0.046	B		mg/L	0.03	0.1	06/16/21 16:19	kja
Boron, total	M200.7 ICP	1	0.043	B		mg/L	0.03	0.1	06/20/21 12:05	kja
Calcium, dissolved	M200.7 ICP	1	75.4			mg/L	0.1	0.5	06/16/21 16:19	kja
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/16/21 16:19	kja
Chromium, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/20/21 12:05	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/16/21 16:19	kja
Copper, total	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/20/21 12:05	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	06/16/21 16:19	kja
Iron, total	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	06/20/21 12:05	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/21/21 17:31	mfm
Lead, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/17/21 22:12	bsu
Magnesium, dissolved	M200.7 ICP	1	35.8			mg/L	0.2	1	06/16/21 16:19	kja
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/16/21 16:19	kja
Manganese, total	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/20/21 12:05	kja
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/09/21 8:05	mlh
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/09/21 11:29	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0406			mg/L	0.0002	0.0005	06/21/21 17:31	mfm
Molybdenum, total	M200.8 ICP-MS	1	0.0393			mg/L	0.0002	0.0005	06/17/21 22:12	bsu
Potassium, dissolved	M200.7 ICP	1	5.13			mg/L	0.2	1	06/16/21 16:19	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00079			mg/L	0.0001	0.00025	06/21/21 17:31	mfm
Selenium, total	M200.8 ICP-MS	1	0.00069			mg/L	0.0001	0.00025	06/17/21 22:12	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/23/21 20:57	bsu
Silver, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/17/21 22:12	bsu
Sodium, dissolved	M200.7 ICP	1	19.0			mg/L	0.2	1	06/16/21 16:19	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/21/21 17:31	mfm
Thallium, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/17/21 22:12	bsu
Uranium, dissolved	M200.8 ICP-MS	1	0.786		*	mg/L	0.0001	0.0005	06/21/21 17:31	mfm
Uranium, total	M200.8 ICP-MS	1	0.712		*	mg/L	0.0001	0.0005	06/17/21 22:12	bsu
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/16/21 16:19	kja
Zinc, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/20/21 12:05	kja

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Project ID: 3100-PO205
Sample ID: MW-06

ACZ Sample ID: **L66280-03**
Date Sampled: 06/01/21 12:29
Date Received: 06/03/21
Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	115			mg/L	2	20	06/09/21 0:00	eep
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	06/09/21 0:00	eep
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	06/09/21 0:00	eep
Total Alkalinity		1	115			mg/L	2	20	06/09/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-0.6			%			07/12/21 0:00	calc
Sum of Anions			7.8			meq/L			07/12/21 0:00	calc
Sum of Cations			7.7			meq/L			07/12/21 0:00	calc
Chloride	SM4500Cl-E	1	34.7		*	mg/L	0.5	2	06/14/21 12:03	syw
Cyanide, WAD	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	06/11/21 23:56	pjb
Fluoride	SM4500F-C	1	0.46			mg/L	0.15	0.35	06/16/21 12:52	emk
Nitrate/Nitrite as N	M353.2 - H ₂ SO ₄ preserved	1	1.18		*	mg/L	0.02	0.1	06/19/21 2:19	pjb
Phosphate, total	Calculation based on total Phosphorus		<0.03	U		mg/L	0.03	0.2	07/12/21 0:00	calc
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	06/19/21 0:47	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	462			mg/L	20	40	06/08/21 15:46	cgm
Residue, Non-Filterable (TSS) @105C	SM2540D	1	<5	U	*	mg/L	5	20	06/07/21 9:40	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	10	212		*	mg/L	10	50	06/21/21 10:40	syw
TDS (calculated)	Calculation		453			mg/L			07/12/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.02						07/12/21 0:00	calc

Ensero Solutions

Project ID: 3100-PO205
 Sample ID: RAW FEED

ACZ Sample ID: **L66280-04**
 Date Sampled: 06/01/21 14:10
 Date Received: 06/03/21
 Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD	SM4500-CN I- distillation								06/11/21 12:56	md
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								06/18/21 11:36	emh
Total Hot Plate Digestion	M200.2 ICP-MS								06/16/21 8:50	mfm
Total Hot Plate Digestion	M200.2 ICP				*				06/18/21 10:50	kja

Ensero Solutions

Project ID: 3100-PO205

Sample ID: RAW FEED

ACZ Sample ID: **L66280-04**

Date Sampled: 06/01/21 14:10

Date Received: 06/03/21

Sample Matrix: Surface Water

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	2	<0.1	U		mg/L	0.1	0.5	06/16/21 16:22	kja
Aluminum, total	M200.7 ICP	2	<0.1	U		mg/L	0.1	0.5	06/20/21 12:08	kja
Antimony, dissolved	M200.8 ICP-MS	200	<0.08	U	*	mg/L	0.08	0.4	06/23/21 21:03	bsu
Antimony, total	M200.8 ICP-MS	2	<0.0008	U		mg/L	0.0008	0.004	06/17/21 22:17	bsu
Arsenic, dissolved	M200.8 ICP-MS	2	0.0237			mg/L	0.0004	0.002	06/21/21 17:32	mfm
Arsenic, total	M200.8 ICP-MS	2	0.0240			mg/L	0.0004	0.002	06/17/21 22:17	bsu
Boron, dissolved	M200.7 ICP	2	0.324			mg/L	0.06	0.2	06/16/21 16:22	kja
Boron, total	M200.7 ICP	2	0.352			mg/L	0.06	0.2	06/20/21 12:08	kja
Calcium, dissolved	M200.7 ICP	2	338			mg/L	0.2	1	06/16/21 16:22	kja
Chromium, dissolved	M200.7 ICP	2	<0.04	U		mg/L	0.04	0.1	06/16/21 16:22	kja
Chromium, total	M200.7 ICP	2	<0.04	U		mg/L	0.04	0.1	06/20/21 12:08	kja
Copper, dissolved	M200.7 ICP	2	0.021	B		mg/L	0.02	0.1	06/16/21 16:22	kja
Copper, total	M200.7 ICP	2	0.024	B		mg/L	0.02	0.1	06/20/21 12:08	kja
Iron, dissolved	M200.7 ICP	2	9.73		*	mg/L	0.12	0.3	06/17/21 16:31	kja
Iron, total	M200.7 ICP	2	11.0			mg/L	0.12	0.3	06/20/21 12:08	kja
Lead, dissolved	M200.8 ICP-MS	2	<0.0002	U		mg/L	0.0002	0.001	06/21/21 17:32	mfm
Lead, total	M200.8 ICP-MS	2	0.00031	B		mg/L	0.0002	0.001	06/17/21 22:17	bsu
Magnesium, dissolved	M200.7 ICP	2	266			mg/L	0.4	2	06/16/21 16:22	kja
Manganese, dissolved	M200.7 ICP	2	0.861			mg/L	0.02	0.1	06/16/21 16:22	kja
Manganese, total	M200.7 ICP	2	0.932			mg/L	0.02	0.1	06/20/21 12:08	kja
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/09/21 8:06	mlh
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/09/21 11:30	mlh
Molybdenum, dissolved	M200.8 ICP-MS	2	1.12			mg/L	0.0004	0.001	06/21/21 17:32	mfm
Molybdenum, total	M200.8 ICP-MS	2	0.986			mg/L	0.0004	0.001	06/17/21 22:17	bsu
Potassium, dissolved	M200.7 ICP	2	29.6			mg/L	0.4	2	06/16/21 16:22	kja
Selenium, dissolved	M200.8 ICP-MS	2	<0.0002	U		mg/L	0.0002	0.0005	06/21/21 17:32	mfm
Selenium, total	M200.8 ICP-MS	2	<0.0002	U		mg/L	0.0002	0.0005	06/17/21 22:17	bsu
Silver, dissolved	M200.8 ICP-MS	2	<0.0002	U		mg/L	0.0002	0.001	06/25/21 12:37	enb
Silver, total	M200.8 ICP-MS	2	<0.0002	U		mg/L	0.0002	0.001	06/17/21 22:17	bsu
Sodium, dissolved	M200.7 ICP	2	276			mg/L	0.4	2	06/16/21 16:22	kja
Thallium, dissolved	M200.8 ICP-MS	2	<0.0002	U		mg/L	0.0002	0.001	06/21/21 17:32	mfm
Thallium, total	M200.8 ICP-MS	2	<0.0002	U		mg/L	0.0002	0.001	06/17/21 22:17	bsu
Uranium, dissolved	M200.8 ICP-MS	200	20.9			mg/L	0.02	0.1	06/23/21 21:03	bsu
Uranium, total	M200.8 ICP-MS	200	20.4			mg/L	0.02	0.1	06/18/21 15:29	bsu
Zinc, dissolved	M200.7 ICP	2	<0.04	U		mg/L	0.04	0.1	06/16/21 16:22	kja
Zinc, total	M200.7 ICP	2	<0.04	U		mg/L	0.04	0.1	06/20/21 12:08	kja

Ensero Solutions

Project ID: 3100-PO205

Sample ID: RAW FEED

ACZ Sample ID: **L66280-04**

Date Sampled: 06/01/21 14:10

Date Received: 06/03/21

Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	814			mg/L	2	20	06/09/21 0:00	eep
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	06/09/21 0:00	eep
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	06/09/21 0:00	eep
Total Alkalinity		1	814		*	mg/L	2	20	06/09/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-2.8			%			07/12/21 0:00	calc
Sum of Anions			55			meq/L			07/12/21 0:00	calc
Sum of Cations			52			meq/L			07/12/21 0:00	calc
Chloride	SM4500Cl-E	1	50.2		*	mg/L	0.5	2	06/14/21 12:03	syw
Cyanide, WAD	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	06/11/21 23:57	pjb
Fluoride	SM4500F-C	1	1.42			mg/L	0.15	0.35	06/16/21 12:55	emk
Nitrate/Nitrite as N	M353.2 - H ₂ SO ₄ preserved	1	<0.02	U		mg/L	0.02	0.1	06/19/21 2:21	pjb
Phosphate, total	Calculation based on total Phosphorus		0.21			mg/L	0.03	0.2	07/12/21 0:00	calc
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	0.067		*	mg/L	0.01	0.05	06/19/21 0:48	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	3470			mg/L	20	40	06/08/21 15:48	cgm
Residue, Non-Filterable (TSS) @105C	SM2540D	1	24.0		*	mg/L	5	20	06/07/21 9:42	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	50	1770		*	mg/L	50	250	06/21/21 10:42	syw
TDS (calculated)	Calculation		3240			mg/L			07/12/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.07						07/12/21 0:00	calc

Ensero Solutions

Project ID: 3100-PO205
Sample ID: SUMPS

ACZ Sample ID: **L66280-05**
Date Sampled: 06/01/21 15:30
Date Received: 06/03/21
Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD	SM4500-CN I- distillation								06/11/21 13:04	md
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								06/18/21 11:45	emh
Total Hot Plate Digestion	M200.2 ICP-MS								06/16/21 8:50	mfm
Total Hot Plate Digestion	M200.2 ICP								06/18/21 11:32	kja

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Project ID: 3100-PO205

Sample ID: SUMPS

ACZ Sample ID: **L66280-05**

Date Sampled: 06/01/21 15:30

Date Received: 06/03/21

Sample Matrix: Surface Water

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/16/21 16:25	kja
Aluminum, total	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/20/21 12:17	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00092	B		mg/L	0.0004	0.002	06/23/21 21:05	bsu
Antimony, total	M200.8 ICP-MS	1	0.00086	B		mg/L	0.0004	0.002	06/17/21 22:23	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00026	B		mg/L	0.0002	0.001	06/21/21 17:34	mfm
Arsenic, total	M200.8 ICP-MS	1	0.00026	B		mg/L	0.0002	0.001	06/17/21 22:23	bsu
Boron, dissolved	M200.7 ICP	1	0.054	B		mg/L	0.03	0.1	06/16/21 16:25	kja
Boron, total	M200.7 ICP	1	0.052	B		mg/L	0.03	0.1	06/20/21 12:17	kja
Calcium, dissolved	M200.7 ICP	1	122			mg/L	0.1	0.5	06/16/21 16:25	kja
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/16/21 16:25	kja
Chromium, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/20/21 12:17	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/16/21 16:25	kja
Copper, total	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/20/21 12:17	kja
Iron, dissolved	M200.7 ICP	1	0.084	B	*	mg/L	0.06	0.15	06/17/21 16:35	kja
Iron, total	M200.7 ICP	1	0.096	B		mg/L	0.06	0.15	06/20/21 12:17	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/21/21 17:34	mfm
Lead, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/17/21 22:23	bsu
Magnesium, dissolved	M200.7 ICP	1	60.3			mg/L	0.2	1	06/16/21 16:25	kja
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/16/21 16:25	kja
Manganese, total	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/20/21 12:17	kja
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/09/21 8:07	mlh
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/09/21 11:32	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0504			mg/L	0.0002	0.0005	06/21/21 17:34	mfm
Molybdenum, total	M200.8 ICP-MS	1	0.0458			mg/L	0.0002	0.0005	06/17/21 22:23	bsu
Potassium, dissolved	M200.7 ICP	1	7.44			mg/L	0.2	1	06/16/21 16:25	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00104			mg/L	0.0001	0.00025	06/21/21 17:34	mfm
Selenium, total	M200.8 ICP-MS	1	0.00093			mg/L	0.0001	0.00025	06/17/21 22:23	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/25/21 12:40	enb
Silver, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/17/21 22:23	bsu
Sodium, dissolved	M200.7 ICP	1	20.9			mg/L	0.2	1	06/16/21 16:25	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00013	B		mg/L	0.0001	0.0005	06/21/21 17:34	mfm
Thallium, total	M200.8 ICP-MS	1	0.00012	B		mg/L	0.0001	0.0005	06/17/21 22:23	bsu
Uranium, dissolved	M200.8 ICP-MS	1	1.05		*	mg/L	0.0001	0.0005	06/21/21 17:34	mfm
Uranium, total	M200.8 ICP-MS	1	0.972		*	mg/L	0.0001	0.0005	06/17/21 22:23	bsu
Zinc, dissolved	M200.7 ICP	1	0.097			mg/L	0.02	0.05	06/16/21 16:25	kja
Zinc, total	M200.7 ICP	1	0.102			mg/L	0.02	0.05	06/20/21 12:17	kja

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Project ID: 3100-PO205

Sample ID: SUMPS

ACZ Sample ID: **L66280-05**

Date Sampled: 06/01/21 15:30

Date Received: 06/03/21

Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	120			mg/L	2	20	06/09/21 0:00	eep
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	06/09/21 0:00	eep
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	06/09/21 0:00	eep
Total Alkalinity		1	120			mg/L	2	20	06/09/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			07/12/21 0:00	calc
Sum of Anions			12			meq/L			07/12/21 0:00	calc
Sum of Cations			12			meq/L			07/12/21 0:00	calc
Chloride	SM4500Cl-E	1	31.8		*	mg/L	0.5	2	06/14/21 12:03	syw
Cyanide, WAD	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	06/11/21 23:58	pjb
Fluoride	SM4500F-C	1	0.49			mg/L	0.15	0.35	06/16/21 12:58	emk
Nitrate/Nitrite as N	M353.2 - H ₂ SO ₄ preserved	1	1.35			mg/L	0.02	0.1	06/19/21 2:23	pjb
Phosphate, total	Calculation based on total Phosphorus		<0.03	U		mg/L	0.03	0.2	07/12/21 0:00	calc
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	06/19/21 0:49	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	778			mg/L	20	40	06/08/21 15:51	cgm
Residue, Non-Filterable (TSS) @105C	SM2540D	1	<5	U	*	mg/L	5	20	06/07/21 9:44	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	20	418		*	mg/L	20	100	06/21/21 10:55	syw
TDS (calculated)	Calculation		734			mg/L			07/12/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.06						07/12/21 0:00	calc

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Project ID: 3100-PO205

Sample ID: MW-19

ACZ Sample ID: **L66280-06**

Date Sampled: 06/01/21 16:40

Date Received: 06/03/21

Sample Matrix: *Surface Water*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD	SM4500-CN I- distillation								06/11/21 13:12	md
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								06/18/21 11:54	emh
Total Hot Plate Digestion	M200.2 ICP-MS								06/16/21 8:50	mfm
Total Hot Plate Digestion	M200.2 ICP								06/18/21 11:46	kja

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Project ID: 3100-PO205

Sample ID: MW-19

ACZ Sample ID: **L66280-06**

Date Sampled: 06/01/21 16:40

Date Received: 06/03/21

Sample Matrix: Surface Water

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/16/21 16:28	kja
Aluminum, total	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/20/21 12:20	kja
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	06/23/21 21:07	bsu
Antimony, total	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	06/17/21 22:25	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	<0.0002	U		mg/L	0.0002	0.001	06/21/21 17:40	mfm
Arsenic, total	M200.8 ICP-MS	1	0.00023	B		mg/L	0.0002	0.001	06/17/21 22:25	bsu
Boron, dissolved	M200.7 ICP	1	0.041	B		mg/L	0.03	0.1	06/16/21 16:28	kja
Boron, total	M200.7 ICP	1	0.045	B		mg/L	0.03	0.1	06/20/21 12:20	kja
Calcium, dissolved	M200.7 ICP	1	39.5			mg/L	0.1	0.5	06/16/21 16:28	kja
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/16/21 16:28	kja
Chromium, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/20/21 12:20	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/16/21 16:28	kja
Copper, total	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/20/21 12:20	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	06/16/21 16:28	kja
Iron, total	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	06/20/21 12:20	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/21/21 17:40	mfm
Lead, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/17/21 22:25	bsu
Magnesium, dissolved	M200.7 ICP	1	29.2			mg/L	0.2	1	06/16/21 16:28	kja
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/16/21 16:28	kja
Manganese, total	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/20/21 12:20	kja
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/09/21 8:08	mlh
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/09/21 11:33	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0700			mg/L	0.0002	0.0005	06/21/21 17:40	mfm
Molybdenum, total	M200.8 ICP-MS	1	0.0683			mg/L	0.0002	0.0005	06/17/21 22:25	bsu
Potassium, dissolved	M200.7 ICP	1	3.79			mg/L	0.2	1	06/16/21 16:28	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00048			mg/L	0.0001	0.00025	06/21/21 17:40	mfm
Selenium, total	M200.8 ICP-MS	1	0.00044			mg/L	0.0001	0.00025	06/17/21 22:25	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/25/21 12:42	enb
Silver, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/17/21 22:25	bsu
Sodium, dissolved	M200.7 ICP	1	15.1			mg/L	0.2	1	06/16/21 16:28	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/21/21 17:40	mfm
Thallium, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/17/21 22:25	bsu
Uranium, dissolved	M200.8 ICP-MS	1	0.378		*	mg/L	0.0001	0.0005	06/21/21 17:40	mfm
Uranium, total	M200.8 ICP-MS	1	0.372		*	mg/L	0.0001	0.0005	06/17/21 22:25	bsu
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/16/21 16:28	kja
Zinc, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/20/21 12:20	kja

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Project ID: 3100-PO205
Sample ID: MW-19

ACZ Sample ID: **L66280-06**
Date Sampled: 06/01/21 16:40
Date Received: 06/03/21
Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	88.7			mg/L	2	20	06/09/21 0:00	eep
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	06/09/21 0:00	eep
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	06/09/21 0:00	eep
Total Alkalinity		1	88.7			mg/L	2	20	06/09/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			2.0			%			07/12/21 0:00	calc
Sum of Anions			4.9			meq/L			07/12/21 0:00	calc
Sum of Cations			5.1			meq/L			07/12/21 0:00	calc
Chloride	SM4500Cl-E	1	38.4		*	mg/L	0.5	2	06/14/21 12:09	syw
Cyanide, WAD	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	06/11/21 23:59	pjb
Fluoride	SM4500F-C	1	0.45			mg/L	0.15	0.35	06/16/21 13:01	emk
Nitrate/Nitrite as N	M353.2 - H ₂ SO ₄ preserved	1	0.480			mg/L	0.02	0.1	06/19/21 2:26	pjb
Phosphate, total	Calculation based on total Phosphorus		<0.03	U		mg/L	0.03	0.2	07/12/21 0:00	calc
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	06/19/21 0:50	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	304			mg/L	20	40	06/08/21 18:16	emk
Residue, Non-Filterable (TSS) @105C	SM2540D	1	<5	U	*	mg/L	5	20	06/07/21 9:46	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	98.0		*	mg/L	5	25	06/21/21 10:22	syw
TDS (calculated)	Calculation		279			mg/L			07/12/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.09						07/12/21 0:00	calc

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Project ID: 3100-PO205
Sample ID: MW-0

ACZ Sample ID: **L66280-07**
Date Sampled: 06/02/21 09:50
Date Received: 06/04/21
Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD	SM4500-CN I- distillation								06/11/21 13:20	md
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								06/18/21 12:03	emh
Total Hot Plate Digestion	M200.2 ICP-MS								06/16/21 8:50	mfm
Total Hot Plate Digestion	M200.2 ICP								06/18/21 12:00	kja

Ensero Solutions

Project ID: 3100-PO205

Sample ID: MW-0

ACZ Sample ID: **L66280-07**

Date Sampled: 06/02/21 09:50

Date Received: 06/04/21

Sample Matrix: Surface Water

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/16/21 16:31	kja
Aluminum, total	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/20/21 12:29	kja
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	06/23/21 21:08	bsu
Antimony, total	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	06/17/21 22:27	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	<0.0002	U		mg/L	0.0002	0.001	06/21/21 17:41	mfm
Arsenic, total	M200.8 ICP-MS	1	<0.0002	U		mg/L	0.0002	0.001	06/17/21 22:27	bsu
Boron, dissolved	M200.7 ICP	1	0.033	B		mg/L	0.03	0.1	06/16/21 16:31	kja
Boron, total	M200.7 ICP	1	0.033	B		mg/L	0.03	0.1	06/20/21 12:29	kja
Calcium, dissolved	M200.7 ICP	1	41.1			mg/L	0.1	0.5	06/16/21 16:31	kja
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/16/21 16:31	kja
Chromium, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/20/21 12:29	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/16/21 16:31	kja
Copper, total	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/20/21 12:29	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	06/16/21 16:31	kja
Iron, total	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	06/20/21 12:29	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/21/21 17:41	mfm
Lead, total	M200.8 ICP-MS	1	0.00010	B		mg/L	0.0001	0.0005	06/17/21 22:27	bsu
Magnesium, dissolved	M200.7 ICP	1	16.9			mg/L	0.2	1	06/16/21 16:31	kja
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/16/21 16:31	kja
Manganese, total	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/20/21 12:29	kja
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/09/21 8:09	mlh
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/09/21 11:34	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0313			mg/L	0.0002	0.0005	06/21/21 17:41	mfm
Molybdenum, total	M200.8 ICP-MS	1	0.0311			mg/L	0.0002	0.0005	06/17/21 22:27	bsu
Potassium, dissolved	M200.7 ICP	1	3.56			mg/L	0.2	1	06/16/21 16:31	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00036			mg/L	0.0001	0.00025	06/21/21 17:41	mfm
Selenium, total	M200.8 ICP-MS	1	0.00031			mg/L	0.0001	0.00025	06/17/21 22:27	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/25/21 12:44	enb
Silver, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/17/21 22:27	bsu
Sodium, dissolved	M200.7 ICP	1	12.2			mg/L	0.2	1	06/16/21 16:31	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/21/21 17:41	mfm
Thallium, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/17/21 22:27	bsu
Uranium, dissolved	M200.8 ICP-MS	1	0.164		*	mg/L	0.0001	0.0005	06/21/21 17:41	mfm
Uranium, total	M200.8 ICP-MS	1	0.161		*	mg/L	0.0001	0.0005	06/17/21 22:27	bsu
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/16/21 16:31	kja
Zinc, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/20/21 12:29	kja

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Project ID: 3100-PO205

Sample ID: MW-0

ACZ Sample ID: **L66280-07**

Date Sampled: 06/02/21 09:50

Date Received: 06/04/21

Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	74.2		*	mg/L	2	20	06/09/21 0:00	eep
Carbonate as CaCO ₃		1	<2	U	*	mg/L	2	20	06/09/21 0:00	eep
Hydroxide as CaCO ₃		1	<2	U	*	mg/L	2	20	06/09/21 0:00	eep
Total Alkalinity		1	74.2		*	mg/L	2	20	06/09/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			3.8			%			07/12/21 0:00	calc
Sum of Anions			3.8			meq/L			07/12/21 0:00	calc
Sum of Cations			4.1			meq/L			07/12/21 0:00	calc
Chloride	SM4500Cl-E	1	41.5		*	mg/L	0.5	2	06/14/21 12:09	syw
Cyanide, WAD	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	06/12/21 0:02	pjb
Fluoride	SM4500F-C	1	0.31	B	*	mg/L	0.15	0.35	06/16/21 13:05	emk
Nitrate/Nitrite as N	M353.2 - H ₂ SO ₄ preserved	1	0.470		*	mg/L	0.02	0.1	06/19/21 2:27	pjb
Phosphate, total	Calculation based on total Phosphorus		<0.03	U		mg/L	0.03	0.2	07/12/21 0:00	calc
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	06/19/21 0:54	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	244		*	mg/L	20	40	06/08/21 18:18	emk
Residue, Non-Filterable (TSS) @105C	SM2540D	1	<5	U	*	mg/L	5	20	06/07/21 9:49	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	55.9	H	*	mg/L	5	25	07/01/21 11:05	wtc
TDS (calculated)	Calculation		217			mg/L			07/12/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.12						07/12/21 0:00	calc

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Project ID: 3100-PO205
 Sample ID: MW-00

ACZ Sample ID: **L66280-08**
 Date Sampled: 06/02/21 11:09
 Date Received: 06/03/21
 Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD	SM4500-CN I- distillation								06/11/21 13:36	md
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								06/18/21 12:11	emh
Total Hot Plate Digestion	M200.2 ICP-MS								06/16/21 8:50	mfm
Total Hot Plate Digestion	M200.2 ICP								06/18/21 12:14	kja

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Project ID: 3100-PO205

Sample ID: MW-00

ACZ Sample ID: **L66280-08**

Date Sampled: 06/02/21 11:09

Date Received: 06/03/21

Sample Matrix: Surface Water

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/16/21 16:41	kja
Aluminum, total	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/20/21 12:32	kja
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	06/23/21 21:10	bsu
Antimony, total	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	06/17/21 22:28	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	<0.0002	U		mg/L	0.0002	0.001	06/21/21 17:47	mfm
Arsenic, total	M200.8 ICP-MS	1	<0.0002	U		mg/L	0.0002	0.001	06/17/21 22:28	bsu
Boron, dissolved	M200.7 ICP	1	<0.03	U		mg/L	0.03	0.1	06/16/21 16:41	kja
Boron, total	M200.7 ICP	1	<0.03	U		mg/L	0.03	0.1	06/20/21 12:32	kja
Calcium, dissolved	M200.7 ICP	1	44.8			mg/L	0.1	0.5	06/16/21 16:41	kja
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/16/21 16:41	kja
Chromium, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/20/21 12:32	kja
Copper, dissolved	M200.7 ICP	1	0.012	B		mg/L	0.01	0.05	06/16/21 16:41	kja
Copper, total	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/20/21 12:32	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	06/16/21 16:41	kja
Iron, total	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	06/20/21 12:32	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/21/21 17:47	mfm
Lead, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/17/21 22:28	bsu
Magnesium, dissolved	M200.7 ICP	1	13.3			mg/L	0.2	1	06/16/21 16:41	kja
Manganese, dissolved	M200.7 ICP	1	0.017	B		mg/L	0.01	0.05	06/16/21 16:41	kja
Manganese, total	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/20/21 12:32	kja
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/09/21 8:12	mlh
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/09/21 11:37	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00047	B		mg/L	0.0002	0.0005	06/21/21 17:47	mfm
Molybdenum, total	M200.8 ICP-MS	1	0.00056			mg/L	0.0002	0.0005	06/17/21 22:28	bsu
Potassium, dissolved	M200.7 ICP	1	2.01			mg/L	0.2	1	06/16/21 16:41	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00052			mg/L	0.0001	0.00025	06/21/21 17:47	mfm
Selenium, total	M200.8 ICP-MS	1	0.00039			mg/L	0.0001	0.00025	06/17/21 22:28	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/25/21 12:46	enb
Silver, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/17/21 22:28	bsu
Sodium, dissolved	M200.7 ICP	1	15.3			mg/L	0.2	1	06/16/21 16:41	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/21/21 17:47	mfm
Thallium, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	06/17/21 22:28	bsu
Uranium, dissolved	M200.8 ICP-MS	1	0.00981		*	mg/L	0.0001	0.0005	06/21/21 17:47	mfm
Uranium, total	M200.8 ICP-MS	1	0.00913		*	mg/L	0.0001	0.0005	06/17/21 22:28	bsu
Zinc, dissolved	M200.7 ICP	1	0.093			mg/L	0.02	0.05	06/16/21 16:41	kja
Zinc, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/20/21 12:32	kja

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Project ID: 3100-PO205
Sample ID: MW-00

ACZ Sample ID: **L66280-08**
Date Sampled: 06/02/21 11:09
Date Received: 06/03/21
Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	131			mg/L	2	20	06/09/21 0:00	eep
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	06/09/21 0:00	eep
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	06/09/21 0:00	eep
Total Alkalinity		1	131			mg/L	2	20	06/09/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			6.5			%			07/12/21 0:00	calc
Sum of Anions			3.6			meq/L			07/12/21 0:00	calc
Sum of Cations			4.1			meq/L			07/12/21 0:00	calc
Chloride	SM4500Cl-E	1	26.4		*	mg/L	0.5	2	06/14/21 12:09	syw
Cyanide, WAD	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	06/12/21 0:03	pjb
Fluoride	SM4500F-C	1	0.27	B		mg/L	0.15	0.35	06/16/21 13:19	emk
Nitrate/Nitrite as N	M353.2 - H ₂ SO ₄ preserved	1	0.225			mg/L	0.02	0.1	06/19/21 2:28	pjb
Phosphate, total	Calculation based on total Phosphorus		<0.03	U		mg/L	0.03	0.2	07/12/21 0:00	calc
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	06/19/21 0:55	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	224			mg/L	20	40	06/08/21 18:20	emk
Residue, Non-Filterable (TSS) @105C	SM2540D	1	<5	U	*	mg/L	5	20	06/07/21 9:51	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	12.2		*	mg/L	1	5	06/21/21 10:16	syw
TDS (calculated)	Calculation		194			mg/L			07/12/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.15						07/12/21 0:00	calc

Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

QC Sample Types

<i>AS</i>	Analytical Spike (Post Digestion)	<i>LCSWD</i>	Laboratory Control Sample - Water Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LFB</i>	Laboratory Fortified Blank
<i>CCB</i>	Continuing Calibration Blank	<i>LFM</i>	Laboratory Fortified Matrix
<i>CCV</i>	Continuing Calibration Verification standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>ICB</i>	Initial Calibration Blank	<i>MS</i>	Matrix Spike
<i>ICV</i>	Initial Calibration Verification standard	<i>MSD</i>	Matrix Spike Duplicate
<i>ICSAB</i>	Inter-element Correction Standard - A plus B solutions	<i>PBS</i>	Prep Blank - Soil
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBW</i>	Prep Blank - Water
<i>LCSSD</i>	Laboratory Control Sample - Soil Duplicate	<i>PQV</i>	Practical Quantitation Verification standard
<i>LCSW</i>	Laboratory Control Sample - Water	<i>SDL</i>	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1)	EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2)	EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3)	EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4)	EPA SW-846. Test Methods for Evaluating Solid Waste.
(5)	Standard Methods for the Examination of Water and Wastewater.

Comments

(1)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2)	Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3)	Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4)	An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5)	If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:

<https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf>

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ACZ Project ID: **L66280**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG520620													
WG520620PBW1	PBW	06/08/21 20:19				5.7	mg/L		-20	20			
WG520620LCSW3	LCSW	06/08/21 20:36	WC210604-7	820.0001		786.6	mg/L	96	90	110			
WG520620LCSW6	LCSW	06/08/21 23:32	WC210604-7	820.0001		782.4	mg/L	95	90	110			
WG520620PBW2	PBW	06/08/21 23:38				U	mg/L		-20	20			
WG520620LCSW9	LCSW	06/09/21 3:07	WC210604-7	820.0001		801.3	mg/L	98	90	110			
WG520620PBW3	PBW	06/09/21 3:14				U	mg/L		-20	20			
L66280-01DUP	DUP	06/09/21 4:33			76.8	77	mg/L				0	20	
L66284-03DUP	DUP	06/09/21 6:10			41.1	38.9	mg/L				6	20	
WG520620LCSW12	LCSW	06/09/21 6:29	WC210604-7	820.0001		807.8	mg/L	99	90	110			
WG520620PBW4	PBW	06/09/21 6:35				U	mg/L		-20	20			
WG520620LCSW15	LCSW	06/09/21 9:35	WC210604-7	820.0001		813.6	mg/L	99	90	110			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521206													
WG521206ICV	ICV	06/16/21 15:46	II210608-1	2		1.977	mg/L	99	95	105			
WG521206ICB	ICB	06/16/21 15:51				U	mg/L		-0.15	0.15			
WG521206PQV	PQV	06/16/21 15:55	II210603-2	.250325		.236	mg/L	94	70	130			
WG521206SIC	SIC	06/16/21 15:58	II210602-1	200.410325		207.5	mg/L	104	1	200			
WG521206LFB	LFB	06/16/21 16:04	II210614-2	1.0013		.981	mg/L	98	85	115			
L66280-02AS	AS	06/16/21 16:13	II210614-2	1.0013	U	.971	mg/L	97	85	115			
L66280-02ASD	ASD	06/16/21 16:16	II210614-2	1.0013	U	1	mg/L	100	85	115	3	20	
WG521206CCV1	CCV	06/16/21 16:34	II210609-1	1		.979	mg/L	98	90	110			
WG521206CCB1	CCB	06/16/21 16:37				U	mg/L		-0.15	0.15			
WG521206CCV2	CCV	06/16/21 17:12	II210609-1	1		1.043	mg/L	104	90	110			
WG521206CCB2	CCB	06/16/21 17:15				U	mg/L		-0.15	0.15			
WG521206CCV3	CCV	06/16/21 17:33	II210609-1	1		1.01	mg/L	101	90	110			
WG521206CCB3	CCB	06/16/21 17:36				U	mg/L		-0.15	0.15			

Aluminum, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521441													
WG521441ICV	ICV	06/20/21 11:34	II210524-1	2		1.933	mg/L	97	95	105			
WG521441ICB	ICB	06/20/21 11:40				U	mg/L		-0.15	0.15			
WG521441PQV	PQV	06/20/21 11:43	II210603-2	.250325		.232	mg/L	93	70	130			
WG521441SIC	SIC	06/20/21 11:47	II210518-2	200.510325		205.1	mg/L	102	1	200			
WG521349LRB	LRB	06/20/21 11:53				U	mg/L		-0.11	0.11			
WG521349LFB	LFB	06/20/21 11:56	II210614-2	1.0013		1.003	mg/L	100	85	115			
L66280-04LFM	LFM	06/20/21 12:11	II2XWATER	2.0038	U	2.034	mg/L	102	70	130			
L66280-04LFMD	LFMD	06/20/21 12:14	II2XWATER	2.0038	U	2.066	mg/L	103	70	130	2	20	
WG521441CCV1	CCV	06/20/21 12:23	II210607-1	1		.978	mg/L	98	90	110			
WG521441CCB1	CCB	06/20/21 12:26				U	mg/L		-0.15	0.15			
WG521441CCV2	CCV	06/20/21 13:00	II210607-1	1		.969	mg/L	97	90	110			
WG521441CCB2	CCB	06/20/21 13:03				U	mg/L		-0.15	0.15			
WG521441CCV3	CCV	06/20/21 13:25	II210607-1	1		1.005	mg/L	101	90	110			
WG521441CCB3	CCB	06/20/21 13:28				U	mg/L		-0.15	0.15			

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ACZ Project ID: **L66280**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Antimony, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521769													
WG521769ICV	ICV	06/23/21 20:41	MS210503-1	.0201		.01851	mg/L	92	90	110			
WG521769ICB	ICB	06/23/21 20:43				U	mg/L		-0.00088	0.00088			
WG521769LFB	LFB	06/23/21 20:44	MS210610-2	.01		.00977	mg/L	98	85	115			
L66280-01AS	AS	06/23/21 20:52	MS210610-2	.01	.00052	.00916	mg/L	86	70	130			
L66280-01ASD	ASD	06/23/21 20:54	MS210610-2	.01	.00052	.00923	mg/L	87	70	130	1	20	
WG521769CCV1	CCV	06/23/21 20:59	MS210521-8	.0125		.01229	mg/L	98	90	110			
WG521769CCB1	CCB	06/23/21 21:01				U	mg/L		-0.0012	0.0012			
WG521769CCV2	CCV	06/23/21 21:21	MS210521-8	.0125		.01226	mg/L	98	90	110			
WG521769CCB2	CCB	06/23/21 21:23				U	mg/L		-0.0012	0.0012			
WG521769CCV3	CCV	06/23/21 21:38	MS210521-8	.0125		.01217	mg/L	97	90	110			
WG521769CCB3	CCB	06/23/21 21:40				U	mg/L		-0.0012	0.0012			

Antimony, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521324													
WG521324ICV	ICV	06/17/21 22:00	MS210503-1	.0201		.01954	mg/L	97	90	110			
WG521324ICB	ICB	06/17/21 22:02				U	mg/L		-0.0012	0.0012			
WG521152LRB	LRB	06/17/21 22:04				U	mg/L		-0.00088	0.00088			
WG521152LFB	LFB	06/17/21 22:06	MS210610-2	.01		.00951	mg/L	95	85	115			
L66280-03LFM	LFM	06/17/21 22:13	MS210610-2	.01	.00042	.00997	mg/L	96	70	130			
L66280-03LFMD	LFMD	06/17/21 22:15	MS210610-2	.01	.00042	.01006	mg/L	96	70	130	1	20	
WG521324CCV1	CCV	06/17/21 22:19	MS210521-8	.0125		.01273	mg/L	102	90	110			
WG521324CCB1	CCB	06/17/21 22:21				U	mg/L		-0.0012	0.0012			
WG521324CCV2	CCV	06/17/21 22:42	MS210521-8	.0125		.01281	mg/L	102	90	110			
WG521324CCB2	CCB	06/17/21 22:43				U	mg/L		-0.0012	0.0012			
WG521324CCV3	CCV	06/17/21 23:00	MS210521-8	.0125		.01276	mg/L	102	90	110			
WG521324CCB3	CCB	06/17/21 23:02				U	mg/L		-0.0012	0.0012			

Arsenic, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521549													
WG521549ICV	ICV	06/21/21 17:22	MS210503-1	.05		.04899	mg/L	98	90	110			
WG521549ICB	ICB	06/21/21 17:24				U	mg/L		-0.00044	0.00044			
WG521549LFB	LFB	06/21/21 17:25	MS210610-2	.05005		.0481	mg/L	96	85	115			
L66280-05AS	AS	06/21/21 17:36	MS210610-2	.05005	.00026	.05071	mg/L	101	70	130			
L66280-05ASD	ASD	06/21/21 17:38	MS210610-2	.05005	.00026	.05118	mg/L	102	70	130	1	20	
WG521549CCV1	CCV	06/21/21 17:43	MS210521-8	.1001		.09864	mg/L	99	90	110			
WG521549CCB1	CCB	06/21/21 17:45				U	mg/L		-0.0006	0.0006			
WG521549CCV2	CCV	06/21/21 18:05	MS210521-8	.1001		.1049	mg/L	105	90	110			
WG521549CCB2	CCB	06/21/21 18:07				U	mg/L		-0.0006	0.0006			
WG521549CCV3	CCV	06/21/21 18:17	MS210521-8	.1001		.10113	mg/L	101	90	110			
WG521549CCB3	CCB	06/21/21 18:19				U	mg/L		-0.0006	0.0006			

Ensero Solutions

ACZ Project ID: **L66280**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Arsenic, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521324													
WG521324ICV	ICV	06/17/21 22:00	MS210503-1	.05		.05156	mg/L	103	90	110			
WG521324ICB	ICB	06/17/21 22:02				U	mg/L		-0.0006	0.0006			
WG521152LRB	LRB	06/17/21 22:04				U	mg/L		-0.00044	0.00044			
WG521152LFB	LFB	06/17/21 22:06	MS210610-2	.05005		.04824	mg/L	96	85	115			
L66280-03LFM	LFM	06/17/21 22:13	MS210610-2	.05005	U	.04927	mg/L	98	70	130			
L66280-03LFMD	LFMD	06/17/21 22:15	MS210610-2	.05005	U	.04948	mg/L	99	70	130	0	20	
WG521324CCV1	CCV	06/17/21 22:19	MS210521-8	.1001		.10376	mg/L	104	90	110			
WG521324CCB1	CCB	06/17/21 22:21				U	mg/L		-0.0006	0.0006			
WG521324CCV2	CCV	06/17/21 22:42	MS210521-8	.1001		.10522	mg/L	105	90	110			
WG521324CCB2	CCB	06/17/21 22:43				U	mg/L		-0.0006	0.0006			
WG521324CCV3	CCV	06/17/21 23:00	MS210521-8	.1001		.10434	mg/L	104	90	110			
WG521324CCB3	CCB	06/17/21 23:02				U	mg/L		-0.0006	0.0006			

Boron, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521206													
WG521206ICV	ICV	06/16/21 15:46	II210608-1	2		2.023	mg/L	101	95	105			
WG521206ICB	ICB	06/16/21 15:51				U	mg/L		-0.09	0.09			
WG521206PQV	PQV	06/16/21 15:55	II210603-2	.1001		.109	mg/L	109	70	130			
WG521206SIC	SIC	06/16/21 15:58	II210602-1	.1001		.104	mg/L	104	80	120			
WG521206LFB	LFB	06/16/21 16:04	II210614-2	.5005		.515	mg/L	103	85	115			
L66280-02AS	AS	06/16/21 16:13	II210614-2	.5005	.05	.561	mg/L	102	85	115			
L66280-02ASD	ASD	06/16/21 16:16	II210614-2	.5005	.05	.563	mg/L	102	85	115	0	20	
WG521206CCV1	CCV	06/16/21 16:34	II210609-1	1		1.015	mg/L	102	90	110			
WG521206CCB1	CCB	06/16/21 16:37				U	mg/L		-0.09	0.09			
WG521206CCV2	CCV	06/16/21 17:12	II210609-1	1		1.071	mg/L	107	90	110			
WG521206CCB2	CCB	06/16/21 17:15				U	mg/L		-0.09	0.09			
WG521206CCV3	CCV	06/16/21 17:33	II210609-1	1		1.041	mg/L	104	90	110			
WG521206CCB3	CCB	06/16/21 17:36				U	mg/L		-0.09	0.09			

Boron, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521441													
WG521441ICV	ICV	06/20/21 11:34	II210524-1	2		1.982	mg/L	99	95	105			
WG521441ICB	ICB	06/20/21 11:40				U	mg/L		-0.09	0.09			
WG521441PQV	PQV	06/20/21 11:43	II210603-2	.1001		.114	mg/L	114	70	130			
WG521441SIC	SIC	06/20/21 11:47	II210518-2	.1001		.108	mg/L	108	80	120			
WG521349LRB	LRB	06/20/21 11:53				U	mg/L		-0.066	0.066			
WG521349LFB	LFB	06/20/21 11:56	II210614-2	.5005		.528	mg/L	105	85	115			
L66280-04LFM	LFM	06/20/21 12:11	II2XWATER	1.001	.352	1.422	mg/L	107	70	130			
L66280-04LFMD	LFMD	06/20/21 12:14	II2XWATER	1.001	.352	1.446	mg/L	109	70	130	2	20	
WG521441CCV1	CCV	06/20/21 12:23	II210607-1	1		1.051	mg/L	105	90	110			
WG521441CCB1	CCB	06/20/21 12:26				U	mg/L		-0.09	0.09			
WG521441CCV2	CCV	06/20/21 13:00	II210607-1	1		1.031	mg/L	103	90	110			
WG521441CCB2	CCB	06/20/21 13:03				U	mg/L		-0.09	0.09			
WG521441CCV3	CCV	06/20/21 13:25	II210607-1	1		1.075	mg/L	108	90	110			
WG521441CCB3	CCB	06/20/21 13:28				U	mg/L		-0.09	0.09			

Ensero Solutions

ACZ Project ID: **L66280**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Calcium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521206													
WG521206ICV	ICV	06/16/21 15:46	II210608-1	100		100.2	mg/L	100	95	105			
WG521206ICB	ICB	06/16/21 15:51				U	mg/L		-0.3	0.3			
WG521206PQV	PQV	06/16/21 15:55	II210603-2	.5006		.52	mg/L	104	70	130			
WG521206SIC	SIC	06/16/21 15:58	II210602-1	200.5606		200.8	mg/L	100	1	200			
WG521206LFB	LFB	06/16/21 16:04	II210614-2	67.98753		68.88	mg/L	101	85	115			
L66280-02AS	AS	06/16/21 16:13	II210614-2	67.98753	113	175.1	mg/L	91	85	115			
L66280-02ASD	ASD	06/16/21 16:16	II210614-2	67.98753	113	176.6	mg/L	94	85	115	1	20	
WG521206CCV1	CCV	06/16/21 16:34	II210609-1	50		50.22	mg/L	100	90	110			
WG521206CCB1	CCB	06/16/21 16:37				U	mg/L		-0.3	0.3			
WG521206CCV2	CCV	06/16/21 17:12	II210609-1	50		53.39	mg/L	107	90	110			
WG521206CCB2	CCB	06/16/21 17:15				U	mg/L		-0.3	0.3			
WG521206CCV3	CCV	06/16/21 17:33	II210609-1	50		51.73	mg/L	103	90	110			
WG521206CCB3	CCB	06/16/21 17:36				U	mg/L		-0.3	0.3			

Chloride

SM4500CI-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG520984													
WG520984ICB	ICB	06/14/21 8:58				U	mg/L		-1.5	1.5			
WG520984ICV	ICV	06/14/21 8:58	WI210503-1	54.89		53.79	mg/L	98	90	110			
WG520984CCV1	CCV	06/14/21 11:59	WI210203-7	50.05		47.73	mg/L	95	90	110			
WG520984CCB1	CCB	06/14/21 11:59				U	mg/L		-1.5	1.5			
WG520984LFB1	LFB	06/14/21 11:59	WI200327-3	30.03		30.78	mg/L	102	90	110			
WG520984CCV2	CCV	06/14/21 12:01	WI210203-7	50.05		47.87	mg/L	96	90	110			
WG520984CCB2	CCB	06/14/21 12:01				U	mg/L		-1.5	1.5			
L66219-06AS	AS	06/14/21 12:01	WI200327-3	30.03	19.6	49.02	mg/L	98	90	110			
L66222-01DUP	DUP	06/14/21 12:01			1.07	1.03	mg/L				4	20	RA
WG520984CCV3	CCV	06/14/21 12:03	WI210203-7	50.05		48.05	mg/L	96	90	110			
WG520984CCB3	CCB	06/14/21 12:03				U	mg/L		-1.5	1.5			
WG520984CCV4	CCV	06/14/21 12:09	WI210203-7	50.05		47.58	mg/L	95	90	110			
WG520984CCB4	CCB	06/14/21 12:09				U	mg/L		-1.5	1.5			
L66286-02AS	AS	06/14/21 12:09	WI200327-3	30.03	68.6	92.03	mg/L	78	90	110			M2
L66286-03DUP	DUP	06/14/21 12:09			29.9	29.78	mg/L				0	20	
WG520984CCV5	CCV	06/14/21 12:09	WI210203-7	50.05		47.71	mg/L	95	90	110			
WG520984CCB5	CCB	06/14/21 12:09				U	mg/L		-1.5	1.5			
WG520984CCV6	CCV	06/14/21 12:35	WI210203-7	50.05		47.85	mg/L	96	90	110			
WG520984CCB6	CCB	06/14/21 12:35				U	mg/L		-1.5	1.5			
WG520984LFB2	LFB	06/14/21 12:35	WI200327-3	30.03		29.96	mg/L	100	90	110			
WG520984CCV7	CCV	06/14/21 12:36	WI210203-7	50.05		47.94	mg/L	96	90	110			
WG520984CCB7	CCB	06/14/21 12:36				U	mg/L		-1.5	1.5			

Ensero Solutions

ACZ Project ID: **L66280**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Chromium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521206													
WG521206ICV	ICV	06/16/21 15:46	II210608-1	2		1.985	mg/L	99	95	105			
WG521206ICB	ICB	06/16/21 15:51				U	mg/L		-0.06	0.06			
WG521206PQV	PQV	06/16/21 15:55	II210603-2	.0502		.057	mg/L	114	70	130			
WG521206SIC	SIC	06/16/21 15:58	II210602-1	.1004		.116	mg/L	116	80	120			
WG521206LFB	LFB	06/16/21 16:04	II210614-2	.502		.51	mg/L	102	85	115			
L66280-02AS	AS	06/16/21 16:13	II210614-2	.502	U	.498	mg/L	99	85	115			
L66280-02ASD	ASD	06/16/21 16:16	II210614-2	.502	U	.497	mg/L	99	85	115	0	20	
WG521206CCV1	CCV	06/16/21 16:34	II210609-1	1		.998	mg/L	100	90	110			
WG521206CCB1	CCB	06/16/21 16:37				U	mg/L		-0.06	0.06			
WG521206CCV2	CCV	06/16/21 17:12	II210609-1	1		1.064	mg/L	106	90	110			
WG521206CCB2	CCB	06/16/21 17:15				U	mg/L		-0.06	0.06			
WG521206CCV3	CCV	06/16/21 17:33	II210609-1	1		1.027	mg/L	103	90	110			
WG521206CCB3	CCB	06/16/21 17:36				U	mg/L		-0.06	0.06			

Chromium, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521441													
WG521441ICV	ICV	06/20/21 11:34	II210524-1	2		1.922	mg/L	96	95	105			
WG521441ICB	ICB	06/20/21 11:40				U	mg/L		-0.06	0.06			
WG521441PQV	PQV	06/20/21 11:43	II210603-2	.0502		.052	mg/L	104	70	130			
WG521441SIC	SIC	06/20/21 11:47	II210518-2	.1004		.11	mg/L	110	80	120			
WG521349LRB	LRB	06/20/21 11:53				U	mg/L		-0.044	0.044			
WG521349LFB	LFB	06/20/21 11:56	II210614-2	.502		.498	mg/L	99	85	115			
L66280-04LFM	LFM	06/20/21 12:11	II2XWATER	.996	U	.99	mg/L	99	70	130			
L66280-04LFMD	LFMD	06/20/21 12:14	II2XWATER	.996	U	1.018	mg/L	102	70	130	3	20	
WG521441CCV1	CCV	06/20/21 12:23	II210607-1	1		.98	mg/L	98	90	110			
WG521441CCB1	CCB	06/20/21 12:26				U	mg/L		-0.06	0.06			
WG521441CCV2	CCV	06/20/21 13:00	II210607-1	1		.951	mg/L	95	90	110			
WG521441CCB2	CCB	06/20/21 13:03				U	mg/L		-0.06	0.06			
WG521441CCV3	CCV	06/20/21 13:25	II210607-1	1		1.006	mg/L	101	90	110			
WG521441CCB3	CCB	06/20/21 13:28				U	mg/L		-0.06	0.06			

Copper, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521206													
WG521206ICV	ICV	06/16/21 15:46	II210608-1	2		1.965	mg/L	98	95	105			
WG521206ICB	ICB	06/16/21 15:51				U	mg/L		-0.03	0.03			
WG521206PQV	PQV	06/16/21 15:55	II210603-2	.0502		.051	mg/L	102	70	130			
WG521206SIC	SIC	06/16/21 15:58	II210602-1	.1004		.097	mg/L	97	80	120			
WG521206LFB	LFB	06/16/21 16:04	II210614-2	.502		.496	mg/L	99	85	115			
L66280-02AS	AS	06/16/21 16:13	II210614-2	.502	U	.503	mg/L	100	85	115			
L66280-02ASD	ASD	06/16/21 16:16	II210614-2	.502	U	.503	mg/L	100	85	115	0	20	
WG521206CCV1	CCV	06/16/21 16:34	II210609-1	1		.983	mg/L	98	90	110			
WG521206CCB1	CCB	06/16/21 16:37				U	mg/L		-0.03	0.03			
WG521206CCV2	CCV	06/16/21 17:12	II210609-1	1		1.045	mg/L	105	90	110			
WG521206CCB2	CCB	06/16/21 17:15				U	mg/L		-0.03	0.03			
WG521206CCV3	CCV	06/16/21 17:33	II210609-1	1		1.011	mg/L	101	90	110			
WG521206CCB3	CCB	06/16/21 17:36				U	mg/L		-0.03	0.03			

Ensero Solutions

ACZ Project ID: **L66280**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Copper, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521441													
WG521441ICV	ICV	06/20/21 11:34	II210524-1	2		1.963	mg/L	98	95	105			
WG521441ICB	ICB	06/20/21 11:40				U	mg/L		-0.03	0.03			
WG521441PQV	PQV	06/20/21 11:43	II210603-2	.0502		.051	mg/L	102	70	130			
WG521441SIC	SIC	06/20/21 11:47	II210518-2	.1004		.097	mg/L	97	80	120			
WG521349LRB	LRB	06/20/21 11:53				U	mg/L		-0.022	0.022			
WG521349LFB	LFB	06/20/21 11:56	II210614-2	.502		.51	mg/L	102	85	115			
L66280-04LFM	LFM	06/20/21 12:11	II2XWATER	1	.024	1.051	mg/L	103	70	130			
L66280-04LFMD	LFMD	06/20/21 12:14	II2XWATER	1	.024	1.075	mg/L	105	70	130	2	20	
WG521441CCV1	CCV	06/20/21 12:23	II210607-1	1		.996	mg/L	100	90	110			
WG521441CCB1	CCB	06/20/21 12:26				U	mg/L		-0.03	0.03			
WG521441CCV2	CCV	06/20/21 13:00	II210607-1	1		.968	mg/L	97	90	110			
WG521441CCB2	CCB	06/20/21 13:03				U	mg/L		-0.03	0.03			
WG521441CCV3	CCV	06/20/21 13:25	II210607-1	1		1.008	mg/L	101	90	110			
WG521441CCB3	CCB	06/20/21 13:28				U	mg/L		-0.03	0.03			

Cyanide, WAD

SM4500-CN I,E-Colorimetric w/ distillation

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG520912													
WG520912ICV	ICV	06/11/21 17:00	WI210601-6	.3		.296	mg/L	99	90	110			
WG520912ICB	ICB	06/11/21 17:01				U	mg/L		-0.003	0.003			
WG520636LRB	LRB	06/11/21 17:02				U	mg/L		-0.003	0.003			
WG520636LFB	LFB	06/11/21 17:03	WI210601-3	.2		.1873	mg/L	94	90	110			
WG520912CCV1	CCV	06/11/21 17:10	WI210601-7	.25		.252	mg/L	101	90	110			
WG520912CCB1	CCB	06/11/21 17:11				U	mg/L		-0.003	0.003			
WG520912CCV2	CCV	06/11/21 17:21	WI210601-7	.25		.2528	mg/L	101	90	110			
WG520912CCB2	CCB	06/11/21 17:21				U	mg/L		-0.003	0.003			
L66281-03DUP	DUP	06/11/21 17:25			U	U	mg/L				0	20	RA
L66281-04LFM	LFM	06/11/21 17:27	WI210601-3	.2	U	.1859	mg/L	93	90	110			
WG520912CCV3	CCV	06/11/21 17:31	WI210601-7	.25		.2526	mg/L	101	90	110			
WG520912CCB3	CCB	06/11/21 17:32				U	mg/L		-0.003	0.003			
WG520920													
WG520920ICV	ICV	06/11/21 23:02	WI210601-6	.3		.2995	mg/L	100	90	110			
WG520920ICB	ICB	06/11/21 23:02				U	mg/L		-0.003	0.003			
WG520922													
WG520922CCV1	CCV	06/11/21 23:49	WI210601-7	.25		.2479	mg/L	99	90	110			
WG520922CCB1	CCB	06/11/21 23:50				U	mg/L		-0.003	0.003			
WG520745LRB	LRB	06/11/21 23:51				U	mg/L		-0.003	0.003			
WG520745LFB	LFB	06/11/21 23:52	WI210601-3	.2		.1935	mg/L	97	90	110			
WG520922CCV2	CCV	06/12/21 0:00	WI210601-7	.25		.2548	mg/L	102	90	110			
WG520922CCB2	CCB	06/12/21 0:01				U	mg/L		-0.003	0.003			
L66280-07DUP	DUP	06/12/21 0:03			U	U	mg/L				0	20	RA
L66280-08LFM	LFM	06/12/21 0:04	WI210601-3	.2	U	.2012	mg/L	101	90	110			
WG520922CCV3	CCV	06/12/21 0:11	WI210601-7	.25		.2524	mg/L	101	90	110			
WG520922CCB3	CCB	06/12/21 0:12				U	mg/L		-0.003	0.003			
WG520922CCV4	CCV	06/12/21 0:19	WI210601-7	.25		.2492	mg/L	100	90	110			
WG520922CCB4	CCB	06/12/21 0:20				U	mg/L		-0.003	0.003			

Ensero Solutions

ACZ Project ID: **L66280**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Fluoride

SM4500F-C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521180													
WG521180ICV	ICV	06/16/21 12:22	WC210609-3	2.002		2.12	mg/L	106	90	110			
WG521180ICB	ICB	06/16/21 12:27				U	mg/L		-0.3	0.3			
WG521180PQV	PQV	06/16/21 12:31	WC210528-8	.35105		.4	mg/L	114	70	130			
WG521180LFB1	LFB	06/16/21 12:35	WC201221-2	5.015		5.09	mg/L	101	90	110			
L66280-01AS	AS	06/16/21 12:42	WC201221-2	5.015	.52	5.26	mg/L	95	90	110			
L66280-01ASD	ASD	06/16/21 12:45	WC201221-2	5.015	.52	5.33	mg/L	96	90	110	1	20	
WG521180CCV1	CCV	06/16/21 13:08	WC210609-3	2.002		2.1	mg/L	105	90	110			
WG521180CCB1	CCB	06/16/21 13:16				U	mg/L		-0.3	0.3			
WG521180CCV2	CCV	06/16/21 13:58	WC210609-3	2.002		2.11	mg/L	105	90	110			
WG521180CCB2	CCB	06/16/21 14:05				U	mg/L		-0.3	0.3			
WG521180LFB2	LFB	06/16/21 14:27	WC201221-2	5.015		5.14	mg/L	102	90	110			
WG521180CCV3	CCV	06/16/21 14:46	WC210609-3	2.002		2.14	mg/L	107	90	110			
WG521180CCB3	CCB	06/16/21 14:54				U	mg/L		-0.3	0.3			
WG521180CCV4	CCV	06/16/21 15:32	WC210609-3	2.002		2.13	mg/L	106	90	110			
WG521180CCB4	CCB	06/16/21 15:40				U	mg/L		-0.3	0.3			
WG521180CCV5	CCV	06/16/21 16:39	WC210609-3	2.002		2.11	mg/L	105	90	110			
WG521180CCB5	CCB	06/16/21 16:47				U	mg/L		-0.3	0.3			

Iron, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521206													
WG521206ICV	ICV	06/16/21 15:46	II210608-1	2		1.983	mg/L	99	95	105			
WG521206ICB	ICB	06/16/21 15:51				U	mg/L		-0.18	0.18			
WG521206PQV	PQV	06/16/21 15:55	II210603-2	.15027		.149	mg/L	99	70	130			
WG521206SIC	SIC	06/16/21 15:58	II210602-1	200.17027		197.8	mg/L	99	1	200			
WG521206LFB	LFB	06/16/21 16:04	II210614-2	1.0018		1.16	mg/L	116	85	115			LA
L66280-02AS	AS	06/16/21 16:13	II210614-2	1.0018	U	1.018	mg/L	102	85	115			
L66280-02ASD	ASD	06/16/21 16:16	II210614-2	1.0018	U	1.02	mg/L	102	85	115	0	20	
WG521206CCV1	CCV	06/16/21 16:34	II210609-1	1		.996	mg/L	100	90	110			
WG521206CCB1	CCB	06/16/21 16:37				U	mg/L		-0.18	0.18			
WG521206CCV2	CCV	06/16/21 17:12	II210609-1	1		1.059	mg/L	106	90	110			
WG521206CCB2	CCB	06/16/21 17:15				U	mg/L		-0.18	0.18			
WG521206CCV3	CCV	06/16/21 17:33	II210609-1	1		1.03	mg/L	103	90	110			
WG521206CCB3	CCB	06/16/21 17:36				U	mg/L		-0.18	0.18			
WG521258													
WG521258ICV	ICV	06/17/21 16:10	II210608-1	2		1.949	mg/L	97	95	105			
WG521258ICB	ICB	06/17/21 16:16				U	mg/L		-0.18	0.18			
WG521258PQV	PQV	06/17/21 16:19	II210603-2	.15027		.162	mg/L	108	70	130			
WG521258SIC	SIC	06/17/21 16:22	II210602-1	200.17027		203.9	mg/L	102	1	200			
WG521258LFB	LFB	06/17/21 16:28	II210614-2	1.0018		.998	mg/L	100	85	115			
WG521258CCV1	CCV	06/17/21 16:59	II210609-1	1		.937	mg/L	94	90	110			
WG521258CCB1	CCB	06/17/21 17:02				U	mg/L		-0.18	0.18			
L66381-04AS	AS	06/17/21 17:09	II210614-2	1.0018	36.1	35.05	mg/L	-105	85	115			M3
L66381-04ASD	ASD	06/17/21 17:12	II210614-2	1.0018	36.1	35.62	mg/L	-48	85	115	2	20	M3
WG521258CCV2	CCV	06/17/21 17:15	II210609-1	1		.974	mg/L	97	90	110			
WG521258CCB2	CCB	06/17/21 17:18				U	mg/L		-0.18	0.18			

Ensero Solutions

ACZ Project ID: **L66280**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Iron, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521441													
WG521441ICV	ICV	06/20/21 11:34	II210524-1	2		1.975	mg/L	99	95	105			
WG521441ICB	ICB	06/20/21 11:40				U	mg/L		-0.18	0.18			
WG521441PQV	PQV	06/20/21 11:43	II210603-2	.15027		.154	mg/L	102	70	130			
WG521441SIC	SIC	06/20/21 11:47	II210518-2	200.17027		198.6	mg/L	99	1	200			
WG521349LRB	LRB	06/20/21 11:53				U	mg/L		-0.132	0.132			
WG521349LFB	LFB	06/20/21 11:56	II210614-2	1.0018		1.063	mg/L	106	85	115			
L66280-04LFM	LFM	06/20/21 12:11	II2XWATER	2.0022	11	12.78	mg/L	89	70	130			
L66280-04LFMD	LFMD	06/20/21 12:14	II2XWATER	2.0022	11	13.088	mg/L	104	70	130	2	20	
WG521441CCV1	CCV	06/20/21 12:23	II210607-1	1		1.042	mg/L	104	90	110			
WG521441CCB1	CCB	06/20/21 12:26				U	mg/L		-0.18	0.18			
WG521441CCV2	CCV	06/20/21 13:00	II210607-1	1		1.017	mg/L	102	90	110			
WG521441CCB2	CCB	06/20/21 13:03				U	mg/L		-0.18	0.18			
WG521441CCV3	CCV	06/20/21 13:25	II210607-1	1		1.084	mg/L	108	90	110			
WG521441CCB3	CCB	06/20/21 13:28				U	mg/L		-0.18	0.18			

Lead, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521549													
WG521549ICV	ICV	06/21/21 17:22	MS210503-1	.05		.05178	mg/L	104	90	110			
WG521549ICB	ICB	06/21/21 17:24				U	mg/L		-0.00022	0.00022			
WG521549LFB	LFB	06/21/21 17:25	MS210610-2	.05005		.04808	mg/L	96	85	115			
L66280-05AS	AS	06/21/21 17:36	MS210610-2	.05005	U	.0497	mg/L	99	70	130			
L66280-05ASD	ASD	06/21/21 17:38	MS210610-2	.05005	U	.04901	mg/L	98	70	130	1	20	
WG521549CCV1	CCV	06/21/21 17:43	MS210521-8	.25025		.24099	mg/L	96	90	110			
WG521549CCB1	CCB	06/21/21 17:45				U	mg/L		-0.0003	0.0003			
WG521549CCV2	CCV	06/21/21 18:05	MS210521-8	.25025		.24413	mg/L	98	90	110			
WG521549CCB2	CCB	06/21/21 18:07				U	mg/L		-0.0003	0.0003			
WG521549CCV3	CCV	06/21/21 18:17	MS210521-8	.25025		.24134	mg/L	96	90	110			
WG521549CCB3	CCB	06/21/21 18:19				U	mg/L		-0.0003	0.0003			

Lead, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521324													
WG521324ICV	ICV	06/17/21 22:00	MS210503-1	.05		.05148	mg/L	103	90	110			
WG521324ICB	ICB	06/17/21 22:02				U	mg/L		-0.0003	0.0003			
WG521152LRB	LRB	06/17/21 22:04				U	mg/L		-0.00022	0.00022			
WG521152LFB	LFB	06/17/21 22:06	MS210610-2	.05005		.04691	mg/L	94	85	115			
L66280-03LFM	LFM	06/17/21 22:13	MS210610-2	.05005	U	.04738	mg/L	95	70	130			
L66280-03LFMD	LFMD	06/17/21 22:15	MS210610-2	.05005	U	.04776	mg/L	95	70	130	1	20	
WG521324CCV1	CCV	06/17/21 22:19	MS210521-8	.25025		.25615	mg/L	102	90	110			
WG521324CCB1	CCB	06/17/21 22:21				U	mg/L		-0.0003	0.0003			
WG521324CCV2	CCV	06/17/21 22:42	MS210521-8	.25025		.25611	mg/L	102	90	110			
WG521324CCB2	CCB	06/17/21 22:43				U	mg/L		-0.0003	0.0003			
WG521324CCV3	CCV	06/17/21 23:00	MS210521-8	.25025		.25618	mg/L	102	90	110			
WG521324CCB3	CCB	06/17/21 23:02				U	mg/L		-0.0003	0.0003			

Ensero Solutions

ACZ Project ID: **L66280**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Magnesium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521206													
WG521206ICV	ICV	06/16/21 15:46	II210608-1	100		98.47	mg/L	98	95	105			
WG521206ICB	ICB	06/16/21 15:51				U	mg/L		-0.6	0.6			
WG521206PQV	PQV	06/16/21 15:55	II210603-2	1.0001		.98	mg/L	98	70	130			
WG521206SIC	SIC	06/16/21 15:58	II210602-1	201.0201		205.2	mg/L	102	1	200			
WG521206LFB	LFB	06/16/21 16:04	II210614-2	50.00302		49.32	mg/L	99	85	115			
L66280-02AS	AS	06/16/21 16:13	II210614-2	50.00302	53.2	99.05	mg/L	92	85	115			
L66280-02ASD	ASD	06/16/21 16:16	II210614-2	50.00302	53.2	100.3	mg/L	94	85	115	1	20	
WG521206CCV1	CCV	06/16/21 16:34	II210609-1	50		49.04	mg/L	98	90	110			
WG521206CCB1	CCB	06/16/21 16:37				U	mg/L		-0.6	0.6			
WG521206CCV2	CCV	06/16/21 17:12	II210609-1	50		52.43	mg/L	105	90	110			
WG521206CCB2	CCB	06/16/21 17:15				U	mg/L		-0.6	0.6			
WG521206CCV3	CCV	06/16/21 17:33	II210609-1	50		50.74	mg/L	101	90	110			
WG521206CCB3	CCB	06/16/21 17:36				U	mg/L		-0.6	0.6			

Manganese, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521206													
WG521206ICV	ICV	06/16/21 15:46	II210608-1	2		1.957	mg/L	98	95	105			
WG521206ICB	ICB	06/16/21 15:51				U	mg/L		-0.03	0.03			
WG521206PQV	PQV	06/16/21 15:55	II210603-2	.05005		.05	mg/L	100	70	130			
WG521206SIC	SIC	06/16/21 15:58	II210602-1	50.10005		47.94	mg/L	96	1	200			
WG521206LFB	LFB	06/16/21 16:04	II210614-2	.5005		.487	mg/L	97	85	115			
L66280-02AS	AS	06/16/21 16:13	II210614-2	.5005	U	.488	mg/L	98	85	115			
L66280-02ASD	ASD	06/16/21 16:16	II210614-2	.5005	U	.489	mg/L	98	85	115	0	20	
WG521206CCV1	CCV	06/16/21 16:34	II210609-1	1		.992	mg/L	99	90	110			
WG521206CCB1	CCB	06/16/21 16:37				U	mg/L		-0.03	0.03			
WG521206CCV2	CCV	06/16/21 17:12	II210609-1	1		1.057	mg/L	106	90	110			
WG521206CCB2	CCB	06/16/21 17:15				U	mg/L		-0.03	0.03			
WG521206CCV3	CCV	06/16/21 17:33	II210609-1	1		1.023	mg/L	102	90	110			
WG521206CCB3	CCB	06/16/21 17:36				U	mg/L		-0.03	0.03			

Manganese, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521441													
WG521441ICV	ICV	06/20/21 11:34	II210524-1	2		1.92	mg/L	96	95	105			
WG521441ICB	ICB	06/20/21 11:40				U	mg/L		-0.03	0.03			
WG521441PQV	PQV	06/20/21 11:43	II210603-2	.05005		.047	mg/L	94	70	130			
WG521441SIC	SIC	06/20/21 11:47	II210518-2	50.10005		48.21	mg/L	96	1	200			
WG521349LRB	LRB	06/20/21 11:53				U	mg/L		-0.022	0.022			
WG521349LFB	LFB	06/20/21 11:56	II210614-2	.5005		.494	mg/L	99	85	115			
L66280-04LFM	LFM	06/20/21 12:11	II2XWATER	1	.932	1.891	mg/L	96	70	130			
L66280-04LFMD	LFMD	06/20/21 12:14	II2XWATER	1	.932	1.942	mg/L	101	70	130	3	20	
WG521441CCV1	CCV	06/20/21 12:23	II210607-1	1		.985	mg/L	99	90	110			
WG521441CCB1	CCB	06/20/21 12:26				U	mg/L		-0.03	0.03			
WG521441CCV2	CCV	06/20/21 13:00	II210607-1	1		.965	mg/L	97	90	110			
WG521441CCB2	CCB	06/20/21 13:03				U	mg/L		-0.03	0.03			
WG521441CCV3	CCV	06/20/21 13:25	II210607-1	1		1.017	mg/L	102	90	110			
WG521441CCB3	CCB	06/20/21 13:28				U	mg/L		-0.03	0.03			

Ensero Solutions

ACZ Project ID: **L66280**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury, dissolved

M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG520573													
WG520573ICV	ICV	06/09/21 7:50	HG210601-3	.00501		.00516	mg/L	103	95	105			
WG520573ICB	ICB	06/09/21 7:51				U	mg/L		-0.0002	0.0002			
WG520573PQV	PQV	06/09/21 7:52	HG210601-5	.001001		.00096	mg/L	96	70	130			
WG520573LRB	LRB	06/09/21 7:53				U	mg/L		-0.00044	0.00044			
WG520573LFB	LFB	06/09/21 7:54	HG210601-6	.002002		.00192	mg/L	96	85	115			
L66228-03LFM	LFM	06/09/21 7:56	HG210601-6	.002002	U	.00195	mg/L	97	85	115			
L66228-03LFMD	LFMD	06/09/21 7:57	HG210601-6	.002002	U	.00194	mg/L	97	85	115	1	20	
WG520573CCV1	CCV	06/09/21 8:02	HG210601-3	.00501		.00534	mg/L	107	90	110			
WG520573CCB1	CCB	06/09/21 8:03				U	mg/L		-0.0002	0.0002			
L66280-07LFM	LFM	06/09/21 8:10	HG210601-6	.002002	U	.00194	mg/L	97	85	115			
L66280-07LFMD	LFMD	06/09/21 8:11	HG210601-6	.002002	U	.0019	mg/L	95	85	115	2	20	
WG520573CCV2	CCV	06/09/21 8:13	HG210601-3	.00501		.00523	mg/L	104	90	110			
WG520573CCB2	CCB	06/09/21 8:14				U	mg/L		-0.0002	0.0002			
WG520573CCV3	CCV	06/09/21 8:22	HG210601-3	.00501		.00543	mg/L	108	90	110			
WG520573CCB3	CCB	06/09/21 8:22				U	mg/L		-0.0002	0.0002			

Mercury, total

M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG520574													
WG520574ICV	ICV	06/09/21 9:37	HG210601-3	.00501		.00526	mg/L	105	95	105			
WG520574ICB	ICB	06/09/21 9:38				U	mg/L		-0.0002	0.0002			
WG520575													
WG520575CCV1	CCV	06/09/21 11:19	HG210601-3	.00501		.00515	mg/L	103	90	110			
WG520575CCB1	CCB	06/09/21 11:20				U	mg/L		-0.0002	0.0002			
WG520575PQV	PQV	06/09/21 11:21	HG210601-5	.001001		.00098	mg/L	98	70	130			
WG520575LRB	LRB	06/09/21 11:22				U	mg/L		-0.00044	0.00044			
WG520575LFB	LFB	06/09/21 11:23	HG210601-6	.002002		.00197	mg/L	98	85	115			
WG520575CCV2	CCV	06/09/21 11:30	HG210601-3	.00501		.00538	mg/L	107	90	110			
WG520575CCB2	CCB	06/09/21 11:31				U	mg/L		-0.0002	0.0002			
L66280-07LFM	LFM	06/09/21 11:35	HG210601-6	.002002	U	.00195	mg/L	97	85	115			
L66280-07LFMD	LFMD	06/09/21 11:36	HG210601-6	.002002	U	.00196	mg/L	98	85	115	1	20	
WG520575CCV3	CCV	06/09/21 11:42	HG210601-3	.00501		.00532	mg/L	106	90	110			
WG520575CCB3	CCB	06/09/21 11:43				U	mg/L		-0.0002	0.0002			
L66327-01LFM	LFM	06/09/21 11:46	HG210601-6	.002002	U	.00199	mg/L	99	85	115			
L66327-01LFMD	LFMD	06/09/21 11:47	HG210601-6	.002002	U	.00188	mg/L	94	85	115	6	20	
WG520575CCV4	CCV	06/09/21 11:48	HG210601-3	.00501		.0052	mg/L	104	90	110			
WG520575CCB4	CCB	06/09/21 11:49				U	mg/L		-0.0002	0.0002			

Ensero Solutions

ACZ Project ID: **L66280**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Molybdenum, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521549													
WG521549ICV	ICV	06/21/21 17:22	MS210503-1	.01992		.01945	mg/L	98	90	110			
WG521549ICB	ICB	06/21/21 17:24				U	mg/L		-0.00044	0.00044			
WG521549LFB	LFB	06/21/21 17:25	MS210610-2	.0501		.04709	mg/L	94	85	115			
L66280-05AS	AS	06/21/21 17:36	MS210610-2	.0501	.0504	.10011	mg/L	99	70	130			
L66280-05ASD	ASD	06/21/21 17:38	MS210610-2	.0501	.0504	.09899	mg/L	97	70	130	1	20	
WG521549CCV1	CCV	06/21/21 17:43	MS210521-8	.1002		.09726	mg/L	97	90	110			
WG521549CCB1	CCB	06/21/21 17:45				U	mg/L		-0.0006	0.0006			
WG521549CCV2	CCV	06/21/21 18:05	MS210521-8	.1002		.10169	mg/L	101	90	110			
WG521549CCB2	CCB	06/21/21 18:07				U	mg/L		-0.0006	0.0006			
WG521549CCV3	CCV	06/21/21 18:17	MS210521-8	.1002		.09903	mg/L	99	90	110			
WG521549CCB3	CCB	06/21/21 18:19				U	mg/L		-0.0006	0.0006			

Molybdenum, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521324													
WG521324ICV	ICV	06/17/21 22:00	MS210503-1	.01992		.01998	mg/L	100	90	110			
WG521324ICB	ICB	06/17/21 22:02				U	mg/L		-0.0006	0.0006			
WG521152LRB	LRB	06/17/21 22:04				U	mg/L		-0.00044	0.00044			
WG521152LFB	LFB	06/17/21 22:06	MS210610-2	.0501		.04707	mg/L	94	85	115			
L66280-03LFM	LFM	06/17/21 22:13	MS210610-2	.0501	.0393	.08525	mg/L	92	70	130			
L66280-03LFMD	LFMD	06/17/21 22:15	MS210610-2	.0501	.0393	.08586	mg/L	93	70	130	1	20	
WG521324CCV1	CCV	06/17/21 22:19	MS210521-8	.1002		.10105	mg/L	101	90	110			
WG521324CCB1	CCB	06/17/21 22:21				U	mg/L		-0.0006	0.0006			
WG521324CCV2	CCV	06/17/21 22:42	MS210521-8	.1002		.09933	mg/L	99	90	110			
WG521324CCB2	CCB	06/17/21 22:43				U	mg/L		-0.0006	0.0006			
WG521324CCV3	CCV	06/17/21 23:00	MS210521-8	.1002		.09764	mg/L	97	90	110			
WG521324CCB3	CCB	06/17/21 23:02				U	mg/L		-0.0006	0.0006			

Nitrate/Nitrite as N

M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521422													
WG521422ICV	ICV	06/18/21 23:25	WI210603-7	2.416		2.399	mg/L	99	90	110			
WG521422ICB	ICB	06/18/21 23:26				U	mg/L		-0.02	0.02			
WG521426													
WG521426CCV1	CCV	06/19/21 1:56	WI210615-5	2		1.961	mg/L	98	90	110			
WG521426CCB1	CCB	06/19/21 1:59				U	mg/L		-0.02	0.02			
WG521426LFB	LFB	06/19/21 2:00	WI210331-13	2		1.963	mg/L	98	90	110			
L41361-187AS	AS	06/19/21 2:03	WI210331-13	2	U	1.924	mg/L	96	90	110			
L64832-14DUP	DUP	06/19/21 2:05			U	U	mg/L				0	20	RA
WG521426CCV2	CCV	06/19/21 2:13	WI210615-5	2		1.939	mg/L	97	90	110			
WG521426CCB2	CCB	06/19/21 2:16				U	mg/L		-0.02	0.02			
L66280-04AS	AS	06/19/21 2:22	WI210331-13	2	U	1.957	mg/L	98	90	110			
L66280-05DUP	DUP	06/19/21 2:24			1.35	1.354	mg/L				0	20	
WG521426CCV3	CCV	06/19/21 2:30	WI210615-5	2		1.942	mg/L	97	90	110			
WG521426CCB3	CCB	06/19/21 2:33				U	mg/L		-0.02	0.02			
WG521426CCV4	CCV	06/19/21 2:42	WI210615-5	2		1.916	mg/L	96	90	110			
WG521426CCB4	CCB	06/19/21 2:45				U	mg/L		-0.02	0.02			

Ensero Solutions

ACZ Project ID: **L66280**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Phosphorus, total M365.1 - Auto Ascorbic Acid (digest)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521421													
WG521421ICV	ICV	06/18/21 22:43	WI210603-3	.65228		.66	mg/L	101	90	110			
WG521421ICB	ICB	06/18/21 22:45				U	mg/L		-0.01	0.01			
WG521423													
WG521423CCV1	CCV	06/19/21 0:38	WI210603-4	.5		.506	mg/L	101	90	110			
WG521423CCB1	CCB	06/19/21 0:39				U	mg/L		-0.01	0.01			
WG521379LRB	LRB	06/19/21 0:40				U	mg/L		-0.01	0.01			
WG521379LFB	LFB	06/19/21 0:41	WI210617-5	.5		.487	mg/L	97	90	110			
L66280-01LFM	LFM	06/19/21 0:44	WI210617-5	.5	U	.453	mg/L	91	90	110			
L66280-02DUP	DUP	06/19/21 0:46			U	U	mg/L				0	20	RA
WG521423CCV2	CCV	06/19/21 0:52	WI210603-4	.5		.504	mg/L	101	90	110			
WG521423CCB2	CCB	06/19/21 0:53				U	mg/L		-0.01	0.01			
WG521423CCV3	CCV	06/19/21 1:05	WI210603-4	.5		.511	mg/L	102	90	110			
WG521423CCB3	CCB	06/19/21 1:06				U	mg/L		-0.01	0.01			
WG521423CCV4	CCV	06/19/21 1:17	WI210603-4	.5		.51	mg/L	102	90	110			
WG521423CCB4	CCB	06/19/21 1:18				U	mg/L		-0.01	0.01			

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521206													
WG521206ICV	ICV	06/16/21 15:46	II210608-1	20		19.81	mg/L	99	95	105			
WG521206ICB	ICB	06/16/21 15:51				U	mg/L		-0.6	0.6			
WG521206PQV	PQV	06/16/21 15:55	II210603-2	1.004		1.03	mg/L	103	70	130			
WG521206SIC	SIC	06/16/21 15:58	II210602-1	1.004		1.03	mg/L	103	80	120			
WG521206LFB	LFB	06/16/21 16:04	II210614-2	100.0157		99.07	mg/L	99	85	115			
L66280-02AS	AS	06/16/21 16:13	II210614-2	100.0157	7.02	105.1	mg/L	98	85	115			
L66280-02ASD	ASD	06/16/21 16:16	II210614-2	100.0157	7.02	107.8	mg/L	101	85	115	3	20	
WG521206CCV1	CCV	06/16/21 16:34	II210609-1	10		9.92	mg/L	99	90	110			
WG521206CCB1	CCB	06/16/21 16:37				U	mg/L		-0.6	0.6			
WG521206CCV2	CCV	06/16/21 17:12	II210609-1	10		10.56	mg/L	106	90	110			
WG521206CCB2	CCB	06/16/21 17:15				U	mg/L		-0.6	0.6			
WG521206CCV3	CCV	06/16/21 17:33	II210609-1	10		10.28	mg/L	103	90	110			
WG521206CCB3	CCB	06/16/21 17:36				U	mg/L		-0.6	0.6			

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG520603													
WG520603PBW	PBW	06/08/21 14:55				U	mg/L		-20	20			
WG520603LCSW	LCSW	06/08/21 14:57	PCN63555	1000		996	mg/L	100	80	120			
L66307-02DUP	DUP	06/08/21 16:00			1090	1050	mg/L				4	10	
WG520618													
WG520618PBW	PBW	06/08/21 17:45				U	mg/L		-20	20			
WG520618LCSW	LCSW	06/08/21 17:46	PCN63556	1000		996	mg/L	100	80	120			
L66315-04DUP	DUP	06/08/21 18:29			208	214	mg/L				3	10	

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ACZ Project ID: **L66280**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Residue, Non-Filterable (TSS) @105C SM2540D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG520460													
WG520460PBW	PBW	06/07/21 9:10				U	mg/L		-5	5			
WG520460LCSW	LCSW	06/07/21 9:12	PCN63555	100		94	mg/L	94	80	120			
L66280-01DUP	DUP	06/07/21 9:36			U	U	mg/L				0	10	RA
L66283-03DUP	DUP	06/07/21 9:59			U	U	mg/L				0	10	RA

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521549													
WG521549ICV	ICV	06/21/21 17:22	MS210503-1	.05		.04831	mg/L	97	90	110			
WG521549ICB	ICB	06/21/21 17:24				U	mg/L		-0.00022	0.00022			
WG521549LFB	LFB	06/21/21 17:25	MS210610-2	.05		.04766	mg/L	95	85	115			
L66280-05AS	AS	06/21/21 17:36	MS210610-2	.05	.00104	.05415	mg/L	106	70	130			
L66280-05ASD	ASD	06/21/21 17:38	MS210610-2	.05	.00104	.05228	mg/L	102	70	130	4	20	
WG521549CCV1	CCV	06/21/21 17:43	MS210521-8	.25		.2403	mg/L	96	90	110			
WG521549CCB1	CCB	06/21/21 17:45				.00017	mg/L		-0.0003	0.0003			
WG521549CCV2	CCV	06/21/21 18:05	MS210521-8	.25		.24009	mg/L	96	90	110			
WG521549CCB2	CCB	06/21/21 18:07				.00016	mg/L		-0.0003	0.0003			
WG521549CCV3	CCV	06/21/21 18:17	MS210521-8	.25		.23313	mg/L	93	90	110			
WG521549CCB3	CCB	06/21/21 18:19				.00014	mg/L		-0.0003	0.0003			

Selenium, total M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521324													
WG521324ICV	ICV	06/17/21 22:00	MS210503-1	.05		.05077	mg/L	102	90	110			
WG521324ICB	ICB	06/17/21 22:02				.00012	mg/L		-0.0003	0.0003			
WG521152LRB	LRB	06/17/21 22:04				U	mg/L		-0.00022	0.00022			
WG521152LFB	LFB	06/17/21 22:06	MS210610-2	.05		.04821	mg/L	96	85	115			
L66280-03LFM	LFM	06/17/21 22:13	MS210610-2	.05	.00069	.04988	mg/L	98	70	130			
L66280-03LFMD	LFMD	06/17/21 22:15	MS210610-2	.05	.00069	.05008	mg/L	99	70	130	0	20	
WG521324CCV1	CCV	06/17/21 22:19	MS210521-8	.25		.25756	mg/L	103	90	110			
WG521324CCB1	CCB	06/17/21 22:21				U	mg/L		-0.0003	0.0003			
WG521324CCV2	CCV	06/17/21 22:42	MS210521-8	.25		.26039	mg/L	104	90	110			
WG521324CCB2	CCB	06/17/21 22:43				U	mg/L		-0.0003	0.0003			
WG521324CCV3	CCV	06/17/21 23:00	MS210521-8	.25		.26122	mg/L	104	90	110			
WG521324CCB3	CCB	06/17/21 23:02				U	mg/L		-0.0003	0.0003			

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ACZ Project ID: **L66280**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Silver, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521769													
WG521769ICV	ICV	06/23/21 20:41	MS210503-1	.02		.02017	mg/L	101	90	110			
WG521769ICB	ICB	06/23/21 20:43				U	mg/L		-0.00022	0.00022			
WG521769LFB	LFB	06/23/21 20:44	MS210610-2	.01002		.01068	mg/L	107	85	115			
L66280-01AS	AS	06/23/21 20:52	MS210610-2	.01002	U	.01012	mg/L	101	70	130			
L66280-01ASD	ASD	06/23/21 20:54	MS210610-2	.01002	U	.01021	mg/L	102	70	130	1	20	
WG521769CCV1	CCV	06/23/21 20:59	MS210521-8	.02505		.02478	mg/L	99	90	110			
WG521769CCB1	CCB	06/23/21 21:01				U	mg/L		-0.0003	0.0003			
WG521936													
WG521936ICV	ICV	06/25/21 12:28	MS210503-1	.02		.01899	mg/L	95	90	110			
WG521936ICB	ICB	06/25/21 12:30				U	mg/L		-0.00022	0.00022			
WG521936LFB	LFB	06/25/21 12:36	MS210610-2	.01002		.01135	mg/L	113	85	115			
WG521936CCV1	CCV	06/25/21 12:47	MS210521-8	.02505		.02516	mg/L	100	90	110			
WG521936CCB1	CCB	06/25/21 12:49				U	mg/L		-0.0003	0.0003			
L66464-03AS	AS	06/25/21 13:00	MS210610-2	2.004	U	2.35435	mg/L	117	70	130			
L66464-03ASD	ASD	06/25/21 13:02	MS210610-2	2.004	U	2.01307	mg/L	100	70	130	16	20	
WG521936CCV2	CCV	06/25/21 13:09	MS210521-8	.02505		.02483	mg/L	99	90	110			
WG521936CCB2	CCB	06/25/21 13:11				U	mg/L		-0.0003	0.0003			
WG521936CCV3	CCV	06/25/21 13:29	MS210521-8	.02505		.02456	mg/L	98	90	110			
WG521936CCB3	CCB	06/25/21 13:31				U	mg/L		-0.0003	0.0003			

Silver, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521324													
WG521324ICV	ICV	06/17/21 22:00	MS210503-1	.02		.02066	mg/L	103	90	110			
WG521324ICB	ICB	06/17/21 22:02				U	mg/L		-0.0003	0.0003			
WG521152LRB	LRB	06/17/21 22:04				U	mg/L		-0.00022	0.00022			
WG521152LFB	LFB	06/17/21 22:06	MS210610-2	.01002		.0099	mg/L	99	85	115			
L66280-03LFM	LFM	06/17/21 22:13	MS210610-2	.01002	U	.00958	mg/L	96	70	130			
L66280-03LFMD	LFMD	06/17/21 22:15	MS210610-2	.01002	U	.00955	mg/L	95	70	130	0	20	
WG521324CCV1	CCV	06/17/21 22:19	MS210521-8	.02505		.02587	mg/L	103	90	110			
WG521324CCB1	CCB	06/17/21 22:21				U	mg/L		-0.0003	0.0003			
WG521324CCV2	CCV	06/17/21 22:42	MS210521-8	.02505		.0255	mg/L	102	90	110			
WG521324CCB2	CCB	06/17/21 22:43				U	mg/L		-0.0003	0.0003			
WG521324CCV3	CCV	06/17/21 23:00	MS210521-8	.02505		.0253	mg/L	101	90	110			
WG521324CCB3	CCB	06/17/21 23:02				U	mg/L		-0.0003	0.0003			

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ACZ Project ID: **L66280**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sodium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521206													
WG521206ICV	ICV	06/16/21 15:46	II210608-1	100		98.59	mg/L	99	95	105			
WG521206ICB	ICB	06/16/21 15:51				U	mg/L		-0.6	0.6			
WG521206PQV	PQV	06/16/21 15:55	II210603-2	.998		1.02	mg/L	102	70	130			
WG521206SIC	SIC	06/16/21 15:58	II210602-1	.998		1.07	mg/L	107	80	120			
WG521206LFB	LFB	06/16/21 16:04	II210614-2	100.0605		97.49	mg/L	97	85	115			
L66280-02AS	AS	06/16/21 16:13	II210614-2	100.0605	21.1	117	mg/L	96	85	115			
L66280-02ASD	ASD	06/16/21 16:16	II210614-2	100.0605	21.1	119.4	mg/L	98	85	115	2	20	
WG521206CCV1	CCV	06/16/21 16:34	II210609-1	50		49.45	mg/L	99	90	110			
WG521206CCB1	CCB	06/16/21 16:37				U	mg/L		-0.6	0.6			
WG521206CCV2	CCV	06/16/21 17:12	II210609-1	50		52.44	mg/L	105	90	110			
WG521206CCB2	CCB	06/16/21 17:15				U	mg/L		-0.6	0.6			
WG521206CCV3	CCV	06/16/21 17:33	II210609-1	50		50.99	mg/L	102	90	110			
WG521206CCB3	CCB	06/16/21 17:36				U	mg/L		-0.6	0.6			

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ACZ Project ID: **L66280**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sulfate

D516-02/-07/-11 - TURBIDIMETRIC

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521486													
WG521486ICB	ICB	06/21/21 9:51				U	mg/L		-3	3			
WG521486ICV	ICV	06/21/21 9:51	WI210615-1	20.46		20.1	mg/L	98	90	110			
WG521486CCV1	CCV	06/21/21 10:13	WI210615-2	25		25	mg/L	100	90	110			
WG521486CCB1	CCB	06/21/21 10:13				U	mg/L		-3	3			
WG521486LFB	LFB	06/21/21 10:13	WI210105-3	10		9.7	mg/L	97	90	110			
WG521486CCV2	CCV	06/21/21 10:16	WI210615-2	25		25.1	mg/L	100	90	110			
WG521486CCB2	CCB	06/21/21 10:16				U	mg/L		-3	3			
WG521486CCV3	CCV	06/21/21 10:17	WI210615-2	25		25	mg/L	100	90	110			
WG521486CCB3	CCB	06/21/21 10:17				U	mg/L		-3	3			
WG521486CCV4	CCV	06/21/21 10:19	WI210615-2	25		24.8	mg/L	99	90	110			
WG521486CCB4	CCB	06/21/21 10:19				U	mg/L		-3	3			
L66280-01DUP	DUP	06/21/21 10:21			122	123.5	mg/L				1	20	
WG521486CCV5	CCV	06/21/21 10:23	WI210615-2	25		24.8	mg/L	99	90	110			
WG521486CCB5	CCB	06/21/21 10:23				U	mg/L		-3	3			
WG521486CCV6	CCV	06/21/21 10:25	WI210615-2	25		25	mg/L	100	90	110			
WG521486CCB6	CCB	06/21/21 10:25				U	mg/L		-3	3			
WG521486CCV7	CCV	06/21/21 10:29	WI210615-2	25		24.8	mg/L	99	90	110			
WG521486CCB7	CCB	06/21/21 10:29				U	mg/L		-3	3			
WG521486CCV8	CCV	06/21/21 10:40	WI210615-2	25		25.2	mg/L	101	90	110			
WG521486CCB8	CCB	06/21/21 10:40				U	mg/L		-3	3			
L66280-02AS	AS	06/21/21 10:40	SO4TURB10X	10	356	364.5	mg/L	85	90	110			M3
WG521486CCV9	CCV	06/21/21 10:42	WI210615-2	25		25.2	mg/L	101	90	110			
WG521486CCB9	CCB	06/21/21 10:42				U	mg/L		-3	3			
WG521486CCV10	CCV	06/21/21 10:45	WI210615-2	25		24.9	mg/L	100	90	110			
WG521486CCB10	CCB	06/21/21 10:45				U	mg/L		-3	3			
WG521486CCV11	CCV	06/21/21 10:55	WI210615-2	25		25.3	mg/L	101	90	110			
WG521486CCB11	CCB	06/21/21 10:55				U	mg/L		-3	3			
WG521486CCV12	CCV	06/21/21 10:57	WI210615-2	25		24.9	mg/L	100	90	110			
WG521486CCB12	CCB	06/21/21 10:57				U	mg/L		-3	3			
WG522310													
WG522310ICB	ICB	07/01/21 9:49				U	mg/L		-3	3			
WG522310ICV	ICV	07/01/21 9:49	WI210629-1	20.46		19.8	mg/L	97	90	110			
WG522310CCV1	CCV	07/01/21 10:26	WI210629-2	25		25.3	mg/L	101	90	110			
WG522310CCB1	CCB	07/01/21 10:26				U	mg/L		-3	3			
WG522310LFB	LFB	07/01/21 10:26	WI210105-3	10		9.6	mg/L	96	90	110			
WG522310CCV2	CCV	07/01/21 10:28	WI210629-2	25		25	mg/L	100	90	110			
WG522310CCB2	CCB	07/01/21 10:28				U	mg/L		-3	3			
WG522310CCV3	CCV	07/01/21 10:30	WI210629-2	25		24.7	mg/L	99	90	110			
WG522310CCB3	CCB	07/01/21 10:30				U	mg/L		-3	3			
WG522310CCV4	CCV	07/01/21 10:32	WI210629-2	25		24.6	mg/L	98	90	110			
WG522310CCB4	CCB	07/01/21 10:32				U	mg/L		-3	3			
WG522310CCV5	CCV	07/01/21 11:03	WI210629-2	25		25.3	mg/L	101	90	110			
WG522310CCB5	CCB	07/01/21 11:03				U	mg/L		-3	3			
L66272-01DUP	DUP	07/01/21 11:03			63.9	64.4	mg/L				1	20	
L66272-02AS	AS	07/01/21 11:03	SO4TURB5X	10	64.7	73.8	mg/L	91	90	110			
WG522310CCV6	CCV	07/01/21 11:05	WI210629-2	25		25.4	mg/L	102	90	110			
WG522310CCB6	CCB	07/01/21 11:05				U	mg/L		-3	3			
WG522310CCV7	CCV	07/01/21 11:07	WI210629-2	25		24.6	mg/L	98	90	110			
WG522310CCB7	CCB	07/01/21 11:07				U	mg/L		-3	3			

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ACZ Project ID: **L66280**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

WG522310CCV8	CCV	07/01/21 11:16	WI210629-2	25	25.3	mg/L	101	90	110				
WG522310CCB8	CCB	07/01/21 11:16			U	mg/L		-3	3				
WG522310CCV9	CCV	07/01/21 11:17	WI210629-2	25	25	mg/L	100	90	110				
WG522310CCB9	CCB	07/01/21 11:17			U	mg/L		-3	3				

Thallium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521549													
WG521549ICV	ICV	06/21/21 17:22	MS210503-1	.05		.05162	mg/L	103	90	110			
WG521549ICB	ICB	06/21/21 17:24				U	mg/L		-0.00022	0.00022			
WG521549LFB	LFB	06/21/21 17:25	MS210610-2	.05		.04677	mg/L	94	85	115			
L66280-05AS	AS	06/21/21 17:36	MS210610-2	.05	.00013	.04932	mg/L	98	70	130			
L66280-05ASD	ASD	06/21/21 17:38	MS210610-2	.05	.00013	.04972	mg/L	99	70	130	1	20	
WG521549CCV1	CCV	06/21/21 17:43	MS210521-8	.1		.09633	mg/L	96	90	110			
WG521549CCB1	CCB	06/21/21 17:45				U	mg/L		-0.0003	0.0003			
WG521549CCV2	CCV	06/21/21 18:05	MS210521-8	.1		.09653	mg/L	97	90	110			
WG521549CCB2	CCB	06/21/21 18:07				U	mg/L		-0.0003	0.0003			
WG521549CCV3	CCV	06/21/21 18:17	MS210521-8	.1		.09669	mg/L	97	90	110			
WG521549CCB3	CCB	06/21/21 18:19				U	mg/L		-0.0003	0.0003			

Thallium, total M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521324													
WG521324ICV	ICV	06/17/21 22:00	MS210503-1	.05		.05232	mg/L	105	90	110			
WG521324ICB	ICB	06/17/21 22:02				U	mg/L		-0.0003	0.0003			
WG521152LRB	LRB	06/17/21 22:04				U	mg/L		-0.00022	0.00022			
WG521152LFB	LFB	06/17/21 22:06	MS210610-2	.05		.04629	mg/L	93	85	115			
L66280-03LFM	LFM	06/17/21 22:13	MS210610-2	.05	U	.04713	mg/L	94	70	130			
L66280-03LFMD	LFMD	06/17/21 22:15	MS210610-2	.05	U	.04741	mg/L	95	70	130	1	20	
WG521324CCV1	CCV	06/17/21 22:19	MS210521-8	.1		.10329	mg/L	103	90	110			
WG521324CCB1	CCB	06/17/21 22:21				U	mg/L		-0.0003	0.0003			
WG521324CCV2	CCV	06/17/21 22:42	MS210521-8	.1		.10288	mg/L	103	90	110			
WG521324CCB2	CCB	06/17/21 22:43				U	mg/L		-0.0003	0.0003			
WG521324CCV3	CCV	06/17/21 23:00	MS210521-8	.1		.1036	mg/L	104	90	110			
WG521324CCB3	CCB	06/17/21 23:02				U	mg/L		-0.0003	0.0003			

Ensero Solutions

ACZ Project ID: **L66280**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Uranium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521549													
WG521549ICV	ICV	06/21/21 17:22	MS210503-1	.05		.04994	mg/L	100	90	110			
WG521549ICB	ICB	06/21/21 17:24				U	mg/L		-0.00022	0.00022			
WG521549LFB	LFB	06/21/21 17:25	MS210610-2	.05		.04593	mg/L	92	85	115			
L66280-05AS	AS	06/21/21 17:36	MS210610-2	.05	1.05	1.0805	mg/L	61	70	130			M3
L66280-05ASD	ASD	06/21/21 17:38	MS210610-2	.05	1.05	1.08589	mg/L	72	70	130	0	20	
WG521549CCV1	CCV	06/21/21 17:43	MS210521-8	.1		.09523	mg/L	95	90	110			
WG521549CCB1	CCB	06/21/21 17:45				.00011	mg/L		-0.0003	0.0003			
WG521549CCV2	CCV	06/21/21 18:05	MS210521-8	.1		.0956	mg/L	96	90	110			
WG521549CCB2	CCB	06/21/21 18:07				U	mg/L		-0.0003	0.0003			
WG521549CCV3	CCV	06/21/21 18:17	MS210521-8	.1		.0951	mg/L	95	90	110			
WG521549CCB3	CCB	06/21/21 18:19				U	mg/L		-0.0003	0.0003			
WG521769													
WG521769ICV	ICV	06/23/21 20:41	MS210503-1	.05		.05131	mg/L	103	90	110			
WG521769ICB	ICB	06/23/21 20:43				U	mg/L		-0.00022	0.00022			
WG521769LFB	LFB	06/23/21 20:44	MS210610-2	.05		.04924	mg/L	98	85	115			
L66280-01AS	AS	06/23/21 20:52	MS210610-2	.05	.206	.25614	mg/L	100	70	130			
L66280-01ASD	ASD	06/23/21 20:54	MS210610-2	.05	.206	.25457	mg/L	97	70	130	1	20	
WG521769CCV1	CCV	06/23/21 20:59	MS210521-8	.1		.10087	mg/L	101	90	110			
WG521769CCB1	CCB	06/23/21 21:01				.00012	mg/L		-0.0003	0.0003			
WG521769CCV2	CCV	06/23/21 21:21	MS210521-8	.1		.09924	mg/L	99	90	110			
WG521769CCB2	CCB	06/23/21 21:23				U	mg/L		-0.0003	0.0003			
WG521769CCV3	CCV	06/23/21 21:38	MS210521-8	.1		.09818	mg/L	98	90	110			
WG521769CCB3	CCB	06/23/21 21:40				U	mg/L		-0.0003	0.0003			

Ensero Solutions

ACZ Project ID: **L66280**

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Uranium, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521324													
WG521324ICV	ICV	06/17/21 22:00	MS210503-1	.05		.0496	mg/L	99	90	110			
WG521324ICB	ICB	06/17/21 22:02				U	mg/L		-0.0003	0.0003			
WG521152LRB	LRB	06/17/21 22:04				U	mg/L		-0.00022	0.00022			
WG521152LFB	LFB	06/17/21 22:06	MS210610-2	.05		.04492	mg/L	90	85	115			
L66280-03LFM	LFM	06/17/21 22:13	MS210610-2	.05	.712	.76211	mg/L	100	70	130			
L66280-03LFMD	LFMD	06/17/21 22:15	MS210610-2	.05	.712	.77124	mg/L	118	70	130	1	20	
WG521324CCV1	CCV	06/17/21 22:19	MS210521-8	.1		.10303	mg/L	103	90	110			
WG521324CCB1	CCB	06/17/21 22:21				.00063	mg/L		-0.0003	0.0003			BB BE
WG521324CCV2	CCV	06/17/21 22:42	MS210521-8	.1		.09907	mg/L	99	90	110			
WG521324CCB2	CCB	06/17/21 22:43				U	mg/L		-0.0003	0.0003			
WG521324CCV3	CCV	06/17/21 23:00	MS210521-8	.1		.09985	mg/L	100	90	110			
WG521324CCB3	CCB	06/17/21 23:02				U	mg/L		-0.0003	0.0003			

WG521403

WG521403ICV	ICV	06/18/21 15:16	MS210503-1	.05		.0511	mg/L	102	90	110			
WG521403ICB	ICB	06/18/21 15:18				U	mg/L		-0.0003	0.0003			
WG521152LRB	LRB	06/18/21 15:19				U	mg/L		-0.00022	0.00022			
WG521152LFB	LFB	06/18/21 15:21	MS210610-2	.05		.04939	mg/L	99	85	115			
L66280-03LFM	LFM	06/18/21 15:25	MS210610-2	.05	.754	.80293	mg/L	98	70	130			
L66280-03LFMD	LFMD	06/18/21 15:27	MS210610-2	.05	.754	.79967	mg/L	91	70	130	0	20	
WG521403CCV1	CCV	06/18/21 15:34	MS210521-8	.1		.10015	mg/L	100	90	110			
WG521403CCB1	CCB	06/18/21 15:36				U	mg/L		-0.0003	0.0003			
WG521403CCV2	CCV	06/18/21 15:45	MS210521-8	.1		.10104	mg/L	101	90	110			
WG521403CCB2	CCB	06/18/21 15:47				U	mg/L		-0.0003	0.0003			

Zinc, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521206													
WG521206ICV	ICV	06/16/21 15:46	II210608-1	2		1.894	mg/L	95	95	105			
WG521206ICB	ICB	06/16/21 15:51				U	mg/L		-0.06	0.06			
WG521206PQV	PQV	06/16/21 15:55	II210603-2	.05015		.051	mg/L	102	70	130			
WG521206SIC	SIC	06/16/21 15:58	II210602-1	.1003		.095	mg/L	95	80	120			
WG521206LFB	LFB	06/16/21 16:04	II210614-2	.50075		.482	mg/L	96	85	115			
L66280-02AS	AS	06/16/21 16:13	II210614-2	.50075	U	.455	mg/L	91	85	115			
L66280-02ASD	ASD	06/16/21 16:16	II210614-2	.50075	U	.463	mg/L	92	85	115	2	20	
WG521206CCV1	CCV	06/16/21 16:34	II210609-1	1		.949	mg/L	95	90	110			
WG521206CCB1	CCB	06/16/21 16:37				U	mg/L		-0.06	0.06			
WG521206CCV2	CCV	06/16/21 17:12	II210609-1	1		1.013	mg/L	101	90	110			
WG521206CCB2	CCB	06/16/21 17:15				U	mg/L		-0.06	0.06			
WG521206CCV3	CCV	06/16/21 17:33	II210609-1	1		.977	mg/L	98	90	110			
WG521206CCB3	CCB	06/16/21 17:36				U	mg/L		-0.06	0.06			

Ensero Solutions

ACZ Project ID: **L66280**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Zinc, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521441													
WG521441ICV	ICV	06/20/21 11:34	II210524-1	2		1.902	mg/L	95	95	105			
WG521441ICB	ICB	06/20/21 11:40				U	mg/L		-0.06	0.06			
WG521441PQV	PQV	06/20/21 11:43	II210603-2	.05015		.052	mg/L	104	70	130			
WG521441SIC	SIC	06/20/21 11:47	II210518-2	.1003		.098	mg/L	98	80	120			
WG521349LRB	LRB	06/20/21 11:53				U	mg/L		-0.044	0.044			
WG521349LFB	LFB	06/20/21 11:56	II210614-2	.50075		.506	mg/L	101	85	115			
L66280-04LFM	LFM	06/20/21 12:11	II2XWATER	.9884	U	.98	mg/L	99	70	130			
L66280-04LFMD	LFMD	06/20/21 12:14	II2XWATER	.9884	U	1.001	mg/L	101	70	130	2	20	
WG521441CCV1	CCV	06/20/21 12:23	II210607-1	1		.992	mg/L	99	90	110			
WG521441CCB1	CCB	06/20/21 12:26				U	mg/L		-0.06	0.06			
WG521441CCV2	CCV	06/20/21 13:00	II210607-1	1		.973	mg/L	97	90	110			
WG521441CCB2	CCB	06/20/21 13:03				U	mg/L		-0.06	0.06			
WG521441CCV3	CCV	06/20/21 13:25	II210607-1	1		1.036	mg/L	104	90	110			
WG521441CCB3	CCB	06/20/21 13:28				U	mg/L		-0.06	0.06			

Ensero Solutions

ACZ Project ID: **L66280**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L66280-01	WG520984	Chloride	SM4500CI-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG520912	Cyanide, WAD	SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521206	Iron, dissolved	M200.7 ICP	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG521426	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521423	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG520460	Residue, Non-Filterable (TSS) @105C	SM2540D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			SM2540D	Z3	Sample volume yielded a residue less than 2.5 mg
	WG521486	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG521549	Uranium, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L66280-02	WG521324	Uranium, total	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG520984	Chloride	SM4500CI-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG520922	Cyanide, WAD	SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521206	Iron, dissolved	M200.7 ICP	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG521426	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521423	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG520460	Residue, Non-Filterable (TSS) @105C	SM2540D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			SM2540D	Z3	Sample volume yielded a residue less than 2.5 mg
	WG521486	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L66280-03	WG521549	Uranium, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG521324	Uranium, total	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.

Ensero Solutions

ACZ Project ID: **L66280**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L66280-03	WG520984	Chloride	SM4500CI-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG520922	Cyanide, WAD	SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521206	Iron, dissolved	M200.7 ICP	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG521426	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521423	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG520460	Residue, Non-Filterable (TSS) @105C	SM2540D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			SM2540D	Z3	Sample volume yielded a residue less than 2.5 mg
	WG521486	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG521549	Uranium, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG521324	Uranium, total	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
L66280-04	WG521769	Antimony, dissolved	M200.8 ICP-MS	D1	Sample required dilution due to matrix.
			M200.8 ICP-MS	D2	Sample required dilution. Target analyte exceeded calibration range.
	WG520984	Chloride	SM4500CI-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG520922	Cyanide, WAD	SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521258	Iron, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG521423	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG520460	Residue, Non-Filterable (TSS) @105C	SM2540D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			SM2540D	Z3	Sample volume yielded a residue less than 2.5 mg
	WG521486	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG520620	Total Alkalinity	SM2320B - Titration	ZW	Method deviation. The sample was centrifuged prior to analysis due to high solid content.
	WG521349	Total Hot Plate Digestion	M200.2 ICP	DJ	Sample dilution required due to insufficient sample.

Ensero SolutionsACZ Project ID: **L66280**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L66280-05	WG520984	Chloride	SM4500CI-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG520922	Cyanide, WAD	SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521258	Iron, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG521423	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG520460	Residue, Non-Filterable (TSS) @105C	SM2540D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			SM2540D	Z3	Sample volume yielded a residue less than 2.5 mg
	WG521486	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG521549	Uranium, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L66280-06	WG521324	Uranium, total	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG520984	Chloride	SM4500CI-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG520922	Cyanide, WAD	SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521206	Iron, dissolved	M200.7 ICP	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG521423	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG520460	Residue, Non-Filterable (TSS) @105C	SM2540D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			SM2540D	Z3	Sample volume yielded a residue less than 2.5 mg
	WG521486	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG521549	Uranium, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG521324	Uranium, total	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.

Ensero Solutions

ACZ Project ID: **L66280**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L66280-07	WG520620	Bicarbonate as CaCO ₃	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO ₃	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG520984	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500Cl-E	Q6	Sample was received above recommended temperature.
	WG520922	Cyanide, WAD	SM4500-CN I,E-Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521180	Fluoride	SM4500F-C	Q6	Sample was received above recommended temperature.
	WG520620	Hydroxide as CaCO ₃	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG521206	Iron, dissolved	M200.7 ICP	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG521426	Nitrate/Nitrite as N	M353.2 - H ₂ SO ₄ preserved	Q6	Sample was received above recommended temperature.
	WG521423	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG520618	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG520460	Residue, Non-Filterable (TSS) @105C	SM2540D	Q6	Sample was received above recommended temperature.
			SM2540D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			SM2540D	Z3	Sample volume yielded a residue less than 2.5 mg
	WG522310	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
	WG520620	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG521549	Uranium, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG521324	Uranium, total	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.

Ensero SolutionsACZ Project ID: **L66280**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L66280-08	WG520984	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG520922	Cyanide, WAD	SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521206	Iron, dissolved	M200.7 ICP	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG521423	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG520460	Residue, Non-Filterable (TSS) @105C	SM2540D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			SM2540D	Z3	Sample volume yielded a residue less than 2.5 mg
	WG521486	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG521549	Uranium, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG521324	Uranium, total	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.

Ensero Solutions

Project ID: 3100-PO205

Sample ID: MW-12

Locator:

ACZ Sample ID: **L66280-01**

Date Sampled: 06/01/21 10:35

Date Received: 06/03/21

Sample Matrix: Surface Water

Combined Radium (total)

Prep Method:

Calculation (RA226 + RA228)

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	07/12/21 12:24		0.53			pCi/L		calc

Gross Alpha & Beta, total

Prep Method:

M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	06/16/21 0:27		120	11	17	pCi/L	*	cer
Gross Beta	06/16/21 0:27		40	4.5	19	pCi/L		cer

Radium 226, dissolved

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	06/28/21 0:04		0.46	0.12	0.1	pCi/L	*	djc

Radium 226, total

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	06/28/21 0:02		0.53	0.13	0.08	pCi/L	*	djc

Radium 228, total

Prep Method:

M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, total	07/06/21 13:20		0.34	0.88	2.3	pCi/L	*	fdw

Ensero Solutions

Project ID: 3100-PO205

Sample ID: MW-07

Locator:

ACZ Sample ID: **L66280-02**

Date Sampled: 06/01/21 11:33

Date Received: 06/03/21

Sample Matrix: Surface Water

Combined Radium (total)

Prep Method:

Calculation (RA226 + RA228)

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	07/12/21 12:24		0.25			pCi/L		calc

Gross Alpha & Beta, total

Prep Method:

M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	06/16/21 0:28		540	27	12	pCi/L	*	cer
Gross Beta	06/16/21 0:28		200	8.8	7.1	pCi/L		cer

Radium 226, dissolved

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	06/28/21 0:07		0.51	0.13	0.12	pCi/L	*	djc

Radium 226, total

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	06/28/21 0:05		0.25	0.12	0.13	pCi/L	*	djc

Radium 228, total

Prep Method:

M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, total	07/06/21 13:21		0.17	0.73	1.8	pCi/L	*	fdw

Ensero Solutions

Project ID: 3100-PO205

Sample ID: MW-06

Locator:

ACZ Sample ID: **L66280-03**

Date Sampled: 06/01/21 12:29

Date Received: 06/03/21

Sample Matrix: Surface Water

Combined Radium (total)

Prep Method:

Calculation (RA226 + RA228)

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	07/12/21 12:24		1.00			pCi/L		calc

Gross Alpha & Beta, total

Prep Method:

M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	06/16/21 0:30		540	26	8	pCi/L	*	cer
Gross Beta	06/16/21 0:30		150	7.7	5.3	pCi/L		cer

Radium 226, dissolved

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	06/28/21 0:10		0.85	0.13	0.02	pCi/L	*	djc

Radium 226, total

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	06/28/21 0:08		1	0.2	0.19	pCi/L	*	djc

Radium 228, total

Prep Method:

M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, total	07/06/21 13:21		0.68	0.83	2	pCi/L	*	fdw

Ensero Solutions

Project ID: 3100-PO205

Sample ID: RAW FEED

Locator:

ACZ Sample ID: **L66280-04**

Date Sampled: 06/01/21 14:10

Date Received: 06/03/21

Sample Matrix: Surface Water

Combined Radium (total)

Prep Method:

Calculation (RA226 + RA228)

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	07/12/21 12:24		150			pCi/L		calc

Gross Alpha & Beta, total

Prep Method:

M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	06/16/21 0:33		12000	270	63	pCi/L	*	cer
Gross Beta	06/16/21 0:33		4700	87	52	pCi/L		cer

Radium 226, dissolved

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	06/28/21 0:12		140	1.4	0.08	pCi/L	*	djc

Radium 226, total

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	06/28/21 0:11		150	1.5	0.1	pCi/L	*	djc

Radium 228, total

Prep Method:

M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, total	07/06/21 13:21		1	0.84	1.9	pCi/L	*	fdw

Ensero Solutions

Project ID: 3100-PO205

Sample ID: SUMPS

Locator:

ACZ Sample ID: **L66280-05**

Date Sampled: 06/01/21 15:30

Date Received: 06/03/21

Sample Matrix: Surface Water

Combined Radium (total)

Prep Method:

Calculation (RA226 + RA228)

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	07/12/21 12:24		6.4			pCi/L		calc

Gross Alpha & Beta, total

Prep Method:

M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	06/16/21 0:36		530	27	8.9	pCi/L	*	cer
Gross Beta	06/16/21 0:36		200	8.8	7	pCi/L		cer

Radium 226, dissolved

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	06/28/21 0:15		0.15	0.09	0.06	pCi/L	*	djc

Radium 226, total

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	06/28/21 0:14		6.4	0.38	0.12	pCi/L	*	djc

Radium 228, total

Prep Method:

M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, total	07/06/21 13:21		1.1	0.9	2.2	pCi/L	*	fdw

Ensero Solutions

Project ID: 3100-PO205

Sample ID: MW-19

Locator:

ACZ Sample ID: **L66280-06**

Date Sampled: 06/01/21 16:40

Date Received: 06/03/21

Sample Matrix: Surface Water

Combined Radium (total)

Prep Method:

Calculation (RA226 + RA228)

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	07/12/21 12:24		1.2			pCi/L		calc

Gross Alpha & Beta, total

Prep Method:

M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	06/29/21 0:17		240	17	7.6	pCi/L	*	ess/amk
Gross Beta	06/29/21 0:17		110	6.8	5.3	pCi/L		ess/amk

Radium 226, dissolved

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	06/28/21 0:18		1	0.13	0.08	pCi/L		djc

Radium 226, total

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	06/28/21 0:17		1.2	0.17	0.1	pCi/L	*	djc

Radium 228, total

Prep Method:

M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, total	07/06/21 13:21		0.45	0.87	2.1	pCi/L	*	fdw

Ensero Solutions

Project ID: 3100-PO205

Sample ID: MW-0

Locator:

ACZ Sample ID: **L66280-07**

Date Sampled: 06/02/21 9:50

Date Received: 06/04/21

Sample Matrix: Surface Water

Combined Radium (total)

Prep Method:

Calculation (RA226 + RA228)

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	07/12/21 12:24		0.13			pCi/L		calc

Gross Alpha & Beta, total

Prep Method:

M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	06/29/21 0:18		130	12	6.1	pCi/L	*	ess/amk
Gross Beta	06/29/21 0:18		55	5.2	9.1	pCi/L		ess/amk

Radium 226, dissolved

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	07/07/21 0:05		0.14	0.14	0.19	pCi/L	*	djc

Radium 226, total

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	07/07/21 0:04		0.13	0.11	0.12	pCi/L	*	djc

Radium 228, total

Prep Method:

M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, total	07/06/21 13:21		1.3	0.97	2.3	pCi/L	*	fdw

Ensero Solutions

Project ID: 3100-PO205

Sample ID: MW-00

Locator:

ACZ Sample ID: **L66280-08**

Date Sampled: 06/02/21 11:09

Date Received: 06/03/21

Sample Matrix: Surface Water

Combined Radium (total)

Prep Method:

Calculation (RA226 + RA228)

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	07/12/21 12:24		0			pCi/L		calc

Gross Alpha & Beta, total

Prep Method:

M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	06/29/21 0:20		11	3.8	12	pCi/L	*	ess/amk
Gross Beta	06/29/21 0:20		9.3	3.1	12	pCi/L		ess/amk

Radium 226, dissolved

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	07/07/21 0:08		0.19	0.14	0.17	pCi/L	*	djc

Radium 226, total

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	07/07/21 0:07		0.14	0.12	0.19	pCi/L	*	djc

Radium 228, total

Prep Method:

M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, total	07/06/21 13:21		0.43	0.8	2	pCi/L	*	fdw

Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Error(+/-)</i>	Calculated sample specific uncertainty
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>LCL</i>	Lower Control Limit, in % (except for LCSS, mg/Kg)
<i>LLD</i>	Calculated sample specific Lower Limit of Detection
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
<i>RER</i>	Relative Error Ratio, calculation used for Dup. QC taking into account the error factor.
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>UCL</i>	Upper Control Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

QC Sample Types

<i>DUP</i>	Sample Duplicate	<i>MS/MSD</i>	Matrix Spike/Matrix Spike Duplicate
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBS</i>	Prep Blank - Soil
<i>LCSW</i>	Laboratory Control Sample - Water	<i>PBW</i>	Prep Blank - Water

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Matrix Spikes	Determines sample matrix interferences, if any.

ACZ Qualifiers (Qual)

H	Analysis exceeded method hold time.
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Method Prefix Reference

M	EPA methodology, including those under SDWA, CWA, and RCRA
SM	Standard Methods for the Examination of Water and Wastewater.
D	ASTM
RP	DOE
ESM	DOE/ESM

Comments

- (1) Solid matrices are reported on a dry weight basis.
- (2) Preparation method: "Method" indicates preparation defined in analytical method.
- (3) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.

For a complete list of ACZ's Extended Qualifiers, please click:

<https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf>

Ensero Solutions

ACZ Project ID: **L66280**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alpha

M900.0

Units: pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG520786																
WG520786PBW	PBW	06/16/21						.61	0.91	11			22			
WG520786LCSWA	LCSW	06/16/21	PCN62436	100				120	9.4	12	120	67	144			
L66173-02DUP	DUP-RER	06/16/21			0.91	1.6	8	4.2	2.5	6.9				1.11	2	
L66173-02DUP	DUP-RPD	06/16/21			0.91	1.6	8	4.2	2.5	6.9				129	20	RG
L66280-03MSA	MS	06/16/21	PCN62436	100	540	26	8	640	29	7.1	100	67	144			
L66280-05DUP	DUP-RPD	06/16/21			530	27	8.9	660	30	8.3				22	20	RM
WG521507																
WG521507PBW	PBW	06/29/21						.96	0.81	0.75			1.5			
WG521507LCSWA	LCSW	06/29/21	PCN62436	100				120	9.3	1.3	120	67	144			
L66163-01DUP	DUP-RER	06/29/21			2	1.4	1.3	3.3	1.7	1.2				0.59	2	
L66163-01DUP	DUP-RPD	06/29/21			2	1.4	1.3	3.3	1.7	1.2				49	20	RG
L66163-01MSA	MS	06/29/21	PCN62436	66.67	2	1.4	1.3	72	6.9	1.1	105	67	144			
L66423-01DUP	DUP-RPD	06/29/21			2.9	1.9	1.6	1.2	1.5	1.5				83	20	RG
L66423-01DUP	DUP-RER	06/29/21			2.9	1.9	1.6	1.2	1.5	1.5				0.7	2	

Ensero Solutions

ACZ Project ID: **L66280**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Beta

M900.0

Units: pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG520786																
WG520786PBW	PBW	06/16/21						-.26	2.5	17			34			
WG520786LCSWB	LCSW	06/16/21	RC200602-10	99.9				99	6.2	6.7	99	82	122			
L66173-02DUP	DUP-RPD	06/16/21			7.8	3	5.3	5.5	3.2	9.2				35	20	RG
L66173-02DUP	DUP-RER	06/16/21			7.8	3	5.3	5.5	3.2	9.2				0.52	2	
L66280-04MSB	MS	06/16/21	RC200602-10	434.35	4700	87	52	5100	91	41	92	82	122			
L66280-05DUP	DUP-RPD	06/16/21			200	8.8	7	220	9.4	8.6				10	20	
WG521507																
WG521507PBW	PBW	06/29/21						.16	1.7	1.8			3.6			
WG521507LCSWB	LCSW	06/29/21	RC210621-11	49.9				42	4.4	2.5	84	82	122			
L66163-01DUP	DUP-RPD	06/29/21			4.5	2.1	2	4.2	1.9	1.8				7	20	
L66284-03MSB	MS	06/29/21	RC210621-11	49.9	3.6	2.9	8.2	50	4.9	17	93	82	122			
L66423-01DUP	DUP-RPD	06/29/21			2.7	1.9	1.8	1.1	1.8	1.9				84	20	RG
L66423-01DUP	DUP-RER	06/29/21			2.7	1.9	1.8	1.1	1.8	1.9				0.61	2	

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ACZ Project ID: **L66280**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Radium 226, total

M903.1

Units: pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG521566																
WG521566PBW	PBW	06/28/21						.13	0.1	0.1			0.2			
WG521566LCSW	LCSW	06/28/21	PCN62879	20				18	0.53	0.09	90	43	148			
L66424-01DUP1	DUP-RER	06/28/21			0.06	0.06	0.06	0	0.05	0.06				0.76	2	
L66424-01DUP1	DUP-RPD	06/28/21			0.06	0.06	0.06	0	0.05	0.06				200	20	RG
L66434-01DUP2	DUP-RPD	06/28/21			14	0.44	0.08	16	0.48	0.09				13	20	
L66434-02MS	MS	06/28/21	PCN62879	20	17	0.5	0.1	36	0.75	0.11	95	43	148			
WG522251																
WG522251PBW	PBW	07/07/21						-.08	0.14	0.16			0.32			
WG522251LCSW	LCSW	07/07/21	PCN62879	20				19	0.67	0.16	95	43	148			
L66481-01DUP1	DUP-RER	07/07/21			-0.04	0.13	0.15	-.07	0.29	0.44				0.09	2	
L66481-01DUP1	DUP-RPD	07/07/21			-0.04	0.13	0.15	-.07	0.29	0.44				55	20	RG
L66481-02DUP2	DUP-RER	07/07/21			0.12	0.09	0.14	.05	0.13	0.65				0.44	2	
L66481-02DUP2	DUP-RPD	07/07/21			0.12	0.09	0.14	.05	0.13	0.65				82	20	RG
L66482-01MS	MS	07/07/21	PCN62879	40	0.16	0.1	0.24	37	1.2	0.54	92	43	148			

Radium 228, total

M904.0

Units: pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG521520																
L66280-01DUP	DUP-RPD	07/06/21			0.34	0.88	2.3	-.44	0.86	2.2				1560	20	RG
WG521520PBW	PBW	07/06/21						.73	0.49	0.48			0.96			
WG521520LCSW	LCSW	07/06/21	PCN63356	9.68				8.7	1	0.71	90	47	123			
L66280-01DUP	DUP-RER	07/06/21			0.34	0.88	2.3	-.44	0.86	2.2				0.63	2	
L66538-01DUP	DUP-RER	07/06/21			-0.15	0.73	1.8	1.6	0.72	1.6				1.71	2	
L66538-01DUP	DUP-RPD	07/06/21			-0.15	0.73	1.8	1.6	0.72	1.6				241	20	RG
L66284-03MS	MS	07/06/21	PCN63356	9.68	1.3	0.9	2.1	9.6	1.1	1.9	86	47	123			

Ensero Solutions

ACZ Project ID: **L66280**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L66280-01	WG520786	Gross Alpha	M900.0	RM	For a water matrix, the duplicate precision assessment (RPD or RER) exceeded the control limit. High sediment, turbidity, or presence of an immiscible liquid attributed to non-homogeneity of the sample.
	WG521566	Radium 226, dissolved	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Radium 226, total	M903.1	DJ	Sample dilution required due to insufficient sample.
			M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG521520	Radium 228, total	M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L66280-02	WG520786	Gross Alpha	M900.0	RM	For a water matrix, the duplicate precision assessment (RPD or RER) exceeded the control limit. High sediment, turbidity, or presence of an immiscible liquid attributed to non-homogeneity of the sample.
	WG521566	Radium 226, dissolved	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Radium 226, total	M903.1	DJ	Sample dilution required due to insufficient sample.
			M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG521520	Radium 228, total	M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L66280-03	WG520786	Gross Alpha	M900.0	RM	For a water matrix, the duplicate precision assessment (RPD or RER) exceeded the control limit. High sediment, turbidity, or presence of an immiscible liquid attributed to non-homogeneity of the sample.
	WG521566	Radium 226, dissolved	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Radium 226, total	M903.1	DJ	Sample dilution required due to insufficient sample.
			M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG521520	Radium 228, total	M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L66280-04	WG520786	Gross Alpha	M900.0	RM	For a water matrix, the duplicate precision assessment (RPD or RER) exceeded the control limit. High sediment, turbidity, or presence of an immiscible liquid attributed to non-homogeneity of the sample.
	WG521566	Radium 226, dissolved	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Radium 226, total	M903.1	DJ	Sample dilution required due to insufficient sample.
			M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG521520	Radium 228, total	M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.

Ensero Solutions

ACZ Project ID: **L66280**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L66280-05	WG520786	Gross Alpha	M900.0	RM	For a water matrix, the duplicate precision assessment (RPD or RER) exceeded the control limit. High sediment, turbidity, or presence of an immiscible liquid attributed to non-homogeneity of the sample.
	WG521566	Radium 226, dissolved	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Radium 226, total	M903.1	DJ	Sample dilution required due to insufficient sample.
			M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG521520	Radium 228, total	M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L66280-06	WG521507	Gross Alpha	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG521566	Radium 226, total	M903.1	DJ	Sample dilution required due to insufficient sample.
	WG521520	Radium 228, total	M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L66280-07	WG521507	Gross Alpha	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG522251	Radium 226, dissolved	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Radium 226, total	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG521520	Radium 228, total	M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L66280-08	WG521507	Gross Alpha	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG522251	Radium 226, dissolved	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Radium 226, total	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG521520	Radium 228, total	M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.

Ensero Solutions

ACZ Project ID: **L66280**

No certification qualifiers associated with this analysis

Ensero Solutions
3100-PO205

ACZ Project ID: L66280
Date Received: 06/03/2021 11:09
Received By:
Date Printed: 6/7/2021

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?	☐	☐	☒
2) Is the Chain of Custody form or other directive shipping papers present?	☒	☐	☐
3) Does this project require special handling procedures such as CLP protocol?	☐	☒	☐
4) Are any samples NRC licensable material?	☐	☐	☒
5) If samples are received past hold time, proceed with requested short hold time analyses?	☒	☐	☐
6) Is the Chain of Custody form complete and accurate?	☒	☐	☐
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?	☐	☒	☐

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	☒	☐	☐
9) Are all labels on containers and are they intact and legible?	☒	☐	☐
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	☒	☐	☐
11) For preserved bottle types, was the pH checked and within limits? ¹	☒	☐	☐
12) Is there sufficient sample volume to perform all requested work?	☒	☐	☐
13) Is the custody seal intact on all containers?	☐	☐	☒
14) Are samples that require zero headspace acceptable?	☐	☐	☒
15) Are all sample containers appropriate for analytical requirements?	☒	☐	☐
16) Is there an Hg-1631 trip blank present?	☐	☐	☒
17) Is there a VOA trip blank present?	☐	☐	☒
18) Were all samples received within hold time?	☒	☐	☐

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp (°C)	Temp Criteria (°C)	Rad (µR/Hr)	Custody Seal Intact?
-----	-----	-----	-----	-----
6774	1.5	<=6.0	15	N/A
6683	5.3	<=6.0	15	N/A
4812	1.4	<=6.0	15	N/A
5313	6.3	<=6.0	15	N/A
6727	5.2	<=6.0	15	N/A

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Ensero Solutions
3100-PO205

ACZ Project ID: L66280

Date Received: 06/03/2021 11:09

Received By:

Date Printed: 6/7/2021

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

¹ The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na₂S₂O₃ preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

**Laboratories, Inc.**

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

CHAIN of CUSTODY

Report to:

Name: Christie Brizinski

Company: Ensero Solutions

E-mail: cbrizinski@ensero.com

Address: 131 E. Lincoln Ave Ste. 200

Fort Collins, CO 80524

Telephone: 867-668-6463, ext 229

Copy of Report to:

Name: Evan Valencia

Company: Ensero Solutions

E-mail: evalencia@ensero.com

Telephone: 818-688-1839

Invoice to:

Name: Pauline Wong

Company: Ensero Solutions

E-mail: ap@ensero.com

Address: 131 E. Lincoln Ave Ste. 200

Fort Collins, CO 80524

Telephone: 778-404-1182

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses?

YES

NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

Are samples for SDWA Compliance Monitoring?

Yes

No

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: EV

Sampler's Site Information

State CO

Zip code 80401

Time Zone MTN

*Sampler's Signature:

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

ANALYSES REQUESTED: attach list or use quote number.

Quote #: Ensero-2020

PO#: 3100-PO205

Reporting state for compliance testing: CO

Check box if samples include NRC licensed material?

☐

SAMPLE IDENTIFICATION			DATE:TIME	Matrix	# of Containers	TSS	Sample suite #1	Sample suite #2	COD	LLHG trip blank	Sample suite #3	TDS	
MW-12	6-1-2021: 10:35	GW			9	☐	☐	☐	☐	☐	☒	☐	☐
MW-07	6-1-2021: 11:33	GW			9	☐	☐	☐	☐	☐	☒	☐	☐
MW-06	6-1-2021: 12:29	GW			9	☐	☐	☐	☐	☐	☒	☐	☐
Raw Feed	6-1-2021: 14:10	GW			9	☐	☐	☐	☐	☐	☒	☐	☐
Sumps	6-1-2021: 15:30	GW			9	☐	☐	☐	☐	☐	☒	☐	☐
MW-19	6-1-2021: 16:14	GW			9	☐	☐	☐	☐	☐	☒	☐	☐
MW-0	6-2-2021: 9:50	GW			9	☐	☐	☐	☐	☐	☒	☐	☐
MW-00	6-2-2021: 11:09	GW			9	☐	☐	☐	☐	☐	☒	☐	☐
						☐	☐	☐	☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐	☐	☐	☐

Matrix SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

72 containers accounted for by this COC. Cooler 1 of 5.

Please also send reports to importer@alexco.ehsdata.com

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:

DATE:TIME

RECEIVED BY:

DATE:TIME

Evan Valencia	6/2/21 15:30		6/4/21 12:00

FRMAD050.06.14.14

White - Return with sample. Yellow - Retain for your records.

August 18, 2021

Report to:

Christie Brizinski
Ensero Solutions
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cc: Ensero/Alexco Importer, Evan Valencia

Project ID: 3100-PO205

ACZ Project ID: L66558

Christie Brizinski:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on June 17, 2021. This project has been assigned to ACZ's project number, L66558. Please reference this number in all future inquiries.

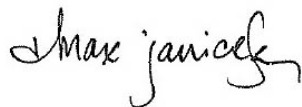
All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L66558. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after September 17, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically \$11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.



Max Janicek has reviewed and
approved this report.



Ensero Solutions

Project ID: 3100-PO205
Sample ID: SW-BPL

ACZ Sample ID: **L66558-01**
Date Sampled: 06/15/21 09:30
Date Received: 06/17/21
Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD	SM4500-CN I- distillation		-						06/22/21 14:46	syw
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								06/29/21 11:16	emh
Total Hot Plate Digestion	M200.2 ICP-MS								07/01/21 8:10	mfm
Total Hot Plate Digestion	M200.2 ICP								06/30/21 16:44	jlw

Ensero Solutions

Project ID: 3100-PO205

Sample ID: SW-BPL

ACZ Sample ID: **L66558-01**

Date Sampled: 06/15/21 09:30

Date Received: 06/17/21

Sample Matrix: Surface Water

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/30/21 16:32	kja
Aluminum, total	M200.7 ICP	1	0.104	B		mg/L	0.05	0.25	07/04/21 15:38	kja
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	07/08/21 16:01	mfm
Antimony, total	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	07/02/21 17:34	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00021	B		mg/L	0.0002	0.001	07/08/21 16:01	mfm
Arsenic, total	M200.8 ICP-MS	1	0.00024	B		mg/L	0.0002	0.001	07/02/21 17:34	mfm
Boron, dissolved	M200.7 ICP	1	0.036	B		mg/L	0.03	0.1	06/30/21 16:32	kja
Boron, total	M200.7 ICP	1	0.032	B		mg/L	0.03	0.1	07/04/21 15:38	kja
Calcium, dissolved	M200.7 ICP	1	26.2			mg/L	0.1	0.5	06/30/21 16:32	kja
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/30/21 16:32	kja
Chromium, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	07/04/21 15:38	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/30/21 16:32	kja
Copper, total	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	07/04/21 15:38	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	06/30/21 16:32	kja
Iron, total	M200.7 ICP	1	0.169			mg/L	0.06	0.15	07/04/21 15:38	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/08/21 16:01	mfm
Lead, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/02/21 17:34	mfm
Magnesium, dissolved	M200.7 ICP	1	7.43			mg/L	0.2	1	06/30/21 16:32	kja
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/30/21 16:32	kja
Manganese, total	M200.7 ICP	1	0.022	B		mg/L	0.01	0.05	07/04/21 15:38	kja
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	07/02/21 13:21	mlh
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	07/02/21 13:55	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00098			mg/L	0.0002	0.0005	07/08/21 16:01	mfm
Molybdenum, total	M200.8 ICP-MS	1	0.00096			mg/L	0.0002	0.0005	07/02/21 17:34	mfm
Potassium, dissolved	M200.7 ICP	1	1.71			mg/L	0.2	1	06/30/21 16:32	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00010	B		mg/L	0.0001	0.00025	07/08/21 16:01	mfm
Selenium, total	M200.8 ICP-MS	1	0.00013	B		mg/L	0.0001	0.00025	07/02/21 17:34	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/08/21 16:01	mfm
Silver, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/02/21 17:34	mfm
Sodium, dissolved	M200.7 ICP	1	16.1			mg/L	0.2	1	06/30/21 16:32	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/08/21 16:01	mfm
Thallium, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/02/21 17:34	mfm
Uranium, dissolved	M200.8 ICP-MS	1	0.0101			mg/L	0.0001	0.0005	07/08/21 16:01	mfm
Uranium, total	M200.8 ICP-MS	1	0.0107			mg/L	0.0001	0.0005	07/02/21 17:34	mfm
Zinc, dissolved	M200.7 ICP	1	0.021	B		mg/L	0.02	0.05	06/30/21 16:32	kja
Zinc, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	07/04/21 15:38	kja

Ensero Solutions

Project ID: 3100-PO205
Sample ID: SW-BPL

ACZ Sample ID: **L66558-01**
Date Sampled: 06/15/21 09:30
Date Received: 06/17/21
Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	55.2		*	mg/L	2	20	06/23/21 0:00	emk
Carbonate as CaCO ₃		1	<2	U	*	mg/L	2	20	06/23/21 0:00	emk
Hydroxide as CaCO ₃		1	<2	U	*	mg/L	2	20	06/23/21 0:00	emk
Total Alkalinity		1	55.2		*	mg/L	2	20	06/23/21 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-1.8			%			08/18/21 0:00	calc
Sum of Anions			2.8			meq/L			08/18/21 0:00	calc
Sum of Cations			2.7			meq/L			08/18/21 0:00	calc
Chloride	SM4500Cl-E	1	48.4		*	mg/L	0.5	2	06/29/21 13:34	wtc
Cyanide, WAD	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	06/23/21 14:44	md
Fluoride	SM4500F-C	1	0.27	B	*	mg/L	0.15	0.35	07/01/21 12:12	eep
Nitrate/Nitrite as N	M353.2 - H ₂ SO ₄ preserved	1	0.047	B	*	mg/L	0.02	0.1	07/03/21 2:53	pjb
Phosphate, total	Calculation based on total Phosphorus		<0.03	U		mg/L	0.03	0.2	08/18/21 0:00	calc
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	06/30/21 0:30	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	206		*	mg/L	20	40	06/21/21 14:31	jck
Residue, Non-Filterable (TSS) @105C	SM2540D	1	<5	UH	*	mg/L	5	20	06/23/21 14:11	eep
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	15.0		*	mg/L	1	5	07/09/21 11:27	wtc
TDS (calculated)	Calculation		149			mg/L			08/18/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.38						08/18/21 0:00	calc

Ensero Solutions

Project ID: 3100-PO205

Sample ID: SW-NWRP

ACZ Sample ID: **L66558-02**

Date Sampled: 06/15/21 10:40

Date Received: 06/17/21

Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD	SM4500-CN I- distillation		-						06/22/21 14:56	syw
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								06/29/21 11:33	emh
Total Hot Plate Digestion	M200.2 ICP-MS								07/01/21 8:10	mfm
Total Hot Plate Digestion	M200.2 ICP								06/30/21 16:58	jlw

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Project ID: 3100-PO205

Sample ID: SW-NWRP

ACZ Sample ID: **L66558-02**

Date Sampled: 06/15/21 10:40

Date Received: 06/17/21

Sample Matrix: Surface Water

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/30/21 16:35	kja
Aluminum, total	M200.7 ICP	1	0.104	B		mg/L	0.05	0.25	07/04/21 15:41	kja
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	07/08/21 16:02	mfm
Antimony, total	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	07/02/21 17:36	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	<0.0002	U		mg/L	0.0002	0.001	07/08/21 16:02	mfm
Arsenic, total	M200.8 ICP-MS	1	<0.0002	U		mg/L	0.0002	0.001	07/02/21 17:36	mfm
Boron, dissolved	M200.7 ICP	1	<0.03	U		mg/L	0.03	0.1	06/30/21 16:35	kja
Boron, total	M200.7 ICP	1	<0.03	U		mg/L	0.03	0.1	07/04/21 15:41	kja
Calcium, dissolved	M200.7 ICP	1	27.5			mg/L	0.1	0.5	06/30/21 16:35	kja
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/30/21 16:35	kja
Chromium, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	07/04/21 15:41	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/30/21 16:35	kja
Copper, total	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	07/04/21 15:41	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	06/30/21 16:35	kja
Iron, total	M200.7 ICP	1	0.175			mg/L	0.06	0.15	07/04/21 15:41	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/08/21 16:02	mfm
Lead, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/02/21 17:36	mfm
Magnesium, dissolved	M200.7 ICP	1	7.67			mg/L	0.2	1	06/30/21 16:35	kja
Manganese, dissolved	M200.7 ICP	1	0.019	B		mg/L	0.01	0.05	06/30/21 16:35	kja
Manganese, total	M200.7 ICP	1	0.022	B		mg/L	0.01	0.05	07/04/21 15:41	kja
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	07/02/21 13:24	mlh
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	07/02/21 13:58	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00066			mg/L	0.0002	0.0005	07/08/21 16:02	mfm
Molybdenum, total	M200.8 ICP-MS	1	0.00068			mg/L	0.0002	0.0005	07/02/21 17:36	mfm
Potassium, dissolved	M200.7 ICP	1	1.83			mg/L	0.2	1	06/30/21 16:35	kja
Selenium, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.00025	07/08/21 16:02	mfm
Selenium, total	M200.8 ICP-MS	1	0.00012	B		mg/L	0.0001	0.00025	07/02/21 17:36	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/08/21 16:02	mfm
Silver, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/02/21 17:36	mfm
Sodium, dissolved	M200.7 ICP	1	15.2			mg/L	0.2	1	06/30/21 16:35	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/08/21 16:02	mfm
Thallium, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/02/21 17:36	mfm
Uranium, dissolved	M200.8 ICP-MS	1	0.00219			mg/L	0.0001	0.0005	07/08/21 16:02	mfm
Uranium, total	M200.8 ICP-MS	1	0.00251			mg/L	0.0001	0.0005	07/02/21 17:36	mfm
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/30/21 16:35	kja
Zinc, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	07/04/21 15:41	kja

Ensero Solutions

Project ID: 3100-PO205
 Sample ID: SW-NWRP

ACZ Sample ID: **L66558-02**
 Date Sampled: 06/15/21 10:40
 Date Received: 06/17/21
 Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	50.5		*	mg/L	2	20	06/24/21 0:00	emk
Carbonate as CaCO ₃		1	<2	U	*	mg/L	2	20	06/24/21 0:00	emk
Hydroxide as CaCO ₃		1	<2	U	*	mg/L	2	20	06/24/21 0:00	emk
Total Alkalinity		1	50.5		*	mg/L	2	20	06/24/21 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			08/18/21 0:00	calc
Sum of Anions			2.7			meq/L			08/18/21 0:00	calc
Sum of Cations			2.7			meq/L			08/18/21 0:00	calc
Chloride	SM4500Cl-E	1	51.5		*	mg/L	0.5	2	06/29/21 13:34	wtc
Cyanide, WAD	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	06/23/21 14:45	md
Fluoride	SM4500F-C	1	0.31	B	*	mg/L	0.15	0.35	07/01/21 12:20	eep
Nitrate/Nitrite as N	M353.2 - H ₂ SO ₄ preserved	1	0.062	B	*	mg/L	0.02	0.1	07/03/21 2:56	pjb
Phosphate, total	Calculation based on total Phosphorus		<0.03	U		mg/L	0.03	0.2	08/18/21 0:00	calc
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	06/30/21 0:32	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	220		*	mg/L	20	40	06/21/21 14:34	jck
Residue, Non-Filterable (TSS) @105C	SM2540D	1	<5	UH	*	mg/L	5	20	06/23/21 14:13	eep
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	13.0		*	mg/L	1	5	07/09/21 11:28	wtc
TDS (calculated)	Calculation		148			mg/L			08/18/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.49						08/18/21 0:00	calc

Ensero Solutions

Project ID: 3100-PO205
Sample ID: SW-AWD

ACZ Sample ID: **L66558-03**
Date Sampled: 06/15/21 11:10
Date Received: 06/17/21
Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, WAD	SM4500-CN I- distillation		-						06/22/21 15:06	syw
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								06/29/21 11:50	emh
Total Hot Plate Digestion	M200.2 ICP-MS								07/01/21 8:10	mfm
Total Hot Plate Digestion	M200.2 ICP								06/30/21 17:12	jlw

Ensero Solutions

Project ID: 3100-PO205

Sample ID: SW-AWD

ACZ Sample ID: **L66558-03**

Date Sampled: 06/15/21 11:10

Date Received: 06/17/21

Sample Matrix: Surface Water

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	06/30/21 16:38	kja
Aluminum, total	M200.7 ICP	1	0.107	B		mg/L	0.05	0.25	07/04/21 15:44	kja
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	07/08/21 16:04	mfm
Antimony, total	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	07/02/21 17:41	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	<0.0002	U		mg/L	0.0002	0.001	07/08/21 16:04	mfm
Arsenic, total	M200.8 ICP-MS	1	0.00041	B		mg/L	0.0002	0.001	07/02/21 17:41	mfm
Boron, dissolved	M200.7 ICP	1	<0.03	U		mg/L	0.03	0.1	06/30/21 16:38	kja
Boron, total	M200.7 ICP	1	<0.03	U		mg/L	0.03	0.1	07/04/21 15:44	kja
Calcium, dissolved	M200.7 ICP	1	27.2			mg/L	0.1	0.5	06/30/21 16:38	kja
Chromium, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/30/21 16:38	kja
Chromium, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	07/04/21 15:44	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/30/21 16:38	kja
Copper, total	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	07/04/21 15:44	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	06/30/21 16:38	kja
Iron, total	M200.7 ICP	1	0.170			mg/L	0.06	0.15	07/04/21 15:44	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/08/21 16:04	mfm
Lead, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/02/21 17:41	mfm
Magnesium, dissolved	M200.7 ICP	1	7.46			mg/L	0.2	1	06/30/21 16:38	kja
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	06/30/21 16:38	kja
Manganese, total	M200.7 ICP	1	0.017	B		mg/L	0.01	0.05	07/04/21 15:44	kja
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	07/02/21 13:25	mlh
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	07/02/21 13:59	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00048	B		mg/L	0.0002	0.0005	07/08/21 16:04	mfm
Molybdenum, total	M200.8 ICP-MS	1	0.00051			mg/L	0.0002	0.0005	07/02/21 17:41	mfm
Potassium, dissolved	M200.7 ICP	1	1.76			mg/L	0.2	1	06/30/21 16:38	kja
Selenium, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.00025	07/08/21 16:04	mfm
Selenium, total	M200.8 ICP-MS	1	0.00013	B		mg/L	0.0001	0.00025	07/02/21 17:41	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/08/21 16:04	mfm
Silver, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/02/21 17:41	mfm
Sodium, dissolved	M200.7 ICP	1	15.3			mg/L	0.2	1	06/30/21 16:38	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/08/21 16:04	mfm
Thallium, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/02/21 17:41	mfm
Uranium, dissolved	M200.8 ICP-MS	1	0.00090			mg/L	0.0001	0.0005	07/08/21 16:04	mfm
Uranium, total	M200.8 ICP-MS	1	0.00100			mg/L	0.0001	0.0005	07/02/21 17:41	mfm
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	06/30/21 16:38	kja
Zinc, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	07/04/21 15:44	kja

Ensero Solutions

Project ID: 3100-PO205

Sample ID: SW-AWD

ACZ Sample ID: **L66558-03**

Date Sampled: 06/15/21 11:10

Date Received: 06/17/21

Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	48.5		*	mg/L	2	20	06/24/21 0:00	emk
Carbonate as CaCO ₃		1	<2	U	*	mg/L	2	20	06/24/21 0:00	emk
Hydroxide as CaCO ₃		1	<2	U	*	mg/L	2	20	06/24/21 0:00	emk
Total Alkalinity		1	48.5		*	mg/L	2	20	06/24/21 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			08/18/21 0:00	calc
Sum of Anions			2.7			meq/L			08/18/21 0:00	calc
Sum of Cations			2.7			meq/L			08/18/21 0:00	calc
Chloride	SM4500Cl-E	1	52.3		*	mg/L	0.5	2	06/29/21 13:34	wtc
Cyanide, WAD	SM4500-CN I,E- Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	06/23/21 14:47	md
Fluoride	SM4500F-C	1	0.31	B	*	mg/L	0.15	0.35	07/01/21 12:27	eep
Nitrate/Nitrite as N	M353.2 - H ₂ SO ₄ preserved	1	0.477		*	mg/L	0.02	0.1	07/03/21 2:58	pjb
Phosphate, total	Calculation based on total Phosphorus		<0.03	U		mg/L	0.03	0.2	08/18/21 0:00	calc
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	06/30/21 0:35	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	216		*	mg/L	20	40	06/21/21 14:36	jck
Residue, Non-Filterable (TSS) @105C	SM2540D	1	<5	UH	*	mg/L	5	20	06/23/21 14:15	eep
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	12.2		*	mg/L	1	5	07/09/21 11:28	wtc
TDS (calculated)	Calculation		146			mg/L			08/18/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.48						08/18/21 0:00	calc



Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

QC Sample Types

<i>AS</i>	Analytical Spike (Post Digestion)	<i>LCSWD</i>	Laboratory Control Sample - Water Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LFB</i>	Laboratory Fortified Blank
<i>CCB</i>	Continuing Calibration Blank	<i>LFM</i>	Laboratory Fortified Matrix
<i>CCV</i>	Continuing Calibration Verification standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>ICB</i>	Initial Calibration Blank	<i>MS</i>	Matrix Spike
<i>ICV</i>	Initial Calibration Verification standard	<i>MSD</i>	Matrix Spike Duplicate
<i>ICSAB</i>	Inter-element Correction Standard - A plus B solutions	<i>PBS</i>	Prep Blank - Soil
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBW</i>	Prep Blank - Water
<i>LCSSD</i>	Laboratory Control Sample - Soil Duplicate	<i>PQV</i>	Practical Quantitation Verification standard
<i>LCSW</i>	Laboratory Control Sample - Water	<i>SDL</i>	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1)	EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2)	EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3)	EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4)	EPA SW-846. Test Methods for Evaluating Solid Waste.
(5)	Standard Methods for the Examination of Water and Wastewater.

Comments

(1)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2)	Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3)	Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4)	An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5)	If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:

<https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf>

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ACZ Project ID: **L66558**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521773													
WG521773PBW1	PBW	06/23/21 17:55				U	mg/L		-20	20			
WG521773LCSW3	LCSW	06/23/21 18:15	WC210622-2	820.0001		793.4	mg/L	97	90	110			
WG521773LCSW6	LCSW	06/23/21 21:05	WC210622-2	820.0001		798.8	mg/L	97	90	110			
WG521773PBW2	PBW	06/23/21 21:10				U	mg/L		-20	20			
L66558-01DUP	DUP	06/23/21 23:52			55.2	55.4	mg/L				0	20	
WG521773LCSW9	LCSW	06/24/21 0:12	WC210622-2	820.0001		798	mg/L	97	90	110			
WG521773PBW3	PBW	06/24/21 0:18				U	mg/L		-20	20			
L66566-02DUP	DUP	06/24/21 1:48			469	454.5	mg/L				3	20	
WG521773LCSW12	LCSW	06/24/21 3:26	WC210622-2	820.0001		800.2	mg/L	98	90	110			
WG521773PBW4	PBW	06/24/21 3:31				U	mg/L		-20	20			
WG521773LCSW15	LCSW	06/24/21 6:19	WC210622-2	820.0001		802.7	mg/L	98	90	110			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522149													
WG522149ICV	ICV	06/30/21 16:05	II210628-1	2		1.964	mg/L	98	95	105			
WG522149ICB	ICB	06/30/21 16:11				U	mg/L		-0.15	0.15			
WG522149PQV	PQV	06/30/21 16:14	II210603-2	.250325		.227	mg/L	91	70	130			
WG522149SIC	SIC	06/30/21 16:17	II210602-1	200.410325		204.3	mg/L	102	1	200			
WG522149LFB	LFB	06/30/21 16:23	II210622-2	1.0013		1.014	mg/L	101	85	115			
L66558-03AS	AS	06/30/21 16:41	II210622-2	1.0013	U	1.001	mg/L	100	85	115			
L66558-03ASD	ASD	06/30/21 16:44	II210622-2	1.0013	U	1.011	mg/L	101	85	115	1	20	
WG522149CCV1	CCV	06/30/21 16:54	II210628-2	1		.946	mg/L	95	90	110			
WG522149CCB1	CCB	06/30/21 16:57				U	mg/L		-0.15	0.15			
WG522149CCV2	CCV	06/30/21 17:31	II210628-2	1		.968	mg/L	97	90	110			
WG522149CCB2	CCB	06/30/21 17:34				U	mg/L		-0.15	0.15			
WG522149CCV3	CCV	06/30/21 17:52	II210628-2	1		.96	mg/L	96	90	110			
WG522149CCB3	CCB	06/30/21 17:56				U	mg/L		-0.15	0.15			

Aluminum, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522346													
WG522346ICV	ICV	07/04/21 15:10	II210620-2	2		1.97	mg/L	99	95	105			
WG522346ICB	ICB	07/04/21 15:16				U	mg/L		-0.15	0.15			
WG522346PQV	PQV	07/04/21 15:19	II210603-2	.250325		.262	mg/L	105	70	130			
WG522346SIC	SIC	07/04/21 15:22	II210518-2	200.510325		199.6	mg/L	100	1	200			
WG522274LRB	LRB	07/04/21 15:29				U	mg/L		-0.11	0.11			
WG522274LFB	LFB	07/04/21 15:32	II210622-2	1.0013		1.037	mg/L	104	85	115			
L66558-03LFM	LFM	07/04/21 15:47	II210622-2	1.0013	.107	1.158	mg/L	105	70	130			
L66558-03LFMD	LFMD	07/04/21 15:50	II210622-2	1.0013	.107	1.176	mg/L	107	70	130	2	20	
WG522346CCV1	CCV	07/04/21 15:59	II210629-1	1		1.026	mg/L	103	90	110			
WG522346CCB1	CCB	07/04/21 16:02				U	mg/L		-0.15	0.15			
WG522346CCV2	CCV	07/04/21 16:36	II210629-1	1		.982	mg/L	98	90	110			
WG522346CCB2	CCB	07/04/21 16:39				U	mg/L		-0.15	0.15			
WG522346CCV3	CCV	07/04/21 17:01	II210629-1	1		.987	mg/L	99	90	110			
WG522346CCB3	CCB	07/04/21 17:04				U	mg/L		-0.15	0.15			

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ACZ Project ID: **L66558**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Antimony, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522768													
WG522768ICV	ICV	07/08/21 15:53	MS210630-2	.0201		.0194	mg/L	97	90	110			
WG522768ICB	ICB	07/08/21 15:55				.00055	mg/L		-0.00088	0.00088			
WG522768LFB	LFB	07/08/21 15:57	MS210702-2	.01		.00901	mg/L	90	85	115			
L66558-03AS	AS	07/08/21 16:06	MS210702-2	.01	U	.0073	mg/L	73	70	130			
L66558-03ASD	ASD	07/08/21 16:08	MS210702-2	.01	U	.00794	mg/L	79	70	130	8	20	
WG522768CCV1	CCV	07/08/21 16:15	MS210521-8	.0125		.01194	mg/L	96	90	110			
WG522768CCB1	CCB	07/08/21 16:17				U	mg/L		-0.0012	0.0012			
WG522768CCV2	CCV	07/08/21 16:36	MS210521-8	.0125		.0121	mg/L	97	90	110			
WG522768CCB2	CCB	07/08/21 16:38				U	mg/L		-0.0012	0.0012			
WG522768CCV3	CCV	07/08/21 16:49	MS210521-8	.0125		.01204	mg/L	96	90	110			
WG522768CCB3	CCB	07/08/21 16:51				U	mg/L		-0.0012	0.0012			

Antimony, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522473													
WG522473ICV	ICV	07/02/21 17:25	MS210630-2	.0201		.02027	mg/L	101	90	110			
WG522473ICB	ICB	07/02/21 17:27				U	mg/L		-0.0012	0.0012			
WG522305LRB	LRB	07/02/21 17:28				U	mg/L		-0.00088	0.00088			
WG522305LFB	LFB	07/02/21 17:30	MS210610-2	.01		.01004	mg/L	100	85	115			
L66558-02LFM	LFM	07/02/21 17:37	MS210610-2	.01	U	.01034	mg/L	103	70	130			
L66558-02LFMD	LFMD	07/02/21 17:39	MS210610-2	.01	U	.01061	mg/L	106	70	130	3	20	
WG522473CCV1	CCV	07/02/21 17:46	MS210521-8	.0125		.01163	mg/L	93	90	110			
WG522473CCB1	CCB	07/02/21 17:48				U	mg/L		-0.0012	0.0012			
WG522473CCV2	CCV	07/02/21 18:08	MS210521-8	.0125		.01177	mg/L	94	90	110			
WG522473CCB2	CCB	07/02/21 18:10				U	mg/L		-0.0012	0.0012			
WG522473CCV3	CCV	07/02/21 18:22	MS210521-8	.0125		.01194	mg/L	96	90	110			
WG522473CCB3	CCB	07/02/21 18:24				U	mg/L		-0.0012	0.0012			

Arsenic, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522768													
WG522768ICV	ICV	07/08/21 15:53	MS210630-2	.05		.04842	mg/L	97	90	110			
WG522768ICB	ICB	07/08/21 15:55				U	mg/L		-0.00044	0.00044			
WG522768LFB	LFB	07/08/21 15:57	MS210702-2	.05005		.05055	mg/L	101	85	115			
L66558-03AS	AS	07/08/21 16:06	MS210702-2	.05005	U	.04948	mg/L	99	70	130			
L66558-03ASD	ASD	07/08/21 16:08	MS210702-2	.05005	U	.0534	mg/L	107	70	130	8	20	
WG522768CCV1	CCV	07/08/21 16:15	MS210521-8	.1001		.09707	mg/L	97	90	110			
WG522768CCB1	CCB	07/08/21 16:17				U	mg/L		-0.0006	0.0006			
WG522768CCV2	CCV	07/08/21 16:36	MS210521-8	.1001		.09713	mg/L	97	90	110			
WG522768CCB2	CCB	07/08/21 16:38				U	mg/L		-0.0006	0.0006			
WG522768CCV3	CCV	07/08/21 16:49	MS210521-8	.1001		.09926	mg/L	99	90	110			
WG522768CCB3	CCB	07/08/21 16:51				U	mg/L		-0.0006	0.0006			

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ACZ Project ID: **L66558**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Arsenic, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522473													
WG522473ICV	ICV	07/02/21 17:25	MS210630-2	.05		.05147	mg/L	103	90	110			
WG522473ICB	ICB	07/02/21 17:27				U	mg/L		-0.0006	0.0006			
WG522305LRB	LRB	07/02/21 17:28				U	mg/L		-0.00044	0.00044			
WG522305LFB	LFB	07/02/21 17:30	MS210610-2	.05005		.04886	mg/L	98	85	115			
L66558-02LFM	LFM	07/02/21 17:37	MS210610-2	.05005	U	.04803	mg/L	96	70	130			
L66558-02LFMD	LFMD	07/02/21 17:39	MS210610-2	.05005	U	.04963	mg/L	99	70	130	3	20	
WG522473CCV1	CCV	07/02/21 17:46	MS210521-8	.1001		.09626	mg/L	96	90	110			
WG522473CCB1	CCB	07/02/21 17:48				U	mg/L		-0.0006	0.0006			
WG522473CCV2	CCV	07/02/21 18:08	MS210521-8	.1001		.09602	mg/L	96	90	110			
WG522473CCB2	CCB	07/02/21 18:10				U	mg/L		-0.0006	0.0006			
WG522473CCV3	CCV	07/02/21 18:22	MS210521-8	.1001		.10212	mg/L	102	90	110			
WG522473CCB3	CCB	07/02/21 18:24				U	mg/L		-0.0006	0.0006			

Boron, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522149													
WG522149ICV	ICV	06/30/21 16:05	II210628-1	2		1.989	mg/L	99	95	105			
WG522149ICB	ICB	06/30/21 16:11				U	mg/L		-0.09	0.09			
WG522149PQV	PQV	06/30/21 16:14	II210603-2	.1001		.107	mg/L	107	70	130			
WG522149SIC	SIC	06/30/21 16:17	II210602-1	.1001		.105	mg/L	105	80	120			
WG522149LFB	LFB	06/30/21 16:23	II210622-2	.5005		.495	mg/L	99	85	115			
L66558-03AS	AS	06/30/21 16:41	II210622-2	.5005	U	.514	mg/L	103	85	115			
L66558-03ASD	ASD	06/30/21 16:44	II210622-2	.5005	U	.512	mg/L	102	85	115	0	20	
WG522149CCV1	CCV	06/30/21 16:54	II210628-2	1		.978	mg/L	98	90	110			
WG522149CCB1	CCB	06/30/21 16:57				U	mg/L		-0.09	0.09			
WG522149CCV2	CCV	06/30/21 17:31	II210628-2	1		.978	mg/L	98	90	110			
WG522149CCB2	CCB	06/30/21 17:34				U	mg/L		-0.09	0.09			
WG522149CCV3	CCV	06/30/21 17:52	II210628-2	1		.985	mg/L	99	90	110			
WG522149CCB3	CCB	06/30/21 17:56				U	mg/L		-0.09	0.09			

Boron, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522346													
WG522346ICV	ICV	07/04/21 15:10	II210620-2	2		2.003	mg/L	100	95	105			
WG522346ICB	ICB	07/04/21 15:16				U	mg/L		-0.09	0.09			
WG522346PQV	PQV	07/04/21 15:19	II210603-2	.1001		.106	mg/L	106	70	130			
WG522346SIC	SIC	07/04/21 15:22	II210518-2	.1001		.1	mg/L	100	80	120			
WG522274LRB	LRB	07/04/21 15:29				U	mg/L		-0.066	0.066			
WG522274LFB	LFB	07/04/21 15:32	II210622-2	.5005		.52	mg/L	104	85	115			
L66558-03LFM	LFM	07/04/21 15:47	II210622-2	.5005	U	.528	mg/L	105	70	130			
L66558-03LFMD	LFMD	07/04/21 15:50	II210622-2	.5005	U	.533	mg/L	106	70	130	1	20	
WG522346CCV1	CCV	07/04/21 15:59	II210629-1	1		1.032	mg/L	103	90	110			
WG522346CCB1	CCB	07/04/21 16:02				U	mg/L		-0.09	0.09			
WG522346CCV2	CCV	07/04/21 16:36	II210629-1	1		.984	mg/L	98	90	110			
WG522346CCB2	CCB	07/04/21 16:39				U	mg/L		-0.09	0.09			
WG522346CCV3	CCV	07/04/21 17:01	II210629-1	1		.98	mg/L	98	90	110			
WG522346CCB3	CCB	07/04/21 17:04				U	mg/L		-0.09	0.09			

Ensero Solutions

ACZ Project ID: **L66558**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Calcium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522149													
WG522149ICV	ICV	06/30/21 16:05	II210628-1	100		99.19	mg/L	99	95	105			
WG522149ICB	ICB	06/30/21 16:11				U	mg/L		-0.3	0.3			
WG522149PQV	PQV	06/30/21 16:14	II210603-2	.5006		.51	mg/L	102	70	130			
WG522149SIC	SIC	06/30/21 16:17	II210602-1	200.5606		196.7	mg/L	98	1	200			
WG522149LFB	LFB	06/30/21 16:23	II210622-2	67.98753		68.71	mg/L	101	85	115			
L66558-03AS	AS	06/30/21 16:41	II210622-2	67.98753	27.2	94.63	mg/L	99	85	115			
L66558-03ASD	ASD	06/30/21 16:44	II210622-2	67.98753	27.2	95.53	mg/L	101	85	115	1	20	
WG522149CCV1	CCV	06/30/21 16:54	II210628-2	50		48.91	mg/L	98	90	110			
WG522149CCB1	CCB	06/30/21 16:57				U	mg/L		-0.3	0.3			
WG522149CCV2	CCV	06/30/21 17:31	II210628-2	50		49.23	mg/L	98	90	110			
WG522149CCB2	CCB	06/30/21 17:34				U	mg/L		-0.3	0.3			
WG522149CCV3	CCV	06/30/21 17:52	II210628-2	50		49.31	mg/L	99	90	110			
WG522149CCB3	CCB	06/30/21 17:56				U	mg/L		-0.3	0.3			

Chloride

SM4500CI-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522154													
WG522154ICB	ICB	06/29/21 11:28				U	mg/L		-1.5	1.5			
WG522154ICV	ICV	06/29/21 11:28	WI210503-1	54.89		55.48	mg/L	101	90	110			
WG522154CCV1	CCV	06/29/21 13:30	WI210203-7	50.05		47.94	mg/L	96	90	110			
WG522154CCB1	CCB	06/29/21 13:30				U	mg/L		-1.5	1.5			
WG522154LFB1	LFB	06/29/21 13:30	WI200327-3	30.03		29.33	mg/L	98	90	110			
WG522154CCV2	CCV	06/29/21 13:32	WI210203-7	50.05		48.18	mg/L	96	90	110			
WG522154CCB2	CCB	06/29/21 13:32				U	mg/L		-1.5	1.5			
L66547-03DUP	DUP	06/29/21 13:32			29	29.23	mg/L				1	20	
L66552-01AS	AS	06/29/21 13:32	WI200327-3	30.03	67.4	91.31	mg/L	80	90	110			M2
WG522154CCV3	CCV	06/29/21 13:34	WI210203-7	50.05		48.29	mg/L	96	90	110			
WG522154CCB3	CCB	06/29/21 13:34				U	mg/L		-1.5	1.5			
WG522154LFB2	LFB	06/29/21 13:34	WI200327-3	30.03		29.57	mg/L	98	90	110			
WG522154CCV4	CCV	06/29/21 13:40	WI210203-7	50.05		47.74	mg/L	95	90	110			
WG522154CCB4	CCB	06/29/21 13:40				U	mg/L		-1.5	1.5			
WG522154CCV5	CCV	06/29/21 13:40	WI210203-7	50.05		47.92	mg/L	96	90	110			
WG522154CCB5	CCB	06/29/21 13:40				U	mg/L		-1.5	1.5			

Ensero Solutions

ACZ Project ID: **L66558**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Chromium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522149													
WG522149ICV	ICV	06/30/21 16:05	II210628-1	2		1.951	mg/L	98	95	105			
WG522149ICB	ICB	06/30/21 16:11				U	mg/L		-0.06	0.06			
WG522149PQV	PQV	06/30/21 16:14	II210603-2	.0502		.054	mg/L	108	70	130			
WG522149SIC	SIC	06/30/21 16:17	II210602-1	.1004		.111	mg/L	111	80	120			
WG522149LFB	LFB	06/30/21 16:23	II210622-2	.502		.488	mg/L	97	85	115			
L66558-03AS	AS	06/30/21 16:41	II210622-2	.502	U	.48	mg/L	96	85	115			
L66558-03ASD	ASD	06/30/21 16:44	II210622-2	.502	U	.483	mg/L	96	85	115	1	20	
WG522149CCV1	CCV	06/30/21 16:54	II210628-2	1		.968	mg/L	97	90	110			
WG522149CCB1	CCB	06/30/21 16:57				U	mg/L		-0.06	0.06			
WG522149CCV2	CCV	06/30/21 17:31	II210628-2	1		.968	mg/L	97	90	110			
WG522149CCB2	CCB	06/30/21 17:34				U	mg/L		-0.06	0.06			
WG522149CCV3	CCV	06/30/21 17:52	II210628-2	1		.97	mg/L	97	90	110			
WG522149CCB3	CCB	06/30/21 17:56				U	mg/L		-0.06	0.06			

Chromium, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522346													
WG522346ICV	ICV	07/04/21 15:10	II210620-2	2		1.937	mg/L	97	95	105			
WG522346ICB	ICB	07/04/21 15:16				U	mg/L		-0.06	0.06			
WG522346PQV	PQV	07/04/21 15:19	II210603-2	.0502		.052	mg/L	104	70	130			
WG522346SIC	SIC	07/04/21 15:22	II210518-2	.1004		.108	mg/L	108	80	120			
WG522274LRB	LRB	07/04/21 15:29				U	mg/L		-0.044	0.044			
WG522274LFB	LFB	07/04/21 15:32	II210622-2	.502		.499	mg/L	99	85	115			
L66558-03LFM	LFM	07/04/21 15:47	II210622-2	.502	U	.497	mg/L	99	70	130			
L66558-03LFMD	LFMD	07/04/21 15:50	II210622-2	.502	U	.504	mg/L	100	70	130	1	20	
WG522346CCV1	CCV	07/04/21 15:59	II210629-1	1		.992	mg/L	99	90	110			
WG522346CCB1	CCB	07/04/21 16:02				U	mg/L		-0.06	0.06			
WG522346CCV2	CCV	07/04/21 16:36	II210629-1	1		.957	mg/L	96	90	110			
WG522346CCB2	CCB	07/04/21 16:39				U	mg/L		-0.06	0.06			
WG522346CCV3	CCV	07/04/21 17:01	II210629-1	1		.962	mg/L	96	90	110			
WG522346CCB3	CCB	07/04/21 17:04				U	mg/L		-0.06	0.06			

Copper, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522149													
WG522149ICV	ICV	06/30/21 16:05	II210628-1	2		1.93	mg/L	97	95	105			
WG522149ICB	ICB	06/30/21 16:11				U	mg/L		-0.03	0.03			
WG522149PQV	PQV	06/30/21 16:14	II210603-2	.0502		.043	mg/L	86	70	130			
WG522149SIC	SIC	06/30/21 16:17	II210602-1	.1004		.086	mg/L	86	80	120			
WG522149LFB	LFB	06/30/21 16:23	II210622-2	.502		.475	mg/L	95	85	115			
L66558-03AS	AS	06/30/21 16:41	II210622-2	.502	U	.482	mg/L	96	85	115			
L66558-03ASD	ASD	06/30/21 16:44	II210622-2	.502	U	.475	mg/L	95	85	115	1	20	
WG522149CCV1	CCV	06/30/21 16:54	II210628-2	1		.953	mg/L	95	90	110			
WG522149CCB1	CCB	06/30/21 16:57				U	mg/L		-0.03	0.03			
WG522149CCV2	CCV	06/30/21 17:31	II210628-2	1		.945	mg/L	95	90	110			
WG522149CCB2	CCB	06/30/21 17:34				U	mg/L		-0.03	0.03			
WG522149CCV3	CCV	06/30/21 17:52	II210628-2	1		.945	mg/L	95	90	110			
WG522149CCB3	CCB	06/30/21 17:56				U	mg/L		-0.03	0.03			

Ensero Solutions

ACZ Project ID: **L66558**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Copper, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522346													
WG522346ICV	ICV	07/04/21 15:10	II210620-2	2		1.956	mg/L	98	95	105			
WG522346ICB	ICB	07/04/21 15:16				U	mg/L		-0.03	0.03			
WG522346PQV	PQV	07/04/21 15:19	II210603-2	.0502		.054	mg/L	108	70	130			
WG522346SIC	SIC	07/04/21 15:22	II210518-2	.1004		.099	mg/L	99	80	120			
WG522274LRB	LRB	07/04/21 15:29				U	mg/L		-0.022	0.022			
WG522274LFB	LFB	07/04/21 15:32	II210622-2	.502		.512	mg/L	102	85	115			
L66558-03LFM	LFM	07/04/21 15:47	II210622-2	.502	U	.511	mg/L	102	70	130			
L66558-03LFMD	LFMD	07/04/21 15:50	II210622-2	.502	U	.514	mg/L	102	70	130	1	20	
WG522346CCV1	CCV	07/04/21 15:59	II210629-1	1		.999	mg/L	100	90	110			
WG522346CCB1	CCB	07/04/21 16:02				U	mg/L		-0.03	0.03			
WG522346CCV2	CCV	07/04/21 16:36	II210629-1	1		.961	mg/L	96	90	110			
WG522346CCB2	CCB	07/04/21 16:39				U	mg/L		-0.03	0.03			
WG522346CCV3	CCV	07/04/21 17:01	II210629-1	1		.963	mg/L	96	90	110			
WG522346CCB3	CCB	07/04/21 17:04				U	mg/L		-0.03	0.03			

Cyanide, WAD

SM4500-CN I,E-Colorimetric w/ distillation

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521742													
WG521742ICV	ICV	06/23/21 14:35	WI210616-7	.3		.2988	mg/L	100	90	110			
WG521742ICB	ICB	06/23/21 14:36				U	mg/L		-0.003	0.003			
WG521627LRB	LRB	06/23/21 14:37				U	mg/L		-0.003	0.003			
WG521627LFB	LFB	06/23/21 14:38	WI210616-6	.2		.1964	mg/L	98	90	110			
L66516-01DUP	DUP	06/23/21 14:40			U	U	mg/L				0	20	RA
L66524-01LFM	LFM	06/23/21 14:41	WI210616-6	.2	U	.1548	mg/L	77	90	110			M2
WG521742CCV1	CCV	06/23/21 14:45	WI210616-8	.25		.2498	mg/L	100	90	110			
WG521742CCB1	CCB	06/23/21 14:46				U	mg/L		-0.003	0.003			
WG521742CCV2	CCV	06/23/21 14:56	WI210616-8	.25		.2431	mg/L	97	90	110			
WG521742CCB2	CCB	06/23/21 14:56				U	mg/L		-0.003	0.003			
WG521742CCV3	CCV	06/23/21 15:04	WI210616-8	.25		.2478	mg/L	99	90	110			
WG521742CCB3	CCB	06/23/21 15:05				U	mg/L		-0.003	0.003			

Ensero Solutions

ACZ Project ID: **L66558**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Fluoride

SM4500F-C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522332													
WG522332ICV	ICV	07/01/21 11:38	WC210609-3	2.002		1.98	mg/L	99	90	110			
WG522332ICB	ICB	07/01/21 11:43				U	mg/L		-0.3	0.3			
WG522332PQV	PQV	07/01/21 11:46	WC210528-8	.35105		.38	mg/L	108	70	130			
WG522332LFB1	LFB	07/01/21 11:51	WC201221-2	5.015		4.93	mg/L	98	90	110			
WG522332CCV1	CCV	07/01/21 12:43	WC210609-3	2.002		2.15	mg/L	107	90	110			
WG522332CCB1	CCB	07/01/21 12:49				U	mg/L		-0.3	0.3			
L66558-03AS	AS	07/01/21 13:01	WC201221-2	5.015	7.73	11.99	mg/L	85	90	110			M2
L66558-03ASD	ASD	07/01/21 13:09	WC201221-2	5.015	7.73	12.05	mg/L	86	90	110	0	20	M2
WG522332CCV2	CCV	07/01/21 13:40	WC210609-3	2.002		2.07	mg/L	103	90	110			
WG522332CCB2	CCB	07/01/21 13:47				U	mg/L		-0.3	0.3			
WG522332LFB2	LFB	07/01/21 14:17	WC201221-2	5.015		5.02	mg/L	100	90	110			
WG522332CCV3	CCV	07/01/21 14:48	WC210609-3	2.002		2.06	mg/L	103	90	110			
WG522332CCB3	CCB	07/01/21 14:55				U	mg/L		-0.3	0.3			
WG522332CCV4	CCV	07/01/21 15:55	WC210609-3	2.002		2.06	mg/L	103	90	110			
WG522332CCB4	CCB	07/01/21 16:02				U	mg/L		-0.3	0.3			
WG522332CCV5	CCV	07/01/21 16:57	WC210609-3	2.002		2.01	mg/L	100	90	110			
WG522332CCB5	CCB	07/01/21 17:05				U	mg/L		-0.3	0.3			

Iron, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522149													
WG522149ICV	ICV	06/30/21 16:05	II210628-1	2		1.928	mg/L	96	95	105			
WG522149ICB	ICB	06/30/21 16:11				U	mg/L		-0.18	0.18			
WG522149PQV	PQV	06/30/21 16:14	II210603-2	.15027		.141	mg/L	94	70	130			
WG522149SIC	SIC	06/30/21 16:17	II210602-1	200.17027		190.2	mg/L	95	1	200			
WG522149LFB	LFB	06/30/21 16:23	II210622-2	1.0018		1.147	mg/L	114	85	115			
L66558-03AS	AS	06/30/21 16:41	II210622-2	1.0018	U	.994	mg/L	99	85	115			
L66558-03ASD	ASD	06/30/21 16:44	II210622-2	1.0018	U	.992	mg/L	99	85	115	0	20	
WG522149CCV1	CCV	06/30/21 16:54	II210628-2	1		.966	mg/L	97	90	110			
WG522149CCB1	CCB	06/30/21 16:57				U	mg/L		-0.18	0.18			
WG522149CCV2	CCV	06/30/21 17:31	II210628-2	1		.983	mg/L	98	90	110			
WG522149CCB2	CCB	06/30/21 17:34				U	mg/L		-0.18	0.18			
WG522149CCV3	CCV	06/30/21 17:52	II210628-2	1		.983	mg/L	98	90	110			
WG522149CCB3	CCB	06/30/21 17:56				U	mg/L		-0.18	0.18			

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ACZ Project ID: **L66558**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Iron, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522346													
WG522346ICV	ICV	07/04/21 15:10	II210620-2	2		1.972	mg/L	99	95	105			
WG522346ICB	ICB	07/04/21 15:16				U	mg/L		-0.18	0.18			
WG522346PQV	PQV	07/04/21 15:19	II210603-2	.15027		.149	mg/L	99	70	130			
WG522346SIC	SIC	07/04/21 15:22	II210518-2	200.17027		194.1	mg/L	97	1	200			
WG522274LRB	LRB	07/04/21 15:29				U	mg/L		-0.132	0.132			
WG522274LFB	LFB	07/04/21 15:32	II210622-2	1.0018		1.041	mg/L	104	85	115			
L66558-03LFM	LFM	07/04/21 15:47	II210622-2	1.0018	.17	1.206	mg/L	103	70	130			
L66558-03LFMD	LFMD	07/04/21 15:50	II210622-2	1.0018	.17	1.217	mg/L	105	70	130	1	20	
WG522346CCV1	CCV	07/04/21 15:59	II210629-1	1		1.008	mg/L	101	90	110			
WG522346CCB1	CCB	07/04/21 16:02				U	mg/L		-0.18	0.18			
WG522346CCV2	CCV	07/04/21 16:36	II210629-1	1		.967	mg/L	97	90	110			
WG522346CCB2	CCB	07/04/21 16:39				U	mg/L		-0.18	0.18			
WG522346CCV3	CCV	07/04/21 17:01	II210629-1	1		.975	mg/L	98	90	110			
WG522346CCB3	CCB	07/04/21 17:04				U	mg/L		-0.18	0.18			

Lead, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522768													
WG522768ICV	ICV	07/08/21 15:53	MS210630-2	.05		.05096	mg/L	102	90	110			
WG522768ICB	ICB	07/08/21 15:55				U	mg/L		-0.00022	0.00022			
WG522768LFB	LFB	07/08/21 15:57	MS210702-2	.05005		.05203	mg/L	104	85	115			
L66558-03AS	AS	07/08/21 16:06	MS210702-2	.05005	U	.04913	mg/L	98	70	130			
L66558-03ASD	ASD	07/08/21 16:08	MS210702-2	.05005	U	.05228	mg/L	104	70	130	6	20	
WG522768CCV1	CCV	07/08/21 16:15	MS210521-8	.25025		.24987	mg/L	100	90	110			
WG522768CCB1	CCB	07/08/21 16:17				U	mg/L		-0.0003	0.0003			
WG522768CCV2	CCV	07/08/21 16:36	MS210521-8	.25025		.2566	mg/L	103	90	110			
WG522768CCB2	CCB	07/08/21 16:38				U	mg/L		-0.0003	0.0003			
WG522768CCV3	CCV	07/08/21 16:49	MS210521-8	.25025		.23837	mg/L	95	90	110			
WG522768CCB3	CCB	07/08/21 16:51				U	mg/L		-0.0003	0.0003			

Lead, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522473													
WG522473ICV	ICV	07/02/21 17:25	MS210630-2	.05		.05276	mg/L	106	90	110			
WG522473ICB	ICB	07/02/21 17:27				U	mg/L		-0.0003	0.0003			
WG522305LRB	LRB	07/02/21 17:28				U	mg/L		-0.00022	0.00022			
WG522305LFB	LFB	07/02/21 17:30	MS210610-2	.05005		.04848	mg/L	97	85	115			
L66558-02LFM	LFM	07/02/21 17:37	MS210610-2	.05005	U	.05071	mg/L	101	70	130			
L66558-02LFMD	LFMD	07/02/21 17:39	MS210610-2	.05005	U	.05069	mg/L	101	70	130	0	20	
WG522473CCV1	CCV	07/02/21 17:46	MS210521-8	.25025		.24339	mg/L	97	90	110			
WG522473CCB1	CCB	07/02/21 17:48				U	mg/L		-0.0003	0.0003			
WG522473CCV2	CCV	07/02/21 18:08	MS210521-8	.25025		.23824	mg/L	95	90	110			
WG522473CCB2	CCB	07/02/21 18:10				U	mg/L		-0.0003	0.0003			
WG522473CCV3	CCV	07/02/21 18:22	MS210521-8	.25025		.24091	mg/L	96	90	110			
WG522473CCB3	CCB	07/02/21 18:24				U	mg/L		-0.0003	0.0003			

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ACZ Project ID: **L66558**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Magnesium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522149													
WG522149ICV	ICV	06/30/21 16:05	II210628-1	100		97.64	mg/L	98	95	105			
WG522149ICB	ICB	06/30/21 16:11				U	mg/L		-0.6	0.6			
WG522149PQV	PQV	06/30/21 16:14	II210603-2	1.0001		.9	mg/L	90	70	130			
WG522149SIC	SIC	06/30/21 16:17	II210602-1	201.0201		201.3	mg/L	100	1	200			
WG522149LFB	LFB	06/30/21 16:23	II210622-2	50.00302		49.06	mg/L	98	85	115			
L66558-03AS	AS	06/30/21 16:41	II210622-2	50.00302	7.46	56.58	mg/L	98	85	115			
L66558-03ASD	ASD	06/30/21 16:44	II210622-2	50.00302	7.46	57.41	mg/L	100	85	115	1	20	
WG522149CCV1	CCV	06/30/21 16:54	II210628-2	50		47.89	mg/L	96	90	110			
WG522149CCB1	CCB	06/30/21 16:57				U	mg/L		-0.6	0.6			
WG522149CCV2	CCV	06/30/21 17:31	II210628-2	50		48.5	mg/L	97	90	110			
WG522149CCB2	CCB	06/30/21 17:34				U	mg/L		-0.6	0.6			
WG522149CCV3	CCV	06/30/21 17:52	II210628-2	50		48.82	mg/L	98	90	110			
WG522149CCB3	CCB	06/30/21 17:56				U	mg/L		-0.6	0.6			

Manganese, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522149													
WG522149ICV	ICV	06/30/21 16:05	II210628-1	2		1.949	mg/L	97	95	105			
WG522149ICB	ICB	06/30/21 16:11				U	mg/L		-0.03	0.03			
WG522149PQV	PQV	06/30/21 16:14	II210603-2	.05005		.047	mg/L	94	70	130			
WG522149SIC	SIC	06/30/21 16:17	II210602-1	50.10005		48.08	mg/L	96	1	200			
WG522149LFB	LFB	06/30/21 16:23	II210622-2	.5005		.484	mg/L	97	85	115			
L66558-03AS	AS	06/30/21 16:41	II210622-2	.5005	U	.482	mg/L	96	85	115			
L66558-03ASD	ASD	06/30/21 16:44	II210622-2	.5005	U	.482	mg/L	96	85	115	0	20	
WG522149CCV1	CCV	06/30/21 16:54	II210628-2	1		.971	mg/L	97	90	110			
WG522149CCB1	CCB	06/30/21 16:57				U	mg/L		-0.03	0.03			
WG522149CCV2	CCV	06/30/21 17:31	II210628-2	1		.986	mg/L	99	90	110			
WG522149CCB2	CCB	06/30/21 17:34				U	mg/L		-0.03	0.03			
WG522149CCV3	CCV	06/30/21 17:52	II210628-2	1		1.003	mg/L	100	90	110			
WG522149CCB3	CCB	06/30/21 17:56				U	mg/L		-0.03	0.03			

Manganese, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522346													
WG522346ICV	ICV	07/04/21 15:10	II210620-2	2		1.937	mg/L	97	95	105			
WG522346ICB	ICB	07/04/21 15:16				U	mg/L		-0.03	0.03			
WG522346PQV	PQV	07/04/21 15:19	II210603-2	.05005		.051	mg/L	102	70	130			
WG522346SIC	SIC	07/04/21 15:22	II210518-2	50.10005		47.4	mg/L	95	1	200			
WG522274LRB	LRB	07/04/21 15:29				U	mg/L		-0.022	0.022			
WG522274LFB	LFB	07/04/21 15:32	II210622-2	.5005		.501	mg/L	100	85	115			
L66558-03LFM	LFM	07/04/21 15:47	II210622-2	.5005	.017	.518	mg/L	100	70	130			
L66558-03LFMD	LFMD	07/04/21 15:50	II210622-2	.5005	.017	.523	mg/L	101	70	130	1	20	
WG522346CCV1	CCV	07/04/21 15:59	II210629-1	1		1.008	mg/L	101	90	110			
WG522346CCB1	CCB	07/04/21 16:02				U	mg/L		-0.03	0.03			
WG522346CCV2	CCV	07/04/21 16:36	II210629-1	1		.975	mg/L	98	90	110			
WG522346CCB2	CCB	07/04/21 16:39				U	mg/L		-0.03	0.03			
WG522346CCV3	CCV	07/04/21 17:01	II210629-1	1		.975	mg/L	98	90	110			
WG522346CCB3	CCB	07/04/21 17:04				U	mg/L		-0.03	0.03			

Ensero Solutions

ACZ Project ID: **L66558**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury, dissolved

M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522259													
WG522259ICV	ICV	07/02/21 13:17	HG210701-3	.00501		.005	mg/L	100	95	105			
WG522259ICB	ICB	07/02/21 13:18				U	mg/L		-0.0002	0.0002			
WG522259PQV	PQV	07/02/21 13:19	HG210701-5	.001001		.00086	mg/L	86	70	130			
WG522259LRB	LRB	07/02/21 13:20				U	mg/L		-0.00044	0.00044			
WG522259LFB	LFB	07/02/21 13:20	HG210701-6	.002002		.00182	mg/L	91	85	115			
L66558-01LFM	LFM	07/02/21 13:22	HG210701-6	.002002	U	.00196	mg/L	98	85	115			
L66558-01LFMD	LFMD	07/02/21 13:23	HG210701-6	.002002	U	.00184	mg/L	92	85	115	6	20	
WG522259CCV1	CCV	07/02/21 13:29	HG210701-3	.00501		.00525	mg/L	105	90	110			
WG522259CCB1	CCB	07/02/21 13:30				U	mg/L		-0.0002	0.0002			
WG522259CCV2	CCV	07/02/21 13:40	HG210701-3	.00501		.00521	mg/L	104	90	110			
WG522259CCB2	CCB	07/02/21 13:41				U	mg/L		-0.0002	0.0002			
WG522259CCV3	CCV	07/02/21 13:48	HG210701-3	.00501		.00528	mg/L	105	90	110			
WG522259CCB3	CCB	07/02/21 13:49				U	mg/L		-0.0002	0.0002			

Mercury, total

M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522259													
WG522259ICV	ICV	07/02/21 13:17	HG210701-3	.00501		.005	mg/L	100	95	105			
WG522259ICB	ICB	07/02/21 13:18				U	mg/L		-0.0002	0.0002			
L66558-01LFM	LFM	07/02/21 13:22	HG210701-6	.002002	U	.00196	mg/L	98	85	115			
L66558-01LFMD	LFMD	07/02/21 13:23	HG210701-6	.002002	U	.00184	mg/L	92	85	115	6	20	
WG522260													
WG522260CCV1	CCV	07/02/21 13:51	HG210701-3	.00501		.00519	mg/L	104	90	110			
WG522260CCB1	CCB	07/02/21 13:52				U	mg/L		-0.0002	0.0002			
WG522260PQV	PQV	07/02/21 13:53	HG210701-5	.001001		.00089	mg/L	89	70	130			
WG522260LRB	LRB	07/02/21 13:54				U	mg/L		-0.00044	0.00044			
WG522260LFB	LFB	07/02/21 13:55	HG210701-6	.002002		.0018	mg/L	90	85	115			
L66558-01LFM	LFM	07/02/21 13:56	HG210701-6	.002002	U	.00189	mg/L	94	85	115			
L66558-01LFMD	LFMD	07/02/21 13:57	HG210701-6	.002002	U	.00184	mg/L	92	85	115	3	20	
WG522260CCV2	CCV	07/02/21 14:02	HG210701-3	.00501		.00509	mg/L	102	90	110			
WG522260CCB2	CCB	07/02/21 14:03				U	mg/L		-0.0002	0.0002			
WG522260CCV3	CCV	07/02/21 14:13	HG210701-3	.00501		.00517	mg/L	103	90	110			
WG522260CCB3	CCB	07/02/21 14:14				U	mg/L		-0.0002	0.0002			
WG522260CCV4	CCV	07/02/21 14:22	HG210701-3	.00501		.00516	mg/L	103	90	110			
WG522260CCB4	CCB	07/02/21 14:23				U	mg/L		-0.0002	0.0002			

Ensero Solutions

ACZ Project ID: **L66558**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Molybdenum, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522768													
WG522768ICV	ICV	07/08/21 15:53	MS210630-2	.01992		.01919	mg/L	96	90	110			
WG522768ICB	ICB	07/08/21 15:55				U	mg/L		-0.00044	0.00044			
WG522768LFB	LFB	07/08/21 15:57	MS210702-2	.0501		.0513	mg/L	102	85	115			
L66558-03AS	AS	07/08/21 16:06	MS210702-2	.0501	.00048	.0487	mg/L	96	70	130			
L66558-03ASD	ASD	07/08/21 16:08	MS210702-2	.0501	.00048	.05198	mg/L	103	70	130	7	20	
WG522768CCV1	CCV	07/08/21 16:15	MS210521-8	.1002		.0981	mg/L	98	90	110			
WG522768CCB1	CCB	07/08/21 16:17				U	mg/L		-0.0006	0.0006			
WG522768CCV2	CCV	07/08/21 16:36	MS210521-8	.1002		.10027	mg/L	100	90	110			
WG522768CCB2	CCB	07/08/21 16:38				U	mg/L		-0.0006	0.0006			
WG522768CCV3	CCV	07/08/21 16:49	MS210521-8	.1002		.09916	mg/L	99	90	110			
WG522768CCB3	CCB	07/08/21 16:51				U	mg/L		-0.0006	0.0006			

Molybdenum, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522473													
WG522473ICV	ICV	07/02/21 17:25	MS210630-2	.01992		.01949	mg/L	98	90	110			
WG522473ICB	ICB	07/02/21 17:27				U	mg/L		-0.0006	0.0006			
WG522305LRB	LRB	07/02/21 17:28				U	mg/L		-0.00044	0.00044			
WG522305LFB	LFB	07/02/21 17:30	MS210610-2	.0501		.04762	mg/L	95	85	115			
L66558-02LFM	LFM	07/02/21 17:37	MS210610-2	.0501	.00068	.05151	mg/L	101	70	130			
L66558-02LFMD	LFMD	07/02/21 17:39	MS210610-2	.0501	.00068	.05223	mg/L	103	70	130	1	20	
WG522473CCV1	CCV	07/02/21 17:46	MS210521-8	.1002		.09699	mg/L	97	90	110			
WG522473CCB1	CCB	07/02/21 17:48				U	mg/L		-0.0006	0.0006			
WG522473CCV2	CCV	07/02/21 18:08	MS210521-8	.1002		.09632	mg/L	96	90	110			
WG522473CCB2	CCB	07/02/21 18:10				U	mg/L		-0.0006	0.0006			
WG522473CCV3	CCV	07/02/21 18:22	MS210521-8	.1002		.10149	mg/L	101	90	110			
WG522473CCB3	CCB	07/02/21 18:24				U	mg/L		-0.0006	0.0006			

Nitrate/Nitrite as N

M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522496													
WG522496ICV	ICV	07/02/21 23:47	WI210603-7	2.416		2.395	mg/L	99	90	110			
WG522496ICB	ICB	07/02/21 23:48				U	mg/L		-0.02	0.02			
WG522501													
WG522501CCV1	CCV	07/03/21 2:48	WI210701-1	2		1.989	mg/L	99	90	110			
WG522501CCB1	CCB	07/03/21 2:51				U	mg/L		-0.02	0.02			
WG522501LFB	LFB	07/03/21 2:52	WI210331-13	2		1.972	mg/L	99	90	110			
L66558-01AS	AS	07/03/21 2:54	WI210331-13	2	.047	2.138	mg/L	105	90	110			
L66558-02DUP	DUP	07/03/21 2:57			.062	.067	mg/L				8	20	RA
WG522501CCV2	CCV	07/03/21 3:05	WI210701-1	2		1.996	mg/L	100	90	110			
WG522501CCB2	CCB	07/03/21 3:07				U	mg/L		-0.02	0.02			
WG522501CCV3	CCV	07/03/21 3:21	WI210701-1	2		1.991	mg/L	100	90	110			
WG522501CCB3	CCB	07/03/21 3:24				U	mg/L		-0.02	0.02			
WG522501CCV4	CCV	07/03/21 3:34	WI210701-1	2		1.976	mg/L	99	90	110			
WG522501CCB4	CCB	07/03/21 3:37				U	mg/L		-0.02	0.02			

Ensero Solutions

ACZ Project ID: **L66558**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Phosphorus, total M365.1 - Auto Ascorbic Acid (digest)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522196													
WG522196ICV	ICV	06/29/21 21:46	WI210603-3	.65228		.687	mg/L	105	90	110			
WG522196ICB	ICB	06/29/21 21:48				U	mg/L		-0.01	0.01			
WG522201													
WG522201CCV1	CCV	06/30/21 0:25	WI210603-4	.5		.523	mg/L	105	90	110			
WG522201CCB1	CCB	06/30/21 0:26				U	mg/L		-0.01	0.01			
WG522118LRB	LRB	06/30/21 0:28				U	mg/L		-0.01	0.01			
WG522118LFB	LFB	06/30/21 0:29	WI210617-5	.5		.519	mg/L	104	90	110			
L66558-01LFM	LFM	06/30/21 0:31	WI210617-5	.5	U	.523	mg/L	105	90	110			
L66558-02DUP	DUP	06/30/21 0:33			U	U	mg/L				0	20	RA
WG522201CCV2	CCV	06/30/21 0:39	WI210603-4	.5		.523	mg/L	105	90	110			
WG522201CCB2	CCB	06/30/21 0:40				U	mg/L		-0.01	0.01			
WG522201CCV3	CCV	06/30/21 0:53	WI210603-4	.5		.517	mg/L	103	90	110			
WG522201CCB3	CCB	06/30/21 0:54				U	mg/L		-0.01	0.01			
WG522201CCV4	CCV	06/30/21 1:05	WI210603-4	.5		.525	mg/L	105	90	110			
WG522201CCB4	CCB	06/30/21 1:06				U	mg/L		-0.01	0.01			

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522149													
WG522149ICV	ICV	06/30/21 16:05	II210628-1	20		19.64	mg/L	98	95	105			
WG522149ICB	ICB	06/30/21 16:11				U	mg/L		-0.6	0.6			
WG522149PQV	PQV	06/30/21 16:14	II210603-2	1.004		.96	mg/L	96	70	130			
WG522149SIC	SIC	06/30/21 16:17	II210602-1	1.004		.97	mg/L	97	80	120			
WG522149LFB	LFB	06/30/21 16:23	II210622-2	100.0157		98.6	mg/L	99	85	115			
L66558-03AS	AS	06/30/21 16:41	II210622-2	100.0157	1.76	100.6	mg/L	99	85	115			
L66558-03ASD	ASD	06/30/21 16:44	II210622-2	100.0157	1.76	102	mg/L	100	85	115	1	20	
WG522149CCV1	CCV	06/30/21 16:54	II210628-2	10		9.68	mg/L	97	90	110			
WG522149CCB1	CCB	06/30/21 16:57				U	mg/L		-0.6	0.6			
WG522149CCV2	CCV	06/30/21 17:31	II210628-2	10		9.81	mg/L	98	90	110			
WG522149CCB2	CCB	06/30/21 17:34				U	mg/L		-0.6	0.6			
WG522149CCV3	CCV	06/30/21 17:52	II210628-2	10		9.7	mg/L	97	90	110			
WG522149CCB3	CCB	06/30/21 17:56				U	mg/L		-0.6	0.6			

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521521													
WG521521PBW	PBW	06/21/21 13:55				U	mg/L		-20	20			
WG521521LCSW	LCSW	06/21/21 13:57	PCN63551	1000		998	mg/L	100	80	120			
L66562-01DUP	DUP	06/21/21 14:55			108	104	mg/L				4	10	RA

Residue, Non-Filterable (TSS) @105C SM2540D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG521721													
WG521721PBW	PBW	06/23/21 14:00				U	mg/L		-5	5			
WG521721LCSW	LCSW	06/23/21 14:01	PCN63833	100		100	mg/L	100	80	120			
L66562-01DUP	DUP	06/23/21 14:23			U	U	mg/L				0	10	RA

Ensero Solutions

ACZ Project ID: **L66558**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Selenium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522768													
WG522768ICV	ICV	07/08/21 15:53	MS210630-2	.05		.04887	mg/L	98	90	110			
WG522768ICB	ICB	07/08/21 15:55				U	mg/L		-0.00022	0.00022			
WG522768LFB	LFB	07/08/21 15:57	MS210702-2	.05		.052	mg/L	104	85	115			
L66558-03AS	AS	07/08/21 16:06	MS210702-2	.05	U	.05304	mg/L	106	70	130			
L66558-03ASD	ASD	07/08/21 16:08	MS210702-2	.05	U	.05768	mg/L	115	70	130	8	20	
WG522768CCV1	CCV	07/08/21 16:15	MS210521-8	.25		.24751	mg/L	99	90	110			
WG522768CCB1	CCB	07/08/21 16:17				U	mg/L		-0.0003	0.0003			
WG522768CCV2	CCV	07/08/21 16:36	MS210521-8	.25		.25452	mg/L	102	90	110			
WG522768CCB2	CCB	07/08/21 16:38				.00011	mg/L		-0.0003	0.0003			
WG522768CCV3	CCV	07/08/21 16:49	MS210521-8	.25		.26409	mg/L	106	90	110			
WG522768CCB3	CCB	07/08/21 16:51				.01139	mg/L		-0.0003	0.0003			BB BE

Selenium, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522473													
WG522473ICV	ICV	07/02/21 17:25	MS210630-2	.05		.05016	mg/L	100	90	110			
WG522473ICB	ICB	07/02/21 17:27				U	mg/L		-0.0003	0.0003			
WG522305LRB	LRB	07/02/21 17:28				U	mg/L		-0.00022	0.00022			
WG522305LFB	LFB	07/02/21 17:30	MS210610-2	.05		.04902	mg/L	98	85	115			
L66558-02LFM	LFM	07/02/21 17:37	MS210610-2	.05	.00012	.05052	mg/L	101	70	130			
L66558-02LFMD	LFMD	07/02/21 17:39	MS210610-2	.05	.00012	.05148	mg/L	103	70	130	2	20	
WG522473CCV1	CCV	07/02/21 17:46	MS210521-8	.25		.23968	mg/L	96	90	110			
WG522473CCB1	CCB	07/02/21 17:48				.00016	mg/L		-0.0003	0.0003			
WG522473CCV2	CCV	07/02/21 18:08	MS210521-8	.25		.235	mg/L	94	90	110			
WG522473CCB2	CCB	07/02/21 18:10				.00011	mg/L		-0.0003	0.0003			
WG522473CCV3	CCV	07/02/21 18:22	MS210521-8	.25		.24265	mg/L	97	90	110			
WG522473CCB3	CCB	07/02/21 18:24				.00027	mg/L		-0.0003	0.0003			

Silver, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522768													
WG522768ICV	ICV	07/08/21 15:53	MS210630-2	.02		.01802	mg/L	90	90	110			
WG522768ICB	ICB	07/08/21 15:55				U	mg/L		-0.00022	0.00022			
WG522768LFB	LFB	07/08/21 15:57	MS210702-2	.01002		.00934	mg/L	93	85	115			
L66558-03AS	AS	07/08/21 16:06	MS210702-2	.01002	U	.00791	mg/L	79	70	130			
L66558-03ASD	ASD	07/08/21 16:08	MS210702-2	.01002	U	.00838	mg/L	84	70	130	6	20	
WG522768CCV1	CCV	07/08/21 16:15	MS210521-8	.02505		.02493	mg/L	100	90	110			
WG522768CCB1	CCB	07/08/21 16:17				U	mg/L		-0.0003	0.0003			
WG522768CCV2	CCV	07/08/21 16:36	MS210521-8	.02505		.02596	mg/L	104	90	110			
WG522768CCB2	CCB	07/08/21 16:38				U	mg/L		-0.0003	0.0003			
WG522768CCB3	CCB	07/08/21 16:51				.00018	mg/L		-0.0003	0.0003			

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ACZ Project ID: **L66558**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Silver, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522473													
WG522473ICV	ICV	07/02/21 17:25	MS210630-2	.02		.01962	mg/L	98	90	110			
WG522473ICB	ICB	07/02/21 17:27				U	mg/L		-0.0003	0.0003			
WG522305LRB	LRB	07/02/21 17:28				U	mg/L		-0.00022	0.00022			
WG522305LFB	LFB	07/02/21 17:30	MS210610-2	.01002		.00979	mg/L	98	85	115			
L66558-02LFM	LFM	07/02/21 17:37	MS210610-2	.01002	U	.00965	mg/L	96	70	130			
L66558-02LFMD	LFMD	07/02/21 17:39	MS210610-2	.01002	U	.00981	mg/L	98	70	130	2	20	
WG522473CCV1	CCV	07/02/21 17:46	MS210521-8	.02505		.02384	mg/L	95	90	110			
WG522473CCB1	CCB	07/02/21 17:48				U	mg/L		-0.0003	0.0003			
WG522473CCV2	CCV	07/02/21 18:08	MS210521-8	.02505		.0236	mg/L	94	90	110			
WG522473CCB2	CCB	07/02/21 18:10				U	mg/L		-0.0003	0.0003			
WG522473CCV3	CCV	07/02/21 18:22	MS210521-8	.02505		.02449	mg/L	98	90	110			
WG522473CCB3	CCB	07/02/21 18:24				U	mg/L		-0.0003	0.0003			

Sodium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522149													
WG522149ICV	ICV	06/30/21 16:05	II210628-1	100		99.01	mg/L	99	95	105			
WG522149ICB	ICB	06/30/21 16:11				U	mg/L		-0.6	0.6			
WG522149PQV	PQV	06/30/21 16:14	II210603-2	.998		.96	mg/L	96	70	130			
WG522149SIC	SIC	06/30/21 16:17	II210602-1	.998		1.03	mg/L	103	80	120			
WG522149LFB	LFB	06/30/21 16:23	II210622-2	100.0605		99.76	mg/L	100	85	115			
L66558-03AS	AS	06/30/21 16:41	II210622-2	100.0605	15.3	113.7	mg/L	98	85	115			
L66558-03ASD	ASD	06/30/21 16:44	II210622-2	100.0605	15.3	114.2	mg/L	99	85	115	0	20	
WG522149CCV1	CCV	06/30/21 16:54	II210628-2	50		49.38	mg/L	99	90	110			
WG522149CCB1	CCB	06/30/21 16:57				U	mg/L		-0.6	0.6			
WG522149CCV2	CCV	06/30/21 17:31	II210628-2	50		49.5	mg/L	99	90	110			
WG522149CCB2	CCB	06/30/21 17:34				.4	mg/L		-0.6	0.6			
WG522149CCV3	CCV	06/30/21 17:52	II210628-2	50		49.29	mg/L	99	90	110			
WG522149CCB3	CCB	06/30/21 17:56				U	mg/L		-0.6	0.6			

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ACZ Project ID: **L66558**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sulfate

D516-02/-07/-11 - TURBIDIMETRIC

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522738													
WG522738ICB	ICB	07/09/21 10:44				U	mg/L		-3	3			
WG522738ICV	ICV	07/09/21 10:44	WI210629-1	20.46		20	mg/L	98	90	110			
WG522738CCV1	CCV	07/09/21 11:27	WI210629-2	25		25.5	mg/L	102	90	110			
WG522738CCB1	CCB	07/09/21 11:27				U	mg/L		-3	3			
WG522738LFB	LFB	07/09/21 11:27	WI210105-3	10		10	mg/L	100	90	110			
WG522738CCV2	CCV	07/09/21 11:30	WI210629-2	25		24.7	mg/L	99	90	110			
WG522738CCB2	CCB	07/09/21 11:30				U	mg/L		-3	3			
WG522738CCV3	CCV	07/09/21 11:31	WI210629-2	25		24.6	mg/L	98	90	110			
WG522738CCB3	CCB	07/09/21 11:31				U	mg/L		-3	3			
WG522738CCV4	CCV	07/09/21 11:33	WI210629-2	25		24.8	mg/L	99	90	110			
WG522738CCB4	CCB	07/09/21 11:33				U	mg/L		-3	3			
WG522738CCV5	CCV	07/09/21 11:37	WI210629-2	25		24.8	mg/L	99	90	110			
WG522738CCB5	CCB	07/09/21 11:37				U	mg/L		-3	3			
WG522738CCV6	CCV	07/09/21 12:08	WI210629-2	25		25.4	mg/L	102	90	110			
WG522738CCB6	CCB	07/09/21 12:08				U	mg/L		-3	3			
L66536-09DUP	DUP	07/09/21 12:08			2840	2826.9	mg/L				0	20	
L66536-10AS	AS	07/09/21 12:08	SO4TURB20X	50	2950	2851.8	mg/L	-196	90	110			M3
WG522738CCV7	CCV	07/09/21 12:10	WI210629-2	25		25.2	mg/L	101	90	110			
WG522738CCB7	CCB	07/09/21 12:10				U	mg/L		-3	3			
WG522738CCV8	CCV	07/09/21 12:12	WI210629-2	25		24.7	mg/L	99	90	110			
WG522738CCB8	CCB	07/09/21 12:12				U	mg/L		-3	3			

Thallium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522768													
WG522768ICV	ICV	07/08/21 15:53	MS210630-2	.05		.05148	mg/L	103	90	110			
WG522768ICB	ICB	07/08/21 15:55				U	mg/L		-0.00022	0.00022			
WG522768LFB	LFB	07/08/21 15:57	MS210702-2	.05		.05158	mg/L	103	85	115			
L66558-03AS	AS	07/08/21 16:06	MS210702-2	.05	U	.04929	mg/L	99	70	130			
L66558-03ASD	ASD	07/08/21 16:08	MS210702-2	.05	U	.05241	mg/L	105	70	130	6	20	
WG522768CCV1	CCV	07/08/21 16:15	MS210521-8	.1		.10039	mg/L	100	90	110			
WG522768CCB1	CCB	07/08/21 16:17				U	mg/L		-0.0003	0.0003			
WG522768CCV2	CCV	07/08/21 16:36	MS210521-8	.1		.10244	mg/L	102	90	110			
WG522768CCB2	CCB	07/08/21 16:38				U	mg/L		-0.0003	0.0003			
WG522768CCV3	CCV	07/08/21 16:49	MS210521-8	.1		.09563	mg/L	96	90	110			
WG522768CCB3	CCB	07/08/21 16:51				U	mg/L		-0.0003	0.0003			

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ACZ Project ID: **L66558**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Thallium, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522473													
WG522473ICV	ICV	07/02/21 17:25	MS210630-2	.05		.05228	mg/L	105	90	110			
WG522473ICB	ICB	07/02/21 17:27				U	mg/L		-0.0003	0.0003			
WG522305LRB	LRB	07/02/21 17:28				U	mg/L		-0.00022	0.00022			
WG522305LFB	LFB	07/02/21 17:30	MS210610-2	.05		.0468	mg/L	94	85	115			
L66558-02LFM	LFM	07/02/21 17:37	MS210610-2	.05	U	.0486	mg/L	97	70	130			
L66558-02LFMD	LFMD	07/02/21 17:39	MS210610-2	.05	U	.0486	mg/L	97	70	130	0	20	
WG522473CCV1	CCV	07/02/21 17:46	MS210521-8	.1		.09598	mg/L	96	90	110			
WG522473CCB1	CCB	07/02/21 17:48				U	mg/L		-0.0003	0.0003			
WG522473CCV2	CCV	07/02/21 18:08	MS210521-8	.1		.09335	mg/L	93	90	110			
WG522473CCB2	CCB	07/02/21 18:10				U	mg/L		-0.0003	0.0003			
WG522473CCV3	CCV	07/02/21 18:22	MS210521-8	.1		.09605	mg/L	96	90	110			
WG522473CCB3	CCB	07/02/21 18:24				U	mg/L		-0.0003	0.0003			

Uranium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522768													
WG522768ICV	ICV	07/08/21 15:53	MS210630-2	.05		.04961	mg/L	99	90	110			
WG522768ICB	ICB	07/08/21 15:55				U	mg/L		-0.00022	0.00022			
WG522768LFB	LFB	07/08/21 15:57	MS210702-2	.05		.05077	mg/L	102	85	115			
L66558-03AS	AS	07/08/21 16:06	MS210702-2	.05	.0009	.05095	mg/L	100	70	130			
L66558-03ASD	ASD	07/08/21 16:08	MS210702-2	.05	.0009	.05367	mg/L	106	70	130	5	20	
WG522768CCV1	CCV	07/08/21 16:15	MS210521-8	.1		.10027	mg/L	100	90	110			
WG522768CCB1	CCB	07/08/21 16:17				U	mg/L		-0.0003	0.0003			
WG522768CCV2	CCV	07/08/21 16:36	MS210521-8	.1		.10371	mg/L	104	90	110			
WG522768CCB2	CCB	07/08/21 16:38				U	mg/L		-0.0003	0.0003			
WG522768CCV3	CCV	07/08/21 16:49	MS210521-8	.1		.09568	mg/L	96	90	110			
WG522768CCB3	CCB	07/08/21 16:51				U	mg/L		-0.0003	0.0003			

Uranium, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522473													
WG522473ICV	ICV	07/02/21 17:25	MS210630-2	.05		.05032	mg/L	101	90	110			
WG522473ICB	ICB	07/02/21 17:27				U	mg/L		-0.0003	0.0003			
WG522305LRB	LRB	07/02/21 17:28				U	mg/L		-0.00022	0.00022			
WG522305LFB	LFB	07/02/21 17:30	MS210610-2	.05		.04622	mg/L	92	85	115			
L66558-02LFM	LFM	07/02/21 17:37	MS210610-2	.05	.00251	.05282	mg/L	101	70	130			
L66558-02LFMD	LFMD	07/02/21 17:39	MS210610-2	.05	.00251	.05295	mg/L	101	70	130	0	20	
WG522473CCV1	CCV	07/02/21 17:46	MS210521-8	.1		.09485	mg/L	95	90	110			
WG522473CCB1	CCB	07/02/21 17:48				U	mg/L		-0.0003	0.0003			
WG522473CCV2	CCV	07/02/21 18:08	MS210521-8	.1		.09416	mg/L	94	90	110			
WG522473CCB2	CCB	07/02/21 18:10				U	mg/L		-0.0003	0.0003			
WG522473CCV3	CCV	07/02/21 18:22	MS210521-8	.1		.0958	mg/L	96	90	110			
WG522473CCB3	CCB	07/02/21 18:24				U	mg/L		-0.0003	0.0003			

Ensero Solutions

ACZ Project ID: **L66558**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Zinc, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522149													
WG522149ICV	ICV	06/30/21 16:05	II210628-1	2		1.909	mg/L	95	95	105			
WG522149ICB	ICB	06/30/21 16:11				.021	mg/L		-0.06	0.06			
WG522149PQV	PQV	06/30/21 16:14	II210603-2	.05015		.06	mg/L	120	70	130			
WG522149SIC	SIC	06/30/21 16:17	II210602-1	.1003		.106	mg/L	106	80	120			
WG522149LFB	LFB	06/30/21 16:23	II210622-2	.50075		.472	mg/L	94	85	115			
L66558-03AS	AS	06/30/21 16:41	II210622-2	.50075	U	.486	mg/L	97	85	115			
L66558-03ASD	ASD	06/30/21 16:44	II210622-2	.50075	U	.51	mg/L	102	85	115	5	20	
WG522149CCV1	CCV	06/30/21 16:54	II210628-2	1		.927	mg/L	93	90	110			
WG522149CCB1	CCB	06/30/21 16:57				U	mg/L		-0.06	0.06			
WG522149CCV2	CCV	06/30/21 17:31	II210628-2	1		.95	mg/L	95	90	110			
WG522149CCB2	CCB	06/30/21 17:34				U	mg/L		-0.06	0.06			
WG522149CCV3	CCV	06/30/21 17:52	II210628-2	1		.945	mg/L	95	90	110			
WG522149CCB3	CCB	06/30/21 17:56				U	mg/L		-0.06	0.06			

Zinc, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG522346													
WG522346ICV	ICV	07/04/21 15:10	II210620-2	2		1.901	mg/L	95	95	105			
WG522346ICB	ICB	07/04/21 15:16				U	mg/L		-0.06	0.06			
WG522346PQV	PQV	07/04/21 15:19	II210603-2	.05015		.05	mg/L	100	70	130			
WG522346SIC	SIC	07/04/21 15:22	II210518-2	.1003		.096	mg/L	96	80	120			
WG522274LRB	LRB	07/04/21 15:29				U	mg/L		-0.044	0.044			
WG522274LFB	LFB	07/04/21 15:32	II210622-2	.50075		.505	mg/L	101	85	115			
L66558-03LFM	LFM	07/04/21 15:47	II210622-2	.50075	U	.495	mg/L	99	70	130			
L66558-03LFMD	LFMD	07/04/21 15:50	II210622-2	.50075	U	.503	mg/L	100	70	130	2	20	
WG522346CCV1	CCV	07/04/21 15:59	II210629-1	1		.977	mg/L	98	90	110			
WG522346CCB1	CCB	07/04/21 16:02				U	mg/L		-0.06	0.06			
WG522346CCV2	CCV	07/04/21 16:36	II210629-1	1		.932	mg/L	93	90	110			
WG522346CCB2	CCB	07/04/21 16:39				U	mg/L		-0.06	0.06			
WG522346CCV3	CCV	07/04/21 17:01	II210629-1	1		.938	mg/L	94	90	110			
WG522346CCB3	CCB	07/04/21 17:04				U	mg/L		-0.06	0.06			

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ACZ Project ID: **L66558**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L66558-01	WG521773	Bicarbonate as CaCO ₃	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO ₃	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG522154	Chloride	SM4500CI-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500CI-E	Q6	Sample was received above recommended temperature.
	WG521742	Cyanide, WAD	SM4500-CN I,E-Colorimetric w/ distillation	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500-CN I,E-Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG522332	Fluoride	SM4500F-C	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500F-C	Q6	Sample was received above recommended temperature.
	WG521773	Hydroxide as CaCO ₃	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG522501	Nitrate/Nitrite as N	M353.2 - H ₂ SO ₄ preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H ₂ SO ₄ preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG522201	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521521	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521721	Residue, Non-Filterable (TSS) @105C	SM2540D	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			SM2540D	Q6	Sample was received above recommended temperature.
			SM2540D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			SM2540D	Z3	Sample volume yielded a residue less than 2.5 mg
	WG522738	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
	WG521773	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Ensero Solutions

ACZ Project ID: **L66558**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L66558-02	WG521773	Bicarbonate as CaCO ₃	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO ₃	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG522154	Chloride	SM4500CI-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500CI-E	Q6	Sample was received above recommended temperature.
	WG521742	Cyanide, WAD	SM4500-CN I,E-Colorimetric w/ distillation	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500-CN I,E-Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG522332	Fluoride	SM4500F-C	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500F-C	Q6	Sample was received above recommended temperature.
	WG521773	Hydroxide as CaCO ₃	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG522501	Nitrate/Nitrite as N	M353.2 - H ₂ SO ₄ preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H ₂ SO ₄ preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG522201	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521521	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521721	Residue, Non-Filterable (TSS) @105C	SM2540D	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			SM2540D	Q6	Sample was received above recommended temperature.
			SM2540D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			SM2540D	Z3	Sample volume yielded a residue less than 2.5 mg
	WG522738	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
	WG521773	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Ensero Solutions

ACZ Project ID: **L66558**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L66558-03	WG521773	Bicarbonate as CaCO ₃	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO ₃	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG522154	Chloride	SM4500CI-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500CI-E	Q6	Sample was received above recommended temperature.
	WG521742	Cyanide, WAD	SM4500-CN I,E-Colorimetric w/ distillation	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500-CN I,E-Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			SM4500-CN I,E-Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG522332	Fluoride	SM4500F-C	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500F-C	Q6	Sample was received above recommended temperature.
	WG521773	Hydroxide as CaCO ₃	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG522501	Nitrate/Nitrite as N	M353.2 - H ₂ SO ₄ preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H ₂ SO ₄ preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG522201	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521521	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG521721	Residue, Non-Filterable (TSS) @105C	SM2540D	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			SM2540D	Q6	Sample was received above recommended temperature.
			SM2540D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			SM2540D	Z3	Sample volume yielded a residue less than 2.5 mg
	WG522738	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
	WG521773	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Ensero Solutions

Project ID: 3100-PO205

Sample ID: SW-BPL

Locator:

ACZ Sample ID: **L66558-01**

Date Sampled: 06/15/21 9:30

Date Received: 06/17/21

Sample Matrix: Surface Water

Combined Radium (total)

Prep Method:

Calculation (RA226 + RA228)

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	08/18/21 10:57		0			pCi/L		calc

Gross Alpha & Beta, total

Prep Method:

M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	07/01/21 0:31		6.6	2.9	5.5	pCi/L	*	ess
Gross Beta	07/01/21 0:31		3.2	3	9	pCi/L	*	ess

Radium 226, dissolved

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	07/14/21 0:14		-0.04	0.15	0.09	pCi/L		djc

Radium 226, total

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	07/14/21 0:12		0.14	0.12	0.19	pCi/L		djc

Radium 228, total

Prep Method:

M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, total	08/16/21 17:00		0.44	0.7	1.7	pCi/L	*	cer

Ensero Solutions

Project ID: 3100-PO205

Sample ID: SW-NWRP

Locator:

ACZ Sample ID: **L66558-02**

Date Sampled: 06/15/21 10:40

Date Received: 06/17/21

Sample Matrix: Surface Water

Combined Radium (total)

Prep Method:

Calculation (RA226 + RA228)

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	08/18/21 10:57		0.22			pCi/L		calc

Gross Alpha & Beta, total

Prep Method:

M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	07/01/21 0:33		4.3	2.4	11	pCi/L	*	ess
Gross Beta	07/01/21 0:33		3	2.6	11	pCi/L	*	ess

Radium 226, dissolved

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	07/14/21 0:17		0.02	0.11	0.05	pCi/L	*	djc

Radium 226, total

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	07/14/21 0:15		0.22	0.11	0.09	pCi/L		djc

Radium 228, total

Prep Method:

M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, total	08/16/21 17:00		0.21	0.69	1.6	pCi/L	*	cer

Ensero Solutions

Project ID: 3100-PO205

Sample ID: SW-AWD

Locator:

ACZ Sample ID: **L66558-03**

Date Sampled: 06/15/21 11:10

Date Received: 06/17/21

Sample Matrix: Surface Water

Combined Radium (total)

Prep Method:

Calculation (RA226 + RA228)

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	08/18/21 10:57		0.14			pCi/L		calc

Gross Alpha & Beta, total

Prep Method:

M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	07/01/21 0:34		1.2	1.4	5.5	pCi/L	*	ess
Gross Beta	07/01/21 0:34		3.3	2.9	9	pCi/L	*	ess

Radium 226, dissolved

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	07/14/21 0:20		0.2	0.13	0.2	pCi/L	*	djc

Radium 226, total

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	07/14/21 0:18		0.14	0.09	0.14	pCi/L	*	djc

Radium 228, total

Prep Method:

M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, total	08/16/21 17:00		-0.76	0.76	1.8	pCi/L	*	cer

Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Error(+/-)</i>	Calculated sample specific uncertainty
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>LCL</i>	Lower Control Limit, in % (except for LCSS, mg/Kg)
<i>LLD</i>	Calculated sample specific Lower Limit of Detection
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
<i>RER</i>	Relative Error Ratio, calculation used for Dup. QC taking into account the error factor.
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>UCL</i>	Upper Control Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

QC Sample Types

<i>DUP</i>	Sample Duplicate	<i>MS/MSD</i>	Matrix Spike/Matrix Spike Duplicate
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBS</i>	Prep Blank - Soil
<i>LCSW</i>	Laboratory Control Sample - Water	<i>PBW</i>	Prep Blank - Water

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Matrix Spikes	Determines sample matrix interferences, if any.

ACZ Qualifiers (Qual)

H	Analysis exceeded method hold time.
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Method Prefix Reference

M	EPA methodology, including those under SDWA, CWA, and RCRA
SM	Standard Methods for the Examination of Water and Wastewater.
D	ASTM
RP	DOE
ESM	DOE/ESM

Comments

- (1) Solid matrices are reported on a dry weight basis.
- (2) Preparation method: "Method" indicates preparation defined in analytical method.
- (3) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.

For a complete list of ACZ's Extended Qualifiers, please click:

<https://aczk.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf>

Ensero Solutions

ACZ Project ID: **L66558**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alpha

M900.0

Units: pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG521774																
WG521774PBW	PBW	07/01/21						.1	0.51	0.75			1.5			
WG521774LCSWA	LCSW	07/01/21	PCN62436	100				110	9.1	1.3	110	67	144			
L66483-02MSA	MS	07/01/21	PCN62436	100	2.4	1.9	8.7	85	9.3	6.5	83	67	144			
L66483-02DUP	DUP-RPD	07/01/21			2.4	1.9	8.7	1.8	1.5	5.9				29	20	RG
L66483-02DUP	DUP-RER	07/01/21			2.4	1.9	8.7	1.8	1.5	5.9				0.25	2	
L66558-03DUP	DUP-RER	07/01/21			1.2	1.4	5.5	2.4	1.9	6.8				0.51	2	
L66558-03DUP	DUP-RPD	07/01/21			1.2	1.4	5.5	2.4	1.9	6.8				67	20	RG

Beta

M900.0

Units: pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG521774																
WG521774PBW	PBW	07/01/21						-1.1	1.6	1.8			3.6			
WG521774LCSWB	LCSW	07/01/21	RC210621-11	49.9				56	4.9	2.5	112	82	122			
L66483-02DUP	DUP-RPD	07/01/21			13	3.2	6.9	6.2	3.1	8.2				71	20	RG
L66483-02DUP	DUP-RER	07/01/21			13	3.2	6.9	6.2	3.1	8.2				1.53	2	
L66558-03DUP	DUP-RPD	07/01/21			3.3	2.9	9	1.7	2.6	6.7				64	20	RG
L66558-03DUP	DUP-RER	07/01/21			3.3	2.9	9	1.7	2.6	6.7				0.41	2	
L66558-03MSB	MS	07/01/21	RC210621-11	49.9	3.3	2.9	9	55	5.1	11	104	82	122			

Ensero Solutions

ACZ Project ID: **L66558**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Radium 226, dissolved

M903.1

Units: pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG522609																
WG522609PBW	PBW	07/14/21						.08	0.09	0.07			0.14			
WG522609LCSW	LCSW	07/14/21	PCN62879	20				14	0.52	0.13	70	43	148			
L66559-01DUP1	DUP-RPD	07/14/21			0.19	0.09	0.27	.16	0.18	0.39				17	20	
L66559-02DUP2	DUP-RER	07/14/21			0.13	0.12	0.31	.35	0.23	0.38				0.85	2	
L66559-02DUP2	DUP-RPD	07/14/21			0.13	0.12	0.31	.35	0.23	0.38				92	20	RG
L66590-03MS	MS	07/14/21	PCN62879	40	0.29	0.14	0.24	40	1.2	0.36	99	43	148			

Radium 228, total

M904.0

Units: pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG524988																
L67260-03DUP	DUP-RER	08/16/21			0.2	0.72	1.8	.95	0.7	1.7				0.75	2	
WG524988LCSW	LCSW	08/16/21	PCN63356	9.55				8.2	1	1.8	86	47	123			
WG524988PBW	PBW	08/16/21						.04	0.7	1.8			3.6			
L67260-03DUP	DUP-RPD	08/16/21			0.2	0.72	1.8	.95	0.7	1.7				130	20	RG
L67442-02MS	MS	08/17/21	PCN63356	19.09	0.66	0.93	2.1	17	2.5	4.3	86	47	123			
L67442-03DUP	DUP-RPD	08/17/21			-0.28	0.94	2.1	.51	1.3	3.3				687	20	RG
L67442-03DUP	DUP-RER	08/17/21			-0.28	0.94	2.1	.51	1.3	3.3				0.49	2	

Ensero Solutions

ACZ Project ID: **L66558**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L66558-01	WG521774	Gross Alpha	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Gross Beta	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG524988	Radium 228, total	M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L66558-02	WG521774	Gross Alpha	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Gross Beta	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG522609	Radium 226, dissolved	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG524988	Radium 228, total	M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L66558-03	WG521774	Gross Alpha	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Gross Beta	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG522609	Radium 226, dissolved	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Radium 226, total	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG524988	Radium 228, total	M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.

Ensero Solutions
3100-PO205

ACZ Project ID: L66558
Date Received: 06/17/2021 11:12
Received By:
Date Printed: 6/18/2021

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?	☐	☐	☒
2) Is the Chain of Custody form or other directive shipping papers present?	☒	☐	☐
3) Does this project require special handling procedures such as CLP protocol?	☐	☒	☐
4) Are any samples NRC licensable material?	☐	☐	☒
5) If samples are received past hold time, proceed with requested short hold time analyses?	☒	☐	☐
6) Is the Chain of Custody form complete and accurate?	☒	☐	☐
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?	☐	☒	☐

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	☒	☐	☐
9) Are all labels on containers and are they intact and legible?	☒	☐	☐
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	☒	☐	☐
11) For preserved bottle types, was the pH checked and within limits? ¹	☒	☐	☐
12) Is there sufficient sample volume to perform all requested work?	☒	☐	☐
13) Is the custody seal intact on all containers?	☐	☐	☒
14) Are samples that require zero headspace acceptable?	☐	☐	☒
15) Are all sample containers appropriate for analytical requirements?	☒	☐	☐
16) Is there an Hg-1631 trip blank present?	☐	☐	☒
17) Is there a VOA trip blank present?	☐	☐	☒
18) Were all samples received within hold time?	☒	☐	☐

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp (°C)	Temp Criteria (°C)	Rad (µR/Hr)	Custody Seal Intact?
-----	-----	-----	-----	-----
5226	7.5	<=6.0	15	N/A

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

Ensero Solutions
3100-PO205

ACZ Project ID: L66558

Date Received: 06/17/2021 11:12

Received By:

Date Printed: 6/18/2021

¹ The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na₂S₂O₃ preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).



Laboratories, Inc.

L66558

CHAIN of CUSTODY

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Report to:

Name: Christie Brizinski
Company: Ensero Solutions
E-mail: cbrizinski@ensero.com

Address: 131 E. Lincoln Ave Ste. 200
Fort Collins, CO 80524
Telephone: 867-668-6463, ext 229

Copy of Report to:

Name: Evan Valencia
Company: Ensero Solutions

E-mail: evalencia@ensero.com
Telephone: 818-688-1839

Invoice to:

Name: Pauline Wong
Company: Ensero Solutions
E-mail: ap@ensero.com

Address: 131 E. Lincoln Ave Ste. 200
Fort Collins, CO 80524
Telephone: 778-404-1182

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses?

YES ☒
NO ☐

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

Are samples for SDWA Compliance Monitoring?

Yes ☐

No ☒

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: EV Sampler's Site Information State CO Zip code 80401 Time Zone MTN

*Sampler's Signature: *[Signature]*

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

ANALYSES REQUESTED (attach list or use quote number)

Quote #: Ensero-2020

PO#: 3100-PO205

Reporting state for compliance testing: CO

Check box if samples include NRC licensed material? ☐

SAMPLE IDENTIFICATION		DATE:TIME	Matrix	# of	TSS	San	San	COD	LLH	Sample	TDS	
SW-BPL	6-15-2021: 9:30	GW	9	☐	☐	☐	☐	☐	☐	☒	☐	☐
SW-NWRP	6-15-2021: 10:40	GW	9	☐	☐	☐	☐	☐	☐	☒	☐	☐
SW-AWD	6-15-2021: 11:10	GW	9	☐	☐	☐	☐	☐	☐	☒	☐	☐
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