

See what's possible.

**SPOKANE**  
9221 N Division Street  
Suite F  
Spokane, WA 99218  
Ph: (509) 413-1430

**HELENA**  
PO Box 4817  
2501 Belt View Drive  
Helena, MT 59604  
Ph: (406) 449-8627  
F: (406) 449-8631

**BILLINGS**  
6780 Trade Center Avenue  
Billings, MT 59101  
Ph: (406) 652-5000  
F: (406) 248-1363

**BOISE**  
3050 N Lakeharbor Lane  
Suite 201  
Boise, ID 83703  
Ph: (208) 576-6646

**GREAT FALLS**  
702 2nd Street S, #2  
Great Falls, MT 59405  
Ph: (406) 952-1109



March 23, 2022

Mr. William Fees  
Washington State Department of Ecology  
Toxics Cleanup Program  
4601 N. Monroe, Suite 202  
Spokane, WA 99205-1295

**RE: L-Bar Site Compliance Monitoring Program—2021 Year-End Groundwater Monitoring Data Submittal**

Dear Mr. Fees:

On behalf of Alcoa, Great West Engineering has prepared this letter and associated attachments to summarize the groundwater monitoring results collected in 2021 as part of the *Compliance Monitoring Program* (CMP) at the L-Bar site.

The following attachments summarize the groundwater monitoring data collected in 2021:

Attachment A	Site Map and CMP Monitoring Network
Attachment B	Groundwater Elevation Hydrograph
Attachment C	Spring 2021 Groundwater Flow Map
Attachment D	Fall 2021 Groundwater Flow Map
Attachment E	Groundwater Field Measurements and Analytical Data
Attachment F	Groundwater Quality Analytical Laboratory Data Packages
Attachment G	Groundwater Time Series Concentration Plots: G-1 Chloride Concentrations G-2 Ammonia Concentrations G-3 Total Dissolved Solids Concentrations

**Attachment A** is the site map showing the current CMP groundwater monitoring network, which includes thirteen (13) sampling locations, including twelve (12) shallow resource-protection groundwater monitoring wells and one (1) deep production well (PW). Groundwater monitoring is conducted semi-annually at the L-Bar site as initiated in the *L-Bar Material Removal and Compliance Monitoring Work Plan* (CH2M, 2001) and as recently updated in the *L-Bar Site Compliance Monitoring Program Sampling and Analysis Work Plan, 2020 Revision* (Jacobs, 2020). Per the CMP, the primary indicator parameters (ammonia, chloride, and TDS) are consistently sampled twice (semi-annual) per year. The secondary parameters (nitrate, nitrite, barium [total], manganese [total], selenium [total], and thallium [total], plus laboratory analyzed turbidity) are sampled twice per year every other year (i.e., secondary constituents are sampled during even numbered years and excluded during odd numbered years). As such, only primary indicator parameters were sampled in 2021.



**Attachment B** is the updated groundwater elevation hydrograph showing the groundwater level fluctuations from semi-annual CMP monitoring events conducted over the past 20 years from 2001 through the latest 2021 sampling event. Previous 5-year Review Reports have discussed the seasonal fluctuations, which were persistent in 2021 monitoring events.

**Attachments C and D** present the groundwater flow maps for the respective spring and fall 2021 monitoring events. The dashed lines represent the inferred groundwater elevation contours, and the blue arrows represent the generalized and inferred groundwater flow direction, perpendicular to the groundwater elevation contours. Both the spring and fall groundwater flow maps support a general flow direction to the north-northwest, illustrating groundwater discharging towards and into the Colville River, which is consistent with previously reported groundwater flow conditions.

**Attachment E** presents the groundwater monitoring field measurements and the groundwater analytical results for both spring and fall monitoring events performed in 2021. Bold-font values are detected concentrations that exceed the site-specific cleanup levels as specified in the *L-Bar Site Compliance Monitoring Program Sampling and Analysis Work Plan, 2020 Revision* (Jacobs, 2020). As shown in the footnotes and associated results, five cases for chloride during the fall event were identified to be erroneous or inconsistent with historic data. For these cases, the laboratory was contacted and recognized that incorrect dilutions had been reported; the laboratory issued the corrected laboratory report on March 23, 2022.

**Attachment F** are the laboratory reports for the respective spring and fall semi-annual groundwater sampling events. As noted above, for the fall event, 5 values for chloride were incorrect due to dilutions, and the corrected laboratory report was issued on March 23, 2022.

**Attachment G** provides updated time-series plots for the primary indicator parameters (Chloride, Ammonia, and TDS in Attachment G.1, G.2, and G.3, respectively) and all the CMP groundwater monitoring wells. Overall, the concentrations for primary indicator parameters are showing continued progress towards achievement of cleanup levels. For SA-10, indicator parameters such as ammonia and TDS are supportive of decreasing concentrations, however, the latest 2 results for chloride are elevated. This phenomenon of 2 primary indicators showing declines while the 3<sup>rd</sup> parameter being elevated is curious, and suggests that these recent chloride values may not be wholly representative of groundwater conditions given the laboratory data quality issues identified for several other chloride results as noted above. Monitoring results and conditions from SA-10 will be closely monitored in future data evaluations to determine if these results represent actual or persistent changes in groundwater quality, or if they are attributed to laboratory issues.

We understand that in planning for 2022-2023 monitoring activities that the next periodic review will occur following completion of sampling in 2022. This next periodic review will provide a focused assessment to track continued progress towards achievement of cleanup levels.



Please feel free to contact me should you have any questions or comments regarding this 2021 CMP groundwater data submittal.

Sincerely,

**Great West Engineering, Inc.**

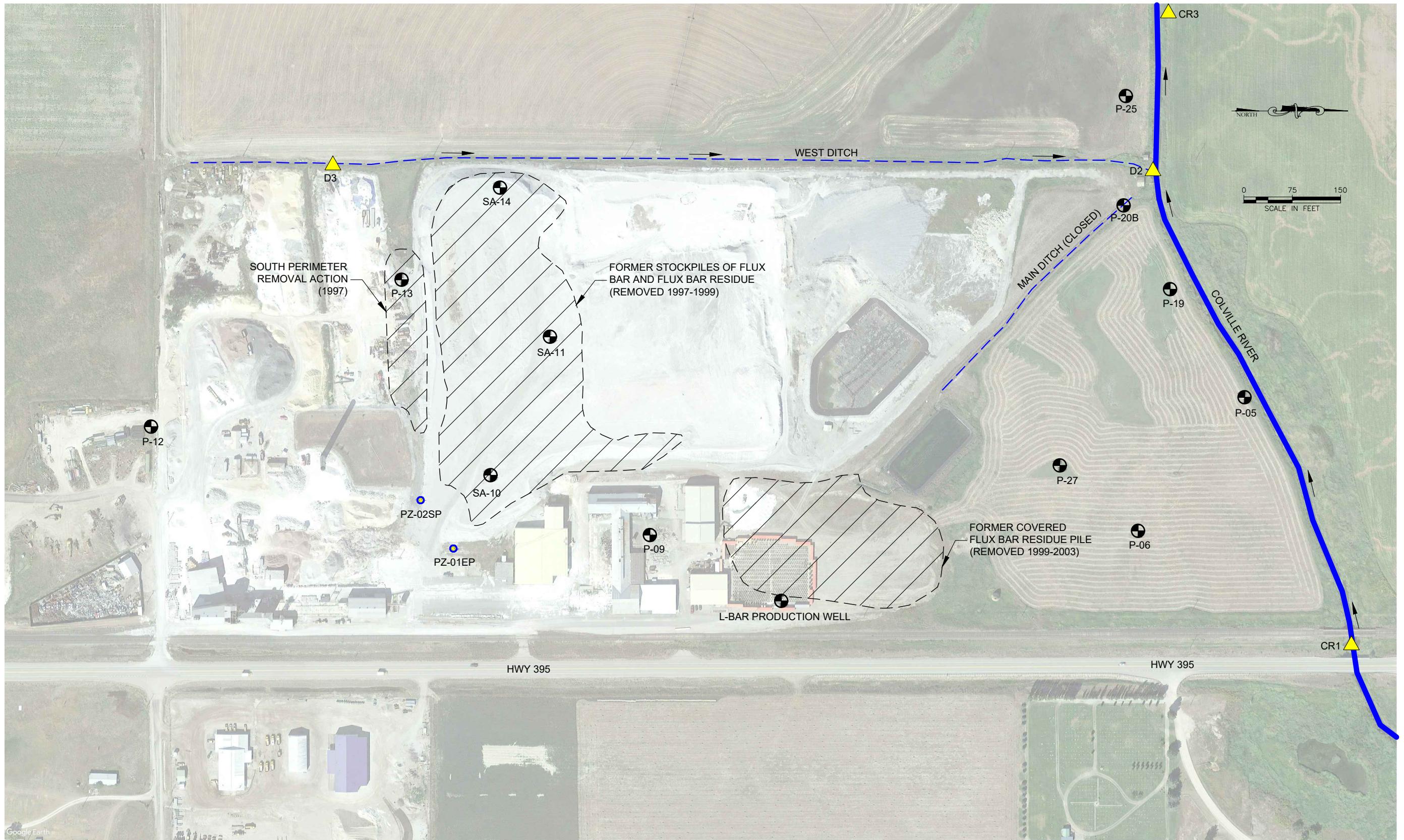
A handwritten signature in blue ink that reads "Craig Sauer".

Craig Sauer, PG  
Project Manager

cc: Kristin Gaines/Alcoa Corporation  
Johnie McCanna/Alcoa Contractor  
Charles Gruenenfelder/Washington State Dept. of Ecology  
Charlie Kessler/Stevens County Conservation District

## **Attachment A**

*Site Map and CMP Monitoring Network*

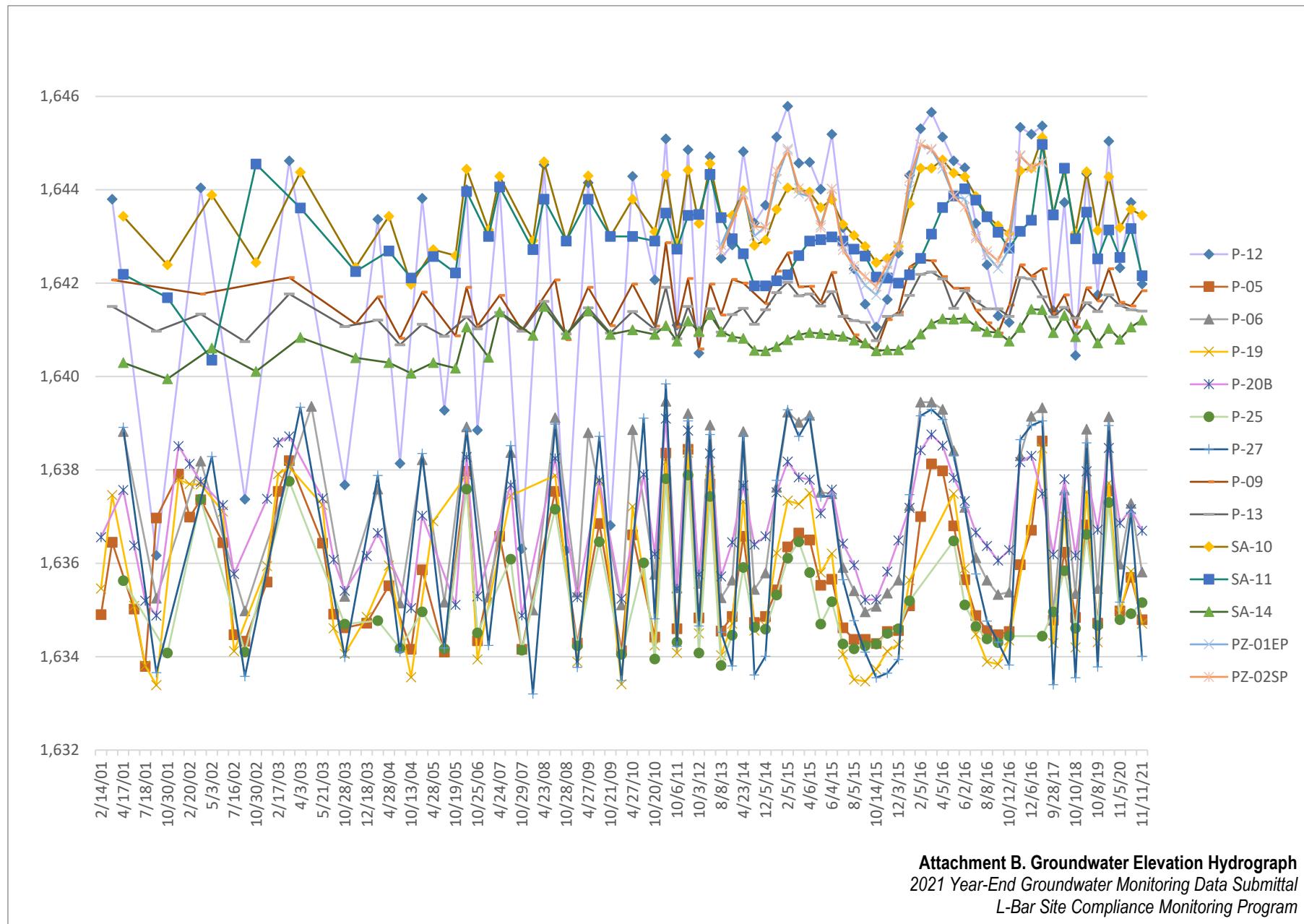


#### LEGEND

- COMPLIANCE GROUNDWATER MONITORING WELL
- GROUNDWATER PIEZOMETER
- ▲ COMPLIANCE SURFACE WATER SAMPLING STATION
- MAJOR SOURCE REMOVAL AREA

## **Attachment B**

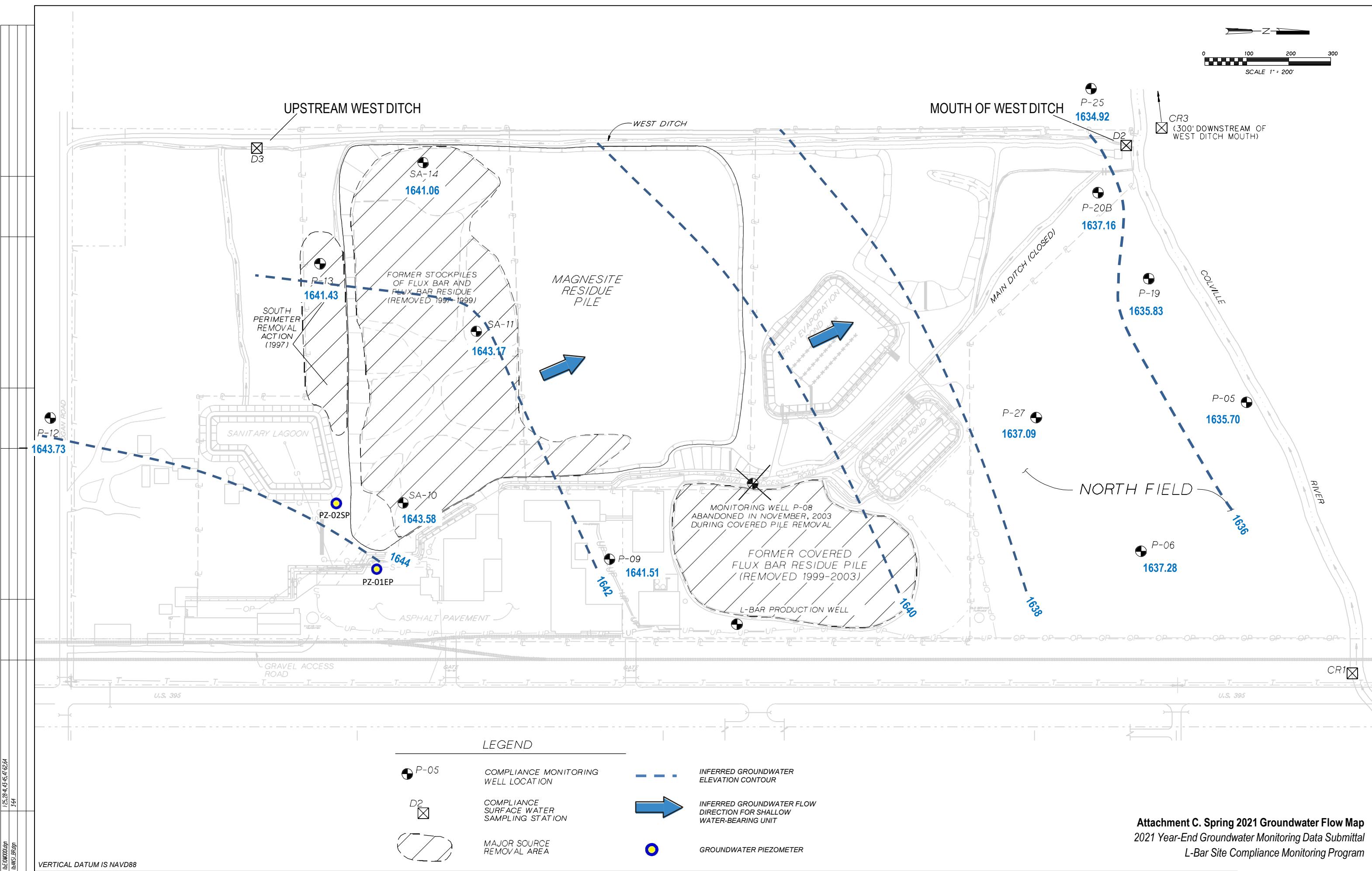
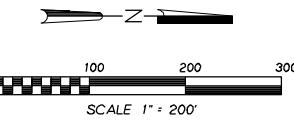
### *Groundwater Elevation Hydrograph*



**Attachment B. Groundwater Elevation Hydrograph**  
2021 Year-End Groundwater Monitoring Data Submittal  
L-Bar Site Compliance Monitoring Program

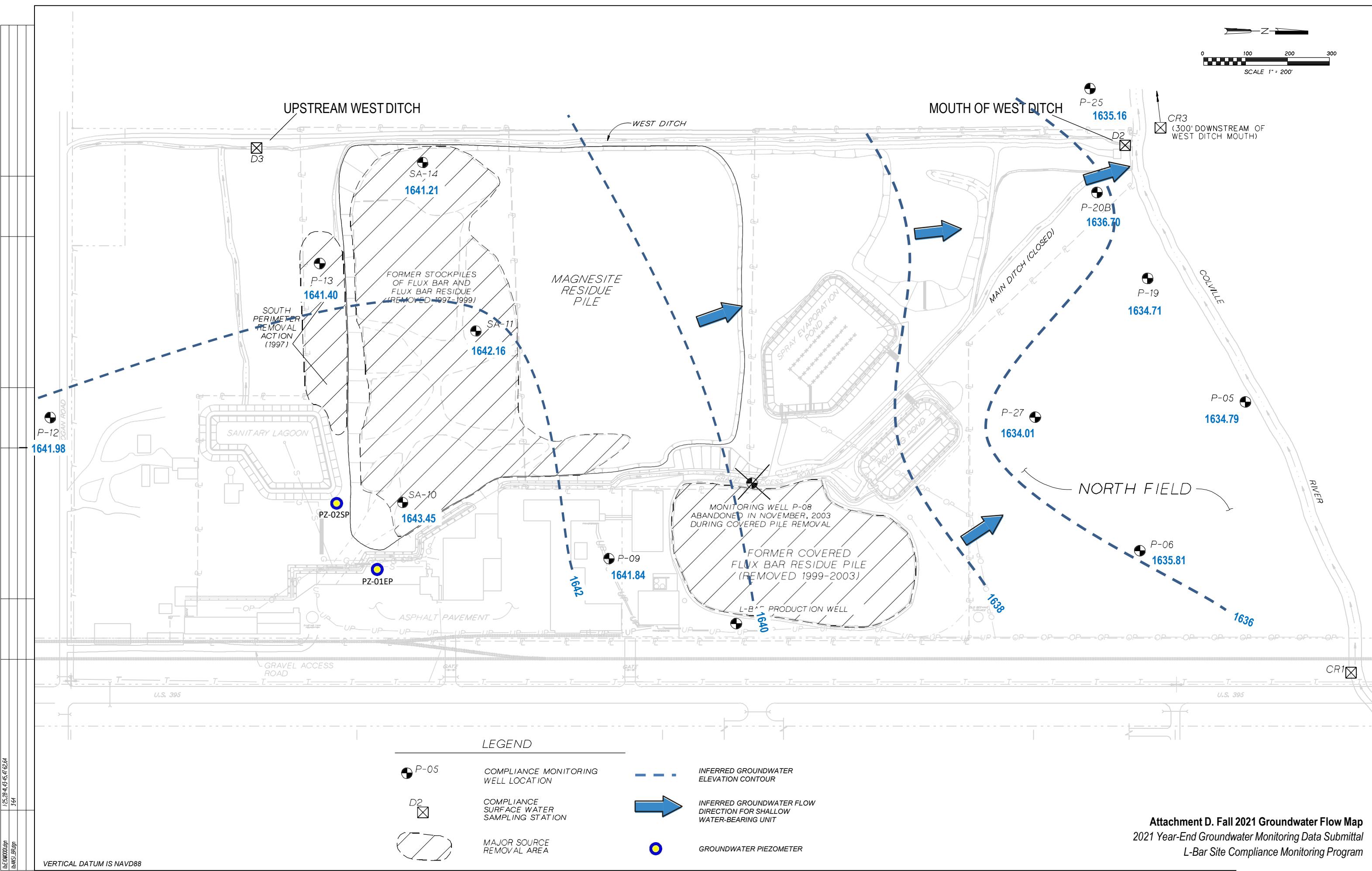
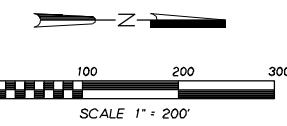
## **Attachment C**

*Spring 2021 Groundwater Flow Map*



## **Attachment D**

*Fall 2021 Groundwater Flow Map*



## **Attachment E**

### *Groundwater Field Measurements and Analytical Data*

**Attachment E. Groundwater Field Measurements and Analytical Data**

2021 Year-End Groundwater Monitoring Data Submittal

L-Bar Site Compliance Monitoring Program

Group	Analyte	Unit	P-12	P-13	SA-10	SA-11	SA-14	P-09	P-05	P-06	P-27	P-19	P-20B	P-25	PW	Cleanup Level
<i>Spring Sampling Event - 5/20/21</i>																
Field	Water Level	ft bgs	5.7	4.55	28.49	25.1	25.79	2.3	7.29	5.05	5.1	4.2	5.09	4.49	--	--
Field	Temperature	°C	8.4	9.7	11.1	11.2	10.9	18.9	7.0	8.1	7.9	10.7	10.1	9.1	11.5	--
Field	pH	units	7.89	8.91	8.54	8.66	10.76	8.94	7.72	7.82	7.74	7.21	7.77	7.28	8.63	--
Field	Conductivity	uS/cm	1,132	6,740	27,440	21,300	5,230	2,628	6,970	1,192	16,650	16,880	5,710	3,537	673	--
Inorganics	Ammonia-N	mg/L	< 0.02	<b>31.2</b>	<b>721</b>	<b>71.5</b>	<b>16.40</b>	<b>0.15</b>	< 0.02	<b>0.49</b>	0.0397	0.0512	<b>12.7</b>	<b>0.57</b>	< 0.02	0.13
Inorganics	Chloride	mg/L	7.05	<b>1,050</b>	<b>12,200</b>	<b>7,590</b>	<b>921</b>	<b>595</b>	<b>2,040</b>	94.9	<b>5,390</b>	<b>5,680</b>	<b>1,400</b>	<b>748</b>	0.942	230
Inorganics	TDS	mg/L	679	<b>4,970</b>	<b>27,500</b>	<b>21,100</b>	<b>4,200</b>	<b>2,260</b>	<b>5,340</b>	745	<b>11,400</b>	<b>14,000</b>	<b>4,630</b>	<b>3,180</b>	275	1,092
Inorganics	Turbidity	NTU	0.49	0.40	1.4	1.41	0.19	0.32	0.98	86	0.67	0.67	13.8	111	2.180	--
<i>Fall Sampling Event - 11/11/21</i>																
Field	Water Level	ft bgs	7.45	4.58	28.62	26.11	25.64	1.97	8.2	6.52	8.18	5.32	5.55	4.25	--	--
Field	Temperature	°C	11.6	9.4	10.9	11.0	10.4	12.5	8.4	10.4	9.8	9.2	13.3	10.2	17.9	--
Field	pH	units	8.38	7.95	8.53	9.21	11.06	8.86	7.97	8.30	7.67	7.59	7.77	7.91	8.89	--
Field	Conductivity	uS/cm	1,098	7,130	34,160	18,970	5,170	3,329	6,780	868	17,170	10,000	7,490	2,820	455	--
Inorganics	Ammonia-N	mg/L	< 0.02	<b>32.5</b>	<b>704</b>	<b>53.9</b>	<b>16.6</b>	<b>1.12</b>	< 0.02	0.0958	< 0.02	<b>19.2</b>	<b>0.184</b>	< 0.02	0.13	
Inorganics	Chloride	mg/L	6.49	<b>1100*</b>	<b>16,600</b>	<b>5,370</b>	<b>960</b>	<b>421*</b>	<b>1,980</b>	177	6250*	<b>2,100</b>	<b>820</b>	2.56*	230	
Inorganics	TDS	mg/L	681	<b>6,070</b>	<b>14,300</b>	<b>10,900</b>	<b>3,170</b>	<b>1,640</b>	<b>3,720</b>	457	<b>10,900</b>	<b>6,230</b>	<b>4,600</b>	<b>1,640</b>	254	1,092
Inorganics	Turbidity	NTU	0.58	1.65	0.50	0.41	0.41	0.24	15.00	0.22	0.57	0.73	1.51	2.62	67.40	--

Notes:

**Bold** values are those that exceed their respective cleanup level

Non-detect values shown as ND or preceded with "<" symbol; non-detect value is Practical Quantitation Limit (PQL)

Selected chloride values flagged with "\*" indicate cases where laboratory initially reported incorrect results due to dilutions; they re-issued the corrected report on March 23, 2022 as provided in Attachment F.

## **Attachment F**

*Groundwater Quality Analytical Laboratory  
Data Packages*

# *Anatek Labs, Inc.*

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email [moscow@anateklabs.com](mailto:moscow@anateklabs.com)  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email [spokane@anateklabs.com](mailto:spokane@anateklabs.com)

**Client:** Great West Engineering, Inc. **Work Order:** WBE0835  
**Address:** 9221 N. Division St., Suite F **Project:** Alcoa Q2 L-Bar  
Spokane, WA 99218 **Reported:** 7/26/2021 14:36  
**Attn:** Craig Sauer

## Analytical Results Report

Sample Location: 052021P12  
Lab/Sample Number: WBE0835-01 Collect Date: 05/20/21 07:50  
Date Received: 05/20/21 16:25 Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	ND	mg/L	0.0200	6/7/21 15:49	TLM	SM 4500-NH3 H	
Chloride	7.05	mg/L	0.100	6/7/21 19:46	BAS	EPA 300.0	
pH	7.33	pH Units	1.00	5/21/21 6:30	KAS	SM 4500-H-B	
TDS	679	mg/L	5.00	5/24/21 15:50	BAS	SM 2540 C	
Turbidity	0.485	NTU	0.100	5/21/21 9:08	CME	EPA 180.1	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Analytical Results Report

(Continued)

Sample Location: 052021P13  
Lab/Sample Number: WBE0835-02      Collect Date: 05/20/21 08:20  
Date Received: 05/20/21 16:25      Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	31.2	mg/L	0.400	6/7/21 18:43	TLM	SM 4500-NH3 H	
Chloride	1050	mg/L	5.00	6/7/21 20:36	BAS	EPA 300.0	
pH	7.98	pH Units	1.00	5/21/21 6:30	KAS	SM 4500-H-B	
TDS	4970	mg/L	5.00	5/24/21 15:50	BAS	SM 2540 C	
Turbidity	0.401	NTU	0.100	5/21/21 9:08	CME	EPA 180.1	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Analytical Results Report

(Continued)

Sample Location: 052021SA10  
Lab/Sample Number: WBE0835-03      Collect Date: 05/20/21 08:50  
Date Received: 05/20/21 16:25      Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	721	mg/L	20.0	6/15/21 14:50	TLM	SM 4500-NH3 H	
Chloride	12200	mg/L	50.0	6/7/21 20:53	BAS	EPA 300.0	
pH	7.32	pH Units	1.00	5/21/21 6:30	KAS	SM 4500-H-B	
TDS	27500	mg/L	5.00	5/24/21 15:50	BAS	SM 2540 C	
Turbidity	1.38	NTU	0.100	5/21/21 9:08	CME	EPA 180.1	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Analytical Results Report

(Continued)

Sample Location: 052021SA11  
Lab/Sample Number: WBE0835-04      Collect Date: 05/20/21 09:10  
Date Received: 05/20/21 16:25      Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	71.5	mg/L	2.00	6/15/21 14:25	TLM	SM 4500-NH3 H	
Chloride	7590	mg/L	50.0	6/7/21 21:09	BAS	EPA 300.0	
pH	7.97	pH Units	1.00	5/21/21 6:30	KAS	SM 4500-H-B	
TDS	21100	mg/L	5.00	5/26/21 8:55	BAS	SM 2540 C	
Turbidity	1.41	NTU	0.100	5/21/21 9:08	CME	EPA 180.1	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Analytical Results Report

(Continued)

Sample Location: 052021SA14  
Lab/Sample Number: WBE0835-05      Collect Date: 05/20/21 09:25  
Date Received: 05/20/21 16:25      Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	16.4	mg/L	0.400	6/7/21 18:51	TLM	SM 4500-NH3 H	
Chloride	921	mg/L	5.00	6/7/21 21:26	BAS	EPA 300.0	
pH	9.93	pH Units	1.00	5/21/21 6:30	KAS	SM 4500-H-B	
TDS	4200	mg/L	5.00	5/26/21 8:55	BAS	SM 2540 C	
Turbidity	0.189	NTU	0.100	5/21/21 9:08	CME	EPA 180.1	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Analytical Results Report

(Continued)

Sample Location: 052021P09  
Lab/Sample Number: WBE0835-06 Collect Date: 05/20/21 12:45  
Date Received: 05/20/21 16:25 Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	0.153	mg/L	0.0200	6/7/21 15:58	TLM	SM 4500-NH3 H	
Chloride	595	mg/L	2.50	6/7/21 21:42	BAS	EPA 300.0	
pH	8.44	pH Units	1.00	5/21/21 6:30	KAS	SM 4500-H-B	
TDS	2260	mg/L	5.00	5/26/21 8:55	BAS	SM 2540 C	
Turbidity	0.316	NTU	0.100	5/21/21 9:08	CME	EPA 180.1	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Analytical Results Report

(Continued)

Sample Location: 052021PW  
Lab/Sample Number: WBE0835-07      Collect Date: 05/20/21 12:20  
Date Received: 05/20/21 16:25      Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	ND	mg/L	0.0200	6/7/21 15:59	TLM	SM 4500-NH3 H	
Chloride	0.942	mg/L	0.100	6/7/21 21:59	BAS	EPA 300.0	
pH	7.49	pH Units	1.00	5/21/21 6:30	KAS	SM 4500-H-B	
TDS	275	mg/L	5.00	5/26/21 8:55	BAS	SM 2540 C	
Turbidity	2.18	NTU	0.100	5/21/21 9:08	CME	EPA 180.1	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Analytical Results Report

(Continued)

Sample Location: 052021P05  
Lab/Sample Number: WBE0835-08      Collect Date: 05/20/21 11:05  
Date Received: 05/20/21 16:25      Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	ND	mg/L	0.0200	6/7/21 16:00	TLM	SM 4500-NH3 H	
Chloride	2040	mg/L	10.0	6/7/21 23:38	BAS	EPA 300.0	
pH	7.02	pH Units	1.00	5/21/21 6:30	KAS	SM 4500-H-B	
TDS	5340	mg/L	5.00	5/26/21 8:55	BAS	SM 2540 C	
Turbidity	0.978	NTU	0.100	5/21/21 9:08	CME	EPA 180.1	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Analytical Results Report

(Continued)

Sample Location: 052021P06  
Lab/Sample Number: WBE0835-09      Collect Date: 05/20/21 11:25  
Date Received: 05/20/21 16:25      Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	0.493	mg/L	0.0200	6/7/21 16:02	TLM	SM 4500-NH3 H	
Chloride	94.9	mg/L	0.400	6/7/21 23:54	BAS	EPA 300.0	
pH	7.05	pH Units	1.00	5/21/21 6:30	KAS	SM 4500-H-B	
TDS	745	mg/L	5.00	5/26/21 8:55	BAS	SM 2540 C	
Turbidity	85.8	NTU	0.250	5/21/21 9:08	CME	EPA 180.1	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Analytical Results Report

(Continued)

Sample Location: 052021P19  
Lab/Sample Number: WBE0835-10      Collect Date: 05/20/21 10:50  
Date Received: 05/20/21 16:25      Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	0.0512	mg/L	0.0200	6/7/21 16:03	TLM	SM 4500-NH3 H	
Chloride	5680	mg/L	25.0	6/14/21 16:41	BAS	EPA 300.0	
pH	6.57	pH Units	1.00	5/21/21 6:30	KAS	SM 4500-H-B	
TDS	14000	mg/L	5.00	5/26/21 8:55	BAS	SM 2540 C	
Turbidity	0.665	NTU	0.100	5/21/21 9:08	CME	EPA 180.1	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Analytical Results Report

(Continued)

Sample Location: 052021P20B  
Lab/Sample Number: WBE0835-11      Collect Date: 05/20/21 10:25  
Date Received: 05/20/21 16:25      Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	12.7	mg/L	0.400	6/7/21 18:53	TLM	SM 4500-NH3 H	
Chloride	1400	mg/L	10.0	6/8/21 0:27	BAS	EPA 300.0	
pH	7.32	pH Units	1.00	5/21/21 6:30	KAS	SM 4500-H-B	
TDS	4630	mg/L	5.00	5/26/21 8:55	BAS	SM 2540 C	
Turbidity	13.8	NTU	0.100	5/21/21 9:08	CME	EPA 180.1	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Analytical Results Report

(Continued)

Sample Location: 052021P25  
Lab/Sample Number: WBE0835-12      Collect Date: 05/20/21 10:05  
Date Received: 05/20/21 16:25      Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	0.566	mg/L	0.0200	6/7/21 16:05	TLM	SM 4500-NH3 H	
Chloride	748	mg/L	2.50	6/8/21 0:44	BAS	EPA 300.0	
pH	6.81	pH Units	1.00	5/21/21 6:30	KAS	SM 4500-H-B	
TDS	3180	mg/L	5.00	5/26/21 8:55	BAS	SM 2540 C	
Turbidity	111	NTU	0.400	5/21/21 9:08	CME	EPA 180.1	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Analytical Results Report

(Continued)

Sample Location: 052021P27  
Lab/Sample Number: WBE0835-13      Collect Date: 05/20/21 11:50  
Date Received: 05/20/21 16:25      Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	0.0397	mg/L	0.0200	6/7/21 16:06	TLM	SM 4500-NH3 H	
Chloride	5390	mg/L	50.0	6/8/21 1:00	BAS	EPA 300.0	
pH	7.12	pH Units	1.00	5/21/21 6:30	KAS	SM 4500-H-B	
TDS	11400	mg/L	5.00	5/26/21 8:55	BAS	SM 2540 C	
Turbidity	0.674	NTU	0.100	5/21/21 9:08	CME	EPA 180.1	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Analytical Results Report

(Continued)

Sample Location: 052021FD3  
Lab/Sample Number: WBE0835-14      Collect Date: 05/20/21 14:30  
Date Received: 05/20/21 16:25      Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	ND	mg/L	0.0200	6/7/21 16:14	TLM	SM 4500-NH3 H	
Chloride	1.07	mg/L	0.100	6/14/21 16:57	BAS	EPA 300.0	
pH	7.82	pH Units	1.00	5/21/21 6:30	KAS	SM 4500-H-B	
TDS	452	mg/L	5.00	5/26/21 8:55	BAS	SM 2540 C	
Turbidity	1.80	NTU	0.100	5/21/21 9:08	CME	EPA 180.1	

Authorized Signature,



Kathleen Sattler, Laboratory Manager

PQL	Practical Quantitation Limit
ND	Not Detected
MCL	EPA's Maximum Contaminant Level
Dry	Sample results reported on a dry weight basis
*	Not a state-certified analyte

This report shall not be reproduced except in full, without the written approval of the laboratory  
The results reported relate only to the samples indicated.

# *Anatek Labs, Inc.*

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

---

## **Certifications**

<b>Code</b>	<b>Description</b>	<b>Facility</b>	<b>Number</b>
W WA DOE	Washington Department of Ecology	Anatek-Spokane, WA	C585

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
 504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Quality Control Data

### Inorganics

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: BBE0704 - W Wet Chem</b>										
<b>Blank (BBE0704-BLK1)</b>										
Turbidity	ND		0.100	NTU				Prepared & Analyzed: 5/21/2021		
<b>Batch: BBE0771 - W Wet Chem</b>										
<b>Blank (BBE0771-BLK1)</b>										
TDS	ND		5.00	mg/L				Prepared & Analyzed: 5/24/2021		
<b>LCS (BBE0771-BS1)</b>										
TDS	479			mg/L	500		95.8	80-120		
<b>LCS Dup (BBE0771-BSD1)</b>										
TDS	488			mg/L	500		97.6	80-120	1.86	20
<b>Duplicate (BBE0771-DUP1)</b>										
TDS	704	<b>Source: WBE0835-01</b>	5.00	mg/L			679		3.62	20
<b>Matrix Spike (BBE0771-MS1)</b>										
TDS	1060	<b>Source: WBE0773-08</b>	5.00	mg/L	500	549	102	80-120		
<b>Matrix Spike Dup (BBE0771-MSD1)</b>										
TDS	1050	<b>Source: WBE0773-08</b>	5.00	mg/L	500	549	101	80-120	0.568	20
<b>Batch: BBE0866 - W Wet Chem</b>										
<b>Blank (BBE0866-BLK1)</b>										
TDS	ND		5.00	mg/L				Prepared & Analyzed: 5/26/2021		

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
 504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Quality Control Data (Continued)

### Inorganics (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: BBE0866 - W Wet Chem (Continued)</b>										
<b>Blank (BBE0866-BLK2)</b>										
TDS	ND		5.00	mg/L				Prepared & Analyzed: 5/26/2021		
<b>LCS (BBE0866-BS1)</b>										
TDS	472			mg/L	500	94.4	80-120			
<b>LCS Dup (BBE0866-BSD1)</b>										
TDS	486			mg/L	500	97.2	80-120	2.92	20	
<b>Duplicate (BBE0866-DUP1)</b>										
TDS	789		5.00	mg/L	805			2.01	20	
<b>Matrix Spike (BBE0866-MS1)</b>										
TDS	716		5.00	mg/L	500	275	88.2	80-120		
<b>Matrix Spike Dup (BBE0866-MSD1)</b>										
TDS	774		5.00	mg/L	500	275	99.8	80-120	7.79	20
<b>Batch: BBF0265 - W Ions</b>										
<b>Blank (BBF0265-BLK1)</b>										
Chloride	ND		0.100	mg/L				Prepared & Analyzed: 6/7/2021		
<b>LCS (BBF0265-BS1)</b>										
Chloride	4.06			mg/L	4.00	102	90-110			
<b>Matrix Spike (BBF0265-MS1)</b>										
Chloride	5.24			mg/L	4.00	0.942	108	80-120		

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
 504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Quality Control Data (Continued)

### Inorganics (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: BBF0265 - W Ions (Continued)</b>										
<b>Matrix Spike Dup (BBF0265-MSD1)</b>			<b>Source: WBE0835-07</b>							
Chloride										
	4.80			mg/L	4.00	0.942	96.5	80-120	8.77	20
<b>Batch: BBF0279 - W FIA</b>										
<b>Blank (BBF0279-BLK1)</b>										
Ammonia/N	ND		0.0200	mg/L						
Prepared & Analyzed: 6/7/2021										
<b>Blank (BBF0279-BLK2)</b>										
Ammonia/N	ND		0.0200	mg/L						
Prepared & Analyzed: 6/7/2021										
<b>Blank (BBF0279-BLK3)</b>										
Ammonia/N	ND		0.0200	mg/L						
Prepared & Analyzed: 6/7/2021										
<b>Blank (BBF0279-BLK4)</b>										
Ammonia/N	ND		0.0200	mg/L						
Prepared & Analyzed: 6/7/2021										
<b>Blank (BBF0279-BLK5)</b>										
Ammonia/N	ND		0.0200	mg/L						
Prepared & Analyzed: 6/7/2021										
<b>Blank (BBF0279-BLK6)</b>										
Ammonia/N	ND		0.0200	mg/L						
Prepared & Analyzed: 6/7/2021										
<b>Blank (BBF0279-BLK7)</b>										
Ammonia/N	ND		0.0200	mg/L						
Prepared & Analyzed: 6/7/2021										
<b>Blank (BBF0279-BLK8)</b>										
Ammonia/N	ND		0.0200	mg/L						
Prepared & Analyzed: 6/7/2021										

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
 504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Quality Control Data (Continued)

### Inorganics (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: BBF0279 - W FIA (Continued)</b>										
<b>Blank (BBF0279-BLK9)</b>										
Ammonia/N	ND		0.0200	mg/L			Prepared & Analyzed: 6/7/2021			
<b>LCS (BBF0279-BS1)</b>										
Ammonia/N	0.198		0.0200	mg/L	0.200	99.0	Prepared & Analyzed: 6/7/2021	90-110		
<b>LCS (BBF0279-BS2)</b>										
Ammonia/N	0.204		0.0200	mg/L	0.200	102	Prepared & Analyzed: 6/7/2021	90-110		
<b>LCS (BBF0279-BS3)</b>										
Ammonia/N	0.201		0.0200	mg/L	0.200	101	Prepared & Analyzed: 6/7/2021	90-110		
<b>LCS (BBF0279-BS4)</b>										
Ammonia/N	0.205		0.0200	mg/L	0.200	103	Prepared & Analyzed: 6/7/2021	90-110		
<b>LCS (BBF0279-BS5)</b>										
Ammonia/N	0.210		0.0200	mg/L	0.200	105	Prepared & Analyzed: 6/7/2021	90-110		
<b>Matrix Spike (BBF0279-MS1)</b>										
Ammonia/N	0.333		0.0200	mg/L	0.200	0.141	95.8	Prepared & Analyzed: 6/7/2021	80-120	
<b>Matrix Spike (BBF0279-MS2)</b>										
Ammonia/N	0.457		0.0200	mg/L	0.200	0.269	94.1	Prepared & Analyzed: 6/7/2021	80-120	
<b>Matrix Spike (BBF0279-MS3)</b>										
Ammonia/N	0.247		0.0200	mg/L	0.200	0.0608	93.3	Prepared & Analyzed: 6/7/2021	80-120	
<b>Matrix Spike (BBF0279-MS4)</b>										
Ammonia/N	0.226		0.0200	mg/L	0.200	0.0372	94.6	Prepared & Analyzed: 6/7/2021	80-120	

*Anatek Labs, Inc.*

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email [moscow@anateklabs.com](mailto:moscow@anateklabs.com)  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email [spokane@anateklabs.com](mailto:spokane@anateklabs.com)

## **Quality Control Data (Continued)**

## Inorganics (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: BBF0279 - W FIA (Continued)</b>										
<b>Matrix Spike Dup (BBF0279-MSD1)</b>	<b>Source: WBE0799-02</b>				Prepared & Analyzed: 6/7/2021					
Ammonia/N	0.323		0.0200	mg/L	0.200	0.141	91.1	80-120	2.83	20
<b>Matrix Spike Dup (BBF0279-MSD2)</b>	<b>Source: WBE0850-02</b>				Prepared & Analyzed: 6/7/2021					
Ammonia/N	0.465		0.0200	mg/L	0.200	0.269	97.8	80-120	1.61	20
<b>Matrix Spike Dup (BBF0279-MSD3)</b>	<b>Source: WBE0904-02</b>				Prepared & Analyzed: 6/7/2021					
Ammonia/N	0.248		0.0200	mg/L	0.200	0.0608	93.6	80-120	0.242	20
<b>Matrix Spike Dup (BBF0279-MSD4)</b>	<b>Source: WBE1136-02</b>				Prepared & Analyzed: 6/7/2021					
Ammonia/N	0.225		0.0200	mg/L	0.200	0.0372	93.8	80-120	0.665	20
<b>Batch: BBF0527 - W Ions</b>										
<b>Blank (BBF0527-BLK1)</b>					Prepared & Analyzed: 6/14/2021					
Chloride	ND		0.100	mg/L						
<b>LCS (BBF0527-BS1)</b>					Prepared & Analyzed: 6/14/2021					
Chloride	3.99			mg/L	4.00		99.8	90-110		
<b>Matrix Spike (BBF0527-MS1)</b>	<b>Source: WBF0459-07RE1</b>				Prepared & Analyzed: 6/14/2021					
Chloride	28.1			mg/L	4.00	24.1	101	80-120		
<b>Matrix Spike Dup (BBF0527-MSD1)</b>	<b>Source: WBF0459-07RE1</b>				Prepared & Analyzed: 6/14/2021					
Chloride	28.1			mg/L	4.00	24.1	99.5	80-120	0.183	20
<b>Batch: BBF0552 - W FIA</b>										
<b>Blank (BBF0552-BLK1)</b>					Prepared & Analyzed: 6/15/2021					
Ammonia/N	ND		0.0200	mg/L						

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
 504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Quality Control Data (Continued)

### Inorganics (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: BBF0552 - W FIA (Continued)</b>										
<b>Blank (BBF0552-BLK2)</b> Ammonia/N	ND		0.0200	mg/L			Prepared & Analyzed: 6/15/2021			
<b>Blank (BBF0552-BLK3)</b> Ammonia/N	ND		0.0200	mg/L			Prepared & Analyzed: 6/15/2021			
<b>Blank (BBF0552-BLK4)</b> Ammonia/N	ND		0.0200	mg/L			Prepared & Analyzed: 6/15/2021			
<b>Blank (BBF0552-BLK5)</b> Ammonia/N	ND		0.0200	mg/L			Prepared & Analyzed: 6/15/2021			
<b>Blank (BBF0552-BLK6)</b> Ammonia/N	ND		0.0200	mg/L			Prepared & Analyzed: 6/15/2021			
<b>LCS (BBF0552-BS1)</b> Ammonia/N	0.201		0.0200	mg/L	0.200	101	Prepared & Analyzed: 6/15/2021	90-110		
<b>LCS (BBF0552-BS2)</b> Ammonia/N	0.199		0.0200	mg/L	0.200	99.6	Prepared & Analyzed: 6/15/2021	90-110		
<b>LCS (BBF0552-BS3)</b> Ammonia/N	0.200		0.0200	mg/L	0.200	100	Prepared & Analyzed: 6/15/2021	90-110		
<b>Matrix Spike (BBF0552-MS1)</b> Ammonia/N	0.346		0.0200	mg/L	0.200	0.132	107	Prepared & Analyzed: 6/15/2021	80-120	
<b>Matrix Spike (BBF0552-MS2)</b> Ammonia/N	0.267		0.0200	mg/L	0.200	0.0643	101	Prepared & Analyzed: 6/15/2021	80-120	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Quality Control Data (Continued)

### Inorganics (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: BBF0552 - W FIA (Continued)</b>										
<b>Matrix Spike (BBF0552-MS3)</b>			<b>Source: WBF0287-02</b>			Prepared & Analyzed: 6/15/2021				
Ammonia/N	0.192		0.0200	mg/L	0.200	ND	96.0	80-120		
<b>Matrix Spike Dup (BBF0552-MSD1)</b>										
Ammonia/N	0.330		0.0200	mg/L	0.200	0.132	99.2	80-120	4.79	20
<b>Matrix Spike Dup (BBF0552-MSD2)</b>			<b>Source: WBF0208-02</b>			Prepared & Analyzed: 6/15/2021				
Ammonia/N	0.260		0.0200	mg/L	0.200	0.0643	97.6	80-120	2.74	20
<b>Matrix Spike Dup (BBF0552-MSD3)</b>			<b>Source: WBF0287-02</b>			Prepared & Analyzed: 6/15/2021				
Ammonia/N	0.183		0.0200	mg/L	0.200	ND	91.4	80-120	4.86	20



## Chain of Custody Record

1282 Alturas Drive, Moscow ID 83843 (208) 883-2839 FAX 882-9246  
504 E Sprague Ste D, Spokane WA 99202 (509) 838-3999 FAX 838-4433

Anatek Log-In #

WBE0835



Due: 06/07/21

Company Name: Great West Engineering	Project Manager: Craig Sauer	
Address: 9221 N Division St	Project Name & #: Alcoa Q2 L-Bar	
City: Spokane	State: WA Zip: 99021	Email Address: csauer@greatwesteng.com
Phone: 509-994-9938	Purchase Order #: Alcoa	
Fax:	Sampler Name & phone: craig sauer / 509-994-9938	

T<sub>1</sub>

Please refer to our normal turn around times at:  
<http://www.anateklabs.com/services/guidelines/reporting.asp>

X Normal  
Next Day\*  
2nd Day\*  
Other\*

\*All rush order requests must be prior approved.

Phone  
Mail  
Fax  
Email

### Provide Sample Description

### List Analyses Requested

### Note Special Instructions/Comments

\* Analyses requested only NH<sub>3</sub>, Cl, TDS, and turbidity.

Additional samples:

MS/MSD: 052021 PW (5/20, 1220)  
FD: 052021 FD3 (5/20, 1430)

Lab ID	Sample Identification	Sampling Date/Time	Matrix	Preservative:							
				# of Containers	Sample Volume	NH <sub>3</sub> , Cl, TDS	POB	Turbidity	pH		
052021 P12		5/20 0750	W	2		X	X	X	X		
052021 P13		5/20 0820	W	3		X	X	X	X		
052021 SA10		5/20 0850	W	2		X	X	X	X		
052021 SA11		5/20 0910	W	2		X	X	X	X		
052021 SA14		5/20 0925	W	3		X	X	X	X		
052021 P09		5/20 1245	W	2		X	X	X	X		
052021 PW		5/20 1220	W	3		X	X	X	X		
052021 P05		5/20 1105	W	2		X	X	X	X		
052021 P06		5/20 1125	W	2		X	X	*	Y	X	
052021 P19		5/20 1050	W	2		X	X	X	X		
052021 P20B		5/20 1025	W	2		X	X	X	X		
052021 P25		5/20 1005	W	2		X	X	X	X		
052021 P27		5/20 1150	W	2		X	X	X	X		

	Printed Name	Signature	Company	Date	Time
Relinquished by	Craig Sauer		Great West	5/20	1625
Received by	KScuff		Delta	5/20/21	1625
Relinquished by					
Received by					
Relinquished by					
Received by					

### Inspection Checklist

- Received Intact?  Y N  
 Labels & Chains Agree?  Y N  
 Containers Sealed?  Y N  
 VOC Head Space?  Y N  
 Cooler?  Y N  
 Ice/Ice Packs Present?  Y N

Temperature (°C): 7.8° iRH,  
Preservative: H<sub>2</sub>SO<sub>4</sub> <3% 2004/62  
P2001/015

Date & Time: 5/20/21

Inspected By: hol/0/1 30pc's

Samples submitted to Anatek Labs may be subcontracted to other accredited labs if necessary. This message serves as notice of this possibility. Subcontracted analyses will be clearly noted on the analytical report.

# *Anatek Labs, Inc.*

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

**Client:** Great West Engineering, Inc. **Work Order:** WBK0468  
**Address:** 9221 N. Division St., Suite F **Project:** Alcoa Q4 L-Bar  
Spokane, WA 99218 **Reported:** 3/23/2022 17:26  
**Attn:** Craig Sauer

# Analytical Results Report

Sample Location: 111121 P12  
Lab/Sample Number: WBK0468-01 Collect Date: 11/11/21 07:50  
Date Received: 11/11/21 15:20 Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	ND	mg/L	0.0200	12/1/21 14:30	TLM	SM 4500-NH3 H	
Chloride	6.49	mg/L	0.100	11/12/21 22:35	ZML	EPA 300.0	
pH	7.81	pH Units	1.00	11/11/21 15:00	ARY	SM 4500-H-B	
TDS	681	mg/L	5.00	11/12/21 14:27	KAS	SM 2540 C	
Turbidity	0.576	NTU	0.100	11/11/21 16:15	ARY	EPA 180.1	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Analytical Results Report

(Continued)

Sample Location: 111121 P13  
Lab/Sample Number: WBK0468-02 Collect Date: 11/11/21 08:25  
Date Received: 11/11/21 15:20 Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	32.5	mg/L	0.400	12/1/21 16:08	TLM	SM 4500-NH3 H	
Chloride	1100	mg/L	5.00	11/15/21 15:36	ZML	EPA 300.0	
pH	7.51	pH Units	1.00	11/11/21 15:00	ARY	SM 4500-H-B	
TDS	6070	mg/L	5.00	11/12/21 14:27	KAS	SM 2540 C	
Turbidity	1.65	NTU	0.100	11/11/21 16:15	ARY	EPA 180.1	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Analytical Results Report

(Continued)

Sample Location: 111121 SA10  
Lab/Sample Number: WBK0468-03 Collect Date: 11/11/21 09:20  
Date Received: 11/11/21 15:20 Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	704	mg/L	10.0	12/1/21 16:27	TLM	SM 4500-NH3 H	
Chloride	16600	mg/L	50.0	11/19/21 13:14	ZML	EPA 300.0	
pH	7.37	pH Units	1.00	11/11/21 15:00	ARY	SM 4500-H-B	
TDS	14300	mg/L	5.00	11/12/21 14:27	KAS	SM 2540 C	
Turbidity	0.502	NTU	0.100	11/11/21 16:15	ARY	EPA 180.1	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Analytical Results Report

(Continued)

Sample Location: 111121 SA11  
Lab/Sample Number: WBK0468-04      Collect Date: 11/11/21 09:05  
Date Received: 11/11/21 15:20      Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	53.9	mg/L	0.800	12/1/21 16:30	TLM	SM 4500-NH3 H	
Chloride	5370	mg/L	50.0	11/29/21 16:55	ZML	EPA 300.0	
pH	8.08	pH Units	1.00	11/11/21 15:00	ARY	SM 4500-H-B	
TDS	10900	mg/L	5.00	11/12/21 14:27	KAS	SM 2540 C	
Turbidity	0.408	NTU	0.100	11/11/21 16:15	ARY	EPA 180.1	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Analytical Results Report

(Continued)

Sample Location: 111121 SA14  
Lab/Sample Number: WBK0468-05      Collect Date: 11/11/21 08:50  
Date Received: 11/11/21 15:20      Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	16.6	mg/L	0.400	12/1/21 16:16	TLM	SM 4500-NH3 H	
Chloride	960	mg/L	5.00	11/16/21 17:50	ZML	EPA 300.0	
pH	9.85	pH Units	1.00	11/11/21 15:00	ARY	SM 4500-H-B	
TDS	3170	mg/L	5.00	11/12/21 14:27	KAS	SM 2540 C	
Turbidity	0.409	NTU	0.100	11/11/21 16:15	ARY	EPA 180.1	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Analytical Results Report

(Continued)

Sample Location: 111121 P09  
Lab/Sample Number: WBK0468-06 Collect Date: 11/11/21 13:10  
Date Received: 11/11/21 15:20 Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	1.12	mg/L	0.0200	12/1/21 14:39	TLM	SM 4500-NH3 H	
Chloride	421	mg/L	5.00	11/16/21 18:22	ZML	EPA 300.0	
pH	7.97	pH Units	1.00	11/11/21 15:00	ARY	SM 4500-H-B	
TDS	1640	mg/L	5.00	11/12/21 14:27	KAS	SM 2540 C	
Turbidity	0.239	NTU	0.100	11/11/21 16:15	ARY	EPA 180.1	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Analytical Results Report

(Continued)

Sample Location: 111121 PW  
Lab/Sample Number: WBK0468-07 Collect Date: 11/11/21 13:20  
Date Received: 11/11/21 15:20 Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	ND	mg/L	0.0200	12/1/21 14:40	TLM	SM 4500-NH3 H	
Chloride	2.56	mg/L	0.100	11/13/21 1:03	ZML	EPA 300.0	
pH	7.87	pH Units	1.00	11/11/21 15:00	ARY	SM 4500-H-B	
TDS	254	mg/L	5.00	11/12/21 14:27	KAS	SM 2540 C	
Turbidity	67.4	NTU	0.200	11/11/21 16:15	ARY	EPA 180.1	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Analytical Results Report

(Continued)

Sample Location: 111121 P05  
Lab/Sample Number: WBK0468-08      Collect Date: 11/11/21 11:20  
Date Received: 11/11/21 15:20      Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	ND	mg/L	0.0200	12/1/21 14:41	TLM	SM 4500-NH3 H	
Chloride	1980	mg/L	10.0	11/16/21 18:22	ZML	EPA 300.0	
pH	7.31	pH Units	1.00	11/11/21 15:00	ARY	SM 4500-H-B	
TDS	3720	mg/L	5.00	11/17/21 13:40	KAS	SM 2540 C	M3
Turbidity	15.0	NTU	0.100	11/11/21 16:15	ARY	EPA 180.1	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Analytical Results Report

(Continued)

Sample Location: 111121 P06  
Lab/Sample Number: WBK0468-09 Collect Date: 11/11/21 11:50  
Date Received: 11/11/21 15:20 Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	0.0958	mg/L	0.0200	12/1/21 14:42	TLM	SM 4500-NH3 H	
Chloride	177	mg/L	20.0	11/19/21 12:24	ZML	EPA 300.0	
pH	7.81	pH Units	1.00	11/11/21 15:00	ARY	SM 4500-H-B	
TDS	457	mg/L	5.00	11/17/21 13:40	KAS	SM 2540 C	M3
Turbidity	0.215	NTU	0.100	11/11/21 16:15	ARY	EPA 180.1	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Analytical Results Report

(Continued)

Sample Location: 111121 P19  
Lab/Sample Number: WBK0468-10      Collect Date: 11/11/21 11:00  
Date Received: 11/11/21 15:20      Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	ND	mg/L	0.0200	12/1/21 14:44	TLM	SM 4500-NH3 H	
Chloride	5320	mg/L	20.0	11/13/21 2:10	ZML	EPA 300.0	
pH	6.91	pH Units	1.00	11/11/21 15:00	ARY	SM 4500-H-B	
TDS	6230	mg/L	5.00	11/17/21 13:40	KAS	SM 2540 C	M3
Turbidity	0.728	NTU	0.100	11/11/21 16:15	ARY	EPA 180.1	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Analytical Results Report

(Continued)

Sample Location: 111121 P20B  
Lab/Sample Number: WBK0468-11 Collect Date: 11/11/21 10:30  
Date Received: 11/11/21 15:20 Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	19.2	mg/L	1.00	12/1/21 16:23	TLM	SM 4500-NH3 H	
Chloride	2100	mg/L	10.0	11/16/21 18:56	ZML	EPA 300.0	
pH	7.33	pH Units	1.00	11/11/21 15:00	ARY	SM 4500-H-B	
TDS	4600	mg/L	5.00	11/17/21 13:40	KAS	SM 2540 C	M3
Turbidity	1.51	NTU	0.100	11/11/21 16:15	ARY	EPA 180.1	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Analytical Results Report

(Continued)

Sample Location: 111121 P25  
Lab/Sample Number: WBK0468-12 Collect Date: 11/11/21 09:55  
Date Received: 11/11/21 15:20 Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	0.184	mg/L	0.0200	12/1/21 14:49	TLM	SM 4500-NH3 H	
Chloride	820	mg/L	25.0	11/19/21 14:04	ZML	EPA 300.0	
pH	7.42	pH Units	1.00	11/11/21 15:00	ARY	SM 4500-H-B	
TDS	1640	mg/L	5.00	11/17/21 13:40	KAS	SM 2540 C	M3
Turbidity	2.62	NTU	0.100	11/11/21 16:15	ARY	EPA 180.1	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Analytical Results Report

(Continued)

Sample Location: 111121 P27  
Lab/Sample Number: WBK0468-13      Collect Date: 11/11/21 12:10  
Date Received: 11/11/21 15:20      Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	ND	mg/L	0.0200	12/1/21 14:50	TLM	SM 4500-NH3 H	
Chloride	6250	mg/L	20.0	11/16/21 18:39	ZML	EPA 300.0	
pH	7.09	pH Units	1.00	11/11/21 15:00	ARY	SM 4500-H-B	
TDS	10900	mg/L	5.00	11/17/21 13:40	KAS	SM 2540 C	M3
Turbidity	0.571	NTU	0.100	11/11/21 16:15	ARY	EPA 180.1	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Analytical Results Report

(Continued)

Sample Location: 111121 FD3  
Lab/Sample Number: WBK0468-14      Collect Date: 11/11/21 14:00  
Date Received: 11/11/21 15:20      Collected By: Craig Sauer  
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
<b>Inorganics</b>							
Ammonia/N	ND	mg/L	0.0200	12/1/21 14:51	TLM	SM 4500-NH3 H	
Chloride	0.968	mg/L	0.100	11/23/21 22:31	ZML	EPA 300.0	
pH	7.88	pH Units	1.00	11/11/21 15:00	ARY	SM 4500-H-B	
TDS	279	mg/L	5.00	11/17/21 13:40	KAS	SM 2540 C	M3
Turbidity	1.51	NTU	0.100	11/11/21 16:15	KAS	EPA 180.1	

Authorized Signature,

Kathleen Sattler, Laboratory Manager

M3 Spike recovery value is unusable. Analyte concentration disproportionate to the spike level. Blank spike recovery acceptable.

PQL Practical Quantitation Limit

ND Not Detected

MCL EPA's Maximum Contaminant Level

Dry Sample results reported on a dry weight basis

\* Not a state-certified analyte

RPD Relative Percent Difference

%REC Percent Recovery

Source Sample that was spiked or duplicated.

This report shall not be reproduced except in full, without the written approval of the laboratory  
The results reported relate only to the samples indicated.

# *Anatek Labs, Inc.*

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

---

## **Certifications**

<b>Code</b>	<b>Description</b>	<b>Facility</b>	<b>Number</b>
W WA DOE	Washington Department of Ecology	Anatek-Spokane, WA	C585

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
 504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Quality Control Data

### Inorganics

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: BBK0436 - W Wet Chem</b>										
<b>Blank (BBK0436-BLK1)</b>										
Turbidity	ND		0.100	NTU						
Prepared & Analyzed: 11/11/2021										
<b>Batch: BBK0449 - W Wet Chem</b>										
<b>Blank (BBK0449-BLK1)</b>										
TDS	ND		5.00	mg/L						
Prepared & Analyzed: 11/12/2021										
<b>Blank (BBK0449-BLK2)</b>										
TDS	ND		5.00	mg/L						
Prepared & Analyzed: 11/12/2021										
<b>LCS (BBK0449-BS1)</b>										
TDS	466			mg/L	500	93.2				
Prepared & Analyzed: 11/12/2021										
<b>LCS (BBK0449-BS2)</b>										
TDS	481			mg/L	500	96.2				
Prepared & Analyzed: 11/12/2021										
<b>Matrix Spike (BBK0449-MS1)</b>										
TDS	1590		5.00	mg/L	500	986	120			
Prepared & Analyzed: 11/12/2021										
<b>Matrix Spike Dup (BBK0449-MSD1)</b>										
TDS	1470		5.00	mg/L	500	986	96.8	80-120	7.72	20
Prepared & Analyzed: 11/12/2021										
<b>Batch: BBK0471 - W Ions</b>										
<b>Blank (BBK0471-BLK1)</b>										
Chloride	ND		0.100	mg/L						
Prepared & Analyzed: 11/13/2021										

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
 504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Quality Control Data (Continued)

### Inorganics (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: BBK0471 - W Ions (Continued)</b>										
<b>Blank (BBK0471-BLK2)</b>										
Chloride	ND		0.100	mg/L			Prepared & Analyzed: 11/12/2021			
<b>LCS (BBK0471-BS1)</b>										
Chloride	3.78			mg/L	4.00	94.5	90-110			
<b>LCS (BBK0471-BS2)</b>										
Chloride	3.86			mg/L	4.00	96.5	90-110			
<b>Batch: BBK0562 - W Ions</b>										
<b>Blank (BBK0562-BLK1)</b>										
Chloride	ND		0.100	mg/L			Prepared & Analyzed: 11/16/2021			
<b>LCS (BBK0562-BS1)</b>										
Chloride	3.74			mg/L	4.00	93.4	90-110			
<b>Batch: BBK0569 - W Wet Chem</b>										
<b>Blank (BBK0569-BLK1)</b>										
TDS	ND	M3	5.00	mg/L			Prepared & Analyzed: 11/17/2021			
<b>LCS (BBK0569-BS1)</b>										
TDS	474	M3		mg/L	500	94.8	80-120			
<b>LCS Dup (BBK0569-BSD1)</b>										
TDS	505	M3		mg/L	500	101	80-120	6.33		20

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
 504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Quality Control Data (Continued)

### Inorganics (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: BBK0569 - W Wet Chem (Continued)</b>										
Duplicate (BBK0569-DUP1)			Source: WBK0468-09				Prepared & Analyzed: 11/17/2021			
TDS	459	M3		5.00	mg/L	457			0.437	20
Matrix Spike (BBK0569-MS1)			Source: WBK0468-13				Prepared & Analyzed: 11/17/2021			
TDS	10200	M3		5.00	mg/L	500	10900	NR	80-120	
Matrix Spike Dup (BBK0569-MSD1)			Source: WBK0468-13				Prepared & Analyzed: 11/17/2021			
TDS	10100	M3		5.00	mg/L	500	10900	NR	80-120	1.06
<b>Batch: BBK0687 - W Ions</b>										
Blank (BBK0687-BLK1)							Prepared & Analyzed: 11/19/2021			
Chloride	ND			0.100	mg/L					
LCS (BBK0687-BS1)							Prepared & Analyzed: 11/19/2021			
Chloride	4.00				mg/L	4.00	99.9	90-110		
<b>Batch: BBK0689 - W Ions</b>										
Blank (BBK0689-BLK1)							Prepared & Analyzed: 11/19/2021			
Chloride	ND			0.100	mg/L					
LCS (BBK0689-BS1)							Prepared & Analyzed: 11/19/2021			
Chloride	4.00				mg/L	4.00	99.9	90-110		
Matrix Spike (BBK0689-MS1)			Source: WBK0736-02				Prepared & Analyzed: 11/19/2021			
Chloride	7.52				mg/L	4.00	2.90	115	80-120	

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
 504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Quality Control Data (Continued)

### Inorganics (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: BBK0689 - W Ions (Continued)</b>										
<b>Matrix Spike Dup (BBK0689-MSD1)</b>			<b>Source: WBK0736-02</b>							
Chloride	7.71			mg/L	4.00	2.90	120	80-120	2.51	20
<b>Batch: BBK0781 - W Ions</b>										
<b>Blank (BBK0781-BLK1)</b>										
Chloride	ND		0.100	mg/L				Prepared & Analyzed: 11/23/2021		
<b>Blank (BBK0781-BLK2)</b>								Prepared & Analyzed: 11/24/2021		
Chloride	ND		0.100	mg/L						
<b>LCS (BBK0781-BS1)</b>								Prepared & Analyzed: 11/23/2021		
Chloride	3.82			mg/L	4.00		95.5	90-110		
<b>LCS (BBK0781-BS2)</b>								Prepared & Analyzed: 11/24/2021		
Chloride	3.81			mg/L	4.00		95.2	90-110		
<b>Matrix Spike (BBK0781-MS1)</b>			<b>Source: WBK0812-03</b>					Prepared & Analyzed: 11/24/2021		
Chloride	6.08			mg/L	4.00	2.31	94.3	80-120		
<b>Matrix Spike Dup (BBK0781-MSD1)</b>			<b>Source: WBK0812-03</b>					Prepared & Analyzed: 11/24/2021		
Chloride	6.25			mg/L	4.00	2.31	98.3	80-120	2.61	20
<b>Batch: BBK0882 - W Ions</b>										
<b>Blank (BBK0882-BLK1)</b>								Prepared & Analyzed: 11/29/2021		
Chloride	ND		0.100	mg/L						

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
 504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Quality Control Data (Continued)

### Inorganics (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: BBK0882 - W Ions (Continued)</b>										
<b>Blank (BBK0882-BLK2)</b>										
Chloride	ND		0.100	mg/L				Prepared & Analyzed: 11/29/2021		
<b>LCS (BBK0882-BS1)</b>										
Chloride	3.70			mg/L	4.00		92.5	90-110		
<b>LCS (BBK0882-BS2)</b>										
Chloride	3.62			mg/L	4.00		90.5	90-110		
<b>Batch: BBL0031 - W FIA</b>										
<b>Blank (BBL0031-BLK1)</b>										
Ammonia/N	ND		0.0200	mg/L				Prepared & Analyzed: 12/1/2021		
<b>Blank (BBL0031-BLK2)</b>										
Ammonia/N	ND		0.0200	mg/L				Prepared & Analyzed: 12/1/2021		
<b>Blank (BBL0031-BLK3)</b>										
Ammonia/N	ND		0.0200	mg/L				Prepared & Analyzed: 12/1/2021		
<b>Blank (BBL0031-BLK4)</b>										
Ammonia/N	ND		0.0200	mg/L				Prepared & Analyzed: 12/1/2021		
<b>Blank (BBL0031-BLK5)</b>										
Ammonia/N	ND		0.0200	mg/L				Prepared & Analyzed: 12/1/2021		
<b>Blank (BBL0031-BLK6)</b>										
Ammonia/N	ND		0.0200	mg/L				Prepared & Analyzed: 12/1/2021		

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
 504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Quality Control Data (Continued)

### Inorganics (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: BBL0031 - W FIA (Continued)</b>										
<b>Blank (BBL0031-BLK7)</b>										
Ammonia/N	ND		0.0200	mg/L				Prepared & Analyzed: 12/1/2021		
<b>LCS (BBL0031-BS1)</b>										
Ammonia/N	0.185		0.0200	mg/L	0.200		92.6	90-110		
<b>LCS (BBL0031-BS2)</b>										
Ammonia/N	0.191		0.0200	mg/L	0.200		95.6	90-110		
<b>LCS (BBL0031-BS3)</b>										
Ammonia/N	0.186		0.0200	mg/L	0.200		93.2	90-110		
<b>LCS (BBL0031-BS4)</b>										
Ammonia/N	0.203		0.0200	mg/L	0.200		101	90-110		
<b>LCS (BBL0031-BS5)</b>										
Ammonia/N	0.210		0.0200	mg/L	0.200		105	90-110		
<b>Matrix Spike (BBL0031-MS1)</b>										
Ammonia/N	1.53		0.0200	mg/L	0.200	1.36	86.5	80-120		
<b>Matrix Spike (BBL0031-MS2)</b>										
Ammonia/N	1.07		0.0200	mg/L	0.200	0.859	105	80-120		
<b>Matrix Spike (BBL0031-MS3)</b>										
Ammonia/N	0.361		0.0200	mg/L	0.200	0.187	86.7	80-120		
<b>Matrix Spike (BBL0031-MS4)</b>										
Ammonia/N	0.364		0.0200	mg/L	0.200	0.158	103	80-120		

# Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - Fax (208) 8829246 - email moscow@anateklabs.com  
 504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - fax (509) 838-4433 - email spokane@anateklabs.com

## Quality Control Data (Continued)

### Inorganics (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch: BBL0031 - W FIA (Continued)</b>										
<b>Matrix Spike Dup (BBL0031-MSD1)</b>			<b>Source: WBK0318-02</b>			Prepared & Analyzed: 12/1/2021				
Ammonia/N	1.55		0.0200	mg/L	0.200	1.36	96.9	80-120	1.36	20
<b>Matrix Spike Dup (BBL0031-MSD2)</b>			<b>Source: WBK0485-02</b>			Prepared & Analyzed: 12/1/2021				
Ammonia/N	1.08		0.0200	mg/L	0.200	0.859	110	80-120	0.838	20
<b>Matrix Spike Dup (BBL0031-MSD3)</b>			<b>Source: WBK0513-02</b>			Prepared & Analyzed: 12/1/2021				
Ammonia/N	0.366		0.0200	mg/L	0.200	0.187	89.5	80-120	1.57	20
<b>Matrix Spike Dup (BBL0031-MSD4)</b>			<b>Source: WBK0769-02</b>			Prepared & Analyzed: 12/1/2021				
Ammonia/N	0.329		0.0200	mg/L	0.200	0.158	85.5	80-120	9.84	20
<b>Batch: BCC0552 - W Ions</b>										
<b>Blank (BCC0552-BLK1)</b>						Prepared & Analyzed: 11/15/2021				
Chloride	ND		0.100	mg/L						



## Chain of Custody Record

**Anatek Lab**

 1282 Alturas Drive, Moscow  
 504 E Sprague Ste D, Spokane

WBK0468



Due: 11/30/21

Company Name: Great West Engineering	Project Manager: Craig Sauer
Address: 9221 N Division St	Project Name & #: Alcoa Q4 L-Bar
City: Spokane	State: WA Zip: 99021
Phone: 509-994-9938	Purchase Order #: Alcoa
Email Address(es): csauer@greatwesteng.com	Sampler Name & Phone: Craig Sauer /509-994-9938

Turn Aro

Please refer to our website:

[www.anateklabs.com/pricing-lists](http://www.anateklabs.com/pricing-lists) Normal Phone Next Day\* Email 2nd Day\* Email Other\*

\*All rush order requests must  
have prior approval

				List Analyses Requested						Note Special Instructions/Comments		
Lab ID	Sample Identification	Sampling Date/Time	Matrix	# of Containers	Preservative:	Sample Volume	N#(3, c1, TDS)	Turbidity	P+			
111121 P12	11/11 0750	w	2	x	x	x						
111121 P13	11/11 0825	w	2	x	x	x						
111121 SA10	11/11 0920	w	2	x	x	x						
111121 SA11	11/11 0905	w	2	x	x	x						
111121 SA14	11/11 0850	w	2	x	x	x						
111121 P09	11/11 1310	w	2	x	x	x						
111121 PW	11/11 1320	w	2	x	x	x						
111121 P05	11/11 1120	w	2	x	x	x						
111121 P06	11/11 1150	w	2	x	x	x						
111121 P19	11/11 1100	w	2	x	x	x						
111121 P20B	11/11 1030	w	2	x	x	x						
111121 P25	11/11 0955	w	2	x	x	x						
111121 P27	11/11 1210	w	2	x	x	x						
				Inspection Checklist								
Relinquished by	Printed Name: Duncan Bradlow			Signature:						Company: Great West Eng	Date: 11/11/21	Time: 1520
Received by	Brock Geyer									Ave LLC	11-11-21	1520
Relinquished by												
Received by												
Relinquished by												
Received by												
Temperature (°C): 8-8/8-7°F/1												
Number of Containers:												
Shipped Via:												
Preservative:												
Date & Time:												
Inspected By: See Attached												

Samples submitted to Anatek Labs may be subcontracted to other accredited labs if necessary. This message serves as notice of this possibility. Subcontracted analyses will be clearly noted on the analytical report.



Anatek Labs, Inc.

## Sample Receipt and Preservation Form

WBK0468



Due: 11/30/21

Client Name: Great West Engineering Project: (apply Anatek sample label here)

TAT: Normal RUSH: \_\_\_\_\_ days

Samples Received From: FedEx UPS USPS  Client Courier Other: \_\_\_\_\_Custody Seal on Cooler/Box:  Yes No Custody Seals Intact: Yes No  N/ANumber of Coolers/Boxes: 1 Type of Ice:  Ice/Ice Packs Blue Ice Dry Ice NonePacking Material: Bubble Wrap Bags Foam/Peanuts  None Other: \_\_\_\_\_Cooler Temp As Read (°C): 8.8 Cooler Temp Corrected (°C): 8.7 Thermometer Used: 1K21

## Comments:

Samples Received Intact?  Yes No N/AChain of Custody Present?  Yes No N/ASamples Received Within Hold Time?  Yes No N/ASamples Properly Preserved?  Yes No N/AVOC Vials Free of Headspace (<6mm)? Yes No  N/AVOC Trip Blanks Present? Yes No  N/ALabels and Chains Agree?  Yes No N/ATotal Number of Sample Bottles Received: 26

Samples Received Intact?	<input checked="" type="radio"/> Yes	No	N/A
Chain of Custody Present?	<input checked="" type="radio"/> Yes	No	N/A
Samples Received Within Hold Time?	<input checked="" type="radio"/> Yes	No	N/A
Samples Properly Preserved?	<input checked="" type="radio"/> Yes	No	N/A
VOC Vials Free of Headspace (<6mm)?	Yes	No	<input checked="" type="radio"/> N/A
VOC Trip Blanks Present?	Yes	No	<input checked="" type="radio"/> N/A
Labels and Chains Agree?	<input checked="" type="radio"/> Yes	No	N/A
Total Number of Sample Bottles Received:	<u>26</u>		

Chain of Custody Fully Completed?  Yes No N/ACorrect Containers Received?  Yes No N/AAnatek Bottles Used?  Yes No Unknown

Chain of Custody Fully Completed?	<input checked="" type="radio"/> Yes	No	N/A
Correct Containers Received?	<input checked="" type="radio"/> Yes	No	N/A
Anatek Bottles Used?	<input checked="" type="radio"/> Yes	No	Unknown

Record preservatives (and lot numbers, if known) for containers below:

H2SO4 2102389-2  
Ph2001015

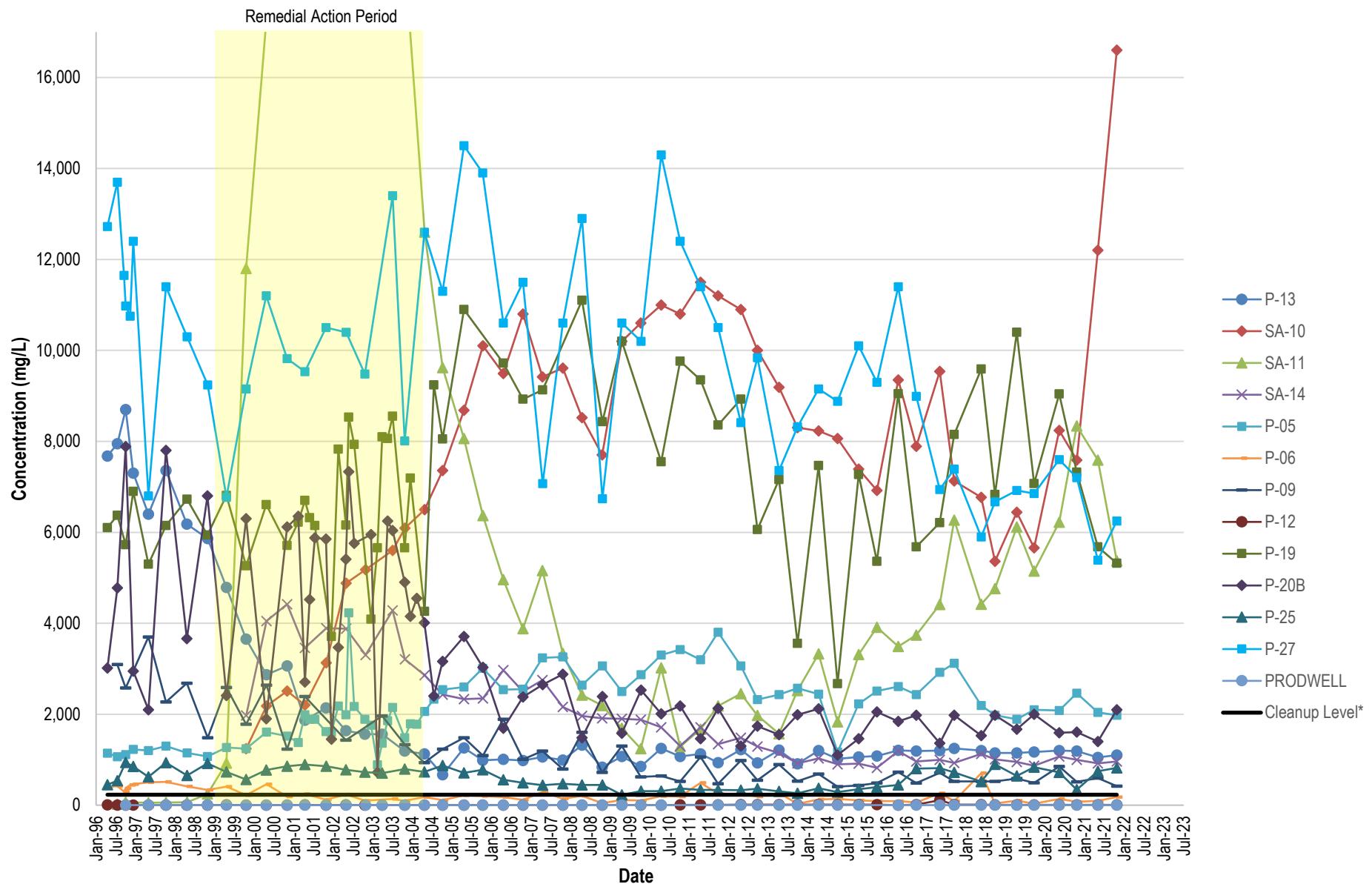
Notes, comments, etc. (also use this space if contacting the client - record names and date/time)

*[Large empty box for notes]*

Received/Inspected By:  Date/Time: 1533 11/11/21

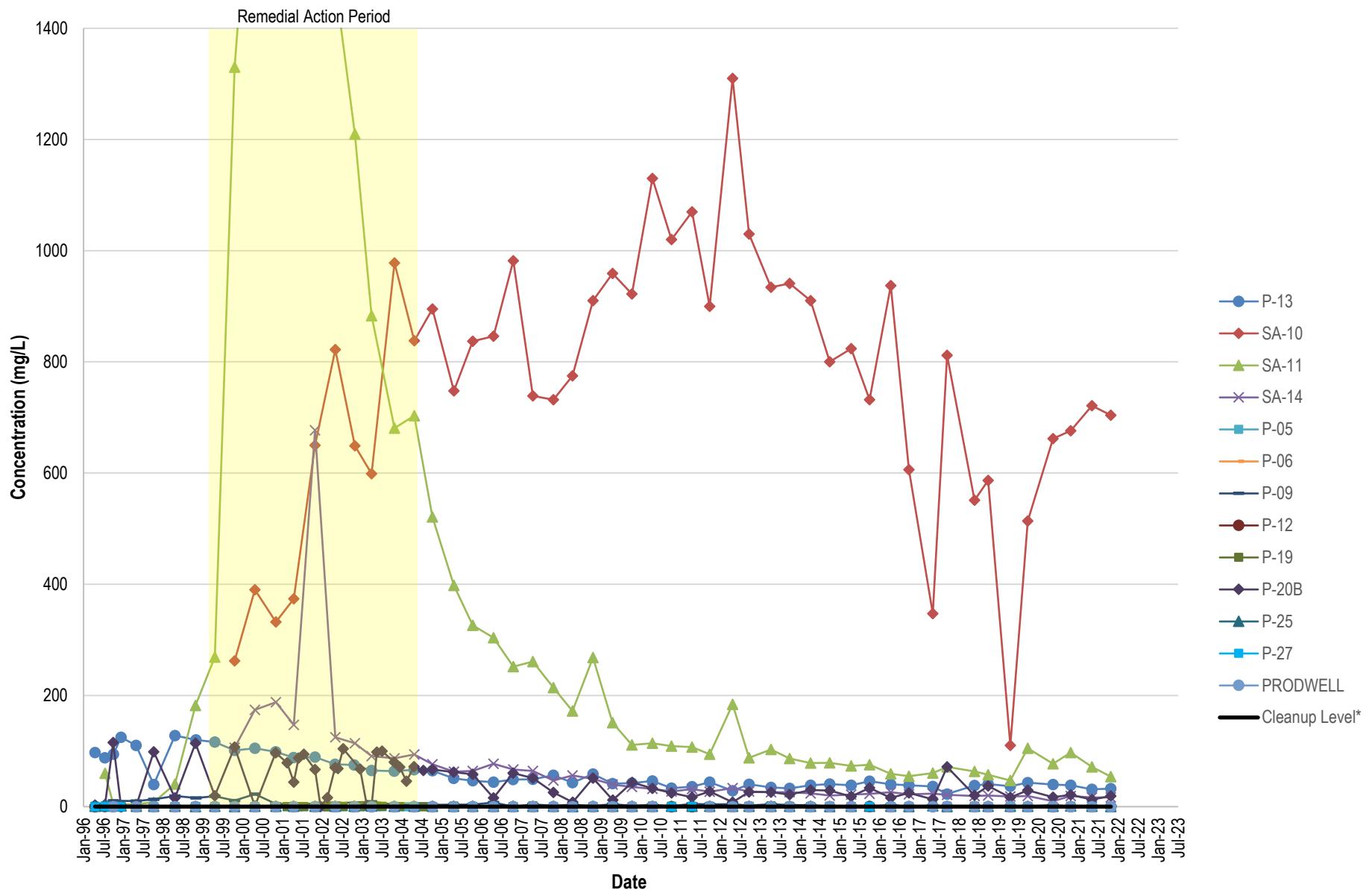
## **Attachment G**

### *Groundwater Time Series Concentration Plots*

**Notes:**

1. Remedial Action Period 1999-2003; Magnesite Residue Pile Removal in 1999, Covered Pile Removal in 2003, and Main Ditch Closure in 2003.
2. Concentration scale truncated - some high values not shown for well SA-11.
3. \*Site-Specific Cleanup Level for Chloride is 230 mg/L; reference L-Bar Cleanup Levels Development and Feasibility Study Report (CH2M HILL, 1999).

**Attachment G-1. Chloride Concentrations**  
**2021 Year-End Groundwater Monitoring Data Submittal**  
**L-Bar Site Compliance Monitoring Program**

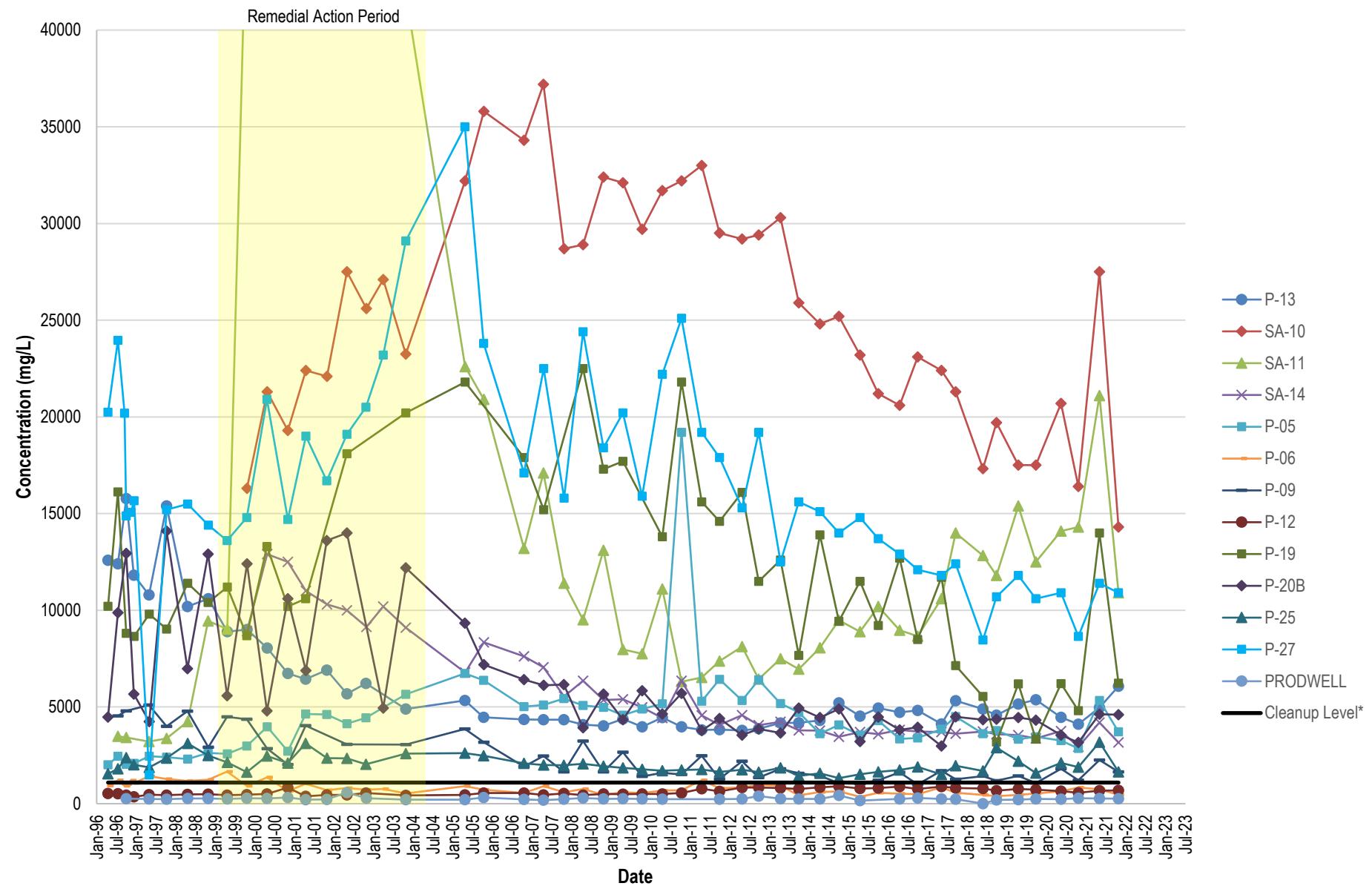


#### Notes:

1. Remedial Action Period 1999-2003; Magnesite Residue Pile Removal in 1999, Covered Pile Removal in 2003, and Main Ditch Closure in 2003.
2. Concentration scale truncated - some high values not shown for well SA-11.
3. \*Site-Specific Cleanup Level for Ammonia is 0.13 mg/L; reference L-Bar Cleanup Levels Development and Feasibility Study Report (CH2M HILL, 1999).

#### Attachment G-2. Ammonia Concentrations

2021 Year-End Groundwater Monitoring Data Submittal  
L-Bar Site Compliance Monitoring Program



**Notes:**

1. Remedial Action Period 1999-2003; Magnesite Residue Pile Removal in 1999, Covered Pile Removal in 2003, and Main Ditch Closure in 2003.
2. Concentration scale truncated - some high values not shown for SA-11.
3. \*Site-Specific Cleanup Level for TDS is 1092.4 mg/L; reference L-Bar Cleanup Levels Development and Feasibility Study Report (CH2M HILL, 1999).

**Attachment G-3. Total Dissolved Solids Concentrations**  
**2021 Year-End Groundwater Monitoring Data Submittal**  
**L-Bar Site Compliance Monitoring Program**