20 December 2019

MEMORANDUM

To: Patrick Breen, Marina Coast Water District
Keith Van Der Maaten, Marina Coast Water District

From: Vera Nelson, P.E., EKI Environment & Water, Inc.
Tina Wang, P.E., EKI Environment & Water, Inc.
Qiwen Zhang, E.I.T., EKI Environment & Water, Inc.

Subject: **Fresh Groundwater in Dune Sand and 180-Foot Aquifer Zones South of Salinas River, 180/400 Foot Aquifer & Monterey Subbasins**
2018 Fort Ord Groundwater Monitoring Well Data
Chloride, Total Dissolved Solids, and Groundwater Specific Conductance
(EKI B60094.03)

Appendix A includes results of groundwater field measurements and sampling results from over 100 monitoring wells at former Fort Ord. These measurements and analyses were performed to assess the extent of seawater intrusion and presence of fresh groundwater in the vicinity of former Fort Ord. The work was completed on behalf of Marina Coast Water District ("MCWD") in December 2018 by Ahtna Environmental, Inc. ("Ahtna") in coordination with EKI Environment & Water, Inc. The work included measurements of specific conductance and collection of groundwater samples for laboratory analysis of total dissolved solids and chloride from wells at Fort Ord. The project vicinity is shown on Figure 1.

These groundwater quality measurements were collected to confirm and supplement airborne electromagnetic ("AEM") data collected by MCWD in 2017[1]. The data were collected to support completion of the Groundwater Sustainability Plan for the Monterey Subbasin, which is being prepared pursuant to the Sustainable Groundwater Management Act ("SGMA"). It is scheduled for completion in January 2022.

The results of the sampling confirm the presence of fresh water in both the Dune Sand Aquifer and underlying Upper-180 Foot Aquifer beneath former Fort Ord. The data show that total dissolved solids ("TDS") concentrations in groundwater beneath former Fort Ord in these aquifer zones is less than <1,000 milligrams per liter ("mg/L")). The data are consistent with the results of the AEM survey, which show that large volumes of groundwater exist in the Dune Sand Aquifer and Upper-180 Foot Aquifer south of the Salinas River that meet beneficial use

[1] Gottschalk et al., 2018. Interpretation of Hydrostratigraphy and Water Quality from AEM Data Collected in the Northern Salinas Valley, CA, March 2018.

standard for drinking water (i.e., < 3,000 mg/L TDS) established within the California Water Quality Control Plan for Central Coast Region[2] ("Freshwater").

The Freshwater in this area is the result of natural rainfall which readily infiltrates into the highly permeable Dune Sand Aquifer and recharges the Upper 180-Foot Aquifer which flows inland into Salinas Valley Basin. A summary of these groundwater sampling results, along with 2017 AEM Data, for the Dune Sand Aquifer and Upper 180-Foot Aquifer, are presented on Figures 2 and 3, respectively. More detailed figures, tables and analytical data are included in Attachment A.

The total saturated thickness of the Dune Sand and Upper 180-foot Aquifers is generally greater than 100 feet south of the Salinas River in the 180/400 Foot Aquifer Subbasin and in the Monterey Subbasin[3]. Therefore, these data, in conjunction with AEM data, show that large volumes of groundwater that meet the beneficial use standard for drinking water of <3,000 mg/L TDS (i.e., approximately 440,000 AF[4]) exist within Dune Sand and Upper-180 Foot Aquifer within this area. The new data obtained from Fort Ord wells indicates that TDS concentrations in groundwater within the Dune Sand Aquifer and Upper-180 Foot Aquifer beneath Fort Ord also meets the secondary drinking standard of 500 mg/L (see Table A-1 included in Attachment A). The majority of this groundwater will infiltrate into underlying deeper aquifers and recharge the Monterey Subbasin, the 180/400 Foot Aquifer Subbasin, and ultimately the greater Salinas Valley Basin.

Weiss Associates ("Weiss") conducted an independent hydrogeologic review of the Monterey Peninsula Water Supply Project ("MPWSP" or "Project") on behalf of the Coastal Commission[5]. Weiss concludes that the Freshwater[6] capture area of the Project Slant wells could cover (7) seven square miles in the Dune Sand Aquifer if the conceptual site model suggested by recent data is accurate. This capture area is depicted on Figure 4. Based on this analysis, Weiss estimates that up to 15% of total water extracted by the MPWSP (i.e., 2,600 AFY) could meet the beneficial use standard for a drinking water source of 3,000 mg/L. Recent data collected at

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[2] Central Coast Regional Water Quality Control Board. 2019. Water quality control Plan for the Central Coast Basin, June 2019 Edition. California Environmental Protection Agency.

[3] Harding ESE, 2001. Hydrogeologic Investigation of the Salinas Valley Basin in the Vicinity of Fort Ord and Marina, Salinas Valley, California, dated 12 April 2001.

[4] The AEM study estimated approximately 188,000 acre-feet ("AF") and 291,000 AF of groundwater with TDS < 3,000 mg/L exists in the Dune Sand Aquifer and the Upper 180-Foot Aquifer, respectively. In the Dune Sand Aquifer, all of this groundwater is located south of the Salinas River. In the Upper 180-Foot Aquifer, approximately two thirds of this groundwater exist south of the Salinas River. The additional fresh groundwater volume identified by the December 2018 Fort Ord sampling event was approximately 57,000 AF, based on a saturated thickness of 100 feet within the Dune Sand and Upper 180-Foot Aquifers and estimated porosity of 0.2 over 2,800 acres.

[5] Weiss Associates, 1 November 2019, Independent hydrogeological Review of Recent Data and Studies Related to California American Water's Proposed Monterey Regional Water Supply Project

[6] Within Weiss' hydrogeological review, Fresh water is defined as <3,000 mg/L TDS.

Fort Ord indicates that much of this water also meets the secondary drinking water standard of 500 mg/L for TDS.

Weiss' Freshwater percentage is based on the estimated annual recharge from rainfall over the (7) square mile slant well capture zone area within the Dune Sand Aquifer. It does not assess the potential depletion of existing fresh groundwater within the capture area that could also be extracted by the Project's slant wells.

The AEM study and Fort Ord sampling results presented herein show that over 44,000 AF of groundwater that meets the beneficial drinking water use standard of < 3,000 mg/L of TDS exists within the (7) seven square mile capture area[7]. Further analysis regarding the potential depletion of Freshwater by the Project is needed to assess its potential impacts to the Monterey and 180/400 Foot Aquifer subbasins.

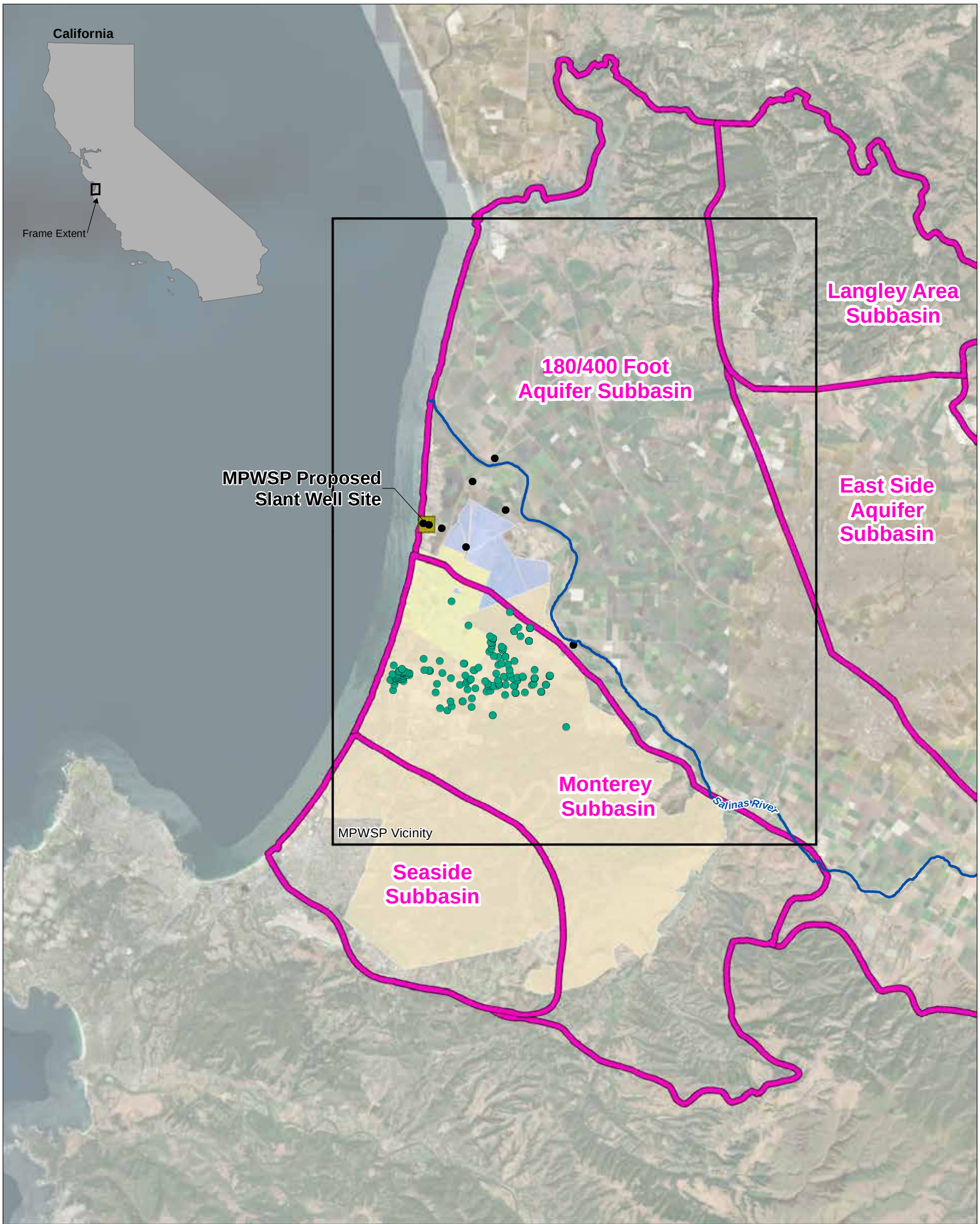
Figures

Figure 1	Project Vicinity
Figure 2	AEM Data and new Fort Ord TDS Data, December 2018, Dune Sand Aquifer
Figure 3	AEM Data and new Fort Ord TDS Data, December 2018, Upper 180-Foot Aquifer
Figure 4	Fresh Water Capture Area and TDS Concentrations, Dune Sand Aquifer

Appendices

Appendix A	Summary of Procedures and Results of December 2018 Groundwater Measurements/Sampling of Fort Ord Wells

7 Estimated fresh water volume within this capture zone is based upon a saturated thickness of 50 feet within the Dune Sand Aquifer and estimated porosity of 0.2 over 7 square miles. These parameters are consistent with the results of the AEM Study and information obtained from over 100 wells at Fort Ord.



Legend

- MPWSP Monitoring Well
- Fort Ord Monitoring Well with new TDS Data
- DWR Groundwater Basins
- MCWD's Service Area - Ord Community
- MCWD's Service Area - Central Marina
- MCWD's Sphere of Influence

Abbreviations

DWR = Department of Water Resources
MCWD = Marina Coast Water District
MPWSP = Monterey Peninsula Water Supply Project
TDS = total dissolved solids

Notes

1. All locations are approximate.
2. The Project (MPWSP) consists of 10 subsurface slant wells at the CEMEX site.

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0 2 4
(Approximate Scale in Miles)

Sources

1. Aerial photograph provided by ESRI's ArcGIS Online, Obtained 8 February 2019.

Project Vicinity

Marina Coast Water District
Monterey County, California
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EKI B60094.09

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Figure 1

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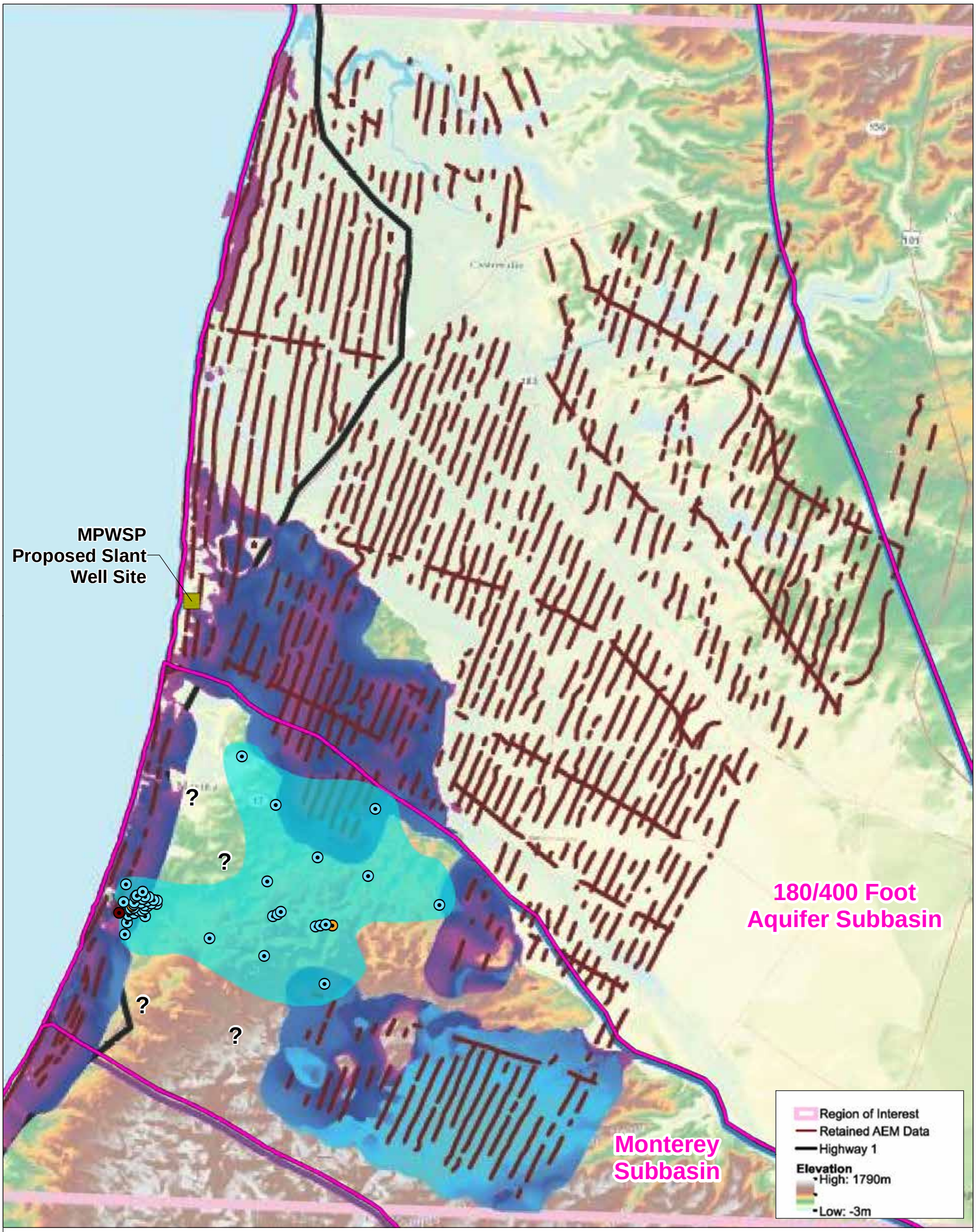

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December 2018 Sampling

- Fort Ord Monitoring Well with TDS >3,000 mg/L
- Fort Ord Monitoring Well with TDS >1,000 and <3,000 mg/L
- Fort Ord Monitoring Well with TDS <1,000 mg/L
- Groundwater within Dune Sand Aquifer with TDS <1,000 mg/L (Note 2)
- DWR Groundwater Basins

Thickness of Groundwater
within Dune Sand Aquifer
with TDS <3,000 mg/L (Note 3)

High : 150m

Low : 0m

Abbreviations

AEM = airborne electromagnetic
DWR = Department of Water Resources
m = meters
mg/L = milligrams per liter
MPWSP = Monterey Peninsula Water Supply Project
TDS = total dissolved solids

Notes

1. All locations are approximate.
2. TDS samples and specific conductance measurements were taken from Fort Ord wells during December 10-14, 2018. Specific conductance to TDS conversion is based on Page 7 of Source 1.
3. Airborne Magnectic data are retained in May 2017 and obtained from Page 58 of Source 2. Source of drinking water identified for areas with TDS less than 3,000 mg/L.
4. Wells screend in the Unconfined Upper 180-Foot Aquifer are shown for areas near the coast beyond the boundary of the Fort Ord - Salinas Valley Aquitard.

Sources

1. MPWSP, 2015. Baseline Water and Total Dissolved Solids Levels -- Test Slant Well Area, dated 20 April 2015.
2. Gottschalk I, et al, 2018. Interpretation of Hydrostratigraphy and Water Quality from AEM Data Collected in the Northern Salinas Valley, CA, dated 15 March 2018.

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(Approximate Scale in Miles)

AEM Data and new Fort Ord TDS Data
December 2018
Dune Sand Aquifer

Marina Coast Water District
Monterey County, California
December 2018
EKI B60094.09

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Figure 2

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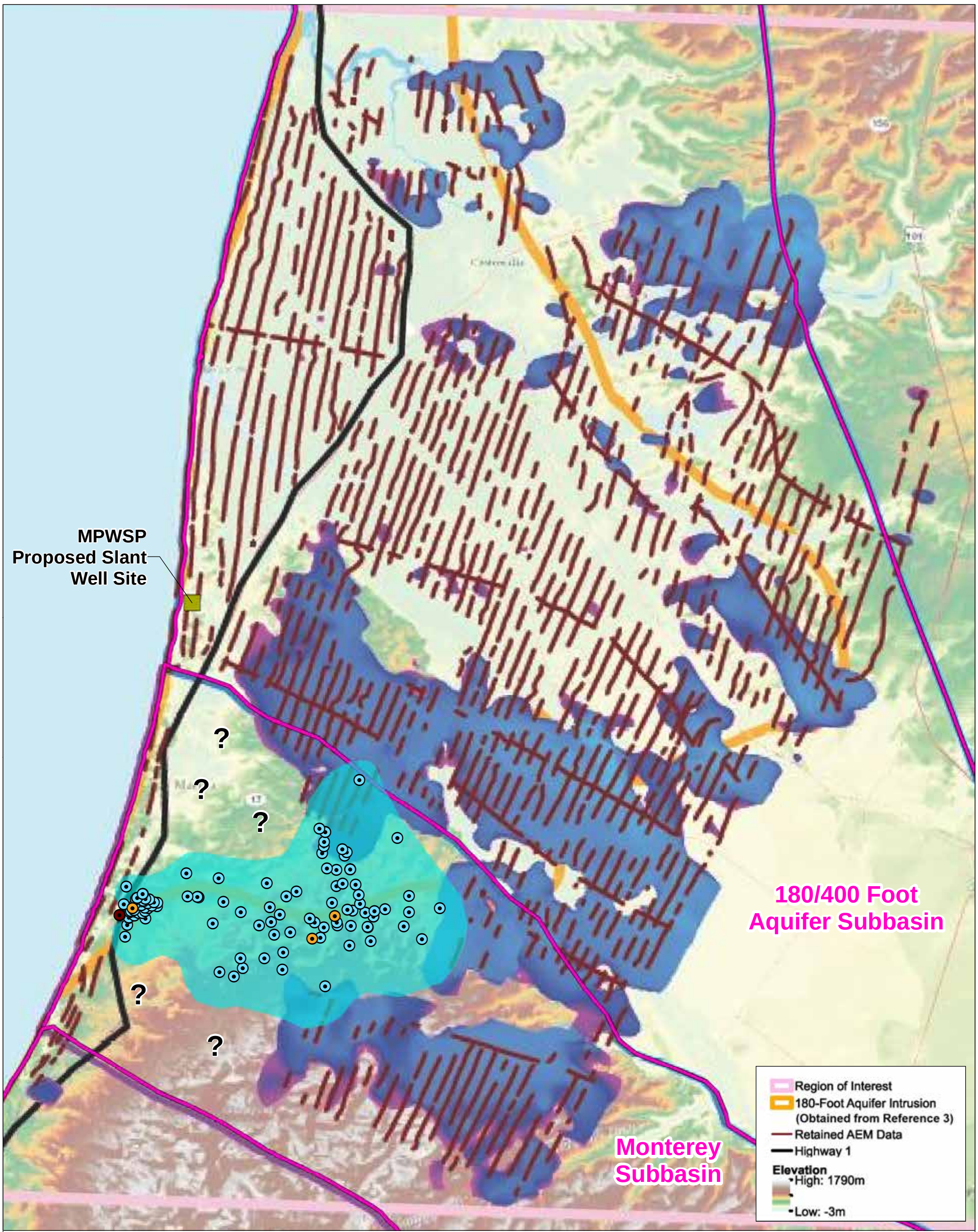

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December 2018 Sampling

- Fort Ord Monitoring Well with TDS >3,000 mg/L
- Fort Ord Monitoring Well with TDS >1,000 and <3,000 mg/L
- Fort Ord Monitoring Well with TDS <1,000 mg/L
- Groundwater within Upper 180-Foot Aquifer with TDS <1,000 mg/L (Note 2)
- DWR Groundwater Basins

Thickness of Groundwater
within Upper 180-Foot Aquifer
with TDS <3,000 mg/L (Note 3)

High : 150m

Low : 0m

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1. MPWSP, 2015. Baseline Water and Total Dissolved Solids Levels -- Test Slant Well Area, dated 20 April 2015.
2. Gottschalk I, et al, 2018. Interpretation of Hydrostratigraphy and Water Quality from AEM Data Collected in the Northern Salinas Valley, CA, dated 15 March 2018.
3. MCWRA, 2017. Historical Seawater Intrusion Map, Pressure 180-Foot Aquifer - 500 mg/L or Greater Chloride Areas, dated 7 June 2017.

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0 1 2
(Approximate Scale in Miles)

AEM Data and new Fort Ord TDS Data
December 2018
Upper 180-Foot Aquifer

Marina Coast Water District
Monterey County, California
December 2019
EKI B60094.09

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Figure 3

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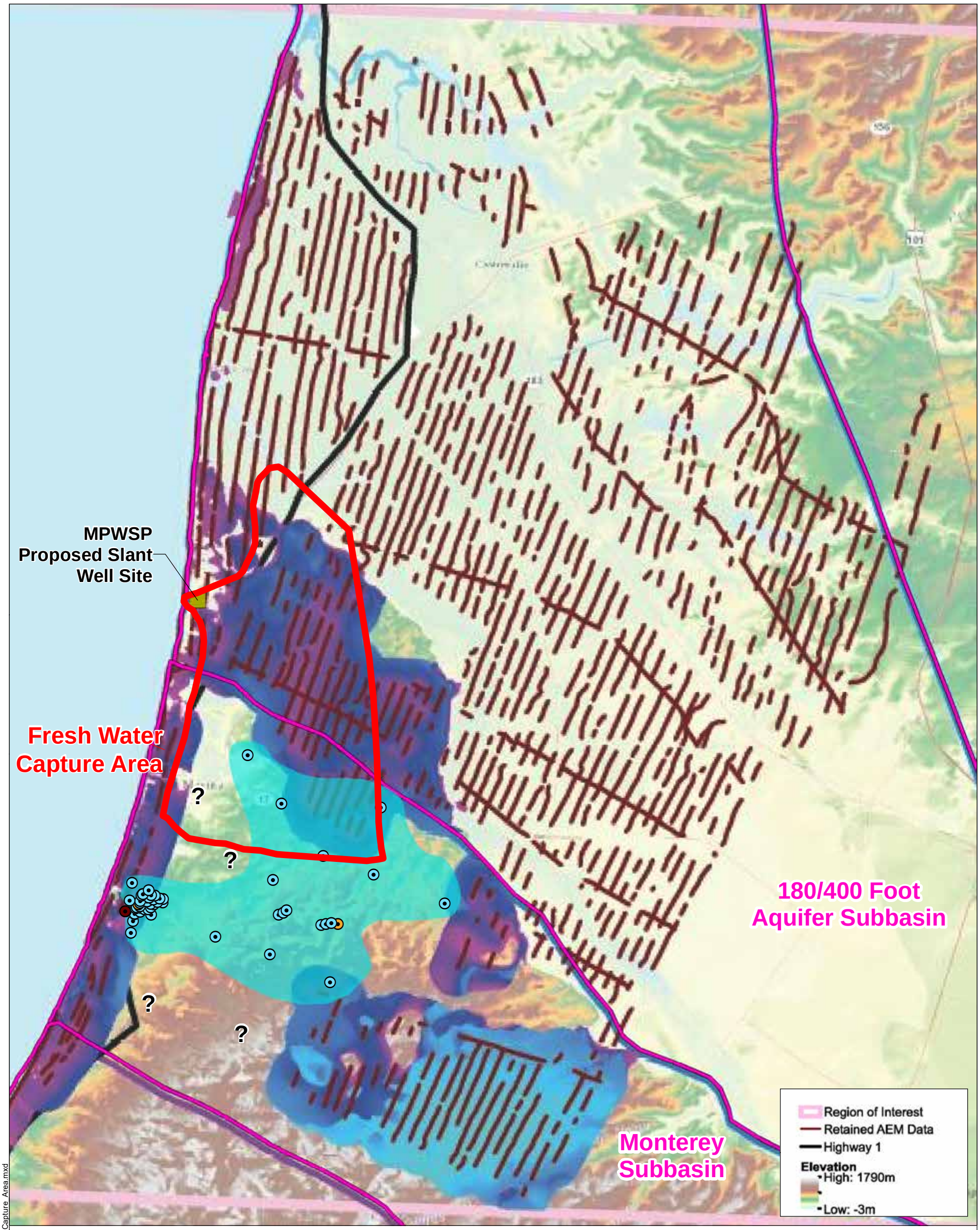

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December 2018 Sampling

- Fort Ord Monitoring Well with TDS >3,000 mg/L
- Fort Ord Monitoring Well with TDS >1,000 and <3,000 mg/L
- Fort Ord Monitoring Well with TDS <1,000 mg/L
- Groundwater within Dune Sand Aquifer with TDS <1,000 mg/L (Note 2)
- DWR Groundwater Basins
- Fresh Water Capture Zone (Source 4)

Thickness of Groundwater
within Dune Sand Aquifer
with TDS <3,000 mg/L (Note 3)

High : 150m

Low : 0m

Notes

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Sources

1. MPWSP, 2015. Baseline Water and Total Dissolved Solids Levels -- Test Slant Well Area, dated 20 April 2015.
2. Gottschalk I, et al, 2018. Interpretation of Hydrostratigraphy and Water Quality from AEM Data Collected in the Northern Salinas Valley, CA, dated 15 March 2018.
3. Appendix E2 of CalAM Monterey Peninsula Water Supply Project Final Environmental Impact Report/ Enivronmental Impact Statement (FEIR/EIS), March 2018.
4. Weiss Associates, 2019, Independent hydrogeological Review of Recent Data and Studies Related to California American Water's Proposed Monterey Regional Water Supply Project, dated 1 November 2019.

Abbreviations

AEM = airborne electromagnetic
DWR = Department of Water Resources
m = meters
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MPWSP = Monterey Peninsula Water Supply Project
TDS = total dissolved solids

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0 1 2
(Approximate Scale in Miles)

Fresh Water Capture Area and TDS Concentrations Dune Sand Aquifer

Marina Coast Water District
Monterey County, California
December 2019
EKI B60094.09

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Figure 4

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APPENDIX A

Summary of Procedures and Results of December 2018
Groundwater Measurements/Sampling of Fort Ord Wells

SAMPLING PROCEDURES

Ahtna measured conductivity in select monitoring wells and collected groundwater samples from select monitoring and extraction wells for laboratory analysis at the former Fort Ord, Monterey County, California. The sampling event was conducted between December 10 and 19, 2018.

Specific conductivity was measured at monitoring wells listed in Table 5 of Attachment A-1. A total of 116 measurements were collected at approximately the middle of the saturate screen interval at each monitoring well.

Groundwater samples were collected from monitoring and extraction wells where specific conductivity measurements were not feasible. These locations are listed in Tables 1 through 4 of Attachment A-1. A total of 72 samples were collected and analyzed for TDS. A selection of 10 samples were additionally analyzed for major anions and cations including alkalinity, bromide, calcium, chloride, magnesium, potassium, sodium, and sulfate. Two additional wells, MW-OU2-24-180 and MW-12-12-180L were sampled and analyzed for major anions and cations only.

The samples were collected in conjunction with the Fourth Quarter 2018 Groundwater Monitoring Program (GWMP) event and the former Fort Ord. All conductivity measurements and sample collections were conducted in accordance with the Quality Assurance Project Plan, Former Fort Ord, California, Volume I, Appendix A, Final Revision 6, Groundwater Remedies and Monitoring at Operable Unit 2, Sites 2 and 12, and Operable Unit Carbon Tetrachloride Plume (QAPP). Ahtna has performed Stage 1 verification and validation checks in accordance with the QAPP on groundwater samples.

Locations of investigate wells are shown on Figures A-1 through A-3.

RESULTS

A summary of specific conductance measurements is shown in Table A-1. The specific conductance measurement was converted to TDS concentration for each location via a relationship developed by the Monterey Peninsula Water Supply Project for its project site located approximately 3 miles northwest of the former Fort Ord. A summary of analytical results for groundwater samples are shown in Table A-2.

Field specific conductivity measurements are shown on Table 5 of Attachment A-1. Lab reports are included as Attachment A-2.

Tables

Table A-1 Summary of Specific Conductance Measurements
Table A-2 Summary of Analytical Results for Groundwater Samples

Figures

Figure A-1 Sampling Locations – Dune Sand Aquifer
Figure A-2 Sampling Locations – Upper 180-Foot Aquifer
Figure A-3 Sampling Locations – Lower 180-Foot and 400-Foot Aquifers

Attachments

Attachment A-1 Sample Validation and Field Measurement Tables
Attachment A-2 Lab Reports

Table A-1
Summary of Specific Conductance Measurements and Estimated TDS Concentrations
Marina Coast Water District

Station	Aquifer	Date Measured	Specific Conductance µs/cm	Estimated TDS mg/L	Comment
Dune Sand Aquifer					
MW-40-01-A	Dune Sand Aquifer	12/12/2018	248	138	
MW-BW-01-A	Dune Sand Aquifer	12/13/2018	273	152	
MW-BW-18-A	Dune Sand Aquifer	12/18/2018	510	284	
MW-BW-41-A	Dune Sand Aquifer	12/14/2018	515	287	
MW-BW-54-A	Dune Sand Aquifer	12/14/2018	334	186	Sediment filled above screen
MW-BW-81-A	Dune Sand Aquifer	12/14/2018	492	273	
MW-OU2-05-A	Dune Sand Aquifer	12/18/2018	743	414	
MW-OU2-23-A	Dune Sand Aquifer	12/10/2018	516	287	
MW-OU2-29-A	Dune Sand Aquifer	12/10/2018	1,125	627	
MW-OU2-34-A	Dune Sand Aquifer	12/13/2018	651	362	
MW-OU2-36-A	Dune Sand Aquifer	--	--	--	Well destroyed
Upper 180-Foot Aquifer and Intermediate 180-Foot Aquifer					
EW-12-03-180M	Upper 180-Foot Aquifer	12/11/2018	214	119	Obstruction, measured at depth of 75’
EW-12-03-180U	Upper 180-Foot Aquifer	12/17/2018	663	369	
EW-12-04-180M	Upper 180-Foot Aquifer	12/17/2018	691	385	
EW-12-04-180U	Upper 180-Foot Aquifer	12/17/2018	555	309	
EW-OU2-01-180	Upper 180-Foot Aquifer	12/10/2018	779	434	
MW-02-05-180	Upper 180-Foot Aquifer	12/14/2018	970	541	
MW-02-06-180	Upper 180-Foot Aquifer	12/14/2018	464	258	
MW-02-10-180	Upper 180-Foot Aquifer	12/14/2018	565	314	
MW-02-13-180M	Upper 180-Foot Aquifer	12/14/2018	34,490	22,199	
MW-02-13-180U	Upper 180-Foot Aquifer	12/14/2018	1,020	568	
MW-12-01-180	Upper 180-Foot Aquifer	12/12/2018	613	341	
MW-12-05-180	Upper 180-Foot Aquifer	12/17/2018	522	290	
MW-12-07-180	Upper 180-Foot Aquifer	12/14/2018	790	440	
MW-12-08-180	Upper 180-Foot Aquifer	12/17/2018	651	363	
MW-12-09R-180	Upper 180-Foot Aquifer	12/11/2018	720	401	
MW-12-14-180M	Upper 180-Foot Aquifer	12/11/2018	712	397	
MW-12-15-180M	Upper 180-Foot Aquifer	12/11/2018	657	366	
MW-12-16-180M	Upper 180-Foot Aquifer	12/11/2018	673	375	
MW-12-17-180U	Upper 180-Foot Aquifer	12/17/2018	684	381	
MW-12-18-180U	Upper 180-Foot Aquifer	12/11/2018	716	399	
MW-12-19-180U	Upper 180-Foot Aquifer	12/17/2018	1,292	721	
MW-12-20-180U	Upper 180-Foot Aquifer	12/11/2018	110	61	
MW-12-21-180U	Upper 180-Foot Aquifer	12/11/2018	226	125	
MW-12-22-180U	Upper 180-Foot Aquifer	12/12/2018	882	491	
MW-12-23-180U	Upper 180-Foot Aquifer	12/17/2018	539	300	
MW-12-24-180U	Upper 180-Foot Aquifer	12/11/2018	134	74	
MW-12-25-180U	Upper 180-Foot Aquifer	12/17/2018	169	94	
MW-12-26-180U	Upper 180-Foot Aquifer	12/11/2018	645	359	
MW-12-27-180U	Upper 180-Foot Aquifer	12/17/2018	717	399	
MW-12-28-180U	Upper 180-Foot Aquifer	12/11/2018	712	396	
MW-12-29-180U	Upper 180-Foot Aquifer	12/11/2018	755	420	
MW-12-30-180U	Upper 180-Foot Aquifer	12/11/2018	659	367	
MW-12-31-180M	Upper 180-Foot Aquifer	12/17/2018	652	363	
MW-12-32-180U	Upper 180-Foot Aquifer	12/11/2018	648	361	
MW-14-03-180	Upper 180-Foot Aquifer	12/14/2018	884	492	
MW-B-05-180	Upper 180-Foot Aquifer	12/11/2018	747	416	
MW-BW-02-180	Upper 180-Foot Aquifer	12/13/2018	338	188	
MW-BW-12-180	Upper 180-Foot Aquifer	12/18/2018	674	375	
MW-BW-14-180	Upper 180-Foot Aquifer	12/11/2018	675	376	
MW-BW-21-180	Upper 180-Foot Aquifer	12/11/2018	603	335	
MW-BW-26-180	Upper 180-Foot Aquifer	12/14/2018	707	393	
MW-BW-43-180	Upper 180-Foot Aquifer	12/14/2018	682	380	
MW-BW-44-180	Upper 180-Foot Aquifer	12/18/2018	754	420	
MW-BW-45-180	Upper 180-Foot Aquifer	12/14/2018	754	420	
MW-BW-47-180	Upper 180-Foot Aquifer	12/17/2018	648	361	
MW-BW-49-180	Upper 180-Foot Aquifer	12/14/2018	669	373	
MW-BW-50-180	Upper 180-Foot Aquifer	12/14/2018	701	390	
MW-BW-51-180	Upper 180-Foot Aquifer	12/14/2018	712	396	

Table A-1
Summary of Specific Conductance Measurements and Estimated TDS Concentrations
Marina Coast Water District

Station	Aquifer	Date Measured	Specific Conductance µs/cm	Estimated TDS mg/L	Comment
MW-BW-52-180	Upper 180-Foot Aquifer	12/13/2018	689	383	
MW-BW-53-180	Upper 180-Foot Aquifer	12/17/2018	803	447	
MW-BW-54-180	Upper 180-Foot Aquifer	12/11/2018	715	398	
MW-BW-55-180	Upper 180-Foot Aquifer	12/11/2018	652	363	
MW-BW-56-180	Upper 180-Foot Aquifer	12/17/2018	767	427	
MW-BW-57-180	Upper 180-Foot Aquifer	12/12/2018	644	358	
MW-BW-58-180	Upper 180-Foot Aquifer	12/12/2018	429	239	
MW-OU2-05-180	Upper 180-Foot Aquifer	12/18/2018	824	459	
MW-OU2-06-180R2	Upper 180-Foot Aquifer	12/13/2018	673	375	
MW-OU2-07-180R	Upper 180-Foot Aquifer	12/12/2018	803	447	
MW-OU2-09-180R	Upper 180-Foot Aquifer	12/18/2018	1,185	661	
MW-OU2-20-180	Upper 180-Foot Aquifer	12/10/2018	696	387	
MW-OU2-20-180X	Upper 180-Foot Aquifer	12/10/2018	514	286	
MW-OU2-23-180	Upper 180-Foot Aquifer	12/10/2018	286	159	
MW-OU2-24-180	Upper 180-Foot Aquifer	12/10/2018	575	320	
MW-OU2-28-180	Upper 180-Foot Aquifer	12/13/2018	765	426	
MW-OU2-29-180	Upper 180-Foot Aquifer	12/18/2018	1,409	787	
MW-OU2-30-180	Upper 180-Foot Aquifer	12/13/2018	579	322	
MW-OU2-31-180R	Upper 180-Foot Aquifer	12/18/2018	659	367	
MW-OU2-36-180	Upper 180-Foot Aquifer	12/18/2018	758	422	
MW-OU2-39-180	Upper 180-Foot Aquifer	12/13/2018	661	368	
MW-OU2-42-180	Upper 180-Foot Aquifer	12/18/2018	705	393	
MW-OU2-43-180	Upper 180-Foot Aquifer	12/11/2018	581	323	
MW-OU2-44-180	Upper 180-Foot Aquifer	12/10/2018	724	403	
MW-OU2-46-180	Upper 180-Foot Aquifer	12/13/2018	785	437	
MW-OU2-47-180	Upper 180-Foot Aquifer	12/14/2018	4,831	2,741	
MW-OU2-49-180	Upper 180-Foot Aquifer	12/18/2018	655	365	
MW-OU2-50-180	Upper 180-Foot Aquifer	12/14/2018	730	407	
MW-OU2-51-180	Upper 180-Foot Aquifer	12/13/2018	388	216	
MW-OU2-52-180	Upper 180-Foot Aquifer	--	--		Unable to measure, obstruction at 195’
MW-OU2-53-180	Upper 180-Foot Aquifer	12/13/2018	703	391	
MW-OU2-54-180	Upper 180-Foot Aquifer	12/14/2018	891	497	
MW-OU2-55-180	Upper 180-Foot Aquifer	12/14/2018	967	539	
MW-OU2-56-180	Upper 180-Foot Aquifer	12/12/2018	753	420	
MW-OU2-61-180	Upper 180-Foot Aquifer	12/13/2018	707	394	
MW-OU2-62-180	Upper 180-Foot Aquifer	12/13/2018	888	495	
MW-OU2-63-180	Upper 180-Foot Aquifer	12/10/2018	532	296	
MW-OU2-64-180	Upper 180-Foot Aquifer	12/13/2018	542	302	
MW-OU2-67-180	Upper 180-Foot Aquifer	12/13/2018	359	200	
MW-OU2-70-180	Upper 180-Foot Aquifer	12/14/2018	470	261	
MW-OU2-81-180	Upper 180-Foot Aquifer	12/13/2018	818	456	
PZ-OU2-06-180	Upper 180-Foot Aquifer	12/14/2018	664	370	
MW-12-19-180M	180-Foot, Intermediate	12/17/2018	844	470	

Table A-1
Summary of Specific Conductance Measurements and Estimated TDS Concentrations
Marina Coast Water District

Station	Aquifer	Date Measured	Specific Conductance µs/cm	Estimated TDS mg/L	Comment
Lower 180-Foot Aquifer and 400-Foot Aquifer					
MW-12-12-180L	Lower 180-Foot Aquifer	12/10/2018	507	282	
MW-BW-04-180	Lower 180-Foot Aquifer	12/13/2018	586	326	
MW-BW-59-180	Lower 180-Foot Aquifer	12/12/2018	1,065	594	661.69 on 12/17/2018
MW-OU2-66-180	Lower 180-Foot Aquifer	12/13/2018	939	524	
MW-OU2-68-180	Lower 180-Foot Aquifer	--	--		Unable to measure due to well damage
MW-OU2-69-180	Lower 180-Foot Aquifer	12/13/2018	679	378	
MW-OU2-71-180	Lower 180-Foot Aquifer	12/14/2018	517	288	
MW-OU2-72-180	Lower 180-Foot Aquifer	12/14/2018	765	426	
MW-OU2-78-180	Lower 180-Foot Aquifer	12/13/2018	1,013	565	
MW-OU2-82-180	Lower 180-Foot Aquifer	12/13/2018	769	428	
TEST2	Lower 180-Foot Aquifer	12/17/2018	978	545	Obstruction at 270'
Airfield	Lower 180-Foot Aquifer / 400-Foot Aquifer	12/12/2018	8,380	4,831	
MCWD-08A	Lower 180-Foot Aquifer / 400-Foot Aquifer	12/14/2018	11,020	6,428	
EW-OU2-07-180	Lower 180-Foot Aquifer / 400-Foot Aquifer	12/13/2018	808	450	
MW-BW-03-400	400-Foot Aquifer	12/13/2018	581	324	
MW-OU2-07-400	400-Foot Aquifer	12/18/2018	721	401	
MW-OU2-28-400	400-Foot Aquifer	12/19/2018	454	253	

Abbreviations
mg/L = milligram per liter
TDS = total dissolved solids
µs/cm = microsiemens per centimeter
-- = not analyzed

Notes:
Specific conductance measurements taken from Fort Ord wells during monitoring December 10-19, 2018. Specific conductance to TDS conversion is based on the formula presented on Page 7 of Reference 1.

References
MPWSP, 2015. Baseline Water and Total Dissolved Solids Levels -- Test Slant Well Area, dated 20 April 2015.

Table A-2
Summary of Analytical Results for Groundwater Samples
Marina Coast Water District

Station Name	Aquifer	Measurement Date	Analytes								
			Alkalinity, Total as CaCO3 mg/L	Bromide mg/L	Calcium mg/L	Chloride mg/L	Magnesium mg/L	Potassium mg/L	Sodium ug/L	Sulfate ug/L	Solids, Total Dissolved mg/L
Dune Sand Aquifer											
EW-OU2-10-A	Dune Sand Aquifer	12/19/2018	--	--	--	--	--	--	--	--	616
EW-OU2-11-AR	Dune Sand Aquifer	12/19/2018	--	--	--	--	--	--	--	--	576
EW-OU2-12-A	Dune Sand Aquifer	12/19/2018	252	3.3	5.69	131	3.39	3.26 J	9.41	25.7	558
EW-OU2-13-A	Dune Sand Aquifer	12/19/2018	--	--	--	--	--	--	--	--	476
EW-OU2-17-A	Dune Sand Aquifer	12/19/2018	--	--	--	--	--	--	--	--	540
EW-OU2-18-A	Dune Sand Aquifer	12/19/2018	--	--	--	--	--	--	--	--	660
EW-OU2-19-A	Dune Sand Aquifer	12/19/2018	--	--	--	--	--	--	--	--	770
EW-OU2-20-A	Dune Sand Aquifer	12/19/2018									1,120
Upper 180-Foot Aquifer and Intermediate 180-Foot Aquifer											
EW-12-05-180M	Upper 180-Foot Aquifer	12/19/2018	--	--	--	--	--	--	--	--	928
EW-12-07-180M	Upper 180-Foot Aquifer	12/19/2018	112	<5.0	10.9	652	7.02	4.6 J	25.2	135	1,540
EW-12-08-180U	Upper 180-Foot Aquifer	12/19/2018	49.75	<0.5	1.76	49.85	1.075	1.68 J	3.6	29.55	220
EW-OU2-02-180R	Upper 180-Foot Aquifer	12/19/2018	149	2.05	4.13	99.75	2.32	3.15 J	6.1	41.15	420
EW-OU2-03-180	Upper 180-Foot Aquifer	12/19/2018	--	--	--	--	--	--	--	--	460
EW-OU2-05-180	Upper 180-Foot Aquifer	12/19/2018	--	--	--	--	--	--	--	--	458
EW-OU2-06-180	Upper 180-Foot Aquifer	12/19/2018	--	--	--	--	--	--	--	--	456
EW-OU2-08-180	Upper 180-Foot Aquifer	12/19/2018	--	--	--	--	--	--	--	--	462
EW-OU2-09-180	Upper 180-Foot Aquifer	12/19/2018	--	--	--	--	--	--	--	--	494
EW-OU2-10-180	Upper 180-Foot Aquifer	12/19/2018	--	--	--	--	--	--	--	--	1,020
EW-OU2-12-180	Upper 180-Foot Aquifer	12/19/2018	--	--	--	--	--	--	--	--	406
MP-BW-35-242	Upper 180-Foot Aquifer	12/12/2018	--	--	--	--	--	--	--	--	386
MP-BW-37-178	Upper 180-Foot Aquifer	12/13/2018	--	--	--	--	--	--	--	--	462
MP-BW-37-193	Upper 180-Foot Aquifer	12/13/2018	--	--	--	--	--	--	--	--	498
MP-BW-41-202	Upper 180-Foot Aquifer	12/11/2018	68.5	1.2 J	4.67	115	1.73	2.79 J	5.75	50.1	420
MP-BW-41-231	Upper 180-Foot Aquifer	12/11/2018	--	--	--	--	--	--	--	--	448
MP-BW-41-256	Upper 180-Foot Aquifer	12/11/2018	71.4	1.2 J	5.66	126	1.97	3.69 J	5.89	41.9	248
MP-BW-46-170	Upper 180-Foot Aquifer	12/11/2018	--	--	--	--	--	--	--	--	252
MP-BW-46-185	Upper 180-Foot Aquifer	12/11/2018	--	--	--	--	--	--	--	--	390
MP-BW-46-200	Upper 180-Foot Aquifer	12/11/2018	--	--	--	--	--	--	--	--	394
MP-BW-46-215	Upper 180-Foot Aquifer	12/11/2018	--	--	--	--	--	--	--	--	362
MW-OU2-24-180	Upper 180-Foot Aquifer	12/12/2018	147	0.88	3.41	80.3	1.57	4.64 J	5.84	24.5	--
MP-BW-30-282	Intermediate 180-Foot Aquifer	12/12/2018	--	--	--	--	--	--	--	--	518
MP-BW-33-272	Intermediate 180-Foot Aquifer	12/12/2018	--	--	--	--	--	--	--	--	558

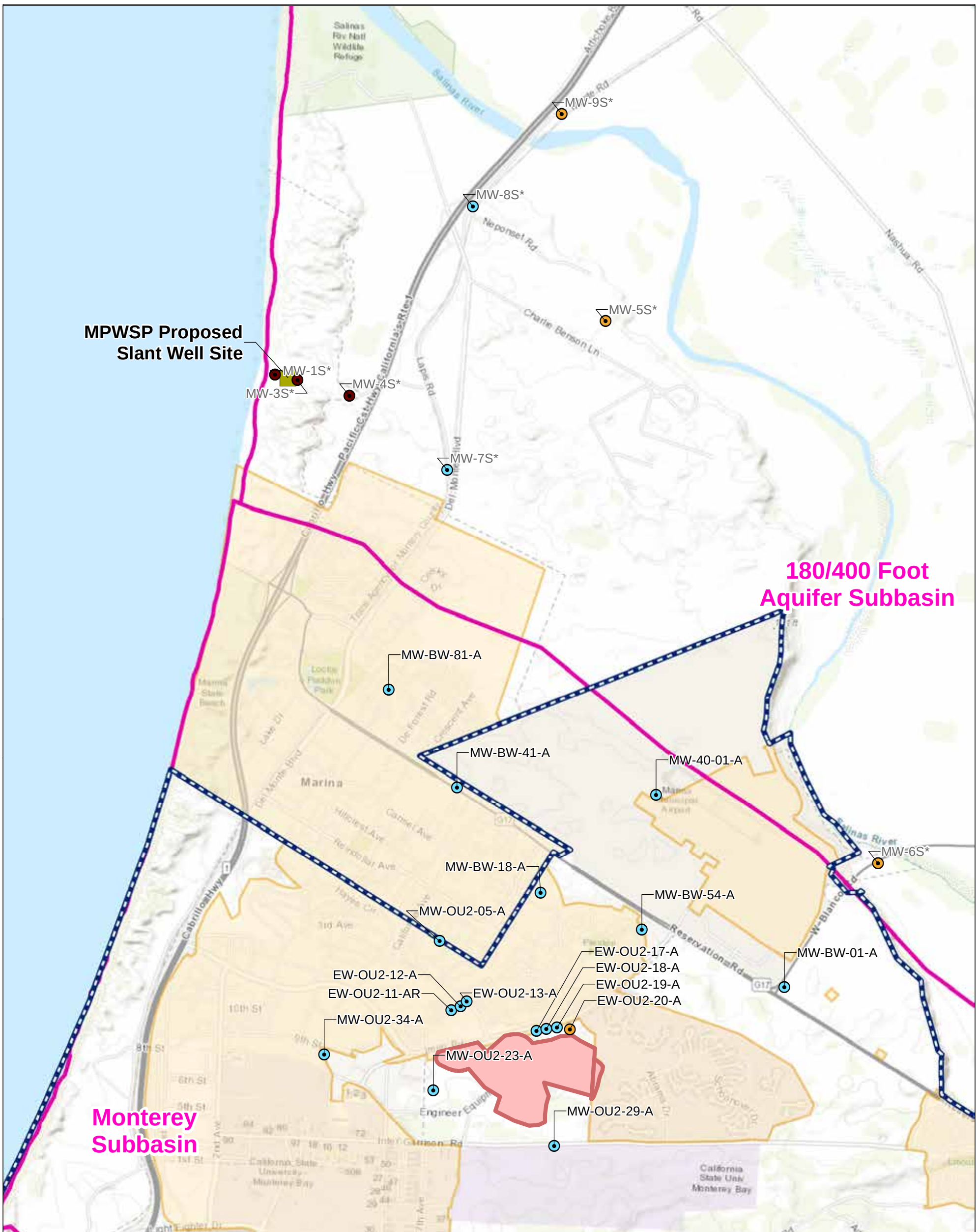
Table A-2
Summary of Analytical Results for Groundwater Samples
Marina Coast Water District

Station Name	Aquifer	Measurement Date	Analytes								
			Alkalinity, Total as CaCO3 mg/L	Bromide mg/L	Calcium mg/L	Chloride mg/L	Magnesium mg/L	Potassium mg/L	Sodium ug/L	Sulfate ug/L	Solids, Total Dissolved mg/L
Lower 180-Foot Aquifer and 400-Foot Aquifer											
MP-BW-37-303	Lower 180-Foot Aquifer	12/13/2018	--	--	--	--	--	--	--	--	460
MP-BW-37-328	Lower 180-Foot Aquifer	12/13/2018	--	--	--	--	--	--	--	--	4,360
MP-BW-37-368	Lower 180-Foot Aquifer	12/13/2018	--	--	--	--	--	--	--	--	16,600
MP-BW-37-398	Lower 180-Foot Aquifer	12/13/2018	--	--	--	--	--	--	--	--	20,900
MP-BW-37-460	Lower 180-Foot Aquifer	12/13/2018	--	--	--	--	--	--	--	--	3,860
MP-BW-38-327	Lower 180-Foot Aquifer	12/12/2018	--	--	--	--	--	--	--	--	5,530
MP-BW-38-341	Lower 180-Foot Aquifer	12/12/2018	--	--	--	--	--	--	--	--	11,600
MP-BW-38-353	Lower 180-Foot Aquifer	12/12/2018	--	--	--	--	--	--	--	--	16,900
MP-BW-38-368	Lower 180-Foot Aquifer	12/12/2018	--	--	--	--	--	--	--	--	17,200
MP-BW-38-418	Lower 180-Foot Aquifer	12/12/2018	--	--	--	--	--	--	--	--	12,100
MP-BW-39-310	Lower 180-Foot Aquifer	12/13/2018	--	--	--	--	--	--	--	--	5,080
MP-BW-39-330	Lower 180-Foot Aquifer	12/13/2018	--	--	--	--	--	--	--	--	12,700
MP-BW-39-350	Lower 180-Foot Aquifer	12/13/2018	--	--	--	--	--	--	--	--	15,400
MP-BW-39-395	Lower 180-Foot Aquifer	12/13/2018	--	--	--	--	--	--	--	--	22,100
MP-BW-41-286	Lower 180-Foot Aquifer	12/11/2018	--	--	--	--	--	--	--	--	358
MP-BW-41-318	Lower 180-Foot Aquifer	12/11/2018	94	1.7 J	7.38	118	2.46	3.59 J	4.38	91.9	480
MP-BW-41-353	Lower 180-Foot Aquifer	12/11/2018	--	--	--	--	--	--	--	--	604
MP-BW-41-396	Lower 180-Foot Aquifer	12/11/2018	157	1	3.78	21.9	1.48	3.4 J	6.65	95.8	350
MW-12-12-180L	Lower 180-Foot Aquifer	12/12/2018	189	0.72	6.52	43.3	1.13	1.03	4.07	35	--
MP-BW-30-317	Lower 180-Foot Aquifer / 400-Foot Aquifer	12/12/2018	--	--	--	--	--	--	--	--	392
MP-BW-30-342	Lower 180-Foot Aquifer / 400-Foot Aquifer	12/12/2018	--	--	--	--	--	--	--	--	6,340
MP-BW-30-397	Lower 180-Foot Aquifer / 400-Foot Aquifer	12/12/2018	--	--	--	--	--	--	--	--	14,800
MP-BW-33-317	Lower 180-Foot Aquifer / 400-Foot Aquifer	12/12/2018	--	--	--	--	--	--	--	--	918
MP-BW-33-352	Lower 180-Foot Aquifer / 400-Foot Aquifer	12/12/2018	--	--	--	--	--	--	--	--	8,980
MP-BW-33-397	Lower 180-Foot Aquifer / 400-Foot Aquifer	12/12/2018	--	--	--	--	--	--	--	--	8,420
MP-BW-35-312	Lower 180-Foot Aquifer / 400-Foot Aquifer	12/12/2018	--	--	--	--	--	--	--	--	2,790
MP-BW-35-366	Lower 180-Foot Aquifer / 400-Foot Aquifer	12/12/2018	--	--	--	--	--	--	--	--	8,350
MP-BW-35-402	Lower 180-Foot Aquifer / 400-Foot Aquifer	12/12/2018	--	--	--	--	--	--	--	--	12,200
MP-BW-35-467	Lower 180-Foot Aquifer / 400-Foot Aquifer	12/12/2018	--	--	--	--	--	--	--	--	3,220
MP-BW-50-289	Lower 180-Foot Aquifer / 400-Foot Aquifer	12/11/2018	--	--	--	--	--	--	--	--	426
MP-BW-50-309	Lower 180-Foot Aquifer / 400-Foot Aquifer	12/11/2018	--	--	--	--	--	--	--	--	358
MP-BW-50-339	Lower 180-Foot Aquifer / 400-Foot Aquifer	12/11/2018	--	--	--	--	--	--	--	--	510
MP-BW-50-359	Lower 180-Foot Aquifer / 400-Foot Aquifer	12/11/2018	--	--	--	--	--	--	--	--	532
MP-BW-50-384	Lower 180-Foot Aquifer / 400-Foot Aquifer	12/11/2018	--	--	--	--	--	--	--	--	486
MP-BW-51-315	Lower 180-Foot Aquifer / 400-Foot Aquifer	12/10/2018	--	--	--	--	--	--	--	--	328
MP-BW-51-340	Lower 180-Foot Aquifer / 400-Foot Aquifer	12/10/2018	--	--	--	--	--	--	--	--	322
MP-BW-51-370	Lower 180-Foot Aquifer / 400-Foot Aquifer	12/10/2018	--	--	--	--	--	--	--	--	414
MP-BW-51-405	Lower 180-Foot Aquifer / 400-Foot Aquifer	12/10/2018	--	--	--	--	--	--	--	--	520

Table A-2
Summary of Analytical Results for Groundwater Samples
Marina Coast Water District

Station Name	Aquifer	Measurement Date	Analytes								
			Alkalinity, Total as CaCO3 mg/L	Bromide mg/L	Calcium mg/L	Chloride mg/L	Magnesium mg/L	Potassium mg/L	Sodium ug/L	Sulfate ug/L	Solids, Total Dissolved mg/L
MP-BW-30-467	400-Foot Aquifer	12/12/2018	--	--	--	--	--	--	--	--	6,950
MP-BW-30-537	400-Foot Aquifer	12/13/2018	--	--	--	--	--	--	--	--	336
MP-BW-35-527	400-Foot Aquifer	12/12/2018	--	--	--	--	--	--	--	--	478
MP-BW-35-562	400-Foot Aquifer	12/12/2018	--	--	--	--	--	--	--	--	354

Abbreviations
mg/L = milligram per liter
ug/L = microgram per liter
-- = not analyzed
J = Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.



Legend

- Fort Ord Landfills
- Fort Ord Boundary
- DWR Groundwater Basin
- MCWD Service Area

December 2018 Sampling

- TDS <1,000 mg/L
- TDS >1,000 mg/L and <3,000 mg/L
- TDS > 3,000 mg/L

Notes

1. All locations are approximate.
2. TDS samples and specific conductance measurements were taken from Fort Ord wells during December 10-19, 2018. Specific conductance to TDS conversion is based on Page 7 of Source 1.
3. Samples from MPWSP monitoring wells (labeled with an aterisk "*") were obtained from Source 3 and shown as a reference.
4. Source 4 indicates that groundwater with relatively high TDS in the vicinity of the Fort Ord landfill appears to have originated from the landfill.

Sources

1. MPWSP, 2015. Baseline Water and Total Dissolved Solids Levels -- Test Slant Well Area, dated 20 April 2015.
2. Topographic basemap provided by ESRI's ArcGIS Online, obtained 5 December 2019.
3. MPWSP, 2018. Test Slant Well Long Term Pumping Monitoring Report No. 154, dated October 9, 2018.
4. HLA, 1994. Basewide Hydrogeologic Characterization, Fort Ord, California, dated 10 June 1994.

Abbreviations

DWR = Department of Water Resources
MCWD = Marina Coast Water District
mg/L = milligrams per liter
MPWSP = Monterey Peninsula Water Supply Project
TDS = total dissolved solids

N

0 0.5 1

(Approximate Scale in Miles)

Sampling Locations
Dune Sand Aquifer

Marina Coast Water District
Monterey County, California
December 2019
EKI B60094.03

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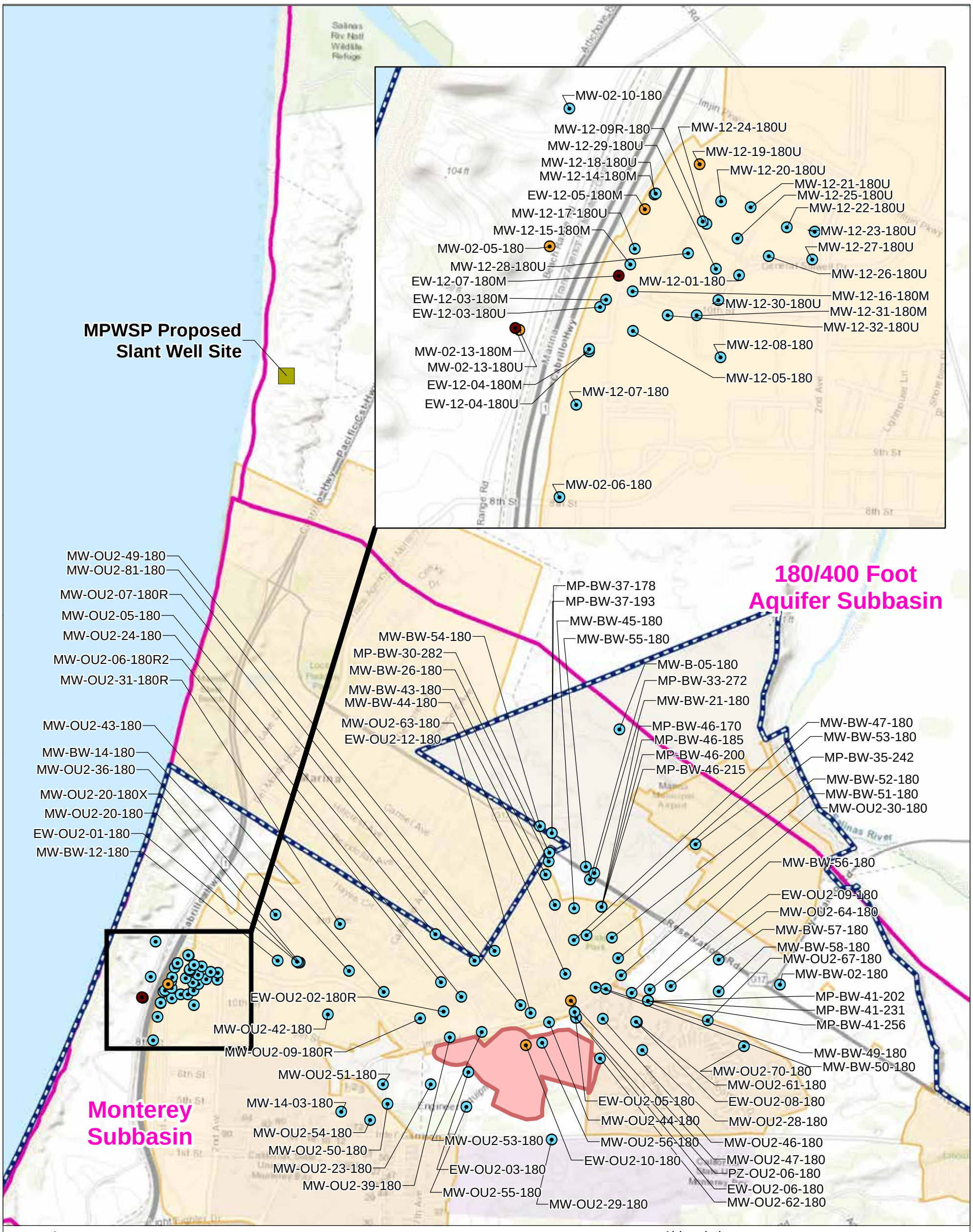
Figure A-1

Path: X:\B60094\Maps\2019\11\Fig1_ShallowAquifer_TDS_Dec2018.mxd



Legend

- Fort Ord Landfills
- Fort Ord Boundary
- DWR Groundwater Basin
- MCWD Service Area

December 2018 Sampling

- TDS <1,000 mg/L
- TDS >1,000 mg/L and <3,000 mg/L
- TDS > 3,000 mg/L

Notes

1. All locations are approximate.
2. TDS samples and specific conductance measurements were taken from Fort Ord wells during December 10-19, 2018. Specific conductance to TDS conversion is based on Page 7 of Source 1.
3. Source 3 indicates that groundwater with relatively high TDS in the vicinity of the Fort Ord landfill appears to have originated from the landfill.

Sources

1. MPWSP, 2015. Baseline Water and Total Dissolved Solids Levels -- Test Slant Well Area, dated 20 April 2015.
2. Topographic basemap provided by ESRI's ArcGIS Online, obtained 9 December 2019.
4. HLA, 1994. Basewide Hydrogeologic Characterization, Fort Ord, California, dated 10 June 1994.

Abbreviations

DWR = Department of Water Resources
MCWD = Marina Coast Water District
mg/L = milligrams per liter
MPWSP = Monterey Peninsula Water Supply Project
TDS = total dissolved solids

N

0 0.5 1

(Approximate Scale in Miles)

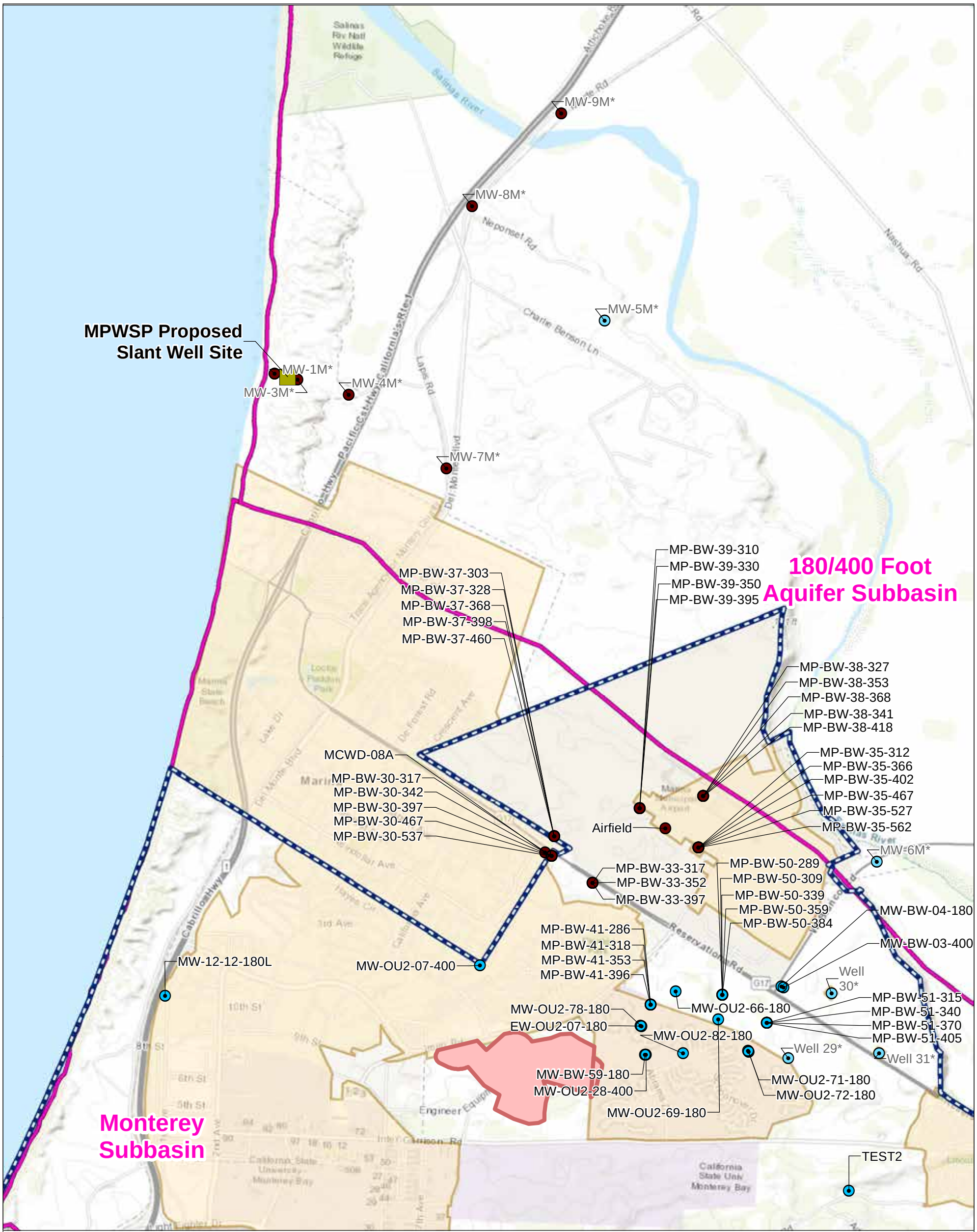
Sampling Locations
Upper 180 Foot Aquifer

Marina Coast Water District
Monterey County, California
December 2019
EKI B60094.03

eki environment & water

Figure A-2

Path: X:\B60094\Maps\2019\11\Fig2_180ftAquifer_TDS_Dec2018.mxd



Legend

- Fort Ord Landfills
- Fort Ord Boundary
- DWR Groundwater Basin
- MCWD Service Area

December 2018 Sampling

- TDS <1,000 mg/L
- TDS >1,000 mg/L and <3,000 mg/L
- TDS > 3,000 mg/L

Notes

1. All locations are approximate.
2. TDS samples and specific conductance measurements were taken from Fort Ord wells during December 10-19, 2018. Specific conductance to TDS conversion is based on Page 7 of Source 1.
3. Samples from MPWSP monitoring wells and MCWD production wells (labeled with an aterisk "*") were obtained from Sources 3 and 4 and shown as a reference.

Sources

1. MPWSP, 2015. Baseline Water and Total Dissolved Solids Levels -- Test Slant Well Area, dated 20 April 2015.
2. Topographic basemap provided by ESRI's ArcGIS Online, obtained 5 December 2019.
3. MPWSP, 2018. Test Slant Well Long Term Pumping Monitoring Report No. 154, dated October 9, 2018.
4. MCWD Production Well Water Quality Data, California Public Water Systems, 2019.

Abbreviations

DWR = Department of Water Resources
MCWD = Marina Coast Water District
mg/L = milligrams per liter
MPWSP = Monterey Peninsula Water Supply Project
TDS = total dissolved solids

N

0 0.5 1
(Approximate Scale in Miles)

Sampling Locations
Lower 180-Foot and 400-Foot Aquifers

Marina Coast Water District
Monterey County, California
December 2019
EKI B60094.03

eki environment & water

Figure A-3

Path: X:\B60094\Maps\2019\11\Fig3_400ftAquifer_TDS_Dec2018.mxd

Attachment A-1

Analytical Results for Groundwater Samples in Quarter 4 2018

Table 1. Multiport Wells to Sample for Marina Coast Water District

Well Name	Station Name	Aquifer	Notes	Package Lab ID
MP-BW-30	MP-BW-30-282	Intermediate 180-Foot	Sampled	FA60205-13
MP-BW-30	MP-BW-30-317	Lower 180-Foot,400-Foot	Sampled	FA60205-14
MP-BW-30	MP-BW-30-342	Lower 180-Foot,400-Foot	Sampled	FA60205-15
MP-BW-30	MP-BW-30-397	Lower 180-Foot,400-Foot	Sampled	FA60205-16
MP-BW-30	MP-BW-30-467	400-Foot	Sampled	FA60205-17
MP-BW-30	MP-BW-30-537	400-Foot	Sampled	FA60245-12
MP-BW-33	MP-BW-33-272	Intermediate 180-Foot	Sampled	FA60205-18
MP-BW-33	MP-BW-33-317	Lower 180-Foot,400-Foot	Sampled	FA60205-19
MP-BW-33	MP-BW-33-352	Lower 180-Foot,400-Foot	Sampled	FA60205-20
MP-BW-33	MP-BW-33-397	Lower 180-Foot,400-Foot	Sampled	FA60205-23
MP-BW-35	MP-BW-35-242	Upper 180-Foot	Sampled	FA60205-6
MP-BW-35	MP-BW-35-312	Lower 180-Foot,400-Foot	Sampled	FA60205-7
MP-BW-35	MP-BW-35-366	Lower 180-Foot,400-Foot	Sampled	FA60205-8
MP-BW-35	MP-BW-35-402	Lower 180-Foot,400-Foot	Sampled	FA60205-9
MP-BW-35	MP-BW-35-467	Lower 180-Foot,400-Foot	Sampled	FA60205-10
MP-BW-35	MP-BW-35-527	400-Foot	Sampled	FA60205-11
MP-BW-35	MP-BW-35-562	400-Foot	Sampled	FA60205-12
MP-BW-37	MP-BW-37-178	Upper 180-Foot	Sampled	FA60245-1
MP-BW-37	MP-BW-37-193	Upper 180-Foot	Sampled	FA60245-2
MP-BW-37	MP-BW-37-303	Lower 180-Foot	Sampled	FA60245-3
MP-BW-37	MP-BW-37-328	Lower 180-Foot	Sampled	FA60245-4
MP-BW-37	MP-BW-37-368	Lower 180-Foot	Sampled	FA60245-5
MP-BW-37	MP-BW-37-398	Lower 180-Foot	Sampled	FA60245-6
MP-BW-37	MP-BW-37-460	Lower 180-Foot	Sampled	FA60245-7
MP-BW-38	MP-BW-38-327	Lower 180-Foot	Sampled	FA60205-1
MP-BW-38	MP-BW-38-341	Lower 180-Foot	Sampled	FA60205-2
MP-BW-38	MP-BW-38-353	Lower 180-Foot	Sampled	FA60205-3
MP-BW-38	MP-BW-38-368	Lower 180-Foot	Sampled	FA60205-4
MP-BW-38	MP-BW-38-418	Lower 180-Foot	Sampled	FA60205-5
MP-BW-39	MP-BW-39-310	Lower 180-Foot	Sampled	FA60245-8
MP-BW-39	MP-BW-39-330	Lower 180-Foot	Sampled	FA60245-9
MP-BW-39	MP-BW-39-350	Lower 180-Foot	Sampled	FA60245-10
MP-BW-39	MP-BW-39-395	Lower 180-Foot	Sampled	FA60245-11
MP-BW-41	MP-BW-41-202	Upper 180-Foot	Sampled	FA60136-10
MP-BW-41	MP-BW-41-231	Upper 180-Foot	Sampled	FA60136-11
MP-BW-41	MP-BW-41-256	Upper 180-Foot	Sampled	FA60136-12
MP-BW-41	MP-BW-41-286	Lower 180-Foot	Sampled	FA60136-13
MP-BW-41	MP-BW-41-318	Lower 180-Foot	Sampled	FA60136-14
MP-BW-41	MP-BW-41-353	Lower 180-Foot	Sampled	FA60136-15
MP-BW-41	MP-BW-41-396	Lower 180-Foot	Sampled	FA60136-16
MP-BW-46	MP-BW-46-170	Upper 180-Foot	Sampled	FA60136-6
MP-BW-46	MP-BW-46-185	Upper 180-Foot	Sampled	FA60136-7
MP-BW-46	MP-BW-46-200	Upper 180-Foot	Sampled	FA60136-8
MP-BW-46	MP-BW-46-215	Upper 180-Foot	Sampled	FA60136-9
MP-BW-50	MP-BW-50-289	Lower 180-Foot,400-Foot	Sampled	FA60136-1
MP-BW-50	MP-BW-50-309	Lower 180-Foot,400-Foot	Sampled	FA60136-2

Table 1. Multiport Wells to Sample for Marina Coast Water District

Well Name	Station Name	Aquifer	Notes	Package Lab ID
MP-BW-50	MP-BW-50-339	Lower 180-Foot,400-Foot	Sampled	FA60136-3
MP-BW-50	MP-BW-50-359	Lower 180-Foot,400-Foot	Sampled	FA60136-4
MP-BW-50	MP-BW-50-384	Lower 180-Foot,400-Foot	Sampled	FA60136-5
MP-BW-51	MP-BW-51-315	Lower 180-Foot,400-Foot	Sampled	FA60105-1
MP-BW-51	MP-BW-51-340	Lower 180-Foot,400-Foot	Sampled	FA60105-2
MP-BW-51	MP-BW-51-370	Lower 180-Foot,400-Foot	Sampled	FA60105-3
MP-BW-51	MP-BW-51-405	Lower 180-Foot,400-Foot	Sampled	FA60105-4

Note:

ID: identification

Table 2. Extraction Wells to Sample for Marina Coast Water District

Well Name	Aquifer	Notes	Package Lab ID
EW-12-05-180M	Upper 180-Foot Aquifer	Sampled	FA60401-1
EW-12-06-180M	Upper 180-Foot Aquifer	Pump failure, not sampled	N/A
EW-12-07-180M	Upper 180-Foot Aquifer	Sampled	FA60401-2
EW-12-08-180U	Upper 180-Foot Aquifer	Sampled	FA60401-3
EW-OU2-04-A	A-Aquifer	Not operational, not sampled	N/A
EW-OU2-09-A	A-Aquifer	Not operational, not sampled	N/A
EW-OU2-10-A	A-Aquifer	Sampled	FA60401-5
EW-OU2-11-AR	A-Aquifer	Sampled	FA60401-8
EW-OU2-12-A	A-Aquifer	Sampled	FA60401-9
EW-OU2-13-A	A-Aquifer	Sampled	FA60401-10
EW-OU2-14-A	A-Aquifer	Not operational, not sampled	N/A
EW-OU2-16-A	A-Aquifer	Not operational, not sampled	N/A
EW-OU2-17-A	A-Aquifer	Sampled	FA60401-11
EW-OU2-18-A	A-Aquifer	Sampled	FA60401-12
EW-OU2-19-A	A-Aquifer	Sampled	FA60401-13
EW-OU2-20-A	A-Aquifer	Sampled	FA60401-14
EW-OU2-02-180R	Upper 180-Foot Aquifer	Sampled	FA60401-6
EW-OU2-03-180	Upper 180-Foot Aquifer	Sampled	FA60401-21
EW-OU2-04-180	Upper 180-Foot Aquifer	Not operational, not sampled	N/A
EW-OU2-05-180	Upper 180-Foot Aquifer	Sampled	FA60401-17
EW-OU2-06-180	Upper 180-Foot Aquifer	Sampled	FA60401-16
EW-OU2-08-180	Upper 180-Foot Aquifer	Sampled	FA60401-18
EW-OU2-09-180	Upper 180-Foot Aquifer	Sampled	FA60401-19
EW-OU2-10-180	Upper 180-Foot Aquifer	Sampled	FA60401-20
EW-OU2-11-180	Upper 180-Foot Aquifer	Not operational, not sampled	N/A
EW-OU2-12-180	Upper 180-Foot Aquifer	Sampled	FA60401-15

Notes:

N/A: not applicable

ID: identification

Table 3. Monitoring Wells to Sample for Marina Coast Water District

Well Name	Aquifer	Notes	Package Lab ID
MW-12-12-180L	Lower 180-Foot Aquifer	Sampled	FA60205-22
MW-OU2-24-180	Upper 180-Foot Aquifer	Sampled	FA60205-21

Note:

ID: identification

Table 4. Sample Table and Validation for Marina Coast Water District

WELL ID	Sample ID	Sample Type	Sample Date	COC #	Package Lab ID	TDS	AAC	Stage 1 Validation Performed
MP-BW-51-315	1850C0BW293F	Primary	12/10/2018	3677	**FA60105-1**	X		1/14/2019
MP-BW-51-340	1850C0BW294F	Primary	12/10/2018	3677	**FA60105-2**	X		1/14/2019
MP-BW-51-370	1850C0BW295F	Primary	12/10/2018	3677	**FA60105-3**	X		1/14/2019
MP-BW-51-405	1850C0BW296F	Primary	12/10/2018	3677	**FA60105-4**	X		1/14/2019
MP-BW-50-289	1850C0BW301T	Primary	12/11/2018	3676	**FA60136-1**	X		1/14/2019
MP-BW-50-309	1850C0BW302T	Primary	12/11/2018	3676	**FA60136-2**	X		1/14/2019
MP-BW-50-339	1850C0BW303T	Primary	12/11/2018	3676	**FA60136-3**	X		1/14/2019
MP-BW-50-359	1850C0BW304T	Primary	12/11/2018	3676	**FA60136-4**	X		1/14/2019
MP-BW-50-384	1850C0BW305T	Primary	12/11/2018	3676	**FA60136-5**	X		1/14/2019
MP-BW-46-170	1850C0BW306T	Primary	12/11/2018	3676	**FA60136-6**	X		1/14/2019
MP-BW-46-185	1850C0BW307T	Primary	12/11/2018	3676	**FA60136-7**	X		1/14/2019
MP-BW-46-200	1850C0BW308T	Primary	12/11/2018	3676	**FA60136-8**	X		1/14/2019
MP-BW-46-215	1850C0BW309T	Primary	12/11/2018	3676	**FA60136-9**	X		1/14/2019
MP-BW-41-202	1850C0BW310T	Primary	12/11/2018	3676	**FA60136-10**	X	X	1/14/2019
MP-BW-41-231	1850C0BW311T	Primary	12/11/2018	3693	**FA60136-11**	X		1/14/2019
MP-BW-41-256	1850C0BW312T	Primary	12/11/2018	3693	**FA60136-12**	X	X	1/14/2019
MP-BW-41-286	1850C0BW313T	Primary	12/11/2018	3693	**FA60136-13**	X		1/14/2019
MP-BW-41-318	1850C0BW314T	Primary	12/11/2018	3693	**FA60136-14**	X	X	1/14/2019
MP-BW-41-353	1850C0BW315T	Primary	12/11/2018	3693	**FA60136-15**	X		1/14/2019
MP-BW-41-396	1850C0BW316T	Primary	12/11/2018	3693	**FA60136-16**	X	X	1/14/2019
MP-BW-38-327	1850COBW316T	Primary	12/12/2018	3705	**FA60205-1**	X		1/14/2019
MP-BW-38-341	1850COBW317T	Primary	12/12/2018	3705	**FA60205-2**	X		1/14/2019
MP-BW-38-353	1850COBW318T	Primary	12/12/2018	3705	**FA60205-3**	X		1/14/2019
MP-BW-38-368	1850COBW319T	Primary	12/12/2018	3705	**FA60205-4**	X		1/14/2019
MP-BW-38-418	1850COBW320T	Primary	12/12/2018	3705	**FA60205-5**	X		1/14/2019
MP-BW-35-242	1850COBW321T	Primary	12/12/2018	3705	**FA60205-6**	X		1/14/2019
MP-BW-35-312	1850COBW322T	Primary	12/12/2018	3705	**FA60205-7**	X		1/14/2019
MP-BW-35-366	1850COBW323T	Primary	12/12/2018	3705	**FA60205-8**	X		1/14/2019
MP-BW-35-402	1850COBW324T	Primary	12/12/2018	3705	**FA60205-9**	X		1/14/2019
MP-BW-35-467	1850COBW325T	Primary	12/12/2018	3705	**FA60205-10**	X		1/14/2019
MP-BW-35-527	1850COBW326T	Primary	12/12/2018	3703	**FA60205-11**	X		1/14/2019
MP-BW-35-562	1850COBW327T	Primary	12/12/2018	3703	**FA60205-12**	X		1/14/2019

Table 4. Sample Table and Validation for Marina Coast Water District

WELL ID	Sample ID	Sample Type	Sample Date	COC #	Package Lab ID	TDS	AAC	Stage 1 Validation Performed
MP-BW-30-282	1850COBW328T	Primary	12/12/2018	3703	**FA60205-13**	X		1/14/2019
MP-BW-30-317	1850COBW329T	Primary	12/12/2018	3703	**FA60205-14**	X		1/14/2019
MP-BW-30-342	1850COBW330T	Primary	12/12/2018	3703	**FA60205-15**	X		1/14/2019
MP-BW-30-397	1850COBW331T	Primary	12/12/2018	3703	**FA60205-16**	X		1/14/2019
MP-BW-30-467	1850COBW332T	Primary	12/12/2018	3703	**FA60205-17**	X		1/14/2019
MP-BW-33-272	1850COBW333T	Primary	12/12/2018	3703	**FA60205-18**	X		1/14/2019
MP-BW-33-317	1850COBW334T	Primary	12/12/2018	3703	**FA60205-19**	X		1/14/2019
MP-BW-33-352	1850COBW335T	Primary	12/12/2018	3703	**FA60205-20**	X		1/14/2019
MW-OU2-24-180	1850BOU2044F	Primary	12/12/2018	3442	**FA60205-21**		X	1/14/2019
MW-12-12-180L	1850G212001F	Primary	12/12/2018	3442	**FA60205-22**		X	1/14/2019
MP-BW-33-397	1850COBW336T	Primary	12/12/2018	3704	**FA60205-23**	X		1/14/2019
MP-BW-37-178	1850C0BW337T	Primary	12/13/2018	3362	**FA60245-1**	X		1/14/2019
MP-BW-37-193	1850C0BW338T	Primary	12/13/2018	3362	**FA60245-2**	X		1/14/2019
MP-BW-37-303	1850C0BW339T	Primary	12/13/2018	3362	**FA60245-3**	X		1/14/2019
MP-BW-37-328	1850C0BW340T	Primary	12/13/2018	3362	**FA60245-4**	X		1/14/2019
MP-BW-37-368	1850C0BW341T	Primary	12/13/2018	3362	**FA60245-5**	X		1/14/2019
MP-BW-37-398	1850C0BW342T	Primary	12/13/2018	3362	**FA60245-6**	X		1/14/2019
MP-BW-37-460	1850C0BW343T	Primary	12/13/2018	3362	**FA60245-7**	X		1/14/2019
MP-BW-39-310	1850C0BW344T	Primary	12/13/2018	3362	**FA60245-8**	X		1/14/2019
MP-BW-39-330	1850C0BW345T	Primary	12/13/2018	3362	**FA60245-9**	X		1/14/2019
MP-BW-39-350	1850C0BW346T	Primary	12/13/2018	3362	**FA60245-10**	X		1/14/2019
MP-BW-39-395	1850C0BW347T	Primary	12/13/2018	19486	**FA60245-11**	X		1/14/2019
MP-BW-30-537	1850C0BW348T	Primary	12/13/2018	19486	**FA60245-12**	X		1/14/2019
EW-12-05-180M	1851M212279F	Primary	12/19/2018	2353	**FA60401-1**	X		1/14/2019
EW-12-07-180M	1851M212280F	Primary	12/19/2018	2353	**FA60401-2**	X	X	1/14/2019
EW-12-08-180U	1851M212281F	Primary	12/19/2018	2353	**FA60401-3**	X	X	1/14/2019
EW-12-08-180U-DUP	1851M212282D	Duplicate	12/19/2018	2353	**FA60401-4**	X	X	1/14/2019
EW-OU2-10-A	1851M2OU283F	Primary	12/19/2018	2353	**FA60401-5**	X		1/14/2019
EW-OU2-02-180R	1851MOU2284F	Primary	12/19/2018	2353	**FA60401-6**	X	X	1/14/2019
EW-OU2-02-180R-DUP	1851MOU2285D	Duplicate	12/19/2018	2353	**FA60401-7**	X	X	1/14/2019
EW-OU2-11-AR	1851MOU2286F	Primary	12/19/2018	2353	**FA60401-8**	X		1/14/2019
EW-OU2-12-A	1851MOU2287F	Primary	12/19/2018	2353	**FA60401-9**	X	X	1/14/2019

Table 4. Sample Table and Validation for Marina Coast Water District

WELL ID	Sample ID	Sample Type	Sample Date	COC #	Package Lab ID	TDS	AAC	Stage 1 Validation Performed
EW-OU2-13-A	1851MOU2288F	Primary	12/19/2018	2353	**FA60401-10**	X		1/14/2019
EW-OU2-17-A	1851MOU2289F	Primary	12/19/2018	2353	**FA60401-11**	X		1/14/2019
EW-OU2-18-A	1851MOU2290F	Primary	12/19/2018	2353	**FA60401-12**	X		1/14/2019
EW-OU2-19-A	1851MOU2291F	Primary	12/19/2018	2353	**FA60401-13**	X		1/14/2019
EW-OU2-20-A	1851MOU2292F	Primary	12/19/2018	2353	**FA60401-14**	X		1/14/2019
EW-OU2-12-180	1851MOU2293F	Primary	12/19/2018	2355	**FA60401-15**	X		1/14/2019
EW-OU2-06-180	1851MOU2294F	Primary	12/19/2018	2355	**FA60401-16**	X		1/14/2019
EW-OU2-05-180	1851MOU2296F	Primary	12/19/2018	2355	**FA60401-17**	X		1/14/2019
EW-OU2-08-180	1851MOU2297F	Primary	12/19/2018	2355	**FA60401-18**	X		1/14/2019
EW-OU2-09-180	1851MOU2298F	Primary	12/19/2018	2355	**FA60401-19**	X		1/14/2019
EW-OU2-10-180	1851MOU2299F	Primary	12/19/2018	2355	**FA60401-20**	X		1/14/2019
EW-OU2-03-180	1851MOU2300F	Primary	12/19/2018	2355	**FA60401-21**	X		1/14/2019

Notes:

AAC: alkalinity, anions (bromide, chloride, and sulfate), and cations (calcium, magnesium, potassium, and sodium)

COC #: chain of custody number

ID: identification

TDS: total dissolved solids

Table 5. Specific Conductance Measurements for Marina Coast Water District

Station	Top of Screen (ft btoc)	Bottom of Screen (ft btoc)	Date Measured	Specific Conductance (µs/cm)	Comment
Airfield	318	379	12/12/2018	8,379.8	
MW-BW-02-180	146.4	166.4	12/13/2018	338.07	
MW-OU2-30-180	190	220	12/13/2018	579.44	
MW-OU2-72-180	354	374	12/14/2018	764.55	
MW-OU2-69-180	325	345	12/13/2018	679.08	
MW-OU2-67-180	193	213	12/13/2018	359.4	
MW-OU2-66-180	318	338	12/13/2018	939.49	
MW-OU2-64-180	180	200	12/13/2018	542.47	
MW-BW-57-180	187.8	207.8	12/12/2018	643.98	
MW-BW-58-180	159.3	179.3	12/12/2018	429.28	
MW-BW-52-180	165	205	12/13/2018	688.53	
MCWD-08A	280	399	12/14/2018	11,020	
MW-40-01-A	74	94	12/12/2018	247.52	
MW-B-05-180	175	205	12/11/2018	746.78	
MW-BW-01-A	79.8	99.3	12/13/2018	273.28	
MW-BW-03-400	457	477	12/13/2018	581.41	
MW-BW-04-180	343	363	12/13/2018	585.98	
MW-BW-21-180	173	193	12/11/2018	602.63	
MW-BW-26-180	227	247	12/14/2018	706.54	
MW-BW-41-A	37	67	12/14/2018	515.17	
MW-BW-43-180	180	200.5	12/14/2018	682.47	
MW-BW-45-180	175.5	195.5	12/14/2018	753.93	
MW-BW-47-180	206	226	12/17/2018	647.67	
MW-BW-49-180	190	220	12/14/2018	669.36	
MW-BW-50-180	200	240	12/14/2018	701.06	
MW-BW-51-180	170	200	12/14/2018	711.61	
MW-BW-53-180	191	221	12/17/2018	803.10	
MW-BW-54-180	161	201	12/11/2018	714.7	
MW-BW-54-A	58	88	12/14/2018	334.21	Sediment filled above screen
MW-BW-55-180	171	201	12/11/2018	652.20	
MW-BW-81-A	39.5	79.5	12/14/2018	491.58	
MW-OU2-63-180	176	196	12/10/2018	531.65	
MW-OU2-68-180	257	277	--	--	Unable to measure due to well damage
MW-OU2-70-180	220	240	12/14/2018	469.67	
MW-OU2-71-180	273	293	12/14/2018	517.05	
PZ-OU2-06-180	173	233	12/14/2018	664.28	
MW-12-16-180M	117	137	12/11/2018	673.02	
MW-12-30-180U	76.9	96.9	12/11/2018	659.43	
MW-12-32-180U	77	97	12/11/2018	647.88	
MW-12-01-180	70	101	12/12/2018	613.25	
MW-12-29-180U	70.5	90.5	12/11/2018	754.56	
MW-12-28-180U	68	88	12/11/2018	711.53	
MW-12-26-180U	75.7	95.7	12/11/2018	644.56	
MW-12-22-180U	65.2	85.2	12/12/2018	881.76	
MW-12-21-180U	70.3	90.3	12/11/2018	225.65	
MW-12-24-180U	64.7	84.7	12/11/2018	133.69	
MW-12-09R-180	115	135	12/11/2018	720.40	
MW-12-20-180U	65.7	85.7	12/11/2018	109.67	
MW-12-14-180M	116	136	12/11/2018	712.27	
MW-12-15-180M	117	137	12/11/2018	657.28	
EW-12-03-180M	120	135	12/11/2018	214.37	Obstruction, measured at depth of 75’
MW-OU2-20-180	154	184	12/10/2018	695.83	

Table 5. Specific Conductance Measurements for Marina Coast Water District

Station	Top of Screen (ft btoc)	Bottom of Screen (ft btoc)	Date Measured	Specific Conductance (µs/cm)	Comment
EW-OU2-01-180	143	173	12/10/2018	778.81	
MW-BW-14-180	155	180	12/11/2018	674.93	
MW-OU2-43-180	140	160	12/11/2018	580.85	
MW-OU2-06-180R2	194.5	214.5	12/13/2018	672.72	
MW-OU2-07-180R	220	240	12/12/2018	803.21	
MW-OU2-24-180	201	231	12/10/2018	575.25	
MW-OU2-47-180	203.5	233.5	12/14/2018	4,831.0	
MW-OU2-81-180	194	214	12/13/2018	818.34	
MW-OU2-62-180	213	233	12/13/2018	887.66	
MW-OU2-28-180	225	255	12/13/2018	765.11	
MW-BW-59-180	344.3	364.3	12/12/2018	1,064.6	661.69 on 12/17/2018
MW-OU2-82-180	345	365	12/13/2018	768.99	
EW-OU2-07-180	210	260	12/13/2018	807.71	
MW-OU2-78-180	320	340	12/13/2018	1,012.8	
MW-OU2-61-180	168	189	12/13/2018	707.07	
MW-OU2-46-180	186.5	206.5	12/13/2018	785.33	
MW-OU2-44-180	174	194	12/10/2018	724.29	
MW-OU2-53-180	236	266	12/13/2018	702.50	
MW-OU2-39-180	225	245	12/13/2018	660.78	
MW-OU2-23-180	210	240	12/10/2018	286.16	
MW-OU2-55-180	263	283	12/14/2018	966.62	
MW-OU2-51-180	205.5	235.5	12/13/2018	387.69	
MW-OU2-50-180	203.5	223.5	12/14/2018	730.46	
MW-OU2-56-180	215.5	235.5	12/12/2018	753.30	
MW-OU2-34-A	135	165	12/13/2018	651.10	
MW-02-13-180M	116	132	12/14/2018	34,490	
EW-12-03-180U	61	81	12/17/2018	663.45	
EW-12-04-180M	120	140	12/17/2018	691.15	
EW-12-04-180U	68	88	12/17/2018	555.24	
MW-02-05-180	48	68	12/14/2018	969.64	
MW-02-06-180	89	109	12/14/2018	463.59	
MW-02-10-180	38	58	12/14/2018	564.78	
MW-02-13-180U	54	74	12/14/2018	1,019.5	
MW-12-05-180	69	89	12/17/2018	521.85	
MW-12-07-180	73	93	12/14/2018	789.58	
MW-12-08-180	78	98	12/17/2018	651.25	
MW-12-12-180L	161	176	12/10/2018	506.95	
MW-12-17-180U	65.5	85.5	12/17/2018	683.99	
MW-12-18-180U	62.6	82.6	12/11/2018	715.95	
MW-12-19-180M	115.1	135.1	12/17/2018	843.92	
MW-12-19-180U	64.5	84.5	12/17/2018	1,291.6	
MW-12-23-180U	72.2	92.2	12/17/2018	538.55	
MW-12-25-180U	70.2	90.2	12/17/2018	168.84	
MW-12-27-180U	70.9	90.9	12/17/2018	716.85	
MW-12-31-180M	78.8	148.8	12/17/2018	651.52	
MW-14-03-180	200	226	12/14/2018	883.74	
MW-BW-12-180	157	182	12/18/2018	673.87	
MW-BW-18-A	65	95	12/18/2018	509.62	
MW-BW-44-180	195	215	12/18/2018	754.02	
MW-BW-56-180	189.5	229.5	12/17/2018	766.75	
MW-OU2-05-180	194	214	12/18/2018	824.18	
MW-OU2-05-A	98.2	127.7	12/18/2018	743.23	

Table 5. Specific Conductance Measurements for Marina Coast Water District

Station	Top of Screen (ft btoc)	Bottom of Screen (ft btoc)	Date Measured	Specific Conductance (µs/cm)	Comment
MW-OU2-07-400	381.9	579.4	12/18/2018	720.71	
MW-OU2-09-180R	190	210	12/18/2018	1,184.7	
MW-OU2-20-180X	160	185	12/10/2018	514.18	
MW-OU2-23-A	102	134	12/10/2018	516.46	
MW-OU2-28-400	405	435	12/19/2018	454.20	
MW-OU2-29-180	264	286	12/18/2018	1,409.0	
MW-OU2-29-A	150	180	12/10/2018	1,124.6	
MW-OU2-31-180R	100	120	12/18/2018	658.89	
MW-OU2-36-180	140	150	12/18/2018	757.55	
MW-OU2-36-A	123	133	--	--	Well destroyed
MW-OU2-42-180	142	162	12/18/2018	704.95	
MW-OU2-49-180	205	235	12/18/2018	655.03	
MW-OU2-52-180	217.5	237.5	--	--	Unable to measure, obstruction at 195’
MW-OU2-54-180	202.5	222.5	12/14/2018	891.07	
TEST2	345	420	12/17/2018	977.77	Obstruction at 270'

Notes:
--: not applicable
µs/cm: microsiemens per centimeter
ft btoc: feet below top of casing

Attachment A-2

Lab Report

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Ahtna Environmental Inc

Fort Ord Groundwater Monitoring

8418191360.05.052(Fort Ord 4th Qtr Basewide) OUCTP-Lower

SGS Job Number: FA60105

Sampling Date: 12/10/18

Report to:

Ahtna Environmental Inc
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West Sacramento, CA 95691
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Total number of pages in report: 21

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Caitlin Brice, M.S.
General Manager

Client Service contact: Elvin Kumar 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AK, AR, IA, KY, MA, MS, ND, NH, NV, OK, OR, UT, WA, WV

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SGS North America Inc.

Sample Summary

Ahtna Environmental Inc

Job No: FA60105

Fort Ord Groundwater Monitoring
Project No: 8418191360.05.052(Fort Ord 4th Qtr Basewide) OUCTP-Lower

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA60105-1	12/10/18	12:40	BFSM	12/12/18	AQ	Ground Water	1850C0BW293F
FA60105-2	12/10/18	12:55	BFSM	12/12/18	AQ	Ground Water	1850C0BW294F
FA60105-3	12/10/18	13:05	BFSM	12/12/18	AQ	Ground Water	1850C0BW295F
FA60105-4	12/10/18	13:20	BFSM	12/12/18	AQ	Ground Water	1850C0BW296F

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Ahtna Environmental Inc **Job No** FA60105

Site: Fort Ord Groundwater Monitoring **Report Date** 12/24/2018 2:06:19

4 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were collected on 12/10/2018, received at SGS North America Inc-Orlando on 12/12/2018, properly preserved at 3 Deg. C, and arrived intact. These Samples received an SGS Orlando job number of FA60105. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

General Chemistry by Method SM2540 C-11

Matrix: AQ **Batch ID:** GN80663

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA60093-1DUP were used as the QC samples for Solids, Total Dissolved.

SGS Orlando certifies that this report meets the project requirements for analytical data produced for the samples as received at SGS Orlando and as stated on the COC. SGS Orlando certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SGS Orlando Quality Manual except as noted above. This report is to be used in its entirety. SGS Orlando is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____

Courtney Hulce, QA Coordinator (signature on file)

Summary of Hits

Job Number: FA60105
Account: Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring
Collected: 12/10/18

3

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA60105-1	**1850C0BW293F**					
Solids, Total Dissolved		328	50	50	mg/l	SM2540 C-11
FA60105-2	**1850C0BW294F**					
Solids, Total Dissolved		322	50	50	mg/l	SM2540 C-11
FA60105-3	**1850C0BW295F**					
Solids, Total Dissolved		414	50	50	mg/l	SM2540 C-11
FA60105-4	**1850C0BW296F**					
Solids, Total Dissolved		520	50	50	mg/l	SM2540 C-11

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW293F		
Lab Sample ID:	FA60105-1	**Date Sampled:**	12/10/18
Matrix:	AQ - Ground Water	**Date Received:**	12/12/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	328	50	50	50	mg/l	1	12/14/18 12:49		GWSM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW294F		
Lab Sample ID:	FA60105-2	**Date Sampled:**	12/10/18
Matrix:	AQ - Ground Water	**Date Received:**	12/12/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	322	50	50	50	mg/l	1	12/14/18 12:49		GWSM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW295F		
Lab Sample ID:	FA60105-3	**Date Sampled:**	12/10/18
Matrix:	AQ - Ground Water	**Date Received:**	12/12/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	414	50	50	50	mg/l	1	12/14/18 12:49		GWSM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW296F		
Lab Sample ID:	FA60105-4	**Date Sampled:**	12/10/18
Matrix:	AQ - Ground Water	**Date Received:**	12/12/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	520	50	50	50	mg/l	1	12/14/18 12:49		GWSM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- QC Evaluation: DOD QSM5 Limits

Seq. No. 3677

CAD51442

1670 Corporate Circle
Suite 201
Petaluma, CA 94954
(707) 793-3800

CHAIN OF CUSTODY FORM

wood.

Lab: SGS Accutest

Samplers: [illegible]

Job Number: 8412191360.05.052

FA60105 1 of 1

Name/Location: Fort [illegible] DUCTP - Lower

Project Manager: Jeff Fenton

Recorder: _____ (Signature Required)

| MATRIX: Water | Soil | Air | # CONTAINERS: 500mL | 250mL | 40mL | VOL | | SAMPLE NUMBER | DATE: YR | MO | DAY | TIME | STATION DESCRIPTION | DEPTH | ANALYSIS REQUESTED: Metals (EPA 6010/7470) | Title 22 Metals | | |

SGS Sample Receipt Summary

Job Number: FA60105 **Client:** AHTNA **Project:** OUCTP - Lower

Date / Time Received: 12/12/2018 9:30:00 AM **Delivery Method:** FedEx **Airbill #'s:** 773944281199

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (3.2);

Cooler Temps (Corrected) °C: Cooler 1: (3.0);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑
	W	**or**	**S**	**N/A**
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: PETERH Date: 12/12/2018 9:30:00 A Reviewer: PH Date: 12/12/2018

FA60105: Chain of Custody
Page 2 of 2

QC Evaluation: DOD QSM5 Limits

Job Number: FA60105
Account: Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring
Collected: 12/10/18

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits

No Exceptions found.

* Sample used for QC is not from job FA60105

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA60105
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Solids, Total Dissolved	GN80663	50	0.00	mg/l				

Associated Samples:
Batch GN80663: FA60105-1, FA60105-2, FA60105-3, FA60105-4
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA60105
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Solids, Total Dissolved	GN80663	FA60093-1	mg/l	94.0	92.0	2.2	0-5%

Associated Samples:
Batch GN80663: FA60105-1, FA60105-2, FA60105-3, FA60105-4
(*) Outside of QC limits

General Chemistry

Raw Data

TDS Worksheet

GN Batch ID: GN80663									
Analyst:	GW	MB ID:	GN80663-MB	RDL:		<RDL:			
Analysis Date:	12/14/2018	Dup ID:	FA60093-1	Smpl Res:	94.00	Dup Res:	92.00	% RPD:	2.15
Method:	SM2540C	Dup2 ID:	FA60094-1	Smpl Res:	12560.00	Dup Res:	16140.00	% RPD:	24.95

Bottle #	Sample ID	Scon Umhos/cm	Dish #	Volume Filtered (ml)	Dish Tare Wt (g)	Initial Wt after drying at 180 C° (g)	Redry 1 Constant Weight in g (a)	Redry ?	Redry 2 Constant Weight in g (a)	Redry ?	Redry 3 Constant Weight in g (a)	Redry ?	RDL	TDS (mg/L)
NA	GN80663-MB	1.0	5	50.0	69.2459	69.2435	69.2436	No					200	-46.00
4	GN80663-D1	77.0	4	50.0	68.6066	68.6114	68.6112	No					200	92.00
10	GN80663-D2	20000.0	69	5.0	67.5486	67.6295	67.6293	No					2000	16140.00
10	FA60093-1	77.0	12	50.0	68.3519	68.3568	68.3566	No					200	94.00
10	FA60093-2	204.0	8	50.0	71.6369	71.6455	71.6454	No					200	170.00
10	FA60093-3	120.0	17X	50.0	50.4289	50.4424	50.4422	No					200	266.00
10	FA60093-4	244.0	D2	50.0	49.9019	49.9116	49.9113	No					200	188.00
10	FA60093-5	230.0	D1	50.0	66.7640	66.7732	66.7730	No					200	180.00
10	FA60093-6	205.0	13	50.0	62.2843	62.2924	62.2923	No					200	160.00
10	FA60093-7	210.0	29	50.0	64.4147	64.4230	64.4231	No					200	168.00
10	FA60093-8	333.0	R2	50.0	67.6649	67.6783	67.6780	No					200	262.00
10	FA60093-9	269.0	17	50.0	66.4216	66.4307	66.4305	No					200	178.00
10	FA60093-10	228.0	FU	50.0	51.0543	51.0635	51.0634	No					200	182.00
10	FA60093-11	64.0	CH	50.0	65.3302	65.3349	65.3347	No					200	90.00
4	FA60094-1	20000.0	LL	5.0	57.1248	57.1876	57.1876	No					2000	12560.00
1	FA60105-1	685.0	15	50.0	61.8708	61.8872	61.8872	No					200	328.00
1	FA60105-2	392.0	5X	50.0	67.1535	67.1698	67.1696	No					200	322.00
1	FA60105-3	764.0	G	50.0	63.6468	63.6676	63.6675	No					200	414.00
1	FA60105-4	642.0	MB	50.0	50.4059	50.4319	50.4319	No					200	520.00
1	FA60136-1	535.0	11	50.0	49.8083	49.8297	49.8296	No					200	426.00
1	FA60136-2	432.0	1	50.0	49.5757	49.5938	49.5936	No					200	358.00

TDS Worksheet

GN Batch ID:													
GN80663	Analyst:	GW	MB ID:	GN80663-MB	RDL:		<RDL:						
	Analysis Date:	12/14/2018	Dup ID:	FA60093-1	Smpl Res:	94.00	Dup Res:	92.00	% RPD:	2.15			
	Method:	SM2540C	Dup2 ID:	FA60094-1	Smpl Res:	12560.00	Dup Res:	16140.00	% RPD:	24.95			

Bottle #	Sample ID	Scon Umhos/cm	Dish #	Volume Filtered (ml)	Dish Tare Wt (g)	Initial Wt after drying at 180 C° (g)	Redry 1 Constant Weight in g (a)	Redry ?	Redry 2 Constant Weight in g (a)	Redry ?	Redry 3 Constant Weight in g (a)	Redry ?	RDL	TDS (mg/L)
1	FA60136-3	612.0	74	50.0	66.9634	66.9888	66.9889	No					200	510.00
1	FA60136-4	671.0	18	50.0	69.5704	69.5971	69.5970	No					200	532.00

SGS

Filtration/Evap Date:	12/14/2018	**Time:**	12:49	**Temp:**	25	**Filter Lot:**		**Balance ID:**	AS-120S	**Scon ID:**	
Oven ID #1:	Oven#2	**Therm ID #1:**	7245	**Corr Factor #1:**	0	**Oven ID #2:**	TDS Oven#2	**Therm ID #2:**	TDS Oven#2	**Corr Factor #2:**	+4

	Oven Used	Start Date:	Stop Date:	Start Time:	End Time:	Observed C° Start Temp:	Corrected Start Temp:	Observed C° End Temp:	Corrected End Temp:
104 Dry	Oven #1	12/14/2018	12/19/2018	14:30	07:50	105	105	105	105
Initial Dry	Oven #2	12/19/2018	12/19/2018	07:51	10:09	175	179	176	180
Redry1	Oven #2	12/19/2018	12/19/2018	11:41	12:42	176	180	176	180
Redry2									

Comments:

Approved By: **ANALYST (garyw)** Approval Date: **12/19/2018**

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Ahtna Environmental Inc

Fort Ord Groundwater Monitoring

8418191360.05.052(Fort Ord Basewide 4Q) TDS

SGS Job Number: FA60136

Sampling Date: 12/11/18

Report to:

Ahtna Environmental Inc
3100 Beacon Blvd
West Sacramento, CA 95691
hdillon@ahtna.net; jeffery.fenton@amecfw.com;
zachary.carroll@amecfw.com; mfisler@ahtna.net;
ATTN: Derek Lieberman

Total number of pages in report: **176**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Caitlin Brice, M.S.
General Manager

Client Service contact: Elvin Kumar 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AK, AR, IA, KY, MA, MS, ND, NH, NV, OK, OR, UT, WA, WV

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EHS.US.CustomerCare@sgs.com

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SGS North America Inc.

Sample Summary

Ahtna Environmental Inc

Job No: FA60136

Fort Ord Groundwater Monitoring
Project No: 8418191360.05.052(Fort Ord Basewide 4Q) TDS

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA60136-1	12/11/18	09:40	BFSM	12/13/18	AQ	Ground Water	1850C0BW301T
FA60136-2	12/11/18	09:50	BFSM	12/13/18	AQ	Ground Water	1850C0BW302T
FA60136-3	12/11/18	10:05	BFSM	12/13/18	AQ	Ground Water	1850C0BW303T
FA60136-4	12/11/18	10:20	BFSM	12/13/18	AQ	Ground Water	1850C0BW304T
FA60136-5	12/11/18	10:30	BFSM	12/13/18	AQ	Ground Water	1850C0BW305T
FA60136-6	12/11/18	11:25	BFSM	12/13/18	AQ	Ground Water	1850C0BW306T
FA60136-7	12/11/18	11:40	BFSM	12/13/18	AQ	Ground Water	1850C0BW307T
FA60136-8	12/11/18	11:55	BFSM	12/13/18	AQ	Ground Water	1850C0BW308T
FA60136-9	12/11/18	12:10	BFSM	12/13/18	AQ	Ground Water	1850C0BW309T
FA60136-10	12/11/18	14:10	BFSM	12/13/18	AQ	Ground Water	1850C0BW310T
FA60136-11	12/11/18	14:35	BFSM	12/13/18	AQ	Ground Water	1850C0BW311T
FA60136-12	12/11/18	14:55	BFSM	12/13/18	AQ	Ground Water	1850C0BW312T
FA60136-13	12/11/18	15:50	BFSM	12/13/18	AQ	Ground Water	1850C0BW313T

SGS North America Inc.

Sample Summary
(continued)

Ahtna Environmental Inc

Job No: FA60136

Fort Ord Groundwater Monitoring
Project No: 8418191360.05.052(Fort Ord Basewide 4Q) TDS

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA60136-14	12/11/18	15:00	BFSM	12/13/18	AQ	Ground Water	1850C0BW314T
FA60136-15	12/11/18	16:05	BFSM	12/13/18	AQ	Ground Water	1850C0BW315T
FA60136-16	12/11/18	16:30	BFSM	12/13/18	AQ	Ground Water	1850C0BW316T

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Ahtna Environmental Inc **Job No** FA60136

Site: Fort Ord Groundwater Monitoring **Report Date** 12/27/2018 12:40:03

2

16 Samples were collected on 12/11/2018 and were received at SGS North America Inc - Orlando on 12/13/2018 properly preserved, at 1 Deg. C and intact. These samples received an SGS Orlando job number of FA60136. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section. Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Metals Analysis By Method EPA 200.7

Matrix: AQ **Batch ID:** MP34829

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA60136-10DUP, FA60136-10MS, FA60136-10MSD, FA60136-10PS, FA60136-10SDL were used as the QC samples for metals.

General Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP32494

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA60416-1MS, FA60416-1MSD were used as the QC samples for Bromide, Chloride, Sulfate.

FA60136-10 for Bromide: Dilution required due to matrix interference.

FA60136-12 for Bromide: Dilution required due to matrix interference.

FA60136-14 for Bromide: Dilution required due to matrix interference.

General Chemistry By Method SM2320 B-11

Matrix: AQ **Batch ID:** GN80685

Sample(s) FA60161-1DUP were used as the QC samples for Alkalinity, Total as CaCO3.

General Chemistry By Method SM2540 C-11

Matrix: AQ **Batch ID:** GN80640

All method blanks for this batch meet method specific criteria.

Sample(s) FA60117-1DUP were used as the QC samples for Solids, Total Dissolved.

The following samples were run outside of holding time for method SM2540 C-11: FA60136-5, FA60136-6, FA60136-7, FA60136-8, FA60136-9

RPD(s) for Duplicate for Solids, Total Dissolved are outside control limits for sample GN80640-D1. RPD acceptable due to low duplicate and sample concentrations.

Matrix: AQ **Batch ID:** GN80663

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA60093-1DUP were used as the QC samples for Solids, Total Dissolved.

SGS Orlando certifies that this report meets the project requirements for analytical data produced for the samples as received at SGS Orlando and as stated on the COC. SGS Orlando certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SGS Orlando Quality Manual except as noted above. This report is to be used in its entirety. SGS Orlando is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____

Ariel Hartney, Client Services *(Signature on File)*

Summary of Hits

Job Number: FA60136
Account: Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring
Collected: 12/11/18

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA60136-1	**1850C0BW301T**					
Solids, Total Dissolved		426	50	50	mg/l	SM2540 C-11
FA60136-2	**1850C0BW302T**					
Solids, Total Dissolved		358	50	50	mg/l	SM2540 C-11
FA60136-3	**1850C0BW303T**					
Solids, Total Dissolved		510	50	50	mg/l	SM2540 C-11
FA60136-4	**1850C0BW304T**					
Solids, Total Dissolved		532	50	50	mg/l	SM2540 C-11
FA60136-5	**1850C0BW305T**					
Solids, Total Dissolved		486	50	50	mg/l	SM2540 C-11
FA60136-6	**1850C0BW306T**					
Solids, Total Dissolved		252	50	50	mg/l	SM2540 C-11
FA60136-7	**1850C0BW307T**					
Solids, Total Dissolved		390	50	50	mg/l	SM2540 C-11
FA60136-8	**1850C0BW308T**					
Solids, Total Dissolved		394	50	50	mg/l	SM2540 C-11
FA60136-9	**1850C0BW309T**					
Solids, Total Dissolved		362	50	50	mg/l	SM2540 C-11
FA60136-10	**1850C0BW310T**					
Calcium		46700	1000	100	ug/l	EPA 200.7
Magnesium		17300	5000	100	ug/l	EPA 200.7
Potassium		2790 J	10000	500	ug/l	EPA 200.7
Sodium		57500	10000	2000	ug/l	EPA 200.7
Alkalinity, Total as CaCO3		68.5	5.0	2.5	mg/l	SM2320 B-11
Bromide [a]		1.2 J	2.5	1.3	mg/l	EPA 300/SW846 9056A
Chloride		115	10	5.0	mg/l	EPA 300/SW846 9056A

Summary of Hits

Job Number: FA60136
Account: Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring
Collected: 12/11/18

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
Solids, Total Dissolved		420	50	50	mg/l	SM2540 C-11
Sulfate		50.1	10	5.0	mg/l	EPA 300/SW846 9056A
FA60136-11	**1850C0BW311T**					
Solids, Total Dissolved		448	50	50	mg/l	SM2540 C-11
FA60136-12	**1850C0BW312T**					
Calcium		56600	1000	100	ug/l	EPA 200.7
Magnesium		19700	5000	100	ug/l	EPA 200.7
Potassium		3690 J	10000	500	ug/l	EPA 200.7
Sodium		58900	10000	2000	ug/l	EPA 200.7
Alkalinity, Total as CaCO3		71.4	5.0	2.5	mg/l	SM2320 B-11
Bromide [a]		1.2 J	2.5	1.3	mg/l	EPA 300/SW846 9056A
Chloride		126	10	5.0	mg/l	EPA 300/SW846 9056A
Solids, Total Dissolved		248	50	50	mg/l	SM2540 C-11
Sulfate		41.9	10	5.0	mg/l	EPA 300/SW846 9056A
FA60136-13	**1850C0BW313T**					
Solids, Total Dissolved		358	50	50	mg/l	SM2540 C-11
FA60136-14	**1850C0BW314T**					
Calcium		73800	1000	100	ug/l	EPA 200.7
Magnesium		24600	5000	100	ug/l	EPA 200.7
Potassium		3590 J	10000	500	ug/l	EPA 200.7
Sodium		43800	10000	2000	ug/l	EPA 200.7
Alkalinity, Total as CaCO3		94.0	5.0	2.5	mg/l	SM2320 B-11
Bromide [a]		1.7 J	2.5	1.3	mg/l	EPA 300/SW846 9056A
Chloride		118	10	5.0	mg/l	EPA 300/SW846 9056A
Solids, Total Dissolved		480	50	50	mg/l	SM2540 C-11
Sulfate		91.9	10	5.0	mg/l	EPA 300/SW846 9056A
FA60136-15	**1850C0BW315T**					
Solids, Total Dissolved		604	50	50	mg/l	SM2540 C-11
FA60136-16	**1850C0BW316T**					
Calcium		37800	1000	100	ug/l	EPA 200.7
Magnesium		14800	5000	100	ug/l	EPA 200.7
Potassium		3400 J	10000	500	ug/l	EPA 200.7
Sodium		66500	10000	2000	ug/l	EPA 200.7

Summary of Hits

Job Number: FA60136
Account: Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring
Collected: 12/11/18

Lab Sample ID Client Sample ID Analyte	Result/ Qual	LOQ	LOD	Units	Method
Alkalinity, Total as CaCO3	157	5.0	2.5	mg/l	SM2320 B-11
Bromide	1.0	0.50	0.25	mg/l	EPA 300/SW846 9056A
Chloride	21.9	2.0	1.0	mg/l	EPA 300/SW846 9056A
Solids, Total Dissolved	350	50	50	mg/l	SM2540 C-11
Sulfate	95.8	2.0	1.0	mg/l	EPA 300/SW846 9056A

(a) Dilution required due to matrix interference.

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW301T		
Lab Sample ID:	FA60136-1	**Date Sampled:**	12/11/18
Matrix:	AQ - Ground Water	**Date Received:**	12/13/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	426	50	50	50	mg/l	1	12/14/18 12:49		GWSM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW302T		
Lab Sample ID:	FA60136-2	**Date Sampled:**	12/11/18
Matrix:	AQ - Ground Water	**Date Received:**	12/13/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	358	50	50	50	mg/l	1	12/14/18 12:49		GWSM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW303T		
Lab Sample ID:	FA60136-3	**Date Sampled:**	12/11/18
Matrix:	AQ - Ground Water	**Date Received:**	12/13/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	510	50	50	50	mg/l	1	12/14/18 12:49		GWSM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW304T		
Lab Sample ID:	FA60136-4	**Date Sampled:**	12/11/18
Matrix:	AQ - Ground Water	**Date Received:**	12/13/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	532	50	50	50	mg/l	1	12/14/18 12:49		GWSM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW305T		
Lab Sample ID:	FA60136-5	**Date Sampled:**	12/11/18
Matrix:	AQ - Ground Water	**Date Received:**	12/13/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	486	50	50	50	mg/l	1	12/18/18 13:50	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW306T		
Lab Sample ID:	FA60136-6	**Date Sampled:**	12/11/18
Matrix:	AQ - Ground Water	**Date Received:**	12/13/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	252	50	50	50	mg/l	1	12/18/18 13:50	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW307T		
Lab Sample ID:	FA60136-7	**Date Sampled:**	12/11/18
Matrix:	AQ - Ground Water	**Date Received:**	12/13/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	390	50	50	50	mg/l	1	12/18/18 13:50	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW308T		
Lab Sample ID:	FA60136-8	**Date Sampled:**	12/11/18
Matrix:	AQ - Ground Water	**Date Received:**	12/13/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	394	50	50	50	mg/l	1	12/18/18 13:50	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW309T		
Lab Sample ID:	FA60136-9	**Date Sampled:**	12/11/18
Matrix:	AQ - Ground Water	**Date Received:**	12/13/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	362	50	50	50	mg/l	1	12/18/18 13:50	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW310T		
Lab Sample ID:	FA60136-10	**Date Sampled:**	12/11/18
Matrix:	AQ - Ground Water	**Date Received:**	12/13/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	46700	1000	100	50	ug/l	1	12/19/18	12/20/18	DM	EPA 200.7 [1]	EPA 200.7 [2]
Magnesium	17300	5000	100	35	ug/l	1	12/19/18	12/20/18	DM	EPA 200.7 [1]	EPA 200.7 [2]
Potassium	2790 J	10000	500	200	ug/l	1	12/19/18	12/20/18	DM	EPA 200.7 [1]	EPA 200.7 [2]
Sodium	57500	10000	2000	500	ug/l	1	12/19/18	12/20/18	DM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA15486
(2) Prep QC Batch: MP34829

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW310T		
Lab Sample ID:	FA60136-10	**Date Sampled:**	12/11/18
Matrix:	AQ - Ground Water	**Date Received:**	12/13/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	68.5	5.0	2.5	2.5	mg/l	1	12/20/18 13:17	LR	SM2320 B-11
Bromide [a]	1.2 J	2.5	1.3	0.60	mg/l	5	12/22/18 17:46	BR	EPA 300/SW846 9056A
Chloride	115	10	5.0	4.0	mg/l	5	12/22/18 17:46	BR	EPA 300/SW846 9056A
Solids, Total Dissolved	420	50	50	50	mg/l	1	12/18/18 13:50	FN	SM2540 C-11
Sulfate	50.1	10	5.0	3.0	mg/l	5	12/22/18 17:46	BR	EPA 300/SW846 9056A

(a) Dilution required due to matrix interference.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW311T		
Lab Sample ID:	FA60136-11	**Date Sampled:**	12/11/18
Matrix:	AQ - Ground Water	**Date Received:**	12/13/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	448	50	50	50	mg/l	1	12/18/18 13:50	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW312T		
Lab Sample ID:	FA60136-12	**Date Sampled:**	12/11/18
Matrix:	AQ - Ground Water	**Date Received:**	12/13/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	56600	1000	100	50	ug/l	1	12/19/18	12/20/18	DM	EPA 200.7 [1]	EPA 200.7 [2]
Magnesium	19700	5000	100	35	ug/l	1	12/19/18	12/20/18	DM	EPA 200.7 [1]	EPA 200.7 [2]
Potassium	3690 J	10000	500	200	ug/l	1	12/19/18	12/20/18	DM	EPA 200.7 [1]	EPA 200.7 [2]
Sodium	58900	10000	2000	500	ug/l	1	12/19/18	12/20/18	DM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA15486
(2) Prep QC Batch: MP34829

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW312T		
Lab Sample ID:	FA60136-12	**Date Sampled:**	12/11/18
Matrix:	AQ - Ground Water	**Date Received:**	12/13/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	71.4	5.0	2.5	2.5	mg/l	1	12/20/18 13:17	LR	SM2320 B-11
Bromide [a]	1.2 J	2.5	1.3	0.60	mg/l	5	12/22/18 18:37	BR	EPA 300/SW846 9056A
Chloride	126	10	5.0	4.0	mg/l	5	12/22/18 18:37	BR	EPA 300/SW846 9056A
Solids, Total Dissolved	248	50	50	50	mg/l	1	12/18/18 13:50	FN	SM2540 C-11
Sulfate	41.9	10	5.0	3.0	mg/l	5	12/22/18 18:37	BR	EPA 300/SW846 9056A

(a) Dilution required due to matrix interference.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW313T		
Lab Sample ID:	FA60136-13	**Date Sampled:**	12/11/18
Matrix:	AQ - Ground Water	**Date Received:**	12/13/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	358	50	50	50	mg/l	1	12/18/18 13:50	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW314T		
Lab Sample ID:	FA60136-14	**Date Sampled:**	12/11/18
Matrix:	AQ - Ground Water	**Date Received:**	12/13/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	73800	1000	100	50	ug/l	1	12/19/18	12/20/18	DM	EPA 200.7 [1]	EPA 200.7 [2]
Magnesium	24600	5000	100	35	ug/l	1	12/19/18	12/20/18	DM	EPA 200.7 [1]	EPA 200.7 [2]
Potassium	3590 J	10000	500	200	ug/l	1	12/19/18	12/20/18	DM	EPA 200.7 [1]	EPA 200.7 [2]
Sodium	43800	10000	2000	500	ug/l	1	12/19/18	12/20/18	DM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA15486
(2) Prep QC Batch: MP34829

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW314T		
Lab Sample ID:	FA60136-14	**Date Sampled:**	12/11/18
Matrix:	AQ - Ground Water	**Date Received:**	12/13/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	94.0	5.0	2.5	2.5	mg/l	1	12/20/18 13:17	LR	SM2320 B-11
Bromide [a]	1.7 J	2.5	1.3	0.60	mg/l	5	12/22/18 18:54	BR	EPA 300/SW846 9056A
Chloride	118	10	5.0	4.0	mg/l	5	12/22/18 18:54	BR	EPA 300/SW846 9056A
Solids, Total Dissolved	480	50	50	50	mg/l	1	12/18/18 13:50	FN	SM2540 C-11
Sulfate	91.9	10	5.0	3.0	mg/l	5	12/22/18 18:54	BR	EPA 300/SW846 9056A

(a) Dilution required due to matrix interference.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW315T		
Lab Sample ID:	FA60136-15	**Date Sampled:**	12/11/18
Matrix:	AQ - Ground Water	**Date Received:**	12/13/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	604	50	50	50	mg/l	1	12/18/18 13:50	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW316T		
Lab Sample ID:	FA60136-16	**Date Sampled:**	12/11/18
Matrix:	AQ - Ground Water	**Date Received:**	12/13/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	37800	1000	100	50	ug/l	1	12/19/18	12/20/18	DM	EPA 200.7 [1]	EPA 200.7 [2]
Magnesium	14800	5000	100	35	ug/l	1	12/19/18	12/20/18	DM	EPA 200.7 [1]	EPA 200.7 [2]
Potassium	3400 J	10000	500	200	ug/l	1	12/19/18	12/20/18	DM	EPA 200.7 [1]	EPA 200.7 [2]
Sodium	66500	10000	2000	500	ug/l	1	12/19/18	12/20/18	DM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA15486
(2) Prep QC Batch: MP34829

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW316T		
Lab Sample ID:	FA60136-16	**Date Sampled:**	12/11/18
Matrix:	AQ - Ground Water	**Date Received:**	12/13/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	157	5.0	2.5	2.5	mg/l	1	12/20/18 13:17	LR	SM2320 B-11
Bromide	1.0	0.50	0.25	0.12	mg/l	1	12/22/18 19:11	BR	EPA 300/SW846 9056A
Chloride	21.9	2.0	1.0	0.80	mg/l	1	12/22/18 19:11	BR	EPA 300/SW846 9056A
Solids, Total Dissolved	350	50	50	50	mg/l	1	12/18/18 13:50	FN	SM2540 C-11
Sulfate	95.8	2.0	1.0	0.60	mg/l	1	12/22/18 19:11	BR	EPA 300/SW846 9056A

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions (DOD)
- Chain of Custody
- QC Evaluation: DOD QSM5 Limits

Parameter Certification Exceptions

Job Number: FA60136
Account: AHTNACAS Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

The following parameters included in this report are exceptions to DOD certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Calcium	7440-70-2	EPA 200.7	AQ	SGS is not certified for this parameter.
Magnesium	7439-95-4	EPA 200.7	AQ	SGS is not certified for this parameter.
Potassium	7440-09-7	EPA 200.7	AQ	SGS is not certified for this parameter.
Sodium	7440-23-5	EPA 200.7	AQ	SGS is not certified for this parameter.

CA05 1449

Seq. No 3676

Lab: SGS Anchor

1670 Corporate Circle
Suite 201
Petaluma CA 94954
(707) 793-3800

CHAIN OF CUSTODY FORM

Samplers: B. Fenter S. Mackinnon

wood.

Job Number: 84 1819560 .05 052

FA60136 1 of 2

Name/Location: PG Bayside 4th Qtr TDS

Project Manager: Jeff Fenton

Recorder: (Signature Required)

MATRIX: Water	Soil	Air	# CONTAINERS: 32ppm	1:2SO4	HNO3	HCl		SAMPLE NUMBER	DATE: YR	MO	DAY	TIME	STATION DESCRIPTION	DEPTH	8260	8270	8310 / 22 METALS	TDS	Cl-Temp	Temp Condition	Arrival Chlorine	Cl2 Total
X			1				01	1B5CC06W3C1T	12	12	11	0940						X				
X			1				02	1B5CC06W3C4T	12	12	11	0955						X				
X			1				03	1B5CC06W3C3T	12	12	11	1005						X				
X			1				04	1B5CC06W3C4T	12	12	11	1020						X				
X			1				05	1B5CC06W3C5T	12	12	11	1030						X				
X			1				06	1B5CC06W3C6T	12	12	11	1125						X				
X			1				07	1B5CC06W3C7T	12	12	11	1140						X				
X			1				08	1B5CC06W3C8T	12	12	11	1155						X				
X			1				09	1B5CC06W3C9T	12	12	11	1210						X				
X			3	1			10	1B5CC06W3C10T	12	12	11	1215						X		X	X	X

ADDITIONAL INFORMATION

REPORT TO: Jeff Fenton

PO#:

TAT Normal

Comments: Field Filtered Y / N

CHAIN OF CUSTODY RECORD

Relinquished By (Signature)	Bill Fenter (Print Name)	Wood (Company)	12/11/18 1715 (Date/Time)
Received By (Signature)	Lee Bautista (Print Name)	SGS (Company)	12/12/18 1100 (Date/Time)
Relinquished By (Signature)	Lee Bautista (Print Name)	SGS (Company)	12/12/18 1500 (Date/Time)
Received By (Signature)	(Print Name)	(Company)	12/12/18 1500 (Date/Time)
Relinquished By (Signature) Fed Ex	(Print Name)	(Company)	(Date/Time) 1630
Received By (Signature)	Shayla Prince (Print Name)	SGS (Company)	12/13/18 (Date/Time)

Method of Shipment: Cooler w/ice i.0

White - Laboratory Copy Yellow - Project Office Copy Pink - Field of Office Copy FTX.8-

FA60136: Chain of Custody
Page 1 of 3

Seq. No. 3693

CA051449
1670 Corporate Circle
Suite 201
Petaluma, CA 94954
(707) 793-3800

CHAIN OF CUSTODY FORM

wood.

Lab: SGS Anchorage

Samplers: B Keller Stanchart

FA60136 2 of 2

Job Number: 8418191360-05.002

Name/Location PO Baseline with QPR GDS

Project Manager Jerry Keeton

Recorder: (Signature Required)

MATRIX: Water	Soil	Air	CONTAINERS: Unpres.	H2SO4	HNO3	HCL		SAMPLE NUMBER	DATE: YR	MO	DAY	TIME	STATION DESCRIPTION / DEPTH	ANALYSIS REQUESTED: 8260	8270	TITLE 22 METALS	Total Petroleum Hydrocarbons
X			1				(1)	18501C06W3117	18	12	11	1935				X	
X			2		1		(2)	18501C06W3121	18	12	11	1455				X	X
X			1				(3)	18501C06W3131	18	12	11	1550				X	
X			2		1		(4)	18501C06W3141	18	12	11	1600	1500			X	X
X			1				(5)	18501C06W3151	18	12	11	1605				X	
X			2		1		(6)	18501C06W3161	18	12	11	1630				X	X

ADDITIONAL INFORMATION

REPORT TO: Jerry Keeton

PO#:

TAT: Normal

Comments: Field Filtered Y / N

CHAIN OF CUSTODY RECORD

Relinquished By (Signature)	(Print Name)	(Company)	(Date/Time)
Bill Keller		Wood	12/11/18 1705
[illegible]	Lee Bauman	SGS	12/12/18 [illegible]
[illegible]	[illegible]	SGS	12/12/18 1500
[illegible]			12/12/18 1500
Fed Ex			1630
[illegible]	[illegible]	SGS	12/13/18

Received By (Signature) (Print Name) (Company) (Date/Time)

Method of Shipment

White - Laboratory Copy Yellow - Project Office Copy Pink - Field or Office Copy F-008-1

FA60136: Chain of Custody
Page 2 of 3

SGS Sample Receipt Summary

Job Number: FA60136 **Client:** AHTNA **Project:** Fort Ord Basewide 4Q - TDS

Date / Time Received: 12/13/2018 10:30:00 AM **Delivery Method:** FedEx **Airbill #'s:** 773957501811

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (1.2);

Cooler Temps (Corrected) °C: Cooler 1: (1.0);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☑	☐
2. Trip Blank listed on COC	☐		☐	☑
	W	**or**	**S**	**N/A**
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: SHAYLAP Date: 12/13/2018 10:30:00 A Reviewer: BK Date: 12/14/2018

FA60136: Chain of Custody
Page 3 of 3

QC Evaluation: DOD QSM5 Limits

Job Number: FA60136
Account: Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring
Collected: 12/11/18

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
GP32494	EPA 300/SW846 9056A						
GP32494-B1	16887-00-6	Chloride	BSP	REC	99.4	%	87-111
GP32494-B1	24959-67-9	Bromide	BSP	REC	100.8	%	91-110
GP32494-B1	14808-79-8	Sulfate	BSP	REC	104.4	%	87-112
GP32494-S1*	16887-00-6	Chloride	MS	REC	99.4	%	87-111
GP32494-S1*	24959-67-9	Bromide	MS	REC	99	%	91-110
GP32494-S1*	14808-79-8	Sulfate	MS	REC	107.8	%	87-112
GP32494-S2*	16887-00-6	Chloride	MSD	RPD	0	%	15
GP32494-S2*	16887-00-6	Chloride	MSD	REC	99.4	%	87-111
GP32494-S2*	24959-67-9	Bromide	MSD	RPD	2.3	%	15
GP32494-S2*	24959-67-9	Bromide	MSD	REC	96.6	%	91-110
GP32494-S2*	14808-79-8	Sulfate	MSD	RPD	.3	%	15
GP32494-S2*	14808-79-8	Sulfate	MSD	REC	107.4	%	87-112

* Sample used for QC is not from job FA60136

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries
- IDL and Linear Range Summaries

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
Analyst: DM Run ID: MA15486
Parameters: Ca,Mg,K,Na

Time	Sample Description	Dilution Factor	PS Recov	Comments
08:37	MA15486-STD1	1		STDA
08:41	MA15486-STD2	1		STDB
08:45	MA15486-STD3	1		STDC
08:49	MA15486-STD4	1		STDD
08:53	MA15486-HSTD1	1		
08:56	MA15486-ICV1	1		
09:02	MA15486-ICB1	1		
09:06	MA15486-CRIA1	1		
09:16	MA15486-ICSA1	1		
09:22	MA15486-ICSAB1	1		
09:27	MA15486-CCV1	1		
09:32	MA15486-CCB1	1		
10:19	MA15486-CCV2	1		
10:24	MA15486-CCB2	1		
11:13	MA15486-CCV3	1		
11:17	MA15486-CCB3	1		
12:07	MA15486-CCV4	1		
12:11	MA15486-CCB4	1		
12:29	MA15486-CCV5	1		
12:34	MA15486-CCB5	1		
12:52	MP34829-MB1	1		
12:56	MP34829-B1	1		
13:00	FA60136-10	1		
13:05	MP34829-D1	1		
13:09	MP34829-SD1	5		
13:13	MP34829-PS1	1		
13:18	MP34829-S1	1		
13:22	MA15486-CCV6	1		
13:26	MA15486-CCB6	1		
13:31	MP34829-S2	1		
13:35	FA60136-12	1		
13:39	FA60136-14	1		
13:44	FA60136-16	1		

----------> Last reportable sample/prep for job FA60136

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
Analyst: DM Run ID: MA15486
Parameters: Ca,Mg,K,Na

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:48	ZZZZZZ	1		
13:52	ZZZZZZ	1		
14:15	MA15486-CCV7	1		
14:19	MA15486-CCB7	1		
15:08	MA15486-CCV8	1		
15:13	MA15486-CCB8	1		
15:39	MA15486-CRIA2	1		
15:44	MA15486-ICSA2	1		
15:48	MA15486-ICSAB2	1		
15:53	MA15486-CCV9	1		
15:57	MA15486-CCB9	1		

----------> Last reportable CCB for job FA60136
Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
Analyst: DM Run ID: MA15486
Parameters: Ca,Mg,K,Na

Time	Sample Description	Element: Dilution	Ca	Mg	K	Na
08:53	MA15486-HSTD1	1	X	X	X	X
08:56	MA15486-ICV1	1	X	X	X	X
09:02	MA15486-ICB1	1	X	X	X	X
09:06	MA15486-CRIA1	1	X	X	X	X
09:16	MA15486-ICSA1	1	X	X	X	X
09:22	MA15486-ICSAB1	1	X	X	X	X
09:27	MA15486-CCV1	1	X	X	X	X
09:32	MA15486-CCB1	1	X	X	X	X
10:19	MA15486-CCV2	1	X	X	X	X
10:24	MA15486-CCB2	1	X	X	X	X
11:13	MA15486-CCV3	1	X	X	X	X
11:17	MA15486-CCB3	1	X	X	X	X
12:07	MA15486-CCV4	1	X	X	X	X
12:11	MA15486-CCB4	1	X	X	X	X
12:29	MA15486-CCV5	1	X	X	X	X
12:34	MA15486-CCB5	1	X	X	X	X
12:52	MP34829-MB1	1	X	X	X	X
12:56	MP34829-B1	1	X	X	X	X
13:00	FA60136-10	1	X	X	X	X
13:05	MP34829-D1	1	X	X	X	X
13:09	MP34829-SD1	5	X	X	X	X
13:13	MP34829-PS1	1	X	X	X	X
13:18	MP34829-S1	1	X	X	X	X
13:22	MA15486-CCV6	1	X	X	X	X
13:26	MA15486-CCB6	1	X	X	X	X
13:31	MP34829-S2	1	X	X	X	X
13:35	FA60136-12	1	X	X	X	X
13:39	FA60136-14	1	X	X	X	X
13:44	FA60136-16	1	X	X	X	X
13:48	ZZZZZZ	1				
13:52	ZZZZZZ	1				
14:15	MA15486-CCV7	1	X	X	X	X
14:19	MA15486-CCB7	1	X	X	X	X
		Element:	Ca	Mg	K	Na

REPORTED ELEMENTS SUMMARY

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
Analyst: DM Run ID: MA15486
Parameters: Ca,Mg,K,Na

Time	Sample Description	Element: Dilution	Ca	Mg	K	Na
15:08	MA15486-CCV8	1	X	X	X	X
15:13	MA15486-CCB8	1	X	X	X	X
15:39	MA15486-CRIA2	1	X	X	X	X
15:44	MA15486-ICSA2	1	X	X	X	X
15:48	MA15486-ICSAB2	1	X	X	X	X
15:53	MA15486-CCV9	1	X	X	X	X
15:57	MA15486-CCB9	1	X	X	X	X
		Element:	Ca	Mg	K	Na

INTERNAL STANDARD SUMMARY

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
Analyst: DM Run ID: MA15486
Parameters: Ca,Mg,K,Na

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
08:37	MA15486-STD1	2383	24182	7124	5694
08:41	MA15486-STD2	2369	24197	7203	5766
08:45	MA15486-STD3	2322	24094	7050	5768
08:49	MA15486-STD4	2253	23906	6971	5704
08:53	MA15486-HSTD1	2242	23720	6918	5684
08:56	MA15486-ICV1	2307	23882	6939	5725
09:02	MA15486-ICB1	2371 R	23942 R	7020 R	5685 R
09:06	MA15486-CRIA1	2380	24261	7035	5721
09:16	MA15486-ICSA1	2159	22417	6797	5574
09:22	MA15486-ICSAB1	2159	22502	6783	5562
09:27	MA15486-CCV1	2282	23414	6796	5662
09:32	MA15486-CCB1	2350	23741	6856	5650
10:19	MA15486-CCV2	2283	23324	6689	5649
10:24	MA15486-CCB2	2352	23515	6846	5632
11:13	MA15486-CCV3	2296	23425	6713	5662
11:17	MA15486-CCB3	2357	23523	6723	5622
12:07	MA15486-CCV4	2295	23344	6603	5683
12:11	MA15486-CCB4	2366	23447	6701	5626
12:29	MA15486-CCV5	2300	23321	6565	5651
12:34	MA15486-CCB5	2351	23438	6541	5565
12:52	MP34829-MB1	2317	23198	6613	5492
12:56	MP34829-B1	2302	23161	6584	5579
13:00	FA60136-10	2317	23404	6483	5591
13:05	MP34829-D1	2313	23381	6562	5586
13:09	MP34829-SD1	2362	23688	6603	5680
13:13	MP34829-PS1	2295	23319	6571	5578
13:18	MP34829-S1	2272	23092	6471	5562
13:22	MA15486-CCV6	2291	23350	6518	5619
13:26	MA15486-CCB6	2360	23537	6604	5614
13:31	MP34829-S2	2281	23024	6472	5583
13:35	FA60136-12	2334	23450	6498	5596
13:39	FA60136-14	2327	23361	6524	5567
13:44	FA60136-16	2335	23411	6498	5646

INTERNAL STANDARD SUMMARY

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
Analyst: DM Run ID: MA15486
Parameters: Ca,Mg,K,Na

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
13:48	ZZZZZZ	2322	23356	6513	5613
13:52	ZZZZZZ	2308	23156	6436	5550
14:15	MA15486-CCV7	2307	23468	6561	5668
14:19	MA15486-CCB7	2371	23728	6611	5641
15:08	MA15486-CCV8	2311	23497	6551	5700
15:13	MA15486-CCB8	2359	23587	6492	5590
15:39	MA15486-CRIA2	2409	23994	6548	5751
15:44	MA15486-ICSA2	2204	22433	6388	5619
15:48	MA15486-ICSAB2	2183	22370	6340	5551
15:53	MA15486-CCV9	2313	23434	6469	5687
15:57	MA15486-CCB9	2388	23619	6469	5679

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
QC Limits: result < RL Run ID: MA15486 Units: ug/l

Time:			09:02		09:32		10:24		11:17	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	6.0	1								
Arsenic	10	1.3								
Barium	200	1								
Beryllium	4.0	.2								
Cadmium	5.0	.2								
Calcium	1000	50	0.00	<1000	8.30	<1000	2.60	<1000	5.60	<1000
Chromium	10	1								
Cobalt	50	.2								
Copper	25	1								
Iron	300	17								
Lead	5.0	1								
Magnesium	5000	35	17.5	<5000	18.6	<5000	12.6	<5000	18.9	<5000
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4								
Potassium	10000	200	-60.4	<10000	-77.9	<10000	-59.6	<10000	-61.6	<10000
Selenium	10	2.4								
Silver	10	.7								
Sodium	10000	500	-9.60	<10000	11.8	<10000	10.5	<10000	190	<10000
Strontium	10	.5								
Thallium	10	1.1								
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
QC Limits: result < RL Run ID: MA15486 Units: ug/l

Time:			12:11		12:34		13:26		14:19	
Sample ID:			CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	6.0	1								
Arsenic	10	1.3								
Barium	200	1								
Beryllium	4.0	.2								
Cadmium	5.0	.2								
Calcium	1000	50	3.20	<1000	3.10	<1000	4.40	<1000	4.70	<1000
Chromium	10	1								
Cobalt	50	.2								
Copper	25	1								
Iron	300	17								
Lead	5.0	1								
Magnesium	5000	35	10.5	<5000	17.8	<5000	10.6	<5000	6.90	<5000
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4								
Potassium	10000	200	-55.4	<10000	57.3	<10000	48.4	<10000	27.8	<10000
Selenium	10	2.4								
Silver	10	.7								
Sodium	10000	500	77.2	<10000	-19.4	<10000	-14.7	<10000	-12.5	<10000
Strontium	10	.5								
Thallium	10	1.1								
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
QC Limits: result < RL Run ID: MA15486 Units: ug/l

Time:			15:13		15:57	
Sample ID:			CCB8		CCB9	
Metal	RL	IDL	raw	final	raw	final
Aluminum	200	14				
Antimony	6.0	1				
Arsenic	10	1.3				
Barium	200	1				
Beryllium	4.0	.2				
Cadmium	5.0	.2				
Calcium	1000	50	2.80	<1000	11.2	<1000
Chromium	10	1				
Cobalt	50	.2				
Copper	25	1				
Iron	300	17				
Lead	5.0	1				
Magnesium	5000	35	16.5	<5000	27.5	<5000
Manganese	15	.5				
Molybdenum	50	.3				
Nickel	40	.4				
Potassium	10000	200	61.8	<10000	47.6	<10000
Selenium	10	2.4				
Silver	10	.7				
Sodium	10000	500	38.0	<10000	-30.5	<10000
Strontium	10	.5				
Thallium	10	1.1				
Tin	50	.9				
Titanium	10	.5				
Vanadium	50	.5				
Zinc	20	3				

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
QC Limits: 95 to 105 % Recovery Run ID: MA15486 Units: ug/l

Time:		08:56			09:27			10:19	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium	40000	41600	104.0	40000	41500	103.8	40000	42200	105.5
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium	40000	42700	106.8*(a	40000	41200	103.0	40000	41900	104.8
Manganese									
Molybdenum									
Nickel									
Potassium	40000	41300	103.3	40000	41100	102.8	40000	41900	104.8
Selenium									
Silver									
Sodium	40000	41300	103.3	40000	41200	103.0	40000	42100	105.3
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested
(a) Positive bias.

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
QC Limits: 95 to 105 % Recovery Run ID: MA15486 Units: ug/l

Time:		11:13			12:07			12:29	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium	40000	42200	105.5	40000	42800	107.0	40000	40300	100.8
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium	40000	41800	104.5	40000	42300	105.8	40000	40300	100.8
Manganese									
Molybdenum									
Nickel									
Potassium	40000	42300	105.8	40000	43000	107.5	40000	39900	99.8
Selenium									
Silver									
Sodium	40000	42100	105.3	40000	43100	107.8	40000	40100	100.3
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
QC Limits: 95 to 105 % Recovery Run ID: MA15486 Units: ug/l

Time:		13:22			14:15			15:08	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium	40000	40500	101.3	40000	40600	101.5	40000	41000	102.5
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium	40000	40700	101.8	40000	40600	101.5	40000	40900	102.3
Manganese									
Molybdenum									
Nickel									
Potassium	40000	40200	100.5	40000	40200	100.5	40000	40600	101.5
Selenium									
Silver									
Sodium	40000	40400	101.0	40000	40500	101.3	40000	40700	101.8
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
QC Limits: 95 to 105 % Recovery Run ID: MA15486 Units: ug/l

Time:		15:53	
Sample ID:	CCV	CCV9	
Metal	True	Results	% Rec
Aluminum			
Antimony			
Arsenic			
Barium			
Beryllium			
Cadmium			
Calcium	40000	40400	101.0
Chromium			
Cobalt			
Copper			
Iron			
Lead			
Magnesium	40000	40500	101.3
Manganese			
Molybdenum			
Nickel			
Potassium	40000	40100	100.3
Selenium			
Silver			
Sodium	40000	40300	100.8
Strontium			
Thallium			
Tin			
Titanium			
Vanadium			
Zinc			

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
QC Limits: 95 to 105 % Recovery Run ID: MA15486 Units: ug/l

Time:		08:53	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum			
Antimony			
Arsenic			
Barium			
Beryllium			
Cadmium			
Calcium	80000	80200	100.3
Chromium			
Cobalt			
Copper			
Iron			
Lead			
Magnesium	80000	79800	99.8
Manganese			
Molybdenum			
Nickel			
Potassium	80000	80700	100.9
Selenium			
Silver			
Sodium	80000	80700	100.9
Strontium			
Thallium			
Tin			
Titanium			
Vanadium			
Zinc			

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA15486 Units: ug/l

Time:			09:06		15:39	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200				
Antimony	10	5.0				
Arsenic	20	10				
Barium	400	200				
Beryllium	10	5.0				
Cadmium	10	5.0				
Calcium	2000	1000	980	98.0	996	99.6
Chromium	20	10				
Cobalt	100	50				
Copper	50	25				
Iron	600	300				
Lead	10	5.0				
Magnesium	10000	5000	4920	98.4	4980	99.6
Manganese	30	15				
Molybdenum	100	50				
Nickel	80	40				
Potassium	20000	10000	9620	96.2	9730	97.3
Selenium	20	10				
Silver	20	10				
Sodium	20000	10000	9530	95.3	9610	96.1
Strontium	20	10				
Thallium	20	10				
Tin	100	50				
Titanium	20	10				
Vanadium	100	50				
Zinc	40	20				

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
QC Limits: 80 to 120 % Recovery Run ID: MA15486 Units: ug/l

Time:			09:16		09:22		15:44		15:48	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	531000	106.2	534000	106.8	531000	106.2	519000	103.8
Antimony		1000	0.200		1070	107.0	8.00		1050	105.0
Arsenic		1000	0.00		1010	101.0	-1.80		990	99.0
Barium		500	0.600		497	99.4	1.10		497	99.4
Beryllium		500	-0.100		493	98.6	0.00		486	97.2
Cadmium		1000	0.00		977	97.7	-0.300		967	96.7
Calcium	500000	500000	473000	94.6	457000	91.4	479000	95.8	450000	90.0
Chromium		500	0.400		496	99.2	-1.20		479	95.8
Cobalt		500	0.100		505	101.0	-1.70		495	99.0
Copper		500	0.00		565	113.0	0.500		551	110.2
Iron	200000	200000	189000	94.5	190000	95.0	188000	94.0	185000	92.5
Lead		1000	0.900		977	97.7	-6.50		960	96.0
Magnesium	500000	500000	516000	103.2	513000	102.6	516000	103.2	507000	101.4
Manganese		500	0.00		507	101.4	2.10		499	99.8
Molybdenum		1000	0.00		911	91.1	0.400		881	88.1
Nickel		1000	1.00		1010	101.0	1.50		997	99.7
Potassium			42.3		124		133		75.6	
Selenium		1000	-1.90		969	96.9	-1.40		938	93.8
Silver		1000	0.400		1120	112.0	0.100		1100	110.0
Sodium			165		218		286		179	
Strontium		1000	0.00		917	91.7	0.300		909	90.9
Thallium		1000	0.400		980	98.0	3.90		980	98.0
Tin		1000	0.00		920	92.0	1.40		906	90.6
Titanium		1000	1.90		1060	106.0	2.40		1050	105.0
Vanadium		500	0.700		494	98.8	1.40		477	95.4
Zinc		1000	-0.400		968	96.8	8.20		949	94.9

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

QC Batch ID: MP34829
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 12/19/18

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	14	14		
Antimony	6.0	1	1		
Arsenic	10	1.3	1.3		
Barium	200	1	1		
Beryllium	4.0	.2	.2		
Cadmium	5.0	.2	.2		
Calcium	1000	50	50	9.2	<1000
Chromium	10	1	1		
Cobalt	50	.2	.2		
Copper	25	1	1		
Iron	300	17	17		
Lead	5.0	1	1.1		
Magnesium	5000	35	35	6.5	<5000
Manganese	15	.5	1		
Molybdenum	50	.3	.3		
Nickel	40	.4	.4		
Potassium	10000	200	200	39.6	<10000
Selenium	10	2.4	2.9		
Silver	10	.7	.7		
Sodium	10000	500	500	6.8	<10000
Strontium	10	.5	.5		
Thallium	10	1.1	1.4		
Tin	50	.9	1		
Titanium	10	.5	1		
Vanadium	50	.5	.6		
Zinc	20	3	4.4		

Associated samples MP34829: FA60136-10, FA60136-12, FA60136-14, FA60136-16

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

QC Batch ID: MP34829
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date:			12/19/18					12/19/18	
Metal	FA60136-10 Original	DUP	RPD	QC Limits	FA60136-10 Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium	46700	45500	2.6	0-20	46700	70400	25000	94.8	70-130
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium	17300	17000	1.7	0-20	17300	41400	25000	96.4	70-130
Manganese									
Molybdenum									
Nickel									
Potassium	2790	2780	0.4	0-20	2790	27200	25000	97.6	70-130
Selenium									
Silver									
Sodium	57500	56200	2.3	0-20	57500	81000	25000	94.0	70-130
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

Associated samples MP34829: FA60136-10, FA60136-12, FA60136-14, FA60136-16

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

QC Batch ID: MP34829
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 12/19/18

Metal	FA60136-10 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium	46700	72600	25000	103.6	3.1	20
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Magnesium	17300	42500	25000	100.8	2.6	20
Manganese						
Molybdenum						
Nickel						
Potassium	2790	27800	25000	100.0	2.2	20
Selenium						
Silver						
Sodium	57500	83400	25000	103.6	2.9	20
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP34829: FA60136-10, FA60136-12, FA60136-14, FA60136-16

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

QC Batch ID: MP34829
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 12/19/18

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium	25100	25000	100.4	85-115
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium	25100	25000	100.4	85-115
Manganese				
Molybdenum				
Nickel				
Potassium	24600	25000	98.4	85-115
Selenium				
Silver				
Sodium	24700	25000	98.8	85-115
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP34829: FA60136-10, FA60136-12, FA60136-14, FA60136-16

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

QC Batch ID: MP34829
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 12/19/18

Metal	FA60136-10 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium	46700	47800	2.2	0-10
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium	17300	18100	4.4	0-10
Manganese				
Molybdenum				
Nickel				
Potassium	2790	2970	6.7	0-10
Selenium				
Silver				
Sodium	57500	58800	2.3	0-10
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP34829: FA60136-10, FA60136-12, FA60136-14, FA60136-16

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

QC Batch ID: MP34829
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 12/19/18

Metal	Sample ml	Final ml	FA60136-10 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium	9.8	10	46730	45795.4	50470	0.2	250	5000	93.5	85-115
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium	9.8	10	17330	16983.4	21720	0.2	250	5000	94.7	85-115
Manganese										
Molybdenum										
Nickel										
Potassium	9.8	10	2787	2731.26	12260	0.2	500	10000	95.3	85-115
Selenium										
Silver										
Sodium	9.8	10	57460	56310.8	65430	0.2	500	10000	91.2	85-115
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP34829: FA60136-10, FA60136-12, FA60136-14, FA60136-16

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

Instrument Detection Limits

Job Number: FA60136
Account: AHTNACAS Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

Instrument ID: SSTRACE1 **Effective Date:** 01/27/15

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	1
Beryllium	.2
Cadmium	.2
Calcium	50
Chromium	1
Cobalt	.2
Copper	1
Iron	17
Lead	1
Magnesium	35
Manganese	.5
Molybdenum	.3
Nickel	.4
Potassium	200
Selenium	2.4
Silicon	5
Silver	.7
Sodium	500
Strontium	.5
Sulfur	5
Thallium	1.1
Tin	.9
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA15486

Instrument Linear Ranges

Job Number: FA60136
Account: AHTNACAS Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

Instrument ID: SSTRACE1 **Effective Date:** 08/13/13

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Sulfur	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA15486

Metals Analysis

Raw Data

Zoom In ▶
Zoom Out

Sample Name: Blank Acquired: 12/20/2018 8:37:56 Type: Cal
Method: 60102007_042011(v362) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0017**	**-.0071**	**-.0004**	**.0086**	**-.0008**	**.0054**	**.0004**	**-.0006**	**-.0004**
Stddev	.0002	.0011	.0003	.0007	.0002	.0002	.0007	.0001	.0002
%RSD	13.25	15.53	71.50	8.394	23.73	3.651	165.9	17.11	57.34
#1	.0014	-.0059	-.0005	.0088	-.0010	.0054	.0001	-.0007	-.0006
#2	.0018	-.0071	-.0006	.0091	-.0008	.0056	.0012	-.0007	-.0004
#3	.0018	-.0081	-.0001	.0078	-.0006	.0052	-.0001	-.0005	-.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0183**	**.0007**	**.0012**	**-.0004**	**.0009**	**.0011**	**-.0144**	**.0002**	**.0004**
Stddev	.0003	.0003	.0015	.0005	.0003	.0002	.0017	.0007	.0003
%RSD	1.761	44.83	127.8	135.4	28.74	17.87	11.93	269.5	89.42
#1	.0186	.0008	.0028	.0002	.0010	.0012	-.0163	.0006	.0007
#2	.0182	.0003	-.0001	-.0007	.0011	.0008	-.0130	.0006	.0005
#3	.0180	.0009	.0008	-.0007	.0006	.0012	-.0139	-.0005	.0000

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0003**	**-.0007**	**.0027**	**.0007**	**-.0002**	**.0026**	**-.0009**	**-.0003**	**.0025**
Stddev	.0003	.0001	.0005	.0002	.0004	.0003	.0002	.0002	.0004
%RSD	109.9	19.70	19.40	29.95	204.6	12.01	20.05	59.56	15.67
#1	.0003	-.0007	.0029	.0007	-.0004	.0024	-.0011	-.0004	.0021
#2	.0000	-.0008	.0031	.0009	-.0004	.0030	-.0007	-.0001	.0028
#3	.0006	-.0006	.0021	.0005	.0003	.0024	-.0010	-.0005	.0027

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5693.5**	**2383.1**	**24182.**	**7123.5**
Stddev	8.6	6.1	91.	10.5
%RSD	.15187	.25523	.37682	.14810
#1	5699.5	2389.5	24284.	7131.0
#2	5697.3	2382.2	24153.	7128.1
#3	5683.6	2377.4	24109.	7111.4

Zoom In ▶
Zoom Out

Sample Name: LowStd Acquired: 12/20/2018 8:41:56 Type: Cal
Method: 60102007_042011(v362) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0395**	**1.464**	**.1272**	**4.418**	**4.140**	**2.294**	**2.561**	**1.424**	**.2554**
Stddev	.0001	.002	.0005	.011	.015	.008	.004	.002	.0009
%RSD	.2078	.1105	.4288	.2493	.3510	.3325	.1723	.1205	.3705
#1	.0394	1.466	.1275	4.405	4.127	2.289	2.563	1.422	.2552
#2	.0395	1.462	.1266	4.426	4.156	2.302	2.556	1.425	.2565
#3	.0396	1.463	.1276	4.422	4.138	2.289	2.563	1.425	.2546

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.4450**	**1.548**	**.6426**	**.2666**	**1.549**	**.4509**	**2.229**	**.9039**	**.0789**
Stddev	.0013	.006	.0018	.0017	.002	.0014	.003	.0008	.0006
%RSD	.2876	.3689	.2733	.6460	.1341	.3191	.1158	.0853	.8140
#1	.4461	1.555	.6441	.2680	1.547	.4496	2.226	.9032	.0788
#2	.4454	1.547	.6430	.2672	1.551	.4506	2.231	.9036	.0783
#3	.4436	1.543	.6407	.2647	1.549	.4524	2.230	.9047	.0795

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1197**	**.0980**	**.1627**	**.2030**	**6.511**	**.9068**	**.0191**	**.3096**	**2.032**
Stddev	.0007	.0005	.0005	.0001	.023	.0023	.0000	.0005	.001
%RSD	.6248	.5477	.3106	.0602	.3562	.2543	.1500	.1563	.0409
#1	.1203	.0976	.1621	.2032	6.486	.9044	.0190	.3092	2.031
#2	.1188	.0977	.1629	.2029	6.531	.9072	.0191	.3101	2.032
#3	.1200	.0986	.1631	.2030	6.518	.9090	.0191	.3093	2.033

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5765.9**	**2368.8**	**24197.**	**7203.1**
Stddev	11.9	2.3	8.	41.6
%RSD	.20612	.09693	.03470	.57775
#1	5771.6	2370.0	24207.	7186.3
#2	5752.2	2366.1	24192.	7172.5
#3	5773.8	2370.2	24193.	7250.5

Zoom In ▶
Zoom Out

Sample Name: MidStd Acquired: 12/20/2018 8:45:36 Type: Cal
Method: 60102007_042011(v362) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1479**	**5.747**	**.5113**	**17.26**	**16.36**	**9.070**	**10.21**	**5.722**	**1.010**
Stddev	.0006	.040	.0004	.07	.10	.073	.01	.004	.003
%RSD	.4244	.6915	.0743	.4221	.6240	.8083	.1451	.0782	.2624
#1	.1486	5.744	.5109	17.23	16.35	9.086	10.19	5.717	1.012
#2	.1475	5.788	.5112	17.35	16.46	9.135	10.22	5.725	1.007
#3	.1475	5.709	.5116	17.21	16.26	8.991	10.21	5.724	1.012

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.784**	**5.892**	**2.546**	**1.042**	**6.067**	**1.926**	**8.883**	**3.623**	**.3112**
Stddev	.005	.048	.017	.007	.006	.003	.051	.005	.0009
%RSD	.2816	.8151	.6720	.7237	.0917	.1392	.5779	.1298	.2835
#1	1.789	5.901	2.547	1.041	6.070	1.923	8.890	3.621	.3103
#2	1.784	5.935	2.563	1.049	6.060	1.927	8.931	3.629	.3111
#3	1.779	5.840	2.529	1.034	6.070	1.927	8.829	3.620	.3120

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.4836**	**.3994**	**.7740**	**.8702**	**27.08**	**3.814**	**.0787**	**1.314**	**8.015**
Stddev	.0017	.0007	.0009	.0013	.16	.007	.0005	.005	.010
%RSD	.3434	.1740	.1187	.1456	.5842	.1972	.6550	.4068	.1251
#1	.4818	.4000	.7730	.8688	27.05	3.820	.0782	1.320	8.004
#2	.4851	.3996	.7749	.8705	27.25	3.806	.0786	1.310	8.023
#3	.4838	.3987	.7740	.8713	26.93	3.817	.0792	1.313	8.019

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5767.7**	**2321.7**	**24094.**	**7049.8**
Stddev	6.7	1.2	117.	72.6
%RSD	.11613	.05325	.48585	1.0293
#1	5772.9	2323.1	24048.	7070.2
#2	5770.0	2321.3	24227.	6969.2
#3	5760.1	2320.7	24006.	7110.0

Zoom In ▶
Zoom Out

Sample Name: HighStd Acquired: 12/20/2018 8:49:08 Type: Cal
Method: 60102007_042011(v362) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.3073**	**11.50**	**1.039**	**34.64**	**32.04**	**18.02**	**20.69**	**11.63**	**1.971**
Stddev	.0002	.03	.003	.04	.78	.08	.03	.03	.011
%RSD	.0692	.2671	.3282	.1171	2.427	.4480	.1528	.2294	.5632
#1	.3071	11.47	1.037	34.62	32.46	17.94	20.66	11.61	1.980
#2	.3072	11.53	1.043	34.68	31.14	18.10	20.72	11.62	1.974
#3	.3075	11.51	1.038	34.60	32.51	18.02	20.70	11.66	1.958

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.628**	**11.56**	**5.130**	**2.068**	**11.88**	**3.862**	**17.88**	**7.376**	**.6217**
Stddev	.006	.03	.021	.005	.12	.006	.08	.008	.0011
%RSD	.1636	.2843	.4077	.2247	.9731	.1437	.4247	.1098	.1773
#1	3.629	11.52	5.112	2.065	12.01	3.857	17.83	7.370	.6217
#2	3.633	11.58	5.153	2.074	11.83	3.860	17.97	7.373	.6229
#3	3.621	11.57	5.125	2.066	11.80	3.868	17.84	7.385	.6207

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.9929**	**.8075**	**1.687**	**1.723**	**52.59**	**7.482**	**.1598**	**2.548**	**16.10**
Stddev	.0025	.0035	.003	.001	.68	.015	.0003	.013	.02
%RSD	.2480	.4340	.2037	.0570	1.285	.2045	.2076	.5076	.1007
#1	.9911	.8065	1.683	1.723	53.01	7.486	.1596	2.556	16.08
#2	.9957	.8047	1.690	1.723	51.81	7.494	.1596	2.554	16.10
#3	.9919	.8114	1.687	1.724	52.95	7.464	.1602	2.533	16.12

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5703.7**	**2253.1**	**23906.**	**6971.3**
Stddev	11.4	6.4	39.	55.3
%RSD	.19975	.28292	.16270	.79362
#1	5716.6	2260.4	23878.	6935.6
#2	5695.1	2249.6	23950.	7035.1
#3	5699.5	2249.2	23889.	6943.4

Zoom In Zoom Out

Sample Name: HSTD Acquired: 12/20/2018 8:53:14 Type: QC
Method: 60102007_042011(v362) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5084	80.11	4.054	4.018	4.065	80.21	4.043	4.032	3.978
Stddev	.0013	.22	.016	.003	.023	.11	.008	.009	.016
%RSD	.2645	.2787	.3822	.0765	.5617	.1320	.2050	.2236	.3945
#1	.5089	80.28	4.040	4.020	4.046	80.13	4.041	4.024	3.960
#2	.5095	80.20	4.051	4.019	4.059	80.33	4.035	4.030	3.982
#3	.5069	79.86	4.071	4.014	4.090	80.16	4.052	4.042	3.991
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.068	79.01	80.73	79.80	4.039	4.038	80.67	4.048	4.021
Stddev	.015	.14	.20	.27	.016	.007	.18	.007	.004
%RSD	.3696	.1791	.2496	.3439	.3951	.1664	.2185	.1810	.1014
#1	4.070	78.96	80.78	79.54	4.020	4.031	80.73	4.042	4.021
#2	4.081	79.17	80.90	79.78	4.049	4.039	80.80	4.045	4.026
#3	4.052	78.90	80.50	80.09	4.048	4.044	80.47	4.056	4.017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.070	4.024	4.214	4.026	3.990	4.027	4.027	4.017	4.026
Stddev	.012	.013	.014	.005	.023	.015	.012	.020	.005
%RSD	.2987	.3276	.3209	.1330	.5857	.3654	.3020	.4899	.1374
#1	4.065	4.010	4.208	4.023	4.013	4.012	4.013	3.999	4.022
#2	4.061	4.026	4.204	4.023	3.966	4.041	4.034	4.038	4.023
#3	4.084	4.036	4.229	4.032	3.990	4.029	4.034	4.014	4.032
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: HSTD Acquired: 12/20/2018 8:53:14 Type: QC
Method: 60102007_042011(v362) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5683.7	2241.8	23720.	6917.7
Stddev	17.0	3.9	82.	38.3
%RSD	.29976	.17232	.34658	.55353
#1	5682.9	2244.6	23813.	6926.1
#2	5667.1	2237.4	23690.	6951.1
#3	5701.2	2243.5	23657.	6875.9

Zoom In Zoom Out

Sample Name: ICV Acquired: 12/20/2018 8:56:41 Type: QC
Method: 60102007_042011(v362) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2320	43.19	1.998	1.969	2.085	41.63	2.003	2.005	2.018
Stddev	.0006	.19	.003	.003	.015	.30	.001	.002	.005
%RSD	.2725	.4489	.1286	.1664	.7250	.7288	.0260	.0848	.2404
#1	.2326	43.22	1.997	1.968	2.084	41.62	2.003	2.003	2.016
#2	.2314	42.99	2.000	1.967	2.071	41.34	2.003	2.007	2.023
#3	.2320	43.37	1.995	1.973	2.101	41.95	2.002	2.005	2.014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.002	40.45	41.28	42.65	2.029	1.864	41.26	1.990	2.018
Stddev	.005	.17	.27	.14	.006	.004	.32	.002	.002
%RSD	.2305	.4185	.6448	.3193	.2757	.1862	.7785	.1058	.0966
#1	2.007	40.47	41.21	42.65	2.035	1.862	41.23	1.988	2.019
#2	2.001	40.27	41.06	42.52	2.026	1.868	40.96	1.991	2.016
#3	1.997	40.60	41.58	42.79	2.025	1.862	41.60	1.992	2.019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.126	1.999	.1093	2.030	2.014	2.005	2.081	1.971	2.023
Stddev	.009	.009	.0010	.003	.011	.006	.006	.005	.003
%RSD	.4161	.4341	.9071	.1443	.5407	.3037	.2865	.2548	.1251
#1	2.122	1.989	.1097	2.028	2.013	2.012	2.088	1.972	2.024
#2	2.120	2.001	.1082	2.033	2.004	2.001	2.078	1.975	2.024
#3	2.136	2.005	.1101	2.028	2.026	2.001	2.077	1.965	2.020
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ICV Acquired: 12/20/2018 8:56:41 Type: QC
Method: 60102007_042011(v362) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5724.7	2306.6	23882.	6938.9
Stddev	17.5	5.9	87.	23.0
%RSD	.30567	.25375	.36272	.33076
#1	5705.4	2301.2	23821.	6962.4
#2	5729.2	2305.8	23843.	6916.5
#3	5739.5	2312.9	23981.	6937.6

Zoom In Zoom Out

Sample Name: ICB Acquired: 12/20/2018 9:02:39 Type: QC
Method: 60102007_042011(v362) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	-.0108	.0007	.0001	.0000	.0000	-.0001	.0004
Stddev	.0007	.0091	.0010	.0000	.000	.001	.0001	.0004
%RSD	155.5	83.82	140.2	33.29	354.3	14320.	50.89	91.72
#1	.0000	-.0044	.0000	.0001	.0000	-.0009	-.0001	.0007
#2	-.0009	-.0173	.0015	.0002	.0000	.0009	-.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0001	.0058	-.0604	.0175	.0001	.0007	-.0096
Stddev	.0008	.0002	.0012	.0171	.0117	.0000	.0003	.0117
%RSD	189.0	154.8	20.18	28.25	66.75	7.877	50.14	122.1
#1	-.0002	.0003	.0067	-.0725	.0257	.0000	.0009	-.0013
#2	.0010	.0000	.0050	-.0483	.0092	.0001	.0004	-.0178
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	F -.0013	.0005	-.0001	.0011	.0006	.0002	.0009
Stddev	.0002	.0004	.0005	.0023	.0002	.0003	.0001	.0001
%RSD	77.84	28.85	99.96	1768.	19.58	41.84	33.71	8.731
#1	-.0001	-.0016	.0009	-.0017	.0009	.0008	.0001	.0008
#2	-.0004	-.0011	.0002	.0015	.0012	.0004	.0002	.0009
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010						
Low Limit		-.0010						

Zoom In Zoom Out

Sample Name: ICB Acquired: 12/20/2018 9:02:39 Type: QC
Method: 60102007_042011(v362) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F -.0024	.0003	-.0002
Stddev	.0023	.0002	.0001
%RSD	96.60	54.80	42.67
#1	-.0040	.0002	-.0001
#2	-.0008	.0005	-.0002
Check ?	Chk Fail	Chk Pass	Chk Pass
High Limit	.0020		
Low Limit	-.0020		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5684.8	2370.5	23942.	7019.9
Stddev	.7	2.3	65.	55.6
%RSD	.01290	.09523	.27182	.79230
#1	5685.4	2368.9	23896.	6980.5
#2	5684.3	2372.1	23988.	7059.2

Zoom In Zoom Out

Sample Name: CRIA Acquired: 12/20/2018 9:06:26 Type: QC
Method: 60102007_042011(v362) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0090	.1937	.0105	.1957	.0051	.9804	.0046	.0465	.0100
Stddev	.0004	.0182	.0012	.0009	.0001	.0086	.0001	.0003	.0005
%RSD	3.989	9.392	11.73	.4489	1.346	.8757	1.297	.5867	4.642
#1	.0093	.2106	.0092	.1963	.0051	.9903	.0046	.0464	.0103
#2	.0091	.1745	.0107	.1960	.0050	.9762	.0046	.0463	.0095
#3	.0086	.1961	.0116	.1947	.0050	.9748	.0047	.0468	.0102
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0227	.2963	9.619	4.924	.0149	.0429	9.526	.0372	F .0037
Stddev	.0004	.0014	.073	.019	.0000	.0002	.071	.0005	.0030
%RSD	1.683	.4884	.7634	.3920	.3050	.3961	.7454	1.262	81.74
#1	.0231	.2948	9.703	4.906	.0148	.0431	9.607	.0377	.0047
#2	.0223	.2966	9.567	4.921	.0149	.0428	9.474	.0372	.0003
#3	.0227	.2976	9.588	4.945	.0149	.0429	9.497	.0368	.0060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value									.0050
Range									-20.00%

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0042	F .0078	.0221	.0464	.0098	.0094	.0093	.0475	.0194
Stddev	.0016	.0008	.0014	.0005	.0001	.0002	.0042	.0002	.0003
%RSD	37.75	9.960	6.353	.9863	1.038	2.347	44.96	.3265	1.297
#1	.0037	.0069	.0234	.0470	.0099	.0092	.0098	.0477	.0192
#2	.0060	.0080	.0221	.0461	.0097	.0095	.0049	.0474	.0197
#3	.0030	.0085	.0206	.0462	.0098	.0097	.0132	.0475	.0193
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.0100							
Range		-20.00%							

Zoom In Zoom Out

Sample Name: CRIA Acquired: 12/20/2018 9:06:26 Type: QC
Method: 60102007_042011(v362) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5721.0	2380.3	24261.	7034.6
Stddev	9.2	2.6	65.	56.9
%RSD	.15994	.10714	.26726	.80857
#1	5731.5	2381.1	24320.	7099.9
#2	5714.9	2377.4	24191.	6995.8
#3	5716.6	2382.3	24272.	7008.1

Zoom In Zoom Out

Sample Name: ICSA Acquired: 12/20/2018 9:16:59 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	531.4	.0000	.0006	-.0001	473.2	.0000	.0001	.0004
Stddev	.0004	12.2	.0004	.0000	.0001	7.7	.000	.0003	.0003
%RSD	94.63	2.300	2135.	8.081	179.0	1.619	1664.	388.6	65.56
#1	.0005	543.7	-.0005	.0006	-.0001	472.0	.0002	-.0002	.0003
#2	.0000	531.2	.0001	.0005	.0001	481.5	-.0003	.0002	.0002
#3	.0007	519.3	.0004	.0006	-.0001	466.3	.0001	.0002	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	188.8	.0423	515.8	.0000	.0000	.1654	.0010	.0009
Stddev	.0004	.7	.0152	2.3	.000	.0004	.0085	.0002	.0037
%RSD	824.1	.3475	35.96	.4387	731.4	1224.	5.110	16.66	427.9
#1	.0005	189.4	.0266	518.4	.0000	.0002	.1593	.0012	-.0002
#2	.0000	188.9	.0433	514.9	.0000	.0003	.1619	.0009	-.0021
#3	-.0003	188.1	.0570	514.2	.0000	-.0004	.1751	.0009	.0050
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0019	.0325	.0000	.0000	.0019	.0004	.0007	-.0004
Stddev	.0025	.0038	.0018	.0010	.0001	.0003	.0073	.0002	.0000
%RSD	1155.	200.9	5.469	6571.	398.6	14.90	1899.	29.86	7.709
#1	.0013	-.0034	.0305	-.0006	.0002	.0017	-.0017	.0004	-.0004
#2	.0019	-.0047	.0335	.0011	-.0001	.0023	.0086	.0008	-.0003
#3	-.0026	.0024	.0336	-.0005	.0000	.0019	-.0057	.0008	-.0004
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ICSA Acquired: 12/20/2018 9:16:59 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5574.1	2158.9	22417.	6796.8
Stddev	5.7	4.0	99.	13.0
%RSD	.10273	.18606	.44143	.19136
#1	5567.6	2163.5	22508.	6790.4
#2	5576.7	2157.1	22432.	6811.8
#3	5578.1	2156.2	22311.	6788.2

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 12/20/2018 9:22:57 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.118	534.4	1.005	.4966	.4929	457.4	.9768	.5053	.4955
Stddev	.006	11.2	.005	.0018	.0016	4.5	.0023	.0012	.0015
%RSD	.5640	2.096	.4875	.3600	.3312	.9860	.2368	.2424	.3056
#1	1.117	538.3	1.010	.4962	.4925	462.0	.9793	.5055	.4972
#2	1.124	543.2	1.000	.4950	.4915	453.0	.9762	.5065	.4950
#3	1.112	521.8	1.005	.4985	.4947	457.2	.9748	.5041	.4944
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5646	189.7	.1244	513.1	.5070	.9106	.2176	1.008	.9772
Stddev	.0016	1.1	.0071	1.8	.0014	.0005	.0081	.005	.0083
%RSD	.2763	.5867	5.720	.3552	.2830	.0505	3.701	.4601	.8464
#1	.5646	190.5	.1163	514.1	.5086	.9105	.2091	1.012	.9754
#2	.5661	188.4	.1273	511.0	.5068	.9111	.2186	1.009	.9700
#3	.5630	190.1	.1296	514.2	.5057	.9102	.2251	1.003	.9863
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.068	.9689	.0693	.9197	.9165	1.064	.9799	.4939	.9679
Stddev	.005	.0065	.0018	.0014	.0028	.003	.0087	.0015	.0012
%RSD	.4436	.6693	2.558	.1517	.3096	.2535	.8868	.3058	.1209
#1	1.065	.9676	.0707	.9213	.9180	1.065	.9899	.4956	.9668
#2	1.073	.9759	.0700	.9189	.9132	1.066	.9763	.4932	.9677
#3	1.065	.9631	.0673	.9190	.9182	1.061	.9736	.4928	.9692
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 12/20/2018 9:22:57 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5562.4	2158.6	22502.	6783.2
Stddev	14.9	.3	132.	19.6
%RSD	.26725	.01470	.58467	.28909
#1	5570.7	2158.9	22458.	6761.6
#2	5571.1	2158.4	22398.	6799.8
#3	5545.2	2158.4	22650.	6788.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 9:27:16 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2466	40.90	2.015	2.034	2.071	41.45	2.019	1.998	2.047
Stddev	.0009	.20	.000	.012	.011	.26	.003	.001	.006
%RSD	.3768	.4832	.0178	.6086	.5270	.6204	.1372	.0415	.2766
#1	.2460	40.90	2.015	2.024	2.069	41.48	2.016	1.997	2.053
#2	.2462	40.70	2.016	2.031	2.062	41.17	2.021	1.998	2.042
#3	.2477	41.09	2.016	2.048	2.083	41.68	2.019	1.999	2.046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.996	41.07	41.11	41.19	2.067	2.039	41.22	2.008	2.040
Stddev	.010	.21	.25	.16	.002	.004	.19	.003	.005
%RSD	.5105	.5106	.6111	.3911	.0887	.1786	.4675	.1381	.2470
#1	2.008	41.08	41.07	41.23	2.069	2.037	41.16	2.005	2.045
#2	1.991	40.86	40.88	41.01	2.065	2.036	41.06	2.011	2.042
#3	1.990	41.28	41.38	41.32	2.066	2.043	41.43	2.008	2.035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.002	1.999	1.944	2.051	2.096	2.074	2.022	2.089	2.038
Stddev	.005	.002	.004	.004	.011	.004	.015	.009	.003
%RSD	.2598	.0753	.2248	.1709	.5087	.1910	.7401	.4219	.1471
#1	1.996	2.000	1.940	2.048	2.089	2.078	2.026	2.099	2.036
#2	2.002	1.997	1.949	2.049	2.091	2.072	2.034	2.083	2.041
#3	2.007	2.000	1.942	2.055	2.108	2.071	2.005	2.086	2.036
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 9:27:16 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5661.7	2281.5	23414.	6796.4
Stddev	8.0	2.1	55.	41.4
%RSD	.14207	.09114	.23397	.60858
#1	5662.7	2283.8	23380.	6755.6
#2	5653.3	2280.0	23385.	6838.3
#3	5669.3	2280.6	23477.	6795.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 9:32:33 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	-.0039	-.0003	.0002	.0001	.0083	.0001	.0001
Stddev	.0005	.0101	.0002	.0002	.0000	.0022	.0001	.0002
%RSD	102.8	257.4	54.37	134.7	37.42	26.51	124.9	114.0
#1	-.0002	.0071	-.0002	.0003	.0001	.0058	.0000	.0003
#2	-.0010	-.0060	-.0005	.0003	.0001	.0089	.0001	.0000
#3	-.0002	-.0128	-.0002	-.0001	.0001	.0101	.0000	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0004	.0090	-.0779	.0186	.0001	.0002	.0118
Stddev	.0002	.0002	.0002	.0154	.0135	.0001	.0005	.0065
%RSD	75.56	38.39	2.705	19.83	72.50	42.92	262.9	55.33
#1	.0004	.0005	.0093	-.0877	.0276	.0001	.0007	.0099
#2	.0002	.0002	.0089	-.0601	.0031	.0001	.0000	.0191
#3	.0001	.0005	.0089	-.0859	.0251	.0002	-.0002	.0065
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	F -.0031	-.0006	.0009	.0000	.0003	.0002	.0004
Stddev	.0001	.0010	.0020	.0014	.0004	.0004	.0001	.0001
%RSD	36.11	30.85	360.3	153.5	1411.	123.1	56.36	25.72
#1	-.0003	-.0028	-.0001	-.0003	.0003	-.0001	.0001	.0004
#2	-.0002	-.0042	-.0027	.0007	.0002	.0007	.0002	.0004
#3	-.0004	-.0023	.0012	.0025	-.0004	.0004	.0003	.0006
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010						
Low Limit		-.0010						

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 9:32:33 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	-.0014	.0000	.0008
Stddev	.0015	.0000	.0000
%RSD	109.1	190.1	3.133
#1	-.0026	.0001	.0009
#2	-.0018	.0000	.0008
#3	.0003	.0000	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5649.8	2350.2	23741.	6856.0
Stddev	23.9	9.5	67.	26.8
%RSD	.42227	.40316	.28258	.39093
#1	5633.4	2341.8	23688.	6882.1
#2	5677.2	2360.5	23719.	6828.5
#3	5638.9	2348.2	23817.	6857.3

Zoom In Zoom Out

Sample Name: MP34831-MB1 Acquired: 12/20/2018 9:36:42 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	-.0093	-.0001	.0001	.0000	.0078	-.0001	-.0001
Stddev	.0003	.0142	.0002	.0002	.000	.0032	.0001	.0002
%RSD	57.37	153.2	198.0	266.4	289.6	41.37	133.4	270.4
#1	-.0003	.0058	-.0003	.0002	.0000	.0055	.0000	.0000
#2	-.0003	-.0112	.0001	-.0001	-.0001	.0065	-.0001	.0000
#3	-.0008	-.0224	-.0001	.0002	.0000	.0115	-.0002	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0004	.0004	-.0498	.0186	.0000	-.0001	.0009
Stddev	.0004	.0006	.0011	.0163	.0143	.0000	.0002	.0019
%RSD	127.3	169.1	279.0	32.80	76.85	85.26	242.8	210.8
#1	-.0001	.0001	.0010	-.0461	.0200	.0000	-.0001	.0015
#2	.0008	.0011	-.0009	-.0357	.0320	.0000	-.0003	.0025
#3	.0003	.0000	.0011	-.0677	.0036	.0000	.0001	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	F -.0028	-.0005	.0003	.0315	.0005	.0000	.0001
Stddev	.0002	.0022	.0009	.0018	.0014	.0003	.000	.0001
%RSD	89.41	76.44	189.2	547.0	4.443	57.36	341.0	179.3
#1	.0000	-.0048	-.0006	.0024	.0311	.0008	.0000	.0002
#2	.0004	-.0033	-.0013	-.0011	.0303	.0003	.0000	.0000
#3	.0002	-.0005	.0005	-.0003	.0330	.0004	-.0001	.0000
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0025						
Low Limit		-.0025						

Zoom In Zoom Out

Sample Name: MP34831-MB1 Acquired: 12/20/2018 9:36:42 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F -.0089	-.0001	.0012
Stddev	.0044	.0003	.0001
%RSD	49.80	222.2	7.191
#1	-.0106	.0000	.0013
#2	-.0123	-.0005	.0011
#3	-.0039	.0001	.0012
Check ?	Chk Fail	Chk Pass	Chk Pass
High Limit	.0050		
Low Limit	-.0050		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5572.9	2329.1	23493.	6876.1
Stddev	15.4	4.1	33.	86.6
%RSD	.27553	.17672	.14253	1.2597
#1	5569.8	2327.5	23482.	6847.5
#2	5589.6	2333.8	23466.	6973.5
#3	5559.3	2326.1	23530.	6807.5

Zoom In Zoom Out

Sample Name: MP34831-B1 Acquired: 12/20/2018 9:41:08 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0490	26.91	1.950	2.025	.0520	25.38	.0489	.4838	.2043
Stddev	.0004	.10	.004	.011	.0003	.07	.0001	.0006	.0009
%RSD	.7228	.3683	.2020	.5535	.5704	.2683	.2602	.1292	.4520
#1	.0486	26.93	1.947	2.019	.0517	25.46	.0487	.4832	.2049
#2	.0492	26.80	1.954	2.017	.0518	25.36	.0489	.4844	.2048
#3	.0492	27.00	1.948	2.037	.0523	25.33	.0490	.4839	.2032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2485	26.06	25.13	25.18	.5179	.4565	25.15	.4941	.4905
Stddev	.0009	.03	.06	.10	.0014	.0010	.05	.0003	.0025
%RSD	.3731	.1122	.2384	.3857	.2681	.2128	.1801	.0691	.5050
#1	.2480	26.09	25.17	25.22	.5195	.4555	25.17	.4939	.4877
#2	.2496	26.04	25.06	25.26	.5172	.4566	25.10	.4939	.4924
#3	.2479	26.05	25.14	25.07	.5170	.4574	25.17	.4945	.4915
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5097	1.909	.4553	.4789	.4963	.4990	2.054	.4899	.4976
Stddev	.0014	.002	.0016	.0015	.0025	.0008	.003	.0005	.0006
%RSD	.2741	.0849	.3500	.3040	.5064	.1643	.1287	.1069	.1266
#1	.5110	1.911	.4545	.4778	.4957	.4996	2.051	.4895	.4973
#2	.5099	1.910	.4571	.4805	.4942	.4993	2.056	.4897	.4983
#3	.5082	1.907	.4543	.4783	.4991	.4981	2.055	.4905	.4972
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP34831-B1 Acquired: 12/20/2018 9:41:08 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5616.5	2304.0	23319.	6800.0
Stddev	10.2	5.5	112.	48.8
%RSD	.18124	.23869	.48089	.71716
#1	5624.4	2309.0	23190.	6764.1
#2	5605.0	2298.1	23397.	6780.3
#3	5620.0	2305.1	23370.	6855.5

Zoom In Zoom Out

Sample Name: FA60161-1 Acquired: 12/20/2018 9:45:19 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0006	.1191	.0000	.0070	-.0001	33.60	.0001	.0005	.0026
Stddev	.0003	.0058	.0007	.0002	.0000	.14	.0000	.0000	.0004
%RSD	44.91	4.857	2465.	2.550	54.15	.4169	26.06	6.387	16.01
#1	-.0009	.1130	.0007	.0072	-.0001	33.54	.0001	.0005	.0026
#2	-.0004	.1197	.0001	.0069	-.0001	33.76	.0002	.0005	.0030
#3	-.0006	.1246	-.0007	.0068	-.0001	33.50	.0001	.0006	.0022

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0004	.1043	5.123	64.14	.0032	.0000	66.42	.0008	.0026
Stddev	.0003	.0015	.009	.14	.0000	.000	.24	.0004	.0002
%RSD	69.70	1.418	.1829	.2251	.8130	714.1	.3624	52.27	8.219
#1	-.0007	.1026	5.122	64.00	.0032	-.0001	66.53	.0006	.0026
#2	-.0002	.1054	5.133	64.12	.0032	-.0001	66.59	.0006	.0024
#3	-.0003	.1049	5.114	64.29	.0032	.0001	66.15	.0013	.0028

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0016	.0013	18.82	.0009	.2492	.0073	-.0051	.0156	.0029
Stddev	.0010	.0020	.04	.0007	.0010	.0001	.0041	.0002	.0001
%RSD	64.19	152.4	.2095	69.06	.3951	1.611	79.98	1.541	2.452
#1	-.0027	-.0009	18.83	.0003	.2487	.0074	-.0079	.0153	.0029
#2	-.0014	.0029	18.85	.0010	.2503	.0073	-.0004	.0157	.0029
#3	-.0007	.0020	18.77	.0016	.2486	.0071	-.0072	.0158	.0028

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5617.9	2315.3	23517.	6758.3
Stddev	10.9	.9	230.	61.4
%RSD	.19451	.03904	.97970	.90782
#1	5620.7	2315.9	23438.	6795.7
#2	5627.2	2315.7	23336.	6791.6
#3	5605.9	2314.2	23776.	6687.5

Zoom In Zoom Out

Sample Name: MP34831-D1 Acquired: 12/20/2018 9:49:42 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0012	.1349	-.0012	.0075	.0000	35.48	.0001	.0010	.0025
Stddev	.0006	.0082	.0003	.0001	.000	.19	.0000	.0001	.0005
%RSD	49.13	6.052	26.48	1.607	76.89	.5324	20.76	5.492	19.08
#1	-.0008	.1271	-.0009	.0076	.0000	35.51	.0001	.0010	.0031
#2	-.0010	.1343	-.0015	.0075	.0000	35.28	.0001	.0010	.0023
#3	-.0019	.1434	-.0011	.0074	-.0001	35.65	.0001	.0009	.0022

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0004	.0912	5.438	67.38	.0033	-.0003	70.04	.0006	.0041
Stddev	.0002	.0021	.035	.35	.0000	.0004	.26	.0000	.0016
%RSD	48.63	2.356	.6368	.5256	.8569	138.0	.3688	6.267	37.99
#1	.0003	.0903	5.400	67.68	.0033	-.0003	70.09	.0005	.0054
#2	.0002	.0896	5.446	66.99	.0033	-.0008	69.76	.0006	.0024
#3	.0006	.0936	5.467	67.48	.0033	.0001	70.26	.0006	.0045

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0008	.0005	19.83	-.0003	.2635	.0069	-.0040	.0162	.0031
Stddev	.0018	.0027	.02	.0006	.0004	.0003	.0007	.0005	.0000
%RSD	234.3	582.1	.0924	241.2	.1633	4.438	18.58	3.321	1.373
#1	-.0003	.0019	19.81	.0002	.2639	.0070	-.0033	.0169	.0031
#2	.0029	-.0026	19.83	-.0010	.2630	.0071	-.0040	.0160	.0031
#3	-.0003	.0022	19.85	-.0001	.2637	.0065	-.0047	.0159	.0032

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5631.8	2315.1	23552.	6813.7
Stddev	17.5	5.8	31.	22.6
%RSD	.31016	.25035	.13116	.33184
#1	5623.4	2313.5	23560.	6800.2
#2	5651.9	2321.6	23518.	6801.1
#3	5620.1	2310.3	23578.	6839.8

Zoom In Zoom Out

Sample Name: MP34831-SD1 Acquired: 12/20/2018 9:54:05 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0029	.0749	.0035	.0080	-.0003	37.49	-.0002	.0006	.0011
Stddev	.0040	.0716	.0028	.0008	.0002	.42	.0003	.0008	.0021
%RSD	135.9	95.61	78.46	9.355	74.97	1.125	108.6	128.4	193.1
#1	-.0059	.0105	.0036	.0089	-.0005	37.98	-.0002	-.0003	.0017
#2	-.0044	.1520	.0007	.0076	.0000	37.31	.0000	.0009	.0028
#3	.0016	.0621	.0062	.0076	-.0004	37.19	-.0005	.0013	-.0013

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0026	.0947	5.397	71.71	.0037	-.0032	73.12	.0015	-.0074
Stddev	.0018	.0072	.226	.78	.0001	.0020	.61	.0012	.0003
%RSD	69.21	7.603	4.183	1.083	1.620	60.89	.8316	83.05	3.482
#1	-.0020	.0953	5.138	72.57	.0038	-.0013	73.82	.0021	-.0072
#2	-.0012	.0872	5.507	71.51	.0037	-.0031	72.86	.0001	-.0077
#3	-.0047	.1015	5.547	71.06	.0036	-.0052	72.69	.0023	-.0073

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0005	.0042	20.90	-.0008	.2785	.0077	.0064	.0168	.0025
Stddev	.0099	.0071	.01	.0020	.0013	.0007	.0087	.0016	.0006
%RSD	1862.	167.9	.0367	260.4	.4548	9.559	134.5	9.399	25.65
#1	.0053	.0120	20.91	.0003	.2798	.0082	.0096	.0157	.0021
#2	.0050	.0025	20.90	-.0031	.2785	.0068	-.0034	.0161	.0032
#3	-.0119	-.0019	20.89	.0005	.2772	.0080	.0131	.0186	.0022

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5669.1	2346.8	23603.	6851.7
Stddev	6.6	2.5	112.	111.1
%RSD	.11576	.10580	.47461	1.6210
#1	5674.8	2348.1	23641.	6731.9
#2	5670.5	2348.3	23692.	6951.2
#3	5661.9	2343.9	23478.	6872.0

Zoom In Zoom Out

Sample Name: MP34831-PS1 Acquired: 12/20/2018 9:58:28 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0496	2.582	.0993	.2589	.0508	37.91	.0478	.0473	.0505
Stddev	.0009	.012	.0010	.0010	.0004	.15	.0001	.0004	.0004
%RSD	1.739	.4743	1.032	.3884	.7045	.3839	.2410	.8056	.7863
#1	.0486	2.597	.0981	.2590	.0506	37.88	.0478	.0470	.0508
#2	.0501	2.575	.1000	.2598	.0512	38.07	.0479	.0477	.0501
#3	.0501	2.576	.0999	.2578	.0506	37.78	.0476	.0471	.0506

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0977	3.005	15.00	67.58	.0531	.0871	74.96	.0956	.0472
Stddev	.0008	.015	.05	.35	.0002	.0005	.18	.0001	.0022
%RSD	.8444	.4881	.3136	.5250	.3513	.5653	.2378	.0526	4.728
#1	.0981	3.006	15.01	67.21	.0530	.0866	75.01	.0956	.0490
#2	.0967	3.018	15.04	67.92	.0530	.0875	75.11	.0955	.0479
#3	.0982	2.989	14.95	67.60	.0533	.0873	74.76	.0956	.0447

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1001	.0883	18.58	.0467	.2961	.1063	.0945	.0634	.2428
Stddev	.0021	.0008	.04	.0006	.0009	.0013	.0058	.0004	.0008
%RSD	2.143	.8930	.2169	1.267	.3072	1.191	6.157	.5565	.3152
#1	.1025	.0878	18.54	.0468	.2964	.1054	.0968	.0636	.2422
#2	.0991	.0879	18.62	.0460	.2967	.1078	.0879	.0630	.2436
#3	.0986	.0892	18.58	.0472	.2950	.1058	.0988	.0637	.2424

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5591.9	2302.2	23340.	6752.5
Stddev	8.0	8.6	175.	70.9
%RSD	.14286	.37204	.75125	1.0504
#1	5601.1	2311.1	23241.	6824.8
#2	5587.0	2294.0	23542.	6683.1
#3	5587.6	2301.4	23236.	6749.5

Zoom In Zoom Out

Sample Name: MP34831-S1 Acquired: 12/20/2018 10:02:46 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0521	27.60	2.017	2.078	.0533	60.15	.0503	.4932	.2078
Stddev	.0004	.09	.005	.002	.0002	.26	.0002	.0010	.0003
%RSD	.6868	.3353	.2702	.1083	.3729	.4323	.4651	.1942	.1628
#1	.0517	27.68	2.017	2.076	.0532	60.27	.0502	.4931	.2075
#2	.0525	27.62	2.023	2.079	.0535	60.33	.0506	.4941	.2081
#3	.0521	27.50	2.012	2.080	.0532	59.86	.0502	.4922	.2078

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2639	26.22	31.21	90.89	.5342	.4660	F 93.88	.5067	.5040
Stddev	.0011	.11	.05	.36	.0022	.0002	.18	.0020	.0015
%RSD	.4085	.4381	.1738	.3950	.4135	.0524	.1969	.3976	.2952
#1	.2635	26.30	31.27	90.72	.5339	.4660	93.98	.5076	.5057
#2	.2631	26.27	31.21	91.30	.5321	.4662	94.01	.5081	.5030
#3	.2651	26.09	31.16	90.64	.5365	.4657	93.67	.5044	.5032

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5301	1.950	20.07	.4937	.7631	.5184	2.115	.5205	.5073
Stddev	.0015	.006	.05	.0029	.0016	.0027	.006	.0021	.0024
%RSD	.2798	.2913	.2266	.5810	.2092	.5236	.2824	.4081	.4686
#1	.5286	1.944	20.09	.4946	.7634	.5169	2.121	.5184	.5090
#2	.5301	1.955	20.09	.4961	.7646	.5168	2.109	.5204	.5082
#3	.5316	1.950	20.02	.4905	.7615	.5215	2.115	.5227	.5046

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5580.1	2271.5	23086.	6721.3
Stddev	18.3	10.6	31.	42.8
%RSD	.32742	.46606	.13568	.63683
#1	5570.1	2265.6	23101.	6749.3
#2	5569.0	2265.2	23107.	6672.0
#3	5601.2	2283.7	23050.	6742.6

Zoom In Zoom Out

Sample Name: MP34831-S2 Acquired: 12/20/2018 10:06:56 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0514	27.49	1.994	2.032	.0522	59.74	.0494	.4893	.2074
Stddev	.0009	.06	.003	.005	.0001	.13	.0001	.0009	.0005
%RSD	1.699	.2194	.1262	.2322	.2184	.2101	.1441	.1811	.2349
#1	.0512	27.56	1.991	2.037	.0521	59.84	.0495	.4883	.2074
#2	.0506	27.44	1.995	2.029	.0522	59.78	.0495	.4899	.2078
#3	.0523	27.47	1.996	2.029	.0524	59.60	.0494	.4897	.2069

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2592	26.35	31.03	89.69	.5238	.4664	F 92.43	.4998	.4999
Stddev	.0009	.05	.10	.08	.0011	.0006	.15	.0004	.0015
%RSD	.3474	.2064	.3292	.0943	.2121	.1389	.1632	.0826	.3090
#1	.2582	26.39	31.12	89.79	.5239	.4667	92.59	.5003	.4985
#2	.2600	26.37	31.05	89.63	.5248	.4657	92.30	.4996	.5016
#3	.2593	26.29	30.92	89.66	.5226	.4669	92.39	.4995	.4996

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5256	1.943	19.79	.4882	.7508	.5109	2.068	.5155	.5009
Stddev	.0008	.005	.02	.0023	.0027	.0015	.001	.0002	.0005
%RSD	.1525	.2500	.0891	.4641	.3565	.2852	.0495	.0400	.0907
#1	.5265	1.944	19.81	.4867	.7539	.5126	2.066	.5154	.5008
#2	.5254	1.937	19.80	.4870	.7490	.5099	2.068	.5158	.5014
#3	.5249	1.946	19.77	.4908	.7496	.5103	2.069	.5154	.5005

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5623.2	2274.0	23156.	6757.8
Stddev	4.8	3.0	43.	33.4
%RSD	.08582	.13244	.18525	.49440
#1	5621.1	2273.5	23202.	6769.2
#2	5619.7	2271.3	23148.	6784.0
#3	5628.7	2277.2	23117.	6720.2

Zoom In Zoom Out

Sample Name: FA60161-3 Acquired: 12/20/2018 10:11:08 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0003	.0416	-.0011	.0068	-.0001	34.43	-.0001	.0006
Stddev	.0006	.0041	.0009	.0002	.0001	.23	.0000	.0003
%RSD	199.8	9.848	87.66	3.380	136.0	.6779	57.50	46.62
#1	.0002	.0397	-.0005	.0068	-.0001	34.16	-.0001	.0009
#2	-.0009	.0389	-.0005	.0066	.0000	34.56	.0000	.0005
#3	-.0002	.0464	-.0021	.0070	-.0001	34.57	-.0001	.0003

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0023	-.0001	.0210	5.257	65.28	.0012	-.0004	67.79
Stddev	.0005	.0003	.0026	.030	.51	.0000	.0002	.25
%RSD	20.97	501.2	12.16	.5720	.7792	3.858	46.00	.3670
#1	.0018	-.0003	.0228	5.228	64.70	.0011	-.0004	67.57
#2	.0026	.0003	.0222	5.254	65.64	.0012	-.0006	67.74
#3	.0027	-.0002	.0181	5.288	65.49	.0012	-.0002	68.06

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0004	-.0001	.0005	.0006	18.95	.0006	.2506	.0028
Stddev	.0004	.0026	.0023	.0007	.03	.0003	.0011	.0001
%RSD	105.7	3035.	456.5	130.8	.1571	50.55	.4353	2.177
#1	.0008	.0029	.0027	-.0002	18.95	.0003	.2496	.0027
#2	.0000	-.0017	.0006	.0012	18.99	.0009	.2504	.0028
#3	.0002	-.0014	-.0018	.0007	18.93	.0005	.2517	.0028

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F -.0102	.0161	.0021
Stddev	.0030	.0004	.0001
%RSD	29.26	2.793	4.162
#1	-.0092	.0163	.0020
#2	-.0136	.0163	.0021
#3	-.0079	.0156	.0021

Zoom In Zoom Out

Sample Name: FA60161-3 Acquired: 12/20/2018 10:11:08 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5616.6	2311.2	23420.	6701.9
Stddev	5.7	1.0	47.	41.0
%RSD	.10126	.04516	.19880	.61156
#1	5617.5	2311.6	23366.	6749.0
#2	5621.7	2310.0	23446.	6675.2
#3	5610.5	2311.9	23447.	6681.3

Zoom In Zoom Out

Sample Name: FA60304-1 Acquired: 12/20/2018 10:15:31 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	.1062	-.0009	.0019	-.0001	2.908	.0000	.0001	.0010
Stddev	.0005	.0037	.0006	.0001	.0000	.011	.000	.0002	.0001
%RSD	414.6	3.524	71.31	6.888	30.01	.3743	271.6	247.7	7.715
#1	-.0005	.1104	-.0006	.0017	-.0001	2.896	.0000	.0001	.0011
#2	-.0003	.1050	-.0016	.0019	-.0001	2.918	-.0001	.0003	.0010
#3	.0005	.1032	-.0004	.0020	-.0001	2.910	.0000	-.0001	.0009

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0082	.0826	.0615	.1484	.0017	-.0004	.4266	.0005	.0003
Stddev	.0000	.0029	.0089	.0158	.0001	.0001	.0053	.0003	.0028
%RSD	.4078	3.504	14.47	10.68	4.846	20.56	1.246	57.83	928.2
#1	.0082	.0803	.0678	.1533	.0016	-.0004	.4221	.0006	-.0008
#2	.0083	.0817	.0654	.1612	.0018	-.0003	.4251	.0008	.0034
#3	.0082	.0858	.0513	.1307	.0017	-.0003	.4325	.0002	-.0018

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0020	-.0011	.1548	.0000	.0072	.0056	-.0072	.0004	.0924
Stddev	.0020	.0043	.0012	.001	.0001	.0001	.0037	.0004	.0002
%RSD	97.71	387.8	.7899	3221.	.9710	1.573	51.03	89.85	.2289
#1	-.0014	-.0036	.1551	-.0005	.0072	.0056	-.0075	.0001	.0922
#2	-.0005	-.0035	.1535	-.0002	.0071	.0056	-.0034	.0004	.0923
#3	-.0043	.0038	.1559	.0007	.0072	.0057	-.0108	.0008	.0926

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5571.9	2330.0	23378.	6791.3
Stddev	10.1	3.3	46.	71.6
%RSD	.18038	.14096	.19801	1.0540
#1	5579.9	2330.6	23411.	6793.0
#2	5575.2	2332.9	23325.	6862.0
#3	5560.6	2326.4	23397.	6718.8

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 10:19:54 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2482	41.39	2.043	2.065	2.114	42.18	2.040	1.997	2.061
Stddev	.0011	.17	.002	.005	.012	.23	.001	.001	.003
%RSD	.4519	.4066	.1016	.2604	.5708	.5377	.0645	.0564	.1536
#1	.2478	41.59	2.041	2.071	2.128	42.42	2.039	1.997	2.057
#2	.2474	41.30	2.045	2.066	2.111	42.12	2.041	1.998	2.062
#3	.2495	41.30	2.044	2.060	2.104	41.98	2.040	1.995	2.063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.025	41.32	41.94	41.91	2.094	2.042	42.05	2.023	2.070
Stddev	.004	.11	.23	.15	.004	.004	.26	.001	.002
%RSD	.1719	.2628	.5410	.3634	.1717	.1805	.6212	.0268	.1141
#1	2.022	41.42	42.18	41.99	2.097	2.038	42.33	2.023	2.067
#2	2.024	41.20	41.94	42.01	2.096	2.045	42.00	2.023	2.072
#3	2.029	41.33	41.72	41.74	2.090	2.044	41.82	2.022	2.069
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.031	1.999	1.972	2.062	2.136	2.106	2.060	2.128	2.058
Stddev	.001	.005	.005	.003	.013	.006	.007	.005	.003
%RSD	.0328	.2428	.2573	.1203	.6192	.3035	.3402	.2552	.1277
#1	2.030	1.994	1.973	2.060	2.151	2.113	2.059	2.133	2.056
#2	2.031	1.997	1.967	2.065	2.132	2.105	2.067	2.129	2.061
#3	2.031	2.004	1.977	2.060	2.126	2.101	2.053	2.123	2.056
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 10:19:54 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5648.6	2282.5	23324.	6689.3
Stddev	8.8	5.6	78.	50.6
%RSD	.15516	.24391	.33233	.75629
#1	5652.5	2286.9	23413.	6719.0
#2	5638.6	2276.2	23283.	6630.9
#3	5654.8	2284.3	23276.	6718.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 10:24:05 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	-.0159	.0003	.0001	.0001	.0026	.0001	.0002
Stddev	.0007	.0144	.0019	.0001	.0000	.0007	.0001	.0002
%RSD	483.6	90.75	567.1	48.13	40.20	25.97	116.7	128.4
#1	.0006	-.0042	.0020	.0002	.0001	.0033	.0001	.0004
#2	-.0005	-.0320	.0008	.0001	.0001	.0025	.0000	.0002
#3	-.0005	-.0115	-.0018	.0001	.0000	.0020	.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0003	.0080	-.0596	.0126	.0001	.0005	.0105
Stddev	.0006	.0004	.0001	.0259	.0206	.0001	.0001	.0060
%RSD	1345.	140.8	1.573	43.44	163.1	69.38	28.27	56.92
#1	.0000	-.0001	.0081	-.0535	.0308	.0000	.0005	.0164
#2	-.0005	.0002	.0079	-.0880	.0168	.0001	.0007	.0105
#3	.0006	.0007	.0081	-.0373	-.0097	.0001	.0004	.0045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	F -.0016	-.0003	-.0004	.0016	.0000	.0001	.0011
Stddev	.0004	.0016	.0021	.0023	.0007	.0002	.0000	.0002
%RSD	297.0	99.94	625.3	540.2	43.70	620.5	38.54	16.10
#1	-.0002	.0002	.0000	-.0002	.0020	.0003	.0001	.0010
#2	-.0005	-.0023	.0016	-.0028	.0008	.0000	.0001	.0010
#3	.0003	-.0027	-.0026	.0018	.0020	-.0002	.0001	.0013
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010						
Low Limit		-.0010						

Zoom In
Zoom Out

Sample Name: CCB Acquired: 12/20/2018 10:24:05 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0013	.0003	.0000
Stddev	.0014	.0001	.0001
%RSD	111.1	31.66	401.9
#1	.0027	.0004	.0001
#2	.0013	.0002	.0001
#3	-.0001	.0004	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5631.8	2351.9	23515.	6845.8
Stddev	1.6	4.3	72.	74.3
%RSD	.02841	.18494	.30799	1.0857
#1	5633.6	2355.7	23597.	6909.5
#2	5630.6	2347.2	23489.	6863.7
#3	5631.1	2352.7	23459.	6764.1

Zoom In
Zoom Out

Sample Name: FA60266-1 Acquired: 12/20/2018 10:28:31 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	-.0079	-.0012	.0365	.0000	135.9	.0001	-.0002	.0004
Stddev	.0003	.0095	.0007	.0002	.0000	.9	.0002	.0003	.0004
%RSD	292.4	120.5	54.89	.6045	88.69	.6754	315.3	174.5	84.26
#1	.0000	-.0024	-.0006	.0363	.0001	134.9	-.0001	-.0003	.0003
#2	-.0001	-.0188	-.0019	.0364	.0000	136.1	.0002	.0002	.0008
#3	.0004	-.0024	-.0011	.0368	.0001	136.7	.0001	-.0004	.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0006	.7381	15.48	38.10	.0182	.0178	F 447.7	.0000	-.0029
Stddev	.0003	.0075	.14	.24	.0001	.0002	6.4	.0001	.0011
%RSD	54.57	1.023	.9242	.6207	.5152	1.358	1.432	148.9	38.83
#1	-.0008	.7302	15.34	37.83	.0182	.0178	445.3	.0000	-.0021
#2	-.0007	.7452	15.45	38.27	.0183	.0176	442.9	.0001	-.0023
#3	-.0002	.7390	15.63	38.19	.0182	.0181	455.0	.0001	-.0042

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0007	-.0011	6.159	.0004	.9038	.0029	-.0059	.0001	.0048
Stddev	.0013	.0042	.016	.0009	.0050	.0001	.0007	.0005	.0001
%RSD	188.7	380.9	.2646	215.5	.5503	4.966	11.03	509.3	2.529
#1	.0008	.0027	6.172	-.0004	.9002	.0030	-.0063	.0004	.0048
#2	-.0018	-.0004	6.165	.0003	.9017	.0027	-.0064	-.0004	.0050
#3	-.0012	-.0056	6.141	.0013	.9095	.0029	-.0052	.0003	.0047

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5758.1	2327.1	23796.	6571.8
Stddev	13.7	4.1	34.	42.5
%RSD	.23843	.17517	.14231	.64606
#1	5772.4	2322.4	23767.	6617.8
#2	5756.8	2329.8	23786.	6563.5
#3	5745.1	2329.1	23833.	6534.1

Zoom In
Zoom Out

Sample Name: FA60267-1 Acquired: 12/20/2018 10:33:02 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0007	.0081	.0002	.0566	-.0001	48.54	-.0002	.0002	.0017
Stddev	.0002	.0146	.0013	.0003	.0000	.26	.0001	.0003	.0002
%RSD	25.14	181.0	689.9	.5551	40.02	.5331	44.56	161.8	14.35
#1	-.0009	-.0021	-.0013	.0565	-.0001	48.25	-.0001	-.0001	.0016
#2	-.0007	.0015	.0008	.0570	-.0001	48.73	-.0002	.0003	.0020
#3	-.0006	.0248	.0011	.0564	.0000	48.65	-.0002	.0003	.0015

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0028	.3243	2.728	2.438	.0139	.0044	5.168	.0010	-.0017
Stddev	.0004	.0067	.011	.036	.0001	.0003	.021	.0000	.0017
%RSD	12.66	2.066	.3954	1.490	.7926	6.083	.4134	3.303	101.9
#1	.0031	.3179	2.718	2.473	.0139	.0042	5.171	.0010	-.0030
#2	.0024	.3312	2.739	2.442	.0137	.0044	5.189	.0010	.0003
#3	.0028	.3238	2.727	2.400	.0140	.0047	5.146	.0010	-.0024

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0014	.0005	.7424	.0008	.1428	.0027	-.0074	.0000	.0083
Stddev	.0029	.0017	.0002	.0001	.0011	.0003	.0034	.000	.0002
%RSD	202.3	346.4	.0291	6.759	.7468	11.62	45.55	41420.	1.971
#1	.0017	.0024	.7427	.0008	.1417	.0027	-.0040	.0000	.0081
#2	-.0040	-.0008	.7424	.0008	.1439	.0025	-.0108	.0003	.0084
#3	-.0020	-.0001	.7423	.0007	.1428	.0031	-.0075	-.0003	.0083

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5579.9	2319.3	23554.	6711.0
Stddev	13.8	6.2	178.	49.1
%RSD	.24705	.26813	.75598	.73116
#1	5595.3	2325.4	23388.	6654.4
#2	5568.7	2313.0	23742.	6739.3
#3	5575.7	2319.5	23533.	6739.4

Zoom In
Zoom Out

Sample Name: FA60267-2 Acquired: 12/20/2018 10:37:26 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0009	.2186	.0008	.0749	.0000	51.45	.0015	.0017	.0027
Stddev	.0007	.0122	.0007	.0001	.000	.22	.0001	.0000	.0001
%RSD	82.22	5.564	78.61	.1369	178.1	.4252	5.637	2.128	3.191
#1	-.0002	.2077	.0001	.0750	.0000	51.32	.0015	.0017	.0026
#2	-.0008	.2317	.0014	.0748	.0000	51.33	.0014	.0017	.0027
#3	-.0016	.2164	.0010	.0748	-.0001	51.70	.0016	.0017	.0027

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0432	1.672	9.421	1.850	.2827	.0112	15.28	.0076	.0284
Stddev	.0005	.012	.027	.015	.0003	.0003	.04	.0006	.0028
%RSD	1.266	.7016	.2891	.8344	.0887	2.939	.2517	7.479	10.00
#1	.0439	1.668	9.398	1.863	.2826	.0113	15.25	.0075	.0277
#2	.0429	1.663	9.451	1.833	.2830	.0109	15.26	.0082	.0315
#3	.0430	1.685	9.413	1.855	.2825	.0115	15.32	.0071	.0260

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0022	.0005	1.203	.0008	.1803	.0076	-.0064	.0002	.3621
Stddev	.0025	.0033	.002	.0001	.0001	.0002	.0019	.0001	.0011
%RSD	110.0	633.7	.1227	7.443	.0363	2.222	29.52	56.31	.3035
#1	-.0001	.0034	1.201	.0008	.1803	.0076	-.0062	.0001	.3613
#2	.0048	-.0031	1.203	.0009	.1804	.0078	-.0046	.0004	.3634
#3	.0020	.0013	1.204	.0009	.1803	.0074	-.0083	.0003	.3617

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5597.4	2321.3	23535.	6848.0
Stddev	9.2	10.1	95.	34.0
%RSD	.16472	.43398	.40421	.49667
#1	5606.0	2332.1	23520.	6817.0
#2	5587.7	2312.2	23637.	6884.4
#3	5598.4	2319.5	23448.	6842.7

Zoom In Zoom Out

Sample Name: FA60133-1 Acquired: 12/20/2018 10:41:46 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0006	.5814	-.0004	.1103	.0000	116.0	.0001	.0003	.0024
Stddev	.0003	.0156	.0014	.0003	.000	.6	.0001	.0000	.0001
%RSD	56.17	2.691	344.2	.2373	773.8	.5071	83.09	14.11	3.005
#1	-.0007	.5976	.0009	.1102	.0000	116.4	.0003	.0003	.0024
#2	-.0007	.5803	-.0003	.1101	.0000	115.3	.0001	.0004	.0023
#3	-.0002	.5664	-.0018	.1106	-.0001	116.3	.0001	.0003	.0025

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0039	.5665	1.652	66.73	.0380	.0026	F 92.48	.0030	-.0009
Stddev	.0005	.0090	.022	.39	.0001	.0002	.37	.0002	.0017
%RSD	11.70	1.593	1.312	.5773	.1875	9.038	.4024	7.893	191.0
#1	.0038	.5716	1.629	66.91	.0379	.0027	92.74	.0028	-.0002
#2	.0044	.5561	1.654	66.29	.0380	.0024	92.06	.0031	.0003
#3	.0035	.5719	1.672	67.00	.0380	.0028	92.65	.0032	-.0028

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0013	.0016	8.635	.0003	.8177	.0385	-.0039	.0053	.0137
Stddev	.0028	.0048	.017	.0009	.0044	.0004	.0065	.0004	.0001
%RSD	221.0	304.5	.1978	340.3	.5354	.9409	164.1	7.112	.9891
#1	-.0007	.0005	8.620	-.0007	.8224	.0385	.0016	.0054	.0136
#2	-.0043	-.0026	8.653	.0010	.8137	.0381	-.0024	.0049	.0136
#3	.0012	.0068	8.632	.0004	.8170	.0389	-.0111	.0056	.0138

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5613.5	2313.4	23512.	6586.0
Stddev	4.3	2.7	152.	61.0
%RSD	.07695	.11694	.64623	.92568
#1	5613.5	2314.6	23683.	6641.5
#2	5609.2	2310.3	23463.	6595.7
#3	5617.9	2315.3	23391.	6520.7

Zoom In Zoom Out

Sample Name: FA60219-1 Acquired: 12/20/2018 10:46:07 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	.5700	.0003	.0665	-.0001	65.67	.0007	.0028	.0034
Stddev	.0005	.0102	.0010	.0003	.0001	.35	.0001	.0000	.0005
%RSD	130.3	1.784	310.1	.4083	108.2	.5382	19.21	1.193	15.61
#1	-.0007	.5796	-.0003	.0663	-.0001	65.31	.0009	.0028	.0029
#2	-.0007	.5712	.0014	.0668	-.0001	66.02	.0006	.0027	.0039
#3	.0002	.5593	-.0002	.0663	.0000	65.67	.0006	.0028	.0035

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1022	1.314	8.589	4.196	.1736	.0158	19.35	.0109	.0251
Stddev	.0005	.004	.023	.025	.0004	.0004	.05	.0004	.0037
%RSD	.4738	.3100	.2689	.5898	.2063	2.439	.2775	3.623	14.68
#1	.1027	1.319	8.563	4.169	.1740	.0155	19.31	.0107	.0222
#2	.1022	1.313	8.595	4.217	.1733	.0162	19.41	.0107	.0292
#3	.1017	1.311	8.608	4.202	.1737	.0155	19.33	.0114	.0238

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0011	.0002	1.456	.0031	.2056	.0077	-.0070	.0013	.5800
Stddev	.0012	.0005	.004	.0001	.0005	.0001	.0024	.0001	.0007
%RSD	111.6	237.1	.2485	4.125	.2330	.8602	33.97	10.09	.1140
#1	.0000	-.0004	1.460	.0030	.2051	.0076	-.0051	.0015	.5796
#2	.0009	.0006	1.454	.0030	.2061	.0077	-.0096	.0013	.5807
#3	.0024	.0005	1.453	.0032	.2057	.0076	-.0062	.0012	.5796

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5639.1	2328.0	23535.	6821.3
Stddev	10.5	5.9	58.	63.6
%RSD	.18621	.25286	.24831	.93266
#1	5633.8	2327.3	23507.	6835.5
#2	5632.3	2322.5	23495.	6751.7
#3	5651.2	2334.3	23602.	6876.6

Zoom In Zoom Out

Sample Name: FA60219-2 Acquired: 12/20/2018 10:50:29 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0003	.4421	.0005	.0625	.0000	50.25	.0004	.0004	.0031
Stddev	.0010	.0026	.0012	.0004	.000	.25	.0000	.0003	.0005
%RSD	289.3	.5933	235.4	.6454	802.9	.4947	11.07	72.82	14.72
#1	.0000	.4392	.0019	.0622	.0000	50.16	.0004	.0003	.0029
#2	.0005	.4442	.0002	.0624	.0000	50.05	.0004	.0002	.0036
#3	-.0014	.4429	-.0005	.0630	-.0001	50.53	.0005	.0007	.0028

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0775	.8197	12.56	4.236	.0326	.0206	28.95	.0091	.0195
Stddev	.0005	.0021	.02	.015	.0001	.0005	.11	.0003	.0025
%RSD	.6680	.2620	.1602	.3501	.2232	2.268	.3868	3.134	12.67
#1	.0780	.8218	12.56	4.221	.0326	.0201	28.98	.0092	.0177
#2	.0769	.8200	12.54	4.251	.0326	.0209	28.83	.0088	.0186
#3	.0776	.8175	12.58	4.235	.0327	.0209	29.05	.0094	.0223

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0042	.0002	1.449	.0024	.2198	.0069	-.0095	.0021	.2315
Stddev	.0016	.0007	.004	.0006	.0009	.0005	.0040	.0003	.0004
%RSD	36.96	368.0	.2595	26.16	.3979	7.192	42.44	12.45	.1547
#1	.0025	-.0005	1.453	.0018	.2194	.0074	-.0049	.0023	.2319
#2	.0046	.0001	1.446	.0025	.2191	.0064	-.0114	.0018	.2315
#3	.0055	.0009	1.447	.0031	.2208	.0069	-.0123	.0020	.2312

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5622.2	2332.4	23585.	6766.7
Stddev	9.6	6.9	79.	17.5
%RSD	.17121	.29467	.33703	.25794
#1	5612.4	2325.1	23573.	6755.3
#2	5622.5	2333.4	23670.	6786.8
#3	5631.7	2338.7	23513.	6758.0

Zoom In Zoom Out

Sample Name: FA60250-1 Acquired: 12/20/2018 10:54:51 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	.0388	.0372	.0039	.0000	6.402	-.0001	.0002	.0260
Stddev	.0004	.0038	.0004	.0002	.000	.027	.0001	.0003	.0002
%RSD	75.40	9.698	1.037	4.498	173.8	.4248	153.5	126.3	.7452
#1	-.0006	.0426	.0369	.0037	.0000	6.429	-.0001	.0003	.0258
#2	-.0001	.0350	.0376	.0039	.0000	6.401	-.0002	-.0001	.0262
#3	-.0008	.0388	.0370	.0040	.0000	6.375	.0001	.0004	.0259

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0166	.0606	3.392	1.019	.0439	.0000	7.768	.0007	-.0023
Stddev	.0006	.0013	.052	.013	.0004	.000	.016	.0004	.0014
%RSD	3.507	2.203	1.539	1.267	.8450	1987.	.2016	49.62	59.95
#1	.0172	.0591	3.359	1.008	.0437	-.0001	7.772	.0011	-.0010
#2	.0164	.0612	3.452	1.017	.0437	-.0001	7.751	.0003	-.0022
#3	.0161	.0616	3.366	1.033	.0443	.0001	7.782	.0008	-.0037

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0005	-.0012	1.496	.0006	.0268	.0026	-.0088	.0013	.0189
Stddev	.0025	.0012	.002	.0006	.0000	.0001	.0076	.0002	.0001
%RSD	518.4	103.1	.1493	100.7	.1748	4.270	86.13	16.92	.4576
#1	-.0018	-.0022	1.494	.0013	.0268	.0025	-.0001	.0011	.0190
#2	-.0020	-.0013	1.498	.0007	.0268	.0027	-.0127	.0014	.0190
#3	.0024	.0001	1.495	.0000	.0269	.0027	-.0137	.0015	.0188

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5595.2	2328.7	23354.	6758.0
Stddev	11.9	5.0	98.	65.4
%RSD	.21328	.21548	.41806	.96736
#1	5582.2	2323.7	23448.	6704.0
#2	5597.7	2328.8	23362.	6739.3
#3	5605.6	2333.7	23254.	6830.7

Zoom In Zoom Out

Sample Name: FA60163-1F Acquired: 12/20/2018 10:59:15 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	-.0179	.0005	.0113	-.0001	378.2	.0001	.0007	.0029
Stddev	.0006	.0038	.0011	.0001	.0000	3.1	.0001	.0000	.0010
%RSD	450.6	20.95	216.8	.9658	80.06	.8071	52.43	4.492	34.35
#1	-.0008	-.0198	-.0008	.0114	.0000	375.9	.0002	.0007	.0027
#2	.0001	-.0204	.0011	.0112	-.0001	381.6	.0001	.0007	.0020
#3	.0003	-.0136	.0012	.0112	.0000	376.9	.0001	.0007	.0039

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0391	.0039	32.44	F 1394.	.0008	.0016	*****	.0053	-.0031
Stddev	.0004	.0029	.47	11.	.0001	.0007	-----	.0007	.0016
%RSD	1.049	74.84	1.440	.7727	9.853	47.08	-----	12.39	51.54
#1	.0390	.0010	32.85	1383.	.0008	.0010	-----	.0059	-.0047
#2	.0388	.0068	32.54	1396.	.0007	.0024	-----	.0053	-.0015
#3	.0396	.0038	31.93	1404.	.0008	.0013	-----	.0046	-.0029

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0001	.4735	3.731	-.0019	F 10.11	.0014	.0035	-.0005	.0191
Stddev	.0012	.0037	.004	.0006	.07	.0002	.0076	.0005	.0001
%RSD	1581.	.7780	.1181	31.15	.6783	10.93	221.5	98.83	.6745
#1	-.0004	.4693	3.727	-.0020	10.04	.0012	.0001	-.0007	.0192
#2	-.0008	.4761	3.731	-.0025	10.13	.0015	-.0019	.0001	.0190
#3	.0014	.4753	3.736	-.0013	10.17	.0014	.0122	-.0009	.0192

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5423.1	2096.7	21133.	5943.9
Stddev	23.0	7.4	73.	87.4
%RSD	.42458	.35074	.34641	1.4696
#1	5397.1	2088.3	21113.	6037.1
#2	5431.4	2099.4	21215.	5930.5
#3	5440.8	2102.2	21073.	5864.0

Zoom In Zoom Out

Sample Name: FA60163-4F Acquired: 12/20/2018 11:03:58 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0007	-.0259	.0003	.0124	-.0001	410.5	.0001	-.0002
Stddev	.0002	.0067	.0007	.0001	.0000	5.0	.0001	.0002
%RSD	28.95	25.80	210.4	.9681	69.92	1.219	46.87	85.64
#1	-.0005	-.0329	-.0001	.0125	.0000	414.9	.0001	-.0004
#2	-.0010	-.0254	.0011	.0123	-.0001	411.6	.0002	-.0002
#3	-.0007	-.0195	-.0001	.0124	-.0001	405.1	.0001	.0000

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0008	.0046	.0009	22.12	492.4	.0004	.0019	F 1588.
Stddev	.0004	.0004	.0018	.07	1.2	.0000	.0000	4.
%RSD	46.85	8.003	196.7	.3021	.2530	12.24	2.262	.2830
#1	.0005	.0049	.0000	22.16	493.7	.0004	.0018	1593.
#2	.0007	.0048	.0030	22.15	492.3	.0003	.0019	1584.
#3	.0013	.0042	-.0003	22.04	491.2	.0004	.0019	1586.

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0031	F -.0066	-.0003	.0439	3.744	-.0009	F 9.610	.0014
Stddev	.0001	.0006	.0009	.0018	.006	.0005	.044	.0002
%RSD	2.000	9.679	319.3	4.130	.1552	60.01	.4584	11.27
#1	.0031	-.0065	.0006	.0447	3.741	-.0009	9.580	.0015
#2	.0031	-.0060	-.0012	.0418	3.740	-.0013	9.660	.0016
#3	.0030	-.0072	-.0002	.0451	3.750	-.0003	9.588	.0013

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0039	.0000	.0095
Stddev	.0024	.001	.0001
%RSD	61.17	2296.	1.095
#1	-.0037	-.0005	.0095
#2	-.0016	.0001	.0096
#3	-.0063	.0004	.0094

Zoom In Zoom Out

Sample Name: FA60163-4F Acquired: 12/20/2018 11:03:58 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5620.7	2211.9	22625.	6303.4
Stddev	13.1	3.4	43.	64.1
%RSD	.23378	.15238	.19120	1.0162
#1	5626.5	2213.3	22653.	6235.0
#2	5605.7	2208.1	22576.	6313.5
#3	5630.0	2214.4	22648.	6361.9

Zoom In Zoom Out

Sample Name: FA60163-6F Acquired: 12/20/2018 11:08:48 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0002	-.0305	.0002	.0088	-.0001	444.7	.0000	.0012	-.0003
Stddev	.0010	.0185	.0003	.0001	.0000	5.7	.0001	.0003	.0007
%RSD	404.6	60.79	171.7	1.581	21.38	1.282	1083.	21.92	198.9
#1	.0009	-.0118	-.0001	.0088	-.0001	438.6	.0000	.0013	-.0011
#2	-.0008	-.0308	.0005	.0090	-.0001	449.9	-.0001	.0014	-.0001
#3	-.0009	-.0489	.0001	.0087	-.0001	445.5	.0001	.0009	.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0007	.0017	23.18	F 683.6	.4867	.0000	F 1262.	.0162	-.0047
Stddev	.0007	.0012	.01	4.0	.0020	.0007	17.	.0003	.0015
%RSD	93.57	70.53	.0419	.5855	.4022	2174.	1.314	1.967	31.96
#1	.0014	.0013	23.17	682.8	.4867	-.0001	1249.	.0166	-.0039
#2	.0000	.0031	23.19	687.9	.4887	-.0006	1280.	.0160	-.0064
#3	.0008	.0008	23.18	680.0	.4848	.0007	1255.	.0160	-.0038

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0000	.0029	3.847	-.0002	F 12.80	.0016	-.0036	-.0004	.0117
Stddev	.004	.0026	.006	.0006	.07	.0002	.0045	.0002	.0001
%RSD	8101.	91.55	.1667	230.4	.5352	14.26	126.0	58.06	1.097
#1	-.0022	.0011	3.855	-.0008	12.76	.0018	-.0072	-.0006	.0118
#2	-.0020	.0016	3.845	-.0002	12.88	.0013	.0014	-.0005	.0116
#3	.0040	.0059	3.842	.0003	12.76	.0016	-.0049	-.0001	.0118

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5574.3	2201.0	22494.	6284.2
Stddev	6.9	5.0	72.	36.4
%RSD	.12467	.22792	.31934	.57945
#1	5579.3	2200.0	22521.	6322.1
#2	5566.4	2196.6	22413.	6249.5
#3	5577.2	2206.5	22548.	6280.8

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 11:13:35 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2490	41.57	2.053	2.096	2.123	42.24	2.053	1.990	2.047
Stddev	.0012	.18	.005	.008	.014	.31	.005	.003	.005
%RSD	.4892	.4420	.2425	.3866	.6364	.7408	.2352	.1308	.2388
#1	.2503	41.66	2.055	2.097	2.134	42.51	2.049	1.987	2.050
#2	.2479	41.36	2.056	2.087	2.108	41.90	2.058	1.992	2.049
#3	.2489	41.69	2.047	2.104	2.126	42.31	2.053	1.990	2.041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.023	40.98	42.31	41.82	2.106	2.034	42.09	2.029	2.083
Stddev	.013	.21	.21	.29	.010	.002	.20	.003	.001
%RSD	.6271	.5206	.4933	.7034	.4552	.0983	.4822	.1599	.0649
#1	2.038	41.09	42.43	42.11	2.115	2.031	42.27	2.026	2.085
#2	2.018	40.73	42.06	41.52	2.108	2.035	41.87	2.032	2.084
#3	2.014	41.11	42.42	41.82	2.096	2.034	42.13	2.030	2.082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.049	1.988	1.991	2.068	2.161	2.118	2.077	2.128	2.056
Stddev	.001	.001	.004	.003	.009	.011	.007	.015	.003
%RSD	.0448	.0472	.1957	.1505	.3940	.5008	.3380	.6810	.1627
#1	2.050	1.987	1.988	2.065	2.167	2.129	2.069	2.143	2.052
#2	2.048	1.989	1.996	2.072	2.151	2.119	2.079	2.126	2.058
#3	2.048	1.987	1.990	2.068	2.165	2.107	2.083	2.114	2.057
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 11:13:35 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5661.7	2295.8	23425.	6713.1
Stddev	12.0	4.3	126.	90.3
%RSD	.21190	.18870	.53667	1.3458
#1	5660.0	2300.6	23359.	6618.6
#2	5674.5	2292.3	23345.	6798.6
#3	5650.7	2294.3	23570.	6722.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 11:17:46 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	-.0005	.0005	.0002	.0000	.0056	.0000	.0003
Stddev	.0007	.0064	.0009	.0002	.0000	.0021	.000	.0002
%RSD	212.6	1190.	191.9	88.85	987.6	36.77	584.2	70.75
#1	-.0002	-.0072	-.0005	.0004	.0000	.0040	.0000	.0002
#2	-.0011	.0000	.0008	.0001	.0001	.0079	.0000	.0006
#3	.0003	.0056	.0011	.0001	.0000	.0050	-.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0006	.0077	-.0616	.0189	.0001	.0007	.1899
Stddev	.0002	.0005	.0019	.0143	.0142	.0001	.0003	.0013
%RSD	73.98	73.31	24.69	23.29	75.01	45.32	42.39	.7038
#1	.0005	-.0002	.0099	-.0498	.0027	.0001	.0010	.1906
#2	.0001	-.0005	.0064	-.0776	.0290	.0002	.0005	.1883
#3	.0002	-.0011	.0068	-.0574	.0249	.0001	.0005	.1907
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	F -.0015	-.0013	-.0013	.0008	-.0003	.0002	.0009
Stddev	.0003	.0007	.0036	.0024	.0008	.0003	.0001	.0001
%RSD	184.6	44.19	273.1	183.7	94.25	115.6	40.49	16.67
#1	.0004	-.0010	-.0009	-.0027	.0008	-.0003	.0001	.0010
#2	.0003	-.0023	.0020	-.0027	.0016	.0001	.0003	.0007
#3	-.0002	-.0012	-.0051	.0015	.0001	-.0006	.0003	.0009
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010						
Low Limit		-.0010						

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 11:17:46 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F .0038	-.0001	-.0001
Stddev	.0062	.0005	.0002
%RSD	162.1	814.0	170.1
#1	.0086	.0003	.0000
#2	.0059	-.0006	.0000
#3	-.0031	.0001	-.0003
Check ?	Chk Fail	Chk Pass	Chk Pass
High Limit	.0020		
Low Limit	-.0020		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5622.1	2356.7	23523.	6723.1
Stddev	6.3	8.9	116.	45.1
%RSD	.11294	.37975	.49130	.67109
#1	5615.6	2346.8	23493.	6677.1
#2	5622.4	2359.4	23426.	6724.9
#3	5628.3	2364.1	23651.	6767.3

Zoom In Zoom Out

Sample Name: FA60163-8F Acquired: 12/20/2018 11:22:14 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	-.0038	-.0008	.0109	.0000	49.22	.0000	.0001	.0007
Stddev	.0002	.0150	.0005	.0001	.000	.45	.000	.0001	.0000
%RSD	88.43	394.0	71.58	1.323	325.2	.9182	56.14	142.4	6.663
#1	.0004	.0077	-.0006	.0110	-.0001	49.50	.0000	.0002	.0008
#2	.0000	-.0207	-.0003	.0107	.0000	48.70	.0000	.0000	.0007
#3	.0003	.0016	-.0014	.0110	.0001	49.46	-.0001	.0001	.0007

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0017	.0099	8.160	24.26	.1247	.0008	F 1621.	.0024	-.0007
Stddev	.0004	.0035	.080	.26	.0006	.0003	24.	.0004	.0015
%RSD	23.83	35.18	.9774	1.052	.5210	38.51	1.488	17.52	206.8
#1	.0021	.0129	8.210	24.50	.1248	.0010	1633.	.0028	-.0019
#2	.0014	.0106	8.068	23.99	.1252	.0008	1593.	.0019	-.0012
#3	.0015	.0061	8.202	24.28	.1239	.0005	1636.	.0024	.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0012	-.0003	3.513	-.0001	3.364	.0023	-.0006	.0005	.0038
Stddev	.0025	.0021	.009	.0007	.032	.0001	.0016	.0003	.0000
%RSD	209.2	692.0	.2665	609.0	.9590	5.167	243.0	64.75	.4204
#1	.0016	-.0008	3.505	.0003	3.401	.0023	.0010	.0008	.0038
#2	-.0029	.0020	3.510	-.0009	3.348	.0022	-.0008	.0004	.0038
#3	-.0023	-.0021	3.523	.0002	3.343	.0024	-.0021	.0002	.0038

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5874.8	2351.5	23359.	6383.2
Stddev	21.5	7.1	141.	73.3
%RSD	.36577	.30359	.60312	1.1478
#1	5895.8	2359.2	23363.	6313.2
#2	5852.8	2345.1	23216.	6459.3
#3	5875.9	2350.2	23498.	6377.0

Zoom In Zoom Out

Sample Name: FA60343-1 Acquired: 12/20/2018 11:26:54 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0007	-.0106	.0083	.0310	-.0001	76.83	.0000	-.0003	.0024
Stddev	.0006	.0239	.0011	.0004	.0001	.90	.0001	.0004	.0003
%RSD	95.05	224.2	12.96	1.149	187.6	1.168	168.7	144.3	14.63
#1	-.0001	-.0310	.0074	.0307	.0000	76.10	.0001	.0001	.0020
#2	-.0005	.0156	.0095	.0308	.0000	76.54	.0001	-.0006	.0027
#3	-.0014	-.0165	.0081	.0314	-.0002	77.83	.0000	-.0003	.0024

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0025	.0414	16.16	82.46	.0006	.0060	F 108.5	.0009	-.0009
Stddev	.0003	.0009	.11	1.07	.0001	.0002	1.3	.0003	.0015
%RSD	13.23	2.081	.7097	1.300	14.93	2.896	1.167	31.36	159.1
#1	.0022	.0418	16.12	81.76	.0006	.0062	107.6	.0009	-.0006
#2	.0026	.0404	16.06	81.92	.0005	.0061	108.0	.0012	-.0025
#3	.0029	.0419	16.29	83.69	.0007	.0058	109.9	.0006	.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0012	.0145	17.32	.0005	3.700	.0023	-.0087	.0540	.0195
Stddev	.0023	.0023	.04	.0007	.046	.0001	.0024	.0005	.0001
%RSD	193.9	15.52	.2315	121.7	1.231	3.847	27.35	.9822	.5763
#1	.0003	.0148	17.27	-.0001	3.650	.0024	-.0111	.0536	.0196
#2	-.0005	.0167	17.32	.0012	3.711	.0022	-.0088	.0546	.0193
#3	.0038	.0122	17.35	.0005	3.739	.0023	-.0063	.0538	.0195

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5586.9	2305.5	23440.	6496.3
Stddev	3.0	2.5	28.	57.8
%RSD	.05406	.10890	.11956	.88958
#1	5588.5	2307.4	23415.	6523.3
#2	5583.5	2306.5	23437.	6535.7
#3	5588.9	2302.7	23470.	6430.0

Zoom In Zoom Out

Sample Name: FA60343-1 Acquired: 12/20/2018 11:31:25 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	-.0320	.0061	.0332	-.0002	80.50	-.0001	-.0001	.0028
Stddev	.0004	.0211	.0041	.0005	.0002	.35	.0001	.0002	.0003
%RSD	586.8	66.08	67.99	1.446	126.6	.4317	159.3	341.4	9.591
#1	.0000	-.0562	.0097	.0333	-.0003	80.19	-.0001	.0001	.0026
#2	.0003	-.0177	.0016	.0337	.0001	80.43	-.0002	-.0003	.0026
#3	-.0005	-.0219	.0069	.0327	-.0002	80.88	.0001	.0000	.0031

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0016	.0432	16.56	86.96	.0008	.0046	114.2	.0015	-.0047
Stddev	.0004	.0067	.04	.57	.0001	.0004	.2	.0008	.0027
%RSD	26.50	15.61	.2124	.6522	6.925	8.642	.1348	54.56	57.95
#1	.0018	.0507	16.53	86.44	.0007	.0048	114.0	.0010	-.0035
#2	.0017	.0410	16.60	86.87	.0008	.0049	114.1	.0024	-.0027
#3	.0011	.0378	16.55	87.56	.0008	.0041	114.3	.0010	-.0078

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0027	.0090	17.57	.0004	3.993	.0034	-.0066	.0565	.0208
Stddev	.0043	.0027	.20	.0007	.004	.0002	.0041	.0004	.0003
%RSD	161.4	30.27	1.145	172.8	.1045	4.739	61.47	.7387	1.466
#1	-.0059	.0118	17.77	.0009	3.991	.0036	-.0099	.0563	.0204
#2	.0022	.0064	17.57	.0007	3.998	.0035	-.0021	.0570	.0208
#3	-.0042	.0086	17.37	-.0004	3.990	.0033	-.0079	.0563	.0211

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5624.6	2333.0	23415.	6533.8
Stddev	13.1	5.8	122.	78.1
%RSD	.23363	.24750	.51954	1.1956
#1	5609.8	2329.4	23333.	6604.4
#2	5629.3	2330.0	23555.	6547.1
#3	5634.8	2339.7	23357.	6449.9

Zoom In Zoom Out

Sample Name: FA60343-2 Acquired: 12/20/2018 11:35:48 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	-.0115	.0064	.0332	.0000	76.95	.0002	-.0003	.0007
Stddev	.0003	.0141	.0005	.0002	.000	.52	.0002	.0001	.0002
%RSD	68.55	122.8	8.152	.6565	108.1	.6731	87.88	37.14	28.71
#1	-.0003	-.0272	.0061	.0330	-.0001	76.51	.0000	-.0002	.0007
#2	-.0009	-.0001	.0061	.0334	-.0001	77.52	.0003	-.0004	.0009
#3	-.0003	-.0071	.0070	.0332	.0000	76.81	.0002	-.0002	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0025	.0014	16.01	81.91	.0034	.0010	F 108.2	.0005	.0008
Stddev	.0006	.0032	.10	.65	.0000	.0004	.6	.0002	.0003
%RSD	23.90	236.2	.6410	.7910	.7556	35.30	.5475	31.39	43.48
#1	.0032	-.0008	15.91	81.33	.0034	.0008	107.8	.0005	.0012
#2	.0024	.0051	16.11	82.61	.0034	.0009	108.9	.0007	.0005
#3	.0020	-.0002	16.00	81.80	.0034	.0014	107.9	.0004	.0006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0006	.0128	17.43	.0006	3.723	.0023	-.0068	.0074	.0089
Stddev	.0016	.0038	.02	.0003	.088	.0002	.0033	.0004	.0000
%RSD	265.2	29.83	.1173	53.99	2.358	7.982	49.09	5.141	.3426
#1	-.0007	.0155	17.45	.0010	3.702	.0021	-.0057	.0078	.0088
#2	.0011	.0084	17.44	.0006	3.819	.0024	-.0042	.0073	.0089
#3	-.0022	.0145	17.41	.0003	3.647	.0025	-.0106	.0071	.0089

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5619.2	2312.3	23592.	6615.8
Stddev	13.5	1.9	101.	57.1
%RSD	.24032	.08353	.42811	.86254
#1	5631.8	2314.1	23512.	6650.3
#2	5620.8	2312.5	23559.	6549.9
#3	5605.0	2310.3	23705.	6647.1

Zoom In Zoom Out

Sample Name: FA60343-2 Acquired: 12/20/2018 11:40:20 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0011	-.0394	.0066	.0333	-.0002	79.13	.0000	.0002	-.0002
Stddev	.0009	.0127	.0027	.0004	.0001	.52	.0004	.0007	.0002
%RSD	82.25	32.33	41.73	1.308	84.02	.6624	746.8	297.0	165.6
#1	-.0001	-.0461	.0064	.0338	-.0001	79.69	-.0003	.0003	-.0003
#2	-.0018	-.0473	.0039	.0331	-.0001	78.66	.0000	.0009	-.0003
#3	-.0015	-.0247	.0094	.0330	-.0003	79.04	.0004	-.0005	.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0017	-.0019	16.11	84.03	.0035	.0000	110.7	.0004	-.0016
Stddev	.0001	.0049	.13	.44	.0001	.0005	.8	.0005	.0033
%RSD	4.786	257.8	.7897	.5274	2.560	6208.	.7345	132.6	209.4
#1	.0016	-.0022	16.17	84.52	.0034	-.0004	111.5	.0001	-.0018
#2	.0017	.0031	15.96	83.66	.0036	.0000	109.9	.0001	-.0048
#3	.0017	-.0067	16.19	83.91	.0035	.0005	110.6	.0010	.0018

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0047	.0107	17.29	-.0004	3.869	.0032	-.0034	.0077	.0088
Stddev	.0012	.0025	.05	.0024	.022	.0002	.0050	.0004	.0001
%RSD	25.45	22.96	.2789	623.2	.5801	6.945	147.4	5.232	1.003
#1	-.0058	.0089	17.32	-.0028	3.893	.0034	-.0090	.0073	.0088
#2	-.0048	.0096	17.31	-.0003	3.848	.0031	-.0015	.0078	.0088
#3	-.0034	.0135	17.23	.0019	3.865	.0030	.0004	.0080	.0089

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5615.0	2326.0	23429.	6571.0
Stddev	16.1	13.0	50.	16.0
%RSD	.28633	.55834	.21158	.24369
#1	5626.7	2327.6	23474.	6556.5
#2	5596.6	2312.3	23436.	6568.4
#3	5621.5	2338.2	23375.	6588.2

Zoom In Zoom Out

Sample Name: FA60343-3 Acquired: 12/20/2018 11:44:44 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	-.0241	.0059	.0332	-.0001	78.58	.0001	-.0002	.0007
Stddev	.001	.0031	.0016	.0002	.0001	.74	.0001	.0001	.0006
%RSD	10090.	12.78	27.78	.5163	117.4	.9460	184.8	49.35	95.00
#1	.0012	-.0213	.0070	.0332	-.0001	78.26	.0000	-.0001	.0006
#2	-.0008	-.0234	.0040	.0331	.0000	78.06	.0001	-.0002	.0001
#3	-.0004	-.0274	.0068	.0334	-.0001	79.43	.0002	-.0003	.0013

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0003	.0159	16.26	83.61	.0036	.0002	F 109.5	.0005	.0012
Stddev	.0004	.0016	.09	.82	.0001	.0004	1.1	.0002	.0029
%RSD	130.3	10.19	.5673	.9762	2.769	153.3	.9725	35.79	240.2
#1	.0000	.0150	16.18	83.13	.0037	-.0002	108.9	.0004	.0007
#2	-.0008	.0149	16.23	83.15	.0036	.0004	108.8	.0004	.0043
#3	-.0002	.0178	16.36	84.56	.0035	.0006	110.7	.0007	-.0014

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0013	.0121	17.40	.0004	3.809	.0022	-.0070	.0026	.0123
Stddev	.0010	.0026	.02	.0007	.074	.0002	.0045	.0003	.0001
%RSD	72.52	21.85	.1001	174.7	1.956	8.435	64.54	12.46	.6062
#1	.0006	.0142	17.42	.0008	3.837	.0022	-.0078	.0026	.0123
#2	.0024	.0091	17.38	.0007	3.724	.0024	-.0111	.0023	.0124
#3	.0010	.0130	17.41	-.0004	3.865	.0020	-.0022	.0029	.0122

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5574.8	2303.4	23335.	6501.5
Stddev	13.1	3.6	164.	67.4
%RSD	.23441	.15418	.70333	1.0366
#1	5559.7	2299.5	23151.	6519.0
#2	5582.9	2304.3	23466.	6558.3
#3	5581.7	2306.4	23387.	6427.0

Zoom In Zoom Out

Sample Name: FA60343-3 Acquired: 12/20/2018 11:49:17 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0010	-.0338	.0038	.0348	-.0001	81.24	.0000	-.0002	.0004
Stddev	.0005	.0170	.0012	.0007	.0002	.54	.0003	.0001	.0002
%RSD	47.31	50.22	31.93	2.063	165.3	.6658	1898.	43.18	46.67
#1	-.0006	-.0177	.0052	.0341	.0000	80.99	.0002	-.0002	.0002
#2	-.0016	-.0322	.0028	.0347	.0000	80.87	-.0003	-.0001	.0005
#3	-.0009	-.0516	.0036	.0355	-.0004	81.86	.0001	-.0003	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0012	.0164	16.55	86.79	.0038	.0002	113.3	.0008	-.0017
Stddev	.0008	.0046	.09	.47	.0001	.0008	.6	.0005	.0013
%RSD	61.65	28.21	.5711	.5376	2.057	327.0	.5273	56.49	74.57
#1	-.0020	.0173	16.46	86.66	.0039	-.0002	113.4	.0003	-.0003
#2	-.0005	.0206	16.54	86.40	.0037	.0012	112.7	.0009	-.0022
#3	-.0013	.0114	16.65	87.31	.0037	-.0003	113.9	.0013	-.0027

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0027	.0127	17.35	-.0006	4.009	.0035	-.0098	.0024	.0120
Stddev	.0044	.0023	.14	.0015	.021	.0002	.0062	.0007	.0003
%RSD	163.6	17.97	.7800	266.4	.5353	5.773	62.71	29.50	2.531
#1	-.0014	.0136	17.50	-.0021	4.013	.0035	-.0154	.0026	.0120
#2	.0021	.0144	17.30	.0010	3.986	.0036	-.0032	.0030	.0123
#3	.0073	.0101	17.25	-.0006	4.029	.0032	-.0110	.0016	.0117

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5631.0	2335.0	23419.	6498.9
Stddev	5.4	3.2	144.	59.2
%RSD	.09586	.13676	.61671	.91169
#1	5633.2	2336.3	23293.	6557.5
#2	5624.9	2331.4	23577.	6500.1
#3	5635.0	2337.4	23386.	6439.0

Zoom In Zoom Out

Sample Name: FA60343-4 Acquired: 12/20/2018 11:53:40 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0003	-.0029	.0050	.0327	-.0001	77.51	.0001	.0000	.0007
Stddev	.0006	.0035	.0012	.0004	.0001	.28	.0001	.000	.0002
%RSD	215.3	121.0	23.64	1.138	88.80	.3666	80.52	82460.	30.01
#1	-.0009	.0007	.0037	.0323	-.0001	77.72	.0002	.0002	.0005
#2	.0003	-.0062	.0056	.0328	-.0001	77.64	.0001	-.0002	.0007
#3	-.0002	-.0032	.0058	.0330	.0000	77.19	.0000	.0000	.0010

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0160	-.0009	16.08	82.77	.0038	.0003	F 109.1	.0008	-.0013
Stddev	.0006	.0009	.07	.23	.0000	.0003	.5	.0005	.0016
%RSD	3.767	100.2	.4103	.2788	.5515	117.2	.4878	54.41	123.0
#1	.0162	-.0014	16.14	83.01	.0038	.0006	109.4	.0010	.0005
#2	.0166	-.0014	16.07	82.77	.0038	.0000	109.5	.0003	-.0019
#3	.0154	.0001	16.01	82.54	.0038	.0002	108.5	.0012	-.0025

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0012	.0011	17.16	.0006	3.692	.0023	-.0062	.0011	.0355
Stddev	.0012	.0011	.02	.0002	.083	.0001	.0065	.0006	.0001
%RSD	103.1	99.39	.1268	23.90	2.256	4.299	105.2	52.72	.3720
#1	-.0004	.0023	17.13	.0006	3.782	.0024	-.0128	.0017	.0356
#2	-.0026	.0010	17.16	.0008	3.676	.0022	-.0057	.0010	.0356
#3	-.0006	.0001	17.17	.0005	3.618	.0023	.0001	.0006	.0354

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5628.4	2315.7	23420.	6554.4
Stddev	19.2	9.2	174.	35.1
%RSD	.34180	.39861	.74202	.53607
#1	5629.3	2321.0	23238.	6528.8
#2	5608.7	2305.1	23439.	6594.5
#3	5647.2	2321.1	23584.	6540.0

Zoom In Zoom Out

Sample Name: FA60343-4 Acquired: 12/20/2018 11:58:12 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0017	-.0151	.0076	.0342	-.0001	79.60	-.0002	.0000	.0009
Stddev	.0006	.0273	.0023	.0002	.0002	.50	.0003	.0005	.0002
%RSD	33.43	180.3	30.93	.4465	177.2	.6300	126.2	1233.	16.64
#1	-.0011	-.0459	.0089	.0343	.0000	80.14	.0001	.0002	.0010
#2	-.0022	.0061	.0049	.0343	-.0003	79.50	-.0002	.0004	.0008
#3	-.0019	-.0056	.0090	.0341	.0000	79.15	-.0004	-.0005	.0010

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0139	-.0024	16.29	85.48	.0040	-.0007	112.1	.0009	-.0026
Stddev	.0003	.0051	.03	.56	.0002	.0007	.7	.0005	.0038
%RSD	2.320	212.7	.1616	.6519	5.191	104.4	.5850	54.22	144.9
#1	.0136	.0028	16.30	86.05	.0038	-.0013	112.8	.0005	-.0044
#2	.0143	-.0074	16.26	85.46	.0042	-.0008	112.2	.0008	.0017
#3	.0140	-.0027	16.31	84.94	.0041	.0001	111.5	.0015	-.0052

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0009	-.0016	17.35	.0012	3.918	.0033	-.0148	.0008	.0364
Stddev	.0023	.0047	.05	.0018	.027	.0005	.0067	.0000	.0000
%RSD	254.3	294.3	.2870	154.8	.6826	13.78	45.61	4.032	.0492
#1	.0022	-.0069	17.40	-.0009	3.945	.0038	-.0070	.0008	.0364
#2	-.0018	.0000	17.32	.0022	3.917	.0032	-.0191	.0008	.0364
#3	.0023	.0021	17.31	.0022	3.892	.0029	-.0182	.0009	.0364

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5617.7	2334.4	23436.	6537.3
Stddev	4.9	3.1	95.	52.7
%RSD	.08695	.13427	.40378	.80574
#1	5621.6	2332.6	23543.	6481.8
#2	5612.2	2332.6	23362.	6543.5
#3	5619.1	2338.0	23403.	6586.6

Zoom In Zoom Out

Sample Name: FA60343-5 Acquired: 12/20/2018 12:02:35 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	-.0026	.0076	.0325	.0000	76.80	.0001	-.0001	.0010
Stddev	.0004	.0023	.0002	.0002	.0000	.87	.0001	.0002	.0006
%RSD	75.16	90.57	2.818	.7223	407.1	1.129	180.3	193.4	58.57
#1	-.0001	-.0051	.0074	.0326	.0001	76.97	.0000	-.0003	.0007
#2	-.0008	-.0006	.0076	.0322	.0000	75.86	.0001	.0001	.0007
#3	-.0005	-.0020	.0078	.0327	.0000	77.57	.0001	-.0001	.0017

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0031	.0055	16.00	82.53	.0038	.0002	F 109.0	.0011	-.0002
Stddev	.0003	.0004	.14	.77	.0000	.0002	1.0	.0005	.0043
%RSD	9.721	7.994	.9011	.9299	1.307	106.3	.8947	44.00	1733.
#1	.0028	.0059	16.06	82.70	.0038	.0003	109.2	.0014	.0012
#2	.0034	.0055	15.83	81.68	.0038	.0002	108.0	.0013	.0032
#3	.0031	.0050	16.09	83.19	.0037	.0000	109.9	.0005	-.0051

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0013	.0003	17.10	.0007	3.757	.0021	-.0086	.0018	.0092
Stddev	.0019	.0028	.02	.0001	.016	.0002	.0024	.0001	.0000
%RSD	145.8	832.9	.1414	16.89	.4250	9.075	27.78	7.532	.2203
#1	-.0006	-.0018	17.12	.0007	3.751	.0021	-.0074	.0020	.0092
#2	.0002	.0034	17.09	.0006	3.775	.0024	-.0071	.0018	.0093
#3	-.0035	-.0006	17.08	.0008	3.744	.0020	-.0114	.0017	.0092

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5593.2	2313.7	23302.	6402.5
Stddev	2.8	4.7	88.	28.8
%RSD	.04923	.20380	.37652	.45044
#1	5590.2	2310.8	23370.	6373.9
#2	5593.6	2311.1	23332.	6431.6
#3	5595.7	2319.1	23203.	6402.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 12:07:08 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2493	41.98	2.067	2.103	2.144	42.82	2.064	1.997	2.063
Stddev	.0003	.12	.009	.004	.004	.16	.005	.004	.004
%RSD	.1291	.2881	.4326	.1776	.2072	.3829	.2560	.1737	.1897
#1	.2497	42.04	2.078	2.104	2.148	42.99	2.070	1.999	2.060
#2	.2491	42.05	2.062	2.098	2.140	42.83	2.060	1.993	2.063
#3	.2491	41.84	2.062	2.105	2.143	42.66	2.062	1.999	2.068
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.053	41.42	43.03	42.31	2.125	2.049	43.06	2.039	2.092
Stddev	.004	.07	.16	.13	.002	.004	.11	.004	.001
%RSD	.2062	.1668	.3753	.3092	.0784	.2170	.2438	.2117	.0631
#1	2.057	41.49	43.11	42.33	2.126	2.050	43.12	2.044	2.091
#2	2.049	41.36	43.14	42.42	2.126	2.044	43.12	2.036	2.093
#3	2.055	41.40	42.85	42.16	2.123	2.052	42.94	2.039	2.092
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.066	2.005	2.005	2.078	2.182	2.147	2.096	2.172	2.068
Stddev	.001	.005	.004	.004	.005	.002	.009	.008	.005
%RSD	.0701	.2681	.2187	.1864	.2462	.0940	.4243	.3684	.2652
#1	2.067	2.004	2.008	2.079	2.186	2.144	2.088	2.163	2.073
#2	2.067	2.000	2.000	2.074	2.176	2.148	2.106	2.175	2.062
#3	2.065	2.010	2.007	2.081	2.185	2.147	2.094	2.178	2.069
Check ? Value Range	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 12:07:08 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5683.4	2294.7	23344.	6602.8
Stddev	11.5	5.9	107.	66.6
%RSD	.20278	.25712	.46040	1.0082
#1	5682.0	2288.7	23468.	6580.1
#2	5672.6	2300.5	23285.	6550.6
#3	5695.5	2294.8	23278.	6677.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 12:11:18 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0067	.0004	.0003	.0001	.0032	-.0001	.0002
Stddev	.0009	.0176	.0004	.0002	.0000	.0013	.0001	.0001
%RSD	408.0	263.7	90.92	69.68	36.99	39.71	74.28	36.88
#1	-.0007	-.0038	.0007	.0005	.0001	.0042	.0000	.0003
#2	.0003	-.0256	.0006	.0001	.0001	.0037	-.0002	.0001
#3	.0012	.0093	.0000	.0004	.0001	.0018	-.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0007	.0109	-.0554	.0105	.0001	.0005	.0772
Stddev	.0001	.0003	.0005	.0282	.0150	.0001	.0006	.0111
%RSD	41.80	45.03	4.804	50.82	142.1	71.10	137.6	14.36
#1	.0002	-.0007	.0112	-.0371	-.0066	.0001	.0011	.0855
#2	.0001	-.0004	.0112	-.0413	.0169	.0001	.0004	.0815
#3	.0002	-.0011	.0103	-.0878	.0213	.0002	-.0001	.0646
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	F -.0020	F .0024	-.0008	.0011	.0004	.0002	.0012
Stddev	.0004	.0015	.0022	.0008	.0010	.0006	.0001	.0003
%RSD	175.0	75.49	90.50	104.5	87.07	154.5	33.62	24.18
#1	-.0001	-.0003	.0047	.0000	.0006	-.0003	.0002	.0011
#2	.0001	-.0024	.0003	-.0016	.0022	.0009	.0002	.0009
#3	-.0006	-.0032	.0023	-.0007	.0005	.0005	.0001	.0015
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010	.0020					
Low Limit		-.0010	-.0020					

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 12:11:18 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F -.0025	.0002	-.0001
Stddev	.0020	.0004	.0001
%RSD	82.39	214.8	70.84
#1	-.0001	.0005	-.0001
#2	-.0034	-.0003	.0000
#3	-.0039	.0004	-.0002
Check ?	Chk Fail	Chk Pass	Chk Pass
High Limit	.0020		
Low Limit	-.0020		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5626.0	2365.5	23447.	6701.4
Stddev	11.5	3.0	49.	28.5
%RSD	.20412	.12828	.21050	.42552
#1	5639.3	2368.8	23400.	6734.2
#2	5619.9	2362.9	23498.	6687.7
#3	5618.9	2364.9	23443.	6682.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 12:29:52 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2443	40.11	1.981	2.019	2.026	40.31	1.995	1.978	2.000
Stddev	.0022	.22	.003	.008	.014	.31	.003	.001	.009
%RSD	.9053	.5527	.1521	.3807	.6773	.7573	.1291	.0605	.4387
#1	.2458	40.06	1.981	2.018	2.028	40.27	1.993	1.978	2.009
#2	.2418	39.91	1.984	2.012	2.011	40.02	1.994	1.979	1.992
#3	.2454	40.35	1.978	2.027	2.038	40.63	1.998	1.976	1.999
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.974	40.43	39.93	40.28	2.028	1.999	40.11	1.986	2.008
Stddev	.002	.25	.35	.22	.009	.004	.31	.003	.002
%RSD	.1235	.6064	.8677	.5504	.4459	.1771	.7753	.1358	.1129
#1	1.975	40.28	40.01	40.21	2.038	2.001	40.15	1.986	2.005
#2	1.975	40.30	39.55	40.10	2.021	2.001	39.78	1.983	2.009
#3	1.971	40.71	40.23	40.52	2.024	1.995	40.40	1.988	2.009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.970	1.961	1.928	2.027	2.055	2.040	2.002	2.030	1.996
Stddev	.006	.004	.003	.001	.015	.005	.003	.015	.003
%RSD	.3126	.2114	.1501	.0352	.7035	.2567	.1424	.7180	.1420
#1	1.969	1.956	1.928	2.027	2.057	2.046	2.003	2.047	1.994
#2	1.964	1.963	1.926	2.027	2.040	2.037	2.005	2.021	1.995
#3	1.976	1.964	1.932	2.028	2.068	2.038	1.999	2.022	1.999
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 12:29:52 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5651.4	2300.1	23321.	6564.5
Stddev	15.7	4.8	107.	30.2
%RSD	.27857	.20882	.45678	.46034
#1	5647.4	2298.9	23199.	6577.7
#2	5668.7	2305.4	23393.	6586.0
#3	5638.0	2296.0	23371.	6530.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 12:34:56 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	-.0164	-.0009	.0000	.0001	.0031	.0000	.0002
Stddev	.0011	.0125	.0010	.0001	.0000	.0023	.0001	.0003
%RSD	170.8	76.49	101.7	460.6	33.06	74.61	327.7	114.7
#1	-.0010	-.0232	-.0018	.0000	.0001	.0054	.0001	.0006
#2	-.0015	-.0240	-.0011	-.0001	.0001	.0030	-.0001	.0002
#3	.0006	-.0019	.0001	.0002	.0001	.0008	.0002	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0006	.0111	.0573	.0178	.0001	F .0013	-.0194
Stddev	.0004	.0003	.0014	.0141	.0150	.0000	.0004	.0084
%RSD	328.5	53.77	12.74	24.68	84.22	11.37	30.18	43.35
#1	.0001	-.0010	.0120	.0734	.0222	.0001	.0017	-.0197
#2	-.0003	-.0003	.0094	.0470	.0301	.0001	.0013	-.0108
#3	.0006	-.0006	.0118	.0516	.0011	.0001	.0009	-.0276
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	F -.0014	.0013	-.0009	-.0010	-.0002	.0001	.0014
Stddev	.0003	.0010	.0017	.0015	.0010	.0004	.0000	.0002
%RSD	225.2	71.09	132.0	173.7	101.4	234.7	57.59	12.64
#1	.0002	-.0010	.0002	-.0022	-.0001	.0002	.0000	.0014
#2	.0005	-.0025	.0004	-.0013	-.0021	-.0006	.0001	.0012
#3	-.0002	-.0007	.0032	.0008	-.0008	-.0002	.0001	.0016
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010						
Low Limit		-.0010						

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 12:34:56 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0013	.0003	.0001
Stddev	.0026	.0003	.0000
%RSD	205.9	91.66	13.14
#1	.0011	.0006	.0001
#2	-.0013	.0004	.0001
#3	.0040	.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5564.7	2350.9	23438.	6540.9
Stddev	9.2	2.8	97.	78.7
%RSD	.16595	.11737	.41531	1.2029
#1	5574.6	2352.6	23517.	6625.0
#2	5556.3	2352.3	23329.	6528.4
#3	5563.1	2347.7	23469.	6469.1

Zoom In Zoom Out

Sample Name: FA60343-5 Acquired: 12/20/2018 12:38:42 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0015	-.0052	.0038	.0316	-.0001	72.63	.0003	.0000	.0002
Stddev	.0007	.0263	.0020	.0001	.0000	.09	.0002	.0002	.0005
%RSD	48.56	509.1	51.79	.2358	63.25	.1245	64.49	10170.	322.0
#1	-.0023	.0192	.0059	.0315	-.0001	72.68	.0003	-.0002	-.0002
#2	-.0013	-.0016	.0020	.0316	.0000	72.67	.0005	.0002	-.0001
#3	-.0009	-.0331	.0036	.0315	-.0001	72.52	.0001	.0000	.0007

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0040	.0118	14.86	79.62	.0038	.0013	101.7	.0006	.0030
Stddev	.0013	.0054	.07	.02	.0001	.0004	.1	.0002	.0035
%RSD	33.31	45.81	.4840	.0226	1.894	29.53	.1230	33.65	116.5
#1	.0033	.0102	14.94	79.61	.0039	.0015	101.8	.0004	.0045
#2	.0056	.0179	14.81	79.64	.0038	.0008	101.8	.0006	.0055
#3	.0032	.0074	14.83	79.61	.0037	.0015	101.6	.0008	-.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0003	.0030	16.49	.0010	3.570	.0051	-.0058	.0025	.0098
Stddev	.0024	.0052	.02	.0010	.003	.0003	.0039	.0016	.0002
%RSD	896.1	172.4	.1204	106.8	.0788	6.227	67.83	62.77	1.627
#1	.0013	-.0003	16.49	-.0002	3.568	.0054	-.0102	.0014	.0097
#2	.0010	.0004	16.52	.0017	3.573	.0048	-.0028	.0044	.0097
#3	-.0031	.0091	16.48	.0014	3.568	.0051	-.0043	.0018	.0099

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5661.4	2352.6	23693.	6543.4
Stddev	14.2	6.8	105.	19.1
%RSD	.25023	.29115	.44516	.29223
#1	5652.9	2349.0	23762.	6562.9
#2	5653.5	2348.3	23572.	6524.7
#3	5677.7	2360.5	23746.	6542.5

Zoom In Zoom Out

Sample Name: FA60343-6 Acquired: 12/20/2018 12:43:07 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	.0050	.0056	.0295	-.0001	65.64	.0002	.0001	.0014
Stddev	.0005	.0041	.0006	.0003	.0001	.28	.0002	.0002	.0002
%RSD	111.1	82.79	10.77	1.179	68.10	.4342	81.23	203.6	17.54
#1	-.0009	.0034	.0051	.0297	-.0001	65.40	.0001	.0003	.0013
#2	-.0005	.0018	.0063	.0291	-.0001	65.95	.0001	.0001	.0013
#3	.0001	.0096	.0056	.0298	.0000	65.56	.0004	-.0001	.0017

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0583	.0111	14.89	79.50	.0046	.0048	F 107.8	.0039	.0004
Stddev	.0006	.0011	.06	.38	.0001	.0003	.3	.0003	.0011
%RSD	.9686	9.542	.4201	.4782	1.189	5.998	.2616	6.826	249.2
#1	.0589	.0111	14.85	79.17	.0046	.0047	107.7	.0042	-.0007
#2	.0583	.0121	14.97	79.92	.0045	.0046	108.0	.0038	.0014
#3	.0577	.0100	14.87	79.41	.0046	.0051	107.5	.0037	.0006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0015	.0098	15.97	.0008	3.211	.0025	-.0085	.0322	.0194
Stddev	.0021	.0025	.03	.0005	.042	.0002	.0052	.0004	.0001
%RSD	134.7	25.24	.1916	63.26	1.322	8.210	61.12	1.235	.3864
#1	.0006	.0099	16.00	.0003	3.163	.0027	-.0029	.0323	.0194
#2	-.0018	.0123	15.94	.0013	3.231	.0023	-.0131	.0325	.0195
#3	-.0034	.0073	15.98	.0007	3.240	.0026	-.0094	.0317	.0194

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5621.4	2326.9	23497.	6428.3
Stddev	12.7	2.8	37.	40.4
%RSD	.22511	.12051	.15735	.62921
#1	5636.0	2330.1	23457.	6472.4
#2	5613.4	2325.0	23507.	6393.0
#3	5614.8	2325.6	23529.	6419.6

Zoom In Zoom Out

Sample Name: FA60343-6 Acquired: 12/20/2018 12:47:37 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0012	-.0136	.0034	.0302	-.0001	66.53	.0000	-.0003	.0019
Stddev	.0018	.0264	.0019	.0003	.0001	.52	.0002	.0002	.0009
%RSD	149.3	194.3	55.81	.9219	125.4	.7767	1148.	60.43	45.38
#1	-.0004	-.0151	.0018	.0304	.0000	67.12	.0002	-.0001	.0011
#2	-.0033	.0135	.0030	.0304	-.0001	66.25	.0000	-.0003	.0028
#3	.0001	-.0391	.0056	.0299	-.0001	66.20	-.0002	-.0005	.0018

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0569	.0087	14.96	81.28	.0047	.0037	109.3	.0039	-.0017
Stddev	.0008	.0035	.04	.42	.0001	.0001	.8	.0008	.0044
%RSD	1.328	39.57	.2555	.5110	1.948	3.886	.6888	20.26	252.1
#1	.0577	.0053	14.98	81.76	.0048	.0037	110.1	.0031	-.0067
#2	.0567	.0122	14.99	81.10	.0047	.0039	108.9	.0046	-.0002
#3	.0563	.0086	14.92	80.99	.0046	.0036	108.8	.0039	.0016

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0021	.0117	16.06	.0001	3.335	.0037	-.0063	.0335	.0206
Stddev	.0020	.0063	.06	.0001	.022	.0003	.0065	.0007	.0001
%RSD	99.49	53.62	.3842	125.7	.6585	8.217	102.2	2.210	.5610
#1	.0027	.0181	16.05	.0003	3.361	.0040	.0004	.0343	.0207
#2	-.0002	.0114	16.00	.0000	3.326	.0034	-.0068	.0329	.0205
#3	.0037	.0056	16.12	.0001	3.320	.0037	-.0126	.0332	.0206

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5623.4	2341.6	23513.	6467.8
Stddev	7.7	6.8	80.	39.5
%RSD	.13766	.28852	.34082	.61032
#1	5632.3	2347.1	23425.	6427.7
#2	5618.4	2343.6	23532.	6506.6
#3	5619.4	2334.0	23582.	6469.2

Zoom In Zoom Out

Sample Name: MP34829-MB1 Acquired: 12/20/2018 12:52:02 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	-.0014	-.0017	.0010	-.0001	.0092	.0000	-.0002
Stddev	.0002	.0029	.0010	.0003	.0001	.0012	.0001	.0002
%RSD	39.76	209.9	57.77	30.24	92.10	13.34	287.8	114.6
#1	-.0006	.0000	-.0020	.0007	.0000	.0080	.0001	-.0003
#2	-.0007	-.0047	-.0026	.0010	-.0001	.0093	.0000	-.0003
#3	-.0003	.0005	-.0006	.0013	-.0001	.0104	.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	-.0002	.1255	.0396	.0065	.0002	.0000	.0068
Stddev	.0003	.0005	.0019	.0304	.0059	.0001	.0002	.0023
%RSD	34.93	243.4	1.546	76.85	90.95	39.00	585.3	32.88
#1	.0012	.0001	.1235	.0518	-.0002	.0003	.0000	.0094
#2	.0008	-.0008	.1274	.0620	.0108	.0001	-.0001	.0058
#3	.0006	.0000	.1256	.0050	.0088	.0002	.0002	.0053
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	F -.0038	.0003	.0007	.0337	.0003	.0001	.0002
Stddev	.0001	.0019	.0003	.0034	.0016	.0001	.0001	.0001
%RSD	92.67	51.86	110.7	471.7	4.678	52.25	60.43	57.58
#1	.0002	-.0015	.0002	.0038	.0320	.0002	.0002	.0003
#2	.0001	-.0046	.0006	.0012	.0339	.0004	.0001	.0002
#3	.0000	-.0051	.0000	-.0029	.0352	.0002	.0001	.0001
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0025						
Low Limit		-.0025						

Zoom In Zoom Out

Sample Name: MP34829-MB1 Acquired: 12/20/2018 12:52:02 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F -.0054	-.0002	.0012
Stddev	.0004	.0001	.0001
%RSD	8.295	37.50	10.05
#1	-.0052	-.0001	.0012
#2	-.0051	-.0003	.0011
#3	-.0059	-.0002	.0013
Check ?	Chk Fail	Chk Pass	Chk Pass
High Limit	.0050		
Low Limit	-.0050		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5492.4	2316.5	23198.	6612.5
Stddev	14.5	5.4	65.	30.7
%RSD	.26332	.23448	.27909	.46462
#1	5477.5	2316.8	23143.	6643.8
#2	5493.2	2310.9	23183.	6582.4
#3	5506.4	2321.8	23269.	6611.3

Zoom In Zoom Out

Sample Name: MP34829-B1 Acquired: 12/20/2018 12:56:30 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0489	26.69	1.925	2.008	.0507	25.09	.0487	.4857	.2021
Stddev	.0014	.10	.003	.012	.0003	.13	.0001	.0007	.0008
%RSD	2.906	.3619	.1427	.5792	.5180	.5016	.3016	.1435	.3879
#1	.0474	26.78	1.927	2.019	.0510	25.23	.0487	.4857	.2024
#2	.0503	26.59	1.924	1.996	.0506	25.00	.0488	.4864	.2012
#3	.0490	26.69	1.922	2.009	.0506	25.03	.0485	.4850	.2026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2474	26.06	24.58	25.11	.5117	.4591	24.68	.4935	.4856
Stddev	.0006	.07	.10	.21	.0010	.0012	.12	.0005	.0015
%RSD	.2335	.2689	.4172	.8436	.2003	.2521	.4999	.1039	.3064
#1	.2480	26.14	24.68	25.35	.5107	.4593	24.80	.4938	.4867
#2	.2469	26.01	24.58	25.01	.5115	.4602	24.55	.4929	.4862
#3	.2473	26.03	24.48	24.97	.5128	.4579	24.68	.4937	.4839
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5051	1.886	.4895	.4846	.4936	.4985	2.021	.4786	.4936
Stddev	.0005	.001	.0002	.0007	.0022	.0010	.005	.0022	.0006
%RSD	.1032	.0684	.0395	.1463	.4368	.1996	.2276	.4499	.1140
#1	.5053	1.886	.4895	.4844	.4960	.4982	2.018	.4797	.4942
#2	.5055	1.885	.4898	.4841	.4919	.4977	2.019	.4761	.4931
#3	.5045	1.888	.4894	.4854	.4928	.4996	2.026	.4800	.4934
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP34829-B1 Acquired: 12/20/2018 12:56:30 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5579.3	2301.8	23161.	6584.0
Stddev	1.6	2.4	78.	80.9
%RSD	.02843	.10294	.33473	1.2290
#1	5577.9	2299.6	23148.	6490.8
#2	5581.1	2301.4	23244.	6625.4
#3	5578.9	2304.3	23091.	6635.8

Zoom In Zoom Out

Sample Name: FA60136-10 Acquired: 12/20/2018 13:00:42 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0004	.0661	-.0017	.0546	.0000	46.73	.0002	-.0001
Stddev	.0013	.0031	.0008	.0001	.000	.20	.0001	.0001
%RSD	298.8	4.645	44.81	.1609	490.8	.4353	50.53	153.2
#1	.0008	.0692	-.0009	.0547	.0000	46.56	.0003	-.0002
#2	-.0004	.0631	-.0025	.0546	.0000	46.68	.0001	-.0001
#3	-.0017	.0660	-.0018	.0546	-.0001	46.96	.0002	.0001

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0032	.0007	.0799	2.787	17.33	.0085	.0027	57.46
Stddev	.0005	.0003	.0018	.059	.15	.0002	.0002	.24
%RSD	15.17	34.44	2.232	2.113	.8760	2.114	8.812	.4237
#1	.0033	.0005	.0780	2.763	17.20	.0086	.0027	57.19
#2	.0026	.0007	.0815	2.854	17.29	.0083	.0025	57.51
#3	.0036	.0010	.0803	2.744	17.49	.0086	.0030	57.67

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0024	-.0008	-.0007	.0019	11.56	.0003	.3496	.0042
Stddev	.0004	.0020	.0020	.0016	.03	.0011	.0013	.0001
%RSD	15.09	243.2	280.3	86.94	.2919	408.4	.3807	1.766
#1	.0026	-.0031	-.0026	.0034	11.56	-.0004	.3482	.0043
#2	.0019	-.0004	-.0010	.0002	11.59	.0015	.3509	.0043
#3	.0025	.0009	.0014	.0020	11.52	-.0003	.3496	.0042

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F -.0105	.0014	.0554
Stddev	.0039	.0002	.0001
%RSD	37.41	13.63	.1892
#1	-.0124	.0015	.0555
#2	-.0130	.0014	.0554
#3	-.0060	.0012	.0553

Zoom In Zoom Out

Sample Name: FA60136-10 Acquired: 12/20/2018 13:00:42 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5590.7	2316.7	23404.	6483.1
Stddev	12.3	3.4	166.	75.0
%RSD	.22048	.14891	.70715	1.1566
#1	5599.2	2313.1	23344.	6506.3
#2	5596.4	2317.2	23591.	6543.7
#3	5576.6	2319.9	23277.	6399.2

Zoom In Zoom Out

Sample Name: MP34829-D1 Acquired: 12/20/2018 13:05:05 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0015	.0712	-.0030	.0541	.0000	45.53	.0002	.0001
Stddev	.0008	.0118	.0010	.0002	.000	.09	.0001	.0003
%RSD	49.16	16.58	32.78	.3754	213.0	.2057	43.01	480.0
#1	-.0015	.0667	-.0019	.0540	.0000	45.51	.0003	-.0003
#2	-.0008	.0846	-.0034	.0544	-.0001	45.45	.0002	.0003
#3	-.0023	.0623	-.0037	.0541	.0000	45.64	.0001	.0002

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0030	.0010	.0714	2.784	16.96	.0087	.0028	56.15
Stddev	.0001	.0006	.0019	.030	.07	.0000	.0003	.11
%RSD	3.238	64.47	2.649	1.087	.4137	.2135	9.595	.1987
#1	.0030	.0017	.0718	2.751	16.90	.0087	.0026	56.12
#2	.0029	.0004	.0693	2.810	16.95	.0087	.0027	56.05
#3	.0030	.0008	.0731	2.793	17.04	.0087	.0031	56.27

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0024	.0012	-.0005	.0034	11.57	.0004	.3425	.0040
Stddev	.0004	.0018	.0022	.0027	.02	.0004	.0002	.0002
%RSD	14.70	146.5	475.2	79.11	.1405	101.7	.0711	4.923
#1	.0025	.0029	-.0026	.0063	11.55	.0009	.3422	.0041
#2	.0027	.0014	-.0004	.0010	11.58	.0001	.3426	.0042
#3	.0020	-.0006	.0017	.0030	11.56	.0003	.3427	.0038

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F -.0119	.0019	.0572
Stddev	.0016	.0005	.0003
%RSD	13.69	26.29	.5613
#1	-.0124	.0013	.0569
#2	-.0101	.0020	.0575
#3	-.0132	.0022	.0570

Zoom In
Zoom Out

Sample Name: MP34829-D1 Acquired: 12/20/2018 13:05:05 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5585.8	2313.1	23381.	6561.9
Stddev	11.9	5.2	30.	33.5
%RSD	.21217	.22599	.12805	.51123
#1	5599.5	2318.7	23354.	6560.3
#2	5578.9	2308.4	23376.	6596.1
#3	5579.0	2312.4	23413.	6529.1

Zoom In
Zoom Out

Sample Name: MP34829-SD1 Acquired: 12/20/2018 13:09:29 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0005	.0764	-.0052	.0573	-.0001	47.75	.0003	.0002	.0039
Stddev	.0038	.0589	.0046	.0005	.0002	.09	.0001	.0012	.0006
%RSD	819.4	77.03	89.40	.9332	322.4	.1961	48.96	565.9	16.27
#1	-.0005	.1374	-.0024	.0570	-.0001	47.70	.0004	-.0009	.0031
#2	.0047	.0199	-.0027	.0579	-.0003	47.70	.0002	.0002	.0042
#3	-.0027	.0720	-.0105	.0569	.0002	47.86	.0002	.0014	.0042

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0023	.0799	2.974	18.10	.0090	.0030	58.77	.0024	-.0089
Stddev	.0007	.0183	.075	.09	.0001	.0003	.30	.0010	.0077
%RSD	29.32	22.95	2.531	.4922	1.193	9.187	.5122	40.46	86.90
#1	.0017	.0911	2.995	18.13	.0089	.0031	58.42	.0024	-.0118
#2	.0030	.0587	2.891	18.00	.0090	.0027	58.96	.0014	-.0001
#3	.0021	.0897	3.037	18.18	.0091	.0033	58.92	.0034	-.0148

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0023	.0061	11.85	.0019	.3628	.0051	-.0212	.0021	.0610
Stddev	.0054	.0050	.05	.0010	.0008	.0001	.0122	.0006	.0001
%RSD	237.0	82.49	.3991	50.84	.2289	2.245	57.77	29.83	.2085
#1	-.0076	.0059	11.90	.0018	.3619	.0049	-.0075	.0020	.0608
#2	-.0025	.0011	11.86	.0010	.3631	.0050	-.0250	.0015	.0611
#3	.0032	.0112	11.80	.0029	.3635	.0052	-.0310	.0027	.0611

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5680.3	2362.4	23688.	6602.5
Stddev	13.2	7.1	79.	10.4
%RSD	.23308	.30195	.33362	.15715
#1	5667.8	2357.3	23759.	6610.6
#2	5694.1	2370.6	23602.	6606.2
#3	5678.9	2359.4	23702.	6590.8

Zoom In
Zoom Out

Sample Name: MP34829-PS1 Acquired: 12/20/2018 13:13:56 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0480	2.471	.0966	.2998	.0493	50.47	.0473	.0466	.0523
Stddev	.0005	.038	.0005	.0013	.0003	.32	.0002	.0002	.0003
%RSD	.9462	1.542	.5677	.4315	.6317	.6430	.4584	.3851	.5565
#1	.0475	2.504	.0971	.3013	.0497	50.70	.0475	.0468	.0521
#2	.0483	2.429	.0968	.2990	.0492	50.10	.0472	.0465	.0523
#3	.0482	2.480	.0960	.2990	.0491	50.61	.0472	.0466	.0526

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0990	2.967	12.26	21.72	.0572	.0887	65.43	.0970	.0444
Stddev	.0000	.024	.02	.11	.0001	.0004	.39	.0004	.0016
%RSD	.0405	.8056	.1243	.4960	.2322	.4761	.6023	.3756	3.491
#1	.0990	2.984	12.27	21.85	.0573	.0885	65.80	.0972	.0461
#2	.0989	2.939	12.27	21.66	.0570	.0892	65.02	.0965	.0430
#3	.0990	2.976	12.24	21.66	.0572	.0884	65.48	.0971	.0442

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1015	.0910	11.48	.0463	.3908	.1002	.0877	.0492	.2902
Stddev	.0026	.0019	.03	.0004	.0019	.0003	.0049	.0002	.0004
%RSD	2.523	2.089	.2226	.9257	.4925	.3165	5.638	.4933	.1418
#1	.0986	.0931	11.50	.0461	.3930	.1004	.0934	.0490	.2904
#2	.1032	.0907	11.45	.0468	.3896	.1004	.0850	.0492	.2904
#3	.1029	.0893	11.47	.0459	.3898	.0998	.0847	.0494	.2897

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5577.8	2294.8	23319.	6571.4
Stddev	19.4	6.6	154.	44.9
%RSD	.34761	.28964	.66092	.68276
#1	5561.6	2288.6	23244.	6551.1
#2	5572.6	2293.9	23217.	6622.8
#3	5599.3	2301.8	23497.	6540.3

Zoom In
Zoom Out

Sample Name: MP34829-S1 Acquired: 12/20/2018 13:18:15 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0496	26.38	1.932	2.060	.0507	70.36	.0488	.4848	.2011
Stddev	.0013	.14	.006	.004	.0002	.47	.0001	.0015	.0007
%RSD	2.552	.5326	.3367	.1744	.4724	.6731	.1788	.3124	.3436
#1	.0507	26.36	1.929	2.056	.0508	70.45	.0488	.4838	.2006
#2	.0482	26.53	1.939	2.062	.0509	70.79	.0489	.4866	.2008
#3	.0498	26.25	1.927	2.061	.0504	69.85	.0488	.4841	.2019

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2558	25.47	27.20	41.44	.5175	.4560	F 80.96	.4956	.4841
Stddev	.0007	.13	.13	.17	.0004	.0010	.39	.0017	.0009
%RSD	.2834	.5152	.4635	.4183	.0862	.2252	.4825	.3506	.1871
#1	.2565	25.51	27.21	41.33	.5174	.4551	81.07	.4954	.4840
#2	.2550	25.58	27.32	41.64	.5180	.4571	81.29	.4974	.4851
#3	.2559	25.32	27.07	41.36	.5171	.4558	80.53	.4940	.4833

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5113	1.877	12.23	.4779	.8273	.4955	2.022	.4774	.5402
Stddev	.0035	.008	.04	.0015	.0046	.0009	.005	.0004	.0009
%RSD	.6918	.4379	.3053	.3123	.5584	.1892	.2392	.0878	.1595
#1	.5103	1.872	12.20	.4796	.8270	.4965	2.017	.4775	.5401
#2	.5083	1.886	12.27	.4771	.8320	.4947	2.022	.4777	.5411
#3	.5152	1.872	12.22	.4770	.8228	.4952	2.027	.4769	.5394

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5562.3	2272.2	23092.	6471.1
Stddev	14.6	7.2	126.	16.6
%RSD	.26244	.31711	.54469	.25710
#1	5574.9	2280.4	23206.	6489.8
#2	5565.6	2269.5	22957.	6457.9
#3	5546.3	2266.8	23114.	6465.6

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 13:22:27 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2451	40.28	1.991	2.036	2.042	40.49	2.010	1.985	2.010
Stddev	.0014	.12	.007	.006	.010	.17	.003	.003	.003
%RSD	.5871	.2906	.3649	.3064	.5047	.4266	.1270	.1476	.1641
#1	.2466	40.15	1.982	2.030	2.032	40.37	2.007	1.982	2.010
#2	.2448	40.32	1.995	2.043	2.041	40.40	2.011	1.984	2.013
#3	.2437	40.37	1.995	2.036	2.053	40.68	2.011	1.988	2.006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.979	40.54	40.17	40.72	2.042	2.003	40.39	1.999	2.025
Stddev	.016	.12	.18	.24	.001	.007	.14	.004	.007
%RSD	.8213	.3015	.4602	.6013	.0694	.3370	.3586	.1784	.3481
#1	1.996	40.42	40.00	40.64	2.044	1.996	40.22	1.995	2.020
#2	1.976	40.53	40.15	40.53	2.041	2.003	40.46	2.001	2.033
#3	1.964	40.66	40.37	41.00	2.043	2.009	40.48	2.001	2.022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.985	1.970	1.946	2.039	2.066	2.046	2.018	2.038	2.008
Stddev	.005	.012	.005	.007	.008	.007	.001	.006	.005
%RSD	.2392	.6300	.2560	.3212	.4007	.3217	.0570	.2922	.2332
#1	1.982	1.959	1.944	2.032	2.057	2.054	2.018	2.043	2.003
#2	1.982	1.969	1.942	2.041	2.072	2.044	2.017	2.039	2.011
#3	1.991	1.984	1.951	2.045	2.070	2.041	2.019	2.031	2.010
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 13:22:27 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5619.4	2291.0	23350.	6518.2
Stddev	5.6	5.5	221.	102.3
%RSD	.09927	.24205	.94494	1.5693
#1	5625.0	2296.6	23598.	6495.5
#2	5613.9	2290.8	23175.	6629.9
#3	5619.1	2285.5	23277.	6429.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 13:26:38 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	-.0077	-.0002	.0003	.0001	.0044	.0000	.0001
Stddev	.0002	.0110	.0007	.0001	.0000	.0031	.000	.0002
%RSD	277.1	141.6	478.3	27.92	5.625	70.22	1127.	180.1
#1	.0000	-.0204	.0007	.0004	.0001	.0050	.0000	.0003
#2	.0001	-.0021	-.0006	.0002	.0001	.0010	-.0001	.0001
#3	-.0003	-.0007	-.0005	.0003	.0001	.0071	.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0008	.0106	.0484	.0106	.0001	.0008	-.0147
Stddev	.0002	.0004	.0036	.0139	.0135	.0000	.0003	.0018
%RSD	217.4	49.02	33.64	28.70	126.8	30.37	45.78	12.27
#1	.0001	.0005	.0146	.0644	.0056	.0001	.0011	-.0165
#2	-.0001	.0012	.0095	.0393	.0004	.0001	.0007	-.0147
#3	.0003	.0006	.0077	.0416	.0259	.0001	.0005	-.0129
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	F -.0024	F .0025	-.0012	.0001	-.0002	.0002	.0013
Stddev	.0003	.0006	.0018	.0017	.0002	.0006	.0000	.0001
%RSD	186.4	23.41	73.79	146.3	204.8	258.4	20.98	5.356
#1	.0003	-.0026	.0004	.0003	.0002	-.0004	.0002	.0013
#2	.0003	-.0028	.0032	-.0007	-.0002	-.0008	.0002	.0013
#3	-.0002	-.0017	.0038	-.0031	.0003	.0004	.0002	.0012
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010	.0020					
Low Limit		-.0010	-.0020					

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 13:26:38 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0016	.0002	.0001
Stddev	.0007	.0001	.0000
%RSD	41.14	63.13	26.00
#1	.0010	.0003	.0002
#2	.0023	.0003	.0001
#3	.0016	.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5613.5	2360.2	23537.	6603.7
Stddev	11.9	10.4	96.	17.6
%RSD	.21206	.44244	.40806	.26596
#1	5600.1	2350.5	23550.	6623.9
#2	5622.9	2371.2	23435.	6591.9
#3	5617.4	2358.9	23626.	6595.2

Zoom In Zoom Out

Sample Name: MP34829-S2 Acquired: 12/20/2018 13:31:05 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0494	26.96	1.960	2.084	.0516	72.57	.0496	.4918	.2065
Stddev	.0010	.16	.004	.010	.0002	.29	.0001	.0010	.0014
%RSD	2.050	.5750	.1910	.4656	.3970	.3986	.2151	.2040	.6952
#1	.0484	26.81	1.956	2.073	.0513	72.58	.0496	.4911	.2079
#2	.0504	27.12	1.964	2.092	.0516	72.85	.0496	.4929	.2050
#3	.0495	26.95	1.960	2.088	.0517	72.27	.0494	.4914	.2066

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2610	26.14	27.84	42.46	.5244	.4644	F 83.42	.5017	.4908
Stddev	.0010	.03	.10	.11	.0037	.0018	.32	.0006	.0024
%RSD	.3990	.1176	.3714	.2516	.7143	.3845	.3893	.1251	.4817
#1	.2621	26.11	27.74	42.49	.5274	.4625	83.18	.5010	.4926
#2	.2600	26.17	27.95	42.55	.5202	.4660	83.79	.5021	.4881
#3	.2608	26.15	27.84	42.34	.5256	.4648	83.29	.5020	.4917

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5174	1.917	12.53	.4856	.8482	.5038	2.068	.4908	.5504
Stddev	.0032	.004	.03	.0018	.0053	.0026	.003	.0047	.0007
%RSD	.6201	.2119	.2005	.3635	.6204	.5072	.1316	.9576	.1310
#1	.5169	1.913	12.50	.4869	.8422	.5055	2.066	.4945	.5499
#2	.5208	1.918	12.55	.4864	.8520	.5008	2.067	.4855	.5513
#3	.5145	1.921	12.52	.4836	.8506	.5049	2.071	.4925	.5501

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5582.7	2280.8	23024.	6471.6
Stddev	29.6	12.3	152.	58.5
%RSD	.53044	.54139	.65907	.90368
#1	5568.2	2275.5	22921.	6406.7
#2	5563.2	2272.0	23198.	6488.0
#3	5616.8	2294.9	22952.	6520.1

Zoom In Zoom Out

Sample Name: FA60136-12 Acquired: 12/20/2018 13:35:19 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	2.922	.0017	.0710	.0007	56.56	.0002	.0014	.0072
Stddev	.0011	.023	.0007	.0007	.0001	.47	.0001	.0001	.0003
%RSD	228.9	.7971	40.90	.9339	10.35	.8241	50.46	3.837	4.332
#1	.0002	2.949	.0009	.0717	.0007	57.02	.0003	.0013	.0076
#2	-.0018	2.910	.0023	.0708	.0008	56.09	.0001	.0013	.0071
#3	.0001	2.908	.0018	.0704	.0006	56.58	.0001	.0014	.0070

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0033	5.394	3.685	19.73	.5916	.0059	58.92	.0054	.0058
Stddev	.0003	.035	.024	.14	.0037	.0002	.46	.0004	.0017
%RSD	10.34	.6390	.6531	.7024	.6261	3.800	.7869	7.042	28.44
#1	.0036	5.402	3.680	19.86	.5959	.0057	59.45	.0055	.0043
#2	.0029	5.356	3.711	19.59	.5893	.0061	58.60	.0049	.0076
#3	.0035	5.424	3.663	19.75	.5897	.0058	58.71	.0057	.0056

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0004	-.0003	16.92	.0006	.3930	.0539	-.0093	.0040	.0475
Stddev	.0011	.0019	.03	.0003	.0034	.0007	.0044	.0003	.0001
%RSD	249.0	749.6	.1977	58.15	.8552	1.257	47.49	7.783	.1547
#1	.0001	-.0024	16.90	.0002	.3969	.0546	-.0057	.0042	.0475
#2	.0017	.0011	16.96	.0008	.3907	.0532	-.0079	.0036	.0475
#3	-.0004	.0006	16.90	.0007	.3915	.0538	-.0142	.0041	.0476

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5595.9	2333.6	23450.	6497.6
Stddev	16.8	4.7	81.	30.6
%RSD	.30086	.20116	.34663	.47160
#1	5588.6	2330.2	23367.	6462.2
#2	5583.9	2331.8	23456.	6514.9
#3	5615.1	2339.0	23529.	6515.6

Zoom In Zoom Out

Sample Name: FA60136-14 Acquired: 12/20/2018 13:39:40 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0008	2.894	-.0002	.0697	.0008	73.78	.0002	.0009	.0066
Stddev	.0010	.020	.0011	.0002	.0001	.63	.0000	.0002	.0005
%RSD	124.3	.6781	616.2	.2596	6.608	.8530	28.07	27.10	6.944
#1	-.0019	2.916	.0000	.0699	.0007	74.48	.0002	.0009	.0061
#2	-.0008	2.881	-.0014	.0696	.0008	73.26	.0002	.0006	.0067
#3	.0002	2.884	.0008	.0696	.0008	73.60	.0001	.0011	.0070

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0024	5.500	3.589	24.58	.2912	.0026	43.77	.0037	.0092
Stddev	.0004	.043	.062	.22	.0010	.0002	.27	.0001	.0011
%RSD	16.59	.7900	1.735	.8810	.3555	6.318	.6210	2.050	12.20
#1	.0021	5.547	3.656	24.81	.2923	.0024	44.08	.0037	.0103
#2	.0028	5.461	3.580	24.38	.2902	.0027	43.60	.0037	.0092
#3	.0024	5.491	3.532	24.56	.2912	.0028	43.63	.0038	.0081

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0006	.0023	18.06	.0006	.4662	.0532	-.0065	.0054	.0568
Stddev	.0022	.0009	.03	.0007	.0020	.0002	.0021	.0005	.0003
%RSD	356.3	39.74	.1893	100.6	.4325	.3665	31.91	9.024	.4603
#1	.0002	.0020	18.08	.0012	.4685	.0534	-.0070	.0056	.0570
#2	-.0031	.0033	18.07	.0000	.4656	.0533	-.0042	.0048	.0569
#3	.0011	.0015	18.02	.0007	.4646	.0530	-.0083	.0057	.0565

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5567.3	2326.7	23361.	6523.6
Stddev	12.5	6.9	54.	75.9
%RSD	.22522	.29868	.22933	1.1631
#1	5570.5	2322.6	23399.	6468.6
#2	5553.4	2322.9	23300.	6610.2
#3	5577.9	2334.8	23385.	6492.1

Zoom In Zoom Out

Sample Name: FA60136-16 Acquired: 12/20/2018 13:44:01 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	1.849	.0004	.0342	.0001	37.80	.0002	.0004	.0124
Stddev	.0002	.005	.0015	.0002	.0000	.15	.0001	.0002	.0005
%RSD	226.0	.2911	402.1	.4629	4.648	.3848	25.86	44.28	3.951
#1	.0000	1.847	-.0007	.0341	.0001	37.95	.0002	.0006	.0121
#2	-.0003	1.854	.0021	.0342	.0002	37.78	.0002	.0002	.0122
#3	.0000	1.844	-.0002	.0344	.0001	37.67	.0003	.0004	.0130

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0033	2.691	3.401	14.78	.1087	.0023	66.48	.0161	.0028
Stddev	.0003	.015	.029	.07	.0003	.0002	.16	.0004	.0010
%RSD	10.07	.5398	.8527	.4923	.2491	9.096	.2358	2.333	34.18
#1	.0030	2.703	3.429	14.86	.1084	.0023	66.65	.0164	.0032
#2	.0033	2.674	3.372	14.72	.1090	.0026	66.45	.0157	.0017
#3	.0037	2.695	3.403	14.76	.1088	.0021	66.34	.0162	.0035

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0007	.0012	14.37	.0019	.2602	.0560	-.0086	.0062	.4758
Stddev	.0010	.0019	.05	.0004	.0008	.0002	.0047	.0003	.0007
%RSD	140.3	164.2	.3793	22.65	.2896	.3078	54.48	5.445	.1473
#1	.0004	.0002	14.43	.0020	.2607	.0560	-.0079	.0064	.4766
#2	-.0014	-.0001	14.35	.0022	.2605	.0562	-.0136	.0064	.4753
#3	-.0012	.0033	14.33	.0014	.2593	.0559	-.0043	.0058	.4754

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5646.3	2334.5	23411.	6497.9
Stddev	15.4	5.9	73.	55.1
%RSD	.27362	.25199	.31265	.84728
#1	5649.7	2329.1	23438.	6436.2
#2	5629.4	2333.6	23468.	6542.2
#3	5659.7	2340.7	23329.	6515.1

Zoom In Zoom Out

Sample Name: FA60205-21 Acquired: 12/20/2018 13:48:22 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0006	.0562	-.0001	.0219	.0000	34.14	.0000	.0004
Stddev	.0007	.0108	.0010	.0002	.000	.19	.0001	.0001
%RSD	109.8	19.32	883.0	.7635	99.41	.5617	342.6	35.35
#1	-.0013	.0679	-.0006	.0221	.0000	33.93	-.0001	.0003
#2	.0001	.0542	.0011	.0217	-.0001	34.21	.0001	.0003
#3	-.0007	.0464	-.0008	.0218	.0000	34.29	.0001	.0006

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0044	.0005	.0862	4.641	15.73	.0146	.0079	58.36
Stddev	.0002	.0002	.0008	.032	.08	.0000	.0005	.25
%RSD	3.924	32.79	.9475	.6918	.5306	.2285	6.107	.4222
#1	.0043	.0007	.0857	4.608	15.63	.0146	.0084	58.10
#2	.0043	.0005	.0871	4.645	15.75	.0146	.0075	58.38
#3	.0046	.0004	.0858	4.672	15.80	.0146	.0076	58.59

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0882	-.0024	.0036	.0008	9.710	.0005	.3252	.0031
Stddev	.0004	.0028	.0007	.0024	.021	.0004	.0016	.0001
%RSD	.4053	116.2	18.38	312.5	.2133	73.45	.4998	4.181
#1	.0884	-.0055	.0040	-.0020	9.699	.0003	.3234	.0031
#2	.0885	-.0018	.0028	.0018	9.733	.0009	.3259	.0032
#3	.0878	.0000	.0039	.0025	9.696	.0003	.3264	.0030

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F -.0103	.0014	.0099
Stddev	.0019	.0003	.0000
%RSD	18.23	23.10	.2481
#1	-.0107	.0016	.0099
#2	-.0082	.0010	.0099
#3	-.0119	.0014	.0099

Zoom In Zoom Out

Sample Name: FA60205-21 Acquired: 12/20/2018 13:48:22 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5613.0	2322.3	23356.	6513.0
Stddev	15.3	3.6	163.	46.3
%RSD	.27225	.15370	.69995	.71055
#1	5614.0	2324.1	23295.	6497.6
#2	5627.7	2324.6	23233.	6565.0
#3	5597.2	2318.2	23542.	6476.4

Zoom In Zoom Out

Sample Name: FA60205-22 Acquired: 12/20/2018 13:52:46 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0004	.0994	-.0036	.0602	-.0001	65.16	.0001	.0000
Stddev	.0003	.0194	.0003	.0002	.0000	.38	.0001	.0003
%RSD	87.38	19.54	9.236	.3071	85.42	.5822	86.07	835.0
#1	-.0001	.0951	-.0036	.0604	.0000	65.41	.0002	.0001
#2	-.0007	.0825	-.0039	.0601	-.0001	65.35	.0000	-.0003
#3	-.0003	.1207	-.0033	.0600	-.0001	64.72	.0002	.0002

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0015	.0110	.0718	10.27	11.25	.0067	.0016	40.73
Stddev	.0002	.0005	.0015	.06	.07	.0001	.0001	.22
%RSD	10.88	4.921	2.063	.5808	.5967	.9504	7.061	.5512
#1	.0017	.0105	.0707	10.32	11.25	.0067	.0017	40.93
#2	.0013	.0109	.0735	10.29	11.31	.0067	.0016	40.78
#3	.0016	.0116	.0712	10.20	11.18	.0068	.0015	40.48

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0038	-.0035	-.0007	-.0002	6.991	.0017	.4255	.0043
Stddev	.0003	.0031	.0012	.0019	.020	.0004	.0016	.0001
%RSD	6.626	88.69	179.2	1201.	.2884	25.56	.3861	2.466
#1	.0041	.0001	.0007	-.0022	7.005	.0022	.4268	.0042
#2	.0037	-.0052	-.0010	.0016	6.968	.0016	.4262	.0044
#3	.0036	-.0053	-.0017	.0001	6.999	.0013	.4237	.0043

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F -.0127	.0015	.0551
Stddev	.0008	.0003	.0001
%RSD	6.259	18.22	.1138
#1	-.0131	.0017	.0552
#2	-.0132	.0016	.0550
#3	-.0118	.0012	.0552

Zoom In Zoom Out

Sample Name: FA60205-22 Acquired: 12/20/2018 13:52:46 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5549.7	2308.1	23156.	6435.5
Stddev	19.7	7.6	48.	43.7
%RSD	.35512	.32712	.20521	.67835
#1	5527.2	2299.4	23208.	6399.6
#2	5557.6	2312.3	23116.	6422.8
#3	5564.1	2312.6	23144.	6484.1

Zoom In Zoom Out

Sample Name: MP34828-MB1 Acquired: 12/20/2018 13:57:10 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0092	-.0029	.0001	.0000	.0069	.0000	-.0004
Stddev	.0006	.0028	.0006	.0002	.000	.0020	.000	.0003
%RSD	733.3	29.98	20.23	174.9	34.12	29.48	616.8	87.02
#1	.0005	.0095	-.0034	-.0001	.0000	.0088	.0000	.0000
#2	.0000	.0064	-.0022	.0003	.0000	.0073	.0000	-.0006
#3	-.0008	.0119	-.0030	.0002	.0000	.0047	-.0001	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0005	.0008	.0387	.0241	.0000	-.0002	-.0072
Stddev	.0004	.0002	.0027	.0163	.0044	.0000	.0003	.0055
%RSD	147.8	49.35	350.3	42.15	18.32	63.49	180.7	76.46
#1	.0003	.0007	.0039	.0287	.0196	.0000	.0000	-.0072
#2	-.0002	.0006	-.0009	.0298	.0285	.0000	-.0005	-.0017
#3	.0006	.0002	-.0007	.0575	.0242	.0001	.0000	-.0127
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	-.0023	-.0003	.0010	.0336	-.0004	.0000	.0000
Stddev	.0003	.0012	.0018	.0009	.0008	.0001	.0000	.0001
%RSD	164.6	51.95	624.8	90.21	2.330	30.50	116.6	344.8
#1	.0000	-.0009	.0015	.0013	.0338	-.0002	.0000	.0000
#2	-.0005	-.0030	-.0003	.0018	.0342	-.0004	.0000	-.0001
#3	-.0001	-.0029	-.0021	.0000	.0327	-.0005	.0000	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: MP34828-MB1 Acquired: 12/20/2018 13:57:10 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F -.0082	.0001	.0012
Stddev	.0031	.0002	.0001
%RSD	37.26	179.4	5.812
#1	-.0117	-.0001	.0013
#2	-.0062	.0003	.0012
#3	-.0068	.0002	.0011
Check ?	Chk Fail	Chk Pass	Chk Pass
High Limit	.0050		
Low Limit	-.0050		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5560.8	2342.4	23352.	6594.5
Stddev	13.9	14.2	139.	31.2
%RSD	.25074	.60562	.59552	.47334
#1	5556.6	2339.1	23457.	6610.2
#2	5549.4	2330.1	23194.	6614.6
#3	5576.4	2357.9	23404.	6558.5

Zoom In Zoom Out

Sample Name: MP34828-B1 Acquired: 12/20/2018 14:01:38 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0516	27.65	2.002	2.084	.0530	25.96	.0504	.5029	.2114
Stddev	.0009	.18	.006	.010	.0005	.27	.0001	.0006	.0014
%RSD	1.702	.6634	.2919	.4689	.9746	1.034	.1318	.1118	.6657
#1	.0506	27.52	1.999	2.080	.0527	25.80	.0505	.5035	.2117
#2	.0524	27.57	2.008	2.077	.0529	25.80	.0505	.5023	.2126
#3	.0517	27.86	1.997	2.095	.0536	26.27	.0504	.5029	.2099
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2591	26.95	25.59	25.91	.5303	.4741	25.67	.5112	.5080
Stddev	.0013	.17	.20	.25	.0010	.0015	.21	.0012	.0028
%RSD	.5016	.6156	.7650	.9637	.1869	.3160	.8337	.2389	.5608
#1	.2591	26.82	25.44	25.79	.5314	.4733	25.57	.5108	.5064
#2	.2604	26.89	25.53	25.75	.5297	.4758	25.52	.5125	.5113
#3	.2578	27.14	25.81	26.20	.5298	.4732	25.91	.5102	.5062
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5275	1.971	.4735	.4988	.5104	.5154	2.104	.5029	.5109
Stddev	.0028	.004	.0030	.0017	.0034	.0018	.001	.0024	.0020
%RSD	.5224	.1848	.6279	.3477	.6667	.3480	.0494	.4708	.3989
#1	.5266	1.971	.4718	.4971	.5084	.5164	2.105	.5043	.5125
#2	.5306	1.967	.4769	.5006	.5085	.5165	2.103	.5042	.5117
#3	.5253	1.974	.4718	.4987	.5143	.5134	2.104	.5002	.5086
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP34828-B1 Acquired: 12/20/2018 14:01:38 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5643.9	2325.1	23315.	6562.9
Stddev	11.5	7.1	51.	52.2
%RSD	.20457	.30334	.21826	.79601
#1	5632.4	2322.1	23264.	6623.2
#2	5643.7	2320.1	23313.	6533.7
#3	5655.5	2333.2	23366.	6531.8

Zoom In
Zoom Out

Sample Name: FA60232-1L Acquired: 12/20/2018 14:05:51 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0006	.0086	-.0022	.0027	.0000	1.010	-.0001	-.0001	.0008
Stddev	.0001	.0068	.0004	.0001	.000	.011	.0001	.0002	.0001
%RSD	15.53	79.39	16.17	3.590	64.88	1.128	114.7	251.2	13.79
#1	-.0005	.0139	-.0026	.0028	.0000	1.022	-.0001	-.0004	.0008
#2	-.0005	.0009	-.0020	.0026	.0000	.9991	.0000	.0001	.0010
#3	-.0007	.0109	-.0020	.0028	.0000	1.010	-.0001	.0000	.0008

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0003	.0049	3.238	.1904	.0054	.0001	F 141.1	.0023	-.0017
Stddev	.0003	.0022	.025	.0132	.0001	.0003	.7	.0003	.0005
%RSD	89.61	45.23	.7672	6.927	1.840	314.3	.4781	13.95	32.92
#1	.0002	.0062	3.267	.2039	.0053	.0004	141.3	.0026	-.0019
#2	.0002	.0060	3.221	.1775	.0055	-.0001	140.3	.0021	-.0010
#3	.0007	.0023	3.228	.1897	.0055	-.0001	141.6	.0021	-.0020

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0008	.0051	.1057	.0005	.0138	.0005	-.0066	.0002	.0034
Stddev	.0017	.0017	.0013	.0003	.0001	.0002	.0037	.0001	.0001
%RSD	215.4	33.71	1.274	55.49	.4742	37.18	56.13	60.34	2.632
#1	-.0010	.0069	.1066	.0008	.0138	.0005	-.0044	.0004	.0035
#2	.0024	.0035	.1042	.0006	.0137	.0003	-.0108	.0001	.0033
#3	.0009	.0048	.1064	.0002	.0139	.0007	-.0045	.0003	.0034

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5756.3	2392.3	23855.	6567.6
Stddev	7.3	4.7	99.	86.9
%RSD	.12720	.19491	.41609	1.3237
#1	5749.8	2387.4	23870.	6467.2
#2	5754.8	2396.7	23749.	6619.7
#3	5764.2	2392.8	23946.	6615.8

Zoom In
Zoom Out

Sample Name: MP34828-D1 Acquired: 12/20/2018 14:10:27 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0005	.0100	-.0013	.0027	-.0001	1.011	-.0001	-.0002	.0009
Stddev	.0005	.0147	.0010	.0002	.0000	.007	.0000	.0001	.0003
%RSD	109.4	147.7	77.58	7.473	34.38	.7022	37.09	53.49	35.47
#1	-.0001	.0222	-.0001	.0025	-.0001	1.007	-.0001	-.0003	.0012
#2	.0006	-.0064	-.0020	.0027	-.0001	1.007	.0000	-.0001	.0009
#3	.0009	.0142	-.0018	.0029	.0000	1.020	.0000	-.0002	.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0000	.0016	3.249	.1988	.0055	.0000	F 143.7	.0022	-.0014
Stddev	.0000	.0017	.029	.0022	.0000	.000	1.5	.0004	.0009
%RSD	366.4	108.5	.8951	1.101	.7882	5401.	1.067	18.19	64.99
#1	.0000	-.0004	3.283	.1965	.0055	-.0002	145.1	.0025	-.0016
#2	.0000	.0029	3.234	.2009	.0055	.0005	142.0	.0018	-.0022
#3	.0001	.0022	3.231	.1991	.0054	-.0003	144.0	.0025	-.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0007	.0020	.1075	.0011	.0139	.0000	-.0088	.0001	.0033
Stddev	.0011	.0010	.0010	.0005	.0001	.000	.0013	.0004	.0000
%RSD	156.7	51.55	.9084	48.93	.7028	7566.	14.95	324.9	.9350
#1	.0010	.0008	.1081	.0007	.0139	-.0002	-.0098	.0006	.0033
#2	-.0005	.0025	.1080	.0008	.0139	.0000	-.0073	-.0003	.0033
#3	.0016	.0027	.1063	.0017	.0140	.0002	-.0093	.0001	.0033

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5696.9	2376.2	23799.	6453.5
Stddev	4.8	5.7	125.	37.3
%RSD	.08357	.24082	.52351	.57756
#1	5691.6	2378.8	23792.	6441.6
#2	5698.2	2369.7	23927.	6495.3
#3	5700.9	2380.3	23678.	6423.7

Zoom In
Zoom Out

Sample Name: CCV Acquired: 12/20/2018 14:15:01 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2448	40.35	1.997	2.040	2.050	40.60	2.007	1.982	2.002
Stddev	.0013	.09	.009	.010	.005	.08	.005	.007	.002
%RSD	.5316	.2297	.4628	.5012	.2294	.1943	.2628	.3677	.0932
#1	.2458	40.41	2.002	2.052	2.055	40.61	2.010	1.985	2.001
#2	.2454	40.39	2.003	2.036	2.051	40.68	2.010	1.987	2.004
#3	.2433	40.24	1.986	2.032	2.045	40.52	2.001	1.974	2.000
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.980	40.41	40.22	40.64	2.040	2.002	40.52	1.996	2.020
Stddev	.003	.11	.24	.09	.002	.005	.13	.006	.003
%RSD	.1565	.2740	.5982	.2254	.1191	.2719	.3284	.2879	.1270
#1	1.984	40.37	40.47	40.55	2.041	2.004	40.65	2.000	2.017
#2	1.980	40.54	40.19	40.73	2.042	2.007	40.51	1.998	2.022
#3	1.978	40.33	39.99	40.62	2.038	1.997	40.39	1.989	2.021
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.992	1.971	1.945	2.036	2.078	2.047	2.021	2.038	2.007
Stddev	.004	.008	.008	.006	.007	.004	.009	.006	.006
%RSD	.1924	.3857	.4168	.3168	.3334	.1922	.4262	.2755	.2838
#1	1.996	1.968	1.951	2.040	2.086	2.050	2.022	2.045	2.010
#2	1.991	1.980	1.948	2.039	2.078	2.047	2.028	2.037	2.011
#3	1.989	1.966	1.936	2.028	2.072	2.042	2.011	2.034	2.000
Check ? Value Range	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Zoom In
Zoom Out

Sample Name: CCV Acquired: 12/20/2018 14:15:01 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5668.3	2306.8	23468.	6561.3
Stddev	4.9	9.1	26.	22.8
%RSD	.08608	.39590	.11091	.34731
#1	5667.2	2301.5	23463.	6586.7
#2	5664.1	2301.6	23497.	6554.5
#3	5673.6	2317.3	23446.	6542.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 14:19:12 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0089	-.0005	.0003	.0001	.0047	.0001	.0001
Stddev	.000	.0093	.0010	.0002	.0000	.0028	.0001	.0001
%RSD	1220.	105.0	207.0	51.88	40.66	59.60	135.1	56.86
#1	.0004	-.0195	.0003	.0002	.0001	.0079	.0000	.0000
#2	-.0002	-.0052	-.0002	.0005	.0001	.0038	.0002	.0002
#3	-.0003	-.0020	-.0015	.0002	.0000	.0025	.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0006	.0104	.0278	.0069	.0002	F .0012	-.0125
Stddev	.0001	.0001	.0008	.0087	.0031	.0001	.0005	.0110
%RSD	30.63	8.885	7.590	31.27	45.29	54.30	40.27	87.71
#1	.0002	.0006	.0108	.0229	.0076	.0002	.0011	-.0210
#2	.0002	.0006	.0095	.0227	.0095	.0003	.0017	-.0165
#3	.0003	.0007	.0109	.0379	.0034	.0001	.0007	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	F -.0020	.0004	.0000	.0006	.0000	.0001	.0012
Stddev	.0001	.0014	.0021	.001	.0006	.0007	.0000	.0002
%RSD	134.7	69.67	555.4	4269.	91.53	2497.	24.88	19.41
#1	-.0002	-.0008	-.0006	-.0006	.0009	.0007	.0001	.0012
#2	-.0002	-.0017	-.0010	-.0010	.0010	-.0006	.0001	.0014
#3	.0001	-.0036	.0028	.0015	.0000	.0000	.0001	.0009
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010						
Low Limit		-.0010						

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 14:19:12 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F -.0024	.0001	.0000
Stddev	.0051	.0005	.0001
%RSD	216.6	386.2	582.1
#1	-.0002	.0001	.0000
#2	-.0082	.0006	-.0001
#3	.0013	-.0003	.0002
Check ?	Chk Fail	Chk Pass	Chk Pass
High Limit	.0020		
Low Limit	-.0020		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5640.8	2370.5	23728.	6610.7
Stddev	2.5	5.3	62.	37.6
%RSD	.04462	.22187	.26134	.56892
#1	5637.9	2364.7	23800.	6651.5
#2	5642.7	2374.8	23697.	6603.4
#3	5641.7	2372.0	23689.	6577.3

Zoom In Zoom Out

Sample Name: MP34828-SD1 Acquired: 12/20/2018 14:23:39 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0012	.0137	-.0056	.0031	-.0001	1.090	-.0001	.0015	.0166
Stddev	.0036	.0417	.0026	.0005	.0002	.010	.0002	.0018	.0026
%RSD	290.9	303.3	45.85	14.47	119.5	.8905	199.5	118.6	15.65
#1	.0031	-.0176	-.0054	.0033	-.0002	1.094	.0001	.0035	.0138
#2	.0035	-.0022	-.0083	.0026	.0001	1.079	-.0004	-.0001	.0172
#3	-.0029	.0611	-.0032	.0035	-.0002	1.098	-.0001	.0013	.0189

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0040	.1405	3.184	.2099	.0272	.0006	136.7	.0026	-.0045
Stddev	.0023	.0062	.094	.0575	.0003	.0003	.8	.0003	.0029
%RSD	56.12	4.448	2.943	27.41	1.090	58.88	.6115	12.31	65.77
#1	.0063	.1428	3.166	.2602	.0273	.0002	137.4	.0027	-.0067
#2	.0040	.1334	3.100	.1471	.0275	.0007	135.8	.0029	-.0055
#3	.0018	.1452	3.285	.2222	.0269	.0008	136.9	.0023	-.0011

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0064	.0059	.1128	.0006	.0130	.0016	-.0041	.0022	.0041
Stddev	.0011	.0115	.0004	.0013	.0005	.0006	.0193	.0012	.0004
%RSD	17.16	193.8	.3683	204.7	3.705	37.06	464.4	56.10	9.341
#1	-.0076	-.0070	.1133	-.0005	.0134	.0018	-.0103	.0028	.0037
#2	-.0060	.0151	.1128	.0020	.0131	.0022	.0174	.0031	.0042
#3	-.0055	.0097	.1124	.0004	.0125	.0010	-.0196	.0008	.0044

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5663.7	2365.6	23543.	6566.9
Stddev	5.9	2.9	121.	35.3
%RSD	.10377	.12466	.51237	.53730
#1	5658.8	2365.4	23485.	6572.1
#2	5670.2	2362.8	23462.	6599.3
#3	5662.0	2368.7	23681.	6529.3

Zoom In Zoom Out

Sample Name: MP34828-S1 Acquired: 12/20/2018 14:28:08 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0500	26.90	1.950	2.039	.0517	26.25	.0493	.4908	.2021
Stddev	.0009	.07	.004	.005	.0002	.12	.0001	.0004	.0003
%RSD	1.725	.2502	.2209	.2409	.4719	.4634	.2902	.0786	.1670
#1	.0507	26.82	1.952	2.033	.0515	26.11	.0491	.4907	.2024
#2	.0491	26.94	1.945	2.042	.0519	26.33	.0493	.4912	.2022
#3	.0503	26.93	1.954	2.042	.0516	26.30	.0494	.4904	.2018

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2592	26.12	28.63	25.42	.5192	.4570	F 169.1	.5036	.4939
Stddev	.0017	.11	.09	.07	.0017	.0004	2.2	.0009	.0055
%RSD	.6431	.4227	.3101	.2933	.3180	.0881	1.276	.1839	1.105
#1	.2609	25.99	28.56	25.34	.5198	.4575	171.4	.5026	.4945
#2	.2575	26.14	28.73	25.42	.5174	.4567	167.2	.5039	.4990
#3	.2591	26.21	28.61	25.49	.5205	.4570	168.6	.5044	.4882

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5144	1.904	.5423	.4859	.5075	.5015	2.071	.4856	.4961
Stddev	.0013	.004	.0014	.0015	.0009	.0014	.005	.0016	.0006
%RSD	.2559	.2037	.2650	.3154	.1853	.2886	.2599	.3272	.1196
#1	.5158	1.900	.5409	.4857	.5065	.5020	2.065	.4855	.4958
#2	.5141	1.903	.5423	.4874	.5084	.4998	2.073	.4841	.4957
#3	.5132	1.908	.5438	.4844	.5077	.5026	2.076	.4873	.4968

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5664.2	2323.5	23310.	6451.6
Stddev	6.7	1.6	13.	25.2
%RSD	.11900	.06885	.05669	.39110
#1	5666.4	2322.9	23303.	6453.2
#2	5656.6	2322.2	23301.	6476.0
#3	5669.6	2325.3	23325.	6425.6

Zoom In Zoom Out

Sample Name: MP34828-S2 Acquired: 12/20/2018 14:32:30 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0495	26.41	1.921	2.013	.0509	25.73	.0486	.4857	.1987
Stddev	.0005	.19	.004	.002	.0005	.16	.0002	.0009	.0012
%RSD	.9447	.7059	.2228	.0799	.9339	.6278	.3557	.1752	.6024
#1	.0494	26.47	1.924	2.011	.0513	25.81	.0484	.4853	.1974
#2	.0500	26.20	1.923	2.014	.0504	25.54	.0488	.4851	.1990
#3	.0491	26.55	1.916	2.013	.0509	25.83	.0487	.4867	.1998

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2547	25.59	28.06	24.89	.5101	.4516	F 166.7	.4965	.4878
Stddev	.0012	.22	.20	.14	.0021	.0013	2.9	.0011	.0022
%RSD	.4778	.8537	.7247	.5485	.4147	.2877	1.744	.2138	.4464
#1	.2556	25.69	28.22	25.00	.5116	.4517	170.0	.4953	.4895
#2	.2533	25.34	27.83	24.74	.5077	.4503	164.4	.4967	.4853
#3	.2552	25.73	28.13	24.92	.5110	.4529	165.7	.4974	.4886

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5073	1.891	.5313	.4782	.4988	.4905	2.054	.4764	.4916
Stddev	.0010	.010	.0007	.0006	.0024	.0018	.005	.0026	.0007
%RSD	.1978	.5121	.1389	.1204	.4902	.3759	.2391	.5408	.1415
#1	.5061	1.889	.5305	.4776	.4998	.4914	2.049	.4776	.4908
#2	.5080	1.882	.5320	.4788	.4960	.4884	2.053	.4735	.4917
#3	.5077	1.901	.5314	.4781	.5005	.4917	2.059	.4782	.4922

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5670.3	2327.8	23541.	6435.3
Stddev	13.6	3.7	188.	40.4
%RSD	.24021	.16009	.79735	.62774
#1	5672.1	2326.5	23422.	6448.9
#2	5682.9	2332.0	23758.	6389.8
#3	5655.9	2324.9	23444.	6467.1

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Zoom In Zoom Out

Sample Name: FA60234-1 Acquired: 12/20/2018 14:36:53 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	.0316	-.0018	.0116	.0000	2.676	.0001	.0018	.0001
Stddev	.0004	.0029	.0009	.0002	.000	.007	.0000	.0002	.0006
%RSD	1532.	9.070	47.79	1.365	162.2	.2664	47.66	11.12	887.9
#1	-.0004	.0349	-.0025	.0117	.0000	2.685	.0001	.0016	.0001
#2	.0004	.0297	-.0022	.0115	.0000	2.672	.0001	.0019	.0006
#3	.0001	.0301	-.0008	.0118	-.0001	2.673	.0000	.0020	-.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0013	.0166	.5194	.5685	.1313	.0002	F 140.6	.0027	-.0021
Stddev	.0002	.0031	.0300	.0072	.0005	.0001	1.6	.0001	.0017
%RSD	13.34	19.02	5.777	1.271	.3834	35.40	1.144	4.210	81.15
#1	.0011	.0129	.4955	.5714	.1312	.0002	139.0	.0029	-.0019
#2	.0013	.0188	.5531	.5602	.1318	.0001	140.6	.0027	-.0005
#3	.0015	.0180	.5097	.5738	.1308	.0002	142.2	.0026	-.0039

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0005	.0027	.2107	.0004	.0157	.0010	-.0064	.0003	.0043
Stddev	.0008	.0021	.0015	.0007	.0002	.0001	.0012	.0008	.0001
%RSD	180.2	78.49	.7251	181.4	1.145	5.075	19.48	230.4	2.811
#1	-.0004	.0052	.2124	-.0004	.0159	.0011	-.0074	.0001	.0044
#2	.0006	.0013	.2096	.0007	.0156	.0010	-.0050	.0012	.0044
#3	.0013	.0017	.2101	.0008	.0156	.0011	-.0068	-.0003	.0042

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5745.8	2388.7	23824.	6498.1
Stddev	18.3	7.6	71.	47.9
%RSD	.31809	.31617	.29867	.73706
#1	5733.0	2380.2	23835.	6484.7
#2	5766.8	2394.7	23749.	6551.2
#3	5737.7	2391.3	23890.	6458.3

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Zoom In Zoom Out

Sample Name: FA60234-2 Acquired: 12/20/2018 14:41:27 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	.0180	-.0010	.0118	.0000	2.112	-.0001	.0004	.0002
Stddev	.000	.0078	.0011	.0000	.000	.009	.0001	.0001	.0003
%RSD	1062.	43.10	111.5	.3918	160.7	.4275	92.10	20.15	196.2
#1	-.0004	.0120	.0003	.0118	.0000	2.105	.0000	.0004	-.0002
#2	.0001	.0153	-.0014	.0117	-.0001	2.122	.0000	.0004	.0003
#3	.0002	.0268	-.0018	.0118	.0000	2.108	-.0001	.0005	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0007	.0100	.5240	.6252	.0984	-.0002	F 154.1	.0012	-.0026
Stddev	.0003	.0006	.0157	.0166	.0005	.0003	2.8	.0005	.0015
%RSD	49.15	6.305	2.993	2.658	.5013	152.5	1.831	38.57	56.72
#1	.0003	.0106	.5293	.6177	.0984	.0001	156.4	.0007	-.0030
#2	.0010	.0094	.5363	.6136	.0980	-.0006	154.9	.0015	-.0010
#3	.0007	.0098	.5063	.6442	.0989	-.0002	150.9	.0015	-.0039

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0026	.0005	.1511	.0008	.0144	.0004	-.0010	.0000	.0030
Stddev	.0010	.0013	.0012	.0008	.0001	.0001	.0020	.0001	.0001
%RSD	40.46	236.0	.8080	99.72	.4486	37.56	192.7	261.2	2.624
#1	.0029	-.0009	.1501	.0001	.0144	.0003	.0011	-.0001	.0030
#2	.0034	.0014	.1509	.0006	.0145	.0003	-.0028	.0001	.0030
#3	.0014	.0011	.1525	.0017	.0144	.0006	-.0014	.0000	.0031

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5752.7	2392.5	23928.	6511.9
Stddev	7.6	4.3	8.	27.6
%RSD	.13281	.17797	.03393	.42377
#1	5760.7	2387.7	23920.	6494.2
#2	5752.0	2395.5	23936.	6497.8
#3	5745.5	2394.5	23929.	6543.7

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Zoom In Zoom Out

Sample Name: FA60234-3 Acquired: 12/20/2018 14:46:02 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0007	.0333	-.0019	.0135	.0000	3.129	.0001	.0021	.0003
Stddev	.0005	.0085	.0011	.0001	.000	.023	.0001	.0002	.0007
%RSD	72.54	25.64	59.56	1.063	985.1	.7490	69.70	9.202	257.7
#1	-.0005	.0394	-.0024	.0135	.0000	3.155	.0001	.0019	-.0003
#2	-.0012	.0235	-.0006	.0136	-.0001	3.123	.0001	.0023	.0000
#3	-.0003	.0369	-.0027	.0134	.0000	3.110	.0000	.0022	.0011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0011	.0193	.5205	.7019	.2298	.0000	F 149.1	.0020	-.0036
Stddev	.0005	.0031	.0297	.0062	.0008	.0002	1.2	.0002	.0025
%RSD	45.24	15.94	5.699	.8859	.3499	378.7	.8027	10.03	67.86
#1	.0015	.0220	.5349	.6966	.2298	.0001	147.8	.0022	-.0056
#2	.0005	.0199	.4863	.7087	.2290	.0002	150.1	.0020	-.0009
#3	.0012	.0160	.5401	.7002	.2306	-.0002	149.4	.0018	-.0044

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0016	.0047	.1868	.0012	.0182	.0004	-.0063	.0002	.0034
Stddev	.0025	.0031	.0024	.0005	.0002	.0001	.0022	.0001	.0000
%RSD	155.1	66.30	1.300	43.17	.9209	14.10	35.53	60.32	1.051
#1	.0035	.0039	.1849	.0006	.0184	.0004	-.0072	.0004	.0034
#2	.0026	.0082	.1861	.0015	.0182	.0003	-.0037	.0001	.0033
#3	-.0012	.0021	.1895	.0015	.0180	.0004	-.0079	.0002	.0034

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5722.3	2375.4	23834.	6467.6
Stddev	6.2	5.2	82.	40.4
%RSD	.10905	.21869	.34362	.62388
#1	5719.6	2374.2	23861.	6463.8
#2	5729.4	2381.0	23899.	6429.3
#3	5717.8	2370.8	23742.	6509.7

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Zoom In
Zoom Out

Sample Name: FA60234-4 Acquired: 12/20/2018 14:50:37 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	.0126	-.0016	.0141	-.0001	7.933	.0001	.0012	.0007
Stddev	.0005	.0085	.0002	.0002	.0000	.014	.0002	.0002	.0005
%RSD	312.9	67.77	11.93	1.569	8.035	.1745	304.0	14.44	68.51
#1	.0001	.0224	-.0015	.0143	.0000	7.927	.0002	.0013	.0010
#2	.0007	.0071	-.0018	.0140	-.0001	7.949	-.0001	.0010	.0009
#3	-.0003	.0082	-.0015	.0139	-.0001	7.924	.0001	.0014	.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0005	.0113	.6143	.5712	.1098	-.0002	F 148.9	.0012	-.0025
Stddev	.0003	.0032	.0211	.0155	.0002	.0001	1.0	.0002	.0015
%RSD	52.46	28.10	3.427	2.721	.1872	53.64	.7017	19.40	58.31
#1	.0005	.0149	.6215	.5539	.1100	-.0002	150.1	.0014	-.0037
#2	.0002	.0086	.5906	.5841	.1096	-.0004	148.4	.0009	-.0009
#3	.0007	.0106	.6309	.5755	.1098	-.0001	148.1	.0013	-.0029

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0007	.0010	.5101	.0003	.0276	.0008	-.0080	.0000	.0037
Stddev	.0009	.0011	.0026	.0011	.0001	.0002	.0008	.0002	.0000
%RSD	142.9	109.2	.5056	358.0	.3360	32.21	9.721	1180.	.2586
#1	.0003	.0016	.5078	-.0010	.0277	.0010	-.0089	.0001	.0037
#2	-.0006	-.0003	.5096	.0011	.0275	.0006	-.0076	-.0002	.0037
#3	-.0016	.0017	.5129	.0008	.0277	.0007	-.0075	.0002	.0037

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5732.5	2375.0	23740.	6563.3
Stddev	13.6	3.6	134.	23.8
%RSD	.23667	.15336	.56243	.36186
#1	5718.8	2372.6	23769.	6554.4
#2	5732.8	2373.1	23857.	6545.2
#3	5745.9	2379.1	23595.	6590.2

Zoom In
Zoom Out

Sample Name: FA60234-5 Acquired: 12/20/2018 14:55:13 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	.0211	-.0009	.0129	.0000	2.855	.0000	.0023	.0003
Stddev	.0005	.0071	.0018	.0002	.0001	.025	.0001	.0003	.0004
%RSD	119.4	33.61	197.6	1.196	414.6	.8683	158.2	12.18	108.0
#1	.0001	.0174	-.0001	.0127	.0000	2.827	.0000	.0026	.0008
#2	-.0005	.0293	-.0030	.0130	.0001	2.865	.0001	.0023	.0001
#3	-.0008	.0167	.0003	.0130	-.0001	2.874	.0001	.0021	.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0011	.0112	.4856	.7051	.1485	.0000	F 148.3	.0028	-.0033
Stddev	.0005	.0021	.0332	.0089	.0007	.000	1.0	.0004	.0007
%RSD	49.59	18.41	6.831	1.263	.4483	524.5	.6624	13.34	22.28
#1	.0015	.0135	.4768	.6974	.1486	.0002	148.0	.0033	-.0042
#2	.0012	.0095	.4577	.7149	.1478	-.0003	147.5	.0026	-.0032
#3	.0005	.0107	.5223	.7029	.1491	.0000	149.4	.0027	-.0027

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0009	.0033	.1723	.0007	.0161	.0001	-.0083	.0002	.0058
Stddev	.0003	.0008	.0009	.0006	.0003	.0001	.0002	.0005	.0001
%RSD	38.22	24.47	.5481	84.68	1.623	97.65	2.554	197.8	1.148
#1	.0009	.0025	.1727	.0002	.0158	.0000	-.0082	.0005	.0059
#2	.0012	.0041	.1712	.0006	.0161	.0003	-.0082	-.0003	.0058
#3	.0006	.0033	.1730	.0013	.0163	.0002	-.0086	.0005	.0058

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5748.7	2391.2	23890.	6480.5
Stddev	8.0	1.4	172.	47.5
%RSD	.13950	.05989	.72173	.73231
#1	5754.8	2392.3	23986.	6526.4
#2	5751.6	2391.6	23994.	6483.4
#3	5739.6	2389.6	23691.	6431.6

Zoom In
Zoom Out

Sample Name: FA60098-1 Acquired: 12/20/2018 14:59:49 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	.0774	-.0013	.0064	.0000	2.353	.0000	.0003	.0008
Stddev	.0011	.0184	.0004	.0001	.000	.022	.0001	.0003	.0005
%RSD	238.4	23.84	30.67	.8584	210.9	.9447	366.1	91.33	59.76
#1	-.0016	.0843	-.0010	.0063	-.0001	2.375	.0000	.0006	.0013
#2	.0007	.0914	-.0017	.0064	-.0001	2.331	.0001	.0000	.0004
#3	-.0005	.0565	-.0011	.0064	.0000	2.354	-.0001	.0004	.0007

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0014	.0256	1.742	.1390	.0354	-.0001	F 1217.	.0011	-.0014
Stddev	.0001	.0015	.057	.0114	.0002	.0003	4.	.0002	.0003
%RSD	4.356	5.838	3.252	8.179	.5922	372.3	.3418	17.44	19.50
#1	.0014	.0245	1.683	.1497	.0356	.0002	1219.	.0013	-.0016
#2	.0013	.0273	1.745	.1402	.0352	-.0004	1219.	.0010	-.0013
#3	.0014	.0250	1.797	.1271	.0355	.0000	1212.	.0010	-.0011

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0018	.0021	.0947	-.0001	.0128	.0010	-.0004	.0002	.0487
Stddev	.0008	.0005	.0009	.0003	.0002	.0001	.0051	.0002	.0001
%RSD	46.02	24.67	.9473	542.6	1.215	7.105	1215.	96.44	.1228
#1	.0009	.0016	.0937	.0003	.0127	.0009	-.0013	.0002	.0486
#2	.0022	.0022	.0954	-.0003	.0127	.0011	-.0050	.0003	.0487
#3	.0024	.0026	.0950	-.0001	.0130	.0010	.0050	.0000	.0487

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5950.6	2425.0	23940.	6252.3
Stddev	11.1	4.3	48.	20.1
%RSD	.18711	.17636	.20115	.32102
#1	5954.0	2426.5	23996.	6236.2
#2	5959.7	2428.3	23910.	6274.8
#3	5938.2	2420.2	23915.	6245.9

Zoom In
Zoom Out

Sample Name: FA60216-1L Acquired: 12/20/2018 15:04:24 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0002	.0122	-.0018	.0019	-.0001	2.632	.0000	-.0001	.0023
Stddev	.0007	.0006	.0009	.0002	.0000	.015	.000	.0004	.0002
%RSD	332.5	5.293	50.94	8.503	56.04	.5772	510.4	419.3	6.507
#1	-.0006	.0116	-.0021	.0018	.0000	2.614	-.0001	-.0002	.0025
#2	-.0006	.0120	-.0026	.0021	-.0001	2.641	-.0001	-.0004	.0023
#3	.0006	.0129	-.0008	.0019	-.0001	2.640	.0001	.0003	.0022

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0010	.0655	2.842	.8414	.0021	.0007	5.340	.0002	-.0039
Stddev	.0007	.0004	.030	.0167	.0001	.0005	.001	.0005	.0008
%RSD	63.19	.5436	1.040	1.988	3.353	69.10	.0200	217.6	21.50
#1	.0016	.0653	2.843	.8377	.0021	.0012	5.341	-.0001	-.0033
#2	.0012	.0652	2.812	.8269	.0021	.0005	5.339	.0008	-.0035
#3	.0003	.0659	2.872	.8597	.0020	.0003	5.339	.0000	-.0048

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0003	.0006	.2774	.0001	.0277	.0004	-.0086	.0001	.0018
Stddev	.0018	.0026	.0009	.0001	.0002	.0002	.0012	.0006	.0001
%RSD	544.6	400.0	.3374	109.4	.5750	37.56	14.48	630.7	3.239
#1	.0000	.0027	.2767	.0002	.0275	.0005	-.0097	.0007	.0018
#2	-.0023	.0014	.2785	.0000	.0276	.0005	-.0088	.0002	.0018
#3	.0013	-.0022	.2771	.0002	.0278	.0002	-.0072	-.0006	.0017

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5628.6	2354.5	23574.	6649.7
Stddev	6.9	4.5	84.	29.4
%RSD	.12205	.19029	.35768	.44212
#1	5634.7	2359.0	23517.	6647.2
#2	5629.9	2354.5	23671.	6680.2
#3	5621.2	2350.0	23533.	6621.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 15:08:50 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2451	40.62	2.004	2.042	2.058	40.98	2.012	1.987	2.020
Stddev	.0005	.14	.003	.004	.012	.26	.001	.005	.002
%RSD	.2202	.3353	.1430	.1956	.5896	.6249	.0521	.2446	.0915
#1	.2456	40.78	2.007	2.046	2.072	41.28	2.011	1.985	2.019
#2	.2445	40.54	2.004	2.038	2.052	40.86	2.013	1.984	2.022
#3	.2451	40.54	2.001	2.041	2.051	40.81	2.012	1.993	2.018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.985	40.75	40.56	40.90	2.038	2.012	40.67	2.001	2.025
Stddev	.006	.24	.12	.16	.001	.004	.22	.004	.002
%RSD	.2871	.5786	.2975	.4025	.0338	.2129	.5399	.2168	.1124
#1	1.983	40.99	40.70	41.08	2.038	2.007	40.91	1.997	2.025
#2	1.980	40.72	40.49	40.87	2.037	2.012	40.50	2.000	2.027
#3	1.991	40.52	40.50	40.75	2.038	2.016	40.59	2.006	2.023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.995	1.980	1.944	2.039	2.089	2.050	2.017	2.050	2.011
Stddev	.004	.007	.006	.002	.011	.005	.006	.006	.001
%RSD	.1964	.3532	.2996	.0721	.5084	.2419	.3117	.3047	.0699
#1	1.991	1.979	1.940	2.039	2.101	2.046	2.022	2.052	2.011
#2	1.999	1.974	1.941	2.037	2.081	2.048	2.019	2.043	2.010
#3	1.995	1.988	1.951	2.040	2.086	2.055	2.010	2.055	2.013
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 15:08:50 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5700.2	2311.3	23497.	6551.2
Stddev	8.3	3.9	79.	22.6
%RSD	.14625	.16978	.33815	.34554
#1	5709.0	2313.4	23573.	6526.0
#2	5699.4	2313.7	23415.	6569.8
#3	5692.3	2306.8	23503.	6557.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 15:13:02 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0049	-.0004	.0003	.0000	.0028	.0000	.0001	.0002
Stddev	.0006	.0145	.0010	.0002	.0001	.0033	.0001	.0001	.0005
%RSD	248.6	296.0	260.9	58.47	145.4	115.5	117.5	75.23	224.9
#1	.0002	-.0112	-.0009	.0002	.0000	.0051	.0001	.0000	.0002
#2	.0008	.0117	-.0010	.0004	.0000	.0043	.0001	.0001	-.0003
#3	-.0003	-.0153	.0008	.0002	.0001	-.0009	.0000	.0002	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0104	.0618	.0165	.0001	F .0011	.0380	.0002	-.0008
Stddev	.0005	.0009	.0292	.0061	.0001	.0002	.0124	.0000	.0011
%RSD	297.2	8.320	47.16	36.98	35.88	20.17	32.59	10.21	140.3
#1	.0006	.0114	.0870	.0231	.0001	.0013	.0255	.0002	.0005
#2	-.0004	.0099	.0685	.0110	.0002	.0009	.0502	.0001	-.0012
#3	.0003	.0099	.0299	.0154	.0002	.0012	.0383	.0002	-.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0009	-.0002	.0002	-.0001	.0002	.0012	.0006	.0002	.0010
Stddev	.0025	.0015	.0005	.0002	.0001	.0003	.0016	.0002	.0002
%RSD	288.0	690.1	211.9	235.9	36.55	20.95	246.7	91.79	17.91
#1	-.0023	-.0020	-.0001	-.0003	.0001	.0015	-.0001	.0000	.0011
#2	.0020	.0006	.0008	-.0001	.0001	.0013	-.0004	.0003	.0011
#3	-.0024	.0007	.0000	.0001	.0002	.0010	.0024	.0003	.0008
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 15:13:02 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5590.3	2359.1	23587.	6492.0
Stddev	6.2	5.1	82.	14.4
%RSD	.11010	.21552	.34661	.22158
#1	5597.1	2362.0	23511.	6475.5
#2	5588.9	2353.2	23577.	6501.7
#3	5585.0	2362.0	23673.	6498.9

Zoom In Zoom Out

Sample Name: MP34828-D2 Acquired: 12/20/2018 15:17:29 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0002	.0066	-.0016	.0027	.0000	1.054	.0000	-.0001	.0005
Stddev	.0007	.0121	.0010	.0002	.000	.013	.000	.0002	.0002
%RSD	479.5	181.9	67.28	7.273	139.6	1.204	2215.	267.4	41.44
#1	-.0008	.0145	-.0023	.0025	.0000	1.045	-.0002	-.0002	.0007
#2	-.0003	-.0073	-.0004	.0028	.0000	1.050	.0002	.0002	.0003
#3	.0006	.0127	-.0020	.0029	-.0001	1.069	.0000	-.0002	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0000	.0020	3.355	.2078	.0056	.0002	F 148.3	.0024	-.0029
Stddev	.000	.0021	.023	.0050	.0001	.0004	2.0	.0003	.0014
%RSD	6348.	106.2	.6766	2.418	2.176	158.7	1.368	13.70	47.77
#1	-.0004	-.0003	3.352	.2078	.0056	.0002	148.9	.0023	-.0040
#2	-.0001	.0025	3.380	.2028	.0058	.0006	146.0	.0028	-.0033
#3	.0004	.0039	3.335	.2129	.0055	-.0001	149.9	.0021	-.0013

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0027	.0037	.1101	.0004	.0145	.0003	-.0057	.0004	.0032
Stddev	.0008	.0003	.0011	.0005	.0001	.0001	.0072	.0000	.0001
%RSD	28.86	7.707	.9580	111.7	.6373	34.33	127.0	11.73	2.869
#1	.0032	.0039	.1113	.0006	.0144	.0004	-.0034	.0004	.0033
#2	.0018	.0033	.1095	.0007	.0146	.0002	-.0137	.0003	.0031
#3	.0032	.0038	.1094	-.0001	.0146	.0002	.0002	.0004	.0031

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5666.9	2361.4	23581.	6352.2
Stddev	10.6	7.8	19.	20.6
%RSD	.18636	.33206	.07953	.32356
#1	5655.8	2354.1	23563.	6328.5
#2	5668.1	2360.3	23581.	6365.9
#3	5676.8	2369.7	23600.	6362.1

Zoom In Zoom Out

Sample Name: MP34828-MB2 Acquired: 12/20/2018 15:22:02 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	.0177	-.0021	.0002	.0000	.0047	-.0001	-.0001	.0003
Stddev	.0001	.0187	.0005	.0001	.000	.0016	.0001	.0003	.0004
%RSD	31.87	105.9	25.32	89.94	239.2	32.88	197.0	303.7	138.1
#1	-.0003	.0229	-.0027	.0000	.0001	.0030	.0001	.0002	.0003
#2	-.0006	-.0031	-.0017	.0002	.0000	.0053	-.0002	-.0002	.0007
#3	-.0004	.0333	-.0020	.0003	-.0001	.0059	.0000	-.0003	-.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0005	.0011	.3400	.0113	.0002	.0002	F 149.8	.0003	-.0015
Stddev	.0004	.0013	.0194	.0153	.0000	.0001	2.4	.0002	.0005
%RSD	82.46	113.7	5.709	135.5	13.67	86.46	1.618	73.95	32.81
#1	-.0006	.0012	.3205	-.0001	.0002	.0003	149.1	.0001	-.0017
#2	-.0008	.0024	.3593	.0052	.0002	.0001	152.5	.0003	-.0009
#3	.0000	-.0002	.3401	.0287	.0002	.0000	147.8	.0004	-.0018

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0003	.0018	.0498	.0011	.0010	.0000	-.0082	.0001	.0012
Stddev	.0019	.0031	.0009	.0002	.0001	.0000	.0017	.0003	.0001
%RSD	628.0	170.0	1.820	18.14	6.729	86.06	20.79	279.4	4.468
#1	.0015	.0007	.0508	.0009	.0010	.0001	-.0102	.0003	.0012
#2	-.0019	.0053	.0496	.0013	.0010	.0000	-.0070	.0003	.0013
#3	.0014	-.0006	.0490	.0011	.0011	.0000	-.0075	-.0003	.0013

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5701.8	2377.8	23763.	6403.3
Stddev	17.2	8.6	225.	62.9
%RSD	.30241	.36206	.94492	.98235
#1	5682.6	2370.9	23508.	6436.8
#2	5706.8	2374.9	23852.	6330.8
#3	5716.0	2387.4	23930.	6442.4

Zoom In Zoom Out

Sample Name: MP34828-B2 Acquired: 12/20/2018 15:26:39 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0486	27.02	1.931	2.021	.0520	25.37	.0487	.4861	.2018
Stddev	.0004	.12	.003	.007	.0002	.11	.0001	.0008	.0005
%RSD	.8574	.4397	.1350	.3496	.2887	.4277	.2546	.1590	.2670
#1	.0483	26.92	1.930	2.017	.0518	25.32	.0485	.4870	.2024
#2	.0491	27.16	1.929	2.018	.0521	25.50	.0487	.4859	.2016
#3	.0485	26.99	1.934	2.029	.0521	25.30	.0488	.4855	.2013

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2570	26.13	25.82	25.12	.5085	.4549	F 173.8	.4962	.4877
Stddev	.0002	.09	.09	.13	.0011	.0004	4.4	.0006	.0029
%RSD	.0695	.3294	.3323	.5295	.2100	.0922	2.532	.1267	.5909
#1	.2572	26.08	25.73	25.16	.5073	.4546	177.8	.4961	.4880
#2	.2570	26.23	25.85	25.23	.5093	.4554	174.6	.4956	.4847
#3	.2568	26.08	25.89	24.97	.5088	.4548	169.1	.4968	.4905

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5101	1.894	.4734	.4815	.4977	.4985	2.055	.4853	.4906
Stddev	.0010	.002	.0016	.0015	.0014	.0018	.004	.0007	.0009
%RSD	.2014	.1173	.3452	.3023	.2770	.3598	.2163	.1359	.1831
#1	.5113	1.894	.4725	.4828	.4961	.4966	2.050	.4850	.4898
#2	.5099	1.896	.4753	.4799	.4984	.5002	2.057	.4860	.4905
#3	.5093	1.891	.4725	.4817	.4985	.4986	2.059	.4848	.4916

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5707.0	2338.1	23374.	6438.8
Stddev	5.1	1.3	111.	51.7
%RSD	.08907	.05497	.47583	.80370
#1	5712.1	2338.8	23410.	6453.6
#2	5707.0	2338.8	23464.	6381.2
#3	5701.9	2336.6	23250.	6481.5

Zoom In Zoom Out

Sample Name: MP34828-MB3 Acquired: 12/20/2018 15:31:01 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	.0014	-.0018	.0002	-.0001	.0053	.0000	-.0002	.0006
Stddev	.0004	.0060	.0003	.0002	.0000	.0012	.0000	.0002	.0003
%RSD	93.36	444.2	16.53	93.97	53.06	22.66	1225.	81.15	43.45
#1	-.0001	-.0038	-.0015	.0000	.0000	.0043	.0000	-.0004	.0003
#2	-.0003	.0079	-.0021	.0002	-.0001	.0066	.0001	-.0002	.0007
#3	-.0008	.0000	-.0017	.0003	.0000	.0049	.0000	-.0001	.0008

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0002	.0055	.0535	.0090	.0001	-.0002	.0483	.0000	-.0011
Stddev	.0000	.0008	.0096	.0097	.0001	.0005	.0083	.000	.0011
%RSD	28.64	14.07	17.89	107.5	133.7	284.8	17.28	1056.	99.56
#1	-.0002	.0050	.0530	-.0015	.0000	-.0005	.0425	-.0002	.0000
#2	-.0001	.0051	.0633	.0176	.0001	-.0004	.0578	-.0003	-.0022
#3	-.0002	.0064	.0442	.0109	.0001	.0004	.0445	.0004	-.0011

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0006	.0011	.0324	.0000	-.0001	.0002	-.0042	.0001	.0016
Stddev	.0011	.0017	.0007	.000	.0001	.0002	.0035	.0002	.0001
%RSD	174.1	150.4	2.236	578.1	116.1	109.4	84.60	290.9	3.236
#1	-.0006	-.0006	.0317	.0000	.0000	.0003	-.0005	.0002	.0016
#2	-.0017	.0028	.0331	.0000	-.0002	.0002	-.0044	.0002	.0016
#3	.0004	.0011	.0325	-.0001	.0000	.0000	-.0076	-.0002	.0015

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5526.2	2331.2	23126.	6441.4
Stddev	13.7	8.4	69.	29.4
%RSD	.24759	.36173	.29910	.45693
#1	5521.7	2329.9	23091.	6472.2
#2	5515.4	2323.5	23206.	6438.5
#3	5541.6	2340.2	23081.	6413.6

Zoom In Zoom Out

Sample Name: MP34828-B3 Acquired: 12/20/2018 15:35:29 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0484	26.59	1.920	2.021	.0510	24.93	.0485	.4814	.2011
Stddev	.0014	.14	.005	.010	.0001	.15	.0001	.0005	.0007
%RSD	2.915	.5244	.2479	.5085	.2813	.6201	.2812	.1062	.3395
#1	.0468	26.66	1.925	2.026	.0511	24.99	.0487	.4819	.2016
#2	.0490	26.43	1.919	2.009	.0509	24.75	.0485	.4814	.2003
#3	.0495	26.68	1.915	2.028	.0512	25.04	.0484	.4809	.2013

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2463	25.72	24.66	24.91	.5106	.4515	24.73	.4907	.4850
Stddev	.0007	.15	.09	.14	.0003	.0002	.13	.0008	.0031
%RSD	.2956	.5680	.3448	.5762	.0678	.0498	.5431	.1532	.6476
#1	.2462	25.82	24.72	25.03	.5103	.4517	24.78	.4916	.4882
#2	.2456	25.56	24.57	24.75	.5110	.4514	24.58	.4905	.4846
#3	.2471	25.79	24.70	24.95	.5105	.4513	24.84	.4901	.4820

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5045	1.877	.4527	.4764	.4918	.4949	2.033	.4796	.4916
Stddev	.0036	.003	.0020	.0034	.0015	.0012	.008	.0010	.0016
%RSD	.7233	.1701	.4361	.7176	.2985	.2513	.3728	.2069	.3222
#1	.5073	1.880	.4519	.4792	.4916	.4939	2.041	.4797	.4932
#2	.5058	1.879	.4513	.4773	.4904	.4945	2.027	.4785	.4916
#3	.5004	1.874	.4550	.4726	.4933	.4963	2.031	.4805	.4900

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5668.1	2340.8	23336.	6480.6
Stddev	16.1	7.9	91.	94.7
%RSD	.28480	.33656	.38817	1.4607
#1	5649.6	2331.8	23419.	6446.5
#2	5679.1	2344.2	23350.	6587.6
#3	5675.7	2346.5	23239.	6407.7

Zoom In Zoom Out

Sample Name: CRIA Acquired: 12/20/2018 15:39:41 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0098	.1986	.0089	.1977	.0051	.9960	.0049	.0468	.0098
Stddev	.0011	.0167	.0011	.0007	.0001	.0120	.0000	.0001	.0003
%RSD	10.98	8.420	11.87	.3620	1.154	1.210	.2404	.2551	2.706
#1	.0086	.2173	.0099	.1970	.0050	.9821	.0049	.0469	.0101
#2	.0107	.1936	.0090	.1976	.0051	1.002	.0049	.0467	.0097
#3	.0101	.1850	.0078	.1984	.0051	1.004	.0048	.0467	.0096

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0227	.3041	9.726	4.976	.0150	.0432	9.614	.0373	.0024
Stddev	.0007	.0025	.092	.047	.0001	.0009	.034	.0003	.0009
%RSD	3.170	.8221	.9486	.9486	.6791	2.004	.3583	.7676	40.20
#1	.0229	.3016	9.630	4.932	.0151	.0432	9.580	.0372	.0025
#2	.0219	.3066	9.814	5.026	.0150	.0441	9.614	.0376	.0032
#3	.0233	.3041	9.732	4.971	.0149	.0424	9.649	.0370	.0013

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0046	.0107	.0213	.0458	.0099	.0093	.0150	.0468	.0204
Stddev	.0018	.0035	.0003	.0013	.0000	.0000	.0007	.0005	.0001
%RSD	38.18	32.79	1.198	2.744	.2497	.2467	4.663	.9802	.6222
#1	.0046	.0087	.0214	.0444	.0099	.0093	.0147	.0472	.0205
#2	.0063	.0147	.0215	.0466	.0099	.0093	.0158	.0469	.0203
#3	.0028	.0086	.0210	.0465	.0099	.0093	.0144	.0463	.0205

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5751.3	2408.8	23994.	6548.4
Stddev	15.7	4.6	74.	31.3
%RSD	.27372	.19159	.30864	.47869
#1	5742.1	2405.2	23940.	6580.0
#2	5742.4	2407.2	23964.	6517.3
#3	5769.5	2414.0	24079.	6547.9

Zoom In Zoom Out

Sample Name: ICSA Acquired: 12/20/2018 15:44:04 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.0001	F 531.1	-.0018	.0011	.0000	479.3	-.0003	-.0017
Stddev	.0004	8.8	.0029	.0003	.000	8.4	.0003	.0002
%RSD	457.0	1.665	165.0	23.62	93.49	1.743	93.32	11.70
#1	-.0003	532.9	.0006	.0008	-.0001	483.2	-.0004	-.0019
#2	.0000	539.0	-.0008	.0013	.0000	485.1	-.0007	-.0017
#3	.0005	521.5	-.0050	.0010	.0000	469.7	.0000	-.0015

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	-.0012	.0005	187.8	.1333	F 516.1	.0021	.0004	.2856
Stddev	.0003	.0001	1.4	.0221	5.6	.0001	.0004	.0027
%RSD	22.59	19.49	.7317	16.57	1.092	3.905	78.87	.9364
#1	-.0013	.0005	188.0	.1553	518.3	.0021	.0005	.2833
#2	-.0009	.0004	189.0	.1111	520.3	.0022	.0008	.2851
#3	-.0015	.0005	186.3	.1336	509.7	.0020	.0001	.2885

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0015	F -.0065	.0080	-.0014	.0157	.0014	.0003	.0024
Stddev	.0003	.0018	.0001	.0060	.0007	.0009	.0001	.0002
%RSD	21.72	27.10	1.848	420.7	4.499	63.71	40.09	8.761
#1	.0013	-.0051	.0081	-.0079	.0157	.0023	.0002	.0026
#2	.0018	-.0084	.0081	-.0001	.0164	.0005	.0003	.0025
#3	.0012	-.0058	.0079	.0038	.0150	.0015	.0005	.0022

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	.0039	.0014	.0082
Stddev	.0068	.0003	.0002
%RSD	173.3	21.45	2.443
#1	-.0039	.0012	.0080
#2	.0082	.0012	.0082
#3	.0075	.0017	.0084

Zoom In Zoom Out

Sample Name: ICSA Acquired: 12/20/2018 15:44:04 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5619.0	2203.6	22433.	6387.9
Stddev	11.6	9.1	80.	90.0
%RSD	.20718	.41206	.35542	1.4084
#1	5605.7	2193.8	22344.	6324.7
#2	5624.3	2205.1	22498.	6348.2
#3	5627.1	2211.8	22458.	6490.9

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 12/20/2018 15:48:43 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F 1.104	F 518.6	.9896	.4972	.4860	449.8	.9674	.4952	.4791
Stddev	.004	7.5	.0026	.0018	.0042	4.0	.0007	.0012	.0014
%RSD	.3512	1.456	.2652	.3552	.8706	.8983	.0696	.2466	.2872
#1	1.099	520.1	.9926	.4989	.4908	454.4	.9676	.4963	.4776
#2	1.105	525.3	.9875	.4954	.4830	447.4	.9667	.4939	.4793
#3	1.107	510.4	.9888	.4975	.4841	447.4	.9680	.4953	.4803

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5505	184.7	.0756	F 506.5	.4994	.8813	.1785	.9967	.9595
Stddev	.0021	1.2	.0318	3.4	.0004	.0025	.0164	.0009	.0046
%RSD	.3821	.6437	42.02	.6651	.0893	.2857	9.178	.0870	.4800
#1	.5483	186.0	.0606	510.2	.4995	.8842	.1973	.9975	.9589
#2	.5507	183.7	.1121	503.6	.4988	.8798	.1707	.9958	.9552
#3	.5525	184.5	.0541	505.8	.4997	.8799	.1674	.9967	.9644

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.053	.9464	.0686	.9069	.9176	1.046	.9751	.4741	.9489
Stddev	.003	.0076	.0021	.0007	.0074	.002	.0052	.0022	.0019
%RSD	.2369	.8129	3.039	.0775	.8161	.1916	.5298	.4593	.2047
#1	1.053	.9464	.0686	.9069	.9176	1.046	.9751	.4741	.9489
#2	1.050	.9334	.0702	.9059	.9051	1.046	.9797	.4776	.9473
#3	1.055	.9329	.0661	.9056	.9044	1.050	.9855	.4782	.9512

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5551.4	2182.7	22370.	6339.5
Stddev	18.6	6.7	20.	6.7
%RSD	.33572	.30915	.09048	.10540
#1	5563.4	2187.6	22370.	6332.0
#2	5560.9	2185.6	22390.	6345.0
#3	5529.9	2175.0	22350.	6341.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 15:53:12 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2455	40.22	1.987	2.029	2.033	40.36	2.004	1.978	2.010
Stddev	.0010	.07	.003	.005	.010	.26	.003	.005	.003
%RSD	.4073	.1834	.1255	.2435	.4741	.6332	.1283	.2310	.1616
#1	.2447	40.24	1.985	2.030	2.032	40.46	2.004	1.978	2.008
#2	.2466	40.14	1.987	2.023	2.024	40.06	2.001	1.974	2.008
#3	.2452	40.29	1.990	2.033	2.043	40.54	2.006	1.983	2.014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.979	40.12	40.05	40.48	2.040	2.001	40.30	1.991	2.026
Stddev	.004	.24	.18	.27	.003	.007	.13	.002	.001
%RSD	.2084	.5951	.4371	.6674	.1278	.3460	.3212	.0871	.0258
#1	1.983	40.13	40.05	40.59	2.043	1.997	40.31	1.992	2.027
#2	1.975	39.88	39.88	40.17	2.039	1.997	40.17	1.989	2.026
#3	1.980	40.36	40.23	40.68	2.038	2.009	40.42	1.992	2.026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.983	1.968	1.937	2.030	2.069	2.047	2.017	2.049	2.005
Stddev	.007	.006	.002	.007	.005	.005	.005	.008	.005
%RSD	.3466	.3225	.0782	.3339	.2400	.2539	.2489	.3687	.2368
#1	1.990	1.963	1.935	2.027	2.072	2.049	2.012	2.051	2.004
#2	1.979	1.967	1.937	2.025	2.064	2.041	2.015	2.041	2.000
#3	1.978	1.975	1.938	2.038	2.073	2.051	2.022	2.056	2.010
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 15:53:12 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5686.8	2313.2	23434.	6468.9
Stddev	4.8	2.3	55.	80.5
%RSD	.08410	.10083	.23308	1.2446
#1	5683.6	2313.1	23422.	6451.0
#2	5684.5	2315.6	23494.	6556.8
#3	5692.3	2311.0	23387.	6398.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 15:57:24 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0066	-.0004	.0003	.0001	.0112	.0000	.0002
Stddev	.0008	.0052	.0007	.0001	.0000	.0013	.0000	.0002
%RSD	355.3	78.05	189.5	22.64	31.53	11.33	243.2	113.8
#1	.0005	.0082	.0004	.0004	.0001	.0121	.0000	.0005
#2	-.0007	.0008	-.0009	.0002	.0002	.0097	.0000	.0001
#3	.0008	.0108	-.0007	.0003	.0001	.0117	.0000	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0003	.0153	.0476	.0275	.0001	F .0011	-.0305
Stddev	.0004	.0001	.0026	.0330	.0213	.0000	.0004	.0158
%RSD	87.38	50.11	17.10	69.29	77.48	18.82	37.05	51.78
#1	.0005	.0004	.0176	.0286	.0177	.0001	.0014	-.0207
#2	.0001	.0001	.0160	.0856	.0128	.0001	.0006	-.0487
#3	.0009	.0003	.0125	.0285	.0518	.0001	.0013	-.0221
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	F -.0030	-.0002	.0005	.0000	-.0003	.0001	.0011
Stddev	.0004	.0006	.0022	.0011	.0012	.0007	.0001	.0002
%RSD	68.03	18.80	1242.	228.9	4203.	254.9	59.76	21.25
#1	.0004	-.0031	-.0022	.0017	.0014	-.0006	.0001	.0011
#2	.0010	-.0035	.0022	-.0003	-.0006	.0005	.0001	.0014
#3	.0003	-.0024	-.0005	.0000	-.0007	-.0006	.0000	.0009
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010						
Low Limit		-.0010						

Zoom In
Zoom Out

Sample Name: CCB Acquired: 12/20/2018 15:57:24 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F .0035	.0004	.0009
Stddev	.0041	.0003	.0000
%RSD	119.6	64.58	5.439
#1	.0083	.0004	.0009
#2	.0012	.0007	.0009
#3	.0010	.0002	.0009
Check ?	Chk Fail	Chk Pass	Chk Pass
High Limit	.0020		
Low Limit	-.0020		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5679.1	2388.0	23619.	6469.4
Stddev	10.4	5.7	117.	57.7
%RSD	.18272	.23840	.49663	.89224
#1	5671.3	2385.4	23623.	6474.5
#2	5675.0	2384.1	23500.	6409.3
#3	5690.9	2394.5	23735.	6524.4

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	☒	2	V	-0.005817	0.000000	No
			Fe	0.000004	0.000000	No
Al 396.152 { 85}	☒	1	Mo	0.040330	0.000000	No
As 189.042 {478}	☒	4	Fe	-0.000018	0.000000	No
			Cr	-0.000653	0.000000	No
			Mo	0.000444	0.000000	No
			Al	0.000001	0.000000	No
Ba 455.403 { 74}	☒	1	Fe	0.000003	0.000000	No
Be 313.042 {108}	☒	2	V	0.000625	0.000000	No
			Ti	-0.000289	0.000000	No
Ca 317.933 {106}	☒	None				
Cd 226.502 {449}	☒	4	Fe	0.000102	0.000000	No
			Ca	-0.000000	0.000000	No
			Al	-0.000002	0.000000	No
			Ti	0.000103	0.000000	No
Co 228.616 {447}	☒	3	Mo	-0.001220	0.000000	No
			Ti	0.002210	0.000000	No
			Fe	0.000007	0.000000	No
Cr 267.716 {126}	☒	4	Al	0.000003	0.000000	No
			Fe	-0.000012	0.000000	No
			Ca	0.000002	0.000000	No
			Cd	-0.000120	0.000000	No
Cu 324.754 {104}	☒	10	Mo	0.000189	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Al	0.000003	0.000000	No
			Mg	0.000003	0.000000	No
			Co	-0.000547	0.000000	No
			Cd	0.000190	0.000000	No
			Fe	-0.000124	0.000000	No
			Ca	0.000001	0.000000	No
			Ti	-0.000268	0.000000	No
Fe 259.940 {130}	☒	None				
In 230.606 {446}*	☒	None				
K 766.490 { 44}	☒	None				
Mg 279.079 {121}	☒	None				
Mn 257.610 {131}	☒	2	Fe	-0.000003	0.000000	No
			Mg	0.000000	0.000000	No
Mo 202.030 {467}	☒	1	Fe	-0.000006	0.000000	No
Na 589.592 { 57}	☒	None				
Ni 231.604 {445}	☒	7	Fe	-0.000046	0.000000	No
			Co	0.000112	0.000000	No
			Mo	0.000980	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000304	0.000000	No
			Tl	0.000172	0.000000	No
Pb 220.353 {453}	☒	8	Al	0.000193	0.000000	No
			Fe	0.000666	0.000000	No
			Mo	-0.002189	0.000000	No
			Cu	0.000467	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000232	0.000000	No
			Ca	-0.000003	0.000000	No
			Cr	-0.000260	0.000000	No
Sb 206.833 {463}	☒	11	Fe	-0.000013	0.000000	No
			Cr	0.011486	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Mo	-0.003944	0.000000	No
			V	-0.000441	0.000000	No
			Sn	-0.008695	0.000000	No
			Ti	0.000278	0.000000	No
			Ca	0.000001	0.000000	No
			Ni	-0.000818	0.000000	No
			Al	0.000010	0.000000	No
			Mn	-0.000133	0.000000	No
			Mg	-0.000002	0.000000	No
Se 196.090 {472}	☒	12	Fe	0.000032	0.000000	No
			Ca	0.000008	0.000000	No
			Mn	0.000331	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000031	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	-0.000111	0.000000	No
			As	0.000125	0.000000	No
			Cd	-0.000250	0.000000	No
			Mg	-0.000004	0.000000	No
			Cr	-0.000326	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.000000	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000021	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000014	0.000000	No
Tl 190.856 {477}	☒	10	Co	0.004099	0.000000	No
			Fe	0.000020	0.000000	No
			Al	-0.000010	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.000648	0.000000	No
			Sb	0.000167	0.000000	No
			Ca	-0.000000	0.000000	No
			Cr	0.000340	0.000000	No
			Mg	-0.000002	0.000000	No
			V	0.000015	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000001	0.000000	No
			Cr	-0.003634	0.000000	No
			Mo	-0.009536	0.000000	No
			Ti	0.000303	0.000000	No
			Mn	-0.000333	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.001305	0.000000	No
			Al	-0.000001	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000028	0.000000	No
			As	0.001105	0.000000	No

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.001685	0.631469	0.000000	1.000000
Al 396.152 { 85}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	-0.007031	0.143825	0.000000	1.000000
As 189.042 {478}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	-0.000370	0.258427	0.000000	1.000000
Ba 455.403 { 74}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.008637	8.659733	0.000000	1.000000
Be 313.042 {108}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	-0.000680	8.079725	0.000000	1.000000
Ca 317.933 {106}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.005450	0.225893	0.000000	1.000000
Cd 226.502 {449}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.000405	5.136195	0.000000	1.000000
Co 228.616 {447}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	-0.000668	2.885860	0.000000	1.000000
Cr 267.716 {126}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	-0.000404	0.498195	0.000000	1.000000
Cu 324.754 {104}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.018243	0.895259	0.000000	1.000000
Fe 259.940 {130}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.000765	0.146116	0.000000	1.000000
In 230.606 {446}*	12/20/2018 9:22:41	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
K 766.490 { 44}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.001176	0.063963	0.000000	1.000000
Mg 279.079 {121}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	-0.000386	0.025980	0.000000	1.000000
Mn 257.610 {131}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.000965	2.999209	0.000000	1.000000
Mo 202.030 {467}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.001044	0.959351	0.000000	1.000000
Na 589.592 { 57}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	-0.014367	0.223336	0.000000	1.000000
Ni 231.604 {445}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.000229	1.831146	0.000000	1.000000
Pb 220.353 {453}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.000380	0.153115	0.000000	1.000000
Sb 206.833 {463}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.000296	0.245999	0.000000	1.000000
Se 196.090 {472}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	-0.000699	0.201087	0.000000	1.000000
Si 212.412 {459}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.002667	0.402339	0.000000	1.000000
Sn 189.989 {477}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.000672	0.429949	0.000000	1.000000
Sr 407.771 { 83}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	-0.000226	13.253190	0.000000	1.000000
Ti 334.941 {101}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.002586	1.876643	0.000000	1.000000
Tl 190.856 {477}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	-0.000930	0.039891	0.000000	1.000000
V 292.402 {115}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	-0.000316	0.650454	0.000000	1.000000
Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Zn 206.200 {463}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.002551	4.019952	0.000000	1.000000

Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
						Slope	Y-int	Slope factor	Offset
Ag 328.068 {103}	0.999802	0.000121	0.000669	0.002229	OK.	1.000000	0.000000	1	0
Al 396.152 { 85}	0.999982	0.001382	0.008898	0.029661	OK.	1.000000	0.000000	1	0
As 189.042 {478}	0.999968	0.000167	0.001280	0.004268	OK.	1.000000	0.000000	1	0
Ba 455.403 { 74}	0.999985	0.003826	0.000185	0.000617	OK.	1.000000	0.000000	1	0
Be 313.042 {108}	0.999929	0.007737	0.000067	0.000224	OK.	1.000000	0.000000	1	0
Ca 317.933 {106}	0.999989	0.001725	0.002700	0.009000	OK.	1.000000	0.000000	1	0
Cd 226.502 {449}	0.999980	0.002627	0.000103	0.000344	OK.	1.000000	0.000000	1	0
Co 228.616 {447}	0.999965	0.001938	0.000208	0.000692	OK.	1.000000	0.000000	1	0
Cr 267.716 {126}	0.999904	0.000556	0.000490	0.001632	OK.	1.000000	0.000000	1	0
Cu 324.754 {104}	0.999872	0.001153	0.000414	0.001378	OK.	1.000000	0.000000	1	0
Fe 259.940 {130}	0.999815	0.004525	0.002180	0.007267	OK.	1.000000	0.000000	1	0
In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
K 766.490 { 44}	0.999994	0.000362	0.032209	0.107365	OK.	1.000000	0.000000	1	0
Mg 279.079 {121}	0.999962	0.000363	0.015877	0.052922	OK.	1.000000	0.000000	1	0
Mn 257.610 {131}	0.999911	0.003219	0.000075	0.000250	OK.	1.000000	0.000000	1	0
Mo 202.030 {467}	0.999838	0.001389	0.000348	0.001161	OK.	1.000000	0.000000	1	0
Na 589.592 { 57}	0.999996	0.001010	0.010203	0.034010	OK.	1.000000	0.000000	1	0
Ni 231.604 {445}	0.999961	0.001309	0.000334	0.001114	OK.	1.000000	0.000000	1	0
Pb 220.353 {453}	0.999996	0.000034	0.001998	0.006659	OK.	1.000000	0.000000	1	0
Sb 206.833 {463}	0.999897	0.000283	0.002193	0.007310	OK.	1.000000	0.000000	1	0
Se 196.090 {472}	0.999975	0.000114	0.002362	0.007872	OK.	1.000000	0.000000	1	0
Si 212.412 {459}	0.997474	0.002308	0.000960	0.003199	OK.	1.000000	0.000000	1	0
Sn 189.989 {477}	0.999848	0.000605	0.000661	0.002203	OK.	1.000000	0.000000	1	0
Sr 407.771 { 83}	0.999898	0.015285	0.000078	0.000260	OK.	1.000000	0.000000	1	0
Ti 334.941 {101}	0.999908	0.002049	0.000208	0.000693	OK.	1.000000	0.000000	1	0
Tl 190.856 {477}	0.999990	0.000014	0.004327	0.014423	OK.	1.000000	0.000000	1	0
V 292.402 {115}	0.999848	0.000902	0.000466	0.001552	OK.	1.000000	0.000000	1	0
Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Zn 206.200 {463}	0.999994	0.001094	0.000099	0.000330	OK.	1.000000	0.000000	1	0

DOD

SGS Accutest - Orlando **Metals Digestion Log Water**

Method of digestion (circle one): SW846-3010A / SW846-3005A / (EPA 200.7) / EPA 200.8 / SM3030C

MP #: 34829

Prep Date/Time (mm/dd/yy 24:00): 12/18/18 1710

HotBlock I.D: 10

Thermometer I.D.: 6011

Correction Factor (°C): -1

Temperature Observed/Corrected (°C): 93 / 92

pH paper lot#: 230416

Volume

Spk. Sol A	Used(ml)	Pipette #
ACC 1103	0.5	KU 15244
ACC 1081	0.25	KU 15244
MET 6245	0.25	KU 15244

Dig Tube Lot# HP3161

Added B: HNO_3 HCL

Lot# 0000 202943 0000 212747

Sample #	Initial Volume(ml)	pH<2	Final Volume(ml)	Comments
Method Blank(MB)	50.0	N/A	50.0	
Spike Blank(SB)		N/A		
Matrix Spike(MS)		✓		
Matrix Spike Dup(MSD)		✓		
Duplicate(DUP)		✓		
1 QC C FA60136-10	3	✓		
2 -12		✓		
3 -14		✓		
4 -16		✓		
5 FA60205-21	2	✓		
6 -22	2	✓		
7				
8				
9				
10				
11 12/18/18 IT				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21 E				
22 E				
23 E				
24 E				

Analyst: NMO Date: 12/18/18

QC Review: Date: 12/20/18

A Used for SB, MS, MSD
B For reagent volumes used consult SOP MET 193, current revision
C Parent sample used to prepare MS, MSD, DUP
D Bottle Number
E Additional Prep QC

icpwaterdigestionlog 0816.xls

Rev 09/12/16 DM
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General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Alkalinity, Total as CaCO3	GN80685			mg/l	250	238	95.3	85-115%
Bromide	GP32494/GN80720	0.50	0.0	mg/l	12.5	12.6	100.8	90-110%
Chloride	GP32494/GN80720	2.0	1.9	mg/l	50	49.7	99.4	90-110%
Fluoride	GP32494/GN80720	0.20	0.0	mg/l	2.5	2.42	96.8	90-110%
Nitrogen, Nitrate	GP32494/GN80720	0.10	0.0	mg/l	2.5	2.45	98.0	90-110%
Nitrogen, Nitrite	GP32494/GN80720	0.10	0.0	mg/l	2.5	2.65	106.0	90-110%
Solids, Total Dissolved	GN80640	50	0.0	mg/l				
Solids, Total Dissolved	GN80663	50	0.00	mg/l				
Sulfate	GP32494/GN80720	2.0	0.0	mg/l	50	52.2	104.4	90-110%

Associated Samples:
Batch GN80640: FA60136-5, FA60136-6, FA60136-7, FA60136-8, FA60136-9, FA60136-10, FA60136-11, FA60136-12, FA60136-13, FA60136-14, FA60136-15, FA60136-16
Batch GN80663: FA60136-1, FA60136-2, FA60136-3, FA60136-4
Batch GN80685: FA60136-10, FA60136-12, FA60136-14, FA60136-16
Batch GP32494: FA60136-10, FA60136-12, FA60136-14, FA60136-16
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Alkalinity, Total as CaCO3	GN80685	FA60161-1	mg/l	166	170	2.6	0-20%
Solids, Total Dissolved	GN80640	FA60117-1	mg/l	536	508	5.4(a)	0-5%
Solids, Total Dissolved	GN80663	FA60093-1	mg/l	94.0	92.0	2.2	0-5%

Associated Samples:
Batch GN80640: FA60136-5, FA60136-6, FA60136-7, FA60136-8, FA60136-9, FA60136-10, FA60136-11, FA60136-12, FA60136-13, FA60136-14, FA60136-15, FA60136-16
Batch GN80663: FA60136-1, FA60136-2, FA60136-3, FA60136-4
Batch GN80685: FA60136-10, FA60136-12, FA60136-14, FA60136-16
(*) Outside of QC limits
(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Bromide	GP32494/GN80720	FA60416-1	mg/l	0.83	12.5	13.2	99.0	90-110%
Chloride	GP32494/GN80720	FA60416-1	mg/l	3.6	50	53.3	99.4	90-110%
Fluoride	GP32494/GN80720	FA60416-1	mg/l	0.084	2.5	2.4	92.6	90-110%
Nitrogen, Nitrate	GP32494/GN80720	FA60416-1	mg/l	0.78	2.5	3.3	100.8	90-110%
Nitrogen, Nitrite	GP32494/GN80720	FA60416-1	mg/l	0.050 U	2.5	2.6	104.0	90-110%
Sulfate	GP32494/GN80720	FA60416-1	mg/l	8.4	50	62.3	107.8	90-110%

Associated Samples:
Batch GP32494: FA60136-10, FA60136-12, FA60136-14, FA60136-16
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Bromide	GP32494/GN80720	FA60416-1	mg/l	0.83	12.5	12.9	2.3	20%
Chloride	GP32494/GN80720	FA60416-1	mg/l	3.6	50	53.3	0.0	20%
Fluoride	GP32494/GN80720	FA60416-1	mg/l	0.084	2.5	2.4	0.0	20%
Nitrogen, Nitrate	GP32494/GN80720	FA60416-1	mg/l	0.78	2.5	3.3	0.0	20%
Nitrogen, Nitrite	GP32494/GN80720	FA60416-1	mg/l	0.050 U	2.5	2.5	3.9	20%
Sulfate	GP32494/GN80720	FA60416-1	mg/l	8.4	50	62.1	0.3	20%

Associated Samples:
Batch GP32494: FA60136-10, FA60136-12, FA60136-14, FA60136-16
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: 318122201.TXT Date Analyzed: 12/22/18 Methods: EPA 300/SW846 9056A
Analyst: BR Run ID: GN80720
Parameters: Bromide,Chloride,Sulfate

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:34	GN80720-CCV1	1		
11:51	GP32494-MB1	1		
12:08	GP32494-B1	1		
12:25	FA60416-1	1		(sample used for QC only; not part of login FA60136)
12:42	ZZZZZZ	100		
12:59	ZZZZZZ	50		
13:16	ZZZZZZ	25		
13:33	GP32494-S1	1		
13:49	GP32494-S2	1		
14:06	FA60445-1A	1		(sample used for QC only; not part of login FA60136)
14:23	ZZZZZZ	1		
14:40	GN80720-CCV2	1		
14:57	GN80720-CCB1	1		
15:14	ZZZZZZ	1		
15:31	ZZZZZZ	1		
15:48	ZZZZZZ	1		
16:05	ZZZZZZ	5		
16:22	ZZZZZZ	10		
16:39	ZZZZZZ	1		
16:56	GP32494-S3	1		
17:13	GP32494-S4	1		
17:30	ZZZZZZ	1		
17:46	FA60136-10	5		
18:03	GN80720-CCV3	1		
18:20	GN80720-CCB2	1		
18:37	FA60136-12	5		
18:54	FA60136-14	5		
19:11	FA60136-16	1		
19:28	ZZZZZZ	1		
19:45	ZZZZZZ	1		
20:02	ZZZZZZ	1		
20:19	GN80720-CCV4	1		
20:36	GN80720-CCB3	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: FA60136
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: 318122201.TXT Date Analyzed: 12/22/18 Methods: EPA 300/SW846 9056A
Run ID: GN80720 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN80720-CCV1	Chloride	49.7	2.0	0.80	50	99.4	90-110
GN80720-CCV1	Bromide	12.9	0.50	0.12	12.5	103.2	90-110
GN80720-CCV1	Sulfate	53.0	2.0	0.60	50	106.0	90-110
GN80720-CCV2	Chloride	49.4	2.0	0.80	50	98.8	90-110
GN80720-CCV2	Bromide	12.3	0.50	0.12	12.5	98.4	90-110
GN80720-CCV2	Sulfate	52.8	2.0	0.60	50	105.6	90-110
GN80720-CCB1	Chloride	0.80 U	2.0	0.80			
GN80720-CCB1	Bromide	0.12 U	0.50	0.12			
GN80720-CCB1	Sulfate	0.60 U	2.0	0.60			
GN80720-CCV3	Chloride	49.2	2.0	0.80	50	98.4	90-110
GN80720-CCV3	Bromide	12.2	0.50	0.12	12.5	97.6	90-110
GN80720-CCV3	Sulfate	52.4	2.0	0.60	50	104.8	90-110
GN80720-CCB2	Chloride	0.80 U	2.0	0.80			
GN80720-CCB2	Bromide	0.12 U	0.50	0.12			
GN80720-CCB2	Sulfate	0.60 U	2.0	0.60			
GN80720-CCV4	Chloride	49.4	2.0	0.80	50	98.8	90-110
GN80720-CCV4	Bromide	12.6	0.50	0.12	12.5	100.8	90-110
GN80720-CCV4	Sulfate	52.4	2.0	0.60	50	104.8	90-110
GN80720-CCB3	Chloride	0.80 U	2.0	0.80			
GN80720-CCB3	Bromide	0.12 U	0.50	0.12			
GN80720-CCB3	Sulfate	0.60 U	2.0	0.60			

(!) Outside of QC limits

General Chemistry

Raw Data

TDS Worksheet

GN Batch ID: GN80640													
	Analyst:	F. N.	MB ID:	GN80640-MB1	RDL:	200	<RDL:						
	Analysis Date:	12/18/2018	Dup ID:	FA60117-1	Smpl Res:		Dup Res:	508.00	% RPD:				
	Method:	SM2540C	Dup2 ID:	FA60190-1	Smpl Res:		Dup Res:		% RPD:				

Bottle #	Sample ID	Scon Umhos/cm	Dish #	Volume Filtered (ml)	Dish Tare Wt (g)	Initial Wt after drying at 180 C° (g)	Redry 1 Constant Weight in g (a)	Redry ?	Redry 2 Constant Weight in g (a)	Redry ?	Redry 3 Constant Weight in g (a)	Redry ?	RDL	TDS (mg/L)
	GN80640-MB1		MB1	50.0	49.4182	49.4184	49.4183	No					200	2.00
6	GN80640-D1	607.0	D1	50.0	49.4985	49.5238	49.5239	No					200	508.00
4	GN80640-D2	423.0	D2	50.0	50.1158	50.1248	50.1251	No					200	186.00
6	FA60117-1	607.0	1	50.0	51.0288	51.0559	51.0556	No					200	536.00
6	FA60117-2	966.0	2	50.0	64.4129	64.4415	64.4418	No					200	578.00
7	FA60117-4	1420.0	3	50.0	68.6233	68.6779	68.6782	No					200	1098.00
7	FA60117-5	1420.0	4	50.0	65.0191	65.0754	65.0757	No					200	1132.00
2	FA60117-6	1253.0	5	50.0	67.9955	68.0393	68.0408	Yes	68.0388	Yes	68.0391	No	200	872.00
1	FA60136-5	770.0	6	50.0	50.8522	50.8768	50.8765	No					200	486.00
1	FA60136-6	396.0	7	50.0	65.5312	65.5425	65.5393	Yes	65.5435	Yes	65.5438	No	200	252.00
1	FA60136-7	679.0	8	50.0	65.5910	65.6107	65.6105	No					200	390.00
1	FA60136-8	688.0	9	50.0	66.9472	66.9661	66.9639	Yes	66.9666	Yes	66.9669	No	200	394.00
1	FA60136-9	6.3	10	50.0	69.0882	69.1067	69.1063	No					200	362.00
2	FA60136-10	711.0	11	50.0	67.7703	67.7910	67.7913	No					200	420.00
1	FA60136-11	720.0	12	50.0	50.8971	50.9198	50.9195	No					200	448.00
1	FA60136-12	733.0	13	50.0	50.8813	50.8933	50.8937	No					200	248.00
1	FA60136-13	231.0	14	50.0	63.0151	63.0333	63.0330	No					200	358.00
1	FA60136-14	838.0	15	50.0	49.3864	49.4100	49.4104	No					200	480.00
1	FA60136-15	977.0	16	50.0	50.8328	50.8628	50.8630	No					200	604.00
1	FA60136-16	586.0	17	50.0	66.4327	66.4498	66.4502	No					200	350.00
4	FA60190-1	423.0	18	50.0	68.3099	68.3189	68.3190	No					200	182.00

TDS Worksheet

GN Batch ID: GN80640											
Analyst:	F. N.	MB ID:	GN80640-MB1	RDL:	200	<RDL:					
Analysis Date:	12/18/2018	Dup ID:	FA60117-1	Smpl Res:		Dup Res:	508.00	% RPD:			
Method:	SM2540C	Dup2 ID:	FA60190-1	Smpl Res:		Dup Res:		% RPD:			

Bottle #	Sample ID	Scon Umhos/cm	Dish #	Volume Filtered (ml)	Dish Tare Wt (g)	Initial Wt after drying at 180 C° (g)	Redry 1 Constant Weight in g (a)	Redry ?	Redry 2 Constant Weight in g (a)	Redry ?	Redry 3 Constant Weight in g (a)	Redry ?	RDL	TDS (mg/L)
4	FA60190-2	557.0	19	50.0	67.7356	67.7493	67.7497	No					200	282.00
4	FA60190-10	245.0	20	50.0	69.1362	69.1426	69.1430	No					200	136.00

Filtration/Evap Date:	12/18/2018	**Time:**	13:50	**Temp:**	25	**Filter Lot:**	.GC283
Balance ID:	AS-120S	**Scon ID:**	COND 3				
Oven ID #1:	OVEN 1	**Therm ID #1:**	7245	**Corr Factor #1:**	0	**Oven ID #2:**	TDS 2
Therm ID #2:	OVEN DIG	**Corr Factor #2:**	+4				

	Oven Used	Start Date:	Stop Date:	Start Time:	End Time:	Observed C° Start Temp:	Corrected Start Temp:	Observed C° End Temp:	Corrected End Temp:
Dry	Oven #1	12/18/2018	12/19/2018	17:45	11:30	105	105	105	105
Redry1	Oven #2	12/19/2018	12/19/2018	11:30	13:30	176	180	176	180
Redry2	Oven #2	12/19/2018	12/19/2018	15:15	16:20	176	180	176	180
Redry3	Oven #2	12/19/2018	12/19/2018	18:00	09:50	176	180	176	180

Comments: re-dry4: on 12-20-2018 at111:40 t:180 end at:12:40 t:180.

Approved By: **ANALYST (fridan)** Approval Date: **12/20/2018**

TDS Worksheet

GN Batch ID: GN80663											
Analyst:	GW	MB ID:	GN80663-MB	RDL:		<RDL:					
Analysis Date:	12/14/2018	Dup ID:	FA60093-1	Smpl Res:	94.00	Dup Res:	92.00	% RPD:	2.15		
Method:	SM2540C	Dup2 ID:	FA60094-1	Smpl Res:	12560.00	Dup Res:	16140.00	% RPD:	24.95		

Bottle #	Sample ID	Scon Umhos/cm	Dish #	Volume Filtered (ml)	Dish Tare Wt (g)	Initial Wt after drying at 180 C° (g)	Redry 1 Constant Weight in g (a)	Redry ?	Redry 2 Constant Weight in g (a)	Redry ?	Redry 3 Constant Weight in g (a)	Redry ?	RDL	TDS (mg/L)
NA	GN80663-MB	1.0	5	50.0	69.2459	69.2435	69.2436	No					200	-46.00
4	GN80663-D1	77.0	4	50.0	68.6066	68.6114	68.6112	No					200	92.00
10	GN80663-D2	20000.0	69	5.0	67.5486	67.6295	67.6293	No					2000	16140.00
10	FA60093-1	77.0	12	50.0	68.3519	68.3568	68.3566	No					200	94.00
10	FA60093-2	204.0	8	50.0	71.6369	71.6455	71.6454	No					200	170.00
10	FA60093-3	120.0	17X	50.0	50.4289	50.4424	50.4422	No					200	266.00
10	FA60093-4	244.0	D2	50.0	49.9019	49.9116	49.9113	No					200	188.00
10	FA60093-5	230.0	D1	50.0	66.7640	66.7732	66.7730	No					200	180.00
10	FA60093-6	205.0	13	50.0	62.2843	62.2924	62.2923	No					200	160.00
10	FA60093-7	210.0	29	50.0	64.4147	64.4230	64.4231	No					200	168.00
10	FA60093-8	333.0	R2	50.0	67.6649	67.6783	67.6780	No					200	262.00
10	FA60093-9	269.0	17	50.0	66.4216	66.4307	66.4305	No					200	178.00
10	FA60093-10	228.0	FU	50.0	51.0543	51.0635	51.0634	No					200	182.00
10	FA60093-11	64.0	CH	50.0	65.3302	65.3349	65.3347	No					200	90.00
4	FA60094-1	20000.0	LL	5.0	57.1248	57.1876	57.1876	No					2000	12560.00
1	FA60105-1	685.0	15	50.0	61.8708	61.8872	61.8872	No					200	328.00
1	FA60105-2	392.0	5X	50.0	67.1535	67.1698	67.1696	No					200	322.00
1	FA60105-3	764.0	G	50.0	63.6468	63.6676	63.6675	No					200	414.00
1	FA60105-4	642.0	MB	50.0	50.4059	50.4319	50.4319	No					200	520.00
1	FA60136-1	535.0	11	50.0	49.8083	49.8297	49.8296	No					200	426.00
1	FA60136-2	432.0	1	50.0	49.5757	49.5938	49.5936	No					200	358.00

TDS Worksheet

GN Batch ID:											
GN80663	Analyst:	GW	MB ID:	GN80663-MB	RDL:		<RDL:				
	Analysis Date:	12/14/2018	Dup ID:	FA60093-1	Smpl Res:	94.00	Dup Res:	92.00	% RPD:	2.15	
	Method:	SM2540C	Dup2 ID:	FA60094-1	Smpl Res:	12560.00	Dup Res:	16140.00	% RPD:	24.95	

Bottle #	Sample ID	Scon Umhos/cm	Dish #	Volume Filtered (ml)	Dish Tare Wt (g)	Initial Wt after drying at 180 C° (g)	Redry 1 Constant Weight in g (a)	Redry ?	Redry 2 Constant Weight in g (a)	Redry ?	Redry 3 Constant Weight in g (a)	Redry ?	RDL	TDS (mg/L)
1	FA60136-3	612.0	74	50.0	66.9634	66.9888	66.9889	No					200	510.00
1	FA60136-4	671.0	18	50.0	69.5704	69.5971	69.5970	No					200	532.00

SGS

Filtration/Evap Date:	12/14/2018	**Time:**	12:49	**Temp:**	25	**Filter Lot:**		**Balance ID:**	AS-120S	**Scon ID:**	
Oven ID #1:	Oven#2	**Therm ID #1:**	7245	**Corr Factor #1:**	0	**Oven ID #2:**	TDS Oven#2	**Therm ID #2:**	TDS Oven#2	**Corr Factor #2:**	+4

	Oven Used	Start Date:	Stop Date:	Start Time:	End Time:	Observed C° Start Temp:	Corrected Start Temp:	Observed C° End Temp:	Corrected End Temp:
104 Dry	Oven #1	12/14/2018	12/19/2018	14:30	07:50	105	105	105	105
Initial Dry	Oven #2	12/19/2018	12/19/2018	07:51	10:09	175	179	176	180
Redry1	Oven #2	12/19/2018	12/19/2018	11:41	12:42	176	180	176	180
Redry2									

Comments:

Approved By: **ANALYST (garyw)** Approval Date: **12/19/2018**

tiamo 2.5 Build 116
License ID: 14676229

Computer name: Laptopjpm140408

JR 12-21-18

User (short name): New User
Printed: 2018-12-21 10:49:55 UTC-5

Determination overview

DNR=Did Not Report; Re-analyze via high or low level analysis

	Sample ID	Determination start	Method name	Initial pH	pH	Cond uS	mL at EP	Total Alk	Temp
1	pH Cal	2018-12-20 13:03:55 UTC-5	855 pH Cal 171016jpm						21.6
2	B1	2018-12-20 13:17:42 UTC-5	Total Alkalinity 171016jpm	10.76			8.34	238.2	22.2
3	BW IDOC3	2018-12-20 13:30:22 UTC-5	Total Alkalinity 171016jpm	10.74			8.77	250.6	22.0
4	BW IDOC4	2018-12-20 13:38:09 UTC-5	Total Alkalinity 171016jpm	10.73			8.69	248.2	22.1
5	FA60161-1.40	2018-12-20 13:45:54 UTC-5	Total Alkalinity 171016jpm	7.45			5.80	165.8	22.2
6	FA60161-1.40 DUP	2018-12-20 13:54:27 UTC-5	Total Alkalinity 171016jpm	7.44			5.95	170.1	22.2
7	FA59998-8.14 DNR	2018-12-20 14:03:24 UTC-5	Total Alkalinity 171016jpm	6.19			0.62	17.6	22.3
8	FA60087-2.7 DNR	2018-12-20 14:08:17 UTC-5	Total Alkalinity 171016jpm	7.58			invalid	invalid	22.5
9	BW IDOC2	2018-12-20 14:31:26 UTC-5	Total Alkalinity 171016jpm	10.70			8.79	251.2	22.9
10	FA60087-3.7 DNR	2018-12-20 14:39:11 UTC-5	Total Alkalinity 171016jpm	7.65			invalid	invalid	22.5
11	FA60088-1.7	2018-12-20 15:01:33 UTC-5	Total Alkalinity 171016jpm	7.60			25.21	720.3	22.2
12	FA60088-2.7	2018-12-20 15:24:08 UTC-5	Total Alkalinity 171016jpm	7.91			25.18	719.5	22.4
13	FA60091-1.1	2018-12-20 15:46:17 UTC-5	Total Alkalinity 171016jpm	7.45			2.66	76.0	22.2
14	FA60123-1.7	2018-12-20 15:52:53 UTC-5	Total Alkalinity 171016jpm	7.69			16.03	458.1	22.4
15	FA60123-2.7	2018-12-20 16:09:25 UTC-5	Total Alkalinity 171016jpm	7.55			16.98	485.2	22.3
16	FA60136-10.2	2018-12-20 16:26:42 UTC-5	Total Alkalinity 171016jpm	7.57			2.40	68.5	22.1
17	FA60136-12.1	2018-12-20 16:33:09 UTC-5	Total Alkalinity 171016jpm	7.78			2.50	71.4	22.1
18	FA60136-14.1	2018-12-20 16:39:36 UTC-5	Total Alkalinity 171016jpm	7.85			3.29	94.0	22.1
19	FA60136-16.1	2018-12-20 16:46:21 UTC-5	Total Alkalinity 171016jpm	7.95			5.48	156.5	22.1
20	FA60137-2.22	2018-12-20 16:54:16 UTC-5	Total Alkalinity 171016jpm	7.00			8.58	245.0	22.2

GN 80685
12-20-18 1317
Metrohm 856 09125

pH meter: AT-pH
Burette: 72311
Normality of Acid (N): 0.02 WC1122

B1 Recovery: 95.28%
B2 : 100.48%
B3 : 100.24%
B4 : 99.28%

RPD: 2.56%

Sodium Carbonate. GN24500

tiamo 2.5 Build 116
License ID: 14676229

Computer name: Laptopjpm140408

JP 12-21-18

User (short name): New User
Printed: 2018-12-21 10:49:55 UTC-5

Determination overview

	Sample ID	Determination start	Method name	Initial pH	pH	Cond uS	mL at EP	Total Alk	Temp
21	FA60161-3.12	2018-12-20 17:05:33 UTC-5	Total Alkalinity 171016jpm	7.48			5.47	156.2	22.2
22	FA60163-1.7	2018-12-20 17:14:07 UTC-5	Total Alkalinity 171016jpm	7.89			18.82	537.7	22.3
23	FA60163-6.7	2018-12-20 17:32:44 UTC-5	Total Alkalinity 171016jpm	7.48			27.47	784.8	22.3
24	FA60163-8.7	2018-12-20 17:57:41 UTC-5	Total Alkalinity 171016jpm	8.01			32.85	938.5	22.2
25	FA60077-13.7	2018-12-20 18:24:50 UTC-5	Total Alkalinity 171016jpm	6.90			7.68	219.4	22.1
26	FA60231-1.7	2018-12-20 18:35:40 UTC-5	Total Alkalinity 171016jpm	7.52			10.87	310.6	22.0

12-21-18

tiamo 2.5 Build 116
License ID: 14676229

Computer name: Laptopjpm140408

JR 12-21-18

User (short name): New User
Printed: 2018-12-21 10:49:55 UTC-5

Determination overview

	Correct...	Slope/Cell Const.	Cond Check uS	pH Cal Z...	p-Alk	Bicarb Alk	Carb Alk	OH Alk	Remarks
1	20.7	99.40		7.01					
2	21.3								
3	21.1								
4	21.2								
5	21.3								
6	21.3								
7	21.4								
8	21.6								
9	22.0								
10	21.6								
11	21.3								
12	21.5								
13	21.3								
14	21.5								
15	21.4								
16	21.2								
17	21.2								
18	21.2								
19	21.2								
20	21.3								

JPM 12-21-18

tiamo 2.5 Build 116
License ID: 14676229

Computer name: Laptopjpm140408

JP 12-21-18

User (short name): New User
Printed: 2018-12-21 10:49:56 UTC-5

Determination overview

	Correct...	Slope/Cell Const.	Cond Check uS	pH Cal Z...	p-Alk	Bicarb Alk	Carb Alk	OH Alk	Remarks
21	21.3								
22	21.4								
23	21.4								
24	21.3								
25	21.2								
26	21.1								

! 12-21-18

SGS

IC STANDARDS PREP LOG

STANDARD NAME	ANALYTES	STOCK MFG. #	STOCK LOT #	STOCK EXP. DATE	STOCK CONC. (mg/l)	VOLUME ADDED (ml)	TOTAL VOLUME (ml)	STANDARD CONC. (mg/l)	PREP DATE	INITIALS	STD LOT #	EXP. DATE
B1	F, NO_2, NO_3	WC1682	Inorganic	05-25-19	500	0.5	100	2.5	12-20-18	BR	IC08676	12-21-18
↓	Br	↓	↓	↓	2500	↓	↓	12.5	↓	↓	↓	↓
	Cl, SO_4				10000			50				
CCV	F, NO_2, NO_3	WC1649	High Purity	04-30-19	500	0.5	100	2.5	12-4-18	BR	1	12-22-18
↓	Br	↓	↓	↓	2500	↓	↓	12.5	↓	↓	↓	↓
	Cl, SO_4				10000			50				
B1	F, NO_2, NO_3	WC1682	Inorganic	05-25-19	500			2.5			2	
↓	Br	↓	↓	↓	2500			12.5				
	Cl, SO_4				10000			50				
CCV	F, NO_2, NO_3	WC1649	High Purity	04-30-19	500	0.5	100	2.5	12-22-18	BR	3	12-23-18
↓	Br	↓	↓	↓	2500	↓	↓	12.5	↓	↓	↓	↓
	Cl, SO_4				10000			50				
B1	F, NO_2, NO_3	WC1682	Inorganic	05-25-19	500			2.5			4	
↓	Br	↓	↓	↓	2500			~~50~~ 12.5				
	Cl, SO_4				10000			50				
CCV	F, NO_2, NO_3	WC1649	High Purity	04-30-19	500	0.5	100	2.5	12-26-18	BR	5	12-27-18
↓	Br	↓	↓	↓	2500	↓	↓	12.5	↓	↓	↓	↓
	Cl, SO_4				10000			50				
B1	F, NO_2, NO_3	WC1682	Inorganic	05-25-19	500			2.5			6	
↓	Br	↓	↓	↓	2500			12.5	↓	↓	↓	↓
	Cl, SO_4				10000			50				

BR 12/26/18

Rev 0116 LM

SGS

IC Instrument Log

Method: EPA300.0 / SW846 9056A (circle one)

Date:	12-22-18 1118
Analyst:	BR
Instrument:	#3
Inst. File Name:	3181222001.txt

Prep Batchs:	32494
Analytical Batch:	80720
Calibration Date:	12-18-18
Pump pressure:	1524

Vial lot#	WC1264
Cap lot#	WC1264
Syringe lot#	N/A
Filter lot#	N/A

Standards	
ICAL:	WC1049
ICV:	N/A
CCV:	IC08673
QC:	WC1682

Sample#	Bot#	Matrix	Scon	DF	Filter (yes)	Ions Needed: F	Cl	NO2	Br	NO3	SO4	Results OK or Dilution Needed: F	Cl	NO2	Br	NO3	SO4	Comments
Rinse																		
CCV	N/A	aq	N/A	1	N	–	–	–	–	–	–	–	–	–	–	–	–	
MB1						–	–	–	–	–	–	–	–	–	–	–	–	
BL						–	–	–	–	–	–	–	–	–	–	–	–	
FA60416-1	1		295uS	1			–	–		–			–	–		–		
-2			8.46mS	100			–	–		–			–	–		–		
-3			5.17mS	50			–	–		–			–	–		–	+(2)	
-4			4.45mS	25			–	–		–			–	–		–		
-151			~~312uS~~	1		–	–	–	–	–	–	–	–	–	–	–	–	
-152			295uS	1		–	–	–	–	–	–	–	–	–	–	–	–	
445-1	1		312uS	1														
LA50577-17	1		56uS	1		–						–						
CCV	N/A		N/A	1		–	–	–	–	–	–	–	–	–	–	–	–	
CCB						–	–	–	–	–	–	–	–	–	–	–	–	
LA50577-18	1		56uS	1		–						–						
-25			58uS	1		–						–						
-26			35uS	1		–						–						
FA60455-1	16		928uS	5			–	–		–	–		–	–		–	–	
-2			1420uS	10			–	–		–	–		–	–		–	–	
-3			606uS	1			–	–		–	–		–	–		–	–	
45-153	1		312uS	1		–	–	–	–	–	–	–	–	–		–	–	
-154						–	–	–	–	–	–	–	–	–	–	–	–	
140-1	4		634uS	1					–									
136-10	2		711uS	5			–		–		–		–		–		–	
CCV	N/A		N/A	1		–	–	–	–	–	–	–	–	–	–	–	–	
CCB						–	–	–	–	–	–	–	–	–	–	–	–	
FA60136-12	1		733uS	5		+(3)	=	+(3)	+(3)	–			–		–		–	(3) Br- needed
-14			838uS	5		–	–			–			–		–		–	
-16			58uS	1		–	=			–			–		–		–	

(1) 29.5uS BR 12/26/18

(2) Ions not needed BR 12/26/18

Rev 0116 LM

IC Instrument Log

Method: EPA300.0 / SW846 9056A (circle one)

Date:	
Analyst:	
Instrument:	
Inst. File Name:	

Prep Batchs:	
Analytical Batch:	
Calibration Date:	
Pump pressure:	

Vial lot#	
Cap lot#	
Syringe lot#	
Filter lot#	

Standards	
ICAL:	
ICV:	
CCV:	
QC:	

Sample#	Bot#	Matrix	Scon	DF	Filter (y/n)	Ions Needed F	Cl	NO2	Br	NO3	SO4	Results OK or Dilution Needed F	Cl	NO2	Br	NO3	SO4	Comments
FA60137-2	21	aq	455ws	1	N						—						—	
1960-1	4		423ws	1							—						—	
-2			557ws	1							—						—	
CCV	NIA		NIA				—		—		—		—		—		—	
CCB							—		—		—		—		—		—	
BLK							—		—		—		—		—		—	

12/26/18

12/26/18

GN80720

QC Reports:

Raw Data GN80720: Bromide, Chloride, Sulfate page 3 of 58

Sequence: 12-22-2018
Operator: Chemistry

Printed: 12/26/2018 12:15:42 PM

Title: ANIONS
Datasource: D6324WN1_local
Location: ICS-2100\My Sequences\ANIONS 2018\DEC 2018
Timebase: ICS-2100
#Samples: 50

Created: 12/22/2018 10:35:35 AM by Chemistry
Last Update: 12/26/2018 12:14:39 PM by Chemistry

No.	Name	Type	Pos.	Program	Dil. Factor	Method	Status
1	STD 0	Standard	35	ANIONS-AS22	1.0000	ANIONS-B	Finished
2	STD A	Standard	36	ANIONS-AS22	1.0000	ANIONS-B	Finished
3	STD B	Standard	37	ANIONS-AS22	1.0000	ANIONS-B	Finished
4	STD C	Standard	38	ANIONS-AS22	1.0000	ANIONS-B	Finished
5	STD D	Standard	39	ANIONS-AS22	1.0000	ANIONS-B	Finished
6	STD E	Standard	40	ANIONS-AS22	1.0000	ANIONS-B	Finished
7	STD F	Standard	41	ANIONS-AS22	1.0000	ANIONS-B	Finished
8	STD G	Standard	42	ANIONS-AS22	1.0000	ANIONS-B	Finished
9	STD H	Standard	43	ANIONS-AS22	1.0000	ANIONS-B	Finished
10	STD I	Standard	44	ANIONS-AS22	1.0000	ANIONS-B	Finished
11	ICB	Unknown	45	ANIONS-AS22	1.0000	ANIONS-B	Finished
12	ICV	Unknown	46	ANIONS-AS22	1.0000	ANIONS-B	Finished
13	CCV2	Unknown	47	ANIONS-AS22	1.0000	ANIONS-B	Finished
14	CCV	Unknown	48	ANIONS-AS22	1.0000	ANIONS-B	Finished
15	CCB	Unknown	49	ANIONS-AS22	1.0000	ANIONS-B	Finished
16	RINSE	Unknown	1	ANIONS-AS22	1.0000	ANIONS-B	Finished
17	CCV	Unknown	2	ANIONS-AS22	1.0000	ANIONS-B	Finished
18	MB1	Unknown	3	ANIONS-AS22	1.0000	ANIONS-B	Finished
19	B1	Unknown	4	ANIONS-AS22	1.0000	ANIONS-B	Finished
20	FA60416-1	Unknown	5	ANIONS-AS22	1.0000	ANIONS-B	Finished
21	FA60416-2	Unknown	6	ANIONS-AS22	100.0000	ANIONS-B	Finished
22	FA60416-3	Unknown	7	ANIONS-AS22	50.0000	ANIONS-B	Finished
23	FA60416-4	Unknown	8	ANIONS-AS22	25.0000	ANIONS-B	Finished
24	FA60416-1 S1	Unknown	9	ANIONS-AS22	1.0000	ANIONS-B	Finished
25	FA60416-1 S2	Unknown	10	ANIONS-AS22	1.0000	ANIONS-B	Finished
26	FA60445-1A	Unknown	11	ANIONS-AS22	1.0000	ANIONS-B	Finished
27	LA50577-17	Unknown	12	ANIONS-AS22	1.0000	ANIONS-B	Finished
28	CCV	Unknown	13	ANIONS-AS22	1.0000	ANIONS-B	Finished
29	CCB	Unknown	14	ANIONS-AS22	1.0000	ANIONS-B	Finished
30	LA50577-18	Unknown	15	ANIONS-AS22	1.0000	ANIONS-B	Finished
31	LA50577-25	Unknown	16	ANIONS-AS22	1.0000	ANIONS-B	Finished
32	LA50577-26	Unknown	17	ANIONS-AS22	1.0000	ANIONS-B	Finished
33	FA60455-1	Unknown	18	ANIONS-AS22	5.0000	ANIONS-B	Finished
34	FA60455-2	Unknown	19	ANIONS-AS22	10.0000	ANIONS-B	Finished
35	FA60455-3	Unknown	20	ANIONS-AS22	1.0000	ANIONS-B	Finished
36	FA60445-1A S3	Unknown	21	ANIONS-AS22	1.0000	ANIONS-B	Finished
37	FA60445-1A S4	Unknown	22	ANIONS-AS22	1.0000	ANIONS-B	Finished
38	FA60100-1	Unknown	23	ANIONS-AS22	1.0000	ANIONS-B	Finished
39	FA60136-10	Unknown	24	ANIONS-AS22	5.0000	ANIONS-B	Finished
40	CCV	Unknown	25	ANIONS-AS22	1.0000	ANIONS-B	Finished
41	CCB	Unknown	26	ANIONS-AS22	1.0000	ANIONS-B	Finished
42	FA60136-12	Unknown	27	ANIONS-AS22	5.0000	ANIONS-B	Finished

Chromeleon © Dionex Corporation, Version 6.80 SR10 Build 2818 (166959)

Sequence: 12-22-2018
Operator: Chemistry

Title: ANIONS
Datasource: D6324WN1_local
Location: ICS-2100\My Sequences\ANIONS 2018\DEC 2018
Timebase: ICS-2100
#Samples: 50

Created: 12/22/2018 10:35:35 AM by Chemistry
Last Update: 12/26/2018 12:14:39 PM by Chemistry

No.	Name	Inj. Date/Time	Inj. Vol.	Comment
1	STD 0	12/18/2018 9:15:21 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
2	STD A	12/18/2018 9:32:17 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
3	STD B	12/18/2018 9:49:13 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
4	STD C	12/18/2018 10:06:08 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
5	STD D	12/18/2018 10:23:04 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
6	STD E	12/18/2018 10:40:00 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
7	STD F	12/18/2018 10:56:55 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
8	STD G	12/18/2018 11:13:51 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
9	STD H	12/18/2018 11:30:47 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
10	STD I	12/18/2018 11:47:44 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
11	ICB	12/19/2018 12:04:40 AM	25.0	ICS 2100 SYSTEM OPERATOR: BR
12	ICV	12/19/2018 12:21:36 AM	25.0	ICS 2100 SYSTEM OPERATOR: BR
13	CCV2	12/19/2018 12:38:32 AM	25.0	ICS 2100 SYSTEM OPERATOR: BR
14	CCV	12/19/2018 12:55:27 AM	25.0	ICS 2100 SYSTEM OPERATOR: BR
15	CCB	12/19/2018 1:12:23 AM	25.0	ICS 2100 SYSTEM OPERATOR: BR
16	RINSE	12/22/2018 11:18:02 AM	25.0	ICS 2100 SYSTEM OPERATOR: BR
17	CCV	12/22/2018 11:34:31 AM	25.0	ICS 2100 SYSTEM OPERATOR: BR
18	MB1	12/22/2018 11:51:28 AM	25.0	ICS 2100 SYSTEM OPERATOR: BR
19	B1	12/22/2018 12:08:24 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
20	FA60416-1	12/22/2018 12:25:20 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
21	FA60416-2	12/22/2018 12:42:16 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
22	FA60416-3	12/22/2018 12:59:10 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
23	FA60416-4	12/22/2018 1:16:07 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
24	FA60416-1 S1	12/22/2018 1:33:02 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
25	FA60416-1 S2	12/22/2018 1:49:58 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
26	FA60445-1A	12/22/2018 2:06:54 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
27	LA50577-17	12/22/2018 2:23:50 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
28	CCV	12/22/2018 2:40:46 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
29	CCB	12/22/2018 2:57:42 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
30	LA50577-18	12/22/2018 3:14:38 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
31	LA50577-25	12/22/2018 3:31:34 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
32	LA50577-26	12/22/2018 3:48:30 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
33	FA60455-1	12/22/2018 4:05:26 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
34	FA60455-2	12/22/2018 4:22:21 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
35	FA60455-3	12/22/2018 4:39:18 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
36	FA60445-1A S3	12/22/2018 4:56:13 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
37	FA60445-1A S4	12/22/2018 5:13:07 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
38	FA60100-1	12/22/2018 5:30:02 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
39	FA60136-10	12/22/2018 5:46:58 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
40	CCV	12/22/2018 6:03:53 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
41	CCB	12/22/2018 6:20:49 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
42	FA60136-12	12/22/2018 6:37:44 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR

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Sequence: 12-22-2018
Operator: Chemistry

Printed: 12/26/2018 12:15:42 PM

Title: ANIONS
Datasource: D6324WN1_local
Location: ICS-2100\My Sequences\ANIONS 2018\DEC 2018
Timebase: ICS-2100
#Samples: 50

Created: 12/22/2018 10:35:35 AM by Chemistry
Last Update: 12/26/2018 12:14:39 PM by Chemistry

No.	Name	Type	Pos.	Program	Dil. Factor	Method	Status
43	FA60136-14	Unknown	28	ANIONS-AS22	5.0000	ANIONS-B	Finished
44	FA60136-16	Unknown	29	ANIONS-AS22	1.0000	ANIONS-B	Finished
45	FA60137-2	Unknown	30	ANIONS-AS22	1.0000	ANIONS-B	Finished
46	FA60190-1	Unknown	31	ANIONS-AS22	1.0000	ANIONS-B	Finished
47	FA60190-2	Unknown	32	ANIONS-AS22	1.0000	ANIONS-B	Finished
48	CCV	Unknown	33	ANIONS-AS22	1.0000	ANIONS-B	Finished
49	CCB	Unknown	34	ANIONS-AS22	1.0000	ANIONS-B	Finished
50	BLK	Unknown	35	SHUTDOWN-AS22	1.0000	ANIONS-B	Finished

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Sequence: 12-22-2018
Operator: Chemistry

Printed: 12/26/2018 12:15:42 PM

Title: ANIONS
Datasource: D6324WN1_local
Location: ICS-2100\My Sequences\ANIONS 2018\DEC 2018
Timebase: ICS-2100
#Samples: 50

Created: 12/22/2018 10:35:35 AM by Chemistry
Last Update: 12/26/2018 12:14:39 PM by Chemistry

No.	Name	Inj. Date/Time	Inj. Vol.	Comment
43	FA60136-14	12/22/2018 6:54:40 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
44	FA60136-16	12/22/2018 7:11:35 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
45	FA60137-2	12/22/2018 7:28:31 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
46	FA60190-1	12/22/2018 7:45:26 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
47	FA60190-2	12/22/2018 8:02:22 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
48	CCV	12/22/2018 8:19:18 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
49	CCB	12/22/2018 8:36:14 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
50	BLK	12/22/2018 8:53:10 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR

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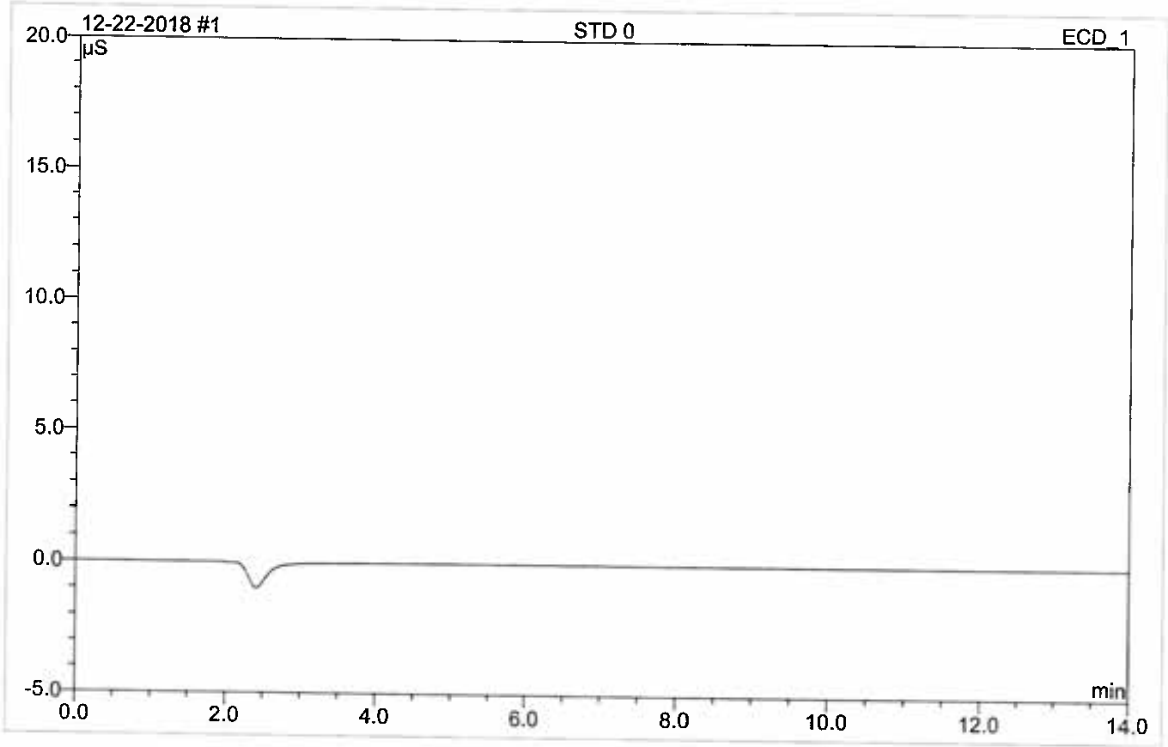
Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

1 STD 0

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**STD 0**	*Injection Volume:*	**25.0**
Vial Number:	**35**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 21:15**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
Total:			0.000	0.000	0.00	0.000	

Anions/Integration

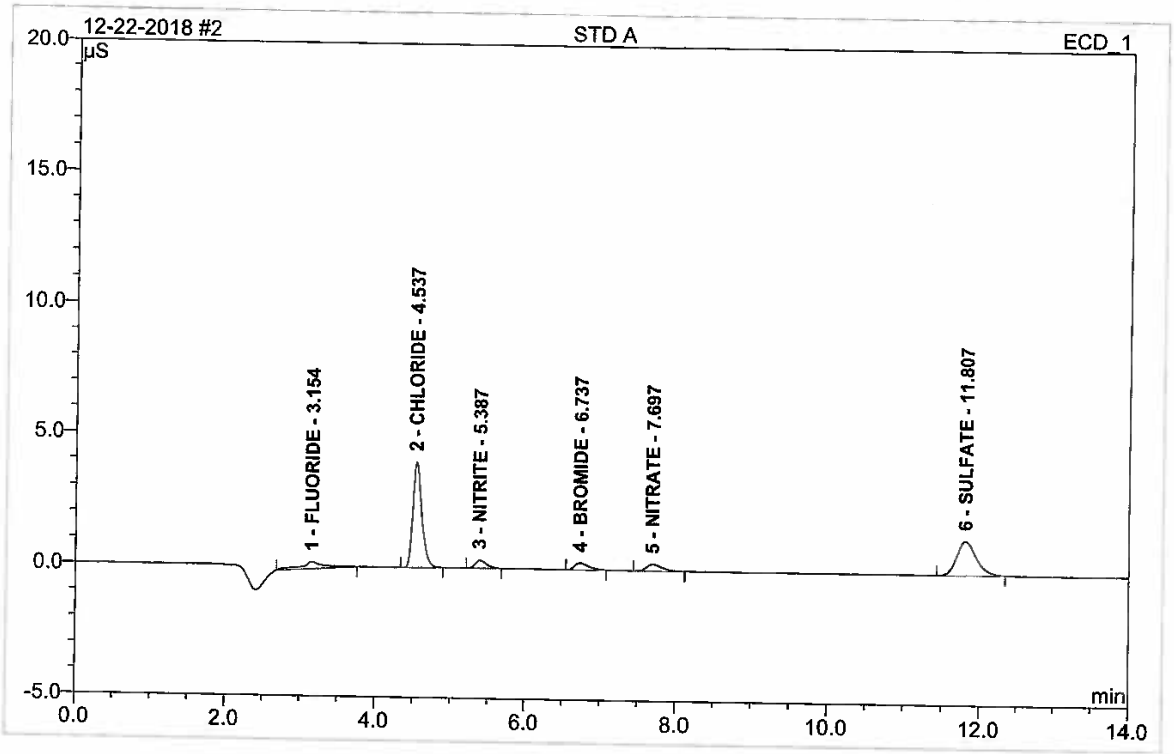
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

2 STD A

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**STD A**	*Injection Volume:*	**25.0**
Vial Number:	**36**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 21:32**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.15	FLUORIDE	0.261	0.095	7.93	0.113	BMB
2	4.54	CHLORIDE	4.003	0.539	44.82	2.529	BMB
3	5.39	NITRITE	0.305	0.053	4.39	0.119	BMB
4	6.74	BROMIDE	0.262	0.056	4.66	0.572	BMB
5	7.70	NITRATE	0.255	0.063	5.28	0.108	BMB
6	11.81	SULFATE	1.292	0.396	32.92	1.628	BMB
Total:			6.377	1.202	100.00	5.069	

Anions/Integration

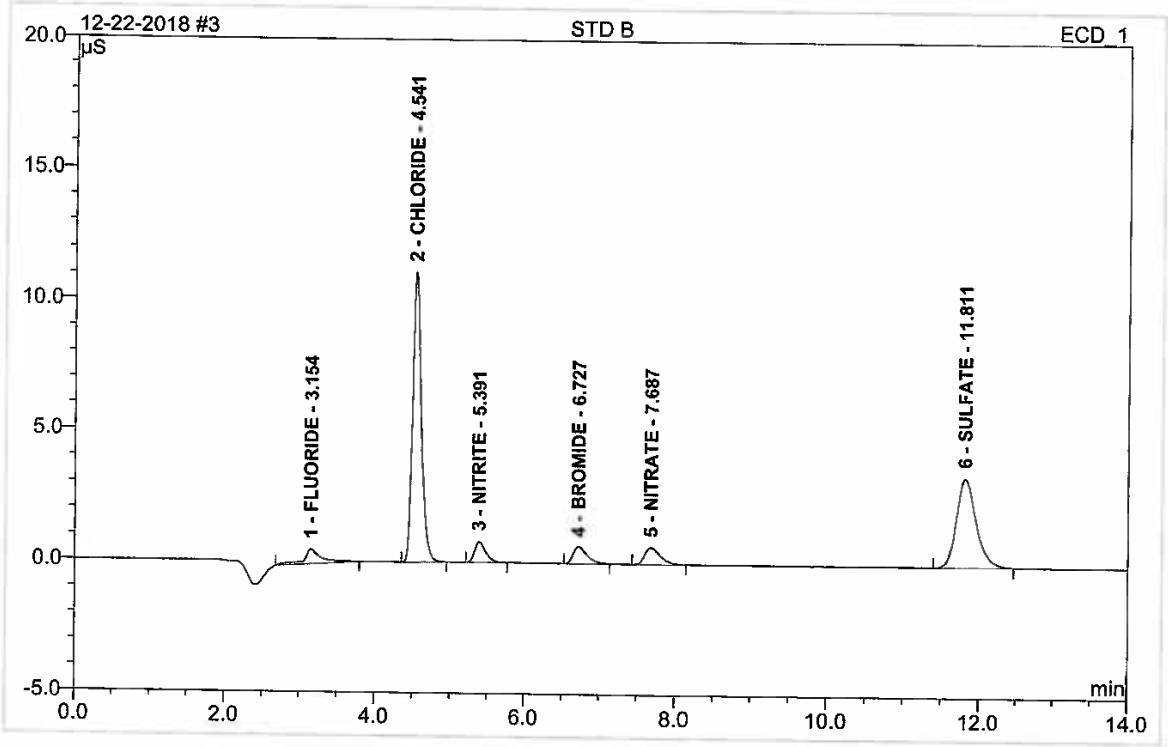
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

3 STD B

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**STD B**	*Injection Volume:*	**25.0**
Vial Number:	**37**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 21:49**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.15	FLUORIDE	0.550	0.149	4.84	0.238	BMB
2	4.54	CHLORIDE	11.096	1.449	47.04	4.701	BMB
3	5.39	NITRITE	0.782	0.137	4.45	0.246	BMB
4	6.73	BROMIDE	0.651	0.142	4.59	1.236	BMB
5	7.69	NITRATE	0.642	0.158	5.12	0.239	BMB
6	11.81	SULFATE	3.400	1.046	33.96	4.459	BMB
Total:			17.122	3.081	100.00	11.120	

Anions/Integration

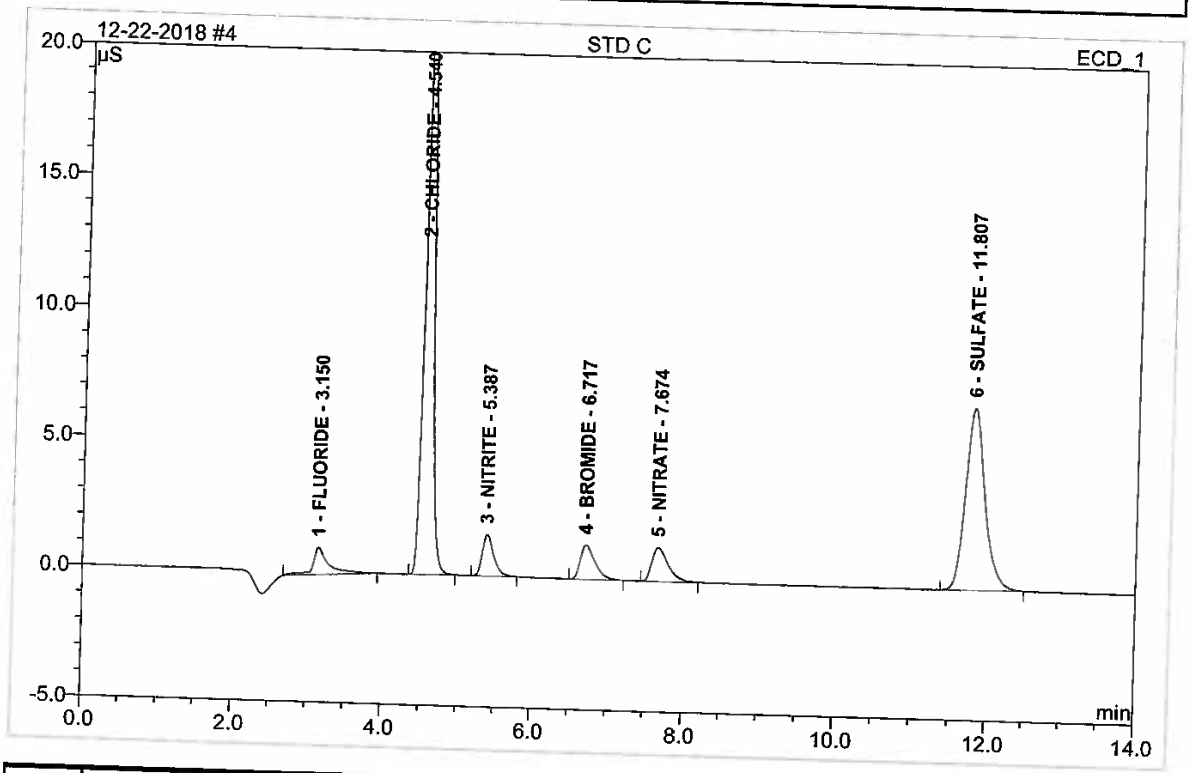
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

4 STD C

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**STD C**	*Injection Volume:*	**25.0**
Vial Number:	**38**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 22:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.15	FLUORIDE	1.028	0.253	3.96	0.477	BMB
2	4.54	CHLORIDE	24.685	3.138	49.15	8.729	BMB
3	5.39	NITRITE	1.578	0.278	4.35	0.459	BMB
4	6.72	BROMIDE	1.298	0.286	4.48	2.357	BMB
5	7.67	NITRATE	1.282	0.315	4.94	0.459	BMB
6	11.81	SULFATE	6.980	2.115	33.12	9.058	BMB
Total:			36.850	6.386	100.00	21.540	

Anions/Integration

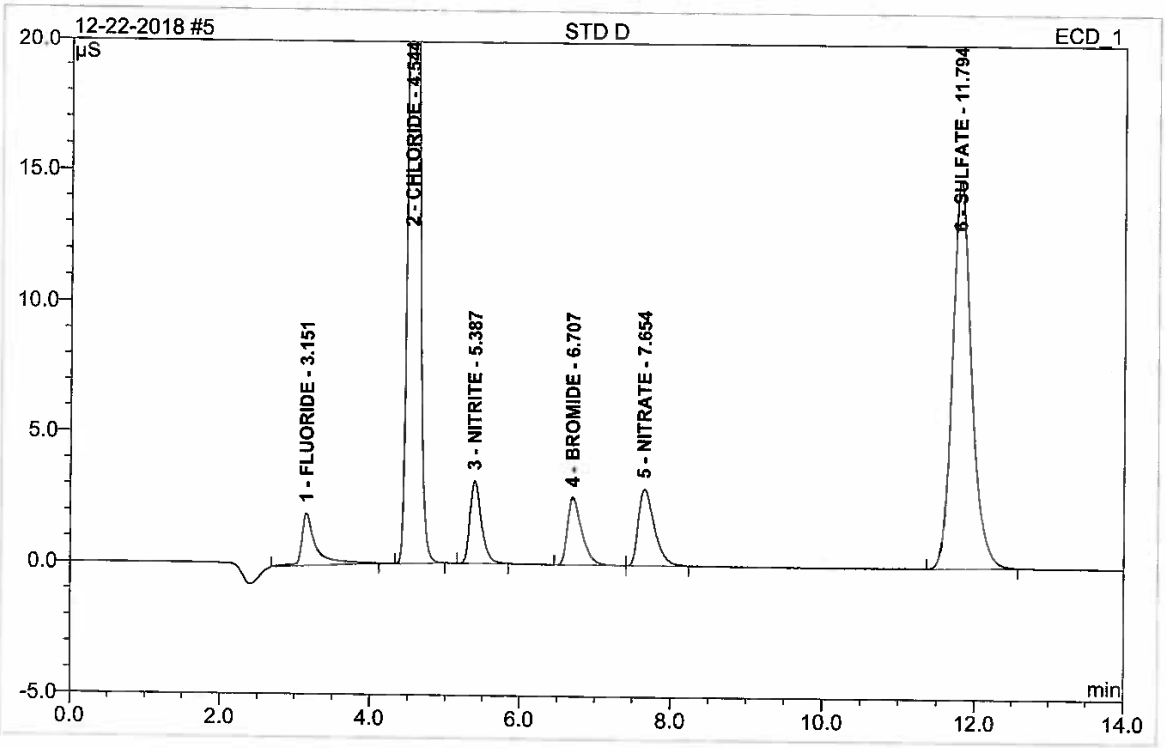
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

5 STD D

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**STD D**	*Injection Volume:*	**25.0**
Vial Number:	**39**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 22:23**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.15	FLUORIDE	1.995	0.451	3.28	0.933	BMB
2	4.54	CHLORIDE	56.320	7.015	51.03	17.975	BMB
3	5.39	NITRITE	3.163	0.564	4.10	0.891	BMB
4	6.71	BROMIDE	2.582	0.573	4.17	4.585	BM
5	7.65	NITRATE	2.929	0.723	5.26	1.027	MB
6	11.79	SULFATE	14.868	4.423	32.17	18.788	BMB
Total:			81.856	13.748	100.00	44.197	

Anions/Integration

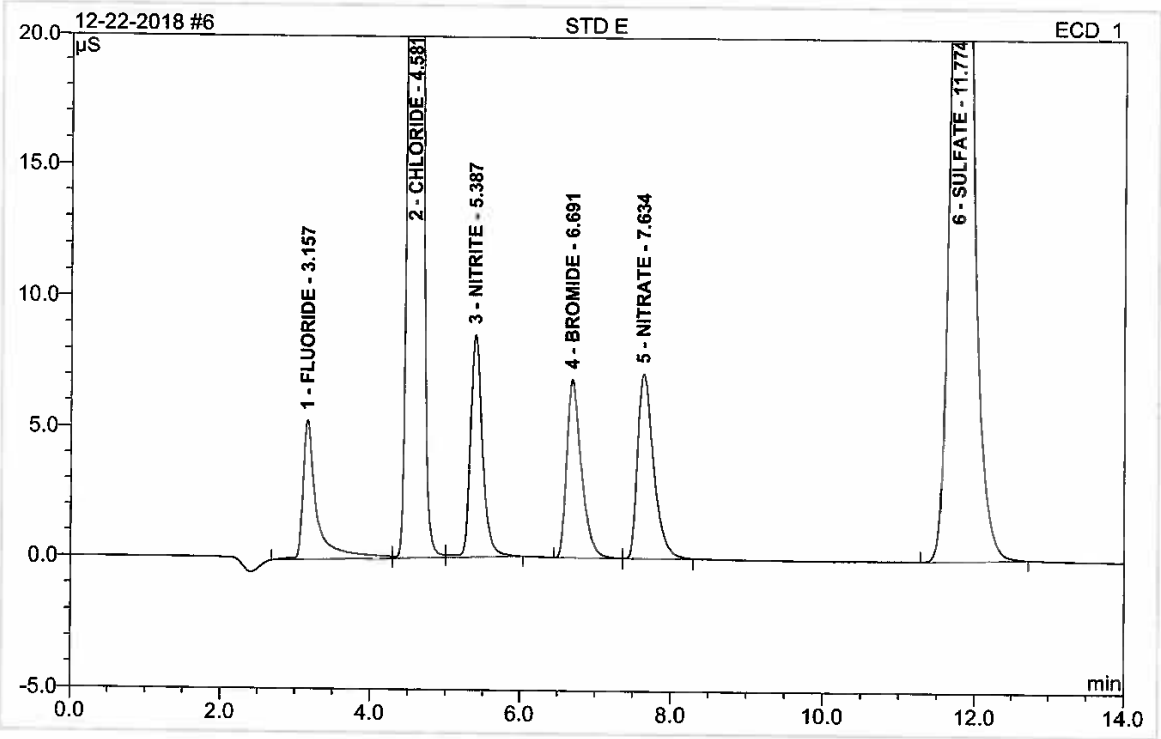
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

6 STD E

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**STD E**	*Injection Volume:*	**25.0**
Vial Number:	**40**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 22:40**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.16	FLUORIDE	5.355	1.150	2.94	2.546	BM
2	4.58	CHLORIDE	155.429	20.157	51.52	49.320	M
3	5.39	NITRITE	8.549	1.603	4.10	2.462	MB
4	6.69	BROMIDE	6.855	1.548	3.96	12.157	BM
5	7.63	NITRATE	7.107	1.757	4.49	2.467	MB
6	11.77	SULFATE	43.626	12.905	32.99	52.440	BMB
Total:			226.920	39.120	100.00	121.392	

Anions/Integration

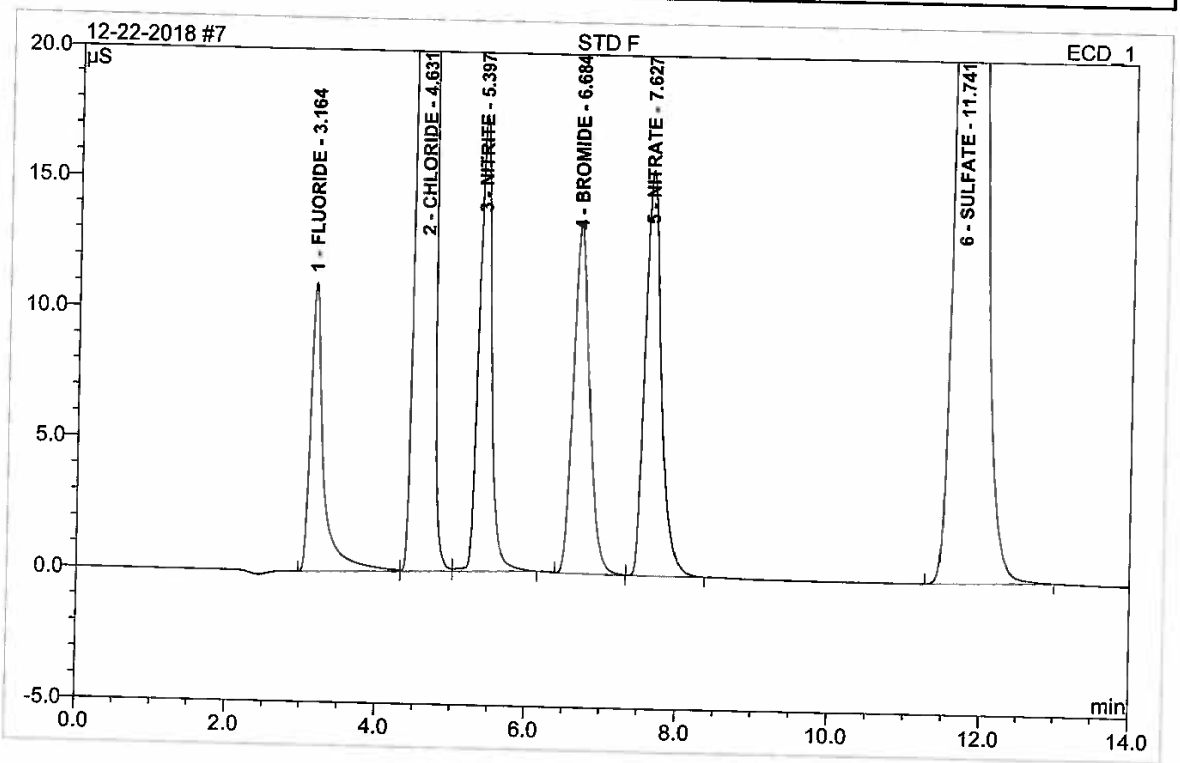
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

7 STD F

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**STD F**	*Injection Volume:*	**25.0**
Vial Number:	**41**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 22:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.16	FLUORIDE	11.028	2.234	2.65	5.043	BM
2	4.63	CHLORIDE	283.304	42.975	50.99	103.746	M
3	5.40	NITRITE	17.440	3.398	4.03	5.174	MB
4	6.68	BROMIDE	13.439	3.311	3.93	25.842	BMB
5	7.63	NITRATE	15.493	3.833	4.55	5.361	BMB
6	11.74	SULFATE	92.246	28.529	33.85	107.760	BMB
Total:			432.949	84.280	100.00	252.926	

Anions/Integration

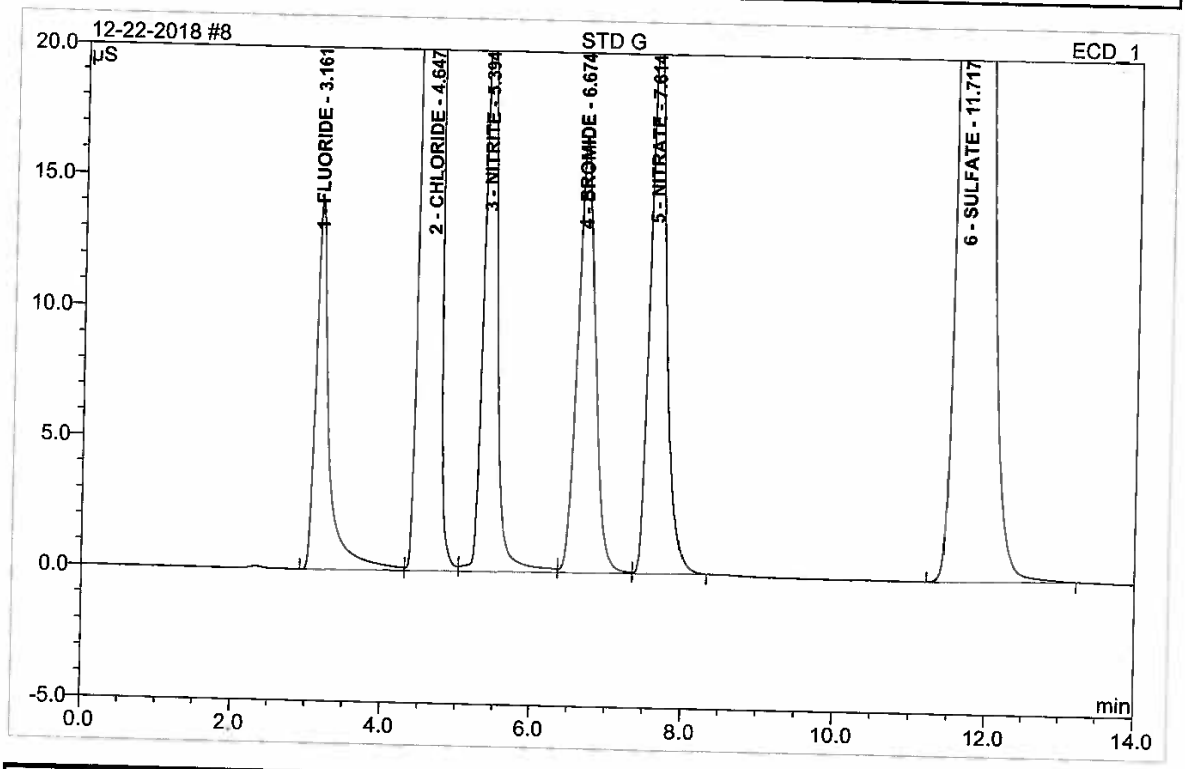
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

8 STD G

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**STD G**	*Injection Volume:*	**25.0**
Vial Number:	**42**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 23:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.16	FLUORIDE	14.196	2.934	2.65	6.657	BM
2	4.65	CHLORIDE	337.506	55.883	50.47	134.532	M
3	5.39	NITRITE	22.548	4.645	4.19	7.058	M
4	6.67	BROMIDE	16.659	4.428	4.00	34.518	M
5	7.61	NITRATE	20.720	5.145	4.65	7.189	MB
6	11.72	SULFATE	118.177	37.693	34.04	137.190	BMB
Total:			529.805	110.728	100.00	327.144	

Anions/Integration

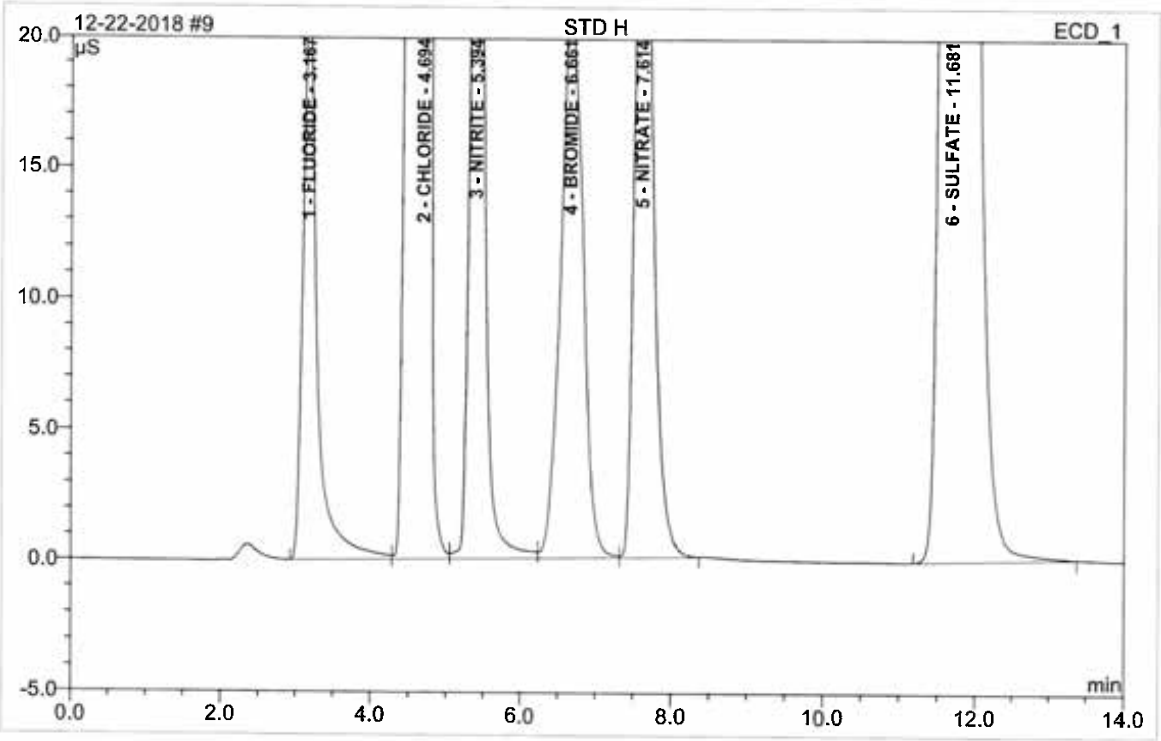
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

9 STD H

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**STD H**	*Injection Volume:*	**25.0**
Vial Number:	**43**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 23:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.17	FLUORIDE	21.899	4.734	2.65	10.804	BM
2	4.69	CHLORIDE	444.446	89.202	49.97	214.004	M
3	5.39	NITRITE	34.611	7.440	4.17	11.283	M
4	6.66	BROMIDE	22.364	7.255	4.06	56.465	M
5	7.61	NITRATE	33.848	8.560	4.79	11.947	MB
6	11.68	SULFATE	181.576	61.331	34.35	205.740	BMB
Total:			738.743	178.522	100.00	510.243	

Anions/Integration

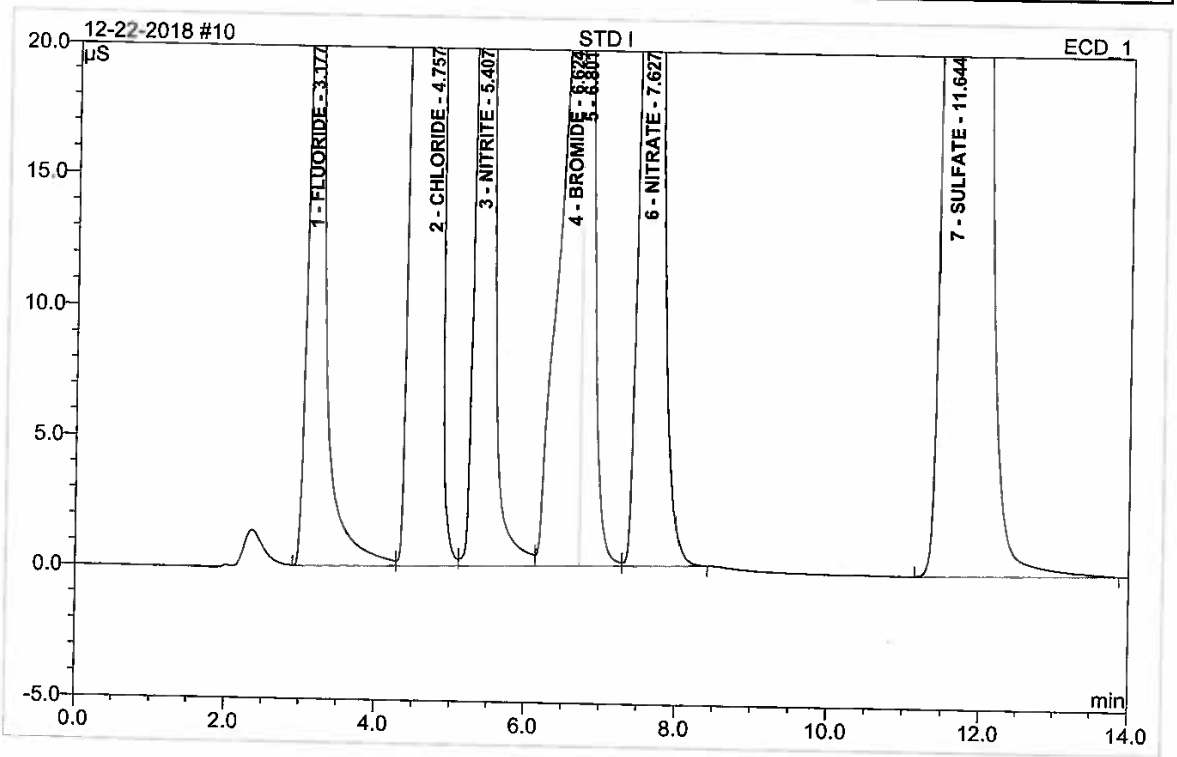
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

10 STD I

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**STD I**	*Injection Volume:*	**25.0**
Vial Number:	**44**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 23:47**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.18	FLUORIDE	32.376	7.612	2.66	17.439	BM
2	4.76	CHLORIDE	568.194	142.124	49.59	340.230	M
3	5.41	NITRITE	52.049	11.776	4.11	17.835	M
4	6.62	BROMIDE	25.276	7.859	2.74	61.158	M
5	6.80	n.a.	21.745	3.929	1.37	n.a.	M
6	7.63	NITRATE	54.279	14.404	5.03	20.089	MB
7	11.64	SULFATE	272.566	98.911	34.51	299.619	BMB
Total:			1026.485	286.615	100.00	756.371	

Anions/Integration

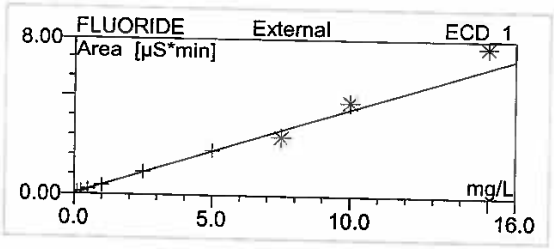
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

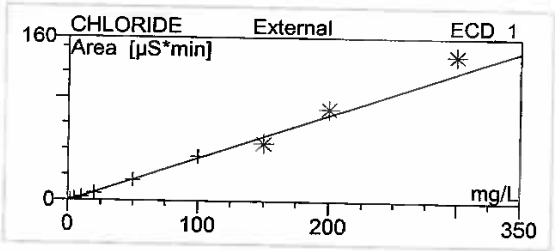
Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

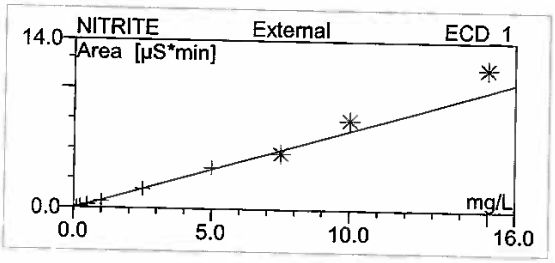
10 STD I

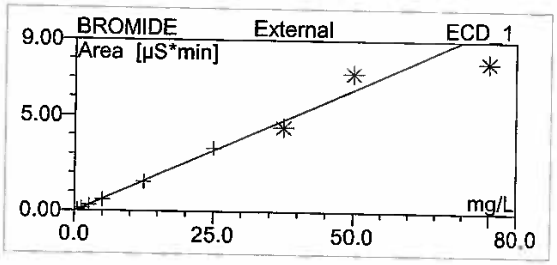
ICS 2100 SYSTEM OPERATOR: BR

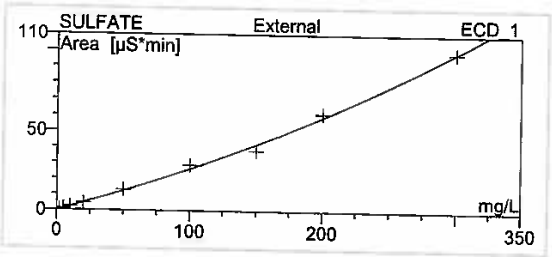
Sample Name:	**STD I**	*Injection Volume:*	**25.0**
Vial Number:	**44**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 23:47**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**

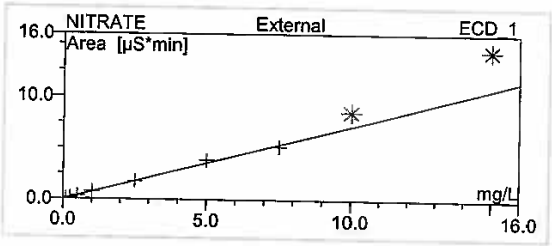












No.	Ret.Time min	Peak Name	Cal.Type	Points	Coeff.Det. %	Offset	Slope	Curve
1	3.18	FLUORIDE	XLOff	6	99.8742	0.0461	0.4339	0.0000
2	4.76	CHLORIDE	XLOff	6	99.5410	-0.5215	0.4193	0.0000
3	5.41	NITRITE	XLOff	6	99.6532	-0.0258	0.6617	0.0000
4	6.62	BROMIDE	XLOff	6	99.7515	-0.0177	0.1288	0.0000
5	6.80	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	7.63	NITRATE	XLOff	7	99.6848	-0.0141	0.7177	0.0000
7	11.64	SULFATE	QOff	9	99.6969	0.0240	0.2277	0.0003
Average:					99.7003	-0.0848	0.4315	0.0001

Anions/Calibration(Batch)

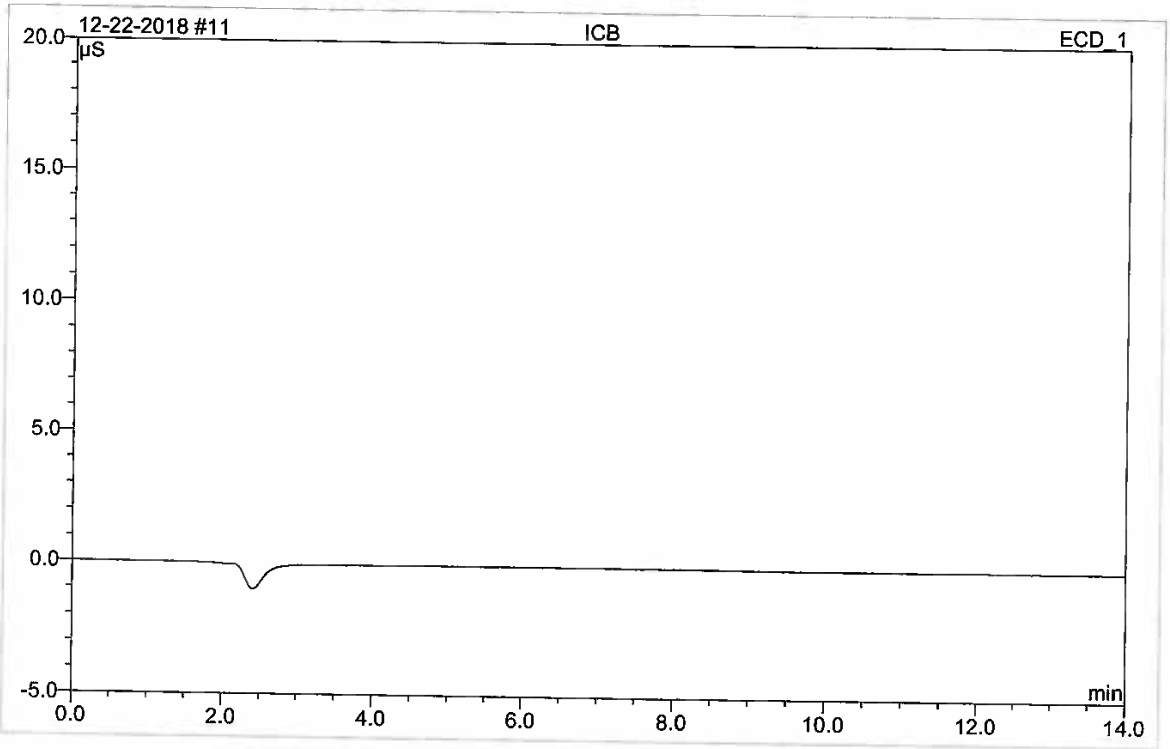
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

11 ICB

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**ICB**	*Injection Volume:*	**25.0**
Vial Number:	**45**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/19/2018 0:04**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
Total:			0.000	0.000	0.00	0.000	

Anions/Integration

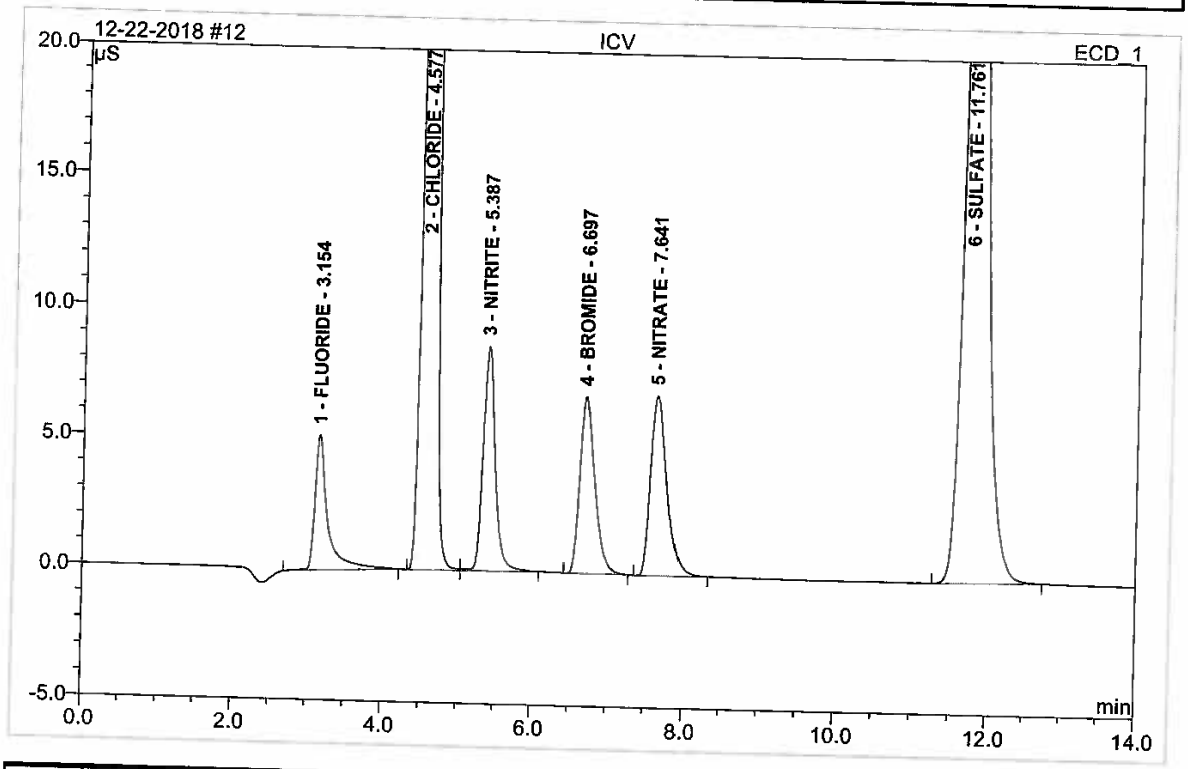
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

12 ICV

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**ICV**	*Injection Volume:*	**25.0**
Vial Number:	**46**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/19/2018 0:21**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.15	FLUORIDE	5.176	1.032	2.69	2.273	BMB
2	4.58	CHLORIDE	154.578	19.979	52.01	48.896	BM
3	5.39	NITRITE	8.609	1.615	4.20	2.479	MB
4	6.70	BROMIDE	6.780	1.526	3.97	11.982	BMB
5	7.64	NITRATE	6.898	1.702	4.43	2.391	BMB
6	11.76	SULFATE	42.383	12.560	32.70	51.128	BMB
Total:			224.425	38.413	100.00	119.150	

Anions/Integration

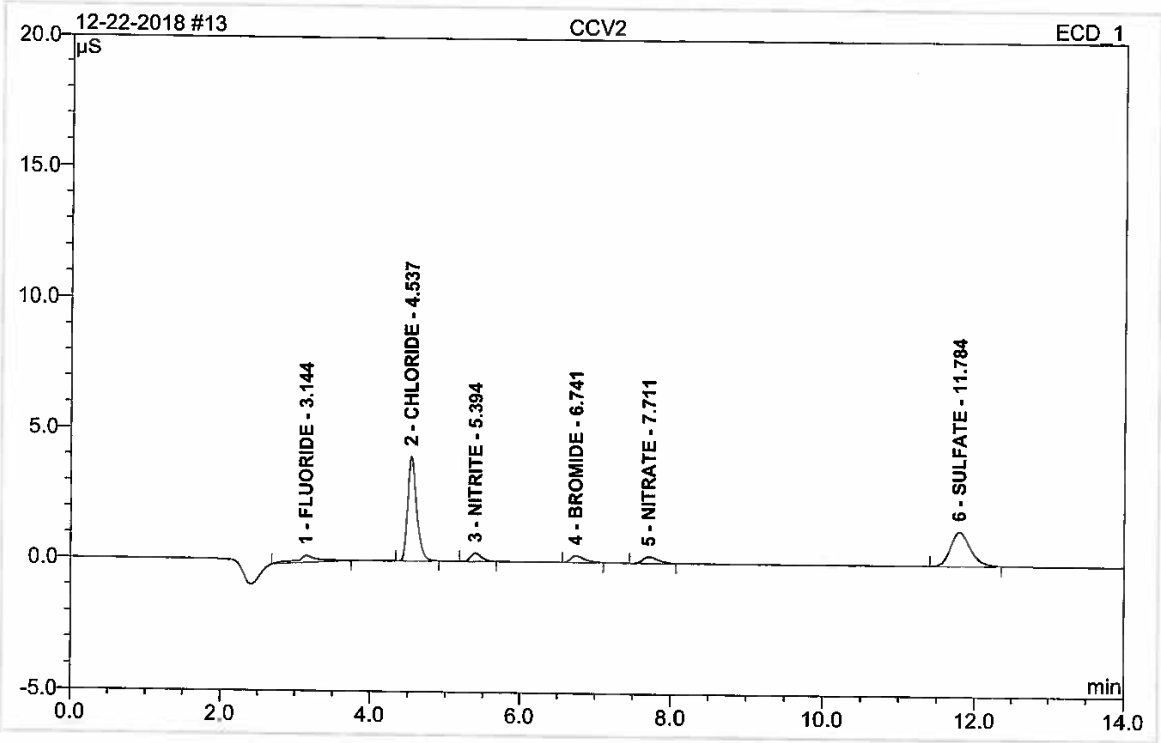
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

13 CCV2

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**CCV2**	*Injection Volume:*	**25.0**
Vial Number:	**47**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/19/2018 0:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.14	FLUORIDE	0.266	0.094	7.70	0.110	BMB
2	4.54	CHLORIDE	4.005	0.541	44.44	2.535	BMB
3	5.39	NITRITE	0.309	0.054	4.41	0.120	BMB
4	6.74	BROMIDE	0.253	0.055	4.55	0.568	BMB
5	7.71	NITRATE	0.248	0.061	4.98	0.104	BMB
6	11.78	SULFATE	1.322	0.413	33.91	1.704	BMB
Total:			6.404	1.218	100.00	5.143	

Anions/Integration

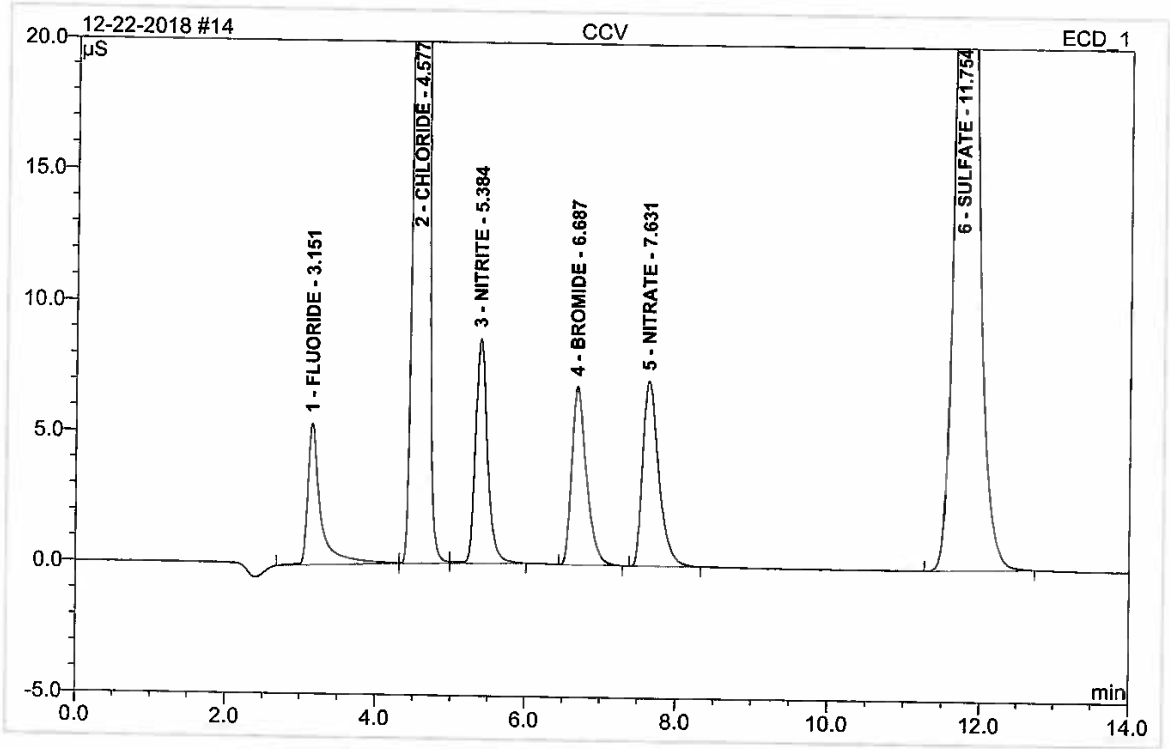
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

14 CCV

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**48**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/19/2018 0:55**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.15	FLUORIDE	5.426	1.088	2.79	2.401	BMB
2	4.58	CHLORIDE	155.512	20.145	51.64	49.293	bM
3	5.38	NITRITE	8.625	1.609	4.12	2.470	MB
4	6.69	BROMIDE	6.831	1.549	3.97	12.165	BMB
5	7.63	NITRATE	7.104	1.761	4.51	2.473	BMB
6	11.75	SULFATE	43.351	12.862	32.97	52.276	BMB
Total:			226.849	39.014	100.00	121.078	

Anions/Integration

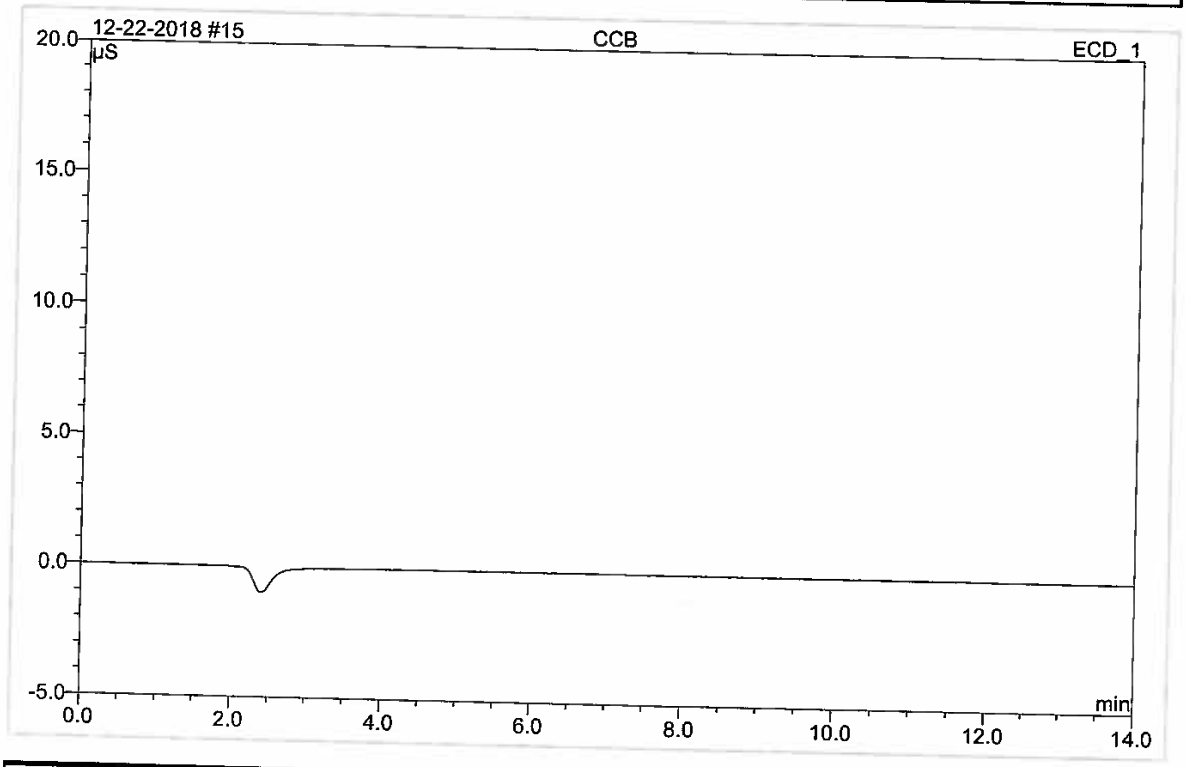
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

15 CCB

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**CCB**	*Injection Volume:*	**25.0**
Vial Number:	**49**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/19/2018 1:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
Total:			0.000	0.000	0.00	0.000	

Anions/Integration

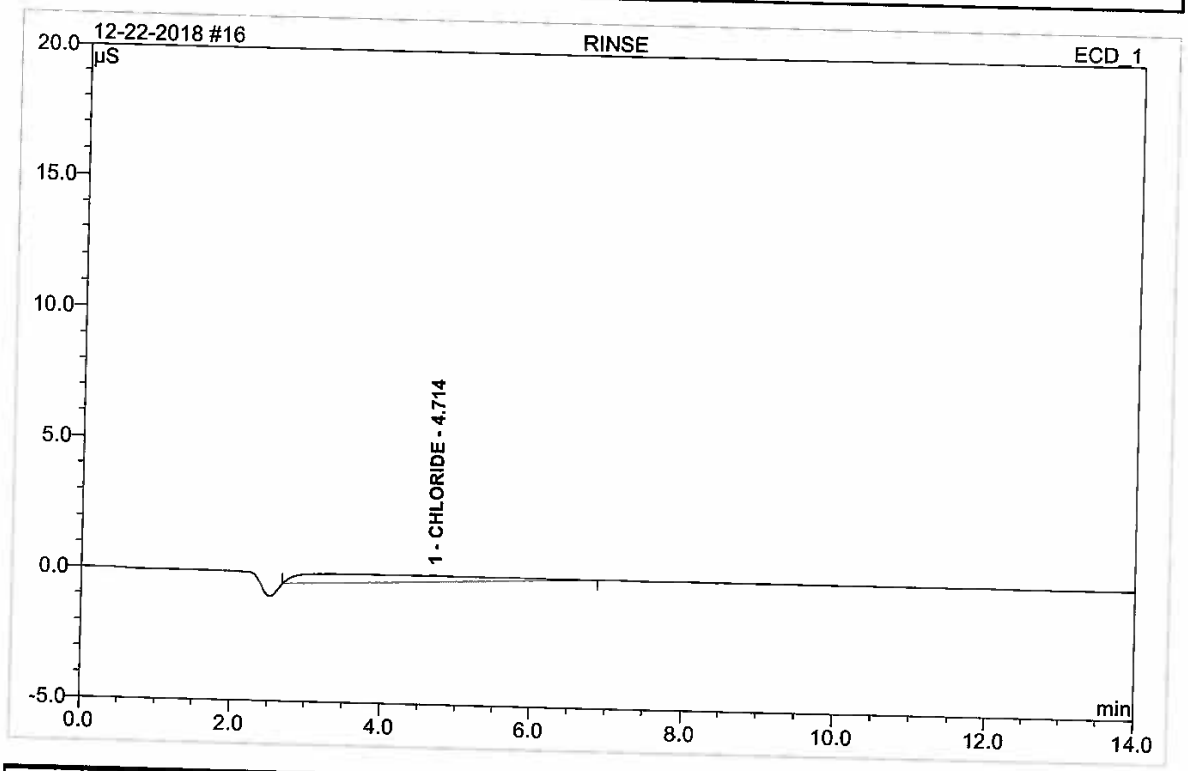
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

16 RINSE

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**RINSE**	*Injection Volume:*	**25.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/22/2018 11:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	4.71	CHLORIDE	0.242	0.833	100.00	3.231	BMB
Total:			0.242	0.833	100.00	3.231	

Anions/Integration

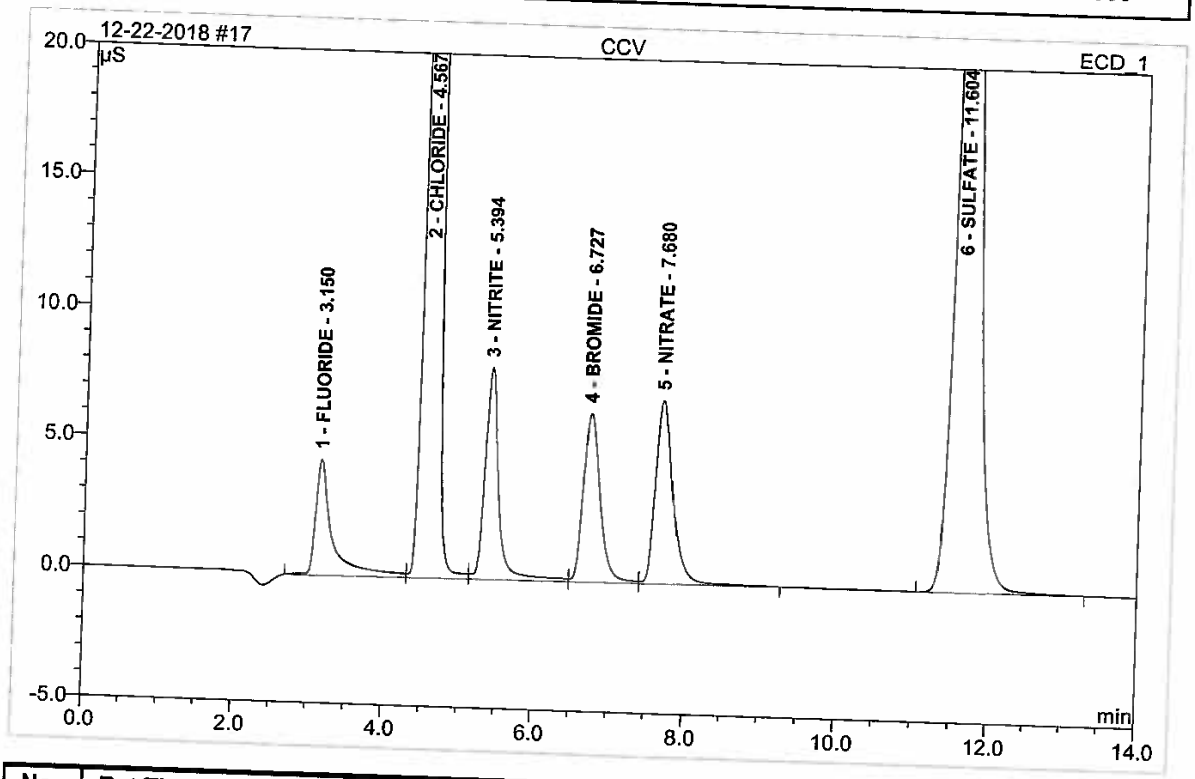
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

17 CCV

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/22/2018 11:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.15	FLUORIDE	4.391	1.160	2.92	2.567	BM
2	4.57	CHLORIDE	142.445	20.295	51.03	49.651	M
3	5.39	NITRITE	8.090	1.759	4.42	2.698	M
4	6.73	BROMIDE	6.424	1.646	4.14	12.916	M
5	7.68	NITRATE	6.988	1.859	4.67	2.609	MB
6	11.60	SULFATE	43.492	13.049	32.81	52.984	BMB
Total:			211.830	39.767	100.00	123.425	

Anions/Integration

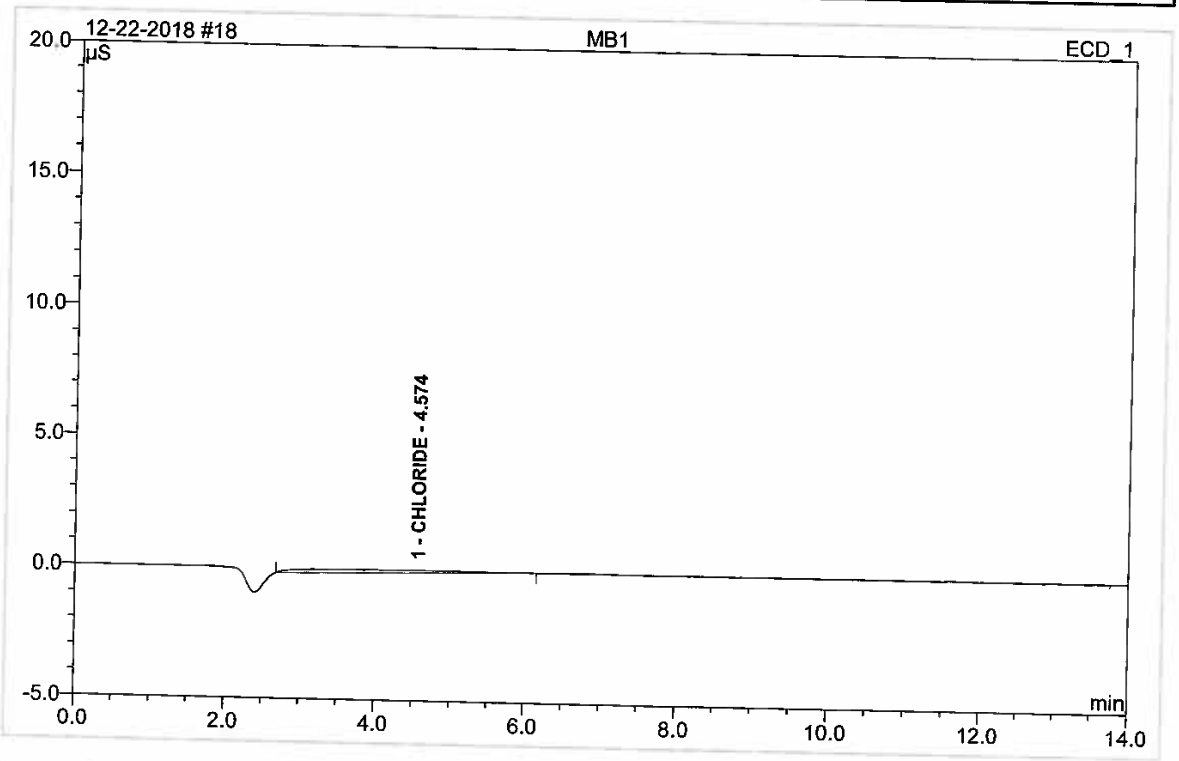
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

18 MB1

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**MB1**	*Injection Volume:*	**25.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/22/2018 11:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	4.57	CHLORIDE	0.090	0.271	100.00	1.890	BMB
Total:			0.090	0.271	100.00	1.890	

Anions/Integration

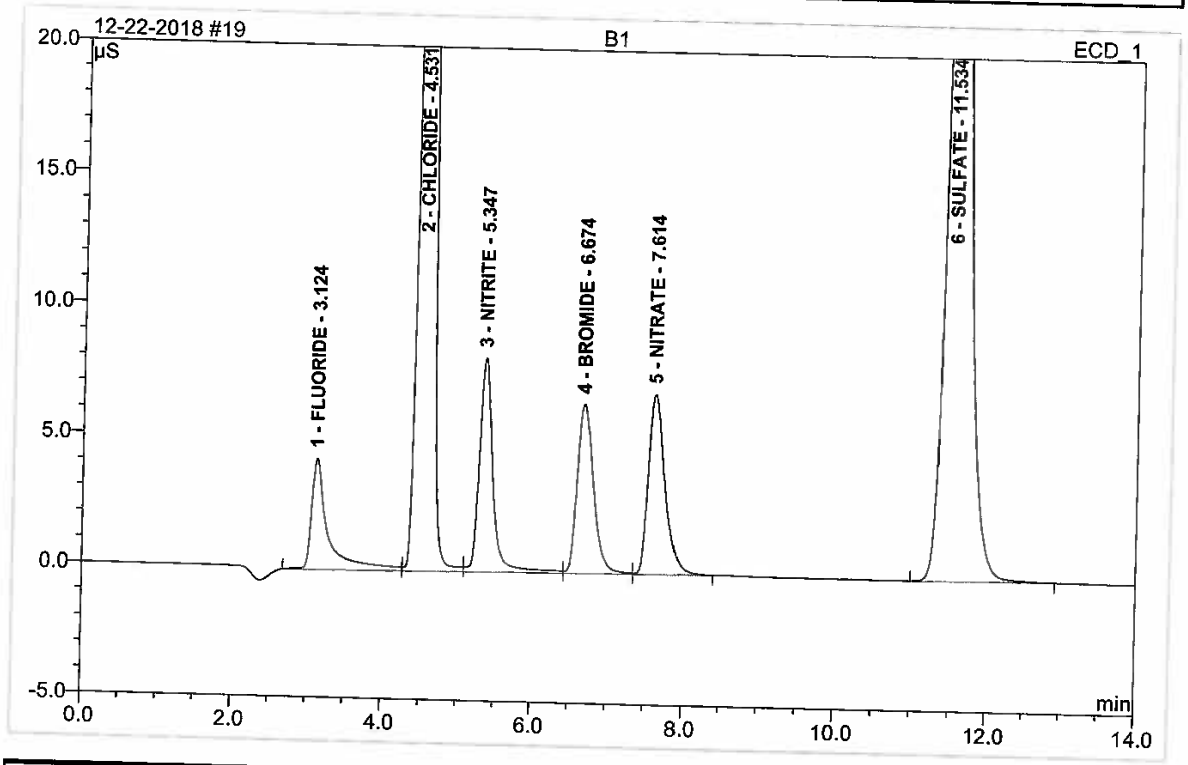
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

19 B1

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**B1**	*Injection Volume:*	**25.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/22/2018 12:08**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.12	FLUORIDE	4.255	1.095	2.78	2.419	BM
2	4.53	CHLORIDE	144.317	20.320	51.66	49.709	M
3	5.35	NITRITE	8.197	1.727	4.39	2.650	M
4	6.67	BROMIDE	6.472	1.602	4.07	12.574	M
5	7.61	NITRATE	6.895	1.748	4.44	2.455	MB
6	11.53	SULFATE	43.215	12.840	32.65	52.193	BMB
Total:			213.351	39.332	100.00	121.999	

Anions/Integration

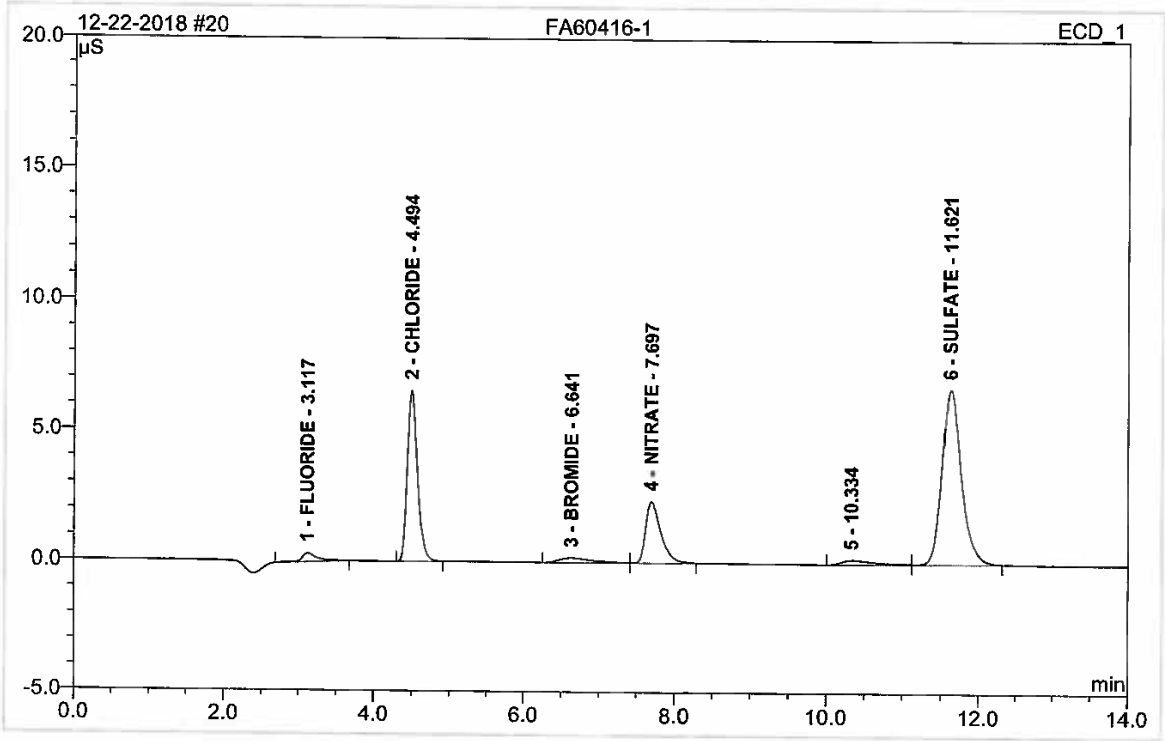
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

20 FA60416-1

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60416-1**	*Injection Volume:*	**25.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/22/2018 12:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.12	FLUORIDE	0.329	0.083	2.19	0.084	BMB
2	4.49	CHLORIDE	6.522	1.006	26.71	3.644	BMB
3	6.64	BROMIDE	0.180	0.090	2.38	0.834	BM
4	7.70	NITRATE	2.337	0.544	14.45	0.778	MB
5	10.33	n.a.	0.170	0.083	2.20	n.a.	BM
6	11.62	SULFATE	6.661	1.961	52.06	8.399	MB
Total:			16.198	3.766	100.00	13.739	

Anions/Integration

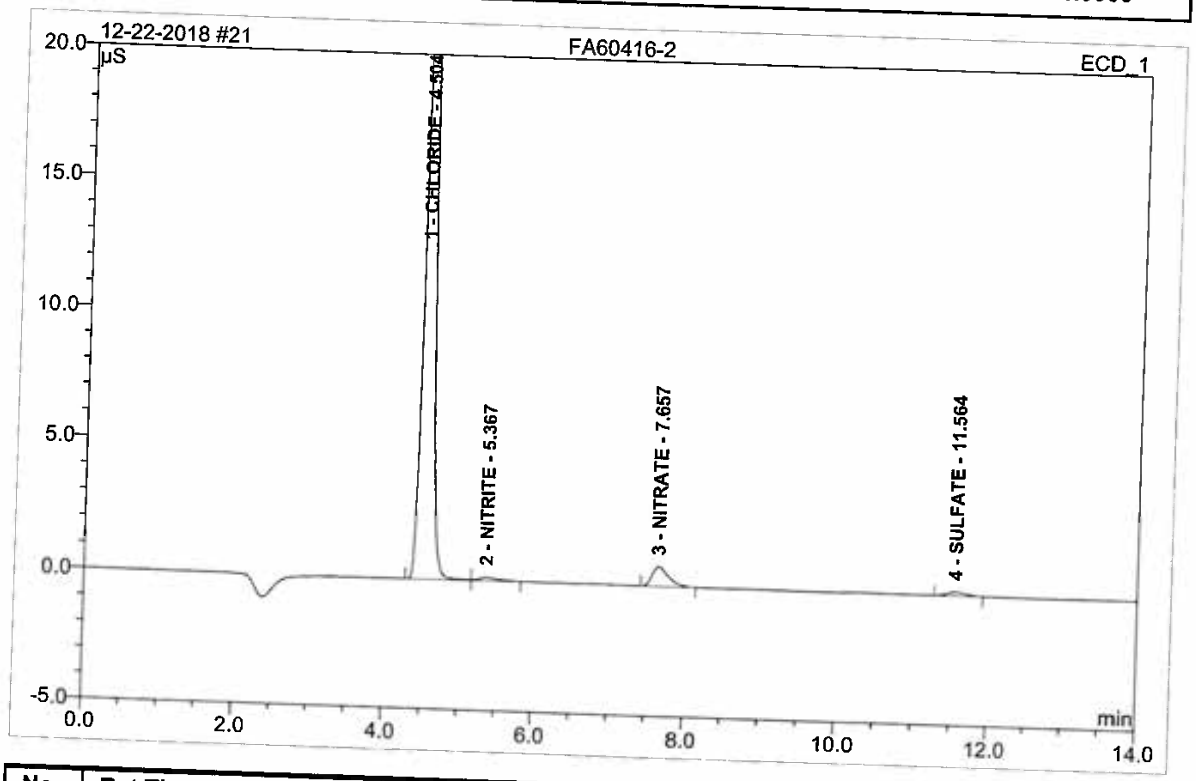
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

21 FA60416-2

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60416-2**	*Injection Volume:*	**25.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**100.0000**
Recording Time:	**12/22/2018 12:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	4.50	CHLORIDE	32.420	4.485	94.49	1194.137	BM
2	5.37	NITRITE	0.125	0.035	0.73	9.153	MB
3	7.66	NITRATE	0.745	0.185	3.89	27.708	BMB
4	11.56	SULFATE	0.144	0.042	0.89	7.937	BMB
Total:			33.434	4.747	100.00	1238.935	

Anions/Integration

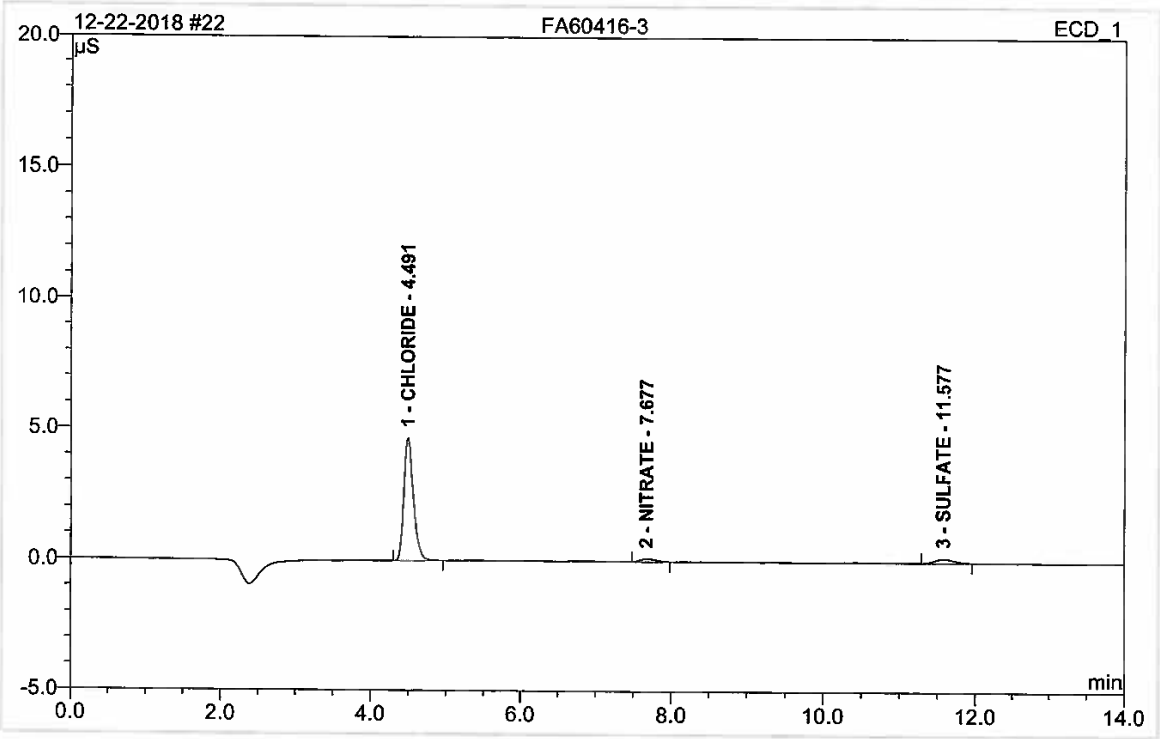
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

22 FA60416-3

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60416-3**	*Injection Volume:*	**25.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**50.0000**
Recording Time:	**12/22/2018 12:59**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	4.49	CHLORIDE	4.665	0.678	90.24	143.076	BMB
2	7.68	NITRATE	0.112	0.027	3.58	2.855	BMB
3	11.58	SULFATE	0.158	0.046	6.18	4.922	BMB
Total:			4.934	0.752	100.00	150.854	

Anions/Integration

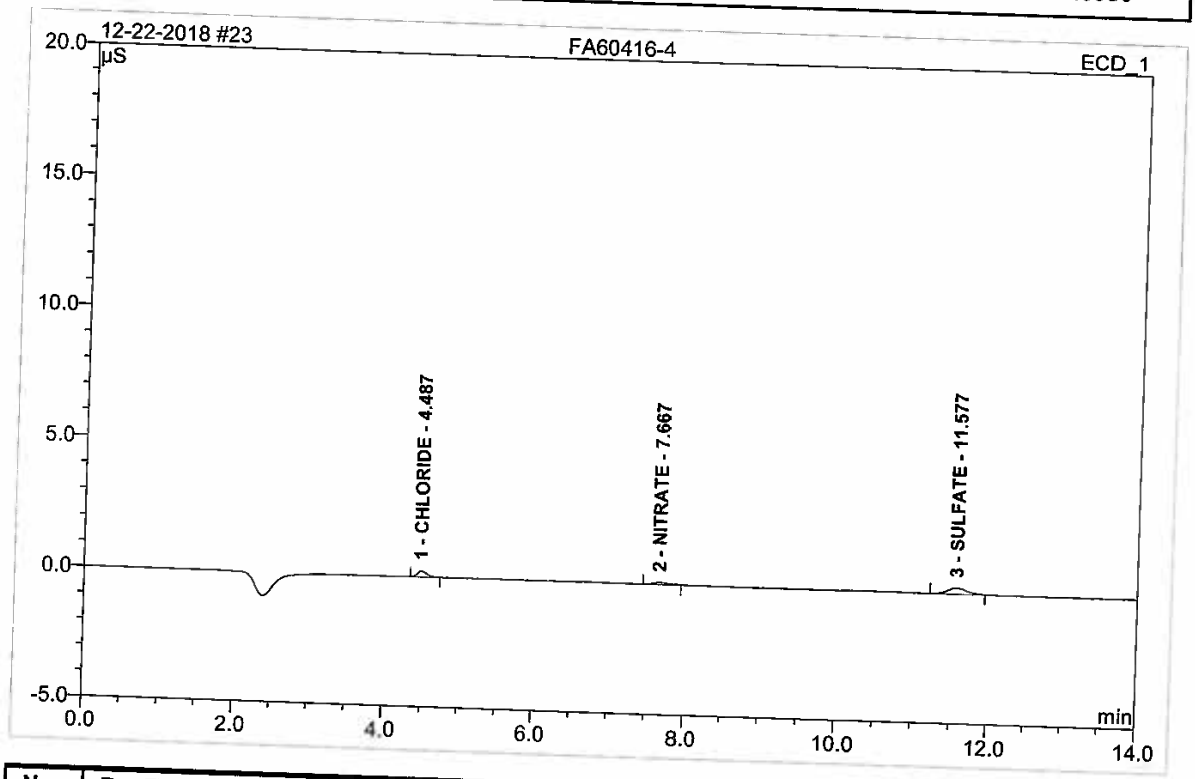
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

23 FA60416-4

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60416-4**	*Injection Volume:*	**25.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**25.0000**
Recording Time:	**12/22/2018 13:16**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	4.49	CHLORIDE	0.241	0.036	29.17	33.231	BMB
2	7.67	NITRATE	0.084	0.019	15.16	1.140	BMB
3	11.58	SULFATE	0.226	0.068	55.68	4.862	BMB
Total:			0.551	0.123	100.00	39.232	

Anions/Integration

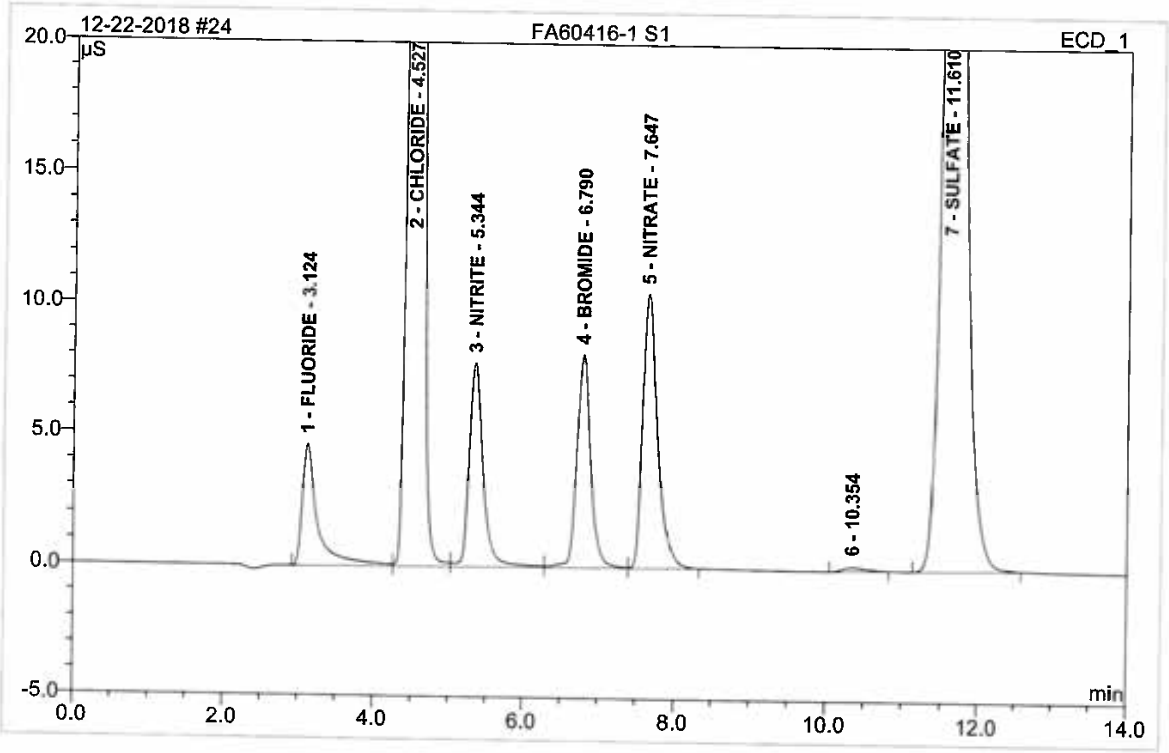
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

24 FA60416-1 S1

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60416-1 S1**	*Injection Volume:*	**25.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/22/2018 13:33**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.12	FLUORIDE	4.562	1.090	2.46	2.406	BM
2	4.53	CHLORIDE	146.982	21.827	49.32	53.304	M
3	5.34	NITRITE	7.730	1.679	3.79	2.577	M
4	6.79	BROMIDE	8.090	1.687	3.81	13.239	M
5	7.65	NITRATE	10.458	2.371	5.36	3.323	MB
6	10.35	n.a.	0.146	0.054	0.12	n.a.	BMB
7	11.61	SULFATE	53.379	15.545	35.13	62.331	BMB
Total:			231.345	44.254	100.00	137.179	

Anions/Integration

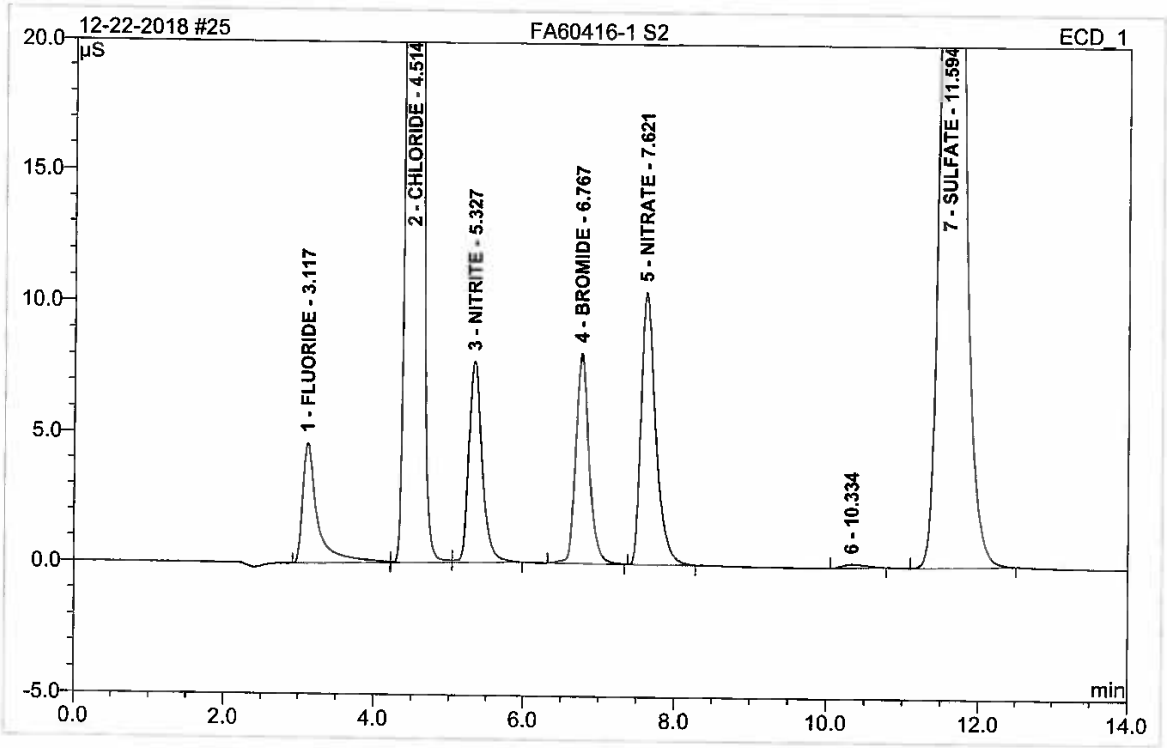
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

25 FA60416-1 S2

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60416-1 S2**	*Injection Volume:*	**25.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/22/2018 13:49**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.12	FLUORIDE	4.624	1.072	2.44	2.364	BM
2	4.51	CHLORIDE	147.514	21.811	49.57	53.266	M
3	5.33	NITRITE	7.737	1.604	3.65	2.463	MB
4	6.77	BROMIDE	8.092	1.644	3.74	12.901	BMB
5	7.62	NITRATE	10.427	2.352	5.35	3.297	BMB
6	10.33	n.a.	0.130	0.046	0.10	n.a.	BMB
7	11.59	SULFATE	53.404	15.474	35.17	62.067	BMB
Total:			231.927	44.002	100.00	136.358	

Anions/Integration

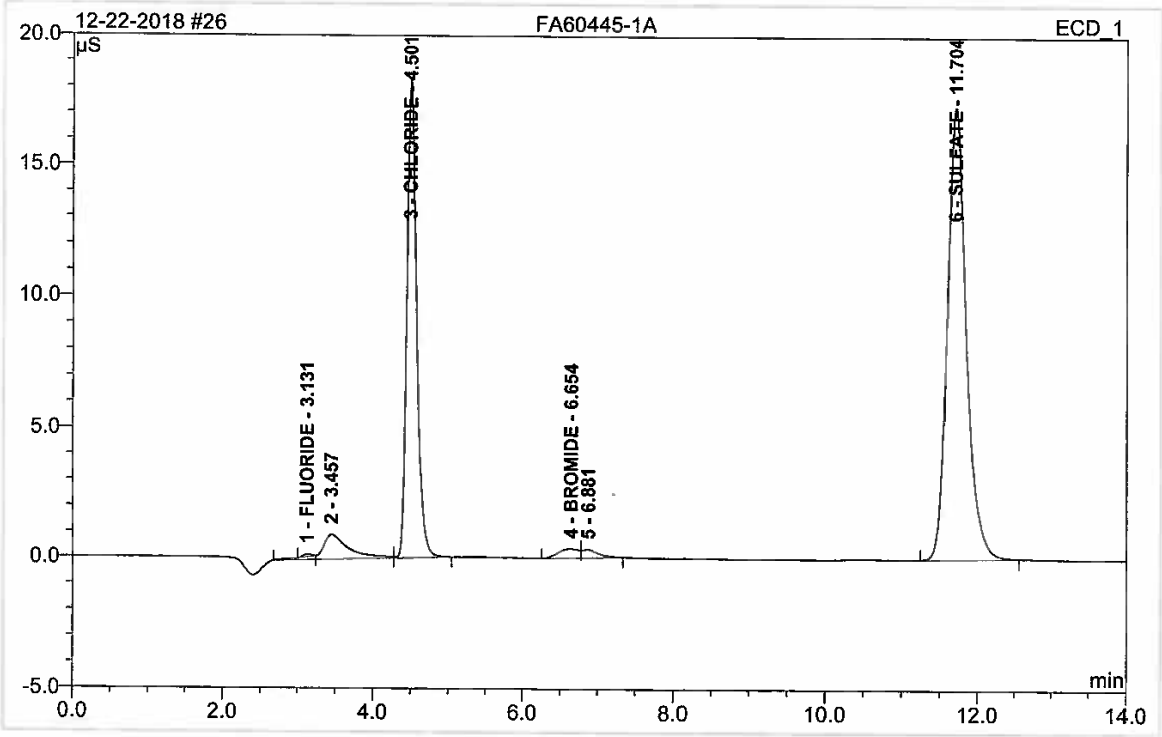
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

26 FA60445-1A

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60445-1A**	*Injection Volume:*	**25.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/22/2018 14:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.13	FLUORIDE	0.105	0.013	0.16	-0.076	Ru
2	3.46	n.a.	0.958	0.411	4.93	n.a.	BM
3	4.50	CHLORIDE	18.266	2.704	32.45	7.693	MB
4	6.65	BROMIDE	0.361	0.115	1.38	1.030	BM
5	6.88	n.a.	0.324	0.082	0.99	n.a.	MB
6	11.70	SULFATE	17.293	5.008	60.10	21.212	BMB
Total:			37.307	8.333	100.00	29.859	

Anions/Integration

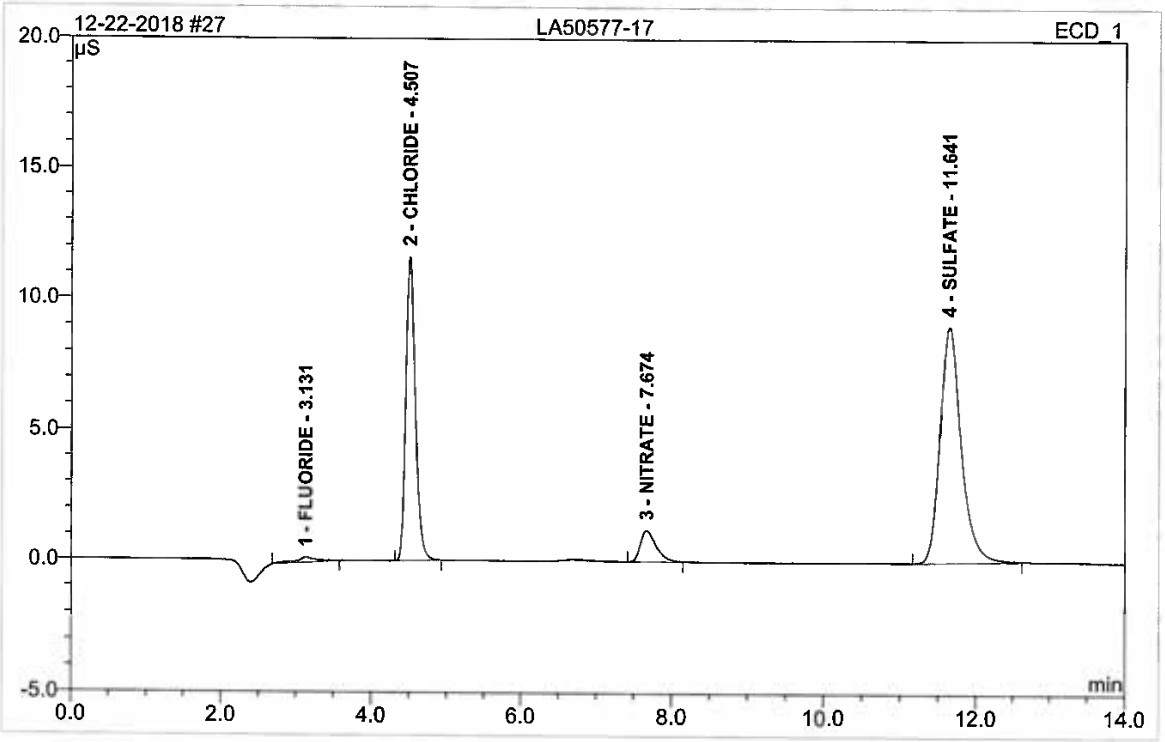
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

27 LA50577-17

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**LA50577-17**	*Injection Volume:*	**25.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/22/2018 14:23**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.13	FLUORIDE	0.183	0.060	1.22	0.033	BMB
2	4.51	CHLORIDE	11.623	1.666	33.76	5.218	BMB
3	7.67	NITRATE	1.193	0.292	5.91	0.426	BMB
4	11.64	SULFATE	9.038	2.918	59.11	12.474	BMB
Total:			22.037	4.936	100.00	18.152	

Anions/Integration

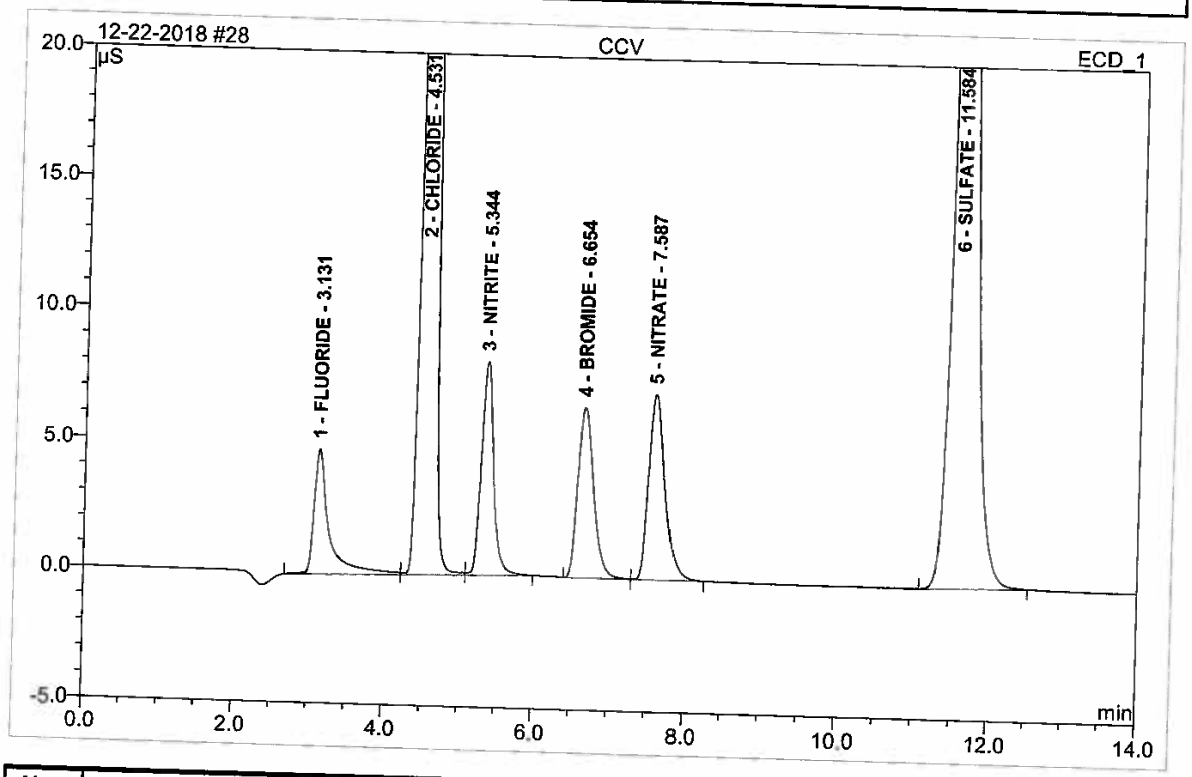
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

28 CCV

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/22/2018 14:40**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.13	FLUORIDE	4.806	1.121	2.86	2.477	BM
2	4.53	CHLORIDE	144.699	20.174	51.48	49.361	M
3	5.34	NITRITE	8.192	1.576	4.02	2.420	MB
4	6.65	BROMIDE	6.546	1.564	3.99	12.278	BM
5	7.59	NITRATE	7.114	1.766	4.51	2.480	MB
6	11.58	SULFATE	43.664	12.987	33.14	52.751	BMB
Total:			215.020	39.186	100.00	121.767	

Anions/Integration

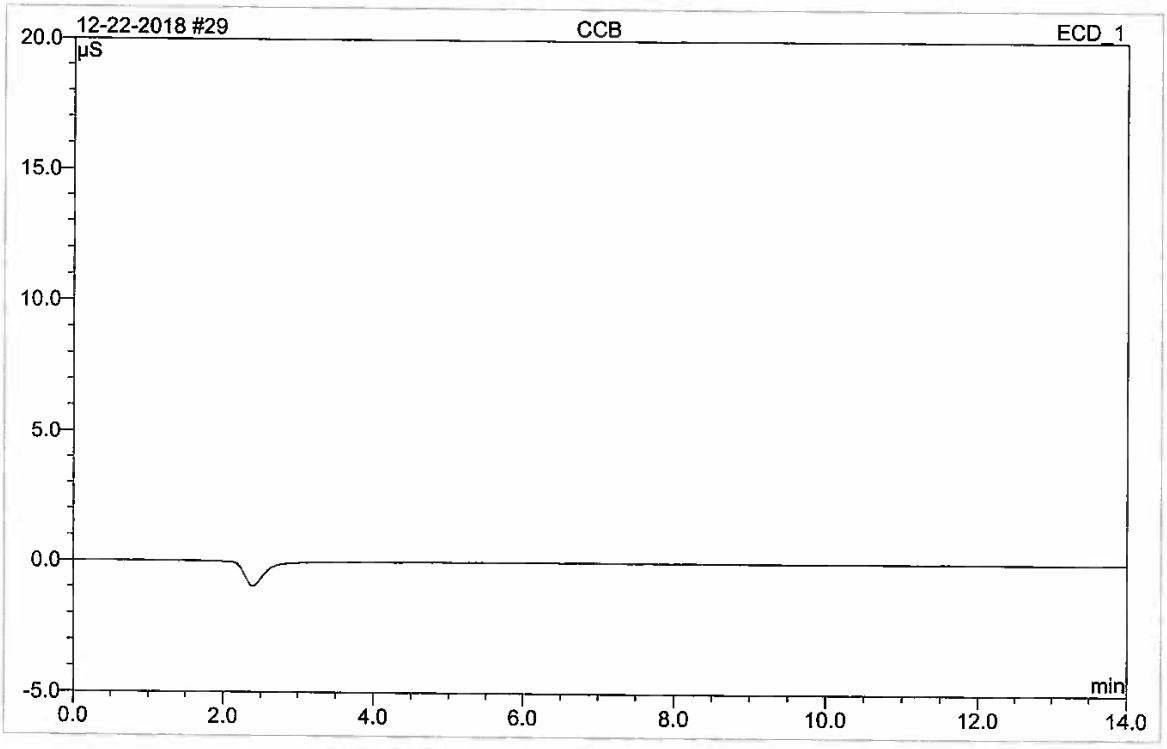
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

29 CCB

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**CCB**	*Injection Volume:*	**25.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/22/2018 14:57**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
Total:			0.000	0.000	0.00	0.000	

Anions/Integration

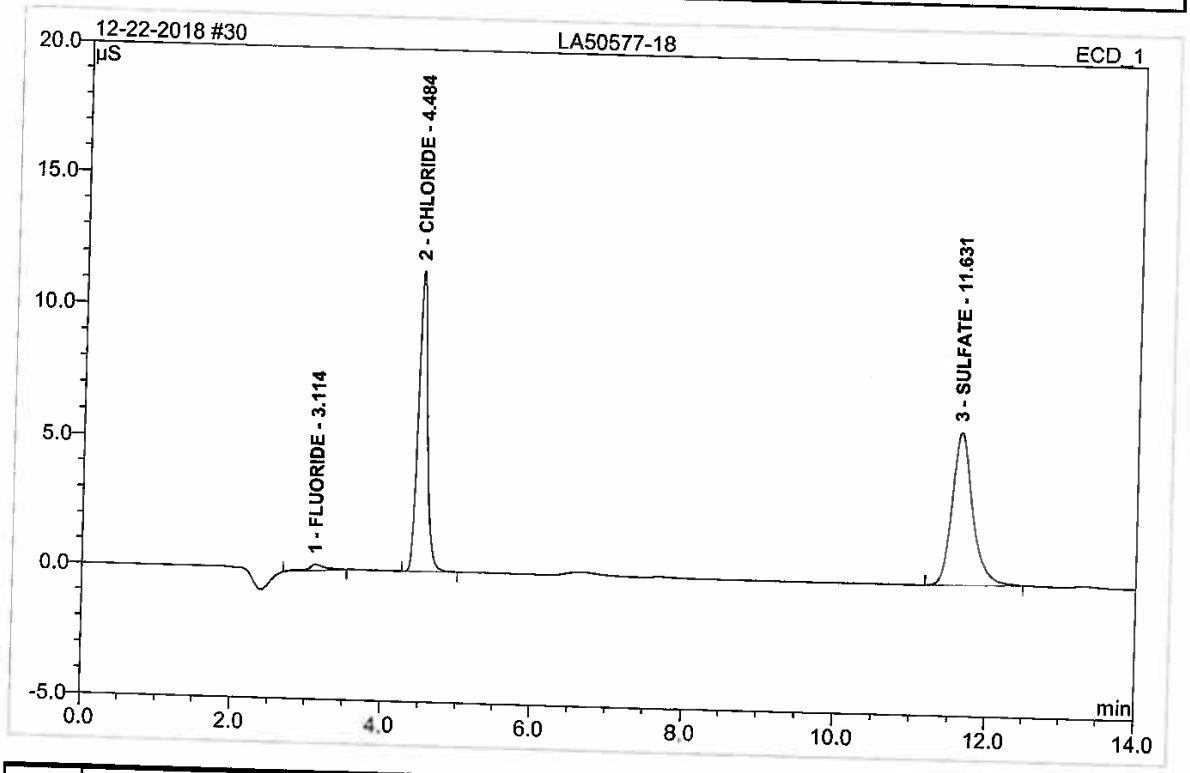
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

30 LA50577-18

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**LA50577-18**	*Injection Volume:*	**25.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/22/2018 15:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.11	FLUORIDE	0.250	0.066	1.82	0.045	BMB
2	4.48	CHLORIDE	11.508	1.652	45.68	5.184	BMB
3	11.63	SULFATE	5.907	1.898	52.50	8.131	BMB
Total:			17.665	3.616	100.00	13.361	

Anions/Integration

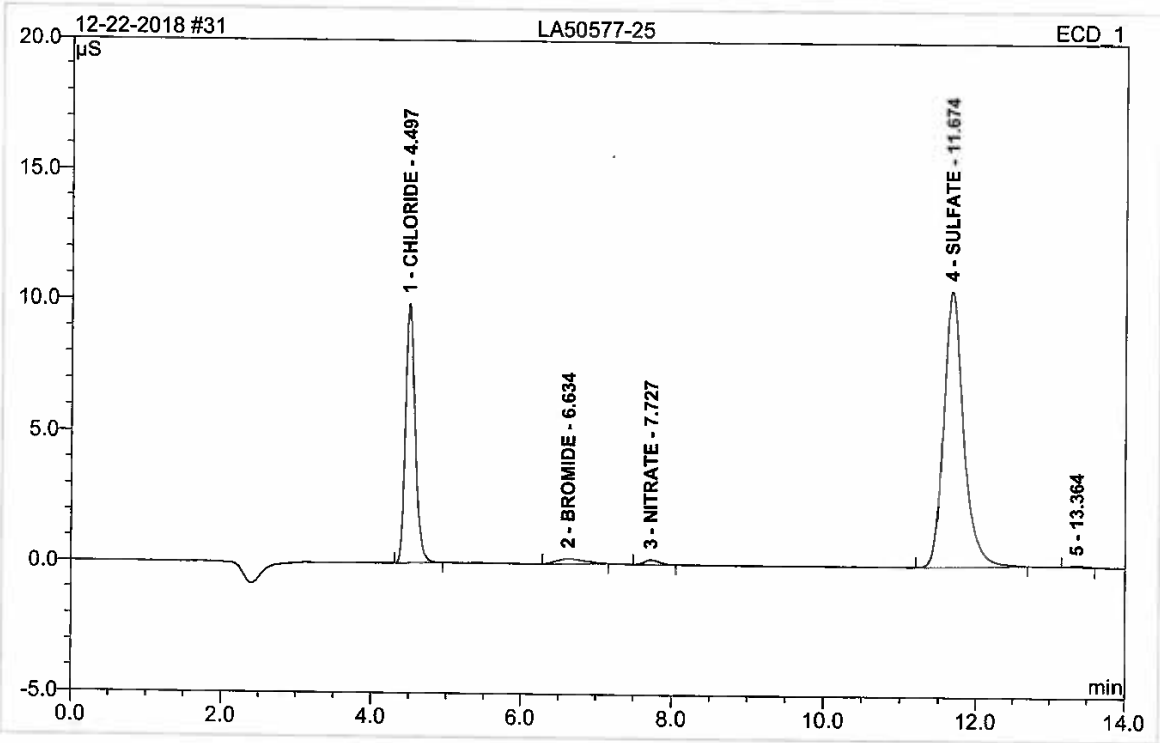
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

31 LA50577-25

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**LA50577-25**	*Injection Volume:*	**25.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/22/2018 15:31**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	4.50	CHLORIDE	9.872	1.435	29.77	4.667	BMB
2	6.63	BROMIDE	0.189	0.082	1.70	0.774	BMB
3	7.73	NITRATE	0.190	0.043	0.89	0.080	BMB
4	11.67	SULFATE	10.517	3.250	67.40	13.876	BMB
5	13.36	n.a.	0.047	0.011	0.23	n.a.	BMB
Total:			20.816	4.821	100.00	19.397	

Anions/Integration

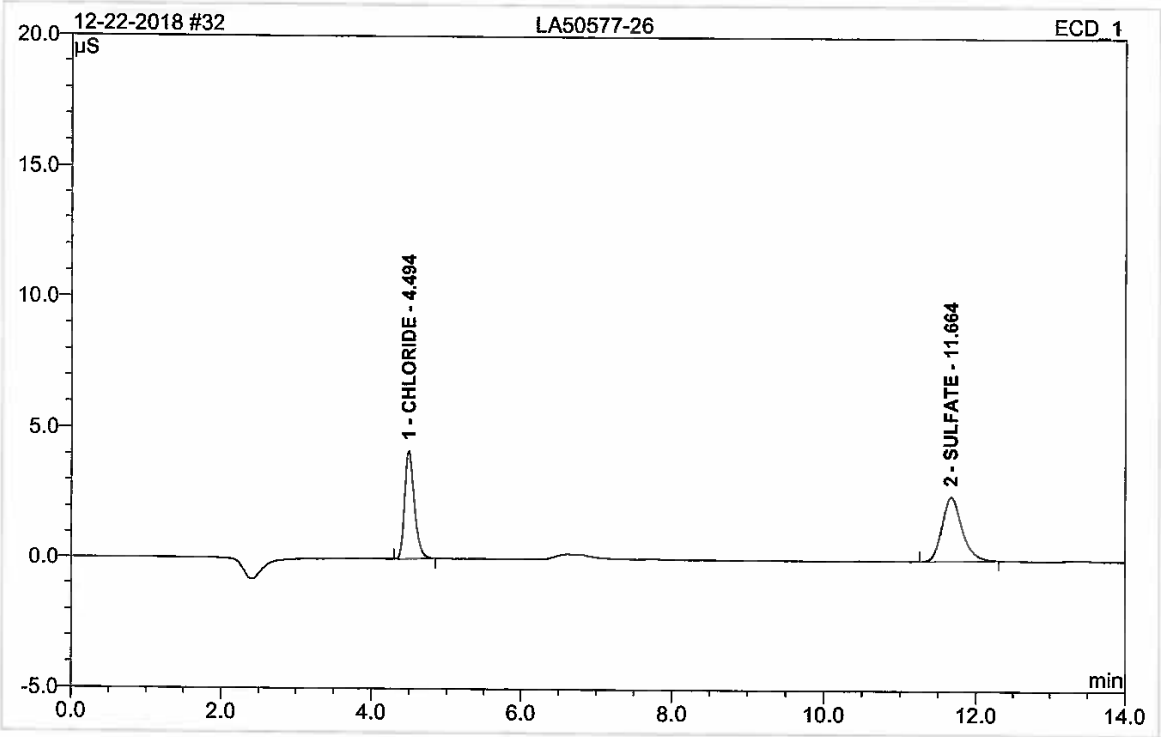
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

32 LA50577-26

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**LA50577-26**	*Injection Volume:*	**25.0**
Vial Number:	**17**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/22/2018 15:48**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	4.49	CHLORIDE	4.168	0.616	44.46	2.712	BMB
2	11.66	SULFATE	2.489	0.769	55.54	3.256	BMB
Total:			6.657	1.385	100.00	5.968	

Anions/Integration

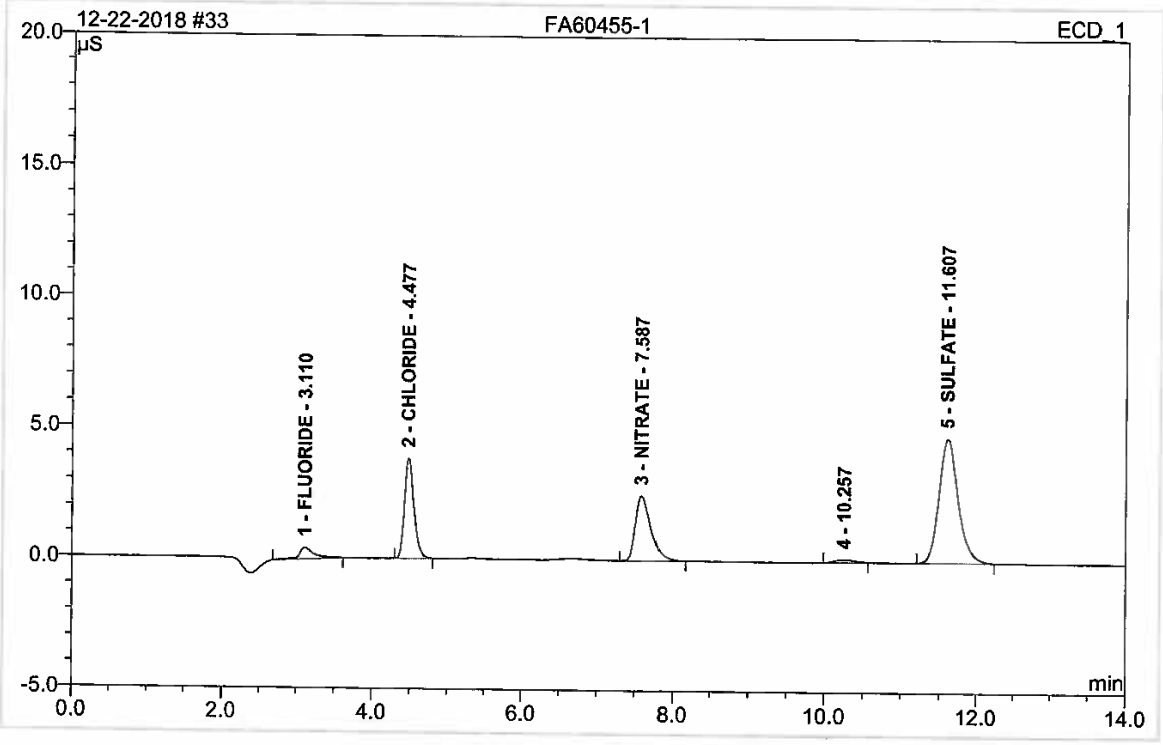
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

33 FA60455-1

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60455-1**	*Injection Volume:*	**25.0**
Vial Number:	**18**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/22/2018 16:05**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.11	FLUORIDE	0.446	0.103	3.82	0.659	BMB
2	4.48	CHLORIDE	3.820	0.561	20.75	12.910	BMB
3	7.59	NITRATE	2.478	0.588	21.76	4.197	BMB
4	10.26	n.a.	0.109	0.032	1.17	n.a.	BMB
5	11.61	SULFATE	4.743	1.420	52.50	30.363	BMB
Total:			11.597	2.704	100.00	48.130	

Anions/Integration

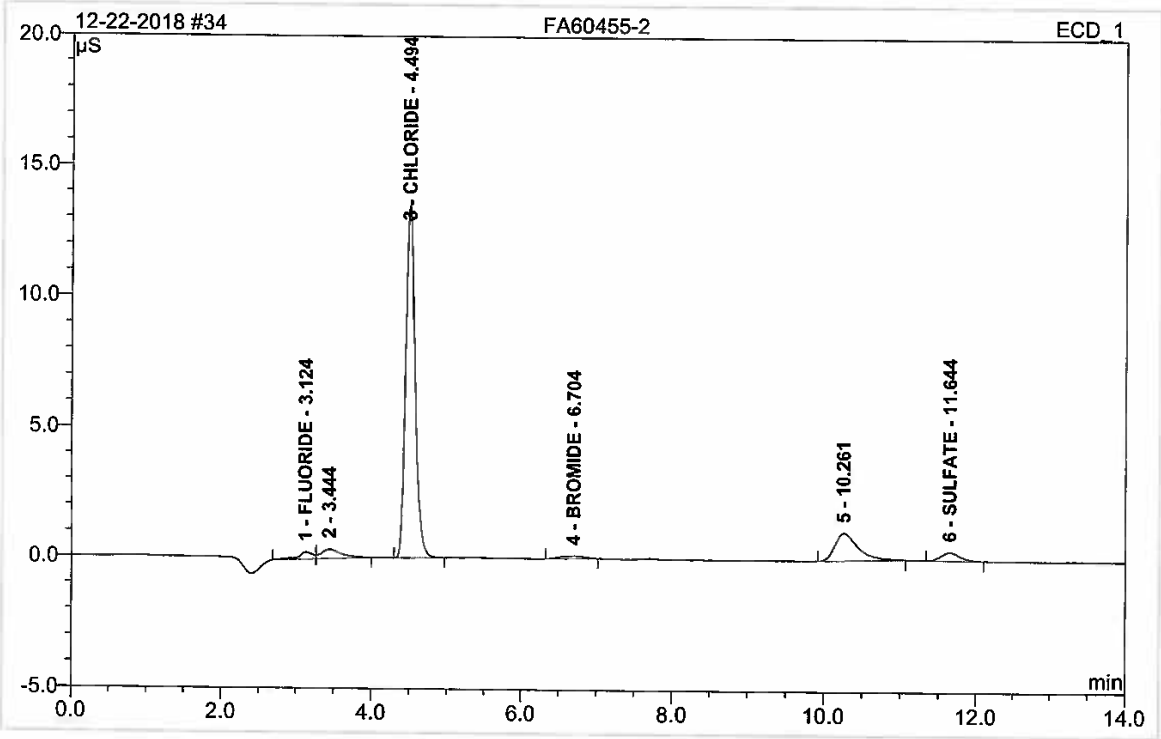
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

34 FA60455-2

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60455-2**	*Injection Volume:*	**25.0**
Vial Number:	**19**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**10.0000**
Recording Time:	**12/22/2018 16:22**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.12	FLUORIDE	0.274	0.066	2.56	0.468	BM
2	3.44	n.a.	0.356	0.111	4.28	n.a.	MB
3	4.49	CHLORIDE	13.478	1.915	73.75	58.116	BMB
4	6.70	BROMIDE	0.098	0.036	1.38	4.165	BMB
5	10.26	n.a.	1.052	0.373	14.36	n.a.	BMB
6	11.64	SULFATE	0.324	0.095	3.67	3.126	BMB
Total:			15.582	2.597	100.00	65.875	

Anions/Integration

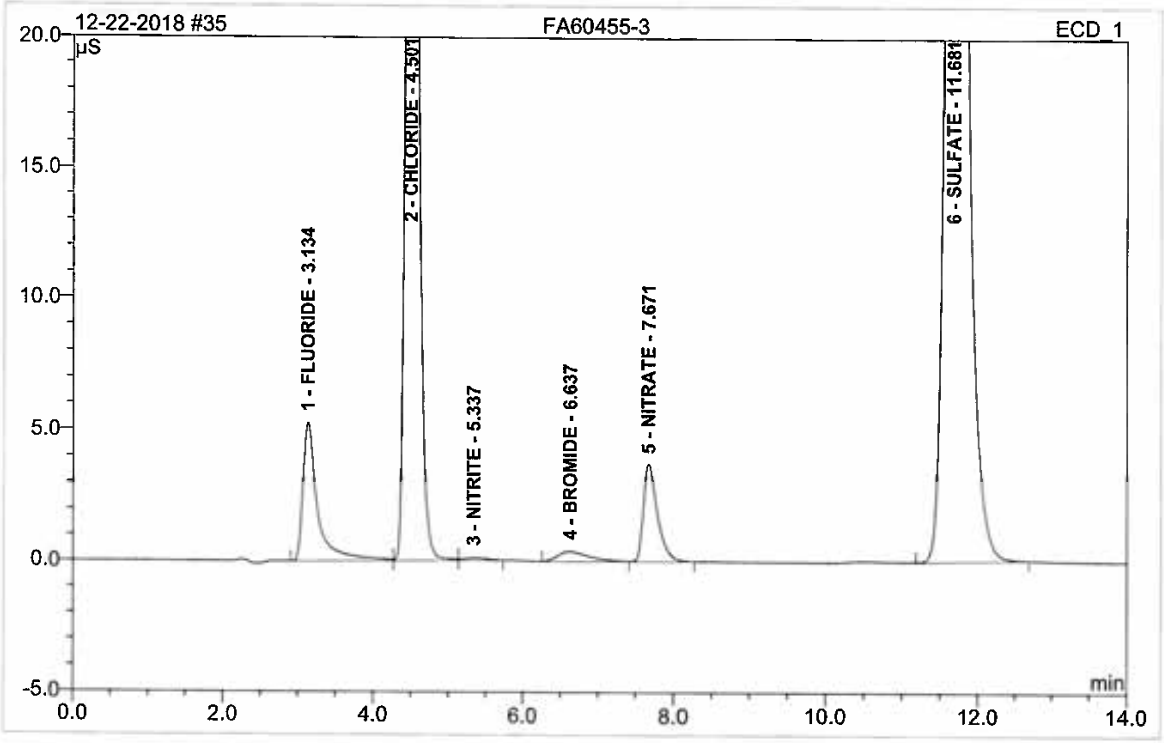
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

35 FA60455-3

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60455-3**	*Injection Volume:*	**25.0**
Vial Number:	**20**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/22/2018 16:39**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.13	FLUORIDE	5.266	1.206	4.33	2.674	BM
2	4.50	CHLORIDE	64.026	9.821	35.26	24.669	M
3	5.34	NITRITE	0.100	0.035	0.12	0.091	MB
4	6.64	BROMIDE	0.371	0.174	0.63	1.492	Ru
5	7.67	NITRATE	3.696	0.814	2.92	1.153	BMB
6	11.68	SULFATE	55.447	15.807	56.74	63.297	BMB
Total:			128.905	27.857	100.00	93.378	

Anions/Integration

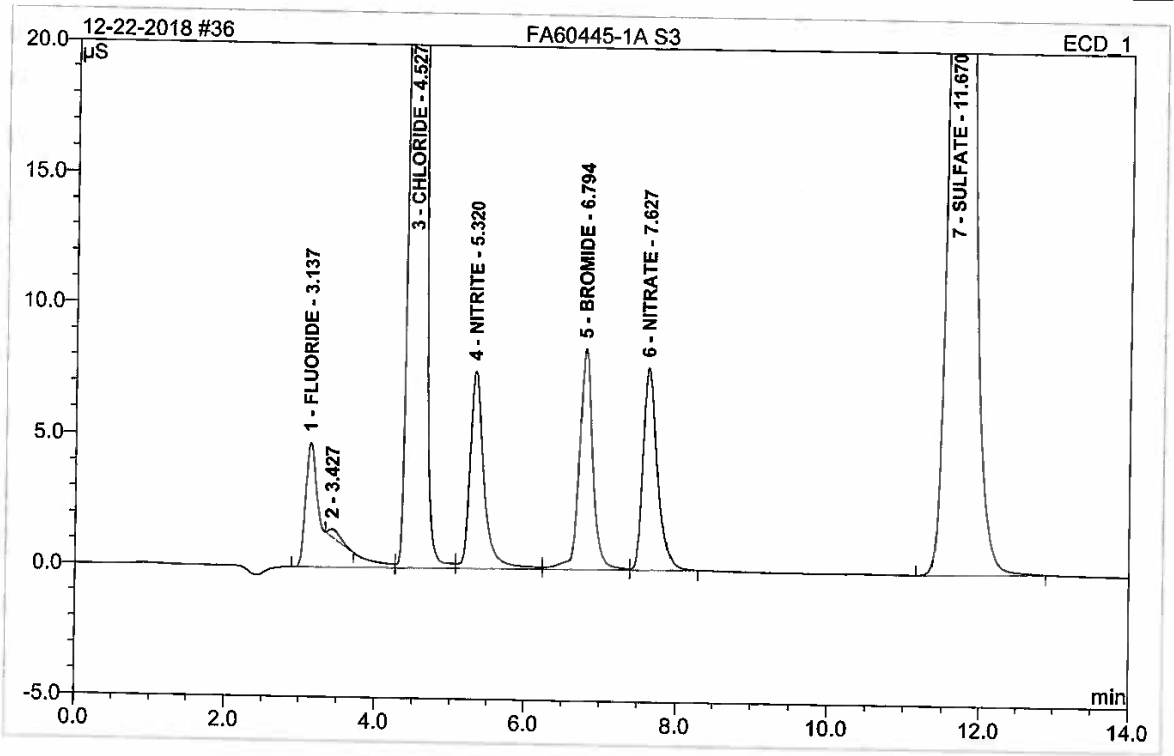
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

36 FA60445-1A S3

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60445-1A S3**	*Injection Volume:*	**25.0**
Vial Number:	**21**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/22/2018 16:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.14	FLUORIDE	4.759	1.417	2.89	3.159	BM
2	3.43	n.a.	0.296	0.058	0.12	n.a.	Rd
3	4.53	CHLORIDE	161.462	23.398	47.78	57.051	M
4	5.32	NITRITE	7.533	1.653	3.38	2.537	M
5	6.79	BROMIDE	8.424	1.746	3.57	13.692	M
6	7.63	NITRATE	7.729	1.707	3.49	2.398	MB
7	11.67	SULFATE	65.353	18.988	38.78	74.871	BMB
Total:			255.556	48.967	100.00	153.708	

Anions/Integration

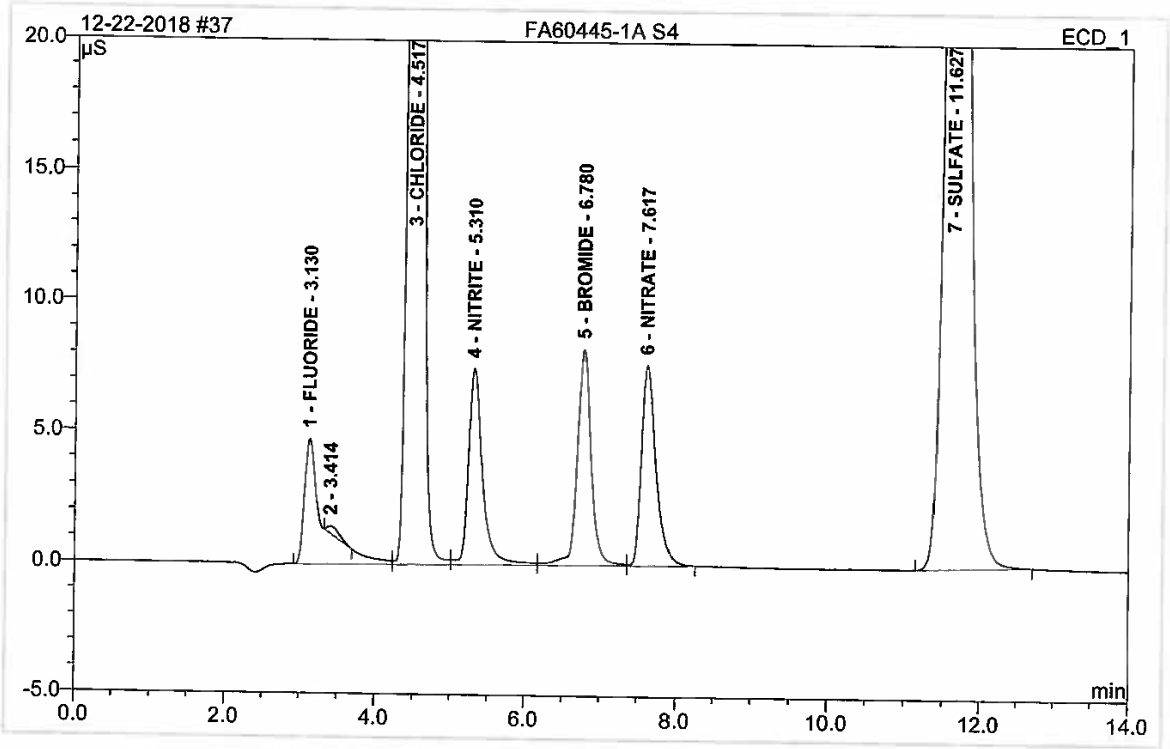
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

37 FA60445-1A S4

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60445-1A S4**	*Injection Volume:*	**25.0**
Vial Number:	**22**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/22/2018 17:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.13	FLUORIDE	4.758	1.397	2.87	3.114	BM
2	3.41	n.a.	0.279	0.057	0.12	n.a.	Rd
3	4.52	CHLORIDE	160.471	23.237	47.74	56.668	M
4	5.31	NITRITE	7.479	1.647	3.38	2.529	M
5	6.78	BROMIDE	8.244	1.736	3.57	13.616	M
6	7.62	NITRATE	7.648	1.699	3.49	2.388	MB
7	11.63	SULFATE	65.242	18.896	38.83	74.541	BMB
Total:			254.121	48.671	100.00	152.855	

Anions/Integration

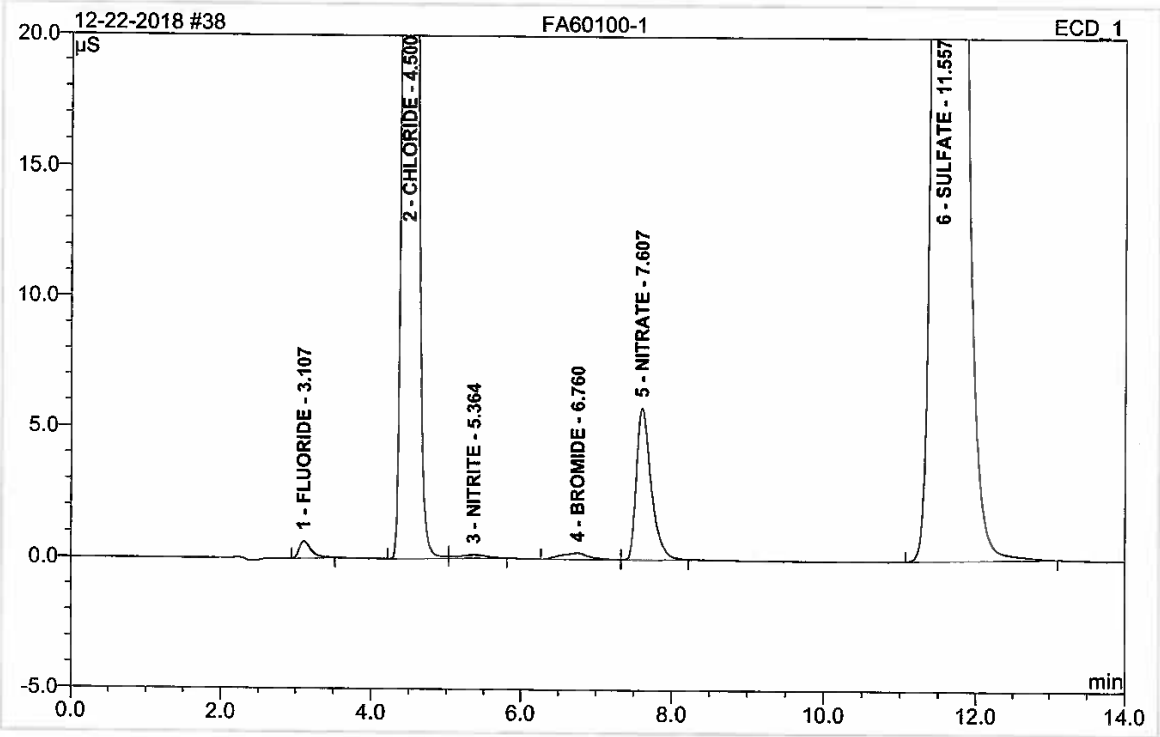
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

38 FA60100-1

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60100-1**	*Injection Volume:*	**25.0**
Vial Number:	**23**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/22/2018 17:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.11	FLUORIDE	0.645	0.120	0.19	0.169	BMB
2	4.50	CHLORIDE	121.535	17.822	28.31	43.751	BM
3	5.36	NITRITE	0.135	0.061	0.10	0.131	MB
4	6.76	BROMIDE	0.250	0.106	0.17	0.958	BM
5	7.61	NITRATE	5.777	1.308	2.08	1.841	MB
6	11.56	SULFATE	140.396	43.532	69.16	155.019	BMB
Total:			268.738	62.947	100.00	201.870	

Anions/Integration

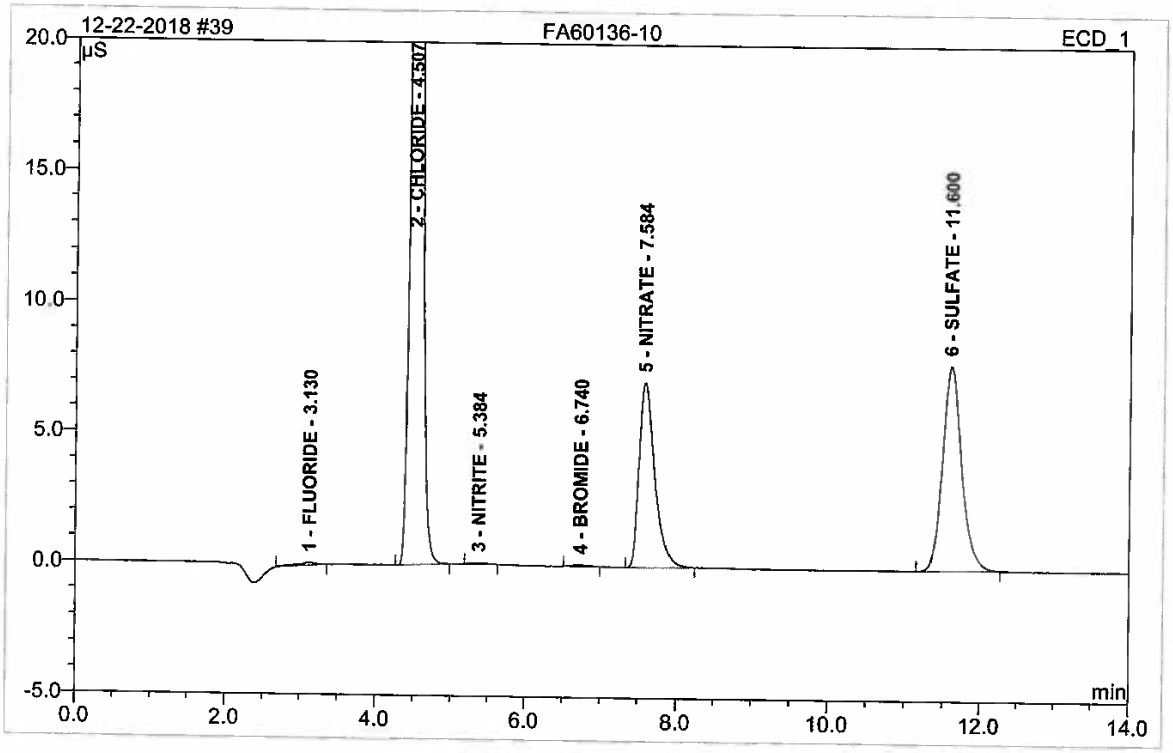
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

39 FA60136-10

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60136-10**	*Injection Volume:*	**25.0**
Vial Number:	**24**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/22/2018 17:46**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.13	FLUORIDE	0.098	0.031	0.24	-0.171	BMB
2	4.51	CHLORIDE	68.412	9.156	69.14	115.407	BMB
3	5.38	NITRITE	0.052	0.012	0.09	0.287	BMB
4	6.74	BROMIDE	0.056	0.013	0.10	1.199	BMB
5	7.58	NITRATE	7.080	1.692	12.78	11.885	BMB
6	11.60	SULFATE	7.851	2.338	17.66	50.054	BMB
Total:			83.549	13.242	100.00	178.660	

Anions/Integration

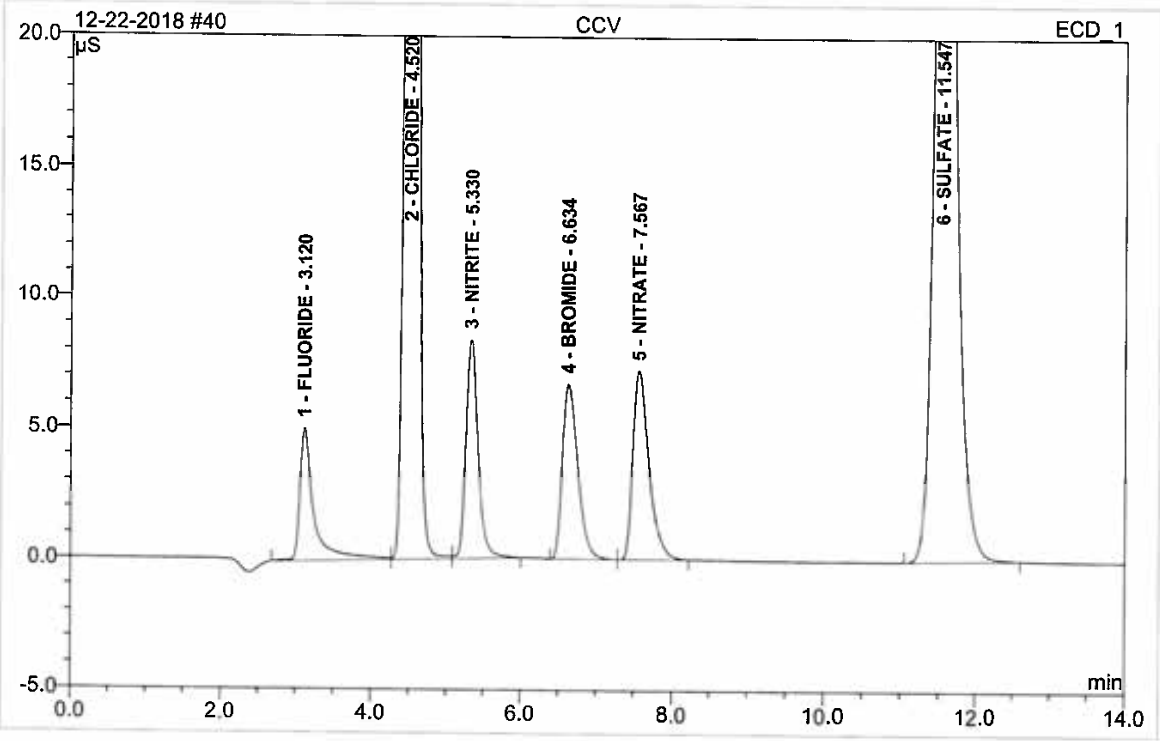
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

40 CCV

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**25**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/22/2018 18:03**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.12	FLUORIDE	5.052	1.103	2.83	2.435	BM
2	4.52	CHLORIDE	146.217	20.105	51.52	49.198	M
3	5.33	NITRITE	8.341	1.594	4.08	2.448	MB
4	6.63	BROMIDE	6.653	1.558	3.99	12.234	BM
5	7.57	NITRATE	7.179	1.764	4.52	2.477	MB
6	11.55	SULFATE	43.667	12.904	33.06	52.435	BMB
Total:			217.109	39.027	100.00	121.227	

Anions/Integration

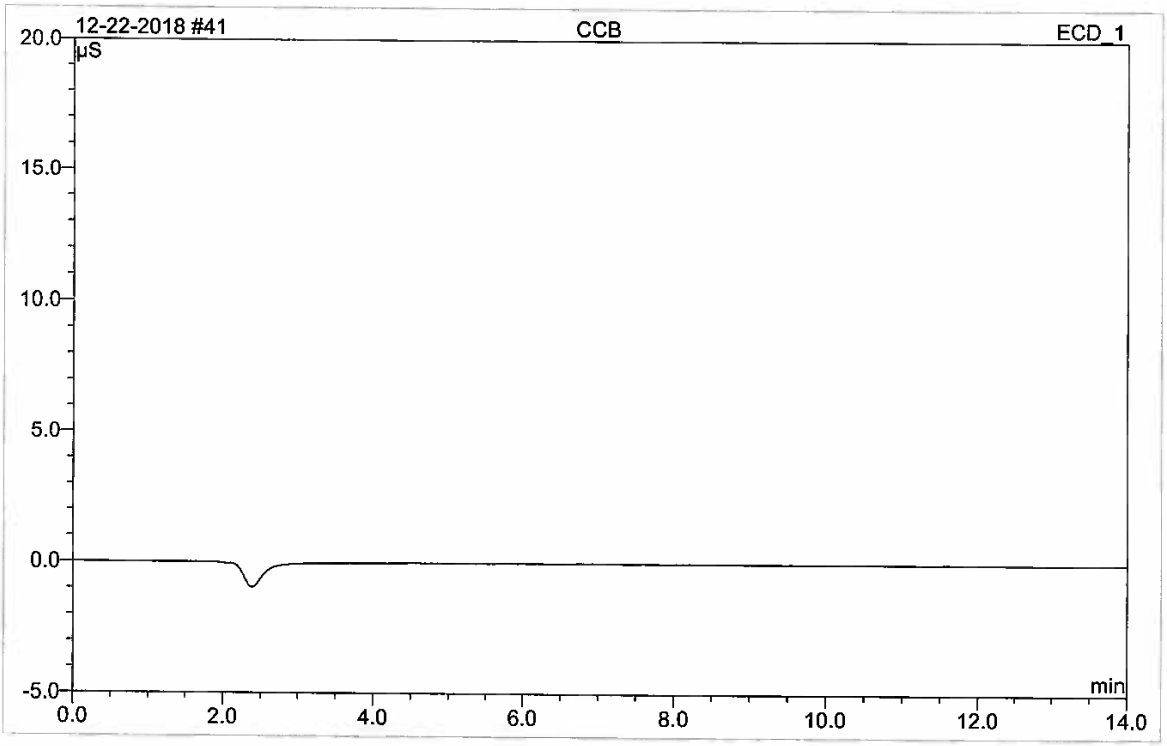
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

41 CCB

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**CCB**	*Injection Volume:*	**25.0**
Vial Number:	**26**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/22/2018 18:20**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
Total:			0.000	0.000	0.00	0.000	

Anions/Integration

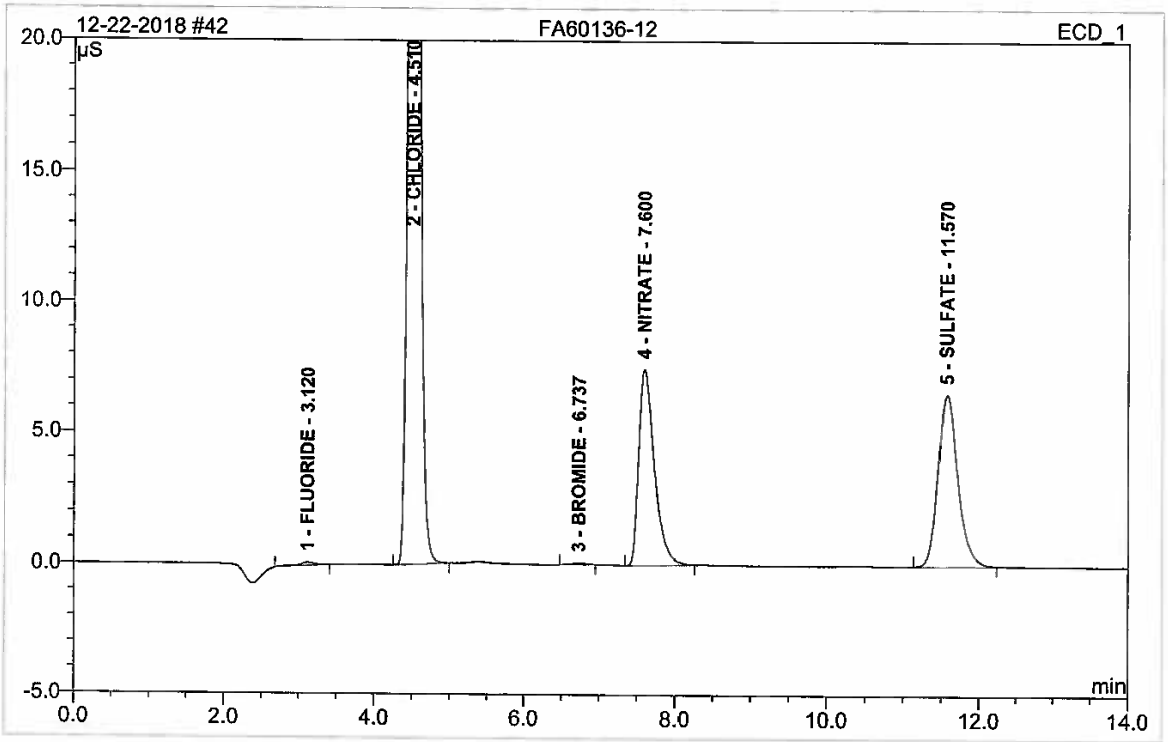
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

42 FA60136-12

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60136-12**	*Injection Volume:*	**25.0**
Vial Number:	**27**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/22/2018 18:37**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.12	FLUORIDE	0.125	0.037	0.26	-0.108	BMB
2	4.51	CHLORIDE	75.049	10.070	72.64	126.308	BMB
3	6.74	BROMIDE	0.061	0.014	0.10	1.216	BMB
4	7.60	NITRATE	7.449	1.787	12.89	12.547	BMB
5	11.57	SULFATE	6.542	1.956	14.11	41.896	BMB
Total:			89.226	13.863	100.00	181.859	

Anions/Integration

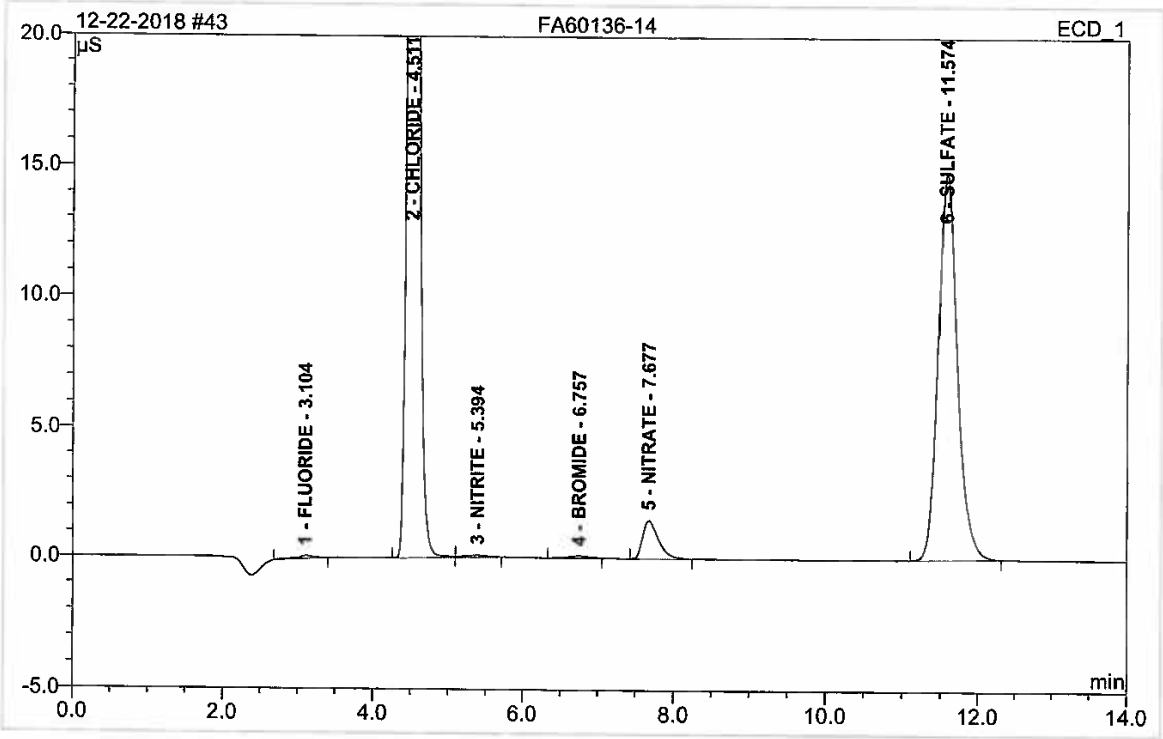
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

43 FA60136-14

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60136-14**	*Injection Volume:*	**25.0**
Vial Number:	**28**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/22/2018 18:54**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.10	FLUORIDE	0.115	0.033	0.23	-0.152	BMB
2	4.51	CHLORIDE	69.402	9.384	66.28	118.135	BM
3	5.39	NITRITE	0.074	0.027	0.19	0.401	MB
4	6.76	BROMIDE	0.083	0.026	0.18	1.700	BMB
5	7.68	NITRATE	1.470	0.360	2.54	2.608	BMB
6	11.57	SULFATE	14.815	4.327	30.56	91.943	BMB
Total:			85.959	14.158	100.00	214.635	

Anions/Integration

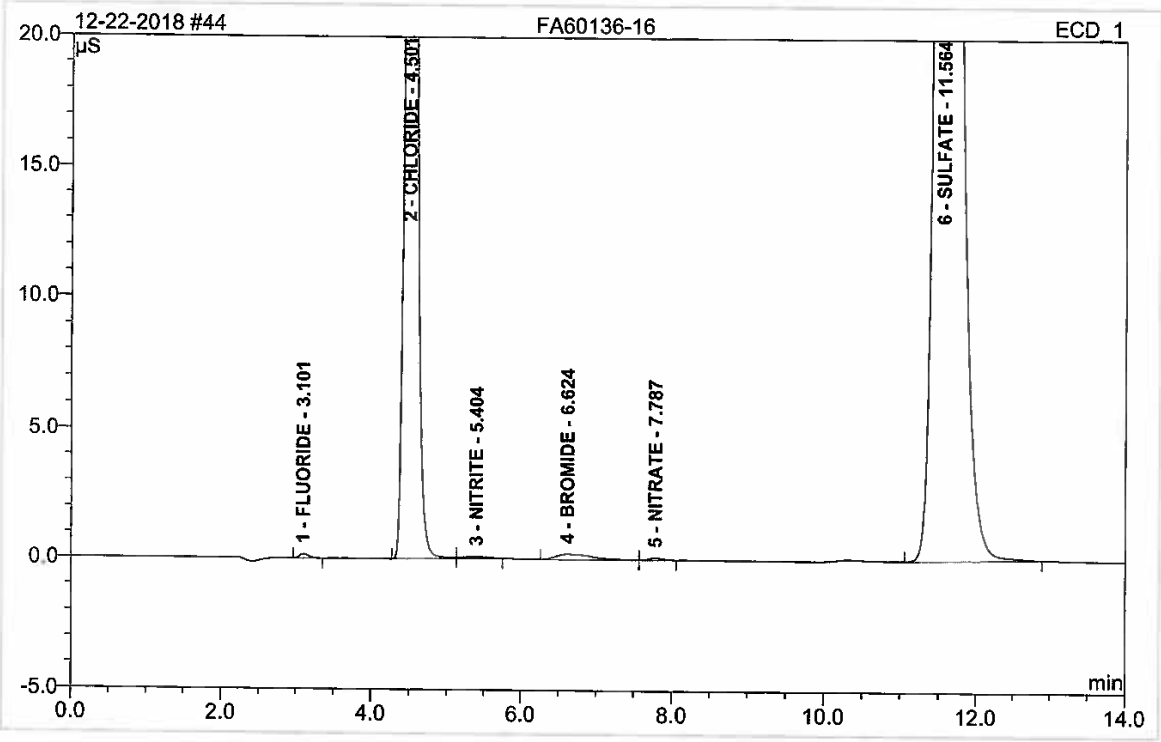
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

44 FA60136-16

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60136-16**	*Injection Volume:*	**25.0**
Vial Number:	**29**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/22/2018 19:11**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.10	FLUORIDE	0.159	0.024	0.07	-0.052	BMB
2	4.50	CHLORIDE	59.722	8.661	25.60	21.901	BM
3	5.40	NITRITE	0.070	0.027	0.08	0.080	MB
4	6.62	BROMIDE	0.209	0.114	0.34	1.023	BM
5	7.79	NITRATE	0.078	0.018	0.05	0.044	MB
6	11.56	SULFATE	84.754	24.989	73.86	95.850	BMB
Total:			144.992	33.832	100.00	118.846	

Anions/Integration

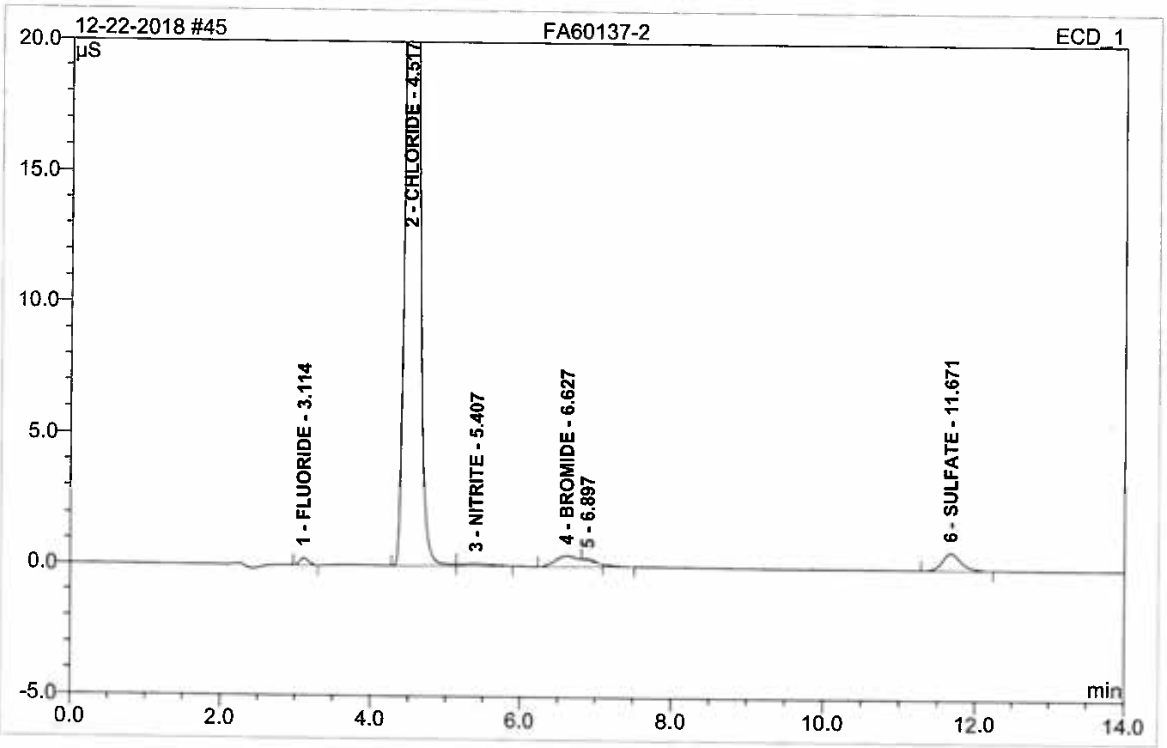
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

45 FA60137-2

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60137-2**	*Injection Volume:*	**25.0**
Vial Number:	**30**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/22/2018 19:28**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.11	FLUORIDE	0.279	0.038	0.41	-0.019	BMB
2	4.52	CHLORIDE	57.975	8.857	94.70	22.369	BM
3	5.41	NITRITE	0.083	0.037	0.40	0.095	MB
4	6.63	BROMIDE	0.422	0.212	2.27	1.783	BMB
5	6.90	n.a.	0.073	0.011	0.11	n.a.	Rd
6	11.67	SULFATE	0.668	0.198	2.12	0.763	BMB
Total:			59.499	9.352	100.00	24.992	

Anions/Integration

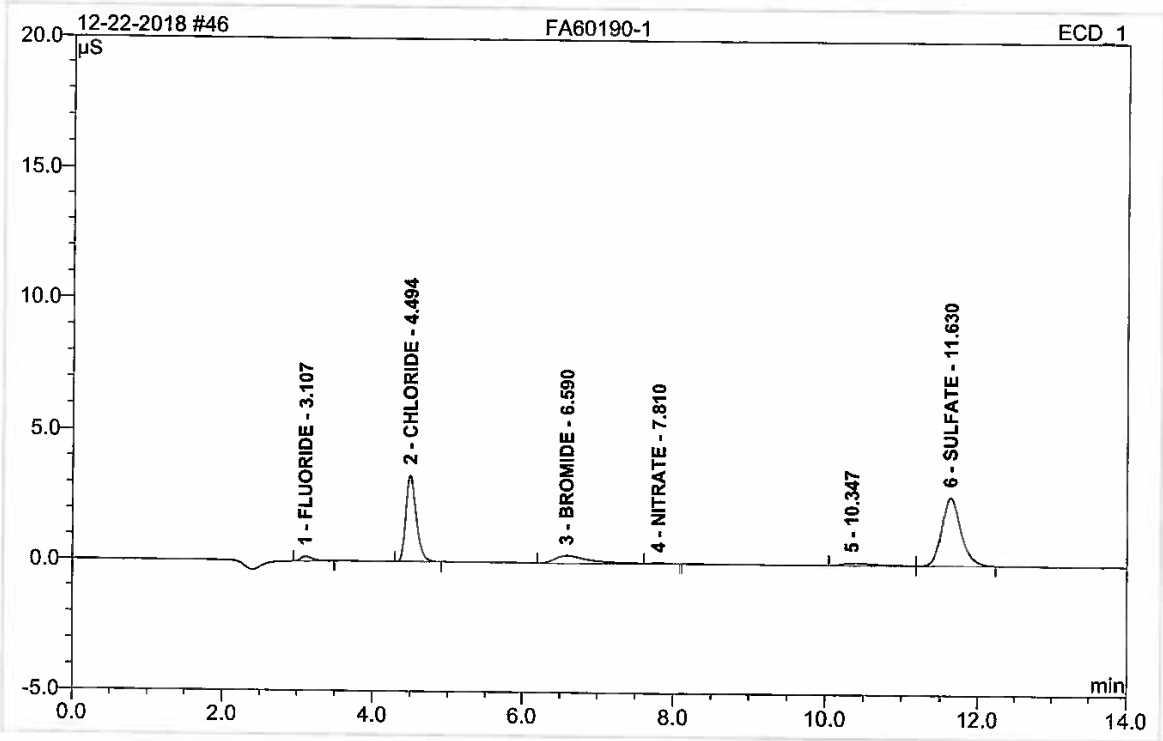
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

46 FA60190-1

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60190-1**	*Injection Volume:*	**25.0**
Vial Number:	**31**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/22/2018 19:45**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.11	FLUORIDE	0.175	0.032	2.07	-0.033	BMB
2	4.49	CHLORIDE	3.325	0.520	33.84	2.484	BMB
3	6.59	BROMIDE	0.295	0.158	10.30	1.366	BMB
4	7.81	NITRATE	0.029	0.006	0.41	0.028	Rd
5	10.35	n.a.	0.094	0.046	2.99	n.a.	BM
6	11.63	SULFATE	2.622	0.774	50.38	3.277	MB
Total:			6.540	1.536	100.00	7.123	

Anions/Integration

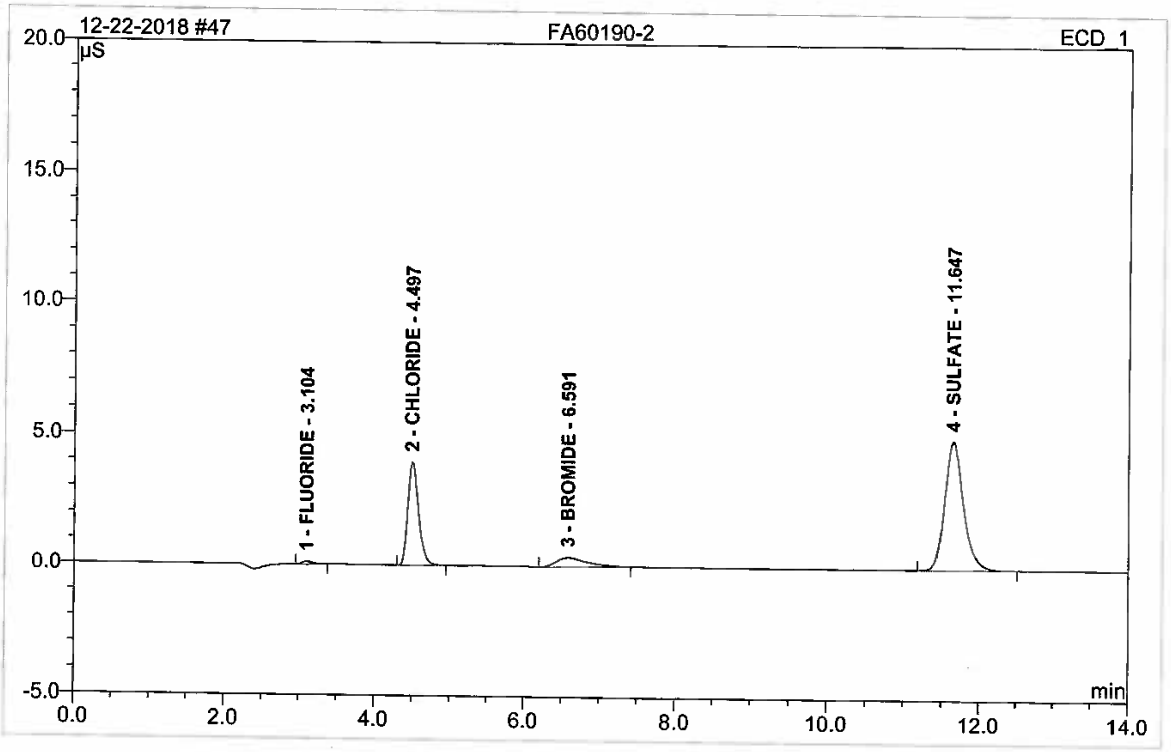
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

47 FA60190-2

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60190-2**	*Injection Volume:*	**25.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/22/2018 20:02**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.10	FLUORIDE	0.108	0.018	0.81	-0.064	BMB
2	4.50	CHLORIDE	3.960	0.646	28.18	2.784	BMB
3	6.59	BROMIDE	0.366	0.174	7.60	1.489	BMB
4	11.65	SULFATE	4.950	1.453	63.42	6.216	BMB
Total:			9.383	2.291	100.00	10.426	

Anions/Integration

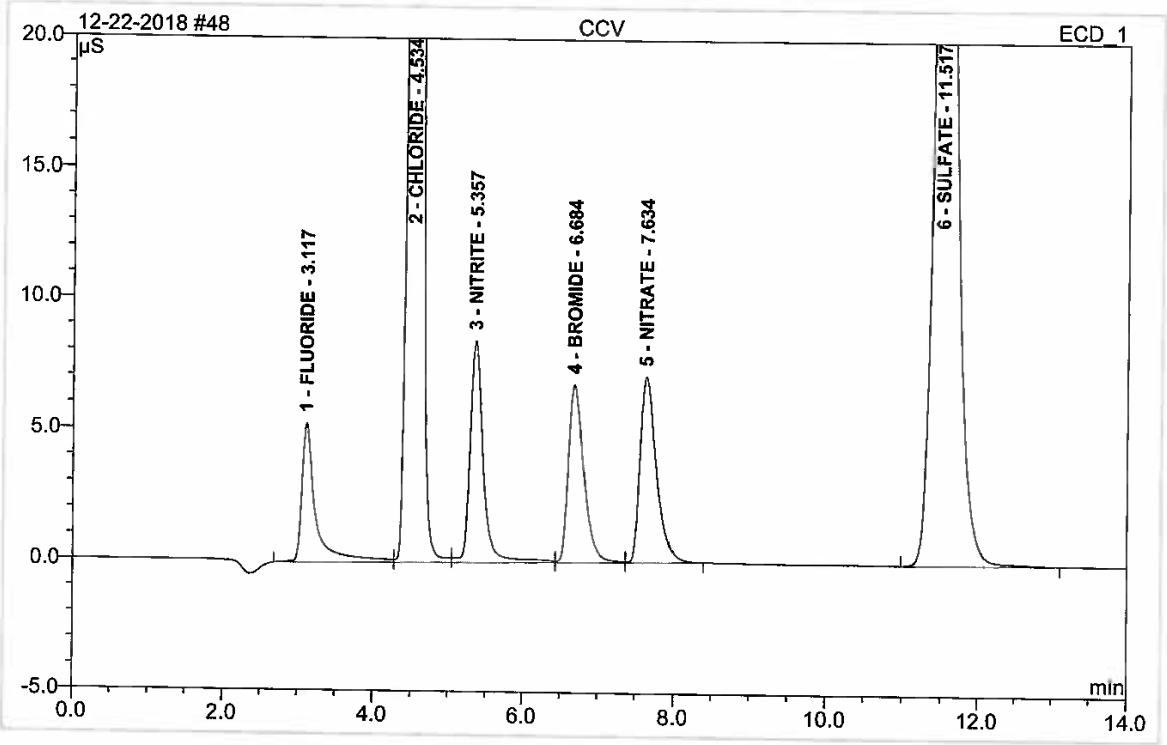
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

48 CCV

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**33**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/22/2018 20:19**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.12	FLUORIDE	5.314	1.158	2.94	2.562	BM
2	4.53	CHLORIDE	147.217	20.186	51.26	49.390	M
3	5.36	NITRITE	8.452	1.743	4.43	2.674	M
4	6.68	BROMIDE	6.783	1.610	4.09	12.641	M
5	7.63	NITRATE	7.080	1.783	4.53	2.504	MB
6	11.52	SULFATE	43.640	12.896	32.75	52.405	BMB
Total:			218.485	39.376	100.00	122.175	

Anions/Integration

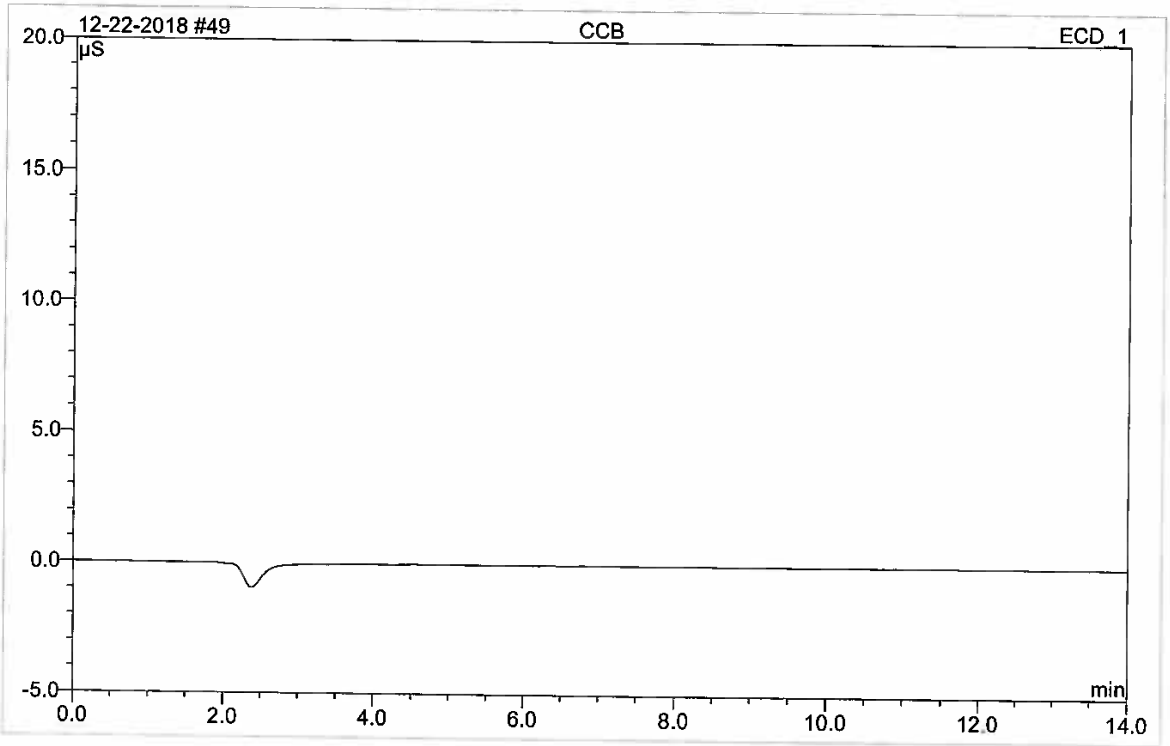
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

49 CCB

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**CCB**	*Injection Volume:*	**25.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/22/2018 20:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
Total:			0.000	0.000	0.00	0.000	

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-22-2018

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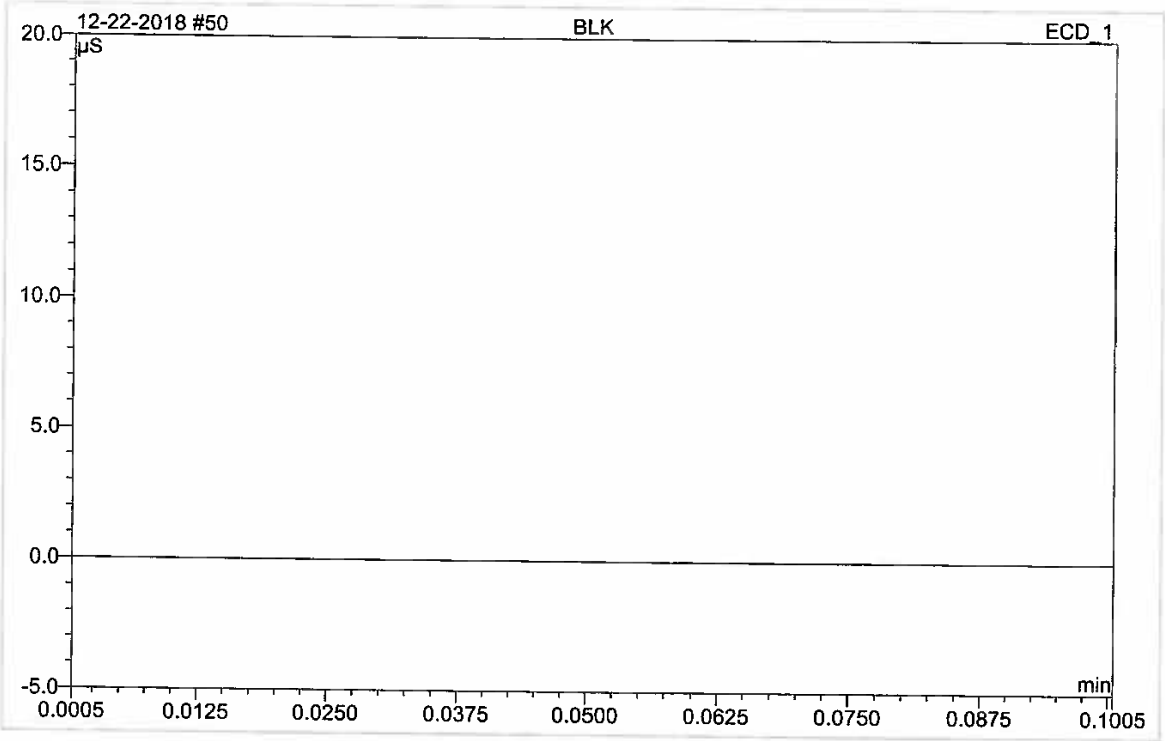
50 BLK

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**BLK**	*Injection Volume:*	**25.0**
Vial Number:	**35**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**SHUTDOWN-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/22/2018 20:53**	*Sample Weight:*	**1.0000**
Run Time (min):	**0.10**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
Total:			0.000	0.000	0.00	0.000	

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Ahtna Environmental Inc

Fort Ord Groundwater Monitoring

8418191360.05.052(Fort Ord Basewide 4Q18 GWM) TDS

SGS Job Number: FA60205

Sampling Date: 12/12/18

Report to:

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Total number of pages in report: **186**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

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General Manager

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SGS North America Inc.

Sample Summary

Ahtna Environmental Inc

Job No: FA60205

Fort Ord Groundwater Monitoring
Project No: 8418191360.05.052(Fort Ord Basewide 4Q18 GWM) TDS

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA60205-1	12/12/18	08:45	BFSM	12/14/18	AQ	Ground Water	1850C0BW316T
FA60205-2	12/12/18	09:00	BFSM	12/14/18	AQ	Ground Water	1850C0BW317T
FA60205-3	12/12/18	09:20	BFSM	12/14/18	AQ	Ground Water	1850C0BW318T
FA60205-4	12/12/18	09:35	BFSM	12/14/18	AQ	Ground Water	1850C0BW319T
FA60205-5	12/12/18	09:50	BFSM	12/14/18	AQ	Ground Water	1850C0BW320T
FA60205-6	12/12/18	10:20	BFSM	12/14/18	AQ	Ground Water	1850C0BW321T
FA60205-7	12/12/18	10:45	BFSM	12/14/18	AQ	Ground Water	1850C0BW322T
FA60205-8	12/12/18	11:00	BFSM	12/14/18	AQ	Ground Water	1850C0BW323T
FA60205-9	12/12/18	11:10	BFSM	12/14/18	AQ	Ground Water	1850C0BW324T
FA60205-10	12/12/18	11:25	BFSM	12/14/18	AQ	Ground Water	1850C0BW325T
FA60205-11	12/12/18	11:40	BFSM	12/14/18	AQ	Ground Water	1850C0BW326T
FA60205-12	12/12/18	11:55	BFSM	12/14/18	AQ	Ground Water	1850C0BW327T
FA60205-13	12/12/18	14:15	BFSM	12/14/18	AQ	Ground Water	1850C0BW328T

SGS North America Inc.

Sample Summary
(continued)

Ahtna Environmental Inc

Job No: FA60205

Fort Ord Groundwater Monitoring
Project No: 8418191360.05.052(Fort Ord Basewide 4Q18 GWM) TDS

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA60205-14	12/12/18	14:05	BFSM	12/14/18	AQ	Ground Water	1850C0BW329T
FA60205-15	12/12/18	13:50	BFSM	12/14/18	AQ	Ground Water	1850C0BW330T
FA60205-16	12/12/18	13:40	BFSM	12/14/18	AQ	Ground Water	1850C0BW331T
FA60205-17	12/12/18	13:30	BFSM	12/14/18	AQ	Ground Water	1850C0BW332T
FA60205-18	12/12/18	15:35	BFSM	12/14/18	AQ	Ground Water	1850C0BW333T
FA60205-19	12/12/18	15:25	BFSM	12/14/18	AQ	Ground Water	1850C0BW334T
FA60205-20	12/12/18	15:15	BFSM	12/14/18	AQ	Ground Water	1850C0BW335T
FA60205-21	12/12/18	12:31	DA	12/14/18	AQ	Ground Water	1850BOU2044F
FA60205-22	12/12/18	11:10	DA	12/14/18	AQ	Ground Water	1850G212001F
FA60205-23	12/12/18	15:05	BFSM	12/14/18	AQ	Ground Water	1850C0BW336T

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	Ahtna Environmental Inc	**Job No**	FA60205
Site:	Fort Ord Groundwater Monitoring	**Report Date**	12/31/2018 11:24:10

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23 Samples were collected on 12/12/2018 and were received at SGS North America Inc - Orlando on 12/14/2018 properly preserved, at 3.4 Deg. C and intact. These samples received an SGS Orlando job number of FA60205. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section. Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Metals Analysis By Method EPA 200.7

Matrix: AQ **Batch ID:** MP34829

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA60136-10DUP, FA60136-10MS, FA60136-10MSD, FA60136-10PS, FA60136-10SDL were used as the QC samples for metals.

General Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP32501

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA60205-21MS, FA60205-21MSD were used as the QC samples for Bromide, Chloride, Sulfate.

General Chemistry By Method SM2320 B-11

Matrix: AQ **Batch ID:** GN80746

Sample(s) FA60313-1DUP were used as the QC samples for Alkalinity, Total as CaCO3.

The following samples were run outside of holding time for method SM2320 B-11: FA60205-21, FA60205-22.

General Chemistry By Method SM2540 C-11

Matrix: AQ **Batch ID:** GN80666

All method blanks for this batch meet method specific criteria.

Sample(s) FA60127-5DUP were used as the QC samples for Solids, Total Dissolved.

The following samples were run outside of holding time for method SM2540 C-11: FA60205-23

RPD(s) for Duplicate for Solids, Total Dissolved are outside control limits for sample GN80666-D1. RPD acceptable due to low duplicate and sample concentrations.

Matrix: AQ **Batch ID:** GN80667

All method blanks for this batch meet method specific criteria.

Sample(s) FA60205-11DUP, FA60205-1DUP were used as the QC samples for Solids, Total Dissolved.

The following samples were run outside of holding time for method SM2540 C-11: FA60205-1, FA60205-10, FA60205-11, FA60205-12, FA60205-13, FA60205-14, FA60205-15, FA60205-16, FA60205-17, FA60205-18, FA60205-19, FA60205-2, FA60205-20, FA60205-3, FA60205-4, FA60205-5, FA60205-6, FA60205-7, FA60205-8,

SGS Orlando certifies that this report meets the project requirements for analytical data produced for the samples as received at SGS Orlando and as stated on the COC. SGS Orlando certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SGS Orlando Quality Manual except as noted above. This report is to be used in its entirety. SGS Orlando is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____

Ariel Hartney, Client Services *(Signature on File)*

Summary of Hits

Job Number: FA60205
Account: Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring
Collected: 12/12/18

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA60205-1	**1850C0BW316T**					
Solids, Total Dissolved		5530	250	250	mg/l	SM2540 C-11
FA60205-2	**1850C0BW317T**					
Solids, Total Dissolved		11600	500	500	mg/l	SM2540 C-11
FA60205-3	**1850C0BW318T**					
Solids, Total Dissolved		16900	500	500	mg/l	SM2540 C-11
FA60205-4	**1850C0BW319T**					
Solids, Total Dissolved		17200	500	500	mg/l	SM2540 C-11
FA60205-5	**1850C0BW320T**					
Solids, Total Dissolved		12100	500	500	mg/l	SM2540 C-11
FA60205-6	**1850C0BW321T**					
Solids, Total Dissolved		386	50	50	mg/l	SM2540 C-11
FA60205-7	**1850C0BW322T**					
Solids, Total Dissolved		2790	100	100	mg/l	SM2540 C-11
FA60205-8	**1850C0BW323T**					
Solids, Total Dissolved		8350	250	250	mg/l	SM2540 C-11
FA60205-9	**1850C0BW324T**					
Solids, Total Dissolved		12200	500	500	mg/l	SM2540 C-11
FA60205-10	**1850C0BW325T**					
Solids, Total Dissolved		3220	250	250	mg/l	SM2540 C-11
FA60205-11	**1850C0BW326T**					
Solids, Total Dissolved		478	50	50	mg/l	SM2540 C-11

Summary of Hits

Job Number: FA60205
Account: Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring
Collected: 12/12/18

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA60205-12	**1850C0BW327T**					
Solids, Total Dissolved		354	50	50	mg/l	SM2540 C-11
FA60205-13	**1850C0BW328T**					
Solids, Total Dissolved		518	50	50	mg/l	SM2540 C-11
FA60205-14	**1850C0BW329T**					
Solids, Total Dissolved		392	50	50	mg/l	SM2540 C-11
FA60205-15	**1850C0BW330T**					
Solids, Total Dissolved		6340	250	250	mg/l	SM2540 C-11
FA60205-16	**1850C0BW331T**					
Solids, Total Dissolved		14800	500	500	mg/l	SM2540 C-11
FA60205-17	**1850C0BW332T**					
Solids, Total Dissolved		6950	250	250	mg/l	SM2540 C-11
FA60205-18	**1850C0BW333T**					
Solids, Total Dissolved		558	50	50	mg/l	SM2540 C-11
FA60205-19	**1850C0BW334T**					
Solids, Total Dissolved		918	50	50	mg/l	SM2540 C-11
FA60205-20	**1850C0BW335T**					
Solids, Total Dissolved		8980	500	500	mg/l	SM2540 C-11
FA60205-21	**1850BOU2044F**					
Calcium		34100	1000	100	ug/l	EPA 200.7
Magnesium		15700	5000	100	ug/l	EPA 200.7
Potassium		4640 J	10000	500	ug/l	EPA 200.7
Sodium		58400	10000	2000	ug/l	EPA 200.7
Alkalinity, Total as CaCO3 [a]		147	5.0	2.5	mg/l	SM2320 B-11
Bromide		0.88	0.50	0.25	mg/l	EPA 300/SW846 9056A
Chloride		80.3	2.0	1.0	mg/l	EPA 300/SW846 9056A

Summary of Hits

Job Number: FA60205
Account: Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring
Collected: 12/12/18

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
Sulfate		24.5	2.0	1.0	mg/l	EPA 300/SW846 9056A
FA60205-22	**1850G212001F**					
Calcium		65200	1000	100	ug/l	EPA 200.7
Magnesium		11300	5000	100	ug/l	EPA 200.7
Potassium		10300	10000	500	ug/l	EPA 200.7
Sodium		40700	10000	2000	ug/l	EPA 200.7
Alkalinity, Total as CaCO3 [a]		189	5.0	2.5	mg/l	SM2320 B-11
Bromide		0.72	0.50	0.25	mg/l	EPA 300/SW846 9056A
Chloride		43.3	2.0	1.0	mg/l	EPA 300/SW846 9056A
Sulfate		35.0	2.0	1.0	mg/l	EPA 300/SW846 9056A
FA60205-23	**1850C0BW336T**					
Solids, Total Dissolved		8420	500	500	mg/l	SM2540 C-11

(a) Exceeded holding time.

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW316T		
Lab Sample ID:	FA60205-1	**Date Sampled:**	12/12/18
Matrix:	AQ - Ground Water	**Date Received:**	12/14/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	5530	250	250	250	mg/l	1	12/19/18 19:30	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW317T		
Lab Sample ID:	FA60205-2	**Date Sampled:**	12/12/18
Matrix:	AQ - Ground Water	**Date Received:**	12/14/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	11600	500	500	500	mg/l	1	12/19/18 19:30	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW318T		
Lab Sample ID:	FA60205-3	**Date Sampled:**	12/12/18
Matrix:	AQ - Ground Water	**Date Received:**	12/14/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	16900	500	500	500	mg/l	1	12/19/18 19:30	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW319T		
Lab Sample ID:	FA60205-4	**Date Sampled:**	12/12/18
Matrix:	AQ - Ground Water	**Date Received:**	12/14/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	17200	500	500	500	mg/l	1	12/19/18 19:30	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW320T		
Lab Sample ID:	FA60205-5	**Date Sampled:**	12/12/18
Matrix:	AQ - Ground Water	**Date Received:**	12/14/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	12100	500	500	500	mg/l	1	12/19/18 19:30	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW321T		
Lab Sample ID:	FA60205-6	**Date Sampled:**	12/12/18
Matrix:	AQ - Ground Water	**Date Received:**	12/14/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	386	50	50	50	mg/l	1	12/19/18 19:30	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW322T		
Lab Sample ID:	FA60205-7	**Date Sampled:**	12/12/18
Matrix:	AQ - Ground Water	**Date Received:**	12/14/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	2790	100	100	100	mg/l	1	12/19/18 19:30	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW323T		
Lab Sample ID:	FA60205-8	**Date Sampled:**	12/12/18
Matrix:	AQ - Ground Water	**Date Received:**	12/14/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	8350	250	250	250	mg/l	1	12/19/18 19:30	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW324T		
Lab Sample ID:	FA60205-9	**Date Sampled:**	12/12/18
Matrix:	AQ - Ground Water	**Date Received:**	12/14/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	12200	500	500	500	mg/l	1	12/19/18 19:30	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW325T		
Lab Sample ID:	FA60205-10	**Date Sampled:**	12/12/18
Matrix:	AQ - Ground Water	**Date Received:**	12/14/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	3220	250	250	250	mg/l	1	12/19/18 19:30	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW326T		
Lab Sample ID:	FA60205-11	**Date Sampled:**	12/12/18
Matrix:	AQ - Ground Water	**Date Received:**	12/14/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	478	50	50	50	mg/l	1	12/19/18 19:30	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW327T		
Lab Sample ID:	FA60205-12	**Date Sampled:**	12/12/18
Matrix:	AQ - Ground Water	**Date Received:**	12/14/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	354	50	50	50	mg/l	1	12/19/18 19:30	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW328T		
Lab Sample ID:	FA60205-13	**Date Sampled:**	12/12/18
Matrix:	AQ - Ground Water	**Date Received:**	12/14/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	518	50	50	50	mg/l	1	12/19/18 19:30	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW329T		
Lab Sample ID:	FA60205-14	**Date Sampled:**	12/12/18
Matrix:	AQ - Ground Water	**Date Received:**	12/14/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	392	50	50	50	mg/l	1	12/19/18 19:30	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW330T		
Lab Sample ID:	FA60205-15	**Date Sampled:**	12/12/18
Matrix:	AQ - Ground Water	**Date Received:**	12/14/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	6340	250	250	250	mg/l	1	12/19/18 19:30	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW331T		
Lab Sample ID:	FA60205-16	**Date Sampled:**	12/12/18
Matrix:	AQ - Ground Water	**Date Received:**	12/14/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	14800	500	500	500	mg/l	1	12/19/18 19:30	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW332T		
Lab Sample ID:	FA60205-17	**Date Sampled:**	12/12/18
Matrix:	AQ - Ground Water	**Date Received:**	12/14/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	6950	250	250	250	mg/l	1	12/19/18 19:30	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW333T		
Lab Sample ID:	FA60205-18	**Date Sampled:**	12/12/18
Matrix:	AQ - Ground Water	**Date Received:**	12/14/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	558	50	50	50	mg/l	1	12/19/18 19:30	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW334T		
Lab Sample ID:	FA60205-19	**Date Sampled:**	12/12/18
Matrix:	AQ - Ground Water	**Date Received:**	12/14/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	918	50	50	50	mg/l	1	12/19/18 19:30	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW335T		
Lab Sample ID:	FA60205-20	**Date Sampled:**	12/12/18
Matrix:	AQ - Ground Water	**Date Received:**	12/14/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	8980	500	500	500	mg/l	1	12/19/18 19:30	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850BOU2044F		
Lab Sample ID:	FA60205-21	**Date Sampled:**	12/12/18
Matrix:	AQ - Ground Water	**Date Received:**	12/14/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	34100	1000	100	50	ug/l	1	12/19/18	12/20/18	DM	EPA 200.7 [1]	EPA 200.7 [2]
Magnesium	15700	5000	100	35	ug/l	1	12/19/18	12/20/18	DM	EPA 200.7 [1]	EPA 200.7 [2]
Potassium	4640 J	10000	500	200	ug/l	1	12/19/18	12/20/18	DM	EPA 200.7 [1]	EPA 200.7 [2]
Sodium	58400	10000	2000	500	ug/l	1	12/19/18	12/20/18	DM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA15486
(2) Prep QC Batch: MP34829

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850BOU2044F		
Lab Sample ID:	FA60205-21	**Date Sampled:**	12/12/18
Matrix:	AQ - Ground Water	**Date Received:**	12/14/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 [a]	147	5.0	2.5	2.5	mg/l	1	12/27/18 14:55	LR	SM2320 B-11
Bromide	0.88	0.50	0.25	0.12	mg/l	1	12/26/18 17:14	BR	EPA 300/SW846 9056A
Chloride	80.3	2.0	1.0	0.80	mg/l	1	12/26/18 17:14	BR	EPA 300/SW846 9056A
Sulfate	24.5	2.0	1.0	0.60	mg/l	1	12/26/18 17:14	BR	EPA 300/SW846 9056A

(a) Exceeded holding time.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850G212001F		
Lab Sample ID:	FA60205-22	**Date Sampled:**	12/12/18
Matrix:	AQ - Ground Water	**Date Received:**	12/14/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	65200	1000	100	50	ug/l	1	12/19/18	12/20/18	DM	EPA 200.7 [1]	EPA 200.7 [2]
Magnesium	11300	5000	100	35	ug/l	1	12/19/18	12/20/18	DM	EPA 200.7 [1]	EPA 200.7 [2]
Potassium	10300	10000	500	200	ug/l	1	12/19/18	12/20/18	DM	EPA 200.7 [1]	EPA 200.7 [2]
Sodium	40700	10000	2000	500	ug/l	1	12/19/18	12/20/18	DM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA15486
(2) Prep QC Batch: MP34829

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850G212001F		
Lab Sample ID:	FA60205-22	**Date Sampled:**	12/12/18
Matrix:	AQ - Ground Water	**Date Received:**	12/14/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 [a]	189	5.0	2.5	2.5	mg/l	1	12/27/18 14:55	LR	SM2320 B-11
Bromide	0.72	0.50	0.25	0.12	mg/l	1	12/26/18 18:05	BR	EPA 300/SW846 9056A
Chloride	43.3	2.0	1.0	0.80	mg/l	1	12/26/18 18:05	BR	EPA 300/SW846 9056A
Sulfate	35.0	2.0	1.0	0.60	mg/l	1	12/26/18 18:05	BR	EPA 300/SW846 9056A

(a) Exceeded holding time.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW336T		
Lab Sample ID:	FA60205-23	**Date Sampled:**	12/12/18
Matrix:	AQ - Ground Water	**Date Received:**	12/14/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	8420	500	500	500	mg/l	1	12/19/18 18:47	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions (DOD)
- Chain of Custody
- QC Evaluation: DOD QSM5 Limits

Parameter Certification Exceptions

Job Number: FA60205
Account: AHTNACAS Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

The following parameters included in this report are exceptions to DOD certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Calcium	7440-70-2	EPA 200.7	AQ	SGS is not certified for this parameter.
Magnesium	7439-95-4	EPA 200.7	AQ	SGS is not certified for this parameter.
Potassium	7440-09-7	EPA 200.7	AQ	SGS is not certified for this parameter.
Sodium	7440-23-5	EPA 200.7	AQ	SGS is not certified for this parameter.

Seq. No. 3705 CADS1451

Lab: SGS Accutest

1670 Corporate Circle
Suite 201
Petaluma CA 94954
(707) 793-3800

CHAIN OF CUSTODY FORM

Samplers: B Fell S. Moreland

wood.

Job Number: 8418194360.05 05-2

FA60205

Name/Location: FT and 4th St Berkeley TDS

Project Manager: Jeff Fenton

Recorder: (Signature Required)

ANALYSIS REQUESTED

MATRIX			# CONTAINERS						SAMPLE NUMBER	DATE YR	MO	DAY	TIME	STATION DESCRIPTION	DEPTH	PAH	8270	TITLE 22 METALS	TDS
Water	Soil	Air	Unpres	H2SO4	HNO3	HCL													
X			1						1826000603167	18	12	12	0854	1				X	
X			1						1826000603177	18	12	12	0900	2				X	
X			1						1826000603127	18	12	12	0920	3				X	
X			1						1826000603197	18	12	12	0935	4				X	
X			1						1826000603216	18	12	12	0950	5				X	
X			1						1826000603217	18	12	12	0200	6				X	
X			1						1826000603227	18	12	12	0400	7				X	
X			1						1826000603237	18	12	12	0100	8				X	
X			1						1826000603247	18	12	12	0110	9				X	
X			1						1826000603256	18	12	12	0125	10				X	

ADDITIONAL INFORMATION

REPORT TO: Jeff Fenton

PO#:

TAT: Normal

Comments: Field Filtered Y / N

CHAIN OF CUSTODY RECORD

Relinquished By (Signature)	Bill Fell (Print Name)	WCC (Company)	12/11/18 1600 (Date/Time)
Received By (Signature)	(Print Name)	(Company)	12/11/18 1700 (Date/Time)
Relinquished By (Signature)	(Print Name)	(Company)	12/11/18 1800 (Date/Time)
Received By (Signature)	(Print Name)	(Company)	(Date/Time)
Relinquished By (Signature)	(Print Name)	(Company)	(Date/Time)
Received By (Signature)	Peter H (Print Name)	SGS (Company)	12/14/18 (Date/Time)

Method of Shipment: Courier

White - Laboratory Copy Yellow - Project Office Copy Pink - Field or Office Copy

3.4

FA60205: Chain of Custody
Page 1 of 5

Seq. No. 3703

Lab. SGS Accutest

CADS1415
1670 Corporate Circle
Suite 201
Petaluma, CA 94954
(707) 793-3800

CHAIN OF CUSTODY FORM

Samplers: B Fellin S. Merchant

2084

wood.

Job Number: 8418191360 05 002

FA60205

Name/Location: FT Ord Qtrly 4th TDS

Project Manager: Terry Renton

Recorder: (Signature Required)

MATRIX: Water	Soil	Air	# CONTAINERS: Unpres.	H2SO4	HNO3	HCL	SAMPLE NUMBER	DATE YR	MO	DAY	TIME	STATION DESCRIPTION	DEPTH	ANALYSIS REQUESTED: 8260	8270	TITLE 22 METALS	TDS
X			1				185060B13360T	18	12	12	1140	(1)					X
X			1				185060B13270T	18	12	12	1150	(2)					X
X			1				185060B13280T	18	12	12	1230	(3)					X
X			1				185060B13290T	18	12	12	1400	(4)					X
X			1				185060B13300T	18	12	12	1350	(5)					X
X			1				185060B13310T	18	12	12	1340	(6)					X
X			1				185060B13320T	18	12	12	1330	(7)					X
X			1				185060B13330T	18	12	12	1350	(8)					X
X			1				185060B13340T	18	12	12	1525	(9)					X
X			1				185060B13350T	18	12	12	1515	(10)					X

ADDITIONAL INFORMATION

REPORT TO: Terry Renton

PO#:

TAT: Normal

Comments Field Filtered Y / N

CHAIN OF CUSTODY RECORD

Relinquished By (Signature)	Bill Fellin (Print Name)	wood (Company)	12/11/18 1630 (Date/Time)
Received By (Signature)	Lee Bautista (Print Name)	SGS (Company)	12/12/18 1100 (Date/Time)
Relinquished By (Signature)	Lee Bautista (Print Name)	SGS (Company)	12/12/18 1500 (Date/Time)
Received By (Signature)	(Print Name)	(Company)	12/12/18 1500 (Date/Time)
Relinquished By (Signature)	(Print Name)	(Company)	(Date/Time)
Received By (Signature)	Peter H. (Print Name)	SGS (Company)	12/14/18 (Date/Time) 1010

Method of Shipment: Courier

White - Laboratory Copy Yellow - Project Office Copy Pink - Field or Office Copy F1008-1

5.2

5

FA60205: Chain of Custody

Page 2 of 5

Seq. No. 3442

Lab: SGS Accutest

CAD51451

1670 Corporate Circle
Suite 101
Petaluma, CA 94954
(707) 793-3800

CHAIN OF CUSTODY FORM

3 of 4

amec foster wheeler

Samplers: DA

Job Number: 84181413602 05-052

FA60205

Name/Location: Fort Ord Basewide 4Q18 GWM TDS

Project Manager: Jeff Fenton

Recorder: (Signature Required)

ANALYSIS REQUESTED

MATRIX: Water	Soil	Air	# CONTAINERS: Unpres	H2SO4	HNO3	HCL	SAMPLE NUMBER	DATE: YR	MO	DAY	TIME	STATION DESCRIPTION	DEPTH	8260	8270	TITLE 22 METALS	Arsenic	Total Nitrate as N	Perchlorate
X			1		1		185602044F	18	12	12	1230	(21)				X	X		
X			1		1		185606022	18	12	12						X	X	X	
X			1		1		185062120001F	18	12	12	1110	(22)				X	X		

ADDITIONAL INFORMATION

REPORT TO: Jeff Fenton

PO#:

TAT: Standard

Comments: Field Filtered Y (N)

CHAIN OF CUSTODY RECORD

Relinquished By (Signature)	(Print Name)	(Company)	(Date/Time)
[signature]	David Arthur	Wood	12/12/18 1700
[signature]	Lee Santana	SGS	12/12/18 1300
[signature]	Lee Santana	SGS	12/12/18 1500
[signature]			12/12/18 1500
[signature]			
[signature]	Peter H.	SGS	12/4/18

Method of Shipment

White - Laboratory Copy Yellow - Project Office Copy Pink - Field or Office Copy F1008-1

5.2

5

FA60205: Chain of Custody

Page 3 of 5

Seq. No. 3704 CAD51451

Lab: SGS Accutest

1670 Corporate Circle
Suite 201
Petaluma, CA 94954
(707) 793-3800

CHAIN OF CUSTODY FORM

4 of 4

wood.

Samplers: B. Fuller & [illegible]

Job Number: 8418913 60 05 052

FA60205

Name/Location: FT and Yuly 4th - TDS

Project Manager: Jeff Fenton

Recorder: (Signature Required)

MATRIX: Water	Soil	Air	# CONTAINERS: Unpres.	H2SO4	HNO3	HCl	SAMPLE NUMBER	DATE YR	MO	DAY	TIME	STATION DESCRIPTION	DEPTH	8260B	8270	TITLE 22 METALS	TDS
X			1				185PC0043367	18	11	12	15:05	GW					X

ANALYSIS REQUESTED

ADDITIONAL INFORMATION

REPORT TO: Jeff Fenton

PO#:

TAT: Normal

Comments: Field Filtered Y / N

CHAIN OF CUSTODY RECORD

	Relinquished By (Signature)	(Print Name)	(Company)	(Date/Time)
	[signature]	[illegible]	[illegible]	12/4/18 1610
Relinquished By	[signature]	LEE BAUTISTA	SGS	12/3/18 1100
Relinquished By	[signature]	LEE BAUTISTA	SGS	04/18 1500
Received By	FEDEX			12/4/18 1:00
Relinquished By	[signature]			
Received By	[signature]	[illegible]	SGS	12/4/18

Method of Shipment: Courier w/ice

White - Laboratory Copy Yellow - Project Office Copy Pink - Field or Office Copy F1008-1

FA60205: Chain of Custody
Page 4 of 5

SGS Sample Receipt Summary

Job Number: FA60205 **Client:** AHTNA **Project:** Fort Ord 4th Qtr Basewide - TDS

Date / Time Received: 12/14/2018 10:00:00 AM **Delivery Method:** FedEx **Airbill #'s:** 773970588832

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (3.6);

Cooler Temps (Corrected) °C: Cooler 1: (3.4);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑
	W	**or**	**S**	**N/A**
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: PETERH Date: 12/14/2018 10:00:00 A Reviewer: PH Date: 12/18/2018

FA60205: Chain of Custody
Page 5 of 5

QC Evaluation: DOD QSM5 Limits

Job Number: FA60205
Account: Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring
Collected: 12/12/18

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
GP32501	EPA 300/SW846 9056A						
GP32501-B1	16887-00-6	Chloride	BSP	REC	101	%	87-111
GP32501-B1	24959-67-9	Bromide	BSP	REC	98.4	%	91-110
GP32501-B1	14808-79-8	Sulfate	BSP	REC	105.8	%	87-112
GP32501-S3	16887-00-6	Chloride	MS	REC	107.4	%	87-111
GP32501-S3	24959-67-9	Bromide	MS	REC	102.6	%	91-110
GP32501-S3	14808-79-8	Sulfate	MS	REC	109	%	87-112
GP32501-S4	16887-00-6	Chloride	MSD	RPD	0	%	15
GP32501-S4	16887-00-6	Chloride	MSD	REC	107.4	%	87-111
GP32501-S4	24959-67-9	Bromide	MSD	RPD	0	%	15
GP32501-S4	24959-67-9	Bromide	MSD	REC	102.6	%	91-110
GP32501-S4	14808-79-8	Sulfate	MSD	RPD	0	%	15
GP32501-S4	14808-79-8	Sulfate	MSD	REC	109	%	87-112

* Sample used for QC is not from job FA60205

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries
- IDL and Linear Range Summaries

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
Analyst: DM Run ID: MA15486
Parameters: Ca,Mg,K,Na

Time	Sample Description	Dilution Factor	PS Recov	Comments
08:37	MA15486-STD1	1		STDA
08:41	MA15486-STD2	1		STDB
08:45	MA15486-STD3	1		STDC
08:49	MA15486-STD4	1		STDD
08:53	MA15486-HSTD1	1		
08:56	MA15486-ICV1	1		
09:02	MA15486-ICB1	1		
09:06	MA15486-CRIA1	1		
09:16	MA15486-ICSA1	1		
09:22	MA15486-ICSAB1	1		
09:27	MA15486-CCV1	1		
09:32	MA15486-CCB1	1		
10:19	MA15486-CCV2	1		
10:24	MA15486-CCB2	1		
11:13	MA15486-CCV3	1		
11:17	MA15486-CCB3	1		
12:07	MA15486-CCV4	1		
12:11	MA15486-CCB4	1		
12:29	MA15486-CCV5	1		
12:34	MA15486-CCB5	1		
12:52	MP34829-MB1	1		
12:56	MP34829-B1	1		
13:00	FA60136-10	1		(sample used for QC only; not part of login FA60205)
13:05	MP34829-D1	1		
13:09	MP34829-SD1	5		
13:13	MP34829-PS1	1		
13:18	MP34829-S1	1		
13:22	MA15486-CCV6	1		
13:26	MA15486-CCB6	1		
13:31	MP34829-S2	1		
13:35	ZZZZZZ	1		
13:39	ZZZZZZ	1		
13:44	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
Analyst: DM Run ID: MA15486
Parameters: Ca,Mg,K,Na

	Time	Sample Description	Dilution Factor	PS Recov	Comments
	13:48	FA60205-21	1		
	13:52	FA60205-22	1		
---------->	Last reportable sample/prep for job FA60205				
	14:15	MA15486-CCV7	1		
	14:19	MA15486-CCB7	1		
	15:08	MA15486-CCV8	1		
	15:13	MA15486-CCB8	1		
	15:39	MA15486-CRIA2	1		
	15:44	MA15486-ICSA2	1		
	15:48	MA15486-ICSAB2	1		
	15:53	MA15486-CCV9	1		
	15:57	MA15486-CCB9	1		
---------->	Last reportable CCB for job FA60205				

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
Analyst: DM Run ID: MA15486
Parameters: Ca,Mg,K,Na

Time	Sample Description	Element: Dilution	Ca	Mg	K	Na	
08:53	MA15486-HSTD1	1	X	X	X	X	
08:56	MA15486-ICV1	1	X	X	X	X	
09:02	MA15486-ICB1	1	X	X	X	X	
09:06	MA15486-CRIA1	1	X	X	X	X	
09:16	MA15486-ICSA1	1	X	X	X	X	
09:22	MA15486-ICSAB1	1	X	X	X	X	
09:27	MA15486-CCV1	1	X	X	X	X	
09:32	MA15486-CCB1	1	X	X	X	X	
10:19	MA15486-CCV2	1	X	X	X	X	
10:24	MA15486-CCB2	1	X	X	X	X	
11:13	MA15486-CCV3	1	X	X	X	X	
11:17	MA15486-CCB3	1	X	X	X	X	
12:07	MA15486-CCV4	1	X	X	X	X	
12:11	MA15486-CCB4	1	X	X	X	X	
12:29	MA15486-CCV5	1	X	X	X	X	
12:34	MA15486-CCB5	1	X	X	X	X	
12:52	MP34829-MB1	1	X	X	X	X	
12:56	MP34829-B1	1	X	X	X	X	
13:00	FA60136-10	1	X	X	X	X	(a)
13:05	MP34829-D1	1	X	X	X	X	
13:09	MP34829-SD1	5	X	X	X	X	
13:13	MP34829-PS1	1	X	X	X	X	
13:18	MP34829-S1	1	X	X	X	X	
13:22	MA15486-CCV6	1	X	X	X	X	
13:26	MA15486-CCB6	1	X	X	X	X	
13:31	MP34829-S2	1	X	X	X	X	
13:35	ZZZZZZ	1					
13:39	ZZZZZZ	1					
13:44	ZZZZZZ	1					
13:48	FA60205-21	1	X	X	X	X	
13:52	FA60205-22	1	X	X	X	X	
14:15	MA15486-CCV7	1	X	X	X	X	
14:19	MA15486-CCB7	1	X	X	X	X	
		Element:	Ca	Mg	K	Na	

REPORTED ELEMENTS SUMMARY

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
Analyst: DM Run ID: MA15486
Parameters: Ca,Mg,K,Na

Time	Sample Description	Element: Dilution	C a	M g	K	N a
15:08	MA15486-CCV8	1	X	X	X	X
15:13	MA15486-CCB8	1	X	X	X	X
15:39	MA15486-CRIA2	1	X	X	X	X
15:44	MA15486-ICSA2	1	X	X	X	X
15:48	MA15486-ICSAB2	1	X	X	X	X
15:53	MA15486-CCV9	1	X	X	X	X
15:57	MA15486-CCB9	1	X	X	X	X

(a) Sample used for QC only; not part of login FA60205.

Element:	C a	M g	K	N a

INTERNAL STANDARD SUMMARY

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
Analyst: DM Run ID: MA15486
Parameters: Ca,Mg,K,Na

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
08:37	MA15486-STD1	2383	24182	7124	5694
08:41	MA15486-STD2	2369	24197	7203	5766
08:45	MA15486-STD3	2322	24094	7050	5768
08:49	MA15486-STD4	2253	23906	6971	5704
08:53	MA15486-HSTD1	2242	23720	6918	5684
08:56	MA15486-ICV1	2307	23882	6939	5725
09:02	MA15486-ICB1	2371 R	23942 R	7020 R	5685 R
09:06	MA15486-CRIA1	2380	24261	7035	5721
09:16	MA15486-ICSA1	2159	22417	6797	5574
09:22	MA15486-ICSAB1	2159	22502	6783	5562
09:27	MA15486-CCV1	2282	23414	6796	5662
09:32	MA15486-CCB1	2350	23741	6856	5650
10:19	MA15486-CCV2	2283	23324	6689	5649
10:24	MA15486-CCB2	2352	23515	6846	5632
11:13	MA15486-CCV3	2296	23425	6713	5662
11:17	MA15486-CCB3	2357	23523	6723	5622
12:07	MA15486-CCV4	2295	23344	6603	5683
12:11	MA15486-CCB4	2366	23447	6701	5626
12:29	MA15486-CCV5	2300	23321	6565	5651
12:34	MA15486-CCB5	2351	23438	6541	5565
12:52	MP34829-MB1	2317	23198	6613	5492
12:56	MP34829-B1	2302	23161	6584	5579
13:00	FA60136-10	2317	23404	6483	5591
13:05	MP34829-D1	2313	23381	6562	5586
13:09	MP34829-SD1	2362	23688	6603	5680
13:13	MP34829-PS1	2295	23319	6571	5578
13:18	MP34829-S1	2272	23092	6471	5562
13:22	MA15486-CCV6	2291	23350	6518	5619
13:26	MA15486-CCB6	2360	23537	6604	5614
13:31	MP34829-S2	2281	23024	6472	5583
13:35	ZZZZZZ	2334	23450	6498	5596
13:39	ZZZZZZ	2327	23361	6524	5567
13:44	ZZZZZZ	2335	23411	6498	5646

INTERNAL STANDARD SUMMARY

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
Analyst: DM Run ID: MA15486
Parameters: Ca,Mg,K,Na

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
13:48	FA60205-21	2322	23356	6513	5613
13:52	FA60205-22	2308	23156	6436	5550
14:15	MA15486-CCV7	2307	23468	6561	5668
14:19	MA15486-CCB7	2371	23728	6611	5641
15:08	MA15486-CCV8	2311	23497	6551	5700
15:13	MA15486-CCB8	2359	23587	6492	5590
15:39	MA15486-CRIA2	2409	23994	6548	5751
15:44	MA15486-ICSA2	2204	22433	6388	5619
15:48	MA15486-ICSAB2	2183	22370	6340	5551
15:53	MA15486-CCV9	2313	23434	6469	5687
15:57	MA15486-CCB9	2388	23619	6469	5679

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
QC Limits: result < RL Run ID: MA15486 Units: ug/l

Time:			09:02		09:32		10:24		11:17	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	6.0	1								
Arsenic	10	1.3								
Barium	200	1								
Beryllium	4.0	.2								
Cadmium	5.0	.2								
Calcium	1000	50	0.00	<1000	8.30	<1000	2.60	<1000	5.60	<1000
Chromium	10	1								
Cobalt	50	.2								
Copper	25	1								
Iron	300	17								
Lead	5.0	1								
Magnesium	5000	35	17.5	<5000	18.6	<5000	12.6	<5000	18.9	<5000
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4								
Potassium	10000	200	-60.4	<10000	-77.9	<10000	-59.6	<10000	-61.6	<10000
Selenium	10	2.4								
Silver	10	.7								
Sodium	10000	500	-9.60	<10000	11.8	<10000	10.5	<10000	190	<10000
Strontium	10	.5								
Thallium	10	1.1								
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
QC Limits: result < RL Run ID: MA15486 Units: ug/l

Time:			12:11		12:34		13:26		14:19	
Sample ID:			CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	6.0	1								
Arsenic	10	1.3								
Barium	200	1								
Beryllium	4.0	.2								
Cadmium	5.0	.2								
Calcium	1000	50	3.20	<1000	3.10	<1000	4.40	<1000	4.70	<1000
Chromium	10	1								
Cobalt	50	.2								
Copper	25	1								
Iron	300	17								
Lead	5.0	1								
Magnesium	5000	35	10.5	<5000	17.8	<5000	10.6	<5000	6.90	<5000
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4								
Potassium	10000	200	-55.4	<10000	57.3	<10000	48.4	<10000	27.8	<10000
Selenium	10	2.4								
Silver	10	.7								
Sodium	10000	500	77.2	<10000	-19.4	<10000	-14.7	<10000	-12.5	<10000
Strontium	10	.5								
Thallium	10	1.1								
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
QC Limits: result < RL Run ID: MA15486 Units: ug/l

Time:			15:13		15:57	
Sample ID:			CCB8		CCB9	
Metal	RL	IDL	raw	final	raw	final
Aluminum	200	14				
Antimony	6.0	1				
Arsenic	10	1.3				
Barium	200	1				
Beryllium	4.0	.2				
Cadmium	5.0	.2				
Calcium	1000	50	2.80	<1000	11.2	<1000
Chromium	10	1				
Cobalt	50	.2				
Copper	25	1				
Iron	300	17				
Lead	5.0	1				
Magnesium	5000	35	16.5	<5000	27.5	<5000
Manganese	15	.5				
Molybdenum	50	.3				
Nickel	40	.4				
Potassium	10000	200	61.8	<10000	47.6	<10000
Selenium	10	2.4				
Silver	10	.7				
Sodium	10000	500	38.0	<10000	-30.5	<10000
Strontium	10	.5				
Thallium	10	1.1				
Tin	50	.9				
Titanium	10	.5				
Vanadium	50	.5				
Zinc	20	3				

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
QC Limits: 95 to 105 % Recovery Run ID: MA15486 Units: ug/l

Time:		08:56			09:27			10:19	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium	40000	41600	104.0	40000	41500	103.8	40000	42200	105.5
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium	40000	42700	106.8*(a	40000	41200	103.0	40000	41900	104.8
Manganese									
Molybdenum									
Nickel									
Potassium	40000	41300	103.3	40000	41100	102.8	40000	41900	104.8
Selenium									
Silver									
Sodium	40000	41300	103.3	40000	41200	103.0	40000	42100	105.3
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested
(a) Positive bias.

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
QC Limits: 95 to 105 % Recovery Run ID: MA15486 Units: ug/l

Time:		11:13			12:07			12:29	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium	40000	42200	105.5	40000	42800	107.0	40000	40300	100.8
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium	40000	41800	104.5	40000	42300	105.8	40000	40300	100.8
Manganese									
Molybdenum									
Nickel									
Potassium	40000	42300	105.8	40000	43000	107.5	40000	39900	99.8
Selenium									
Silver									
Sodium	40000	42100	105.3	40000	43100	107.8	40000	40100	100.3
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
QC Limits: 95 to 105 % Recovery Run ID: MA15486 Units: ug/l

Time:		13:22			14:15			15:08	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium	40000	40500	101.3	40000	40600	101.5	40000	41000	102.5
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium	40000	40700	101.8	40000	40600	101.5	40000	40900	102.3
Manganese									
Molybdenum									
Nickel									
Potassium	40000	40200	100.5	40000	40200	100.5	40000	40600	101.5
Selenium									
Silver									
Sodium	40000	40400	101.0	40000	40500	101.3	40000	40700	101.8
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
QC Limits: 95 to 105 % Recovery Run ID: MA15486 Units: ug/l

Time:		15:53	
Sample ID:	CCV	CCV9	
Metal	True	Results	% Rec
Aluminum			
Antimony			
Arsenic			
Barium			
Beryllium			
Cadmium			
Calcium	40000	40400	101.0
Chromium			
Cobalt			
Copper			
Iron			
Lead			
Magnesium	40000	40500	101.3
Manganese			
Molybdenum			
Nickel			
Potassium	40000	40100	100.3
Selenium			
Silver			
Sodium	40000	40300	100.8
Strontium			
Thallium			
Tin			
Titanium			
Vanadium			
Zinc			

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
QC Limits: 95 to 105 % Recovery Run ID: MA15486 Units: ug/l

Time:		08:53	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum			
Antimony			
Arsenic			
Barium			
Beryllium			
Cadmium			
Calcium	80000	80200	100.3
Chromium			
Cobalt			
Copper			
Iron			
Lead			
Magnesium	80000	79800	99.8
Manganese			
Molybdenum			
Nickel			
Potassium	80000	80700	100.9
Selenium			
Silver			
Sodium	80000	80700	100.9
Strontium			
Thallium			
Tin			
Titanium			
Vanadium			
Zinc			

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA15486 Units: ug/l

Time:			09:06		15:39	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200				
Antimony	10	5.0				
Arsenic	20	10				
Barium	400	200				
Beryllium	10	5.0				
Cadmium	10	5.0				
Calcium	2000	1000	980	98.0	996	99.6
Chromium	20	10				
Cobalt	100	50				
Copper	50	25				
Iron	600	300				
Lead	10	5.0				
Magnesium	10000	5000	4920	98.4	4980	99.6
Manganese	30	15				
Molybdenum	100	50				
Nickel	80	40				
Potassium	20000	10000	9620	96.2	9730	97.3
Selenium	20	10				
Silver	20	10				
Sodium	20000	10000	9530	95.3	9610	96.1
Strontium	20	10				
Thallium	20	10				
Tin	100	50				
Titanium	20	10				
Vanadium	100	50				
Zinc	40	20				

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA122018M2.ICP Date Analyzed: 12/20/18 Methods: EPA 200.7
QC Limits: 80 to 120 % Recovery Run ID: MA15486 Units: ug/l

Time:			09:16		09:22		15:44		15:48	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	531000	106.2	534000	106.8	531000	106.2	519000	103.8
Antimony		1000	0.200		1070	107.0	8.00		1050	105.0
Arsenic		1000	0.00		1010	101.0	-1.80		990	99.0
Barium		500	0.600		497	99.4	1.10		497	99.4
Beryllium		500	-0.100		493	98.6	0.00		486	97.2
Cadmium		1000	0.00		977	97.7	-0.300		967	96.7
Calcium	500000	500000	473000	94.6	457000	91.4	479000	95.8	450000	90.0
Chromium		500	0.400		496	99.2	-1.20		479	95.8
Cobalt		500	0.100		505	101.0	-1.70		495	99.0
Copper		500	0.00		565	113.0	0.500		551	110.2
Iron	200000	200000	189000	94.5	190000	95.0	188000	94.0	185000	92.5
Lead		1000	0.900		977	97.7	-6.50		960	96.0
Magnesium	500000	500000	516000	103.2	513000	102.6	516000	103.2	507000	101.4
Manganese		500	0.00		507	101.4	2.10		499	99.8
Molybdenum		1000	0.00		911	91.1	0.400		881	88.1
Nickel		1000	1.00		1010	101.0	1.50		997	99.7
Potassium			42.3		124		133		75.6	
Selenium		1000	-1.90		969	96.9	-1.40		938	93.8
Silver		1000	0.400		1120	112.0	0.100		1100	110.0
Sodium			165		218		286		179	
Strontium		1000	0.00		917	91.7	0.300		909	90.9
Thallium		1000	0.400		980	98.0	3.90		980	98.0
Tin		1000	0.00		920	92.0	1.40		906	90.6
Titanium		1000	1.90		1060	106.0	2.40		1050	105.0
Vanadium		500	0.700		494	98.8	1.40		477	95.4
Zinc		1000	-0.400		968	96.8	8.20		949	94.9

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

QC Batch ID: MP34829
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 12/19/18

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	14	14		
Antimony	6.0	1	1		
Arsenic	10	1.3	1.3		
Barium	200	1	1		
Beryllium	4.0	.2	.2		
Cadmium	5.0	.2	.2		
Calcium	1000	50	50	9.2	<1000
Chromium	10	1	1		
Cobalt	50	.2	.2		
Copper	25	1	1		
Iron	300	17	17		
Lead	5.0	1	1.1		
Magnesium	5000	35	35	6.5	<5000
Manganese	15	.5	1		
Molybdenum	50	.3	.3		
Nickel	40	.4	.4		
Potassium	10000	200	200	39.6	<10000
Selenium	10	2.4	2.9		
Silver	10	.7	.7		
Sodium	10000	500	500	6.8	<10000
Strontium	10	.5	.5		
Thallium	10	1.1	1.4		
Tin	50	.9	1		
Titanium	10	.5	1		
Vanadium	50	.5	.6		
Zinc	20	3	4.4		

Associated samples MP34829: FA60205-21, FA60205-22

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

QC Batch ID: MP34829
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date:			12/19/18					12/19/18	
Metal	FA60136-10 Original	DUP	RPD	QC Limits	FA60136-10 Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium	46700	45500	2.6	0-20	46700	70400	25000	94.8	70-130
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium	17300	17000	1.7	0-20	17300	41400	25000	96.4	70-130
Manganese									
Molybdenum									
Nickel									
Potassium	2790	2780	0.4	0-20	2790	27200	25000	97.6	70-130
Selenium									
Silver									
Sodium	57500	56200	2.3	0-20	57500	81000	25000	94.0	70-130
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

Associated samples MP34829: FA60205-21, FA60205-22

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

QC Batch ID: MP34829
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 12/19/18

Metal	FA60136-10 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium	46700	72600	25000	103.6	3.1	20
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Magnesium	17300	42500	25000	100.8	2.6	20
Manganese						
Molybdenum						
Nickel						
Potassium	2790	27800	25000	100.0	2.2	20
Selenium						
Silver						
Sodium	57500	83400	25000	103.6	2.9	20
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP34829: FA60205-21, FA60205-22

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

QC Batch ID: MP34829
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 12/19/18

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium	25100	25000	100.4	85-115
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium	25100	25000	100.4	85-115
Manganese				
Molybdenum				
Nickel				
Potassium	24600	25000	98.4	85-115
Selenium				
Silver				
Sodium	24700	25000	98.8	85-115
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP34829: FA60205-21, FA60205-22

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

QC Batch ID: MP34829
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 12/19/18

Metal	FA60136-10 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium	46700	47800	2.2	0-10
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium	17300	18100	4.4	0-10
Manganese				
Molybdenum				
Nickel				
Potassium	2790	2970	6.7	0-10
Selenium				
Silver				
Sodium	57500	58800	2.3	0-10
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP34829: FA60205-21, FA60205-22

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

QC Batch ID: MP34829
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 12/19/18

Metal	Sample ml	Final ml	FA60136-10 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium	9.8	10	46730	45795.4	50470	0.2	250	5000	93.5	85-115
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium	9.8	10	17330	16983.4	21720	0.2	250	5000	94.7	85-115
Manganese										
Molybdenum										
Nickel										
Potassium	9.8	10	2787	2731.26	12260	0.2	500	10000	95.3	85-115
Selenium										
Silver										
Sodium	9.8	10	57460	56310.8	65430	0.2	500	10000	91.2	85-115
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP34829: FA60205-21, FA60205-22

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

Instrument Detection Limits

Job Number: FA60205
Account: AHTNACAS Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

Instrument ID: SSTRACE1 **Effective Date:** 01/27/15

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	1
Beryllium	.2
Cadmium	.2
Calcium	50
Chromium	1
Cobalt	.2
Copper	1
Iron	17
Lead	1
Magnesium	35
Manganese	.5
Molybdenum	.3
Nickel	.4
Potassium	200
Selenium	2.4
Silicon	5
Silver	.7
Sodium	500
Strontium	.5
Sulfur	5
Thallium	1.1
Tin	.9
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA15486

Instrument Linear Ranges

Job Number: FA60205
Account: AHTNACAS Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

Instrument ID: SSTRACE1 **Effective Date:** 08/13/13

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Sulfur	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA15486

Metals Analysis

Raw Data

Zoom In ▶
Zoom Out

Sample Name: Blank Acquired: 12/20/2018 8:37:56 Type: Cal
Method: 60102007_042011(v362) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0017**	**-.0071**	**-.0004**	**.0086**	**-.0008**	**.0054**	**.0004**	**-.0006**	**-.0004**
Stddev	.0002	.0011	.0003	.0007	.0002	.0002	.0007	.0001	.0002
%RSD	13.25	15.53	71.50	8.394	23.73	3.651	165.9	17.11	57.34
#1	.0014	-.0059	-.0005	.0088	-.0010	.0054	.0001	-.0007	-.0006
#2	.0018	-.0071	-.0006	.0091	-.0008	.0056	.0012	-.0007	-.0004
#3	.0018	-.0081	-.0001	.0078	-.0006	.0052	-.0001	-.0005	-.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0183**	**.0007**	**.0012**	**-.0004**	**.0009**	**.0011**	**-.0144**	**.0002**	**.0004**
Stddev	.0003	.0003	.0015	.0005	.0003	.0002	.0017	.0007	.0003
%RSD	1.761	44.83	127.8	135.4	28.74	17.87	11.93	269.5	89.42
#1	.0186	.0008	.0028	.0002	.0010	.0012	-.0163	.0006	.0007
#2	.0182	.0003	-.0001	-.0007	.0011	.0008	-.0130	.0006	.0005
#3	.0180	.0009	.0008	-.0007	.0006	.0012	-.0139	-.0005	.0000

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0003**	**-.0007**	**.0027**	**.0007**	**-.0002**	**.0026**	**-.0009**	**-.0003**	**.0025**
Stddev	.0003	.0001	.0005	.0002	.0004	.0003	.0002	.0002	.0004
%RSD	109.9	19.70	19.40	29.95	204.6	12.01	20.05	59.56	15.67
#1	.0003	-.0007	.0029	.0007	-.0004	.0024	-.0011	-.0004	.0021
#2	.0000	-.0008	.0031	.0009	-.0004	.0030	-.0007	-.0001	.0028
#3	.0006	-.0006	.0021	.0005	.0003	.0024	-.0010	-.0005	.0027

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5693.5**	**2383.1**	**24182.**	**7123.5**
Stddev	8.6	6.1	91.	10.5
%RSD	.15187	.25523	.37682	.14810
#1	5699.5	2389.5	24284.	7131.0
#2	5697.3	2382.2	24153.	7128.1
#3	5683.6	2377.4	24109.	7111.4

◀ Zoom In ▶
Zoom Out

Sample Name: LowStd Acquired: 12/20/2018 8:41:56 Type: Cal
Method: 60102007_042011(v362) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0395**	**1.464**	**.1272**	**4.418**	**4.140**	**2.294**	**2.561**	**1.424**	**.2554**
Stddev	.0001	.002	.0005	.011	.015	.008	.004	.002	.0009
%RSD	.2078	.1105	.4288	.2493	.3510	.3325	.1723	.1205	.3705
#1	.0394	1.466	.1275	4.405	4.127	2.289	2.563	1.422	.2552
#2	.0395	1.462	.1266	4.426	4.156	2.302	2.556	1.425	.2565
#3	.0396	1.463	.1276	4.422	4.138	2.289	2.563	1.425	.2546

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.4450**	**1.548**	**.6426**	**.2666**	**1.549**	**.4509**	**2.229**	**.9039**	**.0789**
Stddev	.0013	.006	.0018	.0017	.002	.0014	.003	.0008	.0006
%RSD	.2876	.3689	.2733	.6460	.1341	.3191	.1158	.0853	.8140
#1	.4461	1.555	.6441	.2680	1.547	.4496	2.226	.9032	.0788
#2	.4454	1.547	.6430	.2672	1.551	.4506	2.231	.9036	.0783
#3	.4436	1.543	.6407	.2647	1.549	.4524	2.230	.9047	.0795

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1197**	**.0980**	**.1627**	**.2030**	**6.511**	**.9068**	**.0191**	**.3096**	**2.032**
Stddev	.0007	.0005	.0005	.0001	.023	.0023	.0000	.0005	.001
%RSD	.6248	.5477	.3106	.0602	.3562	.2543	.1500	.1563	.0409
#1	.1203	.0976	.1621	.2032	6.486	.9044	.0190	.3092	2.031
#2	.1188	.0977	.1629	.2029	6.531	.9072	.0191	.3101	2.032
#3	.1200	.0986	.1631	.2030	6.518	.9090	.0191	.3093	2.033

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5765.9**	**2368.8**	**24197.**	**7203.1**
Stddev	11.9	2.3	8.	41.6
%RSD	.20612	.09693	.03470	.57775
#1	5771.6	2370.0	24207.	7186.3
#2	5752.2	2366.1	24192.	7172.5
#3	5773.8	2370.2	24193.	7250.5

◀ Zoom In ▶
Zoom Out

Sample Name: MidStd Acquired: 12/20/2018 8:45:36 Type: Cal
Method: 60102007_042011(v362) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1479**	**5.747**	**.5113**	**17.26**	**16.36**	**9.070**	**10.21**	**5.722**	**1.010**
Stddev	.0006	.040	.0004	.07	.10	.073	.01	.004	.003
%RSD	.4244	.6915	.0743	.4221	.6240	.8083	.1451	.0782	.2624
#1	.1486	5.744	.5109	17.23	16.35	9.086	10.19	5.717	1.012
#2	.1475	5.788	.5112	17.35	16.46	9.135	10.22	5.725	1.007
#3	.1475	5.709	.5116	17.21	16.26	8.991	10.21	5.724	1.012

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.784**	**5.892**	**2.546**	**1.042**	**6.067**	**1.926**	**8.883**	**3.623**	**.3112**
Stddev	.005	.048	.017	.007	.006	.003	.051	.005	.0009
%RSD	.2816	.8151	.6720	.7237	.0917	.1392	.5779	.1298	.2835
#1	1.789	5.901	2.547	1.041	6.070	1.923	8.890	3.621	.3103
#2	1.784	5.935	2.563	1.049	6.060	1.927	8.931	3.629	.3111
#3	1.779	5.840	2.529	1.034	6.070	1.927	8.829	3.620	.3120

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.4836**	**.3994**	**.7740**	**.8702**	**27.08**	**3.814**	**.0787**	**1.314**	**8.015**
Stddev	.0017	.0007	.0009	.0013	.16	.007	.0005	.005	.010
%RSD	.3434	.1740	.1187	.1456	.5842	.1972	.6550	.4068	.1251
#1	.4818	.4000	.7730	.8688	27.05	3.820	.0782	1.320	8.004
#2	.4851	.3996	.7749	.8705	27.25	3.806	.0786	1.310	8.023
#3	.4838	.3987	.7740	.8713	26.93	3.817	.0792	1.313	8.019

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5767.7**	**2321.7**	**24094.**	**7049.8**
Stddev	6.7	1.2	117.	72.6
%RSD	.11613	.05325	.48585	1.0293
#1	5772.9	2323.1	24048.	7070.2
#2	5770.0	2321.3	24227.	6969.2
#3	5760.1	2320.7	24006.	7110.0

◀ Zoom In ▶
Zoom Out

Sample Name: HighStd Acquired: 12/20/2018 8:49:08 Type: Cal
Method: 60102007_042011(v362) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.3073**	**11.50**	**1.039**	**34.64**	**32.04**	**18.02**	**20.69**	**11.63**	**1.971**
Stddev	.0002	.03	.003	.04	.78	.08	.03	.03	.011
%RSD	.0692	.2671	.3282	.1171	2.427	.4480	.1528	.2294	.5632
#1	.3071	11.47	1.037	34.62	32.46	17.94	20.66	11.61	1.980
#2	.3072	11.53	1.043	34.68	31.14	18.10	20.72	11.62	1.974
#3	.3075	11.51	1.038	34.60	32.51	18.02	20.70	11.66	1.958

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.628**	**11.56**	**5.130**	**2.068**	**11.88**	**3.862**	**17.88**	**7.376**	**.6217**
Stddev	.006	.03	.021	.005	.12	.006	.08	.008	.0011
%RSD	.1636	.2843	.4077	.2247	.9731	.1437	.4247	.1098	.1773
#1	3.629	11.52	5.112	2.065	12.01	3.857	17.83	7.370	.6217
#2	3.633	11.58	5.153	2.074	11.83	3.860	17.97	7.373	.6229
#3	3.621	11.57	5.125	2.066	11.80	3.868	17.84	7.385	.6207

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.9929**	**.8075**	**1.687**	**1.723**	**52.59**	**7.482**	**.1598**	**2.548**	**16.10**
Stddev	.0025	.0035	.003	.001	.68	.015	.0003	.013	.02
%RSD	.2480	.4340	.2037	.0570	1.285	.2045	.2076	.5076	.1007
#1	.9911	.8065	1.683	1.723	53.01	7.486	.1596	2.556	16.08
#2	.9957	.8047	1.690	1.723	51.81	7.494	.1596	2.554	16.10
#3	.9919	.8114	1.687	1.724	52.95	7.464	.1602	2.533	16.12

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5703.7**	**2253.1**	**23906.**	**6971.3**
Stddev	11.4	6.4	39.	55.3
%RSD	.19975	.28292	.16270	.79362
#1	5716.6	2260.4	23878.	6935.6
#2	5695.1	2249.6	23950.	7035.1
#3	5699.5	2249.2	23889.	6943.4

Zoom In Zoom Out

Sample Name: HSTD Acquired: 12/20/2018 8:53:14 Type: QC
Method: 60102007_042011(v362) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5084	80.11	4.054	4.018	4.065	80.21	4.043	4.032	3.978
Stddev	.0013	.22	.016	.003	.023	.11	.008	.009	.016
%RSD	.2645	.2787	.3822	.0765	.5617	.1320	.2050	.2236	.3945
#1	.5089	80.28	4.040	4.020	4.046	80.13	4.041	4.024	3.960
#2	.5095	80.20	4.051	4.019	4.059	80.33	4.035	4.030	3.982
#3	.5069	79.86	4.071	4.014	4.090	80.16	4.052	4.042	3.991
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.068	79.01	80.73	79.80	4.039	4.038	80.67	4.048	4.021
Stddev	.015	.14	.20	.27	.016	.007	.18	.007	.004
%RSD	.3696	.1791	.2496	.3439	.3951	.1664	.2185	.1810	.1014
#1	4.070	78.96	80.78	79.54	4.020	4.031	80.73	4.042	4.021
#2	4.081	79.17	80.90	79.78	4.049	4.039	80.80	4.045	4.026
#3	4.052	78.90	80.50	80.09	4.048	4.044	80.47	4.056	4.017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.070	4.024	4.214	4.026	3.990	4.027	4.027	4.017	4.026
Stddev	.012	.013	.014	.005	.023	.015	.012	.020	.005
%RSD	.2987	.3276	.3209	.1330	.5857	.3654	.3020	.4899	.1374
#1	4.065	4.010	4.208	4.023	4.013	4.012	4.013	3.999	4.022
#2	4.061	4.026	4.204	4.023	3.966	4.041	4.034	4.038	4.023
#3	4.084	4.036	4.229	4.032	3.990	4.029	4.034	4.014	4.032
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: HSTD Acquired: 12/20/2018 8:53:14 Type: QC
Method: 60102007_042011(v362) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5683.7	2241.8	23720.	6917.7
Stddev	17.0	3.9	82.	38.3
%RSD	.29976	.17232	.34658	.55353
#1	5682.9	2244.6	23813.	6926.1
#2	5667.1	2237.4	23690.	6951.1
#3	5701.2	2243.5	23657.	6875.9

Zoom In Zoom Out

Sample Name: ICV Acquired: 12/20/2018 8:56:41 Type: QC
Method: 60102007_042011(v362) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2320	43.19	1.998	1.969	2.085	41.63	2.003	2.005	2.018
Stddev	.0006	.19	.003	.003	.015	.30	.001	.002	.005
%RSD	.2725	.4489	.1286	.1664	.7250	.7288	.0260	.0848	.2404
#1	.2326	43.22	1.997	1.968	2.084	41.62	2.003	2.003	2.016
#2	.2314	42.99	2.000	1.967	2.071	41.34	2.003	2.007	2.023
#3	.2320	43.37	1.995	1.973	2.101	41.95	2.002	2.005	2.014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.002	40.45	41.28	42.65	2.029	1.864	41.26	1.990	2.018
Stddev	.005	.17	.27	.14	.006	.004	.32	.002	.002
%RSD	.2305	.4185	.6448	.3193	.2757	.1862	.7785	.1058	.0966
#1	2.007	40.47	41.21	42.65	2.035	1.862	41.23	1.988	2.019
#2	2.001	40.27	41.06	42.52	2.026	1.868	40.96	1.991	2.016
#3	1.997	40.60	41.58	42.79	2.025	1.862	41.60	1.992	2.019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.126	1.999	.1093	2.030	2.014	2.005	2.081	1.971	2.023
Stddev	.009	.009	.0010	.003	.011	.006	.006	.005	.003
%RSD	.4161	.4341	.9071	.1443	.5407	.3037	.2865	.2548	.1251
#1	2.122	1.989	.1097	2.028	2.013	2.012	2.088	1.972	2.024
#2	2.120	2.001	.1082	2.033	2.004	2.001	2.078	1.975	2.024
#3	2.136	2.005	.1101	2.028	2.026	2.001	2.077	1.965	2.020
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ICV Acquired: 12/20/2018 8:56:41 Type: QC
Method: 60102007_042011(v362) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5724.7	2306.6	23882.	6938.9
Stddev	17.5	5.9	87.	23.0
%RSD	.30567	.25375	.36272	.33076
#1	5705.4	2301.2	23821.	6962.4
#2	5729.2	2305.8	23843.	6916.5
#3	5739.5	2312.9	23981.	6937.6

Zoom In Zoom Out

Sample Name: ICB Acquired: 12/20/2018 9:02:39 Type: QC
Method: 60102007_042011(v362) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	-.0108	.0007	.0001	.0000	.0000	-.0001	.0004
Stddev	.0007	.0091	.0010	.0000	.000	.001	.0001	.0004
%RSD	155.5	83.82	140.2	33.29	354.3	14320.	50.89	91.72
#1	.0000	-.0044	.0000	.0001	.0000	-.0009	-.0001	.0007
#2	-.0009	-.0173	.0015	.0002	.0000	.0009	-.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0001	.0058	-.0604	.0175	.0001	.0007	-.0096
Stddev	.0008	.0002	.0012	.0171	.0117	.0000	.0003	.0117
%RSD	189.0	154.8	20.18	28.25	66.75	7.877	50.14	122.1
#1	-.0002	.0003	.0067	-.0725	.0257	.0000	.0009	-.0013
#2	.0010	.0000	.0050	-.0483	.0092	.0001	.0004	-.0178
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	F -.0013	.0005	-.0001	.0011	.0006	.0002	.0009
Stddev	.0002	.0004	.0005	.0023	.0002	.0003	.0001	.0001
%RSD	77.84	28.85	99.96	1768.	19.58	41.84	33.71	8.731
#1	-.0001	-.0016	.0009	-.0017	.0009	.0008	.0001	.0008
#2	-.0004	-.0011	.0002	.0015	.0012	.0004	.0002	.0009
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010						
Low Limit		-.0010						

Zoom In Zoom Out

Sample Name: ICB Acquired: 12/20/2018 9:02:39 Type: QC
Method: 60102007_042011(v362) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F -.0024	.0003	-.0002
Stddev	.0023	.0002	.0001
%RSD	96.60	54.80	42.67
#1	-.0040	.0002	-.0001
#2	-.0008	.0005	-.0002
Check ?	Chk Fail	Chk Pass	Chk Pass
High Limit	.0020		
Low Limit	-.0020		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5684.8	2370.5	23942.	7019.9
Stddev	.7	2.3	65.	55.6
%RSD	.01290	.09523	.27182	.79230
#1	5685.4	2368.9	23896.	6980.5
#2	5684.3	2372.1	23988.	7059.2

Zoom In Zoom Out

Sample Name: CRIA Acquired: 12/20/2018 9:06:26 Type: QC
Method: 60102007_042011(v362) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0090	.1937	.0105	.1957	.0051	.9804	.0046	.0465	.0100
Stddev	.0004	.0182	.0012	.0009	.0001	.0086	.0001	.0003	.0005
%RSD	3.989	9.392	11.73	.4489	1.346	.8757	1.297	.5867	4.642
#1	.0093	.2106	.0092	.1963	.0051	.9903	.0046	.0464	.0103
#2	.0091	.1745	.0107	.1960	.0050	.9762	.0046	.0463	.0095
#3	.0086	.1961	.0116	.1947	.0050	.9748	.0047	.0468	.0102
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0227	.2963	9.619	4.924	.0149	.0429	9.526	.0372	F .0037
Stddev	.0004	.0014	.073	.019	.0000	.0002	.071	.0005	.0030
%RSD	1.683	.4884	.7634	.3920	.3050	.3961	.7454	1.262	81.74
#1	.0231	.2948	9.703	4.906	.0148	.0431	9.607	.0377	.0047
#2	.0223	.2966	9.567	4.921	.0149	.0428	9.474	.0372	.0003
#3	.0227	.2976	9.588	4.945	.0149	.0429	9.497	.0368	.0060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value									.0050
Range									-20.00%

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0042	F .0078	.0221	.0464	.0098	.0094	.0093	.0475	.0194
Stddev	.0016	.0008	.0014	.0005	.0001	.0002	.0042	.0002	.0003
%RSD	37.75	9.960	6.353	.9863	1.038	2.347	44.96	.3265	1.297
#1	.0037	.0069	.0234	.0470	.0099	.0092	.0098	.0477	.0192
#2	.0060	.0080	.0221	.0461	.0097	.0095	.0049	.0474	.0197
#3	.0030	.0085	.0206	.0462	.0098	.0097	.0132	.0475	.0193
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.0100							
Range		-20.00%							

Zoom In Zoom Out

Sample Name: CRIA Acquired: 12/20/2018 9:06:26 Type: QC
Method: 60102007_042011(v362) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5721.0	2380.3	24261.	7034.6
Stddev	9.2	2.6	65.	56.9
%RSD	.15994	.10714	.26726	.80857
#1	5731.5	2381.1	24320.	7099.9
#2	5714.9	2377.4	24191.	6995.8
#3	5716.6	2382.3	24272.	7008.1

Zoom In Zoom Out

Sample Name: ICSA Acquired: 12/20/2018 9:16:59 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	531.4	.0000	.0006	-.0001	473.2	.0000	.0001	.0004
Stddev	.0004	12.2	.0004	.0000	.0001	7.7	.000	.0003	.0003
%RSD	94.63	2.300	2135.	8.081	179.0	1.619	1664.	388.6	65.56
#1	.0005	543.7	-.0005	.0006	-.0001	472.0	.0002	-.0002	.0003
#2	.0000	531.2	.0001	.0005	.0001	481.5	-.0003	.0002	.0002
#3	.0007	519.3	.0004	.0006	-.0001	466.3	.0001	.0002	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	188.8	.0423	515.8	.0000	.0000	.1654	.0010	.0009
Stddev	.0004	.7	.0152	2.3	.000	.0004	.0085	.0002	.0037
%RSD	824.1	.3475	35.96	.4387	731.4	1224.	5.110	16.66	427.9
#1	.0005	189.4	.0266	518.4	.0000	.0002	.1593	.0012	-.0002
#2	.0000	188.9	.0433	514.9	.0000	.0003	.1619	.0009	-.0021
#3	-.0003	188.1	.0570	514.2	.0000	-.0004	.1751	.0009	.0050
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0019	.0325	.0000	.0000	.0019	.0004	.0007	-.0004
Stddev	.0025	.0038	.0018	.0010	.0001	.0003	.0073	.0002	.0000
%RSD	1155.	200.9	5.469	6571.	398.6	14.90	1899.	29.86	7.709
#1	.0013	-.0034	.0305	-.0006	.0002	.0017	-.0017	.0004	-.0004
#2	.0019	-.0047	.0335	.0011	-.0001	.0023	.0086	.0008	-.0003
#3	-.0026	.0024	.0336	-.0005	.0000	.0019	-.0057	.0008	-.0004
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ICSA Acquired: 12/20/2018 9:16:59 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5574.1	2158.9	22417.	6796.8
Stddev	5.7	4.0	99.	13.0
%RSD	.10273	.18606	.44143	.19136
#1	5567.6	2163.5	22508.	6790.4
#2	5576.7	2157.1	22432.	6811.8
#3	5578.1	2156.2	22311.	6788.2

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 12/20/2018 9:22:57 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.118	534.4	1.005	.4966	.4929	457.4	.9768	.5053	.4955
Stddev	.006	11.2	.005	.0018	.0016	4.5	.0023	.0012	.0015
%RSD	.5640	2.096	.4875	.3600	.3312	.9860	.2368	.2424	.3056
#1	1.117	538.3	1.010	.4962	.4925	462.0	.9793	.5055	.4972
#2	1.124	543.2	1.000	.4950	.4915	453.0	.9762	.5065	.4950
#3	1.112	521.8	1.005	.4985	.4947	457.2	.9748	.5041	.4944
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5646	189.7	.1244	513.1	.5070	.9106	.2176	1.008	.9772
Stddev	.0016	1.1	.0071	1.8	.0014	.0005	.0081	.005	.0083
%RSD	.2763	.5867	5.720	.3552	.2830	.0505	3.701	.4601	.8464
#1	.5646	190.5	.1163	514.1	.5086	.9105	.2091	1.012	.9754
#2	.5661	188.4	.1273	511.0	.5068	.9111	.2186	1.009	.9700
#3	.5630	190.1	.1296	514.2	.5057	.9102	.2251	1.003	.9863
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.068	.9689	.0693	.9197	.9165	1.064	.9799	.4939	.9679
Stddev	.005	.0065	.0018	.0014	.0028	.003	.0087	.0015	.0012
%RSD	.4436	.6693	2.558	.1517	.3096	.2535	.8868	.3058	.1209
#1	1.065	.9676	.0707	.9213	.9180	1.065	.9899	.4956	.9668
#2	1.073	.9759	.0700	.9189	.9132	1.066	.9763	.4932	.9677
#3	1.065	.9631	.0673	.9190	.9182	1.061	.9736	.4928	.9692
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 12/20/2018 9:22:57 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5562.4	2158.6	22502.	6783.2
Stddev	14.9	.3	132.	19.6
%RSD	.26725	.01470	.58467	.28909
#1	5570.7	2158.9	22458.	6761.6
#2	5571.1	2158.4	22398.	6799.8
#3	5545.2	2158.4	22650.	6788.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 9:27:16 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2466	40.90	2.015	2.034	2.071	41.45	2.019	1.998	2.047
Stddev	.0009	.20	.000	.012	.011	.26	.003	.001	.006
%RSD	.3768	.4832	.0178	.6086	.5270	.6204	.1372	.0415	.2766
#1	.2460	40.90	2.015	2.024	2.069	41.48	2.016	1.997	2.053
#2	.2462	40.70	2.016	2.031	2.062	41.17	2.021	1.998	2.042
#3	.2477	41.09	2.016	2.048	2.083	41.68	2.019	1.999	2.046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.996	41.07	41.11	41.19	2.067	2.039	41.22	2.008	2.040
Stddev	.010	.21	.25	.16	.002	.004	.19	.003	.005
%RSD	.5105	.5106	.6111	.3911	.0887	.1786	.4675	.1381	.2470
#1	2.008	41.08	41.07	41.23	2.069	2.037	41.16	2.005	2.045
#2	1.991	40.86	40.88	41.01	2.065	2.036	41.06	2.011	2.042
#3	1.990	41.28	41.38	41.32	2.066	2.043	41.43	2.008	2.035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.002	1.999	1.944	2.051	2.096	2.074	2.022	2.089	2.038
Stddev	.005	.002	.004	.004	.011	.004	.015	.009	.003
%RSD	.2598	.0753	.2248	.1709	.5087	.1910	.7401	.4219	.1471
#1	1.996	2.000	1.940	2.048	2.089	2.078	2.026	2.099	2.036
#2	2.002	1.997	1.949	2.049	2.091	2.072	2.034	2.083	2.041
#3	2.007	2.000	1.942	2.055	2.108	2.071	2.005	2.086	2.036
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 9:27:16 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5661.7	2281.5	23414.	6796.4
Stddev	8.0	2.1	55.	41.4
%RSD	.14207	.09114	.23397	.60858
#1	5662.7	2283.8	23380.	6755.6
#2	5653.3	2280.0	23385.	6838.3
#3	5669.3	2280.6	23477.	6795.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 9:32:33 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	-.0039	-.0003	.0002	.0001	.0083	.0001	.0001
Stddev	.0005	.0101	.0002	.0002	.0000	.0022	.0001	.0002
%RSD	102.8	257.4	54.37	134.7	37.42	26.51	124.9	114.0
#1	-.0002	.0071	-.0002	.0003	.0001	.0058	.0000	.0003
#2	-.0010	-.0060	-.0005	.0003	.0001	.0089	.0001	.0000
#3	-.0002	-.0128	-.0002	-.0001	.0001	.0101	.0000	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0004	.0090	-.0779	.0186	.0001	.0002	.0118
Stddev	.0002	.0002	.0002	.0154	.0135	.0001	.0005	.0065
%RSD	75.56	38.39	2.705	19.83	72.50	42.92	262.9	55.33
#1	.0004	.0005	.0093	-.0877	.0276	.0001	.0007	.0099
#2	.0002	.0002	.0089	-.0601	.0031	.0001	.0000	.0191
#3	.0001	.0005	.0089	-.0859	.0251	.0002	-.0002	.0065
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	F -.0031	-.0006	.0009	.0000	.0003	.0002	.0004
Stddev	.0001	.0010	.0020	.0014	.0004	.0004	.0001	.0001
%RSD	36.11	30.85	360.3	153.5	1411.	123.1	56.36	25.72
#1	-.0003	-.0028	-.0001	-.0003	.0003	-.0001	.0001	.0004
#2	-.0002	-.0042	-.0027	.0007	.0002	.0007	.0002	.0004
#3	-.0004	-.0023	.0012	.0025	-.0004	.0004	.0003	.0006
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010						
Low Limit		-.0010						

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 9:32:33 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	-.0014	.0000	.0008
Stddev	.0015	.0000	.0000
%RSD	109.1	190.1	3.133
#1	-.0026	.0001	.0009
#2	-.0018	.0000	.0008
#3	.0003	.0000	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5649.8	2350.2	23741.	6856.0
Stddev	23.9	9.5	67.	26.8
%RSD	.42227	.40316	.28258	.39093
#1	5633.4	2341.8	23688.	6882.1
#2	5677.2	2360.5	23719.	6828.5
#3	5638.9	2348.2	23817.	6857.3

Zoom In Zoom Out

Sample Name: MP34831-MB1 Acquired: 12/20/2018 9:36:42 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	-.0093	-.0001	.0001	.0000	.0078	-.0001	-.0001
Stddev	.0003	.0142	.0002	.0002	.000	.0032	.0001	.0002
%RSD	57.37	153.2	198.0	266.4	289.6	41.37	133.4	270.4
#1	-.0003	.0058	-.0003	.0002	.0000	.0055	.0000	.0000
#2	-.0003	-.0112	.0001	-.0001	-.0001	.0065	-.0001	.0000
#3	-.0008	-.0224	-.0001	.0002	.0000	.0115	-.0002	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0004	.0004	-.0498	.0186	.0000	-.0001	.0009
Stddev	.0004	.0006	.0011	.0163	.0143	.0000	.0002	.0019
%RSD	127.3	169.1	279.0	32.80	76.85	85.26	242.8	210.8
#1	-.0001	.0001	.0010	-.0461	.0200	.0000	-.0001	.0015
#2	.0008	.0011	-.0009	-.0357	.0320	.0000	-.0003	.0025
#3	.0003	.0000	.0011	-.0677	.0036	.0000	.0001	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	F -.0028	-.0005	.0003	.0315	.0005	.0000	.0001
Stddev	.0002	.0022	.0009	.0018	.0014	.0003	.000	.0001
%RSD	89.41	76.44	189.2	547.0	4.443	57.36	341.0	179.3
#1	.0000	-.0048	-.0006	.0024	.0311	.0008	.0000	.0002
#2	.0004	-.0033	-.0013	-.0011	.0303	.0003	.0000	.0000
#3	.0002	-.0005	.0005	-.0003	.0330	.0004	-.0001	.0000
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0025						
Low Limit		-.0025						

Zoom In Zoom Out

Sample Name: MP34831-MB1 Acquired: 12/20/2018 9:36:42 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F -.0089	-.0001	.0012
Stddev	.0044	.0003	.0001
%RSD	49.80	222.2	7.191
#1	-.0106	.0000	.0013
#2	-.0123	-.0005	.0011
#3	-.0039	.0001	.0012
Check ?	Chk Fail	Chk Pass	Chk Pass
High Limit	.0050		
Low Limit	-.0050		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5572.9	2329.1	23493.	6876.1
Stddev	15.4	4.1	33.	86.6
%RSD	.27553	.17672	.14253	1.2597
#1	5569.8	2327.5	23482.	6847.5
#2	5589.6	2333.8	23466.	6973.5
#3	5559.3	2326.1	23530.	6807.5

Zoom In Zoom Out

Sample Name: MP34831-B1 Acquired: 12/20/2018 9:41:08 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0490	26.91	1.950	2.025	.0520	25.38	.0489	.4838	.2043
Stddev	.0004	.10	.004	.011	.0003	.07	.0001	.0006	.0009
%RSD	.7228	.3683	.2020	.5535	.5704	.2683	.2602	.1292	.4520
#1	.0486	26.93	1.947	2.019	.0517	25.46	.0487	.4832	.2049
#2	.0492	26.80	1.954	2.017	.0518	25.36	.0489	.4844	.2048
#3	.0492	27.00	1.948	2.037	.0523	25.33	.0490	.4839	.2032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2485	26.06	25.13	25.18	.5179	.4565	25.15	.4941	.4905
Stddev	.0009	.03	.06	.10	.0014	.0010	.05	.0003	.0025
%RSD	.3731	.1122	.2384	.3857	.2681	.2128	.1801	.0691	.5050
#1	.2480	26.09	25.17	25.22	.5195	.4555	25.17	.4939	.4877
#2	.2496	26.04	25.06	25.26	.5172	.4566	25.10	.4939	.4924
#3	.2479	26.05	25.14	25.07	.5170	.4574	25.17	.4945	.4915
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5097	1.909	.4553	.4789	.4963	.4990	2.054	.4899	.4976
Stddev	.0014	.002	.0016	.0015	.0025	.0008	.003	.0005	.0006
%RSD	.2741	.0849	.3500	.3040	.5064	.1643	.1287	.1069	.1266
#1	.5110	1.911	.4545	.4778	.4957	.4996	2.051	.4895	.4973
#2	.5099	1.910	.4571	.4805	.4942	.4993	2.056	.4897	.4983
#3	.5082	1.907	.4543	.4783	.4991	.4981	2.055	.4905	.4972
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP34831-B1 Acquired: 12/20/2018 9:41:08 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5616.5	2304.0	23319.	6800.0
Stddev	10.2	5.5	112.	48.8
%RSD	.18124	.23869	.48089	.71716
#1	5624.4	2309.0	23190.	6764.1
#2	5605.0	2298.1	23397.	6780.3
#3	5620.0	2305.1	23370.	6855.5

Zoom In Zoom Out

Sample Name: FA60161-1 Acquired: 12/20/2018 9:45:19 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0006	.1191	.0000	.0070	-.0001	33.60	.0001	.0005	.0026
Stddev	.0003	.0058	.0007	.0002	.0000	.14	.0000	.0000	.0004
%RSD	44.91	4.857	2465.	2.550	54.15	.4169	26.06	6.387	16.01
#1	-.0009	.1130	.0007	.0072	-.0001	33.54	.0001	.0005	.0026
#2	-.0004	.1197	.0001	.0069	-.0001	33.76	.0002	.0005	.0030
#3	-.0006	.1246	-.0007	.0068	-.0001	33.50	.0001	.0006	.0022

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0004	.1043	5.123	64.14	.0032	.0000	66.42	.0008	.0026
Stddev	.0003	.0015	.009	.14	.0000	.000	.24	.0004	.0002
%RSD	69.70	1.418	.1829	.2251	.8130	714.1	.3624	52.27	8.219
#1	-.0007	.1026	5.122	64.00	.0032	-.0001	66.53	.0006	.0026
#2	-.0002	.1054	5.133	64.12	.0032	-.0001	66.59	.0006	.0024
#3	-.0003	.1049	5.114	64.29	.0032	.0001	66.15	.0013	.0028

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0016	.0013	18.82	.0009	.2492	.0073	-.0051	.0156	.0029
Stddev	.0010	.0020	.04	.0007	.0010	.0001	.0041	.0002	.0001
%RSD	64.19	152.4	.2095	69.06	.3951	1.611	79.98	1.541	2.452
#1	-.0027	-.0009	18.83	.0003	.2487	.0074	-.0079	.0153	.0029
#2	-.0014	.0029	18.85	.0010	.2503	.0073	-.0004	.0157	.0029
#3	-.0007	.0020	18.77	.0016	.2486	.0071	-.0072	.0158	.0028

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5617.9	2315.3	23517.	6758.3
Stddev	10.9	.9	230.	61.4
%RSD	.19451	.03904	.97970	.90782
#1	5620.7	2315.9	23438.	6795.7
#2	5627.2	2315.7	23336.	6791.6
#3	5605.9	2314.2	23776.	6687.5

Zoom In Zoom Out

Sample Name: MP34831-D1 Acquired: 12/20/2018 9:49:42 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0012	.1349	-.0012	.0075	.0000	35.48	.0001	.0010	.0025
Stddev	.0006	.0082	.0003	.0001	.000	.19	.0000	.0001	.0005
%RSD	49.13	6.052	26.48	1.607	76.89	.5324	20.76	5.492	19.08
#1	-.0008	.1271	-.0009	.0076	.0000	35.51	.0001	.0010	.0031
#2	-.0010	.1343	-.0015	.0075	.0000	35.28	.0001	.0010	.0023
#3	-.0019	.1434	-.0011	.0074	-.0001	35.65	.0001	.0009	.0022

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0004	.0912	5.438	67.38	.0033	-.0003	70.04	.0006	.0041
Stddev	.0002	.0021	.035	.35	.0000	.0004	.26	.0000	.0016
%RSD	48.63	2.356	.6368	.5256	.8569	138.0	.3688	6.267	37.99
#1	.0003	.0903	5.400	67.68	.0033	-.0003	70.09	.0005	.0054
#2	.0002	.0896	5.446	66.99	.0033	-.0008	69.76	.0006	.0024
#3	.0006	.0936	5.467	67.48	.0033	.0001	70.26	.0006	.0045

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0008	.0005	19.83	-.0003	.2635	.0069	-.0040	.0162	.0031
Stddev	.0018	.0027	.02	.0006	.0004	.0003	.0007	.0005	.0000
%RSD	234.3	582.1	.0924	241.2	.1633	4.438	18.58	3.321	1.373
#1	-.0003	.0019	19.81	.0002	.2639	.0070	-.0033	.0169	.0031
#2	.0029	-.0026	19.83	-.0010	.2630	.0071	-.0040	.0160	.0031
#3	-.0003	.0022	19.85	-.0001	.2637	.0065	-.0047	.0159	.0032

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5631.8	2315.1	23552.	6813.7
Stddev	17.5	5.8	31.	22.6
%RSD	.31016	.25035	.13116	.33184
#1	5623.4	2313.5	23560.	6800.2
#2	5651.9	2321.6	23518.	6801.1
#3	5620.1	2310.3	23578.	6839.8

Zoom In Zoom Out

Sample Name: MP34831-SD1 Acquired: 12/20/2018 9:54:05 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0029	.0749	.0035	.0080	-.0003	37.49	-.0002	.0006	.0011
Stddev	.0040	.0716	.0028	.0008	.0002	.42	.0003	.0008	.0021
%RSD	135.9	95.61	78.46	9.355	74.97	1.125	108.6	128.4	193.1
#1	-.0059	.0105	.0036	.0089	-.0005	37.98	-.0002	-.0003	.0017
#2	-.0044	.1520	.0007	.0076	.0000	37.31	.0000	.0009	.0028
#3	.0016	.0621	.0062	.0076	-.0004	37.19	-.0005	.0013	-.0013

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0026	.0947	5.397	71.71	.0037	-.0032	73.12	.0015	-.0074
Stddev	.0018	.0072	.226	.78	.0001	.0020	.61	.0012	.0003
%RSD	69.21	7.603	4.183	1.083	1.620	60.89	.8316	83.05	3.482
#1	-.0020	.0953	5.138	72.57	.0038	-.0013	73.82	.0021	-.0072
#2	-.0012	.0872	5.507	71.51	.0037	-.0031	72.86	.0001	-.0077
#3	-.0047	.1015	5.547	71.06	.0036	-.0052	72.69	.0023	-.0073

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0005	.0042	20.90	-.0008	.2785	.0077	.0064	.0168	.0025
Stddev	.0099	.0071	.01	.0020	.0013	.0007	.0087	.0016	.0006
%RSD	1862.	167.9	.0367	260.4	.4548	9.559	134.5	9.399	25.65
#1	.0053	.0120	20.91	.0003	.2798	.0082	.0096	.0157	.0021
#2	.0050	.0025	20.90	-.0031	.2785	.0068	-.0034	.0161	.0032
#3	-.0119	-.0019	20.89	.0005	.2772	.0080	.0131	.0186	.0022

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5669.1	2346.8	23603.	6851.7
Stddev	6.6	2.5	112.	111.1
%RSD	.11576	.10580	.47461	1.6210
#1	5674.8	2348.1	23641.	6731.9
#2	5670.5	2348.3	23692.	6951.2
#3	5661.9	2343.9	23478.	6872.0

Zoom In Zoom Out

Sample Name: MP34831-PS1 Acquired: 12/20/2018 9:58:28 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0496	2.582	.0993	.2589	.0508	37.91	.0478	.0473	.0505
Stddev	.0009	.012	.0010	.0010	.0004	.15	.0001	.0004	.0004
%RSD	1.739	.4743	1.032	.3884	.7045	.3839	.2410	.8056	.7863
#1	.0486	2.597	.0981	.2590	.0506	37.88	.0478	.0470	.0508
#2	.0501	2.575	.1000	.2598	.0512	38.07	.0479	.0477	.0501
#3	.0501	2.576	.0999	.2578	.0506	37.78	.0476	.0471	.0506

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0977	3.005	15.00	67.58	.0531	.0871	74.96	.0956	.0472
Stddev	.0008	.015	.05	.35	.0002	.0005	.18	.0001	.0022
%RSD	.8444	.4881	.3136	.5250	.3513	.5653	.2378	.0526	4.728
#1	.0981	3.006	15.01	67.21	.0530	.0866	75.01	.0956	.0490
#2	.0967	3.018	15.04	67.92	.0530	.0875	75.11	.0955	.0479
#3	.0982	2.989	14.95	67.60	.0533	.0873	74.76	.0956	.0447

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1001	.0883	18.58	.0467	.2961	.1063	.0945	.0634	.2428
Stddev	.0021	.0008	.04	.0006	.0009	.0013	.0058	.0004	.0008
%RSD	2.143	.8930	.2169	1.267	.3072	1.191	6.157	.5565	.3152
#1	.1025	.0878	18.54	.0468	.2964	.1054	.0968	.0636	.2422
#2	.0991	.0879	18.62	.0460	.2967	.1078	.0879	.0630	.2436
#3	.0986	.0892	18.58	.0472	.2950	.1058	.0988	.0637	.2424

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5591.9	2302.2	23340.	6752.5
Stddev	8.0	8.6	175.	70.9
%RSD	.14286	.37204	.75125	1.0504
#1	5601.1	2311.1	23241.	6824.8
#2	5587.0	2294.0	23542.	6683.1
#3	5587.6	2301.4	23236.	6749.5

Zoom In Zoom Out

Sample Name: MP34831-S1 Acquired: 12/20/2018 10:02:46 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0521	27.60	2.017	2.078	.0533	60.15	.0503	.4932	.2078
Stddev	.0004	.09	.005	.002	.0002	.26	.0002	.0010	.0003
%RSD	.6868	.3353	.2702	.1083	.3729	.4323	.4651	.1942	.1628
#1	.0517	27.68	2.017	2.076	.0532	60.27	.0502	.4931	.2075
#2	.0525	27.62	2.023	2.079	.0535	60.33	.0506	.4941	.2081
#3	.0521	27.50	2.012	2.080	.0532	59.86	.0502	.4922	.2078

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2639	26.22	31.21	90.89	.5342	.4660	F 93.88	.5067	.5040
Stddev	.0011	.11	.05	.36	.0022	.0002	.18	.0020	.0015
%RSD	.4085	.4381	.1738	.3950	.4135	.0524	.1969	.3976	.2952
#1	.2635	26.30	31.27	90.72	.5339	.4660	93.98	.5076	.5057
#2	.2631	26.27	31.21	91.30	.5321	.4662	94.01	.5081	.5030
#3	.2651	26.09	31.16	90.64	.5365	.4657	93.67	.5044	.5032

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5301	1.950	20.07	.4937	.7631	.5184	2.115	.5205	.5073
Stddev	.0015	.006	.05	.0029	.0016	.0027	.006	.0021	.0024
%RSD	.2798	.2913	.2266	.5810	.2092	.5236	.2824	.4081	.4686
#1	.5286	1.944	20.09	.4946	.7634	.5169	2.121	.5184	.5090
#2	.5301	1.955	20.09	.4961	.7646	.5168	2.109	.5204	.5082
#3	.5316	1.950	20.02	.4905	.7615	.5215	2.115	.5227	.5046

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5580.1	2271.5	23086.	6721.3
Stddev	18.3	10.6	31.	42.8
%RSD	.32742	.46606	.13568	.63683
#1	5570.1	2265.6	23101.	6749.3
#2	5569.0	2265.2	23107.	6672.0
#3	5601.2	2283.7	23050.	6742.6

Zoom In Zoom Out

Sample Name: MP34831-S2 Acquired: 12/20/2018 10:06:56 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0514	27.49	1.994	2.032	.0522	59.74	.0494	.4893	.2074
Stddev	.0009	.06	.003	.005	.0001	.13	.0001	.0009	.0005
%RSD	1.699	.2194	.1262	.2322	.2184	.2101	.1441	.1811	.2349
#1	.0512	27.56	1.991	2.037	.0521	59.84	.0495	.4883	.2074
#2	.0506	27.44	1.995	2.029	.0522	59.78	.0495	.4899	.2078
#3	.0523	27.47	1.996	2.029	.0524	59.60	.0494	.4897	.2069

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2592	26.35	31.03	89.69	.5238	.4664	F 92.43	.4998	.4999
Stddev	.0009	.05	.10	.08	.0011	.0006	.15	.0004	.0015
%RSD	.3474	.2064	.3292	.0943	.2121	.1389	.1632	.0826	.3090
#1	.2582	26.39	31.12	89.79	.5239	.4667	92.59	.5003	.4985
#2	.2600	26.37	31.05	89.63	.5248	.4657	92.30	.4996	.5016
#3	.2593	26.29	30.92	89.66	.5226	.4669	92.39	.4995	.4996

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5256	1.943	19.79	.4882	.7508	.5109	2.068	.5155	.5009
Stddev	.0008	.005	.02	.0023	.0027	.0015	.001	.0002	.0005
%RSD	.1525	.2500	.0891	.4641	.3565	.2852	.0495	.0400	.0907
#1	.5265	1.944	19.81	.4867	.7539	.5126	2.066	.5154	.5008
#2	.5254	1.937	19.80	.4870	.7490	.5099	2.068	.5158	.5014
#3	.5249	1.946	19.77	.4908	.7496	.5103	2.069	.5154	.5005

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5623.2	2274.0	23156.	6757.8
Stddev	4.8	3.0	43.	33.4
%RSD	.08582	.13244	.18525	.49440
#1	5621.1	2273.5	23202.	6769.2
#2	5619.7	2271.3	23148.	6784.0
#3	5628.7	2277.2	23117.	6720.2

Zoom In Zoom Out

Sample Name: FA60161-3 Acquired: 12/20/2018 10:11:08 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0003	.0416	-.0011	.0068	-.0001	34.43	-.0001	.0006
Stddev	.0006	.0041	.0009	.0002	.0001	.23	.0000	.0003
%RSD	199.8	9.848	87.66	3.380	136.0	.6779	57.50	46.62
#1	.0002	.0397	-.0005	.0068	-.0001	34.16	-.0001	.0009
#2	-.0009	.0389	-.0005	.0066	.0000	34.56	.0000	.0005
#3	-.0002	.0464	-.0021	.0070	-.0001	34.57	-.0001	.0003

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0023	-.0001	.0210	5.257	65.28	.0012	-.0004	67.79
Stddev	.0005	.0003	.0026	.030	.51	.0000	.0002	.25
%RSD	20.97	501.2	12.16	.5720	.7792	3.858	46.00	.3670
#1	.0018	-.0003	.0228	5.228	64.70	.0011	-.0004	67.57
#2	.0026	.0003	.0222	5.254	65.64	.0012	-.0006	67.74
#3	.0027	-.0002	.0181	5.288	65.49	.0012	-.0002	68.06

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0004	-.0001	.0005	.0006	18.95	.0006	.2506	.0028
Stddev	.0004	.0026	.0023	.0007	.03	.0003	.0011	.0001
%RSD	105.7	3035.	456.5	130.8	.1571	50.55	.4353	2.177
#1	.0008	.0029	.0027	-.0002	18.95	.0003	.2496	.0027
#2	.0000	-.0017	.0006	.0012	18.99	.0009	.2504	.0028
#3	.0002	-.0014	-.0018	.0007	18.93	.0005	.2517	.0028

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F -.0102	.0161	.0021
Stddev	.0030	.0004	.0001
%RSD	29.26	2.793	4.162
#1	-.0092	.0163	.0020
#2	-.0136	.0163	.0021
#3	-.0079	.0156	.0021

Zoom In Zoom Out

Sample Name: FA60161-3 Acquired: 12/20/2018 10:11:08 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5616.6	2311.2	23420.	6701.9
Stddev	5.7	1.0	47.	41.0
%RSD	.10126	.04516	.19880	.61156
#1	5617.5	2311.6	23366.	6749.0
#2	5621.7	2310.0	23446.	6675.2
#3	5610.5	2311.9	23447.	6681.3

Zoom In Zoom Out

Sample Name: FA60304-1 Acquired: 12/20/2018 10:15:31 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	.1062	-.0009	.0019	-.0001	2.908	.0000	.0001	.0010
Stddev	.0005	.0037	.0006	.0001	.0000	.011	.000	.0002	.0001
%RSD	414.6	3.524	71.31	6.888	30.01	.3743	271.6	247.7	7.715
#1	-.0005	.1104	-.0006	.0017	-.0001	2.896	.0000	.0001	.0011
#2	-.0003	.1050	-.0016	.0019	-.0001	2.918	-.0001	.0003	.0010
#3	.0005	.1032	-.0004	.0020	-.0001	2.910	.0000	-.0001	.0009

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0082	.0826	.0615	.1484	.0017	-.0004	.4266	.0005	.0003
Stddev	.0000	.0029	.0089	.0158	.0001	.0001	.0053	.0003	.0028
%RSD	.4078	3.504	14.47	10.68	4.846	20.56	1.246	57.83	928.2
#1	.0082	.0803	.0678	.1533	.0016	-.0004	.4221	.0006	-.0008
#2	.0083	.0817	.0654	.1612	.0018	-.0003	.4251	.0008	.0034
#3	.0082	.0858	.0513	.1307	.0017	-.0003	.4325	.0002	-.0018

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0020	-.0011	.1548	.0000	.0072	.0056	-.0072	.0004	.0924
Stddev	.0020	.0043	.0012	.001	.0001	.0001	.0037	.0004	.0002
%RSD	97.71	387.8	.7899	3221.	.9710	1.573	51.03	89.85	.2289
#1	-.0014	-.0036	.1551	-.0005	.0072	.0056	-.0075	.0001	.0922
#2	-.0005	-.0035	.1535	-.0002	.0071	.0056	-.0034	.0004	.0923
#3	-.0043	.0038	.1559	.0007	.0072	.0057	-.0108	.0008	.0926

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5571.9	2330.0	23378.	6791.3
Stddev	10.1	3.3	46.	71.6
%RSD	.18038	.14096	.19801	1.0540
#1	5579.9	2330.6	23411.	6793.0
#2	5575.2	2332.9	23325.	6862.0
#3	5560.6	2326.4	23397.	6718.8

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 10:19:54 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2482	41.39	2.043	2.065	2.114	42.18	2.040	1.997	2.061
Stddev	.0011	.17	.002	.005	.012	.23	.001	.001	.003
%RSD	.4519	.4066	.1016	.2604	.5708	.5377	.0645	.0564	.1536
#1	.2478	41.59	2.041	2.071	2.128	42.42	2.039	1.997	2.057
#2	.2474	41.30	2.045	2.066	2.111	42.12	2.041	1.998	2.062
#3	.2495	41.30	2.044	2.060	2.104	41.98	2.040	1.995	2.063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.025	41.32	41.94	41.91	2.094	2.042	42.05	2.023	2.070
Stddev	.004	.11	.23	.15	.004	.004	.26	.001	.002
%RSD	.1719	.2628	.5410	.3634	.1717	.1805	.6212	.0268	.1141
#1	2.022	41.42	42.18	41.99	2.097	2.038	42.33	2.023	2.067
#2	2.024	41.20	41.94	42.01	2.096	2.045	42.00	2.023	2.072
#3	2.029	41.33	41.72	41.74	2.090	2.044	41.82	2.022	2.069
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.031	1.999	1.972	2.062	2.136	2.106	2.060	2.128	2.058
Stddev	.001	.005	.005	.003	.013	.006	.007	.005	.003
%RSD	.0328	.2428	.2573	.1203	.6192	.3035	.3402	.2552	.1277
#1	2.030	1.994	1.973	2.060	2.151	2.113	2.059	2.133	2.056
#2	2.031	1.997	1.967	2.065	2.132	2.105	2.067	2.129	2.061
#3	2.031	2.004	1.977	2.060	2.126	2.101	2.053	2.123	2.056
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 10:19:54 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5648.6	2282.5	23324.	6689.3
Stddev	8.8	5.6	78.	50.6
%RSD	.15516	.24391	.33233	.75629
#1	5652.5	2286.9	23413.	6719.0
#2	5638.6	2276.2	23283.	6630.9
#3	5654.8	2284.3	23276.	6718.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 10:24:05 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	-.0159	.0003	.0001	.0001	.0026	.0001	.0002
Stddev	.0007	.0144	.0019	.0001	.0000	.0007	.0001	.0002
%RSD	483.6	90.75	567.1	48.13	40.20	25.97	116.7	128.4
#1	.0006	-.0042	.0020	.0002	.0001	.0033	.0001	.0004
#2	-.0005	-.0320	.0008	.0001	.0001	.0025	.0000	.0002
#3	-.0005	-.0115	-.0018	.0001	.0000	.0020	.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0003	.0080	-.0596	.0126	.0001	.0005	.0105
Stddev	.0006	.0004	.0001	.0259	.0206	.0001	.0001	.0060
%RSD	1345.	140.8	1.573	43.44	163.1	69.38	28.27	56.92
#1	.0000	-.0001	.0081	-.0535	.0308	.0000	.0005	.0164
#2	-.0005	.0002	.0079	-.0880	.0168	.0001	.0007	.0105
#3	.0006	.0007	.0081	-.0373	-.0097	.0001	.0004	.0045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	F -.0016	-.0003	-.0004	.0016	.0000	.0001	.0011
Stddev	.0004	.0016	.0021	.0023	.0007	.0002	.0000	.0002
%RSD	297.0	99.94	625.3	540.2	43.70	620.5	38.54	16.10
#1	-.0002	.0002	.0000	-.0002	.0020	.0003	.0001	.0010
#2	-.0005	-.0023	.0016	-.0028	.0008	.0000	.0001	.0010
#3	.0003	-.0027	-.0026	.0018	.0020	-.0002	.0001	.0013
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010						
Low Limit		-.0010						

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 10:24:05 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0013	.0003	.0000
Stddev	.0014	.0001	.0001
%RSD	111.1	31.66	401.9
#1	.0027	.0004	.0001
#2	.0013	.0002	.0001
#3	-.0001	.0004	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5631.8	2351.9	23515.	6845.8
Stddev	1.6	4.3	72.	74.3
%RSD	.02841	.18494	.30799	1.0857
#1	5633.6	2355.7	23597.	6909.5
#2	5630.6	2347.2	23489.	6863.7
#3	5631.1	2352.7	23459.	6764.1

Zoom In Zoom Out

Sample Name: FA60266-1 Acquired: 12/20/2018 10:28:31 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	-.0079	-.0012	.0365	.0000	135.9	.0001	-.0002	.0004
Stddev	.0003	.0095	.0007	.0002	.0000	.9	.0002	.0003	.0004
%RSD	292.4	120.5	54.89	.6045	88.69	.6754	315.3	174.5	84.26
#1	.0000	-.0024	-.0006	.0363	.0001	134.9	-.0001	-.0003	.0003
#2	-.0001	-.0188	-.0019	.0364	.0000	136.1	.0002	.0002	.0008
#3	.0004	-.0024	-.0011	.0368	.0001	136.7	.0001	-.0004	.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0006	.7381	15.48	38.10	.0182	.0178	F 447.7	.0000	-.0029
Stddev	.0003	.0075	.14	.24	.0001	.0002	6.4	.0001	.0011
%RSD	54.57	1.023	.9242	.6207	.5152	1.358	1.432	148.9	38.83
#1	-.0008	.7302	15.34	37.83	.0182	.0178	445.3	.0000	-.0021
#2	-.0007	.7452	15.45	38.27	.0183	.0176	442.9	.0001	-.0023
#3	-.0002	.7390	15.63	38.19	.0182	.0181	455.0	.0001	-.0042

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0007	-.0011	6.159	.0004	.9038	.0029	-.0059	.0001	.0048
Stddev	.0013	.0042	.016	.0009	.0050	.0001	.0007	.0005	.0001
%RSD	188.7	380.9	.2646	215.5	.5503	4.966	11.03	509.3	2.529
#1	.0008	.0027	6.172	-.0004	.9002	.0030	-.0063	.0004	.0048
#2	-.0018	-.0004	6.165	.0003	.9017	.0027	-.0064	-.0004	.0050
#3	-.0012	-.0056	6.141	.0013	.9095	.0029	-.0052	.0003	.0047

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5758.1	2327.1	23796.	6571.8
Stddev	13.7	4.1	34.	42.5
%RSD	.23843	.17517	.14231	.64606
#1	5772.4	2322.4	23767.	6617.8
#2	5756.8	2329.8	23786.	6563.5
#3	5745.1	2329.1	23833.	6534.1

Zoom In Zoom Out

Sample Name: FA60267-1 Acquired: 12/20/2018 10:33:02 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0007	.0081	.0002	.0566	-.0001	48.54	-.0002	.0002	.0017
Stddev	.0002	.0146	.0013	.0003	.0000	.26	.0001	.0003	.0002
%RSD	25.14	181.0	689.9	.5551	40.02	.5331	44.56	161.8	14.35
#1	-.0009	-.0021	-.0013	.0565	-.0001	48.25	-.0001	-.0001	.0016
#2	-.0007	.0015	.0008	.0570	-.0001	48.73	-.0002	.0003	.0020
#3	-.0006	.0248	.0011	.0564	.0000	48.65	-.0002	.0003	.0015

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0028	.3243	2.728	2.438	.0139	.0044	5.168	.0010	-.0017
Stddev	.0004	.0067	.011	.036	.0001	.0003	.021	.0000	.0017
%RSD	12.66	2.066	.3954	1.490	.7926	6.083	.4134	3.303	101.9
#1	.0031	.3179	2.718	2.473	.0139	.0042	5.171	.0010	-.0030
#2	.0024	.3312	2.739	2.442	.0137	.0044	5.189	.0010	.0003
#3	.0028	.3238	2.727	2.400	.0140	.0047	5.146	.0010	-.0024

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0014	.0005	.7424	.0008	.1428	.0027	-.0074	.0000	.0083
Stddev	.0029	.0017	.0002	.0001	.0011	.0003	.0034	.000	.0002
%RSD	202.3	346.4	.0291	6.759	.7468	11.62	45.55	41420.	1.971
#1	.0017	.0024	.7427	.0008	.1417	.0027	-.0040	.0000	.0081
#2	-.0040	-.0008	.7424	.0008	.1439	.0025	-.0108	.0003	.0084
#3	-.0020	-.0001	.7423	.0007	.1428	.0031	-.0075	-.0003	.0083

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5579.9	2319.3	23554.	6711.0
Stddev	13.8	6.2	178.	49.1
%RSD	.24705	.26813	.75598	.73116
#1	5595.3	2325.4	23388.	6654.4
#2	5568.7	2313.0	23742.	6739.3
#3	5575.7	2319.5	23533.	6739.4

Zoom In Zoom Out

Sample Name: FA60267-2 Acquired: 12/20/2018 10:37:26 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0009	.2186	.0008	.0749	.0000	51.45	.0015	.0017	.0027
Stddev	.0007	.0122	.0007	.0001	.000	.22	.0001	.0000	.0001
%RSD	82.22	5.564	78.61	.1369	178.1	.4252	5.637	2.128	3.191
#1	-.0002	.2077	.0001	.0750	.0000	51.32	.0015	.0017	.0026
#2	-.0008	.2317	.0014	.0748	.0000	51.33	.0014	.0017	.0027
#3	-.0016	.2164	.0010	.0748	-.0001	51.70	.0016	.0017	.0027

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0432	1.672	9.421	1.850	.2827	.0112	15.28	.0076	.0284
Stddev	.0005	.012	.027	.015	.0003	.0003	.04	.0006	.0028
%RSD	1.266	.7016	.2891	.8344	.0887	2.939	.2517	7.479	10.00
#1	.0439	1.668	9.398	1.863	.2826	.0113	15.25	.0075	.0277
#2	.0429	1.663	9.451	1.833	.2830	.0109	15.26	.0082	.0315
#3	.0430	1.685	9.413	1.855	.2825	.0115	15.32	.0071	.0260

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0022	.0005	1.203	.0008	.1803	.0076	-.0064	.0002	.3621
Stddev	.0025	.0033	.002	.0001	.0001	.0002	.0019	.0001	.0011
%RSD	110.0	633.7	.1227	7.443	.0363	2.222	29.52	56.31	.3035
#1	-.0001	.0034	1.201	.0008	.1803	.0076	-.0062	.0001	.3613
#2	.0048	-.0031	1.203	.0009	.1804	.0078	-.0046	.0004	.3634
#3	.0020	.0013	1.204	.0009	.1803	.0074	-.0083	.0003	.3617

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5597.4	2321.3	23535.	6848.0
Stddev	9.2	10.1	95.	34.0
%RSD	.16472	.43398	.40421	.49667
#1	5606.0	2332.1	23520.	6817.0
#2	5587.7	2312.2	23637.	6884.4
#3	5598.4	2319.5	23448.	6842.7

Zoom In
Zoom Out

Sample Name: FA60133-1 Acquired: 12/20/2018 10:41:46 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0006	.5814	-.0004	.1103	.0000	116.0	.0001	.0003	.0024
Stddev	.0003	.0156	.0014	.0003	.000	.6	.0001	.0000	.0001
%RSD	56.17	2.691	344.2	.2373	773.8	.5071	83.09	14.11	3.005
#1	-.0007	.5976	.0009	.1102	.0000	116.4	.0003	.0003	.0024
#2	-.0007	.5803	-.0003	.1101	.0000	115.3	.0001	.0004	.0023
#3	-.0002	.5664	-.0018	.1106	-.0001	116.3	.0001	.0003	.0025

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0039	.5665	1.652	66.73	.0380	.0026	F 92.48	.0030	-.0009
Stddev	.0005	.0090	.022	.39	.0001	.0002	.37	.0002	.0017
%RSD	11.70	1.593	1.312	.5773	.1875	9.038	.4024	7.893	191.0
#1	.0038	.5716	1.629	66.91	.0379	.0027	92.74	.0028	-.0002
#2	.0044	.5561	1.654	66.29	.0380	.0024	92.06	.0031	.0003
#3	.0035	.5719	1.672	67.00	.0380	.0028	92.65	.0032	-.0028

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0013	.0016	8.635	.0003	.8177	.0385	-.0039	.0053	.0137
Stddev	.0028	.0048	.017	.0009	.0044	.0004	.0065	.0004	.0001
%RSD	221.0	304.5	.1978	340.3	.5354	.9409	164.1	7.112	.9891
#1	-.0007	.0005	8.620	-.0007	.8224	.0385	.0016	.0054	.0136
#2	-.0043	-.0026	8.653	.0010	.8137	.0381	-.0024	.0049	.0136
#3	.0012	.0068	8.632	.0004	.8170	.0389	-.0111	.0056	.0138

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5613.5	2313.4	23512.	6586.0
Stddev	4.3	2.7	152.	61.0
%RSD	.07695	.11694	.64623	.92568
#1	5613.5	2314.6	23683.	6641.5
#2	5609.2	2310.3	23463.	6595.7
#3	5617.9	2315.3	23391.	6520.7

Zoom In
Zoom Out

Sample Name: FA60219-1 Acquired: 12/20/2018 10:46:07 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	.5700	.0003	.0665	-.0001	65.67	.0007	.0028	.0034
Stddev	.0005	.0102	.0010	.0003	.0001	.35	.0001	.0000	.0005
%RSD	130.3	1.784	310.1	.4083	108.2	.5382	19.21	1.193	15.61
#1	-.0007	.5796	-.0003	.0663	-.0001	65.31	.0009	.0028	.0029
#2	-.0007	.5712	.0014	.0668	-.0001	66.02	.0006	.0027	.0039
#3	.0002	.5593	-.0002	.0663	.0000	65.67	.0006	.0028	.0035

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1022	1.314	8.589	4.196	.1736	.0158	19.35	.0109	.0251
Stddev	.0005	.004	.023	.025	.0004	.0004	.05	.0004	.0037
%RSD	.4738	.3100	.2689	.5898	.2063	2.439	.2775	3.623	14.68
#1	.1027	1.319	8.563	4.169	.1740	.0155	19.31	.0107	.0222
#2	.1022	1.313	8.595	4.217	.1733	.0162	19.41	.0107	.0292
#3	.1017	1.311	8.608	4.202	.1737	.0155	19.33	.0114	.0238

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0011	.0002	1.456	.0031	.2056	.0077	-.0070	.0013	.5800
Stddev	.0012	.0005	.004	.0001	.0005	.0001	.0024	.0001	.0007
%RSD	111.6	237.1	.2485	4.125	.2330	.8602	33.97	10.09	.1140
#1	.0000	-.0004	1.460	.0030	.2051	.0076	-.0051	.0015	.5796
#2	.0009	.0006	1.454	.0030	.2061	.0077	-.0096	.0013	.5807
#3	.0024	.0005	1.453	.0032	.2057	.0076	-.0062	.0012	.5796

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5639.1	2328.0	23535.	6821.3
Stddev	10.5	5.9	58.	63.6
%RSD	.18621	.25286	.24831	.93266
#1	5633.8	2327.3	23507.	6835.5
#2	5632.3	2322.5	23495.	6751.7
#3	5651.2	2334.3	23602.	6876.6

Zoom In
Zoom Out

Sample Name: FA60219-2 Acquired: 12/20/2018 10:50:29 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0003	.4421	.0005	.0625	.0000	50.25	.0004	.0004	.0031
Stddev	.0010	.0026	.0012	.0004	.000	.25	.0000	.0003	.0005
%RSD	289.3	.5933	235.4	.6454	802.9	.4947	11.07	72.82	14.72
#1	.0000	.4392	.0019	.0622	.0000	50.16	.0004	.0003	.0029
#2	.0005	.4442	.0002	.0624	.0000	50.05	.0004	.0002	.0036
#3	-.0014	.4429	-.0005	.0630	-.0001	50.53	.0005	.0007	.0028

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0775	.8197	12.56	4.236	.0326	.0206	28.95	.0091	.0195
Stddev	.0005	.0021	.02	.015	.0001	.0005	.11	.0003	.0025
%RSD	.6680	.2620	.1602	.3501	.2232	2.268	.3868	3.134	12.67
#1	.0780	.8218	12.56	4.221	.0326	.0201	28.98	.0092	.0177
#2	.0769	.8200	12.54	4.251	.0326	.0209	28.83	.0088	.0186
#3	.0776	.8175	12.58	4.235	.0327	.0209	29.05	.0094	.0223

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0042	.0002	1.449	.0024	.2198	.0069	-.0095	.0021	.2315
Stddev	.0016	.0007	.004	.0006	.0009	.0005	.0040	.0003	.0004
%RSD	36.96	368.0	.2595	26.16	.3979	7.192	42.44	12.45	.1547
#1	.0025	-.0005	1.453	.0018	.2194	.0074	-.0049	.0023	.2319
#2	.0046	.0001	1.446	.0025	.2191	.0064	-.0114	.0018	.2315
#3	.0055	.0009	1.447	.0031	.2208	.0069	-.0123	.0020	.2312

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5622.2	2332.4	23585.	6766.7
Stddev	9.6	6.9	79.	17.5
%RSD	.17121	.29467	.33703	.25794
#1	5612.4	2325.1	23573.	6755.3
#2	5622.5	2333.4	23670.	6786.8
#3	5631.7	2338.7	23513.	6758.0

Zoom In
Zoom Out

Sample Name: FA60250-1 Acquired: 12/20/2018 10:54:51 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	.0388	.0372	.0039	.0000	6.402	-.0001	.0002	.0260
Stddev	.0004	.0038	.0004	.0002	.000	.027	.0001	.0003	.0002
%RSD	75.40	9.698	1.037	4.498	173.8	.4248	153.5	126.3	.7452
#1	-.0006	.0426	.0369	.0037	.0000	6.429	-.0001	.0003	.0258
#2	-.0001	.0350	.0376	.0039	.0000	6.401	-.0002	-.0001	.0262
#3	-.0008	.0388	.0370	.0040	.0000	6.375	.0001	.0004	.0259

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0166	.0606	3.392	1.019	.0439	.0000	7.768	.0007	-.0023
Stddev	.0006	.0013	.052	.013	.0004	.000	.016	.0004	.0014
%RSD	3.507	2.203	1.539	1.267	.8450	1987.	.2016	49.62	59.95
#1	.0172	.0591	3.359	1.008	.0437	-.0001	7.772	.0011	-.0010
#2	.0164	.0612	3.452	1.017	.0437	-.0001	7.751	.0003	-.0022
#3	.0161	.0616	3.366	1.033	.0443	.0001	7.782	.0008	-.0037

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0005	-.0012	1.496	.0006	.0268	.0026	-.0088	.0013	.0189
Stddev	.0025	.0012	.002	.0006	.0000	.0001	.0076	.0002	.0001
%RSD	518.4	103.1	.1493	100.7	.1748	4.270	86.13	16.92	.4576
#1	-.0018	-.0022	1.494	.0013	.0268	.0025	-.0001	.0011	.0190
#2	-.0020	-.0013	1.498	.0007	.0268	.0027	-.0127	.0014	.0190
#3	.0024	.0001	1.495	.0000	.0269	.0027	-.0137	.0015	.0188

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5595.2	2328.7	23354.	6758.0
Stddev	11.9	5.0	98.	65.4
%RSD	.21328	.21548	.41806	.96736
#1	5582.2	2323.7	23448.	6704.0
#2	5597.7	2328.8	23362.	6739.3
#3	5605.6	2333.7	23254.	6830.7

Zoom In Zoom Out

Sample Name: FA60163-1F Acquired: 12/20/2018 10:59:15 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	-.0179	.0005	.0113	-.0001	378.2	.0001	.0007	.0029
Stddev	.0006	.0038	.0011	.0001	.0000	3.1	.0001	.0000	.0010
%RSD	450.6	20.95	216.8	.9658	80.06	.8071	52.43	4.492	34.35
#1	-.0008	-.0198	-.0008	.0114	.0000	375.9	.0002	.0007	.0027
#2	.0001	-.0204	.0011	.0112	-.0001	381.6	.0001	.0007	.0020
#3	.0003	-.0136	.0012	.0112	.0000	376.9	.0001	.0007	.0039

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0391	.0039	32.44	F 1394.	.0008	.0016	*****	.0053	-.0031
Stddev	.0004	.0029	.47	11.	.0001	.0007	-----	.0007	.0016
%RSD	1.049	74.84	1.440	.7727	9.853	47.08	-----	12.39	51.54
#1	.0390	.0010	32.85	1383.	.0008	.0010	-----	.0059	-.0047
#2	.0388	.0068	32.54	1396.	.0007	.0024	-----	.0053	-.0015
#3	.0396	.0038	31.93	1404.	.0008	.0013	-----	.0046	-.0029

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0001	.4735	3.731	-.0019	F 10.11	.0014	.0035	-.0005	.0191
Stddev	.0012	.0037	.004	.0006	.07	.0002	.0076	.0005	.0001
%RSD	1581.	.7780	.1181	31.15	.6783	10.93	221.5	98.83	.6745
#1	-.0004	.4693	3.727	-.0020	10.04	.0012	.0001	-.0007	.0192
#2	-.0008	.4761	3.731	-.0025	10.13	.0015	-.0019	.0001	.0190
#3	.0014	.4753	3.736	-.0013	10.17	.0014	.0122	-.0009	.0192

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5423.1	2096.7	21133.	5943.9
Stddev	23.0	7.4	73.	87.4
%RSD	.42458	.35074	.34641	1.4696
#1	5397.1	2088.3	21113.	6037.1
#2	5431.4	2099.4	21215.	5930.5
#3	5440.8	2102.2	21073.	5864.0

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Zoom In Zoom Out

Sample Name: FA60163-4F Acquired: 12/20/2018 11:03:58 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0007	-.0259	.0003	.0124	-.0001	410.5	.0001	-.0002
Stddev	.0002	.0067	.0007	.0001	.0000	5.0	.0001	.0002
%RSD	28.95	25.80	210.4	.9681	69.92	1.219	46.87	85.64
#1	-.0005	-.0329	-.0001	.0125	.0000	414.9	.0001	-.0004
#2	-.0010	-.0254	.0011	.0123	-.0001	411.6	.0002	-.0002
#3	-.0007	-.0195	-.0001	.0124	-.0001	405.1	.0001	.0000

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0008	.0046	.0009	22.12	492.4	.0004	.0019	F 1588.
Stddev	.0004	.0004	.0018	.07	1.2	.0000	.0000	4.
%RSD	46.85	8.003	196.7	.3021	.2530	12.24	2.262	.2830
#1	.0005	.0049	.0000	22.16	493.7	.0004	.0018	1593.
#2	.0007	.0048	.0030	22.15	492.3	.0003	.0019	1584.
#3	.0013	.0042	-.0003	22.04	491.2	.0004	.0019	1586.

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0031	F -.0066	-.0003	.0439	3.744	-.0009	F 9.610	.0014
Stddev	.0001	.0006	.0009	.0018	.006	.0005	.044	.0002
%RSD	2.000	9.679	319.3	4.130	.1552	60.01	.4584	11.27
#1	.0031	-.0065	.0006	.0447	3.741	-.0009	9.580	.0015
#2	.0031	-.0060	-.0012	.0418	3.740	-.0013	9.660	.0016
#3	.0030	-.0072	-.0002	.0451	3.750	-.0003	9.588	.0013

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0039	.0000	.0095
Stddev	.0024	.001	.0001
%RSD	61.17	2296.	1.095
#1	-.0037	-.0005	.0095
#2	-.0016	.0001	.0096
#3	-.0063	.0004	.0094

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Zoom In Zoom Out

Sample Name: FA60163-4F Acquired: 12/20/2018 11:03:58 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5620.7	2211.9	22625.	6303.4
Stddev	13.1	3.4	43.	64.1
%RSD	.23378	.15238	.19120	1.0162
#1	5626.5	2213.3	22653.	6235.0
#2	5605.7	2208.1	22576.	6313.5
#3	5630.0	2214.4	22648.	6361.9

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Zoom In Zoom Out

Sample Name: FA60163-6F Acquired: 12/20/2018 11:08:48 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0002	-.0305	.0002	.0088	-.0001	444.7	.0000	.0012	-.0003
Stddev	.0010	.0185	.0003	.0001	.0000	5.7	.0001	.0003	.0007
%RSD	404.6	60.79	171.7	1.581	21.38	1.282	1083.	21.92	198.9
#1	.0009	-.0118	-.0001	.0088	-.0001	438.6	.0000	.0013	-.0011
#2	-.0008	-.0308	.0005	.0090	-.0001	449.9	-.0001	.0014	-.0001
#3	-.0009	-.0489	.0001	.0087	-.0001	445.5	.0001	.0009	.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0007	.0017	23.18	F 683.6	.4867	.0000	F 1262.	.0162	-.0047
Stddev	.0007	.0012	.01	4.0	.0020	.0007	17.	.0003	.0015
%RSD	93.57	70.53	.0419	.5855	.4022	2174.	1.314	1.967	31.96
#1	.0014	.0013	23.17	682.8	.4867	-.0001	1249.	.0166	-.0039
#2	.0000	.0031	23.19	687.9	.4887	-.0006	1280.	.0160	-.0064
#3	.0008	.0008	23.18	680.0	.4848	.0007	1255.	.0160	-.0038

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0000	.0029	3.847	-.0002	F 12.80	.0016	-.0036	-.0004	.0117
Stddev	.004	.0026	.006	.0006	.07	.0002	.0045	.0002	.0001
%RSD	8101.	91.55	.1667	230.4	.5352	14.26	126.0	58.06	1.097
#1	-.0022	.0011	3.855	-.0008	12.76	.0018	-.0072	-.0006	.0118
#2	-.0020	.0016	3.845	-.0002	12.88	.0013	.0014	-.0005	.0116
#3	.0040	.0059	3.842	.0003	12.76	.0016	-.0049	-.0001	.0118

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5574.3	2201.0	22494.	6284.2
Stddev	6.9	5.0	72.	36.4
%RSD	.12467	.22792	.31934	.57945
#1	5579.3	2200.0	22521.	6322.1
#2	5566.4	2196.6	22413.	6249.5
#3	5577.2	2206.5	22548.	6280.8

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Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 11:13:35 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2490	41.57	2.053	2.096	2.123	42.24	2.053	1.990	2.047
Stddev	.0012	.18	.005	.008	.014	.31	.005	.003	.005
%RSD	.4892	.4420	.2425	.3866	.6364	.7408	.2352	.1308	.2388
#1	.2503	41.66	2.055	2.097	2.134	42.51	2.049	1.987	2.050
#2	.2479	41.36	2.056	2.087	2.108	41.90	2.058	1.992	2.049
#3	.2489	41.69	2.047	2.104	2.126	42.31	2.053	1.990	2.041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.023	40.98	42.31	41.82	2.106	2.034	42.09	2.029	2.083
Stddev	.013	.21	.21	.29	.010	.002	.20	.003	.001
%RSD	.6271	.5206	.4933	.7034	.4552	.0983	.4822	.1599	.0649
#1	2.038	41.09	42.43	42.11	2.115	2.031	42.27	2.026	2.085
#2	2.018	40.73	42.06	41.52	2.108	2.035	41.87	2.032	2.084
#3	2.014	41.11	42.42	41.82	2.096	2.034	42.13	2.030	2.082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.049	1.988	1.991	2.068	2.161	2.118	2.077	2.128	2.056
Stddev	.001	.001	.004	.003	.009	.011	.007	.015	.003
%RSD	.0448	.0472	.1957	.1505	.3940	.5008	.3380	.6810	.1627
#1	2.050	1.987	1.988	2.065	2.167	2.129	2.069	2.143	2.052
#2	2.048	1.989	1.996	2.072	2.151	2.119	2.079	2.126	2.058
#3	2.048	1.987	1.990	2.068	2.165	2.107	2.083	2.114	2.057
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 11:13:35 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5661.7	2295.8	23425.	6713.1
Stddev	12.0	4.3	126.	90.3
%RSD	.21190	.18870	.53667	1.3458
#1	5660.0	2300.6	23359.	6618.6
#2	5674.5	2292.3	23345.	6798.6
#3	5650.7	2294.3	23570.	6722.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 11:17:46 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	-.0005	.0005	.0002	.0000	.0056	.0000	.0003
Stddev	.0007	.0064	.0009	.0002	.0000	.0021	.000	.0002
%RSD	212.6	1190.	191.9	88.85	987.6	36.77	584.2	70.75
#1	-.0002	-.0072	-.0005	.0004	.0000	.0040	.0000	.0002
#2	-.0011	.0000	.0008	.0001	.0001	.0079	.0000	.0006
#3	.0003	.0056	.0011	.0001	.0000	.0050	-.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0006	.0077	-.0616	.0189	.0001	.0007	.1899
Stddev	.0002	.0005	.0019	.0143	.0142	.0001	.0003	.0013
%RSD	73.98	73.31	24.69	23.29	75.01	45.32	42.39	.7038
#1	.0005	-.0002	.0099	-.0498	.0027	.0001	.0010	.1906
#2	.0001	-.0005	.0064	-.0776	.0290	.0002	.0005	.1883
#3	.0002	-.0011	.0068	-.0574	.0249	.0001	.0005	.1907
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	F -.0015	-.0013	-.0013	.0008	-.0003	.0002	.0009
Stddev	.0003	.0007	.0036	.0024	.0008	.0003	.0001	.0001
%RSD	184.6	44.19	273.1	183.7	94.25	115.6	40.49	16.67
#1	.0004	-.0010	-.0009	-.0027	.0008	-.0003	.0001	.0010
#2	.0003	-.0023	.0020	-.0027	.0016	.0001	.0003	.0007
#3	-.0002	-.0012	-.0051	.0015	.0001	-.0006	.0003	.0009
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010						
Low Limit		-.0010						

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 11:17:46 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F .0038	-.0001	-.0001
Stddev	.0062	.0005	.0002
%RSD	162.1	814.0	170.1
#1	.0086	.0003	.0000
#2	.0059	-.0006	.0000
#3	-.0031	.0001	-.0003
Check ?	Chk Fail	Chk Pass	Chk Pass
High Limit	.0020		
Low Limit	-.0020		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5622.1	2356.7	23523.	6723.1
Stddev	6.3	8.9	116.	45.1
%RSD	.11294	.37975	.49130	.67109
#1	5615.6	2346.8	23493.	6677.1
#2	5622.4	2359.4	23426.	6724.9
#3	5628.3	2364.1	23651.	6767.3

Zoom In
Zoom Out

Sample Name: FA60163-8F Acquired: 12/20/2018 11:22:14 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	-.0038	-.0008	.0109	.0000	49.22	.0000	.0001	.0007
Stddev	.0002	.0150	.0005	.0001	.000	.45	.000	.0001	.0000
%RSD	88.43	394.0	71.58	1.323	325.2	.9182	56.14	142.4	6.663
#1	.0004	.0077	-.0006	.0110	-.0001	49.50	.0000	.0002	.0008
#2	.0000	-.0207	-.0003	.0107	.0000	48.70	.0000	.0000	.0007
#3	.0003	.0016	-.0014	.0110	.0001	49.46	-.0001	.0001	.0007

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0017	.0099	8.160	24.26	.1247	.0008	F 1621.	.0024	-.0007
Stddev	.0004	.0035	.080	.26	.0006	.0003	24.	.0004	.0015
%RSD	23.83	35.18	.9774	1.052	.5210	38.51	1.488	17.52	206.8
#1	.0021	.0129	8.210	24.50	.1248	.0010	1633.	.0028	-.0019
#2	.0014	.0106	8.068	23.99	.1252	.0008	1593.	.0019	-.0012
#3	.0015	.0061	8.202	24.28	.1239	.0005	1636.	.0024	.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0012	-.0003	3.513	-.0001	3.364	.0023	-.0006	.0005	.0038
Stddev	.0025	.0021	.009	.0007	.032	.0001	.0016	.0003	.0000
%RSD	209.2	692.0	.2665	609.0	.9590	5.167	243.0	64.75	.4204
#1	.0016	-.0008	3.505	.0003	3.401	.0023	.0010	.0008	.0038
#2	-.0029	.0020	3.510	-.0009	3.348	.0022	-.0008	.0004	.0038
#3	-.0023	-.0021	3.523	.0002	3.343	.0024	-.0021	.0002	.0038

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5874.8	2351.5	23359.	6383.2
Stddev	21.5	7.1	141.	73.3
%RSD	.36577	.30359	.60312	1.1478
#1	5895.8	2359.2	23363.	6313.2
#2	5852.8	2345.1	23216.	6459.3
#3	5875.9	2350.2	23498.	6377.0

Zoom In
Zoom Out

Sample Name: FA60343-1 Acquired: 12/20/2018 11:26:54 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0007	-.0106	.0083	.0310	-.0001	76.83	.0000	-.0003	.0024
Stddev	.0006	.0239	.0011	.0004	.0001	.90	.0001	.0004	.0003
%RSD	95.05	224.2	12.96	1.149	187.6	1.168	168.7	144.3	14.63
#1	-.0001	-.0310	.0074	.0307	.0000	76.10	.0001	.0001	.0020
#2	-.0005	.0156	.0095	.0308	.0000	76.54	.0001	-.0006	.0027
#3	-.0014	-.0165	.0081	.0314	-.0002	77.83	.0000	-.0003	.0024

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0025	.0414	16.16	82.46	.0006	.0060	F 108.5	.0009	-.0009
Stddev	.0003	.0009	.11	1.07	.0001	.0002	1.3	.0003	.0015
%RSD	13.23	2.081	.7097	1.300	14.93	2.896	1.167	31.36	159.1
#1	.0022	.0418	16.12	81.76	.0006	.0062	107.6	.0009	-.0006
#2	.0026	.0404	16.06	81.92	.0005	.0061	108.0	.0012	-.0025
#3	.0029	.0419	16.29	83.69	.0007	.0058	109.9	.0006	.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0012	.0145	17.32	.0005	3.700	.0023	-.0087	.0540	.0195
Stddev	.0023	.0023	.04	.0007	.046	.0001	.0024	.0005	.0001
%RSD	193.9	15.52	.2315	121.7	1.231	3.847	27.35	.9822	.5763
#1	.0003	.0148	17.27	-.0001	3.650	.0024	-.0111	.0536	.0196
#2	-.0005	.0167	17.32	.0012	3.711	.0022	-.0088	.0546	.0193
#3	.0038	.0122	17.35	.0005	3.739	.0023	-.0063	.0538	.0195

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5586.9	2305.5	23440.	6496.3
Stddev	3.0	2.5	28.	57.8
%RSD	.05406	.10890	.11956	.88958
#1	5588.5	2307.4	23415.	6523.3
#2	5583.5	2306.5	23437.	6535.7
#3	5588.9	2302.7	23470.	6430.0

Zoom In
Zoom Out

Sample Name: FA60343-1 Acquired: 12/20/2018 11:31:25 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	-.0320	.0061	.0332	-.0002	80.50	-.0001	-.0001	.0028
Stddev	.0004	.0211	.0041	.0005	.0002	.35	.0001	.0002	.0003
%RSD	586.8	66.08	67.99	1.446	126.6	.4317	159.3	341.4	9.591
#1	.0000	-.0562	.0097	.0333	-.0003	80.19	-.0001	.0001	.0026
#2	.0003	-.0177	.0016	.0337	.0001	80.43	-.0002	-.0003	.0026
#3	-.0005	-.0219	.0069	.0327	-.0002	80.88	.0001	.0000	.0031

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0016	.0432	16.56	86.96	.0008	.0046	114.2	.0015	-.0047
Stddev	.0004	.0067	.04	.57	.0001	.0004	.2	.0008	.0027
%RSD	26.50	15.61	.2124	.6522	6.925	8.642	.1348	54.56	57.95
#1	.0018	.0507	16.53	86.44	.0007	.0048	114.0	.0010	-.0035
#2	.0017	.0410	16.60	86.87	.0008	.0049	114.1	.0024	-.0027
#3	.0011	.0378	16.55	87.56	.0008	.0041	114.3	.0010	-.0078

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0027	.0090	17.57	.0004	3.993	.0034	-.0066	.0565	.0208
Stddev	.0043	.0027	.20	.0007	.004	.0002	.0041	.0004	.0003
%RSD	161.4	30.27	1.145	172.8	.1045	4.739	61.47	.7387	1.466
#1	-.0059	.0118	17.77	.0009	3.991	.0036	-.0099	.0563	.0204
#2	.0022	.0064	17.57	.0007	3.998	.0035	-.0021	.0570	.0208
#3	-.0042	.0086	17.37	-.0004	3.990	.0033	-.0079	.0563	.0211

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5624.6	2333.0	23415.	6533.8
Stddev	13.1	5.8	122.	78.1
%RSD	.23363	.24750	.51954	1.1956
#1	5609.8	2329.4	23333.	6604.4
#2	5629.3	2330.0	23555.	6547.1
#3	5634.8	2339.7	23357.	6449.9

Zoom In
Zoom Out

Sample Name: FA60343-2 Acquired: 12/20/2018 11:35:48 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	-.0115	.0064	.0332	.0000	76.95	.0002	-.0003	.0007
Stddev	.0003	.0141	.0005	.0002	.000	.52	.0002	.0001	.0002
%RSD	68.55	122.8	8.152	.6565	108.1	.6731	87.88	37.14	28.71
#1	-.0003	-.0272	.0061	.0330	-.0001	76.51	.0000	-.0002	.0007
#2	-.0009	-.0001	.0061	.0334	-.0001	77.52	.0003	-.0004	.0009
#3	-.0003	-.0071	.0070	.0332	.0000	76.81	.0002	-.0002	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0025	.0014	16.01	81.91	.0034	.0010	F 108.2	.0005	.0008
Stddev	.0006	.0032	.10	.65	.0000	.0004	.6	.0002	.0003
%RSD	23.90	236.2	.6410	.7910	.7556	35.30	.5475	31.39	43.48
#1	.0032	-.0008	15.91	81.33	.0034	.0008	107.8	.0005	.0012
#2	.0024	.0051	16.11	82.61	.0034	.0009	108.9	.0007	.0005
#3	.0020	-.0002	16.00	81.80	.0034	.0014	107.9	.0004	.0006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0006	.0128	17.43	.0006	3.723	.0023	-.0068	.0074	.0089
Stddev	.0016	.0038	.02	.0003	.088	.0002	.0033	.0004	.0000
%RSD	265.2	29.83	.1173	53.99	2.358	7.982	49.09	5.141	.3426
#1	-.0007	.0155	17.45	.0010	3.702	.0021	-.0057	.0078	.0088
#2	.0011	.0084	17.44	.0006	3.819	.0024	-.0042	.0073	.0089
#3	-.0022	.0145	17.41	.0003	3.647	.0025	-.0106	.0071	.0089

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5619.2	2312.3	23592.	6615.8
Stddev	13.5	1.9	101.	57.1
%RSD	.24032	.08353	.42811	.86254
#1	5631.8	2314.1	23512.	6650.3
#2	5620.8	2312.5	23559.	6549.9
#3	5605.0	2310.3	23705.	6647.1

Zoom In Zoom Out

Sample Name: FA60343-2 Acquired: 12/20/2018 11:40:20 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0011	-.0394	.0066	.0333	-.0002	79.13	.0000	.0002	-.0002
Stddev	.0009	.0127	.0027	.0004	.0001	.52	.0004	.0007	.0002
%RSD	82.25	32.33	41.73	1.308	84.02	.6624	746.8	297.0	165.6
#1	-.0001	-.0461	.0064	.0338	-.0001	79.69	-.0003	.0003	-.0003
#2	-.0018	-.0473	.0039	.0331	-.0001	78.66	.0000	.0009	-.0003
#3	-.0015	-.0247	.0094	.0330	-.0003	79.04	.0004	-.0005	.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0017	-.0019	16.11	84.03	.0035	.0000	110.7	.0004	-.0016
Stddev	.0001	.0049	.13	.44	.0001	.0005	.8	.0005	.0033
%RSD	4.786	257.8	.7897	.5274	2.560	6208.	.7345	132.6	209.4
#1	.0016	-.0022	16.17	84.52	.0034	-.0004	111.5	.0001	-.0018
#2	.0017	.0031	15.96	83.66	.0036	.0000	109.9	.0001	-.0048
#3	.0017	-.0067	16.19	83.91	.0035	.0005	110.6	.0010	.0018

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0047	.0107	17.29	-.0004	3.869	.0032	-.0034	.0077	.0088
Stddev	.0012	.0025	.05	.0024	.022	.0002	.0050	.0004	.0001
%RSD	25.45	22.96	.2789	623.2	.5801	6.945	147.4	5.232	1.003
#1	-.0058	.0089	17.32	-.0028	3.893	.0034	-.0090	.0073	.0088
#2	-.0048	.0096	17.31	-.0003	3.848	.0031	-.0015	.0078	.0088
#3	-.0034	.0135	17.23	.0019	3.865	.0030	.0004	.0080	.0089

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5615.0	2326.0	23429.	6571.0
Stddev	16.1	13.0	50.	16.0
%RSD	.28633	.55834	.21158	.24369
#1	5626.7	2327.6	23474.	6556.5
#2	5596.6	2312.3	23436.	6568.4
#3	5621.5	2338.2	23375.	6588.2

Zoom In Zoom Out

Sample Name: FA60343-3 Acquired: 12/20/2018 11:44:44 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	-.0241	.0059	.0332	-.0001	78.58	.0001	-.0002	.0007
Stddev	.001	.0031	.0016	.0002	.0001	.74	.0001	.0001	.0006
%RSD	10090.	12.78	27.78	.5163	117.4	.9460	184.8	49.35	95.00
#1	.0012	-.0213	.0070	.0332	-.0001	78.26	.0000	-.0001	.0006
#2	-.0008	-.0234	.0040	.0331	.0000	78.06	.0001	-.0002	.0001
#3	-.0004	-.0274	.0068	.0334	-.0001	79.43	.0002	-.0003	.0013

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0003	.0159	16.26	83.61	.0036	.0002	F 109.5	.0005	.0012
Stddev	.0004	.0016	.09	.82	.0001	.0004	1.1	.0002	.0029
%RSD	130.3	10.19	.5673	.9762	2.769	153.3	.9725	35.79	240.2
#1	.0000	.0150	16.18	83.13	.0037	-.0002	108.9	.0004	.0007
#2	-.0008	.0149	16.23	83.15	.0036	.0004	108.8	.0004	.0043
#3	-.0002	.0178	16.36	84.56	.0035	.0006	110.7	.0007	-.0014

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0013	.0121	17.40	.0004	3.809	.0022	-.0070	.0026	.0123
Stddev	.0010	.0026	.02	.0007	.074	.0002	.0045	.0003	.0001
%RSD	72.52	21.85	.1001	174.7	1.956	8.435	64.54	12.46	.6062
#1	.0006	.0142	17.42	.0008	3.837	.0022	-.0078	.0026	.0123
#2	.0024	.0091	17.38	.0007	3.724	.0024	-.0111	.0023	.0124
#3	.0010	.0130	17.41	-.0004	3.865	.0020	-.0022	.0029	.0122

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5574.8	2303.4	23335.	6501.5
Stddev	13.1	3.6	164.	67.4
%RSD	.23441	.15418	.70333	1.0366
#1	5559.7	2299.5	23151.	6519.0
#2	5582.9	2304.3	23466.	6558.3
#3	5581.7	2306.4	23387.	6427.0

Zoom In Zoom Out

Sample Name: FA60343-3 Acquired: 12/20/2018 11:49:17 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0010	-.0338	.0038	.0348	-.0001	81.24	.0000	-.0002	.0004
Stddev	.0005	.0170	.0012	.0007	.0002	.54	.0003	.0001	.0002
%RSD	47.31	50.22	31.93	2.063	165.3	.6658	1898.	43.18	46.67
#1	-.0006	-.0177	.0052	.0341	.0000	80.99	.0002	-.0002	.0002
#2	-.0016	-.0322	.0028	.0347	.0000	80.87	-.0003	-.0001	.0005
#3	-.0009	-.0516	.0036	.0355	-.0004	81.86	.0001	-.0003	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0012	.0164	16.55	86.79	.0038	.0002	113.3	.0008	-.0017
Stddev	.0008	.0046	.09	.47	.0001	.0008	.6	.0005	.0013
%RSD	61.65	28.21	.5711	.5376	2.057	327.0	.5273	56.49	74.57
#1	-.0020	.0173	16.46	86.66	.0039	-.0002	113.4	.0003	-.0003
#2	-.0005	.0206	16.54	86.40	.0037	.0012	112.7	.0009	-.0022
#3	-.0013	.0114	16.65	87.31	.0037	-.0003	113.9	.0013	-.0027

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0027	.0127	17.35	-.0006	4.009	.0035	-.0098	.0024	.0120
Stddev	.0044	.0023	.14	.0015	.021	.0002	.0062	.0007	.0003
%RSD	163.6	17.97	.7800	266.4	.5353	5.773	62.71	29.50	2.531
#1	-.0014	.0136	17.50	-.0021	4.013	.0035	-.0154	.0026	.0120
#2	.0021	.0144	17.30	.0010	3.986	.0036	-.0032	.0030	.0123
#3	.0073	.0101	17.25	-.0006	4.029	.0032	-.0110	.0016	.0117

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5631.0	2335.0	23419.	6498.9
Stddev	5.4	3.2	144.	59.2
%RSD	.09586	.13676	.61671	.91169
#1	5633.2	2336.3	23293.	6557.5
#2	5624.9	2331.4	23577.	6500.1
#3	5635.0	2337.4	23386.	6439.0

Zoom In Zoom Out

Sample Name: FA60343-4 Acquired: 12/20/2018 11:53:40 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0003	-.0029	.0050	.0327	-.0001	77.51	.0001	.0000	.0007
Stddev	.0006	.0035	.0012	.0004	.0001	.28	.0001	.000	.0002
%RSD	215.3	121.0	23.64	1.138	88.80	.3666	80.52	82460.	30.01
#1	-.0009	.0007	.0037	.0323	-.0001	77.72	.0002	.0002	.0005
#2	.0003	-.0062	.0056	.0328	-.0001	77.64	.0001	-.0002	.0007
#3	-.0002	-.0032	.0058	.0330	.0000	77.19	.0000	.0000	.0010

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0160	-.0009	16.08	82.77	.0038	.0003	F 109.1	.0008	-.0013
Stddev	.0006	.0009	.07	.23	.0000	.0003	.5	.0005	.0016
%RSD	3.767	100.2	.4103	.2788	.5515	117.2	.4878	54.41	123.0
#1	.0162	-.0014	16.14	83.01	.0038	.0006	109.4	.0010	.0005
#2	.0166	-.0014	16.07	82.77	.0038	.0000	109.5	.0003	-.0019
#3	.0154	.0001	16.01	82.54	.0038	.0002	108.5	.0012	-.0025

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0012	.0011	17.16	.0006	3.692	.0023	-.0062	.0011	.0355
Stddev	.0012	.0011	.02	.0002	.083	.0001	.0065	.0006	.0001
%RSD	103.1	99.39	.1268	23.90	2.256	4.299	105.2	52.72	.3720
#1	-.0004	.0023	17.13	.0006	3.782	.0024	-.0128	.0017	.0356
#2	-.0026	.0010	17.16	.0008	3.676	.0022	-.0057	.0010	.0356
#3	-.0006	.0001	17.17	.0005	3.618	.0023	.0001	.0006	.0354

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5628.4	2315.7	23420.	6554.4
Stddev	19.2	9.2	174.	35.1
%RSD	.34180	.39861	.74202	.53607
#1	5629.3	2321.0	23238.	6528.8
#2	5608.7	2305.1	23439.	6594.5
#3	5647.2	2321.1	23584.	6540.0

Zoom In Zoom Out

Sample Name: FA60343-4 Acquired: 12/20/2018 11:58:12 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0017	-.0151	.0076	.0342	-.0001	79.60	-.0002	.0000	.0009
Stddev	.0006	.0273	.0023	.0002	.0002	.50	.0003	.0005	.0002
%RSD	33.43	180.3	30.93	.4465	177.2	.6300	126.2	1233.	16.64
#1	-.0011	-.0459	.0089	.0343	.0000	80.14	.0001	.0002	.0010
#2	-.0022	.0061	.0049	.0343	-.0003	79.50	-.0002	.0004	.0008
#3	-.0019	-.0056	.0090	.0341	.0000	79.15	-.0004	-.0005	.0010

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0139	-.0024	16.29	85.48	.0040	-.0007	112.1	.0009	-.0026
Stddev	.0003	.0051	.03	.56	.0002	.0007	.7	.0005	.0038
%RSD	2.320	212.7	.1616	.6519	5.191	104.4	.5850	54.22	144.9
#1	.0136	.0028	16.30	86.05	.0038	-.0013	112.8	.0005	-.0044
#2	.0143	-.0074	16.26	85.46	.0042	-.0008	112.2	.0008	.0017
#3	.0140	-.0027	16.31	84.94	.0041	.0001	111.5	.0015	-.0052

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0009	-.0016	17.35	.0012	3.918	.0033	-.0148	.0008	.0364
Stddev	.0023	.0047	.05	.0018	.027	.0005	.0067	.0000	.0000
%RSD	254.3	294.3	.2870	154.8	.6826	13.78	45.61	4.032	.0492
#1	.0022	-.0069	17.40	-.0009	3.945	.0038	-.0070	.0008	.0364
#2	-.0018	.0000	17.32	.0022	3.917	.0032	-.0191	.0008	.0364
#3	.0023	.0021	17.31	.0022	3.892	.0029	-.0182	.0009	.0364

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5617.7	2334.4	23436.	6537.3
Stddev	4.9	3.1	95.	52.7
%RSD	.08695	.13427	.40378	.80574
#1	5621.6	2332.6	23543.	6481.8
#2	5612.2	2332.6	23362.	6543.5
#3	5619.1	2338.0	23403.	6586.6

Zoom In Zoom Out

Sample Name: FA60343-5 Acquired: 12/20/2018 12:02:35 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	-.0026	.0076	.0325	.0000	76.80	.0001	-.0001	.0010
Stddev	.0004	.0023	.0002	.0002	.0000	.87	.0001	.0002	.0006
%RSD	75.16	90.57	2.818	.7223	407.1	1.129	180.3	193.4	58.57
#1	-.0001	-.0051	.0074	.0326	.0001	76.97	.0000	-.0003	.0007
#2	-.0008	-.0006	.0076	.0322	.0000	75.86	.0001	.0001	.0007
#3	-.0005	-.0020	.0078	.0327	.0000	77.57	.0001	-.0001	.0017

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0031	.0055	16.00	82.53	.0038	.0002	F 109.0	.0011	-.0002
Stddev	.0003	.0004	.14	.77	.0000	.0002	1.0	.0005	.0043
%RSD	9.721	7.994	.9011	.9299	1.307	106.3	.8947	44.00	1733.
#1	.0028	.0059	16.06	82.70	.0038	.0003	109.2	.0014	.0012
#2	.0034	.0055	15.83	81.68	.0038	.0002	108.0	.0013	.0032
#3	.0031	.0050	16.09	83.19	.0037	.0000	109.9	.0005	-.0051

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0013	.0003	17.10	.0007	3.757	.0021	-.0086	.0018	.0092
Stddev	.0019	.0028	.02	.0001	.016	.0002	.0024	.0001	.0000
%RSD	145.8	832.9	.1414	16.89	.4250	9.075	27.78	7.532	.2203
#1	-.0006	-.0018	17.12	.0007	3.751	.0021	-.0074	.0020	.0092
#2	.0002	.0034	17.09	.0006	3.775	.0024	-.0071	.0018	.0093
#3	-.0035	-.0006	17.08	.0008	3.744	.0020	-.0114	.0017	.0092

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5593.2	2313.7	23302.	6402.5
Stddev	2.8	4.7	88.	28.8
%RSD	.04923	.20380	.37652	.45044
#1	5590.2	2310.8	23370.	6373.9
#2	5593.6	2311.1	23332.	6431.6
#3	5595.7	2319.1	23203.	6402.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 12:07:08 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2493	41.98	2.067	2.103	2.144	42.82	2.064	1.997	2.063
Stddev	.0003	.12	.009	.004	.004	.16	.005	.004	.004
%RSD	.1291	.2881	.4326	.1776	.2072	.3829	.2560	.1737	.1897
#1	.2497	42.04	2.078	2.104	2.148	42.99	2.070	1.999	2.060
#2	.2491	42.05	2.062	2.098	2.140	42.83	2.060	1.993	2.063
#3	.2491	41.84	2.062	2.105	2.143	42.66	2.062	1.999	2.068
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.053	41.42	43.03	42.31	2.125	2.049	43.06	2.039	2.092
Stddev	.004	.07	.16	.13	.002	.004	.11	.004	.001
%RSD	.2062	.1668	.3753	.3092	.0784	.2170	.2438	.2117	.0631
#1	2.057	41.49	43.11	42.33	2.126	2.050	43.12	2.044	2.091
#2	2.049	41.36	43.14	42.42	2.126	2.044	43.12	2.036	2.093
#3	2.055	41.40	42.85	42.16	2.123	2.052	42.94	2.039	2.092
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.066	2.005	2.005	2.078	2.182	2.147	2.096	2.172	2.068
Stddev	.001	.005	.004	.004	.005	.002	.009	.008	.005
%RSD	.0701	.2681	.2187	.1864	.2462	.0940	.4243	.3684	.2652
#1	2.067	2.004	2.008	2.079	2.186	2.144	2.088	2.163	2.073
#2	2.067	2.000	2.000	2.074	2.176	2.148	2.106	2.175	2.062
#3	2.065	2.010	2.007	2.081	2.185	2.147	2.094	2.178	2.069
Check ? Value Range	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 12:07:08 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5683.4	2294.7	23344.	6602.8
Stddev	11.5	5.9	107.	66.6
%RSD	.20278	.25712	.46040	1.0082
#1	5682.0	2288.7	23468.	6580.1
#2	5672.6	2300.5	23285.	6550.6
#3	5695.5	2294.8	23278.	6677.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 12:11:18 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0067	.0004	.0003	.0001	.0032	-.0001	.0002
Stddev	.0009	.0176	.0004	.0002	.0000	.0013	.0001	.0001
%RSD	408.0	263.7	90.92	69.68	36.99	39.71	74.28	36.88
#1	-.0007	-.0038	.0007	.0005	.0001	.0042	.0000	.0003
#2	.0003	-.0256	.0006	.0001	.0001	.0037	-.0002	.0001
#3	.0012	.0093	.0000	.0004	.0001	.0018	-.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0007	.0109	-.0554	.0105	.0001	.0005	.0772
Stddev	.0001	.0003	.0005	.0282	.0150	.0001	.0006	.0111
%RSD	41.80	45.03	4.804	50.82	142.1	71.10	137.6	14.36
#1	.0002	-.0007	.0112	-.0371	-.0066	.0001	.0011	.0855
#2	.0001	-.0004	.0112	-.0413	.0169	.0001	.0004	.0815
#3	.0002	-.0011	.0103	-.0878	.0213	.0002	-.0001	.0646
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	F -.0020	F .0024	-.0008	.0011	.0004	.0002	.0012
Stddev	.0004	.0015	.0022	.0008	.0010	.0006	.0001	.0003
%RSD	175.0	75.49	90.50	104.5	87.07	154.5	33.62	24.18
#1	-.0001	-.0003	.0047	.0000	.0006	-.0003	.0002	.0011
#2	.0001	-.0024	.0003	-.0016	.0022	.0009	.0002	.0009
#3	-.0006	-.0032	.0023	-.0007	.0005	.0005	.0001	.0015
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010	.0020					
Low Limit		-.0010	-.0020					

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 12:11:18 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F -.0025	.0002	-.0001
Stddev	.0020	.0004	.0001
%RSD	82.39	214.8	70.84
#1	-.0001	.0005	-.0001
#2	-.0034	-.0003	.0000
#3	-.0039	.0004	-.0002
Check ?	Chk Fail	Chk Pass	Chk Pass
High Limit	.0020		
Low Limit	-.0020		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5626.0	2365.5	23447.	6701.4
Stddev	11.5	3.0	49.	28.5
%RSD	.20412	.12828	.21050	.42552
#1	5639.3	2368.8	23400.	6734.2
#2	5619.9	2362.9	23498.	6687.7
#3	5618.9	2364.9	23443.	6682.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 12:29:52 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2443	40.11	1.981	2.019	2.026	40.31	1.995	1.978	2.000
Stddev	.0022	.22	.003	.008	.014	.31	.003	.001	.009
%RSD	.9053	.5527	.1521	.3807	.6773	.7573	.1291	.0605	.4387
#1	.2458	40.06	1.981	2.018	2.028	40.27	1.993	1.978	2.009
#2	.2418	39.91	1.984	2.012	2.011	40.02	1.994	1.979	1.992
#3	.2454	40.35	1.978	2.027	2.038	40.63	1.998	1.976	1.999
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.974	40.43	39.93	40.28	2.028	1.999	40.11	1.986	2.008
Stddev	.002	.25	.35	.22	.009	.004	.31	.003	.002
%RSD	.1235	.6064	.8677	.5504	.4459	.1771	.7753	.1358	.1129
#1	1.975	40.28	40.01	40.21	2.038	2.001	40.15	1.986	2.005
#2	1.975	40.30	39.55	40.10	2.021	2.001	39.78	1.983	2.009
#3	1.971	40.71	40.23	40.52	2.024	1.995	40.40	1.988	2.009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.970	1.961	1.928	2.027	2.055	2.040	2.002	2.030	1.996
Stddev	.006	.004	.003	.001	.015	.005	.003	.015	.003
%RSD	.3126	.2114	.1501	.0352	.7035	.2567	.1424	.7180	.1420
#1	1.969	1.956	1.928	2.027	2.057	2.046	2.003	2.047	1.994
#2	1.964	1.963	1.926	2.027	2.040	2.037	2.005	2.021	1.995
#3	1.976	1.964	1.932	2.028	2.068	2.038	1.999	2.022	1.999
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 12:29:52 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5651.4	2300.1	23321.	6564.5
Stddev	15.7	4.8	107.	30.2
%RSD	.27857	.20882	.45678	.46034
#1	5647.4	2298.9	23199.	6577.7
#2	5668.7	2305.4	23393.	6586.0
#3	5638.0	2296.0	23371.	6530.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 12:34:56 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	-.0164	-.0009	.0000	.0001	.0031	.0000	.0002
Stddev	.0011	.0125	.0010	.0001	.0000	.0023	.0001	.0003
%RSD	170.8	76.49	101.7	460.6	33.06	74.61	327.7	114.7
#1	-.0010	-.0232	-.0018	.0000	.0001	.0054	.0001	.0006
#2	-.0015	-.0240	-.0011	-.0001	.0001	.0030	-.0001	.0002
#3	.0006	-.0019	.0001	.0002	.0001	.0008	.0002	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0006	.0111	.0573	.0178	.0001	F .0013	-.0194
Stddev	.0004	.0003	.0014	.0141	.0150	.0000	.0004	.0084
%RSD	328.5	53.77	12.74	24.68	84.22	11.37	30.18	43.35
#1	.0001	-.0010	.0120	.0734	.0222	.0001	.0017	-.0197
#2	-.0003	-.0003	.0094	.0470	.0301	.0001	.0013	-.0108
#3	.0006	-.0006	.0118	.0516	.0011	.0001	.0009	-.0276
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	F -.0014	.0013	-.0009	-.0010	-.0002	.0001	.0014
Stddev	.0003	.0010	.0017	.0015	.0010	.0004	.0000	.0002
%RSD	225.2	71.09	132.0	173.7	101.4	234.7	57.59	12.64
#1	.0002	-.0010	.0002	-.0022	-.0001	.0002	.0000	.0014
#2	.0005	-.0025	.0004	-.0013	-.0021	-.0006	.0001	.0012
#3	-.0002	-.0007	.0032	.0008	-.0008	-.0002	.0001	.0016
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010						
Low Limit		-.0010						

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 12:34:56 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0013	.0003	.0001
Stddev	.0026	.0003	.0000
%RSD	205.9	91.66	13.14
#1	.0011	.0006	.0001
#2	-.0013	.0004	.0001
#3	.0040	.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5564.7	2350.9	23438.	6540.9
Stddev	9.2	2.8	97.	78.7
%RSD	.16595	.11737	.41531	1.2029
#1	5574.6	2352.6	23517.	6625.0
#2	5556.3	2352.3	23329.	6528.4
#3	5563.1	2347.7	23469.	6469.1

Zoom In Zoom Out

Sample Name: FA60343-5 Acquired: 12/20/2018 12:38:42 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0015	-.0052	.0038	.0316	-.0001	72.63	.0003	.0000	.0002
Stddev	.0007	.0263	.0020	.0001	.0000	.09	.0002	.0002	.0005
%RSD	48.56	509.1	51.79	.2358	63.25	.1245	64.49	10170.	322.0
#1	-.0023	.0192	.0059	.0315	-.0001	72.68	.0003	-.0002	-.0002
#2	-.0013	-.0016	.0020	.0316	.0000	72.67	.0005	.0002	-.0001
#3	-.0009	-.0331	.0036	.0315	-.0001	72.52	.0001	.0000	.0007

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0040	.0118	14.86	79.62	.0038	.0013	101.7	.0006	.0030
Stddev	.0013	.0054	.07	.02	.0001	.0004	.1	.0002	.0035
%RSD	33.31	45.81	.4840	.0226	1.894	29.53	.1230	33.65	116.5
#1	.0033	.0102	14.94	79.61	.0039	.0015	101.8	.0004	.0045
#2	.0056	.0179	14.81	79.64	.0038	.0008	101.8	.0006	.0055
#3	.0032	.0074	14.83	79.61	.0037	.0015	101.6	.0008	-.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0003	.0030	16.49	.0010	3.570	.0051	-.0058	.0025	.0098
Stddev	.0024	.0052	.02	.0010	.003	.0003	.0039	.0016	.0002
%RSD	896.1	172.4	.1204	106.8	.0788	6.227	67.83	62.77	1.627
#1	.0013	-.0003	16.49	-.0002	3.568	.0054	-.0102	.0014	.0097
#2	.0010	.0004	16.52	.0017	3.573	.0048	-.0028	.0044	.0097
#3	-.0031	.0091	16.48	.0014	3.568	.0051	-.0043	.0018	.0099

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5661.4	2352.6	23693.	6543.4
Stddev	14.2	6.8	105.	19.1
%RSD	.25023	.29115	.44516	.29223
#1	5652.9	2349.0	23762.	6562.9
#2	5653.5	2348.3	23572.	6524.7
#3	5677.7	2360.5	23746.	6542.5

Zoom In Zoom Out

Sample Name: FA60343-6 Acquired: 12/20/2018 12:43:07 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	.0050	.0056	.0295	-.0001	65.64	.0002	.0001	.0014
Stddev	.0005	.0041	.0006	.0003	.0001	.28	.0002	.0002	.0002
%RSD	111.1	82.79	10.77	1.179	68.10	.4342	81.23	203.6	17.54
#1	-.0009	.0034	.0051	.0297	-.0001	65.40	.0001	.0003	.0013
#2	-.0005	.0018	.0063	.0291	-.0001	65.95	.0001	.0001	.0013
#3	.0001	.0096	.0056	.0298	.0000	65.56	.0004	-.0001	.0017

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0583	.0111	14.89	79.50	.0046	.0048	F 107.8	.0039	.0004
Stddev	.0006	.0011	.06	.38	.0001	.0003	.3	.0003	.0011
%RSD	.9686	9.542	.4201	.4782	1.189	5.998	.2616	6.826	249.2
#1	.0589	.0111	14.85	79.17	.0046	.0047	107.7	.0042	-.0007
#2	.0583	.0121	14.97	79.92	.0045	.0046	108.0	.0038	.0014
#3	.0577	.0100	14.87	79.41	.0046	.0051	107.5	.0037	.0006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0015	.0098	15.97	.0008	3.211	.0025	-.0085	.0322	.0194
Stddev	.0021	.0025	.03	.0005	.042	.0002	.0052	.0004	.0001
%RSD	134.7	25.24	.1916	63.26	1.322	8.210	61.12	1.235	.3864
#1	.0006	.0099	16.00	.0003	3.163	.0027	-.0029	.0323	.0194
#2	-.0018	.0123	15.94	.0013	3.231	.0023	-.0131	.0325	.0195
#3	-.0034	.0073	15.98	.0007	3.240	.0026	-.0094	.0317	.0194

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5621.4	2326.9	23497.	6428.3
Stddev	12.7	2.8	37.	40.4
%RSD	.22511	.12051	.15735	.62921
#1	5636.0	2330.1	23457.	6472.4
#2	5613.4	2325.0	23507.	6393.0
#3	5614.8	2325.6	23529.	6419.6

Zoom In Zoom Out

Sample Name: FA60343-6 Acquired: 12/20/2018 12:47:37 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0012	-.0136	.0034	.0302	-.0001	66.53	.0000	-.0003	.0019
Stddev	.0018	.0264	.0019	.0003	.0001	.52	.0002	.0002	.0009
%RSD	149.3	194.3	55.81	.9219	125.4	.7767	1148.	60.43	45.38
#1	-.0004	-.0151	.0018	.0304	.0000	67.12	.0002	-.0001	.0011
#2	-.0033	.0135	.0030	.0304	-.0001	66.25	.0000	-.0003	.0028
#3	.0001	-.0391	.0056	.0299	-.0001	66.20	-.0002	-.0005	.0018

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0569	.0087	14.96	81.28	.0047	.0037	109.3	.0039	-.0017
Stddev	.0008	.0035	.04	.42	.0001	.0001	.8	.0008	.0044
%RSD	1.328	39.57	.2555	.5110	1.948	3.886	.6888	20.26	252.1
#1	.0577	.0053	14.98	81.76	.0048	.0037	110.1	.0031	-.0067
#2	.0567	.0122	14.99	81.10	.0047	.0039	108.9	.0046	-.0002
#3	.0563	.0086	14.92	80.99	.0046	.0036	108.8	.0039	.0016

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0021	.0117	16.06	.0001	3.335	.0037	-.0063	.0335	.0206
Stddev	.0020	.0063	.06	.0001	.022	.0003	.0065	.0007	.0001
%RSD	99.49	53.62	.3842	125.7	.6585	8.217	102.2	2.210	.5610
#1	.0027	.0181	16.05	.0003	3.361	.0040	.0004	.0343	.0207
#2	-.0002	.0114	16.00	.0000	3.326	.0034	-.0068	.0329	.0205
#3	.0037	.0056	16.12	.0001	3.320	.0037	-.0126	.0332	.0206

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5623.4	2341.6	23513.	6467.8
Stddev	7.7	6.8	80.	39.5
%RSD	.13766	.28852	.34082	.61032
#1	5632.3	2347.1	23425.	6427.7
#2	5618.4	2343.6	23532.	6506.6
#3	5619.4	2334.0	23582.	6469.2

Zoom In Zoom Out

Sample Name: MP34829-MB1 Acquired: 12/20/2018 12:52:02 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	-.0014	-.0017	.0010	-.0001	.0092	.0000	-.0002
Stddev	.0002	.0029	.0010	.0003	.0001	.0012	.0001	.0002
%RSD	39.76	209.9	57.77	30.24	92.10	13.34	287.8	114.6
#1	-.0006	.0000	-.0020	.0007	.0000	.0080	.0001	-.0003
#2	-.0007	-.0047	-.0026	.0010	-.0001	.0093	.0000	-.0003
#3	-.0003	.0005	-.0006	.0013	-.0001	.0104	.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	-.0002	.1255	.0396	.0065	.0002	.0000	.0068
Stddev	.0003	.0005	.0019	.0304	.0059	.0001	.0002	.0023
%RSD	34.93	243.4	1.546	76.85	90.95	39.00	585.3	32.88
#1	.0012	.0001	.1235	.0518	-.0002	.0003	.0000	.0094
#2	.0008	-.0008	.1274	.0620	.0108	.0001	-.0001	.0058
#3	.0006	.0000	.1256	.0050	.0088	.0002	.0002	.0053
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	F -.0038	.0003	.0007	.0337	.0003	.0001	.0002
Stddev	.0001	.0019	.0003	.0034	.0016	.0001	.0001	.0001
%RSD	92.67	51.86	110.7	471.7	4.678	52.25	60.43	57.58
#1	.0002	-.0015	.0002	.0038	.0320	.0002	.0002	.0003
#2	.0001	-.0046	.0006	.0012	.0339	.0004	.0001	.0002
#3	.0000	-.0051	.0000	-.0029	.0352	.0002	.0001	.0001
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0025						
Low Limit		-.0025						

Zoom In Zoom Out

Sample Name: MP34829-MB1 Acquired: 12/20/2018 12:52:02 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F -.0054	-.0002	.0012
Stddev	.0004	.0001	.0001
%RSD	8.295	37.50	10.05
#1	-.0052	-.0001	.0012
#2	-.0051	-.0003	.0011
#3	-.0059	-.0002	.0013
Check ?	Chk Fail	Chk Pass	Chk Pass
High Limit	.0050		
Low Limit	-.0050		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5492.4	2316.5	23198.	6612.5
Stddev	14.5	5.4	65.	30.7
%RSD	.26332	.23448	.27909	.46462
#1	5477.5	2316.8	23143.	6643.8
#2	5493.2	2310.9	23183.	6582.4
#3	5506.4	2321.8	23269.	6611.3

Zoom In Zoom Out

Sample Name: MP34829-B1 Acquired: 12/20/2018 12:56:30 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0489	26.69	1.925	2.008	.0507	25.09	.0487	.4857	.2021
Stddev	.0014	.10	.003	.012	.0003	.13	.0001	.0007	.0008
%RSD	2.906	.3619	.1427	.5792	.5180	.5016	.3016	.1435	.3879
#1	.0474	26.78	1.927	2.019	.0510	25.23	.0487	.4857	.2024
#2	.0503	26.59	1.924	1.996	.0506	25.00	.0488	.4864	.2012
#3	.0490	26.69	1.922	2.009	.0506	25.03	.0485	.4850	.2026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2474	26.06	24.58	25.11	.5117	.4591	24.68	.4935	.4856
Stddev	.0006	.07	.10	.21	.0010	.0012	.12	.0005	.0015
%RSD	.2335	.2689	.4172	.8436	.2003	.2521	.4999	.1039	.3064
#1	.2480	26.14	24.68	25.35	.5107	.4593	24.80	.4938	.4867
#2	.2469	26.01	24.58	25.01	.5115	.4602	24.55	.4929	.4862
#3	.2473	26.03	24.48	24.97	.5128	.4579	24.68	.4937	.4839
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5051	1.886	.4895	.4846	.4936	.4985	2.021	.4786	.4936
Stddev	.0005	.001	.0002	.0007	.0022	.0010	.005	.0022	.0006
%RSD	.1032	.0684	.0395	.1463	.4368	.1996	.2276	.4499	.1140
#1	.5053	1.886	.4895	.4844	.4960	.4982	2.018	.4797	.4942
#2	.5055	1.885	.4898	.4841	.4919	.4977	2.019	.4761	.4931
#3	.5045	1.888	.4894	.4854	.4928	.4996	2.026	.4800	.4934
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP34829-B1 Acquired: 12/20/2018 12:56:30 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5579.3	2301.8	23161.	6584.0
Stddev	1.6	2.4	78.	80.9
%RSD	.02843	.10294	.33473	1.2290
#1	5577.9	2299.6	23148.	6490.8
#2	5581.1	2301.4	23244.	6625.4
#3	5578.9	2304.3	23091.	6635.8

Zoom In Zoom Out

Sample Name: FA60136-10 Acquired: 12/20/2018 13:00:42 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0004	.0661	-.0017	.0546	.0000	46.73	.0002	-.0001
Stddev	.0013	.0031	.0008	.0001	.000	.20	.0001	.0001
%RSD	298.8	4.645	44.81	.1609	490.8	.4353	50.53	153.2
#1	.0008	.0692	-.0009	.0547	.0000	46.56	.0003	-.0002
#2	-.0004	.0631	-.0025	.0546	.0000	46.68	.0001	-.0001
#3	-.0017	.0660	-.0018	.0546	-.0001	46.96	.0002	.0001

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0032	.0007	.0799	2.787	17.33	.0085	.0027	57.46
Stddev	.0005	.0003	.0018	.059	.15	.0002	.0002	.24
%RSD	15.17	34.44	2.232	2.113	.8760	2.114	8.812	.4237
#1	.0033	.0005	.0780	2.763	17.20	.0086	.0027	57.19
#2	.0026	.0007	.0815	2.854	17.29	.0083	.0025	57.51
#3	.0036	.0010	.0803	2.744	17.49	.0086	.0030	57.67

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0024	-.0008	-.0007	.0019	11.56	.0003	.3496	.0042
Stddev	.0004	.0020	.0020	.0016	.03	.0011	.0013	.0001
%RSD	15.09	243.2	280.3	86.94	.2919	408.4	.3807	1.766
#1	.0026	-.0031	-.0026	.0034	11.56	-.0004	.3482	.0043
#2	.0019	-.0004	-.0010	.0002	11.59	.0015	.3509	.0043
#3	.0025	.0009	.0014	.0020	11.52	-.0003	.3496	.0042

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F -.0105	.0014	.0554
Stddev	.0039	.0002	.0001
%RSD	37.41	13.63	.1892
#1	-.0124	.0015	.0555
#2	-.0130	.0014	.0554
#3	-.0060	.0012	.0553

Zoom In Zoom Out

Sample Name: FA60136-10 Acquired: 12/20/2018 13:00:42 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5590.7	2316.7	23404.	6483.1
Stddev	12.3	3.4	166.	75.0
%RSD	.22048	.14891	.70715	1.1566
#1	5599.2	2313.1	23344.	6506.3
#2	5596.4	2317.2	23591.	6543.7
#3	5576.6	2319.9	23277.	6399.2

Zoom In Zoom Out

Sample Name: MP34829-D1 Acquired: 12/20/2018 13:05:05 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0015	.0712	-.0030	.0541	.0000	45.53	.0002	.0001
Stddev	.0008	.0118	.0010	.0002	.000	.09	.0001	.0003
%RSD	49.16	16.58	32.78	.3754	213.0	.2057	43.01	480.0
#1	-.0015	.0667	-.0019	.0540	.0000	45.51	.0003	-.0003
#2	-.0008	.0846	-.0034	.0544	-.0001	45.45	.0002	.0003
#3	-.0023	.0623	-.0037	.0541	.0000	45.64	.0001	.0002

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0030	.0010	.0714	2.784	16.96	.0087	.0028	56.15
Stddev	.0001	.0006	.0019	.030	.07	.0000	.0003	.11
%RSD	3.238	64.47	2.649	1.087	.4137	.2135	9.595	.1987
#1	.0030	.0017	.0718	2.751	16.90	.0087	.0026	56.12
#2	.0029	.0004	.0693	2.810	16.95	.0087	.0027	56.05
#3	.0030	.0008	.0731	2.793	17.04	.0087	.0031	56.27

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0024	.0012	-.0005	.0034	11.57	.0004	.3425	.0040
Stddev	.0004	.0018	.0022	.0027	.02	.0004	.0002	.0002
%RSD	14.70	146.5	475.2	79.11	.1405	101.7	.0711	4.923
#1	.0025	.0029	-.0026	.0063	11.55	.0009	.3422	.0041
#2	.0027	.0014	-.0004	.0010	11.58	.0001	.3426	.0042
#3	.0020	-.0006	.0017	.0030	11.56	.0003	.3427	.0038

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F -.0119	.0019	.0572
Stddev	.0016	.0005	.0003
%RSD	13.69	26.29	.5613
#1	-.0124	.0013	.0569
#2	-.0101	.0020	.0575
#3	-.0132	.0022	.0570

Zoom In
Zoom Out

Sample Name: MP34829-D1 Acquired: 12/20/2018 13:05:05 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5585.8	2313.1	23381.	6561.9
Stddev	11.9	5.2	30.	33.5
%RSD	.21217	.22599	.12805	.51123
#1	5599.5	2318.7	23354.	6560.3
#2	5578.9	2308.4	23376.	6596.1
#3	5579.0	2312.4	23413.	6529.1

Zoom In
Zoom Out

Sample Name: MP34829-SD1 Acquired: 12/20/2018 13:09:29 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0005	.0764	-.0052	.0573	-.0001	47.75	.0003	.0002	.0039
Stddev	.0038	.0589	.0046	.0005	.0002	.09	.0001	.0012	.0006
%RSD	819.4	77.03	89.40	.9332	322.4	.1961	48.96	565.9	16.27
#1	-.0005	.1374	-.0024	.0570	-.0001	47.70	.0004	-.0009	.0031
#2	.0047	.0199	-.0027	.0579	-.0003	47.70	.0002	.0002	.0042
#3	-.0027	.0720	-.0105	.0569	.0002	47.86	.0002	.0014	.0042

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0023	.0799	2.974	18.10	.0090	.0030	58.77	.0024	-.0089
Stddev	.0007	.0183	.075	.09	.0001	.0003	.30	.0010	.0077
%RSD	29.32	22.95	2.531	.4922	1.193	9.187	.5122	40.46	86.90
#1	.0017	.0911	2.995	18.13	.0089	.0031	58.42	.0024	-.0118
#2	.0030	.0587	2.891	18.00	.0090	.0027	58.96	.0014	-.0001
#3	.0021	.0897	3.037	18.18	.0091	.0033	58.92	.0034	-.0148

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0023	.0061	11.85	.0019	.3628	.0051	-.0212	.0021	.0610
Stddev	.0054	.0050	.05	.0010	.0008	.0001	.0122	.0006	.0001
%RSD	237.0	82.49	.3991	50.84	.2289	2.245	57.77	29.83	.2085
#1	-.0076	.0059	11.90	.0018	.3619	.0049	-.0075	.0020	.0608
#2	-.0025	.0011	11.86	.0010	.3631	.0050	-.0250	.0015	.0611
#3	.0032	.0112	11.80	.0029	.3635	.0052	-.0310	.0027	.0611

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5680.3	2362.4	23688.	6602.5
Stddev	13.2	7.1	79.	10.4
%RSD	.23308	.30195	.33362	.15715
#1	5667.8	2357.3	23759.	6610.6
#2	5694.1	2370.6	23602.	6606.2
#3	5678.9	2359.4	23702.	6590.8

Zoom In
Zoom Out

Sample Name: MP34829-PS1 Acquired: 12/20/2018 13:13:56 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0480	2.471	.0966	.2998	.0493	50.47	.0473	.0466	.0523
Stddev	.0005	.038	.0005	.0013	.0003	.32	.0002	.0002	.0003
%RSD	.9462	1.542	.5677	.4315	.6317	.6430	.4584	.3851	.5565
#1	.0475	2.504	.0971	.3013	.0497	50.70	.0475	.0468	.0521
#2	.0483	2.429	.0968	.2990	.0492	50.10	.0472	.0465	.0523
#3	.0482	2.480	.0960	.2990	.0491	50.61	.0472	.0466	.0526

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0990	2.967	12.26	21.72	.0572	.0887	65.43	.0970	.0444
Stddev	.0000	.024	.02	.11	.0001	.0004	.39	.0004	.0016
%RSD	.0405	.8056	.1243	.4960	.2322	.4761	.6023	.3756	3.491
#1	.0990	2.984	12.27	21.85	.0573	.0885	65.80	.0972	.0461
#2	.0989	2.939	12.27	21.66	.0570	.0892	65.02	.0965	.0430
#3	.0990	2.976	12.24	21.66	.0572	.0884	65.48	.0971	.0442

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1015	.0910	11.48	.0463	.3908	.1002	.0877	.0492	.2902
Stddev	.0026	.0019	.03	.0004	.0019	.0003	.0049	.0002	.0004
%RSD	2.523	2.089	.2226	.9257	.4925	.3165	5.638	.4933	.1418
#1	.0986	.0931	11.50	.0461	.3930	.1004	.0934	.0490	.2904
#2	.1032	.0907	11.45	.0468	.3896	.1004	.0850	.0492	.2904
#3	.1029	.0893	11.47	.0459	.3898	.0998	.0847	.0494	.2897

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5577.8	2294.8	23319.	6571.4
Stddev	19.4	6.6	154.	44.9
%RSD	.34761	.28964	.66092	.68276
#1	5561.6	2288.6	23244.	6551.1
#2	5572.6	2293.9	23217.	6622.8
#3	5599.3	2301.8	23497.	6540.3

Zoom In
Zoom Out

Sample Name: MP34829-S1 Acquired: 12/20/2018 13:18:15 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0496	26.38	1.932	2.060	.0507	70.36	.0488	.4848	.2011
Stddev	.0013	.14	.006	.004	.0002	.47	.0001	.0015	.0007
%RSD	2.552	.5326	.3367	.1744	.4724	.6731	.1788	.3124	.3436
#1	.0507	26.36	1.929	2.056	.0508	70.45	.0488	.4838	.2006
#2	.0482	26.53	1.939	2.062	.0509	70.79	.0489	.4866	.2008
#3	.0498	26.25	1.927	2.061	.0504	69.85	.0488	.4841	.2019

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2558	25.47	27.20	41.44	.5175	.4560	F 80.96	.4956	.4841
Stddev	.0007	.13	.13	.17	.0004	.0010	.39	.0017	.0009
%RSD	.2834	.5152	.4635	.4183	.0862	.2252	.4825	.3506	.1871
#1	.2565	25.51	27.21	41.33	.5174	.4551	81.07	.4954	.4840
#2	.2550	25.58	27.32	41.64	.5180	.4571	81.29	.4974	.4851
#3	.2559	25.32	27.07	41.36	.5171	.4558	80.53	.4940	.4833

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5113	1.877	12.23	.4779	.8273	.4955	2.022	.4774	.5402
Stddev	.0035	.008	.04	.0015	.0046	.0009	.005	.0004	.0009
%RSD	.6918	.4379	.3053	.3123	.5584	.1892	.2392	.0878	.1595
#1	.5103	1.872	12.20	.4796	.8270	.4965	2.017	.4775	.5401
#2	.5083	1.886	12.27	.4771	.8320	.4947	2.022	.4777	.5411
#3	.5152	1.872	12.22	.4770	.8228	.4952	2.027	.4769	.5394

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5562.3	2272.2	23092.	6471.1
Stddev	14.6	7.2	126.	16.6
%RSD	.26244	.31711	.54469	.25710
#1	5574.9	2280.4	23206.	6489.8
#2	5565.6	2269.5	22957.	6457.9
#3	5546.3	2266.8	23114.	6465.6

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 13:22:27 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2451	40.28	1.991	2.036	2.042	40.49	2.010	1.985	2.010
Stddev	.0014	.12	.007	.006	.010	.17	.003	.003	.003
%RSD	.5871	.2906	.3649	.3064	.5047	.4266	.1270	.1476	.1641
#1	.2466	40.15	1.982	2.030	2.032	40.37	2.007	1.982	2.010
#2	.2448	40.32	1.995	2.043	2.041	40.40	2.011	1.984	2.013
#3	.2437	40.37	1.995	2.036	2.053	40.68	2.011	1.988	2.006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.979	40.54	40.17	40.72	2.042	2.003	40.39	1.999	2.025
Stddev	.016	.12	.18	.24	.001	.007	.14	.004	.007
%RSD	.8213	.3015	.4602	.6013	.0694	.3370	.3586	.1784	.3481
#1	1.996	40.42	40.00	40.64	2.044	1.996	40.22	1.995	2.020
#2	1.976	40.53	40.15	40.53	2.041	2.003	40.46	2.001	2.033
#3	1.964	40.66	40.37	41.00	2.043	2.009	40.48	2.001	2.022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.985	1.970	1.946	2.039	2.066	2.046	2.018	2.038	2.008
Stddev	.005	.012	.005	.007	.008	.007	.001	.006	.005
%RSD	.2392	.6300	.2560	.3212	.4007	.3217	.0570	.2922	.2332
#1	1.982	1.959	1.944	2.032	2.057	2.054	2.018	2.043	2.003
#2	1.982	1.969	1.942	2.041	2.072	2.044	2.017	2.039	2.011
#3	1.991	1.984	1.951	2.045	2.070	2.041	2.019	2.031	2.010
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 13:22:27 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5619.4	2291.0	23350.	6518.2
Stddev	5.6	5.5	221.	102.3
%RSD	.09927	.24205	.94494	1.5693
#1	5625.0	2296.6	23598.	6495.5
#2	5613.9	2290.8	23175.	6629.9
#3	5619.1	2285.5	23277.	6429.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 13:26:38 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	-.0077	-.0002	.0003	.0001	.0044	.0000	.0001
Stddev	.0002	.0110	.0007	.0001	.0000	.0031	.000	.0002
%RSD	277.1	141.6	478.3	27.92	5.625	70.22	1127.	180.1
#1	.0000	-.0204	.0007	.0004	.0001	.0050	.0000	.0003
#2	.0001	-.0021	-.0006	.0002	.0001	.0010	-.0001	.0001
#3	-.0003	-.0007	-.0005	.0003	.0001	.0071	.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0008	.0106	.0484	.0106	.0001	.0008	-.0147
Stddev	.0002	.0004	.0036	.0139	.0135	.0000	.0003	.0018
%RSD	217.4	49.02	33.64	28.70	126.8	30.37	45.78	12.27
#1	.0001	.0005	.0146	.0644	.0056	.0001	.0011	-.0165
#2	-.0001	.0012	.0095	.0393	.0004	.0001	.0007	-.0147
#3	.0003	.0006	.0077	.0416	.0259	.0001	.0005	-.0129
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	F -.0024	F .0025	-.0012	.0001	-.0002	.0002	.0013
Stddev	.0003	.0006	.0018	.0017	.0002	.0006	.0000	.0001
%RSD	186.4	23.41	73.79	146.3	204.8	258.4	20.98	5.356
#1	.0003	-.0026	.0004	.0003	.0002	-.0004	.0002	.0013
#2	.0003	-.0028	.0032	-.0007	-.0002	-.0008	.0002	.0013
#3	-.0002	-.0017	.0038	-.0031	.0003	.0004	.0002	.0012
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010	.0020					
Low Limit		-.0010	-.0020					

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 13:26:38 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0016	.0002	.0001
Stddev	.0007	.0001	.0000
%RSD	41.14	63.13	26.00
#1	.0010	.0003	.0002
#2	.0023	.0003	.0001
#3	.0016	.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5613.5	2360.2	23537.	6603.7
Stddev	11.9	10.4	96.	17.6
%RSD	.21206	.44244	.40806	.26596
#1	5600.1	2350.5	23550.	6623.9
#2	5622.9	2371.2	23435.	6591.9
#3	5617.4	2358.9	23626.	6595.2

Zoom In
Zoom Out

Sample Name: MP34829-S2 Acquired: 12/20/2018 13:31:05 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0494	26.96	1.960	2.084	.0516	72.57	.0496	.4918	.2065
Stddev	.0010	.16	.004	.010	.0002	.29	.0001	.0010	.0014
%RSD	2.050	.5750	.1910	.4656	.3970	.3986	.2151	.2040	.6952
#1	.0484	26.81	1.956	2.073	.0513	72.58	.0496	.4911	.2079
#2	.0504	27.12	1.964	2.092	.0516	72.85	.0496	.4929	.2050
#3	.0495	26.95	1.960	2.088	.0517	72.27	.0494	.4914	.2066

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2610	26.14	27.84	42.46	.5244	.4644	F 83.42	.5017	.4908
Stddev	.0010	.03	.10	.11	.0037	.0018	.32	.0006	.0024
%RSD	.3990	.1176	.3714	.2516	.7143	.3845	.3893	.1251	.4817
#1	.2621	26.11	27.74	42.49	.5274	.4625	83.18	.5010	.4926
#2	.2600	26.17	27.95	42.55	.5202	.4660	83.79	.5021	.4881
#3	.2608	26.15	27.84	42.34	.5256	.4648	83.29	.5020	.4917

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5174	1.917	12.53	.4856	.8482	.5038	2.068	.4908	.5504
Stddev	.0032	.004	.03	.0018	.0053	.0026	.003	.0047	.0007
%RSD	.6201	.2119	.2005	.3635	.6204	.5072	.1316	.9576	.1310
#1	.5169	1.913	12.50	.4869	.8422	.5055	2.066	.4945	.5499
#2	.5208	1.918	12.55	.4864	.8520	.5008	2.067	.4855	.5513
#3	.5145	1.921	12.52	.4836	.8506	.5049	2.071	.4925	.5501

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5582.7	2280.8	23024.	6471.6
Stddev	29.6	12.3	152.	58.5
%RSD	.53044	.54139	.65907	.90368
#1	5568.2	2275.5	22921.	6406.7
#2	5563.2	2272.0	23198.	6488.0
#3	5616.8	2294.9	22952.	6520.1

Zoom In
Zoom Out

Sample Name: FA60136-12 Acquired: 12/20/2018 13:35:19 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	2.922	.0017	.0710	.0007	56.56	.0002	.0014	.0072
Stddev	.0011	.023	.0007	.0007	.0001	.47	.0001	.0001	.0003
%RSD	228.9	.7971	40.90	.9339	10.35	.8241	50.46	3.837	4.332
#1	.0002	2.949	.0009	.0717	.0007	57.02	.0003	.0013	.0076
#2	-.0018	2.910	.0023	.0708	.0008	56.09	.0001	.0013	.0071
#3	.0001	2.908	.0018	.0704	.0006	56.58	.0001	.0014	.0070

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0033	5.394	3.685	19.73	.5916	.0059	58.92	.0054	.0058
Stddev	.0003	.035	.024	.14	.0037	.0002	.46	.0004	.0017
%RSD	10.34	.6390	.6531	.7024	.6261	3.800	.7869	7.042	28.44
#1	.0036	5.402	3.680	19.86	.5959	.0057	59.45	.0055	.0043
#2	.0029	5.356	3.711	19.59	.5893	.0061	58.60	.0049	.0076
#3	.0035	5.424	3.663	19.75	.5897	.0058	58.71	.0057	.0056

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0004	-.0003	16.92	.0006	.3930	.0539	-.0093	.0040	.0475
Stddev	.0011	.0019	.03	.0003	.0034	.0007	.0044	.0003	.0001
%RSD	249.0	749.6	.1977	58.15	.8552	1.257	47.49	7.783	.1547
#1	.0001	-.0024	16.90	.0002	.3969	.0546	-.0057	.0042	.0475
#2	.0017	.0011	16.96	.0008	.3907	.0532	-.0079	.0036	.0475
#3	-.0004	.0006	16.90	.0007	.3915	.0538	-.0142	.0041	.0476

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5595.9	2333.6	23450.	6497.6
Stddev	16.8	4.7	81.	30.6
%RSD	.30086	.20116	.34663	.47160
#1	5588.6	2330.2	23367.	6462.2
#2	5583.9	2331.8	23456.	6514.9
#3	5615.1	2339.0	23529.	6515.6

Zoom In
Zoom Out

Sample Name: FA60136-14 Acquired: 12/20/2018 13:39:40 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0008	2.894	-.0002	.0697	.0008	73.78	.0002	.0009	.0066
Stddev	.0010	.020	.0011	.0002	.0001	.63	.0000	.0002	.0005
%RSD	124.3	.6781	616.2	.2596	6.608	.8530	28.07	27.10	6.944
#1	-.0019	2.916	.0000	.0699	.0007	74.48	.0002	.0009	.0061
#2	-.0008	2.881	-.0014	.0696	.0008	73.26	.0002	.0006	.0067
#3	.0002	2.884	.0008	.0696	.0008	73.60	.0001	.0011	.0070

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0024	5.500	3.589	24.58	.2912	.0026	43.77	.0037	.0092
Stddev	.0004	.043	.062	.22	.0010	.0002	.27	.0001	.0011
%RSD	16.59	.7900	1.735	.8810	.3555	6.318	.6210	2.050	12.20
#1	.0021	5.547	3.656	24.81	.2923	.0024	44.08	.0037	.0103
#2	.0028	5.461	3.580	24.38	.2902	.0027	43.60	.0037	.0092
#3	.0024	5.491	3.532	24.56	.2912	.0028	43.63	.0038	.0081

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0006	.0023	18.06	.0006	.4662	.0532	-.0065	.0054	.0568
Stddev	.0022	.0009	.03	.0007	.0020	.0002	.0021	.0005	.0003
%RSD	356.3	39.74	.1893	100.6	.4325	.3665	31.91	9.024	.4603
#1	.0002	.0020	18.08	.0012	.4685	.0534	-.0070	.0056	.0570
#2	-.0031	.0033	18.07	.0000	.4656	.0533	-.0042	.0048	.0569
#3	.0011	.0015	18.02	.0007	.4646	.0530	-.0083	.0057	.0565

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5567.3	2326.7	23361.	6523.6
Stddev	12.5	6.9	54.	75.9
%RSD	.22522	.29868	.22933	1.1631
#1	5570.5	2322.6	23399.	6468.6
#2	5553.4	2322.9	23300.	6610.2
#3	5577.9	2334.8	23385.	6492.1

Zoom In
Zoom Out

Sample Name: FA60136-16 Acquired: 12/20/2018 13:44:01 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	1.849	.0004	.0342	.0001	37.80	.0002	.0004	.0124
Stddev	.0002	.005	.0015	.0002	.0000	.15	.0001	.0002	.0005
%RSD	226.0	.2911	402.1	.4629	4.648	.3848	25.86	44.28	3.951
#1	.0000	1.847	-.0007	.0341	.0001	37.95	.0002	.0006	.0121
#2	-.0003	1.854	.0021	.0342	.0002	37.78	.0002	.0002	.0122
#3	.0000	1.844	-.0002	.0344	.0001	37.67	.0003	.0004	.0130

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0033	2.691	3.401	14.78	.1087	.0023	66.48	.0161	.0028
Stddev	.0003	.015	.029	.07	.0003	.0002	.16	.0004	.0010
%RSD	10.07	.5398	.8527	.4923	.2491	9.096	.2358	2.333	34.18
#1	.0030	2.703	3.429	14.86	.1084	.0023	66.65	.0164	.0032
#2	.0033	2.674	3.372	14.72	.1090	.0026	66.45	.0157	.0017
#3	.0037	2.695	3.403	14.76	.1088	.0021	66.34	.0162	.0035

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0007	.0012	14.37	.0019	.2602	.0560	-.0086	.0062	.4758
Stddev	.0010	.0019	.05	.0004	.0008	.0002	.0047	.0003	.0007
%RSD	140.3	164.2	.3793	22.65	.2896	.3078	54.48	5.445	.1473
#1	.0004	.0002	14.43	.0020	.2607	.0560	-.0079	.0064	.4766
#2	-.0014	-.0001	14.35	.0022	.2605	.0562	-.0136	.0064	.4753
#3	-.0012	.0033	14.33	.0014	.2593	.0559	-.0043	.0058	.4754

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5646.3	2334.5	23411.	6497.9
Stddev	15.4	5.9	73.	55.1
%RSD	.27362	.25199	.31265	.84728
#1	5649.7	2329.1	23438.	6436.2
#2	5629.4	2333.6	23468.	6542.2
#3	5659.7	2340.7	23329.	6515.1

Zoom In Zoom Out

Sample Name: FA60205-21 Acquired: 12/20/2018 13:48:22 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0006	.0562	-.0001	.0219	.0000	34.14	.0000	.0004
Stddev	.0007	.0108	.0010	.0002	.000	.19	.0001	.0001
%RSD	109.8	19.32	883.0	.7635	99.41	.5617	342.6	35.35
#1	-.0013	.0679	-.0006	.0221	.0000	33.93	-.0001	.0003
#2	.0001	.0542	.0011	.0217	-.0001	34.21	.0001	.0003
#3	-.0007	.0464	-.0008	.0218	.0000	34.29	.0001	.0006

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0044	.0005	.0862	4.641	15.73	.0146	.0079	58.36
Stddev	.0002	.0002	.0008	.032	.08	.0000	.0005	.25
%RSD	3.924	32.79	.9475	.6918	.5306	.2285	6.107	.4222
#1	.0043	.0007	.0857	4.608	15.63	.0146	.0084	58.10
#2	.0043	.0005	.0871	4.645	15.75	.0146	.0075	58.38
#3	.0046	.0004	.0858	4.672	15.80	.0146	.0076	58.59

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0882	-.0024	.0036	.0008	9.710	.0005	.3252	.0031
Stddev	.0004	.0028	.0007	.0024	.021	.0004	.0016	.0001
%RSD	.4053	116.2	18.38	312.5	.2133	73.45	.4998	4.181
#1	.0884	-.0055	.0040	-.0020	9.699	.0003	.3234	.0031
#2	.0885	-.0018	.0028	.0018	9.733	.0009	.3259	.0032
#3	.0878	.0000	.0039	.0025	9.696	.0003	.3264	.0030

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F -.0103	.0014	.0099
Stddev	.0019	.0003	.0000
%RSD	18.23	23.10	.2481
#1	-.0107	.0016	.0099
#2	-.0082	.0010	.0099
#3	-.0119	.0014	.0099

Zoom In Zoom Out

Sample Name: FA60205-21 Acquired: 12/20/2018 13:48:22 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5613.0	2322.3	23356.	6513.0
Stddev	15.3	3.6	163.	46.3
%RSD	.27225	.15370	.69995	.71055
#1	5614.0	2324.1	23295.	6497.6
#2	5627.7	2324.6	23233.	6565.0
#3	5597.2	2318.2	23542.	6476.4

Zoom In Zoom Out

Sample Name: FA60205-22 Acquired: 12/20/2018 13:52:46 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0004	.0994	-.0036	.0602	-.0001	65.16	.0001	.0000
Stddev	.0003	.0194	.0003	.0002	.0000	.38	.0001	.0003
%RSD	87.38	19.54	9.236	.3071	85.42	.5822	86.07	835.0
#1	-.0001	.0951	-.0036	.0604	.0000	65.41	.0002	.0001
#2	-.0007	.0825	-.0039	.0601	-.0001	65.35	.0000	-.0003
#3	-.0003	.1207	-.0033	.0600	-.0001	64.72	.0002	.0002

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0015	.0110	.0718	10.27	11.25	.0067	.0016	40.73
Stddev	.0002	.0005	.0015	.06	.07	.0001	.0001	.22
%RSD	10.88	4.921	2.063	.5808	.5967	.9504	7.061	.5512
#1	.0017	.0105	.0707	10.32	11.25	.0067	.0017	40.93
#2	.0013	.0109	.0735	10.29	11.31	.0067	.0016	40.78
#3	.0016	.0116	.0712	10.20	11.18	.0068	.0015	40.48

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0038	-.0035	-.0007	-.0002	6.991	.0017	.4255	.0043
Stddev	.0003	.0031	.0012	.0019	.020	.0004	.0016	.0001
%RSD	6.626	88.69	179.2	1201.	.2884	25.56	.3861	2.466
#1	.0041	.0001	.0007	-.0022	7.005	.0022	.4268	.0042
#2	.0037	-.0052	-.0010	.0016	6.968	.0016	.4262	.0044
#3	.0036	-.0053	-.0017	.0001	6.999	.0013	.4237	.0043

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F -.0127	.0015	.0551
Stddev	.0008	.0003	.0001
%RSD	6.259	18.22	.1138
#1	-.0131	.0017	.0552
#2	-.0132	.0016	.0550
#3	-.0118	.0012	.0552

Zoom In Zoom Out

Sample Name: FA60205-22 Acquired: 12/20/2018 13:52:46 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5549.7	2308.1	23156.	6435.5
Stddev	19.7	7.6	48.	43.7
%RSD	.35512	.32712	.20521	.67835
#1	5527.2	2299.4	23208.	6399.6
#2	5557.6	2312.3	23116.	6422.8
#3	5564.1	2312.6	23144.	6484.1

Zoom In Zoom Out

Sample Name: MP34828-MB1 Acquired: 12/20/2018 13:57:10 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0092	-.0029	.0001	.0000	.0069	.0000	-.0004
Stddev	.0006	.0028	.0006	.0002	.000	.0020	.000	.0003
%RSD	733.3	29.98	20.23	174.9	34.12	29.48	616.8	87.02
#1	.0005	.0095	-.0034	-.0001	.0000	.0088	.0000	.0000
#2	.0000	.0064	-.0022	.0003	.0000	.0073	.0000	-.0006
#3	-.0008	.0119	-.0030	.0002	.0000	.0047	-.0001	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0005	.0008	.0387	.0241	.0000	-.0002	-.0072
Stddev	.0004	.0002	.0027	.0163	.0044	.0000	.0003	.0055
%RSD	147.8	49.35	350.3	42.15	18.32	63.49	180.7	76.46
#1	.0003	.0007	.0039	.0287	.0196	.0000	.0000	-.0072
#2	-.0002	.0006	-.0009	.0298	.0285	.0000	-.0005	-.0017
#3	.0006	.0002	-.0007	.0575	.0242	.0001	.0000	-.0127
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	-.0023	-.0003	.0010	.0336	-.0004	.0000	.0000
Stddev	.0003	.0012	.0018	.0009	.0008	.0001	.0000	.0001
%RSD	164.6	51.95	624.8	90.21	2.330	30.50	116.6	344.8
#1	.0000	-.0009	.0015	.0013	.0338	-.0002	.0000	.0000
#2	-.0005	-.0030	-.0003	.0018	.0342	-.0004	.0000	-.0001
#3	-.0001	-.0029	-.0021	.0000	.0327	-.0005	.0000	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: MP34828-MB1 Acquired: 12/20/2018 13:57:10 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F -.0082	.0001	.0012
Stddev	.0031	.0002	.0001
%RSD	37.26	179.4	5.812
#1	-.0117	-.0001	.0013
#2	-.0062	.0003	.0012
#3	-.0068	.0002	.0011
Check ?	Chk Fail	Chk Pass	Chk Pass
High Limit	.0050		
Low Limit	-.0050		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5560.8	2342.4	23352.	6594.5
Stddev	13.9	14.2	139.	31.2
%RSD	.25074	.60562	.59552	.47334
#1	5556.6	2339.1	23457.	6610.2
#2	5549.4	2330.1	23194.	6614.6
#3	5576.4	2357.9	23404.	6558.5

Zoom In Zoom Out

Sample Name: MP34828-B1 Acquired: 12/20/2018 14:01:38 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0516	27.65	2.002	2.084	.0530	25.96	.0504	.5029	.2114
Stddev	.0009	.18	.006	.010	.0005	.27	.0001	.0006	.0014
%RSD	1.702	.6634	.2919	.4689	.9746	1.034	.1318	.1118	.6657
#1	.0506	27.52	1.999	2.080	.0527	25.80	.0505	.5035	.2117
#2	.0524	27.57	2.008	2.077	.0529	25.80	.0505	.5023	.2126
#3	.0517	27.86	1.997	2.095	.0536	26.27	.0504	.5029	.2099
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2591	26.95	25.59	25.91	.5303	.4741	25.67	.5112	.5080
Stddev	.0013	.17	.20	.25	.0010	.0015	.21	.0012	.0028
%RSD	.5016	.6156	.7650	.9637	.1869	.3160	.8337	.2389	.5608
#1	.2591	26.82	25.44	25.79	.5314	.4733	25.57	.5108	.5064
#2	.2604	26.89	25.53	25.75	.5297	.4758	25.52	.5125	.5113
#3	.2578	27.14	25.81	26.20	.5298	.4732	25.91	.5102	.5062
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5275	1.971	.4735	.4988	.5104	.5154	2.104	.5029	.5109
Stddev	.0028	.004	.0030	.0017	.0034	.0018	.001	.0024	.0020
%RSD	.5224	.1848	.6279	.3477	.6667	.3480	.0494	.4708	.3989
#1	.5266	1.971	.4718	.4971	.5084	.5164	2.105	.5043	.5125
#2	.5306	1.967	.4769	.5006	.5085	.5165	2.103	.5042	.5117
#3	.5253	1.974	.4718	.4987	.5143	.5134	2.104	.5002	.5086
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP34828-B1 Acquired: 12/20/2018 14:01:38 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5643.9	2325.1	23315.	6562.9
Stddev	11.5	7.1	51.	52.2
%RSD	.20457	.30334	.21826	.79601
#1	5632.4	2322.1	23264.	6623.2
#2	5643.7	2320.1	23313.	6533.7
#3	5655.5	2333.2	23366.	6531.8

Zoom In Zoom Out

Sample Name: FA60232-1L Acquired: 12/20/2018 14:05:51 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0006	.0086	-.0022	.0027	.0000	1.010	-.0001	-.0001	.0008
Stddev	.0001	.0068	.0004	.0001	.000	.011	.0001	.0002	.0001
%RSD	15.53	79.39	16.17	3.590	64.88	1.128	114.7	251.2	13.79
#1	-.0005	.0139	-.0026	.0028	.0000	1.022	-.0001	-.0004	.0008
#2	-.0005	.0009	-.0020	.0026	.0000	.9991	.0000	.0001	.0010
#3	-.0007	.0109	-.0020	.0028	.0000	1.010	-.0001	.0000	.0008

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0003	.0049	3.238	.1904	.0054	.0001	F 141.1	.0023	-.0017
Stddev	.0003	.0022	.025	.0132	.0001	.0003	.7	.0003	.0005
%RSD	89.61	45.23	.7672	6.927	1.840	314.3	.4781	13.95	32.92
#1	.0002	.0062	3.267	.2039	.0053	.0004	141.3	.0026	-.0019
#2	.0002	.0060	3.221	.1775	.0055	-.0001	140.3	.0021	-.0010
#3	.0007	.0023	3.228	.1897	.0055	-.0001	141.6	.0021	-.0020

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0008	.0051	.1057	.0005	.0138	.0005	-.0066	.0002	.0034
Stddev	.0017	.0017	.0013	.0003	.0001	.0002	.0037	.0001	.0001
%RSD	215.4	33.71	1.274	55.49	.4742	37.18	56.13	60.34	2.632
#1	-.0010	.0069	.1066	.0008	.0138	.0005	-.0044	.0004	.0035
#2	.0024	.0035	.1042	.0006	.0137	.0003	-.0108	.0001	.0033
#3	.0009	.0048	.1064	.0002	.0139	.0007	-.0045	.0003	.0034

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5756.3	2392.3	23855.	6567.6
Stddev	7.3	4.7	99.	86.9
%RSD	.12720	.19491	.41609	1.3237
#1	5749.8	2387.4	23870.	6467.2
#2	5754.8	2396.7	23749.	6619.7
#3	5764.2	2392.8	23946.	6615.8

Zoom In Zoom Out

Sample Name: MP34828-D1 Acquired: 12/20/2018 14:10:27 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0005	.0100	-.0013	.0027	-.0001	1.011	-.0001	-.0002	.0009
Stddev	.0005	.0147	.0010	.0002	.0000	.007	.0000	.0001	.0003
%RSD	109.4	147.7	77.58	7.473	34.38	.7022	37.09	53.49	35.47
#1	-.0001	.0222	-.0001	.0025	-.0001	1.007	-.0001	-.0003	.0012
#2	.0006	-.0064	-.0020	.0027	-.0001	1.007	.0000	-.0001	.0009
#3	.0009	.0142	-.0018	.0029	.0000	1.020	.0000	-.0002	.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0000	.0016	3.249	.1988	.0055	.0000	F 143.7	.0022	-.0014
Stddev	.0000	.0017	.029	.0022	.0000	.000	1.5	.0004	.0009
%RSD	366.4	108.5	.8951	1.101	.7882	5401.	1.067	18.19	64.99
#1	.0000	-.0004	3.283	.1965	.0055	-.0002	145.1	.0025	-.0016
#2	.0000	.0029	3.234	.2009	.0055	.0005	142.0	.0018	-.0022
#3	.0001	.0022	3.231	.1991	.0054	-.0003	144.0	.0025	-.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0007	.0020	.1075	.0011	.0139	.0000	-.0088	.0001	.0033
Stddev	.0011	.0010	.0010	.0005	.0001	.000	.0013	.0004	.0000
%RSD	156.7	51.55	.9084	48.93	.7028	7566.	14.95	324.9	.9350
#1	.0010	.0008	.1081	.0007	.0139	-.0002	-.0098	.0006	.0033
#2	-.0005	.0025	.1080	.0008	.0139	.0000	-.0073	-.0003	.0033
#3	.0016	.0027	.1063	.0017	.0140	.0002	-.0093	.0001	.0033

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5696.9	2376.2	23799.	6453.5
Stddev	4.8	5.7	125.	37.3
%RSD	.08357	.24082	.52351	.57756
#1	5691.6	2378.8	23792.	6441.6
#2	5698.2	2369.7	23927.	6495.3
#3	5700.9	2380.3	23678.	6423.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 14:15:01 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2448	40.35	1.997	2.040	2.050	40.60	2.007	1.982	2.002
Stddev	.0013	.09	.009	.010	.005	.08	.005	.007	.002
%RSD	.5316	.2297	.4628	.5012	.2294	.1943	.2628	.3677	.0932
#1	.2458	40.41	2.002	2.052	2.055	40.61	2.010	1.985	2.001
#2	.2454	40.39	2.003	2.036	2.051	40.68	2.010	1.987	2.004
#3	.2433	40.24	1.986	2.032	2.045	40.52	2.001	1.974	2.000
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.980	40.41	40.22	40.64	2.040	2.002	40.52	1.996	2.020
Stddev	.003	.11	.24	.09	.002	.005	.13	.006	.003
%RSD	.1565	.2740	.5982	.2254	.1191	.2719	.3284	.2879	.1270
#1	1.984	40.37	40.47	40.55	2.041	2.004	40.65	2.000	2.017
#2	1.980	40.54	40.19	40.73	2.042	2.007	40.51	1.998	2.022
#3	1.978	40.33	39.99	40.62	2.038	1.997	40.39	1.989	2.021
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.992	1.971	1.945	2.036	2.078	2.047	2.021	2.038	2.007
Stddev	.004	.008	.008	.006	.007	.004	.009	.006	.006
%RSD	.1924	.3857	.4168	.3168	.3334	.1922	.4262	.2755	.2838
#1	1.996	1.968	1.951	2.040	2.086	2.050	2.022	2.045	2.010
#2	1.991	1.980	1.948	2.039	2.078	2.047	2.028	2.037	2.011
#3	1.989	1.966	1.936	2.028	2.072	2.042	2.011	2.034	2.000
Check ? Value Range	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 14:15:01 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5668.3	2306.8	23468.	6561.3
Stddev	4.9	9.1	26.	22.8
%RSD	.08608	.39590	.11091	.34731
#1	5667.2	2301.5	23463.	6586.7
#2	5664.1	2301.6	23497.	6554.5
#3	5673.6	2317.3	23446.	6542.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 14:19:12 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0089	-.0005	.0003	.0001	.0047	.0001	.0001
Stddev	.000	.0093	.0010	.0002	.0000	.0028	.0001	.0001
%RSD	1220.	105.0	207.0	51.88	40.66	59.60	135.1	56.86
#1	.0004	-.0195	.0003	.0002	.0001	.0079	.0000	.0000
#2	-.0002	-.0052	-.0002	.0005	.0001	.0038	.0002	.0002
#3	-.0003	-.0020	-.0015	.0002	.0000	.0025	.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0006	.0104	.0278	.0069	.0002	F .0012	-.0125
Stddev	.0001	.0001	.0008	.0087	.0031	.0001	.0005	.0110
%RSD	30.63	8.885	7.590	31.27	45.29	54.30	40.27	87.71
#1	.0002	.0006	.0108	.0229	.0076	.0002	.0011	-.0210
#2	.0002	.0006	.0095	.0227	.0095	.0003	.0017	-.0165
#3	.0003	.0007	.0109	.0379	.0034	.0001	.0007	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	F -.0020	.0004	.0000	.0006	.0000	.0001	.0012
Stddev	.0001	.0014	.0021	.001	.0006	.0007	.0000	.0002
%RSD	134.7	69.67	555.4	4269.	91.53	2497.	24.88	19.41
#1	-.0002	-.0008	-.0006	-.0006	.0009	.0007	.0001	.0012
#2	-.0002	-.0017	-.0010	-.0010	.0010	-.0006	.0001	.0014
#3	.0001	-.0036	.0028	.0015	.0000	.0000	.0001	.0009
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010						
Low Limit		-.0010						

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 14:19:12 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F -.0024	.0001	.0000
Stddev	.0051	.0005	.0001
%RSD	216.6	386.2	582.1
#1	-.0002	.0001	.0000
#2	-.0082	.0006	-.0001
#3	.0013	-.0003	.0002
Check ?	Chk Fail	Chk Pass	Chk Pass
High Limit	.0020		
Low Limit	-.0020		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5640.8	2370.5	23728.	6610.7
Stddev	2.5	5.3	62.	37.6
%RSD	.04462	.22187	.26134	.56892
#1	5637.9	2364.7	23800.	6651.5
#2	5642.7	2374.8	23697.	6603.4
#3	5641.7	2372.0	23689.	6577.3

Zoom In Zoom Out

Sample Name: MP34828-SD1 Acquired: 12/20/2018 14:23:39 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0012	.0137	-.0056	.0031	-.0001	1.090	-.0001	.0015	.0166
Stddev	.0036	.0417	.0026	.0005	.0002	.010	.0002	.0018	.0026
%RSD	290.9	303.3	45.85	14.47	119.5	.8905	199.5	118.6	15.65
#1	.0031	-.0176	-.0054	.0033	-.0002	1.094	.0001	.0035	.0138
#2	.0035	-.0022	-.0083	.0026	.0001	1.079	-.0004	-.0001	.0172
#3	-.0029	.0611	-.0032	.0035	-.0002	1.098	-.0001	.0013	.0189

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0040	.1405	3.184	.2099	.0272	.0006	136.7	.0026	-.0045
Stddev	.0023	.0062	.094	.0575	.0003	.0003	.8	.0003	.0029
%RSD	56.12	4.448	2.943	27.41	1.090	58.88	.6115	12.31	65.77
#1	.0063	.1428	3.166	.2602	.0273	.0002	137.4	.0027	-.0067
#2	.0040	.1334	3.100	.1471	.0275	.0007	135.8	.0029	-.0055
#3	.0018	.1452	3.285	.2222	.0269	.0008	136.9	.0023	-.0011

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0064	.0059	.1128	.0006	.0130	.0016	-.0041	.0022	.0041
Stddev	.0011	.0115	.0004	.0013	.0005	.0006	.0193	.0012	.0004
%RSD	17.16	193.8	.3683	204.7	3.705	37.06	464.4	56.10	9.341
#1	-.0076	-.0070	.1133	-.0005	.0134	.0018	-.0103	.0028	.0037
#2	-.0060	.0151	.1128	.0020	.0131	.0022	.0174	.0031	.0042
#3	-.0055	.0097	.1124	.0004	.0125	.0010	-.0196	.0008	.0044

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5663.7	2365.6	23543.	6566.9
Stddev	5.9	2.9	121.	35.3
%RSD	.10377	.12466	.51237	.53730
#1	5658.8	2365.4	23485.	6572.1
#2	5670.2	2362.8	23462.	6599.3
#3	5662.0	2368.7	23681.	6529.3

Zoom In Zoom Out

Sample Name: MP34828-S1 Acquired: 12/20/2018 14:28:08 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0500	26.90	1.950	2.039	.0517	26.25	.0493	.4908	.2021
Stddev	.0009	.07	.004	.005	.0002	.12	.0001	.0004	.0003
%RSD	1.725	.2502	.2209	.2409	.4719	.4634	.2902	.0786	.1670
#1	.0507	26.82	1.952	2.033	.0515	26.11	.0491	.4907	.2024
#2	.0491	26.94	1.945	2.042	.0519	26.33	.0493	.4912	.2022
#3	.0503	26.93	1.954	2.042	.0516	26.30	.0494	.4904	.2018

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2592	26.12	28.63	25.42	.5192	.4570	F 169.1	.5036	.4939
Stddev	.0017	.11	.09	.07	.0017	.0004	2.2	.0009	.0055
%RSD	.6431	.4227	.3101	.2933	.3180	.0881	1.276	.1839	1.105
#1	.2609	25.99	28.56	25.34	.5198	.4575	171.4	.5026	.4945
#2	.2575	26.14	28.73	25.42	.5174	.4567	167.2	.5039	.4990
#3	.2591	26.21	28.61	25.49	.5205	.4570	168.6	.5044	.4882

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5144	1.904	.5423	.4859	.5075	.5015	2.071	.4856	.4961
Stddev	.0013	.004	.0014	.0015	.0009	.0014	.005	.0016	.0006
%RSD	.2559	.2037	.2650	.3154	.1853	.2886	.2599	.3272	.1196
#1	.5158	1.900	.5409	.4857	.5065	.5020	2.065	.4855	.4958
#2	.5141	1.903	.5423	.4874	.5084	.4998	2.073	.4841	.4957
#3	.5132	1.908	.5438	.4844	.5077	.5026	2.076	.4873	.4968

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5664.2	2323.5	23310.	6451.6
Stddev	6.7	1.6	13.	25.2
%RSD	.11900	.06885	.05669	.39110
#1	5666.4	2322.9	23303.	6453.2
#2	5656.6	2322.2	23301.	6476.0
#3	5669.6	2325.3	23325.	6425.6

Zoom In Zoom Out

Sample Name: MP34828-S2 Acquired: 12/20/2018 14:32:30 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0495	26.41	1.921	2.013	.0509	25.73	.0486	.4857	.1987
Stddev	.0005	.19	.004	.002	.0005	.16	.0002	.0009	.0012
%RSD	.9447	.7059	.2228	.0799	.9339	.6278	.3557	.1752	.6024
#1	.0494	26.47	1.924	2.011	.0513	25.81	.0484	.4853	.1974
#2	.0500	26.20	1.923	2.014	.0504	25.54	.0488	.4851	.1990
#3	.0491	26.55	1.916	2.013	.0509	25.83	.0487	.4867	.1998

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2547	25.59	28.06	24.89	.5101	.4516	F 166.7	.4965	.4878
Stddev	.0012	.22	.20	.14	.0021	.0013	2.9	.0011	.0022
%RSD	.4778	.8537	.7247	.5485	.4147	.2877	1.744	.2138	.4464
#1	.2556	25.69	28.22	25.00	.5116	.4517	170.0	.4953	.4895
#2	.2533	25.34	27.83	24.74	.5077	.4503	164.4	.4967	.4853
#3	.2552	25.73	28.13	24.92	.5110	.4529	165.7	.4974	.4886

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5073	1.891	.5313	.4782	.4988	.4905	2.054	.4764	.4916
Stddev	.0010	.010	.0007	.0006	.0024	.0018	.005	.0026	.0007
%RSD	.1978	.5121	.1389	.1204	.4902	.3759	.2391	.5408	.1415
#1	.5061	1.889	.5305	.4776	.4998	.4914	2.049	.4776	.4908
#2	.5080	1.882	.5320	.4788	.4960	.4884	2.053	.4735	.4917
#3	.5077	1.901	.5314	.4781	.5005	.4917	2.059	.4782	.4922

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5670.3	2327.8	23541.	6435.3
Stddev	13.6	3.7	188.	40.4
%RSD	.24021	.16009	.79735	.62774
#1	5672.1	2326.5	23422.	6448.9
#2	5682.9	2332.0	23758.	6389.8
#3	5655.9	2324.9	23444.	6467.1

Zoom In Zoom Out

Sample Name: FA60234-1 Acquired: 12/20/2018 14:36:53 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	.0316	-.0018	.0116	.0000	2.676	.0001	.0018	.0001
Stddev	.0004	.0029	.0009	.0002	.000	.007	.0000	.0002	.0006
%RSD	1532.	9.070	47.79	1.365	162.2	.2664	47.66	11.12	887.9
#1	-.0004	.0349	-.0025	.0117	.0000	2.685	.0001	.0016	.0001
#2	.0004	.0297	-.0022	.0115	.0000	2.672	.0001	.0019	.0006
#3	.0001	.0301	-.0008	.0118	-.0001	2.673	.0000	.0020	-.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0013	.0166	.5194	.5685	.1313	.0002	F 140.6	.0027	-.0021
Stddev	.0002	.0031	.0300	.0072	.0005	.0001	1.6	.0001	.0017
%RSD	13.34	19.02	5.777	1.271	.3834	35.40	1.144	4.210	81.15
#1	.0011	.0129	.4955	.5714	.1312	.0002	139.0	.0029	-.0019
#2	.0013	.0188	.5531	.5602	.1318	.0001	140.6	.0027	-.0005
#3	.0015	.0180	.5097	.5738	.1308	.0002	142.2	.0026	-.0039

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0005	.0027	.2107	.0004	.0157	.0010	-.0064	.0003	.0043
Stddev	.0008	.0021	.0015	.0007	.0002	.0001	.0012	.0008	.0001
%RSD	180.2	78.49	.7251	181.4	1.145	5.075	19.48	230.4	2.811
#1	-.0004	.0052	.2124	-.0004	.0159	.0011	-.0074	.0001	.0044
#2	.0006	.0013	.2096	.0007	.0156	.0010	-.0050	.0012	.0044
#3	.0013	.0017	.2101	.0008	.0156	.0011	-.0068	-.0003	.0042

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5745.8	2388.7	23824.	6498.1
Stddev	18.3	7.6	71.	47.9
%RSD	.31809	.31617	.29867	.73706
#1	5733.0	2380.2	23835.	6484.7
#2	5766.8	2394.7	23749.	6551.2
#3	5737.7	2391.3	23890.	6458.3

Zoom In Zoom Out

Sample Name: FA60234-2 Acquired: 12/20/2018 14:41:27 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	.0180	-.0010	.0118	.0000	2.112	-.0001	.0004	.0002
Stddev	.000	.0078	.0011	.0000	.000	.009	.0001	.0001	.0003
%RSD	1062.	43.10	111.5	.3918	160.7	.4275	92.10	20.15	196.2
#1	-.0004	.0120	.0003	.0118	.0000	2.105	.0000	.0004	-.0002
#2	.0001	.0153	-.0014	.0117	-.0001	2.122	.0000	.0004	.0003
#3	.0002	.0268	-.0018	.0118	.0000	2.108	-.0001	.0005	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0007	.0100	.5240	.6252	.0984	-.0002	F 154.1	.0012	-.0026
Stddev	.0003	.0006	.0157	.0166	.0005	.0003	2.8	.0005	.0015
%RSD	49.15	6.305	2.993	2.658	.5013	152.5	1.831	38.57	56.72
#1	.0003	.0106	.5293	.6177	.0984	.0001	156.4	.0007	-.0030
#2	.0010	.0094	.5363	.6136	.0980	-.0006	154.9	.0015	-.0010
#3	.0007	.0098	.5063	.6442	.0989	-.0002	150.9	.0015	-.0039

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0026	.0005	.1511	.0008	.0144	.0004	-.0010	.0000	.0030
Stddev	.0010	.0013	.0012	.0008	.0001	.0001	.0020	.0001	.0001
%RSD	40.46	236.0	.8080	99.72	.4486	37.56	192.7	261.2	2.624
#1	.0029	-.0009	.1501	.0001	.0144	.0003	.0011	-.0001	.0030
#2	.0034	.0014	.1509	.0006	.0145	.0003	-.0028	.0001	.0030
#3	.0014	.0011	.1525	.0017	.0144	.0006	-.0014	.0000	.0031

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5752.7	2392.5	23928.	6511.9
Stddev	7.6	4.3	8.	27.6
%RSD	.13281	.17797	.03393	.42377
#1	5760.7	2387.7	23920.	6494.2
#2	5752.0	2395.5	23936.	6497.8
#3	5745.5	2394.5	23929.	6543.7

Zoom In Zoom Out

Sample Name: FA60234-3 Acquired: 12/20/2018 14:46:02 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0007	.0333	-.0019	.0135	.0000	3.129	.0001	.0021	.0003
Stddev	.0005	.0085	.0011	.0001	.000	.023	.0001	.0002	.0007
%RSD	72.54	25.64	59.56	1.063	985.1	.7490	69.70	9.202	257.7
#1	-.0005	.0394	-.0024	.0135	.0000	3.155	.0001	.0019	-.0003
#2	-.0012	.0235	-.0006	.0136	-.0001	3.123	.0001	.0023	.0000
#3	-.0003	.0369	-.0027	.0134	.0000	3.110	.0000	.0022	.0011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0011	.0193	.5205	.7019	.2298	.0000	F 149.1	.0020	-.0036
Stddev	.0005	.0031	.0297	.0062	.0008	.0002	1.2	.0002	.0025
%RSD	45.24	15.94	5.699	.8859	.3499	378.7	.8027	10.03	67.86
#1	.0015	.0220	.5349	.6966	.2298	.0001	147.8	.0022	-.0056
#2	.0005	.0199	.4863	.7087	.2290	.0002	150.1	.0020	-.0009
#3	.0012	.0160	.5401	.7002	.2306	-.0002	149.4	.0018	-.0044

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0016	.0047	.1868	.0012	.0182	.0004	-.0063	.0002	.0034
Stddev	.0025	.0031	.0024	.0005	.0002	.0001	.0022	.0001	.0000
%RSD	155.1	66.30	1.300	43.17	.9209	14.10	35.53	60.32	1.051
#1	.0035	.0039	.1849	.0006	.0184	.0004	-.0072	.0004	.0034
#2	.0026	.0082	.1861	.0015	.0182	.0003	-.0037	.0001	.0033
#3	-.0012	.0021	.1895	.0015	.0180	.0004	-.0079	.0002	.0034

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5722.3	2375.4	23834.	6467.6
Stddev	6.2	5.2	82.	40.4
%RSD	.10905	.21869	.34362	.62388
#1	5719.6	2374.2	23861.	6463.8
#2	5729.4	2381.0	23899.	6429.3
#3	5717.8	2370.8	23742.	6509.7

Zoom In
Zoom Out

Sample Name: FA60234-4 Acquired: 12/20/2018 14:50:37 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	.0126	-.0016	.0141	-.0001	7.933	.0001	.0012	.0007
Stddev	.0005	.0085	.0002	.0002	.0000	.014	.0002	.0002	.0005
%RSD	312.9	67.77	11.93	1.569	8.035	.1745	304.0	14.44	68.51
#1	.0001	.0224	-.0015	.0143	.0000	7.927	.0002	.0013	.0010
#2	.0007	.0071	-.0018	.0140	-.0001	7.949	-.0001	.0010	.0009
#3	-.0003	.0082	-.0015	.0139	-.0001	7.924	.0001	.0014	.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0005	.0113	.6143	.5712	.1098	-.0002	F 148.9	.0012	-.0025
Stddev	.0003	.0032	.0211	.0155	.0002	.0001	1.0	.0002	.0015
%RSD	52.46	28.10	3.427	2.721	.1872	53.64	.7017	19.40	58.31
#1	.0005	.0149	.6215	.5539	.1100	-.0002	150.1	.0014	-.0037
#2	.0002	.0086	.5906	.5841	.1096	-.0004	148.4	.0009	-.0009
#3	.0007	.0106	.6309	.5755	.1098	-.0001	148.1	.0013	-.0029

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0007	.0010	.5101	.0003	.0276	.0008	-.0080	.0000	.0037
Stddev	.0009	.0011	.0026	.0011	.0001	.0002	.0008	.0002	.0000
%RSD	142.9	109.2	.5056	358.0	.3360	32.21	9.721	1180.	.2586
#1	.0003	.0016	.5078	-.0010	.0277	.0010	-.0089	.0001	.0037
#2	-.0006	-.0003	.5096	.0011	.0275	.0006	-.0076	-.0002	.0037
#3	-.0016	.0017	.5129	.0008	.0277	.0007	-.0075	.0002	.0037

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5732.5	2375.0	23740.	6563.3
Stddev	13.6	3.6	134.	23.8
%RSD	.23667	.15336	.56243	.36186
#1	5718.8	2372.6	23769.	6554.4
#2	5732.8	2373.1	23857.	6545.2
#3	5745.9	2379.1	23595.	6590.2

Zoom In
Zoom Out

Sample Name: FA60234-5 Acquired: 12/20/2018 14:55:13 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	.0211	-.0009	.0129	.0000	2.855	.0000	.0023	.0003
Stddev	.0005	.0071	.0018	.0002	.0001	.025	.0001	.0003	.0004
%RSD	119.4	33.61	197.6	1.196	414.6	.8683	158.2	12.18	108.0
#1	.0001	.0174	-.0001	.0127	.0000	2.827	.0000	.0026	.0008
#2	-.0005	.0293	-.0030	.0130	.0001	2.865	.0001	.0023	.0001
#3	-.0008	.0167	.0003	.0130	-.0001	2.874	.0001	.0021	.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0011	.0112	.4856	.7051	.1485	.0000	F 148.3	.0028	-.0033
Stddev	.0005	.0021	.0332	.0089	.0007	.000	1.0	.0004	.0007
%RSD	49.59	18.41	6.831	1.263	.4483	524.5	.6624	13.34	22.28
#1	.0015	.0135	.4768	.6974	.1486	.0002	148.0	.0033	-.0042
#2	.0012	.0095	.4577	.7149	.1478	-.0003	147.5	.0026	-.0032
#3	.0005	.0107	.5223	.7029	.1491	.0000	149.4	.0027	-.0027

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0009	.0033	.1723	.0007	.0161	.0001	-.0083	.0002	.0058
Stddev	.0003	.0008	.0009	.0006	.0003	.0001	.0002	.0005	.0001
%RSD	38.22	24.47	.5481	84.68	1.623	97.65	2.554	197.8	1.148
#1	.0009	.0025	.1727	.0002	.0158	.0000	-.0082	.0005	.0059
#2	.0012	.0041	.1712	.0006	.0161	.0003	-.0082	-.0003	.0058
#3	.0006	.0033	.1730	.0013	.0163	.0002	-.0086	.0005	.0058

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5748.7	2391.2	23890.	6480.5
Stddev	8.0	1.4	172.	47.5
%RSD	.13950	.05989	.72173	.73231
#1	5754.8	2392.3	23986.	6526.4
#2	5751.6	2391.6	23994.	6483.4
#3	5739.6	2389.6	23691.	6431.6

Zoom In
Zoom Out

Sample Name: FA60098-1 Acquired: 12/20/2018 14:59:49 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	.0774	-.0013	.0064	.0000	2.353	.0000	.0003	.0008
Stddev	.0011	.0184	.0004	.0001	.000	.022	.0001	.0003	.0005
%RSD	238.4	23.84	30.67	.8584	210.9	.9447	366.1	91.33	59.76
#1	-.0016	.0843	-.0010	.0063	-.0001	2.375	.0000	.0006	.0013
#2	.0007	.0914	-.0017	.0064	-.0001	2.331	.0001	.0000	.0004
#3	-.0005	.0565	-.0011	.0064	.0000	2.354	-.0001	.0004	.0007

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0014	.0256	1.742	.1390	.0354	-.0001	F 1217.	.0011	-.0014
Stddev	.0001	.0015	.057	.0114	.0002	.0003	4.	.0002	.0003
%RSD	4.356	5.838	3.252	8.179	.5922	372.3	.3418	17.44	19.50
#1	.0014	.0245	1.683	.1497	.0356	.0002	1219.	.0013	-.0016
#2	.0013	.0273	1.745	.1402	.0352	-.0004	1219.	.0010	-.0013
#3	.0014	.0250	1.797	.1271	.0355	.0000	1212.	.0010	-.0011

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0018	.0021	.0947	-.0001	.0128	.0010	-.0004	.0002	.0487
Stddev	.0008	.0005	.0009	.0003	.0002	.0001	.0051	.0002	.0001
%RSD	46.02	24.67	.9473	542.6	1.215	7.105	1215.	96.44	.1228
#1	.0009	.0016	.0937	.0003	.0127	.0009	-.0013	.0002	.0486
#2	.0022	.0022	.0954	-.0003	.0127	.0011	-.0050	.0003	.0487
#3	.0024	.0026	.0950	-.0001	.0130	.0010	.0050	.0000	.0487

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5950.6	2425.0	23940.	6252.3
Stddev	11.1	4.3	48.	20.1
%RSD	.18711	.17636	.20115	.32102
#1	5954.0	2426.5	23996.	6236.2
#2	5959.7	2428.3	23910.	6274.8
#3	5938.2	2420.2	23915.	6245.9

Zoom In
Zoom Out

Sample Name: FA60216-1L Acquired: 12/20/2018 15:04:24 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0002	.0122	-.0018	.0019	-.0001	2.632	.0000	-.0001	.0023
Stddev	.0007	.0006	.0009	.0002	.0000	.015	.000	.0004	.0002
%RSD	332.5	5.293	50.94	8.503	56.04	.5772	510.4	419.3	6.507
#1	-.0006	.0116	-.0021	.0018	.0000	2.614	-.0001	-.0002	.0025
#2	-.0006	.0120	-.0026	.0021	-.0001	2.641	-.0001	-.0004	.0023
#3	.0006	.0129	-.0008	.0019	-.0001	2.640	.0001	.0003	.0022

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0010	.0655	2.842	.8414	.0021	.0007	5.340	.0002	-.0039
Stddev	.0007	.0004	.030	.0167	.0001	.0005	.001	.0005	.0008
%RSD	63.19	.5436	1.040	1.988	3.353	69.10	.0200	217.6	21.50
#1	.0016	.0653	2.843	.8377	.0021	.0012	5.341	-.0001	-.0033
#2	.0012	.0652	2.812	.8269	.0021	.0005	5.339	.0008	-.0035
#3	.0003	.0659	2.872	.8597	.0020	.0003	5.339	.0000	-.0048

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0003	.0006	.2774	.0001	.0277	.0004	-.0086	.0001	.0018
Stddev	.0018	.0026	.0009	.0001	.0002	.0002	.0012	.0006	.0001
%RSD	544.6	400.0	.3374	109.4	.5750	37.56	14.48	630.7	3.239
#1	.0000	.0027	.2767	.0002	.0275	.0005	-.0097	.0007	.0018
#2	-.0023	.0014	.2785	.0000	.0276	.0005	-.0088	.0002	.0018
#3	.0013	-.0022	.2771	.0002	.0278	.0002	-.0072	-.0006	.0017

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5628.6	2354.5	23574.	6649.7
Stddev	6.9	4.5	84.	29.4
%RSD	.12205	.19029	.35768	.44212
#1	5634.7	2359.0	23517.	6647.2
#2	5629.9	2354.5	23671.	6680.2
#3	5621.2	2350.0	23533.	6621.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 15:08:50 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2451	40.62	2.004	2.042	2.058	40.98	2.012	1.987	2.020
Stddev	.0005	.14	.003	.004	.012	.26	.001	.005	.002
%RSD	.2202	.3353	.1430	.1956	.5896	.6249	.0521	.2446	.0915
#1	.2456	40.78	2.007	2.046	2.072	41.28	2.011	1.985	2.019
#2	.2445	40.54	2.004	2.038	2.052	40.86	2.013	1.984	2.022
#3	.2451	40.54	2.001	2.041	2.051	40.81	2.012	1.993	2.018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.985	40.75	40.56	40.90	2.038	2.012	40.67	2.001	2.025
Stddev	.006	.24	.12	.16	.001	.004	.22	.004	.002
%RSD	.2871	.5786	.2975	.4025	.0338	.2129	.5399	.2168	.1124
#1	1.983	40.99	40.70	41.08	2.038	2.007	40.91	1.997	2.025
#2	1.980	40.72	40.49	40.87	2.037	2.012	40.50	2.000	2.027
#3	1.991	40.52	40.50	40.75	2.038	2.016	40.59	2.006	2.023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.995	1.980	1.944	2.039	2.089	2.050	2.017	2.050	2.011
Stddev	.004	.007	.006	.002	.011	.005	.006	.006	.001
%RSD	.1964	.3532	.2996	.0721	.5084	.2419	.3117	.3047	.0699
#1	1.991	1.979	1.940	2.039	2.101	2.046	2.022	2.052	2.011
#2	1.999	1.974	1.941	2.037	2.081	2.048	2.019	2.043	2.010
#3	1.995	1.988	1.951	2.040	2.086	2.055	2.010	2.055	2.013
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 15:08:50 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5700.2	2311.3	23497.	6551.2
Stddev	8.3	3.9	79.	22.6
%RSD	.14625	.16978	.33815	.34554
#1	5709.0	2313.4	23573.	6526.0
#2	5699.4	2313.7	23415.	6569.8
#3	5692.3	2306.8	23503.	6557.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 15:13:02 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0049	-.0004	.0003	.0000	.0028	.0000	.0001	.0002
Stddev	.0006	.0145	.0010	.0002	.0001	.0033	.0001	.0001	.0005
%RSD	248.6	296.0	260.9	58.47	145.4	115.5	117.5	75.23	224.9
#1	.0002	-.0112	-.0009	.0002	.0000	.0051	.0001	.0000	.0002
#2	.0008	.0117	-.0010	.0004	.0000	.0043	.0001	.0001	-.0003
#3	-.0003	-.0153	.0008	.0002	.0001	-.0009	.0000	.0002	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0104	.0618	.0165	.0001	F .0011	.0380	.0002	-.0008
Stddev	.0005	.0009	.0292	.0061	.0001	.0002	.0124	.0000	.0011
%RSD	297.2	8.320	47.16	36.98	35.88	20.17	32.59	10.21	140.3
#1	.0006	.0114	.0870	.0231	.0001	.0013	.0255	.0002	.0005
#2	-.0004	.0099	.0685	.0110	.0002	.0009	.0502	.0001	-.0012
#3	.0003	.0099	.0299	.0154	.0002	.0012	.0383	.0002	-.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0009	-.0002	.0002	-.0001	.0002	.0012	.0006	.0002	.0010
Stddev	.0025	.0015	.0005	.0002	.0001	.0003	.0016	.0002	.0002
%RSD	288.0	690.1	211.9	235.9	36.55	20.95	246.7	91.79	17.91
#1	-.0023	-.0020	-.0001	-.0003	.0001	.0015	-.0001	.0000	.0011
#2	.0020	.0006	.0008	-.0001	.0001	.0013	-.0004	.0003	.0011
#3	-.0024	.0007	.0000	.0001	.0002	.0010	.0024	.0003	.0008
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 15:13:02 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5590.3	2359.1	23587.	6492.0
Stddev	6.2	5.1	82.	14.4
%RSD	.11010	.21552	.34661	.22158
#1	5597.1	2362.0	23511.	6475.5
#2	5588.9	2353.2	23577.	6501.7
#3	5585.0	2362.0	23673.	6498.9

Zoom In Zoom Out

Sample Name: MP34828-D2 Acquired: 12/20/2018 15:17:29 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0002	.0066	-.0016	.0027	.0000	1.054	.0000	-.0001	.0005
Stddev	.0007	.0121	.0010	.0002	.000	.013	.000	.0002	.0002
%RSD	479.5	181.9	67.28	7.273	139.6	1.204	2215.	267.4	41.44
#1	-.0008	.0145	-.0023	.0025	.0000	1.045	-.0002	-.0002	.0007
#2	-.0003	-.0073	-.0004	.0028	.0000	1.050	.0002	.0002	.0003
#3	.0006	.0127	-.0020	.0029	-.0001	1.069	.0000	-.0002	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0000	.0020	3.355	.2078	.0056	.0002	F 148.3	.0024	-.0029
Stddev	.000	.0021	.023	.0050	.0001	.0004	2.0	.0003	.0014
%RSD	6348.	106.2	.6766	2.418	2.176	158.7	1.368	13.70	47.77
#1	-.0004	-.0003	3.352	.2078	.0056	.0002	148.9	.0023	-.0040
#2	-.0001	.0025	3.380	.2028	.0058	.0006	146.0	.0028	-.0033
#3	.0004	.0039	3.335	.2129	.0055	-.0001	149.9	.0021	-.0013

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0027	.0037	.1101	.0004	.0145	.0003	-.0057	.0004	.0032
Stddev	.0008	.0003	.0011	.0005	.0001	.0001	.0072	.0000	.0001
%RSD	28.86	7.707	.9580	111.7	.6373	34.33	127.0	11.73	2.869
#1	.0032	.0039	.1113	.0006	.0144	.0004	-.0034	.0004	.0033
#2	.0018	.0033	.1095	.0007	.0146	.0002	-.0137	.0003	.0031
#3	.0032	.0038	.1094	-.0001	.0146	.0002	.0002	.0004	.0031

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5666.9	2361.4	23581.	6352.2
Stddev	10.6	7.8	19.	20.6
%RSD	.18636	.33206	.07953	.32356
#1	5655.8	2354.1	23563.	6328.5
#2	5668.1	2360.3	23581.	6365.9
#3	5676.8	2369.7	23600.	6362.1

Zoom In Zoom Out

Sample Name: MP34828-MB2 Acquired: 12/20/2018 15:22:02 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	.0177	-.0021	.0002	.0000	.0047	-.0001	-.0001	.0003
Stddev	.0001	.0187	.0005	.0001	.000	.0016	.0001	.0003	.0004
%RSD	31.87	105.9	25.32	89.94	239.2	32.88	197.0	303.7	138.1
#1	-.0003	.0229	-.0027	.0000	.0001	.0030	.0001	.0002	.0003
#2	-.0006	-.0031	-.0017	.0002	.0000	.0053	-.0002	-.0002	.0007
#3	-.0004	.0333	-.0020	.0003	-.0001	.0059	.0000	-.0003	-.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0005	.0011	.3400	.0113	.0002	.0002	F 149.8	.0003	-.0015
Stddev	.0004	.0013	.0194	.0153	.0000	.0001	2.4	.0002	.0005
%RSD	82.46	113.7	5.709	135.5	13.67	86.46	1.618	73.95	32.81
#1	-.0006	.0012	.3205	-.0001	.0002	.0003	149.1	.0001	-.0017
#2	-.0008	.0024	.3593	.0052	.0002	.0001	152.5	.0003	-.0009
#3	.0000	-.0002	.3401	.0287	.0002	.0000	147.8	.0004	-.0018

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0003	.0018	.0498	.0011	.0010	.0000	-.0082	.0001	.0012
Stddev	.0019	.0031	.0009	.0002	.0001	.0000	.0017	.0003	.0001
%RSD	628.0	170.0	1.820	18.14	6.729	86.06	20.79	279.4	4.468
#1	.0015	.0007	.0508	.0009	.0010	.0001	-.0102	.0003	.0012
#2	-.0019	.0053	.0496	.0013	.0010	.0000	-.0070	.0003	.0013
#3	.0014	-.0006	.0490	.0011	.0011	.0000	-.0075	-.0003	.0013

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5701.8	2377.8	23763.	6403.3
Stddev	17.2	8.6	225.	62.9
%RSD	.30241	.36206	.94492	.98235
#1	5682.6	2370.9	23508.	6436.8
#2	5706.8	2374.9	23852.	6330.8
#3	5716.0	2387.4	23930.	6442.4

Zoom In Zoom Out

Sample Name: MP34828-B2 Acquired: 12/20/2018 15:26:39 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0486	27.02	1.931	2.021	.0520	25.37	.0487	.4861	.2018
Stddev	.0004	.12	.003	.007	.0002	.11	.0001	.0008	.0005
%RSD	.8574	.4397	.1350	.3496	.2887	.4277	.2546	.1590	.2670
#1	.0483	26.92	1.930	2.017	.0518	25.32	.0485	.4870	.2024
#2	.0491	27.16	1.929	2.018	.0521	25.50	.0487	.4859	.2016
#3	.0485	26.99	1.934	2.029	.0521	25.30	.0488	.4855	.2013

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2570	26.13	25.82	25.12	.5085	.4549	F 173.8	.4962	.4877
Stddev	.0002	.09	.09	.13	.0011	.0004	4.4	.0006	.0029
%RSD	.0695	.3294	.3323	.5295	.2100	.0922	2.532	.1267	.5909
#1	.2572	26.08	25.73	25.16	.5073	.4546	177.8	.4961	.4880
#2	.2570	26.23	25.85	25.23	.5093	.4554	174.6	.4956	.4847
#3	.2568	26.08	25.89	24.97	.5088	.4548	169.1	.4968	.4905

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5101	1.894	.4734	.4815	.4977	.4985	2.055	.4853	.4906
Stddev	.0010	.002	.0016	.0015	.0014	.0018	.004	.0007	.0009
%RSD	.2014	.1173	.3452	.3023	.2770	.3598	.2163	.1359	.1831
#1	.5113	1.894	.4725	.4828	.4961	.4966	2.050	.4850	.4898
#2	.5099	1.896	.4753	.4799	.4984	.5002	2.057	.4860	.4905
#3	.5093	1.891	.4725	.4817	.4985	.4986	2.059	.4848	.4916

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5707.0	2338.1	23374.	6438.8
Stddev	5.1	1.3	111.	51.7
%RSD	.08907	.05497	.47583	.80370
#1	5712.1	2338.8	23410.	6453.6
#2	5707.0	2338.8	23464.	6381.2
#3	5701.9	2336.6	23250.	6481.5

Zoom In Zoom Out

Sample Name: MP34828-MB3 Acquired: 12/20/2018 15:31:01 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	.0014	-.0018	.0002	-.0001	.0053	.0000	-.0002	.0006
Stddev	.0004	.0060	.0003	.0002	.0000	.0012	.0000	.0002	.0003
%RSD	93.36	444.2	16.53	93.97	53.06	22.66	1225.	81.15	43.45
#1	-.0001	-.0038	-.0015	.0000	.0000	.0043	.0000	-.0004	.0003
#2	-.0003	.0079	-.0021	.0002	-.0001	.0066	.0001	-.0002	.0007
#3	-.0008	.0000	-.0017	.0003	.0000	.0049	.0000	-.0001	.0008

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0002	.0055	.0535	.0090	.0001	-.0002	.0483	.0000	-.0011
Stddev	.0000	.0008	.0096	.0097	.0001	.0005	.0083	.000	.0011
%RSD	28.64	14.07	17.89	107.5	133.7	284.8	17.28	1056.	99.56
#1	-.0002	.0050	.0530	-.0015	.0000	-.0005	.0425	-.0002	.0000
#2	-.0001	.0051	.0633	.0176	.0001	-.0004	.0578	-.0003	-.0022
#3	-.0002	.0064	.0442	.0109	.0001	.0004	.0445	.0004	-.0011

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0006	.0011	.0324	.0000	-.0001	.0002	-.0042	.0001	.0016
Stddev	.0011	.0017	.0007	.000	.0001	.0002	.0035	.0002	.0001
%RSD	174.1	150.4	2.236	578.1	116.1	109.4	84.60	290.9	3.236
#1	-.0006	-.0006	.0317	.0000	.0000	.0003	-.0005	.0002	.0016
#2	-.0017	.0028	.0331	.0000	-.0002	.0002	-.0044	.0002	.0016
#3	.0004	.0011	.0325	-.0001	.0000	.0000	-.0076	-.0002	.0015

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5526.2	2331.2	23126.	6441.4
Stddev	13.7	8.4	69.	29.4
%RSD	.24759	.36173	.29910	.45693
#1	5521.7	2329.9	23091.	6472.2
#2	5515.4	2323.5	23206.	6438.5
#3	5541.6	2340.2	23081.	6413.6

Zoom In Zoom Out

Sample Name: MP34828-B3 Acquired: 12/20/2018 15:35:29 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0484	26.59	1.920	2.021	.0510	24.93	.0485	.4814	.2011
Stddev	.0014	.14	.005	.010	.0001	.15	.0001	.0005	.0007
%RSD	2.915	.5244	.2479	.5085	.2813	.6201	.2812	.1062	.3395
#1	.0468	26.66	1.925	2.026	.0511	24.99	.0487	.4819	.2016
#2	.0490	26.43	1.919	2.009	.0509	24.75	.0485	.4814	.2003
#3	.0495	26.68	1.915	2.028	.0512	25.04	.0484	.4809	.2013

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2463	25.72	24.66	24.91	.5106	.4515	24.73	.4907	.4850
Stddev	.0007	.15	.09	.14	.0003	.0002	.13	.0008	.0031
%RSD	.2956	.5680	.3448	.5762	.0678	.0498	.5431	.1532	.6476
#1	.2462	25.82	24.72	25.03	.5103	.4517	24.78	.4916	.4882
#2	.2456	25.56	24.57	24.75	.5110	.4514	24.58	.4905	.4846
#3	.2471	25.79	24.70	24.95	.5105	.4513	24.84	.4901	.4820

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5045	1.877	.4527	.4764	.4918	.4949	2.033	.4796	.4916
Stddev	.0036	.003	.0020	.0034	.0015	.0012	.008	.0010	.0016
%RSD	.7233	.1701	.4361	.7176	.2985	.2513	.3728	.2069	.3222
#1	.5073	1.880	.4519	.4792	.4916	.4939	2.041	.4797	.4932
#2	.5058	1.879	.4513	.4773	.4904	.4945	2.027	.4785	.4916
#3	.5004	1.874	.4550	.4726	.4933	.4963	2.031	.4805	.4900

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5668.1	2340.8	23336.	6480.6
Stddev	16.1	7.9	91.	94.7
%RSD	.28480	.33656	.38817	1.4607
#1	5649.6	2331.8	23419.	6446.5
#2	5679.1	2344.2	23350.	6587.6
#3	5675.7	2346.5	23239.	6407.7

Zoom In Zoom Out

Sample Name: CRIA Acquired: 12/20/2018 15:39:41 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0098	.1986	.0089	.1977	.0051	.9960	.0049	.0468	.0098
Stddev	.0011	.0167	.0011	.0007	.0001	.0120	.0000	.0001	.0003
%RSD	10.98	8.420	11.87	.3620	1.154	1.210	.2404	.2551	2.706
#1	.0086	.2173	.0099	.1970	.0050	.9821	.0049	.0469	.0101
#2	.0107	.1936	.0090	.1976	.0051	1.002	.0049	.0467	.0097
#3	.0101	.1850	.0078	.1984	.0051	1.004	.0048	.0467	.0096

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0227	.3041	9.726	4.976	.0150	.0432	9.614	.0373	.0024
Stddev	.0007	.0025	.092	.047	.0001	.0009	.034	.0003	.0009
%RSD	3.170	.8221	.9486	.9486	.6791	2.004	.3583	.7676	40.20
#1	.0229	.3016	9.630	4.932	.0151	.0432	9.580	.0372	.0025
#2	.0219	.3066	9.814	5.026	.0150	.0441	9.614	.0376	.0032
#3	.0233	.3041	9.732	4.971	.0149	.0424	9.649	.0370	.0013

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0046	.0107	.0213	.0458	.0099	.0093	.0150	.0468	.0204
Stddev	.0018	.0035	.0003	.0013	.0000	.0000	.0007	.0005	.0001
%RSD	38.18	32.79	1.198	2.744	.2497	.2467	4.663	.9802	.6222
#1	.0046	.0087	.0214	.0444	.0099	.0093	.0147	.0472	.0205
#2	.0063	.0147	.0215	.0466	.0099	.0093	.0158	.0469	.0203
#3	.0028	.0086	.0210	.0465	.0099	.0093	.0144	.0463	.0205

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5751.3	2408.8	23994.	6548.4
Stddev	15.7	4.6	74.	31.3
%RSD	.27372	.19159	.30864	.47869
#1	5742.1	2405.2	23940.	6580.0
#2	5742.4	2407.2	23964.	6517.3
#3	5769.5	2414.0	24079.	6547.9

Zoom In Zoom Out

Sample Name: ICSA Acquired: 12/20/2018 15:44:04 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.0001	F 531.1	-.0018	.0011	.0000	479.3	-.0003	-.0017
Stddev	.0004	8.8	.0029	.0003	.000	8.4	.0003	.0002
%RSD	457.0	1.665	165.0	23.62	93.49	1.743	93.32	11.70
#1	-.0003	532.9	.0006	.0008	-.0001	483.2	-.0004	-.0019
#2	.0000	539.0	-.0008	.0013	.0000	485.1	-.0007	-.0017
#3	.0005	521.5	-.0050	.0010	.0000	469.7	.0000	-.0015

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	-.0012	.0005	187.8	.1333	F 516.1	.0021	.0004	.2856
Stddev	.0003	.0001	1.4	.0221	5.6	.0001	.0004	.0027
%RSD	22.59	19.49	.7317	16.57	1.092	3.905	78.87	.9364
#1	-.0013	.0005	188.0	.1553	518.3	.0021	.0005	.2833
#2	-.0009	.0004	189.0	.1111	520.3	.0022	.0008	.2851
#3	-.0015	.0005	186.3	.1336	509.7	.0020	.0001	.2885

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0015	F -.0065	.0080	-.0014	.0157	.0014	.0003	.0024
Stddev	.0003	.0018	.0001	.0060	.0007	.0009	.0001	.0002
%RSD	21.72	27.10	1.848	420.7	4.499	63.71	40.09	8.761
#1	.0013	-.0051	.0081	-.0079	.0157	.0023	.0002	.0026
#2	.0018	-.0084	.0081	-.0001	.0164	.0005	.0003	.0025
#3	.0012	-.0058	.0079	.0038	.0150	.0015	.0005	.0022

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	.0039	.0014	.0082
Stddev	.0068	.0003	.0002
%RSD	173.3	21.45	2.443
#1	-.0039	.0012	.0080
#2	.0082	.0012	.0082
#3	.0075	.0017	.0084

Zoom In Zoom Out

Sample Name: ICSA Acquired: 12/20/2018 15:44:04 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5619.0	2203.6	22433.	6387.9
Stddev	11.6	9.1	80.	90.0
%RSD	.20718	.41206	.35542	1.4084
#1	5605.7	2193.8	22344.	6324.7
#2	5624.3	2205.1	22498.	6348.2
#3	5627.1	2211.8	22458.	6490.9

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 12/20/2018 15:48:43 Type: Unk
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F 1.104	F 518.6	.9896	.4972	.4860	449.8	.9674	.4952	.4791
Stddev	.004	7.5	.0026	.0018	.0042	4.0	.0007	.0012	.0014
%RSD	.3512	1.456	.2652	.3552	.8706	.8983	.0696	.2466	.2872
#1	1.099	520.1	.9926	.4989	.4908	454.4	.9676	.4963	.4776
#2	1.105	525.3	.9875	.4954	.4830	447.4	.9667	.4939	.4793
#3	1.107	510.4	.9888	.4975	.4841	447.4	.9680	.4953	.4803

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5505	184.7	.0756	F 506.5	.4994	.8813	.1785	.9967	.9595
Stddev	.0021	1.2	.0318	3.4	.0004	.0025	.0164	.0009	.0046
%RSD	.3821	.6437	42.02	.6651	.0893	.2857	9.178	.0870	.4800
#1	.5483	186.0	.0606	510.2	.4995	.8842	.1973	.9975	.9589
#2	.5507	183.7	.1121	503.6	.4988	.8798	.1707	.9958	.9552
#3	.5525	184.5	.0541	505.8	.4997	.8799	.1674	.9967	.9644

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.053	.9464	.0686	.9069	.9176	1.046	.9751	.4741	.9489
Stddev	.003	.0076	.0021	.0007	.0074	.002	.0052	.0022	.0019
%RSD	.2369	.8129	3.039	.0775	.8161	.1916	.5298	.4593	.2047
#1	1.053	.9464	.0686	.9069	.9176	1.046	.9751	.4741	.9489
#2	1.050	.9334	.0702	.9059	.9051	1.046	.9797	.4776	.9473
#3	1.055	.9329	.0661	.9056	.9044	1.050	.9855	.4782	.9512

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	5551.4	2182.7	22370.	6339.5
Stddev	18.6	6.7	20.	6.7
%RSD	.33572	.30915	.09048	.10540
#1	5563.4	2187.6	22370.	6332.0
#2	5560.9	2185.6	22390.	6345.0
#3	5529.9	2175.0	22350.	6341.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 15:53:12 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2455	40.22	1.987	2.029	2.033	40.36	2.004	1.978	2.010
Stddev	.0010	.07	.003	.005	.010	.26	.003	.005	.003
%RSD	.4073	.1834	.1255	.2435	.4741	.6332	.1283	.2310	.1616
#1	.2447	40.24	1.985	2.030	2.032	40.46	2.004	1.978	2.008
#2	.2466	40.14	1.987	2.023	2.024	40.06	2.001	1.974	2.008
#3	.2452	40.29	1.990	2.033	2.043	40.54	2.006	1.983	2.014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.979	40.12	40.05	40.48	2.040	2.001	40.30	1.991	2.026
Stddev	.004	.24	.18	.27	.003	.007	.13	.002	.001
%RSD	.2084	.5951	.4371	.6674	.1278	.3460	.3212	.0871	.0258
#1	1.983	40.13	40.05	40.59	2.043	1.997	40.31	1.992	2.027
#2	1.975	39.88	39.88	40.17	2.039	1.997	40.17	1.989	2.026
#3	1.980	40.36	40.23	40.68	2.038	2.009	40.42	1.992	2.026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.983	1.968	1.937	2.030	2.069	2.047	2.017	2.049	2.005
Stddev	.007	.006	.002	.007	.005	.005	.005	.008	.005
%RSD	.3466	.3225	.0782	.3339	.2400	.2539	.2489	.3687	.2368
#1	1.990	1.963	1.935	2.027	2.072	2.049	2.012	2.051	2.004
#2	1.979	1.967	1.937	2.025	2.064	2.041	2.015	2.041	2.000
#3	1.978	1.975	1.938	2.038	2.073	2.051	2.022	2.056	2.010
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2018 15:53:12 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5686.8	2313.2	23434.	6468.9
Stddev	4.8	2.3	55.	80.5
%RSD	.08410	.10083	.23308	1.2446
#1	5683.6	2313.1	23422.	6451.0
#2	5684.5	2315.6	23494.	6556.8
#3	5692.3	2311.0	23387.	6398.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2018 15:57:24 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0066	-.0004	.0003	.0001	.0112	.0000	.0002
Stddev	.0008	.0052	.0007	.0001	.0000	.0013	.0000	.0002
%RSD	355.3	78.05	189.5	22.64	31.53	11.33	243.2	113.8
#1	.0005	.0082	.0004	.0004	.0001	.0121	.0000	.0005
#2	-.0007	.0008	-.0009	.0002	.0002	.0097	.0000	.0001
#3	.0008	.0108	-.0007	.0003	.0001	.0117	.0000	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0003	.0153	.0476	.0275	.0001	F .0011	-.0305
Stddev	.0004	.0001	.0026	.0330	.0213	.0000	.0004	.0158
%RSD	87.38	50.11	17.10	69.29	77.48	18.82	37.05	51.78
#1	.0005	.0004	.0176	.0286	.0177	.0001	.0014	-.0207
#2	.0001	.0001	.0160	.0856	.0128	.0001	.0006	-.0487
#3	.0009	.0003	.0125	.0285	.0518	.0001	.0013	-.0221
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	F -.0030	-.0002	.0005	.0000	-.0003	.0001	.0011
Stddev	.0004	.0006	.0022	.0011	.0012	.0007	.0001	.0002
%RSD	68.03	18.80	1242.	228.9	4203.	254.9	59.76	21.25
#1	.0004	-.0031	-.0022	.0017	.0014	-.0006	.0001	.0011
#2	.0010	-.0035	.0022	-.0003	-.0006	.0005	.0001	.0014
#3	.0003	-.0024	-.0005	.0000	-.0007	-.0006	.0000	.0009
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010						
Low Limit		-.0010						

Zoom In
Zoom Out

Sample Name: CCB Acquired: 12/20/2018 15:57:24 Type: QC
Method: 60102007_042011(v363) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F .0035	.0004	.0009
Stddev	.0041	.0003	.0000
%RSD	119.6	64.58	5.439
#1	.0083	.0004	.0009
#2	.0012	.0007	.0009
#3	.0010	.0002	.0009
Check ?	Chk Fail	Chk Pass	Chk Pass
High Limit	.0020		
Low Limit	-.0020		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5679.1	2388.0	23619.	6469.4
Stddev	10.4	5.7	117.	57.7
%RSD	.18272	.23840	.49663	.89224
#1	5671.3	2385.4	23623.	6474.5
#2	5675.0	2384.1	23500.	6409.3
#3	5690.9	2394.5	23735.	6524.4

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	☒	2	V	-0.005817	0.000000	No
			Fe	0.000004	0.000000	No
Al 396.152 { 85}	☒	1	Mo	0.040330	0.000000	No
As 189.042 {478}	☒	4	Fe	-0.000018	0.000000	No
			Cr	-0.000653	0.000000	No
			Mo	0.000444	0.000000	No
			Al	0.000001	0.000000	No
Ba 455.403 { 74}	☒	1	Fe	0.000003	0.000000	No
Be 313.042 {108}	☒	2	V	0.000625	0.000000	No
			Ti	-0.000289	0.000000	No
Ca 317.933 {106}	☒	None				
Cd 226.502 {449}	☒	4	Fe	0.000102	0.000000	No
			Ca	-0.000000	0.000000	No
			Al	-0.000002	0.000000	No
			Ti	0.000103	0.000000	No
Co 228.616 {447}	☒	3	Mo	-0.001220	0.000000	No
			Ti	0.002210	0.000000	No
			Fe	0.000007	0.000000	No
Cr 267.716 {126}	☒	4	Al	0.000003	0.000000	No
			Fe	-0.000012	0.000000	No
			Ca	0.000002	0.000000	No
			Cd	-0.000120	0.000000	No
Cu 324.754 {104}	☒	10	Mo	0.000189	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Al	0.000003	0.000000	No
			Mg	0.000003	0.000000	No
			Co	-0.000547	0.000000	No
			Cd	0.000190	0.000000	No
			Fe	-0.000124	0.000000	No
			Ca	0.000001	0.000000	No
			Ti	-0.000268	0.000000	No
Fe 259.940 {130}	☒	None				
In 230.606 {446}*	☒	None				
K 766.490 { 44}	☒	None				
Mg 279.079 {121}	☒	None				
Mn 257.610 {131}	☒	2	Fe	-0.000003	0.000000	No
			Mg	0.000000	0.000000	No
Mo 202.030 {467}	☒	1	Fe	-0.000006	0.000000	No
Na 589.592 { 57}	☒	None				
Ni 231.604 {445}	☒	7	Fe	-0.000046	0.000000	No
			Co	0.000112	0.000000	No
			Mo	0.000980	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000304	0.000000	No
			Tl	0.000172	0.000000	No
Pb 220.353 {453}	☒	8	Al	0.000193	0.000000	No
			Fe	0.000666	0.000000	No
			Mo	-0.002189	0.000000	No
			Cu	0.000467	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000232	0.000000	No
			Ca	-0.000003	0.000000	No
			Cr	-0.000260	0.000000	No
Sb 206.833 {463}	☒	11	Fe	-0.000013	0.000000	No
			Cr	0.011486	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Mo	-0.003944	0.000000	No
			V	-0.000441	0.000000	No
			Sn	-0.008695	0.000000	No
			Ti	0.000278	0.000000	No
			Ca	0.000001	0.000000	No
			Ni	-0.000818	0.000000	No
			Al	0.000010	0.000000	No
			Mn	-0.000133	0.000000	No
			Mg	-0.000002	0.000000	No
Se 196.090 {472}	☒	12	Fe	0.000032	0.000000	No
			Ca	0.000008	0.000000	No
			Mn	0.000331	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000031	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	-0.000111	0.000000	No
			As	0.000125	0.000000	No
			Cd	-0.000250	0.000000	No
			Mg	-0.000004	0.000000	No
			Cr	-0.000326	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.000000	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000021	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000014	0.000000	No
Tl 190.856 {477}	☒	10	Co	0.004099	0.000000	No
			Fe	0.000020	0.000000	No
			Al	-0.000010	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.000648	0.000000	No
			Sb	0.000167	0.000000	No
			Ca	-0.000000	0.000000	No
			Cr	0.000340	0.000000	No
			Mg	-0.000002	0.000000	No
			V	0.000015	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000001	0.000000	No
			Cr	-0.003634	0.000000	No
			Mo	-0.009536	0.000000	No
			Ti	0.000303	0.000000	No
			Mn	-0.000333	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.001305	0.000000	No
			Al	-0.000001	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000028	0.000000	No
			As	0.001105	0.000000	No

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.001685	0.631469	0.000000	1.000000
Al 396.152 { 85}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	-0.007031	0.143825	0.000000	1.000000
As 189.042 {478}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	-0.000370	0.258427	0.000000	1.000000
Ba 455.403 { 74}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.008637	8.659733	0.000000	1.000000
Be 313.042 {108}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	-0.000680	8.079725	0.000000	1.000000
Ca 317.933 {106}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.005450	0.225893	0.000000	1.000000
Cd 226.502 {449}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.000405	5.136195	0.000000	1.000000
Co 228.616 {447}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	-0.000668	2.885860	0.000000	1.000000
Cr 267.716 {126}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	-0.000404	0.498195	0.000000	1.000000
Cu 324.754 {104}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.018243	0.895259	0.000000	1.000000
Fe 259.940 {130}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.000765	0.146116	0.000000	1.000000
In 230.606 {446}*	12/20/2018 9:22:41	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
K 766.490 { 44}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.001176	0.063963	0.000000	1.000000
Mg 279.079 {121}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	-0.000386	0.025980	0.000000	1.000000
Mn 257.610 {131}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.000965	2.999209	0.000000	1.000000
Mo 202.030 {467}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.001044	0.959351	0.000000	1.000000
Na 589.592 { 57}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	-0.014367	0.223336	0.000000	1.000000
Ni 231.604 {445}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.000229	1.831146	0.000000	1.000000
Pb 220.353 {453}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.000380	0.153115	0.000000	1.000000
Sb 206.833 {463}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.000296	0.245999	0.000000	1.000000
Se 196.090 {472}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	-0.000699	0.201087	0.000000	1.000000
Si 212.412 {459}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.002667	0.402339	0.000000	1.000000
Sn 189.989 {477}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.000672	0.429949	0.000000	1.000000
Sr 407.771 { 83}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	-0.000226	13.253190	0.000000	1.000000
Ti 334.941 {101}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.002586	1.876643	0.000000	1.000000
Tl 190.856 {477}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	-0.000930	0.039891	0.000000	1.000000
V 292.402 {115}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	-0.000316	0.650454	0.000000	1.000000
Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Zn 206.200 {463}	12/20/2018 9:22:41	12/20/2018 8:52:34	Linear	1/Conc	0.002551	4.019952	0.000000	1.000000

Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
						Slope	Y-int	Slope factor	Offset
Ag 328.068 {103}	0.999802	0.000121	0.000669	0.002229	OK.	1.000000	0.000000	1	0
Al 396.152 { 85}	0.999982	0.001382	0.008898	0.029661	OK.	1.000000	0.000000	1	0
As 189.042 {478}	0.999968	0.000167	0.001280	0.004268	OK.	1.000000	0.000000	1	0
Ba 455.403 { 74}	0.999985	0.003826	0.000185	0.000617	OK.	1.000000	0.000000	1	0
Be 313.042 {108}	0.999929	0.007737	0.000067	0.000224	OK.	1.000000	0.000000	1	0
Ca 317.933 {106}	0.999989	0.001725	0.002700	0.009000	OK.	1.000000	0.000000	1	0
Cd 226.502 {449}	0.999980	0.002627	0.000103	0.000344	OK.	1.000000	0.000000	1	0
Co 228.616 {447}	0.999965	0.001938	0.000208	0.000692	OK.	1.000000	0.000000	1	0
Cr 267.716 {126}	0.999904	0.000556	0.000490	0.001632	OK.	1.000000	0.000000	1	0
Cu 324.754 {104}	0.999872	0.001153	0.000414	0.001378	OK.	1.000000	0.000000	1	0
Fe 259.940 {130}	0.999815	0.004525	0.002180	0.007267	OK.	1.000000	0.000000	1	0
In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
K 766.490 { 44}	0.999994	0.000362	0.032209	0.107365	OK.	1.000000	0.000000	1	0
Mg 279.079 {121}	0.999962	0.000363	0.015877	0.052922	OK.	1.000000	0.000000	1	0
Mn 257.610 {131}	0.999911	0.003219	0.000075	0.000250	OK.	1.000000	0.000000	1	0
Mo 202.030 {467}	0.999838	0.001389	0.000348	0.001161	OK.	1.000000	0.000000	1	0
Na 589.592 { 57}	0.999996	0.001010	0.010203	0.034010	OK.	1.000000	0.000000	1	0
Ni 231.604 {445}	0.999961	0.001309	0.000334	0.001114	OK.	1.000000	0.000000	1	0
Pb 220.353 {453}	0.999996	0.000034	0.001998	0.006659	OK.	1.000000	0.000000	1	0
Sb 206.833 {463}	0.999897	0.000283	0.002193	0.007310	OK.	1.000000	0.000000	1	0
Se 196.090 {472}	0.999975	0.000114	0.002362	0.007872	OK.	1.000000	0.000000	1	0
Si 212.412 {459}	0.997474	0.002308	0.000960	0.003199	OK.	1.000000	0.000000	1	0
Sn 189.989 {477}	0.999848	0.000605	0.000661	0.002203	OK.	1.000000	0.000000	1	0
Sr 407.771 { 83}	0.999898	0.015285	0.000078	0.000260	OK.	1.000000	0.000000	1	0
Ti 334.941 {101}	0.999908	0.002049	0.000208	0.000693	OK.	1.000000	0.000000	1	0
Tl 190.856 {477}	0.999990	0.000014	0.004327	0.014423	OK.	1.000000	0.000000	1	0
V 292.402 {115}	0.999848	0.000902	0.000466	0.001552	OK.	1.000000	0.000000	1	0
Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Zn 206.200 {463}	0.999994	0.001094	0.000099	0.000330	OK.	1.000000	0.000000	1	0

DOD

SGS Accutest - Orlando **Metals Digestion Log Water**

Method of digestion (circle one): SW846-3010A / SW846-3005A / (EPA 200.7) / EPA 200.8 / SM3030C

MP #: 34829

Prep Date/Time (mm/dd/yy 24:00): 12/18/18 1710

HotBlock I.D: 10

Thermometer I.D.: 6011

Correction Factor (°C): -1

Temperature Observed/Corrected (°C): 93 / 92

pH paper lot#: 230416

Spk. Sol A	Volume Used(ml)	Pipette #
ACC1103	0.5	KU15244
ACC1081	0.25	KU15244
MET6245	0.25	KU15244

Dig Tube Lot#: HP3161

Added B: HNO_3 HCL

Lot#: 0000 202943 0000 212747

Sample #		Initial Volume(ml)	pH<2	Final Volume(ml)	Comments
Method Blank(MB)		50.0	N/A	50.0	
Spike Blank(SB)			N/A		
Matrix Spike(MS)			✓		
Matrix Spike Dup(MSD)			✓		
Duplicate(DUP)			✓		
1 QC C FA60136	-10	3	✓		
2	-12		✓		
3	-14		✓		
4	-16		✓		
5 FA60205	-21	2	✓		
6	-22	2	✓		
7					
8					
9					
10					
11 12/18/18 IT					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21 E					
22 E					
23 E					
24 E					

Analyst: NMO Date: 12/18/18

QC Review: Date: 12/20/18

A Used for SB, MS, MSD
B For reagent volumes used consult SOP MET 103, current revision
C Parent sample used to prepare MS, MSD, DUP
D Bottle Number
E Additional Prep QC

icpwaterdigestionlog 0816.xls Rev 09/12/16 DM

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Alkalinity, Total as CaCO3	GN80746			mg/l	250	250	100.1	85-115%
Bromide	GP32501/GN80730	0.50	0.0	mg/l	12.5	12.3	98.4	90-110%
Chloride	GP32501/GN80730	2.0	0.0	mg/l	50	50.5	101.0	90-110%
Solids, Total Dissolved	GN80666	50	0.0	mg/l				
Solids, Total Dissolved	GN80667	50	0.0	mg/l				
Sulfate	GP32501/GN80730	2.0	0.0	mg/l	50	52.9	105.8	90-110%

Associated Samples:
Batch GN80666: FA60205-23
Batch GN80667: FA60205-1, FA60205-2, FA60205-3, FA60205-4, FA60205-5, FA60205-6, FA60205-7, FA60205-8, FA60205-9, FA60205-10, FA60205-11, FA60205-12, FA60205-13, FA60205-14, FA60205-15, FA60205-16, FA60205-17, FA60205-18, FA60205-19, FA60205-20
Batch GN80746: FA60205-21, FA60205-22
Batch GP32501: FA60205-21, FA60205-22
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Alkalinity, Total as CaCO3	GN80746	FA60313-1	mg/l	632	632	0.1	0-20%
Solids, Total Dissolved	GN80666	FA60127-5	mg/l	132	122	7.9(a)	0-5%
Solids, Total Dissolved	GN80667	FA60205-11	mg/l	478	456	4.7	0-5%
Solids, Total Dissolved	GN80667	FA60205-1	mg/l	5530	5550	0.4	0-5%

Associated Samples:
Batch GN80666: FA60205-23
Batch GN80667: FA60205-1, FA60205-2, FA60205-3, FA60205-4, FA60205-5, FA60205-6, FA60205-7, FA60205-8, FA60205-9, FA60205-10, FA60205-11, FA60205-12, FA60205-13, FA60205-14, FA60205-15, FA60205-16, FA60205-17, FA60205-18, FA60205-19, FA60205-20
Batch GN80746: FA60205-21, FA60205-22
(*) Outside of QC limits
(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Bromide	GP32501/GN80730	FA60205-21	mg/l	0.88	12.5	13.7	102.6	90-110%
Chloride	GP32501/GN80730	FA60205-21	mg/l	80.3	50	134	107.4	90-110%
Sulfate	GP32501/GN80730	FA60205-21	mg/l	24.5	50	79.0	109.0	90-110%

Associated Samples:
Batch GP32501: FA60205-21, FA60205-22
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Bromide	GP32501/GN80730	FA60205-21	mg/l	0.88	12.5	13.7	0.0	20%
Chloride	GP32501/GN80730	FA60205-21	mg/l	80.3	50	134	0.0	20%
Sulfate	GP32501/GN80730	FA60205-21	mg/l	24.5	50	79.0	0.0	20%

Associated Samples:
Batch GP32501: FA60205-21, FA60205-22
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: 318122601.TXT Date Analyzed: 12/26/18 Methods: EPA 300/SW846 9056A
Analyst: BR Run ID: GN80730
Parameters: Bromide,Chloride,Sulfate

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:19	GN80730-CCV1	1		
11:36	GP32501-MB1	1		
11:53	GP32501-B1	1		
13:35	ZZZZZZ	1		
13:51	ZZZZZZ	1		
14:08	ZZZZZZ	1		
14:25	ZZZZZZ	1		
14:42	ZZZZZZ	1		
14:59	ZZZZZZ	1		
15:16	ZZZZZZ	1		
15:33	FA60161-1	5		(sample used for QC only; not part of login FA60205)
15:50	GN80730-CCV2	1		
16:07	GN80730-CCB1	1		
16:23	GP32501-S1	5		
16:40	GP32501-S2	5		
16:57	ZZZZZZ	5		
17:14	FA60205-21	1		
17:31	GP32501-S3	1		
17:48	GP32501-S4	1		
18:05	FA60205-22	1		
18:22	ZZZZZZ	5		
18:39	ZZZZZZ	5		
18:56	ZZZZZZ	1		
19:13	GN80730-CCV3	1		
19:30	GN80730-CCB2	1		
19:47	ZZZZZZ	5		
20:03	ZZZZZZ	10		
20:20	ZZZZZZ	1		
20:37	ZZZZZZ	10		
20:54	ZZZZZZ	1		
21:11	ZZZZZZ	10		
22:02	GN80730-CCV4	1		
22:19	GN80730-CCB3	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: FA60205
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: 318122601.TXT Date Analyzed: 12/26/18 Methods: EPA 300/SW846 9056A
Run ID: GN80730 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN80730-CCV1	Chloride	50.6	2.0	0.80	50	101.2	90-110
GN80730-CCV1	Bromide	12.5	0.50	0.12	12.5	100.0	90-110
GN80730-CCV1	Sulfate	54.5	2.0	0.60	50	109.0	90-110
GN80730-CCV2	Chloride	50.4	2.0	0.80	50	100.8	90-110
GN80730-CCV2	Bromide	12.5	0.50	0.12	12.5	100.0	90-110
GN80730-CCV2	Sulfate	53.4	2.0	0.60	50	106.8	90-110
GN80730-CCB1	Chloride	0.80 U	2.0	0.80			
GN80730-CCB1	Bromide	0.12 U	0.50	0.12			
GN80730-CCB1	Sulfate	0.60 U	2.0	0.60			
GN80730-CCV3	Chloride	50.5	2.0	0.80	50	101.0	90-110
GN80730-CCV3	Bromide	12.6	0.50	0.12	12.5	100.8	90-110
GN80730-CCV3	Sulfate	53.3	2.0	0.60	50	106.6	90-110
GN80730-CCB2	Chloride	0.80 U	2.0	0.80			
GN80730-CCB2	Bromide	0.12 U	0.50	0.12			
GN80730-CCB2	Sulfate	0.60 U	2.0	0.60			
GN80730-CCV4	Chloride	50.5	2.0	0.80	50	101.0	90-110
GN80730-CCV4	Bromide	12.6	0.50	0.12	12.5	100.8	90-110
GN80730-CCV4	Sulfate	53.8	2.0	0.60	50	107.6	90-110
GN80730-CCB3	Chloride	0.80 U	2.0	0.80			
GN80730-CCB3	Bromide	0.12 U	0.50	0.12			
GN80730-CCB3	Sulfate	0.60 U	2.0	0.60			

(!) Outside of QC limits

General Chemistry

Raw Data

TDS Worksheet

GN Batch ID: GN80666											
Analyst:	F. N.	MB ID:	GN80666-MB1	RDL:	200	<RDL:	NO				
Analysis Date:	12/19/2018	Dup ID:	FA60127-5	Smpl Res:	132.00	Dup Res:	122.00	% RPD:	7.87		
Method:	SM2540C	Dup2 ID:	FA60170-6	Smpl Res:	224.00	Dup Res:	258.00	% RPD:	14.11		

Bottle #	Sample ID	Scon Umhos/cm	Dish #	Volume Filtered (ml)	Dish Tare Wt (g)	Initial Wt after drying at 180 C° (g)	Redry 1 Constant Weight in g (a)	Redry ?	Redry 2 Constant Weight in g (a)	Redry ?	Redry 3 Constant Weight in g (a)	Redry ?	RDL	TDS (mg/L)
	GN80666-MB1		MB1	50.0	48.8258	48.8255	48.8257	No					200	-2.00
10	GN80666-D1	128.0	D1	50.0	50.9731	50.9792	50.9792	No					200	122.00
9	GN80666-D2	320.0	D2	50.0	50.7870	50.8002	50.7999	No					200	258.00
10	FA60127-5	128.0	1	50.0	61.6829	61.6898	61.6895	No					200	132.00
10	FA60127-6	156.0	2	50.0	49.6134	49.6198	49.6200	No					200	132.00
10	FA60127-7	259.0	3	50.0	51.1363	51.1465	51.1468	No					200	210.00
10	FA60127-8	158.0	4	50.0	62.8408	62.8470	62.8473	No					200	130.00
10	FA60127-9	219.0	5	50.0	63.5457	63.5554	63.5557	No					200	200.00
10	FA60127-10	304.0	6	50.0	63.4201	63.4315	63.4304	Yes	63.4303	No			200	204.00
10	FA60127-11	80.0	7	50.0	49.1024	49.1055	49.1058	No					200	68.00
9	FA60170-1	76.0	8	10.0	49.0522	49.0573	49.0569	No					1000	470.00
9	FA60170-2	254.0	9	50.0	49.3011	49.3106	49.3086	Yes	49.3084	No			200	146.00
9	FA60170-3	200.0	10	50.0	63.2901	63.2976	63.2979	No					200	156.00
9	FA60170-4	247.0	11	50.0	62.6140	62.6250	62.6226	Yes	62.6224	No			200	168.00
9	FA60170-5	273.0	12	50.0	49.7920	49.8036	49.8038	No					200	236.00
9	FA60170-6	320.0	13	50.0	51.1080	51.1188	51.1192	No					200	224.00
9	FA60170-7	94.0	14	50.0	49.5889	49.5931	49.5935	No					200	92.00
4	FA60190-11	147.7	15	50.0	49.9392	49.9423	49.9425	No					200	66.00
4	FA60190-12	368.0	16	50.0	49.1671	49.1770	49.1767	No					200	192.00
10	FA60190-14	264.0	17	50.0	50.4391	50.4506	50.4503	No					200	224.00
2	FA60191-1	1467.0	18	25.0	64.7976	64.8326	64.8323	No					400	1388.00

TDS Worksheet

GN Batch ID:											
GN80666	Analyst:	F. N.	MB ID:	GN80666-MB1	RDL:	200	<RDL:	NO		
	Analysis Date:	12/19/2018	Dup ID:	FA60127-5	Smpl Res:	132.00	Dup Res:	122.00	% RPD:	7.87
	Method:	SM2540C	Dup2 ID:	FA60170-6	Smpl Res:	224.00	Dup Res:	258.00	% RPD:	14.11

Bottle #	Sample ID	Scon Umhos/cm	Dish #	Volume Filtered (ml)	Dish Tare Wt (g)	Initial Wt after drying at 180 C° (g)	Redry 1 Constant Weight in g (a)	Redry ?	Redry 2 Constant Weight in g (a)	Redry ?	Redry 3 Constant Weight in g (a)	Redry ?	RDL	TDS (mg/L)
5	FA60191-2	1510.0	19	25.0	62.3895	62.4243	62.4220	Yes	62.4181	Yes	62.4184	No	400	1156.00
1	FA60205-23	11570.0	20	5.0	50.4128	50.4844	50.4705	Yes	50.4545	Yes	50.4549	No	2000	8420.00

SGS

Filtration/Evap Date:	12/19/2018	**Time:**	18:47	**Temp:**	25	**Filter Lot:**	GC280	**Balance ID:**	AS-120S	**Scon ID:**	SCOND 3
Oven ID #1:	OVEN1	**Therm ID #1:**	7245	**Corr Factor #1:**	0	**Oven ID #2:**	TDS 2	**Therm ID #2:**	OVEN DIG	**Corr Factor #2:**	+4

	Oven Used	Start Date:	Stop Date:	Start Time:	End Time:	Observed C° Start Temp:	Corrected Start Temp:	Observed C° End Temp:	Corrected End Temp:
Dry	Oven #1	12/19/2018	12/20/2018	20:50	09:50	105	105	105	105
Redry1	Oven #2	12/20/2018	12/20/2018	09:50	11:40	177	181	177	181
Redry2	Oven #2	12/20/2018	12/20/2018	14:40	16:40	176	180	176	180
Redry3	Oven #2	12/20/2018	12/20/2018	18:05	10:40	176	180	176	180

Comments: Re-dry4: on12/21/18 at 13:30 t:180 end at 14:30 t:180.

Approved By: **ANALYST (fridan)** Approval Date: **12/21/2018**

TDS Worksheet

GN Batch ID: GN80667											
Analyst:	F. N.	MB ID:	GN80667-MB1	RDL:	200	<RDL:	NO				
Analysis Date:	12/19/2018	Dup ID:	FA60205-1	Smpl Res:	5530.00	Dup Res:	5550.00	% RPD:	.36		
Method:	SM2540C	Dup2 ID:	FA60205-11	Smpl Res:	478.00	Dup Res:	456.00	% RPD:	4.71		

Bottle #	Sample ID	Scon Umhos/cm	Dish #	Volume Filtered (ml)	Dish Tare Wt (g)	Initial Wt after drying at 180 C° (g)	Redry 1 Constant Weight in g (a)	Redry ?	Redry 2 Constant Weight in g (a)	Redry ?	Redry 3 Constant Weight in g (a)	Redry ?	RDL	TDS (mg/L)
	GN80667-MB1		MB1	50.0	67.3644	67.3643	67.3645	No					200	2.00
1	GN80667-D1	5420.0	D1	10.0	67.0496	67.1054	67.1051	No					1000	5550.00
1	GN80667-D2	734.0	D2	50.0	50.9024	50.9248	50.9252	No					200	456.00
1	FA60205-1	5420.0	1	10.0	67.7000	67.7555	67.7553	No					1000	5530.00
1	FA60205-2	10540.0	2	5.0	68.6149	68.6735	68.6731	No					2000	11640.00
1	FA60205-3	12980.0	3	5.0	64.9770	65.0619	65.0616	No					2000	16920.00
1	FA60205-4	16050.0	4	5.0	68.2007	68.2869	68.2865	No					2000	17160.00
1	FA60205-5	11320.0	5	5.0	67.4579	67.5188	67.5185	No					2000	12120.00
1	FA60205-6	622.0	6	50.0	51.1870	51.2059	51.2063	No					200	386.00
1	FA60205-7	2550.0	7	25.0	68.7192	68.7892	68.7889	No					400	2788.00
1	FA60205-8	8160.0	8	10.0	69.0188	69.1026	69.1023	No					1000	8350.00
1	FA60205-9	11560.0	9	5.0	50.9748	51.0360	51.0357	No					2000	12180.00
1	FA60205-10	4550.0	10	10.0	56.4008	56.4534	56.4496	Yes	56.4327	Yes	56.4330	No	1000	3220.00
11	FA60205-11	734.0	11	50.0	67.5438	67.5673	67.5677	No					200	478.00
1	FA60205-12	586.0	12	50.0	66.4798	66.4971	66.4975	No					200	354.00
1	FA60205-13	696.0	13	50.0	51.0636	51.0898	51.0895	No					200	518.00
1	FA60205-14	612.0	14	50.0	67.7354	67.7547	67.7550	No					200	392.00
1	FA60205-15	9730.0	15	10.0	49.6010	49.6942	49.6911	Yes	49.6647	Yes	49.6644	No	1000	6340.00
1	FA60205-16	18660.0	16	5.0	68.4814	68.5852	68.5820	Yes	68.5552	Yes	68.5555	No	2000	14820.00
1	FA60205-17	9980.0	17	10.0	65.6087	65.7156	65.7078	Yes	65.6780	Yes	65.6782	No	1000	6950.00
1	FA60205-18	674.0	18	50.0	68.1236	68.1517	68.1515	No					200	558.00

TDS Worksheet

GN Batch ID: GN80667											
	Analyst:	F. N.	MB ID:	GN80667-MB1	RDL:	200	<RDL:	NO		
	Analysis Date:	12/19/2018	Dup ID:	FA60205-1	Smpl Res:	5530.00	Dup Res:	5550.00	% RPD:	.36
	Method:	SM2540C	Dup2 ID:	FA60205-11	Smpl Res:	478.00	Dup Res:	456.00	% RPD:	4.71

Bottle #	Sample ID	Scon Umhos/cm	Dish #	Volume Filtered (ml)	Dish Tare Wt (g)	Initial Wt after drying at 180 C° (g)	Redry 1 Constant Weight in g (a)	Redry ?	Redry 2 Constant Weight in g (a)	Redry ?	Redry 3 Constant Weight in g (a)	Redry ?	RDL	TDS (mg/L)
1	FA60205-19	997.0	19	50.0	66.2288	66.2744	66.2747	No					200	918.00
1	FA60205-20	11150.0	20	5.0	49.8229	49.8911	49.8859	Yes	49.8675	Yes	49.8678	No	2000	8980.00

SGS

Filtration/Evap Date:	12/19/2018	**Time:**	19:30	**Temp:**	25	**Filter Lot:**	GC280	**Balance ID:**	AS-120S	**Scon ID:**	SCOND 3
Oven ID #1:	OVEN 1	**Therm ID #1:**	7245	**Corr Factor #1:**	0	**Oven ID #2:**	TDS 2	**Therm ID #2:**	OVEN DIG	**Corr Factor #2:**	+4

	Oven Used	Start Date:	Stop Date:	Start Time:	End Time:	Observed C° Start Temp:	Corrected Start Temp:	Observed C° End Temp:	Corrected End Temp:
Dry	Oven #1	12/19/2018	12/20/2018	22:00	09:50	105	105	105	105
Redry1	Oven #2	12/20/2018	12/20/2018	09:50	14:00	177	181	176	180
Redry2	Oven #2	12/20/2018	12/20/2018	16:35	17:38	176	180	176	180
Redry3	Oven #2	12/20/2018	12/20/2018	19:10	10:40	176	180	176	180

Comments: re-dry4: on 12-21-18 at 13:30 t:180 end at 14:30 t:180.

Approved By: **ANALYST (fridan)** Approval Date: **12/21/2018**

IC STANDARDS PREP LOG

STANDARD NAME	ANALYTES	STOCK MFG. #	STOCK LOT #	STOCK EXP. DATE	STOCK CONC. (mg/l)	VOLUME ADDED (ml)	TOTAL VOLUME (ml)	STANDARD CONC. (mg/l)	PREP DATE	INITIALS	STD LOT #	EXP. DATE
B1	F, NO_2, NO_3	WC1082	Inorganic	05-25-19	500	0.5	100	2.5	12-20-18	BR	IC08670	12-21-18
↓	Br	↓	↓	↓	2500	↓	↓	12.5	↓	↓	↓	↓
↓	Cl, SO_4	↓	↓	↓	10000	↓	↓	50	↓	↓	↓	↓
CCV	F, NO_2, NO_3	WC1049	High Purity	04-30-19	500	0.5	100	2.5	12-21-18	BR	1	12-22-18
↓	Br	↓	↓	↓	2500	↓	↓	12.5	↓	↓	↓	↓
↓	Cl, SO_4	↓	↓	↓	10000	↓	↓	50	↓	↓	↓	↓
B1	F, NO_2, NO_3	WC1082	Inorganic	05-25-19	500	↓	↓	2.5	↓	↓	2	↓
↓	Br	↓	↓	↓	2500	↓	↓	12.5	↓	↓	↓	↓
↓	Cl, SO_4	↓	↓	↓	10000	↓	↓	50	↓	↓	↓	↓
CCV	F, NO_2, NO_3	WC1049	High Purity	04-30-19	500	0.5	100	2.5	12-22-18	BR	3	12-23-18
↓	Br	↓	↓	↓	2500	↓	↓	12.5	↓	↓	↓	↓
↓	Cl, SO_4	↓	↓	↓	10000	↓	↓	50	↓	↓	↓	↓
B1	F, NO_2, NO_3	WC1082	Inorganic	05-25-19	500	↓	↓	2.5	↓	↓	4	↓
↓	Br	↓	↓	↓	2500	↓	↓	~~50~~ 12.5	↓	↓	↓	↓
↓	Cl, SO_4	↓	↓	↓	10000	↓	↓	50	↓	↓	↓	↓
CCV	F, NO_2, NO_3	WC1049	High Purity	04-30-19	500	0.5	100	2.5	12-26-18	BR	5	12-27-18
↓	Br	↓	↓	↓	2500	↓	↓	12.5	↓	↓	↓	↓
↓	Cl, SO_4	↓	↓	↓	10000	↓	↓	50	↓	↓	↓	↓
B1	F, NO_2, NO_3	WC1082	Inorganic	05-25-19	500	↓	↓	2.5	↓	↓	6	↓
↓	Br	↓	↓	↓	2500	↓	↓	12.5	↓	↓	↓	↓
↓	Cl, SO_4	↓	↓	↓	10000	↓	↓	50	↓	↓	↓	↓

BR 12/26/

GN80730

QC Reports:

Raw Data GN80730: Bromide, Chloride, Sulfate page 1 of 60

IC Instrument Log

Method: EPA300.0 / SW846 9056A (circle one)

Date:	12-26-18 1103
Analyst:	BR
Instrument:	#3
Inst. File Name:	3181226c1.txt

Prep Batchs:	32561
Analytical Batch:	80730
Calibration Date:	12-18-18
Pump pressure:	1597

Vial lot#	WC1267
Cap lot#	WC1264
Syringe lot#	N/A
Filter lot#	N/A

Standards	
ICAL:	WC1049
ICV:	NA
CCV:	IC08675
QC:	WC1082

Sample#	Bot#	Matrix	Scon	DF	Filter (y/n)	Ions Needed F	Cl	NO2	Br	NO3	SO4	Results OK or Dilution Needed F	Cl	NO2	Br	NO3	SO4	Comments
Rinse																		
CCV	N/A	aq	N/A	1	N		—		—		—		—		—		—	
MB1	↓		↓	↓			—		—		—		—		—		—	
B1	↓		↓	↓			—		—		—		—		—		—	
FA60190-10	4		245uS	1							—						—	
-11	↓		148uS	1							—						—	
-12	↓		348uS	1							—						—	
-14	10		264uS	1							—						—	
-15			326uS	1							—						—	
-16	↓		320uS	1							—						—	
-18	↓		333uS	1							—						—	
161-1	38		845uS	5							—						—	
CCV	N/A		N/A	1			—		—		—		—		—		—	
CCB	↓		↓	↓			—		—		—		—		—		—	
FA60161-151	38		845uS	5			—		—		—		—		—		—	
-152	↓		↓	5			—		—		—		—		—		—	
-3	12		552uS	5							—						—	
205-21	1		518uS	1			—		—		—		—		—		—	
-2153	↓			↓			—		—		—		—		—		—	
-2154	↓		↓	↓			—		—		—		—		—		—	
-22	1		537uS	1			—		—		—		—		—		—	
231-1	7		843uS	5							—						—	
-2	↓		884uS	5							—						—	
261-1	11		456uS	1							—						—	
CCV	N/A		N/A	1		—	—		—		—	—	—		—		—	
CCB	↓		↓	↓		—	—		—		—	—	—		—		—	
FA60261-2	11		835uS	5							—						—	
68-5	1		1426uS	10							—						—	
93-1	4	↓	628uS	1	↓				—						—			

GN80730

QC Reports:

Raw Data GN80730: Bromide, Chloride, Sulfate page 2 of 60

IC Instrument Log

Method: EPA300.0 / SW846 9056A (circle one)

BR 12/26/18

Date:	
Analyst:	
Instrument:	
Inst. File Name:	

Prep Batchs:	
Analytical Batch:	
Calibration Date:	
Pump pressure:	

Vial lot#	
Cap lot#	
Syringe lot#	
Filter lot#	

Standards	
ICAL:	
ICV:	
CCV:	
QC:	

Sample#	Bot#	Matrix	Scon	DF	Filter (y/n)	Ions Needed F	Cl	NO2	Br	NO3	SO4	Results OK or Dilution Needed F	Cl	NO2	Br	NO3	SO4	Comments
FA60296-1	2	aq	2.57ml	10	N		—						—					
-2	↓	↓	4.91ml	1	↓		—						—					
-3	↓	↓	10.74ml	10	↓		—						—					
LA50577-13	1	↓	2.31ml	1	↓	—						—						GP32484 DNR
-14	↓	↓	1.55ml	1	↓	—						—						↓ ↓
CCV	N/A	↓	N/A	1	↓	—	—		—		—	—	—		—		—	
CCB	↓	↓	↓	↓	↓	—	—		—		—	—	—		—		—	
BLK	↓	↓	↓	↓	↓	—	—		—		—	—	—		—		—	

BR 12/26/18

Sequence: 12-26-2018
Operator: Chemistry

Printed: 12/27/2018 9:25:55 AM

Title: ANIONS
Datasource: D6324WN1_local
Location: ICS-2100\My Sequences\ANIONS 2018\DEC 2018
Timebase: ICS-2100
#Samples: 52

Created: 12/26/2018 11:01:12 AM by Chemistry
Last Update: 12/26/2018 2:13:01 PM by Chemistry

No.	Name	Type	Pos.	Program	Dil. Factor	Method	Status
1	STD 0	Standard	35	ANIONS-AS22	1.0000	ANIONS-B	Finished
2	STD A	Standard	36	ANIONS-AS22	1.0000	ANIONS-B	Finished
3	STD B	Standard	37	ANIONS-AS22	1.0000	ANIONS-B	Finished
4	STD C	Standard	38	ANIONS-AS22	1.0000	ANIONS-B	Finished
5	STD D	Standard	39	ANIONS-AS22	1.0000	ANIONS-B	Finished
6	STD E	Standard	40	ANIONS-AS22	1.0000	ANIONS-B	Finished
7	STD F	Standard	41	ANIONS-AS22	1.0000	ANIONS-B	Finished
8	STD G	Standard	42	ANIONS-AS22	1.0000	ANIONS-B	Finished
9	STD H	Standard	43	ANIONS-AS22	1.0000	ANIONS-B	Finished
10	STD I	Standard	44	ANIONS-AS22	1.0000	ANIONS-B	Finished
11	ICB	Unknown	45	ANIONS-AS22	1.0000	ANIONS-B	Finished
12	ICV	Unknown	46	ANIONS-AS22	1.0000	ANIONS-B	Finished
13	CCV2	Unknown	47	ANIONS-AS22	1.0000	ANIONS-B	Finished
14	CCV	Unknown	48	ANIONS-AS22	1.0000	ANIONS-B	Finished
15	CCB	Unknown	49	ANIONS-AS22	1.0000	ANIONS-B	Finished
16	RINSE	Unknown	1	ANIONS-AS22	1.0000	ANIONS-B	Finished
17	CCV	Unknown	2	ANIONS-AS22	1.0000	ANIONS-B	Finished
18	MB1	Unknown	3	ANIONS-AS22	1.0000	ANIONS-B	Finished
19	B1	Unknown	4	ANIONS-AS22	1.0000	ANIONS-B	Finished
20	FA60190-10	Unknown	5	ANIONS-AS22	1.0000	ANIONS-B	Finished
21	FA60190-11	Unknown	6	ANIONS-AS22	1.0000	ANIONS-B	Finished
22	FA60190-12	Unknown	7	ANIONS-AS22	1.0000	ANIONS-B	Finished
23	FA60190-14	Unknown	8	ANIONS-AS22	1.0000	ANIONS-B	Finished
24	FA60190-15	Unknown	9	ANIONS-AS22	1.0000	ANIONS-B	Finished
25	FA60190-16	Unknown	10	ANIONS-AS22	1.0000	ANIONS-B	Finished
26	FA60190-18	Unknown	11	ANIONS-AS22	1.0000	ANIONS-B	Finished
27	FA60161-1	Unknown	12	ANIONS-AS22	5.0000	ANIONS-B	Finished
28	CCV	Unknown	13	ANIONS-AS22	1.0000	ANIONS-B	Finished
29	CCB	Unknown	14	ANIONS-AS22	1.0000	ANIONS-B	Finished
30	FA60161-1 S1	Unknown	15	ANIONS-AS22	5.0000	ANIONS-B	Finished
31	FA60161-1 S2	Unknown	16	ANIONS-AS22	5.0000	ANIONS-B	Finished
32	FA60161-3	Unknown	17	ANIONS-AS22	5.0000	ANIONS-B	Finished
33	FA60205-21	Unknown	18	ANIONS-AS22	1.0000	ANIONS-B	Finished
34	FA60205-21 S3	Unknown	19	ANIONS-AS22	1.0000	ANIONS-B	Finished
35	FA60205-21 S4	Unknown	20	ANIONS-AS22	1.0000	ANIONS-B	Finished
36	FA60205-22	Unknown	21	ANIONS-AS22	1.0000	ANIONS-B	Finished
37	FA60231-1	Unknown	22	ANIONS-AS22	5.0000	ANIONS-B	Finished
38	FA60231-2	Unknown	23	ANIONS-AS22	5.0000	ANIONS-B	Finished
39	FA60261-1	Unknown	24	ANIONS-AS22	1.0000	ANIONS-B	Finished
40	CCV	Unknown	25	ANIONS-AS22	1.0000	ANIONS-B	Finished
41	CCB	Unknown	26	ANIONS-AS22	1.0000	ANIONS-B	Finished
42	FA60261-2	Unknown	27	ANIONS-AS22	5.0000	ANIONS-B	Finished

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Sequence: 12-26-2018
Operator: Chemistry

Printed: 12/27/2018 9:25:55 AM

Title: ANIONS
Datasource: D6324WN1_local
Location: ICS-2100\My Sequences\ANIONS 2018\DEC 2018
Timebase: ICS-2100
#Samples: 52

Created: 12/26/2018 11:01:12 AM by Chemistry
Last Update: 12/26/2018 2:13:01 PM by Chemistry

No.	Name	Inj. Date/Time	Inj. Vol.	Comment
1	STD 0	12/18/2018 9:15:21 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
2	STD A	12/18/2018 9:32:17 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
3	STD B	12/18/2018 9:49:13 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
4	STD C	12/18/2018 10:06:08 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
5	STD D	12/18/2018 10:23:04 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
6	STD E	12/18/2018 10:40:00 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
7	STD F	12/18/2018 10:56:55 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
8	STD G	12/18/2018 11:13:51 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
9	STD H	12/18/2018 11:30:47 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
10	STD I	12/18/2018 11:47:44 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
11	ICB	12/19/2018 12:04:40 AM	25.0	ICS 2100 SYSTEM OPERATOR: BR
12	ICV	12/19/2018 12:21:36 AM	25.0	ICS 2100 SYSTEM OPERATOR: BR
13	CCV2	12/19/2018 12:38:32 AM	25.0	ICS 2100 SYSTEM OPERATOR: BR
14	CCV	12/19/2018 12:55:27 AM	25.0	ICS 2100 SYSTEM OPERATOR: BR
15	CCB	12/19/2018 1:12:23 AM	25.0	ICS 2100 SYSTEM OPERATOR: BR
16	RINSE	12/26/2018 11:03:12 AM	25.0	ICS 2100 SYSTEM OPERATOR: BR
17	CCV	12/26/2018 11:19:55 AM	25.0	ICS 2100 SYSTEM OPERATOR: BR
18	MB1	12/26/2018 11:36:50 AM	25.0	ICS 2100 SYSTEM OPERATOR: BR
19	B1	12/26/2018 11:53:46 AM	25.0	ICS 2100 SYSTEM OPERATOR: BR
20	FA60190-10	12/26/2018 1:35:06 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
21	FA60190-11	12/26/2018 1:51:33 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
22	FA60190-12	12/26/2018 2:08:29 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
23	FA60190-14	12/26/2018 2:25:25 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
24	FA60190-15	12/26/2018 2:42:22 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
25	FA60190-16	12/26/2018 2:59:18 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
26	FA60190-18	12/26/2018 3:16:14 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
27	FA60161-1	12/26/2018 3:33:10 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
28	CCV	12/26/2018 3:50:06 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
29	CCB	12/26/2018 4:07:02 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
30	FA60161-1 S1	12/26/2018 4:23:58 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
31	FA60161-1 S2	12/26/2018 4:40:54 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
32	FA60161-3	12/26/2018 4:57:50 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
33	FA60205-21	12/26/2018 5:14:46 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
34	FA60205-21 S3	12/26/2018 5:31:41 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
35	FA60205-21 S4	12/26/2018 5:48:37 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
36	FA60205-22	12/26/2018 6:05:32 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
37	FA60231-1	12/26/2018 6:22:28 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
38	FA60231-2	12/26/2018 6:39:23 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
39	FA60261-1	12/26/2018 6:56:18 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
40	CCV	12/26/2018 7:13:13 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
41	CCB	12/26/2018 7:30:08 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
42	FA60261-2	12/26/2018 7:47:03 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR

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Sequence: 12-26-2018
Operator: Chemistry

Title: ANIONS
Datasource: D6324WN1_local
Location: ICS-2100\My Sequences\ANIONS 2018\DEC 2018
Timebase: ICS-2100
#Samples: 52

Created: 12/26/2018 11:01:12 AM by Chemistry
Last Update: 12/26/2018 2:13:01 PM by Chemistry

No.	Name	Type	Pos.	Program	Dil. Factor	Method	Status
43	FA60268-5	Unknown	28	ANIONS-AS22	10.0000	ANIONS-B	Finished
44	FA60293-1	Unknown	29	ANIONS-AS22	1.0000	ANIONS-B	Finished
45	FA60296-1	Unknown	30	ANIONS-AS22	10.0000	ANIONS-B	Finished
46	FA60296-2	Unknown	31	ANIONS-AS22	1.0000	ANIONS-B	Finished
47	FA60296-3	Unknown	32	ANIONS-AS22	10.0000	ANIONS-B	Finished
48	LA50577-13	Unknown	33	ANIONS-AS22	1.0000	ANIONS-B	Finished
49	LA50577-14	Unknown	34	ANIONS-AS22	1.0000	ANIONS-B	Finished
50	CCV	Unknown	35	ANIONS-AS22	1.0000	ANIONS-B	Finished
51	CCB	Unknown	36	ANIONS-AS22	1.0000	ANIONS-B	Finished
52	BLK	Unknown	37	SHUTDOWN-AS22	1.0000	ANIONS-B	Finished

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Sequence: 12-26-2018
Operator: Chemistry

Printed: 12/27/2018 9:25:55 AM

Title: ANIONS
Datasource: D6324WN1_local
Location: ICS-2100\My Sequences\ANIONS 2018\DEC 2018
Timebase: ICS-2100
#Samples: 52

Created: 12/26/2018 11:01:12 AM by Chemistry
Last Update: 12/26/2018 2:13:01 PM by Chemistry

No.	Name	Inj. Date/Time	Inj. Vol.	Comment
43	FA60268-5	12/26/2018 8:03:59 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
44	FA60293-1	12/26/2018 8:20:55 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
45	FA60296-1	12/26/2018 8:37:50 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
46	FA60296-2	12/26/2018 8:54:45 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
47	FA60296-3	12/26/2018 9:11:40 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
48	LA50577-13	12/26/2018 9:28:36 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
49	LA50577-14	12/26/2018 9:45:32 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
50	CCV	12/26/2018 10:02:28 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
51	CCB	12/26/2018 10:19:24 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR
52	BLK	12/26/2018 10:36:19 PM	25.0	ICS 2100 SYSTEM OPERATOR: BR

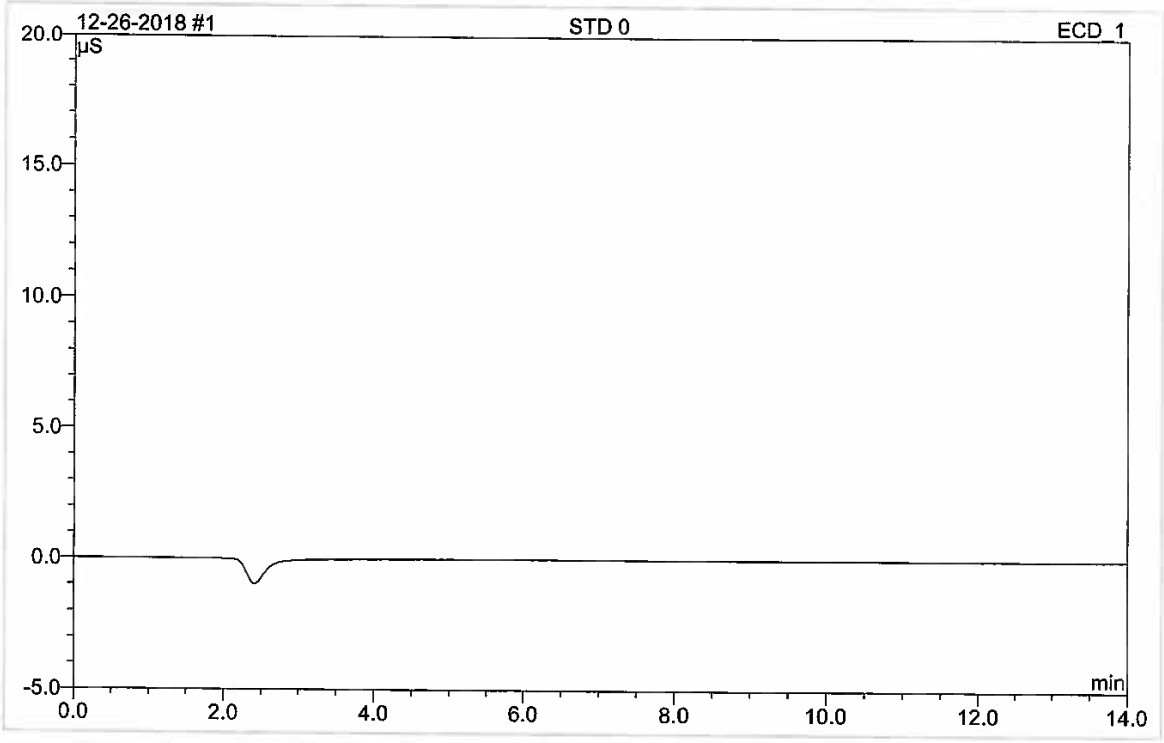
Chromeleon © Dionex Corporation, Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

1 STD 0

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**STD 0**	*Injection Volume:*	**25.0**
Vial Number:	**35**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 21:15**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
Total:			0.000	0.000	0.00	0.000	

Anions/Integration

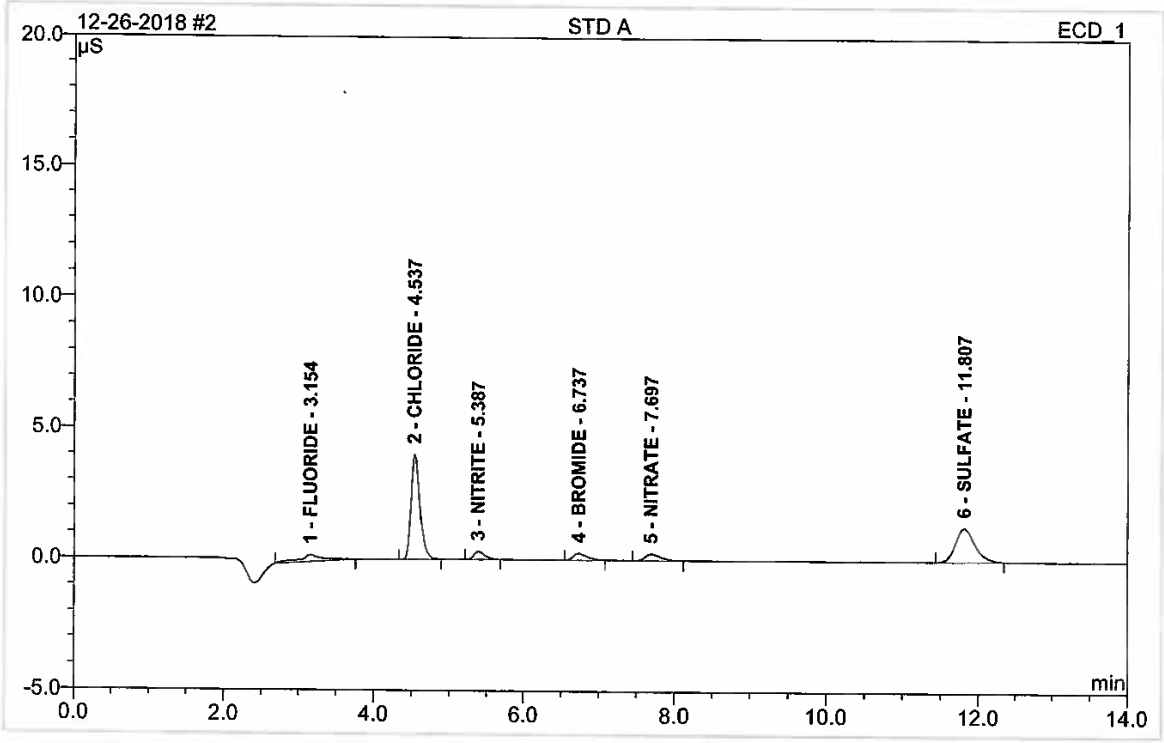
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

2 STD A

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**STD A**	*Injection Volume:*	**25.0**
Vial Number:	**36**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 21:32**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.15	FLUORIDE	0.261	0.095	7.93	0.113	BMB
2	4.54	CHLORIDE	4.003	0.539	44.82	2.529	BMB
3	5.39	NITRITE	0.305	0.053	4.39	0.119	BMB
4	6.74	BROMIDE	0.262	0.056	4.66	0.572	BMB
5	7.70	NITRATE	0.255	0.063	5.28	0.108	BMB
6	11.81	SULFATE	1.292	0.396	32.92	1.628	BMB
Total:			6.377	1.202	100.00	5.069	

Anions/Integration

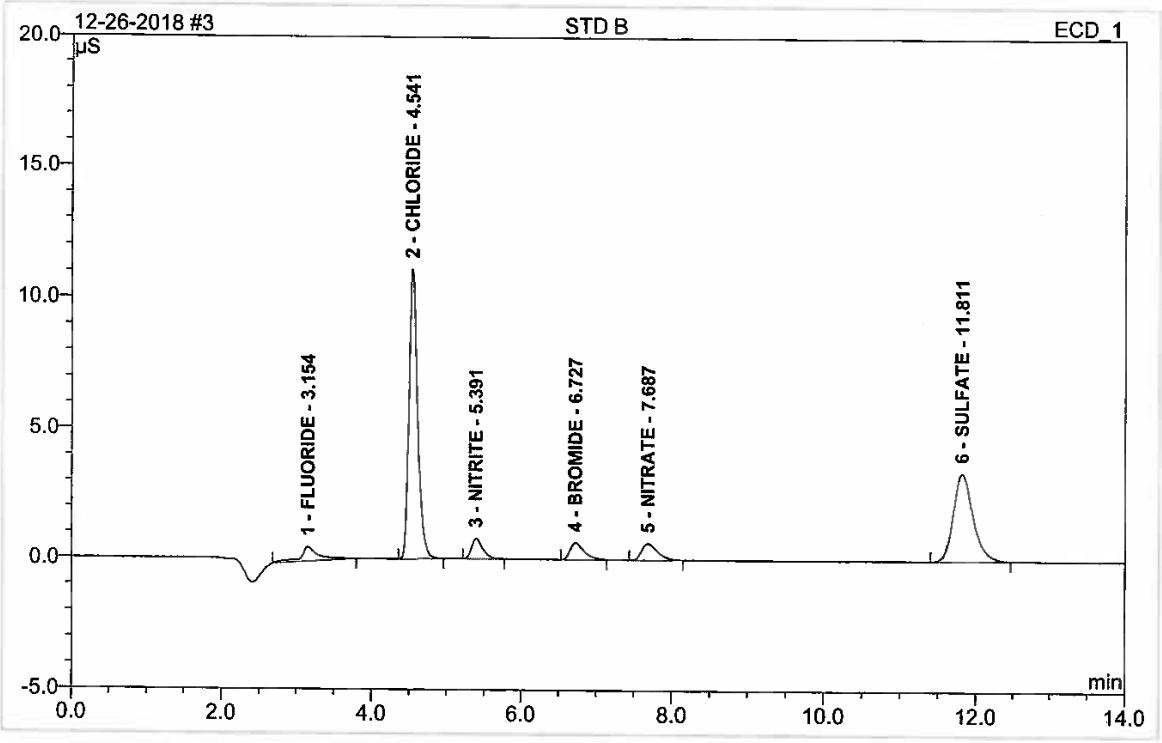
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

3 STD B

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**STD B**	*Injection Volume:*	**25.0**
Vial Number:	**37**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 21:49**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.15	FLUORIDE	0.550	0.149	4.84	0.238	BMB
2	4.54	CHLORIDE	11.096	1.449	47.04	4.701	BMB
3	5.39	NITRITE	0.782	0.137	4.45	0.246	BMB
4	6.73	BROMIDE	0.651	0.142	4.59	1.236	BMB
5	7.69	NITRATE	0.642	0.158	5.12	0.239	BMB
6	11.81	SULFATE	3.400	1.046	33.96	4.459	BMB
Total:			17.122	3.081	100.00	11.120	

Anions/Integration

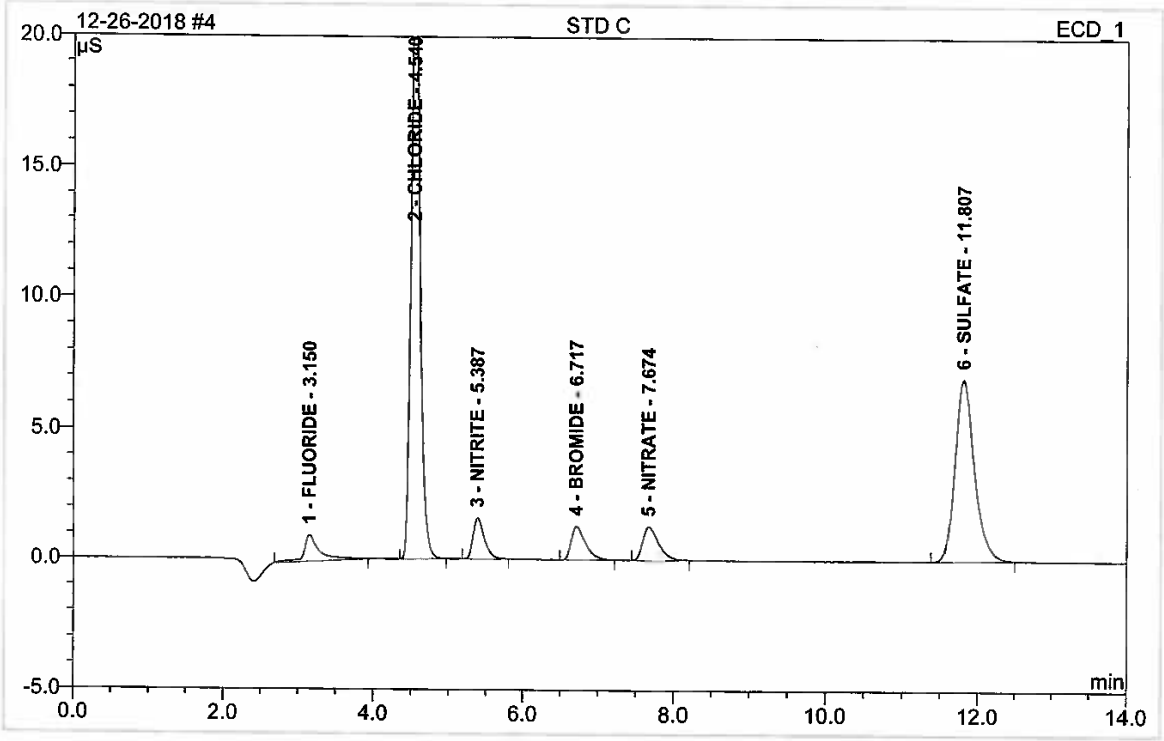
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

4 STD C

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**STD C**	*Injection Volume:*	**25.0**
Vial Number:	**38**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 22:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.15	FLUORIDE	1.028	0.253	3.96	0.477	BMB
2	4.54	CHLORIDE	24.685	3.138	49.15	8.729	BMB
3	5.39	NITRITE	1.578	0.278	4.35	0.459	BMB
4	6.72	BROMIDE	1.298	0.286	4.48	2.357	BMB
5	7.67	NITRATE	1.282	0.315	4.94	0.459	BMB
6	11.81	SULFATE	6.980	2.115	33.12	9.058	BMB
Total:			36.850	6.386	100.00	21.540	

Anions/Integration

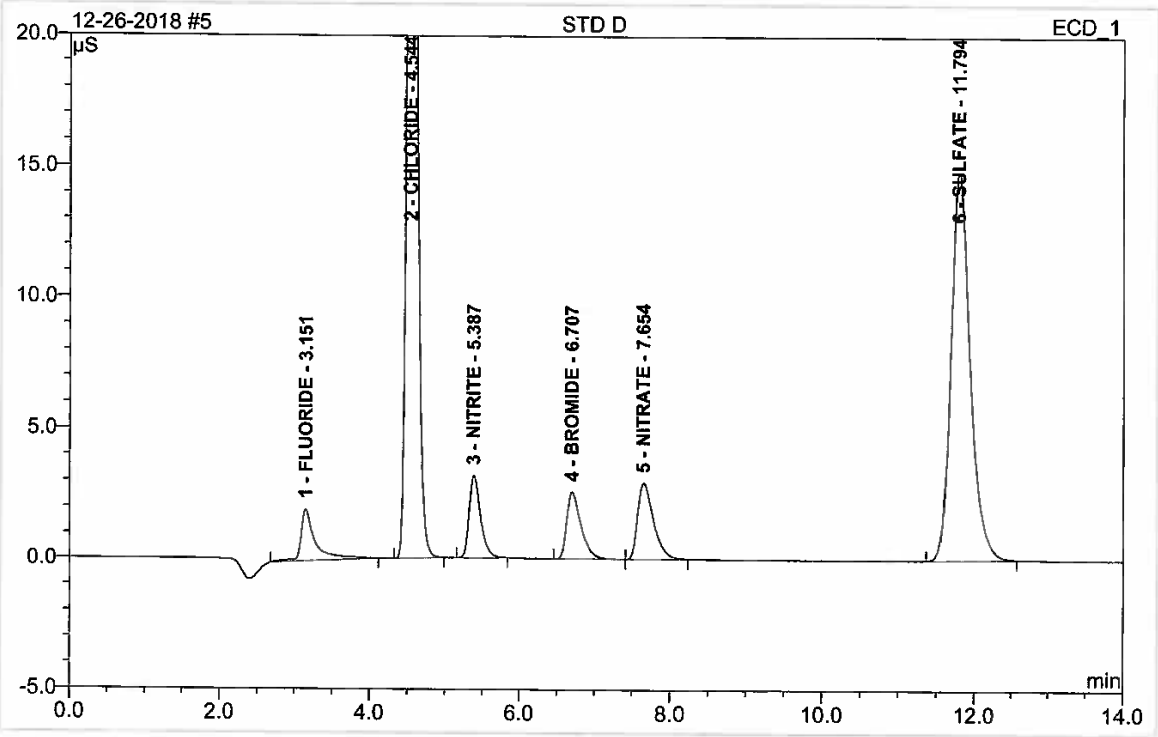
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

5 STD D

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**STD D**	*Injection Volume:*	**25.0**
Vial Number:	**39**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 22:23**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.15	FLUORIDE	1.995	0.451	3.28	0.933	BMB
2	4.54	CHLORIDE	56.320	7.015	51.03	17.975	BMB
3	5.39	NITRITE	3.163	0.564	4.10	0.891	BMB
4	6.71	BROMIDE	2.582	0.573	4.17	4.585	BM
5	7.65	NITRATE	2.929	0.723	5.26	1.027	MB
6	11.79	SULFATE	14.868	4.423	32.17	18.788	BMB
Total:			81.856	13.748	100.00	44.197	

Anions/Integration

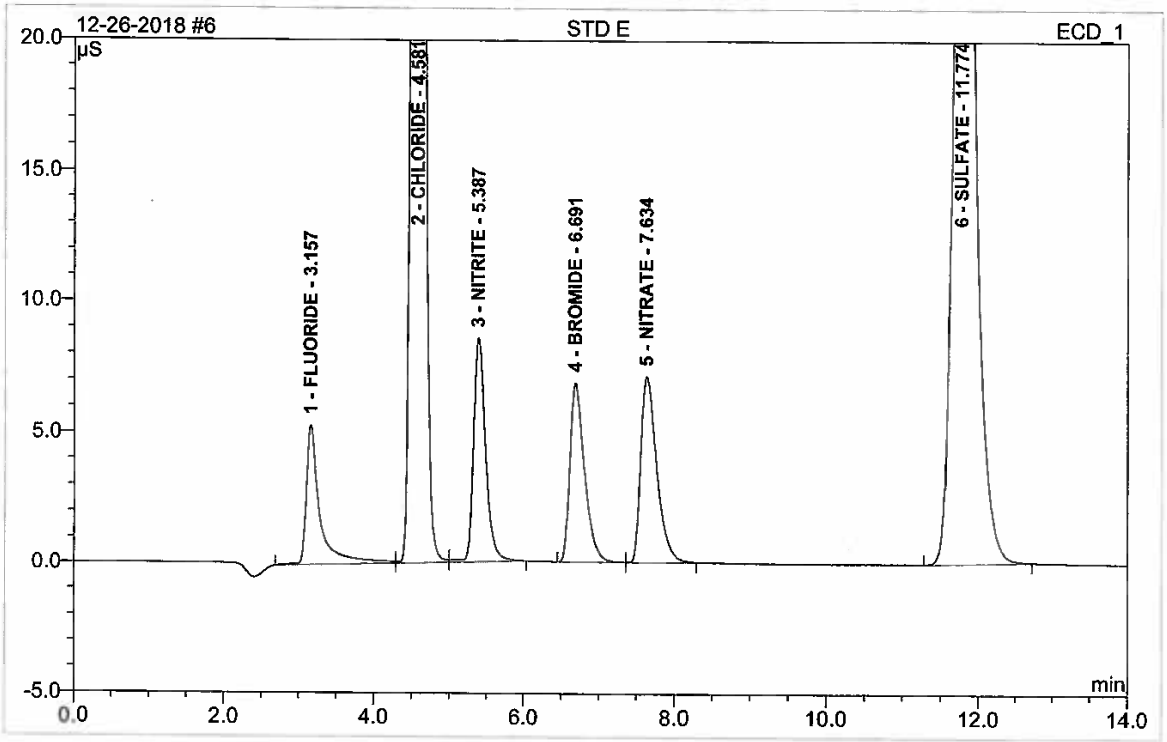
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

6 STD E

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**STD E**	*Injection Volume:*	**25.0**
Vial Number:	**40**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 22:40**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.16	FLUORIDE	5.355	1.150	2.94	2.546	BM
2	4.58	CHLORIDE	155.429	20.157	51.52	49.320	M
3	5.39	NITRITE	8.549	1.603	4.10	2.462	MB
4	6.69	BROMIDE	6.855	1.548	3.96	12.157	BM
5	7.63	NITRATE	7.107	1.757	4.49	2.467	MB
6	11.77	SULFATE	43.626	12.905	32.99	52.440	BMB
Total:			226.920	39.120	100.00	121.392	

Anions/Integration

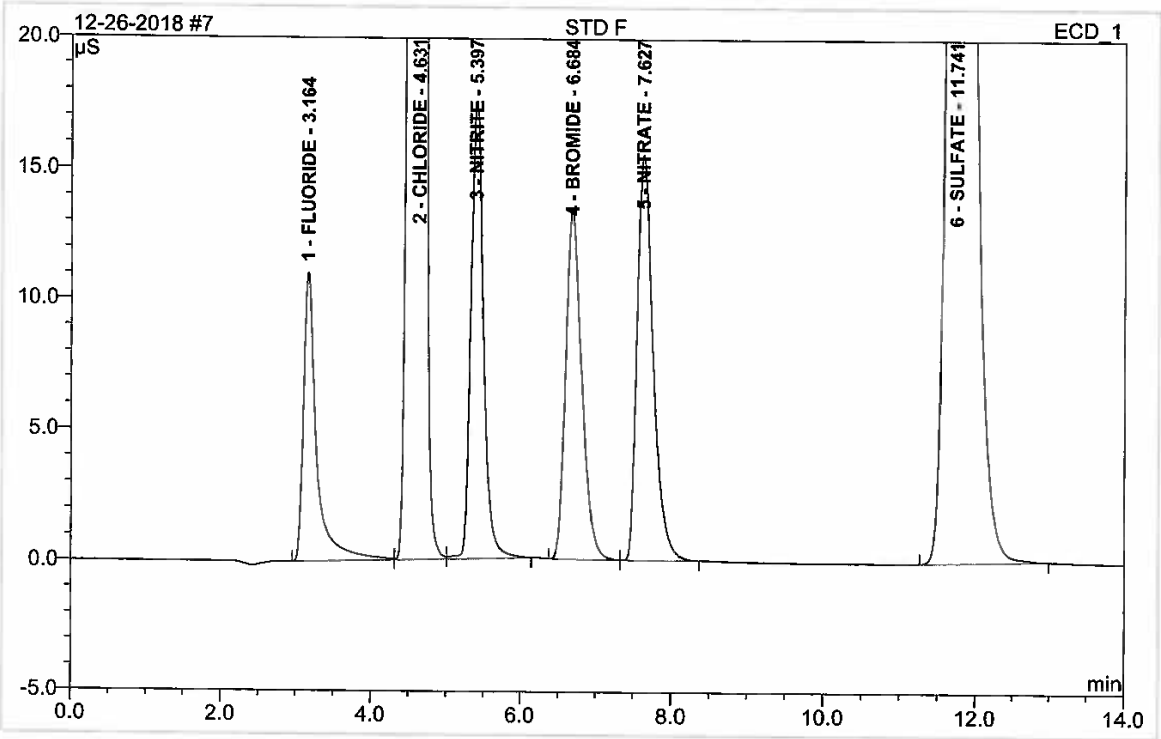
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

7 STD F

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**STD F**	*Injection Volume:*	**25.0**
Vial Number:	**41**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 22:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.16	FLUORIDE	11.028	2.234	2.65	5.043	BM
2	4.63	CHLORIDE	283.304	42.975	50.99	103.746	M
3	5.40	NITRITE	17.440	3.398	4.03	5.174	MB
4	6.68	BROMIDE	13.439	3.311	3.93	25.842	BMB
5	7.63	NITRATE	15.493	3.833	4.55	5.361	BMB
6	11.74	SULFATE	92.246	28.529	33.85	107.760	BMB
Total:			432.949	84.280	100.00	252.926	

Anions/Integration

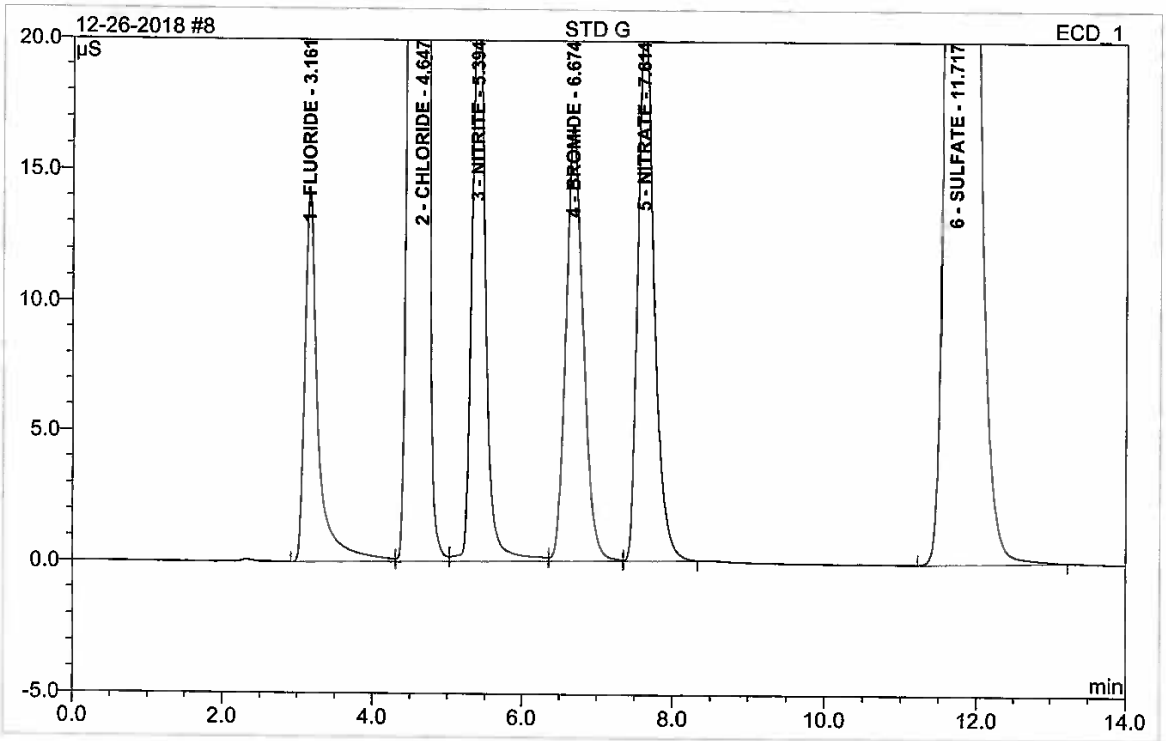
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

8 STD G

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**STD G**	*Injection Volume:*	**25.0**
Vial Number:	**42**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 23:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.16	FLUORIDE	14.196	2.934	2.65	6.657	BM
2	4.65	CHLORIDE	337.506	55.883	50.47	134.532	M
3	5.39	NITRITE	22.548	4.645	4.19	7.058	M
4	6.67	BROMIDE	16.659	4.428	4.00	34.518	M
5	7.61	NITRATE	20.720	5.145	4.65	7.189	MB
6	11.72	SULFATE	118.177	37.693	34.04	137.190	BMB
Total:			529.805	110.728	100.00	327.144	

Anions/Integration

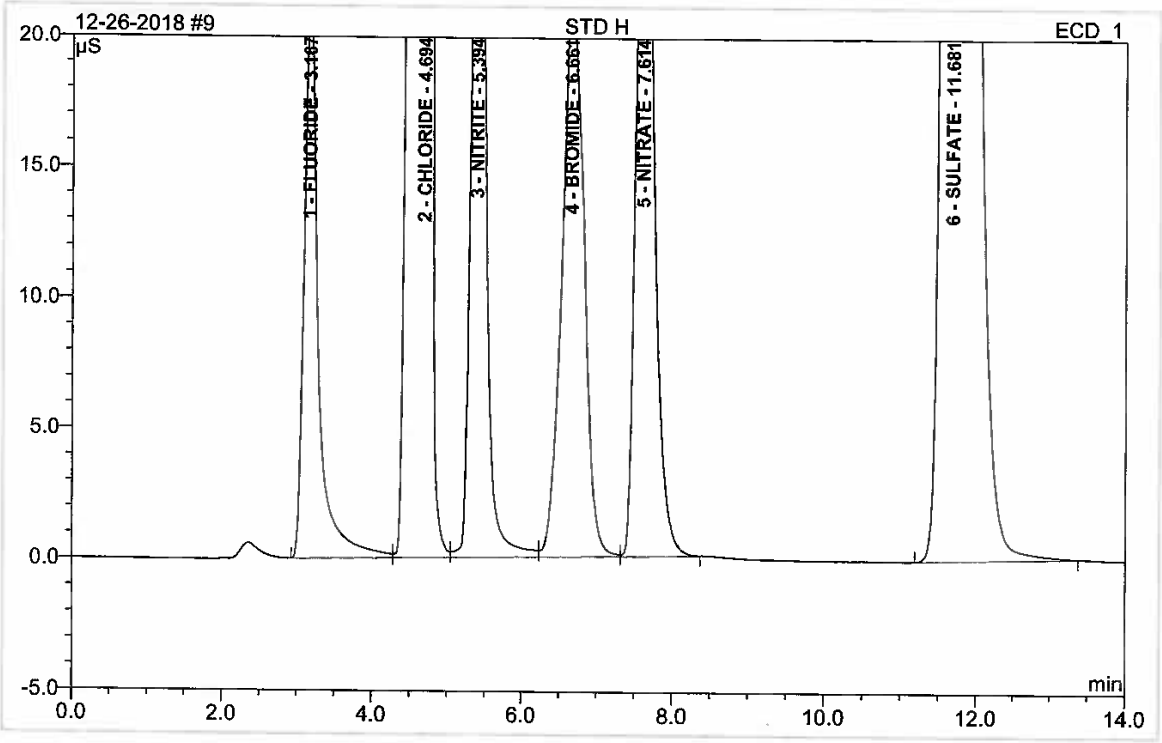
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

9 STD H

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**STD H**	*Injection Volume:*	**25.0**
Vial Number:	**43**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 23:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.17	FLUORIDE	21.899	4.734	2.65	10.804	BM
2	4.69	CHLORIDE	444.446	89.202	49.97	214.004	M
3	5.39	NITRITE	34.611	7.440	4.17	11.283	M
4	6.66	BROMIDE	22.364	7.255	4.06	56.465	M
5	7.61	NITRATE	33.848	8.560	4.79	11.947	MB
6	11.68	SULFATE	181.576	61.331	34.35	205.740	BMB
Total:			738.743	178.522	100.00	510.243	

Anions/Integration

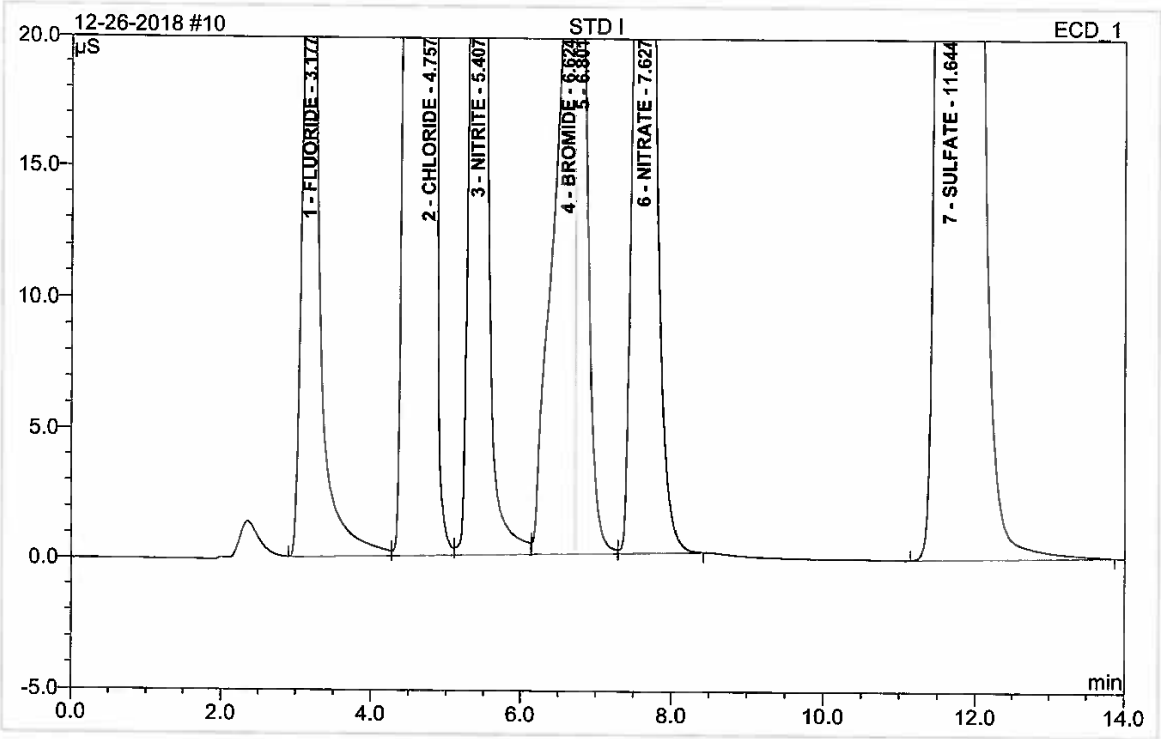
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

10 STD I

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**STD I**	*Injection Volume:*	**25.0**
Vial Number:	**44**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 23:47**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.18	FLUORIDE	32.376	7.612	2.66	17.439	BM
2	4.76	CHLORIDE	568.194	142.124	49.59	340.230	M
3	5.41	NITRITE	52.049	11.776	4.11	17.835	M
4	6.62	BROMIDE	25.276	7.859	2.74	61.158	M
5	6.80	n.a.	21.745	3.929	1.37	n.a.	M
6	7.63	NITRATE	54.279	14.404	5.03	20.089	MB
7	11.64	SULFATE	272.566	98.911	34.51	299.619	BMB
Total:			1026.485	286.615	100.00	756.371	

Anions/Integration

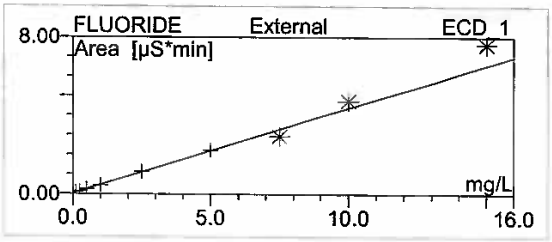
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

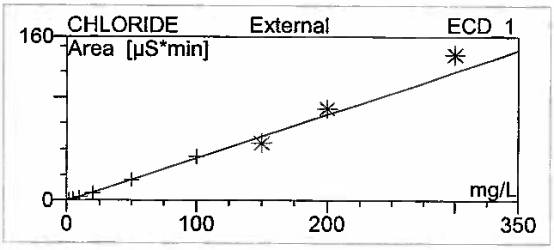
Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

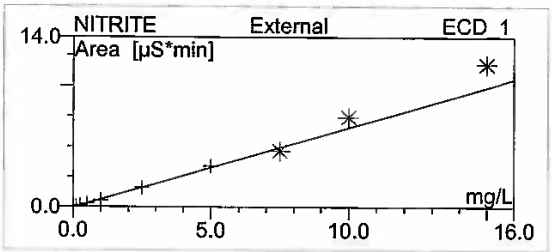
10 STD I

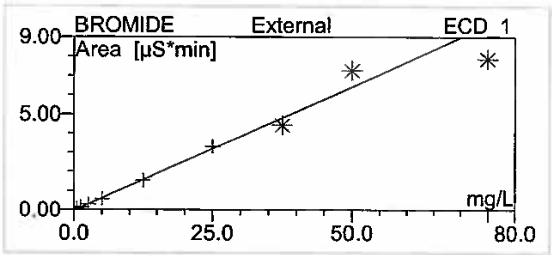
ICS 2100 SYSTEM OPERATOR: BR

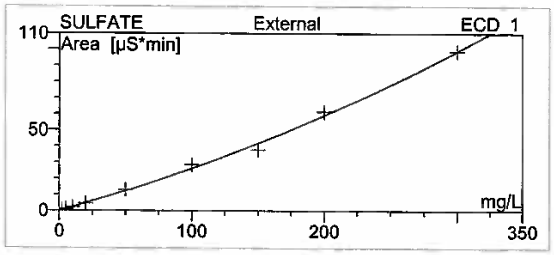
Sample Name:	**STD I**	*Injection Volume:*	**25.0**
Vial Number:	**44**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 23:47**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**

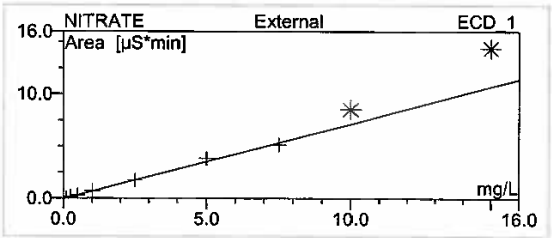












No.	Ret.Time min	Peak Name	Cal.Type	Points	Coeff.Det. %	Offset	Slope	Curve
1	3.18	FLUORIDE	XLOff	6	99.8742	0.0461	0.4339	0.0000
2	4.76	CHLORIDE	XLOff	6	99.5410	-0.5215	0.4193	0.0000
3	5.41	NITRITE	XLOff	6	99.6532	-0.0258	0.6617	0.0000
4	6.62	BROMIDE	XLOff	6	99.7515	-0.0177	0.1288	0.0000
5	6.80	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	7.63	NITRATE	XLOff	7	99.6848	-0.0141	0.7177	0.0000
7	11.64	SULFATE	QOff	9	99.6969	0.0240	0.2277	0.0003
Average:					99.7003	-0.0848	0.4315	0.0001

Anions/Calibration(Batch)

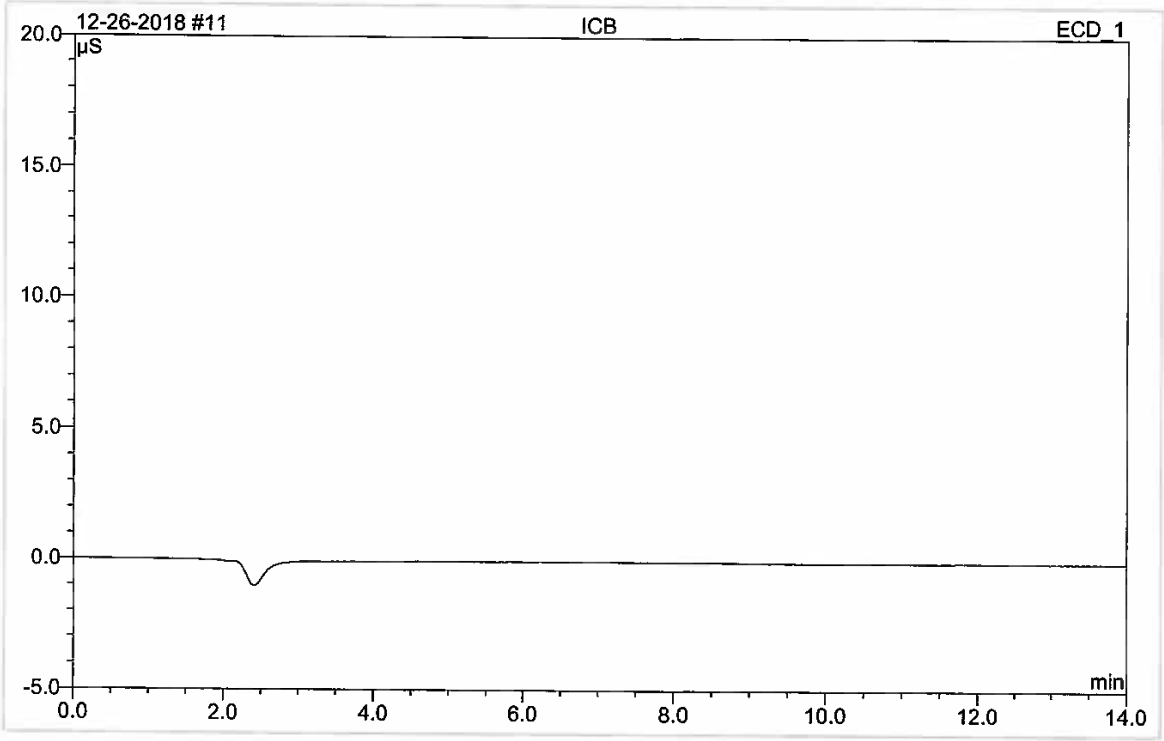
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

11 ICB

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**ICB**	*Injection Volume:*	**25.0**
Vial Number:	**45**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/19/2018 0:04**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
Total:			0.000	0.000	0.00	0.000	

Anions/Integration

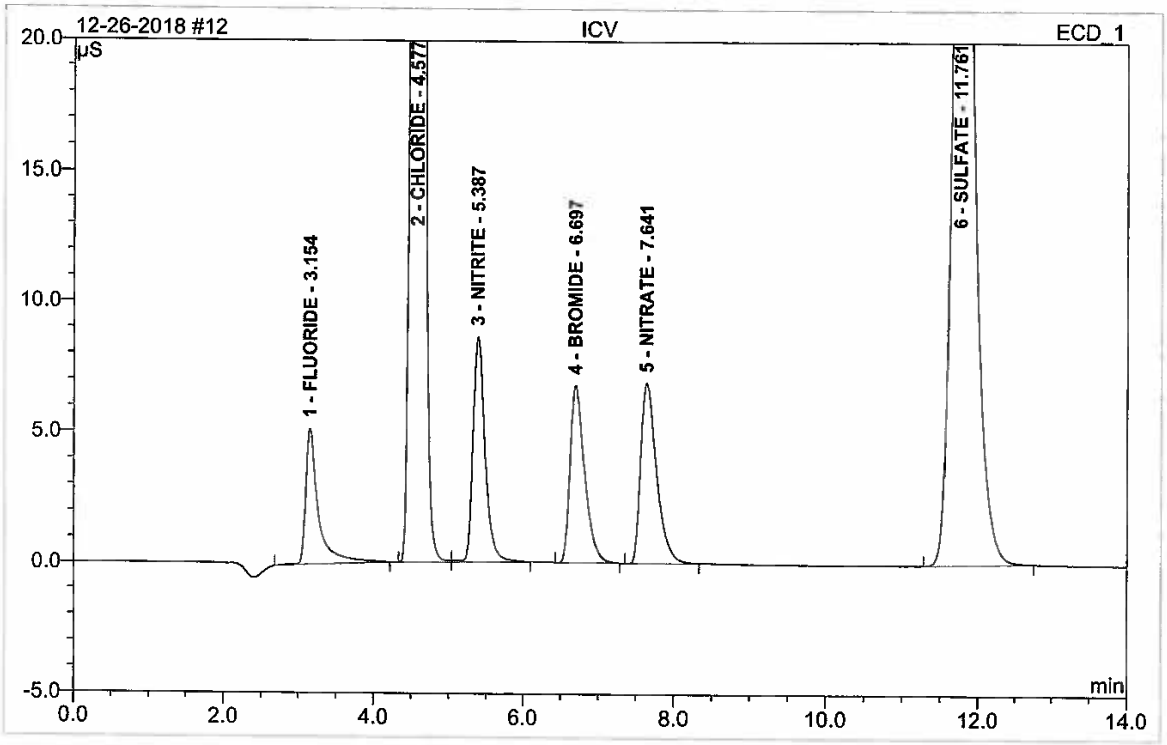
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

12 ICV

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**ICV**	*Injection Volume:*	**25.0**
Vial Number:	**46**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/19/2018 0:21**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.15	FLUORIDE	5.176	1.032	2.69	2.273	BMB
2	4.58	CHLORIDE	154.578	19.979	52.01	48.896	BM
3	5.39	NITRITE	8.609	1.615	4.20	2.479	MB
4	6.70	BROMIDE	6.780	1.526	3.97	11.982	BMB
5	7.64	NITRATE	6.898	1.702	4.43	2.391	BMB
6	11.76	SULFATE	42.383	12.560	32.70	51.128	BMB
Total:			224.425	38.413	100.00	119.150	

Anions/Integration

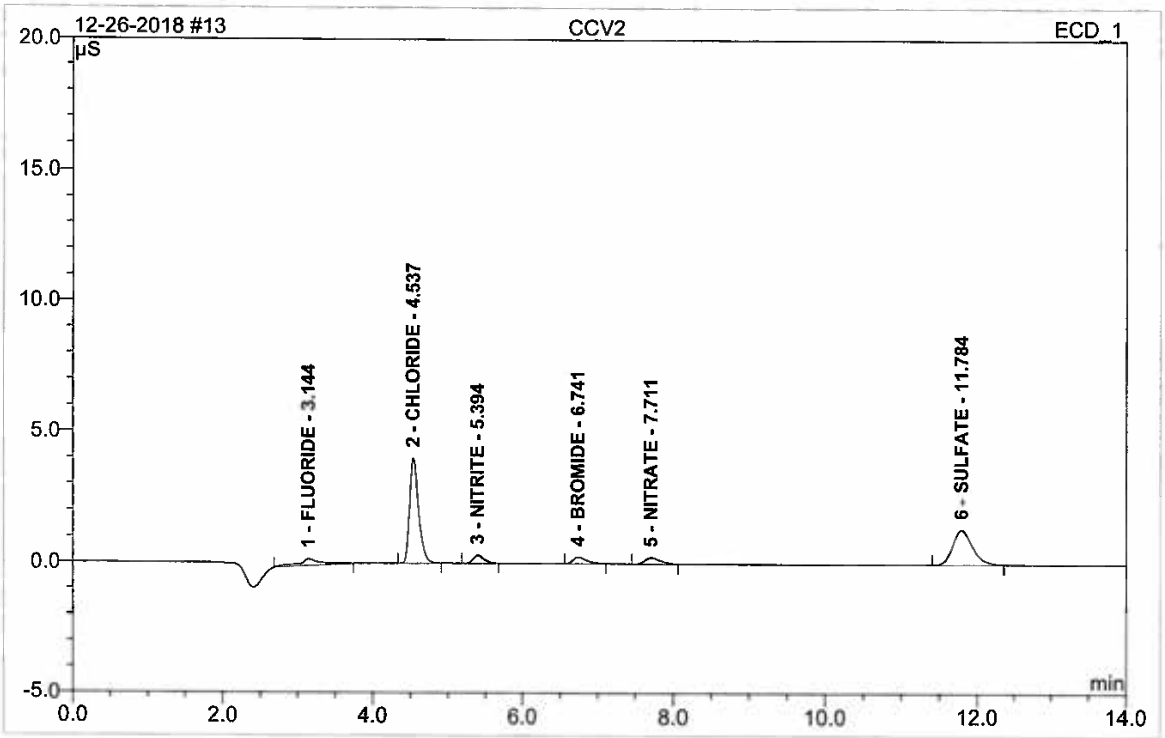
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

13 CCV2

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**CCV2**	*Injection Volume:*	**25.0**
Vial Number:	**47**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/19/2018 0:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.14	FLUORIDE	0.266	0.094	7.70	0.110	BMB
2	4.54	CHLORIDE	4.005	0.541	44.44	2.535	BMB
3	5.39	NITRITE	0.309	0.054	4.41	0.120	BMB
4	6.74	BROMIDE	0.253	0.055	4.55	0.568	BMB
5	7.71	NITRATE	0.248	0.061	4.98	0.104	BMB
6	11.78	SULFATE	1.322	0.413	33.91	1.704	BMB
Total:			6.404	1.218	100.00	5.143	

Anions/Integration

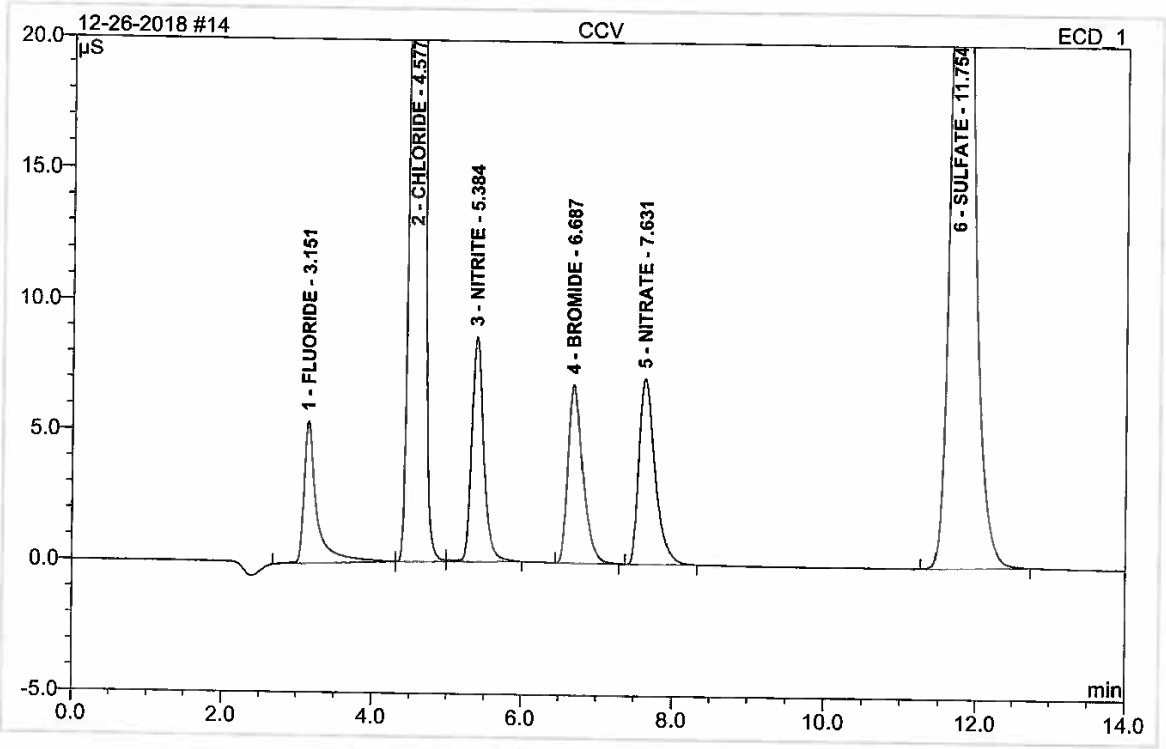
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

14 CCV

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**48**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/19/2018 0:55**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.15	FLUORIDE	5.426	1.088	2.79	2.401	BMB
2	4.58	CHLORIDE	155.512	20.145	51.64	49.293	bM
3	5.38	NITRITE	8.625	1.609	4.12	2.470	MB
4	6.69	BROMIDE	6.831	1.549	3.97	12.165	BMB
5	7.63	NITRATE	7.104	1.761	4.51	2.473	BMB
6	11.75	SULFATE	43.351	12.862	32.97	52.276	BMB
Total:			226.849	39.014	100.00	121.078	

Anions/Integration

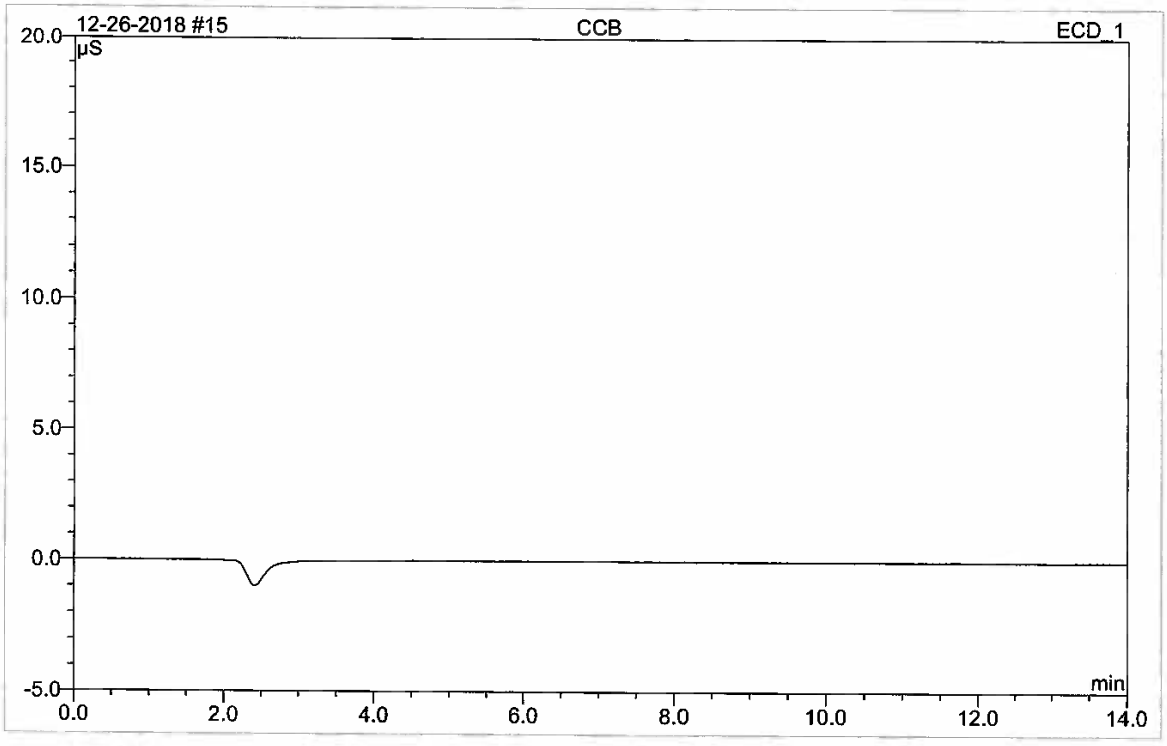
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

15 CCB

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**CCB**	*Injection Volume:*	**25.0**
Vial Number:	**49**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/19/2018 1:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
Total:			0.000	0.000	0.00	0.000	

Anions/Integration

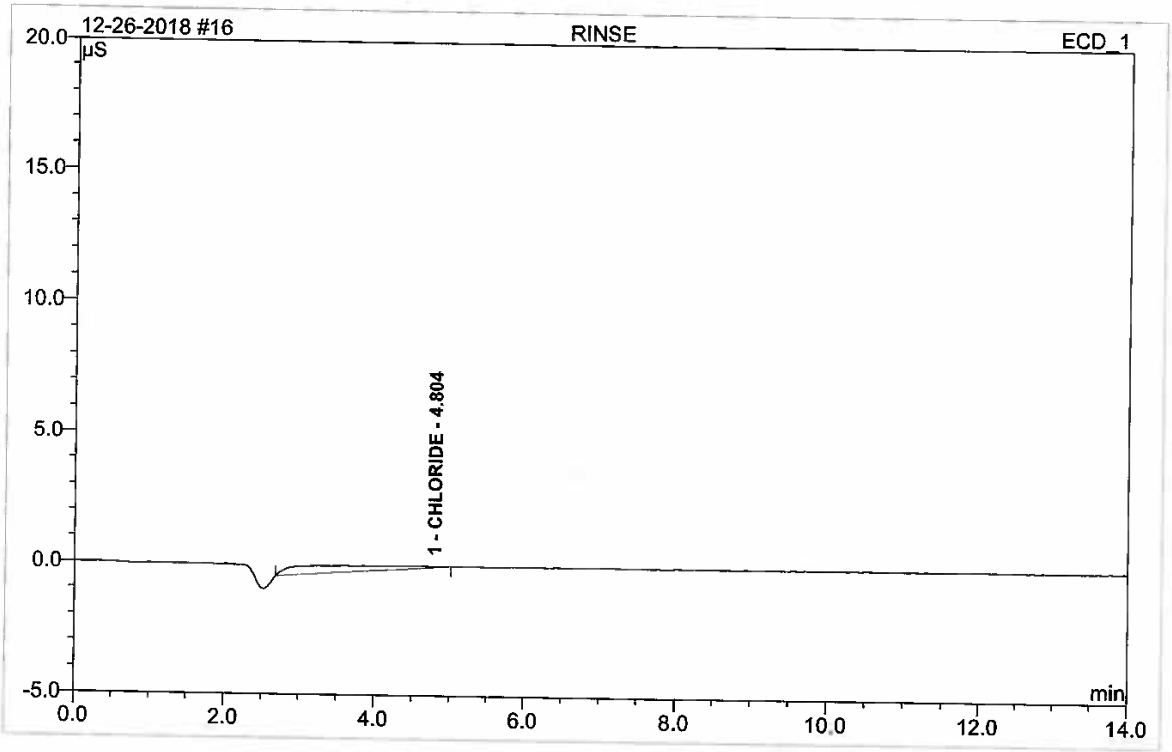
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

16 RINSE

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**RINSE**	*Injection Volume:*	**25.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 11:03**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	4.80	CHLORIDE	0.048	0.442	100.00	2.298	BMB
Total:			0.048	0.442	100.00	2.298	

Anions/Integration

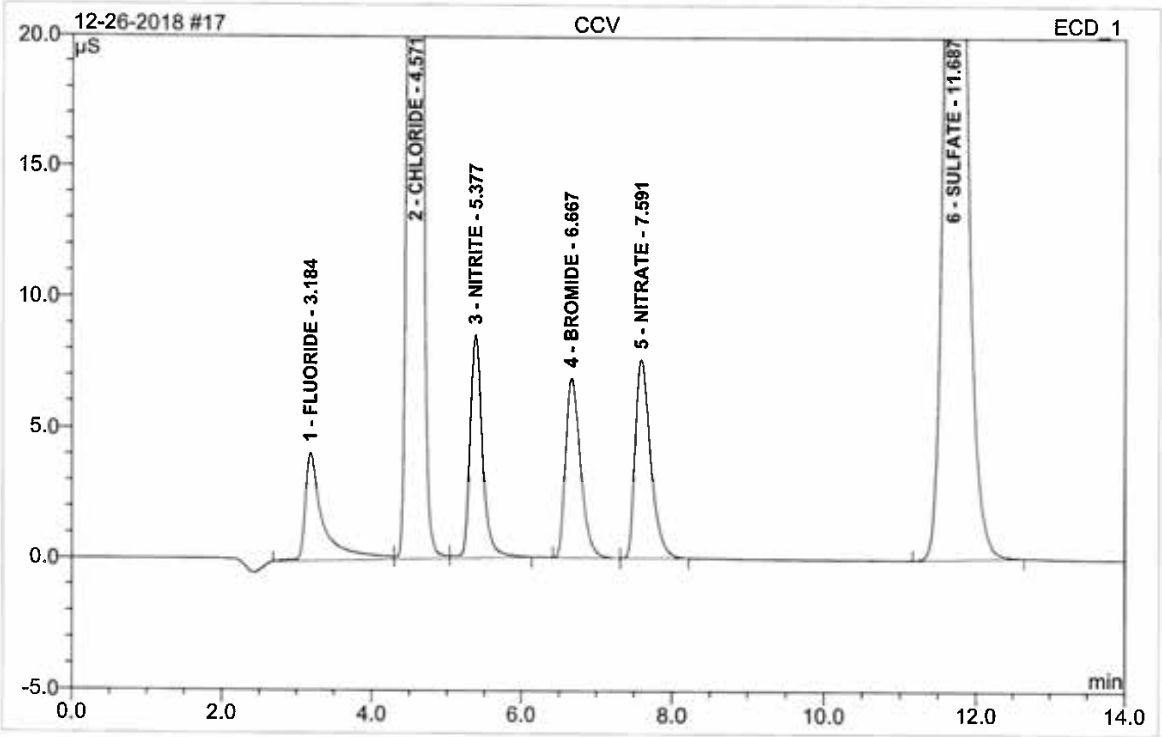
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

17 CCV

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 11:19**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.18	FLUORIDE	4.124	1.174	2.91	2.600	BM
2	4.57	CHLORIDE	150.530	20.693	51.25	50.598	M
3	5.38	NITRITE	8.523	1.653	4.09	2.537	MB
4	6.67	BROMIDE	6.848	1.590	3.94	12.486	BM
5	7.59	NITRATE	7.579	1.805	4.47	2.534	MB
6	11.69	SULFATE	45.995	13.460	33.34	54.538	BMB
Total:			223.598	40.374	100.00	125.293	

Anions/Integration

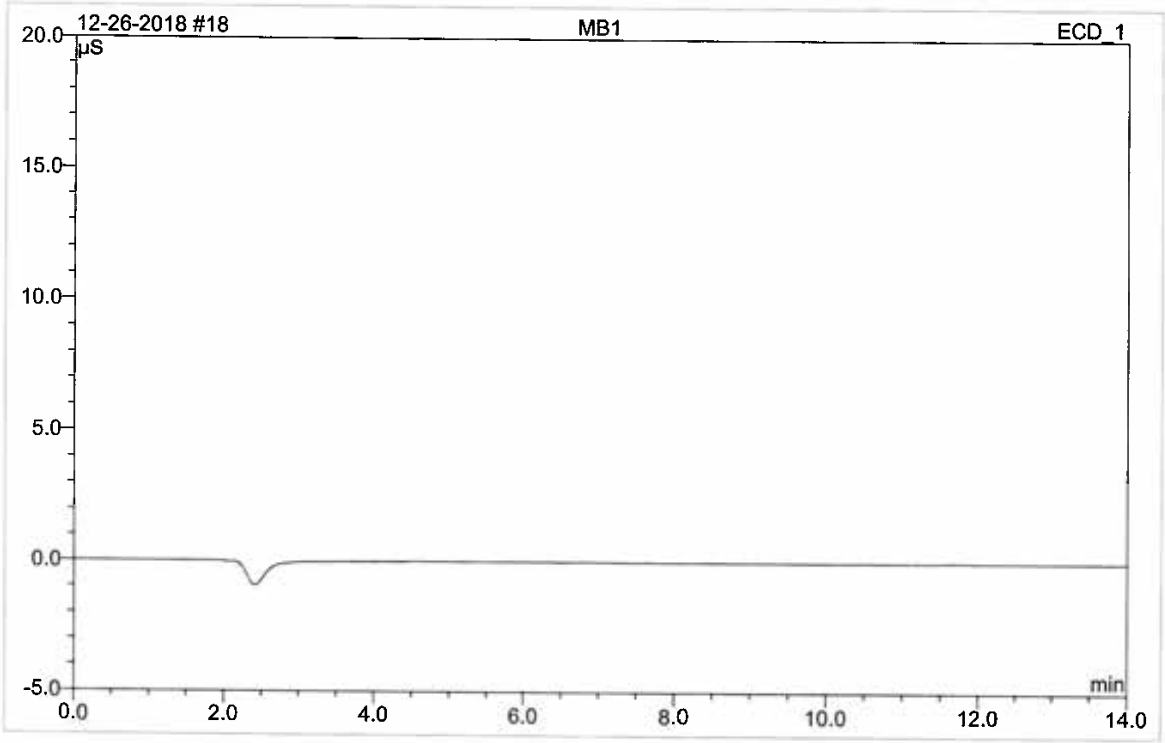
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

18 MB1

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**MB1**	*Injection Volume:*	**25.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 11:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
Total:			0.000	0.000	0.00	0.000	

Anions/Integration

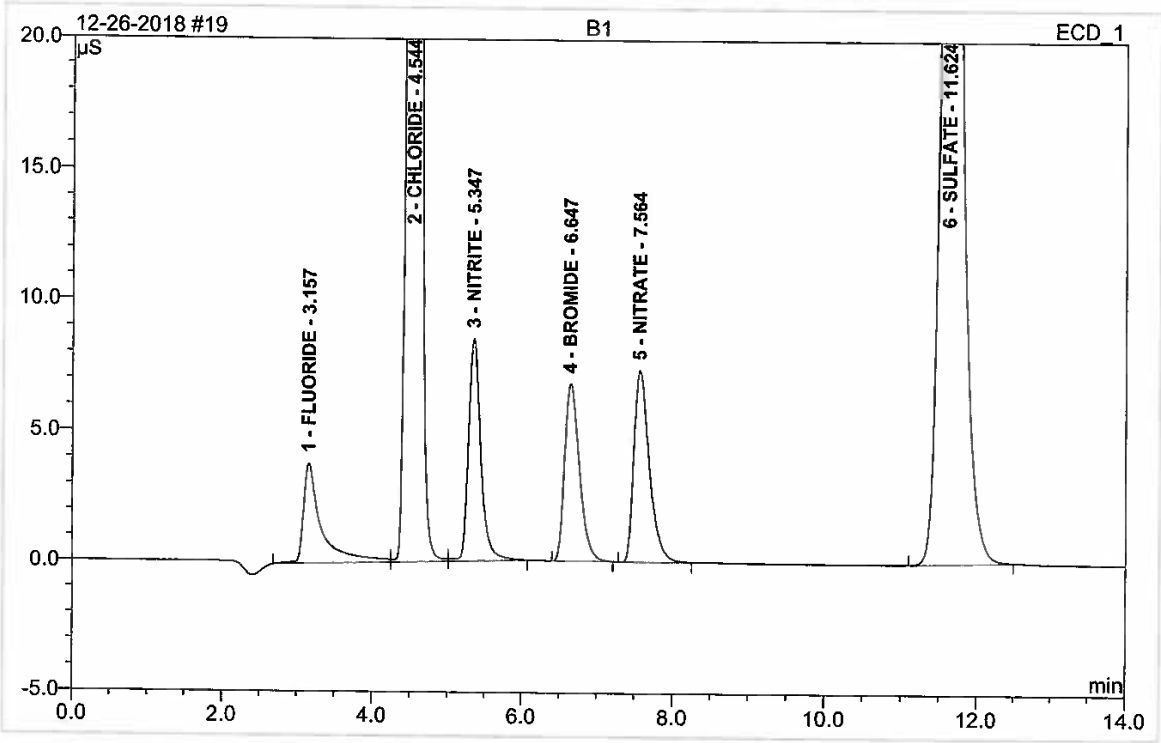
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

19 B1

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**B1**	*Injection Volume:*	**25.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 11:53**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.16	FLUORIDE	3.859	1.089	2.74	2.404	BM
2	4.54	CHLORIDE	149.987	20.662	51.98	50.525	M
3	5.35	NITRITE	8.499	1.642	4.13	2.520	MB
4	6.65	BROMIDE	6.782	1.568	3.95	12.312	BMB
5	7.56	NITRATE	7.333	1.761	4.43	2.473	BMB
6	11.62	SULFATE	44.675	13.024	32.77	52.892	BMB
Total:			221.134	39.746	100.00	123.127	

Anions/Integration

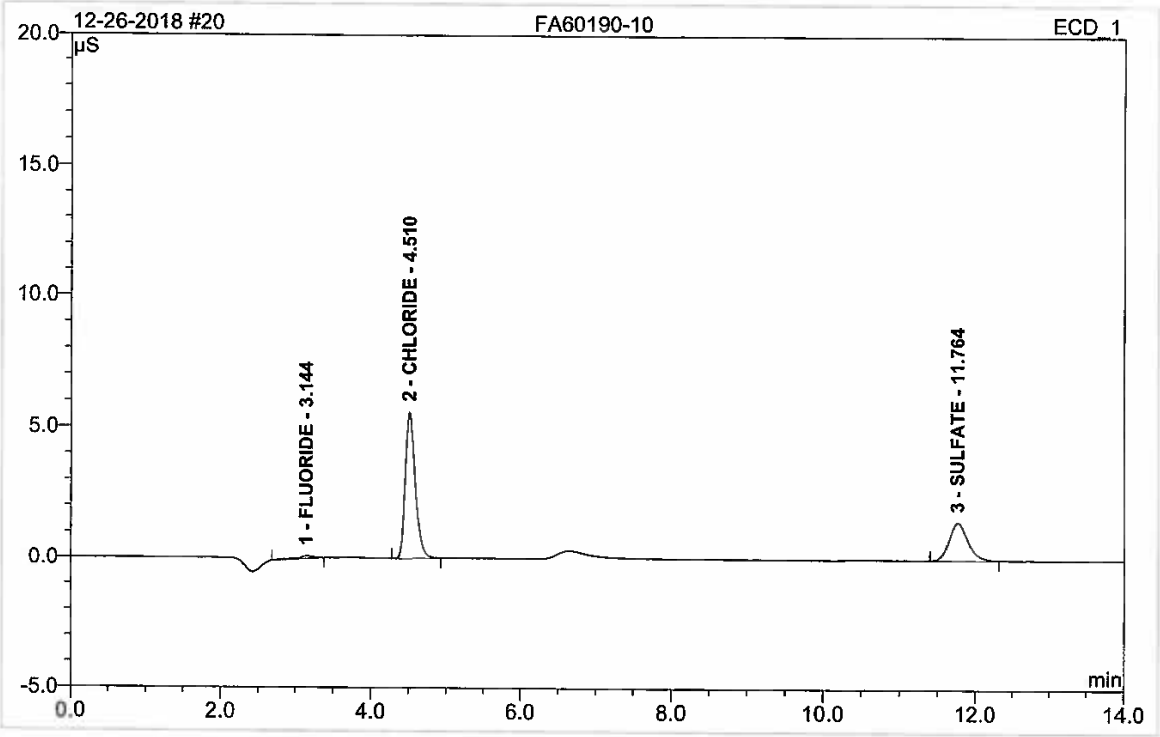
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

20 FA60190-10

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60190-10**	*Injection Volume:*	**25.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 13:35**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.14	FLUORIDE	0.098	0.028	2.16	-0.041	BMB
2	4.51	CHLORIDE	5.584	0.852	65.02	3.275	BMB
3	11.76	SULFATE	1.454	0.430	32.82	1.777	BMB
Total:			7.136	1.310	100.00	5.011	

Anions/Integration

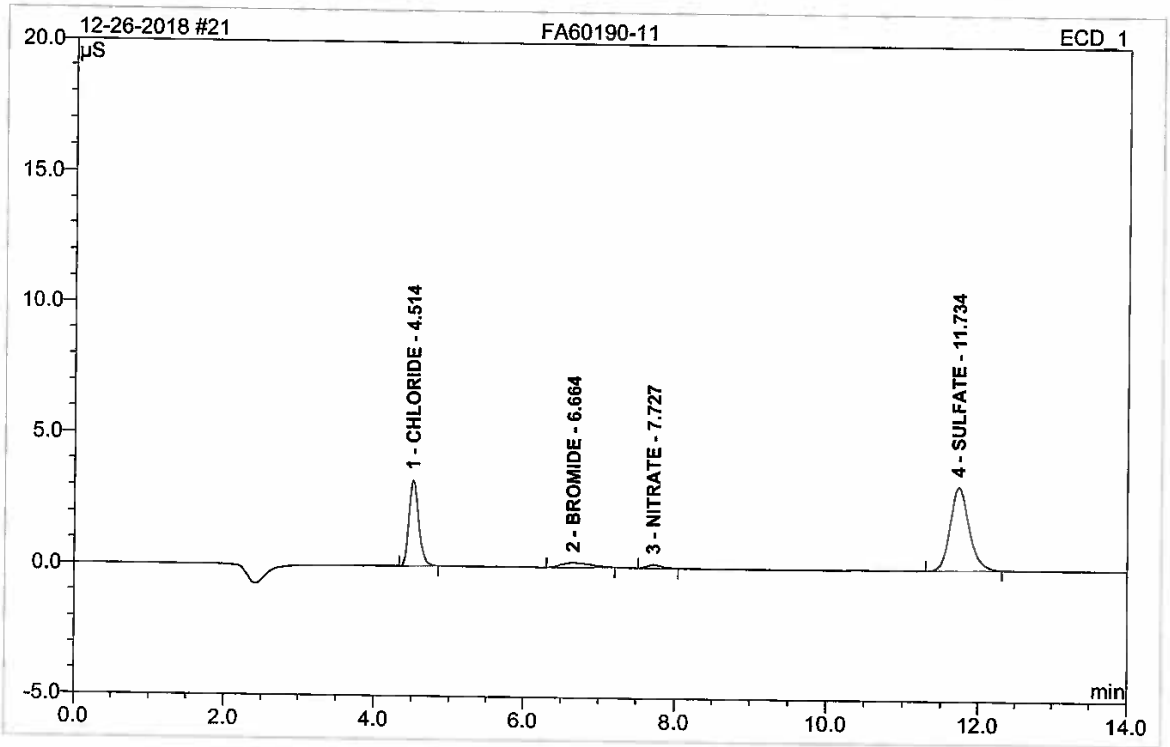
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

21 FA60190-11

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60190-11**	*Injection Volume:*	**25.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 13:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	4.51	CHLORIDE	3.245	0.480	31.34	2.389	BMB
2	6.66	BROMIDE	0.177	0.078	5.10	0.744	BMB
3	7.73	NITRATE	0.138	0.030	1.99	0.062	BMB
4	11.73	SULFATE	3.160	0.943	61.58	4.012	BMB
Total:			6.720	1.532	100.00	7.207	

Anions/Integration

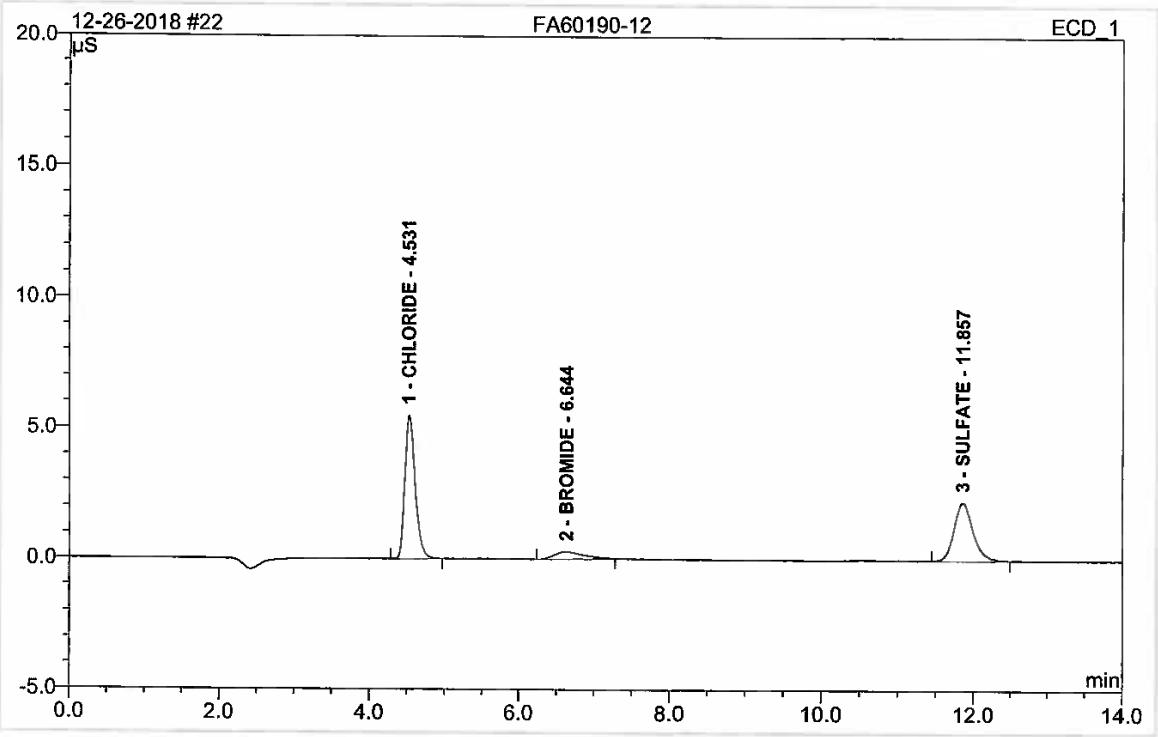
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

22 FA60190-12

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60190-12**	*Injection Volume:*	**25.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 14:08**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	4.53	CHLORIDE	5.490	0.861	52.07	3.297	BMB
2	6.64	BROMIDE	0.288	0.129	7.80	1.139	BMB
3	11.86	SULFATE	2.221	0.663	40.13	2.796	BMB
Total:			7.999	1.653	100.00	7.233	

Anions/Integration

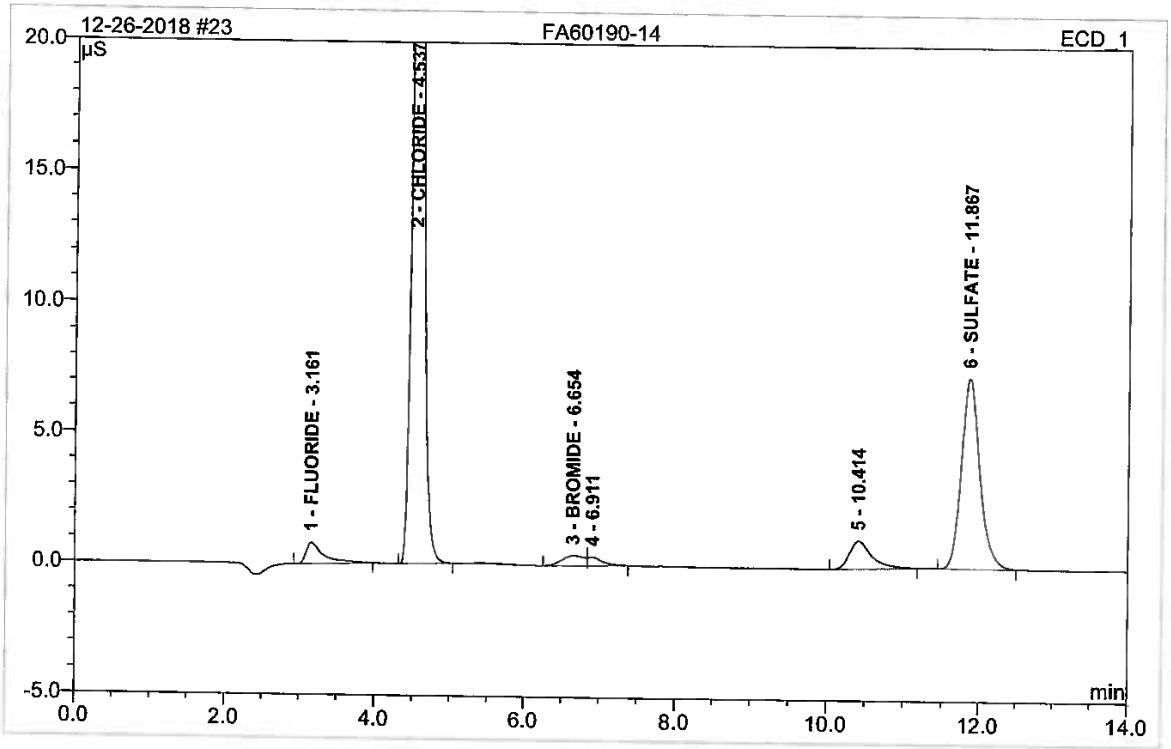
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

23 FA60190-14

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60190-14**	*Injection Volume:*	**25.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 14:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.16	FLUORIDE	0.812	0.222	2.34	0.406	BMB
2	4.54	CHLORIDE	45.267	6.590	69.41	16.963	BMB
3	6.65	BROMIDE	0.385	0.131	1.37	1.151	BM
4	6.91	n.a.	0.329	0.075	0.79	n.a.	MB
5	10.41	n.a.	1.067	0.367	3.86	n.a.	BMB
6	11.87	SULFATE	7.305	2.111	22.23	9.040	BMB
Total:			55.165	9.495	100.00	27.559	

Anions/Integration

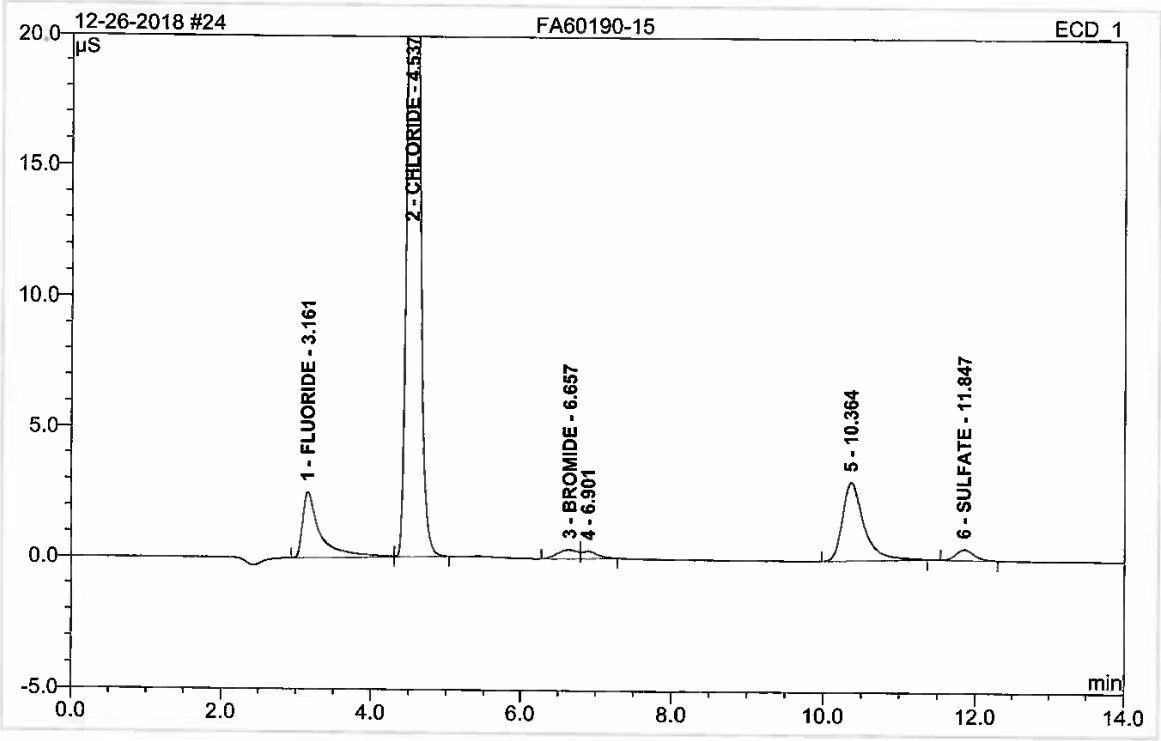
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

24 FA60190-15

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60190-15**	*Injection Volume:*	**25.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 14:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.16	FLUORIDE	2.525	0.698	7.95	1.502	BM
2	4.54	CHLORIDE	45.804	6.798	77.43	17.458	MB
3	6.66	BROMIDE	0.342	0.111	1.27	1.000	BM
4	6.90	n.a.	0.295	0.068	0.78	n.a.	MB
5	10.36	n.a.	3.013	0.980	11.17	n.a.	BMB
6	11.85	SULFATE	0.429	0.124	1.41	0.439	BMB
Total:			52.408	8.780	100.00	20.400	

Anions/Integration

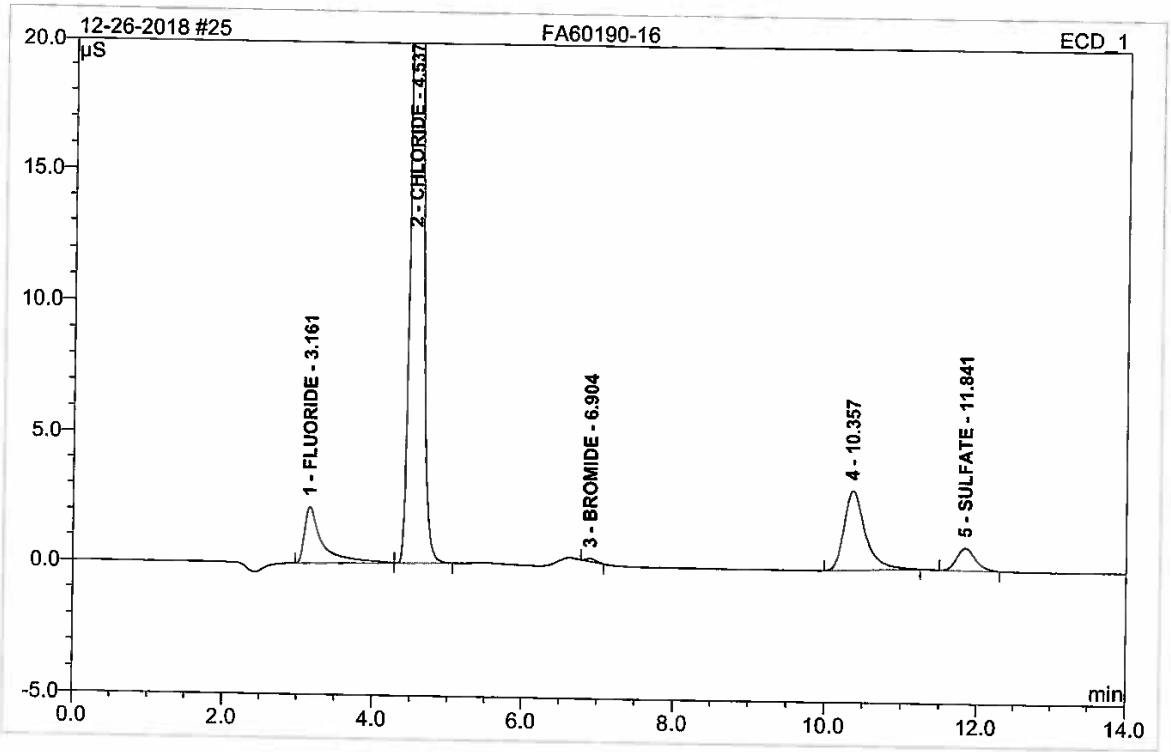
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

25 FA60190-16

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60190-16**	*Injection Volume:*	**25.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 14:59**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.16	FLUORIDE	2.168	0.596	6.83	1.267	BM
2	4.54	CHLORIDE	47.042	6.884	78.89	17.663	MB
3	6.90	BROMIDE	0.106	0.016	0.18	0.261	BMB
4	10.36	n.a.	3.049	0.978	11.20	n.a.	BMB
5	11.84	SULFATE	0.863	0.253	2.89	1.002	BMB
Total:			53.228	8.726	100.00	20.192	

Anions/Integration

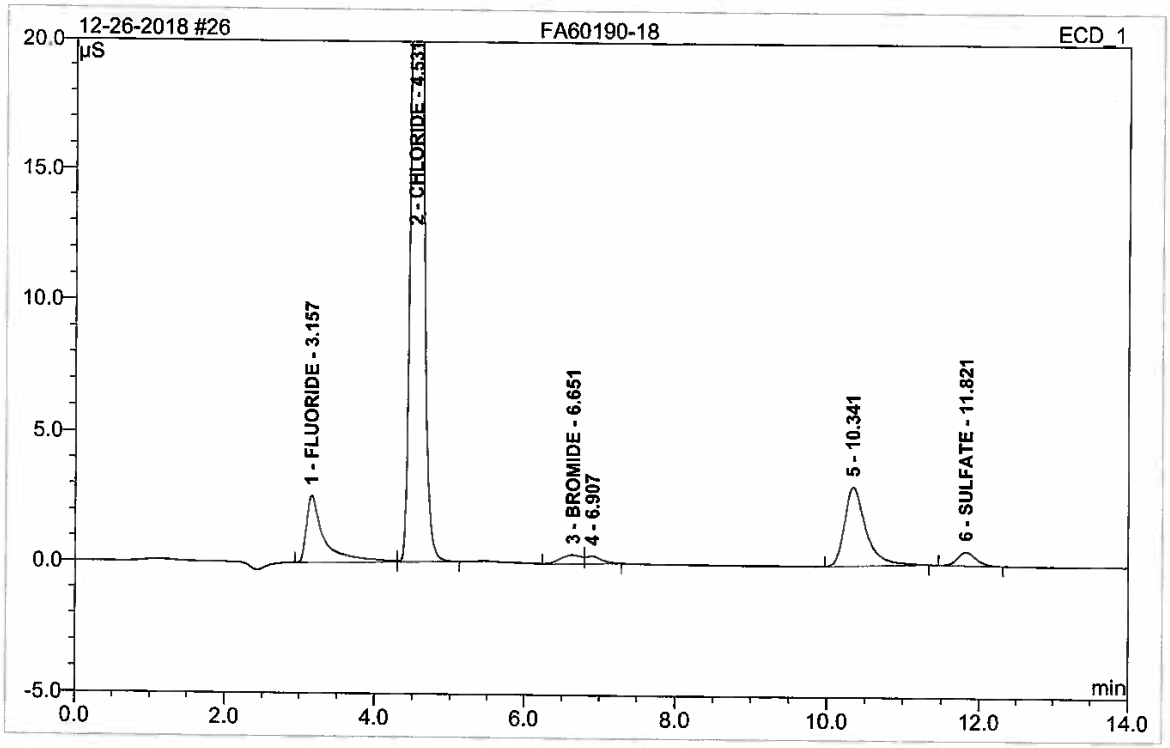
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

26 FA60190-18

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60190-18**	*Injection Volume:*	**25.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 15:16**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.16	FLUORIDE	2.567	0.705	7.95	1.518	BM
2	4.53	CHLORIDE	46.212	6.842	77.22	17.564	MB
3	6.65	BROMIDE	0.333	0.110	1.24	0.994	BM
4	6.91	n.a.	0.288	0.067	0.76	n.a.	MB
5	10.34	n.a.	3.037	0.983	11.09	n.a.	BMB
6	11.82	SULFATE	0.522	0.153	1.73	0.567	BMB
Total:			52.958	8.861	100.00	20.642	

Anions/Integration

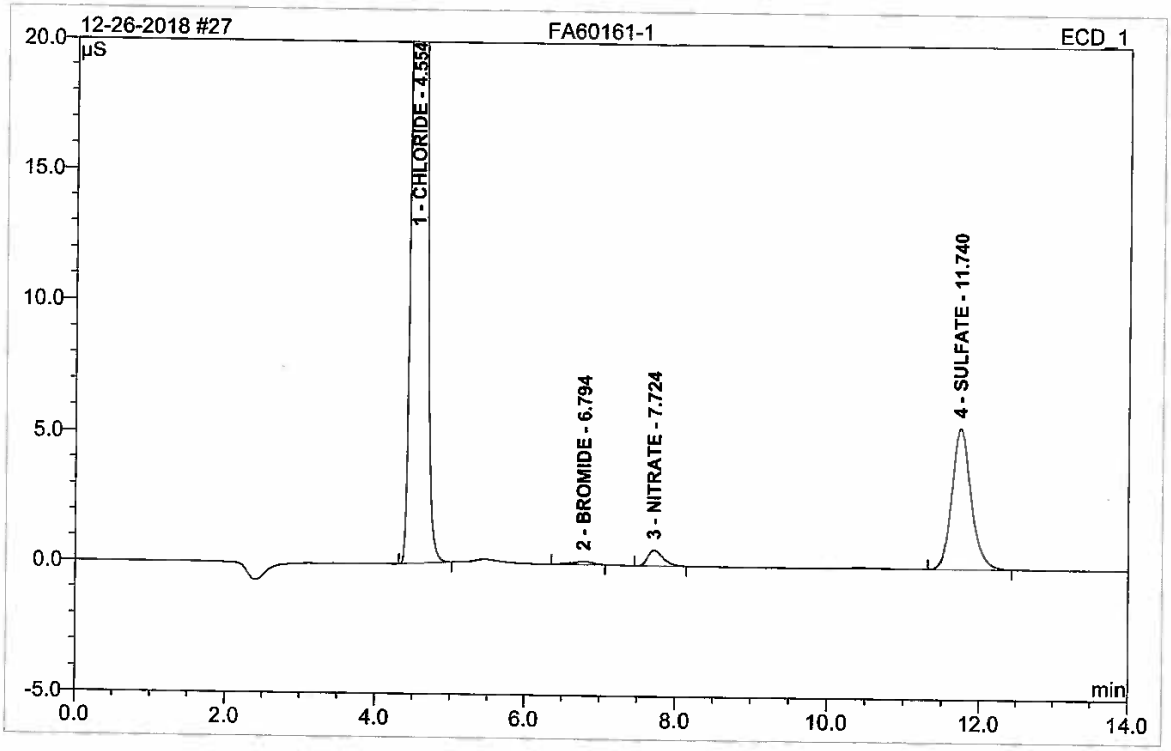
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

27 FA60161-1

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60161-1**	*Injection Volume:*	**25.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/26/2018 15:33**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	4.55	CHLORIDE	121.492	16.527	90.14	203.313	BMB
2	6.79	BROMIDE	0.123	0.038	0.21	2.159	BMB
3	7.72	NITRATE	0.605	0.144	0.79	1.102	BMB
4	11.74	SULFATE	5.417	1.626	8.87	34.812	BMB
Total:			127.637	18.335	100.00	241.385	

Anions/Integration

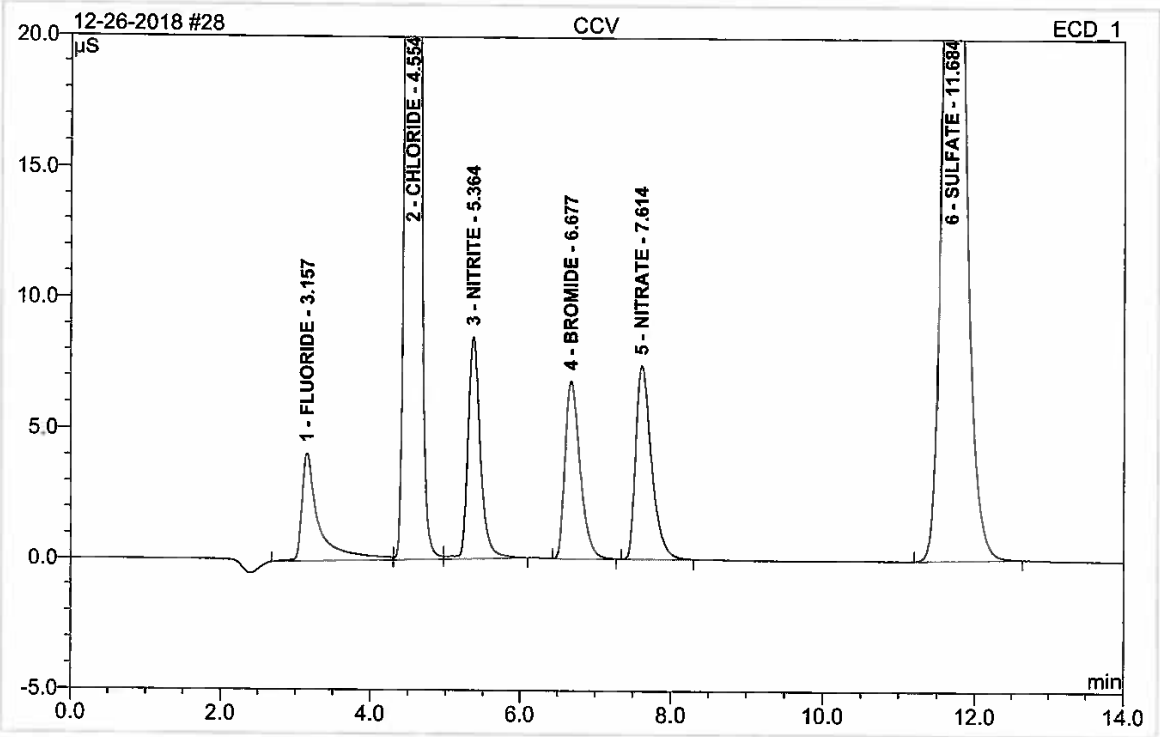
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

28 CCV

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 15:50**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.16	FLUORIDE	4.154	1.121	2.81	2.479	BM
2	4.55	CHLORIDE	150.041	20.600	51.60	50.379	M
3	5.36	NITRITE	8.502	1.645	4.12	2.525	MB
4	6.68	BROMIDE	6.810	1.591	3.99	12.493	BMB
5	7.61	NITRATE	7.420	1.810	4.53	2.541	BMB
6	11.68	SULFATE	44.720	13.155	32.95	53.387	BMB
Total:			221.647	39.923	100.00	123.803	

Anions/Integration

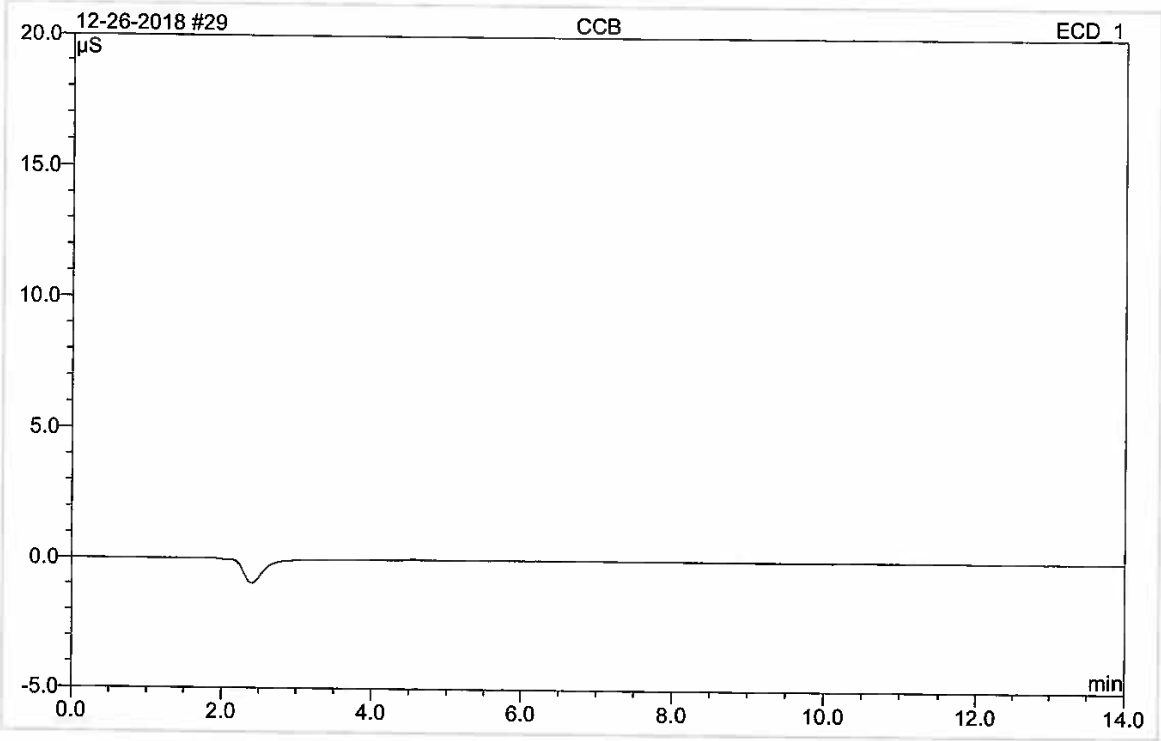
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

29 CCB

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**CCB**	*Injection Volume:*	**25.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 16:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
Total:			0.000	0.000	0.00	0.000	

Anions/Integration

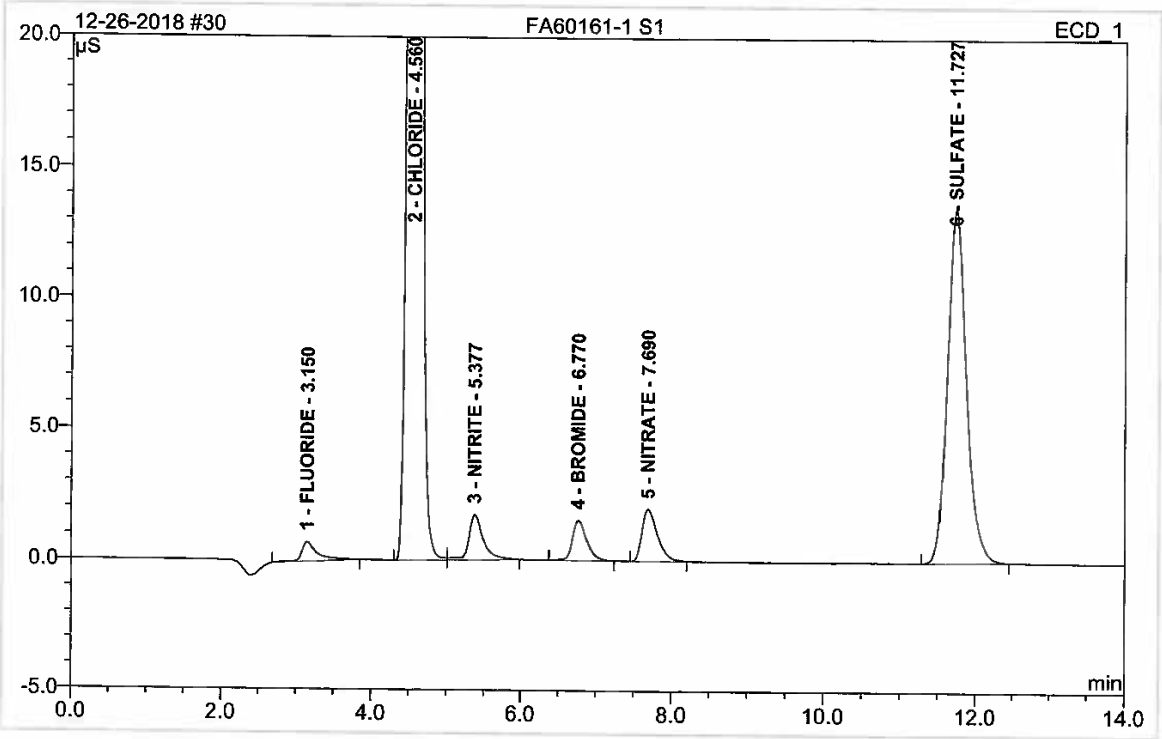
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

30 FA60161-1 S1

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60161-1 S1**	*Injection Volume:*	**25.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/26/2018 16:23**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.15	FLUORIDE	0.746	0.195	0.74	1.716	BMB
2	4.56	CHLORIDE	151.722	21.010	79.67	256.777	BM
3	5.38	NITRITE	1.706	0.384	1.46	3.095	MB
4	6.77	BROMIDE	1.518	0.335	1.27	13.705	BMB
5	7.69	NITRATE	1.973	0.471	1.79	3.379	BMB
6	11.73	SULFATE	13.514	3.975	15.07	84.602	BMB
Total:			171.179	26.370	100.00	363.275	

Anions/Integration

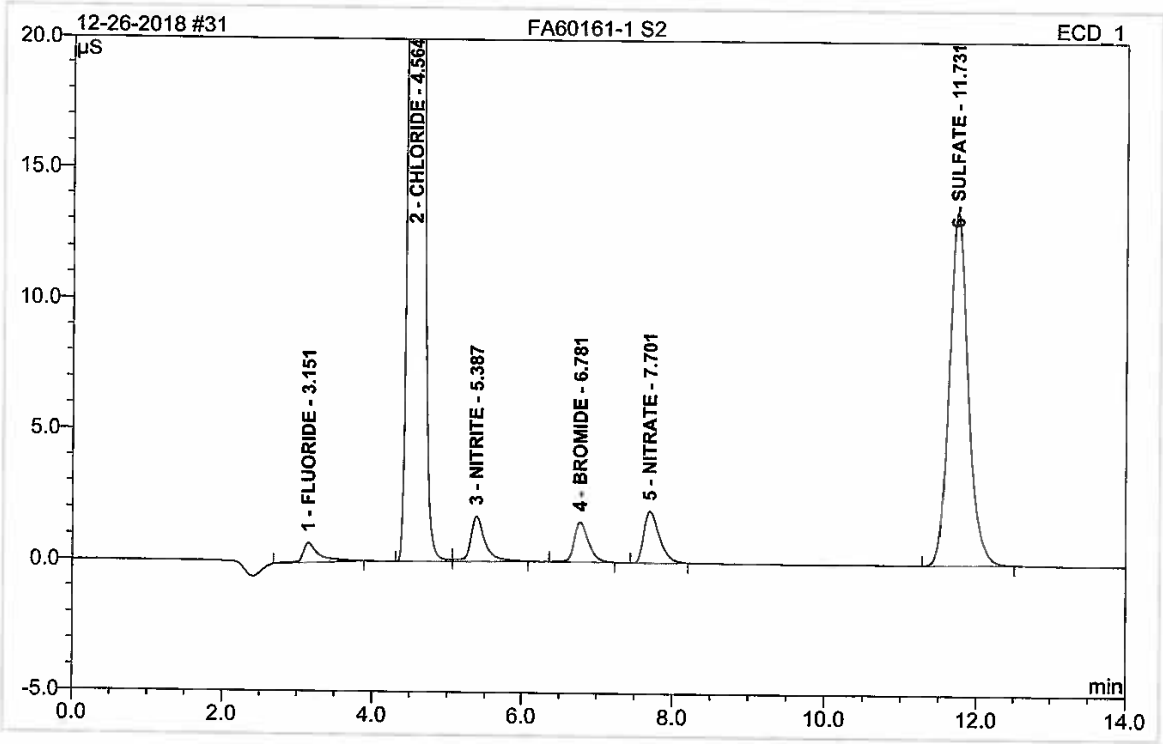
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

31 FA60161-1 S2

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60161-1 S2**	*Injection Volume:*	**25.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/26/2018 16:40**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.15	FLUORIDE	0.745	0.197	0.74	1.736	BMB
2	4.56	CHLORIDE	151.244	21.057	79.71	257.342	BM
3	5.39	NITRITE	1.704	0.382	1.45	3.083	MB
4	6.78	BROMIDE	1.511	0.334	1.26	13.656	BMB
5	7.70	NITRATE	1.967	0.471	1.78	3.380	BMB
6	11.73	SULFATE	13.497	3.976	15.05	84.613	BMB
Total:			170.668	26.417	100.00	363.810	

Anions/Integration

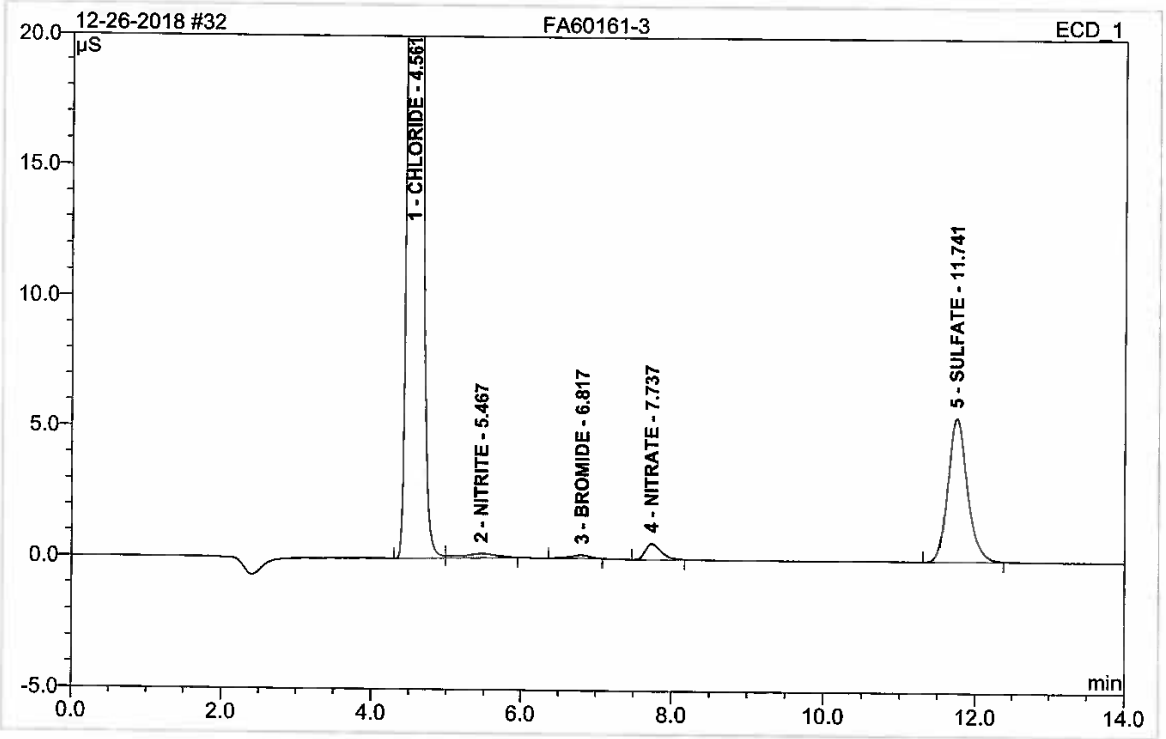
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

32 FA60161-3

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60161-3**	*Injection Volume:*	**25.0**
Vial Number:	**17**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/26/2018 16:57**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	4.56	CHLORIDE	122.672	16.796	89.73	206.520	BM
2	5.47	NITRITE	0.157	0.082	0.44	0.813	MB
3	6.82	BROMIDE	0.129	0.039	0.21	2.204	BMB
4	7.74	NITRATE	0.604	0.144	0.77	1.103	BMB
5	11.74	SULFATE	5.506	1.657	8.85	35.486	BMB
Total:			129.068	18.718	100.00	246.126	

Anions/Integration

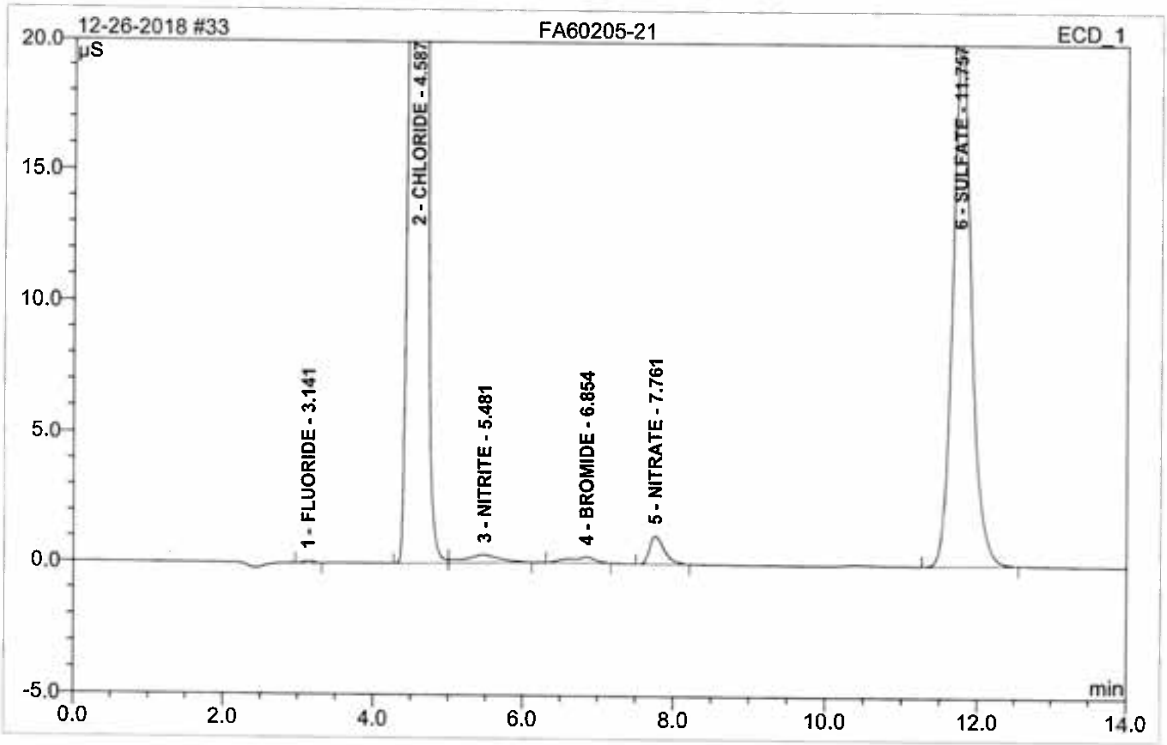
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

33 FA60205-21

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60205-21**	*Injection Volume:*	**25.0**
Vial Number:	**18**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 17:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.14	FLUORIDE	0.082	0.013	0.03	-0.077	BMB
2	4.59	CHLORIDE	220.090	33.147	83.96	80.303	BM
3	5.48	NITRITE	0.308	0.168	0.43	0.293	MB
4	6.85	BROMIDE	0.234	0.096	0.24	0.882	BMB
5	7.76	NITRATE	1.078	0.248	0.63	0.365	BMB
6	11.76	SULFATE	20.138	5.810	14.72	24.506	BMB
Total:			241.929	39.481	100.00	106.272	

Anions/Integration

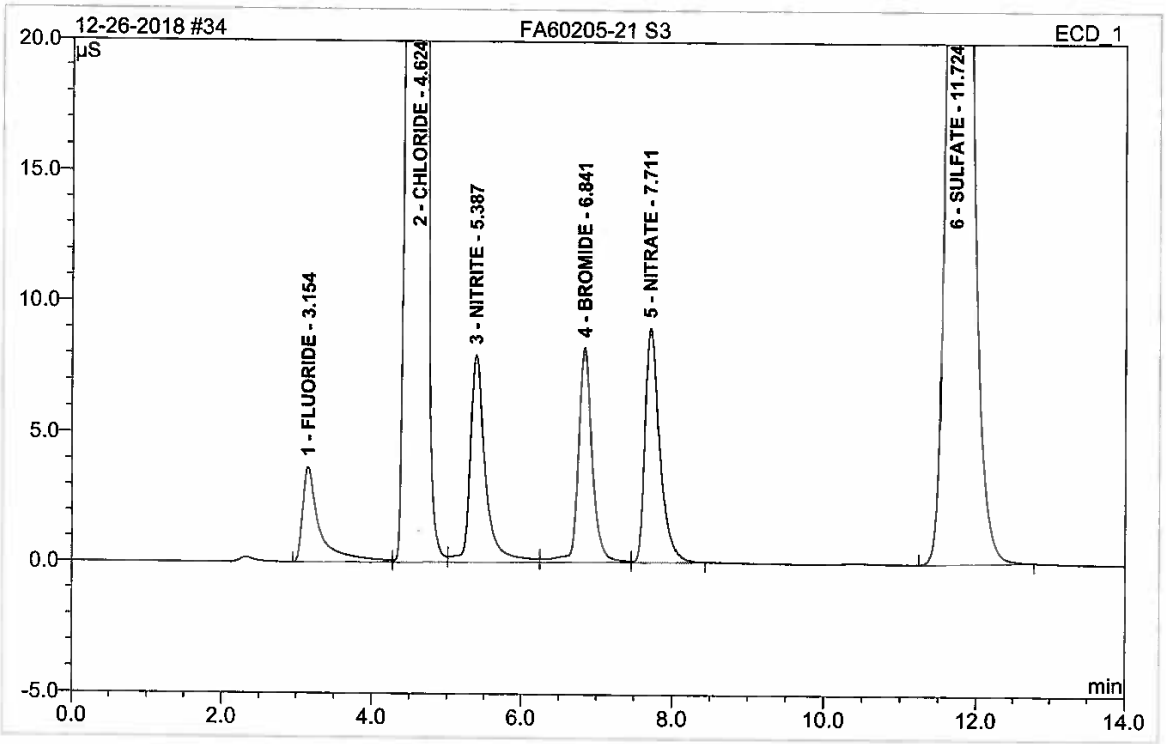
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

34 FA60205-21 S3

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60205-21 S3**	*Injection Volume:*	**25.0**
Vial Number:	**19**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 17:31**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.15	FLUORIDE	3.675	0.967	1.17	2.123	BM
2	4.62	CHLORIDE	327.924	55.653	67.50	133.985	M
3	5.39	NITRITE	7.949	1.887	2.29	2.891	M
4	6.84	BROMIDE	8.241	1.753	2.13	13.745	M
5	7.71	NITRATE	8.993	2.042	2.48	2.865	MB
6	11.72	SULFATE	68.284	20.147	24.44	79.006	BMB
Total:			425.065	82.450	100.00	234.615	

Anions/Integration

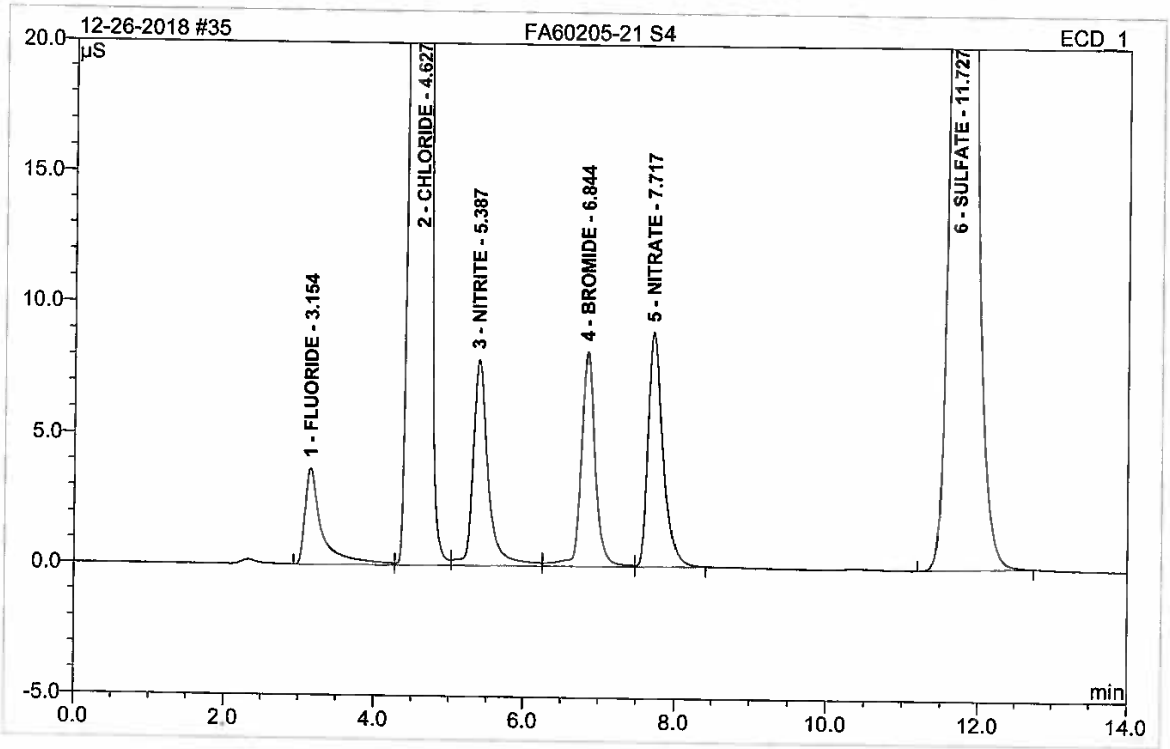
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

35 FA60205-21 S4

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60205-21 S4**	*Injection Volume:*	**25.0**
Vial Number:	**20**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 17:48**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.15	FLUORIDE	3.702	0.978	1.18	2.148	BM
2	4.63	CHLORIDE	327.921	55.771	67.55	134.267	M
3	5.39	NITRITE	7.883	1.859	2.25	2.849	M
4	6.84	BROMIDE	8.223	1.749	2.12	13.714	M
5	7.72	NITRATE	8.976	2.045	2.48	2.868	MB
6	11.73	SULFATE	68.343	20.155	24.41	79.034	BMB
Total:			425.048	82.557	100.00	234.881	

Anions/Integration

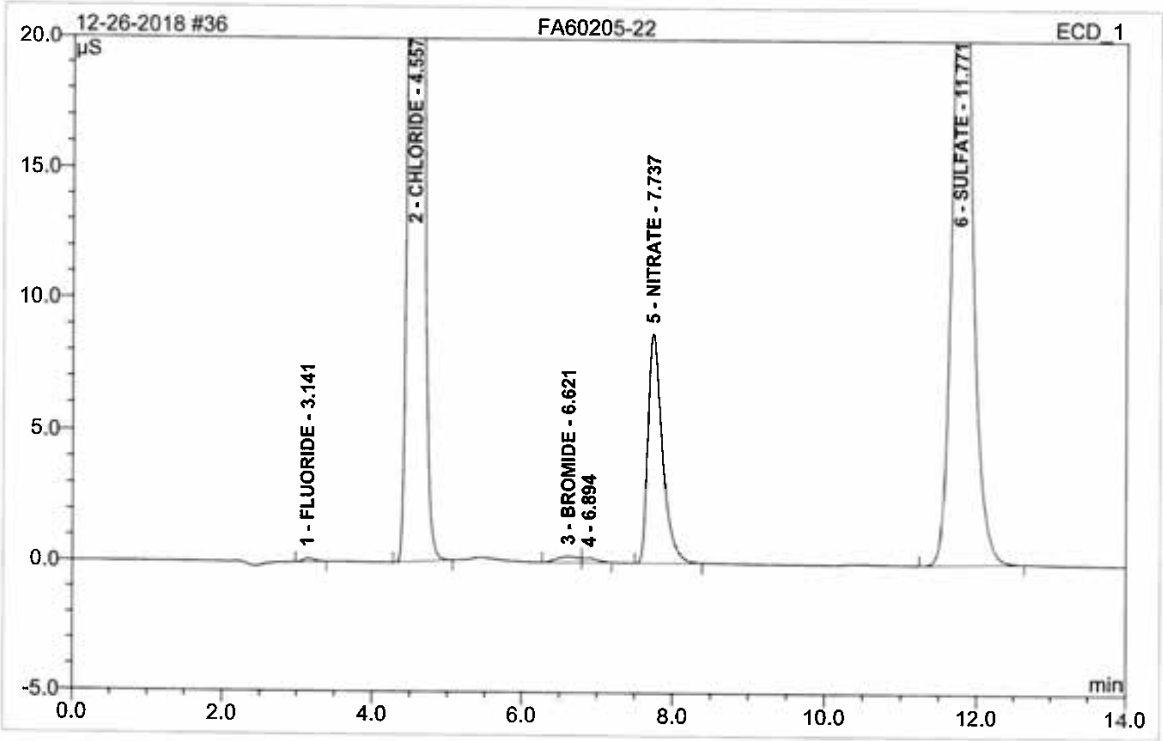
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

36 FA60205-22

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60205-22**	*Injection Volume:*	**25.0**
Vial Number:	**21**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 18:05**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.14	FLUORIDE	0.134	0.023	0.08	-0.053	BMB
2	4.56	CHLORIDE	118.127	17.634	62.70	43.304	BMB
3	6.62	BROMIDE	0.229	0.075	0.27	0.724	BM
4	6.89	n.a.	0.167	0.036	0.13	n.a.	MB
5	7.74	NITRATE	8.709	1.932	6.87	2.712	BMB
6	11.77	SULFATE	29.279	8.422	29.95	35.038	BMB
Total:			156.644	28.124	100.00	81.724	

Anions/Integration

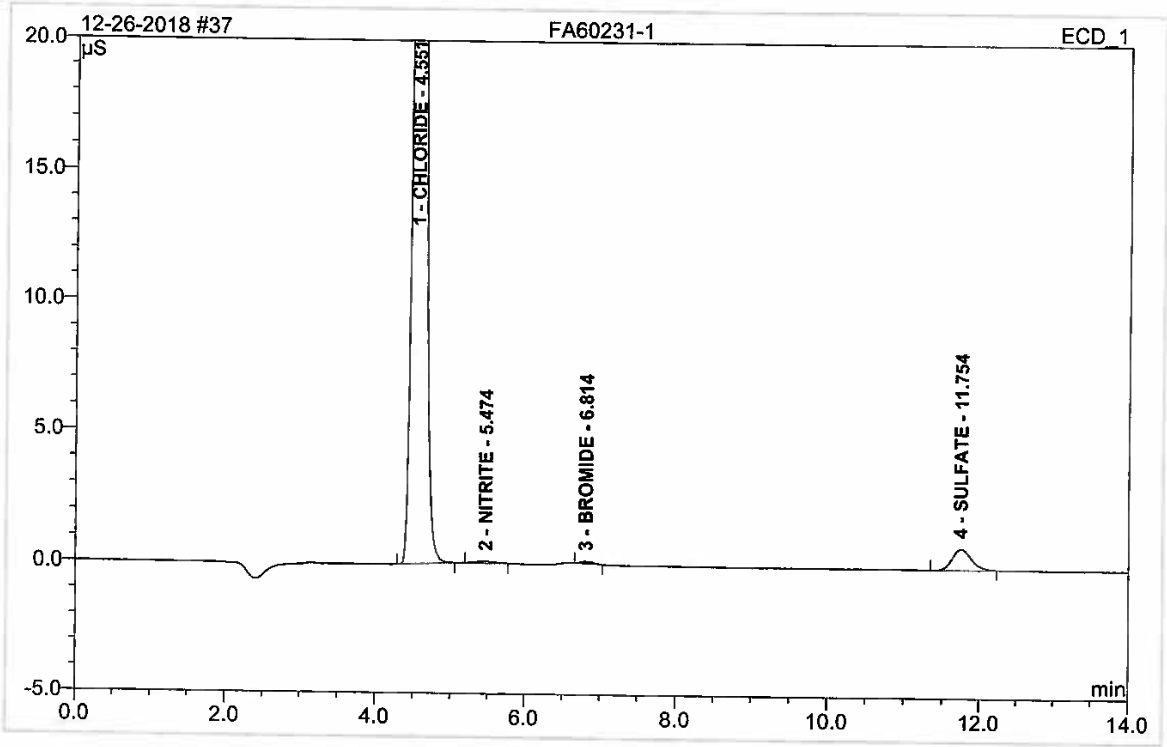
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

37 FA60231-1

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60231-1**	*Injection Volume:*	**25.0**
Vial Number:	**22**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/26/2018 18:22**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	4.55	CHLORIDE	83.749	11.520	97.66	143.598	BMB
2	5.47	NITRITE	0.067	0.020	0.17	0.349	BMB
3	6.81	BROMIDE	0.075	0.014	0.12	1.220	BMB
4	11.75	SULFATE	0.802	0.242	2.05	4.787	BMB
Total:			84.693	11.796	100.00	149.955	

Anions/Integration

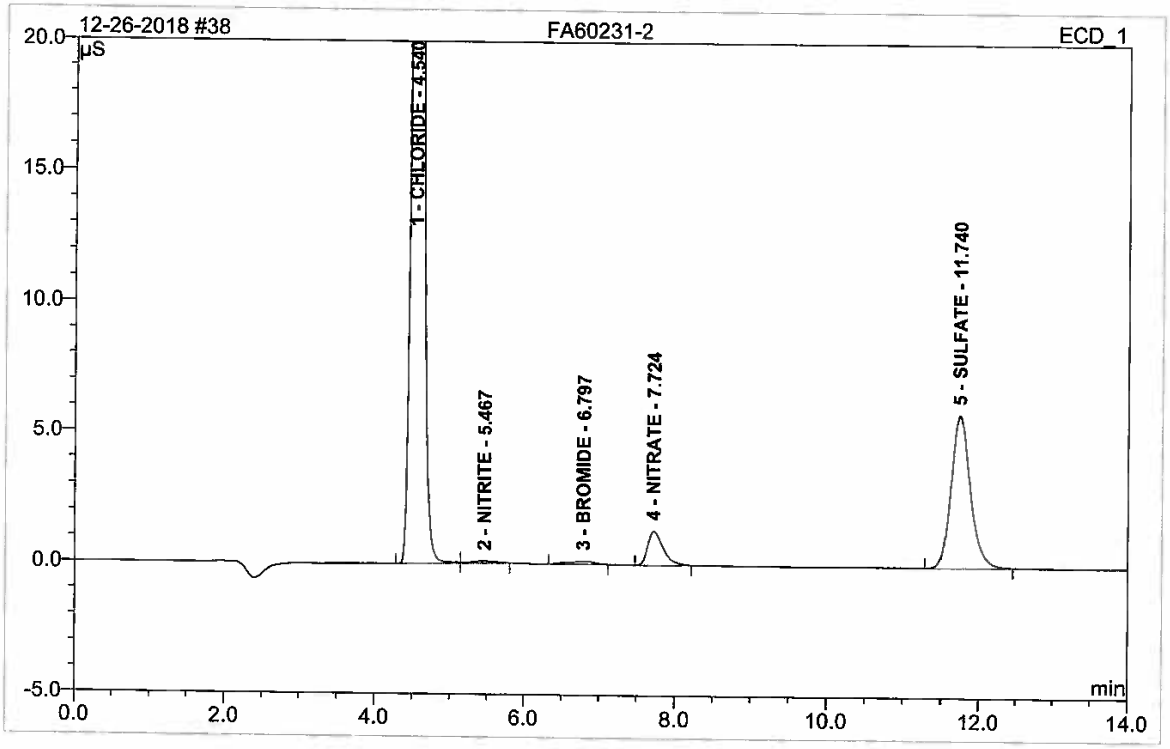
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

38 FA60231-2

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60231-2**	*Injection Volume:*	**25.0**
Vial Number:	**23**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/26/2018 18:39**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	4.54	CHLORIDE	64.096	8.761	80.39	110.702	BM
2	5.47	NITRITE	0.079	0.031	0.28	0.426	MB
3	6.80	BROMIDE	0.121	0.047	0.43	2.497	BMB
4	7.72	NITRATE	1.298	0.308	2.83	2.247	BMB
5	11.74	SULFATE	5.833	1.751	16.07	37.499	BMB
Total:			71.428	10.898	100.00	153.371	

Anions/Integration

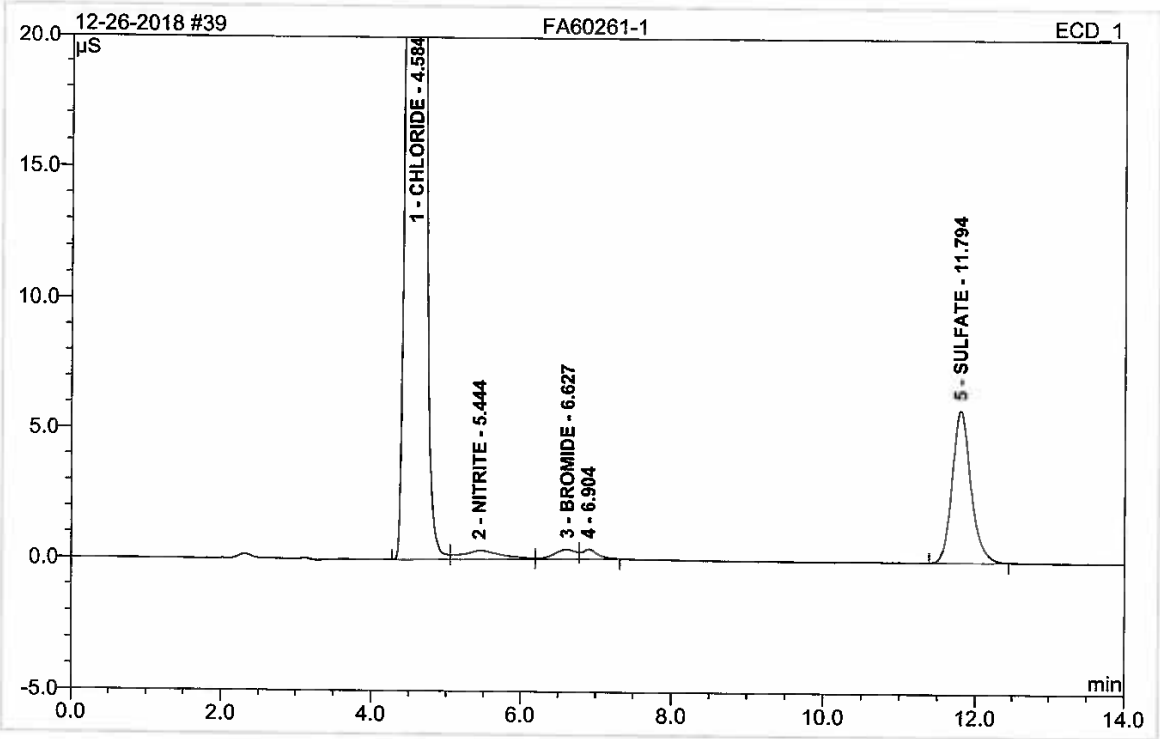
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

39 FA60261-1

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60261-1**	*Injection Volume:*	**25.0**
Vial Number:	**24**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 18:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	4.58	CHLORIDE	215.268	34.843	94.24	84.350	BM
2	5.44	NITRITE	0.334	0.204	0.55	0.347	M
3	6.63	BROMIDE	0.362	0.125	0.34	1.106	M
4	6.90	n.a.	0.370	0.088	0.24	n.a.	MB
5	11.79	SULFATE	5.844	1.712	4.63	7.330	BMB
Total:			222.178	36.971	100.00	93.133	

Anions/Integration

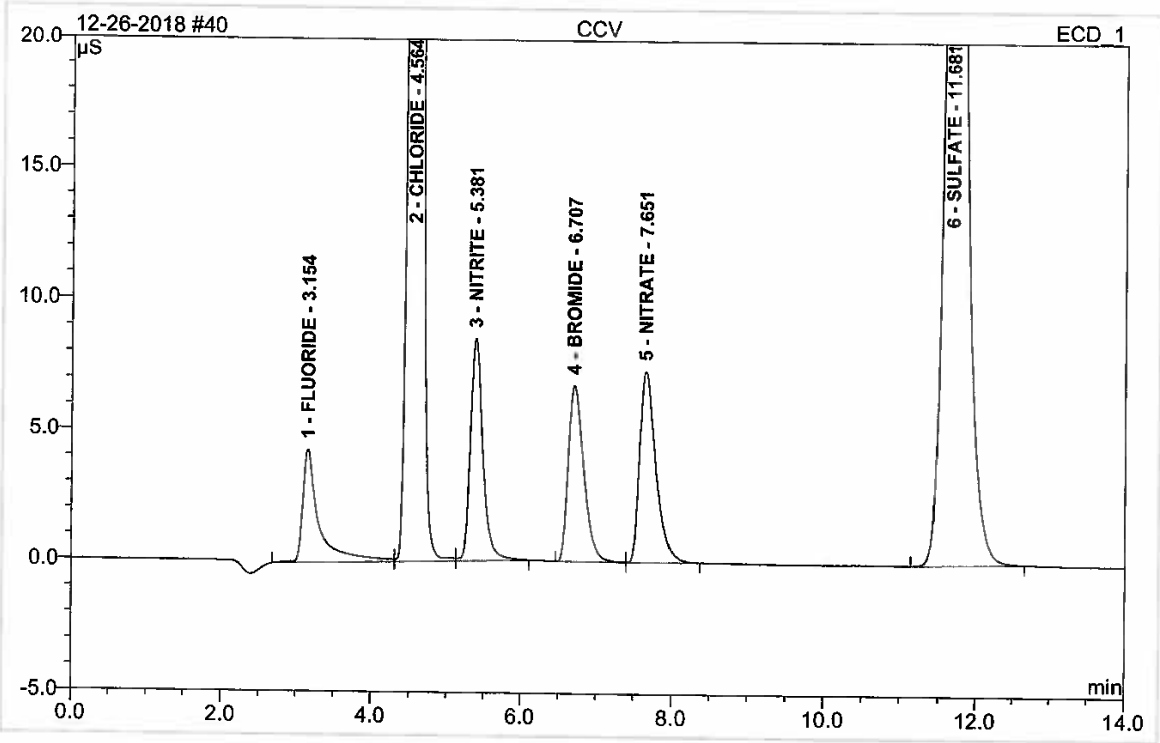
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

40 CCV

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**25**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 19:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.15	FLUORIDE	4.328	1.100	2.75	2.429	BM
2	4.56	CHLORIDE	149.138	20.640	51.66	50.474	M
3	5.38	NITRITE	8.517	1.650	4.13	2.533	MB
4	6.71	BROMIDE	6.781	1.603	4.01	12.585	BM
5	7.65	NITRATE	7.335	1.816	4.54	2.549	MB
6	11.68	SULFATE	44.500	13.144	32.90	53.346	BMB
Total:			220.598	39.954	100.00	123.917	

Anions/Integration

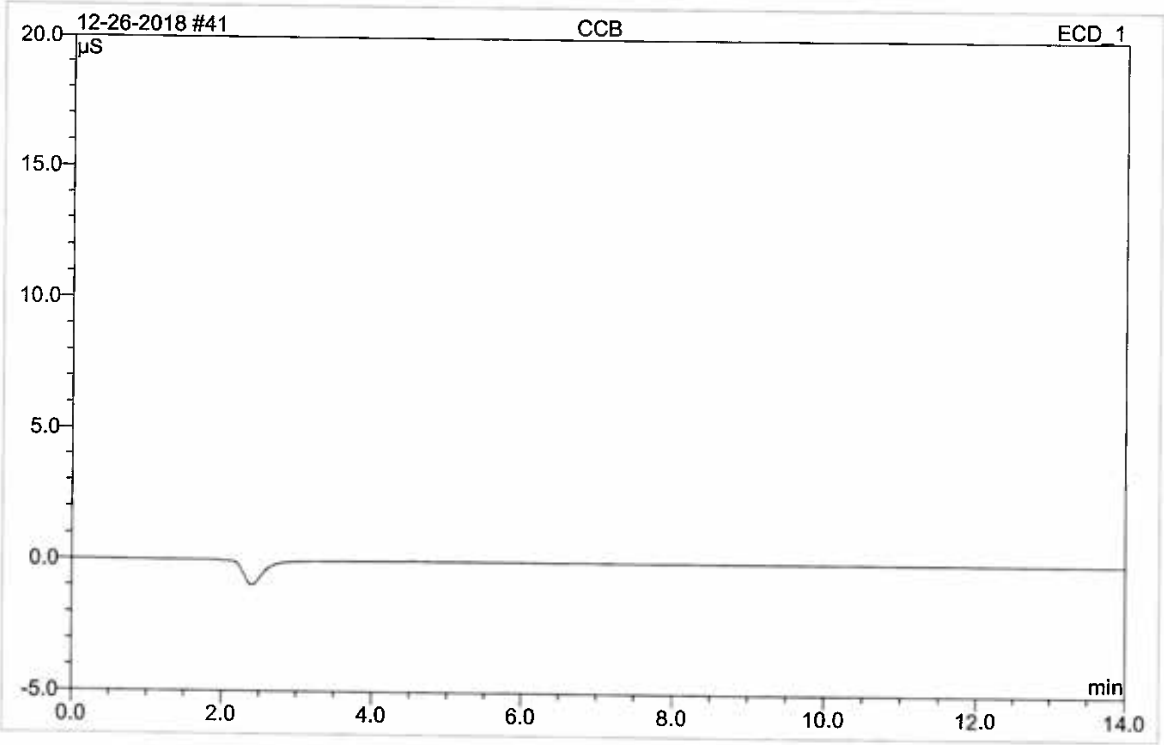
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

41 CCB

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**CCB**	*Injection Volume:*	**25.0**
Vial Number:	**26**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 19:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
Total:			0.000	0.000	0.00	0.000	

Anions/Integration

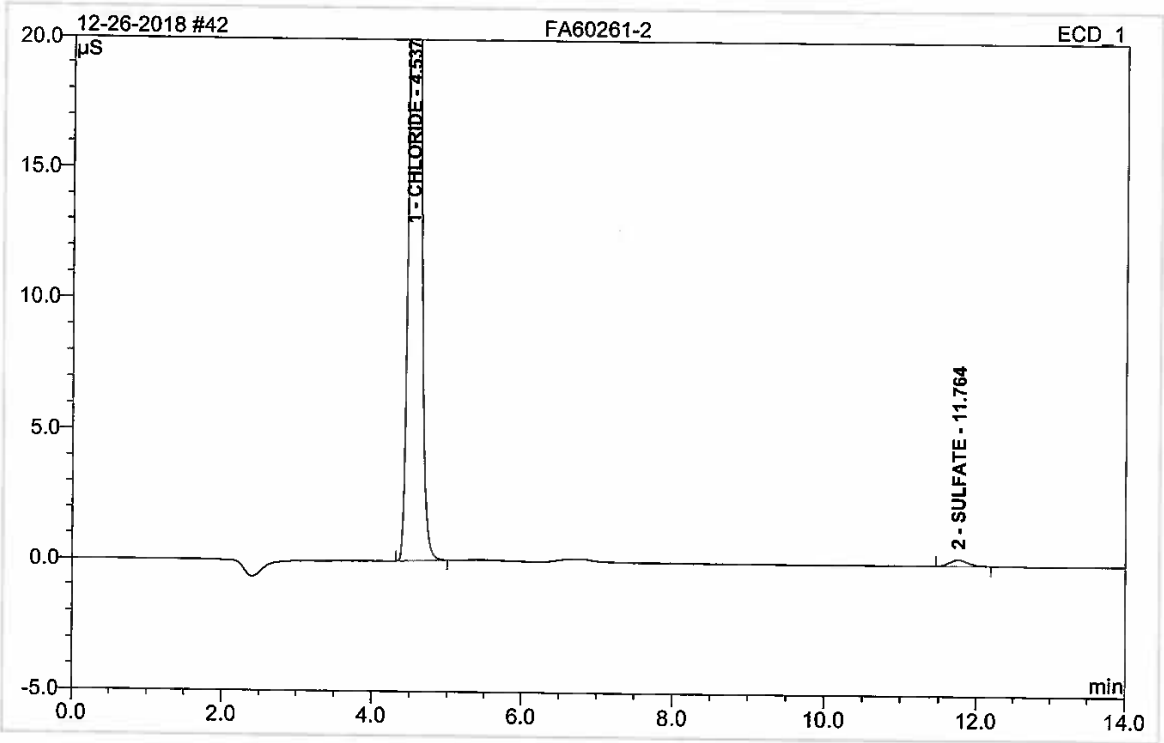
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

42 FA60261-2

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60261-2**	*Injection Volume:*	**25.0**
Vial Number:	**27**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/26/2018 19:47**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	4.54	CHLORIDE	51.460	7.109	98.96	91.002	BMB
2	11.76	SULFATE	0.251	0.075	1.04	1.116	BMB
Total:			51.711	7.184	100.00	92.118	

Anions/Integration

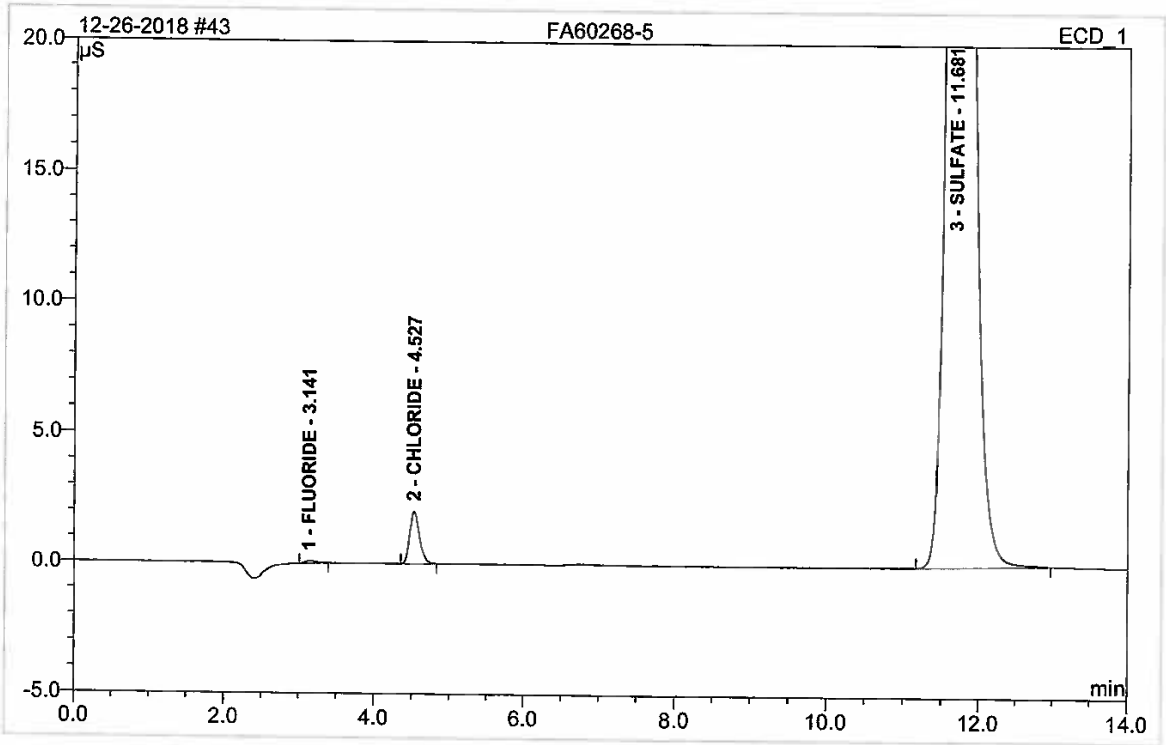
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

43 FA60268-5

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60268-5**	*Injection Volume:*	**25.0**
Vial Number:	**28**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**10.0000**
Recording Time:	**12/26/2018 20:03**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.14	FLUORIDE	0.087	0.015	0.06	-0.706	BMB
2	4.53	CHLORIDE	2.014	0.297	1.13	19.524	BMB
3	11.68	SULFATE	84.572	25.915	98.81	989.966	BMB
Total:			86.673	26.227	100.00	1008.784	

Anions/Integration

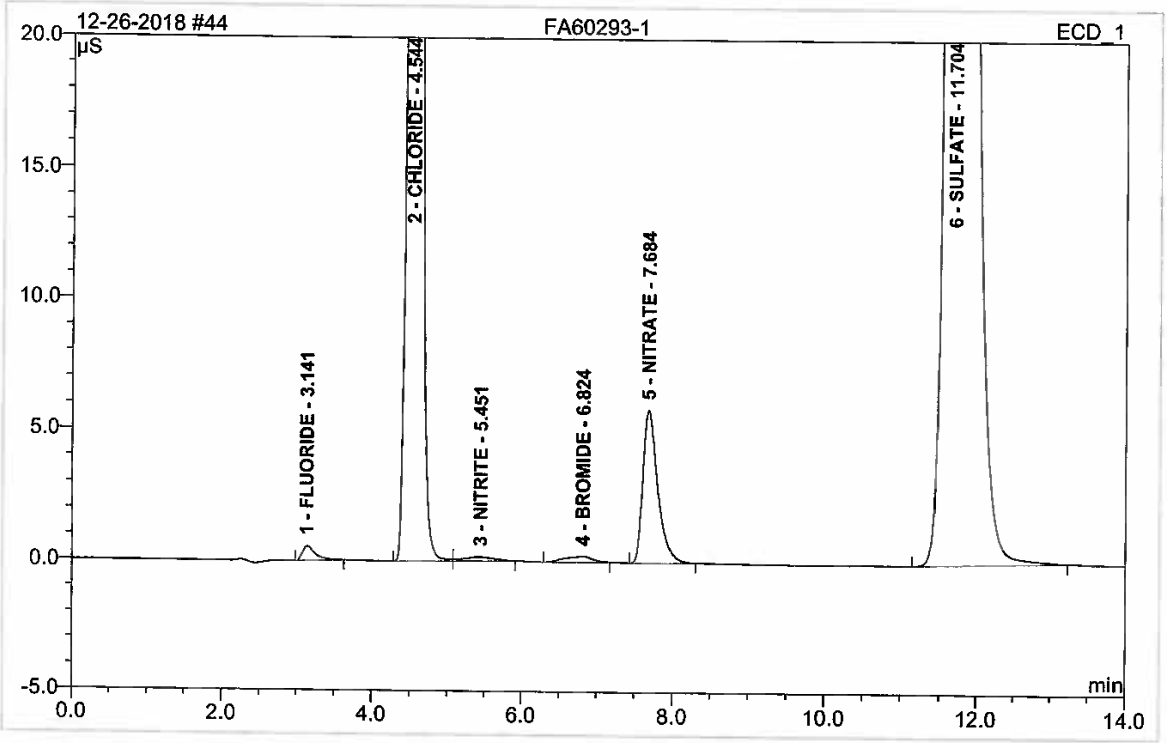
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

44 FA60293-1

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60293-1**	*Injection Volume:*	**25.0**
Vial Number:	**29**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 20:20**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.14	FLUORIDE	0.549	0.110	0.17	0.147	BMB
2	4.54	CHLORIDE	124.072	18.013	28.38	44.208	BM
3	5.45	NITRITE	0.154	0.072	0.11	0.149	MB
4	6.82	BROMIDE	0.225	0.096	0.15	0.884	BMB
5	7.68	NITRATE	5.822	1.327	2.09	1.869	BMB
6	11.70	SULFATE	141.134	43.851	69.09	155.974	BMB
Total:			271.956	63.470	100.00	203.230	

Anions/Integration

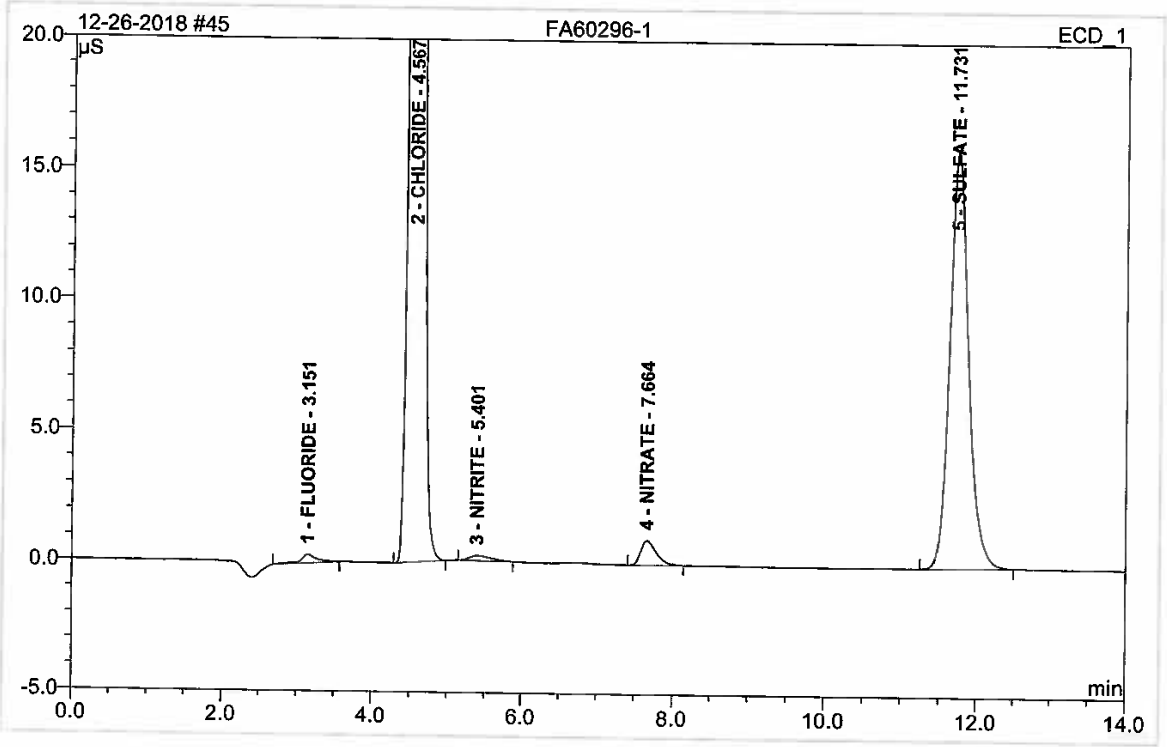
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

45 FA60296-1

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60296-1**	*Injection Volume:*	**25.0**
Vial Number:	**30**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**10.0000**
Recording Time:	**12/26/2018 20:37**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.15	FLUORIDE	0.326	0.084	0.28	0.877	BMB
2	4.57	CHLORIDE	182.526	25.181	83.33	613.040	BMB
3	5.40	NITRITE	0.198	0.066	0.22	1.384	BMB
4	7.66	NITRATE	0.949	0.229	0.76	3.385	BMB
5	11.73	SULFATE	15.917	4.659	15.42	197.685	BMB
Total:			199.915	30.219	100.00	816.370	

Anions/Integration

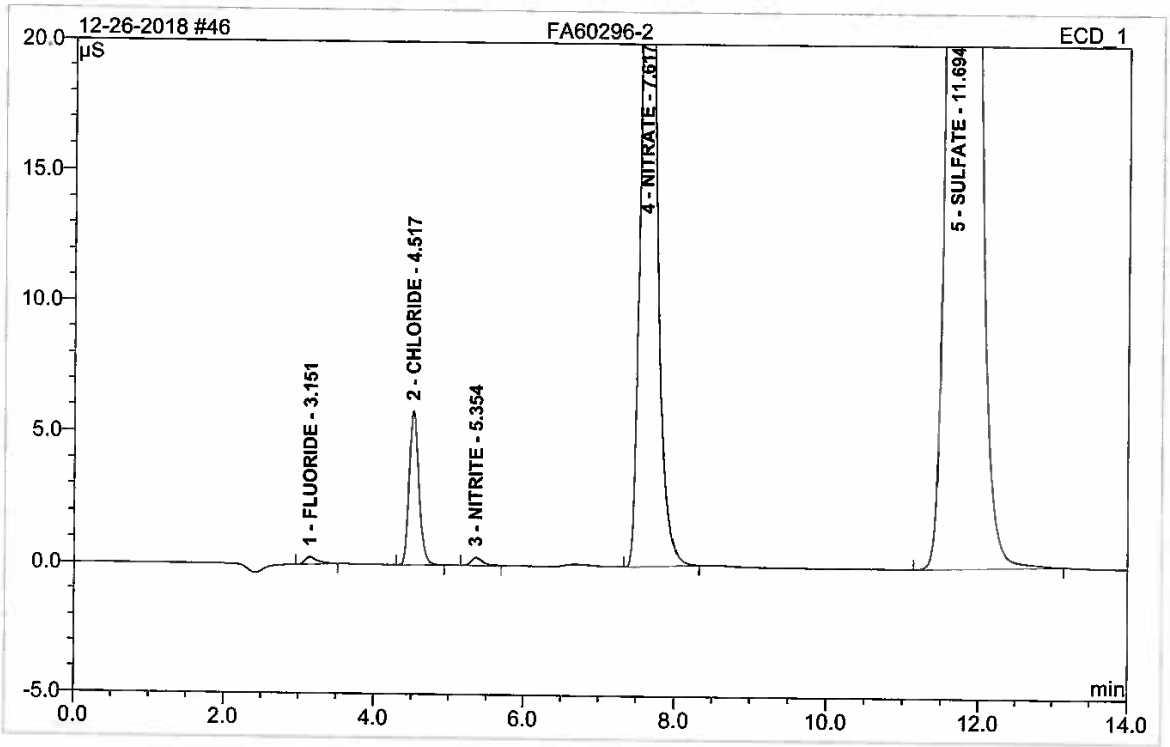
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

46 FA60296-2

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60296-2**	*Injection Volume:*	**25.0**
Vial Number:	**31**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 20:54**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.15	FLUORIDE	0.276	0.055	0.11	0.022	BMB
2	4.52	CHLORIDE	5.832	0.859	1.72	3.293	BMB
3	5.35	NITRITE	0.306	0.056	0.11	0.124	BMB
4	7.62	NITRATE	31.032	7.099	14.17	9.911	BMB
5	11.69	SULFATE	133.854	42.028	83.89	150.491	BMB
Total:			171.299	50.099	100.00	163.841	

Anions/Integration

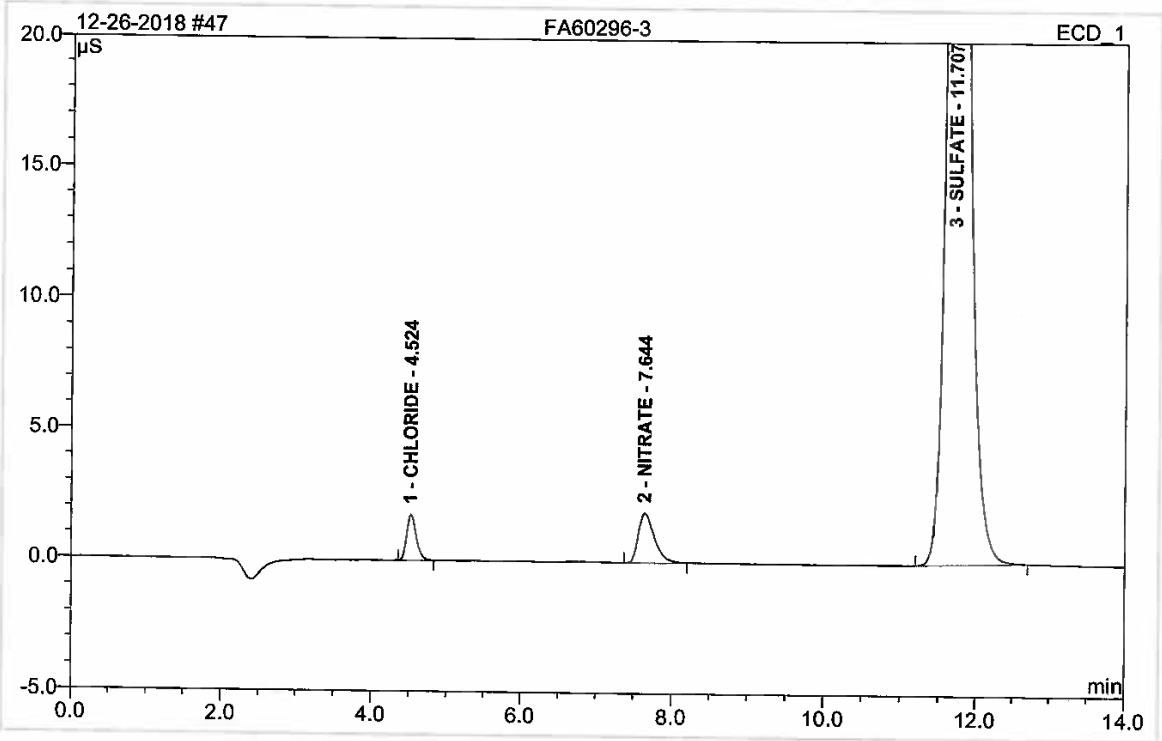
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

47 FA60296-3

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**FA60296-3**	*Injection Volume:*	**25.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**10.0000**
Recording Time:	**12/26/2018 21:11**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	4.52	CHLORIDE	1.753	0.254	1.60	18.485	BMB
2	7.64	NITRATE	1.897	0.471	2.98	6.757	BMB
3	11.71	SULFATE	50.681	15.073	95.41	605.805	BMB
Total:			54.331	15.797	100.00	631.047	

Anions/Integration

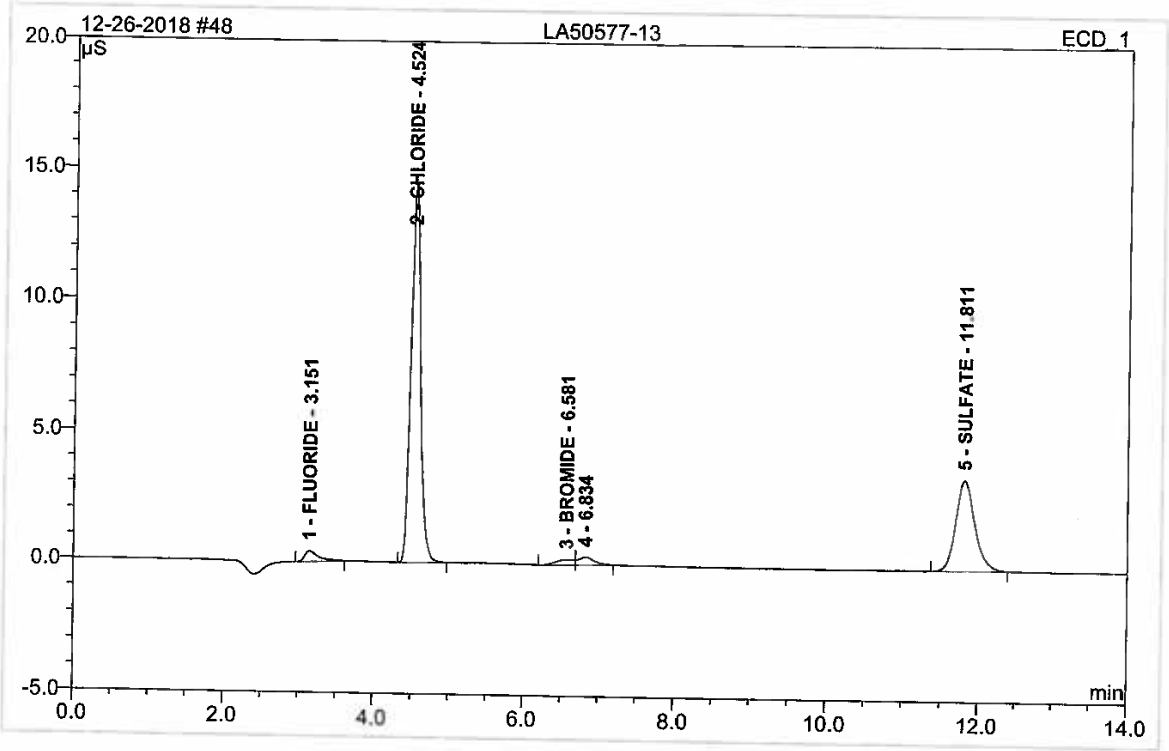
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

48 LA50577-13

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**LA50577-13**	*Injection Volume:*	**25.0**
Vial Number:	**33**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 21:28**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.15	FLUORIDE	0.413	0.088	2.60	0.096	BMB
2	4.52	CHLORIDE	14.556	2.108	62.62	6.271	BMB
3	6.58	BROMIDE	0.204	0.057	1.70	0.581	BM
4	6.83	n.a.	0.304	0.073	2.17	n.a.	MB
5	11.81	SULFATE	3.497	1.040	30.92	4.434	BMB
Total:			18.973	3.365	100.00	11.381	

Anions/Integration

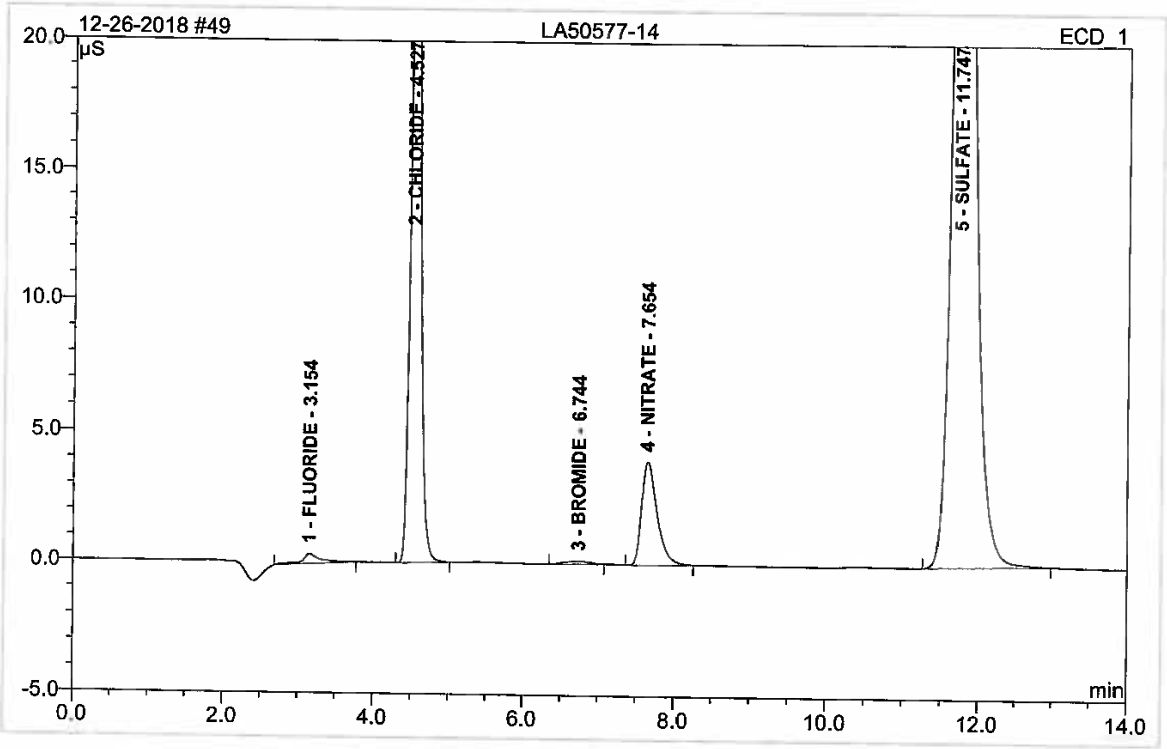
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

49 LA50577-14

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**LA50577-14**	*Injection Volume:*	**25.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 21:45**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.15	FLUORIDE	0.387	0.116	0.59	0.162	BMB
2	4.53	CHLORIDE	32.570	4.377	22.05	11.684	BMB
3	6.74	BROMIDE	0.109	0.042	0.21	0.462	BMB
4	7.65	NITRATE	3.977	0.948	4.77	1.340	BMB
5	11.75	SULFATE	48.205	14.372	72.38	57.967	BMB
Total:			85.248	19.855	100.00	71.616	

Anions/Integration

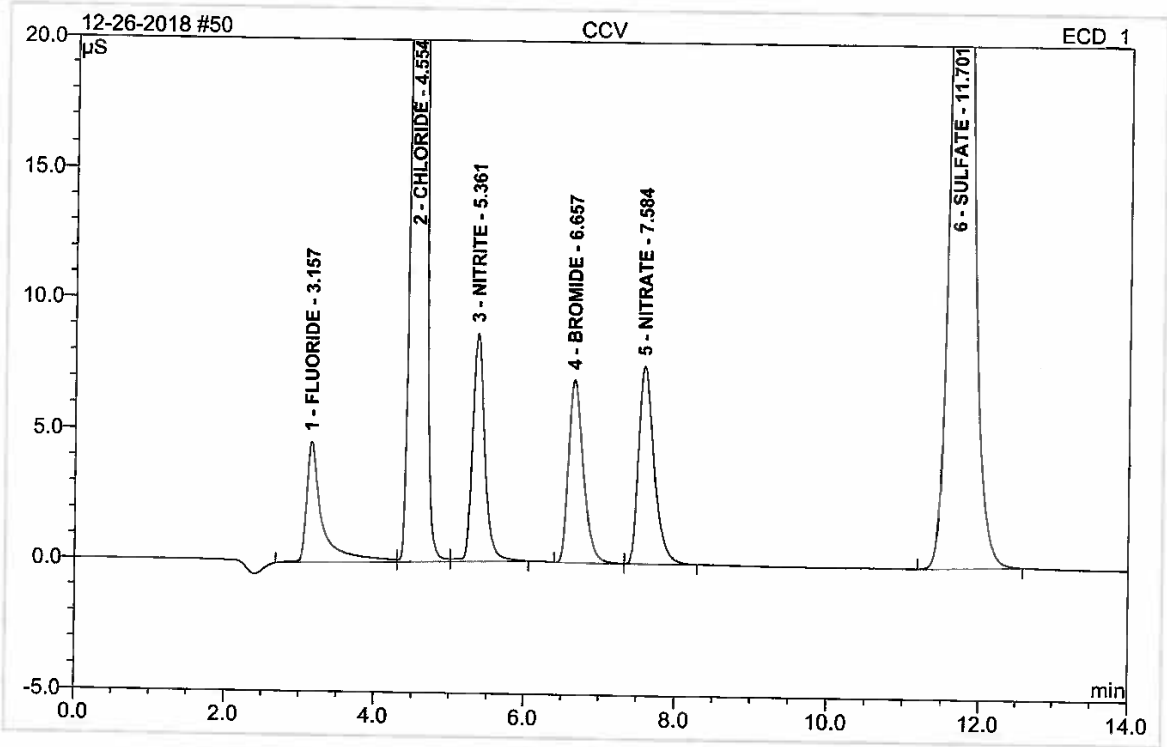
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

50 CCV

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**35**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 22:02**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
1	3.16	FLUORIDE	4.641	1.145	2.85	2.533	BM
2	4.55	CHLORIDE	151.995	20.664	51.47	50.531	M
3	5.36	NITRITE	8.736	1.662	4.14	2.550	MB
4	6.66	BROMIDE	6.992	1.604	3.99	12.590	BM
5	7.58	NITRATE	7.568	1.822	4.54	2.558	MB
6	11.70	SULFATE	45.017	13.253	33.01	53.758	BMB
Total:			224.950	40.150	100.00	124.520	

Anions/Integration

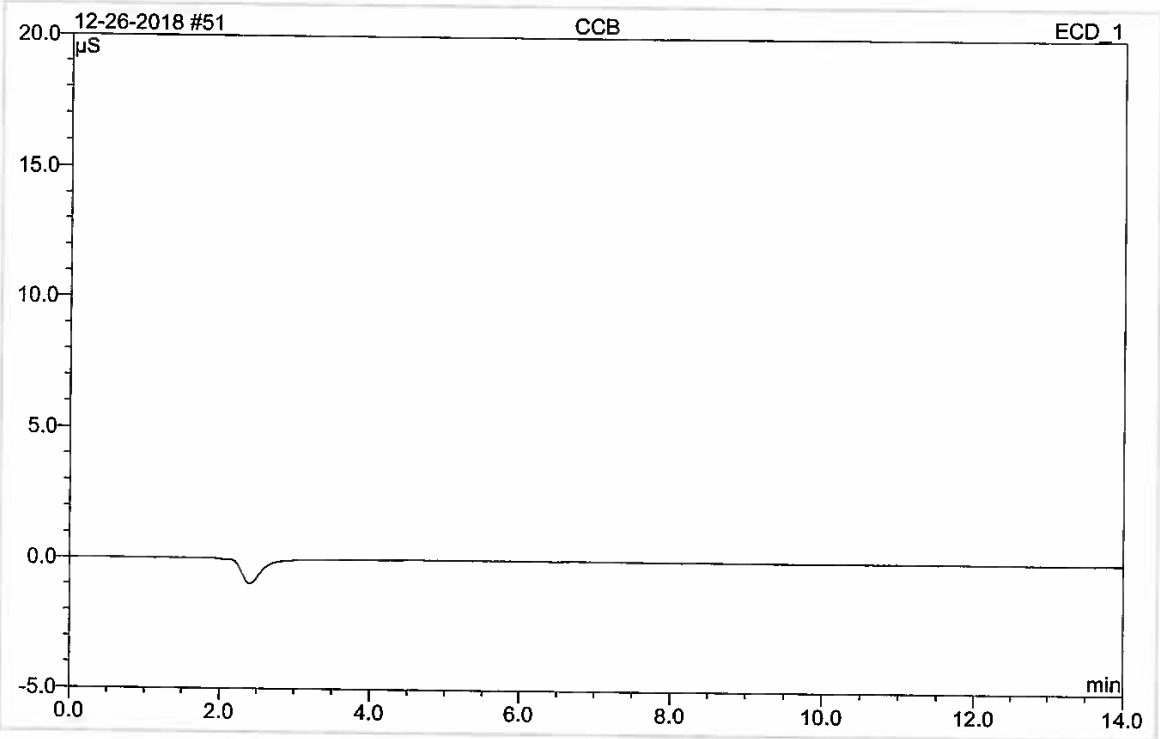
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

51 CCB

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**CCB**	*Injection Volume:*	**25.0**
Vial Number:	**36**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 22:19**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
Total:			0.000	0.000	0.00	0.000	

Anions/Integration

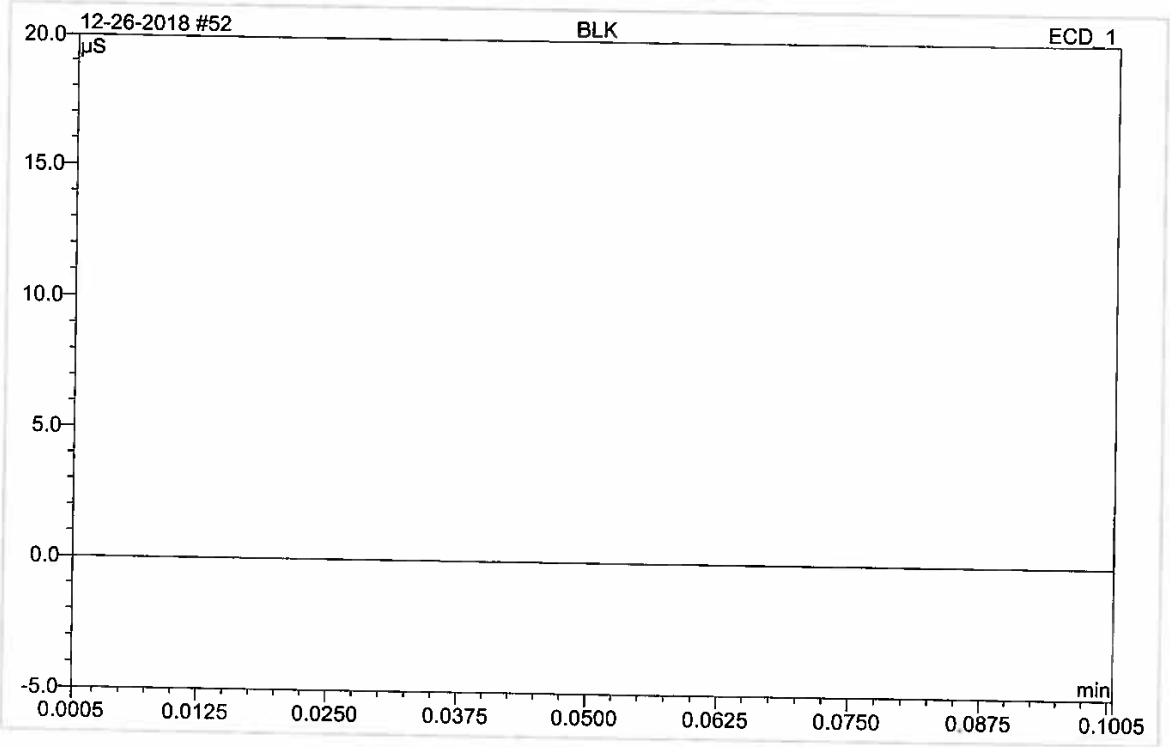
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-26-2018

52 BLK

ICS 2100 SYSTEM OPERATOR: BR

Sample Name:	**BLK**	*Injection Volume:*	**25.0**
Vial Number:	**37**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**SHUTDOWN-AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 22:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**0.10**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg/L	Type
Total:			0.000	0.000	0.00	0.000	

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

tiamo 2.5 Build 116
License ID: 14676229

Computer name: Laptopjpm140408

LR 12-28-18

User (short name): New User
Printed: 2018-12-28 09:26:10 UTC-5

Determination overview

DNR = Did Not Report; Re-analyze via low-level analysis

	Sample ID	Determination start	Method name	Initial pH	pH	Cond uS	mL at EP	Total Alk	Temp
1	pH Cal	2018-12-27 14:41:41 UTC-5	855 pH Cal 171016jpm						21.9
2	B1 250ppm	2018-12-27 14:55:43 UTC-5	Total Alkalinity 171016jpm	10.75			8.76	250.2	22.3
3	FA60313-1.7	2018-12-27 15:03:32 UTC-5	Total Alkalinity 171016jpm	6.69			22.10	631.5	22.5
4	FA60313-1.7 DUP	2018-12-27 15:25:37 UTC-5	Total Alkalinity 171016jpm	6.71			22.13	632.2	22.4
5	FA60205-21.1	2018-12-27 15:47:22 UTC-5	Total Alkalinity 171016jpm	8.26			5.14	146.9	22.0
6	FA60205-22.1	2018-12-27 15:54:54 UTC-5	Total Alkalinity 171016jpm	7.32			6.61	188.8	22.3
7	FA60231-2.7	2018-12-27 16:04:25 UTC-5	Total Alkalinity 171016jpm	7.30			10.64	304.1	22.0
8	FA60283-1.7	2018-12-27 16:16:52 UTC-5	Total Alkalinity 171016jpm	7.45			21.98	628.1	22.2
9	FA60283-2.7	2018-12-27 16:38:20 UTC-5	Total Alkalinity 171016jpm	7.34			18.20	519.9	22.1
10	FA60283-3.7	2018-12-27 16:57:09 UTC-5	Total Alkalinity 171016jpm	7.42			18.27	522.0	22.1
11	FA60283-5.7	2018-12-27 17:15:39 UTC-5	Total Alkalinity 171016jpm	7.40			26.54	758.2	22.1
12	FA60283-6.7	2018-12-27 17:39:07 UTC-5	Total Alkalinity 171016jpm	7.66			14.95	427.2	22.1
13	FA60283-7.7	2018-12-27 17:54:23 UTC-5	Total Alkalinity 171016jpm	7.61			27.80	794.4	22.0
14	FA60348-1.12	2018-12-27 18:19:08 UTC-5	Total Alkalinity 171016jpm	6.74			4.08	116.6	22.0
15	FA60348-2.12	2018-12-27 18:27:17 UTC-5	Total Alkalinity 171016jpm	6.68			8.81	251.8	22.0
16	FA60348-3.8	2018-12-27 18:39:11 UTC-5	Total Alkalinity 171016jpm	7.16			6.15	175.7	22.1
17	FA60348-4.8	2018-12-27 18:48:30 UTC-5	Total Alkalinity 171016jpm	6.97			12.11	345.9	21.9
18	FA60401-2.1	2018-12-27 19:02:34 UTC-5	Total Alkalinity 171016jpm	7.10			3.92	111.9	22.1
19	FA60369-1.11 DNR	2018-12-27 19:10:19 UTC-5	Total Alkalinity 171016jpm	6.46			0.14	4.1	21.8
20	FA60369-2.11 DNR	2018-12-27 19:14:52 UTC-5	Total Alkalinity 171016jpm	5.50			0.09	2.5	21.8

GN80746
12-28-18 1455
Metrohm 856 09125

pH meter: AT-pH
Burette: 72311
Normality of Acid (N): 0.02 WC1122

BS Recovery: 100.08%
RPD: 0.111%
Sodium Bicarbonate: GN26500

Review- 12-28-2018 (W)

GN80746
QC Reports:
Raw Data GN80746: Alkalinity, Total as CaCO3 page 1 of 4
SGS

tiamo 2.5 Build 116
License ID: 14676229

Computer name: Laptopjpm140408

LR 12-28-18

User (short name): New User
Printed: 2018-12-28 09:26:11 UTC-5

Determination overview

	Sample ID	Determination start	Method name	Initial pH	pH	Cond uS	mL at EP	Total Alk	Temp
21	FA60261-1.11	2018-12-27 19:18:41 UTC-5	Total Alkalinity 171016jpm	7.64			7.96	227.5	22.0
22	FA60261-2.11	2018-12-27 19:28:57 UTC-5	Total Alkalinity 171016jpm	7.25			12.61	360.2	21.8
23	FA60472-5.4	2018-12-27 19:42:58 UTC-5	Total Alkalinity 171016jpm	7.37			16.15	461.3	22.0

Review - 12-28-2018 (a)

SGS

JR 12-28-18

tiamo 2.5 Build 116
License ID: 14676229

Computer name: Laptopjpm140408

User (short name): New User
Printed: 2018-12-28 09:26:11 UTC-5

Determination overview

	Correct...	Slope/Cell Const.	Cond Check uS	pH Cal Z...	p-Alk	Bicarb Alk	Carb Alk	OH Alk	Remarks
1	21.0	99.30		7.02					
2	21.4								
3	21.6								
4	21.5								
5	21.1								
6	21.4								
7	21.1								
8	21.3								
9	21.2								
10	21.2								
11	21.2								
12	21.2								
13	21.1								
14	21.1								
15	21.1								
16	21.2								
17	21.0								
18	21.2								
19	20.9								
20	20.9								

Review 12-28-2018 (C)

tiamo 2.5 Build 116
License ID: 14676229

Computer name: Laptopjpm140408

LR 12-28-18

User (short name): New User
Printed: 2018-12-28 09:26:11 UTC-5

Determination overview

	Correct...	Slope/Cell Const.	Cond Check uS	pH Cal Z...	p-Alk	Bicarb Alk	Carb Alk	OH Alk	Remarks
21	21.1								
22	20.9								
23	21.1								

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Ahtna Environmental Inc

Fort Ord Groundwater Monitoring

8418191360.05.052(Fort Ord GWM 4Q18) TDS

SGS Job Number: FA60245

Sampling Date: 12/13/18

Report to:

Ahtna Environmental Inc
3100 Beacon Blvd
West Sacramento, CA 95691
hdillon@ahtna.net; jeffery.fenton@amecfw.com;
zachary.carroll@amecfw.com; mfisler@ahtna.net;
ATTN: Derek Lieberman

Total number of pages in report: 31

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Caitlin Brice, M.S.
General Manager

Client Service contact: Elvin Kumar 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AK, AR, IA, KY, MA, MS, ND, NH, NV, OK, OR, UT, WA, WV

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EHS.US.CustomerCare@sgs.com

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SGS North America Inc.

Sample Summary

Ahtna Environmental Inc

Job No: FA60245

Fort Ord Groundwater Monitoring
Project No: 8418191360.05.052(Fort Ord GWM 4Q18) TDS

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA60245-1	12/13/18	09:20	BFSM	12/15/18	AQ	Ground Water	1850C0BW337T
FA60245-2	12/13/18	09:10	BFSM	12/15/18	AQ	Ground Water	1850C0BW338T
FA60245-3	12/13/18	09:00	BFSM	12/15/18	AQ	Ground Water	1850C0BW339T
FA60245-4	12/13/18	08:50	BFSM	12/15/18	AQ	Ground Water	1850C0BW340T
FA60245-5	12/13/18	08:40	BFSM	12/15/18	AQ	Ground Water	1850C0BW341T
FA60245-6	12/13/18	08:30	BFSM	12/15/18	AQ	Ground Water	1850C0BW342T
FA60245-7	12/13/18	08:15	BFSM	12/15/18	AQ	Ground Water	1850C0BW343T
FA60245-8	12/13/18	11:05	BFSM	12/15/18	AQ	Ground Water	1850C0BW344T
FA60245-9	12/13/18	11:15	BFSM	12/15/18	AQ	Ground Water	1850C0BW345T
FA60245-10	12/13/18	10:50	BFSM	12/15/18	AQ	Ground Water	1850C0BW346T
FA60245-11	12/13/18	10:40	BF	12/15/18	AQ	Ground Water	1850C0BW347T
FA60245-12	12/13/18	11:50	BF	12/15/18	AQ	Ground Water	1850C0BW348T

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	Ahtna Environmental Inc	**Job No**	FA60245
Site:	Fort Ord Groundwater Monitoring	**Report Date**	12/27/2018 3:42:39

2

12 samples were collected on 12/13/2018 and were received at SGS North America Inc - Orlando on 12/15/2018 properly preserved, at 2.9 Deg. C and intact. These samples received an SGS Orlando job number of FA60245. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section. Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

General Chemistry By Method SM2540 C-11

Matrix: AQ **Batch ID:** GN80674

All method blanks for this batch meet method specific criteria.

Sample(s) FA60179-1DUP were used as the QC samples for Solids, Total Dissolved.

SGS Orlando certifies that this report meets the project requirements for analytical data produced for the samples as received at SGS Orlando and as stated on the COC. SGS Orlando certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SGS Orlando Quality Manual except as noted above. This report is to be used in its entirety. SGS Orlando is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____

Ariel Hartney, Client Services *(Signature on File)*

Summary of Hits

Job Number: FA60245
Account: Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring
Collected: 12/13/18

3

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA60245-1	**1850C0BW337T**					
Solids, Total Dissolved		462	50	50	mg/l	SM2540 C-11
FA60245-2	**1850C0BW338T**					
Solids, Total Dissolved		498	50	50	mg/l	SM2540 C-11
FA60245-3	**1850C0BW339T**					
Solids, Total Dissolved		460	50	50	mg/l	SM2540 C-11
FA60245-4	**1850C0BW340T**					
Solids, Total Dissolved		4360	250	250	mg/l	SM2540 C-11
FA60245-5	**1850C0BW341T**					
Solids, Total Dissolved		16600	500	500	mg/l	SM2540 C-11
FA60245-6	**1850C0BW342T**					
Solids, Total Dissolved		20900	500	500	mg/l	SM2540 C-11
FA60245-7	**1850C0BW343T**					
Solids, Total Dissolved		3860	250	250	mg/l	SM2540 C-11
FA60245-8	**1850C0BW344T**					
Solids, Total Dissolved		5080	250	250	mg/l	SM2540 C-11
FA60245-9	**1850C0BW345T**					
Solids, Total Dissolved		12700	500	500	mg/l	SM2540 C-11
FA60245-10	**1850C0BW346T**					
Solids, Total Dissolved		15400	500	500	mg/l	SM2540 C-11
FA60245-11	**1850C0BW347T**					
Solids, Total Dissolved		22100	500	500	mg/l	SM2540 C-11

Summary of Hits

Job Number: FA60245
Account: Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring
Collected: 12/13/18

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA60245-12	**1850C0BW348T**					
Solids, Total Dissolved		336	100	100	mg/l	SM2540 C-11

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW337T		
Lab Sample ID:	FA60245-1	**Date Sampled:**	12/13/18
Matrix:	AQ - Ground Water	**Date Received:**	12/15/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	462	50	50	50	mg/l	1	12/20/18 13:00		GWSM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW338T		
Lab Sample ID:	FA60245-2	**Date Sampled:**	12/13/18
Matrix:	AQ - Ground Water	**Date Received:**	12/15/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	498	50	50	50	mg/l	1	12/20/18 13:00		GWSM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW339T		
Lab Sample ID:	FA60245-3	**Date Sampled:**	12/13/18
Matrix:	AQ - Ground Water	**Date Received:**	12/15/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	460	50	50	50	mg/l	1	12/20/18 13:00		GWSM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW340T		
Lab Sample ID:	FA60245-4	**Date Sampled:**	12/13/18
Matrix:	AQ - Ground Water	**Date Received:**	12/15/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	4360	250	250	250	mg/l	1	12/20/18 13:00		GWSM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW341T		
Lab Sample ID:	FA60245-5	**Date Sampled:**	12/13/18
Matrix:	AQ - Ground Water	**Date Received:**	12/15/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	16600	500	500	500	mg/l	1	12/20/18 13:00		GWSM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW342T		
Lab Sample ID:	FA60245-6	**Date Sampled:**	12/13/18
Matrix:	AQ - Ground Water	**Date Received:**	12/15/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	20900	500	500	500	mg/l	1	12/20/18 13:00		GWSM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW343T		
Lab Sample ID:	FA60245-7	**Date Sampled:**	12/13/18
Matrix:	AQ - Ground Water	**Date Received:**	12/15/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	3860	250	250	250	mg/l	1	12/20/18 13:00		GWSM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW344T		
Lab Sample ID:	FA60245-8	**Date Sampled:**	12/13/18
Matrix:	AQ - Ground Water	**Date Received:**	12/15/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	5080	250	250	250	mg/l	1	12/20/18 13:00		GWSM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW345T		
Lab Sample ID:	FA60245-9	**Date Sampled:**	12/13/18
Matrix:	AQ - Ground Water	**Date Received:**	12/15/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	12700	500	500	500	mg/l	1	12/20/18 13:00		GWSM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW346T		
Lab Sample ID:	FA60245-10	**Date Sampled:**	12/13/18
Matrix:	AQ - Ground Water	**Date Received:**	12/15/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	15400	500	500	500	mg/l	1	12/20/18 13:00		GWSM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW347T		
Lab Sample ID:	FA60245-11	**Date Sampled:**	12/13/18
Matrix:	AQ - Ground Water	**Date Received:**	12/15/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	22100	500	500	500	mg/l	1	12/20/18 13:00		GWSM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1850C0BW348T		
Lab Sample ID:	FA60245-12	**Date Sampled:**	12/13/18
Matrix:	AQ - Ground Water	**Date Received:**	12/15/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	336	100	100	100	mg/l	1	12/20/18 13:00		GWSM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- QC Evaluation: DOD QSM5 Limits

Seq. No. 3362

CADS14614

1670 Corporate Circle
Suite 101
Petaluma, CA 94954
(707) 793-3800

CHAIN OF CUSTODY FORM

1 of 3 12/12/18

1 of 2

amec foster wheeler

Lab: SGS

Samplers: W B. Felk S Machar

Job Number: 84181913 60.05 052

FA60245

Name/Location: Fox and 1/4 Mon YQr - TDS

Project Manager: Jeff Fenton

Recorder: (Signature Required)

MATRIX			# CONTAINERS					SAMPLE NUMBER	DATE YR	MO	DAY	TIME	STATION DESCRIPTION	DEPTH	ANALYSIS REQUESTED: TDS	8270	TITLE 22 METALS
Water	Soil	Air	Unpres	H2SO4	HNO3	HCL											
X			1					1850CO BW337T	18	12	13	0920	1		X		
X			1					1850CO BW338T	18	12	13	0910	2		X		
X			1					1850CO BW339T	18	12	13	0900	3		X		
X			1					1850CO BW340T	18	12	13	0850	4		X		
X			1					1850CO BW341T	18	12	13	0840	5		X		
X			1					1850CO BW342T	18	12	13	0830	6		X		
X			1					1850CO BW343T	18	12	13	0815	7		X		
X			1					1850CO BW344T	18	12	13	1105	8		X		
X			1					1850CO BW345T	18	12	13	1115	9		X		
X			1					1850CO BW346T	18	12	13	0950	10		X		

ADDITIONAL INFORMATION

REPORT TO: Jeff Fenton

PO#:

TAT: Normal

Comments: Field Filtered Y / N

CHAIN OF CUSTODY RECORD

Relinquished By (Signature):	(Print Name)	(Company)	(Date/Time)
	Bill Felk	WBW	12/12/18 1300
Received By (Signature):	(Print Name)	(Company)	(Date/Time)
	Lee Barr	SGS	12/14/18 1345
Relinquished By (Signature):	(Print Name)	(Company)	(Date/Time)
	Lee Barr	SGS	12/14/18 1500
Received By (Signature):	(Print Name)	(Company)	(Date/Time)
			12/14/18 1500
Relinquished By (Signature):	(Print Name)	(Company)	(Date/Time)
	Peter H	SGS	12/15/18 1030
Received By (Signature):	(Print Name)	(Company)	(Date/Time)

Method of Shipment: cooler w/ ice

29

White - Laboratory Copy Yellow - Project Office Copy Pink - Field of Office Copy F1008-1

5.1

5

FA60245: Chain of Custody
Page 1 of 3

CHAIN-OF-CUSTODY RECORD CADS14164

OAK 19486

2 of 3 2 of 2

PROJECT NAME: FO Yly with Forward - TDS			DATE 12/12/18 PAGE 1 OF 1
PROJECT NUMBER 84189360	LABORATORY NAME SGS	CLIENT INFORMATION	REPORTING ADDRESS To Jeff Fenton
RESULTS TO Jeff Fenton	LABORATORY ADDRESS		
TURNAROUND TIME: Normal			180 Grand Avenue, Suite 1100 Oakland, CA 94612 +1 (510) 663-4100 • Fax +1 (510) 663-4141
SAMPLE SHIPMENT METHOD: cooler/ice	LABORATORY CONTACT		
	LABORATORY PHONE NUMBER		

amec foster wheeler

SAMPLERS (SIGNATURE):

ANALYSES

GEOTRACKER REQUIRED YES NO

SITE SPECIFIC GLOBAL ID NO.

DATE	TIME	SAMPLE ID	TDS	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Wipe (WI), Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
12/13/18	1040	1850C08W 347T	X	1 250 ml poly	W	—	—	—		1	11
12/13/18	1150	1850C08W 348T	X	1 250 ml poly	W	—	—	—		1	12

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME	TOTAL NUMBER OF CONTAINERS 2
SIGNATURE: [signature]	12/13/18	1300	SIGNATURE: [signature]	12/14/18	1305	SAMPLING COMMENTS:
PRINTED NAME: Bill Fell			PRINTED NAME: LEE BAUTISTA			
COMPANY: Wood			COMPANY: SGS			
SIGNATURE: [signature]	12/14/18	1500	SIGNATURE:	12/14/18	1500	
PRINTED NAME: LEE BAUTISTA			PRINTED NAME: FEDEX			
COMPANY: SGS			COMPANY:			
SIGNATURE			SIGNATURE: [signature]			
PRINTED NAME: [signature]			PRINTED NAME: [signature]			
COMPANY			COMPANY: SGS			

FA60245: Chain of Custody
Page 2 of 3

SGS Sample Receipt Summary

Job Number: FA60245 **Client:** AHTNA **Project:** Fort Ord 4Q18 GWM - TDS

Date / Time Received: 12/15/2018 10:30:00 AM **Delivery Method:** FedEx **Airbill #'s:** 773982764293

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (3.1);

Cooler Temps (Corrected) °C: Cooler 1: (2.9);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑
	W	**or**	**S**	**N/A**
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: PETERH Date: 12/15/2018 10:30:00 A Reviewer: PH Date: 12/18/2018

FA60245: Chain of Custody
Page 3 of 3

QC Evaluation: DOD QSM5 Limits

Job Number: FA60245
Account: Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring
Collected: 12/13/18

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits

No Exceptions found.

* Sample used for QC is not from job FA60245

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA60245
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Solids, Total Dissolved	GN80674	50	0.0	mg/l				

Associated Samples:
Batch GN80674: FA60245-1, FA60245-2, FA60245-3, FA60245-4, FA60245-5, FA60245-6, FA60245-7, FA60245-8, FA60245-9, FA60245-10, FA60245-11, FA60245-12
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA60245
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Solids, Total Dissolved	GN80674	FA60179-1	mg/l	182	178	2.2	0-5%

Associated Samples:
Batch GN80674: FA60245-1, FA60245-2, FA60245-3, FA60245-4, FA60245-5, FA60245-6, FA60245-7, FA60245-8, FA60245-9, FA60245-10, FA60245-11, FA60245-12
(*) Outside of QC limits

General Chemistry

Raw Data

TDS Worksheet

GN Batch ID:													
GN80674	Analyst:	GW	MB ID:	GN80674-MB	RDL:		<RDL:						
	Analysis Date:	12/20/2018	Dup ID:	FA60179-1	Smpl Res:	182.00	Dup Res:	178.00	% RPD:	2.22			
	Method:	SM2540C	Dup2 ID:	FA60179-2	Smpl Res:	1234.00	Dup Res:	1212.00	% RPD:	1.8			

Bottle #	Sample ID	Scon Umhos/cm	Dish #	Volume Filtered (ml)	Dish Tare Wt (g)	Initial Wt after drying at 180 C° (g)	Redry 1 Constant Weight in g (a)	Redry ?	Redry 2 Constant Weight in g (a)	Redry ?	Redry 3 Constant Weight in g (a)	Redry ?	RDL	TDS (mg/L)
NA	GN80674-MB	1.0	18	50.0	63.4164	63.4164	63.4164	No					200	.00
3	GN80674-D1	294.0	16	50.0	64.5082	64.5170	64.5171	No					200	178.00
3	GN80674-D2	1676.0	D2	50.0	64.7693	64.8300	64.8299	No					200	1212.00
3	FA60179-1	294.0	11	50.0	48.7102	48.7192	48.7193	No					200	182.00
3	FA60179-2	1676.0	1	50.0	67.0739	67.1358	67.1356	No					200	1234.00
3	FA60179-3	445.0	8	50.0	65.2549	65.2706	65.2704	No					200	310.00
3	FA60179-4	272.0	15	50.0	49.8532	49.8623	49.8622	No					200	180.00
10	FA60190-15	326.0	17	50.0	66.4315	66.4474	66.4473	No					200	316.00
10	FA60190-16	320.0	4	50.0	50.6998	50.7144	50.7144	No					200	292.00
10	FA60190-18	333.0	7	50.0	49.4025	49.4181	49.4180	No					200	310.00
1	FA60245-1	646.0	D1	50.0	67.7266	67.7500	67.7497	No					200	462.00
1	FA60245-2	683.0	1	50.0	62.7694	62.7944	62.7943	No					200	498.00
1	FA60245-3	458.0	8	50.0	62.4698	62.4930	62.4928	No					200	460.00
1	FA60245-4	4810.0	2X	10.0	62.2087	62.2526	62.2523	No					1000	4360.00
1	FA60245-5	17370.0	5	5.0	66.9369	67.0201	67.0198	No					2000	16580.00
1	FA60245-6	20000.0	28	5.0	50.7967	50.9015	50.9013	No					2000	20920.00
1	FA60245-7	4690.0	69	10.0	67.5474	67.5861	67.5860	No					1000	3860.00
1	FA60245-8	5970.0	D2	10.0	49.9012	49.9522	49.9520	No					1000	5080.00
1	FA60245-9	12200.0	11	5.0	49.8088	49.8725	49.8722	No					2000	12680.00
1	FA60245-10	14970.0	17X	5.0	50.4283	50.5055	50.5053	No					2000	15400.00
1	FA60245-11	19690.0	13	5.0	62.2832	62.3939	62.3935	No					2000	22060.00

TDS Worksheet

GN Batch ID:											
GN80674	Analyst:	GW	MB ID:	GN80674-MB	RDL:		<RDL:				
	Analysis Date:	12/20/2018	Dup ID:	FA60179-1	Smpl Res:	182.00	Dup Res:	178.00	% RPD:	2.22	
	Method:	SM2540C	Dup2 ID:	FA60179-2	Smpl Res:	1234.00	Dup Res:	1212.00	% RPD:	1.8	

Bottle #	Sample ID	Scon Umhos/cm	Dish #	Volume Filtered (ml)	Dish Tare Wt (g)	Initial Wt after drying at 180 C° (g)	Redry 1 Constant Weight in g (a)	Redry ?	Redry 2 Constant Weight in g (a)	Redry ?	Redry 3 Constant Weight in g (a)	Redry ?	RDL	TDS (mg/L)
1	FA60245-12	2130.0	4	25.0	68.6068	68.6153	68.6152	No					400	336.00
1	FA60336-1	2640.0	MB	25.0	50.4062	50.4229	50.4227	No					400	660.00

Filtration/Evap Date:	12/20/2018	**Time:**	13:00	**Temp:**	25	**Filter Lot:**	WC-981	**Balance ID:**	AS-120S	**Scon ID:**	
Oven ID #1:	Oven#2	**Therm ID #1:**	2808	**Corr Factor #1:**	0	**Oven ID #2:**	TDS Oven 2	**Therm ID #2:**	TDS Oven 2	**Corr Factor #2:**	+4

	Oven Used	Start Date:	Stop Date:	Start Time:	End Time:	Observed C° Start Temp:	Corrected Start Temp:	Observed C° End Temp:	Corrected End Temp:
Initial Dry	Oven #1	12/20/2018	12/21/2018	15:32	08:53	105	105	105	105
Dry1	Oven #2	12/21/2018	12/21/2018	08:54	13:30	176	180	176	180
Redry1	Oven #2	12/21/2018	12/24/2018	16:06	07:45	176	180	176	180
Redry2									

Comments:

Approved By: **GARYW** Approval Date: **12/24/2018**

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Ahtna Environmental Inc

Fort Ord Groundwater Monitoring

05055.05 (GW Monitoring for MCWD)

SGS Job Number: FA60401

Sampling Date: 12/19/18

Report to:

Ahtna Environmental Inc
3100 Beacon Blvd
West Sacramento, CA 95691
hdillon@ahtna.net; jeffery.fenton@amecfw.com;
zachary.carroll@amecfw.com; mfisler@ahtna.net;
ATTN: Derek Lieberman

Total number of pages in report: 207

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Caitlin Brice, M.S.
General Manager

Client Service contact: Elvin Kumar 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AK, AR, IA, KY, MA, MS, ND, NH, NV, OK, OR, UT, WA, WV

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how we can serve you better at:
EHS.US.CustomerCare@sgs.com

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SGS North America Inc.

Sample Summary

Ahtna Environmental Inc

Job No: FA60401

Fort Ord Groundwater Monitoring
Project No: 05055.05 (GW Monitoring for MCWD)

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA60401-1	12/19/18	08:21	MFSK	12/20/18	AQ	Ground Water	1851M212279F
FA60401-2	12/19/18	08:28	MFSK	12/20/18	AQ	Ground Water	1851M212280F
FA60401-3	12/19/18	08:46	MFSK	12/20/18	AQ	Ground Water	1851M212281F
FA60401-4	12/19/18	08:52	MFSK	12/20/18	AQ	Ground Water	1851M212282D
FA60401-5	12/19/18	09:15	MFSK	12/20/18	AQ	Ground Water	1851MOU2283F
FA60401-6	12/19/18	09:26	MFSK	12/20/18	AQ	Ground Water	1851MOU2284F
FA60401-7	12/19/18	09:30	MFSK	12/20/18	AQ	Ground Water	1851MOU2285D
FA60401-8	12/19/18	09:35	MFSK	12/20/18	AQ	Ground Water	1851MOU2286F
FA60401-9	12/19/18	10:00	MFSK	12/20/18	AQ	Ground Water	1851MOU2287F
FA60401-10	12/19/18	10:11	MFSK	12/20/18	AQ	Ground Water	1851MOU2288F
FA60401-11	12/19/18	10:40	MFSK	12/20/18	AQ	Ground Water	1851MOU2289F
FA60401-12	12/19/18	10:51	MFSK	12/20/18	AQ	Ground Water	1851MOU2290F
FA60401-13	12/19/18	10:58	MFSK	12/20/18	AQ	Ground Water	1851MOU2291F

SGS North America Inc.

Sample Summary
(continued)

Ahtna Environmental Inc

Job No: FA60401

Fort Ord Groundwater Monitoring
Project No: 05055.05 (GW Monitoring for MCWD)

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA60401-14	12/19/18	11:07	MFSK	12/20/18	AQ	Ground Water	1851MOU2292F
FA60401-15	12/19/18	11:22	MFSK	12/20/18	AQ	Ground Water	1851MOU2293F
FA60401-16	12/19/18	11:36	MFSK	12/20/18	AQ	Ground Water	1851MOU2294F
FA60401-17	12/19/18	11:53	MFSK	12/20/18	AQ	Ground Water	1851MOU2296F
FA60401-18	12/19/18	13:17	MFSK	12/20/18	AQ	Ground Water	1851MOU2297F
FA60401-19	12/19/18	13:32	MFSK	12/20/18	AQ	Ground Water	1851MOU2298F
FA60401-20	12/19/18	13:47	MFSK	12/20/18	AQ	Ground Water	1851MOU2299F
FA60401-21	12/19/18	13:56	MFSK	12/20/18	AQ	Ground Water	1851MOU2300F

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Ahtna Environmental Inc **Job No:** FA60401

Site: Fort Ord Groundwater Monitoring **Report Date:** 1/4/2019 11:06:43

21 Sample(s) were collected on 12/19/2018 and were received at SGS North America Inc - Orlando on 12/20/2018 properly preserved, at 2.8 Deg. C and intact. These Samples received an SGS Orlando job number of FA60401. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Metals Analysis By Method EPA 200.7

Matrix: AQ **Batch ID:** MP34876

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA60401-2DUP, FA60401-2MS, FA60401-2MSD, FA60401-2PS, FA60401-2SDL were used as the QC samples.

Matrix Spike Duplicate Recovery(s) for Sodium are outside control limits. Probable cause is due to matrix interference.

General Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP32500

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA60401-3MS, FA60401-3MSD were used as the QC samples for Sulfate, Bromide, Chloride.

Matrix Spike Recovery(s) for Bromide, Chloride are outside control limits. Spike recovery indicates possible matrix interference.

FA60401-2 for Bromide: Associated CCV above control limits; data not adversely affected. Dilution required due to matrix interference.

General Chemistry By Method SM2320 B-11

Matrix: AQ **Batch ID:** GN80746

Sample(s) FA60313-1DUP were used as the QC samples for Alkalinity, Total as CaCO3.

Matrix: AQ **Batch ID:** GN80759

Sample(s) FA60472-2DUP were used as the QC samples for Alkalinity, Total as CaCO3.

General Chemistry By Method SM2540 C-11

Matrix: AQ **Batch ID:** GN80705

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA60377-1DUP were used as the QC samples for Solids, Total Dissolved.

Matrix: AQ **Batch ID:** GN80713

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA60401-16DUP were used as the QC samples for Solids, Total Dissolved.

SGS Orlando certifies that this report meets the project requirements for analytical data produced for the samples as received at SGS Orlando and as stated on the COC. SGS Orlando certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SGS Orlando Quality Manual except as noted above. This report is to be used in its entirety. SGS Orlando is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____

Kim Benham, Client Services (signature on file)

Summary of Hits

Job Number: FA60401
Account: Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring
Collected: 12/19/18

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA60401-1	**1851M212279F**					
Solids, Total Dissolved		928	50	50	mg/l	SM2540 C-11
FA60401-2	**1851M212280F**					
Calcium		109000	1000	100	ug/l	EPA 200.7
Magnesium		70200	5000	100	ug/l	EPA 200.7
Potassium		4600 J	10000	500	ug/l	EPA 200.7
Sodium		252000	50000	10000	ug/l	EPA 200.7
Alkalinity, Total as CaCO3		112	5.0	2.5	mg/l	SM2320 B-11
Chloride		652	20	10	mg/l	EPA 300/SW846 9056A
Solids, Total Dissolved		1540	100	100	mg/l	SM2540 C-11
Sulfate		135	20	10	mg/l	EPA 300/SW846 9056A
FA60401-3	**1851M212281F**					
Calcium		17700	1000	100	ug/l	EPA 200.7
Magnesium		10800	5000	100	ug/l	EPA 200.7
Potassium		1700 J	10000	500	ug/l	EPA 200.7
Sodium		36200	10000	2000	ug/l	EPA 200.7
Alkalinity, Total as CaCO3		49.8	5.0	2.5	mg/l	SM2320 B-11
Chloride		49.8	2.0	1.0	mg/l	EPA 300/SW846 9056A
Solids, Total Dissolved		226	50	50	mg/l	SM2540 C-11
Sulfate		29.7	2.0	1.0	mg/l	EPA 300/SW846 9056A
FA60401-4	**1851M212282D**					
Calcium		17500	1000	100	ug/l	EPA 200.7
Magnesium		10700	5000	100	ug/l	EPA 200.7
Potassium		1660 J	10000	500	ug/l	EPA 200.7
Sodium		35800	10000	2000	ug/l	EPA 200.7
Alkalinity, Total as CaCO3		49.7	5.0	2.5	mg/l	SM2320 B-11
Chloride		49.9	2.0	1.0	mg/l	EPA 300/SW846 9056A
Solids, Total Dissolved		214	50	50	mg/l	SM2540 C-11
Sulfate		29.4	2.0	1.0	mg/l	EPA 300/SW846 9056A
FA60401-5	**1851MOU2283F**					
Solids, Total Dissolved		616	50	50	mg/l	SM2540 C-11
FA60401-6	**1851MOU2284F**					
Calcium		41500	1000	100	ug/l	EPA 200.7
Magnesium		23400	5000	100	ug/l	EPA 200.7

Summary of Hits

Job Number: FA60401
Account: Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring
Collected: 12/19/18

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
Potassium		3160 J	10000	500	ug/l	EPA 200.7
Sodium		61400	10000	2000	ug/l	EPA 200.7
Alkalinity, Total as CaCO3		151	5.0	2.5	mg/l	SM2320 B-11
Bromide		2.1	0.50	0.25	mg/l	EPA 300/SW846 9056A
Chloride		99.7	2.0	1.0	mg/l	EPA 300/SW846 9056A
Solids, Total Dissolved		418	50	50	mg/l	SM2540 C-11
Sulfate		41.2	2.0	1.0	mg/l	EPA 300/SW846 9056A
FA60401-7	**1851MOU2285D**					
Calcium		41100	1000	100	ug/l	EPA 200.7
Magnesium		23000	5000	100	ug/l	EPA 200.7
Potassium		3140 J	10000	500	ug/l	EPA 200.7
Sodium		60600	10000	2000	ug/l	EPA 200.7
Alkalinity, Total as CaCO3		147	5.0	2.5	mg/l	SM2320 B-11
Bromide		2.0	0.50	0.25	mg/l	EPA 300/SW846 9056A
Chloride		99.8	2.0	1.0	mg/l	EPA 300/SW846 9056A
Solids, Total Dissolved		422	50	50	mg/l	SM2540 C-11
Sulfate		41.1	2.0	1.0	mg/l	EPA 300/SW846 9056A
FA60401-8	**1851MOU2286F**					
Solids, Total Dissolved		576	50	50	mg/l	SM2540 C-11
FA60401-9	**1851MOU2287F**					
Calcium		56900	1000	100	ug/l	EPA 200.7
Magnesium		33900	5000	100	ug/l	EPA 200.7
Potassium		3260 J	10000	500	ug/l	EPA 200.7
Sodium		94100	20000	4000	ug/l	EPA 200.7
Alkalinity, Total as CaCO3		252	5.0	2.5	mg/l	SM2320 B-11
Bromide		3.3	0.50	0.25	mg/l	EPA 300/SW846 9056A
Chloride		131	10	5.0	mg/l	EPA 300/SW846 9056A
Solids, Total Dissolved		558	50	50	mg/l	SM2540 C-11
Sulfate		25.7	2.0	1.0	mg/l	EPA 300/SW846 9056A
FA60401-10	**1851MOU2288F**					
Solids, Total Dissolved		476	50	50	mg/l	SM2540 C-11
FA60401-11	**1851MOU2289F**					
Solids, Total Dissolved		540	100	100	mg/l	SM2540 C-11

Summary of Hits

Job Number: FA60401
Account: Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring
Collected: 12/19/18

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA60401-12	**1851MOU2290F**					
Solids, Total Dissolved		660	250	250	mg/l	SM2540 C-11
FA60401-13	**1851MOU2291F**					
Solids, Total Dissolved		770	250	250	mg/l	SM2540 C-11
FA60401-14	**1851MOU2292F**					
Solids, Total Dissolved		1120	250	250	mg/l	SM2540 C-11
FA60401-15	**1851MOU2293F**					
Solids, Total Dissolved		406	50	50	mg/l	SM2540 C-11
FA60401-16	**1851MOU2294F**					
Solids, Total Dissolved		456	50	50	mg/l	SM2540 C-11
FA60401-17	**1851MOU2296F**					
Solids, Total Dissolved		458	50	50	mg/l	SM2540 C-11
FA60401-18	**1851MOU2297F**					
Solids, Total Dissolved		462	50	50	mg/l	SM2540 C-11
FA60401-19	**1851MOU2298F**					
Solids, Total Dissolved		494	50	50	mg/l	SM2540 C-11
FA60401-20	**1851MOU2299F**					
Solids, Total Dissolved		1020	50	50	mg/l	SM2540 C-11
FA60401-21	**1851MOU2300F**					
Solids, Total Dissolved		460	50	50	mg/l	SM2540 C-11

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	1851M212279F		
Lab Sample ID:	FA60401-1	**Date Sampled:**	12/19/18
Matrix:	AQ - Ground Water	**Date Received:**	12/20/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	928	50	50	50	mg/l	1	12/24/18 13:00		GWSM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1851M212280F		
Lab Sample ID:	FA60401-2	**Date Sampled:**	12/19/18
Matrix:	AQ - Ground Water	**Date Received:**	12/20/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	109000	1000	100	50	ug/l	1	12/31/18	12/31/18	LM	EPA 200.7 [1]	EPA 200.7 [2]
Magnesium	70200	5000	100	35	ug/l	1	12/31/18	12/31/18	LM	EPA 200.7 [1]	EPA 200.7 [2]
Potassium	4600 J	10000	500	200	ug/l	1	12/31/18	12/31/18	LM	EPA 200.7 [1]	EPA 200.7 [2]
Sodium	252000	50000	10000	2500	ug/l	5	12/31/18	12/31/18	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA15500
(2) Prep QC Batch: MP34876

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1851M212280F		
Lab Sample ID:	FA60401-2	**Date Sampled:**	12/19/18
Matrix:	AQ - Ground Water	**Date Received:**	12/20/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	112	5.0	2.5	2.5	mg/l	1	12/27/18 14:55	LR	SM2320 B-11
Bromide [a]	2.5 U	5.0	2.5	1.2	mg/l	10	12/26/18 16:32	BR	EPA 300/SW846 9056A
Chloride	652	20	10	8.0	mg/l	10	12/26/18 16:32	BR	EPA 300/SW846 9056A
Solids, Total Dissolved	1540	100	100	100	mg/l	1	12/24/18 13:00	GW	SM2540 C-11
Sulfate	135	20	10	6.0	mg/l	10	12/26/18 16:32	BR	EPA 300/SW846 9056A

(a) Associated CCV above control limits; data not adversely affected. Dilution required due to matrix interference.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1851M212281F		
Lab Sample ID:	FA60401-3	**Date Sampled:**	12/19/18
Matrix:	AQ - Ground Water	**Date Received:**	12/20/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	17700	1000	100	50	ug/l	1	12/31/18	12/31/18	LM	EPA 200.7 [1]	EPA 200.7 [2]
Magnesium	10800	5000	100	35	ug/l	1	12/31/18	12/31/18	LM	EPA 200.7 [1]	EPA 200.7 [2]
Potassium	1700 J	10000	500	200	ug/l	1	12/31/18	12/31/18	LM	EPA 200.7 [1]	EPA 200.7 [2]
Sodium	36200	10000	2000	500	ug/l	1	12/31/18	12/31/18	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA15500
(2) Prep QC Batch: MP34876

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1851M212281F		
Lab Sample ID:	FA60401-3	**Date Sampled:**	12/19/18
Matrix:	AQ - Ground Water	**Date Received:**	12/20/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	49.8	5.0	2.5	2.5	mg/l	1	12/29/18	BR	SM2320 B-11
Bromide	0.25 U	0.50	0.25	0.12	mg/l	1	12/26/18 17:23	BR	EPA 300/SW846 9056A
Chloride	49.8	2.0	1.0	0.80	mg/l	1	12/26/18 17:23	BR	EPA 300/SW846 9056A
Solids, Total Dissolved	226	50	50	50	mg/l	1	12/24/18 13:00	GW	SM2540 C-11
Sulfate	29.7	2.0	1.0	0.60	mg/l	1	12/26/18 17:23	BR	EPA 300/SW846 9056A

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1851M212282D		
Lab Sample ID:	FA60401-4	**Date Sampled:**	12/19/18
Matrix:	AQ - Ground Water	**Date Received:**	12/20/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	17500	1000	100	50	ug/l	1	12/31/18	12/31/18	LM	EPA 200.7 [1]	EPA 200.7 [2]
Magnesium	10700	5000	100	35	ug/l	1	12/31/18	12/31/18	LM	EPA 200.7 [1]	EPA 200.7 [2]
Potassium	1660 J	10000	500	200	ug/l	1	12/31/18	12/31/18	LM	EPA 200.7 [1]	EPA 200.7 [2]
Sodium	35800	10000	2000	500	ug/l	1	12/31/18	12/31/18	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA15500
(2) Prep QC Batch: MP34876

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1851M212282D		
Lab Sample ID:	FA60401-4	**Date Sampled:**	12/19/18
Matrix:	AQ - Ground Water	**Date Received:**	12/20/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	49.7	5.0	2.5	2.5	mg/l	1	12/29/18	BR	SM2320 B-11
Bromide	0.25 U	0.50	0.25	0.12	mg/l	1	12/26/18 18:14	BR	EPA 300/SW846 9056A
Chloride	49.9	2.0	1.0	0.80	mg/l	1	12/26/18 18:14	BR	EPA 300/SW846 9056A
Solids, Total Dissolved	214	50	50	50	mg/l	1	12/24/18 13:00	GW	SM2540 C-11
Sulfate	29.4	2.0	1.0	0.60	mg/l	1	12/26/18 18:14	BR	EPA 300/SW846 9056A

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1851MOU2283F		
Lab Sample ID:	FA60401-5	**Date Sampled:**	12/19/18
Matrix:	AQ - Ground Water	**Date Received:**	12/20/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	616	50	50	50	mg/l	1	12/24/18 13:00		GWSM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1851MOU2284F		
Lab Sample ID:	FA60401-6	**Date Sampled:**	12/19/18
Matrix:	AQ - Ground Water	**Date Received:**	12/20/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	41500	1000	100	50	ug/l	1	12/31/18	12/31/18	LM	EPA 200.7 [1]	EPA 200.7 [2]
Magnesium	23400	5000	100	35	ug/l	1	12/31/18	12/31/18	LM	EPA 200.7 [1]	EPA 200.7 [2]
Potassium	3160 J	10000	500	200	ug/l	1	12/31/18	12/31/18	LM	EPA 200.7 [1]	EPA 200.7 [2]
Sodium	61400	10000	2000	500	ug/l	1	12/31/18	12/31/18	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA15500
(2) Prep QC Batch: MP34876

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1851MOU2284F		
Lab Sample ID:	FA60401-6	**Date Sampled:**	12/19/18
Matrix:	AQ - Ground Water	**Date Received:**	12/20/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	151	5.0	2.5	2.5	mg/l	1	12/29/18	BR	SM2320 B-11
Bromide	2.1	0.50	0.25	0.12	mg/l	1	12/26/18 18:31	BR	EPA 300/SW846 9056A
Chloride	99.7	2.0	1.0	0.80	mg/l	1	12/26/18 18:31	BR	EPA 300/SW846 9056A
Solids, Total Dissolved	418	50	50	50	mg/l	1	12/24/18 13:00	GW	SM2540 C-11
Sulfate	41.2	2.0	1.0	0.60	mg/l	1	12/26/18 18:31	BR	EPA 300/SW846 9056A

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1851MOU2285D		
Lab Sample ID:	FA60401-7	**Date Sampled:**	12/19/18
Matrix:	AQ - Ground Water	**Date Received:**	12/20/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	41100	1000	100	50	ug/l	1	12/31/18	12/31/18	LM	EPA 200.7 [1]	EPA 200.7 [2]
Magnesium	23000	5000	100	35	ug/l	1	12/31/18	12/31/18	LM	EPA 200.7 [1]	EPA 200.7 [2]
Potassium	3140 J	10000	500	200	ug/l	1	12/31/18	12/31/18	LM	EPA 200.7 [1]	EPA 200.7 [2]
Sodium	60600	10000	2000	500	ug/l	1	12/31/18	12/31/18	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA15500
(2) Prep QC Batch: MP34876

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1851MOU2285D		
Lab Sample ID:	FA60401-7	**Date Sampled:**	12/19/18
Matrix:	AQ - Ground Water	**Date Received:**	12/20/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	147	5.0	2.5	2.5	mg/l	1	12/29/18	BR	SM2320 B-11
Bromide	2.0	0.50	0.25	0.12	mg/l	1	12/26/18 18:48	BR	EPA 300/SW846 9056A
Chloride	99.8	2.0	1.0	0.80	mg/l	1	12/26/18 18:48	BR	EPA 300/SW846 9056A
Solids, Total Dissolved	422	50	50	50	mg/l	1	12/24/18 13:00	GW	SM2540 C-11
Sulfate	41.1	2.0	1.0	0.60	mg/l	1	12/26/18 18:48	BR	EPA 300/SW846 9056A

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1851MOU2286F		
Lab Sample ID:	FA60401-8	**Date Sampled:**	12/19/18
Matrix:	AQ - Ground Water	**Date Received:**	12/20/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	576	50	50	50	mg/l	1	12/24/18 13:00		GWSM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1851MOU2287F		
Lab Sample ID:	FA60401-9	**Date Sampled:**	12/19/18
Matrix:	AQ - Ground Water	**Date Received:**	12/20/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	56900	1000	100	50	ug/l	1	12/31/18	12/31/18	LM	EPA 200.7 [1]	EPA 200.7 [2]
Magnesium	33900	5000	100	35	ug/l	1	12/31/18	12/31/18	LM	EPA 200.7 [1]	EPA 200.7 [2]
Potassium	3260 J	10000	500	200	ug/l	1	12/31/18	12/31/18	LM	EPA 200.7 [1]	EPA 200.7 [2]
Sodium	94100	20000	4000	1000	ug/l	2	12/31/18	12/31/18	LM	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: MA15500
(2) Prep QC Batch: MP34876

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1851MOU2287F		
Lab Sample ID:	FA60401-9	**Date Sampled:**	12/19/18
Matrix:	AQ - Ground Water	**Date Received:**	12/20/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	252	5.0	2.5	2.5	mg/l	1	12/29/18	BR	SM2320 B-11
Bromide	3.3	0.50	0.25	0.12	mg/l	1	12/26/18 19:05	BR	EPA 300/SW846 9056A
Chloride	131	10	5.0	4.0	mg/l	5	12/27/18 12:36	BR	EPA 300/SW846 9056A
Solids, Total Dissolved	558	50	50	50	mg/l	1	12/24/18 13:00	GW	SM2540 C-11
Sulfate	25.7	2.0	1.0	0.60	mg/l	1	12/26/18 19:05	BR	EPA 300/SW846 9056A

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1851MOU2288F		
Lab Sample ID:	FA60401-10	**Date Sampled:**	12/19/18
Matrix:	AQ - Ground Water	**Date Received:**	12/20/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	476	50	50	50	mg/l	1	12/24/18 13:00		GWSM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1851MOU2289F		
Lab Sample ID:	FA60401-11	**Date Sampled:**	12/19/18
Matrix:	AQ - Ground Water	**Date Received:**	12/20/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	540	100	100	100	mg/l	1	12/26/18 17:00	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1851MOU2290F		
Lab Sample ID:	FA60401-12	**Date Sampled:**	12/19/18
Matrix:	AQ - Ground Water	**Date Received:**	12/20/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	660	250	250	250	mg/l	1	12/26/18 17:00	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1851MOU2291F		
Lab Sample ID:	FA60401-13	**Date Sampled:**	12/19/18
Matrix:	AQ - Ground Water	**Date Received:**	12/20/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	770	250	250	250	mg/l	1	12/26/18 17:00	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1851MOU2292F		
Lab Sample ID:	FA60401-14	**Date Sampled:**	12/19/18
Matrix:	AQ - Ground Water	**Date Received:**	12/20/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	1120	250	250	250	mg/l	1	12/26/18 17:00	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1851MOU2293F		
Lab Sample ID:	FA60401-15	**Date Sampled:**	12/19/18
Matrix:	AQ - Ground Water	**Date Received:**	12/20/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	406	50	50	50	mg/l	1	12/26/18 17:00	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1851MOU2294F		
Lab Sample ID:	FA60401-16	**Date Sampled:**	12/19/18
Matrix:	AQ - Ground Water	**Date Received:**	12/20/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	456	50	50	50	mg/l	1	12/26/18 17:00	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1851MOU2296F		
Lab Sample ID:	FA60401-17	**Date Sampled:**	12/19/18
Matrix:	AQ - Ground Water	**Date Received:**	12/20/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	458	50	50	50	mg/l	1	12/26/18 17:00	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1851MOU2297F		
Lab Sample ID:	FA60401-18	**Date Sampled:**	12/19/18
Matrix:	AQ - Ground Water	**Date Received:**	12/20/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	462	50	50	50	mg/l	1	12/26/18 17:00	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1851MOU2298F		
Lab Sample ID:	FA60401-19	**Date Sampled:**	12/19/18
Matrix:	AQ - Ground Water	**Date Received:**	12/20/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	494	50	50	50	mg/l	1	12/26/18 17:00	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1851MOU2299F		
Lab Sample ID:	FA60401-20	**Date Sampled:**	12/19/18
Matrix:	AQ - Ground Water	**Date Received:**	12/20/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	1020	50	50	50	mg/l	1	12/26/18 17:00	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	1851MOU2300F		
Lab Sample ID:	FA60401-21	**Date Sampled:**	12/19/18
Matrix:	AQ - Ground Water	**Date Received:**	12/20/18
		Percent Solids:	n/a
Project:	Fort Ord Groundwater Monitoring		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	460	50	50	50	mg/l	1	12/26/18 17:00	FN	SM2540 C-11

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions (DOD)
- Chain of Custody
- QC Evaluation: DOD QSM5 Limits

Parameter Certification Exceptions

Job Number: FA60401
Account: AHTNACAS Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

The following parameters included in this report are exceptions to DOD certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Calcium	7440-70-2	EPA 200.7	AQ	SGS is not certified for this parameter.
Magnesium	7439-95-4	EPA 200.7	AQ	SGS is not certified for this parameter.
Potassium	7440-09-7	EPA 200.7	AQ	SGS is not certified for this parameter.
Sodium	7440-23-5	EPA 200.7	AQ	SGS is not certified for this parameter.

CA051479

Ahtna

CHAIN OF CUSTODY

WATER / SOIL

FA60401

Chain of Custody # 2353

1 of 2

Project Information

Project Location: FFO, MARIAN, CA
GW MONITORING PGM
Project Name: ACCWA (TDS, Cl, Mn)
Project Number: 05055.05
Sampling Event:

Sampler(s): MARK FISLER / STEVE KORBY
Report To: DEREK LIEBERMAN
E-Mail: dlieberman@ahtna.net
Laboratory: SGS-NA

Analysis Requested: TOTAL DISSOLVED SOLIDS; ANIONS + ALKALINITY; CATIONS (Na, K, Ca, Mg)

Lab Sample Receipt: Laboratory Sample Delivery; Groups; Custody Seal; Temp (°C)

Lab Number	Sample Number/Description	Sample Collection Date	Sample Collection Time	Matrix Water	Matrix Soil	Matrix Other	Total # of Bottles	Number of Preserved Bottles HCl	HNO3	H2SO4	NaOH	NaHSO4	NaOCl	None	Other	TOTAL DISSOLVED SOLIDS	ANIONS + ALKALINITY	CATIONS (Na, K, Ca, Mg)	Notes
~~C~~	~~185MW212278A~~	~~12/19/16~~		~~X~~			~~2~~	~~2~~											
1	185MW212279F	12/19/16	0821	X			1							1		X			
2	185MW212280F		0828	X			3	1						2		X	X	X	
3	185MW212281F		0841	X			3	1						2		X	X	X	
4	185MW212282O		0852	X			3	1						2		X	X	X	
5	185MW212283F		0915	X			1							1		X			
6	185MW212284F		0926	X			3	1						2		X	X	X	
7	185MW212285O		0930	X			3	1						2		X	X	X	
8	185MW212286F		0935	X			1							1		X			
9	185MW212287F		1000	X			3	1						2		X	X	X	
10	185MW212288F		1011	X			1							1		X			
11	185MW212289F		1040	X			1							1		X			
12	185MW212290F		1051	X			1							1		X			
13	185MW212291F		1058	X			1							1		X			
14	185MW212292F		1107	X			1							1		X			

Turnaround Time: (A) Standard; 48 Hour Rush; 24 Hour Rush; 12 Hour Rush

Shipment: Method; Tracking ID

Comments

Chain of Custody Tracking

Relinquished By	Date/Time	Received By	Date/Time
Steve Korby	12/19/16 1535	Lee Baez	12/19/16 1535
Lee Baez	12/19/16 1600	Fedex	12/19/16 1600
Fed Ex	Date/Time	Received by Laboratory:	12/20/16 1100

2.8 SP 12/20/16

FA60401: Chain of Custody
Page 1 of 3

CAD51479

Ahtna

CHAIN OF CUSTODY

WATER / SOIL

FA60401

Chain of Custody #: 2002 2355

Project Information

Project Location: FFO, MANNA CA. Sampler's: M. FISHER / S. KOLBAY
GW MONITORING FOR
Project Name: MCWD (Lic. Cal. Rules) Report To: DEREK LIEBERMAN
Project Number: 05055.05 Email: dlieberman@ahtna.net
Sampling Event: Laboratory: SGS-NR

Analysis Requested: Total Dissolved Solids; Anions & Metals; Cations (K, Na, Ca, Mg)

Lab Sample Receipt: Laboratory Sample Delivery; Group #; Custody Seal; Temp (°C)

Lab Number	Sample Number/Description	Sample Collection Date	Sample Collection Time	Matrix: Water	Matrix: Soil	Matrix: Other	Total # of Bottles	Number of Preserved Bottles: HCl	HNO_3	H_2SO_4	NaOH	NaOCl	Methanol	None	Other	Total Dissolved Solids	Anions & Metals	Cations (K, Na, Ca, Mg)			Notes
15	185MW002293F	12/19/18	1122	X			1							1		X					
16	185MW002294F		1136	X			1							1		X					
~~[illegible]~~	~~185MW002295F~~		~~1144~~	~~X~~			~~1~~							~~1~~		~~X~~					
17	185MW002296F		1153	X			1							1		X					
18	185MW002297F		1319	X			1							1		X					
19	185MW002298F		1332	X			1							1		X					
20	185MW002299F		1347	X			1							1		X					
21	185MW002300F		1356	X			1							1		X					

Turnaround Time: Standard; 15 Day; 10 Day; 48 Hour; 24 Hour

Shipment Method: Tracking ID:

Comments:

Chain of Custody Tracking

Relinquished by (sampler):	Date/Time	Received by:	Date/Time
Steve Kolbay	12/19/18 1535	Lee Bo	12/19/18 1530
Lee Bo	12/19/18 1600	[illegible]	12/19/18 1600
Fed Ex		[illegible]	12/20/18 1100

SGS Sample Receipt Summary

Job Number: FA60401 **Client:** AHTNA **Project:** GWM for MCWD

Date / Time Received: 12/20/2018 11:00:00 AM **Delivery Method:** FedEx **Airbill #'s:** 774027435253

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (3.0);

Cooler Temps (Corrected) °C: Cooler 1: (2.8);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑
	W	**or**	**S**	**N/A**
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: SHAYLAP Date: 12/20/2018 11:00:00 A Reviewer: PH Date: 12/23/2018

FA60401: Chain of Custody
Page 3 of 3

QC Evaluation: DOD QSM5 Limits

Job Number: FA60401
Account: Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring
Collected: 12/19/18

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
GP32500	EPA 300/SW846 9056A						
GP32500-B1	16887-00-6	Chloride	BSP	REC	97.6	%	87-111
GP32500-B1	24959-67-9	Bromide	BSP	REC	106.4	%	91-110
GP32500-B1	14808-79-8	Sulfate	BSP	REC	101.4	%	87-112
GP32500-S1	16887-00-6	Chloride	MS	REC	112.4 [a]	%	87-111
GP32500-S1	24959-67-9	Bromide	MS	REC	115.2 [a]	%	91-110
GP32500-S1	14808-79-8	Sulfate	MS	REC	100.4	%	87-112
GP32500-S2	16887-00-6	Chloride	MSD	RPD	.9	%	15
GP32500-S2	16887-00-6	Chloride	MSD	REC	110.4	%	87-111
GP32500-S2	24959-67-9	Bromide	MSD	RPD	11.8	%	15
GP32500-S2	24959-67-9	Bromide	MSD	REC	102.4	%	91-110
GP32500-S2	14808-79-8	Sulfate	MSD	RPD	3.7	%	15
GP32500-S2	14808-79-8	Sulfate	MSD	REC	94.6	%	87-112

(a) Spike recovery indicates possible matrix interference.

* Sample used for QC is not from job FA60401

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries
- IDL and Linear Range Summaries

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA123118M2.ICP Date Analyzed: 12/31/18 Methods: EPA 200.7
Analyst: LM Run ID: MA15500
Parameters: Ca,Mg,K,Na

Time	Sample Description	Dilution Factor	PS Recov	Comments
08:10	MA15500-STD1	1		STDA
08:15	MA15500-STD2	1		STDB
08:19	MA15500-STD3	1		STDC
08:23	MA15500-STD4	1		STDD
08:26	MA15500-HSTD1	1		
08:34	MA15500-ICV1	1		
08:51	MA15500-ICB1	1		
09:07	MA15500-CRIA1	1		
09:15	MA15500-ICSA1	1		
09:23	MA15500-ICSAB1	1		
09:30	MA15500-CCV1	1		
09:38	MA15500-CCB1	1		
10:26	MA15500-CCV2	1		
10:31	MA15500-CCB2	1		
10:53	MP34876-MB	1		
10:58	MP34876-B1	1		
11:02	FA60401-2	1		
11:06	MP34876-D1	1		
11:11	MP34876-SD1	5		
11:16	MP34876-PS1	1		
11:20	MA15500-CCV3	1		
11:24	MA15500-CCB3	1		
11:29	MP34876-S1	1		
11:33	MP34876-S2	1		
11:37	FA60401-3	1		
11:42	FA60401-4	1		
11:46	FA60401-6	1		
11:51	FA60401-7	1		
11:55	FA60401-9	1		
12:04	ZZZZZZ	1		
12:09	ZZZZZZ	1		
12:13	MA15500-CCV4	1		
12:18	MA15500-CCB4	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA123118M2.ICP Date Analyzed: 12/31/18 Methods: EPA 200.7
Analyst: LM Run ID: MA15500
Parameters: Ca,Mg,K,Na

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:50	MA15500-CCV5	1		
12:58	MA15500-CCB5	1		
13:02	FA60401-2	5		
13:06	MP34876-D1	5		
13:11	MP34876-S1	5		
13:15	MP34876-S2	5		
13:19	MP34876-PS1	5		
13:24	MP34876-SD1	25		
13:28	FA60401-9	2		
---------->	Last reportable sample/prep for job FA60401			
13:33	ZZZZZZ	5		
13:46	MA15500-CCV6	1		
13:50	MA15500-CCB6	1		
16:27	MA15500-CCV7	1		
16:32	MA15500-CCB7	1		
17:07	MA15500-CRIA2	1		
17:11	MA15500-ICSA2	1		
17:16	MA15500-ICSAB2	1		
17:21	MA15500-CCV8	1		
17:25	MA15500-CCB8	1		
---------->	Last reportable CCB for job FA60401			

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA123118M2.ICP Date Analyzed: 12/31/18 Methods: EPA 200.7
Analyst: LM Run ID: MA15500
Parameters: Ca,Mg,K,Na

Time	Sample Description	Element: Dilution	Ca	Mg	K	Na
08:26	MA15500-HSTD1	1	X	X	X	X
08:34	MA15500-ICV1	1	X	X	X	X
08:51	MA15500-ICB1	1	X	X	X	X
09:07	MA15500-CRIA1	1	X	X	X	X
09:15	MA15500-ICSA1	1	X	X	X	X
09:23	MA15500-ICSAB1	1	X	X	X	X
09:30	MA15500-CCV1	1	X	X	X	X
09:38	MA15500-CCB1	1	X	X	X	X
10:26	MA15500-CCV2	1	X	X	X	X
10:31	MA15500-CCB2	1	X	X	X	X
10:53	MP34876-MB	1	X	X	X	X
10:58	MP34876-B1	1	X	X	X	X
11:02	FA60401-2	1	X	X	X	
11:06	MP34876-D1	1	X	X	X	
11:11	MP34876-SD1	5	X	X	X	
11:16	MP34876-PS1	1	X	X	X	
11:20	MA15500-CCV3	1	X	X	X	X
11:24	MA15500-CCB3	1	X	X	X	X
11:29	MP34876-S1	1	X	X	X	
11:33	MP34876-S2	1	X	X	X	
11:37	FA60401-3	1	X	X	X	X
11:42	FA60401-4	1	X	X	X	X
11:46	FA60401-6	1	X	X	X	X
11:51	FA60401-7	1	X	X	X	X
11:55	FA60401-9	1	X	X	X	
12:04	ZZZZZZ	1				
12:09	ZZZZZZ	1				
12:13	MA15500-CCV4	1	X	X	X	X
12:18	MA15500-CCB4	1	X	X	X	X
12:50	MA15500-CCV5	1	X	X	X	X
12:58	MA15500-CCB5	1	X	X	X	X
13:02	FA60401-2	5				X
13:06	MP34876-D1	5				X
		Element:	Ca	Mg	K	Na

REPORTED ELEMENTS SUMMARY

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA123118M2.ICP Date Analyzed: 12/31/18 Methods: EPA 200.7
Analyst: LM Run ID: MA15500
Parameters: Ca,Mg,K,Na

Time	Sample Description	Element: Dilution	Ca	Mg	K	Na
13:11	MP34876-S1	5				X
13:15	MP34876-S2	5				X
13:19	MP34876-PS1	5				X
13:24	MP34876-SD1	25				X
13:28	FA60401-9	2				X
13:33	ZZZZZZ	5				
13:46	MA15500-CCV6	1	X	X	X	X
13:50	MA15500-CCB6	1	X	X	X	X
16:27	MA15500-CCV7	1	X	X	X	X
16:32	MA15500-CCB7	1	X	X	X	X
17:07	MA15500-CRIA2	1	X	X	X	X
17:11	MA15500-ICSA2	1	X	X	X	X
17:16	MA15500-ICSAB2	1	X	X	X	X
17:21	MA15500-CCV8	1	X	X	X	X
17:25	MA15500-CCB8	1	X	X	X	X
		Element:	Ca	Mg	K	Na

INTERNAL STANDARD SUMMARY

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA123118M2.ICP Date Analyzed: 12/31/18 Methods: EPA 200.7
Analyst: LM Run ID: MA15500
Parameters: Ca,Mg,K,Na

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
08:10	MA15500-STD1	4549	32187	4037	2371
08:15	MA15500-STD2	4429	31585	4083	2163
08:19	MA15500-STD3	4268	30937	4076	1963
08:23	MA15500-STD4	4143	30421	4006	1825
08:26	MA15500-HSTD1	4112	29918	3889	1812
08:34	MA15500-ICV1	4263	30073	3876	1960
08:51	MA15500-ICB1	4466 R	31456 R	3994 R	2345 R
09:07	MA15500-CRIA1	4369	31454	4044	2209
09:15	MA15500-ICSA1	3971	28282	3821	1761
09:23	MA15500-ICSAB1	3991	28922	3949	1750
09:30	MA15500-CCV1	4237	30549	3939	1952
09:38	MA15500-CCB1	4437	31671	4002	2335
10:26	MA15500-CCV2	4247	30399	3909	1954
10:31	MA15500-CCB2	4484	32072	4014	2335
10:53	MP34876-MB	4432	31657	3937	2284
10:58	MP34876-B1	4295	30784	3850	2028
11:02	FA60401-2	4005	29277	3810	1849
11:06	MP34876-D1	4012	29365	3902	1854
11:11	MP34876-SD1	4319	31176	3949	2096
11:16	MP34876-PS1	4020	29333	3835	1840
11:20	MA15500-CCV3	4279	30944	3904	1941
11:24	MA15500-CCB3	4504	32272	4021	2320
11:29	MP34876-S1	4068	29127	3808	1797
11:33	MP34876-S2	4087	29385	3837	1808
11:37	FA60401-3	4349	31309	3921	2118
11:42	FA60401-4	4377	31284	3947	2136
11:46	FA60401-6	4306	30987	3885	2056
11:51	FA60401-7	4309	31131	3928	2054
11:55	FA60401-9	4245	30310	3857	1997
12:04	ZZZZZZ	3756	26859	3681	1630
12:09	ZZZZZZ	4117	29527	3842	1920
12:13	MA15500-CCV4	4341	31649	4023	1973
12:18	MA15500-CCB4	4685	32733	4035	2407

INTERNAL STANDARD SUMMARY

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA123118M2.ICP Date Analyzed: 12/31/18 Methods: EPA 200.7
Analyst: LM Run ID: MA15500
Parameters: Ca,Mg,K,Na

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
12:50	MA15500-CCV5	4296	31100	3889	1948
12:58	MA15500-CCB5	4534	32613	3958	2336
13:02	FA60401-2	4371	31303	3922	2109
13:06	MP34876-D1	4360	31405	3880	2114
13:11	MP34876-S1	4391	31317	3910	2070
13:15	MP34876-S2	4387	31143	3890	2069
13:19	MP34876-PS1	4365	31443	3897	2099
13:24	MP34876-SD1	4485	32237	3933	2264
13:28	FA60401-9	4350	31449	3914	2096
13:33	ZZZZZZ	4314	31139	3954	2062
13:46	MA15500-CCV6	4289	30824	3850	1939
13:50	MA15500-CCB6	4521	32472	3961	2325
16:27	MA15500-CCV7	4409	31537	3808	1992
16:32	MA15500-CCB7	4638	33204	3905	2379
17:07	MA15500-CRIA2	4541	32718	3848	2251
17:11	MA15500-ICSA2	4039	28667	3636	1766
17:16	MA15500-ICSAB2	4032	28525	3635	1732
17:21	MA15500-CCV8	4378	31199	3745	1970
17:25	MA15500-CCB8	4648	32654	3820	2374

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA123118M2.ICP Date Analyzed: 12/31/18 Methods: EPA 200.7
QC Limits: result < RL Run ID: MA15500 Units: ug/l

Time:			08:51		09:38		10:31		11:24	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	6.0	1								
Arsenic	10	1.3								
Barium	200	1								
Beryllium	4.0	.2								
Cadmium	5.0	.2								
Calcium	1000	50	-2.00	<1000	11.3	<1000	11.3	<1000	7.70	<1000
Chromium	10	1								
Cobalt	50	.2								
Copper	25	1								
Iron	300	17								
Lead	5.0	1								
Magnesium	5000	35	18.3	<5000	4.60	<5000	1.70	<5000	26.4	<5000
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4								
Potassium	10000	200	-39.0	<10000	-35.6	<10000	-54.6	<10000	-7.80	<10000
Selenium	10	2.4								
Silver	10	.7	anr							
Sodium	10000	500	-36.2	<10000	0.200	<10000	1.90	<10000	69.2	<10000
Strontium	10	.5								
Thallium	10	1.1								
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA123118M2.ICP Date Analyzed: 12/31/18 Methods: EPA 200.7
QC Limits: result < RL Run ID: MA15500 Units: ug/l

Time:			12:18		12:58		13:50		16:32	
Sample ID:			CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	6.0	1								
Arsenic	10	1.3								
Barium	200	1								
Beryllium	4.0	.2								
Cadmium	5.0	.2								
Calcium	1000	50	6.30	<1000	9.20	<1000	9.20	<1000	4.30	<1000
Chromium	10	1								
Cobalt	50	.2								
Copper	25	1								
Iron	300	17								
Lead	5.0	1								
Magnesium	5000	35	20.5	<5000	-7.60	<5000	2.00	<5000	-29.1	<5000
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4								
Potassium	10000	200	188	<10000	-61.4	<10000	-70.9	<10000	-131	<10000
Selenium	10	2.4								
Silver	10	.7	anr							
Sodium	10000	500	174	<10000	-57.9	<10000	21.6	<10000	132	<10000
Strontium	10	.5								
Thallium	10	1.1								
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA123118M2.ICP Date Analyzed: 12/31/18 Methods: EPA 200.7
QC Limits: result < RL Run ID: MA15500 Units: ug/l

Time:			17:25	
Sample ID:			CCB8	
Metal	RL	IDL	raw	final
Aluminum	200	14		
Antimony	6.0	1		
Arsenic	10	1.3		
Barium	200	1		
Beryllium	4.0	.2		
Cadmium	5.0	.2		
Calcium	1000	50	7.60	<1000
Chromium	10	1		
Cobalt	50	.2		
Copper	25	1		
Iron	300	17		
Lead	5.0	1		
Magnesium	5000	35	-11.4	<5000
Manganese	15	.5		
Molybdenum	50	.3		
Nickel	40	.4		
Potassium	10000	200	-137	<10000
Selenium	10	2.4		
Silver	10	.7	anr	
Sodium	10000	500	4.50	<10000
Strontium	10	.5		
Thallium	10	1.1		
Tin	50	.9		
Titanium	10	.5		
Vanadium	50	.5		
Zinc	20	3		

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA123118M2.ICP Date Analyzed: 12/31/18 Methods: EPA 200.7
QC Limits: 95 to 105 % Recovery Run ID: MA15500 Units: ug/l

Time:		08:34			09:30			10:26	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium	40000	40900	102.3	40000	40700	101.8	40000	41200	103.0
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium	40000	43500	108.8*(a	40000	41200	103.0	40000	41500	103.8
Manganese									
Molybdenum									
Nickel									
Potassium	40000	41000	102.5	40000	40700	101.8	40000	41200	103.0
Selenium									
Silver	anr								
Sodium	40000	40900	102.3	40000	40700	101.8	40000	41200	103.0
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested
(a) Positive bias.

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA123118M2.ICP Date Analyzed: 12/31/18 Methods: EPA 200.7
QC Limits: 95 to 105 % Recovery Run ID: MA15500 Units: ug/l

Time:		11:20			12:13			12:50	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium	40000	40800	102.0	40000	40300	100.8	40000	41100	102.8
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium	40000	41900	104.8	40000	41200	103.0	40000	41000	102.5
Manganese									
Molybdenum									
Nickel									
Potassium	40000	41100	102.8	40000	41300	103.3	40000	40900	102.3
Selenium									
Silver	anr								
Sodium	40000	41100	102.8	40000	40900	102.3	40000	40900	102.3
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA123118M2.ICP Date Analyzed: 12/31/18 Methods: EPA 200.7
QC Limits: 95 to 105 % Recovery Run ID: MA15500 Units: ug/l

Time:		13:46			16:27			17:21	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium	40000	41000	102.5	40000	39600	99.0	40000	39700	99.3
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium	40000	41100	102.8	40000	40400	101.0	40000	40500	101.3
Manganese									
Molybdenum									
Nickel									
Potassium	40000	41000	102.5	40000	40400	101.0	40000	40500	101.3
Selenium									
Silver	anr								
Sodium	40000	41000	102.5	40000	40200	100.5	40000	40300	100.8
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA123118M2.ICP Date Analyzed: 12/31/18 Methods: EPA 200.7
QC Limits: 95 to 105 % Recovery Run ID: MA15500 Units: ug/l

Time:		08:26	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum			
Antimony			
Arsenic			
Barium			
Beryllium			
Cadmium			
Calcium	80000	79800	99.8
Chromium			
Cobalt			
Copper			
Iron			
Lead			
Magnesium	80000	81100	101.4
Manganese			
Molybdenum			
Nickel			
Potassium	80000	80200	100.3
Selenium			
Silver	anr		
Sodium	80000	80300	100.4
Strontium			
Thallium			
Tin			
Titanium			
Vanadium			
Zinc			

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA123118M2.ICP Date Analyzed: 12/31/18 Methods: EPA 200.7
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA15500 Units: ug/l

Time:			09:07		17:07	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200				
Antimony	10	5.0				
Arsenic	20	10				
Barium	400	200				
Beryllium	10	5.0				
Cadmium	10	5.0				
Calcium	2000	1000	999	99.9	973	97.3
Chromium	20	10				
Cobalt	100	50				
Copper	50	25				
Iron	600	300				
Lead	10	5.0				
Magnesium	10000	5000	4990	99.8	4850	97.0
Manganese	30	15				
Molybdenum	100	50				
Nickel	80	40				
Potassium	20000	10000	9710	97.1	9620	96.2
Selenium	20	10				
Silver	20	10	anr			
Sodium	20000	10000	9720	97.2	9640	96.4
Strontium	20	10				
Thallium	20	10				
Tin	100	50				
Titanium	20	10				
Vanadium	100	50				
Zinc	40	20				

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: SA123118M2.ICP Date Analyzed: 12/31/18 Methods: EPA 200.7
QC Limits: 80 to 120 % Recovery Run ID: MA15500 Units: ug/l

Time:			09:15		09:23		17:11		17:16	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	529000	105.8	523000	104.6	526000	105.2	519000	103.8
Antimony		1000	-0.400		996	99.6	-0.900		975	97.5
Arsenic		1000	0.00		982	98.2	3.10		959	95.9
Barium		500	0.300		507	101.4	0.400		517	103.4
Beryllium		500	-0.100		506	101.2	0.00		506	101.2
Cadmium		1000	-0.100		950	95.0	-0.100		937	93.7
Calcium	500000	500000	476000	95.2	476000	95.2	472000	94.4	472000	94.4
Chromium		500	0.00		496	99.2	0.700		502	100.4
Cobalt		500	0.00		475	95.0	-0.100		473	94.6
Copper		500	0.00		539	107.8	0.100		551	110.2
Iron	200000	200000	189000	94.5	183000	91.5	187000	93.5	184000	92.0
Lead		1000	0.800		957	95.7	-0.500		951	95.1
Magnesium	500000	500000	514000	102.8	499000	99.8	505000	101.0	508000	101.6
Manganese		500	0.300		509	101.8	0.300		508	101.6
Molybdenum		1000	0.100		842	84.2	0.300		835	83.5
Nickel		1000	-1.00		949	94.9	-1.00		939	93.9
Potassium			48.1		37.3		57.1		14.4	
Selenium		1000	0.00		912	91.2	2.40		895	89.5
Silver		1000	0.100		1090	109.0	0.00		1090	109.0
Sodium			175		223		493		388	
Strontium		1000	0.100		921	92.1	0.00		916	91.6
Thallium		1000	0.00		884	88.4	1.30		878	87.8
Tin		1000	0.300		1680	168.0*	0.500		1670	167.0*
Titanium		1000	0.00		1040	104.0	-0.100		1030	103.0
Vanadium		500	0.400		497	99.4	0.700		490	98.0
Zinc		1000	-0.300		961	96.1	0.400		943	94.3

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

QC Batch ID: MP34876
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 12/31/18

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	14	14		
Antimony	6.0	1	1		
Arsenic	10	1.3	1.3		
Barium	200	1	1		
Beryllium	4.0	.2	.2		
Cadmium	5.0	.2	.2		
Calcium	1000	50	50	11.0	<1000
Chromium	10	1	1		
Cobalt	50	.2	.2		
Copper	25	1	1		
Iron	300	17	17		
Lead	5.0	1	1.1		
Magnesium	5000	35	35	1.3	<5000
Manganese	15	.5	1		
Molybdenum	50	.3	.3		
Nickel	40	.4	.4		
Potassium	10000	200	200	2.4	<10000
Selenium	10	2.4	2.9		
Silver	10	.7	.7		
Sodium	10000	500	500	105	<10000
Strontium	10	.5	.5		
Thallium	10	1.1	1.4		
Tin	50	.9	1		
Titanium	10	.5	1		
Vanadium	50	.5	.6		
Zinc	20	3	4.4		

Associated samples MP34876: FA60401-2, FA60401-3, FA60401-4, FA60401-6, FA60401-7, FA60401-9

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

QC Batch ID: MP34876
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date:			12/31/18					12/31/18	
Metal	FA60401-2 Original	DUP	RPD	QC Limits	FA60401-2 Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium	109000	106000	2.8	0-20	109000	137000	25000	112.0	70-130
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium	70200	68100	3.0	0-20	70200	98000	25000	111.2	70-130
Manganese									
Molybdenum									
Nickel									
Potassium	4600	4530	1.5	0-20	4600	30800	25000	104.8	70-130
Selenium									
Silver	anr								
Sodium	252000	237000	6.1	0-20	252000	284000	25000	128.0	70-130
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

Associated samples MP34876: FA60401-2, FA60401-3, FA60401-4, FA60401-6, FA60401-7, FA60401-9

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

QC Batch ID: MP34876
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 12/31/18

Metal	FA60401-2 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium	109000	134000	25000	100.0	2.2	20
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Magnesium	70200	95700	25000	102.0	2.4	20
Manganese						
Molybdenum						
Nickel						
Potassium	4600	30700	25000	104.4	0.3	20
Selenium						
Silver	anr					
Sodium	252000	288000	25000	144.0(a)	1.4	20
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP34876: FA60401-2, FA60401-3, FA60401-4, FA60401-6, FA60401-7, FA60401-9

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

QC Batch ID: MP34876
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 12/31/18

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium	25200	25000	100.8	85-115
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium	25600	25000	102.4	85-115
Manganese				
Molybdenum				
Nickel				
Potassium	25000	25000	100.0	85-115
Selenium				
Silver	anr			
Sodium	25100	25000	100.4	85-115
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP34876: FA60401-2, FA60401-3, FA60401-4, FA60401-6, FA60401-7, FA60401-9

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

QC Batch ID: MP34876
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 12/31/18

Metal	FA60401-2 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium	109000	108000	1.1	0-10
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium	70200	70400	0.3	0-10
Manganese				
Molybdenum				
Nickel				
Potassium	4600	4520	1.9	0-10
Selenium				
Silver	anr			
Sodium	252000	239000	5.2	0-10
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP34876: FA60401-2, FA60401-3, FA60401-4, FA60401-6, FA60401-7, FA60401-9

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

QC Batch ID: MP34876
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 12/31/18

Metal	Sample ml	Final ml	FA60401-2 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium	9.8	10	109200	107016	111300	0.2	250	5000	85.7	85-115
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium	9.8	10	70240	68835.2	73770	0.2	250	5000	98.7	85-115
Manganese										
Molybdenum										
Nickel										
Potassium	9.8	10	4603	4510.94	14690	0.2	500	10000	101.8	85-115
Selenium										
Silver										
Sodium	9.8	10	252100	247058	256700	0.2	500	10000	96.4	85-115
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP34876: FA60401-2, FA60401-3, FA60401-4, FA60401-6, FA60401-7, FA60401-9

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

Instrument Detection Limits

Job Number: FA60401
Account: AHTNACAS Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

Instrument ID: SSTRACE1 **Effective Date:** 01/27/15

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	1
Beryllium	.2
Cadmium	.2
Calcium	50
Chromium	1
Cobalt	.2
Copper	1
Iron	17
Lead	1
Magnesium	35
Manganese	.5
Molybdenum	.3
Nickel	.4
Potassium	200
Selenium	2.4
Silicon	5
Silver	.7
Sodium	500
Strontium	.5
Sulfur	5
Thallium	1.1
Tin	.9
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA15500

Instrument Linear Ranges

Job Number: FA60401
Account: AHTNACAS Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

Instrument ID: SSTRACE1 **Effective Date:** 08/13/13

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Sulfur	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA15500

Metals Analysis

Raw Data

Zoom In ▶
Zoom Out

Sample Name: Blank Acquired: 12/31/2018 8:10:27 Type: Cal
Method: 60102007_042011(v374) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0017**	**-.0077**	**-.0005**	**.0207**	**-.0008**	**.0037**	**-.0009**	**-.0003**	**-.0001**
Stddev	.0003	.0026	.0001	.0022	.0007	.0010	.0001	.0002	.0001
%RSD	19.54	33.57	14.19	10.86	85.08	27.74	14.12	68.29	118.0
#1	-.0014	-.0068	-.0005	.0181	-.0003	.0044	-.0011	-.0003	-.0002
#2	-.0020	-.0057	-.0006	.0220	-.0005	.0025	-.0009	-.0006	-.0001
#3	-.0016	-.0106	-.0006	.0221	-.0015	.0042	-.0008	-.0001	.0000

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0095**	**.0012**	**.0004**	**-.0006**	**.0007**	**.0006**	**-.0191**	**-.0005**	**-.0002**
Stddev	.0001	.0005	.0046	.0001	.0001	.0000	.0032	.0002	.0006
%RSD	1.567	38.06	1260.	10.69	21.49	7.441	16.70	42.40	312.0
#1	.0094	.0009	.0017	-.0007	.0007	.0007	-.0179	-.0004	-.0001
#2	.0097	.0010	.0041	-.0006	.0005	.0006	-.0227	-.0003	.0004
#3	.0095	.0017	-.0048	-.0006	.0008	.0006	-.0166	-.0007	-.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0009**	**-.0004**	**.0037**	**.0003**	**-.0044**	**.0021**	**-.0017**	**.0000**	**.0005**
Stddev	.0001	.0001	.0001	.0002	.0015	.0002	.0002	.000	.0001
%RSD	12.33	26.82	2.512	53.30	34.01	10.24	9.539	541.4	25.67
#1	.0008	-.0003	.0037	.0002	-.0061	.0023	-.0019	.0000	.0003
#2	.0010	-.0006	.0038	.0005	-.0038	.0021	-.0016	.0000	.0005
#3	.0008	-.0004	.0036	.0002	-.0033	.0019	-.0017	.0000	.0005

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	
Avg	**2371.0**	**4548.5**	**32187.**	**4036.7**
Stddev	3.1	9.8	159.	24.8
%RSD	.12978	.21574	.49421	.61498
#1	2369.6	4559.0	32289.	4051.3
#2	2374.5	4539.6	32269.	4008.1
#3	2368.8	4546.8	32004.	4050.8

Zoom In ▶
Zoom Out

Sample Name: LowStd Acquired: 12/31/2018 8:15:37 Type: Cal
Method: 60102007_042011(v374) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0294**	**1.848**	**.0825**	**3.413**	**5.488**	**2.676**	**2.469**	**1.283**	**.2706**
Stddev	.0003	.007	.0003	.017	.010	.007	.003	.001	.0009
%RSD	1.107	.3814	.3834	.4930	.1802	.2699	.1278	.0953	.3466
#1	.0291	1.856	.0829	3.431	5.488	2.674	2.467	1.284	.2698
#2	.0294	1.844	.0824	3.398	5.498	2.671	2.468	1.282	.2703
#3	.0298	1.843	.0823	3.410	5.479	2.685	2.473	1.284	.2716

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.4164**	**1.915**	**.8012**	**.2955**	**1.551**	**.5002**	**3.147**	**.7857**	**.4438**
Stddev	.0014	.002	.0038	.0010	.011	.0008	.007	.0016	.0008
%RSD	.3267	.0889	.4758	.3248	.6870	.1525	.2152	.2097	.1697
#1	.4160	1.915	.8053	.2965	1.540	.5009	3.150	.7853	.4429
#2	.4179	1.916	.8006	.2953	1.551	.4994	3.139	.7842	.4443
#3	.4153	1.913	.7978	.2946	1.561	.5002	3.152	.7875	.4441

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1087**	**.0613**	**.1455**	**.1885**	**6.825**	**.9718**	**.1465**	**.3212**	**1.351**
Stddev	.0003	.0003	.0004	.0007	.009	.0069	.0008	.0006	.003
%RSD	.2745	.4307	.2432	.3713	.1243	.7133	.5710	.1904	.2259
#1	.1088	.0613	.1458	.1892	6.827	.9639	.1456	.3207	1.348
#2	.1084	.0616	.1456	.1878	6.832	.9745	.1473	.3209	1.350
#3	.1090	.0611	.1451	.1885	6.815	.9769	.1466	.3218	1.354

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2163.0**	**4428.6**	**31585.**	**4082.6**
Stddev	3.8	10.6	132.	23.2
%RSD	.17634	.23921	.41826	.56728
#1	2162.9	4426.6	31595.	4056.9
#2	2166.9	4440.0	31712.	4101.9
#3	2159.3	4419.1	31448.	4088.9

Zoom In ▶
Zoom Out

Sample Name: MidStd Acquired: 12/31/2018 8:19:18 Type: Cal
Method: 60102007_042011(v374) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1180**	**7.334**	**.3358**	**13.65**	**21.74**	**10.49**	**9.726**	**4.998**	**1.061**
Stddev	.0011	.008	.0016	.03	.06	.03	.028	.013	.004
%RSD	.9562	.1083	.4911	.2407	.2738	.2893	.2901	.2557	.3698
#1	.1192	7.326	.3376	13.63	21.69	10.46	9.758	5.012	1.065
#2	.1180	7.334	.3344	13.69	21.81	10.50	9.707	4.990	1.060
#3	.1169	7.342	.3355	13.64	21.73	10.52	9.712	4.990	1.057

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.627**	**7.274**	**3.201**	**1.145**	**6.042**	**2.095**	**12.53**	**3.051**	**1.810**
Stddev	.002	.016	.003	.007	.011	.006	.03	.010	.003
%RSD	.1288	.2201	.1051	.5760	.1780	.2707	.2423	.3351	.1815
#1	1.627	7.256	3.197	1.140	6.053	2.102	12.51	3.063	1.814
#2	1.629	7.287	3.202	1.152	6.042	2.092	12.51	3.045	1.809
#3	1.625	7.280	3.203	1.143	6.032	2.093	12.56	3.046	1.808

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.4304**	**.2452**	**.7073**	**.7757**	**28.33**	**4.045**	**.5928**	**1.348**	**5.335**
Stddev	.0027	.0013	.0032	.0024	.11	.007	.0021	.004	.018
%RSD	.6168	.5455	.4573	.3046	.3762	.1698	.3572	.2790	.3442
#1	.4333	.2467	.7110	.7784	28.21	4.050	.5948	1.352	5.356
#2	.4294	.2447	.7049	.7741	28.36	4.048	.5905	1.347	5.321
#3	.4283	.2442	.7061	.7746	28.42	4.037	.5930	1.344	5.328

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1962.6**	**4267.7**	**30937.**	**4075.5**
Stddev	2.6	7.7	78.	18.5
%RSD	.13023	.18017	.25220	.45493
#1	1963.7	4262.9	30866.	4089.8
#2	1964.3	4276.6	30924.	4082.3
#3	1959.6	4263.7	31021.	4054.6

Zoom In ▶
Zoom Out

Sample Name: HighStd Acquired: 12/31/2018 8:23:00 Type: Cal
Method: 60102007_042011(v374) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.2374**	**14.21**	**.6625**	**26.84**	**42.12**	**20.42**	**18.74**	**9.691**	**2.043**
Stddev	.0013	.04	.0009	.02	.09	.05	.04	.017	.002
%RSD	.5562	.2748	.1318	.0839	.2051	.2337	.2038	.1717	.1061
#1	.2381	14.25	.6634	26.82	42.14	20.41	18.77	9.705	2.040
#2	.2359	14.23	.6626	26.86	42.19	20.47	18.75	9.695	2.045
#3	.2382	14.17	.6617	26.85	42.02	20.38	18.70	9.673	2.044

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.209**	**14.01**	**6.278**	**2.248**	**11.48**	**4.064**	**24.68**	**5.861**	**3.609**
Stddev	.020	.05	.010	.004	.09	.002	.06	.012	.009
%RSD	.6288	.3458	.1646	.1832	.7619	.0459	.2565	.1976	.2532
#1	3.200	14.05	6.284	2.253	11.47	4.064	24.69	5.874	3.620
#2	3.194	14.01	6.284	2.247	11.40	4.065	24.73	5.858	3.603
#3	3.232	13.95	6.266	2.245	11.57	4.062	24.61	5.852	3.605

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.8453**	**.4824**	**1.409**	**1.479**	**54.63**	**7.796**	**1.164**	**2.578**	**10.27**
Stddev	.0006	.0005	.001	.003	.21	.037	.001	.006	.03
%RSD	.0656	.1081	.0561	.1747	.3840	.4699	.0967	.2239	.2777
#1	.8454	.4829	1.409	1.481	54.76	7.797	1.164	2.583	10.29
#2	.8447	.4819	1.408	1.479	54.75	7.759	1.163	2.572	10.28
#3	.8457	.4825	1.409	1.476	54.39	7.832	1.165	2.579	10.24

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1824.8**	**4143.2**	**30421.**	**4006.1**
Stddev	6.5	15.6	194.	6.3
%RSD	.35650	.37621	.63771	.15703
#1	1818.0	4135.0	30531.	4001.2
#2	1825.3	4133.5	30536.	4003.8
#3	1831.0	4161.2	30197.	4013.2

Zoom In Zoom Out

Sample Name: HSTD Acquired: 12/31/2018 8:26:41 Type: QC
Method: 60102007_042011(v374) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5028	80.44	4.021	4.021	4.001	79.77	3.964	3.969	3.991
Stddev	.0029	.33	.004	.012	.024	.52	.008	.007	.006
%RSD	.5761	.4125	.0994	.2908	.6085	.6522	.1988	.1701	.1468
#1	.5062	80.31	4.025	4.022	3.997	79.53	3.972	3.977	3.984
#2	.5014	80.81	4.017	4.033	4.027	80.37	3.956	3.965	3.994
#3	.5009	80.18	4.022	4.009	3.978	79.42	3.966	3.966	3.995
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.061	79.82	80.19	81.12	3.979	4.005	80.32	3.954	4.026
Stddev	.021	.46	.45	.72	.027	.006	.42	.010	.005
%RSD	.5270	.5754	.5671	.8923	.6745	.1415	.5236	.2550	.1206
#1	4.078	79.65	79.84	81.04	3.948	4.009	80.12	3.960	4.025
#2	4.037	80.35	80.70	81.88	3.991	3.999	80.80	3.942	4.032
#3	4.068	79.48	80.03	80.44	3.998	4.008	80.03	3.960	4.023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.996	4.009	4.095	3.971	3.998	4.009	4.013	3.970	3.982
Stddev	.003	.015	.008	.006	.019	.010	.011	.002	.013
%RSD	.0728	.3802	.1874	.1607	.4735	.2564	.2847	.0476	.3261
#1	4.000	4.020	4.099	3.975	3.988	4.010	4.003	3.969	3.988
#2	3.994	3.991	4.086	3.964	4.020	3.999	4.025	3.969	3.967
#3	3.995	4.016	4.099	3.974	3.987	4.019	4.009	3.972	3.990
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

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Zoom In Zoom Out

Sample Name: HSTD Acquired: 12/31/2018 8:26:41 Type: QC
Method: 60102007_042011(v374) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1811.6	4112.2	29918.	3889.3
Stddev	2.3	9.7	126.	36.3
%RSD	.12498	.23493	.42047	.93302
#1	1810.7	4102.8	30022.	3916.4
#2	1809.9	4122.1	29778.	3848.0
#3	1814.2	4111.8	29955.	3903.4

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Zoom In Zoom Out

Sample Name: ICV Acquired: 12/31/2018 8:34:34 Type: QC
Method: 60102007_042011(v374) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2353	43.67	1.998	1.966	2.053	40.93	2.013	2.029	2.044
Stddev	.0014	.15	.012	.002	.004	.13	.006	.005	.009
%RSD	.6077	.3476	.6209	.0920	.1897	.3193	.2988	.2250	.4306
#1	.2355	43.81	1.986	1.968	2.057	40.88	2.008	2.024	2.037
#2	.2338	43.69	1.999	1.965	2.054	40.84	2.012	2.030	2.041
#3	.2366	43.51	2.011	1.965	2.049	41.08	2.020	2.033	2.054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.062	40.82	40.97	43.51	2.076	1.876	40.86	2.002	1.964
Stddev	.012	.15	.08	.24	.020	.004	.11	.007	.007
%RSD	.5690	.3589	.1995	.5602	.9616	.1943	.2600	.3557	.3607
#1	2.059	40.95	40.99	43.62	2.061	1.873	40.93	1.995	1.961
#2	2.053	40.85	40.88	43.67	2.068	1.876	40.74	2.001	1.958
#3	2.075	40.66	41.04	43.23	2.098	1.880	40.92	2.009	1.972
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.128	2.013	.1230	2.066	1.986	2.036	2.058	1.967	2.026
Stddev	.007	.001	.0000	.005	.005	.016	.007	.012	.008
%RSD	.3333	.0665	.0246	.2521	.2657	.7832	.3624	.6114	.3787
#1	2.120	2.011	.1230	2.060	1.992	2.023	2.058	1.957	2.024
#2	2.131	2.014	.1230	2.070	1.986	2.031	2.050	1.965	2.021
#3	2.133	2.013	.1230	2.069	1.981	2.054	2.065	1.981	2.035
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

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Zoom In Zoom Out

Sample Name: ICV Acquired: 12/31/2018 8:34:34 Type: QC
Method: 60102007_042011(v374) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1959.5	4262.8	30073.	3875.6
Stddev	7.9	10.9	328.	14.1
%RSD	.40537	.25517	1.0892	.36357
#1	1956.2	4268.6	30322.	3869.4
#2	1968.6	4269.5	30196.	3865.8
#3	1953.8	4250.2	29702.	3891.8

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Zoom In Zoom Out

Sample Name: ICB Acquired: 12/31/2018 8:51:05 Type: QC
Method: 60102007_042011(v374) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0042	.0009	.0001	-.0001	-.0020	.0000	-.0001	-.0002
Stddev	.000	.0115	.0003	.0001	.0000	.0028	.000	.0001	.0002
%RSD	1161.	272.1	30.21	94.67	31.47	139.8	25.27	79.40	147.1
#1	-.0003	.0103	.0013	.0002	-.0001	-.0028	-.0001	-.0001	-.0004
#2	.0001	-.0090	.0007	.0000	-.0001	-.0042	.0000	-.0002	-.0002
#3	.0002	.0114	.0008	.0000	.0000	.0011	.0000	.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0004	-.0390	.0183	-.0001	-.0001	-.0362	.0000	.0006
Stddev	.0000	.0009	.0191	.0287	.0001	.0002	.0077	.0002	.0003
%RSD	4.263	236.2	48.97	156.4	96.95	252.9	21.31	5554.	55.26
#1	.0006	-.0005	-.0389	.0450	-.0001	.0001	-.0423	-.0002	.0005
#2	.0006	.0003	-.0581	.0221	.0000	-.0002	-.0275	.0001	.0003
#3	.0006	.0013	-.0200	-.0120	.0000	-.0001	-.0387	.0001	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0005	-.0003	.0001	-.0001	.0001	-.0010	.0000	-.0001
Stddev	.0005	.0032	.0006	.0002	.0001	.0000	.0007	.0004	.0001
%RSD	330.5	608.1	197.2	360.1	51.19	21.56	65.47	1250.	82.65
#1	-.0003	.0027	-.0001	-.0001	-.0001	.0001	-.0018	-.0005	-.0001
#2	-.0006	.0021	.0002	-.0001	.0000	.0001	-.0007	.0003	.0000
#3	.0004	-.0032	-.0009	.0003	-.0001	.0001	-.0006	.0003	-.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

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Zoom In Zoom Out

Sample Name: ICB Acquired: 12/31/2018 8:51:05 Type: QC
Method: 60102007_042011(v374) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2344.8	4466.4	31456.	3993.9
Stddev	6.2	14.7	105.	13.7
%RSD	.26604	.32983	.33343	.34236
#1	2351.2	4474.8	31425.	3978.1
#2	2338.7	4449.4	31573.	4001.9
#3	2344.4	4475.1	31371.	4001.6

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Zoom In Zoom Out

Sample Name: CRIA Acquired: 12/31/2018 9:07:45 Type: QC
Method: 60102007_042011(v374) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0085	.1781	.0110	.1952	.0051	.9992	.0052	.0514	.0101
Stddev	.0016	.0197	.0008	.0011	.0001	.0075	.0001	.0000	.0001
%RSD	18.38	11.08	7.056	.5786	2.146	.7500	1.017	.0458	.9162
#1	.0101	.2006	.0101	.1965	.0050	1.008	.0052	.0514	.0100
#2	.0071	.1702	.0116	.1942	.0052	.9951	.0051	.0514	.0101
#3	.0082	.1636	.0111	.1949	.0051	.9947	.0052	.0514	.0101
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0258	.2967	9.707	4.991	.0157	.0468	9.719	.0421	.0053
Stddev	.0002	.0072	.100	.050	.0001	.0002	.034	.0002	.0010
%RSD	.9056	2.443	1.031	.9940	.4241	.4789	.3540	.5151	19.45
#1	.0258	.2983	9.816	5.047	.0157	.0466	9.756	.0422	.0058
#2	.0256	.3030	9.618	4.973	.0156	.0466	9.689	.0422	.0041
#3	.0260	.2888	9.687	4.953	.0156	.0470	9.710	.0418	.0060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0042	.0085	.0024	.0516	.0099	.0098	.0083	.0488	.0212
Stddev	.0010	.0015	.0004	.0001	.0001	.0001	.0002	.0001	.0001
%RSD	23.01	18.03	17.83	.2539	.9256	1.369	2.046	.2991	.2731
#1	.0033	.0067	.0028	.0517	.0100	.0096	.0085	.0490	.0212
#2	.0052	.0094	.0019	.0517	.0098	.0099	.0082	.0488	.0211
#3	.0042	.0094	.0026	.0515	.0098	.0098	.0082	.0487	.0211
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

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Zoom In Zoom Out

Sample Name: CRIA Acquired: 12/31/2018 9:07:45 Type: QC
Method: 60102007_042011(v374) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2209.3	4369.0	31454.	4043.8
Stddev	3.0	9.1	163.	24.8
%RSD	.13462	.20925	.51744	.61338
#1	2208.4	4374.6	31304.	4018.1
#2	2206.9	4358.4	31431.	4067.6
#3	2212.7	4373.9	31627.	4045.6

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Zoom In Zoom Out

Sample Name: ICSA Acquired: 12/31/2018 9:15:49 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	529.3	.0000	.0003	-.0001	476.2	-.0001	.0000	.0000
Stddev	.0010	1.6	.0020	.0006	.0001	7.0	.0000	.0000	.0001
%RSD	1652.	.3103	9171.	206.4	163.0	1.463	65.19	258.8	1587.
#1	.0003	527.6	.0004	.0009	-.0001	484.2	-.0001	.0000	.0000
#2	.0009	530.9	.0018	.0001	-.0001	472.1	.0000	.0000	.0002
#3	-.0011	529.4	-.0021	-.0002	.0001	472.1	.0000	.0000	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	189.1	.0481	514.3	.0003	.0001	.1754	-.0010	.0008
Stddev	.0005	.7	.0247	3.9	.0001	.0003	.0044	.0000	.0019
%RSD	1433.	.3893	51.38	.7614	19.17	197.1	2.520	3.749	245.0
#1	-.0005	189.9	.0258	518.8	.0004	.0004	.1783	-.0010	.0009
#2	.0004	188.7	.0439	512.0	.0003	.0001	.1703	-.0009	-.0012
#3	.0002	188.6	.0747	512.0	.0002	-.0001	.1775	-.0009	.0026
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	.0000	.0099	.0003	.0001	.0000	.0000	.0004	-.0003
Stddev	.0023	.007	.0006	.0004	.0001	.0001	.001	.0000	.0001
%RSD	506.4	49110.	5.650	108.1	291.8	700.3	7442.	6.511	26.89
#1	-.0023	-.0071	.0102	.0007	-.0001	.0001	.0000	.0005	-.0004
#2	-.0011	.0077	.0102	.0001	.0001	.0000	.0013	.0004	-.0003
#3	.0021	-.0006	.0092	.0002	.0001	.0000	-.0014	.0004	-.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ICSA Acquired: 12/31/2018 9:15:49 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1760.5	3971.4	28282.	3820.6
Stddev	1.3	3.5	266.	35.4
%RSD	.07489	.08800	.94060	.92636
#1	1760.7	3973.7	28057.	3779.8
#2	1759.1	3967.4	28212.	3839.7
#3	1761.7	3973.0	28575.	3842.3

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 12/31/2018 9:23:25 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.085	523.1	.9815	.5071	.5059	475.8	.9498	.4754	.4956
Stddev	.004	6.0	.0031	.0027	.0022	7.1	.0049	.0019	.0010
%RSD	.3585	1.144	.3115	.5264	.4369	1.482	.5154	.3974	.2045
#1	1.087	519.6	.9847	.5051	.5060	468.2	.9549	.4775	.4953
#2	1.081	530.0	.9811	.5102	.5081	482.1	.9494	.4750	.4948
#3	1.089	519.8	.9786	.5062	.5037	477.2	.9452	.4738	.4967
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5389	183.3	.0373	498.8	.5093	.8424	.2231	.9491	.9573
Stddev	.0022	.6	.0757	1.6	.0011	.0019	.0122	.0052	.0065
%RSD	.4154	.3371	203.0	.3282	.2189	.2205	5.451	.5455	.6792
#1	.5414	183.2	.0846	497.0	.5104	.8439	.2128	.9546	.9647
#2	.5371	184.0	-.0500	500.1	.5082	.8430	.2365	.9487	.9548
#3	.5381	182.8	.0774	499.3	.5093	.8404	.2199	.9442	.9525
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9956	.9122	.0950	F 1.675	.9213	1.042	.8840	.4965	.9607
Stddev	.0032	.0078	.0012	.006	.0048	.002	.0053	.0018	.0042
%RSD	.3213	.8556	1.314	.3391	.5177	.1492	.6005	.3547	.4343
#1	.9979	.9199	.0953	1.681	.9239	1.042	.8874	.4983	.9646
#2	.9970	.9123	.0960	1.670	.9242	1.040	.8779	.4948	.9612
#3	.9920	.9043	.0936	1.672	.9158	1.043	.8866	.4963	.9563
Check ?	Chk Pass	Chk Pass	None	Chk Fail	None	None	Chk Pass	Chk Pass	Chk Pass
Value				1.000					
Range				20.00%					

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 12/31/2018 9:23:25 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1749.9	3990.5	28922.	3949.3
Stddev	7.7	18.6	135.	31.6
%RSD	.43802	.46565	.46584	.80015
#1	1741.3	3969.5	29041.	3964.5
#2	1755.9	3997.5	28776.	3913.0
#3	1752.5	4004.7	28950.	3970.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/31/2018 9:30:33 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2525	41.21	2.048	2.034	2.044	40.74	2.063	2.057	2.069
Stddev	.0008	.02	.006	.002	.002	.05	.006	.003	.007
%RSD	.3148	.0471	.3083	.1057	.1072	.1198	.2725	.1593	.3299
#1	.2531	41.21	2.050	2.034	2.044	40.73	2.068	2.058	2.075
#2	.2528	41.20	2.041	2.032	2.041	40.69	2.057	2.053	2.061
#3	.2516	41.23	2.054	2.036	2.045	40.79	2.064	2.060	2.070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.050	41.08	40.73	41.18	2.097	2.077	40.74	2.065	2.026
Stddev	.006	.06	.10	.07	.016	.003	.08	.005	.002
%RSD	.3143	.1466	.2368	.1629	.7798	.1340	.2000	.2204	.0834
#1	2.052	41.14	40.71	41.25	2.113	2.076	40.66	2.068	2.027
#2	2.042	41.08	40.65	41.18	2.080	2.076	40.75	2.060	2.024
#3	2.055	41.01	40.84	41.12	2.099	2.080	40.82	2.068	2.027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.053	2.050	2.061	2.095	2.058	2.085	2.047	2.085	2.073
Stddev	.007	.008	.008	.005	.002	.012	.005	.006	.009
%RSD	.3505	.4101	.3814	.2273	.0753	.5727	.2636	.3140	.4556
#1	2.055	2.046	2.064	2.094	2.058	2.097	2.052	2.093	2.082
#2	2.045	2.045	2.052	2.100	2.057	2.073	2.046	2.080	2.063
#3	2.059	2.060	2.067	2.091	2.060	2.085	2.041	2.084	2.075
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/31/2018 9:30:33 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1951.6	4236.7	30549.	3938.5
Stddev	4.4	6.7	132.	9.2
%RSD	.22668	.15729	.43214	.23251
#1	1947.2	4232.9	30441.	3946.9
#2	1951.4	4244.4	30697.	3939.9
#3	1956.1	4232.8	30510.	3928.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/31/2018 9:38:08 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	-.0011	.0013	-.0001	.0002	.0113	.0001	.0000	-.0002
Stddev	.0001	.0065	.0008	.0002	.0000	.0036	.0001	.0002	.0002
%RSD	32.35	578.2	57.51	271.9	19.95	31.69	76.56	541.2	81.20
#1	.0005	.0039	.0016	-.0003	.0003	.0092	.0002	.0002	-.0004
#2	.0004	.0011	.0019	.0002	.0003	.0154	.0001	.0000	-.0002
#3	.0003	-.0085	.0005	-.0002	.0002	.0092	.0000	-.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	.0046	-.0356	.0046	.0005	.0004	.0002	.0002	.0003
Stddev	.0003	.0015	.0502	.0199	.0001	.0001	.0077	.0001	.0008
%RSD	33.01	31.90	140.8	434.5	14.72	15.86	3155.	77.10	265.7
#1	.0007	.0042	.0187	-.0174	.0005	.0004	.0090	.0003	.0003
#2	.0012	.0062	-.0802	.0213	.0005	.0004	-.0029	.0000	.0011
#3	.0007	.0033	-.0453	.0098	.0004	.0003	-.0054	.0002	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	.0002	.0012	.0003	.0003	.0005	-.0003	.0004	.0006
Stddev	.0012	.0013	.0009	.0002	.0001	.0001	.0002	.0002	.0000
%RSD	187.1	647.5	75.72	93.16	33.86	13.15	86.47	54.73	1.026
#1	.0006	-.0007	.0003	.0004	.0003	.0004	-.0003	.0003	.0007
#2	-.0007	-.0003	.0021	.0000	.0002	.0005	-.0001	.0003	.0007
#3	-.0019	.0017	.0012	.0004	.0004	.0004	-.0005	.0007	.0006
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/31/2018 9:38:08 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2334.6	4437.2	31671.	4001.7
Stddev	8.6	3.9	42.	56.5
%RSD	.36901	.08870	.13196	1.4123
#1	2326.3	4433.0	31717.	4067.0
#2	2343.5	4440.8	31662.	3969.9
#3	2334.0	4437.7	31635.	3968.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/31/2018 10:26:48 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2518	41.53	2.070	2.044	2.060	41.15	2.079	2.071	2.091
Stddev	.0010	.34	.008	.014	.012	.18	.005	.004	.007
%RSD	.4164	.8106	.3792	.6734	.5719	.4287	.2500	.1826	.3582
#1	.2506	41.14	2.062	2.028	2.048	40.95	2.077	2.069	2.095
#2	.2523	41.77	2.069	2.050	2.061	41.21	2.074	2.069	2.096
#3	.2524	41.66	2.078	2.054	2.071	41.29	2.084	2.075	2.082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.060	41.32	41.24	41.53	2.115	2.096	41.16	2.080	2.044
Stddev	.007	.30	.24	.43	.013	.004	.15	.009	.005
%RSD	.3308	.7269	.5771	1.040	.5944	.2085	.3556	.4349	.2396
#1	2.054	40.98	41.02	41.04	2.113	2.097	41.00	2.074	2.041
#2	2.067	41.49	41.49	41.86	2.128	2.091	41.27	2.077	2.041
#3	2.058	41.51	41.22	41.69	2.103	2.100	41.22	2.091	2.050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.073	2.078	2.080	2.107	2.077	2.100	2.071	2.106	2.088
Stddev	.004	.010	.005	.002	.010	.011	.007	.004	.009
%RSD	.2043	.4633	.2418	.0844	.4931	.5070	.3215	.1903	.4219
#1	2.069	2.072	2.078	2.108	2.066	2.097	2.067	2.106	2.081
#2	2.074	2.073	2.076	2.105	2.085	2.112	2.068	2.110	2.084
#3	2.077	2.089	2.086	2.109	2.081	2.091	2.079	2.102	2.098
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/31/2018 10:26:48 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1954.1	4247.2	30399.	3908.5
Stddev	3.7	8.6	284.	31.7
%RSD	.18742	.20218	.93441	.81224
#1	1951.1	4248.4	30560.	3935.7
#2	1958.2	4255.2	30071.	3873.6
#3	1953.0	4238.1	30567.	3916.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/31/2018 10:31:00 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	-.0040	.0008	.0004	.0003	.0113	.0000	.0002	-.0001
Stddev	.0010	.0093	.0005	.0002	.0001	.0021	.0001	.0002	.0002
%RSD	252.9	231.4	67.58	46.02	35.24	18.86	167.7	133.1	272.8
#1	.0008	-.0030	.0002	.0004	.0004	.0128	.0001	.0003	.0001
#2	-.0009	.0047	.0009	.0007	.0003	.0121	.0000	-.0001	-.0003
#3	-.0011	-.0138	.0012	.0003	.0002	.0088	.0000	.0002	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0090	-.0546	.0017	.0005	.0008	.0019	.0002	-.0001
Stddev	.0002	.0030	.0266	.0175	.0000	.0002	.0086	.0000	.0005
%RSD	29.85	33.39	48.67	1032.	7.918	20.18	445.7	20.66	498.2
#1	.0004	.0124	-.0746	-.0158	.0005	.0010	-.0016	.0001	-.0006
#2	.0008	.0065	-.0244	.0193	.0004	.0007	.0117	.0002	.0004
#3	.0007	.0081	-.0647	.0016	.0005	.0007	-.0043	.0002	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0015	.0004	.0026	.0004	.0004	.0009	.0005	.0000	.0006
Stddev	.0009	.0004	.0013	.0004	.0001	.0001	.0003	.0004	.0001
%RSD	56.02	90.88	48.51	110.4	21.28	11.97	51.98	1892.	10.75
#1	-.0019	.0001	.0015	-.0001	.0005	.0008	.0004	.0002	.0007
#2	-.0006	.0003	.0023	.0007	.0004	.0010	.0008	.0003	.0006
#3	-.0022	.0009	.0040	.0004	.0004	.0009	.0003	-.0004	.0005
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/31/2018 10:31:00 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2334.8	4484.0	32072.	4014.2
Stddev	3.8	14.0	91.	41.8
%RSD	.16172	.31117	.28515	1.0404
#1	2333.4	4472.8	31978.	3983.1
#2	2339.0	4499.7	32161.	4061.7
#3	2331.9	4479.6	32078.	3997.8

Zoom In
Zoom Out

Sample Name: MP34876-MB1 Acquired: 12/31/2018 10:53:35 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0174	.0001	-.0002	-.0001	.0110	-.0001	-.0001	.0006
Stddev	.001	.0171	.0014	.0004	.0001	.0034	.0000	.0001	.0003
%RSD	1872.	98.16	1641.	188.0	58.94	31.01	30.22	59.79	51.69
#1	.0005	-.0362	.0015	.0003	-.0001	.0116	-.0001	-.0001	.0002
#2	.0004	-.0029	-.0013	-.0005	.0000	.0141	-.0002	.0000	.0008
#3	-.0010	-.0130	.0000	-.0005	-.0001	.0073	-.0002	-.0002	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0751	.0024	.0013	.0003	-.0001	.1053	-.0001	.0002
Stddev	.0002	.0010	.0308	.0185	.0001	.0001	.0157	.0001	.0004
%RSD	387.0	1.354	1271.	1418.	14.40	276.4	14.92	87.37	163.0
#1	-.0002	.0740	-.0315	-.0135	.0003	-.0002	.1076	-.0002	.0004
#2	-.0001	.0756	.0286	-.0046	.0004	.0001	.1197	-.0002	.0006
#3	.0002	.0758	.0101	.0220	.0003	-.0001	.0885	.0000	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0009	.0381	.0002	.0001	.0001	-.0017	-.0001	.0026
Stddev	.0005	.0008	.0002	.0002	.0001	.0001	.0012	.0004	.0000
%RSD	517.2	87.68	.6327	82.85	204.3	54.65	67.78	436.8	.9967
#1	.0005	.0014	.0384	.0004	.0000	.0001	-.0022	.0000	.0026
#2	-.0005	.0000	.0379	.0003	.0002	.0002	-.0004	-.0005	.0026
#3	.0003	.0013	.0381	.0000	-.0001	.0001	-.0026	.0002	.0026
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In
Zoom Out

Sample Name: MP34876-MB1 Acquired: 12/31/2018 10:53:35 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2284.2	4431.6	31657.	3937.3
Stddev	2.1	6.8	231.	12.1
%RSD	.09338	.15279	.72883	.30806
#1	2283.7	4425.5	31392.	3934.4
#2	2282.4	4438.9	31818.	3950.6
#3	2286.5	4430.5	31759.	3926.9

Zoom In
Zoom Out

Sample Name: MP34876-B1 Acquired: 12/31/2018 10:58:07 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0498	27.15	1.928	2.026	.0509	25.20	.0497	.5031	.2053
Stddev	.0011	.18	.009	.010	.0003	.09	.0001	.0009	.0004
%RSD	2.208	.6708	.4477	.4942	.5550	.3751	.1329	.1874	.1999
#1	.0486	26.94	1.919	2.017	.0507	25.10	.0497	.5034	.2055
#2	.0501	27.24	1.930	2.024	.0509	25.21	.0498	.5021	.2048
#3	.0507	27.26	1.936	2.036	.0512	25.28	.0498	.5039	.2056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2539	26.37	24.99	25.64	.5135	.4744	25.07	.5054	.4743
Stddev	.0007	.15	.17	.24	.0007	.0008	.16	.0001	.0022
%RSD	.2617	.5539	.6724	.9541	.1429	.1586	.6303	.0252	.4542
#1	.2543	26.21	24.82	25.38	.5135	.4743	24.90	.5053	.4743
#2	.2531	26.41	25.15	25.67	.5127	.4737	25.09	.5055	.4721
#3	.2542	26.49	25.01	25.86	.5142	.4752	25.21	.5055	.4765
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5128	1.909	.2866	.5030	.4862	.4914	1.956	.4878	.4937
Stddev	.0017	.004	.0008	.0008	.0028	.0011	.002	.0025	.0012
%RSD	.3240	.1923	.2781	.1641	.5791	.2254	.0920	.5197	.2441
#1	.5119	1.909	.2857	.5027	.4830	.4927	1.958	.4907	.4923
#2	.5118	1.905	.2870	.5023	.4871	.4907	1.957	.4865	.4945
#3	.5147	1.912	.2871	.5039	.4884	.4908	1.954	.4862	.4942
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In
Zoom Out

Sample Name: MP34876-B1 Acquired: 12/31/2018 10:58:07 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2028.0	4294.5	30784.	3850.1
Stddev	4.6	5.1	31.	20.9
%RSD	.22491	.11770	.10054	.54266
#1	2022.9	4291.2	30761.	3874.0
#2	2029.4	4292.0	30771.	3835.6
#3	2031.8	4300.4	30819.	3840.5

Zoom In
Zoom Out

Sample Name: FA60401-2 Acquired: 12/31/2018 11:02:21 Type: Unk
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0008	.0089	-.0001	.1194	.0000	109.2	.0001	-.0002	.0161
Stddev	.0002	.0230	.0017	.0013	.0001	.3	.0000	.0002	.0002
%RSD	20.88	257.6	1691.	1.051	746.5	.2922	39.81	70.85	1.006
#1	.0006	.0241	.0000	.1180	.0001	109.3	.0001	-.0003	.0160
#2	.0008	.0202	.0016	.1197	.0000	108.9	.0001	-.0004	.0163
#3	.0009	-.0175	-.0019	.1205	.0000	109.5	.0001	-.0001	.0160

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0220	.1635	4.603	70.24	.0028	.0012	F 242.2	.0068	-.0024
Stddev	.0003	.0004	.087	.60	.0001	.0001	.7	.0001	.0010
%RSD	1.363	.2206	1.882	.8595	2.329	8.045	.3000	1.053	41.87
#1	.0219	.1639	4.506	70.02	.0028	.0013	242.0	.0068	-.0028
#2	.0218	.1631	4.671	69.77	.0029	.0011	241.6	.0067	-.0012
#3	.0224	.1636	4.633	70.92	.0028	.0012	243.0	.0068	-.0031

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0008	-.0007	11.11	.0003	1.265	.0011	-.0032	.0013	.0174
Stddev	.0002	.0008	.03	.0004	.006	.0003	.0008	.0001	.0001
%RSD	25.77	109.6	.2928	124.1	.5038	24.55	23.62	9.037	.3771
#1	.0009	-.0001	11.13	.0000	1.264	.0011	-.0025	.0013	.0173
#2	.0009	-.0004	11.07	.0002	1.259	.0014	-.0030	.0014	.0175
#3	.0006	-.0016	11.12	.0008	1.272	.0009	-.0040	.0012	.0174

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1849.2	4004.6	29277.	3810.4
Stddev	5.6	12.2	117.	28.5
%RSD	.30486	.30541	.40081	.74886
#1	1855.4	3998.7	29344.	3803.8
#2	1847.9	4018.6	29142.	3841.7
#3	1844.3	3996.4	29346.	3785.8

Zoom In
Zoom Out

Sample Name: MP34876-D1 Acquired: 12/31/2018 11:06:56 Type: Unk
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	.0041	.0000	.1148	.0000	105.9	.0001	-.0003	.0154
Stddev	.0006	.0184	.0004	.0060	.000	5.4	.0000	.0001	.0004
%RSD	344.7	448.7	921.8	5.222	620.5	5.141	31.84	43.20	2.326
#1	-.0005	-.0050	.0003	.1079	.0001	99.65	.0001	-.0002	.0151
#2	.0004	.0253	-.0004	.1185	-.0001	108.8	.0001	-.0002	.0158
#3	.0005	-.0079	.0003	.1181	-.0001	109.4	.0001	-.0004	.0154

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0217	.1474	4.534	68.10	.0027	.0011	F 241.2	.0064	-.0016
Stddev	.0004	.0071	.225	3.01	.0000	.0002	8.1	.0004	.0007
%RSD	1.962	4.826	4.965	4.425	.7492	16.54	3.338	6.424	43.01
#1	.0221	.1392	4.280	64.63	.0027	.0011	233.3	.0061	-.0024
#2	.0213	.1514	4.611	69.62	.0027	.0010	240.8	.0069	-.0011
#3	.0216	.1516	4.710	70.06	.0027	.0013	249.4	.0064	-.0014

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0001	.0022	11.07	.0002	1.227	.0011	-.0029	.0011	.0172
Stddev	.0018	.0028	.01	.0002	.065	.0001	.0008	.0003	.0000
%RSD	1675.	125.4	.0933	86.53	5.274	4.715	28.86	30.24	.2156
#1	.0019	-.0006	11.07	.0002	1.152	.0012	-.0038	.0007	.0172
#2	-.0014	.0050	11.09	.0004	1.263	.0012	-.0026	.0012	.0172
#3	-.0008	.0023	11.07	.0000	1.266	.0011	-.0022	.0013	.0171

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1854.4	4011.7	29365.	3901.7
Stddev	3.6	2.4	235.	166.1
%RSD	.19159	.05943	.80128	4.2567
#1	1850.4	4013.8	29094.	4088.7
#2	1855.6	4009.1	29504.	3845.1
#3	1857.2	4012.1	29498.	3771.3

Zoom In
Zoom Out

Sample Name: MP34876-SD1 Acquired: 12/31/2018 11:11:33 Type: Unk
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0002	-.0642	.0022	.1187	-.0005	108.0	.0000	-.0006	.0150
Stddev	.0032	.0941	.0040	.0015	.0001	.5	.000	.0005	.0019
%RSD	1643.	146.6	186.6	1.279	21.99	.4216	673.6	82.09	12.83
#1	-.0033	-.1026	-.0003	.1177	-.0005	108.5	.0001	-.0012	.0162
#2	-.0004	.0430	-.0001	.1178	-.0005	107.8	-.0002	-.0001	.0128
#3	.0031	-.1330	.0068	.1204	-.0004	107.6	.0000	-.0006	.0160

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0216	.1470	4.517	70.43	.0028	.0000	242.9	.0074	-.0009
Stddev	.0004	.0195	.158	.34	.0000	.001	.8	.0011	.0000
%RSD	1.763	13.24	3.493	.4899	.9117	3125.	.3482	14.92	2.599
#1	.0212	.1694	4.382	70.27	.0028	.0007	243.8	.0083	-.0009
#2	.0215	.1374	4.691	70.82	.0028	.0005	242.9	.0078	-.0009
#3	.0220	.1341	4.478	70.19	.0028	-.0014	242.1	.0062	-.0009

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0015	.0018	10.99	-.0006	1.252	.0024	-.0074	.0003	.0174
Stddev	.0034	.0111	.01	.0028	.004	.0002	.0008	.0008	.0002
%RSD	234.3	605.6	.1111	510.7	.3132	8.227	11.18	233.5	1.143
#1	.0022	-.0003	11.00	-.0038	1.256	.0022	-.0083	.0011	.0173
#2	-.0046	.0139	10.99	.0006	1.249	.0025	-.0072	-.0005	.0176
#3	-.0019	-.0080	10.98	.0015	1.250	.0026	-.0067	.0004	.0173

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2095.6	4319.3	31176.	3948.9
Stddev	4.9	4.5	194.	22.9
%RSD	.23540	.10378	.62103	.57882
#1	2101.3	4319.6	31383.	3975.0
#2	2092.6	4314.7	31145.	3938.7
#3	2092.8	4323.7	31000.	3932.9

Zoom In
Zoom Out

Sample Name: MP34876-PS1 Acquired: 12/31/2018 11:16:01 Type: Unk
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0498	2.510	.1072	.3710	.0504	111.3	.0494	.0490	.0659
Stddev	.0011	.021	.0010	.0024	.0002	.1	.0001	.0000	.0005
%RSD	2.181	.8203	.9276	.6373	.4581	.1033	.1517	.0454	.7236
#1	.0486	2.494	.1063	.3684	.0502	111.3	.0495	.0490	.0658
#2	.0507	2.533	.1083	.3730	.0505	111.2	.0494	.0490	.0664
#3	.0502	2.502	.1070	.3717	.0506	111.5	.0495	.0491	.0654

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1238	3.121	14.69	73.77	.0535	.0955	F 242.9	.1046	.0458
Stddev	.0003	.006	.00	.30	.0002	.0001	3.0	.0003	.0003
%RSD	.2150	.1938	.0167	.4042	.3775	.0581	1.220	.2539	.6445
#1	.1236	3.114	14.69	73.45	.0536	.0954	240.2	.1048	.0461
#2	.1241	3.126	14.70	73.80	.0536	.0955	246.1	.1043	.0455
#3	.1238	3.123	14.69	74.05	.0533	.0955	242.5	.1047	.0459

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1055	.0972	10.87	.0491	1.283	.1013	.0896	.0508	.2646
Stddev	.0006	.0016	.01	.0001	.001	.0004	.0013	.0002	.0009
%RSD	.5607	1.609	.1080	.2480	.0868	.4047	1.453	.4364	.3548
#1	.1049	.0982	10.87	.0490	1.282	.1017	.0908	.0511	.2654
#2	.1056	.0954	10.86	.0492	1.284	.1014	.0882	.0507	.2636
#3	.1061	.0980	10.88	.0491	1.282	.1009	.0899	.0507	.2649

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1839.5	4020.0	29333.	3835.4
Stddev	1.8	7.8	78.	18.2
%RSD	.09579	.19314	.26745	.47535
#1	1839.5	4018.5	29324.	3819.3
#2	1841.2	4028.4	29259.	3855.2
#3	1837.7	4013.0	29415.	3831.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/31/2018 11:20:28 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2530	41.83	2.032	2.086	2.050	40.84	2.052	2.060	2.065
Stddev	.0006	.28	.011	.021	.017	.27	.005	.003	.001
%RSD	.2553	.6633	.5287	1.014	.8232	.6707	.2494	.1315	.0508
#1	.2523	42.01	2.031	2.109	2.065	41.10	2.052	2.059	2.065
#2	.2535	41.51	2.043	2.067	2.032	40.55	2.056	2.063	2.066
#3	.2532	41.98	2.021	2.084	2.053	40.88	2.046	2.059	2.064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.054	41.36	41.10	41.90	2.056	2.085	41.06	2.044	2.040
Stddev	.007	.28	.34	.39	.007	.005	.34	.005	.006
%RSD	.3233	.6804	.8390	.9266	.3458	.2369	.8335	.2289	.2925
#1	2.055	41.63	41.36	42.11	2.060	2.081	41.39	2.041	2.042
#2	2.061	41.07	40.71	41.46	2.060	2.090	40.70	2.050	2.046
#3	2.047	41.38	41.23	42.14	2.047	2.082	41.10	2.042	2.034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.041	2.060	2.047	2.114	2.051	2.049	2.055	2.069	2.036
Stddev	.009	.009	.013	.001	.020	.004	.007	.005	.006
%RSD	.4556	.4243	.6351	.0318	.9520	.2039	.3443	.2350	.2795
#1	2.036	2.053	2.041	2.114	2.068	2.051	2.055	2.074	2.036
#2	2.051	2.070	2.062	2.115	2.030	2.051	2.061	2.066	2.042
#3	2.035	2.057	2.039	2.113	2.055	2.044	2.047	2.066	2.031
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/31/2018 11:20:28 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1940.9	4278.6	30944.	3904.2
Stddev	5.1	1.8	158.	38.6
%RSD	.26531	.04229	.50993	.98822
#1	1935.8	4280.3	31035.	3898.9
#2	1946.1	4279.0	30762.	3945.1
#3	1940.9	4276.7	31035.	3868.5

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/31/2018 11:24:39 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	-.0078	.0006	.0004	.0002	.0077	.0000	.0001	.0000
Stddev	.0003	.0035	.0009	.0007	.0000	.0015	.0001	.0001	.0004
%RSD	100.2	45.62	134.3	155.3	1.205	19.28	164.7	139.0	938.5
#1	.0006	-.0076	.0008	.0003	.0002	.0093	.0001	.0000	.0004
#2	.0000	-.0114	-.0003	-.0001	.0002	.0076	.0001	.0002	.0001
#3	.0003	-.0043	.0014	.0012	.0002	.0063	.0000	.0000	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0027	-.0078	.0264	.0004	.0010	.0692	.0001	.0000
Stddev	.0003	.0005	.0494	.0186	.0000	.0002	.0036	.0001	.0002
%RSD	521.2	19.42	632.5	70.48	3.691	23.83	5.166	87.81	1805.
#1	-.0001	.0021	-.0642	.0070	.0004	.0011	.0651	.0000	.0002
#2	-.0001	.0031	.0279	.0441	.0003	.0011	.0717	.0002	-.0002
#3	.0004	.0029	.0128	.0282	.0003	.0007	.0708	.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0017	.0008	.0020	.0003	.0003	.0008	-.0007	.0003	.0006
Stddev	.0006	.0007	.0003	.0002	.0001	.0001	.0006	.0004	.0001
%RSD	34.67	92.07	15.21	53.61	21.11	16.26	91.23	118.8	10.78
#1	-.0017	.0006	.0020	.0003	.0002	.0009	-.0011	.0005	.0005
#2	-.0011	.0015	.0024	.0005	.0003	.0008	.0000	.0005	.0006
#3	-.0023	.0001	.0018	.0002	.0003	.0006	-.0010	-.0001	.0005
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/31/2018 11:24:39 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2320.3	4504.2	32272.	4020.6
Stddev	5.3	9.1	141.	34.7
%RSD	.23007	.20186	.43675	.86344
#1	2326.3	4514.0	32216.	4022.3
#2	2316.1	4496.1	32167.	4054.5
#3	2318.6	4502.4	32432.	3985.1

Zoom In
Zoom Out

Sample Name: MP34876-S1 Acquired: 12/31/2018 11:29:10 Type: Unk
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0519	27.48	2.002	2.176	.0511	137.3	.0491	.4873	.2178
Stddev	.0003	.12	.003	.016	.0004	.6	.0001	.0005	.0007
%RSD	.6037	.4304	.1469	.7434	.7618	.4619	.1732	.1041	.3197
#1	.0515	27.53	2.004	2.174	.0510	137.4	.0491	.4877	.2180
#2	.0521	27.35	1.999	2.161	.0507	136.6	.0491	.4875	.2171
#3	.0520	27.57	2.003	2.193	.0515	137.9	.0490	.4868	.2184

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2809	26.46	30.75	98.02	.5103	.4702	F 273.5	.4924	.4818
Stddev	.0014	.10	.07	.59	.0024	.0005	2.0	.0006	.0008
%RSD	.5128	.3895	.2273	.5980	.4767	.1092	.7281	.1169	.1715
#1	.2813	26.48	30.77	98.06	.5112	.4708	275.5	.4930	.4823
#2	.2793	26.35	30.68	97.42	.5076	.4701	273.3	.4918	.4808
#3	.2820	26.56	30.82	98.59	.5122	.4697	271.6	.4925	.4822

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5225	1.960	11.58	.4871	1.781	.4907	1.913	.4928	.5038
Stddev	.0027	.005	.01	.0004	.008	.0024	.003	.0034	.0002
%RSD	.5258	.2474	.0937	.0747	.4574	.4790	.1653	.6844	.0477
#1	.5256	1.966	11.59	.4871	1.786	.4901	1.911	.4967	.5038
#2	.5210	1.956	11.59	.4868	1.772	.4886	1.910	.4905	.5041
#3	.5208	1.959	11.57	.4875	1.786	.4932	1.916	.4913	.5036

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1796.7	4067.6	29127.	3808.4
Stddev	5.2	10.6	66.	39.4
%RSD	.28785	.26078	.22828	1.0347
#1	1793.1	4061.7	29112.	3798.9
#2	1794.3	4061.2	29200.	3851.7
#3	1802.6	4079.8	29069.	3774.6

Zoom In
Zoom Out

Sample Name: MP34876-S2 Acquired: 12/31/2018 11:33:32 Type: Unk
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0506	27.32	1.989	2.152	.0507	134.4	.0486	.4844	.2163
Stddev	.0004	.12	.002	.002	.0001	.5	.0001	.0009	.0006
%RSD	.7436	.4391	.0990	.0882	.2607	.3893	.1800	.1900	.2795
#1	.0504	27.26	1.989	2.150	.0507	133.9	.0485	.4838	.2157
#2	.0505	27.46	1.986	2.151	.0509	134.9	.0487	.4840	.2167
#3	.0511	27.24	1.990	2.154	.0506	134.4	.0487	.4855	.2167

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2769	26.23	30.66	95.72	.5060	.4697	F 265.6	.4892	.4787
Stddev	.0007	.11	.17	.50	.0003	.0006	6.5	.0003	.0005
%RSD	.2692	.4118	.5381	.5247	.0680	.1267	2.455	.0607	.1056
#1	.2776	26.19	30.51	95.30	.5063	.4690	268.6	.4889	.4792
#2	.2761	26.36	30.84	96.28	.5060	.4702	270.0	.4892	.4789
#3	.2768	26.16	30.64	95.58	.5056	.4698	258.1	.4895	.4782

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5176	1.953	11.30	.4859	1.752	.4881	1.902	.4861	.5008
Stddev	.0021	.008	.02	.0024	.007	.0005	.009	.0005	.0003
%RSD	.4134	.4047	.1845	.4894	.3816	.1085	.4954	.1000	.0606
#1	.5151	1.948	11.28	.4832	1.746	.4875	1.912	.4862	.5006
#2	.5192	1.949	11.29	.4871	1.759	.4886	1.894	.4856	.5008
#3	.5184	1.962	11.32	.4875	1.752	.4882	1.899	.4866	.5012

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1808.4	4086.7	29385.	3837.2
Stddev	4.0	8.0	115.	35.0
%RSD	.22308	.19688	.39155	.91236
#1	1805.0	4093.0	29306.	3837.3
#2	1807.4	4077.6	29331.	3802.1
#3	1812.9	4089.4	29517.	3872.1

Zoom In
Zoom Out

Sample Name: FA60401-3 Acquired: 12/31/2018 11:37:53 Type: Unk
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0004	.0359	.0015	.0287	-.0001	17.72	.0000	.0000	.0015
Stddev	.0003	.0091	.0004	.0005	.0001	.05	.000	.000	.0003
%RSD	66.29	25.40	28.89	1.649	100.4	.2915	397.8	316.4	21.44
#1	.0005	.0267	.0015	.0289	-.0001	17.69	-.0001	.0001	.0012
#2	.0001	.0360	.0019	.0282	.0000	17.78	.0001	-.0001	.0019
#3	.0006	.0449	.0011	.0290	-.0001	17.69	.0000	-.0001	.0015

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0004	.0151	1.702	10.81	.0495	.0012	36.20	.0034	-.0011
Stddev	.0001	.0016	.011	.13	.0001	.0001	.12	.0004	.0008
%RSD	37.78	10.79	.6142	1.206	.2728	4.918	.3200	10.60	70.13
#1	.0003	.0137	1.703	10.75	.0496	.0011	36.12	.0035	-.0021
#2	.0002	.0149	1.711	10.96	.0496	.0012	36.34	.0037	-.0007
#3	.0005	.0169	1.691	10.72	.0493	.0011	36.16	.0030	-.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0003	.0014	9.224	.0007	.2157	.0011	.0000	.0013	.0068
Stddev	.0013	.0004	.012	.0002	.0009	.0001	.001	.0002	.0001
%RSD	432.0	31.04	.1295	35.83	.4390	9.138	1053.	14.03	1.117
#1	.0010	.0016	9.238	.0009	.2147	.0012	.0002	.0011	.0068
#2	-.0012	.0009	9.214	.0004	.2165	.0012	-.0006	.0015	.0067
#3	.0011	.0016	9.222	.0007	.2160	.0010	.0003	.0014	.0069

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2117.7	4349.1	31309.	3921.1
Stddev	3.1	2.1	152.	29.9
%RSD	.14633	.04719	.48447	.76310
#1	2117.7	4347.3	31266.	3905.7
#2	2120.8	4351.3	31183.	3902.0
#3	2114.6	4348.6	31477.	3955.6

Zoom In
Zoom Out

Sample Name: FA60401-4 Acquired: 12/31/2018 11:42:19 Type: Unk
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0007	.0340	.0001	.0284	.0000	17.52	.0000	.0000	.0017
Stddev	.0009	.0069	.0016	.0009	.000	.13	.000	.000	.0001
%RSD	130.1	20.42	1437.	3.139	253.9	.7459	139.8	1160.	7.655
#1	.0008	.0268	.0015	.0294	-.0001	17.63	.0000	-.0001	.0017
#2	-.0003	.0406	.0006	.0277	.0000	17.38	.0000	.0000	.0016
#3	.0016	.0346	-.0017	.0280	.0000	17.57	-.0001	.0000	.0018

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0001	.0162	1.658	10.70	.0494	.0010	35.81	.0034	-.0011
Stddev	.0006	.0029	.015	.17	.0000	.0001	.25	.0002	.0004
%RSD	888.6	18.18	.9215	1.577	.0524	9.259	.6996	5.992	34.28
#1	-.0008	.0180	1.672	10.83	.0494	.0011	36.05	.0032	-.0007
#2	.0003	.0128	1.642	10.51	.0494	.0009	35.55	.0035	-.0013
#3	.0003	.0177	1.660	10.77	.0494	.0011	35.82	.0035	-.0013

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0007	-.0013	9.121	.0002	.2132	.0011	-.0014	.0014	.0080
Stddev	.0010	.0018	.009	.0004	.0008	.0001	.0019	.0003	.0001
%RSD	140.8	144.2	.0988	216.4	.3578	6.094	137.2	22.47	1.102
#1	-.0017	.0000	9.117	.0007	.2137	.0012	-.0035	.0013	.0079
#2	-.0007	-.0004	9.132	-.0001	.2124	.0011	-.0001	.0017	.0081
#3	.0003	-.0033	9.115	.0000	.2137	.0011	-.0004	.0011	.0080

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2136.1	4377.4	31284.	3946.6
Stddev	3.3	11.4	58.	75.1
%RSD	.15338	.26149	.18543	1.9030
#1	2136.4	4381.8	31238.	3870.9
#2	2132.7	4364.4	31265.	4021.0
#3	2139.3	4385.9	31349.	3947.9

Zoom In Zoom Out

Sample Name: FA60401-6 Acquired: 12/31/2018 11:46:47 Type: Unk
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0006	.0022	.0007	.0784	.0000	41.50	.0000	-.0005	.0041
Stddev	.0004	.0198	.0003	.0002	.000	.40	.000	.0000	.0002
%RSD	65.73	906.7	50.33	.2847	101.3	.9615	113.4	9.598	4.960
#1	.0010	-.0160	.0010	.0783	-.0001	41.73	.0000	-.0005	.0040
#2	.0004	-.0007	.0004	.0787	.0000	41.73	.0000	-.0005	.0043
#3	.0003	.0233	.0006	.0782	.0000	41.04	.0000	-.0006	.0040

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0001	.0091	3.163	23.37	.0005	.0017	61.39	.0022	-.0017
Stddev	.0002	.0015	.047	.33	.0001	.0001	.47	.0002	.0007
%RSD	155.3	15.99	1.494	1.399	13.50	4.950	.7637	11.27	43.21
#1	-.0004	.0087	3.191	23.66	.0004	.0016	61.75	.0022	-.0022
#2	.0000	.0078	3.189	23.43	.0006	.0017	61.56	.0019	-.0009
#3	.0000	.0107	3.108	23.01	.0005	.0017	60.86	.0024	-.0019

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0005	-.0004	12.32	.0006	.4410	.0008	-.0027	.0024	.0065
Stddev	.0003	.0024	.03	.0004	.0037	.0001	.0010	.0003	.0001
%RSD	66.99	643.8	.2150	64.27	.8285	12.00	37.50	14.26	1.427
#1	.0001	-.0029	12.29	.0004	.4431	.0009	-.0033	.0027	.0064
#2	.0008	.0020	12.33	.0005	.4432	.0007	-.0015	.0022	.0066
#3	.0006	-.0002	12.34	.0011	.4368	.0009	-.0033	.0022	.0066

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2055.8	4306.2	30987.	3885.4
Stddev	3.7	2.7	230.	43.1
%RSD	.17889	.06284	.74294	1.1105
#1	2057.0	4309.2	31249.	3860.7
#2	2051.7	4305.7	30815.	3860.2
#3	2058.8	4303.8	30898.	3935.2

Zoom In Zoom Out

Sample Name: FA60401-7 Acquired: 12/31/2018 11:51:13 Type: Unk
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	.0145	.0004	.0777	.0000	41.08	.0000	-.0004	.0043
Stddev	.0009	.0185	.0001	.0002	.000	.10	.000	.0001	.0003
%RSD	865.4	127.4	32.73	.2653	185.8	.2422	62.70	17.03	6.153
#1	-.0008	.0250	.0004	.0779	-.0001	41.06	.0000	-.0003	.0046
#2	-.0004	.0254	.0006	.0775	-.0001	41.19	.0000	-.0005	.0042
#3	.0009	-.0068	.0004	.0776	.0000	40.99	.0000	-.0004	.0041

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0001	.0165	3.140	23.00	.0006	.0019	60.61	.0020	-.0010
Stddev	.0002	.0017	.033	.06	.0001	.0002	.19	.0001	.0007
%RSD	217.6	10.51	1.064	.2805	9.814	9.062	.3148	6.556	68.36
#1	-.0001	.0145	3.161	23.06	.0006	.0020	60.39	.0019	-.0004
#2	.0002	.0174	3.102	23.01	.0006	.0019	60.72	.0022	-.0018
#3	.0002	.0177	3.159	22.93	.0007	.0017	60.72	.0019	-.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0006	.0008	12.18	.0003	.4369	.0010	-.0023	.0022	.0082
Stddev	.0004	.0010	.03	.0002	.0017	.0001	.0006	.0003	.0000
%RSD	69.49	122.6	.2110	64.76	.3985	8.037	25.09	14.02	.1327
#1	.0001	.0013	12.20	.0003	.4349	.0011	-.0020	.0025	.0082
#2	.0007	.0015	12.15	.0001	.4381	.0009	-.0030	.0021	.0082
#3	.0009	-.0003	12.19	.0005	.4376	.0010	-.0020	.0019	.0082

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2054.1	4309.2	31131.	3928.0
Stddev	8.5	11.4	129.	13.3
%RSD	.41400	.26538	.41502	.33941
#1	2062.9	4322.1	30986.	3924.1
#2	2046.0	4300.1	31172.	3917.0
#3	2053.3	4305.5	31235.	3942.8

Zoom In Zoom Out

Sample Name: FA60401-9 Acquired: 12/31/2018 11:55:39 Type: Unk
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	.0196	-.0009	.1375	.0000	56.88	.0000	-.0005	.0030
Stddev	.0007	.0039	.0005	.0003	.000	.36	.0000	.0001	.0003
%RSD	1293.	20.01	52.60	.1901	403.7	.6324	101.8	26.31	9.719
#1	-.0005	.0197	-.0014	.1378	.0000	57.02	.0000	-.0006	.0032
#2	-.0002	.0235	-.0006	.1375	.0001	57.14	.0001	-.0005	.0027
#3	.0008	.0156	-.0006	.1373	-.0001	56.47	.0000	-.0003	.0031

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0002	.0024	3.260	33.90	.0903	-.0002	F 93.92	.0024	-.0012
Stddev	.0001	.0014	.018	.09	.0008	.0001	.58	.0003	.0003
%RSD	55.63	58.70	.5653	.2645	.9334	81.45	.6199	14.34	23.69
#1	-.0004	.0040	3.275	33.96	.0913	.0000	94.04	.0021	-.0011
#2	-.0001	.0016	3.239	33.95	.0900	-.0002	94.43	.0028	-.0010
#3	-.0003	.0015	3.265	33.80	.0897	-.0002	93.28	.0022	-.0015

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0002	-.0013	11.29	.0001	.7575	.0009	-.0029	.0009	.0067
Stddev	.0009	.0004	.05	.0003	.0024	.0002	.0020	.0003	.0001
%RSD	417.5	27.84	.4699	489.5	.3130	17.72	70.36	32.23	1.095
#1	-.0006	-.0016	11.32	-.0001	.7578	.0007	-.0006	.0006	.0067
#2	-.0009	-.0009	11.32	.0005	.7597	.0009	-.0034	.0011	.0068
#3	.0008	-.0013	11.23	-.0002	.7550	.0010	-.0045	.0011	.0067

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1996.9	4244.8	30310.	3857.4
Stddev	2.4	20.9	164.	34.5
%RSD	.11992	.49249	.53983	.89441
#1	1996.5	4230.8	30121.	3849.2
#2	1999.5	4234.7	30393.	3827.7
#3	1994.8	4268.8	30415.	3895.2

Zoom In Zoom Out

Sample Name: FA60481-3 Acquired: 12/31/2018 12:04:35 Type: Unk
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.0141	.2011	-.0005	.0083	.0000	14.34	-.0001	.0002
Stddev	.0008	.0168	.0014	.0004	.0001	.02	.0000	.0001
%RSD	5.697	8.348	295.8	4.899	615.1	.1391	30.91	56.82
#1	.0147	.1877	-.0004	.0079	.0001	14.37	-.0001	.0001
#2	.0132	.1957	-.0020	.0088	-.0001	14.34	-.0001	.0003
#3	.0144	.2199	.0009	.0083	.0000	14.33	-.0001	.0002

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0141	.0042	.2623	F 1132.	.4728	.0034	.0056	F 754.9
Stddev	.0001	.0003	.0035	13.	.0155	.0000	.0001	14.2
%RSD	.9960	7.337	1.318	1.125	3.273	1.112	1.877	1.887
#1	.0143	.0039	.2658	1146.	.4710	.0034	.0057	771.4
#2	.0141	.0042	.2589	1127.	.4583	.0034	.0056	747.0
#3	.0140	.0046	.2621	1122.	.4891	.0034	.0055	746.3

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0925	.0006	.0013	.0066	1.593	.0026	.0214	.0069
Stddev	.0003	.0017	.0003	.0028	.004	.0002	.0001	.0001
%RSD	.3354	313.7	22.08	43.07	.2432	9.042	.2661	1.204
#1	.0922	.0020	.0013	.0075	1.598	.0028	.0214	.0068
#2	.0925	.0010	.0010	.0034	1.591	.0024	.0213	.0070
#3	.0928	-.0014	.0016	.0088	1.591	.0025	.0214	.0068

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F -.0106	.0012	.1197
Stddev	.0017	.0004	.0002
%RSD	16.38	36.76	.1887
#1	-.0120	.0017	.1199
#2	-.0087	.0011	.1198
#3	-.0112	.0008	.1195

Zoom In Zoom Out

Sample Name: FA60481-3 Acquired: 12/31/2018 12:04:35 Type: Unk
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1629.5	3756.0	26859.	3680.8
Stddev	3.9	5.1	23.	20.5
%RSD	.23907	.13491	.08526	.55800
#1	1628.7	3752.4	26873.	3662.9
#2	1626.1	3753.8	26871.	3676.4
#3	1633.8	3761.8	26833.	3703.2

Zoom In Zoom Out

Sample Name: FA60481-4 Acquired: 12/31/2018 12:09:19 Type: Unk
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.1987	.0445	-.0017	.0007	.0000	1.433	-.0020	.0036
Stddev	.0003	.0217	.0009	.0003	.000	.003	.0001	.0001
%RSD	.1613	48.85	51.79	38.15	213.4	.2074	4.742	2.738
#1	.1990	.0200	-.0020	.0007	.0000	1.434	-.0019	.0035
#2	.1985	.0615	-.0023	.0009	-.0001	1.430	-.0020	.0036
#3	.1985	.0519	-.0007	.0004	.0000	1.436	-.0020	.0036

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0159	.0504	210.9	F 101.5	.1592	.7926	.0089	F 329.9
Stddev	.0005	.0007	.4	.1	.0220	.0033	.0004	2.0
%RSD	3.217	1.477	.1692	.0972	13.84	.4199	4.222	.6069
#1	.0163	.0510	210.5	101.6	.1481	.7963	.0087	332.2
#2	.0161	.0507	211.3	101.5	.1846	.7916	.0086	328.8
#3	.0153	.0496	210.9	101.4	.1449	.7898	.0093	328.6

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0400	F -.0207	.0001	.0058	.4641	.0028	.0036	.0021
Stddev	.0001	.0002	.0006	.0012	.0009	.0002	.0001	.0001
%RSD	.2301	.7973	688.2	20.89	.1967	7.493	4.136	5.563
#1	.0399	-.0205	.0002	.0047	.4651	.0027	.0038	.0021
#2	.0400	-.0207	-.0006	.0056	.4636	.0027	.0035	.0019
#3	.0400	-.0209	.0007	.0072	.4635	.0030	.0036	.0021

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0030	.0054	.0176
Stddev	.0008	.0003	.0003
%RSD	27.56	5.595	1.422
#1	-.0035	.0051	.0179
#2	-.0034	.0056	.0176
#3	-.0020	.0056	.0174

Zoom In Zoom Out

Sample Name: FA60481-4 Acquired: 12/31/2018 12:09:19 Type: Unk
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1919.6	4117.2	29527.	3842.2
Stddev	5.8	16.0	91.	17.0
%RSD	.30037	.38745	.30852	.44324
#1	1913.1	4102.0	29443.	3845.9
#2	1921.5	4115.7	29513.	3823.6
#3	1924.1	4133.8	29624.	3857.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/31/2018 12:13:50 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2524	41.81	2.028	2.107	2.031	40.26	2.036	2.055	2.047
Stddev	.0013	.14	.004	.008	.002	.08	.001	.003	.002
%RSD	.5024	.3349	.1762	.3795	.0741	.2067	.0667	.1202	.1006
#1	.2510	41.77	2.032	2.102	2.032	40.23	2.037	2.058	2.044
#2	.2528	41.97	2.026	2.116	2.033	40.36	2.035	2.055	2.046
#3	.2535	41.70	2.025	2.103	2.030	40.20	2.035	2.053	2.049
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.071	40.74	41.27	41.24	2.036	2.088	40.89	2.028	2.019
Stddev	.002	.10	.15	.06	.007	.003	.14	.003	.006
%RSD	.0957	.2377	.3534	.1486	.3370	.1350	.3410	.1325	.3040
#1	2.072	40.69	41.21	41.21	2.029	2.090	40.86	2.031	2.013
#2	2.069	40.85	41.44	41.31	2.037	2.088	41.04	2.026	2.019
#3	2.071	40.67	41.16	41.20	2.043	2.085	40.77	2.027	2.025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.041	2.056	2.055	2.109	2.052	2.038	2.041	2.042	2.009
Stddev	.004	.006	.004	.006	.004	.008	.001	.007	.004
%RSD	.2047	.2877	.1867	.2888	.1828	.4127	.0287	.3510	.2019
#1	2.046	2.055	2.056	2.115	2.056	2.032	2.041	2.038	2.010
#2	2.041	2.062	2.057	2.108	2.052	2.034	2.040	2.038	2.004
#3	2.038	2.050	2.050	2.103	2.048	2.047	2.041	2.051	2.012
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In
Zoom Out

Sample Name: CCV Acquired: 12/31/2018 12:13:50 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1972.5	4340.9	31649.	4023.1
Stddev	10.7	20.4	51.	16.9
%RSD	.54251	.46932	.15999	.41985
#1	1979.9	4337.2	31682.	4034.3
#2	1977.5	4362.9	31591.	4003.7
#3	1960.3	4322.7	31674.	4031.3

Zoom In
Zoom Out

Sample Name: CCB Acquired: 12/31/2018 12:18:01 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	-.0033	.0006	.0003	.0002	.0063	.0001	.0001	-.0001
Stddev	.0002	.0066	.0008	.0004	.0001	.0031	.0000	.0001	.0001
%RSD	34.85	202.1	137.9	148.6	37.28	49.66	33.86	58.05	74.03
#1	.0004	-.0107	-.0002	.0000	.0002	.0068	.0001	.0001	-.0001
#2	.0008	.0020	.0006	.0001	.0001	.0092	.0000	.0001	.0000
#3	.0006	-.0011	.0015	.0007	.0002	.0030	.0001	.0002	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0031	.1881	.0205	.0004	.0008	.1735	.0001	.0008
Stddev	.0002	.0027	.0379	.0033	.0000	.0001	.0055	.0001	.0003
%RSD	65.21	88.10	20.13	15.85	5.249	14.58	3.189	83.41	40.67
#1	-.0002	.0023	.2318	.0169	.0004	.0008	.1758	.0002	.0012
#2	-.0001	.0009	.1686	.0215	.0004	.0010	.1672	.0000	.0007
#3	-.0005	.0062	.1640	.0231	.0004	.0007	.1775	.0002	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	.0004	.0023	.0003	.0002	.0008	-.0002	.0001	.0006
Stddev	.0003	.0026	.0001	.0003	.0001	.0002	.0015	.0001	.0001
%RSD	38.09	689.4	2.899	94.19	55.95	19.34	895.9	70.58	14.90
#1	-.0007	-.0003	.0023	.0000	.0004	.0009	.0015	.0001	.0006
#2	-.0004	-.0018	.0022	.0005	.0001	.0006	-.0014	.0000	.0007
#3	-.0010	.0032	.0023	.0004	.0002	.0009	-.0007	.0002	.0005
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In
Zoom Out

Sample Name: CCB Acquired: 12/31/2018 12:18:01 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2406.5	4684.8	32733.	4035.4
Stddev	80.9	155.2	134.	33.6
%RSD	3.3620	3.3128	.40816	.83268
#1	2500.0	4863.6	32827.	4071.1
#2	2360.4	4605.1	32580.	4030.8
#3	2359.3	4585.6	32793.	4004.3

Zoom In
Zoom Out

Sample Name: CCV Acquired: 12/31/2018 12:50:33 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2505	41.17	2.041	2.038	2.054	41.07	2.065	2.059	2.057
Stddev	.0011	.16	.000	.002	.004	.08	.003	.003	.006
%RSD	.4216	.3872	.0205	.1197	.2207	.1877	.1232	.1561	.2728
#1	.2504	41.35	2.041	2.040	2.059	41.14	2.068	2.062	2.062
#2	.2517	41.10	2.041	2.039	2.054	40.99	2.063	2.056	2.051
#3	.2496	41.05	2.041	2.035	2.050	41.06	2.066	2.061	2.059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.043	41.15	40.88	41.03	2.075	2.071	40.94	2.069	2.029
Stddev	.004	.14	.10	.21	.006	.002	.11	.006	.006
%RSD	.2124	.3498	.2331	.5011	.2905	.0746	.2644	.3153	.2905
#1	2.041	41.28	40.98	41.18	2.077	2.073	41.04	2.075	2.035
#2	2.048	41.16	40.86	41.12	2.068	2.070	40.83	2.062	2.024
#3	2.040	41.00	40.80	40.80	2.079	2.071	40.95	2.069	2.026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.046	2.042	2.058	2.090	2.067	2.073	2.046	2.080	2.069
Stddev	.007	.006	.006	.002	.005	.004	.007	.008	.006
%RSD	.3300	.2894	.3041	.1059	.2625	.1835	.3346	.3893	.2948
#1	2.052	2.044	2.065	2.090	2.071	2.072	2.052	2.082	2.076
#2	2.038	2.035	2.053	2.087	2.069	2.070	2.046	2.071	2.064
#3	2.047	2.046	2.055	2.092	2.061	2.077	2.038	2.087	2.068
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/31/2018 12:50:33 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1947.9	4295.7	31100.	3888.7
Stddev	5.4	8.0	89.	28.2
%RSD	.27755	.18561	.28646	.72485
#1	1942.7	4286.5	31106.	3858.1
#2	1947.5	4300.9	31185.	3913.6
#3	1953.5	4299.7	31007.	3894.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/31/2018 12:58:24 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	-.0081	.0005	.0000	.0003	.0092	.0000	.0002	.0002
Stddev	.0004	.0019	.0010	.001	.0000	.0030	.0000	.0000	.0006
%RSD	166.9	23.45	205.3	2252.	8.536	32.78	26.79	26.16	258.0
#1	.0001	-.0078	-.0006	-.0002	.0003	.0093	.0000	.0001	-.0004
#2	-.0002	-.0101	.0014	.0006	.0003	.0122	.0000	.0001	.0008
#3	-.0007	-.0063	.0006	-.0005	.0002	.0062	.0000	.0002	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0014	-.0614	-.0076	.0002	.0004	-.0579	-.0002	-.0003
Stddev	.0001	.0023	.0167	.0364	.0001	.0001	.0134	.0001	.0011
%RSD	39.31	161.3	27.23	481.3	26.42	16.78	23.13	31.99	353.1
#1	.0005	.0039	-.0446	.0345	.0002	.0005	-.0733	-.0002	.0008
#2	.0004	-.0004	-.0780	-.0290	.0003	.0003	-.0508	-.0003	-.0014
#3	.0002	.0007	-.0615	-.0282	.0002	.0005	-.0496	-.0002	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0014	.0012	.0007	.0001	.0001	.0004	-.0003	.0001	.0004
Stddev	.0004	.0017	.0003	.0004	.0000	.0001	.0007	.0003	.0000
%RSD	24.67	144.0	48.11	297.4	38.26	17.02	243.8	459.7	9.854
#1	-.0012	.0013	.0004	-.0002	.0001	.0004	.0000	.0004	.0004
#2	-.0012	.0028	.0007	.0005	.0001	.0005	-.0010	-.0002	.0004
#3	-.0018	-.0006	.0011	.0001	.0001	.0003	.0002	.0000	.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/31/2018 12:58:24 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2335.9	4534.2	32613.	3957.7
Stddev	8.4	4.6	281.	26.1
%RSD	.36007	.10089	.86242	.65959
#1	2326.4	4530.0	32288.	3927.9
#2	2339.3	4539.1	32763.	3976.3
#3	2342.1	4533.5	32787.	3968.9

Zoom In Zoom Out

Sample Name: FA60401-2 Acquired: 12/31/2018 13:02:15 Type: Unk
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0031	-.0066	-.0023	.1176	.0008	113.1	-.0001	-.0006	.0170
Stddev	.0032	.1262	.0040	.0027	.0001	.3	.0003	.0007	.0017
%RSD	103.7	1909.	177.1	2.263	11.69	.2345	334.5	108.2	10.20
#1	.0011	-.0703	-.0064	.1170	.0007	112.8	-.0003	-.0003	.0153
#2	.0068	.1387	.0017	.1153	.0009	113.2	-.0001	-.0002	.0187
#3	.0014	-.0883	-.0022	.1205	.0008	113.3	.0002	-.0014	.0169

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0243	.1665	3.801	71.62	.0032	.0016	252.1	.0062	-.0038
Stddev	.0011	.0128	.112	.23	.0002	.0004	.3	.0013	.0041
%RSD	4.712	7.699	2.956	.3238	6.138	22.49	.1114	21.22	107.2
#1	.0241	.1518	3.680	71.72	.0030	.0013	251.8	.0069	-.0081
#2	.0233	.1733	3.903	71.35	.0031	.0020	252.4	.0071	-.0031
#3	.0256	.1745	3.818	71.77	.0034	.0014	252.1	.0047	-.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0087	-.0025	11.58	-.0003	1.316	.0044	-.0046	.0013	.0190
Stddev	.0045	.0026	.02	.0005	.002	.0010	.0118	.0005	.0005
%RSD	51.50	101.6	.1983	178.3	.1279	22.85	255.4	42.59	2.413
#1	-.0117	-.0014	11.56	-.0004	1.314	.0051	.0087	.0013	.0187
#2	-.0036	-.0007	11.58	.0003	1.317	.0048	-.0137	.0007	.0187
#3	-.0109	-.0055	11.61	-.0008	1.316	.0032	-.0088	.0018	.0195

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2109.3	4371.4	31303.	3921.7
Stddev	2.0	5.8	39.	15.6
%RSD	.09470	.13169	.12510	.39736
#1	2107.6	4364.9	31338.	3928.9
#2	2111.5	4375.7	31312.	3932.5
#3	2108.9	4373.6	31261.	3903.9

Zoom In
Zoom Out

Sample Name: MP34876-D1 Acquired: 12/31/2018 13:06:43 Type: Unk
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0015	.0577	.0007	.1122	.0002	106.5	-.0002	-.0001	.0177
Stddev	.0022	.0633	.0016	.0017	.0003	.3	.0002	.0007	.0020
%RSD	150.5	109.6	222.5	1.529	193.4	.2582	99.10	456.8	11.18
#1	.0026	.1072	-.0008	.1106	.0000	106.3	-.0003	.0001	.0196
#2	.0030	.0796	.0005	.1140	-.0001	106.8	-.0003	.0004	.0177
#3	-.0011	-.0135	.0023	.1122	.0006	106.3	.0000	-.0009	.0157

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0227	.6441	3.927	67.96	.0070	.0012	237.2	.0063	-.0040
Stddev	.0007	.0131	.250	.41	.0005	.0006	.9	.0004	.0019
%RSD	2.891	2.035	6.361	.6046	7.784	52.48	.3761	6.117	47.24
#1	.0226	.6578	4.043	68.16	.0065	.0012	237.3	.0059	-.0059
#2	.0222	.6317	4.098	68.23	.0070	.0017	238.0	.0067	-.0021
#3	.0235	.6429	3.641	67.48	.0076	.0005	236.2	.0063	-.0040

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0073	-.0015	10.90	-.0003	1.236	.0033	-.0065	.0003	.0180
Stddev	.0062	.0050	.01	.0005	.008	.0006	.0025	.0015	.0003
%RSD	85.37	343.7	.1363	157.5	.6507	19.46	38.35	473.9	1.825
#1	-.0142	.0038	10.88	.0000	1.230	.0028	-.0036	-.0002	.0183
#2	-.0052	-.0021	10.91	.0000	1.245	.0040	-.0077	-.0008	.0177
#3	-.0023	-.0061	10.89	-.0010	1.232	.0030	-.0082	.0020	.0181

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2113.8	4360.2	31405.	3880.4
Stddev	6.5	14.5	169.	31.7
%RSD	.30572	.33278	.53946	.81630
#1	2112.1	4357.7	31301.	3911.6
#2	2121.0	4375.9	31600.	3848.3
#3	2108.4	4347.2	31313.	3881.5

Zoom In
Zoom Out

Sample Name: MP34876-S1 Acquired: 12/31/2018 13:11:11 Type: Unk
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0506	27.56	2.042	2.138	.0529	141.4	.0517	.5181	.2263
Stddev	.0026	.18	.007	.008	.0004	.5	.0003	.0009	.0021
%RSD	5.057	.6486	.3481	.3924	.7092	.3717	.5302	.1751	.9297
#1	.0477	27.64	2.034	2.131	.0526	141.2	.0519	.5172	.2262
#2	.0523	27.36	2.048	2.147	.0527	141.0	.0513	.5180	.2242
#3	.0518	27.69	2.043	2.135	.0533	142.0	.0518	.5190	.2284

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2833	27.38	30.16	99.30	.5415	.4804	283.8	.5315	.4857
Stddev	.0016	.09	.09	.30	.0018	.0012	1.0	.0024	.0040
%RSD	.5803	.3447	.3066	.3039	.3385	.2487	.3526	.4592	.8141
#1	.2819	27.34	30.11	99.16	.5407	.4796	283.8	.5306	.4811
#2	.2829	27.31	30.10	99.08	.5401	.4798	282.8	.5343	.4881
#3	.2851	27.49	30.26	99.64	.5435	.4818	284.8	.5296	.4879

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5313	2.016	12.09	.5137	1.838	.5143	2.010	.5045	.5374
Stddev	.0056	.012	.04	.0007	.010	.0017	.008	.0024	.0006
%RSD	1.051	.5922	.3404	.1375	.5505	.3241	.4134	.4798	.1042
#1	.5275	2.003	12.04	.5145	1.843	.5125	2.000	.5017	.5377
#2	.5377	2.025	12.12	.5133	1.827	.5146	2.015	.5056	.5376
#3	.5288	2.021	12.10	.5132	1.845	.5158	2.014	.5061	.5367

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2069.9	4391.3	31317.	3909.8
Stddev	5.5	14.5	71.	22.4
%RSD	.26489	.33050	.22752	.57280
#1	2072.9	4402.0	31241.	3908.8
#2	2063.6	4374.8	31327.	3932.6
#3	2073.2	4397.0	31383.	3887.9

Zoom In
Zoom Out

Sample Name: MP34876-S2 Acquired: 12/31/2018 13:15:30 Type: Unk
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0540	28.53	2.096	2.204	.0542	143.6	.0530	.5335	.2331
Stddev	.0043	.07	.017	.007	.0007	.4	.0001	.0009	.0012
%RSD	7.883	.2466	.8098	.3220	1.223	.2906	.2825	.1601	.5316
#1	.0575	28.60	2.105	2.208	.0549	143.6	.0529	.5327	.2331
#2	.0553	28.46	2.106	2.196	.0537	143.2	.0529	.5344	.2318
#3	.0492	28.53	2.076	2.208	.0539	144.1	.0531	.5333	.2343

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2925	28.25	31.06	101.6	.5560	.4973	287.6	.5470	.5014
Stddev	.0017	.10	.07	.3	.0038	.0019	.9	.0003	.0031
%RSD	.5730	.3576	.2319	.2748	.6797	.3746	.3088	.0495	.6111
#1	.2907	28.33	31.13	101.3	.5520	.4962	288.3	.5467	.4979
#2	.2940	28.28	30.99	101.7	.5566	.4994	286.6	.5472	.5025
#3	.2928	28.14	31.06	101.8	.5595	.4962	287.9	.5469	.5037

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5474	2.084	12.27	.5322	1.871	.5308	2.086	.5233	.5547
Stddev	.0052	.015	.04	.0029	.003	.0032	.004	.0041	.0018
%RSD	.9417	.7067	.3474	.5399	.1611	.5999	.2123	.7782	.3189
#1	.5415	2.067	12.25	.5346	1.874	.5275	2.085	.5188	.5528
#2	.5511	2.089	12.32	.5290	1.871	.5312	2.091	.5267	.5562
#3	.5495	2.095	12.23	.5331	1.868	.5339	2.082	.5244	.5553

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2068.6	4387.2	31143.	3890.3
Stddev	5.0	7.2	83.	12.7
%RSD	.24140	.16387	.26655	.32626
#1	2071.7	4389.1	31231.	3885.7
#2	2071.3	4379.3	31133.	3904.7
#3	2062.9	4393.3	31066.	3880.5

Zoom In
Zoom Out

Sample Name: MP34876-PS1 Acquired: 12/31/2018 13:19:47 Type: Unk
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0522	2.519	.1139	.3759	.0532	116.0	.0527	.0529	.0713
Stddev	.0021	.096	.0019	.0009	.0007	.9	.0002	.0006	.0015
%RSD	4.114	3.821	1.681	.2305	1.286	.7738	.4186	1.204	2.096
#1	.0521	2.616	.1162	.3755	.0539	116.9	.0529	.0532	.0729
#2	.0545	2.424	.1129	.3754	.0532	115.1	.0526	.0534	.0710
#3	.0502	2.517	.1128	.3769	.0525	116.0	.0524	.0522	.0700

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1293	3.302	14.40	75.74	.0578	.1003	256.7	.1138	.0413
Stddev	.0011	.041	.32	.27	.0001	.0003	1.8	.0009	.0011
%RSD	.8529	1.236	2.199	.3507	.1168	.2883	.6879	.8007	2.562
#1	.1284	3.348	14.51	76.04	.0578	.1006	258.7	.1136	.0405
#2	.1289	3.285	14.64	75.53	.0578	.1000	255.4	.1130	.0425
#3	.1305	3.271	14.04	75.66	.0579	.1002	255.9	.1148	.0409

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0997	.0999	11.38	.0535	1.338	.1102	.0981	.0541	.2865
Stddev	.0035	.0058	.03	.0024	.008	.0014	.0013	.0008	.0007
%RSD	3.493	5.795	.2785	4.547	.6275	1.290	1.297	1.386	.2532
#1	.1010	.0956	11.41	.0513	1.347	.1102	.0967	.0542	.2871
#2	.0958	.0977	11.36	.0530	1.330	.1087	.0993	.0533	.2857
#3	.1024	.1065	11.35	.0561	1.337	.1116	.0983	.0548	.2865

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2098.9	4365.2	31443.	3896.6
Stddev	2.8	16.1	181.	15.2
%RSD	.13389	.36943	.57439	.39128
#1	2098.1	4352.7	31263.	3881.8
#2	2102.0	4383.4	31624.	3912.3
#3	2096.6	4359.5	31443.	3895.9

Zoom In Zoom Out

Sample Name: MP34876-SD1 Acquired: 12/31/2018 13:24:10 Type: Unk
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0096	-.2057	.0171	.1064	.0019	108.1	-.0032	-.0043	.0268
Stddev	.0194	.6017	.0171	.0113	.0033	.2	.0004	.0045	.0081
%RSD	202.9	292.5	99.95	10.66	168.6	.1755	12.10	103.5	30.09
#1	-.0128	.4707	-.0014	.1020	-.0006	108.0	-.0028	.0004	.0296
#2	.0197	-.6814	.0324	.0979	.0008	107.9	-.0035	-.0050	.0177
#3	.0218	-.4065	.0203	.1192	.0056	108.3	-.0033	-.0084	.0331

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0198	.1854	2.179	69.40	.0020	-.0023	238.9	.0016	-.0308
Stddev	.0068	.1009	.759	.79	.0013	.0005	.4	.0020	.0159
%RSD	34.34	54.43	34.85	1.142	65.06	23.42	.1860	128.2	51.66
#1	.0126	.2076	3.027	70.24	.0023	-.0021	238.6	-.0005	-.0158
#2	.0207	.0752	1.562	69.30	.0031	-.0029	239.4	.0018	-.0291
#3	.0260	.2733	1.949	68.67	.0006	-.0018	238.7	.0035	-.0475

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0434	-.0259	10.95	.0034	1.250	.0086	-.0066	.0037	.0202
Stddev	.0312	.0098	.07	.0067	.004	.0022	.0228	.0064	.0015
%RSD	71.86	37.99	.6032	198.4	.3627	25.02	345.1	171.9	7.184
#1	-.0659	-.0162	10.94	-.0043	1.246	.0078	-.0215	-.0028	.0216
#2	-.0564	-.0257	10.89	.0060	1.255	.0111	.0197	.0100	.0202
#3	-.0078	-.0358	11.02	.0085	1.249	.0070	-.0180	.0041	.0187

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2263.9	4484.7	32237.	3933.2
Stddev	6.0	4.0	95.	30.9
%RSD	.26377	.08921	.29578	.78594
#1	2266.6	4484.9	32347.	3940.7
#2	2257.0	4488.6	32176.	3959.6
#3	2267.9	4480.6	32188.	3899.2

Zoom In Zoom Out

Sample Name: FA60401-9 Acquired: 12/31/2018 13:28:37 Type: Unk
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0005	.0097	.0001	.1331	.0003	57.46	.0000	-.0003	.0036
Stddev	.0009	.0163	.0017	.0016	.0001	.29	.000	.0002	.0005
%RSD	185.5	167.2	1238.	1.166	36.66	.4998	343.5	63.52	12.66
#1	.0010	.0274	.0004	.1348	.0003	57.47	.0000	-.0001	.0041
#2	-.0005	.0067	.0017	.1320	.0001	57.75	-.0002	-.0003	.0032
#3	.0010	-.0048	-.0017	.1323	.0003	57.17	.0000	-.0005	.0036

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0003	.0055	3.073	33.22	.0907	-.0002	94.11	.0019	-.0029
Stddev	.0002	.0073	.026	.10	.0007	.0002	.56	.0005	.0012
%RSD	62.24	132.4	.8592	.3037	.7187	73.58	.5907	23.53	39.99
#1	.0005	.0045	3.096	33.21	.0910	-.0002	94.31	.0017	-.0019
#2	.0001	-.0012	3.044	33.33	.0912	-.0004	94.54	.0024	-.0027
#3	.0004	.0133	3.077	33.13	.0900	-.0001	93.48	.0016	-.0042

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0023	.0010	11.43	.0001	.7657	.0014	-.0031	.0008	.0073
Stddev	.0040	.0048	.02	.0005	.0044	.0001	.0011	.0003	.0001
%RSD	172.8	500.6	.1545	545.7	.5691	10.42	35.24	40.18	.6907
#1	-.0058	-.0024	11.45	.0000	.7664	.0013	-.0034	.0009	.0072
#2	.0021	.0065	11.42	.0007	.7696	.0014	-.0041	.0004	.0072
#3	-.0032	-.0011	11.42	-.0004	.7610	.0016	-.0019	.0010	.0073

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2095.5	4349.6	31449.	3913.5
Stddev	6.5	11.4	109.	16.1
%RSD	.30831	.26225	.34565	.41111
#1	2088.3	4336.5	31502.	3904.3
#2	2100.8	4357.6	31324.	3904.1
#3	2097.4	4354.6	31521.	3932.1

Zoom In Zoom Out

Sample Name: FA60466-1 Acquired: 12/31/2018 13:33:02 Type: Unk
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	1.084	.0029	-.0029	-.0031	.0001	4.013	-.0019	.0334
Stddev	.007	.0735	.0004	.0010	.0002	.013	.0002	.0008
%RSD	.6864	2542.	13.35	30.55	211.2	.3224	8.594	2.281
#1	1.081	.0864	-.0031	-.0022	.0003	4.023	-.0021	.0343
#2	1.092	-.0516	-.0024	-.0041	.0000	4.018	-.0018	.0329
#3	1.078	-.0262	-.0032	-.0032	-.0001	3.999	-.0019	.0330

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0194	.0064	235.8	F 676.9	.1719	1.057	.0075	199.1
Stddev	.0009	.0011	1.2	3.9	.1408	.002	.0005	1.2
%RSD	4.567	17.43	.5193	.5760	81.93	.2300	6.621	.5970
#1	.0201	.0077	236.4	680.0	.0326	1.055	.0069	200.1
#2	.0184	.0057	236.5	678.2	.3141	1.056	.0076	199.5
#3	.0197	.0059	234.3	672.5	.1689	1.059	.0079	197.8

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.1018	F -.0263	-.0172	-.0018	.1912	.0033	.0046	.0036
Stddev	.0004	.0007	.0007	.0100	.0040	.0016	.0004	.0004
%RSD	.3580	2.677	4.129	548.8	2.078	48.85	7.654	9.940
#1	.1021	-.0258	-.0180	.0098	.1935	.0026	.0050	.0040
#2	.1014	-.0260	-.0169	-.0073	.1867	.0052	.0046	.0033
#3	.1019	-.0271	-.0167	-.0080	.1936	.0022	.0043	.0036

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0086	.2385	.0275
Stddev	.0048	.0007	.0003
%RSD	56.03	.3005	1.116
#1	-.0139	.2377	.0278
#2	-.0045	.2392	.0274
#3	-.0074	.2386	.0273

Zoom In Zoom Out

Sample Name: FA60466-1 Acquired: 12/31/2018 13:33:02 Type: Unk
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2061.6	4314.3	31139.	3953.5
Stddev	3.0	7.4	62.	14.9
%RSD	.14632	.17135	.19929	.37782
#1	2065.0	4320.5	31113.	3960.0
#2	2059.3	4316.2	31210.	3936.4
#3	2060.6	4306.1	31094.	3964.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/31/2018 13:46:27 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2513	41.15	2.034	2.040	2.047	40.96	2.062	2.059	2.067
Stddev	.0016	.11	.004	.002	.005	.13	.003	.002	.005
%RSD	.6208	.2637	.2200	.1073	.2390	.3105	.1627	.0774	.2407
#1	.2524	41.14	2.031	2.038	2.052	41.11	2.061	2.058	2.072
#2	.2495	41.27	2.032	2.042	2.043	40.91	2.059	2.058	2.067
#3	.2521	41.05	2.039	2.039	2.045	40.87	2.065	2.061	2.062
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.048	41.07	40.98	41.09	2.078	2.072	40.95	2.062	2.034
Stddev	.003	.07	.13	.09	.004	.003	.09	.005	.001
%RSD	.1486	.1799	.3188	.2071	.1662	.1521	.2190	.2310	.0631
#1	2.046	41.16	41.13	41.01	2.074	2.069	41.05	2.061	2.033
#2	2.052	41.04	40.90	41.18	2.081	2.071	40.89	2.058	2.034
#3	2.048	41.02	40.91	41.09	2.079	2.075	40.90	2.068	2.036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.045	2.037	2.058	2.089	2.056	2.075	2.049	2.080	2.058
Stddev	.004	.005	.003	.003	.006	.007	.001	.004	.005
%RSD	.1910	.2510	.1193	.1255	.2729	.3256	.0497	.2103	.2276
#1	2.046	2.032	2.059	2.087	2.062	2.068	2.048	2.081	2.057
#2	2.041	2.042	2.055	2.088	2.054	2.081	2.049	2.085	2.054
#3	2.049	2.037	2.059	2.092	2.051	2.077	2.050	2.076	2.063
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/31/2018 13:46:27 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1939.0	4289.4	30824.	3850.0
Stddev	1.0	4.7	140.	18.6
%RSD	.04963	.10867	.45365	.48276
#1	1939.6	4294.7	30751.	3870.3
#2	1937.9	4287.8	30986.	3845.8
#3	1939.6	4285.8	30736.	3833.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/31/2018 13:50:38 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0116	.0002	.0000	.0002	.0092	.0000	.0001	.0006
Stddev	.0004	.0120	.0010	.0002	.0001	.0022	.0000	.0001	.0002
%RSD	179.9	103.3	484.5	329.0	37.10	24.27	129.4	87.87	42.21
#1	.0007	-.0189	.0010	.0001	.0002	.0069	.0000	.0000	.0003
#2	.0000	-.0181	.0005	-.0001	.0002	.0114	.0001	.0003	.0008
#3	-.0001	.0022	-.0009	.0002	.0001	.0094	.0000	.0001	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0041	-.0709	.0020	.0002	.0009	.0216	-.0002	-.0004
Stddev	.0002	.0032	.0527	.0063	.0001	.0004	.0042	.0001	.0002
%RSD	57.92	76.27	74.33	311.9	26.89	46.99	19.26	26.96	53.83
#1	.0004	.0078	-.0924	.0060	.0002	.0012	.0252	-.0002	-.0007
#2	.0001	.0026	-.0108	-.0053	.0002	.0009	.0227	-.0003	-.0003
#3	.0006	.0020	-.1094	.0054	.0001	.0004	.0170	-.0002	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0014	.0004	.0010	.0002	.0002	.0008	.0005	.0001	.0004
Stddev	.0012	.0016	.0004	.0001	.0001	.0003	.0005	.0002	.0000
%RSD	87.38	438.6	35.20	62.87	87.35	34.76	118.9	185.6	5.554
#1	-.0026	.0019	.0012	.0004	.0003	.0011	.0011	-.0001	.0005
#2	-.0013	.0004	.0006	.0001	.0002	.0009	.0002	.0002	.0004
#3	-.0002	-.0012	.0013	.0002	.0000	.0005	.0001	.0002	.0004
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/31/2018 13:50:38 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2324.6	4520.6	32472.	3960.7
Stddev	5.4	5.2	89.	11.2
%RSD	.23081	.11401	.27473	.28386
#1	2321.5	4515.9	32574.	3971.3
#2	2321.4	4526.1	32408.	3961.9
#3	2330.8	4519.6	32435.	3948.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/31/2018 16:27:48 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2468	40.56	1.970	2.011	1.992	39.58	1.998	2.002	2.022
Stddev	.0017	.06	.005	.004	.010	.14	.007	.005	.004
%RSD	.7065	.1427	.2459	.2150	.5076	.3586	.3491	.2482	.1738
#1	.2474	40.51	1.966	2.006	1.983	39.42	1.994	1.998	2.025
#2	.2483	40.55	1.968	2.014	1.990	39.61	1.994	2.000	2.021
#3	.2449	40.62	1.975	2.013	2.003	39.70	2.006	2.007	2.019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.013	40.11	40.37	40.37	2.026	2.017	40.18	1.993	1.971
Stddev	.006	.17	.10	.11	.003	.008	.12	.007	.007
%RSD	.3037	.4279	.2420	.2716	.1437	.3940	.2956	.3566	.3454
#1	2.019	40.02	40.28	40.34	2.026	2.009	40.10	1.989	1.967
#2	2.007	40.01	40.36	40.28	2.022	2.016	40.12	1.988	1.966
#3	2.012	40.31	40.47	40.49	2.028	2.025	40.31	2.001	1.979
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.982	1.982	2.000	2.040	2.010	2.018	1.988	2.019	1.995
Stddev	.004	.009	.009	.003	.011	.004	.008	.003	.009
%RSD	.2295	.4319	.4285	.1643	.5202	.2176	.4143	.1288	.4698
#1	1.978	1.976	1.999	2.038	2.006	2.020	1.982	2.022	1.995
#2	1.980	1.978	1.992	2.037	2.002	2.013	1.985	2.016	1.986
#3	1.987	1.992	2.009	2.043	2.022	2.020	1.998	2.019	2.005
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/31/2018 16:27:48 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1992.4	4408.5	31537.	3807.7
Stddev	2.8	11.0	79.	17.8
%RSD	.13991	.25043	.25179	.46631
#1	1995.3	4410.3	31452.	3792.6
#2	1992.3	4418.6	31550.	3803.3
#3	1989.7	4396.7	31610.	3827.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/31/2018 16:32:00 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0045	.0002	-.0002	.0001	.0043	.0000	.0001	.0004
Stddev	.0004	.0226	.0005	.0002	.0000	.0023	.000	.0001	.0003
%RSD	4263.	500.8	292.0	106.2	6.389	53.70	249.5	69.52	59.38
#1	.0005	-.0111	.0001	.0000	.0001	.0019	-.0001	.0001	.0002
#2	-.0003	.0305	-.0003	-.0001	.0001	.0064	.0000	.0001	.0007
#3	-.0002	-.0058	.0007	-.0005	.0001	.0045	.0000	.0000	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0043	-.1306	-.0291	.0000	.0009	.1324	-.0003	-.0004
Stddev	.0002	.0017	.0263	.0243	.000	.0001	.0029	.0002	.0003
%RSD	83.97	40.00	20.16	83.44	123.6	6.299	2.195	56.99	82.04
#1	-.0001	.0061	-.1240	-.0431	.0000	.0010	.1325	-.0002	-.0002
#2	-.0004	.0026	-.1082	-.0011	-.0001	.0009	.1353	-.0002	-.0007
#3	-.0001	.0043	-.1596	-.0433	.0000	.0008	.1295	-.0005	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0013	.0008	.0005	.0001	.0001	.0007	.0000	.0002	.0000
Stddev	.0010	.0013	.0006	.0002	.0001	.0001	.000	.0003	.0000
%RSD	76.78	151.2	118.3	152.0	54.14	15.01	1616.	176.1	342.8
#1	-.0002	.0012	-.0002	.0002	.0001	.0008	-.0003	-.0001	.0000
#2	-.0016	-.0006	.0008	-.0001	.0002	.0006	-.0002	.0002	.0000
#3	-.0020	.0019	.0008	.0003	.0001	.0007	.0005	.0005	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/31/2018 16:32:00 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2379.3	4637.9	33204.	3905.4
Stddev	2.9	3.2	206.	2.8
%RSD	.12271	.06834	.62023	.07258
#1	2377.5	4634.7	33419.	3902.8
#2	2382.7	4641.0	33008.	3905.0
#3	2377.7	4638.1	33187.	3908.4

Zoom In
Zoom Out

Sample Name: CRIA Acquired: 12/31/2018 17:07:33 Type: Unk
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0105	.1924	.0098	.1914	.0049	.9727	.0050	.0499	.0100
Stddev	.0002	.0056	.0008	.0006	.0000	.0025	.0000	.0002	.0002
%RSD	1.760	2.903	7.757	.3099	.7826	.2536	.5987	.3251	1.863
#1	.0103	.1979	.0098	.1907	.0049	.9706	.0049	.0500	.0100
#2	.0107	.1867	.0091	.1918	.0049	.9754	.0050	.0500	.0098
#3	.0105	.1927	.0106	.1917	.0050	.9721	.0050	.0497	.0101

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0247	.2893	9.624	4.850	.0150	.0449	9.641	.0403	.0043
Stddev	.0002	.0014	.118	.023	.0000	.0003	.016	.0001	.0006
%RSD	.9363	.4907	1.230	.4665	.3095	.5720	.1675	.3160	14.95
#1	.0245	.2909	9.500	4.835	.0150	.0446	9.647	.0403	.0042
#2	.0249	.2882	9.736	4.840	.0150	.0451	9.653	.0404	.0050
#3	.0246	.2888	9.637	4.876	.0150	.0450	9.622	.0401	.0037

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0043	.0083	.0035	.0504	.0096	.0094	.0090	.0471	.0204
Stddev	.0005	.0011	.0007	.0002	.0000	.0000	.0007	.0001	.0000
%RSD	12.04	13.69	21.18	.4742	.4550	.3722	7.678	.3044	.1770
#1	.0041	.0070	.0043	.0503	.0096	.0095	.0085	.0469	.0204
#2	.0049	.0089	.0033	.0503	.0095	.0094	.0087	.0470	.0205
#3	.0039	.0091	.0029	.0507	.0096	.0094	.0098	.0472	.0204

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2251.0	4541.0	32718.	3848.4
Stddev	2.5	12.6	67.	31.5
%RSD	.10944	.27728	.20542	.81730
#1	2249.6	4555.0	32691.	3880.4
#2	2249.5	4530.7	32794.	3817.6
#3	2253.8	4537.2	32668.	3847.1

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Zoom In
Zoom Out

Sample Name: ICSA Acquired: 12/31/2018 17:11:59 Type: Unk
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	F 525.5	.0031	.0004	.0000	472.2	-.0001	-.0001	.0007
Stddev	.0002	9.5	.0012	.0004	.0001	8.3	.0001	.0000	.0002
%RSD	806.2	1.798	37.84	94.47	1284.	1.763	111.2	31.03	33.55
#1	-.0001	518.1	.0044	.0003	-.0001	466.5	.0000	-.0001	.0005
#2	.0002	522.2	.0027	.0009	.0001	468.4	-.0001	-.0001	.0009
#3	-.0001	536.2	.0021	.0001	.0000	481.8	-.0002	.0000	.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0001	186.5	.0571	F 505.2	.0003	.0003	.4933	-.0010	-.0005
Stddev	.0004	1.5	.0314	5.1	.0000	.0005	.0270	.0002	.0011
%RSD	508.7	.7790	55.04	1.003	10.85	149.9	5.471	19.86	202.2
#1	-.0001	185.1	.0548	500.2	.0003	.0000	.4621	-.0008	.0000
#2	-.0002	186.4	.0269	505.1	.0003	.0000	.5087	-.0009	.0002
#3	.0006	188.0	.0896	510.3	.0003	.0009	.5090	-.0012	-.0018

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0009	.0024	.0120	.0005	.0000	-.0001	.0013	.0007	.0004
Stddev	.0030	.0045	.0010	.0007	.0001	.0003	.0030	.0003	.0001
%RSD	318.8	190.7	8.271	132.7	317.6	515.2	230.5	42.88	31.62
#1	.0020	.0068	.0124	.0004	.0001	-.0003	.0032	.0006	.0002
#2	-.0040	-.0022	.0126	.0012	.0001	.0000	.0029	.0010	.0004
#3	-.0009	.0024	.0108	-.0001	-.0001	.0001	-.0022	.0005	.0004

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1766.1	4038.7	28667.	3635.5
Stddev	1.1	13.6	184.	56.8
%RSD	.06366	.33753	.64273	1.5619
#1	1766.5	4050.3	28527.	3679.6
#2	1764.8	4023.7	28598.	3655.6
#3	1766.9	4042.1	28876.	3571.4

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Zoom In
Zoom Out

Sample Name: ICSAB Acquired: 12/31/2018 17:16:38 Type: Unk
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F 1.088	F 519.0	.9593	.5172	.5062	471.9	.9366	.4727	.5015
Stddev	.001	3.3	.0024	.0009	.0013	1.7	.0003	.0003	.0013
%RSD	.0723	.6312	.2501	.1660	.2592	.3665	.0276	.0549	.2662
#1	1.088	515.8	.9619	.5178	.5077	470.1	.9367	.4724	.5020
#2	1.089	522.4	.9587	.5175	.5059	473.5	.9368	.4730	.5024
#3	1.089	518.8	.9572	.5162	.5051	472.1	.9363	.4727	.4999

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5507	183.6	.0144	F 508.2	.5075	.8349	.3882	.9388	.9511
Stddev	.0039	.6	.0365	1.9	.0019	.0006	.0113	.0018	.0020
%RSD	.7012	.3143	254.4	.3742	.3775	.0732	2.912	.1935	.2089
#1	.5489	183.4	.0286	506.7	.5089	.8342	.3819	.9401	.9532
#2	.5481	184.2	.0416	510.3	.5054	.8353	.3814	.9397	.9510
#3	.5552	183.1	-.0271	507.6	.5084	.8352	.4012	.9367	.9492

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.9752	.8949	.0949	1.674	.9161	1.030	.8780	.4902	.9426
Stddev	.0017	.0044	.0010	.005	.0015	.005	.0041	.0023	.0025
%RSD	.1781	.4871	1.074	.3188	.1594	.4615	.4674	.4773	.2705
#1	.9766	.8903	.0938	1.668	.9163	1.034	.8739	.4929	.9455
#2	.9756	.8957	.0957	1.674	.9174	1.025	.8782	.4887	.9420
#3	.9733	.8989	.0953	1.679	.9145	1.033	.8821	.4890	.9405

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1731.7	4031.8	28525.	3634.8
Stddev	1.4	4.1	163.	22.4
%RSD	.07833	.10242	.57308	.61677
#1	1730.7	4029.7	28375.	3655.0
#2	1731.3	4029.2	28501.	3610.7
#3	1733.2	4036.6	28700.	3638.9

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Zoom In
Zoom Out

Sample Name: CCV Acquired: 12/31/2018 17:21:07 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2475	40.56	1.976	2.022	1.988	39.71	2.010	2.014	2.029
Stddev	.0002	.36	.002	.011	.015	.19	.001	.002	.011
%RSD	.0882	.8834	.0983	.5593	.7328	.4847	.0327	.0809	.5369
#1	.2476	40.16	1.976	2.009	1.972	39.49	2.011	2.013	2.020
#2	.2472	40.85	1.974	2.030	2.001	39.80	2.010	2.014	2.025
#3	.2476	40.68	1.978	2.026	1.991	39.84	2.010	2.016	2.041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.022	40.08	40.52	40.50	2.026	2.028	40.32	2.004	1.989
Stddev	.004	.28	.32	.20	.009	.002	.26	.002	.006
%RSD	.1984	.7102	.7832	.5026	.4610	.0833	.6384	.1022	.2947
#1	2.017	39.76	40.15	40.26	2.016	2.027	40.03	2.006	1.983
#2	2.025	40.31	40.72	40.60	2.027	2.028	40.52	2.004	1.995
#3	2.023	40.18	40.68	40.63	2.035	2.030	40.42	2.001	1.988
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.989	1.992	2.001	2.055	2.005	2.019	2.000	2.020	2.006
Stddev	.000	.005	.007	.002	.017	.006	.003	.005	.002
%RSD	.0148	.2554	.3508	.1189	.8342	.2881	.1661	.2394	.0872
#1	1.988	1.997	2.009	2.052	1.987	2.013	2.001	2.016	2.007
#2	1.989	1.992	1.996	2.056	2.021	2.019	2.004	2.019	2.008
#3	1.989	1.987	1.998	2.056	2.006	2.024	1.997	2.025	2.004
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

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Zoom In Zoom Out

Sample Name: CCV Acquired: 12/31/2018 17:21:07 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1970.3	4378.0	31199.	3744.5
Stddev	5.1	6.3	136.	16.0
%RSD	.26038	.14435	.43469	.42643
#1	1976.1	4382.8	31347.	3758.6
#2	1966.6	4380.5	31169.	3747.7
#3	1968.0	4370.9	31081.	3727.2

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/31/2018 17:25:19 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0008	-.0007	-.0005	.0002	.0076	.0000	.0001	.0004
Stddev	.0005	.0156	.0010	.0001	.0000	.0032	.000	.0000	.0001
%RSD	928.0	1893.	157.0	28.79	3.937	42.73	68.00	62.51	36.63
#1	.0004	.0136	-.0012	-.0005	.0002	.0042	.0000	.0001	.0002
#2	.0003	-.0173	.0005	-.0004	.0002	.0107	.0000	.0001	.0004
#3	-.0005	.0013	-.0013	-.0007	.0002	.0079	-.0001	.0000	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0087	-.1372	-.0114	.0000	.0010	.0045	-.0001	-.0010
Stddev	.0002	.0018	.0462	.0050	.0000	.0001	.0059	.0003	.0004
%RSD	73.03	20.03	33.70	44.15	166.7	12.87	131.1	172.3	40.55
#1	.0000	.0083	-.1207	-.0158	.0000	.0011	.0040	-.0002	-.0008
#2	-.0004	.0072	-.1894	-.0125	.0000	.0008	.0106	-.0004	-.0007
#3	-.0004	.0107	-.1015	-.0059	.0000	.0010	-.0011	.0001	-.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0008	.0007	.0001	.0001	.0001	.0007	.0000	.0002	.0000
Stddev	.0009	.0017	.0007	.0006	.0001	.0001	.001	.0001	.0001
%RSD	107.0	253.3	539.9	667.6	198.5	17.22	7004.	58.20	211.5
#1	.0002	.0021	.0006	.0000	.0000	.0008	.0006	.0001	.0000
#2	-.0012	-.0012	.0005	.0007	.0002	.0008	-.0008	.0003	.0000
#3	-.0015	.0011	-.0006	-.0005	.0000	.0006	.0002	.0003	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/31/2018 17:25:19 Type: QC
Method: 60102007_042011(v375) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2373.6	4648.0	32654.	3820.4
Stddev	7.2	9.8	325.	34.2
%RSD	.30317	.21125	.99652	.89431
#1	2365.6	4647.5	32626.	3830.9
#2	2375.5	4638.4	32343.	3782.3
#3	2379.6	4658.0	32992.	3848.1

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	☒	2	V	-0.005817	0.000000	No
			Fe	0.000004	0.000000	No
Al 396.152 { 85}	☒	1	Mo	0.040330	0.000000	No
As 189.042 {478}	☒	4	Fe	-0.000067	0.000000	No
			Cr	-0.000653	0.000000	No
			Mo	0.000444	0.000000	No
			Al	0.000001	0.000000	No
Ba 455.403 { 74}	☒	1	Fe	0.000003	0.000000	No
Be 313.042 {108}	☒	2	V	0.000625	0.000000	No
			Ti	-0.000289	0.000000	No
Ca 317.933 {106}	☒	None				
Cd 226.502 {449}	☒	4	Fe	0.000185	0.000000	No
			Ca	-0.000000	0.000000	No
			Al	-0.000002	0.000000	No
			Ti	0.000103	0.000000	No
Co 228.616 {447}	☒	3	Mo	-0.001220	0.000000	No
			Ti	0.002210	0.000000	No
			Fe	-0.000001	0.000000	No
Cr 267.716 {126}	☒	4	Al	0.000003	0.000000	No
			Fe	-0.000011	0.000000	No
			Ca	0.000002	0.000000	No
			Cd	-0.000120	0.000000	No
Cu 324.754 {104}	☒	10	Mo	0.000189	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Al	0.000003	0.000000	No
			Mg	0.000003	0.000000	No
			Co	-0.000547	0.000000	No
			Cd	0.000190	0.000000	No
			Fe	-0.000080	0.000000	No
			Ca	0.000001	0.000000	No
			Ti	-0.000268	0.000000	No
Fe 259.940 {130}	☒	None				
In 230.606 {446}*	☒	None				
K 766.490 { 44}	☒	None				
Mg 279.079 {121}	☒	None				
Mn 257.610 {131}	☒	2	Fe	0.000012	0.000000	No
			Mg	0.000000	0.000000	No
Mo 202.030 {467}	☒	1	Fe	-0.000006	0.000000	No
Na 589.592 { 57}	☒	None				
Ni 231.604 {445}	☒	7	Fe	-0.000038	0.000000	No
			Co	0.000112	0.000000	No
			Mo	0.000980	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000304	0.000000	No
			Tl	0.000172	0.000000	No
Pb 220.353 {453}	☒	8	Al	0.000193	0.000000	No
			Fe	-0.000175	0.000000	No
			Mo	-0.002189	0.000000	No
			Cu	0.000467	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000232	0.000000	No
			Ca	-0.000003	0.000000	No
			Cr	-0.000260	0.000000	No
Sb 206.833 {463}	☒	11	Fe	0.000036	0.000000	No
			Cr	0.011486	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Mo	-0.003944	0.000000	No
			V	-0.000441	0.000000	No
			Sn	-0.008695	0.000000	No
			Ti	0.000278	0.000000	No
			Ca	0.000001	0.000000	No
			Ni	-0.000818	0.000000	No
			Al	0.000010	0.000000	No
			Mn	-0.000133	0.000000	No
			Mg	-0.000002	0.000000	No
Se 196.090 {472}	☒	12	Fe	-0.000101	0.000000	No
			Ca	0.000008	0.000000	No
			Mn	0.000331	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000031	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	-0.000111	0.000000	No
			As	0.000125	0.000000	No
			Cd	-0.000250	0.000000	No
			Mg	-0.000004	0.000000	No
			Cr	-0.000326	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.000000	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000021	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000006	0.000000	No
Tl 190.856 {477}	☒	10	Co	0.004099	0.000000	No
			Fe	-0.000021	0.000000	No
			Al	-0.000010	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.000648	0.000000	No
			Sb	0.000167	0.000000	No
			Ca	-0.000000	0.000000	No
			Cr	0.000340	0.000000	No
			Mg	-0.000002	0.000000	No
			V	0.000015	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000012	0.000000	No
			Cr	-0.003634	0.000000	No
			Mo	-0.009536	0.000000	No
			Ti	0.000303	0.000000	No
			Mn	-0.000333	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.001305	0.000000	No
			Al	-0.000001	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000028	0.000000	No
			As	0.001105	0.000000	No

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	12/31/2018 8:26:14	12/31/2018 8:26:14	Linear	1/Conc	-0.001674	0.502938	0.000000	1.000000
Al 396.152 { 85}	12/31/2018 8:26:14	12/31/2018 8:26:14	Linear	1/Conc	-0.007661	0.179781	0.000000	1.000000
As 189.042 {478}	12/31/2018 8:26:14	12/31/2018 8:26:14	Linear	1/Conc	-0.000544	0.166803	0.000000	1.000000
Ba 455.403 { 74}	12/31/2018 8:26:14	12/31/2018 8:26:14	Linear	1/Conc	0.020751	6.744931	0.000000	1.000000
Be 313.042 {108}	12/31/2018 8:26:14	12/31/2018 8:26:14	Linear	1/Conc	-0.000601	10.665852	0.000000	1.000000
Ca 317.933 {106}	12/31/2018 8:26:14	12/31/2018 8:26:14	Linear	1/Conc	0.003820	0.258311	0.000000	1.000000
Cd 226.502 {449}	12/31/2018 8:26:14	12/31/2018 8:26:14	Linear	1/Conc	-0.000821	4.741963	0.000000	1.000000
Co 228.616 {447}	12/31/2018 8:26:14	12/31/2018 8:26:14	Linear	1/Conc	-0.000277	2.454908	0.000000	1.000000
Cr 267.716 {126}	12/31/2018 8:26:14	12/31/2018 8:26:14	Linear	1/Conc	-0.000085	0.519305	0.000000	1.000000
Cu 324.754 {104}	12/31/2018 8:26:14	12/31/2018 8:26:14	Linear	1/Conc	0.009550	0.805296	0.000000	1.000000
Fe 259.940 {130}	12/31/2018 8:26:14	12/31/2018 8:26:14	Linear	1/Conc	0.001323	0.178392	0.000000	1.000000
In 230.606 {446}*	12/31/2018 8:03:47	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
K 766.490 { 44}	12/31/2018 8:26:14	12/31/2018 8:26:14	Linear	1/Conc	0.000378	0.079068	0.000000	1.000000
Mg 279.079 {121}	12/31/2018 8:26:14	12/31/2018 8:26:14	Linear	1/Conc	-0.000635	0.028390	0.000000	1.000000
Mn 257.610 {131}	12/31/2018 8:26:14	12/31/2018 8:26:14	Linear	1/Conc	0.000767	2.933243	0.000000	1.000000
Mo 202.030 {467}	12/31/2018 8:26:14	12/31/2018 8:26:14	Linear	1/Conc	0.000601	1.024307	0.000000	1.000000
Na 589.592 { 57}	12/31/2018 8:26:14	12/31/2018 8:26:14	Linear	1/Conc	-0.018993	0.310829	0.000000	1.000000
Ni 231.604 {445}	12/31/2018 8:26:14	12/31/2018 8:26:14	Linear	1/Conc	-0.000420	1.492032	0.000000	1.000000
Pb 220.353 {453}	12/31/2018 8:26:14	12/31/2018 8:26:14	Linear	1/Conc	-0.000196	0.903347	0.000000	1.000000
Sb 206.833 {463}	12/31/2018 8:26:14	12/31/2018 8:26:14	Linear	1/Conc	0.000854	0.212874	0.000000	1.000000
Se 196.090 {472}	12/31/2018 8:26:14	12/31/2018 8:26:14	Linear	1/Conc	-0.000421	0.121900	0.000000	1.000000
Si 212.412 {459}	12/31/2018 8:26:14	12/31/2018 8:26:14	Linear	1/Conc	0.003677	0.346226	0.000000	1.000000
Sn 189.989 {477}	12/31/2018 8:26:14	12/31/2018 8:26:14	Linear	1/Conc	0.000303	0.375673	0.000000	1.000000
Sr 407.771 { 83}	12/31/2018 8:26:14	12/31/2018 8:26:14	Linear	1/Conc	-0.004388	13.809826	0.000000	1.000000
Ti 334.941 {101}	12/31/2018 8:26:14	12/31/2018 8:26:14	Linear	1/Conc	0.002115	1.970479	0.000000	1.000000
Tl 190.856 {477}	12/31/2018 8:26:14	12/31/2018 8:26:14	Linear	1/Conc	-0.001710	0.292672	0.000000	1.000000
V 292.402 {115}	12/31/2018 8:26:14	12/31/2018 8:26:14	Linear	1/Conc	-0.000004	0.661939	0.000000	1.000000
Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Zn 206.200 {463}	12/31/2018 8:26:14	12/31/2018 8:26:14	Linear	1/Conc	0.000506	2.606887	0.000000	1.000000

Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
						Slope	Y-int	Slope factor	Offset
Ag 328.068 {103}	0.999942	0.000052	0.000600	0.002000	OK.	1.000000	0.000000	1	0
Al 396.152 { 85}	0.999858	0.004896	0.011395	0.037982	OK.	1.000000	0.000000	1	0
As 189.042 {478}	0.999978	0.000089	0.001034	0.003446	OK.	1.000000	0.000000	1	0
Ba 455.403 { 74}	0.999972	0.004094	0.000368	0.001226	OK.	1.000000	0.000000	1	0
Be 313.042 {108}	0.999860	0.014366	0.000083	0.000276	OK.	1.000000	0.000000	1	0
Ca 317.933 {106}	0.999874	0.006605	0.003880	0.012934	OK.	1.000000	0.000000	1	0
Cd 226.502 {449}	0.999797	0.007726	0.000059	0.000195	OK.	1.000000	0.000000	1	0
Co 228.616 {447}	0.999819	0.003769	0.000128	0.000425	OK.	1.000000	0.000000	1	0
Cr 267.716 {126}	0.999776	0.000886	0.000357	0.001190	OK.	1.000000	0.000000	1	0
Cu 324.754 {104}	0.999980	0.000407	0.000349	0.001164	OK.	1.000000	0.000000	1	0
Fe 259.940 {130}	0.999633	0.007791	0.002866	0.009553	OK.	1.000000	0.000000	1	0
In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
K 766.490 { 44}	0.999954	0.001217	0.040905	0.136350	OK.	1.000000	0.000000	1	0
Mg 279.079 {121}	0.999887	0.000687	0.023381	0.077938	OK.	1.000000	0.000000	1	0
Mn 257.610 {131}	0.999595	0.006729	0.000057	0.000191	OK.	1.000000	0.000000	1	0
Mo 202.030 {467}	0.999877	0.001292	0.000174	0.000581	OK.	1.000000	0.000000	1	0
Na 589.592 { 57}	0.999960	0.004505	0.011373	0.037910	OK.	1.000000	0.000000	1	0
Ni 231.604 {445}	0.999712	0.002884	0.000214	0.000712	OK.	1.000000	0.000000	1	0
Pb 220.353 {453}	0.999989	0.000344	0.000661	0.002203	OK.	1.000000	0.000000	1	0
Sb 206.833 {463}	0.999961	0.000152	0.001336	0.004455	OK.	1.000000	0.000000	1	0
Se 196.090 {472}	0.999959	0.000089	0.002106	0.007020	OK.	1.000000	0.000000	1	0
Si 212.412 {459}	0.998641	0.001455	0.000580	0.001932	OK.	1.000000	0.000000	1	0
Sn 189.989 {477}	0.999760	0.000663	0.000395	0.001316	OK.	1.000000	0.000000	1	0
Sr 407.771 { 83}	0.999856	0.018906	0.000120	0.000400	OK.	1.000000	0.000000	1	0
Ti 334.941 {101}	0.999849	0.002759	0.000149	0.000497	OK.	1.000000	0.000000	1	0
Tl 190.856 {477}	0.999957	0.000220	0.001158	0.003860	OK.	1.000000	0.000000	1	0
V 292.402 {115}	0.999780	0.001104	0.000356	0.001187	OK.	1.000000	0.000000	1	0
Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Zn 206.200 {463}	0.999795	0.004250	0.000080	0.000266	OK.	1.000000	0.000000	1	0

DOD +

SGS Accutest - Orlando Metals Digestion Log Water

Method of digestion(circle one) SW846-3010A / SW846-3005A / EPA 200.7 / EPA 200.8 / SM3030C

MP #: 34876

Prep Date/Time (mm/dd/yy 24:00): 12/31/18 0700

HotBlock I.D. 10

Thermometer I.D. 6071

Correction Factor (°C) -1

Temperature Observed/Corrected (°C) 92 / 91

pH paper lot# 220416

Volume		
Spk. Sol [A]	Used(ml)	Pipette #
ACC1109	0.5	EH15246
ACC 1081	0.25	EH15244
HET 6245	0.25	EH15244

Dig. Tube Lot# MP3161

Added [B]:	HNO_3	HCL
Lot#	0000202943	0000212747

Sample #		Initial Volume(ml)	pH<2	Final Volume(ml)	Comments
Method Blank(MB)		50.0	N/A	50.0	
Spike Blank(SB)			N/A		
Matrix Spike(MS)			✓		
Matrix Spike Dup(MSD)			✓		
Duplicate(DUP)			✓		
1 QC [C] FA60401-2	[D] 3		✓		
2 -3			✓		
3 -4			✓		
4 -6			✓		
5 -7			✓		
6 -9			✓		
7 FA60466 -1	1	5.0	✓		
8 FA60481-3			✓		
9 -4			✓		
10					
11					
12					
13 12/31/18 IT					
14					
15					
16					
17					
18					
19					
20					
21 [E]					
22 [E]					
23 [E]					
24 [E]					

Analyst: [signature] Date 12/31/18

QC Review: [signature] Date 12/31/18

A Used for SB, MS, MSD
B For reagent volumes used consult SOP MET 103, current revision
C Parent sample used to prepare MS, MSD, DUP
D Bottle Number
E Additional matrix QC

icpwaterdigestionlog 0916.xls

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General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Alkalinity, Total as CaCO3	GN80746			mg/l	250	250	100.1	85-115%
Alkalinity, Total as CaCO3	GN80759			mg/l	xxxxxxxx	243	97.4	85-115%
Bromide	GP32500/GN80742	0.50	0.0	mg/l	12.5	13.3	106.4	90-110%
Chloride	GP32500/GN80731	2.0	0.0	mg/l	50	48.8	97.6	90-110%
Solids, Total Dissolved	GN80705	50	0.0	mg/l				
Solids, Total Dissolved	GN80713	50	0.0	mg/l				
Sulfate	GP32500/GN80731	2.0	0.0	mg/l	50	50.7	101.4	90-110%

Associated Samples:
Batch GN80705: FA60401-1, FA60401-2, FA60401-3, FA60401-4, FA60401-5, FA60401-6, FA60401-7, FA60401-8, FA60401-9, FA60401-10
Batch GN80713: FA60401-11, FA60401-12, FA60401-13, FA60401-14, FA60401-15, FA60401-16, FA60401-17, FA60401-18, FA60401-19, FA60401-20, FA60401-21
Batch GN80746: FA60401-2
Batch GN80759: FA60401-3, FA60401-4, FA60401-6, FA60401-7, FA60401-9
Batch GP32500: FA60401-2, FA60401-3, FA60401-4, FA60401-6, FA60401-7, FA60401-9
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Alkalinity, Total as CaCO3	GN80746	FA60313-1	mg/l	632	632	0.1	0-20%
Alkalinity, Total as CaCO3	GN80759	FA60472-2	mg/l	474	475	0.1	0-20%
Solids, Total Dissolved	GN80705	FA60377-1	mg/l	50 U	0.00	0.0	0-5%
Solids, Total Dissolved	GN80713	FA60401-16	mg/l	456	434	4.9	0-5%

Associated Samples:
Batch GN80705: FA60401-1, FA60401-2, FA60401-3, FA60401-4, FA60401-5, FA60401-6, FA60401-7, FA60401-8, FA60401-9, FA60401-10
Batch GN80713: FA60401-11, FA60401-12, FA60401-13, FA60401-14, FA60401-15, FA60401-16, FA60401-17, FA60401-18, FA60401-19, FA60401-20, FA60401-21
Batch GN80746: FA60401-2
Batch GN80759: FA60401-3, FA60401-4, FA60401-6, FA60401-7, FA60401-9
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Bromide	GP32500/GN80731	FA60401-3	mg/l	0.12 U	12.5	14.4	115.2N(a)	90-110%
Chloride	GP32500/GN80731	FA60401-3	mg/l	49.8	50	106	112.4N(a)	90-110%
Sulfate	GP32500/GN80731	FA60401-3	mg/l	29.7	50	79.9	100.4	90-110%

Associated Samples:
Batch GP32500: FA60401-2, FA60401-3, FA60401-4, FA60401-6, FA60401-7, FA60401-9
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike recovery indicates possible matrix interference.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Bromide	GP32500/GN80731	FA60401-3	mg/l	0.12 U	12.5	12.8	11.8	20%
Chloride	GP32500/GN80731	FA60401-3	mg/l	49.8	50	105	0.9	20%
Sulfate	GP32500/GN80731	FA60401-3	mg/l	29.7	50	77.0	3.7	20%

Associated Samples:
Batch GP32500: FA60401-2, FA60401-3, FA60401-4, FA60401-6, FA60401-7, FA60401-9
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: 218122601.TXT Date Analyzed: 12/26/18 Methods: EPA 300/SW846 9056A
Analyst: BR Run ID: GN80731
Parameters: Bromide,Chloride,Sulfate

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:17	GN80731-CCV1	1		
11:34	GP32500-MB1	1		
11:51	GP32500-B1	1		
14:34	ZZZZZZ	5		
14:51	ZZZZZZ	5		
15:08	ZZZZZZ	10		
15:25	ZZZZZZ	1		
15:42	ZZZZZZ	1		
15:59	ZZZZZZ	1		
16:15	ZZZZZZ	1		
16:32	FA60401-2	10		
16:49	GN80731-CCV2	1		
17:06	GN80731-CCB1	1		
17:23	FA60401-3	1		
17:40	GP32500-S1	1		
17:57	GP32500-S2	1		
18:14	FA60401-4	1		
18:31	FA60401-6	1		
18:48	FA60401-7	1		
19:05	FA60401-9	1		
19:22	ZZZZZZ	50		
19:39	ZZZZZZ	25		
19:56	ZZZZZZ	50		
20:12	GN80731-CCV3	1		
20:29	GN80731-CCB2	1		
20:46	FA60471-7	50		(sample used for QC only; not part of login FA60401)
21:03	GP32500-S3	50		
21:20	GP32500-S4	50		
21:37	GP32499-MB1	1		
21:54	GP32499-B1	1		
22:11	GP32499-S1	5		
22:28	GP32499-S2	5		
22:45	JC79808-1	5		(sample used for QC only; not part of login FA60401)

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: 218122601.TXT Date Analyzed: 12/26/18 Methods: EPA 300/SW846 9056A
Analyst: BR Run ID: GN80731
Parameters: Bromide,Chloride,Sulfate

Time	Sample Description	Dilution Factor	PS Recov	Comments
23:02	GN80731-CCV4	1		
23:19	GN80731-CCB3	1		

Refer to raw data for calibration curve and standards.

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Instrument QC Summary
Inorganics Analyses

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: 218122601.TXT Date Analyzed: 12/26/18 Methods: EPA 300/SW846 9056A
Run ID: GN80731 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN80731-CCV1	Chloride	48.7	2.0	0.80	50	97.4	90-110
GN80731-CCV1	Bromide	13.9	0.50	0.12	12.5	111.2!(a)	90-110
GN80731-CCV1	Sulfate	54.6	2.0	0.60	50	109.2	90-110
GN80731-CCV2	Chloride	48.8	2.0	0.80	50	97.6	90-110
GN80731-CCV2	Bromide	13.5	0.50	0.12	12.5	108.0	90-110
GN80731-CCV2	Sulfate	50.8	2.0	0.60	50	101.6	90-110
GN80731-CCB1	Chloride	0.80 U	2.0	0.80			
GN80731-CCB1	Bromide	0.12 U	0.50	0.12			
GN80731-CCB1	Sulfate	0.60 U	2.0	0.60			
GN80731-CCV3	Chloride	48.7	2.0	0.80	50	97.4	90-110
GN80731-CCV3	Bromide	12.9	0.50	0.12	12.5	103.2	90-110
GN80731-CCV3	Sulfate	50.1	2.0	0.60	50	100.2	90-110
GN80731-CCB2	Chloride	0.80 U	2.0	0.80			
GN80731-CCB2	Bromide	0.12 U	0.50	0.12			
GN80731-CCB2	Sulfate	0.60 U	2.0	0.60			
GN80731-CCV4	Chloride	48.9	2.0	0.80	50	97.8	90-110
GN80731-CCV4	Bromide	13.4	0.50	0.12	12.5	107.2	90-110
GN80731-CCV4	Sulfate	51.8	2.0	0.60	50	103.6	90-110
GN80731-CCB3	Chloride	0.80 U	2.0	0.80			
GN80731-CCB3	Bromide	0.12 U	0.50	0.12			
GN80731-CCB3	Sulfate	0.60 U	2.0	0.60			

(!) Outside of QC limits
(a) Outside control limits.

SGS Instrument Runlog
Inorganics Analyses

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: 218122701.TXT Date Analyzed: 12/27/18 Methods: EPA 300/SW846 9056A
Analyst: BR Run ID: GN80742
Parameters: Bromide,Chloride

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:12	GN80742-CCV1	1		
11:29	GN80742-CCB1	1		
12:03	GP32500-MB1	1		
12:19	GP32500-B1	1		
12:36	FA60401-9	5		
12:53	GN80742-CCV2	1		
13:10	GN80742-CCB2	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: FA60401
Account: AHTNACAS - Ahtna Environmental Inc
Project: Fort Ord Groundwater Monitoring

File ID: 218122701.TXT Date Analyzed: 12/27/18 Methods: EPA 300/SW846 9056A
Run ID: GN80742 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN80742-CCV1	Chloride	48.2	2.0	0.80	50	96.4	90-110
GN80742-CCV1	Bromide	13.4	0.50	0.12	12.5	107.2	90-110
GN80742-CCB1	Chloride	0.80 U	2.0	0.80			
GN80742-CCB1	Bromide	0.12 U	0.50	0.12			
GN80742-CCV2	Chloride	48.2	2.0	0.80	50	96.4	90-110
GN80742-CCV2	Bromide	13.3	0.50	0.12	12.5	106.4	90-110
GN80742-CCB2	Chloride	0.80 U	2.0	0.80			
GN80742-CCB2	Bromide	0.12 U	0.50	0.12			

(!) Outside of QC limits

General Chemistry

Raw Data

TDS Worksheet

GN Batch ID: GN80705													
	Analyst:	GW	MB ID:	GN80705-MB	RDL:		<RDL:						
	Analysis Date:	12/24/2018	Dup ID:	FA60377-1	Smpl Res:	46.00	Dup Res:	46.00	% RPD:	0			
	Method:	SM2540C	Dup2 ID:	FA60377-2	Smpl Res:	204.00	Dup Res:	208.00	% RPD:	1.94			

Bottle #	Sample ID	Scon Umhos/cm	Dish #	Volume Filtered (ml)	Dish Tare Wt (g)	Initial Wt after drying at 180 C° (g)	Redry 1 Constant Weight in g (a)	Redry ?	Redry 2 Constant Weight in g (a)	Redry ?	Redry 3 Constant Weight in g (a)	Redry ?	RDL	TDS (mg/L)
NA	GN80705-MB	1.0	2	50.0	64.4111	64.4108	64.4108	No					50	-6.00
9	GN80705-D1	143.0	9	50.0	66.2533	66.2556	66.2556	No					50	46.00
9	GN80705-D2	378.0	13	50.0	61.8701	61.8806	61.8805	No					50	208.00
1	FA60268-9	981.0	8	50.0	71.6362	71.6791	71.6787	No					50	850.00
3	FA60312-1	910.0	15	50.0	49.3860	49.4206	49.4205	No					50	690.00
6	FA60312-2	1237.0	5X	50.0	67.1540	67.2084	67.2083	No					50	1086.00
1	FA60312-4	1000.0	D1	50.0	49.4969	49.5416	49.5416	No					50	894.00
7	FA60313-1	1171.0	3	50.0	68.6221	68.6640	68.6639	No					50	836.00
8	FA60371-1	158.9	17	50.0	50.9578	50.9613	50.9610	No					50	64.00
9	FA60377-1	143.0	29	50.0	64.4143	64.4168	64.4166	No					50	46.00
9	FA60377-2	378.0	16	50.0	50.8333	50.8436	50.8435	No					50	204.00
9	FA60377-3	103.0	CH	50.0	65.3305	65.3321	65.3320	No					50	30.00
9	FA60377-4	231.0	99	50.0	49.5761	49.5835	49.5832	No					50	142.00
1	FA60401-1	1185.0	74	50.0	66.9646	67.0110	67.0110	No					50	928.00
2	FA60401-2	2010.0	LL	25.0	57.1245	57.1631	57.1630	No					50	1540.00
2	FA60401-3	302.0	D1	50.0	66.7643	66.7757	66.7756	No					50	226.00
2	FA60401-4	300.0	18	50.0	63.4178	63.4287	63.4285	No					50	214.00
1	FA60401-5	883.0	GW	50.0	51.0508	51.0818	51.0816	No					50	616.00
2	FA60401-6	560.0	1	50.0	51.0255	51.0464	51.0464	No					50	418.00
2	FA60401-7	560.0	45	50.0	65.0180	65.0393	65.0391	No					50	422.00
1	FA60401-8	838.0	M	50.0	67.6658	67.6947	67.6946	No					50	576.00

TDS Worksheet

GN Batch ID:											
GN80705	Analyst:	GW	MB ID:	GN80705-MB	RDL:		<RDL:				
	Analysis Date:	12/24/2018	Dup ID:	FA60377-1	Smpl Res:	46.00	Dup Res:	46.00	% RPD:	0	
	Method:	SM2540C	Dup2 ID:	FA60377-2	Smpl Res:	204.00	Dup Res:	208.00	% RPD:	1.94	

Bottle #	Sample ID	Scon Umhos/cm	Dish #	Volume Filtered (ml)	Dish Tare Wt (g)	Initial Wt after drying at 180 C° (g)	Redry 1 Constant Weight in g (a)	Redry ?	Redry 2 Constant Weight in g (a)	Redry ?	Redry 3 Constant Weight in g (a)	Redry ?	RDL	TDS (mg/L)
2	FA60401-9	760.0	12	50.0	68.3531	68.3813	68.3810	No					50	558.00
1	FA60401-10	660.0	4	50.0	62.8407	62.8647	62.8645	No					50	476.00

Filtration/Evap Date:	12/24/2018	**Time:**	13:00	**Temp:**	25	**Filter Lot:**	GC281	**Balance ID:**	AS-120S	**Scon ID:**	
Oven ID #1:	Oven#2	**Therm ID #1:**	7245	**Corr Factor #1:**	0	**Oven ID #2:**	TDS Oven2	**Therm ID #2:**	TDS Oven2	**Corr Factor #2:**	+4

	Oven Used	Start Date:	Stop Date:	Start Time:	End Time:	Observed C° Start Temp:	Corrected Start Temp:	Observed C° End Temp:	Corrected End Temp:
104 Dry	Oven #1	12/24/2018	12/26/2018	14:00	08:50	104	104	105	105
Initial Dry	Oven #2	12/26/2018	12/26/2018	08:50	11:05	176	180	176	180
Redry1	Oven #2	12/26/2018	12/26/2018	13:30	14:30	176	180	176	180
Redry2									

Comments:

Approved By: **GARYW** Approval Date: **12/26/2018**

TDS Worksheet

GN Batch ID:											
GN80713	Analyst:	F. N.	MB ID:	GN80713-MB1	RDL:	200	<RDL:	NO			
	Analysis Date:	12/26/2018	Dup ID:	FA60416-1	Smpl Res:	192.00	Dup Res:	182.00	% RPD:	5.35	
	Method:	SM2540C	Dup2 ID:	FA60401-16	Smpl Res:	456.00	Dup Res:	434.00	% RPD:	4.94	

Bottle #	Sample ID	Scon Umhos/cm	Dish #	Volume Filtered (ml)	Dish Tare Wt (g)	Initial Wt after drying at 180 C° (g)	Redry 1 Constant Weight in g (a)	Redry ?	Redry 2 Constant Weight in g (a)	Redry ?	Redry 3 Constant Weight in g (a)	Redry ?	RDL	TDS (mg/L)
	GN80713-MB1		MB1	50.0	65.3018	65.3016	65.3019	No					200	2.00
2	GN80713-D1	321.0	D1	50.0	67.0494	67.0582	67.0585	No					200	182.00
1	GN80713-D2	773.0	D2	50.0	64.7688	64.7908	64.7905	No					200	434.00
1	FA60401-11	3140.0	1	25.0	62.7699	62.7831	62.7834	No					400	540.00
1	FA60401-12	4560.0	2	10.0	68.0055	68.0124	68.0121	No					1000	660.00
1	FA60401-13	4300.0	3	10.0	62.2826	62.2906	62.2903	No					1000	770.00
1	FA60401-14	4150.0	4	10.0	68.6065	68.6181	68.6177	No					1000	1120.00
1	FA60401-15	757.0	5	50.0	67.4573	67.4792	67.4776	Yes	67.4776	No			200	406.00
1	FA60401-16	773.0	6	50.0	63.6453	63.6684	63.6681	No					200	456.00
1	FA60401-17	756.0	7	50.0	68.7196	68.7422	68.7425	No					200	458.00
1	FA60401-18	800.0	8	50.0	65.5309	65.5538	65.5540	No					200	462.00
1	FA60401-19	794.0	9	50.0	49.4009	49.4272	49.4260	Yes	49.4256	No			200	494.00
1	FA60401-20	826.0	10	50.0	68.4499	68.5027	68.5014	Yes	68.5010	No			200	1022.00
1	FA60401-21	863.0	11	50.0	66.2297	66.2523	66.2527	No					200	460.00
2	FA60416-1	321.0	12	50.0	50.4389	50.4482	50.4485	No					200	192.00
2	FA60416-2	5700.0	13	10.0	51.0630	51.0901	51.0898	No					1000	2680.00
2	FA60416-3	2710.0	14	25.0	50.9018	50.9126	50.9124	No					400	424.00
2	FA60416-4	2410.0	15	25.0	51.1063	51.1113	51.1111	No					400	192.00

Filtration/Evap Date:	12/26/2018	**Time:**	17:00	**Temp:**	25	**Filter Lot:**	GC280	**Balance ID:**	AS-120S	**Scon ID:**	SCOND 3
Oven ID #1:	OVEN 2	**Therm ID #1:**	2808	**Corr Factor #1:**	0	**Oven ID #2:**	TRDS 2	**Therm ID #2:**	OVEN DIG	**Corr Factor #2:**	+4

	Oven Used	Start Date:	Stop Date:	Start Time:	End Time:	Observed C° Start Temp:	Corrected Start Temp:	Observed C° End Temp:	Corrected End Temp:
Dry	Oven #1	12/26/2018	12/27/2018	18:35	10:30	105	105	105	105
Redry1	Oven #2	12/27/2018	12/27/2018	10:30	12:30	176	180	176	180
Redry2	Oven #2	12/27/2018	12/27/2018	15:00	16:30	176	180	176	180
Redry3	Oven #2	12/27/2018	12/28/2018	19:00	12:50	176	180	176	180

Comments:

Approved By: **JONM** Approval Date: **1/4/2019**

IC STANDARDS PREP LOG

STANDARD NAME	ANALYTES	STOCK MFG. #	STOCK LOT #	STOCK EXP. DATE	STOCK CONC. (mg/l)	VOLUME ADDED (ml)	TOTAL VOLUME (ml)	STANDARD CONC. (mg/l)	PREP DATE	INITIALS	STD LOT #	EXP. DATE
B1	F, NO_2, NO_3	WC1082	Inorganic	05-25-19	500	0.5	100	2.5	12-20-18	BR	IC08676	12-21-18
↓	Br	↓	↓	↓	2500	↓	↓	12.5	↓	↓	↓	↓
↓	Cl, SO_4	↓	↓	↓	10000	↓	↓	50	↓	↓	↓	↓
CCV	F, NO_2, NO_3	WC1049	High Purity	04-30-19	500	0.5	100	2.5	12-21-18	BR	1	12-22-18
↓	Br	↓	↓	↓	2500	↓	↓	12.5	↓	↓	↓	↓
↓	Cl, SO_4	↓	↓	↓	10000	↓	↓	50	↓	↓	↓	↓
B1	F, NO_2, NO_3	WC1082	Inorganic	05-25-19	500	↓	↓	2.5	↓	↓	2	↓
↓	Br	↓	↓	↓	2500	↓	↓	12.5	↓	↓	↓	↓
↓	Cl, SO_4	↓	↓	↓	10000	↓	↓	50	↓	↓	↓	↓
CCV	F, NO_2, NO_3	WC1049	High Purity	04-30-19	500	0.5	100	2.5	12-22-18	BR	3	12-23-18
↓	Br	↓	↓	↓	2500	↓	↓	12.5	↓	↓	↓	↓
↓	Cl, SO_4	↓	↓	↓	10000	↓	↓	50	↓	↓	↓	↓
B1	F, NO_2, NO_3	WC1082	Inorganic	05-25-19	500	↓	↓	2.5	↓	↓	4	↓
↓	Br	↓	↓	↓	2500	↓	↓	~~5~~ 12.5	↓	↓	↓	↓
↓	Cl, SO_4	↓	↓	↓	10000	↓	↓	50	↓	↓	↓	↓
CCV	F, NO_2, NO_3	WC1049	High Purity	04-30-19	500	0.5	100	2.5	12-26-18	BR	5	12-27-18
↓	Br	↓	↓	↓	2500	↓	↓	12.5	↓	↓	↓	↓
↓	Cl, SO_4	↓	↓	↓	10000	↓	↓	50	↓	↓	↓	↓
B1	F, NO_2, NO_3	WC1082	Inorganic	05-25-19	500	↓	↓	2.5	↓	↓	6	↓
↓	Br	↓	↓	↓	2500	↓	↓	12.5	↓	↓	↓	↓
↓	Cl, SO_4	↓	↓	↓	10000	↓	↓	50	↓	↓	↓	↓

*BR 12/20/

*BE 12/26/18

IC Soil Prep

Method: SW846 9056A

Analyst: ~~32499~~ * BE
GP 32499

Date (mm/dd/yy): 12-26-18
Time (24:00): 1441

	Sample ID	Bottle #	Weight g	Final Vol ml
MB	MB1	N/A	4.93	50
SB	B1	N/A	5.01	↓
MS1	JC79808-1 S1	1	4.99	↓
MSD1	↓ -1 S2	↓	4.91	↓
QC1	↓ -1	↓	5.08	↓
2				
3				
4				
5				
6				
7				
8				
9				
10				
MS2				
MSD2				
QC2				
12				
13				
14				
15				
16				
17				
18				
19				
20				

BE 12/26/18

Balance ID Advpro1

REAGENTS
Spike Lot # WC1082
Cup Lot # WC1265
SRM Lot # WC1118
Vial Lot # WC1267
Syringe Lot # N/A
Filter Lot # WC1105

Comments:

Analyst's Signature: BE Date: 12-26-18

Reveiwer's Signature: BE Date: 12-26-18

Rev 0116 LM

SGS Accutest - Orlando

IC Instrument Log

Method: EPA300.0 / SW846 9056A (circle one)

Date:	12-26-18 1100
Analyst:	BR
Instrument:	#2
Inst. File Name:	218122601.txt

Prep Batchs:	32500 32499
Analytical Batch:	80731
Calibration Date:	12-18-18
Pump pressure:	1604

Vial lot#	WC1267
Cap lot#	WC1264
Syringe lot#	N/A
Filter lot#	WC1165

Standards	
ICAL:	WC1049
ICV:	N/A
CCV:	IC08675
QC:	WC1082

Sample#	Bot#	Matrix	Scon	DF	Filter (y/n)	Ions Needed F	Cl	NO2	Br	NO3	SO4	Results OK or Dilution Needed F	Cl	NO2	Br	NO3	SO4	Comments
Rinse																		
CCV	N/A	aq	N/A	1	N		—		—		—		—		X		—	Br- fails high
MB1	↓		↓	↓			—		—		—		—		—		—	
B1	↓		↓	↓			—		—		—		—		—		—	
FA60296-4	2		940uS	5			—						—					
↓ -5	↓		709uS	5			—						—					
312-4	1		1000uS	10							—						—	
348-1	11		292uS	1							—						—	
-2	↓		455uS	1							—						—	
-3	7		350uS	1							—						—	
↓ -4	↓		542uS	1							—						—	
↓ 401-2	1		1426uS	10			—		—		—		—		—		—	
CCV	N/A		N/A	1			—		—		—		—		—		—	
CCB	↓		↓	↓			—		—		—		—		—		—	
FA60401-3	1		307uS	1			—		—		—		—		—		—	
-351			307uS	1			—		—		—		—		—		—	
-352			307uS	1			—		—		—		—		—		—	
-4			316uS	1			—		—		—		—		—		—	
-6			584uS	1			—		—		—		—		—		—	
-7			576uS	1			—		—		—		—		—		—	
↓ -9	↓		844uS	1			—		—		—		PR		—		—	
71-2	17		5.66mS	50							—						—	
-3	7		4.27mS	25							—						—	
↓ -6	17		5.66mS	50							—						—	
CCV	N/A		N/A	1			—		—	—	—		—		—	—	—	
CCB	↓		↓	↓			—		—	—	—		—		—	—	—	
FA60471-7	27		5.06mS	50							—						—	
-753	↓		↓	50			—		—		—		—		—		—	
↓ -754	↓	↓	↓	50	✓		—		—		—		—		—		—	

Rev 0116 LM

SGS

IC Instrument Log

BR 12/26/18

Method: EPA300.0 / SW846 9056A (circle one)

Date:	
Analyst:	
Instrument:	
Inst. File Name:	

Prep Batchs:	
Analytical Batch:	
Calibration Date:	
Pump pressure:	

Vial lot#	
Cap lot#	
Syringe lot#	
Filter lot#	

Standards	
ICAL:	
ICV:	
CCV:	
QC:	

Sample#	Bot#	Matrix	Scon	DF	Filter (y/n)	Ions Needed F	Cl	NO2	Br	NO3	SO4	Results OK or Dilution Needed F	Cl	NO2	Br	NO3	SO4	Comments
MB1 Sc	N/A	Sc	N/A	1	Y					—						—		GP32499
B1 Sc	↓	↓	↓	↓	↓					—						—		↓
SC79868-1S1	↓	↓	↓	5	↓					—						—		
-1S2	↓	↓	↓	5	↓					—						—		
-1	↓	↓	↓	5	↓					—						—		
CCV	↓	↓	↓	1	↓		—		—	—	—		—		—	—	—	
CCB	↓	↓	↓	↓	↓		—		—	—	—		—		—	—	—	
BLK	↓	↓	↓	↓	↓		—		—	—	—		—		—	—	—	

BR 12/27/18

Sequence: 12-26-2018
Operator: Chemistry

Printed: 12/27/2018 1:32:31 PM

Title: HIGH LEVELS
Datasource: FLCHMIC2_local
Location: ICS-2000\My Sequences\ANIONS\ANIONS 2018\DEC 2018
Timebase: FLCHMIC2_1
#Samples: 52

Created: 12/26/2018 10:58:30 AM by Chemistry
Last Update: 12/27/2018 10:00:09 AM by Chemistry

No.	Name	Type	Pos.	Dil. Factor	Program	Method	Status
1	STD 0	Standard	1	1.0000	ANIONS_AS22	ANIONS-B	Finished
2	STD A	Standard	2	1.0000	ANIONS_AS22	ANIONS-B	Finished
3	STD B	Standard	3	1.0000	ANIONS_AS22	ANIONS-B	Finished
4	STD C	Standard	4	1.0000	ANIONS_AS22	ANIONS-B	Finished
5	STD D	Standard	5	1.0000	ANIONS_AS22	ANIONS-B	Finished
6	STD E	Standard	6	1.0000	ANIONS_AS22	ANIONS-B	Finished
7	STD F	Standard	7	1.0000	ANIONS_AS22	ANIONS-B	Finished
8	STD G	Standard	8	1.0000	ANIONS_AS22	ANIONS-B	Finished
9	STD H	Standard	9	1.0000	ANIONS_AS22	ANIONS-B	Finished
10	STD I	Standard	10	1.0000	ANIONS_AS22	ANIONS-B	Finished
11	ICB	Unknown	11	1.0000	ANIONS_AS22	ANIONS-B	Finished
12	ICV	Unknown	12	1.0000	ANIONS_AS22	ANIONS-B	Finished
13	CCV2	Unknown	13	1.0000	ANIONS_AS22	ANIONS-B	Finished
14	CCV	Unknown	14	1.0000	ANIONS_AS22	ANIONS-B	Finished
15	CCB	Unknown	15	1.0000	ANIONS_AS22	ANIONS-B	Finished
16	RINSE	Unknown	1	1.0000	ANIONS_AS22	ANIONS-B	Finished
17	CCV	Unknown	2	1.0000	ANIONS_AS22	ANIONS-B	Finished
18	MB1	Unknown	3	1.0000	ANIONS_AS22	ANIONS-B	Finished
19	B1	Unknown	4	1.0000	ANIONS_AS22	ANIONS-B	Finished
20	FA60296-4	Unknown	5	5.0000	ANIONS_AS22	ANIONS-B	Finished
21	FA60296-5	Unknown	6	5.0000	ANIONS_AS22	ANIONS-B	Finished
22	FA60312-4	Unknown	7	10.0000	ANIONS_AS22	ANIONS-B	Finished
23	FA60348-1	Unknown	8	1.0000	ANIONS_AS22	ANIONS-B	Finished
24	FA60348-2	Unknown	9	1.0000	ANIONS_AS22	ANIONS-B	Finished
25	FA60348-3	Unknown	10	1.0000	ANIONS_AS22	ANIONS-B	Finished
26	FA60348-4	Unknown	11	1.0000	ANIONS_AS22	ANIONS-B	Finished
27	FA60401-2	Unknown	12	10.0000	ANIONS_AS22	ANIONS-B	Finished
28	CCV	Unknown	13	1.0000	ANIONS_AS22	ANIONS-B	Finished
29	CCB	Unknown	14	1.0000	ANIONS_AS22	ANIONS-B	Finished
30	FA60401-3	Unknown	15	1.0000	ANIONS_AS22	ANIONS-B	Finished
31	FA60401-3 S1	Unknown	16	1.0000	ANIONS_AS22	ANIONS-B	Finished
32	FA60401-3 S2	Unknown	17	1.0000	ANIONS_AS22	ANIONS-B	Finished
33	FA60401-4	Unknown	18	1.0000	ANIONS_AS22	ANIONS-B	Finished
34	FA60401-6	Unknown	19	1.0000	ANIONS_AS22	ANIONS-B	Finished
35	FA60401-7	Unknown	20	1.0000	ANIONS_AS22	ANIONS-B	Finished
36	FA60401-9	Unknown	21	1.0000	ANIONS_AS22	ANIONS-B	Finished
37	FA60471-2	Unknown	22	50.0000	ANIONS_AS22	ANIONS-B	Finished
38	FA60471-3	Unknown	23	25.0000	ANIONS_AS22	ANIONS-B	Finished
39	FA60471-6	Unknown	24	50.0000	ANIONS_AS22	ANIONS-B	Finished
40	CCV	Unknown	25	1.0000	ANIONS_AS22	ANIONS-B	Finished
41	CCB	Unknown	26	1.0000	ANIONS_AS22	ANIONS-B	Finished
42	FA60471-7	Unknown	27	50.0000	ANIONS_AS22	ANIONS-B	Finished

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Sequence: 12-26-2018
Operator: Chemistry

Printed: 12/27/2018 1:32:31 PM

Title: HIGH LEVELS
Datasource: FLCHMIC2_local
Location: ICS-2000\My Sequences\ANIONS\ANIONS 2018\DEC 2018
Timebase: FLCHMIC2_1
#Samples: 52

Created: 12/26/2018 10:58:30 AM by Chemistry
Last Update: 12/27/2018 10:00:09 AM by Chemistry

No.	Name	Inj. Date/Time	Inj. Vol.	Comment
1	STD 0	12/18/2018 5:11:53 PM	10.0	System Operator: BR IC 2000
2	STD A	12/18/2018 5:28:26 PM	10.0	System Operator: BR IC 2000
3	STD B	12/18/2018 5:45:22 PM	10.0	System Operator: BR IC 2000
4	STD C	12/18/2018 6:02:18 PM	10.0	System Operator: BR IC 2000
5	STD D	12/18/2018 6:19:13 PM	10.0	System Operator: BR IC 2000
6	STD E	12/18/2018 6:36:10 PM	10.0	System Operator: BR IC 2000
7	STD F	12/18/2018 6:53:06 PM	10.0	System Operator: BR IC 2000
8	STD G	12/18/2018 7:10:01 PM	10.0	System Operator: BR IC 2000
9	STD H	12/18/2018 7:26:57 PM	10.0	System Operator: BR IC 2000
10	STD I	12/18/2018 7:43:53 PM	10.0	System Operator: BR IC 2000
11	ICB	12/18/2018 8:00:49 PM	10.0	System Operator: BR IC 2000
12	ICV	12/18/2018 8:17:45 PM	10.0	System Operator: BR IC 2000
13	CCV2	12/18/2018 8:34:41 PM	10.0	System Operator: BR IC 2000
14	CCV	12/18/2018 8:51:36 PM	10.0	System Operator: BR IC 2000
15	CCB	12/18/2018 9:08:32 PM	10.0	System Operator: BR IC 2000
16	RINSE	12/26/2018 11:00:33 AM	10.0	System Operator: BR IC 2000
17	CCV	12/26/2018 11:17:09 AM	10.0	System Operator: BR IC 2000
18	MB1	12/26/2018 11:34:04 AM	10.0	System Operator: BR IC 2000
19	B1	12/26/2018 11:51:00 AM	10.0	System Operator: BR IC 2000
20	FA60296-4	12/26/2018 2:34:44 PM	10.0	System Operator: BR IC 2000
21	FA60296-5	12/26/2018 2:51:22 PM	10.0	System Operator: BR IC 2000
22	FA60312-4	12/26/2018 3:08:18 PM	10.0	System Operator: BR IC 2000
23	FA60348-1	12/26/2018 3:25:13 PM	10.0	System Operator: BR IC 2000
24	FA60348-2	12/26/2018 3:42:08 PM	10.0	System Operator: BR IC 2000
25	FA60348-3	12/26/2018 3:59:03 PM	10.0	System Operator: BR IC 2000
26	FA60348-4	12/26/2018 4:15:59 PM	10.0	System Operator: BR IC 2000
27	FA60401-2	12/26/2018 4:32:55 PM	10.0	System Operator: BR IC 2000
28	CCV	12/26/2018 4:49:51 PM	10.0	System Operator: BR IC 2000
29	CCB	12/26/2018 5:06:45 PM	10.0	System Operator: BR IC 2000
30	FA60401-3	12/26/2018 5:23:41 PM	10.0	System Operator: BR IC 2000
31	FA60401-3 S1	12/26/2018 5:40:37 PM	10.0	System Operator: BR IC 2000
32	FA60401-3 S2	12/26/2018 5:57:33 PM	10.0	System Operator: BR IC 2000
33	FA60401-4	12/26/2018 6:14:28 PM	10.0	System Operator: BR IC 2000
34	FA60401-6	12/26/2018 6:31:23 PM	10.0	System Operator: BR IC 2000
35	FA60401-7	12/26/2018 6:48:19 PM	10.0	System Operator: BR IC 2000
36	FA60401-9	12/26/2018 7:05:14 PM	10.0	System Operator: BR IC 2000
37	FA60471-2	12/26/2018 7:22:09 PM	10.0	System Operator: BR IC 2000
38	FA60471-3	12/26/2018 7:39:04 PM	10.0	System Operator: BR IC 2000
39	FA60471-6	12/26/2018 7:56:00 PM	10.0	System Operator: BR IC 2000
40	CCV	12/26/2018 8:12:55 PM	10.0	System Operator: BR IC 2000
41	CCB	12/26/2018 8:29:51 PM	10.0	System Operator: BR IC 2000
42	FA60471-7	12/26/2018 8:46:46 PM	10.0	System Operator: BR IC 2000

Chromeleon © Dionex Corporation, Version 6.80 SR10 Build 2818 (166959)

Sequence: 12-26-2018
Operator: Chemistry

Printed: 12/27/2018 1:32:32 PM

Title: HIGH LEVELS
Datasource: FLCHMIC2_local
Location: ICS-2000\My Sequences\ANIONS\ANIONS 2018\DEC 2018
Timebase: FLCHMIC2_1
#Samples: 52

Created: 12/26/2018 10:58:30 AM by Chemistry
Last Update: 12/27/2018 10:00:09 AM by Chemistry

No.	Name	Type	Pos.	Dil. Factor	Program	Method	Status
43	FA60471-7 S3	Unknown	28	50.0000	ANIONS_AS22	ANIONS-B	Finished
44	FA60471-7 S4	Unknown	29	50.0000	ANIONS_AS22	ANIONS-B	Finished
45	MB1 SO	Unknown	30	1.0000	ANIONS_AS22	ANIONS-B	Finished
46	B1 SO	Unknown	31	1.0000	ANIONS_AS22	ANIONS-B	Finished
47	JC79808-1 S1	Unknown	32	5.0000	ANIONS_AS22	ANIONS-B	Finished
48	JC79808-1 S2	Unknown	33	5.0000	ANIONS_AS22	ANIONS-B	Finished
49	JC79808-1	Unknown	34	5.0000	ANIONS_AS22	ANIONS-B	Finished
50	CCV	Unknown	35	1.0000	ANIONS_AS22	ANIONS-B	Finished
51	CCB	Unknown	36	1.0000	ANIONS_AS22	ANIONS-B	Finished
52	BLK	Unknown	37	1.0000	SHUTDOWN_A22	ANIONS-B	Finished

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Sequence: 12-26-2018
Operator: Chemistry

Printed: 12/27/2018 1:32:32 PM

Title: HIGH LEVELS
Datasource: FLCHMIC2_local
Location: ICS-2000\My Sequences\ANIONS\ANIONS 2018\DEC 2018
Timebase: FLCHMIC2_1
#Samples: 52

Created: 12/26/2018 10:58:30 AM by Chemistry
Last Update: 12/27/2018 10:00:09 AM by Chemistry

No.	Name	Inj. Date/Time	Inj. Vol.	Comment
43	FA60471-7 S3	12/26/2018 9:03:41 PM	10.0	System Operator: BR IC 2000
44	FA60471-7 S4	12/26/2018 9:20:38 PM	10.0	System Operator: BR IC 2000
45	MB1 SO	12/26/2018 9:37:34 PM	10.0	System Operator: BR IC 2000
46	B1 SO	12/26/2018 9:54:29 PM	10.0	System Operator: BR IC 2000
47	JC79808-1 S1	12/26/2018 10:11:24 PM	10.0	System Operator: BR IC 2000
48	JC79808-1 S2	12/26/2018 10:28:19 PM	10.0	System Operator: BR IC 2000
49	JC79808-1	12/26/2018 10:45:15 PM	10.0	System Operator: BR IC 2000
50	CCV	12/26/2018 11:02:11 PM	10.0	System Operator: BR IC 2000
51	CCB	12/26/2018 11:19:07 PM	10.0	System Operator: BR IC 2000
52	BLK	12/26/2018 11:36:03 PM	10.0	System Operator: BR IC 2000

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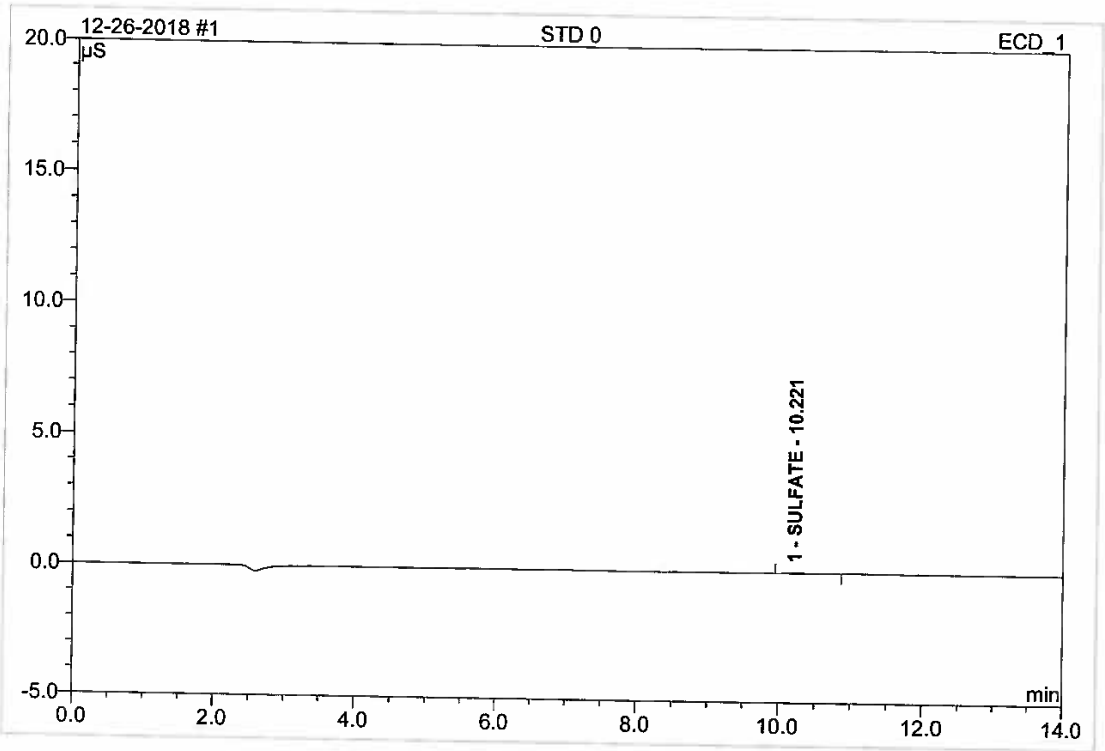
Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

1 STD 0

System Operator: BR IC 2000

Sample Name:	**STD 0**	*Injection Volume:*	**10.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 17:11**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	10.22	SULFATE	0.021	0.008	100.00	-0.393	BMB
Total:			0.021	0.008	100.00	-0.393	

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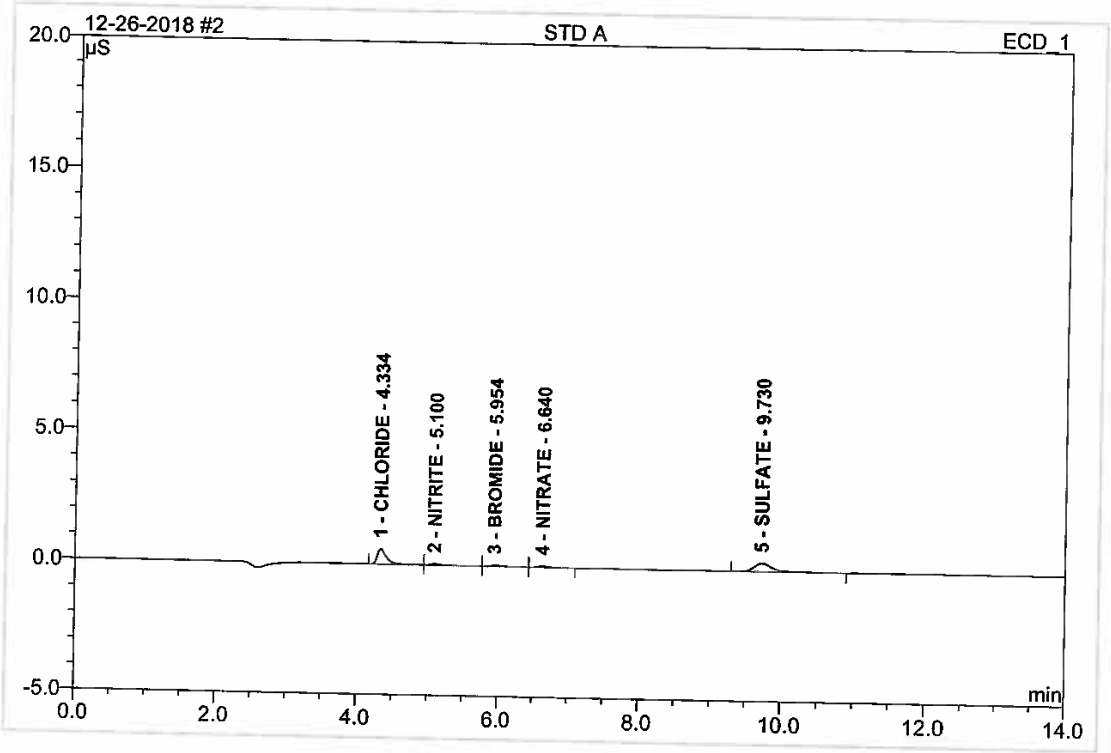
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

2 STD A

System Operator: BR IC 2000

Sample Name:	**STD A**	*Injection Volume:*	**10.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 17:28**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	4.33	CHLORIDE	0.582	0.093	40.02	2.465	BM
2	5.10	NITRITE	0.057	0.014	6.15	0.109	M
3	5.95	BROMIDE	0.056	0.011	4.73	0.509	Mb
4	6.64	NITRATE	0.053	0.011	4.60	0.106	bMB
5	9.73	SULFATE	0.322	0.103	44.49	2.021	BMB
Total:			1.071	0.232	100.00	5.210	

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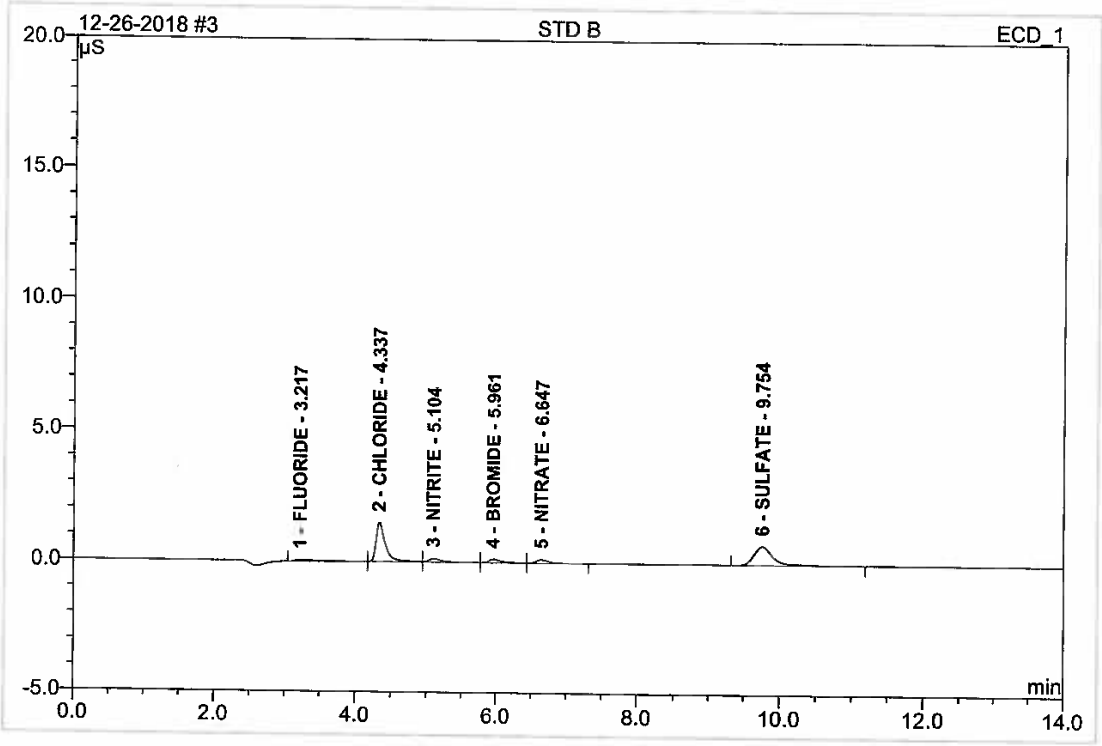
Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

3 STD B

System Operator: BR IC 2000

Sample Name:	**STD B**	*Injection Volume:*	**10.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 17:45**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.22	FLUORIDE	0.055	0.023	4.10	0.243	BMB
2	4.34	CHLORIDE	1.477	0.229	40.60	4.868	bM
3	5.10	NITRITE	0.138	0.030	5.32	0.234	M
4	5.96	BROMIDE	0.133	0.026	4.60	1.230	M
5	6.65	NITRATE	0.132	0.027	4.74	0.235	MB
6	9.75	SULFATE	0.716	0.229	40.64	5.195	BMB
Total:			2.651	0.564	100.00	12.005	

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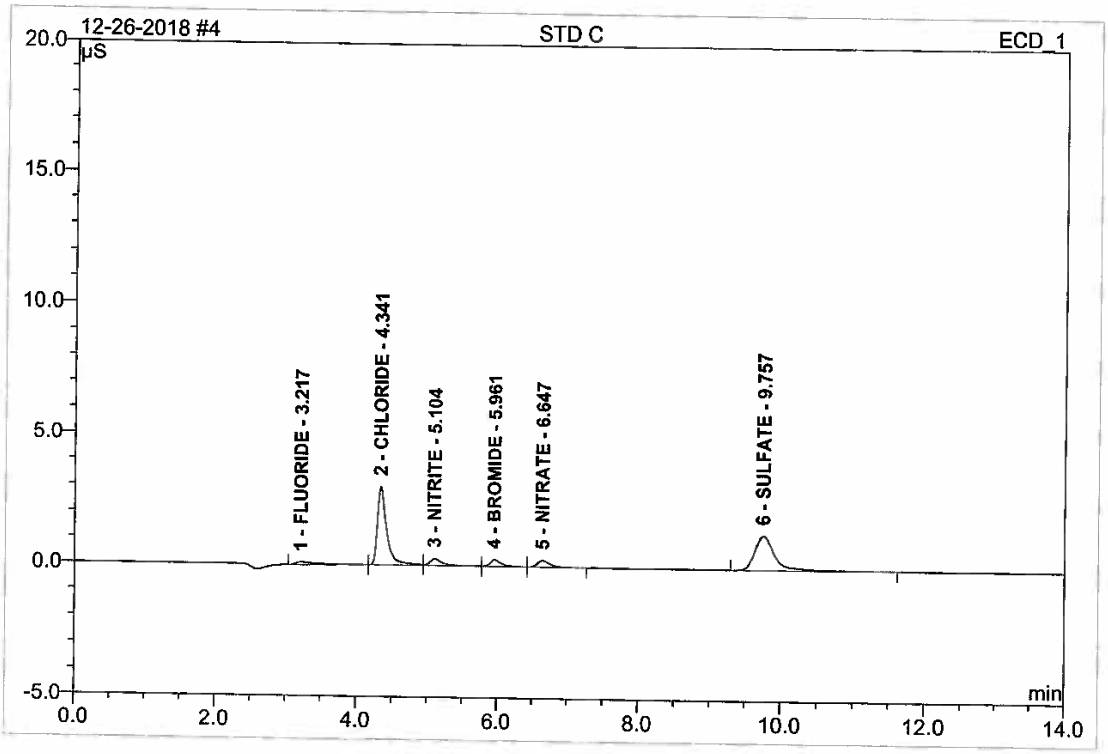
Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

4 STD C

System Operator: BR IC 2000

Sample Name:	**STD C**	*Injection Volume:*	**10.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 18:02**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.22	FLUORIDE	0.102	0.039	3.60	0.510	BMb
2	4.34	CHLORIDE	2.998	0.462	42.25	8.991	bM
3	5.10	NITRITE	0.277	0.062	5.67	0.488	M
4	5.96	BROMIDE	0.265	0.051	4.71	2.462	M
5	6.65	NITRATE	0.267	0.055	5.06	0.465	MB
6	9.76	SULFATE	1.304	0.423	38.72	10.100	BMB
Total:			5.212	1.093	100.00	23.016	

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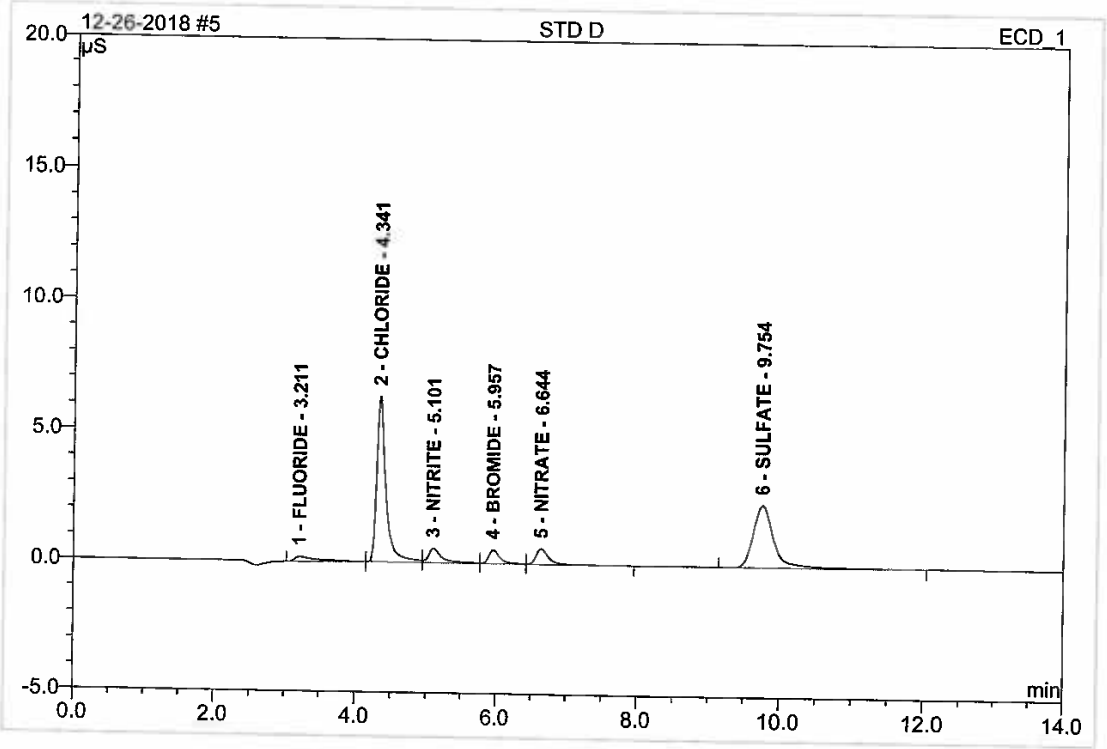
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

5 STD D

System Operator: BR IC 2000

Sample Name:	**STD D**	*Injection Volume:*	**10.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 18:19**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.21	FLUORIDE	0.185	0.068	3.10	0.979	BMb
2	4.34	CHLORIDE	6.331	0.959	43.75	17.775	bM
3	5.10	NITRITE	0.547	0.124	5.66	0.980	M
4	5.96	BROMIDE	0.522	0.103	4.69	4.944	M
5	6.64	NITRATE	0.597	0.131	6.00	1.078	MB
6	9.75	SULFATE	2.388	0.807	36.81	19.774	BMB
Total:			10.571	2.192	100.00	45.530	

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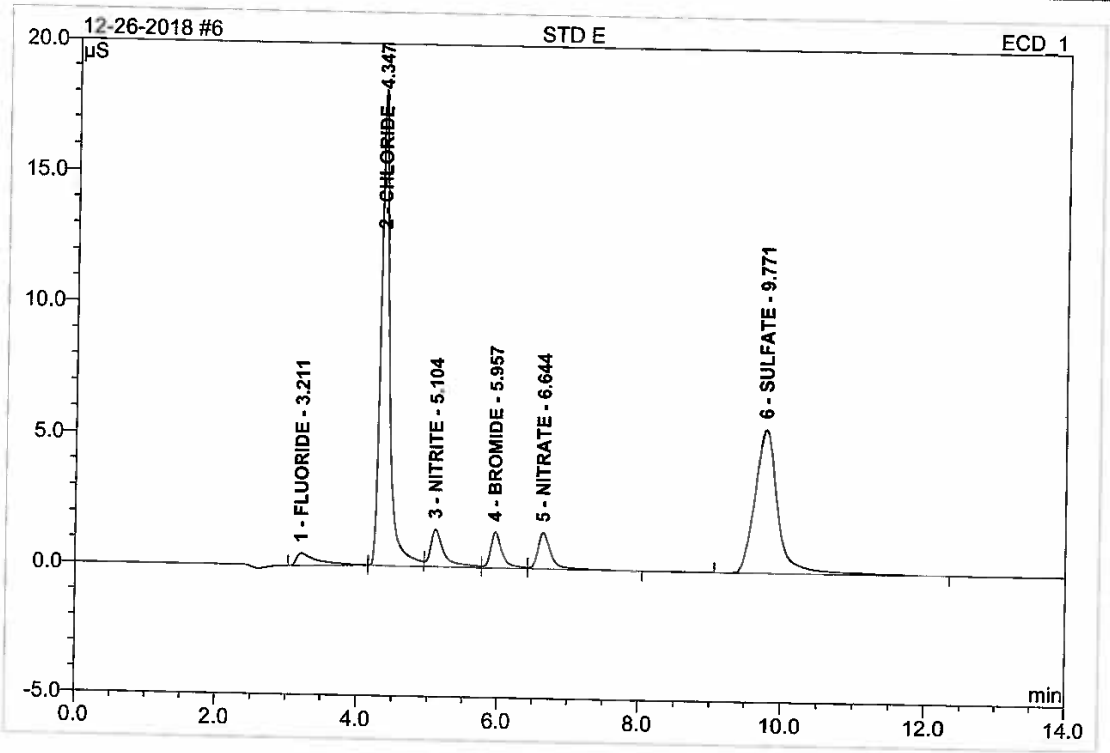
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

6 STD E

System Operator: BR IC 2000

Sample Name:	**STD E**	*Injection Volume:*	**10.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 18:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.21	FLUORIDE	0.473	0.169	2.93	2.635	BMb
2	4.35	CHLORIDE	18.183	2.653	46.03	47.730	bM
3	5.10	NITRITE	1.431	0.323	5.60	2.557	M
4	5.96	BROMIDE	1.373	0.270	4.69	13.029	M
5	6.64	NITRATE	1.390	0.304	5.27	2.465	MB
6	9.77	SULFATE	5.507	2.045	35.48	51.033	BMB
Total:			28.357	5.764	100.00	119.448	

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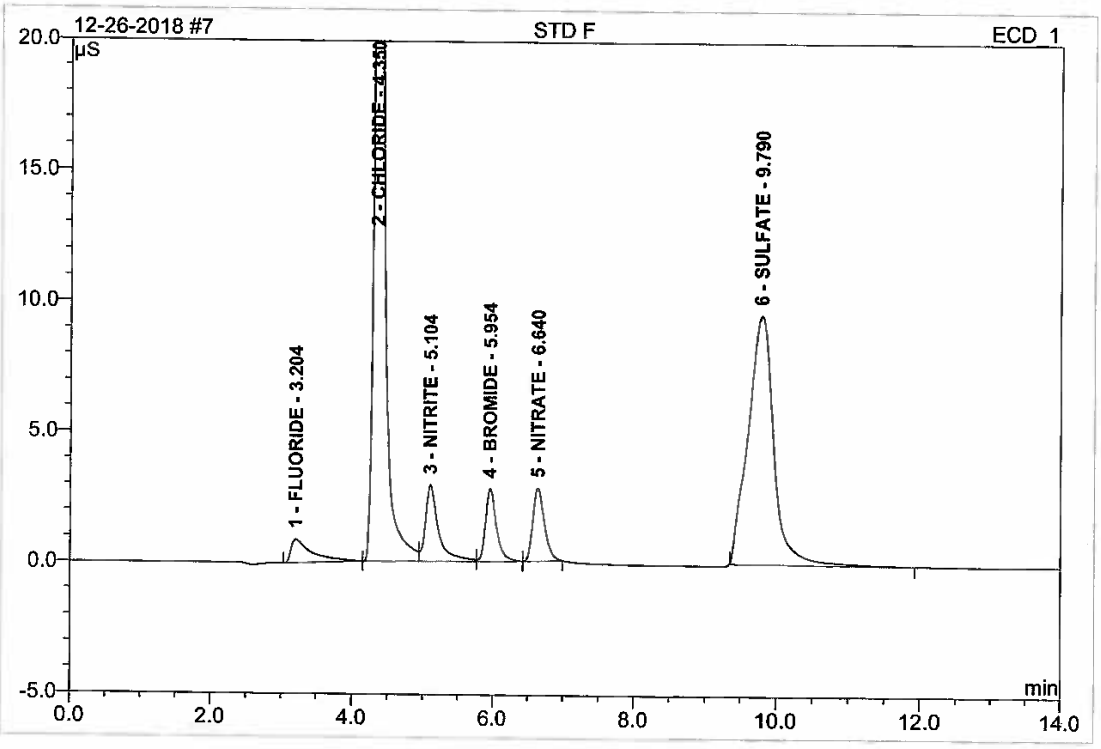
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

7 STD F

System Operator: BR IC 2000

Sample Name:	**STD F**	*Injection Volume:*	**10.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 18:53**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.20	FLUORIDE	0.891	0.306	2.59	4.884	BMb
2	4.35	CHLORIDE	41.677	5.901	49.95	105.172	bM
3	5.10	NITRITE	2.914	0.628	5.32	4.983	M
4	5.95	BROMIDE	2.782	0.510	4.31	24.577	MB
5	6.64	NITRATE	2.781	0.530	4.48	4.283	BMB
6	9.79	SULFATE	9.533	3.941	33.35	98.877	MB
Total:			60.578	11.816	100.00	242.775	

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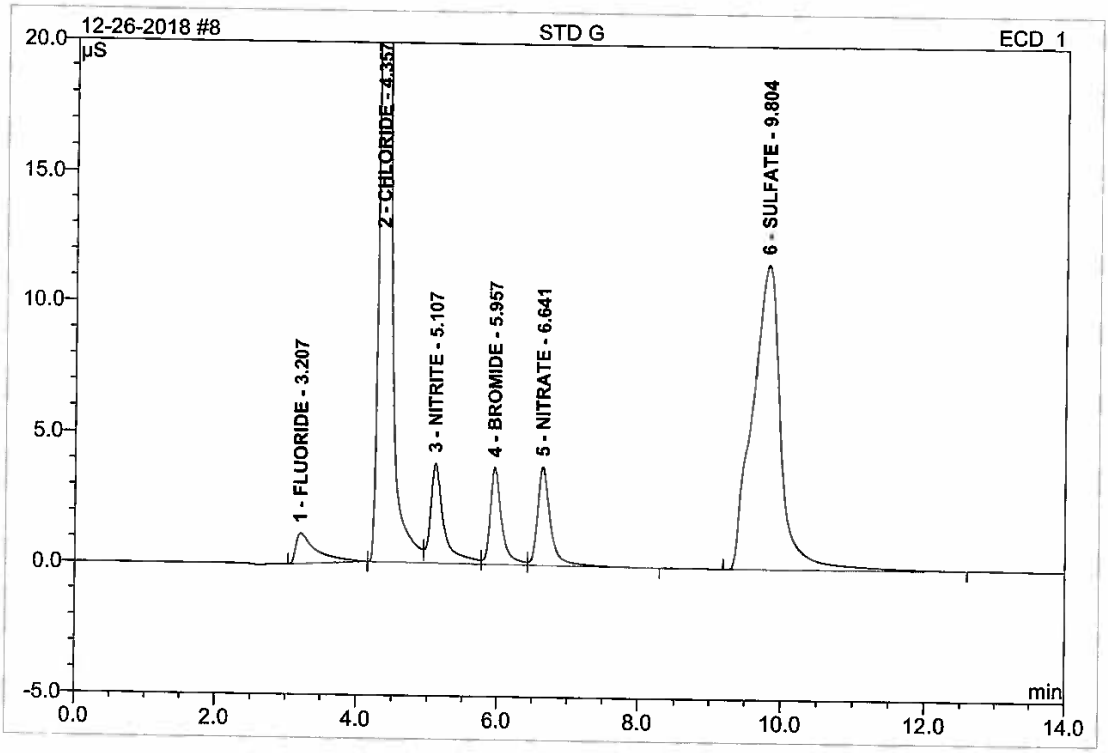
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

8 STD G

System Operator: BR IC 2000

Sample Name:	**STD G**	*Injection Volume:*	**10.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 19:10**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.21	FLUORIDE	1.164	0.396	2.47	6.366	BMb
2	4.36	CHLORIDE	55.940	7.899	49.25	140.499	bM
3	5.11	NITRITE	3.835	0.860	5.36	6.823	M
4	5.96	BROMIDE	3.715	0.724	4.51	34.906	M
5	6.64	NITRATE	3.785	0.819	5.10	6.606	MB
6	9.80	SULFATE	11.660	5.341	33.30	134.218	BMB
Total:			80.099	16.039	100.00	329.417	

ALSE ANION REPORT/Integration

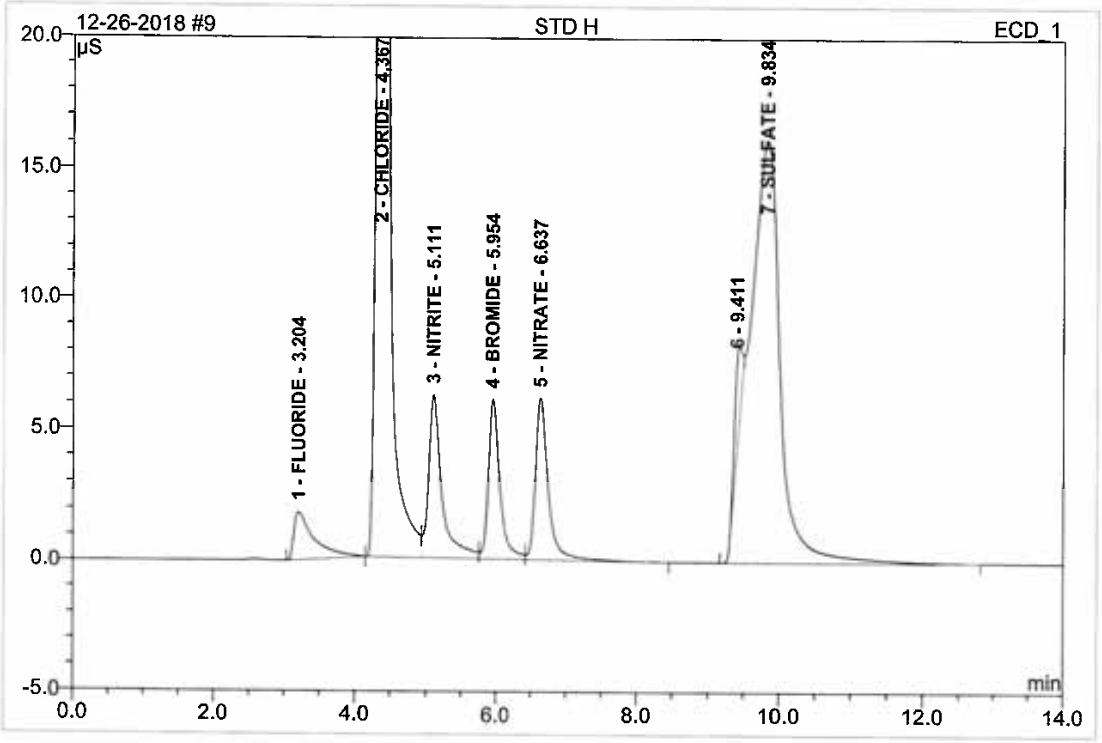
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

9 STD H

System Operator: BR IC 2000

Sample Name:	**STD H**	*Injection Volume:*	**10.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 19:26**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.20	FLUORIDE	1.829	0.610	2.32	9.889	BMb
2	4.37	CHLORIDE	93.247	13.195	50.27	234.143	bM
3	5.11	NITRITE	6.191	1.379	5.25	10.940	M
4	5.95	BROMIDE	6.058	1.168	4.45	56.374	M
5	6.64	NITRATE	6.138	1.317	5.02	10.614	MB
6	9.41	n.a.	3.310	0.370	1.41	n.a.	Ru
7	9.83	SULFATE	16.144	8.210	31.28	206.630	BMB
Total:			132.918	26.250	100.00	528.590	

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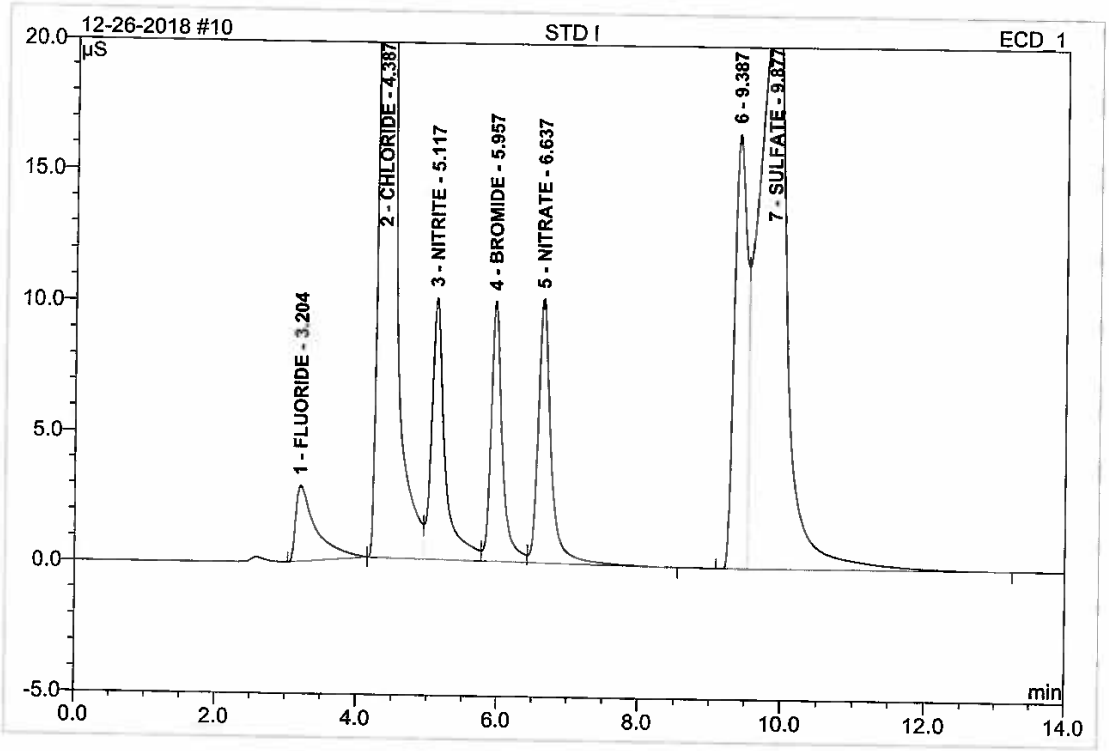
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

10 STD I

System Operator: BR IC 2000

Sample Name:	**STD I**	*Injection Volume:*	**10.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 19:43**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.20	FLUORIDE	2.909	0.963	2.23	15.695	BMb
2	4.39	CHLORIDE	150.173	21.885	50.73	387.791	bM
3	5.12	NITRITE	10.028	2.232	5.17	17.712	M
4	5.96	BROMIDE	9.983	1.904	4.41	91.893	M
5	6.64	NITRATE	10.129	2.154	4.99	17.345	MB
6	9.39	n.a.	16.624	3.429	7.95	n.a.	BM
7	9.88	SULFATE	22.130	10.569	24.50	266.158	MB
Total:			221.978	43.136	100.00	796.593	

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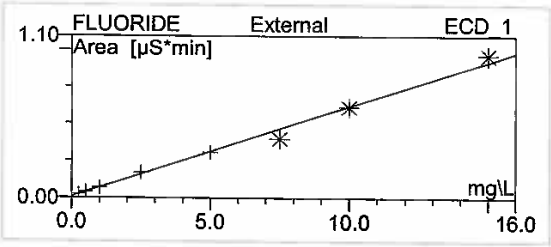
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

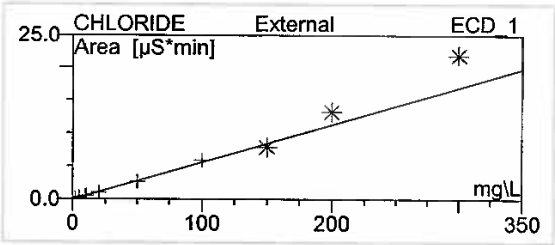
Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

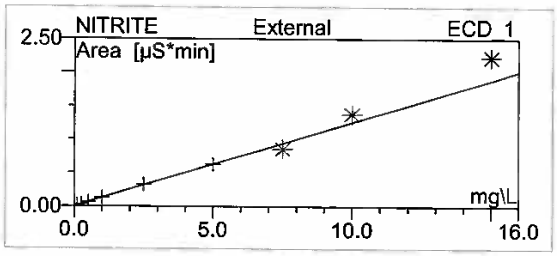
10 STD I

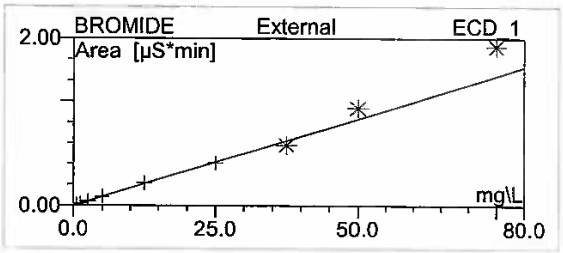
System Operator: BR IC 2000

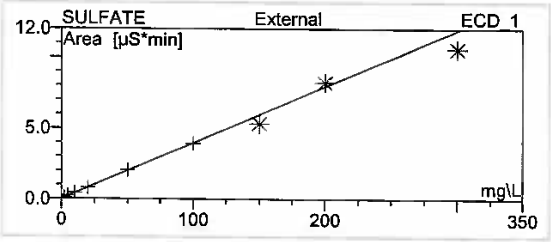
Sample Name:	**STD I**	*Injection Volume:*	**10.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 19:43**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**

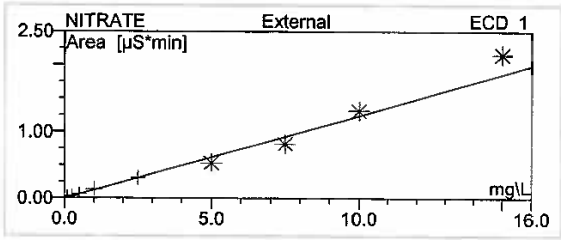












No.	Ret.Time min	Peak Name	Cal.Type	Points	Corr.Coeff. %	Offset	Slope	Curve
1	3.20	FLUORIDE	XLOff	5	99.9094	0.0083	0.0609	0.0000
2	4.39	CHLORIDE	XLOff	6	99.7167	-0.0465	0.0566	0.0000
3	5.12	NITRITE	XLOff	6	99.9729	0.0005	0.1260	0.0000
4	5.96	BROMIDE	XLOff	6	99.9573	0.0004	0.0207	0.0000
5	6.64	NITRATE	XLOff	5	99.8249	-0.0025	0.1243	0.0000
6	9.39	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	9.88	SULFATE	XLOff	7	99.9776	0.0232	0.0396	0.0000
Average:					99.8931	-0.0028	0.0713	0.0000

ALSE ANION REPORT/Calibration(Batch)

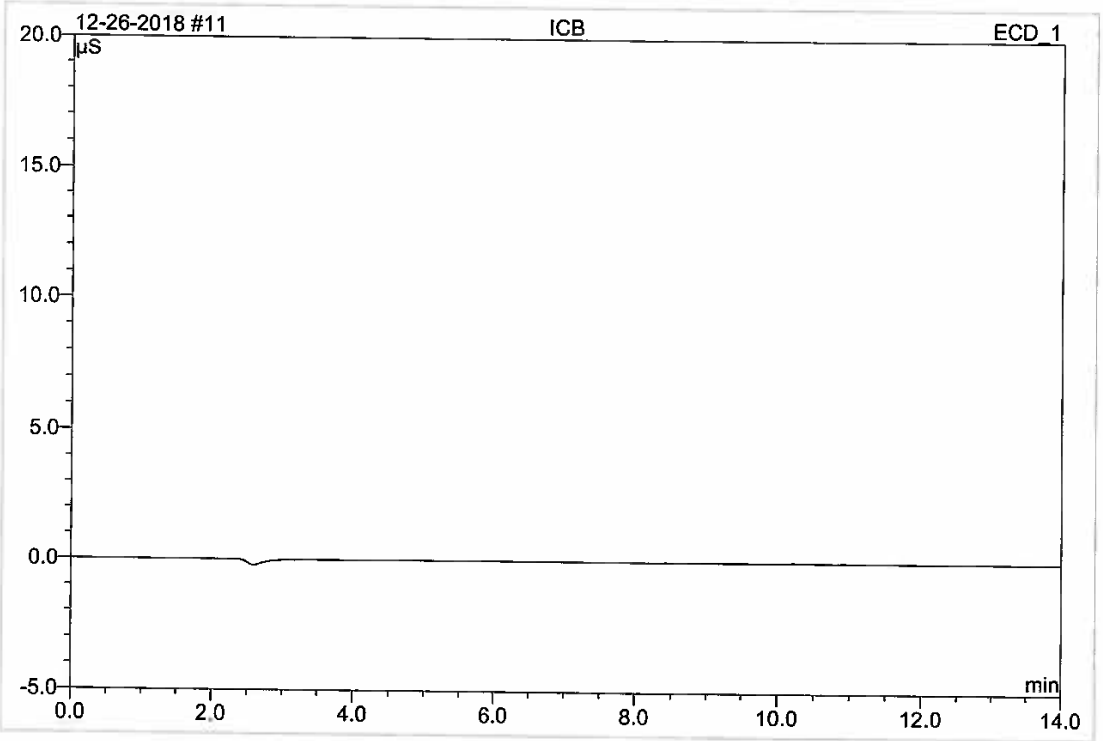
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

11 ICB

System Operator: BR IC 2000

Sample Name:	**ICB**	*Injection Volume:*	**10.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 20:00**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
Total:			0.000	0.000	0.00	0.000	

ALSE ANION REPORT/Integration

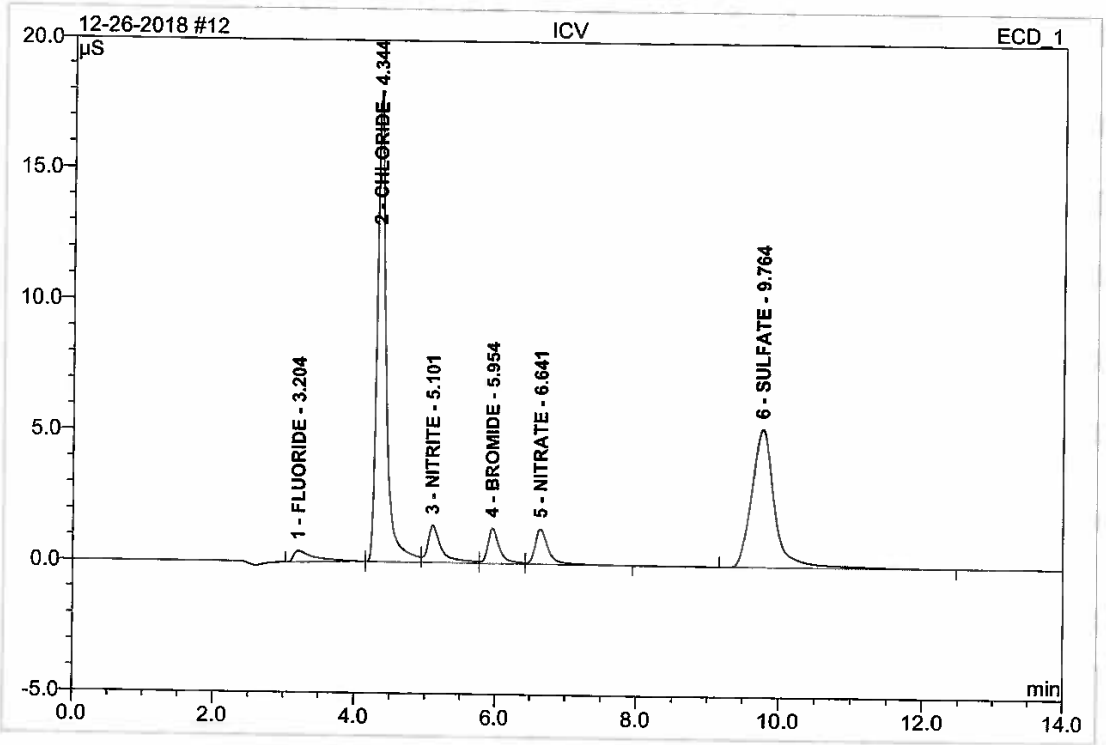
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

12 ICV

System Operator: BR IC 2000

Sample Name:	**ICV**	*Injection Volume:*	**10.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 20:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.20	FLUORIDE	0.432	0.150	2.66	2.323	BMb
2	4.34	CHLORIDE	18.009	2.641	46.96	47.521	bM
3	5.10	NITRITE	1.427	0.324	5.77	2.571	M
4	5.95	BROMIDE	1.348	0.267	4.75	12.879	M
5	6.64	NITRATE	1.349	0.296	5.26	2.400	MB
6	9.76	SULFATE	5.272	1.946	34.60	48.520	BMB
Total:			27.837	5.624	100.00	116.213	

ALSE ANION REPORT/Integration

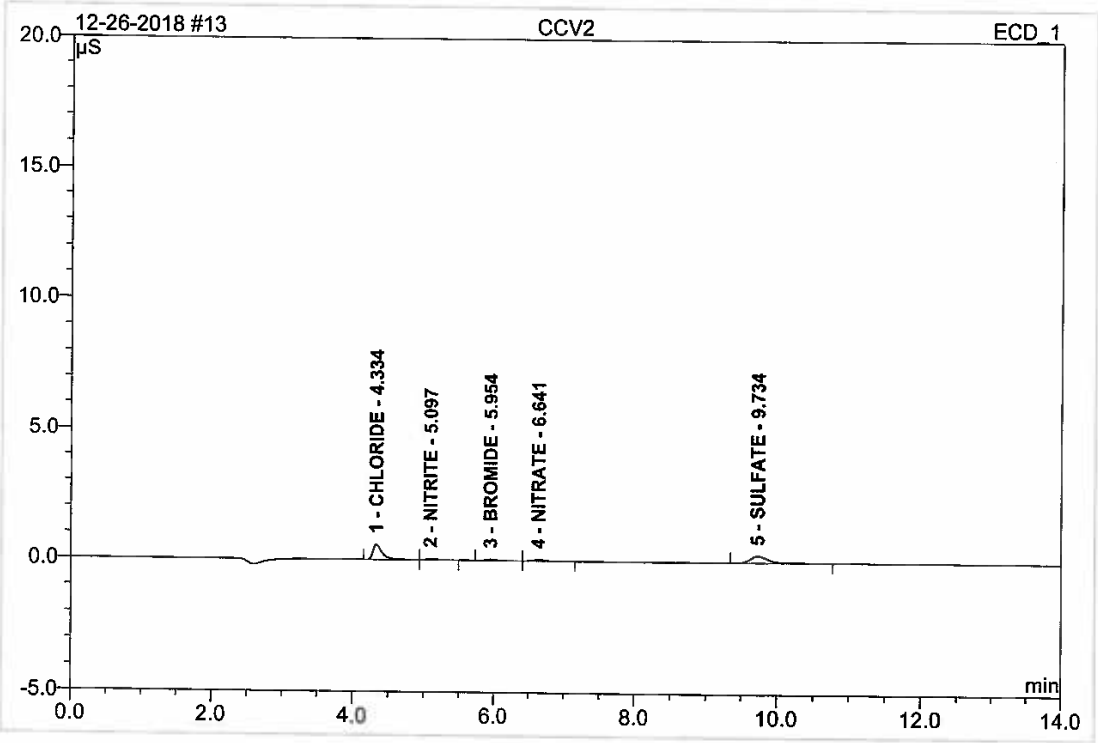
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

13 CCV2

System Operator: BR IC 2000

Sample Name:	**CCV2**	*Injection Volume:*	**10.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 20:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	4.33	CHLORIDE	0.577	0.091	44.83	2.423	BM
2	5.10	NITRITE	0.053	0.010	4.96	0.075	MB
3	5.95	BROMIDE	0.051	0.009	4.68	0.435	BM
4	6.64	NITRATE	0.052	0.010	5.19	0.105	MB
5	9.73	SULFATE	0.262	0.081	40.33	1.470	BMB
Total:			0.994	0.202	100.00	4.508	

ALSE ANION REPORT/Integration

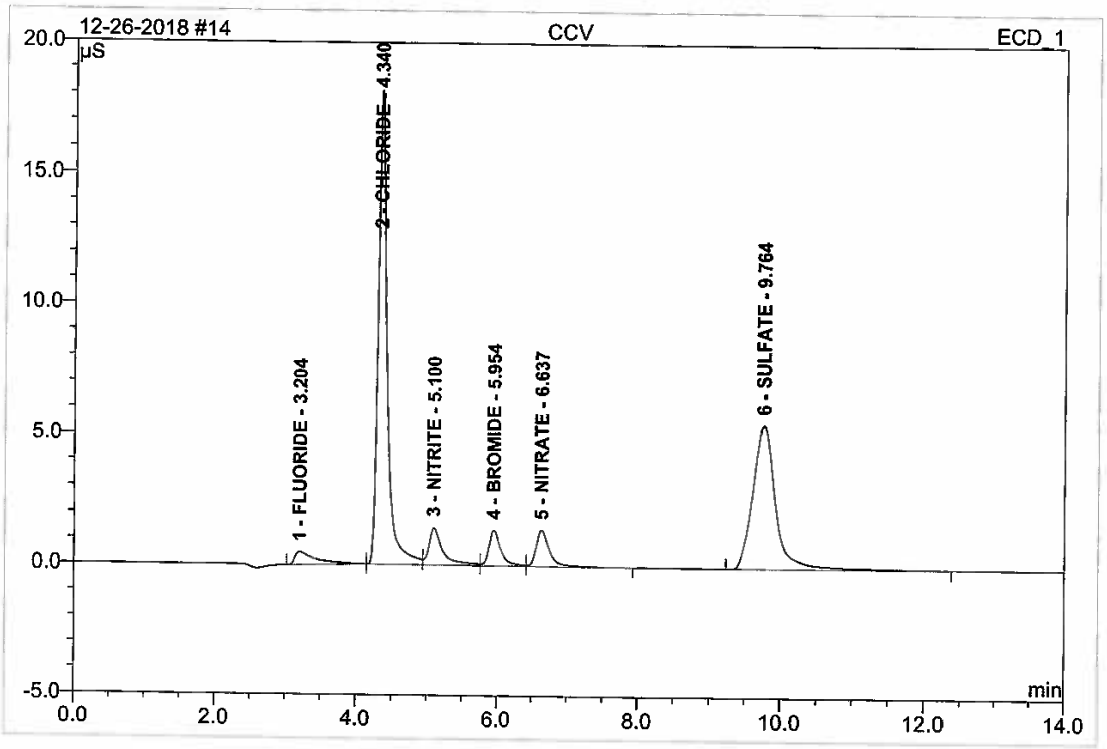
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

14 CCV

System Operator: BR IC 2000

Sample Name:	**CCV**	*Injection Volume:*	**10.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 20:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.20	FLUORIDE	0.482	0.166	2.89	2.592	BMb
2	4.34	CHLORIDE	18.121	2.655	46.13	47.765	bM
3	5.10	NITRITE	1.427	0.323	5.62	2.563	M
4	5.95	BROMIDE	1.371	0.270	4.70	13.027	M
5	6.64	NITRATE	1.390	0.303	5.27	2.460	MB
6	9.76	SULFATE	5.494	2.037	35.40	50.836	BMB
Total:			28.286	5.755	100.00	119.242	

ALSE ANION REPORT/Integration

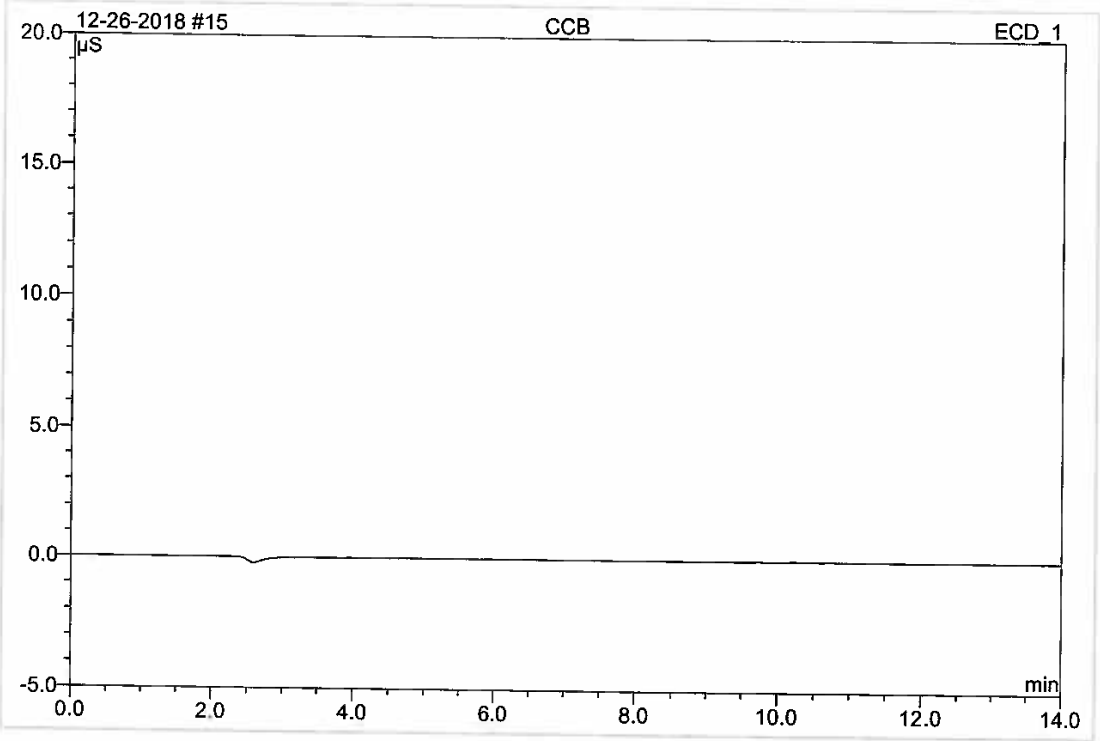
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

15 CCB

System Operator: BR IC 2000

Sample Name:	**CCB**	*Injection Volume:*	**10.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 21:08**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
Total:			0.000	0.000	0.00	0.000	

ALSE ANION REPORT/Integration

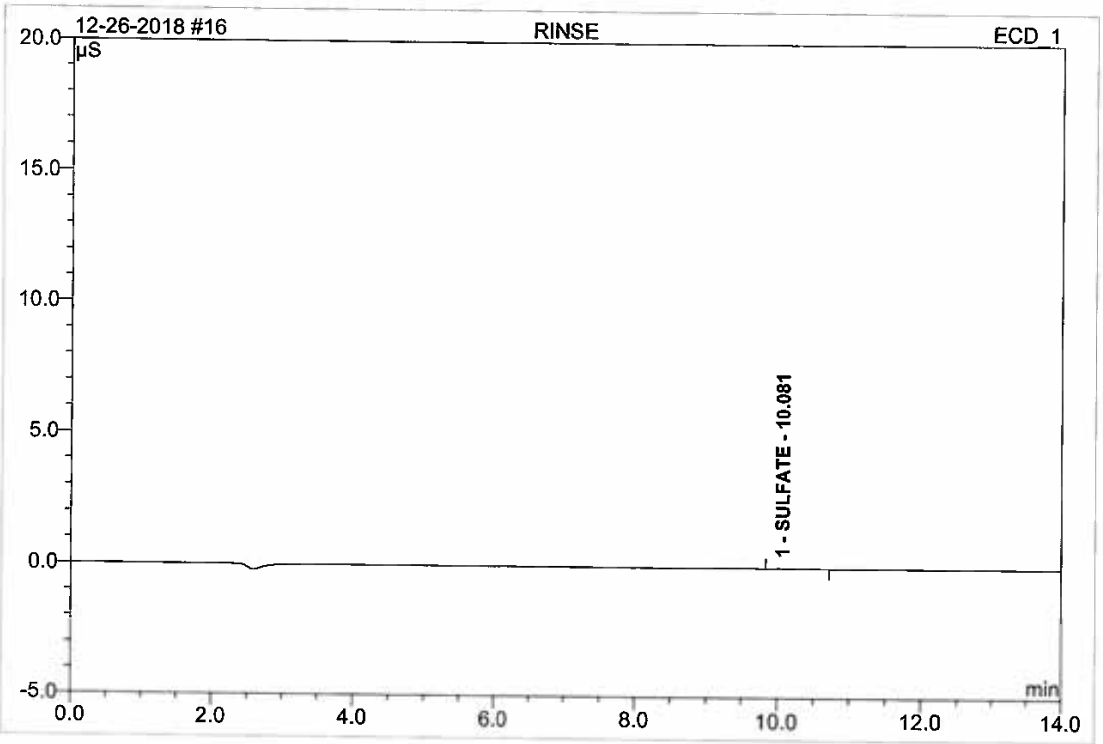
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

16 RINSE

System Operator: BR IC 2000

Sample Name:	**RINSE**	*Injection Volume:*	**10.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 11:00**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	10.08	SULFATE	0.024	0.008	100.00	-0.372	BMB
Total:			0.024	0.008	100.00	-0.372	

ALSE ANION REPORT/Integration

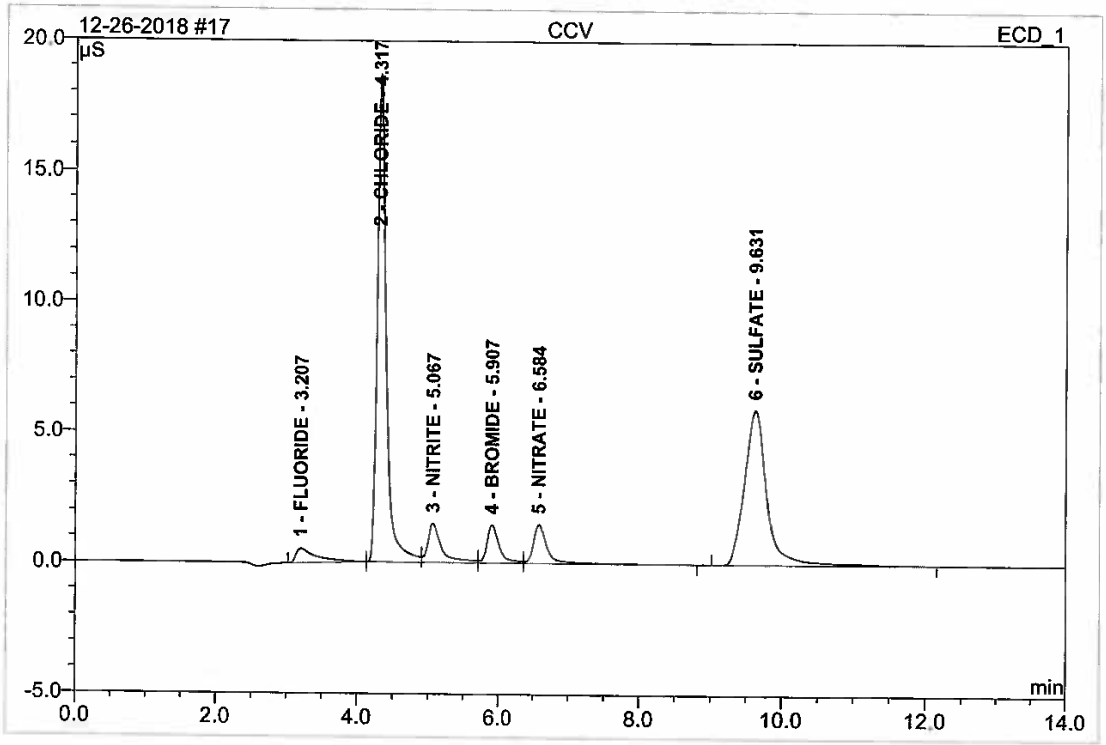
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

17 CCV

System Operator: BR IC 2000

Sample Name:	**CCV**	*Injection Volume:*	**10.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 11:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.21	FLUORIDE	0.534	0.188	3.11	2.951	BMb
2	4.32	CHLORIDE	18.626	2.709	44.80	48.722	bM
3	5.07	NITRITE	1.477	0.335	5.53	2.651	M
4	5.91	BROMIDE	1.442	0.289	4.79	13.949	M
5	6.58	NITRATE	1.465	0.339	5.61	2.747	MB
6	9.63	SULFATE	5.927	2.187	36.16	54.601	BMB
Total:			29.470	6.046	100.00	125.620	

ALSE ANION REPORT/Integration

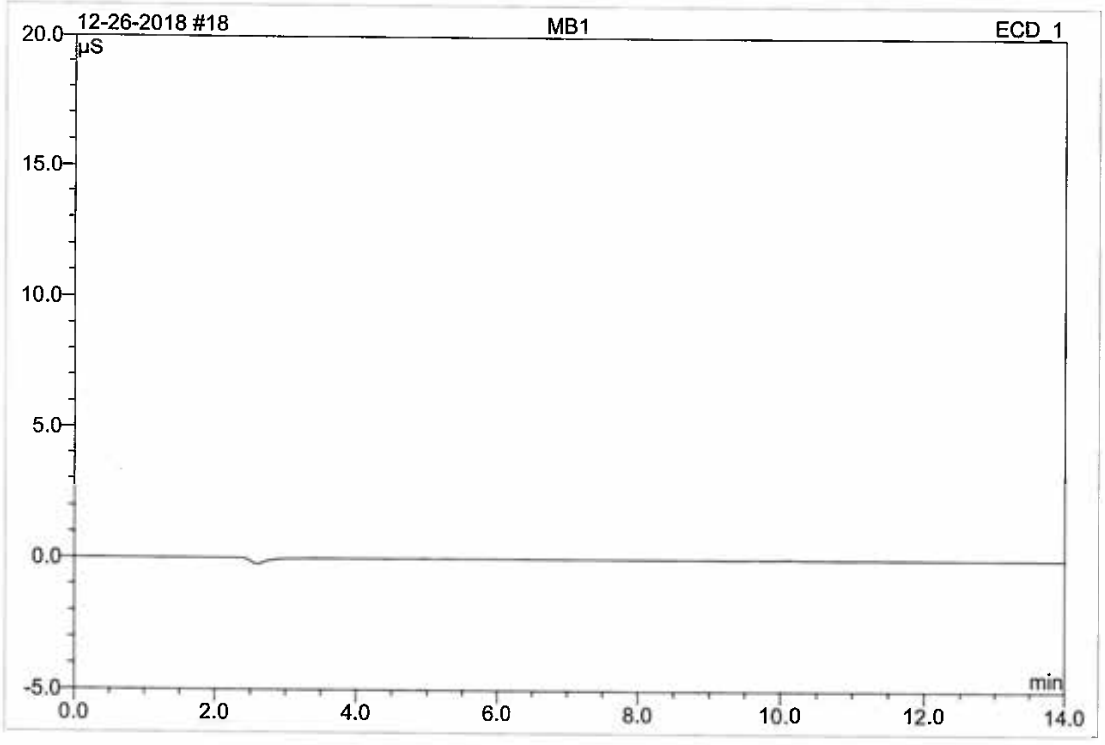
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

18 MB1

System Operator: BR IC 2000

Sample Name:	**MB1**	*Injection Volume:*	**10.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 11:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
Total:			0.000	0.000	0.00	0.000	

ALSE ANION REPORT/Integration

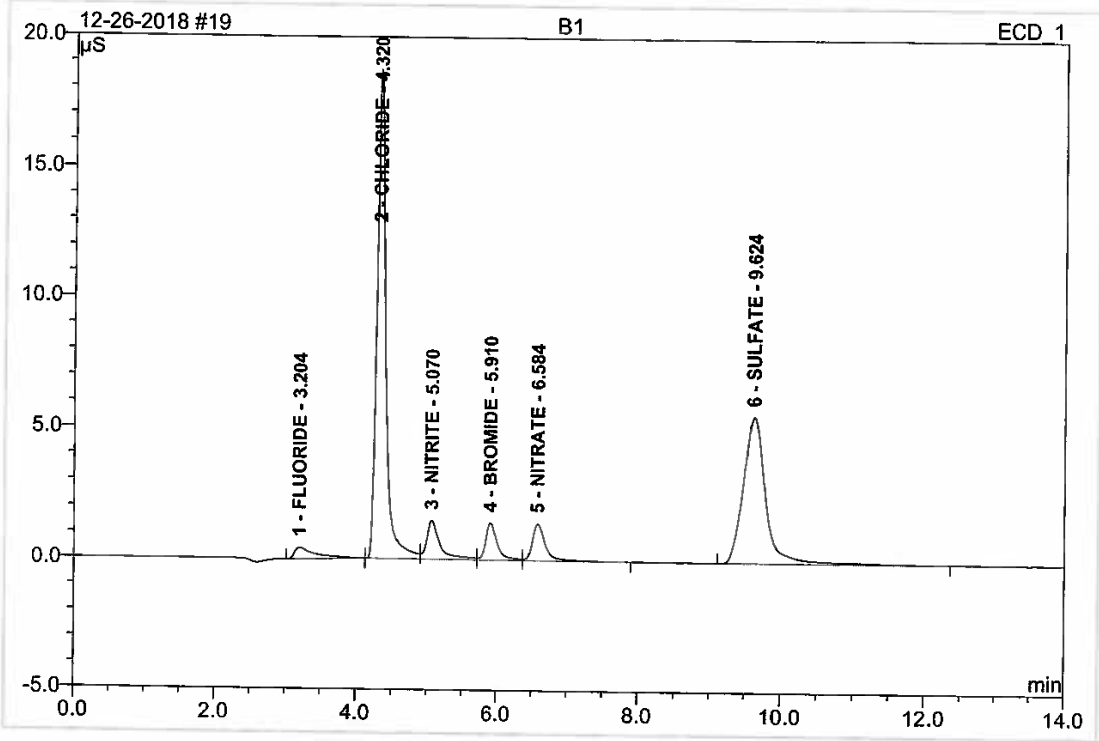
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

19 B1

System Operator: BR IC 2000

Sample Name:	**B1**	*Injection Volume:*	**10.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 11:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.20	FLUORIDE	0.450	0.157	2.70	2.444	BMb
2	4.32	CHLORIDE	18.675	2.713	46.60	48.801	bM
3	5.07	NITRITE	1.483	0.334	5.73	2.644	M
4	5.91	BROMIDE	1.418	0.280	4.81	13.492	M
5	6.58	NITRATE	1.414	0.308	5.29	2.498	MB
6	9.62	SULFATE	5.589	2.030	34.87	50.658	BMB
Total:			29.030	5.822	100.00	120.536	

ALSE ANION REPORT/Integration

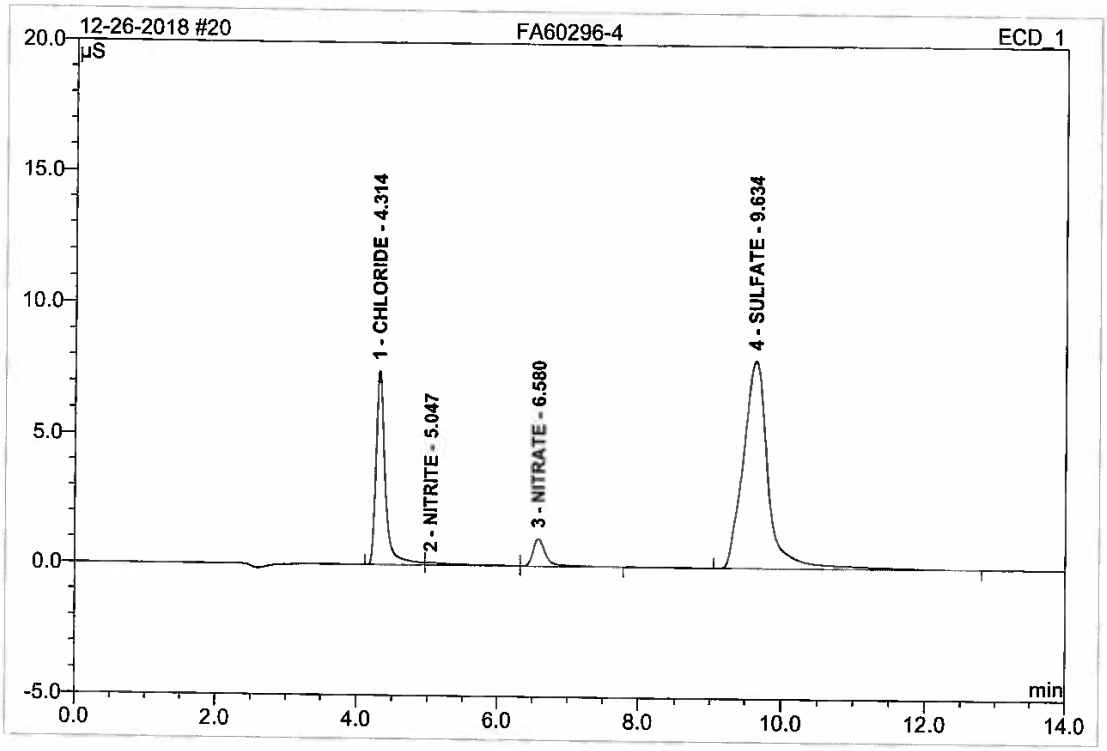
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

20 FA60296-4

System Operator: BR IC 2000

Sample Name:	**FA60296-4**	*Injection Volume:*	**10.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/26/2018 14:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	4.31	CHLORIDE	7.457	1.129	24.42	103.886	BM
2	5.05	NITRITE	0.096	0.050	1.09	1.975	M
3	6.58	NITRATE	1.054	0.222	4.81	9.038	MB
4	9.63	SULFATE	7.989	3.221	69.69	403.555	BMB
Total:			16.596	4.622	100.00	518.453	

ALSE ANION REPORT/Integration

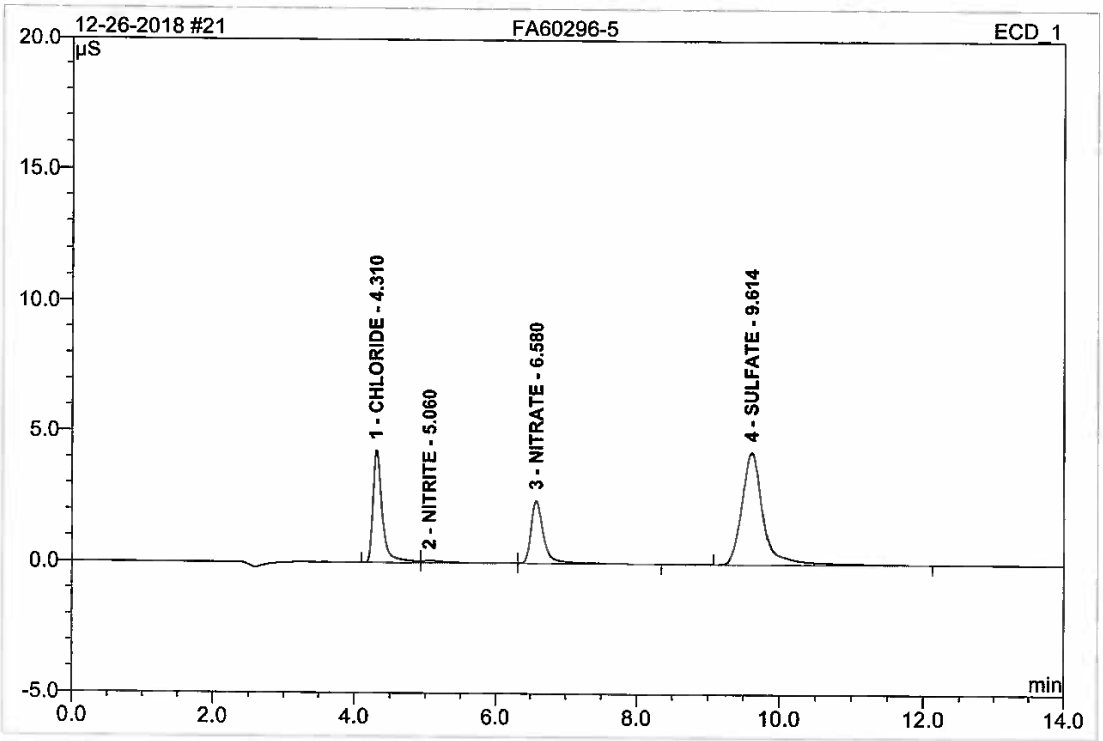
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

21 FA60296-5

System Operator: BR IC 2000

Sample Name:	**FA60296-5**	*Injection Volume:*	**10.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/26/2018 14:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	4.31	CHLORIDE	4.277	0.657	24.22	62.156	BM
2	5.06	NITRITE	0.097	0.041	1.50	1.587	M
3	6.58	NITRATE	2.384	0.504	18.61	20.389	MB
4	9.61	SULFATE	4.278	1.509	55.68	187.524	BMB
Total:			11.035	2.711	100.00	271.656	

ALSE ANION REPORT/Integration

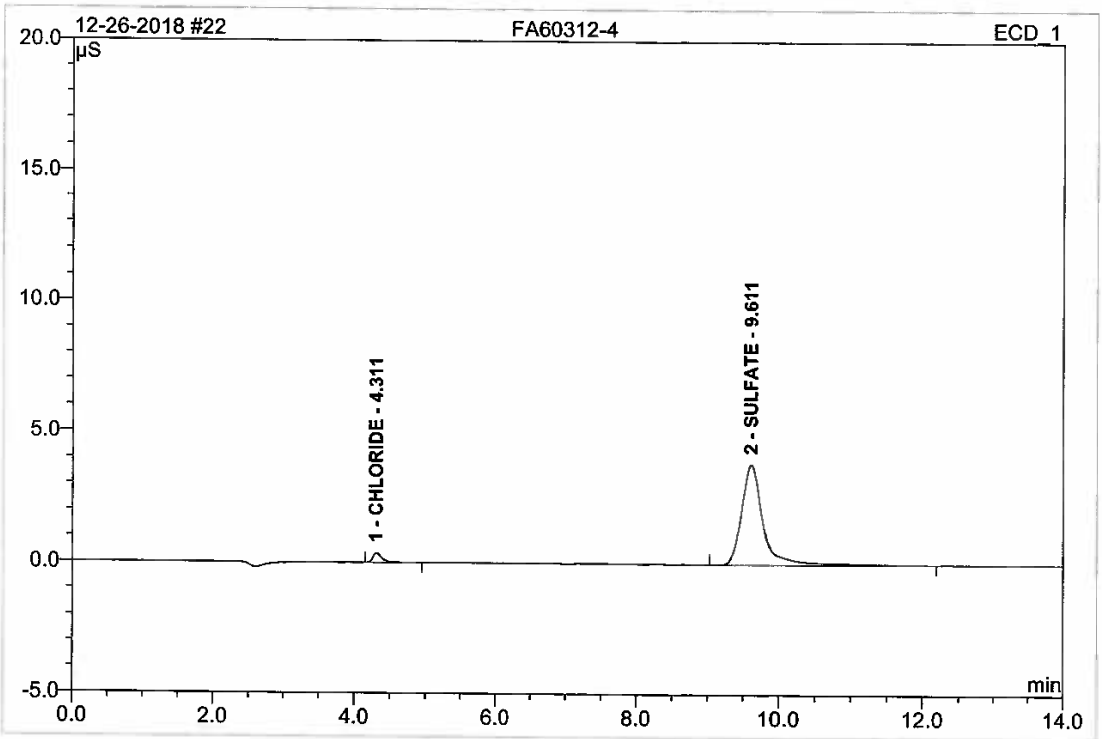
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

22 FA60312-4

System Operator: BR IC 2000

Sample Name:	**FA60312-4**	*Injection Volume:*	**10.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**10.0000**
Recording Time:	**12/26/2018 15:08**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	4.31	CHLORIDE	0.358	0.055	3.89	17.911	BMB
2	9.61	SULFATE	3.818	1.355	96.11	336.010	BMB
Total:			4.176	1.409	100.00	353.920	

ALSE ANION REPORT/Integration

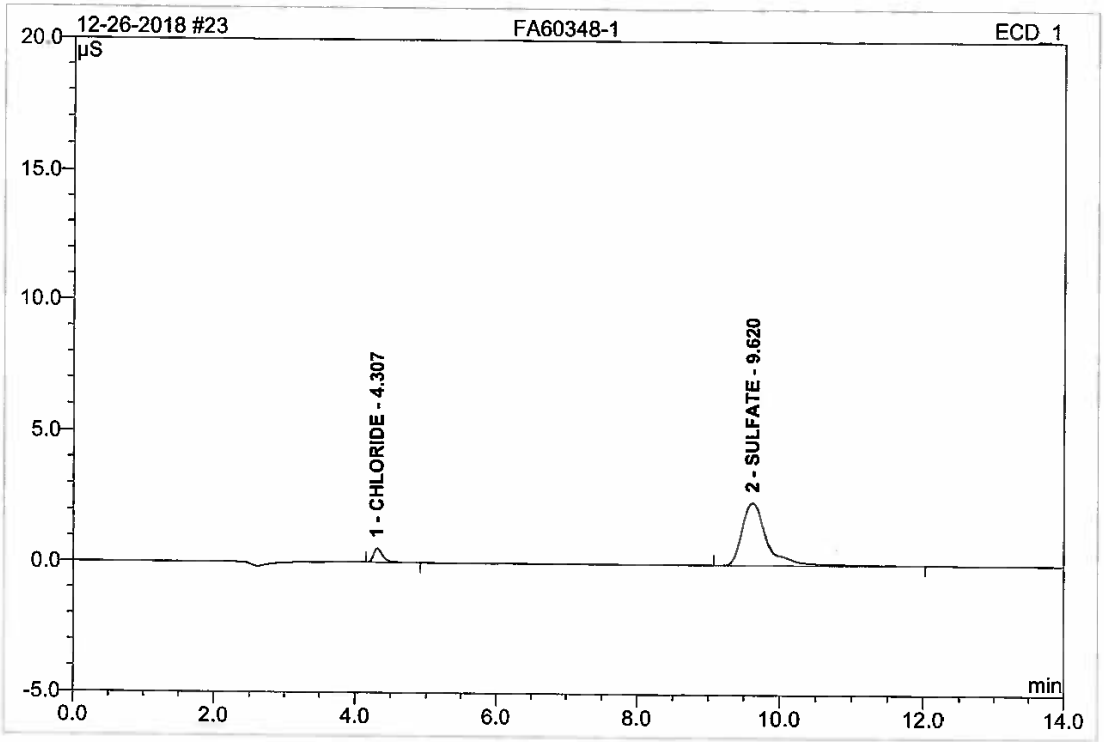
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

23 FA60348-1

System Operator: BR IC 2000

Sample Name:	**FA60348-1**	*Injection Volume:*	**10.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 15:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	4.31	CHLORIDE	0.529	0.078	7.31	2.207	BMB
2	9.62	SULFATE	2.398	0.993	92.69	24.489	BMB
Total:			2.928	1.072	100.00	26.696	

ALSE ANION REPORT/Integration

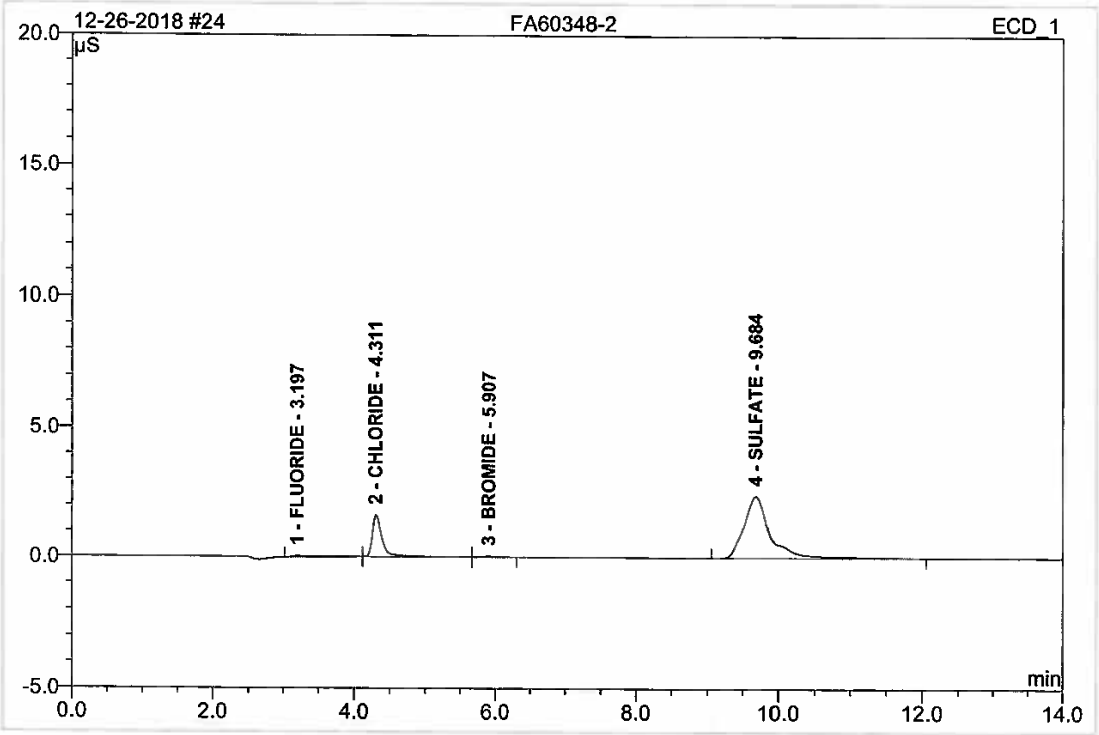
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

24 FA60348-2

System Operator: BR IC 2000

Sample Name:	**FA60348-2**	*Injection Volume:*	**10.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 15:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.20	FLUORIDE	0.048	0.020	1.53	0.195	BMB
2	4.31	CHLORIDE	1.607	0.261	19.72	5.437	bM
3	5.91	BROMIDE	0.038	0.008	0.57	0.343	MB
4	9.68	SULFATE	2.383	1.035	78.19	25.535	BMB
Total:			4.076	1.324	100.00	31.510	

ALSE ANION REPORT/Integration

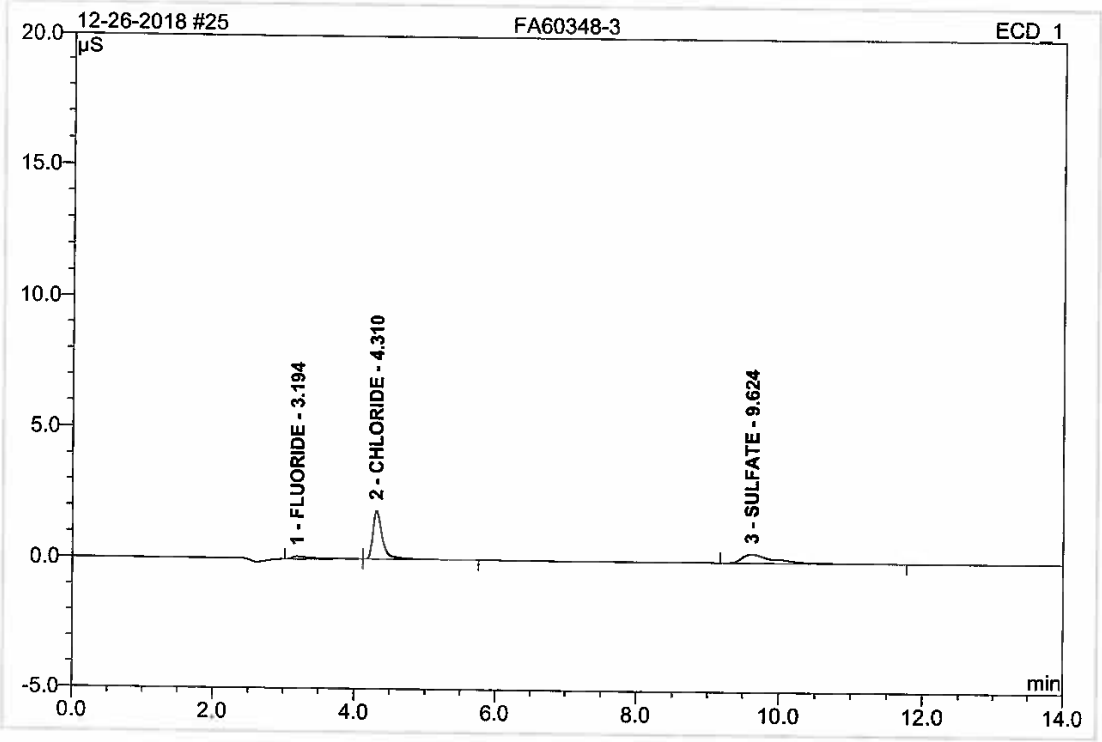
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

25 FA60348-3

System Operator: BR IC 2000

Sample Name:	**FA60348-3**	*Injection Volume:*	**10.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 15:59**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.19	FLUORIDE	0.097	0.034	6.74	0.425	BMB
2	4.31	CHLORIDE	1.849	0.294	58.04	6.029	bMB
3	9.62	SULFATE	0.326	0.179	35.22	3.924	BMB
Total:			2.273	0.507	100.00	10.378	

ALSE ANION REPORT/Integration

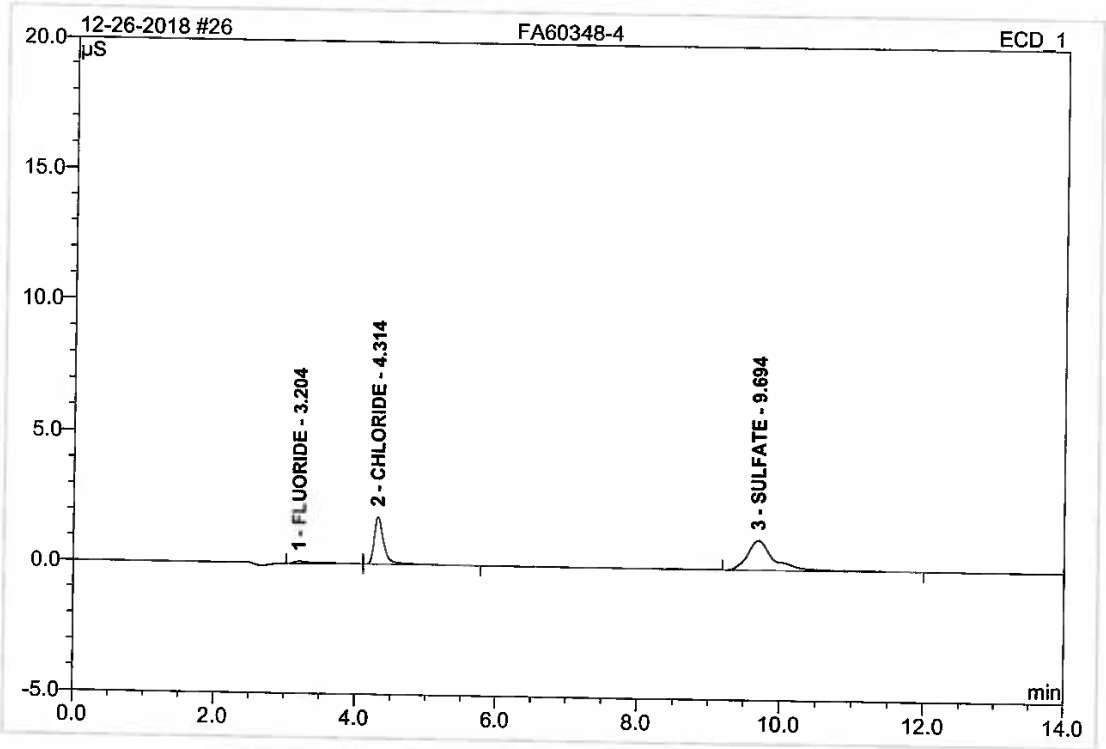
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

26 FA60348-4

System Operator: BR IC 2000

Sample Name:	**FA60348-4**	*Injection Volume:*	**10.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 16:15**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.20	FLUORIDE	0.080	0.031	3.72	0.370	BMB
2	4.31	CHLORIDE	1.808	0.291	35.08	5.972	bMB
3	9.69	SULFATE	1.137	0.508	61.21	12.242	BMB
Total:			3.025	0.830	100.00	18.584	

ALSE ANION REPORT/Integration

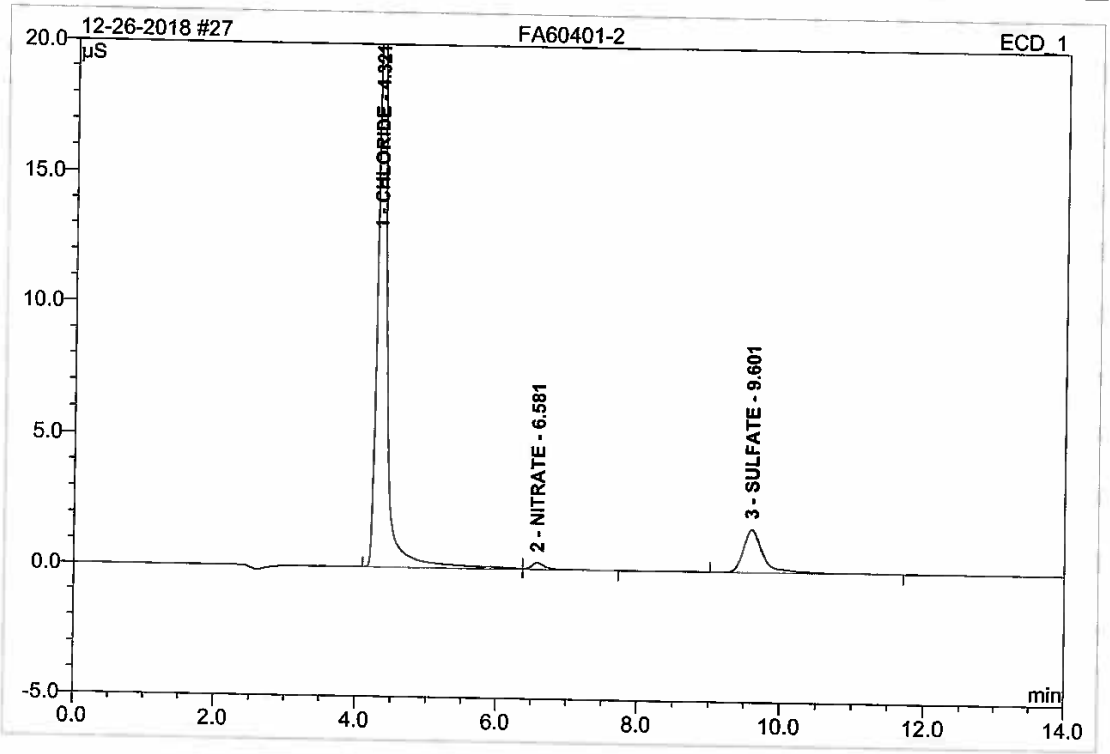
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

27 FA60401-2

System Operator: BR IC 2000

Sample Name:	**FA60401-2**	*Injection Volume:*	**10.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**10.0000**
Recording Time:	**12/26/2018 16:32**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	4.32	CHLORIDE	24.348	3.643	85.40	652.363	BM
2	6.58	NITRATE	0.270	0.065	1.53	5.450	MB
3	9.60	SULFATE	1.672	0.558	13.07	134.913	BMB
Total:			26.291	4.266	100.00	792.726	

ALSE ANION REPORT/Integration

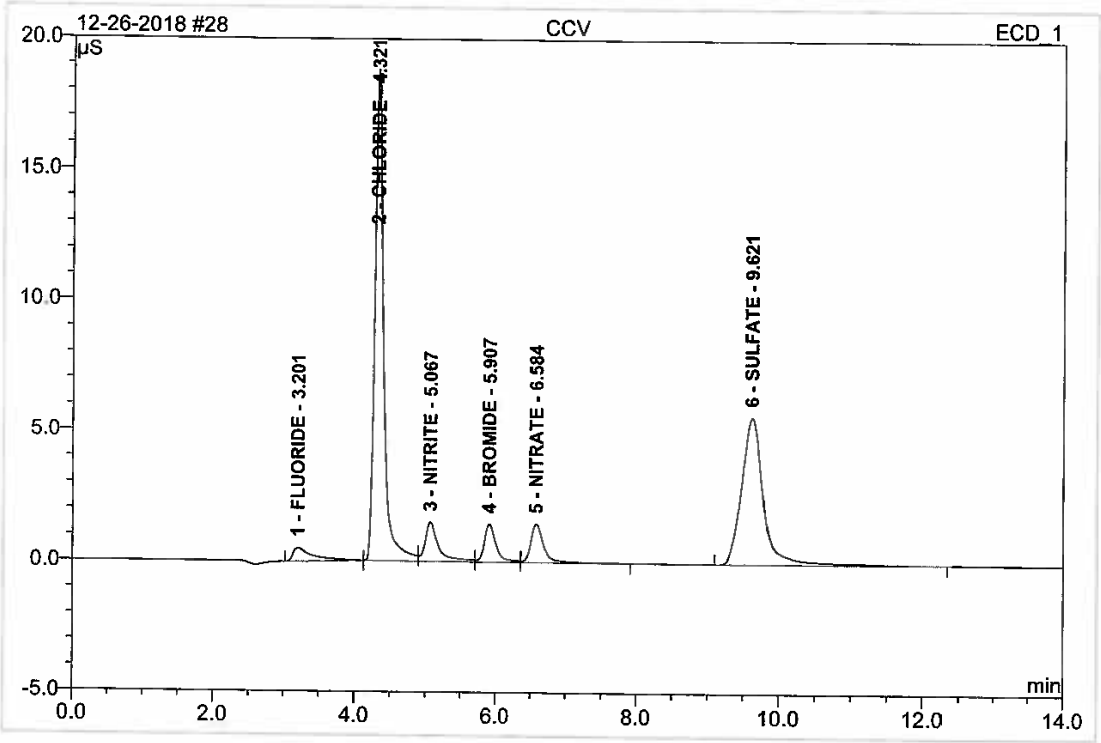
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

28 CCV

System Operator: BR IC 2000

Sample Name:	**CCV**	*Injection Volume:*	**10.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 16:49**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.20	FLUORIDE	0.513	0.170	2.92	2.664	BMb
2	4.32	CHLORIDE	18.755	2.713	46.43	48.786	bM
3	5.07	NITRITE	1.485	0.331	5.66	2.619	M
4	5.91	BROMIDE	1.439	0.280	4.79	13.493	M
5	6.58	NITRATE	1.460	0.314	5.38	2.548	MB
6	9.62	SULFATE	5.625	2.034	34.82	50.763	BMB
Total:			29.278	5.842	100.00	120.874	

ALSE ANION REPORT/Integration

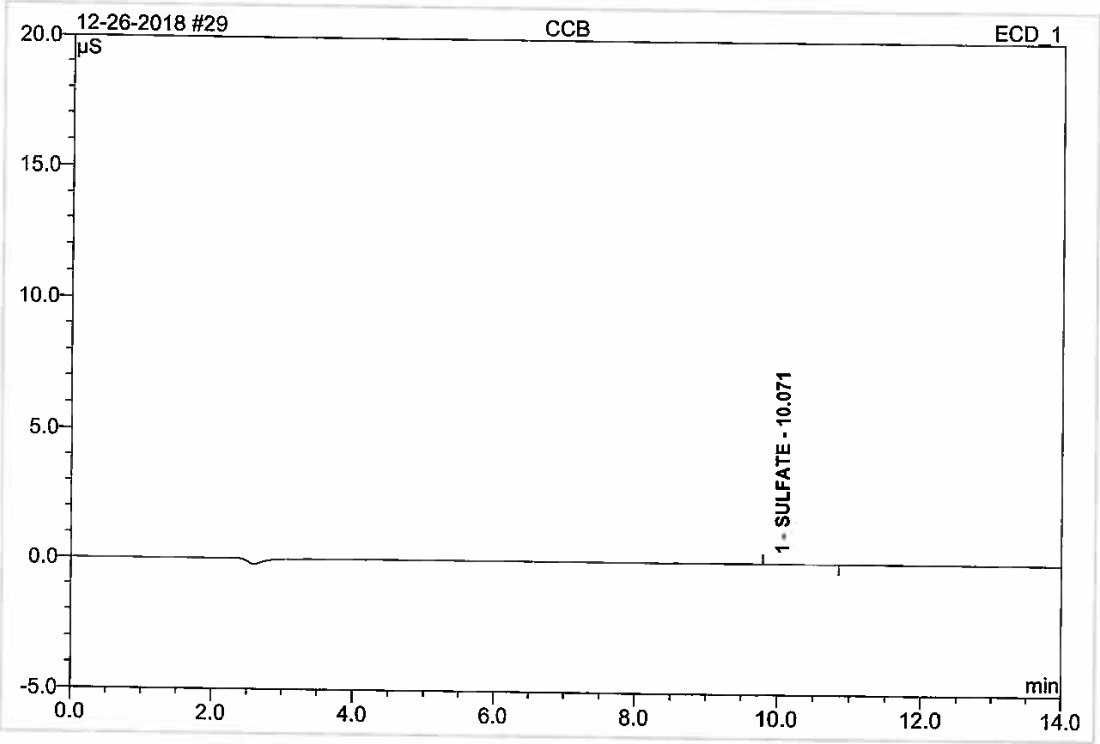
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

29 CCB

System Operator: BR IC 2000

Sample Name:	**CCB**	*Injection Volume:*	**10.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 17:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	10.07	SULFATE	0.023	0.009	100.00	-0.356	BMB
Total:			0.023	0.009	100.00	-0.356	

ALSE ANION REPORT/Integration

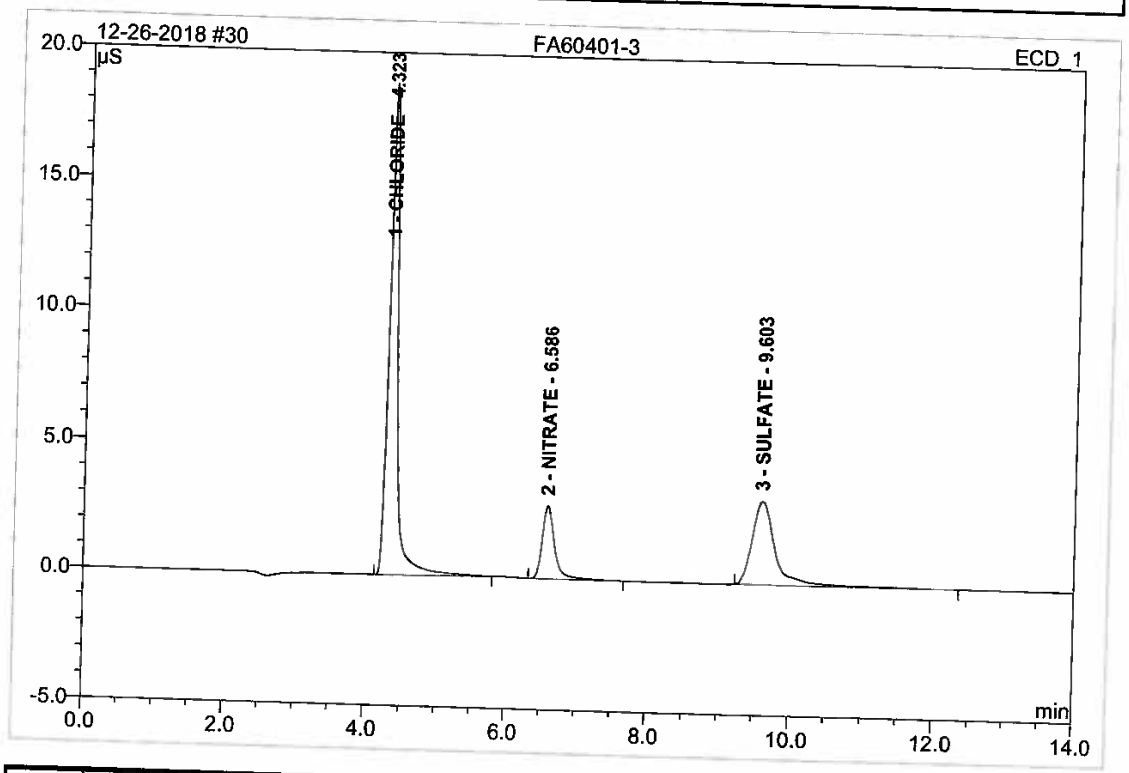
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

30 FA60401-3

System Operator: BR IC 2000

Sample Name:	**FA60401-3**	*Injection Volume:*	**10.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 17:23**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	4.32	CHLORIDE	18.794	2.769	60.95	49.789	BMB
2	6.59	NITRATE	2.810	0.573	12.62	4.631	BM
3	9.60	SULFATE	3.215	1.201	26.43	29.723	MB
Total:			24.819	4.543	100.00	84.143	

ALSE ANION REPORT/Integration

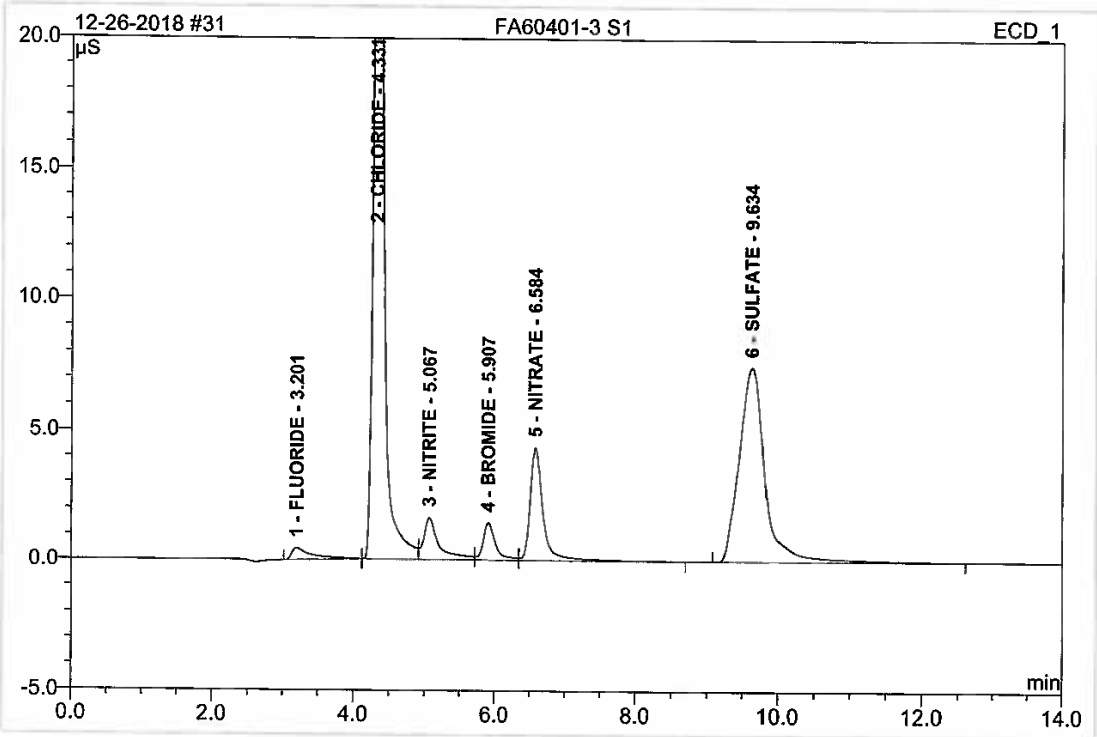
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

31 FA60401-3 S1

System Operator: BR IC 2000

Sample Name:	**FA60401-3 S1**	*Injection Volume:*	**10.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 17:40**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.20	FLUORIDE	0.464	0.153	1.40	2.369	BMb
2	4.33	CHLORIDE	41.783	5.928	54.32	105.637	bM
3	5.07	NITRITE	1.626	0.415	3.80	3.291	M
4	5.91	BROMIDE	1.453	0.298	2.73	14.362	M
5	6.58	NITRATE	4.350	0.931	8.53	7.507	MB
6	9.63	SULFATE	7.457	3.189	29.22	79.891	BMB
Total:			57.133	10.913	100.00	213.058	

ALSE ANION REPORT/Integration

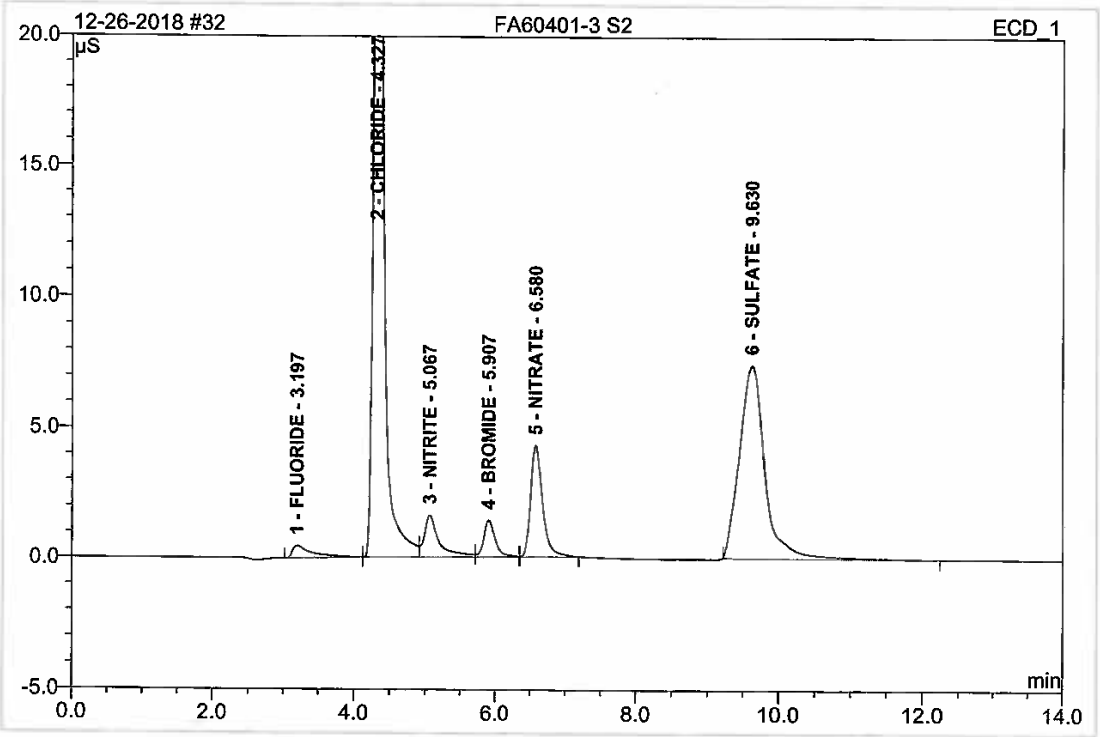
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

32 FA60401-3 S2

System Operator: BR IC 2000

Sample Name:	**FA60401-3 S2**	*Injection Volume:*	**10.0**
Vial Number:	**17**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 17:57**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.20	FLUORIDE	0.466	0.153	1.44	2.384	BMb
2	4.33	CHLORIDE	41.668	5.919	55.59	105.478	bM
3	5.07	NITRITE	1.599	0.392	3.69	3.111	M
4	5.91	BROMIDE	1.405	0.266	2.50	12.831	M
5	6.58	NITRATE	4.278	0.842	7.90	6.789	MB
6	9.63	SULFATE	7.407	3.075	28.88	77.026	MB
Total:			56.824	10.647	100.00	207.619	

ALSE ANION REPORT/Integration

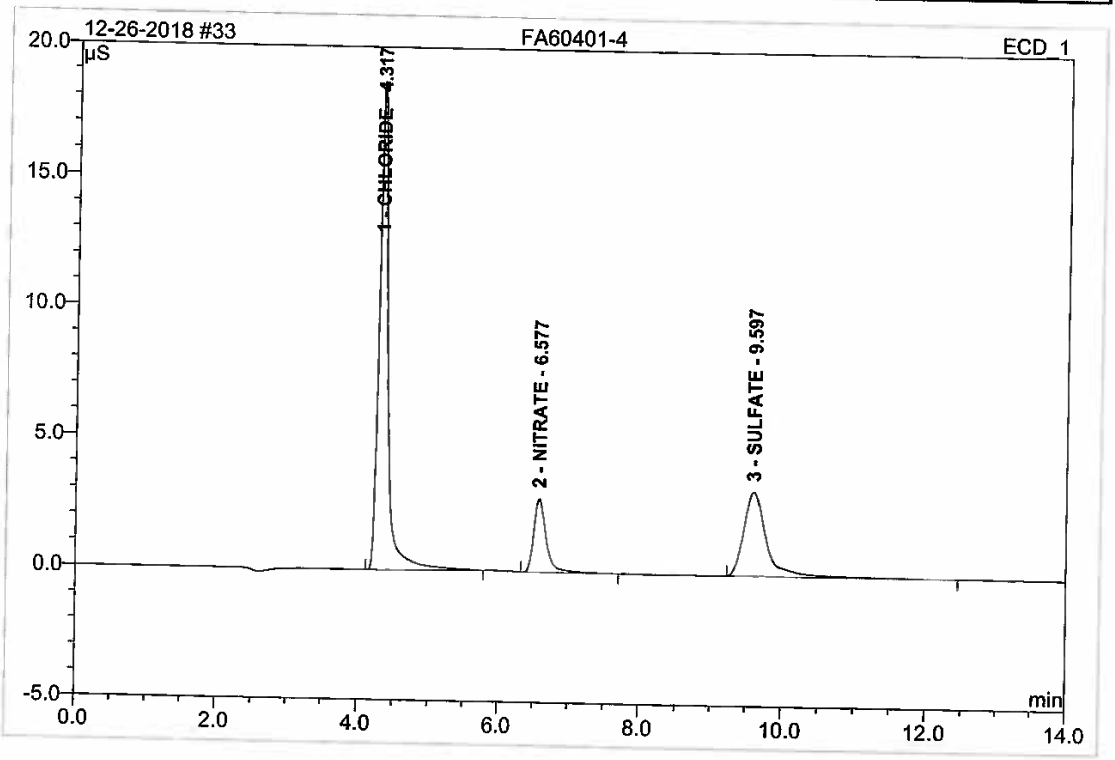
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

33 FA60401-4

System Operator: BR IC 2000

Sample Name:	**FA60401-4**	*Injection Volume:*	**10.0**
Vial Number:	**18**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 18:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	4.32	CHLORIDE	18.635	2.773	61.13	49.857	BMB
2	6.58	NITRATE	2.787	0.573	12.64	4.633	BM
3	9.60	SULFATE	3.196	1.190	26.23	29.448	MB
Total:			24.619	4.536	100.00	83.938	

ALSE ANION REPORT/Integration

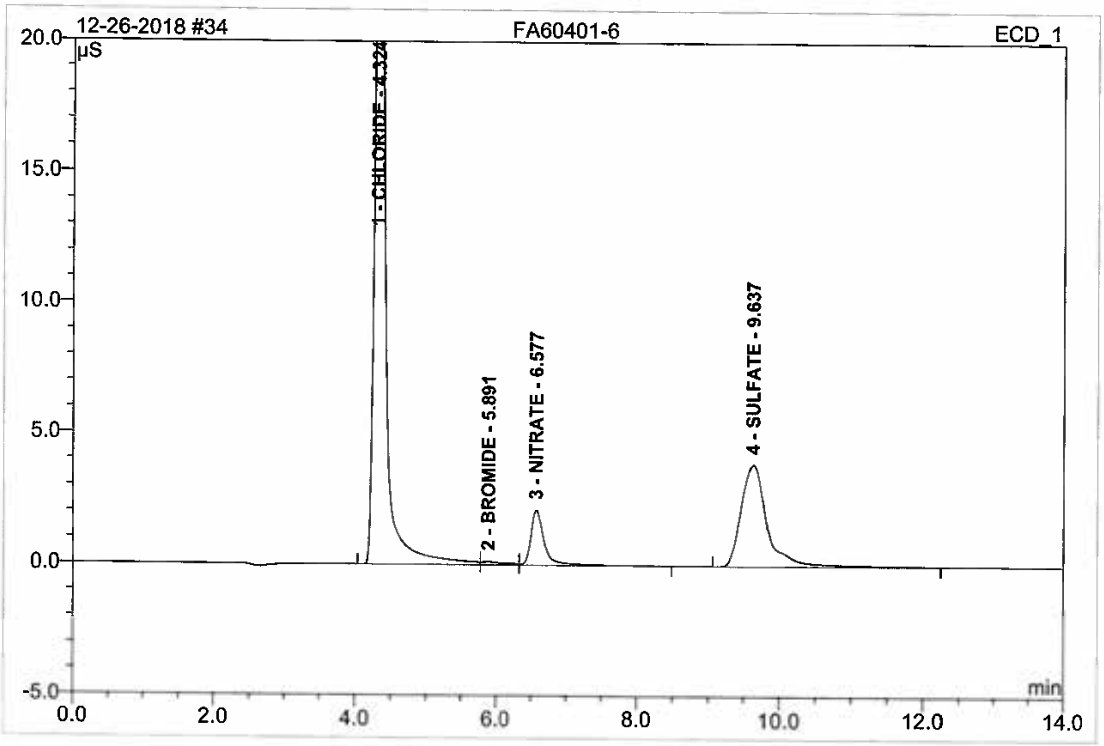
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

34 FA60401-6

System Operator: BR IC 2000

Sample Name:	**FA60401-6**	*Injection Volume:*	**10.0**
Vial Number:	**19**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 18:31**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	4.32	CHLORIDE	37.714	5.592	72.07	99.699	BM
2	5.89	BROMIDE	0.120	0.044	0.57	2.125	M
3	6.58	NITRATE	2.079	0.468	6.03	3.782	MB
4	9.64	SULFATE	3.873	1.655	21.33	41.178	BMB
Total:			43.785	7.759	100.00	146.784	

ALSE ANION REPORT/Integration

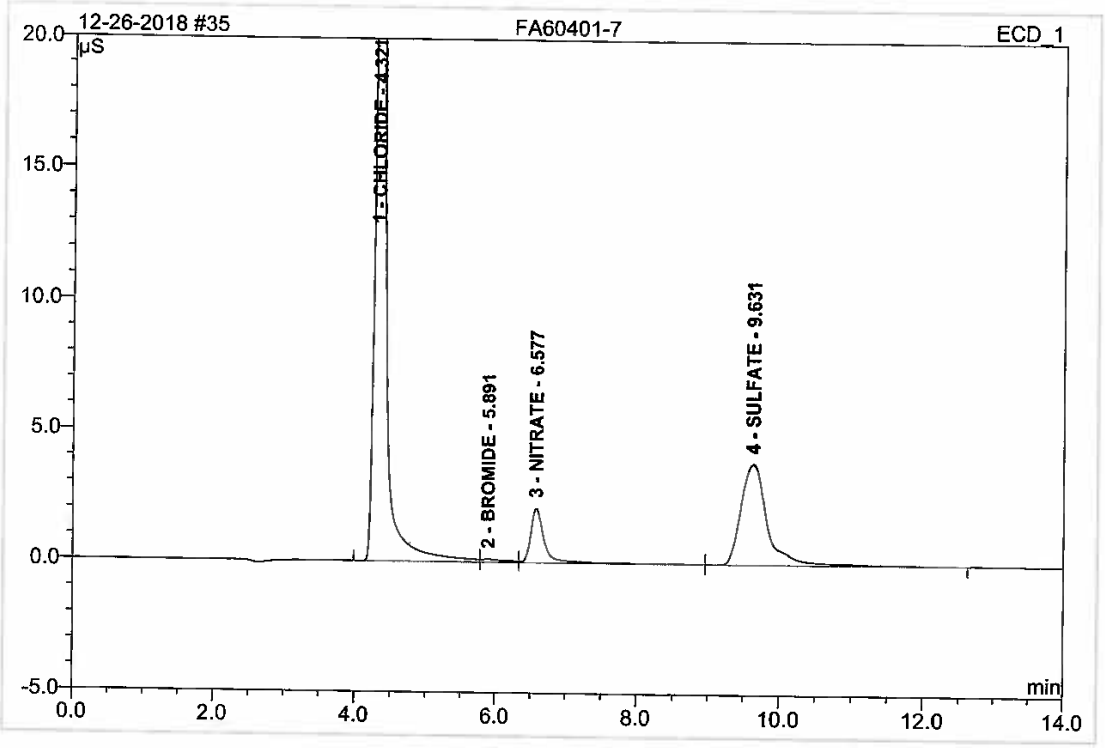
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

35 FA60401-7

System Operator: BR IC 2000

Sample Name:	**FA60401-7**	*Injection Volume:*	**10.0**
Vial Number:	**20**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 18:48**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	4.32	CHLORIDE	37.589	5.596	72.09	99.772	BM
2	5.89	BROMIDE	0.114	0.042	0.55	2.021	M
3	6.58	NITRATE	2.072	0.470	6.06	3.805	M
4	9.63	SULFATE	3.863	1.653	21.30	41.141	MB
Total:			43.637	7.762	100.00	146.739	

ALSE ANION REPORT/Integration

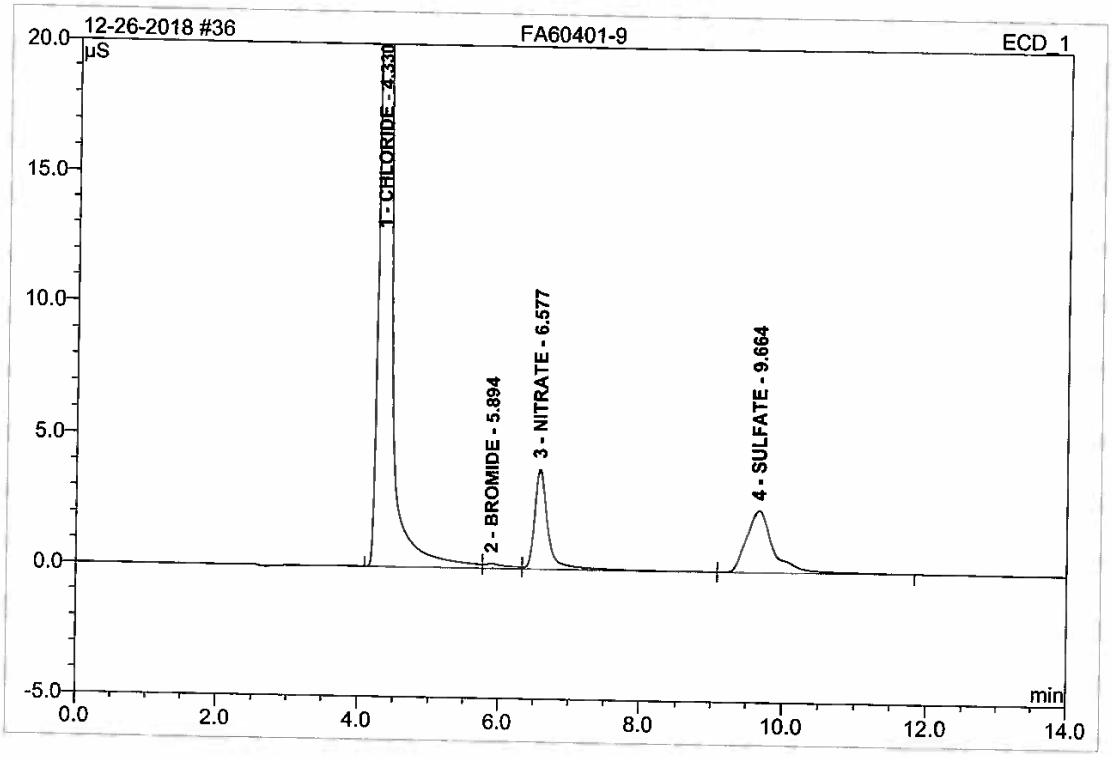
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

36 FA60401-9

System Operator: BR IC 2000

Sample Name:	**FA60401-9**	*Injection Volume:*	**10.0**
Vial Number:	**21**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 19:05**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	4.33	CHLORIDE	57.572	8.546	81.24	151.938	BM
2	5.89	BROMIDE	0.189	0.068	0.65	3.283	M
3	6.58	NITRATE	3.826	0.864	8.22	6.973	Mb
4	9.66	SULFATE	2.370	1.040	9.89	25.669	bMB
Total:			63.958	10.519	100.00	187.863	

ALSE ANION REPORT/Integration

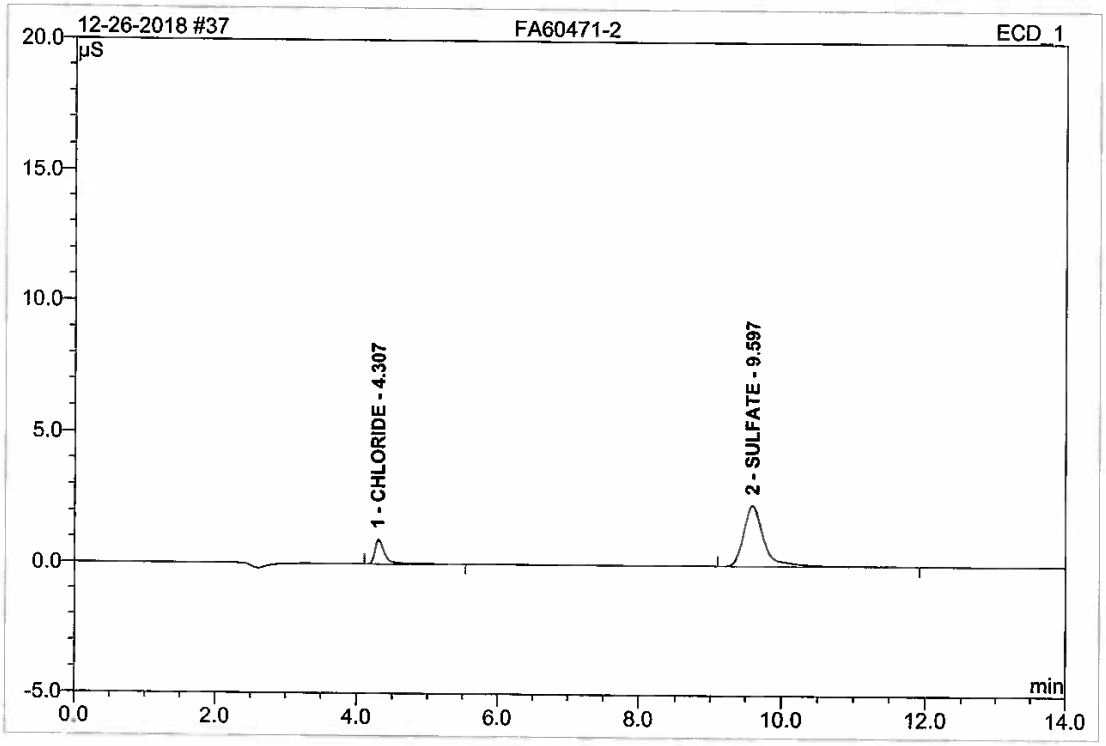
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

37 FA60471-2

System Operator: BR IC 2000

Sample Name:	**FA60471-2**	*Injection Volume:*	**10.0**
Vial Number:	**22**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**50.0000**
Recording Time:	**12/26/2018 19:22**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	4.31	CHLORIDE	0.940	0.152	16.18	175.830	BMB
2	9.60	SULFATE	2.338	0.789	83.82	966.766	BMB
Total:			3.278	0.942	100.00	1142.596	

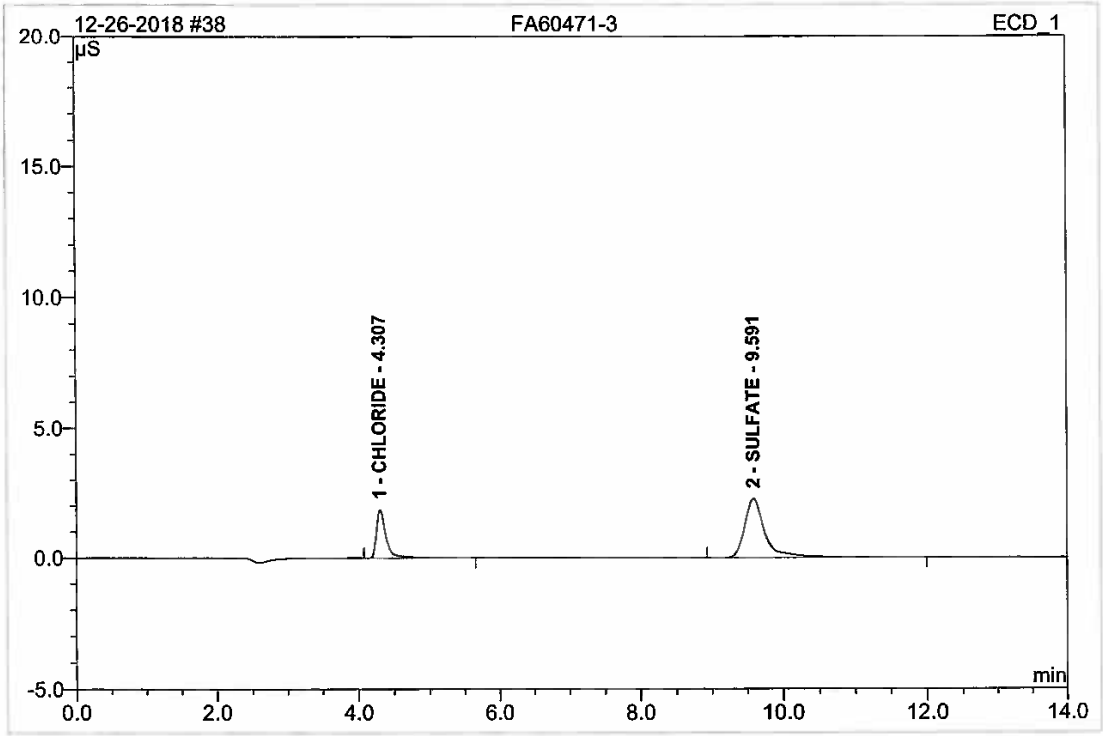
ALSE ANION REPORT/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

38 FA60471-3

System Operator: BR IC 2000

Sample Name:	**FA60471-3**	*Injection Volume:*	**10.0**
Vial Number:	**23**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**25.0000**
Recording Time:	**12/26/2018 19:39**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



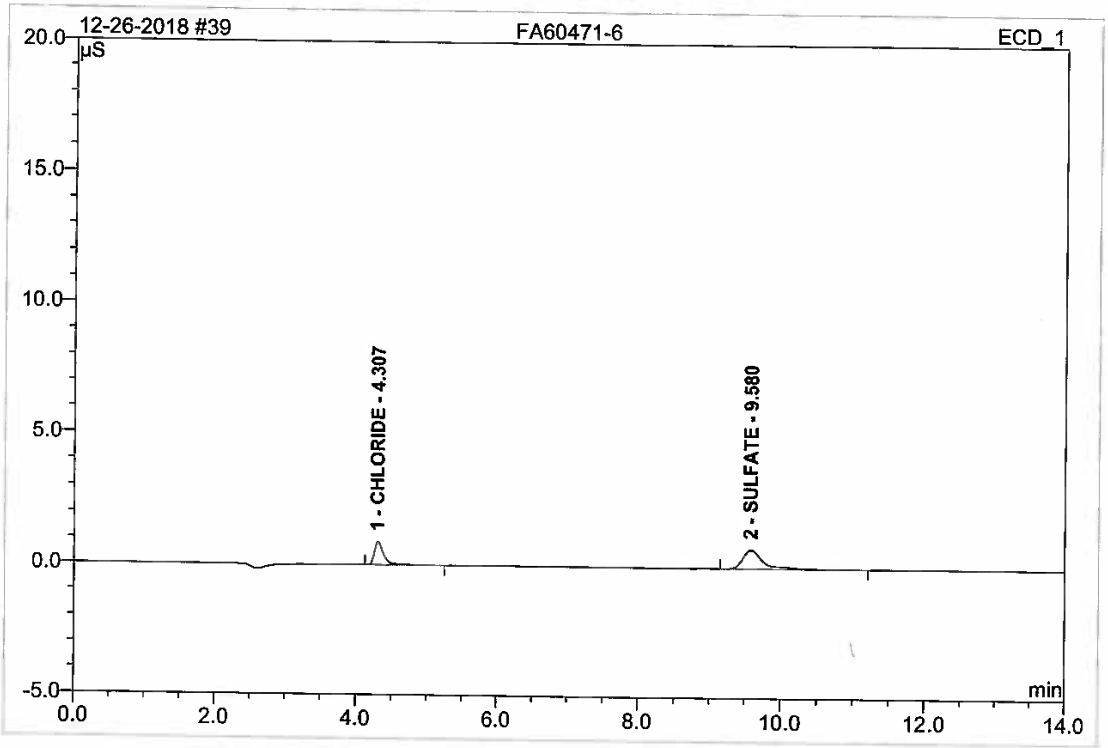
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	4.31	CHLORIDE	1.848	0.295	27.95	150.944	BMB
2	9.59	SULFATE	2.252	0.760	72.05	465.075	BMB
Total:			4.100	1.055	100.00	616.020	

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

39 FA60471-6

System Operator: BR IC 2000

Sample Name:	**FA60471-6**	*Injection Volume:*	**10.0**
Vial Number:	**24**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**50.0000**
Recording Time:	**12/26/2018 19:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	4.31	CHLORIDE	0.892	0.140	36.29	164.624	BMB
2	9.58	SULFATE	0.740	0.245	63.71	280.310	BMB
Total:			1.631	0.385	100.00	444.934	

ALSE ANION REPORT/Integration

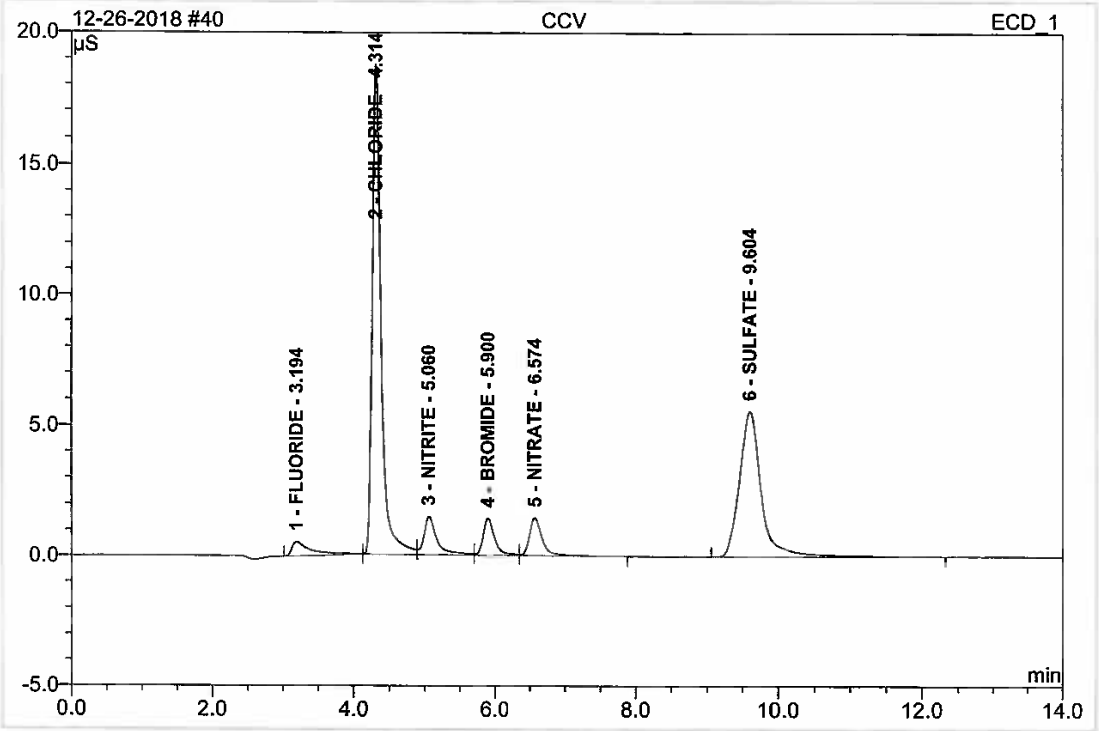
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

40 CCV

System Operator: BR IC 2000

Sample Name:	**CCV**	*Injection Volume:*	**10.0**
Vial Number:	**25**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 20:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.19	FLUORIDE	0.538	0.173	3.00	2.705	BMb
2	4.31	CHLORIDE	18.710	2.706	46.90	48.678	bM
3	5.06	NITRITE	1.463	0.312	5.40	2.470	M
4	5.90	BROMIDE	1.414	0.267	4.64	12.889	M
5	6.57	NITRATE	1.446	0.304	5.26	2.463	MB
6	9.60	SULFATE	5.574	2.008	34.80	50.091	BMB
Total:			29.145	5.770	100.00	119.296	

ALSE ANION REPORT/Integration

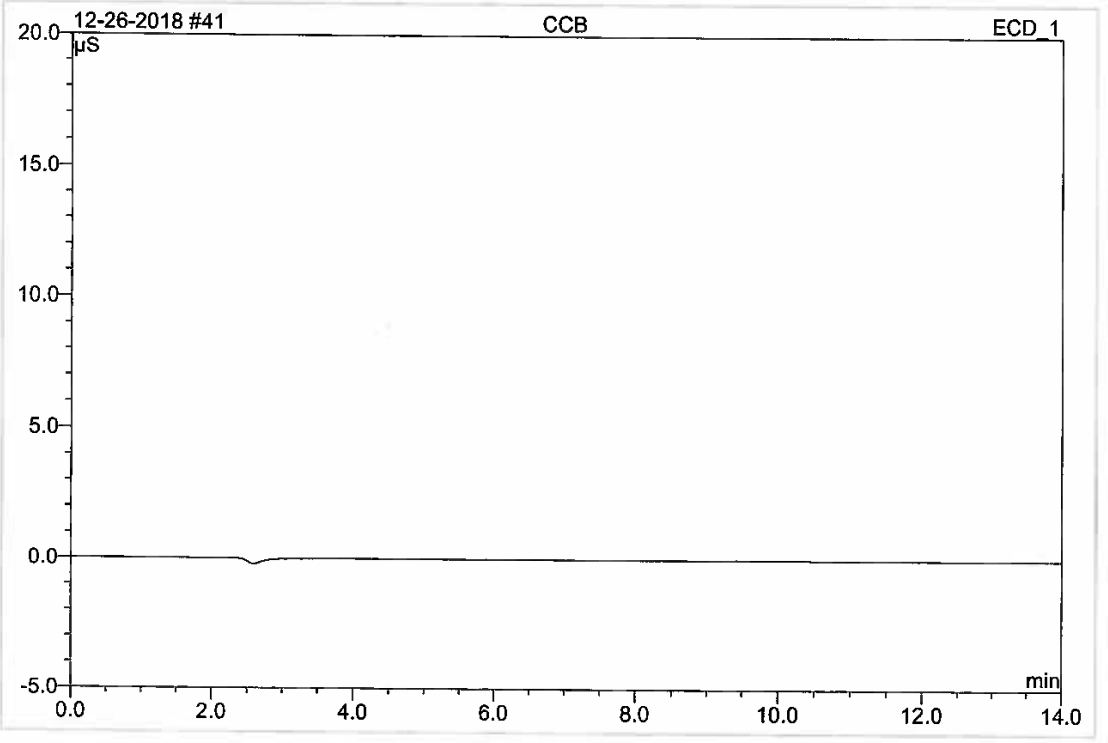
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

41 CCB

System Operator: BR IC 2000

Sample Name:	**CCB**	*Injection Volume:*	**10.0**
Vial Number:	**26**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 20:29**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
Total:			0.000	0.000	0.00	0.000	

ALSE ANION REPORT/Integration

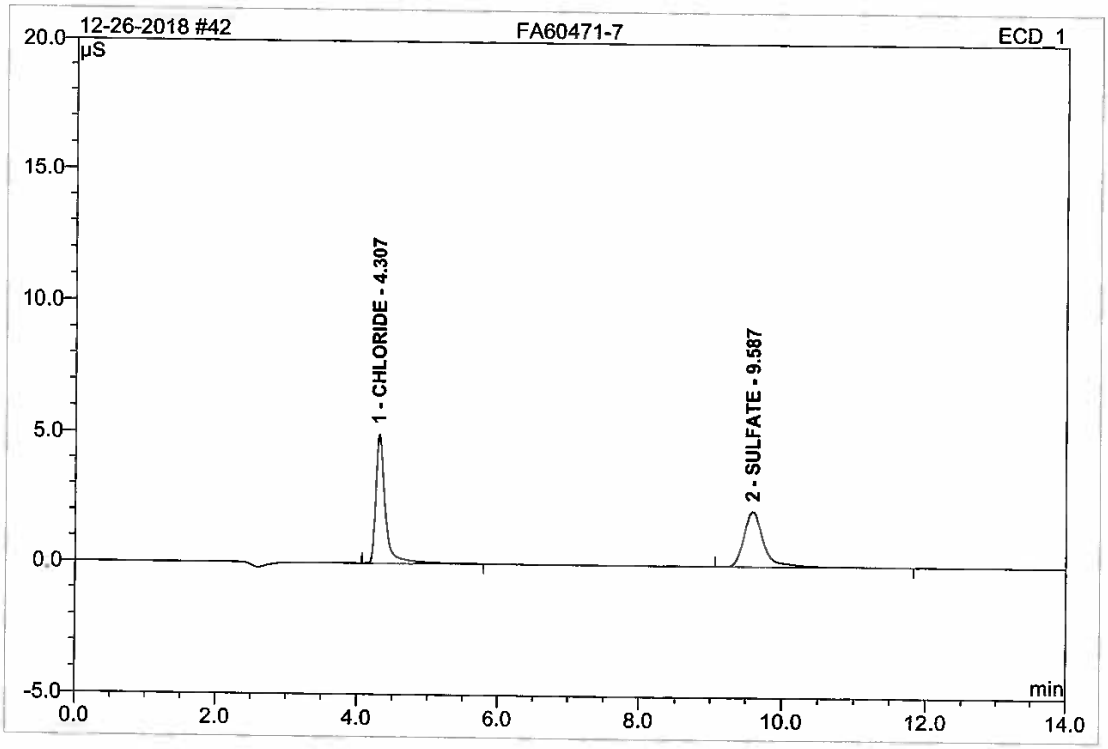
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

42 FA60471-7

System Operator: BR IC 2000

Sample Name:	**FA60471-7**	*Injection Volume:*	**10.0**
Vial Number:	**27**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**50.0000**
Recording Time:	**12/26/2018 20:46**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	4.31	CHLORIDE	4.963	0.777	52.72	728.458	BMB
2	9.59	SULFATE	2.124	0.697	47.28	850.718	BMB
Total:			7.087	1.475	100.00	1579.176	

ALSE ANION REPORT/Integration

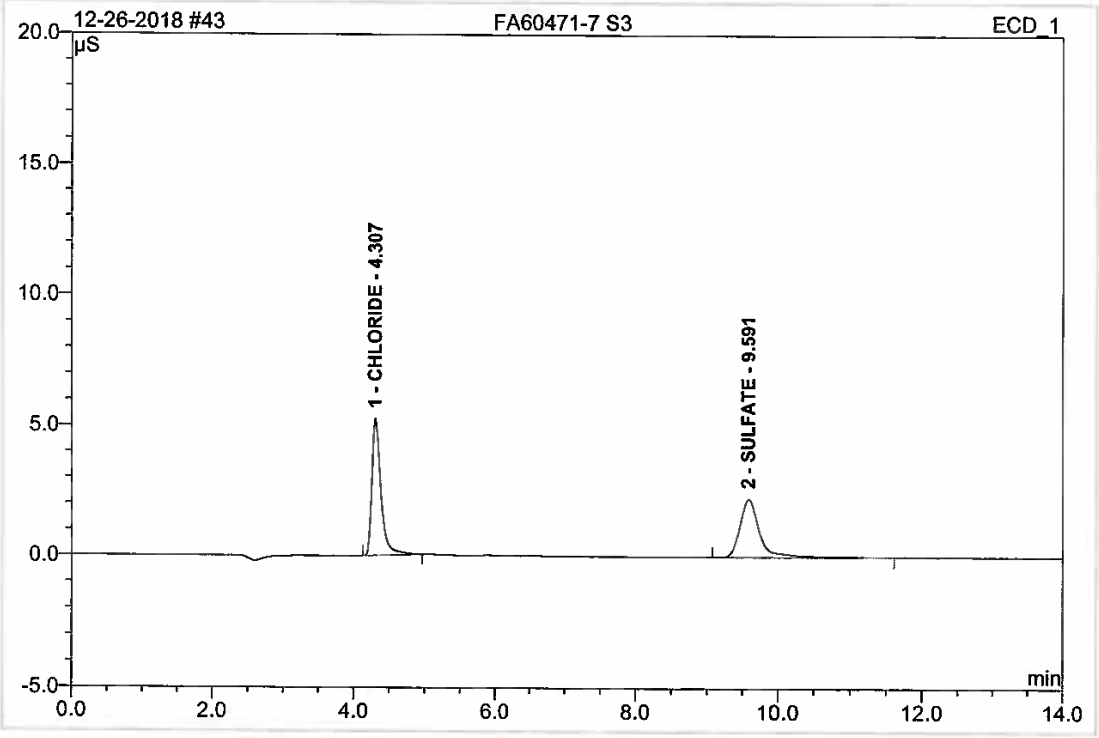
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

43 FA60471-7 S3

System Operator: BR IC 2000

Sample Name:	**FA60471-7 S3**	*Injection Volume:*	**10.0**
Vial Number:	**28**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**50.0000**
Recording Time:	**12/26/2018 21:03**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.01**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	4.31	CHLORIDE	5.265	0.783	51.94	733.350	BMB
2	9.59	SULFATE	2.222	0.725	48.06	885.042	BMB
Total:			7.487	1.507	100.00	1618.393	

ALSE ANION REPORT/Integration

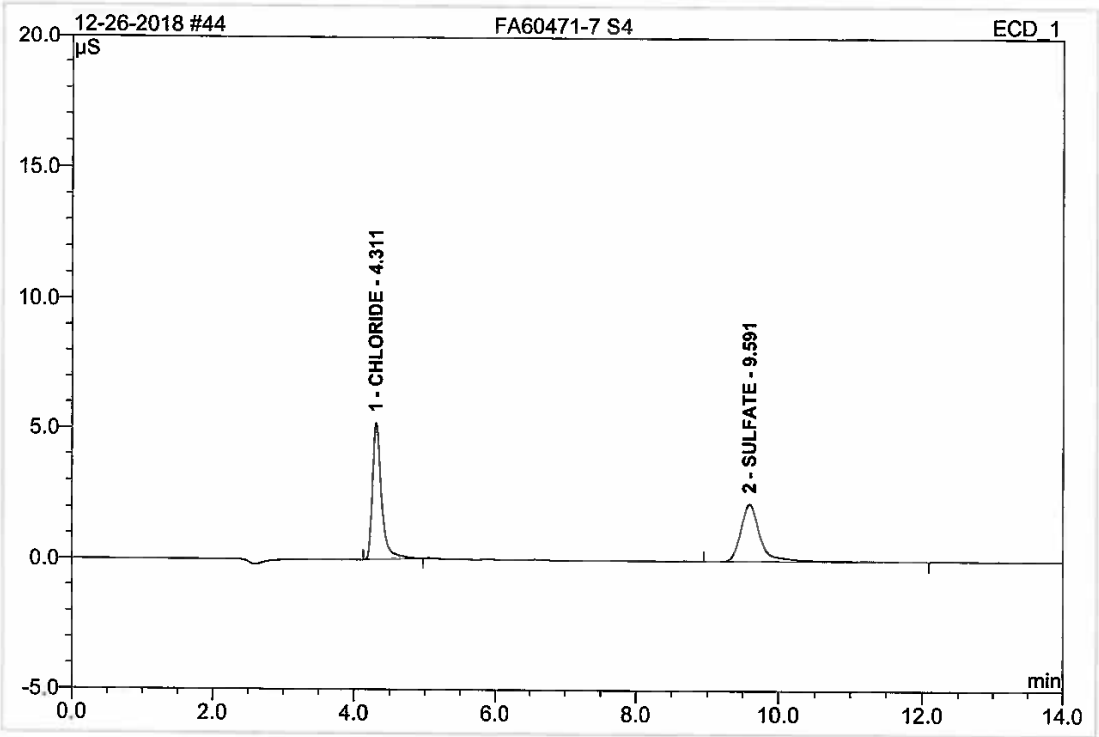
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

44 FA60471-7 S4

System Operator: BR IC 2000

Sample Name:	**FA60471-7 S4**	*Injection Volume:*	**10.0**
Vial Number:	**29**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**50.0000**
Recording Time:	**12/26/2018 21:20**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	4.31	CHLORIDE	5.206	0.774	51.72	725.259	BMB
2	9.59	SULFATE	2.197	0.722	48.28	882.323	BMB
Total:			7.403	1.496	100.00	1607.582	

ALSE ANION REPORT/Integration

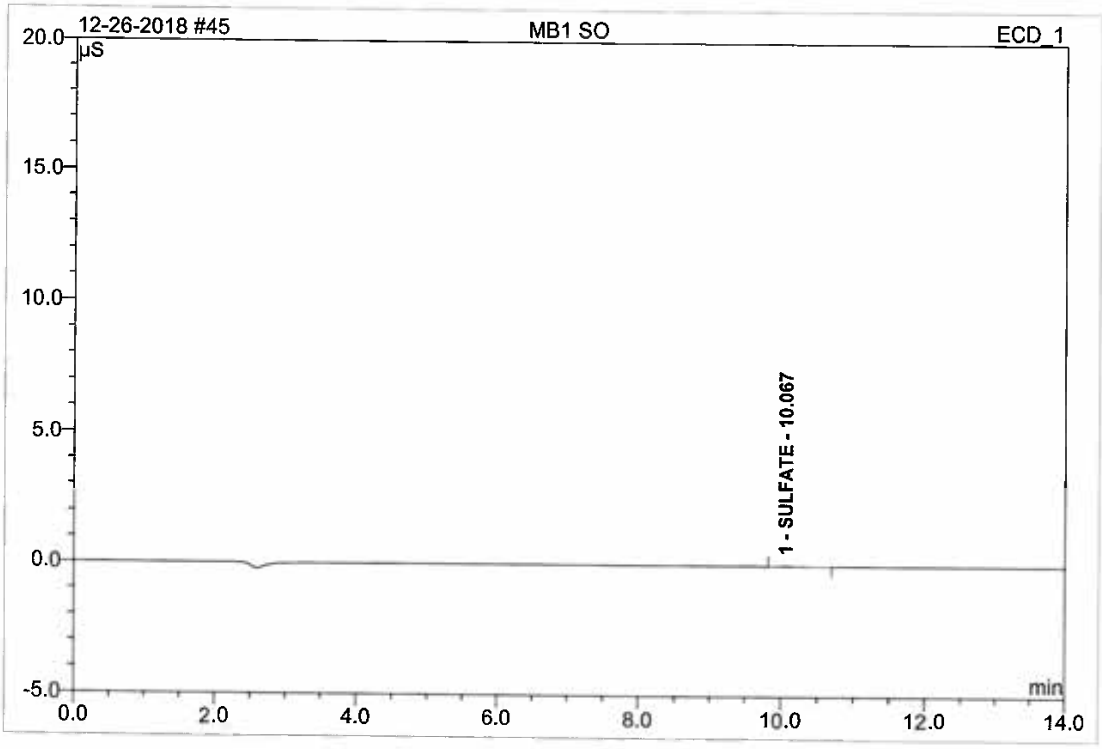
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

45 MB1 SO

System Operator: BR IC 2000

Sample Name:	**MB1 SO**	*Injection Volume:*	**10.0**
Vial Number:	**30**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 21:37**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	10.07	SULFATE	0.020	0.007	100.00	-0.405	BMB
Total:			0.020	0.007	100.00	-0.405	

ALSE ANION REPORT/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

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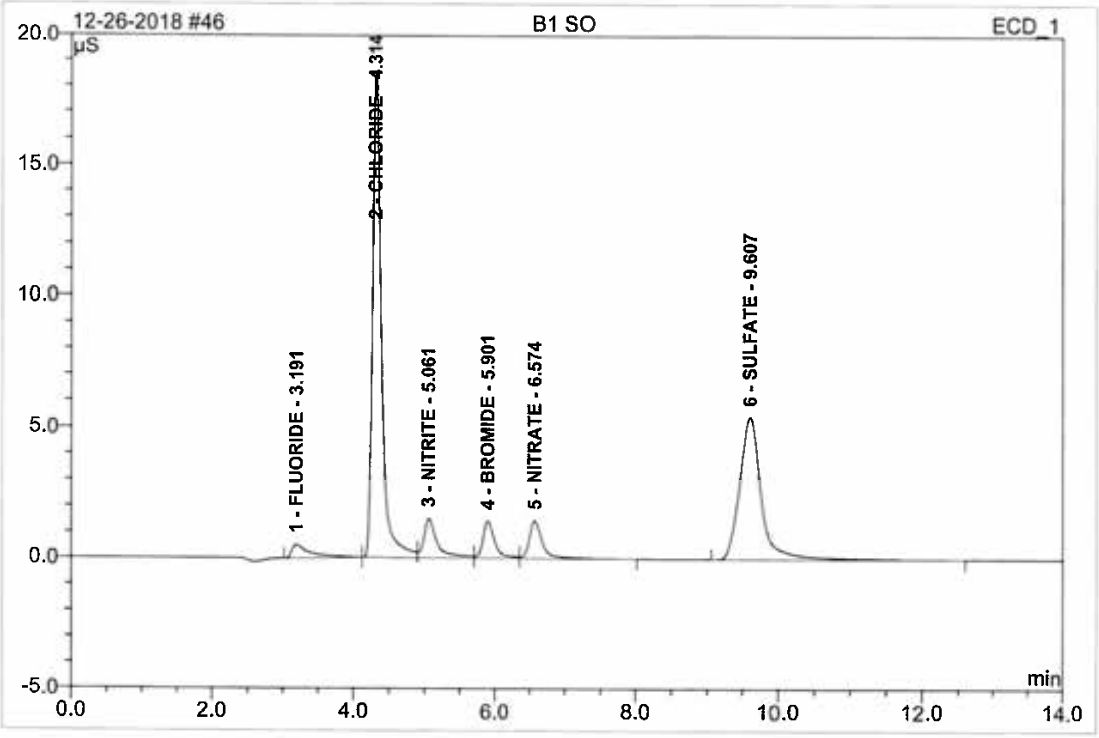
46 B1 SO

System Operator: BR IC 2000

Sample Name:	**B1 SO**	*Injection Volume:*	**10.0**
Vial Number:	**31**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 21:54**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.19	FLUORIDE	0.512	0.161	2.82	2.505	BMb
2	4.31	CHLORIDE	18.484	2.691	47.11	48.396	bM
3	5.06	NITRITE	1.477	0.331	5.79	2.620	M
4	5.90	BROMIDE	1.401	0.274	4.80	13.223	M
5	6.57	NITRATE	1.417	0.308	5.40	2.500	MB
6	9.61	SULFATE	5.406	1.946	34.08	48.532	BMB
Total:			28.699	5.711	100.00	117.777	

ALSE ANION REPORT/Integration

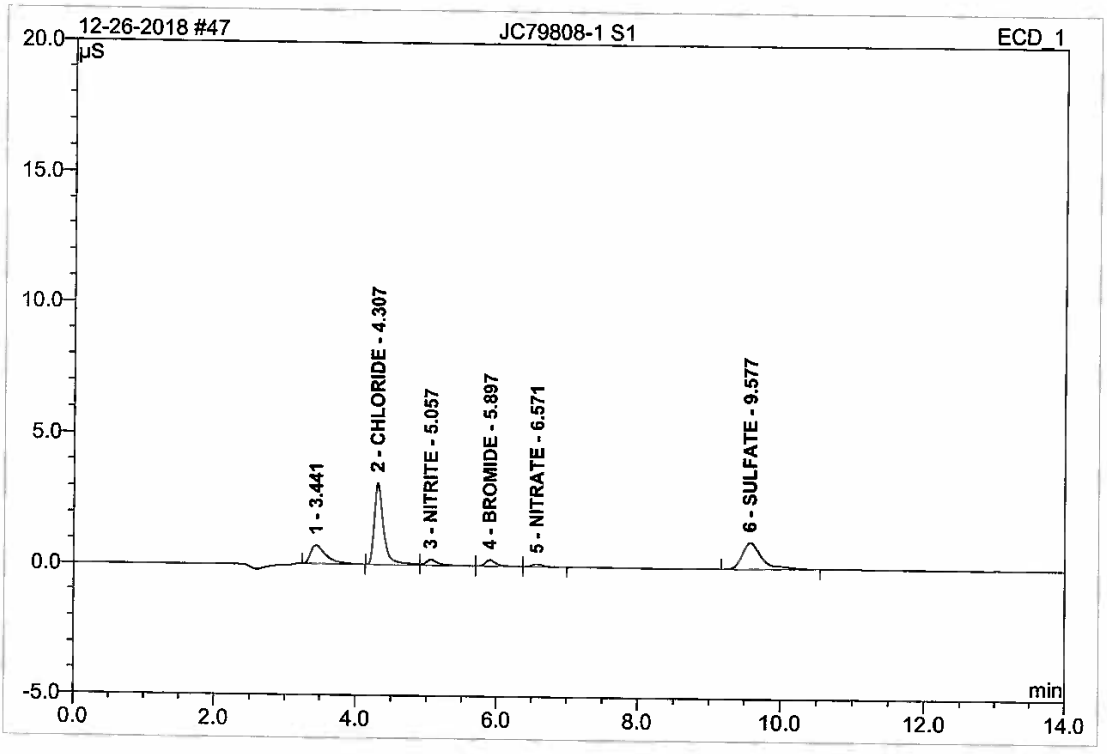
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

47 JC79808-1 S1

System Operator: BR IC 2000

Sample Name:	**JC79808-1 S1**	*Injection Volume:*	**10.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/26/2018 22:11**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.44	n.a.	0.709	0.180	16.45	n.a.	BMB
2	4.31	CHLORIDE	3.133	0.478	43.80	46.381	BM
3	5.06	NITRITE	0.220	0.044	4.06	1.737	Mb
4	5.90	BROMIDE	0.237	0.042	3.87	10.095	bMB
5	6.57	NITRATE	0.097	0.019	1.71	0.851	bMB
6	9.58	SULFATE	1.028	0.329	30.11	38.551	BMB
Total:			5.424	1.091	100.00	97.614	

ALSE ANION REPORT/Integration

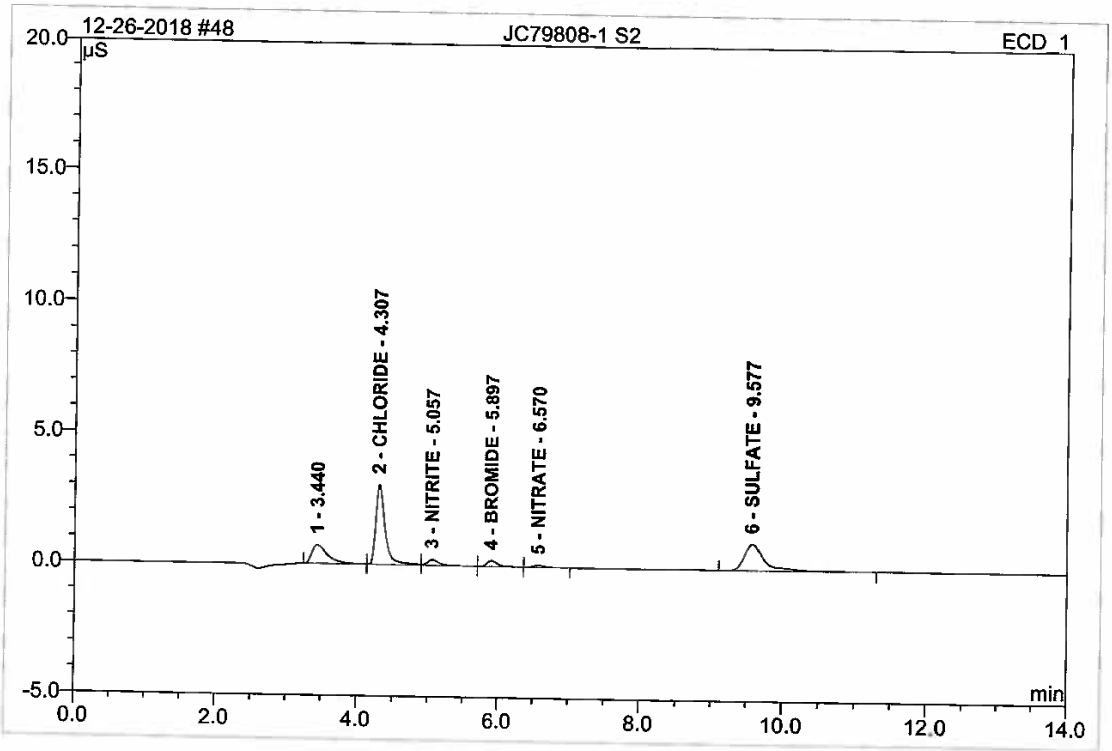
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

48 JC79808-1 S2

System Operator: BR IC 2000

Sample Name:	**JC79808-1 S2**	*Injection Volume:*	**10.0**
Vial Number:	**33**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/26/2018 22:28**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.44	n.a.	0.705	0.178	16.29	n.a.	BMb
2	4.31	CHLORIDE	3.058	0.466	42.61	45.341	bM
3	5.06	NITRITE	0.222	0.044	4.05	1.737	Mb
4	5.90	BROMIDE	0.230	0.041	3.77	9.852	bMB
5	6.57	NITRATE	0.085	0.016	1.50	0.761	BMB
6	9.58	SULFATE	1.019	0.348	31.79	40.989	BMB
Total:			5.320	1.095	100.00	98.680	

ALSE ANION REPORT/Integration

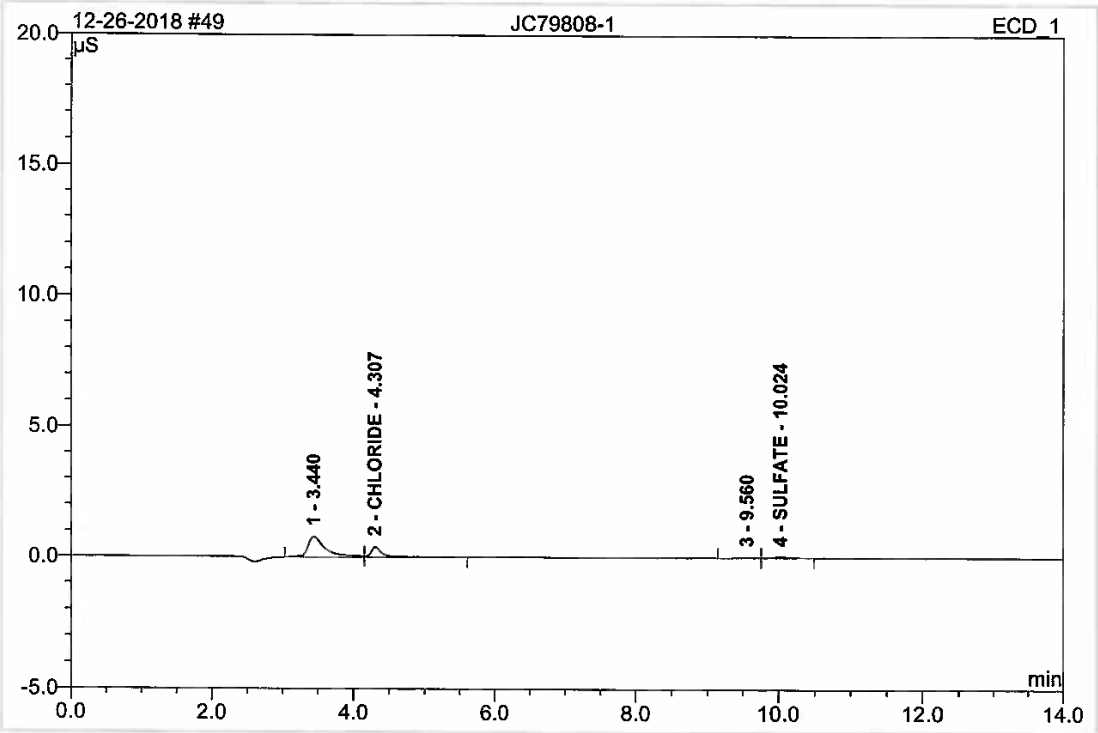
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

49 JC79808-1

System Operator: BR IC 2000

Sample Name:	**JC79808-1**	*Injection Volume:*	**10.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/26/2018 22:45**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.44	n.a.	0.783	0.232	69.42	n.a.	BM
2	4.31	CHLORIDE	0.397	0.079	23.62	11.087	MB
3	9.56	n.a.	0.034	0.009	2.72	n.a.	BM
4	10.02	SULFATE	0.040	0.014	4.24	-1.141	MB
Total:			1.255	0.334	100.00	9.946	

ALSE ANION REPORT/Integration

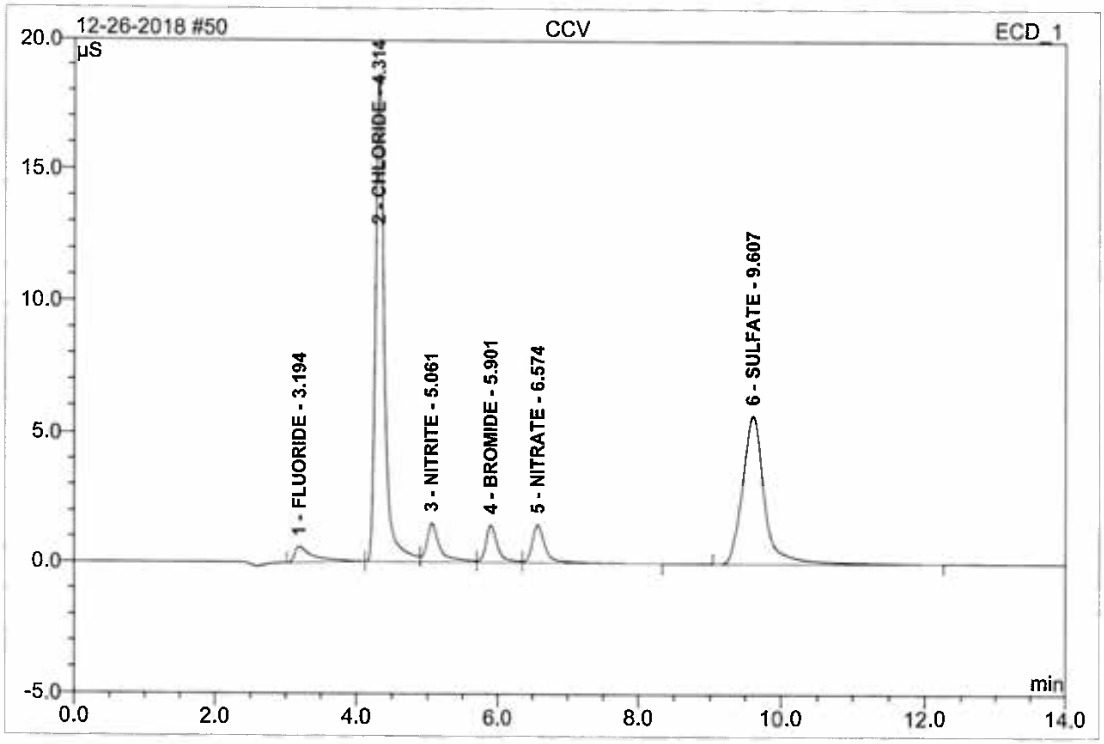
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

50 CCV

System Operator: BR IC 2000

Sample Name:	**CCV**	*Injection Volume:*	**10.0**
Vial Number:	**35**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 23:02**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.19	FLUORIDE	0.615	0.193	3.26	3.035	BMb
2	4.31	CHLORIDE	18.653	2.719	45.96	48.897	bM
3	5.06	NITRITE	1.487	0.331	5.59	2.619	M
4	5.90	BROMIDE	1.429	0.279	4.72	13.445	M
5	6.57	NITRATE	1.455	0.319	5.39	2.585	MB
6	9.61	SULFATE	5.693	2.076	35.09	51.805	BMB
Total:			29.333	5.916	100.00	122.386	

ALSE ANION REPORT/Integration

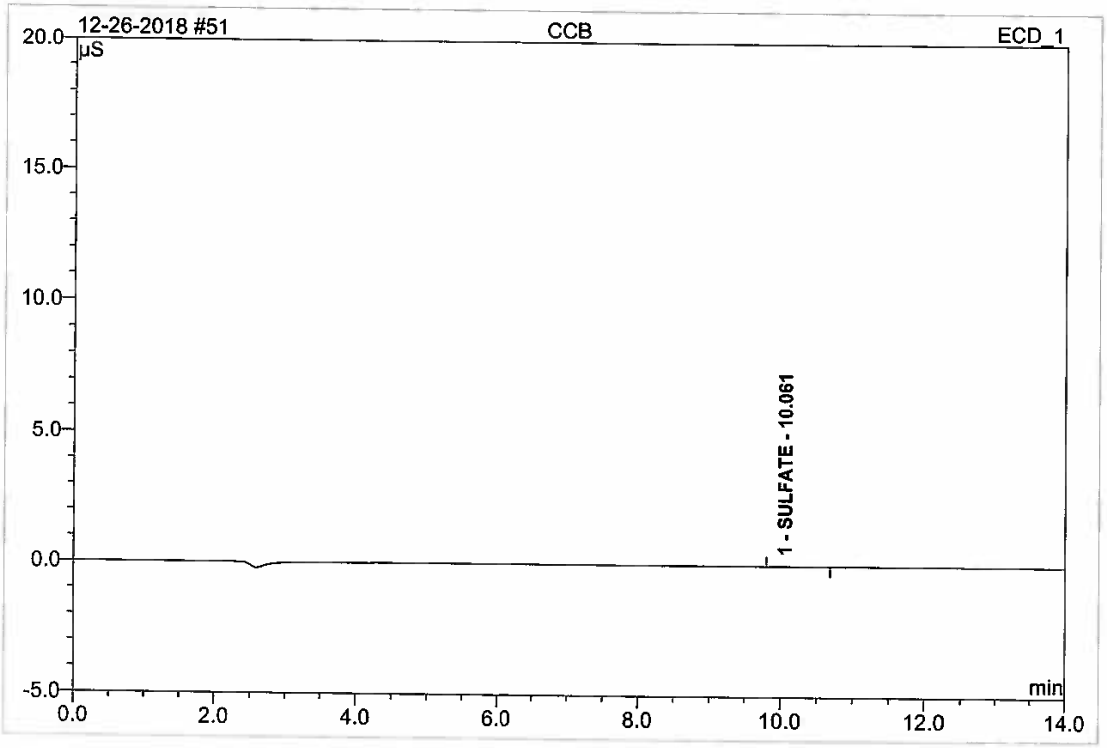
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

51 CCB

System Operator: BR IC 2000

Sample Name:	**CCB**	*Injection Volume:*	**10.0**
Vial Number:	**36**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 23:19**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	10.06	SULFATE	0.021	0.008	100.00	-0.385	BMB
Total:			0.021	0.008	100.00	-0.385	

ALSE ANION REPORT/Integration

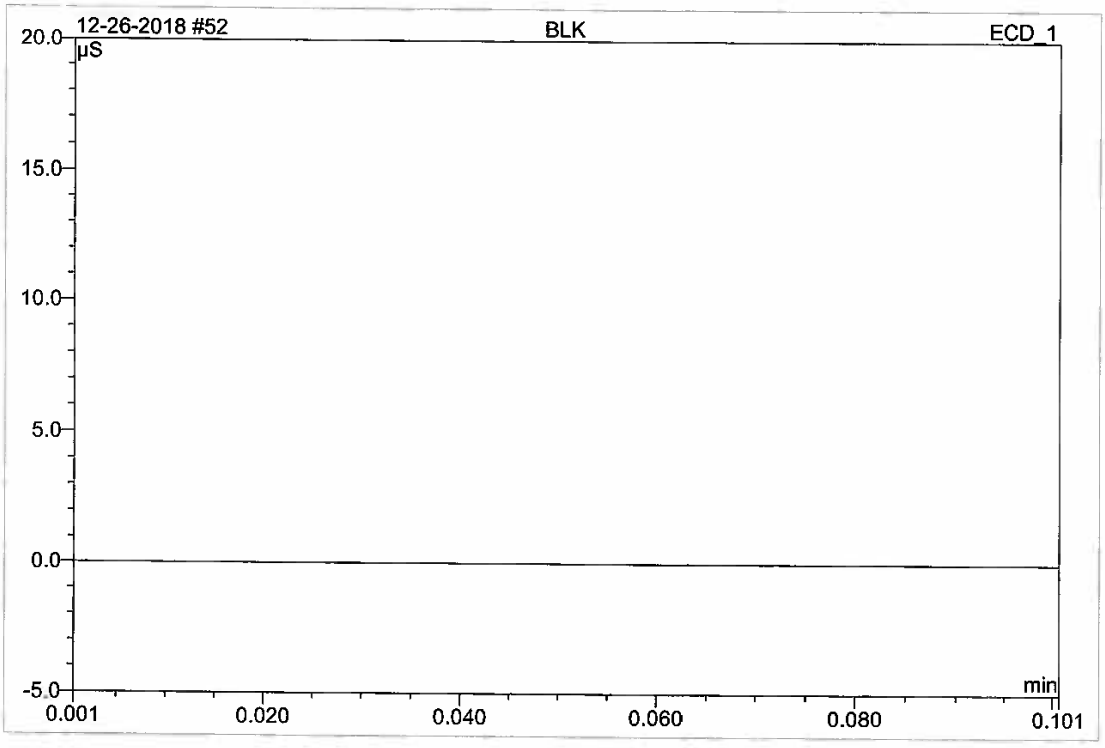
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-26-2018

52 BLK

System Operator: BR IC 2000

Sample Name:	**BLK**	*Injection Volume:*	**10.0**
Vial Number:	**37**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**SHUTDOWN_A22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/26/2018 23:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**0.10**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
Total:			0.000	0.000	0.00	0.000	

ALSE ANION REPORT/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

SGS

IC STANDARDS PREP LOG

STANDARD NAME	ANALYTES	STOCK MFG. #	STOCK LOT #	STOCK EXP. DATE	STOCK CONC. (mg/l)	VOLUME ADDED (ml)	TOTAL VOLUME (ml)	STANDARD CONC. (mg/l)	PREP DATE	INITIALS	STD LOT #	EXP DATE
B1	F, NO_2, NO_3	WC1082	Inorganic	05-25-19	500	0.5	100	2.5	12-20-18	BR	IC08676	12-21-18
↓	Br	↓	↓	↓	2500	↓	↓	12.5	↓	↓	↓	↓
↓	Cl, SO_4	↓	↓	↓	10000	↓	↓	50	↓	↓	↓	↓
CCV	F, NO_2, NO_3	WC1049	High Purity	04-30-19	500	0.5	100	2.5	12-21-18	BR	1	12-22-18
↓	Br	↓	↓	↓	2500	↓	↓	12.5	↓	↓	↓	↓
↓	Cl, SO_4	↓	↓	↓	10000	↓	↓	50	↓	↓	↓	↓
B1	F, NO_2, NO_3	WC1082	Inorganic	05-25-19	500	↓	↓	2.5	↓	↓	2	↓
↓	Br	↓	↓	↓	2500	↓	↓	12.5	↓	↓	↓	↓
↓	Cl, SO_4	↓	↓	↓	10000	↓	↓	50	↓	↓	↓	↓
CCV	F, NO_2, NO_3	WC1049	High Purity	04-30-19	500	0.5	100	2.5	12-22-18	BR	3	12-23-18
↓	Br	↓	↓	↓	2500	↓	↓	12.5	↓	↓	↓	↓
↓	Cl, SO_4	↓	↓	↓	10000	↓	↓	50	↓	↓	↓	↓
B1	F, NO_2, NO_3	WC1082	Inorganic	05-25-19	500	↓	↓	2.5	↓	↓	4	↓
↓	Br	↓	↓	↓	2500	↓	↓	~~5~~ 12.5	↓	↓	↓	↓
↓	Cl, SO_4	↓	↓	↓	10000	↓	↓	50	↓	↓	↓	↓
CCV	F, NO_2, NO_3	WC1049	High Purity	04-30-19	500	0.5	100	2.5	12-26-18	BR	5	12-27-18
↓	Br	↓	↓	↓	2500	↓	↓	12.5	↓	↓	↓	↓
↓	Cl, SO_4	↓	↓	↓	10000	↓	↓	50	↓	↓	↓	↓
B1	F, NO_2, NO_3	WC1082	Inorganic	05-25-19	500	↓	↓	2.5	↓	↓	6	↓
↓	Br	↓	↓	↓	2500	↓	↓	12.5	↓	↓	↓	↓
↓	Cl, SO_4	↓	↓	↓	10000	↓	↓	50	↓	↓	↓	↓
CCV	F, NO_2, NO_3	WC1049	High Purity	04-30-19	500	0.5	100	2.5	12-27-18	BR	7	12-28-18
↓	Br	↓	↓	↓	2500	↓	↓	12.5	↓	↓	↓	↓
↓	Cl, SO_4	↓	↓	↓	10000	↓	↓	50	↓	↓	↓	↓
B1	F, NO_2, NO_3	WC1082	Inorganic	05-25-19	500	↓	↓	2.5	↓	↓	8	↓
↓	Br	↓	↓	↓	2500	↓	↓	12.5	↓	↓	↓	↓
↓	Cl, SO_4	↓	↓	↓	10000	↓	↓	50	↓	↓	↓	↓

BR 12/20/18

GN80742

QC Reports:

Raw Data GN80742: Bromide, Chloride page 1 of 29

IC Instrument Log

Method: EPA300.0 / SW846 9056A (circle one)

Date:	12-27-18
Analyst:	BR
Instrument:	#2
Inst. File Name:	2181227c01.txt

Prep Batchs:	32502
Analytical Batch:	80742
Calibration Date:	12-18-18
Pump pressure:	1583

Vial lot#	WC1267
Cap lot#	WC1264
Syringe lot#	N/A
Filter lot#	N/A

Standards	
ICAL:	WC1249
ICV:	N/A
CCV:	IC08677
QC:	WC1682

Sample#	Bot#	Matrix	Scon	DF	Filter (y/n)	Ions Needed						Results OK or Dilution Needed						Comments
						F	Cl	NO2	Br	NO3	SO4	F	Cl	NO2	Br	NO3	SO4	
Rinse																		
CCV	N/A	aq	N/A	1	N		—		—				—		—			
MBI	↓	↓	↓	↓	↓		—		—				—		—			Reported as CCB
BI																		DMR
GP3CSW-MS1									—						—			
↓ -BI	↓	↓	↓	↓	↓				—						—			
FA60401-1				5			—						—					
CCV	N/A	↓	N/A	1	↓		—		—				—		—			
CCB	↓	↓	↓	↓	↓		—		—				—		—			

BR 12/27/18

GN80742

QC Reports:

Raw Data GN80742: Bromide, Chloride page 2 of 29

Sequence: 12-27-2018
Operator: Chemistry

Printed: 12/27/2018 1:31:42 PM

Title: HIGH LEVELS
Datasource: FLCHMIC2_local
Location: ICS-2000\My Sequences\ANIONS\ANIONS 2018\DEC 2018
Timebase: FLCHMIC2_1
#Samples: 24

Created: 12/27/2018 9:24:52 AM by Chemistry (Modified, not saved)

No.	Name	Type	Pos.	Dil. Factor	Program	Method	Status
1	STD 0	Standard	1	1.0000	ANIONS_AS22	ANIONS-B	Finished
2	STD A	Standard	2	1.0000	ANIONS_AS22	ANIONS-B	Finished
3	STD B	Standard	3	1.0000	ANIONS_AS22	ANIONS-B	Finished
4	STD C	Standard	4	1.0000	ANIONS_AS22	ANIONS-B	Finished
5	STD D	Standard	5	1.0000	ANIONS_AS22	ANIONS-B	Finished
6	STD E	Standard	6	1.0000	ANIONS_AS22	ANIONS-B	Finished
7	STD F	Standard	7	1.0000	ANIONS_AS22	ANIONS-B	Finished
8	STD G	Standard	8	1.0000	ANIONS_AS22	ANIONS-B	Finished
9	STD H	Standard	9	1.0000	ANIONS_AS22	ANIONS-B	Finished
10	STD I	Standard	10	1.0000	ANIONS_AS22	ANIONS-B	Finished
11	ICB	Unknown	11	1.0000	ANIONS_AS22	ANIONS-B	Finished
12	ICV	Unknown	12	1.0000	ANIONS_AS22	ANIONS-B	Finished
13	CCV2	Unknown	13	1.0000	ANIONS_AS22	ANIONS-B	Finished
14	CCV	Unknown	14	1.0000	ANIONS_AS22	ANIONS-B	Finished
15	CCB	Unknown	15	1.0000	ANIONS_AS22	ANIONS-B	Finished
16	RINSE	Unknown	1	1.0000	ANIONS_AS22	ANIONS-B	Finished
17	CCV	Unknown	2	1.0000	ANIONS_AS22	ANIONS-B	Finished
18	MB1	Unknown	3	1.0000	ANIONS_AS22	ANIONS-B	Finished
19	B1	Unknown	4	1.0000	ANIONS_AS22	ANIONS-B	Finished
20	GP32500-MB1	Unknown	5	1.0000	ANIONS_AS22	ANIONS-B	Finished
21	GP32500-B1	Unknown	6	1.0000	ANIONS_AS22	ANIONS-B	Finished
22	FA60401-9	Unknown	7	5.0000	ANIONS_AS22	ANIONS-B	Finished
23	CCV	Unknown	8	1.0000	ANIONS_AS22	ANIONS-B	Finished
24	CCB	Unknown	9	1.0000	ANIONS_AS22	ANIONS-B	Finished

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Sequence: 12-27-2018
Operator: Chemistry

Printed: 12/27/2018 1:31:42 PM

Title: HIGH LEVELS
Datasource: FLCHMIC2_local
Location: ICS-2000\My Sequences\ANIONS\ANIONS 2018\DEC 2018
Timebase: FLCHMIC2_1
#Samples: 24

Created: 12/27/2018 9:24:52 AM by Chemistry (Modified, not saved)

No.	Name	Inj. Date/Time	Inj. Vol.	Comment
1	STD 0	12/18/2018 5:11:53 PM	10.0	System Operator: BR IC 2000
2	STD A	12/18/2018 5:28:26 PM	10.0	System Operator: BR IC 2000
3	STD B	12/18/2018 5:45:22 PM	10.0	System Operator: BR IC 2000
4	STD C	12/18/2018 6:02:18 PM	10.0	System Operator: BR IC 2000
5	STD D	12/18/2018 6:19:13 PM	10.0	System Operator: BR IC 2000
6	STD E	12/18/2018 6:36:10 PM	10.0	System Operator: BR IC 2000
7	STD F	12/18/2018 6:53:06 PM	10.0	System Operator: BR IC 2000
8	STD G	12/18/2018 7:10:01 PM	10.0	System Operator: BR IC 2000
9	STD H	12/18/2018 7:26:57 PM	10.0	System Operator: BR IC 2000
10	STD I	12/18/2018 7:43:53 PM	10.0	System Operator: BR IC 2000
11	ICB	12/18/2018 8:00:49 PM	10.0	System Operator: BR IC 2000
12	ICV	12/18/2018 8:17:45 PM	10.0	System Operator: BR IC 2000
13	CCV2	12/18/2018 8:34:41 PM	10.0	System Operator: BR IC 2000
14	CCV	12/18/2018 8:51:36 PM	10.0	System Operator: BR IC 2000
15	CCB	12/18/2018 9:08:32 PM	10.0	System Operator: BR IC 2000
16	RINSE	12/27/2018 10:55:45 AM	10.0	System Operator: BR IC 2000
17	CCV	12/27/2018 11:12:16 AM	10.0	System Operator: BR IC 2000
18	MB1	12/27/2018 11:29:11 AM	10.0	System Operator: BR IC 2000
19	B1	12/27/2018 11:46:06 AM	10.0	System Operator: BR IC 2000
20	GP32500-MB1	12/27/2018 12:03:02 PM	10.0	System Operator: BR IC 2000
21	GP32500-B1	12/27/2018 12:19:57 PM	10.0	System Operator: BR IC 2000
22	FA60401-9	12/27/2018 12:36:53 PM	10.0	System Operator: BR IC 2000
23	CCV	12/27/2018 12:53:50 PM	10.0	System Operator: BR IC 2000
24	CCB	12/27/2018 1:10:45 PM	10.0	System Operator: BR IC 2000

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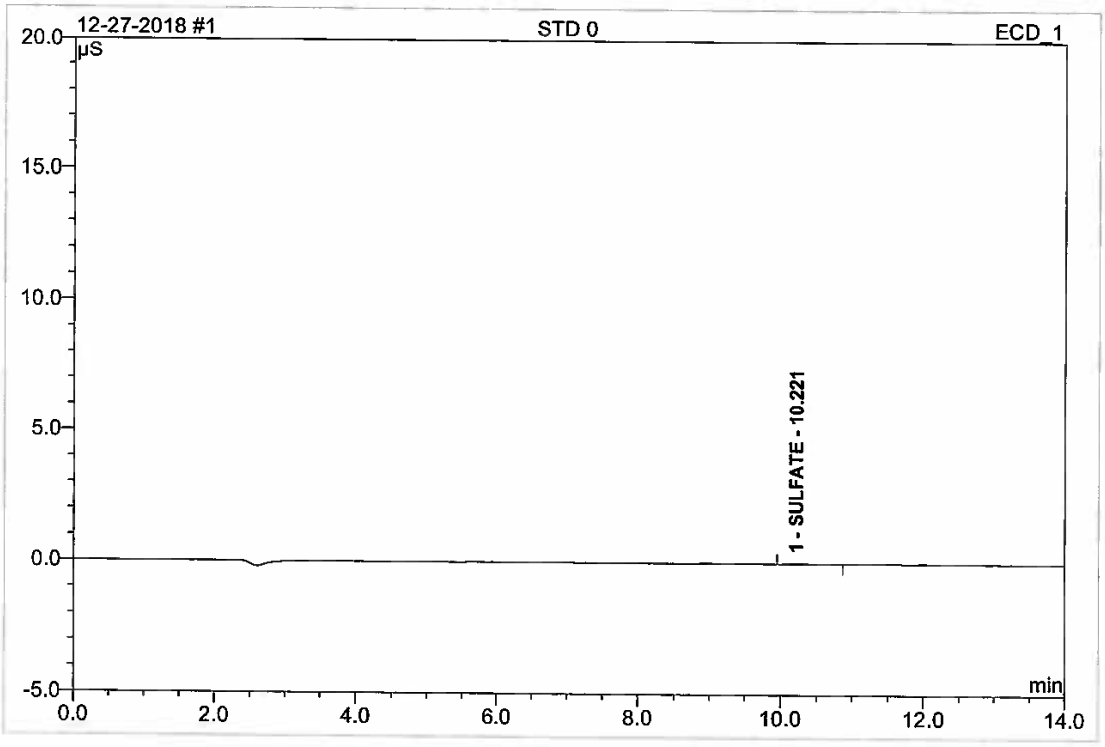
Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-27-2018

1 STD 0

System Operator: BR IC 2000

Sample Name:	**STD 0**	*Injection Volume:*	**10.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 17:11**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	10.22	SULFATE	0.021	0.008	100.00	-0.393	BMB
Total:			0.021	0.008	100.00	-0.393	

ALSE ANION REPORT/Integration

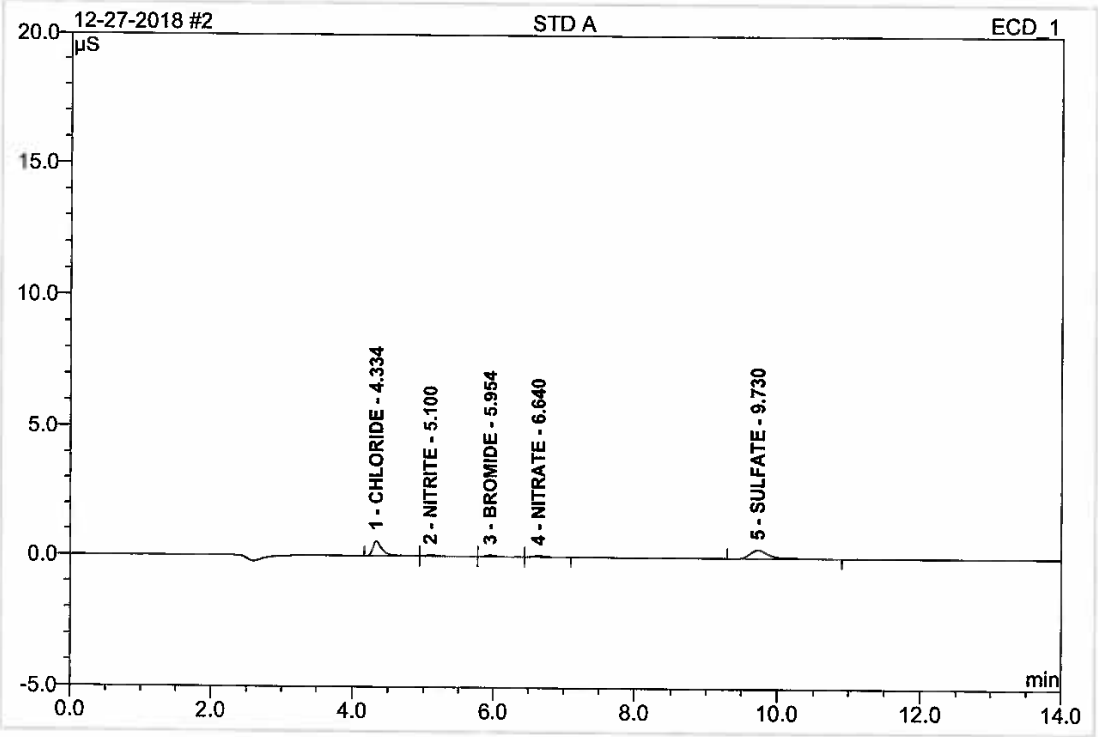
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-27-2018

2 STD A

System Operator: BR IC 2000

Sample Name:	**STD A**	*Injection Volume:*	**10.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 17:28**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	4.33	CHLORIDE	0.582	0.093	40.02	2.465	BM
2	5.10	NITRITE	0.057	0.014	6.15	0.109	M
3	5.95	BROMIDE	0.056	0.011	4.73	0.509	Mb
4	6.64	NITRATE	0.053	0.011	4.60	0.106	bMB
5	9.73	SULFATE	0.322	0.103	44.49	2.021	BMB
Total:			1.071	0.232	100.00	5.210	

ALSE ANION REPORT/Integration

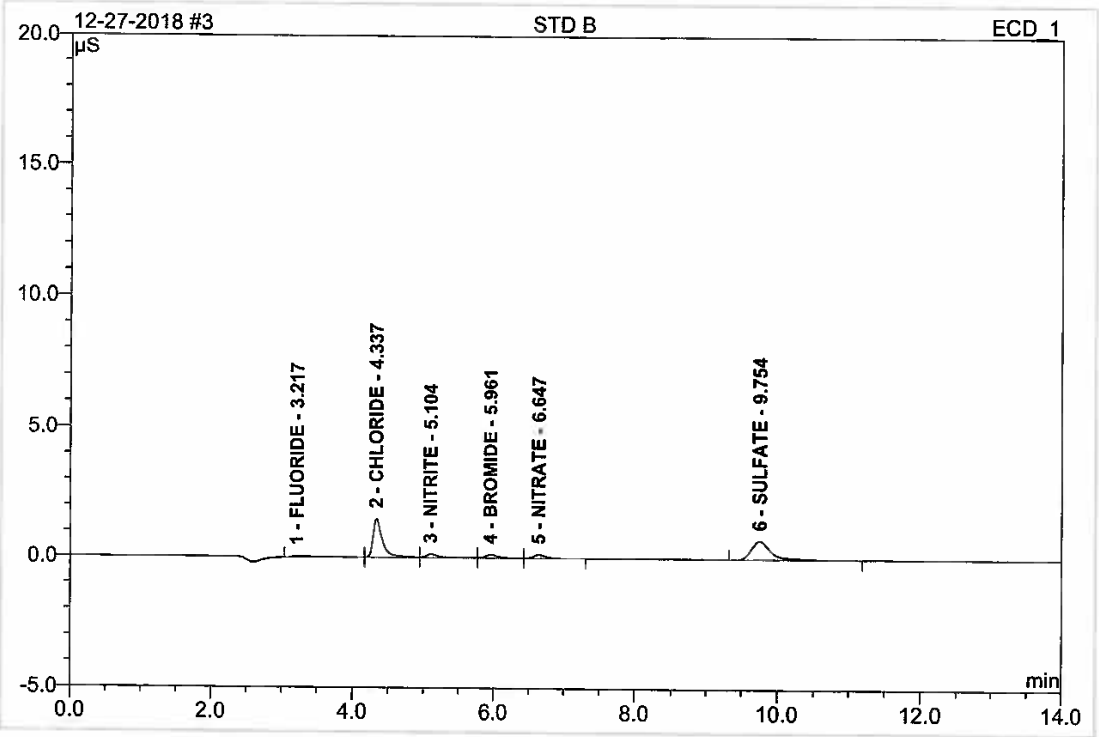
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-27-2018

3 STD B

System Operator: BR IC 2000

Sample Name:	**STD B**	*Injection Volume:*	**10.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 17:45**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.22	FLUORIDE	0.055	0.023	4.10	0.243	BMB
2	4.34	CHLORIDE	1.477	0.229	40.60	4.868	bM
3	5.10	NITRITE	0.138	0.030	5.32	0.234	M
4	5.96	BROMIDE	0.133	0.026	4.60	1.230	M
5	6.65	NITRATE	0.132	0.027	4.74	0.235	MB
6	9.75	SULFATE	0.716	0.229	40.64	5.195	BMB
Total:			2.651	0.564	100.00	12.005	

ALSE ANION REPORT/Integration

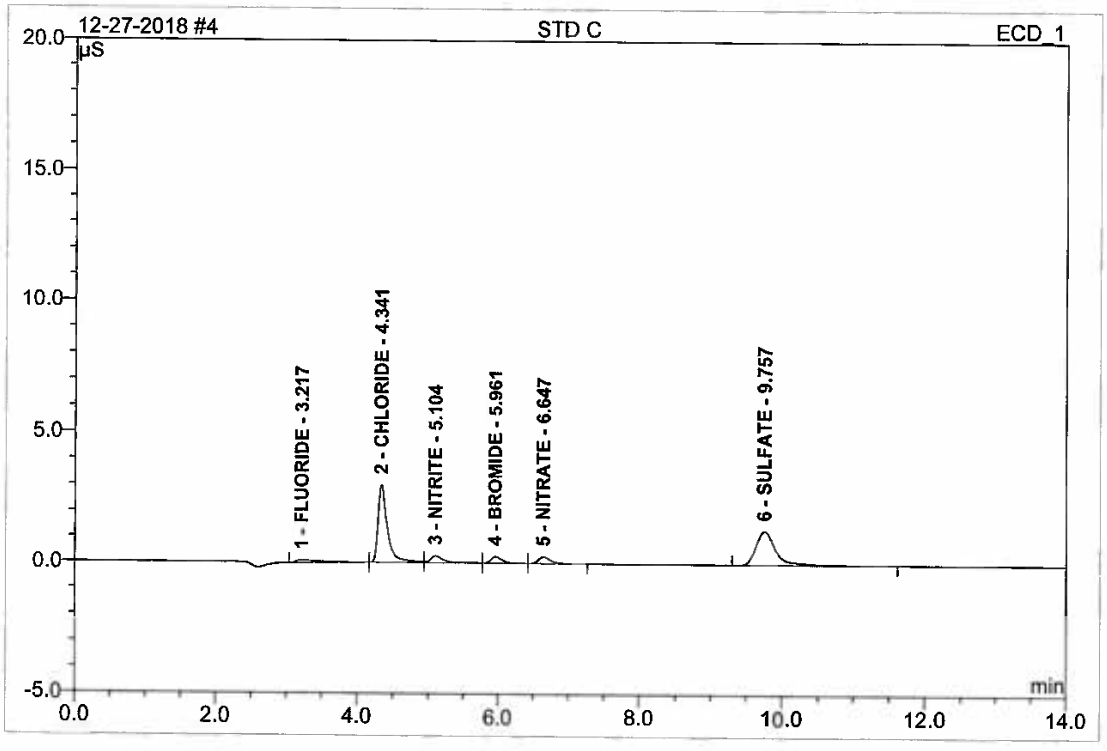
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-27-2018

4 STD C

System Operator: BR IC 2000

Sample Name:	**STD C**	*Injection Volume:*	**10.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 18:02**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.22	FLUORIDE	0.102	0.039	3.60	0.510	BMb
2	4.34	CHLORIDE	2.998	0.462	42.25	8.991	bM
3	5.10	NITRITE	0.277	0.062	5.67	0.488	M
4	5.96	BROMIDE	0.265	0.051	4.71	2.462	M
5	6.65	NITRATE	0.267	0.055	5.06	0.465	MB
6	9.76	SULFATE	1.304	0.423	38.72	10.100	BMB
Total:			5.212	1.093	100.00	23.016	

ALSE ANION REPORT/Integration

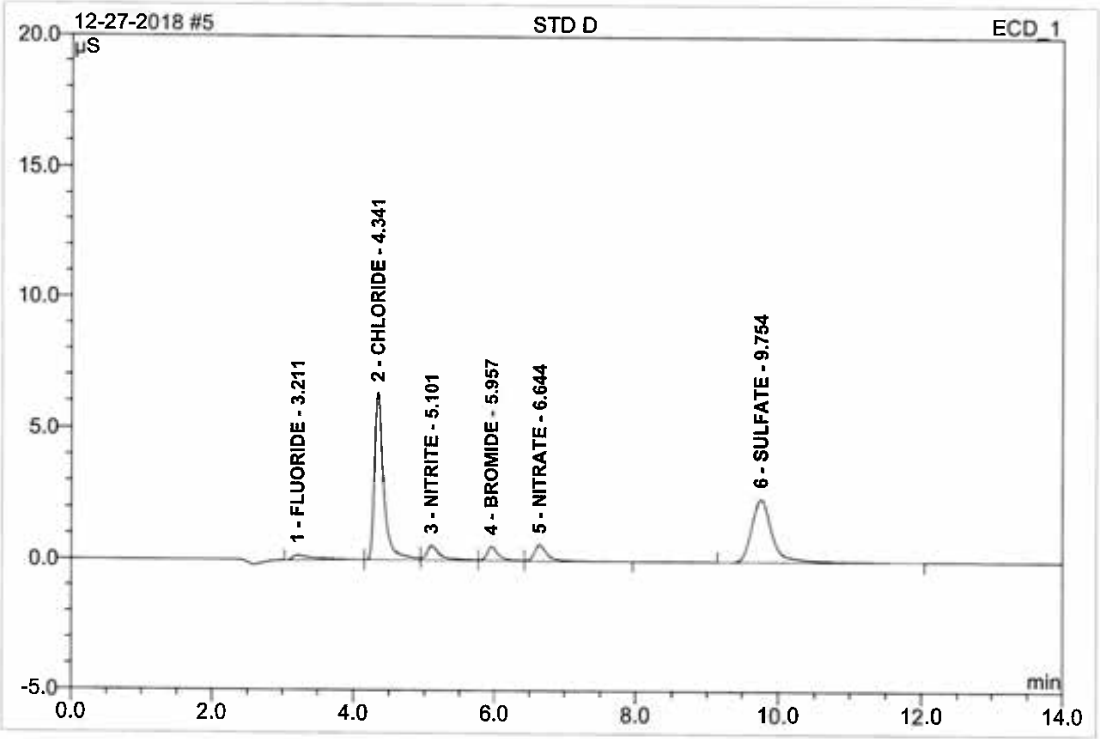
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-27-2018

5 STD D

System Operator: BR IC 2000

Sample Name:	**STD D**	*Injection Volume:*	**10.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 18:19**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.21	FLUORIDE	0.185	0.068	3.10	0.979	BMb
2	4.34	CHLORIDE	6.331	0.959	43.75	17.775	bM
3	5.10	NITRITE	0.547	0.124	5.66	0.980	M
4	5.96	BROMIDE	0.522	0.103	4.69	4.944	M
5	6.64	NITRATE	0.597	0.131	6.00	1.078	MB
6	9.75	SULFATE	2.388	0.807	36.81	19.774	BMB
Total:			10.571	2.192	100.00	45.530	

ALSE ANION REPORT/Integration

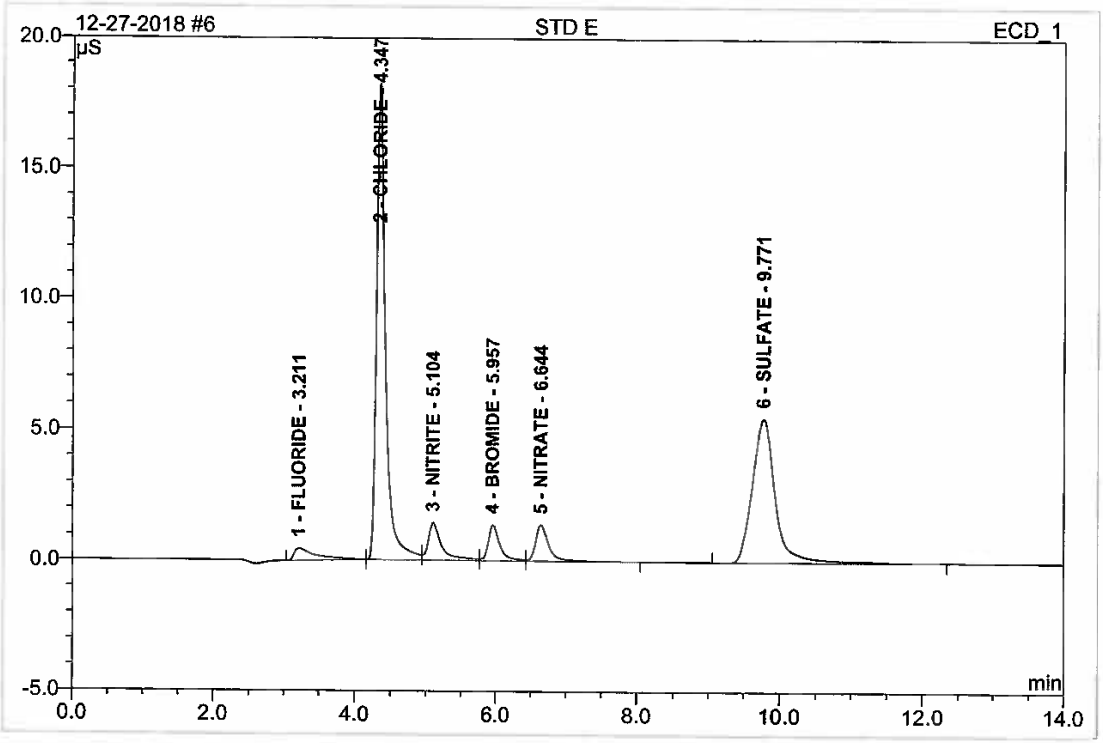
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-27-2018

6 STD E

System Operator: BR IC 2000

Sample Name:	**STD E**	*Injection Volume:*	**10.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 18:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.21	FLUORIDE	0.473	0.169	2.93	2.635	BMb
2	4.35	CHLORIDE	18.183	2.653	46.03	47.730	bM
3	5.10	NITRITE	1.431	0.323	5.60	2.557	M
4	5.96	BROMIDE	1.373	0.270	4.69	13.029	M
5	6.64	NITRATE	1.390	0.304	5.27	2.465	MB
6	9.77	SULFATE	5.507	2.045	35.48	51.033	BMB
Total:			28.357	5.764	100.00	119.448	

ALSE ANION REPORT/Integration

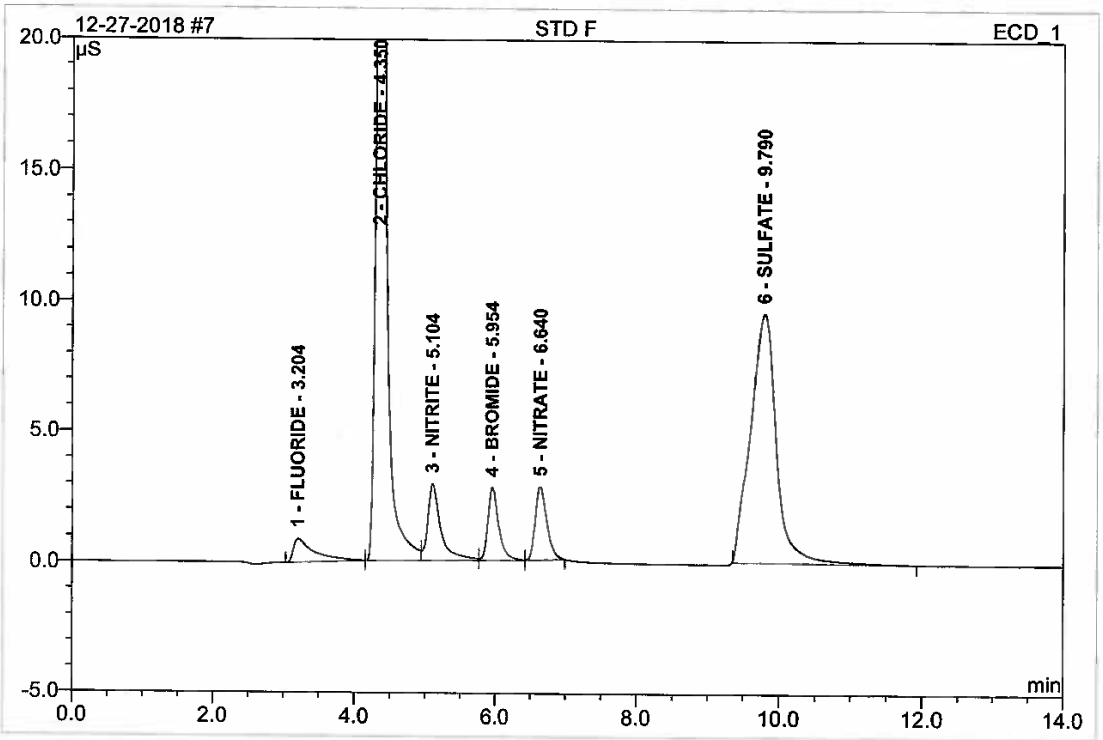
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-27-2018

7 STD F

System Operator: BR IC 2000

Sample Name:	**STD F**	*Injection Volume:*	**10.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 18:53**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.20	FLUORIDE	0.891	0.306	2.59	4.884	BMb
2	4.35	CHLORIDE	41.677	5.901	49.95	105.172	bM
3	5.10	NITRITE	2.914	0.628	5.32	4.983	M
4	5.95	BROMIDE	2.782	0.510	4.31	24.577	MB
5	6.64	NITRATE	2.781	0.530	4.48	4.283	BMB
6	9.79	SULFATE	9.533	3.941	33.35	98.877	MB
Total:			60.578	11.816	100.00	242.775	

ALSE ANION REPORT/Integration

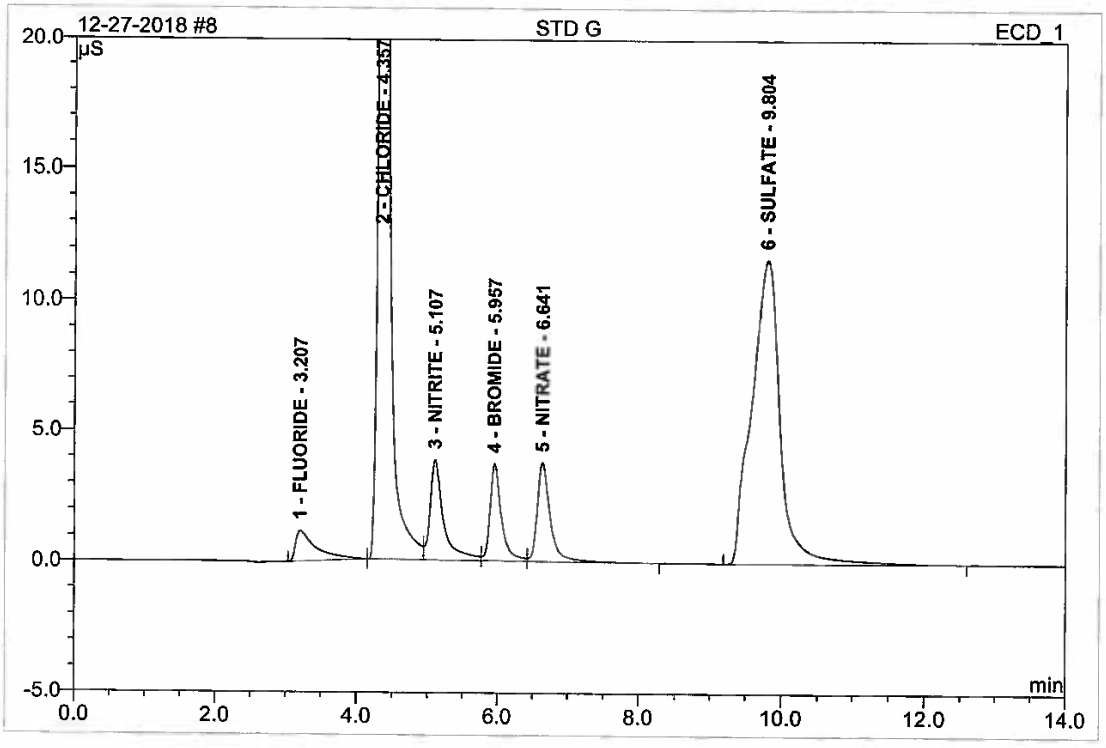
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-27-2018

8 STD G

System Operator: BR IC 2000

Sample Name:	**STD G**	*Injection Volume:*	**10.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 19:10**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.21	FLUORIDE	1.164	0.396	2.47	6.366	BMb
2	4.36	CHLORIDE	55.940	7.899	49.25	140.499	bM
3	5.11	NITRITE	3.835	0.860	5.36	6.823	M
4	5.96	BROMIDE	3.715	0.724	4.51	34.906	M
5	6.64	NITRATE	3.785	0.819	5.10	6.606	MB
6	9.80	SULFATE	11.660	5.341	33.30	134.218	BMB
Total:			80.099	16.039	100.00	329.417	

ALSE ANION REPORT/Integration

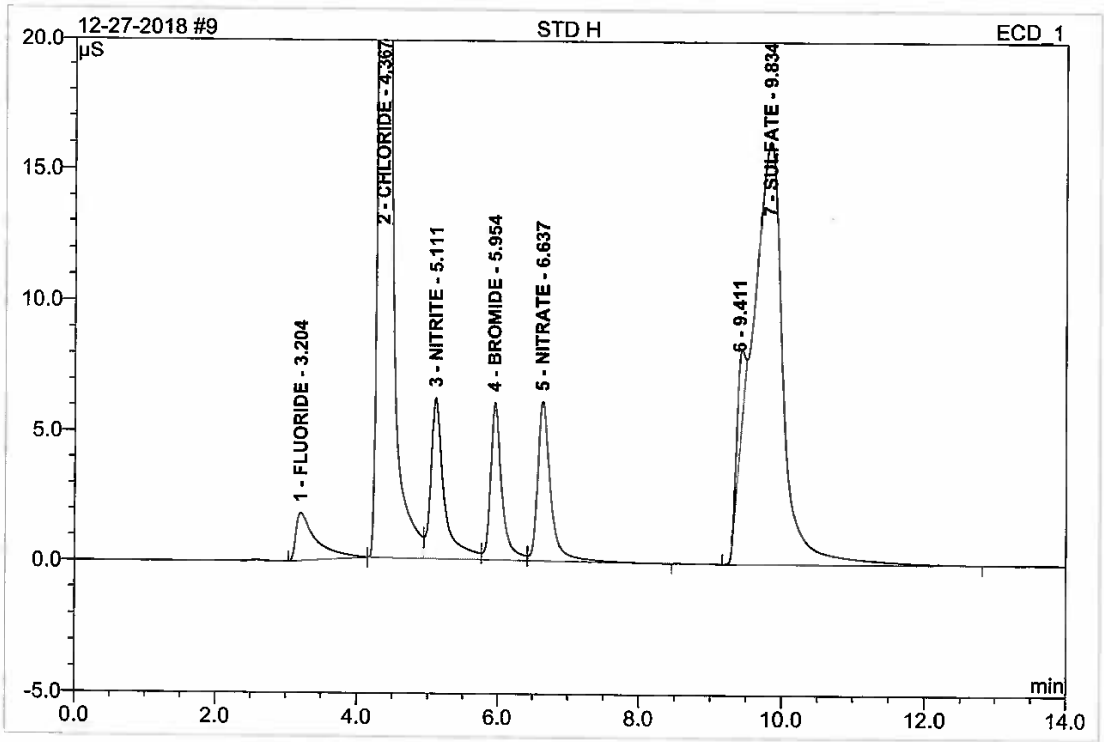
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-27-2018

9 STD H

System Operator: BR IC 2000

Sample Name:	**STD H**	*Injection Volume:*	**10.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 19:26**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.20	FLUORIDE	1.829	0.610	2.32	9.889	BMb
2	4.37	CHLORIDE	93.247	13.195	50.27	234.143	bM
3	5.11	NITRITE	6.191	1.379	5.25	10.940	M
4	5.95	BROMIDE	6.058	1.168	4.45	56.374	M
5	6.64	NITRATE	6.138	1.317	5.02	10.614	MB
6	9.41	n.a.	3.310	0.370	1.41	n.a.	Ru
7	9.83	SULFATE	16.144	8.210	31.28	206.630	BMB
Total:			132.918	26.250	100.00	528.590	

ALSE ANION REPORT/Integration

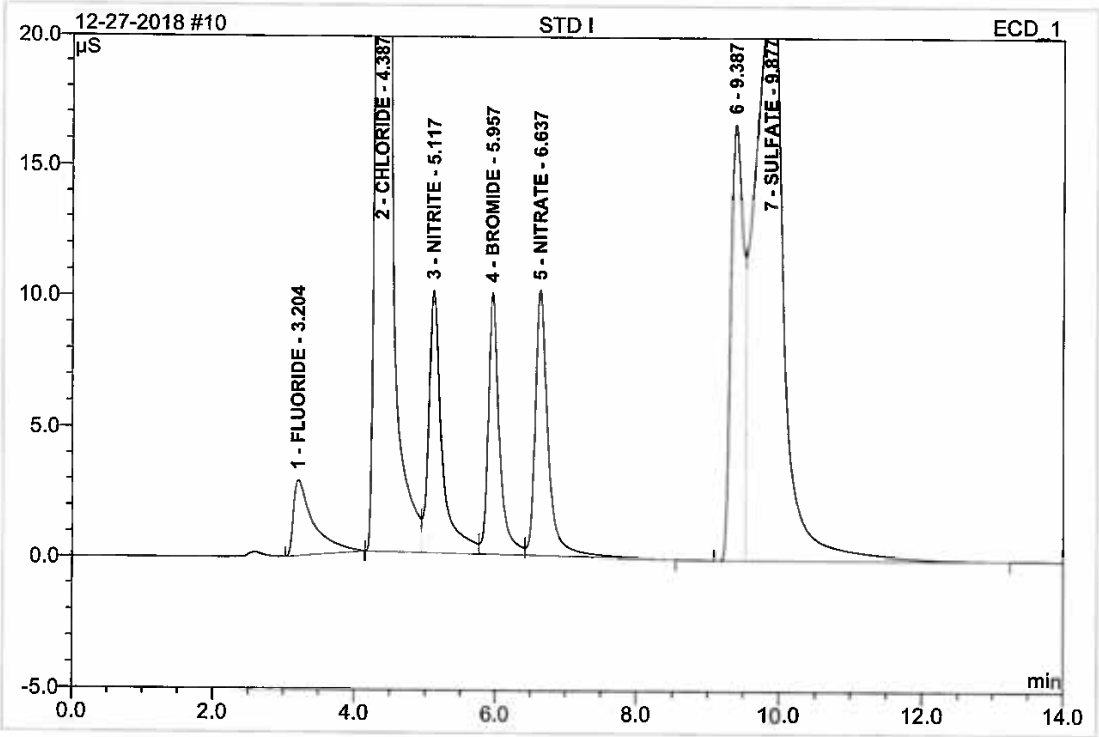
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-27-2018

10 STD I

System Operator: BR IC 2000

Sample Name:	**STD I**	*Injection Volume:*	**10.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 19:43**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.20	FLUORIDE	2.909	0.963	2.23	15.695	BMb
2	4.39	CHLORIDE	150.173	21.885	50.73	387.791	bM
3	5.12	NITRITE	10.028	2.232	5.17	17.712	M
4	5.96	BROMIDE	9.983	1.904	4.41	91.893	M
5	6.64	NITRATE	10.129	2.154	4.99	17.345	MB
6	9.39	n.a.	16.624	3.429	7.95	n.a.	BM
7	9.88	SULFATE	22.130	10.569	24.50	266.158	MB
Total:			221.978	43.136	100.00	796.593	

ALSE ANION REPORT/Integration

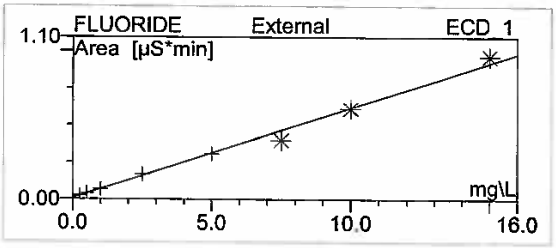
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

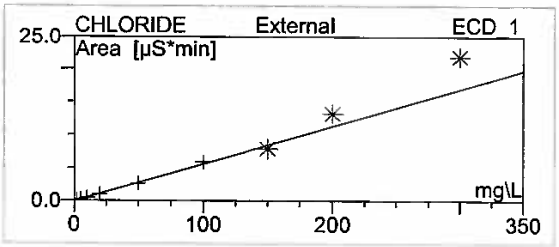
Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-27-2018

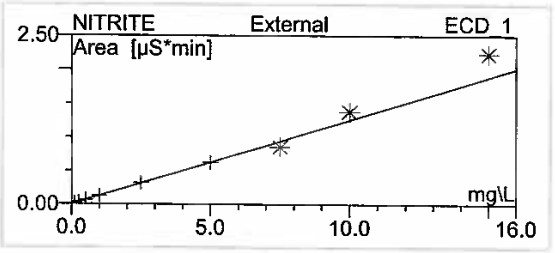
10 STD I

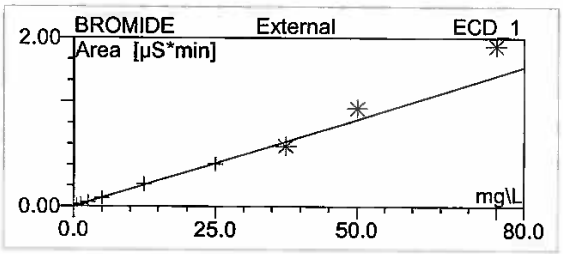
System Operator: BR IC 2000

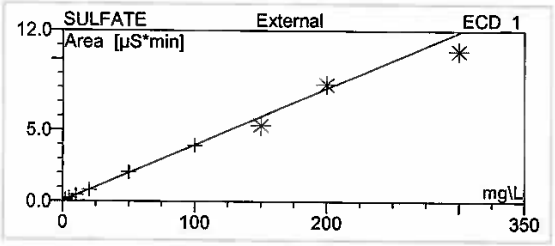
Sample Name:	**STD I**	*Injection Volume:*	**10.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 19:43**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**

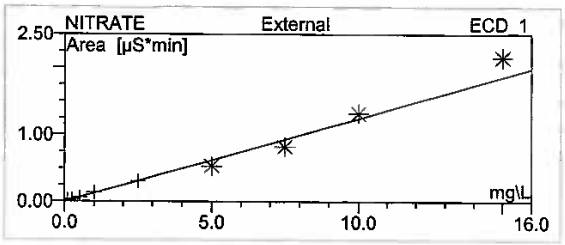












No.	Ret.Time min	Peak Name	Cal.Type	Points	Corr.Coeff. %	Offset	Slope	Curve
1	3.20	FLUORIDE	XLOff	5	99.9094	0.0083	0.0609	0.0000
2	4.39	CHLORIDE	XLOff	6	99.7167	-0.0465	0.0566	0.0000
3	5.12	NITRITE	XLOff	6	99.9729	0.0005	0.1260	0.0000
4	5.96	BROMIDE	XLOff	6	99.9573	0.0004	0.0207	0.0000
5	6.64	NITRATE	XLOff	5	99.8249	-0.0025	0.1243	0.0000
6	9.39	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	9.88	SULFATE	XLOff	7	99.9776	0.0232	0.0396	0.0000
Average:					99.8931	-0.0028	0.0713	0.0000

ALSE ANION REPORT/Calibration(Batch)

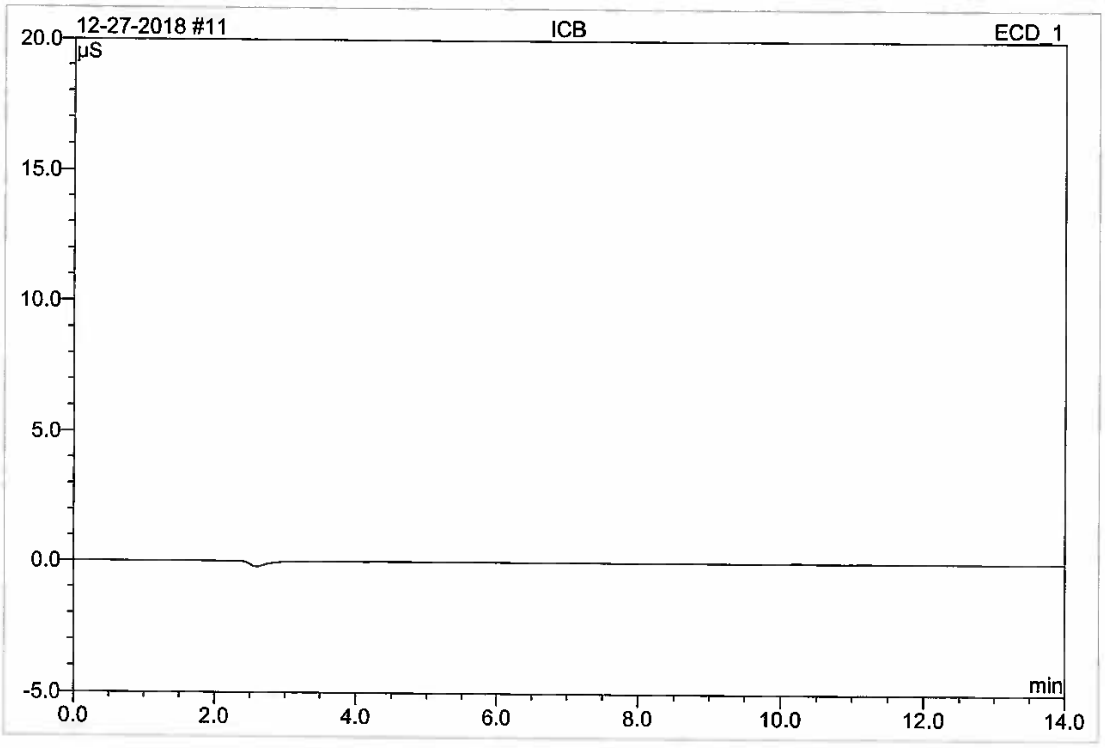
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-27-2018

11 ICB

System Operator: BR IC 2000

Sample Name:	**ICB**	*Injection Volume:*	**10.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 20:00**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
Total:			0.000	0.000	0.00	0.000	

ALSE ANION REPORT/Integration

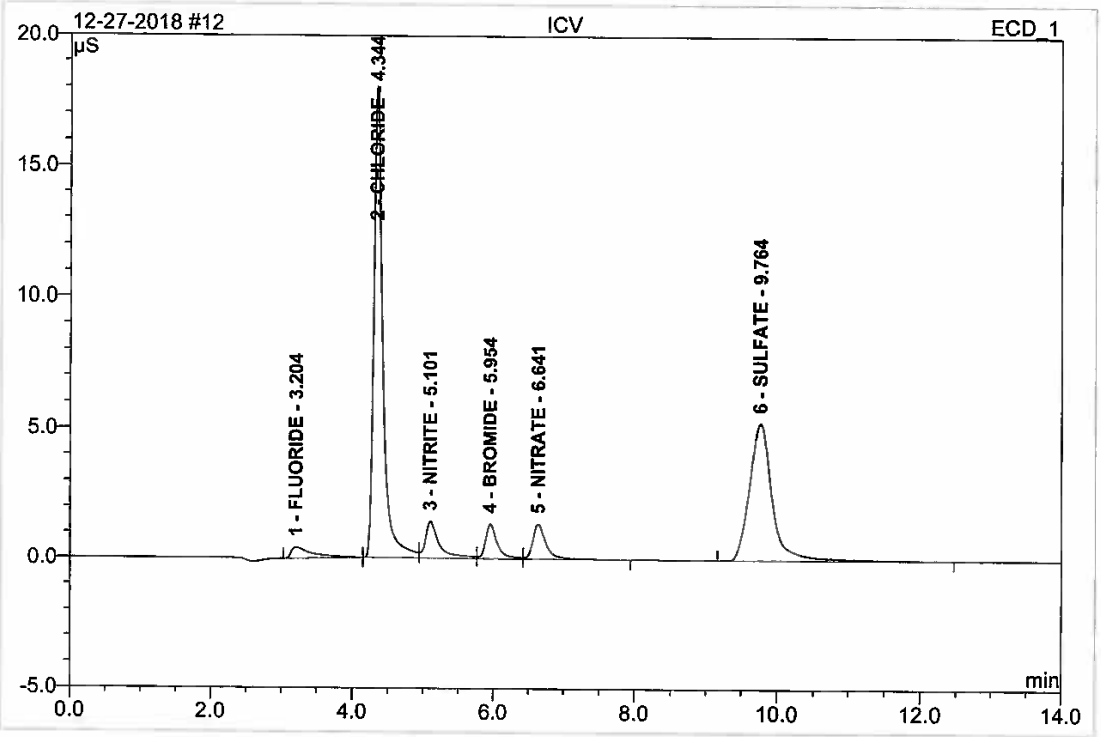
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-27-2018

12 ICV

System Operator: BR IC 2000

Sample Name:	**ICV**	*Injection Volume:*	**10.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 20:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.20	FLUORIDE	0.432	0.150	2.66	2.323	BMb
2	4.34	CHLORIDE	18.009	2.641	46.96	47.521	bM
3	5.10	NITRITE	1.427	0.324	5.77	2.571	M
4	5.95	BROMIDE	1.348	0.267	4.75	12.879	M
5	6.64	NITRATE	1.349	0.296	5.26	2.400	MB
6	9.76	SULFATE	5.272	1.946	34.60	48.520	BMB
Total:			27.837	5.624	100.00	116.213	

ALSE ANION REPORT/Integration

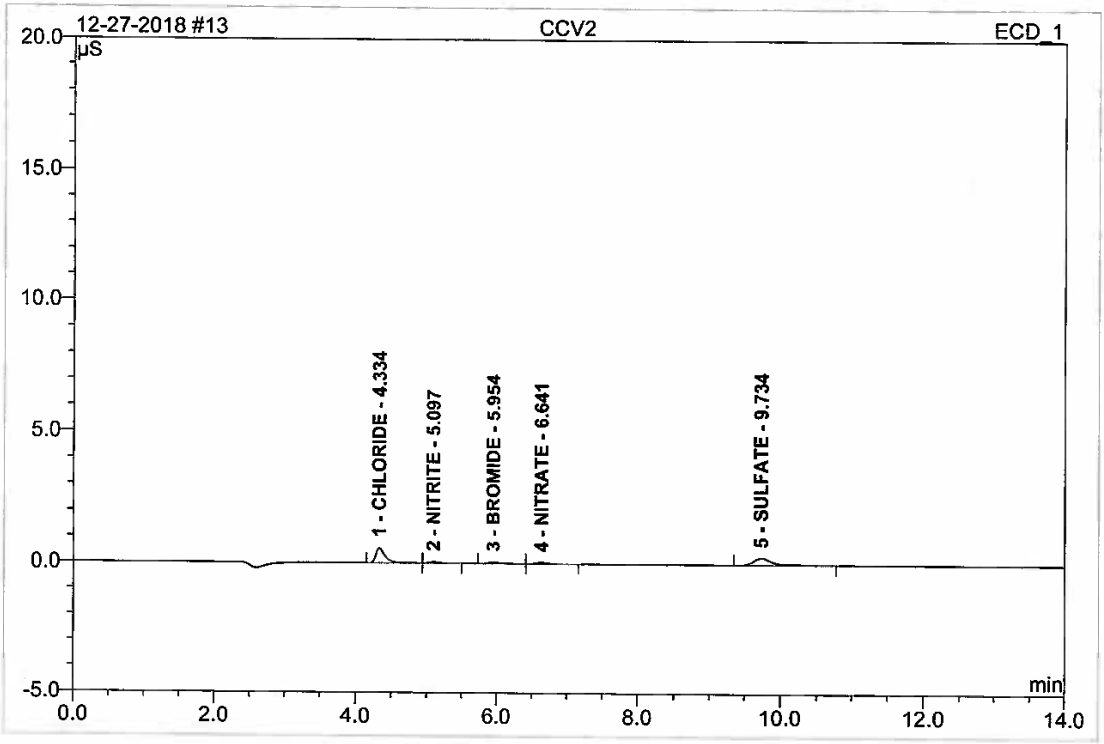
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-27-2018

13 CCV2

System Operator: BR IC 2000

Sample Name:	**CCV2**	*Injection Volume:*	**10.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 20:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	4.33	CHLORIDE	0.577	0.091	44.83	2.423	BM
2	5.10	NITRITE	0.053	0.010	4.96	0.075	MB
3	5.95	BROMIDE	0.051	0.009	4.68	0.435	BM
4	6.64	NITRATE	0.052	0.010	5.19	0.105	MB
5	9.73	SULFATE	0.262	0.081	40.33	1.470	BMB
Total:			0.994	0.202	100.00	4.508	

ALSE ANION REPORT/Integration

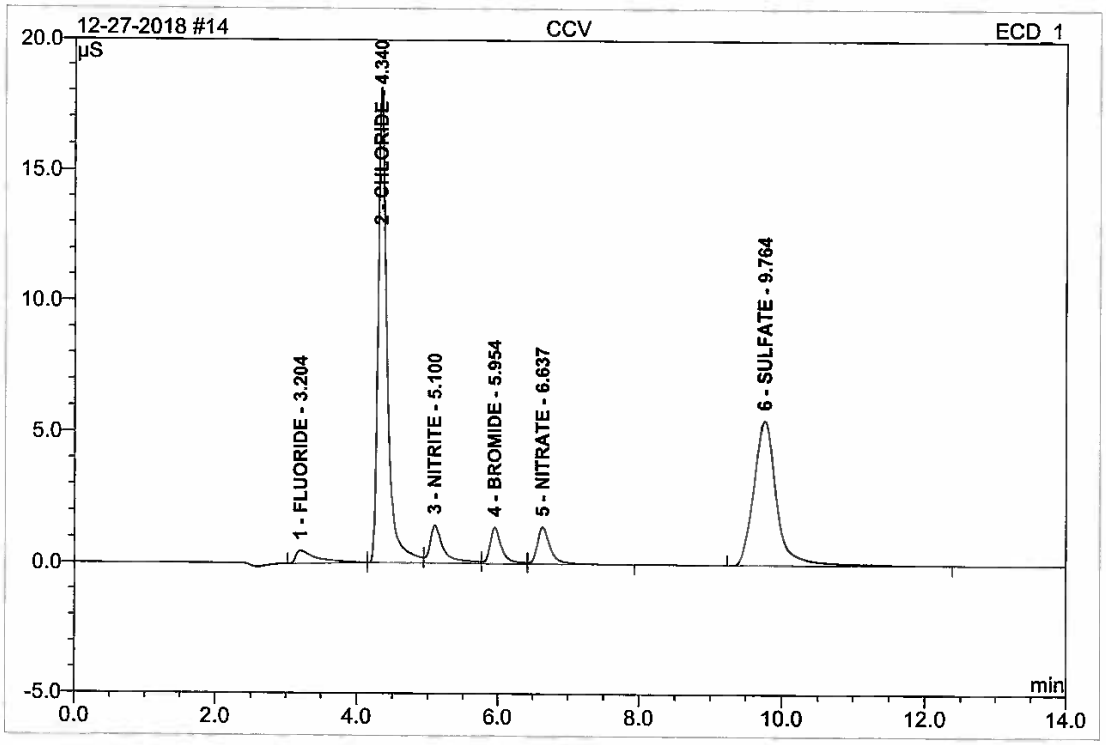
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-27-2018

14 CCV

System Operator: BR IC 2000

Sample Name:	**CCV**	*Injection Volume:*	**10.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 20:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.20	FLUORIDE	0.482	0.166	2.89	2.592	BMb
2	4.34	CHLORIDE	18.121	2.655	46.13	47.765	bM
3	5.10	NITRITE	1.427	0.323	5.62	2.563	M
4	5.95	BROMIDE	1.371	0.270	4.70	13.027	M
5	6.64	NITRATE	1.390	0.303	5.27	2.460	MB
6	9.76	SULFATE	5.494	2.037	35.40	50.836	BMB
Total:			28.286	5.755	100.00	119.242	

ALSE ANION REPORT/Integration

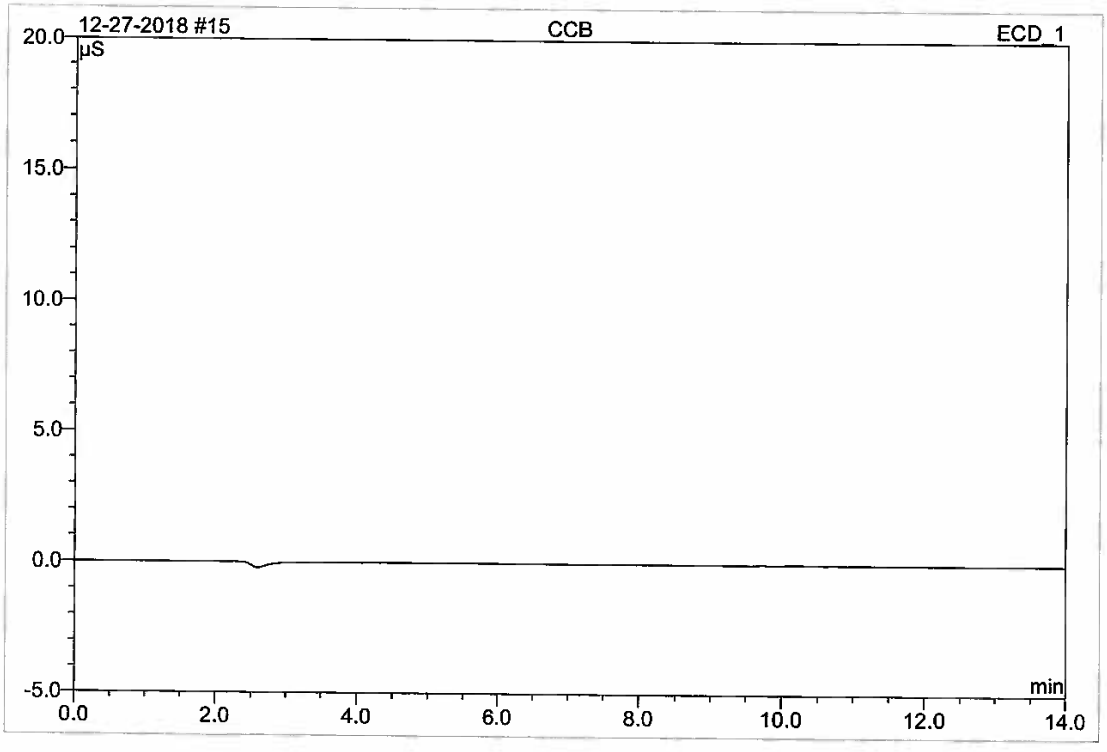
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-27-2018

15 CCB

System Operator: BR IC 2000

Sample Name:	**CCB**	*Injection Volume:*	**10.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/18/2018 21:08**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
Total:			0.000	0.000	0.00	0.000	

ALSE ANION REPORT/Integration

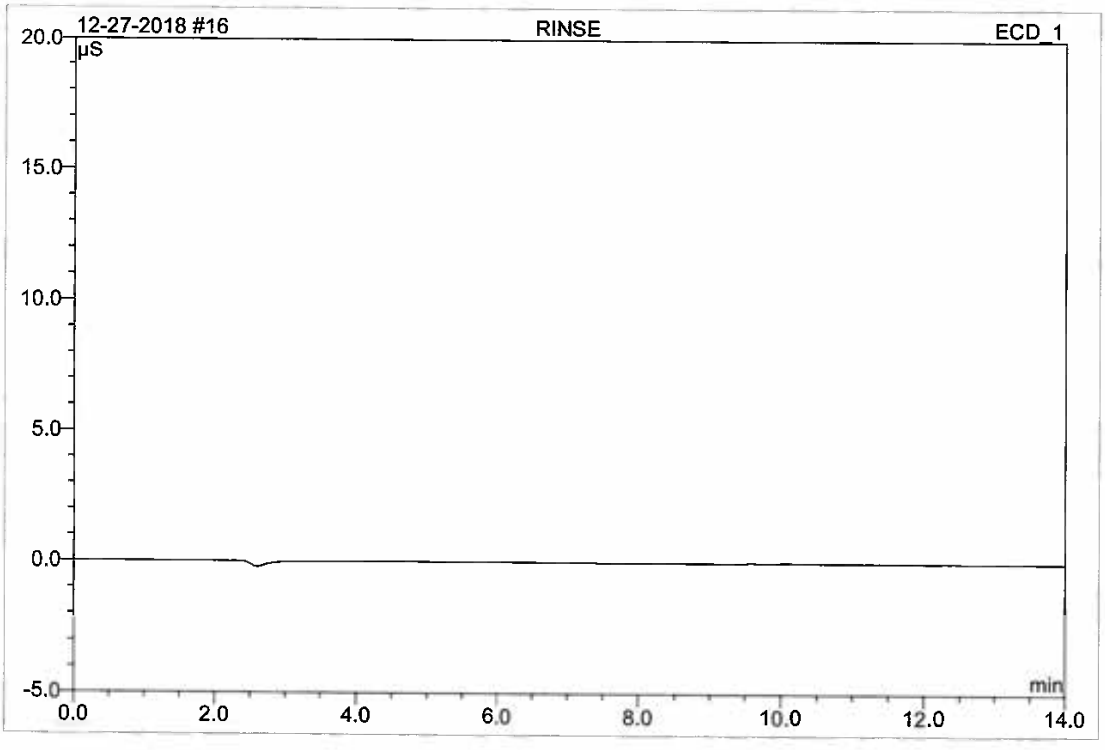
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-27-2018

16 RINSE

System Operator: BR IC 2000

Sample Name:	**RINSE**	*Injection Volume:*	**10.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/27/2018 10:55**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
Total:			0.000	0.000	0.00	0.000	

ALSE ANION REPORT/Integration

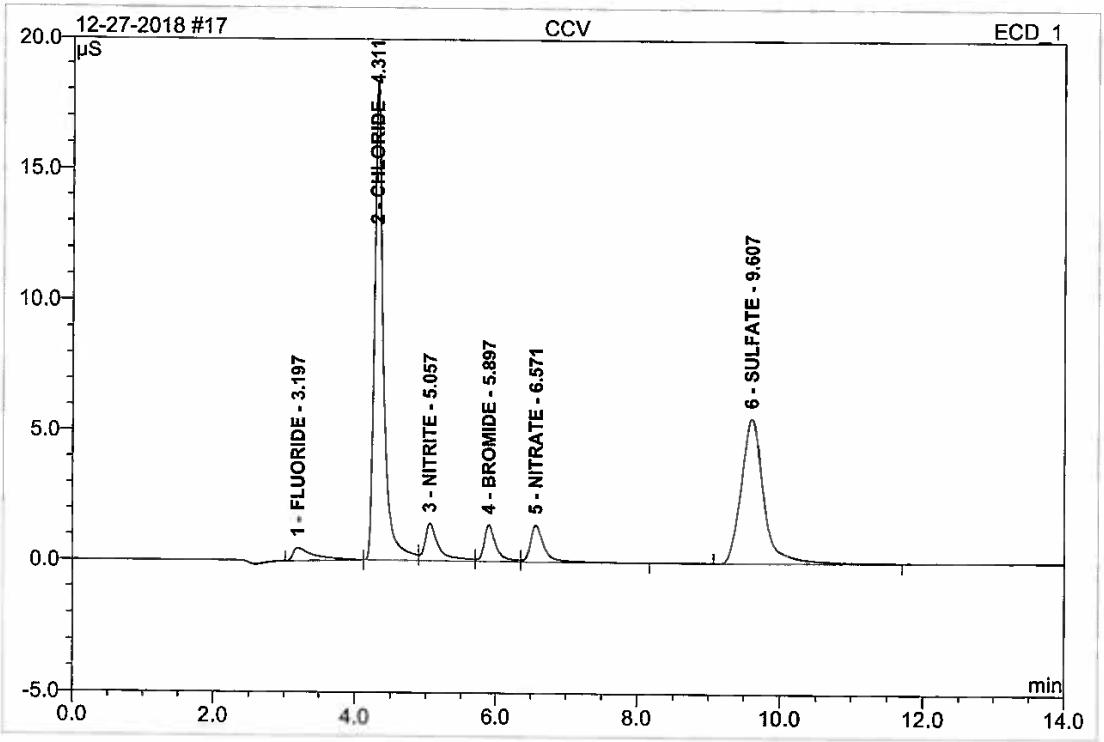
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-27-2018

17 CCV

System Operator: BR IC 2000

Sample Name:	**CCV**	*Injection Volume:*	**10.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/27/2018 11:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.20	FLUORIDE	0.500	0.174	2.99	2.720	BMb
2	4.31	CHLORIDE	18.253	2.680	46.12	48.209	bM
3	5.06	NITRITE	1.433	0.328	5.64	2.596	M
4	5.90	BROMIDE	1.390	0.279	4.79	13.422	M
5	6.57	NITRATE	1.408	0.316	5.43	2.560	MB
6	9.61	SULFATE	5.562	2.035	35.02	50.764	BMB
Total:			28.546	5.810	100.00	120.272	

ALSE ANION REPORT/Integration

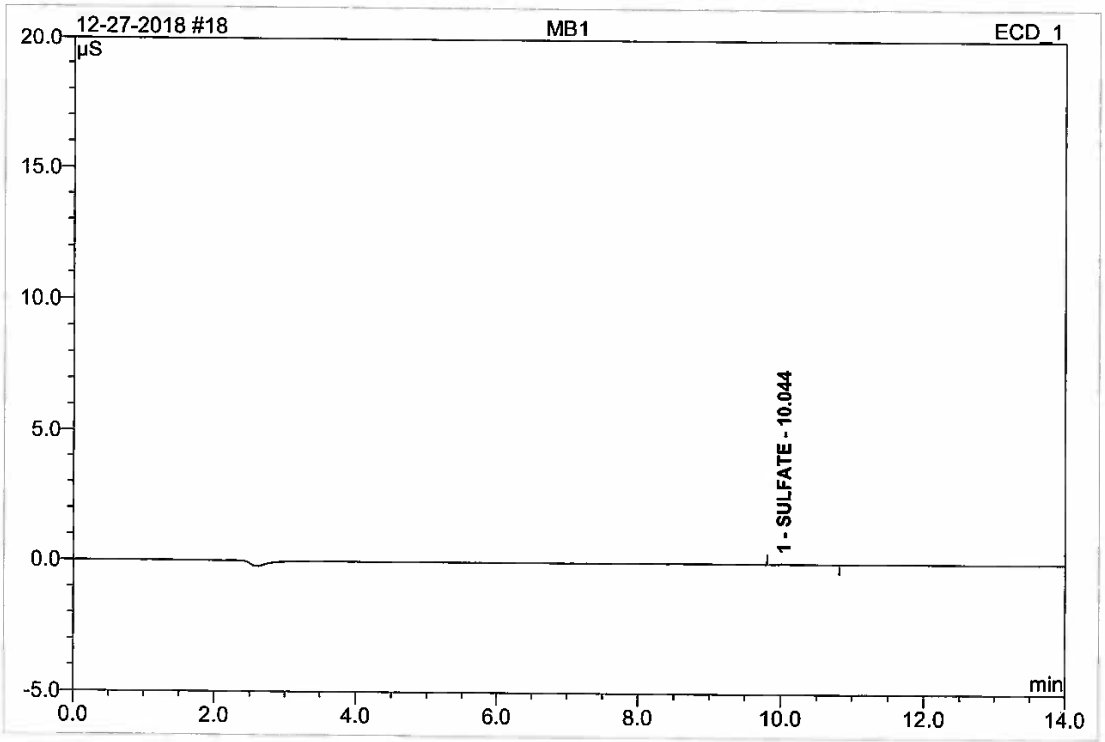
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-27-2018

18 MB1

System Operator: BR IC 2000

Sample Name:	**MB1**	*Injection Volume:*	**10.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/27/2018 11:29**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	10.04	SULFATE	0.024	0.009	100.00	-0.358	BMB
Total:			0.024	0.009	100.00	-0.358	

ALSE ANION REPORT/Integration

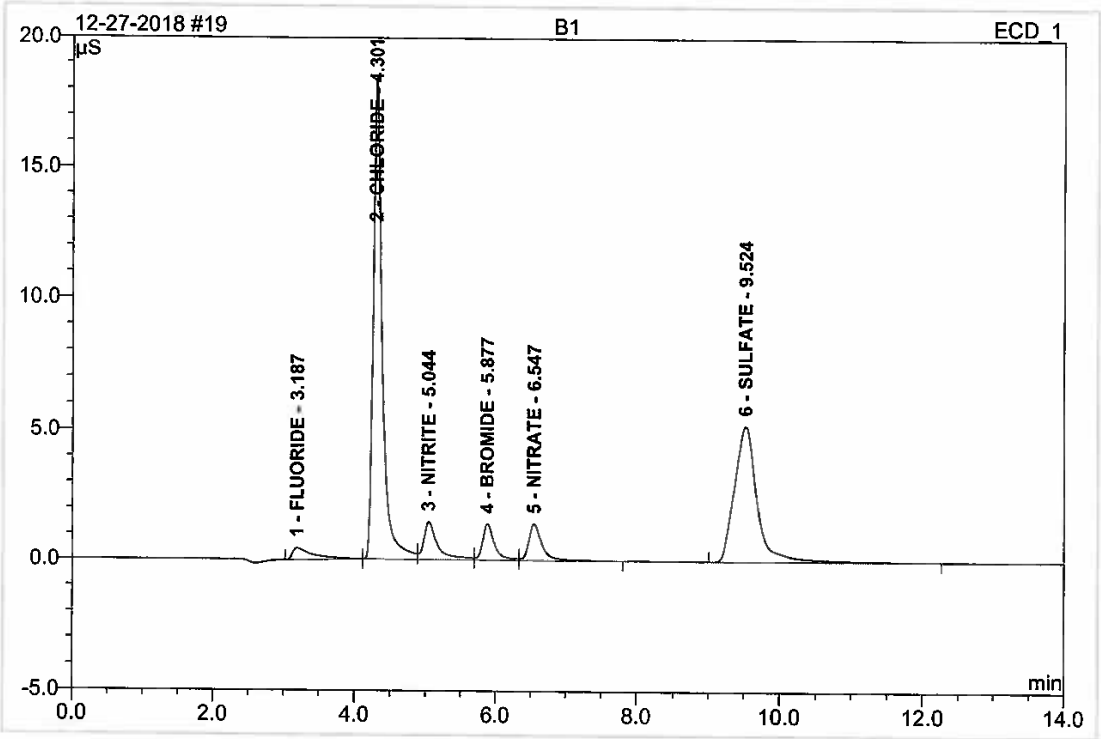
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-27-2018

19 B1

System Operator: BR IC 2000

Sample Name:	**B1**	*Injection Volume:*	**10.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/27/2018 11:46**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.19	FLUORIDE	0.451	0.152	2.64	2.355	BMb
2	4.30	CHLORIDE	18.407	2.701	47.09	48.588	bM
3	5.04	NITRITE	1.453	0.332	5.78	2.629	M
4	5.88	BROMIDE	1.387	0.277	4.82	13.327	M
5	6.55	NITRATE	1.396	0.309	5.38	2.502	MB
6	9.52	SULFATE	5.227	1.967	34.28	49.054	BMB
Total:			28.322	5.737	100.00	118.454	

ALSE ANION REPORT/Integration

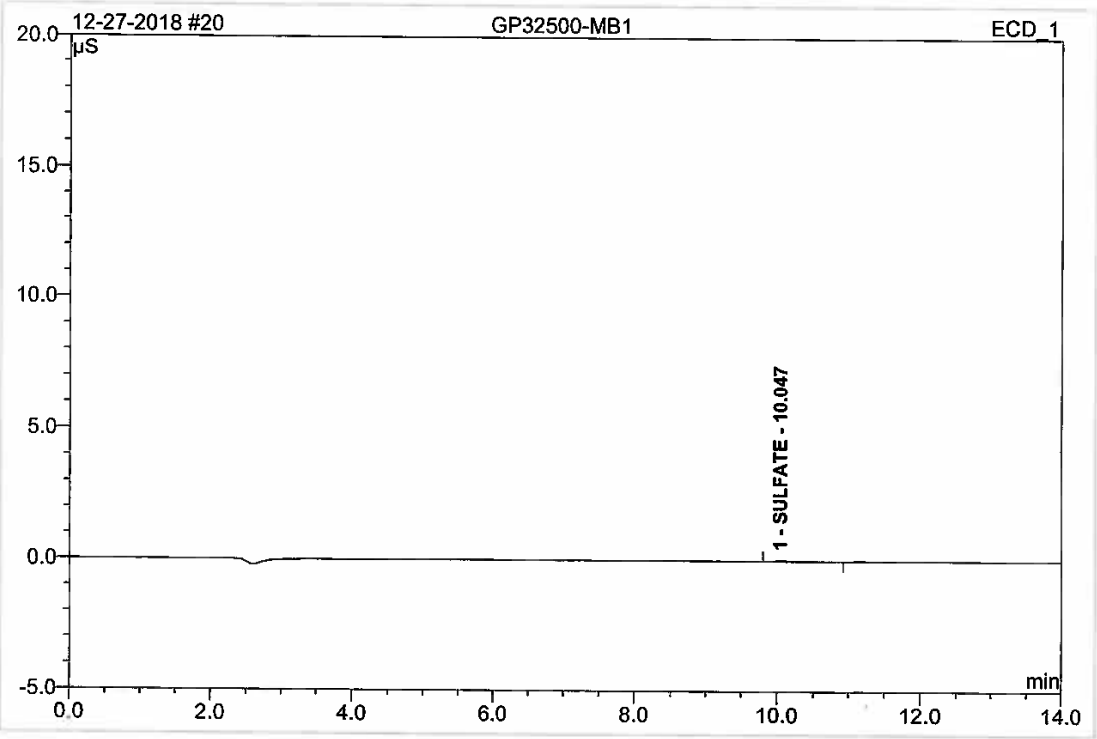
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-27-2018

20 GP32500-MB1

System Operator: BR IC 2000

Sample Name:	**GP32500-MB1**	*Injection Volume:*	**10.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/27/2018 12:03**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	10.05	SULFATE	0.024	0.011	100.00	-0.313	BMB
Total:			0.024	0.011	100.00	-0.313	

ALSE ANION REPORT/Integration

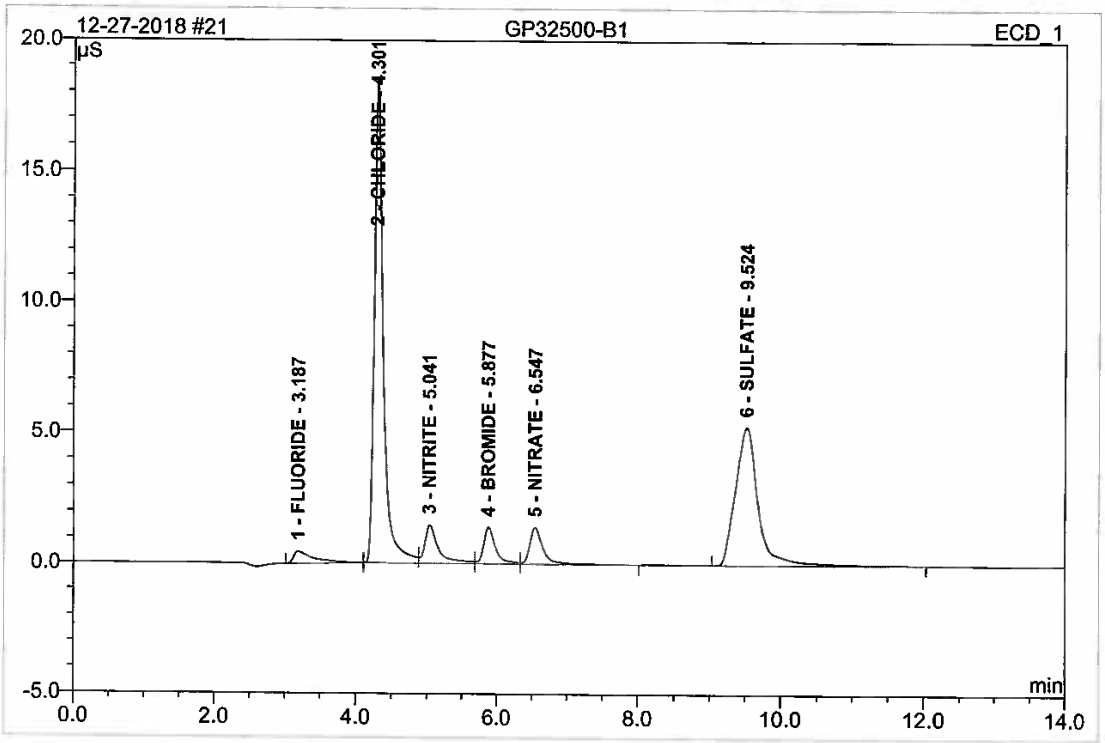
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-27-2018

21 GP32500-B1

System Operator: BR IC 2000

Sample Name:	**GP32500-B1**	*Injection Volume:*	**10.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/27/2018 12:19**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.19	FLUORIDE	0.468	0.155	2.69	2.407	BMb
2	4.30	CHLORIDE	18.453	2.701	46.97	48.581	bM
3	5.04	NITRITE	1.457	0.332	5.77	2.631	M
4	5.88	BROMIDE	1.391	0.277	4.81	13.331	M
5	6.55	NITRATE	1.394	0.310	5.39	2.515	MB
6	9.52	SULFATE	5.270	1.976	34.36	49.279	BMB
Total:			28.433	5.750	100.00	118.744	

ALSE ANION REPORT/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-27-2018

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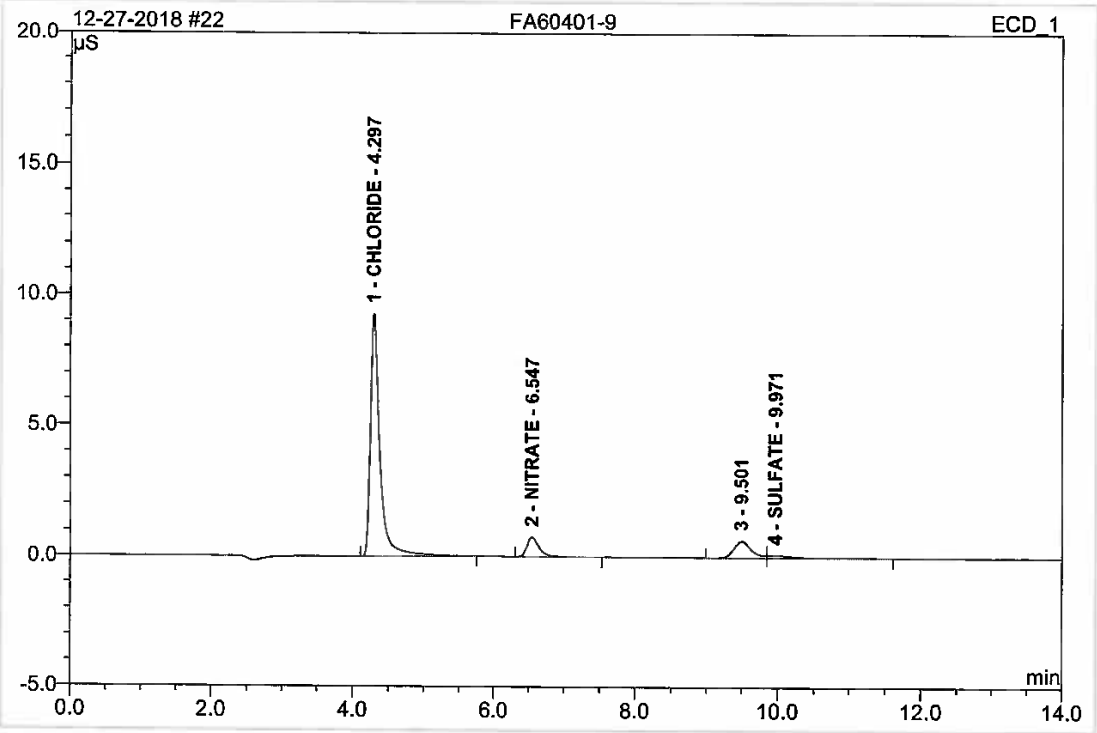
12/27/2018 1:32 PM

22 FA60401-9

System Operator: BR IC 2000

Sample Name:	**FA60401-9**	*Injection Volume:*	**10.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/27/2018 12:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	4.30	CHLORIDE	9.278	1.435	78.63	130.988	BMB
2	6.55	NITRATE	0.745	0.156	8.55	6.380	BMB
3	9.50	n.a.	0.647	0.189	10.36	n.a.	BM
4	9.97	SULFATE	0.100	0.045	2.46	2.735	MB
Total:			10.770	1.825	100.00	140.104	

ALSE ANION REPORT/Integration

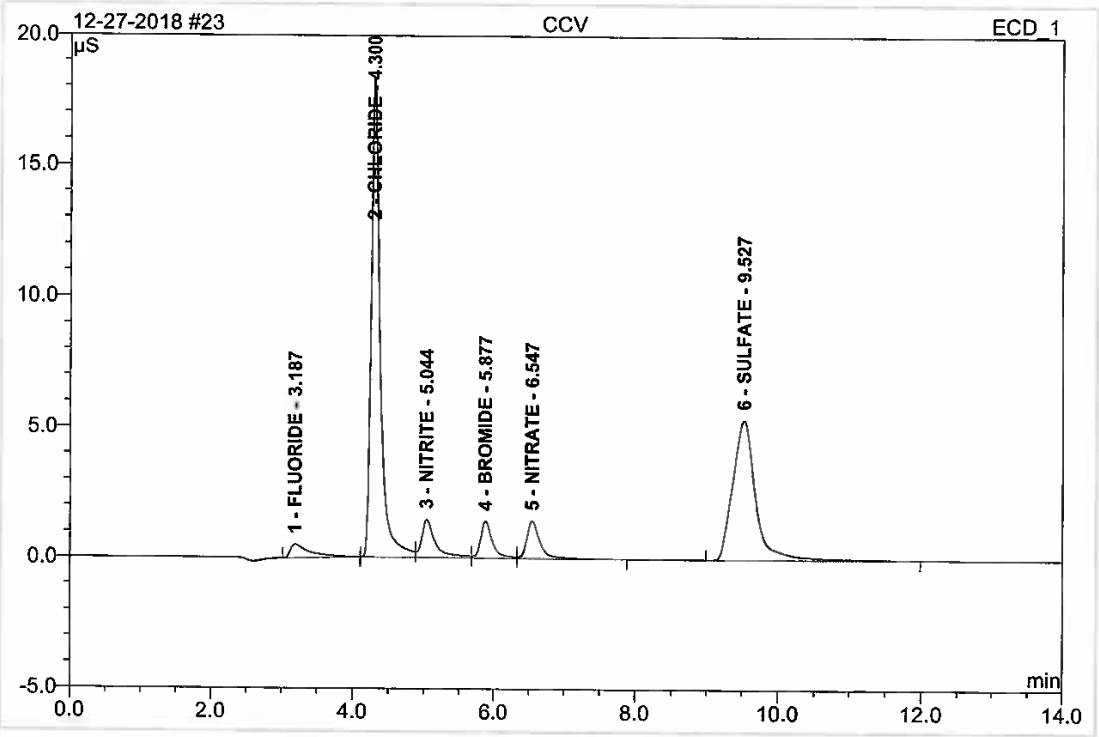
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-27-2018

23 CCV

System Operator: BR IC 2000

Sample Name:	**CCV**	*Injection Volume:*	**10.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/27/2018 12:53**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	3.19	FLUORIDE	0.508	0.167	2.90	2.615	BMb
2	4.30	CHLORIDE	18.312	2.681	46.44	48.235	bM
3	5.04	NITRITE	1.442	0.327	5.66	2.589	M
4	5.88	BROMIDE	1.397	0.276	4.78	13.314	M
5	6.55	NITRATE	1.421	0.311	5.38	2.518	MB
6	9.53	SULFATE	5.349	2.012	34.84	50.193	BMB
Total:			28.429	5.774	100.00	119.463	

ALSE ANION REPORT/Integration

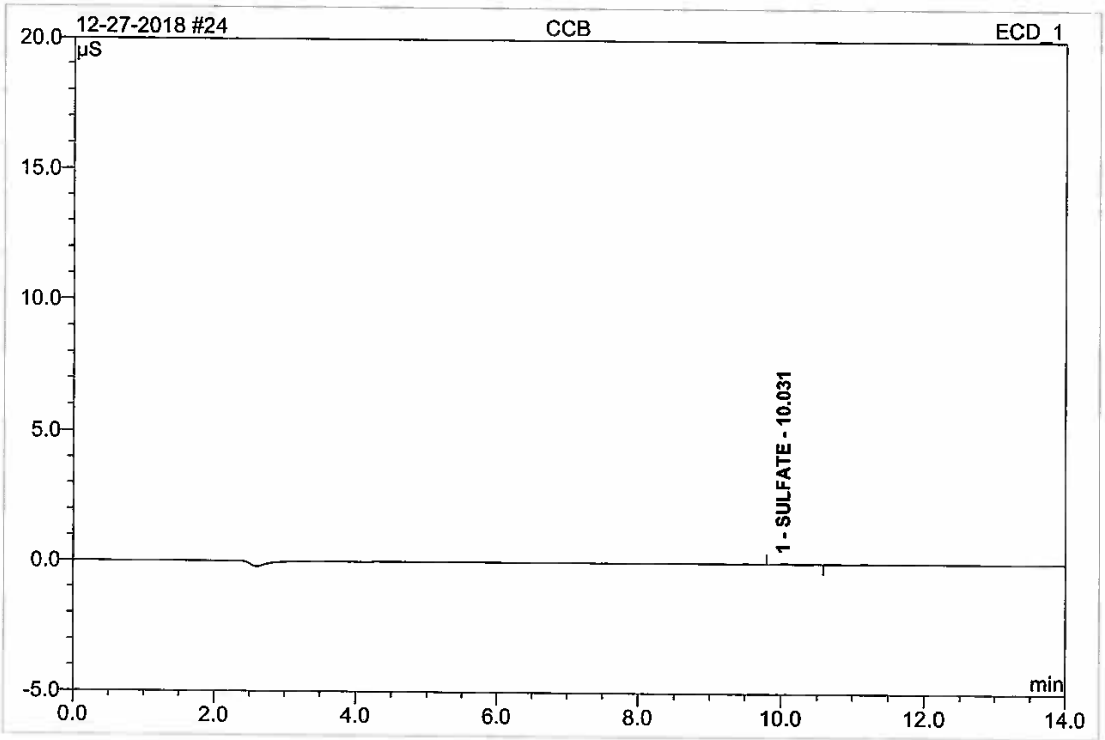
Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:FLCHMIC2_1 Sequence:12-27-2018

24 CCB

System Operator: BR IC 2000

Sample Name:	**CCB**	*Injection Volume:*	**10.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS_AS22**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS-B**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/27/2018 13:10**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount mg\L	Type
1	10.03	SULFATE	0.024	0.009	100.00	-0.366	BMB
Total:			0.024	0.009	100.00	-0.366	

ALSE ANION REPORT/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SR10 Build 2818 (166959)

SGS

GN80746

tiamo 2.5 Build 116
License ID: 14676229

Computer name: Laptopjpm140408

LR 12-28-18

User (short name): New User
Printed: 2018-12-28 09:26:10 UTC-5

Determination overview

DNR = Did Not Report; Re-analyze via low-level analysis

	Sample ID	Determination start	Method name	Initial pH	pH	Cond uS	mL at EP	Total Alk	Temp
1	pH Cal	2018-12-27 14:41:41 UTC-5	855 pH Cal 171016jpm						21.9
2	B1 250ppm	2018-12-27 14:55:43 UTC-5	Total Alkalinity 171016jpm	10.75			8.76	250.2	22.3
3	FA60313-1.7	2018-12-27 15:03:32 UTC-5	Total Alkalinity 171016jpm	6.69			22.10	631.5	22.5
4	FA60313-1.7 DUP	2018-12-27 15:25:37 UTC-5	Total Alkalinity 171016jpm	6.71			22.13	632.2	22.4
5	FA60205-21.1	2018-12-27 15:47:22 UTC-5	Total Alkalinity 171016jpm	8.26			5.14	146.9	22.0
6	FA60205-22.1	2018-12-27 15:54:54 UTC-5	Total Alkalinity 171016jpm	7.32			6.61	188.8	22.3
7	FA60231-2.7	2018-12-27 16:04:25 UTC-5	Total Alkalinity 171016jpm	7.30			10.64	304.1	22.0
8	FA60283-1.7	2018-12-27 16:16:52 UTC-5	Total Alkalinity 171016jpm	7.45			21.98	628.1	22.2
9	FA60283-2.7	2018-12-27 16:38:20 UTC-5	Total Alkalinity 171016jpm	7.34			18.20	519.9	22.1
10	FA60283-3.7	2018-12-27 16:57:09 UTC-5	Total Alkalinity 171016jpm	7.42			18.27	522.0	22.1
11	FA60283-5.7	2018-12-27 17:15:39 UTC-5	Total Alkalinity 171016jpm	7.40			26.54	758.2	22.1
12	FA60283-6.7	2018-12-27 17:39:07 UTC-5	Total Alkalinity 171016jpm	7.66			14.95	427.2	22.1
13	FA60283-7.7	2018-12-27 17:54:23 UTC-5	Total Alkalinity 171016jpm	7.61			27.80	794.4	22.0
14	FA60348-1.12	2018-12-27 18:19:08 UTC-5	Total Alkalinity 171016jpm	6.74			4.08	116.6	22.0
15	FA60348-2.12	2018-12-27 18:27:17 UTC-5	Total Alkalinity 171016jpm	6.68			8.81	251.8	22.0
16	FA60348-3.8	2018-12-27 18:39:11 UTC-5	Total Alkalinity 171016jpm	7.16			6.15	175.7	22.1
17	FA60348-4.8	2018-12-27 18:48:30 UTC-5	Total Alkalinity 171016jpm	6.97			12.11	345.9	21.9
18	FA60401-2.1	2018-12-27 19:02:34 UTC-5	Total Alkalinity 171016jpm	7.10			3.92	111.9	22.1
19	FA60369-1.11 DNR	2018-12-27 19:10:19 UTC-5	Total Alkalinity 171016jpm	6.46			0.14	4.1	21.8
20	FA60369-2.11 DNR	2018-12-27 19:14:52 UTC-5	Total Alkalinity 171016jpm	5.50			0.09	2.5	21.8

GN80746
12-28-18 1455
Metrohm 856 09125

pH meter: AT-pH
Burette: 72311
Normality of Acid (N): 0.02 WC1122

BS Recovery: 100.08%
RPD: 0.111%
Sodium Bicarbonate: GN26500

Review- 12-28-2018 (W)

QC Reports:

Raw Data GN80746: Alkalinity, Total as CaCO3 page 1 of 4

tiamo 2.5 Build 116
License ID: 14676229

Computer name: Laptopjpm140408

LR 12-28-18

User (short name): New User
Printed: 2018-12-28 09:26:11 UTC-5

Determination overview

	Sample ID	Determination start	Method name	Initial pH	pH	Cond uS	mL at EP	Total Alk	Temp
21	FA60261-1.11	2018-12-27 19:18:41 UTC-5	Total Alkalinity 171016jpm	7.64			7.96	227.5	22.0
22	FA60261-2.11	2018-12-27 19:28:57 UTC-5	Total Alkalinity 171016jpm	7.25			12.61	360.2	21.8
23	FA60472-5.4	2018-12-27 19:42:58 UTC-5	Total Alkalinity 171016jpm	7.37			16.15	461.3	22.0

Review - 12-28-2018 (a)

SGS

GN80746

QC Reports:

Raw Data GN80746: Alkalinity, Total as CaCO3 page 3 of 4

tiamo 2.5 Build 116
License ID: 14676229

Computer name: Laptopjpm140408

JR 12-28-18

User (short name): New User
Printed: 2018-12-28 09:26:11 UTC-5

Determination overview

	Correct...	Slope/Cell Const.	Cond Check uS	pH Cal Z...	p-Alk	Bicarb Alk	Carb Alk	OH Alk	Remarks
1	21.0	99.30		7.02					
2	21.4								
3	21.6								
4	21.5								
5	21.1								
6	21.4								
7	21.1								
8	21.3								
9	21.2								
10	21.2								
11	21.2								
12	21.2								
13	21.1								
14	21.1								
15	21.1								
16	21.2								
17	21.0								
18	21.2								
19	20.9								
20	20.9								

Review 12-28-2018 (C)

tiamo 2.5 Build 116
License ID: 14676229

Computer name: Laptopjpm140408

LR 12-28-18

User (short name): New User
Printed: 2018-12-28 09:26:11 UTC-5

Determination overview

	Correct...	Slope/Cell Const.	Cond Check uS	pH Cal Z...	p-Alk	Bicarb Alk	Carb Alk	OH Alk	Remarks
21	21.1								
22	20.9								
23	21.1								

tiamo 2.5 Build 116
License ID: 14676229

Computer name: Laptopjpm140408

User (short name): New User
Printed: 2018-12-29 14:20:35 UTC-5

Determination overview

DNR - did not report; RF via High level analysis

	Sample ID	Determination start	Method name	Initial pH	pH	Cond uS	mL at EP	Total Alk	Temp
1	B1 250ppm	2018-12-28 12:44:24 UTC-5	Total Alkalinity 171016jpm	10.72			8.52	243.4	22.5
2	FA60472-2.7	2018-12-28 12:52:11 UTC-5	Total Alkalinity 171016jpm	7.28			16.59	474.0	22.3
3	FA60472-2.7 DUP D1	2018-12-28 13:09:01 UTC-5	Total Alkalinity 171016jpm	7.30			16.62	474.7	22.2
4	FA60469-5.17	2018-12-28 13:32:41 UTC-5	Total Alkalinity 171016jpm	7.37			21.68	619.4	22.0
5	FA60469-5.17 DUP D2	2018-12-28 13:53:15 UTC-5	Total Alkalinity 171016jpm	7.35			23.54	672.4	22.3
6	FA60455-1.16	2018-12-28 14:15:24 UTC-5	Total Alkalinity 171016jpm	9.57			16.82	480.5	22.1
7	FA60455-2.16	2018-12-28 14:29:35 UTC-5	Total Alkalinity 171016jpm	7.27			29.37	839.1	22.0
8	FA60455-3.16	2018-12-28 14:56:21 UTC-5	Total Alkalinity 171016jpm	7.06			8.07	230.7	21.8
9	FA60472-3.1	2018-12-28 15:07:14 UTC-5	Total Alkalinity 171016jpm	7.00			7.88	225.2	22.0
10	FA60472-4.7	2018-12-28 15:18:08 UTC-5	Total Alkalinity 171016jpm	7.02			7.80	222.9	21.8
11	FA60401-3.1	2018-12-28 15:28:58 UTC-5	Total Alkalinity 171016jpm	6.83			1.74	49.8	21.8
12	FA60401-4.1	2018-12-28 15:35:18 UTC-5	Total Alkalinity 171016jpm	6.81			1.74	49.7	22.0
13	FA60401-6.1	2018-12-28 15:41:40 UTC-5	Total Alkalinity 171016jpm	7.08			5.30	151.4	21.8
14	FA60401-7.1	2018-12-28 15:50:28 UTC-5	Total Alkalinity 171016jpm	7.08			5.13	146.5	21.7
15	FA60401-9.1	2018-12-28 15:59:07 UTC-5	Total Alkalinity 171016jpm	6.89			8.82	251.9	22.0
16	FA60469-2.7	2018-12-28 16:10:50 UTC-5	Total Alkalinity 171016jpm	7.46			22.75	650.1	21.9
17	FA60469-3.7	2018-12-28 16:32:12 UTC-5	Total Alkalinity 171016jpm	7.27			31.15	890.0	21.8
18	FA60469-4.7	2018-12-28 16:59:43 UTC-5	Total Alkalinity 171016jpm	7.31			28.63	817.9	21.8
19	FA60469-6.7	2018-12-28 17:25:25 UTC-5	Total Alkalinity 171016jpm	7.97			16.90	482.9	21.9
20	FA60469-7.7	2018-12-28 17:41:32 UTC-5	Total Alkalinity 171016jpm	7.35 DNR			invalid	invalid	21.9

GN80759
12/28/18 1244
Metrohm 856 09125

pH meter: AT-pH
Burette: 72311
Normality of Acid (N): 0.02
WC1122

B1 Recovery: 97.36%
RPD 1: 0.14757%
RPD 2: 8.2056%
Sodium Carbonate ~~GA80~~ GN20540
BR 12/29/18

12/29/18
data entry only

tiamo 2.5 Build 116
License ID: 14676229

Computer name: Laptopjpm140408

User (short name): New User
Printed: 2018-12-29 14:20:35 UTC-5

Determination overview

	Sample ID	Determination start	Method name	Initial pH	pH	Cond uS	mL at EP	Total Alk	Temp
21	FA60469-8.7	2018-12-28 18:09:54 UTC-5	Total Alkalinity 171016jpm	7.42	DNR		invalid	invalid	21.8
22	FA60469-9.7	2018-12-28 18:38:20 UTC-5	Total Alkalinity 171016jpm	7.21			24.04	687.0	21.8
23	FA60469-10.7	2018-12-28 19:00:00 UTC-5	Total Alkalinity 171016jpm	7.56			15.15	432.8	21.9

√ JPM 1-2-19

BR 12/29/18 data entry only

tiamo 2.5 Build 116
License ID: 14676229

Computer name: Laptopjpm140408

User (short name): New User
Printed: 2018-12-29 14:20:35 UTC-5

Determination overview

	Correct...	Slope/Cell Const.	Cond Check uS	pH Cal Z...	p-Alk	Bicarb Alk	Carb Alk	OH Alk	Remarks
1	21.6								
2	21.4								
3	21.3								
4	21.1								
5	21.4								
6	21.2								
7	21.1								
8	20.9								
9	21.1								
10	20.9								
11	20.9								
12	21.1								
13	20.9								
14	20.8								
15	21.1								
16	21.0								
17	20.9								
18	20.9								
19	21.0								
20	21.0								

1-2-19

12/29/18 data entry only

tiamo 2.5 Build 116
License ID: 14676229

Computer name: Laptopjpm140408

User (short name): New User
Printed: 2018-12-29 14:20:35 UTC-5

Determination overview

	Correct...	Slope/Cell Const.	Cond Check uS	pH Cal Z...	p-Alk	Bicarb Alk	Carb Alk	OH Alk	Remarks
21	20.9								
22	20.9								
23	21.0								

1-2-19

12/29/18 data entry only