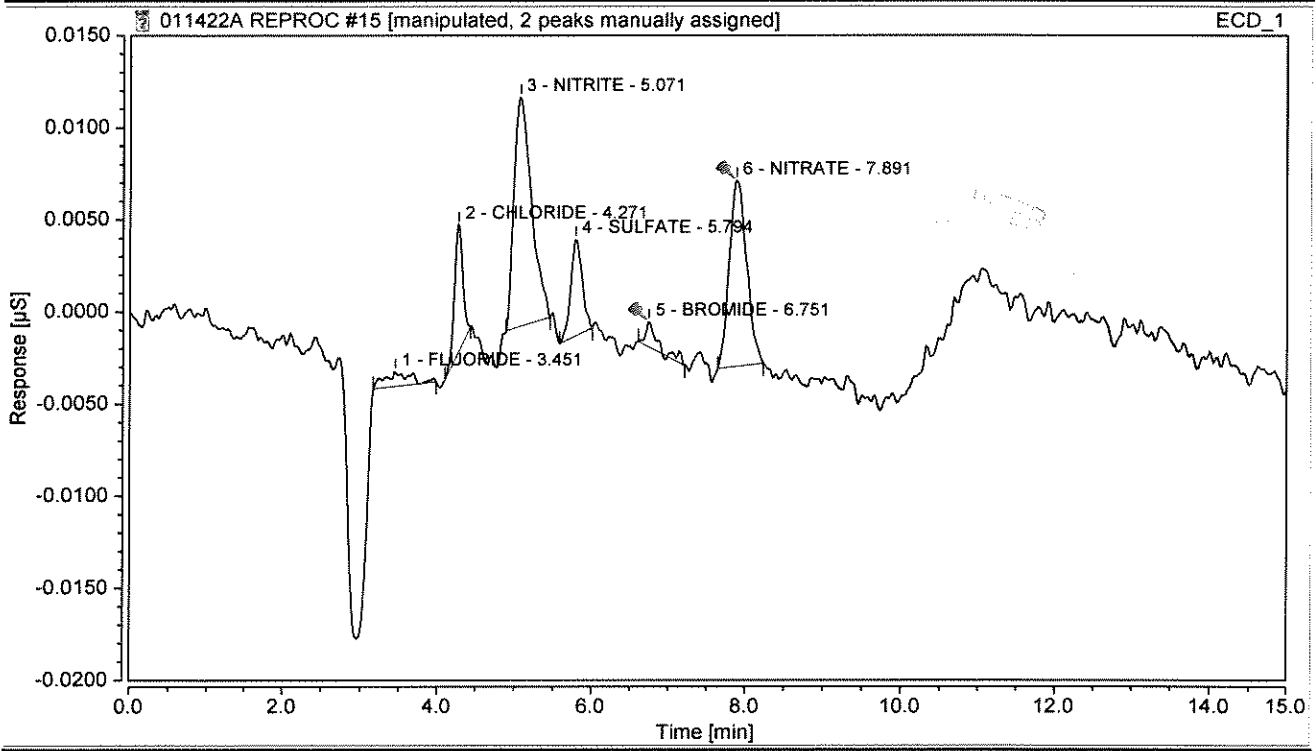
Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.98**
Vial Number:	**15**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 17:05**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

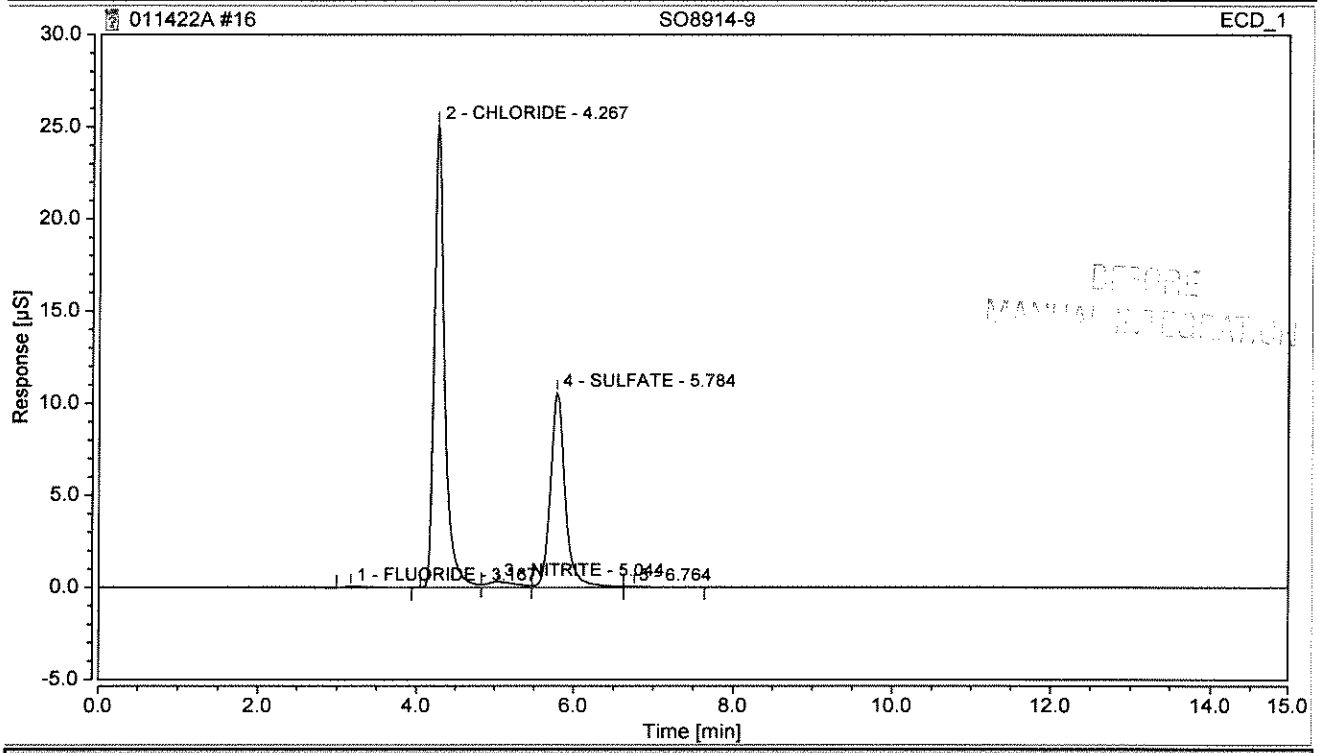
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.451	0.000	0.001	3.59	2.22	0.0006	n.a.
2	CHLORIDE	4.271	0.001	0.007	10.35	18.68	0.1433	n.a.
3	NITRITE	5.071	0.003	0.012	40.32	33.72	0.0053	n.a.
4	SULFATE	5.794	0.001	0.005	11.00	14.26	0.0041	n.a.
5	BROMIDE	6.751	0.000	0.001	2.99	3.73	0.0024	n.a.
6	NITRATE	7.891	0.003	0.010	31.75	27.40	0.0903	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.008**	**0.037**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8914-9**	*Run Time (min):*	**14.98**
Vial Number:	**16**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 17:26**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

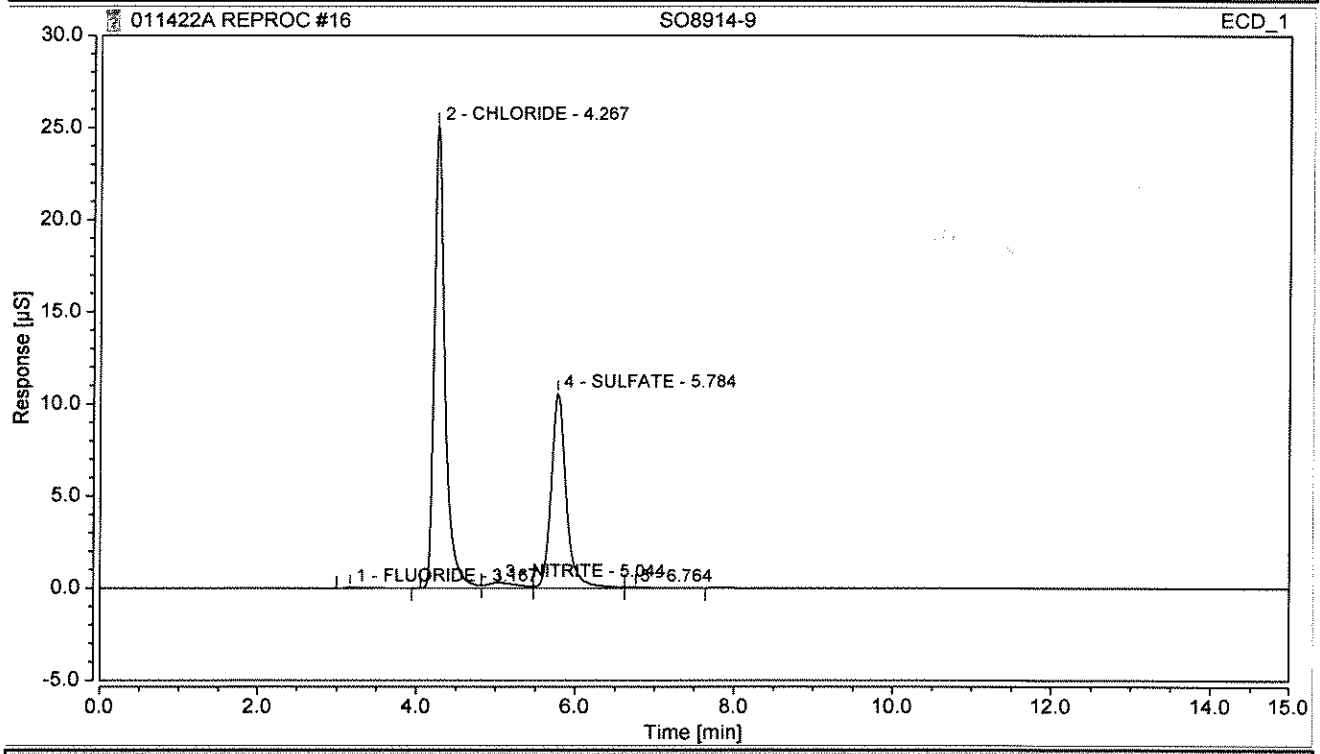
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	0.017	0.067	0.27	0.19	0.0736	n.a.
2	CHLORIDE	4.267	3.909	25.125	61.28	69.58	27.6137	n.a.
3	NITRITE	5.044	0.124	0.292	1.95	0.81	0.3942	n.a.
4	SULFATE	5.784	2.313	10.586	36.26	29.32	20.8162	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.364**	**36.071**	**99.76**	**99.90**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8914-9**	*Run Time (min):*	**14.98**
Vial Number:	**16**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 17:26**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

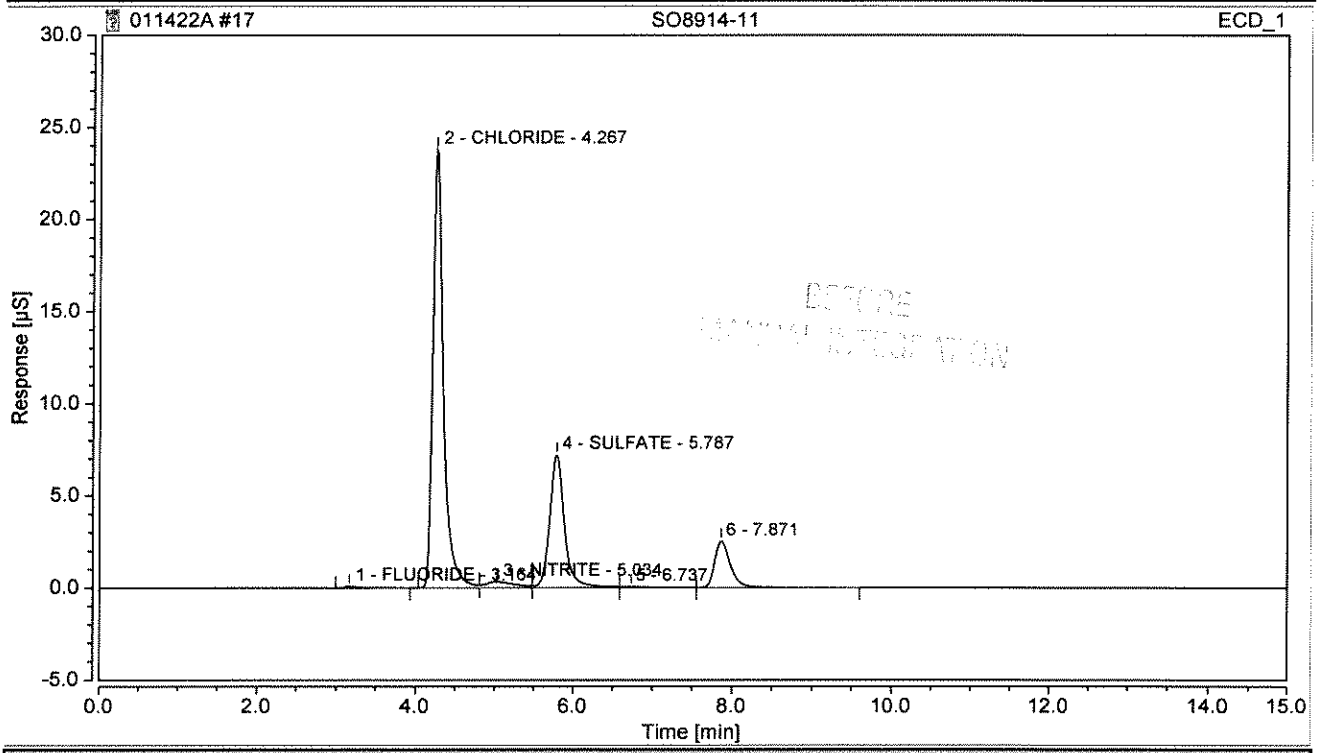
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	0.017	0.067	0.27	0.19	0.0736	n.a.
2	CHLORIDE	4.267	3.909	25.125	61.28	69.58	27.6137	n.a.
3	NITRITE	5.044	0.124	0.292	1.95	0.81	0.3942	n.a.
4	SULFATE	5.784	2.313	10.586	36.26	29.32	20.8162	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.364**	**36.071**	**99.76**	**99.90**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8914-11**	*Run Time (min):*	**14.99**
Vial Number:	**17**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 17:46**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

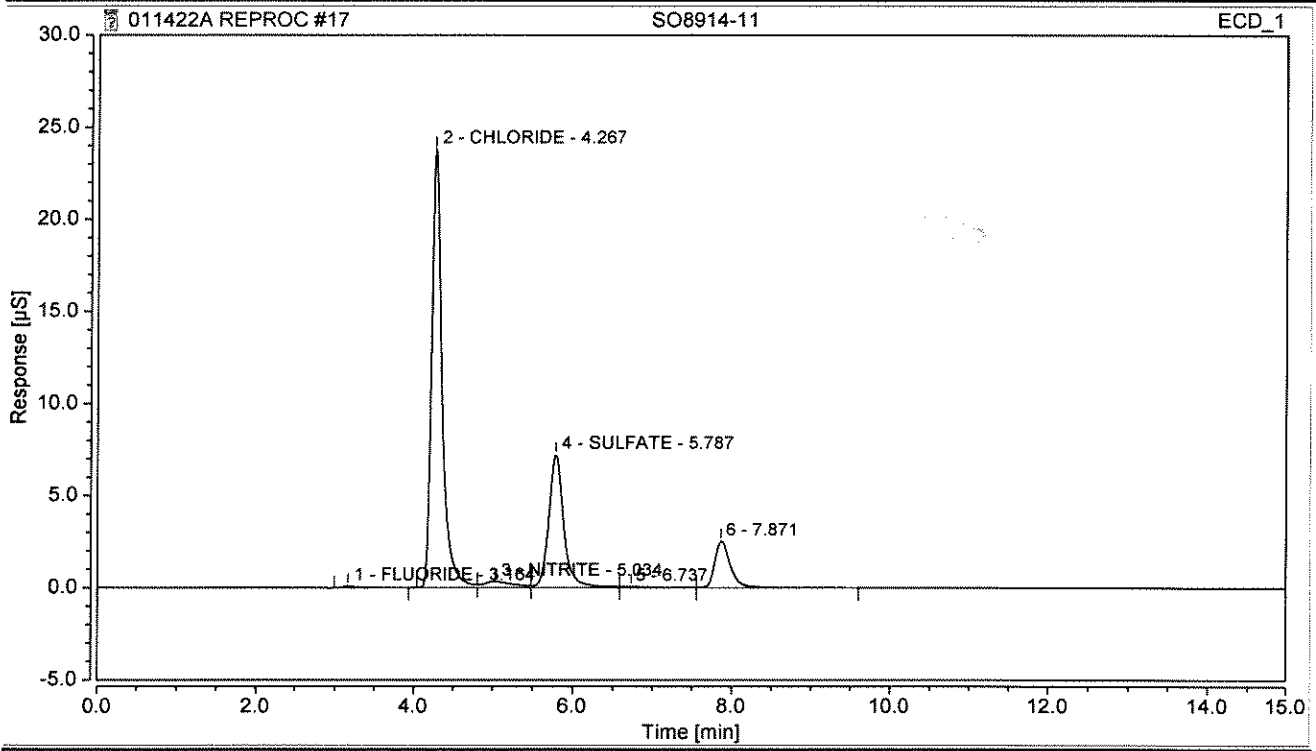
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.164	0.021	0.097	0.34	0.29	0.0875	n.a.
2	CHLORIDE	4.267	3.699	23.807	61.18	69.96	26.1457	n.a.
3	NITRITE	5.034	0.142	0.326	2.35	0.96	0.4514	n.a.
4	SULFATE	5.787	1.578	7.229	26.11	21.24	14.2050	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.440**	**31.460**	**89.98**	**92.44**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8914-11**	*Run Time (min):*	**14.99**
Vial Number:	**17**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 17:46**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

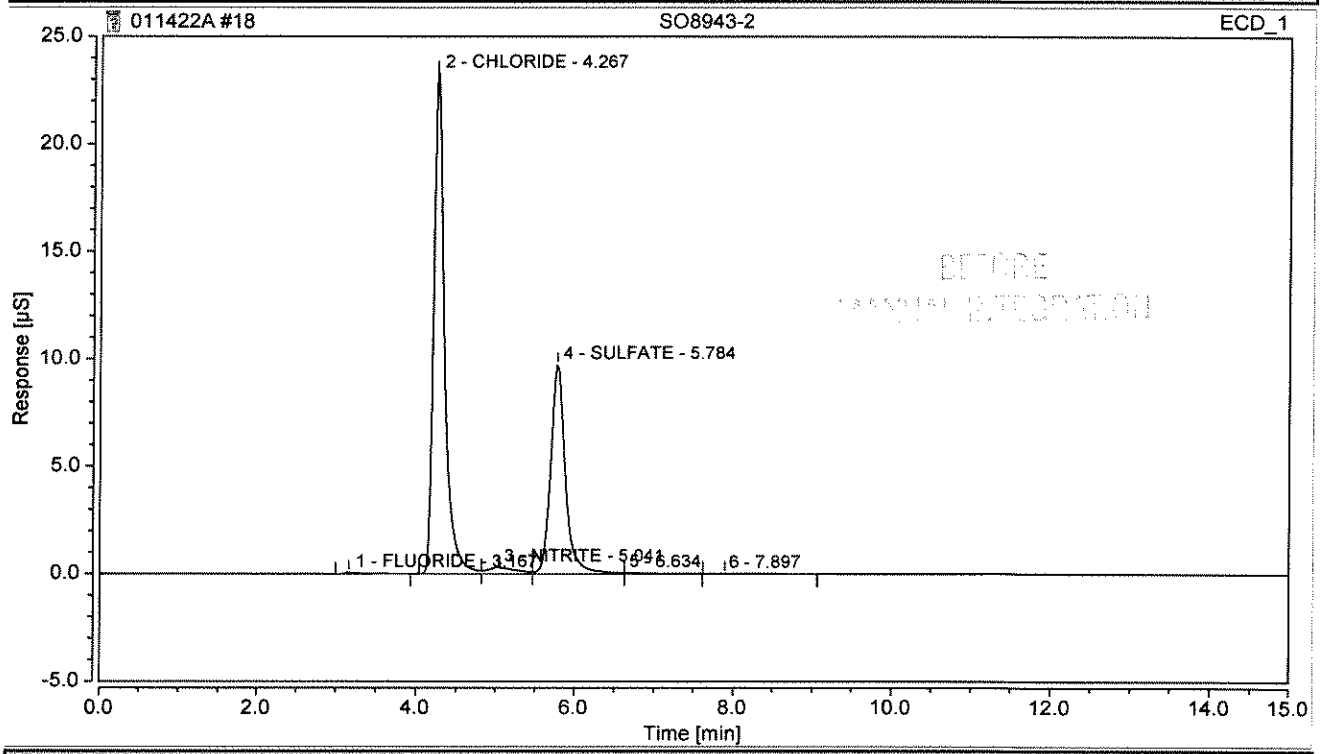
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.164	0.021	0.097	0.34	0.29	0.0875	n.a.
2	CHLORIDE	4.267	3.699	23.807	61.18	69.96	26.1457	n.a.
3	NITRITE	5.034	0.142	0.326	2.35	0.96	0.4514	n.a.
4	SULFATE	5.787	1.578	7.229	26.11	21.24	14.2050	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.440**	**31.460**	**89.98**	**92.44**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8943-2**	*Run Time (min):*	**14.99**
Vial Number:	**18**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 18:07**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

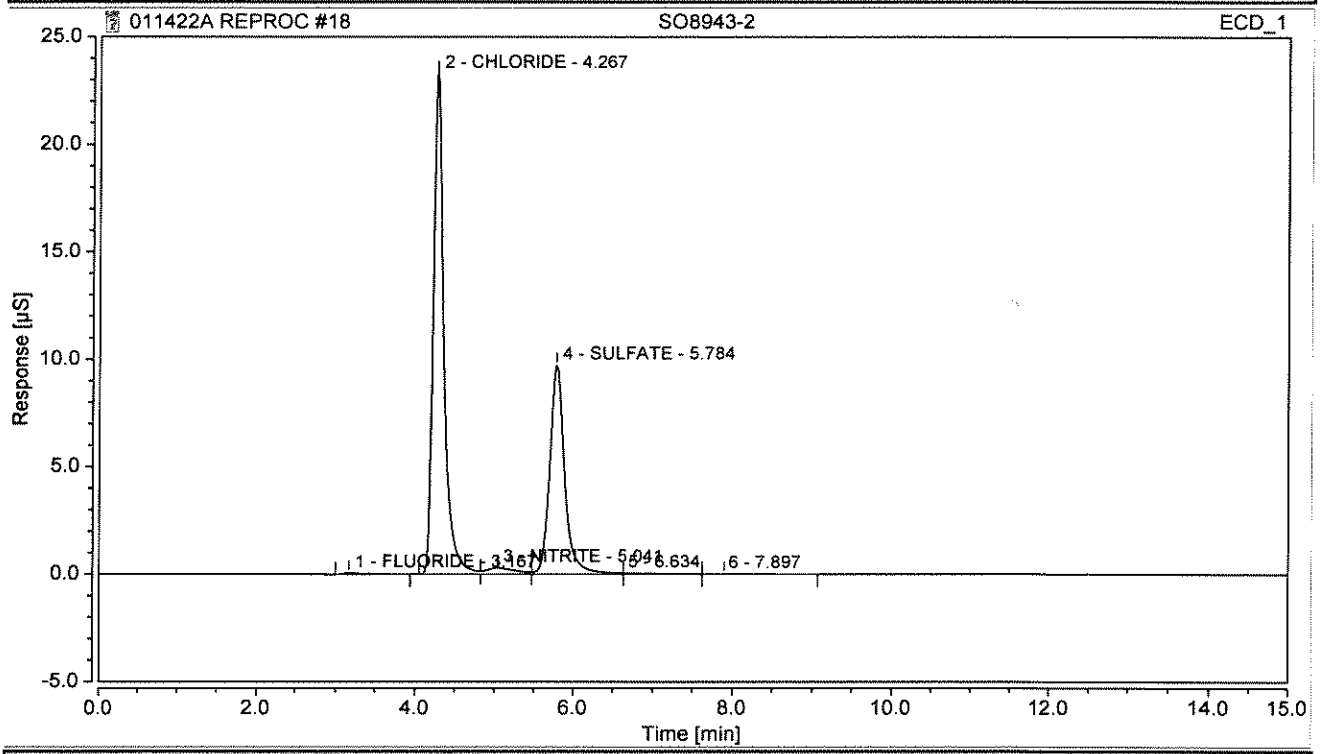
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	0.016	0.064	0.26	0.19	0.0663	n.a.
2	CHLORIDE	4.267	3.641	23.289	61.50	69.67	25.7423	n.a.
3	NITRITE	5.041	0.120	0.291	2.03	0.87	0.3815	n.a.
4	SULFATE	5.784	2.119	9.728	35.79	29.10	19.0690	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.896**	**33.371**	**99.59**	**99.84**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8943-2**	*Run Time (min):*	**14.99**
Vial Number:	**18**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 18:07**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

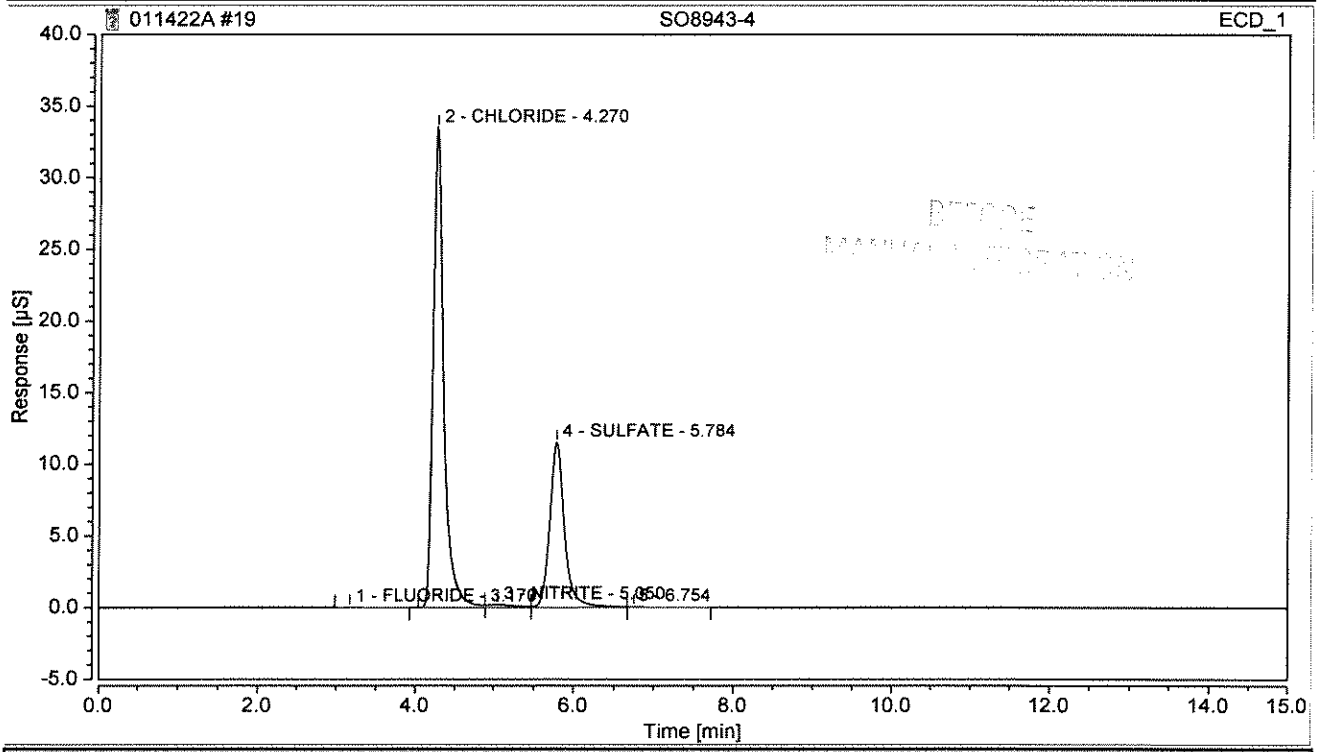
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	0.016	0.064	0.26	0.19	0.0663	n.a.
2	CHLORIDE	4.267	3.641	23.289	61.50	69.67	25.7423	n.a.
3	NITRITE	5.041	0.120	0.291	2.03	0.87	0.3815	n.a.
4	SULFATE	5.784	2.119	9.728	35.79	29.10	19.0690	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.896**	**33.371**	**99.59**	**99.84**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8943-4**	*Run Time (min):*	**14.99**
Vial Number:	**19**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 18:28**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

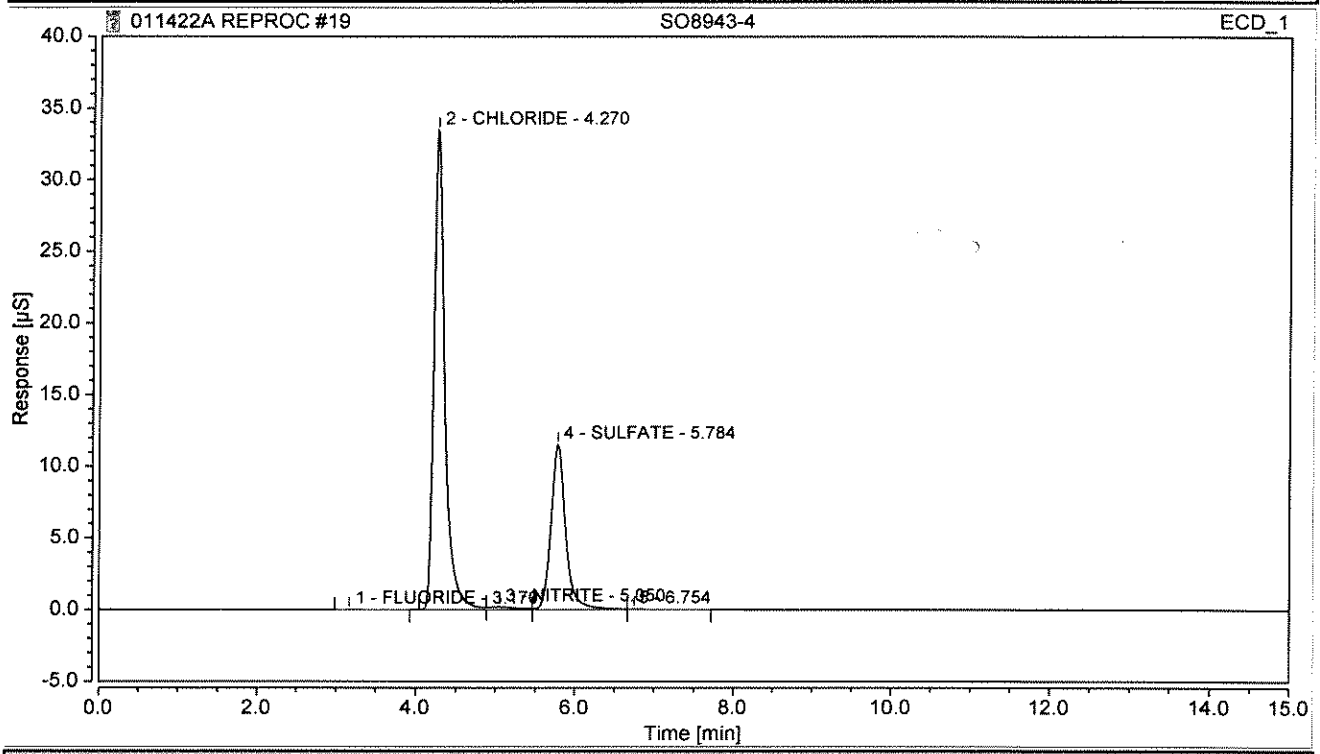
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.170	0.009	0.033	0.12	0.07	0.0392	n.a.
2	CHLORIDE	4.270	5.276	33.491	67.08	73.99	37.1684	n.a.
3	NITRITE	5.050	0.073	0.184	0.93	0.41	0.2312	n.a.
4	SULFATE	5.784	2.493	11.520	31.70	25.45	22.4406	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.851**	**45.227**	**99.83**	**99.92**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8943-4**	*Run Time (min):*	**14.99**
Vial Number:	**19**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 18:28**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

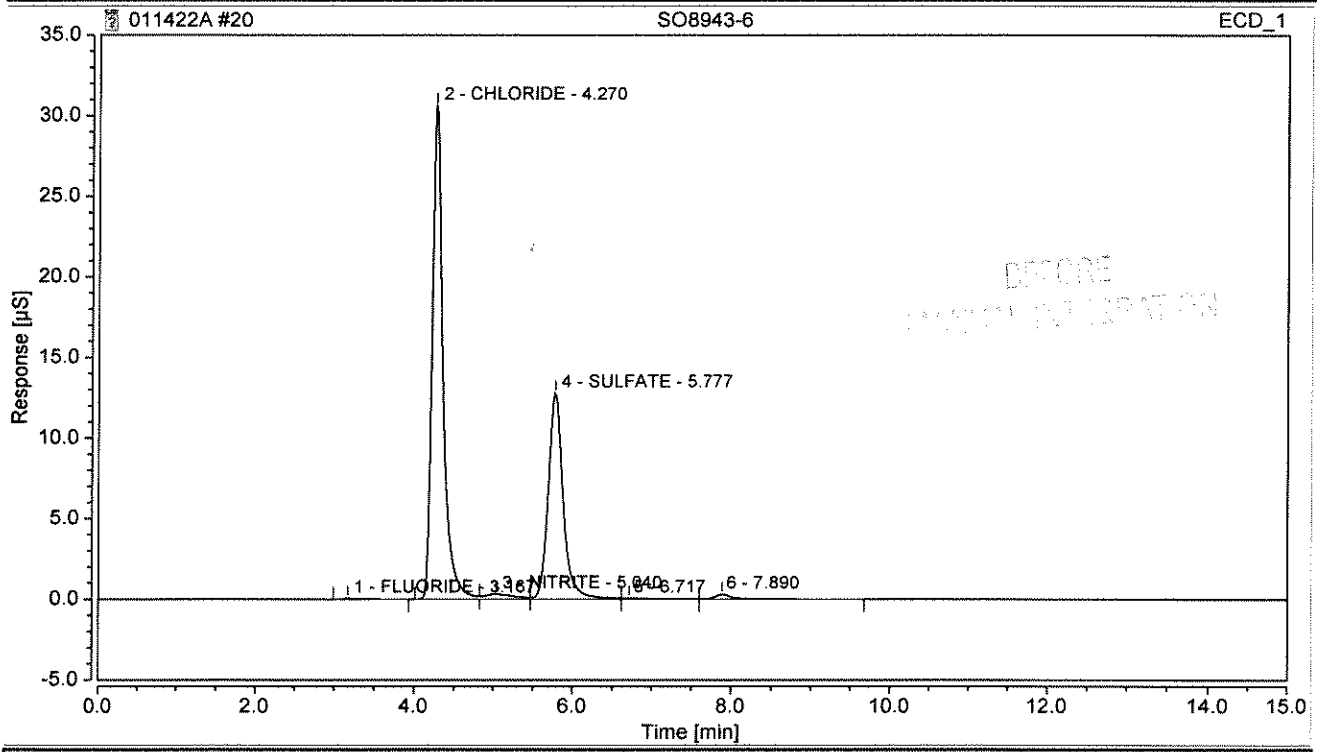
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.170	0.009	0.033	0.12	0.07	0.0392	n.a.
2	CHLORIDE	4.270	5.276	33.491	67.08	73.99	37.1684	n.a.
3	NITRITE	5.050	0.073	0.184	0.93	0.41	0.2312	n.a.
4	SULFATE	5.784	2.493	11.520	31.70	25.45	22.4406	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.851**	**45.227**	**99.83**	**99.92**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8943-6**	*Run Time (min):*	**14.99**
Vial Number:	**20**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 18:49**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

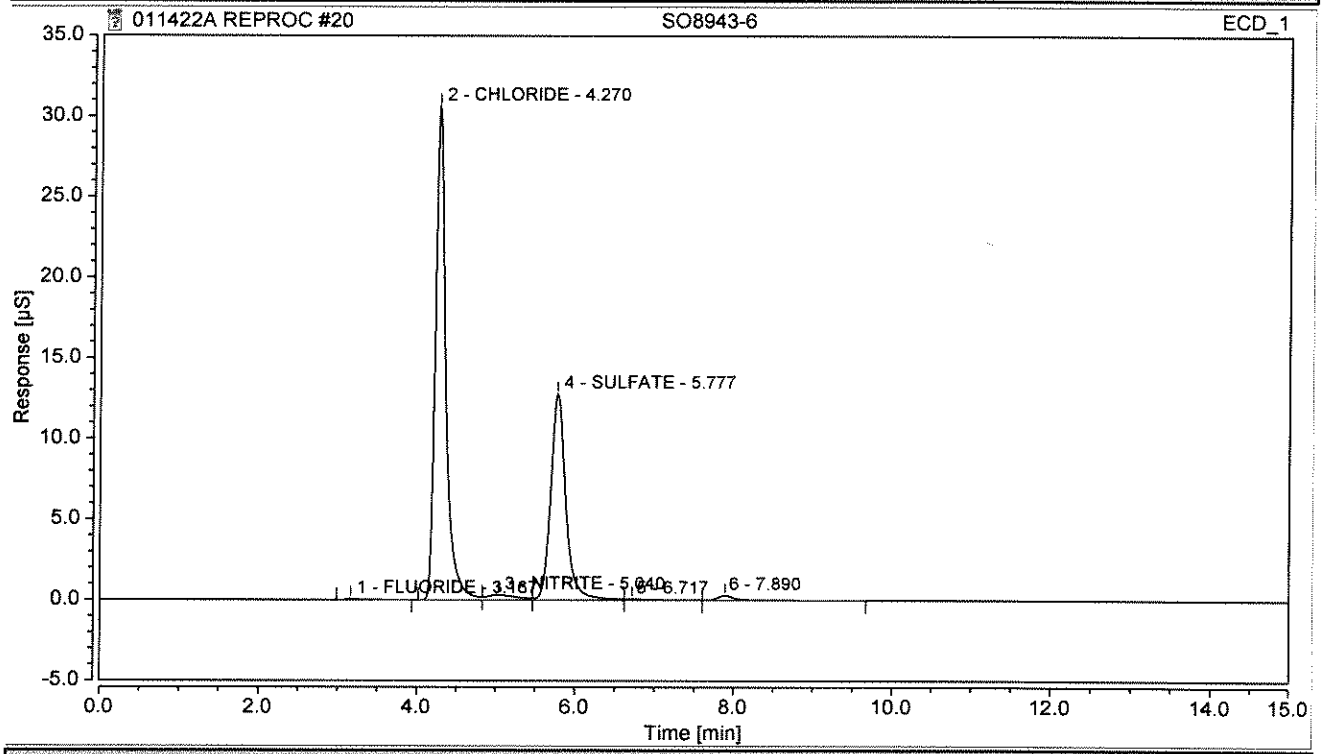
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	0.018	0.075	0.23	0.17	0.0764	n.a.
2	CHLORIDE	4.270	4.800	30.629	61.20	69.36	33.8406	n.a.
3	NITRITE	5.040	0.133	0.314	1.70	0.71	0.4232	n.a.
4	SULFATE	5.777	2.791	12.788	35.59	28.96	25.1152	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.742**	**43.806**	**98.72**	**99.20**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8943-6**	*Run Time (min):*	**14.99**
Vial Number:	**20**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 18:49**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

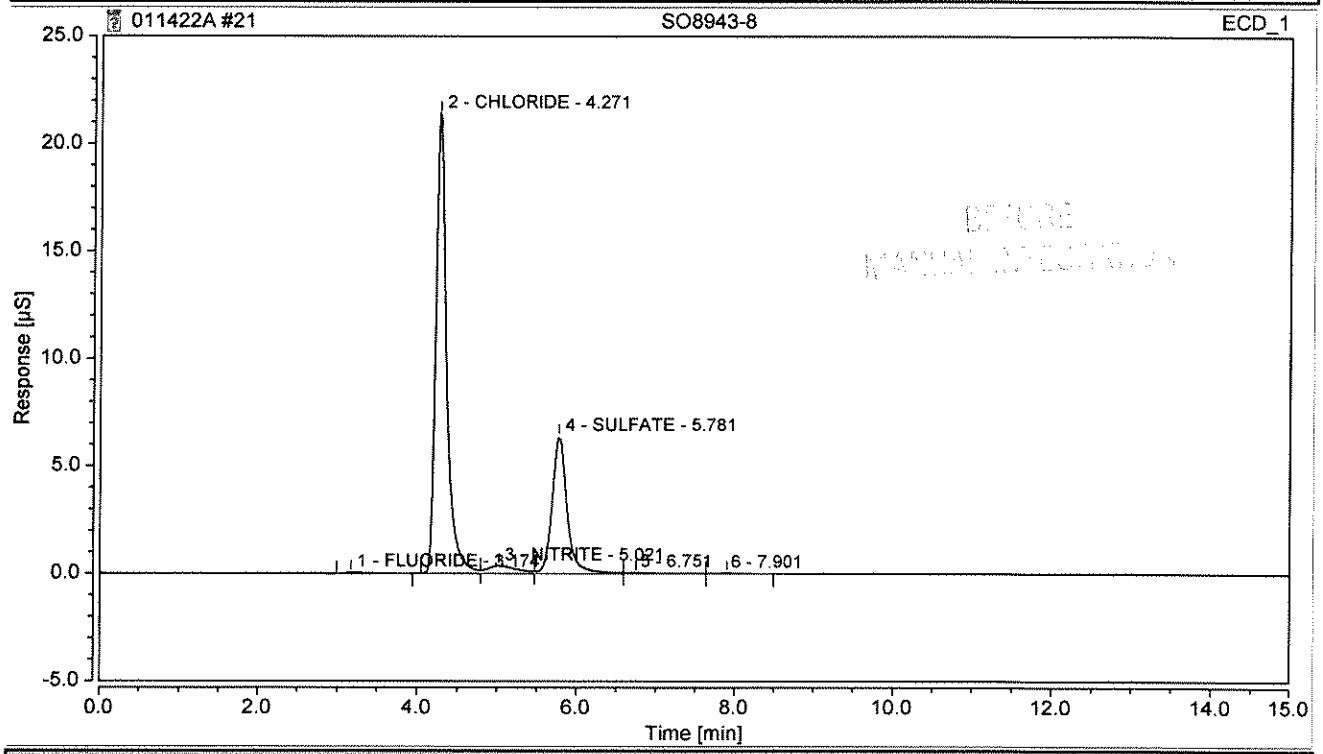
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	0.018	0.075	0.23	0.17	0.0764	n.a.
2	CHLORIDE	4.270	4.800	30.629	61.20	69.36	33.8406	n.a.
3	NITRITE	5.040	0.133	0.314	1.70	0.71	0.4232	n.a.
4	SULFATE	5.777	2.791	12.788	35.59	28.96	25.1152	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.742**	**43.806**	**98.72**	**99.20**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8943-8**	*Run Time (min):*	**14.99**
Vial Number:	**21**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 19:10**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

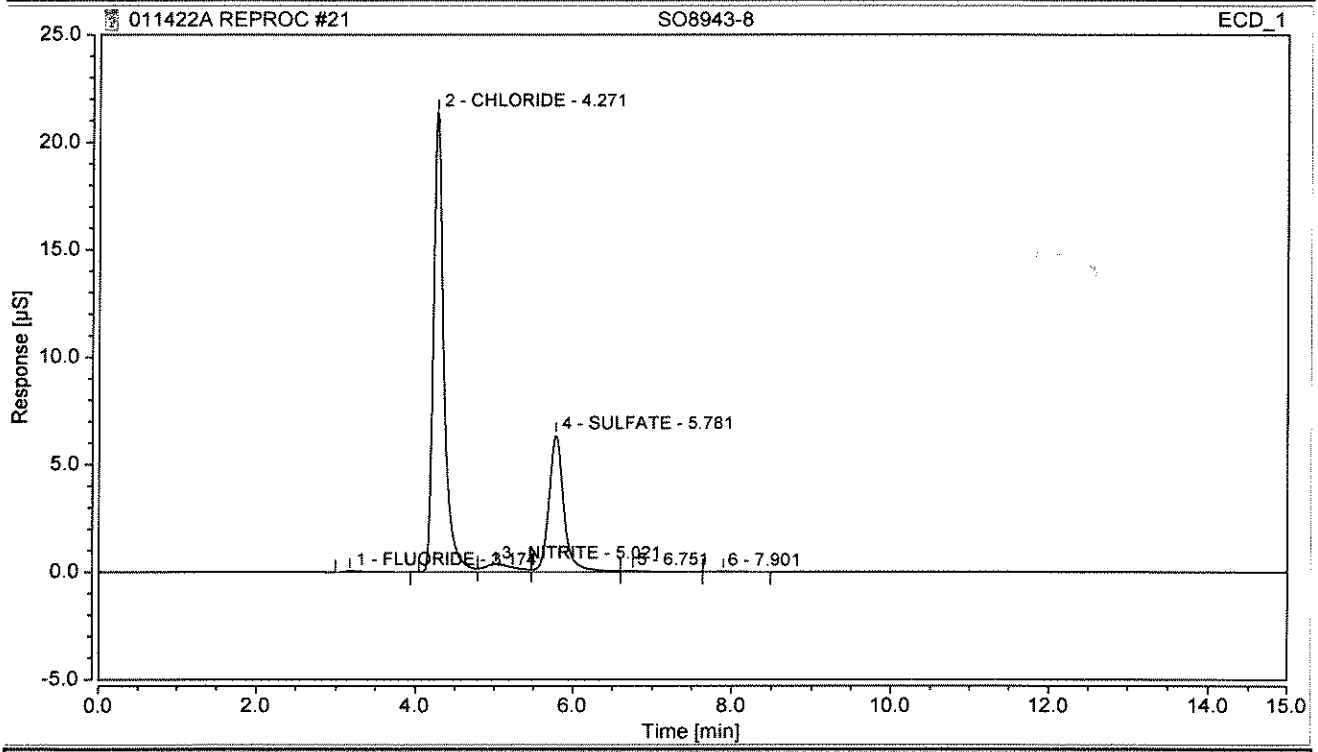
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.174	0.016	0.055	0.33	0.20	0.0691	n.a.
2	CHLORIDE	4.271	3.327	21.389	67.76	75.79	23.5426	n.a.
3	NITRITE	5.021	0.153	0.348	3.11	1.23	0.4841	n.a.
4	SULFATE	5.781	1.390	6.370	28.31	22.57	12.5091	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.886**	**28.162**	**99.51**	**99.78**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8943-8**	*Run Time (min):*	**14.99**
Vial Number:	**21**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 19:10**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

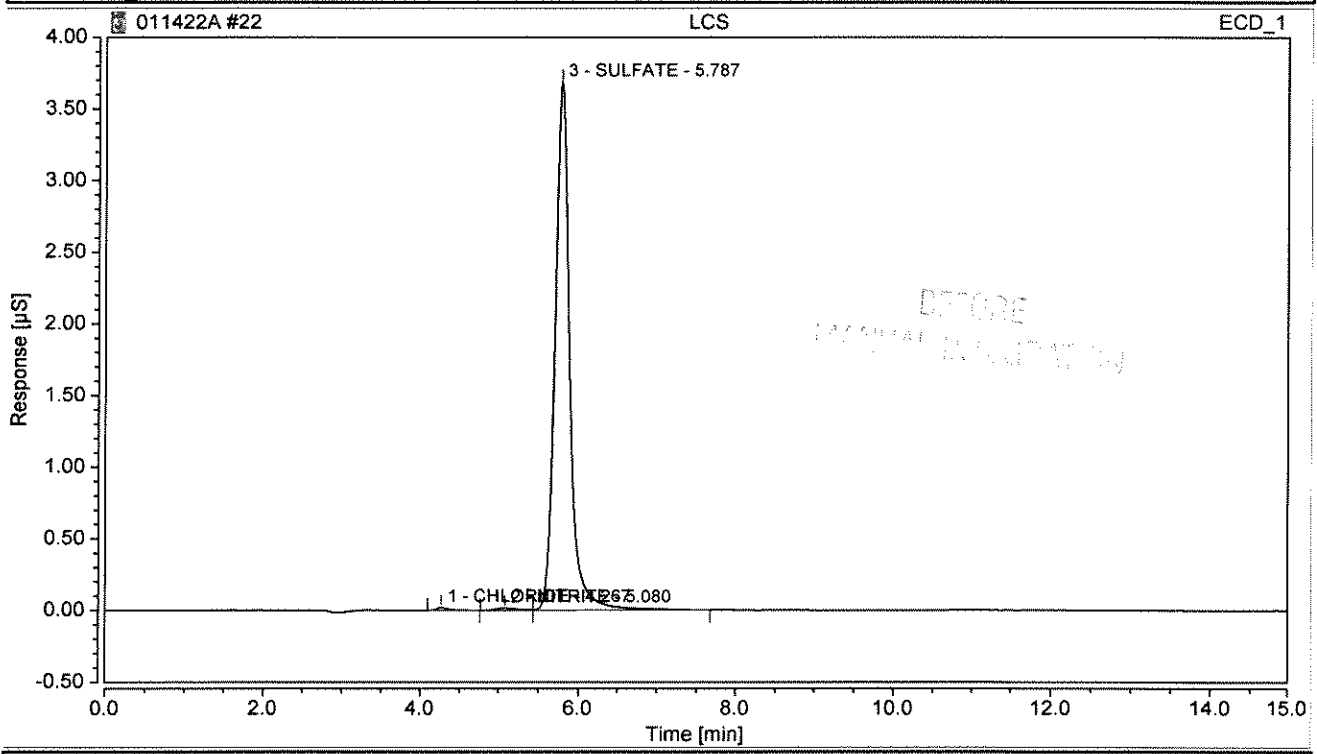
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.174	0.016	0.055	0.33	0.20	0.0691	n.a.
2	CHLORIDE	4.271	3.327	21.389	67.76	75.79	23.5426	n.a.
3	NITRITE	5.021	0.153	0.348	3.11	1.23	0.4841	n.a.
4	SULFATE	5.781	1.390	6.370	28.31	22.57	12.5091	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.886**	**28.162**	**99.51**	**99.78**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.98**
Vial Number:	**22**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**07**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 19:30**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

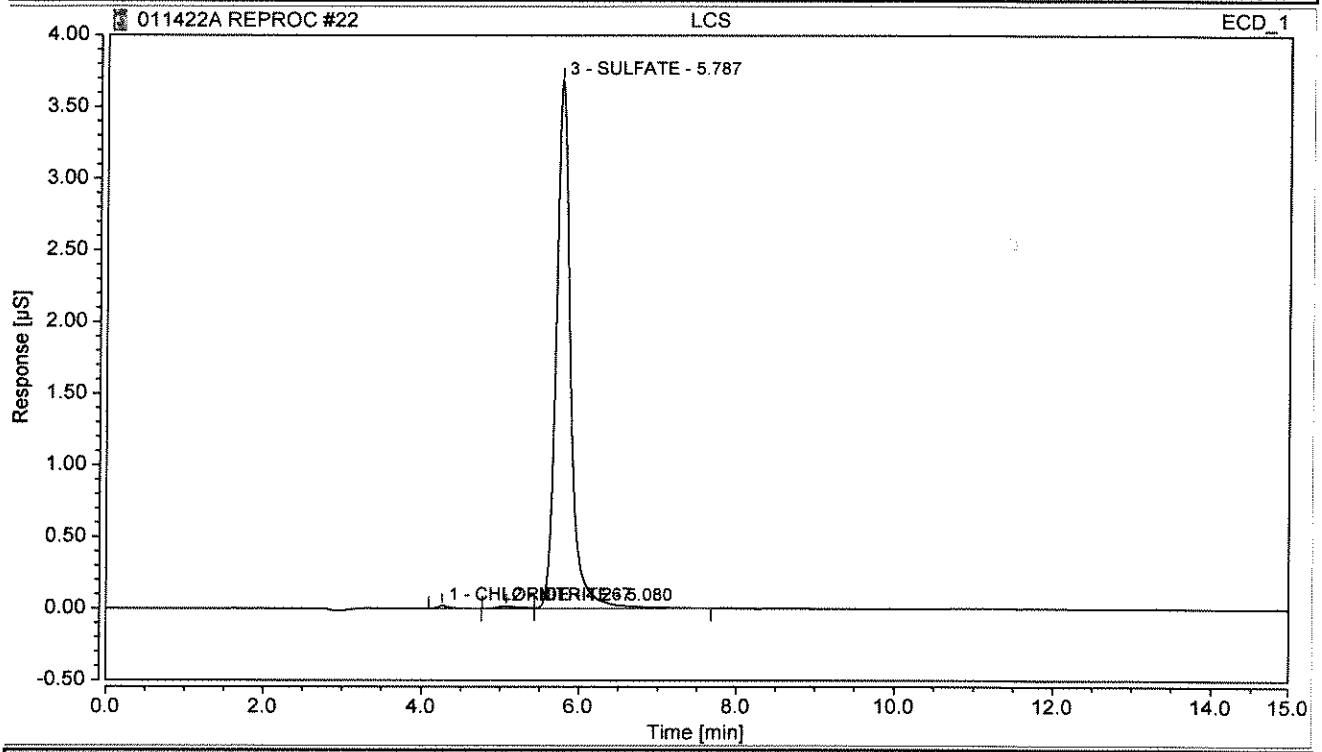
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	0.003	0.019	0.44	0.51	0.1524	-95.9357
2	NITRITE	5.080	0.005	0.016	0.61	0.42	0.0077	-99.3242
3	SULFATE	5.787	0.782	3.686	98.95	99.07	3.5180	-6.1880
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.790**	**3.721**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.98**
Vial Number:	**22**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**07**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 19:30**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

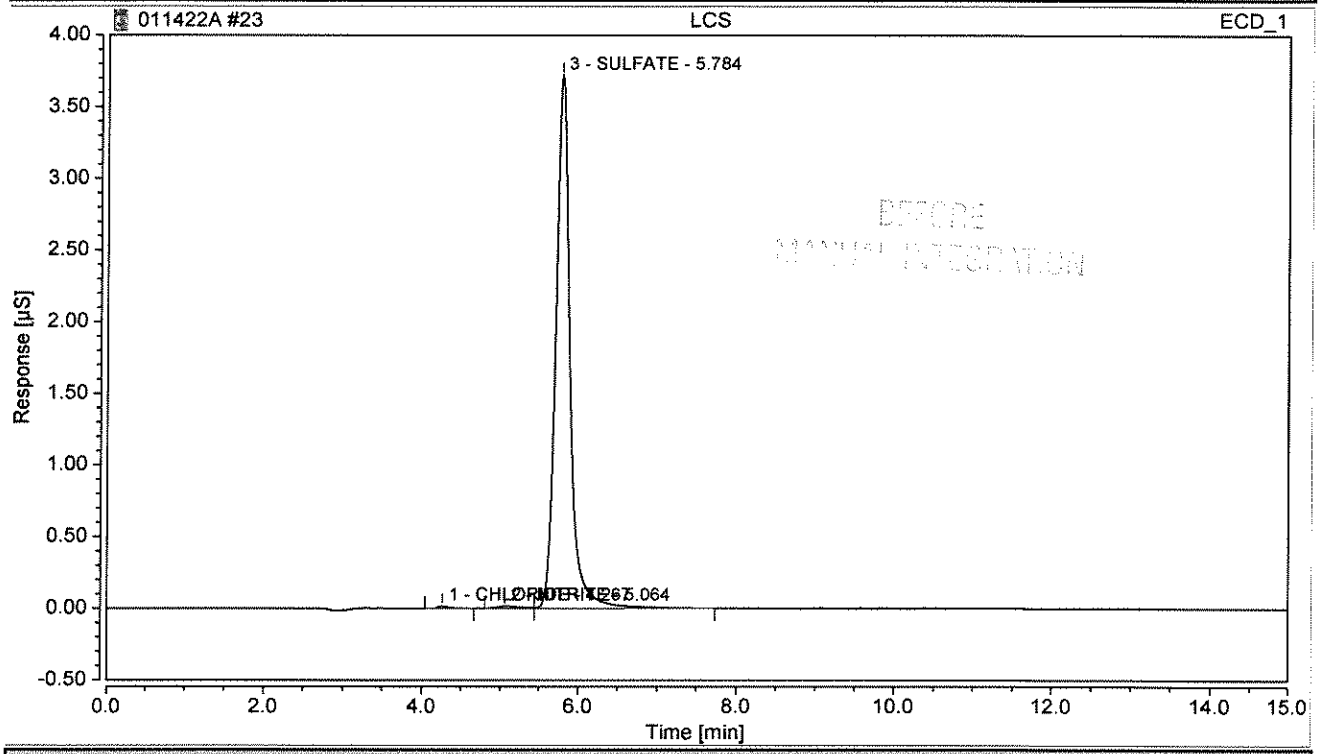
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	0.003	0.019	0.44	0.51	0.1524	-95.9357
2	NITRITE	5.080	0.005	0.016	0.61	0.42	0.0077	-99.3242
3	SULFATE	5.787	0.782	3.686	98.95	99.07	3.5180	-6.1880
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.790**	**3.721**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.98**
Vial Number:	**23**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**07**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 19:51**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

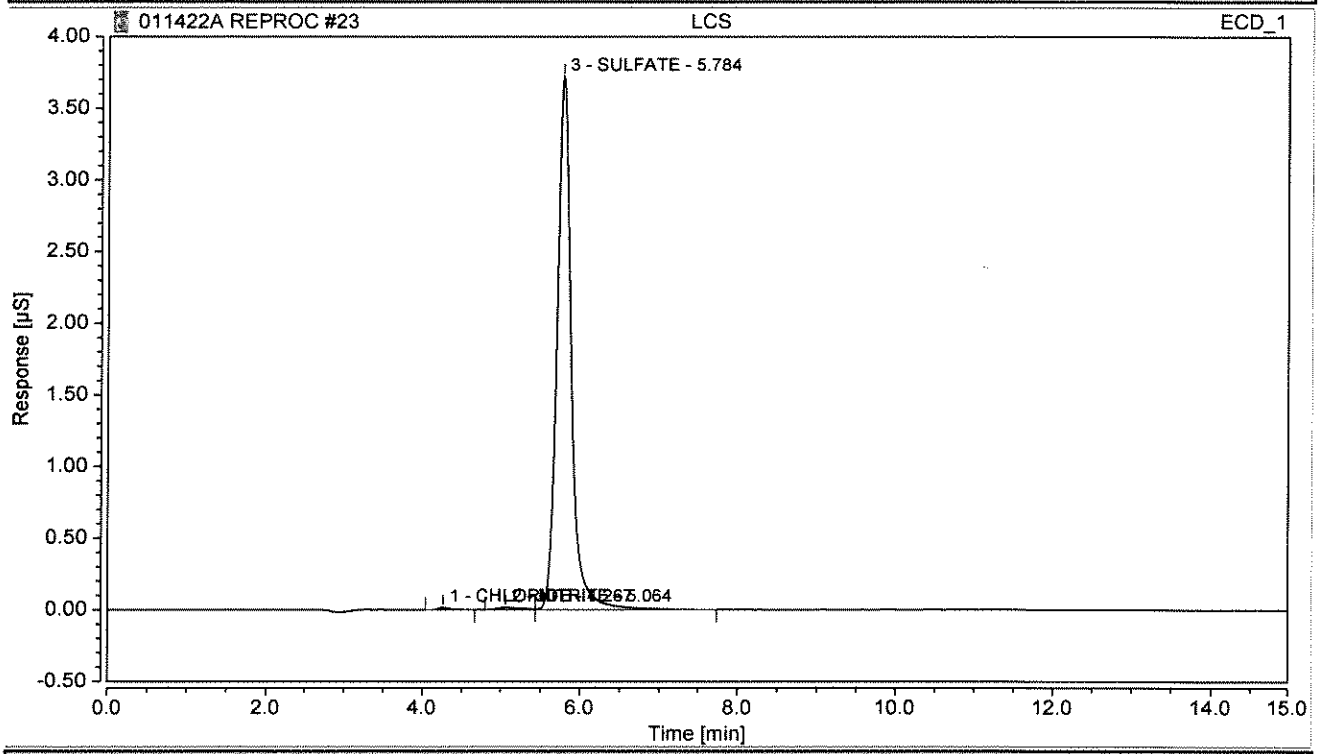
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	0.003	0.016	0.33	0.43	0.1494	-96.0149
2	NITRITE	5.064	0.005	0.015	0.63	0.40	0.0079	-99.3042
3	SULFATE	5.784	0.784	3.720	99.04	99.18	3.5286	-5.9043
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.792**	**3.751**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.98**
Vial Number:	**23**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**07**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 19:51**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

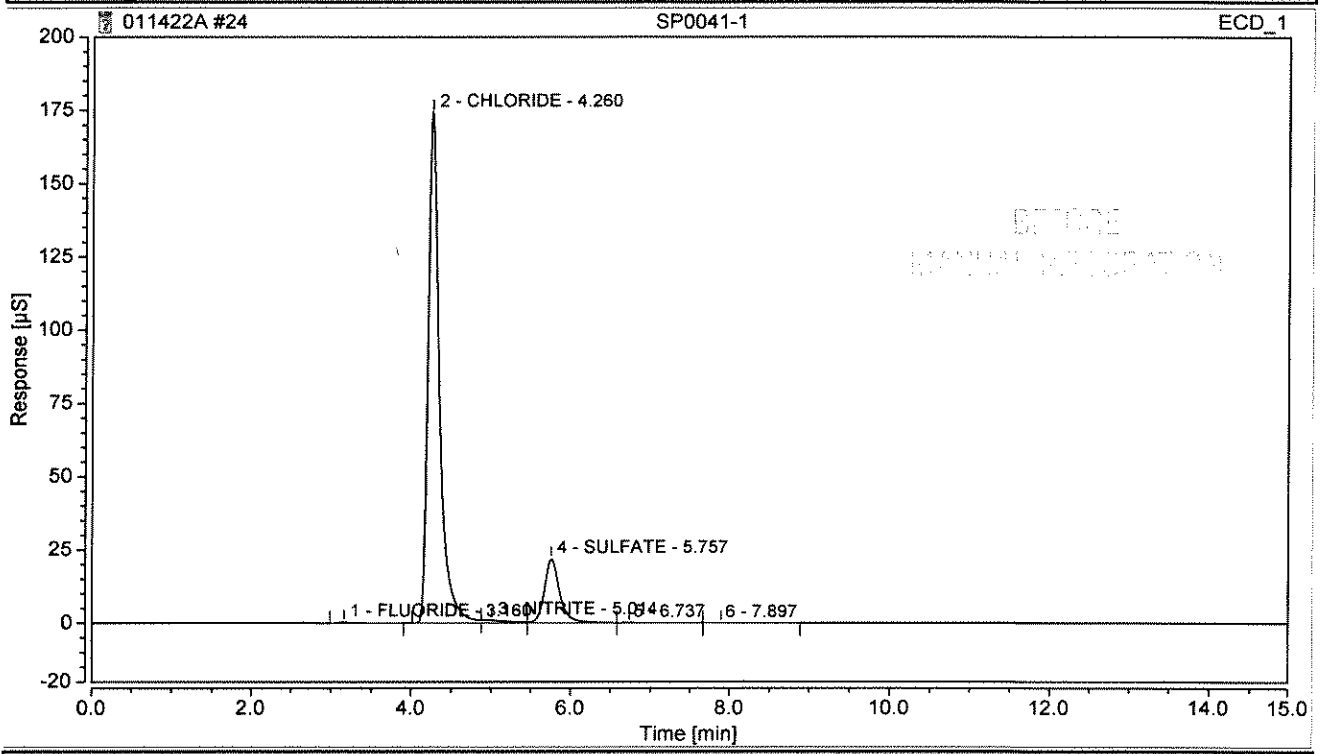
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	0.003	0.016	0.33	0.43	0.1494	-96.0149
2	NITRITE	5.064	0.005	0.015	0.63	0.40	0.0079	-99.3042
3	SULFATE	5.784	0.784	3.720	99.04	99.18	3.5286	-5.9043
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.792**	**3.751**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-1**	*Run Time (min):*	**14.98**
Vial Number:	**24**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 20:12**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

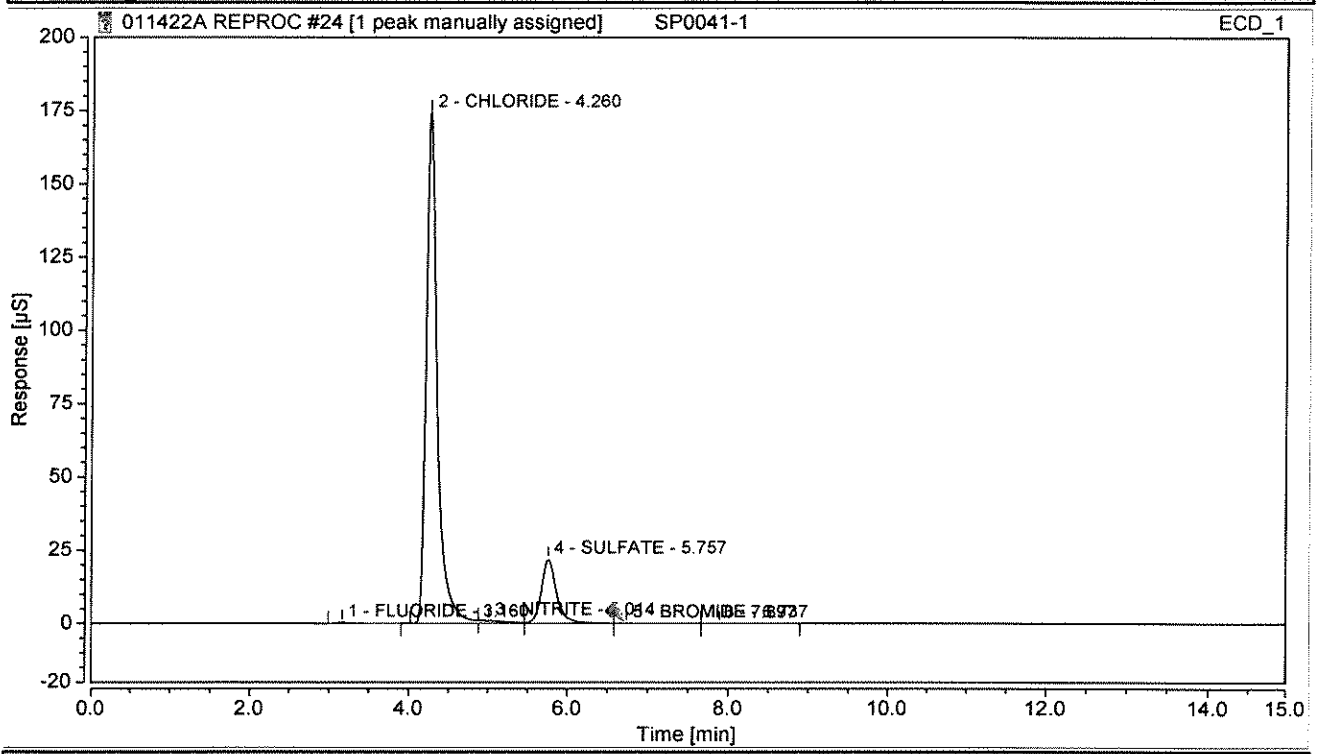
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.160	0.050	0.294	0.15	0.15	0.1068	n.a.
2	CHLORIDE	4.260	28.504	174.297	84.02	88.21	99.7935	n.a.
3	NITRITE	5.014	0.378	0.931	1.11	0.47	0.5999	n.a.
4	SULFATE	5.757	4.930	21.921	14.53	11.09	22.1848	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**33.863**	**197.443**	**99.82**	**99.93**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-1**	*Run Time (min):*	**14.98**
Vial Number:	**24**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 20:12**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

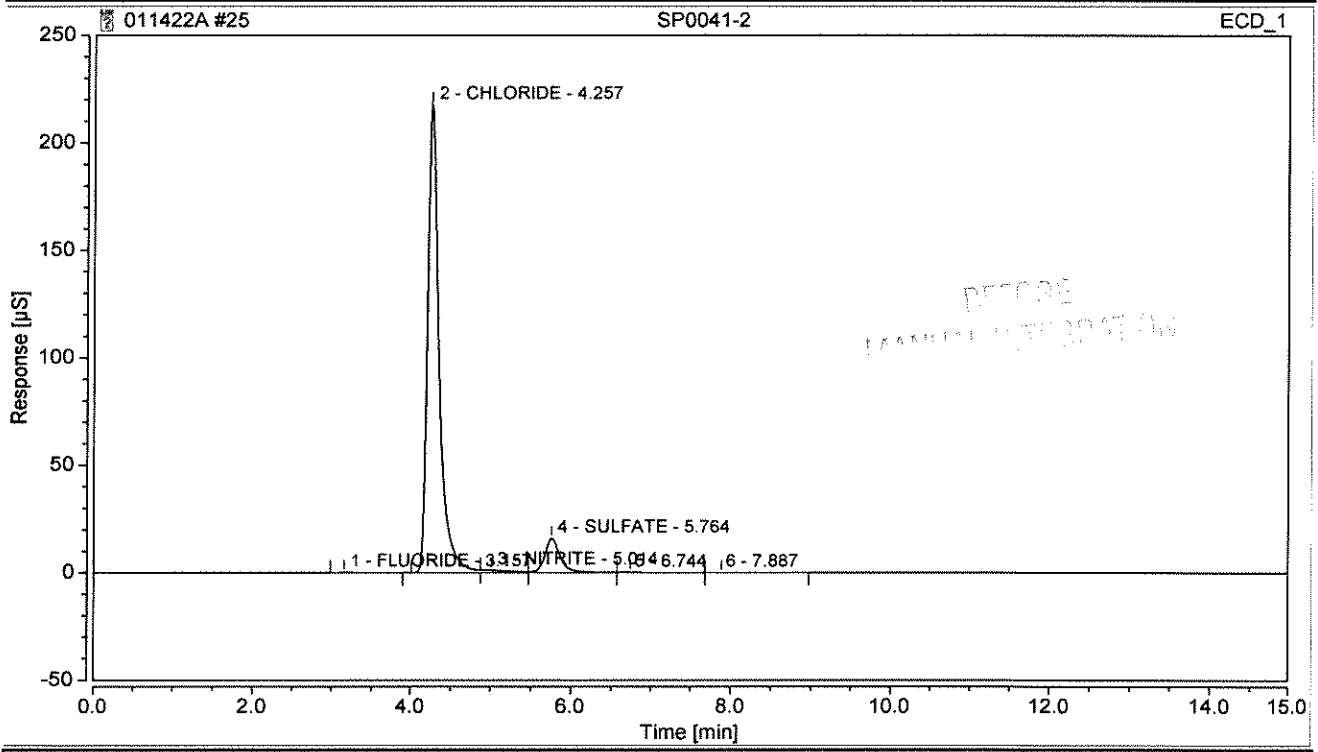
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.160	0.050	0.294	0.15	0.15	0.1068	n.a.
2	CHLORIDE	4.260	28.504	174.297	84.02	88.21	99.7935	n.a.
3	NITRITE	5.014	0.378	0.931	1.11	0.47	0.5999	n.a.
4	SULFATE	5.757	4.930	21.921	14.53	11.09	22.1848	n.a.
5	BROMIDE	6.737	0.052	0.127	0.15	0.06	0.2170	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**33.915**	**197.570**	**99.97**	**99.99**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-2**	*Run Time (min):*	**14.98**
Vial Number:	**25**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 20:33**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

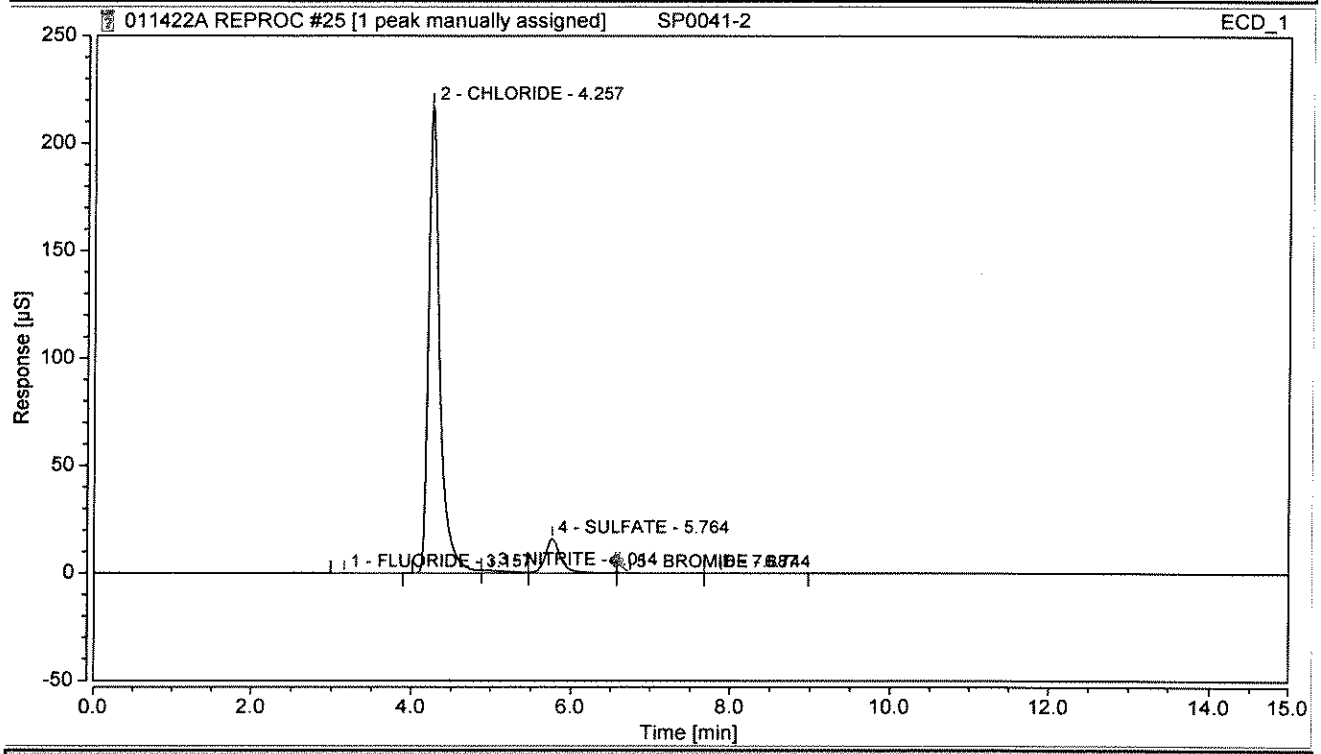
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.157	0.040	0.225	0.10	0.10	0.0852	n.a.
2	CHLORIDE	4.257	36.002	217.724	89.60	92.57	126.0068	n.a.
3	NITRITE	5.014	0.456	1.115	1.13	0.47	0.7230	n.a.
4	SULFATE	5.764	3.625	15.996	9.02	6.80	16.3114	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**40.123**	**235.060**	**99.86**	**99.95**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-2**	*Run Time (min):*	**14.98**
Vial Number:	**25**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 20:33**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

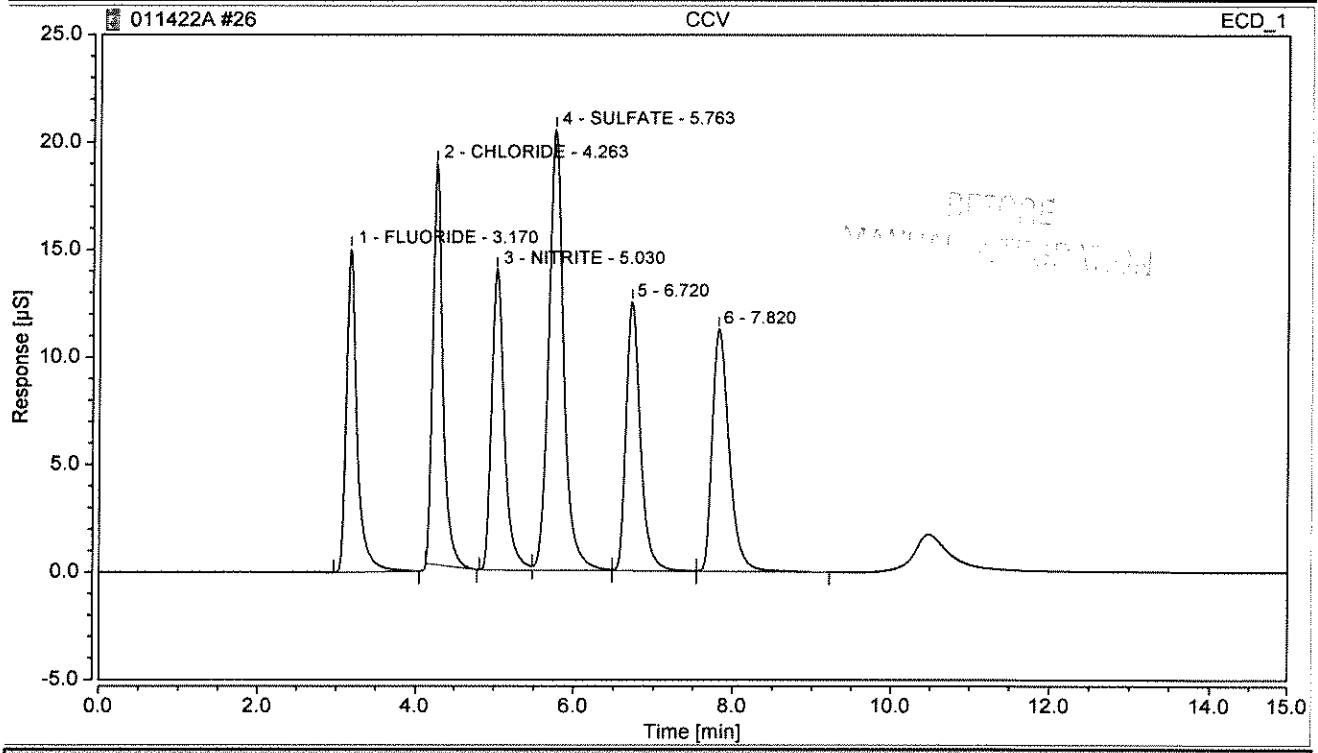
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.157	0.040	0.225	0.10	0.10	0.0852	n.a.
2	CHLORIDE	4.257	36.002	217.724	89.60	92.57	126.0068	n.a.
3	NITRITE	5.014	0.456	1.115	1.13	0.47	0.7230	n.a.
4	SULFATE	5.764	3.625	15.996	9.02	6.80	16.3114	n.a.
5	BROMIDE	6.744	0.049	0.113	0.12	0.05	0.1932	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**40.171**	**235.173**	**99.98**	**99.99**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.99**
Vial Number:	**26**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 20:54**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

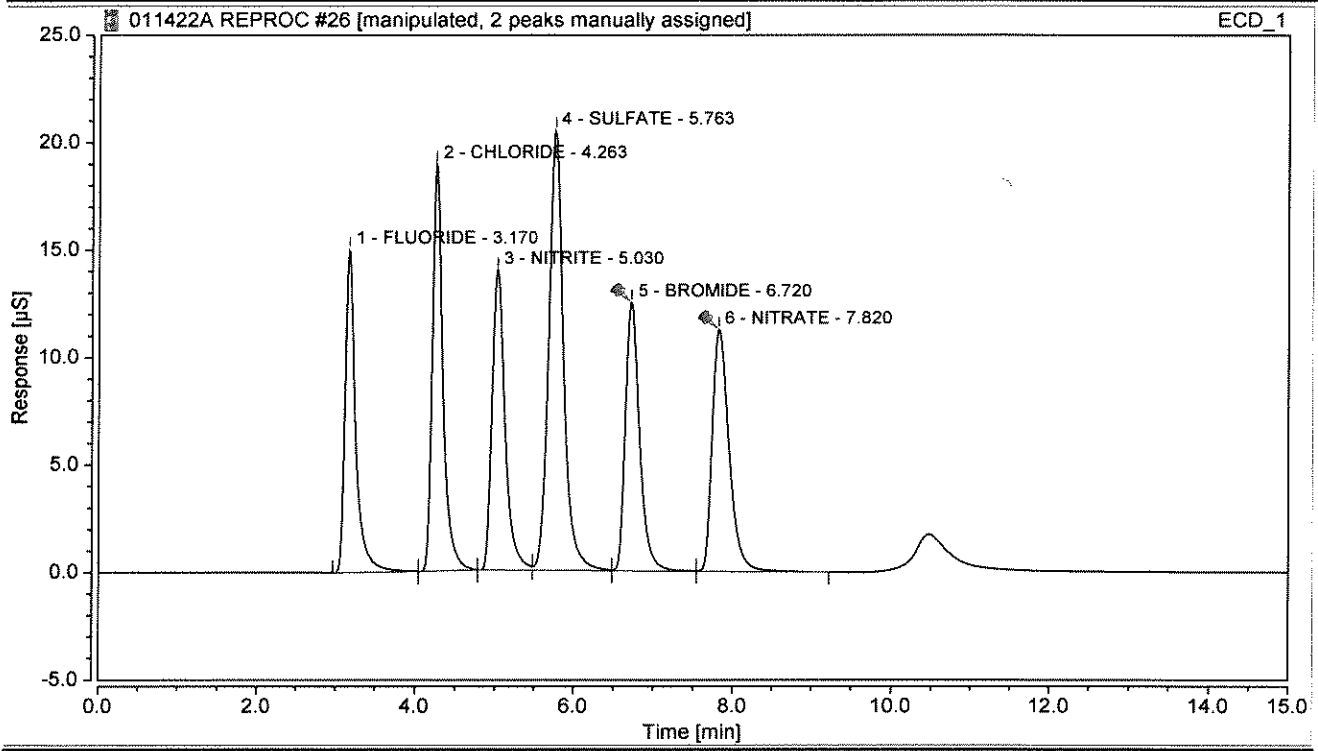
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.170	2.372	15.040	13.45	16.36	5.0281	0.5614
2	CHLORIDE	4.263	2.797	18.670	15.86	20.31	9.9204	-0.7960
3	NITRITE	5.030	2.611	13.976	14.81	15.20	4.1416	3.5412
4	SULFATE	5.763	4.441	20.492	25.18	22.29	19.9850	-0.0752
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.221**	**68.177**	**69.30**	**74.16**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.99**
Vial Number:	**26**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 20:54**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

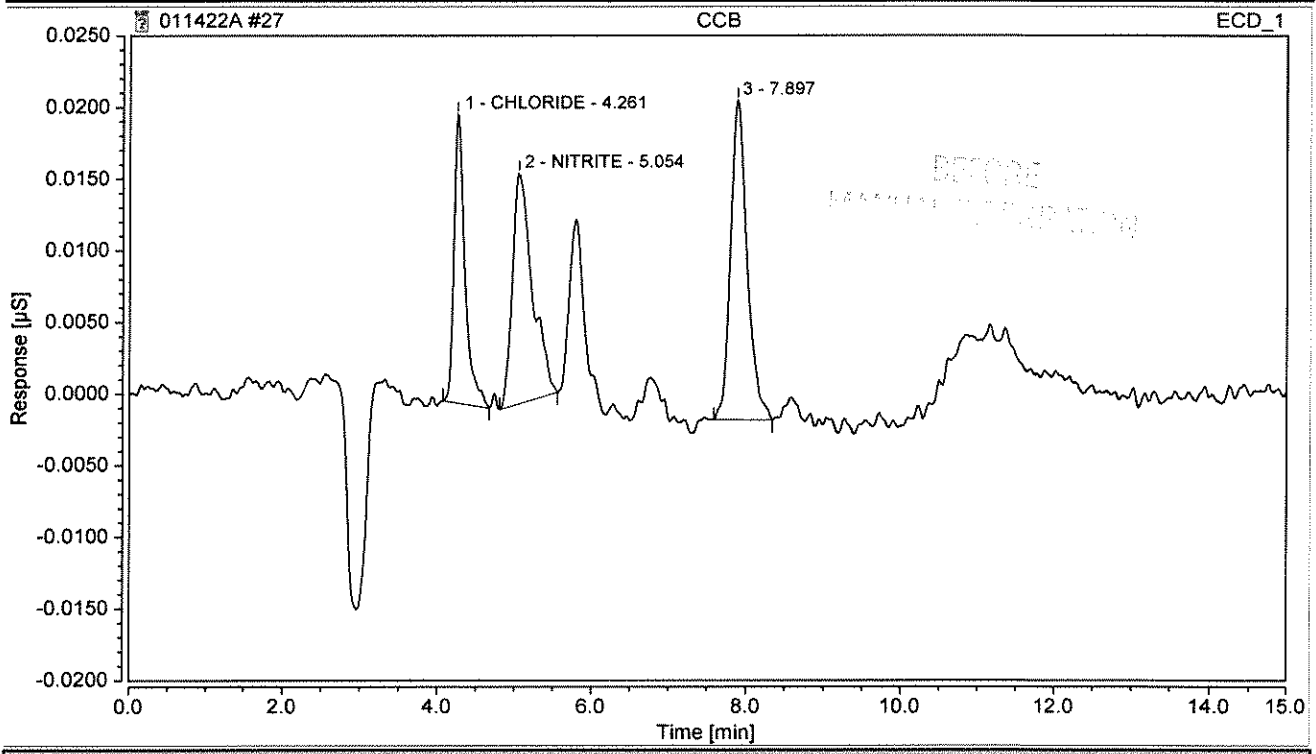
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.170	2.371	15.040	13.37	16.31	5.0277	0.5549
2	CHLORIDE	4.263	2.916	18.951	16.44	20.55	10.3355	3.3548
3	NITRITE	5.030	2.607	13.970	14.70	15.15	4.1351	3.3768
4	SULFATE	5.763	4.436	20.486	25.01	22.22	19.9634	-0.1829
5	BROMIDE	6.720	2.610	12.499	14.71	13.56	21.3901	6.9506
6	NITRATE	7.820	2.800	11.252	15.78	12.20	3.8070	-4.8242
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**17.741**	**92.197**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.98**
Vial Number:	**27**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 21:14**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

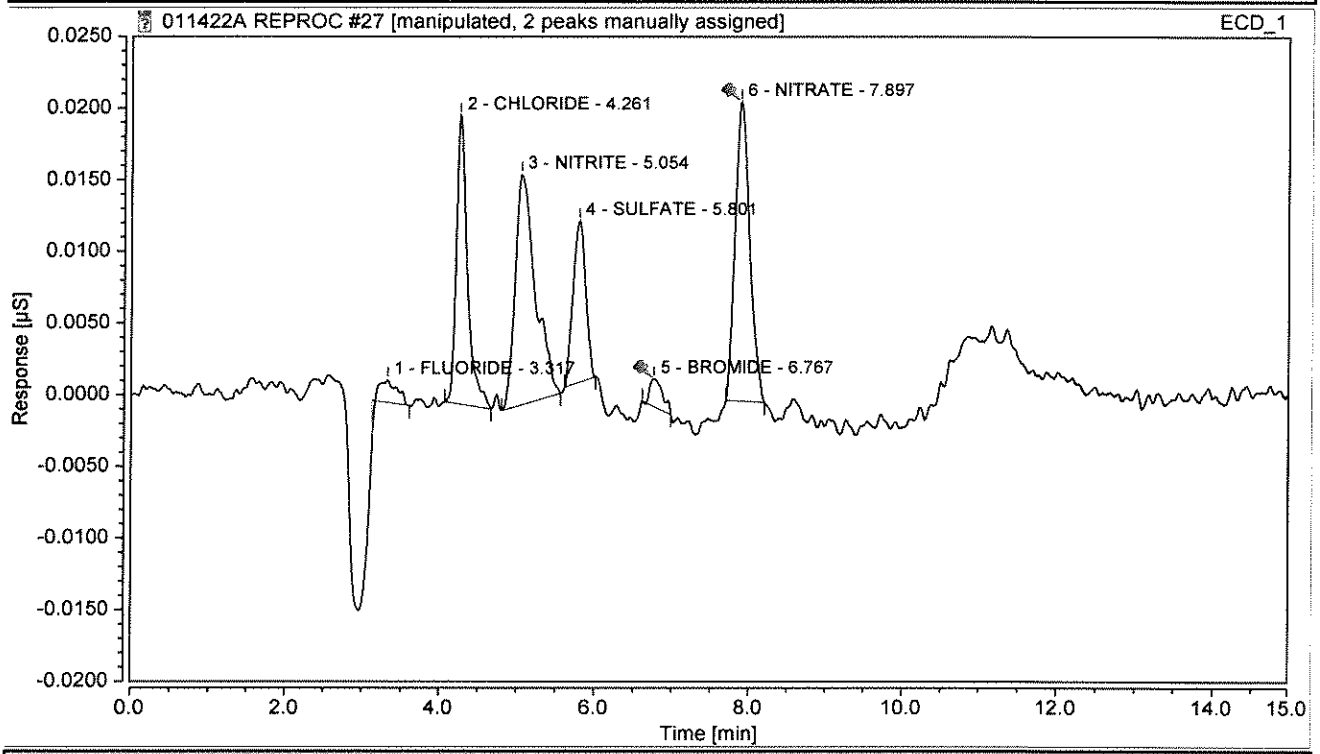
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.261	0.003	0.020	24.22	34.43	0.1519	n.a.
2	NITRITE	5.054	0.005	0.016	35.62	27.51	0.0078	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.008**	**0.036**	**59.83**	**61.94**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.98**
Vial Number:	**27**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 21:14**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

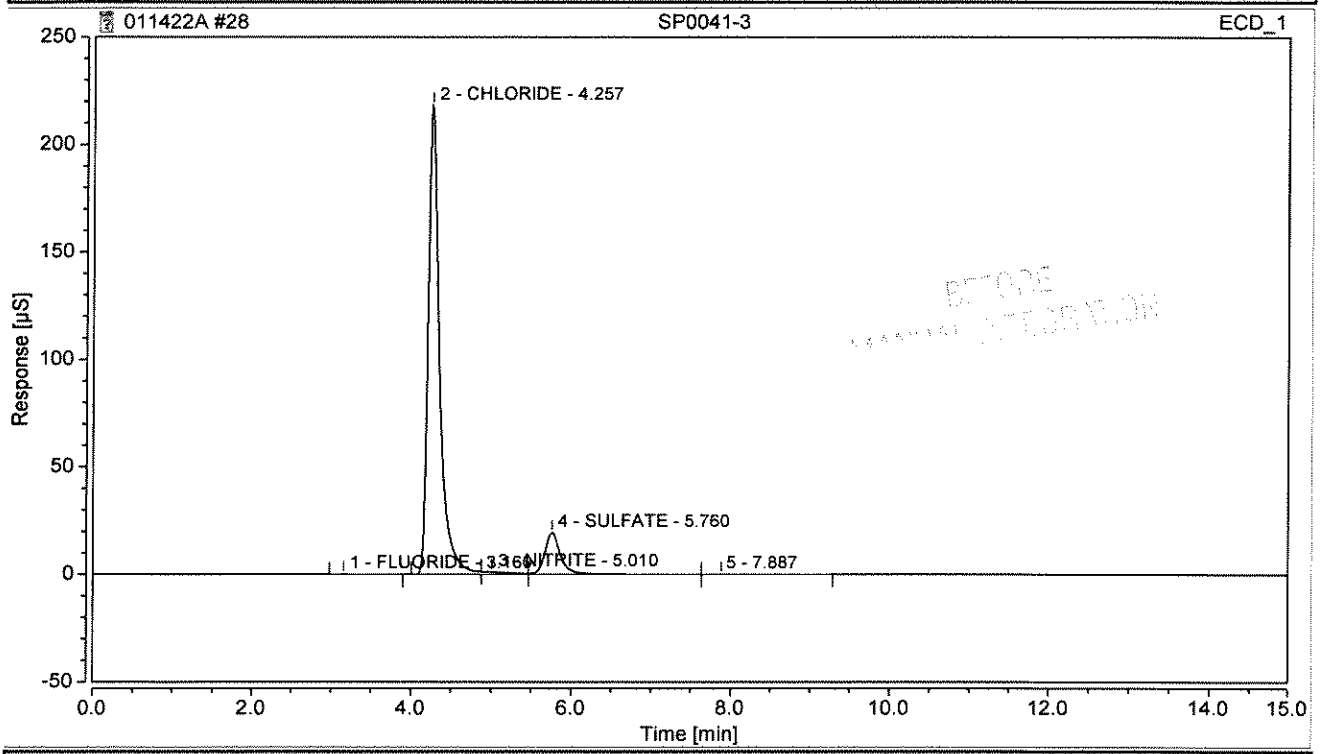
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.317	0.000	0.002	2.34	2.21	0.0008	n.a.
2	CHLORIDE	4.261	0.003	0.020	21.12	28.00	0.1519	n.a.
3	NITRITE	5.054	0.005	0.016	31.05	22.38	0.0078	n.a.
4	SULFATE	5.801	0.002	0.011	13.53	15.67	0.0096	n.a.
5	BROMIDE	6.767	0.000	0.002	2.47	2.71	0.0033	n.a.
6	NITRATE	7.897	0.005	0.021	29.49	29.02	0.0930	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.016**	**0.072**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-3**	*Run Time (min):*	**14.98**
Vial Number:	**28**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 21:35**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

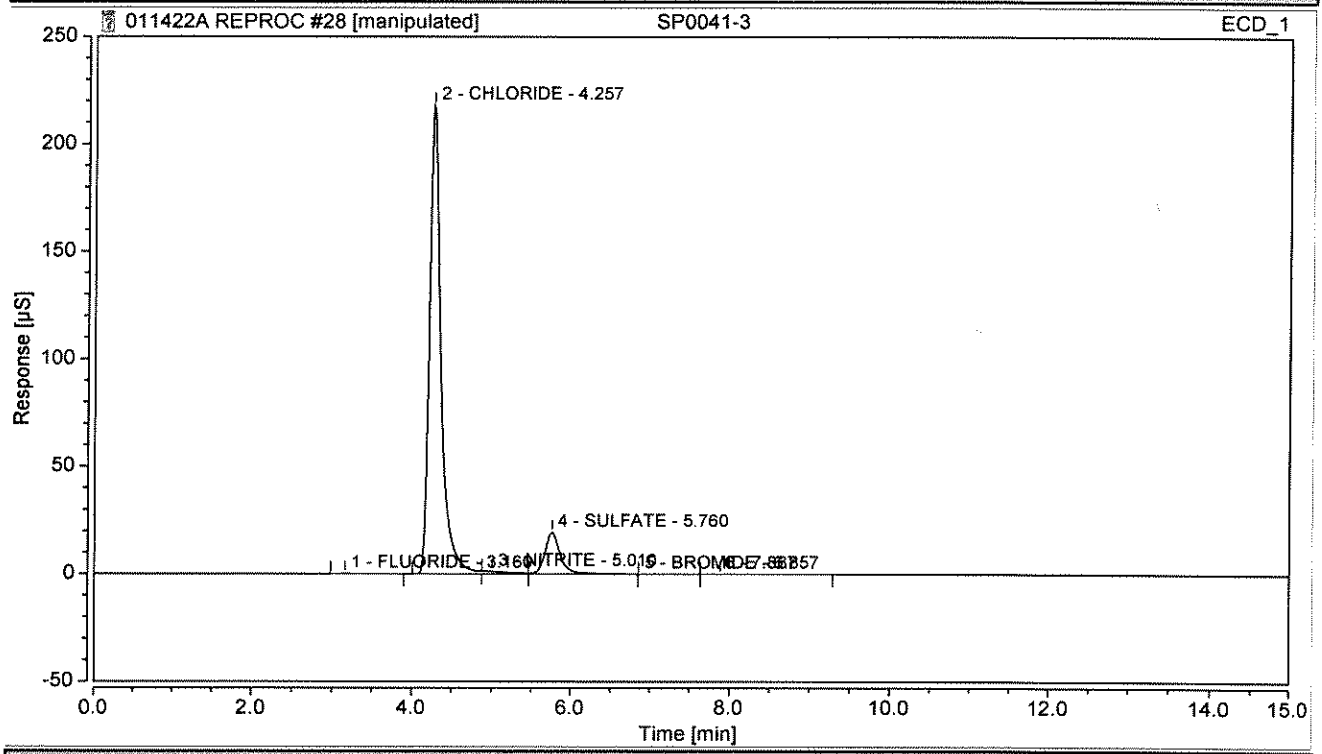
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.160	0.026	0.135	0.06	0.06	0.0549	n.a.
2	CHLORIDE	4.257	36.169	218.199	88.03	91.35	126.5919	n.a.
3	NITRITE	5.010	0.457	1.116	1.11	0.47	0.7242	n.a.
4	SULFATE	5.760	4.424	19.385	10.77	8.12	19.9090	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**41.076**	**238.836**	**99.97**	**99.99**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-3**	*Run Time (min):*	**14.98**
Vial Number:	**28**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 21:35**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

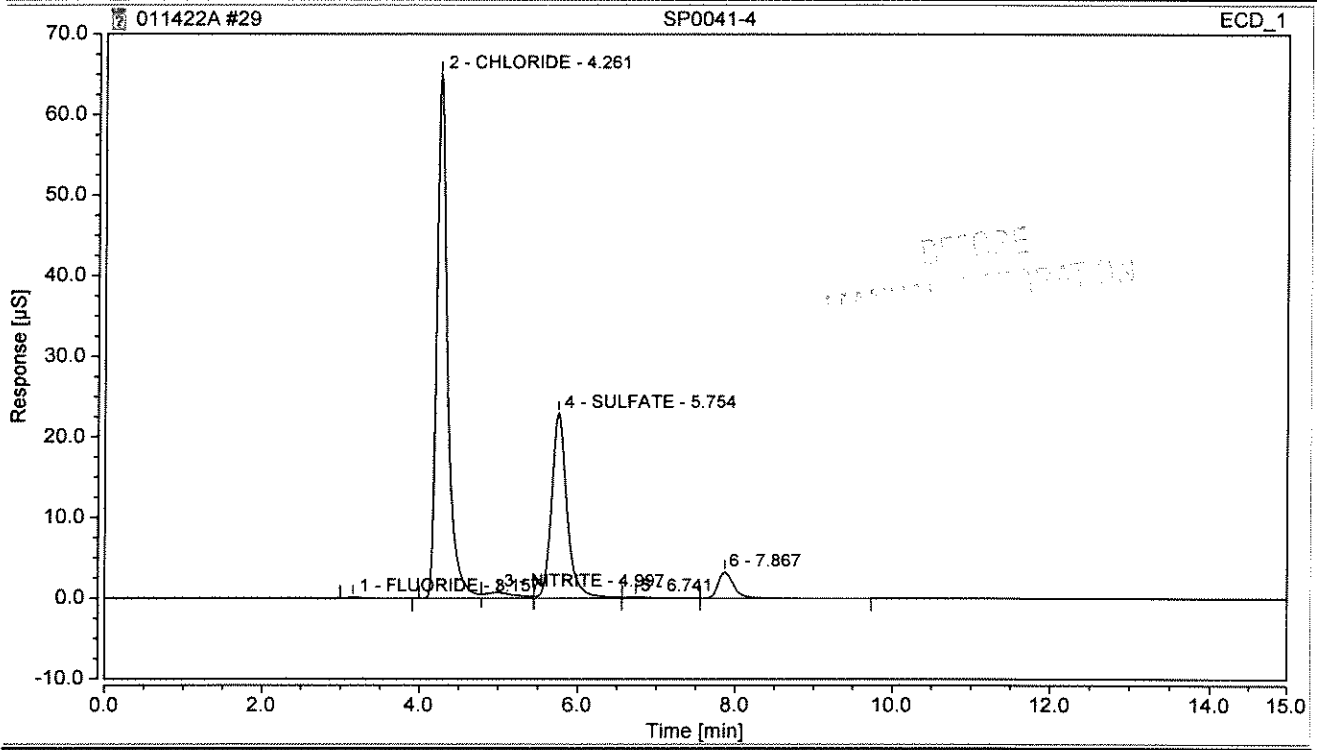
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.160	0.026	0.135	0.06	0.06	0.0549	n.a.
2	CHLORIDE	4.257	36.169	218.199	88.03	91.34	126.5919	n.a.
3	NITRITE	5.010	0.457	1.116	1.11	0.47	0.7242	n.a.
4	SULFATE	5.760	4.405	19.385	10.72	8.11	19.8220	n.a.
5	BROMIDE	6.857	0.019	0.045	0.05	0.02	0.0766	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**41.076**	**238.880**	**99.97**	**99.99**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-4**	*Run Time (min):*	**14.98**
Vial Number:	**29**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 21:56**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

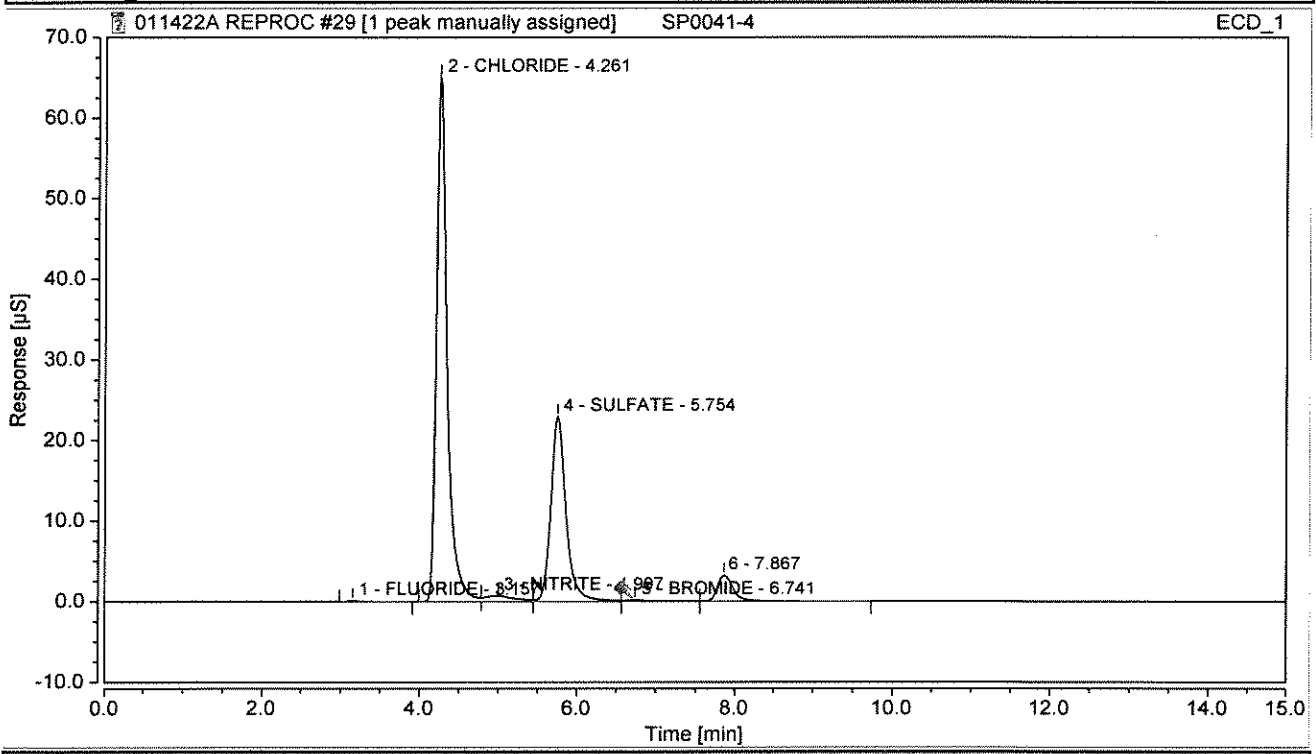
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.157	0.027	0.141	0.17	0.15	0.0582	n.a.
2	CHLORIDE	4.261	10.288	65.055	62.14	70.53	36.1090	n.a.
3	NITRITE	4.997	0.304	0.706	1.83	0.77	0.4815	n.a.
4	SULFATE	5.754	5.122	22.939	30.93	24.87	23.0486	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**15.741**	**88.841**	**95.07**	**96.32**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-4**	*Run Time (min):*	**14.98**
Vial Number:	**29**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 21:56**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

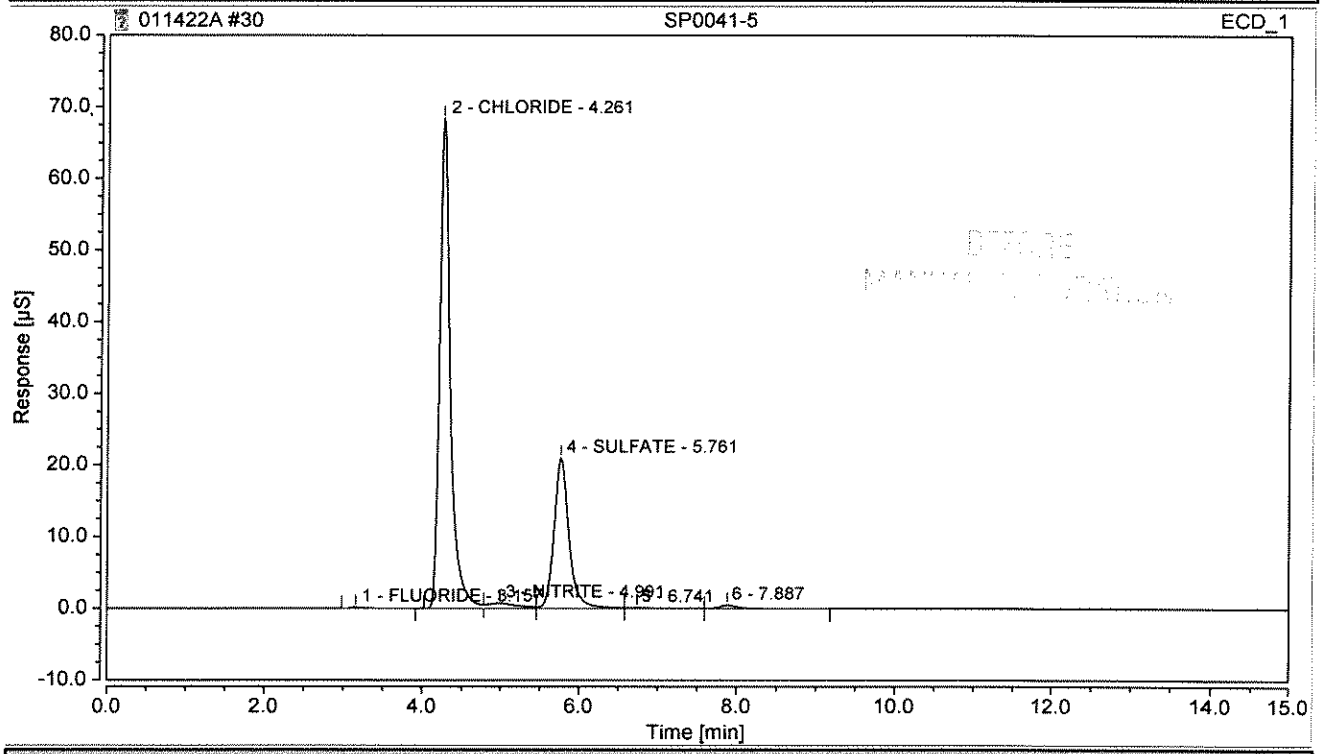
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.157	0.027	0.141	0.17	0.15	0.0582	n.a.
2	CHLORIDE	4.261	10.288	65.055	62.14	70.53	36.1090	n.a.
3	NITRITE	4.997	0.304	0.706	1.83	0.77	0.4815	n.a.
4	SULFATE	5.754	5.122	22.939	30.93	24.87	23.0486	n.a.
5	BROMIDE	6.741	0.056	0.159	0.34	0.17	0.2725	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**15.797**	**89.000**	**95.41**	**96.49**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-5**	*Run Time (min):*	**14.98**
Vial Number:	**30**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 22:17**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

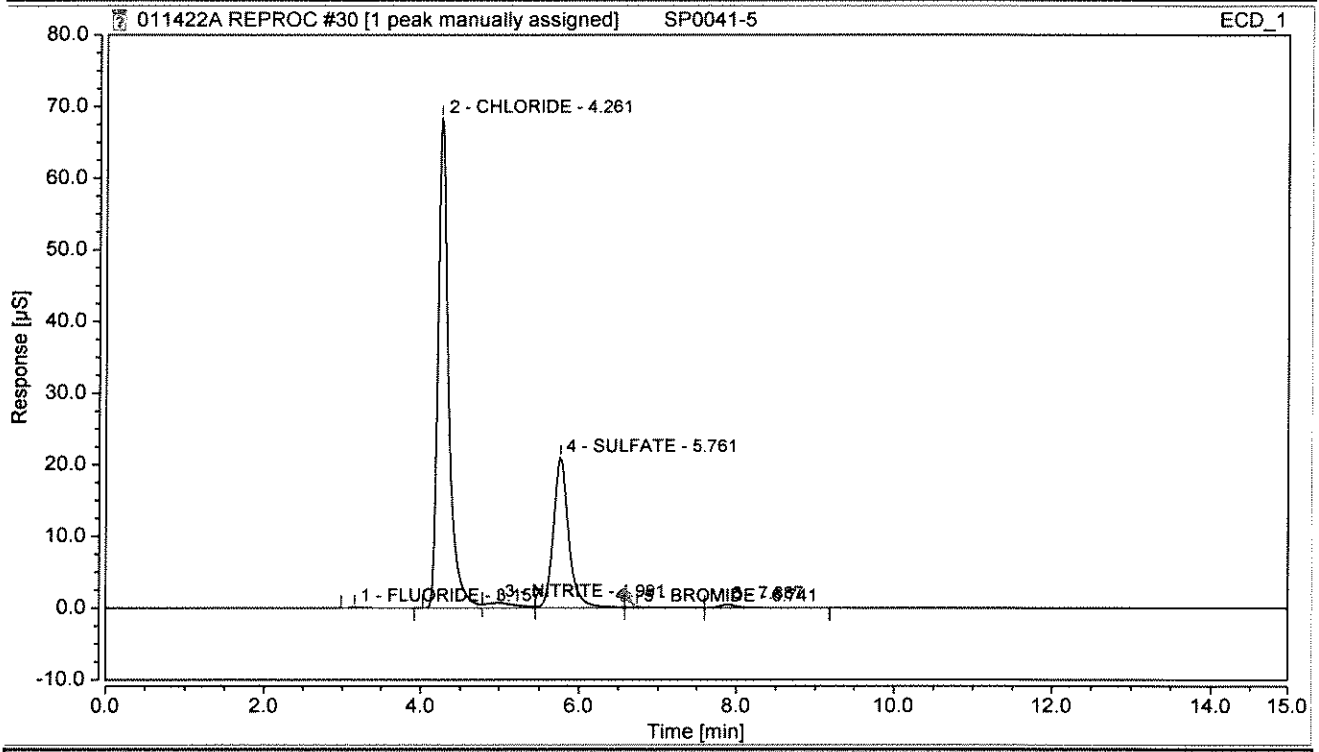
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.157	0.027	0.141	0.17	0.15	0.0570	n.a.
2	CHLORIDE	4.261	10.815	68.369	67.66	75.32	37.9513	n.a.
3	NITRITE	4.991	0.310	0.707	1.94	0.78	0.4922	n.a.
4	SULFATE	5.761	4.675	20.978	29.25	23.11	21.0361	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**15.827**	**90.194**	**99.02**	**99.37**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-5**	*Run Time (min):*	**14.98**
Vial Number:	**30**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 22:17**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

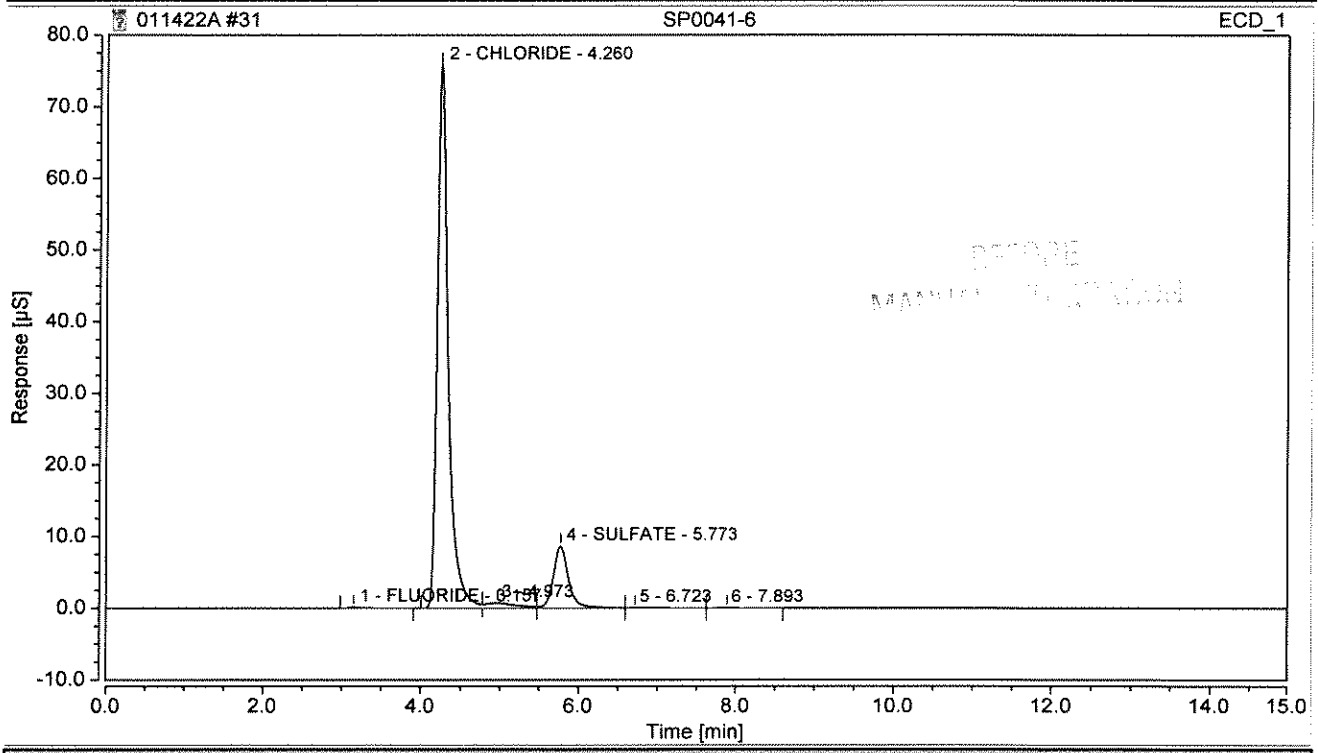
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.157	0.027	0.141	0.17	0.15	0.0570	n.a.
2	CHLORIDE	4.261	10.815	68.369	67.66	75.32	37.9513	n.a.
3	NITRITE	4.991	0.310	0.707	1.94	0.78	0.4922	n.a.
4	SULFATE	5.761	4.675	20.978	29.25	23.11	21.0361	n.a.
5	BROMIDE	6.741	0.044	0.108	0.27	0.12	0.1840	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**15.871**	**90.301**	**99.29**	**99.49**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-6**	*Run Time (min):*	**14.98**
Vial Number:	**31**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 22:38**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

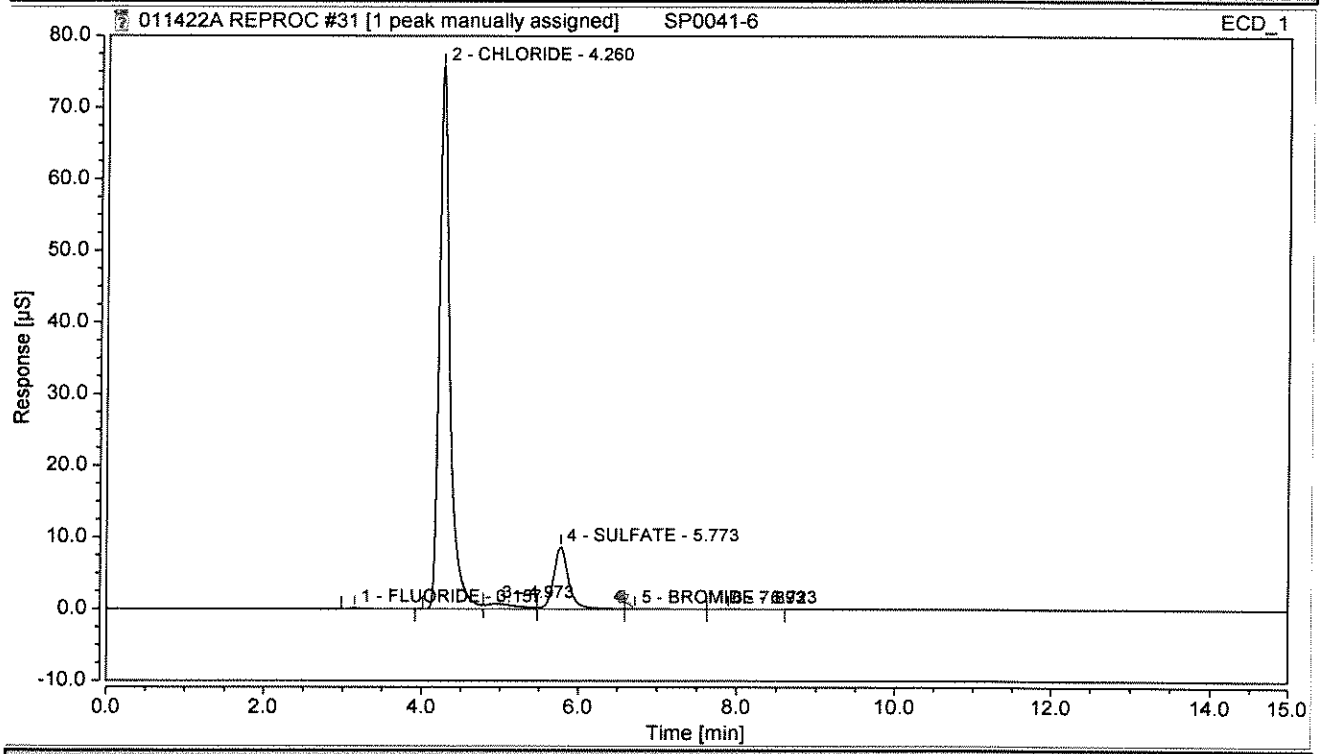
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.157	0.027	0.142	0.19	0.17	0.0564	n.a.
2	CHLORIDE	4.260	12.016	75.815	83.99	88.77	42.1489	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	SULFATE	5.773	1.918	8.670	13.41	10.15	8.6331	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**13.961**	**84.627**	**97.58**	**99.09**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-6**	*Run Time (min):*	**14.98**
Vial Number:	**31**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 22:38**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

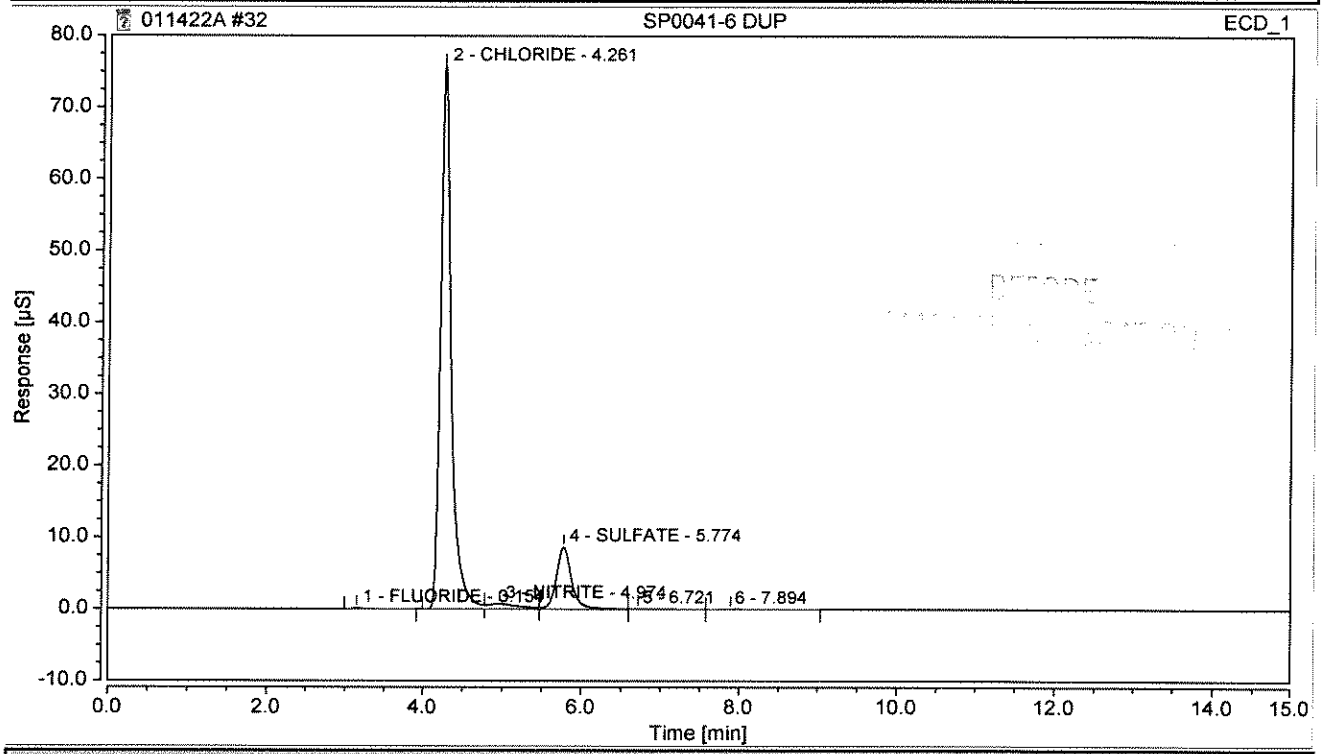
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.157	0.027	0.142	0.19	0.17	0.0564	n.a.
2	CHLORIDE	4.260	12.016	75.815	83.99	88.77	42.1489	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	SULFATE	5.773	1.918	8.670	13.41	10.15	8.6331	n.a.
5	BROMIDE	6.723	0.018	0.040	0.13	0.05	0.0691	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**13.979**	**84.668**	**97.71**	**99.14**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-6 DUP**	*Run Time (min):*	**14.99**
Vial Number:	**32**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 22:58**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

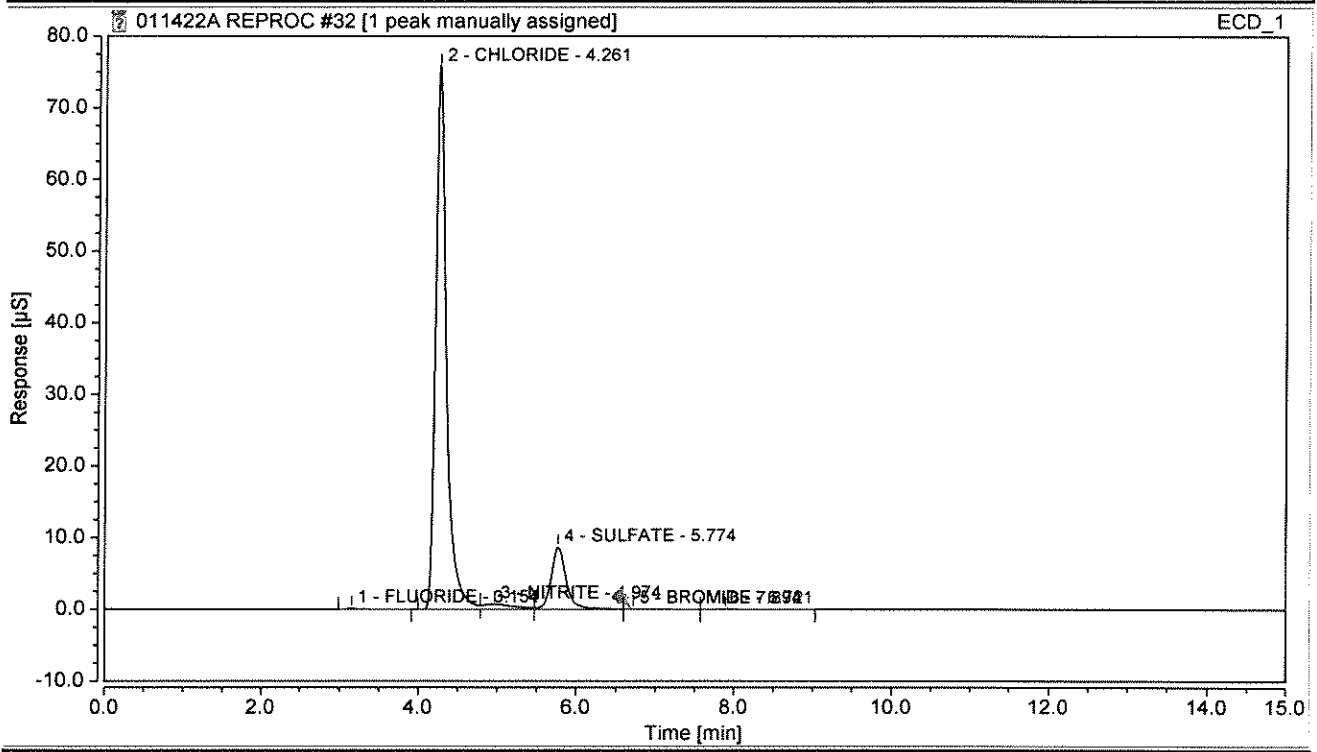
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.154	0.026	0.141	0.18	0.16	0.0553	n.a.
2	CHLORIDE	4.261	12.003	75.749	83.96	88.78	42.1024	n.a.
3	NITRITE	4.974	0.321	0.704	2.24	0.82	0.5086	n.a.
4	SULFATE	5.774	1.917	8.663	13.41	10.15	8.6277	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.266**	**85.257**	**99.80**	**99.92**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-6 DUP**	*Run Time (min):*	**14.99**
Vial Number:	**32**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 22:58**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

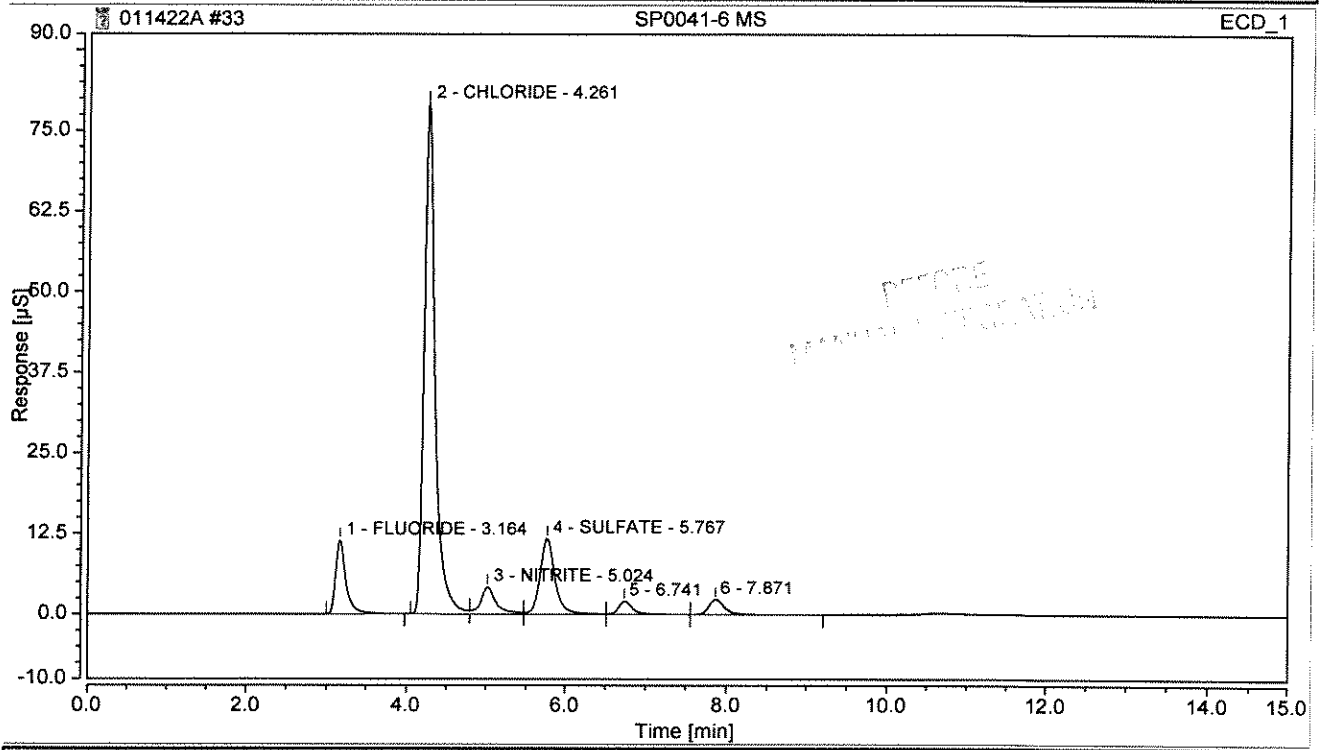
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.154	0.026	0.141	0.18	0.16	0.0553	n.a.
2	CHLORIDE	4.261	12.003	75.749	83.96	88.78	42.1024	n.a.
3	NITRITE	4.974	0.321	0.704	2.24	0.82	0.5086	n.a.
4	SULFATE	5.774	1.917	8.663	13.41	10.15	8.6277	n.a.
5	BROMIDE	6.721	0.019	0.042	0.14	0.05	0.0712	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.286**	**85.299**	**99.93**	**99.97**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-6 MS**	*Run Time (min):*	**14.98**
Vial Number:	**33**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 23:19**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

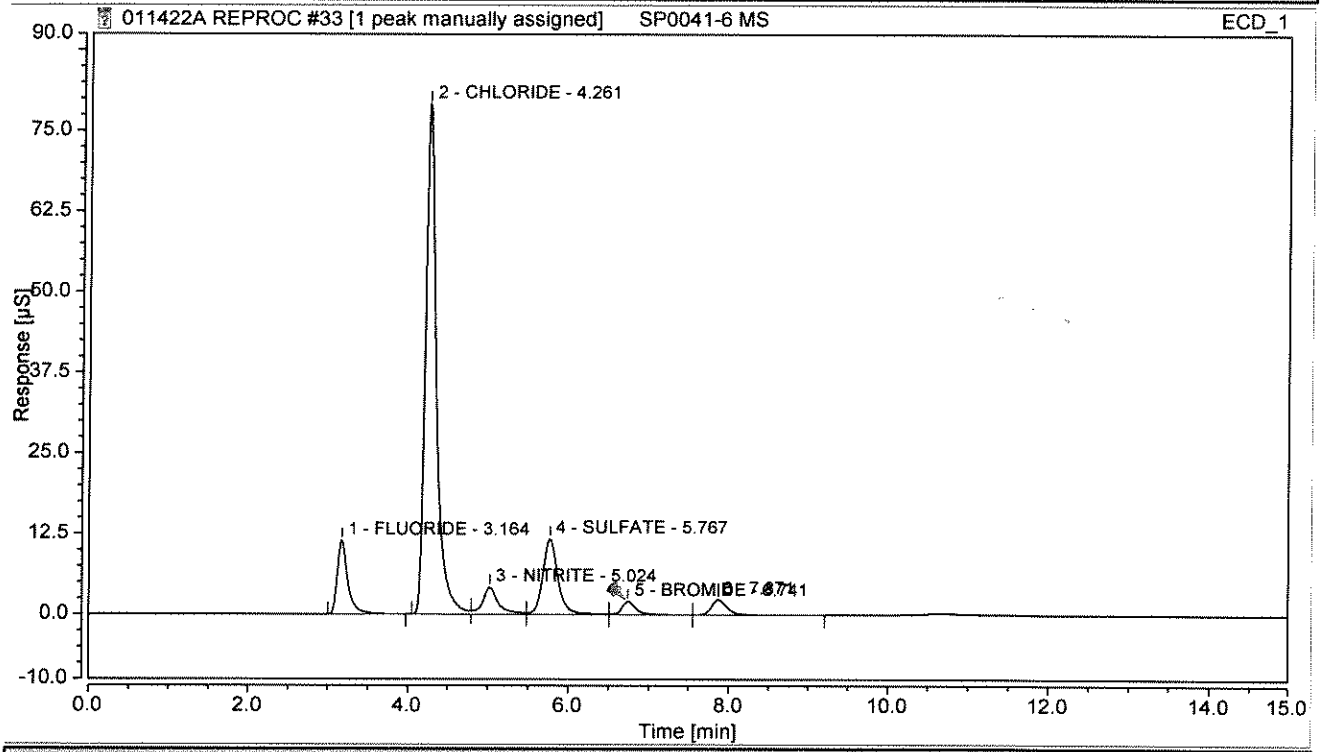
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.164	1.760	11.449	9.37	10.32	3.7310	n.a.
2	CHLORIDE	4.261	12.550	79.170	66.80	71.37	44.0173	n.a.
3	NITRITE	5.024	0.951	4.206	5.06	3.79	1.5091	n.a.
4	SULFATE	5.767	2.581	11.732	13.74	10.58	11.6153	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**17.843**	**106.558**	**94.97**	**96.06**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-6 MS**	*Run Time (min):*	**14.98**
Vial Number:	**33**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 23:19**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

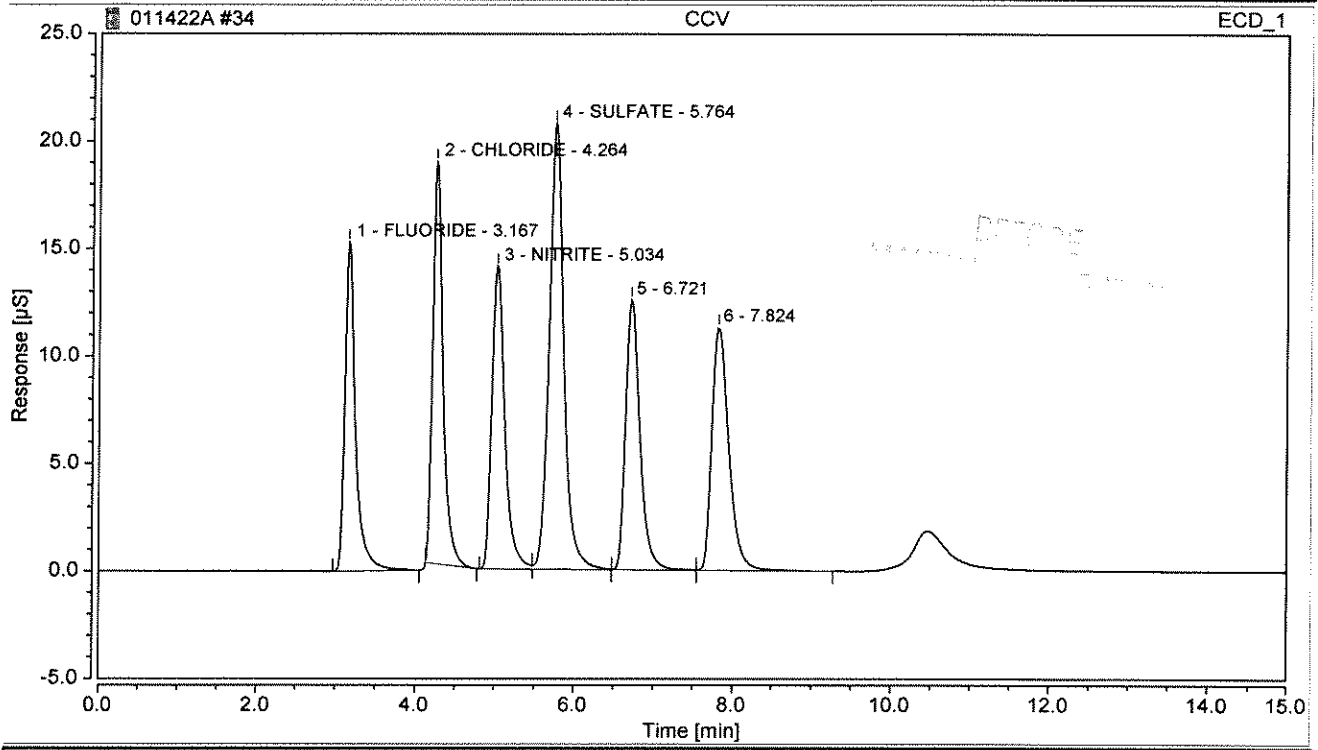
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.164	1.760	11.449	9.37	10.32	3.7310	n.a.
2	CHLORIDE	4.261	12.550	79.170	66.80	71.37	44.0173	n.a.
3	NITRITE	5.024	0.951	4.206	5.06	3.79	1.5091	n.a.
4	SULFATE	5.767	2.581	11.732	13.74	10.58	11.6153	n.a.
5	BROMIDE	6.741	0.413	2.041	2.20	1.84	3.4926	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**18.256**	**108.599**	**97.17**	**97.90**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.99**
Vial Number:	**34**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 23:40**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

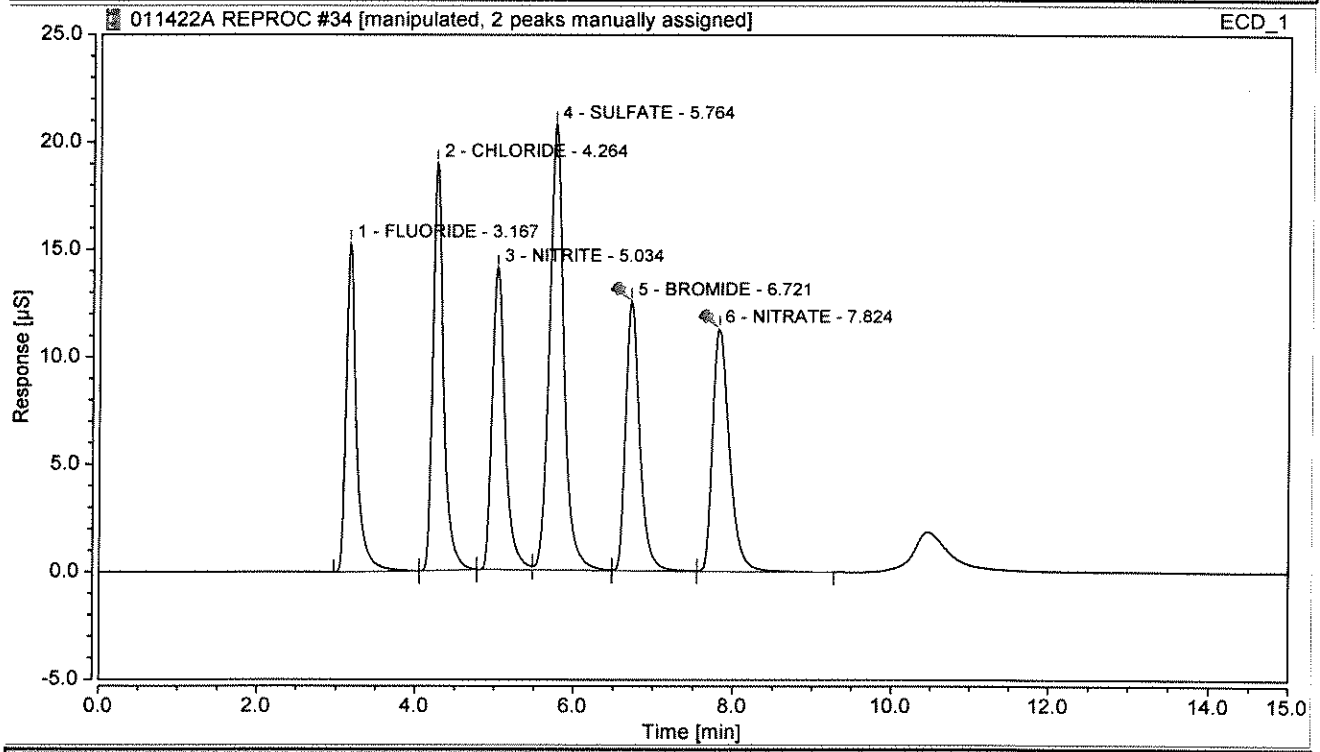
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	2.386	15.313	13.48	16.51	5.0581	1.1623
2	CHLORIDE	4.264	2.799	18.716	15.82	20.18	9.9269	-0.7307
3	NITRITE	5.034	2.622	14.083	14.82	15.18	4.1585	3.9637
4	SULFATE	5.764	4.460	20.758	25.20	22.38	20.0710	0.3548
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.267**	**68.870**	**69.32**	**74.25**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.99**
Vial Number:	**34**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 23:40**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

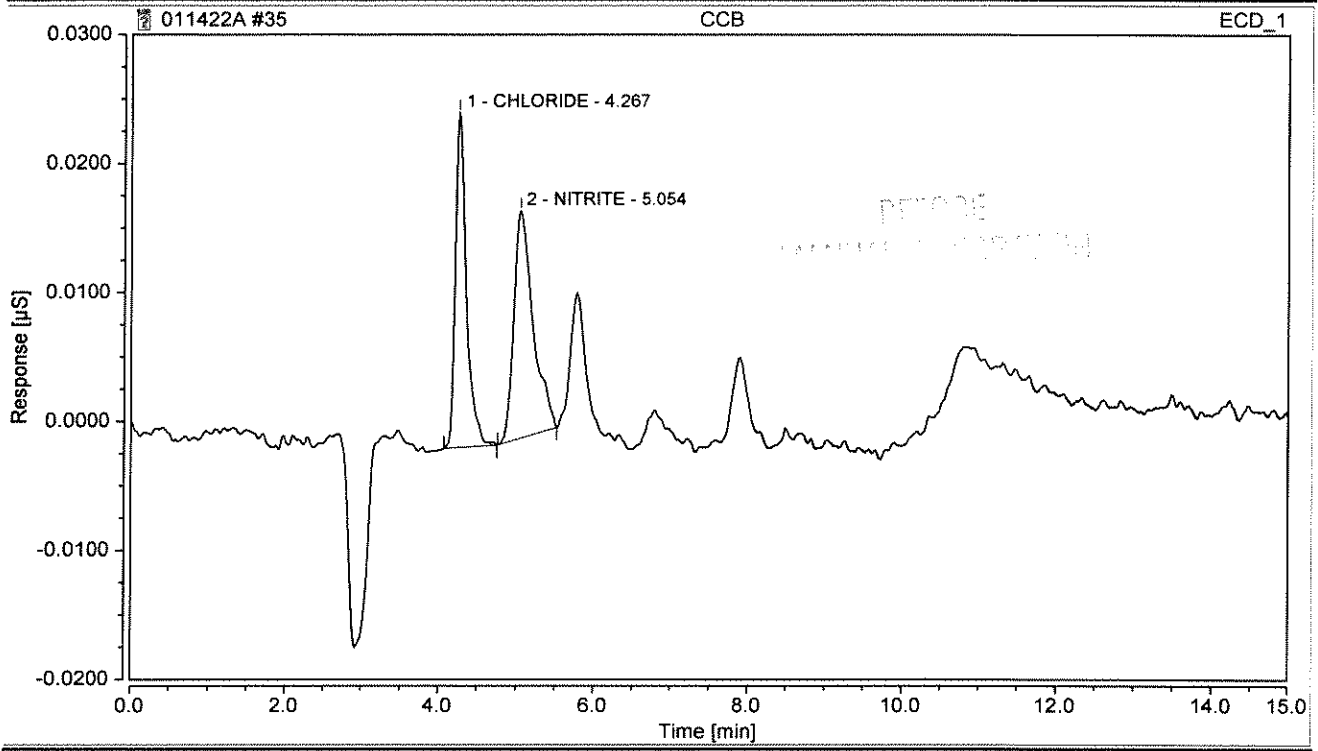
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	2.386	15.313	13.41	16.46	5.0580	1.1607
2	CHLORIDE	4.264	2.919	19.001	16.40	20.43	10.3456	3.4561
3	NITRITE	5.034	2.616	14.074	14.70	15.13	4.1490	3.7255
4	SULFATE	5.764	4.453	20.750	25.02	22.31	20.0398	0.1991
5	BROMIDE	6.721	2.614	12.557	14.69	13.50	21.4900	7.4501
6	NITRATE	7.824	2.808	11.317	15.78	12.17	3.8181	-4.5481
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**17.796**	**93.013**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.99**
Vial Number:	**35**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**15/Jan/22 00:01**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

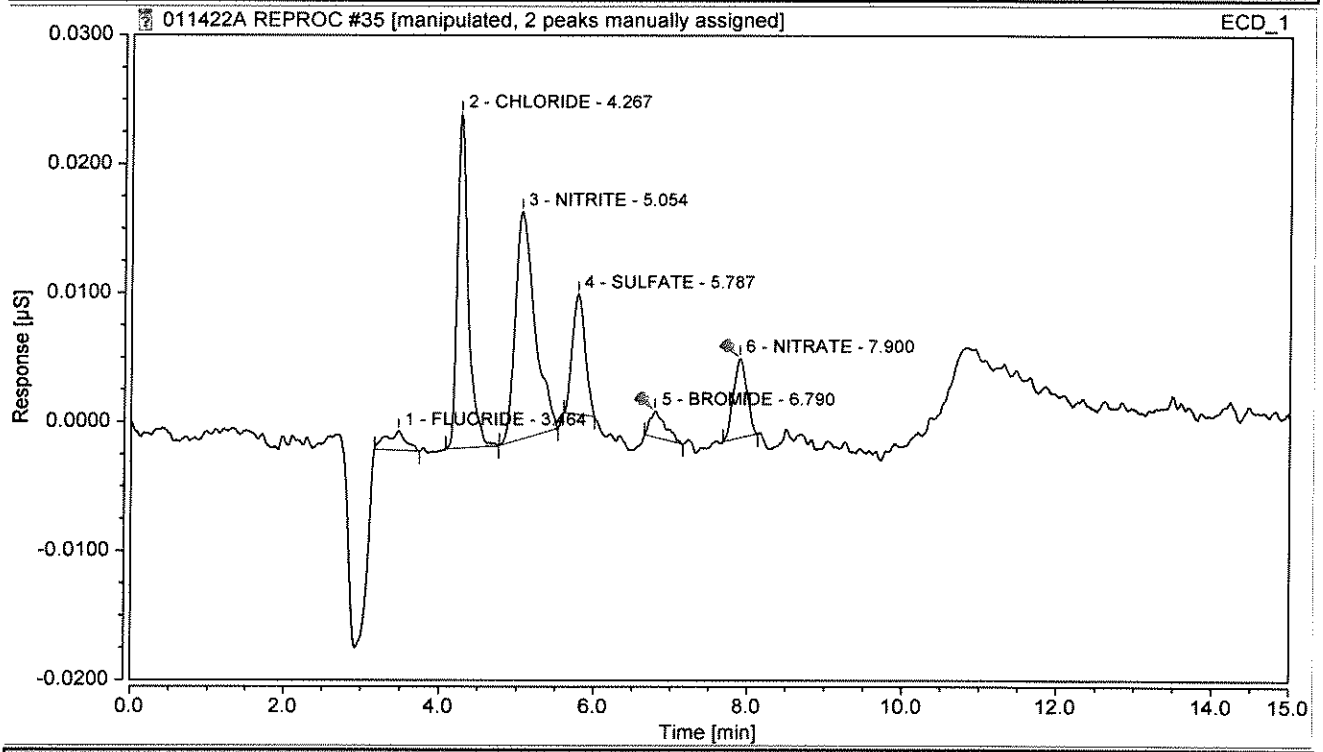
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	0.004	0.026	45.71	59.52	0.1554	n.a.
2	NITRITE	5.054	0.005	0.018	54.29	40.48	0.0081	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.009**	**0.044**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.99**
Vial Number:	**35**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**15/Jan/22 00:01**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

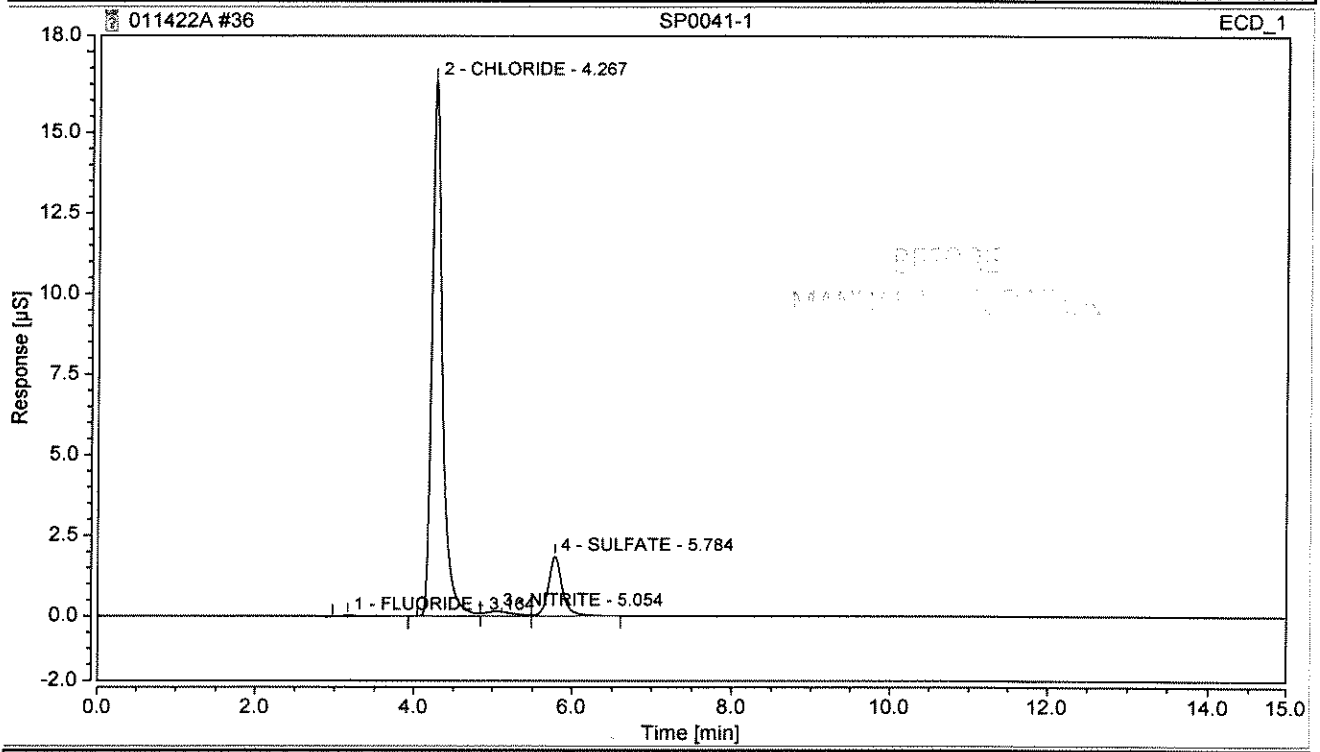
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.464	0.000	0.001	3.23	2.39	0.0009	n.a.
2	CHLORIDE	4.267	0.004	0.026	32.25	41.40	0.1554	n.a.
3	NITRITE	5.054	0.005	0.018	38.31	28.16	0.0081	n.a.
4	SULFATE	5.787	0.002	0.009	13.15	14.92	0.0079	n.a.
5	BROMIDE	6.790	0.000	0.002	3.57	3.26	0.0035	n.a.
6	NITRATE	7.900	0.001	0.006	9.49	9.88	0.0885	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.013**	**0.063**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-1**	*Run Time (min):*	**14.98**
Vial Number:	**36**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**10.0**
Injection Date/Time:	**15/Jan/22 00:22**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

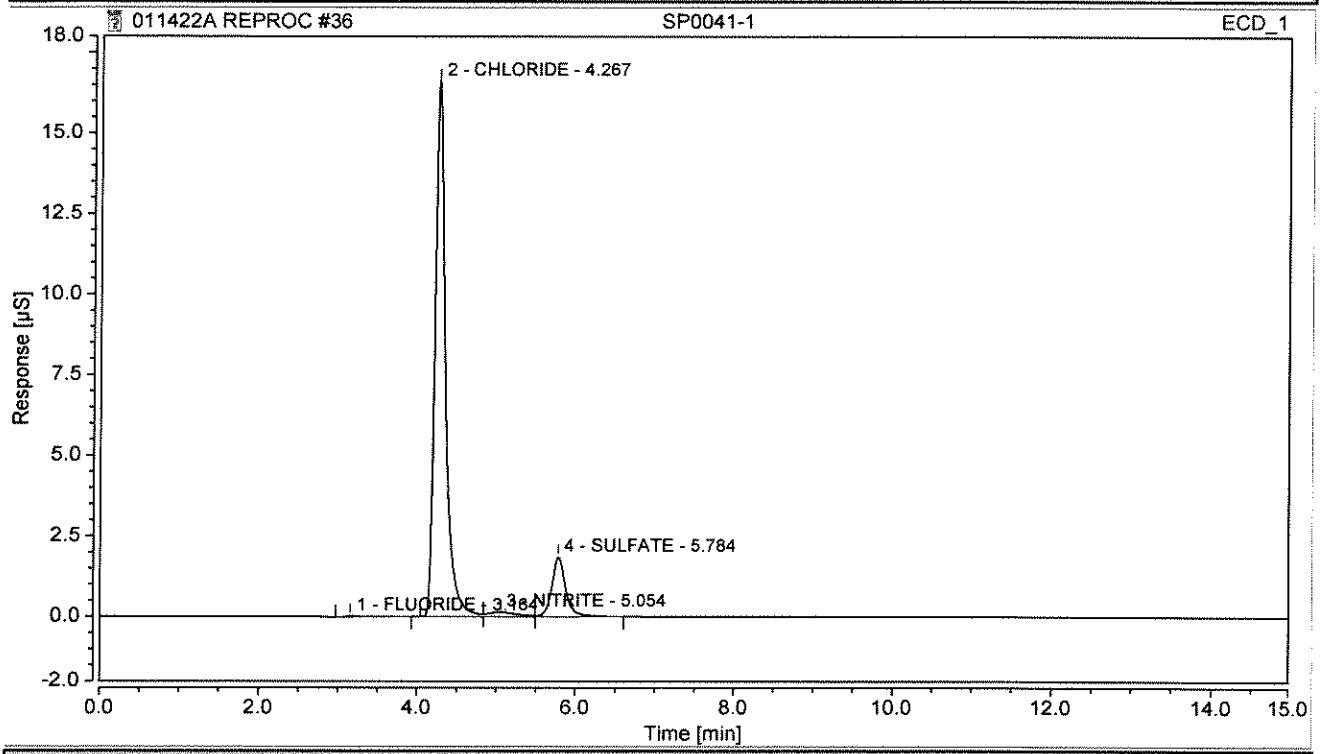
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.164	0.009	0.032	0.31	0.17	0.1975	n.a.
2	CHLORIDE	4.267	2.573	16.613	85.21	89.12	91.3627	n.a.
3	NITRITE	5.054	0.057	0.145	1.88	0.78	0.8996	n.a.
4	SULFATE	5.784	0.381	1.852	12.60	9.93	17.1271	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.020**	**18.641**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-1**	*Run Time (min):*	**14.98**
Vial Number:	**36**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**10.0**
Injection Date/Time:	**15/Jan/22 00:22**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

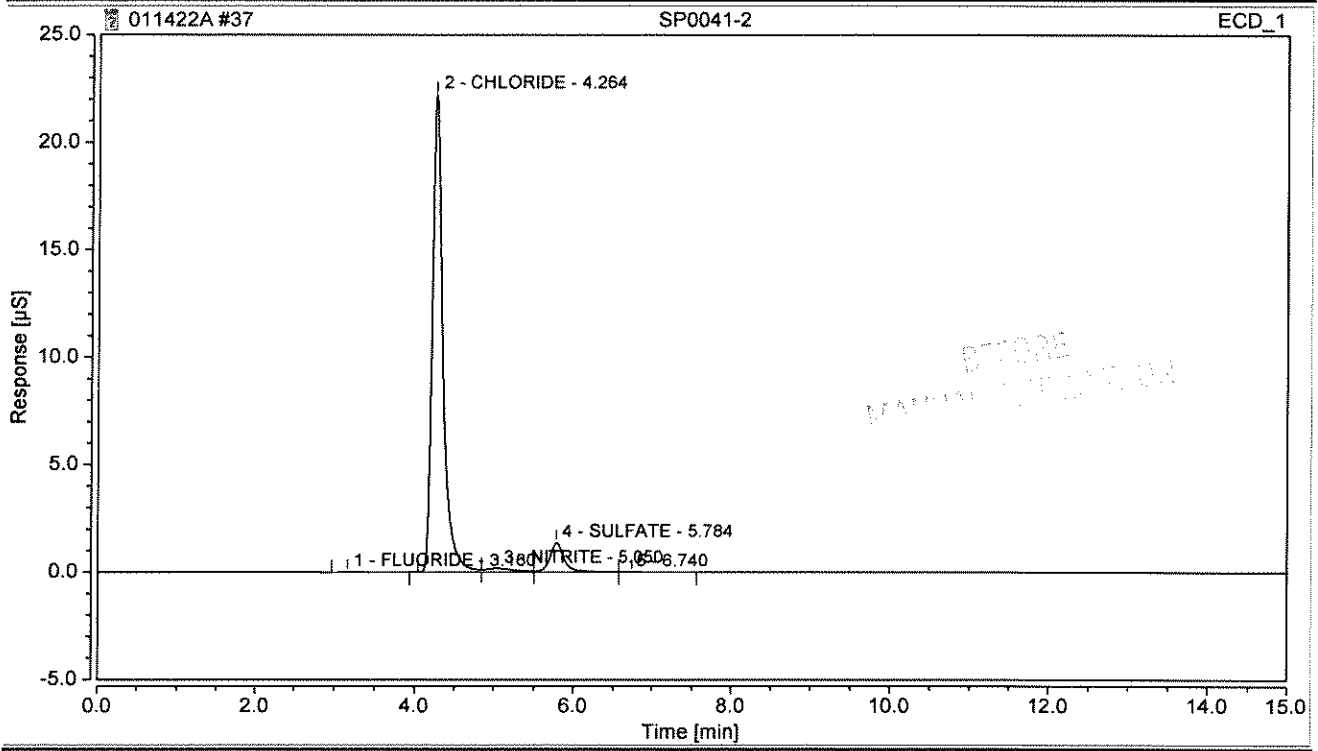
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.164	0.009	0.032	0.31	0.17	0.1975	n.a.
2	CHLORIDE	4.267	2.573	16.613	85.21	89.12	91.3627	n.a.
3	NITRITE	5.054	0.057	0.145	1.88	0.78	0.8996	n.a.
4	SULFATE	5.784	0.381	1.852	12.60	9.93	17.1271	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.020**	**18.641**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-2**	*Run Time (min):*	**14.98**
Vial Number:	**37**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**10.0**
Injection Date/Time:	**15/Jan/22 00:42**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

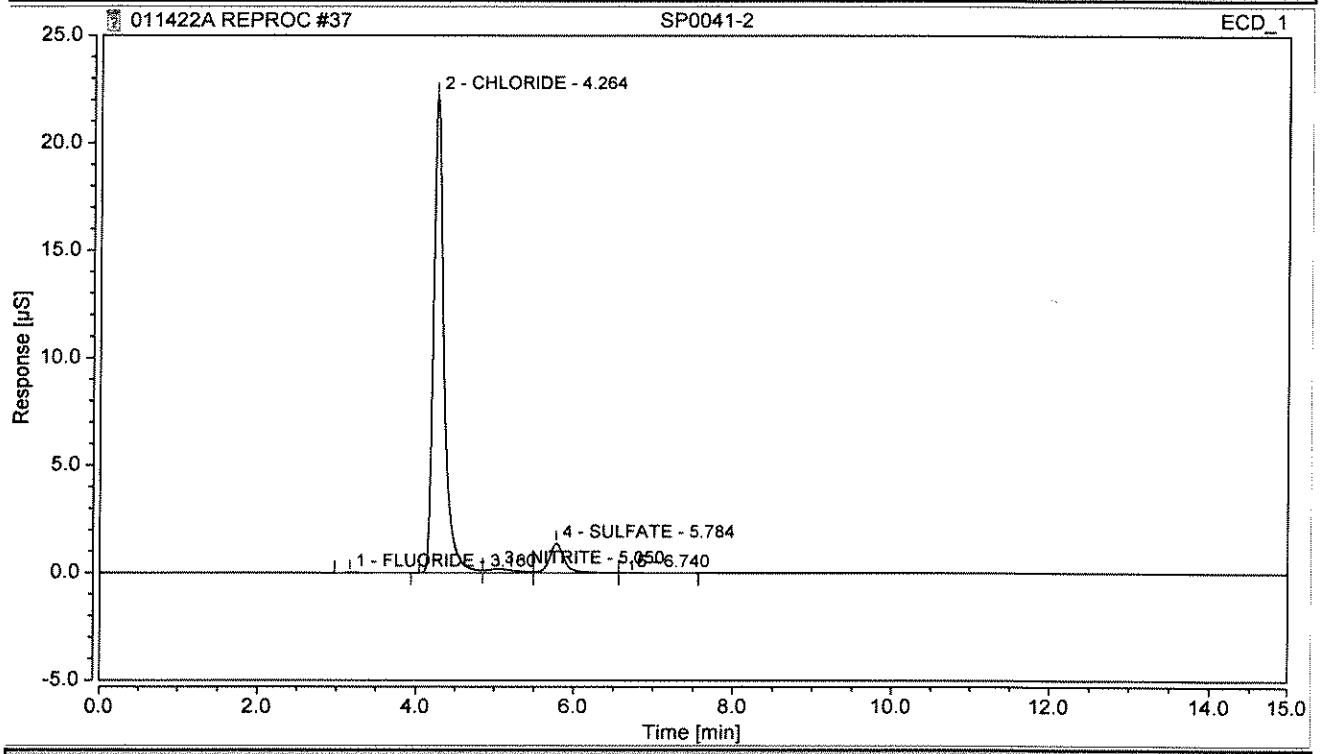
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.160	0.008	0.027	0.21	0.11	0.1742	n.a.
2	CHLORIDE	4.264	3.466	22.249	90.31	93.34	122.5748	n.a.
3	NITRITE	5.050	0.069	0.173	1.81	0.72	1.1018	n.a.
4	SULFATE	5.784	0.290	1.378	7.56	5.78	13.0623	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.834**	**23.827**	**99.90**	**99.96**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-2**	*Run Time (min):*	**14.98**
Vial Number:	**37**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**10.0**
Injection Date/Time:	**15/Jan/22 00:42**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

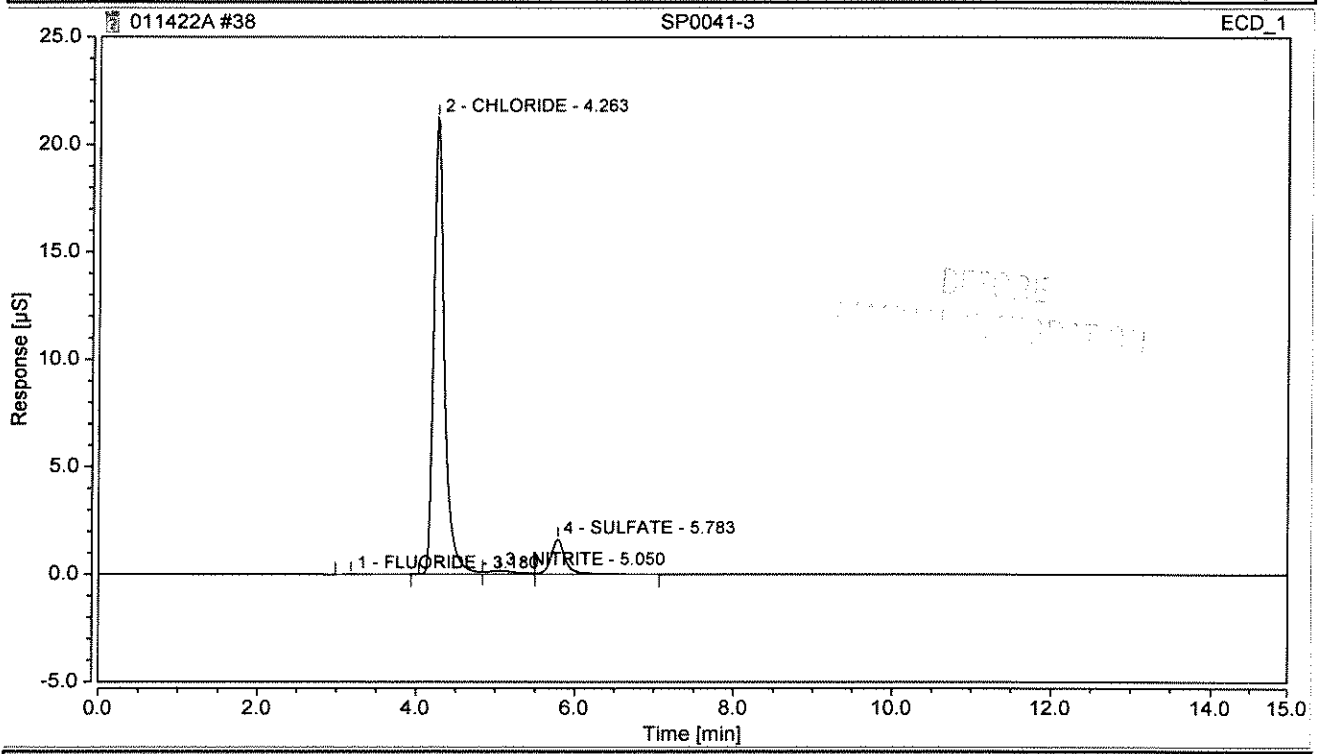
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.160	0.008	0.027	0.21	0.11	0.1742	n.a.
2	CHLORIDE	4.264	3.466	22.249	90.31	93.34	122.5748	n.a.
3	NITRITE	5.050	0.069	0.173	1.81	0.72	1.1018	n.a.
4	SULFATE	5.784	0.290	1.378	7.56	5.78	13.0623	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.834**	**23.827**	**99.90**	**99.96**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-3**	*Run Time (min):*	**14.98**
Vial Number:	**38**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**10.0**
Injection Date/Time:	**15/Jan/22 01:03**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

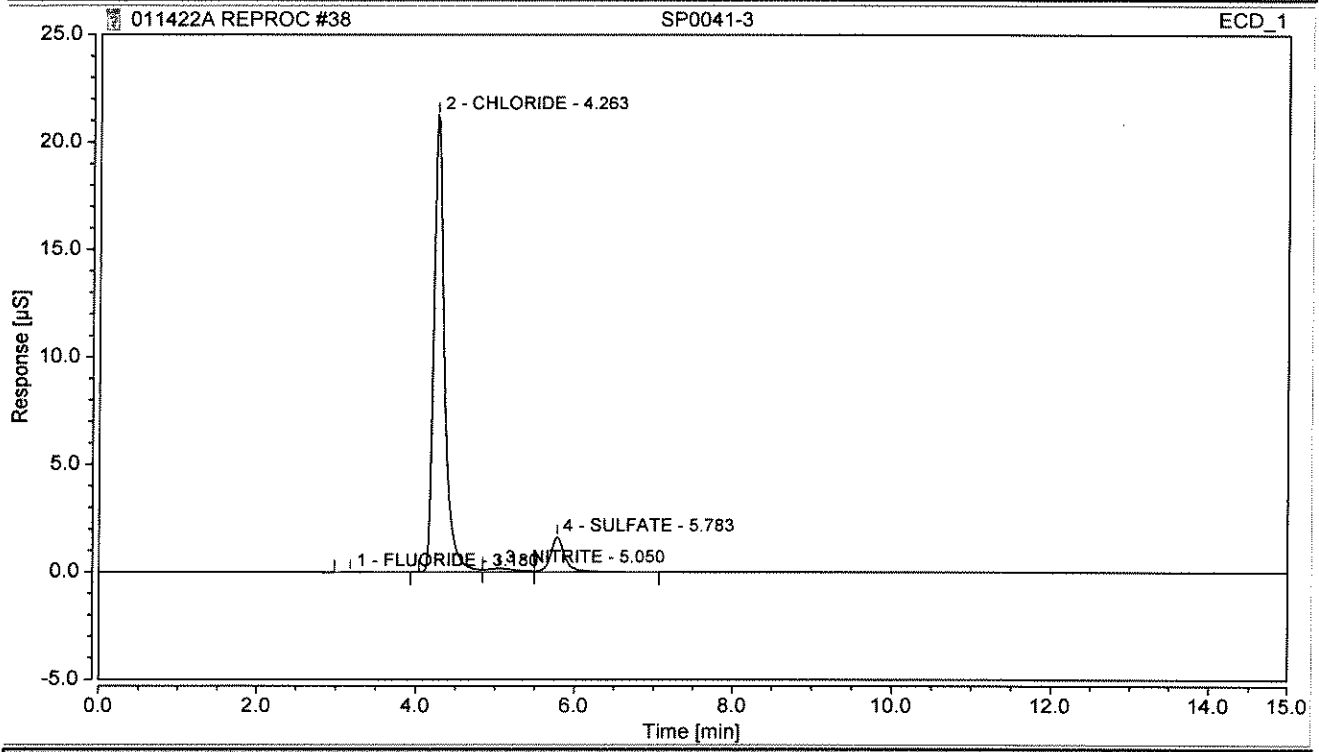
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.180	0.008	0.020	0.21	0.09	0.1671	n.a.
2	CHLORIDE	4.263	3.311	21.265	88.85	92.16	117.1756	n.a.
3	NITRITE	5.050	0.067	0.165	1.79	0.72	1.0555	n.a.
4	SULFATE	5.783	0.341	1.624	9.15	7.04	15.3500	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.727**	**23.074**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-3**	*Run Time (min):*	**14.98**
Vial Number:	**38**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**10.0**
Injection Date/Time:	**15/Jan/22 01:03**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

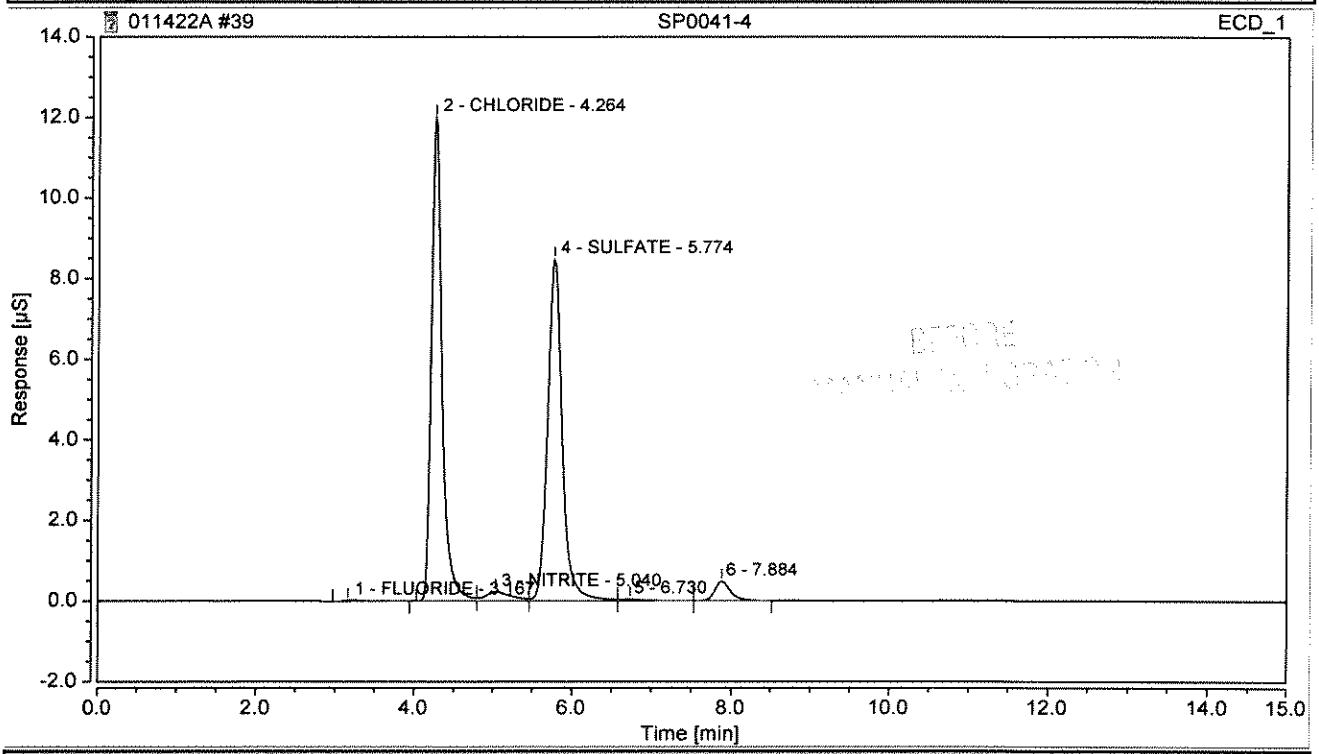
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.180	0.008	0.020	0.21	0.09	0.1671	n.a.
2	CHLORIDE	4.263	3.311	21.265	88.85	92.16	117.1756	n.a.
3	NITRITE	5.050	0.067	0.165	1.79	0.72	1.0555	n.a.
4	SULFATE	5.783	0.341	1.624	9.15	7.04	15.3500	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.727**	**23.074**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-4**	*Run Time (min):*	**14.99**
Vial Number:	**39**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**5.0**
Injection Date/Time:	**15/Jan/22 01:24**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

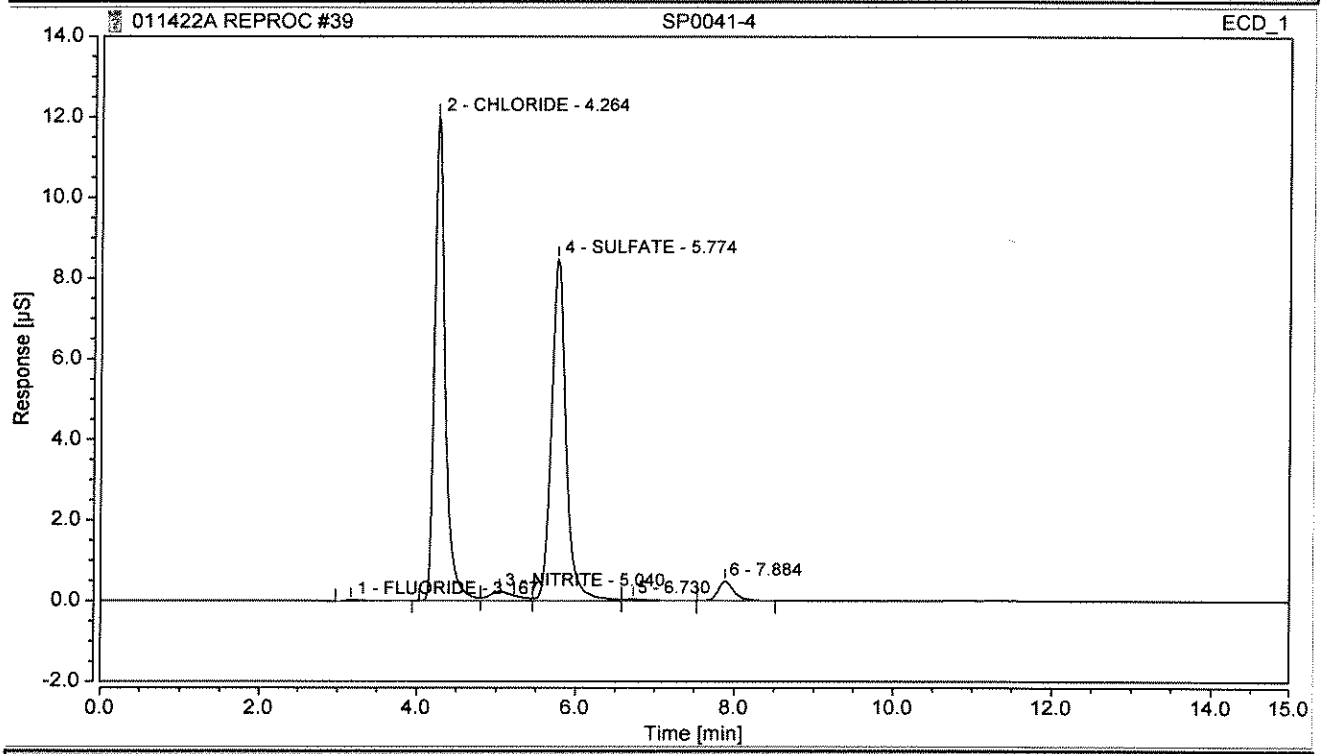
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	0.010	0.032	0.26	0.15	0.1079	n.a.
2	CHLORIDE	4.264	1.841	12.017	47.63	56.48	32.8820	n.a.
3	NITRITE	5.040	0.085	0.226	2.21	1.06	0.6779	n.a.
4	SULFATE	5.774	1.805	8.487	46.71	39.88	40.6219	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.742**	**20.761**	**96.81**	**97.57**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-4**	*Run Time (min):*	**14.99**
Vial Number:	**39**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**5.0**
Injection Date/Time:	**15/Jan/22 01:24**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

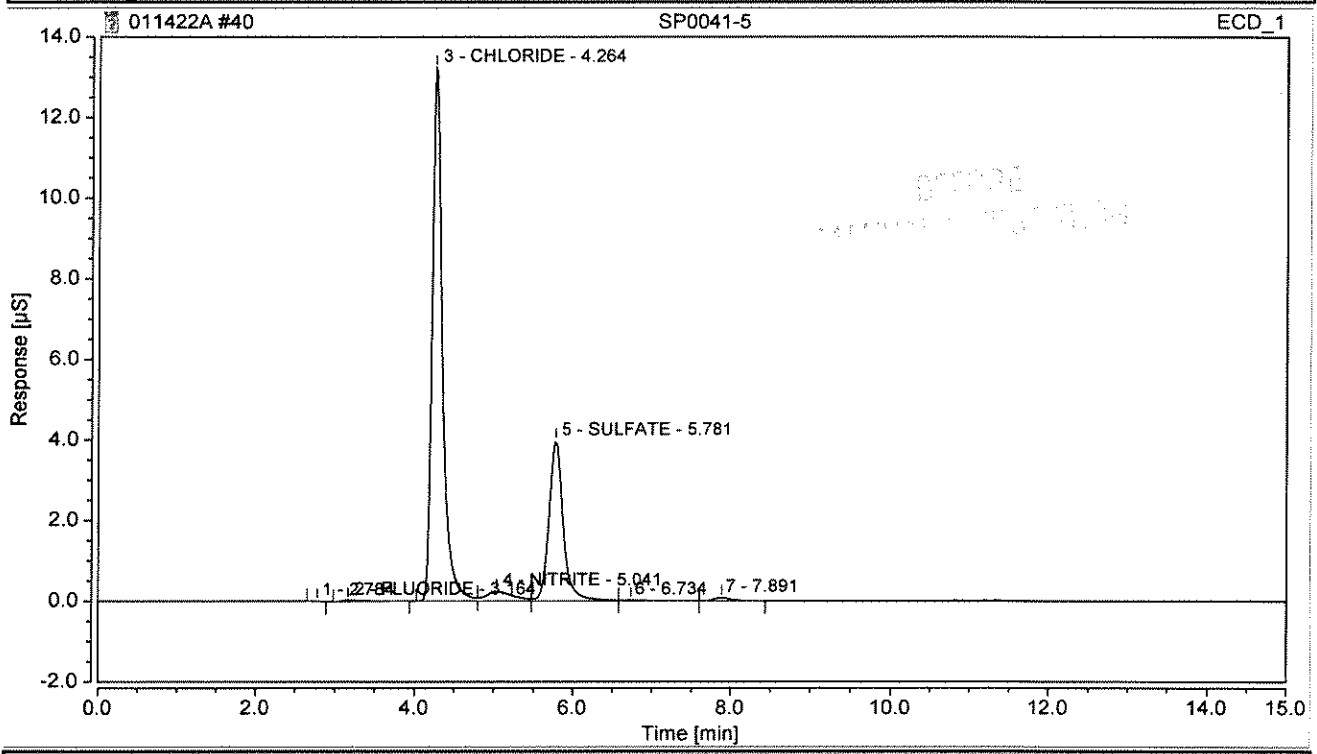
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	0.010	0.032	0.26	0.15	0.1079	n.a.
2	CHLORIDE	4.264	1.841	12.017	47.63	56.48	32.8820	n.a.
3	NITRITE	5.040	0.085	0.226	2.21	1.06	0.6779	n.a.
4	SULFATE	5.774	1.805	8.487	46.71	39.88	40.6219	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.742**	**20.761**	**96.81**	**97.57**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-5**	*Run Time (min):*	**14.99**
Vial Number:	**40**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**5.0**
Injection Date/Time:	**15/Jan/22 01:45**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

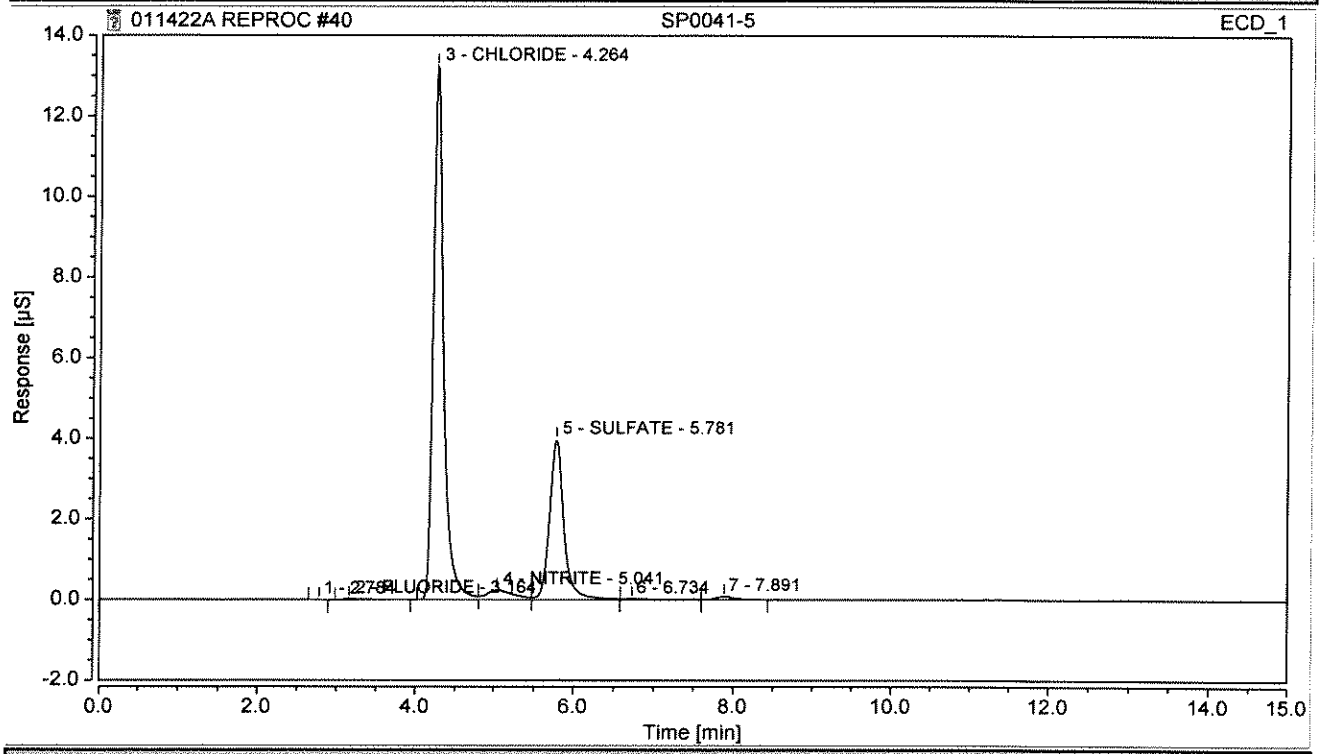
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
2	FLUORIDE	3.164	0.010	0.033	0.32	0.19	0.1021	n.a.
3	CHLORIDE	4.264	2.032	13.237	67.69	75.26	36.2212	n.a.
4	NITRITE	5.041	0.094	0.241	3.13	1.37	0.7445	n.a.
5	SULFATE	5.781	0.838	3.972	27.90	22.58	18.8480	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**2.973**	**17.482**	**99.04**	**99.39**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-5**	*Run Time (min):*	**14.99**
Vial Number:	**40**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**5.0**
Injection Date/Time:	**15/Jan/22 01:45**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

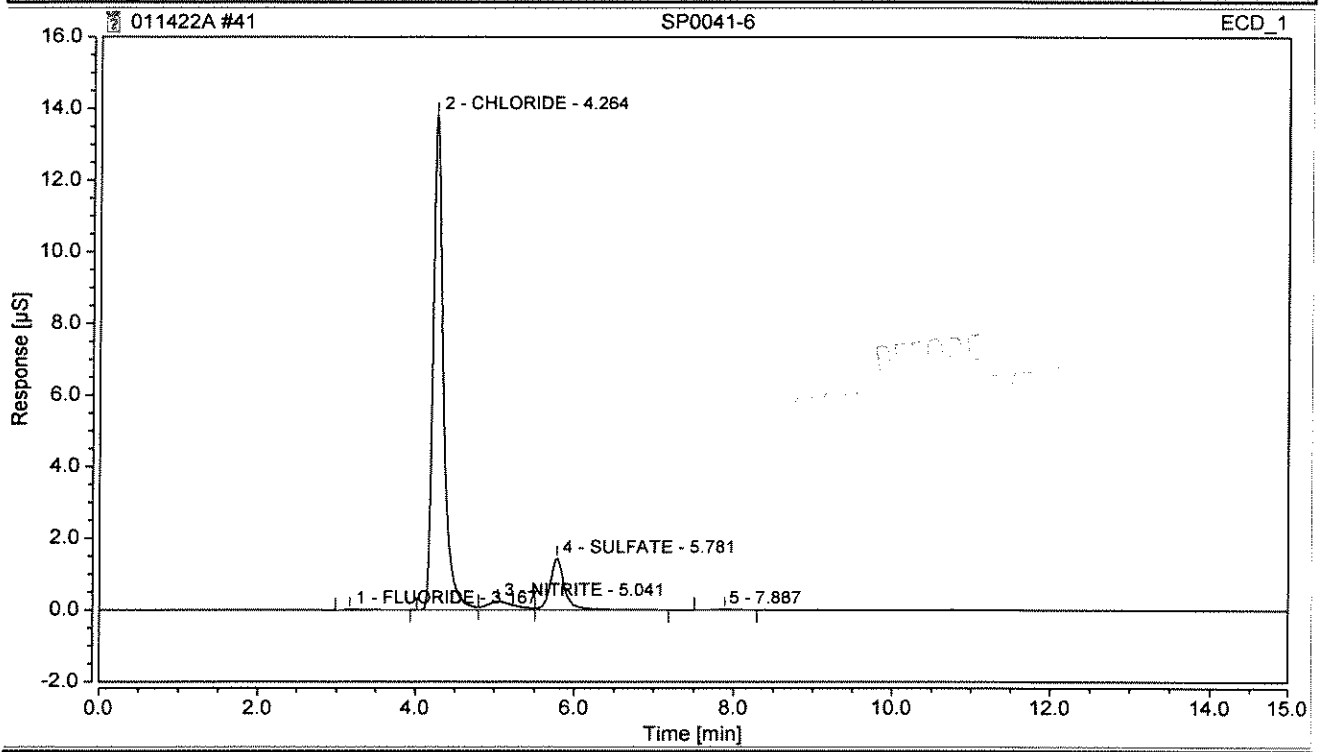
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
2	FLUORIDE	3.164	0.010	0.033	0.32	0.19	0.1021	n.a.
3	CHLORIDE	4.264	2.032	13.237	67.69	75.26	36.2212	n.a.
4	NITRITE	5.041	0.094	0.241	3.13	1.37	0.7445	n.a.
5	SULFATE	5.781	0.838	3.972	27.90	22.58	18.8480	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**2.973**	**17.482**	**99.04**	**99.39**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-6**	*Run Time (min):*	**14.98**
Vial Number:	**41**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**5.0**
Injection Date/Time:	**15/Jan/22 02:06**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

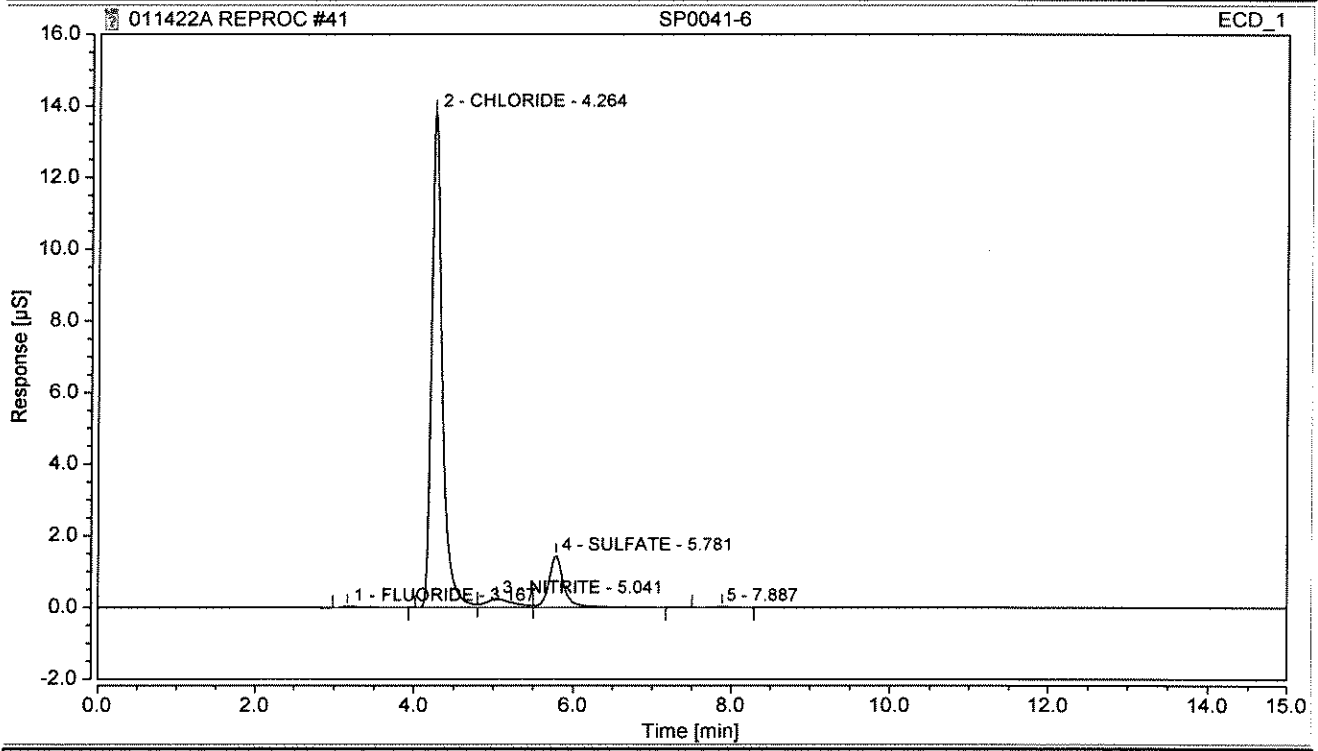
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	0.010	0.031	0.39	0.20	0.1056	n.a.
2	CHLORIDE	4.264	2.126	13.823	83.79	88.98	37.8645	n.a.
3	NITRITE	5.041	0.092	0.232	3.64	1.49	0.7326	n.a.
4	SULFATE	5.781	0.305	1.435	12.03	9.24	6.8677	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**2.534**	**15.521**	**99.86**	**99.90**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-6**	*Run Time (min):*	**14.98**
Vial Number:	**41**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**5.0**
Injection Date/Time:	**15/Jan/22 02:06**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

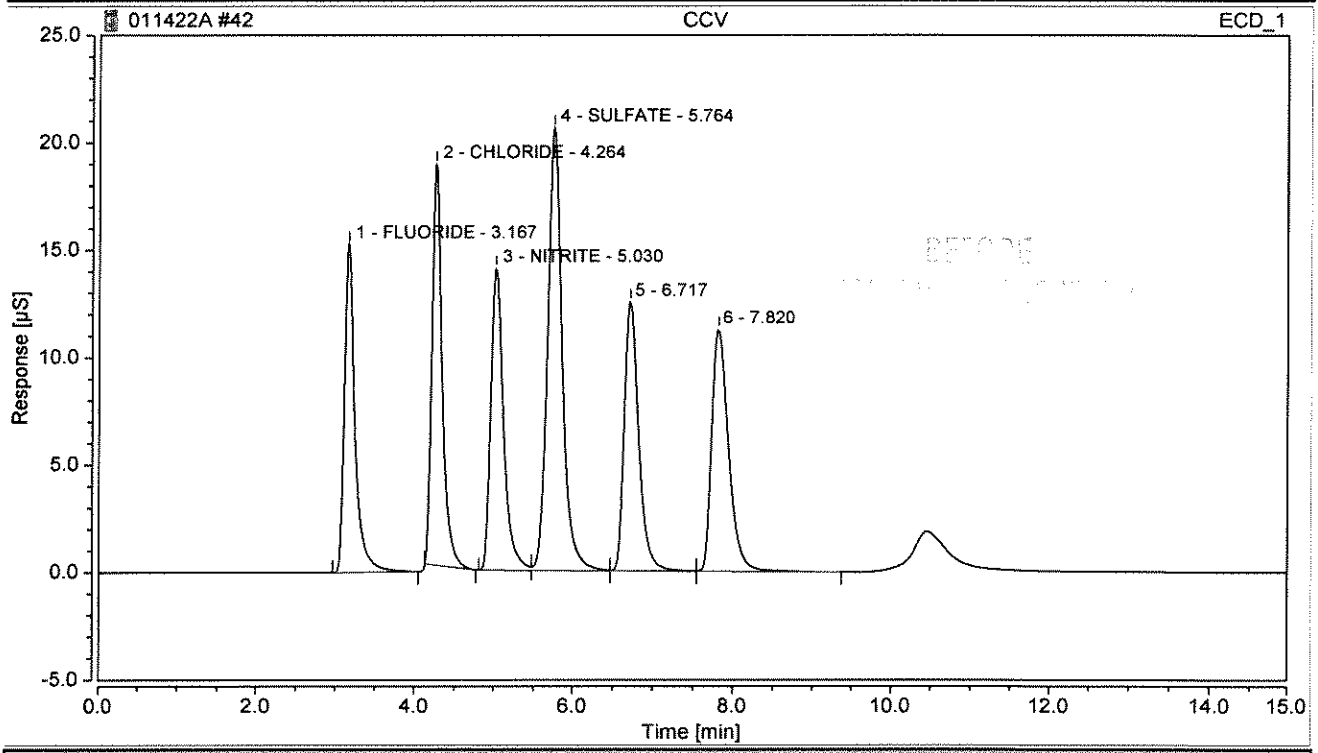
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	0.010	0.031	0.39	0.20	0.1056	n.a.
2	CHLORIDE	4.264	2.126	13.823	83.79	88.98	37.8645	n.a.
3	NITRITE	5.041	0.092	0.232	3.64	1.49	0.7326	n.a.
4	SULFATE	5.781	0.305	1.435	12.03	9.24	6.8677	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**2.534**	**15.521**	**99.86**	**99.90**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.98**
Vial Number:	**42**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**15/Jan/22 02:26**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

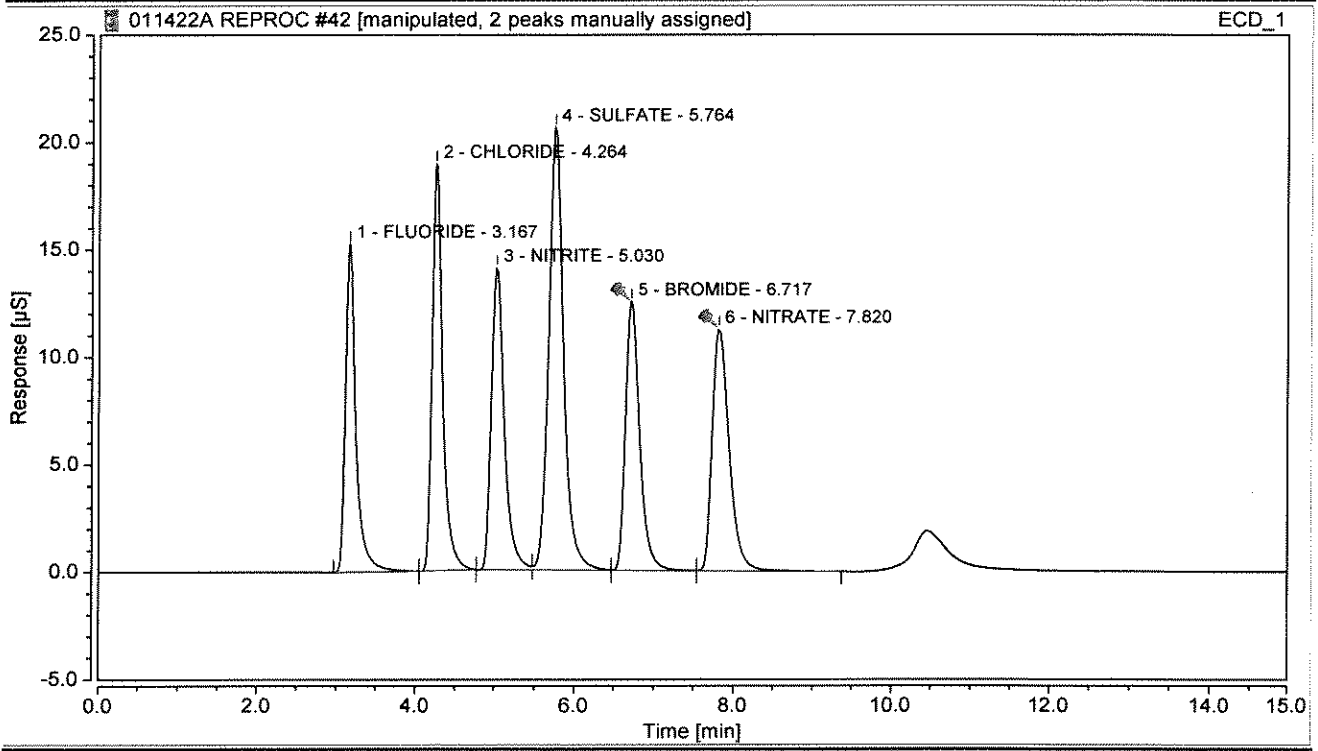
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	2.377	15.295	13.49	16.54	5.0387	0.7732
2	CHLORIDE	4.264	2.784	18.669	15.81	20.19	9.8724	-1.2757
3	NITRITE	5.030	2.612	14.077	14.83	15.22	4.1421	3.5533
4	SULFATE	5.764	4.438	20.633	25.20	22.31	19.9705	-0.1476
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.210**	**68.675**	**69.32**	**74.25**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.98**
Vial Number:	**42**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**15/Jan/22 02:26**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

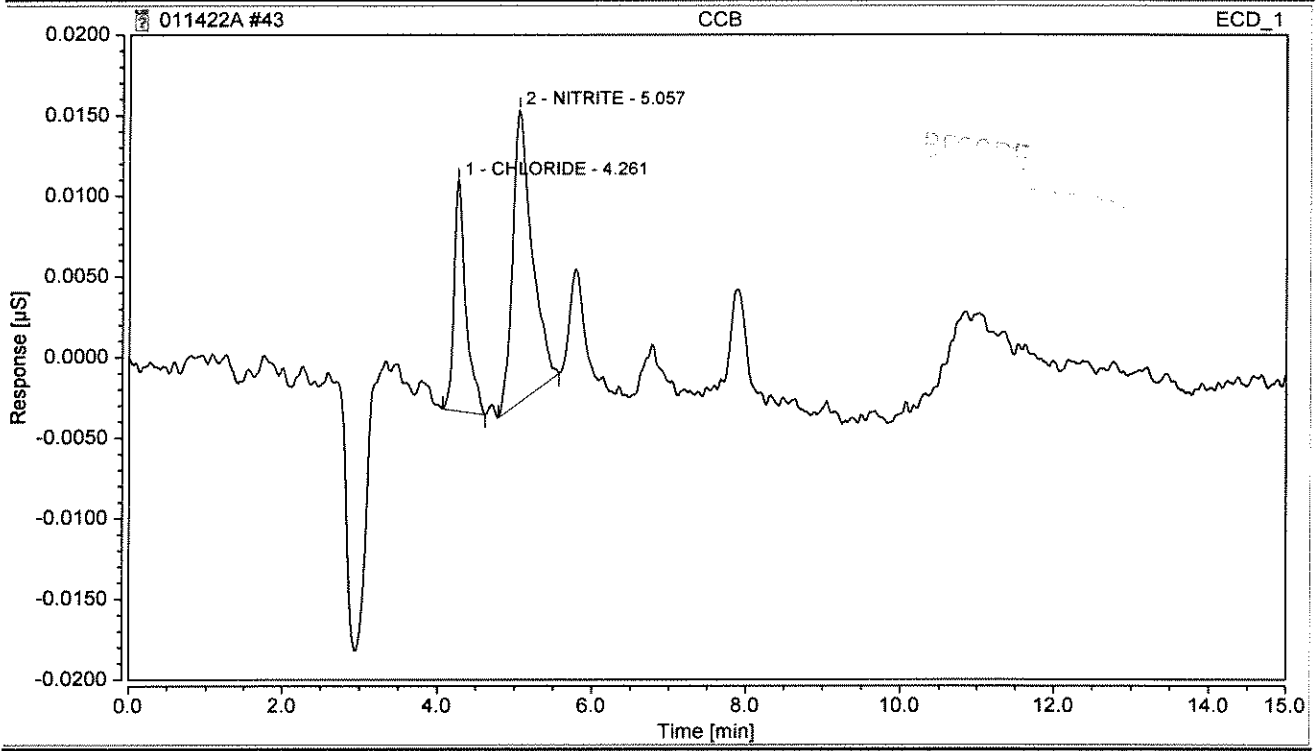
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	2.377	15.295	13.42	16.49	5.0384	0.7679
2	CHLORIDE	4.264	2.900	18.946	16.38	20.43	10.2795	2.7946
3	NITRITE	5.030	2.605	14.068	14.71	15.17	4.1319	3.2986
4	SULFATE	5.764	4.430	20.625	25.02	22.24	19.9370	-0.3148
5	BROMIDE	6.717	2.600	12.528	14.69	13.51	21.4398	7.1989
6	NITRATE	7.820	2.793	11.277	15.77	12.16	3.7982	-5.0455
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**17.706**	**92.739**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.99**
Vial Number:	**43**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**15/Jan/22 02:47**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

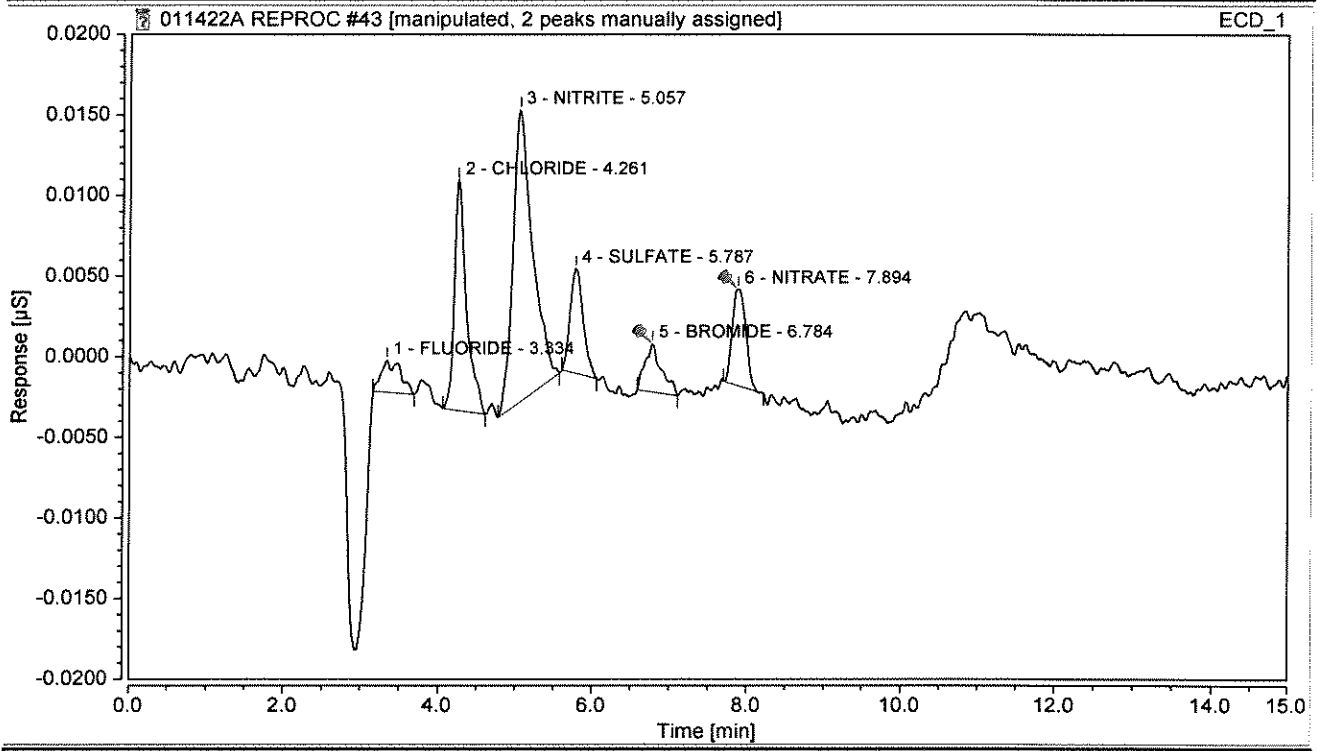
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.261	0.003	0.014	32.86	44.11	0.1493	n.a.
2	NITRITE	5.057	0.005	0.018	67.14	55.89	0.0084	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.008**	**0.032**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.99**
Vial Number:	**43**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**15/Jan/22 02:47**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.334	0.001	0.002	4.99	4.00	0.0012	n.a.
2	CHLORIDE	4.261	0.003	0.014	22.10	28.63	0.1493	n.a.
3	NITRITE	5.057	0.005	0.018	45.15	36.28	0.0084	n.a.
4	SULFATE	5.787	0.001	0.006	10.97	13.01	0.0058	n.a.
5	BROMIDE	6.784	0.001	0.003	6.44	6.07	0.0052	n.a.
6	NITRATE	7.894	0.001	0.006	10.36	12.01	0.0884	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.012**	**0.050**	**100.00**	**100.00**		

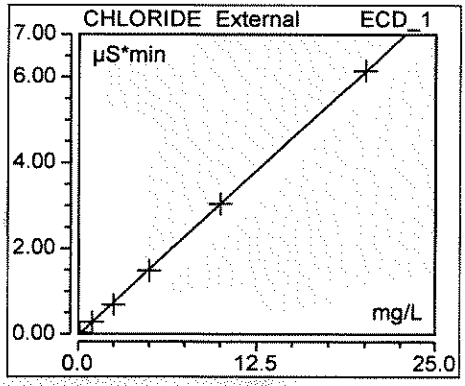
Calibration Batch Report

Sequence:	**010422A CAL**	*Injection Volume:*	**200.00**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Operator:*	**Katahdin Analytical**
Inj. Date / Time:	**04-Jan-2022 / 14:04**	*Run Time:*	**14.9805**

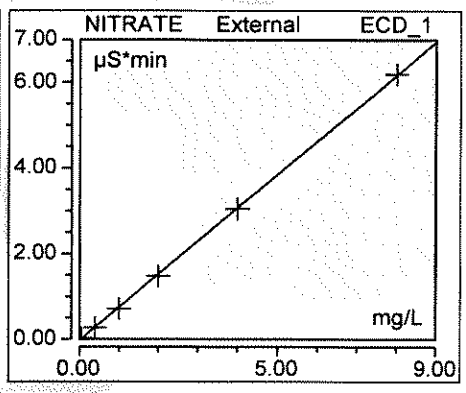
Calibration Summary

Peak Name	Eval.Type	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Coeff.Det. %
FLUORIDE	Area	Lin	6.000	0.000	0.489	0.000	99.9444
CHLORIDE	Area	in, WithOffse	7.000	-0.029	0.308	0.000	99.9754
NITRITE	Area	Lin	7.000	0.000	0.669	0.000	99.9280
SULFATE	Area	Lin	7.000	0.000	0.230	0.000	99.9792
BROMIDE	Height	Lin	6.000	0.000	0.649	0.000	99.9811
NITRATE	Area	in, WithOffse	7.000	-0.035	0.776	0.000	99.9775
		AVERAGE:		-0.0108	0.5202	0.0000	99.9643

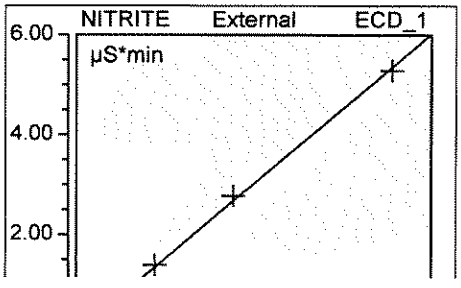
Injection Name / CHLORIDE	Ret.Time min CHLORIDE	Area µS*min CHLORIDE	Height µS CHLORIDE	Amount mg/L CHLORIDE
	ECD_1	ECD_1	ECD_1	ECD_1
CAL 1	4.287	0.0016	0.008	0.100
CAL 2	4.287	0.0145	0.075	0.142
CAL 3	4.277	0.2229	1.490	0.819
CAL 4	4.277	0.6331	4.301	2.150
CAL 5	4.277	1.3263	8.800	4.399
CAL 6	4.277	2.8978	18.330	9.499
CAL 7	4.274	5.6639	36.566	18.476
Average	4.279			
Rel. Std. Dev.	0.127 %			



Injection Name / NITRATE	Ret.Time min NITRATE	Area µS*min NITRATE	Height µS NITRATE	Amount mg/L NITRATE
	ECD_1	ECD_1	ECD_1	ECD_1
CAL 1	7.927	0.0014	0.006	0.047
CAL 2	7.947	0.0143	0.052	0.064
CAL 3	7.923	0.2126	0.900	0.319
CAL 4	7.907	0.6434	2.721	0.875
CAL 5	7.890	1.3767	5.599	1.819
CAL 6	7.860	2.9279	11.276	3.818
CAL 7	7.807	5.9857	21.546	7.758
Average	7.895			
Rel. Std. Dev.	0.604 %			



Injection Name / NITRITE	Ret.Time min NITRITE	Area µS*min NITRITE	Height µS NITRITE	Amount mg/L NITRITE
	ECD_1	ECD_1	ECD_1	ECD_1
CAL 1	5.127	0.0048	0.012	0.007
CAL 2	5.060	0.0176	0.069	0.026
CAL 3	5.047	0.1957	1.124	0.292
CAL 4	5.047	0.6065	3.481	0.906



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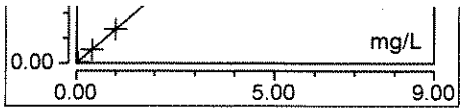
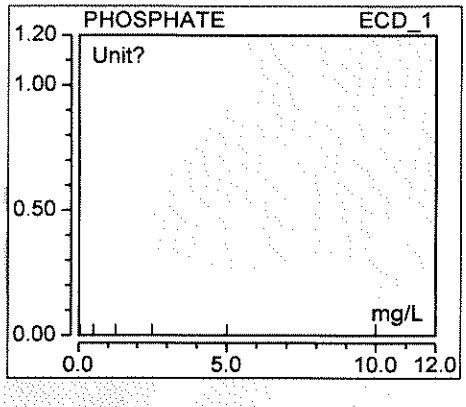
Version 7.1.0.898

Katahdin Analytical Services 5000138

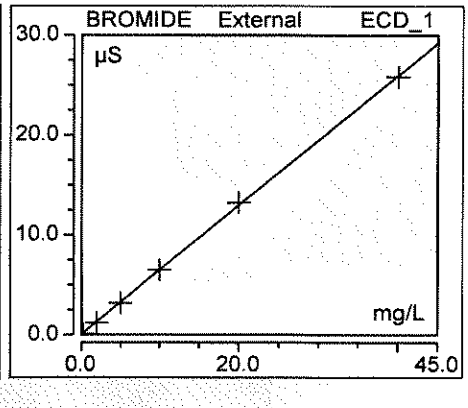
CAL 5	5.047	1.2677	6.958	1.895
CAL 6	5.050	2.6144	13.480	3.907
CAL 7	5.051	5.0018	24.501	7.475
Average	5.061			
Rel. Std. Dev.	0.583 %			



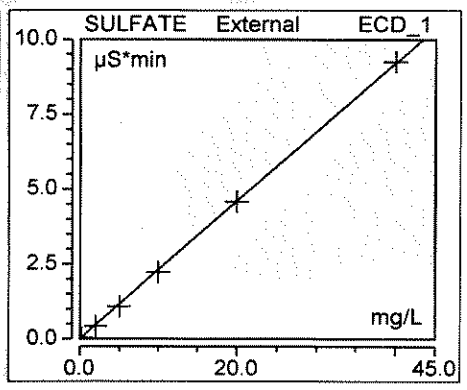
Injection Name **PHOSPHATE**	Ret.Time min PHOSPHATE	Area µS*min PHOSPHATE	Height µS PHOSPHATE	Amount mg/L PHOSPHATE
	ECD_1	ECD_1	ECD_1	ECD_1
CAL 1	n.a.	n.a.	n.a.	n.a.
CAL 2	n.a.	n.a.	n.a.	n.a.
CAL 3	n.a.	n.a.	n.a.	n.a.
CAL 4	n.a.	n.a.	n.a.	n.a.
CAL 5	n.a.	n.a.	n.a.	n.a.
CAL 6	n.a.	n.a.	n.a.	n.a.
CAL 7	n.a.	n.a.	n.a.	n.a.
Average	#DIV/0!			
Rel. Std. Dev.	#DIV/0!			



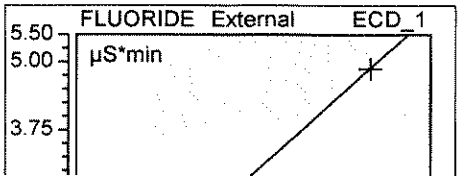
Injection Name **BROMIDE**	Ret.Time min BROMIDE	Area µS*min BROMIDE	Height µS BROMIDE	Amount mg/L BROMIDE
	ECD_1	ECD_1	ECD_1	ECD_1
CAL 1	6.871	0.0004	0.001	0.002
CAL 2	6.794	0.0124	0.047	0.072
CAL 3	6.777	0.1760	0.846	1.305
CAL 4	6.770	0.5624	2.758	4.252
CAL 5	6.763	1.2020	5.749	8.864
CAL 6	6.750	2.5659	11.789	18.177
CAL 7	6.721	5.2191	23.381	36.050
Average	6.778			
Rel. Std. Dev.	0.691 %			



Injection Name **SULFATE**	Ret.Time min SULFATE	Area µS*min SULFATE	Height µS SULFATE	Amount mg/L SULFATE
	ECD_1	ECD_1	ECD_1	ECD_1
CAL 1	5.831	0.0007	0.004	0.003
CAL 2	5.820	0.0320	0.135	0.139
CAL 3	5.810	0.3419	1.713	1.484
CAL 4	5.807	0.9948	4.935	4.317
CAL 5	5.800	2.0947	10.178	9.091
CAL 6	5.787	4.4178	20.927	19.173
CAL 7	5.764	8.9537	41.558	38.858
Average	5.803			
Rel. Std. Dev.	0.381 %			

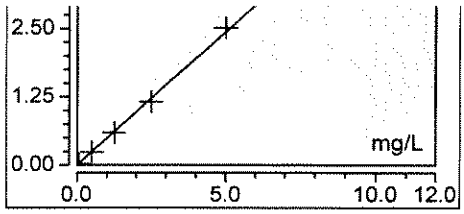


Injection Name **FLUORIDE**	Ret.Time min FLUORIDE	Area µS*min FLUORIDE	Height µS FLUORIDE	Amount mg/L FLUORIDE
	ECD_1	ECD_1	ECD_1	ECD_1
CAL 1	3.511	0.0002	0.001	0.000



CAL 2	3.180	0.0069	0.044	0.014
CAL 3	3.167	0.1623	1.150	0.332
CAL 4	3.170	0.5196	3.635	1.062
CAL 5	3.170	1.0717	7.321	2.191
CAL 6	3.177	2.3790	14.654	4.864
CAL 7	3.184	4.7459	27.661	9.704

Average	3.223
Rel. Std. Dev.	3.944 %



Anion Summary Report

No. CHLORIDE	Name CHLORIDE	Time min CHLORIDE ECD_1	Area µS*min CHLORIDE ECD_1	Rel.Area % CHLORIDE ECD_1	Height µS CHLORIDE ECD_1	Rel.Height % CHLORIDE ECD_1	Amount mg/L CHLORIDE ECD_1
1	CAL 1	4.287	0.0016	17.04	0.01	25.14	0.1003
2	CAL 2	4.287	0.0145	14.81	0.07	17.73	0.1422
3	CAL 3	4.277	0.2229	17.00	1.49	20.63	0.8186
4	CAL 4	4.277	0.6331	15.99	4.30	19.70	2.1497
5	CAL 5	4.277	1.3263	15.90	8.80	19.73	4.3993
6	CAL 6	4.277	2.8978	16.28	18.33	20.26	9.4994
7	CAL 7	4.274	5.6639	15.92	36.57	20.87	18.4760
	Sum:	29.955	10.760	112.941	69.570	144.069	35.586
	Average:	4.279	1.537	16.134	9.939	20.581	5.084
	Rel.Std.Dev:	0.127 %	135.808 %	4.709 %	134.981 %	10.976 %	133.263 %

No. NITRATE	Name NITRATE	Time min NITRATE ECD_1	Area µS*min NITRATE ECD_1	Rel.Area % NITRATE ECD_1	Height µS NITRATE ECD_1	Rel.Height % NITRATE ECD_1	Amount mg/L NITRATE ECD_1
1	CAL 1	7.927	0.0014	15.25	0.01	17.55	0.0473
2	CAL 2	7.947	0.0143	14.62	0.05	12.41	0.0639
3	CAL 3	7.923	0.2126	16.21	0.90	12.46	0.3194
4	CAL 4	7.907	0.6434	16.25	2.72	12.47	0.8746
5	CAL 5	7.890	1.3767	16.51	5.60	12.55	1.8195
6	CAL 6	7.860	2.9279	16.45	11.28	12.47	3.8182
7	CAL 7	7.807	5.9857	16.83	21.55	12.30	7.7581
	Sum:	55.262	11.162	112.117	42.100	92.194	14.701
	Average:	7.895	1.595	16.017	6.014	13.171	2.100
	Rel.Std.Dev:	0.604 %	137.771 %	4.905 %	131.928 %	14.659 %	134.783 %

No. NITRITE	Name NITRITE	Time min NITRITE ECD_1	Area µS*min NITRITE ECD_1	Rel.Area % NITRITE ECD_1	Height µS NITRITE ECD_1	Rel.Height % NITRITE ECD_1	Amount mg/L NITRITE ECD_1
1	CAL 1	5.127	0.0048	52.95	0.01	38.84	0.0072
2	CAL 2	5.060	0.0176	18.01	0.07	16.26	0.0263
3	CAL 3	5.047	0.1957	14.92	1.12	15.55	0.2925
4	CAL 4	5.047	0.6065	15.32	3.48	15.95	0.9064
5	CAL 5	5.047	1.2677	15.20	6.96	15.60	1.8946
6	CAL 6	5.050	2.6144	14.69	13.48	14.90	3.9073
7	CAL 7	5.051	5.0018	14.06	24.50	13.98	7.4754
	Sum:	35.428	9.708	145.146	49.624	131.085	14.510
	Average:	5.061	1.387	20.735	7.089	18.726	2.073
	Rel.Std.Dev:	0.583 %	132.955 %	68.775 %	127.738 %	47.539 %	132.955 %

No. PHOSPHATE	Name PHOSPHATE	Time min PHOSPHATE ECD_1	Area µS*min PHOSPHATE ECD_1	Rel.Area % PHOSPHATE ECD_1	Height µS PHOSPHATE ECD_1	Rel.Height % PHOSPHATE ECD_1	Amount mg/L PHOSPHATE ECD_1
1	CAL 1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	CAL 2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	CAL 3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	CAL 4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	CAL 5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

6	CAL 6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	CAL 7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Sum:	0.000	0.000	0.000	0.000	0.000	0.000
	Average:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Rel.Std.Dev:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

No. BROMIDE	Name BROMIDE	Time min BROMIDE ECD_1	Area µS*min BROMIDE ECD_1	Rel.Area % BROMIDE ECD_1	Height µS BROMIDE ECD_1	Rel.Height % BROMIDE ECD_1	Amount mg/L BROMIDE ECD_1
1	CAL 1	6.871	0.0004	4.52	0.00	3.70	0.0018
2	CAL 2	6.794	0.0124	12.69	0.05	11.15	0.0725
3	CAL 3	6.777	0.1760	13.42	0.85	11.72	1.3051
4	CAL 4	6.770	0.5624	14.20	2.76	12.63	4.2518
5	CAL 5	6.763	1.2020	14.41	5.75	12.89	8.8645
6	CAL 6	6.750	2.5659	14.41	11.79	13.03	18.1773
7	CAL 7	6.721	5.2191	14.67	23.38	13.34	36.0498
	Sum:	47.445	9.738	88.330	44.572	78.467	68.723
	Average:	6.778	1.391	12.619	6.367	11.210	9.818
	Rel.Std.Dev:	0.691 %	137.853 %	28.840 %	134.982 %	30.340 %	134.982 %

No. SULFATE	Name SULFATE	Time min SULFATE ECD_1	Area µS*min SULFATE ECD_1	Rel.Area % SULFATE ECD_1	Height µS SULFATE ECD_1	Rel.Height % SULFATE ECD_1	Amount mg/L SULFATE ECD_1
1	CAL 1	5.831	0.0007	7.89	0.00	11.50	0.0031
2	CAL 2	5.820	0.0320	32.76	0.14	32.05	0.1388
3	CAL 3	5.810	0.3419	26.07	1.71	23.72	1.4838
4	CAL 4	5.807	0.9948	25.12	4.94	22.61	4.3173
5	CAL 5	5.800	2.0947	25.12	10.18	22.82	9.0906
6	CAL 6	5.787	4.4178	24.82	20.93	23.13	19.1726
7	CAL 7	5.764	8.9537	25.17	41.56	23.72	38.8575
	Sum:	40.618	16.836	166.954	79.450	159.547	73.064
	Average:	5.803	2.405	23.851	11.350	22.792	10.438
	Rel.Std.Dev:	0.381 %	136.525 %	31.783 %	134.301 %	26.265 %	136.525 %

No. FLUORIDE	Name FLUORIDE	Time min FLUORIDE ECD_1	Area µS*min FLUORIDE ECD_1	Rel.Area % FLUORIDE ECD_1	Height µS FLUORIDE ECD_1	Rel.Height % FLUORIDE ECD_1	Amount mg/L FLUORIDE ECD_1
1	CAL 1	3.511	0.0002	2.35	0.00	3.27	0.0004
2	CAL 2	3.180	0.0069	7.11	0.04	10.40	0.0142
3	CAL 3	3.167	0.1623	12.38	1.15	15.92	0.3318
4	CAL 4	3.170	0.5196	13.12	3.63	16.65	1.0624
5	CAL 5	3.170	1.0717	12.85	7.32	16.41	2.1914
6	CAL 6	3.177	2.3790	13.36	14.65	16.20	4.8645
7	CAL 7	3.184	4.7459	13.34	27.66	15.79	9.7041
	Sum:	22.558	8.886	74.512	54.465	94.638	18.169
	Average:	3.223	1.269	10.645	7.781	13.520	2.596
	Rel.Std.Dev:	3.944 %	137.765 %	40.227 %	131.090 %	37.112 %	137.765 %

SERES ENGINEERING & SERVICES, LLC

FORT DEVENS 2021 LTM

SO8943

Ms. Leslie Dimond
207-874-2400

KATAHDIN ANALYTICAL SERVICES
600 TECHNOLOGY WAY
SCARBOROUGH, ME 04074

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SAMPLE DATA PACKAGE

NARRATIVE
KATAHDIN ANALYTICAL SERVICES
SERES ENGINEERING & SERVICES, LLC
FORT DEVENS 2021 LTM
SO8943

Sample Receipt

The following samples were received on December 30, 2021 and were logged in under Katahdin Analytical Services work order number SO8943 for a hardcopy due date of January 20, 2022.

KATAHDIN Sample No.	SERES Sample Identification
SO8943-1	MS-21-1D-FF-EVENT#4
SO8943-2	MS-21-1D-EVENT#4
SO8943-3	MS-21-2D-FF-EVENT#4
SO8943-4	MS-21-2D-EVENT#4
SO8943-5	MS-21-2S-FF-EVENT#4
SO8943-6	MS-21-2S-EVENT#4
SO8943-7	MS-21-4S-FF-EVENT#4
SO8943-8	MS-21-4S-EVENT#4

The samples were logged in for the analyses specified on the chain of custody form. All problems encountered and resolved during sample receipt have been documented on the applicable chain of custody forms.

We certify that the test results provided in this report meet all the requirements of the NELAC standards unless otherwise noted in this narrative or in the Report of Analysis.

We certify that the test results provided in this report are accredited under the laboratory's ISO/IEC 17025:2017 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation L2223.

Analytes which are reported but not listed on our ANAB scope of accreditation will be "^" flagged and the following language will be included in the case narrative for all DoD compliant work: "^" Indicates this analyte is not included on Katahdin Analytical Services DoD-ELAP Scope of Accreditation.

Sample analyses have been performed by the methods as noted herein.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact your Katahdin Analytical Services Project Manager, **Ms. Heather Manz**. This narrative is an integral part of the Report of Analysis.

Metals Analysis

The samples associated with Katahdin Work Order SO8943 were prepared and analyzed for metals in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA publication SW846, Third Edition, Final Updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), and V (2015), Office of Solid Waste and Emergency Response, U.S. EPA.

Inductively-Coupled Plasma (ICP) Atomic Emission Spectroscopic Analysis

Aqueous-matrix Katahdin Sample Numbers SO8943-(1-8) were digested for ICP analysis on 01/06/22 (QC Batch PA05ICW1) in accordance USEPA Method 3010A.

ICP analyses of Katahdin Work Order SO8943 samples were performed using a Thermo iCAP 6500 ICP spectrometer in accordance with USEPA Method 6010C. All samples were analyzed within holding times and all applicable analytical run QC criteria were met.

Reporting of Metals Results

Per client request, analytical results for client samples on Form I, preparation blanks on Form IIIP, and matrix QC samples on Forms VA, VD, and VI have been reported using the laboratory's Practical Quantitation Limits (PQL). All results were evaluated down to the laboratory's method detection limits (MDLs). Results that are less than the PQL are flagged with "U" in the C-qualifier column, and the PQL is listed in the concentration column. Results that fall between the MDL and the PQL are flagged with "J" in the C-qualifier column, and the measured concentration appears in the concentration column. These PQLs and MDLs have been adjusted for each sample based on the sample amounts used in preparation and analysis.

Analytical results on Forms VB and IX for client samples, analysis QC samples (serial dilutions and post-digestion spikes) have been reported down to the laboratory's method detection limits (MDLs). Analytical results that are below the MDLs are flagged with "U" in the C-qualifier column, and the adjusted MDL is listed in the concentration column.

Analytical results for instrument run QC samples (ICVs, ICBs, etc.) have been reported down to the laboratory's instrument detection limits (IDLs).

IDLs, MDLs, and PQLs are listed on Form 10 of the accompanying data package.

Wet Chemistry Analysis

The samples of Work Order SO8943 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for alkalinity, filterable residue, and total biochemical oxygen demand were performed according to "Standard Methods for the Examination of Water and Wastewater", 15th, 16th, 17th, 18th, 19th, and 20th editions, 1980, 1985, 1989, 1992, 1995, 1999. APHA-AWWA-WPCF.

Analyses for chloride and sulfate were performed according to "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA publication SW-846, Third Edition, Final Updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), and V (2015).

Analyses for nitrate were performed according to "Methods for the Determination of Inorganic Substances in Environmental Samples", EPA 600/R-93/100, August 1993.

All Wet Chemistry results were evaluated to Katahdin Analytical Services' Method Detection Limits (MDL). Measured concentrations that fall between the MDL and Katahdin's Limit of Quantitation (LOQ)

are flagged "J". Measured concentrations that are below the MDL are flagged "U" and reported as "U LOQ", where "LOQ" is the numerical value of the Limit of Quantitation.

All analyses were performed within analytical holding times. All quality control criteria were met.

Subcontracted Data

Analyses for Dissolved Organic Carbon by Method SW9060A were performed by subcontract laboratories. Please refer to the sections of the data package titled Subcontracted Data.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Quality Assurance Officer, or their designee, as verified by the following signature.

Leslie Dimond ***Feb 04, 2022***

Leslie Dimond
Quality Assurance Officer

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin Analytical Services, LLC.

Sample Receipt Condition Report

Client: Arcadis- Seres	KAS PM: HHM	Sampled By: Client	
Project:	KIMS Entry By: GV	Delivered By: KAS	
KAS Work Order#: 508943	KIMS Review By: HHM	Received By: GV	
	Labeled By: GV		
SDG #:	Cooler: 1 of 1	Date/Time Rec.: 12-30-21 / 13:58	

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓	X			See below
4. Chain of Custody matches samples?		✓			
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 3.1 — Thermometer ID: IR-1
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles: **Aqueous:** No bubble larger than a pea?				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
D.I. Water - Received within 48 hour HT?				✓	
7. Trip Blank present in cooler?	✓				
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	✓				
Sulfide - >9				✓	
Cyanide – pH >12				✓	
11. Bottleware Prepped on:					

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

No VS samples were present in cooler – rec. & logged in as 508914 - 11/12.

Katahdin ANALYTICAL SERVICES
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Fax: (207) 775-4029

CHAIN of CUSTODY

PLEASE BEAR DOWN AND PRINT LEGIBLY IN PEN

Page 1 of 1

Client	Contact	Phone #	Fax #
Arcadis - Seres JV	Heather Levesque	(619) 370-0374	( )

Address	City	State	Zip Code

Purchase Order #	Proj. Name / No.	Katahdin Quote #
	Devens / 30048392.075	

Bill (if different than above)	Address

Sampler (Print / Sign)	Copies To:
Desmond Bedard Desmond Bedard	

LAB USE ONLY

WORK ORDER #:

KATAHDIN PROJECT NUMBER S08943

REMARKS:

SHIPPING INFO: ☐ FED EX ☐ UPS ☐ CLIENT

AIRBILL NO:

TEMP°C ____ ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

ANALYSIS AND CONTAINER TYPE PRESERVATIVES

★	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	Filt. Y N — Dis. TOC H_2SO_4	Filt. Y N — Dis. Metals HNO_3	Filt. Y N — Total Metal HNO_3	Filt. Y N — Alkalinity, TDS, Anions None	Filt. Y N — BOD None	Filt. Y N	Filt. Y N	Filt. Y N	Filt. Y N	Filt. Y N
	MW-21-1S-FF-EVENT#4	12/29/21/ 11:35	GW	3	✓	✓								
	MW-21-1S-EVENT#4	12/29/21/ 11:35	GW	3			✓	✓	✓					
1	MW-21-1D-FF-EVENT#4	12/29/21/ 13:30	GW	3	✓	✓								
2	MW-21-1D-EVENT#4	12/29/21/ 13:30	GW	3			✓	✓	✓					
3	MW-21-2D-FF-EVENT#4	12/29/21/ 14:58	GW	3	✓	✓								
4	MW-21-2D-EVENT#4	12/29/21/ 14:58	GW	3			✓	✓	✓					
5	MW-21-2S-FF-EVENT#4	12/29/21/ 16:17	GW	3	✓	✓								
6	MW-21-2S-EVENT#4	12/29/21/ 16:17	GW	3			✓	✓	✓					
7	MW-21-4S-FF-EVENT#4	12/29/21/ 17:10	GW	3	✓	✓								
8	MW-21-4S-EVENT#4	12/29/21/ 17:10	GW	2			✓	✓						
		/												
		/												
		/												
		/												
		/												
		/												

COMMENTS → Katahdin did not send labels → confirmed custom labels were ok on 12/28/2021 → Bottle Kit was short 250mL HDPE w/ HNO_3 → Confirmed ok to use same bottles from Eurofins on 12/28/2021

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
Desmond Bedard	12/30/21 10:00	TBuchanan 12/30/2021 10:00	TBuchanan 12/30/2021 13:58		
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)

THE TERMS AND CONDITIONS ON THE REVERSE SIDE HEREOF SHALL GOVERN SERVICES, EXCEPT WHEN A SIGNED CONTRACTUAL AGREEMENT EXISTS.

Katahdin Analytical Services

Login Chain of Custody (ln01)

Jan. 04, 2022
05:13 PM

Login Number: SO8943

Account: SERES001
SERES Engineering & Services, LLC

Project: SERES-FT-DEVENS
Former Fort Devens - Annual LTM

Primary Report Address:
Heather Levesque, PMP
SERES Engineering & Services, LLC
669 Marina Drive
Suite B-7
Charleston, SC 29492
USA
halevesque@seres-es.com

Primary Invoice Address:
Accounts Payable
SERES Engineering & Services, LLC
669 Marina Drive
Suite B-7
Charleston,SC 29492
USA
metunstall@seres-es.com

Report CC Addresses:
Invoice CC Addresses:

Quote/Incoming: SERES-FT-DEVENS

Login Information

ANALYSIS INSTRUCTIONS	:	DOD 5.3, ND to LOQ w/ J flags, include LOD on ROAs. Dec 2021 Anions: NO3 by E353.2, Cl/SO4 by SW9056.
CHECK NO.	:	
CLIENT PO#	:	Project # JV2008 04.03 30048392.07F
CLIENT PROJECT MANAGE	:	Heather Levesque
CONTRACT	:	W912WJ-19D-0014
COOLER TEMPERATURE	:	3.1
DELIVERY SERVICES	:	KAS
EDD FORMAT	:	ECC-091317-TXT
ISM INSTRUCTIONS	:	
LOGIN INITIALS	:	GN
PM	:	HHM
PROJECT NAME	:	Fort Devens 2021 LTM
QC LEVEL	:	IV
REPORT INSTRUCTIONS	:	Upload EDD to Ft. Devens Database. Upload to SDS. Email reports to halevesque@seres-es.com; Ian.Martz@arcadis.com; Jennifer.Singer@arcadis.com. Email invoices to METunstall@seres-es.com & HALevesque@seres-es.com.
SDG ID	:	
SDG STATUS	:	
VERBAL TAT	:	

5:15 pm, Jan 04, 2022

Run Reports: Logindetail

Login Number: SO8943

Account: SERES001
SERES Engineering & Services, LLC

Project: SERES-FT-DEVENS
Former Fort Devens - Annual LTM

Quote/Incoming: SERES-FT-DEVENS

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SO8943-1	MS-21-1D-FF-EVENT#4	29-DEC-21 13:30	30-DEC-21		20-JAN-22		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Service	S	COURIER-BILLING			
Aqueous	S	SW3010-PREP	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC-DIS	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON-DIS	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE-DIS	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW9060-DOC(1)	26-JAN-22		125mL Plastic+H2SO4

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SO8943-2	MS-21-1D-EVENT#4	29-DEC-21 13:30	30-DEC-21		20-JAN-22		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Aqueous	S	E353.2-NITRATE	31-DEC-21 SHORT		125mL Plastic
Aqueous	S	SM2320B-ALKALINITY	12-JAN-22		
Aqueous	S	SM2540C-TDS	05-JAN-22		250mL Plastic
Aqueous	S	SM5210B-TBOD	31-DEC-21 SHORT		250mL Plastic
Aqueous	S	SW3010-PREP	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW9056-ANIONS	27-JAN-22		

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SO8943-3	MS-21-2D-FF-EVENT#4	29-DEC-21 14:58	30-DEC-21		20-JAN-22		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Aqueous	S	SW3010-PREP	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC-DIS	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON-DIS	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE-DIS	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW9060-DOC(1)	26-JAN-22		125mL Plastic+H2SO4

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SO8943-4	MS-21-2D-EVENT#4	29-DEC-21 14:58	30-DEC-21		20-JAN-22		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Aqueous	S	E353.2-NITRATE	31-DEC-21 SHORT		125mL Plastic
Aqueous	S	SM2320B-ALKALINITY	12-JAN-22		
Aqueous	S	SM2540C-TDS	05-JAN-22		250mL Plastic
Aqueous	S	SM5210B-TBOD	31-DEC-21 SHORT		250mL Plastic
Aqueous	S	SW3010-PREP	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW9056-ANIONS	27-JAN-22		

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SO8943-5	MS-21-2S-FF-EVENT#4	29-DEC-21 16:17	30-DEC-21		20-JAN-22		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Aqueous	S	SW3010-PREP	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC-DIS	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON-DIS	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE-DIS	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW9060-DOC(1)	26-JAN-22		125mL Plastic+H2SO4

Run Reports: Logindetail

5:15 pm, Jan 04, 2022

Login Number: SO8943

Account: SERES001
SERES Engineering & Services, LLC

Project: SERES-FT-DEVENS
Former Fort Devens - Annual LTM

Quote/Incoming: SERES-FT-DEVENS

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SO8943-6	MS-21-2S-EVENT#4	29-DEC-21 16:17	30-DEC-21		20-JAN-22		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Aqueous	S	E353.2-NITRATE	31-DEC-21 SHORT		125mL Plastic
Aqueous	S	SM2320B-ALKALINITY	12-JAN-22		
Aqueous	S	SM2540C-TDS	05-JAN-22		250mL Plastic
Aqueous	S	SM5210B-TBOD	31-DEC-21 SHORT		250mL Plastic
Aqueous	S	SW3010-PREP	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW9056-ANIONS	27-JAN-22		

SO8943-7	MS-21-4S-FF-EVENT#4	29-DEC-21 17:10	30-DEC-21		20-JAN-22		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Aqueous	S	SW3010-PREP	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC-DIS	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON-DIS	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE-DIS	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW9060-DOC(1)	26-JAN-22		125mL Plastic+H2SO4

SO8943-8	MS-21-4S-EVENT#4	29-DEC-21 17:10	30-DEC-21		20-JAN-22		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Service	S	COURIER-BILLING			
Aqueous	S	E353.2-NITRATE	31-DEC-21 SHORT		125mL Plastic
Aqueous	S	SM2320B-ALKALINITY	12-JAN-22		
Aqueous	S	SM2540C-TDS	05-JAN-22		250mL Plastic
Aqueous	S	SW3010-PREP	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE	27-JUN-22		250mL Plastic+HNO3
Aqueous	S	SW9056-ANIONS	27-JAN-22		

Total Samples: 8 ***Total Analyses: 57***

5:15 pm, Jan 04, 2022

Run Reports: Logindetail

SAMPLE DATA SUMMARY PACKAGE

METALS SAMPLE FLAGGING

FLAG	SPECIFIED MEANING
E	The reported value is estimated because of the presence of interference (as indicated by serial dilution).
N	The pre-digestion spiked sample recovery is not within control limits.
*	The duplicate sample analysis relative percent difference (RPD) is not within control limits.
B	Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.
A	The post-digestion spiked sample recovery is not within control limits.
•	Analytical run QC sample (e.g. ICV, CCV, ICB, CCB, ICSA, ICSAB) not within control limits.
U	The analyte was not detected above the specified level. This level may be the Limit of Quantitation (LOQ) (previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client. Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.
J	The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ) (previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).
Q	One or more quality control criteria failed (e.g., LCS recovery, surrogate spike recovery or CCV).

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level (PQL) or LOQ could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfite H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit
NFL	No Free Liquid Present	FLP	Free Liquid Present
NOD	No Odor Detected	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L. The reported value should be considered a minimum value.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 or 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MS-21-1D-FF-EVENT#4

Matrix: WATER **SDG Name:** SO8943

Percent Solids: 0.00 **Lab Sample ID:** SO8943-001

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	6.2	J		P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	1130			P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	4700			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MS-21-1D-EVENT#4

Matrix: WATER **SDG Name:** SO8943

Percent Solids: 0.00 **Lab Sample ID:** SO8943-002

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	31.7			P	1	8.0	1.4	5.0
7439-89-6	IRON, TOTAL	2060			P	1	100	5.4	80
7439-96-5	MANGANESE, TOTAL	4780			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MS-21-2D-FF-EVENT#4

Matrix: WATER **SDG Name:** SO8943

Percent Solids: 0.00 **Lab Sample ID:** SO8943-003

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	6.4	J		P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	658			P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	1020			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MS-21-2D-EVENT#4

Matrix: WATER **SDG Name:** SO8943

Percent Solids: 0.00 **Lab Sample ID:** SO8943-004

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	68.8			P	1	8.0	1.4	5.0
7439-89-6	IRON, TOTAL	3420			P	1	100	5.4	80
7439-96-5	MANGANESE, TOTAL	1020			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MS-21-2S-FF-EVENT#4

Matrix: WATER **SDG Name:** SO8943

Percent Solids: 0.00 **Lab Sample ID:** SO8943-005

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	2.5	J		P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	5960			P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	1100			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MS-21-2S-EVENT#4

Matrix: WATER **SDG Name:** SO8943

Percent Solids: 0.00 **Lab Sample ID:** SO8943-006

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	5.2	J		P	1	8.0	1.4	5.0
7439-89-6	IRON, TOTAL	6520			P	1	100	5.4	80
7439-96-5	MANGANESE, TOTAL	1010			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MS-21-4S-FF-EVENT#4

Matrix: WATER **SDG Name:** SO8943

Percent Solids: 0.00 **Lab Sample ID:** SO8943-007

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	8.0	U		P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	11200			P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	1570			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MS-21-4S-EVENT#4

Matrix: WATER **SDG Name:** SO8943

Percent Solids: 0.00 **Lab Sample ID:** SO8943-008

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	8.0	U		P	1	8.0	1.4	5.0
7439-89-6	IRON, TOTAL	10200			P	1	100	5.4	80
7439-96-5	MANGANESE, TOTAL	1540			P	1	5.0	1.1	4.0

Comments:

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Heather Levesque, PMP
SERES Engineering & Services, LLC
669 Marina Drive
Charleston,SC 29492

Lab Sample ID: SO8943-2
Report Date: 26-JAN-22
Project: Fort Devens 2021 LTM
SDG: SO8943

Sample Description	Matrix	Date Sampled	Date Received
MS-21-1D-EVENT#4	AQ	29-DEC-21 13:30:00	30-DEC-21

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	120 mg/L	5.0	0.23	4	STDM 2320B	WG312546	06-JAN-22 12:55:08	N/A	N/A	
Chloride	26 mg/L	4.0	0.20	2.0	SW846 9056A	WG312905	14-JAN-22 18:07:00	N/A	N/A	
Nitrate As N	U0.050 mg/L	0.050	0.015	0.025	EPA 353.2	WG312382	30-DEC-21 17:36:03	N/A	N/A	
Solids-Filterable Residue	66. mg/L	10.	5.0	8	STDM 2540C	WG312427	06-JAN-22 08:05:00	SM 2540C	04-JAN-22	
Sulfate	20 mg/L	1.0	0.064	0.50	SW846 9056A	WG312835	13-JAN-22 23:30:00	N/A	N/A	
Total Biochemical Oxygen Demand	U2.0 mg/L	2.0	0.23	1	SM5210B	WG312275	04-JAN-22 11:24:00	SM 5210B	30-DEC-21 1437	

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Heather Levesque, PMP
SERES Engineering & Services, LLC
669 Marina Drive
Charleston,SC 29492

Lab Sample ID: SO8943-4
Report Date: 26-JAN-22
Project: Fort Devens 2021 LTM
SDG: SO8943

Sample Description	Matrix	Date Sampled	Date Received
MS-21-2D-EVENT#4	AQ	29-DEC-21 14:58:00	30-DEC-21

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	25. mg/L	5.0	0.23	4	STDM 2320B	WG312546	06-JAN-22 12:57:43	N/A	N/A	
Chloride	37 mg/L	4.0	0.20	2.0	SW846 9056A	WG312905	14-JAN-22 18:28:00	N/A	N/A	
Nitrate As N	U0.050 mg/L	0.050	0.015	0.025	EPA 353.2	WG312382	30-DEC-21 17:37:14	N/A	N/A	
Solids-Filterable Residue	15. mg/L	10.	5.0	8	STDM 2540C	WG312427	06-JAN-22 08:05:00	SM 2540C	04-JAN-22	
Sulfate	23 mg/L	1.0	0.064	0.50	SW846 9056A	WG312835	13-JAN-22 23:51:00	N/A	N/A	
Total Biochemical Oxygen Demand	J0.36 mg/L	2.0	0.23	1	SM5210B	WG312275	04-JAN-22 11:28:00	SM 5210B	30-DEC-21 1446	

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Heather Levesque, PMP
SERES Engineering & Services, LLC
669 Marina Drive
Charleston,SC 29492

Lab Sample ID: SO8943-6
Report Date: 26-JAN-22
Project: Fort Devens 2021 LTM
SDG: SO8943

Sample Description	Matrix	Date Sampled	Date Received
MS-21-2S-EVENT#4	AQ	29-DEC-21 16:17:00	30-DEC-21

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	120 mg/L	5.0	0.23	4	STDM 2320B	WG312546	06-JAN-22 13:42:08	N/A	N/A	
Chloride	34 mg/L	4.0	0.20	2.0	SW846 9056A	WG312905	14-JAN-22 18:49:00	N/A	N/A	
Nitrate As N	0.19 mg/L	0.050	0.015	0.025	EPA 353.2	WG312382	30-DEC-21 17:38:23	N/A	N/A	
Solids-Filterable Residue	110 mg/L	10.	5.0	8	STDM 2540C	WG312427	06-JAN-22 08:05:00	SM 2540C	04-JAN-22	
Sulfate	26 mg/L	1.0	0.064	0.50	SW846 9056A	WG312835	14-JAN-22 00:12:00	N/A	N/A	
Total Biochemical Oxygen Demand	U2.0 mg/L	2.0	0.23	1	SM5210B	WG312275	04-JAN-22 11:30:00	SM 5210B	30-DEC-21 1454	

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Heather Levesque, PMP
SERES Engineering & Services, LLC
669 Marina Drive
Charleston,SC 29492

Lab Sample ID: SO8943-8
Report Date: 26-JAN-22
Project: Fort Devens 2021 LTM
SDG: SO8943

Sample Description	Matrix	Date Sampled	Date Received
MS-21-4S-EVENT#4	AQ	29-DEC-21 17:10:00	30-DEC-21

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	200 mg/L	5.0	0.23	4	STDM 2320B	WG312546	06-JAN-22 13:44:55	N/A	N/A	
Chloride	24 mg/L	4.0	0.20	2.0	SW846 9056A	WG312905	14-JAN-22 19:10:00	N/A	N/A	
Nitrate As N	U0.10 mg/L	0.10	0.030	0.050	EPA 353.2	WG312382	30-DEC-21 17:44:58	N/A	N/A	
Solids-Filterable Residue	110 mg/L	10.	5.0	8	STDM 2540C	WG312427	06-JAN-22 08:05:00	SM 2540C	04-JAN-22	
Sulfate	13 mg/L	1.0	0.064	0.50	SW846 9056A	WG312835	14-JAN-22 00:33:00	N/A	N/A	

METALS DATA

Sample Data Section

METALS SAMPLE FLAGGING

FLAG	SPECIFIED MEANING
E	The reported value is estimated because of the presence of interference (as indicated by serial dilution).
N	The pre-digestion spiked sample recovery is not within control limits.
*	The duplicate sample analysis relative percent difference (RPD) is not within control limits.
B	Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.
A	The post-digestion spiked sample recovery is not within control limits.
•	Analytical run QC sample (e.g. ICV, CCV, ICB, CCB, ICSA, ICSAB) not within control limits.
U	The analyte was not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client. Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL, "U" LOQ or "U" LOD, where the rate of false negatives is <1%.
J	Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).
Q	One or more quality control criteria failed (e.g., LCS recovery, surrogate spike recovery or CCV).

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Katahdin Analytical Services

SDG Name: SO8943 **SOW No.** SW846

Client Field ID	Lab Sample ID
MS-21-1D-EVENT#4	SO8943-002
MS-21-1D-FF-EVENT#4	SO8943-001
MS-21-2D-EVENT#4	SO8943-004
MS-21-2D-FF-EVENT#4	SO8943-003
MS-21-2S-EVENT#4	SO8943-006
MS-21-2S-FF-EVENT#4	SO8943-005
MS-21-4S-EVENT#4	SO8943-008
MS-21-4S-FF-EVENT#4	SO8943-007

Were ICP interelement corrections applied ?	Yes
Were ICP background corrections applied ?	Yes
If yes - were raw data generated before application of background corrections ?	No

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: George Brewer Name: George Brewer

Date: 01/25/22 Title: Inorganics Dept. Mgr.

Katahdin Analytical Services 4000004

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MS-21-1D-FF-EVENT#4

Matrix: WATER **SDG Name:** SO8943

Percent Solids: 0.00 **Lab Sample ID:** SO8943-001

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	6.2	J		P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	1130			P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	4700			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MS-21-1D-EVENT#4

Matrix: WATER **SDG Name:** SO8943

Percent Solids: 0.00 **Lab Sample ID:** SO8943-002

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	31.7			P	1	8.0	1.4	5.0
7439-89-6	IRON, TOTAL	2060			P	1	100	5.4	80
7439-96-5	MANGANESE, TOTAL	4780			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MS-21-2D-FF-EVENT#4

Matrix: WATER **SDG Name:** SO8943

Percent Solids: 0.00 **Lab Sample ID:** SO8943-003

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	6.4	J		P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	658			P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	1020			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MS-21-2D-EVENT#4

Matrix: WATER **SDG Name:** SO8943

Percent Solids: 0.00 **Lab Sample ID:** SO8943-004

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	68.8			P	1	8.0	1.4	5.0
7439-89-6	IRON, TOTAL	3420			P	1	100	5.4	80
7439-96-5	MANGANESE, TOTAL	1020			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MS-21-2S-FF-EVENT#4

Matrix: WATER **SDG Name:** SO8943

Percent Solids: 0.00 **Lab Sample ID:** SO8943-005

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	2.5	J		P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	5960			P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	1100			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MS-21-2S-EVENT#4

Matrix: WATER **SDG Name:** SO8943

Percent Solids: 0.00 **Lab Sample ID:** SO8943-006

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	5.2	J		P	1	8.0	1.4	5.0
7439-89-6	IRON, TOTAL	6520			P	1	100	5.4	80
7439-96-5	MANGANESE, TOTAL	1010			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MS-21-4S-FF-EVENT#4

Matrix: WATER **SDG Name:** SO8943

Percent Solids: 0.00 **Lab Sample ID:** SO8943-007

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	8.0	U		P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	11200			P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	1570			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MS-21-4S-EVENT#4

Matrix: WATER **SDG Name:** SO8943

Percent Solids: 0.00 **Lab Sample ID:** SO8943-008

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	8.0	U		P	1	8.0	1.4	5.0
7439-89-6	IRON, TOTAL	10200			P	1	100	5.4	80
7439-96-5	MANGANESE, TOTAL	1540			P	1	5.0	1.1	4.0

Comments:

QC Summary Section

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SO8943

Concentration Units: ug/L

SAMPLE: ICV

File: IPA06A Jan 06, 2022 11:26

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	10110.00	101.1
ARSENIC	400.0	391.50	97.9
CALCIUM	10000.0	10240.00	102.4
IRON	10000.0	10020.00	100.2
MAGNESIUM	10000.0	10090.00	100.9
MANGANESE	400.0	398.60	99.7

SAMPLE: CCV

File: IPA06A Jan 06, 2022 11:48

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12810.00	102.5
ARSENIC	500.0	510.20	102.0
CALCIUM	12500.0	13130.00	105.0
IRON	12500.0	12840.00	102.7
MAGNESIUM	12500.0	12940.00	103.5
MANGANESE	500.0	505.80	101.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SO8943

Concentration Units: ug/L

SAMPLE: CCV

File: IPA06A Jan 06, 2022 12:06

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12970.00	103.8
ARSENIC	500.0	515.20	103.0
CALCIUM	12500.0	13240.00	105.9
IRON	12500.0	13010.00	104.1
MAGNESIUM	12500.0	13020.00	104.2
MANGANESE	500.0	513.20	102.6

SAMPLE: CCV

File: IPA06A Jan 06, 2022 12:57

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12700.00	101.6
ARSENIC	500.0	515.90	103.2
CALCIUM	12500.0	12940.00	103.5
IRON	12500.0	12750.00	102.0
MAGNESIUM	12500.0	13120.00	105.0
MANGANESE	500.0	507.40	101.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SO8943

Concentration Units: ug/L

SAMPLE: CCV

File: IPA06A Jan 06, 2022 13:49

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12910.00	103.3
ARSENIC	500.0	517.90	103.6
CALCIUM	12500.0	13020.00	104.2
IRON	12500.0	12770.00	102.2
MAGNESIUM	12500.0	13220.00	105.8
MANGANESE	500.0	514.40	102.9

SAMPLE: CCV

File: IPA06A Jan 06, 2022 14:41

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12940.00	103.5
ARSENIC	500.0	520.20	104.0
CALCIUM	12500.0	12990.00	103.9
IRON	12500.0	12720.00	101.8
MAGNESIUM	12500.0	13320.00	106.6
MANGANESE	500.0	518.50	103.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SO8943

Concentration Units: ug/L

SAMPLE: CCV

File: IPA06A Jan 06, 2022 15:33

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12680.00	101.4
ARSENIC	500.0	519.50	103.9
CALCIUM	12500.0	12810.00	102.5
IRON	12500.0	12560.00	100.5
MAGNESIUM	12500.0	13330.00	106.6
MANGANESE	500.0	510.90	102.2

SAMPLE: CCV

File: IPA06A Jan 06, 2022 16:25

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12480.00	99.8
ARSENIC	500.0	525.90	105.2
CALCIUM	12500.0	12550.00	100.4
IRON	12500.0	12250.00	98.0
MAGNESIUM	12500.0	13520.00	108.2
MANGANESE	500.0	505.20	101.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SO8943

Concentration Units: ug/L

SAMPLE: CCV

File: IPA06A Jan 06, 2022 17:17

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12520.00	100.2
ARSENIC	500.0	521.70	104.3
CALCIUM	12500.0	12530.00	100.2
IRON	12500.0	12330.00	98.6
MAGNESIUM	12500.0	13510.00	108.1
MANGANESE	500.0	505.40	101.1

SAMPLE: CCV

File: IPA06A Jan 06, 2022 17:48

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12470.00	99.8
ARSENIC	500.0	523.70	104.7
CALCIUM	12500.0	12530.00	100.2
IRON	12500.0	12240.00	97.9
MAGNESIUM	12500.0	13470.00	107.8
MANGANESE	500.0	505.70	101.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SO8943

Concentration Units: ug/L

SAMPLE: PQL

File: IPA06A Jan 06, 2022 11:34

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	314.70	104.9
ARSENIC	8.0	7.32	91.5
CALCIUM	100.0	108.20	108.2
IRON	100.0	106.40	106.4
MAGNESIUM	100.0	99.22	99.2
MANGANESE	5.0	4.72	94.4

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SO8943

Concentration Units: ug/L

SAMPLE: ICB

File: IPA06A Jan 06, 2022 11:30

Analyte	Result	C
ALUMINUM	10.000	U
ARSENIC	1.400	U
CALCIUM	11.000	U
IRON	4.319	J
MAGNESIUM	2.900	U
MANGANESE	0.870	U

SAMPLE: CCB

File: IPA06A Jan 06, 2022 11:52

Analyte	Result	C
ALUMINUM	16.680	J
ARSENIC	1.400	U
CALCIUM	11.000	U
IRON	8.815	J
MAGNESIUM	16.600	J
MANGANESE	0.870	U

SAMPLE: CCB

File: IPA06A Jan 06, 2022 12:10

Analyte	Result	C
ALUMINUM	13.150	J
ARSENIC	1.400	U
CALCIUM	11.000	U
IRON	8.403	J
MAGNESIUM	7.382	J
MANGANESE	0.870	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SO8943

Concentration Units: ug/L

SAMPLE: CCB
File: IPA06A Jan 06, 2022 13:02

Analyte	Result	C
ALUMINUM	10.000	U
ARSENIC	1.400	U
CALCIUM	11.000	U
IRON	8.939	J
MAGNESIUM	7.297	J
MANGANESE	0.870	U

SAMPLE: CCB
File: IPA06A Jan 06, 2022 13:53

Analyte	Result	C
ALUMINUM	10.000	U
ARSENIC	1.400	U
CALCIUM	11.000	U
IRON	10.640	J
MAGNESIUM	9.119	J
MANGANESE	0.870	U

SAMPLE: CCB
File: IPA06A Jan 06, 2022 14:45

Analyte	Result	C
ALUMINUM	10.000	U
ARSENIC	1.400	U
CALCIUM	11.000	U
IRON	9.517	J
MAGNESIUM	4.457	J
MANGANESE	0.870	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SO8943

Concentration Units: ug/L

SAMPLE: CCB
File: IPA06A Jan 06, 2022 15:37

Analyte	Result	C
ALUMINUM	14.190	J
ARSENIC	1.400	U
CALCIUM	11.000	U
IRON	10.700	J
MAGNESIUM	5.637	J
MANGANESE	0.870	U

SAMPLE: CCB
File: IPA06A Jan 06, 2022 16:29

Analyte	Result	C
ALUMINUM	10.640	J
ARSENIC	1.400	U
CALCIUM	11.000	U
IRON	8.483	J
MAGNESIUM	3.708	J
MANGANESE	0.870	U

SAMPLE: CCB
File: IPA06A Jan 06, 2022 17:21

Analyte	Result	C
ALUMINUM	13.770	J
ARSENIC	1.400	U
CALCIUM	11.000	U
IRON	7.740	J
MAGNESIUM	5.463	J
MANGANESE	0.870	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SO8943

Concentration Units: ug/L

SAMPLE: CCB

File: IPA06A Jan 06, 2022 17:52

Analyte	Result	C
ALUMINUM	10.000	U
ARSENIC	1.400	U
CALCIUM	11.000	U
IRON	7.267	J
MAGNESIUM	6.105	J
MANGANESE	0.870	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWPA05ICW1

Matrix: WATER **SDG Name:** SO8943

QC Batch ID: PA05ICW1

Concentration Units : ug/L

Analyte	RESULT	C
ARSENIC	8.0	U
IRON	100	U
MANGANESE	5.0	U

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SO8943

Concentration Units: ug/L

SAMPLE: ICSA

File: IPA06A Jan 06, 2022 11:39

Analyte	TRUE	FOUND	% R
ALUMINUM	500000.00	534600.00	106.9
ARSENIC	0	3.17	
CALCIUM	500000.00	508800.00	101.8
IRON	200000.00	199100.00	99.6
MAGNESIUM	500000.00	490800.00	98.2
MANGANESE	0	0.76	

SAMPLE: ICSAB

File: IPA06A Jan 06, 2022 11:43

Analyte	TRUE	FOUND	% R
ALUMINUM	500000.00	467300.00	93.5
ARSENIC	100.00	103.40	103.0
CALCIUM	500000.00	445100.00	89.0
IRON	200000.00	174600.00	87.3
MAGNESIUM	500000.00	441800.00	88.4
MANGANESE	500.00	488.40	97.6

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWPA05ICW1

Matrix: WATER **SDG Name:** SO8943

QC Batch ID: PA05ICW1

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ARSENIC	100	106	105.7	87	113
IRON	2000	2150	107.5	87	115
MANGANESE	1000	1060	106.2	90	114

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 01/23/2019

Concentration Units: ug/L

Analyte	PQL/LOQ	IDL	M
ALUMINUM	300	10	P
ARSENIC	8.0	1.4	P
CALCIUM	100	11	P
IRON	100	3.6	P
MAGNESIUM	100	2.9	P
MANGANESE	5.0	0.87	P

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 06/11/2010

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ARSENIC	5.0	ug/L	P	SW846 3010A / SW846 6010C
IRON	80	ug/L	P	SW846 3010A / SW846 6010C
MANGANESE	4.0	ug/L	P	SW846 3010A / SW846 6010C

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 01/19/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ARSENIC	1.4	ug/L	P	SW846 3010A / SW846 6010C
IRON	5.4	ug/L	P	SW846 3010A / SW846 6010C
MANGANESE	1.1	ug/L	P	SW846 3010A / SW846 6010C

ICP INTERELEMENT CORRECTION FACTORS

Lab Name: Katahdin Analytical Services **SDG Name:** SO8943

Instrument Name: THERMO ICAP 6500 **Instrument ID:** I **Date:** 03/10/2021

	Wavelength	Interelement Correction Factors for:												
Analyte	**(nm)**	**Al**	**Ca**	**Fe**	**Mg**	**As**	**Cr**	**Co**	**Cu**	**Mn**	**Mo**	**Ni**	**Ti**	**V**
ALUMINUM	396.15	0.0	0.0006250	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0293740	0.0	0.0	0.0
ANTIMONY	206.83	0.0000130	0.0	0.0000150	0.0	0.0000731	0.0160080	0.0	0.0	0.0	-0.0046490	-0.0008980	0.0	-0.0005030
ARSENIC	189.04	-0.0000090	0.0	-0.0001780	0.0	0.0	0.0001984	0.0	0.0	0.0	0.0015170	0.0	0.0	0.0
BARIUM	455.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BERYLLIUM	313.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0006836	0.0001220
BORON	208.96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0501700	0.0	0.0	0.0
CADMIUM	226.50	0.0	0.0	0.0000850	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0001140	0.0000801	0.0
CALCIUM	315.89	0.0	0.0	0.0	0.0	0.0	0.0026700	0.0008487	0.0	0.0	0.0	0.0	0.0	0.0
CHROMIUM	267.72	0.0	0.0	-0.0000010	0.0	0.0	0.0	0.0	0.0	0.0003640	0.0	0.0	0.0	-0.0000100
COBALT	228.62	0.0	0.0	0.0000050	0.0	0.0	0.0001670	0.0	0.0	0.0	0.0	0.0001562	0.0017840	0.0
COPPER	327.40	0.0000079	0.0	-0.0000147	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0006988	0.0004860
GOLD	242.79	0.0	0.0	0.0001110	0.0	0.0	0.0	0.0	0.0	0.0058700	0.0	0.0	0.0	0.0
IRON	259.94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LEAD	220.35	-0.0001590	0.0	0.0000440	0.0	0.0001480	-0.0000772	-0.0000860	0.0004910	0.0	-0.0010840	0.0003270	-0.0000220	0.0
LITHIUM	670.78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAGNESIUM	202.58	0.0	0.0	0.0000300	0.0	0.0	0.0	0.1395100	0.0	0.0	0.0145280	0.0	0.0003530	0.0
MANGANESE	257.61	-0.0000050	0.0	0.0000100	0.0000391	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MOLYBDENUM	202.03	0.0	0.0	0.0	0.0	0.0	0.0000270	0.0	0.0	-0.0000204	0.0	0.0	0.0	-0.0001163
NICKEL	231.60	0.0	0.0	-0.0000490	0.0	0.0	0.0	0.0000390	0.0	0.0	0.0034490	0.0	0.0	0.0
POTASSIUM	766.49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SELENIUM	196.09	0.0000090	0.0	0.0000320	0.0	0.0003180	0.0	0.0002310	0.0	0.0006280	0.0	0.0	0.0	0.0003040
SILICON	251.61	0.0	0.0	-0.0000150	0.0	0.0	0.0	0.0	0.0	0.0	0.0132630	0.0	0.0105540	0.0
SILVER	328.07	0.0	0.0	-0.0002820	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0008413	0.0
SODIUM	589.59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRONTIUM	421.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
THALLIUM	190.86	0.0000030	0.0	0.0000001	0.0	0.0	0.0	0.0023030	-0.0000680	-0.0024730	-0.0000880	0.0	-0.0009840	-0.0078940
TIN	189.99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TITANIUM	334.90	0.0	0.0	0.0	0.0	0.0	0.0001510	0.0	0.0	0.0	0.0002130	0.0	0.0	0.0
VANADIUM	292.40	0.0	0.0	0.0000120	0.0	0.0	-0.0053650	0.0	0.0	-0.0001670	-0.0037960	0.0	0.0006990	0.0
ZINC	206.20	0.0	0.0	0.0	0.0	0.0	-0.0010444	0.0	0.0	0.0	0.0	0.0	0.0	0.0

FORM XI - IN

ICP LINEAR RANGES

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 11/25/2020

Concentration Units: ug/L

Analyte	Integration Time (sec)	Linear Range	M
ALUMINUM	5.00	500000	P
ARSENIC	45.00	20000	P
CALCIUM	5.00	500000	P
IRON	5.00	250000	P
MAGNESIUM	45.00	200000	P
MANGANESE	5.00	20000	P

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** PA05ICW1

Matrix: WATER **SDG Name:** SO8943

Method: P **Prep Date:** 01/05/2022

Client ID	Lab Sample ID	Initial (L)	Final (L)	Bottle ID
LCSWPA05ICW1	LCSWPA05ICW1	0.05	0.05	
PBWPA05ICW1	PBWPA05ICW1	0.05	0.05	
MS-21-1D-FF-EVENT#4	SO8943-001	0.05	0.05	C
MS-21-1D-EVENT#4	SO8943-002	0.05	0.05	C
MS-21-2D-FF-EVENT#4	SO8943-003	0.05	0.05	C
MS-21-2D-EVENT#4	SO8943-004	0.05	0.05	C
MS-21-2S-FF-EVENT#4	SO8943-005	0.05	0.05	C
MS-21-2S-EVENT#4	SO8943-006	0.05	0.05	C
MS-21-4S-FF-EVENT#4	SO8943-007	0.05	0.05	C
MS-21-4S-EVENT#4	SO8943-008	0.05	0.05	A

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SO8943

Instrument ID: THERMO ICAP 6500 **File Name:** IPA06A

Date: 01/06/2022 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements				
Blank		1	11:17	AL	AS	CA	FE	MG MN
Std 1		1	11:22	AL	AS	CA	FE	MG MN
ICV		1	11:26	AL	AS	CA	FE	MG MN
ICB		1	11:30	AL	AS	CA	FE	MG MN
PQL		1	11:34	AL	AS	CA	FE	MG MN
ICSA		1	11:39	AL	AS	CA	FE	MG MN
ICSAB		1	11:43	AL	AS	CA	FE	MG MN
CCV		1	11:48	AL	AS	CA	FE	MG MN
CCB		1	11:52	AL	AS	CA	FE	MG MN
ZZZZZZ		1	11:56					
ZZZZZZ		1	12:01					
CCV		1	12:06	AL	AS	CA	FE	MG MN
CCB		1	12:10	AL	AS	CA	FE	MG MN
ZZZZZZ		1	12:14					
ZZZZZZ		1	12:19					
ZZZZZZ		1	12:23					
ZZZZZZ		1	12:27					
ZZZZZZ		1	12:32					
ZZZZZZ		1	12:36					
ZZZZZZ		1	12:40					
ZZZZZZ		1	12:44					
ZZZZZZ		1	12:49					
ZZZZZZ		1	12:53					
CCV		1	12:57	AL	AS	CA	FE	MG MN
CCB		1	13:02	AL	AS	CA	FE	MG MN
ZZZZZZ		1	13:06					
ZZZZZZ		1	13:10					

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SO8943

Instrument ID: THERMO ICAP 6500 **File Name:** IPA06A

Date: 01/06/2022 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements				
ZZZZZZ		1	13:15					
ZZZZZZ		1	13:19					
LCSWPA05ICW1		1	13:23		AS		FE	MN
PBWPA05ICW1		1	13:27		AS		FE	MN
ZZZZZZ		5	13:32					
ZZZZZZ		5	13:36					
ZZZZZZ		5	13:40					
ZZZZZZ		5	13:45					
CCV		1	13:49	AL	AS	CA	FE	MG MN
CCB		1	13:53	AL	AS	CA	FE	MG MN
ZZZZZZ		1	13:57					
ZZZZZZ		1	14:02					
ZZZZZZ		5	14:06					
ZZZZZZ		5	14:11					
ZZZZZZ		5	14:15					
ZZZZZZ		5	14:19					
ZZZZZZ		5	14:23					
ZZZZZZ		5	14:28					
ZZZZZZ		5	14:32					
ZZZZZZ		5	14:36					
CCV		1	14:41	AL	AS	CA	FE	MG MN
CCB		1	14:45	AL	AS	CA	FE	MG MN
ZZZZZZ		5	14:49					
ZZZZZZ		1	14:53					
ZZZZZZ		1	14:58					
ZZZZZZ		1	15:02					
ZZZZZZ		1	15:07					

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SO8943

Instrument ID: THERMO ICAP 6500 **File Name:** IPA06A

Date: 01/06/2022 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements				
ZZZZZZ		1	15:11					
ZZZZZZ		1	15:15					
ZZZZZZ		1	15:20					
ZZZZZZ		1	15:24					
ZZZZZZ		1	15:28					
CCV		1	15:33	AL	AS	CA	FE	MG MN
CCB		1	15:37	AL	AS	CA	FE	MG MN
ZZZZZZ		2	15:41					
ZZZZZZ		2	15:46					
ZZZZZZ		1	15:50					
ZZZZZZ		5	15:55					
ZZZZZZ		1	15:59					
ZZZZZZ		1	16:03					
ZZZZZZ		1	16:07					
ZZZZZZ		1	16:12					
ZZZZZZ		1	16:16					
ZZZZZZ		1	16:20					
CCV		1	16:25	AL	AS	CA	FE	MG MN
CCB		1	16:29	AL	AS	CA	FE	MG MN
ZZZZZZ		1	16:33					
ZZZZZZ		1	16:38					
ZZZZZZ		1	16:42					
SO8943-001	MS-21-1D-FF-EVENT#4	1	16:47		AS		FE	MN
SO8943-002	MS-21-1D-EVENT#4	1	16:51		AS		FE	MN
SO8943-003	MS-21-2D-FF-EVENT#4	1	16:56		AS		FE	MN
SO8943-004	MS-21-2D-EVENT#4	1	17:00		AS		FE	MN
SO8943-005	MS-21-2S-FF-EVENT#4	1	17:04		AS		FE	MN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SO8943

Instrument ID: THERMO ICAP 6500 **File Name:** IPA06A

Date: 01/06/2022 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements				
SO8943-006	MS-21-2S-EVENT#4	1	17:09		AS		FE	MN
SO8943-007	MS-21-4S-FF-EVENT#4	1	17:13		AS		FE	MN
CCV		1	17:17	AL	AS	CA	FE	MG MN
CCB		1	17:21	AL	AS	CA	FE	MG MN
SO8943-008	MS-21-4S-EVENT#4	1	17:26		AS		FE	MN
ZZZZZZ		1	17:30					
ZZZZZZ		1	17:35					
ZZZZZZ		1	17:39					
ZZZZZZ		1	17:43					
CCV		1	17:48	AL	AS	CA	FE	MG MN
CCB		1	17:52	AL	AS	CA	FE	MG MN

Raw Data Section

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: I (Thermo iCAP 6500) **ANALYST**: EP **ANALYSIS DATE**: 01/06/2022

METHOD: ICP
- ☑ 200.7
- ☑ 6010
- ☑ DOD
- ☐ _____

FILE NAME: IPA06A

REVIEWED
for 01-10-22
KATAHDIN ANALYTICAL
METALS SECTION

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by _____ (initals) on _____ (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW20733	12/20/2021	12/20/2022	0 ug/L
Standard 1	MW20722	12/14/2021	02/04/2022	Varies by Element
ICV	MW20710	12/09/2021	01/27/2022	Varies by Element
PQL	MW20737	12/22/2021	03/22/2022	Varies by Element
LRS1	MW20736	12/22/2021	03/22/2022	Varies by Element
LRS2	MW20724	12/17/2021	03/17/2022	Varies by Element
ICSA	MW20738	12/22/2021	03/22/2022	Varies by Element
ICSAB	MW20739	12/22/2021	01/26/2022	Varies by Element
CCV	MW20751	01/04/2022	02/04/2022	Varies by Element
Internal Standard	MW20706	12/08/2021	03/08/2022	5.0 mg/L Yttrium

Additional Comments and Notes:

for 01-10-22

Dilutions: Some samples were diluted based on history or due to interfering element concentrations.

Dilution preparations are as follows:

2x diln.: 4.0mL of sample (pipet M25) + 4.0mL of MW19407 (pipet M25)

5x diln.: 2.0 mL of sample (pipet M29) + 8.0 mL of MW20693 (pipet M29)

Post Spike: 0.123mL MW20532 (pipet M27) to 6.0mL of sample (pipet M29)

INSTRUMENT RUNLOG

Instrument: ICAP 6500

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
Blank	1.000	IPA06A	01/06/2022	11:17	EP
Std 1	1.000	IPA06A	01/06/2022	11:22	EP
ICV	1.000	IPA06A	01/06/2022	11:26	EP
ICB	1.000	IPA06A	01/06/2022	11:30	EP
PQL	1.000	IPA06A	01/06/2022	11:34	EP
ICSA	1.000	IPA06A	01/06/2022	11:39	EP
ICSAB	1.000	IPA06A	01/06/2022	11:43	EP
CCV	1.000	IPA06A	01/06/2022	11:48	EP
CCB	1.000	IPA06A	01/06/2022	11:52	EP
LRS1	1.000	IPA06A	01/06/2022	11:56	EP
LRS2	1.000	IPA06A	01/06/2022	12:01	EP
CCV	1.000	IPA06A	01/06/2022	12:06	EP
CCB	1.000	IPA06A	01/06/2022	12:10	EP
LCSOOK24ICS1	1.000	IPA06A	01/06/2022	12:14	EP
PBSOK24ICS1	1.000	IPA06A	01/06/2022	12:19	EP
LCSWOK30ICW1	1.000	IPA06A	01/06/2022	12:23	EP
PBWOK30ICW1	1.000	IPA06A	01/06/2022	12:27	EP
LCSOOL01ICS1	1.000	IPA06A	01/06/2022	12:32	EP
PBSOL01ICS1	1.000	IPA06A	01/06/2022	12:36	EP
LCSOOL06ICS1	1.000	IPA06A	01/06/2022	12:40	EP
PBSOL06ICS1	1.000	IPA06A	01/06/2022	12:44	EP
LCSOOL08ICS1	1.000	IPA06A	01/06/2022	12:49	EP
PBSOL08ICS1	1.000	IPA06A	01/06/2022	12:53	EP
CCV	1.000	IPA06A	01/06/2022	12:57	EP
CCB	1.000	IPA06A	01/06/2022	13:02	EP
LCSWOL08ICW2	1.000	IPA06A	01/06/2022	13:06	EP
PBWOL08ICW2	1.000	IPA06A	01/06/2022	13:10	EP
LCSWOL08ICW3	1.000	IPA06A	01/06/2022	13:15	EP
PBWOL08ICW3	1.000	IPA06A	01/06/2022	13:19	EP
LCSWPA05ICW1	1.000	IPA06A	01/06/2022	13:23	EP
PBWPA05ICW1	1.000	IPA06A	01/06/2022	13:27	EP
SO8135-001	5.000	IPA06A	01/06/2022	13:32	EP
SO8135-004	5.000	IPA06A	01/06/2022	13:36	EP
SO8135-006	5.000	IPA06A	01/06/2022	13:40	EP
SO8135-007	5.000	IPA06A	01/06/2022	13:45	EP
CCV	1.000	IPA06A	01/06/2022	13:49	EP
CCB	1.000	IPA06A	01/06/2022	13:53	EP
SO8135-005	1.000	IPA06A	01/06/2022	13:57	EP
SO8135-009	1.000	IPA06A	01/06/2022	14:02	EP
SO8260-002	5.000	IPA06A	01/06/2022	14:06	EP
SO8260-003	5.000	IPA06A	01/06/2022	14:11	EP
SO8329-002	5.000	IPA06A	01/06/2022	14:15	EP
SO8329-006	5.000	IPA06A	01/06/2022	14:19	EP
SO8329-007	5.000	IPA06A	01/06/2022	14:23	EP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SO8329-010	5.000	IPA06A	01/06/2022	14:28	EP
SO8329-011	5.000	IPA06A	01/06/2022	14:32	EP
SO8397-001	5.000	IPA06A	01/06/2022	14:36	EP
CCV	1.000	IPA06A	01/06/2022	14:41	EP
CCB	1.000	IPA06A	01/06/2022	14:45	EP
SO8397-002	5.000	IPA06A	01/06/2022	14:49	EP
SO8260-007	1.000	IPA06A	01/06/2022	14:53	EP
SO8329-005	1.000	IPA06A	01/06/2022	14:58	EP
SO8397-007	1.000	IPA06A	01/06/2022	15:02	EP
SO7393-001	1.000	IPA06A	01/06/2022	15:07	EP
SO7393-002	1.000	IPA06A	01/06/2022	15:11	EP
SO7393-003	1.000	IPA06A	01/06/2022	15:15	EP
SO7393-004	1.000	IPA06A	01/06/2022	15:20	EP
SO7393-005	1.000	IPA06A	01/06/2022	15:24	EP
SO8910-001	1.000	IPA06A	01/06/2022	15:28	EP
CCV	1.000	IPA06A	01/06/2022	15:33	EP
CCB	1.000	IPA06A	01/06/2022	15:37	EP
SO8892-001	2.000	IPA06A	01/06/2022	15:41	EP
SO8892-005	2.000	IPA06A	01/06/2022	15:46	EP
SO8914-010	1.000	IPA06A	01/06/2022	15:50	EP
SO8914-010L	5.000	IPA06A	01/06/2022	15:55	EP
SO8914-010A	1.000	IPA06A	01/06/2022	15:59	EP
SO8914-010P	1.000	IPA06A	01/06/2022	16:03	EP
SO8914-010S	1.000	IPA06A	01/06/2022	16:07	EP
SO8914-011	1.000	IPA06A	01/06/2022	16:12	EP
SO8914-012	1.000	IPA06A	01/06/2022	16:16	EP
SO8914-014	1.000	IPA06A	01/06/2022	16:20	EP
CCV	1.000	IPA06A	01/06/2022	16:25	EP
CCB	1.000	IPA06A	01/06/2022	16:29	EP
SO8921-001	1.000	IPA06A	01/06/2022	16:33	EP
SO8921-002	1.000	IPA06A	01/06/2022	16:38	EP
SO8921-005	1.000	IPA06A	01/06/2022	16:42	EP
SO8943-001	1.000	IPA06A	01/06/2022	16:47	EP
SO8943-002	1.000	IPA06A	01/06/2022	16:51	EP
SO8943-003	1.000	IPA06A	01/06/2022	16:56	EP
SO8943-004	1.000	IPA06A	01/06/2022	17:00	EP
SO8943-005	1.000	IPA06A	01/06/2022	17:04	EP
SO8943-006	1.000	IPA06A	01/06/2022	17:09	EP
SO8943-007	1.000	IPA06A	01/06/2022	17:13	EP
CCV	1.000	IPA06A	01/06/2022	17:17	EP
CCB	1.000	IPA06A	01/06/2022	17:21	EP
SO8943-008	1.000	IPA06A	01/06/2022	17:26	EP
SO8944-001	1.000	IPA06A	01/06/2022	17:30	EP
SO8945-001	1.000	IPA06A	01/06/2022	17:35	EP
SO8946-001	1.000	IPA06A	01/06/2022	17:39	EP
SO8946-002	1.000	IPA06A	01/06/2022	17:43	EP
CCV	1.000	IPA06A	01/06/2022	17:48	EP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CCB	1.000	IPA06A	01/06/2022	17:52	EP
PQL	1.000	IPA06A	01/06/2022	17:56	EP
ICSA	1.000	IPA06A	01/06/2022	18:01	EP
ICSAB	1.000	IPA06A	01/06/2022	18:05	EP
CCV	1.000	IPA06A	01/06/2022	18:10	EP
CCB	1.000	IPA06A	01/06/2022	18:14	EP

Intensity Report

Author:

Published: 1/8/2022 8:35:38AM

Notes:

Blank

Method Name: FAST-2016_NO_AU Method Revision: 1,077

Analyst Name: EP

Acquire Date: 1/6/2022 11:17:51AM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.0001230	Cts/S	0.00001600	13.13	-18.10
Al3961_R		-0.0003470	Cts/S	0.0001520	43.81	-6.247
As1891_A		-0.0001820	Cts/S	0.00005100	28.30	-1.569
B_2089_A		0.0005280	Cts/S	0.00003500	6.660	4.564
Ba4554_R		0.0006990	Cts/S	0.0004110	58.74	12.56
Be3130_R		-0.0001210	Cts/S	0.0001230	101.4	-2.202
Ca3158_R		-0.001143	Cts/S	0.0003650	31.91	-20.56
Cd2265_A		-0.00005500	Cts/S	0.00001400	26.12	-0.4765
Co2286_A		0.0003740	Cts/S	0.00001500	4.083	3.231
Cr2677_A		0.000001000	Cts/S	0.000005000	439.9	-0.1778
Cu3273_A		-0.0002290	Cts/S	0.00001500	6.343	-33.73
Fe2599_R		0.0002870	Cts/S	0.00007500	26.01	5.186
K_7664_R		-0.005270	Cts/S	0.0007110	13.48	-94.96
Li6707_R		0.00001600	Cts/S	0.0002890	1,857	0.3182
Mg2025_A		-0.0009270	Cts/S	0.00003300	3.612	-8.003
Mn2576_R		0.00006800	Cts/S	0.0001260	183.9	1.217
Mo2020_A		-0.00005000	Cts/S	0.000004000	7.463	-0.4319
Na5895_R		0.001576	Cts/S	0.0003830	24.33	28.38
Ni2316_A		0.00007200	Cts/S	0.0001140	158.7	0.6243
Pb2203_A		-0.0001490	Cts/S	0.00001000	6.413	-1.283
Sb2068_A		0.00009500	Cts/S	0.00003000	31.71	0.8188
Se1960_A		0.0002840	Cts/S	0.00003200	11.13	2.454
Si2516_R		0.001349	Cts/S	0.0002720	20.15	24.37
Sn1899_A		0.00008200	Cts/S	0.00002300	27.69	0.7123
Sr4215_R		-0.007996	Cts/S	0.0005350	6.690	-144.3
Ti3349_A		-0.00007400	Cts/S	0.00001000	13.45	-10.95
Tl1908_A		-0.0001160	Cts/S	0.0000	0.1082	-0.9988
V_2924_A		-0.00001100	Cts/S	0.0000	2.476	-1.694
Zn2062_A		0.00001200	Cts/S	0.00004700	384.3	0.1070
Y_3600_R		18,036	Cts/S	260.12	1.4422	18,036
Y_2243_A		8,636.1	Cts/S	55.287	0.64019	8,636.1
Y_3600_A		147,450	Cts/S	227.12	0.15404	147,450

Std 1

Method Name: FAST-2016_NO_AU Method Revision: 1,077

Analyst Name: EP

Acquire Date: 1/6/2022 11:22:13AM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1450	Cts/S	0.0001590	0.1098	20,500
Al3961_R		1.453	Cts/S	0.02198	1.512	25,690
As1891_A		0.04680	Cts/S	0.0002240	0.4794	394.2
B_2089_A		0.1828	Cts/S	0.0008130	0.4446	1,540
Ba4554_R		3.614	Cts/S	0.06281	1.738	63,870
Be3130_R		5.230	Cts/S	0.1076	2.057	92,430
Ca3158_R		1.791	Cts/S	0.02124	1.186	31,660
Cd2265_A		1.580	Cts/S	0.007204	0.4559	13,310
Co2286_A		0.4729	Cts/S	0.002129	0.4502	3,983
Cr2677_A		0.07960	Cts/S	0.00006900	0.08714	11,250
Cu3273_A		0.08211	Cts/S	0.00001600	0.01917	11,610
Fe2599_R		2.794	Cts/S	0.04734	1.694	49,380
K_7664_R		0.8239	Cts/S	0.01154	1.401	14,560
Li6707_R		0.6122	Cts/S	0.01166	1.905	10,820

Std 1

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 11:22:13AM
Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Mg2025_A		1.015	Cts/S	0.003522	0.3470	8,552
Mn2576_R		0.6106	Cts/S	0.007970	1.305	10,790
Mo2020_A		0.3923	Cts/S	0.001761	0.4490	3,304
Na5895_R		2.721	Cts/S	0.03649	1.341	48,090
Ni2316_A		0.2461	Cts/S	0.0007870	0.3198	2,073
Pb2203_A		0.1208	Cts/S	0.0005650	0.4678	1,017
Sb2068_A		0.06556	Cts/S	0.0003520	0.5373	552.3
Se1960_A		0.03624	Cts/S	0.0001160	0.3201	305.3
Si2516_R		0.6969	Cts/S	0.007378	1.059	12,320
Sn1899_A		0.06042	Cts/S	0.0003080	0.5101	509.0
Sr4215_R		4.014	Cts/S	0.07927	1.975	70,930
Ti3349_A		0.1895	Cts/S	0.0005950	0.3141	26,790
Tl1908_A		0.07048	Cts/S	0.0004270	0.6055	593.7
V_2924_A		0.07811	Cts/S	0.0003350	0.4291	11,040
Zn2062_A		0.3727	Cts/S	0.001804	0.4841	3,140
Y_3600_R		17,675	Cts/S	77.130	0.43639	17,675
Y_2243_A		8,423.9	Cts/S	19.142	0.22723	8,423.9
Y_3600_A		141,380	Cts/S	285.36	0.20184	141,380

ICV

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 11:26:20AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		396.7	ug/L	1.514	0.3817	8,251
Al3961_R		10,110	ug/L	164.5	1.627	10,510
As1891_A		391.5	ug/L	1.131	0.2889	152.8
B_2089_A		403.9	ug/L	0.2469	0.06112	622.8
Ba4554_R		397.5	ug/L	3.619	0.9106	25,700
Be3130_R		396.3	ug/L	2.036	0.5136	37,070
Ca3158_R		10,240	ug/L	171.9	1.678	13,110
Cd2265_A		405.9	ug/L	0.2475	0.06097	5,383
Co2286_A		411.3	ug/L	0.3918	0.09528	1,634
Cr2677_A		399.7	ug/L	1.723	0.4312	4,569
Cu3273_A		403.2	ug/L	0.8884	0.2203	4,736
Fe2599_R		10,020	ug/L	92.24	0.9202	20,040
K_7664_R		13,690	ug/L	263.8	1.927	8,027
Li6707_R		403.7	ug/L	0.09217	0.02283	4,421
Mg2025_A		10,090	ug/L	2.516	0.02494	3,434
Mn2576_R		398.6	ug/L	5.655	1.419	4,354
Mo2020_A		413.9	ug/L	0.05960	0.01440	1,363
Na5895_R		10,160	ug/L	176.3	1.736	19,790
Ni2316_A		411.4	ug/L	0.1667	0.04052	850.2
Pb2203_A		410.4	ug/L	0.02694	0.006565	415.3
Sb2068_A		404.6	ug/L	0.7737	0.1912	223.0
Se1960_A		408.6	ug/L	2.684	0.6568	125.7
Si2516_R		10,100	ug/L	155.2	1.537	4,953
Sn1899_A		410.3	ug/L	0.2206	0.05376	208.5
Sr4215_R		396.7	ug/L	1.738	0.4381	28,390
Ti3349_A		405.0	ug/L	0.01358	0.003353	11,020
Tl1908_A		412.7	ug/L	0.1234	0.02990	243.6
V_2924_A		405.1	ug/L	2.034	0.5021	4,543
Zn2062_A		407.1	ug/L	0.8105	0.1991	1,274
Y_3600_R		17,888	Cts/S	54.498	0.30467	17,888
Y_2243_A		8,393.3	Cts/S	16.829	0.20051	8,393.3
Y_3600_A		143,630	Cts/S	365.99	0.25481	143,630

ICB

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 11:30:29AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1058	ug/L	0.5087	480.7	-15.92
Al3961_R		2.068	ug/L	6.339	306.5	-3.997
As1891_A		-0.7322	ug/L	0.08539	11.66	-1.864
B_2089_A		1.941	ug/L	0.1198	6.171	7.559
Ba4554_R		0.1517	ug/L	0.1655	109.1	22.18
Be3130_R		0.1223	ug/L	0.007013	5.734	9.187
Ca3158_R		0.3529	ug/L	1.392	394.5	-19.90
Cd2265_A		0.04869	ug/L	0.008828	18.13	0.1948
Co2286_A		-0.05050	ug/L	0.06617	131.0	3.023
Cr2677_A		0.2305	ug/L	0.06327	27.45	2.522
Cu3273_A		0.4149	ug/L	0.3384	81.57	-28.67
Fe2599_R		4.319	ug/L	1.742	40.33	13.70
K_7664_R		10.74	ug/L	22.52	209.7	-87.60
Li6707_R		0.7674	ug/L	0.4778	62.26	8.624
Mg2025_A		0.7338	ug/L	0.9406	128.2	-7.726
Mn2576_R		-0.3872	ug/L	0.3977	102.7	-3.016
Mo2020_A		0.7045	ug/L	0.07414	10.52	1.951
Na5895_R		1.393	ug/L	1.842	132.3	30.80
Ni2316_A		0.02751	ug/L	0.03199	116.3	0.6875
Pb2203_A		0.8295	ug/L	0.1297	15.63	-0.4139
Sb2068_A		-0.4713	ug/L	0.03047	6.465	0.5474
Se1960_A		-0.7104	ug/L	0.5999	84.44	2.229
Si2516_R		14.12	ug/L	7.918	56.07	30.89
Sn1899_A		0.3002	ug/L	0.05402	18.00	0.8659
Sr4215_R		0.02610	ug/L	0.02731	104.6	-140.6
Ti3349_A		0.7157	ug/L	0.3054	42.67	8.997
Tl1908_A		0.1216	ug/L	0.9069	746.0	-0.9223
V_2924_A		-0.1237	ug/L	0.1345	108.7	-3.185
Zn2062_A		0.09548	ug/L	0.06815	71.38	0.4113
Y_3600_R		17,816	Cts/S	154.53	0.86738	17,816
Y_2243_A		8,614.7	Cts/S	17.852	0.20723	8,614.7
Y_3600_A		147,430	Cts/S	1,901.6	1.2898	147,430

PQL

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 11:34:53AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		9.690	ug/L	0.4740	4.892	182.5
Al3961_R		314.7	ug/L	3.711	1.179	315.1
As1891_A		7.320	ug/L	1.082	14.78	1.371
B_2089_A		51.15	ug/L	0.4928	0.9634	81.92
Ba4554_R		5.357	ug/L	0.1467	2.738	352.3
Be3130_R		5.153	ug/L	0.005409	0.1050	470.9
Ca3158_R		108.2	ug/L	3.190	2.948	116.2
Cd2265_A		5.211	ug/L	0.06459	1.239	69.05
Co2286_A		10.30	ug/L	0.05794	0.5625	44.31
Cr2677_A		10.75	ug/L	0.01763	0.1640	121.3
Cu3273_A		26.48	ug/L	0.1363	0.5148	276.8
Fe2599_R		106.4	ug/L	1.473	1.385	213.9
K_7664_R		1,049	ug/L	2.648	0.2525	518.4
Li6707_R		102.2	ug/L	2.403	2.350	1,100
Mg2025_A		99.22	ug/L	0.1420	0.1431	26.58
Mn2576_R		4.723	ug/L	0.06385	1.352	51.82
Mo2020_A		10.68	ug/L	0.1204	1.128	34.96
Na5895_R		1,050	ug/L	5.793	0.5516	2,035
Ni2316_A		10.68	ug/L	0.02256	0.2113	22.81

PQL

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 11:34:53AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		4.790	ug/L	0.05646	1.179	3.618
Sb2068_A		8.810	ug/L	0.3719	4.221	5.121
Se1960_A		10.86	ug/L	1.611	14.84	5.697
Si2516_R		212.9	ug/L	5.862	2.753	125.8
Sn1899_A		103.8	ug/L	0.7400	0.7126	53.63
Sr4215_R		10.54	ug/L	0.2661	2.525	604.2
Ti3349_A		15.60	ug/L	0.1258	0.8060	409.4
Tl1908_A		14.49	ug/L	0.4221	2.913	7.660
V_2924_A		9.750	ug/L	0.5156	5.288	106.5
Zn2062_A		21.38	ug/L	0.07139	0.3339	67.45
Y_3600_R		17,567	Cts/S	53.919	0.30694	17,567
Y_2243_A		8,447.5	Cts/S	13.762	0.16291	8,447.5
Y_3600_A		141,990	Cts/S	127.20	0.089580	141,990

ICSA

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 11:39:15AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.4320	ug/L	0.7622	176.4	-435.1
Al3961_R		534,600	ug/L	14,540	2.719	513,000
As1891_A		3.175	ug/L	0.3670	11.56	-12.09
B_2089_A		0.3305	ug/L	0.3566	107.9	4.242
Ba4554_R		1.639	ug/L	0.1844	11.25	109.5
Be3130_R		0.01031	ug/L	0.06389	619.5	-1.057
Ca3158_R		508,800	ug/L	15,690	3.084	602,900
Cd2265_A	W	-2.508	ug/L	1.009	40.24	357.8
Co2286_A		-0.3270	ug/L	0.1052	32.18	4.718
Cr2677_A		2.989	ug/L	0.2663	8.908	48.30
Cu3273_A		-3.004	ug/L	1.016	33.81	-36.71
Fe2599_R		199,100	ug/L	7,327	3.679	367,800
K_7664_R		-2.113	ug/L	15.85	750.3	-88.34
Li6707_R		11.06	ug/L	0.6535	5.911	112.1
Mg2025_A		490,800	ug/L	436.5	0.08893	145,000
Mn2576_R		0.7641	ug/L	0.3361	43.98	15.32
Mo2020_A		-1.962	ug/L	0.08594	4.379	-5.998
Na5895_R		78.35	ug/L	11.38	14.53	166.8
Ni2316_A		3.555	ug/L	0.2728	7.673	-7.185
Pb2203_A		0.9781	ug/L	1.276	130.5	-42.71
Sb2068_A		-0.8526	ug/L	0.8712	102.2	5.918
Se1960_A		2.012	ug/L	0.1565	7.782	9.139
Si2516_R		10.52	ug/L	2.417	22.98	12.07
Sn1899_A		3.830	ug/L	2.210	57.71	2.294
Sr4215_R	W	5.434	ug/L	0.07538	1.387	229.1
Ti3349_A		1.441	ug/L	0.003123	0.2167	24.69
Tl1908_A		-1.041	ug/L	0.4414	42.41	-0.7101
V_2924_A		3.037	ug/L	0.6645	21.88	23.41
Zn2062_A		6.982	ug/L	0.3912	5.603	19.14
Y_3600_R		16,533	Cts/S	227.64	1.3769	16,533
Y_2243_A		7,315.2	Cts/S	8.5503	0.11688	7,315.2
Y_3600_A		124,370	Cts/S	452.73	0.36402	124,370

ICSAB

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 11:43:49AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

ICSAB

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 11:43:49AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		221.1	ug/L	0.9514	0.4303	3,679
Al3961_R		467,300	ug/L	11,040	2.362	457,400
As1891_A		103.4	ug/L	0.5733	0.5545	24.33
B_2089_A		510.0	ug/L	1.821	0.3571	694.6
Ba4554_R		513.8	ug/L	3.291	0.6405	31,310
Be3130_R		504.9	ug/L	4.345	0.8606	44,520
Ca3158_R		445,100	ug/L	7,493	1.683	538,000
Cd2265_A		961.0	ug/L	6.170	0.6421	11,580
Co2286_A		482.0	ug/L	2.131	0.4421	1,698
Cr2677_A		502.6	ug/L	1.879	0.3739	5,072
Cu3273_A		534.6	ug/L	3.074	0.5751	5,547
Fe2599_R		174,600	ug/L	2,045	1.171	328,900
K_7664_R		21,540	ug/L	27.05	0.1256	11,950
Li6707_R		553.8	ug/L	8.869	1.602	5,715
Mg2025_A		441,800	ug/L	2,058	0.4657	132,600
Mn2576_R		488.4	ug/L	4.413	0.9037	5,039
Mo2020_A		506.8	ug/L	2.264	0.4467	1,477
Na5895_R		21,460	ug/L	28.98	0.1350	39,390
Ni2316_A		949.9	ug/L	4.858	0.5114	1,720
Pb2203_A		47.87	ug/L	2.261	4.723	4.013
Sb2068_A		634.2	ug/L	0.009827	0.001549	314.1
Se1960_A		50.76	ug/L	0.2892	0.5698	21.51
Si2516_R		2,129	ug/L	13.41	0.6300	991.7
Sn1899_A		501.1	ug/L	2.439	0.4868	225.2
Sr4215_R		518.9	ug/L	4.856	0.9358	35,050
Ti3349_A		517.8	ug/L	3.227	0.6233	12,390
Tl1908_A		92.37	ug/L	0.7291	0.7892	48.67
V_2924_A		510.0	ug/L	2.700	0.5294	5,030
Zn2062_A		951.8	ug/L	4.515	0.4744	2,637
Y_3600_R		16,859	Cts/S	108.79	0.64530	16,859
Y_2243_A		7,429.2	Cts/S	21.245	0.28597	7,429.2
Y_3600_A		126,370	Cts/S	538.36	0.42602	126,370

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 11:48:16AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		510.1	ug/L	1.627	0.3188	10,630
Al3961_R		12,810	ug/L	564.1	4.404	13,350
As1891_A		510.2	ug/L	0.4578	0.08973	200.8
B_2089_A		513.9	ug/L	2.347	0.4566	795.5
Ba4554_R		503.0	ug/L	21.01	4.177	32,610
Be3130_R		499.6	ug/L	20.58	4.119	46,860
Ca3158_R		13,130	ug/L	460.0	3.503	16,860
Cd2265_A		512.0	ug/L	1.884	0.3681	6,830
Co2286_A		517.5	ug/L	2.029	0.3921	2,067
Cr2677_A		513.0	ug/L	3.587	0.6993	5,874
Cu3273_A		502.7	ug/L	3.813	0.7585	5,921
Fe2599_R		12,840	ug/L	556.4	4.335	25,730
K_7664_R		12,650	ug/L	402.9	3.185	7,429
Li6707_R		503.7	ug/L	18.99	3.769	5,531
Mg2025_A		12,940	ug/L	22.95	0.1773	4,434
Mn2576_R		505.8	ug/L	19.75	3.905	5,540
Mo2020_A		514.8	ug/L	2.835	0.5507	1,705
Na5895_R		12,650	ug/L	474.2	3.749	24,710
Ni2316_A		517.8	ug/L	1.880	0.3630	1,076

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 11:48:16AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		516.8	ug/L	2.980	0.5766	526.3
Sb2068_A		510.7	ug/L	2.978	0.5832	283.0
Se1960_A		515.5	ug/L	0.4812	0.09334	158.9
Si2516_R		13,090	ug/L	482.0	3.682	6,428
Sn1899_A		522.0	ug/L	1.058	0.2028	266.6
Sr4215_R		502.0	ug/L	20.66	4.116	36,070
Ti3349_A		507.0	ug/L	2.469	0.4869	13,810
Tl1908_A		521.8	ug/L	3.163	0.6062	310.0
V_2924_A		508.0	ug/L	2.427	0.4779	5,706
Zn2062_A		514.8	ug/L	2.517	0.4889	1,620
Y_3600_R		17,942	Cts/S	389.05	2.1683	17,942
Y_2243_A		8,443.3	Cts/S	19.504	0.23100	8,443.3
Y_3600_A		143,850	Cts/S	829.92	0.57692	143,850

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 11:52:25AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3393	ug/L	0.02401	7.076	-10.76
Al3961_R		16.68	ug/L	4.025	24.12	11.11
As1891_A		-0.8215	ug/L	0.6654	81.00	-1.878
B_2089_A		2.017	ug/L	0.1423	7.055	7.596
Ba4554_R		0.3552	ug/L	0.1961	55.20	35.47
Be3130_R		0.1779	ug/L	0.07374	41.46	14.41
Ca3158_R		8.062	ug/L	6.310	78.27	-10.05
Cd2265_A		0.2250	ug/L	0.1342	59.65	2.563
Co2286_A		0.06034	ug/L	0.1010	167.4	3.434
Cr2677_A		0.3483	ug/L	0.1565	44.94	3.868
Cu3273_A		0.5325	ug/L	0.1610	30.24	-27.04
Fe2599_R		8.815	ug/L	1.071	12.15	22.73
K_7664_R		14.36	ug/L	16.00	111.5	-85.67
Li6707_R		-0.3680	ug/L	0.4735	128.7	-3.769
Mg2025_A		16.60	ug/L	2.165	13.05	-2.172
Mn2576_R		-0.1054	ug/L	0.4717	447.4	0.09331
Mo2020_A		1.094	ug/L	0.3540	32.36	3.228
Na5895_R		11.08	ug/L	1.699	15.33	49.68
Ni2316_A		0.4363	ug/L	0.1710	39.19	1.536
Pb2203_A		0.01901	ug/L	1.362	7,161	-1.247
Sb2068_A		-0.09150	ug/L	0.2160	236.1	0.7566
Se1960_A		1.893	ug/L	0.2835	14.97	2.998
Si2516_R		6.266	ug/L	5.085	81.17	27.15
Sn1899_A		-0.1589	ug/L	0.5436	342.2	0.6198
Sr4215_R		0.2378	ug/L	0.03397	14.28	-125.7
Ti3349_A		0.9806	ug/L	0.1043	10.64	16.32
Tl1908_A		0.1792	ug/L	1.378	768.7	-0.8773
V_2924_A		-0.1557	ug/L	0.2298	147.6	-3.534
Zn2062_A		0.3453	ug/L	0.02723	7.886	1.199
Y_3600_R		17,863	Cts/S	154.64	0.86569	17,863
Y_2243_A		8,511.4	Cts/S	1.6847	0.019793	8,511.4
Y_3600_A		146,100	Cts/S	906.88	0.62074	146,100

LRS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 11:56:48AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

LRS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 11:56:48AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		2,070	ug/L	4.291	0.2072	41,390
Al3961_R		28.14	ug/L	0.4582	1.629	220.0
As1891_A		21,100	ug/L	16.23	0.07691	8,014
B_2089_A		21,270	ug/L	3.277	0.01540	30,760
Ba4554_R		20,290	ug/L	250.4	1.234	1,289,000
Be3130_R		19,960	ug/L	230.8	1.156	1,835,000
Ca3158_R		5.889	ug/L	0.7395	12.56	2.777
Cd2265_A		19,790	ug/L	202.2	1.022	250,900
Co2286_A		20,930	ug/L	4.004	0.01914	79,680
Cr2677_A		20,750	ug/L	13.52	0.06517	228,600
Cu3273_A		20,480	ug/L	151.7	0.7405	233,200
Fe2599_R		6.524	ug/L	0.2740	4.199	17.87
K_7664_R		-11.90	ug/L	0.2850	2.394	-99.60
Li6707_R		21,170	ug/L	59.15	0.2795	227,800
Mg2025_A		38.52	ug/L	11.38	29.53	991.0
Mn2576_R		20,030	ug/L	92.31	0.4608	215,100
Mo2020_A		5,229	ug/L	0.4653	0.008897	16,530
Na5895_R		34.56	ug/L	0.5201	1.505	93.81
Ni2316_A		20,910	ug/L	0.6640	0.003175	41,290
Pb2203_A		21,370	ug/L	20.21	0.09457	20,880
Sb2068_A		20,940	ug/L	12.14	0.05798	11,040
Se1960_A		21,570	ug/L	0.8932	0.004141	6,240
Si2516_R		167.0	ug/L	34.62	20.74	220.5
Sn1899_A		20,860	ug/L	32.10	0.1539	10,150
Sr4215_R		20,860	ug/L	250.7	1.201	1,475,000
Ti3349_A		20,140	ug/L	98.70	0.4902	528,200
Tl1908_A		20,630	ug/L	1.285	0.006230	11,740
V_2924_A		20,160	ug/L	1.360	0.006747	219,000
Zn2062_A		20,060	ug/L	12.24	0.06099	60,260
Y_3600_R		17,582	Cts/S	49.481	0.28143	17,582
Y_2243_A		8,059.5	Cts/S	46.804	0.58073	8,059.5
Y_3600_A		138,440	Cts/S	135.66	0.097987	138,440

LRS2

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 12:01:38PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-1.494	ug/L	0.0000	0.0000	-582.7
Al3961_R	F	592,400	ug/L	0.0000	0.0000	588,800
As1891_A		45.11	ug/L	0.0000	0.0000	-0.8721
B_2089_A		14.08	ug/L	0.0000	0.0000	78.73
Ba4554_R		3.832	ug/L	0.0000	0.0000	249.0
Be3130_R		2.433	ug/L	0.0000	0.0000	215.6
Ca3158_R		535,000	ug/L	0.0000	0.0000	656,500
Cd2265_A		-43.38	ug/L	0.0000	0.0000	23.34
Co2286_A		-1.099	ug/L	0.0000	0.0000	10.91
Cr2677_A		1.281	ug/L	0.0000	0.0000	37.30
Cu3273_A		-1.259	ug/L	0.0000	0.0000	10.35
Fe2599_R		260,600	ug/L	0.0000	0.0000	498,500
K_7664_R	F	344,500	ug/L	0.0000	0.0000	195,500
Li6707_R		15.02	ug/L	0.0000	0.0000	157.7
Mg2025_A	F	128.0	ug/L	0.0000	0.0000	121.5
Mn2576_R		21.60	ug/L	0.0000	0.0000	48.63
Mo2020_A		0.3508	ug/L	0.0000	0.0000	2.254
Na5895_R	F	230,200	ug/L	0.0000	0.0000	428,700
Ni2316_A		10.64	ug/L	0.0000	0.0000	4.210

LRS2

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 12:01:38PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		54.57	ug/L	0.0000	0.0000	2.060
Sb2068_A		-15.09	ug/L	0.0000	0.0000	1.685
Se1960_A		-31.84	ug/L	0.0000	0.0000	5.393
Si2516_R	F	56,970	ug/L	0.0000	0.0000	26,600
Sn1899_A		0.01057	ug/L	0.0000	0.0000	2.149
Sr4215_R		9.608	ug/L	0.0000	0.0000	524.6
Ti3349_A		12.44	ug/L	0.0000	0.0000	284.5
Tl1908_A		0.006267	ug/L	0.0000	0.0000	-0.5261
V_2924_A		8.513	ug/L	0.0000	0.0000	75.57
Zn2062_A		0.6379	ug/L	0.0000	0.0000	6.464
Y_3600_R		17,119	Cts/S	0.00000	0.00000	17,119
Y_2243_A		25,880	Cts/S	0.00000	0.00000	25,880
Y_3600_A		124,600	Cts/S	0.00000	0.00000	124,600

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 12:06:17PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		519.8	ug/L	5.314	1.022	10,680
Al3961_R		12,970	ug/L	59.47	0.4585	13,460
As1891_A		515.2	ug/L	1.675	0.3250	201.7
B_2089_A	W	541.4	ug/L	2.633	0.4863	832.5
Ba4554_R		515.4	ug/L	5.921	1.149	33,260
Be3130_R		514.1	ug/L	6.256	1.217	48,010
Ca3158_R	W	13,240	ug/L	40.71	0.3074	16,930
Cd2265_A		516.7	ug/L	1.026	0.1986	6,857
Co2286_A		521.0	ug/L	0.7977	0.1531	2,070
Cr2677_A		521.6	ug/L	3.341	0.6405	5,888
Cu3273_A		517.6	ug/L	7.072	1.366	6,010
Fe2599_R		13,010	ug/L	144.8	1.114	25,960
K_7664_R		12,990	ug/L	18.41	0.1417	7,602
Li6707_R		515.5	ug/L	4.718	0.9152	5,635
Mg2025_A		13,020	ug/L	65.23	0.5010	4,436
Mn2576_R		513.2	ug/L	2.683	0.5227	5,597
Mo2020_A		518.8	ug/L	0.5187	0.09999	1,709
Na5895_R		12,980	ug/L	6.234	0.04802	25,250
Ni2316_A		522.3	ug/L	0.02683	0.005136	1,080
Pb2203_A		523.5	ug/L	1.312	0.2507	530.3
Sb2068_A		515.9	ug/L	0.02677	0.005189	284.4
Se1960_A		520.6	ug/L	0.2235	0.04293	159.6
Si2516_R	W	13,540	ug/L	40.31	0.2976	6,621
Sn1899_A		526.2	ug/L	2.610	0.4960	267.3
Sr4215_R		514.1	ug/L	5.910	1.150	36,770
Ti3349_A		517.2	ug/L	4.658	0.9008	13,890
Tl1908_A		525.4	ug/L	1.568	0.2985	310.4
V_2924_A		510.3	ug/L	6.713	1.315	5,650
Zn2062_A		518.1	ug/L	0.5183	0.1000	1,622
Y_3600_R		17,857	Cts/S	40.478	0.22668	17,857
Y_2243_A		8,397.4	Cts/S	35.137	0.41843	8,397.4
Y_3600_A		141,800	Cts/S	713.13	0.50293	141,800

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 12:10:25PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 12:10:25PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1116	ug/L	0.1013	90.76	-15.68
Al3961_R		13.15	ug/L	11.22	85.35	7.588
As1891_A		0.2220	ug/L	0.9620	433.3	-1.457
B_2089_A	W	14.19	ug/L	0.7434	5.238	26.05
Ba4554_R		0.4005	ug/L	0.01454	3.630	39.08
Be3130_R		0.4557	ug/L	0.06592	14.47	41.07
Ca3158_R		7.209	ug/L	1.156	16.03	-11.40
Cd2265_A		0.4830	ug/L	0.05513	11.42	6.008
Co2286_A		0.5443	ug/L	0.01271	2.335	5.372
Cr2677_A		0.5279	ug/L	0.07643	14.48	5.988
Cu3273_A		0.7093	ug/L	0.3903	55.02	-25.02
Fe2599_R		8.403	ug/L	0.02837	0.3375	22.32
K_7664_R		62.98	ug/L	10.30	16.36	-57.94
Li6707_R		0.9949	ug/L	1.335	134.2	11.42
Mg2025_A		7.382	ug/L	1.181	16.00	-5.306
Mn2576_R		0.1235	ug/L	0.07032	56.94	2.618
Mo2020_A		1.355	ug/L	0.09748	7.192	4.093
Na5895_R		10.93	ug/L	1.022	9.349	50.35
Ni2316_A		0.5727	ug/L	0.08983	15.69	1.820
Pb2203_A		1.107	ug/L	0.03189	2.880	-0.1238
Sb2068_A		0.5920	ug/L	1.163	196.5	1.129
Se1960_A		2.390	ug/L	1.171	49.01	3.144
Si2516_R		10.27	ug/L	12.32	119.9	29.70
Sn1899_A		1.313	ug/L	0.7618	58.02	1.373
Sr4215_R		0.3854	ug/L	0.04131	10.72	-117.4
Ti3349_A		1.689	ug/L	0.03124	1.849	36.07
Tl1908_A		-0.5731	ug/L	0.5663	98.81	-1.325
V_2924_A		0.3314	ug/L	0.1077	32.51	2.054
Zn2062_A		0.6326	ug/L	0.1268	20.05	2.108
Y_3600_R		18,206	Cts/S	108.26	0.59464	18,206
Y_2243_A		8,496.5	Cts/S	1.5054	0.017718	8,496.5
Y_3600_A		146,690	Cts/S	419.45	0.28594	146,690

LCSOOK24ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 12:14:50PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		51.79	ug/L	0.01370	0.02644	1,040
Al3961_R		2,147	ug/L	61.28	2.854	2,215
As1891_A		104.1	ug/L	1.067	1.025	38.90
B_2089_A		534.7	ug/L	3.758	0.7029	794.8
Ba4554_R		2,138	ug/L	50.88	2.379	137,300
Be3130_R		52.77	ug/L	1.246	2.361	4,903
Ca3158_R		2,636	ug/L	80.91	3.070	3,339
Cd2265_A		263.5	ug/L	1.671	0.6342	3,422
Co2286_A		546.3	ug/L	4.995	0.9144	2,132
Cr2677_A		214.0	ug/L	0.8358	0.3906	2,414
Cu3273_A		270.1	ug/L	1.899	0.7031	3,115
Fe2599_R		1,082	ug/L	32.27	2.983	2,154
K_7664_R		10,630	ug/L	218.1	2.052	6,172
Li6707_R		547.8	ug/L	11.07	2.020	5,961
Mg2025_A		5,270	ug/L	49.85	0.9460	1,774
Mn2576_R		525.7	ug/L	14.43	2.745	5,710
Mo2020_A		112.1	ug/L	0.8960	0.7993	362.1
Na5895_R		7,972	ug/L	170.7	2.141	15,440
Ni2316_A		545.7	ug/L	3.676	0.6737	1,103

LCSOOK24ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 12:14:50PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		107.2	ug/L	0.4644	0.4333	105.7
Sb2068_A		107.9	ug/L	1.076	0.9975	56.23
Se1960_A		108.3	ug/L	0.08292	0.07654	34.50
Si2516_R		1,031	ug/L	20.75	2.013	526.6
Sn1899_A		592.3	ug/L	5.946	1.004	295.4
Sr4215_R		536.4	ug/L	11.97	2.231	38,210
Ti3349_A		538.1	ug/L	3.309	0.6149	14,440
Tl1908_A		107.4	ug/L	1.895	1.764	62.21
V_2924_A		534.1	ug/L	5.225	0.9784	5,948
Zn2062_A		528.0	ug/L	2.839	0.5377	1,624
Y_3600_R		17,778	Cts/S	217.69	1.2245	17,778
Y_2243_A		8,247.1	Cts/S	59.929	0.72666	8,247.1
Y_3600_A		141,740	Cts/S	297.67	0.21001	141,740

PBSOK24ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 12:19:02PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1163	ug/L	0.2250	193.4	-20.36
Al3961_R		13.09	ug/L	0.5611	4.285	7.482
As1891_A		1.326	ug/L	0.2146	16.18	-1.013
B_2089_A		7.995	ug/L	0.6094	7.622	16.61
Ba4554_R		0.5650	ug/L	0.01844	3.264	49.51
Be3130_R		0.09348	ug/L	0.002389	2.555	6.551
Ca3158_R		10.65	ug/L	2.637	24.75	-6.854
Cd2265_A		0.05399	ug/L	0.006104	11.31	0.2745
Co2286_A		0.1579	ug/L	0.1317	83.36	3.816
Cr2677_A		0.8974	ug/L	0.05576	6.213	10.20
Cu3273_A		0.9070	ug/L	0.1975	21.78	-22.40
Fe2599_R		9.758	ug/L	2.232	22.88	24.86
K_7664_R		74.05	ug/L	25.94	35.03	-50.78
Li6707_R		1.256	ug/L	0.1351	10.75	14.18
Mg2025_A		6.143	ug/L	0.7694	12.52	-5.743
Mn2576_R		0.3602	ug/L	0.1827	50.71	5.198
Mo2020_A		0.7759	ug/L	0.05145	6.631	2.157
Na5895_R		14.57	ug/L	0.1254	0.8607	57.09
Ni2316_A		0.5939	ug/L	0.1120	18.86	1.852
Pb2203_A		-0.07778	ug/L	0.1216	156.3	-1.341
Sb2068_A		-0.3613	ug/L	1.412	390.8	0.3268
Se1960_A		2.046	ug/L	0.2295	11.21	3.034
Si2516_R		10.26	ug/L	10.70	104.3	29.45
Sn1899_A		47.71	ug/L	0.3330	0.6980	25.11
Sr4215_R		0.2679	ug/L	0.1335	49.82	-125.0
Ti3349_A		1.361	ug/L	0.1337	9.822	26.68
Tl1908_A		-0.7200	ug/L	0.6511	90.42	-1.411
V_2924_A		-0.05049	ug/L	0.1432	283.7	-2.318
Zn2062_A		0.6005	ug/L	0.1426	23.75	2.002
Y_3600_R		18,061	Cts/S	118.95	0.65859	18,061
Y_2243_A		8,481.1	Cts/S	37.114	0.43760	8,481.1
Y_3600_A		145,280	Cts/S	827.69	0.56971	145,280

LCSWOK30ICW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 12:23:25PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

LCSWOK30ICW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 12:23:25PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		52.72	ug/L	0.1673	0.3173	1,066
Al3961_R		2,184	ug/L	30.76	1.409	2,227
As1891_A		104.7	ug/L	2.127	2.031	39.31
B_2089_A		527.3	ug/L	3.171	0.6014	787.2
Ba4554_R		2,221	ug/L	17.05	0.7678	141,000
Be3130_R		54.77	ug/L	0.4751	0.8674	5,032
Ca3158_R		2,700	ug/L	33.62	1.245	3,382
Cd2265_A		264.5	ug/L	1.761	0.6659	3,449
Co2286_A		547.6	ug/L	2.954	0.5394	2,146
Cr2677_A		216.7	ug/L	1.003	0.4628	2,460
Cu3273_A		270.0	ug/L	0.6840	0.2533	3,134
Fe2599_R		1,124	ug/L	13.57	1.208	2,212
K_7664_R		10,750	ug/L	56.41	0.5247	6,173
Li6707_R		556.1	ug/L	4.706	0.8462	5,982
Mg2025_A		5,324	ug/L	12.45	0.2338	1,800
Mn2576_R		538.8	ug/L	6.089	1.130	5,786
Mo2020_A		109.9	ug/L	0.07599	0.06914	356.5
Na5895_R		8,129	ug/L	73.73	0.9071	15,570
Ni2316_A		548.2	ug/L	2.800	0.5107	1,113
Pb2203_A		108.3	ug/L	0.7048	0.6509	107.3
Sb2068_A		107.9	ug/L	0.1911	0.1771	56.83
Se1960_A		108.8	ug/L	0.03333	0.03064	34.78
Si2516_R		1,109	ug/L	3.990	0.3598	557.8
Sn1899_A		536.2	ug/L	2.375	0.4429	268.7
Sr4215_R		550.3	ug/L	3.061	0.5563	38,750
Ti3349_A		525.4	ug/L	0.4741	0.09024	14,190
Tl1908_A		107.9	ug/L	1.070	0.9918	62.74
V_2924_A		531.2	ug/L	1.271	0.2392	5,955
Zn2062_A		532.7	ug/L	3.558	0.6680	1,645
Y_3600_R		17,572	Cts/S	77.076	0.43862	17,572
Y_2243_A		8,282.3	Cts/S	36.131	0.43624	8,282.3
Y_3600_A		142,660	Cts/S	50.876	0.035661	142,660

PBWOK30ICW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 12:27:37PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1019	ug/L	0.2373	232.9	-15.72
Al3961_R		12.01	ug/L	8.512	70.90	6.348
As1891_A		-0.6850	ug/L	1.050	153.3	-1.809
B_2089_A		5.618	ug/L	0.2930	5.215	12.94
Ba4554_R		0.6254	ug/L	0.03086	4.935	53.53
Be3130_R		0.04953	ug/L	0.001376	2.778	2.428
Ca3158_R		32.52	ug/L	0.3314	1.019	21.51
Cd2265_A		0.06274	ug/L	0.008589	13.69	0.3833
Co2286_A		-0.001909	ug/L	0.08104	4,245	3.159
Cr2677_A		0.04906	ug/L	0.04353	88.73	0.3936
Cu3273_A		0.7933	ug/L	0.5175	65.23	-23.77
Fe2599_R		6.594	ug/L	1.474	22.35	18.52
K_7664_R		27.02	ug/L	10.30	38.10	-79.12
Li6707_R		1.298	ug/L	0.1366	10.53	14.66
Mg2025_A		6.440	ug/L	0.8441	13.11	-5.627
Mn2576_R		0.07731	ug/L	0.03670	47.47	2.089
Mo2020_A		0.3202	ug/L	0.01647	5.142	0.6389
Na5895_R		10.75	ug/L	6.954	64.70	49.65
Ni2316_A		-0.05303	ug/L	0.2057	387.8	0.5022

PBWOK30ICW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 12:27:37PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.3873	ug/L	0.4913	126.9	-0.8591
Sb2068_A		0.003603	ug/L	0.08733	2,424	0.7988
Se1960_A		0.7472	ug/L	0.3490	46.71	2.628
Si2516_R		14.82	ug/L	7.485	50.50	31.73
Sn1899_A		0.6251	ug/L	0.3687	58.98	1.015
Sr4215_R		0.2336	ug/L	0.1281	54.85	-127.7
Ti3349_A		0.8494	ug/L	0.05671	6.676	12.59
Tl1908_A		-0.4659	ug/L	0.5180	111.2	-1.255
V_2924_A		-0.1601	ug/L	0.03218	20.10	-3.514
Zn2062_A		2.834	ug/L	0.1309	4.620	9.035
Y_3600_R		18,089	Cts/S	27.714	0.15321	18,089
Y_2243_A		8,447.2	Cts/S	6.3039	0.074627	8,447.2
Y_3600_A		145,240	Cts/S	872.32	0.60059	145,240

LCSOOL01ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 12:32:02PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		52.22	ug/L	0.1942	0.3719	1,041
Al3961_R		2,183	ug/L	31.79	1.457	2,253
As1891_A		105.1	ug/L	0.1651	0.1570	38.98
B_2089_A		532.6	ug/L	1.840	0.3454	785.4
Ba4554_R		2,164	ug/L	15.91	0.7351	139,100
Be3130_R		52.95	ug/L	0.3996	0.7545	4,924
Ca3158_R		2,677	ug/L	20.37	0.7608	3,394
Cd2265_A		267.5	ug/L	0.4190	0.1566	3,446
Co2286_A		556.7	ug/L	1.097	0.1970	2,155
Cr2677_A		217.8	ug/L	3.950	1.813	2,440
Cu3273_A		276.1	ug/L	1.849	0.6697	3,162
Fe2599_R		1,094	ug/L	12.38	1.131	2,180
K_7664_R		10,790	ug/L	47.39	0.4392	6,270
Li6707_R		542.8	ug/L	5.560	1.024	5,910
Mg2025_A		5,346	ug/L	3.400	0.06360	1,786
Mn2576_R		534.7	ug/L	1.686	0.3152	5,811
Mo2020_A		113.5	ug/L	0.3329	0.2934	363.6
Na5895_R		8,069	ug/L	45.68	0.5660	15,640
Ni2316_A		553.8	ug/L	0.4171	0.07532	1,110
Pb2203_A		108.2	ug/L	0.2625	0.2427	105.9
Sb2068_A		109.5	ug/L	0.1060	0.09680	56.68
Se1960_A		108.9	ug/L	1.773	1.628	34.38
Si2516_R		1,077	ug/L	2.210	0.2052	549.4
Sn1899_A		587.6	ug/L	1.009	0.1718	290.7
Sr4215_R		534.1	ug/L	4.966	0.9298	38,060
Ti3349_A		540.3	ug/L	8.188	1.515	14,390
Tl1908_A		108.2	ug/L	0.7381	0.6824	62.15
V_2924_A		545.7	ug/L	10.16	1.862	6,035
Zn2062_A		534.9	ug/L	2.031	0.3798	1,632
Y_3600_R		17,786	Cts/S	42.097	0.23669	17,786
Y_2243_A		8,181.5	Cts/S	25.039	0.30604	8,181.5
Y_3600_A		140,740	Cts/S	799.09	0.56779	140,740

PBSOL01ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 12:36:13PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

PBSOL01ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 12:36:13PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.02551	ug/L	0.2765	1,084	-17.30
Al3961_R		7.119	ug/L	2.357	33.10	1.204
As1891_A		-0.009252	ug/L	0.6635	7,171	-1.539
B_2089_A		4.985	ug/L	0.05789	1.161	11.98
Ba4554_R		1.066	ug/L	0.02055	1.927	83.58
Be3130_R		0.07833	ug/L	0.0002060	0.2634	5.221
Ca3158_R		13.92	ug/L	3.728	26.78	-2.606
Cd2265_A		0.03198	ug/L	0.03811	119.2	-0.02606
Co2286_A		-0.1113	ug/L	0.07782	69.93	2.724
Cr2677_A		0.6270	ug/L	0.2813	44.87	7.057
Cu3273_A		0.8488	ug/L	0.3219	37.93	-23.07
Fe2599_R		6.965	ug/L	0.7163	10.29	19.58
K_7664_R		36.86	ug/L	30.98	84.04	-74.52
Li6707_R		1.795	ug/L	1.176	65.53	20.32
Mg2025_A		6.393	ug/L	1.529	23.92	-5.646
Mn2576_R		0.1607	ug/L	0.2341	145.6	3.085
Mo2020_A		0.3692	ug/L	0.1951	52.85	0.8002
Na5895_R		16.00	ug/L	5.922	37.02	60.76
Ni2316_A		0.6718	ug/L	0.07268	10.82	1.999
Pb2203_A		0.9042	ug/L	0.1048	11.59	-0.3292
Sb2068_A		-0.7064	ug/L	0.4528	64.11	0.1508
Se1960_A		0.8545	ug/L	0.2782	32.56	2.659
Si2516_R		13.17	ug/L	2.765	20.99	31.36
Sn1899_A		44.25	ug/L	0.2868	0.6481	23.24
Sr4215_R		0.3701	ug/L	0.09431	25.48	-119.4
Ti3349_A		1.123	ug/L	0.05702	5.079	20.11
Tl1908_A		-0.2906	ug/L	0.02399	8.256	-1.150
V_2924_A		-0.04677	ug/L	0.2296	490.9	-2.248
Zn2062_A		0.4462	ug/L	0.02541	5.695	1.507
Y_3600_R		18,360	Cts/S	404.07	2.2009	18,360
Y_2243_A		8,442.9	Cts/S	14.691	0.17400	8,442.9
Y_3600_A		145,210	Cts/S	1,210.1	0.83336	145,210

LCSOOL06ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 12:40:38PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		50.46	ug/L	0.06931	0.1374	1,019
Al3961_R		2,117	ug/L	24.66	1.165	2,191
As1891_A		104.4	ug/L	2.029	1.943	38.87
B_2089_A		518.5	ug/L	0.5318	0.1026	767.9
Ba4554_R		2,100	ug/L	21.80	1.038	135,400
Be3130_R		51.32	ug/L	0.5634	1.098	4,786
Ca3158_R		2,594	ug/L	25.16	0.9699	3,299
Cd2265_A		260.4	ug/L	0.2802	0.1076	3,369
Co2286_A		541.2	ug/L	0.4620	0.08537	2,104
Cr2677_A		209.6	ug/L	1.409	0.6722	2,379
Cu3273_A		265.2	ug/L	0.2474	0.09329	3,076
Fe2599_R		1,069	ug/L	13.57	1.269	2,137
K_7664_R		10,510	ug/L	43.92	0.4181	6,123
Li6707_R		532.3	ug/L	0.9778	0.1837	5,814
Mg2025_A		5,266	ug/L	19.81	0.3761	1,766
Mn2576_R		520.0	ug/L	5.147	0.9897	5,670
Mo2020_A		109.6	ug/L	0.005758	0.005252	352.8
Na5895_R		7,857	ug/L	77.85	0.9909	15,280
Ni2316_A		539.0	ug/L	0.5289	0.09813	1,085

LCSOOL06ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 12:40:38PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		105.7	ug/L	0.2893	0.2738	103.8
Sb2068_A		107.3	ug/L	0.05714	0.05324	55.79
Se1960_A		106.9	ug/L	0.5077	0.4750	33.94
Si2516_R		988.2	ug/L	32.67	3.306	507.7
Sn1899_A		576.9	ug/L	0.6086	0.1055	286.7
Sr4215_R		520.2	ug/L	4.867	0.9356	37,180
Ti3349_A		524.3	ug/L	0.5069	0.09667	14,150
Tl1908_A		106.2	ug/L	1.284	1.209	61.27
V_2924_A		529.5	ug/L	0.9269	0.1751	5,932
Zn2062_A		519.7	ug/L	0.4811	0.09258	1,592
Y_3600_R		17,843	Cts/S	22.723	0.12735	17,843
Y_2243_A		8,215.6	Cts/S	26.243	0.31943	8,215.6
Y_3600_A		142,570	Cts/S	149.09	0.10457	142,570

PBSOL06ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 12:44:50PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1407	ug/L	0.1876	133.3	-21.29
Al3961_R		12.91	ug/L	6.278	48.63	7.462
As1891_A		-0.4281	ug/L	0.3073	71.78	-1.714
B_2089_A		4.101	ug/L	0.1933	4.714	10.70
Ba4554_R		0.4383	ug/L	0.1360	31.03	42.10
Be3130_R		0.04163	ug/L	0.03958	95.08	1.696
Ca3158_R		14.63	ug/L	0.6686	4.571	-1.736
Cd2265_A		0.1629	ug/L	0.01833	11.25	1.717
Co2286_A		0.03726	ug/L	0.09701	260.4	3.334
Cr2677_A		2.887	ug/L	0.09170	3.177	33.89
Cu3273_A		0.9114	ug/L	0.3949	43.33	-22.81
Fe2599_R		10.92	ug/L	1.122	10.28	27.83
K_7664_R		56.92	ug/L	28.99	50.93	-62.35
Li6707_R		1.075	ug/L	0.3596	33.44	12.45
Mg2025_A		8.182	ug/L	0.4970	6.074	-5.052
Mn2576_R		0.2218	ug/L	0.1345	60.66	3.763
Mo2020_A		0.3915	ug/L	0.02007	5.125	0.8789
Na5895_R		8.387	ug/L	6.553	78.13	45.96
Ni2316_A	W	9.667	ug/L	0.09727	1.006	20.67
Pb2203_A		0.8234	ug/L	0.5208	63.25	-0.4133
Sb2068_A		-0.6165	ug/L	0.7378	119.7	0.1606
Se1960_A		0.2206	ug/L	1.292	585.6	2.479
Si2516_R		4.866	ug/L	9.181	188.7	27.34
Sn1899_A	W	51.98	ug/L	0.1861	0.3581	27.30
Sr4215_R		0.03653	ug/L	0.02614	71.55	-144.8
Ti3349_A		1.010	ug/L	0.1422	14.08	17.38
Tl1908_A		-0.2468	ug/L	0.2785	112.8	-1.129
V_2924_A		-0.08691	ug/L	0.01001	11.52	-2.826
Zn2062_A		0.7233	ug/L	0.07968	11.02	2.383
Y_3600_R		18,453	Cts/S	119.75	0.64893	18,453
Y_2243_A		8,482.0	Cts/S	21.213	0.25009	8,482.0
Y_3600_A		148,290	Cts/S	74.471	0.050219	148,290

LCSOOL08ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 12:49:15PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

LCSOOL08ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 12:49:15PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		51.35	ug/L	1.129	2.199	1,033
Al3961_R		2,181	ug/L	12.58	0.5769	2,231
As1891_A		104.0	ug/L	1.490	1.432	38.84
B_2089_A		520.0	ug/L	5.033	0.9679	772.3
Ba4554_R		2,162	ug/L	27.98	1.295	137,700
Be3130_R		52.40	ug/L	0.8196	1.564	4,829
Ca3158_R		2,692	ug/L	23.36	0.8675	3,383
Cd2265_A		263.7	ug/L	1.688	0.6401	3,420
Co2286_A		551.4	ug/L	3.626	0.6576	2,149
Cr2677_A		213.1	ug/L	3.017	1.416	2,410
Cu3273_A		267.4	ug/L	1.720	0.6431	3,092
Fe2599_R		1,098	ug/L	11.18	1.019	2,167
K_7664_R		10,810	ug/L	92.43	0.8552	6,226
Li6707_R		545.9	ug/L	6.308	1.155	5,892
Mg2025_A		5,330	ug/L	51.98	0.9752	1,793
Mn2576_R		536.9	ug/L	2.771	0.5161	5,783
Mo2020_A		111.4	ug/L	0.5854	0.5253	359.5
Na5895_R		8,073	ug/L	50.75	0.6287	15,510
Ni2316_A		544.9	ug/L	3.157	0.5793	1,100
Pb2203_A		107.3	ug/L	0.3283	0.3060	105.7
Sb2068_A		108.6	ug/L	0.3828	0.3525	56.56
Se1960_A	F	112.3	ug/L	0.3461	0.3082	35.64
Si2516_R		1,050	ug/L	16.09	1.532	531.6
Sn1899_A		590.1	ug/L	0.2787	0.04723	294.0
Sr4215_R		532.9	ug/L	8.582	1.610	37,640
Ti3349_A		533.2	ug/L	5.213	0.9776	14,340
Tl1908_A		108.3	ug/L	0.2655	0.2451	62.66
V_2924_A		541.4	ug/L	6.625	1.224	6,045
Zn2062_A		526.7	ug/L	2.731	0.5184	1,618
Y_3600_R		17,630	Cts/S	282.36	1.6016	17,630
Y_2243_A		8,238.9	Cts/S	107.48	1.3045	8,238.9
Y_3600_A		142,110	Cts/S	1,943.6	1.3677	142,110

PBSOL08ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 12:53:28PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1176	ug/L	0.3509	298.4	-20.47
Al3961_R		14.86	ug/L	3.646	24.53	9.443
As1891_A		-0.8724	ug/L	0.7794	89.34	-1.902
B_2089_A		3.142	ug/L	0.1830	5.823	9.297
Ba4554_R		0.6271	ug/L	0.2591	41.31	54.17
Be3130_R		0.07278	ug/L	0.0005650	0.7758	4.661
Ca3158_R		13.90	ug/L	1.788	12.87	-2.678
Cd2265_A		0.01462	ug/L	0.02405	164.5	-0.2447
Co2286_A		-0.1047	ug/L	0.1264	120.8	2.777
Cr2677_A		0.3732	ug/L	0.02474	6.628	4.163
Cu3273_A		2.026	ug/L	0.4430	21.86	-9.061
Fe2599_R		13.16	ug/L	2.556	19.42	32.12
K_7664_R		74.16	ug/L	10.35	13.95	-51.36
Li6707_R		1.291	ug/L	0.2107	16.32	14.72
Mg2025_A		5.410	ug/L	1.149	21.24	-6.040
Mn2576_R		0.7998	ug/L	0.4625	57.83	10.17
Mo2020_A		0.3464	ug/L	0.03012	8.695	0.7323
Na5895_R		9.526	ug/L	4.542	47.68	47.74
Ni2316_A		0.7262	ug/L	0.005031	0.6928	2.132

PBSOL08ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 12:53:28PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.3427	ug/L	0.3048	88.95	-0.9132
Sb2068_A		-0.09487	ug/L	0.6953	732.9	0.4958
Se1960_A		-0.2113	ug/L	0.8728	413.1	2.359
Si2516_R		-0.1620	ug/L	2.144	1,323	24.59
Sn1899_A		44.14	ug/L	0.2907	0.6587	23.41
Sr4215_R		0.1208	ug/L	0.1760	145.6	-137.3
Ti3349_A		1.024	ug/L	0.2265	22.12	17.48
Tl1908_A		-1.297	ug/L	0.06749	5.205	-1.766
V_2924_A		-0.2169	ug/L	0.3081	142.1	-4.194
Zn2062_A		0.8820	ug/L	0.02056	2.331	2.909
Y_3600_R		18,278	Cts/S	55.894	0.30580	18,278
Y_2243_A		8,526.1	Cts/S	6.9945	0.082036	8,526.1
Y_3600_A		146,060	Cts/S	562.58	0.38517	146,060

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 12:57:53PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		517.3	ug/L	2.685	0.5190	10,750
Al3961_R		12,700	ug/L	265.1	2.088	13,440
As1891_A		515.9	ug/L	4.908	0.9513	200.7
B_2089_A		517.1	ug/L	5.331	1.031	790.8
Ba4554_R		505.9	ug/L	12.13	2.398	33,280
Be3130_R		498.2	ug/L	11.17	2.241	47,430
Ca3158_R		12,940	ug/L	194.9	1.506	16,870
Cd2265_A		508.3	ug/L	3.284	0.6460	6,701
Co2286_A		521.4	ug/L	3.553	0.6814	2,058
Cr2677_A		515.6	ug/L	3.677	0.7132	5,884
Cu3273_A		508.3	ug/L	1.994	0.3923	5,968
Fe2599_R		12,750	ug/L	272.4	2.137	25,940
K_7664_R		12,620	ug/L	189.1	1.499	7,520
Li6707_R		512.8	ug/L	14.63	2.854	5,715
Mg2025_A		13,120	ug/L	104.4	0.7951	4,442
Mn2576_R		507.4	ug/L	9.014	1.776	5,641
Mo2020_A		517.2	ug/L	4.548	0.8794	1,692
Na5895_R		12,580	ug/L	263.7	2.095	24,950
Ni2316_A		516.5	ug/L	4.311	0.8347	1,061
Pb2203_A		515.7	ug/L	2.248	0.4359	519.0
Sb2068_A		520.2	ug/L	3.513	0.6753	284.8
Se1960_A		522.7	ug/L	5.112	0.9781	159.1
Si2516_R		13,150	ug/L	208.0	1.582	6,556
Sn1899_A	W	530.8	ug/L	4.278	0.8060	267.9
Sr4215_R		503.7	ug/L	12.63	2.508	36,730
Ti3349_A		511.8	ug/L	1.960	0.3829	13,900
Tl1908_A	W	527.6	ug/L	4.554	0.8631	309.7
V_2924_A		513.5	ug/L	2.402	0.4677	5,750
Zn2062_A		508.0	ug/L	2.626	0.5168	1,580
Y_3600_R		18,204	Cts/S	46.795	0.25706	18,204
Y_2243_A		8,342.7	Cts/S	91.533	1.0972	8,342.7
Y_3600_A		143,380	Cts/S	19.302	0.013462	143,380

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 1:02:02PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 1:02:02PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1345	ug/L	0.08505	63.24	-15.13
Al3961_R		9.764	ug/L	2.591	26.53	4.018
As1891_A		0.01773	ug/L	0.2365	1,334	-1.529
B_2089_A		2.487	ug/L	0.04443	1.787	8.238
Ba4554_R		0.1999	ug/L	0.2997	149.9	25.83
Be3130_R		0.2228	ug/L	0.009937	4.460	18.92
Ca3158_R		5.277	ug/L	0.7147	13.54	-13.90
Cd2265_A		0.2175	ug/L	0.05487	25.23	2.444
Co2286_A		0.1844	ug/L	0.01701	9.226	3.902
Cr2677_A		0.5364	ug/L	0.1827	34.06	6.055
Cu3273_A		0.9060	ug/L	0.01160	1.281	-22.57
Fe2599_R		8.939	ug/L	0.1094	1.224	23.38
K_7664_R		14.22	ug/L	8.026	56.44	-87.25
Li6707_R		1.716	ug/L	1.179	68.71	19.40
Mg2025_A		7.297	ug/L	0.6428	8.810	-5.323
Mn2576_R		-0.02759	ug/L	0.1665	603.7	0.9326
Mo2020_A		0.8680	ug/L	0.09473	10.91	2.454
Na5895_R		1.583	ug/L	0.4941	31.22	31.79
Ni2316_A		0.5679	ug/L	0.1877	33.05	1.792
Pb2203_A		-0.1221	ug/L	0.02982	24.43	-1.381
Sb2068_A		-0.1792	ug/L	1.218	680.0	0.7005
Se1960_A		0.8403	ug/L	1.220	145.2	2.655
Si2516_R		8.103	ug/L	0.6239	7.700	28.56
Sn1899_A		0.1232	ug/L	0.6575	533.7	0.7585
Sr4215_R		0.1755	ug/L	0.1265	72.09	-132.6
Ti3349_A		1.116	ug/L	0.09541	8.549	20.10
Tl1908_A		0.1486	ug/L	0.1469	98.82	-0.8884
V_2924_A		0.08614	ug/L	0.4584	532.1	-0.7163
Zn2062_A		0.4933	ug/L	0.09335	18.92	1.656
Y_3600_R		18,184	Cts/S	42.678	0.23470	18,184
Y_2243_A		8,445.6	Cts/S	10.726	0.12700	8,445.6
Y_3600_A		146,300	Cts/S	1,935.8	1.3232	146,300

LCSWOL08ICW2

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 1:06:27PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		51.09	ug/L	0.1966	0.3847	1,040
Al3961_R		2,120	ug/L	14.52	0.6850	2,219
As1891_A		103.2	ug/L	1.837	1.780	38.48
B_2089_A		514.5	ug/L	1.635	0.3178	763.5
Ba4554_R		2,103	ug/L	18.27	0.8686	137,100
Be3130_R		51.30	ug/L	0.4399	0.8574	4,838
Ca3158_R		2,608	ug/L	18.30	0.7018	3,353
Cd2265_A		257.5	ug/L	0.7964	0.3093	3,337
Co2286_A		544.6	ug/L	2.502	0.4595	2,121
Cr2677_A		210.7	ug/L	0.7892	0.3745	2,410
Cu3273_A		262.0	ug/L	0.1272	0.04854	3,062
Fe2599_R		1,068	ug/L	8.829	0.8266	2,158
K_7664_R		10,250	ug/L	98.39	0.9599	6,037
Li6707_R		524.1	ug/L	2.534	0.4835	5,788
Mg2025_A		5,275	ug/L	25.31	0.4799	1,772
Mn2576_R		519.8	ug/L	5.077	0.9768	5,730
Mo2020_A		108.4	ug/L	0.3616	0.3336	349.5
Na5895_R		7,712	ug/L	44.18	0.5729	15,160
Ni2316_A		540.4	ug/L	1.939	0.3589	1,090

LCSWOL08ICW2

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 1:06:27PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		104.3	ug/L	0.5125	0.4914	102.6
Sb2068_A		106.7	ug/L	0.2807	0.2632	55.79
Se1960_A		107.3	ug/L	1.027	0.9575	34.13
Si2516_R		1,077	ug/L	10.18	0.9453	556.8
Sn1899_A		534.7	ug/L	1.474	0.2757	266.2
Sr4215_R		514.9	ug/L	3.895	0.7565	37,210
Ti3349_A		512.1	ug/L	0.1021	0.01994	13,930
Tl1908_A		106.6	ug/L	0.1441	0.1352	61.61
V_2924_A		523.5	ug/L	0.1029	0.01965	5,910
Zn2062_A		530.6	ug/L	2.265	0.4269	1,629
Y_3600_R		18,040	Cts/S	98.255	0.54465	18,040
Y_2243_A		8,231.5	Cts/S	10.382	0.12613	8,231.5
Y_3600_A		143,680	Cts/S	837.83	0.58311	143,680

PBWOL08ICW2

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 1:10:40PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1761	ug/L	0.3487	198.0	-21.55
Al3961_R		10.54	ug/L	2.606	24.73	4.817
As1891_A		-1.483	ug/L	0.4286	28.90	-2.135
B_2089_A		2.676	ug/L	0.4306	16.09	8.538
Ba4554_R		0.2412	ug/L	0.1176	48.75	28.89
Be3130_R		0.05111	ug/L	0.03603	70.49	2.657
Ca3158_R		8.057	ug/L	5.756	71.43	-10.26
Cd2265_A		0.04019	ug/L	0.03538	88.02	0.09314
Co2286_A		-0.1279	ug/L	0.04899	38.32	2.667
Cr2677_A		0.1794	ug/L	0.1246	69.45	1.893
Cu3273_A		1.003	ug/L	0.1254	12.50	-21.22
Fe2599_R		10.97	ug/L	0.2274	2.073	27.74
K_7664_R		11.61	ug/L	5.192	44.72	-89.57
Li6707_R		-0.3475	ug/L	0.1750	50.37	-3.639
Mg2025_A		2.564	ug/L	1.256	49.00	-6.978
Mn2576_R		0.8698	ug/L	0.1984	22.81	10.96
Mo2020_A		0.2749	ug/L	0.02884	10.49	0.4904
Na5895_R		6.749	ug/L	2.454	36.36	42.41
Ni2316_A		0.3709	ug/L	0.07398	19.95	1.382
Pb2203_A		0.3142	ug/L	0.6940	220.9	-0.9374
Sb2068_A		-1.021	ug/L	0.1654	16.19	0.2330
Se1960_A		0.2982	ug/L	1.382	463.5	2.501
Si2516_R		13.06	ug/L	1.435	10.99	31.25
Sn1899_A		0.1411	ug/L	0.1415	100.2	0.7709
Sr4215_R		0.08628	ug/L	0.03604	41.77	-140.2
Ti3349_A		0.8819	ug/L	0.05729	6.496	13.47
Tl1908_A		-0.5766	ug/L	0.7296	126.5	-1.326
V_2924_A		-0.1160	ug/L	0.3550	306.0	-2.998
Zn2062_A	W	11.78	ug/L	0.07600	0.6454	37.35
Y_3600_R		18,328	Cts/S	469.10	2.5595	18,328
Y_2243_A		8,478.7	Cts/S	0.98636	0.011633	8,478.7
Y_3600_A		145,070	Cts/S	978.69	0.67462	145,070

LCSWOL08ICW3

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 1:15:06PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

LCSWOL08ICW3

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 1:15:06PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		51.30	ug/L	0.4472	0.8719	1,085
Al3961_R		2,090	ug/L	47.37	2.266	2,230
As1891_A		108.2	ug/L	0.2339	0.2161	42.06
B_2089_A		535.9	ug/L	0.4756	0.08875	826.9
Ba4554_R		2,050	ug/L	36.72	1.791	136,200
Be3130_R		50.28	ug/L	0.9033	1.796	4,833
Ca3158_R		2,623	ug/L	50.20	1.914	3,437
Cd2265_A		263.9	ug/L	0.9151	0.3467	3,557
Co2286_A		538.2	ug/L	1.327	0.2465	2,180
Cr2677_A		203.7	ug/L	3.883	1.906	2,419
Cu3273_A		253.1	ug/L	3.711	1.466	3,070
Fe2599_R		1,022	ug/L	21.43	2.097	2,106
K_7664_R		10,480	ug/L	187.2	1.786	6,294
Li6707_R		522.1	ug/L	8.722	1.671	5,876
Mg2025_A		5,453	ug/L	6.825	0.1252	1,905
Mn2576_R		518.1	ug/L	12.07	2.329	5,820
Mo2020_A		106.8	ug/L	0.4112	0.3850	358.1
Na5895_R		7,791	ug/L	153.9	1.976	15,610
Ni2316_A		536.2	ug/L	1.470	0.2741	1,125
Pb2203_A		107.7	ug/L	0.2322	0.2156	110.3
Sb2068_A		107.8	ug/L	0.3146	0.2918	58.75
Se1960_A		112.7	ug/L	0.5681	0.5043	37.14
Si2516_R		1,078	ug/L	18.81	1.745	567.9
Sn1899_A		517.1	ug/L	6.401	1.238	267.8
Sr4215_R		513.8	ug/L	7.163	1.394	37,840
Ti3349_A		501.5	ug/L	2.363	0.4712	14,160
Tl1908_A		110.2	ug/L	0.05544	0.05032	66.23
V_2924_A		515.8	ug/L	5.143	0.9973	6,046
Zn2062_A		530.5	ug/L	2.529	0.4767	1,694
Y_3600_R		18,386	Cts/S	141.40	0.76907	18,386
Y_2243_A		8,561.5	Cts/S	21.517	0.25133	8,561.5
Y_3600_A		149,180	Cts/S	1,491.1	0.99953	149,180

PBWOL08ICW3

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 1:19:18PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1366	ug/L	0.05596	40.96	-21.41
Al3961_R		9.623	ug/L	10.58	109.9	3.854
As1891_A		0.2855	ug/L	0.2324	81.38	-1.462
B_2089_A		1.900	ug/L	0.4281	22.53	7.544
Ba4554_R		0.6040	ug/L	0.08295	13.73	53.83
Be3130_R		0.06689	ug/L	0.0001410	0.2109	4.128
Ca3158_R		4.008	ug/L	0.2857	7.129	-15.97
Cd2265_A		0.06355	ug/L	0.02846	44.78	0.4066
Co2286_A		0.05990	ug/L	0.02595	43.32	3.502
Cr2677_A		0.03551	ug/L	0.1498	421.8	0.2502
Cu3273_A		0.7400	ug/L	0.2641	35.69	-25.15
Fe2599_R		6.020	ug/L	1.940	32.23	17.88
K_7664_R		12.57	ug/L	7.069	56.22	-90.61
Li6707_R		-0.7914	ug/L	2.160	272.9	-8.974
Mg2025_A		11.10	ug/L	0.4794	4.317	-4.142
Mn2576_R		-0.07924	ug/L	0.01465	18.49	0.3745
Mo2020_A		0.4795	ug/L	0.1698	35.41	1.201
Na5895_R		4.667	ug/L	0.03926	0.8413	38.89
Ni2316_A		-0.2517	ug/L	0.1079	42.88	0.09529

PBWOL08ICW3

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 1:19:18PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		1.424	ug/L	0.6639	46.62	0.2115
Sb2068_A		-1.009	ug/L	0.006093	0.6040	0.2297
Se1960_A		-1.181	ug/L	2.083	176.3	2.095
Si2516_R		6.768	ug/L	11.26	166.4	28.59
Sn1899_A		2.690	ug/L	1.003	37.30	2.126
Sr4215_R		0.09628	ug/L	0.01881	19.53	-142.0
Ti3349_A		1.724	ug/L	0.1066	6.185	37.81
Tl1908_A		0.9424	ug/L	0.5525	58.62	-0.4269
V_2924_A		-0.3789	ug/L	0.03299	8.705	-6.206
Zn2062_A		1.062	ug/L	0.07679	7.228	3.543
Y_3600_R		18,663	Cts/S	337.74	1.8097	18,663
Y_2243_A		8,674.9	Cts/S	86.659	0.99897	8,674.9
Y_3600_A		149,770	Cts/S	1,265.6	0.84506	149,770

LCSWPA05ICW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 1:23:43PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	F	103.2	ug/L	0.1448	0.1404	2,108
Al3961_R	F	4,314	ug/L	90.52	2.098	4,426
As1891_A		105.7	ug/L	2.847	2.694	39.97
B_2089_A		514.3	ug/L	8.055	1.566	774.4
Ba4554_R	F	4,258	ug/L	98.08	2.303	272,000
Be3130_R	F	103.8	ug/L	2.308	2.223	9,634
Ca3158_R		2,670	ug/L	53.57	2.006	3,366
Cd2265_A		260.0	ug/L	4.045	1.556	3,420
Co2286_A	F	1,071	ug/L	14.61	1.364	4,227
Cr2677_A	F	417.5	ug/L	0.6775	0.1623	4,732
Cu3273_A	F	532.1	ug/L	1.572	0.2954	6,201
Fe2599_R	F	2,151	ug/L	61.38	2.853	4,256
K_7664_R		10,650	ug/L	230.0	2.158	6,155
Li6707_R		541.5	ug/L	16.28	3.007	5,861
Mg2025_A		5,222	ug/L	69.79	1.336	1,806
Mn2576_R	F	1,062	ug/L	27.72	2.611	11,470
Mo2020_A		106.7	ug/L	1.728	1.620	348.7
Na5895_R		8,036	ug/L	143.1	1.780	15,490
Ni2316_A	F	1,064	ug/L	16.18	1.521	2,175
Pb2203_A		106.8	ug/L	0.7332	0.6865	106.6
Sb2068_A		107.7	ug/L	1.106	1.026	57.39
Se1960_A		109.2	ug/L	1.212	1.110	35.32
Si2516_R		1,105	ug/L	17.26	1.562	559.4
Sn1899_A		545.7	ug/L	6.765	1.240	275.7
Sr4215_R		526.0	ug/L	12.00	2.282	37,260
Ti3349_A		528.0	ug/L	0.6593	0.1249	14,230
Tl1908_A		107.6	ug/L	1.103	1.025	64.16
V_2924_A	F	1,063	ug/L	3.643	0.3427	11,900
Zn2062_A	F	1,034	ug/L	13.96	1.350	3,222
Y_3600_R		17,684	Cts/S	130.49	0.73788	17,684
Y_2243_A		8,354.1	Cts/S	120.87	1.4469	8,354.1
Y_3600_A		142,390	Cts/S	401.50	0.28198	142,390

PBWPA05ICW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 1:27:55PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

PBWPA05ICW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 1:27:55PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.08076	ug/L	0.2267	280.7	-16.00
Al3961_R		9.858	ug/L	6.281	63.71	4.065
As1891_A		-1.260	ug/L	1.291	102.5	-2.014
B_2089_A		2.315	ug/L	0.05789	2.500	7.880
Ba4554_R		0.4555	ug/L	0.08563	18.80	42.45
Be3130_R		0.06531	ug/L	0.05566	85.23	3.889
Ca3158_R		1.622	ug/L	0.8970	55.29	-18.59
Cd2265_A		0.07595	ug/L	0.03256	42.87	0.5489
Co2286_A		-0.03870	ug/L	0.07398	191.2	2.979
Cr2677_A		0.2711	ug/L	0.1368	50.44	2.931
Cu3273_A		0.9630	ug/L	0.3455	35.87	-21.53
Fe2599_R		3.949	ug/L	0.1177	2.981	13.19
K_7664_R		38.53	ug/L	19.14	49.68	-72.31
Li6707_R		0.1451	ug/L	0.005037	3.472	1.889
Mg2025_A		2.815	ug/L	0.5250	18.65	-6.795
Mn2576_R		0.09468	ug/L	0.2125	224.4	2.278
Mo2020_A		0.3342	ug/L	0.05992	17.93	0.6791
Na5895_R		7.665	ug/L	3.457	45.11	43.62
Ni2316_A		0.1794	ug/L	0.08805	49.09	0.9732
Pb2203_A		0.5852	ug/L	0.1717	29.33	-0.6485
Sb2068_A		-0.4242	ug/L	0.9984	235.3	0.5463
Se1960_A		-0.4406	ug/L	0.7671	174.1	2.243
Si2516_R		1.324	ug/L	0.6869	51.89	25.09
Sn1899_A		1.728	ug/L	0.7361	42.61	1.558
Sr4215_R		-0.09005	ug/L	0.01491	16.56	-151.3
Ti3349_A		0.8283	ug/L	0.07757	9.365	11.89
Tl1908_A		-0.9172	ug/L	0.4479	48.84	-1.506
V_2924_A		-0.5644	ug/L	0.1282	22.71	-8.070
Zn2062_A		0.9710	ug/L	0.03614	3.722	3.128
Y_3600_R		18,106	Cts/S	76.827	0.42433	18,106
Y_2243_A		8,357.5	Cts/S	86.100	1.0302	8,357.5
Y_3600_A		143,860	Cts/S	175.33	0.12188	143,860

SO8135-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 1:32:20PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		17.38	ug/L	1.387	7.982	-285.2
Al3961_R	W	324,600	ug/L	21.13	0.006511	69,370
As1891_A		-28.64	ug/L	1.034	3.612	-9.296
B_2089_A		66.15	ug/L	0.2264	0.3423	23.86
Ba4554_R		3,467	ug/L	2.803	0.08085	46,150
Be3130_R		3.778	ug/L	0.2508	6.640	-0.7454
Ca3158_R		60,210	ug/L	18.81	0.03125	15,880
Cd2265_A		-12.86	ug/L	0.2347	1.826	251.3
Co2286_A		243.8	ug/L	0.4797	0.1967	206.4
Cr2677_A		278.0	ug/L	2.336	0.8405	662.1
Cu3273_A		1,543	ug/L	16.74	1.085	3,746
Fe2599_R	W	645,500	ug/L	277.8	0.04304	265,700
K_7664_R		2,064	ug/L	52.61	2.549	155.1
Li6707_R		71.74	ug/L	2.267	3.160	162.1
Mg2025_A	W	145,200	ug/L	370.2	0.2549	9,698
Mn2576_R	W	13,420	ug/L	24.02	0.1790	30,140
Mo2020_A		-5.516	ug/L	0.8772	15.90	-4.347
Na5895_R		57,670	ug/L	303.9	0.5270	23,140
Ni2316_A		157.0	ug/L	0.7500	0.4777	53.80

SO8135-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 1:32:20PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		67.05	ug/L	0.6333	0.9445	7.481
Sb2068_A		-14.81	ug/L	3.456	23.33	2.208
Se1960_A		-9.755	ug/L	5.031	51.58	4.740
Si2516_R		41,010	ug/L	38.02	0.09269	4,141
Sn1899_A		54.35	ug/L	3.462	6.370	6.106
Sr4215_R		688.6	ug/L	1.542	0.2239	10,050
Ti3349_A	W	7,806	ug/L	122.0	1.563	43,130
Tl1908_A		-7.231	ug/L	0.001739	0.02405	-4.004
V_2924_A		2,421	ug/L	46.58	1.924	5,558
Zn2062_A		786.0	ug/L	1.090	0.1387	485.0
Y_3600_R		18,417	Cts/S	167.65	0.91034	18,417
Y_2243_A		8,270.0	Cts/S	38.830	0.46953	8,270.0
Y_3600_A		145,900	Cts/S	1,716.8	1.1767	145,900

SO8135-004

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 1:36:35PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		20.15	ug/L	0.5738	2.848	-343.0
Al3961_R	W	686,500	ug/L	4,523	0.6589	144,900
As1891_A		-29.91	ug/L	10.21	34.13	-10.63
B_2089_A		58.57	ug/L	0.08739	0.1492	20.96
Ba4554_R		370.1	ug/L	0.4464	0.1206	4,875
Be3130_R		-2.018	ug/L	0.01873	0.9283	-236.4
Ca3158_R	W	283,800	ug/L	1,629	0.5738	73,990
Cd2265_A		-9.787	ug/L	2.356	24.07	296.9
Co2286_A		400.6	ug/L	0.1383	0.03452	333.0
Cr2677_A		311.4	ug/L	0.002455	0.0007880	706.9
Cu3273_A		1,162	ug/L	22.25	1.915	2,681
Fe2599_R	W	747,500	ug/L	14,700	1.966	303,800
K_7664_R		1,225	ug/L	60.74	4.959	51.87
Li6707_R		117.1	ug/L	2.233	1.907	261.0
Mg2025_A	W	255,500	ug/L	943.5	0.3693	16,550
Mn2576_R	W	10,660	ug/L	59.48	0.5582	23,620
Mo2020_A		-5.880	ug/L	0.1103	1.876	-4.459
Na5895_R		47,580	ug/L	424.6	0.8924	18,850
Ni2316_A		295.7	ug/L	0.01502	0.005079	105.0
Pb2203_A		851.1	ug/L	0.4747	0.05578	153.3
Sb2068_A		0.8361	ug/L	4.786	572.4	4.455
Se1960_A		-12.94	ug/L	0.7038	5.437	5.196
Si2516_R		46,560	ug/L	421.5	0.9054	4,647
Sn1899_A		48.43	ug/L	4.725	9.756	5.347
Sr4215_R		799.3	ug/L	2.886	0.3611	11,540
Ti3349_A	W	18,110	ug/L	199.2	1.099	95,430
Tl1908_A		-13.56	ug/L	1.192	8.795	-5.198
V_2924_A		3,098	ug/L	24.83	0.8016	6,798
Zn2062_A		751.7	ug/L	3.692	0.4912	449.7
Y_3600_R		18,184	Cts/S	88.032	0.48412	18,184
Y_2243_A		8,018.9	Cts/S	14.640	0.18257	8,018.9
Y_3600_A		139,090	Cts/S	1,392.1	1.0009	139,090

SO8135-006

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 1:40:56PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO8135-006

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 1:40:56PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		15.42	ug/L	1.310	8.498	-313.0
Al3961_R	W	465,200	ug/L	3,692	0.7937	98,450
As1891_A		-23.56	ug/L	2.672	11.34	-9.355
B_2089_A		66.94	ug/L	0.6431	0.9607	24.12
Ba4554_R		588.6	ug/L	6.204	1.054	7,770
Be3130_R		0.04451	ug/L	0.08591	193.0	-133.6
Ca3158_R		83,850	ug/L	532.5	0.6350	21,910
Cd2265_A		-12.87	ug/L	2.314	17.98	260.4
Co2286_A		279.4	ug/L	1.883	0.6740	241.4
Cr2677_A		199.9	ug/L	3.305	1.654	470.0
Cu3273_A		871.7	ug/L	7.785	0.8930	2,076
Fe2599_R	W	663,200	ug/L	8,448	1.274	270,400
K_7664_R		2,644	ug/L	3.134	0.1186	223.7
Li6707_R		106.6	ug/L	10.25	9.615	238.3
Mg2025_A	W	173,800	ug/L	1,568	0.9021	11,620
Mn2576_R	W	9,122	ug/L	64.81	0.7104	20,280
Mo2020_A		-5.689	ug/L	0.4679	8.225	-4.430
Na5895_R		42,530	ug/L	281.1	0.6609	16,910
Ni2316_A		134.7	ug/L	0.6869	0.5101	44.53
Pb2203_A		23.32	ug/L	2.449	10.50	-3.941
Sb2068_A		-13.30	ug/L	1.872	14.08	2.499
Se1960_A		-15.57	ug/L	1.544	9.917	4.543
Si2516_R		46,670	ug/L	378.1	0.8100	4,669
Sn1899_A		52.80	ug/L	0.7743	1.466	5.958
Sr4215_R		456.2	ug/L	8.964	1.965	6,546
Ti3349_A	W	12,760	ug/L	94.81	0.7432	68,980
Tl1908_A		-4.928	ug/L	2.695	54.68	-3.714
V_2924_A		2,652	ug/L	17.60	0.6637	5,970
Zn2062_A		735.2	ug/L	0.7016	0.09544	454.2
Y_3600_R		18,240	Cts/S	5.5979	0.030690	18,240
Y_2243_A		8,280.0	Cts/S	98.865	1.1940	8,280.0
Y_3600_A		142,770	Cts/S	817.10	0.57231	142,770

SO8135-007

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 1:45:11PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		20.55	ug/L	0.4078	1.985	-318.8
Al3961_R	W	555,700	ug/L	2,941	0.5292	117,500
As1891_A		-24.34	ug/L	7.577	31.13	-9.655
B_2089_A		86.76	ug/L	0.03847	0.04434	29.59
Ba4554_R		452.1	ug/L	1.616	0.3574	5,966
Be3130_R		-0.6629	ug/L	0.03172	4.785	-218.4
Ca3158_R		92,560	ug/L	542.0	0.5856	24,160
Cd2265_A		-12.36	ug/L	1.330	10.76	268.9
Co2286_A		295.8	ug/L	1.245	0.4210	258.7
Cr2677_A		103.6	ug/L	1.434	1.383	249.5
Cu3273_A		779.4	ug/L	6.044	0.7755	1,834
Fe2599_R	W	685,000	ug/L	5,344	0.7801	279,000
K_7664_R		1,231	ug/L	2.885	0.2343	52.75
Li6707_R		122.2	ug/L	5.106	4.177	273.0
Mg2025_A	W	204,400	ug/L	725.7	0.3550	13,490
Mn2576_R	W	8,194	ug/L	29.13	0.3554	18,190
Mo2020_A		-5.512	ug/L	1.215	22.05	-4.252
Na5895_R		41,750	ug/L	92.17	0.2208	16,580
Ni2316_A		122.7	ug/L	0.04304	0.03507	38.84

SO8135-007

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 1:45:11PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		26.80	ug/L	3.418	12.75	-4.860
Sb2068_A		-8.334	ug/L	6.079	72.94	3.099
Se1960_A		-18.93	ug/L	4.364	23.06	4.468
Si2516_R		45,320	ug/L	260.0	0.5737	4,536
Sn1899_A		51.31	ug/L	0.7136	1.391	5.733
Sr4215_R		488.7	ug/L	4.803	0.9829	7,016
Ti3349_A	W	18,340	ug/L	234.6	1.280	98,310
Tl1908_A		-7.507	ug/L	2.188	29.14	-4.443
V_2924_A		2,750	ug/L	29.83	1.085	6,147
Zn2062_A		768.1	ug/L	0.7843	0.1021	468.4
Y_3600_R		18,221	Cts/S	40.325	0.22131	18,221
Y_2243_A		8,171.9	Cts/S	32.879	0.40235	8,171.9
Y_3600_A		141,560	Cts/S	988.26	0.69814	141,560

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 1:49:26PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		509.5	ug/L	8.500	1.668	10,550
Al3961_R		12,910	ug/L	246.5	1.910	13,570
As1891_A		517.9	ug/L	1.115	0.2152	200.0
B_2089_A		515.0	ug/L	0.6726	0.1306	782.1
Ba4554_R		508.2	ug/L	7.981	1.570	33,220
Be3130_R		493.5	ug/L	8.189	1.659	46,680
Ca3158_R		13,020	ug/L	281.2	2.159	16,870
Cd2265_A		506.5	ug/L	0.6027	0.1190	6,628
Co2286_A		523.6	ug/L	0.7994	0.1527	2,052
Cr2677_A		503.4	ug/L	9.788	1.944	5,727
Cu3273_A		502.2	ug/L	7.220	1.438	5,876
Fe2599_R		12,770	ug/L	172.1	1.348	25,810
K_7664_R		12,820	ug/L	259.3	2.023	7,594
Li6707_R		515.2	ug/L	6.828	1.325	5,705
Mg2025_A	W	13,220	ug/L	41.38	0.3130	4,442
Mn2576_R		514.4	ug/L	9.197	1.788	5,681
Mo2020_A		517.6	ug/L	0.1845	0.03564	1,681
Na5895_R		12,700	ug/L	284.7	2.241	25,020
Ni2316_A		514.1	ug/L	0.5604	0.1090	1,048
Pb2203_A		512.7	ug/L	0.2510	0.04896	512.2
Sb2068_A		524.7	ug/L	1.264	0.2409	285.2
Se1960_A		521.5	ug/L	2.122	0.4069	157.7
Si2516_R		13,430	ug/L	164.4	1.224	6,650
Sn1899_A	W	534.6	ug/L	0.1425	0.02666	267.8
Sr4215_R		502.5	ug/L	6.448	1.283	36,410
Ti3349_A		511.7	ug/L	9.262	1.810	13,850
Tl1908_A	W	531.3	ug/L	1.426	0.2684	309.7
V_2924_A		513.3	ug/L	8.696	1.694	5,729
Zn2062_A		504.9	ug/L	0.6039	0.1196	1,559
Y_3600_R		18,089	Cts/S	306.41	1.6939	18,089
Y_2243_A		8,282.4	Cts/S	45.964	0.55497	8,282.4
Y_3600_A		142,920	Cts/S	2,078.4	1.4542	142,920

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 1:53:35PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 1:53:35PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3500	ug/L	0.04409	12.59	-10.63
Al3961_R		9.812	ug/L	0.9049	9.222	4.095
As1891_A		-0.3429	ug/L	0.5147	150.1	-1.672
B_2089_A		1.753	ug/L	0.1904	10.86	7.123
Ba4554_R		0.06630	ug/L	0.1141	172.1	17.17
Be3130_R		0.2602	ug/L	0.03819	14.68	22.58
Ca3158_R		7.930	ug/L	2.734	34.47	-10.49
Cd2265_A		0.2297	ug/L	0.07813	34.01	2.607
Co2286_A		0.2215	ug/L	0.2321	104.8	4.047
Cr2677_A		0.4068	ug/L	0.1163	28.59	4.590
Cu3273_A		0.8587	ug/L	0.5726	66.68	-23.32
Fe2599_R		10.64	ug/L	0.7010	6.590	26.98
K_7664_R		16.20	ug/L	7.499	46.28	-86.51
Li6707_R		1.509	ug/L	0.7990	52.94	17.18
Mg2025_A		9.119	ug/L	0.4769	5.229	-4.696
Mn2576_R		-0.1369	ug/L	0.1067	77.90	-0.2796
Mo2020_A		0.8122	ug/L	0.2298	28.29	2.266
Na5895_R		8.678	ug/L	10.14	116.9	46.09
Ni2316_A		0.6472	ug/L	0.1505	23.25	1.953
Pb2203_A		0.3854	ug/L	0.01399	3.629	-0.8604
Sb2068_A		0.1284	ug/L	0.4908	382.1	0.8671
Se1960_A		1.826	ug/L	0.2562	14.03	2.951
Si2516_R		8.531	ug/L	7.672	89.92	28.92
Sn1899_A		0.7007	ug/L	0.04382	6.253	1.052
Sr4215_R		0.2717	ug/L	0.04799	17.66	-126.2
Ti3349_A		1.363	ug/L	0.09977	7.319	27.12
Tl1908_A		0.06061	ug/L	0.4688	773.5	-0.9402
V_2924_A		0.08545	ug/L	0.06378	74.64	-0.7562
Zn2062_A		0.5849	ug/L	0.05055	8.642	1.943
Y_3600_R		18,279	Cts/S	49.736	0.27209	18,279
Y_2243_A		8,437.3	Cts/S	19.640	0.23278	8,437.3
Y_3600_A		147,350	Cts/S	599.53	0.40686	147,350

SO8135-005

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 1:57:59PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.04285	ug/L	0.06904	161.1	-19.67
Al3961_R		224.8	ug/L	2.755	1.225	230.6
As1891_A		-2.360	ug/L	0.5528	23.43	-2.466
B_2089_A		2.850	ug/L	0.2502	8.780	8.681
Ba4554_R		1.243	ug/L	0.07942	6.391	94.21
Be3130_R		0.03576	ug/L	0.07194	201.2	0.5921
Ca3158_R		125.1	ug/L	2.990	2.389	142.1
Cd2265_A		0.04835	ug/L	0.09070	187.6	0.8585
Co2286_A		0.007004	ug/L	0.05656	807.5	3.250
Cr2677_A		1.633	ug/L	0.07424	4.547	18.70
Cu3273_A		1.297	ug/L	0.4810	37.09	-17.63
Fe2599_R		322.5	ug/L	4.076	1.264	659.5
K_7664_R		54.41	ug/L	2.242	4.121	-62.90
Li6707_R		-0.3394	ug/L	0.5225	154.0	-3.518
Mg2025_A		103.2	ug/L	0.5675	0.5500	27.15
Mn2576_R		5.267	ug/L	0.1992	3.782	59.54
Mo2020_A		0.2248	ug/L	0.003148	1.400	0.3188
Na5895_R		179.3	ug/L	7.518	4.193	382.6
Ni2316_A		29.13	ug/L	0.07362	0.2527	60.18

SO8135-005

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 1:57:59PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.9637	ug/L	0.5235	54.32	-0.2813
Sb2068_A		-0.01717	ug/L	0.3424	1,995	0.7811
Se1960_A		0.1900	ug/L	1.200	631.6	2.443
Si2516_R		462.4	ug/L	0.4404	0.09523	253.4
Sn1899_A		0.7657	ug/L	0.5088	66.45	1.076
Sr4215_R		0.5079	ug/L	0.1104	21.74	-108.0
Ti3349_A		9.876	ug/L	0.07457	0.7551	260.5
Tl1908_A		-0.9175	ug/L	0.04552	4.961	-1.516
V_2924_A		1.120	ug/L	0.2398	21.41	11.09
Zn2062_A		66.78	ug/L	0.2393	0.3583	208.5
Y_3600_R		18,152	Cts/S	180.64	0.99519	18,152
Y_2243_A		8,365.2	Cts/S	3.4449	0.041181	8,365.2
Y_3600_A		145,020	Cts/S	2,110.4	1.4552	145,020

SO8135-009

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 2:02:24PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1508	ug/L	0.06528	43.29	-17.69
Al3961_R		680.7	ug/L	12.73	1.871	715.2
As1891_A		-1.428	ug/L	0.3552	24.87	-2.123
B_2089_A		89.55	ug/L	0.2586	0.2888	138.1
Ba4554_R		2.788	ug/L	0.03346	1.200	196.7
Be3130_R		0.05013	ug/L	0.06384	127.4	0.9046
Ca3158_R		291.6	ug/L	0.04972	0.01705	360.9
Cd2265_A		-0.02269	ug/L	0.001582	6.973	-2.321
Co2286_A		0.7711	ug/L	0.01891	2.453	7.964
Cr2677_A		111.2	ug/L	0.01856	0.01670	1,283
Cu3273_A		3.204	ug/L	0.1146	3.577	5.493
Fe2599_R		1,062	ug/L	9.059	0.8529	2,173
K_7664_R		71.35	ug/L	22.85	32.03	-53.00
Li6707_R		0.4532	ug/L	1.659	366.2	5.390
Mg2025_A		238.4	ug/L	1.909	0.8008	72.87
Mn2576_R		14.64	ug/L	0.4160	2.842	164.2
Mo2020_A		0.2769	ug/L	0.09521	34.39	0.4976
Na5895_R		185.2	ug/L	2.764	1.493	396.6
Ni2316_A	W	2,644	ug/L	5.806	0.2196	5,410
Pb2203_A		1.093	ug/L	0.7023	64.28	-0.02325
Sb2068_A		-0.5397	ug/L	0.3126	57.91	-0.1580
Se1960_A		1.320	ug/L	0.1312	9.943	2.798
Si2516_R		1,485	ug/L	31.51	2.121	764.3
Sn1899_A		0.5117	ug/L	0.3252	63.56	0.9472
Sr4215_R		2.011	ug/L	0.07818	3.888	1.644
Ti3349_A		28.74	ug/L	0.3572	1.243	779.2
Tl1908_A		-0.5798	ug/L	0.1495	25.79	-1.331
V_2924_A		3.004	ug/L	0.1255	4.177	29.41
Zn2062_A		81.33	ug/L	0.4908	0.6035	253.5
Y_3600_R		18,263	Cts/S	77.503	0.42437	18,263
Y_2243_A		8,363.4	Cts/S	14.487	0.17322	8,363.4
Y_3600_A		145,020	Cts/S	166.97	0.11513	145,020

SO8260-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 2:06:46PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO8260-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 2:06:46PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		14.98	ug/L	0.004686	0.03128	-271.8
Al3961_R	W	463,400	ug/L	3,875	0.8363	98,410
As1891_A		-30.92	ug/L	0.5265	1.702	-9.468
B_2089_A		78.05	ug/L	2.044	2.619	27.03
Ba4554_R		1,082	ug/L	3.827	0.3535	14,320
Be3130_R		-0.02853	ug/L	0.02282	79.99	-53.69
Ca3158_R	W	137,800	ug/L	1,157	0.8401	36,130
Cd2265_A		-10.90	ug/L	0.1582	1.452	241.6
Co2286_A		348.2	ug/L	3.817	1.096	282.3
Cr2677_A		98.03	ug/L	1.097	1.119	239.3
Cu3273_A		1,050	ug/L	12.64	1.204	2,497
Fe2599_R	W	619,300	ug/L	4,309	0.6958	253,300
K_7664_R		2,746	ug/L	187.4	6.822	237.0
Li6707_R		95.61	ug/L	2.428	2.539	214.5
Mg2025_A	W	138,600	ug/L	953.9	0.6881	9,143
Mn2576_R	W	17,600	ug/L	160.7	0.9132	39,290
Mo2020_A		-4.593	ug/L	0.1536	3.344	-3.772
Na5895_R		57,520	ug/L	366.5	0.6372	22,930
Ni2316_A		88.86	ug/L	1.206	1.358	26.32
Pb2203_A		273.8	ug/L	0.7457	0.2724	45.69
Sb2068_A		-13.92	ug/L	4.346	31.21	2.148
Se1960_A		-19.79	ug/L	5.131	25.93	4.360
Si2516_R		38,000	ug/L	270.2	0.7111	3,813
Sn1899_A		56.21	ug/L	0.2052	0.3650	6.213
Sr4215_R		509.1	ug/L	2.351	0.4618	7,346
Ti3349_A	W	6,437	ug/L	82.20	1.277	34,790
Tl1908_A		-9.551	ug/L	0.2024	2.119	-4.459
V_2924_A		2,577	ug/L	25.53	0.9906	5,785
Zn2062_A		702.2	ug/L	7.045	1.003	427.9
Y_3600_R		18,299	Cts/S	82.167	0.44903	18,299
Y_2243_A		8,166.6	Cts/S	45.702	0.55962	8,166.6
Y_3600_A		142,740	Cts/S	1,051.5	0.73670	142,740

SO8260-003

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 2:11:04PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		15.26	ug/L	1.493	9.787	-328.2
Al3961_R	W	595,700	ug/L	1,035	0.1737	126,700
As1891_A		-38.83	ug/L	1.389	3.577	-11.31
B_2089_A		86.96	ug/L	1.270	1.461	29.47
Ba4554_R		466.7	ug/L	1.638	0.3509	6,192
Be3130_R		-0.1347	ug/L	0.1332	98.84	-38.36
Ca3158_R	W	143,700	ug/L	406.9	0.2831	37,730
Cd2265_A		-12.44	ug/L	1.176	9.457	294.8
Co2286_A		292.5	ug/L	2.199	0.7518	237.9
Cr2677_A		68.04	ug/L	0.4232	0.6220	170.4
Cu3273_A		1,109	ug/L	0.8548	0.07705	2,616
Fe2599_R	W	754,500	ug/L	2,786	0.3692	309,000
K_7664_R		2,065	ug/L	37.52	1.817	154.4
Li6707_R		114.5	ug/L	0.8076	0.7056	257.1
Mg2025_A	W	183,500	ug/L	840.3	0.4579	12,050
Mn2576_R	W	11,100	ug/L	35.38	0.3189	24,780
Mo2020_A		-7.229	ug/L	1.030	14.25	-5.407
Na5895_R		71,150	ug/L	233.9	0.3287	28,390
Ni2316_A		113.8	ug/L	0.2074	0.1823	33.99

SO8260-003

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 2:11:04PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		17.44	ug/L	4.986	28.59	-7.209
Sb2068_A		-10.85	ug/L	6.000	55.30	3.083
Se1960_A		-9.681	ug/L	3.850	39.77	5.349
Si2516_R		34,820	ug/L	152.3	0.4374	3,498
Sn1899_A		55.00	ug/L	1.655	3.010	6.064
Sr4215_R		315.2	ug/L	0.6109	0.1938	4,499
Ti3349_A	W	5,865	ug/L	6.301	0.1074	31,260
Tl1908_A		-7.905	ug/L	0.5629	7.120	-3.354
V_2924_A		3,345	ug/L	5.811	0.1737	7,409
Zn2062_A		850.5	ug/L	1.735	0.2040	515.8
Y_3600_R		18,325	Cts/S	29.853	0.16291	18,325
Y_2243_A		8,127.8	Cts/S	27.916	0.34347	8,127.8
Y_3600_A		140,730	Cts/S	48.294	0.034316	140,730

SO8329-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 2:15:26PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		13.59	ug/L	0.5020	3.693	-225.1
Al3961_R	W	356,600	ug/L	3,471	0.9732	76,000
As1891_A		-22.39	ug/L	0.001902	0.008494	-7.791
B_2089_A		57.64	ug/L	2.094	3.634	21.19
Ba4554_R		713.8	ug/L	0.09423	0.01320	9,481
Be3130_R		0.4219	ug/L	0.2041	48.39	-52.27
Ca3158_R	W	218,100	ug/L	1,140	0.5229	57,390
Cd2265_A		-9.884	ug/L	0.05203	0.5264	197.0
Co2286_A		248.7	ug/L	1.514	0.6087	206.5
Cr2677_A		84.87	ug/L	0.4525	0.5332	204.7
Cu3273_A		893.3	ug/L	0.2120	0.02373	2,114
Fe2599_R	W	508,300	ug/L	1,208	0.2376	208,600
K_7664_R		2,880	ug/L	58.49	2.031	254.0
Li6707_R		72.08	ug/L	4.686	6.502	162.3
Mg2025_A		109,800	ug/L	296.4	0.2698	7,277
Mn2576_R	W	7,710	ug/L	26.89	0.3488	17,250
Mo2020_A		-3.715	ug/L	0.07559	2.035	-3.068
Na5895_R		23,450	ug/L	147.3	0.6282	9,397
Ni2316_A		76.88	ug/L	0.08457	0.1100	23.40
Pb2203_A		2,862	ug/L	16.78	0.5864	562.5
Sb2068_A		-10.27	ug/L	0.3763	3.662	2.009
Se1960_A		-3.701	ug/L	4.772	128.9	4.502
Si2516_R		38,980	ug/L	306.1	0.7851	3,926
Sn1899_A		50.08	ug/L	1.667	3.329	5.636
Sr4215_R		2,351	ug/L	1.625	0.06912	34,570
Ti3349_A	W	6,618	ug/L	9.667	0.1461	35,710
Tl1908_A		-3.730	ug/L	0.5798	15.55	-2.733
V_2924_A		2,216	ug/L	12.60	0.5686	4,972
Zn2062_A		964.0	ug/L	1.515	0.1571	590.3
Y_3600_R		18,358	Cts/S	144.24	0.78572	18,358
Y_2243_A		8,205.4	Cts/S	13.238	0.16133	8,205.4
Y_3600_A		142,500	Cts/S	304.02	0.21335	142,500

SO8329-006

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 2:19:42PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO8329-006

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 2:19:42PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		9.865	ug/L	0.9661	9.793	-273.0
Al3961_R	W	354,600	ug/L	3,440	0.9702	76,490
As1891_A		-20.62	ug/L	1.183	5.739	-8.478
B_2089_A		39.47	ug/L	1.504	3.810	16.09
Ba4554_R		650.7	ug/L	5.490	0.8438	8,754
Be3130_R		1.635	ug/L	0.3066	18.75	29.66
Ca3158_R		49,860	ug/L	681.9	1.368	13,270
Cd2265_A		-11.12	ug/L	0.3915	3.521	237.8
Co2286_A		177.2	ug/L	2.782	1.570	147.5
Cr2677_A		137.5	ug/L	0.1775	0.1291	328.9
Cu3273_A		716.9	ug/L	9.003	1.256	1,739
Fe2599_R	W	603,600	ug/L	7,876	1.305	250,800
K_7664_R		4,105	ug/L	76.67	1.868	408.2
Li6707_R		90.36	ug/L	1.746	1.933	206.0
Mg2025_A		114,600	ug/L	1,165	1.017	7,701
Mn2576_R	W	6,735	ug/L	66.18	0.9827	15,250
Mo2020_A		-5.170	ug/L	0.2496	4.828	-4.052
Na5895_R		31,190	ug/L	304.2	0.9753	12,640
Ni2316_A		83.43	ug/L	2.965	3.554	24.86
Pb2203_A		388.3	ug/L	2.734	0.7041	71.69
Sb2068_A		-11.40	ug/L	3.995	35.03	2.371
Se1960_A		-5.434	ug/L	1.612	29.67	4.731
Si2516_R		50,780	ug/L	552.1	1.087	5,165
Sn1899_A		46.82	ug/L	0.8027	1.714	5.389
Sr4215_R		496.5	ug/L	4.953	0.9976	7,275
Ti3349_A		2,236	ug/L	25.74	1.151	12,170
Tl1908_A		-9.004	ug/L	6.123	68.01	-2.813
V_2924_A		2,273	ug/L	20.22	0.8896	5,142
Zn2062_A		733.2	ug/L	12.21	1.665	455.4
Y_3600_R		18,591	Cts/S	73.739	0.39664	18,591
Y_2243_A		8,322.6	Cts/S	33.074	0.39740	8,322.6
Y_3600_A		143,830	Cts/S	993.61	0.69081	143,830

SO8329-007

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 2:23:58PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		11.82	ug/L	0.1365	1.155	-250.2
Al3961_R	W	395,200	ug/L	3,214	0.8133	84,960
As1891_A		-15.84	ug/L	0.1594	1.006	-7.798
B_2089_A		46.55	ug/L	1.165	2.503	18.05
Ba4554_R		768.8	ug/L	8.011	1.042	10,300
Be3130_R		2.015	ug/L	0.05050	2.506	10.57
Ca3158_R		116,200	ug/L	1,435	1.235	30,840
Cd2265_A		-10.18	ug/L	0.6745	6.623	219.3
Co2286_A		223.6	ug/L	0.07098	0.03174	184.8
Cr2677_A		170.7	ug/L	3.112	1.822	405.3
Cu3273_A		684.8	ug/L	22.12	3.230	1,653
Fe2599_R	W	559,200	ug/L	7,047	1.260	231,500
K_7664_R		6,537	ug/L	28.70	0.4391	705.5
Li6707_R		86.97	ug/L	3.781	4.347	197.5
Mg2025_A		113,800	ug/L	35.31	0.03103	7,587
Mn2576_R	W	10,250	ug/L	89.51	0.8736	23,140
Mo2020_A		-4.764	ug/L	0.3700	7.767	-3.786
Na5895_R		31,700	ug/L	241.1	0.7605	12,800
Ni2316_A		132.6	ug/L	1.453	1.096	45.23

SO8329-007

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 2:23:58PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		682.9	ug/L	4.149	0.6076	129.3
Sb2068_A		-10.86	ug/L	1.126	10.37	2.277
Se1960_A		-0.2703	ug/L	6.365	2,355	5.037
Si2516_R		44,330	ug/L	326.3	0.7361	4,497
Sn1899_A		47.37	ug/L	1.110	2.344	5.402
Sr4215_R		692.7	ug/L	6.019	0.8689	10,170
Ti3349_A		3,996	ug/L	91.18	2.282	21,790
Tl1908_A		-3.172	ug/L	3.429	108.1	-2.716
V_2924_A		2,040	ug/L	61.86	3.032	4,620
Zn2062_A		1,072	ug/L	0.6901	0.06435	660.9
Y_3600_R		18,524	Cts/S	323.32	1.7454	18,524
Y_2243_A		8,258.5	Cts/S	1.2881	0.015597	8,258.5
Y_3600_A		144,040	Cts/S	2,601.3	1.8060	144,040

SO8329-010

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 2:28:14PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		11.05	ug/L	1.587	14.36	-286.9
Al3961_R	W	370,700	ug/L	2,184	0.5892	79,200
As1891_A		-27.70	ug/L	0.7419	2.679	-9.288
B_2089_A		36.20	ug/L	0.7745	2.140	14.96
Ba4554_R		1,527	ug/L	11.68	0.7647	20,330
Be3130_R		1.240	ug/L	0.1634	13.18	28.11
Ca3158_R		29,270	ug/L	167.8	0.5734	7,707
Cd2265_A		-11.40	ug/L	0.4124	3.619	252.9
Co2286_A		211.8	ug/L	0.01629	0.007689	172.8
Cr2677_A		112.2	ug/L	1.739	1.549	271.5
Cu3273_A		678.8	ug/L	3.203	0.4720	1,651
Fe2599_R	W	645,500	ug/L	5,389	0.8350	265,600
K_7664_R		4,002	ug/L	164.8	4.118	391.7
Li6707_R		82.18	ug/L	2.169	2.639	185.6
Mg2025_A		97,030	ug/L	260.7	0.2687	6,452
Mn2576_R	W	6,308	ug/L	40.44	0.6410	14,140
Mo2020_A		-4.473	ug/L	0.3786	8.464	-3.580
Na5895_R		42,460	ug/L	361.1	0.8504	17,040
Ni2316_A		64.29	ug/L	0.2979	0.4634	16.23
Pb2203_A		44.52	ug/L	5.792	13.01	2.073
Sb2068_A		-10.42	ug/L	0.9571	9.184	2.611
Se1960_A		-7.273	ug/L	10.54	144.9	4.716
Si2516_R		41,610	ug/L	320.9	0.7713	4,194
Sn1899_A		49.47	ug/L	2.712	5.482	5.596
Sr4215_R		339.5	ug/L	2.593	0.7638	4,881
Ti3349_A		2,081	ug/L	4.118	0.1979	11,300
Tl1908_A		-1.126	ug/L	0.8431	74.85	-1.763
V_2924_A		2,603	ug/L	1.613	0.06194	5,877
Zn2062_A		618.4	ug/L	1.241	0.2007	380.1
Y_3600_R		18,413	Cts/S	83.771	0.45496	18,413
Y_2243_A		8,236.1	Cts/S	16.276	0.19761	8,236.1
Y_3600_A		143,530	Cts/S	259.15	0.18055	143,530

SO8329-011

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 2:32:31PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO8329-011

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 2:32:31PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		13.18	ug/L	1.929	14.63	-297.9
Al3961_R	W	398,600	ug/L	971.3	0.2437	85,870
As1891_A		-26.87	ug/L	5.062	18.84	-9.381
B_2089_A		67.52	ug/L	0.01784	0.02643	24.05
Ba4554_R		1,053	ug/L	2.247	0.2135	14,130
Be3130_R		2.401	ug/L	0.04532	1.887	7.621
Ca3158_R		28,750	ug/L	3.346	0.01164	7,633
Cd2265_A		-11.51	ug/L	0.6271	5.450	260.4
Co2286_A		269.6	ug/L	0.9331	0.3461	221.2
Cr2677_A		207.0	ug/L	3.056	1.477	487.7
Cu3273_A		815.7	ug/L	5.092	0.6242	1,966
Fe2599_R	W	664,700	ug/L	4,952	0.7450	275,800
K_7664_R		2,450	ug/L	57.04	2.329	203.8
Li6707_R		80.70	ug/L	1.761	2.182	183.7
Mg2025_A		84,820	ug/L	22.01	0.02595	5,612
Mn2576_R	W	9,478	ug/L	32.13	0.3390	21,450
Mo2020_A		-5.139	ug/L	0.4964	9.660	-4.030
Na5895_R		41,210	ug/L	55.68	0.1351	16,670
Ni2316_A		99.27	ug/L	0.5525	0.5566	29.87
Pb2203_A		53.29	ug/L	0.2903	0.5447	3.319
Sb2068_A		-10.70	ug/L	1.572	14.70	2.722
Se1960_A		0.6429	ug/L	13.02	2,025	5.362
Si2516_R		38,500	ug/L	38.14	0.09907	3,917
Sn1899_A		52.74	ug/L	4.770	9.044	5.892
Sr4215_R		348.3	ug/L	3.538	1.016	5,053
Ti3349_A	W	5,342	ug/L	32.78	0.6137	28,960
Tl1908_A		-9.748	ug/L	2.189	22.45	-3.467
V_2924_A		2,605	ug/L	14.08	0.5404	5,869
Zn2062_A		654.0	ug/L	3.740	0.5719	399.9
Y_3600_R		18,567	Cts/S	3.3316	0.017944	18,567
Y_2243_A		8,195.6	Cts/S	6.0334	0.073618	8,195.6
Y_3600_A		143,180	Cts/S	859.39	0.60022	143,180

SO8397-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 2:36:46PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		19.79	ug/L	0.2909	1.470	-295.4
Al3961_R	W	475,800	ug/L	23,770	4.997	101,800
As1891_A	F	-40.80	ug/L	0.08673	0.2126	-10.75
B_2089_A		75.92	ug/L	1.104	1.454	26.27
Ba4554_R		899.1	ug/L	45.65	5.078	11,990
Be3130_R		0.07690	ug/L	0.04348	56.54	-82.55
Ca3158_R		95,410	ug/L	4,436	4.649	25,190
Cd2265_A		-9.284	ug/L	4.906	52.84	276.9
Co2286_A		265.5	ug/L	0.1286	0.04843	221.3
Cr2677_A		135.5	ug/L	3.512	2.591	323.0
Cu3273_A		797.4	ug/L	17.23	2.160	1,906
Fe2599_R	W	693,400	ug/L	26,180	3.775	285,700
K_7664_R		2,380	ug/L	320.5	13.46	193.5
Li6707_R		98.08	ug/L	2.446	2.493	221.7
Mg2025_A	W	139,100	ug/L	72.01	0.05178	9,122
Mn2576_R	W	6,918	ug/L	333.7	4.823	15,520
Mo2020_A		-5.915	ug/L	0.1675	2.832	-4.483
Na5895_R		36,250	ug/L	1,755	4.840	14,570
Ni2316_A		172.4	ug/L	1.068	0.6195	58.21

SO8397-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 2:36:46PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		412.2	ug/L	5.817	1.411	72.60
Sb2068_A		-8.546	ug/L	0.6338	7.416	3.039
Se1960_A		-12.55	ug/L	8.218	65.48	4.674
Si2516_R		35,400	ug/L	1,613	4.556	3,581
Sn1899_A		51.51	ug/L	0.8376	1.626	5.718
Sr4215_R		425.0	ug/L	23.96	5.638	6,151
Ti3349_A	W	9,118	ug/L	206.8	2.268	49,140
Tl1908_A		-6.676	ug/L	0.2779	4.162	-3.159
V_2924_A		2,950	ug/L	59.18	2.006	6,615
Zn2062_A		712.6	ug/L	4.581	0.6429	431.9
Y_3600_R		18,440	Cts/S	392.44	2.1282	18,440
Y_2243_A		8,122.9	Cts/S	16.102	0.19823	8,122.9
Y_3600_A		142,330	Cts/S	2,354.8	1.6545	142,330

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 2:41:04PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		506.9	ug/L	6.315	1.246	10,510
Al3961_R		12,940	ug/L	145.7	1.126	13,600
As1891_A		520.2	ug/L	1.524	0.2929	199.3
B_2089_A		513.0	ug/L	1.078	0.2101	772.8
Ba4554_R		503.1	ug/L	7.697	1.530	32,880
Be3130_R		484.0	ug/L	6.543	1.352	45,770
Ca3158_R		12,990	ug/L	108.1	0.8323	16,820
Cd2265_A		499.8	ug/L	1.739	0.3479	6,489
Co2286_A		526.5	ug/L	0.7509	0.1426	2,047
Cr2677_A		496.6	ug/L	5.169	1.041	5,657
Cu3273_A		497.5	ug/L	7.244	1.456	5,829
Fe2599_R		12,720	ug/L	159.1	1.251	25,710
K_7664_R		12,770	ug/L	160.4	1.256	7,563
Li6707_R		518.1	ug/L	7.620	1.471	5,735
Mg2025_A	W	13,320	ug/L	24.08	0.1808	4,440
Mn2576_R		518.5	ug/L	2.405	0.4639	5,726
Mo2020_A		519.6	ug/L	0.8982	0.1729	1,674
Na5895_R		12,640	ug/L	140.1	1.109	24,880
Ni2316_A		512.1	ug/L	0.9681	0.1890	1,036
Pb2203_A		507.4	ug/L	4.015	0.7913	502.7
Sb2068_A	W	534.7	ug/L	0.4012	0.07503	288.2
Se1960_A		523.7	ug/L	1.725	0.3294	157.0
Si2516_R	W	13,610	ug/L	106.8	0.7847	6,737
Sn1899_A	W	539.6	ug/L	1.390	0.2577	268.2
Sr4215_R		496.1	ug/L	8.691	1.752	35,930
Ti3349_A		511.8	ug/L	6.303	1.232	13,870
Tl1908_A	W	537.3	ug/L	0.6718	0.1250	310.7
V_2924_A		518.7	ug/L	6.373	1.228	5,798
Zn2062_A		497.4	ug/L	2.106	0.4234	1,523
Y_3600_R		18,083	Cts/S	244.69	1.3531	18,083
Y_2243_A		8,215.6	Cts/S	17.501	0.21302	8,215.6
Y_3600_A		143,110	Cts/S	957.94	0.66939	143,110

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 2:45:13PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 2:45:13PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2355	ug/L	0.01754	7.447	-13.11
Al3961_R		8.744	ug/L	5.962	68.19	3.049
As1891_A		-0.05465	ug/L	0.1730	316.6	-1.545
B_2089_A		1.049	ug/L	0.2755	26.26	6.017
Ba4554_R		0.1022	ug/L	0.06148	60.17	19.90
Be3130_R		0.2335	ug/L	0.006573	2.816	20.37
Ca3158_R		3.669	ug/L	1.352	36.85	-16.34
Cd2265_A		0.1849	ug/L	0.04838	26.17	1.994
Co2286_A		0.09151	ug/L	0.1691	184.8	3.502
Cr2677_A		0.4045	ug/L	0.1526	37.72	4.569
Cu3273_A		1.167	ug/L	0.3630	31.10	-19.63
Fe2599_R		9.517	ug/L	0.5432	5.707	25.10
K_7664_R		13.52	ug/L	9.296	68.77	-89.62
Li6707_R		-0.8765	ug/L	0.1445	16.49	-9.677
Mg2025_A		4.457	ug/L	0.9675	21.71	-6.242
Mn2576_R		0.1874	ug/L	0.06233	33.25	3.402
Mo2020_A		0.8387	ug/L	0.2028	24.18	2.335
Na5895_R		3.670	ug/L	1.116	30.40	36.74
Ni2316_A		0.3161	ug/L	0.2019	63.88	1.261
Pb2203_A		-0.2585	ug/L	0.009016	3.487	-1.507
Sb2068_A		-0.6023	ug/L	0.08309	13.80	0.4590
Se1960_A		0.5534	ug/L	1.409	254.5	2.546
Si2516_R		16.48	ug/L	0.02425	0.1471	33.45
Sn1899_A		0.5208	ug/L	0.8942	171.7	0.9523
Sr4215_R		0.1548	ug/L	0.04204	27.16	-137.1
Ti3349_A		1.016	ug/L	0.06167	6.071	17.45
Tl1908_A		-0.3644	ug/L	0.4626	126.9	-1.184
V_2924_A		-0.08004	ug/L	0.1331	166.3	-2.693
Zn2062_A		0.3045	ug/L	0.07491	24.61	1.052
Y_3600_R		18,594	Cts/S	235.31	1.2655	18,594
Y_2243_A		8,371.8	Cts/S	25.007	0.29870	8,371.8
Y_3600_A		147,680	Cts/S	1,177.7	0.79752	147,680

SO8397-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 2:49:37PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		23.25	ug/L	2.818	12.12	-347.3
Al3961_R	W	581,500	ug/L	28,230	4.854	124,200
As1891_A		-33.47	ug/L	2.887	8.626	-11.00
B_2089_A		77.60	ug/L	2.368	3.052	26.54
Ba4554_R		583.8	ug/L	31.64	5.420	7,775
Be3130_R		-0.9722	ug/L	0.3551	36.53	-184.6
Ca3158_R	W	195,100	ug/L	8,543	4.380	51,450
Cd2265_A		-7.463	ug/L	4.149	55.60	319.8
Co2286_A		362.2	ug/L	0.3225	0.08904	302.5
Cr2677_A		177.3	ug/L	2.241	1.264	420.3
Cu3273_A		1,100	ug/L	13.83	1.258	2,611
Fe2599_R	W	784,500	ug/L	26,630	3.395	322,700
K_7664_R		2,864	ug/L	80.73	2.819	252.6
Li6707_R		128.7	ug/L	8.897	6.915	290.1
Mg2025_A	W	224,000	ug/L	913.6	0.4079	14,580
Mn2576_R	W	10,740	ug/L	505.9	4.709	24,100
Mo2020_A		-7.893	ug/L	0.8688	11.01	-5.777
Na5895_R		37,700	ug/L	1,616	4.285	15,130
Ni2316_A		219.4	ug/L	3.013	1.373	74.86

SO8397-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 2:49:37PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		569.0	ug/L	3.788	0.6657	100.9
Sb2068_A		-13.84	ug/L	5.336	38.56	2.919
Se1960_A		-2.957	ug/L	22.35	755.9	5.755
Si2516_R		47,820	ug/L	2,077	4.343	4,828
Sn1899_A		52.38	ug/L	5.152	9.836	5.761
Sr4215_R		867.0	ug/L	47.71	5.503	12,680
Ti3349_A	W	15,740	ug/L	180.6	1.147	84,810
Tl1908_A		-2.875	ug/L	1.861	64.73	-3.799
V_2924_A		3,347	ug/L	47.27	1.412	7,509
Zn2062_A		1,156	ug/L	3.151	0.2726	695.3
Y_3600_R		18,414	Cts/S	456.01	2.4764	18,414
Y_2243_A		8,061.1	Cts/S	24.157	0.29967	8,061.1
Y_3600_A		142,270	Cts/S	1,163.7	0.81792	142,270

SO8260-007

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 2:53:58PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1759	ug/L	0.1828	103.9	-21.77
Al3961_R		24.01	ug/L	1.842	7.671	18.89
As1891_A		-1.984	ug/L	1.144	57.67	-2.286
B_2089_A		0.6375	ug/L	0.03717	5.832	5.329
Ba4554_R		0.2087	ug/L	0.01492	7.152	26.22
Be3130_R		0.03470	ug/L	0.04131	119.1	0.9557
Ca3158_R		29.76	ug/L	3.549	11.92	17.87
Cd2265_A		0.02434	ug/L	0.06619	271.9	-0.05818
Co2286_A		0.08834	ug/L	0.009896	11.20	3.464
Cr2677_A		-0.03100	ug/L	0.09162	295.6	-0.5314
Cu3273_A		0.9059	ug/L	0.5061	55.87	-22.50
Fe2599_R		36.72	ug/L	0.2509	0.6832	79.20
K_7664_R		22.84	ug/L	19.82	86.77	-81.40
Li6707_R		-0.3620	ug/L	0.7633	210.9	-3.721
Mg2025_A		16.84	ug/L	0.6055	3.597	-2.031
Mn2576_R		0.1835	ug/L	0.03168	17.26	3.246
Mo2020_A		0.1140	ug/L	0.01147	10.06	-0.04408
Na5895_R		42.59	ug/L	7.141	16.77	112.0
Ni2316_A		0.6468	ug/L	0.1839	28.44	1.907
Pb2203_A		-0.2804	ug/L	0.1290	46.00	-1.516
Sb2068_A		-0.7822	ug/L	0.8581	109.7	0.3611
Se1960_A		0.6964	ug/L	1.728	248.2	2.566
Si2516_R		49.92	ug/L	5.246	10.51	48.90
Sn1899_A		-0.3094	ug/L	0.4838	156.4	0.5286
Sr4215_R		-0.03236	ug/L	0.2240	692.4	-146.6
Ti3349_A		2.094	ug/L	0.02922	1.395	47.02
Tl1908_A		-1.501	ug/L	1.078	71.83	-1.837
V_2924_A		0.01287	ug/L	0.1082	840.8	-1.518
Zn2062_A		21.20	ug/L	0.1172	0.5527	65.70
Y_3600_R		18,039	Cts/S	20.517	0.11374	18,039
Y_2243_A		8,294.1	Cts/S	0.44141	0.0053220	8,294.1
Y_3600_A		145,850	Cts/S	161.01	0.11040	145,850

SO8329-005

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 2:58:22PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO8329-005

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 2:58:22PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2623	ug/L	0.1050	40.02	-12.44
Al3961_R		24.72	ug/L	2.153	8.710	19.92
As1891_A		-1.651	ug/L	0.9198	55.71	-2.158
B_2089_A		0.4612	ug/L	0.04734	10.27	5.078
Ba4554_R		-0.04295	ug/L	0.04159	96.83	9.946
Be3130_R		0.05936	ug/L	0.02381	40.11	3.396
Ca3158_R		44.86	ug/L	0.3548	0.7908	37.92
Cd2265_A		0.03333	ug/L	0.02222	66.65	0.02931
Co2286_A		-0.2074	ug/L	0.09716	46.85	2.302
Cr2677_A		0.1510	ug/L	0.08431	55.85	1.583
Cu3273_A		0.9618	ug/L	0.09036	9.395	-21.87
Fe2599_R		23.92	ug/L	0.07127	0.2979	54.13
K_7664_R		16.88	ug/L	34.67	205.4	-86.17
Li6707_R		1.113	ug/L	1.181	106.1	12.78
Mg2025_A		10.39	ug/L	0.3732	3.591	-4.207
Mn2576_R		0.5865	ug/L	0.006100	1.040	7.792
Mo2020_A		0.2083	ug/L	0.02346	11.26	0.2633
Na5895_R		30.76	ug/L	3.348	10.88	90.02
Ni2316_A		0.7424	ug/L	0.01118	1.506	2.106
Pb2203_A		-0.1328	ug/L	0.4826	363.5	-1.369
Sb2068_A		0.4523	ug/L	0.1272	28.12	1.032
Se1960_A		1.280	ug/L	1.381	107.9	2.743
Si2516_R		45.91	ug/L	0.7816	1.702	47.56
Sn1899_A		0.4432	ug/L	0.5234	118.1	0.9060
Sr4215_R		0.04780	ug/L	0.03727	77.99	-142.7
Ti3349_A		0.9939	ug/L	0.05837	5.873	16.67
Tl1908_A		-1.643	ug/L	0.1668	10.15	-1.923
V_2924_A		-0.07025	ug/L	0.2848	405.4	-2.501
Zn2062_A		23.97	ug/L	0.08469	0.3533	74.38
Y_3600_R		18,285	Cts/S	77.279	0.42264	18,285
Y_2243_A		8,304.7	Cts/S	22.838	0.27501	8,304.7
Y_3600_A		146,190	Cts/S	31.019	0.021218	146,190

SO8397-007

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 3:02:48PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2520	ug/L	0.001163	0.4612	-12.63
Al3961_R		32.60	ug/L	1.614	4.951	28.48
As1891_A		-1.806	ug/L	0.04499	2.491	-2.235
B_2089_A		0.7908	ug/L	0.1708	21.60	5.604
Ba4554_R		0.03841	ug/L	0.1873	487.7	15.45
Be3130_R		0.08054	ug/L	0.01205	14.97	5.468
Ca3158_R		24.24	ug/L	0.4277	1.764	10.97
Cd2265_A		-0.05114	ug/L	0.02608	51.00	-1.097
Co2286_A		-0.1075	ug/L	0.07117	66.23	2.712
Cr2677_A		0.1464	ug/L	0.09024	61.62	1.528
Cu3273_A		0.6577	ug/L	0.1614	24.53	-25.52
Fe2599_R		17.82	ug/L	0.7746	4.347	41.99
K_7664_R		48.41	ug/L	31.53	65.12	-67.53
Li6707_R		0.8086	ug/L	1.152	142.5	9.411
Mg2025_A		10.96	ug/L	1.862	16.99	-4.048
Mn2576_R		0.2349	ug/L	0.02015	8.579	3.896
Mo2020_A		0.07174	ug/L	0.2761	384.9	-0.1818
Na5895_R		39.91	ug/L	1.706	4.274	109.1
Ni2316_A		0.8464	ug/L	0.1856	21.93	2.334

SO8397-007

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 3:02:48PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.1035	ug/L	0.002728	2.636	-1.141
Sb2068_A		-0.7448	ug/L	0.1821	24.44	0.3841
Se1960_A		0.7723	ug/L	0.8859	114.7	2.611
Si2516_R		36.66	ug/L	3.617	9.867	43.29
Sn1899_A		-0.1617	ug/L	0.9875	610.7	0.6085
Sr4215_R		0.1454	ug/L	0.1611	110.7	-136.6
Ti3349_A		0.6940	ug/L	0.07222	10.41	8.356
Tl1908_A		-1.177	ug/L	0.9780	83.06	-1.662
V_2924_A		-0.2611	ug/L	0.1003	38.41	-4.687
Zn2062_A		13.59	ug/L	0.2023	1.488	42.54
Y_3600_R		18,430	Cts/S	4.3935	0.023839	18,430
Y_2243_A		8,367.5	Cts/S	20.186	0.24124	8,367.5
Y_3600_A		146,080	Cts/S	87.584	0.059955	146,080

SO7393-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 3:07:13PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.2409	ug/L	0.1280	53.12	-48.87
Al3961_R		38.15	ug/L	4.558	11.95	104.3
As1891_A		57.99	ug/L	0.2143	0.3695	20.63
B_2089_A		15.52	ug/L	0.03909	0.2519	27.23
Ba4554_R		29.48	ug/L	0.7304	2.477	1,975
Be3130_R		0.08407	ug/L	0.06352	75.56	5.823
Ca3158_R	W	77,190	ug/L	1,532	1.985	101,900
Cd2265_A		-0.1727	ug/L	0.03036	17.58	20.57
Co2286_A		0.2727	ug/L	0.05686	20.85	4.332
Cr2677_A		0.5849	ug/L	0.1468	25.10	8.023
Cu3273_A		0.2728	ug/L	0.3226	118.3	-21.75
Fe2599_R		10,620	ug/L	273.2	2.572	21,870
K_7664_R		4,718	ug/L	74.69	1.583	2,785
Li6707_R		16.54	ug/L	1.938	11.72	186.6
Mg2025_A	W	28,160	ug/L	105.9	0.3760	9,370
Mn2576_R		225.4	ug/L	5.537	2.456	2,544
Mo2020_A		1.080	ug/L	0.04560	4.223	3.066
Na5895_R		12,970	ug/L	178.6	1.377	26,020
Ni2316_A		-0.07967	ug/L	0.2013	252.7	-0.3964
Pb2203_A		0.9791	ug/L	0.4505	46.01	-0.1432
Sb2068_A		-2.137	ug/L	1.282	60.01	-0.1351
Se1960_A		-0.8743	ug/L	0.5984	68.44	2.290
Si2516_R		7,534	ug/L	215.3	2.858	3,807
Sn1899_A		-0.2776	ug/L	0.4116	148.3	0.5411
Sr4215_R		415.7	ug/L	9.371	2.254	30,640
Ti3349_A		0.1825	ug/L	0.1231	67.45	-5.766
Tl1908_A		0.2098	ug/L	0.9007	429.3	-0.9780
V_2924_A		0.3110	ug/L	0.01683	5.410	0.6086
Zn2062_A		4.852	ug/L	0.005287	0.1090	15.03
Y_3600_R		18,423	Cts/S	323.09	1.7537	18,423
Y_2243_A		8,246.0	Cts/S	23.208	0.28144	8,246.0
Y_3600_A		146,030	Cts/S	561.62	0.38458	146,030

SO7393-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 3:11:34PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO7393-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 3:11:34PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1350	ug/L	0.1182	87.52	-26.93
Al3961_R		-63.93	ug/L	12.95	20.26	33.63
As1891_A		24.42	ug/L	0.2869	1.175	7.628
B_2089_A		30.10	ug/L	0.4246	1.411	47.09
Ba4554_R		36.56	ug/L	0.8784	2.403	2,415
Be3130_R		0.008739	ug/L	0.06969	797.4	-1.337
Ca3158_R	W	119,900	ug/L	2,226	1.856	156,400
Cd2265_A		-0.04354	ug/L	0.01364	31.33	4.811
Co2286_A		0.1697	ug/L	0.1586	93.47	3.668
Cr2677_A		0.7799	ug/L	0.006436	0.8253	9.892
Cu3273_A		1.414	ug/L	0.4514	31.92	-13.97
Fe2599_R		2,736	ug/L	81.73	2.987	5,566
K_7664_R		7,270	ug/L	74.24	1.021	4,290
Li6707_R		39.41	ug/L	1.956	4.963	439.0
Mg2025_A	W	59,860	ug/L	131.5	0.2197	19,280
Mn2576_R		927.8	ug/L	20.60	2.221	10,330
Mo2020_A		1.260	ug/L	0.02621	2.081	3.484
Na5895_R	W	27,300	ug/L	408.5	1.496	54,040
Ni2316_A		0.04763	ug/L	0.1016	213.2	0.4737
Pb2203_A		0.03733	ug/L	0.1466	392.7	-1.117
Sb2068_A		-1.531	ug/L	1.032	67.40	0.01112
Se1960_A		0.7191	ug/L	2.579	358.7	2.655
Si2516_R		7,438	ug/L	121.8	1.637	3,713
Sn1899_A		0.2469	ug/L	0.2293	92.89	0.7759
Sr4215_R		676.8	ug/L	18.83	2.782	49,360
Ti3349_A		0.1201	ug/L	0.1269	105.7	-7.354
Tl1908_A		0.2814	ug/L	0.6391	227.1	-1.308
V_2924_A		-0.1281	ug/L	0.02228	17.39	-6.885
Zn2062_A		0.9884	ug/L	0.2184	22.10	3.038
Y_3600_R		18,193	Cts/S	286.29	1.5736	18,193
Y_2243_A		7,976.1	Cts/S	27.076	0.33946	7,976.1
Y_3600_A		143,260	Cts/S	56.819	0.039661	143,260

SO7393-003

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 3:15:55PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3229	ug/L	0.1992	61.69	-16.49
Al3961_R		-35.80	ug/L	11.02	30.77	42.74
As1891_A		35.83	ug/L	0.2118	0.5912	11.89
B_2089_A		33.49	ug/L	0.5521	1.649	51.78
Ba4554_R		26.80	ug/L	0.1952	0.7286	1,801
Be3130_R		0.06716	ug/L	0.03642	54.22	4.243
Ca3158_R	W	96,190	ug/L	1,321	1.373	127,400
Cd2265_A		0.03080	ug/L	0.01201	38.99	5.038
Co2286_A		0.1869	ug/L	0.09471	50.67	3.715
Cr2677_A		0.9828	ug/L	0.08584	8.734	12.35
Cu3273_A		1.072	ug/L	0.2605	24.30	-18.16
Fe2599_R		2,411	ug/L	23.37	0.9691	4,983
K_7664_R		5,906	ug/L	39.33	0.6658	3,521
Li6707_R		27.01	ug/L	2.290	8.476	305.9
Mg2025_A	W	47,150	ug/L	374.1	0.7934	15,130
Mn2576_R	W	1,195	ug/L	16.59	1.389	13,500
Mo2020_A		2.465	ug/L	0.06935	2.814	7.216
Na5895_R		24,520	ug/L	252.7	1.030	49,310
Ni2316_A		0.3578	ug/L	0.4033	112.7	1.113

SO7393-003

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 3:15:55PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.3911	ug/L	1.516	387.7	-0.7843
Sb2068_A		-1.869	ug/L	1.359	72.68	-0.1681
Se1960_A		0.2474	ug/L	0.4583	185.3	2.549
Si2516_R		7,349	ug/L	131.1	1.784	3,726
Sn1899_A		-0.8485	ug/L	0.3612	42.57	0.2487
Sr4215_R		493.1	ug/L	4.591	0.9310	36,490
Ti3349_A		0.02911	ug/L	0.1021	350.8	-9.739
Tl1908_A		1.015	ug/L	0.2592	25.53	-1.046
V_2924_A		-0.3534	ug/L	0.1438	40.69	-10.48
Zn2062_A		2.217	ug/L	0.1563	7.049	6.667
Y_3600_R		18,474	Cts/S	176.34	0.95450	18,474
Y_2243_A		7,950.2	Cts/S	54.266	0.68257	7,950.2
Y_3600_A		142,390	Cts/S	93.482	0.065654	142,390

SO7393-004

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 3:20:17PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.5234	ug/L	0.03982	7.607	-50.92
Al3961_R		-20.19	ug/L	5.290	26.21	42.92
As1891_A		1.089	ug/L	1.635	150.2	-1.744
B_2089_A		27.89	ug/L	0.2773	0.9942	44.72
Ba4554_R		149.9	ug/L	1.041	0.6943	10,010
Be3130_R		0.02712	ug/L	0.03312	122.1	0.4223
Ca3158_R	W	78,220	ug/L	250.7	0.3206	103,500
Cd2265_A		-0.2162	ug/L	0.03264	15.10	36.83
Co2286_A		4.974	ug/L	0.07683	1.545	22.43
Cr2677_A		1.507	ug/L	0.2269	15.06	21.98
Cu3273_A		1.097	ug/L	0.3635	33.12	-5.470
Fe2599_R		18,560	ug/L	39.52	0.2130	38,280
K_7664_R		5,193	ug/L	27.52	0.5300	3,081
Li6707_R		3.825	ug/L	0.5519	14.43	43.53
Mg2025_A		19,970	ug/L	81.28	0.4069	6,547
Mn2576_R	W	3,106	ug/L	4.097	0.1319	35,010
Mo2020_A		-0.1781	ug/L	0.01004	5.636	-1.176
Na5895_R		9,538	ug/L	3.851	0.04038	19,180
Ni2316_A		8.361	ug/L	0.01019	0.1219	15.74
Pb2203_A		2.320	ug/L	0.1087	4.686	1.264
Sb2068_A		-1.804	ug/L	0.2834	15.71	0.2140
Se1960_A		0.2847	ug/L	0.9410	330.5	3.162
Si2516_R		11,420	ug/L	45.32	0.3969	5,768
Sn1899_A		0.08992	ug/L	0.4520	502.7	0.7134
Sr4215_R		280.7	ug/L	1.021	0.3637	20,680
Ti3349_A		0.5997	ug/L	0.1305	21.77	5.631
Tl1908_A		-0.4763	ug/L	1.096	230.2	-3.061
V_2924_A		1.492	ug/L	0.1692	11.34	2.526
Zn2062_A		6.031	ug/L	0.1124	1.864	18.38
Y_3600_R		18,454	Cts/S	192.81	1.0449	18,454
Y_2243_A		8,124.2	Cts/S	8.4700	0.10426	8,124.2
Y_3600_A		143,320	Cts/S	763.04	0.53241	143,320

SO7393-005

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 3:24:38PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO7393-005

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 3:24:38PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.01218	ug/L	0.03064	251.6	-23.37
Al3961_R		-41.60	ug/L	0.5174	1.244	45.65
As1891_A		21.07	ug/L	0.5037	2.391	6.373
B_2089_A		28.23	ug/L	0.4711	1.669	44.40
Ba4554_R		32.73	ug/L	0.07015	0.2143	2,193
Be3130_R		0.01392	ug/L	0.02168	155.7	-0.9285
Ca3158_R	W	106,400	ug/L	738.3	0.6937	140,700
Cd2265_A		-0.05273	ug/L	0.03287	62.34	4.099
Co2286_A		0.1783	ug/L	0.05903	33.11	3.695
Cr2677_A		0.7904	ug/L	0.05906	7.472	9.747
Cu3273_A		1.388	ug/L	0.7194	51.84	-14.26
Fe2599_R		2,457	ug/L	5.552	0.2260	5,068
K_7664_R		6,451	ug/L	32.57	0.5049	3,848
Li6707_R		36.92	ug/L	1.155	3.129	417.0
Mg2025_A	W	55,110	ug/L	517.2	0.9385	17,730
Mn2576_R		828.2	ug/L	4.437	0.5358	9,347
Mo2020_A		1.153	ug/L	0.1552	13.46	3.155
Na5895_R		24,160	ug/L	224.9	0.9309	48,500
Ni2316_A		0.3290	ug/L	0.4690	142.5	1.039
Pb2203_A		0.9261	ug/L	0.1358	14.67	-0.2618
Sb2068_A		-2.204	ug/L	0.07275	3.301	-0.3451
Se1960_A		-0.1054	ug/L	1.204	1,142	2.400
Si2516_R		6,632	ug/L	57.99	0.8743	3,359
Sn1899_A		-0.1460	ug/L	0.5892	403.5	0.5872
Sr4215_R		602.0	ug/L	1.367	0.2272	44,490
Ti3349_A		0.09889	ug/L	0.3360	339.8	-7.775
Tl1908_A		0.7213	ug/L	0.2939	40.74	-1.001
V_2924_A		-0.5122	ug/L	0.01332	2.600	-10.66
Zn2062_A		1.381	ug/L	0.02866	2.075	4.202
Y_3600_R		18,440	Cts/S	61.111	0.33141	18,440
Y_2243_A		7,970.2	Cts/S	38.296	0.48049	7,970.2
Y_3600_A		141,260	Cts/S	1,429.4	1.0119	141,260

SO8910-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 3:28:59PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2944	ug/L	0.01611	5.473	-27.41
Al3961_R		1,820	ug/L	19.26	1.058	1,934
As1891_A		0.2219	ug/L	1.519	684.7	-1.633
B_2089_A		66.36	ug/L	0.2218	0.3342	100.8
Ba4554_R		57.93	ug/L	1.011	1.746	3,814
Be3130_R		0.1057	ug/L	0.04463	42.20	2.987
Ca3158_R		24,340	ug/L	268.9	1.105	31,680
Cd2265_A		-0.05012	ug/L	0.03434	68.51	11.85
Co2286_A		1.921	ug/L	0.01625	0.8459	11.12
Cr2677_A		23.05	ug/L	0.1494	0.6480	266.0
Cu3273_A		24.77	ug/L	0.1622	0.6549	265.3
Fe2599_R		5,942	ug/L	152.9	2.572	12,070
K_7664_R		21,540	ug/L	163.3	0.7583	12,880
Li6707_R		2.859	ug/L	1.577	55.18	32.09
Mg2025_A		6,369	ug/L	28.35	0.4451	2,088
Mn2576_R		131.5	ug/L	0.6812	0.5181	1,460
Mo2020_A		0.8579	ug/L	0.003419	0.3986	2.324
Na5895_R		7,368	ug/L	44.96	0.6103	14,590
Ni2316_A		6.921	ug/L	0.3347	4.836	13.92

SO8910-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 3:28:59PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		3.489	ug/L	1.028	29.47	2.127
Sb2068_A		-1.945	ug/L	0.1617	8.314	-0.3025
Se1960_A		1.057	ug/L	0.1346	12.74	2.752
Si2516_R		1,959	ug/L	10.14	0.5180	994.4
Sn1899_A		40.69	ug/L	0.3495	0.8589	20.67
Sr4215_R		137.6	ug/L	3.388	2.463	9,903
Ti3349_A		86.96	ug/L	0.2956	0.3400	2,373
Tl1908_A		-1.273	ug/L	0.3592	28.23	-1.791
V_2924_A		12.25	ug/L	0.2080	1.698	137.2
Zn2062_A		64.31	ug/L	0.1383	0.2151	195.5
Y_3600_R		18,164	Cts/S	43.073	0.23714	18,164
Y_2243_A		8,146.7	Cts/S	33.590	0.41231	8,146.7
Y_3600_A		144,710	Cts/S	293.39	0.20275	144,710

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 3:33:20PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		503.7	ug/L	3.096	0.6146	10,520
Al3961_R		12,680	ug/L	158.9	1.253	13,420
As1891_A		519.5	ug/L	1.883	0.3624	199.9
B_2089_A		508.1	ug/L	0.6410	0.1262	768.8
Ba4554_R		501.3	ug/L	8.705	1.737	32,980
Be3130_R		480.9	ug/L	8.455	1.758	45,780
Ca3158_R		12,810	ug/L	169.9	1.326	16,700
Cd2265_A		496.3	ug/L	0.9397	0.1893	6,471
Co2286_A		525.6	ug/L	1.511	0.2875	2,052
Cr2677_A		499.7	ug/L	1.722	0.3447	5,732
Cu3273_A		486.7	ug/L	2.477	0.5089	5,741
Fe2599_R		12,560	ug/L	191.3	1.523	25,550
K_7664_R		12,560	ug/L	138.7	1.105	7,485
Li6707_R		515.7	ug/L	9.602	1.862	5,746
Mg2025_A	W	13,330	ug/L	72.91	0.5470	4,461
Mn2576_R		510.9	ug/L	6.355	1.244	5,679
Mo2020_A		516.1	ug/L	2.136	0.4139	1,670
Na5895_R		12,370	ug/L	167.3	1.352	24,530
Ni2316_A		507.7	ug/L	1.150	0.2265	1,031
Pb2203_A		507.0	ug/L	1.090	0.2150	504.5
Sb2068_A	W	534.9	ug/L	2.087	0.3902	289.5
Se1960_A		523.8	ug/L	0.8828	0.1685	157.7
Si2516_R		13,370	ug/L	177.2	1.326	6,663
Sn1899_A	W	543.3	ug/L	0.9180	0.1690	271.1
Sr4215_R		494.9	ug/L	9.039	1.826	36,080
Ti3349_A		502.3	ug/L	1.440	0.2866	13,710
Tl1908_A	W	537.0	ug/L	1.701	0.3168	311.8
V_2924_A		508.8	ug/L	3.535	0.6947	5,726
Zn2062_A		496.2	ug/L	0.02366	0.004769	1,526
Y_3600_R		18,203	Cts/S	13.150	0.072242	18,203
Y_2243_A		8,250.5	Cts/S	38.389	0.46530	8,250.5
Y_3600_A		144,100	Cts/S	526.51	0.36538	144,100

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 3:37:28PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 3:37:28PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.7563	ug/L	0.3294	43.56	-1.910
Al3961_R		14.19	ug/L	2.885	20.34	8.724
As1891_A		-0.9779	ug/L	0.5006	51.19	-1.900
B_2089_A		0.9218	ug/L	0.3053	33.11	5.801
Ba4554_R		0.2688	ug/L	0.08019	29.83	30.49
Be3130_R		0.3167	ug/L	0.01013	3.197	27.98
Ca3158_R		9.665	ug/L	0.6017	6.226	-8.210
Cd2265_A		0.2202	ug/L	0.08042	36.53	2.453
Co2286_A		0.1521	ug/L	0.1722	113.2	3.724
Cr2677_A		0.5159	ug/L	0.03983	7.720	5.847
Cu3273_A		0.9636	ug/L	0.3118	32.36	-21.94
Fe2599_R		10.70	ug/L	0.5073	4.743	27.06
K_7664_R		45.59	ug/L	41.15	90.25	-68.58
Li6707_R		0.3052	ug/L	0.7453	244.2	3.691
Mg2025_A		5.637	ug/L	0.6397	11.35	-5.812
Mn2576_R		0.2653	ug/L	0.2169	81.77	4.202
Mo2020_A		0.8600	ug/L	0.03824	4.447	2.395
Na5895_R		6.101	ug/L	3.700	60.64	40.89
Ni2316_A		0.4470	ug/L	0.1161	25.98	1.522
Pb2203_A		0.2234	ug/L	0.8896	398.2	-1.012
Sb2068_A		-0.3403	ug/L	0.6216	182.7	0.6047
Se1960_A		0.9286	ug/L	0.2437	26.25	2.646
Si2516_R		20.18	ug/L	10.67	52.88	34.68
Sn1899_A		-0.07519	ug/L	0.4017	534.2	0.6484
Sr4215_R		0.2072	ug/L	0.07611	36.73	-130.7
Ti3349_A		1.137	ug/L	0.1509	13.27	20.70
Tl1908_A		-0.3761	ug/L	0.07980	21.22	-1.185
V_2924_A		0.3904	ug/L	0.1413	36.19	2.765
Zn2062_A		0.2876	ug/L	0.03537	12.30	0.9946
Y_3600_R		18,253	Cts/S	11.796	0.064628	18,253
Y_2243_A		8,332.2	Cts/S	29.082	0.34903	8,332.2
Y_3600_A		146,660	Cts/S	599.61	0.40884	146,660

SO8892-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 3:41:53PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.010	ug/L	0.5167	51.13	-7.312
Al3961_R		-185.6	ug/L	28.69	15.46	35.89
As1891_A		-1.167	ug/L	0.01071	0.9184	-1.608
B_2089_A		56.29	ug/L	0.4075	0.7240	42.59
Ba4554_R		200.3	ug/L	0.3817	0.1906	6,520
Be3130_R		0.2271	ug/L	0.06669	29.36	8.431
Ca3158_R	W	313,800	ug/L	2,044	0.6513	202,300
Cd2265_A		-0.01124	ug/L	0.09551	850.1	-0.01785
Co2286_A		18.46	ug/L	0.4825	2.614	36.16
Cr2677_A		3.036	ug/L	0.05269	1.736	21.03
Cu3273_A		4.935	ug/L	0.1507	3.054	-3.344
Fe2599_R		482.7	ug/L	0.4520	0.09363	490.2
K_7664_R		9,520	ug/L	75.15	0.7894	2,744
Li6707_R		96.55	ug/L	2.792	2.892	531.7
Mg2025_A		33,170	ug/L	64.87	0.1956	5,115
Mn2576_R	W	10,070	ug/L	83.43	0.8283	55,320
Mo2020_A		9.806	ug/L	0.01673	0.1706	14.02
Na5895_R	W	260,800	ug/L	8,032	3.079	255,200
Ni2316_A		29.04	ug/L	0.4900	1.687	27.75

SO8892-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 3:41:53PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		1.602	ug/L	0.4307	26.88	-0.3855
Sb2068_A		-3.031	ug/L	0.4264	14.07	-0.03999
Se1960_A		1.568	ug/L	1.819	116.0	3.126
Si2516_R		12,940	ug/L	146.1	1.129	3,195
Sn1899_A		1.372	ug/L	1.251	91.20	0.9459
Sr4215_R		1,111	ug/L	4.235	0.3812	40,040
Ti3349_A		0.6122	ug/L	0.003171	0.5180	-2.146
Tl1908_A		-2.269	ug/L	0.7676	33.83	-4.290
V_2924_A		-1.605	ug/L	0.05463	3.403	-29.44
Zn2062_A		1.473	ug/L	0.2518	17.10	2.189
Y_3600_R		17,983	Cts/S	5.6892	0.031637	17,983
Y_2243_A		7,646.2	Cts/S	33.217	0.43443	7,646.2
Y_3600_A		137,470	Cts/S	397.19	0.28892	137,470

SO8892-005

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 3:46:20PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3400	ug/L	0.2495	73.38	-14.17
Al3961_R		-166.2	ug/L	16.77	10.09	37.99
As1891_A		-0.1168	ug/L	0.6417	549.5	-1.447
B_2089_A		52.40	ug/L	0.3723	0.7105	40.72
Ba4554_R		186.4	ug/L	8.268	4.436	6,120
Be3130_R		0.1831	ug/L	0.02206	12.05	6.427
Ca3158_R	W	294,900	ug/L	11,220	3.805	191,800
Cd2265_A		0.1095	ug/L	0.03610	32.98	0.6737
Co2286_A		17.31	ug/L	0.1968	1.137	34.77
Cr2677_A		3.043	ug/L	0.07669	2.520	21.11
Cu3273_A		5.431	ug/L	0.7100	13.07	-0.5361
Fe2599_R		435.8	ug/L	16.70	3.833	447.0
K_7664_R		8,884	ug/L	290.3	3.267	2,577
Li6707_R		91.41	ug/L	2.665	2.916	507.9
Mg2025_A		30,940	ug/L	29.30	0.09472	4,867
Mn2576_R	W	9,459	ug/L	406.3	4.296	52,410
Mo2020_A		8.486	ug/L	0.1742	2.053	12.30
Na5895_R	W	248,300	ug/L	10,380	4.181	245,100
Ni2316_A		27.31	ug/L	0.6995	2.562	26.65
Pb2203_A		2.740	ug/L	0.4799	17.51	0.1444
Sb2068_A		-3.631	ug/L	0.9893	27.25	-0.1964
Se1960_A		1.309	ug/L	3.433	262.2	3.107
Si2516_R		12,040	ug/L	546.0	4.535	3,002
Sn1899_A		1.901	ug/L	1.795	94.42	1.091
Sr4215_R		1,041	ug/L	43.44	4.173	37,830
Ti3349_A		0.8574	ug/L	0.08543	9.964	1.061
Tl1908_A		-4.812	ug/L	0.2679	5.567	-4.901
V_2924_A		-1.523	ug/L	0.5317	34.92	-28.22
Zn2062_A		1.666	ug/L	0.1533	9.202	2.515
Y_3600_R		18,151	Cts/S	473.89	2.6108	18,151
Y_2243_A		7,800.6	Cts/S	23.308	0.29880	7,800.6
Y_3600_A		139,620	Cts/S	2,570.1	1.8407	139,620

SO8914-010

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 3:50:48PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO8914-010

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 3:50:48PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.6742	ug/L	0.1012	15.01	-64.47
Al3961_R		19.17	ug/L	10.47	54.61	44.55
As1891_A		245.7	ug/L	1.281	0.5214	90.76
B_2089_A		79.34	ug/L	0.2459	0.3099	118.3
Ba4554_R		25.17	ug/L	0.2013	0.7999	1,667
Be3130_R		0.04253	ug/L	0.02060	48.43	1.846
Ca3158_R	W	34,110	ug/L	303.4	0.8894	44,460
Cd2265_A		-0.4250	ug/L	0.04229	9.950	49.33
Co2286_A		10.91	ug/L	0.04103	0.3761	44.87
Cr2677_A		0.4113	ug/L	0.02759	6.708	8.547
Cu3273_A		-1.532	ug/L	0.09262	6.044	-30.61
Fe2599_R	W	25,790	ug/L	214.6	0.8321	52,440
K_7664_R		6,488	ug/L	62.28	0.9600	3,818
Li6707_R		3.439	ug/L	1.097	31.89	38.66
Mg2025_A		5,508	ug/L	11.80	0.2143	1,784
Mn2576_R	W	1,364	ug/L	11.88	0.8712	15,140
Mo2020_A		1.454	ug/L	0.06671	4.589	4.101
Na5895_R		16,830	ug/L	203.0	1.206	33,340
Ni2316_A		4.030	ug/L	0.4792	11.89	6.531
Pb2203_A		1.665	ug/L	0.4625	27.78	0.6791
Sb2068_A		-0.3461	ug/L	0.8615	248.9	1.149
Se1960_A		-1.736	ug/L	0.1093	6.296	2.400
Si2516_R		11,910	ug/L	86.50	0.7265	5,928
Sn1899_A		0.5358	ug/L	0.2175	40.59	0.9234
Sr4215_R		330.8	ug/L	4.729	1.430	24,050
Ti3349_A		-0.2901	ug/L	0.05497	18.95	-18.34
Tl1908_A		-0.5186	ug/L	0.2870	55.33	-2.028
V_2924_A		-0.04304	ug/L	0.1653	384.2	-8.214
Zn2062_A		40.60	ug/L	0.2034	0.5010	122.0
Y_3600_R		18,192	Cts/S	222.84	1.2249	18,192
Y_2243_A		8,049.4	Cts/S	10.953	0.13607	8,049.4
Y_3600_A		142,120	Cts/S	1,379.7	0.97085	142,120

SO8914-010L

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 3:55:09PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.7926	ug/L	0.9006	113.6	-27.36
Al3961_R		17.24	ug/L	14.37	83.34	3.470
As1891_A		233.9	ug/L	7.223	3.088	16.70
B_2089_A		76.02	ug/L	1.521	2.001	27.09
Ba4554_R		24.66	ug/L	0.4774	1.936	340.0
Be3130_R		0.1724	ug/L	0.05815	33.73	1.081
Ca3158_R		34,150	ug/L	304.4	0.8914	8,970
Cd2265_A		-0.4552	ug/L	0.2866	62.95	9.800
Co2286_A		9.941	ug/L	0.4691	4.718	11.05
Cr2677_A		1.515	ug/L	0.2207	14.57	4.222
Cu3273_A		2.249	ug/L	0.3293	14.64	-24.12
Fe2599_R		25,810	ug/L	268.7	1.041	10,600
K_7664_R		6,374	ug/L	102.1	1.602	679.4
Li6707_R		13.47	ug/L	6.448	47.85	30.55
Mg2025_A		5,451	ug/L	44.08	0.8086	360.3
Mn2576_R		1,362	ug/L	10.42	0.7651	3,054
Mo2020_A		2.011	ug/L	0.07222	3.591	0.8824
Na5895_R		16,610	ug/L	145.8	0.8779	6,665
Ni2316_A		3.790	ug/L	0.08669	2.288	1.739

SO8914-010L

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 3:55:09PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		2.617	ug/L	1.989	76.03	-0.6600
Sb2068_A		-5.769	ug/L	1.000	17.34	0.2794
Se1960_A		3.470	ug/L	5.009	144.4	2.709
Si2516_R		11,590	ug/L	38.89	0.3354	1,185
Sn1899_A		-2.921	ug/L	3.484	119.3	0.3948
Sr4215_R		327.3	ug/L	2.313	0.7067	4,687
Ti3349_A		-0.6130	ug/L	1.473	240.4	-14.26
Tl1908_A		-1.707	ug/L	2.003	117.4	-1.333
V_2924_A		-1.160	ug/L	0.2941	25.34	-5.669
Zn2062_A		41.35	ug/L	0.3050	0.7376	25.88
Y_3600_R		18,360	Cts/S	66.863	0.36419	18,360
Y_2243_A		8,354.2	Cts/S	44.931	0.53782	8,354.2
Y_3600_A		147,260	Cts/S	3,105.9	2.1092	147,260

SO8914-010A

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 3:59:31PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		487.0	ug/L	0.2173	0.04462	9,831
Al3961_R		10,870	ug/L	161.2	1.483	11,440
As1891_A		746.2	ug/L	1.466	0.1965	278.4
B_2089_A		579.4	ug/L	2.549	0.4400	846.9
Ba4554_R		527.6	ug/L	5.692	1.079	34,450
Be3130_R		484.5	ug/L	4.138	0.8541	45,780
Ca3158_R	W	39,110	ug/L	667.8	1.707	50,640
Cd2265_A		489.4	ug/L	1.388	0.2836	6,221
Co2286_A		534.1	ug/L	2.478	0.4640	2,020
Cr2677_A		496.0	ug/L	2.322	0.4682	5,530
Cu3273_A		497.3	ug/L	0.1712	0.03442	5,714
Fe2599_R	W	31,030	ug/L	349.3	1.126	62,650
K_7664_R		16,510	ug/L	276.4	1.674	9,798
Li6707_R		531.1	ug/L	4.891	0.9211	5,874
Mg2025_A		11,210	ug/L	23.73	0.2116	3,640
Mn2576_R	W	1,839	ug/L	27.23	1.481	20,290
Mo2020_A		528.3	ug/L	2.136	0.4043	1,656
Na5895_R		22,070	ug/L	311.8	1.413	43,400
Ni2316_A		508.1	ug/L	1.177	0.2317	998.9
Pb2203_A		500.0	ug/L	1.399	0.2799	482.4
Sb2068_A		534.7	ug/L	4.207	0.7868	280.8
Se1960_A		522.1	ug/L	4.718	0.9036	152.8
Si2516_R		11,940	ug/L	237.7	1.991	5,906
Sn1899_A		544.4	ug/L	1.820	0.3343	263.2
Sr4215_R		829.9	ug/L	6.777	0.8166	60,150
Ti3349_A		512.8	ug/L	1.863	0.3634	13,600
Tl1908_A		529.8	ug/L	1.936	0.3654	297.3
V_2924_A		524.4	ug/L	1.186	0.2262	5,727
Zn2062_A		527.4	ug/L	0.9490	0.1799	1,571
Y_3600_R		18,068	Cts/S	151.88	0.84063	18,068
Y_2243_A		7,993.6	Cts/S	21.507	0.26905	7,993.6
Y_3600_A		139,970	Cts/S	72.281	0.051638	139,970

SO8914-010P

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 4:03:41PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO8914-010P

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 4:03:41PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		103.2	ug/L	0.01802	0.01746	2,031
Al3961_R		4,255	ug/L	2.078	0.04884	4,483
As1891_A		354.2	ug/L	0.9889	0.2792	131.6
B_2089_A		597.9	ug/L	0.3098	0.05181	865.3
Ba4554_R	W	4,133	ug/L	23.16	0.5604	269,300
Be3130_R		100.7	ug/L	0.02544	0.02527	9,526
Ca3158_R	W	37,280	ug/L	71.89	0.1928	48,180
Cd2265_A		251.9	ug/L	0.3440	0.1366	3,246
Co2286_A	W	1,097	ug/L	1.599	0.1457	4,166
Cr2677_A		407.5	ug/L	1.720	0.4220	4,586
Cu3273_A		513.1	ug/L	2.386	0.4650	5,950
Fe2599_R	W	28,420	ug/L	59.54	0.2095	57,270
K_7664_R		16,960	ug/L	33.43	0.1971	10,050
Li6707_R		547.7	ug/L	1.468	0.2681	6,046
Mg2025_A		10,850	ug/L	26.43	0.2437	3,566
Mn2576_R	W	2,436	ug/L	2.222	0.09123	26,820
Mo2020_A		110.0	ug/L	0.5601	0.5093	345.9
Na5895_R		24,780	ug/L	76.89	0.3103	48,640
Ni2316_A	W	1,052	ug/L	0.7189	0.06837	2,067
Pb2203_A		103.9	ug/L	0.1253	0.1206	99.98
Sb2068_A		112.7	ug/L	1.132	1.005	58.31
Se1960_A		110.4	ug/L	0.04346	0.03937	34.94
Si2516_R		13,220	ug/L	42.39	0.3206	6,525
Sn1899_A		561.7	ug/L	0.1444	0.02571	273.1
Sr4215_R		855.8	ug/L	1.911	0.2232	61,920
Ti3349_A		524.5	ug/L	2.354	0.4487	14,020
Tl1908_A		107.6	ug/L	0.5070	0.4713	60.93
V_2924_A	W	1,075	ug/L	1.387	0.1290	11,930
Zn2062_A	W	1,049	ug/L	1.677	0.1599	3,145
Y_3600_R		18,031	Cts/S	217.87	1.2083	18,031
Y_2243_A		8,037.8	Cts/S	9.3080	0.11580	8,037.8
Y_3600_A		141,230	Cts/S	180.46	0.12778	141,230

SO8914-010S

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 4:07:59PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		103.9	ug/L	0.3711	0.3570	2,021
Al3961_R		4,155	ug/L	131.7	3.170	4,123
As1891_A		358.2	ug/L	3.595	1.004	131.5
B_2089_A		608.0	ug/L	5.966	0.9812	868.5
Ba4554_R	W	4,097	ug/L	112.0	2.733	251,400
Be3130_R		98.63	ug/L	2.511	2.546	8,788
Ca3158_R	W	36,800	ug/L	610.9	1.660	44,760
Cd2265_A		253.6	ug/L	2.371	0.9353	3,224
Co2286_A	W	1,098	ug/L	10.45	0.9516	4,115
Cr2677_A		407.1	ug/L	1.371	0.3368	4,524
Cu3273_A		520.2	ug/L	0.3931	0.07557	5,958
Fe2599_R	W	28,060	ug/L	478.5	1.705	53,220
K_7664_R		16,680	ug/L	445.2	2.669	9,305
Li6707_R		535.9	ug/L	18.00	3.360	5,571
Mg2025_A		10,910	ug/L	132.2	1.211	3,540
Mn2576_R	W	2,394	ug/L	58.59	2.448	24,820
Mo2020_A		109.8	ug/L	0.9156	0.8337	341.0
Na5895_R		24,670	ug/L	592.5	2.402	45,580
Ni2316_A	W	1,056	ug/L	9.392	0.8891	2,050

SO8914-010S

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 4:07:59PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		104.3	ug/L	0.8125	0.7791	99.08
Sb2068_A		111.8	ug/L	1.601	1.432	57.10
Se1960_A		109.7	ug/L	1.910	1.741	34.29
Si2516_R		14,160	ug/L	1,118	7.901	6,545
Sn1899_A		559.6	ug/L	5.745	1.027	268.6
Sr4215_R		837.9	ug/L	28.23	3.369	57,090
Ti3349_A		524.2	ug/L	1.182	0.2255	13,840
Tl1908_A		107.3	ug/L	0.8135	0.7580	60.04
V_2924_A	W	1,066	ug/L	3.018	0.2830	11,690
Zn2062_A	W	1,065	ug/L	7.135	0.6697	3,153
Y_3600_R		16,958	Cts/S	1,535.8	9.0562	16,958
Y_2243_A		7,935.0	Cts/S	74.580	0.93989	7,935.0
Y_3600_A		139,490	Cts/S	50.276	0.036042	139,490

SO8914-011

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 4:12:15PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.01105	ug/L	0.04632	419.3	-17.40
Al3961_R		-13.06	ug/L	4.613	35.33	19.88
As1891_A		0.2699	ug/L	0.9737	360.8	-1.353
B_2089_A		242.2	ug/L	0.4836	0.1996	350.1
Ba4554_R		78.70	ug/L	1.370	1.741	5,178
Be3130_R		0.04301	ug/L	0.01758	40.88	1.888
Ca3158_R	W	44,630	ug/L	756.4	1.695	58,110
Cd2265_A		0.1280	ug/L	0.04473	34.94	1.206
Co2286_A		0.8742	ug/L	0.1167	13.35	6.294
Cr2677_A		0.7236	ug/L	0.05237	7.237	8.478
Cu3273_A		3.938	ug/L	0.2540	6.449	13.29
Fe2599_R		16.96	ug/L	1.206	7.108	39.65
K_7664_R		12,400	ug/L	225.0	1.815	7,374
Li6707_R		0.5889	ug/L	0.2162	36.71	6.832
Mg2025_A		7,464	ug/L	19.58	0.2623	2,404
Mn2576_R		665.9	ug/L	9.521	1.430	7,393
Mo2020_A		2.220	ug/L	0.07410	3.338	6.524
Na5895_R		19,730	ug/L	396.7	2.010	39,030
Ni2316_A		1.348	ug/L	0.06118	4.540	3.241
Pb2203_A		0.9000	ug/L	0.1958	21.75	-0.3154
Sb2068_A		1.319	ug/L	0.6605	50.09	1.451
Se1960_A		2.993	ug/L	0.05892	1.969	3.235
Si2516_R		5,119	ug/L	95.91	1.873	2,560
Sn1899_A		0.6001	ug/L	0.7542	125.7	0.9496
Sr4215_R		423.6	ug/L	6.062	1.431	30,800
Ti3349_A		0.5458	ug/L	0.07379	13.52	4.108
Tl1908_A		-0.4284	ug/L	0.1526	35.62	-1.554
V_2924_A		0.6043	ug/L	0.1296	21.45	2.359
Zn2062_A		0.7839	ug/L	0.1330	16.97	2.436
Y_3600_R		18,168	Cts/S	1.0526	0.0057940	18,168
Y_2243_A		7,999.7	Cts/S	30.363	0.37955	7,999.7
Y_3600_A		139,510	Cts/S	520.32	0.37296	139,510

SO8914-012

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 4:16:37PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO8914-012

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 4:16:37PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.04955	ug/L	0.2903	585.8	-18.54
Al3961_R		-21.60	ug/L	7.813	36.17	10.80
As1891_A		0.07659	ug/L	0.01328	17.34	-1.423
B_2089_A		241.8	ug/L	0.04323	0.01788	348.7
Ba4554_R		78.68	ug/L	1.961	2.492	5,213
Be3130_R		0.04243	ug/L	0.03869	91.19	1.909
Ca3158_R	W	44,430	ug/L	897.1	2.019	58,250
Cd2265_A		0.06605	ug/L	0.02984	45.17	0.3977
Co2286_A		0.7124	ug/L	0.04272	5.997	5.668
Cr2677_A		0.6608	ug/L	0.004586	0.6941	7.930
Cu3273_A		4.969	ug/L	0.02280	0.4588	25.61
Fe2599_R		5.270	ug/L	1.352	25.65	16.02
K_7664_R		12,410	ug/L	229.4	1.848	7,434
Li6707_R		1.239	ug/L	0.7891	63.69	14.13
Mg2025_A		7,480	ug/L	10.22	0.1366	2,404
Mn2576_R		666.8	ug/L	16.27	2.441	7,455
Mo2020_A		2.073	ug/L	0.07310	3.527	6.050
Na5895_R		19,620	ug/L	416.3	2.122	39,080
Ni2316_A		1.359	ug/L	0.2336	17.19	3.256
Pb2203_A		1.136	ug/L	0.03242	2.855	-0.08537
Sb2068_A		1.259	ug/L	0.4265	33.88	1.414
Se1960_A		2.276	ug/L	0.5080	22.32	3.022
Si2516_R		5,118	ug/L	112.1	2.190	2,578
Sn1899_A		0.8345	ug/L	0.4746	56.87	1.059
Sr4215_R		423.5	ug/L	9.101	2.149	31,010
Ti3349_A		-0.06763	ug/L	0.1395	206.3	-12.37
Tl1908_A		-0.7811	ug/L	0.1744	22.32	-1.749
V_2924_A		0.7306	ug/L	0.2152	29.46	3.835
Zn2062_A		1.305	ug/L	0.04179	3.202	3.982
Y_3600_R		18,297	Cts/S	140.83	0.76971	18,297
Y_2243_A		7,982.6	Cts/S	16.901	0.21173	7,982.6
Y_3600_A		142,200	Cts/S	1,868.0	1.3137	142,200

SO8914-014

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 4:20:59PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1788	ug/L	0.3831	214.2	-14.06
Al3961_R		19.38	ug/L	9.596	49.50	14.36
As1891_A		-2.225	ug/L	1.055	47.43	-2.356
B_2089_A		12.11	ug/L	0.1499	1.237	22.11
Ba4554_R		22.08	ug/L	0.2852	1.292	1,481
Be3130_R		0.06403	ug/L	0.03049	47.62	3.876
Ca3158_R		56.60	ug/L	0.3423	0.6047	53.63
Cd2265_A		0.02033	ug/L	0.02397	117.9	-0.1810
Co2286_A		-0.2143	ug/L	0.1051	49.03	2.252
Cr2677_A		0.7750	ug/L	0.7088	91.45	8.757
Cu3273_A		0.9342	ug/L	0.2785	29.81	-22.12
Fe2599_R		4.258	ug/L	0.8368	19.65	14.03
K_7664_R		64.63	ug/L	29.56	45.74	-57.53
Li6707_R		0.6693	ug/L	0.4345	64.93	7.821
Mg2025_A		3.850	ug/L	1.781	46.25	-6.338
Mn2576_R		0.2625	ug/L	0.003379	1.287	4.205
Mo2020_A		0.1969	ug/L	0.03668	18.63	0.2235
Na5895_R		58.75	ug/L	3.135	5.337	146.6
Ni2316_A		0.5279	ug/L	0.1034	19.59	1.654

SO8914-014

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 4:20:59PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.4845	ug/L	0.7879	162.6	-0.7394
Sb2068_A		-0.3482	ug/L	0.4242	121.8	0.5888
Se1960_A		0.8151	ug/L	1.122	137.7	2.576
Si2516_R		56.67	ug/L	10.82	19.09	53.26
Sn1899_A		0.5403	ug/L	0.2210	40.90	0.9448
Sr4215_R		0.7298	ug/L	0.02150	2.946	-93.12
Ti3349_A		1.276	ug/L	0.6670	52.29	24.26
Tl1908_A		-1.076	ug/L	0.2329	21.64	-1.574
V_2924_A		0.4187	ug/L	0.6589	157.4	3.062
Zn2062_A		12.47	ug/L	0.2820	2.262	38.31
Y_3600_R		18,398	Cts/S	18.055	0.098138	18,398
Y_2243_A		8,215.1	Cts/S	0.057252	0.00069700	8,215.1
Y_3600_A		145,450	Cts/S	1,378.5	0.94771	145,450

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 4:25:23PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		507.4	ug/L	8.915	1.757	10,560
Al3961_R		12,480	ug/L	114.8	0.9199	13,340
As1891_A		525.9	ug/L	2.265	0.4307	199.3
B_2089_A		510.7	ug/L	0.4765	0.09329	761.1
Ba4554_R		487.1	ug/L	6.159	1.264	32,380
Be3130_R	W	461.3	ug/L	6.862	1.487	44,380
Ca3158_R		12,550	ug/L	61.08	0.4866	16,530
Cd2265_A		495.4	ug/L	1.291	0.2606	6,360
Co2286_A	W	532.2	ug/L	2.142	0.4025	2,046
Cr2677_A		498.9	ug/L	10.55	2.115	5,703
Cu3273_A		487.1	ug/L	7.549	1.550	5,725
Fe2599_R		12,250	ug/L	143.8	1.174	25,180
K_7664_R		12,330	ug/L	149.5	1.212	7,427
Li6707_R		506.8	ug/L	4.320	0.8524	5,706
Mg2025_A	W	13,520	ug/L	62.27	0.4606	4,456
Mn2576_R		505.2	ug/L	5.204	1.030	5,674
Mo2020_A		521.9	ug/L	1.720	0.3296	1,663
Na5895_R		12,060	ug/L	123.4	1.024	24,150
Ni2316_A		508.7	ug/L	1.698	0.3338	1,018
Pb2203_A		503.5	ug/L	2.158	0.4285	493.4
Sb2068_A	W	546.6	ug/L	3.779	0.6915	291.3
Se1960_A	W	529.9	ug/L	0.6620	0.1249	157.1
Si2516_R		13,380	ug/L	133.1	0.9947	6,739
Sn1899_A	F	554.3	ug/L	4.421	0.7977	272.4
Sr4215_R		477.8	ug/L	6.814	1.426	35,200
Ti3349_A		510.4	ug/L	5.668	1.111	13,880
Tl1908_A	W	545.6	ug/L	2.571	0.4712	312.0
V_2924_A		523.0	ug/L	6.662	1.274	5,866
Zn2062_A		494.0	ug/L	1.967	0.3982	1,496
Y_3600_R		18,392	Cts/S	67.849	0.36891	18,392
Y_2243_A		8,125.0	Cts/S	23.114	0.28449	8,125.0
Y_3600_A		143,600	Cts/S	1,764.7	1.2289	143,600

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 4:29:32PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 4:29:32PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2573	ug/L	0.2972	115.5	-12.60
Al3961_R		10.64	ug/L	1.551	14.57	5.040
As1891_A		-0.1884	ug/L	0.4085	216.9	-1.584
B_2089_A		0.9614	ug/L	0.6978	72.58	5.838
Ba4554_R		0.2517	ug/L	0.1593	63.31	29.79
Be3130_R		0.1950	ug/L	0.03626	18.60	16.61
Ca3158_R		8.715	ug/L	0.04469	0.5128	-9.618
Cd2265_A		0.2079	ug/L	0.09606	46.21	2.278
Co2286_A		0.02038	ug/L	0.1186	581.9	3.194
Cr2677_A		0.5236	ug/L	0.09823	18.76	5.975
Cu3273_A		0.8604	ug/L	0.1282	14.90	-23.32
Fe2599_R		8.483	ug/L	0.5055	5.959	22.93
K_7664_R		15.93	ug/L	10.93	68.58	-88.11
Li6707_R		0.2520	ug/L	1.087	431.3	3.257
Mg2025_A		3.708	ug/L	0.7703	20.78	-6.446
Mn2576_R		0.2557	ug/L	0.1260	49.27	4.178
Mo2020_A		0.8247	ug/L	0.1714	20.79	2.271
Na5895_R		7.055	ug/L	3.887	55.09	43.46
Ni2316_A		0.3668	ug/L	0.01150	3.134	1.353
Pb2203_A		0.4205	ug/L	0.4695	111.7	-0.8115
Sb2068_A		0.2014	ug/L	0.2310	114.7	0.8966
Se1960_A		1.031	ug/L	0.8651	83.89	2.668
Si2516_R		12.72	ug/L	4.440	34.92	31.52
Sn1899_A		0.2104	ug/L	0.4929	234.3	0.7897
Sr4215_R		-0.05192	ug/L	0.1506	290.0	-152.3
Ti3349_A		1.066	ug/L	0.4591	43.08	18.80
Tl1908_A		0.7805	ug/L	0.4628	59.30	-0.5045
V_2924_A		0.3384	ug/L	0.07641	22.58	2.178
Zn2062_A		0.3251	ug/L	0.02627	8.079	1.107
Y_3600_R		18,570	Cts/S	310.66	1.6729	18,570
Y_2243_A		8,303.8	Cts/S	2.6798	0.032273	8,303.8
Y_3600_A		147,540	Cts/S	1,055.5	0.71541	147,540

SO8921-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 4:33:56PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3680	ug/L	0.09957	27.05	-12.14
Al3961_R		-187.5	ug/L	3.689	1.968	69.15
As1891_A		-1.315	ug/L	0.1987	15.11	-1.865
B_2089_A		26.63	ug/L	0.06692	0.2513	39.82
Ba4554_R		78.02	ug/L	0.3743	0.4797	5,031
Be3130_R		0.06937	ug/L	0.09645	139.0	4.209
Ca3158_R	W	306,700	ug/L	6,219	2.028	391,500
Cd2265_A		-0.04722	ug/L	0.05497	116.4	1.110
Co2286_A		5.964	ug/L	0.3455	5.792	24.04
Cr2677_A		1.754	ug/L	0.03003	1.712	22.03
Cu3273_A		68.62	ug/L	0.1006	0.1466	728.2
Fe2599_R		1,269	ug/L	1.438	0.1133	2,530
K_7664_R		9,530	ug/L	70.66	0.7415	5,533
Li6707_R		48.32	ug/L	0.7288	1.508	526.8
Mg2025_A	W	30,830	ug/L	30.38	0.09852	9,307
Mn2576_R	W	3,755	ug/L	10.87	0.2895	40,840
Mo2020_A		11.87	ug/L	0.009469	0.07979	34.22
Na5895_R	F	240,400	ug/L	2,105	0.8757	465,500
Ni2316_A		332.2	ug/L	457.8	137.8	608.4

SO8921-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 4:33:56PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		2.748	ug/L	1.806	65.73	1.433
Sb2068_A		-0.9229	ug/L	0.1770	19.18	0.1681
Se1960_A		2.821	ug/L	0.8887	31.50	3.436
Si2516_R		12,700	ug/L	84.21	0.6632	6,187
Sn1899_A		0.2600	ug/L	0.6692	257.4	0.7336
Sr4215_R	W	1,013	ug/L	2.581	0.2549	72,370
Ti3349_A		1.061	ug/L	0.1250	11.78	17.22
Tl1908_A		-1.030	ug/L	0.2520	24.46	-3.445
V_2924_A		-0.8784	ug/L	0.4560	51.91	-25.32
Zn2062_A		87.66	ug/L	48.44	55.25	244.7
Y_3600_R		17,803	Cts/S	119.49	0.67117	17,803
Y_2243_A		7,478.1	Cts/S	3.2070	0.042885	7,478.1
Y_3600_A		134,250	Cts/S	309.06	0.23021	134,250

SO8921-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 4:38:27PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1331	ug/L	0.1238	93.03	-20.91
Al3961_R		10.98	ug/L	2.314	21.07	5.448
As1891_A		-2.336	ug/L	0.8461	36.22	-2.418
B_2089_A		0.1461	ug/L	0.2085	142.7	4.603
Ba4554_R		-0.04814	ug/L	0.02246	46.66	9.594
Be3130_R		0.09979	ug/L	0.02887	28.93	7.275
Ca3158_R		169.0	ug/L	13.56	8.024	200.3
Cd2265_A		0.02622	ug/L	0.01243	47.41	-0.1046
Co2286_A		-0.1011	ug/L	0.1721	170.2	2.707
Cr2677_A		0.1319	ug/L	0.4126	312.9	1.365
Cu3273_A		0.7448	ug/L	0.01962	2.634	-24.62
Fe2599_R		5.148	ug/L	1.061	20.61	15.73
K_7664_R		33.99	ug/L	12.22	35.96	-75.63
Li6707_R		1.421	ug/L	0.2780	19.57	16.16
Mg2025_A		3.640	ug/L	1.061	29.14	-6.460
Mn2576_R		1.829	ug/L	0.4703	25.71	21.62
Mo2020_A		0.3418	ug/L	0.01091	3.191	0.6966
Na5895_R		164.1	ug/L	13.54	8.251	354.4
Ni2316_A		0.2419	ug/L	0.06473	26.75	1.090
Pb2203_A		-0.1776	ug/L	0.2495	140.5	-1.409
Sb2068_A		-0.9624	ug/L	0.8325	86.51	0.2593
Se1960_A		2.841	ug/L	0.6243	21.98	3.199
Si2516_R		24.07	ug/L	5.500	22.85	36.60
Sn1899_A		0.01415	ug/L	0.2861	2,022	0.6898
Sr4215_R		0.4314	ug/L	0.05714	13.25	-114.3
Ti3349_A		0.2650	ug/L	0.2224	83.93	-3.532
Tl1908_A		-1.248	ug/L	0.7637	61.20	-1.687
V_2924_A		-0.4422	ug/L	0.1940	43.88	-6.837
Zn2062_A		0.4385	ug/L	0.008988	2.050	1.456
Y_3600_R		18,251	Cts/S	86.241	0.47252	18,251
Y_2243_A		8,282.3	Cts/S	25.002	0.30188	8,282.3
Y_3600_A		146,960	Cts/S	83.446	0.056781	146,960

SO8921-005

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 4:42:53PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO8921-005

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 4:42:53PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2742	ug/L	0.1562	56.99	-46.19
Al3961_R		271.9	ug/L	1.333	0.4901	367.0
As1891_A		28.57	ug/L	1.495	5.231	8.036
B_2089_A		972.1	ug/L	4.615	0.4747	1,283
Ba4554_R		127.8	ug/L	1.996	1.562	8,140
Be3130_R		0.1188	ug/L	0.06637	55.87	5.288
Ca3158_R	W	109,900	ug/L	1,159	1.055	138,700
Cd2265_A		-0.1648	ug/L	0.1119	67.90	29.45
Co2286_A		6.385	ug/L	0.02837	0.4442	25.63
Cr2677_A		7.843	ug/L	0.2524	3.218	82.96
Cu3273_A		2.760	ug/L	0.1239	4.490	10.48
Fe2599_R		16,200	ug/L	277.8	1.715	31,880
K_7664_R	W	264,200	ug/L	2,046	0.7742	154,200
Li6707_R		18.11	ug/L	1.431	7.902	195.5
Mg2025_A	W	57,760	ug/L	320.4	0.5548	17,190
Mn2576_R	W	1,905	ug/L	27.82	1.461	20,500
Mo2020_A		6.922	ug/L	0.04028	0.5819	19.53
Na5895_R	F	833,000	ug/L	15,540	1.866	1,595,000
Ni2316_A		13.14	ug/L	0.2976	2.265	23.16
Pb2203_A		1.935	ug/L	0.6339	32.75	0.7534
Sb2068_A		1.544	ug/L	1.155	74.84	1.779
Se1960_A		1.944	ug/L	1.184	60.89	3.106
Si2516_R		9,707	ug/L	102.4	1.055	4,682
Sn1899_A		0.3991	ug/L	0.03858	9.667	0.7847
Sr4215_R		465.6	ug/L	8.605	1.848	32,820
Ti3349_A		68.12	ug/L	0.04495	0.06599	1,643
Tl1908_A		-1.622	ug/L	0.5301	32.68	-2.750
V_2924_A		12.26	ug/L	0.3070	2.504	115.0
Zn2062_A		6.312	ug/L	0.1809	2.866	17.42
Y_3600_R		17,604	Cts/S	62.159	0.35310	17,604
Y_2243_A		7,370.2	Cts/S	59.472	0.80693	7,370.2
Y_3600_A		128,060	Cts/S	67.894	0.053018	128,060

SO8943-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 4:47:18PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3598	ug/L	0.008173	2.272	-12.77
Al3961_R		6.519	ug/L	7.549	115.8	32.74
As1891_A		6.161	ug/L	1.267	20.57	0.8308
B_2089_A		74.04	ug/L	0.2804	0.3788	110.7
Ba4554_R		17.55	ug/L	0.3129	1.783	1,178
Be3130_R		0.07518	ug/L	0.01208	16.06	4.960
Ca3158_R	W	35,520	ug/L	371.1	1.045	46,760
Cd2265_A		0.04098	ug/L	0.01831	44.67	2.478
Co2286_A		11.28	ug/L	0.03764	0.3337	45.86
Cr2677_A		0.9133	ug/L	0.05950	6.515	14.79
Cu3273_A		1.252	ug/L	0.3807	30.41	-17.14
Fe2599_R		1,131	ug/L	20.49	1.811	2,328
K_7664_R		5,855	ug/L	20.83	0.3558	3,471
Li6707_R		4.731	ug/L	1.577	33.33	53.48
Mg2025_A		6,091	ug/L	3.178	0.05218	1,973
Mn2576_R	W	4,704	ug/L	57.54	1.223	52,790
Mo2020_A		2.045	ug/L	0.09241	4.519	5.752
Na5895_R		14,610	ug/L	50.25	0.3440	29,230
Ni2316_A		11.26	ug/L	0.08784	0.7802	22.68

SO8943-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 4:47:18PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.004598	ug/L	1.173	25,510	-1.182
Sb2068_A		-0.6534	ug/L	0.05634	8.622	0.4364
Se1960_A		0.5437	ug/L	1.392	256.1	3.186
Si2516_R		5,502	ug/L	62.42	1.134	2,781
Sn1899_A		0.4969	ug/L	0.2383	47.95	0.9046
Sr4215_R		274.3	ug/L	4.645	1.694	20,120
Ti3349_A		-0.1084	ug/L	0.08221	75.81	-13.53
Tl1908_A		-1.563	ug/L	0.5082	32.50	-4.559
V_2924_A		-0.7011	ug/L	0.1563	22.30	-28.05
Zn2062_A		1.345	ug/L	0.07765	5.774	4.134
Y_3600_R		18,373	Cts/S	30.424	0.16559	18,373
Y_2243_A		8,048.7	Cts/S	9.7728	0.12142	8,048.7
Y_3600_A		143,150	Cts/S	174.20	0.12169	143,150

SO8943-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 4:51:40PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3432	ug/L	0.1699	49.52	-15.41
Al3961_R		68.23	ug/L	4.775	6.999	97.24
As1891_A		31.66	ug/L	0.8988	2.838	10.49
B_2089_A		75.04	ug/L	0.1586	0.2113	112.3
Ba4554_R		18.58	ug/L	0.2138	1.150	1,218
Be3130_R		0.03556	ug/L	0.008913	25.07	0.9871
Ca3158_R	W	36,630	ug/L	770.0	2.102	47,120
Cd2265_A		0.1035	ug/L	0.09228	89.12	5.264
Co2286_A		11.40	ug/L	0.1598	1.403	46.40
Cr2677_A		0.9335	ug/L	0.1196	12.81	15.26
Cu3273_A		1.713	ug/L	0.06428	3.752	-11.07
Fe2599_R		2,058	ug/L	41.82	2.032	4,135
K_7664_R		5,882	ug/L	132.2	2.248	3,407
Li6707_R		4.865	ug/L	2.248	46.20	53.67
Mg2025_A		6,168	ug/L	2.757	0.04469	2,002
Mn2576_R	W	4,781	ug/L	110.9	2.320	52,420
Mo2020_A		1.932	ug/L	0.2392	12.38	5.401
Na5895_R		14,690	ug/L	271.8	1.850	28,720
Ni2316_A		11.46	ug/L	0.04647	0.4055	23.04
Pb2203_A		0.4685	ug/L	0.1352	28.86	-0.7264
Sb2068_A		-1.089	ug/L	0.04638	4.257	0.2264
Se1960_A		1.381	ug/L	1.059	76.66	3.461
Si2516_R		5,797	ug/L	106.9	1.844	2,861
Sn1899_A		0.6347	ug/L	0.3983	62.76	0.9733
Sr4215_R		284.8	ug/L	4.968	1.745	20,410
Ti3349_A		2.199	ug/L	0.04489	2.041	49.24
Tl1908_A		-2.024	ug/L	0.2565	12.67	-4.874
V_2924_A		-0.5898	ug/L	0.4821	81.75	-27.19
Zn2062_A		1.279	ug/L	0.06061	4.738	3.943
Y_3600_R		17,952	Cts/S	100.56	0.56016	17,952
Y_2243_A		8,062.0	Cts/S	18.397	0.22820	8,062.0
Y_3600_A		143,790	Cts/S	1,155.0	0.80325	143,790

SO8943-003

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 4:56:01PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO8943-003

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 4:56:01PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1247	ug/L	0.2347	188.2	-16.58
Al3961_R		50.66	ug/L	3.402	6.715	58.07
As1891_A		6.369	ug/L	0.7901	12.41	0.9309
B_2089_A		69.79	ug/L	0.5486	0.7860	104.9
Ba4554_R		14.32	ug/L	0.6886	4.809	976.7
Be3130_R		0.09403	ug/L	0.03052	32.46	6.779
Ca3158_R		10,730	ug/L	728.4	6.791	14,300
Cd2265_A		0.07197	ug/L	0.0005800	0.8059	1.875
Co2286_A		13.31	ug/L	0.04852	0.3647	53.72
Cr2677_A		0.4838	ug/L	0.03998	8.263	6.396
Cu3273_A		3.184	ug/L	0.4412	13.86	5.228
Fe2599_R		658.5	ug/L	41.09	6.240	1,376
K_7664_R		4,915	ug/L	320.8	6.527	2,937
Li6707_R		3.919	ug/L	0.1736	4.430	44.98
Mg2025_A		1,918	ug/L	17.39	0.9066	618.9
Mn2576_R	W	1,025	ug/L	69.65	6.792	11,660
Mo2020_A		-0.01442	ug/L	0.04808	333.5	-0.5164
Na5895_R		19,710	ug/L	1,285	6.520	39,960
Ni2316_A		5.473	ug/L	0.02194	0.4009	11.34
Pb2203_A		0.8736	ug/L	1.343	153.8	-0.3462
Sb2068_A		-0.03329	ug/L	0.1803	541.6	0.7623
Se1960_A		1.543	ug/L	0.8592	55.67	2.913
Si2516_R		6,101	ug/L	400.2	6.560	3,123
Sn1899_A		-0.06708	ug/L	0.4150	618.7	0.6335
Sr4215_R		109.3	ug/L	6.604	6.043	8,036
Ti3349_A		1.102	ug/L	0.02297	2.085	19.29
Tl1908_A		-1.302	ug/L	0.08902	6.837	-2.253
V_2924_A		0.02558	ug/L	0.3825	1,495	-5.369
Zn2062_A		2.442	ug/L	0.08220	3.366	7.458
Y_3600_R		18,646	Cts/S	745.97	4.0006	18,646
Y_2243_A		8,076.5	Cts/S	56.130	0.69498	8,076.5
Y_3600_A		143,500	Cts/S	1,167.7	0.81372	143,500

SO8943-004

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 5:00:23PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.03082	ug/L	0.02554	82.86	-25.17
Al3961_R		434.3	ug/L	27.28	6.283	466.5
As1891_A		68.75	ug/L	2.100	3.055	24.55
B_2089_A		68.29	ug/L	1.081	1.583	102.6
Ba4554_R		16.67	ug/L	0.6139	3.683	1,120
Be3130_R		0.08566	ug/L	0.009890	11.55	5.129
Ca3158_R		10,730	ug/L	359.2	3.348	14,120
Cd2265_A		0.05097	ug/L	0.03074	60.32	7.543
Co2286_A		13.66	ug/L	0.1721	1.260	55.18
Cr2677_A		1.418	ug/L	0.1085	7.651	17.21
Cu3273_A		7.007	ug/L	0.2322	3.313	51.88
Fe2599_R		3,420	ug/L	118.5	3.464	7,034
K_7664_R		4,977	ug/L	131.0	2.633	2,938
Li6707_R		3.802	ug/L	0.2289	6.020	43.07
Mg2025_A		1,984	ug/L	28.85	1.454	640.1
Mn2576_R	W	1,020	ug/L	37.40	3.668	11,450
Mo2020_A		0.06058	ug/L	0.1404	231.7	-0.2804
Na5895_R		19,770	ug/L	678.6	3.433	39,570
Ni2316_A		6.422	ug/L	0.1602	2.495	13.00

SO8943-004

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 5:00:23PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		1.103	ug/L	0.5566	50.47	-0.1277
Sb2068_A		-0.8944	ug/L	0.2208	24.69	0.3696
Se1960_A		2.360	ug/L	0.4255	18.03	3.194
Si2516_R		6,875	ug/L	213.1	3.099	3,472
Sn1899_A		0.1657	ug/L	0.4904	296.0	0.7473
Sr4215_R		109.0	ug/L	3.483	3.195	7,914
Ti3349_A		14.08	ug/L	0.4058	2.882	368.9
Tl1908_A		-1.184	ug/L	0.5534	46.73	-2.187
V_2924_A		0.5695	ug/L	0.1184	20.80	0.7670
Zn2062_A		3.647	ug/L	0.02531	0.6941	11.08
Y_3600_R		18,393	Cts/S	279.34	1.5187	18,393
Y_2243_A		8,072.6	Cts/S	93.799	1.1619	8,072.6
Y_3600_A		142,270	Cts/S	157.87	0.11096	142,270

SO8943-005

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 5:04:45PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1427	ug/L	0.05583	39.11	-28.84
Al3961_R		76.80	ug/L	2.565	3.340	107.1
As1891_A		2.535	ug/L	0.9140	36.05	-0.7173
B_2089_A		166.2	ug/L	1.496	0.9005	242.0
Ba4554_R		50.47	ug/L	0.04801	0.09511	3,315
Be3130_R		0.08714	ug/L	0.005043	5.787	5.938
Ca3158_R	W	36,670	ug/L	195.1	0.5320	47,590
Cd2265_A		-0.003077	ug/L	0.04748	1,543	12.22
Co2286_A		2.864	ug/L	0.02779	0.9700	13.95
Cr2677_A		0.7694	ug/L	0.009543	1.240	10.28
Cu3273_A		5.392	ug/L	0.1231	2.284	35.35
Fe2599_R		5,964	ug/L	38.28	0.6419	12,080
K_7664_R		9,007	ug/L	38.77	0.4305	5,314
Li6707_R		0.8476	ug/L	1.633	192.6	9.717
Mg2025_A		4,545	ug/L	30.29	0.6664	1,464
Mn2576_R	W	1,096	ug/L	3.177	0.2899	12,120
Mo2020_A		1.644	ug/L	0.1263	7.683	4.700
Na5895_R	W	36,500	ug/L	42.25	0.1157	71,940
Ni2316_A		3.917	ug/L	0.09774	2.495	7.819
Pb2203_A		0.6507	ug/L	1.050	161.3	-0.5045
Sb2068_A		0.3711	ug/L	0.2777	74.84	1.085
Se1960_A		1.649	ug/L	1.884	114.2	3.012
Si2516_R		5,437	ug/L	19.22	0.3535	2,709
Sn1899_A		0.3678	ug/L	0.9186	249.8	0.8397
Sr4215_R		323.5	ug/L	1.758	0.5434	23,410
Ti3349_A		1.894	ug/L	0.1410	7.444	40.81
Tl1908_A		-0.5909	ug/L	0.1664	28.15	-1.903
V_2924_A		0.0009560	ug/L	0.2313	24,190	-6.168
Zn2062_A		33.84	ug/L	0.3574	1.056	101.3
Y_3600_R		18,111	Cts/S	75.964	0.41944	18,111
Y_2243_A		8,017.2	Cts/S	41.857	0.52209	8,017.2
Y_3600_A		143,220	Cts/S	1,927.7	1.3460	143,220

SO8943-006

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 5:09:06PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO8943-006

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 5:09:06PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1792	ug/L	0.1616	90.19	-29.57
Al3961_R		128.9	ug/L	9.101	7.060	160.7
As1891_A		5.228	ug/L	0.5228	9.999	0.2812
B_2089_A		154.9	ug/L	0.7240	0.4675	228.6
Ba4554_R		47.37	ug/L	0.7954	1.679	3,165
Be3130_R		0.1050	ug/L	0.05283	50.29	7.722
Ca3158_R	W	32,420	ug/L	499.1	1.539	42,780
Cd2265_A		0.004479	ug/L	0.02502	558.5	13.67
Co2286_A		3.021	ug/L	0.1253	4.146	14.73
Cr2677_A		0.8239	ug/L	0.03715	4.510	10.93
Cu3273_A		1.623	ug/L	0.2865	17.65	-8.678
Fe2599_R		6,525	ug/L	69.70	1.068	13,430
K_7664_R		8,567	ug/L	153.6	1.793	5,135
Li6707_R		1.913	ug/L	1.230	64.29	21.86
Mg2025_A		4,120	ug/L	11.01	0.2673	1,343
Mn2576_R	W	1,007	ug/L	13.16	1.306	11,330
Mo2020_A		1.498	ug/L	0.1234	8.240	4.297
Na5895_R	W	33,170	ug/L	447.7	1.350	66,480
Ni2316_A		3.984	ug/L	0.03813	0.9570	8.000
Pb2203_A		0.6704	ug/L	0.1613	24.06	-0.4936
Sb2068_A		-0.4175	ug/L	0.2416	57.88	0.6882
Se1960_A		1.796	ug/L	0.6586	36.66	3.088
Si2516_R		5,383	ug/L	61.32	1.139	2,727
Sn1899_A		0.3064	ug/L	0.08190	26.73	0.8185
Sr4215_R		293.0	ug/L	3.122	1.066	21,550
Ti3349_A		2.865	ug/L	0.02507	0.8750	67.42
Tl1908_A		-1.417	ug/L	0.4529	31.97	-2.345
V_2924_A		0.4111	ug/L	0.3464	84.27	-1.222
Zn2062_A		1.738	ug/L	0.07524	4.328	5.359
Y_3600_R		18,416	Cts/S	11.468	0.062271	18,416
Y_2243_A		8,113.5	Cts/S	28.436	0.35048	8,113.5
Y_3600_A		143,870	Cts/S	77.512	0.053878	143,870

SO8943-007

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 5:13:28PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.06597	ug/L	0.01358	20.58	-43.22
Al3961_R		30.18	ug/L	8.065	26.72	71.20
As1891_A		-0.8123	ug/L	0.4450	54.79	-2.180
B_2089_A		256.4	ug/L	0.5725	0.2233	372.2
Ba4554_R		122.6	ug/L	0.01196	0.009749	8,112
Be3130_R		0.06248	ug/L	0.001825	2.921	3.717
Ca3158_R	W	50,640	ug/L	455.8	0.9001	66,340
Cd2265_A		-0.07076	ug/L	0.03473	49.09	22.64
Co2286_A		20.34	ug/L	0.01495	0.07353	80.34
Cr2677_A		0.8591	ug/L	0.1764	20.53	12.40
Cu3273_A		1.402	ug/L	0.004066	0.2900	-7.612
Fe2599_R		11,220	ug/L	37.38	0.3330	22,930
K_7664_R		11,240	ug/L	102.8	0.9150	6,718
Li6707_R		1.345	ug/L	0.3887	28.89	15.35
Mg2025_A		8,035	ug/L	9.930	0.1236	2,604
Mn2576_R	W	1,571	ug/L	8.677	0.5524	17,540
Mo2020_A		0.1027	ug/L	0.07354	71.61	-0.1792
Na5895_R		17,510	ug/L	113.5	0.6482	34,840
Ni2316_A		3.188	ug/L	0.1821	5.710	5.982

SO8943-007

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 5:13:28PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.2479	ug/L	0.1749	70.54	-0.8456
Sb2068_A		-0.2971	ug/L	0.3943	132.7	0.8495
Se1960_A		1.338	ug/L	1.069	79.90	3.086
Si2516_R		5,629	ug/L	25.27	0.4489	2,829
Sn1899_A		0.2077	ug/L	0.6086	293.0	0.7634
Sr4215_R		458.9	ug/L	0.6244	0.1361	33,580
Ti3349_A		0.9204	ug/L	0.01648	1.790	14.42
Tl1908_A		-0.9706	ug/L	0.4003	41.25	-2.371
V_2924_A		0.2919	ug/L	0.1293	44.30	-4.846
Zn2062_A		3.994	ug/L	0.1291	3.232	12.08
Y_3600_R		18,278	Cts/S	108.42	0.59314	18,278
Y_2243_A		8,042.0	Cts/S	1.9969	0.024831	8,042.0
Y_3600_A		144,090	Cts/S	312.25	0.21670	144,090

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 5:17:48PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		498.5	ug/L	0.3976	0.07976	10,410
Al3961_R		12,520	ug/L	114.5	0.9149	13,480
As1891_A		521.7	ug/L	2.300	0.4410	196.6
B_2089_A		513.8	ug/L	2.257	0.4393	761.2
Ba4554_R		493.3	ug/L	5.239	1.062	33,030
Be3130_R	W	464.7	ug/L	6.966	1.499	45,030
Ca3158_R		12,530	ug/L	91.30	0.7285	16,630
Cd2265_A		495.2	ug/L	2.051	0.4141	6,322
Co2286_A	W	530.2	ug/L	2.132	0.4022	2,027
Cr2677_A		487.7	ug/L	1.315	0.2697	5,597
Cu3273_A		483.9	ug/L	0.1894	0.03915	5,711
Fe2599_R		12,330	ug/L	125.9	1.022	25,520
K_7664_R		12,360	ug/L	8.959	0.07247	7,497
Li6707_R		513.7	ug/L	2.479	0.4825	5,826
Mg2025_A	W	13,510	ug/L	60.45	0.4475	4,428
Mn2576_R		505.4	ug/L	4.006	0.7926	5,718
Mo2020_A		521.2	ug/L	1.886	0.3619	1,652
Na5895_R		12,100	ug/L	78.15	0.6458	24,420
Ni2316_A		508.8	ug/L	2.047	0.4023	1,012
Pb2203_A		505.6	ug/L	0.01720	0.003403	492.6
Sb2068_A	W	542.7	ug/L	1.498	0.2760	287.6
Se1960_A		525.7	ug/L	3.541	0.6735	155.0
Si2516_R		13,370	ug/L	75.33	0.5634	6,782
Sn1899_A	W	548.6	ug/L	2.868	0.5228	268.1
Sr4215_R		484.3	ug/L	6.981	1.441	35,930
Ti3349_A		500.3	ug/L	1.233	0.2464	13,660
Tl1908_A	W	541.0	ug/L	0.9731	0.1799	307.6
V_2924_A		511.8	ug/L	0.5657	0.1105	5,763
Zn2062_A		494.0	ug/L	1.454	0.2943	1,488
Y_3600_R		18,525	Cts/S	102.82	0.55503	18,525
Y_2243_A		8,079.4	Cts/S	43.939	0.54384	8,079.4
Y_3600_A		144,180	Cts/S	420.70	0.29179	144,180

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 5:21:57PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 5:21:57PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1527	ug/L	0.07825	51.24	-14.91
Al3961_R		13.77	ug/L	9.403	68.30	8.447
As1891_A		-0.2959	ug/L	0.0006240	0.2107	-1.629
B_2089_A		1.147	ug/L	0.1884	16.43	6.122
Ba4554_R		0.1321	ug/L	0.006633	5.022	21.84
Be3130_R		0.2697	ug/L	0.01112	4.122	23.88
Ca3158_R		7.542	ug/L	1.393	18.46	-11.18
Cd2265_A		0.2440	ug/L	0.007610	3.119	2.752
Co2286_A		0.2785	ug/L	0.008397	3.015	4.210
Cr2677_A		0.4322	ug/L	0.1651	38.21	4.914
Cu3273_A		0.9283	ug/L	0.2946	31.74	-22.55
Fe2599_R		7.740	ug/L	0.4387	5.668	21.38
K_7664_R		-3.819	ug/L	8.205	214.8	-100.2
Li6707_R		0.6112	ug/L	0.3756	61.45	7.247
Mg2025_A		5.463	ug/L	1.255	22.98	-5.855
Mn2576_R		-0.003691	ug/L	0.1989	5,390	1.217
Mo2020_A		0.7791	ug/L	0.09297	11.93	2.127
Na5895_R		19.37	ug/L	4.083	21.08	68.39
Ni2316_A		0.5069	ug/L	0.1017	20.06	1.639
Pb2203_A		0.5407	ug/L	0.1677	31.01	-0.6923
Sb2068_A		0.1490	ug/L	0.2804	188.2	0.8699
Se1960_A		1.962	ug/L	0.1516	7.728	2.950
Si2516_R		12.99	ug/L	3.785	29.15	31.63
Sn1899_A		0.1496	ug/L	0.3911	261.4	0.7609
Sr4215_R		-0.1069	ug/L	0.1631	152.6	-156.5
Ti3349_A		0.9123	ug/L	0.02164	2.372	14.59
Tl1908_A		-0.6798	ug/L	0.3405	50.09	-1.360
V_2924_A		0.002099	ug/L	0.1318	6,280	-1.734
Zn2062_A		0.3672	ug/L	0.02881	7.845	1.240
Y_3600_R		18,563	Cts/S	113.53	0.61160	18,563
Y_2243_A		8,317.3	Cts/S	36.666	0.44084	8,317.3
Y_3600_A		147,950	Cts/S	535.85	0.36217	147,950

SO8943-008

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 5:26:21PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.4289	ug/L	0.02812	6.557	-32.56
Al3961_R		-15.70	ug/L	5.247	33.43	21.28
As1891_A		-0.5645	ug/L	1.215	215.1	-2.051
B_2089_A		250.3	ug/L	1.861	0.7436	363.9
Ba4554_R		119.2	ug/L	0.9049	0.7589	7,854
Be3130_R		0.08838	ug/L	0.06468	73.18	6.241
Ca3158_R	W	49,380	ug/L	800.2	1.621	64,410
Cd2265_A		-0.06616	ug/L	0.06474	97.84	20.43
Co2286_A		19.96	ug/L	0.1497	0.7497	78.98
Cr2677_A		0.6873	ug/L	0.03243	4.718	10.14
Cu3273_A		2.853	ug/L	0.4484	15.71	8.592
Fe2599_R		10,150	ug/L	123.6	1.217	20,660
K_7664_R		10,960	ug/L	172.6	1.574	6,522
Li6707_R		1.631	ug/L	0.9462	58.03	18.48
Mg2025_A		7,846	ug/L	63.10	0.8043	2,545
Mn2576_R	W	1,537	ug/L	18.70	1.217	17,080
Mo2020_A		0.2343	ug/L	0.0006270	0.2677	0.2386
Na5895_R		17,090	ug/L	158.6	0.9277	33,870
Ni2316_A		2.850	ug/L	0.07207	2.529	5.406

SO8943-008

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 5:26:21PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.03629	ug/L	0.02172	59.85	-1.059
Sb2068_A		-0.7352	ug/L	0.1943	26.44	0.5900
Se1960_A		-0.7622	ug/L	0.9182	120.5	2.462
Si2516_R		5,443	ug/L	99.71	1.832	2,725
Sn1899_A		0.9215	ug/L	0.07708	8.364	1.111
Sr4215_R		450.6	ug/L	2.481	0.5506	32,840
Ti3349_A		-0.07124	ug/L	0.06787	95.26	-12.44
Tl1908_A		-1.358	ug/L	0.7501	55.22	-2.574
V_2924_A		0.1272	ug/L	0.01956	15.38	-6.472
Zn2062_A		2.967	ug/L	0.2304	7.765	9.007
Y_3600_R		18,202	Cts/S	117.13	0.64354	18,202
Y_2243_A		8,050.5	Cts/S	52.756	0.65531	8,050.5
Y_3600_A		142,030	Cts/S	3,375.8	2.3768	142,030

SO8944-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 5:30:41PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.03341	ug/L	0.2048	613.0	-19.76
Al3961_R		351.3	ug/L	8.661	2.465	373.7
As1891_A		-1.483	ug/L	0.4362	29.42	-2.075
B_2089_A		4.961	ug/L	0.07774	1.567	11.52
Ba4554_R		32.26	ug/L	0.03916	0.1214	2,166
Be3130_R		0.1301	ug/L	0.04351	33.44	9.951
Ca3158_R		3,854	ug/L	4.548	0.1180	5,083
Cd2265_A		0.1348	ug/L	0.02643	19.60	2.437
Co2286_A		1.196	ug/L	0.07971	6.667	7.692
Cr2677_A		0.6606	ug/L	0.1943	29.40	7.508
Cu3273_A		4.550	ug/L	0.2236	4.915	21.23
Fe2599_R		534.5	ug/L	1.586	0.2967	1,109
K_7664_R		850.1	ug/L	15.39	1.811	423.5
Li6707_R		0.2316	ug/L	1.152	497.6	2.816
Mg2025_A		550.4	ug/L	0.1126	0.02045	173.6
Mn2576_R		65.32	ug/L	0.3759	0.5754	738.3
Mo2020_A		0.1760	ug/L	0.1212	68.83	0.1513
Na5895_R	W	40,340	ug/L	98.41	0.2439	81,090
Ni2316_A		2.757	ug/L	0.2587	9.384	6.040
Pb2203_A		1.374	ug/L	0.4132	30.07	0.1216
Sb2068_A		-0.5860	ug/L	0.5800	98.98	0.4686
Se1960_A		0.8819	ug/L	1.533	173.8	2.594
Si2516_R		1,675	ug/L	10.57	0.6309	868.5
Sn1899_A		0.5040	ug/L	1.058	209.9	0.9185
Sr4215_R		17.48	ug/L	0.1111	0.6357	1,151
Ti3349_A		5.708	ug/L	0.06882	1.206	144.9
Tl1908_A		-0.7845	ug/L	0.9370	119.4	-1.431
V_2924_A		0.3794	ug/L	0.2527	66.61	2.399
Zn2062_A		4.835	ug/L	0.07825	1.618	14.80
Y_3600_R		18,473	Cts/S	256.80	1.3901	18,473
Y_2243_A		8,147.4	Cts/S	19.102	0.23445	8,147.4
Y_3600_A		143,940	Cts/S	790.68	0.54932	143,940

SO8945-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 5:35:05PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO8945-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 5:35:05PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.2386	ug/L	0.01058	4.435	-22.97
Al3961_R		37.44	ug/L	1.878	5.018	69.98
As1891_A		-1.266	ug/L	0.8906	70.37	-1.929
B_2089_A		16.43	ug/L	0.1803	1.097	27.55
Ba4554_R		15.52	ug/L	0.1236	0.7965	1,029
Be3130_R		0.07269	ug/L	0.03697	50.86	4.897
Ca3158_R	W	41,360	ug/L	136.4	0.3297	53,740
Cd2265_A		0.07797	ug/L	0.006406	8.216	0.9347
Co2286_A		0.4537	ug/L	0.1481	32.63	4.688
Cr2677_A		1.545	ug/L	0.09545	6.178	17.47
Cu3273_A		4.010	ug/L	0.2491	6.212	14.59
Fe2599_R		189.2	ug/L	0.7218	0.3814	388.6
K_7664_R		12,530	ug/L	11.39	0.09090	7,439
Li6707_R		6.130	ug/L	0.9316	15.20	68.29
Mg2025_A		2,919	ug/L	6.618	0.2268	930.5
Mn2576_R		62.40	ug/L	0.3745	0.6001	693.2
Mo2020_A		0.6538	ug/L	0.08689	13.29	1.637
Na5895_R	W	44,720	ug/L	6.100	0.01364	88,210
Ni2316_A		2.112	ug/L	0.4730	22.39	4.677
Pb2203_A		0.1619	ug/L	0.6109	377.3	-1.027
Sb2068_A		-0.5247	ug/L	0.1972	37.58	0.4838
Se1960_A		-0.3381	ug/L	0.1828	54.07	2.178
Si2516_R		6,285	ug/L	8.394	0.1336	3,131
Sn1899_A		0.2073	ug/L	0.6964	335.9	0.7546
Sr4215_R		126.7	ug/L	0.1061	0.08379	9,091
Ti3349_A		0.9204	ug/L	0.3098	33.66	14.35
Tl1908_A		-1.272	ug/L	0.3956	31.11	-1.667
V_2924_A		4.204	ug/L	0.03551	0.8446	45.33
Zn2062_A		10.12	ug/L	0.04419	0.4368	30.12
Y_3600_R		18,130	Cts/S	80.445	0.44372	18,130
Y_2243_A		7,955.4	Cts/S	22.321	0.28057	7,955.4
Y_3600_A		142,880	Cts/S	1,185.3	0.82960	142,880

SO8946-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 5:39:28PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.2494	ug/L	0.1473	59.05	-23.49
Al3961_R		50.69	ug/L	0.9233	1.821	53.74
As1891_A		-1.149	ug/L	0.2228	19.39	-1.947
B_2089_A		5.048	ug/L	0.1641	3.250	11.77
Ba4554_R		7.530	ug/L	0.08194	1.088	511.4
Be3130_R		0.06199	ug/L	0.01119	18.04	3.686
Ca3158_R		6,876	ug/L	27.73	0.4033	9,014
Cd2265_A		0.03540	ug/L	0.01221	34.50	0.2300
Co2286_A		1.211	ug/L	0.01710	1.412	7.783
Cr2677_A		0.3089	ug/L	0.1911	61.86	3.582
Cu3273_A		7.736	ug/L	0.3331	4.307	59.66
Fe2599_R		104.8	ug/L	3.733	3.562	219.8
K_7664_R		1,100	ug/L	8.512	0.7736	572.2
Li6707_R		0.4743	ug/L	0.3812	80.37	5.617
Mg2025_A		1,549	ug/L	2.459	0.1588	507.3
Mn2576_R		174.2	ug/L	0.4551	0.2613	1,951
Mo2020_A		0.2618	ug/L	0.09913	37.86	0.4221
Na5895_R		1,726	ug/L	7.261	0.4208	3,469
Ni2316_A		2.253	ug/L	0.2901	12.87	5.122

SO8946-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 5:39:28PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.1224	ug/L	0.6023	492.0	-1.103
Sb2068_A		-0.6124	ug/L	0.9766	159.5	0.4488
Se1960_A		1.229	ug/L	0.1647	13.40	2.732
Si2516_R		4,222	ug/L	9.154	0.2168	2,134
Sn1899_A		0.1919	ug/L	0.3793	197.7	0.7735
Sr4215_R		31.67	ug/L	0.1150	0.3633	2,187
Ti3349_A		0.3530	ug/L	0.09175	25.99	-1.061
Tl1908_A		-1.102	ug/L	0.8562	77.72	-1.692
V_2924_A		-0.2288	ug/L	0.04833	21.12	-5.034
Zn2062_A		1.557	ug/L	0.05175	3.324	4.881
Y_3600_R		18,326	Cts/S	89.765	0.48982	18,326
Y_2243_A		8,229.8	Cts/S	8.8303	0.10730	8,229.8
Y_3600_A		146,140	Cts/S	1,716.4	1.1745	146,140

SO8946-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 5:43:51PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1041	ug/L	0.2576	247.4	-20.38
Al3961_R		179.9	ug/L	3.431	1.907	187.5
As1891_A		-1.932	ug/L	0.1051	5.439	-2.243
B_2089_A		0.4235	ug/L	0.1814	42.84	4.956
Ba4554_R		1.482	ug/L	0.02428	1.639	111.2
Be3130_R		0.05503	ug/L	0.007929	14.41	2.934
Ca3158_R		2,365	ug/L	25.50	1.079	3,093
Cd2265_A		0.04457	ug/L	0.002014	4.518	0.2648
Co2286_A		-0.2430	ug/L	0.02829	11.64	2.142
Cr2677_A		0.4331	ug/L	0.1706	39.39	4.878
Cu3273_A		4.430	ug/L	0.1695	3.826	19.84
Fe2599_R		64.91	ug/L	2.997	4.617	138.5
K_7664_R		287.8	ug/L	9.565	3.323	78.53
Li6707_R		-0.02192	ug/L	1.280	5,837	0.006648
Mg2025_A		686.8	ug/L	3.439	0.5008	219.9
Mn2576_R		2.267	ug/L	0.02302	1.015	26.88
Mo2020_A		0.08516	ug/L	0.2050	240.7	-0.1378
Na5895_R		1,313	ug/L	23.56	1.794	2,652
Ni2316_A		0.5082	ug/L	0.01102	2.169	1.606
Pb2203_A		0.4327	ug/L	0.8927	206.3	-0.8011
Sb2068_A		-0.4893	ug/L	0.6402	130.8	0.5149
Se1960_A		1.674	ug/L	2.238	133.7	2.826
Si2516_R		4,855	ug/L	54.49	1.122	2,456
Sn1899_A		0.3133	ug/L	0.01715	5.475	0.8310
Sr4215_R		11.98	ug/L	0.1834	1.531	737.7
Ti3349_A		1.687	ug/L	0.08501	5.039	35.88
Tl1908_A		-0.8722	ug/L	0.1011	11.59	-1.455
V_2924_A		-0.2757	ug/L	0.1788	64.86	-4.876
Zn2062_A		0.3649	ug/L	0.09894	27.11	1.215
Y_3600_R		18,368	Cts/S	83.394	0.45403	18,368
Y_2243_A		8,203.2	Cts/S	39.187	0.47770	8,203.2
Y_3600_A		146,270	Cts/S	613.94	0.41973	146,270

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 5:48:14PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 5:48:14PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		498.0	ug/L	1.044	0.2096	10,430
Al3961_R		12,470	ug/L	87.42	0.7011	13,430
As1891_A		523.7	ug/L	1.774	0.3388	199.3
B_2089_A		504.8	ug/L	2.739	0.5425	755.6
Ba4554_R		487.8	ug/L	1.652	0.3386	32,680
Be3130_R	W	460.3	ug/L	3.087	0.6706	44,620
Ca3158_R		12,530	ug/L	160.2	1.279	16,630
Cd2265_A		490.2	ug/L	1.748	0.3566	6,321
Co2286_A	W	530.4	ug/L	1.069	0.2015	2,048
Cr2677_A		489.5	ug/L	1.994	0.4073	5,634
Cu3273_A		478.9	ug/L	3.941	0.8229	5,668
Fe2599_R		12,240	ug/L	106.0	0.8658	25,370
K_7664_R		12,280	ug/L	82.44	0.6713	7,452
Li6707_R		510.0	ug/L	1.207	0.2366	5,787
Mg2025_A	W	13,470	ug/L	4.153	0.03084	4,458
Mn2576_R		505.7	ug/L	2.862	0.5659	5,725
Mo2020_A		519.4	ug/L	0.3884	0.07478	1,662
Na5895_R		12,010	ug/L	98.72	0.8222	24,240
Ni2316_A		504.8	ug/L	1.593	0.3155	1,014
Pb2203_A		498.0	ug/L	0.2412	0.04845	490.0
Sb2068_A	W	545.1	ug/L	1.322	0.2425	291.7
Se1960_A	W	529.1	ug/L	0.6697	0.1266	157.5
Si2516_R		13,410	ug/L	102.5	0.7644	6,803
Sn1899_A	F	552.4	ug/L	0.2116	0.03830	272.6
Sr4215_R		478.2	ug/L	1.011	0.2115	35,500
Ti3349_A		503.0	ug/L	0.7562	0.1503	13,780
Tl1908_A	W	544.1	ug/L	2.158	0.3967	312.5
V_2924_A		517.7	ug/L	1.207	0.2331	5,847
Zn2062_A		488.9	ug/L	2.952	0.6039	1,487
Y_3600_R		18,537	Cts/S	49.947	0.26945	18,537
Y_2243_A		8,159.5	Cts/S	5.8053	0.071148	8,159.5
Y_3600_A		144,590	Cts/S	275.40	0.19047	144,590

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 5:52:23PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.7087	ug/L	0.04127	5.824	-2.920
Al3961_R		7.687	ug/L	0.9205	11.97	1.884
As1891_A		0.2171	ug/L	0.04565	21.03	-1.439
B_2089_A		0.3034	ug/L	0.09694	31.95	4.908
Ba4554_R		0.07389	ug/L	0.1489	201.6	18.09
Be3130_R		0.2014	ug/L	0.01476	7.326	17.34
Ca3158_R		10.64	ug/L	0.9627	9.049	-7.095
Cd2265_A		0.2407	ug/L	0.01450	6.022	2.728
Co2286_A		0.07140	ug/L	0.09468	132.6	3.428
Cr2677_A		0.4097	ug/L	0.2394	58.45	4.632
Cu3273_A		1.134	ug/L	0.1769	15.60	-19.99
Fe2599_R		7.267	ug/L	0.3717	5.115	20.50
K_7664_R		2.277	ug/L	4.656	204.4	-96.91
Li6707_R		1.544	ug/L	1.071	69.36	17.84
Mg2025_A		6.105	ug/L	0.3142	5.146	-5.694
Mn2576_R		-0.002654	ug/L	0.3694	13,920	1.217
Mo2020_A		0.7428	ug/L	0.2056	27.68	2.026
Na5895_R		4.023	ug/L	2.862	71.15	37.60
Ni2316_A		0.6938	ug/L	0.009200	1.326	2.036

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 5:52:23PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.3343	ug/L	0.4023	120.3	-0.9080
Sb2068_A		-0.2742	ug/L	1.224	446.4	0.6374
Se1960_A		0.6803	ug/L	0.01545	2.271	2.588
Si2516_R		14.11	ug/L	2.934	20.79	32.36
Sn1899_A		0.6332	ug/L	0.5657	89.33	1.012
Sr4215_R		-0.008944	ug/L	0.2003	2,240	-149.7
Ti3349_A		1.025	ug/L	0.1680	16.39	17.69
Tl1908_A		0.4229	ug/L	0.1171	27.69	-0.7204
V_2924_A		0.1379	ug/L	0.1329	96.37	-0.1450
Zn2062_A		0.3864	ug/L	0.01049	2.715	1.310
Y_3600_R		18,653	Cts/S	237.42	1.2728	18,653
Y_2243_A		8,383.2	Cts/S	60.906	0.72653	8,383.2
Y_3600_A		147,520	Cts/S	60.533	0.041035	147,520

PQL

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 5:56:46PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		9.286	ug/L	0.001587	0.01709	180.2
Al3961_R		308.7	ug/L	8.074	2.616	324.6
As1891_A		7.302	ug/L	0.3230	4.424	1.322
B_2089_A		48.58	ug/L	0.002879	0.005926	75.71
Ba4554_R		4.926	ug/L	0.05901	1.198	341.5
Be3130_R		4.681	ug/L	0.1399	2.988	449.3
Ca3158_R		102.2	ug/L	4.371	4.277	114.2
Cd2265_A		5.001	ug/L	0.02416	0.4831	64.26
Co2286_A		10.47	ug/L	0.09109	0.8698	43.64
Cr2677_A		10.01	ug/L	0.2685	2.682	116.9
Cu3273_A		24.27	ug/L	0.1565	0.6447	259.7
Fe2599_R		101.7	ug/L	2.944	2.893	215.2
K_7664_R		996.6	ug/L	51.86	5.204	512.8
Li6707_R		103.3	ug/L	1.090	1.056	1,167
Mg2025_A		103.4	ug/L	3.500	3.385	27.17
Mn2576_R		4.924	ug/L	0.03721	0.7557	56.72
Mo2020_A		10.61	ug/L	0.03101	0.2924	33.69
Na5895_R		958.4	ug/L	13.89	1.450	1,954
Ni2316_A		10.41	ug/L	0.02935	0.2821	21.59
Pb2203_A		4.609	ug/L	0.7046	15.29	3.332
Sb2068_A		9.049	ug/L	1.179	13.03	5.054
Se1960_A		11.65	ug/L	1.085	9.315	5.759
Si2516_R		220.1	ug/L	0.6977	0.3170	135.8
Sn1899_A		110.6	ug/L	0.4832	0.4370	55.35
Sr4215_R		9.435	ug/L	0.1005	1.065	552.8
Ti3349_A		15.22	ug/L	0.1316	0.8643	413.0
Tl1908_A		15.26	ug/L	1.313	8.603	7.874
V_2924_A		9.644	ug/L	0.01843	0.1911	109.0
Zn2062_A		20.17	ug/L	0.07846	0.3891	61.73
Y_3600_R		18,459	Cts/S	90.840	0.49211	18,459
Y_2243_A		8,194.8	Cts/S	51.491	0.62833	8,194.8
Y_3600_A		146,950	Cts/S	1,168.1	0.79490	146,950

ICSA

Method Name: FAST-2016_NO_AU
Method Revision: 1,077
Analyst Name: EP
Acquire Date: 1/6/2022 6:01:09PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

Logbooks and Supporting Documents

Katahdin Analytical Services, Inc.

Metals Preparation Benchsheet

Reagents and Consumables Information:

Method: 3010

HNO3: MSR268 **HCL:** MSR269 **Digestion Vessels:** ~~17397~~ JT 1/5/22 MLD0260000130

1:1 HNO3: MR3236 **1:1 HCL:** MR3237

Pipet	LCS/Spiking Information:
M11	CLPP-SPK-1 (ID/Vol): / 0.05 mL
M21	CLPP-SPK-INT1 (ID/Vol): / 0.5 mL
M21	CLPP-SPK-INT2 (ID/Vol): / 0.5 mL
–	– Spike (ID/Vol): – / – mL

Heat Source ID : A
Start Time: 7:46 **/Temp.** 90 **°C**
End Time: 1412 **/Temp.** 90 **°C**
Thermometer ID/Pos: ALL30 /

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Bottle	pH<2
LCSWPA05ICW1	PA05ICW1	0.05	L	0.05	L	AQ	IC	JT	01/05/2022	–	✓
PBWPA05ICW1	PA05ICW1		L		L	AQ	IC	JT	01/05/2022	–	
SO8914-010	PA05ICW1		L		L	AQ	IC	JT	01/05/2022	C	
SO8914-010P	PA05ICW1		L		L	AQ	IC	JT	01/05/2022		
SO8914-010S	PA05ICW1		L		L	AQ	IC	JT	01/05/2022		
SO8914-011	PA05ICW1		L		L	AQ	IC	JT	01/05/2022		
SO8914-012	PA05ICW1		L		L	AQ	IC	JT	01/05/2022	A	
SO8914-014	PA05ICW1		L		L	AQ	IC	JT	01/05/2022	C	
SO8921-001	PA05ICW1		L		L	AQ	IC	JT	01/05/2022		
SO8921-002	PA05ICW1		L		L	AQ	IC	JT	01/05/2022		
SO8921-005	PA05ICW1		L		L	AQ	IC	JT	01/05/2022		
SO8943-001	PA05ICW1		L		L	AQ	IC	JT	01/05/2022		
SO8943-002	PA05ICW1		L		L	AQ	IC	JT	01/05/2022		<2
SO8943-003	PA05ICW1		L		L	AQ	IC	JT	01/05/2022		
SO8943-004	PA05ICW1		L		L	AQ	IC	JT	01/05/2022		
SO8943-005	PA05ICW1		L		L	AQ	IC	JT	01/05/2022		
SO8943-006	PA05ICW1		L		L	AQ	IC	JT	01/05/2022		
SO8943-007	PA05ICW1		L		L	AQ	IC	JT	01/05/2022		
SO8943-008	PA05ICW1		L		L	AQ	IC	JT	01/05/2022	A	
SO8944-001	PA05ICW1		L		L	AQ	IC	JT	01/05/2022	A	
SO8945-001	PA05ICW1		L		L	AQ	IC	JT	01/05/2022	C	
SO8946-001	PA05ICW1		L		L	AQ	IC	JT	01/05/2022	D	
SO8946-002	PA05ICW1		L		L	AQ	IC	JT	01/05/2022		

Client IDs Verified
JT 1/5/22

REVIEWED
CD 1-6-22
KATAHDIN ANALYTICAL
METALS SECTION

QA-064-Revision 5 -12/07/2018 **Digestion performed by:** JT/CD **On:** 1/5/22 **Page:** PA015 **Revision:** 00

CONVENTIONAL AND PHYSICAL ANALYTICAL DATA

QC Summary Section

Quality Control Report

Blank Sample Summary Report

Alkalinity

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG312546	SM2320B	06-JAN-22	N/A	J 2.7 mg/L	5.0 mg/L	4.0

Chloride

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG312905	SW846 9056A	14-JAN-22	N/A	J 0.16 mg/L	2.0 mg/L	1.0

Nitrate As N

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG312382	EPA 353.2	30-DEC-21	N/A	U 0.025 mg/L	0.050 mg/L	0.025

Solids-Filterable Residue

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG312427	SM2540C	06-JAN-22	04-JAN-22	U 8.0 mg/L	10. mg/L	8.0

Sulfate

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG312835	SW846 9056A	13-JAN-22	N/A	U 1.0 mg/L	1.0 mg/L	0.50

Total Biochemical Oxygen Demand

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG312275	SM5210B	04-JAN-22	30-DEC-21	U 1.0 mg/L	2.0 mg/L	1.0

Quality Control Report

Laboratory Control Sample Summary Report

Alkalinity

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG312546-2	LCS	WG312546	06-JAN-22	N/A	mg/L	120	130	111	80-120	

Chloride

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG312905-2	LCS	WG312905	14-JAN-22	N/A	mg/L	3.75	3.60	96.0	90-110	

Nitrate As N

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG312382-2	LCS	WG312382	30-DEC-21	N/A	mg/L	1	1.0	100	90-110	

Solids-Filterable Residue

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG312427-2	LCS	WG312427	06-JAN-22	04-JAN-22	mg/L	750	680	90	80-120	

Sulfate

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG312835-2	LCS	WG312835	13-JAN-22	N/A	mg/L	3.75	3.54	94.4	90-110	

Total Biochemical Oxygen Demand

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG312275-2	LCS	WG312275	04-JAN-22	30-DEC-21	mg/L	198	190	96	85-115	

Sample Data Section

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level (PQL) or LOQ could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfite H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit
NFL	No Free Liquid Present	FLP	Free Liquid Present
NOD	No Odor Detected	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L. The reported value should be considered a minimum value.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 or 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Heather Levesque, PMP
SERES Engineering & Services, LLC
669 Marina Drive
Charleston,SC 29492

Lab Sample ID: SO8943-2
Report Date: 26-JAN-22
Project: Fort Devens 2021 LTM
SDG: SO8943

Sample Description	Matrix	Date Sampled	Date Received
MS-21-1D-EVENT#4	AQ	29-DEC-21 13:30:00	30-DEC-21

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	120 mg/L	5.0	0.23	4	STDM 2320B	WG312546	06-JAN-22 12:55:08	N/A	N/A	
Chloride	26 mg/L	4.0	0.20	2.0	SW846 9056A	WG312905	14-JAN-22 18:07:00	N/A	N/A	
Nitrate As N	U0.050 mg/L	0.050	0.015	0.025	EPA 353.2	WG312382	30-DEC-21 17:36:03	N/A	N/A	
Solids-Filterable Residue	66. mg/L	10.	5.0	8	STDM 2540C	WG312427	06-JAN-22 08:05:00	SM 2540C	04-JAN-22	
Sulfate	20 mg/L	1.0	0.064	0.50	SW846 9056A	WG312835	13-JAN-22 23:30:00	N/A	N/A	
Total Biochemical Oxygen Demand	U2.0 mg/L	2.0	0.23	1	SM5210B	WG312275	04-JAN-22 11:24:00	SM 5210B	30-DEC-21 1437	

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Heather Levesque, PMP
SERES Engineering & Services, LLC
669 Marina Drive
Charleston,SC 29492

Lab Sample ID: SO8943-4
Report Date: 26-JAN-22
Project: Fort Devens 2021 LTM
SDG: SO8943

Sample Description	Matrix	Date Sampled	Date Received
MS-21-2D-EVENT#4	AQ	29-DEC-21 14:58:00	30-DEC-21

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	25. mg/L	5.0	0.23	4	STDM 2320B	WG312546	06-JAN-22 12:57:43	N/A	N/A	
Chloride	37 mg/L	4.0	0.20	2.0	SW846 9056A	WG312905	14-JAN-22 18:28:00	N/A	N/A	
Nitrate As N	U0.050 mg/L	0.050	0.015	0.025	EPA 353.2	WG312382	30-DEC-21 17:37:14	N/A	N/A	
Solids-Filterable Residue	15. mg/L	10.	5.0	8	STDM 2540C	WG312427	06-JAN-22 08:05:00	SM 2540C	04-JAN-22	
Sulfate	23 mg/L	1.0	0.064	0.50	SW846 9056A	WG312835	13-JAN-22 23:51:00	N/A	N/A	
Total Biochemical Oxygen Demand	J0.36 mg/L	2.0	0.23	1	SM5210B	WG312275	04-JAN-22 11:28:00	SM 5210B	30-DEC-21 1446	

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Heather Levesque, PMP
SERES Engineering & Services, LLC
669 Marina Drive
Charleston,SC 29492

Lab Sample ID: SO8943-6
Report Date: 26-JAN-22
Project: Fort Devens 2021 LTM
SDG: SO8943

Sample Description	Matrix	Date Sampled	Date Received
MS-21-2S-EVENT#4	AQ	29-DEC-21 16:17:00	30-DEC-21

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	120 mg/L	5.0	0.23	4	STDM 2320B	WG312546	06-JAN-22 13:42:08	N/A	N/A	
Chloride	34 mg/L	4.0	0.20	2.0	SW846 9056A	WG312905	14-JAN-22 18:49:00	N/A	N/A	
Nitrate As N	0.19 mg/L	0.050	0.015	0.025	EPA 353.2	WG312382	30-DEC-21 17:38:23	N/A	N/A	
Solids-Filterable Residue	110 mg/L	10.	5.0	8	STDM 2540C	WG312427	06-JAN-22 08:05:00	SM 2540C	04-JAN-22	
Sulfate	26 mg/L	1.0	0.064	0.50	SW846 9056A	WG312835	14-JAN-22 00:12:00	N/A	N/A	
Total Biochemical Oxygen Demand	U2.0 mg/L	2.0	0.23	1	SM5210B	WG312275	04-JAN-22 11:30:00	SM 5210B	30-DEC-21 1454	

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Heather Levesque, PMP
SERES Engineering & Services, LLC
669 Marina Drive
Charleston,SC 29492

Lab Sample ID: SO8943-8
Report Date: 26-JAN-22
Project: Fort Devens 2021 LTM
SDG: SO8943

Sample Description	Matrix	Date Sampled	Date Received
MS-21-4S-EVENT#4	AQ	29-DEC-21 17:10:00	30-DEC-21

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	200 mg/L	5.0	0.23	4	STDM 2320B	WG312546	06-JAN-22 13:44:55	N/A	N/A	
Chloride	24 mg/L	4.0	0.20	2.0	SW846 9056A	WG312905	14-JAN-22 19:10:00	N/A	N/A	
Nitrate As N	U0.10 mg/L	0.10	0.030	0.050	EPA 353.2	WG312382	30-DEC-21 17:44:58	N/A	N/A	
Solids-Filterable Residue	110 mg/L	10.	5.0	8	STDM 2540C	WG312427	06-JAN-22 08:05:00	SM 2540C	04-JAN-22	
Sulfate	13 mg/L	1.0	0.064	0.50	SW846 9056A	WG312835	14-JAN-22 00:33:00	N/A	N/A	

Raw Data Section

WET CHEMISTRY BATCH REPORT
Jan 04 2022, 12:30 pm
Batch: WG312275 Run ID 1: R584053 Run ID 2: NONE

Parameter: Total Biochemical Oxygen Demand

Prep Date: 30-DEC-21

Date Analyzed: 04-JAN-22

Prep Method: SM 5210B

Analyst Initials: JL

Prep Chemist: JL

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SO8914-11	SAMP	SM5210B	300.00mL	300.00mL	1	.11	U2.0 mg/L	NA	2	0.23	2.0		
SO8917-1	SAMP	SM5210B	1.5000mL	300.00mL	200	2.535	510 mg/L	NA	2	47.	400		
SO8918-1	SAMP	SM5210B	300.00mL	300.00mL	1	1.08	U2.0 mg/L	NA	2	0.23	2.0		
SO8919-1	SAMP	SM5210B	0.75000mL	300.00mL	400	2.74	1100 mg/L	NA	2	93.	800		
SO8929-1	SAMP	SM5210B	50.000mL	300.00mL	6	2.39	14. mg/L	NA	2	1.4	12.		
SO8943-2	SAMP	SM5210B	300.00mL	300.00mL	1	-1.06	U2.0 mg/L	NA	2	0.23	2.0		
SO8943-4	SAMP	SM5210B	300.00mL	300.00mL	1	.36	J0.36 mg/L	NA	2	0.23	2.0		
SO8943-6	SAMP	SM5210B	300.00mL	300.00mL	1	-.67	U2.0 mg/L	NA	2	0.23	2.0		
WG312275-1	MBLANK	SM5210B	300.00mL	300.00mL	1	-.05	U1.0 mg/L	NA	2	0.23	2.0		
WG312275-2	LCS	SM5210B	6.0000mL	300.00mL	50	3.81	190 mg/L	NA	2	12.	100		96
WG312275-3	MS	SM5210B	25.000mL	300.00mL	12	3.74	45. mg/L	NA	2	2.8	24.		94

Comments:

WG312275-1	SO8914-11
WG312275-2	SO8914-11
WG312275-3	SO8914-11

Entered by: JL Date: 1/4/22 Accepted by: [signature] Date: 01/04/22

Katahdin Analytical Services 5000012

KATAHDIN ANALYTICAL SERVICES, INC.

Biochemical Oxygen Demand - Methods EPA 405.1 & SM 5210B

TBOD5 X **CBOD5**

Data Entry By: JL

R584053
WG317275

BOD5,mg/L=(DO consumed- Seed Correction Factor)* Total Volume in mL /Sample Volume in mL
DO consumed = Initial DO - Final DO
Total Volume = 300 mL
Volume of seed added to each sample including (LCSs and MS) in mL = 1

Blank: 0914 1100
LCS: 0920 1105

Sample ID	Seed Volume mL	Initial DO D1	Final DO D2	Cons. DO D1-D2	Seed Correction Factor	In Criteria?
Blank 1	0	8.37	8.15	0.22	N/A	No
Blank 2	0	8.12	8.17	-0.05	N/A	Yes
Blank 3	0	8.26	8.08	0.18	N/A	Yes
Seed Control 1	1	8.17	6.94	1.23	1.23	No
Seed Control 2	2	7.79	5.95	1.84	0.92	No
Seed Control 3	4	8.08	3.15	4.93	1.23	1.23
Seed Control 4	6	8.31	1.06	7.25	1.21	1.21
			Mean Seed Correction Factor (SCF):			**1.22**

LCS Recovery Calculations

GGA Added (mL): 6 **LCS True Value (mg/L):** 198

LCS ID	Calc mg/L	% Recovery	Recovery Acceptance Limits (%): 84.6 TO 115.4
LCS 1	185.98	93.9	LCS Within Criteria ? Yes
LCS 2	190.48	96.2	LCS Within Criteria ? Yes
LCS 3	194.98	98.5	LCS Within Criteria ? Yes
Mean	190.48	96.2	LCS Within Criteria ? Yes

Matrix Spike Recovery Calculations (75-125%)
Spike Recovery=(Seed Corrected DO MS-Seed Corrected DO Sample)/(Total mg Spike)

Katahdin Sample Number	Sample Volume (mL)	Sample BOD (mg/L)	Spk. Sample BOD (mg/L)	mL GGA Spike Added	MS True Value (mg/L)	Spike Recovery (%)
8914	25.00	0.11	44.88	6	47.52	94.4
					#DIV/0!	#DIV/0!
					#DIV/0!	#DIV/0!

All Data From This Batch Must Be Qualified As Follows:

LCS 1
LCS 2
LCS 3
Blank 1 D11
Blank 2

KATAHDIN ANALYTICAL SERVICES, INC.

Biochemical Oxygen Demand - Methods EPA 405.1 & SM 5210B

TBOD5 [X] **CBOD5** [ ]

Data Entry By: JL

Sample Analysis								
Sample ID	**Sample Volume mL**	**Initial DO mg/L** *(D1)*	**Final DO mg/L** *(D2)*	**DO Cons. mg/L** *(D1-D2)*	**Corrected DO cons.** *(D1-D2-SCF)*	**Calc. BOD mg/L**	**DO consumed in Criteria?**	**Adjusted PQL**
LCS 1	6.000	8.33	3.39	4.94	3.72	185.98	Yes	100.0
LCS 2	6.000	8.11	3.08	5.03	3.81	190.48	Yes	100.0
LCS 3	6.000	8.27	3.15	5.12	3.90	194.98	Yes	100.0
Mean LCS Result	6.000	8.237	3.207	5.030	3.810	190.479	Yes	100.0
8914-11	25.000	8.54	7.09	1.45	0.23	2.75	No	24.0
0923 1107	50.000	8.72	7.45	1.27	0.05	0.30	No	12.0
	100.000	8.94	7.79	1.15	-0.07	-0.21	No	6.0
	300.000	9.47	8.14	1.33	0.11	0.11	Yes	2.0
0927 **MS** 1111	25.000	8.08	3.12	4.96	3.74	44.88	Yes	24.0
DUP	100.000	9.28	7.84	1.44	0.22	0.66	No	6.0
8918	5.000	8.25	6.90	1.35	0.13	7.77	No	120.0
0902 1113	10.000	7.95	6.98	0.97	-0.25	-7.51	No	60.0
	25.000	8.35	7.05	1.30	0.08	0.95	No	24.0
	50.000	8.74	7.09	1.65	0.43	2.58	No	12.0
	100.000	8.88	7.31	1.57	0.35	1.05	No	6.0
	300.000	9.50	7.20	2.30	1.08	1.08	Yes	2.0
8917	0.500	8.05	6.28	1.77	0.55	329.75	No	1200.0
1025 1118	1.000 1.5	8.16	5.31	2.85	1.63 2.535	488.88	Yes	600.0
	2.000	8.21	3.55	4.66	3.44	515.94	Yes	300.0
	5.000	7.90	<1	6.90	5.68	340.78	No	120.0
	10.000	8.27	<1	7.27	6.05	181.49	No	60.0
	25.000	8.31	<1	7.31	6.09	73.08	No	24.0
8919	0.500 1.75	8.07	5.02	3.05	1.83 2.74	1097.75	Yes	1200.0
1032 1120	1.000	7.98	3.11	4.87	3.65	1094.88	Yes	600.0
	2.000	8.16	<1	7.16	5.94	890.94	No	300.0
	5.000	8.08	<1	7.08	5.86	351.58	No	120.0
8929	25.000	7.46	5.79	1.67	0.45	5.40	No	24.0
1200 1122	50.000	7.98	4.37	3.61	2.39	14.34	Yes	12.0
	100.000	7.60	1.30	6.30	5.08	15.24	Yes	6.0
	300.000	9.41	<1	8.41	7.19	7.19	No	2.0
8943-2	25.000	8.16	7.73	0.43	-0.79	-9.49	No	24.0
1437 1124	50.000	8.31	7.69	0.62	-0.60	-3.60	No	12.0
	100.000	9.01	8.45	0.56	-0.66	-1.98	No	6.0
	300.000	9.20	9.04	0.16	-1.06	-1.06	Yes	2.0
8943-4	25.000	7.84	7.49	0.35	-0.87	-10.45	No	24.0
1446 1129	50.000	8.19	7.49	0.70	-0.52	-3.12	No	12.0
	100.000	8.15	7.53	0.62	-0.60	-1.80	No	6.0
	300.000	8.08	6.50	1.58	0.36	0.36	Yes	2.0
				0.00	-1.22	#DIV/0!	No	#DIV/0!
				0.00	-1.22	#DIV/0!	No	#DIV/0!
				0.00	-1.22	#DIV/0!	No	#DIV/0!

KATAHDIN ANALYTICAL SERVICES, INC.

Biochemical Oxygen Demand - Methods EPA 405.1 & SM 5210B

TBOD5 [X] CBOD5 [ ]

Data Entry By: JL

Sample Analysis								
Sample ID	Sample Volume mL	Initial DO mg/L *(D1)*	Final DO mg/L *(D2)*	DO Cons. mg/L *(D1-D2)*	Corrected DO cons. *(D1-D2-SCF)*	Calc. BOD mg/L	DO consumed in Criteria?	Adjusted PQL
8943-6	25.000	7.83	7.53	0.30	-0.92	-11.05	No	24.0
1454 1130	50.000	8.07	7.51	0.56	-0.66	-3.96	No	12.0
	100.000	8.30	7.59	0.71	-0.51	-1.53	No	6.0
	300.000	7.94	7.39	0.55	-0.67	-0.67	Yes	2.0
				0.00	-1.22	#DIV/0!	No	#DIV/0!

KATAHDIN ANALYTICAL SERVICES - BIOCHEMICAL OXYGEN DEMAND

WG312275

Check the appropriate Test and Method:	If CBOD is checked below, this indicates that 0.16g of nitrification inhibitor has been added to each bottle below.	pH Meter Calibration		Probe ID:		
Total BOD: SM5210B EPA 405.1	**PQL: 2.0 mg/L**	True Value	Lot ID	Actual Value	Accept? ± 0.05	
Carbonaceous BOD: SM5210B	**PQL: 2.0 mg/L**	4.01				
Glutamic Acid Std (GGA) ID: GGA 123021	GGA Preparation:	Seed Used Source ID and Amount:		7.00		
Nitirification Inhibitor ID:	0.15g Glucose ID:	LAWPCA: ✓	1 mL ✓	10.01		
Phosphate Bffr Soln. ID: W20571	SWL4207	SSD: ✓	1 mL ✓	DO Meter ID: B27869		DO Probe ID: 08100300
$H_{14}MgO_{11}S$ ID: SWL4874	0.15 g Glutamic Acid ID:	$Na_2S_2O_3$ ID:		KI Paper ID: 14-860		pH Paper ID: 6102002
Ferric Chloride Soln. ID: SWL4778	SWL4028	Starch Indicator ID:		Carboy ID: H		1:50 H_2SO_4 ID:
Calcium Chloride Soln. ID: SWL4757		Potassium Iodide Soln. ID:		Pipet IDs: W3710113		
Acid 1 ID (A1):	Acid 2 ID (A2):	Base1 ID (B1):		Base 2 ID (B2):		INC ID:

SAMPLE ID	SITE ID	START TIME	pH 6.5 - 7.5?	pH 7.0-7.2?	Acid/Base Used	CL- Y/N	BOTTLE ID#	VOL (ml)	D.O. DAY 1	D.O. DAY 5	END TIME	SMP TEMP DAY 1 17-23 °C Y / N *
Blank		0914					444		8.37	8.15	1100	
↓		15					1019		8.12	8.17	01	
		16					AC		8.26	8.08	01	
1		0917					SR		8.17	6.94	~~1002~~ 1102	
2		18					302		7.79	5.95	03	
4		19					A85		8.08	3.15	04	
6		20					567		8.31	1.06	04	
LCS		0920					244		8.33	3.39	1105	
↓		21					724		8.11	3.08	06	
		22					1009		8.27	3.15	06	
508914-11	Seres	0923	✓			N	864	25	8.54	7.09	1107	
		24				↓	AZZ	50	8.72	7.45	08	
		25					181	100	8.94	7.79	09	
		28					390	300	9.47	8.14	10	
	MS	0927					188	25	8.08	3.12	1111	
	Dup	29	↓			↓	388	100	9.28	7.84	12	

JC 114122

SAMPLE ID	SITE ID	START TIME	pH 6.5 - 7.5?	pH 7.0-7.2?	Acid/Base Used	CL- Y/N	BOTTLE ID#	VOL (ml)	D.O. DAY 1	D.O. DAY 5	END TIME	SMP TEMP DAY 1 17-23 °C Y / N *
So8918	Fiber	0902	✓			N	071	5	8.25	6.90	1113	
		03					2009	10	7.95	6.98	14	
		04					134T	25	8.35	7.05	15	
		05					54	50	8.14	7.09	15	
		06					333	100	8.88	7.31	16	
		09					108	300	9.50	7.20	17	
So8917	York H	1025	✓			N	412	.5	8.05	6.28	1118	
	Surg kit	26					BP31	1	8.16	5.31	18	
		26					492	2	8.21	3.55	19	
		27					288m	5	7.90	<1	19	
		27					Ft	10	8.27	<1	19	
		28	✓				137	25	8.31	<1	19	
So8919	Unifirst	1032	✓			N	A2	.5	8.07	5.02	1120	
		33					248	-1	7.98	3.11	21	
		34					7127	2	8.16	<1	21	
		35	✓			✓	R2	5	8.08	<1	21	
So8929-1	Penob	1200	✓			N	F19	25	7.46	5.79	1122	
	mccrum	00					047	50	7.98	4.37	22	
		01					R2	100	7.60	1.30	23	
		03	✓			✓	1955	300	9.41	<1	23	

JL 1/4/22

NOTES:

ANALYST 1 JL	DATE 12/30/21
ANALYST 2 JL	DATE 1/4/22
CHECKED BY:	DATE 01/04/22

* If N, please comment why

LAWPCA = Lewiston-Auburn Water Pollution Control Authority, SSD=Scarborough Sanitary District

H14MgO11S = Magnesium Sulfate Heptahydrate

Katahdin Analytical Services 5000017

KATAHDIN ANALYTICAL SERVICES - BIOCHEMICAL OXYGEN DEMAND

Check the appropriate Test and Method:	If CBOD is checked below, this indicates that 0.16g of nitrification inhibitor has been added to each bottle below.					pH Meter Calibration		Probe ID:			
Total BOD: SM5210B EPA 405.1				**PQL: 2.0 mg/L**		True Value	Lot ID	Actual Value	Accept? ± 0.05		
Carbonaceous BOD: SM5210B				**PQL: 2.0 mg/L**		4.01					
Glutamic Acid Std (GGA) ID: GGA	GGA Preparation:	Seed Used Source ID and Amount:				7.00					
Nitirification Inhibitor ID:	0.15g Glucose ID:	LAWPCA:	1 mL			10.01					
Phosphate Bffr Soln. ID:		SSD:	1 mL			DO Meter ID: B27869		DO Probe ID:			
$H_{14}MgO_{11}S$ ID:	0.15 g Glutamic Acid ID:	$Na_2S_2O_3$ ID:				KI Paper ID:		pH Paper ID:			
Ferric Chloride Soln. ID:		Starch Indicator ID:				Carboy ID:		1:50 H_2SO_4 ID:			
Calcium Chloride Soln. ID:		Potassium Iodide Soln. ID:				Pipet IDs:					
Acid 1 ID (A1):	Acid 2 ID (A2):	Base1 ID (B1):				Base 2 ID (B2):		INC ID:			

SAMPLE ID	SITE ID	START TIME	pH 6.5 - 7.5?	pH 7.0-7.2?	Acid/Base Used	CL- Y/N	BOTTLE ID#	VOL (ml)	D.O. DAY 1	D.O. DAY 5	END TIME	SMP TEMP DAY 1 17-23 °C Y / N *
508943-2	Seres	1437	✓			N	173	25	8.16	7.73	1124	
		38	↓			↓	84	50	8.31	7.69	25	
		39	↓			↓	6666	100	9.01	8.45	26	
		43	↓			↓	F88	300	9.20	9.04	27	
508943-4	Seres	1446	✓			N	T29	25	7.84	7.49	1128	
		46	↓			↓	118	50	8.19	7.49	28	
		47	↓			↓	BP24	100	8.15	7.53	29	
508943-6	Seres	49	↓			↓	859	300	8.08	6.50	1130	
↓	↓	1454	✓			N	T9	25	7.83	7.55	1130	
		55	↓			↓	360	50	8.07	7.51	31	
		56	↓			↓	L1	100	8.30	7.59	32	
		57	↓			↓	391	300	7.94	7.39	32	

JZ 11/4/22

QAWL1023 000398 0000170

Katahdin Analytical Services 5000018

SAMPLE ID	SITE ID	START TIME	pH 6.5 - 7.5?	pH 7.0-7.2?	Acid/Base Used	CL- Y/N	BOTTLE ID#	VOL (ml)	D.O. DAY 1	D.O. DAY 5	END TIME	SMP TEMP DAY 1 17-23 °C Y / N *

JR 1/4/22

NOTES:

ANALYST 1 JZ	DATE 12/30/21
ANALYST 2 JR	DATE 1/4/22
CHECKED BY:	DATE 01/04/22

* If N, please comment why

LAWPCA = Lewiston-Auburn Water Pollution Control Authority, SSD=Scarborough Sanitary District

H14MgO11S = Magnesium Sulfate Heptahydrate

Katahdin Analytical Services 5000019

WET CHEMISTRY BATCH REPORT
Jan 06 2022, 03:05 pm
Batch: WG312382 Run ID 1: R584198 Run ID 2: R584201

Parameter: Nitrate As N
Prep Date: N/A

Date Analyzed: 30-DEC-21
Prep Method: N/A

Analyst Initials: MH
Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SO8921-1	SAMP	EPA 353.2	5.0000mL	5.0000mL	1	0	U0.050 mg/L	NA	.05	0.015	0.050		
SO8921-2	SAMP	EPA 353.2	5.0000mL	5.0000mL	1	0	U0.050 mg/L	NA	.05	0.015	0.050		
SO8921-5	SAMP	EPA 353.2	5.0000mL	5.0000mL	1	.104	0.10 mg/L	NA	.05	0.015	0.050		
SO8943-2	SAMP	EPA 353.2	5.0000mL	5.0000mL	1	0	U0.050 mg/L	NA	.05	0.015	0.050		
SO8943-4	SAMP	EPA 353.2	5.0000mL	5.0000mL	1	0	U0.050 mg/L	NA	.05	0.015	0.050		
SO8943-6	SAMP	EPA 353.2	5.0000mL	5.0000mL	1	.189	0.19 mg/L	NA	.05	0.015	0.050		
SO8943-8	SAMP	EPA 353.2	5.0000mL	5.0000mL	2	0	U0.10 mg/L	NA	.05	0.030	0.10		
SO8945-1	SAMP	EPA 353.2	5.0000mL	5.0000mL	1	.719	0.72 mg/L	NA	.05	0.015	0.050		
WG312382-1	MBLANK	EPA 353.2	5.0000mL	5.0000mL	1	0	U0.025 mg/L	NA	.05	0.015	0.050		
WG312382-2	LCS	EPA 353.2	5.0000mL	5.0000mL	1	.999	1.0 mg/L	NA	.05	0.015	0.050		100
WG312382-5	MS	EPA 353.2	5.0000mL	5.0000mL	1	.524	0.52 mg/L	NA	.05	0.015	0.050		105

Comments:

WG312382-1	SO8921-1
WG312382-2	SO8921-1
WG312382-5	SO8921-1

Entered by: MH/ Date: 1/6/22 Accepted by: Date: 01/06/22

Katahdin Analytical Services 5000020

WET CHEMISTRY BATCH REPORT
Jan 06 2022, 02:54 pm
Batch: WG312542 Run ID 1: R584200 Run ID 2: R584202

Parameter: Nitrate As N
Prep Date: N/A

Date Analyzed: 30-DEC-21
Prep Method: N/A

Analyst Initials: MH
Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SO8927-1	SAMP	EPA 353.2	5.0000mL	5.0000mL	1	1.3	1.3 mg/L	NA	.05	0.0040	0.050		
WG312542-1	MBLANK	EPA 353.2	5.0000mL	5.0000mL	1	0	U0.025 mg/L	NA	.05	0.0040	0.050		
WG312542-2	LCS	EPA 353.2	5.0000mL	5.0000mL	1	.999	1.0 mg/L	NA	.05	0.0040	0.050		100
WG312542-4	DUP	EPA 353.2	5.0000mL	5.0000mL	1	1.3	1.3 mg/L	NA	.05	0.0040	0.050	0	
WG312542-5	MS	EPA 353.2	5.0000mL	5.0000mL	2	2.412	2.4 mg/L	NA	.05	0.0080	0.10		111

Comments:

WG312542-1	SO8927-1
WG312542-2	SO8927-1
WG312542-3	SO8927-1
WG312542-4	SO8927-1
WG312542-5	SO8927-1

Entered by: MH Date: 1/6/22 Accepted by: ZC Date: 1/6/22

Katahdin Analytical Services 5000021

WET CHEMISTRY BATCH REPORT
Jan 06 2022, 02:54 pm
Batch: WG312542 Run ID 1: R584200 Run ID 2: R584202

Parameter: Nitrite As N
Prep Date: N/A

Date Analyzed: 30-DEC-21
Prep Method: N/A

Analyst Initials: MH
Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SO8927-1	SAMP	EPA 353.2	5.0000mL	5.0000mL	1	-.0412	U0.050 mg/L	NA	.05	0.0030	0.050		
WG312542-1	MBLANK	EPA 353.2	5.0000mL	5.0000mL	1	-.0395	U0.025 mg/L	NA	.05	0.0030	0.050		
WG312542-3	LCS	EPA 353.2	5.0000mL	5.0000mL	1	1.05	1.0 mg/L	NA	.05	0.0030	0.050		105
WG312542-4	DUP	EPA 353.2	5.0000mL	5.0000mL	1	-.0419	U0.050 mg/L	NA	.05	0.0030	0.050	NC	
WG312542-5	MS	EPA 353.2	5.0000mL	5.0000mL	2	1.068	1.1 mg/L	NA	.05	0.0060	0.10		107

Comments:

WG312542-1	SO8927-1
WG312542-2	SO8927-1
WG312542-3	SO8927-1
WG312542-4	SO8927-1
WG312542-5	SO8927-1

Entered by: MH Date: 1/6/22 Accepted by: [illegible] Date: 1/6/22

Katahdin Analytical Services 5000022

KATAHDIN ANALYTICAL SERVICES, LLC.
Wet Chemistry Analysis Run Information Sheet

Analyte: NO3, NO2, and NO3+NO2	Analyst: MH
Instrument: LACHAT	Analysis Date: 12/30/21

Were pHs of all samples adjusted to 5-9 prior to analysis?

Circle one: (Yes) No **pH Paper Lot ID:** 6105008

Were all samples checked for the presence of chlorine prior to analysis?

Circle one: (Yes) No **Chloride Paper Lot ID:** 14-860

Analytical Method (Check all that apply):

[✓] EPA 353.2 [ ] SM 4500 F [ ] Other

Reagent Information: Aq: WG312388 → R584198 DW: WG312542 → R584200

Reagent Name	Reagent ID	Expiration Date
Ammonium Chloride Buffer	**W20585**	**1/16/2022**
Sulfanilamide Color Reagent	**W20602**	**1/29/2022**
Carrier	**DI Water**	
Cadmium Reduction Column	**S/N: SWL4871**	

Standards Information:

Standard Name	Concentration (mg/L)	ID	Expiration Date
Nitrate CCV	0.5	W20550	1/2/22
Nitrite CCV	0.5	W20558	1/6/22
Nitrate ICV/LCS	1.0	W20549	1/2/22
Nitrite ICV/LCS	1.0	W20566	1/7/22
Standard #1	2.0	W20559	1/6/22
Standard #2	1.0	W20560	1/6/22
Standard #3	0.5	W20558	1/6/22
Standard #4	0.25	W20561	1/6/22
Standard# 5	0.05	W20565	1/7/22
Standard #6	0.0	DI water	N/A
Nitrate Standard	100.0	W20037	5/27/2022
Nitrite Standard	100.0	W20366	9/16/2022

Notes:

1. Matrix Spiking: To 5mL Sample Alliquot add 0.025 mL of Nitrate Standard and 0.025mL Nitrite Standard

Comments: Pipettes: W5, W3, W9, W8

MS: 200uL, 5mL 5x, 10x, & 20x Dilutions: 1mL, 5mL

2x, 4x Dilutions: 5mL 25x, 50x, 100x, 200x Dilutions: 200uL, 5mL

250x, 500x, 1000x, 2000x, 2500x Dilutions: 200uL, 1ml, 5mL

Author: wetchem

Date : 12/30/2021

Original Run Filename: OM_12-30-2021_05-04-47PM.OMN Created: 12/30/2021 5:04:47 PM
Original Run Author's Signature: [wetchem]
Current Run Filename: OM_12-30-2021_05-04-47PM.OMN Last Modified: 12/30/2021 5:52:33 PM
Current Run Author's Signature: [wetchem]
Description: Default New Run

Sample	Channel 1 NITRATE/NITRITE			Channel 2 NITRITE			Detection Time	MDF
	Conc. (mg/L)	Area (V.s)	Height (V)	Conc. (mg/L)	Area (V.s)	Height (V)		
STD 2.0	2.00	18.4	1.38	2.00	20.9	1.90	12/30/2021@5:05:50 PM	
STD 1.0	1.00	10.1	0.777	1.00	11.7	1.07	12/30/2021@5:07:00 PM	
STD .5	0.500	4.97	0.379	0.500	6.01	0.543	12/30/2021@5:08:09 PM	
STD .25	0.250	2.61	0.198	0.250	2.94	0.267	12/30/2021@5:09:20 PM	
STD.05	0.0500	0.772	0.0561	0.0500	0.882	0.0786	12/30/2021@5:10:30 PM	
STD 0.0	0.00	0.113	7.29e-3	0.00	-4.00e-3	5.82e-4	12/30/2021@5:11:41 PM	
103.2% CCV NO3	0.516	5.08	0.381	-0.0393	0.0117	1.07e-3	12/30/2021@5:14:46 PM	
Known Conc:	0.500			0.500				
Calibration:	Table/Fig. : 1			Table/Fig. : 2				
106% CCV NO2	0.508	5.00	0.379	0.530	5.99	0.546	12/30/2021@5:15:57 PM	
Known Conc:	0.500			0.500				
CCB	-0.0371	7.79e-3	1.18e-3	-0.0403	1.23e-3	9.49e-4	12/30/2021@5:17:10 PM	
Known Conc:	0.00			0.00				
BLANK	-0.0283	0.0884	6.03e-3	-0.0395	9.75e-3	1.11e-3	12/30/2021@5:18:20 PM	
Known Conc:	0.00			0.00				
NO3 LCS	0.999	9.50	0.712	-0.0388	0.0165	1.42e-3	12/30/2021@5:19:30 PM	
Known Conc:	1.00			1.00				
NO2 LCS	1.03	9.79	0.738	1.05	11.4	1.04	12/30/2021@5:20:39 PM	
Known Conc:	1.00			1.00				
SO8921-5 MH-9	0.419	4.19	0.298	0.315	3.74	0.330	12/30/2021@5:21:51 PM	
SO8927 - 1	1.30	12.3	0.912	-0.0412	-8.21e-3	-8.70e-4	12/30/2021@5:23:03 PM	
SO8921-1 MW-28A	-0.0278	0.0932	6.55e-3	-0.0363	0.0432	3.10e-3	12/30/2021@5:24:14 PM	
not reporting; ZF confirmed MH 1/6/22 LM-5	0.0880	1.15	0.0847	-0.0226	0.186	0.0156	12/30/2021@5:25:26 PM	
LM-6	0.103	1.29	0.0960	-0.0192	0.222	0.0184	12/30/2021@5:26:36 PM	
SO8927 MS	2.42	22.5	1.66	0.562	6.33	0.570	12/30/2021@5:27:45 PM	
SO8945-1 CB-DD2	0.719	6.93	0.519	-0.0381	0.0242	2.15e-3	12/30/2021@5:28:56 PM	
103.6% CCV NO3	0.518	5.10	0.387	-0.0402	2.23e-3	1.06e-3	12/30/2021@5:30:08 PM	
Known Conc:	0.500			0.500				
105.6% CCV NO2	0.505	4.98	0.376	0.528	5.98	0.536	12/30/2021@5:31:19 PM	
Known Conc:	0.500			0.500				
CCB	-0.0367	0.0118	1.29e-3	-0.0399	5.34e-3	7.88e-4	12/30/2021@5:32:31 PM	
Known Conc:	0.00			0.00				
SO8927 MS	3.47	16.2	1.21	1.07	6.03	0.542	12/30/2021@5:33:40 PM	2.00
SO8921-2 FB-15	-0.0379	9.63e-5	6.88e-4	-0.0425	-0.0218	-9.63e-4	12/30/2021@5:34:50 PM	
SO8943-2	-0.0215	0.150	0.0109	-0.0244	0.168	0.0139	12/30/2021@5:36:01 PM	
SO8943-4	-0.0287	0.0845	6.50e-3	-0.0365	0.0405	3.78e-3	12/30/2021@5:37:12 PM	
SO8943-6	0.189	2.08	0.150	-0.0212	0.202	0.0173	12/30/2021@5:38:22 PM	
SO8943-8	-0.0556	-0.162	-8.82e-3	-0.0328	0.0798	6.85e-3	12/30/2021@5:39:33 PM	
SO8927 DUP	1.30	12.3	0.912	-0.0419	-0.0160	-7.83e-4	12/30/2021@5:40:43 PM	
SO8921-1 MS MW-28A MS	1.04	9.87	0.744	0.516	5.84	0.528	12/30/2021@5:41:54 PM	
SO8943-8	-0.0961	-0.0925	-4.77e-3	-0.0722	0.0451	4.03e-3	12/30/2021@5:44:56 PM	2.00
103% CCV NO3	0.515	5.06	0.383	-0.0426	-0.0228	-9.69e-4	12/30/2021@5:48:02 PM	
Known Conc:	0.500			0.500				
104.6% CCV NO2	0.507	4.99	0.382	0.523	5.92	0.536	12/30/2021@5:49:13 PM	
Known Conc:	0.500			0.500				
CCB	-0.0352	0.0255	1.61e-3	-0.0399	5.04e-3	7.28e-4	12/30/2021@5:50:27 PM	
Known Conc:	0.00			0.00				

) - login / ZF confirmed client didn't want results for these samples MH 1/6/22

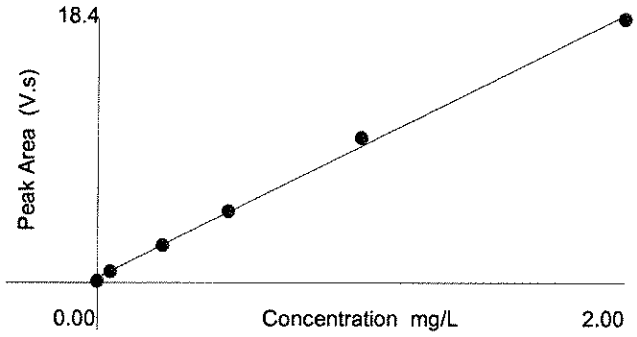
Author: wetchem

Date : 12/30/2021

Table : 1 (NITRATE/NITRITE)

	Known Conc. (mg/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg/L)	Detection Date	Detection Time
1	2.00	1	18.4	1.38	0.0	1.6	1.96	12/30/2021	5:05:50 PM
2	1.00	1	10.1	0.777	0.0	-6.1	1.06	12/30/2021	5:07:00 PM
3	0.500	1	4.97	0.379	0.0	-0.8	0.504	12/30/2021	5:08:09 PM
4	0.250	1	2.61	0.198	0.0	1.3	0.247	12/30/2021	5:09:20 PM
5	0.0500	1	0.772	0.0561	0.0	5.5	0.0463	12/30/2021	5:10:30 PM
6	0.00	1	0.113	7.29e-3			-0.0256	12/30/2021	5:11:41 PM

Figure : 1 (NITRATE/NITRITE)



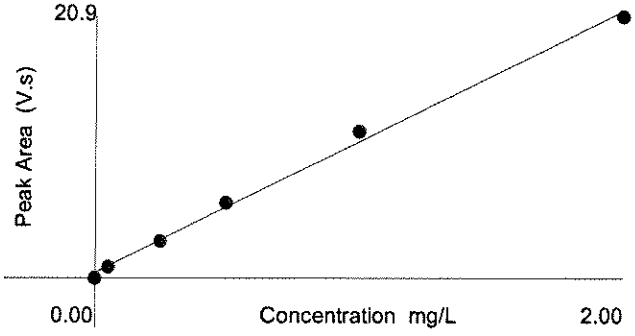
Area = 9.14 * Conc + 0.359
Conc = 0.109 * Area - 0.0380
Correlation Coefficient (r) = 0.99899

Weighting : None

Table : 2 (NITRITE)

	Known Conc. (mg/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg/L)	Detection Date	Detection Time
1	2.00	1	20.9	1.90	0.0	2.2	1.95	12/30/2021	5:05:51 PM
2	1.00	1	11.7	1.07	0.0	-7.4	1.08	12/30/2021	5:07:02 PM
3	0.500	1	6.01	0.543	0.0	-5.8	0.532	12/30/2021	5:08:11 PM
4	0.250	1	2.94	0.267	0.0	4.0	0.240	12/30/2021	5:09:21 PM
5	0.0500	1	0.882	0.0786	0.0	9.4	0.0435	12/30/2021	5:10:32 PM
6	0.00	1	-4.00e-3	5.82e-4			-0.0408	12/30/2021	5:11:43 PM

Figure : 2 (NITRITE)



Area = 10.5 * Conc + 0.449
Conc = 0.0952 * Area - 0.0404
Correlation Coefficient (r) = 0.99811

Weighting : None

WET CHEMISTRY BATCH REPORT
Jan 07 2022, 12:04 pm
Batch: WG312427 Run ID 1: R584181 Run ID 2: NONE

Parameter: Solids-Filterable Residue
Prep Date: 04-JAN-22

Date Analyzed: 06-JAN-22
Prep Method: SM 2540C

Analyst Initials: JJ
Prep Chemist: JJ

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SO8892-1	SAMP	STDM 2540C	65.000mL	91.44190g	1.5	1340	1300 mg/L	NA	10	7.5	15.		
SO8892-2	SAMP	STDM 2540C	100.00mL	90.27990g	1	-41	U10. mg/L	NA	10	5.02	10.		
SO8892-3	SAMP	STDM 2540C	100.00mL	73.51420g	1	222	220 mg/L	NA	10	5.02	10.		
SO8892-4	SAMP	STDM 2540C	100.00mL	73.77920g	1	346	350 mg/L	NA	10	5.02	10.		
SO8892-5	SAMP	STDM 2540C	100.00mL	93.17920g	1	1109	1100 mg/L	NA	10	5.02	10.		
SO8894-1	SAMP	STDM 2540C	100.00mL	80.12810g	1	~~100308~~ 308	310 mg/L	NA	10	5.02	10.		
SO8894-2	SAMP	STDM 2540C	100.00mL	87.34630g	1	137	140 mg/L	NA	10	5.02	10.		
SO8914-1	SAMP	STDM 2540C	100.00mL	77.52630g	1	100	100 mg/L	NA	10	5.0	10.		
SO8914-3	SAMP	STDM 2540C	100.00mL	78.40610g	1	103	100 mg/L	NA	10	5.0	10.		
SO8914-7	SAMP	STDM 2540C	100.00mL	85.73850g	1	191	190 mg/L	NA	10	5.0	10.		
SO8914-9	SAMP	STDM 2540C	100.00mL	90.58120g	1	194	190 mg/L	NA	10	5.0	10.		
SO8914-11	SAMP	STDM 2540C	100.00mL	92.80990g	1	168	170 mg/L	NA	10	5.0	10.		
SO8921-1	SAMP	STDM 2540C	100.00mL	102.7626g	1	1325	1300 mg/L	NA	10	5.02	10.		
SO8921-2	SAMP	STDM 2540C	100.00mL	94.07720g	1	-236	U10. mg/L	NA	10	5.02	10.		
SO8921-5	SAMP	STDM 2540C	100.00mL	100.0522g	1	2944	2900 mg/L	NA	10	5.02	10.		
SO8943-2	SAMP	STDM 2540C	100.00mL	89.99110g	1	66	66. mg/L	NA	10	5.0	10.		
SO8943-4	SAMP	STDM 2540C	100.00mL	80.89550g	1	15	15. mg/L	NA	10	5.0	10.		
SO8943-6	SAMP	STDM 2540C	100.00mL	80.64920g	1	112	110 mg/L	NA	10	5.0	10.		
SO8943-8	SAMP	STDM 2540C	100.00mL	85.75180g	1	108	110 mg/L	NA	10	5.0	10.		
WG312427-1	MBLANK	STDM 2540C	100.00mL	94.06290g	1	-8	U8.0 mg/L	NA	10	5.0	10.		
WG312427-2	LCS	STDM 2540C	100.00mL	91.83110g	1	675	680 mg/L	NA	10	5.0	10.		90

Comments:

SO8914-1	MS/MSD
WG312427-1	SO8892-1
WG312427-2	SO8892-1
WG312427-3	SO8892-3
WG312427-4	SO8914-1

Entered by: JJ Date: 1/7/22 Accepted by: [signature] Date: 01/07/22

Katahdin Analytical Services 5000026

WG312427
R584181

KATAHDIN ANALYTICAL SERVICES, LLC

TOTAL DISSOLVED SOLIDS/TOTAL SUSPENDED SOLIDS

Total Disolved Solids: EPA 160.1____ Total Dissolved Solids: SM 2540C ✓ PQL: 10mg/L

Total Suspended Solids: EPA 160.2____ Total Suspended Solids: SM 2540D____ PQL: 4mg/L

Aqueous Solids LCS Sand ID/Lot# W20526

Filter Lot # SWL4878

ASTM Class Weights

Balance ID: 01

True WT (g)	Initial WT (g)	Final WT (g)
0.1000	0.0999	0.1000
1.0000	0.9999	0.9997
10.0000	9.9998	9.9996
100.0000	100.0001	99.9998

Oven Temperatures (C)

TDS: 180 +/- 2°C, TSS: 103 - 105 °C

Oven ID: 01

In Temp. 180	Date: 1/4/22	Time: 13:30
Out Temp. 180	Date: 1/5/22	Time: 8:20
In Temp. 180	Date: 1/5/22	Time: 10:20
Out Temp. 180	Date: 1/5/22	Time: 13:15
In Temp.	Date:	Time:
Out Temp.	Date:	Time:

Notes: Due to low sample volume, for sample S08892-1, 65 mL was all that could be filtered. Final weighing 1/6 0.1002 0.9998 10.0000 99.9997

* 93.0683

both DUPs did not pass, only reporting LCS

KAS Sample ID	Sample Volume (ml)	Time of Initial Aliquot	Filter or Dish ID	Filter or Dish Wt. (g)	Dry 1 Dish/Filter + Sample Residue Wt. (g)	Dry 2 Dish/Filter + Sample Residue Wt. (g)	Time of Final Weighing (Analysis) 1/6
Blank	100	9:00	206	94.0637	94.0627	94.0629	8:05
LCS	100		213	91.7636	91.8301	91.8311	
* S08892-1	65		217	91.3548	91.4409	91.4419	
-2	100		219	90.2840	90.2793	90.2799	
-3			404	73.4920	73.5138	73.5142	
-4			413	73.7446	73.7782	73.7792	
-5			ARK	~~93.0607~~ *	93.1782	93.1792	
S08894-1	100		00046	80.0973	80.1271	80.1281	
-2			10	87.3326	87.3455	87.3463	
S08914-1			58	77.5263	77.5256	77.5263	
-3			77	78.3958	78.4051	78.4061	
-5			007	90.0675	90.0102	90.0112	
-7			008	85.7194	85.7375	85.7385	JJ 1/6
-9			009	90.5618	90.5808	~~90.5809~~	90.5812
-11			010	92.7931	92.8091	92.8099	
S08921-1			J741	102.6301	102.7616	102.7626	
-2			J745	94.1008	94.0762	94.0772	
-5			W40	99.7578	100.0514	100.0522	
S08943-2			W35	89.9845	89.9902	89.9911	
-4			AL6	80.8940	80.8945	80.8955	
-6			AL11	80.6380	80.6484	80.6492	
-8			AL14	85.7410	85.7508	85.7518	
~~S08892-3 DUP~~			~~AL16~~	~~91.4812~~	~~91.4680~~	~~91.4690~~	
~~S08914-1 DUP~~		9:30	~~AL22~~	~~87.17~~ 87.1600	~~87.1338~~	~~87.1348~~	8:15

re-running JJ 1/7

S08892-3 DUP

JJ 1/6

Analyst: JJ Date: 1/4/22

Checked By: [signature] Date: 01/06/22

WET CHEMISTRY BATCH REPORT
Jan 10 2022, 04:02 pm
Batch: WG312546 Run ID 1: R584347 Run ID 2: NONE

Parameter: Alkalinity
Prep Date: N/A

Date Analyzed: 06-JAN-22
Prep Method: N/A

Analyst Initials: ZL
Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SO8914-1	SAMP	STDM 2320B	50.0mL	50.0mL	1	107.666	110 mg/L	NA	5	0.23	5.0		
SO8921-2	SAMP	STDM 2320B	50.0mL	50.0mL	1	5.716	5.7 mg/L	NA	5	0.23	5.0		
SO8943-2	SAMP	STDM 2320B	50.0mL	50.0mL	1	121.628	120 mg/L	NA	5	0.23	5.0		
SO8943-4	SAMP	STDM 2320B	50.0mL	50.0mL	1	25.111	25. mg/L	NA	5	0.23	5.0		
SO8943-6	SAMP	STDM 2320B	50.0mL	50.0mL	1	115.201	120 mg/L	NA	5	0.23	5.0		
SO8943-8	SAMP	STDM 2320B	50.0mL	50.0mL	1	204.872	200 mg/L	NA	5	0.23	5.0		
SO8945-1	SAMP	STDM 2320B	50.0mL	50.0mL	1	163.177	160 mg/L	NA	5	0.23	5.0		
SP0040-1	SAMP	STDM 2320B	50.0mL	50.0mL	1	153.469	150 mg/L	NA	5	0.23	5.0		
SP0040-2	SAMP	STDM 2320B	50.0mL	50.0mL	1	317.116	320 mg/L	NA	5	0.23	5.0		
SP0040-3	SAMP	STDM 2320B	50.0mL	50.0mL	1	2.299	J2.3 mg/L	NA	5	0.23	5.0		
SP0040-4	SAMP	STDM 2320B	50.0mL	50.0mL	1	2.715	J2.7 mg/L	NA	5	0.23	5.0		
SP0061-2	SAMP	STDM 2320B	50.0mL	50.0mL	1	334.055	330 mg/L	NA	5	0.23	5.0		
SP0061-5	SAMP	STDM 2320B	50.0mL	50.0mL	1	367.767	370 mg/L	NA	5	0.23	5.0		
SP0061-7	SAMP	STDM 2320B	50.0mL	50.0mL	1	535.293	540 mg/L	NA	5	0.23	5.0		
SP0061-9	SAMP	STDM 2320B	50.0mL	50.0mL	1	445.891	440 mg/L	NA	5	0.23	5.0		
WG312546-1	MBLANK	STDM 2320B	50.0mL	50.0mL	1	2.675	J2.7 mg/L	NA	5	0.23	5.0		
WG312546-2	LCS	STDM 2320B	50.0mL	50.0mL	1	133.52	130 mg/L	NA	5	0.23	5.0		111
WG312546-3	MS	STDM 2320B	50.0mL	50.0mL	1	218.321	220 mg/L	NA	5	0.23	5.0		103
WG312546-4	MSD	STDM 2320B	50.0mL	50.0mL	1	219.575	220 mg/L	NA	5	0.23	5.0	0	104

Comments:

SO8914-1	MS/MSD
SP0061-2	MS/MSD on VOC & Metals only
WG312546-1	SO8914-1
WG312546-2	SO8914-1
WG312546-3	SO8914-1
WG312546-4	SO8914-1

Entered by: ZL Date: 1/10/22 Accepted by: [signature] Date: 01/12/22

Katahdin Analytical Services 5000028

WET CHEMISTRY BATCH REPORT
Jan 10 2022, 04:02 pm
Batch: WG312547

Parameter: Bicarbonate (As CaCO3)

Date Analyzed: 06-JAN-22

Analyst Initials: ZL

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

Sample	Samp Type	Method	Alkalinity	pH	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SO8921-2	SAMP	SM4500CO2 D	5.72mg/L	6.75pH	1	5.71012	5.7 mg/L	NA	5	.497	5		
SO8945-1	SAMP	SM4500CO2 D	163.mg/L	6.43pH	1	163.13418	160 mg/L	NA	5	.497	5		
WG312547-1	MBLANK	SM4500CO2 D	2.68mg/L	5.34pH	1	2.67484	U5.0 mg/L	NA	5	.497	5		

Comments:

WG312547-1 SO8921-2

Katahdin Analytical Services 5000029

Entered by: ZL Date: 1/10/22 Accepted by: [signature] Date: 01/12/22 J

WET CHEMISTRY BATCH REPORT
Jan 10 2022, 04:02 pm
Batch: WG312548

Parameter: Carbonate (As CaCO3)

Prep Date: N/A

Date Analyzed: 06-JAN-22

Prep Method: N/A

Analyst Initials: ZL

Prep Chemist: N/A

Sample	Samp Type	Method	Bicarb	pH	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SO8921-2	SAMP	SM4500CO2 D		6.75pH	1	.00305	U5.0 mg/L	NA	5	.497	5		
SO8945-1	SAMP	SM4500CO2 D		6.43pH	1	.04146	U5.0 mg/L	NA	5	.497	5		
WG312548-1	MBLANK	SM4500CO2 D		5.34pH	1	.00005	U5.0 mg/L	NA	5	.497	5		

Comments:

WG312548-1 SO8921-2

Entered by: ZL Date: 1/10/22 Accepted by: Date: 01/12/22

Katahdin Analytical Services 5000030

WG312546 R584347
TB WG312547 R584348
TC WG312548 R584349

KATAHDIN ANALYTICAL SERVICES

ALKALINITY, BICARBONATE, CARBONATE, FREE CO2 - DL 25 AUTOTITRATOR

Analysis: EPA 310.1 SM2320B **Calculations:** SM 4500-CO2 D

pH Probe ID: DGIII-SC			
Alkalinity Acid Reagent: W20501		**Buffer pH 4 ID:** SWL 4798	
Acid Concentration: 0.02N		**Buffer pH 7 ID:** 4901	
Alkalinity Check Standard: W20605 TV=125 mg/L		**Buffer pH 10 ID:** 4898	
Alkalinity MS: W20531 TV=120 mg/L		**Pipette IDs:** WL1	
Sulfuric Acid Titrant ID:			

Sample ID	Run #	Volume (mL)	Sample ID	Run #	Volume (mL)	Comments - Must indicate which sample
CCV	1	50	-5	9	50	
CCB	2	|	-7	10	|	
LCS	3	|	CCV	11	|	
LCSD	4	—	CCB	12	|	
			-9	13	|	
8914-1	1	50	CCV	14	|	
-1 MS	2	44	CCB	15	—	
-1 MSD	3	|				
8921-1	4	50				8921-1 fail
-2	5	|				
-5	6	|				-5 fail
8943-2	7	|				
-4	8	|				
CCV	9	|				
CCB	10	—				
				1/6/22		
8943-6	1	50				
-8	2	|				
8945-1	3	|				
SP00410-1	4	|				
-2	5	|				
-3	6	|				
-4	7	|				
SP00611-2	8	—				

Analyst: ZL **Date:** 1/6/22

Checked By: [signature] **Date:** 01/12/22

Start time:	1/6/2022 11:54						
Results							
No.	Comment / ID	Start time	Rx	Result	Unit	Name	RECOVERY
1/4	CCV	1/6/2022 1	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	130.949	mg/L	Total Alkal	104.76%
			R3 =	7.803	pH	pH	
			R4 =	20.5	oC	TEMPERATURE	
2/4	CCB	1/6/2022 1	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.675	mg/L	Total Alkalinity	
			R3 =	5.338	pH	pH	
			R4 =	20.9	oC	TEMPERATURE	
3/4	LCS	1/6/2022 1	R1 =	103.152	mg/L	P Alkalinity- pH8.2	
			R2 =	133.52	mg/L	Total Alkalinity	
			R3 =	10.534	pH	pH	
			R4 =	20.8	oC	TEMPERATURE	
4/4	LCSD	1/6/2022 1	R1 =	99.807	mg/L	P Alkalinity- pH8.2	
			R2 =	133.811	mg/L	Total Alkalinity	
			R3 =	10.541	pH	pH	
			R4 =	20.5	oC	TEMPERATURE	
1/10	SO8914-1	1/6/2022 1	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	107.666	mg/L	Total Alkalinity	
			R3 =	5.659	pH	pH	
			R4 =	11.2	oC	TEMPERATURE	
2/10	SO8914-1 MS	1/6/2022 1	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	218.321	mg/L	Total Alkalinity	
			R3 =	6.212	pH	pH	
			R4 =	12.3	oC	TEMPERATURE	
3/10	SO8914-1 MSD	1/6/2022 1	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	219.575	mg/L	Total Alkalinity	
			R3 =	6.253	pH	pH	
			R4 =	12.6	oC	TEMPERATURE	
4/10	SO8921-1	1/6/2022 1	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	NaN	mg/L	Total Alkalinity	
			R3 =	6.533	pH	pH	
			R4 =	11.7	oC	TEMPERATURE	
5/10	SO8921-2	1/6/2022 1	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	5.716	mg/L	Total Alkalinity	
			R3 =	6.754	pH	pH	
			R4 =	13	oC	TEMPERATURE	
6/10	SO8921-5	1/6/2022 1	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	NaN	mg/L	Total Alkalinity	
			R3 =	7.46	pH	pH	
			R4 =	13	oC	TEMPERATURE	
7/10	SO8943-2	1/6/2022 1	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	121.628	mg/L	Total Alkalinity	
			R3 =	6.677	pH	pH	
			R4 =	14.5	oC	TEMPERATURE	

8/10	SO8943-4	1/6/2022 1	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	25.111	mg/L	Total Alkalinity	
			R3 =	5.57	pH	pH	
			R4 =	14.6	oC	TEMPERATURE	
9/10	CCV	1/6/2022 1	R1 =	10.993	mg/L	P Alkalinity- pH8.2	
			R2 =	132.401	mg/L	Total Alkal	105.92%
			R3 =	8.534	pH	pH	
			R4 =	19.6	oC	TEMPERATURE	
10/10	CCB	1/6/2022 1	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	3.334	mg/L	Total Alkalinity	
			R3 =	5.385	pH	pH	
			R4 =	20.2	oC	TEMPERATURE	
1/15	SO8943-6	1/6/2022 1	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	115.201	mg/L	Total Alkalinity	
			R3 =	5.891	pH	pH	
			R4 =	14	oC	TEMPERATURE	
2/15	SO8943-8	1/6/2022 1	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	204.872	mg/L	Total Alkalinity	
			R3 =	5.979	pH	pH	
			R4 =	14.3	oC	TEMPERATURE	
3/15	SO8945-1	1/6/2022 1	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	163.177	mg/L	Total Alkalinity	
			R3 =	6.432	pH	pH	
			R4 =	15.5	oC	TEMPERATURE	
4/15	SP0040-1	1/6/2022 1	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	153.469	mg/L	Total Alkalinity	
			R3 =	6.757	pH	pH	
			R4 =	15.1	oC	TEMPERATURE	
5/15	SP0040-2	1/6/2022 1	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	317.116	mg/L	Total Alkalinity	
			R3 =	6.545	pH	pH	
			R4 =	15	oC	TEMPERATURE	
6/15	SP0040-3	1/6/2022 1	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.299	mg/L	Total Alkalinity	
			R3 =	5.565	pH	pH	
			R4 =	15.4	oC	TEMPERATURE	
7/15	SP0040-4	1/6/2022 1	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.715	mg/L	Total Alkalinity	
			R3 =	5.377	pH	pH	
			R4 =	15.9	oC	TEMPERATURE	
8/15	SP0061-2	1/6/2022 1	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	334.055	mg/L	Total Alkalinity	
			R3 =	7.179	pH	pH	
			R4 =	16.9	oC	TEMPERATURE	
9/15	SP0061-5	1/6/2022 1	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	367.767	mg/L	Total Alkalinity	
			R3 =	6.747	pH	pH	

			R4 =	17.6	oC	TEMPERATURE	
10/15	SP0061-7	1/6/2022 1	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	535.293	mg/L	Total Alkalinity	
			R3 =	7.663	pH	pH	
			R4 =	17.7	oC	TEMPERATURE	
11/15	CCV	1/6/2022 1	R1 =	10.544	mg/L	P Alkalinity- pH8.2	
			R2 =	130.019	mg/L	Total Alkal	104.02%
			R3 =	8.537	pH	pH	
			R4 =	20	oC	TEMPERATURE	
12/15	CCB	1/6/2022 1	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.571	mg/L	Total Alkalinity	
			R3 =	5.634	pH	pH	
			R4 =	19.9	oC	TEMPERATURE	
13/15	SP0061-9	1/6/2022 1	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	445.891	mg/L	Total Alkalinity	
			R3 =	6.563	pH	pH	
			R4 =	18.6	oC	TEMPERATURE	
14/15	CCV	1/6/2022 1	R1 =	11.328	mg/L	P Alkalinity- pH8.2	
			R2 =	132.83	mg/L	Total Alkal	106.26%
			R3 =	8.478	pH	pH	
			R4 =	20.1	oC	TEMPERATURE	
15/15	CCB	1/6/2022 1	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.492	mg/L	Total Alkalinity	
			R3 =	5.526	pH	pH	
			R4 =	20.1	oC	TEMPERATURE	
Start time:	1/6/2022 11:00						
Results							
No.	Comment / ID	Start time	Rx	Result	Unit	Name	
Calibration data							
	Number of segm	1					
	Slope	-58.38 mV/pH					
	Zero point	6.959 pH					
	Calibration temp	25.0 oC					

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: SS
Date Analyzed: 14-JAN-22

Batch: WG312904
Prep Method: E300.0
Prep Chemist: SS

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SO8886-1DL	SAMP	EPA 300.0	Chloride	2	21.266	21.	mg/L	2	4.0	.0993	0.20		
SP0006-1DL	SAMP	EPA 300.0	Chloride	2	28.8176	29.	mg/L	2	4.0	.0993	0.20		
SP0012-1DL	SAMP	EPA 300.0	Chloride	2	33.1155	33.	mg/L	2	4.0	.0993	0.20		
WG312904-1	MBLANK	EPA 300.0	Chloride	1	.1565	J 0.16	mg/L	2	2.0	.0993	0.099		
WG312904-2	LCS	EPA 300.0	Chloride	1	3.5996	3.60	mg/L	2	2.0	.0993	0.099		96.0

Comments:

WG312904-1	SO8886-1
WG312904-2	SO8886-1

Entered by: SS Date: 1/18/22 Accepted by: Date: 01/19/22

Katahdin Analytical Services 5000035

Katahdin
ANALYTICAL SERVICES

Accredited in accordance with nelac
Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: SS
Date Analyzed: 14-JAN-22

Batch: WG312905
Prep Method: N/A
Prep Chemist: SS

Sample	Samp Type	Method	Parameter	DF	Result		Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SO8914-11DL	SAMP	SW846 9056A	Chloride	2	26.1457		26	mg/L	2	4.0	.0993	0.20		
SO8914-1DL	SAMP	SW846 9056A	Chloride	2	27.2314		27	mg/L	2	4.0	.0993	0.20		
SO8914-3DL	SAMP	SW846 9056A	Chloride	2	30.7587		31	mg/L	2	4.0	.0993	0.20		
SO8914-5DL	SAMP	SW846 9056A	Chloride	2	30.8079		31	mg/L	2	4.0	.0993	0.20		
SO8914-7DL	SAMP	SW846 9056A	Chloride	2	31.6201		32	mg/L	2	4.0	.0993	0.20		
SO8914-9DL	SAMP	SW846 9056A	Chloride	2	27.6137		28	mg/L	2	4.0	.0993	0.20		
SO8943-2DL	SAMP	SW846 9056A	Chloride	2	25.7423		26	mg/L	2	4.0	.0993	0.20		
SO8943-4DL	SAMP	SW846 9056A	Chloride	2	37.1684		37	mg/L	2	4.0	.0993	0.20		
SO8943-6DL	SAMP	SW846 9056A	Chloride	2	33.8406		34	mg/L	2	4.0	.0993	0.20		
SO8943-8DL	SAMP	SW846 9056A	Chloride	2	23.5426		24	mg/L	2	4.0	.0993	0.20		
WG312905-1	MBLANK	SW846 9056A	Chloride	1	.1565	J	0.16	mg/L	2	2.0	.0993	0.099		
WG312905-2	LCS	SW846 9056A	Chloride	1	3.5996		3.60	mg/L	2	2.0	.0993	0.099		96.0
WG312905-3	MS	SW846 9056A	Chloride	2	33.0331		33.	mg/L	2	4.0	.0993	0.20		95.5
WG312905-4	MSD	SW846 9056A	Chloride	2	33.1782		33.	mg/L	2	4.0	.0993	0.20	0	97.4

Comments:

SO8914-1	MS/MSD
WG312905-1	SO8914-1
WG312905-2	SO8914-1
WG312905-3	SO8914-1
WG312905-4	SO8914-1

Entered by: SS Date: 1/18/22 Accepted by: Date: 01/19/22

Katahdin Analytical Services 5000036

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: SS
Date Analyzed: 14-JAN-22
15-JAN-22

Batch: WG312907
Prep Method: N/A
Prep Chemist: SS

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SP0041-1DL	SAMP	SW846 9056A	Bromide	1	.217	J 0.22	mg/L	.5	0.50	.2	0.20		
SP0041-1DLB	SAMP	SW846 9056A	Chloride	10	91.3627	91	mg/L	2	20.	.5	5.0		
SP0041-2DL	SAMP	SW846 9056A	Bromide	1	.1932	U 0.40	mg/L	.5	0.50	.2	0.20		
SP0041-2DLB	SAMP	SW846 9056A	Chloride	10	122.5748	120	mg/L	2	20.	.5	5.0		
SP0041-3DL	SAMP	SW846 9056A	Bromide	1	.0766	U 0.40	mg/L	.5	0.50	.2	0.20		
SP0041-3DLB	SAMP	SW846 9056A	Chloride	10	117.1756	120	mg/L	2	20.	.5	5.0		
SP0041-4DL	SAMP	SW846 9056A	Bromide	1	.2725	J 0.27	mg/L	.5	0.50	.2	0.20		
SP0041-4DLB	SAMP	SW846 9056A	Chloride	5	32.882	33	mg/L	2	10.	.5	2.5		
SP0041-5DL	SAMP	SW846 9056A	Bromide	1	.184	U 0.40	mg/L	.5	0.50	.2	0.20		
SP0041-5DLB	SAMP	SW846 9056A	Chloride	5	36.2212	36	mg/L	2	10.	.5	2.5		
SP0041-6DL	SAMP	SW846 9056A	Bromide	1	.0691	U 0.40	mg/L	.5	0.50	.2	0.20		
SP0041-6DLB	SAMP	SW846 9056A	Chloride	5	37.8645	38	mg/L	2	10.	.5	2.5		
WG312907-1	MBLANK	SW846 9056A	Bromide	1	.0052	U 0.40	mg/L	.5	0.50	.2	0.20		
WG312907-1	MBLANK	SW846 9056A	Chloride	1	.1493	U 1.0	mg/L	2	2.0	.5	0.50		
WG312907-2	LCS	SW846 9056A	Bromide	1	3.4271	3.43	mg/L	.5	0.50	.2	0.20		91.5
WG312907-2	LCS	SW846 9056A	Chloride	1	3.5618	3.56	mg/L	2	2.0	.5	0.50		94.9
WG312907-3	DUP	SW846 9056A	Bromide	1	.0712	U 0.40	mg/L	.5	0.50	.2	0.20	NC	
WG312907-4	MS	SW846 9056A	Bromide	1	3.4926	3.5	mg/L	.5	0.50	.2	0.20		93.1

Comments:

WG312907-1	SP0041-1
WG312907-2	SP0041-1
WG312907-3	SP0041-6
WG312907-4	SP0041-6

Entered by: SS Date: 1/19/22 Accepted by: Date: 01/19/22

Katahdin Analytical Services 5000037

IC STANDARDS PREPARATION

Fill sheet in completely, file with each batch of samples analyzed.

MIX ID: W20608	Expiration Date:1/17/22	ICAL Date: 01/04/22

LYTE	INITIAL AMOUNT (mL)	OF	STOCK CONC. (mg/L)	TO	FINAL VOLUME(mL)	=	FINAL CONC.(mg/L)
Cl	2.0	OF	1000	TO	100	=	20
(as N)	0.8	OF	1000			=	8
(as N)	0.8	OF	1000			=	8
Br	4.0	OF	1000			=	40
O4	4.0	OF	1000			=	40
F	1.0	OF	1000			=	10
(as P)	1	OF	1000			=	10

WORKING STANDARDS Standards prepared on each day of use

INITIAL AMOUNT (mL)	OF	Final Volume (mL)	FINAL CONC. (mg/L)							STD ID*
			Cl	NO2	NO3	Br	SO4	PO4	F	
1	ICAL	1	20	8	8	40	40	10	10	IC7-010422
0.5	IC7	1	10	4	4	20	20	5	5	IC6-010422
0.25	IC7	1	5	2	2	10	10	2.5	2.5	IC5-010422
0.25	IC6	1	2.5	1	1	5	5	1.25	1.25	IC4-010422
0.1	IC6	1	1	0.4	0.4	2	2	0.5	.5	IC3-010422
0.1	IC3	1	0.1	0.04	0.04	0.2	0.2	0.05	.05	IC2-010422
0.5	IC7	1	10	4	4	20	20	5	5	CCV-011422

*** STD ID is prefix followed by the date of preparation (ie. IC6-020216)**

MATRIX SPIKE MIX ID: W20612	Expiration Date:01/18/22

7.5 mL of High Purity multi-element IC standard solution "A" and 7.5 mL of High Purity multi-element standard solution "B" diluted to 100 mL. For MS, add 0.05 mL of mix to 1.0 mL of sample. For LCS, add 0.05 mL of mix to 1.0 mL of DI water.

Final Concentrations (mg/L):

	NO2 (as N)	NO3 (as N)	Br	SO4	PO4 (as P)	F	STD ID*
5	1.14	0.845	3.75	3.75	1.22	3.75	IC-LCS-011422

*** STD ID is prefix followed by the date of preparation (ie. IC-LCS-020216)**

Comments:
2x dil = 0.5mL 1x→1.0mL
20x dil = 0.05mL 1x→1.0mL

Pipettes: W3, W5
5x dil = 0.2mL 1x→1.0mL
50x dil = 0.02mL 1x→1.0mL

10x dil = 0.1mL 1x→1.0mL
100x dil = 0.1mL 10x→1.0mL

Katahdin Analytical Services **ION CHROMATOGRAPHY RUNLOG** Dionex ICS-2100 (Instrument IC-3)

Analysis Date: 01/14/22	**Analytical Column S/N:** 20423034	**Calibration Date:** 01/04/22
Analysis Sequence: 011422A	**Guard Column S/N:** 20727027	**Calibration Sequence:** 010422ACal
Analyst: SS	**Suppressor S/N:** 18082509	☐ If box at left is checked, continued from previous page. Refer to previous page for header information.

Reporting / Reanalysis Codes: ✓ Report without manipulation; S Report, peak automatically reintegrated with SmartPeak; M Report, peak manually integrated; A Report, peak manually assigned; R Do not report, reanalyze sample

Method Codes: E EPA 300.0; SW SW846 9056A

Katahdin Sample Number	Dilution Factor	Method Code	Report or Reanalyze (enter appropriate code): F	Cl	NO_2	SO_4	Br	NO_3	PO_4	Comments
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	M	M	M	M	M		
LCS			✓	✓	✓		✓	✓		
LCS			✓	✓	✓		✓	✓		
SO 8886-1	2	HW		✓						
SP0006-1	2	HW		✓						
SP0012-1	2	HW		✓						
SO 8914-1	2	S		✓						
MS	2	″		✓						
MSD	2	″		✓						
8914-3	2	″		✓						
-5	2	″		✓						
-7	2	″		✓						
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	M	M	M	M	M		
8914-9	2	S		✓						
-11	2	″		✓						
8943-2	2	S		✓						
-4	2	″		✓						
-6	2	″		✓						
-8	2	″		✓						
LCS						✓				

HW: WG312904 → RS64733
S: WG312905 → RS64734
S: WG312907 → RS64735

Reviewed by: _____ Review Date: 01/19/22

QAWL1045 - 000352

Katahdin Analytical Services 5000039

Katahdin Analytical Services **ION CHROMATOGRAPHY RUNLOG** Dionex ICS-2100 (Instrument IC-3)

Analysis Date:	**Analytical Column S/N:**	**Calibration Date:**
Analysis Sequence:	**Guard Column S/N:**	**Calibration Sequence:**
Analyst:	**Suppressor S/N:**	☑ If box at left is checked, continued from previous page. Refer to previous page for header information.

Reporting / Reanalysis Codes: ✓ Report without manipulation; S Report, peak automatically reintegrated with SmartPeak; M Report, peak manually integrated; A Report, peak manually assigned; R Do not report, reanalyze sample

Method Codes: E EPA 300.0; SW SW846 9056A

Katahdin Sample Number	Dilution Factor	Method Code	Report or Reanalyze (enter appropriate code): F	Cl	NO_2	SO_4	Br	NO_3	PO_4	Comments
LCS						✓				
SP0041-1	1	S					✓			
-2	1	"					✓			
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	M	M	M	M	M		
SP0041-3	1	S					✓			
-4	1	"					✓			
-5	1	"					✓			
-6	1	"					✓			
+ Dup	1	"					✓			
+ MS	1	"					✓			
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	M	M	M	M	M		
SP0041-1	10	S		✓						
-2	10	"		✓						
-3	10	"		✓						
-4	5	"		✓						
-5	5	"		✓						
-6	5	"		✓						
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	M	M	M	M	M		

SS 1/18/22

Reviewed by: _____ Review Date: 01/19/22

QAWL1045 - 000352

Katahdin Analytical Services 5000040

Sequence Overview

Sequence Details

Name:	**011422A REPROC**	*Created On:*	**10/Feb/16 13:48:22**
Directory:	**Instrument Data\ICS-2100\2022\01-JAN**	*Created By:*	**Katahdin Analytical**
Data Vault:	**ChromeleonLocal**	*Updated On:*	**18/Jan/22 15:05:19**
No. of Injections:	**43**	*Updated By:*	**Katahdin Analytical**

Injection Details

No.	Injection Name	Position	Type	Level	Inject Time	Status
1	CCV	1	Check Standard	06	14/Jan/22 12:13:57	Finished
2	CCB	2	Unknown		14/Jan/22 12:34:39	Finished
3	LCS	3	Check Standard	07	14/Jan/22 12:55:28	Finished
4	LCS	4	Check Standard	07	14/Jan/22 13:16:16	Finished
5	SO8886-1	5	Unknown		14/Jan/22 13:37:04	Finished
6	SP0006-1	6	Unknown		14/Jan/22 13:57:52	Finished
7	SP0012-1	7	Unknown		14/Jan/22 14:18:39	Finished
8	SO8914-1	8	Unknown		14/Jan/22 14:39:48	Finished
9	SO8914-1 MS	9	Unknown		14/Jan/22 15:00:36	Finished
10	SO8914-1 MSD	10	Unknown		14/Jan/22 15:21:23	Finished
11	SO8914-3	11	Unknown		14/Jan/22 15:42:11	Finished
12	SO8914-5	12	Unknown		14/Jan/22 16:02:58	Finished
13	SO8914-7	13	Unknown		14/Jan/22 16:23:46	Finished
14	CCV	14	Check Standard	06	14/Jan/22 16:44:34	Finished
15	CCB	15	Unknown		14/Jan/22 17:05:21	Finished
16	SO8914-9	16	Unknown		14/Jan/22 17:26:09	Finished
17	SO8914-11	17	Unknown		14/Jan/22 17:46:57	Finished
18	SO8943-2	18	Unknown		14/Jan/22 18:07:45	Finished
19	SO8943-4	19	Unknown		14/Jan/22 18:28:33	Finished
20	SO8943-6	20	Unknown		14/Jan/22 18:49:21	Finished
21	SO8943-8	21	Unknown		14/Jan/22 19:10:08	Finished
22	LCS	22	Check Standard	07	14/Jan/22 19:30:57	Finished
23	LCS	23	Check Standard	07	14/Jan/22 19:51:45	Finished
24	SP0041-1	24	Unknown		14/Jan/22 20:12:33	Finished
25	SP0041-2	25	Unknown		14/Jan/22 20:33:21	Finished
26	CCV	26	Check Standard	06	14/Jan/22 20:54:08	Finished
27	CCB	27	Unknown		14/Jan/22 21:14:56	Finished
28	SP0041-3	28	Unknown		14/Jan/22 21:35:44	Finished
29	SP0041-4	29	Unknown		14/Jan/22 21:56:32	Finished
30	SP0041-5	30	Unknown		14/Jan/22 22:17:19	Finished
31	SP0041-6	31	Unknown		14/Jan/22 22:38:07	Finished
32	SP0041-6 DUP	32	Unknown		14/Jan/22 22:58:55	Finished
33	SP0041-6 MS	33	Unknown		14/Jan/22 23:19:43	Finished
34	CCV	34	Check Standard	06	14/Jan/22 23:40:31	Finished
35	CCB	35	Unknown		15/Jan/22 00:01:18	Finished
36	SP0041-1	36	Unknown		15/Jan/22 00:22:06	Finished
37	SP0041-2	37	Unknown		15/Jan/22 00:42:54	Finished
38	SP0041-3	38	Unknown		15/Jan/22 01:03:42	Finished
39	SP0041-4	39	Unknown		15/Jan/22 01:24:30	Finished
40	SP0041-5	40	Unknown		15/Jan/22 01:45:17	Finished
41	SP0041-6	41	Unknown		15/Jan/22 02:06:06	Finished
42	CCV	42	Check Standard	06	15/Jan/22 02:26:53	Finished

43	CCB	43	Unknown		15/Jan/22 02:47:41	Finished

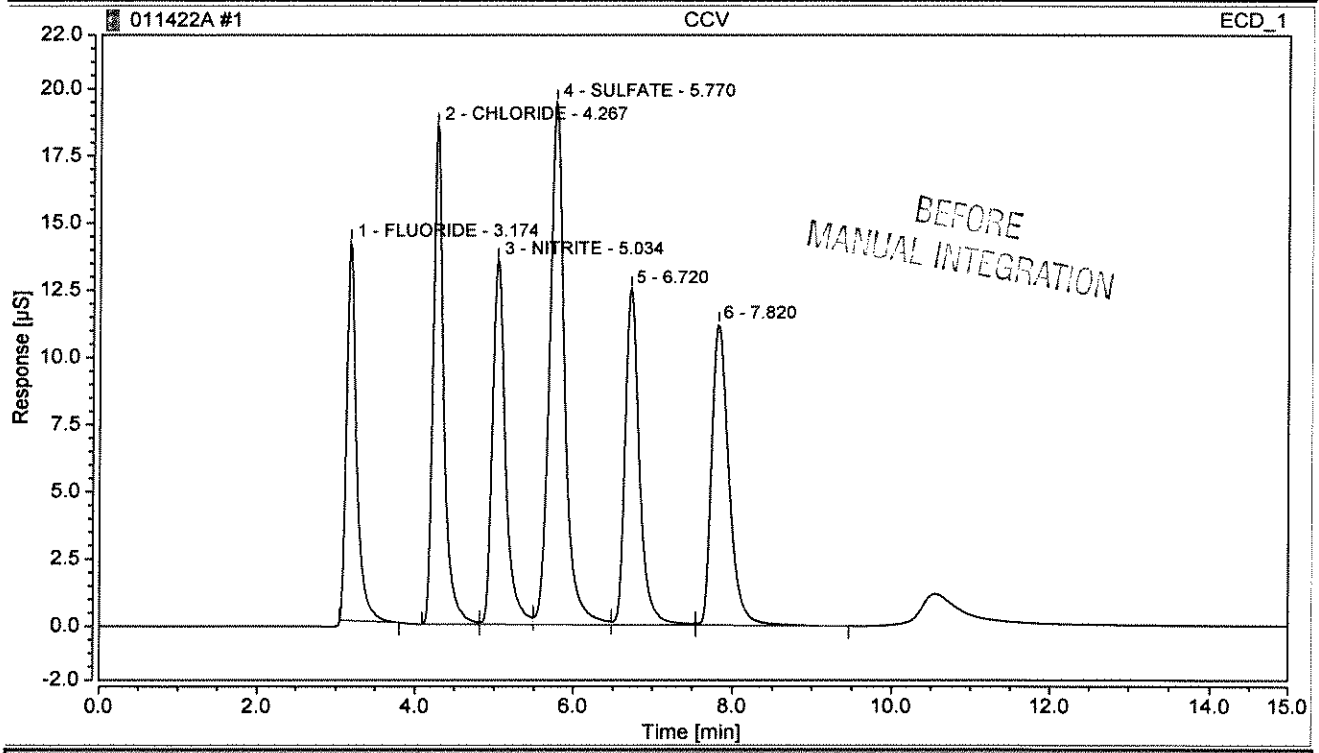


Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.98**
Vial Number:	**1**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 12:13**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

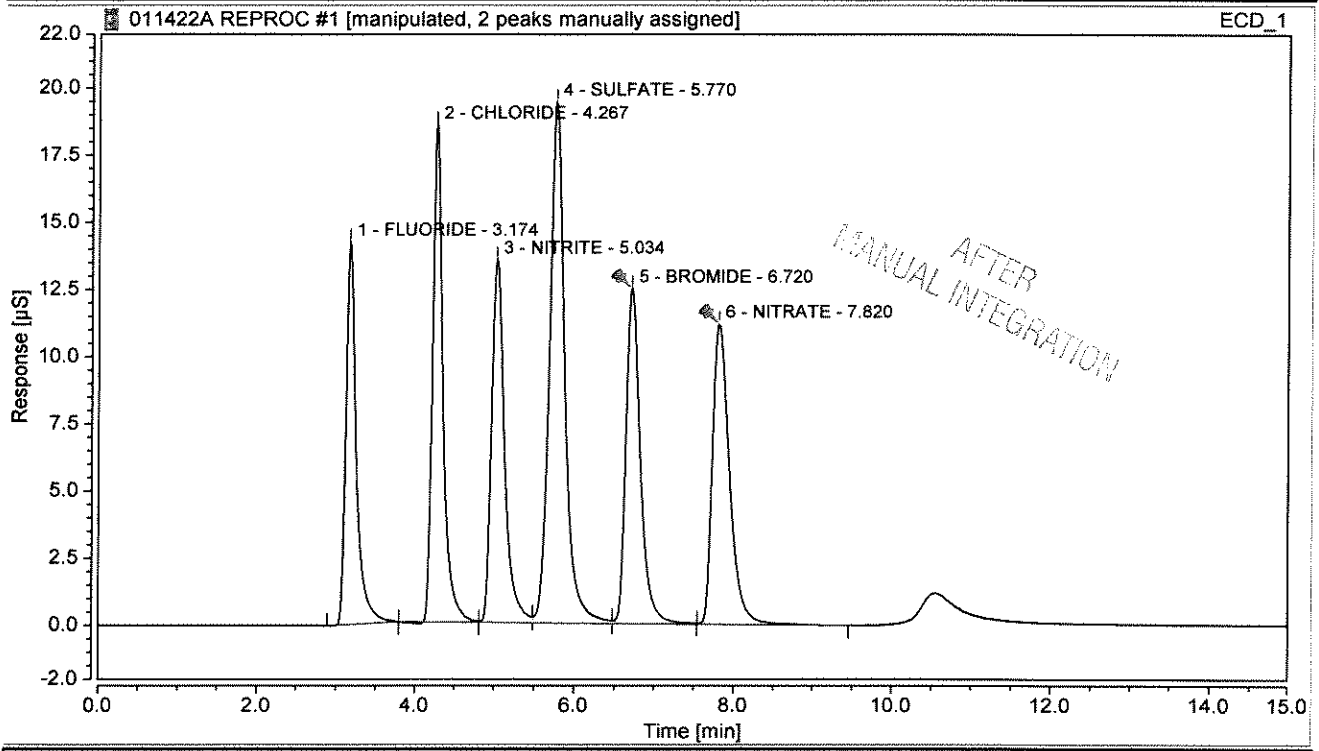
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.174	2.125	14.092	12.23	15.76	4.5057	-9.8868
2	CHLORIDE	4.267	2.889	18.576	16.62	20.78	10.2397	2.3966
3	NITRITE	5.034	2.562	13.560	14.74	15.17	4.0633	1.5814
4	SULFATE	5.770	4.336	19.448	24.95	21.75	19.5122	-2.4392
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.912**	**65.675**	**68.55**	**73.46**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.98**
Vial Number:	**1**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 12:13**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

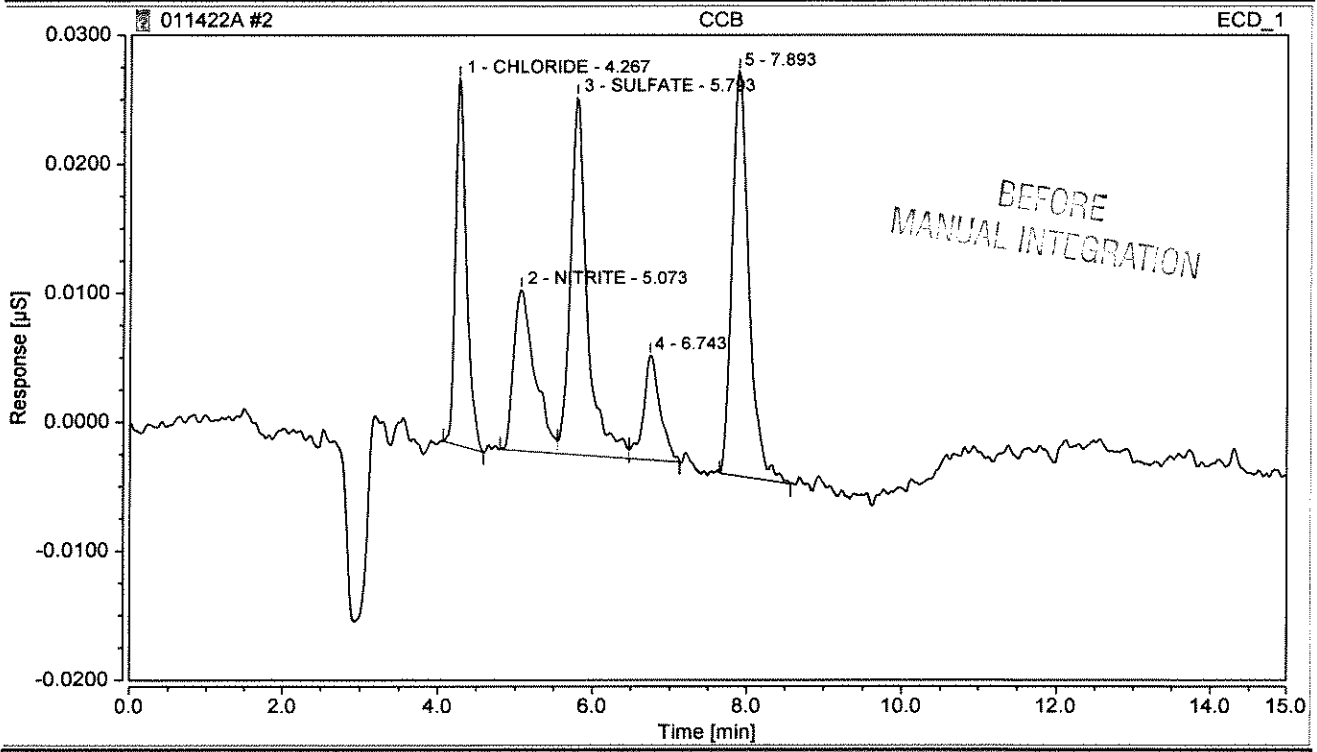
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.174	2.205	14.264	12.74	15.96	4.6740	-6.5197
2	CHLORIDE	4.267	2.841	18.523	16.42	20.72	10.0712	0.7120
3	NITRITE	5.034	2.532	13.515	14.64	15.12	4.0167	0.4175
4	SULFATE	5.770	4.301	19.411	24.86	21.71	19.3537	-3.2317
5	BROMIDE	6.720	2.629	12.480	15.20	13.96	21.3587	6.7936
6	NITRATE	7.820	2.791	11.199	16.13	12.53	3.7954	-5.1138
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**17.298**	**89.391**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.98**
Vial Number:	**2**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 12:34**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

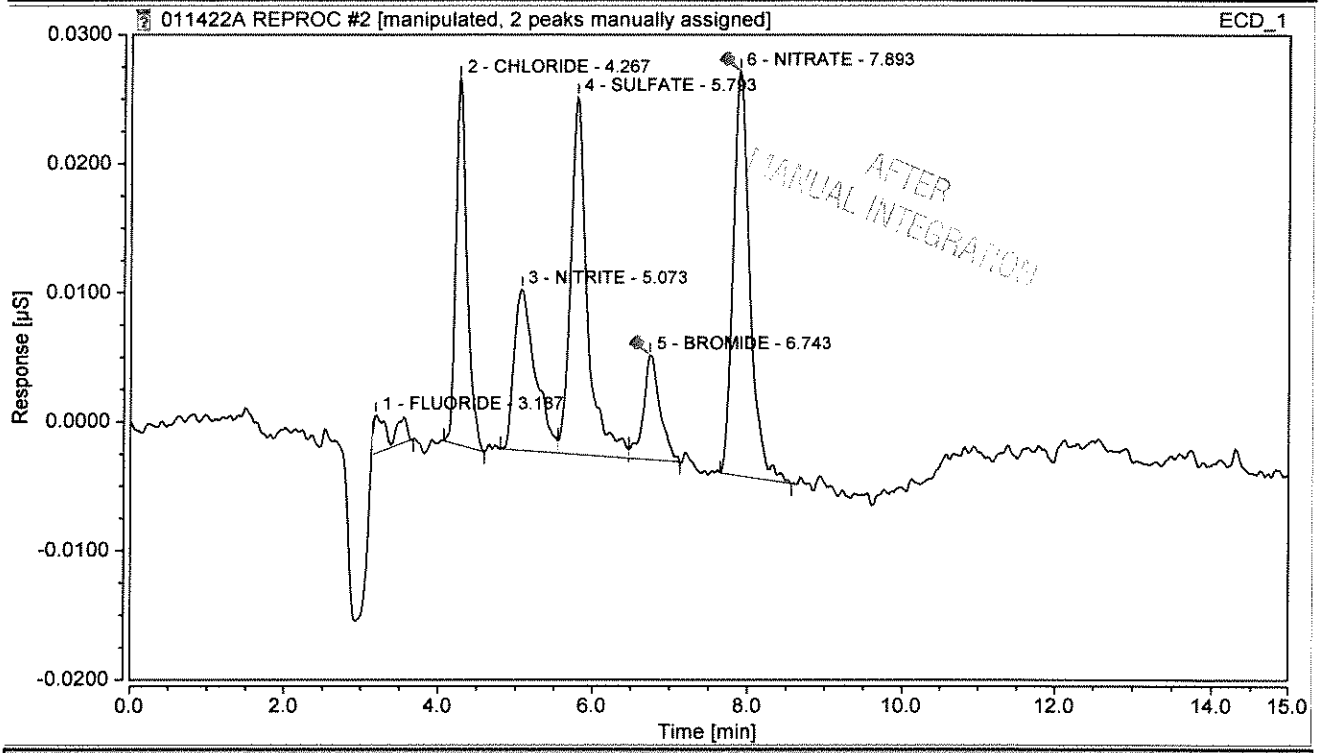
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	0.005	0.028	18.13	26.28	0.1565	n.a.
2	NITRITE	5.073	0.004	0.013	15.61	11.57	0.0063	n.a.
3	SULFATE	5.793	0.007	0.028	27.22	25.65	0.0313	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.016**	**0.069**	**60.96**	**63.50**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.98**
Vial Number:	**2**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 12:34**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

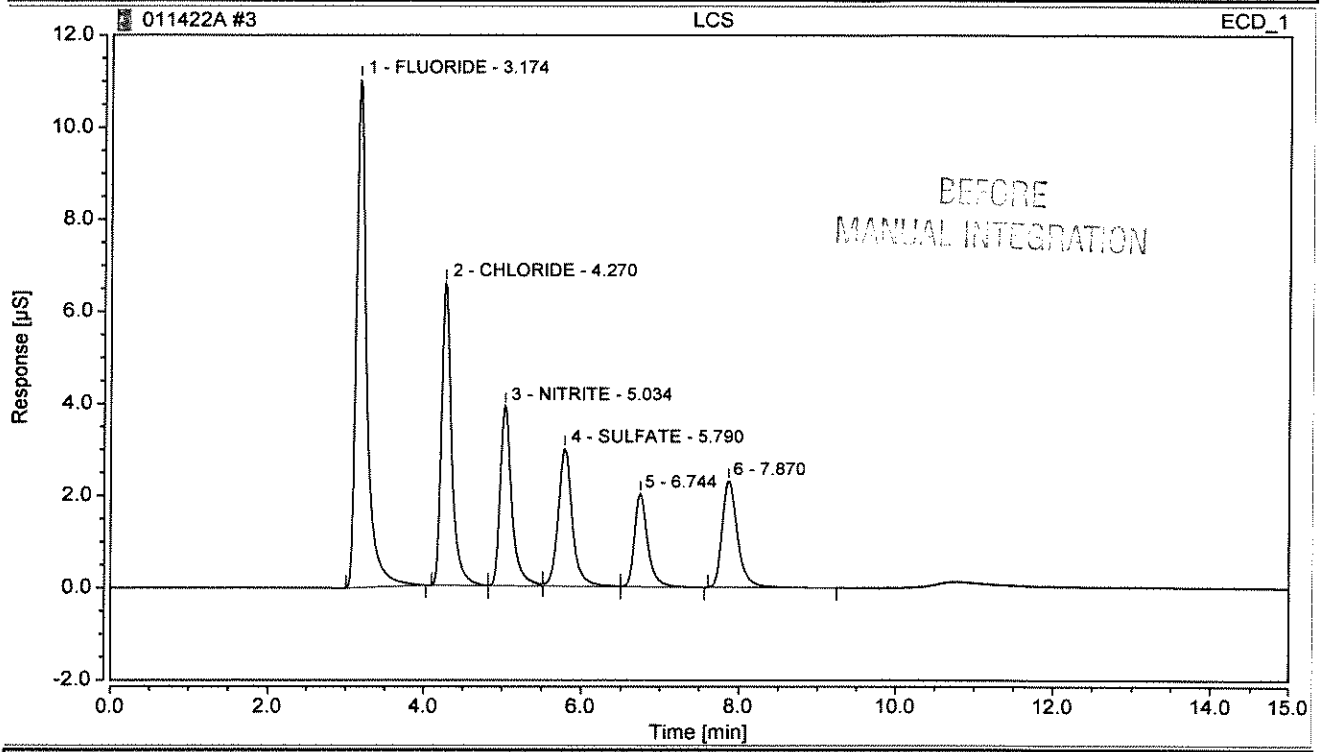
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.187	0.001	0.003	2.94	2.68	0.0016	n.a.
2	CHLORIDE	4.267	0.005	0.028	17.60	25.58	0.1565	n.a.
3	NITRITE	5.073	0.004	0.013	15.15	11.26	0.0063	n.a.
4	SULFATE	5.793	0.007	0.028	26.42	24.96	0.0313	n.a.
5	BROMIDE	6.743	0.002	0.008	7.68	7.29	0.0139	n.a.
6	NITRATE	7.893	0.008	0.031	30.21	28.23	0.0974	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.026**	**0.111**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.99**
Vial Number:	**3**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**07**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 12:55**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

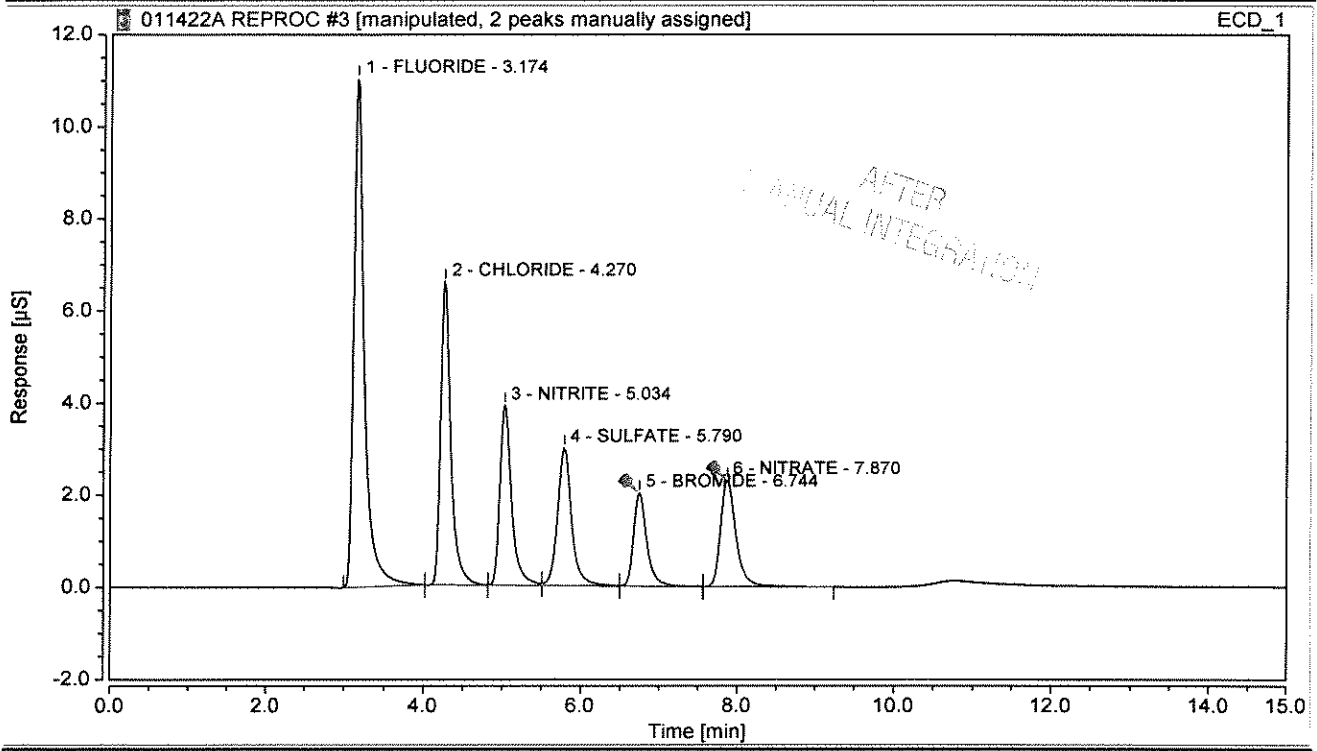
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.174	1.715	11.049	34.79	38.26	3.6353	-3.0587
2	CHLORIDE	4.270	0.989	6.588	20.07	22.81	3.5984	-4.0426
3	NITRITE	5.034	0.675	3.910	13.69	13.54	1.0703	-6.1156
4	SULFATE	5.790	0.627	2.995	12.73	10.37	2.8230	-24.7194
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.006**	**24.542**	**81.27**	**84.98**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.99**
Vial Number:	**3**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**07**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 12:55**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

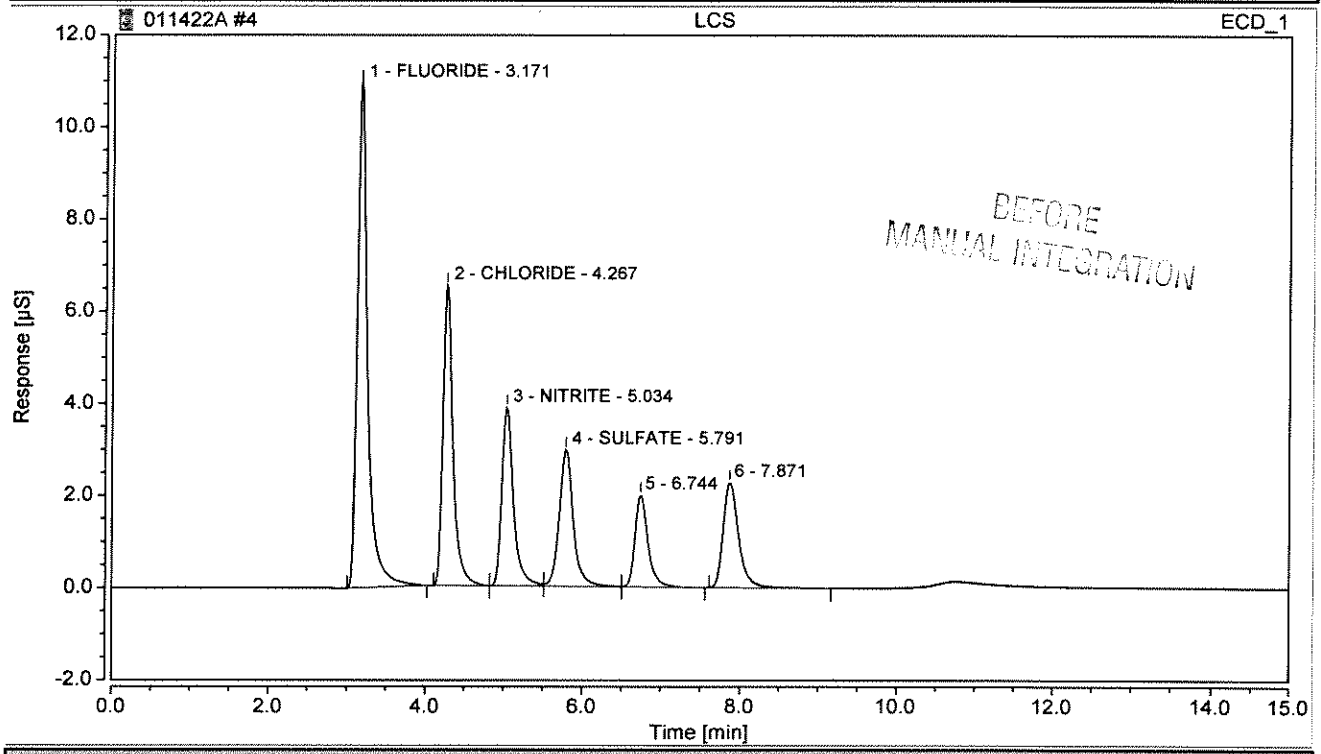
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.174	1.715	11.049	34.76	38.25	3.6353	-3.0587
2	CHLORIDE	4.270	0.989	6.589	20.06	22.81	3.5996	-4.0114
3	NITRITE	5.034	0.675	3.911	13.69	13.54	1.0709	-6.0586
4	SULFATE	5.790	0.628	2.996	12.72	10.37	2.8248	-24.6733
5	BROMIDE	6.744	0.398	2.027	8.06	7.02	3.4682	-7.5135
6	NITRATE	7.870	0.529	2.316	10.72	8.02	0.7895	-6.5623
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.933**	**28.887**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.98**
Vial Number:	**4**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**07**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 13:16**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

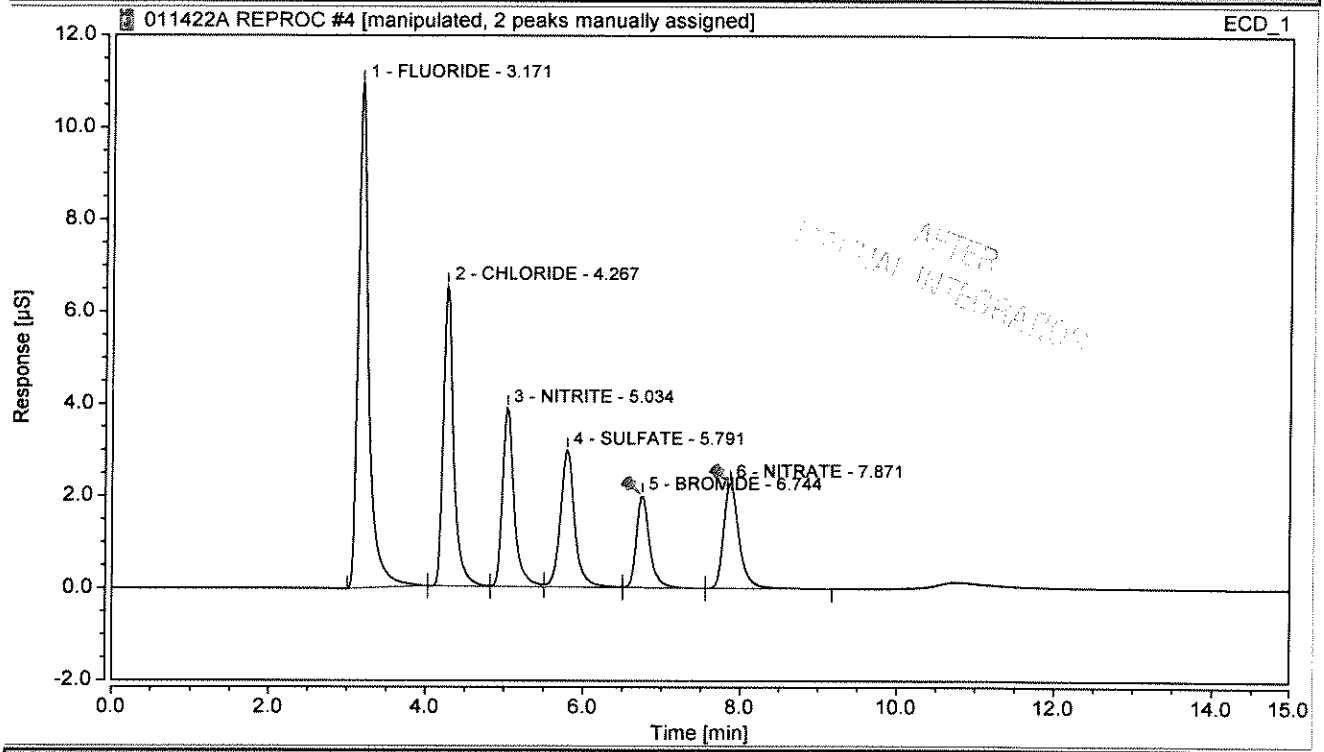
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.171	1.700	10.963	34.87	38.31	3.6041	-3.8899
2	CHLORIDE	4.267	0.976	6.526	20.01	22.80	3.5509	-5.3102
3	NITRITE	5.034	0.666	3.874	13.66	13.54	1.0560	-7.3655
4	SULFATE	5.791	0.623	2.970	12.78	10.38	2.8030	-25.2539
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.964**	**24.333**	**81.32**	**85.03**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.98**
Vial Number:	**4**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**07**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 13:16**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

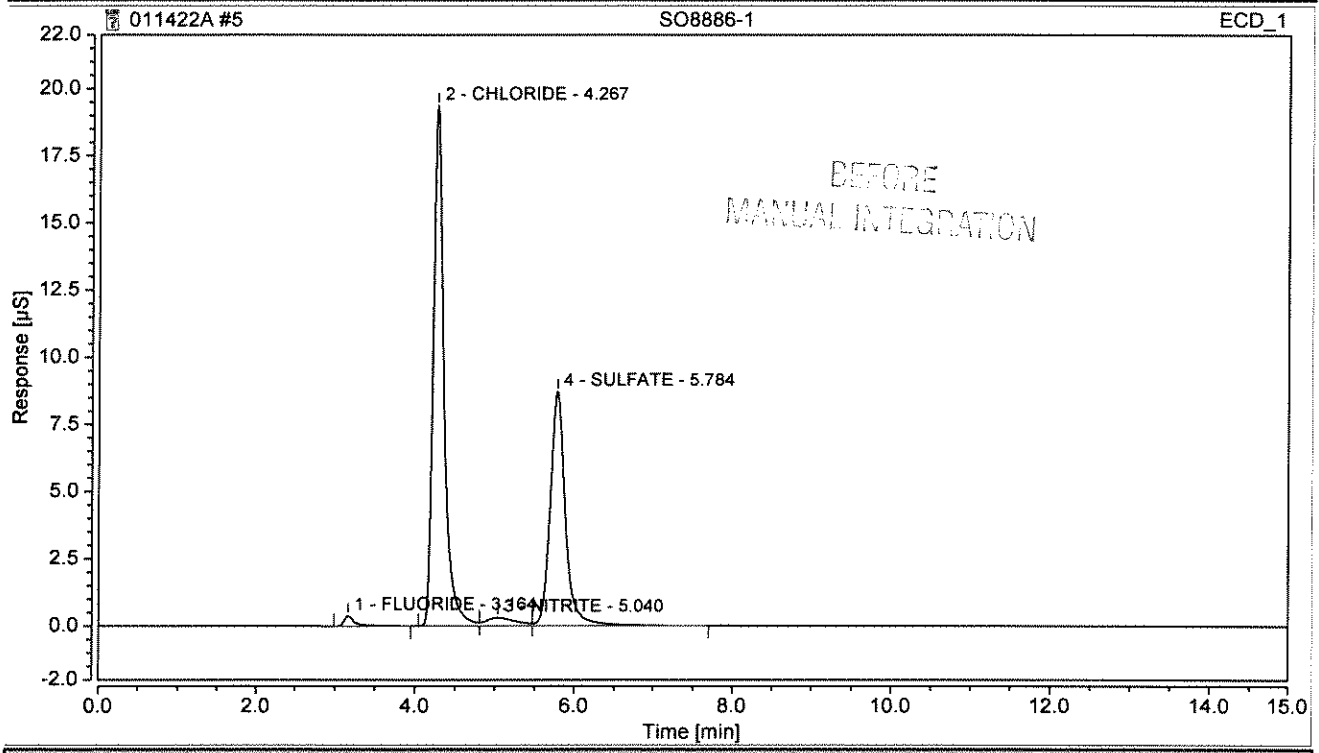
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.171	1.700	10.963	34.79	38.29	3.6041	-3.8899
2	CHLORIDE	4.267	0.979	6.531	20.03	22.81	3.5618	-5.0197
3	NITRITE	5.034	0.668	3.878	13.68	13.54	1.0598	-7.0322
4	SULFATE	5.791	0.625	2.973	12.79	10.38	2.8131	-24.9848
5	BROMIDE	6.744	0.393	2.002	8.03	6.99	3.4271	-8.6111
6	NITRATE	7.871	0.522	2.286	10.67	7.98	0.7799	-7.7058
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.886**	**28.633**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8886-1**	*Run Time (min):*	**14.98**
Vial Number:	**5**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 13:37**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

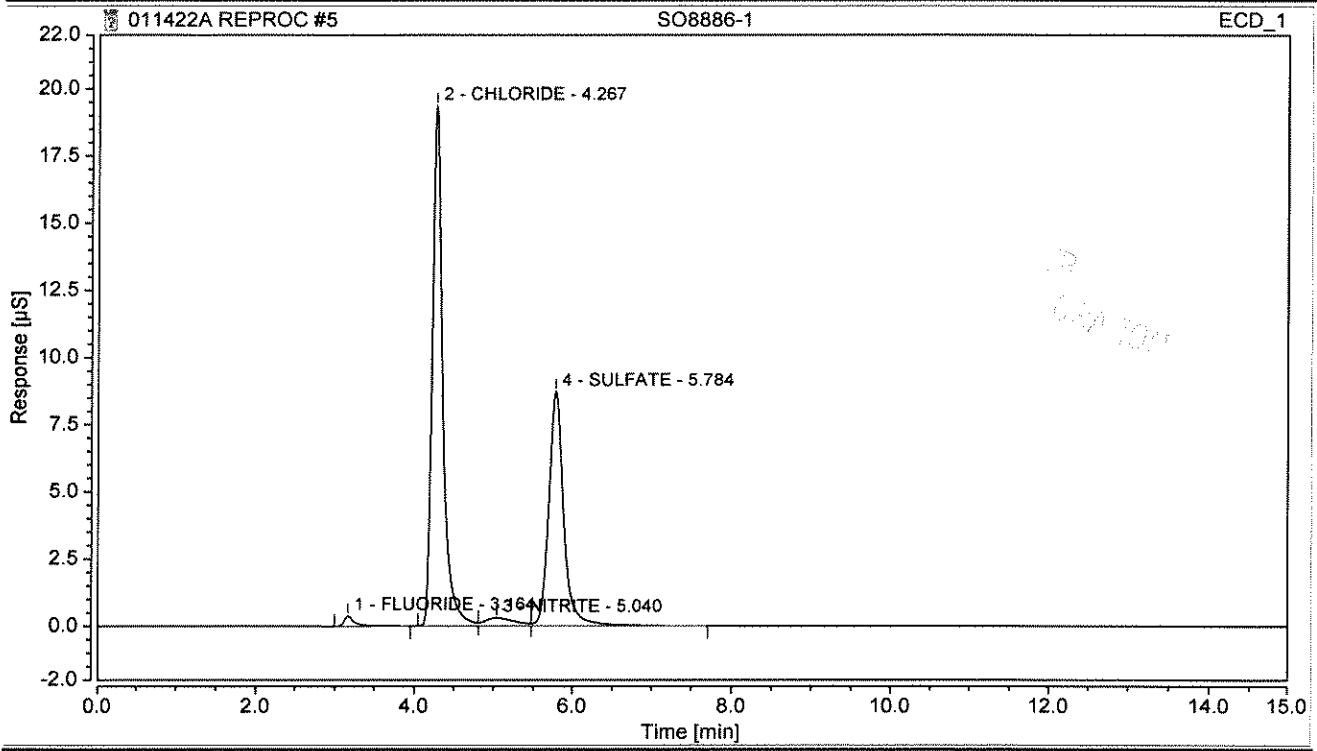
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.164	0.063	0.392	1.24	1.36	0.2689	n.a.
2	CHLORIDE	4.267	3.001	19.370	58.45	67.27	21.2660	n.a.
3	NITRITE	5.040	0.132	0.307	2.57	1.06	0.4183	n.a.
4	SULFATE	5.784	1.938	8.726	37.74	30.30	17.4419	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.134**	**28.794**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8886-1**	*Run Time (min):*	**14.98**
Vial Number:	**5**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 13:37**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

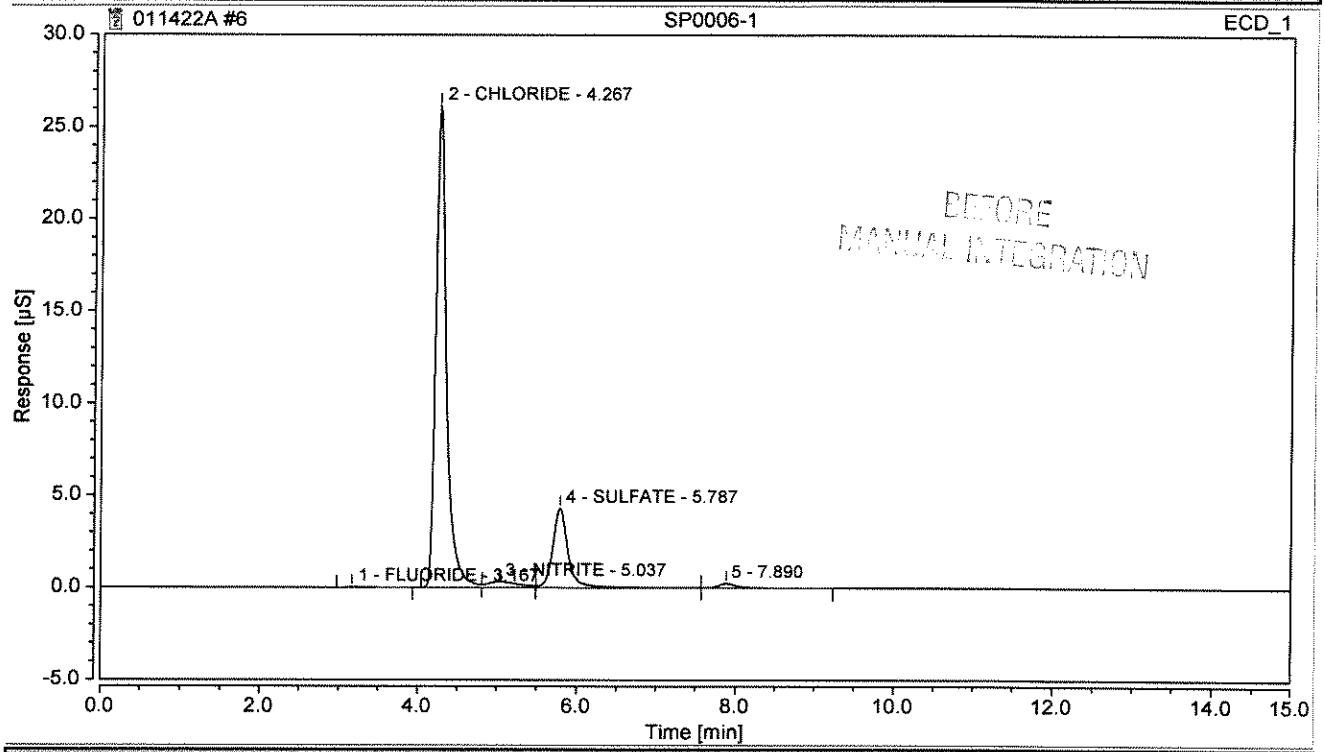
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.164	0.063	0.392	1.24	1.36	0.2689	n.a.
2	CHLORIDE	4.267	3.001	19.370	58.45	67.27	21.2660	n.a.
3	NITRITE	5.040	0.132	0.307	2.57	1.06	0.4183	n.a.
4	SULFATE	5.784	1.938	8.726	37.74	30.30	17.4419	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.134**	**28.794**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0006-1**	*Run Time (min):*	**14.99**
Vial Number:	**6**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 13:57**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

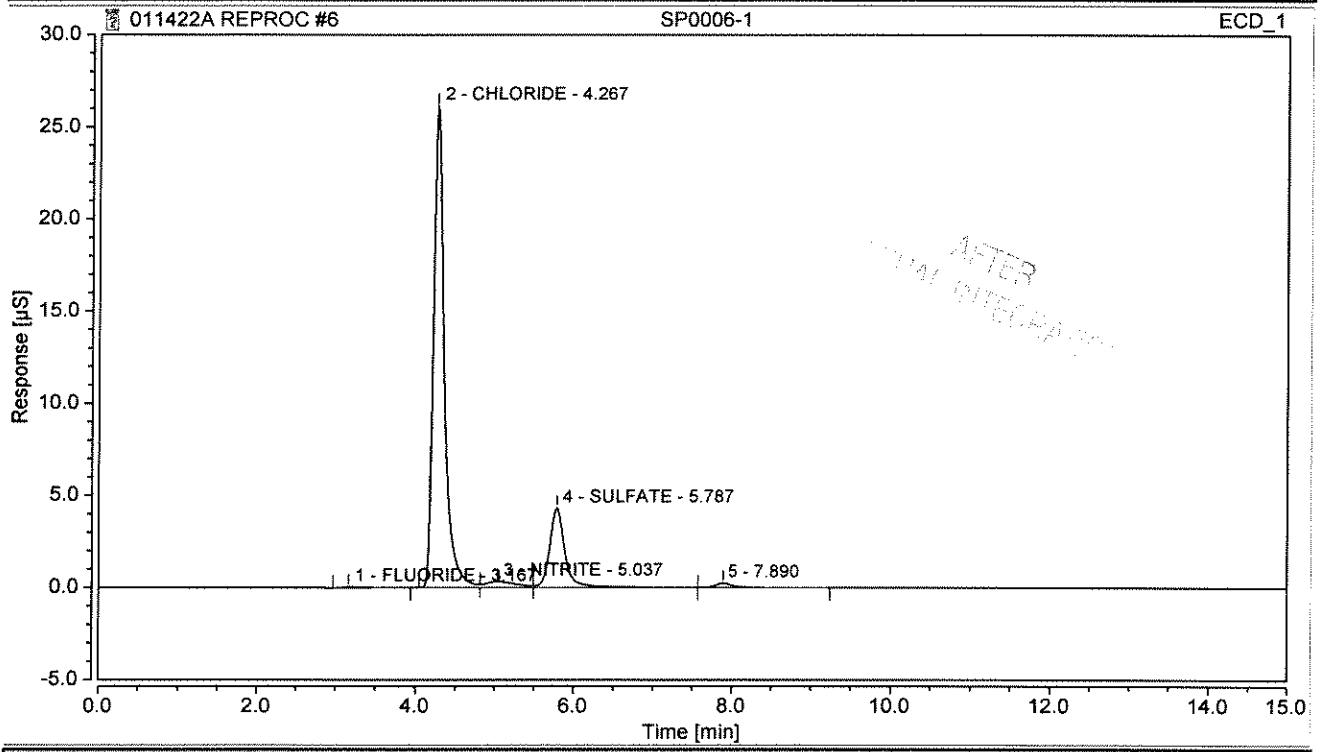
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	0.013	0.043	0.25	0.14	0.0563	n.a.
2	CHLORIDE	4.267	4.081	26.156	77.56	84.16	28.8176	n.a.
3	NITRITE	5.037	0.143	0.326	2.72	1.05	0.4534	n.a.
4	SULFATE	5.787	0.963	4.314	18.31	13.88	8.6692	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.201**	**30.839**	**98.84**	**99.23**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0006-1**	*Run Time (min):*	**14.99**
Vial Number:	**6**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 13:57**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

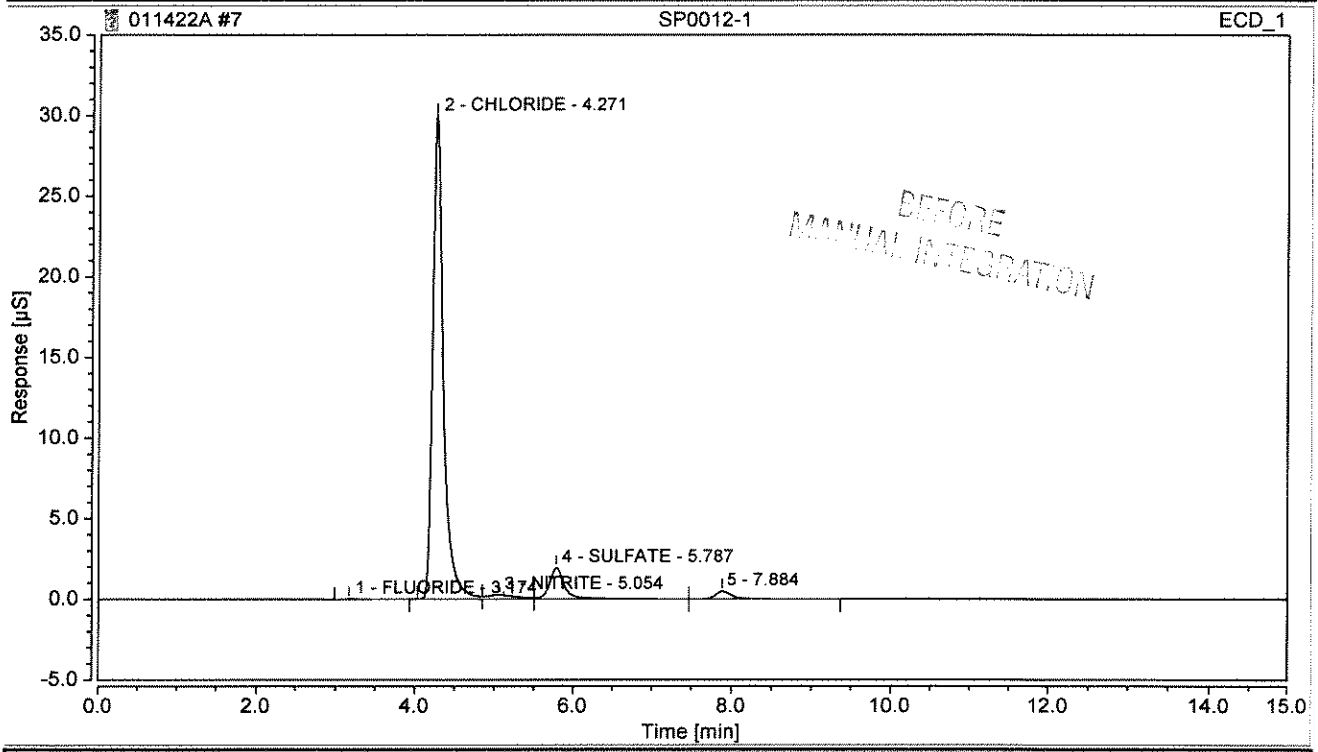
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	0.013	0.043	0.25	0.14	0.0563	n.a.
2	CHLORIDE	4.267	4.081	26.156	77.56	84.16	28.8176	n.a.
3	NITRITE	5.037	0.143	0.326	2.72	1.05	0.4534	n.a.
4	SULFATE	5.787	0.963	4.314	18.31	13.88	8.6692	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.201**	**30.839**	**98.84**	**99.23**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0012-1**	*Run Time (min):*	**14.99**
Vial Number:	**7**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 14:18**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

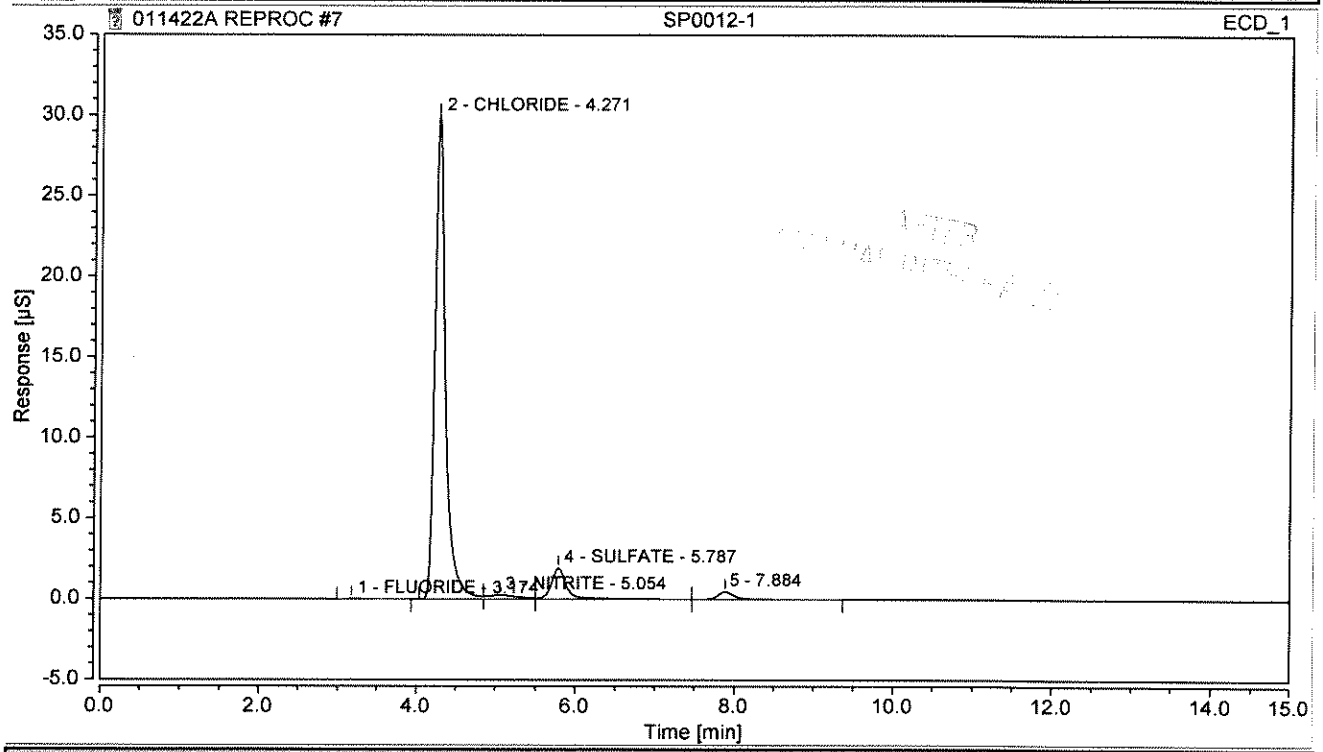
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.174	0.009	0.026	0.16	0.08	0.0367	n.a.
2	CHLORIDE	4.271	4.696	29.965	87.62	91.76	33.1155	n.a.
3	NITRITE	5.054	0.110	0.257	2.04	0.79	0.3475	n.a.
4	SULFATE	5.787	0.430	1.935	8.03	5.92	3.8718	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.244**	**32.182**	**97.86**	**98.55**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0012-1**	*Run Time (min):*	**14.99**
Vial Number:	**7**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 14:18**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

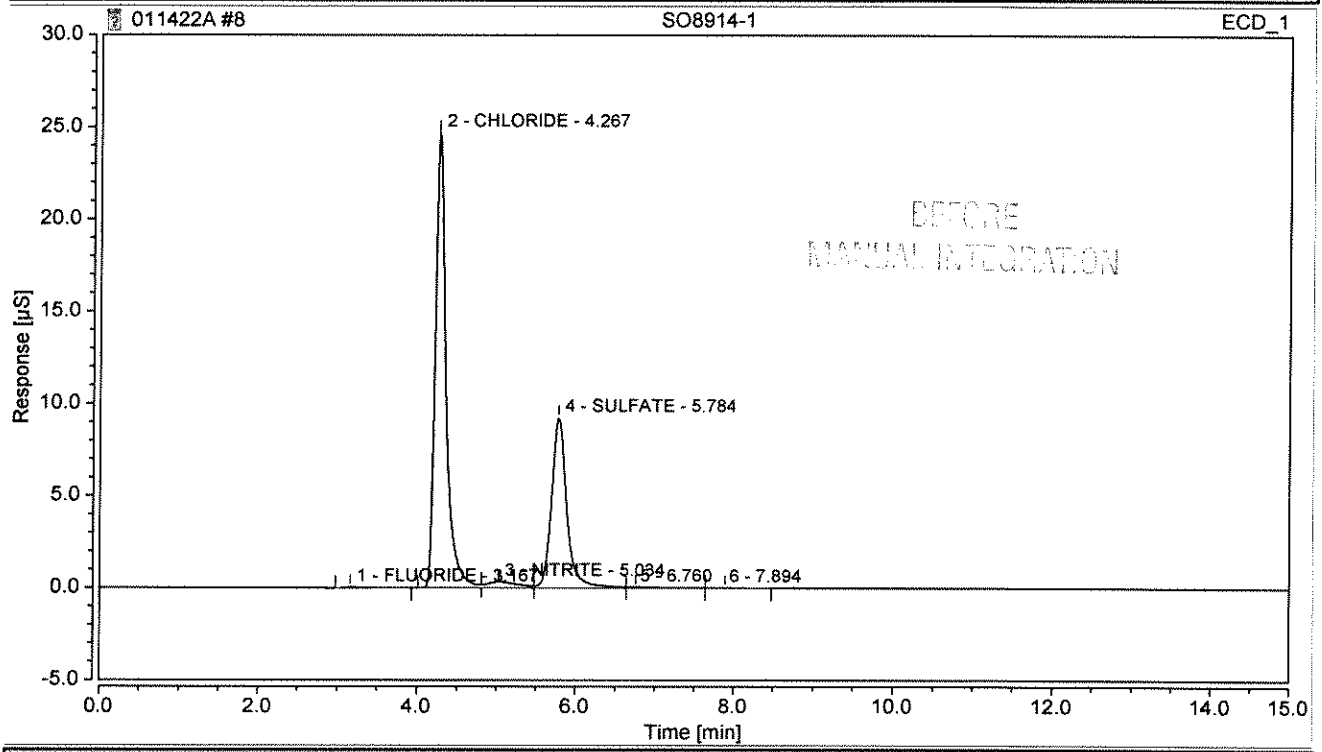
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.174	0.009	0.026	0.16	0.08	0.0367	n.a.
2	CHLORIDE	4.271	4.696	29.965	87.62	91.76	33.1155	n.a.
3	NITRITE	5.054	0.110	0.257	2.04	0.79	0.3475	n.a.
4	SULFATE	5.787	0.430	1.935	8.03	5.92	3.8718	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.244**	**32.182**	**97.86**	**98.55**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8914-1**	*Run Time (min):*	**14.99**
Vial Number:	**8**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 14:39**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

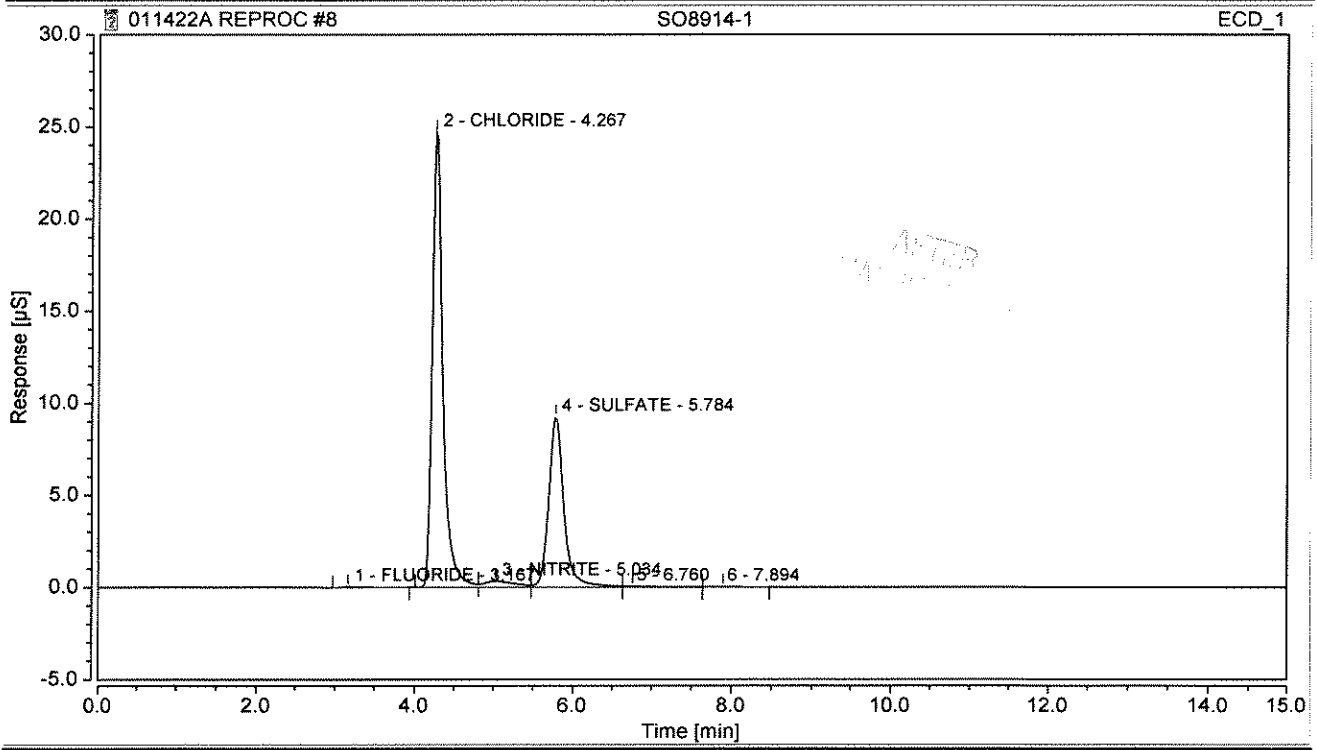
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	0.013	0.047	0.22	0.14	0.0564	n.a.
2	CHLORIDE	4.267	3.854	24.715	63.24	71.85	27.2314	n.a.
3	NITRITE	5.034	0.147	0.333	2.42	0.97	0.4670	n.a.
4	SULFATE	5.784	2.053	9.245	33.69	26.88	18.4810	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.068**	**34.339**	**99.56**	**99.83**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8914-1**	*Run Time (min):*	**14.99**
Vial Number:	**8**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 14:39**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

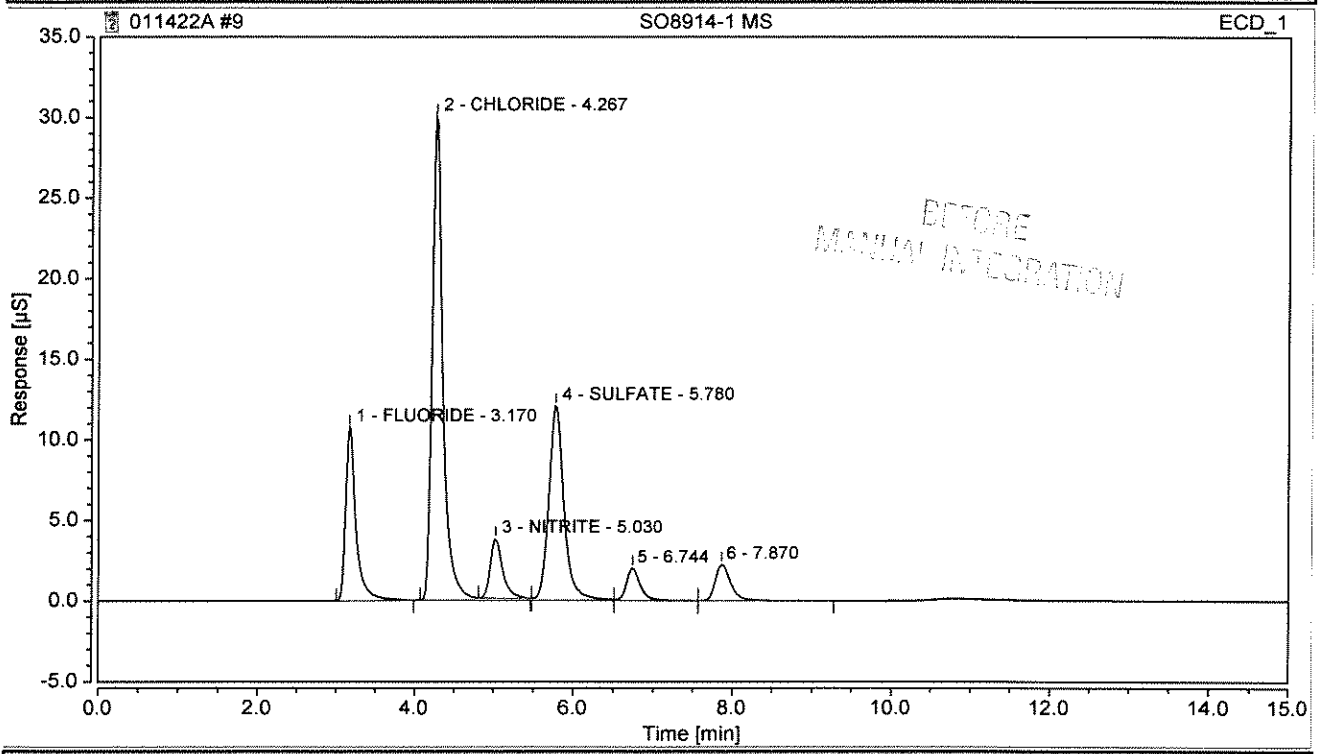
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	0.013	0.047	0.22	0.14	0.0564	n.a.
2	CHLORIDE	4.267	3.854	24.715	63.24	71.85	27.2314	n.a.
3	NITRITE	5.034	0.147	0.333	2.42	0.97	0.4670	n.a.
4	SULFATE	5.784	2.053	9.245	33.69	26.88	18.4810	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.068**	**34.339**	**99.56**	**99.83**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8914-1 MS**	*Run Time (min):*	**14.99**
Vial Number:	**9**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 15:00**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

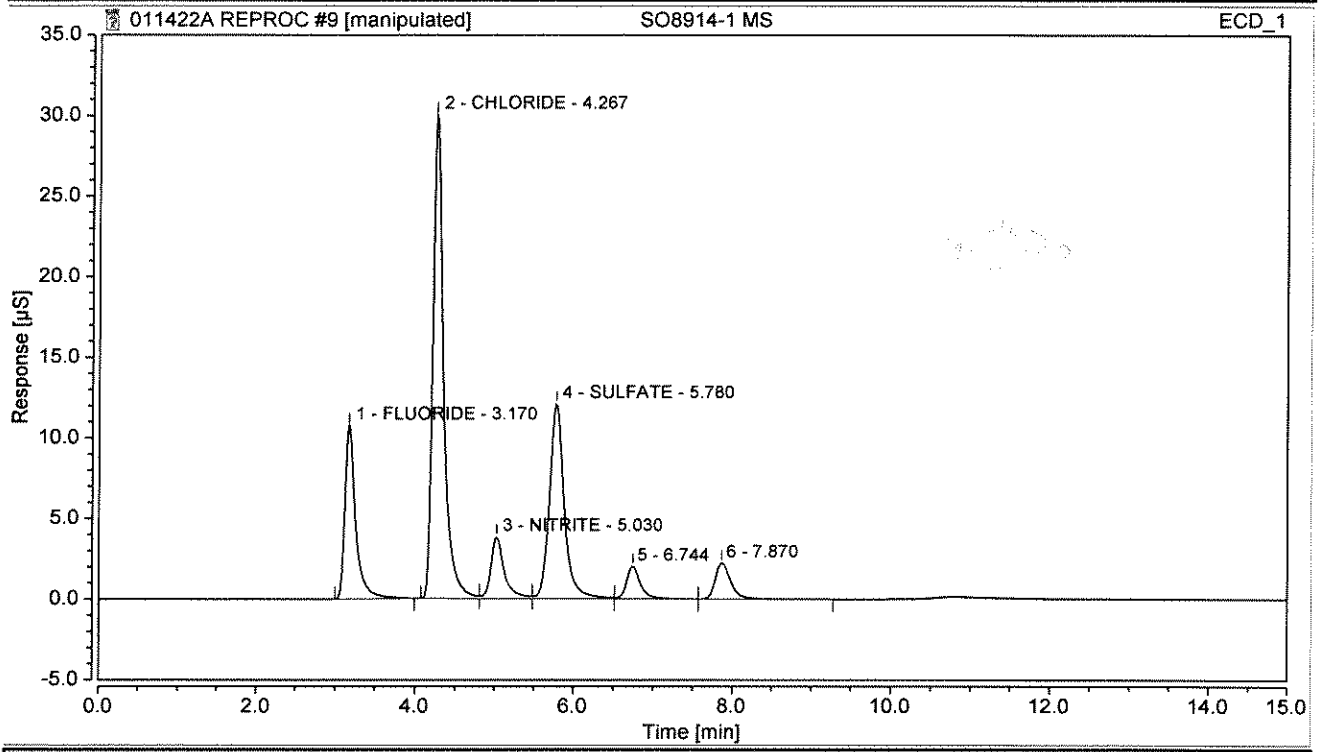
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.170	1.675	10.783	15.69	17.72	7.1014	n.a.
2	CHLORIDE	4.267	4.776	30.032	44.73	49.36	33.6746	n.a.
3	NITRITE	5.030	0.660	3.691	6.18	6.07	2.0941	n.a.
4	SULFATE	5.780	2.650	12.085	24.82	19.86	23.8537	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.761**	**56.591**	**91.42**	**93.02**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8914-1 MS**	*Run Time (min):*	**14.99**
Vial Number:	**9**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 15:00**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

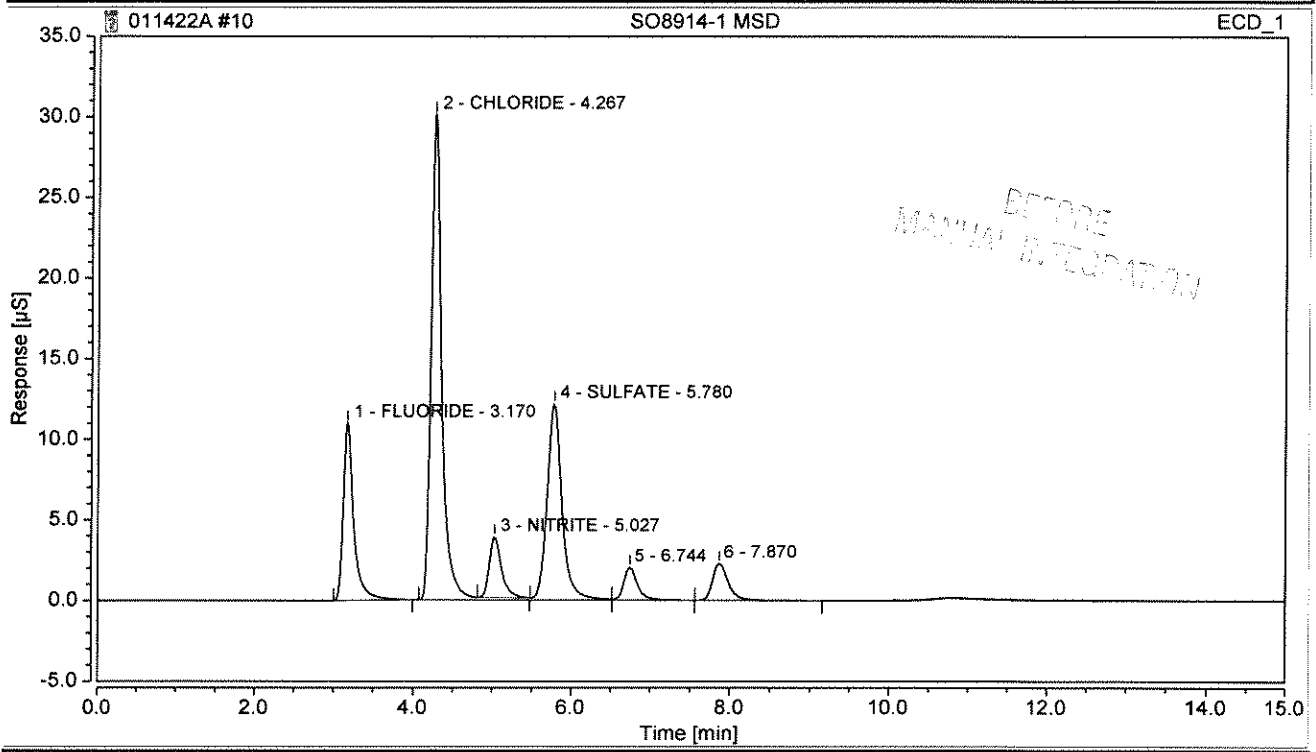
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.170	1.675	10.783	15.69	17.68	7.1014	n.a.
2	CHLORIDE	4.267	4.684	30.032	43.87	49.25	33.0331	n.a.
3	NITRITE	5.030	0.752	3.832	7.04	6.28	2.3851	n.a.
4	SULFATE	5.780	2.650	12.085	24.82	19.82	23.8537	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.761**	**56.733**	**91.42**	**93.03**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8914-1 MSD**	*Run Time (min):*	**14.99**
Vial Number:	**10**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 15:21**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

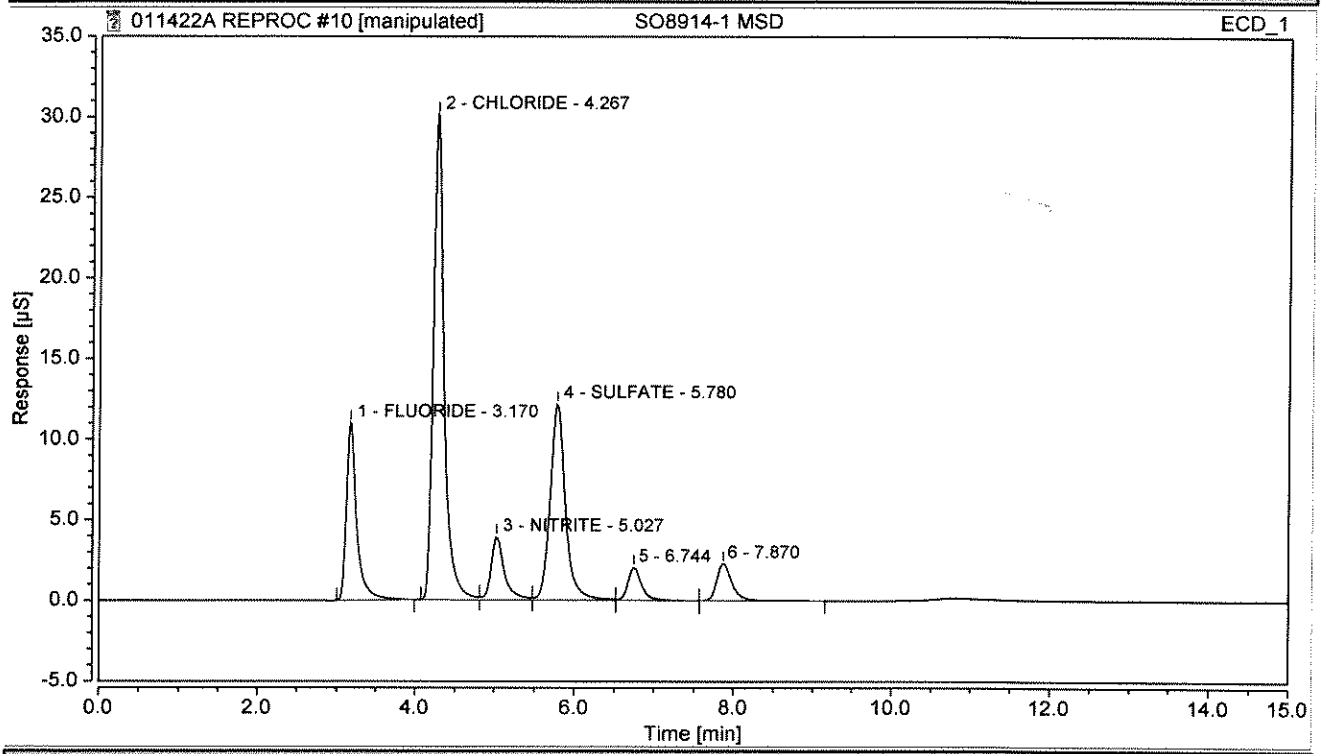
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.170	1.714	11.026	15.90	17.95	7.2682	n.a.
2	CHLORIDE	4.267	4.793	30.105	44.45	49.01	33.7960	n.a.
3	NITRITE	5.027	0.673	3.773	6.24	6.14	2.1338	n.a.
4	SULFATE	5.780	2.671	12.190	24.77	19.84	24.0382	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.851**	**57.093**	**91.35**	**92.94**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8914-1 MSD**	*Run Time (min):*	**14.99**
Vial Number:	**10**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 15:21**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

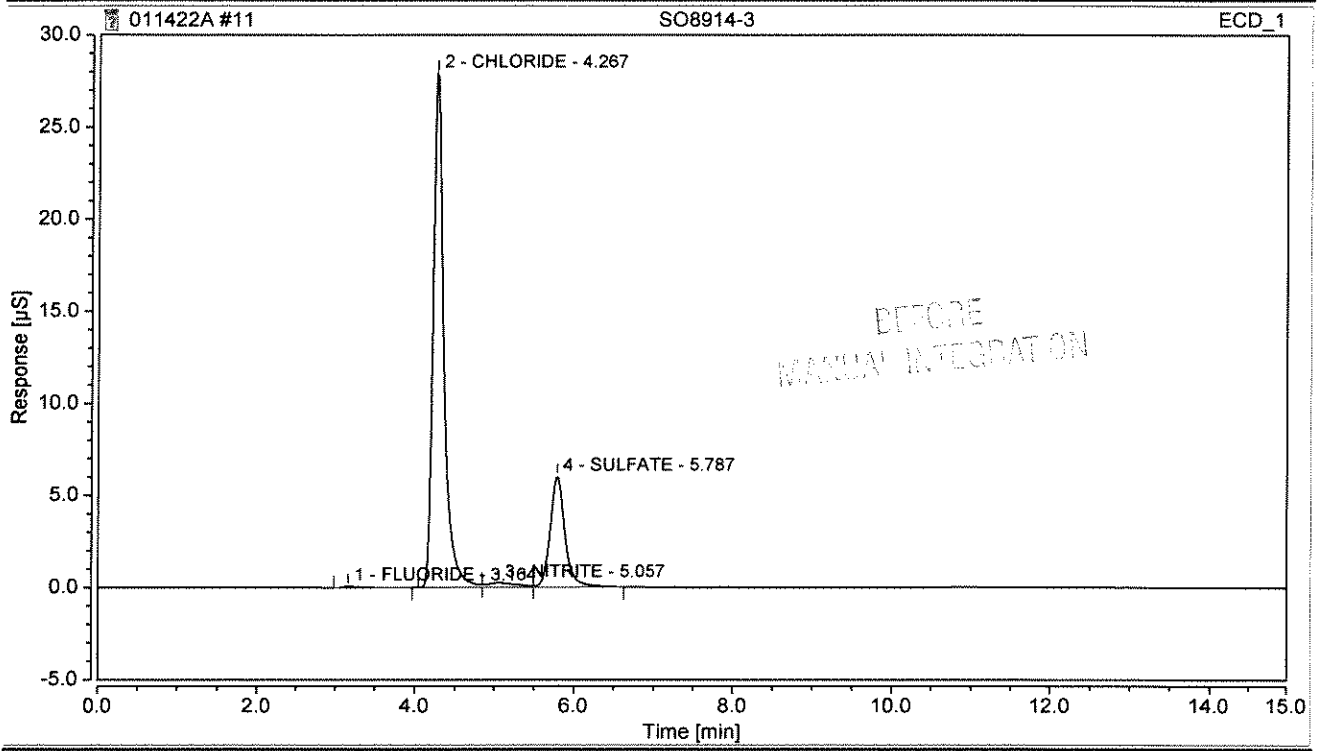
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.170	1.714	11.026	15.90	17.91	7.2682	n.a.
2	CHLORIDE	4.267	4.705	30.105	43.63	48.90	33.1782	n.a.
3	NITRITE	5.027	0.761	3.912	7.06	6.35	2.4141	n.a.
4	SULFATE	5.780	2.671	12.190	24.77	19.80	24.0382	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.851**	**57.232**	**91.35**	**92.96**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8914-3**	*Run Time (min):*	**14.98**
Vial Number:	**11**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 15:42**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

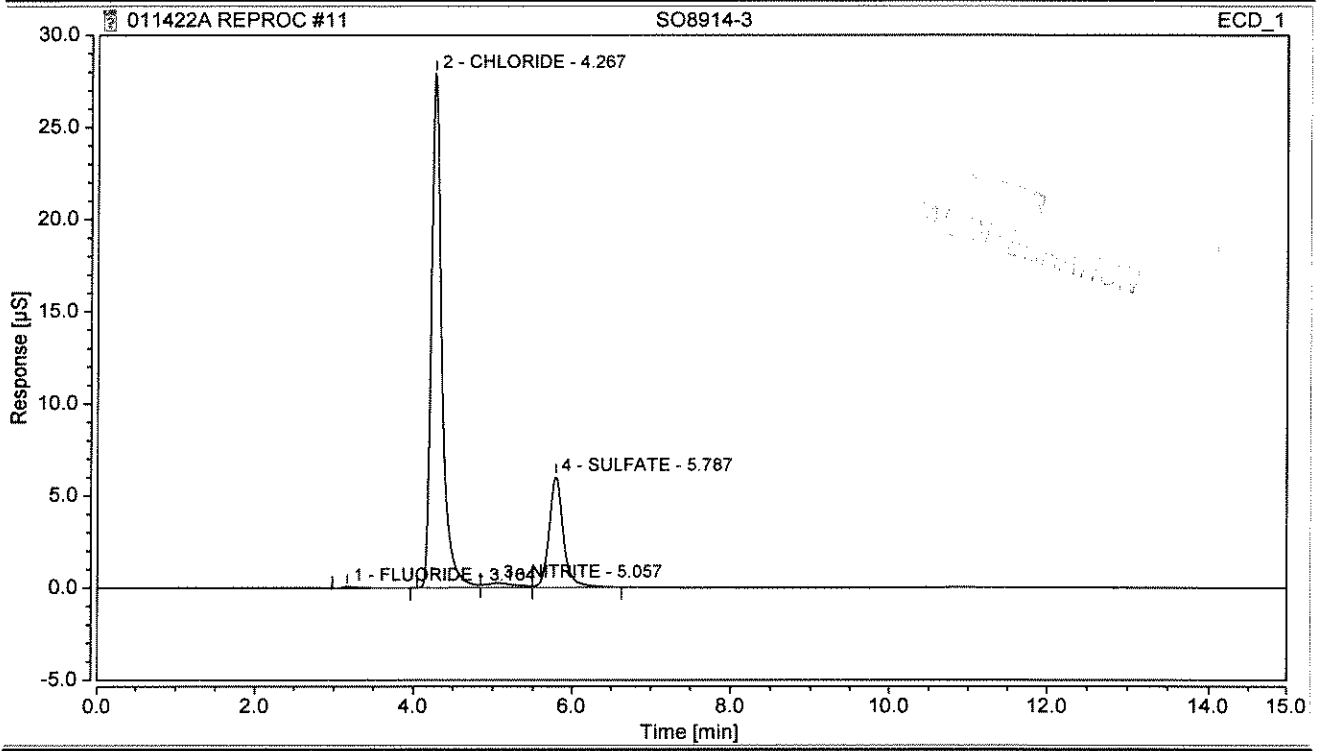
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.164	0.020	0.089	0.35	0.26	0.0857	n.a.
2	CHLORIDE	4.267	4.359	27.913	75.61	81.48	30.7587	n.a.
3	NITRITE	5.057	0.102	0.239	1.77	0.70	0.3241	n.a.
4	SULFATE	5.787	1.284	6.016	22.27	17.56	11.5542	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.765**	**34.256**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8914-3**	*Run Time (min):*	**14.98**
Vial Number:	**11**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 15:42**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

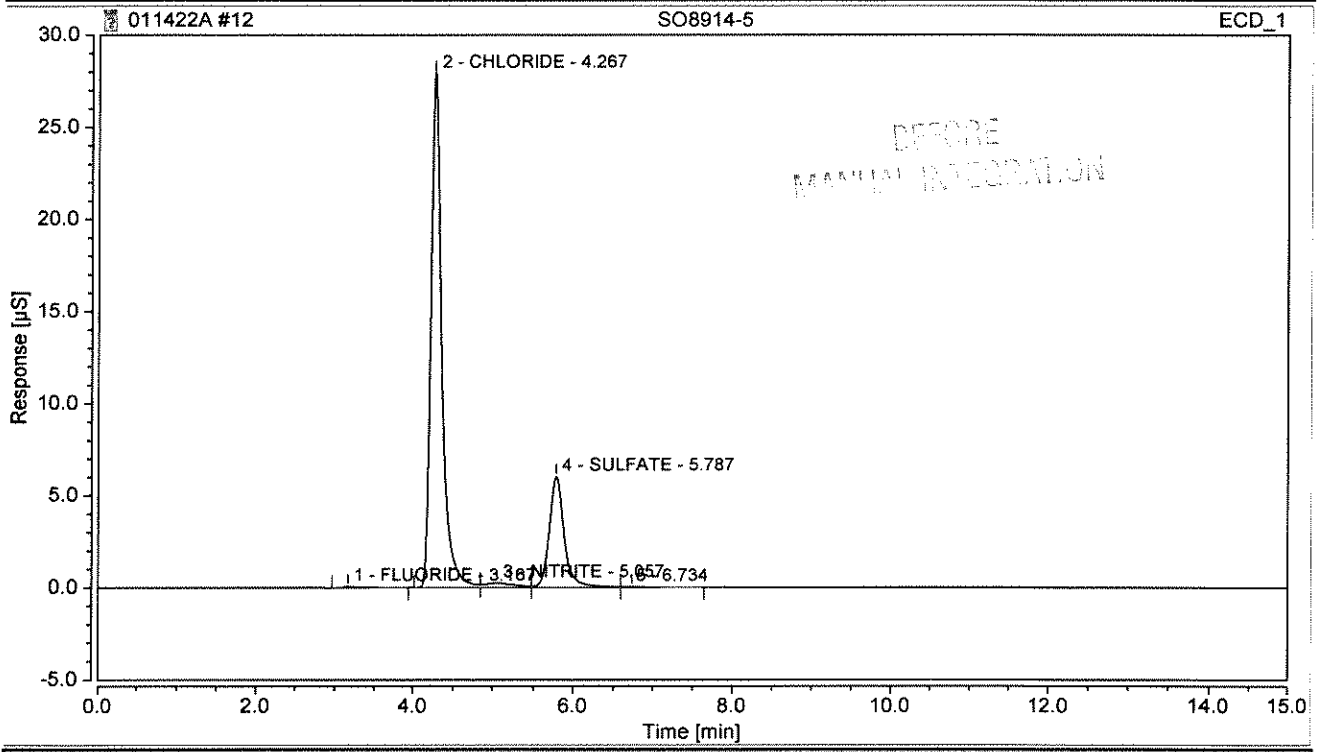
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.164	0.020	0.089	0.35	0.26	0.0857	n.a.
2	CHLORIDE	4.267	4.359	27.913	75.61	81.48	30.7587	n.a.
3	NITRITE	5.057	0.102	0.239	1.77	0.70	0.3241	n.a.
4	SULFATE	5.787	1.284	6.016	22.27	17.56	11.5542	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.765**	**34.256**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8914-5**	*Run Time (min):*	**14.99**
Vial Number:	**12**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 16:02**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

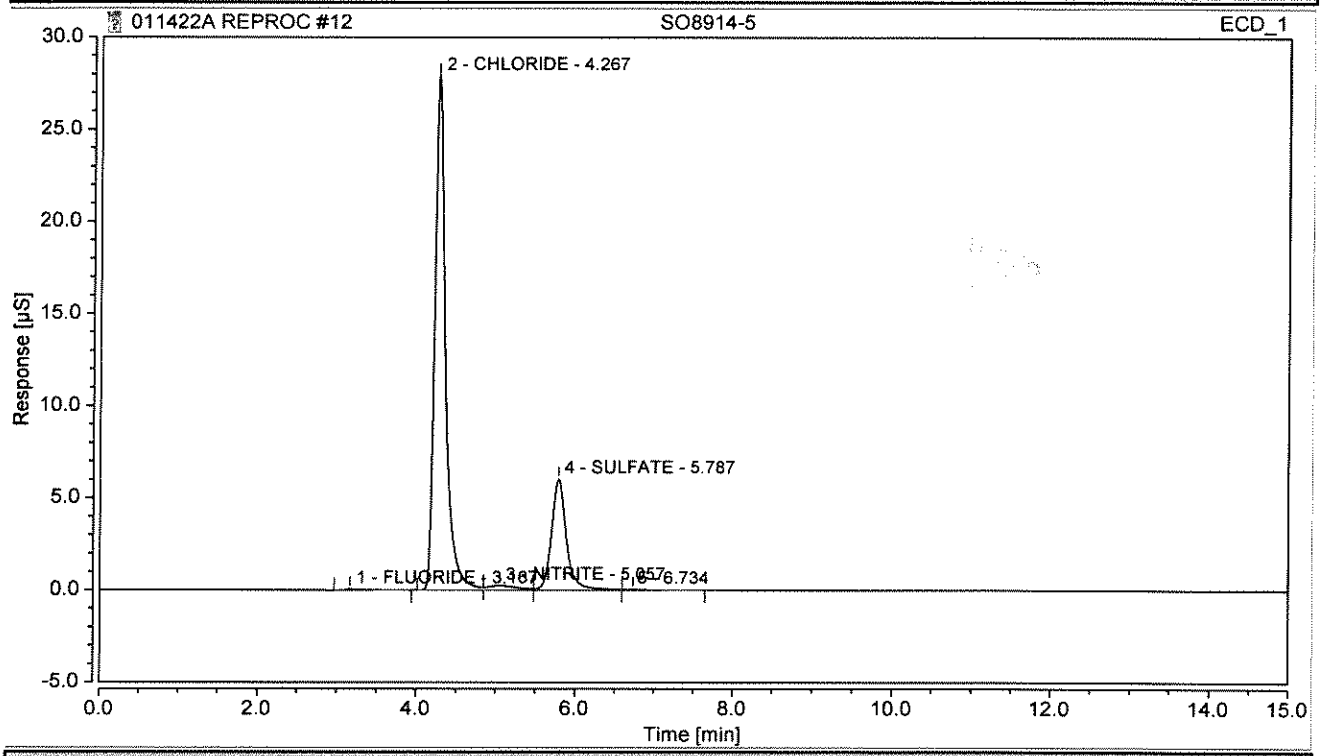
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	0.015	0.059	0.26	0.17	0.0651	n.a.
2	CHLORIDE	4.267	4.366	27.917	75.26	81.44	30.8079	n.a.
3	NITRITE	5.057	0.100	0.241	1.73	0.70	0.3181	n.a.
4	SULFATE	5.787	1.306	6.026	22.52	17.58	11.7562	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.788**	**34.243**	**99.77**	**99.89**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8914-5**	*Run Time (min):*	**14.99**
Vial Number:	**12**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 16:02**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

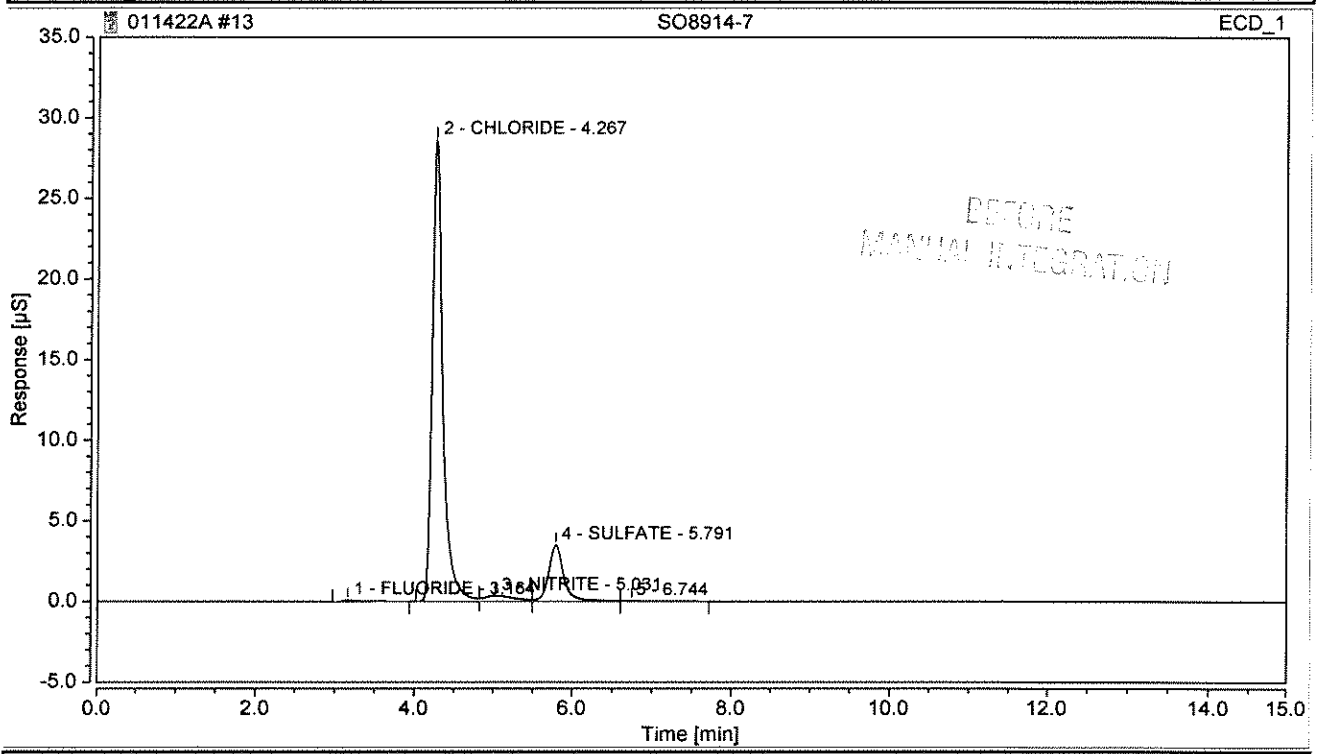
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	0.015	0.059	0.26	0.17	0.0651	n.a.
2	CHLORIDE	4.267	4.366	27.917	75.26	81.44	30.8079	n.a.
3	NITRITE	5.057	0.100	0.241	1.73	0.70	0.3181	n.a.
4	SULFATE	5.787	1.306	6.026	22.52	17.58	11.7562	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.788**	**34.243**	**99.77**	**99.89**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8914-7**	*Run Time (min):*	**14.98**
Vial Number:	**13**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 16:23**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

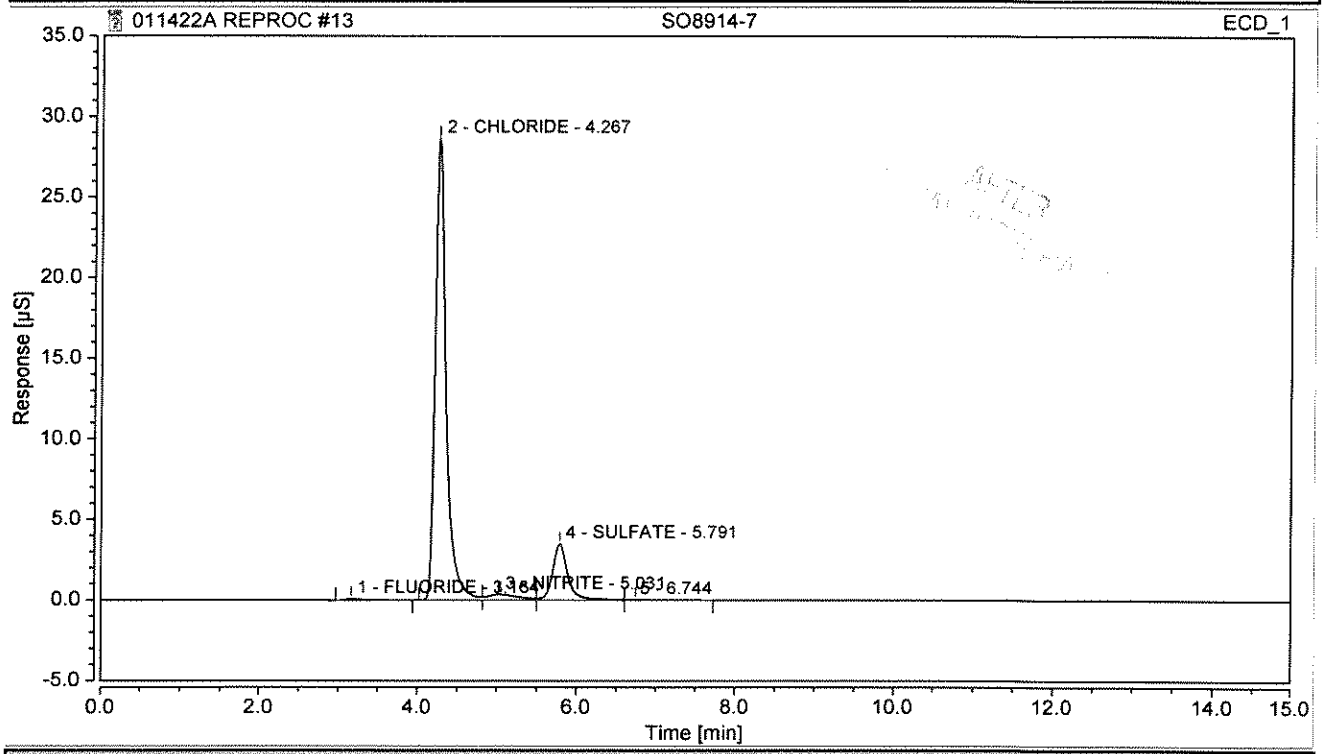
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.164	0.023	0.089	0.42	0.27	0.0979	n.a.
2	CHLORIDE	4.267	4.482	28.651	82.36	87.84	31.6201	n.a.
3	NITRITE	5.031	0.154	0.348	2.84	1.07	0.4899	n.a.
4	SULFATE	5.791	0.770	3.499	14.15	10.73	6.9287	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.429**	**32.586**	**99.76**	**99.91**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8914-7**	*Run Time (min):*	**14.98**
Vial Number:	**13**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 16:23**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

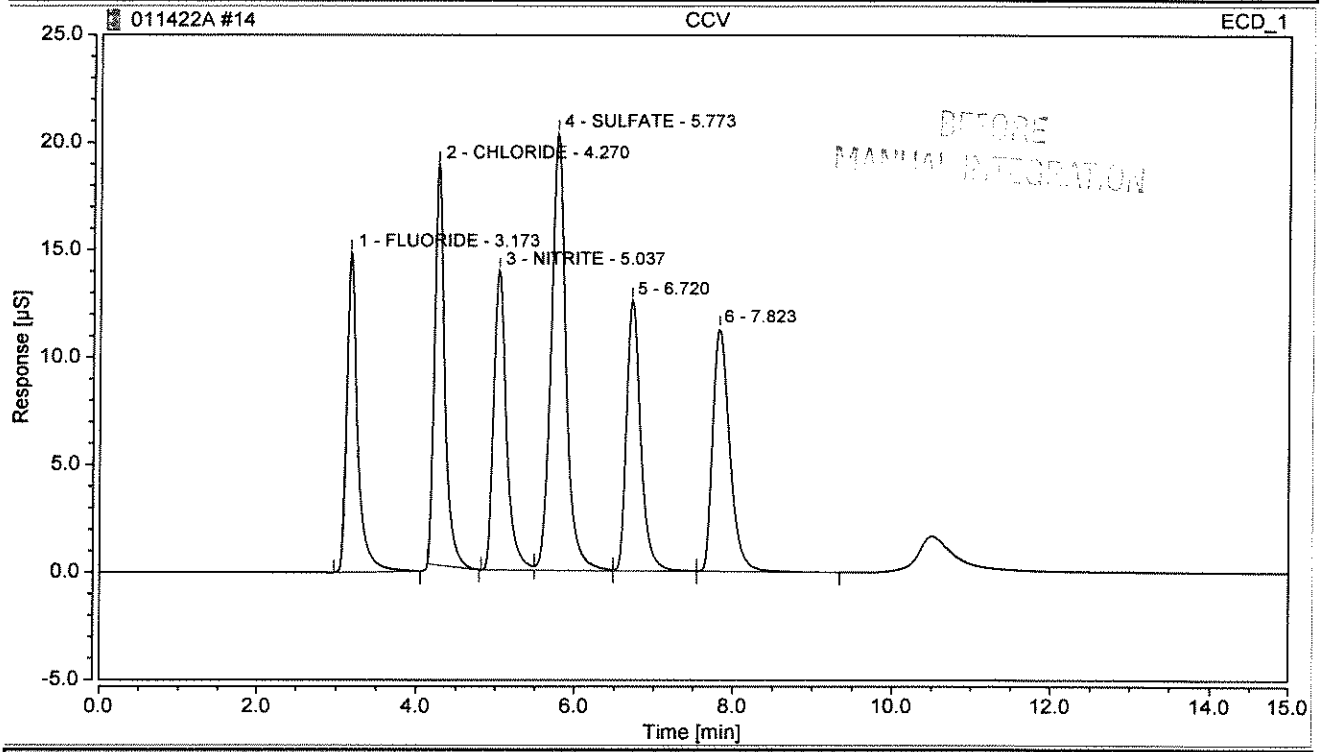
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.164	0.023	0.089	0.42	0.27	0.0979	n.a.
2	CHLORIDE	4.267	4.482	28.651	82.36	87.84	31.6201	n.a.
3	NITRITE	5.031	0.154	0.348	2.84	1.07	0.4899	n.a.
4	SULFATE	5.791	0.770	3.499	14.15	10.73	6.9287	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.429**	**32.586**	**99.76**	**99.91**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.98**
Vial Number:	**14**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 16:44**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

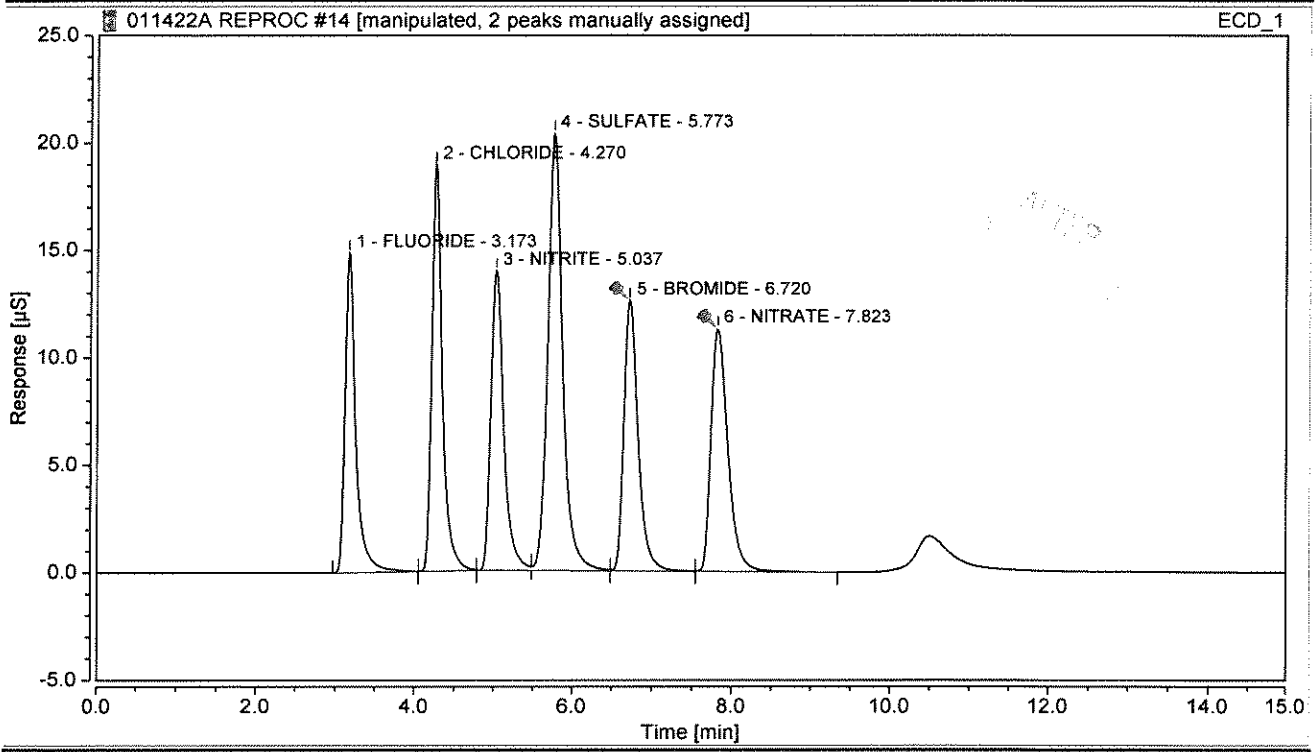
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.173	2.361	14.882	13.41	16.22	5.0056	0.1121
2	CHLORIDE	4.270	2.789	18.663	15.84	20.34	9.8914	-1.0864
3	NITRITE	5.037	2.604	13.943	14.79	15.19	4.1309	3.2717
4	SULFATE	5.773	4.428	20.361	25.15	22.19	19.9280	-0.3602
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.183**	**67.850**	**69.18**	**73.93**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.98**
Vial Number:	**14**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 16:44**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

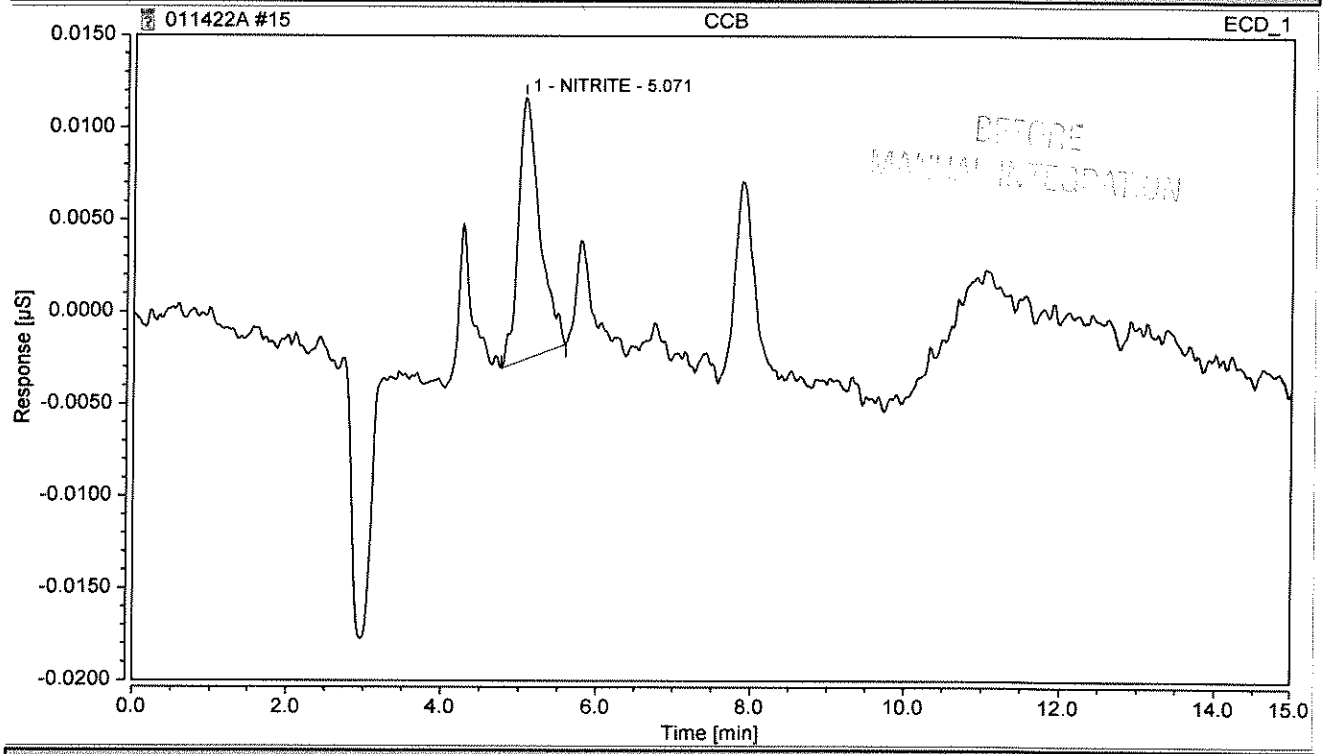
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.173	2.361	14.882	13.33	16.17	5.0056	0.1121
2	CHLORIDE	4.270	2.903	18.929	16.39	20.57	10.2895	2.8948
3	NITRITE	5.037	2.601	13.938	14.68	15.15	4.1247	3.1187
4	SULFATE	5.773	4.424	20.356	24.98	22.12	19.9078	-0.4610
5	BROMIDE	6.720	2.618	12.597	14.78	13.69	21.5585	7.7927
6	NITRATE	7.823	2.803	11.318	15.83	12.30	3.8118	-4.7038
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**17.710**	**92.020**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.98**
Vial Number:	**15**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 17:05**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

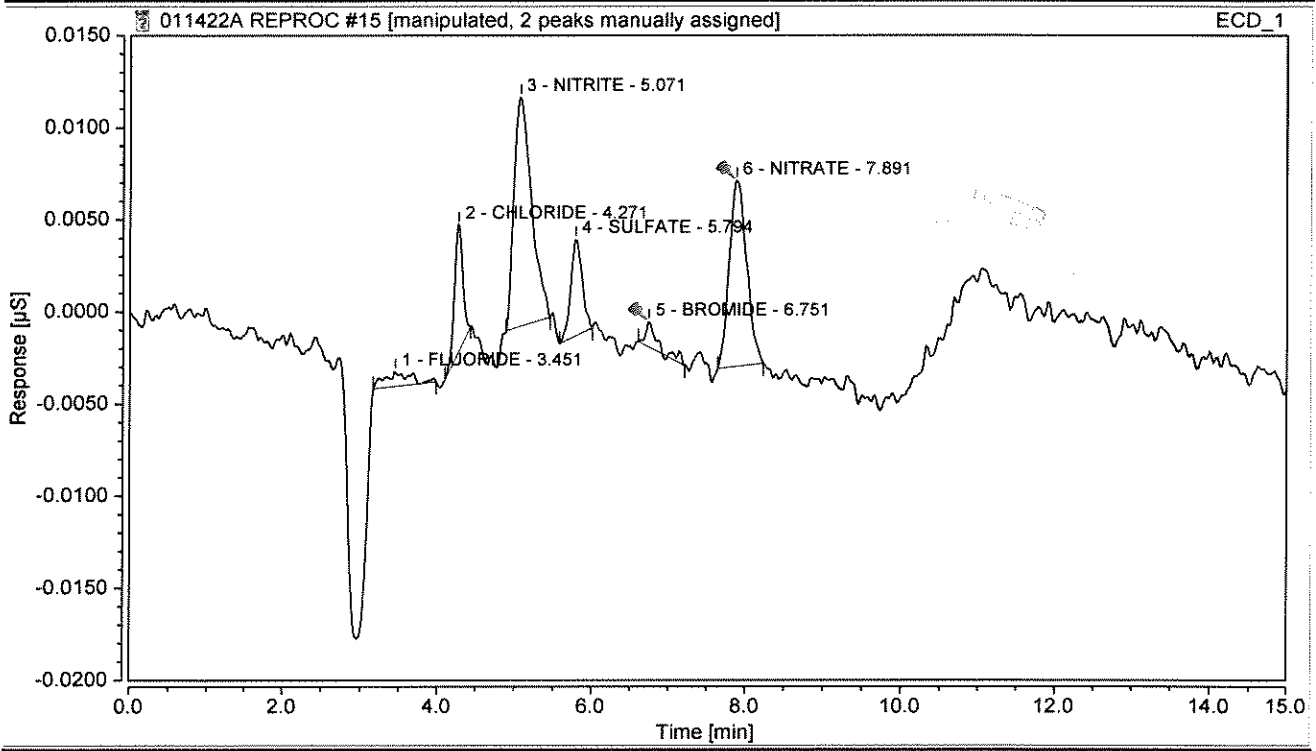
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	NITRITE	5.071	0.005	0.014	100.00	100.00	0.0073	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.005**	**0.014**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.98**
Vial Number:	**15**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 17:05**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

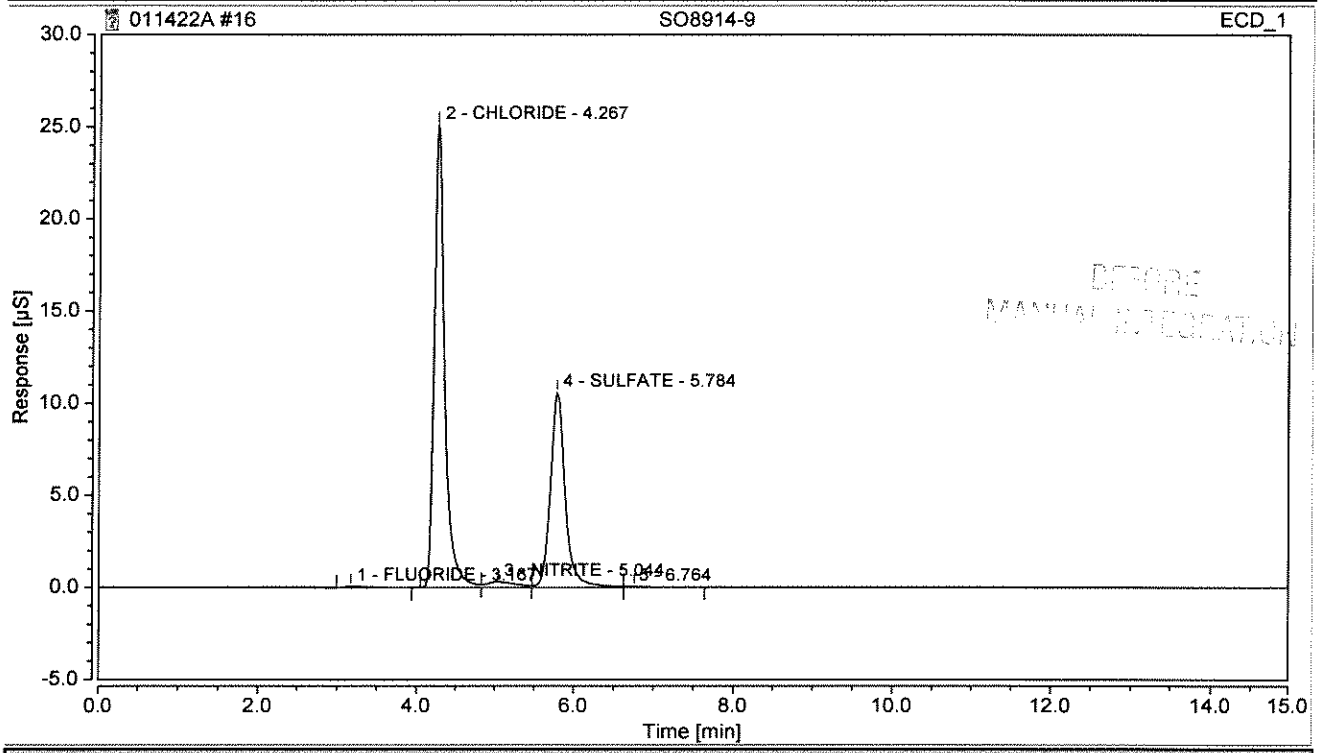
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.451	0.000	0.001	3.59	2.22	0.0006	n.a.
2	CHLORIDE	4.271	0.001	0.007	10.35	18.68	0.1433	n.a.
3	NITRITE	5.071	0.003	0.012	40.32	33.72	0.0053	n.a.
4	SULFATE	5.794	0.001	0.005	11.00	14.26	0.0041	n.a.
5	BROMIDE	6.751	0.000	0.001	2.99	3.73	0.0024	n.a.
6	NITRATE	7.891	0.003	0.010	31.75	27.40	0.0903	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.008**	**0.037**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8914-9**	*Run Time (min):*	**14.98**
Vial Number:	**16**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 17:26**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

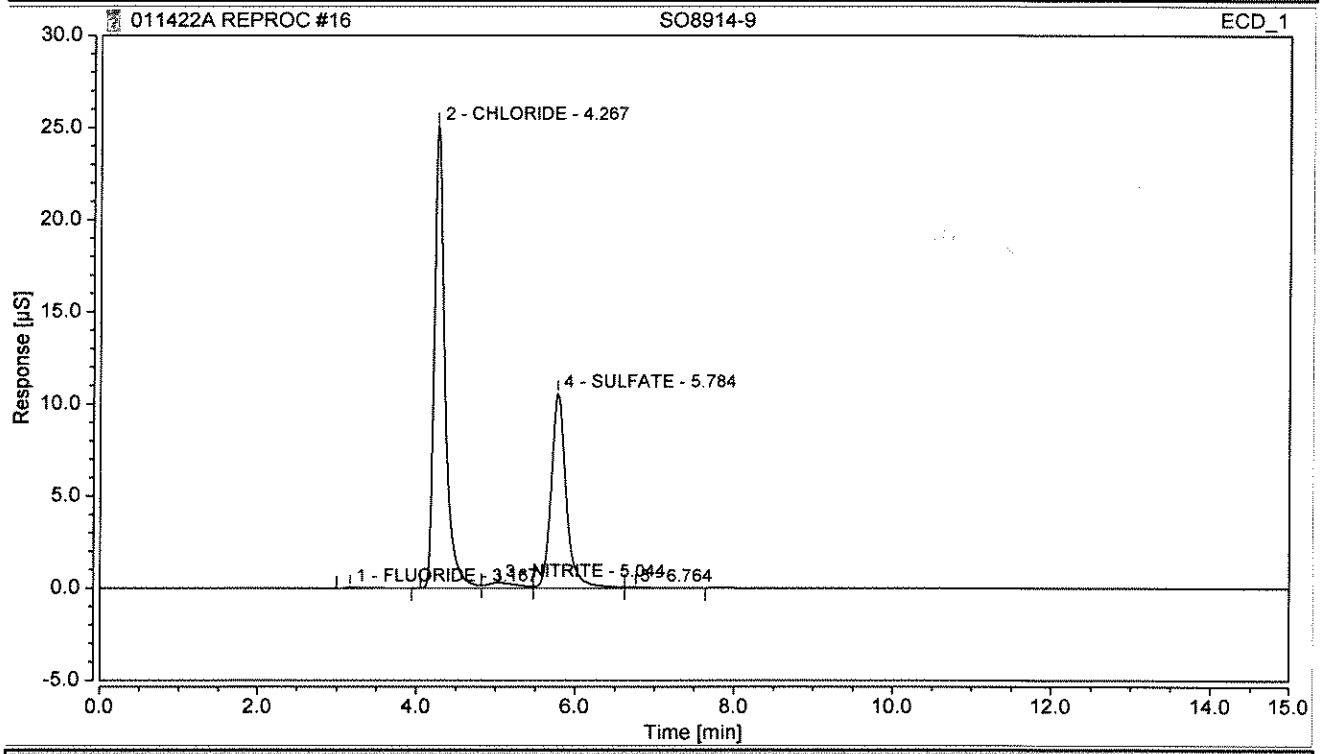
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	0.017	0.067	0.27	0.19	0.0736	n.a.
2	CHLORIDE	4.267	3.909	25.125	61.28	69.58	27.6137	n.a.
3	NITRITE	5.044	0.124	0.292	1.95	0.81	0.3942	n.a.
4	SULFATE	5.784	2.313	10.586	36.26	29.32	20.8162	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.364**	**36.071**	**99.76**	**99.90**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8914-9**	*Run Time (min):*	**14.98**
Vial Number:	**16**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 17:26**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

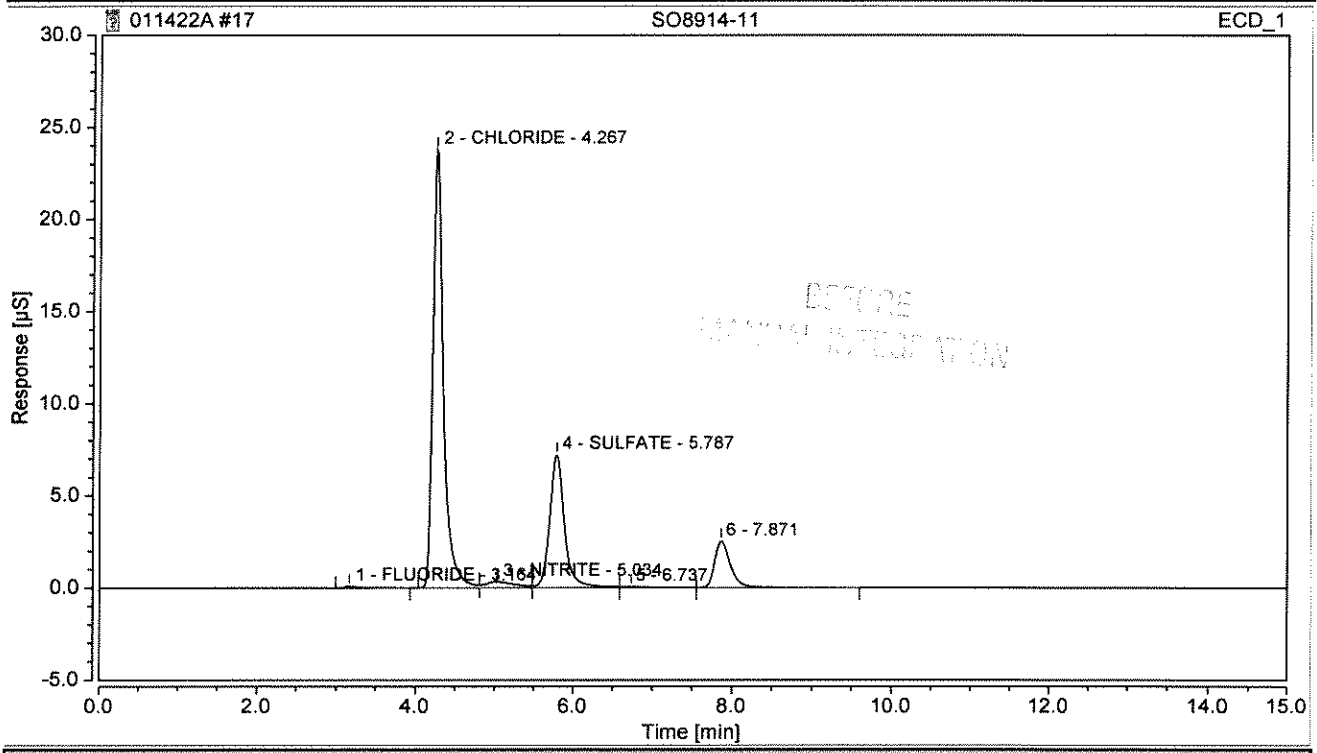
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	0.017	0.067	0.27	0.19	0.0736	n.a.
2	CHLORIDE	4.267	3.909	25.125	61.28	69.58	27.6137	n.a.
3	NITRITE	5.044	0.124	0.292	1.95	0.81	0.3942	n.a.
4	SULFATE	5.784	2.313	10.586	36.26	29.32	20.8162	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.364**	**36.071**	**99.76**	**99.90**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8914-11**	*Run Time (min):*	**14.99**
Vial Number:	**17**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 17:46**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

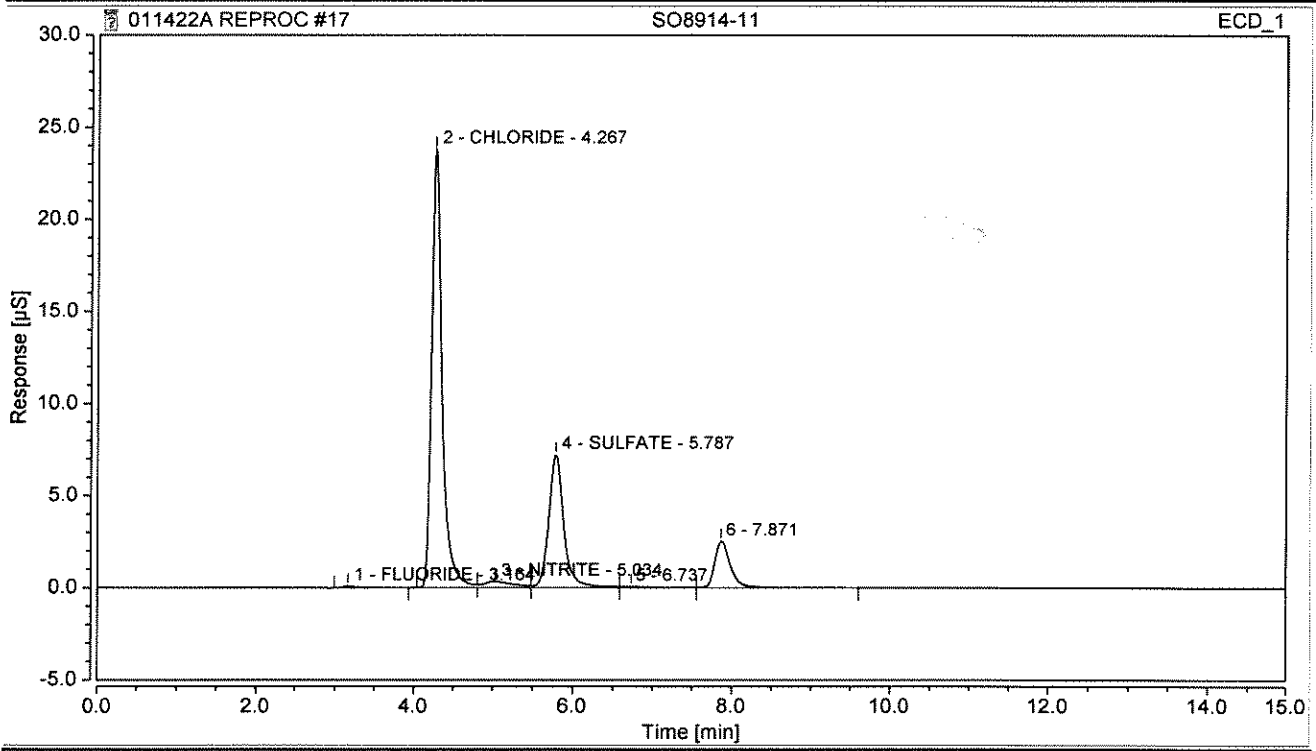
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.164	0.021	0.097	0.34	0.29	0.0875	n.a.
2	CHLORIDE	4.267	3.699	23.807	61.18	69.96	26.1457	n.a.
3	NITRITE	5.034	0.142	0.326	2.35	0.96	0.4514	n.a.
4	SULFATE	5.787	1.578	7.229	26.11	21.24	14.2050	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.440**	**31.460**	**89.98**	**92.44**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8914-11**	*Run Time (min):*	**14.99**
Vial Number:	**17**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 17:46**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

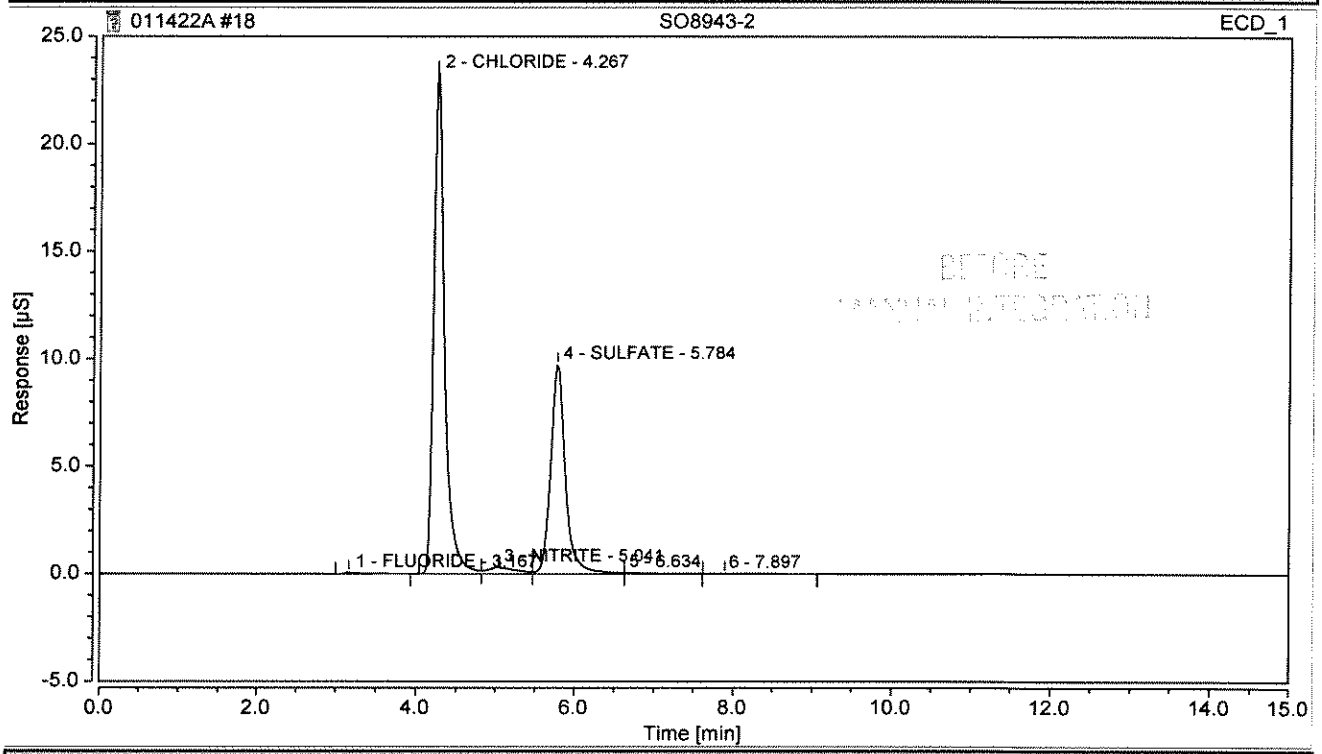
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.164	0.021	0.097	0.34	0.29	0.0875	n.a.
2	CHLORIDE	4.267	3.699	23.807	61.18	69.96	26.1457	n.a.
3	NITRITE	5.034	0.142	0.326	2.35	0.96	0.4514	n.a.
4	SULFATE	5.787	1.578	7.229	26.11	21.24	14.2050	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.440**	**31.460**	**89.98**	**92.44**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8943-2**	*Run Time (min):*	**14.99**
Vial Number:	**18**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 18:07**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

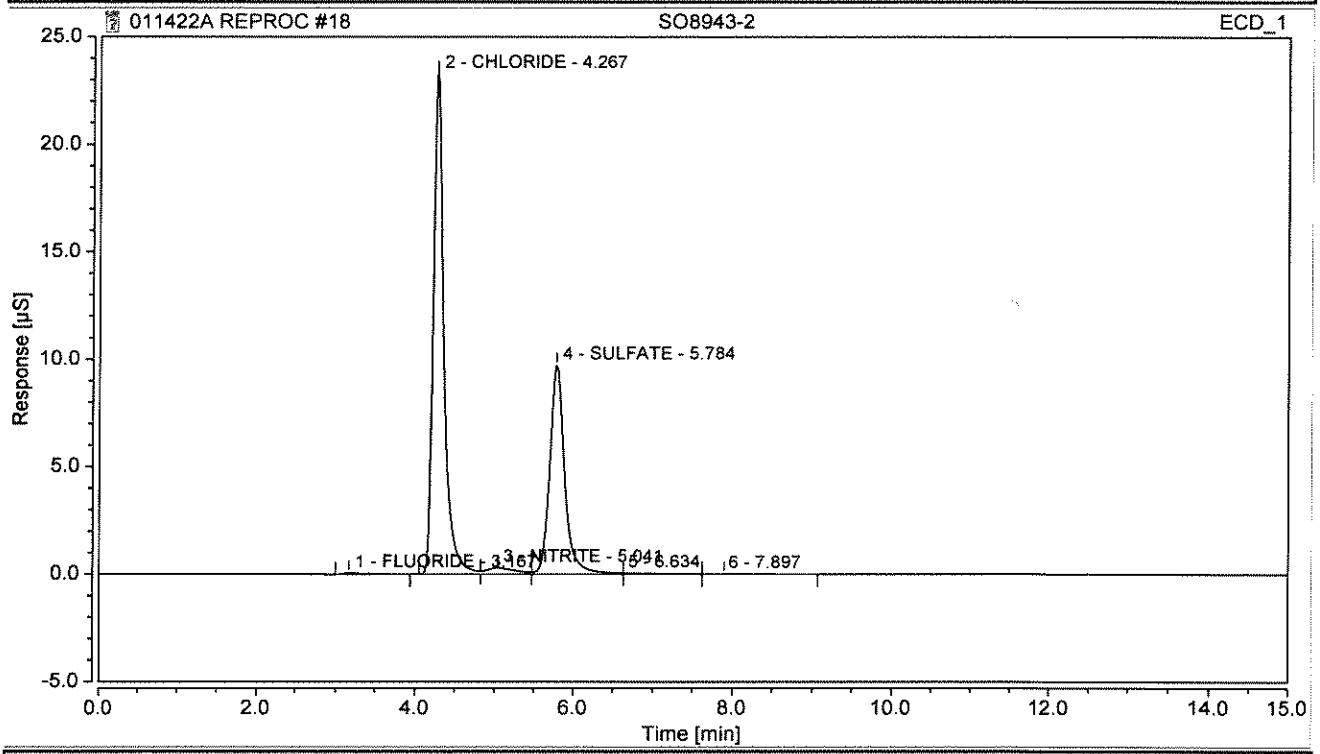
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	0.016	0.064	0.26	0.19	0.0663	n.a.
2	CHLORIDE	4.267	3.641	23.289	61.50	69.67	25.7423	n.a.
3	NITRITE	5.041	0.120	0.291	2.03	0.87	0.3815	n.a.
4	SULFATE	5.784	2.119	9.728	35.79	29.10	19.0690	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.896**	**33.371**	**99.59**	**99.84**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8943-2**	*Run Time (min):*	**14.99**
Vial Number:	**18**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 18:07**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

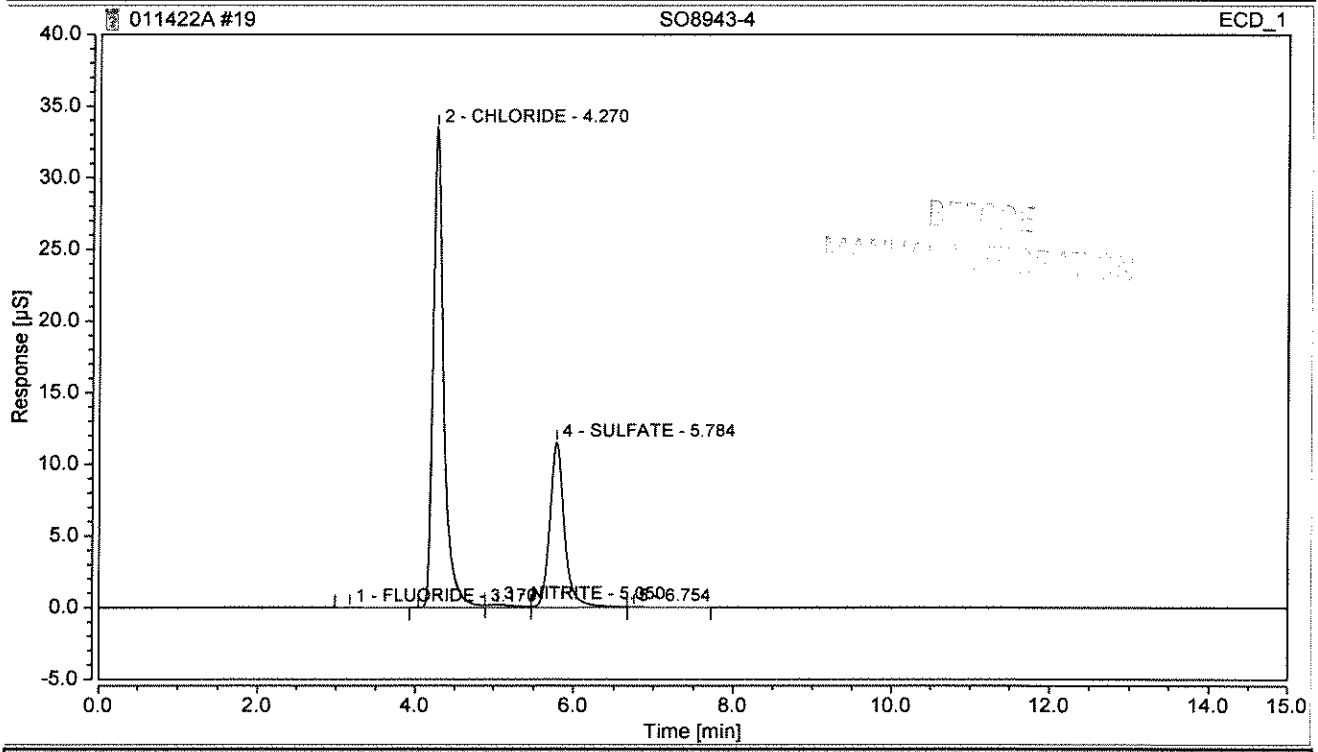
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	0.016	0.064	0.26	0.19	0.0663	n.a.
2	CHLORIDE	4.267	3.641	23.289	61.50	69.67	25.7423	n.a.
3	NITRITE	5.041	0.120	0.291	2.03	0.87	0.3815	n.a.
4	SULFATE	5.784	2.119	9.728	35.79	29.10	19.0690	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.896**	**33.371**	**99.59**	**99.84**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8943-4**	*Run Time (min):*	**14.99**
Vial Number:	**19**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 18:28**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

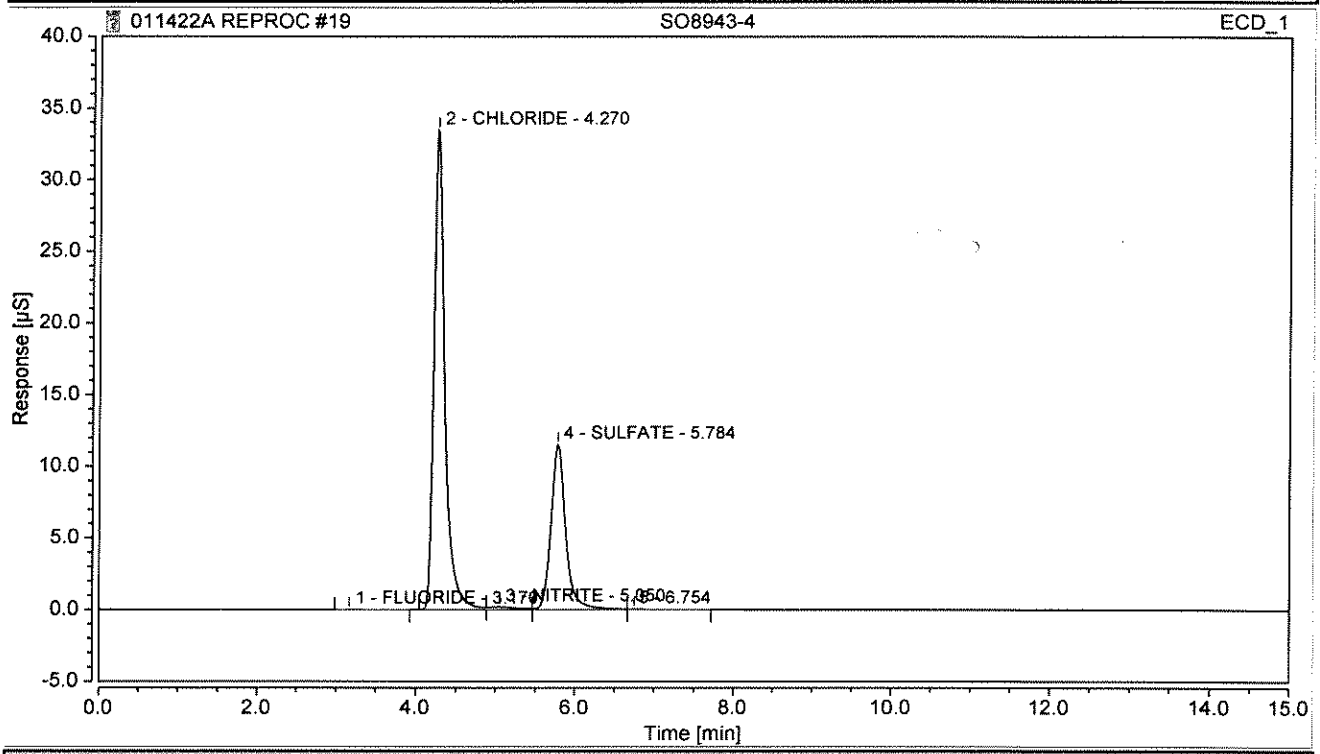
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.170	0.009	0.033	0.12	0.07	0.0392	n.a.
2	CHLORIDE	4.270	5.276	33.491	67.08	73.99	37.1684	n.a.
3	NITRITE	5.050	0.073	0.184	0.93	0.41	0.2312	n.a.
4	SULFATE	5.784	2.493	11.520	31.70	25.45	22.4406	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.851**	**45.227**	**99.83**	**99.92**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8943-4**	*Run Time (min):*	**14.99**
Vial Number:	**19**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 18:28**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

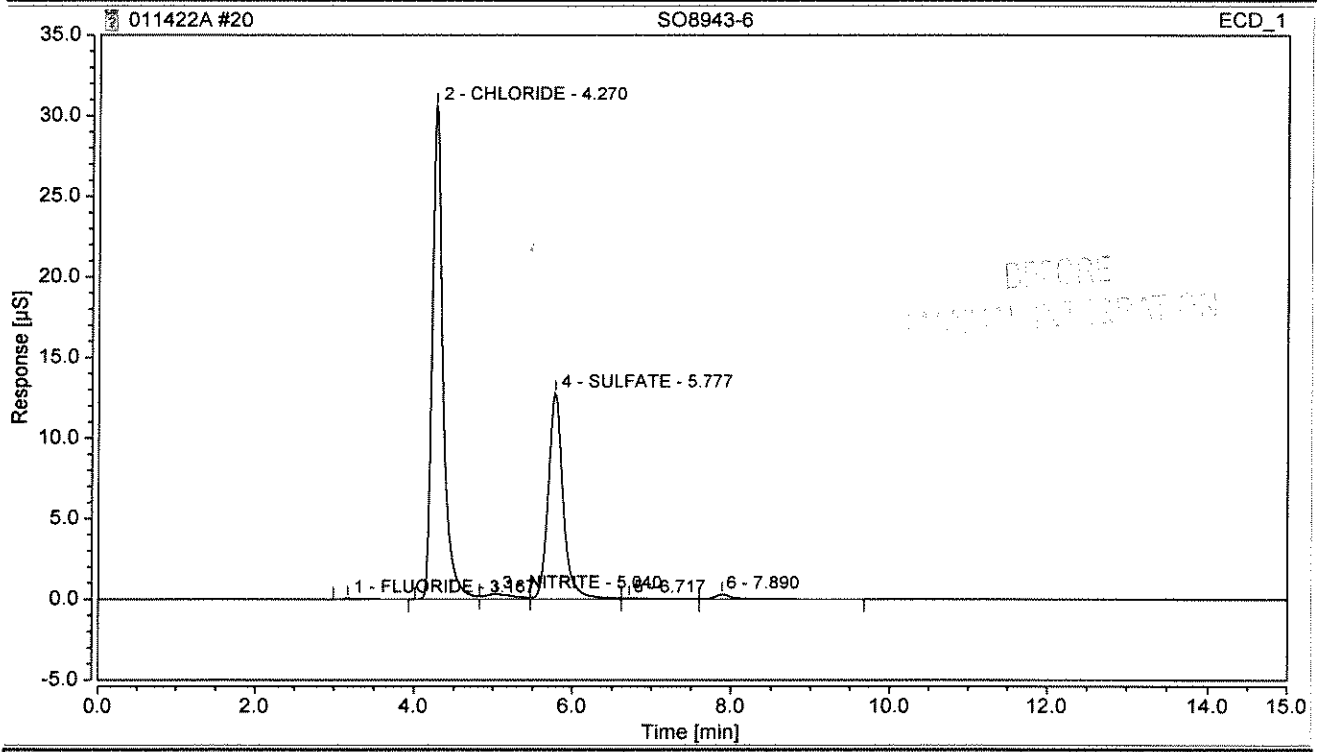
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.170	0.009	0.033	0.12	0.07	0.0392	n.a.
2	CHLORIDE	4.270	5.276	33.491	67.08	73.99	37.1684	n.a.
3	NITRITE	5.050	0.073	0.184	0.93	0.41	0.2312	n.a.
4	SULFATE	5.784	2.493	11.520	31.70	25.45	22.4406	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.851**	**45.227**	**99.83**	**99.92**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8943-6**	*Run Time (min):*	**14.99**
Vial Number:	**20**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 18:49**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

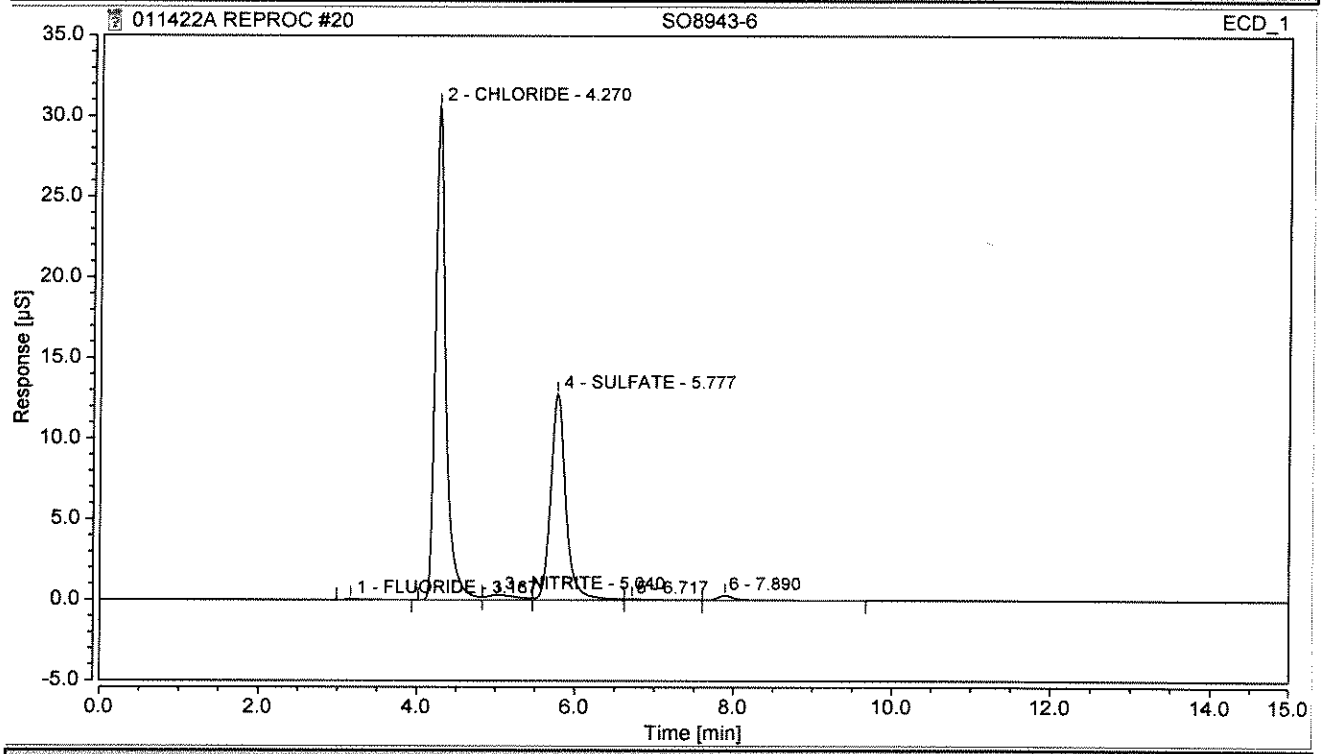
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	0.018	0.075	0.23	0.17	0.0764	n.a.
2	CHLORIDE	4.270	4.800	30.629	61.20	69.36	33.8406	n.a.
3	NITRITE	5.040	0.133	0.314	1.70	0.71	0.4232	n.a.
4	SULFATE	5.777	2.791	12.788	35.59	28.96	25.1152	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.742**	**43.806**	**98.72**	**99.20**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8943-6**	*Run Time (min):*	**14.99**
Vial Number:	**20**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 18:49**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

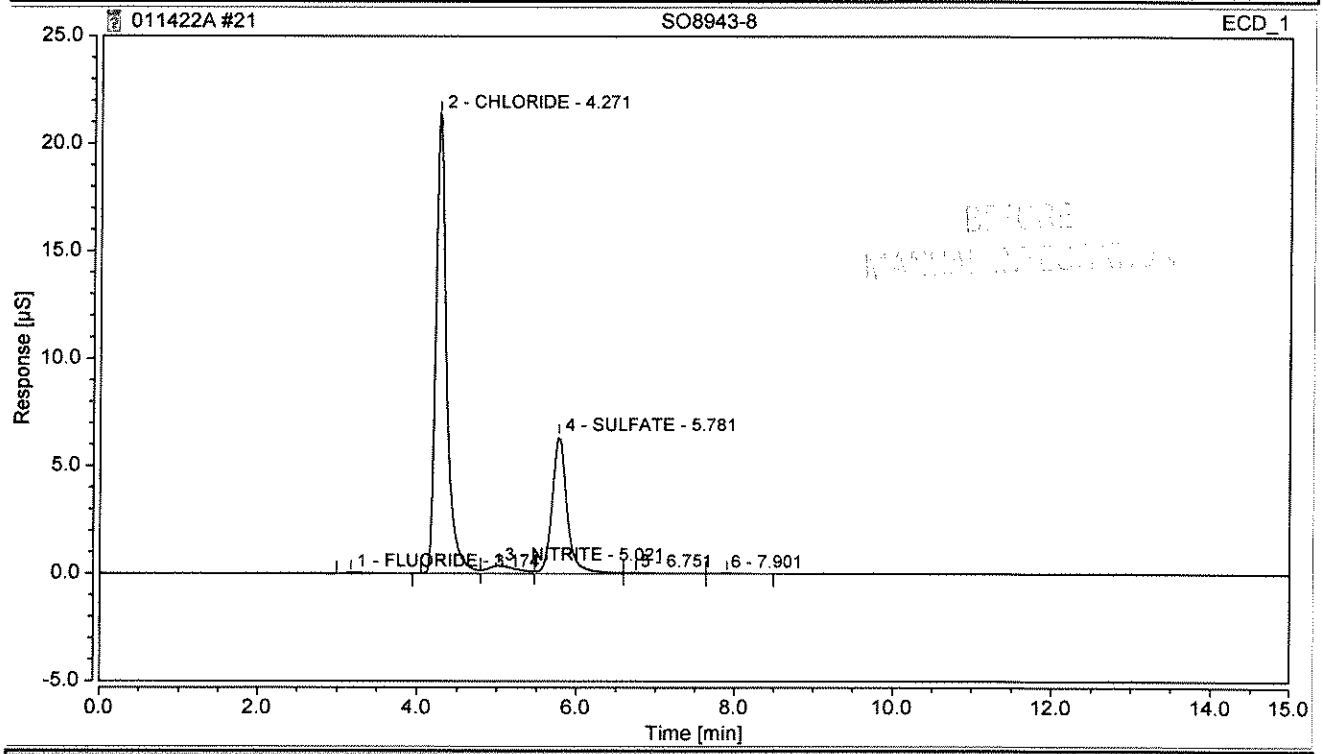
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	0.018	0.075	0.23	0.17	0.0764	n.a.
2	CHLORIDE	4.270	4.800	30.629	61.20	69.36	33.8406	n.a.
3	NITRITE	5.040	0.133	0.314	1.70	0.71	0.4232	n.a.
4	SULFATE	5.777	2.791	12.788	35.59	28.96	25.1152	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.742**	**43.806**	**98.72**	**99.20**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8943-8**	*Run Time (min):*	**14.99**
Vial Number:	**21**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 19:10**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

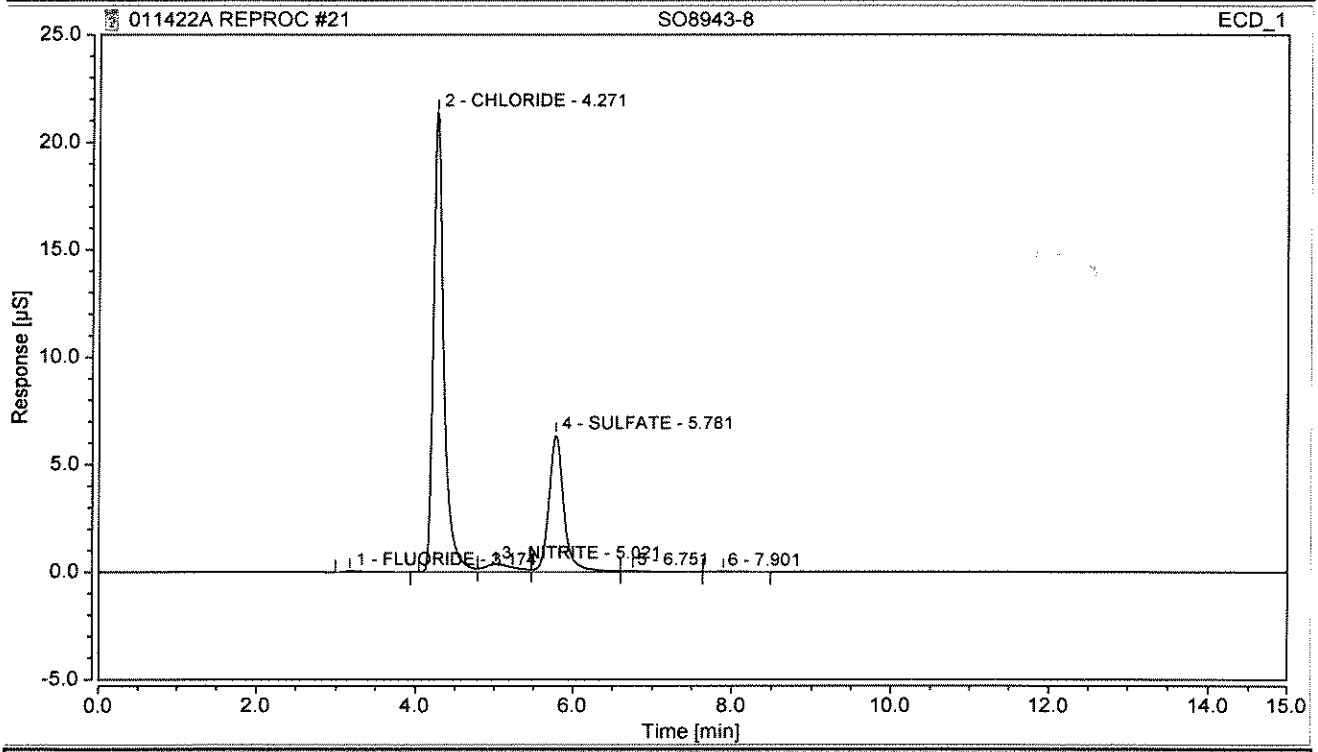
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.174	0.016	0.055	0.33	0.20	0.0691	n.a.
2	CHLORIDE	4.271	3.327	21.389	67.76	75.79	23.5426	n.a.
3	NITRITE	5.021	0.153	0.348	3.11	1.23	0.4841	n.a.
4	SULFATE	5.781	1.390	6.370	28.31	22.57	12.5091	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.886**	**28.162**	**99.51**	**99.78**		

Chromatogram and Results

Injection Details

Injection Name:	**SO8943-8**	*Run Time (min):*	**14.99**
Vial Number:	**21**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**14/Jan/22 19:10**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

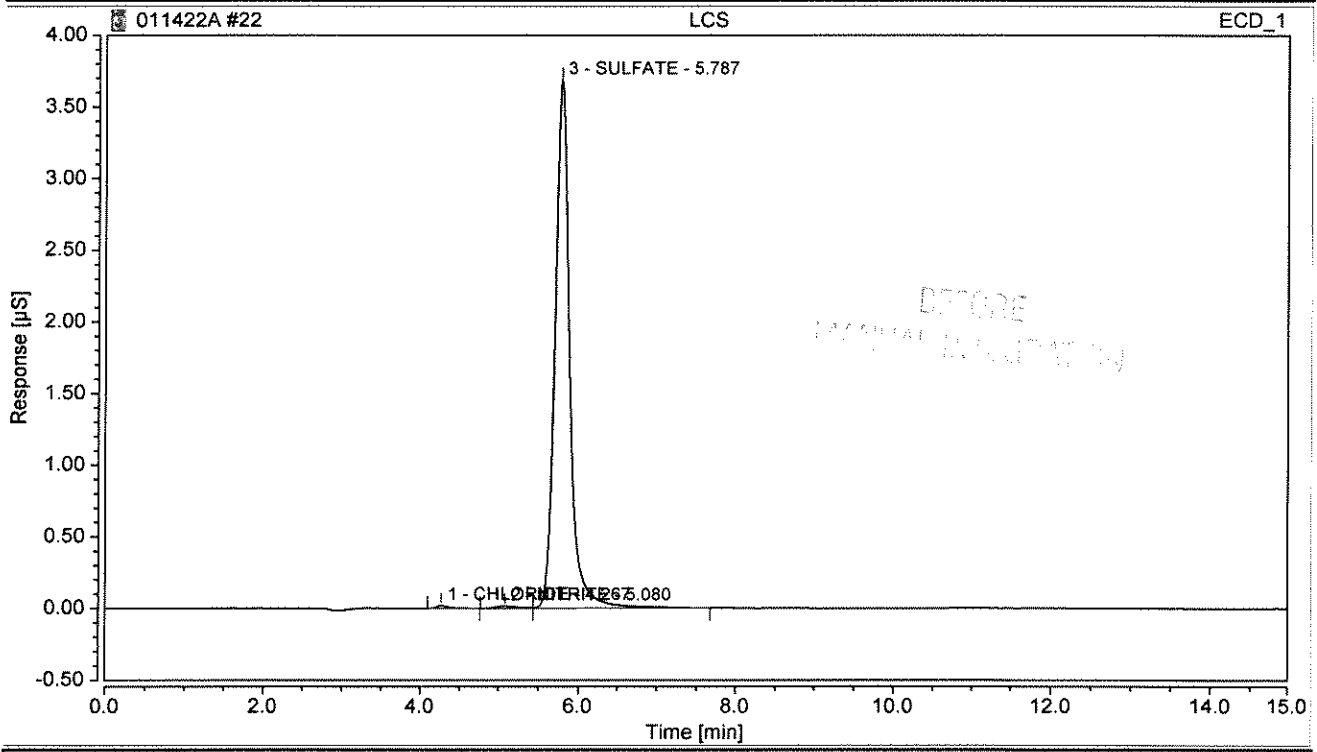
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.174	0.016	0.055	0.33	0.20	0.0691	n.a.
2	CHLORIDE	4.271	3.327	21.389	67.76	75.79	23.5426	n.a.
3	NITRITE	5.021	0.153	0.348	3.11	1.23	0.4841	n.a.
4	SULFATE	5.781	1.390	6.370	28.31	22.57	12.5091	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.886**	**28.162**	**99.51**	**99.78**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.98**
Vial Number:	**22**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**07**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 19:30**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

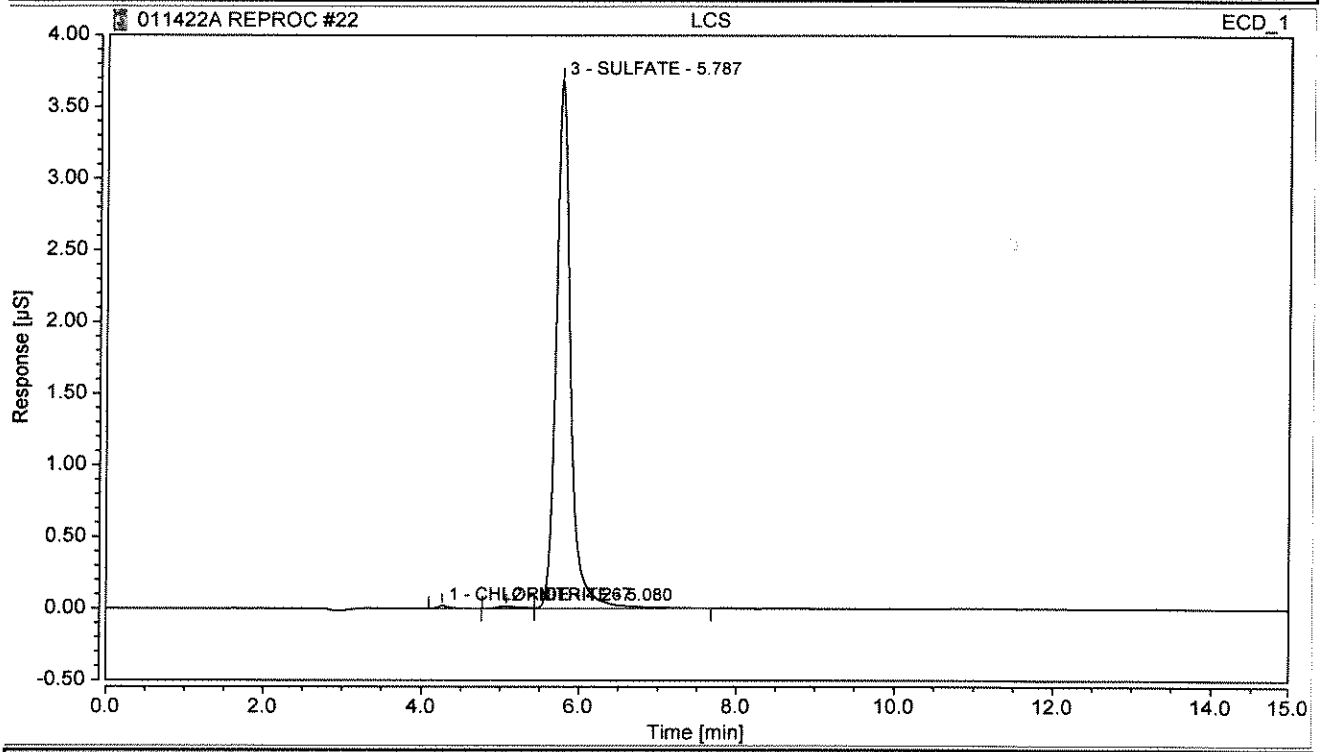
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	0.003	0.019	0.44	0.51	0.1524	-95.9357
2	NITRITE	5.080	0.005	0.016	0.61	0.42	0.0077	-99.3242
3	SULFATE	5.787	0.782	3.686	98.95	99.07	3.5180	-6.1880
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.790**	**3.721**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.98**
Vial Number:	**22**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**07**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 19:30**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

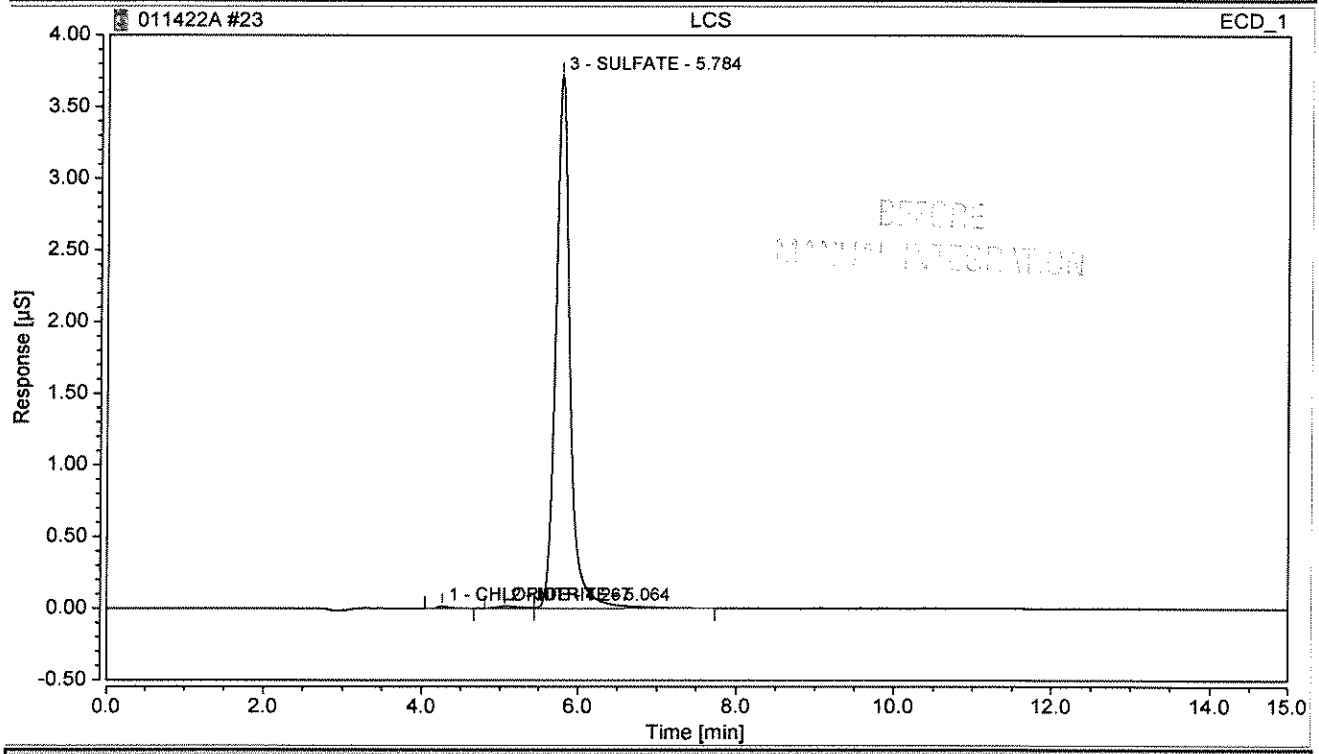
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	0.003	0.019	0.44	0.51	0.1524	-95.9357
2	NITRITE	5.080	0.005	0.016	0.61	0.42	0.0077	-99.3242
3	SULFATE	5.787	0.782	3.686	98.95	99.07	3.5180	-6.1880
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.790**	**3.721**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.98**
Vial Number:	**23**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**07**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 19:51**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

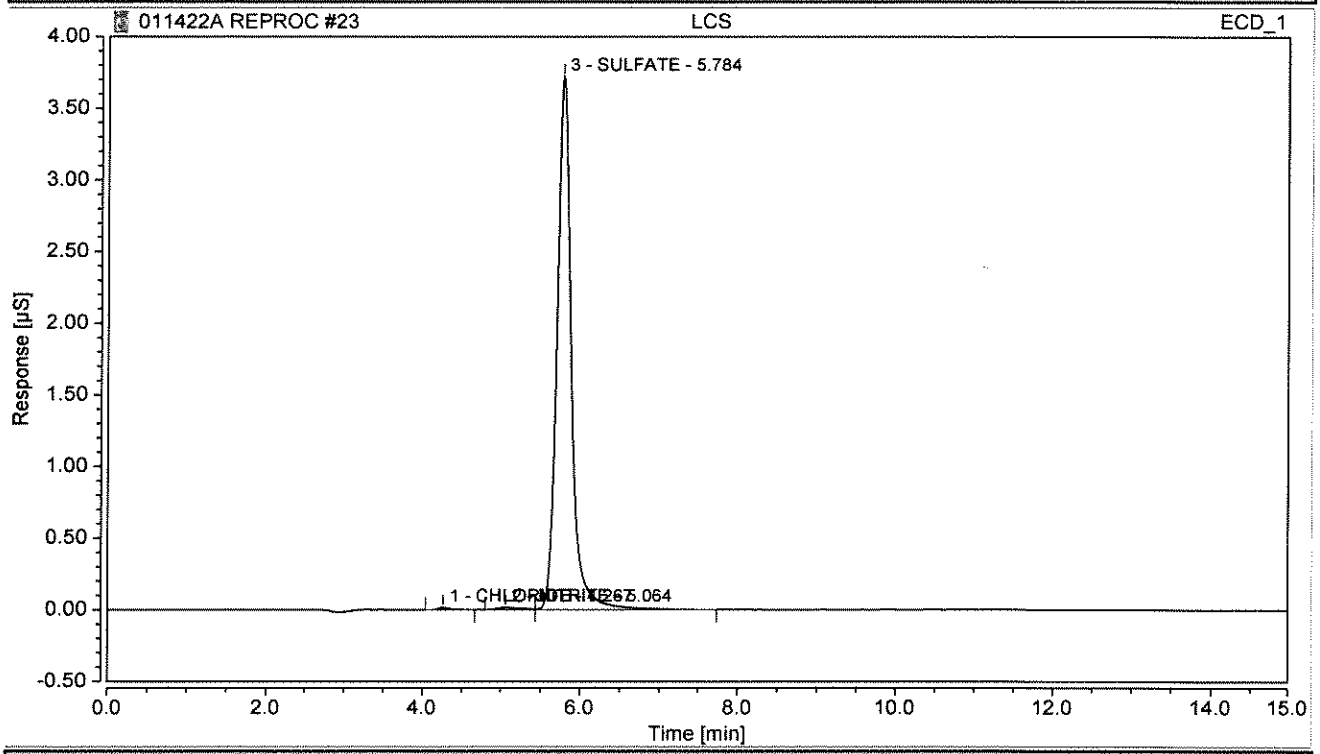
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	0.003	0.016	0.33	0.43	0.1494	-96.0149
2	NITRITE	5.064	0.005	0.015	0.63	0.40	0.0079	-99.3042
3	SULFATE	5.784	0.784	3.720	99.04	99.18	3.5286	-5.9043
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.792**	**3.751**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.98**
Vial Number:	**23**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**07**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 19:51**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

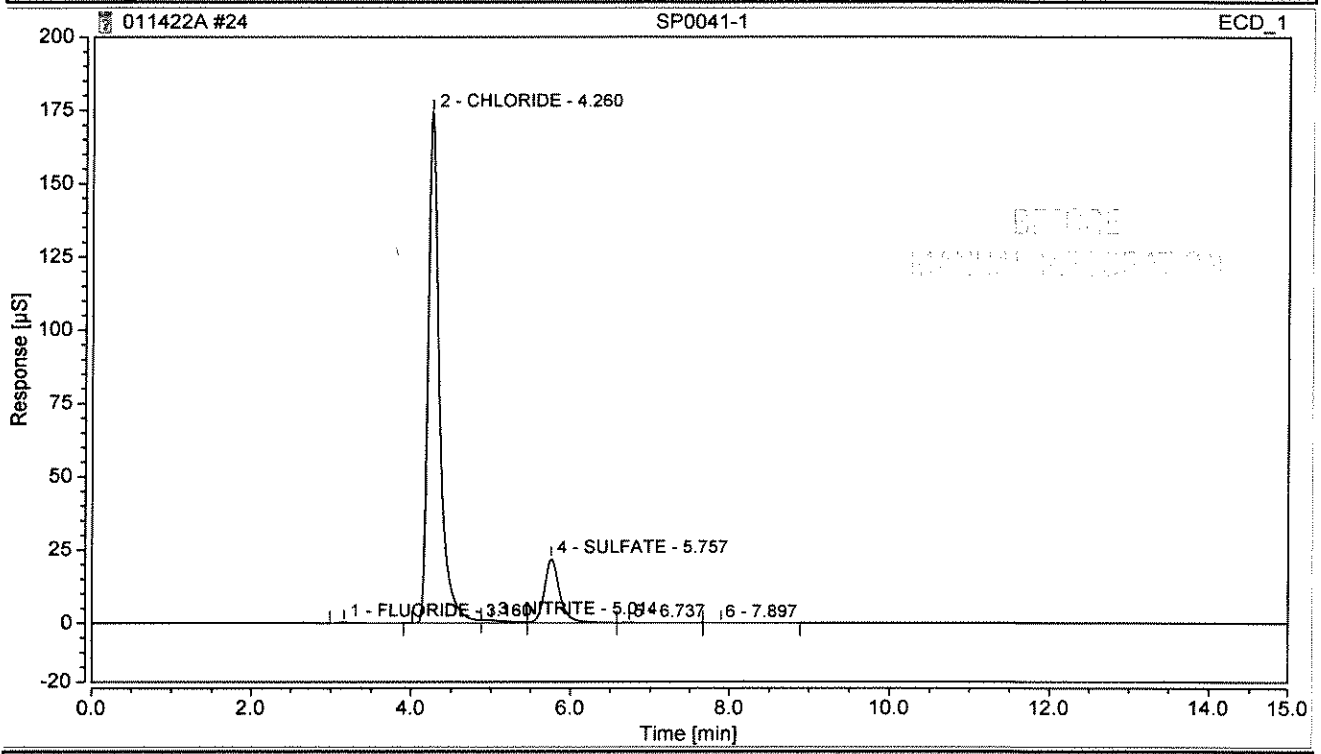
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	0.003	0.016	0.33	0.43	0.1494	-96.0149
2	NITRITE	5.064	0.005	0.015	0.63	0.40	0.0079	-99.3042
3	SULFATE	5.784	0.784	3.720	99.04	99.18	3.5286	-5.9043
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.792**	**3.751**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-1**	*Run Time (min):*	**14.98**
Vial Number:	**24**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 20:12**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

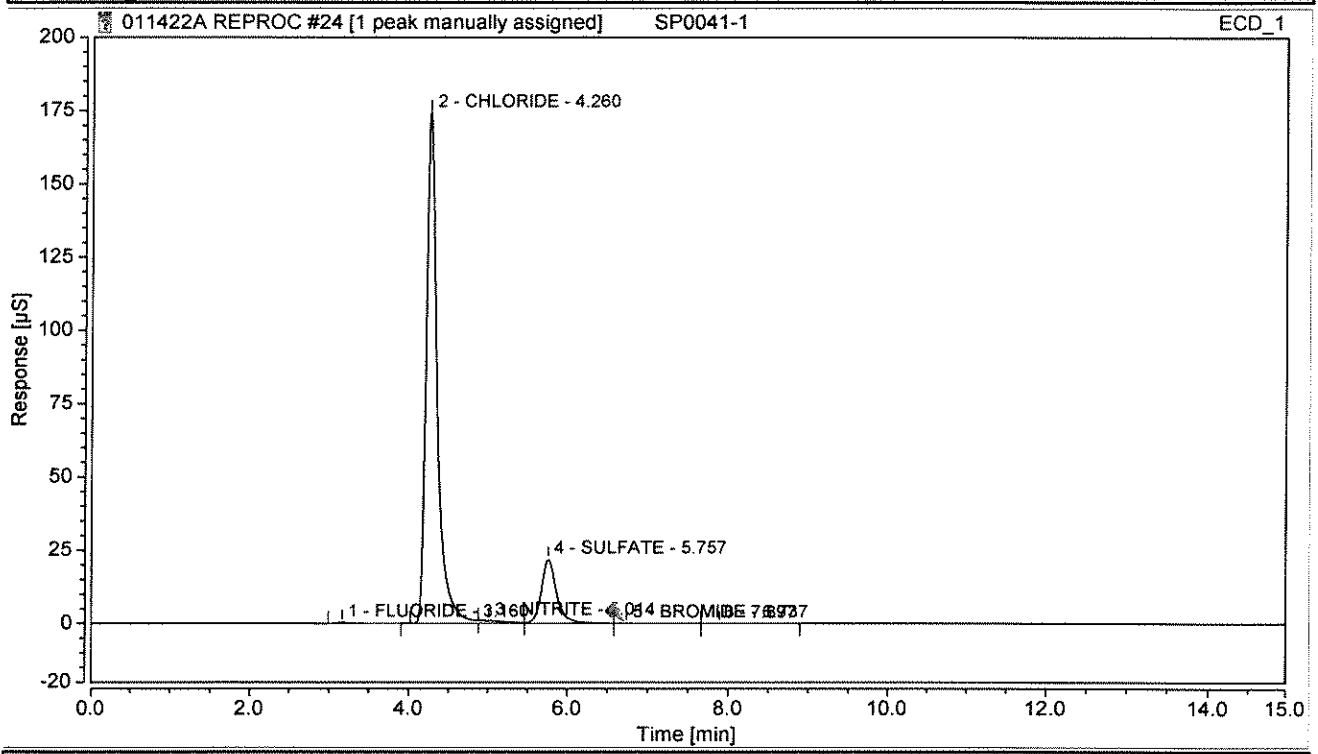
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.160	0.050	0.294	0.15	0.15	0.1068	n.a.
2	CHLORIDE	4.260	28.504	174.297	84.02	88.21	99.7935	n.a.
3	NITRITE	5.014	0.378	0.931	1.11	0.47	0.5999	n.a.
4	SULFATE	5.757	4.930	21.921	14.53	11.09	22.1848	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**33.863**	**197.443**	**99.82**	**99.93**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-1**	*Run Time (min):*	**14.98**
Vial Number:	**24**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 20:12**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

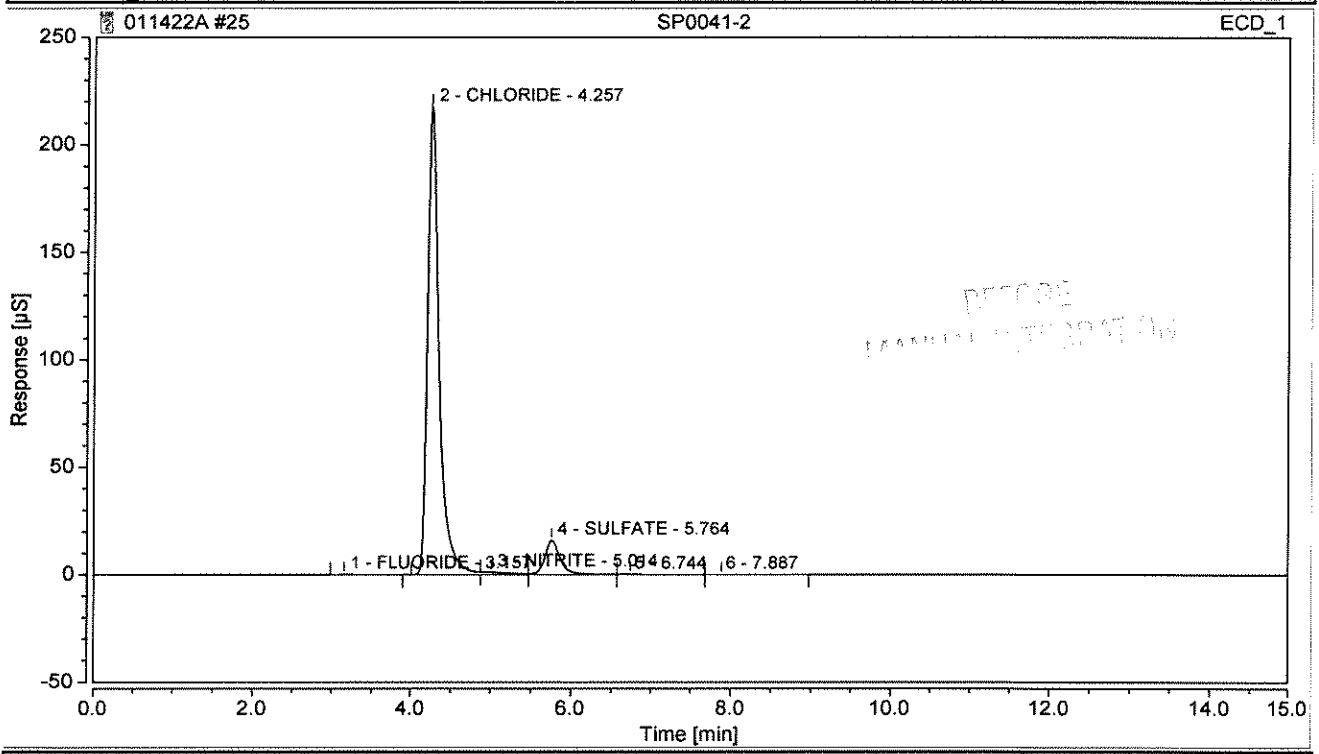
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.160	0.050	0.294	0.15	0.15	0.1068	n.a.
2	CHLORIDE	4.260	28.504	174.297	84.02	88.21	99.7935	n.a.
3	NITRITE	5.014	0.378	0.931	1.11	0.47	0.5999	n.a.
4	SULFATE	5.757	4.930	21.921	14.53	11.09	22.1848	n.a.
5	BROMIDE	6.737	0.052	0.127	0.15	0.06	0.2170	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**33.915**	**197.570**	**99.97**	**99.99**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-2**	*Run Time (min):*	**14.98**
Vial Number:	**25**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 20:33**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

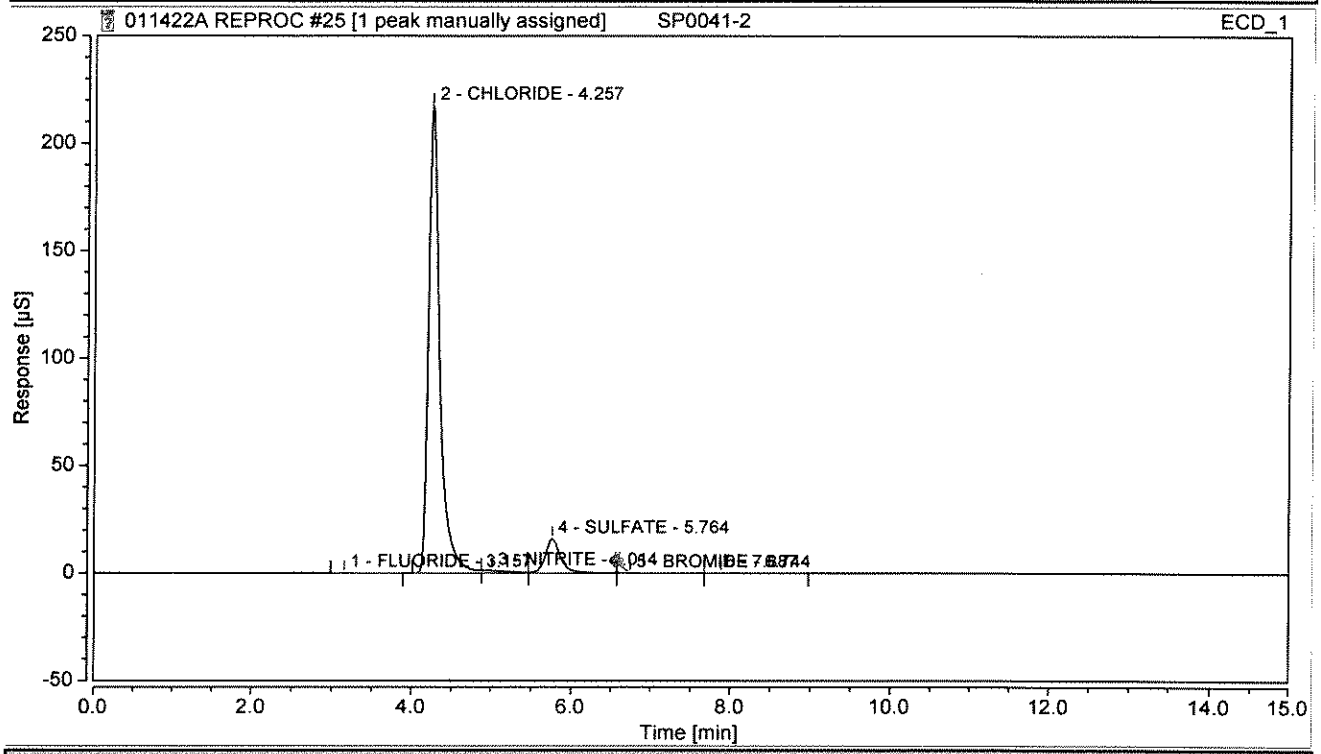
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.157	0.040	0.225	0.10	0.10	0.0852	n.a.
2	CHLORIDE	4.257	36.002	217.724	89.60	92.57	126.0068	n.a.
3	NITRITE	5.014	0.456	1.115	1.13	0.47	0.7230	n.a.
4	SULFATE	5.764	3.625	15.996	9.02	6.80	16.3114	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**40.123**	**235.060**	**99.86**	**99.95**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-2**	*Run Time (min):*	**14.98**
Vial Number:	**25**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 20:33**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

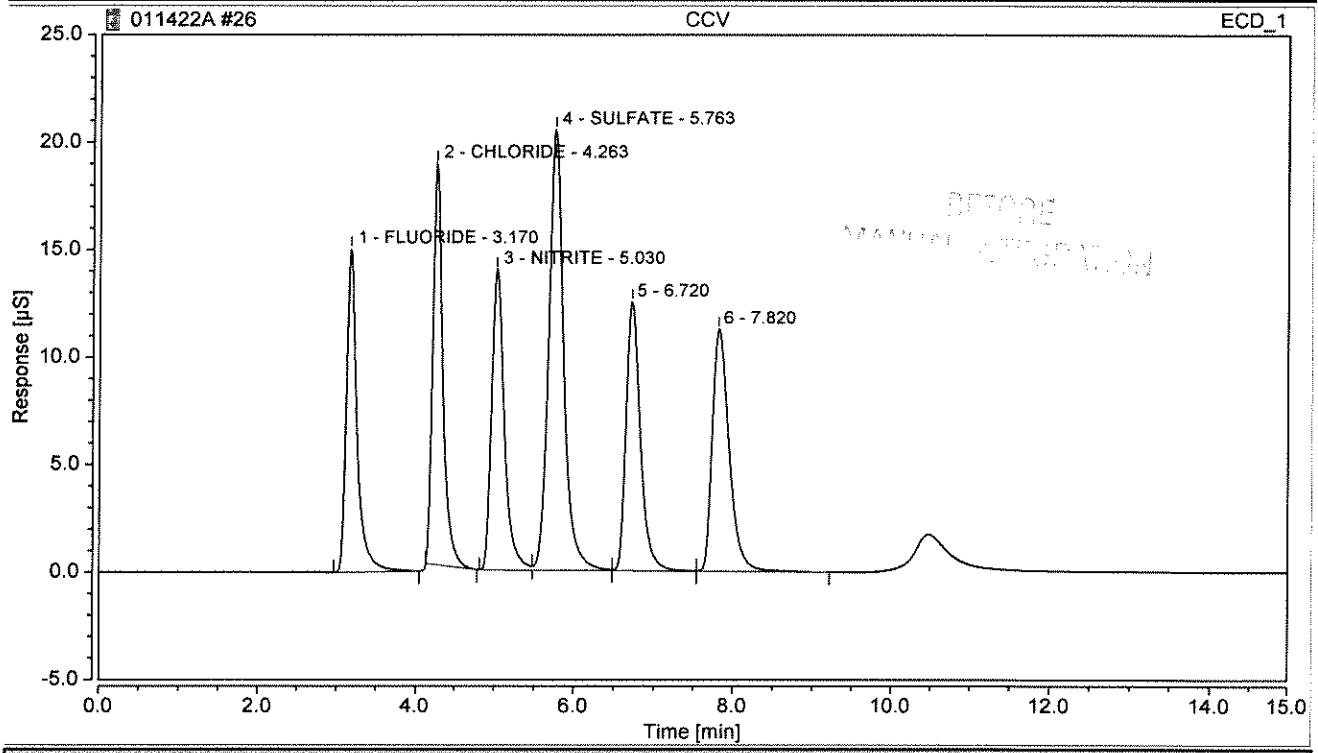
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.157	0.040	0.225	0.10	0.10	0.0852	n.a.
2	CHLORIDE	4.257	36.002	217.724	89.60	92.57	126.0068	n.a.
3	NITRITE	5.014	0.456	1.115	1.13	0.47	0.7230	n.a.
4	SULFATE	5.764	3.625	15.996	9.02	6.80	16.3114	n.a.
5	BROMIDE	6.744	0.049	0.113	0.12	0.05	0.1932	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**40.171**	**235.173**	**99.98**	**99.99**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.99**
Vial Number:	**26**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 20:54**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

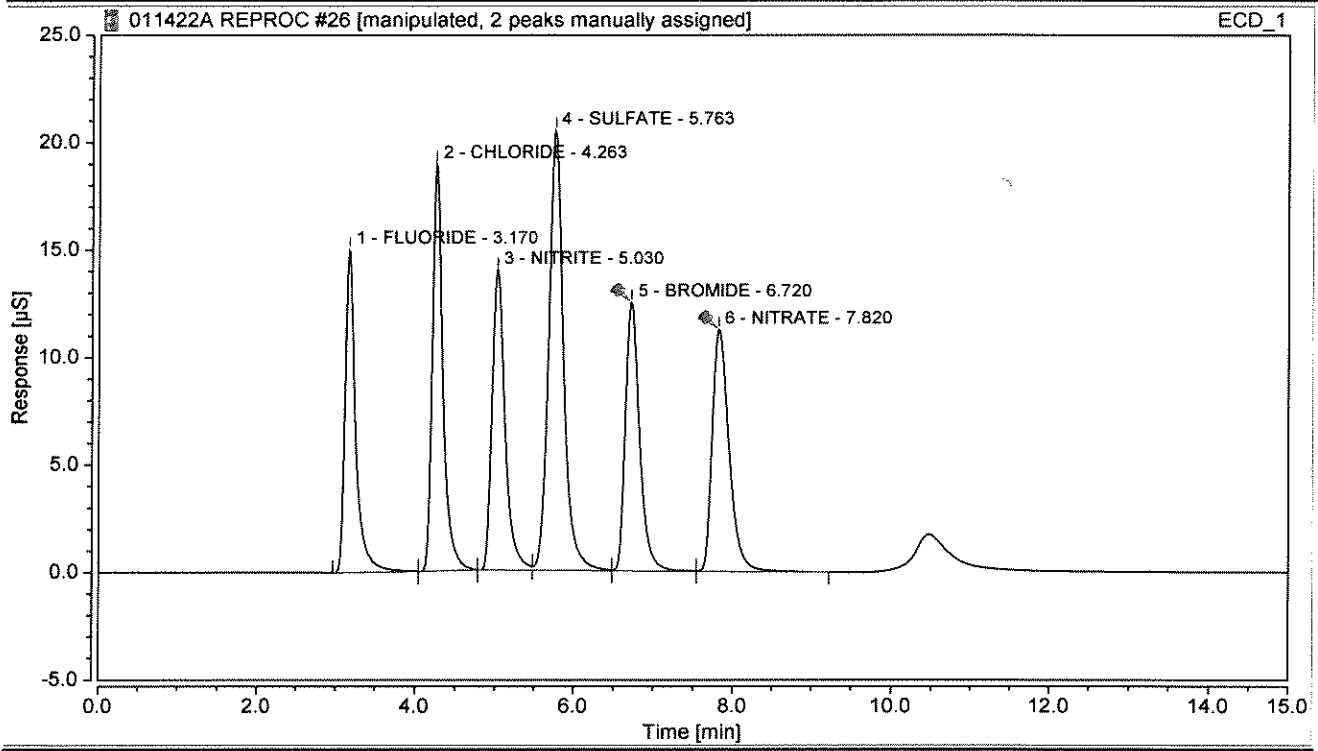
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.170	2.372	15.040	13.45	16.36	5.0281	0.5614
2	CHLORIDE	4.263	2.797	18.670	15.86	20.31	9.9204	-0.7960
3	NITRITE	5.030	2.611	13.976	14.81	15.20	4.1416	3.5412
4	SULFATE	5.763	4.441	20.492	25.18	22.29	19.9850	-0.0752
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.221**	**68.177**	**69.30**	**74.16**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.99**
Vial Number:	**26**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 20:54**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

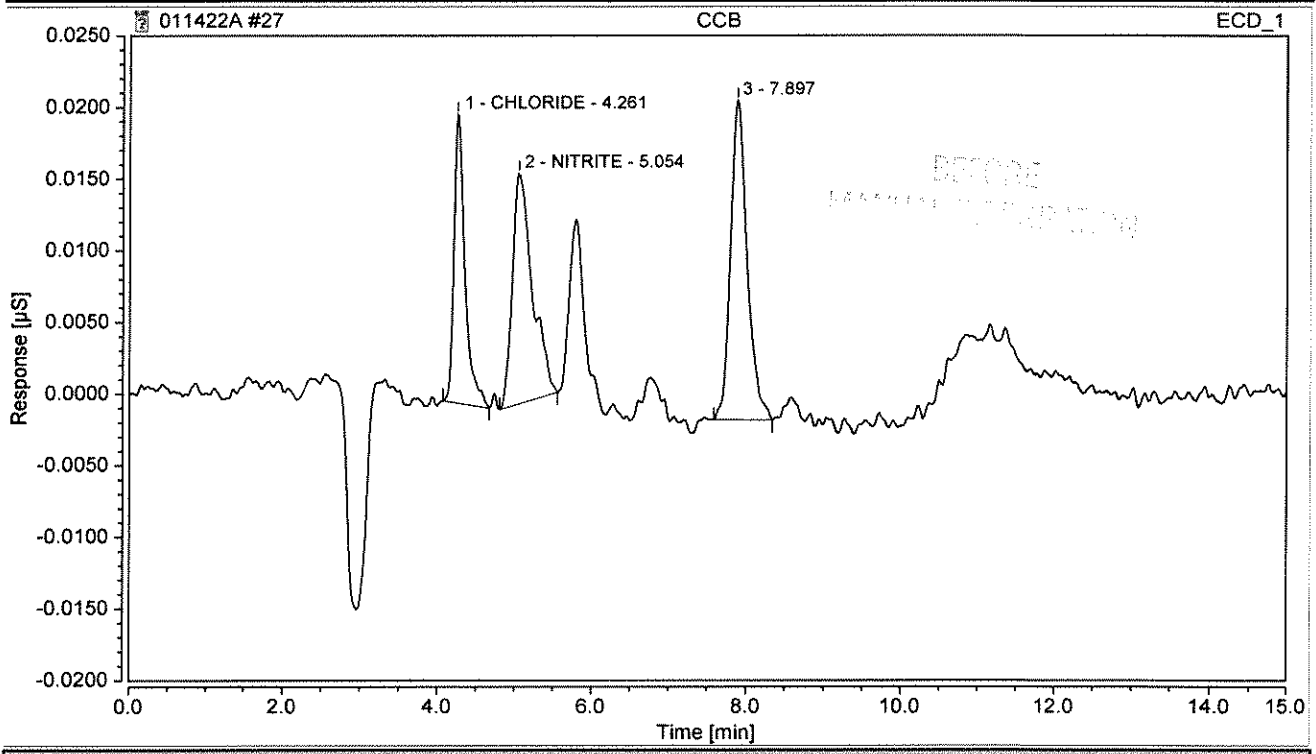
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.170	2.371	15.040	13.37	16.31	5.0277	0.5549
2	CHLORIDE	4.263	2.916	18.951	16.44	20.55	10.3355	3.3548
3	NITRITE	5.030	2.607	13.970	14.70	15.15	4.1351	3.3768
4	SULFATE	5.763	4.436	20.486	25.01	22.22	19.9634	-0.1829
5	BROMIDE	6.720	2.610	12.499	14.71	13.56	21.3901	6.9506
6	NITRATE	7.820	2.800	11.252	15.78	12.20	3.8070	-4.8242
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**17.741**	**92.197**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.98**
Vial Number:	**27**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 21:14**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

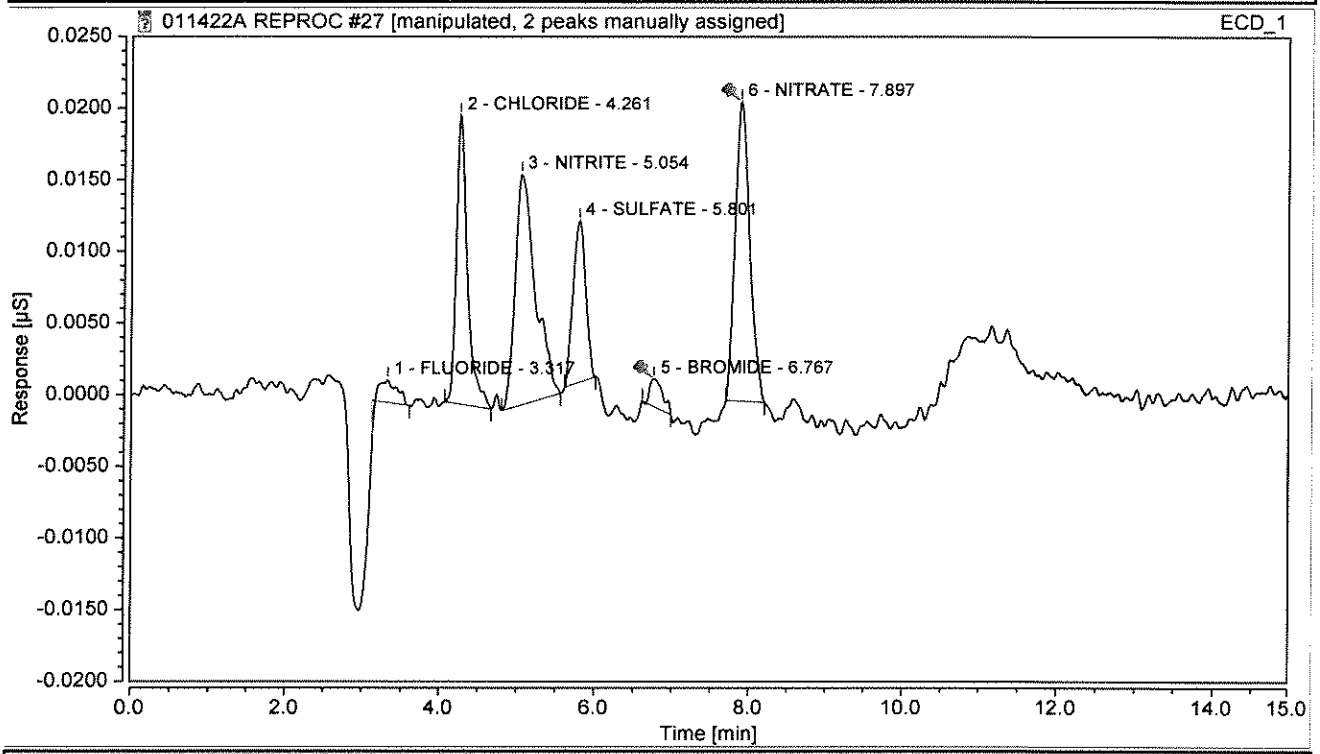
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.261	0.003	0.020	24.22	34.43	0.1519	n.a.
2	NITRITE	5.054	0.005	0.016	35.62	27.51	0.0078	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.008**	**0.036**	**59.83**	**61.94**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.98**
Vial Number:	**27**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 21:14**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

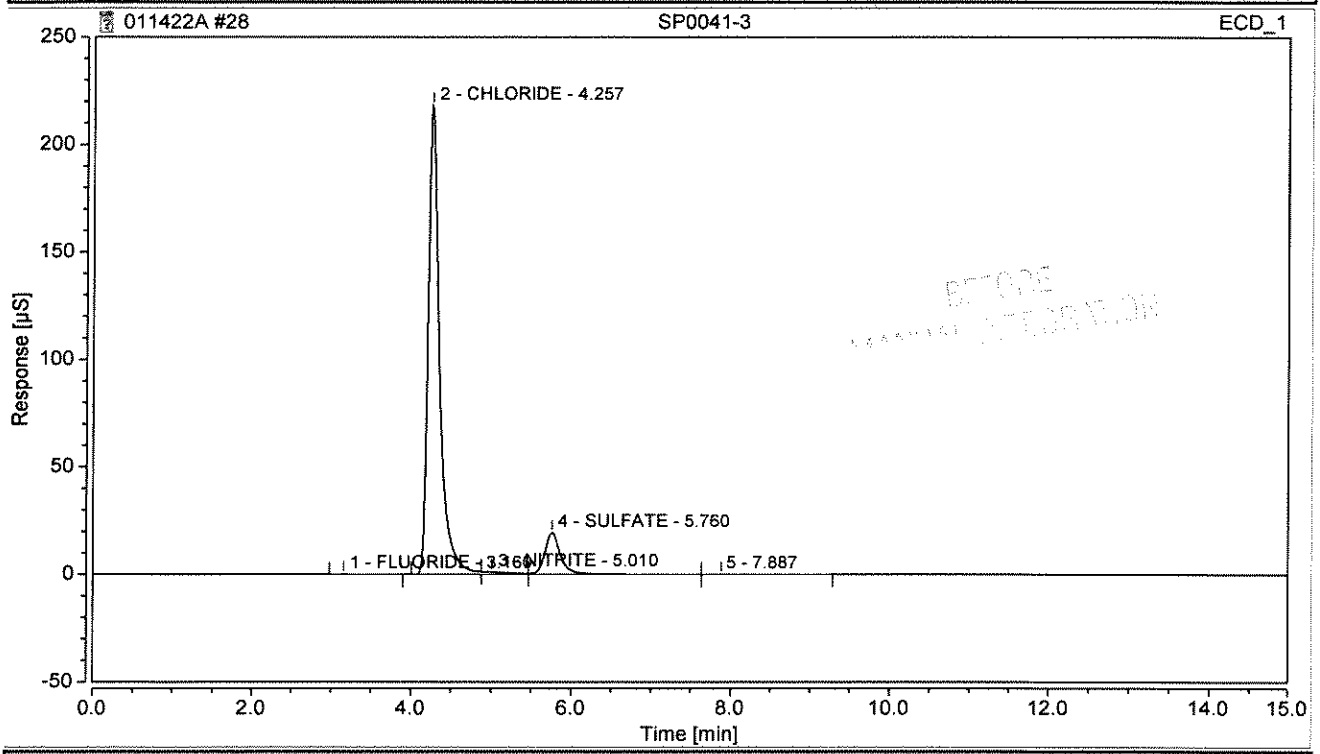
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.317	0.000	0.002	2.34	2.21	0.0008	n.a.
2	CHLORIDE	4.261	0.003	0.020	21.12	28.00	0.1519	n.a.
3	NITRITE	5.054	0.005	0.016	31.05	22.38	0.0078	n.a.
4	SULFATE	5.801	0.002	0.011	13.53	15.67	0.0096	n.a.
5	BROMIDE	6.767	0.000	0.002	2.47	2.71	0.0033	n.a.
6	NITRATE	7.897	0.005	0.021	29.49	29.02	0.0930	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.016**	**0.072**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-3**	*Run Time (min):*	**14.98**
Vial Number:	**28**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 21:35**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

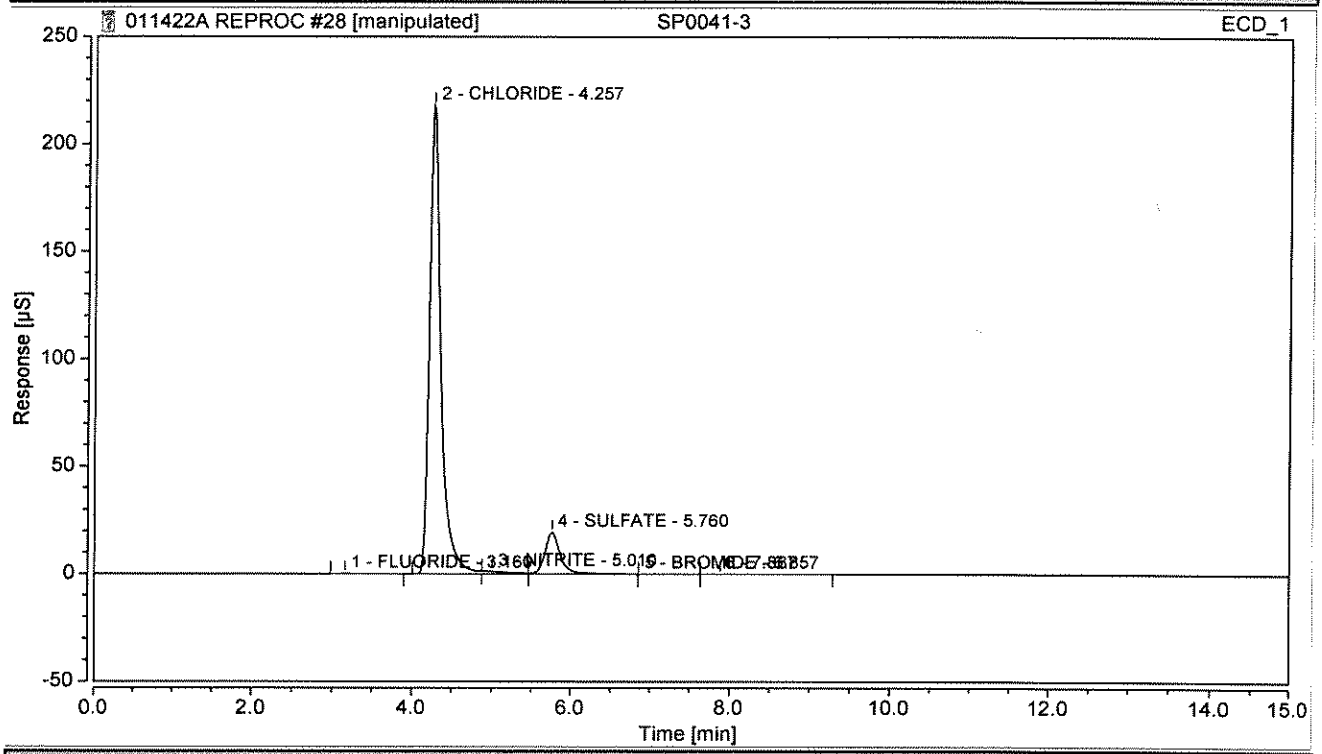
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.160	0.026	0.135	0.06	0.06	0.0549	n.a.
2	CHLORIDE	4.257	36.169	218.199	88.03	91.35	126.5919	n.a.
3	NITRITE	5.010	0.457	1.116	1.11	0.47	0.7242	n.a.
4	SULFATE	5.760	4.424	19.385	10.77	8.12	19.9090	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**41.076**	**238.836**	**99.97**	**99.99**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-3**	*Run Time (min):*	**14.98**
Vial Number:	**28**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 21:35**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

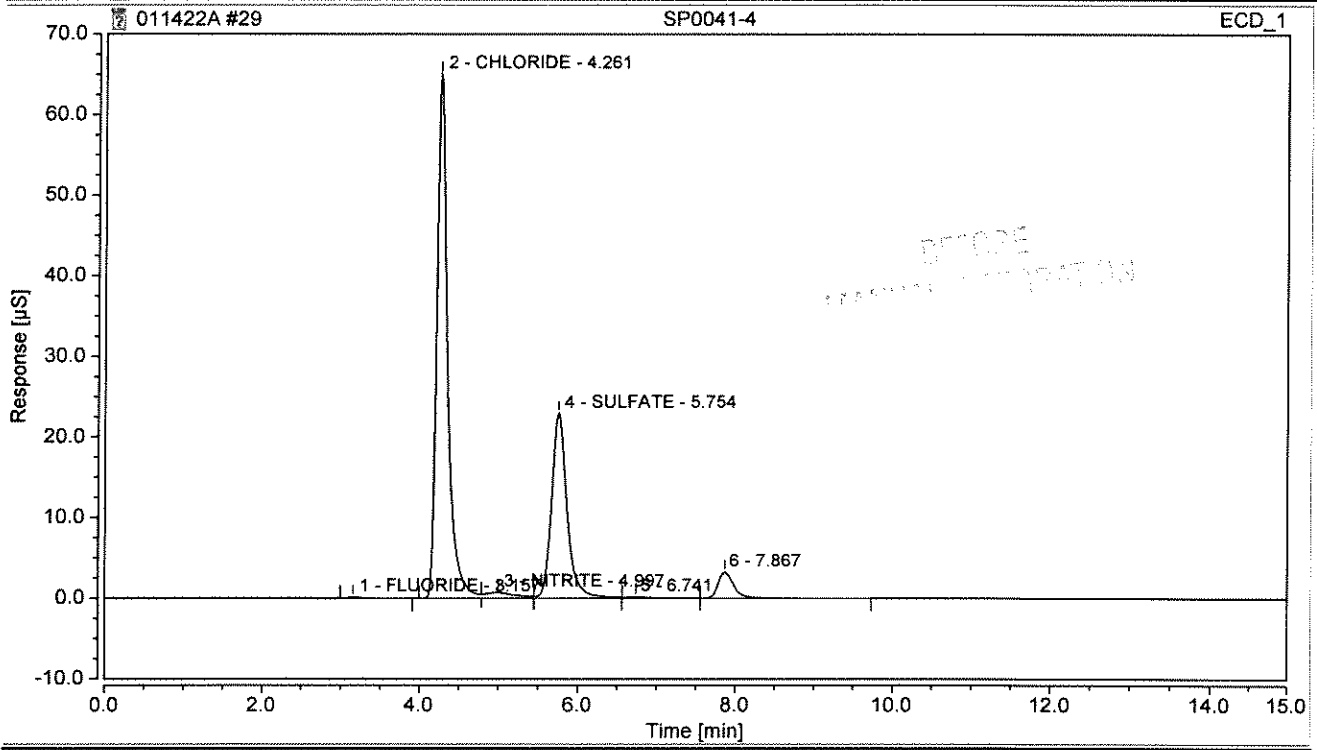
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.160	0.026	0.135	0.06	0.06	0.0549	n.a.
2	CHLORIDE	4.257	36.169	218.199	88.03	91.34	126.5919	n.a.
3	NITRITE	5.010	0.457	1.116	1.11	0.47	0.7242	n.a.
4	SULFATE	5.760	4.405	19.385	10.72	8.11	19.8220	n.a.
5	BROMIDE	6.857	0.019	0.045	0.05	0.02	0.0766	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**41.076**	**238.880**	**99.97**	**99.99**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-4**	*Run Time (min):*	**14.98**
Vial Number:	**29**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 21:56**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

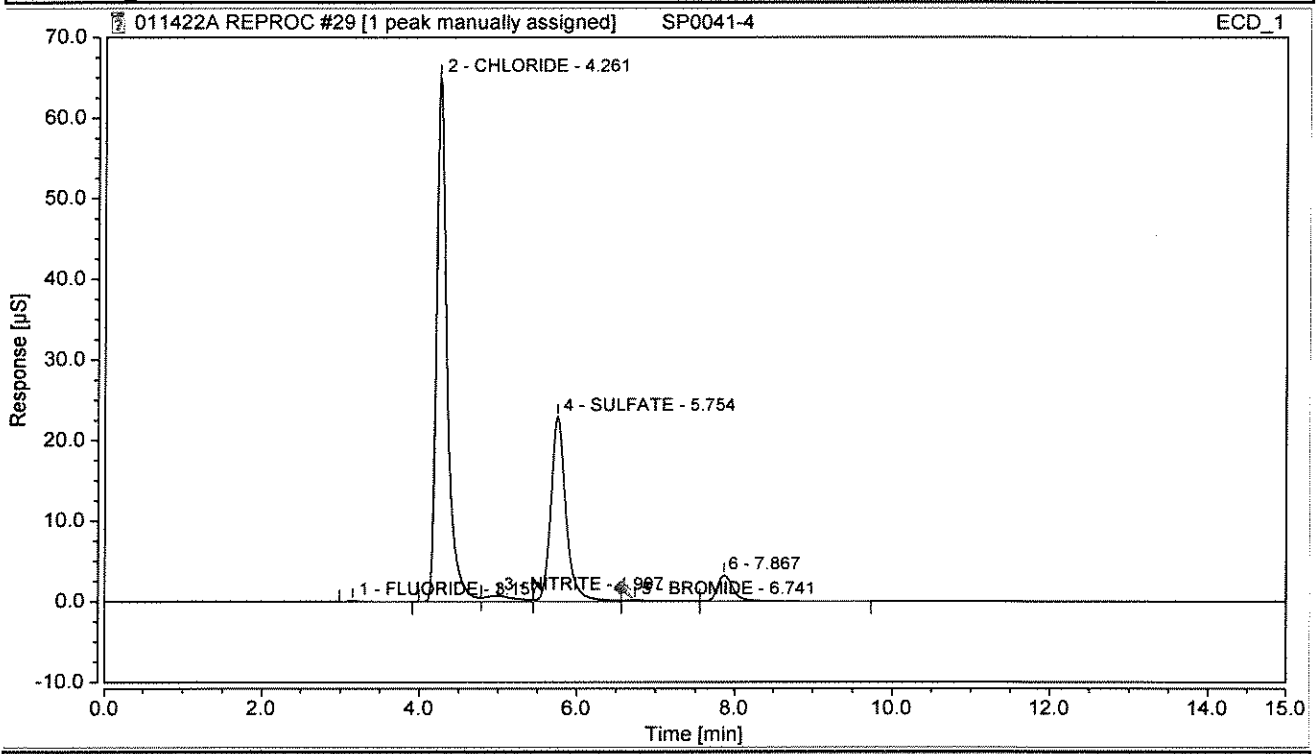
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.157	0.027	0.141	0.17	0.15	0.0582	n.a.
2	CHLORIDE	4.261	10.288	65.055	62.14	70.53	36.1090	n.a.
3	NITRITE	4.997	0.304	0.706	1.83	0.77	0.4815	n.a.
4	SULFATE	5.754	5.122	22.939	30.93	24.87	23.0486	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**15.741**	**88.841**	**95.07**	**96.32**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-4**	*Run Time (min):*	**14.98**
Vial Number:	**29**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 21:56**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

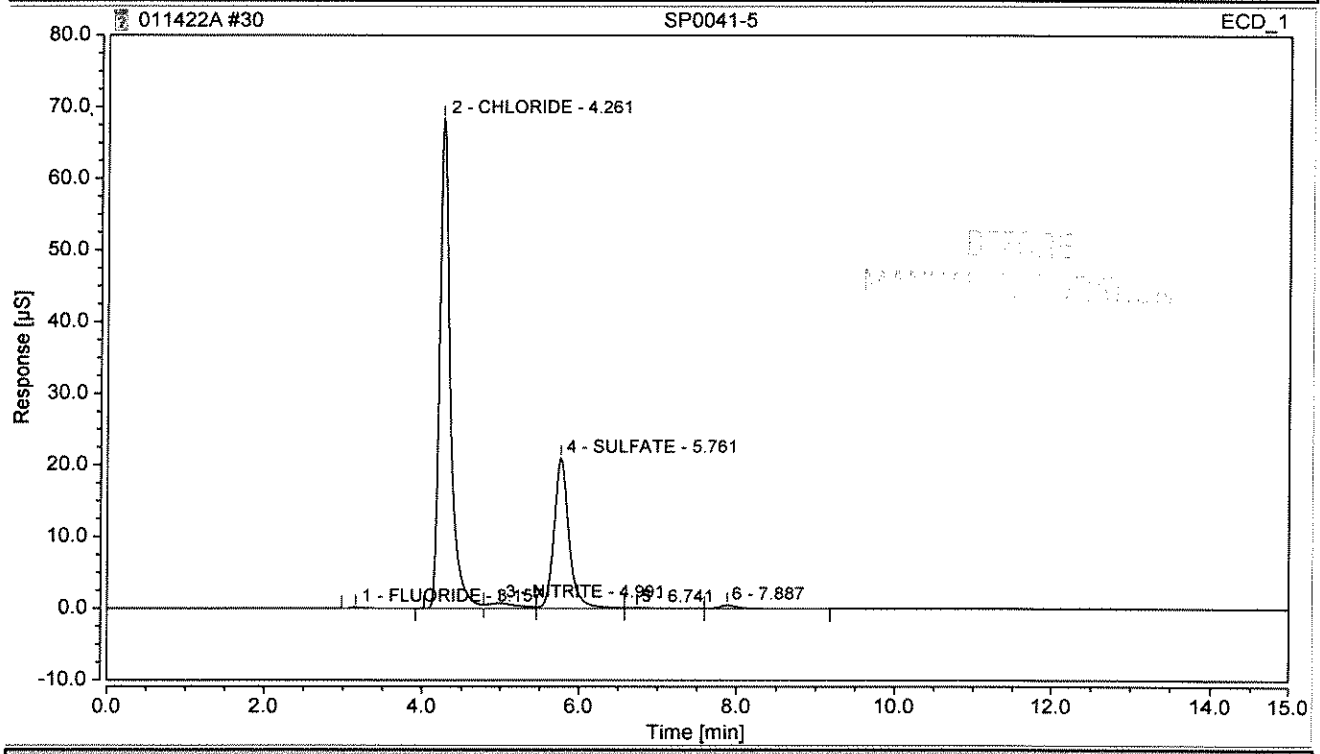
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.157	0.027	0.141	0.17	0.15	0.0582	n.a.
2	CHLORIDE	4.261	10.288	65.055	62.14	70.53	36.1090	n.a.
3	NITRITE	4.997	0.304	0.706	1.83	0.77	0.4815	n.a.
4	SULFATE	5.754	5.122	22.939	30.93	24.87	23.0486	n.a.
5	BROMIDE	6.741	0.056	0.159	0.34	0.17	0.2725	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**15.797**	**89.000**	**95.41**	**96.49**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-5**	*Run Time (min):*	**14.98**
Vial Number:	**30**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 22:17**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

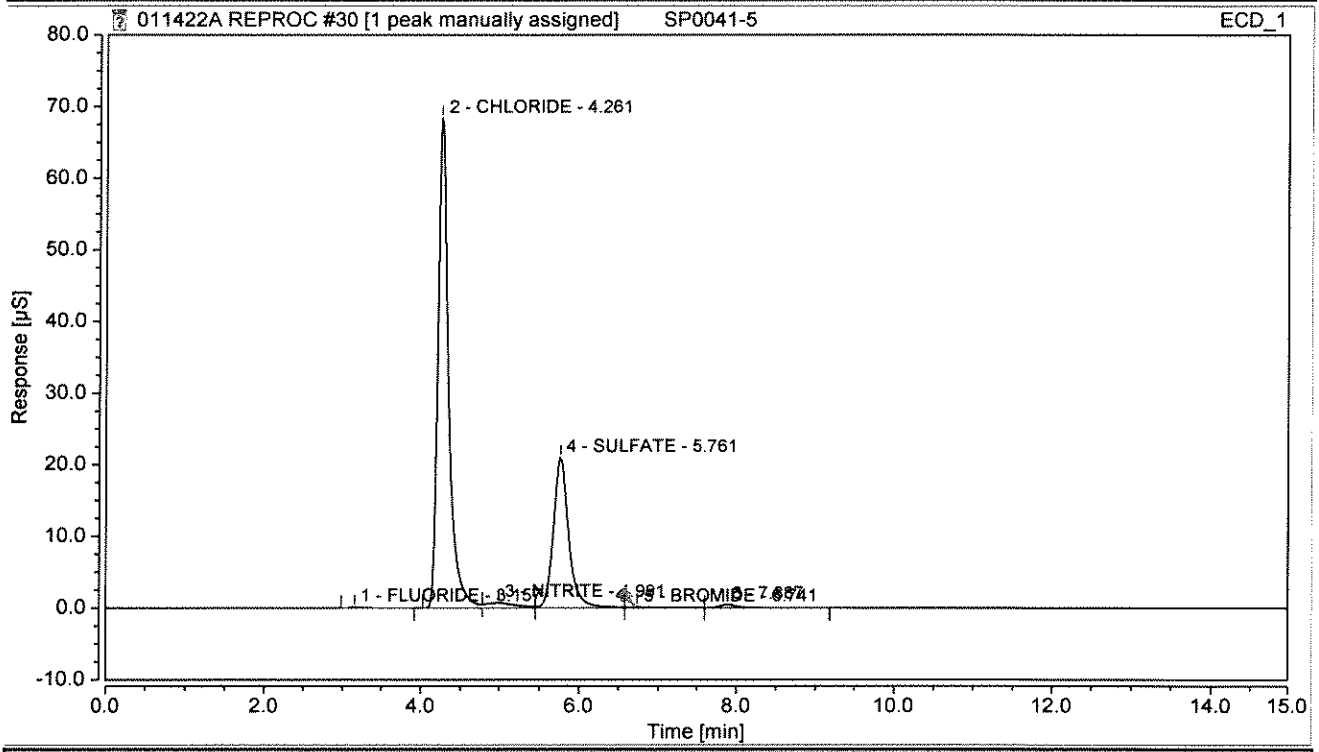
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.157	0.027	0.141	0.17	0.15	0.0570	n.a.
2	CHLORIDE	4.261	10.815	68.369	67.66	75.32	37.9513	n.a.
3	NITRITE	4.991	0.310	0.707	1.94	0.78	0.4922	n.a.
4	SULFATE	5.761	4.675	20.978	29.25	23.11	21.0361	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**15.827**	**90.194**	**99.02**	**99.37**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-5**	*Run Time (min):*	**14.98**
Vial Number:	**30**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 22:17**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

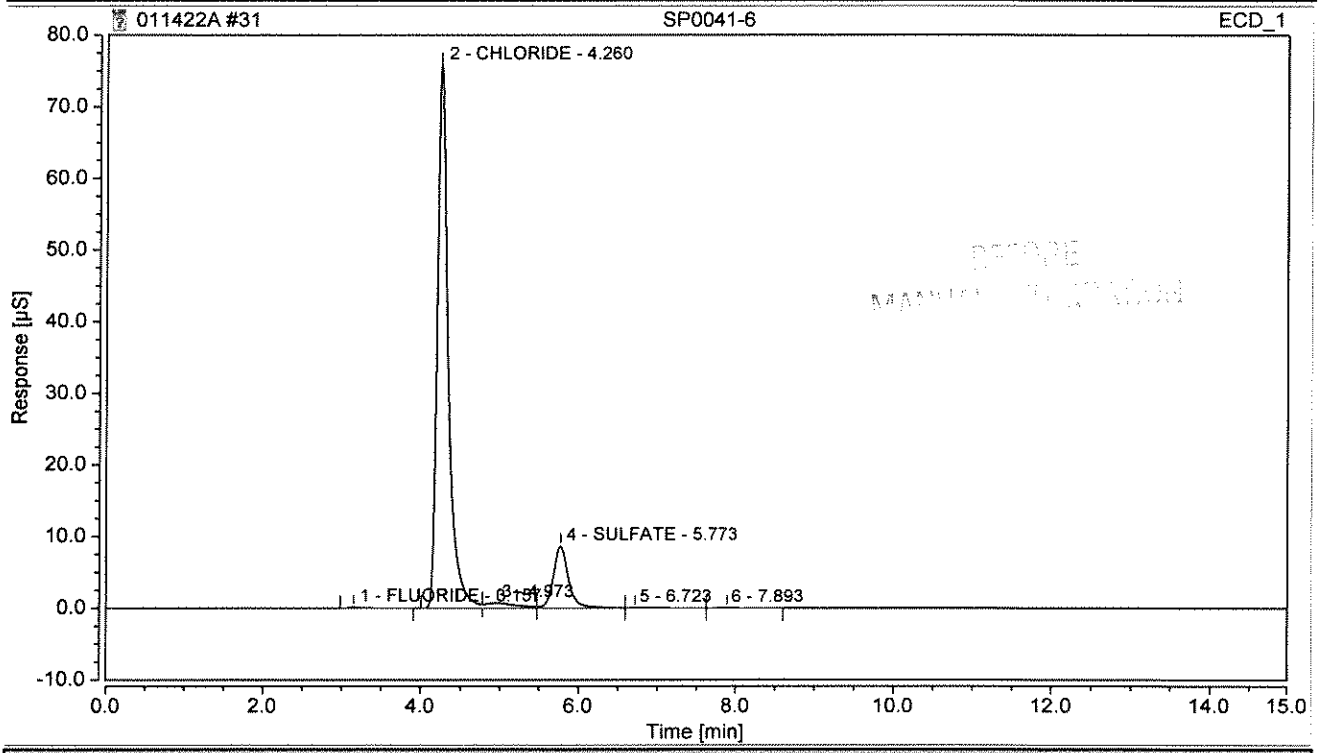
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.157	0.027	0.141	0.17	0.15	0.0570	n.a.
2	CHLORIDE	4.261	10.815	68.369	67.66	75.32	37.9513	n.a.
3	NITRITE	4.991	0.310	0.707	1.94	0.78	0.4922	n.a.
4	SULFATE	5.761	4.675	20.978	29.25	23.11	21.0361	n.a.
5	BROMIDE	6.741	0.044	0.108	0.27	0.12	0.1840	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**15.871**	**90.301**	**99.29**	**99.49**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-6**	*Run Time (min):*	**14.98**
Vial Number:	**31**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 22:38**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

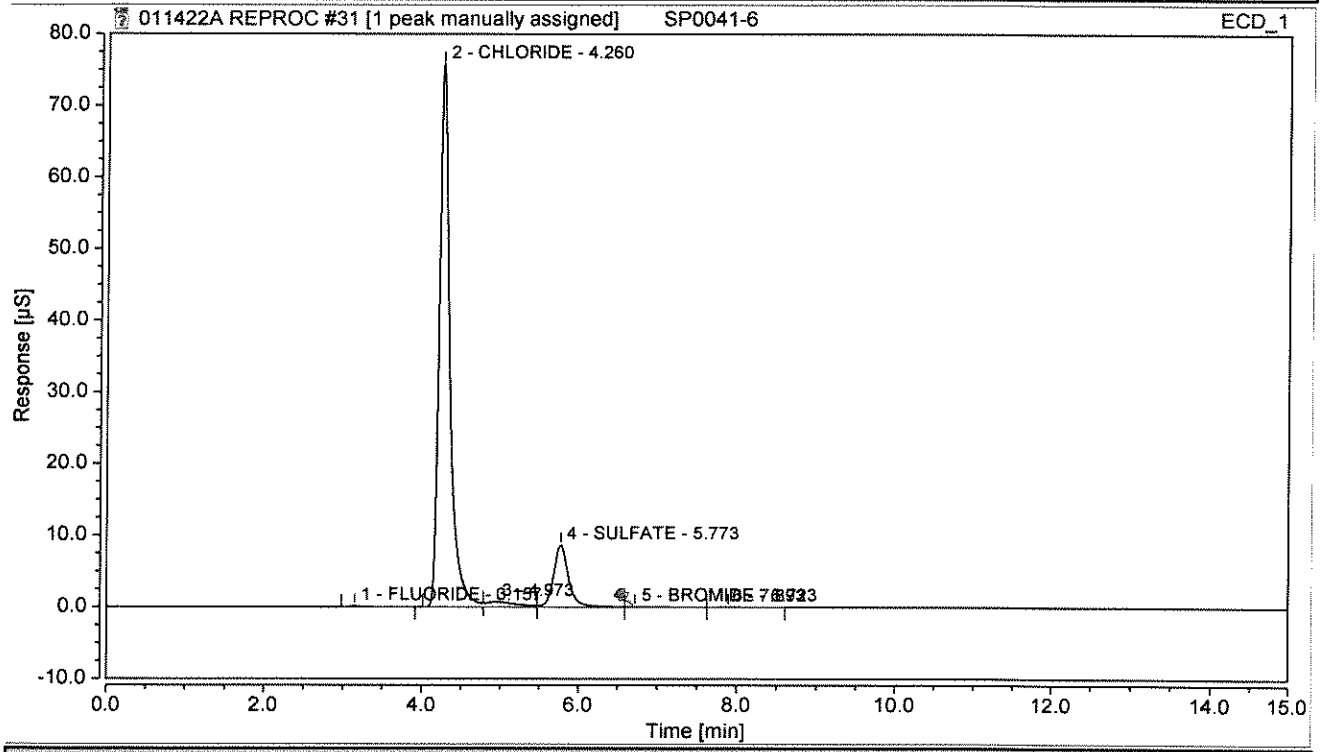
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.157	0.027	0.142	0.19	0.17	0.0564	n.a.
2	CHLORIDE	4.260	12.016	75.815	83.99	88.77	42.1489	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	SULFATE	5.773	1.918	8.670	13.41	10.15	8.6331	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**13.961**	**84.627**	**97.58**	**99.09**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-6**	*Run Time (min):*	**14.98**
Vial Number:	**31**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 22:38**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

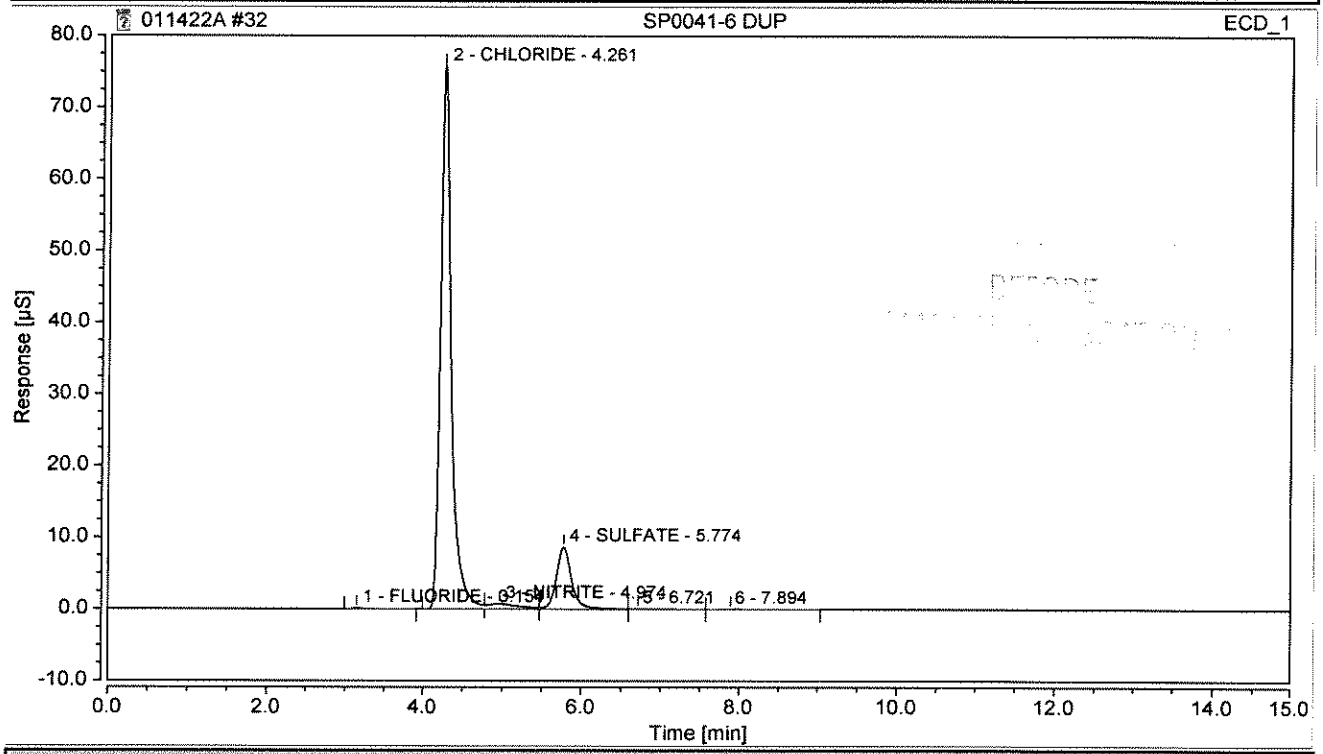
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.157	0.027	0.142	0.19	0.17	0.0564	n.a.
2	CHLORIDE	4.260	12.016	75.815	83.99	88.77	42.1489	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	SULFATE	5.773	1.918	8.670	13.41	10.15	8.6331	n.a.
5	BROMIDE	6.723	0.018	0.040	0.13	0.05	0.0691	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**13.979**	**84.668**	**97.71**	**99.14**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-6 DUP**	*Run Time (min):*	**14.99**
Vial Number:	**32**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 22:58**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

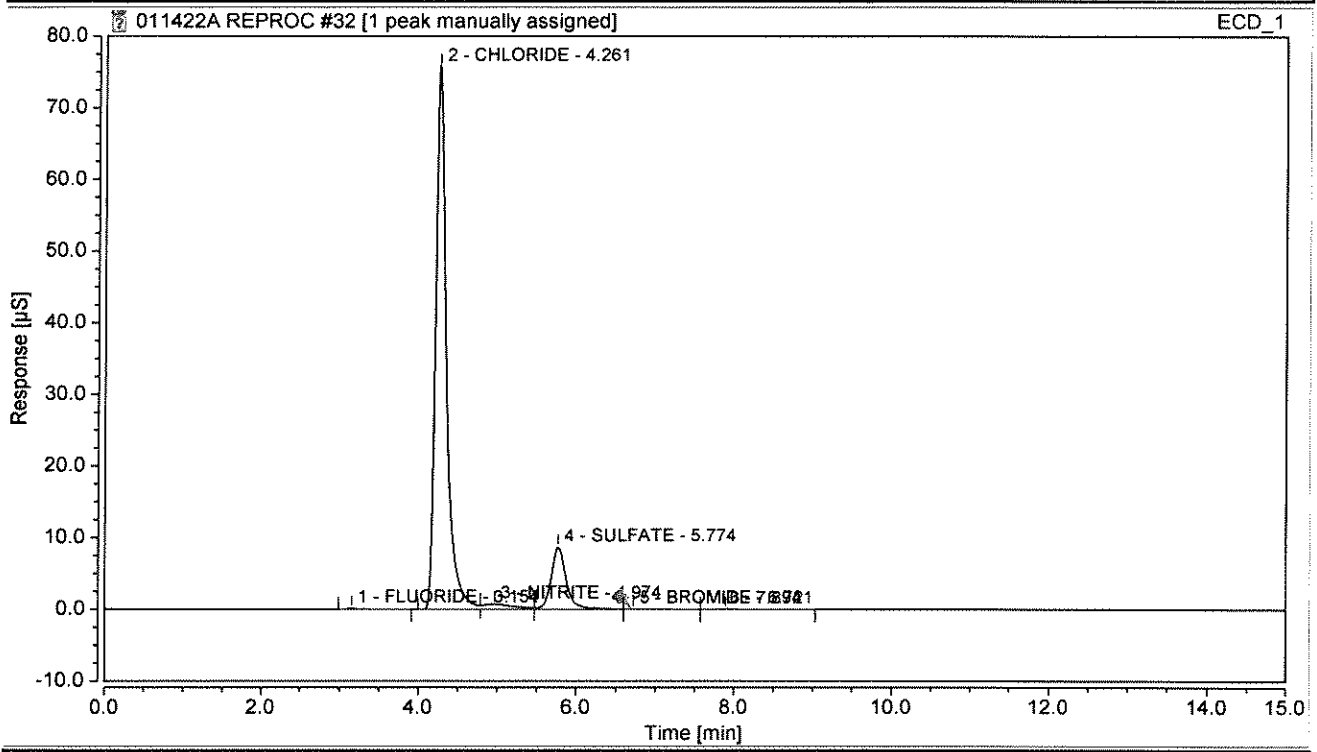
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.154	0.026	0.141	0.18	0.16	0.0553	n.a.
2	CHLORIDE	4.261	12.003	75.749	83.96	88.78	42.1024	n.a.
3	NITRITE	4.974	0.321	0.704	2.24	0.82	0.5086	n.a.
4	SULFATE	5.774	1.917	8.663	13.41	10.15	8.6277	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.266**	**85.257**	**99.80**	**99.92**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-6 DUP**	*Run Time (min):*	**14.99**
Vial Number:	**32**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 22:58**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

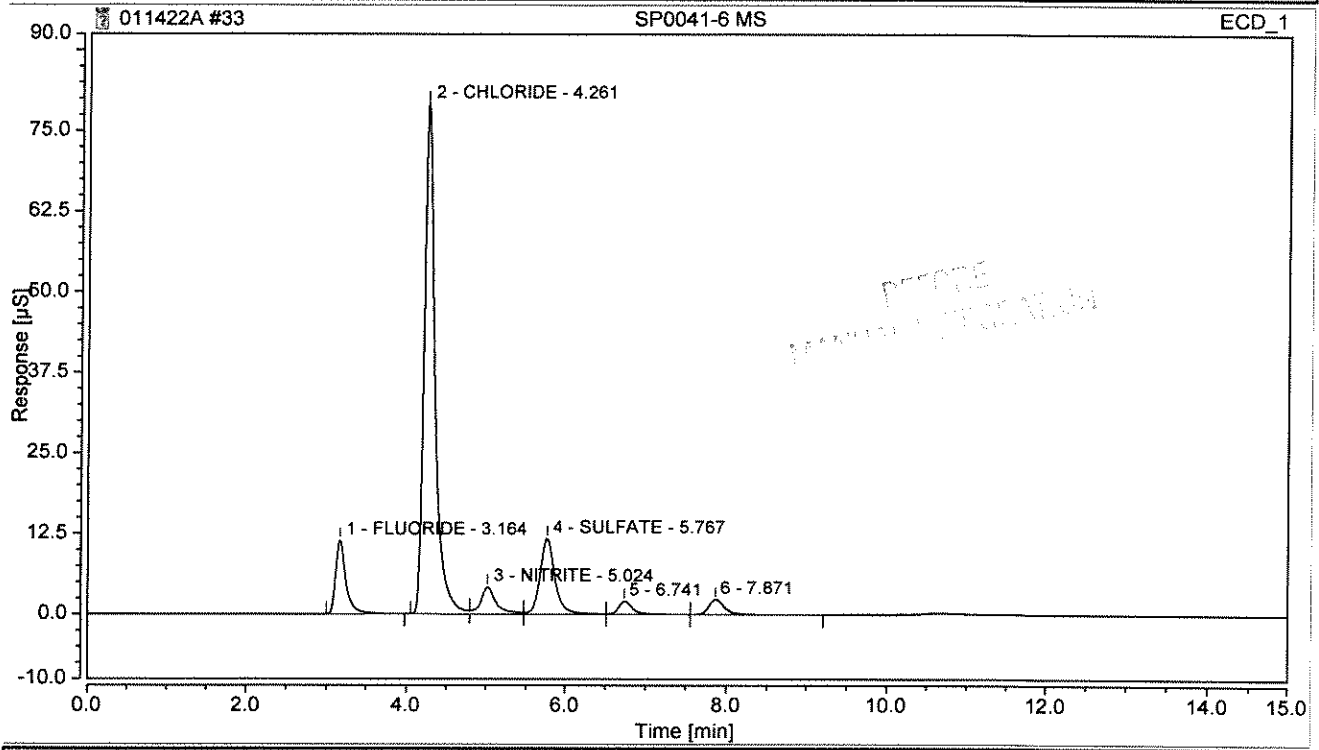
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.154	0.026	0.141	0.18	0.16	0.0553	n.a.
2	CHLORIDE	4.261	12.003	75.749	83.96	88.78	42.1024	n.a.
3	NITRITE	4.974	0.321	0.704	2.24	0.82	0.5086	n.a.
4	SULFATE	5.774	1.917	8.663	13.41	10.15	8.6277	n.a.
5	BROMIDE	6.721	0.019	0.042	0.14	0.05	0.0712	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.286**	**85.299**	**99.93**	**99.97**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-6 MS**	*Run Time (min):*	**14.98**
Vial Number:	**33**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 23:19**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

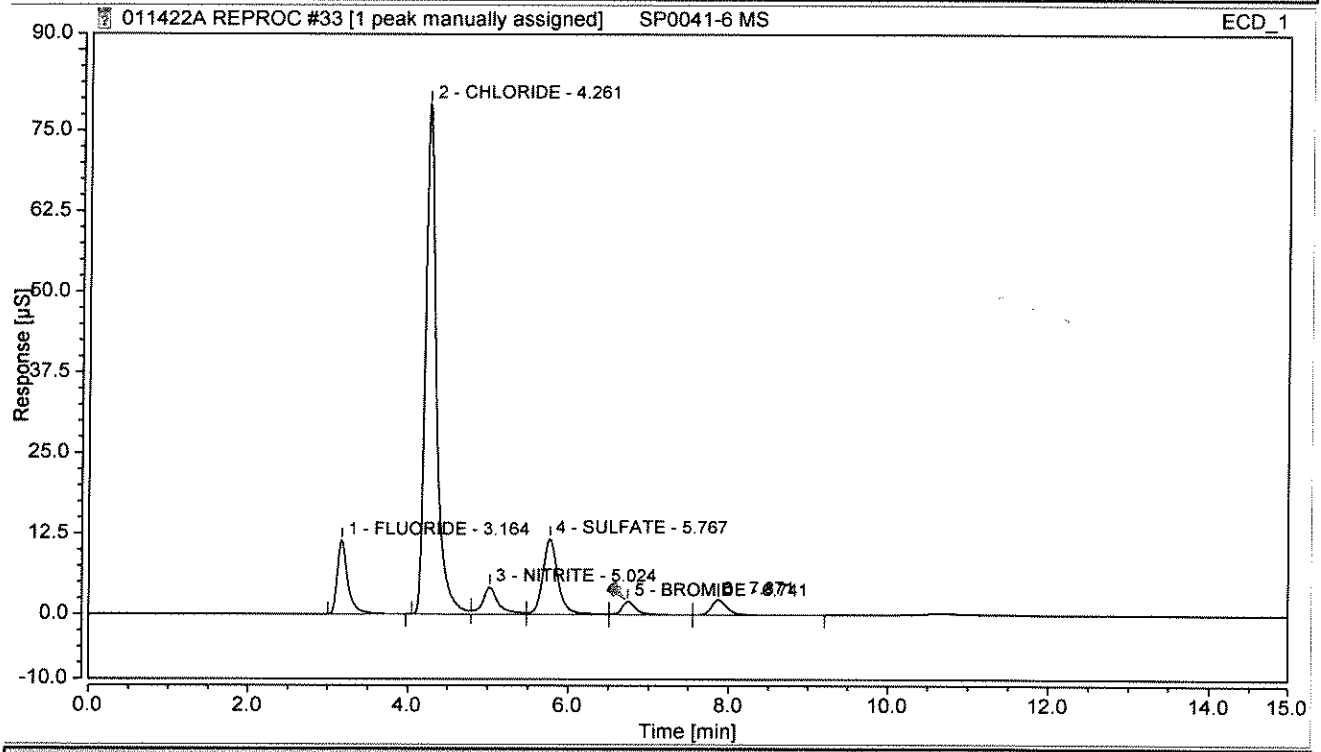
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.164	1.760	11.449	9.37	10.32	3.7310	n.a.
2	CHLORIDE	4.261	12.550	79.170	66.80	71.37	44.0173	n.a.
3	NITRITE	5.024	0.951	4.206	5.06	3.79	1.5091	n.a.
4	SULFATE	5.767	2.581	11.732	13.74	10.58	11.6153	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**17.843**	**106.558**	**94.97**	**96.06**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-6 MS**	*Run Time (min):*	**14.98**
Vial Number:	**33**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 23:19**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

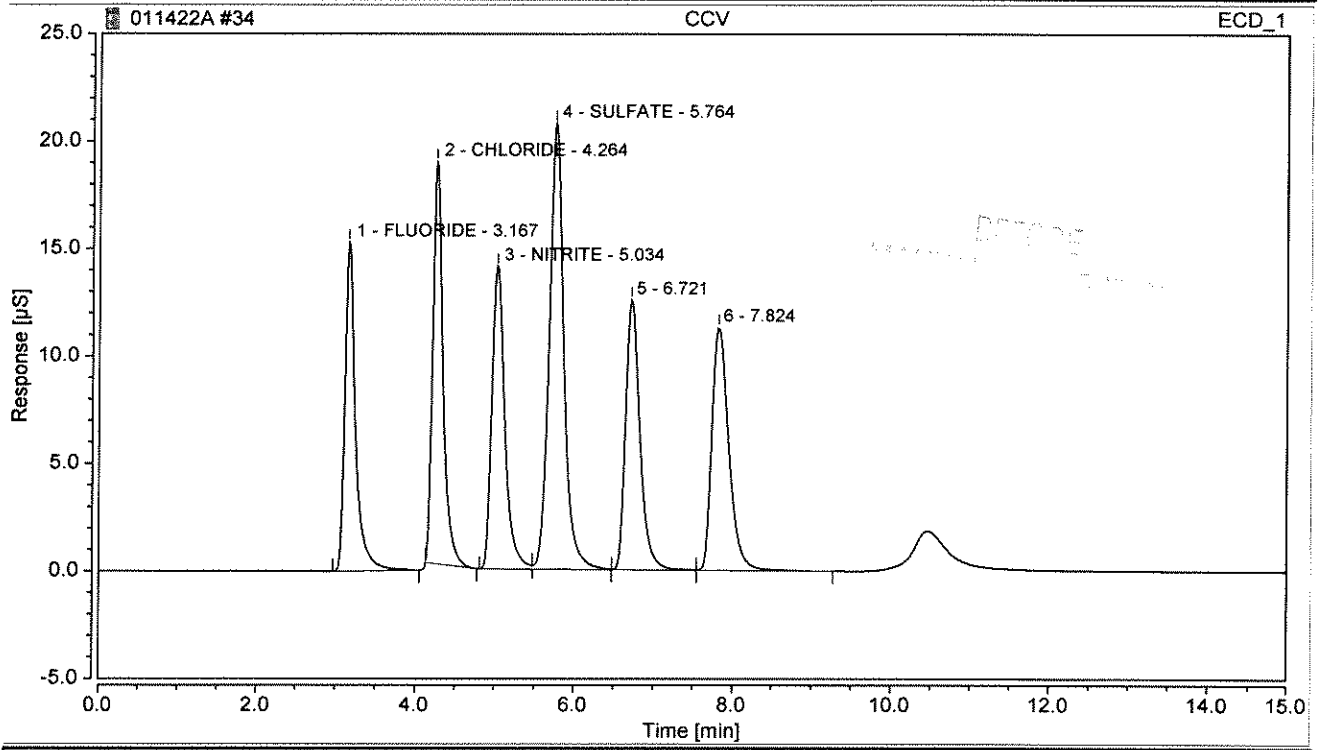
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.164	1.760	11.449	9.37	10.32	3.7310	n.a.
2	CHLORIDE	4.261	12.550	79.170	66.80	71.37	44.0173	n.a.
3	NITRITE	5.024	0.951	4.206	5.06	3.79	1.5091	n.a.
4	SULFATE	5.767	2.581	11.732	13.74	10.58	11.6153	n.a.
5	BROMIDE	6.741	0.413	2.041	2.20	1.84	3.4926	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**18.256**	**108.599**	**97.17**	**97.90**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.99**
Vial Number:	**34**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 23:40**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

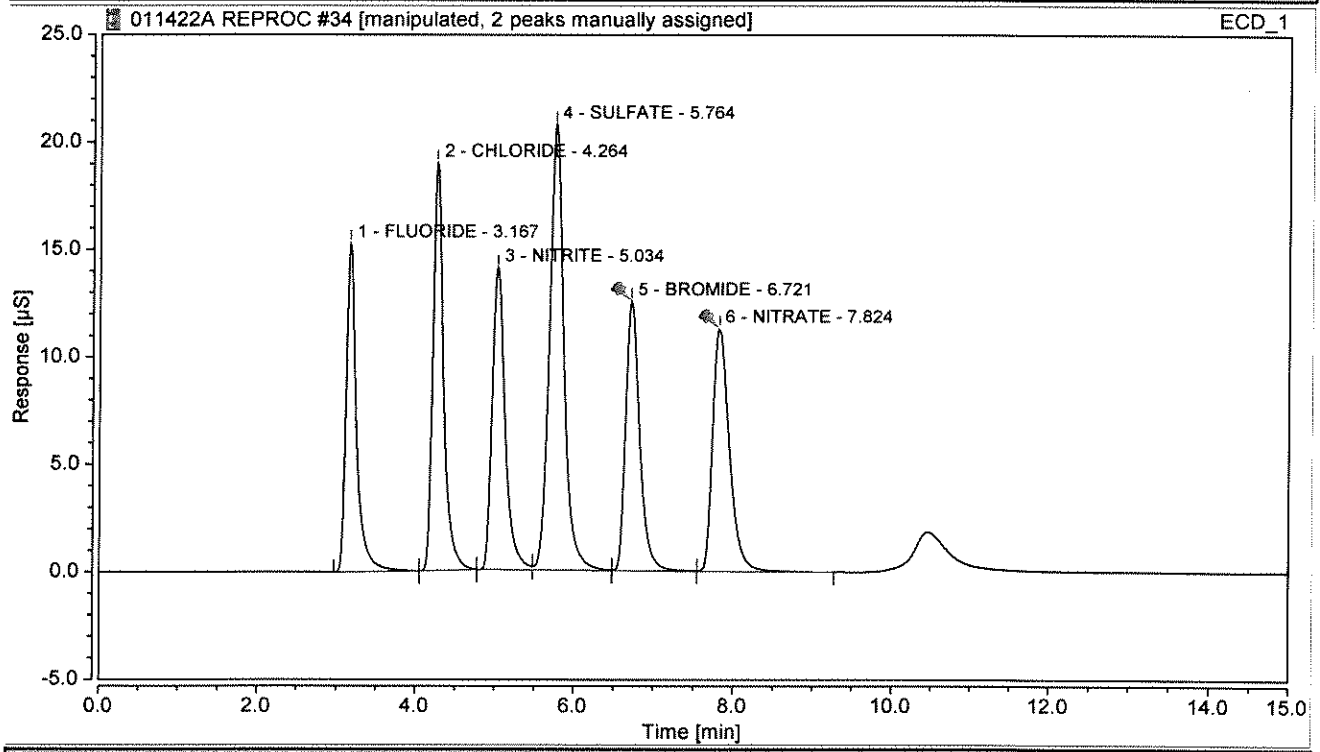
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	2.386	15.313	13.48	16.51	5.0581	1.1623
2	CHLORIDE	4.264	2.799	18.716	15.82	20.18	9.9269	-0.7307
3	NITRITE	5.034	2.622	14.083	14.82	15.18	4.1585	3.9637
4	SULFATE	5.764	4.460	20.758	25.20	22.38	20.0710	0.3548
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.267**	**68.870**	**69.32**	**74.25**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.99**
Vial Number:	**34**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**14/Jan/22 23:40**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

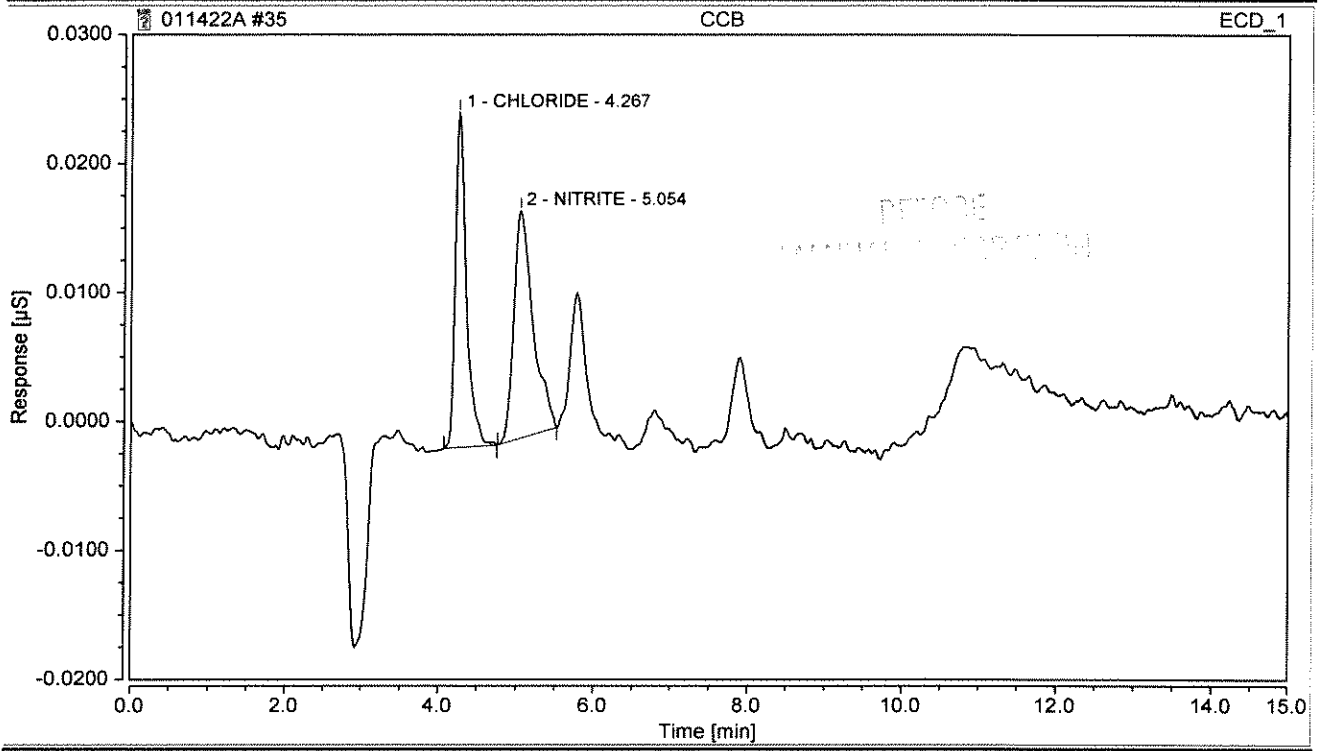
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	2.386	15.313	13.41	16.46	5.0580	1.1607
2	CHLORIDE	4.264	2.919	19.001	16.40	20.43	10.3456	3.4561
3	NITRITE	5.034	2.616	14.074	14.70	15.13	4.1490	3.7255
4	SULFATE	5.764	4.453	20.750	25.02	22.31	20.0398	0.1991
5	BROMIDE	6.721	2.614	12.557	14.69	13.50	21.4900	7.4501
6	NITRATE	7.824	2.808	11.317	15.78	12.17	3.8181	-4.5481
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**17.796**	**93.013**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.99**
Vial Number:	**35**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**15/Jan/22 00:01**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

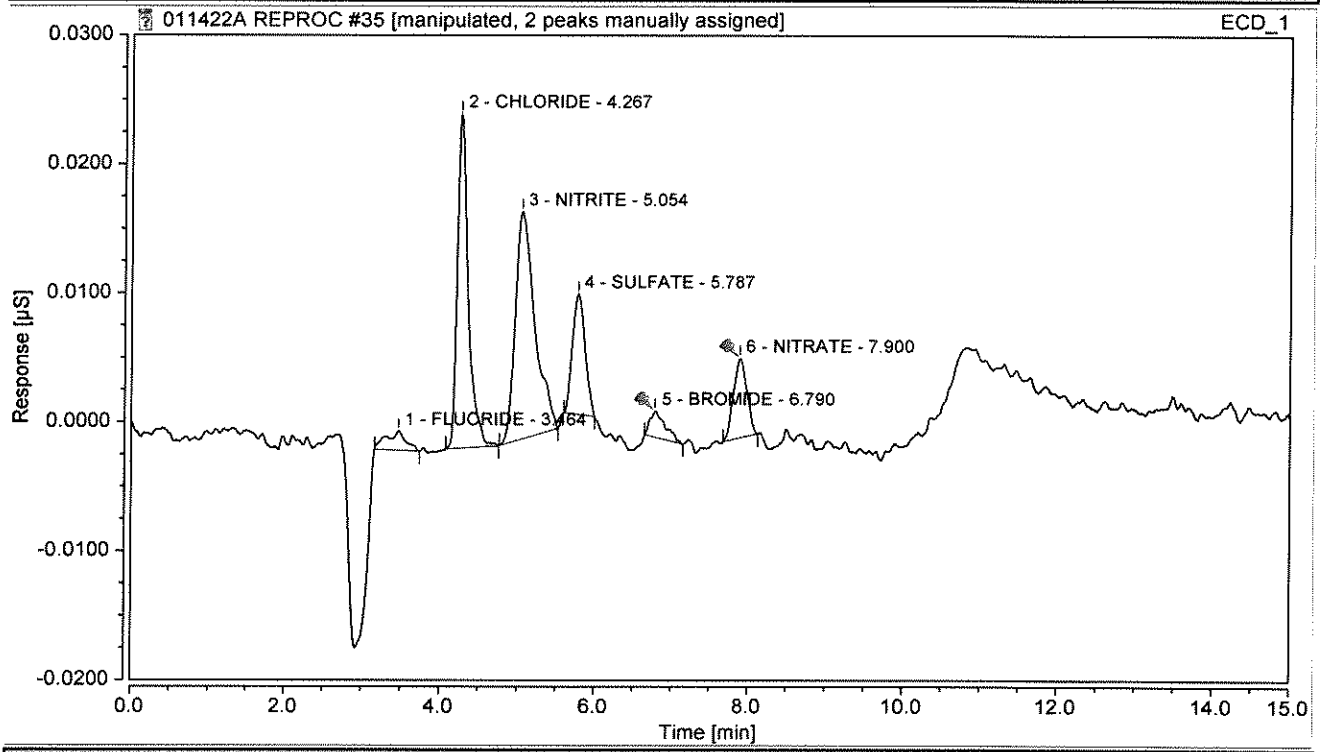
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	0.004	0.026	45.71	59.52	0.1554	n.a.
2	NITRITE	5.054	0.005	0.018	54.29	40.48	0.0081	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.009**	**0.044**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.99**
Vial Number:	**35**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**15/Jan/22 00:01**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

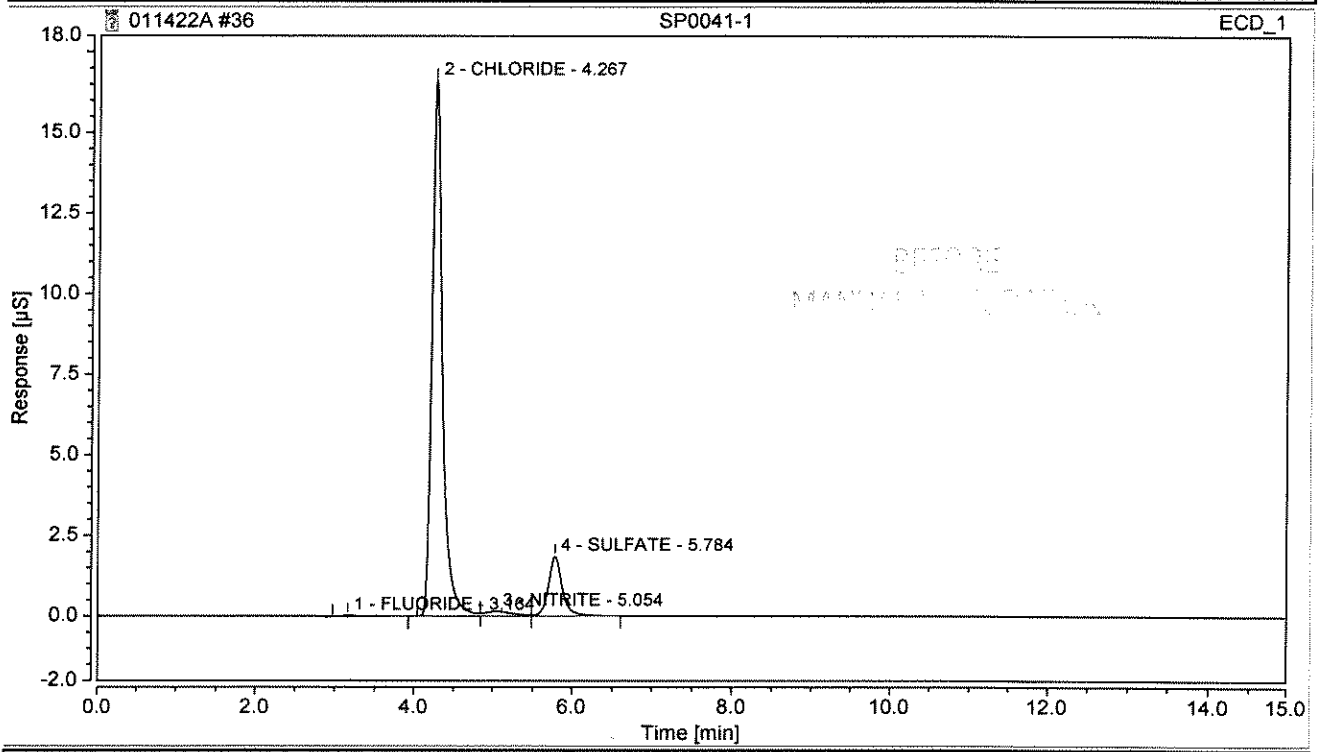
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.464	0.000	0.001	3.23	2.39	0.0009	n.a.
2	CHLORIDE	4.267	0.004	0.026	32.25	41.40	0.1554	n.a.
3	NITRITE	5.054	0.005	0.018	38.31	28.16	0.0081	n.a.
4	SULFATE	5.787	0.002	0.009	13.15	14.92	0.0079	n.a.
5	BROMIDE	6.790	0.000	0.002	3.57	3.26	0.0035	n.a.
6	NITRATE	7.900	0.001	0.006	9.49	9.88	0.0885	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.013**	**0.063**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-1**	*Run Time (min):*	**14.98**
Vial Number:	**36**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**10.0**
Injection Date/Time:	**15/Jan/22 00:22**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

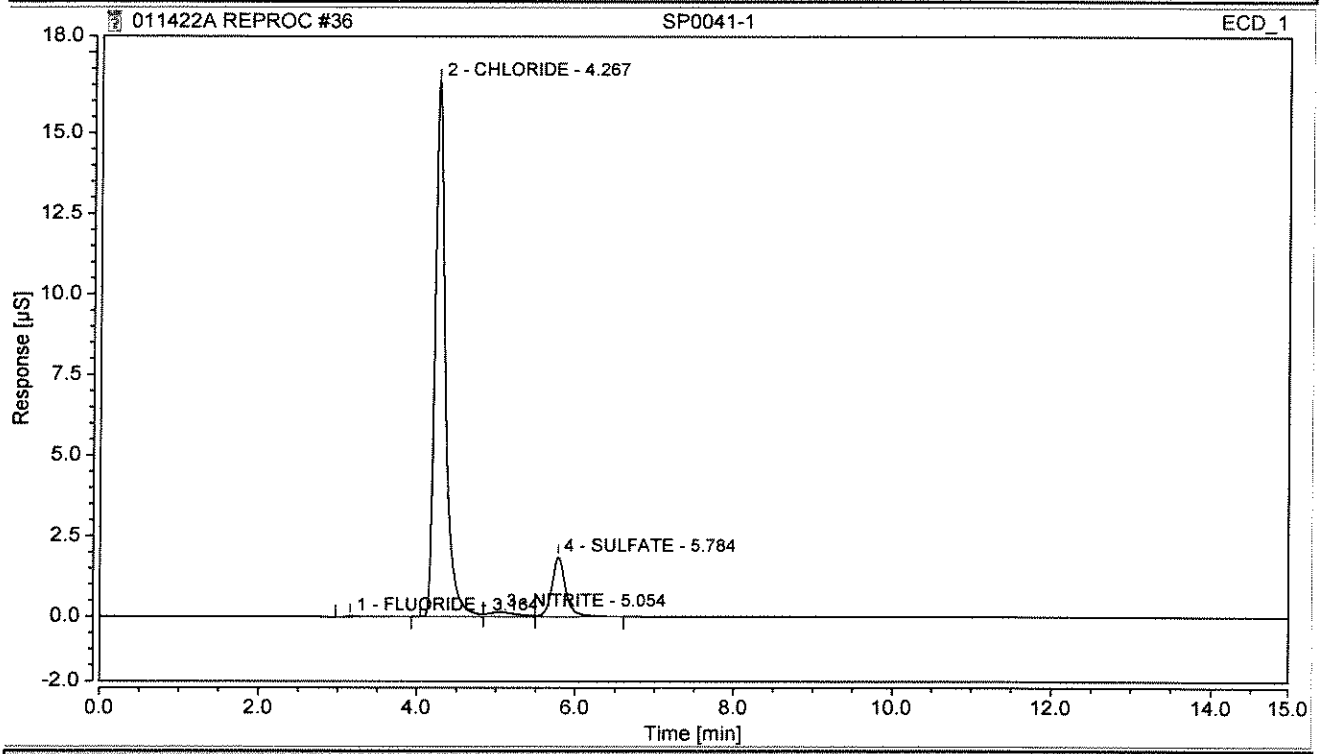
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.164	0.009	0.032	0.31	0.17	0.1975	n.a.
2	CHLORIDE	4.267	2.573	16.613	85.21	89.12	91.3627	n.a.
3	NITRITE	5.054	0.057	0.145	1.88	0.78	0.8996	n.a.
4	SULFATE	5.784	0.381	1.852	12.60	9.93	17.1271	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.020**	**18.641**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-1**	*Run Time (min):*	**14.98**
Vial Number:	**36**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**10.0**
Injection Date/Time:	**15/Jan/22 00:22**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

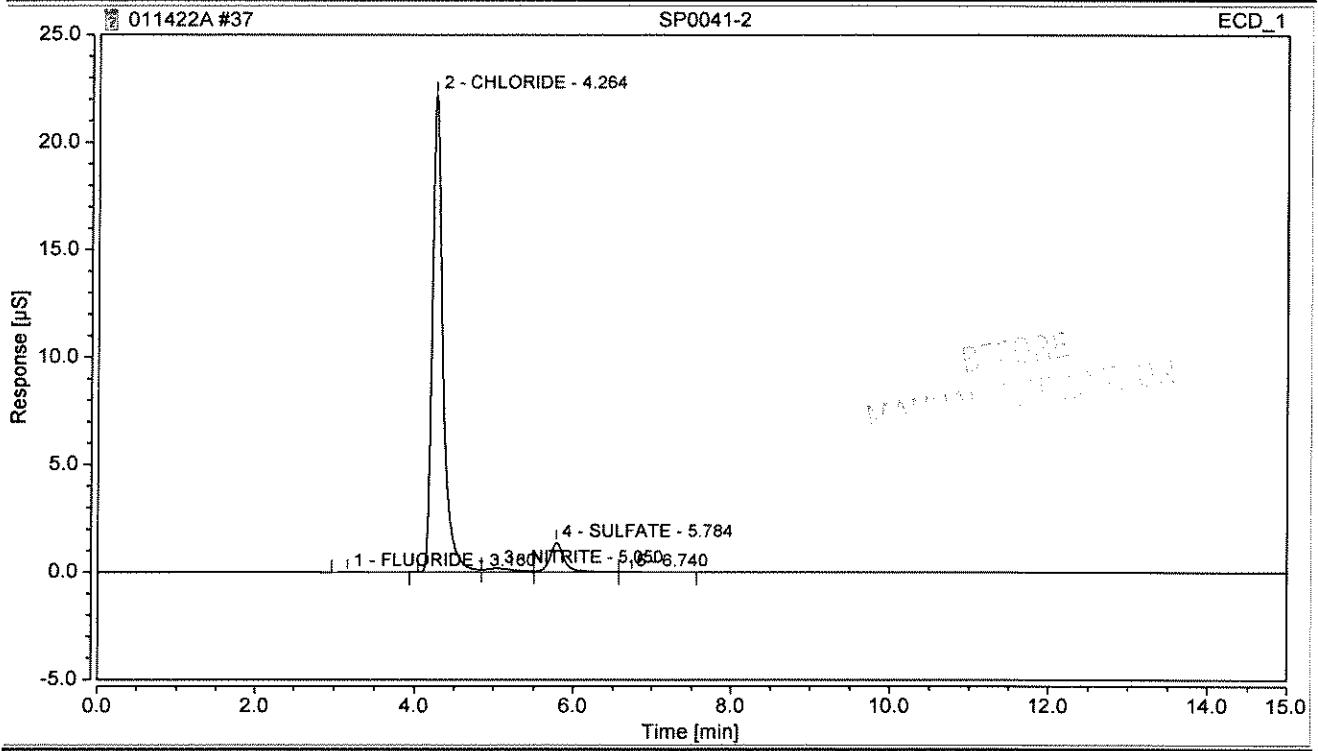
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.164	0.009	0.032	0.31	0.17	0.1975	n.a.
2	CHLORIDE	4.267	2.573	16.613	85.21	89.12	91.3627	n.a.
3	NITRITE	5.054	0.057	0.145	1.88	0.78	0.8996	n.a.
4	SULFATE	5.784	0.381	1.852	12.60	9.93	17.1271	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.020**	**18.641**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-2**	*Run Time (min):*	**14.98**
Vial Number:	**37**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**10.0**
Injection Date/Time:	**15/Jan/22 00:42**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

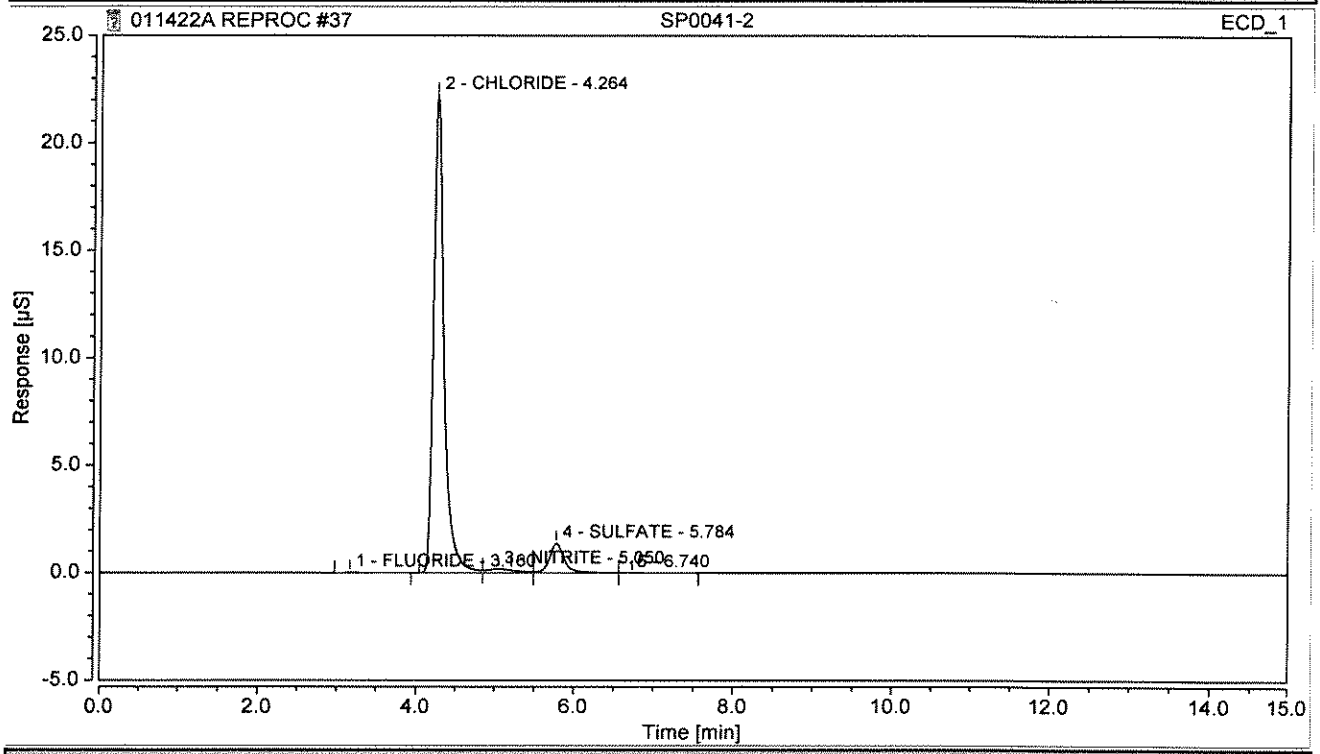
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.160	0.008	0.027	0.21	0.11	0.1742	n.a.
2	CHLORIDE	4.264	3.466	22.249	90.31	93.34	122.5748	n.a.
3	NITRITE	5.050	0.069	0.173	1.81	0.72	1.1018	n.a.
4	SULFATE	5.784	0.290	1.378	7.56	5.78	13.0623	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.834**	**23.827**	**99.90**	**99.96**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-2**	*Run Time (min):*	**14.98**
Vial Number:	**37**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**10.0**
Injection Date/Time:	**15/Jan/22 00:42**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

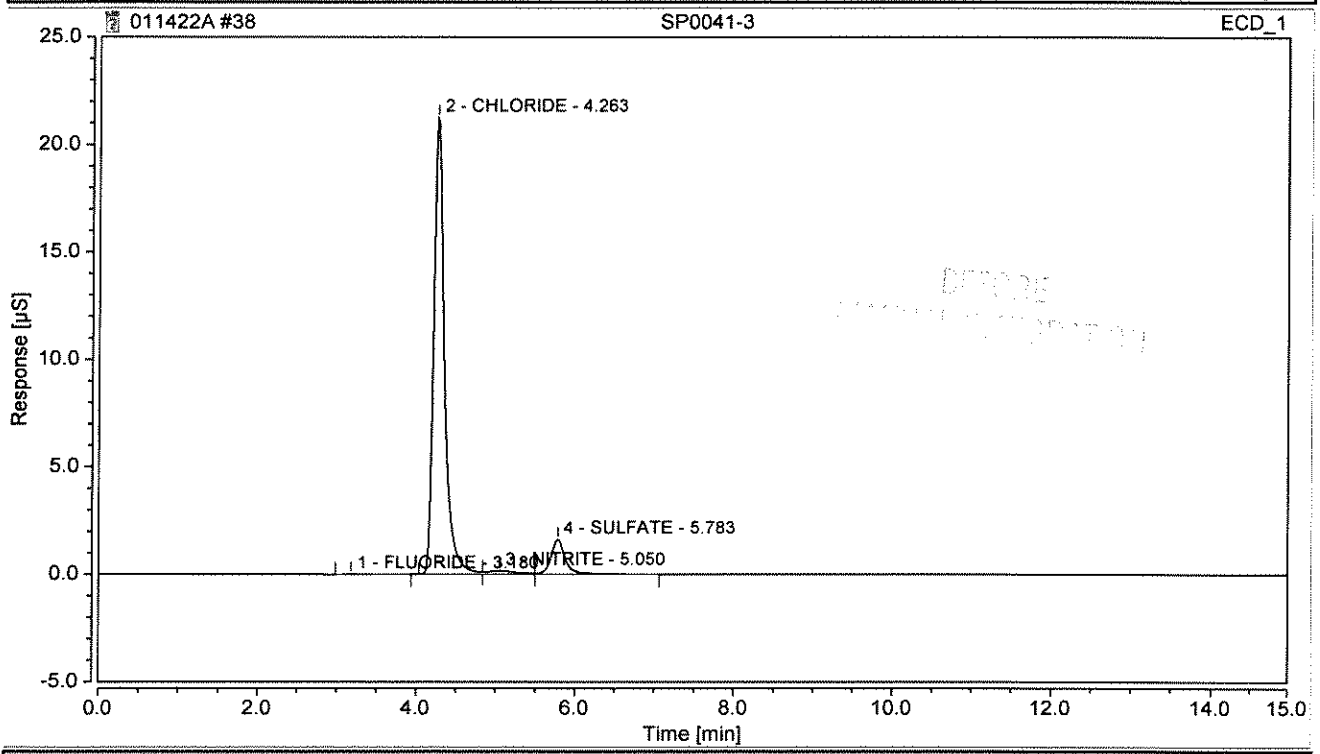
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.160	0.008	0.027	0.21	0.11	0.1742	n.a.
2	CHLORIDE	4.264	3.466	22.249	90.31	93.34	122.5748	n.a.
3	NITRITE	5.050	0.069	0.173	1.81	0.72	1.1018	n.a.
4	SULFATE	5.784	0.290	1.378	7.56	5.78	13.0623	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.834**	**23.827**	**99.90**	**99.96**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-3**	*Run Time (min):*	**14.98**
Vial Number:	**38**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**10.0**
Injection Date/Time:	**15/Jan/22 01:03**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

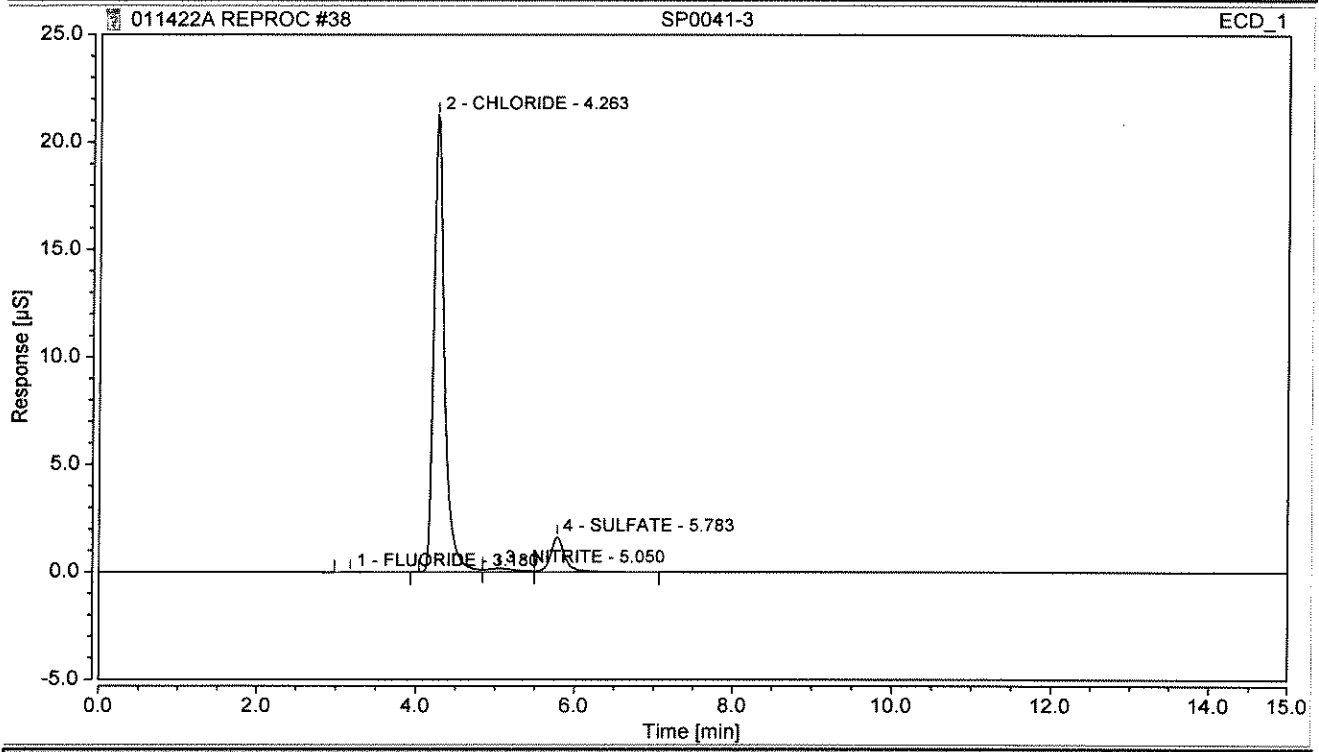
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.180	0.008	0.020	0.21	0.09	0.1671	n.a.
2	CHLORIDE	4.263	3.311	21.265	88.85	92.16	117.1756	n.a.
3	NITRITE	5.050	0.067	0.165	1.79	0.72	1.0555	n.a.
4	SULFATE	5.783	0.341	1.624	9.15	7.04	15.3500	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.727**	**23.074**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-3**	*Run Time (min):*	**14.98**
Vial Number:	**38**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**10.0**
Injection Date/Time:	**15/Jan/22 01:03**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

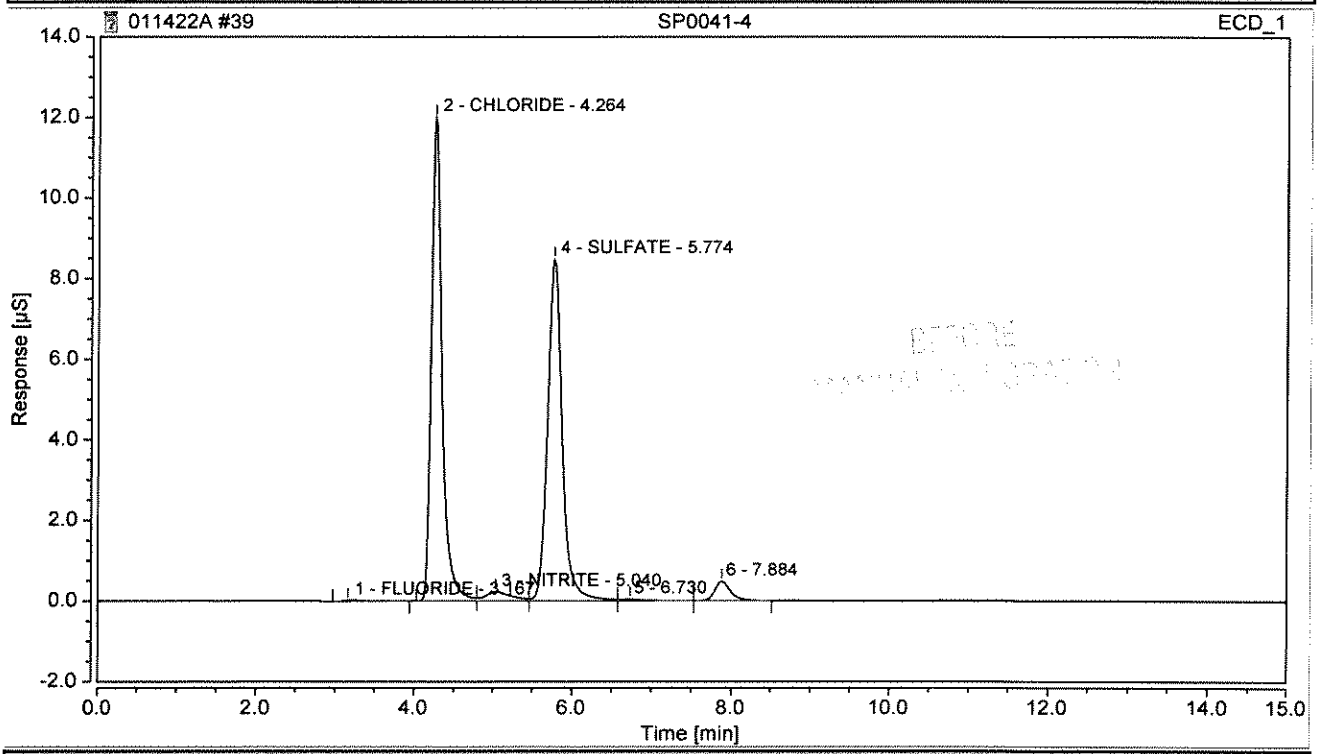
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.180	0.008	0.020	0.21	0.09	0.1671	n.a.
2	CHLORIDE	4.263	3.311	21.265	88.85	92.16	117.1756	n.a.
3	NITRITE	5.050	0.067	0.165	1.79	0.72	1.0555	n.a.
4	SULFATE	5.783	0.341	1.624	9.15	7.04	15.3500	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.727**	**23.074**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-4**	*Run Time (min):*	**14.99**
Vial Number:	**39**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**5.0**
Injection Date/Time:	**15/Jan/22 01:24**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

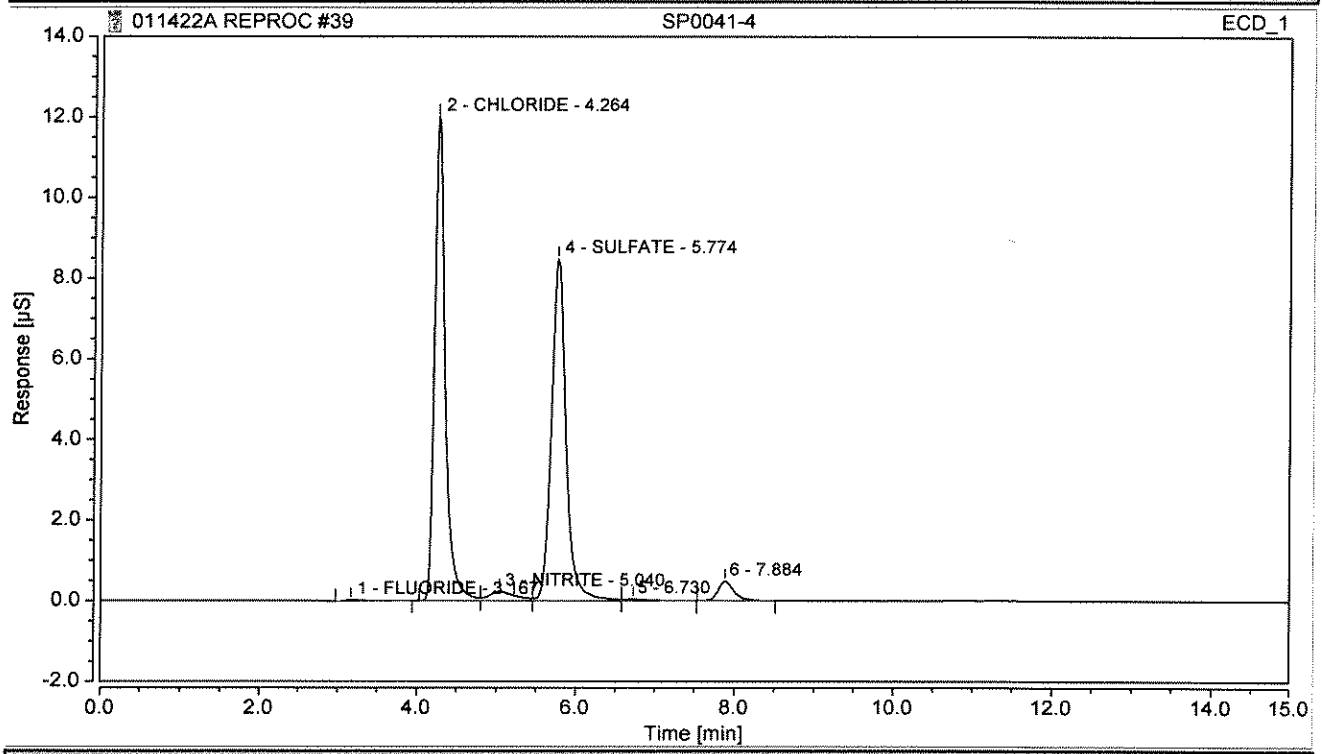
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	0.010	0.032	0.26	0.15	0.1079	n.a.
2	CHLORIDE	4.264	1.841	12.017	47.63	56.48	32.8820	n.a.
3	NITRITE	5.040	0.085	0.226	2.21	1.06	0.6779	n.a.
4	SULFATE	5.774	1.805	8.487	46.71	39.88	40.6219	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.742**	**20.761**	**96.81**	**97.57**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-4**	*Run Time (min):*	**14.99**
Vial Number:	**39**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**5.0**
Injection Date/Time:	**15/Jan/22 01:24**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

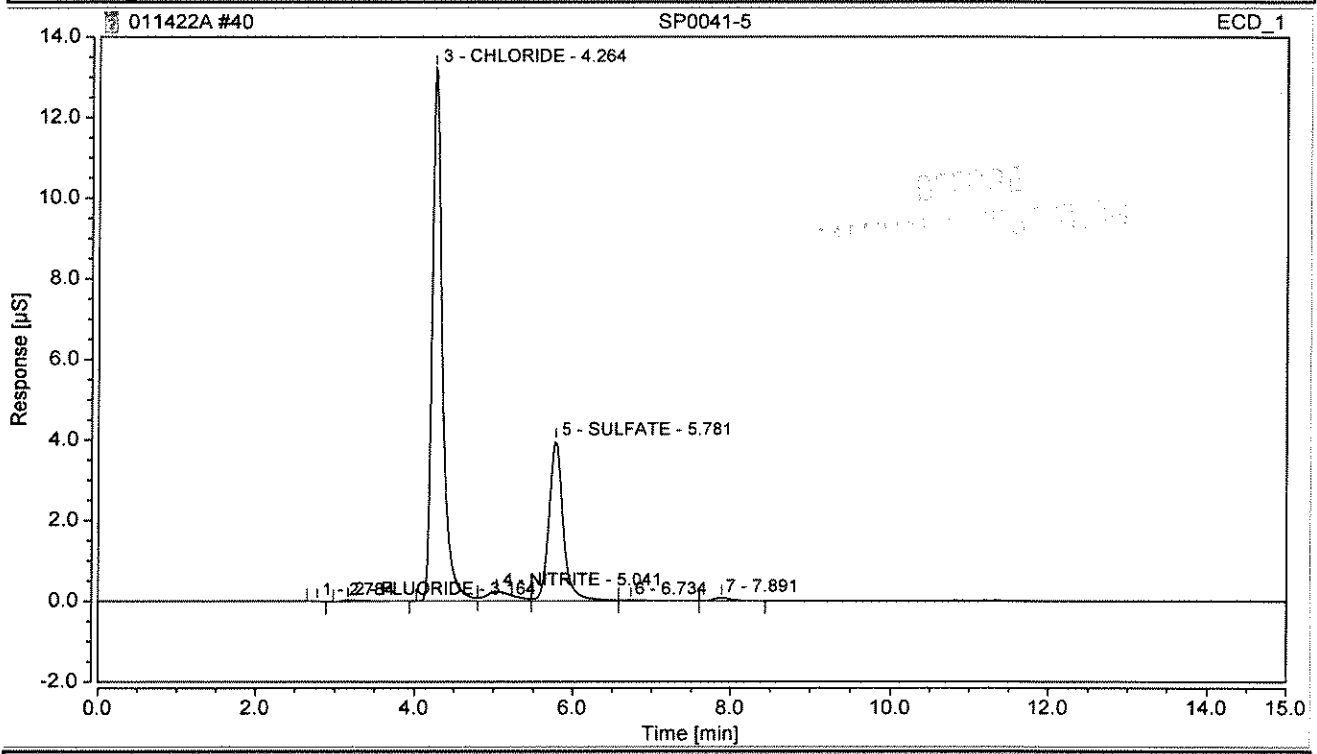
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	0.010	0.032	0.26	0.15	0.1079	n.a.
2	CHLORIDE	4.264	1.841	12.017	47.63	56.48	32.8820	n.a.
3	NITRITE	5.040	0.085	0.226	2.21	1.06	0.6779	n.a.
4	SULFATE	5.774	1.805	8.487	46.71	39.88	40.6219	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.742**	**20.761**	**96.81**	**97.57**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-5**	*Run Time (min):*	**14.99**
Vial Number:	**40**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**5.0**
Injection Date/Time:	**15/Jan/22 01:45**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

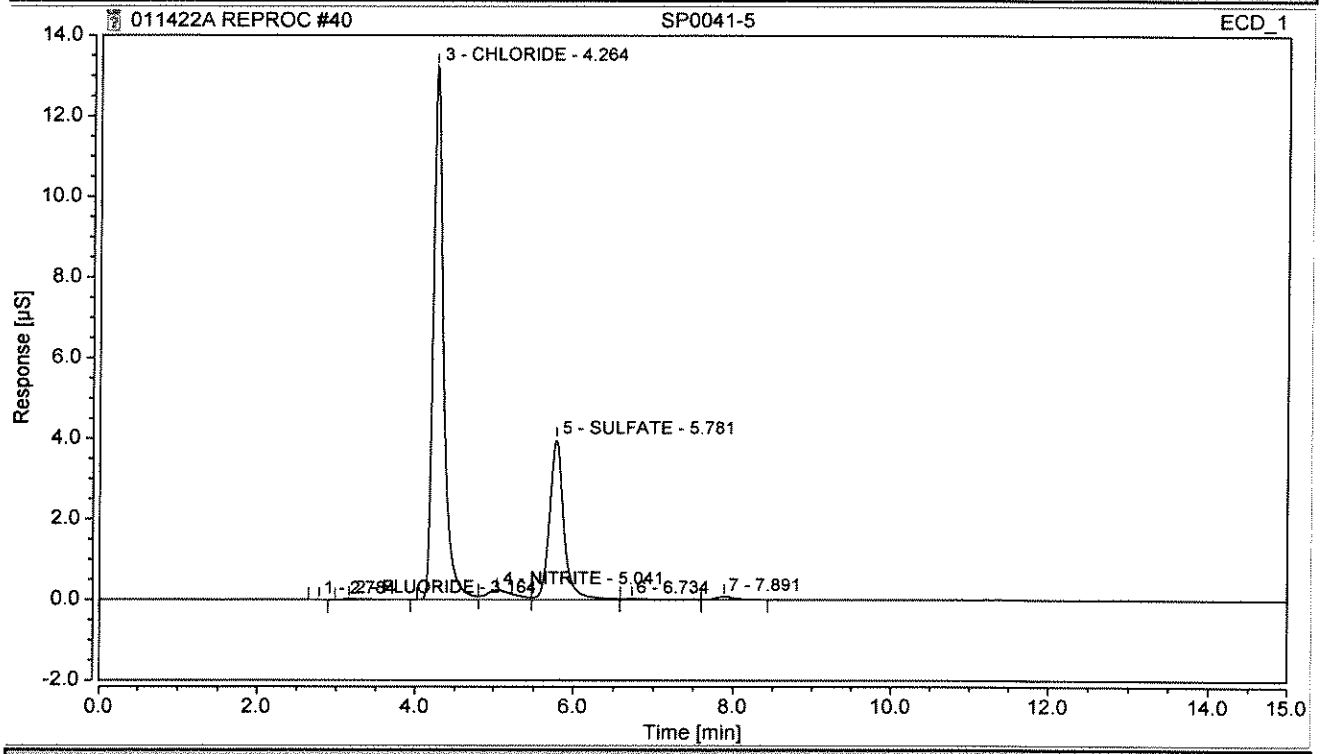
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
2	FLUORIDE	3.164	0.010	0.033	0.32	0.19	0.1021	n.a.
3	CHLORIDE	4.264	2.032	13.237	67.69	75.26	36.2212	n.a.
4	NITRITE	5.041	0.094	0.241	3.13	1.37	0.7445	n.a.
5	SULFATE	5.781	0.838	3.972	27.90	22.58	18.8480	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**2.973**	**17.482**	**99.04**	**99.39**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-5**	*Run Time (min):*	**14.99**
Vial Number:	**40**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**5.0**
Injection Date/Time:	**15/Jan/22 01:45**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

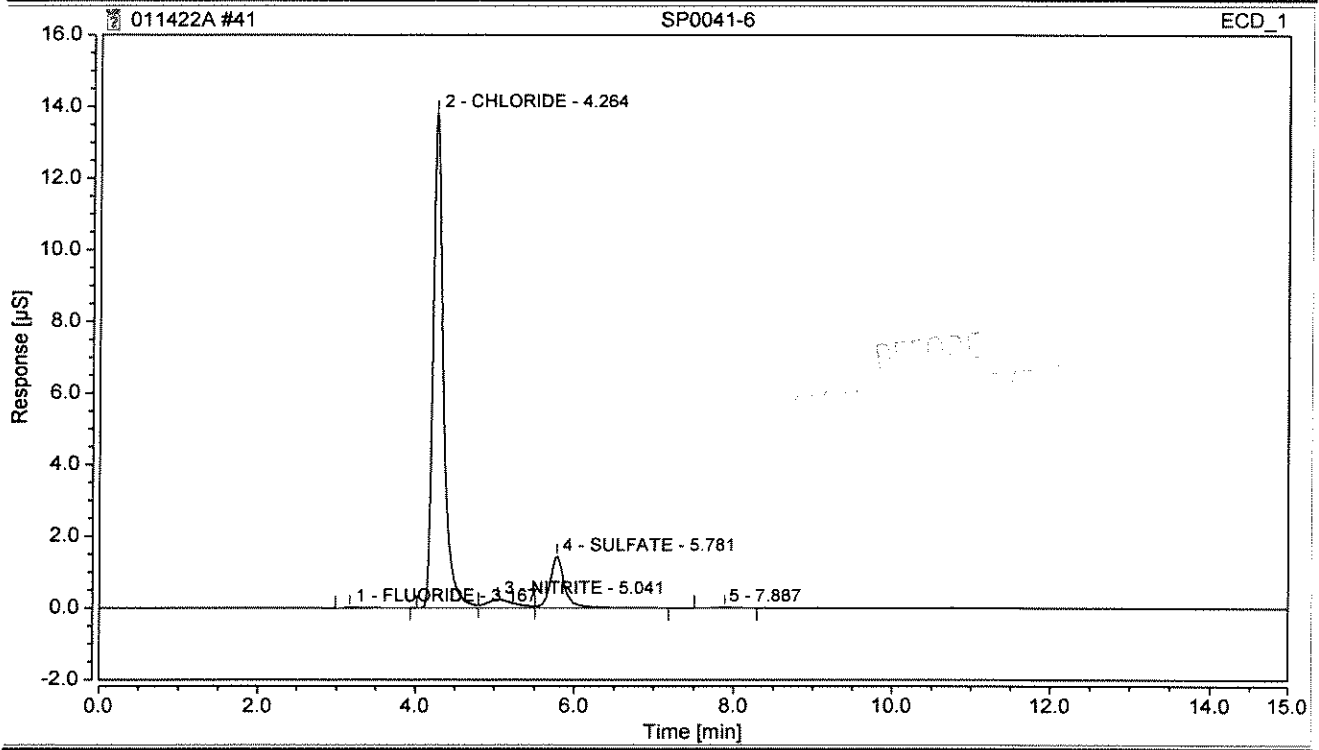
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
2	FLUORIDE	3.164	0.010	0.033	0.32	0.19	0.1021	n.a.
3	CHLORIDE	4.264	2.032	13.237	67.69	75.26	36.2212	n.a.
4	NITRITE	5.041	0.094	0.241	3.13	1.37	0.7445	n.a.
5	SULFATE	5.781	0.838	3.972	27.90	22.58	18.8480	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**2.973**	**17.482**	**99.04**	**99.39**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-6**	*Run Time (min):*	**14.98**
Vial Number:	**41**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**5.0**
Injection Date/Time:	**15/Jan/22 02:06**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

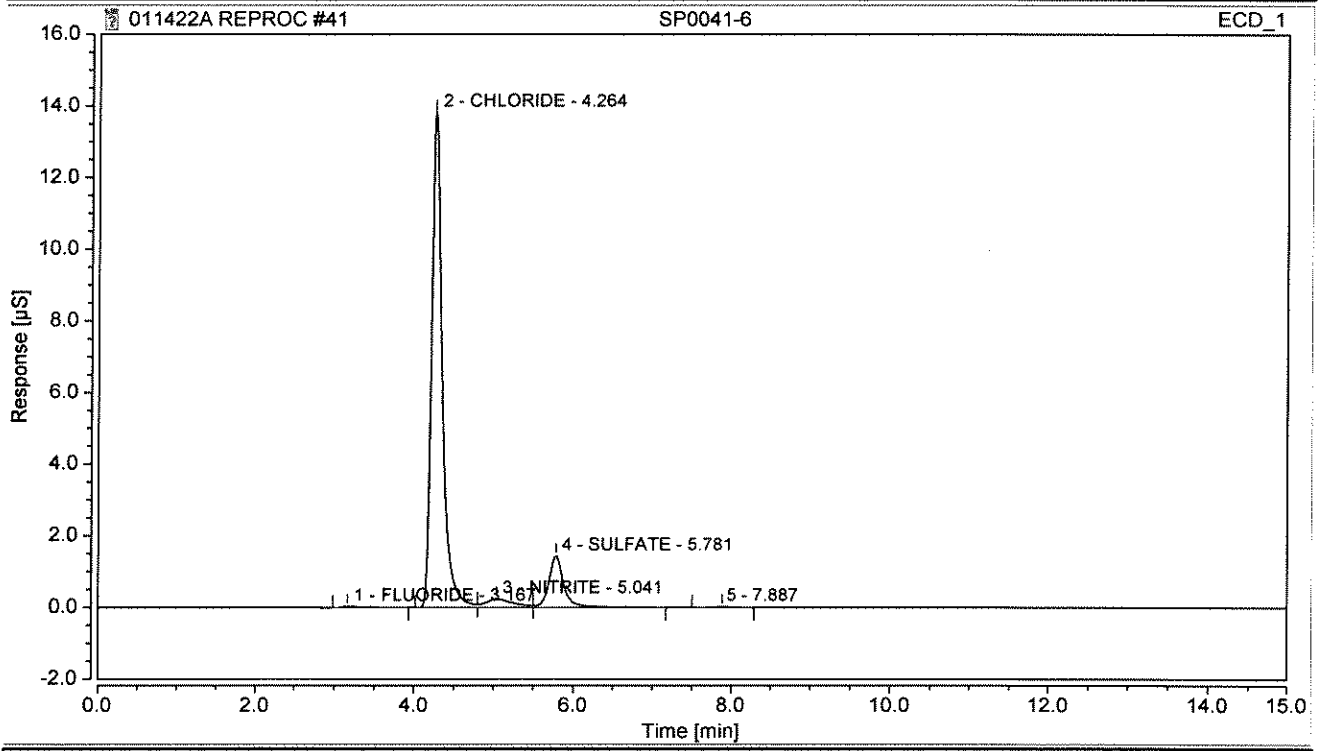
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	0.010	0.031	0.39	0.20	0.1056	n.a.
2	CHLORIDE	4.264	2.126	13.823	83.79	88.98	37.8645	n.a.
3	NITRITE	5.041	0.092	0.232	3.64	1.49	0.7326	n.a.
4	SULFATE	5.781	0.305	1.435	12.03	9.24	6.8677	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**2.534**	**15.521**	**99.86**	**99.90**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0041-6**	*Run Time (min):*	**14.98**
Vial Number:	**41**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**5.0**
Injection Date/Time:	**15/Jan/22 02:06**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

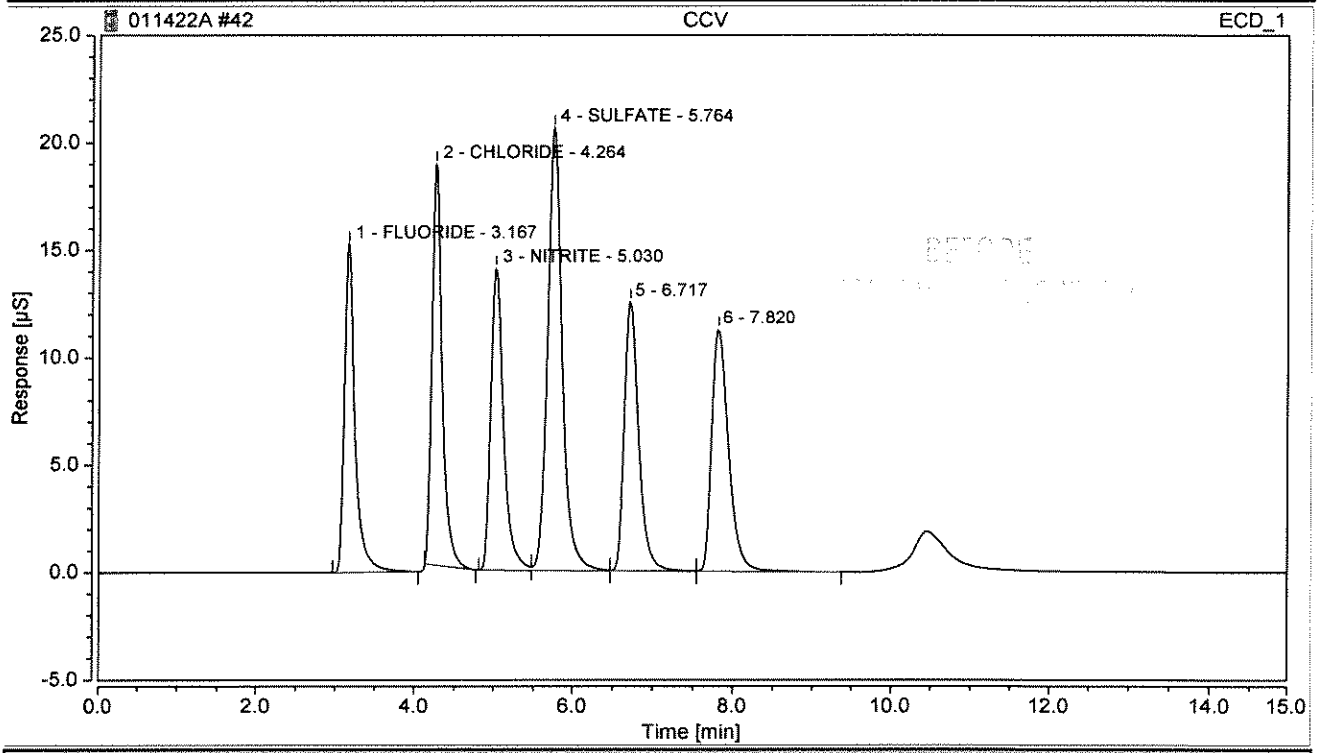
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	0.010	0.031	0.39	0.20	0.1056	n.a.
2	CHLORIDE	4.264	2.126	13.823	83.79	88.98	37.8645	n.a.
3	NITRITE	5.041	0.092	0.232	3.64	1.49	0.7326	n.a.
4	SULFATE	5.781	0.305	1.435	12.03	9.24	6.8677	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**2.534**	**15.521**	**99.86**	**99.90**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.98**
Vial Number:	**42**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**15/Jan/22 02:26**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

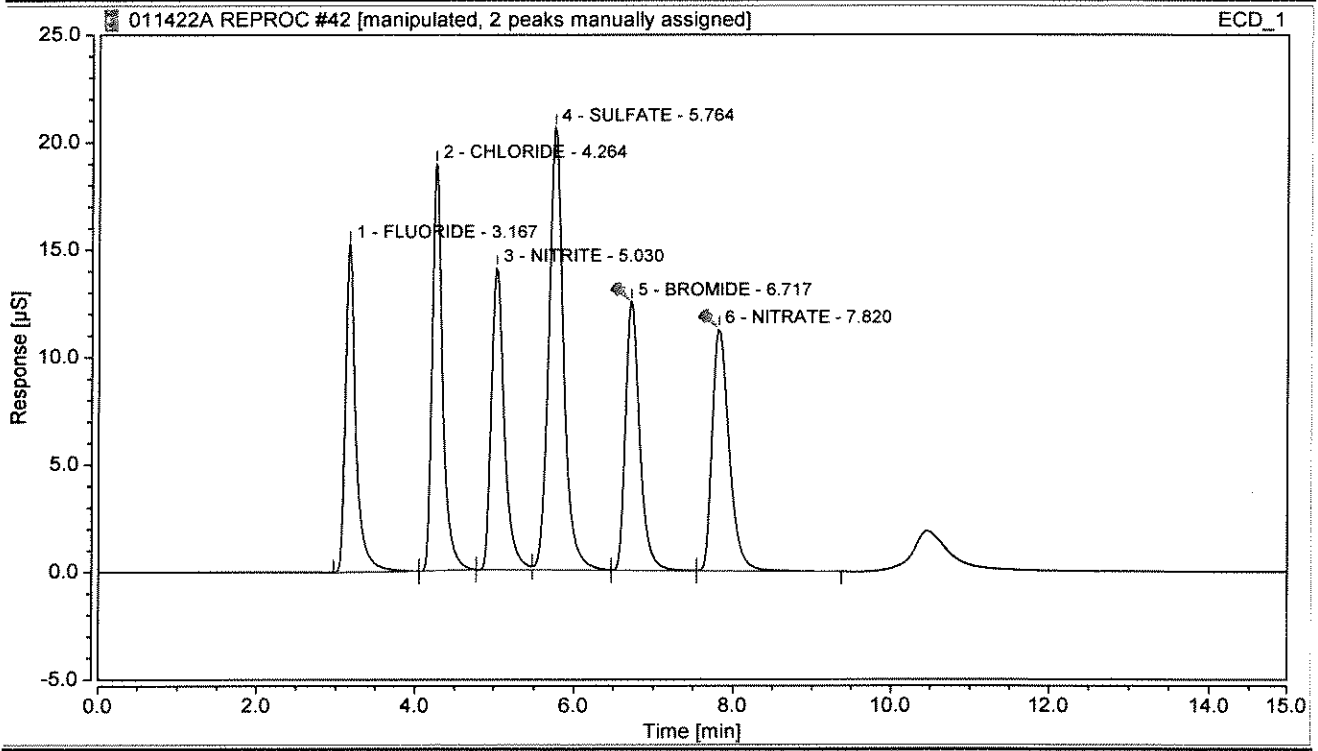
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	2.377	15.295	13.49	16.54	5.0387	0.7732
2	CHLORIDE	4.264	2.784	18.669	15.81	20.19	9.8724	-1.2757
3	NITRITE	5.030	2.612	14.077	14.83	15.22	4.1421	3.5533
4	SULFATE	5.764	4.438	20.633	25.20	22.31	19.9705	-0.1476
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.210**	**68.675**	**69.32**	**74.25**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.98**
Vial Number:	**42**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**15/Jan/22 02:26**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

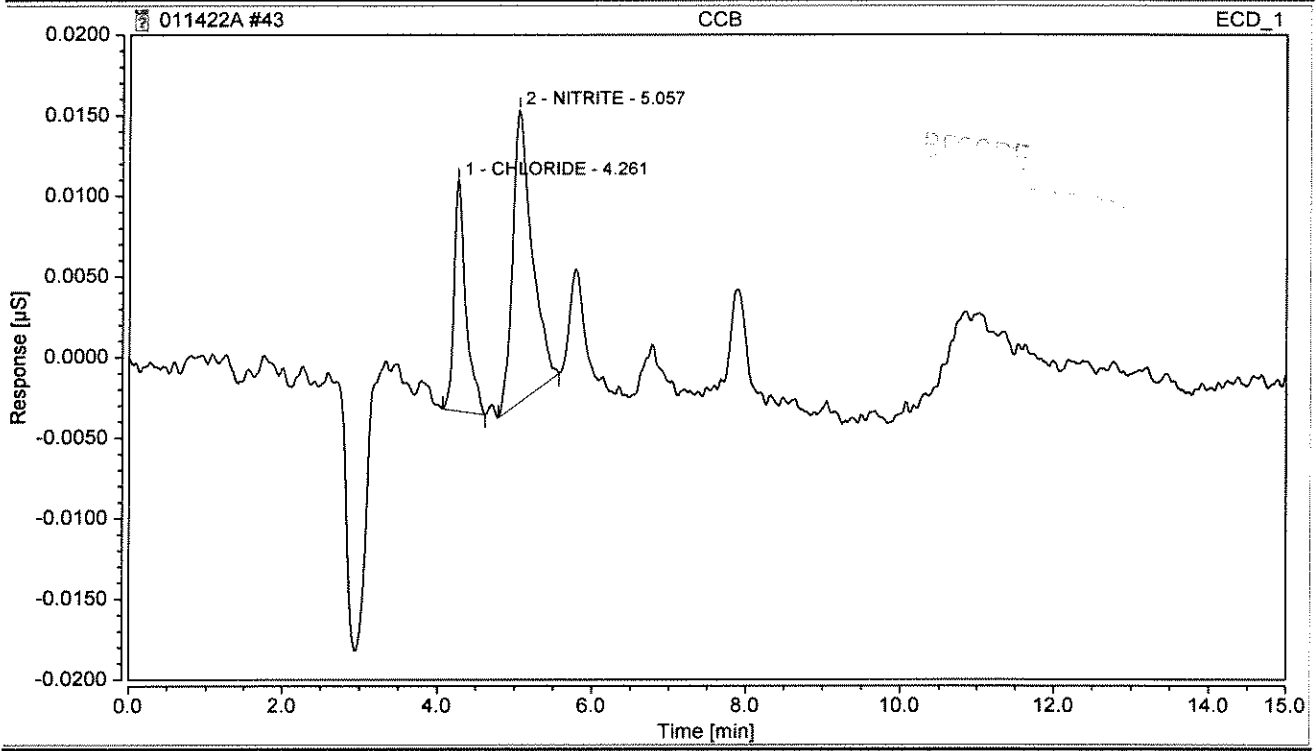
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.167	2.377	15.295	13.42	16.49	5.0384	0.7679
2	CHLORIDE	4.264	2.900	18.946	16.38	20.43	10.2795	2.7946
3	NITRITE	5.030	2.605	14.068	14.71	15.17	4.1319	3.2986
4	SULFATE	5.764	4.430	20.625	25.02	22.24	19.9370	-0.3148
5	BROMIDE	6.717	2.600	12.528	14.69	13.51	21.4398	7.1989
6	NITRATE	7.820	2.793	11.277	15.77	12.16	3.7982	-5.0455
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**17.706**	**92.739**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.99**
Vial Number:	**43**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**15/Jan/22 02:47**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

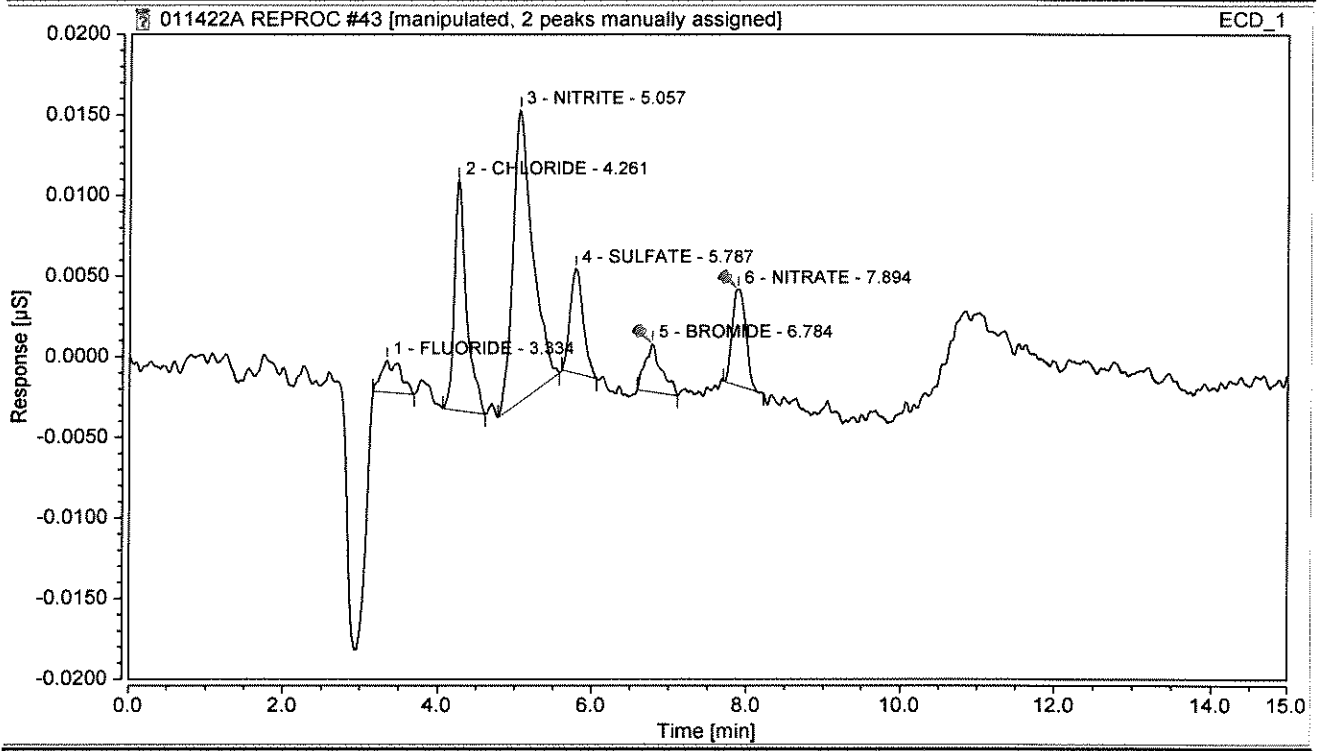
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.261	0.003	0.014	32.86	44.11	0.1493	n.a.
2	NITRITE	5.057	0.005	0.018	67.14	55.89	0.0084	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.008**	**0.032**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.99**
Vial Number:	**43**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**15/Jan/22 02:47**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.334	0.001	0.002	4.99	4.00	0.0012	n.a.
2	CHLORIDE	4.261	0.003	0.014	22.10	28.63	0.1493	n.a.
3	NITRITE	5.057	0.005	0.018	45.15	36.28	0.0084	n.a.
4	SULFATE	5.787	0.001	0.006	10.97	13.01	0.0058	n.a.
5	BROMIDE	6.784	0.001	0.003	6.44	6.07	0.0052	n.a.
6	NITRATE	7.894	0.001	0.006	10.36	12.01	0.0884	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.012**	**0.050**	**100.00**	**100.00**		

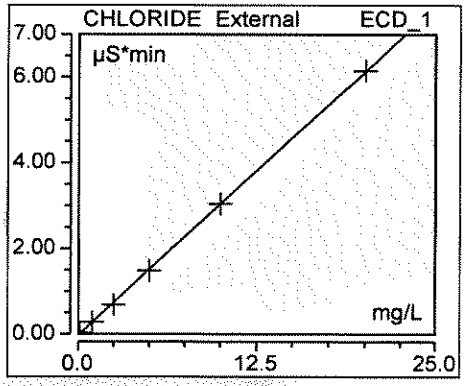
Calibration Batch Report

Sequence:	**010422A CAL**	*Injection Volume:*	**200.00**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Operator:*	**Katahdin Analytical**
Inj. Date / Time:	**04-Jan-2022 / 14:04**	*Run Time:*	**14.9805**

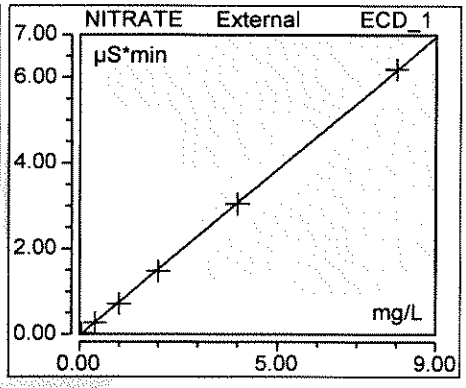
Calibration Summary

Peak Name	Eval.Type	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Coeff.Det. %
FLUORIDE	Area	Lin	6.000	0.000	0.489	0.000	99.9444
CHLORIDE	Area	in, WithOffse	7.000	-0.029	0.308	0.000	99.9754
NITRITE	Area	Lin	7.000	0.000	0.669	0.000	99.9280
SULFATE	Area	Lin	7.000	0.000	0.230	0.000	99.9792
BROMIDE	Height	Lin	6.000	0.000	0.649	0.000	99.9811
NITRATE	Area	in, WithOffse	7.000	-0.035	0.776	0.000	99.9775
		AVERAGE:		-0.0108	0.5202	0.0000	99.9643

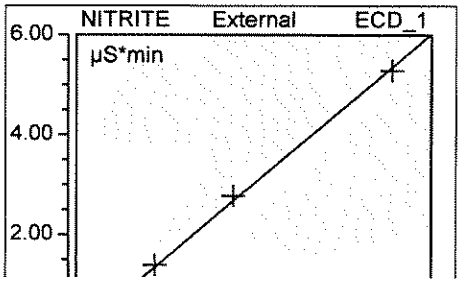
Injection Name / CHLORIDE	Ret.Time min CHLORIDE	Area µS*min CHLORIDE	Height µS CHLORIDE	Amount mg/L CHLORIDE
	ECD_1	ECD_1	ECD_1	ECD_1
CAL 1	4.287	0.0016	0.008	0.100
CAL 2	4.287	0.0145	0.075	0.142
CAL 3	4.277	0.2229	1.490	0.819
CAL 4	4.277	0.6331	4.301	2.150
CAL 5	4.277	1.3263	8.800	4.399
CAL 6	4.277	2.8978	18.330	9.499
CAL 7	4.274	5.6639	36.566	18.476
Average	4.279			
Rel. Std. Dev.	0.127 %			



Injection Name / NITRATE	Ret.Time min NITRATE	Area µS*min NITRATE	Height µS NITRATE	Amount mg/L NITRATE
	ECD_1	ECD_1	ECD_1	ECD_1
CAL 1	7.927	0.0014	0.006	0.047
CAL 2	7.947	0.0143	0.052	0.064
CAL 3	7.923	0.2126	0.900	0.319
CAL 4	7.907	0.6434	2.721	0.875
CAL 5	7.890	1.3767	5.599	1.819
CAL 6	7.860	2.9279	11.276	3.818
CAL 7	7.807	5.9857	21.546	7.758
Average	7.895			
Rel. Std. Dev.	0.604 %			



Injection Name / NITRITE	Ret.Time min NITRITE	Area µS*min NITRITE	Height µS NITRITE	Amount mg/L NITRITE
	ECD_1	ECD_1	ECD_1	ECD_1
CAL 1	5.127	0.0048	0.012	0.007
CAL 2	5.060	0.0176	0.069	0.026
CAL 3	5.047	0.1957	1.124	0.292
CAL 4	5.047	0.6065	3.481	0.906



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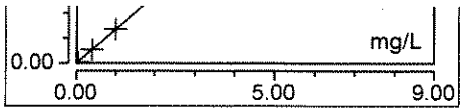
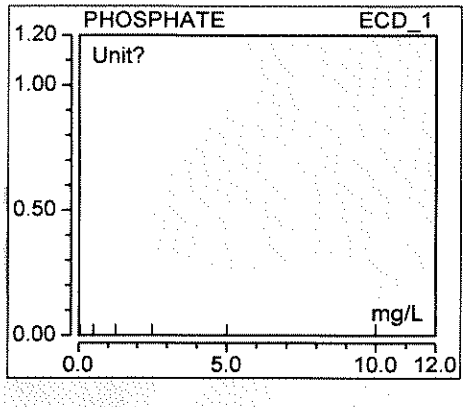
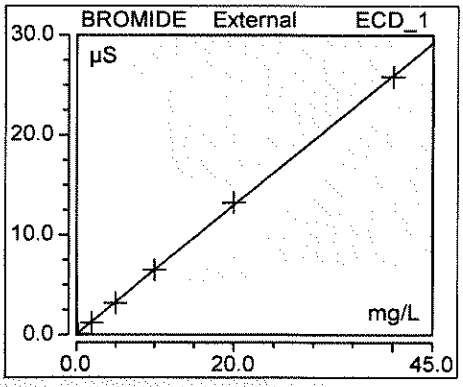
CAL 5	5.047	1.2677	6.958	1.895
CAL 6	5.050	2.6144	13.480	3.907
CAL 7	5.051	5.0018	24.501	7.475
Average	5.061			
Rel. Std. Dev.	0.583 %			



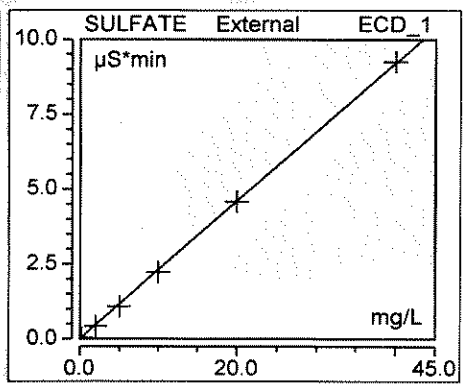
Injection Name	Ret.Time min	Area µS*min	Height µS	Amount mg/L
PHOSPHATE	PHOSPHATE	PHOSPHATE	PHOSPHATE	PHOSPHATE
	ECD_1	ECD_1	ECD_1	ECD_1
CAL 1	n.a.	n.a.	n.a.	n.a.
CAL 2	n.a.	n.a.	n.a.	n.a.
CAL 3	n.a.	n.a.	n.a.	n.a.
CAL 4	n.a.	n.a.	n.a.	n.a.
CAL 5	n.a.	n.a.	n.a.	n.a.
CAL 6	n.a.	n.a.	n.a.	n.a.
CAL 7	n.a.	n.a.	n.a.	n.a.
Average	#DIV/0!			
Rel. Std. Dev.	#DIV/0!			



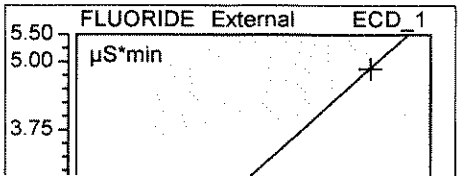
Injection Name	Ret.Time min	Area µS*min	Height µS	Amount mg/L
BROMIDE	BROMIDE	BROMIDE	BROMIDE	BROMIDE
	ECD_1	ECD_1	ECD_1	ECD_1
CAL 1	6.871	0.0004	0.001	0.002
CAL 2	6.794	0.0124	0.047	0.072
CAL 3	6.777	0.1760	0.846	1.305
CAL 4	6.770	0.5624	2.758	4.252
CAL 5	6.763	1.2020	5.749	8.864
CAL 6	6.750	2.5659	11.789	18.177
CAL 7	6.721	5.2191	23.381	36.050
Average	6.778			
Rel. Std. Dev.	0.691 %			



Injection Name	Ret.Time min	Area µS*min	Height µS	Amount mg/L
SULFATE	SULFATE	SULFATE	SULFATE	SULFATE
	ECD_1	ECD_1	ECD_1	ECD_1
CAL 1	5.831	0.0007	0.004	0.003
CAL 2	5.820	0.0320	0.135	0.139
CAL 3	5.810	0.3419	1.713	1.484
CAL 4	5.807	0.9948	4.935	4.317
CAL 5	5.800	2.0947	10.178	9.091
CAL 6	5.787	4.4178	20.927	19.173
CAL 7	5.764	8.9537	41.558	38.858
Average	5.803			
Rel. Std. Dev.	0.381 %			

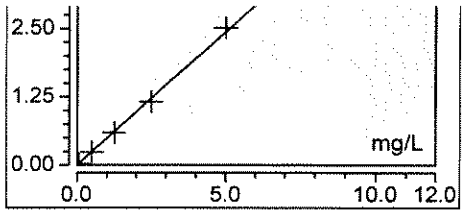


Injection Name	Ret.Time min	Area µS*min	Height µS	Amount mg/L
FLUORIDE	FLUORIDE	FLUORIDE	FLUORIDE	FLUORIDE
	ECD_1	ECD_1	ECD_1	ECD_1
CAL 1	3.511	0.0002	0.001	0.000



CAL 2	3.180	0.0069	0.044	0.014
CAL 3	3.167	0.1623	1.150	0.332
CAL 4	3.170	0.5196	3.635	1.062
CAL 5	3.170	1.0717	7.321	2.191
CAL 6	3.177	2.3790	14.654	4.864
CAL 7	3.184	4.7459	27.661	9.704

Average	3.223
Rel. Std. Dev.	3.944 %



Anion Summary Report

No. CHLORIDE	Name CHLORIDE	Time min CHLORIDE ECD_1	Area µS*min CHLORIDE ECD_1	Rel.Area % CHLORIDE ECD_1	Height µS CHLORIDE ECD_1	Rel.Height % CHLORIDE ECD_1	Amount mg/L CHLORIDE ECD_1
1	CAL 1	4.287	0.0016	17.04	0.01	25.14	0.1003
2	CAL 2	4.287	0.0145	14.81	0.07	17.73	0.1422
3	CAL 3	4.277	0.2229	17.00	1.49	20.63	0.8186
4	CAL 4	4.277	0.6331	15.99	4.30	19.70	2.1497
5	CAL 5	4.277	1.3263	15.90	8.80	19.73	4.3993
6	CAL 6	4.277	2.8978	16.28	18.33	20.26	9.4994
7	CAL 7	4.274	5.6639	15.92	36.57	20.87	18.4760
	Sum:	29.955	10.760	112.941	69.570	144.069	35.586
	Average:	4.279	1.537	16.134	9.939	20.581	5.084
	Rel.Std.Dev:	0.127 %	135.808 %	4.709 %	134.981 %	10.976 %	133.263 %

No. NITRATE	Name NITRATE	Time min NITRATE ECD_1	Area µS*min NITRATE ECD_1	Rel.Area % NITRATE ECD_1	Height µS NITRATE ECD_1	Rel.Height % NITRATE ECD_1	Amount mg/L NITRATE ECD_1
1	CAL 1	7.927	0.0014	15.25	0.01	17.55	0.0473
2	CAL 2	7.947	0.0143	14.62	0.05	12.41	0.0639
3	CAL 3	7.923	0.2126	16.21	0.90	12.46	0.3194
4	CAL 4	7.907	0.6434	16.25	2.72	12.47	0.8746
5	CAL 5	7.890	1.3767	16.51	5.60	12.55	1.8195
6	CAL 6	7.860	2.9279	16.45	11.28	12.47	3.8182
7	CAL 7	7.807	5.9857	16.83	21.55	12.30	7.7581
	Sum:	55.262	11.162	112.117	42.100	92.194	14.701
	Average:	7.895	1.595	16.017	6.014	13.171	2.100
	Rel.Std.Dev:	0.604 %	137.771 %	4.905 %	131.928 %	14.659 %	134.783 %

No. NITRITE	Name NITRITE	Time min NITRITE ECD_1	Area µS*min NITRITE ECD_1	Rel.Area % NITRITE ECD_1	Height µS NITRITE ECD_1	Rel.Height % NITRITE ECD_1	Amount mg/L NITRITE ECD_1
1	CAL 1	5.127	0.0048	52.95	0.01	38.84	0.0072
2	CAL 2	5.060	0.0176	18.01	0.07	16.26	0.0263
3	CAL 3	5.047	0.1957	14.92	1.12	15.55	0.2925
4	CAL 4	5.047	0.6065	15.32	3.48	15.95	0.9064
5	CAL 5	5.047	1.2677	15.20	6.96	15.60	1.8946
6	CAL 6	5.050	2.6144	14.69	13.48	14.90	3.9073
7	CAL 7	5.051	5.0018	14.06	24.50	13.98	7.4754
	Sum:	35.428	9.708	145.146	49.624	131.085	14.510
	Average:	5.061	1.387	20.735	7.089	18.726	2.073
	Rel.Std.Dev:	0.583 %	132.955 %	68.775 %	127.738 %	47.539 %	132.955 %

No. PHOSPHATE	Name PHOSPHATE	Time min PHOSPHATE ECD_1	Area µS*min PHOSPHATE ECD_1	Rel.Area % PHOSPHATE ECD_1	Height µS PHOSPHATE ECD_1	Rel.Height % PHOSPHATE ECD_1	Amount mg/L PHOSPHATE ECD_1
1	CAL 1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	CAL 2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	CAL 3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	CAL 4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	CAL 5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

6	CAL 6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	CAL 7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Sum:	0.000	0.000	0.000	0.000	0.000	0.000
	Average:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Rel.Std.Dev:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

No. BROMIDE	Name BROMIDE	Time min BROMIDE ECD_1	Area µS*min BROMIDE ECD_1	Rel.Area % BROMIDE ECD_1	Height µS BROMIDE ECD_1	Rel.Height % BROMIDE ECD_1	Amount mg/L BROMIDE ECD_1
1	CAL 1	6.871	0.0004	4.52	0.00	3.70	0.0018
2	CAL 2	6.794	0.0124	12.69	0.05	11.15	0.0725
3	CAL 3	6.777	0.1760	13.42	0.85	11.72	1.3051
4	CAL 4	6.770	0.5624	14.20	2.76	12.63	4.2518
5	CAL 5	6.763	1.2020	14.41	5.75	12.89	8.8645
6	CAL 6	6.750	2.5659	14.41	11.79	13.03	18.1773
7	CAL 7	6.721	5.2191	14.67	23.38	13.34	36.0498
	Sum:	47.445	9.738	88.330	44.572	78.467	68.723
	Average:	6.778	1.391	12.619	6.367	11.210	9.818
	Rel.Std.Dev:	0.691 %	137.853 %	28.840 %	134.982 %	30.340 %	134.982 %

No. SULFATE	Name SULFATE	Time min SULFATE ECD_1	Area µS*min SULFATE ECD_1	Rel.Area % SULFATE ECD_1	Height µS SULFATE ECD_1	Rel.Height % SULFATE ECD_1	Amount mg/L SULFATE ECD_1
1	CAL 1	5.831	0.0007	7.89	0.00	11.50	0.0031
2	CAL 2	5.820	0.0320	32.76	0.14	32.05	0.1388
3	CAL 3	5.810	0.3419	26.07	1.71	23.72	1.4838
4	CAL 4	5.807	0.9948	25.12	4.94	22.61	4.3173
5	CAL 5	5.800	2.0947	25.12	10.18	22.82	9.0906
6	CAL 6	5.787	4.4178	24.82	20.93	23.13	19.1726
7	CAL 7	5.764	8.9537	25.17	41.56	23.72	38.8575
	Sum:	40.618	16.836	166.954	79.450	159.547	73.064
	Average:	5.803	2.405	23.851	11.350	22.792	10.438
	Rel.Std.Dev:	0.381 %	136.525 %	31.783 %	134.301 %	26.265 %	136.525 %

No. FLUORIDE	Name FLUORIDE	Time min FLUORIDE ECD_1	Area µS*min FLUORIDE ECD_1	Rel.Area % FLUORIDE ECD_1	Height µS FLUORIDE ECD_1	Rel.Height % FLUORIDE ECD_1	Amount mg/L FLUORIDE ECD_1
1	CAL 1	3.511	0.0002	2.35	0.00	3.27	0.0004
2	CAL 2	3.180	0.0069	7.11	0.04	10.40	0.0142
3	CAL 3	3.167	0.1623	12.38	1.15	15.92	0.3318
4	CAL 4	3.170	0.5196	13.12	3.63	16.65	1.0624
5	CAL 5	3.170	1.0717	12.85	7.32	16.41	2.1914
6	CAL 6	3.177	2.3790	13.36	14.65	16.20	4.8645
7	CAL 7	3.184	4.7459	13.34	27.66	15.79	9.7041
	Sum:	22.558	8.886	74.512	54.465	94.638	18.169
	Average:	3.223	1.269	10.645	7.781	13.520	2.596
	Rel.Std.Dev:	3.944 %	137.765 %	40.227 %	131.090 %	37.112 %	137.765 %

SUBCONTRACTED DATA

February 0 , 0 Service Request No:R 005 0

Heather Manz
Katahdin Analytical Services
00 Technology Way
P.O. Bo 5 0
Scarborough, M 0 0 0

r r R r r D

Dear Heather,

nclosed are the results of the sample s submitted to our laboratory anuary , 0
For your reference, these analyses have been assigned our service request number **R**

All testing was performed according to our laboratory's quality assurance program and met the requirements of the TNI standards e cept as noted in the case narrative report. Any testing not included in the lab s accreditation is identified on a Non Certified Analytes report. All results are intended to be considered in their entirety. ALS nvironmental is not responsible for use of less than the complete report. Results apply only to the individual samples submitted to the lab for analysis, as listed in the report. The measurement uncertainty of the results included in this report is within that e pected when using the prescribed method s , and represented by Laboratory Control Sample control limits. Any events, such as QC failures or Holding Time e ceedances, which may add to the uncertainty are e plained in the report narrative or are flagged with qualifiers. The flags are e plained in the Report Qualifiers and Definitions page of this report.

Please contact me if you have any questions. My e tension is . You may also contact me via email at anice. aeger alsglobal.com.

Respectfully submitted,

r r d r

anice aeger
Pro ect Manager

CC: Greg Lull

ALS nvironmental
ALS Group USA, Corp
5 5 efferson Road, Building 00, Suite 0
Rochester, NY
5 5 5 0
5 5 5

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Narrative Documents

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: Katahdin Analytical Services
Project: SO8943 Fort Devens
Sample Matrix: Water

Service Request: R2200580
Date Received: 01/21/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level IV requested by the client.

Sample Receipt:

Four water samples were received for analysis at ALS Environmental on 01/21/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

General Chemistry:

No significant anomalies were noted with this analysis.

Approved by _____ Date 02/02/2022

D M D		D R				
	R	MD	MR		M	d
Carbon, Dissolved Organic DOC	.	0.5	.0	mg L	0	0A
Carbon, Dissolved Organic DOC	.	0.5	.0	mg L	0	0A
Carbon, Dissolved Organic DOC	.	0.5	.0	mg L	0	0A
Carbon, Dissolved Organic DOC	.	0.5	.0	mg L	0	0A

D M D		D R				
	R	MD	MR		M	d
Carbon, Dissolved Organic DOC	.5	0.5	.0	mg L	0	0A
Carbon, Dissolved Organic DOC	.	0.5	.0	mg L	0	0A
Carbon, Dissolved Organic DOC	.	0.5	.0	mg L	0	0A
Carbon, Dissolved Organic DOC	.	0.5	.0	mg L	0	0A

D M		D R				
	R	MD	MR		M	d
Carbon, Dissolved Organic DOC	.	0.5	.0	mg L	0	0A
Carbon, Dissolved Organic DOC	.	0.5	.0	mg L	0	0A
Carbon, Dissolved Organic DOC	.0	0.5	.0	mg L	0	0A
Carbon, Dissolved Organic DOC	.	0.5	.0	mg L	0	0A

D M		D R				
	R	MD	MR		M	d
Carbon, Dissolved Organic DOC	.	0.5	.0	mg L	0	0A
Carbon, Dissolved Organic DOC	.	0.5	.0	mg L	0	0A
Carbon, Dissolved Organic DOC	.0	0.5	.0	mg L	0	0A
Carbon, Dissolved Organic DOC	.	0.5	.0	mg L	0	0A

Sample Receipt Information

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

M R R R

SAMPL	CLI	NT	SAMPL ID	DAT	TIM
R 005 0 00	MS	D	FF V NT	0	0
R 005 0 00	MS	D	FF V NT	0	5
R 005 0 00	MS	S	FF V NT	0	
R 005 0 00	MS	S	FF V NT	0	0

ALS Rochester

Katahdin
ANALYTICAL SERVICES

Sub-contract Laboratory Chain of Custody

Client:	Contact:	Email:	Phone #:
Katahdin Analytical Services	Ms. Heather Manz	hmanz@katahdinlab.com	(207) 874-2400
Address:	**City:**	**State:** / **Zip:**	**Project Name:**
600 Technology Way	Scarborough	Maine / 04074	Fort Devens
KAS WO #:	**Quote #:**	**Purchase Order #:**	**TAT:** 2 week
SO8943		SO8943	**Verbal TAT:** N/A
RPT Level: 4	**Reporting Format:** POD	**EDD:** General spreadsheet	

Sample ID:	Collect Date/Time:	Matrix:	No. of Containers	Pres. H2SO4	MS/MSD Dup.	Analysis: SW9060 DOC Filtered? (Y) N	~~Analysis:~~ Filtered? Y / N	~~Analysis:~~ Filtered? Y / N
MS-21-1D-FF-EVENT#4	29-DEC-21 13:30	AQ	2		NO	X		
MS-21-2D-FF-EVENT#4	29-DEC-21 14:58	AQ	2					
MS-21-2S-FF-EVENT#4	29-DEC-21 16:17	AQ	2					
MS-21-4S-FF-EVENT#4	29-DEC-21 17:10	AQ	2	↓	↓	↓		

Relinquished By:	Date/Time:	Received By:
[signature]	01/20/22 1430	[signature] 1/21/22 10:30

Comments:

Hold time will expire on Jan. 26

Please report this COC separately

R2200580 5
Katahdin Analytical Services
SO8943 Fort Devens

R2200580 5
Katahdin Analytical Services
SO8943 Fort Devens

Cooler Receipt and Preservation Check Form

Project/Client Katahdin Folder Number

Cooler received on 1/21/22 by: MM

COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	Y	N
2	**Custody papers** properly completed (ink, signed)?	Y	N
3	Did all bottles arrive in good **condition** (unbroken)?	Y	N
4	Circle: **Wet Ice** **Dry Ice** **Gel packs** present?	Y	N

5a	**Perchlorate** samples have required headspace?	Y	N	NA
5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	Y	N	NA
6	Where did the bottles originate?	ALS/ROC	CLIENT	
7	Soil VOA received as:	Bulk	Encore	5035set NA

8. Temperature Readings Date: 1/21/22 Time: 10:50 ID: IR#7 IR#11 From: Temp Blank Sample Bottle

Observed Temp (°C)	2.0						
Within 0-6°C?	Y N	Y N	Y N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed (described below) Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: R/our by MM on 1/21/22 at 11:00

5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 1/21/22 Time: 1332 by: AD

9. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? YES NO
10. Did all bottle labels and tags agree with custody papers? YES NO
11. Were correct containers used for the tests indicated? YES NO
12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO
13. Air Samples: Cassettes / Tubes Intact Y / N with MS Y / N Canisters Pressurized Tedlar® Bags Inflated N/A N/A

pH	Lot of test paper	Reagent	Preserved? Yes	Preserved? No	Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
≥12		NaOH								
≤2		HNO_3								
≤2	225320	H_2SO_4	✓		Client					
<4		$NaHSO_4$								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add $Na_2S_2O_3$ (625, 608, CN), ascorbic (phenol).					
		$Na_2S_2O_3$								
		ZnAcetate	-	-						
		HCl	**	**						

**VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).

Bottle lot numbers: Client

Explain all Discrepancies/ Other Comments:

HPROD	BULK
HTR	FLDT
SUB	HGFB
ALS	LL3541

Labels secondary reviewed by: DMA 1/24/22

PC Secondary Review: *significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

P:\INTRANET\QAQC\Forms Controlled\Cooler Receipt r19.doc 03/02/2021

ALS Group USA, Corp.
dba ALS Environmental

Internal Chain of Custody Report

Client: Katahdin Analytical Services **Service Request:** R2200580
Project: SO8943 Fort Devens

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R2200580-001.01					
	9060A				
		1/21/2022	1332	SMO / GLAFORCE	
		1/21/2022	1405	RT000455 / GLAFORCE	
R2200580-001.02					
		1/21/2022	1334	SMO / GLAFORCE	
		1/21/2022	1405	RT000455 / GLAFORCE	
R2200580-002.01					
	9060A				
		1/21/2022	1332	SMO / GLAFORCE	
		1/21/2022	1406	RT000455 / GLAFORCE	
R2200580-002.02					
		1/21/2022	1334	SMO / GLAFORCE	
		1/21/2022	1406	RT000455 / GLAFORCE	
R2200580-003.01					
	9060A				
		1/21/2022	1332	SMO / GLAFORCE	
		1/21/2022	1406	RT000455 / GLAFORCE	
R2200580-003.02					
		1/21/2022	1334	SMO / GLAFORCE	
		1/21/2022	1406	RT000455 / GLAFORCE	
R2200580-004.01					
	9060A				
		1/21/2022	1332	SMO / GLAFORCE	
		1/21/2022	1406	RT000455 / GLAFORCE	
R2200580-004.02					
		1/21/2022	1334	SMO / GLAFORCE	
		1/21/2022	1406	RT000455 / GLAFORCE	

Miscellaneous Forms

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REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
E	Organics- Concentration has exceeded the calibration range for that specific analysis.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.
#	Spike was diluted out.
+	Correlation coefficient for MSA is <0.995.
N	Inorganics- Matrix spike recovery was outside laboratory limits.
N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
S	Concentration has been determined using Method of Standard Additions (MSA).
W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
P	Concentration >40% difference between the two GC columns.
C	Confirmed by GC/MS
Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).
X	See Case Narrative for discussion.
MRL LOQ	Method Reporting Limit. Also known as: Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for Accreditations[1]

NELAP State Accreditation #
Florida ID # E87674
New Hampshire ID # 2941
New York ID # 10145
Pennsylvania ID# 68-786
Virginia #460167

Non-NELAP State Accreditation #
Connecticut ID #PH0556
Delaware Approved
Maine ID #NY01587
North Carolina #36701
North Carolina #676
Rhode Island ID #LAO00333

PJLA Testing DoD ELAP Accreditation #65817

[1] Analyses were performed according to the current DoD Quality Systems Manual, our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current requirements, where applicable, except as noted in the case narrative. This report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory or go to https://www.alsglobal.com/locations/americas/north-america/usa/new-york/rochester-environmental

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Katahdin Analytical Services **Service Request:** R2200580
Project: SO8943 Fort Devens/

Sample Name: MS-21-1D-FF-EVENT#4 **Date Collected:** 12/29/21
Lab Code: R2200580-001 **Date Received:** 01/21/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
9060A		SMEDBURY

Sample Name: MS-21-2D-FF-EVENT#4 **Date Collected:** 12/29/21
Lab Code: R2200580-002 **Date Received:** 01/21/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
9060A		SMEDBURY

Sample Name: MS-21-2S-FF-EVENT#4 **Date Collected:** 12/29/21
Lab Code: R2200580-003 **Date Received:** 01/21/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
9060A		SMEDBURY

Sample Name: MS-21-4S-FF-EVENT#4 **Date Collected:** 12/29/21
Lab Code: R2200580-004 **Date Received:** 01/21/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
9060A		SMORGAN

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C	3005A/3010A
6020A	ILM05.3
9034 Sulfide Acid Soluble	9030B
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3005A/3010A
6010 SPLP (1312) extract	3005A/3010A
7199	3060A
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction
For analytical methods not listed, the preparation method is the same as the analytical method reference.	

Sample Results

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Analytical Report

Client:	Katahdin Analytical Services	**Service Request:**	R2200580
Project:	SO8943 Fort Devens	**Date Collected:**	12/29/21 13:30
Sample Matrix:	Water	**Date Received:**	01/21/22 10:30
Sample Name:	MS-21-1D-FF-EVENT#4	**Basis:**	NA
Lab Code:	R2200580-001		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Carbon, Dissolved Organic (DOC)	9060A	**2.6**	mg/L	1.0	0.5	0.5	1	01/24/22 02:52	
Carbon, Dissolved Organic (DOC)	9060A	**2.6**	mg/L	1.0	0.5	0.5	1	01/24/22 02:33	
Carbon, Dissolved Organic (DOC)	9060A	**3.3**	mg/L	1.0	0.5	0.5	1	01/24/22 02:42	
Carbon, Dissolved Organic (DOC)	9060A	**2.8**	mg/L	1.0	0.5	0.5	1	01/24/22 03:02	

Analytical Report

Client:	Katahdin Analytical Services	**Service Request:**	R2200580
Project:	SO8943 Fort Devens	**Date Collected:**	12/29/21 14:58
Sample Matrix:	Water	**Date Received:**	01/21/22 10:30
Sample Name:	MS-21-2D-FF-EVENT#4	**Basis:**	NA
Lab Code:	R2200580-002		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Carbon, Dissolved Organic (DOC)	9060A	**1.5**	mg/L	1.0	0.5	0.5	1	01/24/22 04:45	
Carbon, Dissolved Organic (DOC)	9060A	**1.3**	mg/L	1.0	0.5	0.5	1	01/24/22 04:35	
Carbon, Dissolved Organic (DOC)	9060A	**1.4**	mg/L	1.0	0.5	0.5	1	01/24/22 05:05	
Carbon, Dissolved Organic (DOC)	9060A	**1.6**	mg/L	1.0	0.5	0.5	1	01/24/22 04:55	

Analytical Report

Client:	Katahdin Analytical Services	**Service Request:**	R2200580
Project:	SO8943 Fort Devens	**Date Collected:**	12/29/21 16:17
Sample Matrix:	Water	**Date Received:**	01/21/22 10:30
Sample Name:	MS-21-2S-FF-EVENT#4	**Basis:**	NA
Lab Code:	R2200580-003		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Carbon, Dissolved Organic (DOC)	9060A	**2.8**	mg/L	1.0	0.5	0.5	1	01/24/22 05:16	
Carbon, Dissolved Organic (DOC)	9060A	**2.8**	mg/L	1.0	0.5	0.5	1	01/24/22 05:26	
Carbon, Dissolved Organic (DOC)	9060A	**3.0**	mg/L	1.0	0.5	0.5	1	01/24/22 05:36	
Carbon, Dissolved Organic (DOC)	9060A	**3.2**	mg/L	1.0	0.5	0.5	1	01/24/22 05:45	

Analytical Report

Client:	Katahdin Analytical Services	**Service Request:**	R2200580
Project:	SO8943 Fort Devens	**Date Collected:**	12/29/21 17:10
Sample Matrix:	Water	**Date Received:**	01/21/22 10:30
Sample Name:	MS-21-4S-FF-EVENT#4	**Basis:**	NA
Lab Code:	R2200580-004		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Carbon, Dissolved Organic (DOC)	9060A	**4.1**	mg/L	1.0	0.5	0.5	1	01/25/22 20:53	
Carbon, Dissolved Organic (DOC)	9060A	**4.1**	mg/L	1.0	0.5	0.5	1	01/25/22 21:03	
Carbon, Dissolved Organic (DOC)	9060A	**4.0**	mg/L	1.0	0.5	0.5	1	01/25/22 21:23	
Carbon, Dissolved Organic (DOC)	9060A	**3.8**	mg/L	1.0	0.5	0.5	1	01/25/22 21:13	

QC Summary Forms

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Analytical Report

Client:	Katahdin Analytical Services	**Service Request:**	R2200580
Project:	SO8943 Fort Devens	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R2200580-MB1		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Carbon, Dissolved Organic (DOC)	9060A	ND	U	mg/L	1.0	0.5	0.5	1	01/23/22 19:45	
Carbon, Dissolved Organic (DOC)	9060A	ND	U	mg/L	1.0	0.5	0.5	1	01/23/22 20:14	
Carbon, Dissolved Organic (DOC)	9060A	ND	U	mg/L	1.0	0.5	0.5	1	01/23/22 20:04	
Carbon, Dissolved Organic (DOC)	9060A	ND	U	mg/L	1.0	0.5	0.5	1	01/23/22 19:54	

Analytical Report

Client:	Katahdin Analytical Services	**Service Request:**	R2200580
Project:	SO8943 Fort Devens	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R2200580-MB2		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Carbon, Dissolved Organic (DOC)	9060A	ND	U	mg/L	1.0	0.5	0.5	1	01/25/22 10:41	
Carbon, Dissolved Organic (DOC)	9060A	ND	U	mg/L	1.0	0.5	0.5	1	01/25/22 11:11	
Carbon, Dissolved Organic (DOC)	9060A	ND	U	mg/L	1.0	0.5	0.5	1	01/25/22 11:01	
Carbon, Dissolved Organic (DOC)	9060A	ND	U	mg/L	1.0	0.5	0.5	1	01/25/22 10:51	

Client: Katahdin Analytical Services
Project: SO8943 Fort Devens
Sample Matrix: Water

Service Request: R2200580
Date Analyzed: 01/23/22

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R2200580-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Carbon, Dissolved Organic (DOC)	9060A	10	10.0	100	85-115
Carbon, Dissolved Organic (DOC)	9060A	9.4	10.0	94	85-115
Carbon, Dissolved Organic (DOC)	9060A	9.3	10.0	93	85-115
Carbon, Dissolved Organic (DOC)	9060A	9.9	10.0	99	85-115

Client: Katahdin Analytical Services
Project: SO8943 Fort Devens
Sample Matrix: Water

Service Request: R2200580
Date Analyzed: 01/25/22

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R2200580-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Carbon, Dissolved Organic (DOC)	9060A	10.6	10.0	106	85-115
Carbon, Dissolved Organic (DOC)	9060A	10.5	10.0	105	85-115
Carbon, Dissolved Organic (DOC)	9060A	9.41	10.0	94	85-115
Carbon, Dissolved Organic (DOC)	9060A	10.6	10.0	106	85-115

Client: Katahdin Analytical Services **Service Request:**R2200580
Project: SO8943 Fort Devens

Continuing Calibration Blank (CCB) Summary
Carbon, Dissolved Organic (DOC)

Analysis Method: 9060A **Units:**mg/L

	Analysis Lot	Lab Code	Date Analyzed	LOQ	LOD	MDL	Result	Q
CCB1	752551	RQ2200677-02	01/23/22 20:04	1.0	0.5	0.5	ND	U
CCB2	752551	RQ2200677-02	01/23/22 19:45	1.0	0.5	0.5	ND	U
CCB3	752551	RQ2200677-02	01/23/22 20:14	1.0	0.5	0.5	ND	U
CCB4	752551	RQ2200677-02	01/23/22 19:54	1.0	0.5	0.5	ND	U
CCB5	752551	RQ2200677-08	01/24/22 03:54	1.0	0.5	0.5	ND	U
CCB6	752551	RQ2200677-08	01/24/22 04:24	1.0	0.5	0.5	ND	U
CCB7	752551	RQ2200677-08	01/24/22 04:14	1.0	0.5	0.5	ND	U
CCB8	752551	RQ2200677-08	01/24/22 04:04	1.0	0.5	0.5	ND	U
CCB9	752551	RQ2200677-10	01/24/22 12:13	1.0	0.5	0.5	ND	U
CCB10	752551	RQ2200677-10	01/24/22 12:23	1.0	0.5	0.5	ND	U
CCB11	752551	RQ2200677-10	01/24/22 12:03	1.0	0.5	0.5	ND	U
CCB12	752551	RQ2200677-10	01/24/22 12:33	1.0	0.5	0.5	ND	U
CCB13	752551	RQ2200677-11	01/24/22 20:12	1.0	0.5	0.5	ND	U
CCB14	752551	RQ2200677-11	01/24/22 20:42	1.0	0.5	0.5	ND	U
CCB15	752551	RQ2200677-11	01/24/22 20:32	1.0	0.5	0.5	ND	U
CCB16	752551	RQ2200677-11	01/24/22 20:22	1.0	0.5	0.5	ND	U
CCB17	752706	RQ2200792-02	01/25/22 10:41	1.0	0.5	0.5	ND	U
CCB18	752706	RQ2200792-02	01/25/22 11:11	1.0	0.5	0.5	ND	U
CCB19	752706	RQ2200792-02	01/25/22 10:51	1.0	0.5	0.5	ND	U
CCB20	752706	RQ2200792-02	01/25/22 11:01	1.0	0.5	0.5	ND	U
CCB21	752706	RQ2200792-08	01/25/22 19:01	1.0	0.5	0.5	ND	U
CCB22	752706	RQ2200792-08	01/25/22 19:10	1.0	0.5	0.5	ND	U
CCB23	752706	RQ2200792-08	01/25/22 18:51	1.0	0.5	0.5	ND	U
CCB24	752706	RQ2200792-08	01/25/22 19:20	1.0	0.5	0.5	ND	U
CCB25	752706	RQ2200792-10	01/26/22 03:10	1.0	0.5	0.5	ND	U
CCB26	752706	RQ2200792-10	01/26/22 03:20	1.0	0.5	0.5	ND	U
CCB27	752706	RQ2200792-10	01/26/22 03:00	1.0	0.5	0.5	ND	U
CCB28	752706	RQ2200792-10	01/26/22 03:30	1.0	0.5	0.5	ND	U
CCB29	752706	RQ2200792-12	01/26/22 11:28	1.0	0.5	0.5	ND	U
CCB30	752706	RQ2200792-12	01/26/22 11:18	1.0	0.5	0.5	ND	U
CCB31	752706	RQ2200792-12	01/26/22 11:08	1.0	0.5	0.5	ND	U
CCB32	752706	RQ2200792-12	01/26/22 11:38	1.0	0.5	0.5	ND	U

Client: Katahdin Analytical Services **Service Request:** R2200580
Project: SO8943 Fort Devens

Continuing Calibration Verification (CCV) Summary

Carbon, Dissolved Organic (DOC)

Analysis Method: 9060A **Units:** mg/L

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	752551	RQ2200677-01	01/23/22 19:04	15.0	15.1	101	85-115
CCV2	752551	RQ2200677-01	01/23/22 19:24	15.0	15.6	104	85-115
CCV3	752551	RQ2200677-01	01/23/22 19:14	15.0	14.7	98	85-115
CCV4	752551	RQ2200677-01	01/23/22 19:34	15.0	15.7	105	85-115
CCV5	752551	RQ2200677-07	01/24/22 03:43	15.0	15.9	106	85-115
CCV6	752551	RQ2200677-07	01/24/22 03:13	15.0	16.3	109	85-115
CCV7	752551	RQ2200677-07	01/24/22 03:23	15.0	15.8	105	85-115
CCV8	752551	RQ2200677-07	01/24/22 03:33	15.0	15.2	101	85-115
CCV9	752551	RQ2200677-09	01/24/22 11:42	15.0	13.9	93	85-115
CCV10	752551	RQ2200677-09	01/24/22 11:52	15.0	15.5	103	85-115
CCV11	752551	RQ2200677-09	01/24/22 11:32	15.0	13.5	90	85-115
CCV12	752551	RQ2200677-09	01/24/22 11:22	15.0	14.6	98	85-115
CCV13	752551	RQ2200677-12	01/24/22 19:41	15.0	15.3	102	85-115
CCV14	752551	RQ2200677-12	01/24/22 19:51	15.0	15.4	103	85-115
CCV15	752551	RQ2200677-12	01/24/22 19:31	15.0	16.1	108	85-115
CCV16	752551	RQ2200677-12	01/24/22 20:01	15.0	16.0	107	85-115
CCV17	752706	RQ2200792-01	01/25/22 10:20	15.0	15.5	103	85-115
CCV18	752706	RQ2200792-01	01/25/22 10:00	15.0	15.4	103	85-115
CCV19	752706	RQ2200792-01	01/25/22 10:10	15.0	15.0	100	85-115
CCV20	752706	RQ2200792-01	01/25/22 10:30	15.0	15.5	103	85-115
CCV21	752706	RQ2200792-07	01/25/22 18:30	15.0	15.2	101	85-115
CCV22	752706	RQ2200792-07	01/25/22 18:10	15.0	16.1	107	85-115
CCV23	752706	RQ2200792-07	01/25/22 18:40	15.0	16.0	106	85-115
CCV24	752706	RQ2200792-07	01/25/22 18:20	15.0	15.1	101	85-115
CCV25	752706	RQ2200792-09	01/26/22 02:19	15.0	15.6	104	85-115
CCV26	752706	RQ2200792-09	01/26/22 02:49	15.0	16.4	109	85-115
CCV27	752706	RQ2200792-09	01/26/22 02:29	15.0	15.5	103	85-115
CCV28	752706	RQ2200792-09	01/26/22 02:39	15.0	15.5	103	85-115
CCV29	752706	RQ2200792-11	01/26/22 10:58	15.0	15.8	105	85-115
CCV30	752706	RQ2200792-11	01/26/22 10:28	15.0	15.3	102	85-115
CCV31	752706	RQ2200792-11	01/26/22 10:48	15.0	15.6	104	85-115
CCV32	752706	RQ2200792-11	01/26/22 10:38	15.0	14.8	99	85-115

Raw Data

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Analytical Report

Client:	Katahdin Analytical Services	**Service Request:**	R2200580
Project:	SO8943 Fort Devens	**Date Collected:**	12/29/21 13:30
Sample Matrix:	Water	**Date Received:**	01/21/22 10:30
Sample Name:	MS-21-1D-FF-EVENT#4	**Basis:**	NA
Lab Code:	R2200580-001		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Carbon, Dissolved Organic (DOC)	9060A	**2.6**	mg/L	1.0	0.5	0.5	1	01/24/22 02:52	
Carbon, Dissolved Organic (DOC)	9060A	**2.6**	mg/L	1.0	0.5	0.5	1	01/24/22 02:33	
Carbon, Dissolved Organic (DOC)	9060A	**3.3**	mg/L	1.0	0.5	0.5	1	01/24/22 02:42	
Carbon, Dissolved Organic (DOC)	9060A	**2.8**	mg/L	1.0	0.5	0.5	1	01/24/22 03:02	

Client:	Katahdin Analytical Services	**Service Request:**	R2200580
Project:	SO8943 Fort Devens	**Date Collected:**	12/29/21 14:58
Sample Matrix:	Water	**Date Received:**	01/21/22 10:30
Sample Name:	MS-21-2D-FF-EVENT#4	**Basis:**	NA
Lab Code:	R2200580-002		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Carbon, Dissolved Organic (DOC)	9060A	**1.5**	mg/L	1.0	0.5	0.5	1	01/24/22 04:45	
Carbon, Dissolved Organic (DOC)	9060A	**1.3**	mg/L	1.0	0.5	0.5	1	01/24/22 04:35	
Carbon, Dissolved Organic (DOC)	9060A	**1.4**	mg/L	1.0	0.5	0.5	1	01/24/22 05:05	
Carbon, Dissolved Organic (DOC)	9060A	**1.6**	mg/L	1.0	0.5	0.5	1	01/24/22 04:55	

Analytical Report

Client:	Katahdin Analytical Services	**Service Request:**	R2200580
Project:	SO8943 Fort Devens	**Date Collected:**	12/29/21 16:17
Sample Matrix:	Water	**Date Received:**	01/21/22 10:30
Sample Name:	MS-21-2S-FF-EVENT#4	**Basis:**	NA
Lab Code:	R2200580-003		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Carbon, Dissolved Organic (DOC)	9060A	**2.8**	mg/L	1.0	0.5	0.5	1	01/24/22 05:16	
Carbon, Dissolved Organic (DOC)	9060A	**2.8**	mg/L	1.0	0.5	0.5	1	01/24/22 05:26	
Carbon, Dissolved Organic (DOC)	9060A	**3.0**	mg/L	1.0	0.5	0.5	1	01/24/22 05:36	
Carbon, Dissolved Organic (DOC)	9060A	**3.2**	mg/L	1.0	0.5	0.5	1	01/24/22 05:45	

Client:	Katahdin Analytical Services	**Service Request:**	R2200580
Project:	SO8943 Fort Devens	**Date Collected:**	12/29/21 17:10
Sample Matrix:	Water	**Date Received:**	01/21/22 10:30
Sample Name:	MS-21-4S-FF-EVENT#4	**Basis:**	NA
Lab Code:	R2200580-004		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Carbon, Dissolved Organic (DOC)	9060A	**4.1**	mg/L	1.0	0.5	0.5	1	01/25/22 20:53	
Carbon, Dissolved Organic (DOC)	9060A	**4.1**	mg/L	1.0	0.5	0.5	1	01/25/22 21:03	
Carbon, Dissolved Organic (DOC)	9060A	**4.0**	mg/L	1.0	0.5	0.5	1	01/25/22 21:23	
Carbon, Dissolved Organic (DOC)	9060A	**3.8**	mg/L	1.0	0.5	0.5	1	01/25/22 21:13	

Analytical Results Summary

Instrument Name: R-TOC-01 **Analyst:** SMEDBURY **Analysis Lot:** 752551 **Method/Testcode:** 9060A/TOC 4X D DOD

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ2200677-01	Carbon, Dissolved Organic (DOC)	CCV		Water	15.12 mg/L	42 mL	15.1 mg/L	1					1/23/22 19:04:00	N	IV
RQ2200677-01	Carbon, Dissolved Organic (DOC)	CCV		Water	14.67 mg/L	42 mL	14.7 mg/L	1					1/23/22 19:14:00	N	IV
RQ2200677-01	Carbon, Dissolved Organic (DOC)	CCV		Water	15.60 mg/L	42 mL	15.6 mg/L	1					1/23/22 19:24:00	N	IV
RQ2200677-01	Carbon, Dissolved Organic (DOC)	CCV		Water	15.71 mg/L	42 mL	15.7 mg/L	1					1/23/22 19:34:00	N	IV
RQ2200677-02	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/23/22 19:45:00	N	IV
RQ2200677-03	Carbon, Dissolved Organic (DOC)	MB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/23/22 19:45:00	N	IV
RQ2200677-02	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/23/22 19:54:00	N	IV
RQ2200677-03	Carbon, Dissolved Organic (DOC)	MB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/23/22 19:54:00	N	IV
RQ2200677-02	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/23/22 20:04:00	N	IV
RQ2200677-03	Carbon, Dissolved Organic (DOC)	MB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/23/22 20:04:00	N	IV
RQ2200677-02	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/23/22 20:14:00	N	IV
RQ2200677-03	Carbon, Dissolved Organic (DOC)	MB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/23/22 20:14:00	N	IV
RQ2200677-04	Carbon, Dissolved Organic (DOC)	LCS		Water	9.31 mg/L	42 mL	9.31 mg/L	1	0.5	1.0	93		1/23/22 20:25:00	N	IV
RQ2200677-04	Carbon, Dissolved Organic (DOC)	LCS		Water	9.43 mg/L	42 mL	9.43 mg/L	1	0.5	1.0	94		1/23/22 20:35:00	N	IV
RQ2200677-04	Carbon, Dissolved Organic (DOC)	LCS		Water	9.98 mg/L	42 mL	9.98 mg/L	1	0.5	1.0	100		1/23/22 20:45:00	N	IV
RQ2200677-04	Carbon, Dissolved Organic (DOC)	LCS		Water	9.93 mg/L	42 mL	9.93 mg/L	1	0.5	1.0	99		1/23/22 20:55:00	N	IV
R2200581-001	Carbon, Dissolved Organic (DOC)	N/A		Water	2.13 mg/L	42 mL	2.1 mg/L	1	0.5	1.0			1/23/22 21:06:00	Y	IV
R2200581-001	Carbon, Dissolved Organic (DOC)	N/A		Water	2.32 mg/L	42 mL	2.3 mg/L	1	0.5	1.0			1/23/22 21:16:00	Y	IV
R2200581-001	Carbon, Dissolved Organic (DOC)	N/A		Water	2.18 mg/L	42 mL	2.2 mg/L	1	0.5	1.0			1/23/22 21:26:00	Y	IV
R2200581-001	Carbon, Dissolved Organic (DOC)	N/A		Water	2.18 mg/L	42 mL	2.2 mg/L	1	0.5	1.0			1/23/22 21:36:00	Y	IV
RQ2200677-05	Carbon, Dissolved Organic (DOC)	MS	R2200581-001	Water	11.17 mg/L	42 mL	11.2 mg/L	1	0.5	1.0	90		1/23/22 21:47:00	N	IV
RQ2200677-05	Carbon, Dissolved Organic (DOC)	MS	R2200581-001	Water	11.08 mg/L	42 mL	11.1 mg/L	1	0.5	1.0	88		1/23/22 21:57:00	N	IV
RQ2200677-05	Carbon, Dissolved Organic (DOC)	MS	R2200581-001	Water	11.05 mg/L	42 mL	11.1 mg/L	1	0.5	1.0	89		1/23/22 22:07:00	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-TOC-01 **Analyst:** SMEDBURY **Analysis Lot:** 752551 **Method/Testcode:** 9060A/TOC 4X D DOD

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2200677-05	Carbon, Dissolved Organic (DOC)	MS	R2200581-001	Water	11.96 mg/L	42 mL	12.0 mg/L	1	0.5	1.0	98		1/23/22 22:17:00	N	IV
KQ2200677-06	Carbon, Dissolved Organic (DOC)	DMS	R2200581-001	Water	11.36 mg/L	42 mL	11.4 mg/L	1	0.5	1.0	92	2	1/23/22 22:28:00	N	IV
KQ2200677-06	Carbon, Dissolved Organic (DOC)	DMS	R2200581-001	Water	11.29 mg/L	42 mL	11.3 mg/L	1	0.5	1.0	90	2	1/23/22 22:38:00	N	IV
KQ2200677-06	Carbon, Dissolved Organic (DOC)	DMS	R2200581-001	Water	11.05 mg/L	42 mL	11.0 mg/L	1	0.5	1.0	89	<1	1/23/22 22:48:00	N	IV
KQ2200677-06	Carbon, Dissolved Organic (DOC)	DMS	R2200581-001	Water	12.12 mg/L	42 mL	12.1 mg/L	1	0.5	1.0	99	1	1/23/22 22:58:00	N	IV
K2200581-002	Carbon, Dissolved Organic (DOC)	N/A		Water	2.14 mg/L	42 mL	2.1 mg/L	1	0.5	1.0			1/23/22 23:09:00	N	IV
K2200581-002	Carbon, Dissolved Organic (DOC)	N/A		Water	2.11 mg/L	42 mL	2.1 mg/L	1	0.5	1.0			1/23/22 23:19:00	N	IV
K2200581-002	Carbon, Dissolved Organic (DOC)	N/A		Water	2.12 mg/L	42 mL	2.1 mg/L	1	0.5	1.0			1/23/22 23:28:00	N	IV
K2200581-002	Carbon, Dissolved Organic (DOC)	N/A		Water	2.21 mg/L	42 mL	2.2 mg/L	1	0.5	1.0			1/23/22 23:38:00	N	IV
K2200581-003	Carbon, Dissolved Organic (DOC)	N/A		Water	2.17 mg/L	42 mL	2.2 mg/L	1	0.5	1.0			1/23/22 23:49:00	N	IV
K2200581-003	Carbon, Dissolved Organic (DOC)	N/A		Water	2.16 mg/L	42 mL	2.2 mg/L	1	0.5	1.0			1/23/22 23:59:00	N	IV
K2200581-003	Carbon, Dissolved Organic (DOC)	N/A		Water	2.05 mg/L	42 mL	2.1 mg/L	1	0.5	1.0			1/24/22 00:09:00	N	IV
K2200581-003	Carbon, Dissolved Organic (DOC)	N/A		Water	2.29 mg/L	42 mL	2.3 mg/L	1	0.5	1.0			1/24/22 00:19:00	N	IV
K2200580-001	Carbon, Dissolved Organic (DOC)	N/A		Water	2.55 mg/L	42 mL	2.6 mg/L	1	0.5	1.0			1/24/22 02:33:00	N	IV
K2200580-001	Carbon, Dissolved Organic (DOC)	N/A		Water	3.33 mg/L	42 mL	3.3 mg/L	1	0.5	1.0			1/24/22 02:42:00	N	IV
K2200580-001	Carbon, Dissolved Organic (DOC)	N/A		Water	2.63 mg/L	42 mL	2.6 mg/L	1	0.5	1.0			1/24/22 02:52:00	N	IV
K2200580-001	Carbon, Dissolved Organic (DOC)	N/A		Water	2.76 mg/L	42 mL	2.8 mg/L	1	0.5	1.0			1/24/22 03:02:00	N	IV
KQ2200677-07	Carbon, Dissolved Organic (DOC)	CCV		Water	16.30 mg/L	42 mL	16.3 mg/L	1					1/24/22 03:13:00	N	IV
KQ2200677-07	Carbon, Dissolved Organic (DOC)	CCV		Water	15.82 mg/L	42 mL	15.8 mg/L	1					1/24/22 03:23:00	N	IV
KQ2200677-07	Carbon, Dissolved Organic (DOC)	CCV		Water	15.22 mg/L	42 mL	15.2 mg/L	1					1/24/22 03:33:00	N	IV
KQ2200677-07	Carbon, Dissolved Organic (DOC)	CCV		Water	15.86 mg/L	42 mL	15.9 mg/L	1					1/24/22 03:43:00	N	IV
KQ2200677-08	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 03:54:00	N	IV
KQ2200677-08	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 04:04:00	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-TOC-01 **Analyst:** SMEDBURY **Analysis Lot:** 752551 **Method/Testcode:** 9060A/TOC 4X D DOD

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2200677-08	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 04:14:00	N	IV
KQ2200677-08	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 04:24:00	N	IV
K2200580-002	Carbon, Dissolved Organic (DOC)	N/A		Water	1.34 mg/L	42 mL	1.3 mg/L	1	0.5	1.0			1/24/22 04:35:00	N	IV
K2200580-002	Carbon, Dissolved Organic (DOC)	N/A		Water	1.53 mg/L	42 mL	1.5 mg/L	1	0.5	1.0			1/24/22 04:45:00	N	IV
K2200580-002	Carbon, Dissolved Organic (DOC)	N/A		Water	1.65 mg/L	42 mL	1.6 mg/L	1	0.5	1.0			1/24/22 04:55:00	N	IV
K2200580-002	Carbon, Dissolved Organic (DOC)	N/A		Water	1.39 mg/L	42 mL	1.4 mg/L	1	0.5	1.0			1/24/22 05:05:00	N	IV
K2200580-003	Carbon, Dissolved Organic (DOC)	N/A		Water	2.76 mg/L	42 mL	2.8 mg/L	1	0.5	1.0			1/24/22 05:16:00	N	IV
K2200580-003	Carbon, Dissolved Organic (DOC)	N/A		Water	2.79 mg/L	42 mL	2.8 mg/L	1	0.5	1.0			1/24/22 05:26:00	N	IV
K2200580-003	Carbon, Dissolved Organic (DOC)	N/A		Water	2.97 mg/L	42 mL	3.0 mg/L	1	0.5	1.0			1/24/22 05:36:00	N	IV
K2200580-003	Carbon, Dissolved Organic (DOC)	N/A		Water	3.18 mg/L	42 mL	3.2 mg/L	1	0.5	1.0			1/24/22 05:45:00	N	IV
K2200582-001 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	2.49 mg/L	42 mL	2.5 mg/L	1	0.5	1.0			1/24/22 06:37:00	N	IV
K2200582-001 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	2.46 mg/L	42 mL	2.5 mg/L	1	0.5	1.0			1/24/22 06:47:00	N	IV
K2200582-001 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	2.57 mg/L	42 mL	2.6 mg/L	1	0.5	1.0			1/24/22 06:57:00	N	IV
K2200582-001 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	2.73 mg/L	42 mL	2.7 mg/L	1	0.5	1.0			1/24/22 07:07:00	N	IV
K2200582-003 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	2.12 mg/L	42 mL	2.1 mg/L	1	0.5	1.0			1/24/22 09:20:00	N	IV
K2200582-003 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	2.16 mg/L	42 mL	2.2 mg/L	1	0.5	1.0			1/24/22 09:30:00	N	IV
K2200582-003 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	2.31 mg/L	42 mL	2.3 mg/L	1	0.5	1.0			1/24/22 09:40:00	N	IV
K2200582-003 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	2.38 mg/L	42 mL	2.4 mg/L	1	0.5	1.0			1/24/22 09:50:00	N	IV
K2200582-004 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	2.54 mg/L	42 mL	2.5 mg/L	1	0.5	1.0			1/24/22 10:01:00	N	IV
K2200582-004 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	2.40 mg/L	42 mL	2.4 mg/L	1	0.5	1.0			1/24/22 10:11:00	N	IV
K2200582-004 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	2.35 mg/L	42 mL	2.4 mg/L	1	0.5	1.0			1/24/22 10:21:00	N	IV
K2200582-004 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	3.16 mg/L	42 mL	3.2 mg/L	1	0.5	1.0			1/24/22 10:31:00	N	IV
KQ2200677-09	Carbon, Dissolved Organic (DOC)	CCV		Water	14.65 mg/L	42 mL	14.6 mg/L	1					1/24/22 11:22:00	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-TOC-01 **Analyst:** SMEDBURY **Analysis Lot:** 752551 **Method/Testcode:** 9060A/TOC 4X D DOD

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2200677-09	Carbon, Dissolved Organic (DOC)	CCV		Water	13.48 mg/L	42 mL	13.5 mg/L	1					1/24/22 11:32:00	N	IV
KQ2200677-09	Carbon, Dissolved Organic (DOC)	CCV		Water	13.93 mg/L	42 mL	13.9 mg/L	1					1/24/22 11:42:00	N	IV
KQ2200677-09	Carbon, Dissolved Organic (DOC)	CCV		Water	15.45 mg/L	42 mL	15.5 mg/L	1					1/24/22 11:52:00	N	IV
KQ2200677-10	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 12:03:00	N	IV
KQ2200677-10	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 12:13:00	N	IV
KQ2200677-10	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 12:23:00	N	IV
KQ2200677-10	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 12:33:00	N	IV
K2200582-010 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	2.16 mg/L	42 mL	2.2 mg/L	1	0.5	1.0			1/24/22 15:27:00	N	IV
K2200582-010 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	2.09 mg/L	42 mL	2.1 mg/L	1	0.5	1.0			1/24/22 15:37:00	N	IV
K2200582-010 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	2.22 mg/L	42 mL	2.2 mg/L	1	0.5	1.0			1/24/22 15:47:00	N	IV
K2200582-010 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	2.19 mg/L	42 mL	2.2 mg/L	1	0.5	1.0			1/24/22 15:57:00	N	IV
KQ2200677-12	Carbon, Dissolved Organic (DOC)	CCV		Water	16.13 mg/L	42 mL	16.1 mg/L	1					1/24/22 19:31:00	N	IV
KQ2200677-12	Carbon, Dissolved Organic (DOC)	CCV		Water	15.32 mg/L	42 mL	15.3 mg/L	1					1/24/22 19:41:00	N	IV
KQ2200677-12	Carbon, Dissolved Organic (DOC)	CCV		Water	15.45 mg/L	42 mL	15.4 mg/L	1					1/24/22 19:51:00	N	IV
KQ2200677-12	Carbon, Dissolved Organic (DOC)	CCV		Water	16.02 mg/L	42 mL	16.0 mg/L	1					1/24/22 20:01:00	N	IV
KQ2200677-11	Carbon, Dissolved Organic (DOC)	CCB		Water	0.04 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 20:12:00	N	IV
KQ2200677-11	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 20:22:00	N	IV
KQ2200677-11	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 20:32:00	N	IV
KQ2200677-11	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 20:42:00	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-TOC-01 **Analyst:** SMEDBURY **Analysis Lot:** 752552 **Method/Testcode:** 9060A/TOC 4X D DOD

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2200678-01	Carbon, Dissolved Organic (DOC)	CCV		Water	14.65 mg/L	42 mL	14.6 mg/L	1					1/24/22 11:22:00	N	IV
KQ2200678-01	Carbon, Dissolved Organic (DOC)	CCV		Water	13.48 mg/L	42 mL	13.5 mg/L	1					1/24/22 11:32:00	N	IV
KQ2200678-01	Carbon, Dissolved Organic (DOC)	CCV		Water	13.93 mg/L	42 mL	13.9 mg/L	1					1/24/22 11:42:00	N	IV
KQ2200678-01	Carbon, Dissolved Organic (DOC)	CCV		Water	15.45 mg/L	42 mL	15.5 mg/L	1					1/24/22 11:52:00	N	IV
KQ2200678-02	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 12:03:00	N	IV
KQ2200678-03	Carbon, Dissolved Organic (DOC)	MB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 12:03:00	N	IV
KQ2200678-02	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 12:13:00	N	IV
KQ2200678-03	Carbon, Dissolved Organic (DOC)	MB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 12:13:00	N	IV
KQ2200678-02	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 12:23:00	N	IV
KQ2200678-03	Carbon, Dissolved Organic (DOC)	MB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 12:23:00	N	IV
KQ2200678-02	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 12:33:00	N	IV
KQ2200678-03	Carbon, Dissolved Organic (DOC)	MB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 12:33:00	N	IV
KQ2200678-04	Carbon, Dissolved Organic (DOC)	LCS		Water	10.52 mg/L	42 mL	10.5 mg/L	1	0.5	1.0	105		1/24/22 16:07:00	N	IV
KQ2200678-04	Carbon, Dissolved Organic (DOC)	LCS		Water	9.63 mg/L	42 mL	9.63 mg/L	1	0.5	1.0	96		1/24/22 16:17:00	N	IV
KQ2200678-04	Carbon, Dissolved Organic (DOC)	LCS		Water	10.14 mg/L	42 mL	10.1 mg/L	1	0.5	1.0	101		1/24/22 16:27:00	N	IV
KQ2200678-04	Carbon, Dissolved Organic (DOC)	LCS		Water	10.40 mg/L	42 mL	10.4 mg/L	1	0.5	1.0	104		1/24/22 16:37:00	N	IV
K2200544-010 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	5.99 mg/L	42 mL	1200 mg/L	200	90	200			1/24/22 17:29:00	N	IV
K2200544-010 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	5.81 mg/L	42 mL	1160 mg/L	200	90	200			1/24/22 17:39:00	N	IV
K2200544-010 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	6.07 mg/L	42 mL	1210 mg/L	200	90	200			1/24/22 17:49:00	N	IV
K2200544-010 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	6.16 mg/L	42 mL	1230 mg/L	200	90	200			1/24/22 17:59:00	N	IV
K2200544-011 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	1.26 mg/L	42 mL	2.5 mg/L	2	0.9	2.0			1/24/22 18:10:00	N	IV
K2200544-011 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	1.22 mg/L	42 mL	2.4 mg/L	2	0.9	2.0			1/24/22 18:20:00	N	IV
K2200544-011 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	1.08 mg/L	42 mL	2.2 mg/L	2	0.9	2.0			1/24/22 18:30:00	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-TOC-01 **Analyst:** SMEDBURY **Analysis Lot:** 752552 **Method/Testcode:** 9060A/TOC 4X D DOD

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R2200544-011 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	1.53 mg/L	42 mL	3.1 mg/L	2	0.9	2.0			1/24/22 18:40:00	N	IV
R2200544-012 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	1.16 mg/L	42 mL	1.2 mg/L	1	0.5	1.0			1/24/22 18:50:00	N	IV
R2200544-012 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	1.04 mg/L	42 mL	1.0 mg/L	1	0.5	1.0			1/24/22 19:00:00	N	IV
R2200544-012 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	0.87 mg/L	42 mL	0.9 mg/L J	1	0.5	1.0			1/24/22 19:10:00	N	IV
R2200544-012 (H)	Carbon, Dissolved Organic (DOC)	N/A		Water	0.93 mg/L	42 mL	0.9 mg/L J	1	0.5	1.0			1/24/22 19:20:00	N	IV
RQ2200678-06	Carbon, Dissolved Organic (DOC)	CCV		Water	16.13 mg/L	42 mL	16.1 mg/L	1					1/24/22 19:31:00	N	IV
RQ2200678-06	Carbon, Dissolved Organic (DOC)	CCV		Water	15.32 mg/L	42 mL	15.3 mg/L	1					1/24/22 19:41:00	N	IV
RQ2200678-06	Carbon, Dissolved Organic (DOC)	CCV		Water	15.45 mg/L	42 mL	15.4 mg/L	1					1/24/22 19:51:00	N	IV
RQ2200678-06	Carbon, Dissolved Organic (DOC)	CCV		Water	16.02 mg/L	42 mL	16.0 mg/L	1					1/24/22 20:01:00	N	IV
RQ2200678-05	Carbon, Dissolved Organic (DOC)	CCB		Water	0.04 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 20:12:00	N	IV
RQ2200678-05	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 20:22:00	N	IV
RQ2200678-05	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 20:32:00	N	IV
RQ2200678-05	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 20:42:00	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-TOC-01 **Analyst:** SMEDBURY **Analysis Lot:** 752553 **Method/Testcode:** 9060A/TOC 4X T DOD

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2200679-01	Carbon, Total Organic (TOC)	CCV		Water	14.65 mg/L	42 mL	14.6 mg/L	1					1/24/22 11:22:00	N	IV
KQ2200679-01	Carbon, Total Organic (TOC)	CCV		Water	13.48 mg/L	42 mL	13.5 mg/L	1					1/24/22 11:32:00	N	IV
KQ2200679-01	Carbon, Total Organic (TOC)	CCV		Water	13.93 mg/L	42 mL	13.9 mg/L	1					1/24/22 11:42:00	N	IV
KQ2200679-01	Carbon, Total Organic (TOC)	CCV		Water	15.45 mg/L	42 mL	15.5 mg/L	1					1/24/22 11:52:00	N	IV
KQ2200679-02	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 12:03:00	N	IV
KQ2200679-03	Carbon, Total Organic (TOC)	MB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 12:03:00	N	IV
KQ2200679-02	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 12:13:00	N	IV
KQ2200679-03	Carbon, Total Organic (TOC)	MB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 12:13:00	N	IV
KQ2200679-02	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 12:23:00	N	IV
KQ2200679-03	Carbon, Total Organic (TOC)	MB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 12:23:00	N	IV
KQ2200679-02	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 12:33:00	N	IV
KQ2200679-03	Carbon, Total Organic (TOC)	MB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 12:33:00	N	IV
KQ2200679-04	Carbon, Total Organic (TOC)	LCS		Water	10.52 mg/L	42 mL	10.5 mg/L	1	0.5	1.0	105		1/24/22 16:07:00	N	IV
KQ2200679-04	Carbon, Total Organic (TOC)	LCS		Water	9.63 mg/L	42 mL	9.63 mg/L	1	0.5	1.0	96		1/24/22 16:17:00	N	IV
KQ2200679-04	Carbon, Total Organic (TOC)	LCS		Water	10.14 mg/L	42 mL	10.1 mg/L	1	0.5	1.0	101		1/24/22 16:27:00	N	IV
KQ2200679-04	Carbon, Total Organic (TOC)	LCS		Water	10.40 mg/L	42 mL	10.4 mg/L	1	0.5	1.0	104		1/24/22 16:37:00	N	IV
KQ2200679-05	Carbon, Total Organic (TOC)	CCV		Water	16.13 mg/L	42 mL	16.1 mg/L	1					1/24/22 19:31:00	N	IV
KQ2200679-05	Carbon, Total Organic (TOC)	CCV		Water	15.32 mg/L	42 mL	15.3 mg/L	1					1/24/22 19:41:00	N	IV
KQ2200679-05	Carbon, Total Organic (TOC)	CCV		Water	15.45 mg/L	42 mL	15.4 mg/L	1					1/24/22 19:51:00	N	IV
KQ2200679-05	Carbon, Total Organic (TOC)	CCV		Water	16.02 mg/L	42 mL	16.0 mg/L	1					1/24/22 20:01:00	N	IV
KQ2200679-06	Carbon, Total Organic (TOC)	CCB		Water	0.04 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 20:12:00	N	IV
KQ2200679-06	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 20:22:00	N	IV
KQ2200679-06	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 20:32:00	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-TOC-01 **Analyst:** SMEDBURY **Analysis Lot:** 752553 **Method/Testcode:** 9060A/TOC 4X T DOD

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
?Q2200679-06	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/24/22 20:42:00	N	IV
?2200544-002 (H)	Carbon, Total Organic (TOC)	N/A		Water	12.75 mg/L	42 mL	25.5 mg/L	2	0.9	2.0			1/24/22 21:34:00	N	IV
?2200544-002 (H)	Carbon, Total Organic (TOC)	N/A		Water	13.48 mg/L	42 mL	27.0 mg/L	2	0.9	2.0			1/24/22 21:43:00	N	IV
?2200544-002 (H)	Carbon, Total Organic (TOC)	N/A		Water	15.07 mg/L	42 mL	30.1 mg/L	2	0.9	2.0			1/24/22 21:53:00	N	IV
?2200544-002 (H)	Carbon, Total Organic (TOC)	N/A		Water	15.44 mg/L	42 mL	30.9 mg/L	2	0.9	2.0			1/24/22 22:03:00	N	IV
?2200544-004 (H)	Carbon, Total Organic (TOC)	N/A		Water	0.57 mg/L	42 mL	0.6 mg/L J	1	0.5	1.0			1/25/22 00:16:00	N	IV
?2200544-004 (H)	Carbon, Total Organic (TOC)	N/A		Water	0.59 mg/L	42 mL	0.6 mg/L J	1	0.5	1.0			1/25/22 00:26:00	N	IV
?2200544-004 (H)	Carbon, Total Organic (TOC)	N/A		Water	0.63 mg/L	42 mL	0.6 mg/L J	1	0.5	1.0			1/25/22 00:36:00	N	IV
?2200544-004 (H)	Carbon, Total Organic (TOC)	N/A		Water	0.65 mg/L	42 mL	0.6 mg/L J	1	0.5	1.0			1/25/22 00:46:00	N	IV
?2200544-005 (H)	Carbon, Total Organic (TOC)	N/A		Water	6.08 mg/L	42 mL	1220 mg/L	200	90	200			1/25/22 00:57:00	N	IV
?2200544-005 (H)	Carbon, Total Organic (TOC)	N/A		Water	5.79 mg/L	42 mL	1160 mg/L	200	90	200			1/25/22 01:07:00	N	IV
?2200544-005 (H)	Carbon, Total Organic (TOC)	N/A		Water	6.40 mg/L	42 mL	1280 mg/L	200	90	200			1/25/22 01:17:00	N	IV
?2200544-005 (H)	Carbon, Total Organic (TOC)	N/A		Water	6.19 mg/L	42 mL	1240 mg/L	200	90	200			1/25/22 01:27:00	N	IV
?2200544-006 (H)	Carbon, Total Organic (TOC)	N/A		Water	0.73 mg/L	42 mL	0.7 mg/L J	1	0.5	1.0			1/25/22 01:38:00	N	IV
?2200544-006 (H)	Carbon, Total Organic (TOC)	N/A		Water	0.72 mg/L	42 mL	0.7 mg/L J	1	0.5	1.0			1/25/22 01:48:00	N	IV
?2200544-006 (H)	Carbon, Total Organic (TOC)	N/A		Water	0.77 mg/L	42 mL	0.8 mg/L J	1	0.5	1.0			1/25/22 01:58:00	N	IV
?2200544-006 (H)	Carbon, Total Organic (TOC)	N/A		Water	0.84 mg/L	42 mL	0.8 mg/L J	1	0.5	1.0			1/25/22 02:08:00	N	IV
?Q2200679-08	Carbon, Total Organic (TOC)	CCV		Water	13.82 mg/L	42 mL	13.8 mg/L	1					1/25/22 02:19:00	N	IV
?Q2200679-08	Carbon, Total Organic (TOC)	CCV		Water	14.90 mg/L	42 mL	14.9 mg/L	1					1/25/22 02:29:00	N	IV
?Q2200679-08	Carbon, Total Organic (TOC)	CCV		Water	15.57 mg/L	42 mL	15.6 mg/L	1					1/25/22 02:39:00	N	IV
?Q2200679-08	Carbon, Total Organic (TOC)	CCV		Water	15.69 mg/L	42 mL	15.7 mg/L	1					1/25/22 02:49:00	N	IV
?Q2200679-07	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 03:00:00	N	IV
?Q2200679-07	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 03:10:00	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-TOC-01 **Analyst:** SMEDBURY **Analysis Lot:** 752553 **Method/Testcode:** 9060A/TOC 4X T DOD

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2200679-07	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 03:20:00	N	IV
KQ2200679-07	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 03:30:00	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Sample Dilutions

Final Volume: 30-40mL - TOC

Analyst: S MEDBURY
Instrument: TOC #1

Date 1/23/22
Analysis 9060A

Common Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor
1/2	DI	20	20	1/2												
1/3	DI	10	20	1/3												
1/4	DI	10	30	1/4												
1/6	DI	7	35	1/6												
1/7	DI	6	36	1/7												
1/10	DI	3	27	1/10												
1/10	DI	4	36	1/10												
1/20	DI	2	38	1/20												
1/30	DI	1	29	1/30												
1/40	DI	1	39	1/40												
1/100	DI	0.4	39.6	1/100												
1/200	DI	0.2	39.8	1/200												
1/300	DI	0.1	29.9	1/300												
1/400	DI	0.1	39.9	1/400												
1/1000	DI	1	9	1/10	0.4	39.6	1/1000									
1/2000	DI	1	9	1/10	0.2	39.8	1/2000									
1/4000	DI	1	9	1/10	0.1	39.9	1/4000									
1/10000	DI	0.4	39.6	1/100	0.4	39.6	1/10000									

Special Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor

TOC

CALIBRATION: 011321

1/23/22
SMEDBURY
TOC #1
9060A
PIPETTE: WAYNE

Pos/ Vial	Run Type	Rep #	Run Date	Run Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (ppm)	TC Area (cts)	TC Mass (ugC)	TC Conc (ppm)
** Spl		Name: WARM-UP					Data File: 0123052						
		Remarks: <none>											
1	Spl	1	23Jan2022	17:42	-	-	-	678	0.428	0.428	-	-	-
1	Spl	2	23Jan2022	17:52	-	-	-	531	0.281	0.281	-	-	-
1	Spl	3	23Jan2022	18:02	-	-	-	599	0.349	0.349	-	-	-
1	Spl	4	23Jan2022	18:12	-	-	-	541	0.291	0.291	-	-	-
1	Spl	Avg						587	0.337	0.337			
1	Spl	SDev						67.520					
1	Spl	%RSD						11.50					
** Spl		Name: WARM-UP					Data File: 0123053						
		Remarks: <none>											
2	Spl	1	23Jan2022	18:23	-	-	-	411	0.161	0.161	-	-	-
2	Spl	2	23Jan2022	18:33	-	-	-	280	0.030	0.030	-	-	-
2	Spl	3	23Jan2022	18:43	-	-	-	254	0.004	0.004	-	-	-
2	Spl	4	23Jan2022	18:53	-	-	-	261	0.011	0.011	-	-	-
2	Spl	Avg						301	0.052	0.052			
2	Spl	SDev						73.822					
2	Spl	%RSD						24.48					
** Spl		Name: CCV					Data File: 0123054						
		Remarks: <none>											
3	Spl	1	23Jan2022	19:04	-	-	-	15358	15.114	15.115	-	-	-
3	Spl	2	23Jan2022	19:14	-	-	-	14913	14.669	14.669	-	-	-
3	Spl	3	23Jan2022	19:24	-	-	-	15842	15.599	15.599	-	-	-
3	Spl	4	23Jan2022	19:34	-	-	-	15957	15.714	15.714	-	-	-
3	Spl	Avg						15517	15.274	15.274			
3	Spl	SDev						479.347					
3	Spl	%RSD						3.09					
** Spl		Name: CCB					Data File: 0123055						
		Remarks: <none>											
4	Spl	1	23Jan2022	19:45	-	-	-	192	0.000	0.000	-	-	-
4	Spl	2	23Jan2022	19:54	-	-	-	196	0.000	0.000	-	-	-
4	Spl	3	23Jan2022	20:04	-	-	-	197	0.000	0.000	-	-	-
4	Spl	4	23Jan2022	20:14	-	-	-	148	0.000	0.000	-	-	-
4	Spl	Avg						183	0.000	0.000			
4	Spl	SDev						23.599					
4	Spl	%RSD						12.88					
** Spl		Name: LCS					Data File: 0123056						
		Remarks: <none>											
5	Spl	1	23Jan2022	20:25	-	-	-	9554	9.308	9.308	-	-	-
5	Spl	2	23Jan2022	20:35	-	-	-	9677	9.431	9.431	-	-	-
5	Spl	3	23Jan2022	20:45	-	-	-	10224	9.978	9.978	-	-	-
5	Spl	4	23Jan2022	20:55	-	-	-	10179	9.933	9.933	-	-	-
5	Spl	Avg						9908	9.663	9.663			
5	Spl	SDev						342.526					
5	Spl	%RSD						3.46					
** Spl		Name: R2200581-001					Data File: 0123057						
		Remarks: <none>											
6	Spl	1	23Jan2022	21:06	-	-	-	2375	2.126	2.126	-	-	-
6	Spl	2	23Jan2022	21:16	-	-	-	2570	2.321	2.321	-	-	-
6	Spl	3	23Jan2022	21:26	-	-	-	2425	2.176	2.176	-	-	-
6	Spl	4	23Jan2022	21:36	-	-	-	2433	2.184	2.184	-	-	-
6	Spl	Avg						2450	2.202	2.202			
6	Spl	SDev						83.540					
6	Spl	%RSD						3.41					
** Spl		Name: R2200581-001S!					Data File: 0123058						
		Remarks: <none>											
7	Spl	1	23Jan2022	21:47	-	-	-	11411	11.166	11.166	-	-	-
7	Spl	2	23Jan2022	21:57	-	-	-	11326	11.081	11.081	-	-	-
7	Spl	3	23Jan2022	22:07	-	-	-	11298	11.053	11.053	-	-	-
7	Spl	4	23Jan2022	22:17	-	-	-	12206	11.961	11.961	-	-	-
7	Spl	Avg						11560	11.315	11.315			
7	Spl	SDev						433.173					
7	Spl	%RSD						3.75					
** Spl		Name: R2200581-001SD!					Data File: 0123059						
		Remarks: <none>											
8	Spl	1	23Jan2022	22:28	-	-	-	11602	11.357	11.357	-	-	-
8	Spl	2	23Jan2022	22:38	-	-	-	11532	11.287	11.287	-	-	-
8	Spl	3	23Jan2022	22:48	-	-	-	11290	11.045	11.045	-	-	-

012322

8	Spl	4 23Jan2022 22:58	-	-	-	12363	12.118	12.118	-	-	-
8	Spl	Avg				11696	11.452	11.452			
8	Spl	SDev				463.844					
8	Spl	%RSD				3.97					

** Spl Name: R2200581-002 Data File: 0123060
Remarks: <none>

9	Spl	1 23Jan2022 23:09	-	-	-	2389	2.140	2.140	-	-	-
9	Spl	2 23Jan2022 23:19	-	-	-	2358	2.109	2.109	-	-	-
9	Spl	3 23Jan2022 23:28	-	-	-	2371	2.122	2.122	-	-	-
9	Spl	4 23Jan2022 23:38	-	-	-	2455	2.206	2.206	-	-	-
9	Spl	Avg				2393	2.144	2.144			
9	Spl	SDev				43.084					
9	Spl	%RSD				1.80					

** Spl Name: R2200581-003 Data File: 0123061
Remarks: <none>

10	Spl	1 23Jan2022 23:49	-	-	-	2419	2.170	2.170	-	-	-
10	Spl	2 23Jan2022 23:59	-	-	-	2411	2.162	2.162	-	-	-
10	Spl	3 24Jan2022 00:09	-	-	-	2300	2.051	2.051	-	-	-
10	Spl	4 24Jan2022 00:19	-	-	-	2536	2.287	2.287	-	-	-
10	Spl	Avg				2416	2.167	2.167			
10	Spl	SDev				96.417					
10	Spl	%RSD				3.99					

** Spl Name: R2200581-004 Data File: 0123062
Remarks: 4

11	Spl	1 24Jan2022 00:30	-	-	-	961	0.711	0.711	-	-	-
11	Spl	2 24Jan2022 00:40	-	-	-	949	0.699	0.699	-	-	-
11	Spl	3 24Jan2022 00:50	-	-	-	858	0.608	0.608	-	-	-
11	Spl	4 24Jan2022 01:00	-	-	-	979	0.729	0.729	-	-	-
11	Spl	Avg				936	0.687	0.687			
11	Spl	SDev				53.928					
11	Spl	%RSD				5.76					

********DNR; RERUN STRAIGHT*******

** Spl Name: R2200581-005 Data File: 0123063
Remarks: 10

12	Spl	1 24Jan2022 01:11	-	-	-	342	0.092	0.092	-	-	-
12	Spl	2 24Jan2022 01:21	-	-	-	347	0.097	0.097	-	-	-
12	Spl	3 24Jan2022 01:31	-	-	-	371	0.121	0.121	-	-	-
12	Spl	4 24Jan2022 01:41	-	-	-	379	0.129	0.129	-	-	-
12	Spl	Avg				359	0.110	0.110			
12	Spl	SDev				18.025					
12	Spl	%RSD				5.01					

********DNR; RERUN STRAIGHT*******

** Spl Name: R2200581-006 Data File: 0123064
Remarks: 10

13	Spl	1 24Jan2022 01:52	-	-	-	466	0.216	0.216	-	-	-
13	Spl	2 24Jan2022 02:02	-	-	-	448	0.198	0.198	-	-	-
13	Spl	3 24Jan2022 02:12	-	-	-	445	0.195	0.195	-	-	-
13	Spl	4 24Jan2022 02:22	-	-	-	522	0.272	0.272	-	-	-
13	Spl	Avg				470	0.220	0.220			
13	Spl	SDev				35.725					
13	Spl	%RSD				7.60					

********DNR; RERUN STRAIGHT*******

** Spl Name: R2200580-001 Data File: 0123065
Remarks: <none>

14	Spl	1 24Jan2022 02:33	-	-	-	2800	2.551	2.551	-	-	-
14	Spl	2 24Jan2022 02:42	-	-	-	3577	3.328	3.328	-	-	-
14	Spl	3 24Jan2022 02:52	-	-	-	2882	2.633	2.633	-	-	-
14	Spl	4 24Jan2022 03:02	-	-	-	3010	2.761	2.761	-	-	-
14	Spl	Avg				3067	2.818	2.819			
14	Spl	SDev				350.648					
14	Spl	%RSD				11.43					

** Spl Name: CCV Data File: 0123066
Remarks: <none>

15	Spl	1 24Jan2022 03:13	-	-	-	16543	16.300	16.300	-	-	-
15	Spl	2 24Jan2022 03:23	-	-	-	16060	15.817	15.817	-	-	-
15	Spl	3 24Jan2022 03:33	-	-	-	15462	15.219	15.219	-	-	-
15	Spl	4 24Jan2022 03:43	-	-	-	16101	15.858	15.858	-	-	-
15	Spl	Avg				16041	15.798	15.798			
15	Spl	SDev				443.924					
15	Spl	%RSD				2.77					

** Spl Name: CCB Data File: 0123067
Remarks: <none>

16	Spl	1 24Jan2022 03:54	-	-	-	169	0.000	0.000	-	-	-
16	Spl	2 24Jan2022 04:04	-	-	-	185	0.000	0.000	-	-	-
16	Spl	3 24Jan2022 04:14	-	-	-	164	0.000	0.000	-	-	-
16	Spl	4 24Jan2022 04:24	-	-	-	169	0.000	0.000	-	-	-
16	Spl	Avg				171	0.000	0.000			
16	Spl	SDev				9.142					

16	Spl	%RSD					5.32					

** Spl Name: R2200580-002 Data File: 0123068
Remarks: <none>

17	Spl	1 24Jan2022 04:35	-	-	-	1584	1.335	1.335	-	-	-
17	Spl	2 24Jan2022 04:45	-	-	-	1774	1.525	1.525	-	-	-
17	Spl	3 24Jan2022 04:55	-	-	-	1895	1.646	1.646	-	-	-
17	Spl	4 24Jan2022 05:05	-	-	-	1640	1.391	1.391	-	-	-
17	Spl	Avg				1723	1.474	1.474			
17	Spl	SDev				139.517					
17	Spl	%RSD				8.10					

** Spl Name: R2200580-003 Data File: 0123069
Remarks: <none>

18	Spl	1 24Jan2022 05:16	-	-	-	3005	2.756	2.756	-	-	-
18	Spl	2 24Jan2022 05:26	-	-	-	3034	2.785	2.785	-	-	-
18	Spl	3 24Jan2022 05:36	-	-	-	3222	2.973	2.973	-	-	-
18	Spl	4 24Jan2022 05:45	-	-	-	3424	3.175	3.175	-	-	-
18	Spl	Avg				3171	2.923	2.922			
18	Spl	SDev				194.023					
18	Spl	%RSD				6.12					

** Spl Name: R2200580-004 Data File: 0123070
Remarks: 4

19	Spl	1 24Jan2022 05:56	-	-	-	1003	0.753	0.753	-	-	-
19	Spl	2 24Jan2022 06:06	-	-	-	954	0.704	0.704	-	-	-
19	Spl	3 24Jan2022 06:16	-	-	-	967	0.717	0.717	-	-	-
19	Spl	4 24Jan2022 06:26	-	-	-	964	0.714	0.714	-	-	-
19	Spl	Avg				972	0.722	0.722			
19	Spl	SDev				21.401					
19	Spl	%RSD				2.20					

*********DNR; RERUN STRAIGHT*******

** Spl Name: R2200582-001 Data File: 0123071
Remarks: <none>

20	Spl	1 24Jan2022 06:37	-	-	-	2742	2.493	2.493	-	-	-
20	Spl	2 24Jan2022 06:47	-	-	-	2710	2.461	2.461	-	-	-
20	Spl	3 24Jan2022 06:57	-	-	-	2814	2.565	2.565	-	-	-
20	Spl	4 24Jan2022 07:07	-	-	-	2981	2.732	2.732	-	-	-
20	Spl	Avg				2811	2.563	2.563			
20	Spl	SDev				120.925					
20	Spl	%RSD				4.30					

** Spl Name: R2200582-002 Data File: 0123072
Remarks: 10

21	Spl	1 24Jan2022 07:18	-	-	-	529	0.279	0.279	-	-	-
21	Spl	2 24Jan2022 07:28	-	-	-	473	0.223	0.223	-	-	-
21	Spl	3 24Jan2022 07:38	-	-	-	242	0.000	0.000	-	-	-
21	Spl	4 24Jan2022 07:48	-	-	-	552	0.302	0.302	-	-	-
21	Spl	Avg				449	0.199	0.199			
21	Spl	SDev				141.932					
21	Spl	%RSD				31.61					

*********DNR; RERUN STRAIGHT*******

** Spl Name: R2200582-002S! Data File: 0123073
Remarks: 10

22	Spl	1 24Jan2022 07:59	-	-	-	10620	10.374	10.374	-	-	-
22	Spl	2 24Jan2022 08:09	-	-	-	10715	10.469	10.469	-	-	-
22	Spl	3 24Jan2022 08:18	-	-	-	10948	10.703	10.703	-	-	-
22	Spl	4 24Jan2022 08:28	-	-	-	10960	10.715	10.715	-	-	-
22	Spl	Avg				10810	10.565	10.565			
22	Spl	SDev				169.967					
22	Spl	%RSD				1.57					

*********DNR; RERUN STRAIGHT*******

** Spl Name: R2200582-002SD! Data File: 0123074
Remarks: 10

23	Spl	1 24Jan2022 08:39	-	-	-	11052	10.807	10.807	-	-	-
23	Spl	2 24Jan2022 08:49	-	-	-	10259	10.013	10.013	-	-	-
23	Spl	3 24Jan2022 08:59	-	-	-	10695	10.449	10.450	-	-	-
23	Spl	4 24Jan2022 09:09	-	-	-	10553	10.307	10.307	-	-	-
23	Spl	Avg				10639	10.394	10.394			
23	Spl	SDev				329.393					
23	Spl	%RSD				3.10					

*********DNR; RERUN STRAIGHT*******

** Spl Name: R2200582-003 Data File: 0123075
Remarks: <none>

24	Spl	1 24Jan2022 09:20	-	-	-	2369	2.120	2.120	-	-	-
24	Spl	2 24Jan2022 09:30	-	-	-	2410	2.161	2.161	-	-	-
24	Spl	3 24Jan2022 09:40	-	-	-	2559	2.310	2.310	-	-	-
24	Spl	4 24Jan2022 09:50	-	-	-	2627	2.378	2.378	-	-	-
24	Spl	Avg				2491	2.242	2.242			
24	Spl	SDev				121.881					
24	Spl	%RSD				4.89					

** Spl Name: R2200582-004 Data File: 0123076
Remarks: <none>

25	Spl	1 24Jan2022 10:01	-	-	-	2792	2.543	2.543	-	-	-
25	Spl	2 24Jan2022 10:11	-	-	-	2651	2.402	2.402	-	-	-
25	Spl	3 24Jan2022 10:21	-	-	-	2603	2.354	2.354	-	-	-
25	Spl	4 24Jan2022 10:31	-	-	-	3407	3.158	3.158	-	-	-
25	Spl	Avg				2863	2.614	2.614			
25	Spl	SDev				371.268					
25	Spl	%RSD				12.97					

** Spl Name: R2200582-005 Data File: 0123077
Remarks: 10

26	Spl	1 24Jan2022 10:41	-	-	-	407	0.157	0.157	-	-	-
26	Spl	2 24Jan2022 10:51	-	-	-	353	0.103	0.103	-	-	-
26	Spl	3 24Jan2022 11:01	-	-	-	444	0.194	0.194	-	-	-
26	Spl	4 24Jan2022 11:11	-	-	-	353	0.103	0.103	-	-	-
26	Spl	Avg				389	0.139	0.139			
26	Spl	SDev				44.500					
26	Spl	%RSD				11.43					

*********DNR; RERUN STRAIGHT*******

** Spl Name: CCV Data File: 0123078
Remarks: <none>

27	Spl	1 24Jan2022 11:22	-	-	-	14893	14.649	14.649	-	-	-
27	Spl	2 24Jan2022 11:32	-	-	-	13724	13.480	13.480	-	-	-
27	Spl	3 24Jan2022 11:42	-	-	-	14172	13.928	13.928	-	-	-
27	Spl	4 24Jan2022 11:52	-	-	-	15693	15.450	15.450	-	-	-
27	Spl	Avg				14620	14.377	14.377			
27	Spl	SDev				862.047					
27	Spl	%RSD				5.90					

** Spl Name: CCB Data File: 0123079
Remarks: <none>

28	Spl	1 24Jan2022 12:03	-	-	-	177	0.000	0.000	-	-	-
28	Spl	2 24Jan2022 12:13	-	-	-	129	0.000	0.000	-	-	-
28	Spl	3 24Jan2022 12:23	-	-	-	127	0.000	0.000	-	-	-
28	Spl	4 24Jan2022 12:33	-	-	-	158	0.000	0.000	-	-	-
28	Spl	Avg				147	0.000	0.000			
28	Spl	SDev				24.102					
28	Spl	%RSD				16.31					

** Spl Name: R2200582-006 Data File: 0123080
Remarks: 40

29	Spl	1 24Jan2022 12:44	-	-	-	168	0.000	0.000	-	-	-
29	Spl	2 24Jan2022 12:54	-	-	-	176	0.000	0.000	-	-	-
29	Spl	3 24Jan2022 13:04	-	-	-	157	0.000	0.000	-	-	-
29	Spl	4 24Jan2022 13:14	-	-	-	209	0.000	0.000	-	-	-
29	Spl	Avg				177	0.000	0.000			
29	Spl	SDev				22.398					
29	Spl	%RSD				12.62					

*********DNR; RERUN STRAIGHT*******

** Spl Name: R2200582-007 Data File: 0123081
Remarks: 40

30	Spl	1 24Jan2022 13:24	-	-	-	135	0.000	0.000	-	-	-
30	Spl	2 24Jan2022 13:34	-	-	-	137	0.000	0.000	-	-	-
30	Spl	3 24Jan2022 13:44	-	-	-	180	0.000	0.000	-	-	-
30	Spl	4 24Jan2022 13:54	-	-	-	317	0.067	0.067	-	-	-
30	Spl	Avg				192	0.000	0.000			
30	Spl	SDev				85.718					
30	Spl	%RSD				44.59					

*********DNR; RERUN STRAIGHT*******

** Spl Name: R2200582-008 Data File: 0123082
Remarks: 10

31	Spl	1 24Jan2022 14:05	-	-	-	431	0.181	0.181	-	-	-
31	Spl	2 24Jan2022 14:15	-	-	-	457	0.207	0.207	-	-	-
31	Spl	3 24Jan2022 14:25	-	-	-	476	0.226	0.226	-	-	-
31	Spl	4 24Jan2022 14:35	-	-	-	531	0.281	0.281	-	-	-
31	Spl	Avg				473	0.224	0.224			
31	Spl	SDev				42.390					
31	Spl	%RSD				8.95					

*********DNR; RERUN STRAIGHT*******

** Spl Name: R2200582-009 Data File: 0123083
Remarks: 40

32	Spl	1 24Jan2022 14:46	-	-	-	156	0.000	0.000	-	-	-
32	Spl	2 24Jan2022 14:56	-	-	-	324	0.074	0.074	-	-	-
32	Spl	3 24Jan2022 15:06	-	-	-	263	0.013	0.013	-	-	-
32	Spl	4 24Jan2022 15:16	-	-	-	227	0.000	0.000	-	-	-
32	Spl	Avg				242	0.000	0.000			
32	Spl	SDev				70.202					
32	Spl	%RSD				28.95					

*********DNR; RERUN STRAIGHT*******

** Spl Name: R2200582-010 Data File: 0123084
Remarks: <none>

33	Spl	1 24Jan2022 15:27	-	-	-	2406	2.157	2.157	-	-	-
33	Spl	2 24Jan2022 15:37	-	-	-	2341	2.092	2.092	-	-	-
33	Spl	3 24Jan2022 15:47	-	-	-	2470	2.221	2.221	-	-	-
33	Spl	4 24Jan2022 15:57	-	-	-	2440	2.191	2.191	-	-	-
33	Spl	Avg				2414	2.165	2.165			
33	Spl	SDev				55.392					
33	Spl	%RSD				2.29					

** Spl Name: LCS Data File: 0123085
Remarks: <none>

34	Spl	1 24Jan2022 16:07	-	-	-	10768	10.523	10.523	-	-	-
34	Spl	2 24Jan2022 16:17	-	-	-	9875	9.629	9.629	-	-	-
34	Spl	3 24Jan2022 16:27	-	-	-	10382	10.136	10.136	-	-	-
34	Spl	4 24Jan2022 16:37	-	-	-	10641	10.395	10.396	-	-	-
34	Spl	Avg				10416	10.171	10.171			
34	Spl	SDev				395.122					
34	Spl	%RSD				3.79					

** Spl Name: R2200544-008 Data File: 0123086
Remarks: 100

35	Spl	1 24Jan2022 16:48	-	-	-	993	0.743	0.743	-	-	-
35	Spl	2 24Jan2022 16:58	-	-	-	1003	0.753	0.753	-	-	-
35	Spl	3 24Jan2022 17:08	-	-	-	971	0.721	0.721	-	-	-
35	Spl	4 24Jan2022 17:18	-	-	-	1040	0.790	0.790	-	-	-
35	Spl	Avg				1001	0.752	0.752			
35	Spl	SDev				28.791					
35	Spl	%RSD				2.87					

*********REPEATED AT A 1/10 ON 1/25********

** Spl Name: R2200544-010 Data File: 0123087
Remarks: 200

36	Spl	1 24Jan2022 17:29	-	-	-	6235	5.988	5.988	-	-	-
36	Spl	2 24Jan2022 17:39	-	-	-	6060	5.812	5.812	-	-	-
36	Spl	3 24Jan2022 17:49	-	-	-	6312	6.065	6.065	-	-	-
36	Spl	4 24Jan2022 17:59	-	-	-	6402	6.155	6.155	-	-	-
36	Spl	Avg				6252	6.005	6.005			
36	Spl	SDev				145.204					
36	Spl	%RSD				2.32					

over range on 1/11/22

** Spl Name: R2200544-011 Data File: 0123088
Remarks: 2

37	Spl	1 24Jan2022 18:10	-	-	-	1506	1.257	1.257	-	-	-
37	Spl	2 24Jan2022 18:20	-	-	-	1465	1.216	1.215	-	-	-
37	Spl	3 24Jan2022 18:30	-	-	-	1331	1.081	1.082	-	-	-
37	Spl	4 24Jan2022 18:40	-	-	-	1777	1.528	1.528	-	-	-
37	Spl	Avg				1519	1.270	1.270			
37	Spl	SDev				187.075					
37	Spl	%RSD				12.31					

RPD on 1/11/22

** Spl Name: R2200544-012 Data File: 0123089
Remarks: <none>

38	Spl	1 24Jan2022 18:50	-	-	-	1405	1.155	1.156	-	-	-
38	Spl	2 24Jan2022 19:00	-	-	-	1288	1.038	1.038	-	-	-
38	Spl	3 24Jan2022 19:10	-	-	-	1123	0.873	0.873	-	-	-
38	Spl	4 24Jan2022 19:20	-	-	-	1182	0.932	0.932	-	-	-
38	Spl	Avg				1249	1.000	1.000			
38	Spl	SDev				124.125					
38	Spl	%RSD				9.93					

** Spl Name: CCV Data File: 0123090
Remarks: <none>

39	Spl	1 24Jan2022 19:31	-	-	-	16372	16.129	16.129	-	-	-
39	Spl	2 24Jan2022 19:41	-	-	-	15565	15.322	15.322	-	-	-
39	Spl	3 24Jan2022 19:51	-	-	-	15691	15.448	15.448	-	-	-
39	Spl	4 24Jan2022 20:01	-	-	-	16261	16.018	16.018	-	-	-
39	Spl	Avg				15972	15.729	15.729			
39	Spl	SDev				403.374					
39	Spl	%RSD				2.53					

** Spl Name: CCB Data File: 0123091
Remarks: <none>

40	Spl	1 24Jan2022 20:12	-	-	-	286	0.036	0.036	-	-	-
40	Spl	2 24Jan2022 20:22	-	-	-	209	0.000	0.000	-	-	-
40	Spl	3 24Jan2022 20:32	-	-	-	150	0.000	0.000	-	-	-
40	Spl	4 24Jan2022 20:42	-	-	-	124	0.000	0.000	-	-	-
40	Spl	Avg				192	0.000	0.000			
40	Spl	SDev				71.909					
40	Spl	%RSD				37.40					

** Spl Name: R2200544-001 Data File: 0123092
Remarks: <none>

41	Spl	1 24Jan2022 20:53	-	-	-	18789	18.547	18.547	-	-	-
41	Spl	2 24Jan2022 21:03	-	-	-	19563	19.321	19.321	-	-	-
41	Spl	3 24Jan2022 21:13	-	-	-	19527	19.285	19.285	-	-	-

012322

41	Spl	4 24Jan2022 21:23	-	-	-	22234	21.993	21.993	-	-	-
41	Spl	Avg				20028	19.787	19.787			
41	Spl	SDev				1513.141					
41	Spl	%RSD				7.55					

** Spl Name: R2200544-002 Data File: 0123093
Remarks: 2

42	Spl	1 24Jan2022 21:34	-	-	-	12994	12.749	12.750	-	-	-
42	Spl	2 24Jan2022 21:43	-	-	-	13723	13.479	13.479	-	-	-
42	Spl	3 24Jan2022 21:53	-	-	-	15311	15.067	15.068	-	-	-
42	Spl	4 24Jan2022 22:03	-	-	-	15683	15.440	15.440	-	-	-
42	Spl	Avg				14427	14.184	14.184			
42	Spl	SDev				1279.075					
42	Spl	%RSD				8.87	over range on 1/21				

** Spl Name: R2200544-003 Data File: 0123094
Remarks: 100

43	Spl	1 24Jan2022 22:14	-	-	-	1174	0.924	0.924	-	-	-
43	Spl	2 24Jan2022 22:24	-	-	-	1191	0.941	0.941	-	-	-
43	Spl	3 24Jan2022 22:34	-	-	-	1142	0.892	0.892	-	-	-
43	Spl	4 24Jan2022 22:44	-	-	-	1157	0.907	0.907	-	-	-
43	Spl	Avg				1166	0.916	0.916			
43	Spl	SDev				21.182					
43	Spl	%RSD				1.82					

*********REPEATED AT A 1/10 ON 1/25********

** Spl Name: R2200544-003S Data File: 0123095
Remarks: 100

44	Spl	1 24Jan2022 22:55	-	-	-	11591	11.346	11.346	-	-	-
44	Spl	2 24Jan2022 23:05	-	-	-	11545	11.300	11.300	-	-	-
44	Spl	3 24Jan2022 23:15	-	-	-	11065	10.820	10.820	-	-	-
44	Spl	4 24Jan2022 23:25	-	-	-	11279	11.034	11.034	-	-	-
44	Spl	Avg				11370	11.125	11.125			
44	Spl	SDev				245.474					
44	Spl	%RSD				2.16					

** Spl Name: R2200544-003SD Data File: 0123096
Remarks: 100

45	Spl	1 24Jan2022 23:36	-	-	-	11062	10.817	10.817	-	-	-
45	Spl	2 24Jan2022 23:46	-	-	-	10566	10.320	10.320	-	-	-
45	Spl	3 24Jan2022 23:56	-	-	-	11205	10.960	10.960	-	-	-
45	Spl	4 25Jan2022 00:05	-	-	-	11570	11.325	11.325	-	-	-
45	Spl	Avg				11100	10.855	10.855			
45	Spl	SDev				415.741					
45	Spl	%RSD				3.75					

** Spl Name: R2200544-004 Data File: 0123097
Remarks: <none>

46	Spl	1 25Jan2022 00:16	-	-	-	820	0.570	0.570	-	-	-
46	Spl	2 25Jan2022 00:26	-	-	-	844	0.594	0.594	-	-	-
46	Spl	3 25Jan2022 00:36	-	-	-	877	0.627	0.627	-	-	-
46	Spl	4 25Jan2022 00:46	-	-	-	896	0.646	0.646	-	-	-
46	Spl	Avg				859	0.610	0.609			
46	Spl	SDev				33.856					
46	Spl	%RSD				3.94					

** Spl Name: R2200544-005 Data File: 0123098
Remarks: 200

47	Spl	1 25Jan2022 00:57	-	-	-	6331	6.084	6.084	-	-	-
47	Spl	2 25Jan2022 01:07	-	-	-	6033	5.785	5.786	-	-	-
47	Spl	3 25Jan2022 01:17	-	-	-	6645	6.398	6.398	-	-	-
47	Spl	4 25Jan2022 01:27	-	-	-	6441	6.194	6.194	-	-	-
47	Spl	Avg				6362	6.115	6.115			
47	Spl	SDev				255.298					
47	Spl	%RSD				4.01	over range on 1/21/22				

** Spl Name: R2200544-006 Data File: 0123099
Remarks: <none>

48	Spl	1 25Jan2022 01:38	-	-	-	978	0.728	0.728	-	-	-
48	Spl	2 25Jan2022 01:48	-	-	-	971	0.721	0.721	-	-	-
48	Spl	3 25Jan2022 01:58	-	-	-	1015	0.765	0.765	-	-	-
48	Spl	4 25Jan2022 02:08	-	-	-	1085	0.835	0.835	-	-	-
48	Spl	Avg				1012	0.763	0.763			
48	Spl	SDev				52.201					
48	Spl	%RSD				5.16					

** Spl Name: CCV Data File: 0123100
Remarks: <none>

49	Spl	1 25Jan2022 02:19	-	-	-	14060	13.816	13.816	-	-	-
49	Spl	2 25Jan2022 02:29	-	-	-	15140	14.896	14.896	-	-	-
49	Spl	3 25Jan2022 02:39	-	-	-	15817	15.574	15.574	-	-	-
49	Spl	4 25Jan2022 02:49	-	-	-	15933	15.690	15.690	-	-	-
49	Spl	Avg				15237	14.994	14.994			
49	Spl	SDev				859.371					

012322

49	Spl	%RSD				5.64					

** Spl Name: CCB Data File: 0123101
Remarks: <none>

50	Spl	1	25Jan2022 03:00	-	-	-	203	0.000	0.000	-	-	-
50	Spl	2	25Jan2022 03:10	-	-	-	124	0.000	0.000	-	-	-
50	Spl	3	25Jan2022 03:20	-	-	-	144	0.000	0.000	-	-	-
50	Spl	4	25Jan2022 03:30	-	-	-	91	0.000	0.000	-	-	-
50	Spl	Avg					140	0.000	0.000			
50	Spl	SDev					47.050					
50	Spl	%RSD					33.49					

ALS Environmental
1565 Jefferson Rd., Rochester, NY 14623

General Chemistry Analytical Run Cover Sheet

Analyst: SMcGowan Date: 1/29/22

Analysis: Total Organic Carbon, SM5310C/9060/9060A Instrument: (R-TOC-01) OI Analytical Model1010 TOC Analyzer
High Level: 1.0 to 30.0 ppm

PRIMARY STOCKS	Log ID Prep/Exp. Dates	Reagent	Weight (g)	Final Vol. (mLs)	Conc. (mg/L)
Standards * ✓	**Log ID: 220617 Received: 11/24/2021 Expires: 09/30/2023**	Purchased Sucrose Solution			1000 (A)
Reference * ✓	**Log ID: 218253 Received: 07/17/2021 Expires: 07/8/2023**	Purchased KHP Solution			1000 (B)

*Diluent is UPDI

QUALITY CONTROL	Vol. (mLs)	Conc. (mg/L)	Final Vol. (mLs)	TV (mg/L)
I/CCV	3.0	1000 (B)	200	15.0
LCS	1.0	1000 (A)	100	10.0
MS	0.42	1000 (A)	42	10.0

Standard Curve Prep

Concentration	mLs 1000 mg/L Stock (A)	Final Volume (mLs)
30.0	3.00	100
10.0	1.00	100
5.0	0.50	100
1.0	0.10	100
0.0	0.00	100

Comments:

Curve Date = 01/13/2021
Filter LOT: 41291103 (Phenex 0.45µm Syringe Filter)

Note: Dilutions greater than 1/1 are placed in the "comments" section of the Model 1010 Analyzer report.
The "Dilution Factor" on the Model 1010 will always read "1.00"
TOC results on the Model 1010 Analyzer reports do not include the dilution factor.
Final results on the Starlims run and final report include the dilution factor.

Pipetteerayne SM 1/14/2021

011321CAL

TOC

CALIBRATION: 011321

Pos/ Vial	Run Type	Rep #	Run Date	Run Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (ppm)	TC Area (cts)	TC Mass (ugC)	TC Conc (ppm)
** Std1	Name: 0						Data File: 0113001						
	Remarks: <none>												
1	Std1	1	13Jan2021	15:03	-	-	-	276	0.000	0.000	-	-	-
1	Std1	2	13Jan2021	15:13	-	-	-	278	0.000	0.000	-	-	-
1	Std1	3	13Jan2021	15:22	-	-	-	553	0.000	0.000	-	-	-
1	Std1	4	13Jan2021	15:32	-	-	-	287	0.000	0.000	-	-	-
1	Std	Avg						348	0.000	0.000			
1	Std	SDev						136.417					
1	Std	%RSD						39.14					
** Calibration:	RF (ugC/k-cts):	0.959											
	R-Squared:	0.9987											
	Offset (cts):	191											
	Offset (ugC):	-0.183											
** Std2	Name: 1						Data File: 0113002						
	Remarks: <none>												
2	Std2	1	13Jan2021	15:43	-	-	-	1150	1.000	1.000	-	-	-
2	Std2	2	13Jan2021	15:53	-	-	-	1137	1.000	1.000	-	-	-
2	Std2	3	13Jan2021	16:03	-	-	-	1099	1.000	1.000	-	-	-
2	Std2	4	13Jan2021	16:13	-	-	-	1195	1.000	1.000	-	-	-
2	Std	Avg						1145	1.000	1.000			
2	Std	SDev						39.601					
2	Std	%RSD						3.46					
** Calibration:	RF (ugC/k-cts):	0.959											
	R-Squared:	0.9987											
	Offset (cts):	172											
	Offset (ugC):	-0.166											
** Std3	Name: 5						Data File: 0113003						
	Remarks: <none>												
3	Std3	1	13Jan2021	16:24	-	-	-	4719	5.000	5.000	-	-	-
3	Std3	2	13Jan2021	16:34	-	-	-	4853	5.000	5.000	-	-	-
3	Std3	3	13Jan2021	16:44	-	-	-	4964	5.000	5.000	-	-	-
3	Std3	4	13Jan2021	16:54	-	-	-	4946	5.000	5.000	-	-	-
3	Std	Avg						4870	5.000	5.000			
3	Std	SDev						112.103					
3	Std	%RSD						2.30					
** Calibration:	RF (ugC/k-cts):	0.956											
	R-Squared:	0.9984											
	Offset (cts):	48											
	Offset (ugC):	-0.046											
** Std4	Name: 10						Data File: 0113004						
	Remarks: <none>												
4	Std4	1	13Jan2021	17:05	-	-	-	9889	10.000	10.000	-	-	-
4	Std4	2	13Jan2021	17:15	-	-	-	9564	10.000	10.000	-	-	-
4	Std4	3	13Jan2021	17:25	-	-	-	9514	10.000	10.000	-	-	-
4	Std4	4	13Jan2021	17:35	-	-	-	9819	10.000	10.000	-	-	-
4	Std	Avg						9696	10.000	10.000			
4	Std	SDev						185.225					
4	Std	%RSD						1.91					
** Calibration:	RF (ugC/k-cts):	0.956											
	R-Squared:	0.9976											
	Offset (cts):	-120											
	Offset (ugC):	0.115											
** Std5	Name: 30						Data File: 0113005						
	Remarks: <none>												
5	Std5	1	13Jan2021	17:46	-	-	-	31002	30.000	30.000	-	-	-
5	Std5	2	13Jan2021	17:56	-	-	-	29342	30.000	30.000	-	-	-
5	Std5	3	13Jan2021	18:06	-	-	-	29838	30.000	30.000	-	-	-
5	Std5	4	13Jan2021	18:16	-	-	-	30421	30.000	30.000	-	-	-
5	Std	Avg						30150	30.000	30.000			
5	Std	SDev						718.691					
5	Std	%RSD						2.38					
** Calibration:	RF (ugC/k-cts):	1.000											
	R-Squared:	0.9988											
	Offset (cts):	46											
	Offset (ugC):	-0.046											
** Spl	Name: ICV						Data File: 0113006						
	Remarks: <none>												
6	Spl	1	13Jan2021	18:27	-	-	-	15255	15.011	15.011	-	-	-

SM 1/14/2021

011321CAL

6	Spl	2 13Jan2021 18:37	-	-	-	14391	14.147	14.147	-	-	-
6	Spl	3 13Jan2021 18:46	-	-	-	14918	14.674	14.674	-	-	-
6	Spl	4 13Jan2021 18:56	-	-	-	15164	14.920	14.920	-	-	-
6	Spl	Avg				14932	14.688	14.688			
6	Spl	SDev				387.741					
6	Spl	%RSD				2.60					

** Spl Name: ICB Data File: 0113007
Remarks: <none>

7	Spl	1 13Jan2021 19:07	-	-	-	256	0.006	0.006	-	-	-
7	Spl	2 13Jan2021 19:17	-	-	-	274	0.024	0.024	-	-	-
7	Spl	3 13Jan2021 19:27	-	-	-	221	0.000	0.000	-	-	-
7	Spl	4 13Jan2021 19:37	-	-	-	246	0.000	0.000	-	-	-
7	Spl	Avg				249	0.000	0.000			
7	Spl	SDev				22.111					
7	Spl	%RSD				8.87					

Sm 1/14/2021

****
** CALIBRATION **
****

TOC Unit: TOC
011321TOC Wed Jan 13 18:16:06 2021

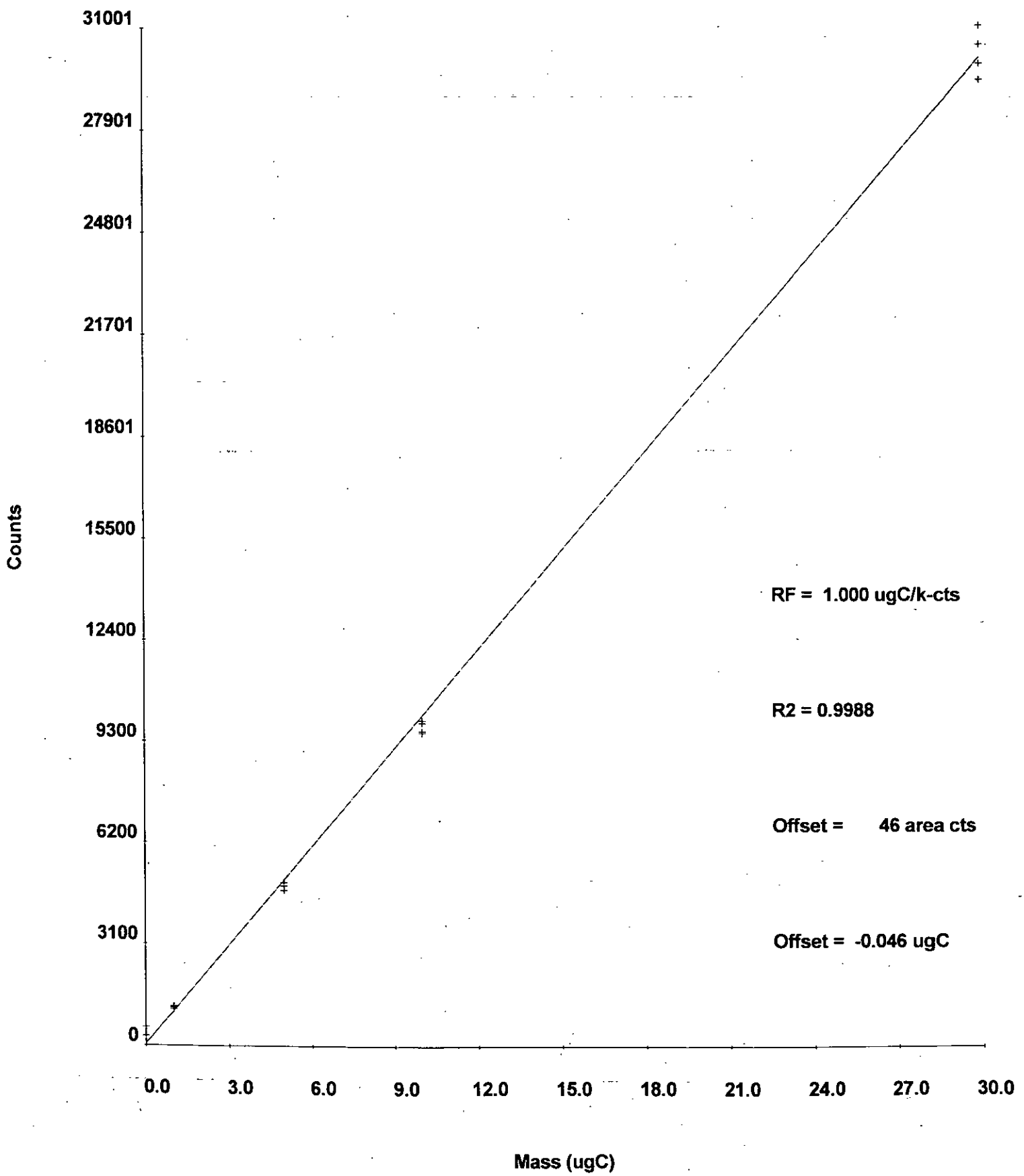
Std. #	Used	Conc. (ppm)	Volume (mL)
1	Yes	0.000	1.000
2	Yes	1.000	1.000
3	Yes	5.000	1.000
4	Yes	10.000	1.000
5	Yes	30.000	1.000

RF (ugC/k-cts): 1.000
R-Squared: 0.9988
Offset (cts): 46
Offset (ugC): -0.046
Calibration Mode: TOC
Allow Editing: No

Rep	Std. 1	Std. 2	Std. 3	Std. 4	Std. 5
1	276	1150	4719	9889	31002
2	278	1137	4853	9564	29342
3	553	1099	4964	9514	29838
4	287	1195	4946	9819	30421
5	-	-	-	-	-
6	-	-	-	-	-
7	-	-	-	-	-
8	-	-	-	-	-
9	-	-	-	-	-
10	-	-	-	-	-

(* = unused)

SM 1/14/2021


Calibration - 011321TOC (TOC, 13Jan2021 18:16)
31001
27901
24801
21701
18601
15500
12400
9300
6200
3100
0
Counts
0.0
3.0
6.0
9.0
12.0
15.0
18.0
21.0
24.0
27.0
30.0
Mass (ugC)
RF = 1.000 ugC/k-cts
R2 = 0.9988
Offset = 46 area cts
Offset = -0.046 ugC

Standard Solution Logbook - Inventory ID Summary

Inventory ID:	220617	Date Received:	11/24/21
Standard Name:	Total Organic Carbon (TOC) Std 1000 mg/L as	Expiration Date:	9/30/23
Standard Type:	Working Standard	Source:	SCP Science
ALS Lab:	ROCHESTER	Catalog #:	250-250-051
ALSTeam:	GenChem	Lot #:	S210910014
Container ID:	220617	Amount Prepared:	1.00 mL
Location:	IC ROOM		

Component Name	Amount	Units	Method / Test Name
Carbon	1000	ppm	9060A / TOC 4X T
Carbon Result	1000	ppm	9060A / TOC 4X T

Standard Solution Logbook - Inventory ID Summary

Inventory ID:	218253	Date Received:	7/17/21
Standard Name:	Total Organic Carbon (TOC) Ref 1000 mg/L as	Expiration Date:	7/8/23
Standard Type:	Working Standard	Source:	Absolute Standards
ALS Lab:	ROCHESTER	Catalog #:	50110A
ALSTeam:	GenChem	Lot #:	070821
Container ID:	218253	Amount Prepared:	2.00 mL
Location:	IC ROOM		

Component Name	Amount	Units	Method / Test Name
Carbon	1000	ppm	9060 / TOC 4X T
Carbon Result	1000	ppm	9060 / TOC 4X T

Analytical Results Summary

Instrument Name: R-TOC-01 **Analyst:** SMORGAN **Analysis Lot:** 752706 **Method/Testcode:** 9060A/TOC 4X D DOD

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ2200792-01	Carbon, Dissolved Organic (DOC)	CCV		Water	15.45 mg/L	42 mL	15.4 mg/L	1					1/25/22 10:00:00	N	IV
RQ2200792-01	Carbon, Total Organic (TOC)	CCV		Water	15.45 mg/L	42 mL	15.4 mg/L	1					1/25/22 10:00:00	N	IV
RQ2200792-01	Carbon, Dissolved Organic (DOC)	CCV		Water	15.02 mg/L	42 mL	15.0 mg/L	1					1/25/22 10:10:00	N	IV
RQ2200792-01	Carbon, Total Organic (TOC)	CCV		Water	15.02 mg/L	42 mL	15.0 mg/L	1					1/25/22 10:10:00	N	IV
RQ2200792-01	Carbon, Dissolved Organic (DOC)	CCV		Water	15.45 mg/L	42 mL	15.5 mg/L	1					1/25/22 10:20:00	N	IV
RQ2200792-01	Carbon, Total Organic (TOC)	CCV		Water	15.45 mg/L	42 mL	15.5 mg/L	1					1/25/22 10:20:00	N	IV
RQ2200792-01	Carbon, Dissolved Organic (DOC)	CCV		Water	15.52 mg/L	42 mL	15.5 mg/L	1					1/25/22 10:30:00	N	IV
RQ2200792-01	Carbon, Total Organic (TOC)	CCV		Water	15.52 mg/L	42 mL	15.5 mg/L	1					1/25/22 10:30:00	N	IV
RQ2200792-02	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 10:41:00	N	IV
RQ2200792-02	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 10:41:00	N	IV
RQ2200792-03	Carbon, Dissolved Organic (DOC)	MB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 10:41:00	N	IV
RQ2200792-03	Carbon, Total Organic (TOC)	MB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 10:41:00	N	IV
RQ2200792-02	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 10:51:00	N	IV
RQ2200792-02	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 10:51:00	N	IV
RQ2200792-03	Carbon, Dissolved Organic (DOC)	MB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 10:51:00	N	IV
RQ2200792-03	Carbon, Total Organic (TOC)	MB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 10:51:00	N	IV
RQ2200792-02	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 11:01:00	N	IV
RQ2200792-02	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 11:01:00	N	IV
RQ2200792-03	Carbon, Dissolved Organic (DOC)	MB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 11:01:00	N	IV
RQ2200792-03	Carbon, Total Organic (TOC)	MB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 11:01:00	N	IV
RQ2200792-02	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 11:11:00	N	IV
RQ2200792-02	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 11:11:00	N	IV
RQ2200792-03	Carbon, Dissolved Organic (DOC)	MB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 11:11:00	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-TOC-01 **Analyst:** SMORGAN **Analysis Lot:** 752706 **Method/Testcode:** 9060A/TOC 4X T DOD

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2200792-03	Carbon, Total Organic (TOC)	MB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 11:11:00	N	IV
KQ2200792-04	Carbon, Dissolved Organic (DOC)	LCS		Water	10.57 mg/L	42 mL	10.6 mg/L	1	0.5	1.0	106		1/25/22 11:22:00	N	IV
KQ2200792-04	Carbon, Total Organic (TOC)	LCS		Water	10.57 mg/L	42 mL	10.6 mg/L	1	0.5	1.0	106		1/25/22 11:22:00	N	IV
KQ2200792-04	Carbon, Dissolved Organic (DOC)	LCS		Water	9.41 mg/L	42 mL	9.41 mg/L	1	0.5	1.0	94		1/25/22 11:32:00	N	IV
KQ2200792-04	Carbon, Total Organic (TOC)	LCS		Water	9.41 mg/L	42 mL	9.41 mg/L	1	0.5	1.0	94		1/25/22 11:32:00	N	IV
KQ2200792-04	Carbon, Dissolved Organic (DOC)	LCS		Water	10.50 mg/L	42 mL	10.5 mg/L	1	0.5	1.0	105		1/25/22 11:42:00	N	IV
KQ2200792-04	Carbon, Total Organic (TOC)	LCS		Water	10.50 mg/L	42 mL	10.5 mg/L	1	0.5	1.0	105		1/25/22 11:42:00	N	IV
KQ2200792-04	Carbon, Dissolved Organic (DOC)	LCS		Water	10.56 mg/L	42 mL	10.6 mg/L	1	0.5	1.0	106		1/25/22 11:52:00	N	IV
KQ2200792-04	Carbon, Total Organic (TOC)	LCS		Water	10.56 mg/L	42 mL	10.6 mg/L	1	0.5	1.0	106		1/25/22 11:52:00	N	IV
K2200581-004	Carbon, Dissolved Organic (DOC)	N/A		Water	3.30 mg/L	42 mL	3.3 mg/L	1	0.5	1.0			1/25/22 12:03:00	N	IV
K2200581-004	Carbon, Dissolved Organic (DOC)	N/A		Water	3.43 mg/L	42 mL	3.4 mg/L	1	0.5	1.0			1/25/22 12:13:00	N	IV
K2200581-004	Carbon, Dissolved Organic (DOC)	N/A		Water	3.68 mg/L	42 mL	3.7 mg/L	1	0.5	1.0			1/25/22 12:23:00	N	IV
K2200581-004	Carbon, Dissolved Organic (DOC)	N/A		Water	3.52 mg/L	42 mL	3.5 mg/L	1	0.5	1.0			1/25/22 12:33:00	N	IV
K2200581-005	Carbon, Dissolved Organic (DOC)	N/A		Water	4.73 mg/L	42 mL	4.7 mg/L	1	0.5	1.0			1/25/22 12:44:00	N	IV
K2200581-005	Carbon, Dissolved Organic (DOC)	N/A		Water	3.55 mg/L	42 mL	3.6 mg/L	1	0.5	1.0			1/25/22 12:54:00	N	IV
K2200581-005	Carbon, Dissolved Organic (DOC)	N/A		Water	3.55 mg/L	42 mL	3.5 mg/L	1	0.5	1.0			1/25/22 13:04:00	N	IV
K2200581-005	Carbon, Dissolved Organic (DOC)	N/A		Water	3.64 mg/L	42 mL	3.6 mg/L	1	0.5	1.0			1/25/22 13:14:00	N	IV
K2200581-006	Carbon, Dissolved Organic (DOC)	N/A		Water	3.37 mg/L	42 mL	3.4 mg/L	1	0.5	1.0			1/25/22 13:24:00	N	IV
K2200581-006	Carbon, Dissolved Organic (DOC)	N/A		Water	3.71 mg/L	42 mL	3.7 mg/L	1	0.5	1.0			1/25/22 13:34:00	N	IV
K2200581-006	Carbon, Dissolved Organic (DOC)	N/A		Water	4.01 mg/L	42 mL	4.0 mg/L	1	0.5	1.0			1/25/22 13:44:00	N	IV
K2200581-006	Carbon, Dissolved Organic (DOC)	N/A		Water	3.56 mg/L	42 mL	3.6 mg/L	1	0.5	1.0			1/25/22 13:54:00	N	IV
K2200582-002	Carbon, Dissolved Organic (DOC)	N/A		Water	4.10 mg/L	42 mL	4.1 mg/L	1	0.5	1.0			1/25/22 14:05:00	Y	IV
K2200582-002	Carbon, Dissolved Organic (DOC)	N/A		Water	4.22 mg/L	42 mL	4.2 mg/L	1	0.5	1.0			1/25/22 14:15:00	Y	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-TOC-01 **Analyst:** SMORGAN **Analysis Lot:** 752706 **Method/Testcode:** 9060A/TOC 4X D DOD

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R2200582-002	Carbon, Dissolved Organic (DOC)	N/A		Water	4.39 mg/L	42 mL	4.4 mg/L	1	0.5	1.0			1/25/22 14:25:00	Y	IV
R2200582-002	Carbon, Dissolved Organic (DOC)	N/A		Water	4.40 mg/L	42 mL	4.4 mg/L	1	0.5	1.0			1/25/22 14:35:00	Y	IV
WQ2200792-05	Carbon, Dissolved Organic (DOC)	MS	R2200582-002	Water	13.67 mg/L	42 mL	13.7 mg/L	1	0.5	1.0	96		1/25/22 14:46:00	N	IV
WQ2200792-05	Carbon, Dissolved Organic (DOC)	MS	R2200582-002	Water	13.69 mg/L	42 mL	13.7 mg/L	1	0.5	1.0	95		1/25/22 14:56:00	N	IV
WQ2200792-05	Carbon, Dissolved Organic (DOC)	MS	R2200582-002	Water	14.23 mg/L	42 mL	14.2 mg/L	1	0.5	1.0	98		1/25/22 15:06:00	N	IV
WQ2200792-05	Carbon, Dissolved Organic (DOC)	MS	R2200582-002	Water	13.64 mg/L	42 mL	13.6 mg/L	1	0.5	1.0	92		1/25/22 15:16:00	N	IV
WQ2200792-06	Carbon, Dissolved Organic (DOC)	DMS	R2200582-002	Water	12.69 mg/L	42 mL	12.7 mg/L	1	0.5	1.0	86	7	1/25/22 15:27:00	N	IV
WQ2200792-06	Carbon, Dissolved Organic (DOC)	DMS	R2200582-002	Water	12.96 mg/L	42 mL	13.0 mg/L	1	0.5	1.0	87	5	1/25/22 15:37:00	N	IV
WQ2200792-06	Carbon, Dissolved Organic (DOC)	DMS	R2200582-002	Water	13.69 mg/L	42 mL	13.7 mg/L	1	0.5	1.0	93	4	1/25/22 15:47:00	N	IV
WQ2200792-06	Carbon, Dissolved Organic (DOC)	DMS	R2200582-002	Water	14.57 mg/L	42 mL	14.6 mg/L	1	0.5	1.0	102	7	1/25/22 15:57:10	N	IV
R2200582-005	Carbon, Dissolved Organic (DOC)	N/A		Water	2.83 mg/L	42 mL	2.8 mg/L	1	0.5	1.0			1/25/22 16:07:00	N	IV
R2200582-005	Carbon, Dissolved Organic (DOC)	N/A		Water	2.85 mg/L	42 mL	2.8 mg/L	1	0.5	1.0			1/25/22 16:17:00	N	IV
R2200582-005	Carbon, Dissolved Organic (DOC)	N/A		Water	3.03 mg/L	42 mL	3.0 mg/L	1	0.5	1.0			1/25/22 16:27:00	N	IV
R2200582-005	Carbon, Dissolved Organic (DOC)	N/A		Water	2.79 mg/L	42 mL	2.8 mg/L	1	0.5	1.0			1/25/22 16:37:00	N	IV
R2200582-006	Carbon, Dissolved Organic (DOC)	N/A		Water	1.37 mg/L	42 mL	1.4 mg/L	1	0.5	1.0			1/25/22 16:48:00	N	IV
R2200582-006	Carbon, Dissolved Organic (DOC)	N/A		Water	1.28 mg/L	42 mL	1.3 mg/L	1	0.5	1.0			1/25/22 16:58:00	N	IV
R2200582-006	Carbon, Dissolved Organic (DOC)	N/A		Water	1.34 mg/L	42 mL	1.3 mg/L	1	0.5	1.0			1/25/22 17:08:00	N	IV
R2200582-006	Carbon, Dissolved Organic (DOC)	N/A		Water	1.50 mg/L	42 mL	1.5 mg/L	1	0.5	1.0			1/25/22 17:18:00	N	IV
R2200582-007	Carbon, Dissolved Organic (DOC)	N/A		Water	2.28 mg/L	42 mL	2.3 mg/L	1	0.5	1.0			1/25/22 17:29:00	N	IV
R2200582-007	Carbon, Dissolved Organic (DOC)	N/A		Water	2.29 mg/L	42 mL	2.3 mg/L	1	0.5	1.0			1/25/22 17:39:00	N	IV
R2200582-007	Carbon, Dissolved Organic (DOC)	N/A		Water	2.60 mg/L	42 mL	2.6 mg/L	1	0.5	1.0			1/25/22 17:49:00	N	IV
R2200582-007	Carbon, Dissolved Organic (DOC)	N/A		Water	2.56 mg/L	42 mL	2.6 mg/L	1	0.5	1.0			1/25/22 17:59:00	N	IV
WQ2200792-07	Carbon, Dissolved Organic (DOC)	CCV		Water	16.12 mg/L	42 mL	16.1 mg/L	1					1/25/22 18:10:00	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-TOC-01 **Analyst:** SMORGAN **Analysis Lot:** 752706 **Method/Testcode:** 9060A/TOC 4X T DOD

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2200792-07	Carbon, Total Organic (TOC)	CCV		Water	16.12 mg/L	42 mL	16.1 mg/L	1					1/25/22 18:10:00	N	IV
KQ2200792-07	Carbon, Dissolved Organic (DOC)	CCV		Water	15.13 mg/L	42 mL	15.1 mg/L	1					1/25/22 18:20:00	N	IV
KQ2200792-07	Carbon, Total Organic (TOC)	CCV		Water	15.13 mg/L	42 mL	15.1 mg/L	1					1/25/22 18:20:00	N	IV
KQ2200792-07	Carbon, Dissolved Organic (DOC)	CCV		Water	15.15 mg/L	42 mL	15.2 mg/L	1					1/25/22 18:30:00	N	IV
KQ2200792-07	Carbon, Total Organic (TOC)	CCV		Water	15.15 mg/L	42 mL	15.2 mg/L	1					1/25/22 18:30:00	N	IV
KQ2200792-07	Carbon, Dissolved Organic (DOC)	CCV		Water	15.97 mg/L	42 mL	16.0 mg/L	1					1/25/22 18:40:00	N	IV
KQ2200792-07	Carbon, Total Organic (TOC)	CCV		Water	15.97 mg/L	42 mL	16.0 mg/L	1					1/25/22 18:40:00	N	IV
KQ2200792-08	Carbon, Dissolved Organic (DOC)	CCB		Water	0.06 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 18:51:00	N	IV
KQ2200792-08	Carbon, Total Organic (TOC)	CCB		Water	0.06 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 18:51:00	N	IV
KQ2200792-08	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 19:01:00	N	IV
KQ2200792-08	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 19:01:00	N	IV
KQ2200792-08	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 19:10:00	N	IV
KQ2200792-08	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 19:10:00	N	IV
KQ2200792-08	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 19:20:00	N	IV
KQ2200792-08	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/25/22 19:20:00	N	IV
K2200582-008	Carbon, Dissolved Organic (DOC)	N/A		Water	3.83 mg/L	42 mL	3.8 mg/L	1	0.5	1.0			1/25/22 19:31:00	N	IV
K2200582-008	Carbon, Dissolved Organic (DOC)	N/A		Water	3.67 mg/L	42 mL	3.7 mg/L	1	0.5	1.0			1/25/22 19:41:00	N	IV
K2200582-008	Carbon, Dissolved Organic (DOC)	N/A		Water	3.78 mg/L	42 mL	3.8 mg/L	1	0.5	1.0			1/25/22 19:51:00	N	IV
K2200582-008	Carbon, Dissolved Organic (DOC)	N/A		Water	3.92 mg/L	42 mL	3.9 mg/L	1	0.5	1.0			1/25/22 20:01:00	N	IV
K2200582-009	Carbon, Dissolved Organic (DOC)	N/A		Water	3.63 mg/L	42 mL	3.6 mg/L	1	0.5	1.0			1/25/22 20:12:00	N	IV
K2200582-009	Carbon, Dissolved Organic (DOC)	N/A		Water	3.65 mg/L	42 mL	3.7 mg/L	1	0.5	1.0			1/25/22 20:22:00	N	IV
K2200582-009	Carbon, Dissolved Organic (DOC)	N/A		Water	3.81 mg/L	42 mL	3.8 mg/L	1	0.5	1.0			1/25/22 20:32:00	N	IV
K2200582-009	Carbon, Dissolved Organic (DOC)	N/A		Water	3.86 mg/L	42 mL	3.9 mg/L	1	0.5	1.0			1/25/22 20:42:00	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-TOC-01 **Analyst:** SMORGAN **Analysis Lot:** 752706 **Method/Testcode:** 9060A/TOC 4X D DOD

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
2200580-004	Carbon, Dissolved Organic (DOC)	N/A		Water	4.13 mg/L	42 mL	4.1 mg/L	1	0.5	1.0			1/25/22 20:53:00	N	IV
2200580-004	Carbon, Dissolved Organic (DOC)	N/A		Water	4.08 mg/L	42 mL	4.1 mg/L	1	0.5	1.0			1/25/22 21:03:00	N	IV
2200580-004	Carbon, Dissolved Organic (DOC)	N/A		Water	3.82 mg/L	42 mL	3.8 mg/L	1	0.5	1.0			1/25/22 21:13:00	N	IV
2200580-004	Carbon, Dissolved Organic (DOC)	N/A		Water	4.01 mg/L	42 mL	4.0 mg/L	1	0.5	1.0			1/25/22 21:23:00	N	IV
2200542-008	Carbon, Dissolved Organic (DOC), Average	N/A		Water	21.21 mg/L	42 mL	21.2 mg/L	1	0.5	1.0			1/26/22 00:06:00	N	IV
2200542-011	Carbon, Dissolved Organic (DOC), Average	N/A		Water	0.41 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 01:27:00	N	IV
2200543-008	Carbon, Dissolved Organic (DOC), Average	N/A		Water	3.25 mg/L	42 mL	6.5 mg/L	2	0.9	2.0			1/26/22 02:08:00	N	IV
Q2200792-09	Carbon, Dissolved Organic (DOC)	CCV		Water	15.61 mg/L	42 mL	15.6 mg/L	1					1/26/22 02:19:00	N	IV
Q2200792-09	Carbon, Total Organic (TOC)	CCV		Water	15.61 mg/L	42 mL	15.6 mg/L	1					1/26/22 02:19:00	N	IV
Q2200792-09	Carbon, Dissolved Organic (DOC)	CCV		Water	15.48 mg/L	42 mL	15.5 mg/L	1					1/26/22 02:29:00	N	IV
Q2200792-09	Carbon, Total Organic (TOC)	CCV		Water	15.48 mg/L	42 mL	15.5 mg/L	1					1/26/22 02:29:00	N	IV
Q2200792-09	Carbon, Dissolved Organic (DOC)	CCV		Water	15.51 mg/L	42 mL	15.5 mg/L	1					1/26/22 02:39:00	N	IV
Q2200792-09	Carbon, Total Organic (TOC)	CCV		Water	15.51 mg/L	42 mL	15.5 mg/L	1					1/26/22 02:39:00	N	IV
Q2200792-09	Carbon, Dissolved Organic (DOC)	CCV		Water	16.38 mg/L	42 mL	16.4 mg/L	1					1/26/22 02:49:00	N	IV
Q2200792-09	Carbon, Total Organic (TOC)	CCV		Water	16.38 mg/L	42 mL	16.4 mg/L	1					1/26/22 02:49:00	N	IV
Q2200792-10	Carbon, Dissolved Organic (DOC)	CCB		Water	0.02 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 03:00:00	N	IV
Q2200792-10	Carbon, Total Organic (TOC)	CCB		Water	0.02 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 03:00:00	N	IV
Q2200792-10	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 03:10:00	N	IV
Q2200792-10	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 03:10:00	N	IV
Q2200792-10	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 03:20:00	N	IV
Q2200792-10	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 03:20:00	N	IV
Q2200792-10	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 03:30:00	N	IV
Q2200792-10	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 03:30:00	N	IV

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Analytical Results Summary

Instrument Name: R-TOC-01 **Analyst:** SMORGAN **Analysis Lot:** 752706 **Method/Testcode:** 9060A/TOC 4X D DOD

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
R2200543-009	Carbon, Dissolved Organic (DOC), Average	N/A		Water	0.15 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 04:10:00	N	IV
R2200541-006	Carbon, Dissolved Organic (DOC), Average	N/A		Water	~~15.51~~ 15.54 mg/L	42 mL	1550 mg/L	100	50	100			1/26/22 04:51:00	N	IV
R2200544-008	Carbon, Dissolved Organic (DOC)	N/A		Water	9.55 mg/L	42 mL	96 mg/L	10	5	10			1/26/22 05:02:00	N	IV
R2200544-008	Carbon, Dissolved Organic (DOC)	N/A		Water	9.16 mg/L	42 mL	92 mg/L	10	5	10			1/26/22 05:12:00	N	IV
R2200544-008	Carbon, Dissolved Organic (DOC)	N/A		Water	9.48 mg/L	42 mL	95 mg/L	10	5	10			1/26/22 05:22:00	N	IV
R2200544-008	Carbon, Dissolved Organic (DOC)	N/A		Water	9.44 mg/L	42 mL	94 mg/L	10	5	10			1/26/22 05:32:00	N	IV
R2200541-003	Carbon, Total Organic (TOC), Average	N/A		Water	2.93 mg/L	42 mL	2.9 mg/L	1	0.5	1.0			1/26/22 06:12:00	N	IV
R2200542-001	Carbon, Total Organic (TOC), Average	N/A		Water	10.06 mg/L	42 mL	1010 mg/L	100	50	100			1/26/22 06:53:00	N	IV
RQ2200792-11	Carbon, Dissolved Organic (DOC)	CCV		Water	15.35 mg/L	42 mL	15.3 mg/L	1					1/26/22 10:28:00	N	IV
RQ2200792-11	Carbon, Total Organic (TOC)	CCV		Water	15.35 mg/L	42 mL	15.3 mg/L	1					1/26/22 10:28:00	N	IV
RQ2200792-11	Carbon, Dissolved Organic (DOC)	CCV		Water	14.80 mg/L	42 mL	14.8 mg/L	1					1/26/22 10:38:00	N	IV
RQ2200792-11	Carbon, Total Organic (TOC)	CCV		Water	14.80 mg/L	42 mL	14.8 mg/L	1					1/26/22 10:38:00	N	IV
RQ2200792-11	Carbon, Dissolved Organic (DOC)	CCV		Water	15.56 mg/L	42 mL	15.6 mg/L	1					1/26/22 10:48:00	N	IV
RQ2200792-11	Carbon, Total Organic (TOC)	CCV		Water	15.56 mg/L	42 mL	15.6 mg/L	1					1/26/22 10:48:00	N	IV
RQ2200792-11	Carbon, Dissolved Organic (DOC)	CCV		Water	15.75 mg/L	42 mL	15.8 mg/L	1					1/26/22 10:58:00	N	IV
RQ2200792-11	Carbon, Total Organic (TOC)	CCV		Water	15.75 mg/L	42 mL	15.8 mg/L	1					1/26/22 10:58:00	N	IV
RQ2200792-12	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 11:08:00	N	IV
RQ2200792-12	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 11:08:00	N	IV
RQ2200792-12	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 11:18:00	N	IV
RQ2200792-12	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 11:18:00	N	IV
RQ2200792-12	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 11:28:00	N	IV
RQ2200792-12	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 11:28:00	N	IV
RQ2200792-12	Carbon, Dissolved Organic (DOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 11:38:00	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-TOC-01 **Analyst:** SMORGAN **Analysis Lot:** 752706 **Method/Testcode:** 9060A/TOC 4X T DOD

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ2200792-12	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 11:38:00	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-TOC-01 **Analyst:** SMORGAN **Analysis Lot:** 752819 **Method/Testcode:** 9060A/TOC 4X T DOD

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2200791-01	Carbon, Total Organic (TOC)	CCV		Water	15.61 mg/L	42 mL	15.6 mg/L	1					1/26/22 02:19:00	N	IV
KQ2200791-01	Carbon, Total Organic (TOC)	CCV		Water	15.48 mg/L	42 mL	15.5 mg/L	1					1/26/22 02:29:00	N	IV
KQ2200791-01	Carbon, Total Organic (TOC)	CCV		Water	15.51 mg/L	42 mL	15.5 mg/L	1					1/26/22 02:39:00	N	IV
KQ2200791-01	Carbon, Total Organic (TOC)	CCV		Water	16.38 mg/L	42 mL	16.4 mg/L	1					1/26/22 02:49:00	N	IV
KQ2200791-02	Carbon, Total Organic (TOC)	CCB		Water	0.02 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 03:00:00	N	IV
KQ2200791-03	Carbon, Total Organic (TOC)	MB		Water	0.02 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 03:00:00	N	IV
KQ2200791-02	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 03:10:00	N	IV
KQ2200791-03	Carbon, Total Organic (TOC)	MB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 03:10:00	N	IV
KQ2200791-02	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 03:20:00	N	IV
KQ2200791-03	Carbon, Total Organic (TOC)	MB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 03:20:00	N	IV
KQ2200791-02	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 03:30:00	N	IV
KQ2200791-03	Carbon, Total Organic (TOC)	MB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 03:30:00	N	IV
KQ2200791-04	Carbon, Total Organic (TOC)	LCS		Water	10.52 mg/L	42 mL	10.5 mg/L	1	0.5	1.0	105		1/26/22 07:04:00	N	IV
KQ2200791-04	Carbon, Total Organic (TOC)	LCS		Water	9.85 mg/L	42 mL	9.85 mg/L	1	0.5	1.0	99		1/26/22 07:14:00	N	IV
KQ2200791-04	Carbon, Total Organic (TOC)	LCS		Water	10.22 mg/L	42 mL	10.2 mg/L	1	0.5	1.0	102		1/26/22 07:24:00	N	IV
KQ2200791-04	Carbon, Total Organic (TOC)	LCS		Water	10.13 mg/L	42 mL	10.1 mg/L	1	0.5	1.0	101		1/26/22 07:34:00	N	IV
KQ2200791-05	Carbon, Total Organic (TOC)	CCV		Water	15.35 mg/L	42 mL	15.3 mg/L	1					1/26/22 10:28:00	N	IV
KQ2200791-05	Carbon, Total Organic (TOC)	CCV		Water	14.80 mg/L	42 mL	14.8 mg/L	1					1/26/22 10:38:00	N	IV
KQ2200791-05	Carbon, Total Organic (TOC)	CCV		Water	15.56 mg/L	42 mL	15.6 mg/L	1					1/26/22 10:48:00	N	IV
KQ2200791-05	Carbon, Total Organic (TOC)	CCV		Water	15.75 mg/L	42 mL	15.8 mg/L	1					1/26/22 10:58:00	N	IV
KQ2200791-06	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 11:08:00	N	IV
KQ2200791-06	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 11:18:00	N	IV
KQ2200791-06	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 11:28:00	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-TOC-01 **Analyst:** SMORGAN **Analysis Lot:** 752819 **Method/Testcode:** 9060A/TOC 4X T DOD

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
KQ2200791-06	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 11:38:00	N	IV
K2200543-001	Carbon, Total Organic (TOC), Average	N/A		Water	0.35 mg/L	42 mL	2.0 mg/L U	2	0.9	2.0			1/26/22 12:19:00	N	IV
K2200543-003	Carbon, Total Organic (TOC), Average	N/A		Water	1.13 mg/L	42 mL	1.1 mg/L	1	0.5	1.0			1/26/22 13:00:00	N	IV
K2200543-007	Carbon, Total Organic (TOC), Average	N/A		Water	7.21 mg/L	42 mL	7.2 mg/L	1	0.5	1.0			1/26/22 13:41:00	N	IV
K2200544-003	Carbon, Total Organic (TOC), Average	N/A		Water	9.57 mg/L	42 mL	96 mg/L	10	5	10			1/26/22 14:21:00	N	IV
KQ2200791-07	Carbon, Total Organic (TOC)	CCV		Water	15.97 mg/L	42 mL	16.0 mg/L	1					1/26/22 14:32:00	N	IV
KQ2200791-07	Carbon, Total Organic (TOC)	CCV		Water	15.10 mg/L	42 mL	15.1 mg/L	1					1/26/22 14:42:00	N	IV
KQ2200791-07	Carbon, Total Organic (TOC)	CCV		Water	16.48 mg/L	42 mL	16.5 mg/L	1					1/26/22 14:52:00	N	IV
KQ2200791-07	Carbon, Total Organic (TOC)	CCV		Water	16.35 mg/L	42 mL	16.4 mg/L	1					1/26/22 15:02:00	N	IV
KQ2200791-08	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 15:13:00	N	IV
KQ2200791-08	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 15:23:00	N	IV
KQ2200791-08	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 15:33:00	N	IV
KQ2200791-08	Carbon, Total Organic (TOC)	CCB		Water	0.00 mg/L	42 mL	1.0 mg/L U	1	0.5	1.0			1/26/22 15:43:00	N	IV

! indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Sample Dilutions

Final Volume: 30-40mL - TOC

Analyst: SCOM
Instrument: TOC#1

Date 1/25/22
Analysis TOC (NPOC)

Common Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor
1/2	DI	20	20	1/2												
1/3	DI	10	20	1/3												
1/4	DI	10	30	1/4												
1/6	DI	7	35	1/6												
1/7	DI	6	36	1/7												
1/10	DI	3	27	1/10												
1/10	DI	4	36	1/10												
1/20	DI	2	38	1/20												
1/30	DI	1	29	1/30												
1/40	DI	1	39	1/40												
1/100	DI	0.4	39.6	1/100												
1/200	DI	0.2	39.8	1/200												
1/300	DI	0.1	29.9	1/300												
1/400	DI	0.1	39.9	1/400												
1/1000	DI	1	9	1/10	0.4	39.6	1/1000									
1/2000	DI	1	9	1/10	0.2	39.8	1/2000									
1/4000	DI	1	9	1/10	0.1	39.9	1/4000									
1/10000	DI	0.4	39.6	1/100	0.4	39.6	1/10000									

Special Dilutions

Dilution	Matrix of Diluent	1st Dilution			2nd Dilution			3rd Dilution			4th Dilution			5th Dilution		
		mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor	mL's of Sample	mL's of Diluent	Dilution Factor

1/26/22

Pipetwayne SCOM 1/26/22 CSM 1/26/22)

TOC

CALIBRATION: 011321

Pos/ Vial	Run Type	Rep #	Run Date	Run Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (ppm)	TC Area (cts)	TC Mass (ugC)	TC Conc (ppm)
** Spl		Name: WARM-UP					Data File: 0125001						
		Remarks: <none>											
1	Spl	1	25Jan2022	08:39	-	-	-	255	0.005	0.005	-	-	-
1	Spl	2	25Jan2022	08:49	-	-	-	205	0.000	0.000	-	-	-
1	Spl	3	25Jan2022	08:59	-	-	-	356	0.106	0.106	-	-	-
1	Spl	4	25Jan2022	09:09	-	-	-	207	0.000	0.000	-	-	-
1	Spl	Avg						255	0.006	0.006			
1	Spl	SDev						70.717					
1	Spl	%RSD						27.65					
** Spl		Name: WARM-UP					Data File: 0125002						
		Remarks: <none>											
2	Spl	1	25Jan2022	09:20	-	-	-	382	0.132	0.132	-	-	-
2	Spl	2	25Jan2022	09:30	-	-	-	341	0.091	0.091	-	-	-
2	Spl	3	25Jan2022	09:39	-	-	-	180	0.000	0.000	-	-	-
2	Spl	4	25Jan2022	09:50	-	-	-	121	0.000	0.000	-	-	-
2	Spl	Avg						256	0.006	0.006			
2	Spl	SDev						125.302					
2	Spl	%RSD						48.95					
** Spl		Name: CCV					Data File: 0125003						
		Remarks: <none>											
3	Spl	1	25Jan2022	10:00	-	-	-	15690	15.447	15.447	-	-	-
3	Spl	2	25Jan2022	10:10	-	-	-	15268	15.024	15.024	-	-	-
3	Spl	3	25Jan2022	10:20	-	-	-	15697	15.454	15.454	-	-	-
3	Spl	4	25Jan2022	10:30	-	-	-	15762	15.519	15.519	-	-	-
3	Spl	Avg						15604	15.361	15.361			
3	Spl	SDev						226.499					
3	Spl	%RSD						1.45					
** Spl		Name: CCB					Data File: 0125004						
		Remarks: <none>											
4	Spl	1	25Jan2022	10:41	-	-	-	118	0.000	0.000	-	-	-
4	Spl	2	25Jan2022	10:51	-	-	-	130	0.000	0.000	-	-	-
4	Spl	3	25Jan2022	11:01	-	-	-	117	0.000	0.000	-	-	-
4	Spl	4	25Jan2022	11:11	-	-	-	106	0.000	0.000	-	-	-
4	Spl	Avg						117	0.000	0.000			
4	Spl	SDev						9.811					
4	Spl	%RSD						8.33					
** Spl		Name: LCS					Data File: 0125005						
		Remarks: <none>											
5	Spl	1	25Jan2022	11:22	-	-	-	10818	10.573	10.573	-	-	-
5	Spl	2	25Jan2022	11:32	-	-	-	9653	9.407	9.407	-	-	-
5	Spl	3	25Jan2022	11:42	-	-	-	10744	10.498	10.498	-	-	-
5	Spl	4	25Jan2022	11:52	-	-	-	10806	10.561	10.561	-	-	-
5	Spl	Avg						10505	10.260	10.260			
5	Spl	SDev						569.091					
5	Spl	%RSD						5.42					
** Spl		Name: R2200581-004					Data File: 0125006						
		Remarks: <none>											
6	Spl	1	25Jan2022	12:03	-	-	-	3546	3.297	3.297	-	-	-
6	Spl	2	25Jan2022	12:13	-	-	-	3676	3.427	3.428	-	-	-
6	Spl	3	25Jan2022	12:23	-	-	-	3923	3.675	3.675	-	-	-
6	Spl	4	25Jan2022	12:33	-	-	-	3772	3.524	3.523	-	-	-
6	Spl	Avg						3729	3.481	3.481			
6	Spl	SDev						158.937					
6	Spl	%RSD						4.26					
** Spl		Name: R2200581-005					Data File: 0125007						
		Remarks: <none>											
7	Spl	1	25Jan2022	12:44	-	-	-	4979	4.731	4.731	-	-	-
7	Spl	2	25Jan2022	12:54	-	-	-	3798	3.550	3.549	-	-	-
7	Spl	3	25Jan2022	13:04	-	-	-	3793	3.545	3.545	-	-	-
7	Spl	4	25Jan2022	13:14	-	-	-	3887	3.639	3.639	-	-	-
7	Spl	Avg						4114	3.866	3.866			
7	Spl	SDev						578.115					
7	Spl	%RSD						14.05					
** Spl		Name: R2200581-006					Data File: 0125008						
		Remarks: <none>											
8	Spl	1	25Jan2022	13:24	-	-	-	3620	3.371	3.371	-	-	-
8	Spl	2	25Jan2022	13:34	-	-	-	3960	3.712	3.712	-	-	-
8	Spl	3	25Jan2022	13:44	-	-	-	4261	4.013	4.013	-	-	-

								012522					
8	Spl	4	25Jan2022	13:54	-	-	-	3803	3.555	3.555	-	-	-
8	Spl	Avg						3911	3.663	3.663			
8	Spl	SDev						271.567					
8	Spl	%RSD						6.94					

** Spl Name: R2200582-002 Data File: 0125009
Remarks: <none>

9	Spl	1	25Jan2022	14:05	-	-	-	4350	4.102	4.102	-	-	-
9	Spl	2	25Jan2022	14:15	-	-	-	4466	4.218	4.218	-	-	-
9	Spl	3	25Jan2022	14:25	-	-	-	4639	4.391	4.391	-	-	-
9	Spl	4	25Jan2022	14:35	-	-	-	4651	4.403	4.403	-	-	-
9	Spl	Avg						4526	4.278	4.278			
9	Spl	SDev						144.878					
9	Spl	%RSD						3.20					

** Spl Name: R2200582-002S! Data File: 0125010
Remarks: <none>

10	Spl	1	25Jan2022	14:46	-	-	-	13915	13.671	13.671	-	-	-
10	Spl	2	25Jan2022	14:56	-	-	-	13936	13.692	13.692	-	-	-
10	Spl	3	25Jan2022	15:06	-	-	-	14478	14.234	14.234	-	-	-
10	Spl	4	25Jan2022	15:16	-	-	-	13885	13.641	13.641	-	-	-
10	Spl	Avg						14053	13.809	13.809			
10	Spl	SDev						283.773					
10	Spl	%RSD						2.02					

** Spl Name: R2200582-002SD! Data File: 0125011
Remarks: <none>

11	Spl	1	25Jan2022	15:27	-	-	-	12933	12.688	12.688	-	-	-
11	Spl	2	25Jan2022	15:37	-	-	-	13204	12.960	12.960	-	-	-
11	Spl	3	25Jan2022	15:47	-	-	-	13932	13.688	13.688	-	-	-
11	Spl	4	25Jan2022	15:57	-	-	-	14815	14.571	14.571	-	-	-
11	Spl	Avg						13721	13.477	13.477			
11	Spl	SDev						842.534					
11	Spl	%RSD						6.14					

** Spl Name: R2200582-005 Data File: 0125012
Remarks: <none>

12	Spl	1	25Jan2022	16:07	-	-	-	3077	2.828	2.828	-	-	-
12	Spl	2	25Jan2022	16:17	-	-	-	3097	2.848	2.848	-	-	-
12	Spl	3	25Jan2022	16:27	-	-	-	3283	3.034	3.034	-	-	-
12	Spl	4	25Jan2022	16:37	-	-	-	3037	2.788	2.788	-	-	-
12	Spl	Avg						3123	2.875	2.875			
12	Spl	SDev						109.220					
12	Spl	%RSD						3.50					

** Spl Name: R2200582-006 Data File: 0125013
Remarks: <none>

13	Spl	1	25Jan2022	16:48	-	-	-	1617	1.368	1.368	-	-	-
13	Spl	2	25Jan2022	16:58	-	-	-	1528	1.279	1.278	-	-	-
13	Spl	3	25Jan2022	17:08	-	-	-	1588	1.339	1.339	-	-	-
13	Spl	4	25Jan2022	17:18	-	-	-	1746	1.497	1.497	-	-	-
13	Spl	Avg						1619	1.370	1.370			
13	Spl	SDev						91.965					
13	Spl	%RSD						5.68					

** Spl Name: R2200582-007 Data File: 0125014
Remarks: <none>

14	Spl	1	25Jan2022	17:29	-	-	-	2532	2.283	2.283	-	-	-
14	Spl	2	25Jan2022	17:39	-	-	-	2538	2.289	2.289	-	-	-
14	Spl	3	25Jan2022	17:49	-	-	-	2852	2.603	2.603	-	-	-
14	Spl	4	25Jan2022	17:59	-	-	-	2812	2.563	2.563	-	-	-
14	Spl	Avg						2683	2.435	2.434			
14	Spl	SDev						172.266					
14	Spl	%RSD						6.42					

** Spl Name: CCV Data File: 0125015
Remarks: <none>

15	Spl	1	25Jan2022	18:10	-	-	-	16363	16.120	16.120	-	-	-
15	Spl	2	25Jan2022	18:20	-	-	-	15377	15.133	15.134	-	-	-
15	Spl	3	25Jan2022	18:30	-	-	-	15398	15.154	15.155	-	-	-
15	Spl	4	25Jan2022	18:40	-	-	-	16209	15.966	15.966	-	-	-
15	Spl	Avg						15836	15.593	15.593			
15	Spl	SDev						522.615					
15	Spl	%RSD						3.30					

** Spl Name: CCB Data File: 0125016
Remarks: <none>

16	Spl	1	25Jan2022	18:51	-	-	-	311	0.061	0.061	-	-	-
16	Spl	2	25Jan2022	19:01	-	-	-	150	0.000	0.000	-	-	-
16	Spl	3	25Jan2022	19:10	-	-	-	117	0.000	0.000	-	-	-
16	Spl	4	25Jan2022	19:20	-	-	-	202	0.000	0.000	-	-	-
16	Spl	Avg						195	0.000	0.000			
16	Spl	SDev						84.880					
16	Spl	%RSD						43.53					

** Spl Name: R2200582-008 Data File: 0125017
Remarks: <none>

17	Spl	1	25Jan2022	19:31	-	-	-	4075	3.827	3.827	-	-	-
17	Spl	2	25Jan2022	19:41	-	-	-	3916	3.668	3.668	-	-	-
17	Spl	3	25Jan2022	19:51	-	-	-	4027	3.779	3.779	-	-	-
17	Spl	4	25Jan2022	20:01	-	-	-	4165	3.917	3.917	-	-	-
17	Spl	Avg						4045	3.797	3.797			
17	Spl	SDev						103.703					
17	Spl	%RSD						2.56					

** Spl Name: R2200582-009 Data File: 0125018
Remarks: <none>

18	Spl	1	25Jan2022	20:12	-	-	-	3878	3.630	3.630	-	-	-
18	Spl	2	25Jan2022	20:22	-	-	-	3902	3.654	3.654	-	-	-
18	Spl	3	25Jan2022	20:32	-	-	-	4058	3.810	3.810	-	-	-
18	Spl	4	25Jan2022	20:42	-	-	-	4107	3.859	3.859	-	-	-
18	Spl	Avg						3986	3.738	3.738			
18	Spl	SDev						113.350					
18	Spl	%RSD						2.84					

** Spl Name: R2200580-004 Data File: 0125019
Remarks: <none>

19	Spl	1	25Jan2022	20:53	-	-	-	4373	4.125	4.125	-	-	-
19	Spl	2	25Jan2022	21:03	-	-	-	4323	4.075	4.075	-	-	-
19	Spl	3	25Jan2022	21:13	-	-	-	4064	3.816	3.816	-	-	-
19	Spl	4	25Jan2022	21:23	-	-	-	4253	4.005	4.005	-	-	-
19	Spl	Avg						4253	4.005	4.005			
19	Spl	SDev						135.426					
19	Spl	%RSD						3.18					

** Spl Name: R2200542-002 Data File: 0125020
Remarks: <none>

20	Spl	1	25Jan2022	21:34	-	-	-	406542	406.466	406.466	-	-	-
20	Spl	2	25Jan2022	21:44	-	-	-	543560	543.543	543.543	-	-	-
20	Spl	3	25Jan2022	21:53	-	-	-	408583	408.508	408.508	-	-	-
20	Spl	4	25Jan2022	22:03	-	-	-	390788	390.705	390.705	-	-	-
20	Spl	Avg						437368	437.305	437.306			
20	Spl	SDev						71239.633					
20	Spl	%RSD						16.29					

** Spl Name: R2200542-004 Data File: 0125021
Remarks: <none>

21	Spl	1	25Jan2022	22:14	-	-	-	332054	331.946	331.946	-	-	-
21	Spl	2	25Jan2022	22:24	-	-	-	371026	370.935	370.935	-	-	-
21	Spl	3	25Jan2022	22:34	-	-	-	359832	359.736	359.736	-	-	-
21	Spl	4	25Jan2022	22:44	-	-	-	563847	563.838	563.838	-	-	-
21	Spl	Avg						406689	406.614	406.614			
21	Spl	SDev						106044.719					
21	Spl	%RSD						26.08					

** Spl Name: R2200542-006 Data File: 0125022
Remarks: <none>

22	Spl	1	25Jan2022	22:55	-	-	-	43647	43.416	43.416	-	-	-
22	Spl	2	25Jan2022	23:05	-	-	-	24020	23.780	23.780	-	-	-
22	Spl	3	25Jan2022	23:15	-	-	-	16629	16.386	16.386	-	-	-
22	Spl	4	25Jan2022	23:25	-	-	-	15203	14.959	14.959	-	-	-
22	Spl	Avg						24874	24.635	24.635			
22	Spl	SDev						13097.877					
22	Spl	%RSD						52.66					

** Spl Name: R2200542-008 Data File: 0125023
Remarks: <none>

23	Spl	1	25Jan2022	23:36	-	-	-	21032	20.791	20.791	-	-	-
23	Spl	2	25Jan2022	23:46	-	-	-	18955	18.713	18.713	-	-	-
23	Spl	3	25Jan2022	23:56	-	-	-	22310	22.069	22.069	-	-	-
23	Spl	4	26Jan2022	00:06	-	-	-	23501	23.261	23.261	-	-	-
23	Spl	Avg						21449	21.209	21.209			
23	Spl	SDev						1944.732					
23	Spl	%RSD						9.07					

** Spl Name: R2200542-010 Data File: 0125024
Remarks: <none>

24	Spl	1	26Jan2022	00:17	-	-	-	33278	33.042	33.042	-	-	-
24	Spl	2	26Jan2022	00:27	-	-	-	34544	34.309	34.309	-	-	-
24	Spl	3	26Jan2022	00:37	-	-	-	33078	32.842	32.842	-	-	-
24	Spl	4	26Jan2022	00:47	-	-	-	37664	37.430	37.430	-	-	-
24	Spl	Avg						34641	34.406	34.406			
24	Spl	SDev						2117.284					
24	Spl	%RSD						6.11					

** Spl Name: R2200542-011 Data File: 0125025
Remarks: <none>

25	Spl	1 26Jan2022 00:57	-	-	-	923	0.673	0.673	-	-	-
25	Spl	2 26Jan2022 01:07	-	-	-	625	0.375	0.375	-	-	-
25	Spl	3 26Jan2022 01:17	-	-	-	569	0.319	0.319	-	-	-
25	Spl	4 26Jan2022 01:27	-	-	-	531	0.281	0.281	-	-	-
25	Spl	Avg				662	0.412	0.412			
25	Spl	SDev				178.232					
25	Spl	%RSD				26.92					

** Spl Name: R2200543-008 Data File: 0125026
Remarks: 2

26	Spl	1 26Jan2022 01:38	-	-	-	3343	3.094	3.094	-	-	-
26	Spl	2 26Jan2022 01:48	-	-	-	3644	3.395	3.395	x2	-	-
26	Spl	3 26Jan2022 01:58	-	-	-	3512	3.263	3.263	-	-	-
26	Spl	4 26Jan2022 02:08	-	-	-	3498	3.249	3.249	-	-	-
26	Spl	Avg				3499	3.251	3.251			
26	Spl	SDev				123.195					
26	Spl	%RSD				3.52					

Report @ 1/2 due to high RPD in straight analysis.
1/28/22

********OVER RANGE ON 1/21********

** Spl Name: CCV Data File: 0125027
Remarks: <none>

27	Spl	1 26Jan2022 02:19	-	-	-	15850	15.607	15.607	-	-	-
27	Spl	2 26Jan2022 02:29	-	-	-	15725	15.482	15.482	-	-	-
27	Spl	3 26Jan2022 02:39	-	-	-	15751	15.508	15.508	-	-	-
27	Spl	4 26Jan2022 02:49	-	-	-	16620	16.377	16.377	-	-	-
27	Spl	Avg				15986	15.743	15.743			
27	Spl	SDev				425.753					
27	Spl	%RSD				2.66					

** Spl Name: CCB Data File: 0125028
Remarks: <none>

28	Spl	1 26Jan2022 03:00	-	-	-	265	0.015	0.015	-	-	-
28	Spl	2 26Jan2022 03:10	-	-	-	168	0.000	0.000	-	-	-
28	Spl	3 26Jan2022 03:20	-	-	-	235	0.000	0.000	-	-	-
28	Spl	4 26Jan2022 03:30	-	-	-	221	0.000	0.000	-	-	-
28	Spl	Avg				222	0.000	0.000			
28	Spl	SDev				40.558					
28	Spl	%RSD				18.25					

** Spl Name: R2200543-009 Data File: 0125029
Remarks: <none>

29	Spl	1 26Jan2022 03:40	-	-	-	367	0.117	0.117	-	-	-
29	Spl	2 26Jan2022 03:50	-	-	-	376	0.126	0.126	-	-	-
29	Spl	3 26Jan2022 04:00	-	-	-	446	0.196	0.196	-	-	-
29	Spl	4 26Jan2022 04:10	-	-	-	421	0.171	0.171	-	-	-
29	Spl	Avg				402	0.153	0.153			
29	Spl	SDev				37.403					
29	Spl	%RSD				9.29					

** Spl Name: R2200541-006 Data File: 0125030
Remarks: 100

30	Spl	1 26Jan2022 04:21	-	-	-	15896	15.653	15.653	-	-	-
30	Spl	2 26Jan2022 04:31	-	-	-	14982	14.738	14.738	x100	-	-
30	Spl	3 26Jan2022 04:41	-	-	-	15341	15.097	15.097	-	-	-
30	Spl	4 26Jan2022 04:51	-	-	-	16898	16.655	16.655	-	-	-
30	Spl	Avg				15779	15.536	15.536			
30	Spl	SDev				835.245					
30	Spl	%RSD				5.29					

** Spl Name: R2200544-008 Data File: 0125031
Remarks: 10

31	Spl	1 26Jan2022 05:02	-	-	-	9800	9:554	9.554	-	-	-
31	Spl	2 26Jan2022 05:12	-	-	-	9409	9.163	9.163	x10	-	-
31	Spl	3 26Jan2022 05:22	-	-	-	9728	9.482	9.482	-	-	-
31	Spl	4 26Jan2022 05:32	-	-	-	9681	9.435	9.435	-	-	-
31	Spl	Avg				9654	9.409	9.408			
31	Spl	SDev				170.826					
31	Spl	%RSD				1.77					

** Spl Name: R2200541-003 Datá File: 0125032
Remarks: <none>

32	Spl	1 26Jan2022 05:43	-	-	-	3234	2.985	2.985	-	-	-
32	Spl	2 26Jan2022 05:53	-	-	-	3168	2.919	2.919	-	-	-
32	Spl	3 26Jan2022 06:02	-	-	-	2895	2.646	2.646	-	-	-
32	Spl	4 26Jan2022 06:12	-	-	-	3433	3.184	3.184	-	-	-
32	Spl	Avg				3182	2.934	2.934			
32	Spl	SDev				222.313					
32	Spl	%RSD				6.99					

** Spl Name: R2200542-001 Data File: 0125033
Remarks: 100

33	Spl	1 26Jan2022 06:23	-	-	-	10049	9.803	9.803	x100	-	-
33	Spl	2 26Jan2022 06:33	-	-	-	10124	9.878	9.878	-	-	-

								012522					
33	Spl	3	26Jan2022 06:43	-	-	-	10092	9.846	9.846	-	-	-	
33	Spl	4	26Jan2022 06:53	-	-	-	10955	10.710	10.710	-	-	-	
33	Spl	Avg					10305	10.059	10.059				
33	Spl	SDev					434.421						
33	Spl	%RSD					4.22						

** Spl Name: LCS Data File: 0125034
Remarks: <none>

34	Spl	1	26Jan2022 07:04	-	-	-	10767	10.522	10.521	-	-	-	
34	Spl	2	26Jan2022 07:14	-	-	-	10098	9.852	9.852	-	-	-	
34	Spl	3	26Jan2022 07:24	-	-	-	10468	10.222	10.222	-	-	-	
34	Spl	4	26Jan2022 07:34	-	-	-	10378	10.132	10.132	-	-	-	
34	Spl	Avg					10427	10.182	10.182				
34	Spl	SDev					275.633						
34	Spl	%RSD					2.64						

** Spl Name: R2200542-003 Data File: 0125035
Remarks: 2000

35	Spl	1	26Jan2022 07:45	-	-	-	420	0.170	0.170	-	-	-	
35	Spl	2	26Jan2022 07:55	-	-	-	384	0.134	0.134	-	-	-	
35	Spl	3	26Jan2022 08:05	-	-	-	428	0.178	0.178	-	-	-	
35	Spl	4	26Jan2022 08:15	-	-	-	353	0.103	0.103	-	-	-	
35	Spl	Avg					396	0.146	0.146				
35	Spl	SDev					34.606						
35	Spl	%RSD					8.73						

**********REPEATED ON 1/26**********

** Spl Name: R2200542-005 Data File: 0125036
Remarks: 400

36	Spl	1	26Jan2022 08:25	-	-	-	281	0.031	0.031	-	-	-	
36	Spl	2	26Jan2022 08:35	-	-	-	157	0.000	0.000	-	-	-	
36	Spl	3	26Jan2022 08:45	-	-	-	222	0.000	0.000	-	-	-	
36	Spl	4	26Jan2022 08:55	-	-	-	171	0.000	0.000	-	-	-	
36	Spl	Avg					207	0.000	0.000				
36	Spl	SDev					56.258						
36	Spl	%RSD					27.08						

**********REPEATED ON 1/26**********

** Spl Name: R2200542-007 Data File: 0125037
Remarks: 200

37	Spl	1	26Jan2022 09:06	-	-	-	238	0.000	0.000	-	-	-	
37	Spl	2	26Jan2022 09:16	-	-	-	152	0.000	0.000	-	-	-	
37	Spl	3	26Jan2022 09:26	-	-	-	170	0.000	0.000	-	-	-	
37	Spl	4	26Jan2022 09:36	-	-	-	234	0.000	0.000	-	-	-	
37	Spl	Avg					198	0.000	0.000				
37	Spl	SDev					43.951						
37	Spl	%RSD					22.14						

**********REPEATED ON 1/26**********

** Spl Name: R2200542-009 Data File: 0125038
Remarks: 200

38	Spl	1	26Jan2022 09:47	-	-	-	270	0.020	0.020	-	-	-	
38	Spl	2	26Jan2022 09:57	-	-	-	311	0.061	0.061	-	-	-	
38	Spl	3	26Jan2022 10:07	-	-	-	341	0.091	0.091	-	-	-	
38	Spl	4	26Jan2022 10:17	-	-	-	262	0.012	0.012	-	-	-	
38	Spl	Avg					296	0.046	0.046				
38	Spl	SDev					36.887						
38	Spl	%RSD					12.46						

**********REPEATED ON 1/26**********

** Spl Name: CCV Data File: 0125039
Remarks: <none>

39	Spl	1	26Jan2022 10:28	-	-	-	15590	15.347	15.347	-	-	-	
39	Spl	2	26Jan2022 10:38	-	-	-	15041	14.797	14.797	-	-	-	
39	Spl	3	26Jan2022 10:48	-	-	-	15803	15.560	15.560	-	-	-	
39	Spl	4	26Jan2022 10:58	-	-	-	15994	15.751	15.751	-	-	-	
39	Spl	Avg					15607	15.364	15.364				
39	Spl	SDev					411.837						
39	Spl	%RSD					2.64						

** Spl Name: CCB Data File: 0125040
Remarks: <none>

40	Spl	1	26Jan2022 11:08	-	-	-	183	0.000	0.000	-	-	-	
40	Spl	2	26Jan2022 11:18	-	-	-	127	0.000	0.000	-	-	-	
40	Spl	3	26Jan2022 11:28	-	-	-	139	0.000	0.000	-	-	-	
40	Spl	4	26Jan2022 11:38	-	-	-	233	0.000	0.000	-	-	-	
40	Spl	Avg					170	0.000	0.000				
40	Spl	SDev					48.121						
40	Spl	%RSD					28.22						

** Spl Name: R2200543-001 Data File: 0125041
Remarks: 2

41	Spl	1	26Jan2022 11:49	-	-	-	563	0.313	0.313	-	-	-	
41	Spl	2	26Jan2022 11:59	-	-	-	548	0.298	0.298	-	-	-	
41	Spl	3	26Jan2022 12:09	-	-	-	567	0.317	0.317	-	-	-	
41	Spl	4	26Jan2022 12:19	-	-	-	706	0.456	0.456	-	-	-	
41	Spl	Avg					596	0.346	0.346				
41	Spl	SDev					73.788						

↑ Insufficient vol to Run Straight
SM 1/26/22

41	Spl	%RSD				12.38						
********HIGH RPD ON 1/21*********												
** Spl		Name: R2200543-003				Data File: 0125042						
		Remarks: <none>										
42	Spl	1 26Jan2022 12:30	-	-	-	1251	1.001	1.001	-	-	-	
42	Spl	2 26Jan2022 12:40	-	-	-	1382	1.132	1.133	-	-	-	
42	Spl	3 26Jan2022 12:50	-	-	-	1442	1.193	1.192	-	-	-	
42	Spl	4 26Jan2022 13:00	-	-	-	1460	1.211	1.211	-	-	-	
42	Spl	Avg				1383	1.134	1.134				
42	Spl	SDev				94.574						
42	Spl	%RSD				6.83						
** Spl		Name: R2200543-007				Data File: 0125043						
		Remarks: <none>										
43	Spl	1 26Jan2022 13:11	-	-	-	7331	7.084	7.084	-	-	-	
43	Spl	2 26Jan2022 13:21	-	-	-	7458	7.211	7.211	-	-	-	
43	Spl	3 26Jan2022 13:31	-	-	-	7770	7.523	7.523	-	-	-	
43	Spl	4 26Jan2022 13:41	-	-	-	7275	7.028	7.028	-	-	-	
43	Spl	Avg				7458	7.212	7.212				
43	Spl	SDev				221.330						
43	Spl	%RSD				2.97						
** Spl		Name: R2200544-003				Data File: 0125044						
		Remarks: 10										
44	Spl	1 26Jan2022 13:52	-	-	-	9575	9.329	9.329			-	
44	Spl	2 26Jan2022 14:01	-	-	-	9339	9.093	9.093	x10		-	
44	Spl	3 26Jan2022 14:11	-	-	-	10089	9.843	9.843			-	
44	Spl	4 26Jan2022 14:21	-	-	-	10275	10.029	10.029	-		-	
44	Spl	Avg				9819	9.574	9.574				
44	Spl	SDev				436.185						
44	Spl	%RSD				4.44						
** Spl		Name: CCV				Data File: 0125045						
		Remarks: <none>										
45	Spl	1 26Jan2022 14:32	-	-	-	16211	15.968	15.968	-	-	-	
45	Spl	2 26Jan2022 14:42	-	-	-	15345	15.101	15.101	-	-	-	
45	Spl	3 26Jan2022 14:52	-	-	-	16718	16.475	16.475	-	-	-	
45	Spl	4 26Jan2022 15:02	-	-	-	16595	16.352	16.352	-	-	-	
45	Spl	Avg				16217	15.974	15.974				
45	Spl	SDev				620.297						
45	Spl	%RSD				3.82						
** Spl		Name: CCB				Data File: 0125046						
		Remarks: <none>										
46	Spl	1 26Jan2022 15:13	-	-	-	190	0.000	0.000	-	-	-	
46	Spl	2 26Jan2022 15:23	-	-	-	161	0.000	0.000	-	-	-	
46	Spl	3 26Jan2022 15:33	-	-	-	146	0.000	0.000	-	-	-	
46	Spl	4 26Jan2022 15:43	-	-	-	102	0.000	0.000	-	-	-	
46	Spl	Avg				149	0.000	0.000				
46	Spl	SDev				36.700						
46	Spl	%RSD				24.51						

ALS Environmental
1565 Jefferson Rd., Rochester, NY 14623

General Chemistry Analytical Run Cover Sheet

Analyst: SCGM Date: 1/25/22

Analysis: Total Organic Carbon, SM5310C/9060/9060A Instrument: (R-TOC-01) OI Analytical Model1010 TOC Analyzer
High Level: 1.0 to 30.0 ppm

PRIMARY STOCKS	Log ID Prep/Exp. Dates	Reagent	Weight (g)	Final Vol. (mLs)	Conc. (mg/L)
Standards *	**Log ID: 220617 Received: 11/24/2021 Expires: 09/30/2023**	Purchased Sucrose Solution			1000 (A)
Reference *	**Log ID: 218253 Received: 07/17/2021 Expires: 07/8/2023**	Purchased KHP Solution			1000 (B)

*Diluent is UPDI

QUALITY CONTROL	Vol. (mLs)	Conc. (mg/L)	Final Vol. (mLs)	TV (mg/L)
I/CCV	3.0	1000 (B)	200	15.0
LCS	1.0	1000 (A)	100	10.0
MS	0.42	1000 (A)	42	10.0

Standard Curve Prep

Concentration	mLs 1000 mg/L Stock (A)	Final Volume (mLs)
30.0	3.00	100
10.0	1.00	100
5.0	0.50	100
1.0	0.10	100
0.0	0.00	100

Comments:

Curve Date = 01/13/2021
Filter LOT: 41291103 (Phenex 0.45µm Syringe Filter)

Note: Dilutions greater than 1/1 are placed in the "comments" section of the Model 1010 Analyzer report.
The "Dilution Factor" on the Model 1010 will always read "1.00"
TOC results on the Model 1010 Analyzer reports do not include the dilution factor.
Final results on the Starlims run and final report include the dilution factor.

P:pet:lexayne SM 1/14/2021

011321CAL

TOC

CALIBRATION: 011321

Pos/ Vial	Run Type	Rep #	Run Date	Run Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (ppm)	TC Area (cts)	TC Mass (ugC)	TC Conc (ppm)
** Std1	Name: 0						Data File: 0113001						
	Remarks: <none>												
1	Std1	1	13Jan2021	15:03	-	-	-	276	0.000	0.000	-	-	-
1	Std1	2	13Jan2021	15:13	-	-	-	278	0.000	0.000	-	-	-
1	Std1	3	13Jan2021	15:22	-	-	-	553	0.000	0.000	-	-	-
1	Std1	4	13Jan2021	15:32	-	-	-	287	0.000	0.000	-	-	-
1	Std	Avg						348	0.000	0.000			
1	Std	SDev						136.417					
1	Std	%RSD						39.14					
** Calibration:	RF (ugC/k-cts):	0.959											
	R-Squared:	0.9987											
	Offset (cts):	191											
	Offset (ugC):	-0.183											
** Std2	Name: 1						Data File: 0113002						
	Remarks: <none>												
2	Std2	1	13Jan2021	15:43	-	-	-	1150	1.000	1.000	-	-	-
2	Std2	2	13Jan2021	15:53	-	-	-	1137	1.000	1.000	-	-	-
2	Std2	3	13Jan2021	16:03	-	-	-	1099	1.000	1.000	-	-	-
2	Std2	4	13Jan2021	16:13	-	-	-	1195	1.000	1.000	-	-	-
2	Std	Avg						1145	1.000	1.000			
2	Std	SDev						39.601					
2	Std	%RSD						3.46					
** Calibration:	RF (ugC/k-cts):	0.959											
	R-Squared:	0.9987											
	Offset (cts):	172											
	Offset (ugC):	-0.166											
** Std3	Name: 5						Data File: 0113003						
	Remarks: <none>												
3	Std3	1	13Jan2021	16:24	-	-	-	4719	5.000	5.000	-	-	-
3	Std3	2	13Jan2021	16:34	-	-	-	4853	5.000	5.000	-	-	-
3	Std3	3	13Jan2021	16:44	-	-	-	4964	5.000	5.000	-	-	-
3	Std3	4	13Jan2021	16:54	-	-	-	4946	5.000	5.000	-	-	-
3	Std	Avg						4870	5.000	5.000			
3	Std	SDev						112.103					
3	Std	%RSD						2.30					
** Calibration:	RF (ugC/k-cts):	0.956											
	R-Squared:	0.9984											
	Offset (cts):	48											
	Offset (ugC):	-0.046											
** Std4	Name: 10						Data File: 0113004						
	Remarks: <none>												
4	Std4	1	13Jan2021	17:05	-	-	-	9889	10.000	10.000	-	-	-
4	Std4	2	13Jan2021	17:15	-	-	-	9564	10.000	10.000	-	-	-
4	Std4	3	13Jan2021	17:25	-	-	-	9514	10.000	10.000	-	-	-
4	Std4	4	13Jan2021	17:35	-	-	-	9819	10.000	10.000	-	-	-
4	Std	Avg						9696	10.000	10.000			
4	Std	SDev						185.225					
4	Std	%RSD						1.91					
** Calibration:	RF (ugC/k-cts):	0.956											
	R-Squared:	0.9976											
	Offset (cts):	-120											
	Offset (ugC):	0.115											
** Std5	Name: 30						Data File: 0113005						
	Remarks: <none>												
5	Std5	1	13Jan2021	17:46	-	-	-	31002	30.000	30.000	-	-	-
5	Std5	2	13Jan2021	17:56	-	-	-	29342	30.000	30.000	-	-	-
5	Std5	3	13Jan2021	18:06	-	-	-	29838	30.000	30.000	-	-	-
5	Std5	4	13Jan2021	18:16	-	-	-	30421	30.000	30.000	-	-	-
5	Std	Avg						30150	30.000	30.000			
5	Std	SDev						718.691					
5	Std	%RSD						2.38					
** Calibration:	RF (ugC/k-cts):	1.000											
	R-Squared:	0.9988											
	Offset (cts):	46											
	Offset (ugC):	-0.046											
** Spl	Name: ICV						Data File: 0113006						
	Remarks: <none>												
6	Spl	1	13Jan2021	18:27	-	-	-	15255	15.011	15.011	-	-	-

SM 1/14/2021

							011321CAL					
6	Spl	2	13Jan2021 18:37	-	-	-	14391	14.147	14.147	-	-	-
6	Spl	3	13Jan2021 18:46	-	-	-	14918	14.674	14.674	-	-	-
6	Spl	4	13Jan2021 18:56	-	-	-	15164	14.920	14.920	-	-	-
6	Spl	Avg					14932	14.688	14.688			
6	Spl	SDev					387.741					
6	Spl	%RSD					2.60					

** Spl Name: ICB Data File: 0113007
Remarks: <none>

7	Spl	1	13Jan2021 19:07	-	-	-	256	0.006	0.006	-	-	-
7	Spl	2	13Jan2021 19:17	-	-	-	274	0.024	0.024	-	-	-
7	Spl	3	13Jan2021 19:27	-	-	-	221	0.000	0.000	-	-	-
7	Spl	4	13Jan2021 19:37	-	-	-	246	0.000	0.000	-	-	-
7	Spl	Avg					249	0.000	0.000			
7	Spl	SDev					22.111					
7	Spl	%RSD					8.87					

Sm 1/14/2021

****
** CALIBRATION **
****

TOC Unit: TOC
011321TOC Wed Jan 13 18:16:06 2021

Std. #	Used	Conc. (ppm)	Volume (mL)
1	Yes	0.000	1.000
2	Yes	1.000	1.000
3	Yes	5.000	1.000
4	Yes	10.000	1.000
5	Yes	30.000	1.000

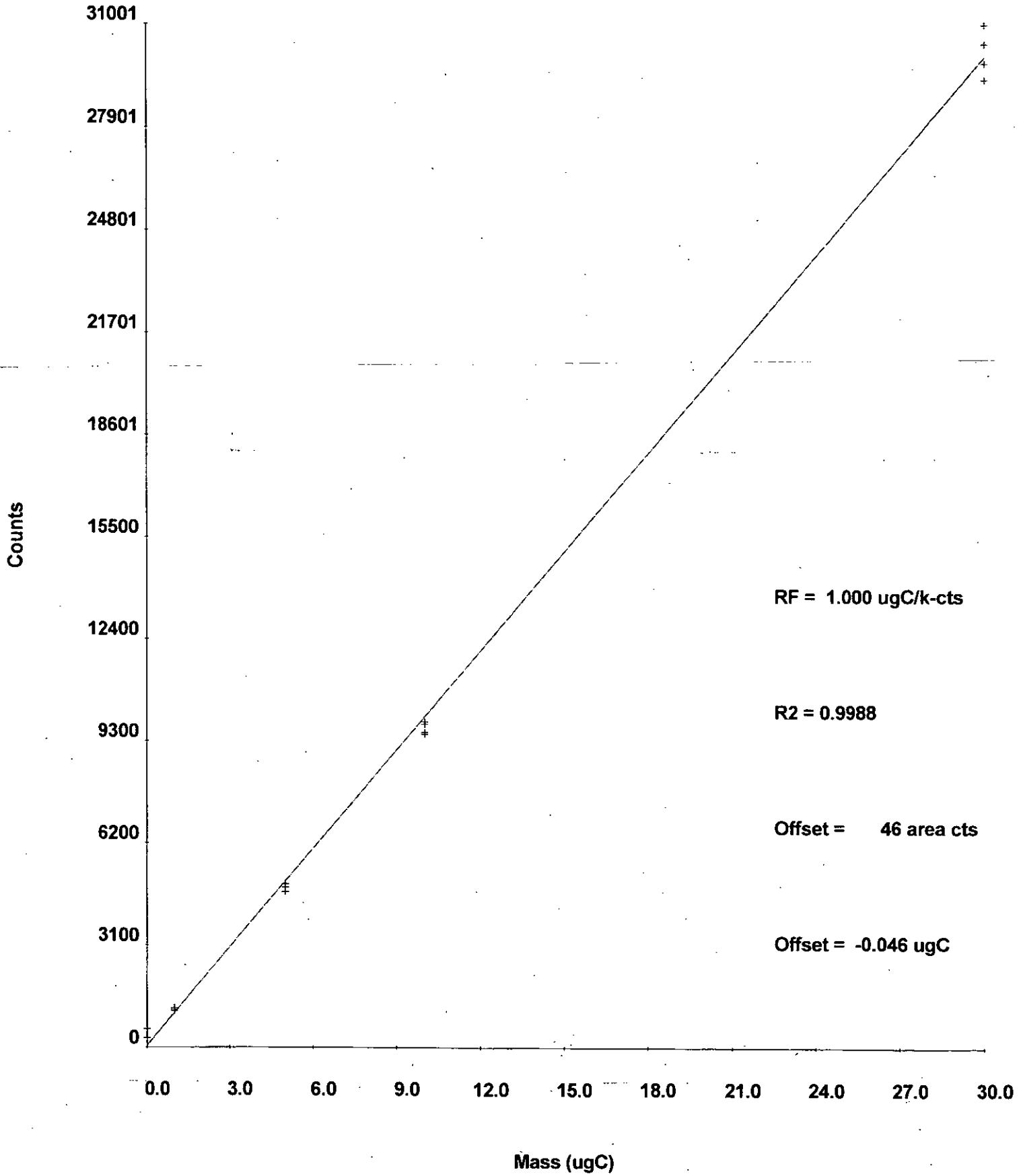
RF (ugC/k-cts): 1.000
R-Squared: 0.9988
Offset (cts): 46
Offset (ugC): -0.046
Calibration Mode: TOC
Allow Editing: No

Rep	Std. 1	Std. 2	Std. 3	Std. 4	Std. 5
1	276	1150	4719	9889	31002
2	278	1137	4853	9564	29342
3	553	1099	4964	9514	29838
4	287	1195	4946	9819	30421
5	-	-	-	-	-
6	-	-	-	-	-
7	-	-	-	-	-
8	-	-	-	-	-
9	-	-	-	-	-
10	-	-	-	-	-

(* = unused)

SM 1/14/2021

Calibration - 011321TOC (TOC, 13Jan2021 18:16)



Standard Solution Logbook - Inventory ID Summary

Inventory ID:	218253	Date Received:	7/17/21
Standard Name:	Total Organic Carbon (TOC) Ref 1000 mg/L as	Expiration Date:	7/8/23
Standard Type:	Working Standard	Source:	Absolute Standards
ALS Lab:	ROCHESTER	Catalog #:	50110A
ALSTeam:	GenChem	Lot #:	070821
Container ID:	218253	Amount Prepared:	2.00 mL
Location:	IC ROOM		

Component Name	Amount	Units	Method / Test Name
Carbon	1000	ppm	9060 / TOC 4X T
Carbon Result	1000	ppm	9060 / TOC 4X T

Standard Solution Logbook - Inventory ID Summary

Inventory ID:	220617	Date Received:	11/24/21
Standard Name:	Total Organic Carbon (TOC) Std 1000 mg/L as	Expiration Date:	9/30/23
Standard Type:	Working Standard	Source:	SCP Science
ALS Lab:	ROCHESTER	Catalog #:	250-250-051
ALSTeam:	GenChem	Lot #:	S210910014
Container ID:	220617	Amount Prepared:	1.00 mL
Location:	IC ROOM		

Component Name	Amount	Units	Method / Test Name
Carbon	1000	ppm	9060A / TOC 4X T
Carbon Result	1000	ppm	9060A / TOC 4X T

SERES ENGINEERING & SERVICES, LLC

FORT DEVENS 2022 LTM 30048392

SP0783

Ms. Leslie Dimond
207-874-2400

KATAHDIN ANALYTICAL SERVICES
600 TECHNOLOGY WAY
SCARBOROUGH, ME 04074

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SAMPLE DATA PACKAGE

NARRATIVE
KATAHDIN ANALYTICAL SERVICES
SERES ENGINEERING & SERVICES, LLC
FORT DEVENS 2022 LTM 30048392
SP0783

Sample Receipt

The following samples were received on February 16, 2022 and were logged in under Katahdin Analytical Services work order number SP0783 for a hardcopy due date of March 10, 2022.

KATAHDIN Sample No.	SERES Sample Identification
SP0783-1	MW-21-2S-EVENT#6
SP0783-2	MW-21-2S-FF-EVENT#6
SP0783-3	MW-21-2D-EVENT#6
SP0783-4	MW-21-2D-FF-EVENT#6
SP0783-5	MW-21-1D-EVENT#6
SP0783-6	MW-21-1D-FF-EVENT#6
SP0783-7	MW-21-1S-EVENT#6
SP0783-8	MW-21-1S-FF-EVENT#6
SP0783-9	MW-21-3S-EVENT#6
SP0783-10	MW-21-3S-FF-EVENT#6
SP0783-11	MW-21-3D-EVENT#6
SP0783-12	MW-21-3D-FF-EVENT#6
SP0783-13	AS-DUP-EVENT#6
SP0783-14	AS-DUP-FF-EVENT#6
SP0783-15	MW-21-4D-EVENT#6
SP0783-16	MW-21-4D-FF-EVENT#6
SP0783-17	SHM-10-06-EVENT#6
SP0783-18	SHM-10-06-FF-EVENT#6
SP0783-19	MW-21-4S-EVENT#6
SP0783-20	MW-21-4S-FF-EVENT#6

The samples were logged in for the analyses specified on the chain of custody form. All problems encountered and resolved during sample receipt have been documented on the applicable chain of custody forms.

We certify that the test results provided in this report meet all the requirements of the NELAP standards unless otherwise noted in this narrative or in the Report of Analysis.

We certify that the test results provided in this report are accredited under the laboratory's ISO/IEC 17025:2017 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation L2223.

Analytes which are reported but not listed on our ANAB scope of accreditation will be "^" flagged and the following language will be included in the case narrative for all DoD compliant work: "^" Indicates this analyte is not included on Katahdin Analytical Services DoD-ELAP Scope of Accreditation.

Sample analyses have been performed by the methods as noted herein.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact your Katahdin Analytical Services Project Manager, **Ms. Heather Manz**. This narrative is an integral part of the Report of Analysis.

Metals Analysis

The samples associated with Katahdin Work Order SP0783 were prepared and analyzed for metals in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA publication SW846, Third Edition, Final Updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), and V (2015), Office of Solid Waste and Emergency Response, U.S. EPA.

Inductively-Coupled Plasma (ICP) Atomic Emission Spectroscopic Analysis

Aqueous-matrix Katahdin Sample Numbers SP0783-(1-17) were digested or ICP-AES analysis on 02/22/22 (QC Batch PB22ICW1) in accordance with USEPA Method 3010A. Per client request, Katahdin Sample Number SP0783-17 was prepared with duplicate matrix-spiked aliquots.

Aqueous-matrix Katahdin Sample Numbers SP0783-(18-20) were digested or ICP-AES analysis on 02/22/22 (QC Batch PB22ICW2) in accordance with USEPA Method 3010A. Per client request, Katahdin Sample Number SP0783-18 was prepared with duplicate matrix-spiked aliquots.

ICP analyses of Katahdin Work Order SP0783 samples were performed using a Thermo iCAP 6500 ICP spectrometer in accordance with USEPA Method 6010C. All samples were analyzed within holding times and all applicable analytical run QC criteria were met.

Matrix QC Summary

The measured recovery of iron in both of the matrix-spiked aliquots of Katahdin Sample Number SP0783-17 are outside the laboratory's acceptance limits. This may be attributable to the native sample concentration being much greater than the spike added.

The measured recoveries of arsenic, iron, and manganese in both of the matrix-spiked aliquots of Katahdin Sample Number SP0783-18 are outside the laboratory's acceptance limits. This may be attributable to the native sample concentration being much greater than the spike added.

The measured recoveries of arsenic, calcium, iron, and manganese in the post-digestion matrix spike aliquot of Katahdin Sample Number SP0783-17 are outside the laboratory's acceptance limits. For calcium, iron, and manganese, this may be attributable to the native sample concentration being much greater than the spike added.

The measured recovery of iron in the post-digestion matrix spike aliquot of Katahdin Sample Number SP0783-18 is outside the laboratory's acceptance limits. This may be attributable to the native sample concentration being much greater than the spike added.

Reporting of Metals Results

Per client request, analytical results for client samples on Form I and preparation blanks on Form IIIP have been reported using the laboratory's limits of quantitation (LOQ). All results were evaluated down to the laboratory's method detection limits (MDLs). Results that fall between the MDL and the LOQ are flagged with "J" in the C-qualifier column, and the measured concentration appears in the concentration column. Results that are less than the MDL are flagged with "U" in the C-qualifier column, and the LOQ is listed in the concentration column. These LOQs, MDLs and LODs have been adjusted for each sample based on the sample amounts used in preparation and analysis.

Analytical results on Forms VA, VD, VII, and IX for client samples, matrix QC samples (duplicates and matrix spikes), and laboratory control samples have been reported down to the laboratory's method detection limits (MDLs). Analytical results that are below the MDLs are flagged with "U" in the C-qualifier column, and the adjusted LOD is listed in the concentration column.

Analytical results for instrument run QC samples (ICVs, ICBs, etc.) have been reported down to the laboratory's instrument detection limits (IDLs).

IDLs, LODs, MDLs, and LOQs are listed on Form 10 of the accompanying data package.

Wet Chemistry Analysis

The samples of Work Order SP0783 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for alkalinity, filterable residue, dissolved organic carbon, anions, and total biochemical oxygen demand were performed according to "Standard Methods for the Examination of Water and Wastewater", 15th, 16th, 17th, 18th, 19th, and 20th editions, 1980, 1985, 1989, 1992, 1995, 1999. APHA-AWWA-WPCF.

Analyses for nitrate, and nitrite were performed according to "Methods for Chemical Analysis of Water and Wastes", EPA 600/4-79-020, 1979 Revised 1983, U.S. EPA.

All Wet Chemistry results were evaluated to Katahdin Analytical Services' Method Detection Limits (MDL). Measured concentrations that fall between the MDL and Katahdin's Limit of Quantitation (LOQ) are flagged "J". Measured concentrations that are below the MDL are flagged "U" and reported as "U LOQ", where "LOQ" is the numerical value of the Limit of Quantitation.

All analyses were performed within analytical holding times. All quality control criteria were met, with the following exception:

Due to instrumentation error SP0783-1 was run 3 minutes after the expiration of the 48-hour analytical hold time. The recovery of the matrix spike (14%) and matrix spike dup (15%) for nitrate performed on SP0783-17 are outside the laboratory's acceptance limits of 90-110%. The recoveries of the LCS (68%) and LCSD (74%) for solids filterable residue were outside the laboratory's acceptance range of 80-120% samples were rerun out of hold time with similar results and passing LCS recoveries.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Quality Assurance Officer, or their designee, as verified by the following signature.

Leslie Dimond ***Mar 30, 2022***

Leslie Dimond
Quality Assurance Officer

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin Analytical Services, LLC.

Sample Receipt Condition Report

Client: Arcadis	KAS PM: HHM	Sampled By: Client
Project:	KIMS Entry By: GN	Delivered By: ~~Client~~ KAS
KAS Work Order#: SP0783	KIMS Review By: HHM	Received By: GN
	Labeled By: MLK	
SDG #:	Cooler: 1 of 2	Date/Time Rec.: 2-17-22/15:28

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?		✓			
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 0.1 — Thermometer ID: IR-1
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles:					
Aqueous: No bubble larger than a pea?				✓	
Soil/Sediment:					
Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
D.I. Water - Received within 48 hour HT?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	✓				
Sulfide - >9				✓	
Cyanide – pH >12				✓	
11. Bottleware Prepped on:					

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

Katahdin Analytical Services, LLC. — Sample Receipt Condition Report

Client: Arcadis	KAS PM: HHM	Sampled By: Client
Project:	KIMS Entry By: GN	Delivered By: ~~Client~~ KAS
KAS Work Order#: SP0783	KIMS Review By: HHM	Received By: GN
	Labeled By: MLV	
SDG #:	Cooler: 2 of 2	Date/Time Rec.: 2-17-22/15:28

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?		✓			
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 0-5 — Thermometer ID: IR-1
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles: **Aqueous:** No bubble larger than a pea?				✓	
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
D.I. Water - Received within 48 hour HT?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	✓				
Sulfide - >9				✓	
Cyanide – pH >12				✓	
11. Bottleware Prepped on:					

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

Katahdin ANALYTICAL SERVICES
600 Technology Way
Scarborough, ME 04074
Tel: (207) 874-2400
Fax: (207) 775-4029

CHAIN of CUSTODY

PLEASE BEAR DOWN AND PRINT LEGIBLY IN PEN

Page 1 of 2

Client	Contact	Phone #	Fax #
Arcadis - Series JV		( )	( )

Address	City	State	Zip Code

Purchase Order #	Proj. Name / No.	Katahdin Quote #
	30048392	

Bill (if different than above)	Address

Sampler (Print / Sign)	Copies To:
Grace Sheckler & Desmond Bedard	

LAB USE ONLY

WORK ORDER #: SP0783

KATAHDIN PROJECT NUMBER

REMARKS:

SHIPPING INFO: ☐ FED EX ☐ UPS ☐ CLIENT

AIRBILL NO:

TEMP°C ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

ANALYSIS AND CONTAINER TYPE PRESERVATIVES

★	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	Filt. Y N — Diss. TOC, H_2SO_4	Filt. Y N — Diss. Metals, HNO_3 (DB)	Filt. Y N — Total Metals ★, HNO_3	Filt. Y N — Alkalinity, TDS, Anions (Cl, SO_4), None	Filt. Y N — BOD_5, None	Filt. Y N	Filt. Y N	Filt. Y N	Filt. Y N	Filt. Y N
	MW-21-25-FF-EVENT#6	02/16/22 10:40	GW	DB 3	✓	✓								
	MW-21-25-EVENT#6	02/16/22 10:40	GW	DB 4			✓	✓	✓					
	MW-21-20-FF-EVENT#6	02/16/22 12:25	GW	3	✓	✓								
	MW-21-20-EVENT#6	02/16/22 12:25	GW	4			✓	✓	✓					
	MW-21-ID-Event#6	2/16/22 1057	GW	4			✓	✓	✓					
	MW-21-ID-FF-Event#6	2/16/22 10:57	GW	3	✓	✓								
	MW-21-1S-Event#6	2/16/22 12:50	GW	4			✓	✓	✓					
	MW-21-1S-FF-Event#6	2/16/22 12:50	GW	3	✓	✓								
	MW-21-35-Event#6	2/16/22 14:35	GW	3			✓	✓						
	MW-21-35-FF-Event#6	2/16/22 14:35	GW	3	✓	✓								
	MW-21-30-FF-EVENT#6	02/16/22 14:19	GW	3	✓	✓								
	MW-21-30-EVENT#6	02/16/22 14:19	GW	3			✓	✓						
	AS-DUP-FF-EVENT#6	02/17/22 08:00	GW	3	✓	✓								
	AS-DUP-EVENT#6	02/17/22 08:00	GW	2			✓	✓						
	MW-21-40-FF-EVENT#6	02/17/22 11:10	GW	3	✓	✓								
	MW-21-40-EVENT#6	02/17/22 11:10	GW	2			✓	✓						

COMMENTS ★ Metals must be analyzed for: Iron, Manganese, Arsenic, Calcium, Magnesium, Sodium, and Potassium (Total Metals Only)

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
Grace Sheckler	2/17/22 13:35	BJohanan 02/17/2022 13:35	BJohanan 02/17/2022	15:28	
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)

THE TERMS AND CONDITIONS ON THE REVERSE SIDE HEREOF SHALL GOVERN SERVICES, EXCEPT WHEN A SIGNED CONTRACTUAL AGREEMENT EXISTS.

Katahdin ANALYTICAL SERVICES
600 Technology Way
Scarborough, ME 04074
Tel: (207) 874-2400
Fax: (207) 775-4029

CHAIN of CUSTODY

PLEASE BEAR DOWN AND PRINT LEGIBLY IN PEN

Page 2 of 2

Client	Contact	Phone #	Fax #
Arcadis - Scres JV		( )	( )

Address	City	State	Zip Code

Purchase Order #	Proj. Name / No.	Katahdin Quote #
	30048392	

Bill (if different than above)	Address

Sampler (Print / Sign)	Copies To:
Grace Sheckler & Desmond Bedard	

LAB USE ONLY

WORK ORDER #: SP0783

KATAHDIN PROJECT NUMBER _____

REMARKS: _____

SHIPPING INFO: ☐ FED EX ☐ UPS ☐ CLIENT

AIRBILL NO: _____

TEMP°C _____ ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

★	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	ANALYSIS AND CONTAINER TYPE PRESERVATIVES: Filt. Y/N — Diss. TOC H_2SO_4	Diss. Metals HNO_3	Total Metals* HNO_3	Alkalinity, TDS, Anions (Cl, SO_4, NO$_3$) None	BOD_5 None						
	SHM-10-06-Event#6	2/17/22/11:26	GW	2			✓	✓							
	SHM-10-06-FF-Event#6	2/17/22/11:26	GW	3	✓	✓									
	SHM-10-06-FF-Event#6-MS	2/17/22/11:26	GW	3	✓	✓									
	~~SHM-10-06-FF-Event#6~~	2/17/22/													
	SHM-10-06-Event#6-MS	2/17/22/11:26	GW	1			✓								
	SHM-10-06-Event#6-MSD	2/17/22/11:26	GW	1				✓							
	SHM-10-06-Event#6-MSD	2/17/22/11:26	GW	1			✓								
	SHM-10-06-FF-Event#6-MSD	2/17/22/11:26	GW	3	✓	✓									
	MW-21-4S-Event#6	2/17/22/12:55	GW	2			✓	✓							
	MW-21-4S-FF-Event#6	2/17/22/12:55	GW	3	✓	✓									
		/													
		/													
		/													
		/													
		/													
		/													

COMMENTS: * Total Metals to be Sampled: Iron, Manganese, Arsenic, Calcium, Magnesium, Sodium, and Potassium (only Total)

Note: we did not receive 500 mL bottles for Alkalinity, TDS, Anions - we used what we were given or what was left onsite.

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
Grace Sheckler	2/17/22 13:55	T Buchanan 02/17/2022 13:55	T Buchanan 02/17/2022	15:28	
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)

THE TERMS AND CONDITIONS ON THE REVERSE SIDE HEREOF SHALL GOVERN SERVICES, EXCEPT WHEN A SIGNED CONTRACTUAL AGREEMENT EXISTS.

Mar. 23, 2022
12:16 PM

Login Number: SP0783

Account: SERES001
SERES Engineering & Services, LLC

Project: SERES-FT-DEVENS
Former Fort Devens - Annual LTM

Primary Report Address:
Heather Levesque, PMP
SERES Engineering & Services, LLC
669 Marina Drive
Suite B-7
Charleston, SC 29492
USA
halevesque@seres-es.com

Primary Invoice Address:
Accounts Payable
SERES Engineering & Services, LLC
669 Marina Drive
Suite B-7
Charleston,SC 29492
USA
metunstall@seres-es.com

Report CC Addresses:
Invoice CC Addresses:

Quote/Incoming: SERES-FT-DEVENS

Login Information

ANALYSIS INSTRUCTIONS	:	DOD 5.3, ND to LOQ w/ J flags, include LOD on ROAs. Anions: NO3 by E353.2, Cl/SO4 by SW9056.
CHECK NO.	:	
CLIENT PO#	:	Project # JV2008 04.03
CLIENT PROJECT MANAGE	:	Heather Levesque
CONTRACT	:	W912WJ-19D-0014
COOLER TEMPERATURE	:	0.1, 0.5
DELIVERY SERVICES	:	KAS
EDD FORMAT	:	WESTMDLPWLLOD-XLS
ISM INSTRUCTIONS	:	
LOGIN INITIALS	:	GN
PM	:	HHM
PROJECT NAME	:	Fort Devens 2022 LTM 30048392
QC LEVEL	:	IV
REPORT INSTRUCTIONS	:	Upload EDD to Ft. Devens Database. Upload to SDS. Email reports to halevesque@seres-es.com; Ian.Martz@arcadis.com; Jennifer.Singer@arcadis.com. Email invoices to METunstall@seres-es.com & HALevesque@seres-es.com.
SDG ID	:	
SDG STATUS	:	
VERBAL TAT	:	

1:17 pm, Mar 23, 2022

Run Reports: Logindetail

Login Number: SP0783

Account: SERES001
SERES Engineering & Services, LLC

Project: SERES-FT-DEVENS
Former Fort Devens - Annual LTM

Quote/Incoming: SERES-FT-DEVENS

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SP0783-1	MW-21-2S-EVENT#6	16-FEB-22 10:40	17-FEB-22		10-MAR-22		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Aqueous	S	E353.2-NITRATE	18-FEB-22 SHORT		125mL Plastic
Aqueous	S	SM2320B-ALKALINITY	02-MAR-22		
Aqueous	S	SM2540C-TDS	23-FEB-22		250mL Plastic
Aqueous	S	SM5210B-TBOD	18-FEB-22 SHORT		250mL Plastic
Aqueous	S	SW3010-PREP	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-CALCIUM	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MAGNESIUM	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-POTASSIUM	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-SODIUM	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW9056-ANIONS	17-MAR-22		

SP0783-2	MW-21-2S-FF-EVENT#6	16-FEB-22 10:40	17-FEB-22		10-MAR-22		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Service	S	COURIER-BILLING			
Aqueous	S	SW3010-PREP	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC-DIS	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON-DIS	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE-DIS	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW9060-DOC(1)	16-MAR-22		125mL Plastic+H2SO4

SP0783-3	MW-21-2D-EVENT#6	16-FEB-22 12:25	17-FEB-22		10-MAR-22		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Aqueous	S	E353.2-NITRATE	18-FEB-22 SHORT		125mL Plastic
Aqueous	S	SM2320B-ALKALINITY	02-MAR-22		
Aqueous	S	SM2540C-TDS	23-FEB-22		250mL Plastic
Aqueous	S	SM5210B-TBOD	18-FEB-22 SHORT		250mL Plastic
Aqueous	S	SW3010-PREP	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-CALCIUM	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MAGNESIUM	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-POTASSIUM	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-SODIUM	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW9056-ANIONS	17-MAR-22		

SP0783-4	MW-21-2D-FF-EVENT#6	16-FEB-22 12:25	17-FEB-22		10-MAR-22		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Aqueous	S	SW3010-PREP	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC-DIS	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON-DIS	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE-DIS	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW9060-DOC(1)	16-MAR-22		125mL Plastic+H2SO4

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SERES Engineering & Services, LLC

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Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SP0783-5	MW-21-1D-EVENT#6	16-FEB-22 10:57	17-FEB-22		10-MAR-22		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Aqueous	S	E353.2-NITRATE	18-FEB-22 SHORT		125mL Plastic
Aqueous	S	SM2320B-ALKALINITY	02-MAR-22		
Aqueous	S	SM2540C-TDS	23-FEB-22		250mL Plastic
Aqueous	S	SM5210B-TBOD	18-FEB-22 SHORT		250mL Plastic
Aqueous	S	SW3010-PREP	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-CALCIUM	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MAGNESIUM	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-POTASSIUM	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-SODIUM	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW9056-ANIONS	17-MAR-22		

SP0783-6	MW-21-1D-FF-EVENT#6	16-FEB-22 10:57	17-FEB-22		10-MAR-22		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Aqueous	S	SW3010-PREP	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC-DIS	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON-DIS	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE-DIS	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW9060-DOC(1)	16-MAR-22		125mL Plastic+H2SO4

SP0783-7	MW-21-1S-EVENT#6	16-FEB-22 12:50	17-FEB-22		10-MAR-22		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Aqueous	S	E353.2-NITRATE	18-FEB-22 SHORT		125mL Plastic
Aqueous	S	SM2320B-ALKALINITY	02-MAR-22		
Aqueous	S	SM2540C-TDS	23-FEB-22		250mL Plastic
Aqueous	S	SM5210B-TBOD	18-FEB-22 SHORT		250mL Plastic
Aqueous	S	SW3010-PREP	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-CALCIUM	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MAGNESIUM	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-POTASSIUM	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-SODIUM	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW9056-ANIONS	17-MAR-22		

SP0783-8	MW-21-1S-FF-EVENT#6	16-FEB-22 12:50	17-FEB-22		10-MAR-22		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Aqueous	S	SW3010-PREP	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC-DIS	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON-DIS	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE-DIS	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW9060-DOC(1)	16-MAR-22		125mL Plastic+H2SO4

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Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SP0783-9	MW-21-3S-EVENT#6	16-FEB-22 14:35	17-FEB-22		10-MAR-22		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Aqueous	S	E353.2-NITRATE	18-FEB-22 SHORT		125mL Plastic
Aqueous	S	SM2320B-ALKALINITY	02-MAR-22		
Aqueous	S	SM2540C-TDS	23-FEB-22		250mL Plastic
Aqueous	S	SW3010-PREP	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-CALCIUM	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MAGNESIUM	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-POTASSIUM	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-SODIUM	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW9056-ANIONS	17-MAR-22		

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SP0783-10	MW-21-3S-FF-EVENT#6	16-FEB-22 14:35	17-FEB-22		10-MAR-22		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Aqueous	S	SW3010-PREP	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC-DIS	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON-DIS	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE-DIS	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW9060-DOC(1)	16-MAR-22		125mL Plastic+H2SO4

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SP0783-11	MW-21-3D-EVENT#6	16-FEB-22 14:19	17-FEB-22		10-MAR-22		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Aqueous	S	E353.2-NITRATE	18-FEB-22 SHORT		125mL Plastic
Aqueous	S	SM2320B-ALKALINITY	02-MAR-22		
Aqueous	S	SM2540C-TDS	23-FEB-22		250mL Plastic
Aqueous	S	SW3010-PREP	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-CALCIUM	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MAGNESIUM	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-POTASSIUM	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-SODIUM	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW9056-ANIONS	17-MAR-22		

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SP0783-12	MW-21-3D-FF-EVENT#6	16-FEB-22 14:19	17-FEB-22		10-MAR-22		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Aqueous	S	SW3010-PREP	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC-DIS	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON-DIS	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE-DIS	15-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW9060-DOC(1)	16-MAR-22		125mL Plastic+H2SO4



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SERES Engineering & Services, LLC

Project: SERES-FT-DEVENS

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Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SP0783-13	AS-DUP-EVENT#6	17-FEB-22 08:00	17-FEB-22		10-MAR-22		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Aqueous	S	E353.2-NITRATE	19-FEB-22 SHORT		125mL Plastic
Aqueous	S	SM2320B-ALKALINITY	03-MAR-22		
Aqueous	S	SM2540C-TDS	24-FEB-22		250mL Plastic
Aqueous	S	SW3010-PREP	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-CALCIUM	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MAGNESIUM	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-POTASSIUM	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-SODIUM	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW9056-ANIONS	17-MAR-22		

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SP0783-14	AS-DUP-FF-EVENT#6	17-FEB-22 08:00	17-FEB-22		10-MAR-22		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Aqueous	S	SW3010-PREP	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC-DIS	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON-DIS	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE-DIS	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW9060-DOC(1)	17-MAR-22		125mL Plastic+H2SO4

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SP0783-15	MW-21-4D-EVENT#6	17-FEB-22 11:10	17-FEB-22		10-MAR-22		

Sample Comments: NO3 not reported by lab.

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Aqueous	S	SM2320B-ALKALINITY	03-MAR-22		
Aqueous	S	SM2540C-TDS	24-FEB-22		250mL Plastic
Aqueous	S	SW3010-PREP	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-CALCIUM	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MAGNESIUM	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-POTASSIUM	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-SODIUM	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW9056-ANIONS	17-MAR-22		

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SP0783-16	MW-21-4D-FF-EVENT#6	17-FEB-22 11:10	17-FEB-22		10-MAR-22		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Aqueous	S	SW3010-PREP	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC-DIS	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON-DIS	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE-DIS	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW9060-DOC(1)	17-MAR-22		125mL Plastic+H2SO4



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Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SP0783-17	SHM-10-06-EVENT#6	17-FEB-22 11:26	17-FEB-22		10-MAR-22		

Sample Comments: MS/MSD

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Aqueous	S	E353.2-NITRATE	19-FEB-22 SHORT		125mL Plastic
Aqueous	S	SM2320B-ALKALINITY	03-MAR-22		
Aqueous	S	SM2540C-TDS	24-FEB-22		250mL Plastic
Aqueous	S	SW3010-PREP	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-CALCIUM	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MAGNESIUM	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-POTASSIUM	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-SODIUM	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW9056-ANIONS	17-MAR-22		

SP0783-18	SHM-10-06-FF-EVENT#6	17-FEB-22 11:26	17-FEB-22		10-MAR-22		

Sample Comments: MS/MSD

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Aqueous	S	SW3010-PREP	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC-DIS	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON-DIS	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE-DIS	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW9060-DOC(1)	17-MAR-22		125mL Plastic+H2SO4

SP0783-19	MW-21-4S-EVENT#6	17-FEB-22 12:55	17-FEB-22		10-MAR-22		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Aqueous	S	E353.2-NITRATE	19-FEB-22 SHORT		125mL Plastic
Aqueous	S	SM2320B-ALKALINITY	03-MAR-22		
Aqueous	S	SM2540C-TDS	24-FEB-22		250mL Plastic
Aqueous	S	SW3010-PREP	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-CALCIUM	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MAGNESIUM	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-POTASSIUM	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-SODIUM	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW9056-ANIONS	17-MAR-22		

SP0783-20	MW-21-4S-FF-EVENT#6	17-FEB-22 12:55	17-FEB-22		10-MAR-22		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Aqueous	S	SW3010-PREP	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-ARSENIC-DIS	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-IRON-DIS	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW6010-MANGANESE-DIS	16-AUG-22		250mL Plastic+HNO3
Aqueous	S	SW9060-DOC(1)	17-MAR-22		125mL Plastic+H2SO4

Total Samples: 20 ***Total Analyses: 174***

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SAMPLE DATA SUMMARY PACKAGE

METALS SAMPLE FLAGGING

FLAG	SPECIFIED MEANING
E	The reported value is estimated because of the presence of interference (as indicated by serial dilution).
N	The pre-digestion spiked sample recovery is not within control limits.
*	The duplicate sample analysis relative percent difference (RPD) is not within control limits.
B	Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.
A	The post-digestion spiked sample recovery is not within control limits.
•	Analytical run QC sample (e.g. ICV, CCV, ICB, CCB, ICSA, ICSAB) not within control limits.
U	The analyte was not detected above the specified level. This level may be the Limit of Quantitation (LOQ) (previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client. Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.
J	The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ) (previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).
Q	One or more quality control criteria failed (e.g., LCS recovery, surrogate spike recovery or CCV).

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level (PQL) or LOQ could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfite H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit
NFL	No Free Liquid Present	FLP	Free Liquid Present
NOD	No Odor Detected	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L. The reported value should be considered a minimum value.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 or 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-2S-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-001

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	2.8	J		P	1	8.0	1.4	5.0
7440-70-2	CALCIUM, TOTAL	43600			P	1	100	11	80
7439-89-6	IRON, TOTAL	501			P	1	100	5.4	80
7439-95-4	MAGNESIUM, TOTAL	7650			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	888			P	1	5.0	1.1	4.0
7440-09-7	POTASSIUM, TOTAL	9080			P	1	1000	41	500
7440-23-5	SODIUM, TOTAL	31300			P	1	1000	24	500

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-2S-FF-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-002

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	8.0	U		P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	28	J		P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	963			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-2D-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-003

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	2.9	J		P	1	8.0	1.4	5.0
7440-70-2	CALCIUM, TOTAL	12200			P	1	100	11	80
7439-89-6	IRON, TOTAL	1300			P	1	100	5.4	80
7439-95-4	MAGNESIUM, TOTAL	2240			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	2370			P	1	5.0	1.1	4.0
7440-09-7	POTASSIUM, TOTAL	4830			P	1	1000	41	500
7440-23-5	SODIUM, TOTAL	20500			P	1	1000	24	500

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-2D-FF-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-004

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	8.0	U		P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	1030			P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	2630			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-1D-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-005

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	26.9			P	1	8.0	1.4	5.0
7440-70-2	CALCIUM, TOTAL	69000			P	1	100	11	80
7439-89-6	IRON, TOTAL	2540			P	1	100	5.4	80
7439-95-4	MAGNESIUM, TOTAL	10100			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	10600			P	1	5.0	1.1	4.0
7440-09-7	POTASSIUM, TOTAL	8010			P	1	1000	41	500
7440-23-5	SODIUM, TOTAL	15000			P	1	1000	24	500

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-1D-FF-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-006

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	11			P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	1320			P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	10700			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-1S-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-007

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	8.0	U		P	1	8.0	1.4	5.0
7440-70-2	CALCIUM, TOTAL	43400			P	1	100	11	80
7439-89-6	IRON, TOTAL	100	U		P	1	100	5.4	80
7439-95-4	MAGNESIUM, TOTAL	6850			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	643			P	1	5.0	1.1	4.0
7440-09-7	POTASSIUM, TOTAL	12300			P	1	1000	41	500
7440-23-5	SODIUM, TOTAL	19200			P	1	1000	24	500

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-1S-FF-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-008

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	8.0	U		P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	100	U		P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	698			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-3S-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-009

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	4.4	J		P	1	8.0	1.4	5.0
7440-70-2	CALCIUM, TOTAL	21300			P	1	100	11	80
7439-89-6	IRON, TOTAL	495			P	1	100	5.4	80
7439-95-4	MAGNESIUM, TOTAL	3440			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	330			P	1	5.0	1.1	4.0
7440-09-7	POTASSIUM, TOTAL	8030			P	1	1000	41	500
7440-23-5	SODIUM, TOTAL	19300			P	1	1000	24	500

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-3S-FF-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-010

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	2.1	J		P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	195			P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	323			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-3D-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-011

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	1520			P	1	8.0	1.4	5.0
7440-70-2	CALCIUM, TOTAL	31100			P	1	100	11	80
7439-89-6	IRON, TOTAL	43800			P	1	100	5.4	80
7439-95-4	MAGNESIUM, TOTAL	5040			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	4000			P	1	5.0	1.1	4.0
7440-09-7	POTASSIUM, TOTAL	5860			P	1	1000	41	500
7440-23-5	SODIUM, TOTAL	16800			P	1	1000	24	500

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-3D-FF-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-012

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	1460			P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	43800			P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	4060			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** AS-DUP-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-013

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	1380			P	1	8.0	1.4	5.0
7440-70-2	CALCIUM, TOTAL	19900			P	1	100	11	80
7439-89-6	IRON, TOTAL	31500			P	1	100	5.4	80
7439-95-4	MAGNESIUM, TOTAL	2800			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	998			P	1	5.0	1.1	4.0
7440-09-7	POTASSIUM, TOTAL	5000			P	1	1000	41	500
7440-23-5	SODIUM, TOTAL	14900			P	1	1000	24	500

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** AS-DUP-FF-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-014

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	1330			P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	29700			P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	951			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-4D-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-015

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	1390			P	1	8.0	1.4	5.0
7440-70-2	CALCIUM, TOTAL	18200			P	1	100	11	80
7439-89-6	IRON, TOTAL	29400			P	1	100	5.4	80
7439-95-4	MAGNESIUM, TOTAL	2780			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	918			P	1	5.0	1.1	4.0
7440-09-7	POTASSIUM, TOTAL	4640			P	1	1000	41	500
7440-23-5	SODIUM, TOTAL	13800			P	1	1000	24	500

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-4D-FF-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-016

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	1350			P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	27600			P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	898			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** SHM-10-06-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-017

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	1050		A	P	1	8.0	1.4	5.0
7440-70-2	CALCIUM, TOTAL	30800		A	P	1	100	11	80
7439-89-6	IRON, TOTAL	65400		NA	P	1	100	5.4	80
7439-95-4	MAGNESIUM, TOTAL	4800			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	2470		A	P	1	5.0	1.1	4.0
7440-09-7	POTASSIUM, TOTAL	9140			P	1	1000	41	500
7440-23-5	SODIUM, TOTAL	15700			P	1	1000	24	500

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** SHM-10-06-FF-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-018

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	968		N	P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	62100		NA	P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	2330		N	P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-4S-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-019

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	1.6	J		P	1	8.0	1.4	5.0
7440-70-2	CALCIUM, TOTAL	46400			P	1	100	11	80
7439-89-6	IRON, TOTAL	14500			P	1	100	5.4	80
7439-95-4	MAGNESIUM, TOTAL	6340			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	1560			P	1	5.0	1.1	4.0
7440-09-7	POTASSIUM, TOTAL	10700			P	1	1000	41	500
7440-23-5	SODIUM, TOTAL	19200			P	1	1000	24	500

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-4S-FF-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-020

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	8.0	U		P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	13600			P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	1500			P	1	5.0	1.1	4.0

Comments:

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Report of Analytical Results

Lab Sample ID: SP0783-1
Client ID: MW-21-2S-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	16-FEB-22 10:40	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	180 mg/L	5.0	0.23	4	STDM 2320B	WG314455	23-FEB-22 17:08	N/A	N/A	
Chloride	34 mg/L	4.0	0.20	2.0	SW846 9056A	WG315251	10-MAR-22 17:21	N/A	N/A	
Nitrate As N	1.2 mg/L	0.050	0.015	0.025	EPA 353.2	WG315915	18-FEB-22 10:43	N/A	N/A	
Solids-Filterable Residue	220 mg/L	10.	5.0	8	STDM 2540C	WG314179	21-FEB-22 18:05	SM 2540C	18-FEB-22	
Sulfate	18 mg/L	1.0	0.064	0.50	SW846 9056A	WG314976	09-MAR-22 20:16	N/A	N/A	
Total Biochemical Oxygen Demand	J2.4 mg/L	3.0	0.35	1	SM5210B	WG314110	23-FEB-22 14:11	SM 5210B	18-FEB-22 1003	

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Report of Analytical Results

Lab Sample ID: SP0783-2
Client ID: MW-21-2S-FF-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	16-FEB-22 10:40	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Dissolved Organic Carbon (1)	3.2 mg/L	1.0	0.32	0.50	SW846 9060A	WG314225	22-FEB-22 00:30	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SP0783-3
Client ID: MW-21-2D-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	16-FEB-22 12:25	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	31. mg/L	5.0	0.23	4	STDM 2320B	WG314455	23-FEB-22 17:11	N/A	N/A	
Chloride	33 mg/L	4.0	0.20	2.0	SW846 9056A	WG315251	10-MAR-22 17:42	N/A	N/A	
Nitrate As N	0.059 mg/L	0.050	0.015	0.025	EPA 353.2	WG315915	18-FEB-22 11:09	N/A	N/A	
Solids-Filterable Residue	120 mg/L	10.	5.0	8	STDM 2540C	WG314179	21-FEB-22 18:05	SM 2540C	18-FEB-22	
Sulfate	34 mg/L	1.0	0.064	0.50	SW846 9056A	WG314976	09-MAR-22 20:36	N/A	N/A	
Total Biochemical Oxygen Demand	J1.2 mg/L	2.0	0.23	1	SM5210B	WG314110	23-FEB-22 14:17	SM 5210B	18-FEB-22 1021	

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Report of Analytical Results

Lab Sample ID: SP0783-4
Client ID: MW-21-2D-FF-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	16-FEB-22 12:25	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Dissolved Organic Carbon (1)	1.0 mg/L	1.0	0.32	0.50	SW846 9060A	WG314225	22-FEB-22 00:42	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SP0783-5
Client ID: MW-21-1D-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	16-FEB-22 10:57	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	240 mg/L	5.0	0.23	4	STDM 2320B	WG314455	23-FEB-22 17:13	N/A	N/A	
Chloride	25 mg/L	4.0	0.20	2.0	SW846 9056A	WG315251	10-MAR-22 18:03	N/A	N/A	
Nitrate As N	0.91 mg/L	0.050	0.015	0.025	EPA 353.2	WG314835	18-FEB-22 10:49	N/A	N/A	
Solids-Filterable Residue	290 mg/L	10.	5.0	8	STDM 2540C	WG314179	21-FEB-22 18:05	SM 2540C	18-FEB-22	
Sulfate	18 mg/L	1.0	0.064	0.50	SW846 9056A	WG314976	09-MAR-22 20:57	N/A	N/A	
Total Biochemical Oxygen Demand	J1.1 mg/L	2.0	0.23	1	SM5210B	WG314110	23-FEB-22 14:20	SM 5210B	18-FEB-22 1025	

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Report of Analytical Results

Lab Sample ID: SP0783-6
Client ID: MW-21-1D-FF-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	16-FEB-22 10:57	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Dissolved Organic Carbon (1)	1.8 mg/L	1.0	0.32	0.50	SW846 9060A	WG314225	22-FEB-22 00:54	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SP0783-7
Client ID: MW-21-1S-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	16-FEB-22 12:50	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	140 mg/L	5.0	0.23	4	STDM 2320B	WG314455	23-FEB-22 17:17	N/A	N/A	
Chloride	25 mg/L	4.0	0.20	2.0	SW846 9056A	WG315251	10-MAR-22 18:24	N/A	N/A	
Nitrate As N	6.8 mg/L	0.25	0.076	0.12	EPA 353.2	WG314835	18-FEB-22 11:19	N/A	N/A	
Solids-Filterable Residue	220 mg/L	10.	5.0	8	STDM 2540C	WG314179	21-FEB-22 18:05	SM 2540C	18-FEB-22	
Sulfate	17 mg/L	1.0	0.064	0.50	SW846 9056A	WG314976	09-MAR-22 21:18	N/A	N/A	
Total Biochemical Oxygen Demand	3.0 mg/L	3.0	0.35	1	SM5210B	WG314110	23-FEB-22 14:24	SM 5210B	18-FEB-22 1034	

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Report of Analytical Results

Lab Sample ID: SP0783-8
Client ID: MW-21-1S-FF-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	16-FEB-22 12:50	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Dissolved Organic Carbon (1)	2.8 mg/L	1.0	0.32	0.50	SW846 9060A	WG314225	22-FEB-22 01:06	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SP0783-9
Client ID: MW-21-3S-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	16-FEB-22 14:35	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	88. mg/L	5.0	0.23	4	STDM 2320B	WG314455	23-FEB-22 17:20	N/A	N/A	
Chloride	30 mg/L	4.0	0.20	2.0	SW846 9056A	WG315251	10-MAR-22 18:45	N/A	N/A	
Nitrate As N	0.61 mg/L	0.050	0.015	0.025	EPA 353.2	WG314835	18-FEB-22 11:11	N/A	N/A	
Solids-Filterable Residue	U10. mg/L	10.	5.0	8	STDM 2540C	WG314323	24-FEB-22 17:59	SM 2540C	23-FEB-22	
Sulfate	13 mg/L	1.0	0.064	0.50	SW846 9056A	WG314976	09-MAR-22 21:39	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SP0783-10
Client ID: MW-21-3S-FF-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	16-FEB-22 14:35	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Dissolved Organic Carbon (1)	2.7 mg/L	1.0	0.32	0.50	SW846 9060A	WG314225	22-FEB-22 01:18	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SP0783-11
Client ID: MW-21-3D-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	16-FEB-22 14:19	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	100 mg/L	5.0	0.23	4	STDM 2320B	WG314455	23-FEB-22 17:22	N/A	N/A	
Chloride	27 mg/L	4.0	0.20	2.0	SW846 9056A	WG315251	10-MAR-22 19:05	N/A	N/A	
Nitrate As N	U0.050 mg/L	0.050	0.015	0.025	EPA 353.2	WG314835	18-FEB-22 11:12	N/A	N/A	
Solids-Filterable Residue	96. mg/L	10.	5.0	8	STDM 2540C	WG314323	24-FEB-22 17:59	SM 2540C	23-FEB-22	
Sulfate	25 mg/L	1.0	0.064	0.50	SW846 9056A	WG314976	09-MAR-22 22:00	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SP0783-12
Client ID: MW-21-3D-FF-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	16-FEB-22 14:19	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Dissolved Organic Carbon (1)	1.7 mg/L	1.0	0.32	0.50	SW846 9060A	WG314225	22-FEB-22 01:31	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SP0783-13
Client ID: AS-DUP-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	17-FEB-22 08:00	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	59. mg/L	5.0	0.23	4	STDM 2320B	WG314455	23-FEB-22 17:25	N/A	N/A	
Chloride	29 mg/L	4.0	0.20	2.0	SW846 9056A	WG315251	10-MAR-22 20:08	N/A	N/A	
Nitrate As N	U0.050 mg/L	0.050	0.015	0.025	EPA 353.2	WG314835	18-FEB-22 11:13	N/A	N/A	
Solids-Filterable Residue	80. mg/L	10.	5.0	8	STDM 2540C	WG314323	24-FEB-22 17:59	SM 2540C	23-FEB-22	
Sulfate	22 mg/L	1.0	0.064	0.50	SW846 9056A	WG314976	09-MAR-22 22:20	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SP0783-14
Client ID: AS-DUP-FF-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	17-FEB-22 08:00	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Dissolved Organic Carbon (1)	1.3 mg/L	1.0	0.32	0.50	SW846 9060A	WG314225	22-FEB-22 01:43	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SP0783-15
Client ID: MW-21-4D-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	17-FEB-22 11:10	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	58. mg/L	5.0	0.23	4	STDM 2320B	WG314455	23-FEB-22 18:15	N/A	N/A	
Chloride	29 mg/L	4.0	0.20	2.0	SW846 9056A	WG315251	10-MAR-22 20:29	N/A	N/A	
Solids-Filterable Residue	69. mg/L	10.	5.0	8	STDM 2540C	WG314323	24-FEB-22 17:59	SM 2540C	23-FEB-22	
Sulfate	22 mg/L	1.0	0.064	0.50	SW846 9056A	WG314976	09-MAR-22 22:41	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SP0783-16
Client ID: MW-21-4D-FF-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	17-FEB-22 11:10	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Dissolved Organic Carbon (1)	1.2 mg/L	1.0	0.32	0.50	SW846 9060A	WG314225	22-FEB-22 01:55	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SP0783-17
Client ID: SHM-10-06-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	17-FEB-22 11:26	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	140 mg/L	5.0	0.23	4	STDM 2320B	WG314455	23-FEB-22 18:17	N/A	N/A	
Chloride	30 mg/L	4.0	0.20	2.0	SW846 9056A	WG315251	10-MAR-22 20:49	N/A	N/A	
Nitrate As N	U0.050 mg/L	0.050	0.015	0.025	EPA 353.2	WG314835	18-FEB-22 11:04	N/A	N/A	
Solids-Filterable Residue	130 mg/L	10.	5.0	8	STDM 2540C	WG314323	24-FEB-22 17:59	SM 2540C	23-FEB-22	
Sulfate	11 mg/L	1.0	0.064	0.50	SW846 9056A	WG314976	09-MAR-22 23:44	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SP0783-18
Client ID: SHM-10-06-FF-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	17-FEB-22 11:26	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Dissolved Organic Carbon (1)	2.1 mg/L	1.0	0.32	0.50	SW846 9060A	WG314225	22-FEB-22 02:07	N/A	N/A	

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ANALYTICAL SERVICES

Report of Analytical Results

Lab Sample ID: SP0783-19
Client ID: MW-21-4S-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	17-FEB-22 12:55	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	210 mg/L	5.0	0.23	4	STDM 2320B	WG314455	23-FEB-22 18:20	N/A	N/A	
Chloride	23 mg/L	4.0	0.20	2.0	SW846 9056A	WG315251	10-MAR-22 21:52	N/A	N/A	
Nitrate As N	U0.050 mg/L	0.050	0.015	0.025	EPA 353.2	WG314835	18-FEB-22 10:50	N/A	N/A	
Solids-Filterable Residue	140 mg/L	10.	5.0	8	STDM 2540C	WG314323	24-FEB-22 17:59	SM 2540C	23-FEB-22	
Sulfate	14 mg/L	1.0	0.064	0.50	SW846 9056A	WG314976	10-MAR-22 00:46	N/A	N/A	

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ANALYTICAL SERVICES

Report of Analytical Results

Lab Sample ID: SP0783-20
Client ID: MW-21-4S-FF-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	17-FEB-22 12:55	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Dissolved Organic Carbon (1)	3.3 mg/L	1.0	0.32	0.50	SW846 9060A	WG314225	22-FEB-22 03:14	N/A	N/A	

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METALS DATA

Sample Data Section

METALS SAMPLE FLAGGING

FLAG	SPECIFIED MEANING
E	The reported value is estimated because of the presence of interference (as indicated by serial dilution).
N	The pre-digestion spiked sample recovery is not within control limits.
*	The duplicate sample analysis relative percent difference (RPD) is not within control limits.
B	Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.
A	The post-digestion spiked sample recovery is not within control limits.
•	Analytical run QC sample (e.g. ICV, CCV, ICB, CCB, ICSA, ICSAB) not within control limits.
U	The analyte was not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client. Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL, "U" LOQ or "U" LOD, where the rate of false negatives is <1%.
J	Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).
Q	One or more quality control criteria failed (e.g., LCS recovery, surrogate spike recovery or CCV).

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Katahdin Analytical Services

SDG Name: SP0783 **SOW No.** SW846

Client Field ID	Lab Sample ID
AS-DUP-EVENT#6	SP0783-013
AS-DUP-FF-EVENT#6	SP0783-014
MW-21-1D-EVENT#6	SP0783-005
MW-21-1D-FF-EVENT#6	SP0783-006
MW-21-1S-EVENT#6	SP0783-007
MW-21-1S-FF-EVENT#6	SP0783-008
MW-21-2D-EVENT#6	SP0783-003
MW-21-2D-FF-EVENT#6	SP0783-004
MW-21-2S-EVENT#6	SP0783-001
MW-21-2S-FF-EVENT#6	SP0783-002
MW-21-3D-EVENT#6	SP0783-011
MW-21-3D-FF-EVENT#6	SP0783-012
MW-21-3S-EVENT#6	SP0783-009
MW-21-3S-FF-EVENT#6	SP0783-010
MW-21-4D-EVENT#6	SP0783-015
MW-21-4D-FF-EVENT#6	SP0783-016
MW-21-4S-EVENT#6	SP0783-019
MW-21-4S-FF-EVENT#6	SP0783-020
SHM-10-06-EVENT#6	SP0783-017
SHM-10-06-EVENT#6P	SP0783-017P
SHM-10-06-EVENT#6S	SP0783-017S
SHM-10-06-FF-EVENT#6	SP0783-018
SHM-10-06-FF-EVENT#6P	SP0783-018P
SHM-10-06-FF-EVENT#6S	SP0783-018S

Were ICP interelement corrections applied ?	Yes
Were ICP background corrections applied ?	Yes
If yes - were raw data generated before application of background corrections ?	No

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Edward A. Morgan Name: Edward A. Morgan

Date: March 16, 2022 Title: Data Management

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-2S-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-001

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	2.8	J		P	1	8.0	1.4	5.0
7440-70-2	CALCIUM, TOTAL	43600			P	1	100	11	80
7439-89-6	IRON, TOTAL	501			P	1	100	5.4	80
7439-95-4	MAGNESIUM, TOTAL	7650			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	888			P	1	5.0	1.1	4.0
7440-09-7	POTASSIUM, TOTAL	9080			P	1	1000	41	500
7440-23-5	SODIUM, TOTAL	31300			P	1	1000	24	500

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-2S-FF-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-002

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	8.0	U		P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	28	J		P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	963			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-2D-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-003

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	2.9	J		P	1	8.0	1.4	5.0
7440-70-2	CALCIUM, TOTAL	12200			P	1	100	11	80
7439-89-6	IRON, TOTAL	1300			P	1	100	5.4	80
7439-95-4	MAGNESIUM, TOTAL	2240			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	2370			P	1	5.0	1.1	4.0
7440-09-7	POTASSIUM, TOTAL	4830			P	1	1000	41	500
7440-23-5	SODIUM, TOTAL	20500			P	1	1000	24	500

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-2D-FF-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-004

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	8.0	U		P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	1030			P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	2630			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-1D-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-005

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	26.9			P	1	8.0	1.4	5.0
7440-70-2	CALCIUM, TOTAL	69000			P	1	100	11	80
7439-89-6	IRON, TOTAL	2540			P	1	100	5.4	80
7439-95-4	MAGNESIUM, TOTAL	10100			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	10600			P	1	5.0	1.1	4.0
7440-09-7	POTASSIUM, TOTAL	8010			P	1	1000	41	500
7440-23-5	SODIUM, TOTAL	15000			P	1	1000	24	500

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-1D-FF-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-006

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	11			P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	1320			P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	10700			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-1S-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-007

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	8.0	U		P	1	8.0	1.4	5.0
7440-70-2	CALCIUM, TOTAL	43400			P	1	100	11	80
7439-89-6	IRON, TOTAL	100	U		P	1	100	5.4	80
7439-95-4	MAGNESIUM, TOTAL	6850			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	643			P	1	5.0	1.1	4.0
7440-09-7	POTASSIUM, TOTAL	12300			P	1	1000	41	500
7440-23-5	SODIUM, TOTAL	19200			P	1	1000	24	500

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-1S-FF-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-008

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	8.0	U		P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	100	U		P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	698			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-3S-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-009

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	4.4	J		P	1	8.0	1.4	5.0
7440-70-2	CALCIUM, TOTAL	21300			P	1	100	11	80
7439-89-6	IRON, TOTAL	495			P	1	100	5.4	80
7439-95-4	MAGNESIUM, TOTAL	3440			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	330			P	1	5.0	1.1	4.0
7440-09-7	POTASSIUM, TOTAL	8030			P	1	1000	41	500
7440-23-5	SODIUM, TOTAL	19300			P	1	1000	24	500

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-3S-FF-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-010

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	2.1	J		P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	195			P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	323			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-3D-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-011

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	1520			P	1	8.0	1.4	5.0
7440-70-2	CALCIUM, TOTAL	31100			P	1	100	11	80
7439-89-6	IRON, TOTAL	43800			P	1	100	5.4	80
7439-95-4	MAGNESIUM, TOTAL	5040			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	4000			P	1	5.0	1.1	4.0
7440-09-7	POTASSIUM, TOTAL	5860			P	1	1000	41	500
7440-23-5	SODIUM, TOTAL	16800			P	1	1000	24	500

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-3D-FF-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-012

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	1460			P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	43800			P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	4060			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** AS-DUP-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-013

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	1380			P	1	8.0	1.4	5.0
7440-70-2	CALCIUM, TOTAL	19900			P	1	100	11	80
7439-89-6	IRON, TOTAL	31500			P	1	100	5.4	80
7439-95-4	MAGNESIUM, TOTAL	2800			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	998			P	1	5.0	1.1	4.0
7440-09-7	POTASSIUM, TOTAL	5000			P	1	1000	41	500
7440-23-5	SODIUM, TOTAL	14900			P	1	1000	24	500

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** AS-DUP-FF-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-014

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	1330			P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	29700			P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	951			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-4D-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-015

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	1390			P	1	8.0	1.4	5.0
7440-70-2	CALCIUM, TOTAL	18200			P	1	100	11	80
7439-89-6	IRON, TOTAL	29400			P	1	100	5.4	80
7439-95-4	MAGNESIUM, TOTAL	2780			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	918			P	1	5.0	1.1	4.0
7440-09-7	POTASSIUM, TOTAL	4640			P	1	1000	41	500
7440-23-5	SODIUM, TOTAL	13800			P	1	1000	24	500

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-4D-FF-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-016

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	1350			P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	27600			P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	898			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** SHM-10-06-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-017

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	1050		A	P	1	8.0	1.4	5.0
7440-70-2	CALCIUM, TOTAL	30800		A	P	1	100	11	80
7439-89-6	IRON, TOTAL	65400		NA	P	1	100	5.4	80
7439-95-4	MAGNESIUM, TOTAL	4800			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	2470		A	P	1	5.0	1.1	4.0
7440-09-7	POTASSIUM, TOTAL	9140			P	1	1000	41	500
7440-23-5	SODIUM, TOTAL	15700			P	1	1000	24	500

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** SHM-10-06-FF-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-018

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	968		N	P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	62100		NA	P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	2330		N	P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-4S-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-019

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	1.6	J		P	1	8.0	1.4	5.0
7440-70-2	CALCIUM, TOTAL	46400			P	1	100	11	80
7439-89-6	IRON, TOTAL	14500			P	1	100	5.4	80
7439-95-4	MAGNESIUM, TOTAL	6340			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	1560			P	1	5.0	1.1	4.0
7440-09-7	POTASSIUM, TOTAL	10700			P	1	1000	41	500
7440-23-5	SODIUM, TOTAL	19200			P	1	1000	24	500

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-4S-FF-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-020

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	8.0	U		P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	13600			P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	1500			P	1	5.0	1.1	4.0

Comments:

QC Summary Section

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SP0783

Concentration Units: ug/L

SAMPLE: ICV

File: IPB23A Feb 23, 2022 13:03

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	9855.00	98.6
ARSENIC	400.0	368.00	92.0
CALCIUM	10000.0	9999.00	100.0
IRON	10000.0	10010.00	100.1
MAGNESIUM	10000.0	9538.00	95.4
MANGANESE	400.0	392.50	98.1
POTASSIUM	13600.0	13390.00	98.5
SODIUM	10000.0	10000.00	100.0

SAMPLE: CCV

File: IPB23A Feb 23, 2022 13:25

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12730.00	101.8
ARSENIC	500.0	489.40	97.9
CALCIUM	12500.0	12740.00	101.9
IRON	12500.0	12810.00	102.5
MAGNESIUM	12500.0	12460.00	99.7
MANGANESE	500.0	505.40	101.1
POTASSIUM	12500.0	12660.00	101.3
SODIUM	12500.0	12740.00	101.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SP0783

Concentration Units: ug/L

SAMPLE: CCV

File: IPB23A Feb 23, 2022 13:42

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12270.00	98.2
ARSENIC	500.0	482.80	96.6
CALCIUM	12500.0	12410.00	99.3
IRON	12500.0	12430.00	99.4
MAGNESIUM	12500.0	12130.00	97.0
MANGANESE	500.0	492.50	98.5
POTASSIUM	12500.0	12230.00	97.8
SODIUM	12500.0	12300.00	98.4

SAMPLE: CCV

File: IPB23A Feb 23, 2022 14:34

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12650.00	101.2
ARSENIC	500.0	487.90	97.6
CALCIUM	12500.0	12890.00	103.1
IRON	12500.0	12870.00	103.0
MAGNESIUM	12500.0	12270.00	98.2
MANGANESE	500.0	507.40	101.5
POTASSIUM	12500.0	12660.00	101.3
SODIUM	12500.0	12780.00	102.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SP0783

Concentration Units: ug/L

SAMPLE: CCV

File: IPB23A Feb 23, 2022 15:26

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12320.00	98.6
ARSENIC	500.0	493.60	98.7
CALCIUM	12500.0	12400.00	99.2
IRON	12500.0	12470.00	99.8
MAGNESIUM	12500.0	12610.00	100.9
MANGANESE	500.0	494.20	98.8
POTASSIUM	12500.0	12350.00	98.8
SODIUM	12500.0	12390.00	99.1

SAMPLE: CCV

File: IPB23A Feb 23, 2022 16:18

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12400.00	99.2
ARSENIC	500.0	502.00	100.4
CALCIUM	12500.0	12490.00	99.9
IRON	12500.0	12520.00	100.2
MAGNESIUM	12500.0	12770.00	102.2
MANGANESE	500.0	506.90	101.4
POTASSIUM	12500.0	12260.00	98.1
SODIUM	12500.0	12100.00	96.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SP0783

Concentration Units: ug/L

SAMPLE: CCV

File: IPB23A Feb 23, 2022 17:10

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12730.00	101.8
ARSENIC	500.0	490.30	98.1
CALCIUM	12500.0	12730.00	101.8
IRON	12500.0	12890.00	103.1
MAGNESIUM	12500.0	12660.00	101.3
MANGANESE	500.0	517.40	103.5
POTASSIUM	12500.0	12650.00	101.2
SODIUM	12500.0	12470.00	99.8

SAMPLE: CCV

File: IPB23A Feb 23, 2022 18:01

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12230.00	97.8
ARSENIC	500.0	485.90	97.2
CALCIUM	12500.0	12100.00	96.8
IRON	12500.0	12360.00	98.9
MAGNESIUM	12500.0	12440.00	99.5
MANGANESE	500.0	500.20	100.0
POTASSIUM	12500.0	12130.00	97.0
SODIUM	12500.0	11930.00	95.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SP0783

Concentration Units: ug/L

SAMPLE: CCV

File: IPB23A Feb 23, 2022 18:49

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12470.00	99.8
ARSENIC	500.0	506.80	101.4
CALCIUM	12500.0	12520.00	100.2
IRON	12500.0	12850.00	102.8
MAGNESIUM	12500.0	13040.00	104.3
MANGANESE	500.0	512.80	102.6
POTASSIUM	12500.0	12470.00	99.8
SODIUM	12500.0	12320.00	98.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SP0783

Concentration Units: ug/L

SAMPLE: PQL

File: IPB23A Feb 23, 2022 13:12

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	297.40	99.1
ARSENIC	8.0	9.41	117.6
CALCIUM	100.0	102.60	102.6
IRON	100.0	101.10	101.1
MAGNESIUM	100.0	102.40	102.4
MANGANESE	5.0	5.16	103.2
POTASSIUM	1000.0	1005.00	100.5
SODIUM	1000.0	1011.00	101.1

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SP0783

Concentration Units: ug/L

SAMPLE: ICB

File: IPB23A Feb 23, 2022 13:07

Analyte	Result	C
ALUMINUM	10.000	U
ARSENIC	1.400	U
CALCIUM	11.000	U
IRON	7.377	J
MAGNESIUM	2.900	U
MANGANESE	0.870	U
POTASSIUM	73.000	U
SODIUM	12.000	U

SAMPLE: CCB

File: IPB23A Feb 23, 2022 13:29

Analyte	Result	C
ALUMINUM	12.630	J
ARSENIC	1.400	U
CALCIUM	22.910	J
IRON	20.050	J
MAGNESIUM	12.340	J
MANGANESE	0.870	U
POTASSIUM	73.000	U
SODIUM	15.490	J

SAMPLE: CCB

File: IPB23A Feb 23, 2022 13:47

Analyte	Result	C
ALUMINUM	10.000	U
ARSENIC	1.400	U
CALCIUM	11.000	U
IRON	10.070	J
MAGNESIUM	2.900	U
MANGANESE	0.870	U
POTASSIUM	73.000	U
SODIUM	12.490	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SP0783

Concentration Units: ug/L

SAMPLE: CCB
File: IPB23A Feb 23, 2022 14:38

Analyte	Result	C
ALUMINUM	10.000	U
ARSENIC	1.400	U
CALCIUM	13.980	J
IRON	18.420	J
MAGNESIUM	3.812	J
MANGANESE	0.870	U
POTASSIUM	73.000	U
SODIUM	31.300	J

SAMPLE: CCB
File: IPB23A Feb 23, 2022 15:30

Analyte	Result	C
ALUMINUM	10.000	U
ARSENIC	1.400	U
CALCIUM	18.420	J
IRON	16.900	J
MAGNESIUM	4.733	J
MANGANESE	0.870	U
POTASSIUM	73.000	U
SODIUM	21.660	J

SAMPLE: CCB
File: IPB23A Feb 23, 2022 16:22

Analyte	Result	C
ALUMINUM	10.980	J
ARSENIC	1.400	U
CALCIUM	15.320	J
IRON	18.660	J
MAGNESIUM	7.028	J
MANGANESE	0.870	U
POTASSIUM	73.000	U
SODIUM	21.650	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SP0783

Concentration Units: ug/L

SAMPLE: CCB
File: IPB23A Feb 23, 2022 17:14

Analyte	Result	C
ALUMINUM	10.000	U
ARSENIC	1.400	U
CALCIUM	11.400	J
IRON	16.380	J
MAGNESIUM	4.906	J
MANGANESE	0.870	U
POTASSIUM	73.000	U
SODIUM	20.000	J

SAMPLE: CCB
File: IPB23A Feb 23, 2022 18:06

Analyte	Result	C
ALUMINUM	10.000	U
ARSENIC	1.400	U
CALCIUM	16.810	J
IRON	20.740	J
MAGNESIUM	6.589	J
MANGANESE	0.870	U
POTASSIUM	73.000	U
SODIUM	62.510	J

SAMPLE: CCB
File: IPB23A Feb 23, 2022 18:53

Analyte	Result	C
ALUMINUM	10.000	U
ARSENIC	1.400	U
CALCIUM	13.700	J
IRON	16.270	J
MAGNESIUM	5.962	J
MANGANESE	0.870	U
POTASSIUM	73.000	U
SODIUM	69.440	J

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWPB22ICW1

Matrix: WATER **SDG Name:** SP0783

QC Batch ID: PB22ICW1

Concentration Units : ug/L

Analyte	RESULT	C
ARSENIC	8.0	U
CALCIUM	14	J
IRON	100	U
MAGNESIUM	100	U
MANGANESE	5.0	U
POTASSIUM	1000	U
SODIUM	32	J

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWPB22ICW2

Matrix: WATER **SDG Name:** SP0783

QC Batch ID: PB22ICW2

Concentration Units : ug/L

Analyte	RESULT	C
ARSENIC	8.0	U
CALCIUM	100	U
IRON	100	U
MAGNESIUM	100	U
MANGANESE	5.0	U
POTASSIUM	1000	U
SODIUM	1000	U

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SP0783

Concentration Units: ug/L

SAMPLE: ICSA

File: IPB23A Feb 23, 2022 13:16

Analyte	TRUE	FOUND	% R
ALUMINUM	500000.00	536900.00	107.4
ARSENIC	0	3.34	
CALCIUM	500000.00	509200.00	101.8
IRON	200000.00	199000.00	99.5
MAGNESIUM	500000.00	445900.00	89.2
MANGANESE	0	0.10	
POTASSIUM	0	-17.13	
SODIUM	0	61.37	

SAMPLE: ICSAB

File: IPB23A Feb 23, 2022 13:21

Analyte	TRUE	FOUND	% R
ALUMINUM	500000.00	489400.00	97.9
ARSENIC	100.00	98.58	99.0
CALCIUM	500000.00	458000.00	91.6
IRON	200000.00	180000.00	90.0
MAGNESIUM	500000.00	429500.00	85.9
MANGANESE	500.00	450.90	90.2
POTASSIUM	20000.00	20350.00	101.8
SODIUM	20000.00	20470.00	102.4

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** SHM-10-06-EVENT#6P

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-017P

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ARSENIC, TOTAL	1160		1050		100	106.0		87	113	P
CALCIUM, TOTAL	33500		30800		2500	109.6		87	113	P
IRON, TOTAL	66700		65400		1000	129.0	N	87	115	P
MAGNESIUM, TOTAL	9730		4800		5000	98.6		85	113	P
MANGANESE, TOTAL	3020		2470		500	110.6		90	114	P
POTASSIUM, TOTAL	19300		9140		10000	102.0		86	114	P
SODIUM, TOTAL	23200		15700		7500	99.6		87	115	P

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** SHM-10-06-EVENT#6S

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-017S

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ARSENIC, TOTAL	1160		1050		100	105.0		87	113	P
CALCIUM, TOTAL	33300		30800		2500	100.8		87	113	P
IRON, TOTAL	66100		65400		1000	71.0	N	87	115	P
MAGNESIUM, TOTAL	9810		4800		5000	100.2		85	113	P
MANGANESE, TOTAL	3000		2470		500	106.8		90	114	P
POTASSIUM, TOTAL	19300		9140		10000	101.3		86	114	P
SODIUM, TOTAL	23000		15700		7500	97.9		87	115	P

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** SHM-10-06-FF-EVENT#6P

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-018P

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ARSENIC, DISSOLVED	1120		968		100	147.0	N	87	113	P
IRON, DISSOLVED	65500		62100		1000	344.0	N	87	115	P
MANGANESE, DISSOLVED	2910		2330		500	115.8	N	90	114	P

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** SHM-10-06-FF-EVENT#6S

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-018S

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ARSENIC, DISSOLVED	1120		968		100	150.0	N	87	113	P
IRON, DISSOLVED	67300		62100		1000	524.0	N	87	115	P
MANGANESE, DISSOLVED	2990		2330		500	132.4	N	90	114	P

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** SHM-10-06-EVENT#6A

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-017A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ARSENIC, TOTAL	1430		1050		500	76.8	A	80	120	P
CALCIUM, TOTAL	34700		30800		5500	70.4	A	80	120	P
IRON, TOTAL	67700		65400		5500	42.0	A	80	120	P
MAGNESIUM, TOTAL	9500		4800		5500	85.5		80	120	P
MANGANESE, TOTAL	2820		2470		500	69.0	A	80	120	P
POTASSIUM, TOTAL	18200		9140		10000	90.7		80	120	P
SODIUM, TOTAL	20100		15700		5500	80.2		80	120	P

Comments:

FORM V (Part 2) - IN

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** SHM-10-06-FF-EVENT#6A

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-018A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ARSENIC, DISSOLVED	1430		968		500	91.6		80	120	P
IRON, DISSOLVED	66200		62100		5500	75.1	A	80	120	P
MANGANESE, DISSOLVED	2750		2330		500	84.2		80	120	P

Comments:

FORM V (Part 2) - IN

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** SHM-10-06-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-017

Concentration Units : ug/L

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
ARSENIC, TOTAL		1160		1160		0.1		P
CALCIUM, TOTAL		33300		33500		0.7		P
IRON, TOTAL		66100		66700		0.9		P
MAGNESIUM, TOTAL		9810		9730		0.8		P
MANGANESE, TOTAL		3000		3020		0.6		P
POTASSIUM, TOTAL		19300		19300		0.4		P
SODIUM, TOTAL		23000		23200		0.6		P

Comments:

FORM VD - IN

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** SHM-10-06-FF-EVENT#6

Matrix: WATER **SDG Name:** SP0783

Percent Solids: 0.00 **Lab Sample ID:** SP0783-018

Concentration Units : ug/L

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
ARSENIC, DISSOLVED		1120		1120		0.3		P
IRON, DISSOLVED		67300		65500		2.7		P
MANGANESE, DISSOLVED		2990		2910		2.8		P

Comments:

FORM VD - IN

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWPB22ICW1

Matrix: WATER **SDG Name:** SP0783

QC Batch ID: PB22ICW1

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ARSENIC	100	104	103.5	87	113
CALCIUM	2500	2650	105.8	87	113
IRON	1000	1090	109.3	87	115
MAGNESIUM	5000	5120	102.4	85	113
MANGANESE	500	532	106.4	90	114
POTASSIUM	10000	10400	103.7	86	114
SODIUM	7500	7940	105.9	87	115

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWPB22ICW2

Matrix: WATER **SDG Name:** SP0783

QC Batch ID: PB22ICW2

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ARSENIC	100	99.7	99.7	87	113
CALCIUM	2500	2600	103.8	87	113
IRON	1000	1060	106.5	87	115
MAGNESIUM	5000	4910	98.2	85	113
MANGANESE	500	517	103.5	90	114
POTASSIUM	10000	10200	101.6	86	114
SODIUM	7500	7790	103.9	87	115

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** SHM-10-06-EVENT#6L

Matrix: WATER **SDG Name:** SP0783

Lab Sample ID: SP0783-017L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ARSENIC, TOTAL	1050		1020		2.9		P
CALCIUM, TOTAL	30800		31400		1.9		P
IRON, TOTAL	65400		66600		1.8		P
MAGNESIUM, TOTAL	4800		4820		0.4		P
MANGANESE, TOTAL	2470		2530		2.4		P
POTASSIUM, TOTAL	9140		9190		0.5		P
SODIUM, TOTAL	15700		15800		0.6		P

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** SHM-10-06-FF-EVENT#6L

Matrix: WATER **SDG Name:** SP0783

Lab Sample ID: SP0783-018L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ARSENIC, DISSOLVED	968		958		1.0		P
IRON, DISSOLVED	62100		62700		1.0		P
MANGANESE, DISSOLVED	2330		2340		0.4		P

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 01/23/2019

Concentration Units: ug/L

Analyte	PQL/LOQ	IDL	M
ALUMINUM	300	10	P
ARSENIC	8.0	1.4	P
CALCIUM	100	11	P
IRON	100	3.6	P
MAGNESIUM	100	2.9	P
MANGANESE	5.0	0.87	P
POTASSIUM	1000	73	P
SODIUM	1000	12	P

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 06/11/2010

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ARSENIC	5.0	ug/L	P	SW846 3010A / SW846 6010C
CALCIUM	80	ug/L	P	SW846 3010A / SW846 6010C
IRON	80	ug/L	P	SW846 3010A / SW846 6010C
MAGNESIUM	80	ug/L	P	SW846 3010A / SW846 6010C
MANGANESE	4.0	ug/L	P	SW846 3010A / SW846 6010C
POTASSIUM	500	ug/L	P	SW846 3010A / SW846 6010C
SODIUM	500	ug/L	P	SW846 3010A / SW846 6010C

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 01/19/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ARSENIC	1.4	ug/L	P	SW846 3010A / SW846 6010C
CALCIUM	11	ug/L	P	SW846 3010A / SW846 6010C
IRON	5.4	ug/L	P	SW846 3010A / SW846 6010C
MAGNESIUM	7.8	ug/L	P	SW846 3010A / SW846 6010C
MANGANESE	1.1	ug/L	P	SW846 3010A / SW846 6010C
POTASSIUM	41	ug/L	P	SW846 3010A / SW846 6010C
SODIUM	24	ug/L	P	SW846 3010A / SW846 6010C

ICP INTERELEMENT CORRECTION FACTORS

Lab Name: Katahdin Analytical Services **SDG Name:** SP0783

Instrument Name: THERMO ICAP 6500 **Instrument ID:** I **Date:** 03/10/2021

Analyte	Wavelength (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	As	Cr	Co	Cu	Mn	Mo	Ni	Ti	V
ALUMINUM	396.15	0.0	0.0006250	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0293740	0.0	0.0	0.0
ANTIMONY	206.83	0.0000130	0.0	0.0000150	0.0	0.0000731	0.0160080	0.0	0.0	0.0	-0.0046490	-0.0008980	0.0	-0.0005030
ARSENIC	189.04	-0.0000090	0.0	-0.0001780	0.0	0.0	0.0001984	0.0	0.0	0.0	0.0015170	0.0	0.0	0.0
BARIUM	455.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BERYLLIUM	313.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0006836	0.0001220
BORON	208.96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0501700	0.0	0.0	0.0
CADMIUM	226.50	0.0	0.0	0.0000850	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0001140	0.0000801	0.0
CALCIUM	315.89	0.0	0.0	0.0	0.0	0.0	0.0026700	0.0008487	0.0	0.0	0.0	0.0	0.0	0.0
CHROMIUM	267.72	0.0	0.0	-0.0000010	0.0	0.0	0.0	0.0	0.0	0.0003640	0.0	0.0	0.0	-0.0000100
COBALT	228.62	0.0	0.0	0.0000050	0.0	0.0	0.0001670	0.0	0.0	0.0	0.0	0.0001562	0.0017840	0.0
COPPER	327.40	0.0000079	0.0	-0.0000147	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0006988	0.0004860
GOLD	242.79	0.0	0.0	0.0001110	0.0	0.0	0.0	0.0	0.0	0.0058700	0.0	0.0	0.0	0.0
IRON	259.94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LEAD	220.35	-0.0001590	0.0	0.0000440	0.0	0.0001480	-0.0000772	-0.0000860	0.0004910	0.0	-0.0010840	0.0003270	-0.0000220	0.0
LITHIUM	670.78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAGNESIUM	202.58	0.0	0.0	0.0000300	0.0	0.0	0.0	0.1395100	0.0	0.0	0.0145280	0.0	0.0003530	0.0
MANGANESE	257.61	-0.0000050	0.0	0.0000100	0.0000391	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MOLYBDENUM	202.03	0.0	0.0	0.0	0.0	0.0	0.0000270	0.0	0.0	-0.0000204	0.0	0.0	0.0	-0.0001163
NICKEL	231.60	0.0	0.0	-0.0000490	0.0	0.0	0.0	0.0000390	0.0	0.0	0.0034490	0.0	0.0	0.0
POTASSIUM	766.49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SELENIUM	196.09	0.0000090	0.0	0.0000320	0.0	0.0003180	0.0	0.0002310	0.0	0.0006280	0.0	0.0	0.0	0.0003040
SILICON	251.61	0.0	0.0	-0.0000150	0.0	0.0	0.0	0.0	0.0	0.0	0.0132630	0.0	0.0105540	0.0
SILVER	328.07	0.0	0.0	-0.0002820	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0008413	0.0
SODIUM	589.59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRONTIUM	421.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
THALLIUM	190.86	0.0000030	0.0	0.0000001	0.0	0.0	0.0	0.0023030	-0.0000680	-0.0024730	-0.0000880	0.0	-0.0009840	-0.0078940
TIN	189.99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TITANIUM	334.90	0.0	0.0	0.0	0.0	0.0	0.0001510	0.0	0.0	0.0	0.0002130	0.0	0.0	0.0
VANADIUM	292.40	0.0	0.0	0.0000120	0.0	0.0	-0.0053650	0.0	0.0	-0.0001670	-0.0037960	0.0	0.0006990	0.0
ZINC	206.20	0.0	0.0	0.0	0.0	0.0	-0.0010444	0.0	0.0	0.0	0.0	0.0	0.0	0.0

FORM XI - IN

ICP LINEAR RANGES

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 11/25/2020

Concentration Units: ug/L

Analyte	Integration Time (sec)	Linear Range	M
ALUMINUM	5.00	500000	P
ARSENIC	45.00	20000	P
CALCIUM	5.00	500000	P
IRON	5.00	250000	P
MAGNESIUM	45.00	200000	P
MANGANESE	5.00	20000	P
POTASSIUM	5.00	300000	P
SODIUM	5.00	200000	P

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** PB22ICW1

Matrix: WATER **SDG Name:** SP0783

Method: P **Prep Date:** 02/22/2022

Client ID	Lab Sample ID	Initial (L)	Final (L)	Bottle ID
LCSWPB22ICW1	LCSWPB22ICW1	0.05	0.05	
PBWPB22ICW1	PBWPB22ICW1	0.05	0.05	
MW-21-2S-EVENT#6	SP0783-001	0.05	0.05	C
MW-21-2S-FF-EVENT#6	SP0783-002	0.05	0.05	C
MW-21-2D-EVENT#6	SP0783-003	0.05	0.05	E
MW-21-2D-FF-EVENT#6	SP0783-004	0.05	0.05	C
MW-21-1D-EVENT#6	SP0783-005	0.05	0.05	C
MW-21-1D-FF-EVENT#6	SP0783-006	0.05	0.05	C
MW-21-1S-EVENT#6	SP0783-007	0.05	0.05	C
MW-21-1S-FF-EVENT#6	SP0783-008	0.05	0.05	C
MW-21-3S-EVENT#6	SP0783-009	0.05	0.05	C
MW-21-3S-FF-EVENT#6	SP0783-010	0.05	0.05	C
MW-21-3D-EVENT#6	SP0783-011	0.05	0.05	C
MW-21-3D-FF-EVENT#6	SP0783-012	0.05	0.05	C
AS-DUP-EVENT#6	SP0783-013	0.05	0.05	C
AS-DUP-FF-EVENT#6	SP0783-014	0.05	0.05	C
MW-21-4D-EVENT#6	SP0783-015	0.05	0.05	C
MW-21-4D-FF-EVENT#6	SP0783-016	0.05	0.05	C
SHM-10-06-EVENT#6	SP0783-017	0.05	0.05	D
SHM-10-06-EVENT#6P	SP0783-017P	0.05	0.05	D
SHM-10-06-EVENT#6S	SP0783-017S	0.05	0.05	D

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** PB22ICW2

Matrix: WATER **SDG Name:** SP0783

Method: P **Prep Date:** 02/22/2022

Client ID	Lab Sample ID	Initial (L)	Final (L)	Bottle ID
LCSWPB22ICW2	LCSWPB22ICW2	0.05	0.05	
PBWPB22ICW2	PBWPB22ICW2	0.05	0.05	
SHM-10-06-FF-EVENT#6	SP0783-018	0.05	0.05	G
SHM-10-06-FF-EVENT#6P	SP0783-018P	0.05	0.05	G
SHM-10-06-FF-EVENT#6S	SP0783-018S	0.05	0.05	G
MW-21-4S-EVENT#6	SP0783-019	0.05	0.05	C
MW-21-4S-FF-EVENT#6	SP0783-020	0.05	0.05	C

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SP0783

Instrument ID: THERMO ICAP 6500 **File Name:** IPB23A

Date: 02/23/2022 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements						
Blank		1	12:55	AL	AS	CA	FE	MG MN	K	NA
Std 1		1	12:59	AL	AS	CA	FE	MG MN	K	NA
ICV		1	13:03	AL	AS	CA	FE	MG MN	K	NA
ICB		1	13:07	AL	AS	CA	FE	MG MN	K	NA
PQL		1	13:12	AL	AS	CA	FE	MG MN	K	NA
ICSA		1	13:16	AL	AS	CA	FE	MG MN	K	NA
ICSAB		1	13:21	AL	AS	CA	FE	MG MN	K	NA
CCV		1	13:25	AL	AS	CA	FE	MG MN	K	NA
CCB		1	13:29	AL	AS	CA	FE	MG MN	K	NA
ZZZZZZ		1	13:34							
ZZZZZZ		1	13:38							
CCV		1	13:42	AL	AS	CA	FE	MG MN	K	NA
CCB		1	13:47	AL	AS	CA	FE	MG MN	K	NA
ZZZZZZ		1	13:51							
ZZZZZZ		1	13:55							
LCSWPB22ICW1		1	14:00		AS	CA	FE	MG MN	K	NA
PBWPB22ICW1		1	14:04		AS	CA	FE	MG MN	K	NA
LCSWPB22ICW2		1	14:08		AS	CA	FE	MG MN	K	NA
PBWPB22ICW2		1	14:12		AS	CA	FE	MG MN	K	NA
ZZZZZZ		1	14:17							
ZZZZZZ		1	14:21							
ZZZZZZ		5	14:26							
ZZZZZZ		5	14:30							
CCV		1	14:34	AL	AS	CA	FE	MG MN	K	NA
CCB		1	14:38	AL	AS	CA	FE	MG MN	K	NA
ZZZZZZ		5	14:43							
ZZZZZZ		1	14:47							

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SP0783

Instrument ID: THERMO ICAP 6500 **File Name:** IPB23A

Date: 02/23/2022 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements						
ZZZZZZ		1	14:52							
ZZZZZZ		1	14:56							
ZZZZZZ		1	15:00							
ZZZZZZ		5	15:04							
ZZZZZZ		1	15:09							
ZZZZZZ		1	15:13							
ZZZZZZ		1	15:17							
ZZZZZZ		1	15:21							
CCV		1	15:26	AL	AS	CA	FE	MG MN	K	NA
CCB		1	15:30	AL	AS	CA	FE	MG MN	K	NA
ZZZZZZ		1	15:34							
ZZZZZZ		1	15:39							
ZZZZZZ		1	15:43							
ZZZZZZ		1	15:47							
ZZZZZZ		1	15:52							
ZZZZZZ		1	15:56							
ZZZZZZ		1	16:00							
SP0783-001	MW-21-2S-EVENT#6	1	16:05		AS	CA	FE	MG MN	K	NA
SP0783-002	MW-21-2S-FF-EVENT#6	1	16:09		AS		FE	MN		
SP0783-003	MW-21-2D-EVENT#6	1	16:13		AS	CA	FE	MG MN	K	NA
CCV		1	16:18	AL	AS	CA	FE	MG MN	K	NA
CCB		1	16:22	AL	AS	CA	FE	MG MN	K	NA
SP0783-004	MW-21-2D-FF-EVENT#6	1	16:26		AS		FE	MN		
SP0783-005	MW-21-1D-EVENT#6	1	16:31		AS	CA	FE	MG MN	K	NA
SP0783-006	MW-21-1D-FF-EVENT#6	1	16:35		AS		FE	MN		
SP0783-007	MW-21-1S-EVENT#6	1	16:39		AS	CA	FE	MG MN	K	NA
SP0783-008	MW-21-1S-FF-EVENT#6	1	16:44		AS		FE	MN		

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SP0783

Instrument ID: THERMO ICAP 6500 **File Name:** IPB23A

Date: 02/23/2022 **Method:** P

Lab Sample ID	Client ID	D.F.	Time		Elements					
SP0783-009	MW-21-3S-EVENT#6	1	16:48		AS	CA	FE	MG MN	K	NA
SP0783-010	MW-21-3S-FF-EVENT#6	1	16:52		AS		FE	MN		
SP0783-011	MW-21-3D-EVENT#6	1	16:57		AS	CA	FE	MG MN	K	NA
SP0783-012	MW-21-3D-FF-EVENT#6	1	17:01		AS		FE	MN		
SP0783-013	AS-DUP-EVENT#6	1	17:05		AS	CA	FE	MG MN	K	NA
CCV		1	17:10	AL	AS	CA	FE	MG MN	K	NA
CCB		1	17:14	AL	AS	CA	FE	MG MN	K	NA
SP0783-014	AS-DUP-FF-EVENT#6	1	17:18		AS		FE	MN		
SP0783-015	MW-21-4D-EVENT#6	1	17:23		AS	CA	FE	MG MN	K	NA
SP0783-016	MW-21-4D-FF-EVENT#6	1	17:27		AS		FE	MN		
SP0783-017	SHM-10-06-EVENT#6	1	17:31		AS	CA	FE	MG MN	K	NA
SP0783-017L	SHM-10-06-EVENT#6L	5	17:36		AS	CA	FE	MG MN	K	NA
SP0783-017A	SHM-10-06-EVENT#6A	1	17:40		AS	CA	FE	MG MN	K	NA
SP0783-017P	SHM-10-06-EVENT#6P	1	17:44		AS	CA	FE	MG MN	K	NA
SP0783-017S	SHM-10-06-EVENT#6S	1	17:48		AS	CA	FE	MG MN	K	NA
ZZZZZZ		1	17:53							
ZZZZZZ		1	17:57							
CCV		1	18:01	AL	AS	CA	FE	MG MN	K	NA
CCB		1	18:06	AL	AS	CA	FE	MG MN	K	NA
SP0783-018	SHM-10-06-FF-EVENT#6	1	18:10		AS		FE	MN		
SP0783-018L	SHM-10-06-FF-EVENT#6L	5	18:14		AS		FE	MN		
SP0783-018A	SHM-10-06-FF-EVENT#6A	1	18:19		AS		FE	MN		
SP0783-018P	SHM-10-06-FF-EVENT#6P	1	18:23		AS		FE	MN		
SP0783-018S	SHM-10-06-FF-EVENT#6S	1	18:27		AS		FE	MN		
SP0783-019	MW-21-4S-EVENT#6	1	18:31		AS	CA	FE	MG MN	K	NA
SP0783-020	MW-21-4S-FF-EVENT#6	1	18:36		AS		FE	MN		
ZZZZZZ		1	18:40							

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SP0783

Instrument ID: THERMO ICAP 6500 **File Name:** IPB23A

Date: 02/23/2022 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements						
ZZZZZZ		1	18:44							
CCV		1	18:49	AL	AS	CA	FE	MG MN	K	NA
CCB		1	18:53	AL	AS	CA	FE	MG MN	K	NA

Raw Data Section

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: I (Thermo iCAP 6500) **ANALYST**: JT **ANALYSIS DATE**: 02/23/2022

METHOD: **ICP**
- ☑ 200.7
- ☑ 6010
- ☒ DOD
- ☐ _____

FILE NAME: IPB23A

REVIEWED
2/24/22
KATAHDIN ANALYTICAL
METALS SECTION

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by JT (initals) on 2/23/22 (date).

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW20824	02/21/2022	02/21/2023	0 ug/L
Standard 1	MW20815	02/16/2022	04/08/2022	Varies by Element
ICV	MW20831	02/23/2022	05/23/2022	Varies by Element
PQL	MW20799	02/01/2022	03/22/2022	Varies by Element
LRS1	MW20774	01/18/2022	02/12/2022	Varies by Element
LRS2	MW20775	01/18/2022	04/08/2022	Varies by Element
ICSA	MW20821	02/21/2022	05/02/2022	Varies by Element
ICSAB	MW20812	02/14/2022	04/08/2022	Varies by Element
CCV	MW20820	02/21/2022	04/08/2022	Varies by Element
Internal Standard	MW20803	02/02/2022	05/02/2022	5.0 mg/L Yttrium

Additional Comments and Notes:

2/24/22

Dilutions: Some samples were diluted based on history or due to interfering element concentrations.

Dilution preparations are as follows:

5x diln.: 2.0 mL of sample (pipet M25) + 8.0 mL of MW20824 (pipet M25)

Post Spike: 0.123mL MW20830 (pipet M27) to 6.0mL of sample (pipet M29)

INSTRUMENT RUNLOG

Instrument: ICAP 6500

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
Blank	1.000	IPB23A	02/23/2022	12:55	JT
Std 1	1.000	IPB23A	02/23/2022	12:59	JT
ICV	1.000	IPB23A	02/23/2022	13:03	JT
ICB	1.000	IPB23A	02/23/2022	13:07	JT
PQL	1.000	IPB23A	02/23/2022	13:12	JT
ICSA	1.000	IPB23A	02/23/2022	13:16	JT
ICSAB	1.000	IPB23A	02/23/2022	13:21	JT
CCV	1.000	IPB23A	02/23/2022	13:25	JT
CCB	1.000	IPB23A	02/23/2022	13:29	JT
LRS1	1.000	IPB23A	02/23/2022	13:34	JT
LRS2	1.000	IPB23A	02/23/2022	13:38	JT
CCV	1.000	IPB23A	02/23/2022	13:42	JT
CCB	1.000	IPB23A	02/23/2022	13:47	JT
LCSOPB22ICS1	1.000	IPB23A	02/23/2022	13:51	JT
PBSPB22ICS1	1.000	IPB23A	02/23/2022	13:55	JT
LCSWPB22ICW1	1.000	IPB23A	02/23/2022	14:00	JT
PBWPB22ICW1	1.000	IPB23A	02/23/2022	14:04	JT
LCSWPB22ICW2	1.000	IPB23A	02/23/2022	14:08	JT
PBWPB22ICW2	1.000	IPB23A	02/23/2022	14:12	JT
PBT1729A	1.000	IPB23A	02/23/2022	14:17	JT
SP0809-001	1.000	IPB23A	02/23/2022	14:21	JT
SO7863-031	5.000	IPB23A	02/23/2022	14:26	JT
SO7947-006	5.000	IPB23A	02/23/2022	14:30	JT
CCV	1.000	IPB23A	02/23/2022	14:34	JT
CCB	1.000	IPB23A	02/23/2022	14:38	JT
SO8048-005	5.000	IPB23A	02/23/2022	14:43	JT
SP0701-001	1.000	IPB23A	02/23/2022	14:47	JT
SP0747-001	1.000	IPB23A	02/23/2022	14:52	JT
SP0781-001	1.000	IPB23A	02/23/2022	14:56	JT
SP0787-001	1.000	IPB23A	02/23/2022	15:00	JT
SP0787-001L	5.000	IPB23A	02/23/2022	15:04	JT
SP0787-001A	1.000	IPB23A	02/23/2022	15:09	JT
SP0787-001P	1.000	IPB23A	02/23/2022	15:13	JT
SP0787-001S	1.000	IPB23A	02/23/2022	15:17	JT
SP0787-003	1.000	IPB23A	02/23/2022	15:21	JT
CCV	1.000	IPB23A	02/23/2022	15:26	JT
CCB	1.000	IPB23A	02/23/2022	15:30	JT
SP0787-004	1.000	IPB23A	02/23/2022	15:34	JT
SP0787-005	1.000	IPB23A	02/23/2022	15:39	JT
SP0787-006	1.000	IPB23A	02/23/2022	15:43	JT
SP0787-007	1.000	IPB23A	02/23/2022	15:47	JT
SP0787-008	1.000	IPB23A	02/23/2022	15:52	JT
SP0789-001	1.000	IPB23A	02/23/2022	15:56	JT
SP0789-002	1.000	IPB23A	02/23/2022	16:00	JT

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SP0783-001	1.000	IPB23A	02/23/2022	16:05	JT
SP0783-002	1.000	IPB23A	02/23/2022	16:09	JT
SP0783-003	1.000	IPB23A	02/23/2022	16:13	JT
CCV	1.000	IPB23A	02/23/2022	16:18	JT
CCB	1.000	IPB23A	02/23/2022	16:22	JT
SP0783-004	1.000	IPB23A	02/23/2022	16:26	JT
SP0783-005	1.000	IPB23A	02/23/2022	16:31	JT
SP0783-006	1.000	IPB23A	02/23/2022	16:35	JT
SP0783-007	1.000	IPB23A	02/23/2022	16:39	JT
SP0783-008	1.000	IPB23A	02/23/2022	16:44	JT
SP0783-009	1.000	IPB23A	02/23/2022	16:48	JT
SP0783-010	1.000	IPB23A	02/23/2022	16:52	JT
SP0783-011	1.000	IPB23A	02/23/2022	16:57	JT
SP0783-012	1.000	IPB23A	02/23/2022	17:01	JT
SP0783-013	1.000	IPB23A	02/23/2022	17:05	JT
CCV	1.000	IPB23A	02/23/2022	17:10	JT
CCB	1.000	IPB23A	02/23/2022	17:14	JT
SP0783-014	1.000	IPB23A	02/23/2022	17:18	JT
SP0783-015	1.000	IPB23A	02/23/2022	17:23	JT
SP0783-016	1.000	IPB23A	02/23/2022	17:27	JT
SP0783-017	1.000	IPB23A	02/23/2022	17:31	JT
SP0783-017L	5.000	IPB23A	02/23/2022	17:36	JT
SP0783-017A	1.000	IPB23A	02/23/2022	17:40	JT
SP0783-017P	1.000	IPB23A	02/23/2022	17:44	JT
SP0783-017S	1.000	IPB23A	02/23/2022	17:48	JT
SP0652-001	1.000	IPB23A	02/23/2022	17:53	JT
SP0653-001	1.000	IPB23A	02/23/2022	17:57	JT
CCV	1.000	IPB23A	02/23/2022	18:01	JT
CCB	1.000	IPB23A	02/23/2022	18:06	JT
SP0783-018	1.000	IPB23A	02/23/2022	18:10	JT
SP0783-018L	5.000	IPB23A	02/23/2022	18:14	JT
SP0783-018A	1.000	IPB23A	02/23/2022	18:19	JT
SP0783-018P	1.000	IPB23A	02/23/2022	18:23	JT
SP0783-018S	1.000	IPB23A	02/23/2022	18:27	JT
SP0783-019	1.000	IPB23A	02/23/2022	18:31	JT
SP0783-020	1.000	IPB23A	02/23/2022	18:36	JT
SP0780-002	1.000	IPB23A	02/23/2022	18:40	JT
SP0781-002	1.000	IPB23A	02/23/2022	18:44	JT
CCV	1.000	IPB23A	02/23/2022	18:49	JT
CCB	1.000	IPB23A	02/23/2022	18:53	JT
PQL	1.000	IPB23A	02/23/2022	18:57	JT
ICSA	1.000	IPB23A	02/23/2022	19:02	JT
ICSAB	1.000	IPB23A	02/23/2022	19:06	JT
CCV	1.000	IPB23A	02/23/2022	19:11	JT
CCB	1.000	IPB23A	02/23/2022	19:15	JT

Intensity Report

Author:

Published: 2/24/2022 12:50:06PM

Notes:

Blank

Method Name: FAST-2016_NO_AU Method Revision: 1,102

Analyst Name: JT

Acquire Date: 2/23/2022 12:55:05PM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.0001160	Cts/S	0.00002600	22.25	-22.90
Al3961_R		0.0004330	Cts/S	0.0001600	37.05	8.591
As1891_A		-0.0002330	Cts/S	0.00003600	15.64	-2.413
B_2089_A		0.0005900	Cts/S	0.00001100	1.872	6.107
Ba4554_R		0.00002200	Cts/S	0.00001100	49.76	0.4449
Be3130_R		0.0002510	Cts/S	0.0003030	120.5	4.993
Ca3158_R		-0.001068	Cts/S	0.00008800	8.241	-21.19
Cd2265_A		-0.00006700	Cts/S	0.00002500	36.93	-0.6931
Co2286_A		0.0001430	Cts/S	0.000003000	1.840	1.476
Cr2677_A		0.00003400	Cts/S	0.000005000	14.79	6.811
Cu3273_A		-0.00005700	Cts/S	0.00001800	30.65	-11.33
Fe2599_R		0.0003430	Cts/S	0.00002200	6.380	6.802
K_7664_R		-0.004361	Cts/S	0.00006200	1.429	-86.51
Li6707_R		-0.001247	Cts/S	0.0002640	21.14	-24.74
Mg2025_A		-0.0007870	Cts/S	0.00003800	4.820	-8.139
Mn2576_R		0.00007600	Cts/S	0.0001820	241.1	1.495
Mo2020_A		-0.00002000	Cts/S	0.00002200	110.2	-0.2055
Na5895_R		0.0003600	Cts/S	0.0001020	28.24	7.148
Ni2316_A		-0.0001060	Cts/S	0.000004000	4.131	-1.101
Pb2203_A		-0.0001490	Cts/S	0.00005700	38.41	-1.541
Sb2068_A		0.00009500	Cts/S	0.000008000	8.780	0.9855
Se1960_A		0.0001640	Cts/S	0.00005500	33.19	1.701
Si2516_R		0.003252	Cts/S	0.0004190	12.90	64.50
Sn1899_A		0.0001460	Cts/S	0.00002800	19.56	1.506
Sr4215_R		-0.001159	Cts/S	0.00005000	4.348	-22.99
Ti3349_A		-0.00007500	Cts/S	0.00003800	51.16	-14.84
Tl1908_A		-0.0001920	Cts/S	0.000006000	2.944	-1.983
V_2924_A		-0.00003200	Cts/S	0.00001400	44.44	-6.271
Zn2062_A		0.000004000	Cts/S	0.00003800	981.4	-0.03984
Y_3600_R		19,838	Cts/S	60.552	0.30523	19,838
Y_2243_A		10,344	Cts/S	6.1484	0.059441	10,344
Y_3600_A		198,220	Cts/S	1,078.7	0.54421	198,220

Std 1

Method Name: FAST-2016_NO_AU Method Revision: 1,102

Analyst Name: JT

Acquire Date: 2/23/2022 12:59:29PM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1181	Cts/S	0.001046	0.8861	21,660
Al3961_R		1.455	Cts/S	0.00007300	0.005028	28,010
As1891_A		0.04019	Cts/S	0.0005770	1.435	395.7
B_2089_A		0.1640	Cts/S	0.002698	1.645	1,614
Ba4554_R		3.287	Cts/S	0.007470	0.2273	63,250
Be3130_R		4.863	Cts/S	0.003753	0.07716	93,600
Ca3158_R		1.690	Cts/S	0.003410	0.2018	32,520
Cd2265_A		1.439	Cts/S	0.02442	1.697	14,170
Co2286_A		0.4476	Cts/S	0.009232	2.062	4,407
Cr2677_A		0.07928	Cts/S	0.0008720	1.100	14,540
Cu3273_A		0.08095	Cts/S	0.0008900	1.099	14,850
Fe2599_R		2.360	Cts/S	0.004541	0.1924	45,420
K_7664_R		0.8917	Cts/S	0.002679	0.3004	17,160
Li6707_R		0.7208	Cts/S	0.0009270	0.1286	13,870

Std 1

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 12:59:29PM
Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Mg2025_A		0.9432	Cts/S	0.01815	1.924	9,286
Mn2576_R		0.5272	Cts/S	0.001477	0.2802	10,150
Mo2020_A		0.3578	Cts/S	0.006336	1.771	3,523
Na5895_R		2.875	Cts/S	0.007213	0.2509	55,340
Ni2316_A		0.1942	Cts/S	0.003207	1.651	1,912
Pb2203_A		0.1107	Cts/S	0.001748	1.579	1,090
Sb2068_A		0.06056	Cts/S	0.001263	2.086	596.2
Se1960_A		0.03127	Cts/S	0.0005690	1.821	307.9
Si2516_R		0.6547	Cts/S	0.01351	2.063	12,600
Sn1899_A		0.05464	Cts/S	0.001184	2.167	537.9
Sr4215_R		4.517	Cts/S	0.005042	0.1116	86,930
Ti3349_A		0.1793	Cts/S	0.001708	0.9528	32,890
Tl1908_A		0.06337	Cts/S	0.001198	1.891	623.9
V_2924_A		0.07937	Cts/S	0.0007500	0.9447	14,560
Zn2062_A		0.3100	Cts/S	0.005081	1.639	3,052
Y_3600_R		19,246	Cts/S	138.04	0.71725	19,246
Y_2243_A		9,846.5	Cts/S	129.25	1.3127	9,846.5
Y_3600_A		183,460	Cts/S	1,038.5	0.56608	183,460

ICV

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 1:03:35PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	W	368.6	ug/L	1.184	0.3211	8,420
Al3961_R		9,855	ug/L	42.48	0.4310	11,110
As1891_A	W	368.0	ug/L	0.4255	0.1156	149.2
B_2089_A	W	375.8	ug/L	0.5828	0.1551	632.7
Ba4554_R		395.0	ug/L	0.1393	0.03525	25,120
Be3130_R		398.9	ug/L	1.959	0.4911	37,540
Ca3158_R		9,999	ug/L	8.426	0.08427	13,060
Cd2265_A		385.5	ug/L	0.01542	0.003999	5,656
Co2286_A		392.3	ug/L	0.8037	0.2048	1,791
Cr2677_A	W	376.1	ug/L	1.788	0.4753	5,782
Cu3273_A	W	374.8	ug/L	0.03074	0.008201	5,873
Fe2599_R		10,010	ug/L	20.83	0.2080	18,290
K_7664_R		13,390	ug/L	13.79	0.1030	9,202
Li6707_R		395.7	ug/L	0.4781	0.1208	5,504
Mg2025_A		9,538	ug/L	5.323	0.05581	3,664
Mn2576_R		392.5	ug/L	1.621	0.4130	4,005
Mo2020_A		398.2	ug/L	0.1111	0.02790	1,452
Na5895_R		10,000	ug/L	12.11	0.1210	22,270
Ni2316_A		390.9	ug/L	0.2311	0.05912	773.3
Pb2203_A		390.4	ug/L	0.04472	0.01145	439.7
Sb2068_A	W	377.7	ug/L	0.5908	0.1564	233.7
Se1960_A		379.1	ug/L	1.402	0.3698	121.9
Si2516_R		10,170	ug/L	194.4	1.911	5,093
Sn1899_A		385.3	ug/L	1.642	0.4262	215.5
Sr4215_R		401.0	ug/L	0.06036	0.01505	35,030
Ti3349_A		379.4	ug/L	1.324	0.3491	13,170
Tl1908_A		389.8	ug/L	0.1228	0.03150	250.6
V_2924_A	W	378.4	ug/L	2.282	0.6032	5,814
Zn2062_A		386.6	ug/L	0.1807	0.04675	1,222
Y_3600_R		19,351	Cts/S	116.18	0.60039	19,351
Y_2243_A		10,193	Cts/S	5.2280	0.051290	10,193
Y_3600_A		193,790	Cts/S	891.16	0.45987	193,790

ICB

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 1:07:45PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.02299	ug/L	0.2162	940.5	-23.12
Al3961_R		3.972	ug/L	5.466	137.6	13.03
As1891_A		0.3317	ug/L	0.7871	237.3	-2.224
B_2089_A		0.7164	ug/L	0.1403	19.58	7.153
Ba4554_R		0.2382	ug/L	0.01546	6.491	15.71
Be3130_R		0.1443	ug/L	0.02305	15.97	18.53
Ca3158_R		3.205	ug/L	1.296	40.42	-16.57
Cd2265_A		0.02767	ug/L	0.04557	164.7	-0.2577
Co2286_A		0.02210	ug/L	0.09826	444.7	1.547
Cr2677_A		0.2121	ug/L	0.04107	19.36	9.998
Cu3273_A		-0.3868	ug/L	0.006045	1.563	-17.29
Fe2599_R		7.377	ug/L	2.376	32.20	20.20
K_7664_R		26.23	ug/L	11.36	43.31	-66.76
Li6707_R		1.016	ug/L	1.476	145.3	-10.27
Mg2025_A		-0.2402	ug/L	1.976	822.7	-8.047
Mn2576_R		0.3302	ug/L	0.2055	62.24	4.891
Mo2020_A		0.5898	ug/L	0.05670	9.613	1.935
Na5895_R		11.74	ug/L	6.663	56.75	33.15
Ni2316_A		0.07278	ug/L	0.1342	184.4	-0.9267
Pb2203_A		0.6000	ug/L	0.05016	8.360	-0.8340
Sb2068_A		-0.4699	ug/L	0.7200	153.2	0.6715
Se1960_A		1.395	ug/L	0.9602	68.83	2.102
Si2516_R		68.06	ug/L	39.48	58.02	97.01
Sn1899_A		0.5519	ug/L	0.2327	42.16	1.777
Sr4215_R		0.1198	ug/L	0.06105	50.95	-12.10
Ti3349_A		0.4706	ug/L	0.1624	34.51	1.911
Tl1908_A		0.9282	ug/L	0.5639	60.75	-1.345
V_2924_A		0.2577	ug/L	0.2978	115.6	-2.236
Zn2062_A		0.04268	ug/L	0.07874	184.5	0.09430
Y_3600_R		19,489	Cts/S	478.58	2.4556	19,489
Y_2243_A		10,117	Cts/S	7.6420	0.075537	10,117
Y_3600_A		195,390	Cts/S	1,745.1	0.89315	195,390

PQL

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 1:12:09PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		9.476	ug/L	0.07165	0.7562	198.8
Al3961_R		297.4	ug/L	6.013	2.022	346.1
As1891_A		9.406	ug/L	0.2542	2.703	1.529
B_2089_A		47.11	ug/L	0.1656	0.3516	84.51
Ba4554_R		5.188	ug/L	0.1340	2.583	333.3
Be3130_R		5.035	ug/L	0.1689	3.355	482.5
Ca3158_R		102.6	ug/L	3.411	3.323	114.6
Cd2265_A		5.008	ug/L	0.02534	0.5059	73.89
Co2286_A		10.16	ug/L	0.001874	0.01845	48.58
Cr2677_A		9.803	ug/L	0.08243	0.8409	160.3
Cu3273_A		24.19	ug/L	0.02245	0.09282	375.5
Fe2599_R		101.1	ug/L	3.598	3.557	193.0
K_7664_R		1,005	ug/L	29.88	2.972	618.2
Li6707_R		98.22	ug/L	3.498	3.562	1,360
Mg2025_A		102.4	ug/L	1.376	1.343	32.28
Mn2576_R		5.156	ug/L	0.2645	5.129	54.50
Mo2020_A		10.09	ug/L	0.08923	0.8845	37.19
Na5895_R		1,011	ug/L	33.53	3.316	2,277
Ni2316_A		10.20	ug/L	0.1015	0.9946	19.45

PQL

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 1:12:09PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		5.974	ug/L	0.1567	2.623	5.299
Sb2068_A		6.796	ug/L	0.2249	3.309	4.636
Se1960_A		9.250	ug/L	1.677	18.13	4.681
Si2516_R		205.9	ug/L	25.81	12.54	166.1
Sn1899_A		99.59	ug/L	1.456	1.462	57.71
Sr4215_R		10.11	ug/L	0.3492	3.453	868.9
Ti3349_A		14.53	ug/L	0.2489	1.713	500.0
Tl1908_A		16.32	ug/L	0.07250	0.4443	8.747
V_2924_A		9.348	ug/L	0.1879	2.010	140.4
Zn2062_A		19.73	ug/L	0.09654	0.4893	63.33
Y_3600_R		19,526	Cts/S	559.72	2.8665	19,526
Y_2243_A		10,356	Cts/S	20.256	0.19559	10,356
Y_3600_A		197,630	Cts/S	468.12	0.23687	197,630

ICSA

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 1:16:31PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.5895	ug/L	0.9515	161.4	-426.1
Al3961_R		536,900	ug/L	304.4	0.05670	547,600
As1891_A		3.335	ug/L	3.128	93.78	-12.89
B_2089_A		-0.1738	ug/L	0.07244	41.69	4.715
Ba4554_R	W	2.516	ug/L	0.03614	1.437	145.5
Be3130_R		-0.05654	ug/L	0.01235	21.84	-0.2969
Ca3158_R		509,200	ug/L	1,288	0.2530	604,300
Cd2265_A		-1.037	ug/L	1.278	123.2	400.9
Co2286_A		-0.04583	ug/L	0.02877	62.77	4.449
Cr2677_A		2.506	ug/L	0.04541	1.812	60.33
Cu3273_A		-3.067	ug/L	0.1206	3.931	-20.81
Fe2599_R		199,000	ug/L	778.7	0.3913	329,600
K_7664_R		-17.13	ug/L	2.546	14.86	-87.30
Li6707_R		4.757	ug/L	0.2346	4.931	38.38
Mg2025_A		445,900	ug/L	14,510	3.254	142,000
Mn2576_R		0.09710	ug/L	0.7208	742.3	5.586
Mo2020_A		-2.138	ug/L	0.3589	16.79	-6.655
Na5895_R		61.37	ug/L	13.99	22.79	130.2
Ni2316_A		-3.017	ug/L	0.06224	2.063	-17.83
Pb2203_A		1.784	ug/L	3.032	169.9	-39.58
Sb2068_A		-0.9890	ug/L	0.6568	66.41	4.573
Se1960_A		0.1550	ug/L	0.8094	522.3	5.720
Si2516_R		27.75	ug/L	7.011	25.26	42.39
Sn1899_A		9.678	ug/L	0.8460	8.741	5.720
Sr4215_R		4.748	ug/L	0.05389	1.135	356.1
Ti3349_A		1.466	ug/L	0.03936	2.684	29.52
Tl1908_A		-0.2498	ug/L	0.8004	320.4	-1.060
V_2924_A		3.530	ug/L	0.1505	4.265	33.15
Zn2062_A		1.193	ug/L	0.6056	50.76	3.086
Y_3600_R		17,549	Cts/S	78.749	0.44873	17,549
Y_2243_A		8,492.4	Cts/S	202.39	2.3832	8,492.4
Y_3600_A		157,200	Cts/S	75.727	0.048172	157,200

ICSAB

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 1:21:05PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

ICSAB

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 1:21:05PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		204.2	ug/L	6.159	3.017	3,622
Al3961_R		489,400	ug/L	4,436	0.9064	535,600
As1891_A		98.58	ug/L	0.1458	0.1479	21.66
B_2089_A		475.8	ug/L	4.614	0.9697	683.2
Ba4554_R		484.4	ug/L	3.838	0.7923	29,980
Be3130_R		476.3	ug/L	4.697	0.9861	43,630
Ca3158_R		458,000	ug/L	3,680	0.8036	583,300
Cd2265_A		913.2	ug/L	7.784	0.8524	11,800
Co2286_A		446.1	ug/L	5.004	1.122	1,746
Cr2677_A		453.5	ug/L	10.54	2.324	6,006
Cu3273_A		498.6	ug/L	13.06	2.619	6,727
Fe2599_R		180,000	ug/L	1,384	0.7688	319,900
K_7664_R		20,350	ug/L	133.2	0.6544	13,660
Li6707_R		518.6	ug/L	4.457	0.8594	7,029
Mg2025_A		429,500	ug/L	4,849	1.129	140,600
Mn2576_R		450.9	ug/L	0.5977	0.1326	4,491
Mo2020_A		468.9	ug/L	4.979	1.062	1,464
Na5895_R		20,470	ug/L	207.3	1.013	44,330
Ni2316_A		881.6	ug/L	9.706	1.101	1,479
Pb2203_A		44.32	ug/L	1.326	2.992	3.825
Sb2068_A		596.9	ug/L	8.254	1.383	319.8
Se1960_A		49.10	ug/L	4.340	8.840	18.80
Si2516_R		1,861	ug/L	5.991	0.3219	933.8
Sn1899_A		458.1	ug/L	5.677	1.239	219.1
Sr4215_R		489.6	ug/L	4.289	0.8759	41,640
Ti3349_A		466.7	ug/L	12.87	2.757	13,910
Tl1908_A		81.44	ug/L	1.116	1.370	44.63
V_2924_A		464.2	ug/L	8.826	1.901	6,122
Zn2062_A		903.8	ug/L	7.593	0.8400	2,446
Y_3600_R		18,833	Cts/S	73.913	0.39246	18,833
Y_2243_A		8,724.6	Cts/S	82.349	0.94387	8,724.6
Y_3600_A		166,410	Cts/S	3,009.4	1.8085	166,410

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 1:25:32PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		488.5	ug/L	0.8766	0.1795	10,920
Al3961_R		12,730	ug/L	57.93	0.4550	14,310
As1891_A		489.4	ug/L	6.888	1.408	197.4
B_2089_A		496.4	ug/L	7.325	1.476	825.3
Ba4554_R		509.5	ug/L	0.2228	0.04374	32,320
Be3130_R		511.3	ug/L	0.5622	0.1100	47,990
Ca3158_R		12,740	ug/L	27.88	0.2188	16,610
Cd2265_A		496.2	ug/L	6.861	1.383	7,215
Co2286_A		497.0	ug/L	6.615	1.331	2,248
Cr2677_A		490.1	ug/L	0.6157	0.1256	7,368
Cu3273_A		494.9	ug/L	0.1221	0.02468	7,589
Fe2599_R		12,810	ug/L	36.55	0.2854	23,330
K_7664_R		12,660	ug/L	38.33	0.3029	8,670
Li6707_R		504.7	ug/L	0.2148	0.04257	7,010
Mg2025_A		12,460	ug/L	184.0	1.477	4,743
Mn2576_R		505.4	ug/L	1.488	0.2945	5,143
Mo2020_A		496.3	ug/L	7.229	1.456	1,794
Na5895_R		12,740	ug/L	10.94	0.08586	28,290
Ni2316_A		501.8	ug/L	5.896	1.175	983.9

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 1:25:32PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		502.6	ug/L	7.335	1.459	561.4
Sb2068_A		488.6	ug/L	4.850	0.9927	299.4
Se1960_A		489.4	ug/L	6.779	1.385	155.4
Si2516_R		12,690	ug/L	171.5	1.351	6,321
Sn1899_A		490.4	ug/L	5.391	1.099	271.4
Sr4215_R		511.5	ug/L	0.5206	0.1018	44,580
Ti3349_A		487.4	ug/L	0.2457	0.05041	16,560
Tl1908_A		506.6	ug/L	7.076	1.397	323.3
V_2924_A		486.7	ug/L	1.720	0.3535	7,319
Zn2062_A		494.9	ug/L	7.499	1.515	1,550
Y_3600_R		19,301	Cts/S	102.06	0.52880	19,301
Y_2243_A		10,102	Cts/S	108.23	1.0714	10,102
Y_3600_A		189,570	Cts/S	167.94	0.088591	189,570

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 1:29:41PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.3797	ug/L	0.1667	43.89	-31.05
Al3961_R		12.63	ug/L	0.6244	4.944	22.19
As1891_A		0.7408	ug/L	0.8401	113.4	-2.049
B_2089_A		0.7100	ug/L	0.08972	12.64	7.120
Ba4554_R		-0.03166	ug/L	0.1231	389.0	-1.518
Be3130_R		0.04507	ug/L	0.03873	85.93	8.913
Ca3158_R		22.91	ug/L	2.139	9.336	9.142
Cd2265_A		0.06157	ug/L	0.001767	2.869	0.2645
Co2286_A		0.03562	ug/L	0.01260	35.38	1.603
Cr2677_A		0.1658	ug/L	0.2314	139.6	9.163
Cu3273_A		-0.3125	ug/L	0.09835	31.48	-15.90
Fe2599_R		20.05	ug/L	3.099	15.46	42.43
K_7664_R		5.618	ug/L	15.10	268.8	-78.97
Li6707_R		0.5739	ug/L	0.2852	49.69	-15.81
Mg2025_A		12.34	ug/L	3.298	26.74	-3.259
Mn2576_R		0.6497	ug/L	0.3150	48.48	7.920
Mo2020_A		0.7891	ug/L	0.1213	15.38	2.644
Na5895_R		15.49	ug/L	4.471	28.87	40.60
Ni2316_A		-0.1959	ug/L	0.01733	8.843	-1.444
Pb2203_A		0.4695	ug/L	0.1075	22.90	-0.9774
Sb2068_A		0.2296	ug/L	0.07344	31.98	1.104
Se1960_A		1.686	ug/L	0.6779	40.20	2.184
Si2516_R		25.48	ug/L	20.64	80.99	74.10
Sn1899_A		-0.3886	ug/L	0.06660	17.14	1.253
Sr4215_R		-0.07726	ug/L	0.03404	44.06	-28.61
Ti3349_A		0.6474	ug/L	0.01542	2.381	7.977
Tl1908_A		0.8540	ug/L	0.4571	53.52	-1.387
V_2924_A		0.2054	ug/L	0.05132	24.98	-3.012
Zn2062_A		0.01305	ug/L	0.05206	399.1	0.001592
Y_3600_R		18,977	Cts/S	149.85	0.78965	18,977
Y_2243_A		10,074	Cts/S	32.947	0.32705	10,074
Y_3600_A		192,930	Cts/S	631.06	0.32710	192,930

LRS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 1:34:05PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

LRS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 1:34:05PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	F	0.001637	ug/L	0.07364	4,498	-22.76
Al3961_R		-7.728	ug/L	4.462	57.74	-0.2828
As1891_A	F	0.5611	ug/L	0.1409	25.11	-2.185
B_2089_A	F	0.2714	ug/L	0.2409	88.79	6.593
Ba4554_R	F	-0.1097	ug/L	0.1000	91.18	-6.489
Be3130_R	F	-0.05020	ug/L	0.01107	22.05	0.1381
Ca3158_R		4.993	ug/L	2.548	51.03	-14.02
Cd2265_A	F	0.01907	ug/L	0.01025	53.75	-0.4066
Co2286_A	F	-0.04080	ug/L	0.2114	518.1	1.292
Cr2677_A	F	0.2927	ug/L	0.1109	37.87	11.35
Cu3273_A	F	-0.2457	ug/L	0.1926	78.41	-15.20
Fe2599_R		1.969	ug/L	1.116	56.66	10.15
K_7664_R		-5.459	ug/L	41.52	760.6	-87.44
Li6707_R	F	0.7317	ug/L	0.8562	117.0	-13.79
Mg2025_A		3.185	ug/L	3.996	125.4	-6.927
Mn2576_R	F	0.06569	ug/L	0.1653	251.7	2.116
Mo2020_A	F	0.3518	ug/L	0.01299	3.691	1.101
Na5895_R		6.733	ug/L	6.316	93.80	21.76
Ni2316_A	F	-0.1142	ug/L	0.03965	34.73	-1.329
Pb2203_A	F	0.2353	ug/L	0.1567	66.59	-1.275
Sb2068_A	F	0.3193	ug/L	0.6623	207.4	1.195
Se1960_A	F	1.787	ug/L	0.04627	2.589	2.283
Si2516_R		-13.72	ug/L	15.49	112.9	55.68
Sn1899_A	F	-0.4914	ug/L	0.5255	106.9	1.233
Sr4215_R	F	-0.009668	ug/L	0.03919	405.3	-23.08
Ti3349_A	F	0.1080	ug/L	0.03037	28.11	-10.91
Tl1908_A	F	0.3393	ug/L	0.4986	146.9	-1.768
V_2924_A	F	0.1458	ug/L	0.1566	107.4	-3.988
Zn2062_A	F	0.1168	ug/L	0.1254	107.4	0.3355
Y_3600_R		19,188	Cts/S	18.280	0.095270	19,188
Y_2243_A		10,381	Cts/S	13.211	0.12726	10,381
Y_3600_A		197,180	Cts/S	184.64	0.093641	197,180

LRS2

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 1:38:30PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.04526	ug/L	0.1056	233.4	-23.64
Al3961_R	F	-6.192	ug/L	0.2420	3.908	1.424
As1891_A		0.2863	ug/L	0.04460	15.58	-2.284
B_2089_A		0.3781	ug/L	0.3865	102.2	6.709
Ba4554_R		0.02320	ug/L	0.07439	320.6	1.907
Be3130_R		-0.04329	ug/L	0.02457	56.75	0.7790
Ca3158_R	F	4.346	ug/L	1.576	36.26	-14.94
Cd2265_A		0.05193	ug/L	0.07223	139.1	0.06745
Co2286_A		0.1219	ug/L	0.03123	25.62	2.033
Cr2677_A		0.2001	ug/L	0.07980	39.88	9.817
Cu3273_A		-0.1674	ug/L	0.3721	222.3	-13.82
Fe2599_R	F	-1.562	ug/L	1.222	78.20	3.773
K_7664_R	F	28.57	ug/L	10.60	37.09	-64.42
Li6707_R		0.5865	ug/L	0.02038	3.475	-15.90
Mg2025_A	F	2.431	ug/L	2.575	105.9	-7.166
Mn2576_R		0.1999	ug/L	0.2087	104.4	3.497
Mo2020_A		0.1240	ug/L	0.05867	47.33	0.2513
Na5895_R	F	11.81	ug/L	3.433	29.07	33.17
Ni2316_A		-0.1385	ug/L	0.3589	259.0	-1.374

LRS2

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 1:38:30PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.8023	ug/L	0.4241	52.87	-0.6142
Sb2068_A		-0.1853	ug/L	0.2882	155.5	0.8677
Se1960_A		1.410	ug/L	0.08639	6.126	2.145
Si2516_R	F	-24.20	ug/L	8.156	33.71	50.85
Sn1899_A		-0.06931	ug/L	0.5495	792.8	1.459
Sr4215_R		-0.05535	ug/L	0.003007	5.432	-27.21
Ti3349_A		0.1736	ug/L	0.04209	24.24	-8.531
Tl1908_A		0.9439	ug/L	0.4968	52.63	-1.358
V_2924_A		0.05788	ug/L	0.1729	298.8	-5.310
Zn2062_A		0.2733	ug/L	0.03035	11.11	0.8340
Y_3600_R		19,306	Cts/S	11.298	0.058521	19,306
Y_2243_A		10,305	Cts/S	105.87	1.0273	10,305
Y_3600_A		195,500	Cts/S	737.38	0.37718	195,500

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 1:42:54PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		478.6	ug/L	11.59	2.421	10,970
Al3961_R		12,270	ug/L	209.2	1.706	14,100
As1891_A		482.8	ug/L	3.112	0.6447	201.8
B_2089_A		483.2	ug/L	4.932	1.021	832.6
Ba4554_R		491.3	ug/L	7.104	1.446	31,860
Be3130_R		495.2	ug/L	8.207	1.657	47,530
Ca3158_R		12,410	ug/L	236.3	1.903	16,540
Cd2265_A		489.6	ug/L	4.732	0.9666	7,374
Co2286_A		489.4	ug/L	3.113	0.6361	2,294
Cr2677_A		483.0	ug/L	12.35	2.557	7,442
Cu3273_A		481.6	ug/L	11.15	2.315	7,568
Fe2599_R		12,430	ug/L	213.6	1.719	23,150
K_7664_R		12,230	ug/L	204.1	1.668	8,567
Li6707_R		485.4	ug/L	8.085	1.666	6,892
Mg2025_A		12,130	ug/L	83.26	0.6866	4,785
Mn2576_R		492.5	ug/L	10.30	2.090	5,125
Mo2020_A		486.2	ug/L	4.601	0.9464	1,821
Na5895_R		12,300	ug/L	221.6	1.801	27,930
Ni2316_A		494.3	ug/L	3.949	0.7989	1,004
Pb2203_A		497.0	ug/L	3.981	0.8010	575.2
Sb2068_A		476.9	ug/L	4.077	0.8550	302.8
Se1960_A		480.2	ug/L	3.106	0.6467	158.1
Si2516_R		12,410	ug/L	452.4	3.645	6,320
Sn1899_A		483.7	ug/L	4.529	0.9363	277.4
Sr4215_R		493.3	ug/L	7.105	1.440	43,960
Ti3349_A		478.0	ug/L	11.79	2.467	16,640
Tl1908_A		497.1	ug/L	3.782	0.7609	328.7
V_2924_A		477.4	ug/L	12.65	2.650	7,357
Zn2062_A		491.5	ug/L	5.209	1.060	1,595
Y_3600_R		19,737	Cts/S	238.03	1.2060	19,737
Y_2243_A		10,467	Cts/S	48.612	0.46442	10,467
Y_3600_A		194,320	Cts/S	3,602.0	1.8537	194,320

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 1:47:04PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 1:47:04PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1252	ug/L	0.1588	126.8	-19.49
Al3961_R		-2.677	ug/L	1.160	43.32	5.422
As1891_A		0.3868	ug/L	0.8284	214.1	-2.283
B_2089_A		0.4375	ug/L	0.09299	21.25	6.958
Ba4554_R		0.1157	ug/L	0.05584	48.26	7.809
Be3130_R		0.06500	ug/L	0.009306	14.32	10.99
Ca3158_R		4.668	ug/L	2.023	43.34	-14.62
Cd2265_A		0.1173	ug/L	0.01301	11.09	1.087
Co2286_A		0.1051	ug/L	0.04373	41.61	1.997
Cr2677_A		0.1052	ug/L	0.1664	158.2	8.246
Cu3273_A		-0.2440	ug/L	0.5579	228.6	-14.85
Fe2599_R		10.07	ug/L	2.839	28.17	25.11
K_7664_R		8.316	ug/L	8.911	107.2	-78.91
Li6707_R		0.6215	ug/L	0.3384	54.45	-15.51
Mg2025_A		2.739	ug/L	0.3464	12.65	-7.171
Mn2576_R		0.2804	ug/L	0.04400	15.69	4.339
Mo2020_A		0.6535	ug/L	0.06834	10.46	2.246
Na5895_R		12.49	ug/L	6.499	52.02	34.84
Ni2316_A		0.07556	ug/L	0.1875	248.2	-0.9534
Pb2203_A		0.3436	ug/L	0.05584	16.25	-1.164
Sb2068_A		-0.01617	ug/L	0.09679	598.8	0.9910
Se1960_A		1.274	ug/L	0.1954	15.34	2.142
Si2516_R		14.89	ug/L	25.49	171.2	70.49
Sn1899_A		-0.1578	ug/L	0.7260	460.1	1.436
Sr4215_R		0.1233	ug/L	0.05217	42.30	-11.70
Ti3349_A		0.6184	ug/L	0.2627	42.47	6.975
Tl1908_A		0.7693	ug/L	0.1302	16.93	-1.502
V_2924_A		0.2469	ug/L	0.2763	111.9	-2.357
Zn2062_A		-0.02300	ug/L	0.04539	197.4	-0.1166
Y_3600_R		19,418	Cts/S	125.82	0.64795	19,418
Y_2243_A		10,499	Cts/S	103.59	0.98670	10,499
Y_3600_A		193,090	Cts/S	125.79	0.065147	193,090

LCSOPB22ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 1:51:27PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		47.82	ug/L	0.9171	1.918	1,045
Al3961_R		2,064	ug/L	10.48	0.5075	2,279
As1891_A		95.46	ug/L	0.4348	0.4554	38.07
B_2089_A		458.8	ug/L	0.4111	0.08961	778.4
Ba4554_R		2,066	ug/L	0.3144	0.01522	128,300
Be3130_R		52.06	ug/L	0.3464	0.6654	4,786
Ca3158_R		2,640	ug/L	3.190	0.1209	3,352
Cd2265_A		244.2	ug/L	0.05213	0.02135	3,667
Co2286_A		495.1	ug/L	0.7268	0.1468	2,322
Cr2677_A		204.5	ug/L	4.186	2.047	3,089
Cu3273_A		254.0	ug/L	4.936	1.943	3,897
Fe2599_R		1,053	ug/L	2.947	0.2799	1,884
K_7664_R		10,290	ug/L	1.502	0.01460	6,882
Li6707_R		508.3	ug/L	0.3938	0.07747	6,909
Mg2025_A		4,734	ug/L	15.02	0.3173	1,880
Mn2576_R		513.2	ug/L	3.111	0.6062	5,115
Mo2020_A		100.2	ug/L	0.1163	0.1161	375.1
Na5895_R		7,900	ug/L	11.59	0.1467	17,170
Ni2316_A		499.8	ug/L	0.01504	0.003009	1,012

LCSOPB22ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 1:51:27PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		102.6	ug/L	0.3712	0.3618	117.6
Sb2068_A		94.51	ug/L	0.5674	0.6003	57.96
Se1960_A		96.95	ug/L	0.8765	0.9041	33.36
Si2516_R		921.6	ug/L	9.013	0.9780	508.7
Sn1899_A		527.1	ug/L	0.5175	0.09817	302.4
Sr4215_R		523.2	ug/L	1.697	0.3243	44,630
Ti3349_A		504.6	ug/L	9.086	1.801	17,190
Tl1908_A		100.2	ug/L	0.6058	0.6049	65.28
V_2924_A		501.5	ug/L	11.23	2.240	7,616
Zn2062_A		495.0	ug/L	0.2829	0.05717	1,608
Y_3600_R		18,890	Cts/S	47.114	0.24942	18,890
Y_2243_A		10,474	Cts/S	21.254	0.20291	10,474
Y_3600_A		190,280	Cts/S	3,324.8	1.7473	190,280

PBSPB22ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 1:55:40PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.05649	ug/L	0.2204	390.1	-23.97
Al3961_R		2.284	ug/L	0.3762	16.47	10.80
As1891_A		0.2254	ug/L	0.9374	415.8	-2.356
B_2089_A		1.958	ug/L	0.2800	14.30	9.510
Ba4554_R		0.2969	ug/L	0.3392	114.3	19.12
Be3130_R		-0.006502	ug/L	0.03538	544.2	4.123
Ca3158_R		23.18	ug/L	2.502	10.79	9.499
Cd2265_A		0.06294	ug/L	0.01915	30.43	0.2730
Co2286_A		0.08428	ug/L	0.06917	82.07	1.905
Cr2677_A		1.027	ug/L	0.1695	16.50	22.64
Cu3273_A		0.2575	ug/L	0.1267	49.21	-7.112
Fe2599_R		11.88	ug/L	0.7258	6.111	27.87
K_7664_R		37.84	ug/L	14.14	37.36	-57.27
Li6707_R		1.023	ug/L	0.6831	66.77	-9.729
Mg2025_A		12.73	ug/L	1.379	10.84	-3.243
Mn2576_R		0.4434	ug/L	0.3875	87.40	5.914
Mo2020_A		0.2714	ug/L	0.006502	2.396	0.8123
Na5895_R		31.29	ug/L	0.7228	2.310	75.41
Ni2316_A		0.6680	ug/L	0.08283	12.40	0.2418
Pb2203_A		0.8656	ug/L	0.2608	30.13	-0.5573
Sb2068_A		-0.6279	ug/L	0.3181	50.66	0.3532
Se1960_A		-0.04036	ug/L	0.5642	1,398	1.717
Si2516_R		-17.73	ug/L	12.97	73.11	53.28
Sn1899_A		37.24	ug/L	1.345	3.613	22.87
Sr4215_R		0.1984	ug/L	0.07689	38.75	-4.969
Ti3349_A		0.7891	ug/L	0.1145	14.51	13.05
Tl1908_A		1.051	ug/L	0.1884	17.92	-1.315
V_2924_A		0.1356	ug/L	0.03852	28.41	-4.135
Zn2062_A		1.440	ug/L	0.1273	8.844	4.653
Y_3600_R		19,046	Cts/S	200.51	1.0528	19,046
Y_2243_A		10,516	Cts/S	105.20	1.0003	10,516
Y_3600_A		195,620	Cts/S	93.145	0.047614	195,620

LCSWPB22ICW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 2:00:04PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

LCSWPB22ICW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 2:00:04PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		50.86	ug/L	0.09642	0.1896	1,127
Al3961_R		2,139	ug/L	8.293	0.3878	2,427
As1891_A		103.5	ug/L	1.336	1.290	40.62
B_2089_A		504.0	ug/L	1.428	0.2834	836.5
Ba4554_R		2,162	ug/L	15.28	0.7066	138,000
Be3130_R		54.61	ug/L	0.8061	1.476	5,164
Ca3158_R		2,646	ug/L	21.97	0.8304	3,455
Cd2265_A		262.5	ug/L	0.8610	0.3280	3,860
Co2286_A		549.4	ug/L	1.703	0.3100	2,522
Cr2677_A		214.4	ug/L	0.5479	0.2556	3,278
Cu3273_A		268.9	ug/L	0.1811	0.06737	4,178
Fe2599_R		1,093	ug/L	4.872	0.4456	2,011
K_7664_R		10,370	ug/L	33.16	0.3198	7,134
Li6707_R		513.6	ug/L	3.606	0.7021	7,179
Mg2025_A		5,119	ug/L	7.502	0.1466	1,992
Mn2576_R		532.0	ug/L	4.658	0.8756	5,453
Mo2020_A		107.2	ug/L	0.5434	0.5068	393.2
Na5895_R		7,945	ug/L	64.88	0.8166	17,750
Ni2316_A		555.1	ug/L	0.7029	0.1266	1,100
Pb2203_A		109.4	ug/L	0.3381	0.3091	122.9
Sb2068_A		101.9	ug/L	0.2260	0.2217	61.40
Se1960_A		103.8	ug/L	1.762	1.698	34.85
Si2516_R		1,054	ug/L	29.28	2.779	588.7
Sn1899_A		525.0	ug/L	1.291	0.2458	294.9
Sr4215_R		528.1	ug/L	5.609	1.062	46,320
Ti3349_A		513.8	ug/L	0.4977	0.09686	17,720
Tl1908_A		108.3	ug/L	0.9050	0.8355	69.34
V_2924_A		529.4	ug/L	2.420	0.4572	8,139
Zn2062_A		549.7	ug/L	2.093	0.3807	1,749
Y_3600_R		19,424	Cts/S	25.117	0.12931	19,424
Y_2243_A		10,255	Cts/S	15.267	0.14887	10,255
Y_3600_A		192,600	Cts/S	485.55	0.25211	192,600

PBWPB22ICW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 2:04:16PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.3090	ug/L	0.04169	13.50	-31.22
Al3961_R		-6.823	ug/L	4.388	64.31	0.7051
As1891_A		0.4215	ug/L	0.6286	149.1	-2.289
B_2089_A		0.5885	ug/L	0.2303	39.14	7.267
Ba4554_R		0.8039	ug/L	0.06356	7.906	51.76
Be3130_R		0.02011	ug/L	0.005368	26.69	6.740
Ca3158_R		14.43	ug/L	0.8060	5.586	-1.800
Cd2265_A		0.04531	ug/L	0.04589	101.3	-0.02799
Co2286_A		0.07100	ug/L	0.04254	59.92	1.857
Cr2677_A		0.1152	ug/L	0.2105	182.7	8.923
Cu3273_A		-0.2138	ug/L	0.1950	91.22	-15.27
Fe2599_R		-0.02110	ug/L	2.420	11,470	6.601
K_7664_R		26.86	ug/L	12.49	46.53	-66.09
Li6707_R		0.4452	ug/L	1.989	446.7	-17.83
Mg2025_A		6.527	ug/L	1.078	16.51	-5.744
Mn2576_R		0.4321	ug/L	0.2249	52.04	5.915
Mo2020_A		0.1449	ug/L	0.1148	79.25	0.3431
Na5895_R		32.30	ug/L	4.691	14.52	79.12
Ni2316_A		0.1919	ug/L	0.3324	173.2	-0.7264

PBWPB22ICW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 2:04:16PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		1.157	ug/L	0.4744	41.00	-0.2110
Sb2068_A		-1.001	ug/L	0.1145	11.43	0.3638
Se1960_A		0.1595	ug/L	1.543	967.5	1.801
Si2516_R		-7.935	ug/L	13.33	168.0	59.23
Sn1899_A		0.2322	ug/L	0.1492	64.25	1.678
Sr4215_R		0.1011	ug/L	0.05021	49.65	-13.62
Ti3349_A		0.7241	ug/L	0.05126	7.079	11.27
Tl1908_A		1.008	ug/L	0.5074	50.36	-1.353
V_2924_A		0.1131	ug/L	0.1400	123.8	-4.653
Zn2062_A		1.055	ug/L	0.01830	1.734	3.430
Y_3600_R		19,433	Cts/S	210.43	1.0828	19,433
Y_2243_A		10,602	Cts/S	201.61	1.9017	10,602
Y_3600_A		204,970	Cts/S	736.86	0.35950	204,970

LCSWPB22ICW2

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 2:08:46PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		48.34	ug/L	0.04856	0.1005	1,089
Al3961_R		2,083	ug/L	9.901	0.4754	2,371
As1891_A		99.73	ug/L	3.227	3.236	39.85
B_2089_A		479.7	ug/L	9.958	2.076	813.1
Ba4554_R		2,100	ug/L	1.332	0.06345	134,500
Be3130_R		52.90	ug/L	0.1093	0.2066	5,016
Ca3158_R		2,595	ug/L	1.799	0.06934	3,398
Cd2265_A		251.1	ug/L	5.310	2.115	3,768
Co2286_A		520.4	ug/L	10.93	2.101	2,439
Cr2677_A		204.4	ug/L	0.9327	0.4562	3,181
Cu3273_A		256.8	ug/L	0.05916	0.02304	4,059
Fe2599_R		1,065	ug/L	4.091	0.3843	1,964
K_7664_R		10,160	ug/L	40.84	0.4021	7,007
Li6707_R		503.5	ug/L	0.2452	0.04870	7,058
Mg2025_A		4,909	ug/L	104.1	2.120	1,949
Mn2576_R		517.3	ug/L	0.6216	0.1202	5,318
Mo2020_A		102.0	ug/L	2.368	2.323	381.6
Na5895_R		7,793	ug/L	9.644	0.1238	17,460
Ni2316_A		526.1	ug/L	11.70	2.224	1,064
Pb2203_A		105.5	ug/L	2.654	2.514	121.0
Sb2068_A		97.50	ug/L	3.023	3.100	59.99
Se1960_A		98.70	ug/L	5.717	5.793	33.90
Si2516_R		1,026	ug/L	17.45	1.701	576.6
Sn1899_A		500.4	ug/L	13.34	2.666	287.0
Sr4215_R		515.9	ug/L	0.6888	0.1335	45,380
Ti3349_A		491.0	ug/L	0.2875	0.05855	17,230
Tl1908_A		104.3	ug/L	1.649	1.581	68.04
V_2924_A		504.4	ug/L	2.338	0.4635	7,889
Zn2062_A		520.9	ug/L	12.14	2.330	1,691
Y_3600_R		19,481	Cts/S	99.098	0.50870	19,481
Y_2243_A		10,470	Cts/S	157.41	1.5035	10,470
Y_3600_A		195,930	Cts/S	470.03	0.23990	195,930

PBWPB22ICW2

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 2:12:59PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

PBWPB22ICW2

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 2:12:59PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.07362	ug/L	0.04578	62.18	-21.35
Al3961_R		0.5377	ug/L	5.120	952.2	9.084
As1891_A		-0.06665	ug/L	1.010	1,516	-2.500
B_2089_A		0.9044	ug/L	0.1646	18.19	7.799
Ba4554_R		0.1791	ug/L	0.1927	107.6	11.93
Be3130_R		-0.01628	ug/L	0.008225	50.51	3.355
Ca3158_R		9.929	ug/L	1.129	11.37	-7.748
Cd2265_A		-0.0009720	ug/L	0.01630	1,677	-0.7234
Co2286_A		0.04516	ug/L	0.1015	224.7	1.729
Cr2677_A		0.3441	ug/L	0.06917	20.10	12.31
Cu3273_A		-0.1968	ug/L	0.04822	24.50	-14.61
Fe2599_R		0.6438	ug/L	2.498	388.0	7.886
K_7664_R		27.49	ug/L	14.49	52.71	-65.94
Li6707_R		1.522	ug/L	0.7895	51.88	-2.892
Mg2025_A		3.762	ug/L	0.4625	12.29	-6.840
Mn2576_R		0.2434	ug/L	0.2654	109.0	3.987
Mo2020_A		0.2119	ug/L	0.07443	35.13	0.5939
Na5895_R		17.99	ug/L	0.04207	0.2339	47.44
Ni2316_A		0.01794	ug/L	0.007267	40.52	-1.088
Pb2203_A		0.2337	ug/L	0.3779	161.7	-1.303
Sb2068_A		-0.3082	ug/L	0.02708	8.788	0.8139
Se1960_A		0.3066	ug/L	0.9534	311.0	1.843
Si2516_R		-13.30	ug/L	11.47	86.22	56.89
Sn1899_A		-0.2622	ug/L	0.4895	186.7	1.391
Sr4215_R		0.05544	ug/L	0.05343	96.37	-17.75
Ti3349_A		0.5691	ug/L	0.07700	13.53	5.443
Tl1908_A		0.2062	ug/L	0.07731	37.49	-1.894
V_2924_A		0.4894	ug/L	0.1447	29.57	1.469
Zn2062_A		1.024	ug/L	0.1589	15.52	3.326
Y_3600_R		19,534	Cts/S	9.8972	0.050668	19,534
Y_2243_A		10,600	Cts/S	67.632	0.63804	10,600
Y_3600_A		199,700	Cts/S	131.40	0.065802	199,700

PBT1729A

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 2:17:24PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.2394	ug/L	0.3815	159.4	-25.60
Al3961_R		1.397	ug/L	4.535	324.7	9.709
As1891_A		-0.05571	ug/L	0.04309	77.35	-2.285
B_2089_A		3.234	ug/L	0.2617	8.092	10.74
Ba4554_R		10.16	ug/L	0.06369	0.6267	629.6
Be3130_R		-0.02778	ug/L	0.01824	65.67	2.186
Ca3158_R		11.34	ug/L	1.722	15.19	-5.668
Cd2265_A		0.01371	ug/L	0.008112	59.17	-0.4082
Co2286_A		0.03415	ug/L	0.1116	326.9	1.534
Cr2677_A		0.4426	ug/L	0.005624	1.271	12.32
Cu3273_A		-0.2258	ug/L	0.01792	7.939	-13.37
Fe2599_R		22.21	ug/L	1.048	4.721	45.95
K_7664_R		79.31	ug/L	10.46	13.19	-28.57
Li6707_R		1.279	ug/L	1.181	92.30	-6.020
Mg2025_A		3.675	ug/L	0.6461	17.58	-6.289
Mn2576_R		0.3305	ug/L	0.02641	7.990	4.701
Mo2020_A		-0.06609	ug/L	0.02422	36.64	-0.4218
Na5895_R	F	313,200	ug/L	4,533	1.448	678,400
Ni2316_A		0.9816	ug/L	0.1154	11.76	0.8038

PBT1729A

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 2:17:24PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		1.033	ug/L	0.03523	3.410	-0.3309
Sb2068_A		-1.471	ug/L	0.7203	48.98	0.05588
Se1960_A		1.418	ug/L	0.1149	8.105	2.022
Si2516_R		-31.94	ug/L	12.14	38.01	45.92
Sn1899_A		0.5628	ug/L	0.1525	27.10	1.709
Sr4215_R		4.217	ug/L	0.02542	0.6028	337.1
Ti3349_A		0.05895	ug/L	0.2956	501.4	-11.39
Tl1908_A		-0.5145	ug/L	0.3220	62.58	-2.175
V_2924_A		0.1533	ug/L	0.03760	24.52	-3.456
Zn2062_A		6.367	ug/L	0.07061	1.109	19.12
Y_3600_R		18,838	Cts/S	154.38	0.81951	18,838
Y_2243_A		9,697.0	Cts/S	63.915	0.65912	9,697.0
Y_3600_A		177,440	Cts/S	46.565	0.026243	177,440

SP0809-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 2:21:54PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.2344	ug/L	0.4130	176.2	-27.37
Al3961_R		-33.04	ug/L	5.764	17.44	26.07
As1891_A		4.021	ug/L	1.384	34.42	-0.7134
B_2089_A		14.48	ug/L	0.2209	1.526	29.54
Ba4554_R		9.054	ug/L	0.2606	2.878	580.6
Be3130_R		-0.02465	ug/L	0.004769	19.35	2.593
Ca3158_R	W	57,300	ug/L	1,653	2.885	75,530
Cd2265_A		0.001318	ug/L	0.0004750	36.04	-0.6305
Co2286_A		0.1845	ug/L	0.05209	28.23	2.286
Cr2677_A		0.2102	ug/L	0.04294	20.43	9.726
Cu3273_A		1.316	ug/L	0.1362	10.35	9.408
Fe2599_R		12.86	ug/L	1.035	8.048	30.34
K_7664_R		2,059	ug/L	42.75	2.076	1,354
Li6707_R		6.503	ug/L	1.495	22.99	67.44
Mg2025_A		9,364	ug/L	28.35	0.3028	3,563
Mn2576_R		13.67	ug/L	0.2786	2.039	145.0
Mo2020_A		0.1395	ug/L	0.09066	65.00	0.3043
Na5895_R	W	79,450	ug/L	2,449	3.083	178,100
Ni2316_A		0.3896	ug/L	0.02273	5.834	-0.3155
Pb2203_A		0.4514	ug/L	0.3855	85.40	-1.001
Sb2068_A		-1.607	ug/L	0.5400	33.61	-0.02467
Se1960_A		2.224	ug/L	0.4759	21.40	2.375
Si2516_R		5,743	ug/L	159.6	2.779	2,923
Sn1899_A		0.07447	ug/L	0.3989	535.6	1.521
Sr4215_R		402.6	ug/L	11.69	2.905	35,440
Ti3349_A		-0.1850	ug/L	0.04139	22.37	-20.53
Tl1908_A		-0.1391	ug/L	0.05711	41.05	-2.047
V_2924_A		0.2358	ug/L	0.004447	1.886	-2.532
Zn2062_A		3.814	ug/L	0.1763	4.622	11.99
Y_3600_R		19,503	Cts/S	325.08	1.6668	19,503
Y_2243_A		10,163	Cts/S	1.3139	0.012928	10,163
Y_3600_A		190,320	Cts/S	1,854.5	0.97442	190,320

SO7863-031

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 2:26:16PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO7863-031

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 2:26:16PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		4.493	ug/L	0.8462	18.84	-327.1
Al3961_R	W	416,600	ug/L	3,169	0.7606	92,880
As1891_A		0.8558	ug/L	6.803	794.9	-10.18
B_2089_A		140.3	ug/L	1.851	1.319	52.76
Ba4554_R		484.4	ug/L	5.251	1.084	6,113
Be3130_R		0.1474	ug/L	0.3777	256.2	-23.66
Ca3158_R		48,230	ug/L	197.8	0.4101	12,500
Cd2265_A		-15.80	ug/L	0.9824	6.216	276.5
Co2286_A		280.9	ug/L	1.659	0.5906	273.4
Cr2677_A		88.93	ug/L	0.9998	1.124	295.1
Cu3273_A		645.6	ug/L	2.722	0.4217	2,069
Fe2599_R	W	634,100	ug/L	4,352	0.6863	229,800
K_7664_R		3,248	ug/L	14.30	0.4402	363.2
Li6707_R		107.4	ug/L	0.7370	0.6863	273.7
Mg2025_A		72,690	ug/L	414.1	0.5696	5,666
Mn2576_R	W	10,900	ug/L	45.18	0.4146	22,000
Mo2020_A		-3.690	ug/L	0.1829	4.956	-3.353
Na5895_R		47,620	ug/L	452.9	0.9511	21,030
Ni2316_A		44.40	ug/L	0.1365	0.3074	7.390
Pb2203_A		26.79	ug/L	4.050	15.12	1.124
Sb2068_A		-9.129	ug/L	2.727	29.87	2.427
Se1960_A		6.828	ug/L	4.182	61.25	4.138
Si2516_R		3,105	ug/L	123.1	3.964	353.3
Sn1899_A		41.06	ug/L	3.056	7.444	6.162
Sr4215_R		241.8	ug/L	3.127	1.293	4,171
Ti3349_A	W	5,170	ug/L	22.29	0.4311	35,190
Tl1908_A		2.576	ug/L	0.7208	27.98	-3.385
V_2924_A		2,759	ug/L	0.9092	0.03295	8,380
Zn2062_A		470.5	ug/L	3.585	0.7620	303.3
Y_3600_R		19,195	Cts/S	182.36	0.95002	19,195
Y_2243_A		10,391	Cts/S	23.896	0.22996	10,391
Y_3600_A		190,000	Cts/S	494.73	0.26038	190,000

SO7947-006

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 2:30:33PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		6.982	ug/L	1.249	17.89	-332.8
Al3961_R	W	473,100	ug/L	7,788	1.646	103,500
As1891_A		9.823	ug/L	2.277	23.18	-9.314
B_2089_A		57.13	ug/L	1.403	2.455	23.89
Ba4554_R		713.3	ug/L	8.732	1.224	8,823
Be3130_R		-0.3915	ug/L	0.4225	107.9	-128.0
Ca3158_R	W	901,300	ug/L	16,100	1.787	229,400
Cd2265_A		-14.69	ug/L	1.707	11.62	280.5
Co2286_A		269.7	ug/L	1.130	0.4189	261.8
Cr2677_A		198.8	ug/L	1.128	0.5674	585.8
Cu3273_A		1,092	ug/L	1.089	0.09975	3,204
Fe2599_R	W	660,100	ug/L	9,828	1.489	234,500
K_7664_R		2,475	ug/L	64.59	2.609	251.8
Li6707_R		127.0	ug/L	0.8439	0.6644	321.7
Mg2025_A	W	178,400	ug/L	49.87	0.02795	13,240
Mn2576_R	W	11,130	ug/L	214.6	1.929	22,030
Mo2020_A		-3.696	ug/L	0.2488	6.731	-3.170
Na5895_R		21,290	ug/L	312.2	1.467	9,220
Ni2316_A		144.7	ug/L	0.9825	0.6788	45.00

SO7947-006

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 2:30:33PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		1,911	ug/L	1.183	0.06190	414.2
Sb2068_A		-7.283	ug/L	9.778	134.3	2.738
Se1960_A		6.022	ug/L	3.808	63.24	4.010
Si2516_R		3,661	ug/L	46.10	1.259	406.4
Sn1899_A		47.97	ug/L	6.251	13.03	6.609
Sr4215_R	W	8,170	ug/L	99.93	1.223	138,900
Ti3349_A	W	12,440	ug/L	101.9	0.8194	79,180
Tl1908_A		3.949	ug/L	1.424	36.07	-3.988
V_2924_A		2,434	ug/L	15.39	0.6321	6,924
Zn2062_A		868.4	ug/L	1.240	0.1428	532.8
Y_3600_R		18,819	Cts/S	135.47	0.71986	18,819
Y_2243_A		9,888.4	Cts/S	13.023	0.13170	9,888.4
Y_3600_A		177,650	Cts/S	687.16	0.38680	177,650

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 2:34:49PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		479.9	ug/L	0.2745	0.05720	11,000
Al3961_R		12,650	ug/L	555.3	4.389	14,060
As1891_A		487.9	ug/L	9.437	1.934	203.0
B_2089_A		489.4	ug/L	8.376	1.712	839.0
Ba4554_R		503.4	ug/L	21.02	4.176	31,590
Be3130_R		513.1	ug/L	21.54	4.197	47,640
Ca3158_R		12,890	ug/L	489.6	3.800	16,620
Cd2265_A		498.9	ug/L	8.180	1.640	7,478
Co2286_A		494.8	ug/L	7.583	1.532	2,308
Cr2677_A		488.4	ug/L	0.6507	0.1332	7,526
Cu3273_A		484.8	ug/L	2.357	0.4861	7,619
Fe2599_R		12,870	ug/L	511.6	3.976	23,190
K_7664_R		12,660	ug/L	431.3	3.406	8,581
Li6707_R		495.8	ug/L	20.60	4.154	6,811
Mg2025_A		12,270	ug/L	183.8	1.498	4,819
Mn2576_R		507.4	ug/L	18.49	3.644	5,108
Mo2020_A		491.0	ug/L	8.262	1.683	1,830
Na5895_R		12,780	ug/L	526.3	4.118	28,070
Ni2316_A		502.2	ug/L	8.533	1.699	1,015
Pb2203_A		507.7	ug/L	7.664	1.509	584.8
Sb2068_A		477.9	ug/L	8.861	1.854	301.9
Se1960_A		486.1	ug/L	7.906	1.626	159.2
Si2516_R		12,730	ug/L	266.7	2.096	6,272
Sn1899_A		490.4	ug/L	9.562	1.950	279.8
Sr4215_R		508.6	ug/L	22.21	4.367	43,850
Ti3349_A		480.0	ug/L	0.2991	0.06231	16,710
Tl1908_A		501.6	ug/L	8.497	1.694	330.0
V_2924_A		479.7	ug/L	0.8169	0.1703	7,392
Zn2062_A		504.0	ug/L	6.567	1.303	1,627
Y_3600_R		19,104	Cts/S	538.82	2.8205	19,104
Y_2243_A		10,417	Cts/S	139.68	1.3409	10,417
Y_3600_A		194,290	Cts/S	485.17	0.24971	194,290

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 2:38:58PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 2:38:58PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.08327	ug/L	0.1027	123.3	-20.75
Al3961_R		0.02041	ug/L	3.829	18,760	8.300
As1891_A		0.3068	ug/L	0.6319	206.0	-2.319
B_2089_A		0.2876	ug/L	0.2750	95.62	6.707
Ba4554_R		0.1505	ug/L	0.03465	23.03	9.960
Be3130_R		0.1561	ug/L	0.03836	24.58	19.30
Ca3158_R		13.98	ug/L	0.3609	2.581	-2.358
Cd2265_A		0.1314	ug/L	0.001829	1.391	1.323
Co2286_A		0.1266	ug/L	0.1162	91.82	2.101
Cr2677_A		0.3284	ug/L	0.1569	47.79	11.81
Cu3273_A		-0.1900	ug/L	0.6372	335.4	-14.20
Fe2599_R		18.42	ug/L	2.558	13.89	39.89
K_7664_R		38.26	ug/L	16.81	43.94	-57.58
Li6707_R		0.6673	ug/L	0.2372	35.55	-14.63
Mg2025_A		3.812	ug/L	1.004	26.34	-6.750
Mn2576_R		0.1463	ug/L	0.1620	110.7	2.899
Mo2020_A		0.6383	ug/L	0.0006940	0.1088	2.190
Na5895_R		31.30	ug/L	4.621	14.76	75.84
Ni2316_A		0.05119	ug/L	0.1176	229.8	-1.005
Pb2203_A		0.3084	ug/L	0.1304	42.27	-1.205
Sb2068_A		-0.4817	ug/L	0.3970	82.42	0.6953
Se1960_A		1.727	ug/L	2.449	141.8	2.292
Si2516_R		23.84	ug/L	29.02	121.7	73.88
Sn1899_A		-0.1146	ug/L	0.2874	250.7	1.463
Sr4215_R		0.1873	ug/L	0.03093	16.52	-6.055
Ti3349_A		0.8724	ug/L	0.1862	21.34	15.97
Tl1908_A		0.3721	ug/L	0.03319	8.920	-1.766
V_2924_A		0.3045	ug/L	0.1451	47.63	-1.488
Zn2062_A		0.1873	ug/L	0.1453	77.57	0.5699
Y_3600_R		19,196	Cts/S	634.78	3.3068	19,196
Y_2243_A		10,500	Cts/S	51.603	0.49145	10,500
Y_3600_A		195,630	Cts/S	294.61	0.15060	195,630

SO8048-005

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 2:43:23PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		3.903	ug/L	1.718	44.03	-160.5
Al3961_R	W	188,800	ug/L	2,838	1.503	41,290
As1891_A		7.193	ug/L	3.667	50.99	-5.380
B_2089_A		17.52	ug/L	1.056	6.027	11.72
Ba4554_R		1,136	ug/L	11.19	0.9846	14,050
Be3130_R		1.014	ug/L	0.2087	20.58	-10.99
Ca3158_R		101,200	ug/L	1,788	1.768	25,730
Cd2265_A		-6.284	ug/L	1.455	23.16	130.6
Co2286_A		143.9	ug/L	2.093	1.454	139.3
Cr2677_A		22.58	ug/L	0.5583	2.472	86.37
Cu3273_A		472.1	ug/L	2.995	0.6344	1,481
Fe2599_R	W	297,800	ug/L	4,352	1.462	105,800
K_7664_R		7,799	ug/L	98.67	1.265	970.0
Li6707_R		54.39	ug/L	1.249	2.297	124.3
Mg2025_A		114,100	ug/L	1,322	1.158	8,728
Mn2576_R	W	13,810	ug/L	231.4	1.676	27,390
Mo2020_A		-2.322	ug/L	1.273	54.81	-2.153
Na5895_R		23,810	ug/L	271.2	1.139	10,310
Ni2316_A		25.48	ug/L	0.3820	1.499	4.653

SO8048-005

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 2:43:23PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		90.31	ug/L	0.6044	0.6692	17.47
Sb2068_A		-5.713	ug/L	2.906	50.86	1.481
Se1960_A		-0.9343	ug/L	1.528	163.6	2.821
Si2516_R		3,226	ug/L	50.67	1.570	366.1
Sn1899_A		36.19	ug/L	1.820	5.029	5.506
Sr4215_R		450.6	ug/L	4.464	0.9907	7,640
Ti3349_A		3,374	ug/L	24.39	0.7228	22,920
Tl1908_A		2.348	ug/L	1.497	63.77	-3.789
V_2924_A		640.0	ug/L	1.511	0.2361	1,928
Zn2062_A		1,124	ug/L	7.022	0.6246	711.4
Y_3600_R		18,820	Cts/S	171.19	0.90962	18,820
Y_2243_A		10,197	Cts/S	94.532	0.92709	10,197
Y_3600_A		189,690	Cts/S	646.67	0.34090	189,690

SP0701-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 2:47:42PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.514	ug/L	0.03408	2.252	-77.11
Al3961_R		4,952	ug/L	96.08	1.940	5,649
As1891_A		13.70	ug/L	1.234	9.008	1.298
B_2089_A		14.76	ug/L	0.1224	0.8297	30.70
Ba4554_R		115.5	ug/L	2.084	1.805	7,431
Be3130_R		0.2664	ug/L	0.04356	16.35	20.27
Ca3158_R		11,930	ug/L	211.4	1.773	15,770
Cd2265_A		1.095	ug/L	0.09228	8.430	104.2
Co2286_A		5.928	ug/L	0.06731	1.135	30.91
Cr2677_A		27.50	ug/L	0.5492	1.997	438.7
Cu3273_A		242.8	ug/L	2.680	1.104	3,850
Fe2599_R	W	34,940	ug/L	750.9	2.149	64,570
K_7664_R		10,570	ug/L	168.1	1.591	7,329
Li6707_R		3.327	ug/L	0.3476	10.45	22.60
Mg2025_A		5,808	ug/L	38.58	0.6642	2,245
Mn2576_R	W	1,916	ug/L	27.97	1.460	19,770
Mo2020_A		6.096	ug/L	0.1271	2.086	22.19
Na5895_R		2,692	ug/L	31.94	1.187	6,068
Ni2316_A		16.08	ug/L	0.1239	0.7703	28.52
Pb2203_A		18.58	ug/L	0.2833	1.525	20.79
Sb2068_A		0.00008800	ug/L	0.3148	356,900	1.428
Se1960_A		3.941	ug/L	0.6107	15.50	3.616
Si2516_R		1,176	ug/L	4.024	0.3423	647.2
Sn1899_A		58.39	ug/L	0.8180	1.401	34.38
Sr4215_R		68.94	ug/L	1.153	1.672	6,075
Ti3349_A		164.1	ug/L	1.069	0.6519	5,713
Tl1908_A		1.050	ug/L	0.2042	19.44	-2.695
V_2924_A		10.15	ug/L	0.03636	0.3582	140.6
Zn2062_A		583.1	ug/L	0.9223	0.1582	1,870
Y_3600_R		19,579	Cts/S	150.91	0.77078	19,579
Y_2243_A		10,333	Cts/S	97.862	0.94712	10,333
Y_3600_A		194,830	Cts/S	1,576.9	0.80940	194,830

SP0747-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 2:52:01PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SP0747-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 2:52:01PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		3.482	ug/L	0.06951	1.996	-6.532
Al3961_R		7,191	ug/L	58.13	0.8084	7,861
As1891_A		11.62	ug/L	0.5978	5.145	1.020
B_2089_A		32.79	ug/L	0.5055	1.542	57.86
Ba4554_R		340.3	ug/L	0.7896	0.2320	20,990
Be3130_R		0.3392	ug/L	0.1032	30.41	15.68
Ca3158_R		19,760	ug/L	153.0	0.7744	25,060
Cd2265_A		1.481	ug/L	0.04719	3.186	77.61
Co2286_A		3.886	ug/L	0.02641	0.6795	21.59
Cr2677_A		52.81	ug/L	0.5166	0.9782	785.9
Cu3273_A		661.9	ug/L	0.5971	0.09021	9,945
Fe2599_R		23,600	ug/L	70.52	0.2988	41,810
K_7664_R		7,686	ug/L	79.52	1.035	5,088
Li6707_R		6.935	ug/L	0.1943	2.802	70.57
Mg2025_A		8,363	ug/L	101.9	1.218	3,086
Mn2576_R		250.3	ug/L	3.694	1.476	2,469
Mo2020_A		10.54	ug/L	0.1707	1.619	36.97
Na5895_R		6,253	ug/L	38.29	0.6124	13,500
Ni2316_A		24.37	ug/L	0.3222	1.322	43.83
Pb2203_A		22.74	ug/L	0.08040	0.3536	23.81
Sb2068_A		3.664	ug/L	0.6236	17.02	3.147
Se1960_A		6.952	ug/L	0.1259	1.811	4.024
Si2516_R		2,438	ug/L	43.25	1.774	1,228
Sn1899_A		102.5	ug/L	2.069	2.018	56.50
Sr4215_R		243.9	ug/L	1.160	0.4756	20,660
Ti3349_A		333.5	ug/L	2.798	0.8389	11,070
Tl1908_A		0.1741	ug/L	0.7887	452.9	-2.099
V_2924_A		13.80	ug/L	0.1764	1.278	197.4
Zn2062_A		955.4	ug/L	12.83	1.343	2,922
Y_3600_R		18,765	Cts/S	153.21	0.81645	18,765
Y_2243_A		9,855.6	Cts/S	109.15	1.1075	9,855.6
Y_3600_A		185,480	Cts/S	85.627	0.046166	185,480

SP0781-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 2:56:19PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		5.915	ug/L	0.005684	0.09610	-326.7
Al3961_R	W	77,280	ug/L	33.79	0.04373	86,710
As1891_A		31.47	ug/L	0.8928	2.837	2.167
B_2089_A		886.2	ug/L	11.53	1.302	1,299
Ba4554_R		542.0	ug/L	0.08854	0.01634	34,150
Be3130_R		1.579	ug/L	0.03733	2.365	-233.6
Ca3158_R	F	724,700	ug/L	3,376	0.4658	939,500
Cd2265_A		1.536	ug/L	0.3486	22.70	333.7
Co2286_A		62.18	ug/L	1.634	2.628	311.2
Cr2677_A		149.7	ug/L	0.8007	0.5350	2,071
Cu3273_A		662.1	ug/L	3.036	0.4585	9,267
Fe2599_R	W	137,200	ug/L	118.5	0.08634	248,200
K_7664_R		18,700	ug/L	33.83	0.1809	12,760
Li6707_R		116.5	ug/L	1.021	0.8762	1,589
Mg2025_A	W	137,200	ug/L	1,815	1.323	46,950
Mn2576_R	W	2,592	ug/L	3.071	0.1185	26,180
Mo2020_A		13.64	ug/L	0.1230	0.9016	43.67
Na5895_R		5,592	ug/L	8.812	0.1576	12,330
Ni2316_A		252.1	ug/L	3.763	1.493	434.5

SP0781-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 2:56:19PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		472.1	ug/L	6.920	1.466	475.0
Sb2068_A		2.323	ug/L	0.2943	12.67	4.177
Se1960_A		6.269	ug/L	0.5095	8.127	5.113
Si2516_R		2,849	ug/L	14.47	0.5079	1,475
Sn1899_A		86.19	ug/L	1.174	1.362	44.18
Sr4215_R	W	1,362	ug/L	0.4751	0.03488	117,900
Ti3349_A	W	7,421	ug/L	34.71	0.4677	229,300
Tl1908_A		1.162	ug/L	0.4775	41.08	-6.115
V_2924_A	W	1,388	ug/L	9.689	0.6980	19,200
Zn2062_A	W	2,434	ug/L	39.63	1.628	6,891
Y_3600_R		19,171	Cts/S	11.321	0.059056	19,171
Y_2243_A		9,123.3	Cts/S	91.858	1.0068	9,123.3
Y_3600_A		172,400	Cts/S	862.93	0.50053	172,400

SP0787-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 3:00:40PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1609	ug/L	0.08410	52.27	-60.58
Al3961_R		11,080	ug/L	273.8	2.471	12,660
As1891_A		4.587	ug/L	0.2591	5.648	-1.393
B_2089_A		81.48	ug/L	0.6486	0.7960	132.1
Ba4554_R		207.7	ug/L	4.949	2.383	13,290
Be3130_R		0.2719	ug/L	0.02372	8.724	15.23
Ca3158_R	W	132,100	ug/L	3,267	2.473	174,000
Cd2265_A		0.4433	ug/L	0.1040	23.47	44.39
Co2286_A		6.829	ug/L	0.03591	0.5259	33.23
Cr2677_A		31.74	ug/L	0.01118	0.03524	472.8
Cu3273_A		210.3	ug/L	2.183	1.038	3,136
Fe2599_R		16,290	ug/L	421.7	2.589	29,950
K_7664_R	W	35,350	ug/L	830.6	2.350	24,590
Li6707_R		8.376	ug/L	0.1098	1.311	93.49
Mg2025_A		13,960	ug/L	115.8	0.8299	5,066
Mn2576_R		737.9	ug/L	17.65	2.392	7,576
Mo2020_A		5.302	ug/L	0.002710	0.05113	18.13
Na5895_R		7,501	ug/L	188.4	2.512	16,810
Ni2316_A		47.74	ug/L	0.1567	0.3282	87.22
Pb2203_A		13.87	ug/L	0.02212	0.1595	13.06
Sb2068_A		-0.6659	ug/L	0.1627	24.43	0.7310
Se1960_A		4.054	ug/L	0.7350	18.13	3.128
Si2516_R		1,647	ug/L	35.04	2.127	881.4
Sn1899_A		35.27	ug/L	0.3986	1.130	20.02
Sr4215_R		244.8	ug/L	6.337	2.589	21,510
Ti3349_A		255.5	ug/L	1.843	0.7215	8,424
Tl1908_A		0.2094	ug/L	0.1027	49.02	-2.312
V_2924_A		17.43	ug/L	0.06692	0.3840	247.8
Zn2062_A		378.5	ug/L	3.425	0.9049	1,137
Y_3600_R		19,476	Cts/S	246.90	1.2677	19,476
Y_2243_A		9,685.2	Cts/S	87.743	0.90595	9,685.2
Y_3600_A		184,290	Cts/S	1,205.6	0.65418	184,290

SP0787-001L

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 3:04:58PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SP0787-001L

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 3:04:58PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.3283	ug/L	1.225	373.0	-32.48
Al3961_R		11,670	ug/L	46.20	0.3959	2,583
As1891_A		-1.011	ug/L	4.032	399.0	-2.613
B_2089_A		79.41	ug/L	1.105	1.391	31.25
Ba4554_R		219.8	ug/L	1.939	0.8825	2,719
Be3130_R		0.1693	ug/L	0.1697	100.2	4.757
Ca3158_R	W	140,600	ug/L	642.8	0.4572	35,760
Cd2265_A		0.2427	ug/L	0.07399	30.49	8.598
Co2286_A		7.675	ug/L	0.3150	4.105	8.745
Cr2677_A		34.49	ug/L	0.2700	0.7828	109.7
Cu3273_A		209.0	ug/L	2.357	1.128	626.5
Fe2599_R		17,450	ug/L	79.02	0.4528	6,205
K_7664_R		36,770	ug/L	78.76	0.2142	4,878
Li6707_R		7.931	ug/L	4.284	54.02	-1.917
Mg2025_A		14,500	ug/L	1.561	0.01077	1,077
Mn2576_R		784.5	ug/L	4.021	0.5125	1,558
Mo2020_A		5.871	ug/L	0.5314	9.051	3.979
Na5895_R		7,901	ug/L	24.59	0.3112	3,426
Ni2316_A		48.58	ug/L	0.1551	0.3194	17.42
Pb2203_A		14.11	ug/L	3.479	24.66	1.551
Sb2068_A		-1.556	ug/L	2.912	187.2	0.8094
Se1960_A		2.210	ug/L	1.139	51.54	1.845
Si2516_R		1,546	ug/L	22.35	1.446	209.5
Sn1899_A		34.99	ug/L	6.084	17.39	5.252
Sr4215_R		260.3	ug/L	0.08490	0.03262	4,404
Ti3349_A		261.8	ug/L	2.191	0.8370	1,747
Tl1908_A		2.542	ug/L	2.931	115.3	-1.717
V_2924_A		16.61	ug/L	1.471	8.858	43.21
Zn2062_A		385.4	ug/L	1.732	0.4493	238.4
Y_3600_R		18,815	Cts/S	17.195	0.091386	18,815
Y_2243_A		9,967.8	Cts/S	0.18300	0.0018360	9,967.8
Y_3600_A		187,740	Cts/S	1,631.3	0.86892	187,740

SP0787-001A

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 3:09:18PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		484.8	ug/L	0.5400	0.1114	10,270
Al3961_R		22,010	ug/L	240.0	1.090	24,130
As1891_A		503.8	ug/L	0.4628	0.09186	188.7
B_2089_A		584.0	ug/L	1.212	0.2076	900.6
Ba4554_R		711.6	ug/L	8.812	1.238	43,870
Be3130_R		510.4	ug/L	3.656	0.7163	46,550
Ca3158_R	W	140,200	ug/L	711.0	0.5073	177,800
Cd2265_A		498.8	ug/L	0.6246	0.1252	6,769
Co2286_A		510.3	ug/L	0.4176	0.08185	2,150
Cr2677_A		516.0	ug/L	4.215	0.8168	7,369
Cu3273_A		711.4	ug/L	2.079	0.2923	10,360
Fe2599_R		22,080	ug/L	180.9	0.8192	39,100
K_7664_R	W	46,170	ug/L	326.7	0.7077	30,960
Li6707_R		522.2	ug/L	7.512	1.438	7,050
Mg2025_A		19,620	ug/L	18.46	0.09406	6,942
Mn2576_R	W	1,242	ug/L	14.28	1.150	12,280
Mo2020_A		524.5	ug/L	0.5946	0.1134	1,764
Na5895_R		13,370	ug/L	107.9	0.8068	28,850
Ni2316_A		550.3	ug/L	0.2160	0.03925	1,003

SP0787-001A

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 3:09:18PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		512.5	ug/L	0.2768	0.05400	532.3
Sb2068_A		506.8	ug/L	0.4328	0.08540	289.0
Se1960_A		520.1	ug/L	2.694	0.5180	153.8
Si2516_R		2,003	ug/L	11.86	0.5920	1,023
Sn1899_A		536.1	ug/L	2.654	0.4949	276.0
Sr4215_R		756.1	ug/L	7.359	0.9732	64,050
Ti3349_A		746.2	ug/L	2.293	0.3072	24,070
Tl1908_A		498.6	ug/L	1.276	0.2558	295.5
V_2924_A		510.7	ug/L	1.756	0.3439	7,292
Zn2062_A		881.1	ug/L	3.260	0.3700	2,569
Y_3600_R		18,757	Cts/S	57.270	0.30532	18,757
Y_2243_A		9,399.9	Cts/S	6.8780	0.073170	9,399.9
Y_3600_A		180,030	Cts/S	655.63	0.36418	180,030

SP0787-001P

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 3:13:28PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		44.34	ug/L	0.07071	0.1594	873.8
Al3961_R		18,000	ug/L	57.59	0.3200	19,690
As1891_A		97.02	ug/L	0.5988	0.6172	34.99
B_2089_A		505.6	ug/L	1.240	0.2454	800.0
Ba4554_R	W	2,171	ug/L	2.829	0.1303	133,800
Be3130_R		48.92	ug/L	0.1858	0.3799	4,446
Ca3158_R	W	100,200	ug/L	68.98	0.06886	127,000
Cd2265_A		222.8	ug/L	0.7376	0.3311	3,172
Co2286_A		461.3	ug/L	1.347	0.2921	2,023
Cr2677_A		221.0	ug/L	0.002024	0.0009160	3,197
Cu3273_A		474.2	ug/L	0.7122	0.1502	6,984
Fe2599_R		20,990	ug/L	30.48	0.1452	37,140
K_7664_R	W	46,260	ug/L	26.46	0.05720	31,000
Li6707_R		495.5	ug/L	0.5386	0.1087	6,683
Mg2025_A		18,680	ug/L	77.17	0.4131	6,872
Mn2576_R	W	1,331	ug/L	3.587	0.2696	13,150
Mo2020_A		100.5	ug/L	0.3702	0.3684	351.3
Na5895_R		14,900	ug/L	10.83	0.07269	32,130
Ni2316_A		497.4	ug/L	1.846	0.3712	938.6
Pb2203_A		106.9	ug/L	0.2144	0.2005	113.8
Sb2068_A		80.39	ug/L	0.1749	0.2175	46.49
Se1960_A		95.05	ug/L	2.402	2.527	30.96
Si2516_R		3,352	ug/L	6.083	0.1815	1,667
Sn1899_A		482.5	ug/L	0.7286	0.1510	258.6
Sr4215_R		757.1	ug/L	0.3611	0.04770	64,100
Ti3349_A		773.8	ug/L	3.000	0.3876	25,220
Tl1908_A		89.95	ug/L	0.05380	0.05981	53.86
V_2924_A		482.9	ug/L	0.6617	0.1370	7,012
Zn2062_A		860.8	ug/L	3.112	0.3615	2,612
Y_3600_R		18,747	Cts/S	87.354	0.46597	18,747
Y_2243_A		9,779.8	Cts/S	21.585	0.22072	9,779.8
Y_3600_A		181,990	Cts/S	446.26	0.24521	181,990

SP0787-001S

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 3:17:40PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SP0787-001S

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 3:17:40PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		43.05	ug/L	0.1235	0.2869	840.7
Al3961_R		22,800	ug/L	117.3	0.5143	26,100
As1891_A		98.88	ug/L	0.9421	0.9528	35.25
B_2089_A		523.8	ug/L	7.686	1.467	831.9
Ba4554_R	W	2,134	ug/L	11.72	0.5493	137,600
Be3130_R		46.97	ug/L	0.1073	0.2284	4,458
Ca3158_R	W	127,600	ug/L	623.7	0.4889	169,200
Cd2265_A		220.8	ug/L	3.755	1.701	3,183
Co2286_A		465.7	ug/L	7.288	1.565	2,052
Cr2677_A		224.7	ug/L	0.7455	0.3317	3,342
Cu3273_A		504.0	ug/L	0.5901	0.1171	7,634
Fe2599_R	W	31,960	ug/L	114.3	0.3576	59,170
K_7664_R	W	53,040	ug/L	140.2	0.2643	37,200
Li6707_R		489.2	ug/L	1.846	0.3774	6,904
Mg2025_A	W	27,260	ug/L	409.0	1.500	10,060
Mn2576_R	W	1,471	ug/L	5.902	0.4013	15,210
Mo2020_A		98.60	ug/L	1.558	1.580	346.0
Na5895_R		15,780	ug/L	63.67	0.4034	35,610
Ni2316_A		534.7	ug/L	9.320	1.743	1,012
Pb2203_A		105.8	ug/L	2.735	2.585	113.0
Sb2068_A		79.95	ug/L	0.04878	0.06101	46.68
Se1960_A		97.23	ug/L	0.3031	0.3117	31.90
Si2516_R		3,267	ug/L	0.3739	0.01145	1,700
Sn1899_A		477.2	ug/L	7.824	1.639	256.8
Sr4215_R		770.5	ug/L	3.699	0.4802	68,250
Ti3349_A		897.6	ug/L	0.4269	0.04756	30,070
Tl1908_A		87.61	ug/L	0.1917	0.2188	52.47
V_2924_A		477.8	ug/L	0.7266	0.1521	7,128
Zn2062_A		941.4	ug/L	16.34	1.735	2,868
Y_3600_R		19,615	Cts/S	27.788	0.14167	19,615
Y_2243_A		9,820.4	Cts/S	115.32	1.1743	9,820.4
Y_3600_A		186,990	Cts/S	688.61	0.36827	186,990

SP0787-003

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 3:21:53PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3375	ug/L	0.2161	64.04	-74.35
Al3961_R		12,220	ug/L	162.6	1.331	13,810
As1891_A		4.372	ug/L	1.094	25.03	-1.884
B_2089_A		54.13	ug/L	0.2678	0.4948	87.07
Ba4554_R		258.7	ug/L	4.149	1.604	16,320
Be3130_R		0.3248	ug/L	0.08453	26.03	23.95
Ca3158_R	W	197,200	ug/L	1,660	0.8419	255,900
Cd2265_A		0.3942	ug/L	0.004568	1.159	61.94
Co2286_A		5.752	ug/L	0.08940	1.554	27.39
Cr2677_A		31.26	ug/L	0.4722	1.511	460.6
Cu3273_A		191.0	ug/L	1.900	0.9946	2,819
Fe2599_R		24,780	ug/L	340.7	1.375	44,890
K_7664_R		22,860	ug/L	145.6	0.6368	15,640
Li6707_R		7.126	ug/L	0.1449	2.033	74.81
Mg2025_A	W	40,660	ug/L	111.0	0.2731	14,340
Mn2576_R		571.9	ug/L	6.708	1.173	5,790
Mo2020_A		4.305	ug/L	0.08799	2.044	14.25
Na5895_R		7,085	ug/L	82.36	1.162	15,640
Ni2316_A		23.69	ug/L	0.05809	0.2452	40.42

SP0787-003

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 3:21:53PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		17.65	ug/L	0.4346	2.462	16.85
Sb2068_A		-0.8362	ug/L	0.5845	69.90	0.7796
Se1960_A		4.393	ug/L	1.728	39.33	3.179
Si2516_R		2,493	ug/L	34.66	1.390	1,281
Sn1899_A		35.93	ug/L	0.2993	0.8332	19.77
Sr4215_R		545.9	ug/L	6.219	1.139	47,310
Ti3349_A		190.8	ug/L	1.198	0.6280	6,204
Tl1908_A		0.2972	ug/L	0.2819	94.85	-2.062
V_2924_A		16.04	ug/L	0.2564	1.598	224.3
Zn2062_A		333.0	ug/L	2.189	0.6574	971.1
Y_3600_R		19,191	Cts/S	102.12	0.53211	19,191
Y_2243_A		9,399.3	Cts/S	22.033	0.23441	9,399.3
Y_3600_A		181,830	Cts/S	1,355.5	0.74549	181,830

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 3:26:12PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		475.6	ug/L	4.562	0.9594	10,850
Al3961_R		12,320	ug/L	72.42	0.5878	14,060
As1891_A		493.6	ug/L	1.653	0.3349	198.2
B_2089_A		494.0	ug/L	2.488	0.5036	817.4
Ba4554_R		496.1	ug/L	1.415	0.2853	31,960
Be3130_R		495.8	ug/L	0.2273	0.04585	47,270
Ca3158_R		12,400	ug/L	18.35	0.1479	16,420
Cd2265_A		493.3	ug/L	3.441	0.6976	7,136
Co2286_A		500.8	ug/L	3.637	0.7262	2,254
Cr2677_A		476.6	ug/L	1.808	0.3793	7,308
Cu3273_A		482.4	ug/L	4.041	0.8377	7,544
Fe2599_R		12,470	ug/L	8.427	0.06760	23,070
K_7664_R		12,350	ug/L	67.56	0.5471	8,590
Li6707_R		492.8	ug/L	0.9600	0.1948	6,951
Mg2025_A		12,610	ug/L	65.36	0.5183	4,779
Mn2576_R		494.2	ug/L	1.233	0.2495	5,108
Mo2020_A		496.7	ug/L	3.673	0.7394	1,787
Na5895_R		12,390	ug/L	66.72	0.5386	27,930
Ni2316_A		501.8	ug/L	4.411	0.8790	979.1
Pb2203_A		502.7	ug/L	3.097	0.6160	558.8
Sb2068_A		492.4	ug/L	3.661	0.7435	300.1
Se1960_A		490.8	ug/L	6.049	1.232	155.1
Si2516_R		12,490	ug/L	312.7	2.504	6,318
Sn1899_A		496.1	ug/L	4.218	0.8504	273.2
Sr4215_R		498.0	ug/L	1.527	0.3067	44,080
Ti3349_A		475.7	ug/L	2.648	0.5567	16,480
Tl1908_A		507.2	ug/L	2.889	0.5696	322.1
V_2924_A		476.4	ug/L	0.6494	0.1363	7,307
Zn2062_A		491.6	ug/L	2.919	0.5937	1,532
Y_3600_R		19,604	Cts/S	81.258	0.41450	19,604
Y_2243_A		10,052	Cts/S	58.816	0.58509	10,052
Y_3600_A		193,360	Cts/S	588.67	0.30445	193,360

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 3:30:21PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 3:30:21PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.03734	ug/L	0.4564	1,222	-21.68
Al3961_R		2.735	ug/L	1.620	59.22	11.37
As1891_A		-0.1819	ug/L	0.3329	183.0	-2.443
B_2089_A		0.5869	ug/L	0.2197	37.43	6.963
Ba4554_R		0.1777	ug/L	0.1982	111.5	11.63
Be3130_R		0.1699	ug/L	0.02102	12.37	20.61
Ca3158_R		18.42	ug/L	2.381	12.93	3.396
Cd2265_A		0.1765	ug/L	0.06809	38.58	1.930
Co2286_A		-0.01062	ug/L	0.03285	309.3	1.407
Cr2677_A		0.3034	ug/L	0.03801	12.52	11.37
Cu3273_A		0.3018	ug/L	0.07020	23.26	-6.368
Fe2599_R		16.90	ug/L	2.001	11.84	37.13
K_7664_R		52.56	ug/L	9.009	17.14	-47.45
Li6707_R		1.442	ug/L	0.2442	16.93	-3.937
Mg2025_A		4.733	ug/L	0.2604	5.502	-6.180
Mn2576_R		0.4927	ug/L	0.2451	49.74	6.419
Mo2020_A		0.5261	ug/L	0.08042	15.28	1.709
Na5895_R		21.66	ug/L	0.7817	3.609	54.61
Ni2316_A		0.2747	ug/L	0.07087	25.80	-0.5353
Pb2203_A		0.1629	ug/L	0.4699	288.4	-1.329
Sb2068_A		-0.2872	ug/L	0.2111	73.49	0.7894
Se1960_A		1.340	ug/L	0.7528	56.19	2.091
Si2516_R		21.34	ug/L	18.90	88.55	72.73
Sn1899_A		0.1626	ug/L	0.3232	198.8	1.567
Sr4215_R		0.1647	ug/L	0.03325	20.19	-7.949
Ti3349_A		0.8758	ug/L	0.2120	24.20	16.01
Tl1908_A		0.5185	ug/L	1.026	197.8	-1.613
V_2924_A		0.3997	ug/L	0.1001	25.05	0.01031
Zn2062_A		0.1074	ug/L	0.06876	64.04	0.2978
Y_3600_R		19,157	Cts/S	34.298	0.17904	19,157
Y_2243_A		10,148	Cts/S	9.9220	0.097775	10,148
Y_3600_A		194,540	Cts/S	315.27	0.16206	194,540

SP0787-004

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 3:34:47PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.7123	ug/L	0.2823	39.63	-71.12
Al3961_R		12,550	ug/L	136.9	1.091	14,110
As1891_A		7.561	ug/L	0.3756	4.968	-0.7233
B_2089_A		86.61	ug/L	0.4012	0.4633	138.2
Ba4554_R		228.5	ug/L	1.639	0.7169	14,360
Be3130_R		0.3975	ug/L	0.01050	2.641	23.56
Ca3158_R	W	187,600	ug/L	1,207	0.6433	242,500
Cd2265_A		0.3738	ug/L	0.01179	3.153	64.66
Co2286_A		8.747	ug/L	0.1396	1.596	41.57
Cr2677_A		36.42	ug/L	0.05411	0.1485	541.5
Cu3273_A		128.7	ug/L	0.2103	0.1634	1,924
Fe2599_R	W	25,590	ug/L	294.4	1.150	46,180
K_7664_R	W	33,580	ug/L	265.4	0.7904	22,930
Li6707_R		8.262	ug/L	1.928	23.34	90.19
Mg2025_A		19,440	ug/L	110.7	0.5695	6,963
Mn2576_R		697.2	ug/L	5.993	0.8595	7,025
Mo2020_A		5.756	ug/L	0.002958	0.05140	19.44
Na5895_R		11,520	ug/L	106.4	0.9237	25,340
Ni2316_A		59.33	ug/L	0.02179	0.03672	106.8

SP0787-004

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 3:34:47PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		17.63	ug/L	0.1198	0.6796	17.08
Sb2068_A		-0.5053	ug/L	0.5723	113.2	1.004
Se1960_A		3.808	ug/L	0.6636	17.42	3.087
Si2516_R		2,996	ug/L	13.29	0.4436	1,523
Sn1899_A		34.91	ug/L	0.3396	0.9728	19.57
Sr4215_R		855.5	ug/L	8.728	1.020	73,870
Ti3349_A		310.1	ug/L	2.402	0.7746	10,210
Tl1908_A		0.9927	ug/L	0.7848	79.05	-1.820
V_2924_A		24.08	ug/L	0.001637	0.006801	345.4
Zn2062_A		331.8	ug/L	1.850	0.5577	983.7
Y_3600_R		19,119	Cts/S	41.614	0.21765	19,119
Y_2243_A		9,555.6	Cts/S	42.557	0.44536	9,555.6
Y_3600_A		183,940	Cts/S	418.58	0.22756	183,940

SP0787-005

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 3:39:04PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.6701	ug/L	0.1676	25.01	-109.1
Al3961_R		22,070	ug/L	16.57	0.07505	25,160
As1891_A		3.696	ug/L	0.09730	2.632	-3.192
B_2089_A		80.41	ug/L	1.056	1.313	133.0
Ba4554_R		433.9	ug/L	0.4932	0.1137	27,800
Be3130_R		0.5493	ug/L	0.05433	9.891	37.42
Ca3158_R	W	173,500	ug/L	184.8	0.1065	228,800
Cd2265_A		0.1664	ug/L	0.1283	77.12	101.1
Co2286_A		9.255	ug/L	0.1684	1.820	45.61
Cr2677_A		55.77	ug/L	0.5521	0.9899	832.2
Cu3273_A		179.9	ug/L	0.2242	0.1246	2,719
Fe2599_R	W	40,970	ug/L	29.25	0.07141	75,390
K_7664_R	W	36,450	ug/L	45.81	0.1257	25,380
Li6707_R		11.08	ug/L	0.03925	0.3543	131.7
Mg2025_A		17,020	ug/L	195.6	1.149	6,299
Mn2576_R	W	1,019	ug/L	0.04286	0.004205	10,470
Mo2020_A		6.396	ug/L	0.1148	1.795	22.33
Na5895_R		5,831	ug/L	11.95	0.2049	13,080
Ni2316_A		44.66	ug/L	0.7237	1.620	81.34
Pb2203_A		18.75	ug/L	0.1540	0.8216	18.54
Sb2068_A		-0.05318	ug/L	0.1219	229.1	1.708
Se1960_A		1.245	ug/L	0.7830	62.87	2.639
Si2516_R		1,750	ug/L	15.56	0.8890	930.5
Sn1899_A		34.28	ug/L	0.4924	1.437	19.88
Sr4215_R		265.3	ug/L	0.6098	0.2298	23,350
Ti3349_A		327.2	ug/L	3.081	0.9417	10,850
Tl1908_A		0.03887	ug/L	0.1516	390.0	-2.689
V_2924_A		25.63	ug/L	0.1288	0.5025	368.3
Zn2062_A		477.9	ug/L	4.183	0.8752	1,464
Y_3600_R		19,497	Cts/S	77.062	0.39526	19,497
Y_2243_A		9,873.5	Cts/S	76.831	0.77816	9,873.5
Y_3600_A		185,330	Cts/S	652.81	0.35225	185,330

SP0787-006

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 3:43:23PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SP0787-006

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 3:43:23PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.298	ug/L	0.2948	22.71	-113.1
Al3961_R	W	25,750	ug/L	224.3	0.8713	28,220
As1891_A		3.956	ug/L	1.476	37.30	-3.411
B_2089_A		77.43	ug/L	5.540	7.155	123.3
Ba4554_R		501.1	ug/L	3.656	0.7296	30,910
Be3130_R		0.6029	ug/L	0.07048	11.69	40.72
Ca3158_R	W	164,500	ug/L	2,055	1.249	208,700
Cd2265_A		0.05883	ug/L	0.5262	894.5	114.8
Co2286_A		10.88	ug/L	0.5398	4.963	50.93
Cr2677_A		62.80	ug/L	0.9902	1.577	924.1
Cu3273_A		195.2	ug/L	4.133	2.117	2,916
Fe2599_R	W	49,180	ug/L	644.2	1.310	87,120
K_7664_R	W	35,080	ug/L	177.6	0.5062	23,520
Li6707_R		9.624	ug/L	0.6425	6.676	107.0
Mg2025_A		18,770	ug/L	1,201	6.400	6,676
Mn2576_R	W	1,090	ug/L	12.69	1.164	10,770
Mo2020_A		7.300	ug/L	0.3738	5.120	24.53
Na5895_R		5,902	ug/L	13.06	0.2213	12,740
Ni2316_A		53.93	ug/L	2.983	5.532	94.64
Pb2203_A		20.87	ug/L	0.8070	3.868	20.02
Sb2068_A		-0.5558	ug/L	0.9399	169.1	1.523
Se1960_A		4.544	ug/L	0.7977	17.55	3.605
Si2516_R		2,281	ug/L	44.95	1.970	1,149
Sn1899_A		38.52	ug/L	2.015	5.231	21.31
Sr4215_R		312.0	ug/L	0.9616	0.3082	26,440
Ti3349_A		332.2	ug/L	3.918	1.179	10,870
Tl1908_A		-0.4538	ug/L	0.07768	17.12	-2.929
V_2924_A		27.53	ug/L	0.3999	1.453	390.1
Zn2062_A		533.1	ug/L	33.84	6.348	1,569
Y_3600_R		18,768	Cts/S	116.23	0.61932	18,768
Y_2243_A		9,502.8	Cts/S	451.19	4.7479	9,502.8
Y_3600_A		182,870	Cts/S	1,763.4	0.96424	182,870

SP0787-007

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 3:47:42PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.224	ug/L	0.06845	5.593	-102.3
Al3961_R		22,690	ug/L	26.99	0.1190	25,810
As1891_A		7.800	ug/L	1.615	20.71	-1.518
B_2089_A		92.30	ug/L	1.400	1.517	143.1
Ba4554_R		336.9	ug/L	0.9832	0.2918	21,450
Be3130_R		0.6472	ug/L	0.01560	2.410	33.08
Ca3158_R	W	299,500	ug/L	773.7	0.2583	392,300
Cd2265_A		3.137	ug/L	0.2449	7.807	137.7
Co2286_A		15.71	ug/L	0.3505	2.231	71.48
Cr2677_A		59.62	ug/L	0.2983	0.5004	877.8
Cu3273_A		175.2	ug/L	0.4593	0.2621	2,614
Fe2599_R	W	42,140	ug/L	63.11	0.1498	77,040
K_7664_R	W	38,180	ug/L	39.21	0.1027	26,420
Li6707_R		15.96	ug/L	0.7672	4.806	199.1
Mg2025_A	W	39,160	ug/L	886.2	2.263	13,670
Mn2576_R	W	1,122	ug/L	2.615	0.2330	11,460
Mo2020_A		7.773	ug/L	0.002785	0.03583	25.63
Na5895_R		7,825	ug/L	16.87	0.2156	17,440
Ni2316_A		114.3	ug/L	2.181	1.908	201.8

SP0787-007

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 3:47:42PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		31.30	ug/L	0.5314	1.698	30.44
Sb2068_A		-0.6824	ug/L	0.5410	79.28	1.243
Se1960_A		5.425	ug/L	0.3901	7.191	3.724
Si2516_R		2,895	ug/L	10.70	0.3697	1,491
Sn1899_A		36.81	ug/L	1.191	3.235	20.02
Sr4215_R		587.9	ug/L	0.5764	0.09805	51,420
Ti3349_A		541.7	ug/L	0.8014	0.1479	17,750
Tl1908_A		-0.3727	ug/L	0.4320	115.9	-2.951
V_2924_A		33.55	ug/L	0.1494	0.4455	481.0
Zn2062_A		560.1	ug/L	11.25	2.009	1,617
Y_3600_R		19,369	Cts/S	8.9023	0.045961	19,369
Y_2243_A		9,308.0	Cts/S	150.13	1.6129	9,308.0
Y_3600_A		183,010	Cts/S	33.327	0.018211	183,010

SP0787-008

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 3:52:04PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.9381	ug/L	0.07925	8.447	-110.2
Al3961_R		24,990	ug/L	166.7	0.6671	28,620
As1891_A		5.735	ug/L	0.5745	10.02	-2.440
B_2089_A		94.60	ug/L	0.4138	0.4374	149.0
Ba4554_R		474.2	ug/L	1.603	0.3380	30,540
Be3130_R		0.5983	ug/L	0.01602	2.677	33.98
Ca3158_R	W	182,400	ug/L	1,140	0.6250	241,700
Cd2265_A		0.7856	ug/L	0.05900	7.510	112.0
Co2286_A		14.35	ug/L	0.09313	0.6490	66.33
Cr2677_A		59.54	ug/L	0.4783	0.8034	871.6
Cu3273_A		227.7	ug/L	0.7572	0.3325	3,373
Fe2599_R	W	43,790	ug/L	116.6	0.2663	81,010
K_7664_R	W	36,310	ug/L	240.0	0.6610	25,420
Li6707_R		13.10	ug/L	0.4137	3.159	160.9
Mg2025_A		23,390	ug/L	51.81	0.2215	8,298
Mn2576_R	W	1,168	ug/L	8.956	0.7667	12,060
Mo2020_A		7.683	ug/L	0.05129	0.6676	25.74
Na5895_R		6,080	ug/L	33.01	0.5430	13,710
Ni2316_A		61.87	ug/L	0.07502	0.1213	109.3
Pb2203_A		24.30	ug/L	0.1433	0.5898	23.43
Sb2068_A		0.02965	ug/L	0.2703	911.6	1.724
Se1960_A		5.467	ug/L	0.8403	15.37	3.832
Si2516_R		3,510	ug/L	72.80	2.074	1,816
Sn1899_A		38.20	ug/L	0.2001	0.5238	21.07
Sr4215_R		335.1	ug/L	1.615	0.4820	29,650
Ti3349_A		462.2	ug/L	4.275	0.9251	15,050
Tl1908_A		-0.7295	ug/L	0.1404	19.25	-3.190
V_2924_A		33.39	ug/L	0.2905	0.8699	474.7
Zn2062_A		548.3	ug/L	0.04529	0.008259	1,610
Y_3600_R		19,599	Cts/S	140.28	0.71576	19,599
Y_2243_A		9,462.4	Cts/S	15.563	0.16447	9,462.4
Y_3600_A		181,900	Cts/S	450.34	0.24758	181,900

SP0789-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 3:56:21PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SP0789-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 3:56:21PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		4.100	ug/L	0.3954	9.643	15.15
Al3961_R	W	80,780	ug/L	636.2	0.7876	90,830
As1891_A		5.522	ug/L	0.2791	5.054	-1.683
B_2089_A		46.19	ug/L	0.0009800	0.002121	78.70
Ba4554_R	W	1,099	ug/L	10.17	0.9254	69,900
Be3130_R		0.09960	ug/L	0.02072	20.80	-2.298
Ca3158_R	W	46,250	ug/L	306.7	0.6633	60,510
Cd2265_A		1.939	ug/L	0.02462	1.270	76.75
Co2286_A		12.52	ug/L	0.07935	0.6337	58.96
Cr2677_A		45.87	ug/L	0.2840	0.6192	696.0
Cu3273_A		971.8	ug/L	3.816	0.3927	14,820
Fe2599_R		20,690	ug/L	178.2	0.8610	37,800
K_7664_R		2,771	ug/L	7.676	0.2770	1,838
Li6707_R		7.323	ug/L	1.396	19.07	78.22
Mg2025_A		5,869	ug/L	40.01	0.6818	2,158
Mn2576_R		845.1	ug/L	4.188	0.4956	8,615
Mo2020_A		8.656	ug/L	0.1877	2.169	30.18
Na5895_R		4,474	ug/L	37.13	0.8300	9,965
Ni2316_A		30.07	ug/L	0.2230	0.7415	54.71
Pb2203_A		66.19	ug/L	0.6439	0.9728	63.71
Sb2068_A		-0.01482	ug/L	0.4471	3,017	1.097
Se1960_A		12.51	ug/L	0.2296	1.835	6.242
Si2516_R		1,467	ug/L	13.59	0.9262	786.6
Sn1899_A		87.76	ug/L	0.4143	0.4721	48.42
Sr4215_R		482.4	ug/L	4.728	0.9801	42,160
Ti3349_A		280.4	ug/L	2.404	0.8575	9,466
Tl1908_A		-0.2644	ug/L	0.3942	149.1	-2.534
V_2924_A		23.75	ug/L	0.3429	1.444	347.8
Zn2062_A	W	1,393	ug/L	12.22	0.8774	4,248
Y_3600_R		19,355	Cts/S	22.623	0.11688	19,355
Y_2243_A		9,827.0	Cts/S	58.112	0.59135	9,827.0
Y_3600_A		188,660	Cts/S	121.18	0.064232	188,660

SP0789-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 4:00:40PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		10.60	ug/L	0.1514	1.428	-373.2
Al3961_R	W	114,600	ug/L	389.6	0.3398	127,200
As1891_A		55.48	ug/L	0.1524	0.2747	7.894
B_2089_A		326.1	ug/L	1.639	0.5025	477.5
Ba4554_R		709.5	ug/L	1.467	0.2068	44,440
Be3130_R		2.874	ug/L	0.01487	0.5174	-186.0
Ca3158_R	W	384,000	ug/L	4,247	1.106	494,900
Cd2265_A		3.115	ug/L	0.3242	10.41	478.6
Co2286_A		117.1	ug/L	0.6236	0.5326	536.2
Cr2677_A		260.0	ug/L	1.495	0.5752	3,636
Cu3273_A	W	3,410	ug/L	25.44	0.7461	48,330
Fe2599_R	W	194,400	ug/L	1,442	0.7416	349,700
K_7664_R	W	26,200	ug/L	114.3	0.4365	17,810
Li6707_R		157.8	ug/L	0.8848	0.5606	2,148
Mg2025_A	W	111,200	ug/L	512.4	0.4607	37,740
Mn2576_R	W	3,138	ug/L	20.93	0.6669	31,480
Mo2020_A		20.29	ug/L	0.07877	0.3883	64.95
Na5895_R		7,893	ug/L	37.95	0.4808	17,310
Ni2316_A		337.4	ug/L	1.516	0.4492	576.2

SP0789-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 4:00:40PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		529.9	ug/L	0.1962	0.03702	528.2
Sb2068_A		9.043	ug/L	0.05617	0.6211	6.620
Se1960_A		6.355	ug/L	0.9671	15.22	5.819
Si2516_R		4,780	ug/L	1.676	0.03506	2,402
Sn1899_A		572.1	ug/L	0.9686	0.1693	283.2
Sr4215_R		957.9	ug/L	2.727	0.2847	82,460
Ti3349_A	W	8,115	ug/L	64.76	0.7981	254,300
Tl1908_A		-2.158	ug/L	1.274	59.05	-8.586
V_2924_A		911.8	ug/L	6.353	0.6967	12,800
Zn2062_A	W	2,607	ug/L	13.75	0.5272	7,316
Y_3600_R		19,060	Cts/S	10.764	0.056477	19,060
Y_2243_A		9,042.5	Cts/S	21.903	0.24223	9,042.5
Y_3600_A		174,870	Cts/S	864.11	0.49416	174,870

SP0783-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 4:05:04PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.04021	ug/L	0.1046	260.1	-24.01
Al3961_R		53.26	ug/L	4.774	8.964	109.9
As1891_A		2.771	ug/L	0.4007	14.46	-1.203
B_2089_A		167.7	ug/L	0.5876	0.3503	266.8
Ba4554_R		42.72	ug/L	1.014	2.374	2,721
Be3130_R		-0.003850	ug/L	0.03266	848.2	4.273
Ca3158_R	W	43,550	ug/L	948.4	2.178	57,040
Cd2265_A		0.06689	ug/L	0.002848	4.258	1.464
Co2286_A		7.917	ug/L	0.03067	0.3873	35.84
Cr2677_A		0.6080	ug/L	0.4328	71.18	16.79
Cu3273_A		1.612	ug/L	0.08470	5.253	14.29
Fe2599_R		501.2	ug/L	0.3721	0.07425	923.3
K_7664_R		9,081	ug/L	189.3	2.084	6,222
Li6707_R		1.245	ug/L	0.07235	5.812	-6.752
Mg2025_A		7,651	ug/L	35.19	0.4600	2,786
Mn2576_R		888.5	ug/L	19.65	2.211	9,084
Mo2020_A		1.380	ug/L	0.1165	8.442	4.548
Na5895_R	W	31,280	ug/L	679.3	2.172	69,700
Ni2316_A		10.40	ug/L	0.1891	1.818	18.49
Pb2203_A		0.7247	ug/L	0.6614	91.27	-0.6531
Sb2068_A		0.2380	ug/L	0.3937	165.4	1.076
Se1960_A		2.079	ug/L	1.809	86.99	2.374
Si2516_R		4,287	ug/L	81.10	1.892	2,184
Sn1899_A		-0.3210	ug/L	0.004862	1.515	1.246
Sr4215_R		315.5	ug/L	7.181	2.276	27,590
Ti3349_A		4.049	ug/L	0.2239	5.531	122.9
Tl1908_A		1.201	ug/L	0.6978	58.12	-1.678
V_2924_A		0.7248	ug/L	0.1447	19.97	0.2099
Zn2062_A		1.596	ug/L	0.09672	6.060	4.779
Y_3600_R		19,378	Cts/S	215.61	1.1127	19,378
Y_2243_A		9,727.8	Cts/S	23.507	0.24164	9,727.8
Y_3600_A		188,900	Cts/S	1,283.9	0.67967	188,900

SP0783-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 4:09:25PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SP0783-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 4:09:25PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.03044	ug/L	0.2246	737.9	-21.30
Al3961_R		-13.15	ug/L	9.249	70.36	36.68
As1891_A		0.4919	ug/L	0.1745	35.48	-2.086
B_2089_A		171.2	ug/L	1.045	0.6104	273.5
Ba4554_R		44.29	ug/L	0.1314	0.2966	2,819
Be3130_R		-0.02530	ug/L	0.01463	57.82	2.482
Ca3158_R	W	45,170	ug/L	71.53	0.1584	59,130
Cd2265_A		0.1012	ug/L	0.02435	24.06	0.8144
Co2286_A		7.582	ug/L	0.1860	2.453	34.50
Cr2677_A		0.6641	ug/L	0.1905	28.68	17.71
Cu3273_A		1.447	ug/L	0.2246	15.52	11.37
Fe2599_R		27.94	ug/L	0.7181	2.571	57.70
K_7664_R		8,948	ug/L	44.32	0.4953	6,126
Li6707_R		0.7184	ug/L	0.06052	8.425	-14.10
Mg2025_A		7,786	ug/L	42.94	0.5515	2,848
Mn2576_R		963.3	ug/L	2.273	0.2359	9,844
Mo2020_A		1.385	ug/L	0.04087	2.952	4.580
Na5895_R	W	31,520	ug/L	218.1	0.6920	70,200
Ni2316_A		10.16	ug/L	0.6404	6.306	18.15
Pb2203_A		0.7002	ug/L	0.8720	124.5	-0.6954
Sb2068_A		-0.8052	ug/L	0.3486	43.30	0.4470
Se1960_A		-0.04889	ug/L	0.7543	1,543	1.748
Si2516_R		4,284	ug/L	35.72	0.8339	2,181
Sn1899_A		0.5082	ug/L	0.7141	140.5	1.693
Sr4215_R		337.0	ug/L	1.885	0.5592	29,460
Ti3349_A		0.4011	ug/L	0.03616	9.016	-0.5373
Tl1908_A		1.092	ug/L	0.4254	38.96	-1.800
V_2924_A		0.3595	ug/L	0.07090	19.72	-5.783
Zn2062_A		1.376	ug/L	0.07023	5.103	4.134
Y_3600_R		19,365	Cts/S	75.322	0.38896	19,365
Y_2243_A		9,773.9	Cts/S	24.695	0.25266	9,773.9
Y_3600_A		190,370	Cts/S	6,901.8	3.6255	190,370

SP0783-003

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 4:13:46PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1946	ug/L	0.01514	7.782	-21.86
Al3961_R		5.237	ug/L	4.023	76.83	27.01
As1891_A		2.871	ug/L	0.5809	20.23	-1.289
B_2089_A		63.31	ug/L	0.5521	0.8720	111.4
Ba4554_R		18.20	ug/L	0.4758	2.615	1,206
Be3130_R		0.08521	ug/L	0.04828	56.66	13.50
Ca3158_R		12,220	ug/L	345.7	2.828	16,630
Cd2265_A		0.1601	ug/L	0.06530	40.78	4.995
Co2286_A		17.44	ug/L	0.04047	0.2321	82.47
Cr2677_A		0.1025	ug/L	0.1238	120.9	11.84
Cu3273_A		0.3761	ug/L	0.05103	13.57	-3.971
Fe2599_R		1,304	ug/L	40.50	3.107	2,486
K_7664_R		4,831	ug/L	123.0	2.545	3,401
Li6707_R		2.674	ug/L	0.7975	29.82	13.90
Mg2025_A		2,235	ug/L	3.563	0.1594	864.4
Mn2576_R	W	2,367	ug/L	65.56	2.770	25,150
Mo2020_A		-0.05531	ug/L	0.04749	85.87	-0.5915
Na5895_R		20,460	ug/L	552.4	2.700	47,410
Ni2316_A		9.489	ug/L	0.08491	0.8947	17.85

SP0783-003

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 4:13:46PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.8301	ug/L	0.1367	16.47	-0.5346
Sb2068_A		-0.6365	ug/L	0.0009370	0.1471	0.6141
Se1960_A		-0.2318	ug/L	1.113	480.3	2.053
Si2516_R		6,352	ug/L	120.7	1.901	3,334
Sn1899_A		-0.4298	ug/L	0.01447	3.368	1.269
Sr4215_R		130.9	ug/L	3.985	3.044	11,890
Ti3349_A		-0.07050	ug/L	0.1303	184.8	-17.54
Tl1908_A		1.078	ug/L	0.1288	11.94	-2.858
V_2924_A		0.5213	ug/L	0.3614	69.32	-11.13
Zn2062_A		2.456	ug/L	0.01595	0.6494	7.879
Y_3600_R		20,154	Cts/S	376.06	1.8659	20,154
Y_2243_A		10,392	Cts/S	38.176	0.36735	10,392
Y_3600_A		200,450	Cts/S	1,622.0	0.80918	200,450

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 4:18:07PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		481.3	ug/L	0.8577	0.1782	11,030
Al3961_R		12,400	ug/L	79.74	0.6431	14,090
As1891_A		502.0	ug/L	2.310	0.4601	202.4
B_2089_A		489.2	ug/L	0.8487	0.1735	812.8
Ba4554_R		492.7	ug/L	1.749	0.3550	31,600
Be3130_R		481.8	ug/L	4.400	0.9133	45,720
Ca3158_R		12,490	ug/L	62.02	0.4966	16,460
Cd2265_A		491.8	ug/L	0.4611	0.09375	7,141
Co2286_A		511.6	ug/L	0.5867	0.1147	2,311
Cr2677_A		484.4	ug/L	0.4418	0.09120	7,465
Cu3273_A	W	469.1	ug/L	0.1232	0.02626	7,372
Fe2599_R		12,520	ug/L	36.01	0.2877	23,060
K_7664_R		12,260	ug/L	88.38	0.7212	8,486
Li6707_R		498.4	ug/L	0.5742	0.1152	6,998
Mg2025_A		12,770	ug/L	9.511	0.07448	4,857
Mn2576_R		506.9	ug/L	1.528	0.3015	5,216
Mo2020_A		501.1	ug/L	1.362	0.2717	1,809
Na5895_R		12,100	ug/L	101.8	0.8416	27,160
Ni2316_A		500.8	ug/L	1.243	0.2482	980.8
Pb2203_A		500.6	ug/L	0.8862	0.1770	558.5
Sb2068_A		507.4	ug/L	3.410	0.6721	310.3
Se1960_A		498.5	ug/L	1.853	0.3718	158.1
Si2516_R		12,950	ug/L	219.1	1.692	6,518
Sn1899_A		516.8	ug/L	0.7266	0.1406	285.6
Sr4215_R		489.4	ug/L	3.802	0.7767	43,130
Ti3349_A		485.8	ug/L	0.07069	0.01455	16,910
Tl1908_A		516.7	ug/L	4.346	0.8411	329.4
V_2924_A		491.6	ug/L	2.250	0.4577	7,577
Zn2062_A		494.3	ug/L	0.8774	0.1775	1,546
Y_3600_R		19,514	Cts/S	92.565	0.47436	19,514
Y_2243_A		10,089	Cts/S	11.302	0.11203	10,089
Y_3600_A		194,290	Cts/S	227.09	0.11688	194,290

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 4:22:16PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 4:22:16PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.4346	ug/L	0.1635	37.62	-13.05
Al3961_R		10.98	ug/L	5.688	51.81	21.31
As1891_A		-0.1254	ug/L	0.2353	187.6	-2.455
B_2089_A		-0.03409	ug/L	0.1768	518.7	6.044
Ba4554_R		0.3193	ug/L	0.1005	31.46	21.31
Be3130_R		0.3947	ug/L	0.08219	20.82	43.12
Ca3158_R		15.32	ug/L	1.795	11.71	-0.6342
Cd2265_A		0.2115	ug/L	0.04418	20.89	2.483
Co2286_A		0.1974	ug/L	0.1369	69.34	2.389
Cr2677_A		0.4217	ug/L	0.06735	15.97	13.73
Cu3273_A		0.2577	ug/L	0.3712	144.0	-7.366
Fe2599_R		18.66	ug/L	1.741	9.328	41.83
K_7664_R		21.04	ug/L	7.429	35.31	-71.69
Li6707_R		1.151	ug/L	0.3407	29.59	-8.263
Mg2025_A		7.028	ug/L	0.9943	14.15	-5.367
Mn2576_R		0.6393	ug/L	0.09575	14.98	8.199
Mo2020_A		0.5814	ug/L	0.1596	27.45	1.942
Na5895_R		21.65	ug/L	0.6809	3.144	56.66
Ni2316_A		0.08127	ug/L	0.02452	30.17	-0.9272
Pb2203_A		1.238	ug/L	0.01002	0.8096	-0.1193
Sb2068_A		-0.3189	ug/L	0.7803	244.7	0.7876
Se1960_A		1.064	ug/L	0.4631	43.52	2.032
Si2516_R		27.52	ug/L	21.89	79.55	78.62
Sn1899_A		-0.2317	ug/L	0.009370	4.044	1.368
Sr4215_R		0.3261	ug/L	0.1623	49.77	6.242
Ti3349_A		1.011	ug/L	0.2495	24.67	21.57
Tl1908_A		1.269	ug/L	0.1011	7.970	-1.146
V_2924_A		0.5830	ug/L	0.04954	8.497	2.974
Zn2062_A		0.1685	ug/L	0.07416	44.00	0.4953
Y_3600_R		19,878	Cts/S	10.111	0.050866	19,878
Y_2243_A		10,293	Cts/S	157.17	1.5270	10,293
Y_3600_A		202,590	Cts/S	634.91	0.31339	202,590

SP0783-004

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 4:26:40PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2220	ug/L	0.1861	83.82	-19.35
Al3961_R		9.904	ug/L	2.998	30.28	31.75
As1891_A		0.9362	ug/L	0.006665	0.7119	-2.035
B_2089_A		66.05	ug/L	1.976	2.991	112.9
Ba4554_R		19.67	ug/L	0.03942	0.2004	1,235
Be3130_R		0.06707	ug/L	0.01109	16.53	11.06
Ca3158_R		13,290	ug/L	107.6	0.8098	17,150
Cd2265_A		0.1823	ug/L	0.005079	2.786	4.503
Co2286_A		17.94	ug/L	0.5624	3.135	82.59
Cr2677_A		0.3869	ug/L	0.05917	15.29	15.71
Cu3273_A		1.017	ug/L	0.5071	49.87	5.778
Fe2599_R		1,028	ug/L	9.328	0.9073	1,860
K_7664_R		5,288	ug/L	42.73	0.8081	3,537
Li6707_R		2.084	ug/L	0.4734	22.72	4.935
Mg2025_A		2,316	ug/L	59.59	2.573	872.9
Mn2576_R	W	2,629	ug/L	26.76	1.018	26,490
Mo2020_A		0.03148	ug/L	0.1810	575.0	-0.2762
Na5895_R		22,540	ug/L	192.8	0.8553	49,520
Ni2316_A		9.781	ug/L	0.4960	5.071	17.97

SP0783-004

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 4:26:40PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		1.223	ug/L	0.2211	18.08	-0.09298
Sb2068_A		-1.338	ug/L	0.6377	47.65	0.1620
Se1960_A		0.4472	ug/L	0.7069	158.1	2.253
Si2516_R		6,944	ug/L	74.29	1.070	3,449
Sn1899_A		-0.06057	ug/L	0.5505	909.0	1.438
Sr4215_R		144.0	ug/L	1.189	0.8257	12,410
Ti3349_A		-0.04399	ug/L	0.1083	246.2	-15.63
Tl1908_A		0.5589	ug/L	0.4559	81.58	-3.294
V_2924_A		0.4353	ug/L	0.04212	9.678	-13.20
Zn2062_A		3.501	ug/L	0.1934	5.524	10.96
Y_3600_R		19,100	Cts/S	101.59	0.53186	19,100
Y_2243_A		10,126	Cts/S	162.32	1.6029	10,126
Y_3600_A		189,100	Cts/S	69.361	0.036679	189,100

SP0783-005

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 4:31:02PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.9148	ug/L	0.2618	28.62	-7.545
Al3961_R		-27.51	ug/L	7.788	28.31	44.31
As1891_A		26.90	ug/L	0.3664	1.362	8.364
B_2089_A		80.94	ug/L	0.1586	0.1959	134.1
Ba4554_R		29.87	ug/L	0.5895	1.974	1,951
Be3130_R		-0.03757	ug/L	0.01912	50.90	1.431
Ca3158_R	W	68,960	ug/L	332.1	0.4816	92,640
Cd2265_A		0.1891	ug/L	0.02198	11.62	8.163
Co2286_A		9.857	ug/L	0.02733	0.2773	45.09
Cr2677_A		1.071	ug/L	0.1140	10.65	36.64
Cu3273_A		1.158	ug/L	0.01221	1.055	9.627
Fe2599_R		2,538	ug/L	26.00	1.024	4,767
K_7664_R		8,012	ug/L	52.43	0.6544	5,619
Li6707_R		4.378	ug/L	0.3139	7.170	38.03
Mg2025_A		10,090	ug/L	12.17	0.1206	3,744
Mn2576_R	W	10,610	ug/L	81.73	0.7704	111,200
Mo2020_A		0.3215	ug/L	0.01558	4.844	0.1763
Na5895_R		15,000	ug/L	152.7	1.019	34,270
Ni2316_A		14.51	ug/L	0.09481	0.6534	26.54
Pb2203_A		2.005	ug/L	0.7163	35.73	0.8366
Sb2068_A		-0.4483	ug/L	0.07163	15.98	0.7211
Se1960_A		1.512	ug/L	0.6834	45.19	3.854
Si2516_R		9,904	ug/L	96.66	0.9760	5,089
Sn1899_A		0.2405	ug/L	0.7323	304.6	1.572
Sr4215_R		552.8	ug/L	6.217	1.125	49,600
Ti3349_A		-0.1523	ug/L	0.03779	24.82	-19.59
Tl1908_A		0.4562	ug/L	0.8146	178.6	-8.502
V_2924_A		0.9264	ug/L	0.4011	43.30	-48.36
Zn2062_A		1.594	ug/L	0.1206	7.564	4.860
Y_3600_R		19,868	Cts/S	2.9617	0.014907	19,868
Y_2243_A		9,907.7	Cts/S	4.5167	0.045587	9,907.7
Y_3600_A		192,120	Cts/S	96.719	0.050343	192,120

SP0783-006

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 4:35:24PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SP0783-006

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 4:35:24PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.047	ug/L	0.1109	10.60	-1.524
Al3961_R		-25.74	ug/L	11.36	44.13	46.91
As1891_A		10.78	ug/L	0.6844	6.346	1.914
B_2089_A		82.94	ug/L	2.010	2.424	134.8
Ba4554_R		29.49	ug/L	0.2326	0.7887	1,889
Be3130_R		-0.008527	ug/L	0.02740	321.3	4.151
Ca3158_R	W	70,500	ug/L	78.81	0.1118	92,870
Cd2265_A		0.2048	ug/L	0.007075	3.454	5.320
Co2286_A		9.996	ug/L	0.2250	2.251	44.86
Cr2677_A		1.487	ug/L	0.1004	6.756	42.30
Cu3273_A		1.073	ug/L	0.3790	35.33	6.961
Fe2599_R		1,316	ug/L	5.008	0.3805	2,427
K_7664_R		8,171	ug/L	8.824	0.1080	5,620
Li6707_R		4.001	ug/L	0.1562	3.905	31.99
Mg2025_A		10,340	ug/L	230.7	2.232	3,767
Mn2576_R	W	10,730	ug/L	15.42	0.1438	110,200
Mo2020_A		0.4777	ug/L	0.1075	22.51	0.7057
Na5895_R		15,300	ug/L	33.05	0.2160	34,280
Ni2316_A		14.41	ug/L	0.1272	0.8829	25.96
Pb2203_A		2.109	ug/L	0.4387	20.80	0.8901
Sb2068_A		-0.2404	ug/L	0.4058	168.8	0.8085
Se1960_A		-0.1739	ug/L	0.2716	156.2	3.285
Si2516_R		10,090	ug/L	23.43	0.2322	5,083
Sn1899_A		-0.1899	ug/L	0.2838	149.4	1.317
Sr4215_R		561.4	ug/L	0.2379	0.04237	49,390
Ti3349_A		-0.1528	ug/L	0.1756	114.9	-19.33
Tl1908_A		0.8664	ug/L	0.4254	49.11	-8.173
V_2924_A		0.9112	ug/L	0.2285	25.08	-48.46
Zn2062_A		1.514	ug/L	0.09911	6.547	4.532
Y_3600_R		19,482	Cts/S	49.126	0.25217	19,482
Y_2243_A		9,730.7	Cts/S	165.34	1.6991	9,730.7
Y_3600_A		189,270	Cts/S	1,109.7	0.58628	189,270

SP0783-007

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 4:39:45PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.04590	ug/L	0.09585	208.8	-23.05
Al3961_R		-28.54	ug/L	7.937	27.81	18.11
As1891_A		0.8659	ug/L	0.01068	1.233	-1.936
B_2089_A		236.1	ug/L	0.3503	0.1484	374.8
Ba4554_R		79.07	ug/L	2.817	3.563	5,128
Be3130_R		-0.001338	ug/L	0.06533	4,883	4.840
Ca3158_R	W	43,370	ug/L	1,107	2.552	57,860
Cd2265_A		0.07109	ug/L	0.03782	53.20	0.3427
Co2286_A		0.9368	ug/L	0.01461	1.559	5.482
Cr2677_A		0.3322	ug/L	0.1204	36.24	12.36
Cu3273_A		1.864	ug/L	0.03551	1.905	17.86
Fe2599_R		2.371	ug/L	1.305	55.06	11.21
K_7664_R		12,290	ug/L	383.0	3.115	8,609
Li6707_R		0.6323	ug/L	0.7172	113.4	-15.68
Mg2025_A		6,847	ug/L	22.58	0.3298	2,503
Mn2576_R		643.0	ug/L	17.57	2.732	6,697
Mo2020_A		1.774	ug/L	0.009598	0.5412	5.963
Na5895_R		19,150	ug/L	570.8	2.981	43,460
Ni2316_A		1.496	ug/L	0.2923	19.54	1.806

SP0783-007

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 4:39:45PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.1979	ug/L	0.003166	1.600	-1.240
Sb2068_A		0.2734	ug/L	0.7233	264.5	1.091
Se1960_A		1.931	ug/L	0.5634	29.18	2.296
Si2516_R		4,255	ug/L	121.3	2.850	2,209
Sn1899_A		0.2201	ug/L	0.5092	231.4	1.539
Sr4215_R		412.7	ug/L	13.77	3.337	36,780
Ti3349_A		-0.2690	ug/L	0.03680	13.68	-23.38
Tl1908_A		0.4829	ug/L	0.03500	7.249	-1.985
V_2924_A		0.6581	ug/L	0.08788	13.35	0.4460
Zn2062_A		0.7786	ug/L	0.06512	8.363	2.323
Y_3600_R		19,739	Cts/S	318.44	1.6132	19,739
Y_2243_A		9,771.8	Cts/S	39.083	0.39996	9,771.8
Y_3600_A		190,440	Cts/S	0.48098	0.00025300	190,440

SP0783-008

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 4:44:07PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.09513	ug/L	0.2237	235.2	-24.27
Al3961_R		-21.15	ug/L	5.731	27.10	29.15
As1891_A		0.1881	ug/L	1.655	879.5	-2.195
B_2089_A		247.6	ug/L	2.150	0.8685	390.5
Ba4554_R		84.87	ug/L	0.5494	0.6473	5,311
Be3130_R		0.01424	ug/L	0.04412	309.8	6.160
Ca3158_R	W	47,190	ug/L	222.4	0.4713	60,740
Cd2265_A		0.08270	ug/L	0.01152	13.93	0.5001
Co2286_A		0.8198	ug/L	0.04598	5.609	4.941
Cr2677_A		0.5269	ug/L	0.06073	11.52	15.47
Cu3273_A		2.144	ug/L	0.1160	5.408	22.35
Fe2599_R		1.313	ug/L	0.5680	43.25	8.890
K_7664_R		13,380	ug/L	50.05	0.3742	9,045
Li6707_R		0.7696	ug/L	0.2570	33.39	-13.17
Mg2025_A		7,203	ug/L	74.68	1.037	2,618
Mn2576_R		697.8	ug/L	1.517	0.2174	7,011
Mo2020_A		1.880	ug/L	0.1945	10.35	6.290
Na5895_R		20,870	ug/L	61.25	0.2934	45,710
Ni2316_A		1.574	ug/L	0.08427	5.353	1.944
Pb2203_A		0.4926	ug/L	0.1096	22.26	-0.9155
Sb2068_A		0.1680	ug/L	0.5624	334.8	1.021
Se1960_A		1.322	ug/L	1.332	100.7	2.110
Si2516_R		4,626	ug/L	4.871	0.1053	2,311
Sn1899_A		0.4475	ug/L	0.7995	178.7	1.653
Sr4215_R		446.9	ug/L	2.985	0.6679	38,420
Ti3349_A		-0.3204	ug/L	0.05562	17.36	-25.28
Tl1908_A		0.7590	ug/L	0.5870	77.33	-1.837
V_2924_A		0.7281	ug/L	0.1082	14.86	1.236
Zn2062_A		1.361	ug/L	0.08278	6.081	4.064
Y_3600_R		19,039	Cts/S	66.820	0.35097	19,039
Y_2243_A		9,715.0	Cts/S	77.200	0.79465	9,715.0
Y_3600_A		191,830	Cts/S	4,700.2	2.4502	191,830

SP0783-009

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 4:48:30PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SP0783-009

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 4:48:30PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1128	ug/L	0.1121	99.44	-20.76
Al3961_R		-4.589	ug/L	10.11	220.4	23.48
As1891_A		4.386	ug/L	0.4005	9.131	-0.5622
B_2089_A		202.1	ug/L	0.9509	0.4704	318.6
Ba4554_R		26.74	ug/L	0.03188	0.1192	1,692
Be3130_R		0.01593	ug/L	0.002204	13.84	6.331
Ca3158_R		21,340	ug/L	52.34	0.2453	27,750
Cd2265_A		0.04885	ug/L	0.01597	32.70	1.192
Co2286_A		4.891	ug/L	0.04300	0.8790	22.54
Cr2677_A		0.3082	ug/L	0.08587	27.86	11.74
Cu3273_A		1.587	ug/L	0.1115	7.031	14.13
Fe2599_R		494.9	ug/L	0.7605	0.1537	905.4
K_7664_R		8,033	ug/L	0.9254	0.01152	5,457
Li6707_R		0.8939	ug/L	0.4737	52.99	-11.56
Mg2025_A		3,437	ug/L	13.08	0.3805	1,241
Mn2576_R		330.0	ug/L	0.002999	0.0009090	3,352
Mo2020_A		0.9670	ug/L	0.01896	1.961	3.134
Na5895_R		19,260	ug/L	75.86	0.3939	42,630
Ni2316_A		6.859	ug/L	0.3598	5.246	11.77
Pb2203_A		0.9543	ug/L	0.5679	59.52	-0.3971
Sb2068_A		0.3288	ug/L	0.00001300	0.003980	1.123
Se1960_A		0.9208	ug/L	1.021	110.8	1.925
Si2516_R		5,015	ug/L	0.4438	0.008849	2,527
Sn1899_A		0.1264	ug/L	0.1955	154.7	1.475
Sr4215_R		139.4	ug/L	0.4594	0.3295	12,100
Ti3349_A		-0.01571	ug/L	0.2738	1,743	-14.83
Tl1908_A		0.8909	ug/L	0.6285	70.55	-1.509
V_2924_A		0.07882	ug/L	0.02775	35.20	-6.714
Zn2062_A		1.722	ug/L	0.008879	0.5158	5.131
Y_3600_R		19,244	Cts/S	85.297	0.44323	19,244
Y_2243_A		9,676.8	Cts/S	30.513	0.31532	9,676.8
Y_3600_A		191,360	Cts/S	473.68	0.24753	191,360

SP0783-010

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 4:52:52PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.3006	ug/L	0.004918	1.636	-29.35
Al3961_R		-8.800	ug/L	0.4430	5.034	18.65
As1891_A		2.103	ug/L	1.123	53.40	-1.467
B_2089_A		199.5	ug/L	5.846	2.931	318.8
Ba4554_R		26.16	ug/L	0.5785	2.211	1,678
Be3130_R		-0.01472	ug/L	0.03330	226.2	3.532
Ca3158_R		20,960	ug/L	77.74	0.3709	27,630
Cd2265_A		0.05027	ug/L	0.01078	21.45	0.5098
Co2286_A		4.984	ug/L	0.1567	3.145	23.26
Cr2677_A		0.6014	ug/L	0.08764	14.57	16.09
Cu3273_A		1.527	ug/L	0.1877	12.29	12.87
Fe2599_R		195.3	ug/L	0.9261	0.4742	366.3
K_7664_R		7,962	ug/L	54.95	0.6902	5,483
Li6707_R		1.763	ug/L	0.7310	41.47	0.5107
Mg2025_A		3,380	ug/L	95.56	2.827	1,237
Mn2576_R		322.9	ug/L	1.073	0.3323	3,325
Mo2020_A		1.172	ug/L	0.07532	6.429	3.893
Na5895_R		19,090	ug/L	130.9	0.6859	42,840
Ni2316_A		6.691	ug/L	0.1814	2.712	11.64

SP0783-010

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 4:52:52PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.4888	ug/L	0.2269	46.41	-0.9184
Sb2068_A		0.6611	ug/L	0.2993	45.27	1.334
Se1960_A		1.520	ug/L	0.8242	54.23	2.133
Si2516_R		4,998	ug/L	25.54	0.5109	2,554
Sn1899_A		0.03047	ug/L	0.6869	2,254	1.441
Sr4215_R		136.9	ug/L	1.346	0.9834	12,040
Ti3349_A		-0.2024	ug/L	0.08667	42.81	-21.17
Tl1908_A		0.7819	ug/L	0.1008	12.90	-1.591
V_2924_A		0.1886	ug/L	0.03647	19.34	-5.004
Zn2062_A		2.028	ug/L	0.08609	4.245	6.133
Y_3600_R		19,512	Cts/S	25.323	0.12978	19,512
Y_2243_A		9,812.0	Cts/S	202.09	2.0596	9,812.0
Y_3600_A		190,940	Cts/S	210.84	0.11042	190,940

SP0783-011

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 4:57:13PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.027	ug/L	0.1854	18.05	-107.5
Al3961_R		21.95	ug/L	9.088	41.40	65.02
As1891_A	W	1,517	ug/L	10.73	0.7075	612.7
B_2089_A		69.09	ug/L	0.5098	0.7378	116.8
Ba4554_R		27.47	ug/L	0.6499	2.366	1,815
Be3130_R		0.01663	ug/L	0.003402	20.46	6.719
Ca3158_R	W	31,080	ug/L	860.6	2.768	42,230
Cd2265_A		-0.3489	ug/L	0.1957	56.09	102.0
Co2286_A		23.89	ug/L	0.004533	0.01898	109.4
Cr2677_A		0.2046	ug/L	0.1939	94.74	21.53
Cu3273_A		-3.485	ug/L	0.2964	8.507	-20.79
Fe2599_R	W	43,800	ug/L	1,237	2.823	83,110
K_7664_R		5,855	ug/L	165.5	2.827	4,130
Li6707_R		4.837	ug/L	0.7383	15.26	45.07
Mg2025_A		5,045	ug/L	22.30	0.4420	1,894
Mn2576_R	W	4,000	ug/L	104.9	2.623	42,400
Mo2020_A		0.5864	ug/L	0.1201	20.49	1.612
Na5895_R		16,840	ug/L	420.4	2.496	38,940
Ni2316_A		12.88	ug/L	0.2453	1.904	20.80
Pb2203_A		1.388	ug/L	0.7859	56.60	1.849
Sb2068_A		-1.339	ug/L	0.1356	10.13	1.089
Se1960_A		-0.5080	ug/L	0.8092	159.3	2.560
Si2516_R		10,430	ug/L	269.7	2.585	5,414
Sn1899_A		-0.4664	ug/L	0.005140	1.102	1.206
Sr4215_R		311.9	ug/L	8.438	2.706	28,300
Ti3349_A		0.6502	ug/L	0.09196	14.14	8.189
Tl1908_A		0.5057	ug/L	0.7153	141.5	-4.232
V_2924_A		1.274	ug/L	0.1728	13.56	-9.685
Zn2062_A		3.292	ug/L	0.1241	3.769	10.21
Y_3600_R		20,105	Cts/S	287.87	1.4319	20,105
Y_2243_A		10,035	Cts/S	36.681	0.36554	10,035
Y_3600_A		195,690	Cts/S	454.08	0.23203	195,690

SP0783-012

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 5:01:32PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SP0783-012

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 5:01:32PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.347	ug/L	0.3445	25.58	-98.02
Al3961_R		-16.81	ug/L	1.556	9.255	20.40
As1891_A	W	1,459	ug/L	16.74	1.147	575.6
B_2089_A		71.61	ug/L	0.5397	0.7537	118.0
Ba4554_R		27.59	ug/L	0.5196	1.883	1,785
Be3130_R		0.02936	ug/L	0.04837	164.7	7.803
Ca3158_R	W	32,090	ug/L	455.3	1.419	42,690
Cd2265_A		-0.4805	ug/L	0.01126	2.343	97.69
Co2286_A		24.02	ug/L	0.5287	2.201	107.4
Cr2677_A		0.1271	ug/L	0.1680	132.2	20.03
Cu3273_A		-3.694	ug/L	0.3860	10.45	-23.61
Fe2599_R	W	43,760	ug/L	627.7	1.435	81,310
K_7664_R		6,054	ug/L	119.6	1.976	4,186
Li6707_R		6.039	ug/L	0.2079	3.444	61.31
Mg2025_A		5,186	ug/L	66.55	1.283	1,901
Mn2576_R	W	4,061	ug/L	55.18	1.359	42,150
Mo2020_A		0.5270	ug/L	0.1383	26.24	1.365
Na5895_R		17,280	ug/L	327.7	1.896	39,130
Ni2316_A		12.71	ug/L	0.3064	2.411	19.99
Pb2203_A		0.4719	ug/L	0.6389	135.4	0.8119
Sb2068_A		-0.5923	ug/L	1.074	181.4	1.501
Se1960_A		-0.1228	ug/L	0.2252	183.4	2.625
Si2516_R		10,690	ug/L	195.7	1.830	5,433
Sn1899_A		0.6492	ug/L	0.6664	102.7	1.772
Sr4215_R		322.2	ug/L	5.814	1.804	28,630
Ti3349_A		-0.05677	ug/L	0.1267	223.2	-16.25
Tl1908_A		0.04779	ug/L	0.4622	967.2	-4.456
V_2924_A		1.149	ug/L	0.1678	14.60	-11.71
Zn2062_A		3.611	ug/L	0.06094	1.688	10.94
Y_3600_R		19,687	Cts/S	269.35	1.3682	19,687
Y_2243_A		9,800.1	Cts/S	93.355	0.95259	9,800.1
Y_3600_A		191,890	Cts/S	2,725.8	1.4205	191,890

SP0783-013

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 5:05:51PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.9633	ug/L	0.1182	12.27	-76.42
Al3961_R		12.01	ug/L	10.12	84.24	40.71
As1891_A	W	1,383	ug/L	19.98	1.444	562.1
B_2089_A		64.02	ug/L	0.3895	0.6084	109.3
Ba4554_R		16.29	ug/L	0.03745	0.2299	1,032
Be3130_R		0.004073	ug/L	0.03123	766.6	5.252
Ca3158_R		19,870	ug/L	131.8	0.6632	25,880
Cd2265_A		-0.5837	ug/L	0.1307	22.39	68.78
Co2286_A		6.197	ug/L	0.1168	1.885	30.00
Cr2677_A		-0.03145	ug/L	0.1839	584.6	11.87
Cu3273_A		-2.695	ug/L	0.08446	3.134	-20.54
Fe2599_R	W	31,500	ug/L	14.14	0.04490	57,300
K_7664_R		4,999	ug/L	27.91	0.5584	3,369
Li6707_R		2.216	ug/L	0.9343	42.16	6.801
Mg2025_A		2,797	ug/L	44.02	1.574	1,052
Mn2576_R		998.0	ug/L	5.107	0.5117	10,130
Mo2020_A		1.963	ug/L	0.1018	5.183	6.813
Na5895_R		14,930	ug/L	99.19	0.6643	33,100
Ni2316_A		1.392	ug/L	0.09569	6.876	-0.5813

SP0783-013

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 5:05:51PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.3491	ug/L	0.1447	41.46	0.1852
Sb2068_A		-1.439	ug/L	0.3023	21.01	0.7710
Se1960_A		0.6391	ug/L	0.4325	67.68	2.328
Si2516_R		10,730	ug/L	46.94	0.4376	5,338
Sn1899_A		1.057	ug/L	0.4996	47.27	2.048
Sr4215_R		197.3	ug/L	1.145	0.5803	17,160
Ti3349_A		0.2743	ug/L	0.02507	9.142	-4.833
Tl1908_A		0.4490	ug/L	0.2887	64.29	-2.330
V_2924_A		0.7196	ug/L	0.1265	17.58	-1.695
Zn2062_A		19.85	ug/L	0.1874	0.9440	62.12
Y_3600_R		19,272	Cts/S	14.582	0.075661	19,272
Y_2243_A		10,089	Cts/S	109.78	1.0882	10,089
Y_3600_A		190,550	Cts/S	1,112.0	0.58355	190,550

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 5:10:11PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	W	468.7	ug/L	9.059	1.933	10,830
Al3961_R		12,730	ug/L	53.61	0.4212	14,280
As1891_A		490.3	ug/L	1.544	0.3149	198.3
B_2089_A		479.9	ug/L	0.7336	0.1529	800.4
Ba4554_R		511.7	ug/L	3.226	0.6303	32,400
Be3130_R		496.5	ug/L	2.608	0.5254	46,510
Ca3158_R		12,730	ug/L	70.45	0.5536	16,560
Cd2265_A		478.4	ug/L	2.017	0.4217	6,974
Co2286_A		501.4	ug/L	2.162	0.4311	2,274
Cr2677_A		473.4	ug/L	10.78	2.276	7,355
Cu3273_A	W	463.7	ug/L	8.533	1.840	7,348
Fe2599_R		12,890	ug/L	65.46	0.5078	23,440
K_7664_R		12,650	ug/L	133.8	1.058	8,650
Li6707_R		517.1	ug/L	4.941	0.9555	7,168
Mg2025_A		12,660	ug/L	52.79	0.4169	4,834
Mn2576_R		517.4	ug/L	4.551	0.8795	5,255
Mo2020_A		492.2	ug/L	1.552	0.3154	1,784
Na5895_R		12,470	ug/L	77.45	0.6213	27,620
Ni2316_A		490.7	ug/L	1.465	0.2986	964.6
Pb2203_A		486.8	ug/L	2.572	0.5283	545.1
Sb2068_A		501.0	ug/L	0.4569	0.09121	307.6
Se1960_A		490.0	ug/L	1.446	0.2950	156.0
Si2516_R		13,340	ug/L	302.9	2.270	6,629
Sn1899_A		508.8	ug/L	3.162	0.6213	282.3
Sr4215_R		506.2	ug/L	1.746	0.3450	44,030
Ti3349_A		475.3	ug/L	11.02	2.318	16,680
Tl1908_A		510.4	ug/L	0.9388	0.1839	326.5
V_2924_A		484.7	ug/L	12.40	2.557	7,532
Zn2062_A		477.8	ug/L	1.894	0.3963	1,500
Y_3600_R		19,263	Cts/S	246.89	1.2817	19,263
Y_2243_A		10,127	Cts/S	18.884	0.18647	10,127
Y_3600_A		195,920	Cts/S	3,411.2	1.7412	195,920

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 5:14:19PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 5:14:19PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1544	ug/L	0.2667	172.8	-19.28
Al3961_R		0.7617	ug/L	0.9624	126.3	9.222
As1891_A		0.6588	ug/L	0.8176	124.1	-2.097
B_2089_A		-0.004889	ug/L	0.1550	3,171	6.006
Ba4554_R		0.2664	ug/L	0.07910	29.70	17.31
Be3130_R		0.2723	ug/L	0.0003280	0.1205	30.25
Ca3158_R		11.40	ug/L	0.4764	4.180	-5.713
Cd2265_A		0.2114	ug/L	0.07584	35.88	2.429
Co2286_A		0.2513	ug/L	0.04416	17.57	2.591
Cr2677_A		0.3701	ug/L	0.1443	39.00	12.58
Cu3273_A		0.05545	ug/L	0.2940	530.3	-10.41
Fe2599_R		16.38	ug/L	3.033	18.52	36.26
K_7664_R		21.61	ug/L	8.035	37.19	-68.90
Li6707_R		0.7780	ug/L	0.7733	99.40	-13.27
Mg2025_A		4.906	ug/L	1.075	21.90	-6.096
Mn2576_R		0.6272	ug/L	0.04971	7.925	7.804
Mo2020_A		0.7233	ug/L	0.1794	24.81	2.421
Na5895_R		20.00	ug/L	1.139	5.695	51.12
Ni2316_A		0.2450	ug/L	0.04988	20.35	-0.5899
Pb2203_A		0.5921	ug/L	0.0006400	0.1080	-0.8443
Sb2068_A		-0.2182	ug/L	0.6856	314.3	0.8298
Se1960_A		2.521	ug/L	0.08187	3.247	2.462
Si2516_R		39.42	ug/L	41.23	104.6	81.70
Sn1899_A		0.2006	ug/L	0.02758	13.75	1.587
Sr4215_R		0.1990	ug/L	0.1014	50.96	-5.077
Ti3349_A		0.7645	ug/L	0.02014	2.634	12.30
Tl1908_A		0.7661	ug/L	0.5842	76.27	-1.454
V_2924_A		0.2537	ug/L	0.2343	92.37	-2.308
Zn2062_A		0.1800	ug/L	0.09990	55.50	0.5248
Y_3600_R		19,226	Cts/S	345.14	1.7952	19,226
Y_2243_A		10,141	Cts/S	83.467	0.82302	10,141
Y_3600_A		197,400	Cts/S	1,249.6	0.63303	197,400

SP0783-014

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 5:18:44PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.7231	ug/L	0.05083	7.030	-80.37
Al3961_R		-5.525	ug/L	4.739	85.77	20.47
As1891_A	W	1,329	ug/L	2.178	0.1639	545.9
B_2089_A		63.04	ug/L	0.08274	0.1313	108.9
Ba4554_R		15.78	ug/L	0.08299	0.5259	1,002
Be3130_R		0.005989	ug/L	0.03412	569.6	5.454
Ca3158_R		19,180	ug/L	16.34	0.08518	25,030
Cd2265_A		-0.5621	ug/L	0.02873	5.112	65.26
Co2286_A		5.755	ug/L	0.09336	1.622	28.27
Cr2677_A		-0.1001	ug/L	0.1014	101.3	10.91
Cu3273_A		-2.424	ug/L	0.3317	13.68	-18.92
Fe2599_R	W	29,670	ug/L	14.73	0.04965	54,100
K_7664_R		4,882	ug/L	6.744	0.1381	3,296
Li6707_R		1.790	ug/L	0.05022	2.805	0.8827
Mg2025_A		2,689	ug/L	5.909	0.2198	1,021
Mn2576_R		951.0	ug/L	2.331	0.2451	9,677
Mo2020_A		2.045	ug/L	0.07110	3.477	7.187
Na5895_R		14,850	ug/L	6.845	0.04609	32,990
Ni2316_A		0.9212	ug/L	0.01597	1.734	-1.382

SP0783-014

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 5:18:44PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.4089	ug/L	0.2850	69.70	0.1793
Sb2068_A		-1.595	ug/L	0.09194	5.764	0.6516
Se1960_A		0.2956	ug/L	1.263	427.2	2.218
Si2516_R		10,610	ug/L	23.35	0.2202	5,291
Sn1899_A		-0.2402	ug/L	0.5791	241.1	1.351
Sr4215_R		193.9	ug/L	0.1829	0.09431	16,900
Ti3349_A		0.06763	ug/L	0.005764	8.523	-12.34
Tl1908_A		1.005	ug/L	0.4181	41.60	-1.961
V_2924_A		0.8026	ug/L	0.01857	2.313	-0.1270
Zn2062_A		19.92	ug/L	0.09055	0.4545	62.99
Y_3600_R		19,316	Cts/S	84.778	0.43890	19,316
Y_2243_A		10,195	Cts/S	10.689	0.10484	10,195
Y_3600_A		197,830	Cts/S	1,540.6	0.77874	197,830

SP0783-015

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 5:23:04PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.5096	ug/L	0.1908	37.44	-84.50
Al3961_R		10.61	ug/L	4.199	39.59	39.99
As1891_A	W	1,392	ug/L	13.11	0.9418	566.5
B_2089_A		63.62	ug/L	0.6589	1.036	108.8
Ba4554_R		15.25	ug/L	0.3579	2.347	1,028
Be3130_R		0.06011	ug/L	0.03285	54.65	11.20
Ca3158_R		18,230	ug/L	144.6	0.7928	25,250
Cd2265_A		-0.1952	ug/L	0.1099	56.32	69.31
Co2286_A		6.159	ug/L	0.1180	1.916	29.83
Cr2677_A		0.04227	ug/L	0.007347	17.38	13.03
Cu3273_A		-2.408	ug/L	0.02406	0.9991	-18.88
Fe2599_R	W	29,400	ug/L	285.9	0.9722	56,890
K_7664_R		4,642	ug/L	3.047	0.06564	3,321
Li6707_R		2.376	ug/L	0.7053	29.68	9.606
Mg2025_A		2,780	ug/L	32.21	1.159	1,046
Mn2576_R		917.7	ug/L	6.941	0.7564	9,909
Mo2020_A		2.182	ug/L	0.02679	1.227	7.621
Na5895_R		13,790	ug/L	118.2	0.8570	32,510
Ni2316_A		1.179	ug/L	0.006057	0.5136	-0.8446
Pb2203_A		0.004568	ug/L	0.01681	368.1	-0.2887
Sb2068_A		-1.403	ug/L	0.7996	56.98	0.7576
Se1960_A		1.154	ug/L	0.2844	24.65	2.462
Si2516_R		9,880	ug/L	56.82	0.5750	5,234
Sn1899_A		-0.03289	ug/L	0.1379	419.2	1.452
Sr4215_R		182.2	ug/L	1.591	0.8731	16,850
Ti3349_A		0.1005	ug/L	0.03558	35.41	-11.16
Tl1908_A		0.9118	ug/L	0.1078	11.83	-1.980
V_2924_A		0.9076	ug/L	0.001431	0.1577	1.706
Zn2062_A		18.98	ug/L	0.01049	0.05528	59.46
Y_3600_R		20,498	Cts/S	17.768	0.086681	20,498
Y_2243_A		10,102	Cts/S	83.692	0.82849	10,102
Y_3600_A		197,390	Cts/S	1,778.9	0.90122	197,390

SP0783-016

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 5:27:24PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SP0783-016

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 5:27:24PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.7274	ug/L	0.06292	8.649	-75.07
Al3961_R		0.05200	ug/L	18.36	35,300	26.91
As1891_A	W	1,352	ug/L	3.718	0.2749	546.1
B_2089_A		63.73	ug/L	0.08614	0.1352	108.2
Ba4554_R		14.62	ug/L	0.1575	1.077	974.5
Be3130_R		-0.004141	ug/L	0.01345	324.8	4.728
Ca3158_R		18,030	ug/L	140.7	0.7806	24,690
Cd2265_A		-0.1219	ug/L	0.06354	52.12	65.39
Co2286_A		5.793	ug/L	0.04700	0.8113	27.93
Cr2677_A		-0.1043	ug/L	0.1497	143.5	10.47
Cu3273_A		-2.118	ug/L	0.04363	2.060	-16.18
Fe2599_R	W	27,590	ug/L	147.2	0.5335	52,790
K_7664_R		4,574	ug/L	44.73	0.9779	3,234
Li6707_R		2.874	ug/L	0.3318	11.54	16.78
Mg2025_A		2,761	ug/L	9.043	0.3275	1,031
Mn2576_R		898.3	ug/L	8.472	0.9431	9,591
Mo2020_A		2.073	ug/L	0.08048	3.883	7.171
Na5895_R		13,970	ug/L	89.79	0.6426	32,580
Ni2316_A		1.178	ug/L	0.1279	10.86	-0.7148
Pb2203_A		0.5683	ug/L	0.01173	2.064	0.2683
Sb2068_A		-1.086	ug/L	0.01142	1.051	0.9083
Se1960_A		0.3282	ug/L	1.257	382.9	2.166
Si2516_R		9,943	ug/L	10.02	0.1008	5,208
Sn1899_A		0.003393	ug/L	0.1392	4,102	1.461
Sr4215_R		182.1	ug/L	0.9859	0.5414	16,650
Ti3349_A		0.06709	ug/L	0.1967	293.2	-12.38
Tl1908_A		1.607	ug/L	0.7523	46.81	-1.508
V_2924_A		0.7460	ug/L	0.1083	14.52	-0.6512
Zn2062_A		20.65	ug/L	0.03287	0.1592	64.21
Y_3600_R		20,268	Cts/S	2.9098	0.014357	20,268
Y_2243_A		10,024	Cts/S	24.399	0.24340	10,024
Y_3600_A		197,860	Cts/S	741.85	0.37493	197,860

SP0783-017

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 5:31:44PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.617	ug/L	0.0009550	0.05905	-145.2
Al3961_R		-16.09	ug/L	9.214	57.27	20.33
As1891_A	W	1,051	ug/L	20.02	1.904	417.9
B_2089_A		150.6	ug/L	2.568	1.706	245.2
Ba4554_R		47.21	ug/L	0.4903	1.039	3,093
Be3130_R		0.01101	ug/L	0.04221	383.3	6.211
Ca3158_R	W	30,840	ug/L	213.4	0.6919	41,550
Cd2265_A		-0.7110	ug/L	0.1720	24.20	148.4
Co2286_A		20.78	ug/L	0.5392	2.595	94.92
Cr2677_A		-0.3165	ug/L	0.1693	53.49	14.46
Cu3273_A		-5.414	ug/L	0.1777	3.282	-28.45
Fe2599_R	W	65,370	ug/L	229.1	0.3505	123,000
K_7664_R		9,145	ug/L	36.12	0.3950	6,447
Li6707_R		2.190	ug/L	0.1288	5.881	6.663
Mg2025_A		4,802	ug/L	101.8	2.119	1,785
Mn2576_R	W	2,474	ug/L	7.001	0.2830	25,980
Mo2020_A		2.705	ug/L	0.04779	1.767	9.244
Na5895_R		15,680	ug/L	126.1	0.8044	35,960
Ni2316_A		0.8509	ug/L	0.1758	20.66	-3.978

SP0783-017

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 5:31:44PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		-0.1075	ug/L	0.1061	98.72	1.055
Sb2068_A		-1.197	ug/L	0.4617	38.59	1.567
Se1960_A		0.1260	ug/L	0.4772	378.8	2.641
Si2516_R		9,498	ug/L	60.91	0.6413	4,891
Sn1899_A		0.8752	ug/L	0.3672	41.95	1.919
Sr4215_R		338.9	ug/L	1.868	0.5511	30,510
Ti3349_A		-0.2488	ug/L	0.1135	45.60	-22.93
Tl1908_A		0.6769	ug/L	0.2227	32.90	-3.116
V_2924_A		1.546	ug/L	0.02095	1.355	1.774
Zn2062_A		2.570	ug/L	0.06488	2.525	7.885
Y_3600_R		19,937	Cts/S	175.27	0.87911	19,937
Y_2243_A		9,937.3	Cts/S	151.37	1.5232	9,937.3
Y_3600_A		192,760	Cts/S	1,274.9	0.66141	192,760

SP0783-017L

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 5:36:04PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.9545	ug/L	0.9734	102.0	-52.34
Al3961_R		-26.14	ug/L	49.06	187.7	8.669
As1891_A		1,021	ug/L	7.408	0.7255	82.11
B_2089_A		143.3	ug/L	1.578	1.101	53.28
Ba4554_R		47.68	ug/L	0.4739	0.9941	619.8
Be3130_R		0.2145	ug/L	0.2088	97.35	9.082
Ca3158_R		31,450	ug/L	323.3	1.028	8,386
Cd2265_A		-0.8683	ug/L	0.2997	34.51	30.36
Co2286_A		20.62	ug/L	0.9238	4.480	20.70
Cr2677_A		-0.2203	ug/L	0.09442	42.85	8.853
Cu3273_A		-5.907	ug/L	0.5237	8.865	-16.37
Fe2599_R		66,610	ug/L	272.5	0.4090	24,860
K_7664_R		9,190	ug/L	89.40	0.9728	1,216
Li6707_R		2.191	ug/L	0.03040	1.387	-18.39
Mg2025_A		4,816	ug/L	12.04	0.2501	364.4
Mn2576_R		2,530	ug/L	21.73	0.8589	5,270
Mo2020_A		2.862	ug/L	0.1480	5.171	1.866
Na5895_R		15,850	ug/L	72.49	0.4574	7,212
Ni2316_A		1.104	ug/L	2.209	200.1	-1.619
Pb2203_A		1.116	ug/L	1.809	162.1	-0.7185
Sb2068_A		-6.053	ug/L	2.450	40.47	0.5107
Se1960_A		2.252	ug/L	2.565	113.9	2.041
Si2516_R		9,359	ug/L	30.01	0.3206	1,007
Sn1899_A		-2.619	ug/L	1.579	60.30	1.205
Sr4215_R		342.8	ug/L	1.862	0.5432	6,100
Ti3349_A		0.1033	ug/L	0.3904	377.8	-14.19
Tl1908_A		4.525	ug/L	3.250	71.81	-1.730
V_2924_A		0.4508	ug/L	0.2661	59.03	-8.274
Zn2062_A		4.005	ug/L	0.08484	2.119	2.519
Y_3600_R		19,766	Cts/S	97.745	0.49452	19,766
Y_2243_A		10,293	Cts/S	24.425	0.23731	10,293
Y_3600_A		199,830	Cts/S	610.01	0.30527	199,830

SP0783-017A

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 5:40:26PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SP0783-017A

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 5:40:26PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		446.6	ug/L	0.9383	0.2101	10,230
Al3961_R		10,040	ug/L	114.9	1.144	11,820
As1891_A	W	1,434	ug/L	2.424	0.1690	591.8
B_2089_A		582.1	ug/L	2.803	0.4816	980.0
Ba4554_R		521.1	ug/L	3.549	0.6811	34,530
Be3130_R		463.1	ug/L	2.774	0.5990	45,410
Ca3158_R	W	34,670	ug/L	318.4	0.9182	47,250
Cd2265_A		446.4	ug/L	2.543	0.5696	6,746
Co2286_A		493.7	ug/L	1.099	0.2226	2,274
Cr2677_A		455.2	ug/L	1.029	0.2260	7,121
Cu3273_A		444.0	ug/L	0.6546	0.1474	7,131
Fe2599_R	W	67,710	ug/L	525.0	0.7753	128,900
K_7664_R		18,210	ug/L	96.37	0.5292	13,070
Li6707_R		490.5	ug/L	3.397	0.6926	7,116
Mg2025_A		9,504	ug/L	40.28	0.4238	3,688
Mn2576_R	W	2,815	ug/L	29.13	1.035	29,910
Mo2020_A		480.4	ug/L	1.169	0.2434	1,767
Na5895_R		20,110	ug/L	126.7	0.6298	46,640
Ni2316_A		460.4	ug/L	1.491	0.3238	914.7
Pb2203_A		451.3	ug/L	2.436	0.5397	515.3
Sb2068_A		474.9	ug/L	1.022	0.2153	297.2
Se1960_A		461.9	ug/L	0.03166	0.006854	150.3
Si2516_R		9,377	ug/L	88.33	0.9420	4,888
Sn1899_A		486.6	ug/L	0.3161	0.06496	274.1
Sr4215_R		794.0	ug/L	5.797	0.7301	72,300
Ti3349_A		465.5	ug/L	0.01961	0.004213	16,430
Tl1908_A		466.4	ug/L	0.2434	0.05219	301.2
V_2924_A		477.0	ug/L	0.3707	0.07772	7,438
Zn2062_A		451.3	ug/L	1.221	0.2706	1,438
Y_3600_R		20,163	Cts/S	108.59	0.53857	20,163
Y_2243_A		10,279	Cts/S	24.008	0.23356	10,279
Y_3600_A		196,940	Cts/S	282.03	0.14321	196,940

SP0783-017P

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 5:44:36PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		51.33	ug/L	0.3792	0.7388	972.2
Al3961_R		2,110	ug/L	23.26	1.103	2,461
As1891_A	W	1,156	ug/L	0.7960	0.06883	458.0
B_2089_A		637.5	ug/L	2.351	0.3687	1,018
Ba4554_R	W	2,182	ug/L	27.27	1.250	141,400
Be3130_R		51.32	ug/L	0.6395	1.246	4,927
Ca3158_R	W	33,540	ug/L	249.8	0.7447	44,700
Cd2265_A		243.4	ug/L	0.4642	0.1907	3,610
Co2286_A		563.5	ug/L	1.562	0.2772	2,496
Cr2677_A		205.8	ug/L	0.8621	0.4189	3,142
Cu3273_A		249.4	ug/L	1.087	0.4358	3,919
Fe2599_R	W	66,690	ug/L	630.6	0.9457	124,100
K_7664_R		19,340	ug/L	200.0	1.034	13,580
Li6707_R		529.3	ug/L	5.898	1.114	7,510
Mg2025_A		9,729	ug/L	52.62	0.5408	3,633
Mn2576_R	W	3,023	ug/L	21.23	0.7022	31,410
Mo2020_A		108.3	ug/L	0.2464	0.2276	382.5
Na5895_R		23,170	ug/L	262.3	1.132	52,550
Ni2316_A		525.8	ug/L	1.626	0.3092	1,000

SP0783-017P

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 5:44:36PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		100.2	ug/L	0.1510	0.1507	111.1
Sb2068_A		105.6	ug/L	0.2266	0.2145	62.66
Se1960_A		105.0	ug/L	0.5019	0.4780	34.94
Si2516_R		10,780	ug/L	19.62	0.1820	5,486
Sn1899_A		536.3	ug/L	0.1149	0.02142	290.4
Sr4215_R		844.6	ug/L	11.09	1.313	75,210
Ti3349_A		508.0	ug/L	2.520	0.4962	17,420
Tl1908_A		103.0	ug/L	0.4647	0.4510	61.89
V_2924_A		540.8	ug/L	4.247	0.7854	8,252
Zn2062_A		511.5	ug/L	1.017	0.1989	1,569
Y_3600_R		19,715	Cts/S	31.925	0.16193	19,715
Y_2243_A		9,887.6	Cts/S	32.153	0.32518	9,887.6
Y_3600_A		191,510	Cts/S	932.42	0.48687	191,510

SP0783-017S

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 5:48:49PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		50.92	ug/L	0.1744	0.3424	962.7
Al3961_R		2,117	ug/L	11.17	0.5277	2,457
As1891_A	W	1,155	ug/L	5.593	0.4842	452.7
B_2089_A		644.8	ug/L	3.116	0.4833	1,019
Ba4554_R	W	2,194	ug/L	20.42	0.9307	141,500
Be3130_R		51.59	ug/L	0.4240	0.8219	4,930
Ca3158_R	W	33,320	ug/L	210.1	0.6305	44,200
Cd2265_A		246.5	ug/L	1.329	0.5394	3,615
Co2286_A		570.5	ug/L	3.663	0.6421	2,500
Cr2677_A		206.7	ug/L	0.3945	0.1909	3,150
Cu3273_A		249.3	ug/L	1.745	0.7002	3,910
Fe2599_R	W	66,110	ug/L	858.5	1.299	122,500
K_7664_R		19,270	ug/L	67.86	0.3521	13,470
Li6707_R		530.5	ug/L	2.127	0.4010	7,493
Mg2025_A		9,812	ug/L	25.52	0.2601	3,627
Mn2576_R	W	3,004	ug/L	1.811	0.06028	31,070
Mo2020_A		109.6	ug/L	0.9114	0.8312	383.4
Na5895_R		23,040	ug/L	112.5	0.4883	52,010
Ni2316_A		532.7	ug/L	2.837	0.5326	1,003
Pb2203_A		101.5	ug/L	0.4158	0.4098	111.3
Sb2068_A		107.5	ug/L	1.357	1.262	63.07
Se1960_A		106.9	ug/L	0.1106	0.1034	35.15
Si2516_R		10,670	ug/L	5.054	0.04737	5,406
Sn1899_A		545.9	ug/L	3.792	0.6946	292.5
Sr4215_R		843.8	ug/L	6.189	0.7334	74,800
Ti3349_A		509.4	ug/L	2.233	0.4384	17,440
Tl1908_A		104.6	ug/L	0.3132	0.2995	62.23
V_2924_A		543.4	ug/L	3.550	0.6533	8,279
Zn2062_A		517.0	ug/L	4.123	0.7975	1,569
Y_3600_R		19,627	Cts/S	60.741	0.30947	19,627
Y_2243_A		9,786.3	Cts/S	13.848	0.14150	9,786.3
Y_3600_A		191,210	Cts/S	692.60	0.36222	191,210

SP0652-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 5:53:01PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SP0652-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 5:53:01PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1420	ug/L	0.04353	30.66	-40.27
Al3961_R		144.9	ug/L	3.336	2.303	177.2
As1891_A		-0.6324	ug/L	0.07035	11.12	-2.944
B_2089_A		6.150	ug/L	0.1298	2.110	14.82
Ba4554_R		646.3	ug/L	20.71	3.204	41,820
Be3130_R		0.01227	ug/L	0.03724	303.5	5.791
Ca3158_R		3,155	ug/L	105.7	3.351	4,180
Cd2265_A		-0.03287	ug/L	0.09982	303.6	21.27
Co2286_A		1.189	ug/L	0.08024	6.747	6.567
Cr2677_A		4.708	ug/L	0.001391	0.02954	75.31
Cu3273_A		10.70	ug/L	0.3157	2.949	155.9
Fe2599_R		9,690	ug/L	299.4	3.090	18,020
K_7664_R		404.4	ug/L	23.17	5.728	199.5
Li6707_R		0.9774	ug/L	0.2382	24.37	-10.62
Mg2025_A		402.7	ug/L	2.394	0.5946	135.1
Mn2576_R		136.1	ug/L	3.666	2.693	1,411
Mo2020_A		0.3246	ug/L	0.01529	4.711	0.8968
Na5895_R	F	316,900	ug/L	13,750	4.340	717,400
Ni2316_A		7.898	ug/L	0.1508	1.909	12.71
Pb2203_A		3.595	ug/L	0.6690	18.61	2.716
Sb2068_A		-1.263	ug/L	0.8640	68.38	0.3697
Se1960_A		1.287	ug/L	0.6157	47.83	2.019
Si2516_R		232.8	ug/L	9.103	3.910	179.8
Sn1899_A		0.05354	ug/L	0.2331	435.5	1.397
Sr4215_R		76.24	ug/L	2.436	3.195	6,759
Ti3349_A		5.056	ug/L	0.1819	3.599	150.7
Tl1908_A		0.3207	ug/L	0.1792	55.86	-1.706
V_2924_A		0.5581	ug/L	0.06013	10.77	1.160
Zn2062_A		184.9	ug/L	2.490	1.347	539.8
Y_3600_R		19,696	Cts/S	410.79	2.0856	19,696
Y_2243_A		9,410.3	Cts/S	66.416	0.70579	9,410.3
Y_3600_A		181,220	Cts/S	347.36	0.19168	181,220

SP0653-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 5:57:29PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.3113	ug/L	0.1098	35.27	-27.64
Al3961_R		1,215	ug/L	0.2530	0.02082	1,434
As1891_A		7.476	ug/L	0.4713	6.304	0.6384
B_2089_A		12.15	ug/L	0.5351	4.404	23.49
Ba4554_R		32.17	ug/L	0.2790	0.8672	2,072
Be3130_R		0.07965	ug/L	0.02684	33.69	12.54
Ca3158_R	W	45,230	ug/L	213.9	0.4728	59,900
Cd2265_A		0.08329	ug/L	0.01593	19.12	0.7135
Co2286_A		0.03630	ug/L	0.1545	425.6	1.477
Cr2677_A		5.798	ug/L	0.1096	1.891	88.95
Cu3273_A		1.045	ug/L	0.1351	12.93	4.658
Fe2599_R		105.1	ug/L	0.2162	0.2056	201.1
K_7664_R		5,549	ug/L	45.19	0.8145	3,810
Li6707_R		3.009	ug/L	1.236	41.08	18.14
Mg2025_A		15,490	ug/L	167.7	1.082	5,383
Mn2576_R		182.7	ug/L	0.1084	0.05933	1,894
Mo2020_A		0.05467	ug/L	0.05689	104.1	-0.01544
Na5895_R	F	313,000	ug/L	2,167	0.6924	705,000
Ni2316_A		6.539	ug/L	0.01468	0.2245	10.72

SP0653-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 5:57:29PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		1.396	ug/L	0.2345	16.80	-0.05433
Sb2068_A		-1.588	ug/L	0.3064	19.29	0.008401
Se1960_A		2.502	ug/L	0.2731	10.92	2.281
Si2516_R		9,283	ug/L	9.552	0.1029	4,708
Sn1899_A		-0.06960	ug/L	0.09608	138.1	1.314
Sr4215_R		176.8	ug/L	0.7826	0.4427	15,620
Ti3349_A		-0.2541	ug/L	0.03609	14.20	-21.59
Tl1908_A		0.07733	ug/L	0.4399	568.9	-1.842
V_2924_A		0.1783	ug/L	0.04497	25.22	-4.266
Zn2062_A		25.83	ug/L	0.3652	1.414	74.25
Y_3600_R		19,589	Cts/S	27.598	0.14088	19,589
Y_2243_A		9,271.6	Cts/S	67.911	0.73246	9,271.6
Y_3600_A		179,710	Cts/S	117.82	0.065561	179,710

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 6:01:57PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	W	463.7	ug/L	0.3202	0.06905	10,730
Al3961_R		12,230	ug/L	91.11	0.7452	14,190
As1891_A		485.9	ug/L	10.01	2.060	197.6
B_2089_A	W	465.1	ug/L	7.226	1.554	780.2
Ba4554_R		491.8	ug/L	1.658	0.3372	32,220
Be3130_R	W	467.0	ug/L	3.101	0.6640	45,270
Ca3158_R		12,100	ug/L	57.43	0.4746	16,290
Cd2265_A	W	460.9	ug/L	7.094	1.539	6,755
Co2286_A		496.9	ug/L	8.260	1.662	2,265
Cr2677_A	W	471.5	ug/L	1.583	0.3358	7,338
Cu3273_A	W	453.5	ug/L	1.149	0.2534	7,198
Fe2599_R		12,360	ug/L	101.3	0.8202	23,250
K_7664_R		12,130	ug/L	117.5	0.9687	8,577
Li6707_R		506.7	ug/L	4.338	0.8561	7,267
Mg2025_A		12,440	ug/L	186.7	1.501	4,775
Mn2576_R		500.2	ug/L	1.326	0.2651	5,257
Mo2020_A		481.8	ug/L	7.989	1.658	1,755
Na5895_R		11,930	ug/L	73.10	0.6130	27,340
Ni2316_A		476.5	ug/L	7.216	1.514	941.7
Pb2203_A	W	470.4	ug/L	6.870	1.460	529.4
Sb2068_A		499.9	ug/L	4.687	0.9375	308.6
Se1960_A		480.0	ug/L	7.005	1.459	153.7
Si2516_R		12,950	ug/L	134.5	1.038	6,660
Sn1899_A		508.9	ug/L	6.273	1.233	283.8
Sr4215_R		482.5	ug/L	2.775	0.5751	43,420
Ti3349_A		475.0	ug/L	1.064	0.2239	16,700
Tl1908_A		494.5	ug/L	8.323	1.683	318.0
V_2924_A		493.3	ug/L	0.7674	0.1556	7,682
Zn2062_A	W	459.3	ug/L	7.915	1.723	1,450
Y_3600_R		19,931	Cts/S	0.54689	0.0027440	19,931
Y_2243_A		10,182	Cts/S	112.03	1.1003	10,182
Y_3600_A		196,240	Cts/S	234.36	0.11943	196,240

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 6:06:06PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 6:06:06PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3857	ug/L	0.1176	30.48	-14.01
Al3961_R		7.508	ug/L	2.366	31.52	17.20
As1891_A		-0.2885	ug/L	0.1815	62.91	-2.424
B_2089_A		-0.04899	ug/L	0.4746	968.8	5.783
Ba4554_R		0.3443	ug/L	0.09321	27.07	22.78
Be3130_R		0.4174	ug/L	0.001949	0.4670	45.02
Ca3158_R		16.81	ug/L	2.123	12.63	1.356
Cd2265_A		0.2678	ug/L	0.02993	11.17	3.183
Co2286_A		0.2999	ug/L	0.004403	1.468	2.744
Cr2677_A		0.4119	ug/L	0.04508	10.94	13.37
Cu3273_A		0.3418	ug/L	0.2721	79.60	-5.886
Fe2599_R		20.74	ug/L	3.866	18.64	45.45
K_7664_R		40.05	ug/L	8.411	21.00	-57.77
Li6707_R		0.6032	ug/L	0.4868	80.70	-16.02
Mg2025_A		6.589	ug/L	2.002	30.39	-5.315
Mn2576_R		0.6953	ug/L	0.1008	14.50	8.728
Mo2020_A		0.6757	ug/L	0.1793	26.54	2.198
Na5895_R		62.51	ug/L	4.212	6.739	149.1
Ni2316_A		0.6837	ug/L	0.02074	3.033	0.2616
Pb2203_A		0.5940	ug/L	0.06644	11.19	-0.8215
Sb2068_A		-0.04899	ug/L	0.01327	27.08	0.9157
Se1960_A		1.062	ug/L	1.145	107.9	1.954
Si2516_R		32.82	ug/L	34.31	104.5	80.80
Sn1899_A		-0.2591	ug/L	0.3015	116.4	1.300
Sr4215_R		0.4243	ug/L	0.03441	8.110	14.97
Ti3349_A		0.9108	ug/L	0.08400	9.223	17.67
Tl1908_A		0.8688	ug/L	0.06508	7.491	-1.352
V_2924_A		0.3842	ug/L	0.1650	42.96	-0.2577
Zn2062_A		0.1917	ug/L	0.02703	14.10	0.5487
Y_3600_R		19,750	Cts/S	43.377	0.21963	19,750
Y_2243_A		9,891.6	Cts/S	78.128	0.78985	9,891.6
Y_3600_A		199,560	Cts/S	69.060	0.034607	199,560

SP0783-018

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 6:10:31PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		2.294	ug/L	0.1000	4.361	-124.5
Al3961_R		-23.55	ug/L	6.473	27.49	9.989
As1891_A		968.5	ug/L	0.5464	0.05642	384.1
B_2089_A		145.2	ug/L	0.7630	0.5256	236.3
Ba4554_R		45.02	ug/L	0.2420	0.5375	2,955
Be3130_R		0.06364	ug/L	0.05803	91.19	11.31
Ca3158_R	W	29,020	ug/L	153.9	0.5305	39,160
Cd2265_A		-0.4238	ug/L	0.02085	4.919	144.3
Co2286_A		19.88	ug/L	0.02056	0.1034	90.73
Cr2677_A		-0.3124	ug/L	0.1610	51.54	14.19
Cu3273_A		-5.662	ug/L	0.1018	1.799	-36.46
Fe2599_R	W	62,110	ug/L	516.0	0.8308	117,100
K_7664_R		8,760	ug/L	11.28	0.1288	6,182
Li6707_R		1.631	ug/L	0.1927	11.81	-1.368
Mg2025_A		4,597	ug/L	18.39	0.4001	1,705
Mn2576_R	W	2,327	ug/L	12.98	0.5577	24,480
Mo2020_A		2.598	ug/L	0.002848	0.1096	8.857
Na5895_R		14,630	ug/L	49.67	0.3396	33,600
Ni2316_A		0.6257	ug/L	0.3920	62.64	-4.178

SP0783-018

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 6:10:31PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.4805	ug/L	0.6222	129.5	1.571
Sb2068_A		-1.387	ug/L	0.2755	19.85	1.384
Se1960_A		-0.7527	ug/L	1.162	154.4	2.311
Si2516_R		9,128	ug/L	29.21	0.3200	4,710
Sn1899_A		0.6688	ug/L	0.2703	40.42	1.805
Sr4215_R		315.0	ug/L	1.103	0.3503	28,390
Ti3349_A		-0.3024	ug/L	0.1053	34.81	-25.37
Tl1908_A		0.7854	ug/L	0.1738	22.13	-2.945
V_2924_A		1.637	ug/L	0.1416	8.652	4.198
Zn2062_A		1.777	ug/L	0.04407	2.480	5.433
Y_3600_R		19,968	Cts/S	113.81	0.56994	19,968
Y_2243_A		9,919.7	Cts/S	16.188	0.16319	9,919.7
Y_3600_A		197,190	Cts/S	196.89	0.099846	197,190

SP0783-018L

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 6:14:50PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		2.620	ug/L	0.07062	2.695	-43.11
Al3961_R		-35.18	ug/L	2.672	7.594	6.238
As1891_A		958.0	ug/L	0.2609	0.02724	75.61
B_2089_A		140.0	ug/L	1.915	1.368	51.32
Ba4554_R		44.97	ug/L	0.4102	0.9122	592.0
Be3130_R		0.3282	ug/L	0.1378	41.98	11.46
Ca3158_R		29,090	ug/L	92.12	0.3167	7,853
Cd2265_A		-0.1002	ug/L	0.000005000	0.005231	30.15
Co2286_A		20.60	ug/L	0.06804	0.3303	20.32
Cr2677_A		-0.1365	ug/L	1.233	903.2	9.077
Cu3273_A		-6.009	ug/L	1.957	32.57	-17.81
Fe2599_R		62,720	ug/L	210.0	0.3349	23,700
K_7664_R		8,765	ug/L	59.83	0.6826	1,170
Li6707_R		1.547	ug/L	2.629	170.0	-20.48
Mg2025_A		4,701	ug/L	12.38	0.2633	349.5
Mn2576_R		2,340	ug/L	8.560	0.3657	4,937
Mo2020_A		2.536	ug/L	0.2560	10.09	1.601
Na5895_R		14,800	ug/L	5.647	0.03817	6,818
Ni2316_A		2.698	ug/L	1.535	56.89	-0.9134
Pb2203_A		3.574	ug/L	0.01806	0.5052	-0.1852
Sb2068_A		-6.935	ug/L	4.670	67.33	0.3722
Se1960_A		-1.113	ug/L	0.4884	43.89	1.782
Si2516_R		8,893	ug/L	15.72	0.1767	972.3
Sn1899_A		0.6669	ug/L	0.7054	105.8	1.547
Sr4215_R		316.7	ug/L	0.2307	0.07283	5,705
Ti3349_A		-0.3309	ug/L	0.06011	18.17	-17.56
Tl1908_A		2.980	ug/L	2.630	88.24	-1.873
V_2924_A		2.872	ug/L	0.6919	24.09	-0.2922
Zn2062_A		2.099	ug/L	0.05860	2.792	1.279
Y_3600_R		20,014	Cts/S	14.264	0.071268	20,014
Y_2243_A		10,121	Cts/S	25.617	0.25310	10,121
Y_3600_A		202,820	Cts/S	820.25	0.40441	202,820

SP0783-018A

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 6:19:12PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SP0783-018A

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 6:19:12PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		445.2	ug/L	0.4784	0.1075	10,240
Al3961_R		10,130	ug/L	229.3	2.264	11,690
As1891_A	W	1,426	ug/L	11.59	0.8125	570.1
B_2089_A		595.4	ug/L	4.444	0.7463	971.2
Ba4554_R		519.4	ug/L	10.78	2.076	33,750
Be3130_R		458.0	ug/L	9.823	2.145	44,030
Ca3158_R	W	33,750	ug/L	668.0	1.979	45,100
Cd2265_A		459.3	ug/L	3.327	0.7245	6,714
Co2286_A		520.5	ug/L	5.297	1.018	2,321
Cr2677_A		454.5	ug/L	1.633	0.3592	7,132
Cu3273_A		432.5	ug/L	2.439	0.5639	6,967
Fe2599_R	W	66,230	ug/L	1,400	2.113	123,600
K_7664_R		18,130	ug/L	408.9	2.255	12,760
Li6707_R		501.6	ug/L	10.45	2.082	7,135
Mg2025_A		9,762	ug/L	81.38	0.8336	3,671
Mn2576_R	W	2,751	ug/L	45.85	1.667	28,660
Mo2020_A		499.3	ug/L	4.695	0.9404	1,779
Na5895_R		19,500	ug/L	442.9	2.272	44,330
Ni2316_A		476.6	ug/L	5.282	1.108	917.7
Pb2203_A		464.3	ug/L	2.333	0.5024	513.4
Sb2068_A		503.6	ug/L	5.043	1.001	305.0
Se1960_A		483.4	ug/L	4.256	0.8804	152.2
Si2516_R		9,280	ug/L	129.7	1.398	4,743
Sn1899_A		517.4	ug/L	4.849	0.9372	282.2
Sr4215_R		779.2	ug/L	16.73	2.147	69,570
Ti3349_A		467.6	ug/L	0.3143	0.06721	16,550
Tl1908_A		484.7	ug/L	3.423	0.7063	303.4
V_2924_A		484.9	ug/L	0.2912	0.06006	7,585
Zn2062_A		464.2	ug/L	5.612	1.209	1,433
Y_3600_R		19,770	Cts/S	147.98	0.74849	19,770
Y_2243_A		9,956.7	Cts/S	67.573	0.67867	9,956.7
Y_3600_A		197,530	Cts/S	353.26	0.17884	197,530

SP0783-018P

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 6:23:21PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		49.96	ug/L	0.2818	0.5640	953.2
Al3961_R		2,020	ug/L	2.268	0.1123	2,352
As1891_A	W	1,115	ug/L	3.228	0.2896	438.1
B_2089_A		630.2	ug/L	1.097	0.1740	999.2
Ba4554_R	W	2,099	ug/L	3.116	0.1484	135,700
Be3130_R		49.45	ug/L	0.1105	0.2235	4,737
Ca3158_R	W	32,500	ug/L	3.558	0.01095	43,220
Cd2265_A		240.5	ug/L	0.7285	0.3030	3,540
Co2286_A		564.6	ug/L	0.9172	0.1624	2,483
Cr2677_A		200.1	ug/L	1.058	0.5285	3,085
Cu3273_A		235.3	ug/L	1.784	0.7580	3,736
Fe2599_R	W	65,540	ug/L	134.5	0.2052	121,700
K_7664_R		18,900	ug/L	57.53	0.3045	13,240
Li6707_R		516.7	ug/L	0.4013	0.07767	7,315
Mg2025_A		9,660	ug/L	20.48	0.2120	3,583
Mn2576_R	W	2,909	ug/L	5.018	0.1725	30,160
Mo2020_A		107.7	ug/L	0.006669	0.006194	377.8
Na5895_R		22,320	ug/L	62.31	0.2792	50,500
Ni2316_A		519.6	ug/L	0.04014	0.007726	981.3

SP0783-018P

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 6:23:21PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		99.39	ug/L	0.1290	0.1298	109.4
Sb2068_A		106.8	ug/L	0.8351	0.7819	62.84
Se1960_A		103.4	ug/L	1.607	1.555	34.17
Si2516_R		10,500	ug/L	58.09	0.5530	5,335
Sn1899_A		546.4	ug/L	2.201	0.4028	293.8
Sr4215_R		812.8	ug/L	0.6413	0.07890	72,220
Ti3349_A		496.7	ug/L	4.622	0.9304	17,200
Tl1908_A		102.7	ug/L	0.9135	0.8893	61.35
V_2924_A		531.6	ug/L	3.963	0.7456	8,191
Zn2062_A		504.6	ug/L	2.049	0.4061	1,537
Y_3600_R		19,672	Cts/S	59.770	0.30383	19,672
Y_2243_A		9,819.1	Cts/S	15.573	0.15860	9,819.1
Y_3600_A		193,360	Cts/S	804.60	0.41611	193,360

SP0783-018S

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 6:27:33PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		50.07	ug/L	0.08397	0.1677	942.9
Al3961_R		2,065	ug/L	22.58	1.093	2,342
As1891_A	W	1,118	ug/L	2.178	0.1948	441.4
B_2089_A		628.4	ug/L	2.311	0.3678	1,001
Ba4554_R	W	2,133	ug/L	23.72	1.112	134,300
Be3130_R		50.18	ug/L	0.3420	0.6816	4,682
Ca3158_R	W	33,570	ug/L	47.31	0.1409	43,480
Cd2265_A		239.7	ug/L	1.225	0.5109	3,550
Co2286_A		560.6	ug/L	2.772	0.4944	2,477
Cr2677_A		202.2	ug/L	1.516	0.7496	3,090
Cu3273_A		237.9	ug/L	0.8889	0.3737	3,744
Fe2599_R	W	67,340	ug/L	701.4	1.041	121,800
K_7664_R		19,280	ug/L	69.31	0.3594	13,160
Li6707_R		524.7	ug/L	7.697	1.467	7,235
Mg2025_A		9,624	ug/L	60.69	0.6306	3,585
Mn2576_R	W	2,992	ug/L	5.681	0.1899	30,210
Mo2020_A		106.8	ug/L	0.4779	0.4474	376.5
Na5895_R		22,830	ug/L	118.7	0.5201	50,310
Ni2316_A		517.3	ug/L	1.272	0.2458	981.3
Pb2203_A		98.87	ug/L	0.1587	0.1605	109.3
Sb2068_A		106.8	ug/L	0.7013	0.6567	63.17
Se1960_A		102.7	ug/L	3.438	3.348	34.13
Si2516_R		10,830	ug/L	20.43	0.1887	5,354
Sn1899_A		542.5	ug/L	3.499	0.6451	293.0
Sr4215_R		829.2	ug/L	5.444	0.6566	71,760
Ti3349_A		500.5	ug/L	2.826	0.5646	17,180
Tl1908_A		102.1	ug/L	0.5518	0.5403	61.19
V_2924_A		535.6	ug/L	1.443	0.2693	8,179
Zn2062_A		504.7	ug/L	3.161	0.6264	1,544
Y_3600_R		19,161	Cts/S	39.748	0.20744	19,161
Y_2243_A		9,863.3	Cts/S	42.944	0.43540	9,863.3
Y_3600_A		191,650	Cts/S	1,054.5	0.55024	191,650

SP0783-019

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 6:31:45PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SP0783-019

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 6:31:45PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.4088	ug/L	0.2446	59.83	-48.41
Al3961_R		-11.19	ug/L	4.860	43.45	40.01
As1891_A		1.563	ug/L	0.2196	14.05	-2.579
B_2089_A		217.0	ug/L	1.038	0.4782	363.7
Ba4554_R		143.7	ug/L	1.267	0.8814	9,149
Be3130_R		0.01430	ug/L	0.009119	63.79	6.248
Ca3158_R	W	46,410	ug/L	584.3	1.259	60,750
Cd2265_A		-0.1543	ug/L	0.04435	28.75	33.58
Co2286_A		18.12	ug/L	0.1290	0.7118	85.21
Cr2677_A		0.4425	ug/L	0.1228	27.75	17.50
Cu3273_A		-0.4660	ug/L	0.1421	30.49	-3.457
Fe2599_R		14,470	ug/L	198.9	1.375	26,450
K_7664_R		10,690	ug/L	82.49	0.7719	7,333
Li6707_R		0.8321	ug/L	0.03704	4.451	-12.51
Mg2025_A		6,339	ug/L	21.06	0.3323	2,445
Mn2576_R	W	1,559	ug/L	16.26	1.043	15,920
Mo2020_A		-0.03330	ug/L	0.03735	112.2	-0.4447
Na5895_R		19,150	ug/L	145.4	0.7593	42,660
Ni2316_A		2.489	ug/L	0.04724	1.898	2.806
Pb2203_A		1.000	ug/L	0.1778	17.77	0.2204
Sb2068_A		-1.002	ug/L	0.9183	91.69	0.6516
Se1960_A		0.1286	ug/L	0.01165	9.063	2.123
Si2516_R		4,802	ug/L	33.08	0.6889	2,436
Sn1899_A		0.2887	ug/L	0.5770	199.9	1.663
Sr4215_R		458.2	ug/L	3.865	0.8435	40,070
Ti3349_A		-0.06207	ug/L	0.08313	133.9	-16.59
Tl1908_A		1.490	ug/L	0.5503	36.94	-2.031
V_2924_A		0.4756	ug/L	0.1630	34.27	-7.668
Zn2062_A		2.192	ug/L	0.01106	0.5045	6.969
Y_3600_R		19,367	Cts/S	116.82	0.60319	19,367
Y_2243_A		10,307	Cts/S	39.350	0.38177	10,307
Y_3600_A		193,170	Cts/S	594.99	0.30801	193,170

SP0783-020

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 6:36:06PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3903	ug/L	0.2944	75.44	-47.81
Al3961_R		-22.47	ug/L	3.745	16.67	26.10
As1891_A		0.9027	ug/L	0.7682	85.10	-2.695
B_2089_A		225.0	ug/L	0.8738	0.3883	362.4
Ba4554_R		138.3	ug/L	3.166	2.289	8,916
Be3130_R		0.008519	ug/L	0.003045	35.75	5.783
Ca3158_R	W	44,780	ug/L	1,077	2.405	59,380
Cd2265_A		-0.02522	ug/L	0.06338	251.4	31.96
Co2286_A		18.98	ug/L	0.06276	0.3307	85.66
Cr2677_A		0.3871	ug/L	0.09782	25.27	16.83
Cu3273_A		-0.1735	ug/L	0.2704	155.8	0.2369
Fe2599_R		13,580	ug/L	306.0	2.253	25,150
K_7664_R		10,340	ug/L	239.0	2.312	7,182
Li6707_R		1.512	ug/L	0.2241	14.82	-3.052
Mg2025_A		6,613	ug/L	8.274	0.1251	2,452
Mn2576_R	W	1,495	ug/L	32.57	2.178	15,470
Mo2020_A		-0.1037	ug/L	0.03760	36.26	-0.6725
Na5895_R		18,340	ug/L	461.3	2.515	41,370
Ni2316_A		2.568	ug/L	0.1480	5.761	2.908

SP0783-020

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 6:36:06PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		1.267	ug/L	0.5258	41.50	0.4715
Sb2068_A		-1.142	ug/L	0.5223	45.73	0.5230
Se1960_A		0.1318	ug/L	0.09225	69.99	2.024
Si2516_R		4,572	ug/L	95.14	2.081	2,352
Sn1899_A		0.5041	ug/L	0.2752	54.60	1.714
Sr4215_R		442.4	ug/L	11.80	2.667	39,180
Ti3349_A		-0.2427	ug/L	0.1002	41.30	-23.41
Tl1908_A		1.128	ug/L	0.5843	51.80	-2.136
V_2924_A		0.4456	ug/L	0.1900	42.63	-7.959
Zn2062_A		2.431	ug/L	0.09910	4.076	7.434
Y_3600_R		19,616	Cts/S	171.76	0.87564	19,616
Y_2243_A		9,906.2	Cts/S	21.405	0.21608	9,906.2
Y_3600_A		197,750	Cts/S	2,486.3	1.2573	197,750

SP0780-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 6:40:27PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.2903	ug/L	0.09127	31.44	-27.52
Al3961_R		-46.75	ug/L	4.356	9.317	63.19
As1891_A		-1.496	ug/L	0.6121	40.92	-2.746
B_2089_A		10.37	ug/L	0.1015	0.9784	21.00
Ba4554_R		60.39	ug/L	0.8747	1.448	3,839
Be3130_R		0.01948	ug/L	0.05924	304.1	6.739
Ca3158_R	W	112,700	ug/L	2,088	1.853	147,400
Cd2265_A		0.3196	ug/L	0.06906	21.61	3.723
Co2286_A		0.7361	ug/L	0.07809	10.61	4.404
Cr2677_A		0.9985	ug/L	0.05015	5.022	20.88
Cu3273_A		3.414	ug/L	0.1204	3.525	40.13
Fe2599_R		33.65	ug/L	2.181	6.481	68.09
K_7664_R		1,001	ug/L	14.02	1.400	609.9
Li6707_R		2.629	ug/L	0.7709	29.32	12.57
Mg2025_A		895.8	ug/L	2.913	0.3252	306.7
Mn2576_R		102.3	ug/L	2.194	2.145	1,045
Mo2020_A		0.1872	ug/L	0.005838	3.119	0.4326
Na5895_R	F	295,400	ug/L	2,028	0.6864	657,100
Ni2316_A		3.494	ug/L	0.3970	11.36	5.308
Pb2203_A		31.13	ug/L	1.190	3.824	30.90
Sb2068_A		-1.827	ug/L	0.6486	35.50	-0.1402
Se1960_A		0.6839	ug/L	0.001647	0.2409	1.749
Si2516_R		35.80	ug/L	15.05	42.05	80.61
Sn1899_A		0.2952	ug/L	0.1445	48.95	1.509
Sr4215_R		198.6	ug/L	3.429	1.727	17,330
Ti3349_A		0.006417	ug/L	0.06880	1,072	-13.45
Tl1908_A		0.5795	ug/L	0.6077	104.9	-1.508
V_2924_A		1.074	ug/L	0.1148	10.69	9.362
Zn2062_A		390.1	ug/L	0.8598	0.2204	1,130
Y_3600_R		19,344	Cts/S	139.59	0.72161	19,344
Y_2243_A		9,336.4	Cts/S	3.7176	0.039819	9,336.4
Y_3600_A		182,890	Cts/S	192.99	0.10552	182,890

SP0781-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 6:44:55PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SP0781-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 6:44:55PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.2802	ug/L	0.1836	65.52	-27.22
Al3961_R		-50.56	ug/L	0.6318	1.250	61.25
As1891_A		-1.050	ug/L	0.6327	60.25	-2.559
B_2089_A		10.26	ug/L	0.2019	1.967	20.71
Ba4554_R		73.05	ug/L	2.211	3.026	4,663
Be3130_R		-0.01863	ug/L	0.03530	189.4	3.123
Ca3158_R	W	114,900	ug/L	2,190	1.905	150,900
Cd2265_A		0.4213	ug/L	0.002928	0.6950	5.009
Co2286_A		1.341	ug/L	0.1778	13.26	6.877
Cr2677_A		1.062	ug/L	0.02728	2.569	21.87
Cu3273_A		3.337	ug/L	0.08751	2.622	38.90
Fe2599_R		17.98	ug/L	0.5519	3.070	39.61
K_7664_R		1,069	ug/L	8.049	0.7533	659.2
Li6707_R		2.335	ug/L	0.4187	17.94	8.572
Mg2025_A		1,104	ug/L	0.1163	0.01053	377.2
Mn2576_R		195.6	ug/L	3.358	1.717	2,005
Mo2020_A		0.3607	ug/L	0.1863	51.64	0.9996
Na5895_R	F	318,200	ug/L	11,480	3.609	710,400
Ni2316_A		5.184	ug/L	0.2950	5.690	8.302
Pb2203_A		22.24	ug/L	0.2574	1.157	21.53
Sb2068_A		-0.6861	ug/L	0.3565	51.96	0.5071
Se1960_A		2.047	ug/L	1.848	90.28	2.144
Si2516_R		291.4	ug/L	21.80	7.479	207.6
Sn1899_A		-0.4582	ug/L	0.3542	77.30	1.118
Sr4215_R		255.2	ug/L	5.400	2.116	22,370
Ti3349_A		-0.08513	ug/L	0.05103	59.95	-16.41
Tl1908_A		-0.5847	ug/L	0.5439	93.02	-2.238
V_2924_A		0.4081	ug/L	0.1071	26.25	-0.8745
Zn2062_A		340.3	ug/L	0.1428	0.04197	979.3
Y_3600_R		19,423	Cts/S	323.92	1.6677	19,423
Y_2243_A		9,272.3	Cts/S	3.5949	0.038771	9,272.3
Y_3600_A		182,530	Cts/S	887.62	0.48629	182,530

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 6:49:23PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	W	470.1	ug/L	3.350	0.7126	10,690
Al3961_R		12,470	ug/L	20.97	0.1682	14,030
As1891_A		506.8	ug/L	7.369	1.454	200.3
B_2089_A		485.2	ug/L	8.855	1.825	790.4
Ba4554_R		507.1	ug/L	1.850	0.3649	32,200
Be3130_R		485.1	ug/L	1.438	0.2965	45,600
Ca3158_R		12,520	ug/L	52.63	0.4204	16,340
Cd2265_A		486.7	ug/L	9.497	1.952	6,926
Co2286_A		523.7	ug/L	9.220	1.761	2,318
Cr2677_A		488.7	ug/L	1.560	0.3192	7,478
Cu3273_A	W	469.0	ug/L	1.386	0.2955	7,318
Fe2599_R		12,850	ug/L	36.37	0.2832	23,430
K_7664_R		12,470	ug/L	61.40	0.4925	8,549
Li6707_R		522.2	ug/L	2.199	0.4210	7,262
Mg2025_A		13,040	ug/L	210.5	1.614	4,861
Mn2576_R		512.8	ug/L	0.7586	0.1479	5,225
Mo2020_A		506.8	ug/L	9.269	1.829	1,793
Na5895_R		12,320	ug/L	56.73	0.4604	27,390
Ni2316_A		505.4	ug/L	9.625	1.904	970.2

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 6:49:23PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		495.2	ug/L	10.55	2.130	541.4
Sb2068_A		523.1	ug/L	9.396	1.796	313.5
Se1960_A		499.2	ug/L	9.456	1.894	155.2
Si2516_R		13,360	ug/L	197.5	1.479	6,658
Sn1899_A	W	538.0	ug/L	8.360	1.554	291.3
Sr4215_R		495.6	ug/L	0.1442	0.02909	43,250
Ti3349_A		486.9	ug/L	3.620	0.7435	16,830
Tl1908_A		518.1	ug/L	9.023	1.741	323.8
V_2924_A		510.2	ug/L	4.162	0.8158	7,810
Zn2062_A		484.6	ug/L	7.622	1.573	1,485
Y_3600_R		19,324	Cts/S	79.083	0.40924	19,324
Y_2243_A		9,889.1	Cts/S	126.61	1.2803	9,889.1
Y_3600_A		192,920	Cts/S	1,158.2	0.60036	192,920

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 6:53:32PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.4133	ug/L	0.02117	5.121	-13.45
Al3961_R		4.381	ug/L	0.8330	19.01	13.48
As1891_A		-1.079	ug/L	0.7256	67.23	-2.828
B_2089_A		-0.7223	ug/L	0.1630	22.57	4.867
Ba4554_R		0.1084	ug/L	0.08406	77.55	7.418
Be3130_R		0.2008	ug/L	0.02147	10.70	23.97
Ca3158_R		13.70	ug/L	1.141	8.326	-2.769
Cd2265_A		0.2578	ug/L	0.003978	1.543	3.126
Co2286_A		0.1617	ug/L	0.03707	22.93	2.199
Cr2677_A		0.3256	ug/L	0.2201	67.59	12.11
Cu3273_A		0.03295	ug/L	0.05921	179.7	-10.97
Fe2599_R		16.27	ug/L	1.129	6.942	36.74
K_7664_R		55.46	ug/L	8.811	15.89	-46.40
Li6707_R		0.01572	ug/L	0.1334	848.3	-24.16
Mg2025_A		5.962	ug/L	0.1518	2.546	-5.732
Mn2576_R		0.07459	ug/L	0.2560	343.2	2.248
Mo2020_A		0.6412	ug/L	0.1550	24.17	2.137
Na5895_R		69.44	ug/L	0.9435	1.359	163.2
Ni2316_A		0.4687	ug/L	0.005381	1.148	-0.1542
Pb2203_A		0.1362	ug/L	0.4498	330.3	-1.365
Sb2068_A		0.1032	ug/L	0.1406	136.2	1.038
Se1960_A		0.2425	ug/L	1.436	592.2	1.753
Si2516_R		30.40	ug/L	33.35	109.7	78.77
Sn1899_A		-0.08500	ug/L	0.5767	678.4	1.438
Sr4215_R		0.1152	ug/L	0.08080	70.11	-12.47
Ti3349_A		0.8024	ug/L	0.2546	31.72	13.90
Tl1908_A		1.042	ug/L	0.8497	81.56	-1.284
V_2924_A		0.1720	ug/L	0.02601	15.12	-3.667
Zn2062_A		0.1143	ug/L	0.09240	80.85	0.3220
Y_3600_R		19,561	Cts/S	81.956	0.41898	19,561
Y_2243_A		10,202	Cts/S	45.533	0.44633	10,202
Y_3600_A		201,210	Cts/S	268.00	0.13320	201,210

PQL

Method Name: FAST-2016_NO_AU
Method Revision: 1,102
Analyst Name: JT
Acquire Date: 2/23/2022 6:57:55PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

Logbooks and Supporting Documents

Katahdin Analytical Services, Inc.

Reagents and Consumables Information:

HNO3: MSR274 HCL: MSR268

1:1 HNO3: MR3269 1:1 HCL: MR3258

Metals Preparation Benchsheet

Method: 3010

Digestion Vessels: MD0260000130

Pipet

M27

M21

1

LCS/Spiking Information:

CLPP-SPK-1 (ID/Vol): MS2369 / 0.1 mL

CLPP-SPK-INT1 (ID/Vol): MW20814 / 1.0 mL

CLPP-SPK-INT2 (ID/Vol): MW20796 / 1.0 mL

_____ Spike (ID/Vol): _____ / _____ mL

Heat Source ID : A

Start Time: 8:43 /Temp. 90 °C

End Time: 14:24 /Temp. 90 °C

Thermometer ID/Pos: ALC 25 / 4, 8

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Bottle	pH <2
LCSWPB22ICW1	PB22ICW1	0.05	L	0.05	L	AQ	IC	NWA	02/22/2022	-	✓
PBWPB22ICW1	PB22ICW1		L		L	AQ	IC	NWA	02/22/2022	-	
SP0783-001	PB22ICW1		L		L	AQ	IC	NWA	02/22/2022	C	
SP0783-002	PB22ICW1		L		L	AQ	IC	NWA	02/22/2022	C	
SP0783-003	PB22ICW1		L		L	AQ	IC	NWA	02/22/2022	E	
SP0783-004	PB22ICW1		L		L	AQ	IC	NWA	02/22/2022	C	
SP0783-005	PB22ICW1		L		L	AQ	IC	NWA	02/22/2022		
SP0783-006	PB22ICW1		L		L	AQ	IC	NWA	02/22/2022		
SP0783-007	PB22ICW1		L		L	AQ	IC	NWA	02/22/2022		
SP0783-008	PB22ICW1		L		L	AQ	IC	NWA	02/22/2022		
SP0783-009	PB22ICW1		L		L	AQ	IC	NWA	02/22/2022		
SP0783-010	PB22ICW1		L		L	AQ	IC	NWA	02/22/2022		
SP0783-011	PB22ICW1		L		L	AQ	IC	NWA	02/22/2022		
SP0783-012	PB22ICW1		L		L	AQ	IC	NWA	02/22/2022		
SP0783-013	PB22ICW1		L		L	AQ	IC	NWA	02/22/2022		
SP0783-014	PB22ICW1		L		L	AQ	IC	NWA	02/22/2022		
SP0783-015	PB22ICW1		L		L	AQ	IC	NWA	02/22/2022		
SP0783-016	PB22ICW1		L		L	AQ	IC	NWA	02/22/2022		
SP0783-017	PB22ICW1		L		L	AQ	IC	NWA	02/22/2022	P	
SP0783-017P	PB22ICW1		L		L	AQ	IC	NWA	02/22/2022		
SP0783-017S	PB22ICW1		L		L	AQ	IC	NWA	02/22/2022		

Client IDs Verified 2/22/22 NWA

REVIEWED

EM 02-22-22

KATAHDIN ANALYTICAL METALS SECTION

Digestion performed by: NWA On: 2/22/22

Katahdin Analytical Services, Inc.

Reagents and Consumables Information:

Metals Preparation Benchsheet

Method: 3010

HNO3: MSR274 HCL: MSR268 Digestion Vessels: MLD026000130

1:1 HNO3: MR3264 1:1 HCL: MR3259

Pipet **LCS/Spiking Information:**

M27 CLPP-SPK-1 (ID/Vol): MS2369 / 0.1 mL

M21 CLPP-SPK-INT1 (ID/Vol): MW20814 / 1.0 mL

1 CLPP-SPK-INT2 (ID/Vol): MW20796 / 1.0 mL

____ _____ Spike (ID/Vol): _____ / _____ mL

Heat Source ID : A

Start Time: 8:43 /Temp. 90 °C

End Time: 14:24 /Temp. 90 °C

Thermometer ID/Pos: ALC25 / 2,8

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Bottle	pH <2
LCSWPB22ICW2	PB22ICW2	0.05	L	0.05	L	AQ	IC	NWA	02/22/2022	—	✓
PBT1729A	PB22ICW2	0.01	L		L	AQ	IC	NWA	02/22/2022	—	
PBT1730A	PB22ICW2	1	L		L	AQ	IC	NWA	02/22/2022	—	
PBWPB22ICW2	PB22ICW2	0.05	L		L	AQ	IC	NWA	02/22/2022	—	
SP0652-001	PB22ICW2	0.01	L		L	AQ	IC	NWA	02/22/2022	—	
SP0653-001	PB22ICW2		L		L	AQ	IC	NWA	02/22/2022	—	
SP0780~~-001~~ 007	PB22ICW2		L		L	AQ	IC	NWA	02/22/2022	—	
SP0781~~-001~~ 007	PB22ICW2		L		L	AQ	IC	NWA	02/22/2022	—	
SP0783-018	PB22ICW2	0.05	L		L	AQ	IC	NWA	02/22/2022	G	
SP0783-018P	PB22ICW2		L		L	AQ	IC	NWA	02/22/2022	1	
SP0783-018S	PB22ICW2		L		L	AQ	IC	NWA	02/22/2022		
SP0783-019	PB22ICW2		L		L	AQ	IC	NWA	02/22/2022	C	
SP0783-020	PB22ICW2		L		L	AQ	IC	NWA	02/22/2022	1	

Client ID, Verified NWA 2/22/22

REVIEWED
2-22-22
KATAHDIN ANALYTICAL
METALS SECTION

CONVENTIONAL AND PHYSICAL ANALYTICAL DATA

QC Summary Section

Katahdin
ANALYTICAL SERVICES

Quality Control Report

Blank Sample Summary Report

Alkalinity

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG314455	STDM 2320B	23-FEB-22	N/A	J2.6	mg/L	5.0	0.23	4.0

Chloride

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG315251	SW846 9056A	10-MAR-22	N/A	U2.0	mg/L	2.0	0.099	1.0

Dissolved Organic Carbon (1)

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG314225	SW846 9060A	22-FEB-22	N/A	J0.52	mg/L	1.0	0.32	0.50

Nitrate As N

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG314835	EPA 353.2	18-FEB-22	N/A	U0.025	mg/L	0.050	0.015	0.025
WG315915	EPA 353.2	18-FEB-22	N/A	U0.025	mg/L	0.050	0.015	0.025

Solids-Filterable Residue

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG314179	STDM 2540C	21-FEB-22	18-FEB-22	U8.0	mg/L	10.	5.0	8.0
WG314323	STDM 2540C	24-FEB-22	23-FEB-22	U8.0	mg/L	10.	5.0	8.0

Sulfate

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG314976	SW846 9056A	10-MAR-22	N/A	U1.0	mg/L	1.0	0.064	0.50

Total Biochemical Oxygen Demand

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG314110	SM5210B	23-FEB-22	18-FEB-22	U1.0	mg/L	2.0	0.23	1.0

Quality Control Report

Laboratory Control Sample Summary Report

Alkalinity

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG314455-2	LCS	WG314455	23-FEB-22	N/A	mg/L	120	130	108	80-120	
WG314455-3	LCSD	WG314455	23-FEB-22	N/A	mg/L	120	130	108	80-120	0

Chloride

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG315251-2	LCS	WG315251	10-MAR-22	N/A	mg/L	3.75	3.63	96.8	90-110	

Dissolved Organic Carbon (1)

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG314225-2	LCS	WG314225	22-FEB-22	N/A	mg/L	50	50.	101	80-120	

Nitrate As N

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG314835-2	LCS	WG314835	18-FEB-22	N/A	mg/L	1	1.0	101	90-110	
WG315915-2	LCS	WG315915	18-FEB-22	N/A	mg/L	1	1.0	101	90-110	

Solids-Filterable Residue

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG314179-2	LCS	WG314179	21-FEB-22	18-FEB-22	mg/L	750	690	92	80-120	
WG314179-3	LCSD	WG314179	21-FEB-22	18-FEB-22	mg/L	750	710	95	80-120	3
WG314323-2	LCS	WG314323	24-FEB-22	23-FEB-22	mg/L	750	510	*68	80-120	
WG314323-3	LCSD	WG314323	24-FEB-22	23-FEB-22	mg/L	750	560	*74	80-120	9

Sulfate

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG314976-2	LCS	WG314976	10-MAR-22	N/A	mg/L	3.75	3.59	95.7	90-110	

Total Biochemical Oxygen Demand

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG314110-2	LCS	WG314110	23-FEB-22	18-FEB-22	mg/L	198	210	107	85-115	

Quality Control Report

Duplicate Sample Summary Report

Alkalinity

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Result Units	Sample Result	Duplicate Result	RPD(%)	RPD Limit
WG314455-4	SP0783-13	WG314455	23-FEB-22	mg/L	59.	60.	1	20

Total Biochemical Oxygen Demand

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Result Units	Sample Result	Duplicate Result	RPD(%)	RPD Limit
WG314110-4	SP0783-1	WG314110	23-FEB-22	mg/L	J 2.4	U 12.	NC	20

Quality Control Report

Matrix Spike Sample Summary Report

Alkalinity

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Result Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Recovery Limit
WG314455-5	MS	SP0783-17	WG314455	23-FEB-22	mg/L	120	140	220	85	75 - 125
WG314455-6	MS	SP0783-19	WG314455	23-FEB-22	mg/L	120	210	290	92	75 - 125

Chloride

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Result Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Recovery Limit
WG315251-4	MS	SP0783-17	WG315251	10-MAR-22	mg/L	7.5	30	36.	101.	90 - 110
WG315251-5	MSD	SP0783-17	WG315251	10-MAR-22	mg/L	7.5	30	36.	103.	90 - 110

Dissolved Organic Carbon (1)

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Result Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Recovery Limit
WG314225-3	MS	SP0783-18	WG314225	22-FEB-22	mg/L	100	2.1	100	99	75 - 125
WG314225-4	MSD	SP0783-18	WG314225	22-FEB-22	mg/L	100	2.1	100	101	75 - 125

Nitrate As N

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Result Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Recovery Limit
WG314835-3	MS	SP0783-17	WG314835	18-FEB-22	mg/L	0.5	U 0.050	0.069	14*	90 - 110
WG314835-4	MSD	SP0783-17	WG314835	18-FEB-22	mg/L	0.5	U 0.050	0.073	15*	90 - 110

Sulfate

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Result Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Recovery Limit
WG314976-3	MS	SP0783-17	WG314976	10-MAR-22	mg/L	3.75	11	14.	94.3	90 - 110
WG314976-4	MSD	SP0783-17	WG314976	10-MAR-22	mg/L	3.75	11	14.	96.5	90 - 110

Total Biochemical Oxygen Demand

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Result Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Recovery Limit
WG314110-3	MS	SP0783-1	WG314110	23-FEB-22	mg/L	47.52	J 2.4	58.	118	75 - 125

Sample Data Section

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level (PQL) or LOQ could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfite H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit
NFL	No Free Liquid Present	FLP	Free Liquid Present
NOD	No Odor Detected	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L. The reported value should be considered a minimum value.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 or 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Lab Sample ID: SP0783-1
Client ID: MW-21-2S-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	16-FEB-22 10:40	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	180 mg/L	5.0	0.23	4	STDM 2320B	WG314455	23-FEB-22 17:08	N/A	N/A	
Chloride	34 mg/L	4.0	0.20	2.0	SW846 9056A	WG315251	10-MAR-22 17:21	N/A	N/A	
Nitrate As N	1.2 mg/L	0.050	0.015	0.025	EPA 353.2	WG315915	18-FEB-22 10:43	N/A	N/A	
Solids-Filterable Residue	220 mg/L	10.	5.0	8	STDM 2540C	WG314179	21-FEB-22 18:05	SM 2540C	18-FEB-22	
Sulfate	18 mg/L	1.0	0.064	0.50	SW846 9056A	WG314976	09-MAR-22 20:16	N/A	N/A	
Total Biochemical Oxygen Demand	J2.4 mg/L	3.0	0.35	1	SM5210B	WG314110	23-FEB-22 14:11	SM 5210B	18-FEB-22 1003	

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Report of Analytical Results

Lab Sample ID: SP0783-2
Client ID: MW-21-2S-FF-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	16-FEB-22 10:40	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Dissolved Organic Carbon (1)	3.2 mg/L	1.0	0.32	0.50	SW846 9060A	WG314225	22-FEB-22 00:30	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SP0783-3
Client ID: MW-21-2D-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	16-FEB-22 12:25	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	31. mg/L	5.0	0.23	4	STDM 2320B	WG314455	23-FEB-22 17:11	N/A	N/A	
Chloride	33 mg/L	4.0	0.20	2.0	SW846 9056A	WG315251	10-MAR-22 17:42	N/A	N/A	
Nitrate As N	0.059 mg/L	0.050	0.015	0.025	EPA 353.2	WG315915	18-FEB-22 11:09	N/A	N/A	
Solids-Filterable Residue	120 mg/L	10.	5.0	8	STDM 2540C	WG314179	21-FEB-22 18:05	SM 2540C	18-FEB-22	
Sulfate	34 mg/L	1.0	0.064	0.50	SW846 9056A	WG314976	09-MAR-22 20:36	N/A	N/A	
Total Biochemical Oxygen Demand	J1.2 mg/L	2.0	0.23	1	SM5210B	WG314110	23-FEB-22 14:17	SM 5210B	18-FEB-22 1021	

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Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Lab Sample ID: SP0783-4
Client ID: MW-21-2D-FF-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	16-FEB-22 12:25	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Dissolved Organic Carbon (1)	1.0 mg/L	1.0	0.32	0.50	SW846 9060A	WG314225	22-FEB-22 00:42	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SP0783-5
Client ID: MW-21-1D-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	16-FEB-22 10:57	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	240 mg/L	5.0	0.23	4	STDM 2320B	WG314455	23-FEB-22 17:13	N/A	N/A	
Chloride	25 mg/L	4.0	0.20	2.0	SW846 9056A	WG315251	10-MAR-22 18:03	N/A	N/A	
Nitrate As N	0.91 mg/L	0.050	0.015	0.025	EPA 353.2	WG314835	18-FEB-22 10:49	N/A	N/A	
Solids-Filterable Residue	290 mg/L	10.	5.0	8	STDM 2540C	WG314179	21-FEB-22 18:05	SM 2540C	18-FEB-22	
Sulfate	18 mg/L	1.0	0.064	0.50	SW846 9056A	WG314976	09-MAR-22 20:57	N/A	N/A	
Total Biochemical Oxygen Demand	J1.1 mg/L	2.0	0.23	1	SM5210B	WG314110	23-FEB-22 14:20	SM 5210B	18-FEB-22 1025	

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ANALYTICAL SERVICES

Report of Analytical Results

Lab Sample ID: SP0783-6
Client ID: MW-21-1D-FF-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	16-FEB-22 10:57	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Dissolved Organic Carbon (1)	1.8 mg/L	1.0	0.32	0.50	SW846 9060A	WG314225	22-FEB-22 00:54	N/A	N/A	

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ANALYTICAL SERVICES

Report of Analytical Results

Lab Sample ID: SP0783-7
Client ID: MW-21-1S-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	16-FEB-22 12:50	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	140 mg/L	5.0	0.23	4	STDM 2320B	WG314455	23-FEB-22 17:17	N/A	N/A	
Chloride	25 mg/L	4.0	0.20	2.0	SW846 9056A	WG315251	10-MAR-22 18:24	N/A	N/A	
Nitrate As N	6.8 mg/L	0.25	0.076	0.12	EPA 353.2	WG314835	18-FEB-22 11:19	N/A	N/A	
Solids-Filterable Residue	220 mg/L	10.	5.0	8	STDM 2540C	WG314179	21-FEB-22 18:05	SM 2540C	18-FEB-22	
Sulfate	17 mg/L	1.0	0.064	0.50	SW846 9056A	WG314976	09-MAR-22 21:18	N/A	N/A	
Total Biochemical Oxygen Demand	3.0 mg/L	3.0	0.35	1	SM5210B	WG314110	23-FEB-22 14:24	SM 5210B	18-FEB-22 1034	

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Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Lab Sample ID: SP0783-8
Client ID: MW-21-1S-FF-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	16-FEB-22 12:50	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Dissolved Organic Carbon (1)	2.8 mg/L	1.0	0.32	0.50	SW846 9060A	WG314225	22-FEB-22 01:06	N/A	N/A	

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Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Lab Sample ID: SP0783-9
Client ID: MW-21-3S-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	16-FEB-22 14:35	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	88. mg/L	5.0	0.23	4	STDM 2320B	WG314455	23-FEB-22 17:20	N/A	N/A	
Chloride	30 mg/L	4.0	0.20	2.0	SW846 9056A	WG315251	10-MAR-22 18:45	N/A	N/A	
Nitrate As N	0.61 mg/L	0.050	0.015	0.025	EPA 353.2	WG314835	18-FEB-22 11:11	N/A	N/A	
Solids-Filterable Residue	U10. mg/L	10.	5.0	8	STDM 2540C	WG314323	24-FEB-22 17:59	SM 2540C	23-FEB-22	
Sulfate	13 mg/L	1.0	0.064	0.50	SW846 9056A	WG314976	09-MAR-22 21:39	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SP0783-10
Client ID: MW-21-3S-FF-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	16-FEB-22 14:35	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Dissolved Organic Carbon (1)	2.7 mg/L	1.0	0.32	0.50	SW846 9060A	WG314225	22-FEB-22 01:18	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SP0783-11
Client ID: MW-21-3D-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	16-FEB-22 14:19	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	100 mg/L	5.0	0.23	4	STDM 2320B	WG314455	23-FEB-22 17:22	N/A	N/A	
Chloride	27 mg/L	4.0	0.20	2.0	SW846 9056A	WG315251	10-MAR-22 19:05	N/A	N/A	
Nitrate As N	U0.050 mg/L	0.050	0.015	0.025	EPA 353.2	WG314835	18-FEB-22 11:12	N/A	N/A	
Solids-Filterable Residue	96. mg/L	10.	5.0	8	STDM 2540C	WG314323	24-FEB-22 17:59	SM 2540C	23-FEB-22	
Sulfate	25 mg/L	1.0	0.064	0.50	SW846 9056A	WG314976	09-MAR-22 22:00	N/A	N/A	

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ANALYTICAL SERVICES

Report of Analytical Results

Lab Sample ID: SP0783-12
Client ID: MW-21-3D-FF-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	16-FEB-22 14:19	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Dissolved Organic Carbon (1)	1.7 mg/L	1.0	0.32	0.50	SW846 9060A	WG314225	22-FEB-22 01:31	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SP0783-13
Client ID: AS-DUP-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	17-FEB-22 08:00	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	59. mg/L	5.0	0.23	4	STDM 2320B	WG314455	23-FEB-22 17:25	N/A	N/A	
Chloride	29 mg/L	4.0	0.20	2.0	SW846 9056A	WG315251	10-MAR-22 20:08	N/A	N/A	
Nitrate As N	U0.050 mg/L	0.050	0.015	0.025	EPA 353.2	WG314835	18-FEB-22 11:13	N/A	N/A	
Solids-Filterable Residue	80. mg/L	10.	5.0	8	STDM 2540C	WG314323	24-FEB-22 17:59	SM 2540C	23-FEB-22	
Sulfate	22 mg/L	1.0	0.064	0.50	SW846 9056A	WG314976	09-MAR-22 22:20	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SP0783-14
Client ID: AS-DUP-FF-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	17-FEB-22 08:00	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Dissolved Organic Carbon (1)	1.3 mg/L	1.0	0.32	0.50	SW846 9060A	WG314225	22-FEB-22 01:43	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SP0783-15
Client ID: MW-21-4D-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	17-FEB-22 11:10	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	58. mg/L	5.0	0.23	4	STDM 2320B	WG314455	23-FEB-22 18:15	N/A	N/A	
Chloride	29 mg/L	4.0	0.20	2.0	SW846 9056A	WG315251	10-MAR-22 20:29	N/A	N/A	
Solids-Filterable Residue	69. mg/L	10.	5.0	8	STDM 2540C	WG314323	24-FEB-22 17:59	SM 2540C	23-FEB-22	
Sulfate	22 mg/L	1.0	0.064	0.50	SW846 9056A	WG314976	09-MAR-22 22:41	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SP0783-16
Client ID: MW-21-4D-FF-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	17-FEB-22 11:10	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Dissolved Organic Carbon (1)	1.2 mg/L	1.0	0.32	0.50	SW846 9060A	WG314225	22-FEB-22 01:55	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SP0783-17
Client ID: SHM-10-06-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	17-FEB-22 11:26	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	140 mg/L	5.0	0.23	4	STDM 2320B	WG314455	23-FEB-22 18:17	N/A	N/A	
Chloride	30 mg/L	4.0	0.20	2.0	SW846 9056A	WG315251	10-MAR-22 20:49	N/A	N/A	
Nitrate As N	U0.050 mg/L	0.050	0.015	0.025	EPA 353.2	WG314835	18-FEB-22 11:04	N/A	N/A	
Solids-Filterable Residue	130 mg/L	10.	5.0	8	STDM 2540C	WG314323	24-FEB-22 17:59	SM 2540C	23-FEB-22	
Sulfate	11 mg/L	1.0	0.064	0.50	SW846 9056A	WG314976	09-MAR-22 23:44	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SP0783-18
Client ID: SHM-10-06-FF-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	17-FEB-22 11:26	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Dissolved Organic Carbon (1)	2.1 mg/L	1.0	0.32	0.50	SW846 9060A	WG314225	22-FEB-22 02:07	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SP0783-19
Client ID: MW-21-4S-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	17-FEB-22 12:55	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	210 mg/L	5.0	0.23	4	STDM 2320B	WG314455	23-FEB-22 18:20	N/A	N/A	
Chloride	23 mg/L	4.0	0.20	2.0	SW846 9056A	WG315251	10-MAR-22 21:52	N/A	N/A	
Nitrate As N	U0.050 mg/L	0.050	0.015	0.025	EPA 353.2	WG314835	18-FEB-22 10:50	N/A	N/A	
Solids-Filterable Residue	140 mg/L	10.	5.0	8	STDM 2540C	WG314323	24-FEB-22 17:59	SM 2540C	23-FEB-22	
Sulfate	14 mg/L	1.0	0.064	0.50	SW846 9056A	WG314976	10-MAR-22 00:46	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SP0783-20
Client ID: MW-21-4S-FF-EVENT#6
SDG: SP0783
Report Date: 30-MAR-22

Matrix	Date Sampled	Date Received
AQ	17-FEB-22 12:55	17-FEB-22

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Dissolved Organic Carbon (1)	3.3 mg/L	1.0	0.32	0.50	SW846 9060A	WG314225	22-FEB-22 03:14	N/A	N/A	

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Raw Data Section

WET CHEMISTRY BATCH REPORT
Feb 24 2022, 03:08 pm
Batch: WG314110 Run ID 1: R586577 Run ID 2: NONE

Parameter: Total Biochemical Oxygen Demand

Prep Date: 18-FEB-22

Date Analyzed: 23-FEB-22

Prep Method: SM 5210B

Analyst Initials: JL/JB

Prep Chemist: JL/JB

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SP0782-1	SAMP	SM5210B	1.5000mL	300.00mL	200	2.235	450 mg/L	NA	2	47.	400		
SP0782-3	SAMP	SM5210B	1.5000mL	300.00mL	200	2.31	460 mg/L	NA	2	47.	400		
SP0782-5	SAMP	SM5210B	7.5000mL	300.00mL	40	2.26	90. mg/L	NA	2	9.3	80.		
SP0782-7	SAMP	SM5210B	5.6700mL	300.00mL	53	4.13	220 mg/L	NA	2	12.	100		
SP0783-1	SAMP	SM5210B	200.00mL	300.00mL	1.5	1.615	J2.4 mg/L	NA	2	0.35	3.0		
SP0783-3	SAMP	SM5210B	300.00mL	300.00mL	1	1.15	J1.2 mg/L	NA	2	0.23	2.0		
SP0783-5	SAMP	SM5210B	300.00mL	300.00mL	1	1.11	J1.1 mg/L	NA	2	0.23	2.0		
SP0783-7	SAMP	SM5210B	200.00mL	300.00mL	1.5	2.035	3.0 mg/L	NA	2	0.35	3.0		
SP0801-1	SAMP	SM5210B	7.5000mL	300.00mL	40	4.975	200 mg/L	NA	2	9.3	80.		
WG314110-1	MBLANK	SM5210B	300.00mL	300.00mL	1	.06	U1.0 mg/L	NA	2	0.23	2.0		
WG314110-2	LCS	SM5210B	6.0000mL	300.00mL	50	4.246	210 mg/L	NA	2	12.	100		107
WG314110-3	MS	SM5210B	25.000mL	300.00mL	12	4.86	58. mg/L	NA	2	2.8	24.		118
WG314110-4	DUP	SM5210B	50.000mL	300.00mL	6	1.13	U12. mg/L	NA	2	1.4	12.	NC	

JL JB 2/25/22

Comments:

WG314110-1 SP0783-1
WG314110-2 SP0783-1
WG314110-3 SP0783-1
WG314110-4 SP0783-1

Entered by: JB/JL Date: 2/24/22 Accepted by: [signature] Date: 02/25/22

Katahdin Analytical Services SP0783 Page 212 of 389

KATAHDIN ANALYTICAL SERVICES, INC.

Biochemical Oxygen Demand - Methods EPA 405.1 & SM 5210B

TBOD5 [X] CBOD5 [ ]

Data Entry By: [JL]

WG314110
R5865 77

BOD5,mg/L=(DO consumed- Seed Correction Factor)* Total Volume in mL /Sample Volume in mL
DO consumed = Initial DO - Final DO
Total Volume = 300 mL
Volume of seed added to each sample including (LCSs and MS) in mL = [1]

Sample ID	Seed Volume mL	Initial DO D1	Final DO D2	Cons. DO D1-D2	Seed Correction Factor	In Criteria?
Blank 1	0	8.47	8.41	0.06	N/A	Yes
Blank 2	0	8.62	8.47	0.15	N/A	Yes
Blank 3	0	8.33	8.53	-0.2	N/A	Yes
Seed Control 1	1	8.58	7.81	0.77	0.77	No
Seed Control 2	2	8.55	7.17	1.38	0.69	No
Seed Control 3	4	8.58	6.03	2.55	0.64	0.64
Seed Control 4	6	8.56	4.58	3.98	0.66	0.66
			Mean Seed Correction Factor (SCF):			**0.65**

Blank 0959 1401
LCS 1005 1409

LCS Recovery Calculations

GGA Added (mL): 6 **LCS True Value (mg/L):** 198

LCS ID	Calc mg/L	% Recovery	Recovery Acceptance Limits (%): 84.6 TO 115.4	
LCS 1	200.98	101.5	LCS Within Criteria ?	Yes
LCS 2	216.98	109.6	LCS Within Criteria ?	Yes
LCS 3	218.98	110.6	LCS Within Criteria ?	Yes
Mean	212.31	107.2	LCS Within Criteria ?	Yes

Matrix Spike Recovery Calculations (75-125%)
Spike Recovery=(Seed Corrected DO MS-Seed Corrected DO Sample)/(Total mg Spike)

Katahdin Sample Number	Sample Volume (mL)	Sample BOD (mg/L)	Spk. Sample BOD (mg/L)	mL GGA Spike Added	MS True Value (mg/L)	Spike Recovery (%)
SO0783-1	25.00	3.13	58.32	6	47.52	116.2
					#DIV/0!	#DIV/0!
					#DIV/0!	#DIV/0!

All Data From This Batch Must Be Qualified As Follows:
LCS 1
LCS 2
LCS 3
Blank 1
Blank 2

KATAHDIN ANALYTICAL SERVICES, INC.

Biochemical Oxygen Demand - Methods EPA 405.1 & SM 5210B

TBOD5 X **CBOD5**

Data Entry By: JL

Sample Analysis								
Sample ID	Sample Volume mL	Initial DO mg/L *(D1)*	Final DO mg/L *(D2)*	DO Cons. mg/L *(D1-D2)*	Corrected DO cons. *(D1-D2-SCF)*	Calc. BOD mg/L	DO consumed in Criteria?	Adjusted PQL
LCS 1	6.000	8.61	3.94	4.67	4.02	200.98	Yes	100.0
LCS 2	6.000	8.58	3.59	4.99	4.34	216.98	Yes	100.0
LCS 3	6.000	8.60	3.57	5.03	4.38	218.98	Yes	100.0
Mean LCS Result	6.000	8.597	3.700	4.897	4.246	212.313	Yes	100.0
SP0783-1	25.000	8.67	7.80	0.87	0.22	2.64	No	24.0
1013 1411	50.000	8.59	7.40	1.19	0.54	3.24	No	12.0
	100.000 200	9.26	7.10	2.16	1.51 1.615	4.53	Yes	6.0
	300.000	8.93	6.56	2.37	1.72	1.72	Yes	2.0
1016 MS 1415	25.000	8.60	3.09	5.51	4.86	58.32	Yes	24.0
1017 DUP 1416	50.000	8.89	7.11	1.78	1.13	6.78	No	12.0
SP0783-3	25.000	8.59	7.84	0.75	0.10	1.20	No	24.0
1021 1417	50.000	8.70	7.88	0.82	0.17	1.02	No	12.0
	100.000	8.87	7.48	1.39	0.74	2.22	No	6.0
	300.000	9.06	7.26	1.80	1.15	1.15	Yes	2.0
SP0783-5	25.000	8.63	7.92	0.71	0.06	0.72	No	24.0
1025 1420	50.000	8.75	7.73	1.02	0.37	2.22	No	12.0
	100.000	8.86	7.43	1.43	0.78	2.34	No	6.0
	300.000	8.88	7.12	1.76	1.11	1.11	Yes	2.0
SP0789-7	25.000	8.32	7.23	1.09	0.44	5.28	No	24.0
1034 1424	50.000	8.47	7.69	0.78	0.13	0.78	No	12.0
	100.000 200	8.77	6.64	2.13	1.48 2.035	4.44	Yes	6.0
	300.000	8.81	5.57	3.24	2.59	2.59	Yes	2.0
1057 SP0782 1428	1.000	8.15	7.12	1.03	0.38	113.88	No	600.0
PARKING -7	2.000 15.67	8.57	6.06	2.51	1.86 4.13	278.94	Yes	300.0
	5.000	8.55	3.21	5.34	4.69	281.38	Yes	120.0
	10.000	8.55	2.05	6.50	5.85	175.49	Yes	60.0
	25.000	8.36	<1	7.36	6.71	80.52	No	24.0
1109 SP0782 1434	0.500	8.42	7.29	1.13	0.48	287.75	No	1200.0
DELTA -3	1.000 1.5	8.59	6.52	2.07	1.42 2.31	425.88	Yes	600.0
	2.000	8.59	4.74	3.85	3.20	479.94	Yes	300.0
	5.000	8.57	<1	7.57	6.92	415.18	No	120.0
	10.000	8.56	<1	7.56	6.91	207.29	No	60.0
1120 SP0782 1440	5.000 7.5	8.51	6.40	2.11	1.46 2.26	87.58	Yes	120.0
INDUSTRIAL-5	10.000	8.62	4.91	3.71	3.06	91.79	Yes	60.0
	25.000	8.72	<1	7.72	7.07	84.84	No	24.0
	50.000	8.84	<1	7.84	7.19	43.14	No	12.0
1130 SP0782-1444	0.500	8.52	7.29	1.23	0.58	347.75	No	1200.0
HARVEY -1	1.000 1.5	8.55	6.45	2.10	1.45 2.235	434.88	Yes	600.0
	2.000	8.54	4.87	3.67	3.02	452.94	Yes	300.0
	5.000	8.55	<1	7.55	6.90	413.98	No	120.0
				0.00	-0.65	#DIV/0!	No	#DIV/0!

KATAHDIN ANALYTICAL SERVICES, INC.

Biochemical Oxygen Demand - Methods EPA 405.1 & SM 5210B

TBOD5 [X] **CBOD5** [ ]

Data Entry By: JL

Sample Analysis								
Sample ID	**Sample Volume mL**	**Initial DO mg/L** *(D1)*	**Final DO mg/L** *(D2)*	**DO Cons. mg/L** *(D1-D2)*	**Corrected DO cons.** *(D1-D2-SCF)*	**Calc. BOD mg/L**	**DO consumed in Criteria?**	**Adjusted PQL**
IG18 **SP0801** 1448	1.000	8.30	7.21	1.09	0.44	131.88	No	600.0
	2.000	8.36	6.56	1.80	1.15	172.44	No	300.0
	5.000 / 7.5	8.44	4.54	3.90	3.25 / 4.975	194.98	Yes	120.0
	10.000 /	8.43	1.08	7.35	6.70 /	200.99	Yes	60.0
	25.000	8.42	<1	7.42	6.77	81.24	No	24.0
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!
				0.00	-0.65	#DIV/0!	No	#DIV/0!

KATAHDIN ANALYTICAL SERVICES - BIOCHEMICAL OXYGEN DEMAND

WG314110

Check the appropriate Test and Method:	If CBOD is checked below, this indicates that 0.16g of nitrification inhibitor has been added to each bottle below.		
Total BOD: SM5210B	EPA 405.1	PQL: 2.0 mg/L	
Carbonaceous BOD:	SM5210B	PQL: 2.0 mg/L	
Glutamic Acid Std (GGA) ID: GGA 021822	GGA Preparation:	Seed Used Source ID and Amount:	
Nitirification Inhibitor ID:	0.15g Glucose ID:	LAWPCA:	1 mL
Phosphate Bffr Soln. ID: WL0571	SWL4207	SSD: ✓	1 mL ✓
$H_{14}MgO_{11}S$ ID: SWL4874	0.15 g Glutamic Acid ID:	$Na_2S_2O_3$ ID:	
Ferric Chloride Soln. ID: SWL 4770	SWL4623	Starch Indicator ID:	
Calcium Chloride Soln. ID: SWL4907		Potassium Iodide Soln. ID:	
Acid 1 ID (A1):	Acid 2 ID (A2):	Base1 ID (B1):	

pH Meter Calibration		Probe ID:		
True Value	Lot ID	Actual Value	Accept? ± 0.05	
4.01				
7.00				
10.01				

DO Meter ID: B27869	DO Probe ID: 086030MD
KI Paper ID: 14-8600	pH Paper ID: 6102002
Carboy ID: H	1:50 H_2SO_4 ID:
Pipet IDs:	
Base 2 ID (B2):	INC ID:

SAMPLE ID	SITE ID	START TIME	pH 6.5 - 7.5?	pH 7.0-7.2?	Acid/Base Used	CL- Y/N	BOTTLE ID#	VOL (ml)	D.O. DAY 1	D.O. DAY 5	END TIME	SMP TEMP DAY 1 17-23 °C Y / N *
Blank		09:59					214		8.47	~~14 01~~ 8.41	1401	
↓		09:59					17H		8.62	8.47	02	
↓		10:00					174T		8.33	8.53	03	
1		10:01					165		8.58	7.81	04	
2		10:02					171		8.55	7.17	06	
4		10:03					188		8.58	6.03	07	
6		10:03					975		8.56	4.58	07	
LCS		10:05					423		8.61	3.94	14 09	
↓		10:05					H171		8.58	3.59	10	
↓		10:05					PPQ		8.60	3.57	10	
SP0783-1	Arcadis	13	✓			N	190A	25	8.67	7.80	14 11	
	2S	14	↓			↓	2059	50	8.59	7.40	12	
		15	↓			↓	27LL	100	9.26	7.10	13	
		26	↓			↓	418P	300	8.93	6.56	14	
	~~[illegible]~~ MS	16	↓			↓	073	25	8.60	3.09	14 15	
	DUP	17	↓			↓	192	50	8.89	7.11	14 16	
		↓										

JG 2/18/22

JG 2/2

WL-013 - Revision 10 - 09/23/2021

QAWL1049 - 000656

0000038

SAMPLE ID	SITE ID	START TIME	pH 6.5 - 7.5?	pH 7.0-7.2?	Acid/Base Used	CL- Y/N	BOTTLE ID#	VOL (ml)	D.O. DAY 1	D.O. DAY 5	END TIME	SMP TEMP DAY 1 17-23 °C Y/N *
SP0783-3	2D	10:21	✓			N	322	25	8.59	7.84	14 17	
	Arcadis	21					43	50	8.70	7.88	18	
		22					R2	100	8.87	7.48	18	
		23					626	300	9.06	7.26	19	
SP0783-5	Arcadis	25	✓			N	367	25	8.63	7.92	14 20	
	1D	28					091	50	8.75	7.73	21	
		31 ~~[illegible]~~					137	100	8.86	7.43	22	
		32					068	300	8.88	7.12	23	
SP0783-7	Arcadis	34				N	Q1	25	8.32	7.23	14 24	
	1S	35					6	50	8.47	7.69	25	
		35					17T	100	8.77	6.64	26	
		37					H2	300	8.81	5.57	27	
SP0782-7	Parking lot	57	✓			N	50	1	8.15	7.12	14 28	
	F.	58					14E	2	8.57	6.06	29	
		58					347X	5	8.55	3.21	31	
		59					I2	10	8.55	2.05	32	
							25M	25	8.36	<1	33	
SP0782-3	Delta	~~10:57~~ 11:09	✓			N	1C	0.5	8.42	7.29	14 34	
	Drive	11:10					447	1	8.59	6.52	35	
		11					021	2	8.59	4.74	36	
		12					186	5	8.57	<1	37	
		13					T22	10	8.56	<1	38	

NOTES:

ANALYST 1 JL/JB	DATE 2/18/22
ANALYST 2 JL/JB	DATE 2/23/22
CHECKED BY: [signature]	DATE 02/28/22

* If N, please comment why

LAWPCA = Lewiston-Auburn Water Pollution Control Authority, SSD=Scarborough Sanitary District

H14MgO11S = Magnesium Sulfate Heptahydrate

JB 2/18/22

JB 2/18/22

WL-013 - Revision 10 - 09/23/2021

QAWL1049 - 000656

0000039

KATAHDIN ANALYTICAL SERVICES - BIOCHEMICAL OXYGEN DEMAND

Check the appropriate Test and Method:	If CBOD is checked below, this indicates that 0.16g of nitrification inhibitor has been added to each bottle below.				pH Meter Calibration		Probe ID:	
Total BOD: SM5210B	EPA 405.1		PQL: 2.0 mg/L		True Value	Lot ID	Actual Value	Accept? ± 0.05
Carbonaceous BOD:	SM5210B		PQL: 2.0 mg/L		4.01			
Glutamic Acid Std (GGA) ID: GGA	GGA Preparation:	Seed Used Source ID and Amount:			7.00			
Nitirification Inhibitor ID:	0.15g Glucose ID:	LAWPCA:	1 mL		10.01			
Phosphate Bffr Soln. ID:		SSD:	1 mL		DO Meter ID: B27869		DO Probe ID:	
$H_{14}MgO_{11}S$ ID:	0.15 g Glutamic Acid ID:	$Na_2S_2O_3$ ID:			KI Paper ID:		pH Paper ID:	
Ferric Chloride Soln. ID:		Starch Indicator ID:			Carboy ID:		1:50 H_2SO_4 ID:	
Calcium Chloride Soln. ID:		Potassium Iodide Soln. ID:			Pipet IDs:			
Acid 1 ID (A1):	Acid 2 ID (A2):	Base1 ID (B1):			Base 2 ID (B2):		INC ID:	

SAMPLE ID	SITE ID	START TIME	pH 6.5 - 7.5?	pH 7.0-7.2?	Acid/Base Used	CL- Y/N	BOTTLE ID#	VOL (ml)	D.O. DAY 1	D.O. DAY 5	END TIME	SMP TEMP DAY 1 17-23 °C Y / N *
SP0782-5	Industrial	11:20	✓			N	E2	5	8.51	6.40	14 40	
	Drive	21					9P	10	8.62	4.91	41	
		22					U	25	8.72	<1	42	
		23	✓			✓	129B	50	8.84	<1	43	
SP0782-1	Harvey	30					Z	.5	8.52	7.29	14 44	
	Road	32					K9	1	8.55	6.45	45	
		33					BP06	2	8.54	4.87	46	
		34	✓			✓	T3	5	8.55	<1	47	
SP0801	~~[illegible]~~	16:18	✓			N	044	1	8.30	7.21	14 48	
	YMECA	19					22C	2	8.36	6.56	49	
		20					4321	5	8.44	4.54	50	
		21					2345	10	8.43	1.08	51	
		22	✓			✓	158A	25	8.42	<1	51	

JB 2/24/22

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OAWL1049 - 000656

0000040
0038

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SAMPLE ID	SITE ID	START TIME	pH 6.5 - 7.5?	pH 7.0-7.2?	Acid/Base Used	CL- Y/N	BOTTLE ID#	VOL (ml)	D.O. DAY 1	D.O. DAY 5	END TIME	SMP TEMP DAY 1 17-23 °C Y / N *

JB 2/24/22

NOTES:

ANALYST 1	JB/SZ	DATE	02/22
ANALYST 2	SZ/JB	DATE	2/23/22
CHECKED BY:		DATE	02/28/22

* If N, please comment why

LAWPCA = Lewiston-Auburn Water Pollution Control Authority, SSD=Scarborough Sanitary District

H14MgO11S = Magnesium Sulfate Heptahydrate

WET CHEMISTRY BATCH REPORT
Feb 22 2022, 08:24 am
Batch: WG314179

Parameter: Solids-Filterable Residue

Prep Date: 18-FEB-22

Date Analyzed: 21-FEB-22

Prep Method: STDM 2540C

Analyst Initials: JL/MH/SS

Prep Chemist: JL/MH/SS

Sample	Samp Type	Method	Tare Amt.	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SP0672-1	SAMP	STDM 2540C	130.2598g		130.2622g	1	24	24. mg/L	NA	10	5.02	10.		
SP0672-2	SAMP	STDM 2540C	133.2630g		133.2657g	1	27	27. mg/L	NA	10	5.02	10.		
SP0707-1	SAMP	STDM 2540C	142.7613g		142.7691g	1	78	78. mg/L	NA	10	5.02	10.		
SP0707-2	SAMP	STDM 2540C	129.1197g		129.1280g	1	83	83. mg/L	NA	10	5.02	10.		
SP0707-3	SAMP	STDM 2540C	131.3309g		131.3368g	1	59	59. mg/L	NA	10	5.02	10.		
SP0783-1	SAMP	STDM 2540C	139.4067g		139.4290g	1	223	220 mg/L	NA	10	5.02	10.		
SP0783-3	SAMP	STDM 2540C	137.0119g		137.0241g	1	122	120 mg/L	NA	10	5.02	10.		
SP0783-5	SAMP	STDM 2540C	131.7965g		131.8259g	1	294	290 mg/L	NA	10	5.02	10.		
SP0783-7	SAMP	STDM 2540C	137.9202g		137.9423g	1	221	220 mg/L	NA	10	5.02	10.		
WG314179-1	MBLANK	STDM 2540C	89.97320g		89.97080g	1	-24	U8.0 mg/L	NA	10	5.02	10.		
WG314179-2	LCS	STDM 2540C	99.74780g		99.81680g	1	690	690 mg/L	NA	10	5.02	10.		92
WG314179-3	LCSD	STDM 2540C	142.9472g		143.0186g	1	714	710 mg/L	NA	10	5.02	10.	3	95

Comments:

WG314179-1 SP0672-1
WG314179-2 SP0672-1
WG314179-3 SP0672-1

Entered by: JL Date: 2/22/22 Accepted by: ZF Date: 2/22/22

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R580374
WG314179

KATAHDIN ANALYTICAL SERVICES, LLC

TOTAL DISSOLVED SOLIDS/TOTAL SUSPENDED SOLIDS

Total Disolved Solids: EPA 160.1____ Total Dissolved Solids: SM 2540C ✓ PQL: 10mg/L

Total Suspended Solids: EPA 160.2____ Total Suspended Solids: SM 2540D____ PQL: 4mg/L

Aqueous Solids LCS Sand ID/Lot# Filter Lot # SWL4878

ASTM Class Weights

Balance ID: 01

True WT (g)	Initial WT (g)	Final WT (g)
0.1000	0.1001	0.0999
1.0000	0.9998	0.9996
10.0000	9.9998	9.9998
100.0000	99.9999	100.0000

Notes:

Oven Temperatures (C)

TDS: 180 +/- 2°C, TSS: 103 - 105 °C

Oven ID: 1

In Temp. 180	Date: 2/18/22	Time: 1800
Out Temp. 178	Date: 2/21/22	Time: 1042
In Temp. 182	Date: 2/21/22	Time: 1321
Out Temp. 178	Date: 2/21/22	Time: 1427
In Temp.	Date:	Time:
Out Temp.	Date:	Time:

KAS Sample ID	Sample Volume (ml)	Time of Initial Aliquot	Filter or Dish ID	Filter or Dish Wt. (g)	Dry 1 Dish/Filter + Sample Residue Wt. (g)	Dry 2 Dish/Filter + Sample Residue Wt. (g)	Time of Final Weighing (Analysis)
Blank	100	1440	W35	89.9732	89.9700	89.9708	1805
LCS			W40	99.7478	99.8174	99.8168	
LCSD			B31	142.9472	143.0182	143.0186	
SP0672-1			BP67	130.2598	130.2623	130.2622	
-2			AC	133.2630	133.2662	133.2657	
SP0707-1			A6	142.7613	142.7692	142.7691	
-2			B13	129.1197	129.1263	129.1280	
-3			JF	131.3309	131.3374	131.3368	
SP0783-1			B14	139.4067	139.4292	139.4290	
-3			B11	137.0119	137.0243	137.0241	
-5			B12	131.7965	131.8263	131.8259	
-7		1527	B10	137.9202	137.9425	137.9423	1809

JZ 2/22/22

Analyst: MH/SS/JZ Date: 2/18/22

Checked By: ZF Date: 2/22/22

WET CHEMISTRY BATCH REPORT
Feb 22 2022, 12:57 pm
Batch: WG314225 Run ID 1: R586400 Run ID 2: R586409

Parameter: Dissolved Organic Carbon (1)

Date Analyzed: 22-FEB-22

Analyst Initials: JL

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SP0783-2	SAMP	SW846 9060A	20.000mL	20.000mL	1	3.219	3.2 mg/L	NA	1	0.32	1.0		
SP0783-4	SAMP	SW846 9060A	20.000mL	20.000mL	1	1.058	1.0 mg/L	NA	1	0.32	1.0		
SP0783-6	SAMP	SW846 9060A	20.000mL	20.000mL	1	1.846	1.8 mg/L	NA	1	0.32	1.0		
SP0783-8	SAMP	SW846 9060A	20.000mL	20.000mL	1	2.774	2.8 mg/L	NA	1	0.32	1.0		
SP0783-10	SAMP	SW846 9060A	20.000mL	20.000mL	1	2.732	2.7 mg/L	NA	1	0.32	1.0		
SP0783-12	SAMP	SW846 9060A	20.000mL	20.000mL	1	1.696	1.7 mg/L	NA	1	0.32	1.0		
SP0783-14	SAMP	SW846 9060A	20.000mL	20.000mL	1	1.33	1.3 mg/L	NA	1	0.32	1.0		
SP0783-16	SAMP	SW846 9060A	20.000mL	20.000mL	1	1.18	1.2 mg/L	NA	1	0.32	1.0		
SP0783-18	SAMP	SW846 9060A	20.000mL	20.000mL	1	2.129	2.1 mg/L	NA	1	0.32	1.0		
SP0783-20	SAMP	SW846 9060A	20.000mL	20.000mL	1	3.267	3.3 mg/L	NA	1	0.32	1.0		
WG314225-1	MBLANK	SW846 9060A	20.000mL	20.000mL	1	.5234	J0.52 mg/L	NA	1	0.32	1.0		
WG314225-2	LCS	SW846 9060A	20.000mL	20.000mL	1	50.48	50. mg/L	NA	1	0.32	1.0		101
WG314225-3	MS	SW846 9060A	20.000mL	20.000mL	1	101.5	100 mg/L	NA	1	0.32	1.0		99
WG314225-4	MSD	SW846 9060A	20.000mL	20.000mL	1	103.6	100 mg/L	NA	1	0.32	1.0	2	101

Comments:

SP0783-18	MS/MSD
WG314225-1	SP0783-10
WG314225-2	SP0783-10
WG314225-3	SP0783-18
WG314225-4	SP0783-18

Entered by: JL/JB Date: 2/22/22 Accepted by: ZF Date: 2/23/22

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WET CHEMISTRY BATCH REPORT
Feb 22 2022, 12:40 pm
Batch: WG314224 Run ID 1: R586398 Run ID 2: R586404

Parameter: Dissolved Organic Carbon
Prep Date: N/A

Date Analyzed: 22-FEB-22
Prep Method: N/A

Analyst Initials: JL
Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SP0805-10	SAMP	SM5310B	20.000mL	20.000mL	1	1.581	1.6 mg/L	NA	1	0.10	1.0		
WG314224-1	MBLANK	SM5310B	20.000mL	20.000mL	1	.4579	J0.46 mg/L	NA	1	0.10	1.0		

Comments:

WG314224-1 SP0790-14
WG314224-2 SP0790-14

Entered by: JL Date: 2/22/22 Accepted by: ZF Date: 2/23/22

WET CHEMISTRY BATCH REPORT
Feb 22 2022, 12:40 pm
Batch: WG314224 Run ID 1: R586398 Run ID 2: R586404

Parameter: Dissolved Organic Carbon
Prep Date: N/A

Date Analyzed: 21-FEB-22
Prep Method: N/A

Analyst Initials: JL
Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SP0790-14	SAMP	SM5310B	20.000mL	20.000mL	1	1.025	1.0 mg/L	NA	1	0.10	1.0		
SP0805-2	SAMP	SM5310B	20.000mL	20.000mL	1	1.282	1.3 mg/L	NA	1	0.10	1.0		
SP0805-6	SAMP	SM5310B	20.000mL	20.000mL	1	.9598	U1.0 mg/L	NA	1	0.10	1.0		
SP0805-8	SAMP	SM5310B	20.000mL	20.000mL	1	.8287	U1.0 mg/L	NA	1	0.10	1.0		
WG314224-2	LCS	SM5310B	20.000mL	20.000mL	1	52.52	52. mg/L	NA	1	0.10	1.0		105

Comments:

WG314224-1 SP0790-14
WG314224-2 SP0790-14

Entered by: JL JB Date: 2/22/22 Accepted by: ZF Date: 2/23/22

WET CHEMISTRY BATCH REPORT
Feb 22 2022, 12:36 pm
Batch: WG314222 Run ID 1: R586396 Run ID 2: R586403

Parameter: Dissolved Organic Carbon
Prep Date: N/A

Date Analyzed: 21-FEB-22
Prep Method: N/A

Analyst Initials: JL
Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SP0742-2	SAMP	SM5310B	20.000mL	20.000mL	1	.2573	U1.0 mg/L	NA	1	0.10	1.0		
SP0742-4	SAMP	SM5310B	20.000mL	20.000mL	1	.4278	U1.0 mg/L	NA	1	0.10	1.0		
SP0742-6	SAMP	SM5310B	20.000mL	20.000mL	1	.4615	U1.0 mg/L	NA	1	0.10	1.0		
SP0742-8	SAMP	SM5310B	20.000mL	20.000mL	1	.682	U1.0 mg/L	NA	1	0.10	1.0		
SP0742-10	SAMP	SM5310B	20.000mL	20.000mL	1	.9245	U1.0 mg/L	NA	1	0.10	1.0		
SP0742-12	SAMP	SM5310B	20.000mL	20.000mL	1	.9169	U1.0 mg/L	NA	1	0.10	1.0		
SP0773-2	SAMP	SM5310B	20.000mL	20.000mL	1	.8564	U1.0 mg/L	NA	1	0.10	1.0		
SP0773-4	SAMP	SM5310B	20.000mL	20.000mL	1	1.048	1.0 mg/L	NA	1	0.10	1.0		
SP0773-8	SAMP	SM5310B	20.000mL	20.000mL	1	2.703	2.7 mg/L	NA	1	0.10	1.0		
SP0773-12	SAMP	SM5310B	20.000mL	20.000mL	1	.6596	U1.0 mg/L	NA	1	0.10	1.0		
SP0773-14	SAMP	SM5310B	20.000mL	20.000mL	1	1.176	1.2 mg/L	NA	1	0.10	1.0		
SP0773-16	SAMP	SM5310B	20.000mL	20.000mL	1	2.444	2.4 mg/L	NA	1	0.10	1.0		
SP0773-18	SAMP	SM5310B	20.000mL	20.000mL	1	.3831	U1.0 mg/L	NA	1	0.10	1.0		
SP0773-20	SAMP	SM5310B	20.000mL	20.000mL	1	4.34	4.3 mg/L	NA	1	0.10	1.0		
SP0790-2	SAMP	SM5310B	20.000mL	20.000mL	1	.4721	U1.0 mg/L	NA	1	0.10	1.0		
SP0790-4	SAMP	SM5310B	20.000mL	20.000mL	1	1.558	1.6 mg/L	NA	1	0.10	1.0		
SP0790-6	SAMP	SM5310B	20.000mL	20.000mL	1	1.124	1.1 mg/L	NA	1	0.10	1.0		
SP0790-8	SAMP	SM5310B	20.000mL	20.000mL	1	.6157	U1.0 mg/L	NA	1	0.10	1.0		
SP0790-10	SAMP	SM5310B	20.000mL	20.000mL	1	.3426	U1.0 mg/L	NA	1	0.10	1.0		
SP0790-12	SAMP	SM5310B	20.000mL	20.000mL	1	.5243	U1.0 mg/L	NA	1	0.10	1.0		
WG314222-1	MBLANK	SM5310B	20.000mL	20.000mL	1	.4443	J0.44 mg/L	NA	1	0.10	1.0		
WG314222-2	LCS	SM5310B	20.000mL	20.000mL	1	51.49	51. mg/L	NA	1	0.10	1.0		103
WG314222-3	DUP	SM5310B	20.000mL	20.000mL	1	.8264	U1.0 mg/L	NA	1	0.10	1.0	NC	
WG314222-4	MS	SM5310B	20.000mL	20.000mL	1	103.7	100 mg/L	NA	1	0.10	1.0		103
WG314222-5	DUP	SM5310B	20.000mL	20.000mL	1	.4456	U1.0 mg/L	NA	1	0.10	1.0	NC	
WG314222-6	MS	SM5310B	20.000mL	20.000mL	1	102.1	100 mg/L	NA	1	0.10	1.0		102

Comments:

SP0742-6	MS/MSD on metals only
WG314222-1	SP0742-10
WG314222-2	SP0742-10
WG314222-3	SP0773-2
WG314222-4	SP0773-2
WG314222-5	SP0790-2
WG314222-6	SP0790-2

Entered by: JL 1/23 Date: 2/22/22 Accepted by: ZF Date: 2/23/22

Kalahdin Analytical Services SP0783 Page 225 of 389

	Sample Name	Dilution	Result	Comment	Date / Time	Vial
1	ALK CHECK	1.000	NPOC:0.000 mg/L		2/21/2022 4:20:21 PM	1
2	CCV	1.000	NPOC:104.1 mg/L	104%	2/21/2022 4:35:04 PM	2
3	BLANK	1.000	NPOC:0.4443 mg/L		2/21/2022 4:46:50 PM	5
4	LCS	1.000	NPOC:51.49 mg/L		2/21/2022 5:00:18 PM	8
5	LCS	1.000	NPOC:52.52 mg/L		2/21/2022 5:14:13 PM	9
6	SP0742-2	1.000	NPOC:0.2573 mg/L		2/21/2022 5:25:35 PM	10
7	SP0742-4	1.000	NPOC:0.4278 mg/L		2/21/2022 5:37:10 PM	11
8	SP0742-6	1.000	NPOC:0.4615 mg/L		2/21/2022 5:48:48 PM	12
9	SP0742-8	1.000	NPOC:0.6820 mg/L		2/21/2022 6:00:31 PM	13
10	SP072-10	1.000	NPOC:0.9245 mg/L		2/21/2022 6:12:13 PM	14
11	SP0742-12	1.000	NPOC:0.9169 mg/L		2/21/2022 6:24:02 PM	15
12	SP0773-2	1.000	NPOC:0.8564 mg/L		2/21/2022 6:35:50 PM	16
13	SP0773-2 DUP	1.000	NPOC:0.8264 mg/L		2/21/2022 6:45:33 PM	16
14	CCV	1.000	NPOC:104.1 mg/L	104%	2/21/2022 7:00:04 PM	2
15	BLANK	1.000	NPOC:0.4208 mg/L		2/21/2022 7:11:40 PM	5
16	SP0773-2 MS	1.000	NPOC:103.7 mg/L		2/21/2022 7:25:58 PM	17
17	SP0773-4	1.000	NPOC:1.048 mg/L		2/21/2022 7:40:32 PM	18
18	SP0773-8	1.000	NPOC:2.703 mg/L		2/21/2022 7:52:40 PM	19
19	SP0773-12	1.000	NPOC:0.6596 mg/L		2/21/2022 8:04:22 PM	20
20	SP0773-14	1.000	NPOC:1.176 mg/L		2/21/2022 8:16:15 PM	21
21	SP0773-16	1.000	NPOC:2.444 mg/L		2/21/2022 8:28:32 PM	22
22	SP0773-18	1.000	NPOC:0.3831 mg/L		2/21/2022 8:40:10 PM	23
23	SP0773-20	1.000	NPOC:4.340 mg/L		2/21/2022 8:52:40 PM	24
24	SP0790-2	1.000	NPOC:0.4721 mg/L		2/21/2022 9:04:07 PM	25
25	SP0790-2 DUP	1.000	NPOC:0.4456 mg/L		2/21/2022 9:13:33 PM	25
26	CCV	1.000	NPOC:99.06 mg/L	99%	2/21/2022 9:27:56 PM	3
27	BLANK	1.000	NPOC:0.4618 mg/L		2/21/2022 9:39:43 PM	6
28	SP0790-2 MS	1.000	NPOC:102.1 mg/L		2/21/2022 9:54:10 PM	26
29	SP0790-4	1.000	NPOC:1.558 mg/L		2/21/2022 10:06:38 PM	27
30	SP0790-6	1.000	NPOC:1.124 mg/L		2/21/2022 10:18:46 PM	28
31	SP0790-8	1.000	NPOC:0.6157 mg/L		2/21/2022 10:30:18 PM	29
32	SP0790-10	1.000	NPOC:0.3426 mg/L		2/21/2022 10:41:46 PM	30
33	SP0790-12	1.000	NPOC:0.5243 mg/L		2/21/2022 10:53:23 PM	31
34	SP0790-14	1.000	NPOC:1.025 mg/L		2/21/2022 11:05:11 PM	32
35	SP0805-2	1.000	NPOC:1.282 mg/L		2/21/2022 11:17:30 PM	33
36	SP0805-6	1.000	NPOC:0.9598 mg/L		2/21/2022 11:30:05 PM	34
37	SP0805-8	1.000	NPOC:0.8287 mg/L		2/21/2022 11:41:44 PM	35
38	CCV	1.000	NPOC:98.43 mg/L	98%	2/21/2022 11:56:37 PM	3
39	BLANK	1.000	NPOC:0.4579 mg/L		2/22/2022 12:08:30 AM	6
40	SP0805-10	1.000	NPOC:1.581 mg/L		2/22/2022 12:20:50 AM	36
41	SP0783-2	1.000	NPOC:3.219 mg/L		2/22/2022 12:33:03 AM	37
42	SP0783-4	1.000	NPOC:1.058 mg/L		2/22/2022 12:44:53 AM	38
43	SP0783-6	1.000	NPOC:1.846 mg/L		2/22/2022 12:56:52 AM	39
44	SP0783-8	1.000	NPOC:2.774 mg/L		2/22/2022 1:09:27 AM	40
45	SP0783-10	1.000	NPOC:2.732 mg/L		2/22/2022 1:21:38 AM	41
46	SP0783-12	1.000	NPOC:1.696 mg/L		2/22/2022 1:33:45 AM	42
47	SP0783-14	1.000	NPOC:1.330 mg/L		2/22/2022 1:46:05 AM	43
48	SP0783-16	1.000	NPOC:1.180 mg/L		2/22/2022 1:57:55 AM	44
49	SP0783-18	1.000	NPOC:2.129 mg/L		2/22/2022 2:09:58 AM	45
50	CCV	1.000	NPOC:103.3 mg/L	103%	2/22/2022 2:24:17 AM	4
51	BLANK	1.000	NPOC:0.5234 mg/L		2/22/2022 2:36:09 AM	7
52	SP0783-18 MS	1.000	NPOC:101.5 mg/L		2/22/2022 2:50:27 AM	46
53	SP0783-18 MSD	1.000	NPOC:103.6 mg/L		2/22/2022 3:04:37 AM	47
54	SP0783-20	1.000	NPOC:3.267 mg/L		2/22/2022 3:17:14 AM	48
55	LCS	1.000	NPOC:50.48 mg/L		2/22/2022 3:31:31 AM	8
56	CCV	1.000	NPOC:101.6 mg/L	102%	2/22/2022 3:46:01 AM	4
57	BLANK	1.000	NPOC:0.09235 mg/L		2/22/2022 3:57:45 AM	7
58						
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KATAHDIN ANALYTICAL SERVICES, LLC
CARBON ANALYSIS RUN INFORMATION SHEET

INSTR. ID: WC2 (Shimadzu TOC-V_{CPH}) **ANALYST:** SL/JB **DATE:** 2/22/22

FILE NAME: TOC AG 022122 **METHOD(S):**

TOC	DOC	TIC
• EPA 415.1	• EPA 415.1	• EPA 415.1
• SM5310B	• SM5310B	• SM5310B
• _____	• _____	• _____

CALIBRATION DATE: 02-11-22 **CALIBRATION ANALYST:** ZF

Calibration standards were prepared by performing dilutions of the following standard on the day of calibration:

Calibration Source Standard ID	Prep Date	Expiration Date	Standard Conc. (mg/L)
W20677	02/03/22	05/03/22	2000

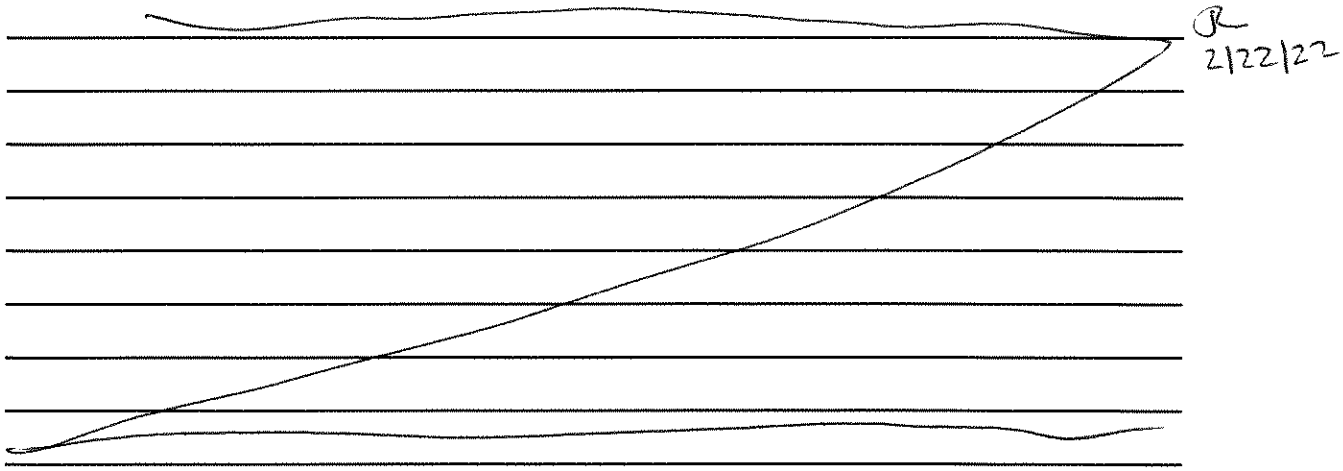
Note: Calibration must be performed quarterly or whenever a change in analysis conditions warrant. A copy of the associated calibration data is attached to this run.

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
CCV	W20679	02/04/22	05/03/22	100 mg C/L
LCS	W20690	02/08/22	05/08/22	50 mg C/L
MS Stock Std. *	W20677	02/03/22	05/03/22	2000 mg C/L
Alkalinity Check	W20680	02/04/22	05/04/22	15 mg/L (Inorg. C)

* Matrix spikes are prepared by adding 2.0 mL of MS Stock Std. to 38 mL of sample.

Additional Comments and Notes:



Instr.Information

System	TOC-Vcph / ASI-V
Detector	Combustion
Catalyst	Regular Sensitivity
Cell Length	long

Sample

Sample Name:	ALK CHECK
Sample ID:	<Untitled>
Origin:	DOUBLE INJECTION B.met
Chk. Result	

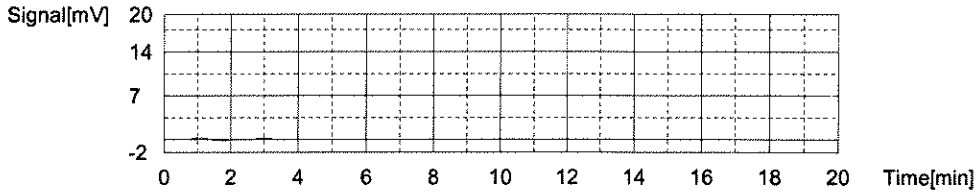
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.000 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	0.000mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 4:18:15 PM
2	0.000	0.000mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 4:20:21 PM

Mean Area 0.000
Mean Conc. 0.000mg/L



Control Sample

Sample Name:	CCV
Sample ID:	<Untitled>
Method:	CCV DOUBLE INJECTION.tpl
Chk. Result	Control value: 104.1 / Control within range!

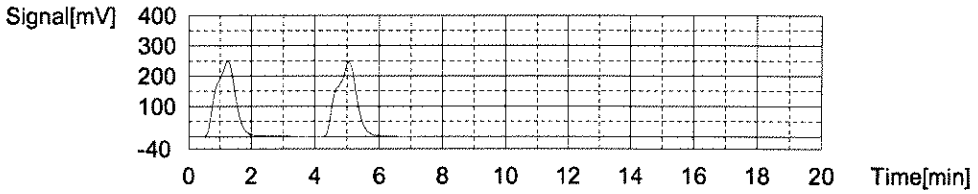
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:104.1 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1082	104.4mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 4:31:22 PM
2	1076	103.8mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 4:35:04 PM

Mean Area 1079
Mean Conc. 104.1mg/L



Control Sample

Sample Name: BLANK
Sample ID: <Untitled>
Method: BLANK DOUBLE INJECTION.tpl
Chk. Result Control value: 0.4443 / Control within range!

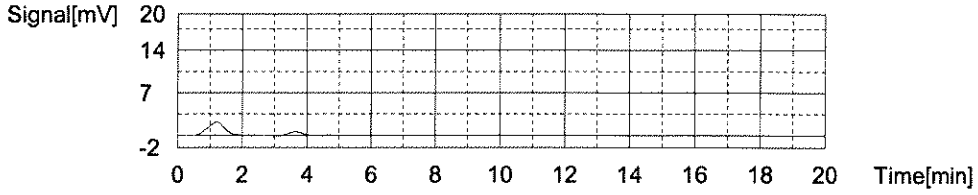
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:0.4443 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.487	0.7222mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 4:44:20 PM
2	1.725	0.1664mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 4:46:50 PM

Mean Area 4.606
Mean Conc. 0.4443mg/L



Control Sample

Sample Name: LCS
Sample ID: <Untitled>
Method: LCS DOUBLE INJECTION.tpl
Chk. Result Control value: 51.49 / Control within range!

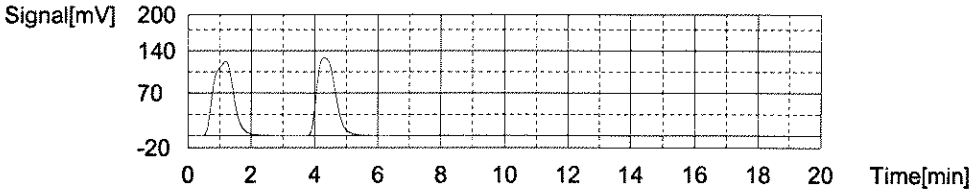
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:51.49 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	540.8	52.16mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 4:57:00 PM
2	526.8	50.81mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 5:00:18 PM

Mean Area 533.8
Mean Conc. 51.49mg/L



Control Sample

Sample Name: LCS
Sample ID: <Untitled>
Method: LCS DOUBLE INJECTION.tpl
Chk. Result Control value: 52.52 / Control within range!

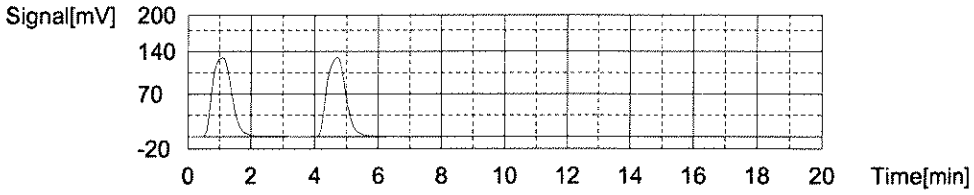
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:52.52 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	548.1	52.87mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 5:10:45 PM
2	540.9	52.17mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 5:14:13 PM

Mean Area 544.5
Mean Conc. 52.52mg/L



Sample

Sample Name: SP0742-2
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

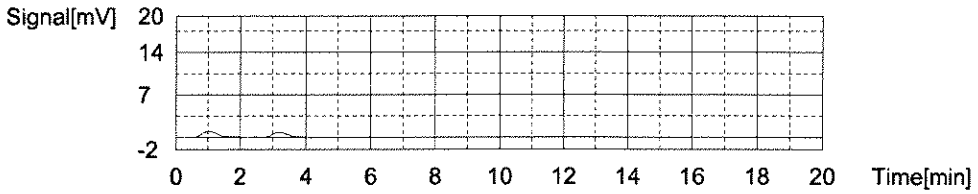
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.2573 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.008	0.2901mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 5:23:18 PM
2	2.328	0.2246mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 5:25:35 PM

Mean Area 2.668
Mean Conc. 0.2573mg/L



Sample

Sample Name: SP0742-4
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

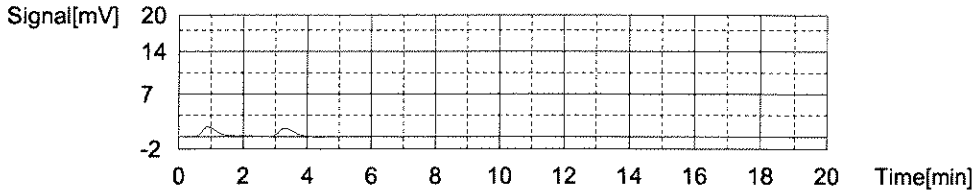
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.4278 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.597	0.4434mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 5:34:48 PM
2	4.274	0.4123mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 5:37:10 PM

Mean Area 4.436
Mean Conc. 0.4278mg/L



Sample

Sample Name: SP0742-6
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

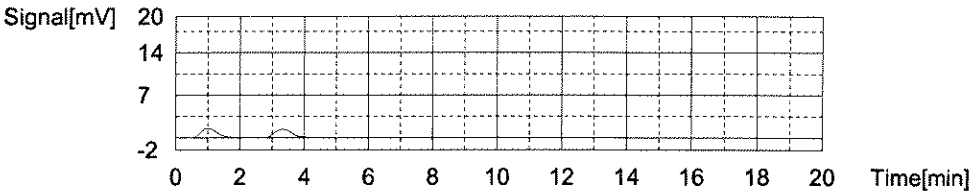
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.4615 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.835	0.4664mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 5:46:19 PM
2	4.733	0.4565mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 5:48:48 PM

Mean Area 4.784
Mean Conc. 0.4615mg/L



Sample

Sample Name: SP0742-8
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

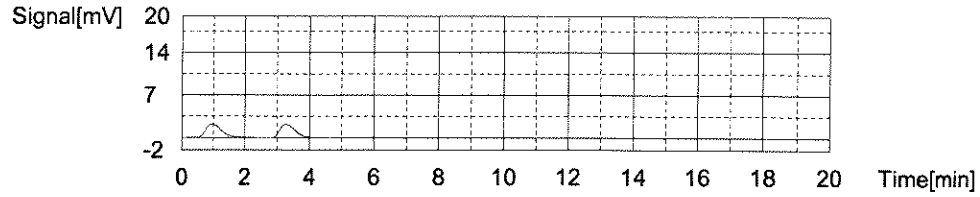
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.6820 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.001	0.6753mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 5:57:58 PM
2	7.141	0.6888mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 6:00:31 PM

Mean Area 7.071
Mean Conc. 0.6820mg/L



Sample

Sample Name: SP072-10
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

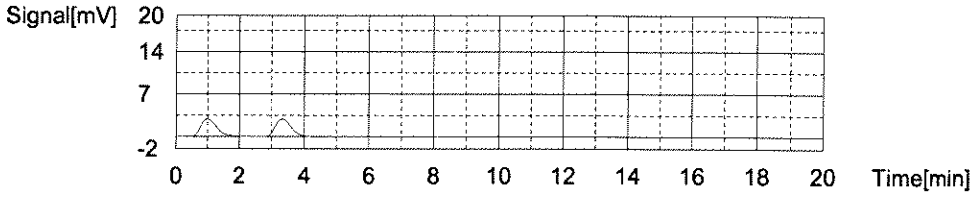
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.9245 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.496	0.9160mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 6:09:43 PM
2	9.673	0.9330mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 6:12:13 PM

Mean Area 9.585
Mean Conc. 0.9245mg/L



Sample

Sample Name: SP0742-12
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

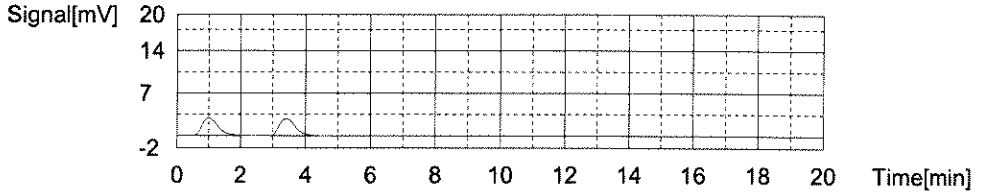
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.9169 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.665	0.9323mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 6:21:29 PM
2	9.346	0.9015mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 6:24:02 PM

Mean Area 9.506
Mean Conc. 0.9169mg/L



Sample

Sample Name: SP0773-2
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

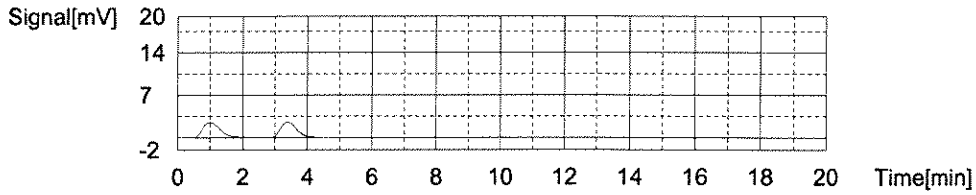
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.8564 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.979	0.8661mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 6:33:17 PM
2	8.778	0.8467mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 6:35:50 PM

Mean Area 8.879
Mean Conc. 0.8564mg/L



Sample

Sample Name: SP0773-2 DUP
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

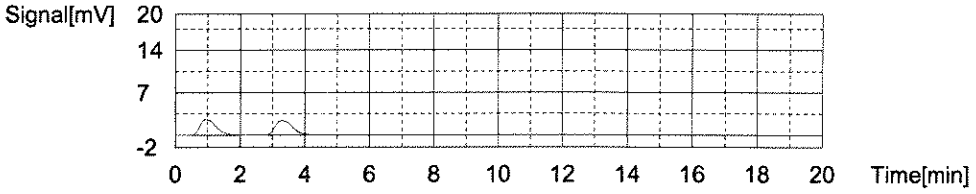
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.8264 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.669	0.8362mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 6:43:01 PM
2	8.467	0.8167mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 6:45:33 PM

Mean Area 8.568
Mean Conc. 0.8264mg/L



Control Sample

Sample Name: CCV
Sample ID: <Untitled>
Method: CCV DOUBLE INJECTION.tpl
Chk. Result Control value: 104.1 / Control within range!

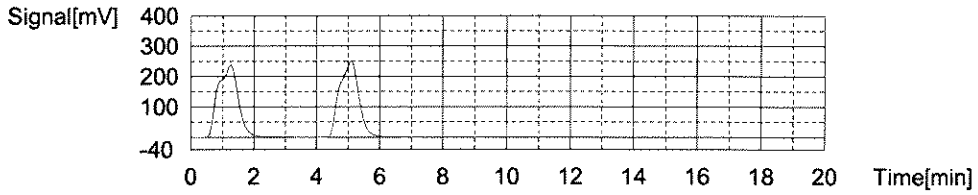
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:104.1 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1083	104.5mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 6:56:24 PM
2	1075	103.7mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 7:00:04 PM

Mean Area 1079
Mean Conc. 104.1mg/L



Control Sample

Sample Name: BLANK
Sample ID: <Untitled>
Method: BLANK DOUBLE INJECTION.tpl
Chk. Result Control value: 0.4208 / Control within range!

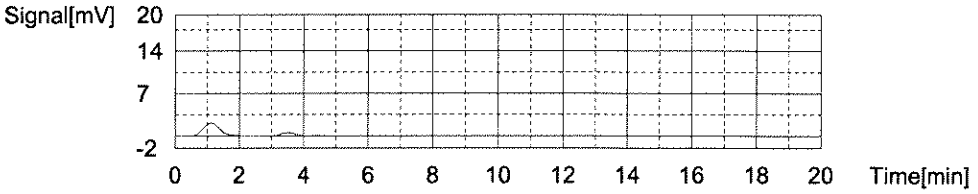
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:0.4208 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.271	0.7013mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 7:09:20 PM
2	1.455	0.1403mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 7:11:40 PM

Mean Area 4.363
Mean Conc. 0.4208mg/L



Sample

Sample Name: SP0773-2 MS
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

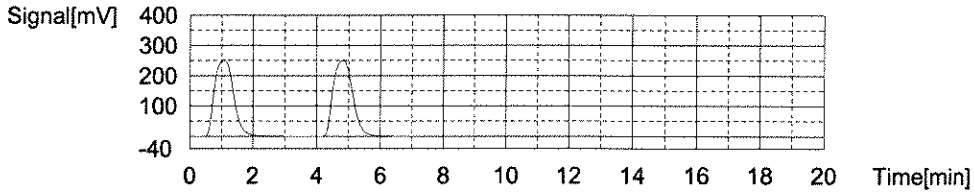
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:103.7 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1076	103.8mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 7:22:22 PM
2	1074	103.6mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 7:25:58 PM

Mean Area 1075
Mean Conc. 103.7mg/L



Sample

Sample Name: SP0773-4
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

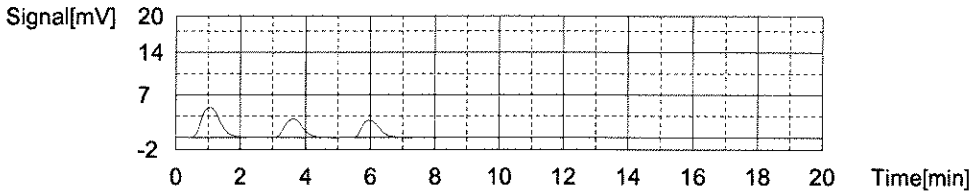
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.048 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.09	1.841mg/L	150uL	1	E	toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 7:35:22 PM
2	11.49	1.108mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 7:37:59 PM
3	10.25	0.9887mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 7:40:32 PM

Mean Area 10.87
Mean Conc. 1.048mg/L



Sample

Sample Name: SP0773-8
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

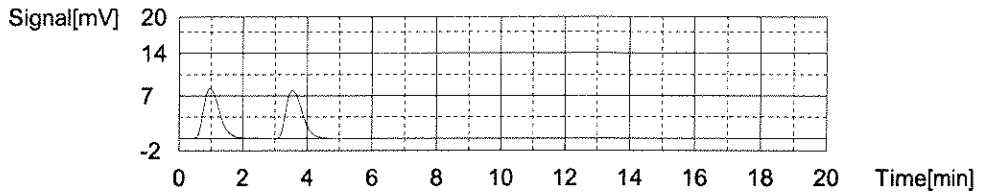
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:2.703 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	27.99	2.700mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 7:49:53 PM
2	28.06	2.707mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 7:52:40 PM

Mean Area 28.03
Mean Conc. 2.703mg/L



Sample

Sample Name: SP0773-12
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

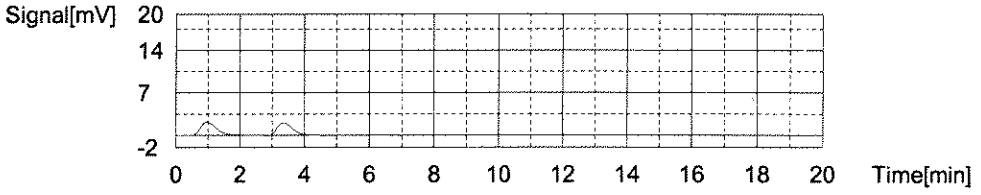
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.6596 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.992	0.6744mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 8:01:53 PM
2	6.685	0.6448mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 8:04:22 PM

Mean Area 6.838
Mean Conc. 0.6596mg/L



Sample

Sample Name: SP0773-14
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

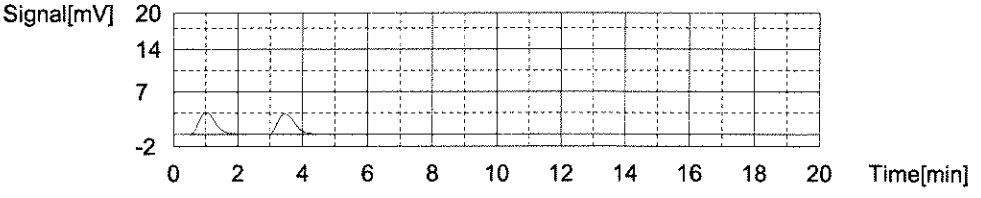
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.176 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.32	1.188mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 8:13:40 PM
2	12.07	1.164mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 8:16:15 PM

Mean Area 12.20
Mean Conc. 1.176mg/L



Sample

Sample Name: SP0773-16
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

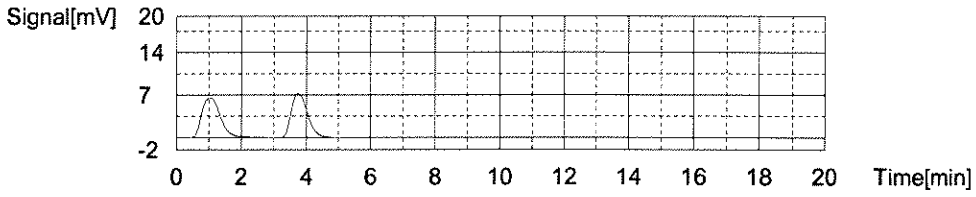
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:2.444 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	25.21	2.432mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 8:25:51 PM
2	25.47	2.457mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 8:28:32 PM

Mean Area 25.34
Mean Conc. 2.444mg/L



Sample

Sample Name: SP0773-18
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

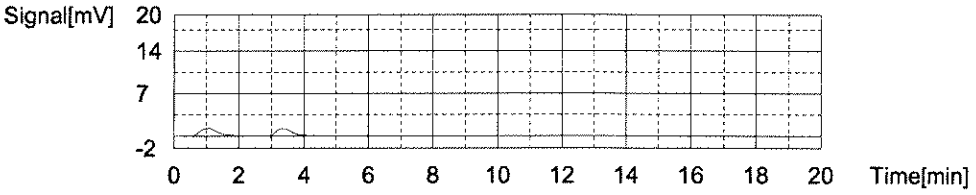
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.3831 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.212	0.4063mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 8:37:44 PM
2	3.732	0.3600mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 8:40:10 PM

Mean Area 3.972
Mean Conc. 0.3831mg/L



Sample

Sample Name: SP0773-20
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

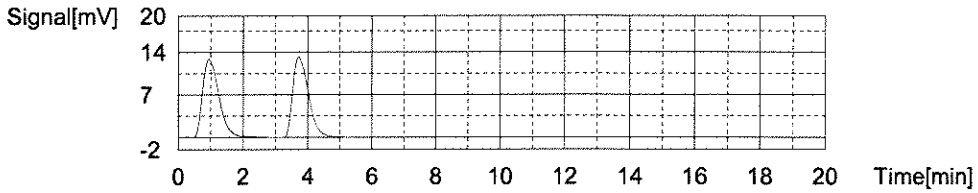
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:4.340 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	44.73	4.315mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 8:49:48 PM
2	45.25	4.365mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 8:52:40 PM

Mean Area 44.99
Mean Conc. 4.340mg/L



Sample

Sample Name: SP0790-2
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

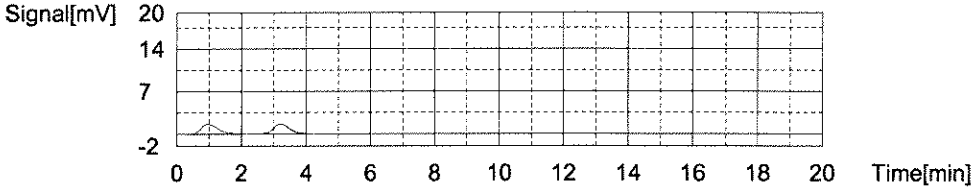
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.4721 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.962	0.4786mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 9:01:44 PM
2	4.826	0.4655mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 9:04:07 PM

Mean Area 4.894
Mean Conc. 0.4721mg/L



Sample

Sample Name: SP0790-2 DUP
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

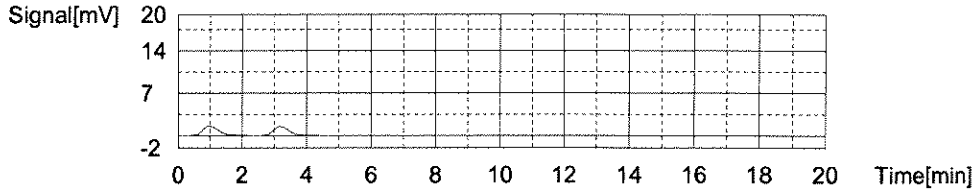
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.4456 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.670	0.4505mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 9:11:10 PM
2	4.570	0.4408mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 9:13:33 PM

Mean Area 4.620
Mean Conc. 0.4456mg/L



Control Sample

Sample Name: CCV
Sample ID: <Untitled>
Method: CCV DOUBLE INJECTION.tpl
Chk. Result Control value: 99.06 / Control within range!

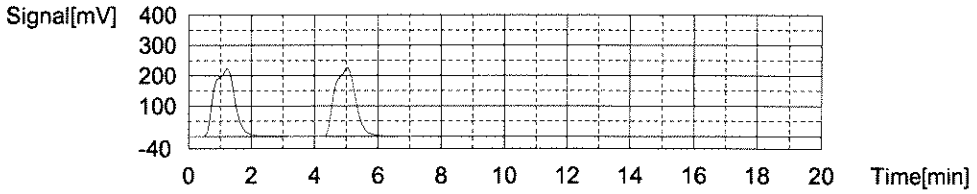
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:99.06 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1024	98.77mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 9:24:15 PM
2	1030	99.35mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 9:27:56 PM

Mean Area 1027
Mean Conc. 99.06mg/L



Control Sample

Sample Name: BLANK
Sample ID: <Untitled>
Method: BLANK DOUBLE INJECTION.tpl
Chk. Result Control value: 0.4618 / Control within range!

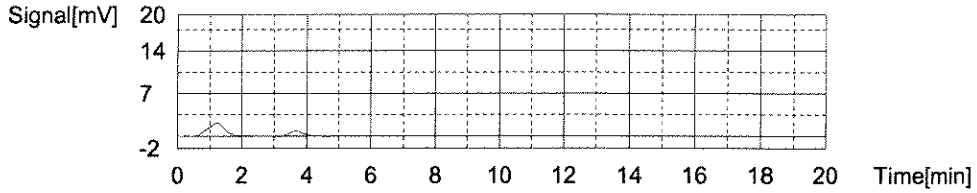
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:0.4618 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.466	0.7201mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 9:37:14 PM
2	2.109	0.2034mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 9:39:43 PM

Mean Area 4.787
Mean Conc. 0.4618mg/L



Sample

Sample Name: SP0790-2 MS
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

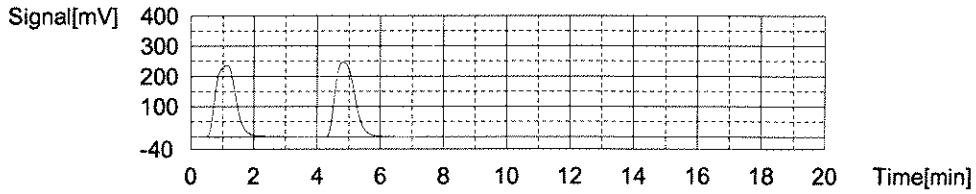
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:102.1 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1056	101.9mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 9:50:35 PM
2	1061	102.3mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 9:54:10 PM

Mean Area 1059
Mean Conc. 102.1mg/L



Sample

Sample Name: SP0790-4
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

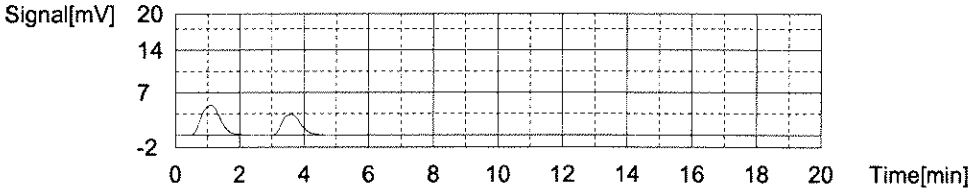
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.558 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.32	1.864mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 10:04:00 PM
2	12.98	1.252mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 10:06:38 PM

Mean Area 16.15
Mean Conc. 1.558mg/L



Sample

Sample Name: SP0790-6
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

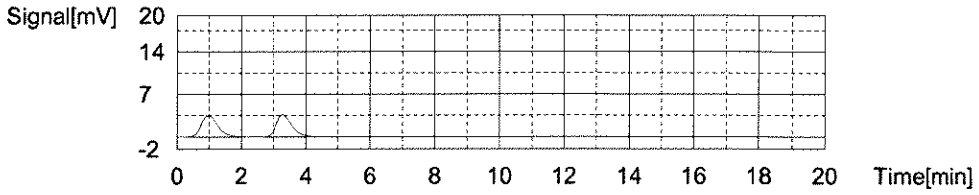
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.124 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.72	1.130mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 10:16:16 PM
2	11.58	1.117mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 10:18:46 PM

Mean Area 11.65
Mean Conc. 1.124mg/L



Sample

Sample Name: SP0790-8
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

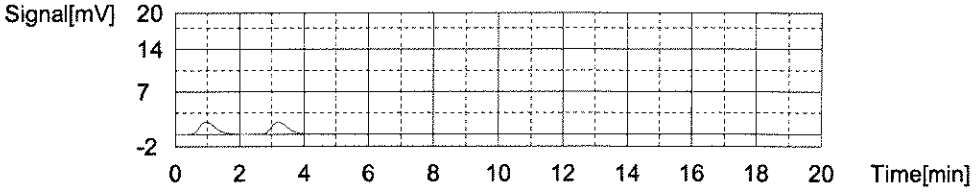
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.6157 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.320	0.6096mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 10:27:51 PM
2	6.446	0.6218mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 10:30:18 PM

Mean Area 6.383
Mean Conc. 0.6157mg/L



Sample

Sample Name: SP0790-10
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

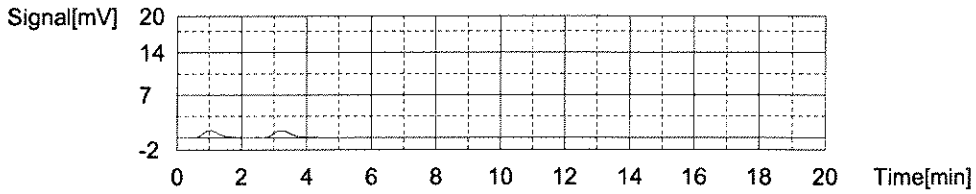
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.3426 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.514	0.3390mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 10:39:21 PM
2	3.590	0.3463mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 10:41:46 PM

Mean Area 3.552
Mean Conc. 0.3426mg/L



Sample

Sample Name: SP0790-12
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

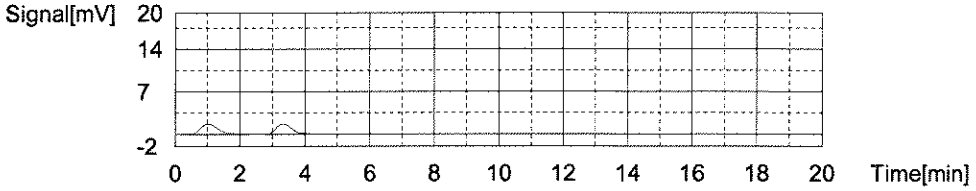
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.5243 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.549	0.5352mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 10:50:56 PM
2	5.322	0.5133mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 10:53:23 PM

Mean Area 5.436
Mean Conc. 0.5243mg/L



Sample

Sample Name: SP0790-14
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

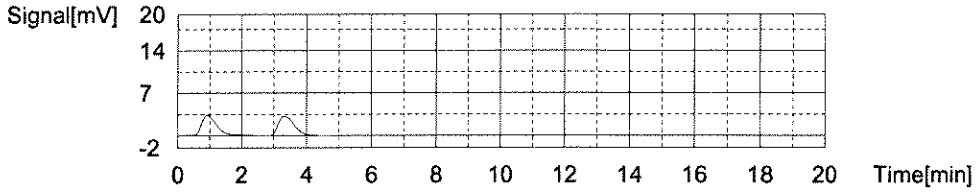
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.025 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.52	1.015mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 11:02:39 PM
2	10.73	1.035mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 11:05:11 PM

Mean Area 10.63
Mean Conc. 1.025mg/L



Sample

Sample Name: SP0805-2
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

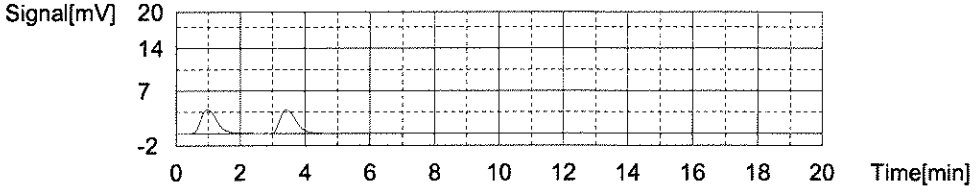
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.282 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.54	1.306mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 11:14:56 PM
2	13.04	1.258mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 11:17:30 PM

Mean Area 13.29
Mean Conc. 1.282mg/L



Sample

Sample Name: SP0805-6
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

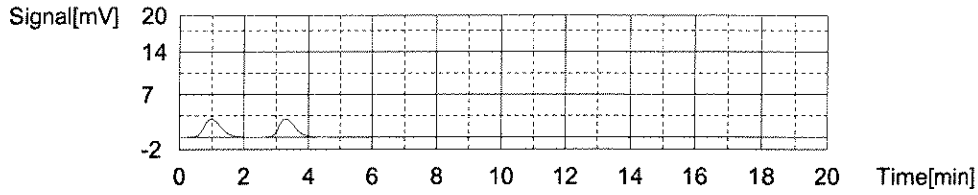
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.9598 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.977	0.9624mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 11:27:33 PM
2	9.925	0.9573mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 11:30:05 PM

Mean Area 9.951
Mean Conc. 0.9598mg/L



Sample

Sample Name: SP0805-8
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

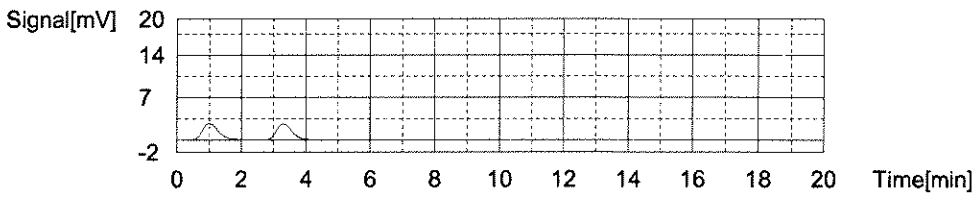
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.8287 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.622	0.8317mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 11:39:14 PM
2	8.561	0.8258mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 11:41:44 PM

Mean Area 8.591
Mean Conc. 0.8287mg/L



Control Sample

Sample Name: CCV
Sample ID: <Untitled>
Method: CCV DOUBLE INJECTION.tpl
Chk. Result Control value: 98.43 / Control within range!

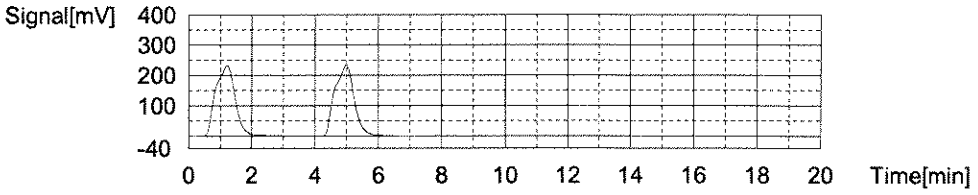
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:98.43 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1023	98.68mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 11:52:59 PM
2	1018	98.19mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/21/2022 11:56:37 PM

Mean Area 1021
Mean Conc. 98.43mg/L



Control Sample

Sample Name: BLANK
Sample ID: <Untitled>
Method: BLANK DOUBLE INJECTION.tpl
Chk. Result Control value: 0.4579 / Control within range!

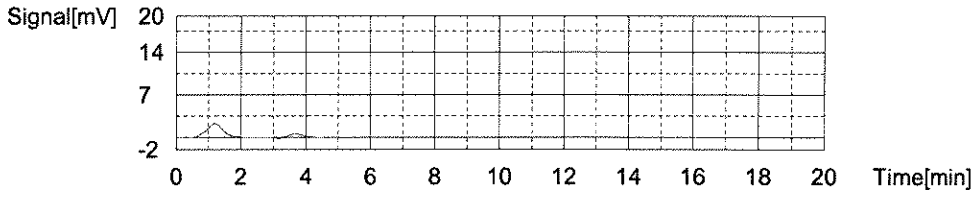
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:0.4579 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.534	0.7267mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 12:05:56 AM
2	1.960	0.1891mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 12:08:30 AM

Mean Area 4.747
Mean Conc. 0.4579mg/L



Sample

Sample Name: SP0805-10
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

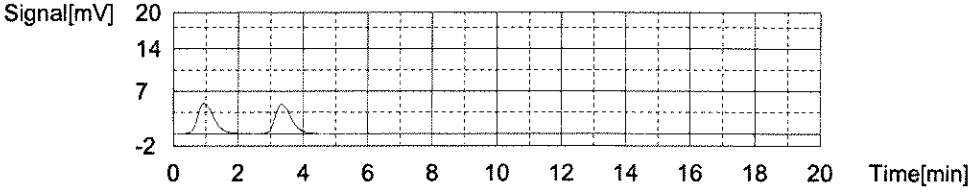
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.581 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.48	1.590mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 12:18:13 AM
2	16.31	1.573mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 12:20:50 AM

Mean Area 16.40
Mean Conc. 1.581mg/L



Sample

Sample Name: SP0783-2
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

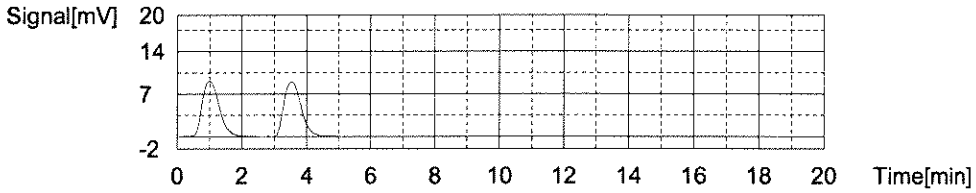
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:3.219 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	33.22	3.204mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 12:30:13 AM
2	33.53	3.234mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 12:33:03 AM

Mean Area 33.38
Mean Conc. 3.219mg/L



Sample

Sample Name: SP0783-4
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

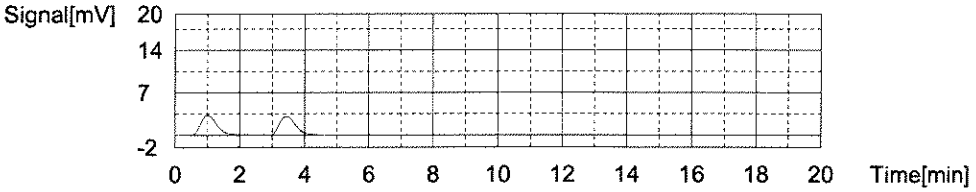
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.058 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.28	1.088mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 12:42:21 AM
2	10.66	1.028mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 12:44:53 AM

Mean Area 10.97
Mean Conc. 1.058mg/L



Sample

Sample Name: SP0783-6
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

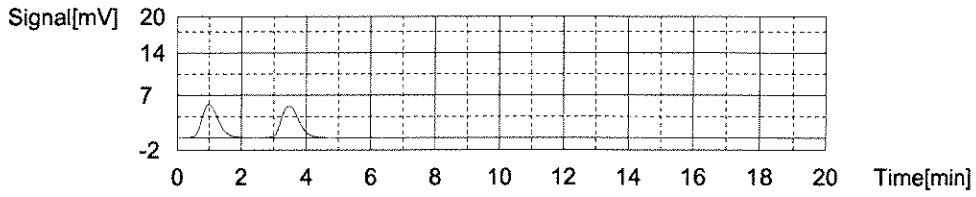
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.846 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.11	1.843mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 12:54:12 AM
2	19.17	1.849mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 12:56:52 AM

Mean Area 19.14
Mean Conc. 1.846mg/L



Sample

Sample Name: SP0783-8
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

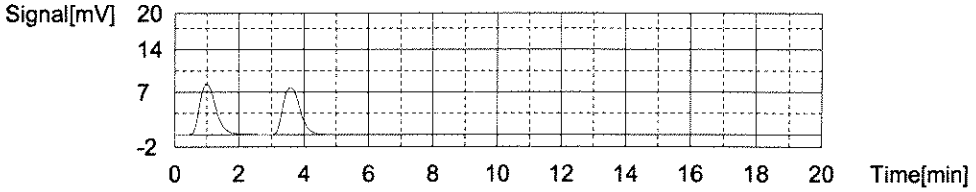
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:2.774 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	29.03	2.800mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 1:06:44 AM
2	28.48	2.747mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 1:09:27 AM

Mean Area 28.76
Mean Conc. 2.774mg/L



Sample

Sample Name: SP0783-10
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

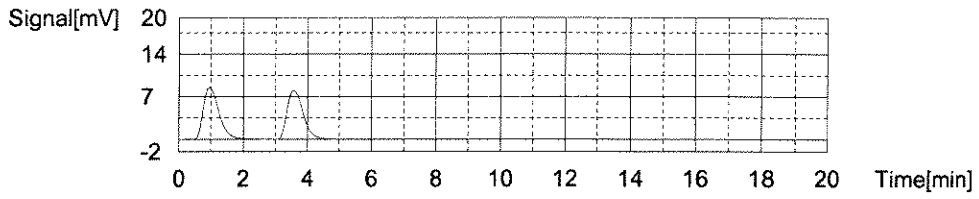
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:2.732 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	28.46	2.745mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 1:18:54 AM
2	28.19	2.719mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 1:21:38 AM

Mean Area 28.33
Mean Conc. 2.732mg/L



Sample

Sample Name: SP0783-12
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

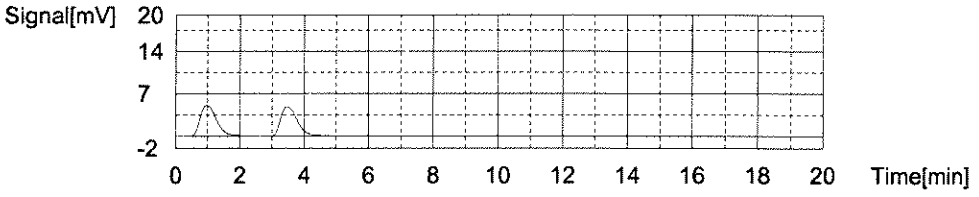
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.696 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.72	1.709mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 1:31:00 AM
2	17.45	1.683mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 1:33:45 AM

Mean Area 17.59
Mean Conc. 1.696mg/L



Sample

Sample Name: SP0783-14
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

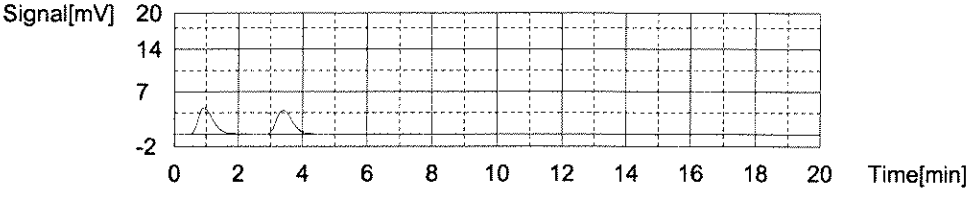
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.330 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.88	1.339mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 1:43:27 AM
2	13.69	1.320mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 1:46:05 AM

Mean Area 13.79
Mean Conc. 1.330mg/L



Sample

Sample Name: SP0783-16
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

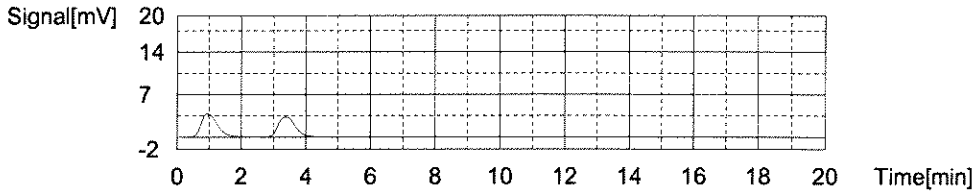
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:1.180 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.66	1.221mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 1:55:18 AM
2	11.81	1.139mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 1:57:55 AM

Mean Area 12.23
Mean Conc. 1.180mg/L



Sample

Sample Name: SP0783-18
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

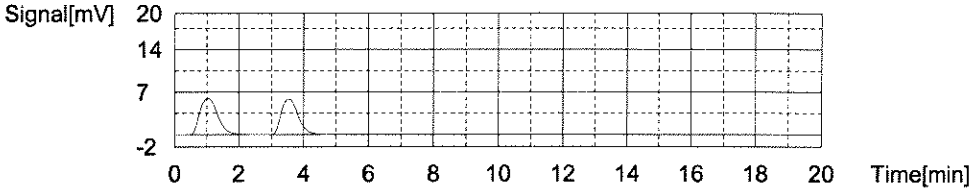
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:2.129 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	22.59	2.179mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 2:07:18 AM
2	21.55	2.079mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 2:09:58 AM

Mean Area 22.07
Mean Conc. 2.129mg/L



Control Sample

Sample Name: CCV
Sample ID: <Untitled>
Method: CCV DOUBLE INJECTION.tpl
Chk. Result Control value: 103.3 / Control within range!

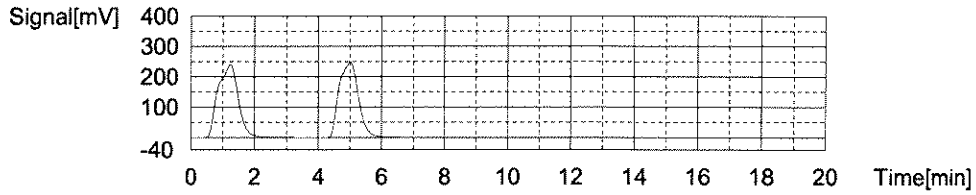
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:103.3 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1071	103.3mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 2:20:43 AM
2	1070	103.2mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 2:24:17 AM

Mean Area 1071
Mean Conc. 103.3mg/L



Control Sample

Sample Name: BLANK
Sample ID: <Untitled>
Method: BLANK DOUBLE INJECTION.tpl
Chk. Result Control value: 0.5234 / Control within range!

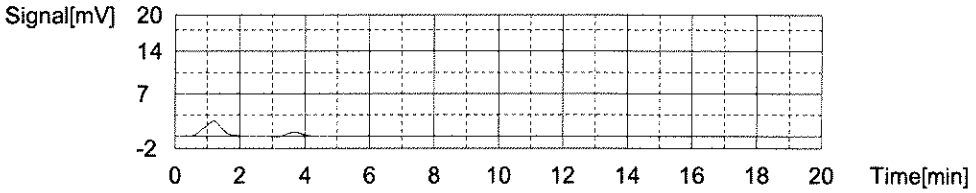
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:0.5234 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.815	0.8503mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 2:33:35 AM
2	2.038	0.1966mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 2:36:09 AM

Mean Area 5.427
Mean Conc. 0.5234mg/L



Sample

Sample Name: SP0783-18 MS
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

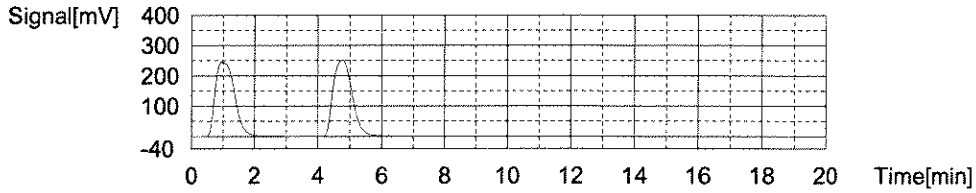
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:101.5 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1047	101.0mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 2:46:54 AM
2	1057	102.0mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 2:50:27 AM

Mean Area 1052
Mean Conc. 101.5mg/L



Sample

Sample Name: SP0783-18 MSD
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

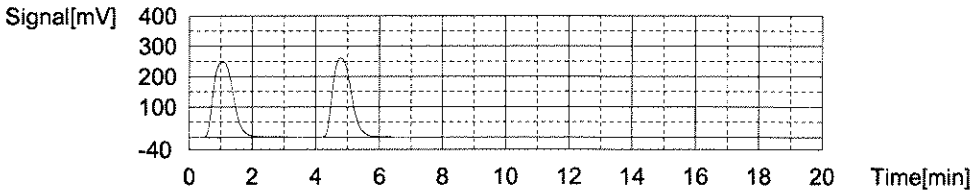
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:103.6 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1077	103.9mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 3:01:05 AM
2	1071	103.3mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 3:04:37 AM

Mean Area 1074
Mean Conc. 103.6mg/L



Sample

Sample Name: SP0783-20
Sample ID: <Untitled>
Origin: DOUBLE INJECTION B.met
Chk. Result

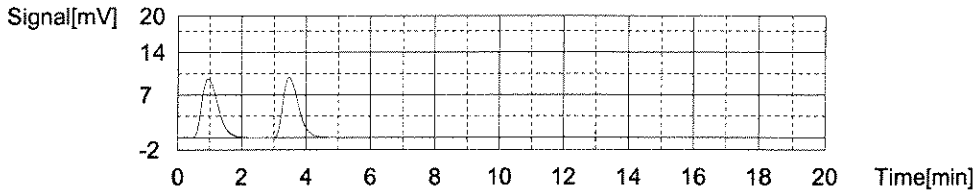
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:3.267 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	33.98	3.278mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 3:14:28 AM
2	33.76	3.256mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 3:17:14 AM

Mean Area 33.87
Mean Conc. 3.267mg/L



Control Sample

Sample Name: LCS
Sample ID: <Untitled>
Method: LCS DOUBLE INJECTION.tpl
Chk. Result Control value: 50.48 / Control within range!

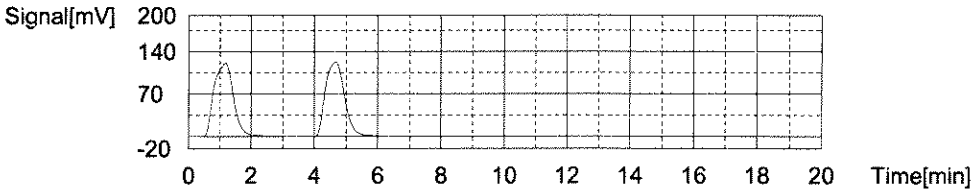
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:50.48 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	524.7	50.61mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 3:28:07 AM
2	521.9	50.34mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 3:31:31 AM

Mean Area 523.3
Mean Conc. 50.48mg/L



Control Sample

Sample Name: CCV
Sample ID: <Untitled>
Method: CCV DOUBLE INJECTION.tpl
Chk. Result Control value: 101.6 / Control within range!

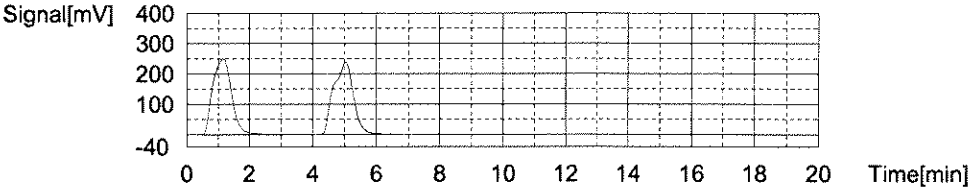
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:101.6 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1053	101.6mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 3:42:23 AM
2	1054	101.7mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 3:46:01 AM

Mean Area 1054
Mean Conc. 101.6mg/L



Control Sample

Sample Name: BLANK
Sample ID: <Untitled>
Method: BLANK DOUBLE INJECTION.tpl
Chk. Result Control value: 0.09235 / Control within range!

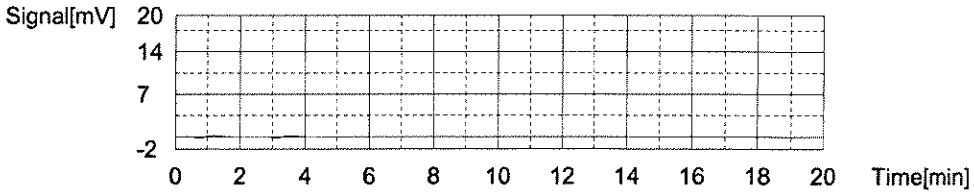
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:0.09235 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.9715	0.09371mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 3:55:13 AM
2	0.9434	0.09100mg/L	150uL	1		toc aq cal 021122.2022_02_11_15_07_10.cal	2/22/2022 3:57:45 AM

Mean Area 0.9575
Mean Conc. 0.09235mg/L



Instr.Information

System	TOC-Vcph / ASI-V
Detector	Combustion
Catalyst	Regular Sensitivity
Cell Length	long

Cal. Curve

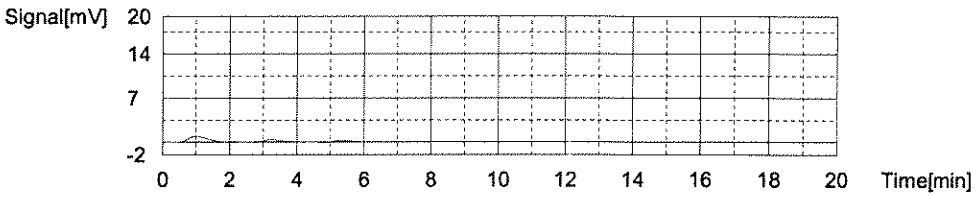
Sample Name:	Untitled
Sample ID:	Untitled
Cal. Curve:	toc aq cal 021122.2022_02_11_15_07_10.cal

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	2.917	150uL	1	*******	E	2/11/2022 3:15:56 PM
2	0.7884	150uL	1	*******		2/11/2022 3:20:35 PM
3	0.000	150uL	1	*******		2/11/2022 3:25:06 PM

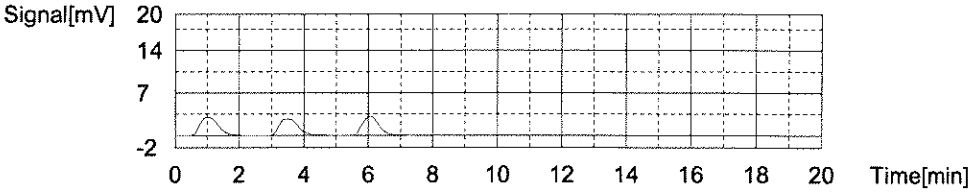
Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 0.3942



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	11.47	150uL	1	*******		2/11/2022 3:34:26 PM
2	11.05	150uL	1	*******	E	2/11/2022 3:39:36 PM
3	11.28	150uL	1	*******		2/11/2022 3:44:42 PM

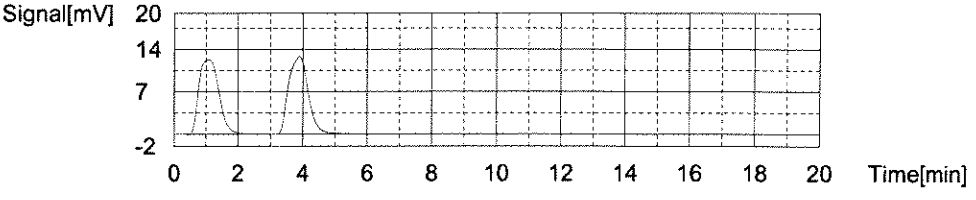
Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 11.38



Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	53.10	150uL	1	*******		2/11/2022 3:54:19 PM
2	54.49	150uL	1	*******		2/11/2022 3:59:51 PM

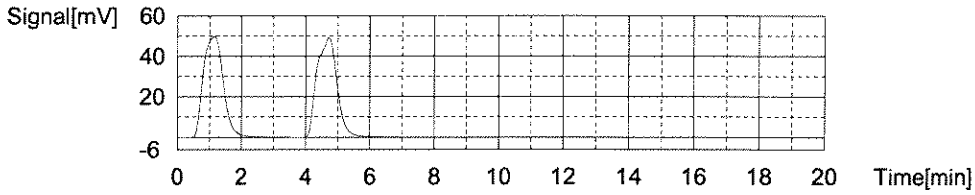
Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 53.80



Conc: 20.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	216.5	150uL	1	*******		2/11/2022 4:10:15 PM
2	215.7	150uL	1	*******		2/11/2022 4:16:21 PM

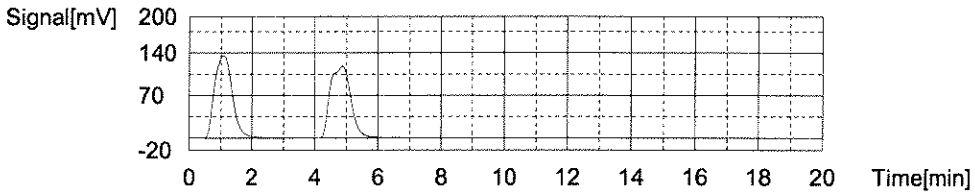
Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 216.1



Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	545.1	150uL	1	*******		2/11/2022 4:27:46 PM
2	543.5	150uL	1	*******		2/11/2022 4:33:59 PM

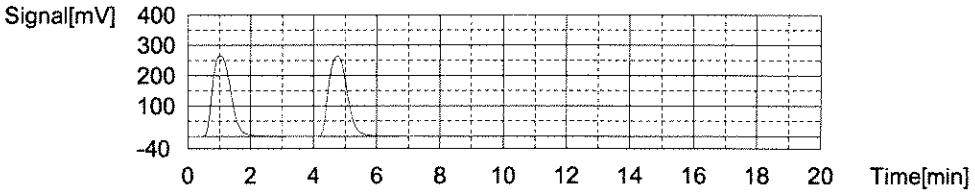
Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 544.3



Conc: 100.0mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	1081	150uL	1	*******		2/11/2022 4:45:24 PM
2	1089	150uL	1	*******		2/11/2022 4:51:42 PM

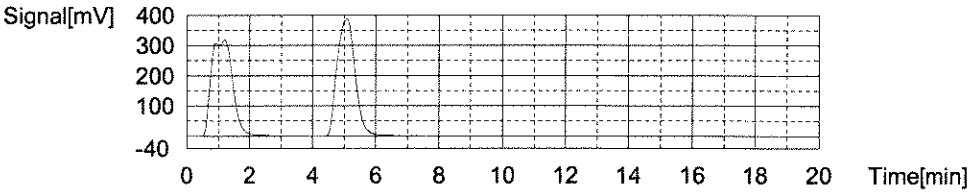
Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 1085



Conc: 150.0mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	1529	150uL	1	*******		2/11/2022 5:03:23 PM
2	1566	150uL	1	*******		2/11/2022 5:09:44 PM

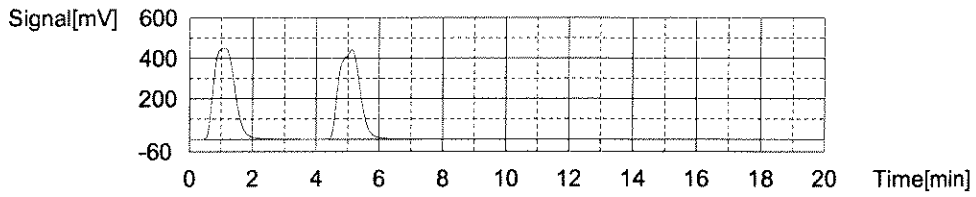
Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 1548



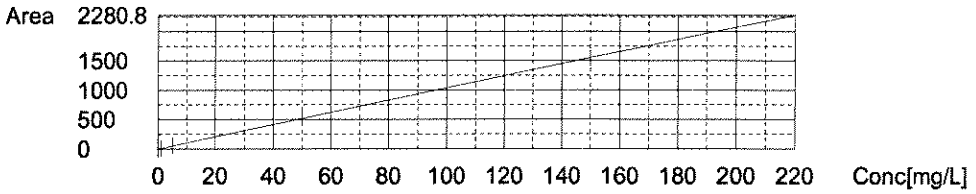
Conc: 200.0mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	2069	150uL	1	*******		2/11/2022 5:21:23 PM
2	2078	150uL	1	*******		2/11/2022 5:27:59 PM

Acid Add.	1.500%
Sp. Time	90.00sec
Mean Area	2074



Slope:	10.37
Intercept	0.000
r^2	0.999461



WET CHEMISTRY BATCH REPORT
Mar 03 2022, 06:27 pm
Batch: WG314323

Parameter: Solids-Filterable Residue

Prep Date: 23-FEB-22

Date Analyzed: 24-FEB-22

Prep Method: STDM 2540C

Analyst Initials: MH

Prep Chemist: MH

Sample	Samp Type	Method	Tare Amt.	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SP0783-11	SAMP	STDM 2540C	85.72750g		85.73710g	1	96	96. mg/L	NA	10	5.02	10.		
SP0783-13	SAMP	STDM 2540C	80.62980g		80.63780g	1	80	80. mg/L	NA	10	5.02	10.		
SP0783-15	SAMP	STDM 2540C	93.37540g		93.38230g	1	69	69. mg/L	NA	10	5.02	10.		
SP0783-17	SAMP	STDM 2540C	91.30320g		91.31640g	1	132	130 mg/L	NA	10	5.02	10.		
SP0783-19	SAMP	STDM 2540C	88.17120g		88.18470g	1	135	140 mg/L	NA	10	5.02	10.		
SP0783-9	SAMP	STDM 2540C	90.00140g		90.00170g	1	3	U10. mg/L	NA	10	5.02	10.		
SP0826-1	SAMP	STDM 2540C	88.24540g		88.26960g	1	242	240 mg/L	NA	10	5.02	10.		
WG314323-1	MBLANK	STDM 2540C	91.44430g		91.41820g	1	-261	U8.0 mg/L	NA	10	5.02	10.		
WG314323-2	LCS	STDM 2540C	86.52870g		86.57970g	1	510	510 mg/L	NA	10	5.02	10.		68
WG314323-3	LCSD	STDM 2540C	87.11660g		87.17230g	1	557	560 mg/L	NA	10	5.02	10.	9	74

Comments:

SP0783-17	MS/MSD
WG314323-1	SP0783-11
WG314323-2	SP0783-11
WG314323-3	SP0783-11

Entered by: MH Date: 3/3/22 Accepted by: [illegible] Date: 3/11/22

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KATAHDIN ANALYTICAL SERVICES, LLC

TOTAL DISSOLVED SOLIDS/TOTAL SUSPENDED SOLIDS

Total Disolved Solids: EPA 160.1____ Total Dissolved Solids: SM 2540C ✓ PQL: 10mg/L

Total Suspended Solids: EPA 160.2____ Total Suspended Solids: SM 2540D____ PQL: 4mg/L

Aqueous Solids LCS Sand ID/Lot# Filter Lot # 1 SWL 4878

ASTM Class Weights

Balance ID: 01

True WT (g)	Initial WT (g)	Final WT (g)
0.1000	0.1000	0.1002
1.0000	.9997	0.9997
10.0000	9.9998	9.9997
100.0000	99.9998	99.9995

Notes: WG314323 → R586952

Oven Temperatures (C)

TDS: 180 +/- 2°C, TSS: 103 - 105 °C

Oven ID: 1

In Temp. 178	Date: 2/23/22	Time: 1223
Out Temp. 182	Date: 2/24/22	Time: 1304
In Temp. 181	Date: 2/24/22	Time: 1421
Out Temp. 178	Date: 2/24/22	Time: 1739
In Temp.	Date:	Time:
Out Temp.	Date:	Time:

KAS Sample ID	Sample Volume (ml)	Time of Initial Aliquot	Filter or Dish ID	Filter or Dish Wt. (g)	Dry 1 Dish/Filter + Sample Residue Wt. (g)	Dry 2 Dish/Filter + Sample Residue Wt. (g)	Time of Final Weighing (Analysis)
Blank	100	10:49	A116	91.4443	~~91.4384~~ 91.4401	91.4182	1759
LCS			AL9	86.5287	86.5969	86.5797	
LCSD			AL22	87.1166	87.1856	87.1723	
SP0783-9			007	90.0014	90.0133	90.0017	
-11			AL14	85.7275	85.7434	85.7371	
-13			AL11	80.6298	80.6401	80.6378	
-15			003	93.3754	93.3859	93.3823	
-17			004	91.3032	91.3197	91.3164	
-19			BP7	88.1712	88.1919	88.1847	
0826-1			AL13	88.2454	88.2780	88.2696	1808

MH 3/3/22

Analyst: SS/MH Date: 2/23/22

Checked By: Date:

WET CHEMISTRY BATCH REPORT
Mar 08 2022, 12:00 pm
Batch: WG314455 Run ID 1: R587173 Run ID 2: NONE

Parameter: Alkalinity
Prep Date: N/A

Date Analyzed: 23-FEB-22
Prep Method: N/A

Analyst Initials: ZF
Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SP0783-1	SAMP	STDM 2320B	50.0mL	50.0mL	1	185.247	180 mg/L	NA	5	0.23	5.0		
SP0783-3	SAMP	STDM 2320B	50.0mL	50.0mL	1	30.629	31. mg/L	NA	5	0.23	5.0		
SP0783-5	SAMP	STDM 2320B	50.0mL	50.0mL	1	242.743	240 mg/L	NA	5	0.23	5.0		
SP0783-7	SAMP	STDM 2320B	50.0mL	50.0mL	1	142.893	140 mg/L	NA	5	0.23	5.0		
SP0783-9	SAMP	STDM 2320B	50.0mL	50.0mL	1	87.843	88. mg/L	NA	5	0.23	5.0		
SP0783-11	SAMP	STDM 2320B	50.0mL	50.0mL	1	101.114	100 mg/L	NA	5	0.23	5.0		
SP0783-13	SAMP	STDM 2320B	50.0mL	50.0mL	1	59.032	59. mg/L	NA	5	0.23	5.0		
SP0783-15	SAMP	STDM 2320B	50.0mL	50.0mL	1	57.726	58. mg/L	NA	5	0.23	5.0		
SP0783-17	SAMP	STDM 2320B	50.0mL	50.0mL	1	139.999	140 mg/L	NA	5	0.23	5.0		
SP0783-19	SAMP	STDM 2320B	50.0mL	50.0mL	1	207.934	210 mg/L	NA	5	0.23	5.0		
SP0790-1	SAMP	STDM 2320B	50.0mL	50.0mL	1	235.752	240 mg/L	NA	5	0.23	5.0		
SP0790-3	SAMP	STDM 2320B	50.0mL	50.0mL	1	217.329	220 mg/L	NA	5	0.23	5.0		
SP0790-5	SAMP	STDM 2320B	50.0mL	50.0mL	1	157.032	160 mg/L	NA	5	0.23	5.0		
SP0790-7	SAMP	STDM 2320B	50.0mL	50.0mL	1	65.354	65. mg/L	NA	5	0.23	5.0		
SP0790-9	SAMP	STDM 2320B	50.0mL	50.0mL	1	51.633	52. mg/L	NA	5	0.23	5.0		
SP0790-11	SAMP	STDM 2320B	50.0mL	50.0mL	1	60.182	60. mg/L	NA	5	0.23	5.0		
SP0790-13	SAMP	STDM 2320B	50.0mL	50.0mL	1	375.385	380 mg/L	NA	5	0.23	5.0		
WG314455-1	MBLANK	STDM 2320B	50.0mL	50.0mL	1	2.654	J2.6 mg/L	NA	5	0.23	5.0		
WG314455-2	LCS	STDM 2320B	50.0mL	50.0mL	1	129.821	130 mg/L	NA	5	0.23	5.0		108
WG314455-3	LCSD	STDM 2320B	50.0mL	50.0mL	1	129.988	130 mg/L	NA	5	0.23	5.0	0	108
WG314455-4	DUP	STDM 2320B	50.0mL	50.0mL	1	59.617	60. mg/L	NA	5	0.23	5.0	1	
WG314455-5	MS	STDM 2320B	50.0mL	50.0mL	1	225.051	220 mg/L	NA	5	0.23	5.0		85
WG314455-6	MS	STDM 2320B	50.0mL	50.0mL	1	293.446	290 mg/L	NA	5	0.23	5.0		92

Comments:

SP0783-17	MS/MSD
SP0790-1	MS/MSD on metals only. Report method SM5310B for TOC.
SP0790-3	Report method SM5310B for TOC.
SP0790-5	Report method SM5310B for TOC.
SP0790-7	Report method SM5310B for TOC.
SP0790-9	Report method SM5310B for TOC.
SP0790-11	Report method SM5310B for TOC.
SP0790-13	Report method SM5310B for TOC.
WG314455-1	SP0783-1
WG314455-2	SP0783-1
WG314455-3	SP0783-1
WG314455-4	SP0783-13
WG314455-5	SP0783-17
WG314455-6	SP0783-19

Entered by: ZF Date: 3/8/22 Accepted by: JR Date: 3/8/22

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WET CHEMISTRY BATCH REPORT
Mar 08 2022, 11:54 am
Batch: WG314456

Parameter: Bicarbonate (As CaCO3)

Prep Date: N/A

Date Analyzed: 23-FEB-22

Prep Method: N/A

Analyst Initials: ZF

Prep Chemist: N/A

Sample	Samp Type	Method	Alkalinity	pH	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SP0707-1	SAMP	SM4500CO2 D	27.0mg/L	5.47pH	1	26.98111	27. mg/L	NA	5	.497	5		
SP0707-2	SAMP	SM4500CO2 D	36.9mg/L	5.63pH	1	36.88631	37. mg/L	NA	5	.497	5		
SP0707-3	SAMP	SM4500CO2 D	34.7mg/L	5.65pH	1	34.66132	35. mg/L	NA	5	.497	5		
WG314456-1	MBLANK	SM4500CO2 D	2.67mg/L	5.31pH	1	2.67084	U5.0 mg/L	NA	5	.497	5		

Comments:

WG314456-1 SP0707-1

Entered by: ZF Date: 3/8/22 Accepted by: JVR Date: 3-8-22

Start time: 2/23/2022 16:25

Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name	% RECOVERY
1/4	CCV	2/23/2022 4:26:40 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	129.078	mg/L	Total Alkalinity	103.26%
			R3 =	7.784	pH	pH	
			R4 =	20.7	oC	TEMPERATURE	
2/4	CCB	2/23/2022 4:30:02 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.654	mg/L	Total Alkalinity	
			R3 =	5.576	pH	pH	
			R4 =	20.8	oC	TEMPERATURE	
3/4	LCS	2/23/2022 4:31:56 PM	R1 =	114.25	mg/L	P Alkalinity- pH8.2	
			R2 =	129.988	mg/L	Total Alkalinity	
			R3 =	10.569	pH	pH	
			R4 =	20.7	oC	TEMPERATURE	
4/4	LCSD	2/23/2022 4:35:00 PM	R1 =	114.407	mg/L	P Alkalinity- pH8.2	
			R2 =	129.821	mg/L	Total Alkalinity	
			R3 =	10.575	pH	pH	
			R4 =	20.6	oC	TEMPERATURE	
1/10	SP0783-1	2/23/2022 5:08:32 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	185.247	mg/L	Total Alkalinity	
			R3 =	5.954	pH	pH	
			R4 =	10.5	oC	TEMPERATURE	
2/10	SP0783-3	2/23/2022 5:11:48 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	30.629	mg/L	Total Alkalinity	
			R3 =	5.494	pH	pH	
			R4 =	10.1	oC	TEMPERATURE	
3/10	SP0783-5	2/23/2022 5:13:54 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	242.743	mg/L	Total Alkalinity	
			R3 =	6.024	pH	pH	
			R4 =	10.4	oC	TEMPERATURE	
4/10	SP0783-7	2/23/2022 5:17:32 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	142.893	mg/L	Total Alkalinity	
			R3 =	6.037	pH	pH	
			R4 =	10.9	oC	TEMPERATURE	
5/10	SP0783-9	2/23/2022 5:20:23 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	87.843	mg/L	Total Alkalinity	
			R3 =	5.888	pH	pH	
			R4 =	11.6	oC	TEMPERATURE	
6/10	SP0783-11	2/23/2022 5:22:56 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	101.114	mg/L	Total Alkalinity	
			R3 =	5.782	pH	pH	
			R4 =	11.9	oC	TEMPERATURE	
7/10	SP0783-13	2/23/2022 5:25:32 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	59.032	mg/L	Total Alkalinity	
			R3 =	5.708	pH	pH	
			R4 =	12.9	oC	TEMPERATURE	
8/10	SP0783-13 DUP	2/23/2022 5:27:49 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	59.617	mg/L	Total Alkalinity	
			R3 =	5.675	pH	pH	
			R4 =	13.1	oC	TEMPERATURE	
9/10	CCV	2/23/2022 5:30:02 PM	R1 =	12.028	mg/L	P Alkalinity- pH8.2	
			R2 =	130.395	mg/L	Total Alkalinity	104.32%
			R3 =	8.428	pH	pH	
			R4 =	20	oC	TEMPERATURE	
10/10	CCB	2/23/2022 5:33:29 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.671	mg/L	Total Alkalinity	
			R3 =	5.313	pH	pH	
			R4 =	20.6	oC	TEMPERATURE	
1/12	SP0783-15	2/23/2022 6:15:01 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	57.726	mg/L	Total Alkalinity	
			R3 =	5.647	pH	pH	
			R4 =	13.8	oC	TEMPERATURE	
2/12	SP0783-17	2/23/2022 6:17:28 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	139.999	mg/L	Total Alkalinity	
			R3 =	5.821	pH	pH	
			R4 =	13.6	oC	TEMPERATURE	

3/12	SP0783-19	2/23/2022 6:20:15 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	207.934	mg/L	Total Alkalinity	
			R3 =	5.958	pH	pH	
			R4 =	13.9	oC	TEMPERATURE	
4/12	SP0790-1	2/23/2022 6:23:36 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	235.752	mg/L	Total Alkalinity	
			R3 =	6.377	pH	pH	
			R4 =	13.8	oC	TEMPERATURE	
5/12	SP0790-3	2/23/2022 6:27:21 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	217.329	mg/L	Total Alkalinity	
			R3 =	6.11	pH	pH	
			R4 =	14.2	oC	TEMPERATURE	
6/12	SP0790-5	2/23/2022 6:30:51 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	157.032	mg/L	Total Alkalinity	
			R3 =	5.965	pH	pH	
			R4 =	15.4	oC	TEMPERATURE	
7/12	SP0790-7	2/23/2022 6:33:45 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	65.354	mg/L	Total Alkalinity	
			R3 =	5.782	pH	pH	
			R4 =	14.8	oC	TEMPERATURE	
8/12	SP0790-9	2/23/2022 6:36:01 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	51.633	mg/L	Total Alkalinity	
			R3 =	5.682	pH	pH	
			R4 =	14.9	oC	TEMPERATURE	
9/12	SP0790-11	2/23/2022 6:38:11 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	60.182	mg/L	Total Alkalinity	
			R3 =	5.804	pH	pH	
			R4 =	14.6	oC	TEMPERATURE	
10/12	SP0790-13	2/23/2022 6:40:27 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	375.385	mg/L	Total Alkalinity	
			R3 =	6.687	pH	pH	
			R4 =	14.7	oC	TEMPERATURE	
11/12	CCV	2/23/2022 6:45:15 PM	R1 =	12.31	mg/L	P Alkalinity- pH8.2	
			R2 =	131.91	mg/L	Total Alkalinity	105.53%
			R3 =	8.535	pH	pH	
			R4 =	19.1	oC	TEMPERATURE	
12/12	CCB	2/23/2022 6:48:42 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.571	mg/L	Total Alkalinity	
			R3 =	5.497	pH	pH	
			R4 =	20.3	oC	TEMPERATURE	
1/7	SP0707-1	2/23/2022 7:12:41 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	26.982	mg/L	Total Alkalinity	
			R3 =	5.468	pH	pH	
			R4 =	13	oC	TEMPERATURE	
2/7	SP0707-2	2/23/2022 7:14:48 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	36.888	mg/L	Total Alkalinity	
			R3 =	5.629	pH	pH	
			R4 =	13	oC	TEMPERATURE	
3/7	SP0707-3	2/23/2022 7:16:53 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	34.663	mg/L	Total Alkalinity	
			R3 =	5.649	pH	pH	
			R4 =	14.1	oC	TEMPERATURE	
4/7	SP0783-17 MS	2/23/2022 7:18:56 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	225.051	mg/L	Total Alkalinity	
			R3 =	6.115	pH	pH	
			R4 =	14.8	oC	TEMPERATURE	
5/7	SP0783-19 MS	2/23/2022 7:22:26 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	293.446	mg/L	Total Alkalinity	
			R3 =	6.238	pH	pH	
			R4 =	15.6	oC	TEMPERATURE	
6/7	CCV	2/23/2022 7:26:23 PM	R1 =	10.534	mg/L	P Alkalinity- pH8.2	
			R2 =	129.476	mg/L	Total Alkalinity	103.58%
			R3 =	8.515	pH	pH	
			R4 =	19.6	oC	TEMPERATURE	
7/7	CCB	2/23/2022 7:29:49 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.78	mg/L	Total Alkalinity	
			R3 =	5.572	pH	pH	

			R4 =	20.4	oC	TEMPERATURE

Start time: 2/23/2022 16:11

Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name
Calibration data						
	Number of segments		1			
	Slope	-58.65 mV/pH				
	Zero point	6.978 pH				
	Calibration temperature	25.0 oC				

WG314455 → R587173
Bicarb: WG314466 → R587174

KATAHDIN ANALYTICAL SERVICES

ALKALINITY, BICARBONATE, CARBONATE, FREE CO2 - DL 25 AUTOTITRATOR

Analysis: EPA 310.1 SM2320B **Calculations:** SM 4500-CO2 D

pH Probe ID: DG11-9C			
Alkalinity Acid Reagent: W20797		**Buffer pH 4 ID:** SWL 4799	
Acid Concentration: 0.02N		**Buffer pH 7 ID:** 4886	
Alkalinity Check Standard: W20682 TV=125 mg/L		**Buffer pH 10 ID:** 4898	
Alkalinity MS: W20670 TV=120 mg/L		**Pipette IDs:** W13	
Sulfuric Acid Titrant ID:			

Sample ID	Run #	Volume (mL)	Sample ID	Run #	Volume (mL)	Comments - Must indicate which sample
CCV	1	50	-11	9	50	
CCB	2	"	-13	10	"	
LCS	3	"	CCV	11	"	
LCSD	4	"	CCB	12	"	
0783-1	1	50	0707-1	1	50	
-3	2		-2	2	"	
-5	3		-3	3	"	
-7	4		0783-17MS	4	44	
-9	5		-19MS	5	"	
-11	6		CCV	6	50	
-13	7		CCB	7	"	
-13Dup	8					
CCV	9					
CCB	10	"				
-15	1	50				
-17	2					
-19	3					
0790-1	4					
-3	5					
-5	6					
-7	7					
-9	8	"				

SS 2/28/22

Analyst: TL **Date:** 2/23/22

Checked By: JP **Date:** 3/8/22

WET CHEMISTRY BATCH REPORT
Mar 08 2022, 12:18 pm
Batch: WG314835 Run ID 1: R587178 Run ID 2: R587180

Parameter: Nitrate As N

Date Analyzed: 18-FEB-22

Analyst Initials: MH

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SP0783-5	SAMP	EPA 353.2	5.0000mL	5.0000mL	1	.907	0.91 mg/L	NA	.05	0.015	0.050		
SP0783-7	SAMP	EPA 353.2	5.0000mL	5.0000mL	5	6.75	6.8 mg/L	NA	.05	0.076	0.25		
SP0783-9	SAMP	EPA 353.2	5.0000mL	5.0000mL	1	.611	0.61 mg/L	NA	.05	0.015	0.050		
SP0783-11	SAMP	EPA 353.2	5.0000mL	5.0000mL	1	-.0075	U0.050 mg/L	NA	.05	0.015	0.050		
SP0783-13	SAMP	EPA 353.2	5.0000mL	5.0000mL	1	-.0164	U0.050 mg/L	NA	.05	0.015	0.050		
SP0783-17	SAMP	EPA 353.2	5.0000mL	5.0000mL	1	-.0198	U0.050 mg/L	NA	.05	0.015	0.050		
SP0783-19	SAMP	EPA 353.2	5.0000mL	5.0000mL	1	0	U0.050 mg/L	NA	.05	0.015	0.050		
WG314835-1	MBLANK	EPA 353.2	5.0000mL	5.0000mL	1	0	U0.025 mg/L	NA	.05	0.015	0.050		
WG314835-2	LCS	EPA 353.2	5.0000mL	5.0000mL	1	1.01	1.0 mg/L	NA	.05	0.015	0.050		101
WG314835-3	MS	EPA 353.2	5.0000mL	5.0000mL	1	.069	0.069 mg/L	NA	.05	0.015	0.050		14
WG314835-4	MSD	EPA 353.2	5.0000mL	5.0000mL	1	.073	0.073 mg/L	NA	.05	0.015	0.050	6	15

Comments:

SP0783-17	MS/MSD
WG314835-1	SP0783-11
WG314835-2	SP0783-11
WG314835-3	SP0783-17
WG314835-4	SP0783-17

Entered by: MH Date: 3/18/22 Accepted by: Date: 03/21/22

Katahdin Analytical Services SP0783 Page 265 of 389

KATAHDIN ANALYTICAL SERVICES, LLC.
Wet Chemistry Analysis Run Information Sheet

Analyte: NO3, NO2, and NO3+NO2	**Analyst:** MH
Instrument: LACHAT	**Analysis Date:** 2/18/22

Were pHs of all samples adjusted to 5-9 prior to analysis?

Circle one: (Yes) No **pH Paper Lot ID:** 6105008

Were all samples checked for the presence of chlorine prior to analysis?

Circle one: (Yes) No **Chloride Paper Lot ID:** 14-860

Analytical Method (Check all that apply):

[ ] EPA 353.2 [ ] SM 4500 F [ ] Other

Reagent Information: WG314835 → R587178

Reagent Name	Reagent ID	Expiration Date
Ammonium Chloride Buffer	**W20706**	**3/15/2022**
Sulfanilamide Color Reagent	**W20678**	**3/3/2022**
Carrier	**DI Water**	
Cadmium Reduction Column	**S/N: SWL4871**	

Standards Information:

Standard Name	Concentration (mg/L)	ID	Expiration Date
Nitrate CCV	0.5	W20710	3/16/22
Nitrite CCV	0.5	W20675	3/2/22
Nitrate ICV/LCS	1.0	W20698	3/10/22
Nitrite ICV/LCS	1.0	W20641	3/16/22
Standard #1	2.0	W20695	3/9/22
Standard #2	1.0	W20692	3/9/22
Standard #3	0.5	W20675	3/2/22
Standard #4	0.25	W20693	3/9/22
Standard# 5	0.05	W20642	3/16/22
Standard #6	0.0	DI water	N/A
Nitrate Standard	100.0	W20037	5/27/2022
Nitrite Standard	100.0	W20366	9/16/2022

Notes:

1. Matrix Spiking: To 5mL Sample Alliquot add 0.025 mL of Nitrate Standard and 0.025mL Nitrite Standard

Comments: Pipettes: W5, W3, W9, W8

MS: 200uL, 5mL 5x, 10x, & 20x Dilutions: 1mL, 5mL

2x, 4x Dilutions: 5mL 25x, 50x, 100x, 200x Dilutions: 200uL, 5mL

250x, 500x, 1000x, 2000x, 2500x Dilutions: 200uL, 1ml, 5mL

Author: wetchem

Date : 2/18/2022

Original Run Filename: OM_2-18-2022_10-28-10AM.OMN Created: 2/18/2022 10:28:10 AM
Original Run Author's Signature: [wetchem]
Current Run Filename: OM_2-18-2022_10-28-10AM.OMN Last Modified: 2/18/2022 11:27:22 AM
Current Run Author's Signature: [wetchem]
Description: Default New Run

	Sample	Channel 1 NITRATE/NITRITE			Channel 2 NITRITE			Detection Time	MDF
		Conc. (mg/L)	Area (V.s)	Height (V)	Conc. (mg/L)	Area (V.s)	Height (V)		
103%	CCV NO3	0.516	5.89	0.490	-0.0154	5.93e-3	1.09e-3	2/18/2022@10:29:14 AM	
	Known Conc:	0.500			0.500				
	Calibration:				Table/Fig. : 1				
102%	CCV NO2	0.522	5.95	0.499	0.511	5.84	0.542	2/18/2022@10:30:22 AM	
	Known Conc:	0.500			0.500				
	Calibration:	Table/Fig. : 2							
	CCB	-0.0126	0.106	6.52e-3	-0.0161	-2.38e-3	-6.20e-4	2/18/2022@10:31:34 AM	
	Known Conc:	0.00			0.00				
	BLANK	4.62e-5	0.245	0.0190	-0.0148	0.0118	8.84e-4	2/18/2022@10:32:44 AM	
	Known Conc:	0.00			0.00				
	NO3 LCS	1.01	11.3	0.903	-0.0146	0.0146	1.24e-3	2/18/2022@10:33:53 AM	
	Known Conc:	1.00			1.00				
	NO2 LCS	1.07	12.0	0.943	1.05	11.8	1.09	2/18/2022@10:35:03 AM	
	Known Conc:	1.00			1.00				
	SP0783-17	-0.0362	-0.152	-0.0146	2.26	25.2	4.38	2/18/2022@10:36:14 AM	
	SP0783-17 MS	-0.0308	-0.0924	-0.0146	0.617	7.01	1.10	2/18/2022@10:37:24 AM	
	SP0783-17 MSD	-0.0383	-0.174	-0.0104	-9.83e-3	0.0673	5.18e-3	2/18/2022@10:38:36 AM	
	SP0783-17	-3.50e-3	0.206	0.0316	2.06	23.0	9.54	2/18/2022@10:39:47 AM	
	SP0783-17 MS	0.178	2.19	0.162	0.204	2.44	0.189	2/18/2022@10:40:57 AM	
	SP0783-17 MSD	0.163	2.03	0.147	0.206	2.46	0.190	2/18/2022@10:42:07 AM	
	SP0783-1	1.29	14.4	1.20	0.0569	0.806	0.0718	2/18/2022@10:43:18 AM	
103%	CCV NO3	0.515	5.88	0.485	-0.0160	-1.02e-3	-9.87e-4	2/18/2022@10:44:31 AM	
	Known Conc:	0.500			0.500				
102%	CCV NO2	0.520	5.93	0.489	0.510	5.82	0.545	2/18/2022@10:45:41 AM	
	Known Conc:	0.500			0.500				
	CCB	-0.0142	0.0892	6.55e-3	-0.0152	7.70e-3	1.12e-3	2/18/2022@10:46:53 AM	
	Known Conc:	0.00			0.00				
	SP0783-17	-0.0635	-0.450	-0.0198	0.0258	0.462	0.0359	2/18/2022@10:48:05 AM	
	SP0783-5	0.907	10.2	0.801	-0.0128	0.0341	2.86e-3	2/18/2022@10:49:16 AM	
	SP0783-19	-0.0482	-0.283	-0.0136	-6.01e-3	0.110	8.82e-3	2/18/2022@10:50:26 AM	
	SP0773-1	-0.0183	0.0438	3.30e-3	-0.0150	0.0105	1.06e-3	2/18/2022@10:51:37 AM	
	SP0773-3	0.0872	1.20	0.0917	-0.0148	0.0127	8.29e-4	2/18/2022@10:52:48 AM	
	SP0773-7	0.103	1.37	0.104	-7.67e-3	0.0912	7.24e-3	2/18/2022@10:53:58 AM	
	SP0773-11	-0.0184	0.0426	2.64e-3	-0.0116	0.0477	3.60e-3	2/18/2022@10:55:08 AM	
	SP0773-13	-0.0357	-0.146	-8.07e-3	-0.0107	0.0582	5.31e-3	2/18/2022@10:56:19 AM	
	SP0773-15	0.289	3.40	0.314	0.147	1.80	0.0745	2/18/2022@10:57:30 AM	
	SP0773-17	3.05	33.6	2.53	-0.0163	-4.27e-3	-4.88e-3	2/18/2022@10:58:40 AM	
102%	CCV NO3	0.509	5.81	0.442	-0.0161	-1.94e-3	7.76e-3	2/18/2022@10:59:51 AM	
	Known Conc:	0.500			0.500				
103%	CCV NO2	0.526	6.00	0.461	0.515	5.88	0.546	2/18/2022@11:01:00 AM	
	Known Conc:	0.500			0.500				
	CCB	-0.0145	0.0852	5.62e-3	-0.0189	-0.0335	-1.56e-3	2/18/2022@11:02:12 AM	
	Known Conc:	0.00			0.00				
	SP0773-19	-0.0337	-0.124	-6.74e-3	4.22e-3	0.223	0.0184	2/18/2022@11:03:22 AM	
	SP0783-17	-0.0345	-0.134	-6.57e-3	0.0198	0.396	0.0336	2/18/2022@11:04:33 AM	3.00
	SP0783-17 MS	0.290	3.42	0.223	0.221	2.62	0.214	2/18/2022@11:05:43 AM	2.00
	SP0783-17 MSD	0.289	3.41	0.223	0.216	2.57	0.209	2/18/2022@11:06:54 AM	2.00
	SP0773-17	3.19	17.7	1.35	-0.0289	0.0161	8.89e-4	2/18/2022@11:08:05 AM	2.00
	SP0783-3	0.0586	0.885	0.0660	-1.42e-3	0.161	0.0136	2/18/2022@11:09:15 AM	
	SP0783-7	5.26	57.7	3.71	0.0370	0.586	0.0517	2/18/2022@11:10:24 AM	
	SP0783-9	0.815	9.16	0.713	0.204	2.44	0.223	2/18/2022@11:11:33 AM	
	SP0783-11	-0.0386	-0.178	-8.06e-3	7.51e-3	0.259	0.0205	2/18/2022@11:12:42 AM	
98.6%	SP0783-13	-0.0359	-0.148	-7.05e-3	0.0164	0.358	0.0266	2/18/2022@11:13:52 AM	
	CCV NO3	0.493	5.63	0.444	0.0149	0.342	0.0221	2/18/2022@11:15:03 AM	
	Known Conc:	0.500			0.500				
101%	CCV NO2	0.516	5.88	0.467	0.505	5.77	0.542	2/18/2022@11:16:12 AM	
	Known Conc:	0.500			0.500				
	CCB	-0.0152	0.0784	6.15e-3	-0.0174	-0.0164	-8.95e-4	2/18/2022@11:17:25 AM	

Known Conc:	0.00			0.00				
SP0783-15	-0.0403	-0.197	-8.54e-3	1.63e-3	0.194	0.0155	2/18/2022@11:18:35 AM	
SP0783-7	6.73	15.0	1.19	-0.0240	0.123	0.0104	2/18/2022@11:19:44 AM	5.00
1015 CCV NO3	0.503	5.75	0.454	-0.0148	0.0128	9.43e-4	2/18/2022@11:22:50 AM	
Known Conc:	0.500			0.500				
1038 CCV NO2	0.518	5.91	0.474	0.514	5.87	0.552	2/18/2022@11:24:02 AM	
Known Conc:	0.500			0.500				
CCB	-0.0150	0.0805	5.89e-3	-0.0150	0.0101	8.88e-4	2/18/2022@11:25:17 AM	
Known Conc:	0.00			0.00				

Table : 1 (NITRITE)

	Known Conc. (mg/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg/L)	Detection Date	Detection Time
1	2.00	1	22.1	2.02	0.0	1.0	1.98	2/18/2022	9:51:20 AM
2	1.00	1	11.6	1.09	0.0	-3.4	1.03	2/18/2022	9:52:29 AM
3	0.500	1	5.83	0.540	0.0	-2.0	0.510	2/18/2022	9:53:39 AM
4	0.250	1	2.98	0.272	0.0	-1.2	0.253	2/18/2022	9:54:50 AM
5	0.0500	1	0.583	0.0518	0.0	20.7	0.0367	2/18/2022	9:56:00 AM
6	0.00	1	0.0231	1.14e-3			-0.0138	2/18/2022	9:57:11 AM

Figure : 1 (NITRITE)

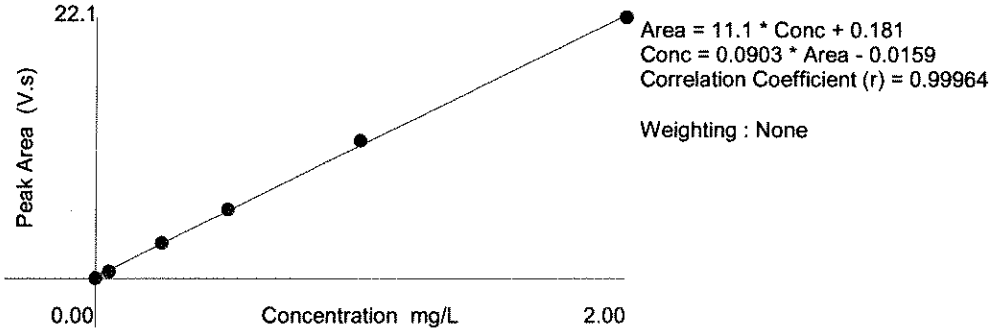


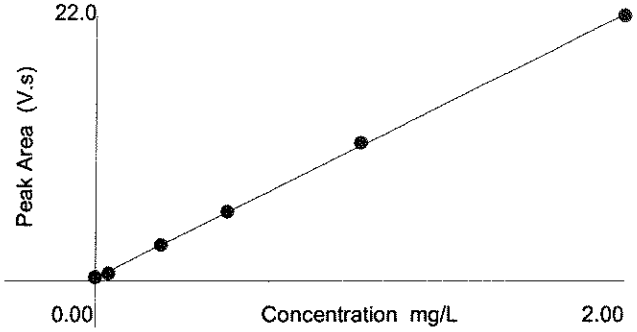
Table : 2 (NITRATE/NITRITE)

	Known Conc. (mg/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg/L)	Detection Date	Detection Time
1	2.00	1	22.0	1.44	0.0	0.6	1.99	2/18/2022	9:51:18 AM
2	1.00	1	11.4	0.768	0.0	-2.4	1.02	2/18/2022	9:52:28 AM
3	0.500	1	5.74	0.384	0.0	-0.5	0.503	2/18/2022	9:53:37 AM
4	0.250	1	2.95	0.196	0.0	0.9	0.248	2/18/2022	9:54:48 AM
5	0.0500	1	0.606	0.0396	0.0	23.6	0.0331	2/18/2022	9:55:59 AM
6	0.00	1	0.296	0.0195			4.74e-3	2/18/2022	9:57:10 AM

Author: wetchem

Date : 2/18/2022

Figure : 2 (NITRATE/NITRITE)



Area = 10.9 * Conc + 0.247
Conc = 0.0914 * Area - 0.0223
Correlation Coefficient (r) = 0.99982

Weighting : None

Katahdin
ANALYTICAL SERVICES

Accredited in accordance with nelac
Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: SS
Date Analyzed: 10-MAR-22
11-MAR-22

Batch: WG315251
Prep Method: N/A
Prep Chemist: SS

Sample	Samp Type	Method	Parameter	DF	Result		Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SP0783-11DL	SAMP	SW846 9056A	Chloride	2	27.3854		27	mg/L	2	4.0	.0993	0.20		
SP0783-13DL	SAMP	SW846 9056A	Chloride	2	29.05		29	mg/L	2	4.0	.0993	0.20		
SP0783-15DL	SAMP	SW846 9056A	Chloride	2	29.2488		29	mg/L	2	4.0	.0993	0.20		
SP0783-17DL	SAMP	SW846 9056A	Chloride	2	30.3411		30	mg/L	2	4.0	.0993	0.20		
SP0783-19DL	SAMP	SW846 9056A	Chloride	2	23.1607		23	mg/L	2	4.0	.0993	0.20		
SP0783-1DL	SAMP	SW846 9056A	Chloride	2	33.9404		34	mg/L	2	4.0	.0993	0.20		
SP0783-3DL	SAMP	SW846 9056A	Chloride	2	33.0549		33	mg/L	2	4.0	.0993	0.20		
SP0783-5DL	SAMP	SW846 9056A	Chloride	2	24.6069		25	mg/L	2	4.0	.0993	0.20		
SP0783-7DL	SAMP	SW846 9056A	Chloride	2	24.6512		25	mg/L	2	4.0	.0993	0.20		
SP0783-9DL	SAMP	SW846 9056A	Chloride	2	30.4972		30	mg/L	2	4.0	.0993	0.20		
SP0964-3DL	SAMP	SW846 9056A	Sulfate	50	1523.4749		1500	mg/L	1	50.	.0637	3.2		
SP0964-3DLA	SAMP	SW846 9056A	Chloride	5	77.1189		77	mg/L	2	10.	.0993	0.50		
SP0964-5DL	SAMP	SW846 9056A	Chloride	20	186.783		190	mg/L	2	40.	.0993	2.0		
SP0964-5DL	SAMP	SW846 9056A	Sulfate	20	389.5821		390	mg/L	1	20.	.0637	1.3		
SP0987-1DL	SAMP	SW846 9056A	Sulfate	5	154.9282		150	mg/L	1	5.0	.0637	0.32		
SP0987-5DL	SAMP	SW846 9056A	Sulfate	2	61.0935		61	mg/L	1	2.0	.0637	0.13		
SP0987-5DLA	SAMP	SW846 9056A	Chloride	1	2.5677		2.6	mg/L	2	2.0	.0993	0.099		
SP1089-2	SAMP	SW846 9056A	Fluoride	1	.1033		0.10	mg/L	.05	0.050	.0072	0.0072		
SP1089-2	SAMP	SW846 9056A	Nitrate as N	1	.0606		0.061	mg/L	.05	0.050	.0174	0.017		
WG315251-1	MBLANK	SW846 9056A	Chloride	1	.0946	U	1.0	mg/L	2	2.0	.0993	0.099		
WG315251-1	MBLANK	SW846 9056A	Chloride	1	.0946	U	2.0	mg/L	2	2.0	.0993	0.099		
WG315251-1	MBLANK	SW846 9056A	Fluoride	1	.0024	U	0.025	mg/L	.05	0.050	.0072	0.0072		
WG315251-1	MBLANK	SW846 9056A	Nitrate as N	1	.0391	J	0.039	mg/L	.05	0.050	.0174	0.017		
WG315251-1	MBLANK	SW846 9056A	Sulfate	1	.0133	U	0.50	mg/L	1	1.0	.0637	0.064		
WG315251-2	LCS	SW846 9056A	Chloride	1	3.6286		3.63	mg/L	2	2.0	.0993	0.099		96.8
WG315251-2	LCS	SW846 9056A	Fluoride	1	3.7608		3.76	mg/L	.05	0.050	.0072	0.0072		100.
WG315251-2	LCS	SW846 9056A	Nitrate as N	1	.7953		0.795	mg/L	.05	0.050	.0174	0.017		94.1
WG315251-3	LCS	SW846 9056A	Sulfate	1	3.5915		3.59	mg/L	1	1.0	.0637	0.064		95.7
WG315251-4	MS	SW846 9056A	Chloride	2	36.4186		36.	mg/L	2	4.0	.0993	0.20		101.
WG315251-5	MSD	SW846 9056A	Chloride	2	36.541		36.	mg/L	2	4.0	.0993	0.20	0	103.
WG315251-6	MS	SW846 9056A	Fluoride	1	3.9269		3.9	mg/L	.05	0.050	.0072	0.0072		102.
WG315251-6	MS	SW846 9056A	Nitrate as N	1	.8248		0.82	mg/L	.05	0.050	.0174	0.017		90.8
WG315251-7	MSD	SW846 9056A	Fluoride	1	3.9759		4.0	mg/L	.05	0.050	.0072	0.0072	1	103.
WG315251-7	MSD	SW846 9056A	Nitrate as N	1	.832		0.83	mg/L	.05	0.050	.0174	0.017	1	91.6

Comments:

SP0783-15	NO3 not reported by I
SP0783-17	MS/MSD
SP0964-3	Please report SO4, NC
SP0964-5	Please report SO4, NC
SP1089-2	MS/MSD
WG315251-1	SP0783-1
WG315251-2	SP0783-1
WG315251-3	SP0783-1
WG315251-4	SP0783-17

Entered by: SS Date: 3/24/22 Accepted by: BF Date: 3/25/22

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: SS
Date Analyzed: 10-MAR-22
11-MAR-22

Batch: WG315251
Prep Method: N/A
Prep Chemist: SS

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
WG315251-5		SP0783-17											
WG315251-6		SP1089-2											
WG315251-7		SP1089-2											

Entered by: SS Date: 3/24/22 Accepted by: JF Date: 3/25/22

Katahdin Analytical Services SP0783 Page 271 of 389

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: SS
Date Analyzed: 10-MAR-22

Batch: WG315252
Prep Method: E300.0
Prep Chemist: SS

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SP1101-1	SAMP	EPA 300.0	Chloride	1	5.9286	5.9	mg/L	2	2.0	.0993	0.099		
SP1101-1	SAMP	EPA 300.0	Nitrate as N	1	.0395	U 0.050	mg/L	.05	0.050	.0174	0.017		
SP1101-1	SAMP	EPA 300.0	Nitrite as N	1	.1008	0.10	mg/L	.05	0.050	.0092	0.0092		
WG315252-1	MBLANK	EPA 300.0	Chloride	1	.0946	U 1.0	mg/L	2	2.0	.0993	0.099		
WG315252-1	MBLANK	EPA 300.0	Nitrate as N	1	.0391	J 0.039	mg/L	.05	0.050	.0174	0.017		
WG315252-1	MBLANK	EPA 300.0	Nitrite as N	1	.005	U 0.025	mg/L	.05	0.050	.0092	0.0092		
WG315252-2	LCS	EPA 300.0	Chloride	1	3.6286	3.63	mg/L	2	2.0	.0993	0.099		96.8
WG315252-2	LCS	EPA 300.0	Nitrate as N	1	.7953	0.795	mg/L	.05	0.050	.0174	0.017		94.1
WG315252-2	LCS	EPA 300.0	Nitrite as N	1	1.1575	1.16	mg/L	.05	0.050	.0092	0.0092		102.

Comments:

WG315252-1	SP1101-1
WG315252-2	SP1101-1

Entered by: SS Date: 3/24/22 Accepted by: AF Date: 3/25/22

Katahdin Analytical Services SP0783 Page 272 of 389

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: SS
Date Analyzed: 11-MAR-22
10-MAR-22

Batch: WG315253
Prep Method: E300.0
Prep Chemist: SS

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SP0895-7DL	SAMP	EPA 300.0	Sulfate	2	44.6632	45	mg/L	1	2.0	.0637	0.13		
SP0989-1DL	SAMP	EPA 300.0	Chloride	5	48.7019	49	mg/L	2	10.	.0993	0.50		
SP0989-1DLA	SAMP	EPA 300.0	Sulfate	1	1.8417	1.8	mg/L	1	1.0	.0637	0.064		
SP0989-2DL	SAMP	EPA 300.0	Sulfate	1	7.9621	8.0	mg/L	1	1.0	.0637	0.064		
SP0989-3DL	SAMP	EPA 300.0	Sulfate	5	87.7551	88	mg/L	1	5.0	.0637	0.32		
SP0989-4DL	SAMP	EPA 300.0	Sulfate	2	71.8173	72	mg/L	1	2.0	.0637	0.13		
SP0989-5DL	SAMP	EPA 300.0	Sulfate	1	17.2711	17	mg/L	1	1.0	.0637	0.064		
SP0989-6DL	SAMP	EPA 300.0	Sulfate	1	.0393	U 0.50	mg/L	1	1.0	.0637	0.064		
SP0989-7DL	SAMP	EPA 300.0	Chloride	20	215.2792	220	mg/L	2	40.	.0993	2.0		
SP1017-1DL	SAMP	EPA 300.0	Sulfate	1	4.2913	4.3	mg/L	1	1.0	.0637	0.064		
SP1017-2DL	SAMP	EPA 300.0	Chloride	2	23.3245	23	mg/L	2	4.0	.0993	0.20		
SP1017-2DL	SAMP	EPA 300.0	Sulfate	2	79.0708	79	mg/L	1	2.0	.0637	0.13		
SP1017-3DL	SAMP	EPA 300.0	Sulfate	2	57.45	57	mg/L	1	2.0	.0637	0.13		
WG315253-1	MBLANK	EPA 300.0	Chloride	1	.0989	U 1.0	mg/L	2	2.0	.0993	0.099		
WG315253-1	MBLANK	EPA 300.0	Sulfate	1	.0933	J 0.093	mg/L	1	1.0	.0637	0.064		
WG315253-2	LCS	EPA 300.0	Chloride	1	3.6771	3.68	mg/L	2	2.0	.0993	0.099		98.1
WG315253-3	LCS	EPA 300.0	Sulfate	1	3.5387	3.54	mg/L	1	1.0	.0637	0.064		94.4

Comments:

SP0989-1	MS/MSD for VOA on
SP0989-4	-4 has different VOA :
WG315253-1	SP0989-1
WG315253-2	SP0989-1
WG315253-3	SP0989-1

Entered by: SS Date: 3/24/22 Accepted by: [illegible] Date: 3/25/22

Katahdin Analytical Services SP0783 Page 273 of 389

IC STANDARDS PREPARATION

Fill sheet in completely, file with each batch of samples analyzed.

MIX ID: W20743	Expiration Date:3/22/22	ICAL Date: 02/23/22

_YTE	INITIAL AMOUNT (mL)	OF	STOCK CONC. (mg/L)	TO	FINAL VOLUME(mL)	=	FINAL CONC.(mg/L)
:l	2.0	OF	1000	TO	100	=	20
'as N)	0.8	OF	1000			=	8
'as N)	0.8	OF	1000			=	8
lr	4.0	OF	1000			=	40
)4	4.0	OF	1000			=	40
:	1.0	OF	1000			=	10
'as P)	1	OF	1000			=	10

WORKING STANDARDS Standards prepared on each day of use

INITIAL AMOUNT (mL)	OF	Final Volume (mL)	FINAL CONC. (mg/L)							STD ID*
			Cl	NO2	NO3	Br	SO4	PO4	F	
1	ICAL	1	20	8	8	40	40	10	10	IC7-022322
0.5	IC7	1	10	4	4	20	20	5	5	IC6-022322
0.25	IC7	1	5	2	2	10	10	2.5	2.5	IC5-022322
0.25	IC6	1	2.5	1	1	5	5	1.25	1.25	IC4-022322
0.1	IC6	1	1	0.4	0.4	2	2	0.5	.5	IC3-022322
0.1	IC3	1	0.1	0.04	0.04	0.2	0.2	0.05	.05	IC2-022322
0.5	IC7	1	10	4	4	20	20	5	5	CCV-031022

*** STD ID is prefix followed by the date of preparation (ie. IC6-020216)**

MATRIX SPIKE MIX ID: W20750	Expiration Date:03/24/22

7.5 mL of High Purity multi-element IC standard solution "A" and 7.5 mL of High Purity multi-element standard solution "B" diluted to 100 mL. For MS, add 0.05 mL of mix to 1.0 mL of sample. For LCS, add 0.05 mL of mix to 1.0 mL of DI water.

Final Concentrations (mg/L):

	NO2 (as N)	NO3 (as N)	Br	SO4	PO4 (as P)	F	STD ID*
;	1.14	0.845	3.75	3.75	1.22	3.75	IC-LCS-031022

*** STD ID is prefix followed by the date of preparation (ie. IC-LCS-020216)**

Comments:
2x dil = 0.5mL 1x→1.0mL
20x dil = 0.05mL 1x→1.0mL

Pipettes: W3, W5
5x dil = 0.2mL 1x→1.0mL
50x dil = 0.02mL 1x→1.0mL

10x dil = 0.1mL 1x→1.0mL
100x dil = 0.1mL 10x→1.0mL

WL-068 – Revision 2 – 04/08/2019

AC: 220105300 SS 3/24/22

Katahdin Analytical Services

ION CHROMATOGRAPHY RUNLOG

Dionex ICS-2100 (Instrument IC-3)

Analysis Date: 3/10/22	**Analytical Column S/N:** ~~210423034~~ 211231	**Calibration Date:** 02/23/22
Analysis Sequence: 3/10/22A	**Guard Column S/N:** ~~210727027~~ 211231054	**Calibration Sequence:** 022322 A Cal
Analyst: SS	**Suppressor S/N:** 180825029	☐ If box at left is checked, continued from previous page. Refer to previous page for header information.

Reporting / Reanalysis Codes:
✓ Report without manipulation
S Report, peak automatically reintegrated with SmartPeak
M Report, peak manually integrated
A Report, peak manually assigned
R Do not report, reanalyze sample

Method Codes:
E EPA 300.0
SW SW846 9056A

Katahdin Sample Number	Dilution Factor	Method Code	Report or Reanalyze (enter appropriate code): F	Cl	NO_2	SO_4	Br	NO_3	PO_4	Comments
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	M	M	M	M	M		
LCS			✓	✓	✓		✓	✓		
LCS						✓				
SP1089-2	1	S	✓	R		R		✓		Cl = 2X SO4 = 5X
1101-1	1	HW		✓	✓			✓		
0783-1	2	S		✓						
-3	2			✓						
-5	2			✓						
-7	2			✓						
-9	2			✓						
-11	2			✓						
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	M	M	M	M	M		
0783-13	2	S		✓						
-15	2			✓						
-17	2			✓						
MS	2			✓						
MSD	2			✓						
-19	2			✓						
0895-7	2	E				✓				
0964-3	50	S				✓				

S: W6315251 → R588072
HW: W6315252 → R588073
E: W6315253 → R588074

WL-069-Revision 1 – 04/12/20016

Reviewed by: _____ Review Date: _____

QAWL1045 - 000352

0000064

Katahdin Analytical Services **ION CHROMATOGRAPHY RUNLOG** Dionex ICS-2100 (Instrument IC-3)

Analysis Date:	**Analytical Column S/N:**	**Calibration Date:**
Analysis Sequence:	**Guard Column S/N:**	**Calibration Sequence:**
Analyst:	**Suppressor S/N:**	☑ **If box at left is checked, continued from previous page. Refer to previous page for header information.**

Reporting / Reanalysis Codes:
✓ Report without manipulation
S Report, peak automatically reintegrated with SmartPeak
M Report, peak manually integrated
A Report, peak manually assigned
R Do not report, reanalyze sample

Method Codes:
E EPA 300.0
SW SW846 9056A

Katahdin Sample Number	Dilution Factor	Method Code	Report or Reanalyze (enter appropriate code): F	Cl	NO_2	SO_4	Br	NO_3	PO_4	Comments
0964-3	5	S		✓						
-5	20	〃		✓		✓				
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	M	M	M	M	M		
0989-2	1	E				✓				
-3	5	〃				✓				
-7	20	〃		✓						
-7	1	〃								Bad pull, rerun SS 3/11/22
-4	2	〃				✓				
-5	1	〃				✓				
LCS			✓	✓	✓		✓	✓		
LCS						✓				
0989-1	5	E		✓						
0989-1	1	〃				✓				
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	M	M	M	M	M		
0989-6	1	E				✓				
0987-1	5	S				✓				
-3	1	〃								rerun, wrong dil. SS 3/24/22
-5	2	〃				✓				
-5	1	〃		✓						
1017-2	2	E		✓		✓				

Reviewed by: _____ Review Date: _____

Katahdin Analytical Services **ION CHROMATOGRAPHY RUNLOG** Dionex ICS-2100 (Instrument IC-3)

Analysis Date:	**Analytical Column S/N:**	**Calibration Date:**
Analysis Sequence:	**Guard Column S/N:**	**Calibration Sequence:**
Analyst:	**Suppressor S/N:**	☑ **If box at left is checked, continued from previous page. Refer to previous page for header information.**

Reporting / Reanalysis Codes:
✓ Report without manipulation
S Report, peak automatically reintegrated with SmartPeak
M Report, peak manually integrated
A Report, peak manually assigned
R Do not report, reanalyze sample

Method Codes:
E EPA 300.0
SW SW846 9056A

Katahdin Sample Number	Dilution Factor	Method Code	Report or Reanalyze (enter appropriate code): F	Cl	NO_2	SO_4	Br	NO_3	PO_4	Comments
1017-3	2	E				✓				
1017-1	1	1				✓				
1089-2 MS	1	S	✓	R		R		✓		Cl = 2x SO4 = 5x
1 MSD	1	1								+
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	M	M	M	M	M		

SS 3/11/12

Reviewed by: _____ **Review Date:** _____

Sequence Overview

Sequence Details

Name:	**031022A REPROC**	*Created On:*	**10/Feb/16 13:48:22**
Directory:	**Instrument Data\ICS-2100\2022\03-MAR**	*Created By:*	**Katahdin Analytical**
Data Vault:	**ChromeleonLocal**	*Updated On:*	**11/Mar/22 16:26:53**
No. of Injections:	**50**	*Updated By:*	**Katahdin Analytical**

Injection Details

No.	Injection Name	Position	Type	Level	Inject Time	Status
1	CCV	1	Check Standard	06	10/Mar/22 15:17:38	Finished
2	CCB	2	Unknown		10/Mar/22 15:37:49	Finished
3	LCS	3	Check Standard	07	10/Mar/22 15:58:37	Finished
4	LCS	4	Check Standard	07	10/Mar/22 16:19:24	Finished
5	SP1089-2	5	Unknown		10/Mar/22 16:40:12	Finished
6	SP1101-1	6	Unknown		10/Mar/22 17:01:00	Finished
7	SP0783-1	7	Unknown		10/Mar/22 17:21:48	Finished
8	SP0783-3	8	Unknown		10/Mar/22 17:42:36	Finished
9	SP0783-5	9	Unknown		10/Mar/22 18:03:24	Finished
10	SP0783-7	10	Unknown		10/Mar/22 18:24:12	Finished
11	SP0783-9	11	Unknown		10/Mar/22 18:45:01	Finished
12	SP0783-11	12	Unknown		10/Mar/22 19:05:49	Finished
13	CCV	13	Check Standard	06	10/Mar/22 19:26:37	Finished
14	CCB	14	Unknown		10/Mar/22 19:47:25	Finished
15	SP0783-13	15	Unknown		10/Mar/22 20:08:14	Finished
16	SP0783-15	16	Unknown		10/Mar/22 20:29:01	Finished
17	SP0783-17	17	Unknown		10/Mar/22 20:49:49	Finished
18	SP0783-17 MS	18	Unknown		10/Mar/22 21:10:38	Finished
19	SP0783-17 MSD	19	Unknown		10/Mar/22 21:31:26	Finished
20	SP0783-19	20	Unknown		10/Mar/22 21:52:14	Finished
21	SP0895-7	21	Unknown		10/Mar/22 22:13:02	Finished
22	SP0964-3	22	Unknown		10/Mar/22 22:33:50	Finished
23	SP0964-3	23	Unknown		10/Mar/22 22:54:37	Finished
24	SP0964-5	24	Unknown		10/Mar/22 23:15:26	Finished
25	CCV	25	Check Standard	06	10/Mar/22 23:36:14	Finished
26	CCB	26	Unknown		10/Mar/22 23:57:02	Finished
27	SP0989-2	27	Unknown		11/Mar/22 00:17:50	Finished
28	SP0989-3	28	Unknown		11/Mar/22 00:38:38	Finished
29	SP0989-7	29	Unknown		11/Mar/22 00:59:26	Finished
30	SP0989-7	30	Unknown		11/Mar/22 01:20:14	Finished
31	SP0989-4	31	Unknown		11/Mar/22 01:41:03	Finished
32	SP0989-5	32	Unknown		11/Mar/22 02:01:50	Finished
33	LCS	33	Check Standard	07	11/Mar/22 02:22:37	Finished
34	LCS	34	Check Standard	07	11/Mar/22 02:43:25	Finished
35	SP0989-1	35	Unknown		11/Mar/22 03:04:13	Finished
36	SP0989-1	36	Unknown		11/Mar/22 03:25:00	Finished
37	CCV	37	Check Standard	06	11/Mar/22 03:45:48	Finished
38	CCB	38	Unknown		11/Mar/22 04:06:36	Finished
39	SP0989-6	39	Unknown		11/Mar/22 04:27:24	Finished
40	SP0987-1	40	Unknown		11/Mar/22 04:48:12	Finished
41	SP0987-3	41	Unknown		11/Mar/22 05:08:59	Finished
42	SP0987-5	42	Unknown		11/Mar/22 05:29:47	Finished

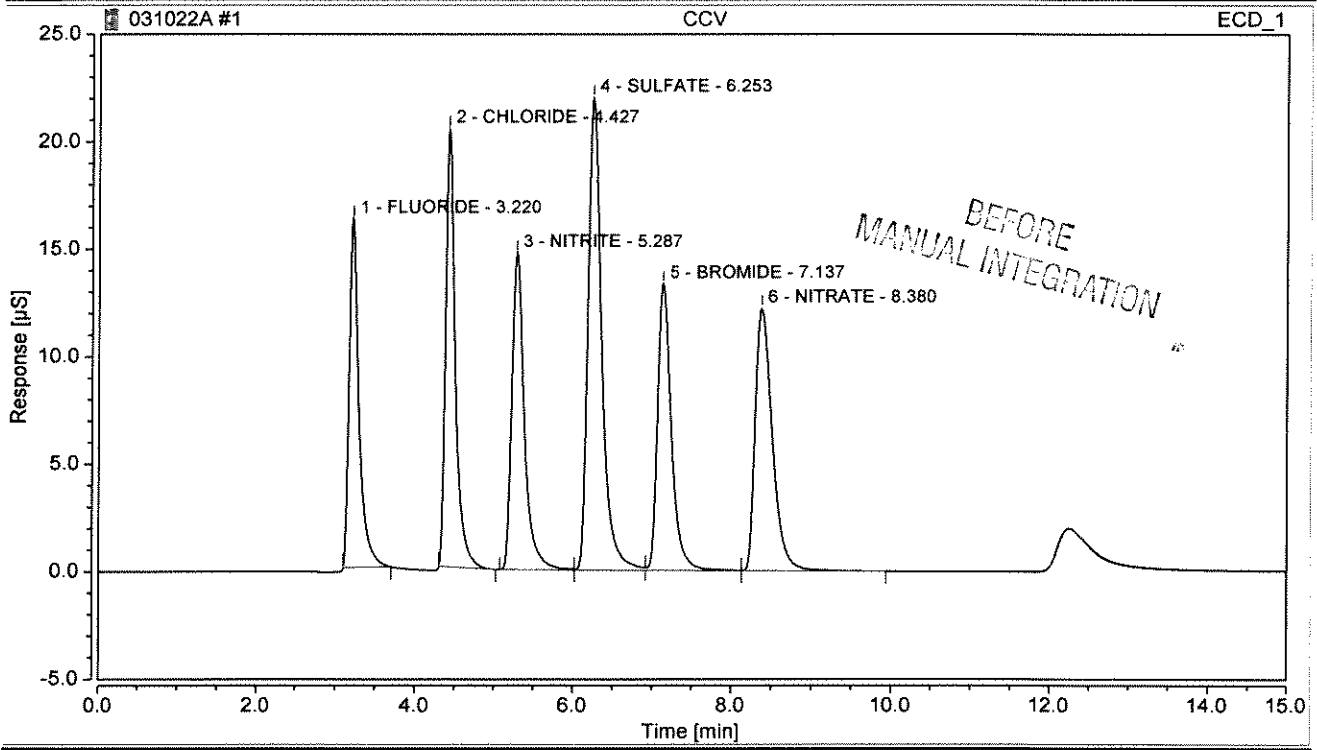
43	SP0987-5	43	Unknown		11/Mar/22 05:50:35	Finished
44	SP1017-2	44	Unknown		11/Mar/22 06:11:23	Finished
45	SP1017-3	45	Unknown		11/Mar/22 06:32:11	Finished
46	SP1017-1	46	Unknown		11/Mar/22 06:52:59	Finished
47	SP1089-2 MS	47	Unknown		11/Mar/22 07:13:47	Finished
48	SP1089-2 MSD	48	Unknown		11/Mar/22 07:34:34	Finished
49	CCV	49	Check Standard	06	11/Mar/22 07:55:22	Finished
50	CCB	50	Unknown		11/Mar/22 08:16:10	Finished

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.99**
Vial Number:	**1**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**10/Mar/22 15:17**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

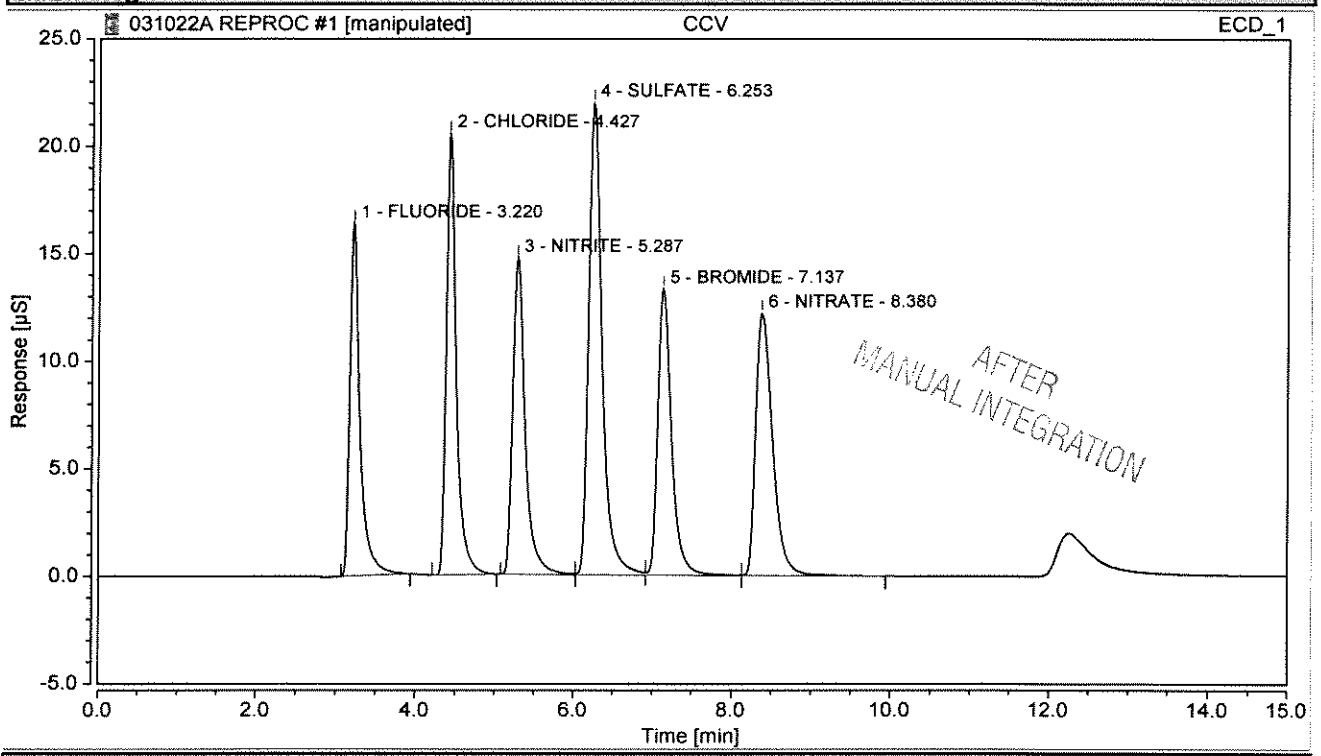
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.220	2.312	16.224	12.81	16.41	4.6792	-6.4157
2	CHLORIDE	4.427	2.916	20.391	16.15	20.62	9.7552	-2.4480
3	NITRITE	5.287	2.693	14.733	14.91	14.90	4.1056	2.6409
4	SULFATE	6.253	4.420	21.980	24.48	22.23	19.5983	-2.0083
5	BROMIDE	7.137	2.710	13.327	15.01	13.48	20.6786	3.3931
6	NITRATE	8.380	3.004	12.219	16.64	12.36	3.8970	-2.5740
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**18.054**	**98.875**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.99**
Vial Number:	**1**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**10/Mar/22 15:17**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

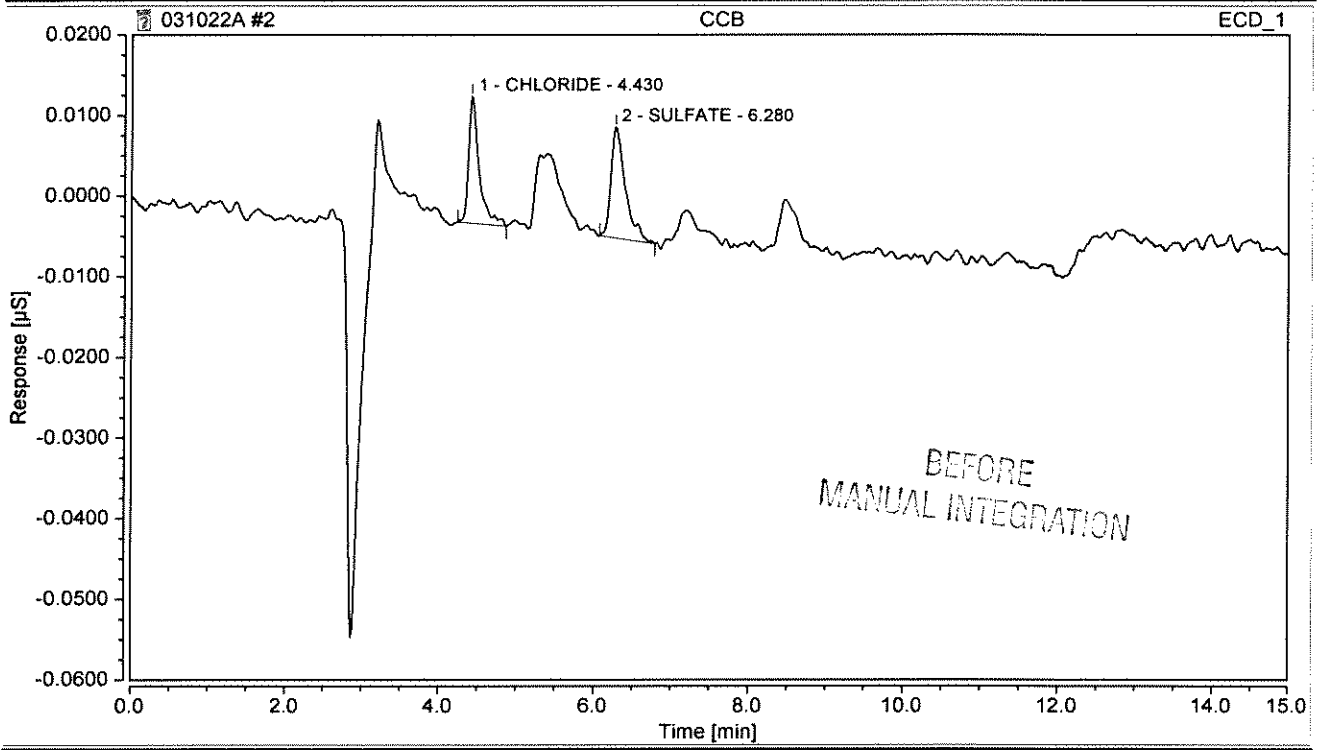
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.220	2.431	16.412	13.33	16.54	4.9201	-1.5989
2	CHLORIDE	4.427	2.988	20.553	16.38	20.71	9.9957	-0.0428
3	NITRITE	5.287	2.693	14.733	14.76	14.85	4.1056	2.6409
4	SULFATE	6.253	4.420	21.980	24.22	22.15	19.5983	-2.0083
5	BROMIDE	7.137	2.710	13.327	14.85	13.43	20.6786	3.3931
6	NITRATE	8.380	3.004	12.219	16.46	12.31	3.8970	-2.5740
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**18.246**	**99.224**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.98**
Vial Number:	**2**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**10/Mar/22 15:37**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

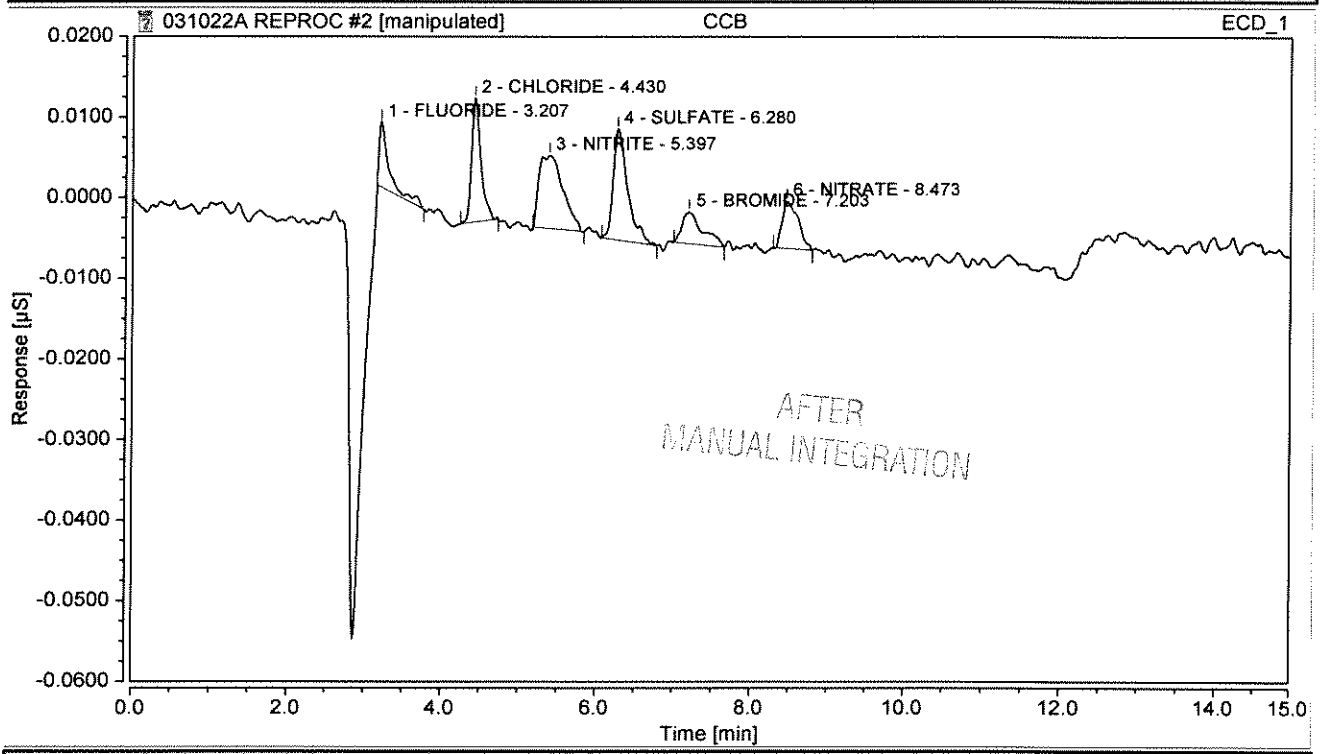
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.430	0.003	0.016	45.85	53.33	0.0957	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	6.280	0.003	0.014	54.15	46.67	0.0133	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.006**	**0.029**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.98**
Vial Number:	**2**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**10/Mar/22 15:37**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

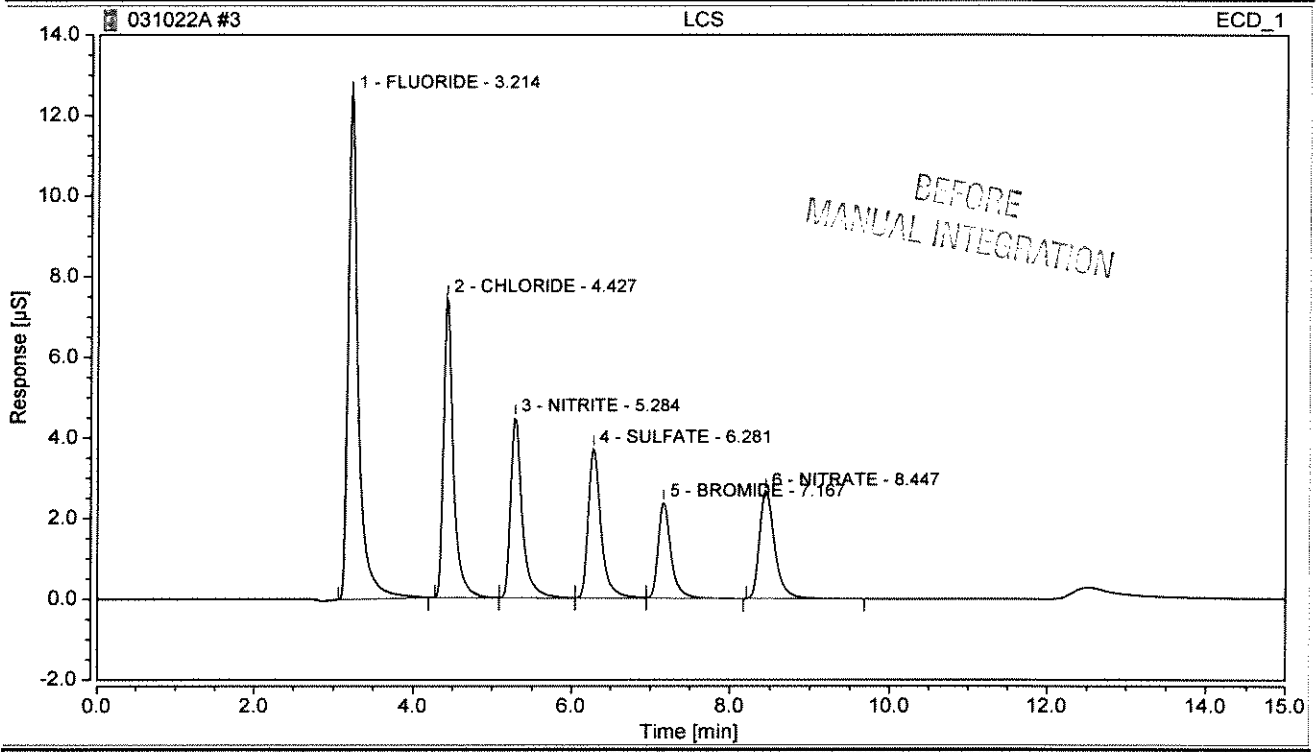
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.207	0.001	0.008	9.79	14.37	0.0024	n.a.
2	CHLORIDE	4.430	0.002	0.015	17.88	27.40	0.0946	n.a.
3	NITRITE	5.397	0.003	0.009	26.52	16.15	0.0050	n.a.
4	SULFATE	6.280	0.003	0.014	24.40	24.59	0.0133	n.a.
5	BROMIDE	7.203	0.001	0.004	9.83	7.02	0.0061	n.a.
6	NITRATE	8.473	0.001	0.006	11.56	10.47	0.0391	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.012**	**0.056**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.98**
Vial Number:	**3**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**07**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**10/Mar/22 15:58**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

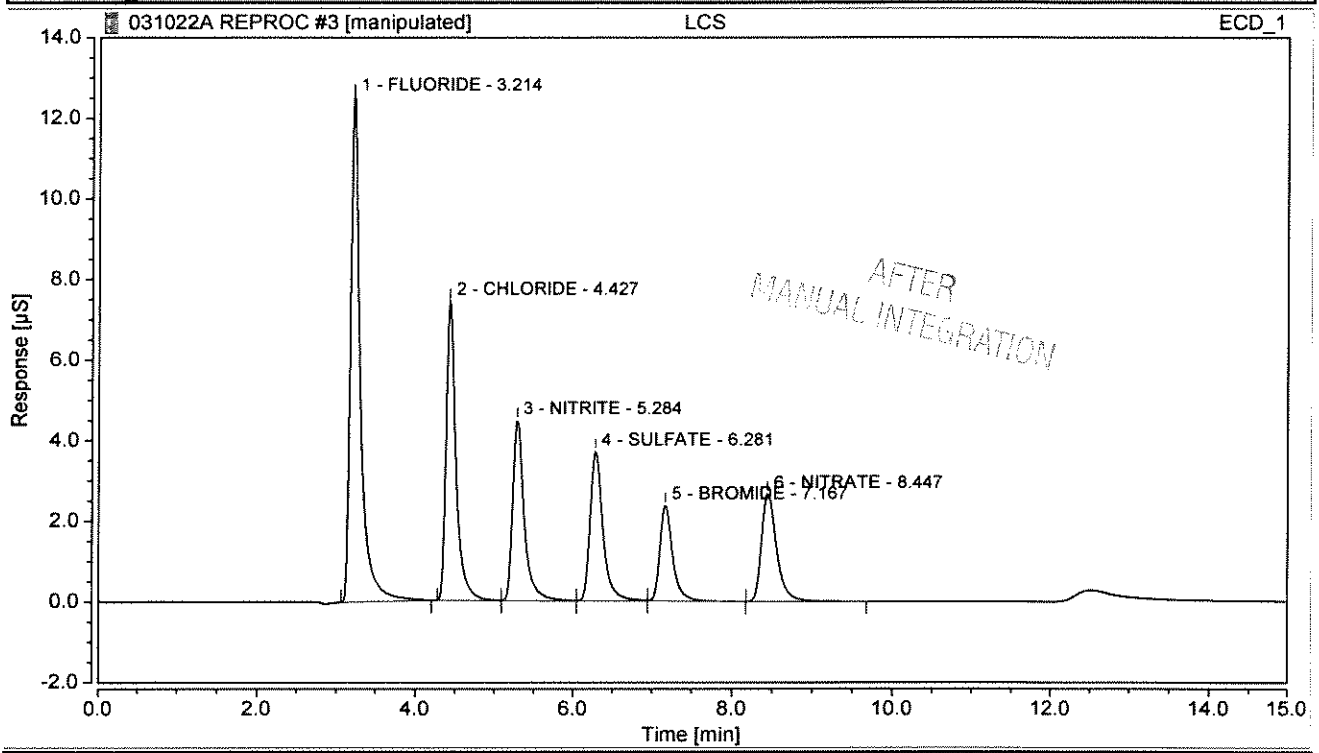
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.214	1.859	12.545	34.19	37.76	3.7608	0.2887
2	CHLORIDE	4.427	1.068	7.440	19.64	22.39	3.6286	-3.2383
3	NITRITE	5.284	0.759	4.480	13.96	13.48	1.1575	1.5374
4	SULFATE	6.281	0.710	3.714	13.05	11.18	3.1466	-16.0907
5	BROMIDE	7.167	0.453	2.382	8.33	7.17	3.6954	-1.4564
6	NITRATE	8.447	0.588	2.665	10.82	8.02	0.7928	-6.1808
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.436**	**33.225**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.98**
Vial Number:	**3**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**07**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**10/Mar/22 15:58**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

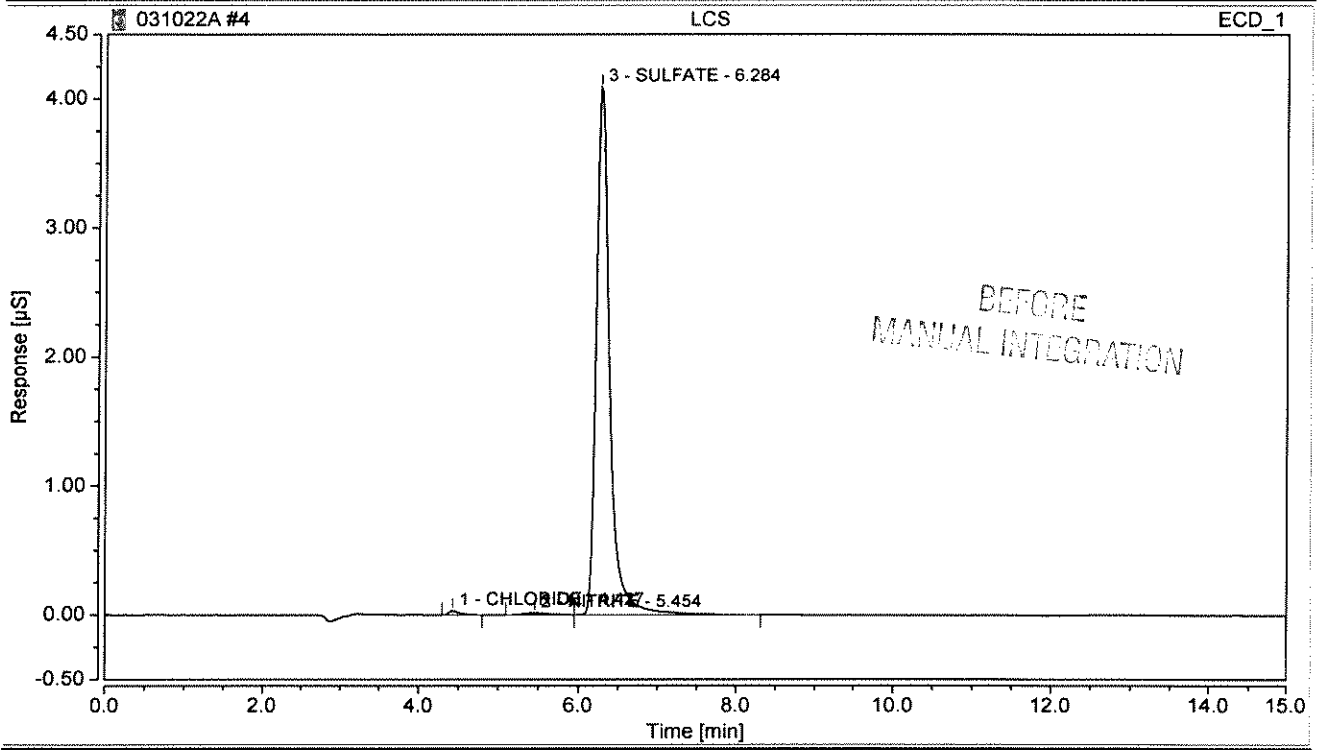
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.214	1.859	12.545	34.18	37.75	3.7608	0.2887
2	CHLORIDE	4.427	1.068	7.440	19.64	22.39	3.6286	-3.2383
3	NITRITE	5.284	0.759	4.480	13.96	13.48	1.1575	1.5374
4	SULFATE	6.281	0.710	3.714	13.05	11.18	3.1466	-16.0907
5	BROMIDE	7.167	0.453	2.382	8.33	7.17	3.6954	-1.4564
6	NITRATE	8.447	0.590	2.667	10.85	8.03	0.7953	-5.8791
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.438**	**33.227**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.98**
Vial Number:	**4**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**07**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**10/Mar/22 16:19**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

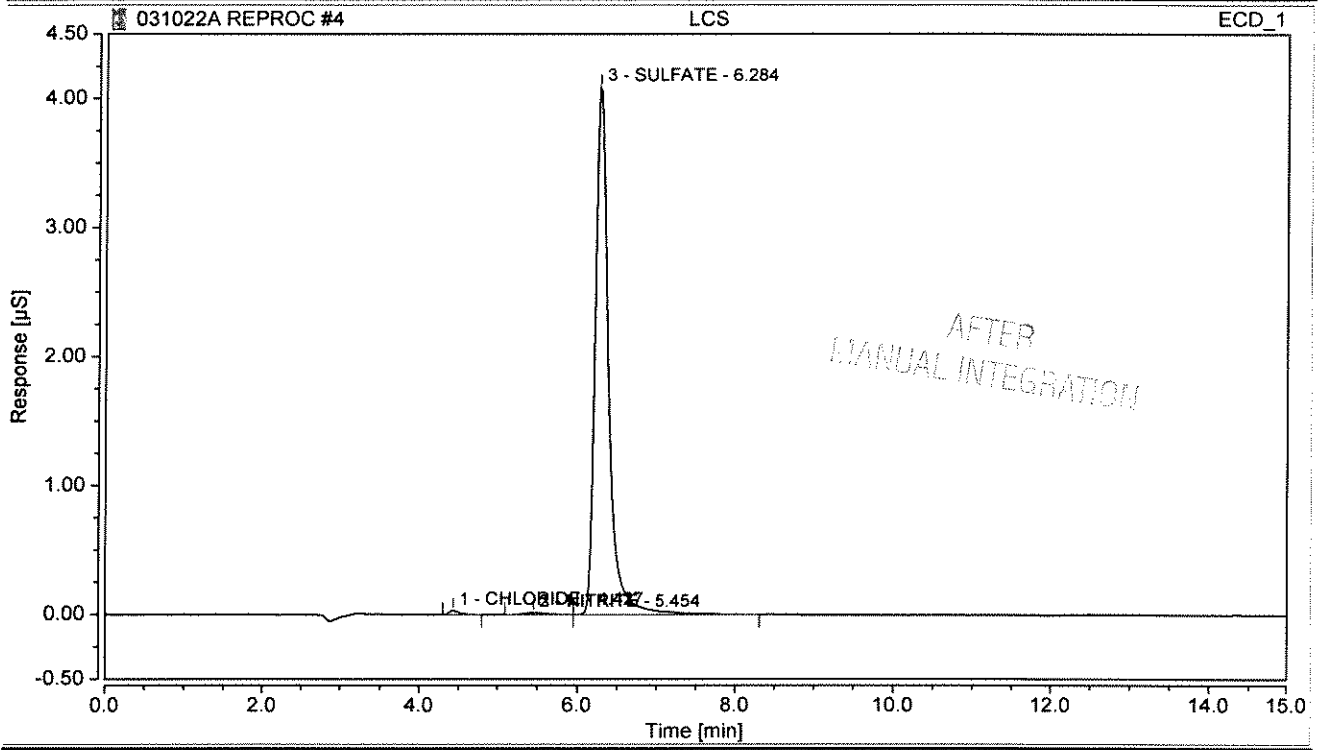
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.427	0.005	0.033	0.63	0.79	0.1045	-97.2123
2	NITRITE	5.454	0.005	0.015	0.62	0.36	0.0077	-99.3248
3	SULFATE	6.284	0.810	4.092	98.75	98.84	3.5915	-4.2259
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.820**	**4.140**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.98**
Vial Number:	**4**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**07**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**10/Mar/22 16:19**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

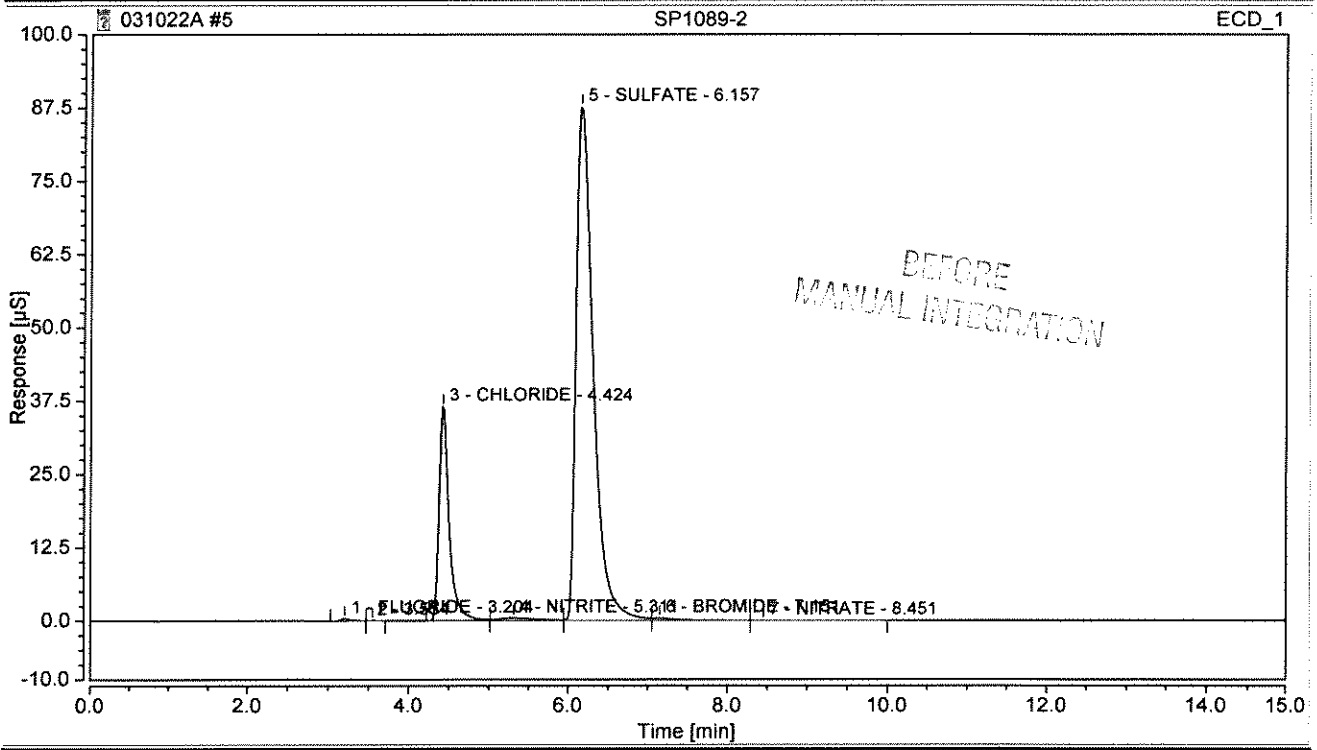
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.427	0.005	0.033	0.63	0.79	0.1045	-97.2123
2	NITRITE	5.454	0.005	0.015	0.62	0.36	0.0077	-99.3248
3	SULFATE	6.284	0.810	4.092	98.75	98.84	3.5915	-4.2259
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.820**	**4.140**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP1089-2**	*Run Time (min):*	**14.98**
Vial Number:	**5**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMisocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**10/Mar/22 16:40**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

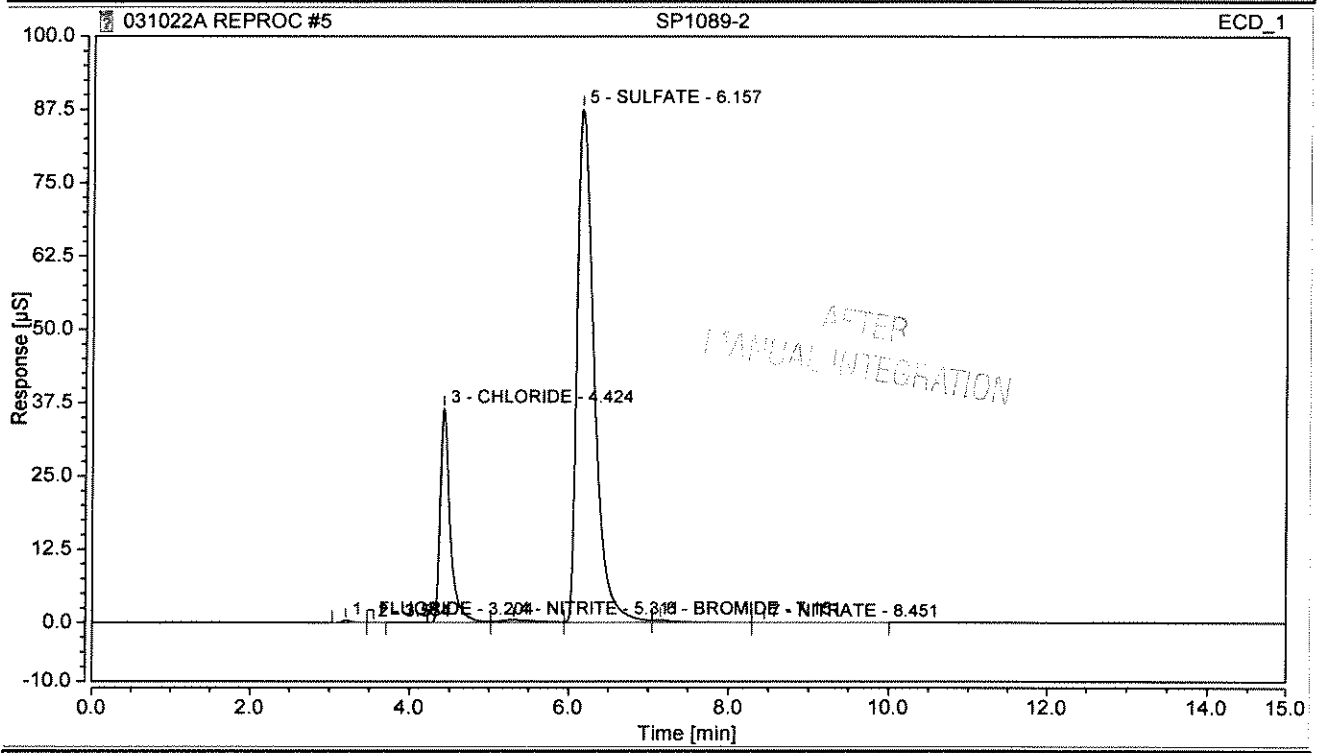
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.204	0.051	0.395	0.18	0.32	0.1033	n.a.
3	CHLORIDE	4.424	5.352	36.513	19.27	29.09	17.8332	n.a.
4	NITRITE	5.311	0.250	0.442	0.90	0.35	0.3816	n.a.
5	SULFATE	6.157	21.929	87.674	78.97	69.86	97.2344	n.a.
6	BROMIDE	7.151	0.166	0.413	0.60	0.33	0.6403	n.a.
7	NITRATE	8.451	0.018	0.029	0.07	0.02	0.0606	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**27.766**	**125.467**	**99.99**	**99.98**		

Chromatogram and Results

Injection Details

Injection Name:	**SP1089-2**	*Run Time (min):*	**14.98**
Vial Number:	**5**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMisocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**10/Mar/22 16:40**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

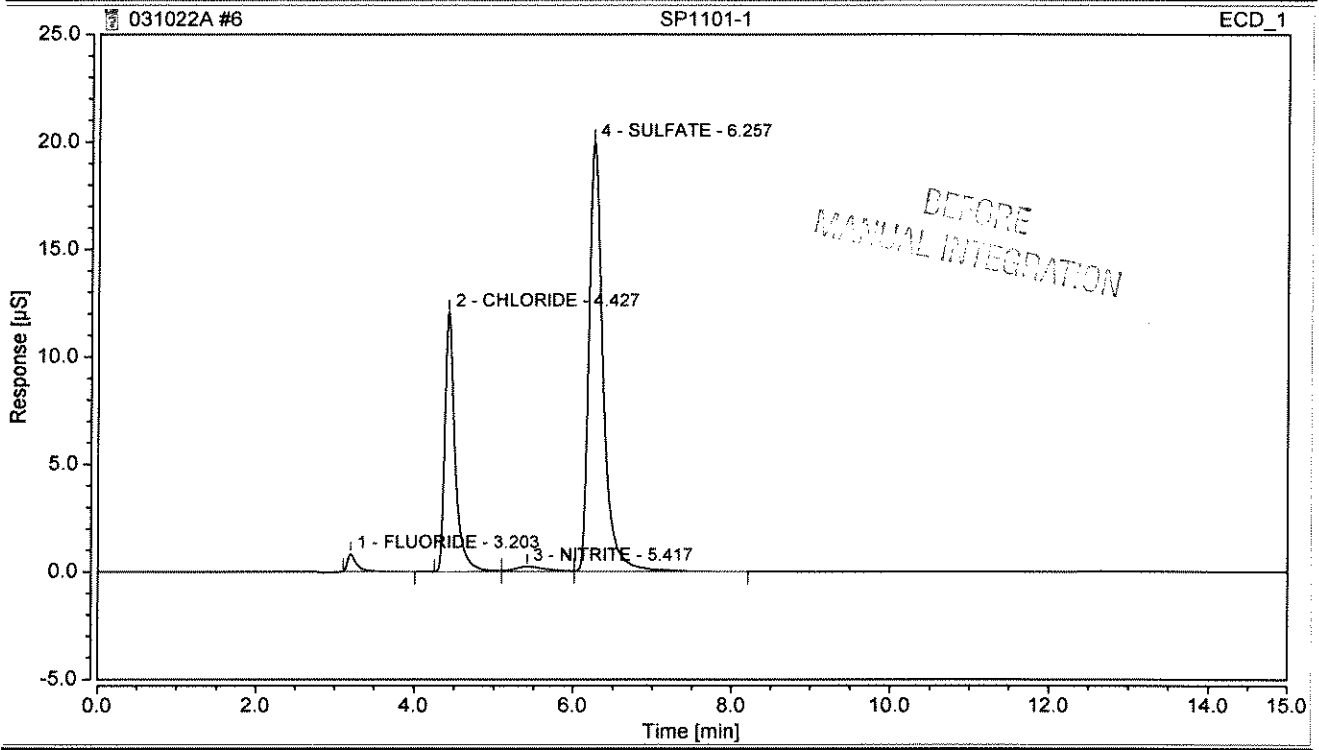
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.204	0.051	0.395	0.18	0.32	0.1033	n.a.
3	CHLORIDE	4.424	5.352	36.513	19.27	29.09	17.8332	n.a.
4	NITRITE	5.311	0.250	0.442	0.90	0.35	0.3816	n.a.
5	SULFATE	6.157	21.929	87.674	78.97	69.86	97.2344	n.a.
6	BROMIDE	7.151	0.166	0.413	0.60	0.33	0.6403	n.a.
7	NITRATE	8.451	0.018	0.029	0.07	0.02	0.0606	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**27.766**	**125.467**	**99.99**	**99.98**		

Chromatogram and Results

Injection Details

Injection Name:	**SP1101-1**	*Run Time (min):*	**14.99**
Vial Number:	**6**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**10/Mar/22 17:01**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

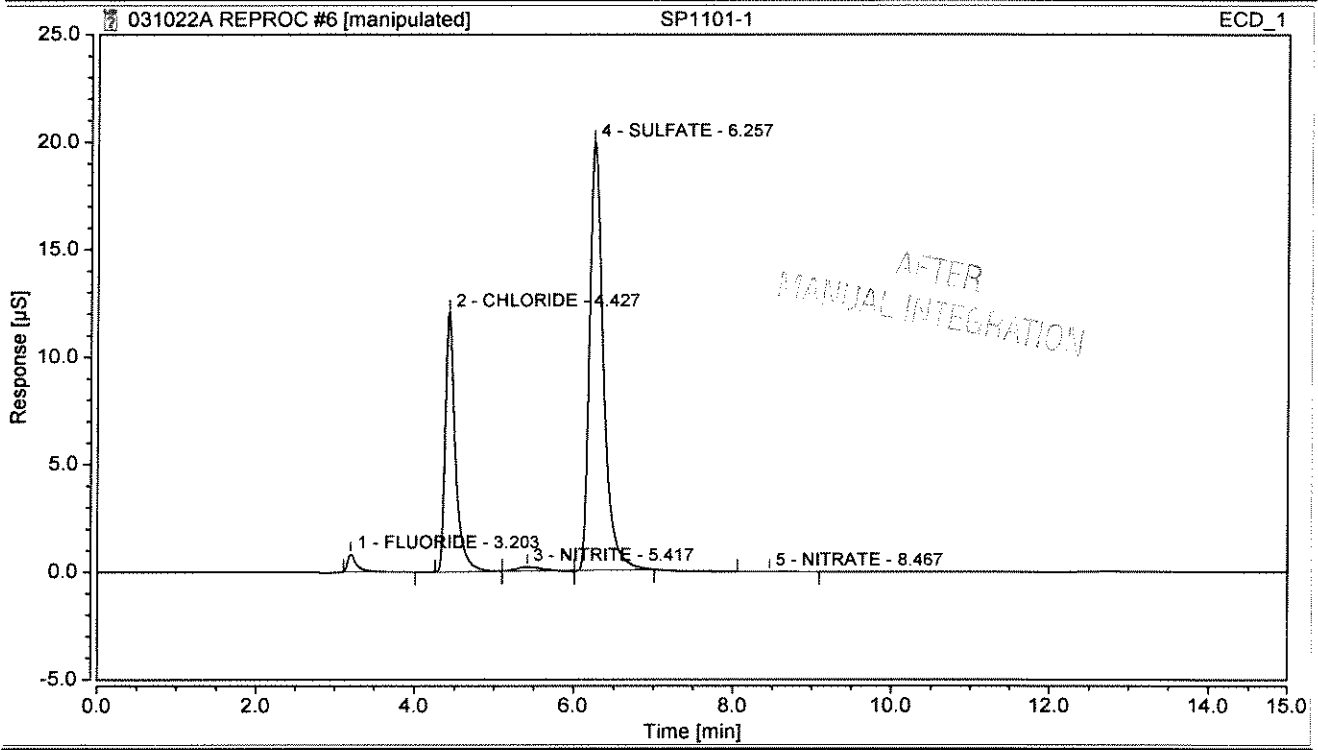
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.203	0.111	0.822	1.81	2.48	0.2239	n.a.
2	CHLORIDE	4.427	1.775	12.077	28.99	36.47	5.9715	n.a.
3	NITRITE	5.417	0.109	0.237	1.78	0.72	0.1659	n.a.
4	SULFATE	6.257	4.128	19.980	67.43	60.33	18.3040	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.122**	**33.116**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP1101-1**	*Run Time (min):*	**14.99**
Vial Number:	**6**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**10/Mar/22 17:01**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

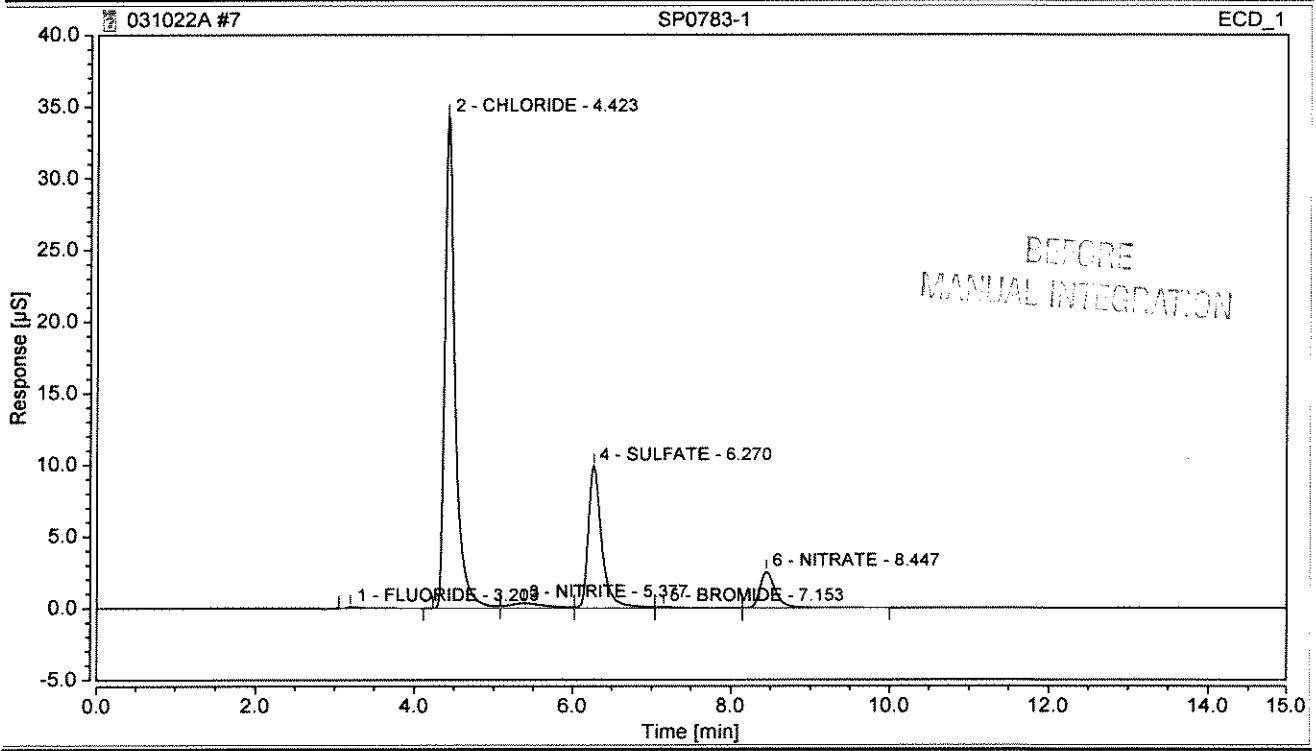
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.203	0.111	0.822	1.86	2.49	0.2239	n.a.
2	CHLORIDE	4.427	1.762	12.071	29.59	36.57	5.9286	n.a.
3	NITRITE	5.417	0.066	0.196	1.11	0.59	0.1008	n.a.
4	SULFATE	6.257	4.014	19.907	67.42	60.32	17.7989	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	8.467	0.002	0.010	0.03	0.03	0.0395	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.954**	**33.005**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0783-1**	*Run Time (min):*	**14.99**
Vial Number:	**7**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**10/Mar/22 17:21**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

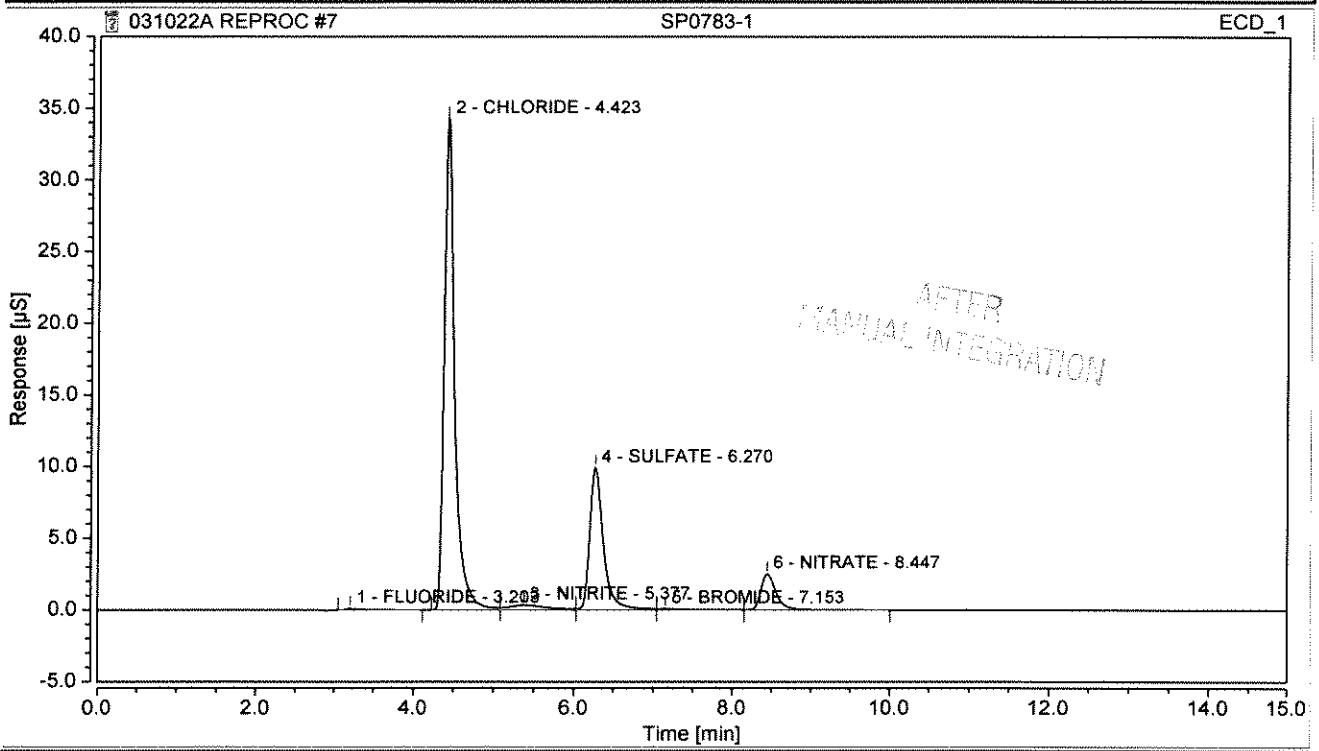
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.203	0.025	0.097	0.31	0.20	0.0994	n.a.
2	CHLORIDE	4.423	5.091	34.266	64.47	72.63	33.9404	n.a.
3	NITRITE	5.377	0.180	0.339	2.28	0.72	0.5490	n.a.
4	SULFATE	6.270	2.009	9.904	25.44	20.99	17.8147	n.a.
5	BROMIDE	7.153	0.030	0.071	0.38	0.15	0.2210	n.a.
6	NITRATE	8.447	0.562	2.499	7.12	5.30	1.5190	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.897**	**47.176**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0783-1**	*Run Time (min):*	**14.99**
Vial Number:	**7**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**10/Mar/22 17:21**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

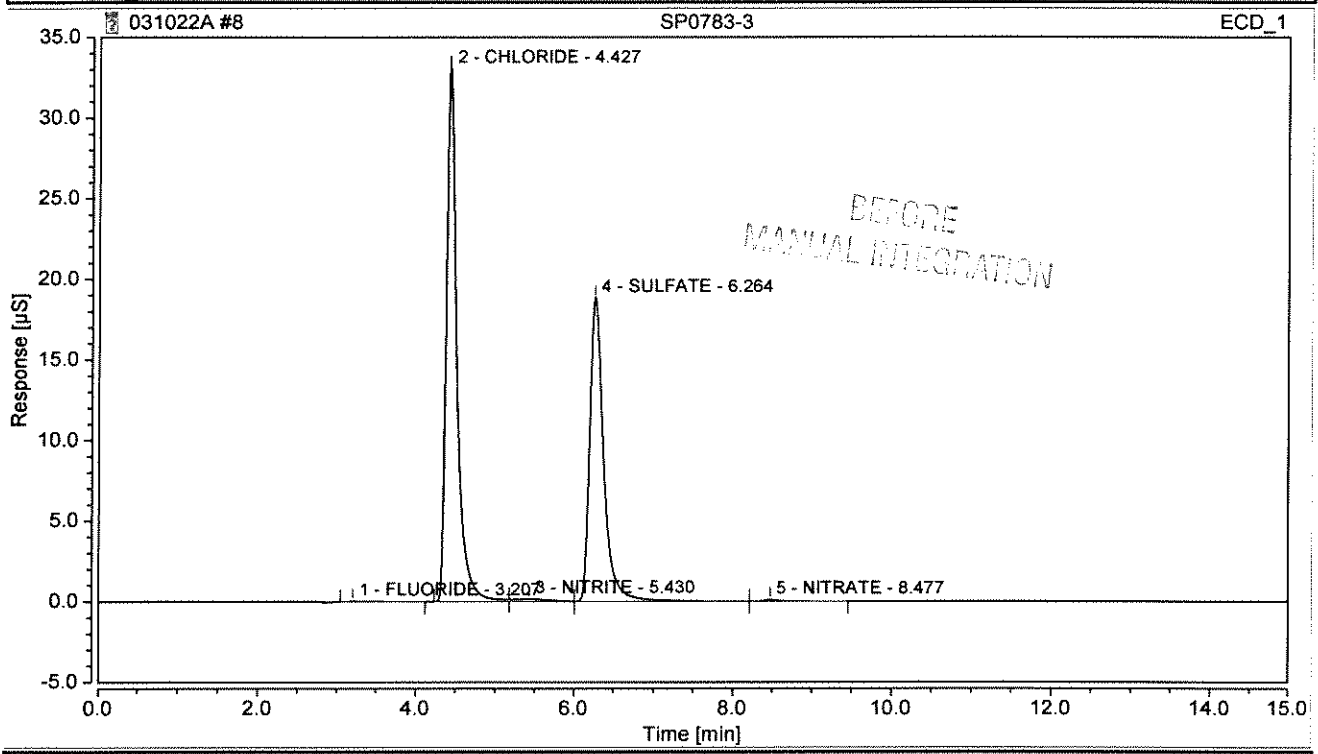
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.203	0.025	0.097	0.31	0.20	0.0994	n.a.
2	CHLORIDE	4.423	5.091	34.266	64.47	72.63	33.9404	n.a.
3	NITRITE	5.377	0.180	0.339	2.28	0.72	0.5490	n.a.
4	SULFATE	6.270	2.009	9.904	25.44	20.99	17.8147	n.a.
5	BROMIDE	7.153	0.030	0.071	0.38	0.15	0.2210	n.a.
6	NITRATE	8.447	0.562	2.499	7.12	5.30	1.5190	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.897**	**47.176**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0783-3**	*Run Time (min):*	**14.99**
Vial Number:	**8**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**10/Mar/22 17:42**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

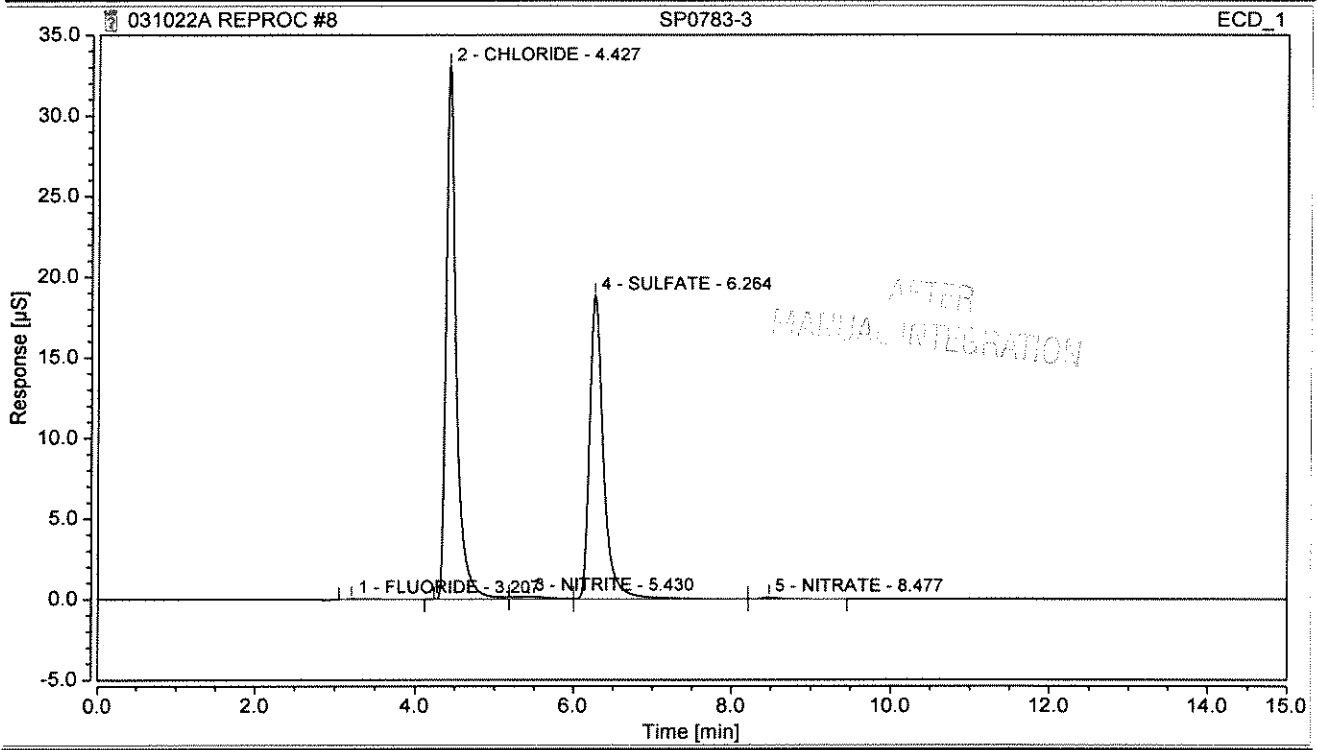
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.207	0.014	0.043	0.16	0.08	0.0574	n.a.
2	CHLORIDE	4.427	4.958	33.063	55.48	63.35	33.0549	n.a.
3	NITRITE	5.430	0.077	0.163	0.86	0.31	0.2349	n.a.
4	SULFATE	6.264	3.864	18.831	43.23	36.08	34.2628	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	8.477	0.024	0.091	0.27	0.17	0.1354	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.936**	**52.191**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0783-3**	*Run Time (min):*	**14.99**
Vial Number:	**8**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**10/Mar/22 17:42**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

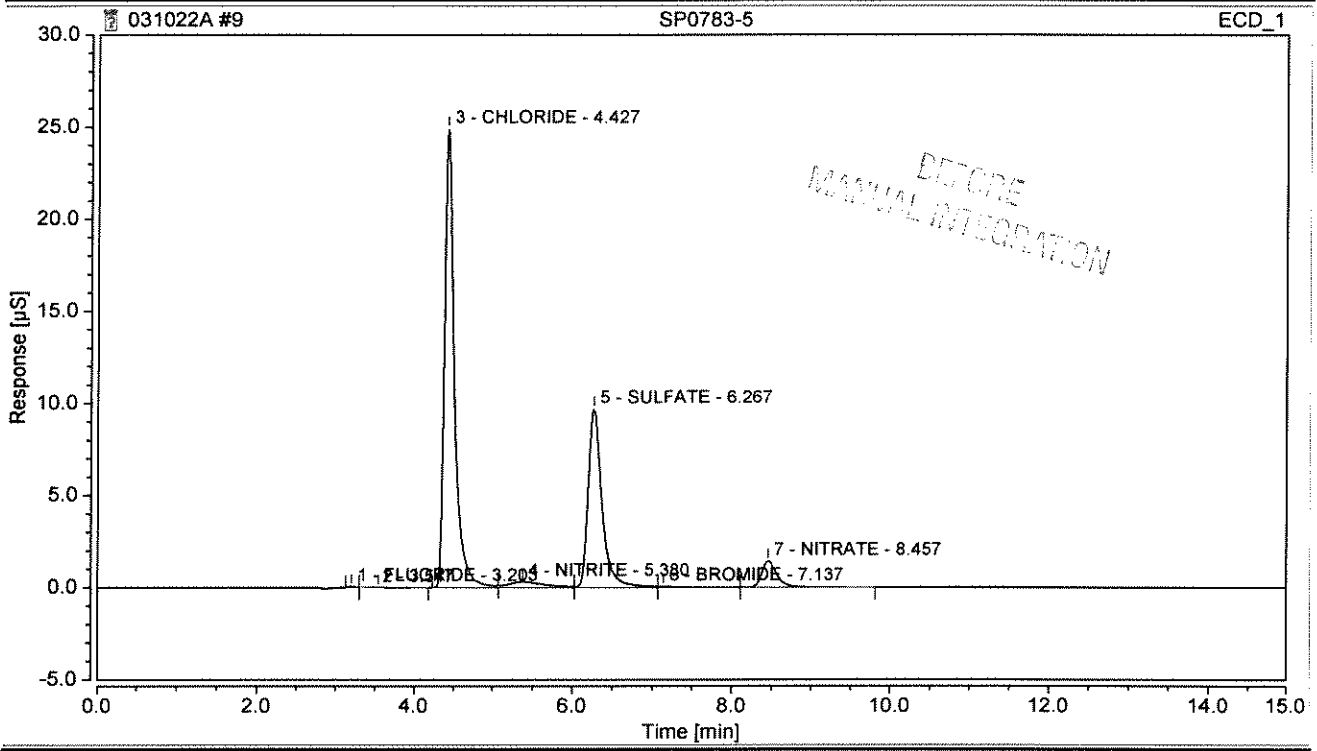
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.207	0.014	0.043	0.16	0.08	0.0574	n.a.
2	CHLORIDE	4.427	4.958	33.063	55.48	63.35	33.0549	n.a.
3	NITRITE	5.430	0.077	0.163	0.86	0.31	0.2349	n.a.
4	SULFATE	6.264	3.864	18.831	43.23	36.08	34.2628	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	8.477	0.024	0.091	0.27	0.17	0.1354	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.936**	**52.191**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0783-5**	*Run Time (min):*	**14.98**
Vial Number:	**9**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**10/Mar/22 18:03**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

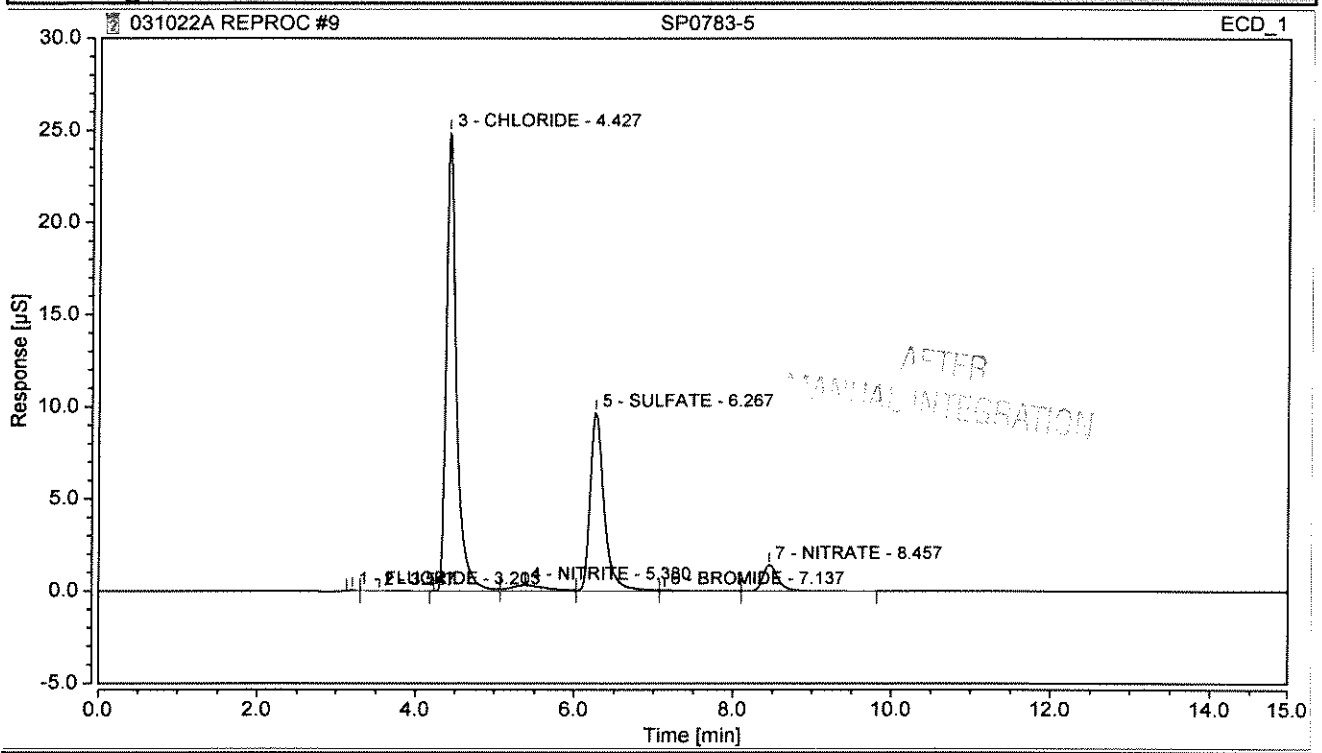
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.203	0.004	0.042	0.06	0.11	0.0150	n.a.
3	CHLORIDE	4.427	3.684	24.916	59.70	68.29	24.6069	n.a.
4	NITRITE	5.380	0.167	0.322	2.71	0.88	0.5100	n.a.
5	SULFATE	6.267	1.968	9.710	31.89	26.61	17.4497	n.a.
6	BROMIDE	7.137	0.022	0.052	0.35	0.14	0.1608	n.a.
7	NITRATE	8.457	0.317	1.427	5.13	3.91	0.8879	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.161**	**36.469**	**99.84**	**99.96**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0783-5**	*Run Time (min):*	**14.98**
Vial Number:	**9**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMisocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**10/Mar/22 18:03**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

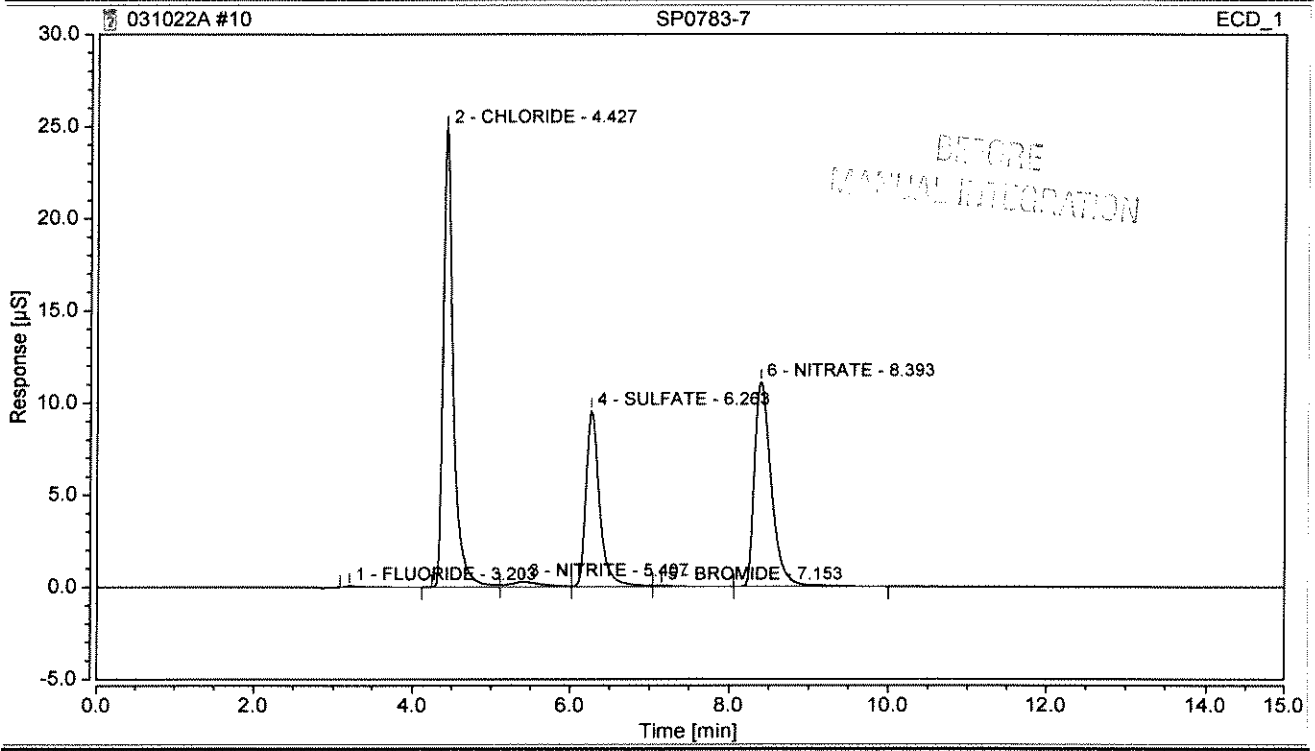
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.203	0.004	0.042	0.06	0.11	0.0150	n.a.
3	CHLORIDE	4.427	3.684	24.916	59.70	68.29	24.6069	n.a.
4	NITRITE	5.380	0.167	0.322	2.71	0.88	0.5100	n.a.
5	SULFATE	6.267	1.968	9.710	31.89	26.61	17.4497	n.a.
6	BROMIDE	7.137	0.022	0.052	0.35	0.14	0.1608	n.a.
7	NITRATE	8.457	0.317	1.427	5.13	3.91	0.8879	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.161**	**36.469**	**99.84**	**99.96**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0783-7**	*Run Time (min):*	**14.99**
Vial Number:	**10**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**10/Mar/22 18:24**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

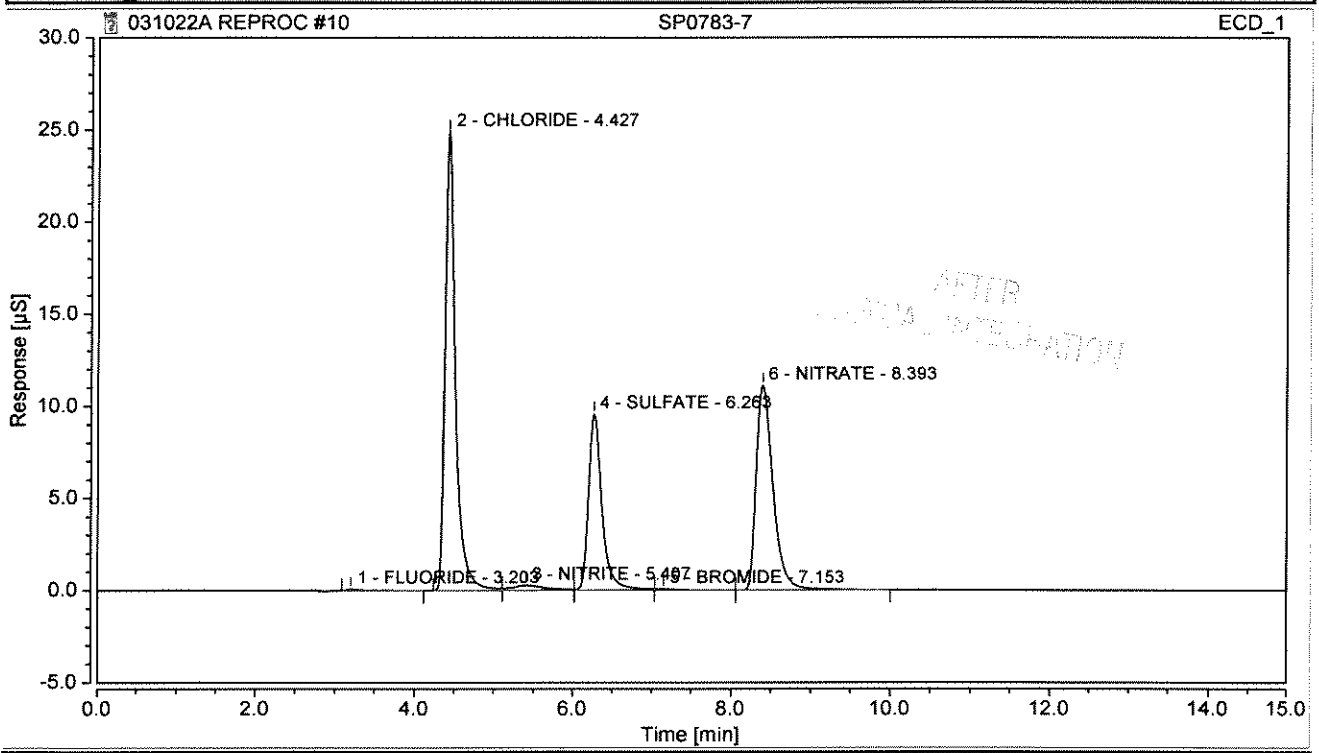
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.203	0.019	0.080	0.22	0.17	0.0753	n.a.
2	CHLORIDE	4.427	3.691	24.889	43.43	54.15	24.6512	n.a.
3	NITRITE	5.407	0.126	0.261	1.48	0.57	0.3846	n.a.
4	SULFATE	6.263	1.915	9.564	22.53	20.81	16.9795	n.a.
5	BROMIDE	7.153	0.022	0.062	0.26	0.14	0.1926	n.a.
6	NITRATE	8.393	2.726	11.109	32.08	24.17	7.0792	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.498**	**45.965**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0783-7**	*Run Time (min):*	**14.99**
Vial Number:	**10**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**10/Mar/22 18:24**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

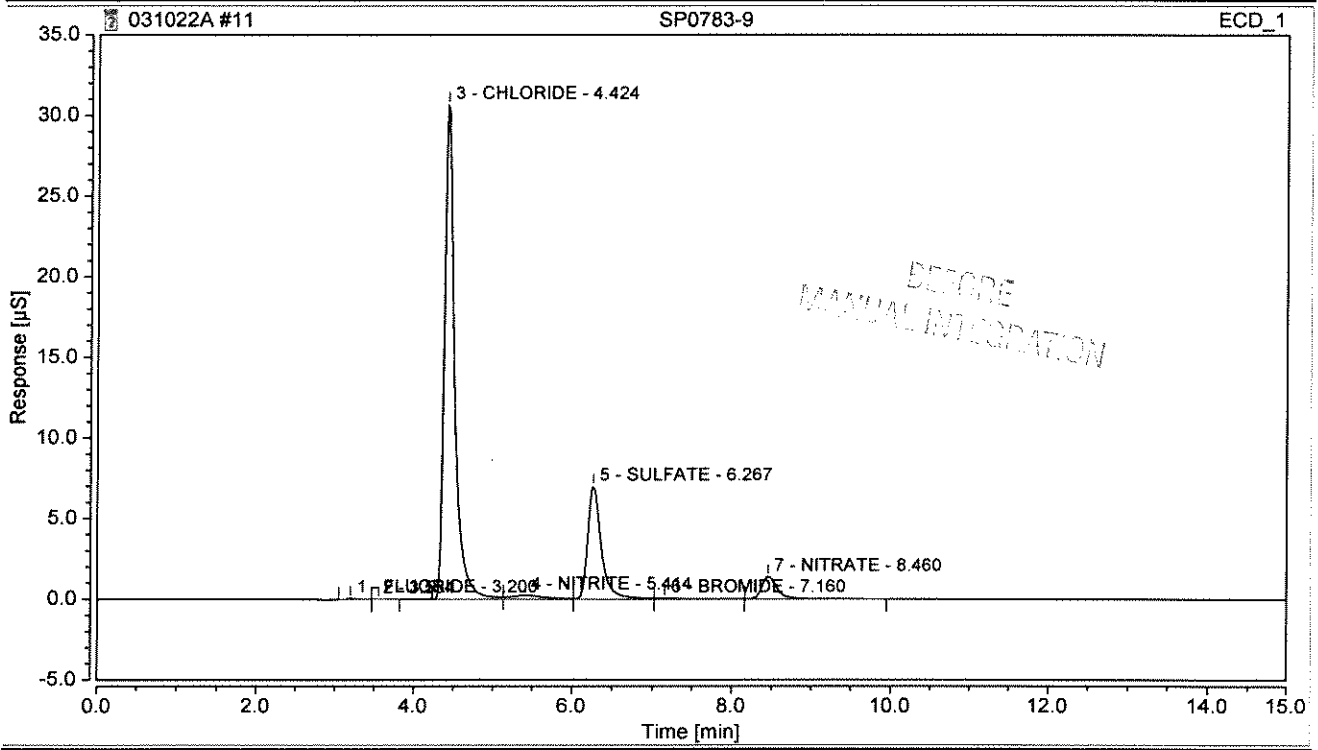
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.203	0.019	0.080	0.22	0.17	0.0753	n.a.
2	CHLORIDE	4.427	3.691	24.889	43.43	54.15	24.6512	n.a.
3	NITRITE	5.407	0.126	0.261	1.48	0.57	0.3846	n.a.
4	SULFATE	6.263	1.915	9.564	22.53	20.81	16.9795	n.a.
5	BROMIDE	7.153	0.022	0.062	0.26	0.14	0.1926	n.a.
6	NITRATE	8.393	2.726	11.109	32.08	24.17	7.0792	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.498**	**45.965**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0783-9**	*Run Time (min):*	**14.99**
Vial Number:	**11**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**10/Mar/22 18:45**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

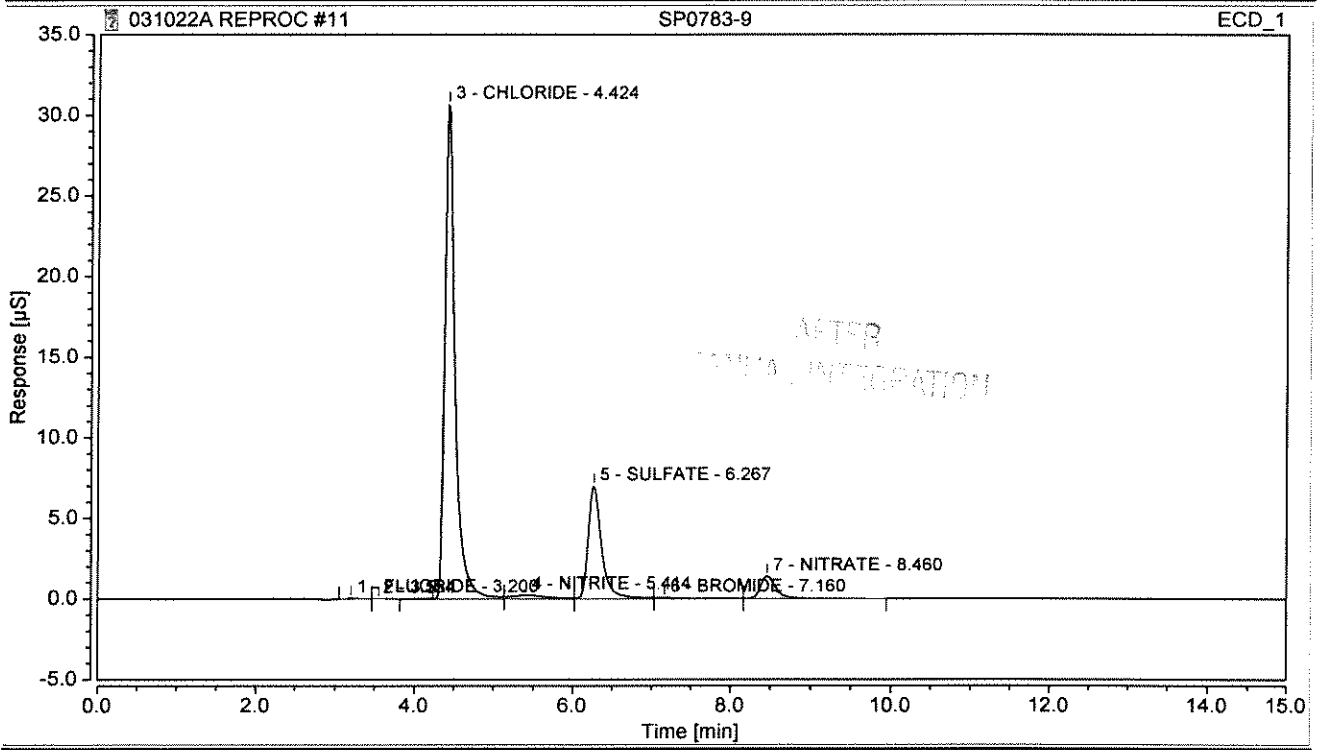
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.200	0.009	0.062	0.15	0.16	0.0381	n.a.
3	CHLORIDE	4.424	4.572	30.666	71.23	77.82	30.4972	n.a.
4	NITRITE	5.414	0.111	0.233	1.73	0.59	0.3388	n.a.
5	SULFATE	6.267	1.395	7.002	21.74	17.77	12.3734	n.a.
6	BROMIDE	7.160	0.023	0.057	0.36	0.14	0.1766	n.a.
7	NITRATE	8.460	0.307	1.378	4.78	3.50	0.8627	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.418**	**39.398**	**99.98**	**99.97**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0783-9**	*Run Time (min):*	**14.99**
Vial Number:	**11**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**10/Mar/22 18:45**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

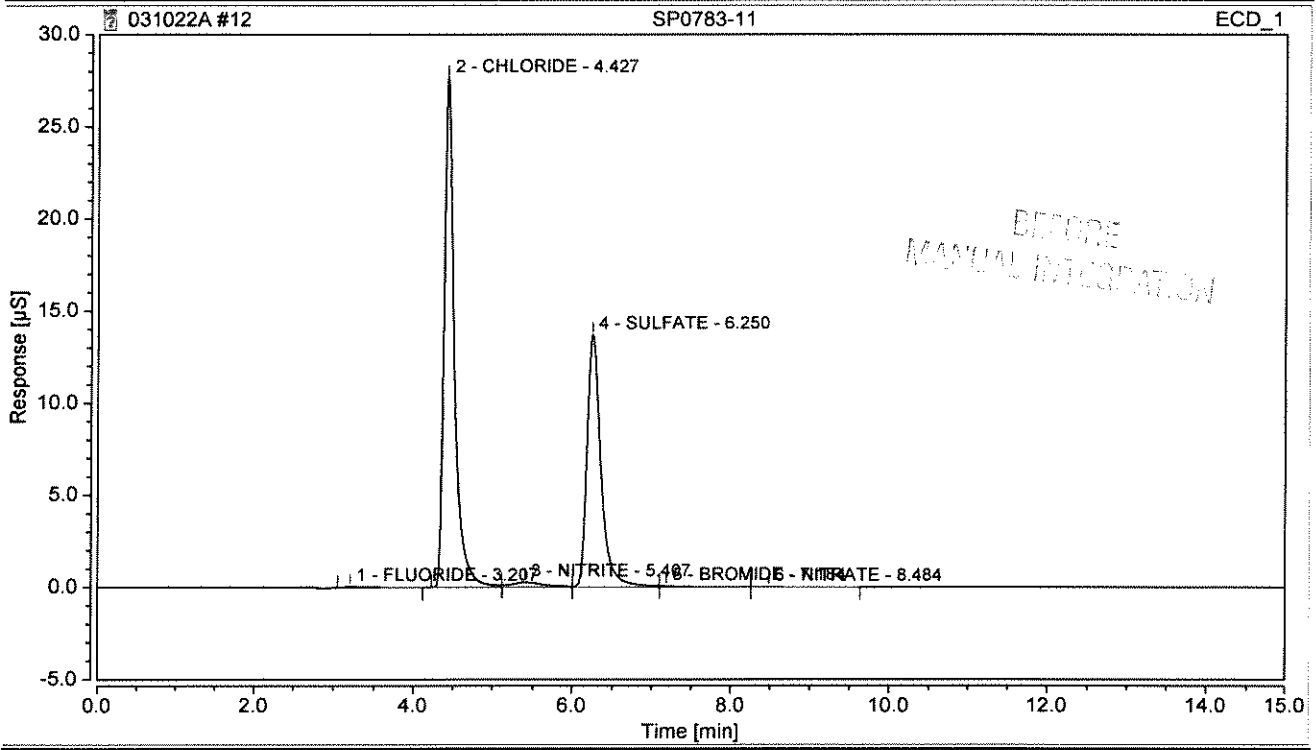
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.200	0.009	0.062	0.15	0.16	0.0381	n.a.
3	CHLORIDE	4.424	4.572	30.666	71.23	77.82	30.4972	n.a.
4	NITRITE	5.414	0.111	0.233	1.73	0.59	0.3388	n.a.
5	SULFATE	6.267	1.395	7.002	21.74	17.77	12.3734	n.a.
6	BROMIDE	7.160	0.023	0.057	0.36	0.14	0.1766	n.a.
7	NITRATE	8.460	0.307	1.378	4.78	3.50	0.8627	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.418**	**39.398**	**99.98**	**99.97**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0783-11**	*Run Time (min):*	**14.98**
Vial Number:	**12**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**10/Mar/22 19:05**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

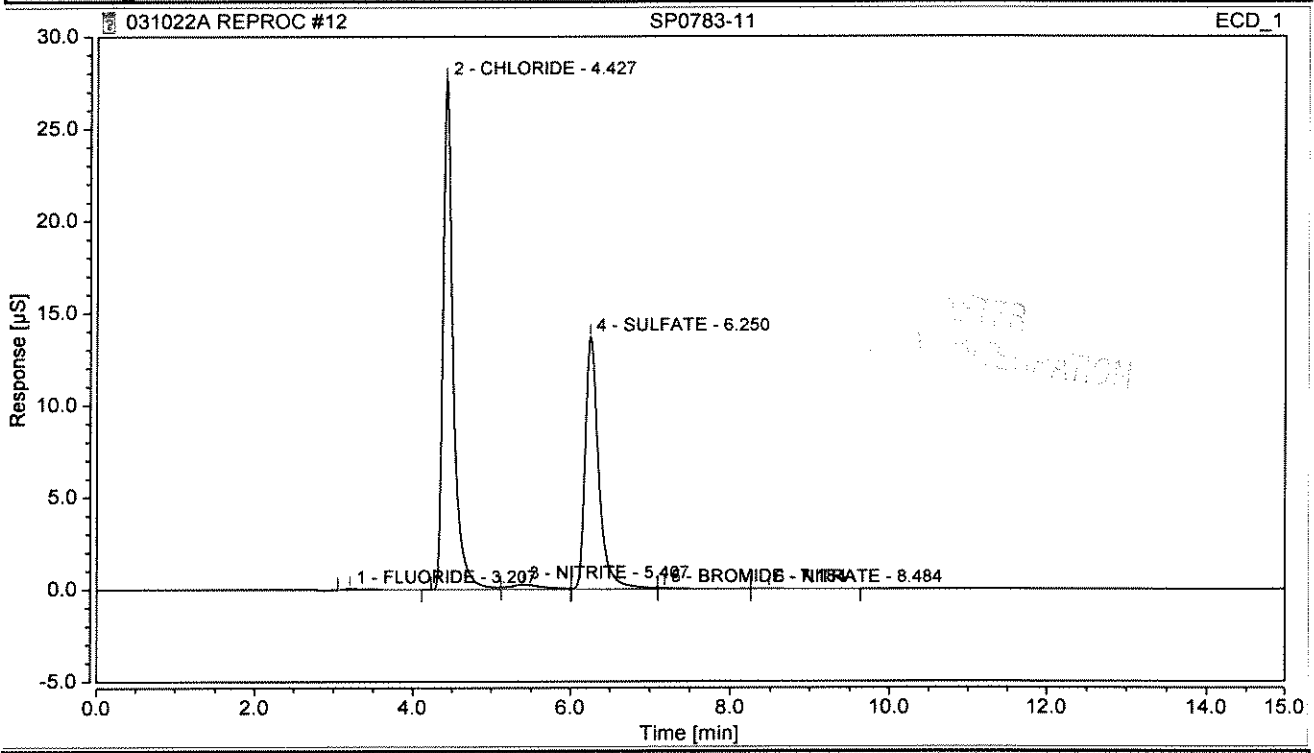
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.207	0.018	0.062	0.26	0.15	0.0731	n.a.
2	CHLORIDE	4.427	4.103	27.635	58.28	66.24	27.3854	n.a.
3	NITRITE	5.407	0.124	0.259	1.77	0.62	0.3796	n.a.
4	SULFATE	6.250	2.762	13.697	39.23	32.83	24.4900	n.a.
5	BROMIDE	7.184	0.026	0.056	0.37	0.13	0.1746	n.a.
6	NITRATE	8.484	0.006	0.013	0.09	0.03	0.0912	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.040**	**41.722**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0783-11**	*Run Time (min):*	**14.98**
Vial Number:	**12**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**10/Mar/22 19:05**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

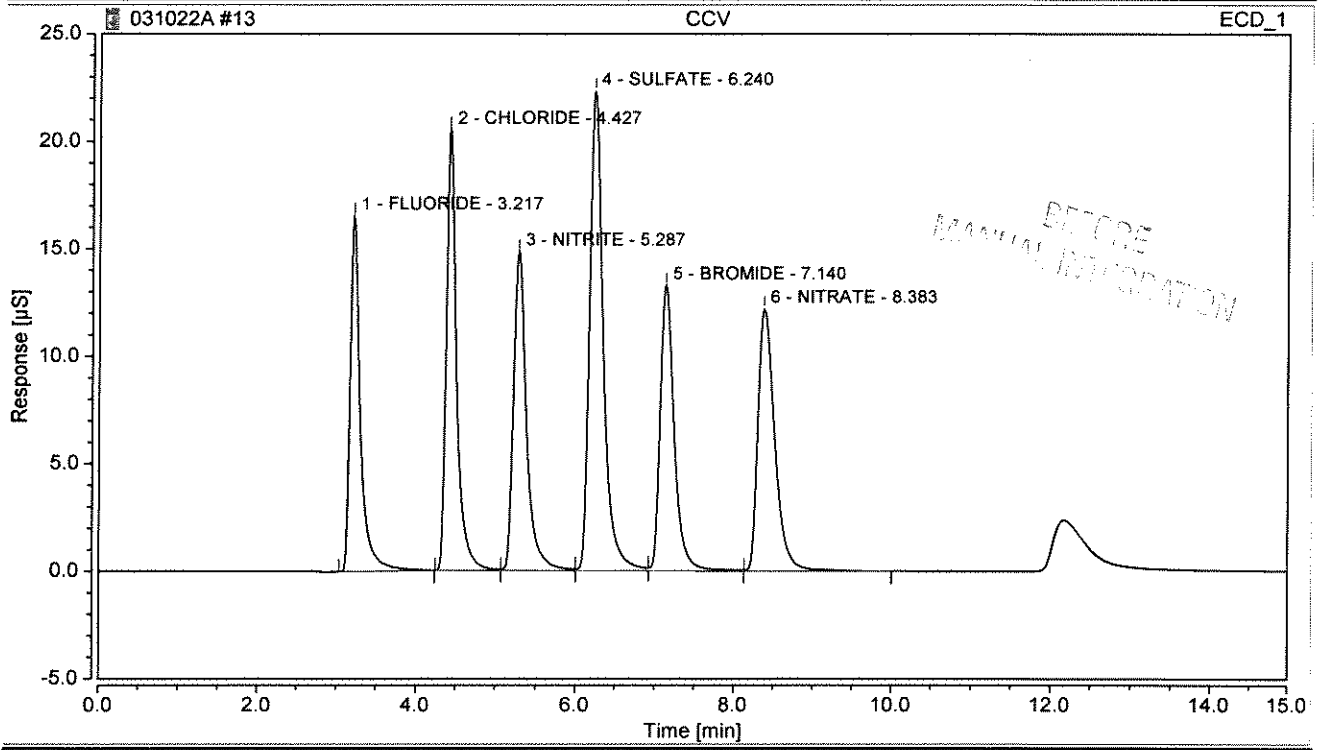
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.207	0.018	0.062	0.26	0.15	0.0731	n.a.
2	CHLORIDE	4.427	4.103	27.635	58.28	66.24	27.3854	n.a.
3	NITRITE	5.407	0.124	0.259	1.77	0.62	0.3796	n.a.
4	SULFATE	6.250	2.762	13.697	39.23	32.83	24.4900	n.a.
5	BROMIDE	7.184	0.026	0.056	0.37	0.13	0.1746	n.a.
6	NITRATE	8.484	0.006	0.013	0.09	0.03	0.0912	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.040**	**41.722**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.99**
Vial Number:	**13**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**10/Mar/22 19:26**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

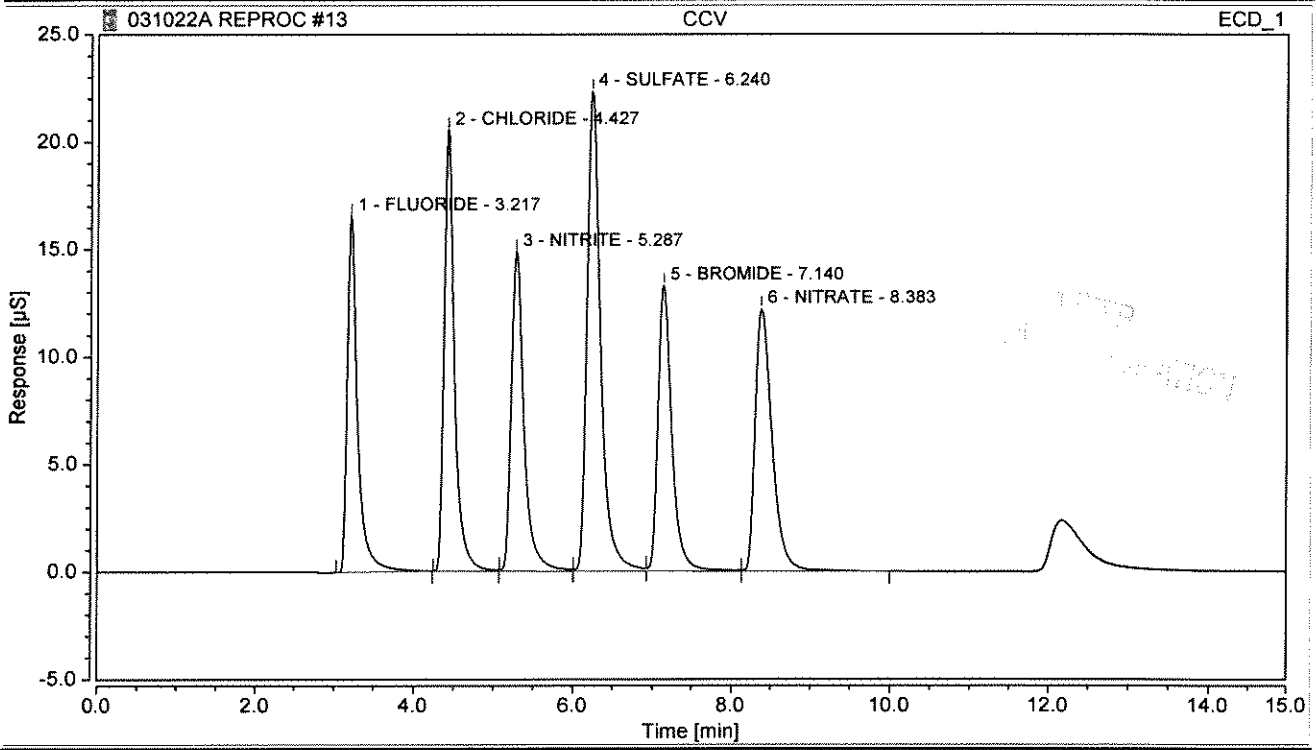
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.217	2.494	16.568	13.48	16.61	5.0466	0.9324
2	CHLORIDE	4.427	3.022	20.508	16.33	20.57	10.1076	1.0761
3	NITRITE	5.287	2.747	14.847	14.84	14.89	4.1892	4.7306
4	SULFATE	6.240	4.491	22.315	24.27	22.38	19.9148	-0.4259
5	BROMIDE	7.140	2.729	13.280	14.75	13.32	20.6052	3.0262
6	NITRATE	8.383	3.023	12.201	16.34	12.24	3.9218	-1.9538
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**18.507**	**99.720**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.99**
Vial Number:	**13**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**10/Mar/22 19:26**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

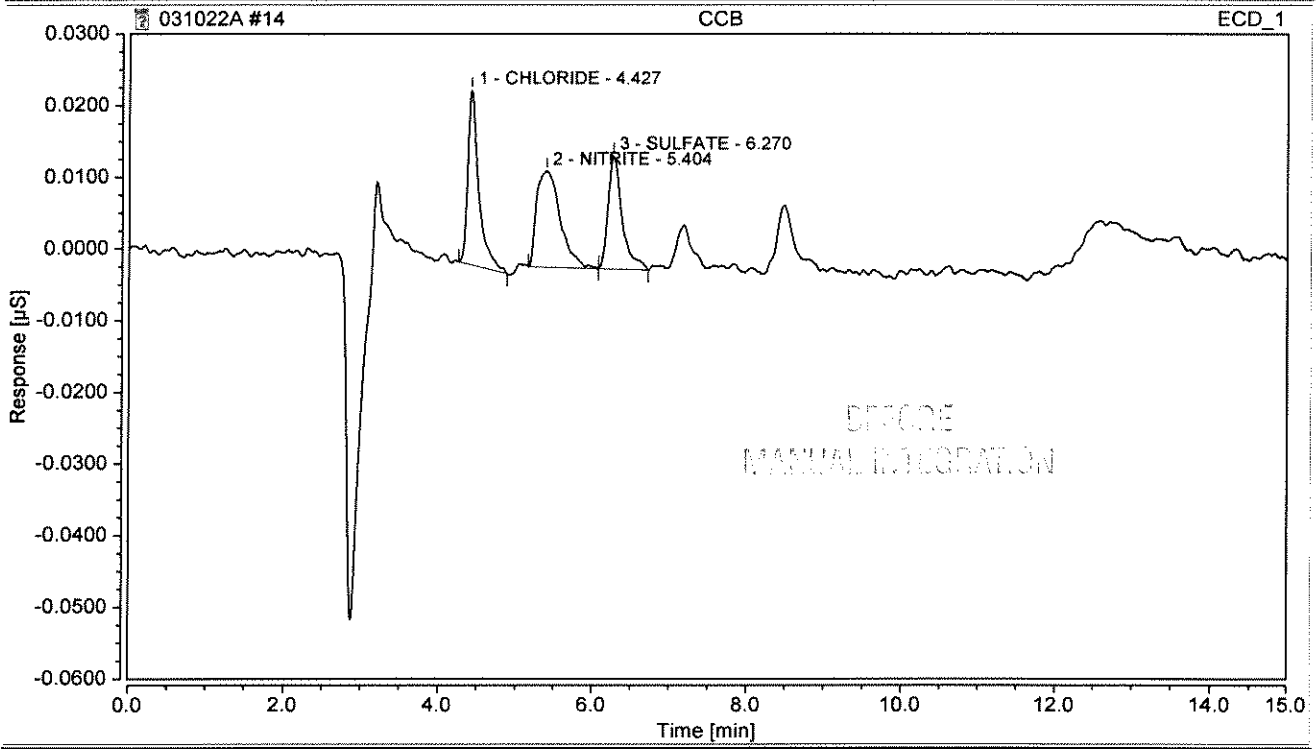
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.217	2.494	16.568	13.48	16.61	5.0466	0.9324
2	CHLORIDE	4.427	3.022	20.508	16.33	20.57	10.1076	1.0761
3	NITRITE	5.287	2.747	14.847	14.84	14.89	4.1892	4.7306
4	SULFATE	6.240	4.491	22.315	24.27	22.38	19.9148	-0.4259
5	BROMIDE	7.140	2.729	13.280	14.75	13.32	20.6052	3.0262
6	NITRATE	8.383	3.023	12.201	16.34	12.24	3.9218	-1.9538
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**18.507**	**99.720**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.99**
Vial Number:	**14**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**10/Mar/22 19:47**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

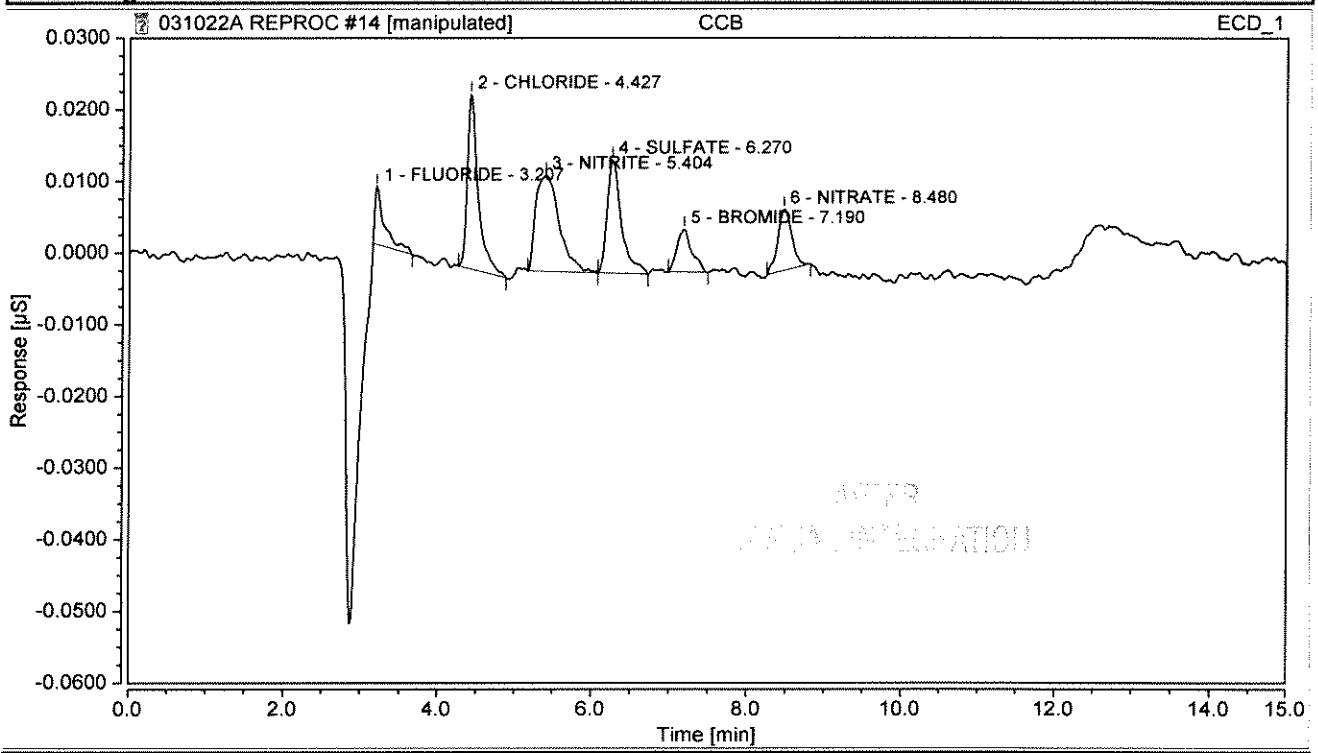
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.427	0.004	0.024	32.75	45.38	0.1006	n.a.
2	NITRITE	5.404	0.005	0.013	39.51	25.06	0.0074	n.a.
3	SULFATE	6.270	0.003	0.016	27.73	29.56	0.0151	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.012**	**0.054**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.99**
Vial Number:	**14**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMisocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**10/Mar/22 19:47**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

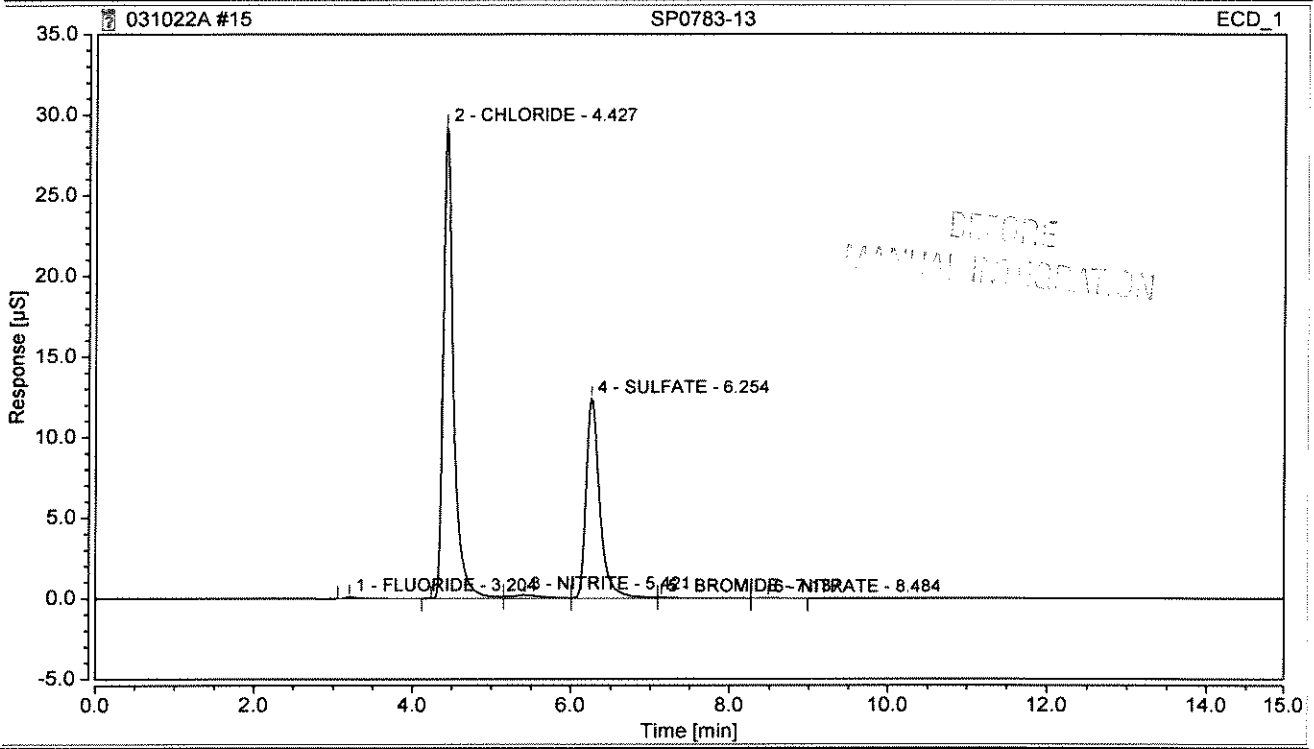
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.207	0.001	0.008	6.93	10.56	0.0023	n.a.
2	CHLORIDE	4.427	0.004	0.024	24.29	31.97	0.1006	n.a.
3	NITRITE	5.404	0.005	0.013	29.30	17.65	0.0074	n.a.
4	SULFATE	6.270	0.003	0.016	20.57	20.82	0.0151	n.a.
5	BROMIDE	7.190	0.001	0.006	7.89	7.81	0.0093	n.a.
6	NITRATE	8.480	0.002	0.009	11.02	11.19	0.0396	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.017**	**0.076**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0783-13**	*Run Time (min):*	**14.98**
Vial Number:	**15**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**10/Mar/22 20:08**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

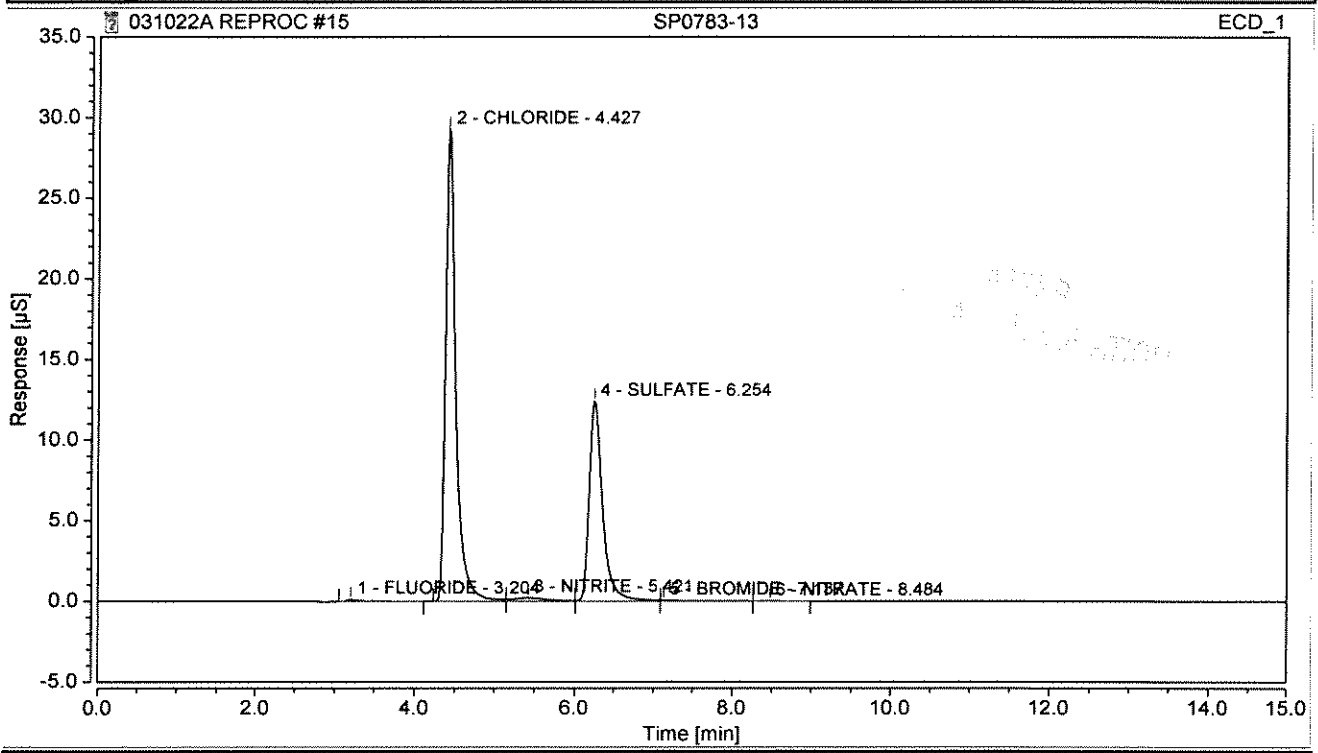
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.204	0.025	0.106	0.35	0.25	0.0996	n.a.
2	CHLORIDE	4.427	4.354	29.272	62.58	69.65	29.0500	n.a.
3	NITRITE	5.421	0.093	0.204	1.33	0.49	0.2832	n.a.
4	SULFATE	6.254	2.464	12.385	35.41	29.47	21.8488	n.a.
5	BROMIDE	7.137	0.019	0.049	0.28	0.12	0.1526	n.a.
6	NITRATE	8.484	0.003	0.009	0.04	0.02	0.0821	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.958**	**42.026**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0783-13**	*Run Time (min):*	**14.98**
Vial Number:	**15**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**10/Mar/22 20:08**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

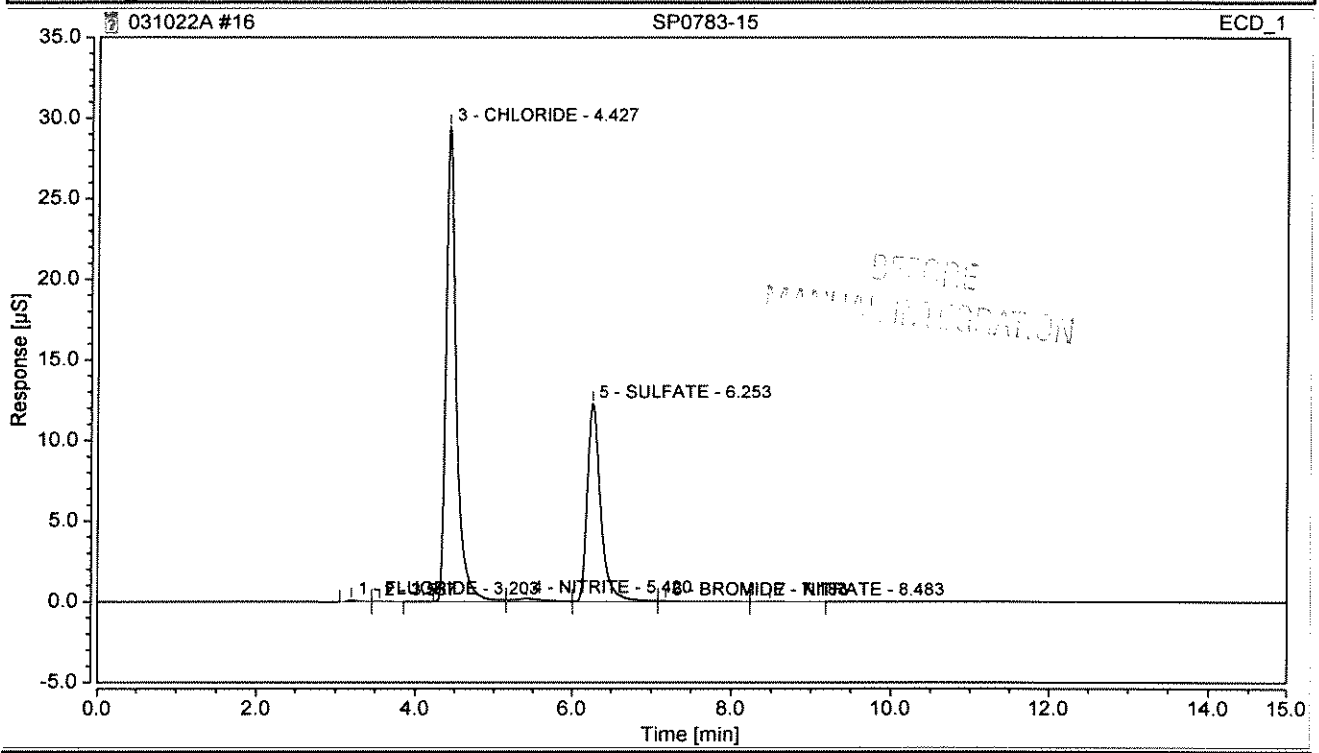
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.204	0.025	0.106	0.35	0.25	0.0996	n.a.
2	CHLORIDE	4.427	4.354	29.272	62.58	69.65	29.0500	n.a.
3	NITRITE	5.421	0.093	0.204	1.33	0.49	0.2832	n.a.
4	SULFATE	6.254	2.464	12.385	35.41	29.47	21.8488	n.a.
5	BROMIDE	7.137	0.019	0.049	0.28	0.12	0.1526	n.a.
6	NITRATE	8.484	0.003	0.009	0.04	0.02	0.0821	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.958**	**42.026**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0783-15**	*Run Time (min):*	**14.99**
Vial Number:	**16**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**10/Mar/22 20:29**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

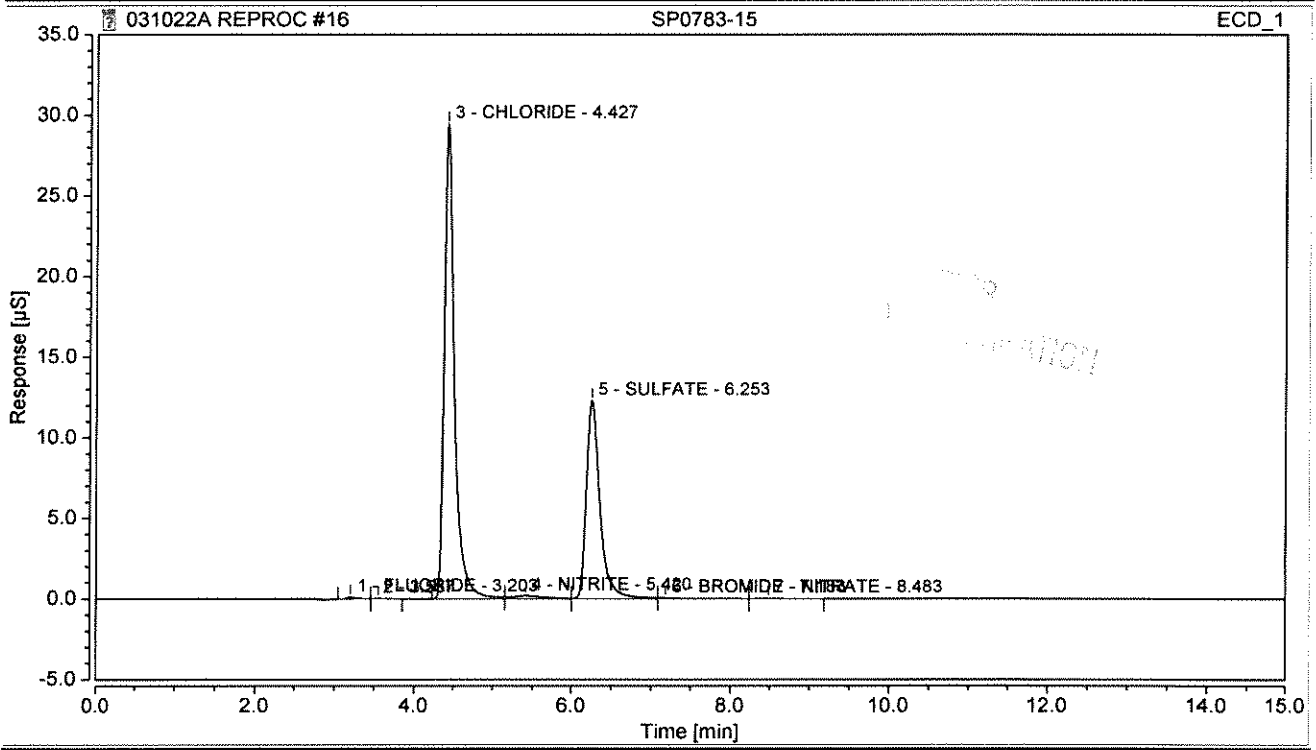
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.203	0.014	0.100	0.20	0.24	0.0575	n.a.
3	CHLORIDE	4.427	4.384	29.464	63.00	69.96	29.2488	n.a.
4	NITRITE	5.420	0.086	0.189	1.23	0.45	0.2619	n.a.
5	SULFATE	6.253	2.445	12.276	35.14	29.15	21.6858	n.a.
6	BROMIDE	7.183	0.020	0.045	0.29	0.11	0.1399	n.a.
7	NITRATE	8.483	0.006	0.019	0.08	0.05	0.0896	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.955**	**42.094**	**99.96**	**99.94**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0783-15**	*Run Time (min):*	**14.99**
Vial Number:	**16**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**10/Mar/22 20:29**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

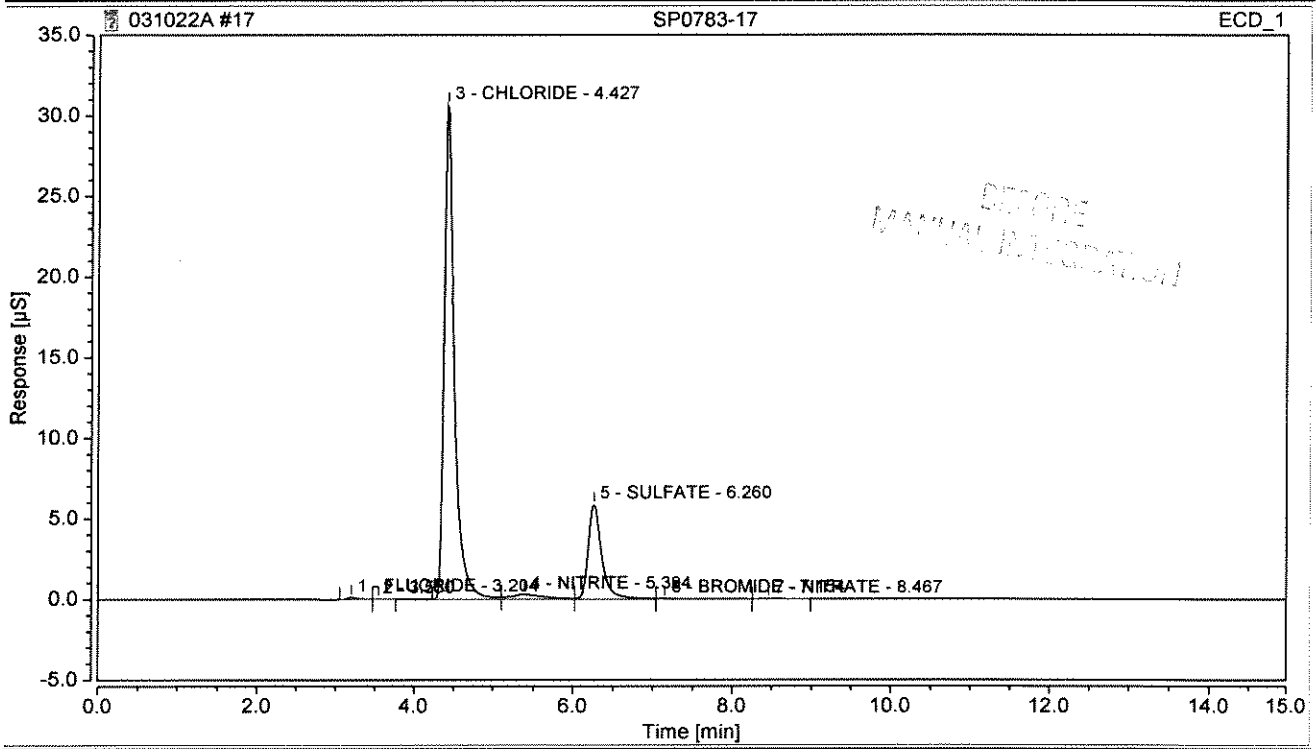
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.203	0.014	0.100	0.20	0.24	0.0575	n.a.
3	CHLORIDE	4.427	4.384	29.464	63.00	69.96	29.2488	n.a.
4	NITRITE	5.420	0.086	0.189	1.23	0.45	0.2619	n.a.
5	SULFATE	6.253	2.445	12.276	35.14	29.15	21.6858	n.a.
6	BROMIDE	7.183	0.020	0.045	0.29	0.11	0.1399	n.a.
7	NITRATE	8.483	0.006	0.019	0.08	0.05	0.0896	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.955**	**42.094**	**99.96**	**99.94**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0783-17**	*Run Time (min):*	**14.98**
Vial Number:	**17**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**10/Mar/22 20:49**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

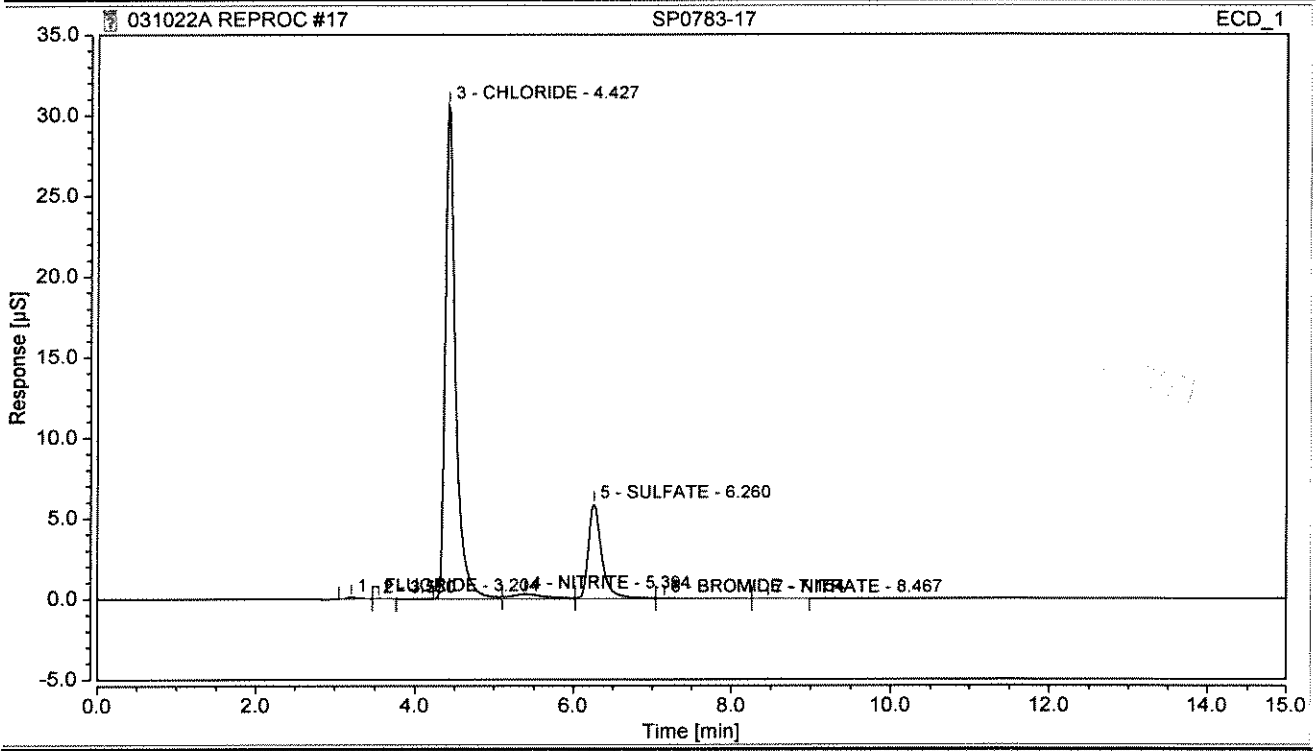
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.204	0.017	0.122	0.29	0.33	0.0687	n.a.
3	CHLORIDE	4.427	4.549	30.666	77.29	82.86	30.3411	n.a.
4	NITRITE	5.394	0.139	0.284	2.37	0.77	0.4249	n.a.
5	SULFATE	6.260	1.160	5.878	19.72	15.88	10.2906	n.a.
6	BROMIDE	7.154	0.016	0.036	0.27	0.10	0.1120	n.a.
7	NITRATE	8.467	0.003	0.009	0.05	0.02	0.0814	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.884**	**36.995**	**99.97**	**99.96**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0783-17**	*Run Time (min):*	**14.98**
Vial Number:	**17**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**10/Mar/22 20:49**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

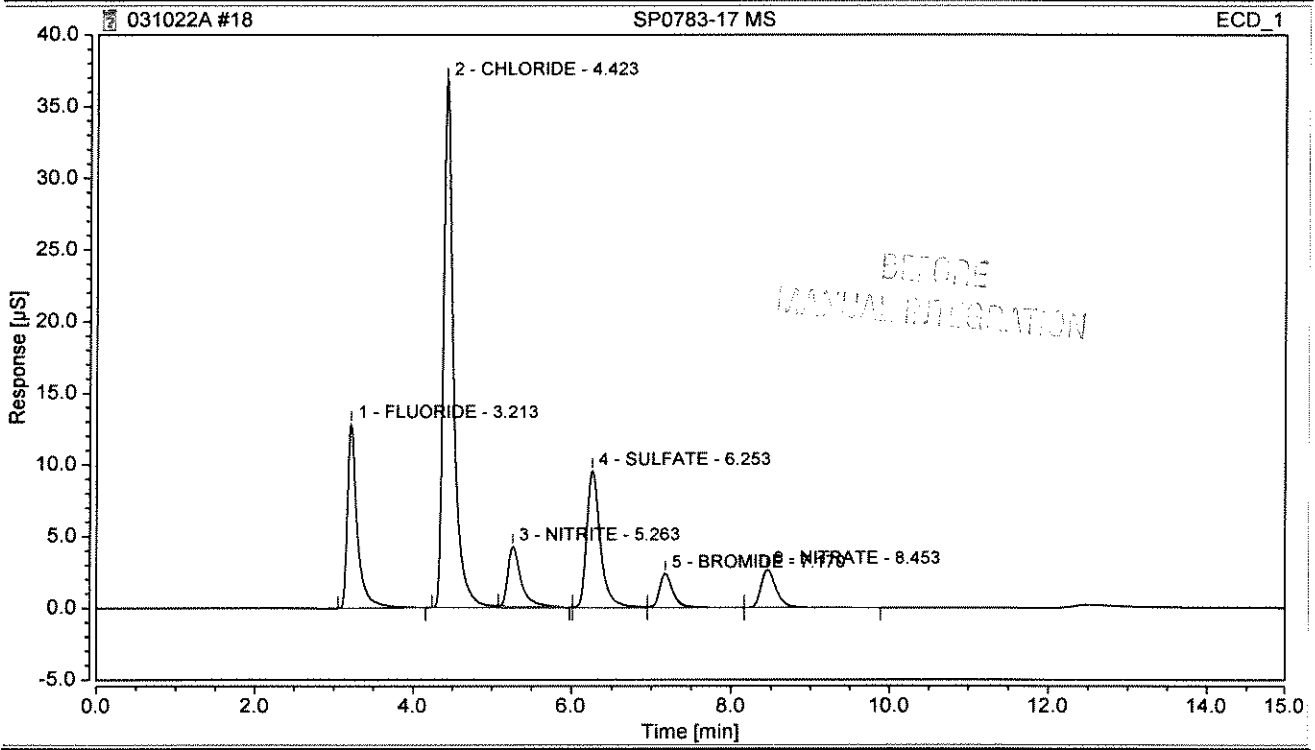
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.204	0.017	0.122	0.29	0.33	0.0687	n.a.
3	CHLORIDE	4.427	4.549	30.666	77.29	82.86	30.3411	n.a.
4	NITRITE	5.394	0.139	0.284	2.37	0.77	0.4249	n.a.
5	SULFATE	6.260	1.160	5.878	19.72	15.88	10.2906	n.a.
6	BROMIDE	7.154	0.016	0.036	0.27	0.10	0.1120	n.a.
7	NITRATE	8.467	0.003	0.009	0.05	0.02	0.0814	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.884**	**36.995**	**99.97**	**99.96**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0783-17 MS**	*Run Time (min):*	**14.98**
Vial Number:	**18**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**10/Mar/22 21:10**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

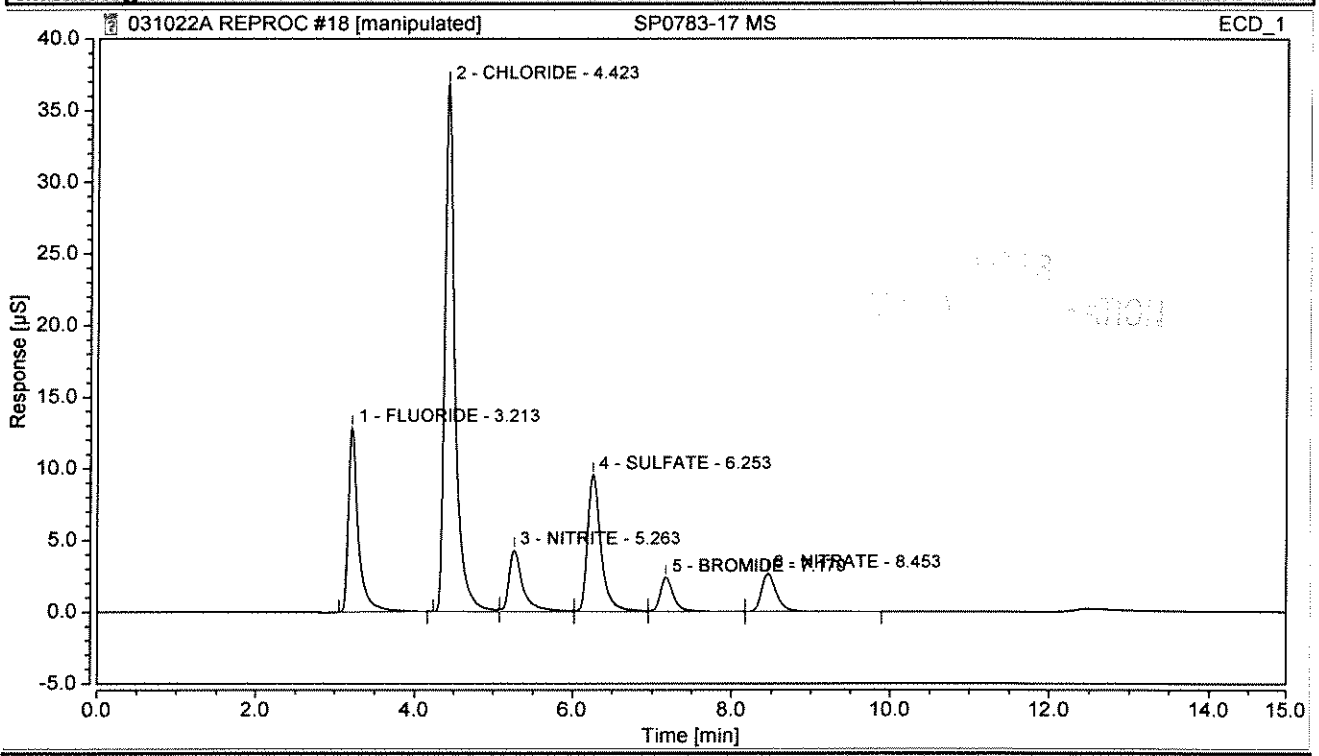
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.213	1.894	12.879	16.97	18.82	7.6642	n.a.
2	CHLORIDE	4.423	5.539	36.791	49.64	53.75	36.9118	n.a.
3	NITRITE	5.263	0.794	4.186	7.12	6.12	2.4219	n.a.
4	SULFATE	6.253	1.879	9.546	16.84	13.95	16.6665	n.a.
5	BROMIDE	7.170	0.465	2.390	4.17	3.49	7.4162	n.a.
6	NITRATE	8.453	0.588	2.652	5.27	3.87	1.5858	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.160**	**68.445**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0783-17 MS**	*Run Time (min):*	**14.98**
Vial Number:	**18**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMisocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**10/Mar/22 21:10**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

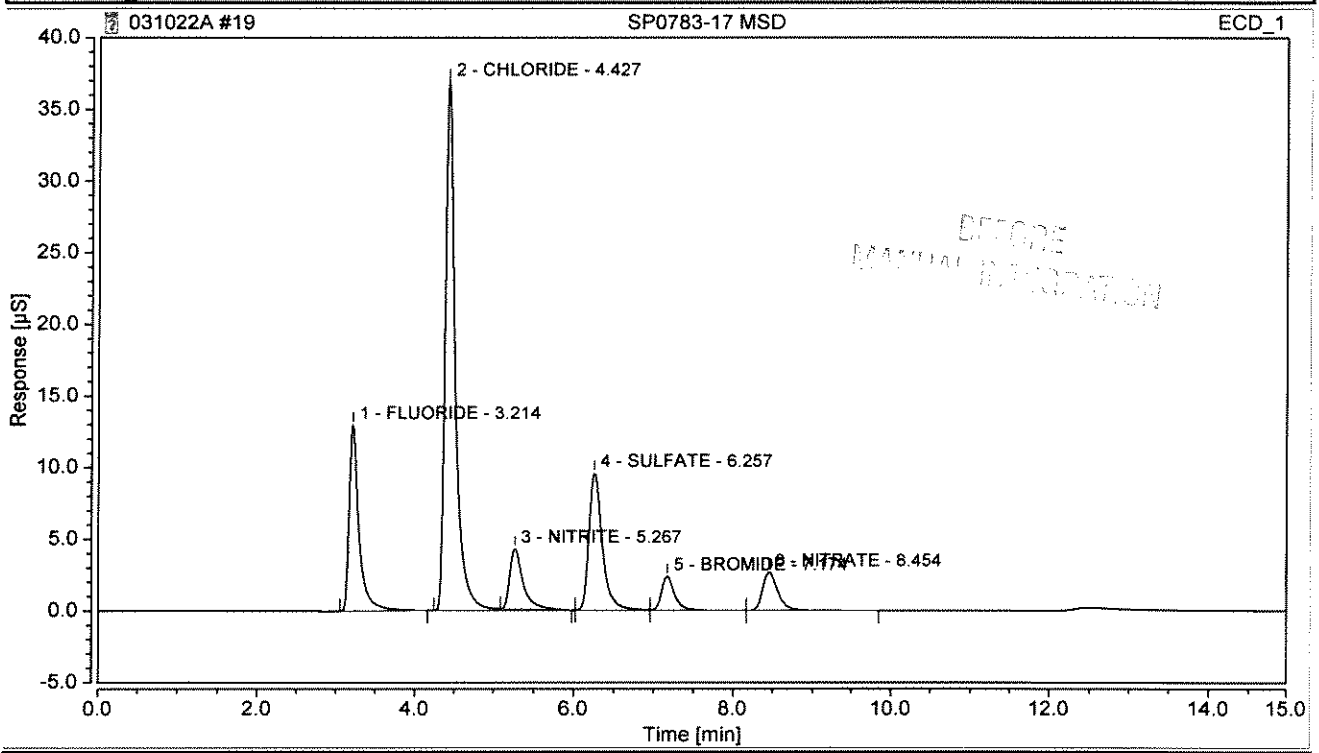
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.213	1.894	12.879	16.97	18.79	7.6642	n.a.
2	CHLORIDE	4.423	5.465	36.791	48.97	53.67	36.4186	n.a.
3	NITRITE	5.263	0.869	4.293	7.78	6.26	2.6487	n.a.
4	SULFATE	6.253	1.879	9.546	16.84	13.93	16.6665	n.a.
5	BROMIDE	7.170	0.465	2.390	4.17	3.49	7.4162	n.a.
6	NITRATE	8.453	0.588	2.652	5.27	3.87	1.5858	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.160**	**68.551**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0783-17 MSD**	*Run Time (min):*	**14.98**
Vial Number:	**19**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMisocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**10/Mar/22 21:31**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

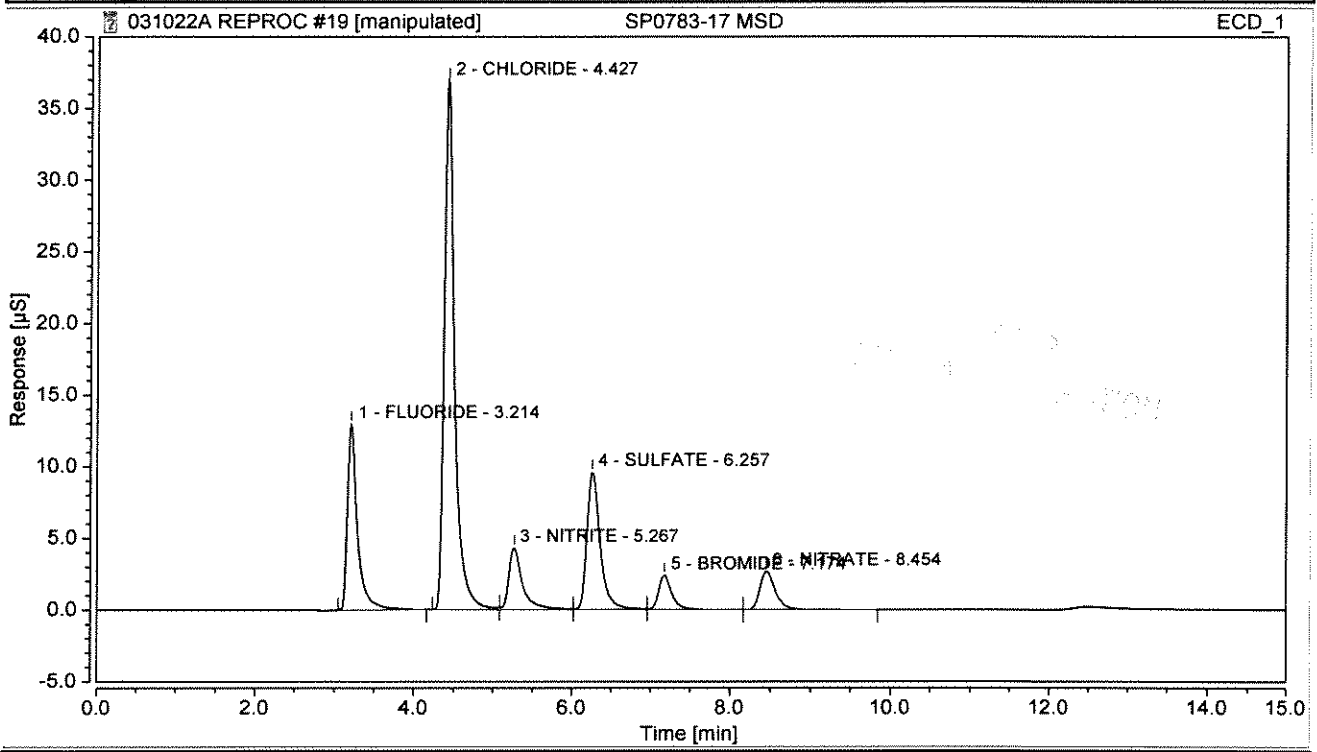
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.214	1.909	13.004	17.02	18.89	7.7259	n.a.
2	CHLORIDE	4.427	5.558	36.923	49.55	53.63	37.0323	n.a.
3	NITRITE	5.267	0.799	4.222	7.13	6.13	2.4379	n.a.
4	SULFATE	6.257	1.891	9.619	16.86	13.97	16.7653	n.a.
5	BROMIDE	7.174	0.466	2.403	4.16	3.49	7.4581	n.a.
6	NITRATE	8.454	0.593	2.671	5.28	3.88	1.5971	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.216**	**68.843**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0783-17 MSD**	*Run Time (min):*	**14.98**
Vial Number:	**19**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**10/Mar/22 21:31**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

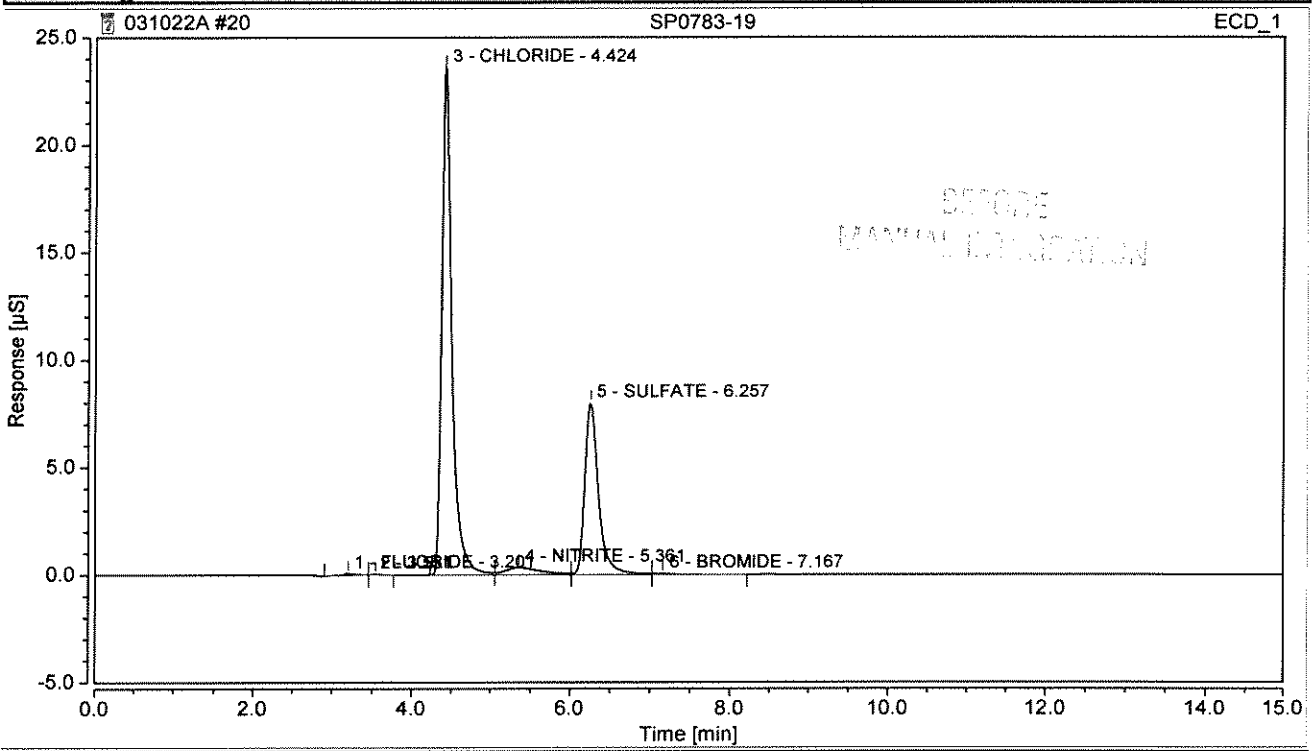
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.214	1.909	13.004	17.02	18.86	7.7259	n.a.
2	CHLORIDE	4.427	5.484	36.923	48.89	53.55	36.5410	n.a.
3	NITRITE	5.267	0.873	4.328	7.79	6.28	2.6638	n.a.
4	SULFATE	6.257	1.891	9.619	16.86	13.95	16.7653	n.a.
5	BROMIDE	7.174	0.466	2.403	4.16	3.49	7.4581	n.a.
6	NITRATE	8.454	0.593	2.671	5.28	3.87	1.5971	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.216**	**68.949**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0783-19**	*Run Time (min):*	**14.98**
Vial Number:	**20**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**10/Mar/22 21:52**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

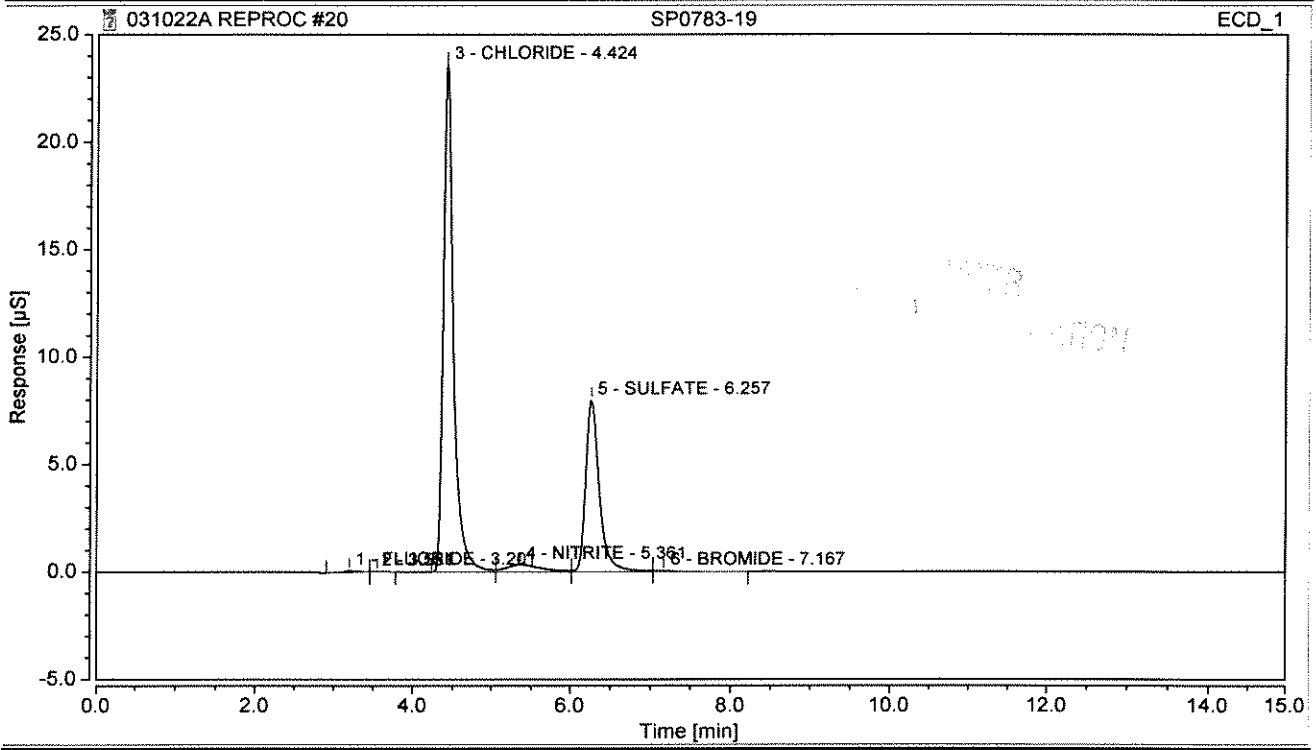
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.201	0.015	0.079	0.29	0.25	0.0608	n.a.
3	CHLORIDE	4.424	3.466	23.613	65.85	73.56	23.1607	n.a.
4	NITRITE	5.361	0.174	0.339	3.31	1.06	0.5313	n.a.
5	SULFATE	6.257	1.588	7.994	30.16	24.90	14.0784	n.a.
6	BROMIDE	7.167	0.017	0.049	0.32	0.15	0.1519	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.260**	**32.074**	**99.94**	**99.91**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0783-19**	*Run Time (min):*	**14.98**
Vial Number:	**20**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMisocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**10/Mar/22 21:52**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

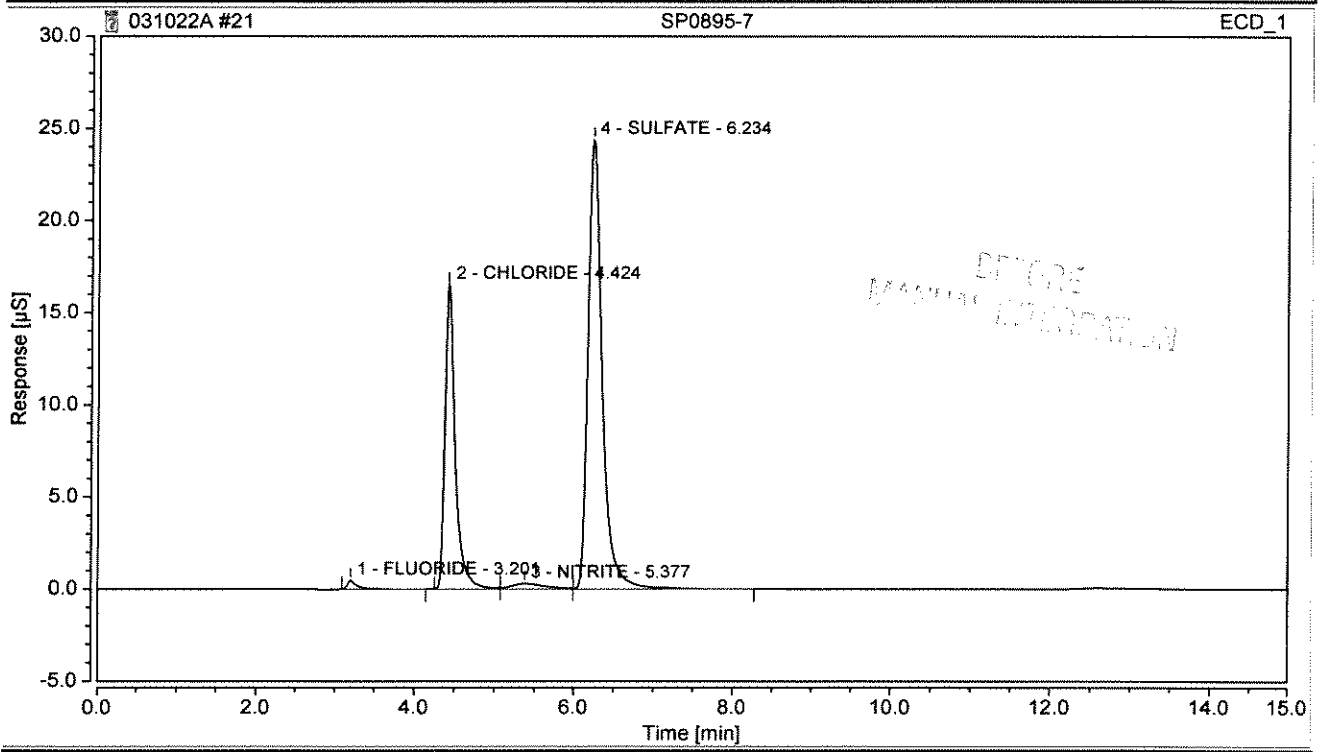
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.201	0.015	0.079	0.29	0.25	0.0608	n.a.
3	CHLORIDE	4.424	3.466	23.613	65.85	73.56	23.1607	n.a.
4	NITRITE	5.361	0.174	0.339	3.31	1.06	0.5313	n.a.
5	SULFATE	6.257	1.588	7.994	30.16	24.90	14.0784	n.a.
6	BROMIDE	7.167	0.017	0.049	0.32	0.15	0.1519	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.260**	**32.074**	**99.94**	**99.91**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0895-7**	*Run Time (min):*	**14.98**
Vial Number:	**21**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**10/Mar/22 22:13**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

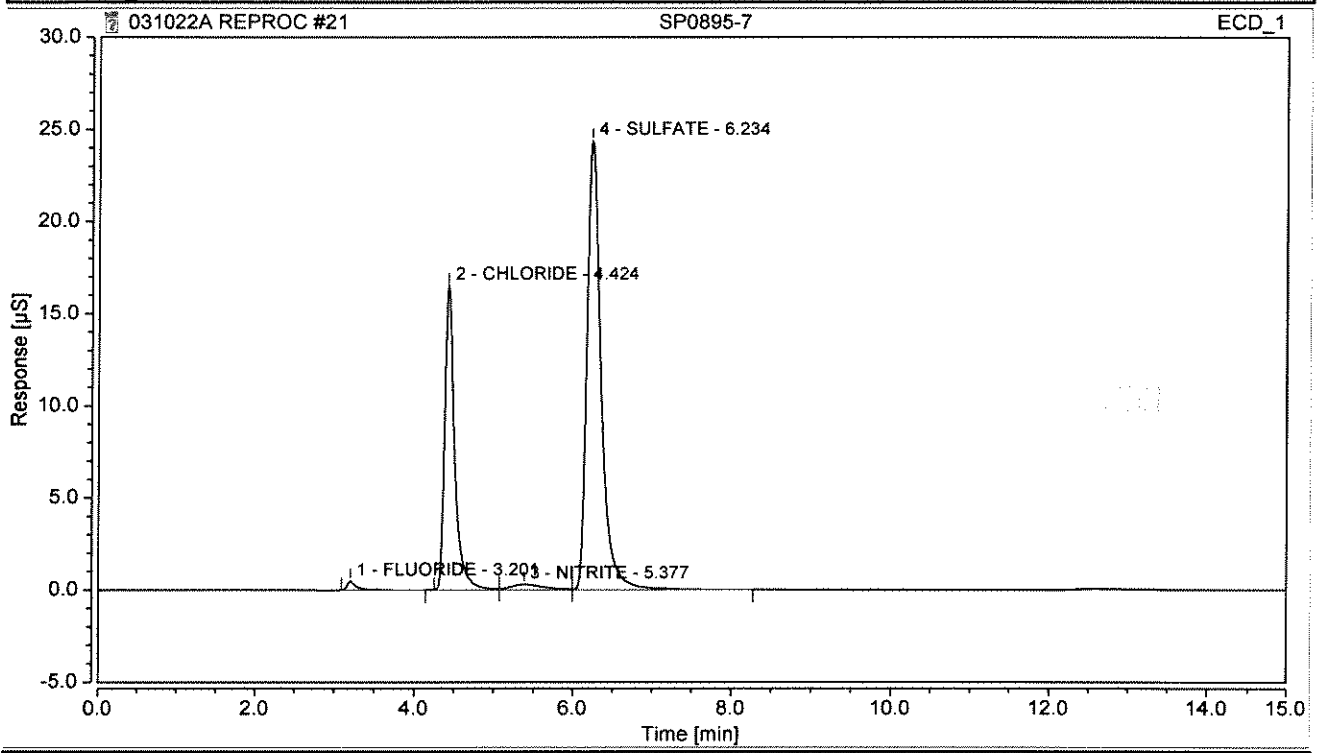
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.201	0.073	0.485	0.95	1.16	0.2961	n.a.
2	CHLORIDE	4.424	2.416	16.524	31.52	39.64	16.1995	n.a.
3	NITRITE	5.377	0.140	0.294	1.82	0.71	0.4259	n.a.
4	SULFATE	6.234	5.036	24.386	65.70	58.50	44.6632	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.666**	**41.690**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0895-7**	*Run Time (min):*	**14.98**
Vial Number:	**21**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMisocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**10/Mar/22 22:13**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

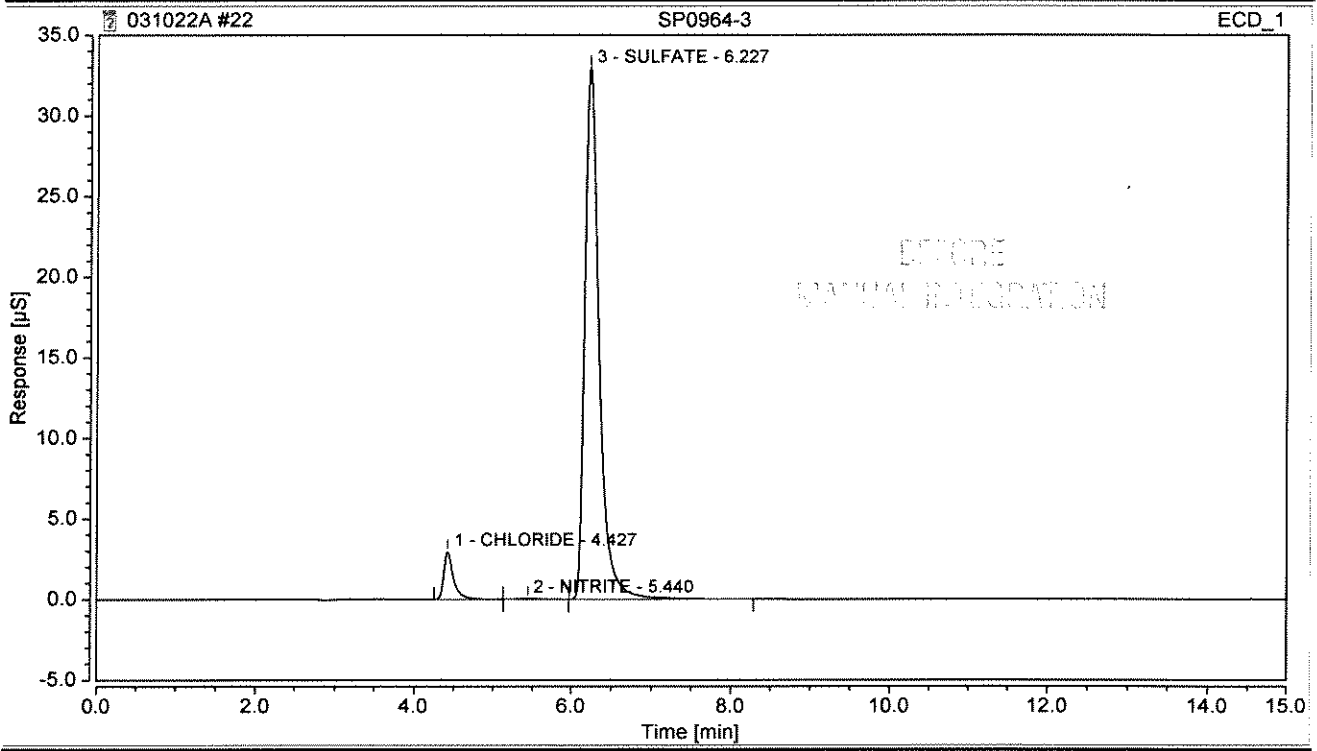
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.201	0.073	0.485	0.95	1.16	0.2961	n.a.
2	CHLORIDE	4.424	2.416	16.524	31.52	39.64	16.1995	n.a.
3	NITRITE	5.377	0.140	0.294	1.82	0.71	0.4259	n.a.
4	SULFATE	6.234	5.036	24.386	65.70	58.50	44.6632	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.666**	**41.690**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0964-3**	*Run Time (min):*	**14.99**
Vial Number:	**22**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**50.0**
Injection Date/Time:	**10/Mar/22 22:33**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

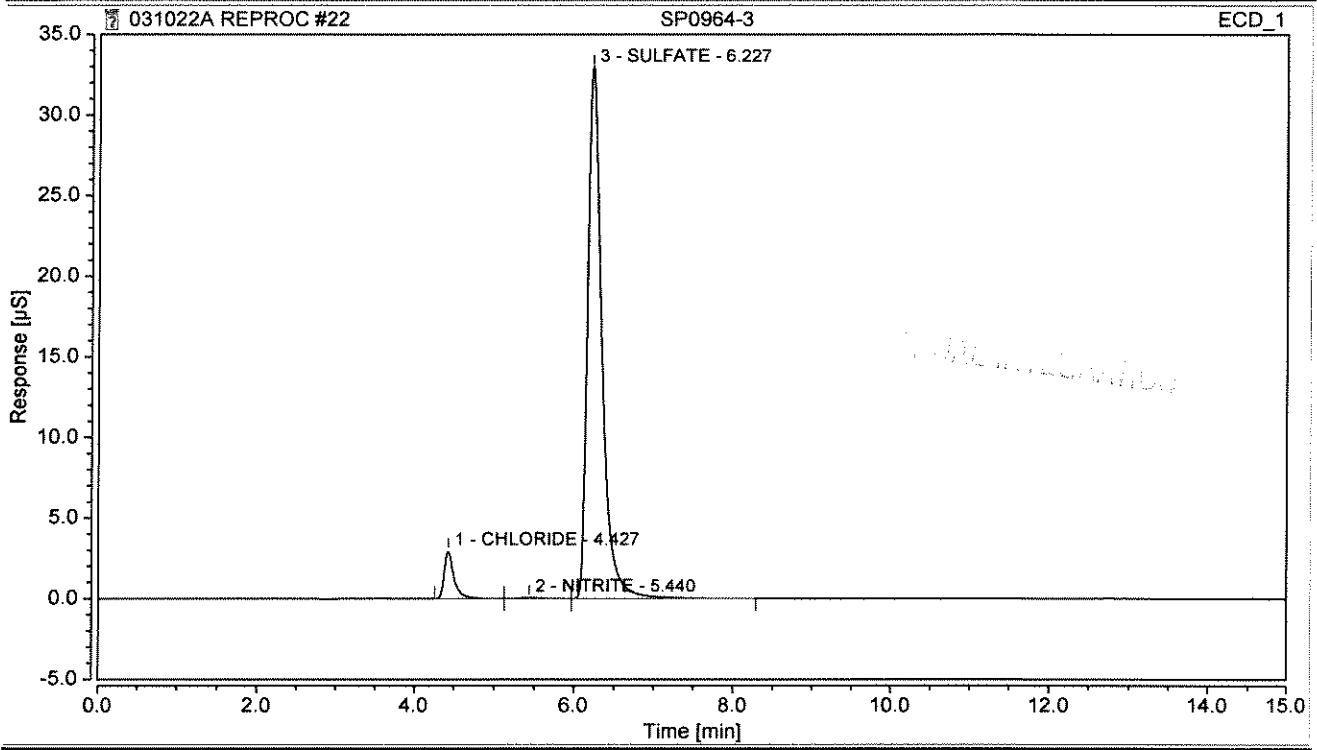
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.427	0.422	2.966	5.77	8.25	74.3865	n.a.
2	NITRITE	5.440	0.020	0.060	0.28	0.17	1.5554	n.a.
3	SULFATE	6.227	6.872	32.941	93.95	91.59	1523.4749	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.314**	**35.966**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0964-3**	*Run Time (min):*	**14.99**
Vial Number:	**22**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**50.0**
Injection Date/Time:	**10/Mar/22 22:33**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

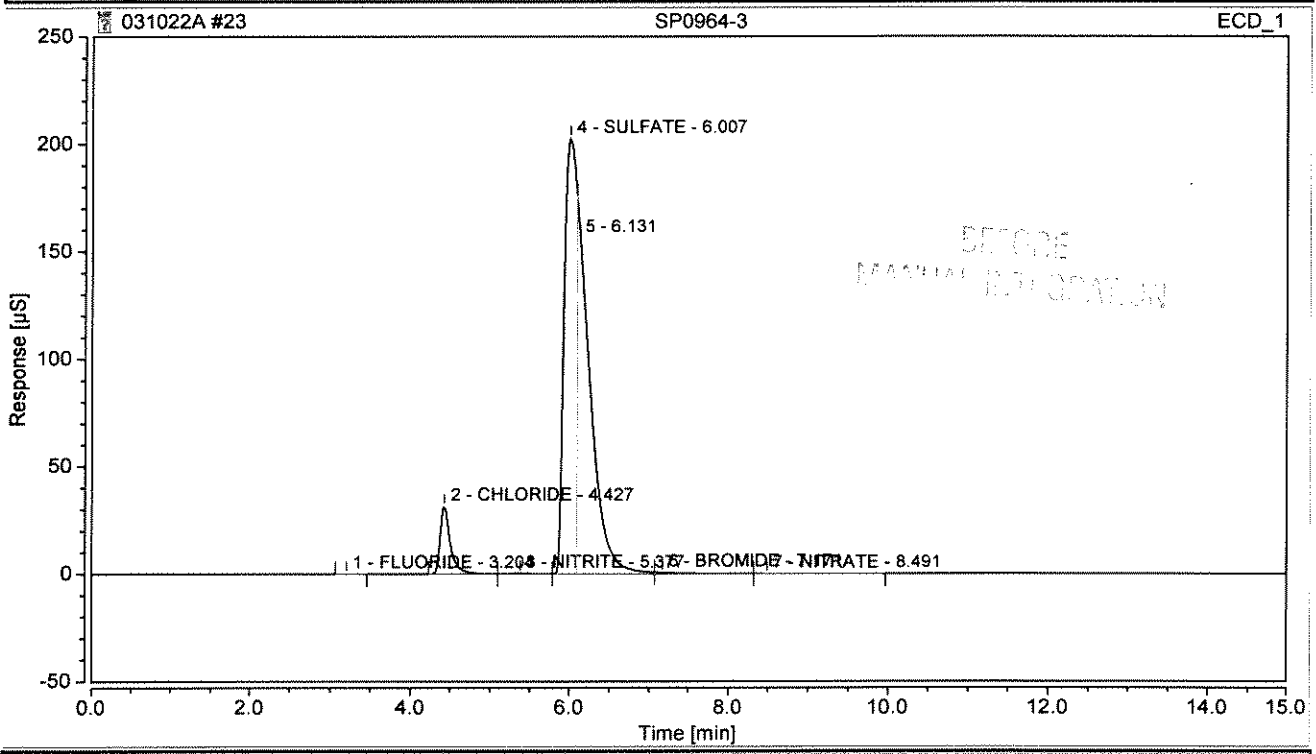
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.427	0.422	2.966	5.77	8.25	74.3865	n.a.
2	NITRITE	5.440	0.020	0.060	0.28	0.17	1.5554	n.a.
3	SULFATE	6.227	6.872	32.941	93.95	91.59	1523.4749	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.314**	**35.966**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0964-3**	*Run Time (min):*	**14.98**
Vial Number:	**23**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**5.0**
Injection Date/Time:	**10/Mar/22 22:54**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

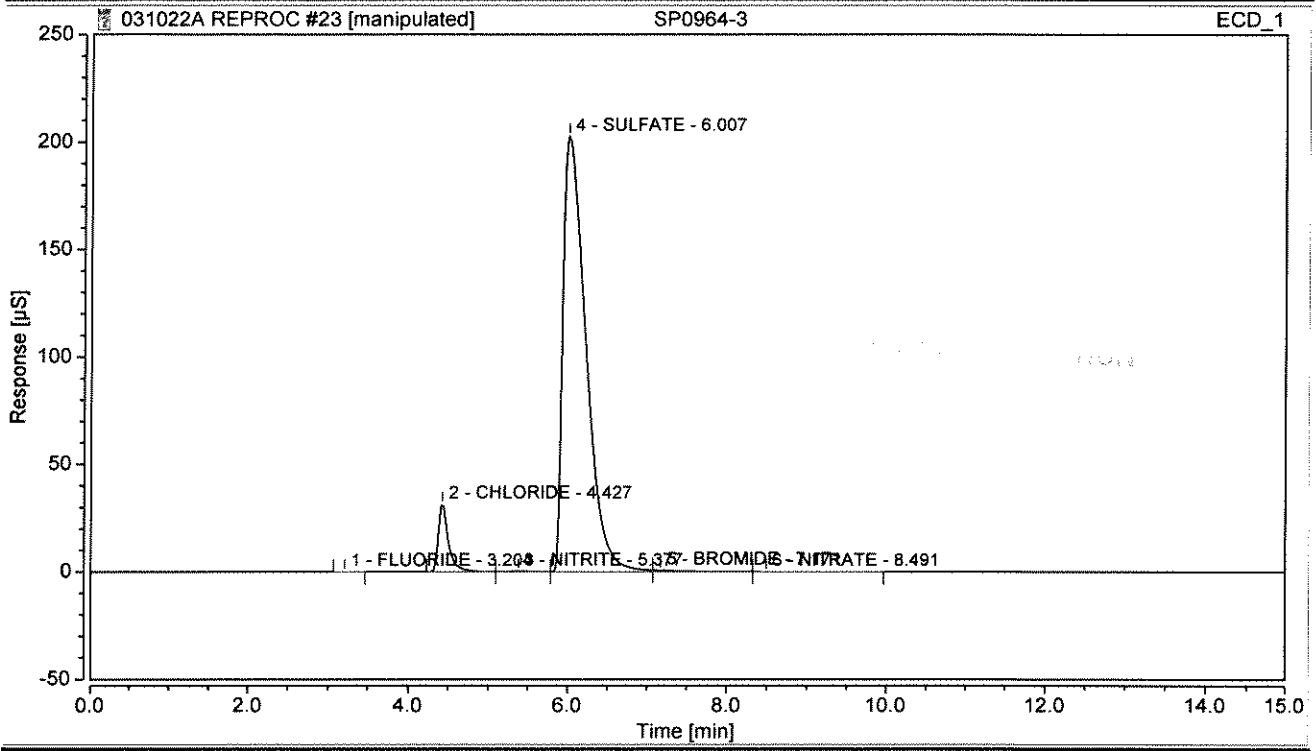
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.204	0.010	0.066	0.01	0.02	0.0973	n.a.
2	CHLORIDE	4.427	4.625	31.475	6.35	8.04	77.1189	n.a.
3	NITRITE	5.377	0.118	0.268	0.16	0.07	0.8973	n.a.
4	SULFATE	6.007	34.378	202.584	47.21	51.76	762.1688	n.a.
6	BROMIDE	7.171	0.295	0.597	0.41	0.15	4.6304	n.a.
7	NITRATE	8.491	0.033	0.050	0.05	0.01	0.4002	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**39.459**	**235.040**	**54.19**	**60.05**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0964-3**	*Run Time (min):*	**14.98**
Vial Number:	**23**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**5.0**
Injection Date/Time:	**10/Mar/22 22:54**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

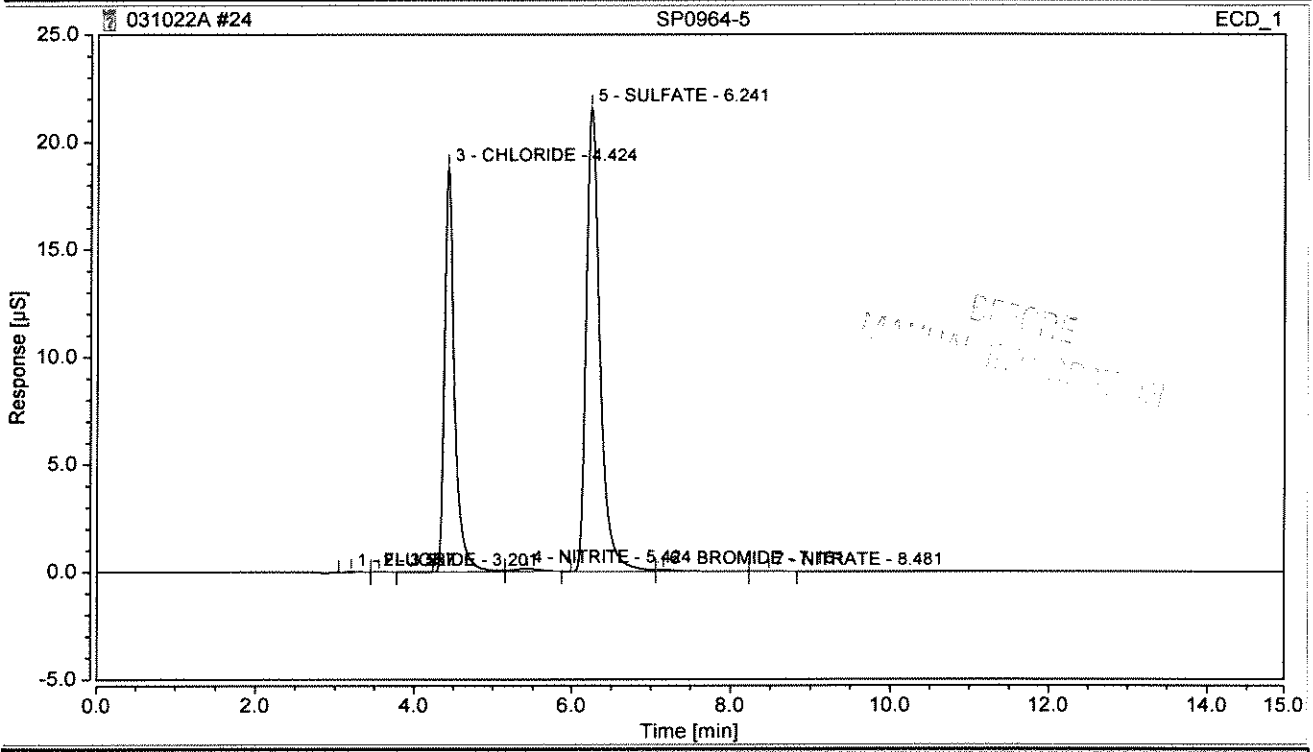
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.204	0.010	0.066	0.01	0.03	0.0973	n.a.
2	CHLORIDE	4.427	4.625	31.475	6.35	13.39	77.1189	n.a.
3	NITRITE	5.377	0.118	0.268	0.16	0.11	0.8973	n.a.
4	SULFATE	6.007	67.740	202.584	93.02	86.19	1501.8096	n.a.
5	BROMIDE	7.171	0.295	0.597	0.41	0.25	4.6304	n.a.
6	NITRATE	8.491	0.033	0.050	0.05	0.02	0.4002	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**72.821**	**235.040**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0964-5**	*Run Time (min):*	**14.97**
Vial Number:	**24**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**20.0**
Injection Date/Time:	**10/Mar/22 23:15**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

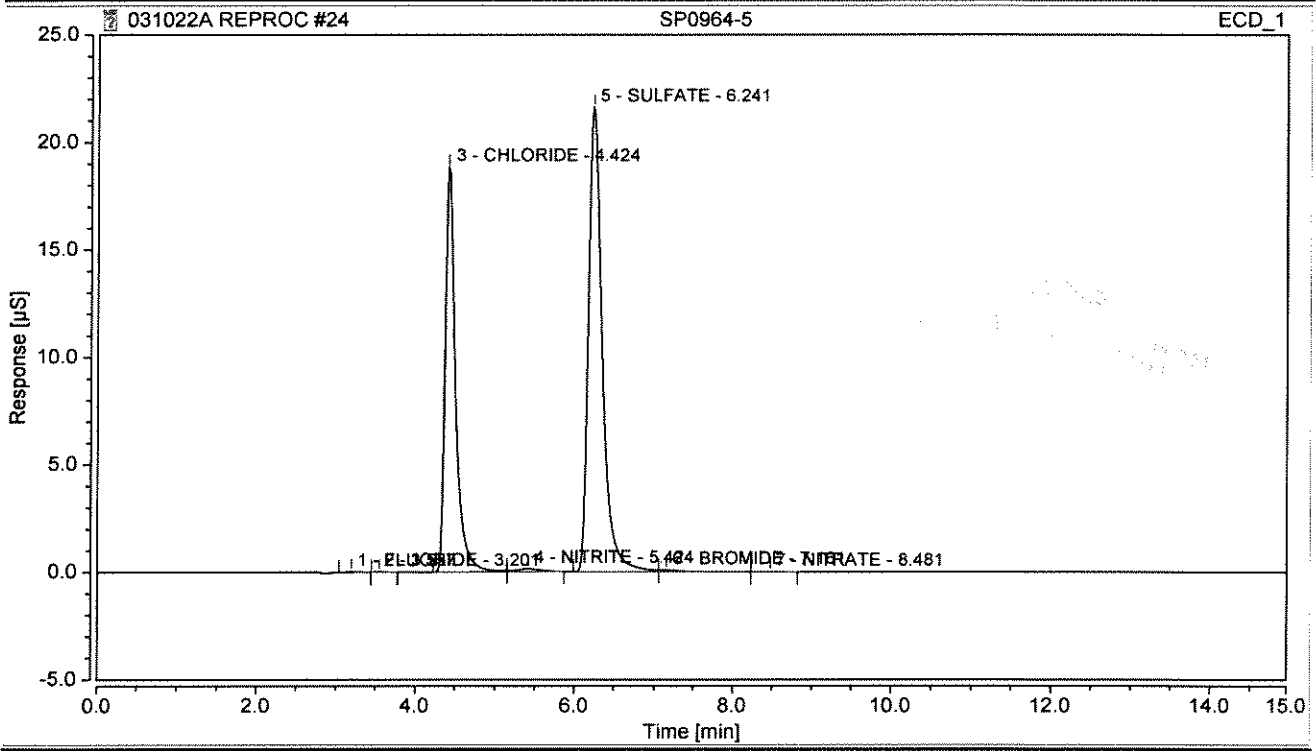
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.201	0.005	0.031	0.07	0.08	0.1937	n.a.
3	CHLORIDE	4.424	2.790	18.850	38.38	46.27	186.7830	n.a.
4	NITRITE	5.424	0.048	0.132	0.67	0.32	1.4759	n.a.
5	SULFATE	6.241	4.393	21.611	60.43	53.05	389.5821	n.a.
6	BROMIDE	7.161	0.028	0.083	0.39	0.20	2.5652	n.a.
7	NITRATE	8.481	0.003	0.013	0.04	0.03	0.8281	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.268**	**40.720**	**99.97**	**99.96**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0964-5**	*Run Time (min):*	**14.97**
Vial Number:	**24**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**20.0**
Injection Date/Time:	**10/Mar/22 23:15**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

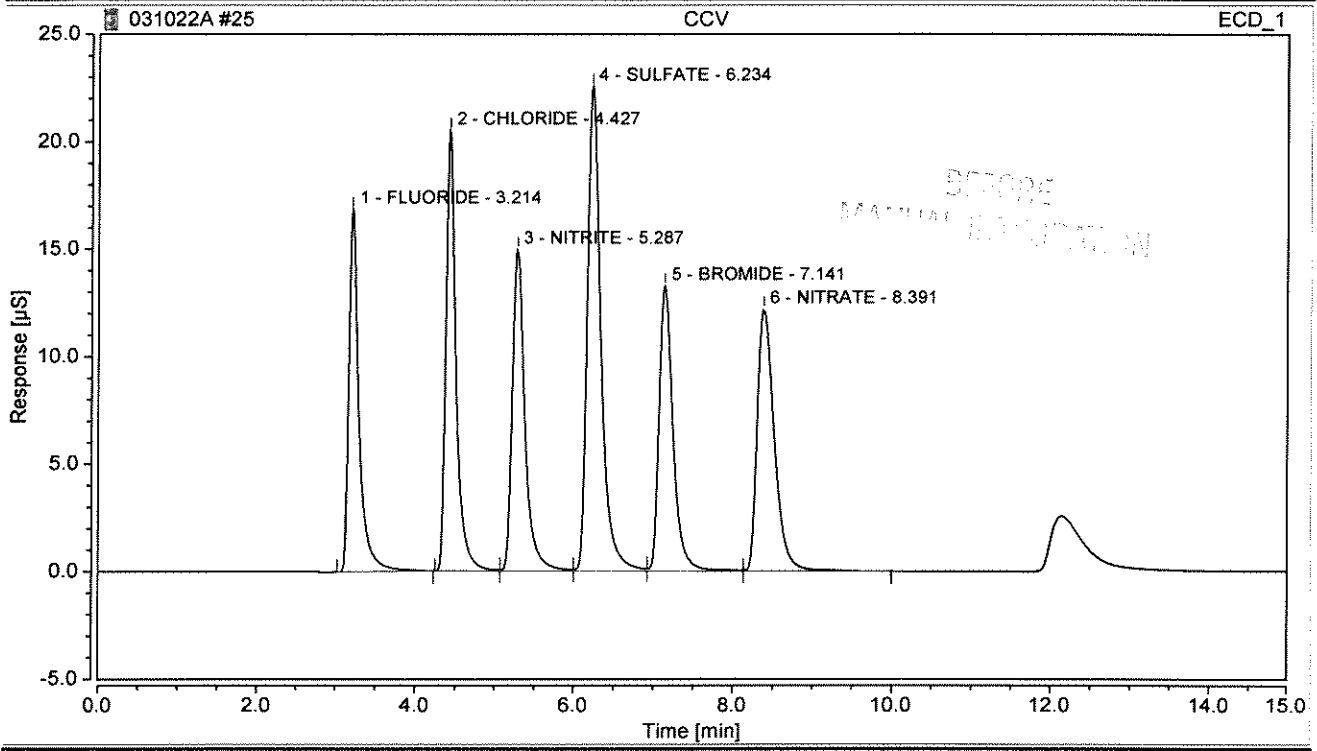
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.201	0.005	0.031	0.07	0.08	0.1937	n.a.
3	CHLORIDE	4.424	2.790	18.850	38.38	46.27	186.7830	n.a.
4	NITRITE	5.424	0.048	0.132	0.67	0.32	1.4759	n.a.
5	SULFATE	6.241	4.393	21.611	60.43	53.05	389.5821	n.a.
6	BROMIDE	7.161	0.028	0.083	0.39	0.20	2.5652	n.a.
7	NITRATE	8.481	0.003	0.013	0.04	0.03	0.8281	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.268**	**40.720**	**99.97**	**99.96**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.98**
Vial Number:	**25**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**10/Mar/22 23:36**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

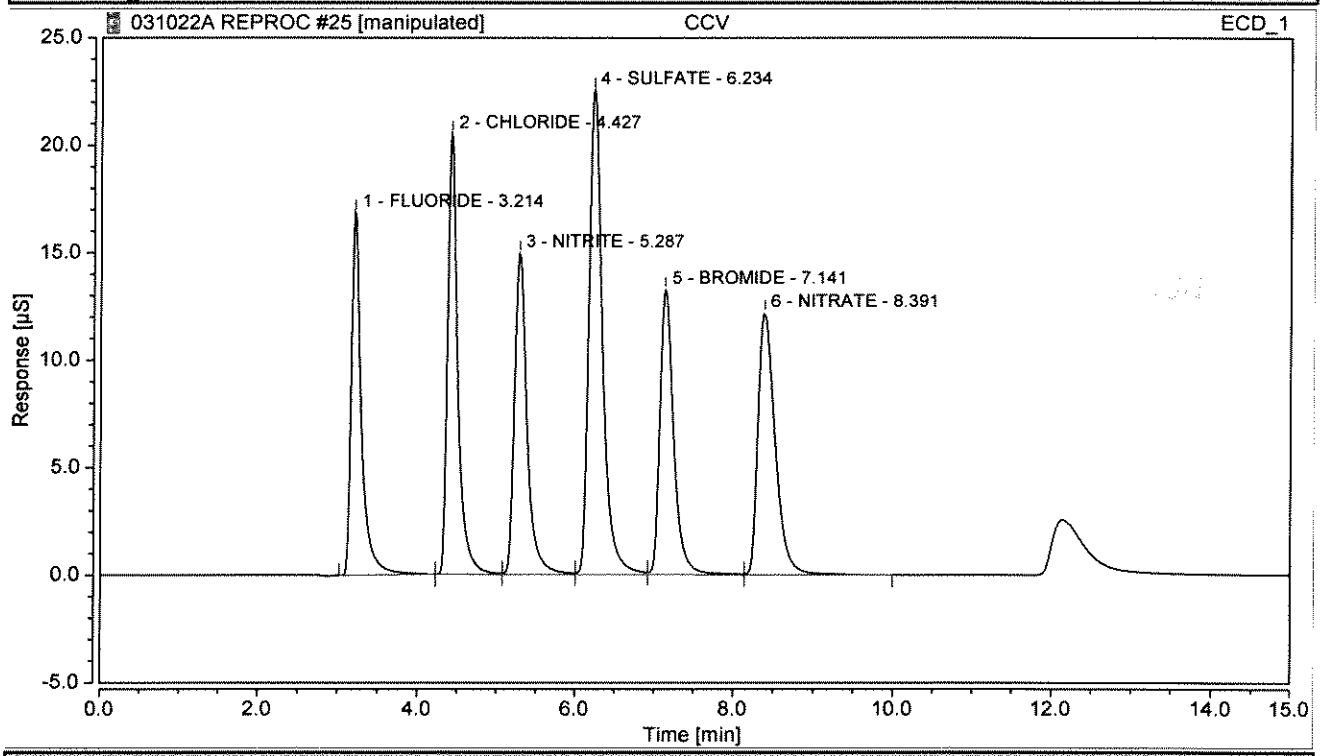
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.214	2.513	16.873	13.53	16.81	5.0853	1.7066
2	CHLORIDE	4.427	3.029	20.506	16.30	20.43	10.1298	1.2977
3	NITRITE	5.287	2.759	14.959	14.85	14.91	4.2071	5.1765
4	SULFATE	6.234	4.522	22.547	24.34	22.47	20.0517	0.2584
5	BROMIDE	7.141	2.731	13.269	14.70	13.22	20.5885	2.9423
6	NITRATE	8.391	3.028	12.196	16.29	12.15	3.9274	-1.8153
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**18.581**	**100.350**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.98**
Vial Number:	**25**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**10/Mar/22 23:36**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

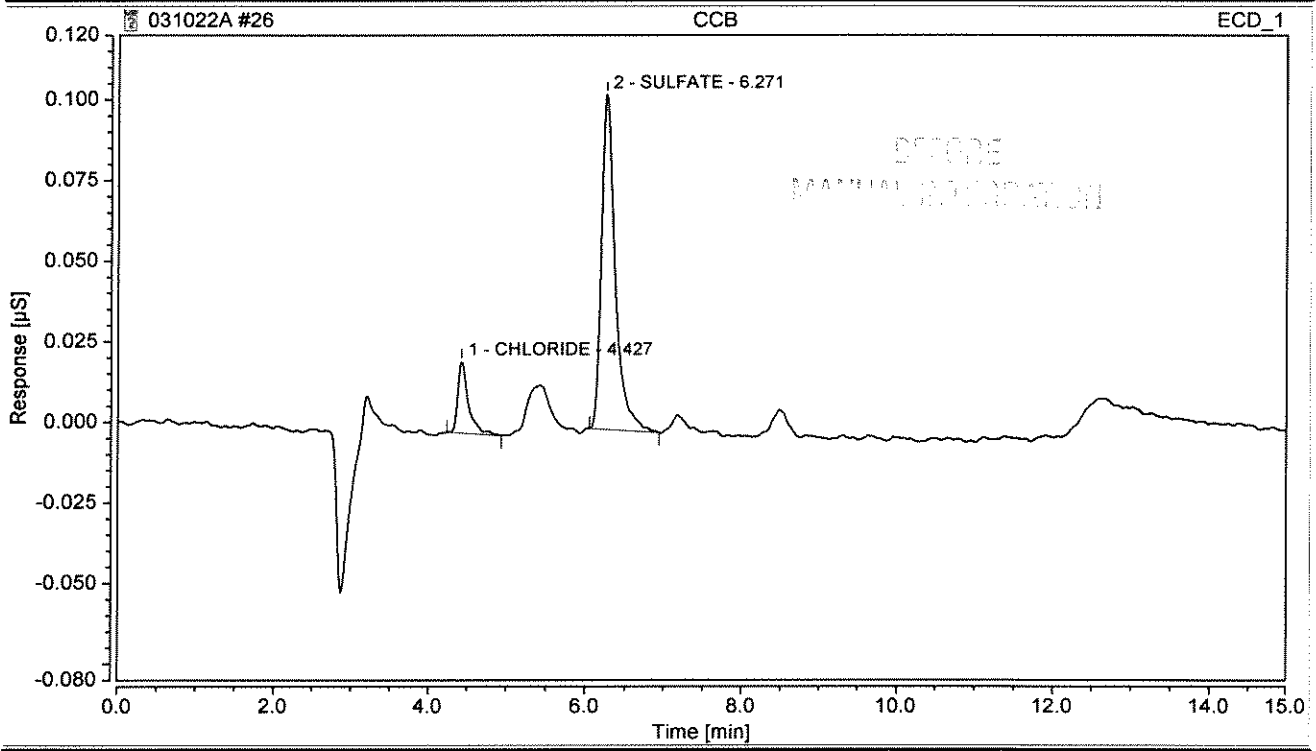
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.214	2.513	16.873	13.53	16.81	5.0848	1.6968
2	CHLORIDE	4.427	3.028	20.505	16.30	20.43	10.1278	1.2781
3	NITRITE	5.287	2.758	14.958	14.85	14.91	4.2062	5.1556
4	SULFATE	6.234	4.522	22.546	24.34	22.47	20.0498	0.2489
5	BROMIDE	7.141	2.730	13.269	14.70	13.22	20.5879	2.9394
6	NITRATE	8.391	3.027	12.196	16.30	12.15	3.9271	-1.8227
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**18.579**	**100.348**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.99**
Vial Number:	**26**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**10/Mar/22 23:57**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

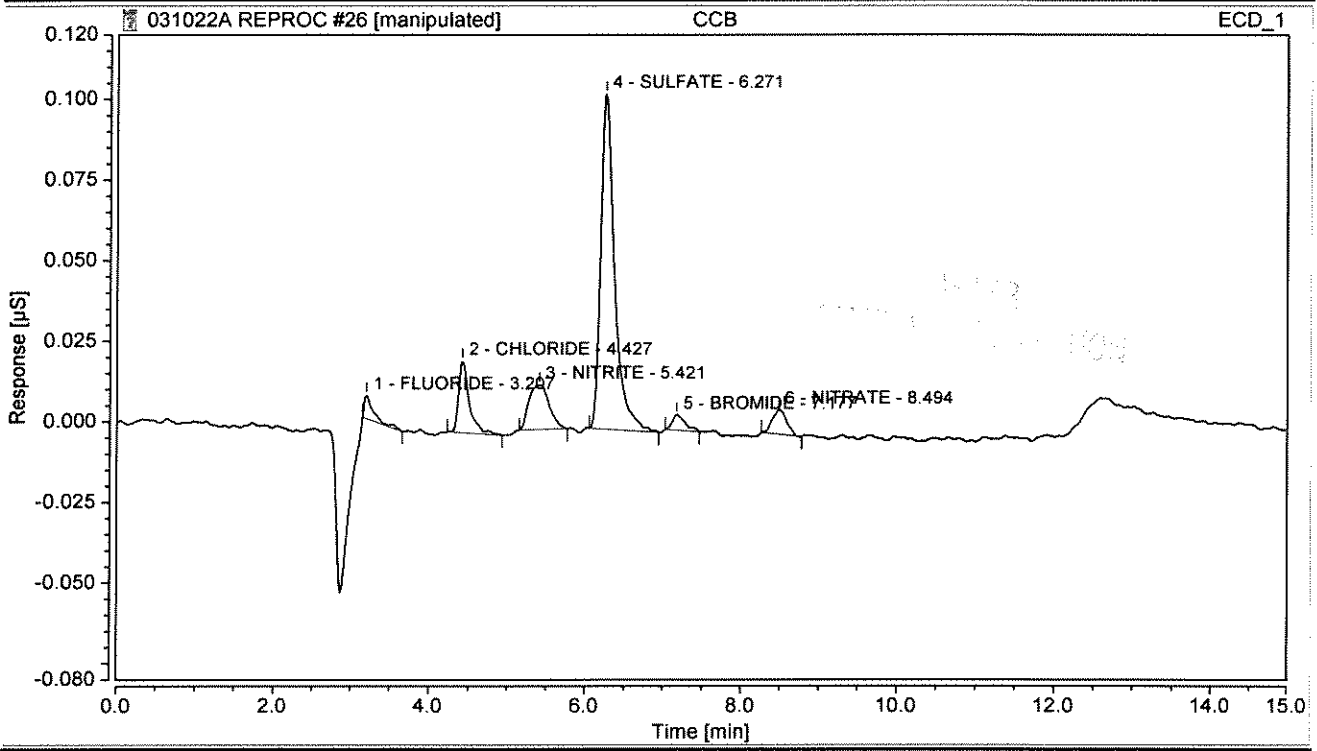
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.427	0.003	0.022	14.21	17.66	0.0989	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	6.271	0.021	0.104	85.79	82.34	0.0933	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.025**	**0.126**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.99**
Vial Number:	**26**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**10/Mar/22 23:57**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

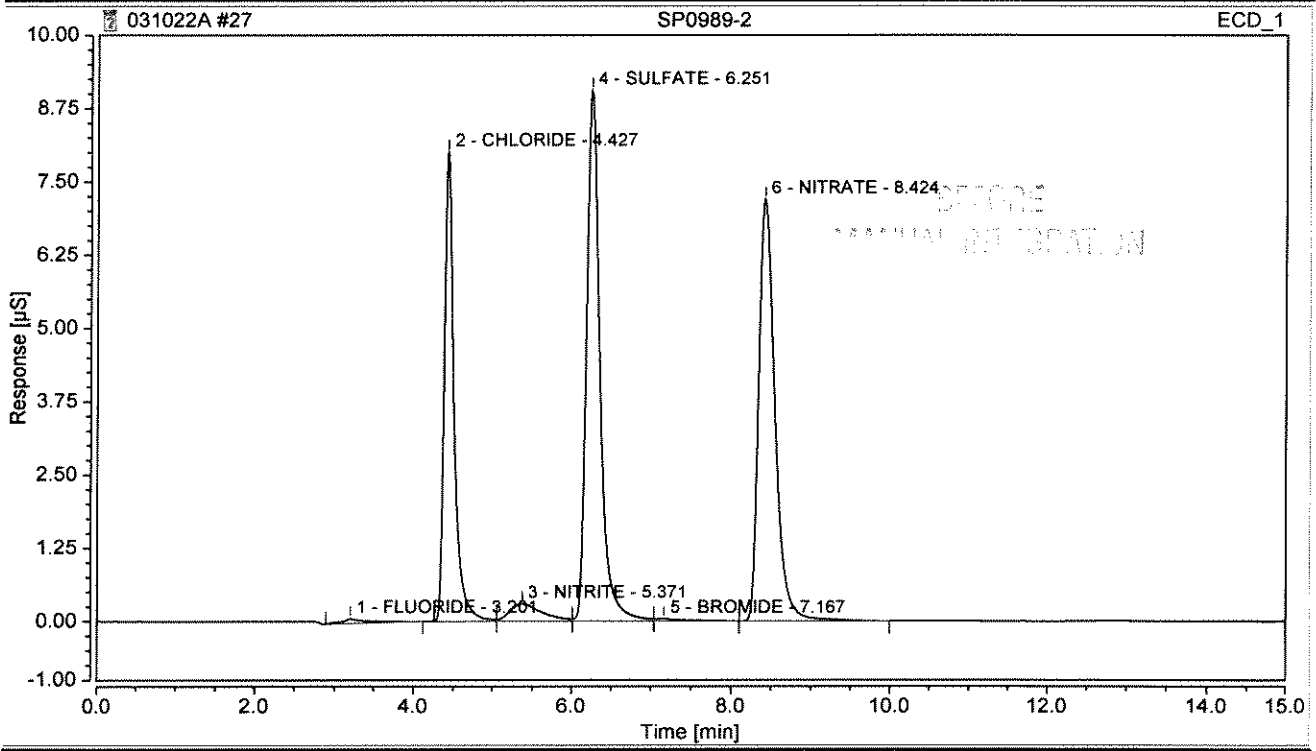
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.207	0.001	0.007	3.06	4.56	0.0020	n.a.
2	CHLORIDE	4.427	0.003	0.022	10.80	13.95	0.0989	n.a.
3	NITRITE	5.421	0.004	0.014	13.12	8.69	0.0065	n.a.
4	SULFATE	6.271	0.021	0.104	65.23	65.04	0.0933	n.a.
5	BROMIDE	7.177	0.001	0.005	2.83	2.98	0.0074	n.a.
6	NITRATE	8.494	0.002	0.008	4.97	4.78	0.0393	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.032**	**0.160**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0989-2**	*Run Time (min):*	**14.99**
Vial Number:	**27**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 00:17**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

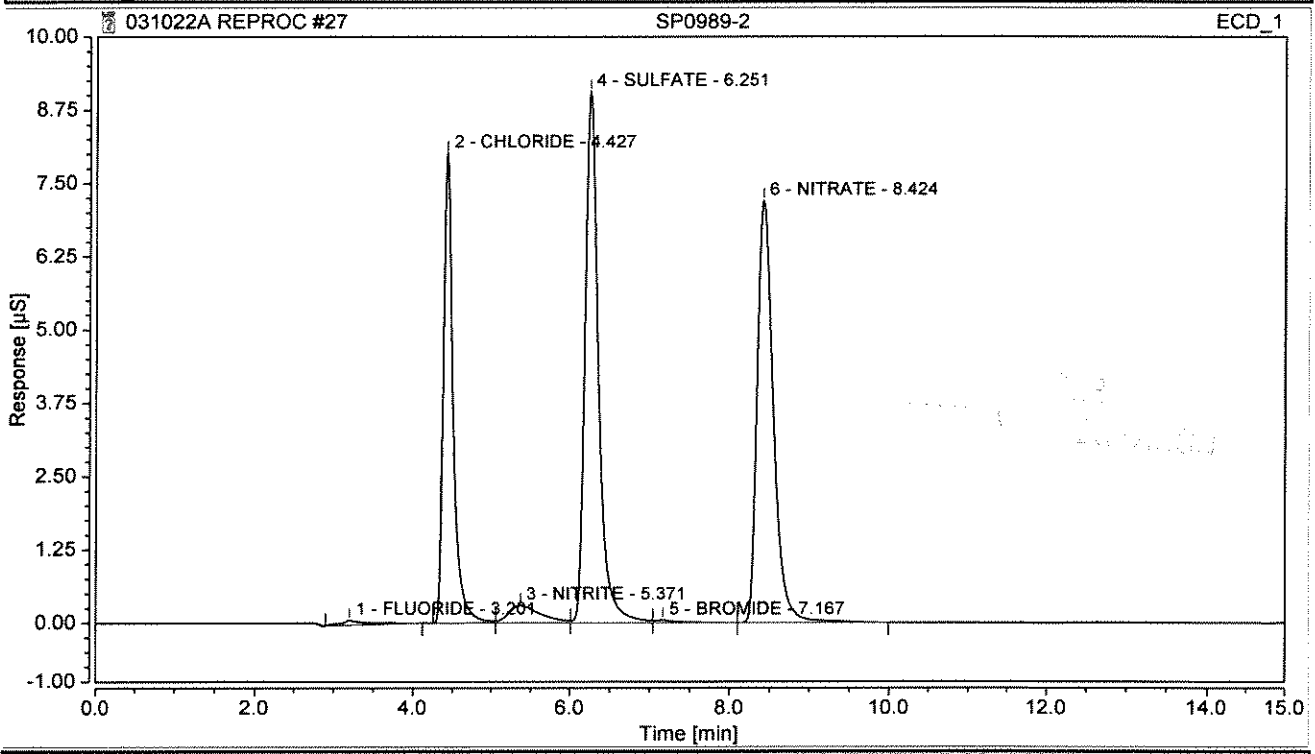
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.201	0.031	0.080	0.63	0.32	0.0618	n.a.
2	CHLORIDE	4.427	1.161	8.012	23.99	32.45	3.9375	n.a.
3	NITRITE	5.371	0.142	0.298	2.93	1.21	0.2164	n.a.
4	SULFATE	6.251	1.796	9.063	37.09	36.70	7.9621	n.a.
5	BROMIDE	7.167	0.017	0.044	0.35	0.18	0.0682	n.a.
6	NITRATE	8.424	1.695	7.197	35.01	29.14	2.2148	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.841**	**24.694**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0989-2**	*Run Time (min):*	**14.99**
Vial Number:	**27**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 00:17**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

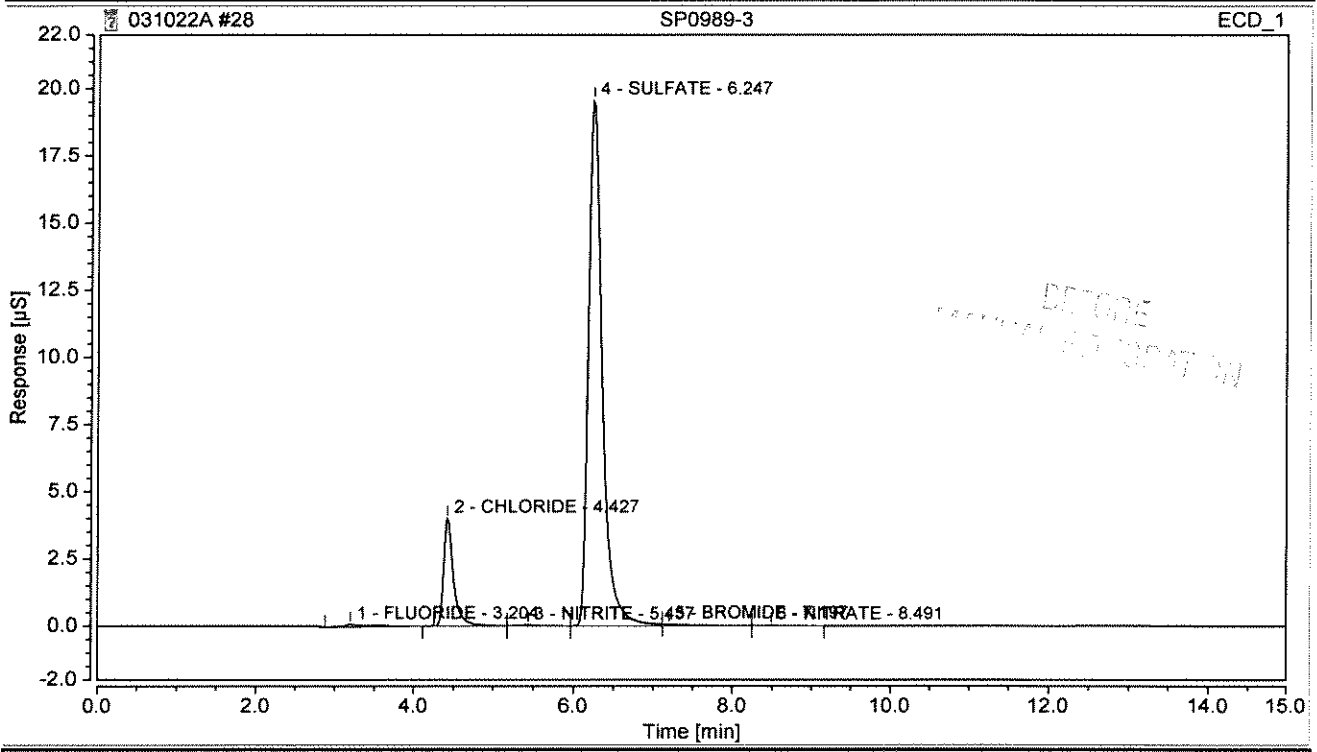
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.201	0.031	0.080	0.63	0.32	0.0618	n.a.
2	CHLORIDE	4.427	1.161	8.012	23.99	32.45	3.9375	n.a.
3	NITRITE	5.371	0.142	0.298	2.93	1.21	0.2164	n.a.
4	SULFATE	6.251	1.796	9.063	37.09	36.70	7.9621	n.a.
5	BROMIDE	7.167	0.017	0.044	0.35	0.18	0.0682	n.a.
6	NITRATE	8.424	1.695	7.197	35.01	29.14	2.2148	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.841**	**24.694**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0989-3**	*Run Time (min):*	**14.98**
Vial Number:	**28**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**5.0**
Injection Date/Time:	**11/Mar/22 00:38**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

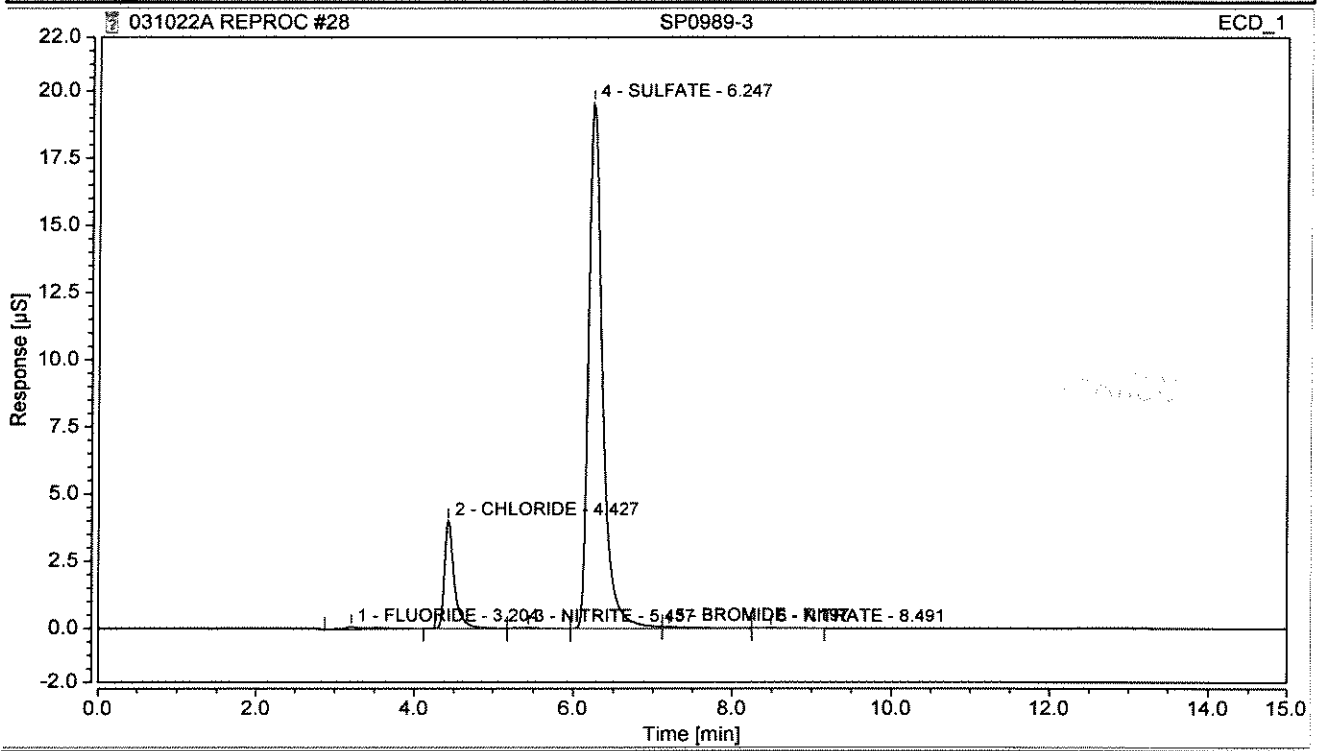
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.204	0.036	0.090	0.77	0.38	0.3602	n.a.
2	CHLORIDE	4.427	0.578	4.004	12.52	16.84	10.0127	n.a.
3	NITRITE	5.437	0.011	0.028	0.24	0.12	0.0845	n.a.
4	SULFATE	6.247	3.958	19.577	85.80	82.34	87.7551	n.a.
5	BROMIDE	7.197	0.025	0.056	0.54	0.24	0.4378	n.a.
6	NITRATE	8.491	0.006	0.019	0.13	0.08	0.2245	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.613**	**23.775**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0989-3**	*Run Time (min):*	**14.98**
Vial Number:	**28**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**5.0**
Injection Date/Time:	**11/Mar/22 00:38**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

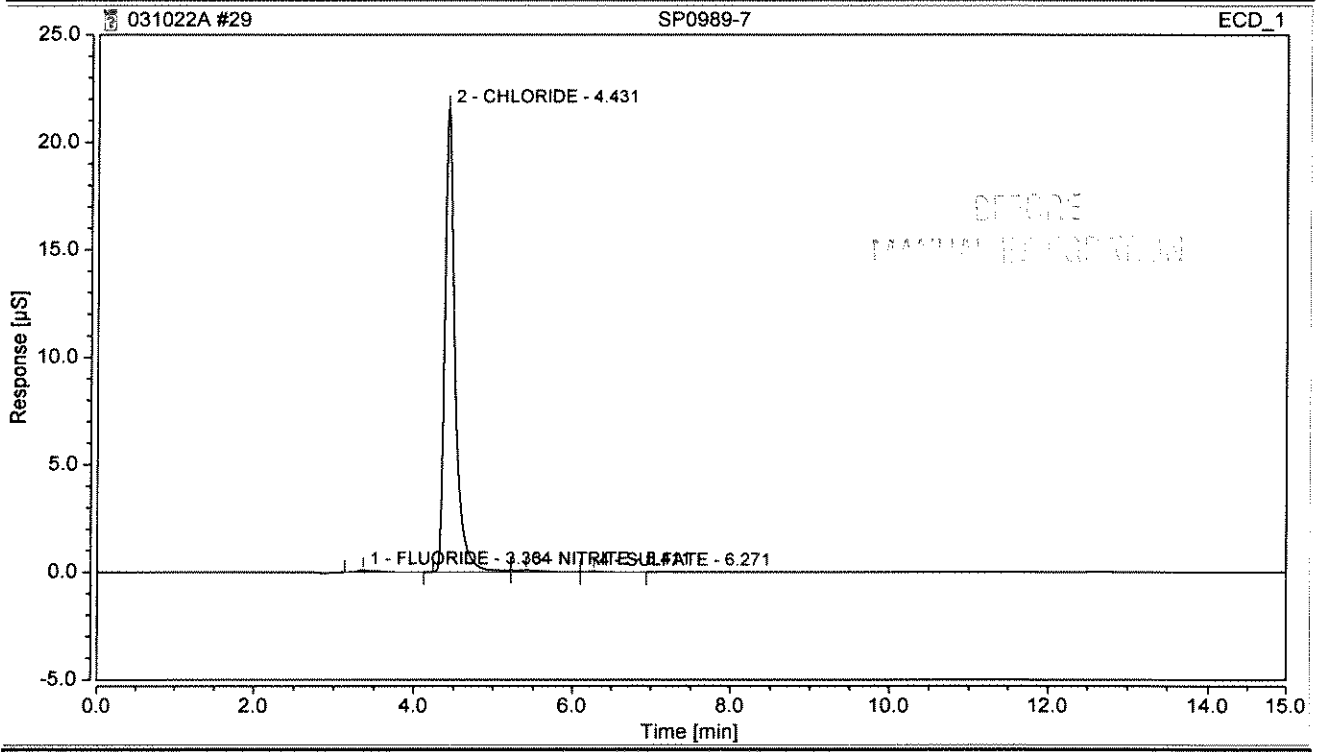
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.204	0.036	0.090	0.77	0.38	0.3602	n.a.
2	CHLORIDE	4.427	0.578	4.004	12.52	16.84	10.0127	n.a.
3	NITRITE	5.437	0.011	0.028	0.24	0.12	0.0845	n.a.
4	SULFATE	6.247	3.958	19.577	85.80	82.34	87.7551	n.a.
5	BROMIDE	7.197	0.025	0.056	0.54	0.24	0.4378	n.a.
6	NITRATE	8.491	0.006	0.019	0.13	0.08	0.2245	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.613**	**23.775**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0989-7**	*Run Time (min):*	**14.98**
Vial Number:	**29**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**20.0**
Injection Date/Time:	**11/Mar/22 00:59**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

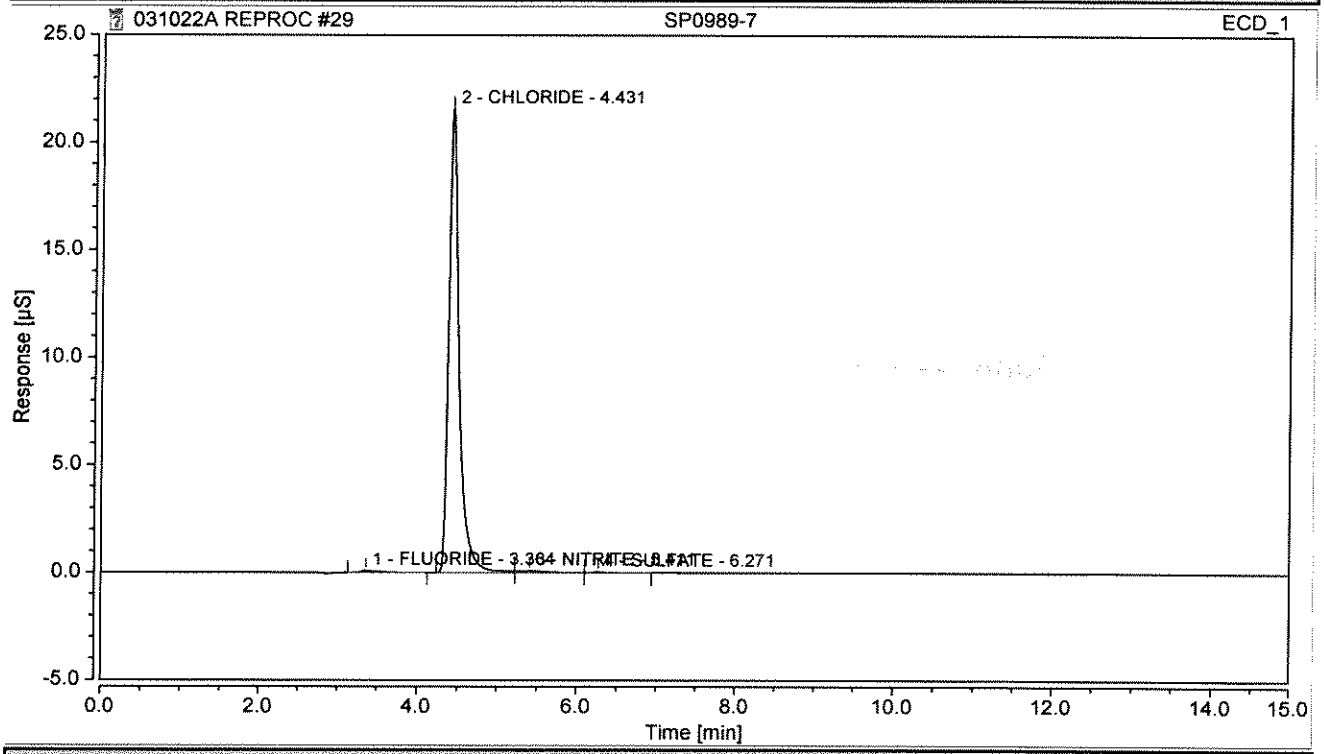
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.364	0.024	0.098	0.73	0.45	0.9772	n.a.
2	CHLORIDE	4.431	3.220	21.582	97.83	98.99	215.2792	n.a.
3	NITRITE	5.411	0.037	0.083	1.12	0.38	1.1282	n.a.
4	SULFATE	6.271	0.010	0.039	0.31	0.18	0.9001	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.291**	**21.802**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0989-7**	*Run Time (min):*	**14.98**
Vial Number:	**29**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**20.0**
Injection Date/Time:	**11/Mar/22 00:59**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

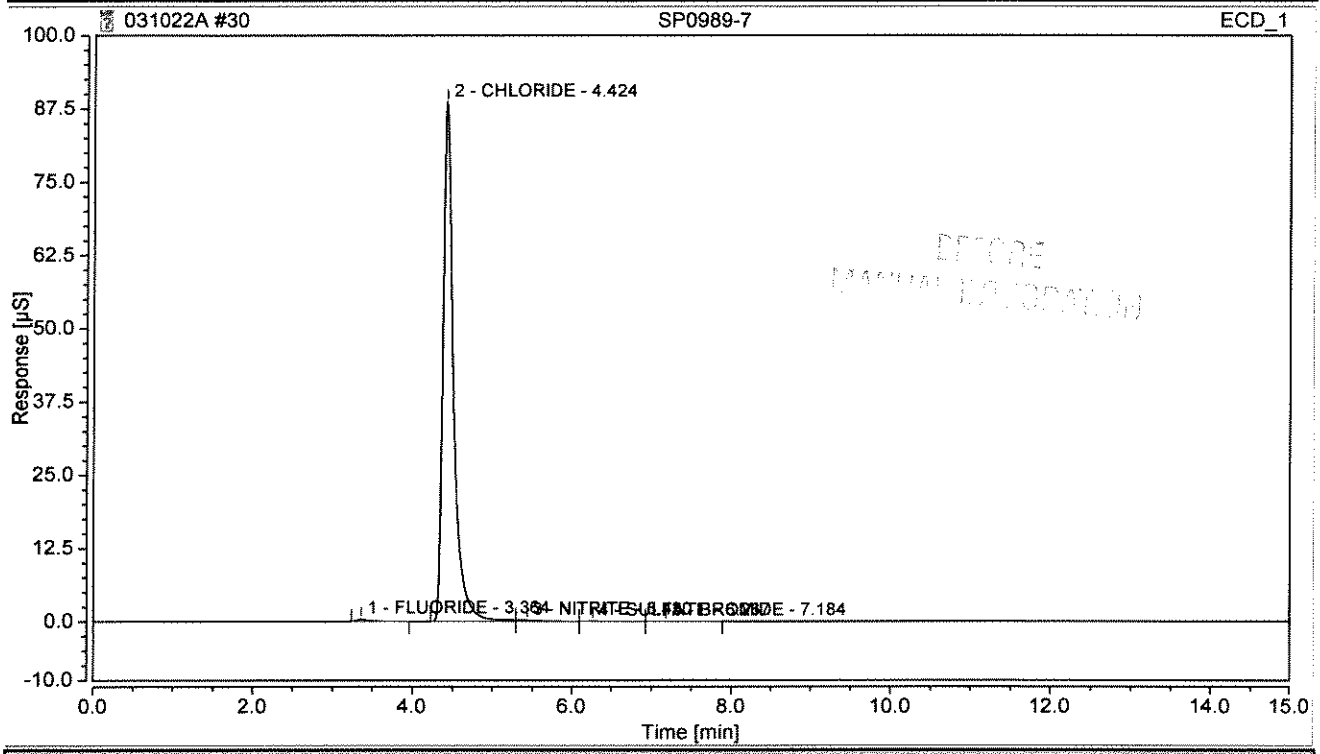
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.364	0.024	0.098	0.73	0.45	0.9772	n.a.
2	CHLORIDE	4.431	3.220	21.582	97.83	98.99	215.2792	n.a.
3	NITRITE	5.411	0.037	0.083	1.12	0.38	1.1282	n.a.
4	SULFATE	6.271	0.010	0.039	0.31	0.18	0.9001	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.291**	**21.802**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0989-7**	*Run Time (min):*	**14.99**
Vial Number:	**30**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 01:20**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

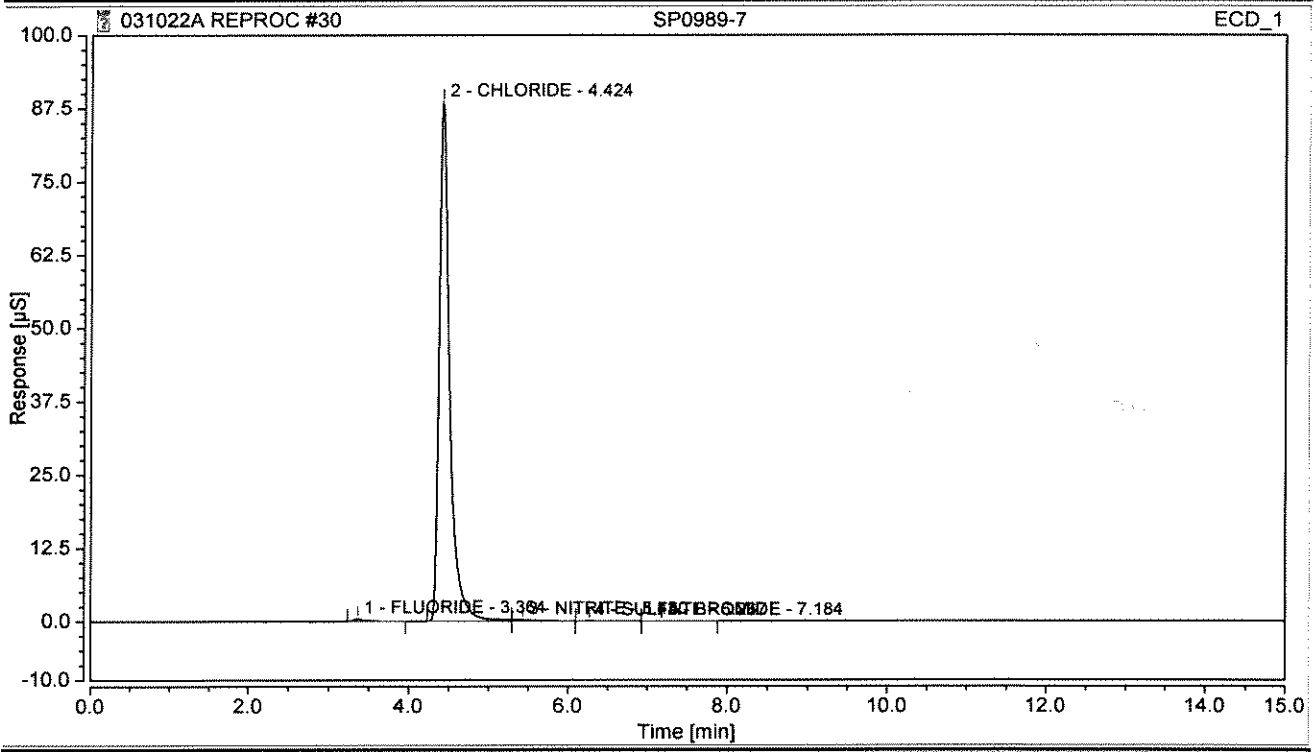
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.364	0.068	0.381	0.50	0.43	0.1385	n.a.
2	CHLORIDE	4.424	13.580	88.619	98.66	99.21	45.1164	n.a.
3	NITRITE	5.430	0.090	0.219	0.65	0.25	0.1365	n.a.
4	SULFATE	6.267	0.017	0.059	0.12	0.07	0.0738	n.a.
5	BROMIDE	7.184	0.010	0.047	0.08	0.05	0.0732	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**13.765**	**89.325**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0989-7**	*Run Time (min):*	**14.99**
Vial Number:	**30**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 01:20**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

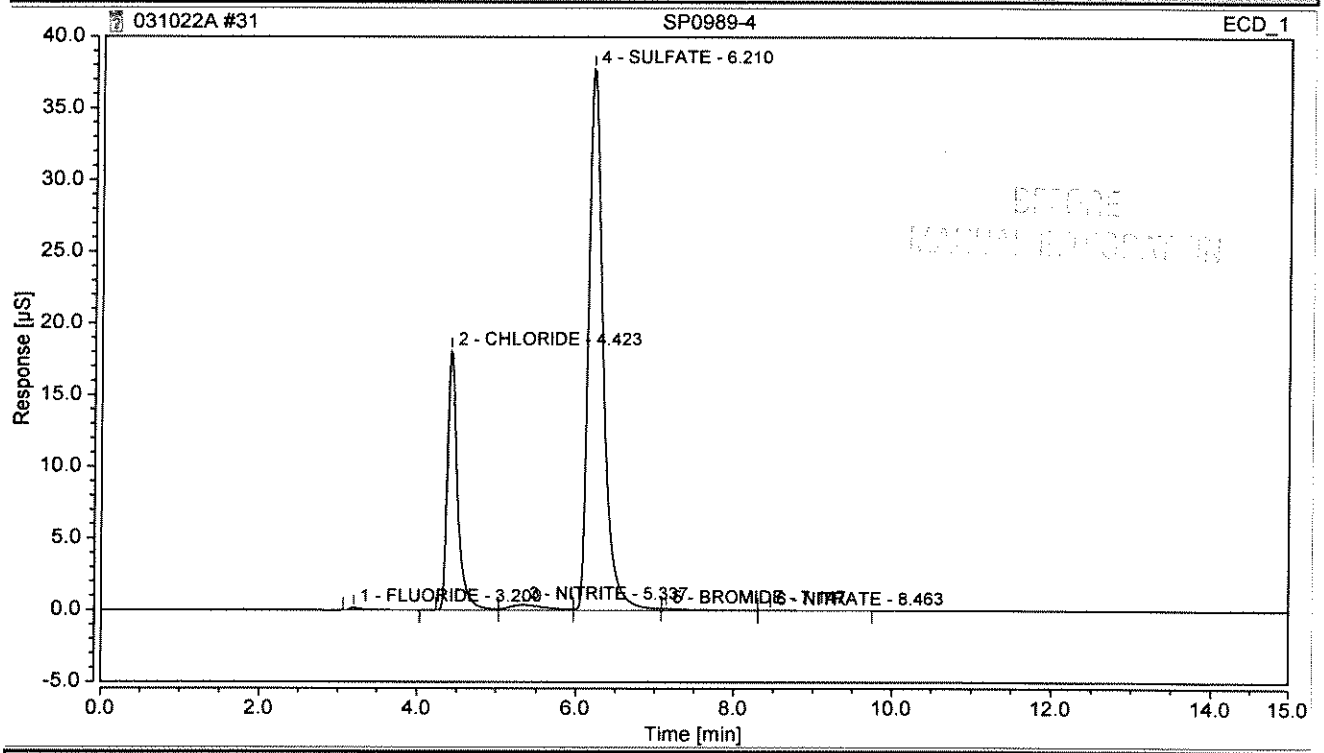
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.364	0.068	0.381	0.50	0.43	0.1385	n.a.
2	CHLORIDE	4.424	13.580	88.619	98.66	99.21	45.1164	n.a.
3	NITRITE	5.430	0.090	0.219	0.65	0.25	0.1365	n.a.
4	SULFATE	6.267	0.017	0.059	0.12	0.07	0.0738	n.a.
5	BROMIDE	7.184	0.010	0.047	0.08	0.05	0.0732	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**13.765**	**89.325**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0989-4**	*Run Time (min):*	**14.99**
Vial Number:	**31**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**11/Mar/22 01:41**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

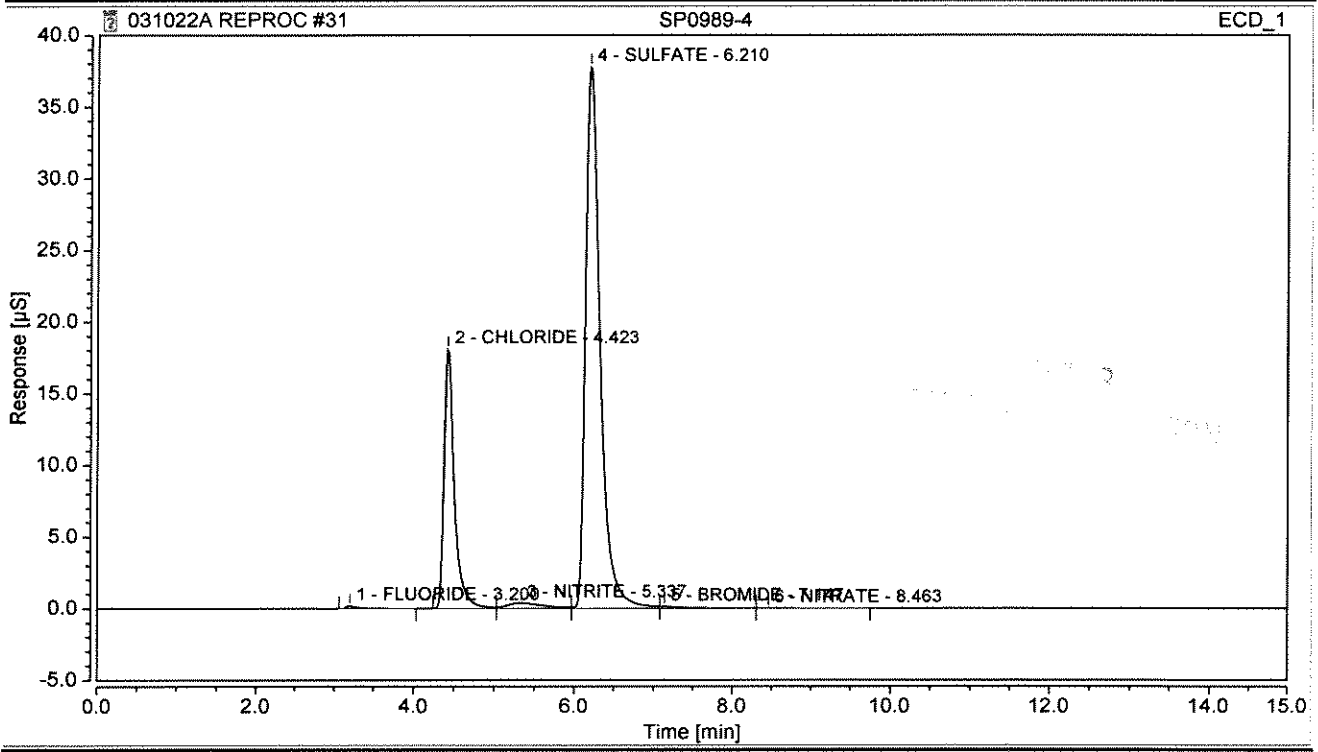
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.200	0.035	0.187	0.32	0.33	0.1407	n.a.
2	CHLORIDE	4.423	2.652	18.112	24.05	32.00	17.7651	n.a.
3	NITRITE	5.337	0.187	0.367	1.70	0.65	0.5716	n.a.
4	SULFATE	6.210	8.098	37.802	73.43	66.79	71.8173	n.a.
5	BROMIDE	7.147	0.050	0.118	0.45	0.21	0.3667	n.a.
6	NITRATE	8.463	0.006	0.013	0.05	0.02	0.0901	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.029**	**56.600**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0989-4**	*Run Time (min):*	**14.99**
Vial Number:	**31**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**11/Mar/22 01:41**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

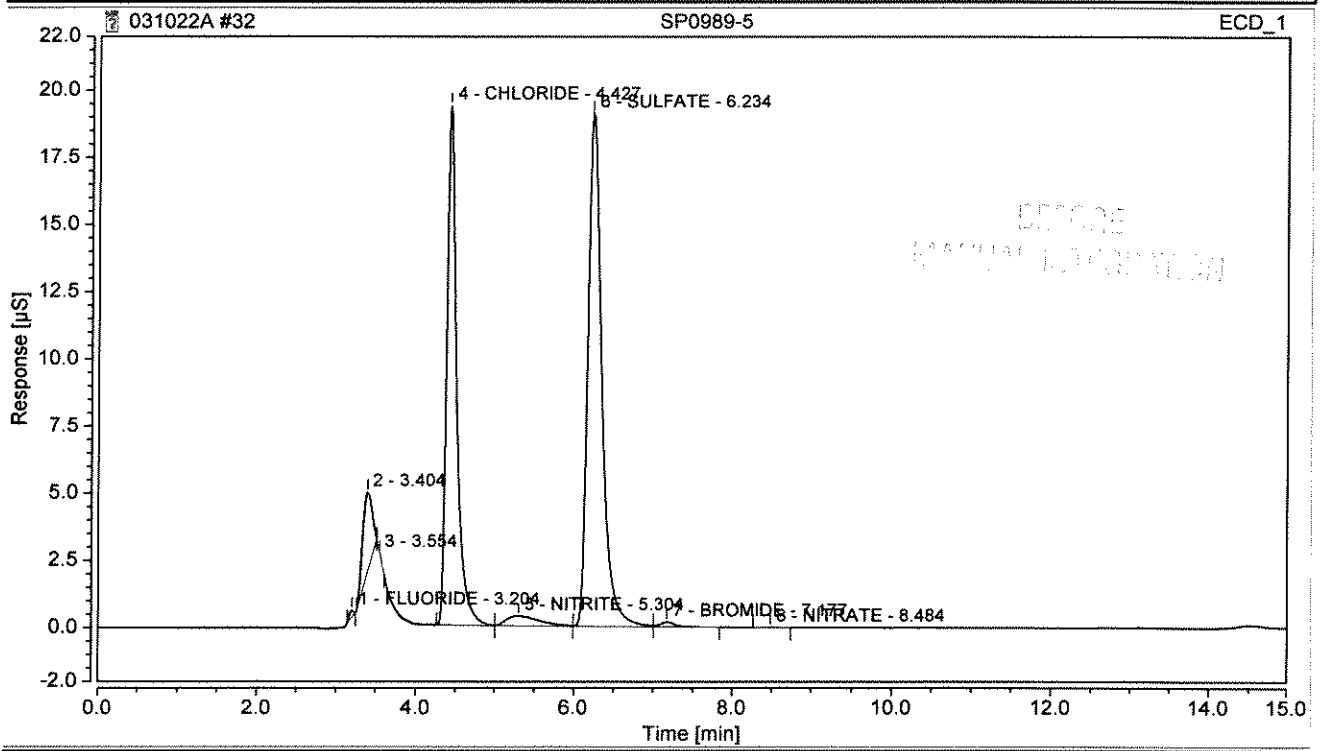
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.200	0.035	0.187	0.32	0.33	0.1407	n.a.
2	CHLORIDE	4.423	2.652	18.112	24.05	32.00	17.7651	n.a.
3	NITRITE	5.337	0.187	0.367	1.70	0.65	0.5716	n.a.
4	SULFATE	6.210	8.098	37.802	73.43	66.79	71.8173	n.a.
5	BROMIDE	7.147	0.050	0.118	0.45	0.21	0.3667	n.a.
6	NITRATE	8.463	0.006	0.013	0.05	0.02	0.0901	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.029**	**56.600**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0989-5**	*Run Time (min):*	**14.98**
Vial Number:	**32**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 02:01**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

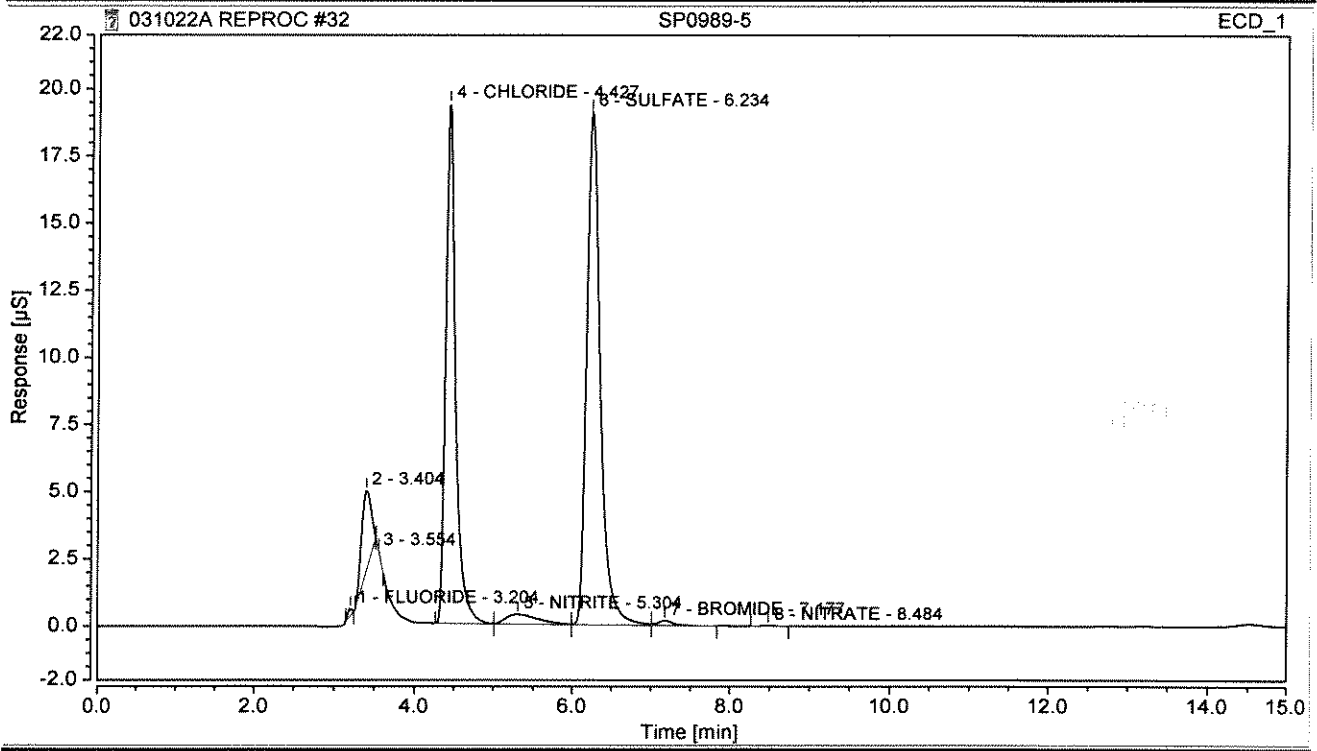
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.204	0.016	0.256	0.22	0.61	0.0333	n.a.
4	CHLORIDE	4.427	2.796	19.357	38.12	45.83	9.3598	n.a.
5	NITRITE	5.304	0.174	0.363	2.38	0.86	0.2659	n.a.
6	SULFATE	6.234	3.895	19.102	53.10	45.22	17.2711	n.a.
7	BROMIDE	7.177	0.040	0.179	0.55	0.42	0.2783	n.a.
8	NITRATE	8.484	0.002	0.011	0.03	0.03	0.0402	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.925**	**39.269**	**94.41**	**92.96**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0989-5**	*Run Time (min):*	**14.98**
Vial Number:	**32**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 02:01**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

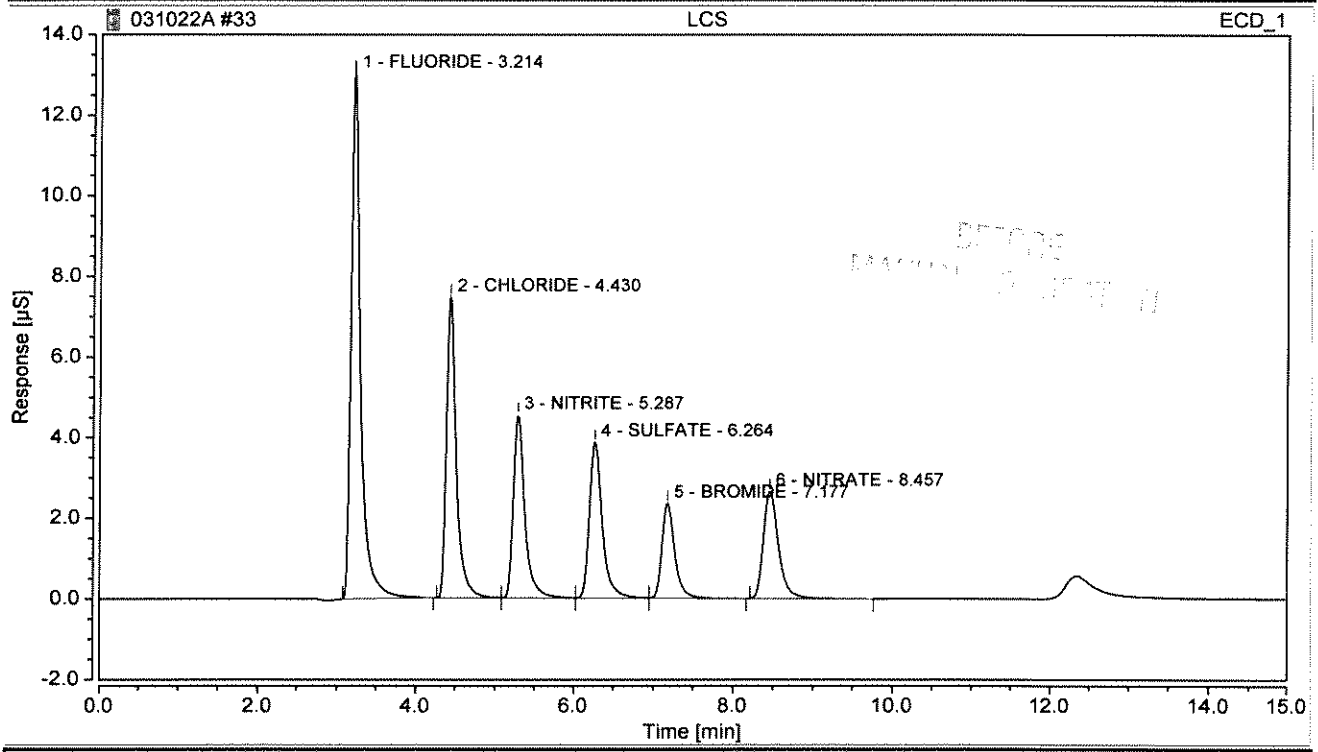
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.204	0.016	0.256	0.22	0.61	0.0333	n.a.
4	CHLORIDE	4.427	2.796	19.357	38.12	45.83	9.3598	n.a.
5	NITRITE	5.304	0.174	0.363	2.38	0.86	0.2659	n.a.
6	SULFATE	6.234	3.895	19.102	53.10	45.22	17.2711	n.a.
7	BROMIDE	7.177	0.040	0.179	0.55	0.42	0.2783	n.a.
8	NITRATE	8.484	0.002	0.011	0.03	0.03	0.0402	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.925**	**39.269**	**94.41**	**92.96**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.99**
Vial Number:	**33**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**07**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 02:22**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

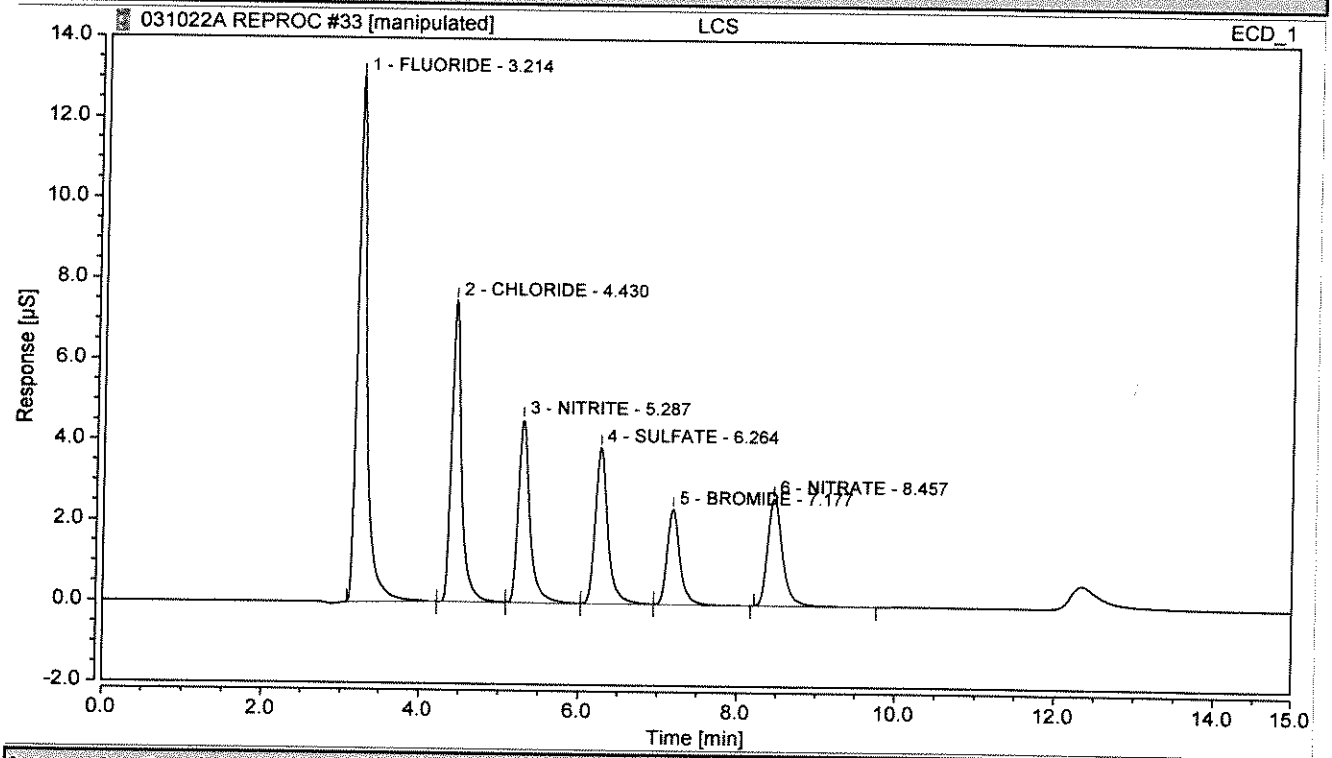
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.214	1.889	13.041	34.28	38.41	3.8214	1.9037
2	CHLORIDE	4.430	1.083	7.473	19.65	22.01	3.6777	-1.9290
3	NITRITE	5.287	0.771	4.550	14.00	13.40	1.1759	3.1460
4	SULFATE	6.264	0.732	3.877	13.29	11.42	3.2470	-13.4136
5	BROMIDE	7.177	0.449	2.361	8.16	6.95	3.6640	-2.2925
6	NITRATE	8.457	0.585	2.653	10.63	7.81	0.7894	-6.5784
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.510**	**33.955**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.99**
Vial Number:	**33**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**07**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 02:22**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

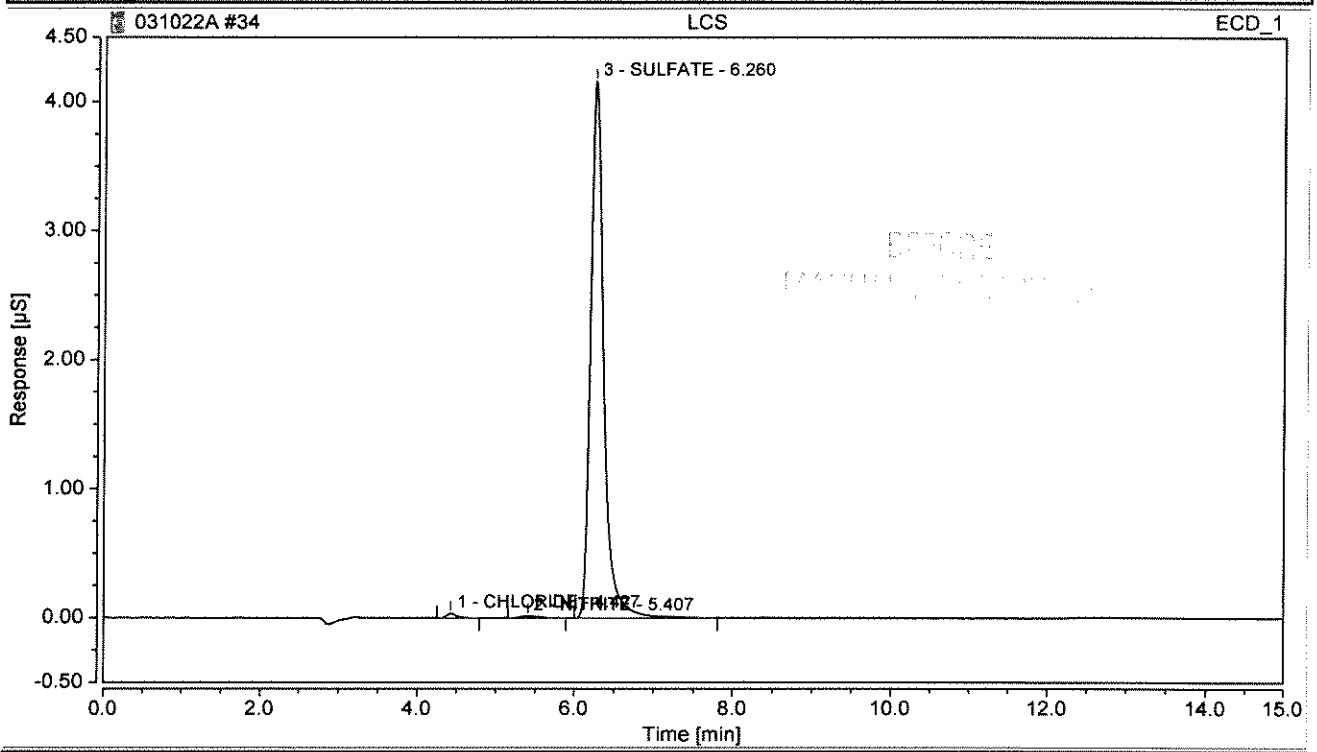
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.214	1.889	13.041	34.28	38.41	3.8214	1.9037
2	CHLORIDE	4.430	1.083	7.473	19.65	22.01	3.6771	-1.9431
3	NITRITE	5.287	0.771	4.549	14.00	13.40	1.1757	3.1305
4	SULFATE	6.264	0.732	3.877	13.29	11.42	3.2467	-13.4223
5	BROMIDE	7.177	0.449	2.361	8.16	6.95	3.6640	-2.2944
6	NITRATE	8.457	0.585	2.653	10.63	7.81	0.7894	-6.5784
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.509**	**33.955**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.99**
Vial Number:	**34**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**07**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 02:43**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

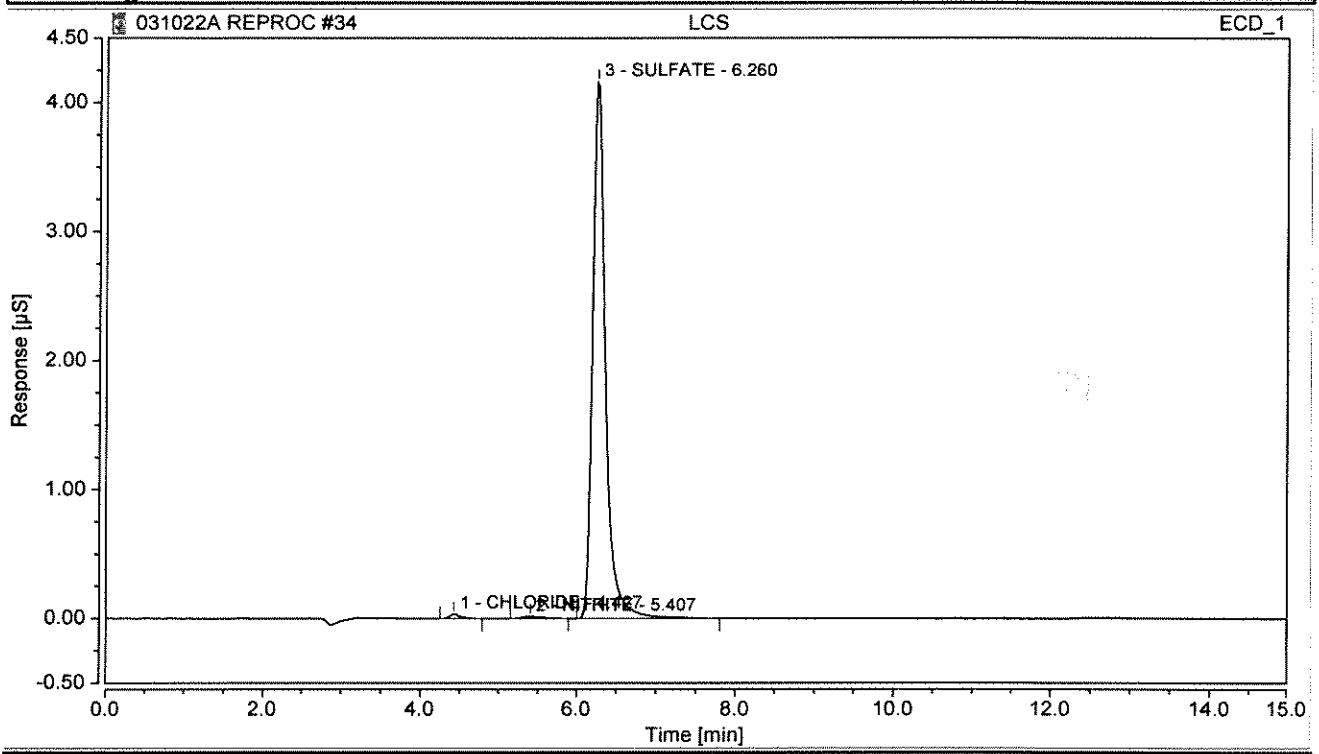
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.427	0.006	0.037	0.70	0.87	0.1061	-97.1695
2	NITRITE	5.407	0.005	0.016	0.57	0.37	0.0071	-99.3784
3	SULFATE	6.260	0.798	4.163	98.72	98.76	3.5387	-5.6347
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.808**	**4.215**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.99**
Vial Number:	**34**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**07**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 02:43**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

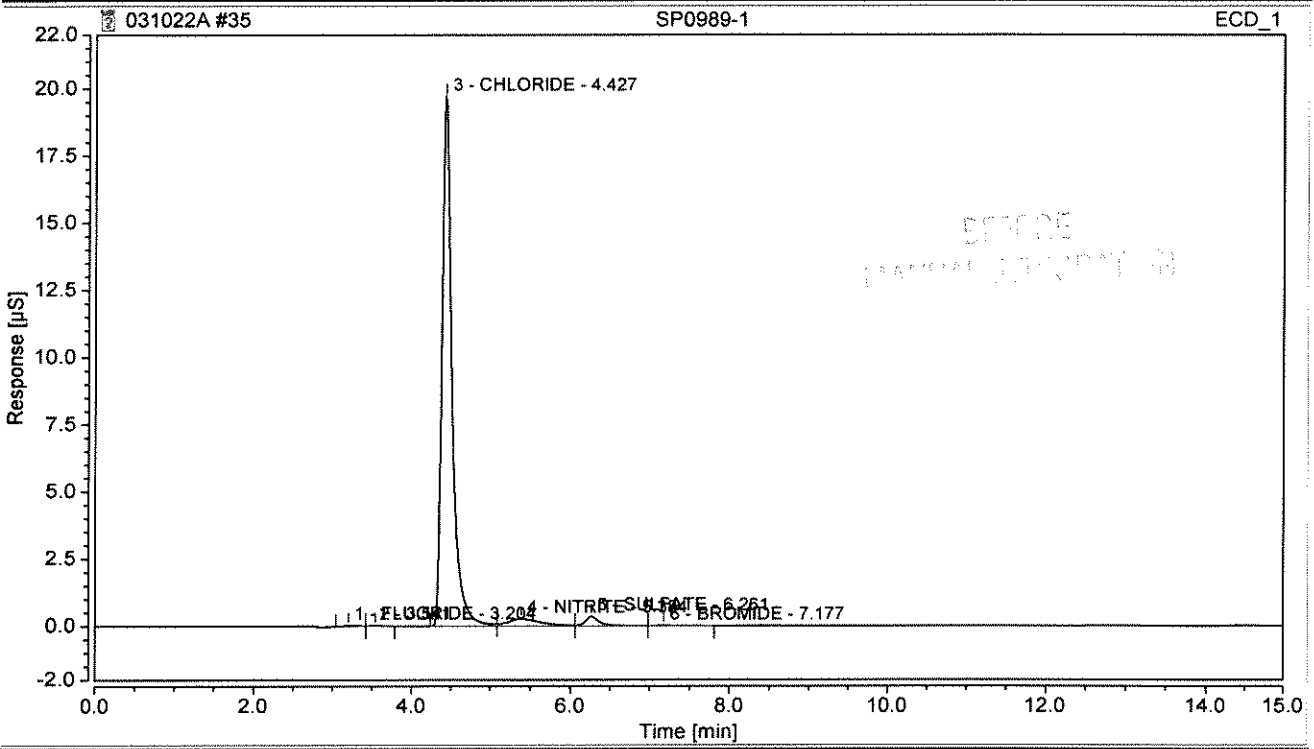
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.427	0.006	0.037	0.70	0.87	0.1061	-97.1695
2	NITRITE	5.407	0.005	0.016	0.57	0.37	0.0071	-99.3784
3	SULFATE	6.260	0.798	4.163	98.72	98.76	3.5387	-5.6347
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.808**	**4.215**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0989-1**	*Run Time (min):*	**14.98**
Vial Number:	**35**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**5.0**
Injection Date/Time:	**11/Mar/22 03:04**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

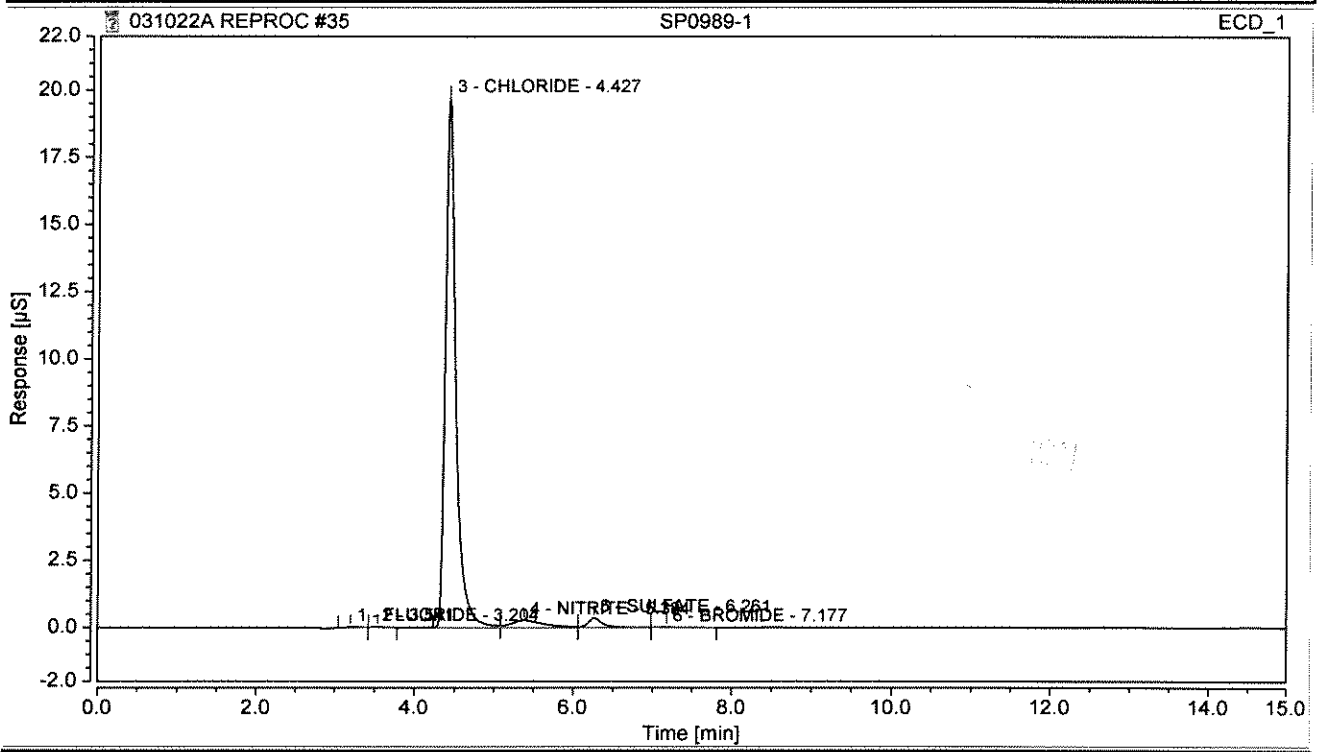
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.204	0.006	0.041	0.19	0.20	0.0591	n.a.
3	CHLORIDE	4.427	2.911	19.720	93.04	96.53	48.7019	n.a.
4	NITRITE	5.384	0.128	0.270	4.08	1.32	0.9742	n.a.
5	SULFATE	6.261	0.076	0.354	2.42	1.73	1.6758	n.a.
6	BROMIDE	7.177	0.005	0.018	0.15	0.09	0.1435	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.125**	**20.403**	**99.89**	**99.88**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0989-1**	*Run Time (min):*	**14.98**
Vial Number:	**35**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**5.0**
Injection Date/Time:	**11/Mar/22 03:04**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

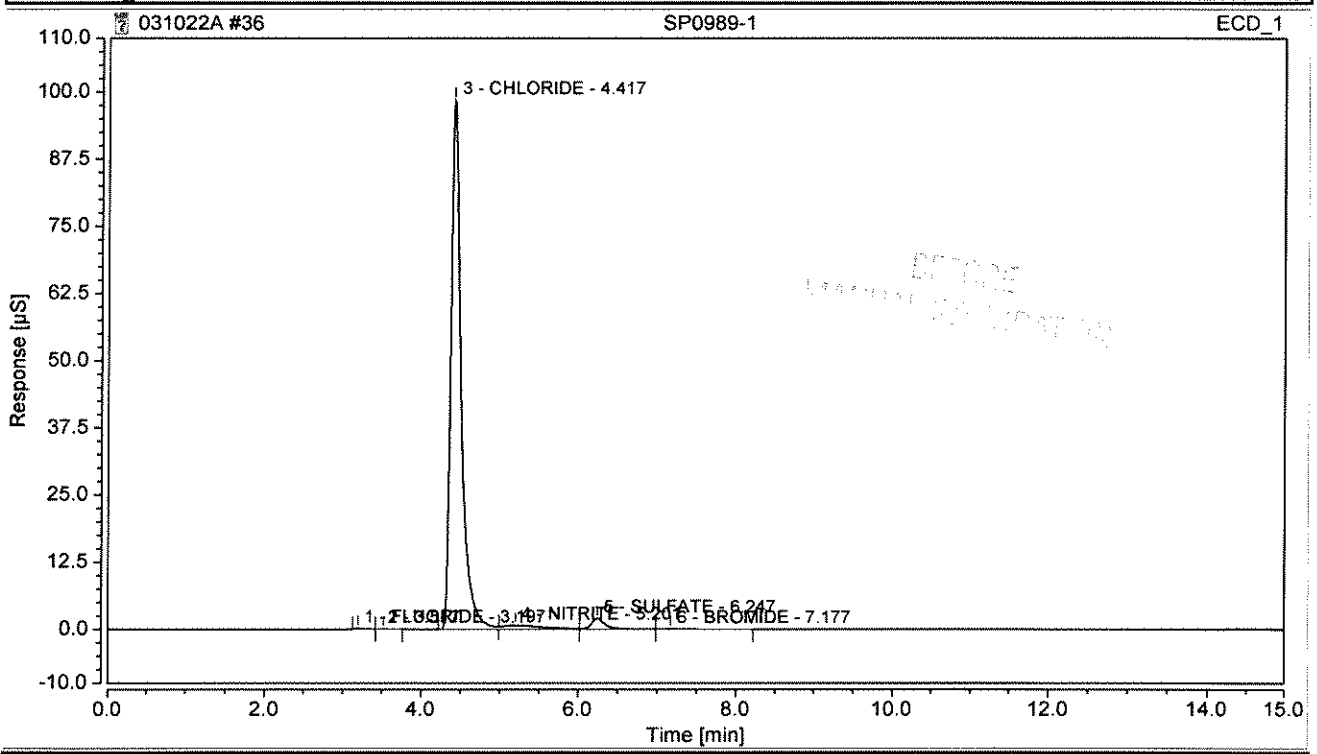
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.204	0.006	0.041	0.19	0.20	0.0591	n.a.
3	CHLORIDE	4.427	2.911	19.720	93.04	96.53	48.7019	n.a.
4	NITRITE	5.384	0.128	0.270	4.08	1.32	0.9742	n.a.
5	SULFATE	6.261	0.076	0.354	2.42	1.73	1.6758	n.a.
6	BROMIDE	7.177	0.005	0.018	0.15	0.09	0.1435	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.125**	**20.403**	**99.89**	**99.88**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0989-1**	*Run Time (min):*	**14.99**
Vial Number:	**36**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 03:25**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

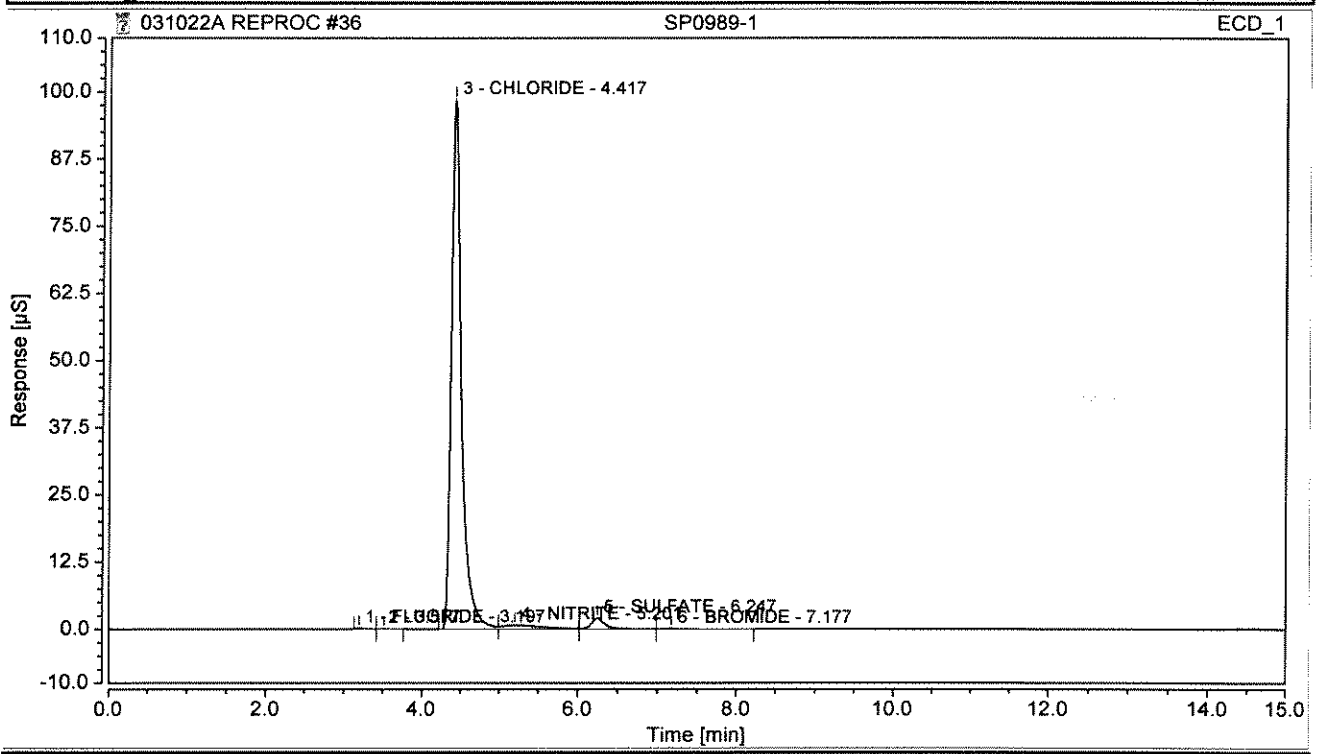
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.197	0.019	0.156	0.12	0.15	0.0385	n.a.
3	CHLORIDE	4.417	14.768	98.535	94.34	97.00	49.0562	n.a.
4	NITRITE	5.201	0.421	0.724	2.69	0.71	0.6423	n.a.
5	SULFATE	6.247	0.415	2.013	2.65	1.98	1.8417	n.a.
6	BROMIDE	7.177	0.023	0.091	0.15	0.09	0.1416	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**15.647**	**101.520**	**99.95**	**99.94**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0989-1**	*Run Time (min):*	**14.99**
Vial Number:	**36**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 03:25**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

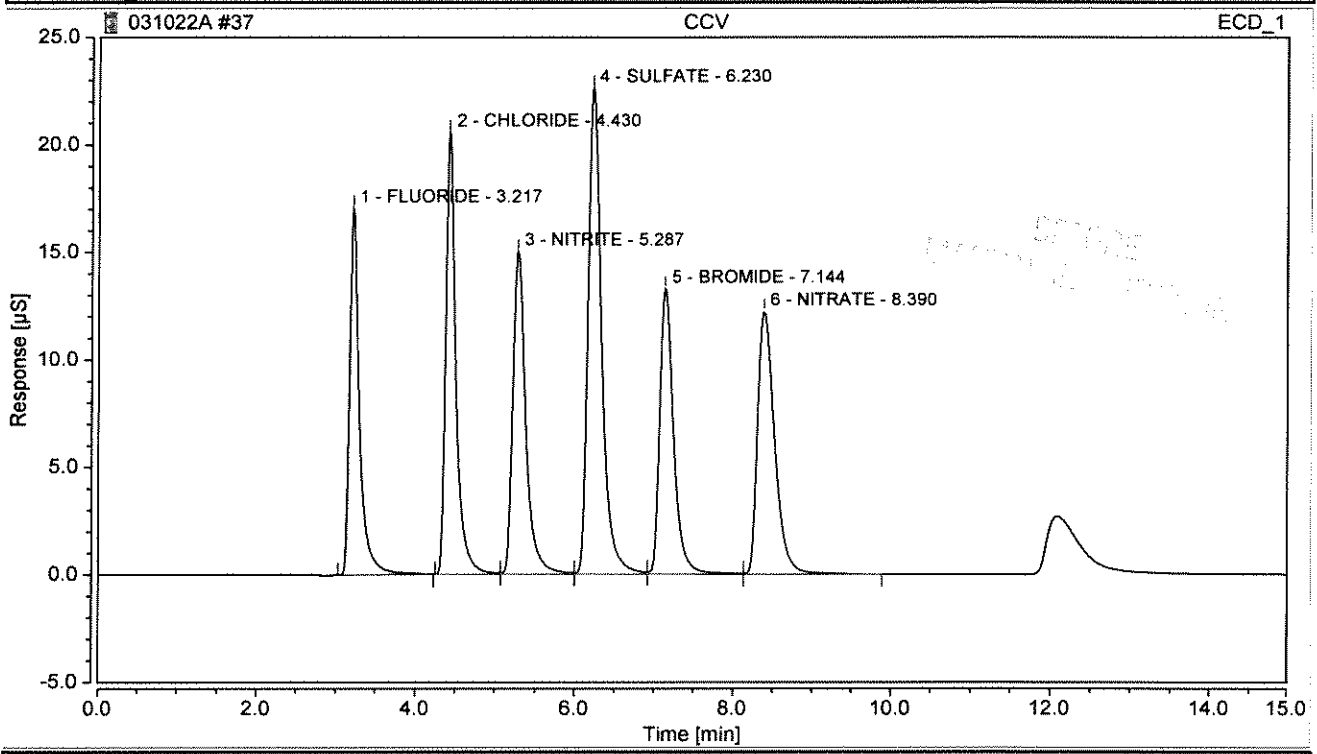
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.197	0.019	0.156	0.12	0.15	0.0385	n.a.
3	CHLORIDE	4.417	14.768	98.535	94.34	97.00	49.0562	n.a.
4	NITRITE	5.201	0.421	0.724	2.69	0.71	0.6423	n.a.
5	SULFATE	6.247	0.415	2.013	2.65	1.98	1.8417	n.a.
6	BROMIDE	7.177	0.023	0.091	0.15	0.09	0.1416	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**15.647**	**101.520**	**99.95**	**99.94**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.98**
Vial Number:	**37**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 03:45**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

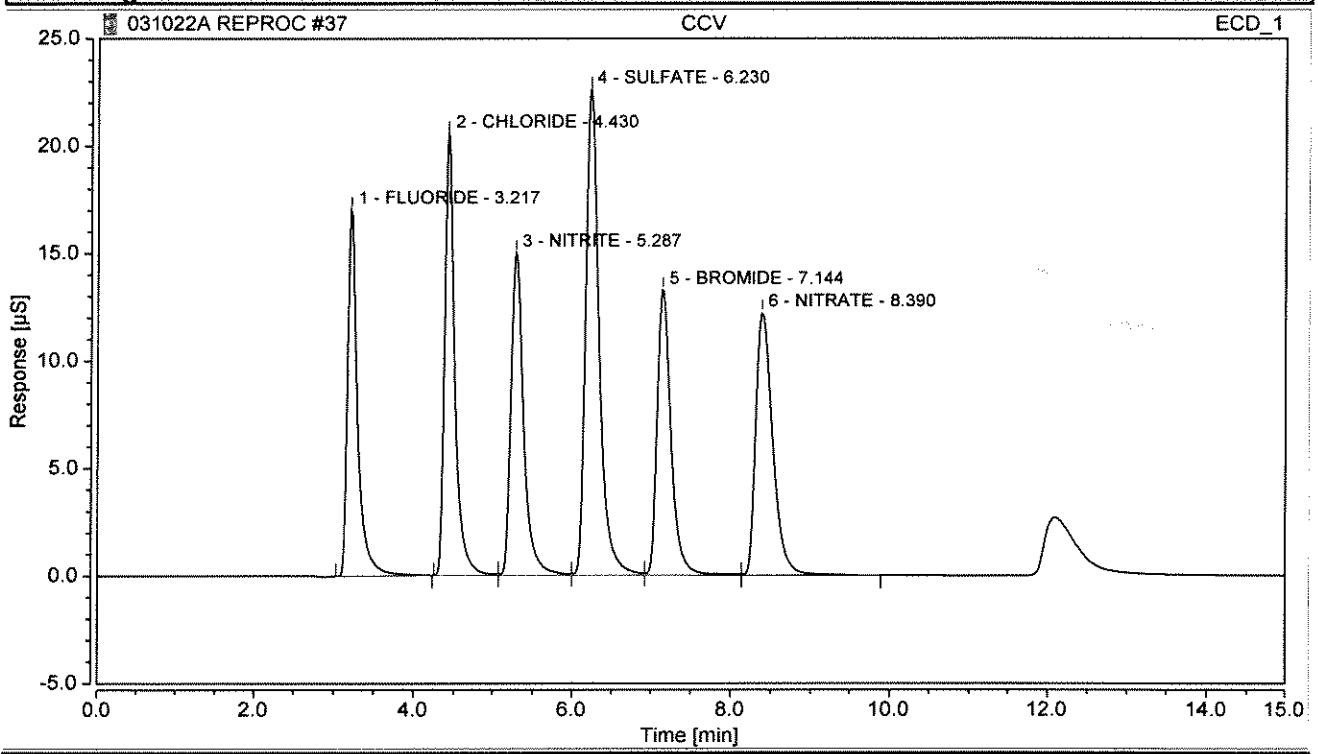
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.217	2.519	17.077	13.53	16.94	5.0965	1.9308
2	CHLORIDE	4.430	3.041	20.565	16.34	20.40	10.1713	1.7134
3	NITRITE	5.287	2.768	15.023	14.87	14.90	4.2204	5.5100
4	SULFATE	6.230	4.528	22.620	24.33	22.44	20.0761	0.3803
5	BROMIDE	7.144	2.730	13.287	14.67	13.18	20.6169	3.0846
6	NITRATE	8.390	3.028	12.228	16.27	12.13	3.9278	-1.8038
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**18.613**	**100.801**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.98**
Vial Number:	**37**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 03:45**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

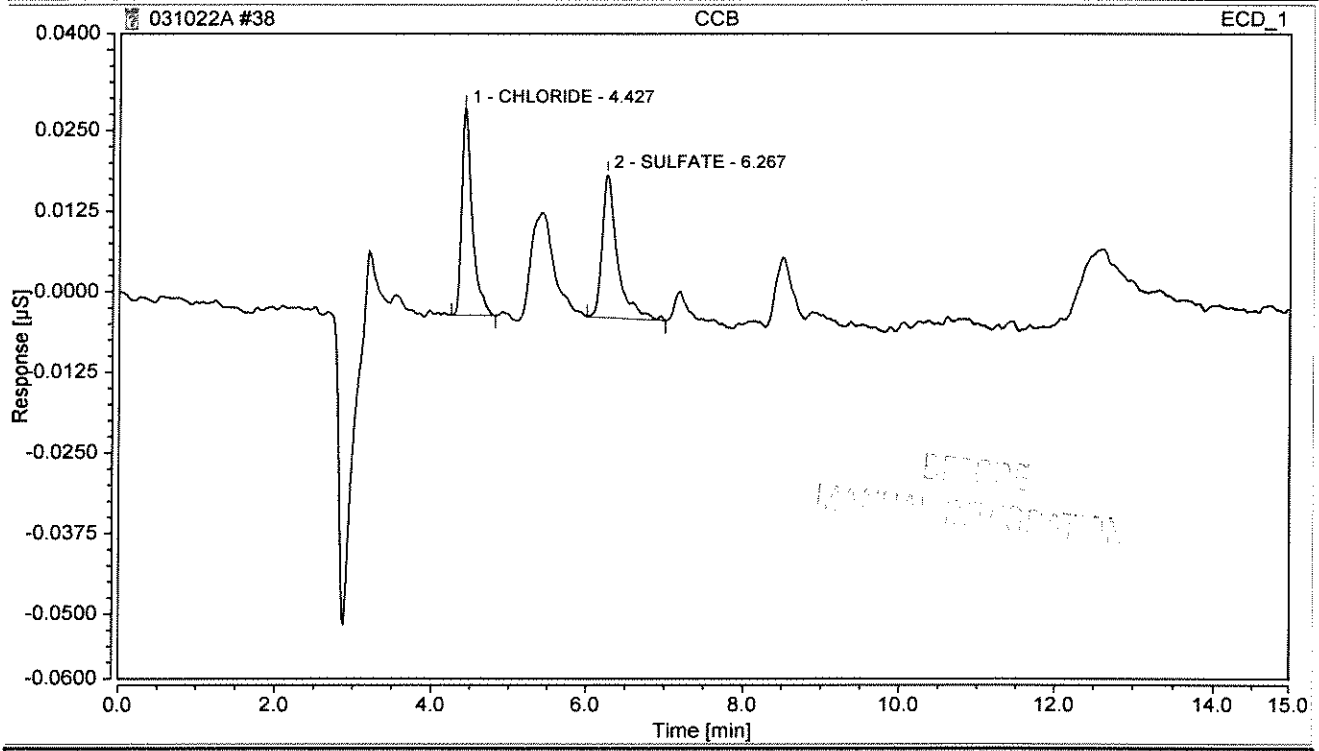
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.217	2.519	17.077	13.53	16.94	5.0965	1.9308
2	CHLORIDE	4.430	3.041	20.565	16.34	20.40	10.1713	1.7134
3	NITRITE	5.287	2.768	15.023	14.87	14.90	4.2204	5.5100
4	SULFATE	6.230	4.528	22.620	24.33	22.44	20.0761	0.3803
5	BROMIDE	7.144	2.730	13.287	14.67	13.18	20.6169	3.0846
6	NITRATE	8.390	3.028	12.228	16.27	12.13	3.9278	-1.8038
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**18.613**	**100.801**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.97**
Vial Number:	**38**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 04:06**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

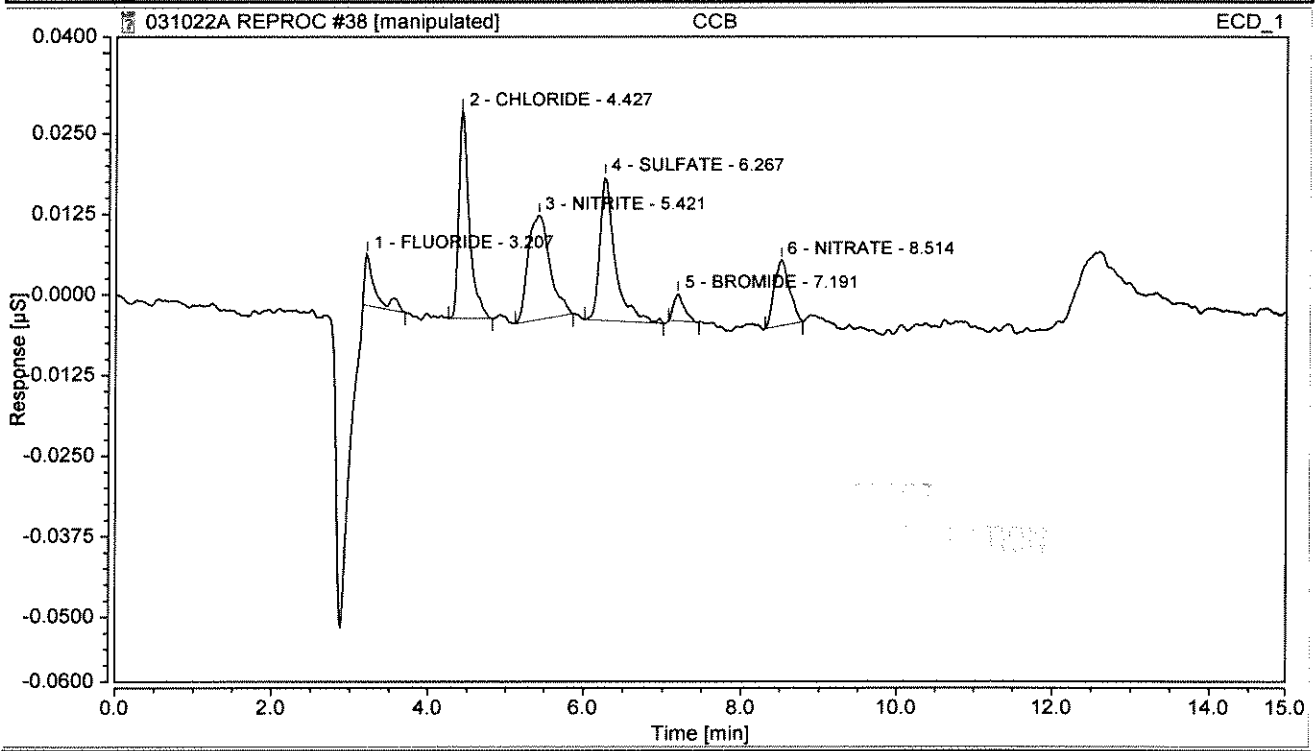
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.427	0.005	0.032	49.48	58.97	0.1038	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	6.267	0.005	0.022	50.52	41.03	0.0224	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.010**	**0.054**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.97**
Vial Number:	**38**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 04:06**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

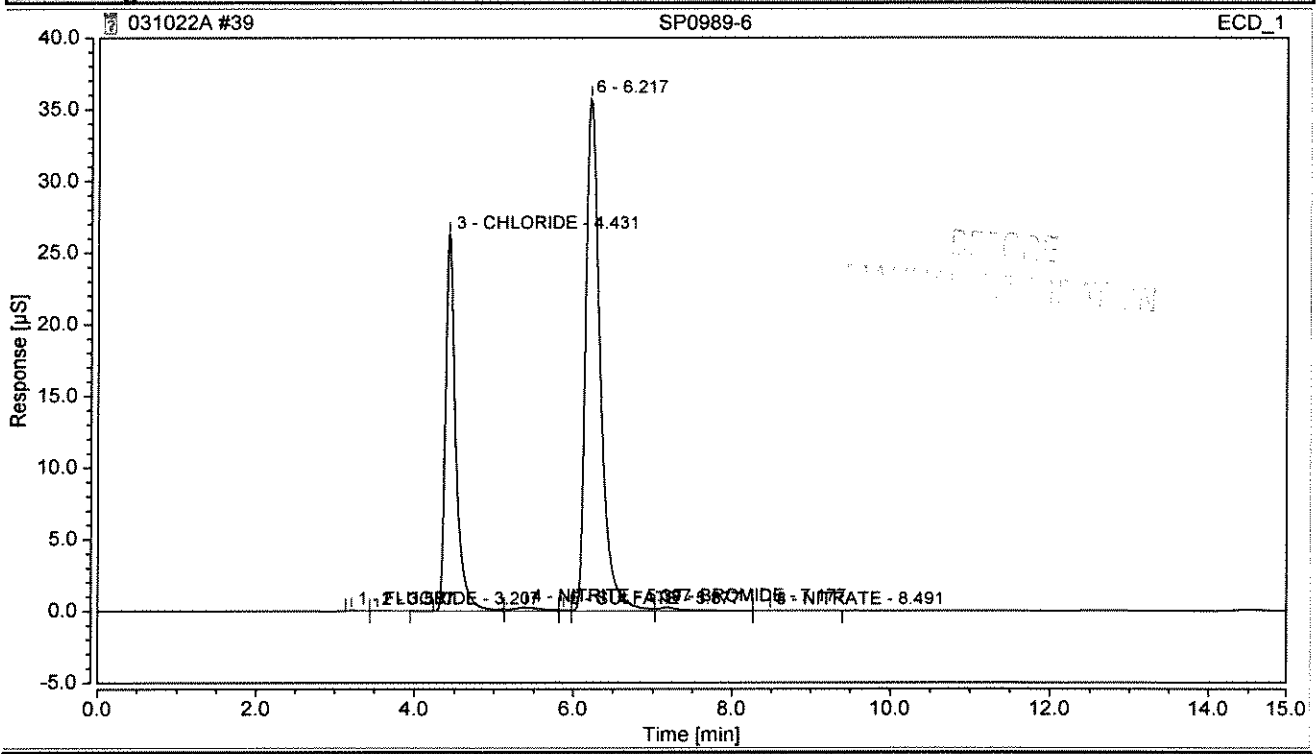
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.207	0.001	0.008	6.29	8.60	0.0025	n.a.
2	CHLORIDE	4.427	0.005	0.032	25.32	34.53	0.1038	n.a.
3	NITRITE	5.421	0.005	0.016	27.28	17.37	0.0081	n.a.
4	SULFATE	6.267	0.005	0.022	25.85	24.03	0.0224	n.a.
5	BROMIDE	7.191	0.001	0.004	3.28	4.53	0.0065	n.a.
6	NITRATE	8.514	0.002	0.010	11.99	10.93	0.0403	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.020**	**0.093**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0989-6**	*Run Time (min):*	**14.98**
Vial Number:	**39**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 04:27**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

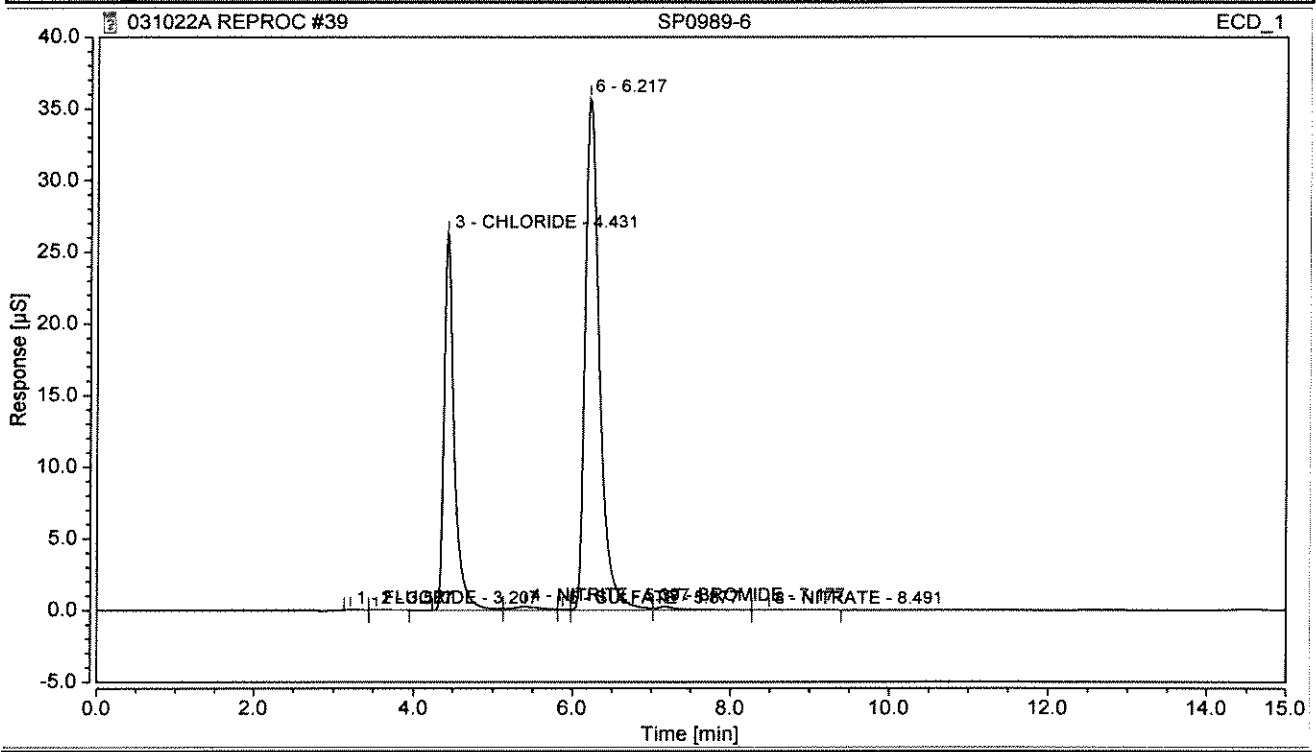
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.207	0.008	0.052	0.07	0.08	0.0158	n.a.
3	CHLORIDE	4.431	3.906	26.282	33.55	41.94	13.0391	n.a.
4	NITRITE	5.397	0.101	0.235	0.87	0.37	0.1539	n.a.
5	SULFATE	5.877	0.009	0.059	0.08	0.09	0.0393	n.a.
7	BROMIDE	7.177	0.081	0.240	0.70	0.38	0.3721	n.a.
8	NITRATE	8.491	0.007	0.018	0.06	0.03	0.0467	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.112**	**26.885**	**35.32**	**42.90**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0989-6**	*Run Time (min):*	**14.98**
Vial Number:	**39**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 04:27**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

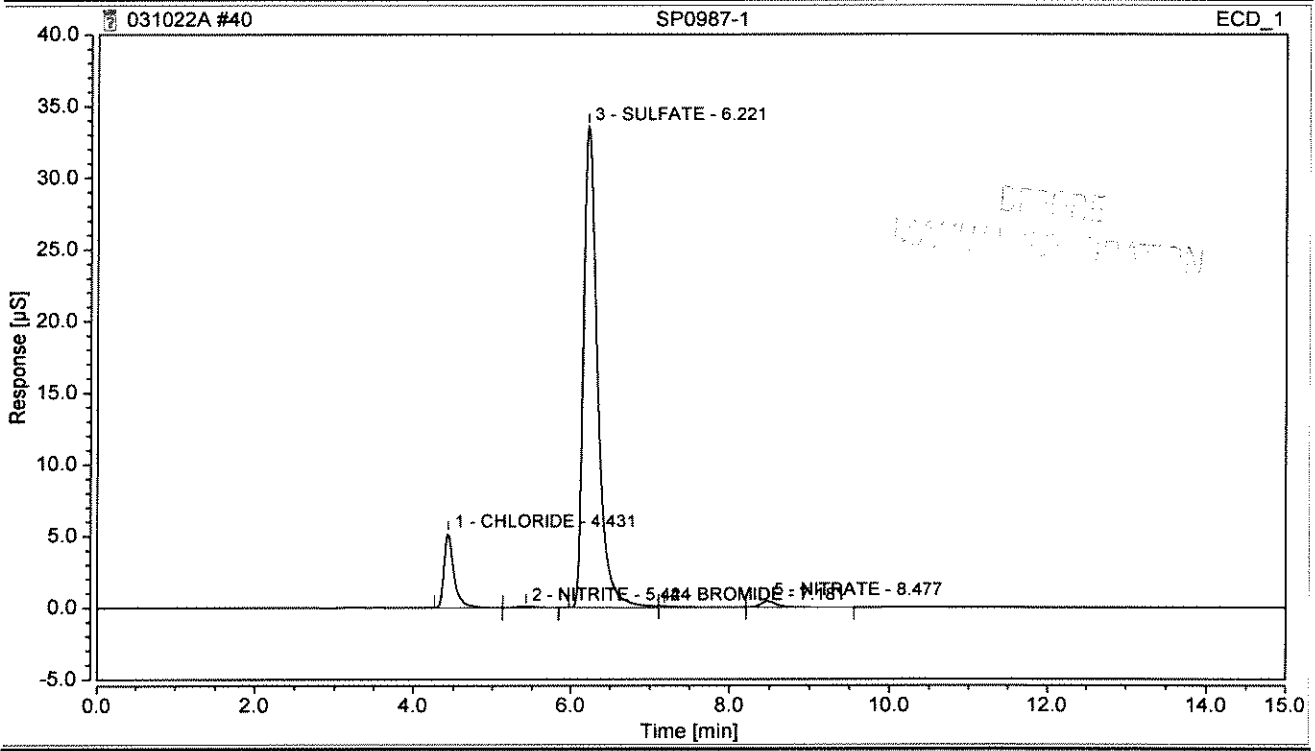
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.207	0.008	0.052	0.07	0.08	0.0158	n.a.
3	CHLORIDE	4.431	3.906	26.282	33.55	41.94	13.0391	n.a.
4	NITRITE	5.397	0.101	0.235	0.87	0.37	0.1539	n.a.
5	SULFATE	5.877	0.009	0.059	0.08	0.09	0.0393	n.a.
7	BROMIDE	7.177	0.081	0.240	0.70	0.38	0.3721	n.a.
8	NITRATE	8.491	0.007	0.018	0.06	0.03	0.0467	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.112**	**26.885**	**35.32**	**42.90**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0987-1**	*Run Time (min):*	**14.99**
Vial Number:	**40**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**5.0**
Injection Date/Time:	**11/Mar/22 04:48**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

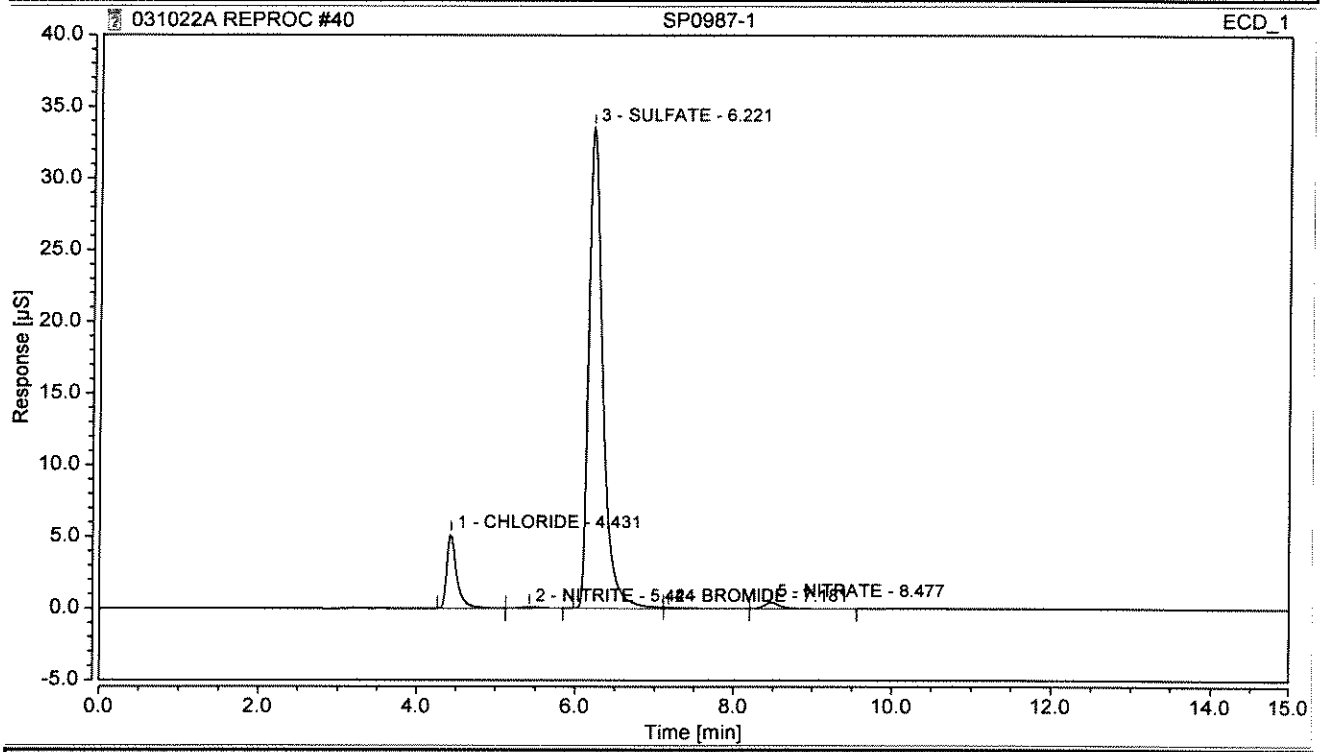
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.431	0.750	5.208	9.51	13.22	12.8781	n.a.
2	NITRITE	5.424	0.025	0.081	0.32	0.21	0.1923	n.a.
3	SULFATE	6.221	6.988	33.603	88.55	85.28	154.9282	n.a.
4	BROMIDE	7.181	0.031	0.078	0.39	0.20	0.6086	n.a.
5	NITRATE	8.477	0.097	0.432	1.24	1.10	0.8127	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.892**	**39.401**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0987-1**	*Run Time (min):*	**14.99**
Vial Number:	**40**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**5.0**
Injection Date/Time:	**11/Mar/22 04:48**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

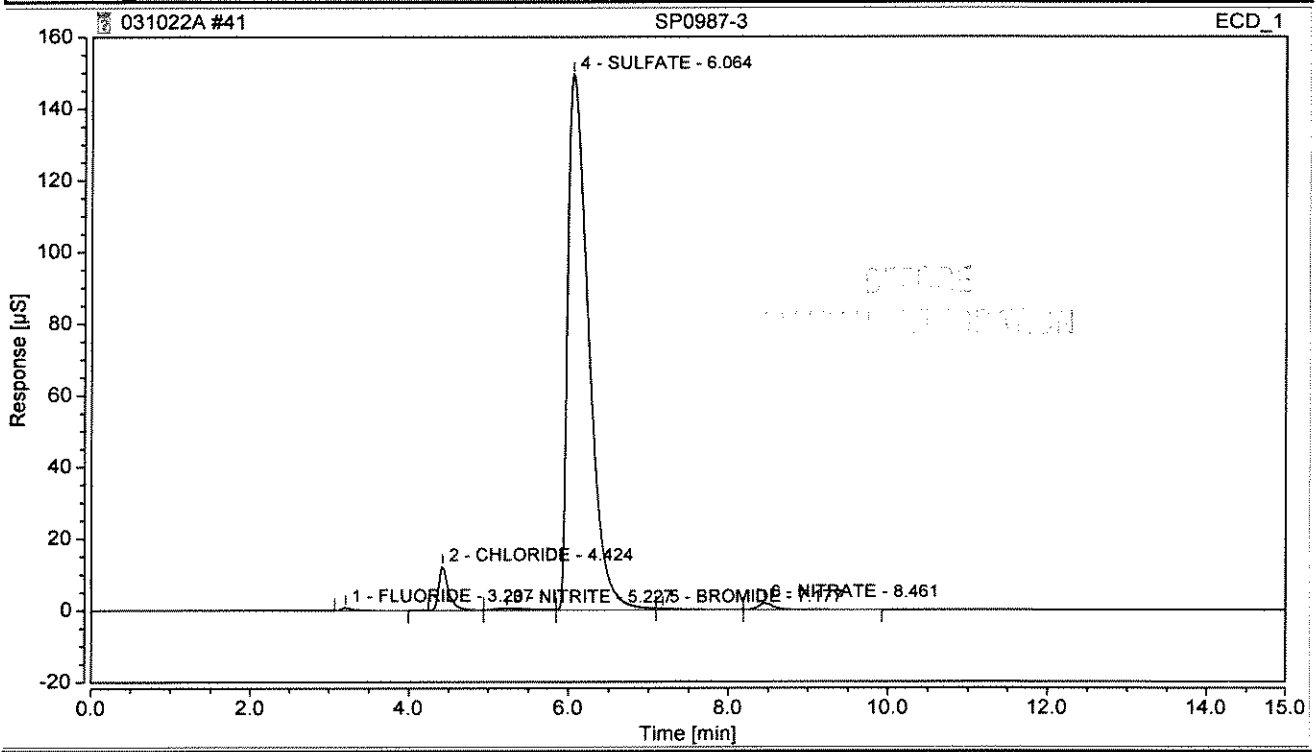
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.431	0.750	5.208	9.51	13.22	12.8781	n.a.
2	NITRITE	5.424	0.025	0.081	0.32	0.21	0.1923	n.a.
3	SULFATE	6.221	6.988	33.603	88.55	85.28	154.9282	n.a.
4	BROMIDE	7.181	0.031	0.078	0.39	0.20	0.6086	n.a.
5	NITRATE	8.477	0.097	0.432	1.24	1.10	0.8127	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.892**	**39.401**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0987-3**	*Run Time (min):*	**14.99**
Vial Number:	**41**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 05:08**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

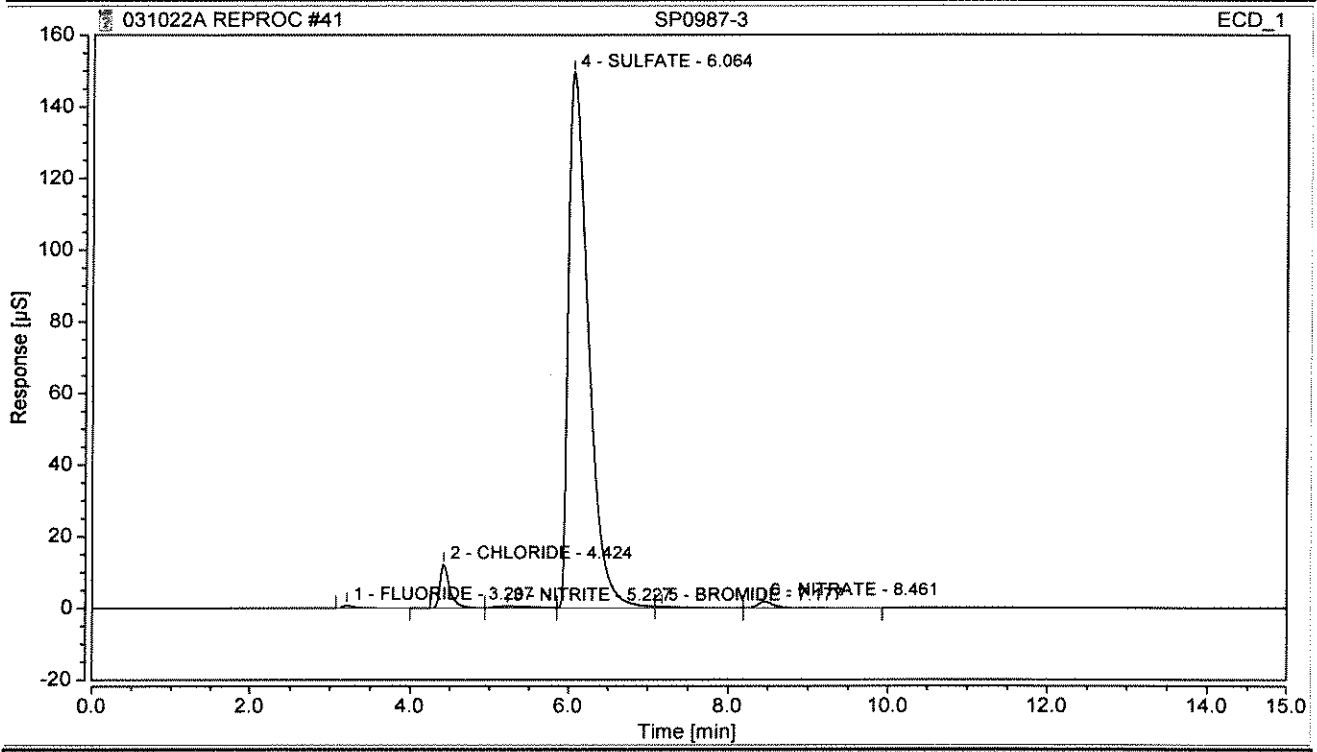
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.207	0.123	0.773	0.26	0.47	0.2496	n.a.
2	CHLORIDE	4.424	1.745	12.136	3.74	7.35	5.8723	n.a.
3	NITRITE	5.227	0.271	0.505	0.58	0.31	0.4135	n.a.
4	SULFATE	6.064	43.888	149.472	94.13	90.55	194.6001	n.a.
5	BROMIDE	7.177	0.185	0.420	0.40	0.25	0.6512	n.a.
6	NITRATE	8.461	0.414	1.775	0.89	1.07	0.5687	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**46.625**	**165.080**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0987-3**	*Run Time (min):*	**14.99**
Vial Number:	**41**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 05:08**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

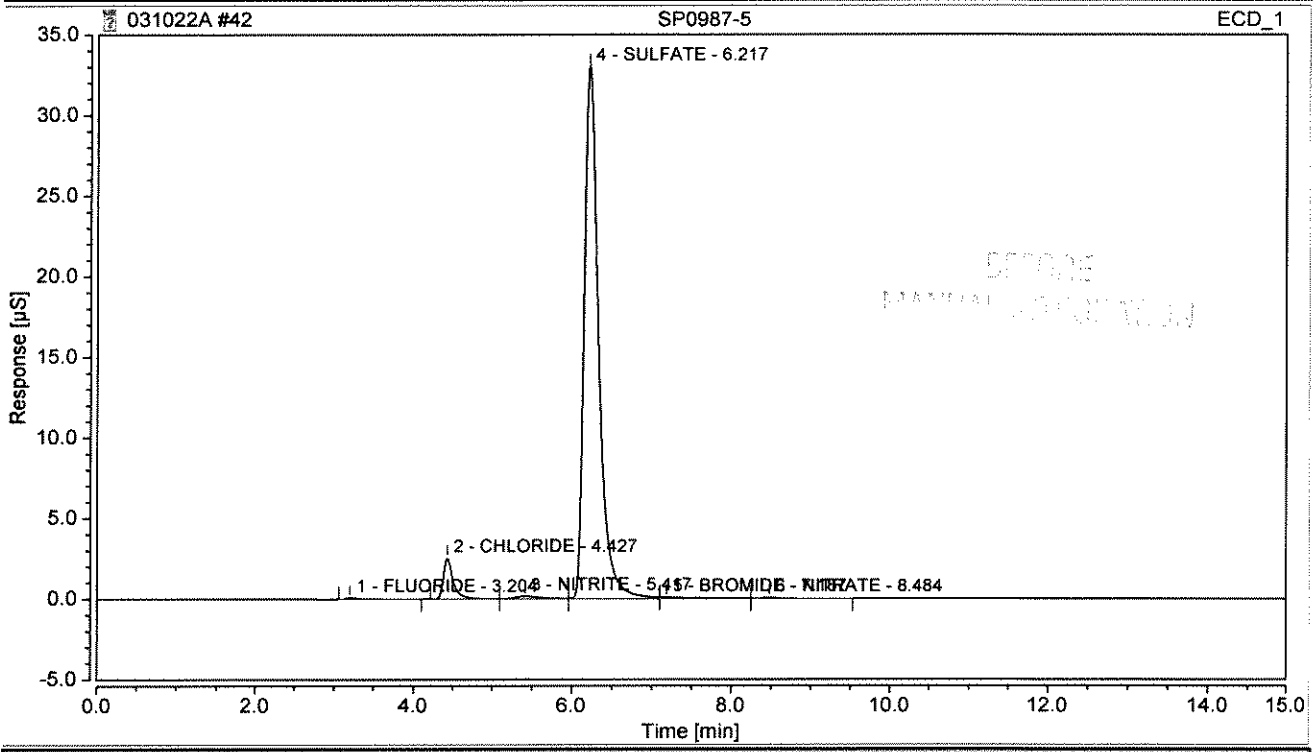
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.207	0.123	0.773	0.26	0.47	0.2496	n.a.
2	CHLORIDE	4.424	1.745	12.136	3.74	7.35	5.8723	n.a.
3	NITRITE	5.227	0.271	0.505	0.58	0.31	0.4135	n.a.
4	SULFATE	6.064	43.888	149.472	94.13	90.55	194.6001	n.a.
5	BROMIDE	7.177	0.185	0.420	0.40	0.25	0.6512	n.a.
6	NITRATE	8.461	0.414	1.775	0.89	1.07	0.5687	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**46.625**	**165.080**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0987-5**	*Run Time (min):*	**14.99**
Vial Number:	**42**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**11/Mar/22 05:29**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

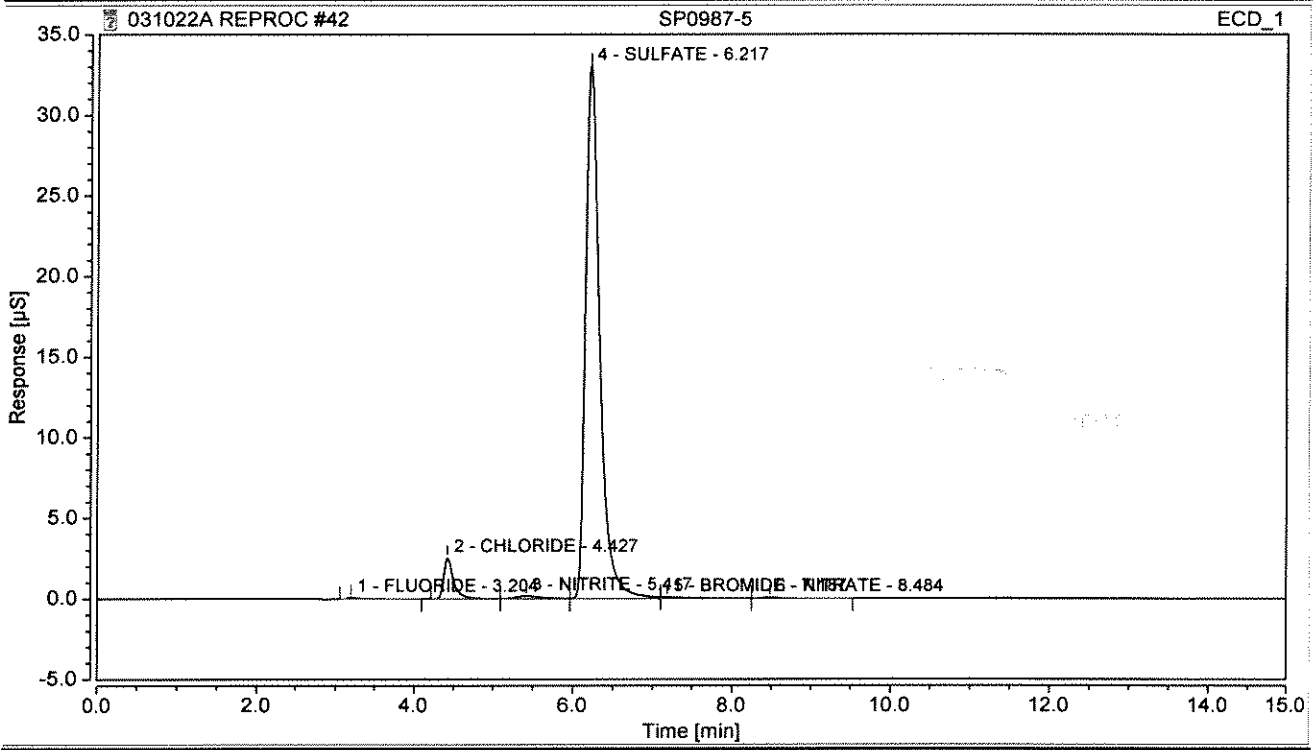
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.204	0.020	0.092	0.27	0.26	0.0821	n.a.
2	CHLORIDE	4.427	0.365	2.553	4.94	7.10	2.5940	n.a.
3	NITRITE	5.417	0.061	0.157	0.82	0.43	0.1852	n.a.
4	SULFATE	6.217	6.889	33.043	93.24	91.84	61.0935	n.a.
5	BROMIDE	7.187	0.037	0.079	0.51	0.22	0.2454	n.a.
6	NITRATE	8.484	0.016	0.057	0.22	0.16	0.1163	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.389**	**35.981**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0987-5**	*Run Time (min):*	**14.99**
Vial Number:	**42**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**11/Mar/22 05:29**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

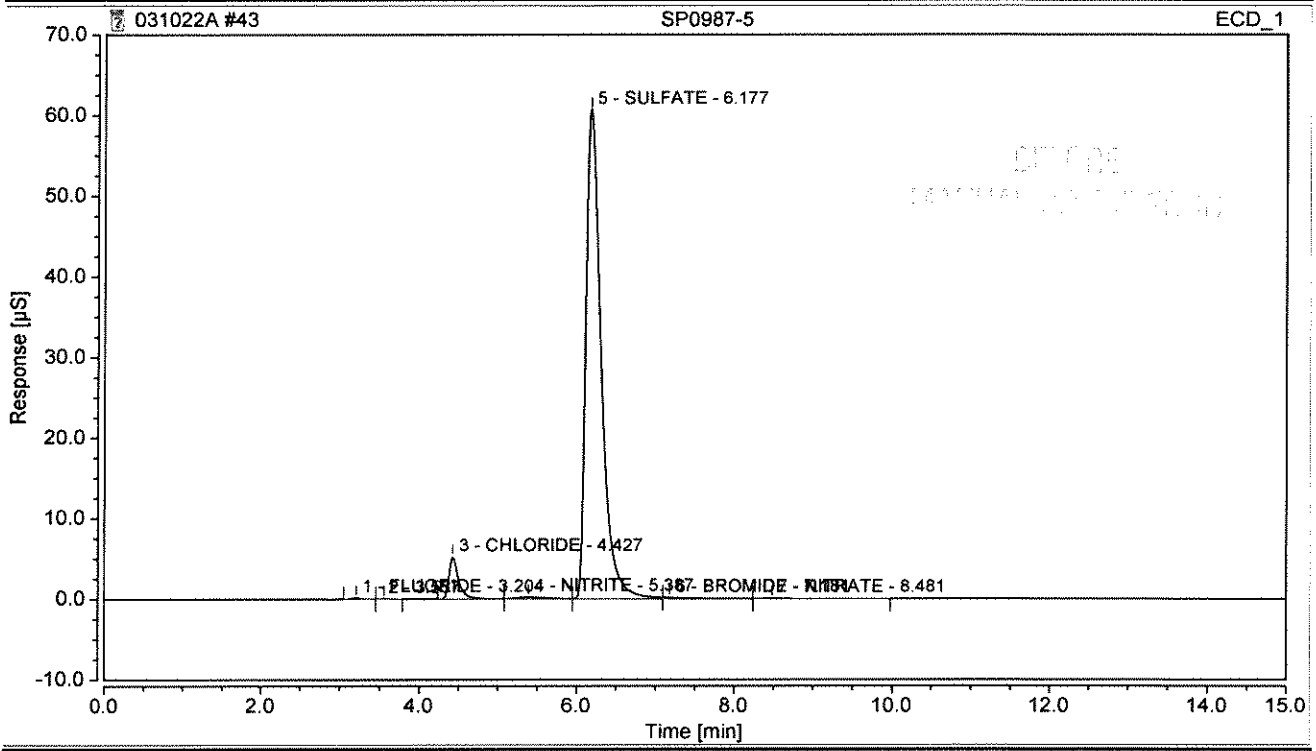
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.204	0.020	0.092	0.27	0.26	0.0821	n.a.
2	CHLORIDE	4.427	0.365	2.553	4.94	7.10	2.5940	n.a.
3	NITRITE	5.417	0.061	0.157	0.82	0.43	0.1852	n.a.
4	SULFATE	6.217	6.889	33.043	93.24	91.84	61.0935	n.a.
5	BROMIDE	7.187	0.037	0.079	0.51	0.22	0.2454	n.a.
6	NITRATE	8.484	0.016	0.057	0.22	0.16	0.1163	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.389**	**35.981**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0987-5**	*Run Time (min):*	**14.98**
Vial Number:	**43**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 05:50**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

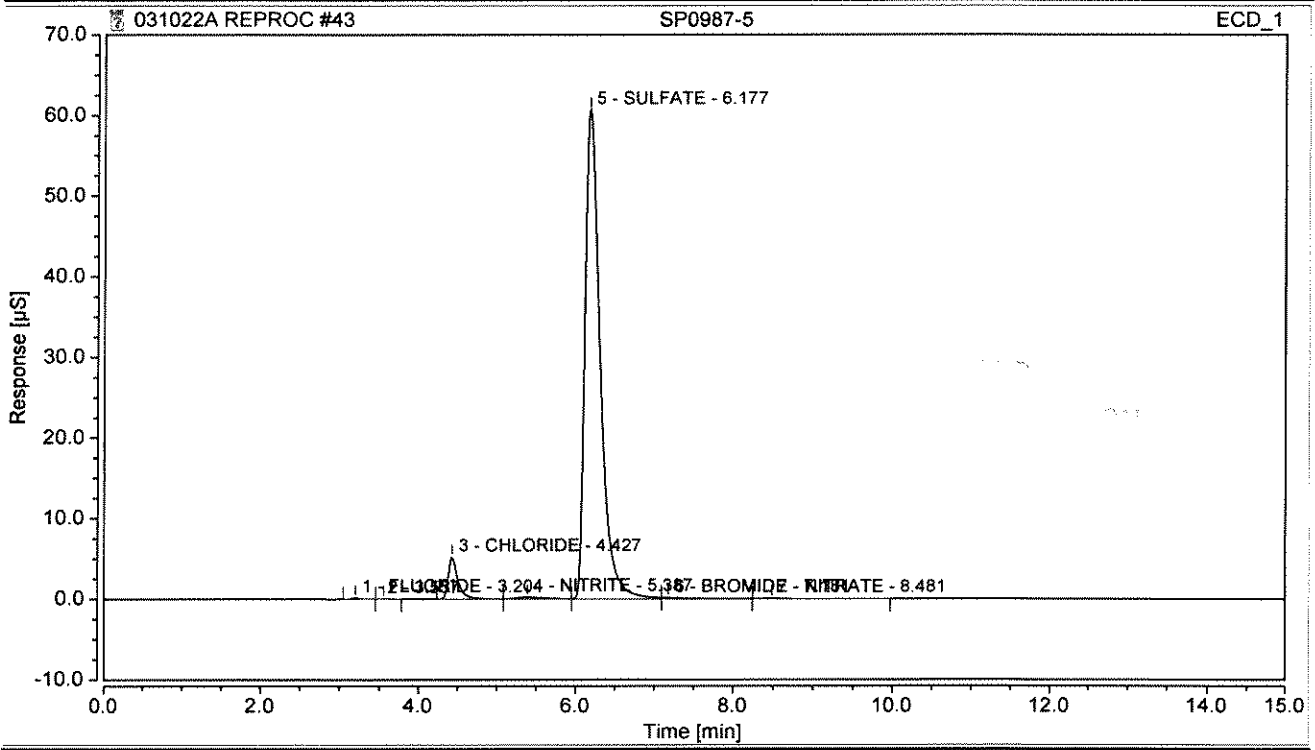
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.204	0.022	0.167	0.15	0.25	0.0444	n.a.
3	CHLORIDE	4.427	0.748	5.197	5.09	7.81	2.5677	n.a.
4	NITRITE	5.387	0.099	0.228	0.67	0.34	0.1510	n.a.
5	SULFATE	6.177	13.736	60.671	93.39	91.17	60.9061	n.a.
6	BROMIDE	7.181	0.070	0.149	0.47	0.22	0.2307	n.a.
7	NITRATE	8.481	0.028	0.088	0.19	0.13	0.0735	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.703**	**66.501**	**99.96**	**99.93**		

Chromatogram and Results

Injection Details

Injection Name:	**SP0987-5**	*Run Time (min):*	**14.98**
Vial Number:	**43**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 05:50**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

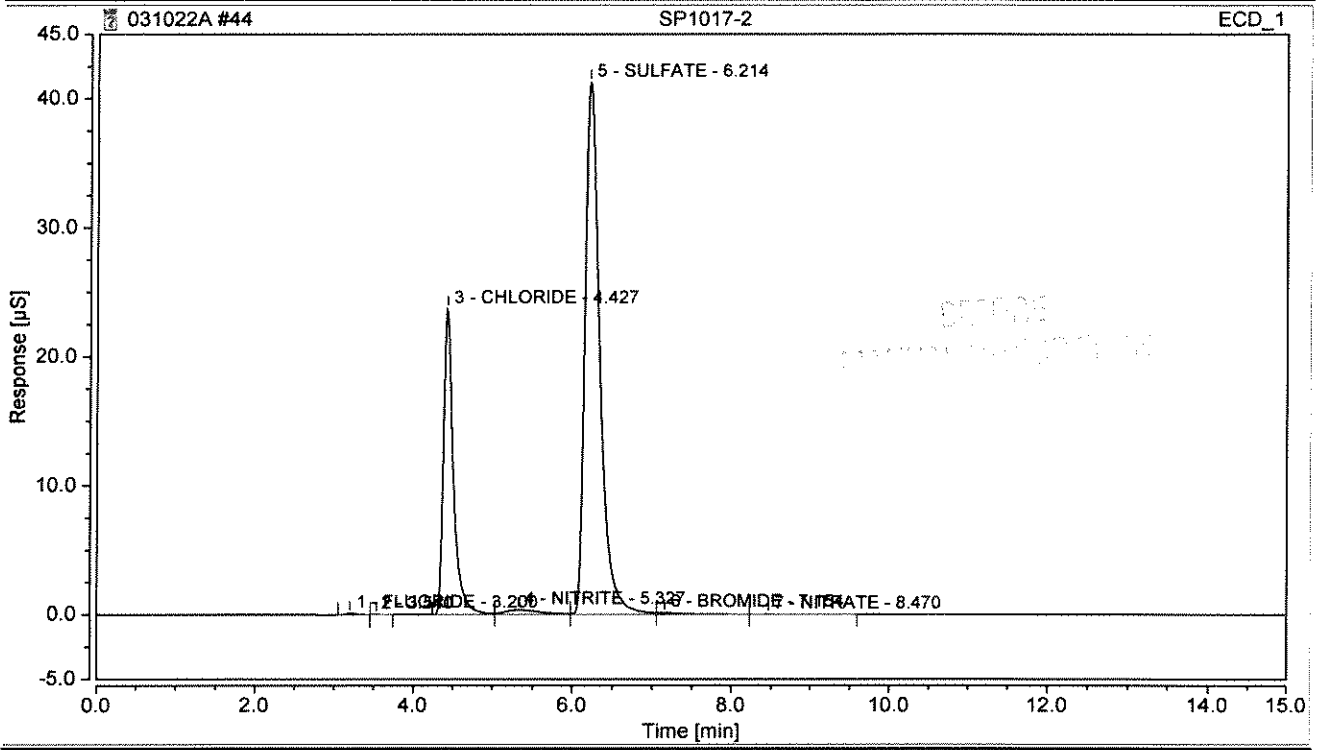
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.204	0.022	0.167	0.15	0.25	0.0444	n.a.
3	CHLORIDE	4.427	0.748	5.197	5.09	7.81	2.5677	n.a.
4	NITRITE	5.387	0.099	0.228	0.67	0.34	0.1510	n.a.
5	SULFATE	6.177	13.736	60.671	93.39	91.17	60.9061	n.a.
6	BROMIDE	7.181	0.070	0.149	0.47	0.22	0.2307	n.a.
7	NITRATE	8.481	0.028	0.088	0.19	0.13	0.0735	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.703**	**66.501**	**99.96**	**99.93**		

Chromatogram and Results

Injection Details

Injection Name:	**SP1017-2**	*Run Time (min):*	**14.99**
Vial Number:	**44**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**11/Mar/22 06:11**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

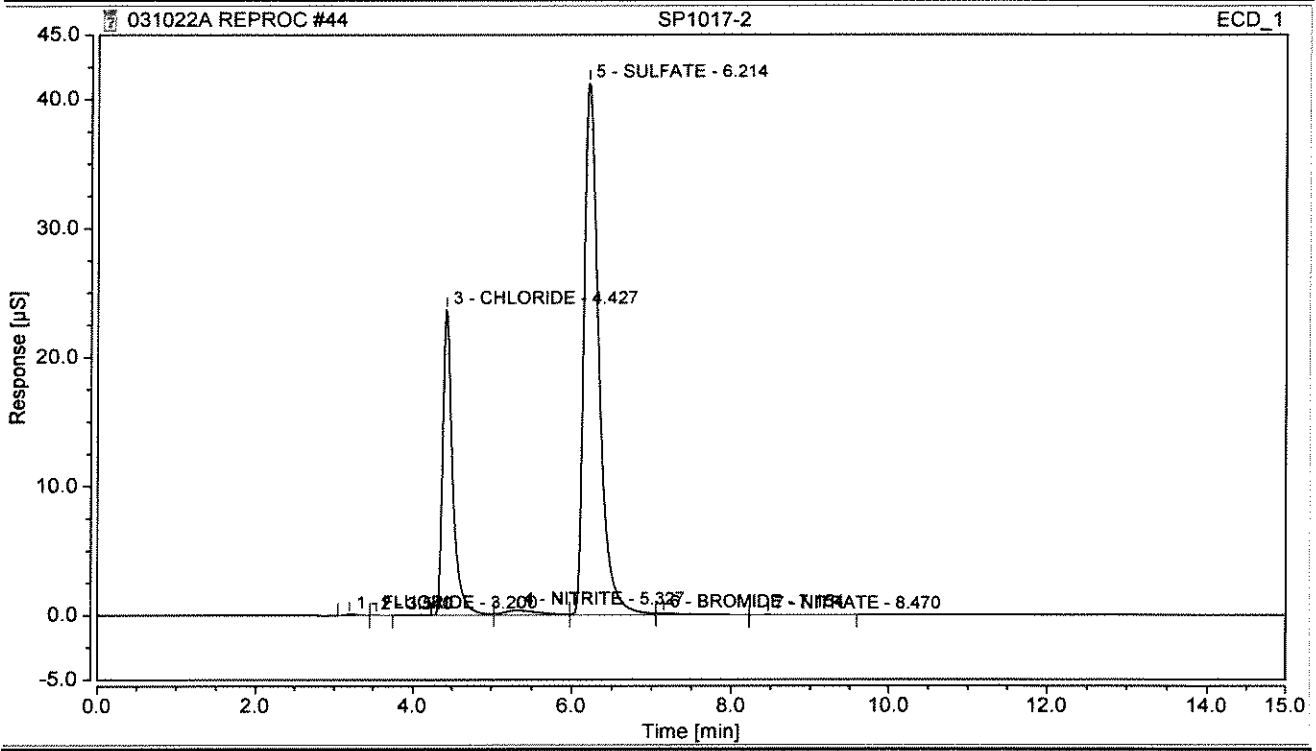
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.200	0.015	0.102	0.12	0.16	0.0597	n.a.
3	CHLORIDE	4.427	3.491	23.714	27.52	36.13	23.3245	n.a.
4	NITRITE	5.327	0.189	0.361	1.49	0.55	0.5764	n.a.
5	SULFATE	6.214	8.916	41.269	70.29	62.88	79.0708	n.a.
6	BROMIDE	7.154	0.063	0.144	0.49	0.22	0.4472	n.a.
7	NITRATE	8.470	0.010	0.021	0.08	0.03	0.1014	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.684**	**65.612**	**99.99**	**99.97**		

Chromatogram and Results

Injection Details

Injection Name:	**SP1017-2**	*Run Time (min):*	**14.99**
Vial Number:	**44**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**11/Mar/22 06:11**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

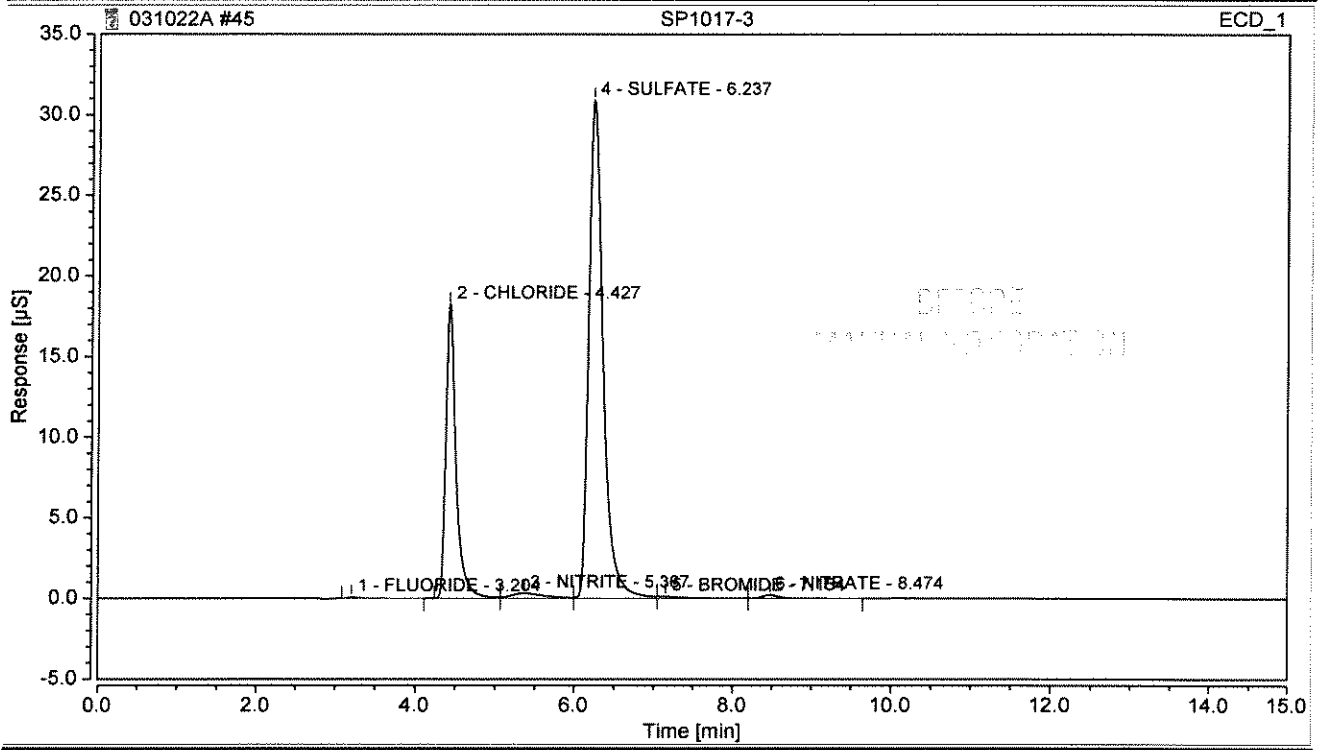
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.200	0.015	0.102	0.12	0.16	0.0597	n.a.
3	CHLORIDE	4.427	3.491	23.714	27.52	36.13	23.3245	n.a.
4	NITRITE	5.327	0.189	0.361	1.49	0.55	0.5764	n.a.
5	SULFATE	6.214	8.916	41.269	70.29	62.88	79.0708	n.a.
6	BROMIDE	7.154	0.063	0.144	0.49	0.22	0.4472	n.a.
7	NITRATE	8.470	0.010	0.021	0.08	0.03	0.1014	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.684**	**65.612**	**99.99**	**99.97**		

Chromatogram and Results

Injection Details

Injection Name:	**SP1017-3**	*Run Time (min):*	**14.99**
Vial Number:	**45**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**11/Mar/22 06:32**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

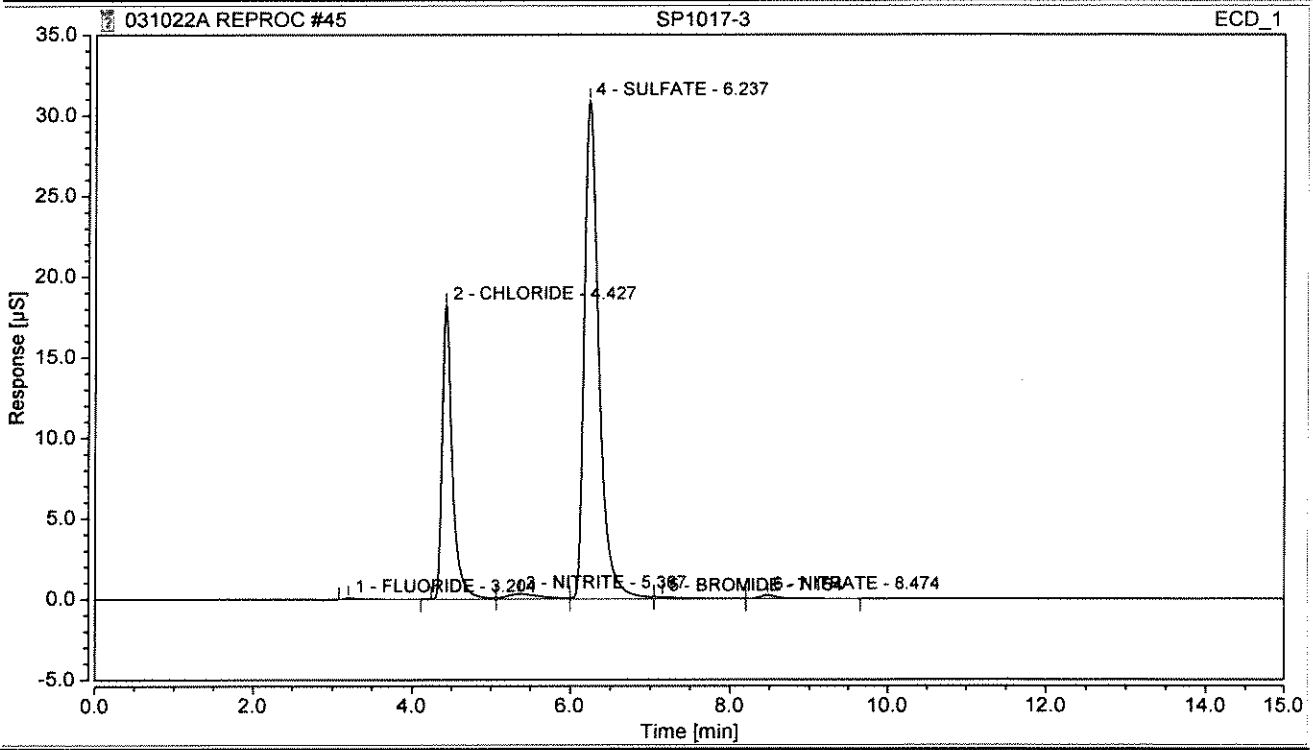
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.204	0.018	0.083	0.20	0.17	0.0748	n.a.
2	CHLORIDE	4.427	2.685	18.236	28.45	36.56	17.9831	n.a.
3	NITRITE	5.367	0.152	0.310	1.61	0.62	0.4640	n.a.
4	SULFATE	6.237	6.478	30.901	68.64	61.96	57.4500	n.a.
5	BROMIDE	7.154	0.050	0.122	0.53	0.24	0.3776	n.a.
6	NITRATE	8.474	0.054	0.221	0.57	0.44	0.2136	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.438**	**49.873**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP1017-3**	*Run Time (min):*	**14.99**
Vial Number:	**45**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**11/Mar/22 06:32**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

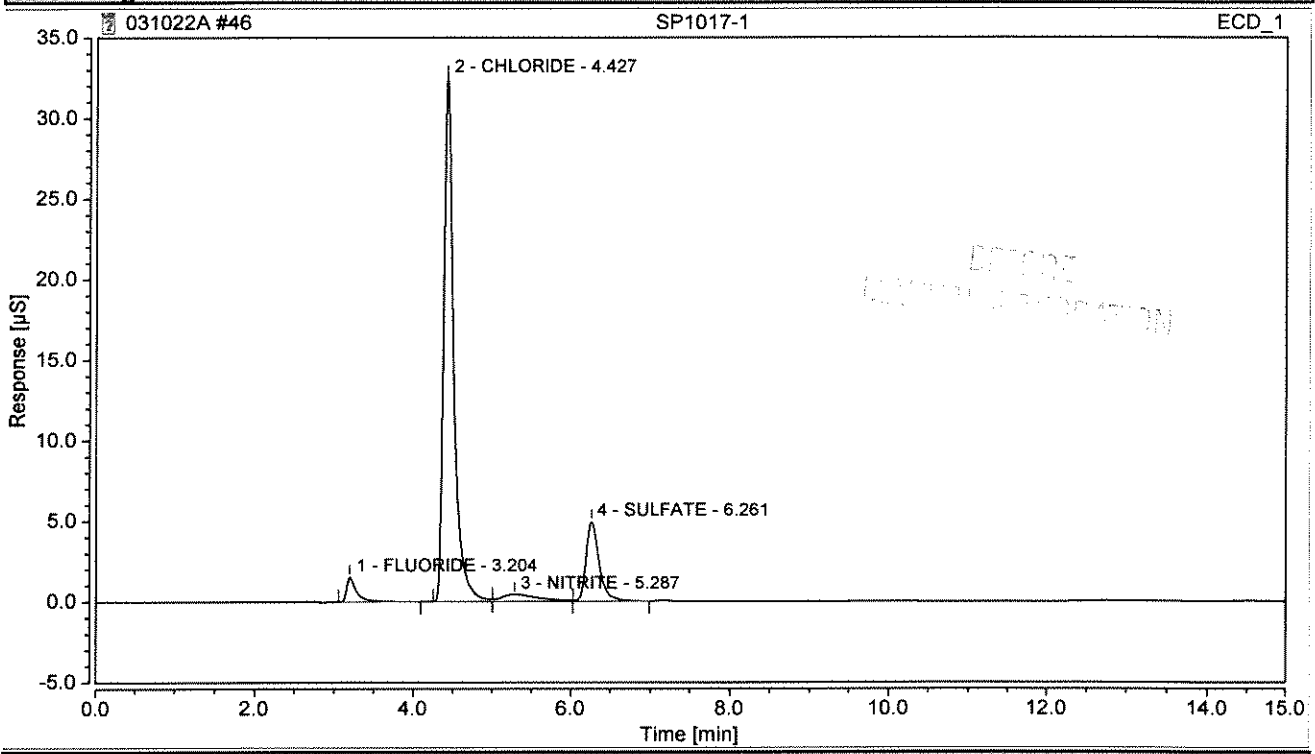
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.204	0.018	0.083	0.20	0.17	0.0748	n.a.
2	CHLORIDE	4.427	2.685	18.236	28.45	36.56	17.9831	n.a.
3	NITRITE	5.367	0.152	0.310	1.61	0.62	0.4640	n.a.
4	SULFATE	6.237	6.478	30.901	68.64	61.96	57.4500	n.a.
5	BROMIDE	7.154	0.050	0.122	0.53	0.24	0.3776	n.a.
6	NITRATE	8.474	0.054	0.221	0.57	0.44	0.2136	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.438**	**49.873**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP1017-1**	*Run Time (min):*	**14.99**
Vial Number:	**46**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 06:52**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

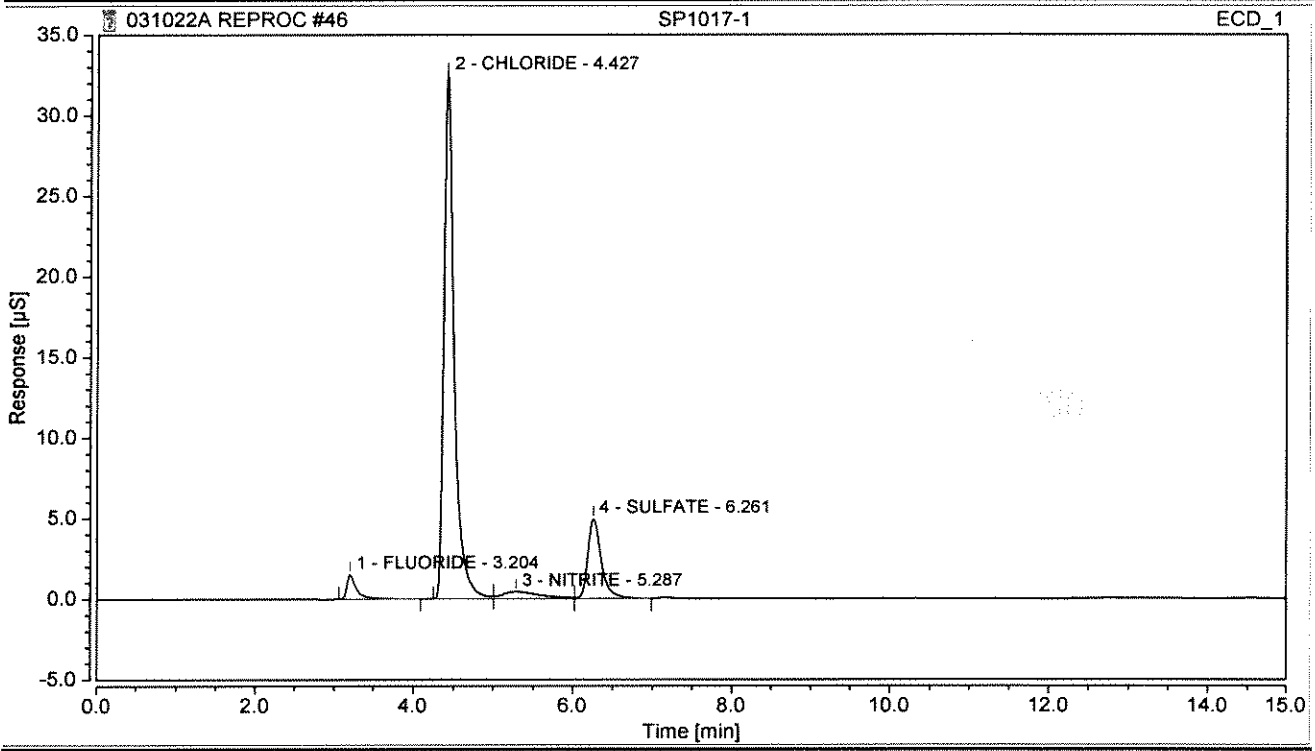
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.204	0.227	1.528	3.65	3.88	0.4587	n.a.
2	CHLORIDE	4.427	4.788	32.490	77.02	82.46	15.9633	n.a.
3	NITRITE	5.287	0.234	0.430	3.76	1.09	0.3565	n.a.
4	SULFATE	6.261	0.968	4.951	15.57	12.57	4.2913	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.216**	**39.399**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP1017-1**	*Run Time (min):*	**14.99**
Vial Number:	**46**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 06:52**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

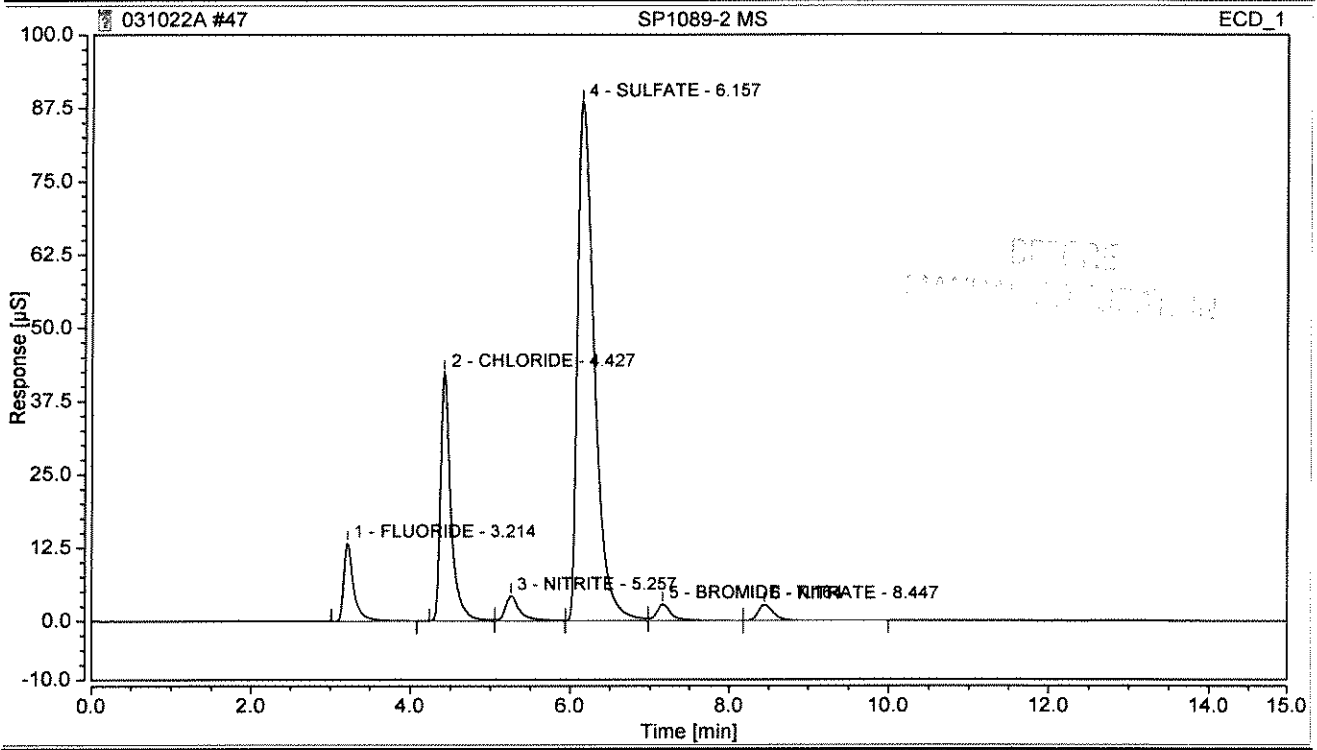
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.204	0.227	1.528	3.65	3.88	0.4587	n.a.
2	CHLORIDE	4.427	4.788	32.490	77.02	82.46	15.9633	n.a.
3	NITRITE	5.287	0.234	0.430	3.76	1.09	0.3565	n.a.
4	SULFATE	6.261	0.968	4.951	15.57	12.57	4.2913	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.216**	**39.399**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP1089-2 MS**	*Run Time (min):*	**14.99**
Vial Number:	**47**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 07:13**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

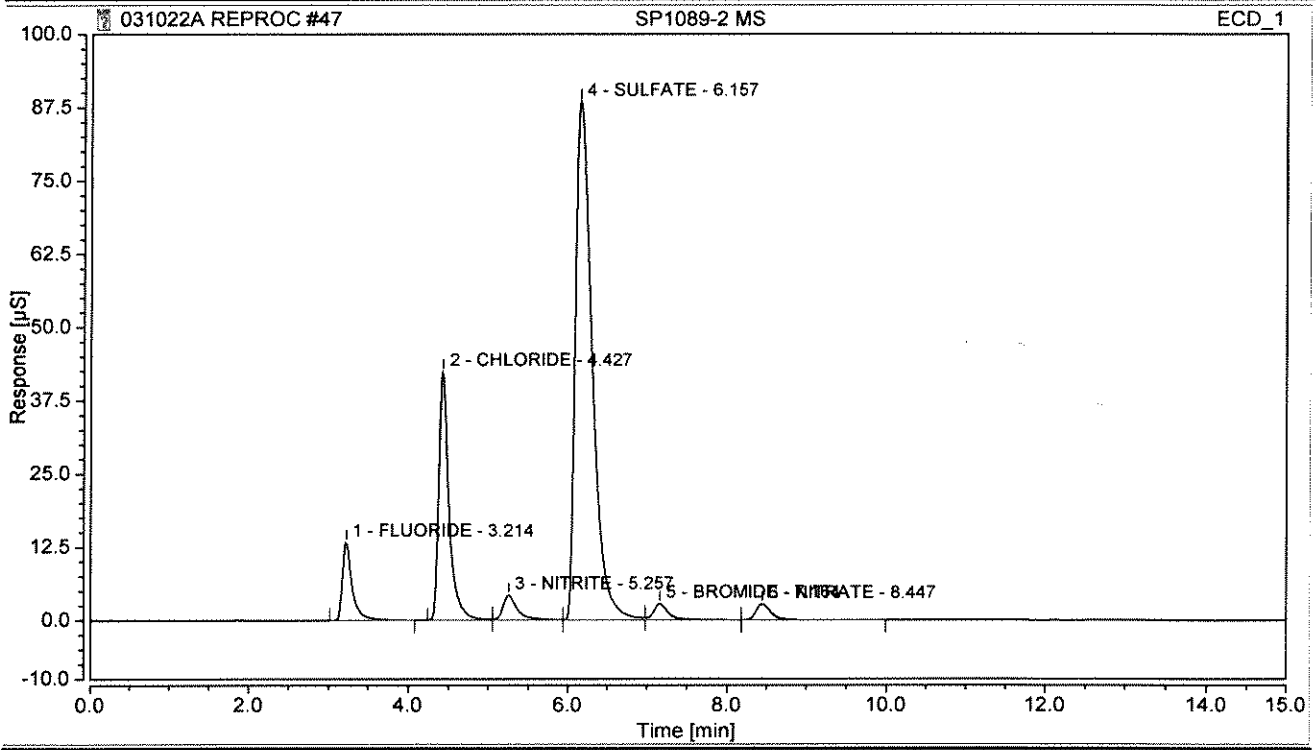
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.214	1.941	13.322	6.03	8.65	3.9269	n.a.
2	CHLORIDE	4.427	6.289	42.393	19.54	27.53	20.9404	n.a.
3	NITRITE	5.257	0.901	4.266	2.80	2.77	1.3742	n.a.
4	SULFATE	6.157	21.799	88.471	67.75	57.46	96.6584	n.a.
5	BROMIDE	7.164	0.634	2.805	1.97	1.82	4.3523	n.a.
6	NITRATE	8.447	0.613	2.714	1.91	1.76	0.8248	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**32.177**	**153.970**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP1089-2 MS**	*Run Time (min):*	**14.99**
Vial Number:	**47**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 07:13**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

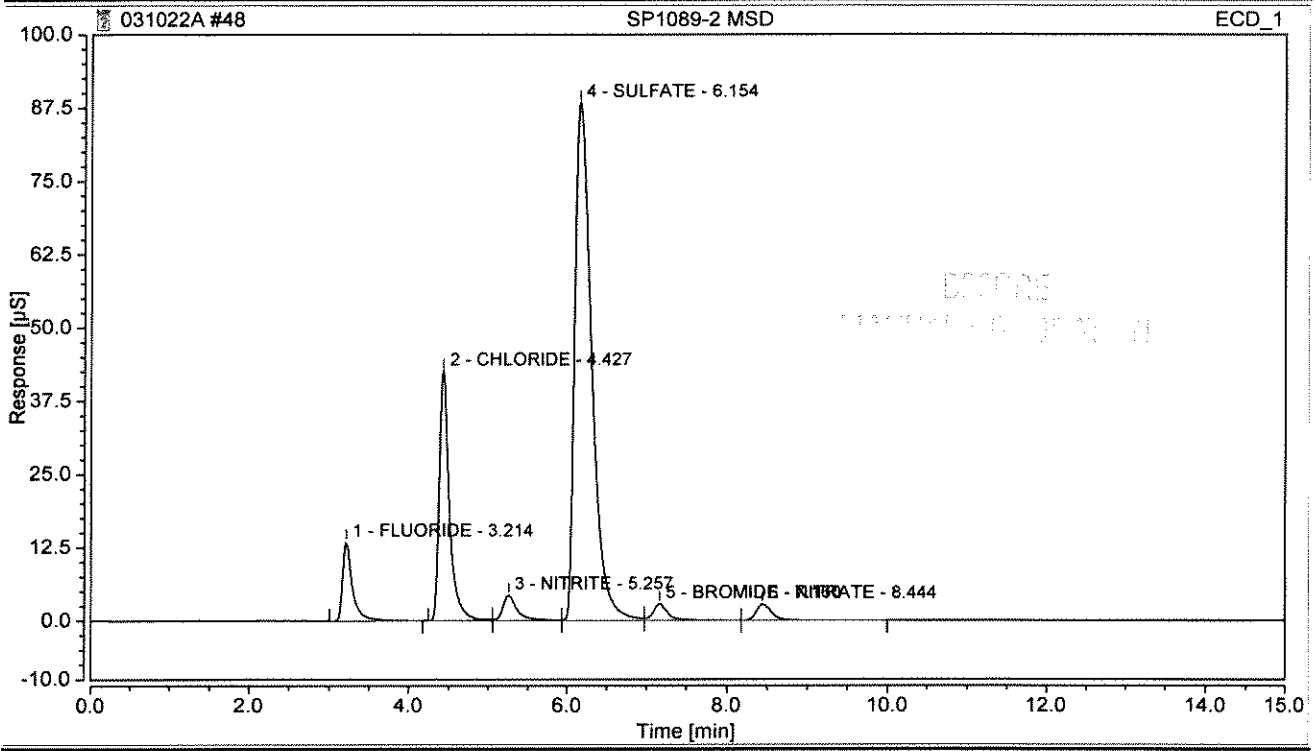
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.214	1.941	13.322	6.03	8.65	3.9269	n.a.
2	CHLORIDE	4.427	6.289	42.393	19.54	27.53	20.9404	n.a.
3	NITRITE	5.257	0.901	4.266	2.80	2.77	1.3742	n.a.
4	SULFATE	6.157	21.799	88.471	67.75	57.46	96.6584	n.a.
5	BROMIDE	7.164	0.634	2.805	1.97	1.82	4.3523	n.a.
6	NITRATE	8.447	0.613	2.714	1.91	1.76	0.8248	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**32.177**	**153.970**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP1089-2 MSD**	*Run Time (min):*	**14.99**
Vial Number:	**48**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 07:34**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

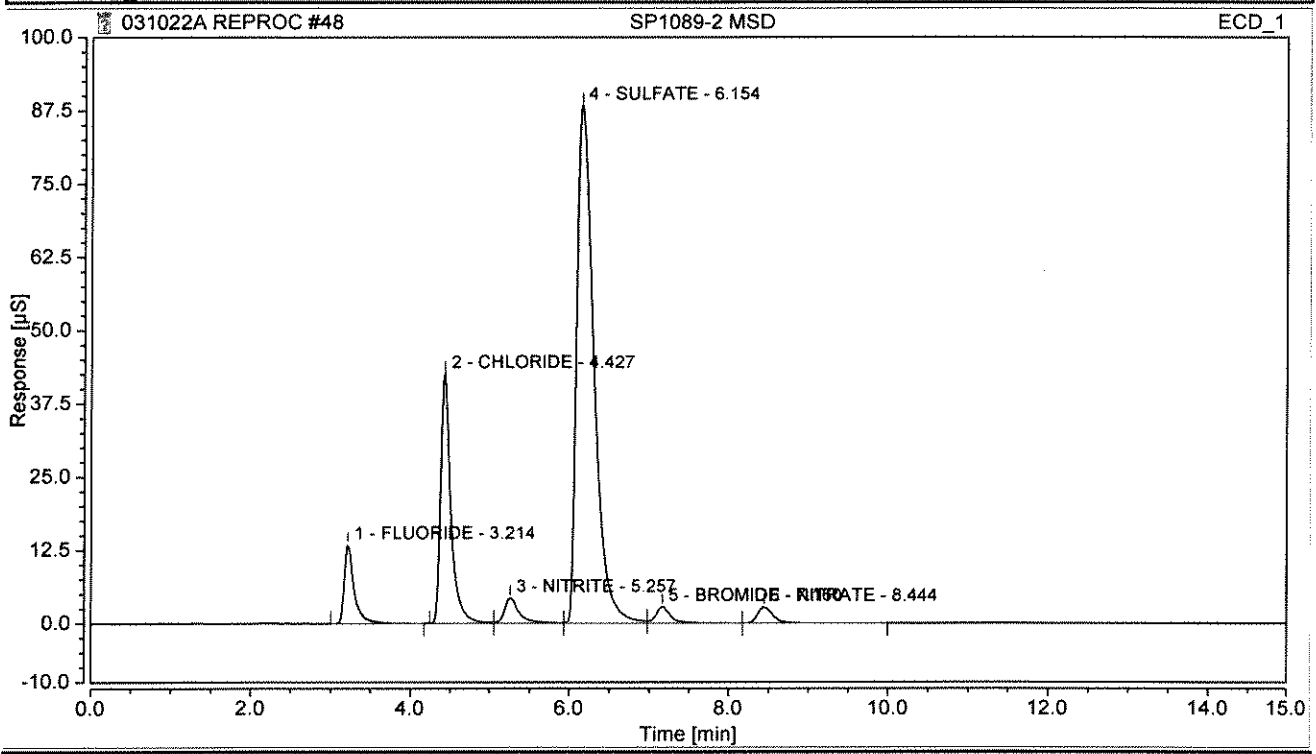
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.214	1.965	13.454	6.10	8.72	3.9759	n.a.
2	CHLORIDE	4.427	6.299	42.573	19.55	27.60	20.9751	n.a.
3	NITRITE	5.257	0.908	4.314	2.82	2.80	1.3845	n.a.
4	SULFATE	6.154	21.800	88.340	67.65	57.27	96.6619	n.a.
5	BROMIDE	7.160	0.636	2.832	1.97	1.84	4.3941	n.a.
6	NITRATE	8.444	0.619	2.743	1.92	1.78	0.8320	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**32.227**	**154.256**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SP1089-2 MSD**	*Run Time (min):*	**14.99**
Vial Number:	**48**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 07:34**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

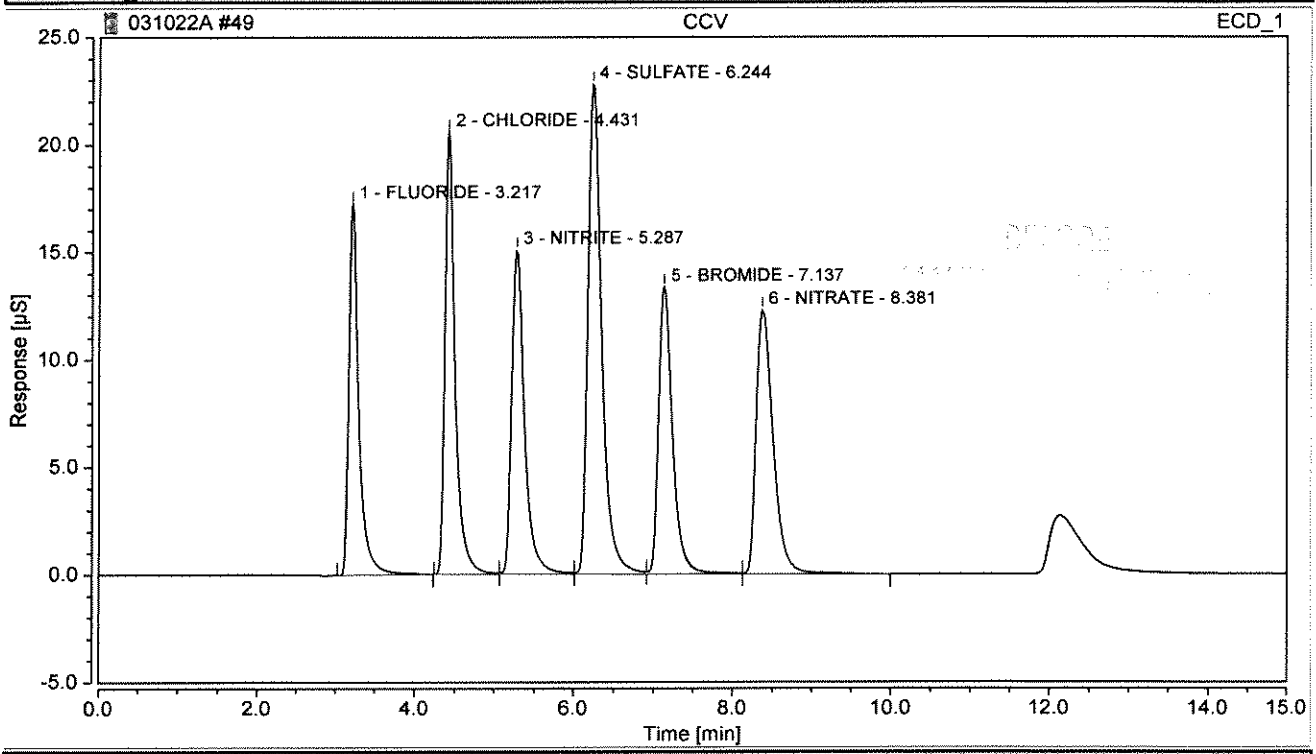
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.214	1.965	13.454	6.10	8.72	3.9759	n.a.
2	CHLORIDE	4.427	6.299	42.573	19.55	27.60	20.9751	n.a.
3	NITRITE	5.257	0.908	4.314	2.82	2.80	1.3845	n.a.
4	SULFATE	6.154	21.800	88.340	67.65	57.27	96.6619	n.a.
5	BROMIDE	7.160	0.636	2.832	1.97	1.84	4.3941	n.a.
6	NITRATE	8.444	0.619	2.743	1.92	1.78	0.8320	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**32.227**	**154.256**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.99**
Vial Number:	**49**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 07:55**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

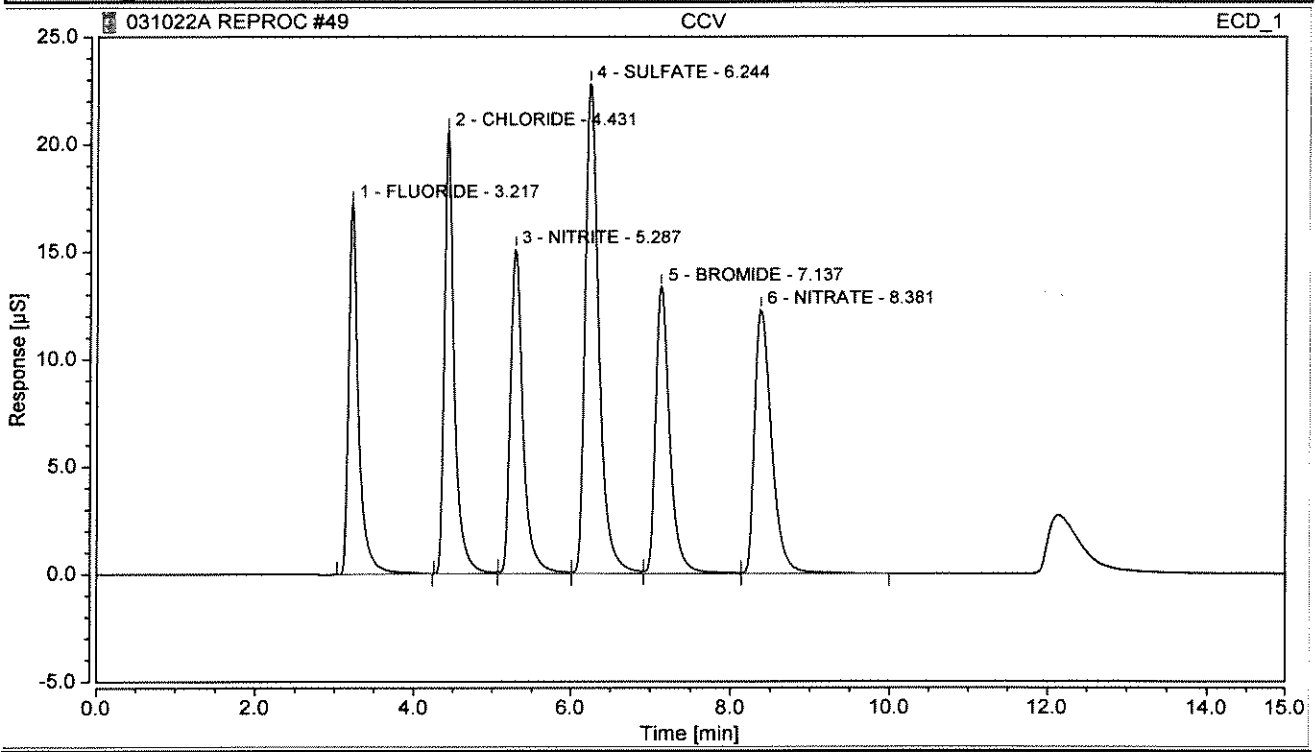
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.217	2.534	17.263	13.56	17.03	5.1284	2.5679
2	CHLORIDE	4.431	3.045	20.573	16.30	20.29	10.1850	1.8503
3	NITRITE	5.287	2.770	15.097	14.82	14.89	4.2238	5.5961
4	SULFATE	6.244	4.557	22.799	24.39	22.49	20.2066	1.0328
5	BROMIDE	7.137	2.738	13.354	14.65	13.17	20.7199	3.5997
6	NITRATE	8.381	3.041	12.290	16.28	12.12	3.9450	-1.3739
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**18.686**	**101.377**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.99**
Vial Number:	**49**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 07:55**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

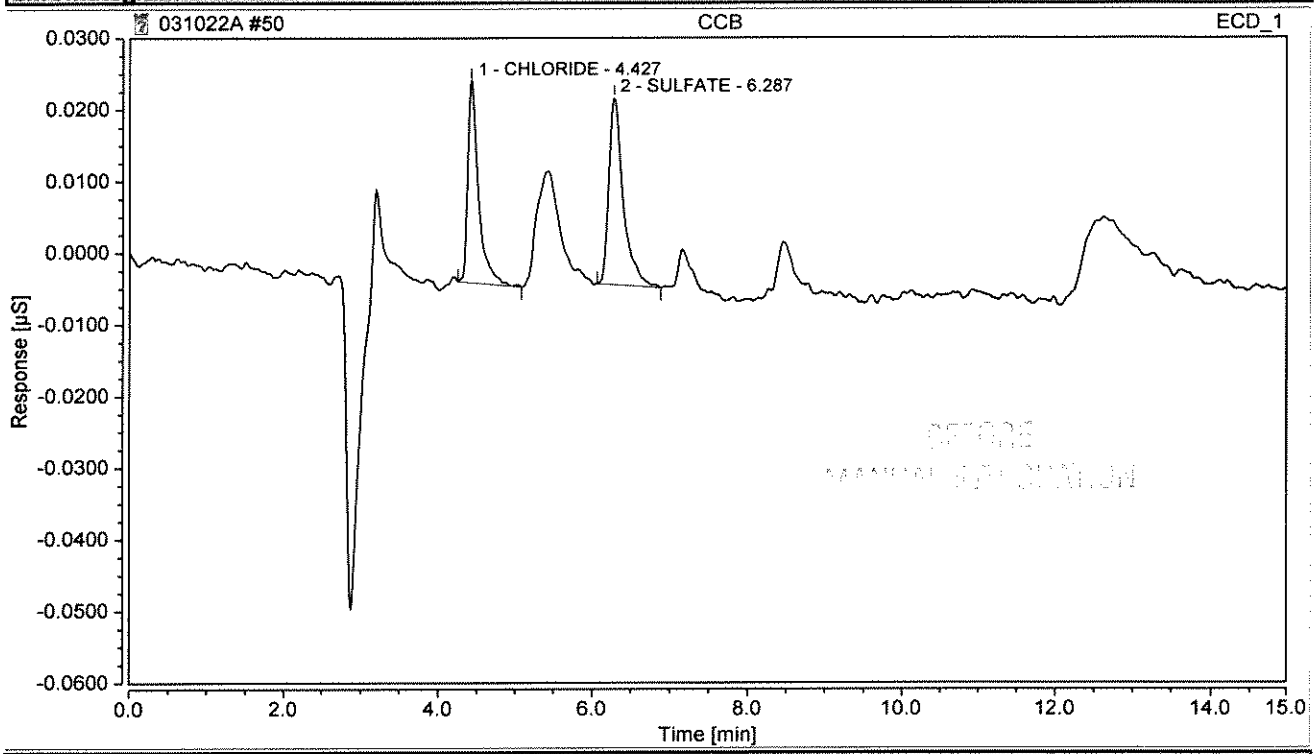
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.217	2.534	17.263	13.56	17.03	5.1284	2.5679
2	CHLORIDE	4.431	3.045	20.573	16.30	20.29	10.1850	1.8503
3	NITRITE	5.287	2.770	15.097	14.82	14.89	4.2238	5.5961
4	SULFATE	6.244	4.557	22.799	24.39	22.49	20.2066	1.0328
5	BROMIDE	7.137	2.738	13.354	14.65	13.17	20.7199	3.5997
6	NITRATE	8.381	3.041	12.290	16.28	12.12	3.9450	-1.3739
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**18.686**	**101.377**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.98**
Vial Number:	**50**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 08:16**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

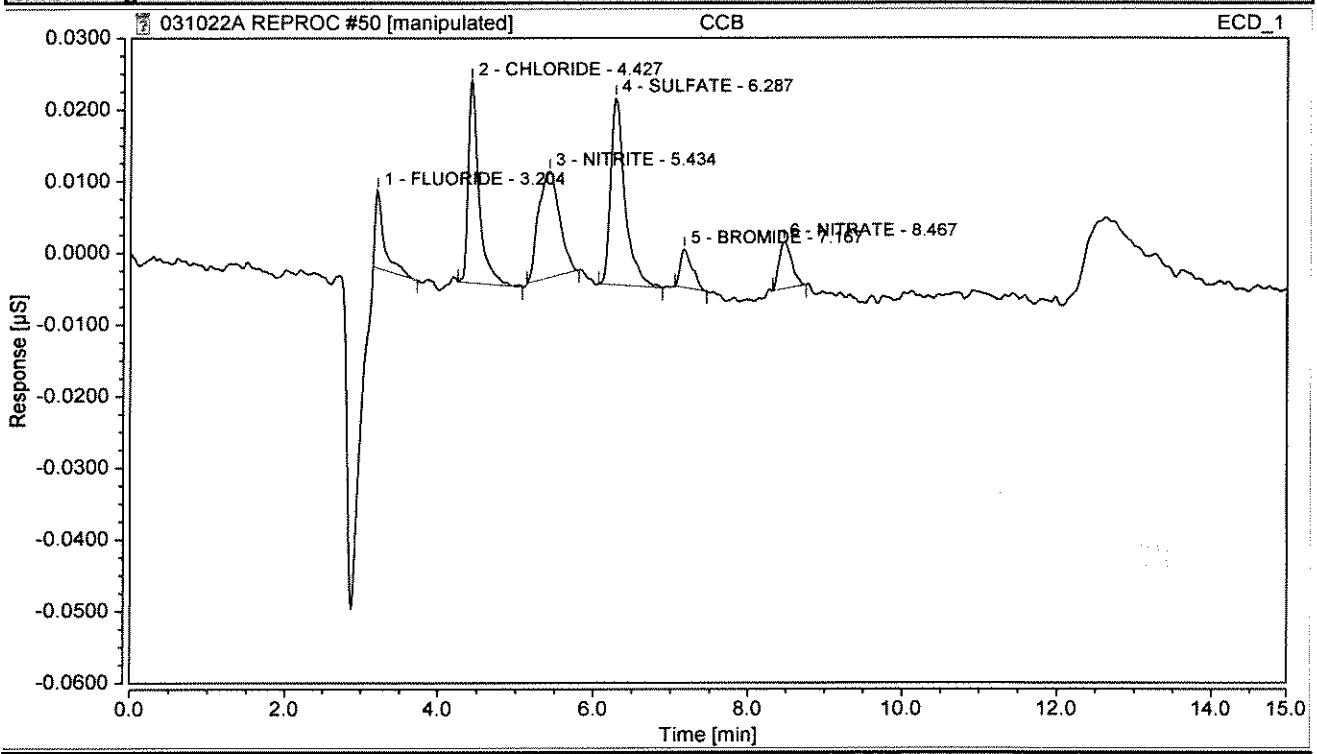
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.427	0.005	0.028	44.64	51.92	0.1024	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	6.287	0.006	0.026	55.36	48.08	0.0250	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.010**	**0.054**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.98**
Vial Number:	**50**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**11/Mar/22 08:16**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.204	0.001	0.011	7.77	11.79	0.0029	n.a.
2	CHLORIDE	4.427	0.005	0.028	24.55	30.70	0.1024	n.a.
3	NITRITE	5.434	0.005	0.015	25.37	16.15	0.0072	n.a.
4	SULFATE	6.287	0.006	0.026	30.44	28.43	0.0250	n.a.
5	BROMIDE	7.167	0.001	0.005	5.05	5.81	0.0083	n.a.
6	NITRATE	8.467	0.001	0.007	6.82	7.12	0.0389	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.019**	**0.092**	**100.00**	**100.00**		

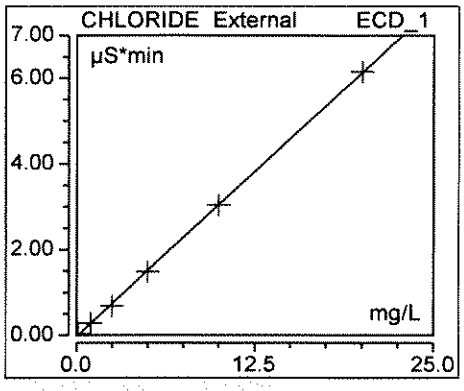
Calibration Batch Report

Sequence:	**022322A CAL REPROC**	*Injection Volume:*	**200.00**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Operator:*	**Katahdin Analytical**
Inj. Date / Time:	**23-Feb-2022 / 10:39**	*Run Time:*	**14.977167**

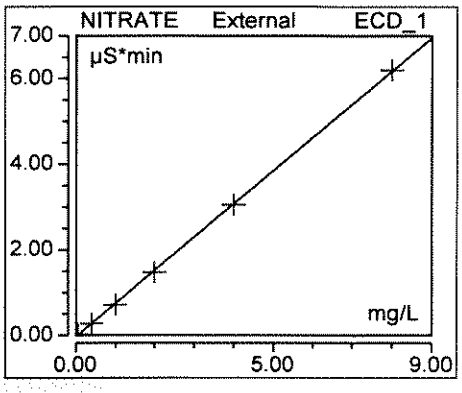
Calibration Summary

Peak Name	Eval.Type	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Coeff.Det. %
FLUORIDE	Area	Lin	6.000	0.000	0.489	0.000	99.9444
CHLORIDE	Area	in, WithOffse	7.000	-0.029	0.308	0.000	99.9754
NITRITE	Area	Lin	7.000	0.000	0.669	0.000	99.9280
SULFATE	Area	Lin	7.000	0.000	0.230	0.000	99.9792
BROMIDE	Height	Lin	6.000	0.000	0.649	0.000	99.9811
NITRATE	Area	in, WithOffse	7.000	-0.035	0.776	0.000	99.9775
		AVERAGE:		-0.0108	0.5202	0.0000	99.9643

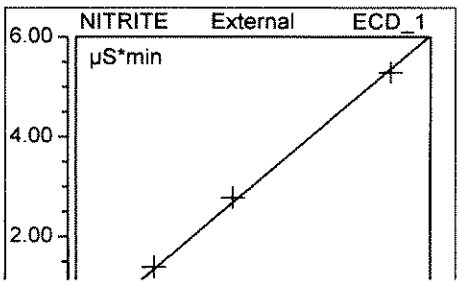
Injection Name / CHLORIDE	Ret.Time min CHLORIDE	Area µS*min CHLORIDE	Height µS CHLORIDE	Amount mg/L CHLORIDE
	ECD_1	ECD_1	ECD_1	ECD_1
CAL 1	4.454	0.0013	0.009	0.099
CAL 2	4.451	0.0244	0.159	0.174
CAL 3	4.450	0.2708	1.940	0.974
CAL 4	4.453	0.7228	5.107	2.441
CAL 5	4.450	1.4490	10.193	4.798
CAL 6	4.450	2.9588	20.489	9.697
CAL 7	4.447	6.0293	41.218	19.662
Average	4.451			
Rel. Std. Dev.	0.050 %			



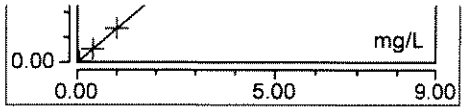
Injection Name / NITRATE	Ret.Time min NITRATE	Area µS*min NITRATE	Height µS NITRATE	Amount mg/L NITRATE
	ECD_1	ECD_1	ECD_1	ECD_1
CAL 1	8.614	0.0016	0.009	0.048
CAL 2	8.584	0.0250	0.109	0.078
CAL 3	8.567	0.2736	1.245	0.398
CAL 4	8.547	0.7338	3.271	0.991
CAL 5	8.520	1.5014	6.431	1.980
CAL 6	8.484	3.0602	12.299	3.989
CAL 7	8.417	6.2183	22.524	8.058
Average	8.533			
Rel. Std. Dev.	0.779 %			



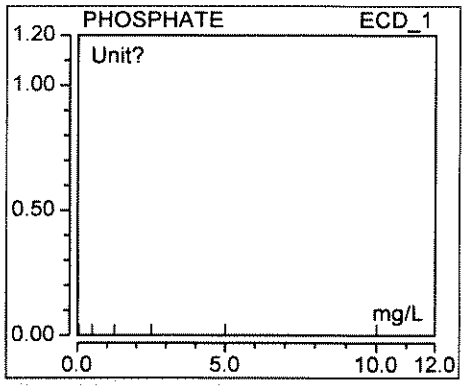
Injection Name / NITRITE	Ret.Time min NITRITE	Area µS*min NITRITE	Height µS NITRITE	Amount mg/L NITRITE
	ECD_1	ECD_1	ECD_1	ECD_1
CAL 1	5.691	0.0041	0.015	0.006
CAL 2	5.324	0.0259	0.129	0.039
CAL 3	5.324	0.2643	1.596	0.395
CAL 4	5.327	0.6947	4.151	1.038



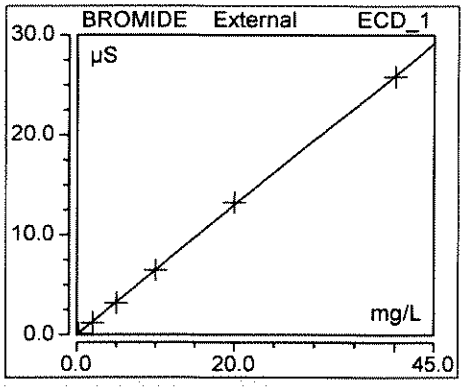
CAL 5	5.323	1.3832	8.007	2.067
CAL 6	5.327	2.7069	14.983	4.046
CAL 7	5.321	5.1818	26.751	7.744
Average	5.377			
Rel. Std. Dev.	2.576 %			



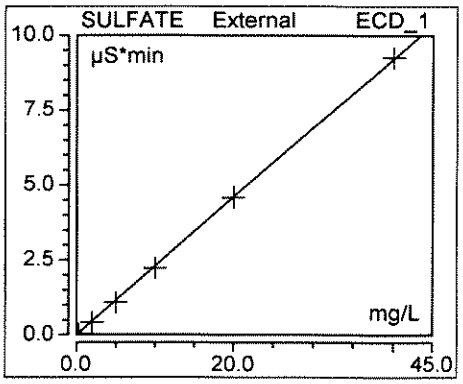
Injection Name	Ret.Time min	Area µS*min	Height µS	Amount mg/L
PHOSPHATE	PHOSPHATE	PHOSPHATE	PHOSPHATE	PHOSPHATE
	ECD_1	ECD_1	ECD_1	ECD_1
CAL 1	n.a.	n.a.	n.a.	n.a.
CAL 2	n.a.	n.a.	n.a.	n.a.
CAL 3	n.a.	n.a.	n.a.	n.a.
CAL 4	n.a.	n.a.	n.a.	n.a.
CAL 5	n.a.	n.a.	n.a.	n.a.
CAL 6	n.a.	n.a.	n.a.	n.a.
CAL 7	n.a.	n.a.	n.a.	n.a.
Average	#DIV/0!			
Rel. Std. Dev.	#DIV/0!			



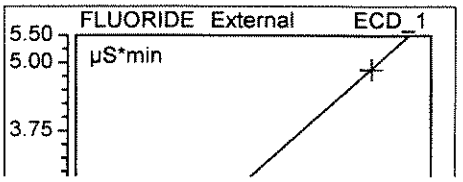
Injection Name	Ret.Time min	Area µS*min	Height µS	Amount mg/L
BROMIDE	BROMIDE	BROMIDE	BROMIDE	BROMIDE
	ECD_1	ECD_1	ECD_1	ECD_1
CAL 1	n.a.	n.a.	n.a.	n.a.
CAL 2	7.254	0.0201	0.101	0.156
CAL 3	7.244	0.2446	1.263	1.948
CAL 4	7.237	0.6507	3.380	5.211
CAL 5	7.223	1.3262	6.741	10.394
CAL 6	7.207	2.6988	13.277	20.470
CAL 7	7.167	5.4826	25.494	39.307
Average	7.222			
Rel. Std. Dev.	0.436 %			



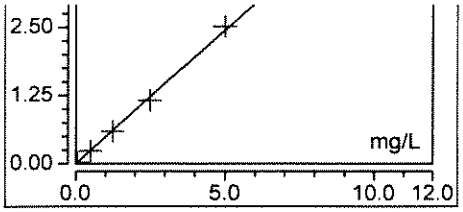
Injection Name	Ret.Time min	Area µS*min	Height µS	Amount mg/L
SULFATE	SULFATE	SULFATE	SULFATE	SULFATE
	ECD_1	ECD_1	ECD_1	ECD_1
CAL 1	6.344	0.0025	0.013	0.011
CAL 2	6.347	0.0370	0.186	0.160
CAL 3	6.340	0.4076	2.153	1.769
CAL 4	6.333	1.0965	5.725	4.758
CAL 5	6.320	2.2075	11.338	9.580
CAL 6	6.304	4.4792	22.480	19.439
CAL 7	6.267	9.0548	43.054	39.296
Average	6.322			
Rel. Std. Dev.	0.454 %			



Injection Name	Ret.Time min	Area µS*min	Height µS	Amount mg/L
FLUORIDE	FLUORIDE	FLUORIDE	FLUORIDE	FLUORIDE
	ECD_1	ECD_1	ECD_1	ECD_1
CAL 1	n.a.	n.a.	n.a.	n.a.



CAL 2	3.211	0.0195	0.131	0.040
CAL 3	3.210	0.2332	1.738	0.477
CAL 4	3.217	0.6257	4.563	1.279
CAL 5	3.220	1.2491	8.947	2.554
CAL 6	3.224	2.5054	17.172	5.123
CAL 7	3.231	4.9211	31.897	10.062
Average	3.219			
Rel. Std. Dev.	0.242 %			



Anion Summary Report

No. CHLORIDE	Name CHLORIDE	Time min CHLORIDE ECD_1	Area µS*min CHLORIDE ECD_1	Rel.Area % CHLORIDE ECD_1	Height µS CHLORIDE ECD_1	Rel.Height % CHLORIDE ECD_1	Amount mg/L CHLORIDE ECD_1
1	CAL 1	4.454	0.0013	13.30	0.01	19.01	0.0994
2	CAL 2	4.451	0.0244	16.04	0.16	19.56	0.1744
3	CAL 3	4.450	0.2708	15.99	1.94	19.53	0.9742
4	CAL 4	4.453	0.7228	15.98	5.11	19.49	2.4410
5	CAL 5	4.450	1.4490	15.89	10.19	19.73	4.7977
6	CAL 6	4.450	2.9588	16.07	20.49	20.35	9.6975
7	CAL 7	4.447	6.0293	16.34	41.22	21.59	19.6617
	Sum:	31.156	11.456	109.616	79.114	139.255	37.846
	Average:	4.451	1.637	15.659	11.302	19.894	5.407
	Rel.Std.Dev:	0.050 %	134.452 %	6.715 %	133.126 %	4.246 %	132.083 %

No. NITRATE	Name NITRATE	Time min NITRATE ECD_1	Area µS*min NITRATE ECD_1	Rel.Area % NITRATE ECD_1	Height µS NITRATE ECD_1	Rel.Height % NITRATE ECD_1	Amount mg/L NITRATE ECD_1
1	CAL 1	8.614	0.0016	17.24	0.01	19.84	0.0477
2	CAL 2	8.584	0.0250	16.49	0.11	13.31	0.0778
3	CAL 3	8.567	0.2736	16.15	1.24	12.53	0.3981
4	CAL 4	8.547	0.7338	16.22	3.27	12.49	0.9911
5	CAL 5	8.520	1.5014	16.47	6.43	12.45	1.9802
6	CAL 6	8.484	3.0602	16.62	12.30	12.21	3.9886
7	CAL 7	8.417	6.2183	16.86	22.52	11.80	8.0578
	Sum:	59.732	11.814	116.050	45.887	94.629	15.541
	Average:	8.533	1.688	16.579	6.555	13.518	2.220
	Rel.Std.Dev:	0.779 %	134.597 %	2.268 %	126.317 %	20.903 %	131.836 %

No. NITRITE	Name NITRITE	Time min NITRITE ECD_1	Area µS*min NITRITE ECD_1	Rel.Area % NITRITE ECD_1	Height µS NITRITE ECD_1	Rel.Height % NITRITE ECD_1	Amount mg/L NITRITE ECD_1
1	CAL 1	5.691	0.0041	43.09	0.01	32.78	0.0061
2	CAL 2	5.324	0.0259	17.06	0.13	15.77	0.0387
3	CAL 3	5.324	0.2643	15.60	1.60	16.06	0.3950
4	CAL 4	5.327	0.6947	15.36	4.15	15.84	1.0383
5	CAL 5	5.323	1.3832	15.17	8.01	15.50	2.0672
6	CAL 6	5.327	2.7069	14.70	14.98	14.88	4.0455
7	CAL 7	5.321	5.1818	14.05	26.75	14.01	7.7445
	Sum:	37.636	10.261	135.033	55.631	124.847	15.335
	Average:	5.377	1.466	19.290	7.947	17.835	2.191
	Rel.Std.Dev:	2.576 %	129.451 %	54.616 %	123.917 %	37.153 %	129.451 %

No. PHOSPHATE	Name PHOSPHATE	Time min PHOSPHATE ECD_1	Area µS*min PHOSPHATE ECD_1	Rel.Area % PHOSPHATE ECD_1	Height µS PHOSPHATE ECD_1	Rel.Height % PHOSPHATE ECD_1	Amount mg/L PHOSPHATE ECD_1
1	CAL 1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	CAL 2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	CAL 3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	CAL 4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	CAL 5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

6	CAL 6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	CAL 7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Sum:	0.000	0.000	0.000	0.000	0.000	0.000
	Average:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Rel.Std.Dev:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

No. BROMIDE	Name BROMIDE	Time min BROMIDE ECD_1	Area µS*min BROMIDE ECD_1	Rel.Area % BROMIDE ECD_1	Height µS BROMIDE ECD_1	Rel.Height % BROMIDE ECD_1	Amount mg/L BROMIDE ECD_1
1	CAL 1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	CAL 2	7.254	0.0201	13.21	0.10	12.40	0.1559
3	CAL 3	7.244	0.2446	14.44	1.26	12.71	1.9477
4	CAL 4	7.237	0.6507	14.38	3.38	12.90	5.2113
5	CAL 5	7.223	1.3262	14.55	6.74	13.05	10.3938
6	CAL 6	7.207	2.6988	14.66	13.28	13.18	20.4705
7	CAL 7	7.167	5.4826	14.86	25.49	13.35	39.3067
	Sum:	43.332	10.423	86.101	50.256	77.607	77.486
	Average:	7.222	1.737	14.350	8.376	12.934	12.914
	Rel.Std.Dev:	0.436 %	119.310 %	4.067 %	114.977 %	2.637 %	114.977 %

No. SULFATE	Name SULFATE	Time min SULFATE ECD_1	Area µS*min SULFATE ECD_1	Rel.Area % SULFATE ECD_1	Height µS SULFATE ECD_1	Rel.Height % SULFATE ECD_1	Amount mg/L SULFATE ECD_1
1	CAL 1	6.344	0.0025	26.37	0.01	28.36	0.0109
2	CAL 2	6.347	0.0370	24.34	0.19	22.83	0.1604
3	CAL 3	6.340	0.4076	24.06	2.15	21.67	1.7687
4	CAL 4	6.333	1.0965	24.24	5.72	21.85	4.7585
5	CAL 5	6.320	2.2075	24.21	11.34	21.95	9.5803
6	CAL 6	6.304	4.4792	24.33	22.48	22.32	19.4390
7	CAL 7	6.267	9.0548	24.55	43.05	22.55	39.2963
	Sum:	44.256	17.285	172.099	84.949	161.544	75.014
	Average:	6.322	2.469	24.586	12.136	23.078	10.716
	Rel.Std.Dev:	0.454 %	133.921 %	3.262 %	130.033 %	10.254 %	133.921 %

No. FLUORIDE	Name FLUORIDE	Time min FLUORIDE ECD_1	Area µS*min FLUORIDE ECD_1	Rel.Area % FLUORIDE ECD_1	Height µS FLUORIDE ECD_1	Rel.Height % FLUORIDE ECD_1	Amount mg/L FLUORIDE ECD_1
1	CAL 1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	CAL 2	3.211	0.0195	12.85	0.13	16.13	0.0399
3	CAL 3	3.210	0.2332	13.77	1.74	17.50	0.4768
4	CAL 4	3.217	0.6257	13.83	4.56	17.42	1.2794
5	CAL 5	3.220	1.2491	13.70	8.95	17.32	2.5541
6	CAL 6	3.224	2.5054	13.61	17.17	17.05	5.1229
7	CAL 7	3.231	4.9211	13.34	31.90	16.71	10.0624
	Sum:	19.312	9.554	81.101	64.448	102.117	19.536
	Average:	3.219	1.592	13.517	10.741	17.020	3.256
	Rel.Std.Dev:	0.242 %	116.774 %	2.714 %	112.020 %	3.082 %	116.774 %

WET CHEMISTRY BATCH REPORT
Mar 30 2022, 12:59 pm
Batch: WG315915 Run ID 1: R588466 Run ID 2: R588467

Parameter: Nitrate As N

Date Analyzed: 18-FEB-22

Analyst Initials: MH

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SP0783-1	SAMP	EPA 353.2	5.0000mL	5.0000mL	1	1.2331	1.2 mg/L	NA	.05	0.015	0.050		
SP0783-3	SAMP	EPA 353.2	5.0000mL	5.0000mL	1	.0586	0.059 mg/L	NA	.05	0.015	0.050		
WG315915-1	MBLANK	EPA 353.2	5.0000mL	5.0000mL	1	0	U0.025 mg/L	NA	.05	0.015	0.050		
WG315915-2	LCS	EPA 353.2	5.0000mL	5.0000mL	1	1.01	1.0 mg/L	NA	.05	0.015	0.050		101

Comments:

WG315915-1 SP0783-1
WG315915-2 SP0783-1

Entered by: M.H Date: 3/30/22 Accepted by: ZF Date: 3/30/22

KATAHDIN ANALYTICAL SERVICES, LLC.
Wet Chemistry Analysis Run Information Sheet

Analyte: NO3, NO2, and NO3+NO2	Analyst: MH
Instrument: LACHAT	Analysis Date: ~~3/30/22~~ 2/18/22

Were pHs of all samples adjusted to 5-9 prior to analysis?

Circle one: (Yes) No **pH Paper Lot ID:** 6105008

Were all samples checked for the presence of chlorine prior to analysis?

Circle one: (Yes) No **Chloride Paper Lot ID:** 14-860

Analytical Method (Check all that apply):

☑ EPA 353.2 ☐ SM 4500 F ☐ Other

Reagent Information: WQ315915 → RS88466

Reagent Name	Reagent ID	Expiration Date
Ammonium Chloride Buffer	**W20742**	**4/4/2022**
Sulfanilamide Color Reagent	**W20751**	**4/10/2022**
Carrier	**DI Water**	
Cadmium Reduction Column	**S/N: SWL4871**	

Standards Information:

Standard Name	Concentration (mg/L)	ID	Expiration Date
Nitrate CCV	0.5	W20777	4/18/22
Nitrite CCV	0.5	W20737	4/3/22
Nitrate ICV/LCS	1.0	W20755	4/11/22
Nitrite ICV/LCS	1.0	W20776	4/18/22
Standard #1	2.0	W20739	4/4/22
Standard #2	1.0	W20740	4/4/22
Standard #3	0.5	W20737	4/3/22
Standard #4	0.25	W20741	4/4/22
Standard# 5	0.05	W20738	4/3/22
Standard #6	0.0	DI water	N/A
Nitrate Standard	100.0	W20037	5/27/2022
Nitrite Standard	100.0	W20366	9/16/2022

Notes:

1. Matrix Spiking: To 5mL Sample Alliquot add 0.025 mL of Nitrate Standard and 0.025mL Nitrite Standard

Comments: Pipettes: W5, W3, W9, W8

MS: 200uL, 5mL 5x, 10x, & 20x Dilutions: 1mL, 5mL

2x, 4x Dilutions: 5mL 25x, 50x, 100x, 200x Dilutions: 200uL, 5mL

250x, 500x, 1000x, 2000x, 2500x Dilutions: 200uL, 1ml, 5mL

Author: wetchem

Date : 3/30/2022

Original Run Filename: OM_2-18-2022_10-28-10AM.OMN Created: 2/18/2022 10:28:10 AM
Original Run Author's Signature: [wetchem]
Current Run Filename: OM_2-18-2022_10-28-10AM.OMN Last Modified: 2/18/2022 11:27:22 AM
Current Run Author's Signature: [wetchem]
Description: Default New Run

	Sample	Channel 1 NITRATE/NITRITE Conc. (mg/L)	Area (V.s)	Height (V)	Channel 2 NITRITE Conc. (mg/L)	Area (V.s)	Height (V)	Detection Time	MDF
103.2%	CCV NO3	0.516	5.89	0.490	-0.0154	5.93e-3	1.09e-3	2/18/2022@10:29:14 AM	
	Known Conc:	0.500			0.500				
102.2%	CCV NO2	0.522	5.95	0.499	0.511	5.84	0.542	2/18/2022@10:30:22 AM	
	Known Conc:	0.500			0.500				
	CCB	-0.0126	0.106	6.52e-3	-0.0161	-2.38e-3	-6.20e-4	2/18/2022@10:31:34 AM	
	Known Conc:	0.00			0.00				
	BLANK	4.62e-5	0.245	0.0190	-0.0148	0.0118	8.84e-4	2/18/2022@10:32:44 AM	
	Known Conc:	0.00			0.00				
	NO3 LCS	1.01	11.3	0.903	-0.0146	0.0146	1.24e-3	2/18/2022@10:33:53 AM	
	Known Conc:	1.00			1.00				
	NO2 LCS	1.07	12.0	0.943	1.05	11.8	1.09	2/18/2022@10:35:03 AM	
	Known Conc:	1.00			1.00				
	SP0783-17	-0.0362	-0.152	-0.0146	2.26	25.2	4.38	2/18/2022@10:36:14 AM	
	SP0783-17 MS	-0.0308	-0.0924	-0.0146	0.617	7.01	1.10	2/18/2022@10:37:24 AM	
	SP0783-17 MSD	-0.0383	-0.174	-0.0104	-9.83e-3	0.0673	5.18e-3	2/18/2022@10:38:36 AM	
	SP0783-17	-3.50e-3	0.206	0.0316	2.06	23.0	9.54	2/18/2022@10:39:47 AM	
	SP0783-17 MS	0.178	2.19	0.162	0.204	2.44	0.189	2/18/2022@10:40:57 AM	
	SP0783-17 MSD	0.163	2.03	0.147	0.206	2.46	0.190	2/18/2022@10:42:07 AM	
	SP0783-1	1.29	14.4	1.20	0.0569	0.806	0.0718	2/18/2022@10:43:18 AM	
103%	CCV NO3	0.515	5.88	0.485	-0.0160	-1.02e-3	-9.87e-4	2/18/2022@10:44:31 AM	
	Known Conc:	0.500			0.500				
102%	CCV NO2	0.520	5.93	0.489	0.510	5.82	0.545	2/18/2022@10:45:41 AM	
	Known Conc:	0.500			0.500				
	CCB	-0.0142	0.0892	6.55e-3	-0.0152	7.70e-3	1.12e-3	2/18/2022@10:46:53 AM	
	Known Conc:	0.00			0.00				
	SP0783-17	-0.0635	-0.450	-0.0198	0.0258	0.462	0.0359	2/18/2022@10:48:05 AM	
	SP0783-5	0.907	10.2	0.801	-0.0128	0.0341	2.86e-3	2/18/2022@10:49:16 AM	
	SP0783-19	-0.0482	-0.283	-0.0136	-6.01e-3	0.110	8.82e-3	2/18/2022@10:50:26 AM	
	SP0773-1	-0.0183	0.0438	3.30e-3	-0.0150	0.0105	1.06e-3	2/18/2022@10:51:37 AM	
	SP0773-3	0.0872	1.20	0.0917	-0.0148	0.0127	8.29e-4	2/18/2022@10:52:48 AM	
	SP0773-7	0.103	1.37	0.104	-7.67e-3	0.0912	7.24e-3	2/18/2022@10:53:58 AM	
	SP0773-11	-0.0184	0.0426	2.64e-3	-0.0116	0.0477	3.60e-3	2/18/2022@10:55:08 AM	
	SP0773-13	-0.0357	-0.146	-8.07e-3	-0.0107	0.0582	5.31e-3	2/18/2022@10:56:19 AM	
	SP0773-15	0.289	3.40	0.314	0.147	1.80	0.0745	2/18/2022@10:57:30 AM	
	SP0773-17	3.05	33.6	2.53	-0.0163	-4.27e-3	-4.88e-3	2/18/2022@10:58:40 AM	
101.8%	CCV NO3	0.509	5.81	0.442	-0.0161	-1.94e-3	7.76e-3	2/18/2022@10:59:51 AM	
	Known Conc:	0.500			0.500				
103%	CCV NO2	0.526	6.00	0.461	0.515	5.88	0.546	2/18/2022@11:01:00 AM	
	Known Conc:	0.500			0.500				
	CCB	-0.0145	0.0852	5.62e-3	-0.0189	-0.0335	-1.56e-3	2/18/2022@11:02:12 AM	
	Known Conc:	0.00			0.00				
	SP0773-19	-0.0337	-0.124	-6.74e-3	4.22e-3	0.223	0.0184	2/18/2022@11:03:22 AM	
	SP0783-17	-0.0345	-0.134	-6.57e-3	0.0198	0.396	0.0336	2/18/2022@11:04:33 AM	
	SP0783-17 MS	0.290	3.42	0.223	0.221	2.62	0.214	2/18/2022@11:05:43 AM	
	SP0783-17 MSD	0.289	3.41	0.223	0.216	2.57	0.209	2/18/2022@11:06:54 AM	
	SP0773-17	1.60	17.7	1.35	-0.0145	0.0161	8.89e-4	2/18/2022@11:08:05 AM	2.00
	SP0783-3	0.0586	0.885	0.0660	-1.42e-3	0.161	0.0136	2/18/2022@11:09:15 AM	
	SP0783-7	5.26	57.7	3.71	0.0370	0.586	0.0517	2/18/2022@11:10:24 AM	
	Calibration:	Table/Fig. : 1			Table/Fig. : 2				
	SP0783-9	0.815	9.16	0.713	0.204	2.44	0.223	2/18/2022@11:11:33 AM	
	SP0783-11	-0.0386	-0.178	-8.06e-3	7.51e-3	0.259	0.0205	2/18/2022@11:12:42 AM	
	SP0783-13	-0.0359	-0.148	-7.05e-3	0.0164	0.358	0.0266	2/18/2022@11:13:52 AM	
98.6%	CCV NO3	0.493	5.63	0.444	0.0149	0.342	0.0221	2/18/2022@11:15:03 AM	
	Known Conc:	0.500			0.500				
101%	CCV NO2	0.516	5.88	0.467	0.505	5.77	0.542	2/18/2022@11:16:12 AM	
	Known Conc:	0.500			0.500				
	CCB	-0.0152	0.0784	6.15e-3	-0.0174	-0.0164	-8.95e-4	2/18/2022@11:17:25 AM	
	Known Conc:	0.00			0.00				

	SP0783-15	-0.0403	-0.197	-8.54e-3	1.63e-3	0.194	0.0155	2/18/2022@11:18:35 AM	
	SP0783-7	1.35	15.0	1.19	-4.80e-3	0.123	0.0104	2/18/2022@11:19:44 AM	5.00
100.6%	CCV NO3	0.503	5.75	0.454	-0.0148	0.0128	9.43e-4	2/18/2022@11:22:50 AM	
	Known Conc:	0.500			0.500				
102.8%	CCV NO2	0.518	5.91	0.474	0.514	5.87	0.552	2/18/2022@11:24:02 AM	
	Known Conc:	0.500			0.500				
	CCB	-0.0150	0.0805	5.89e-3	-0.0150	0.0101	8.88e-4	2/18/2022@11:25:17 AM	
	Known Conc:	0.00			0.00				

Table : 1 (NITRATE/NITRITE)

	Known Conc. (mg/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg/L)	Detection Date	Detection Time
1	2.00	1	22.0	1.44	0.0	0.6	1.99	2/18/2022	9:51:18 AM
2	1.00	1	11.4	0.768	0.0	-2.4	1.02	2/18/2022	9:52:28 AM
3	0.500	1	5.74	0.384	0.0	-0.5	0.503	2/18/2022	9:53:37 AM
4	0.250	1	2.95	0.196	0.0	0.9	0.248	2/18/2022	9:54:48 AM
5	0.0500	1	0.606	0.0396	0.0	23.6	0.0331	2/18/2022	9:55:59 AM
6	0.00	1	0.296	0.0195			4.74e-3	2/18/2022	9:57:10 AM

Figure : 1 (NITRATE/NITRITE)

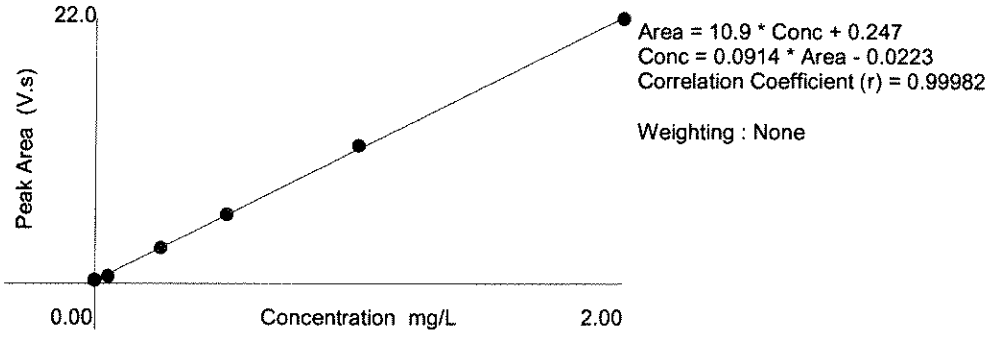


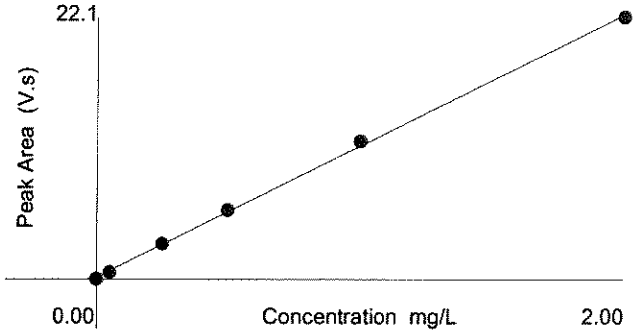
Table : 2 (NITRITE)

	Known Conc. (mg/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg/L)	Detection Date	Detection Time
1	2.00	1	22.1	2.02	0.0	1.0	1.98	2/18/2022	9:51:20 AM
2	1.00	1	11.6	1.09	0.0	-3.4	1.03	2/18/2022	9:52:29 AM
3	0.500	1	5.83	0.540	0.0	-2.0	0.510	2/18/2022	9:53:39 AM
4	0.250	1	2.98	0.272	0.0	-1.2	0.253	2/18/2022	9:54:50 AM
5	0.0500	1	0.583	0.0518	0.0	20.7	0.0367	2/18/2022	9:56:00 AM
6	0.00	1	0.0231	1.14e-3			-0.0138	2/18/2022	9:57:11 AM

Author: wetchem

Date : 3/30/2022

Figure : 2 (NITRITE)



Area = 11.1 * Conc + 0.181
Conc = 0.0903 * Area - 0.0159
Correlation Coefficient (r) = 0.99964

Weighting : None

SERES ENGINEERING & SERVICES, LLC
FORT DEVENS SHL
AIR SPARGE PILOT TEST
SO5463

KATAHDIN ANALYTICAL SERVICES
600 TECHNOLOGY WAY
SCARBOROUGH, ME 04074

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SAMPLE DATA PACKAGE

NARRATIVE
KATAHDIN ANALYTICAL SERVICES
SERES ENGINEERING & SERVICES, LLC
FORT DEVENS SHL AIR SPARGE PILOT TEST
SO5463

Sample Receipt

The following samples were received on August 18, 2021 and were logged in under Katahdin Analytical Services work order number SO5463 for a hardcopy due date of August 30, 2021.

KATAHDIN Sample No.	SERES Sample Identification
SO5463-1	MW-21-1S-BASELINE
SO5463-2	MW-21-1D-BASELINE
SO5463-3	MW-21-1S-BASELINE-FF
SO5463-4	MW-21-1D-BASELINE-FF

The samples were logged in for the analyses specified on the chain of custody form. All problems encountered and resolved during sample receipt have been documented on the applicable chain of custody forms.

We certify that the test results provided in this report meet all the requirements of the NELAC standards unless otherwise noted in this narrative or in the Report of Analysis.

We certify that the test results provided in this report are accredited under the laboratory's ISO/IEC 17025:2017 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation L2223.

Analytes which are reported but not listed on our ANAB scope of accreditation will be "^" flagged and the following language will be included in the case narrative for all DoD compliant work: "^" Indicates this analyte is not included on Katahdin Analytical Services DoD-ELAP Scope of Accreditation.

Sample analyses have been performed by the methods as noted herein.

SERES notified Katahdin that the sample volume for total metals for samples in work order SO5463 were mistakenly filtered in the field. Katahdin poured off unpreserved sample volume for each sample into new bottles and preserved these bottles with HNO3 on 08/19/2021.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact your Katahdin Analytical Services Project Manager, **Ms. Heather Manz**. This narrative is an integral part of the Report of Analysis.

Metals Analysis

The samples associated with Katahdin Work Order SO5463 were prepared and analyzed for metals in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA publication SW846, Third Edition, Final Updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), and V (2015), Office of Solid Waste and Emergency Response, U.S. EPA.

Inductively-Coupled Plasma (ICP) Atomic Emission Spectroscopic Analysis

Aqueous-matrix Katahdin Sample Numbers SO5463-(1 and 3) were digested for ICP analysis on 08/20/21 (QC Batch OH20CW1) in accordance USEPA Method 3010A.

Aqueous-matrix Katahdin Sample Numbers SO5463-(2 and 4) were digested for ICP analysis on 08/31/21 (QC Batch OH31CW1) in accordance USEPA Method 3010A. Per client request, Katahdin Sample Numbers SO5463-(2 and 4) were prepared with duplicate matrix-spiked aliquots.

ICP analyses of Katahdin Work Order SO5463 samples were performed using a Thermo iCAP 6500 ICP spectrometer in accordance with USEPA Method 6010C. All samples were analyzed within holding times and all applicable analytical run QC criteria were met, with the following exceptions:

The CCB analyzed at 14:10 in ICP analysis sequence IOI01A was above the project acceptance limit for calcium. All associated samples had calcium concentrations greater than ten times the CCB or less than ½ LOQ and were accepted without corrective action.

The PQL/LOQ standard analyzed in ICP analysis sequence IOI03A was below the project acceptance limit for calcium and magnesium. All associated samples had calcium and magnesium concentrations greater than ten times the true value of the PQL/LOQ standard and were accepted without corrective action.

Matrix QC Summary

The measured recoveries of arsenic, calcium, iron, magnesium, manganese, potassium, and sodium in one or both of the matrix-spiked aliquots of Katahdin Sample Number SO5463-2 are outside project acceptance criteria. For arsenic, calcium, iron, and manganese, this may be attributable to the sample concentration being significantly higher than the spike amount. Because the laboratory control sample was acceptable, no corrective action was taken.

The measured recoveries of arsenic, iron, and manganese in one or both of the matrix-spiked aliquots of Katahdin Sample Number SO5463-4 are outside laboratory acceptance criteria. This may be attributable to the sample concentration being significantly higher than the spike amount. Because the laboratory control sample was acceptable, no corrective action was taken.

The relative percent differences between the matrix-spiked duplicate analyses of Katahdin Sample Numbers SO5463-(2 and 4) are within project acceptance criteria (<20% relative difference between duplicate sample aliquots) for all analytes.

The measured recoveries in the post-digestion spiked aliquot of Katahdin Sample Number SO5463-2 are outside laboratory acceptance criteria (80%-120% recovery of the added element) for calcium and iron. This may be attributable to the sample concentration being significantly higher than the spike amount. Because the serial dilution was acceptable, no corrective action was taken.

The measured recovery in the post-digestion spiked aliquot of Katahdin Sample Number SO5463-4 is outside laboratory acceptance criteria (80%-120% recovery of the added element) for iron. This may be attributable to the sample concentration being significantly higher than the spike amount. Because the serial dilution was acceptable, no corrective action was taken.

The serial dilution analyses of Katahdin Sample Numbers SO5463-(2 and 4) are within laboratory acceptance criteria (<10% relative percent difference, if the concentration in the original sample is greater than 50 times the LOD) for all analytes.

Reporting of Metals Results

Per client request, analytical results for client samples on Form I, preparation blanks on Form IIIP, and matrix QC samples on Forms VA, VD, and VI have been reported using the laboratory's Limits of Quantitation (LOQ). All results were evaluated down to the laboratory's method detection limits (MDLs). Results that are less than the MDL are flagged with "U" in the C-qualifier column, and the LOQ is listed in the concentration column. Results that fall between the MDL and the LOQ are flagged with "J" in the C-qualifier column, and the measured concentration appears in the concentration column. These LOQs and MDLs have been adjusted for each sample based on the sample amounts used in preparation and analysis.

Analytical results on Forms VB and IX for client samples, analysis QC samples (serial dilutions and post-digestion spikes) have been reported down to the laboratory's method detection limits (MDLs). Analytical results that are below the MDLs are flagged with "U" in the C-qualifier column, and the adjusted MDL is listed in the concentration column.

Analytical results for instrument run QC samples (ICVs, ICBs, etc.) have been reported down to the laboratory's instrument detection limits (IDLs).

IDLs, MDLs, LODs, and LOQs are listed on Form 10 of the accompanying data package.

Wet Chemistry Analysis

The samples of SO5463 were analyzed in accordance with the specific methods listed on the Report of Analysis.
Analyses for alkalinity, chemical oxygen demand, filterable residue, and total biochemical oxygen demand were performed according to "Standard Methods for the Examination of Water and Wastewater", 15th, 16th, 17th, 18th, 19th, and 20th editions, 1980, 1985, 1989, 1992, 1995, 1999. APHA-AWWA-WPCF.

Analyses for nitrate were performed according to "Methods for the Determination of Inorganic Substances in Environmental Samples", EPA 600/R-93/100, August 1993.

Analyses for total organic carbon, chloride, and sulfate were performed according to "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA publication SW-846, Third Edition, Final Updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), and V (2015).

All Wet Chemistry results were evaluated to Katahdin Analytical Services' Method Detection Limits (MDL). Measured concentrations that fall between the MDL and Katahdin's Limit of Quantitation (LOQ) are flagged "J". Measured concentrations that are below the MDL are flagged "U" and reported as "U LOQ", where "LOQ" is the numerical value of the Limit of Quantitation.

All analyses were performed within analytical holding times, with the following exception:
Due to analyst error, the matrix spike and matrix spike duplicate for alkalinity were analyzed 19 days after the expiration of the method-specified 14-day holding time for the analysis.

All quality control criteria were met, with the following exceptions:
The alkalinity recoveries for the matrix spike (60%) and matrix spike duplicate (58%) aliquots of Katahdin Sample No. SO5463-2 are outside the laboratory's acceptance limits of 75% - 125%.

The nitrate recoveries for the matrix spike (37%) and matrix spike duplicate (34%) aliquots of Katahdin Sample No. SO5463-2 are outside the laboratory's acceptance limits of 90% - 110%.

The sulfate recoveries for the matrix spike (28%) and matrix spike duplicate (28%) aliquots of Katahdin Sample No. SO5463-2 are outside the laboratory's acceptance limits of 90% - 110%.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Quality Assurance Officer, or their designee, as verified by the following signature.

Leslie Dimond ***Sep 22, 2021***

Leslie Dimond
Quality Assurance Officer

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin Analytical Services, LLC. **Sample Receipt Condition Report**

Client: SERES	KAS PM: HHM	Sampled By: Client	
Project:	KIMS Entry By: JCB	Delivered By: KAS	
KAS Work Order#: 505463	KIMS Review By: HHM	Received By: JCB	
	Labeled By: JCB		
SDG #:	Cooler: 1 of 1	Date/Time Rec.: 8/18/21 1610	

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?		/			
2. Chain of Custody present in cooler?	/				
3. Chain of Custody signed by client?	/				
4. Chain of Custody matches samples?	/				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	/				Temp (°C): 4.6 — Thermometer ID: IR-1
Samples received at <6 °C w/o freezing?	/				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	/				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	/				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				/	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles: **Aqueous:** No bubble larger than a pea?				/	
Soil/Sediment: Received in airtight container?				/	
Received in methanol?				/	
Methanol covering soil?				/	
D.I. Water - Received within 48 hour HT?				/	
7. Trip Blank present in cooler?				/	
8. Proper sample containers and volume?	/				
9. Samples within hold time upon receipt?	/				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	/				
Sulfide - >9				/	
Cyanide – pH >12				/	
11. Bottleware Prepped on:					

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

Katahdin ANALYTICAL SERVICES
600 Technology Way
Scarborough, ME 04074
Tel: (207) 874-2400
Fax: (207) 775-4029

CHAIN of CUSTODY

PLEASE BEAR DOWN AND PRINT LEGIBLY IN PEN

Page 1 of 1

Client: SERES Engineering	Contact: Heather Levesque	Phone #: (619) 370-0374	Fax #: ( )
Address: 669 Marina Dr. B7	City: Charleston	State: SC	Zip Code: 29492
Purchase Order #: Ft. Devens	Proj. Name / No.: Ft. Devens	Katahdin Quote #	
Bill (if different than above)	Address		
Sampler (Print / Sign): Spencer Gust Spencer P Gust		Copies To:	

LAB USE ONLY — WORK ORDER #: S05463

KATAHDIN PROJECT NUMBER

REMARKS:

SHIPPING INFO: ☐ FED EX ☐ UPS ☐ CLIENT

AIRBILL NO:

TEMP°C ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

ANALYSIS AND CONTAINER TYPE PRESERVATIVES

★	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	Filt. Y N	TOC 40ml Glass H_2SO_4	Filt. Y N	Total Metals 250ml HDPE HNO_3	Filt. Y N	DISS Metals 250ml HDPE HNO_3	Filt. Y N	COD 250ml HDPE H_2SO_4	Filt. Y N	BOD, Alk, TDS 1000ml HDPE None	Filt. Y N	Anions 250ml HDPE None	Filt. Y N	Filt. Y N	Filt. Y N	Filt. Y N
	MW-21-1S-Baseline	8.18/09:05	GW	8		2		1		1		1		2		1				
	MW-21-1D-Baseline MS	8.18/10:50	GW	8		2		1		1		1		2		1				
	MW-21-1D-Baseline MSD	8.18/10:50	GW	8		2		1		1		1		2		1				
	MW-21-1D-Baseline	8.18/10:50	GW	8		2		1		1		1		2		1				
		/																		
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COMMENTS: Container volumes differentiate from original order for COD & Anions, Nitrate. Spoke with Lab to confirm these are okay to use. (SG)

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
Spencer P Gust	8.18 2:07	Kendall C	Kendall C	8/18 16:10	
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)

THE TERMS AND CONDITIONS ON THE REVERSE SIDE HEREOF SHALL GOVERN SERVICES, EXCEPT WHEN A SIGNED CONTRACTUAL AGREEMENT EXISTS.

0000008

Login Number: SO5463

Account: SERES001
SERES Engineering & Services, LLC

Project: SERES-FT-DEVENS
Former Fort Devens - Annual LTM

Primary Report Address:

Heather Levesque, PMP
SERES Engineering & Services, LLC
669 Marina Drive
Suite B-7
Charleston, SC 29492
USA
halevesque@seres-es.com

Primary Invoice Address:

Mary Tunstall
SERES Engineering & Services, LLC
669 Marina Drive
Suite B-7
Charleston,SC 29492
USA

Report CC Addresses:
Invoice CC Addresses:

Quote/Incoming: SERES-FT-DEVENS

Login Information:

ANALYSIS INSTRUCTIONS	:	DOD 5.3, ND to LOQ w/ J flags, include LOD on ROAs. Anions list is for Cl & SO4, check sample comments for what to report.
CHECK NO.	:	
CLIENT PO#	:	Project # JV2008
CLIENT PROJECT MANAGE	:	Heather Levesque
CONTRACT	:	W912WJ-20F-0022
COOLER TEMPERATURE	:	4.6
DELIVERY SERVICES	:	KAS
EDD FORMAT	:	ECC-091317-TXT
LOGIN INITIALS	:	JCB
PM	:	HHM
PROJECT NAME	:	Fort Devens SHL Air Sparge Pilot Test
QC LEVEL	:	IV
REPORT INSTRUCTIONS	:	Upload EDD to Ft. Devens Database. Upload to SDS. Email reports to halevesque@seres-es.com; Ian.Martz@arcadis.com; Jennifer.Singer@arcadis.com. Email invoices to METunstall@seres-es.com & HALevesque@seres-es.com.
SDG ID	:	
SDG STATUS	:	
VERBAL TAT	:	

HHM

5:04 pm, Aug 26, 2021

Login Number: SO5463

Quote/Incoming: SERES-FT-DEVENS

Account: SERES001
SERES Engineering & Services, LLC

Project: SERES-FT-DEVENS
Former Fort Devens - Annual LTM

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SO5463-1	MW-21-1S-BASELINE	18-AUG-21 09:05	18-AUG-21			30-AUG-21	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Service	S	COURIER-BILLING				**Anions report Cl & SO4.**
Aqueous	S	E353.2-NITRATE	20-AUG-21	125mL Plastic		
Aqueous	S	SM2320B-ALKALINITY	01-SEP-21			
Aqueous	S	SM2540C-TDS	25-AUG-21	250mL Plastic		
Aqueous	S	SM5210B-TBOD	20-AUG-21	250mL Plastic		
Aqueous	S	SM5220-COD-COLOR	15-SEP-21	250mL Plastic+H2SO4		
Aqueous	S	SW3010-PREP	14-FEB-22	250mL Plastic+HNO3		
Aqueous	S	SW6010-ARSENIC	14-FEB-22	250mL Plastic+HNO3		
Aqueous	S	SW6010-CALCIUM	14-FEB-22	250mL Plastic+HNO3		
Aqueous	S	SW6010-IRON	14-FEB-22	250mL Plastic+HNO3		
Aqueous	S	SW6010-MAGNESIUM	14-FEB-22	250mL Plastic+HNO3		
Aqueous	S	SW6010-MANGANESE	14-FEB-22	250mL Plastic+HNO3		
Aqueous	S	SW6010-POTASSIUM	14-FEB-22	250mL Plastic+HNO3		
Aqueous	S	SW6010-SODIUM	14-FEB-22	250mL Plastic+HNO3		
Aqueous	S	SW9056-ANIONS	15-SEP-21			
Aqueous	S	SW9060-TOC(1)	15-SEP-21	40 mL Vial+H2SO4		

SO5463-2	MW-21-1D-BASELINE	18-AUG-21 10:50	18-AUG-21			30-AUG-21	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Aqueous	S	E353.2-NITRATE	20-AUG-21	125mL Plastic		**MS/MSD, Anions report Cl & SO4.**
Aqueous	S	SM2320B-ALKALINITY	01-SEP-21			
Aqueous	S	SM2540C-TDS	25-AUG-21	250mL Plastic		
Aqueous	S	SM5210B-TBOD	20-AUG-21	250mL Plastic		
Aqueous	S	SM5220-COD-COLOR	15-SEP-21	250mL Plastic+H2SO4		
Aqueous	S	SW3010-PREP	14-FEB-22	250mL Plastic+HNO3		
Aqueous	S	SW6010-ARSENIC	14-FEB-22	250mL Plastic+HNO3		
Aqueous	S	SW6010-CALCIUM	14-FEB-22	250mL Plastic+HNO3		
Aqueous	S	SW6010-IRON	14-FEB-22	250mL Plastic+HNO3		
Aqueous	S	SW6010-MAGNESIUM	14-FEB-22	250mL Plastic+HNO3		
Aqueous	S	SW6010-MANGANESE	14-FEB-22	250mL Plastic+HNO3		
Aqueous	S	SW6010-POTASSIUM	14-FEB-22	250mL Plastic+HNO3		
Aqueous	S	SW6010-SODIUM	14-FEB-22	250mL Plastic+HNO3		
Aqueous	S	SW9056-ANIONS	15-SEP-21			
Aqueous	S	SW9060-TOC(1)	15-SEP-21	40 mL Vial+H2SO4		

SO5463-3	MW-21-1S-BASELINE-FF	18-AUG-21 09:05	18-AUG-21			30-AUG-21	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Aqueous	S	SW3010-PREP	14-FEB-22	250mL Plastic+HNO3		
Aqueous	S	SW6010-ARSENIC-DIS	14-FEB-22	250mL Plastic+HNO3		
Aqueous	S	SW6010-IRON-DIS	14-FEB-22	250mL Plastic+HNO3		
Aqueous	S	SW6010-MANGANESE-DIS	14-FEB-22	250mL Plastic+HNO3		

SO5463-4	MW-21-1D-BASELINE-FF	18-AUG-21 10:50	18-AUG-21			30-AUG-21	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Aqueous	S	SW3010-PREP	14-FEB-22	250mL Plastic+HNO3		**MS/MSD**
Aqueous	S	SW6010-ARSENIC-DIS	14-FEB-22	250mL Plastic+HNO3		
Aqueous	S	SW6010-IRON-DIS	14-FEB-22	250mL Plastic+HNO3		
Aqueous	S	SW6010-MANGANESE-DIS	14-FEB-22	250mL Plastic+HNO3		

Total Samples: 4 ***Total Analyses: 39***

5:04 pm, Aug 26, 2021

SAMPLE DATA SUMMARY PACKAGE

METALS SAMPLE FLAGGING

FLAG	SPECIFIED MEANING
E	The reported value is estimated because of the presence of interference (as indicated by serial dilution).
N	The pre-digestion spiked sample recovery is not within control limits.
*	The duplicate sample analysis relative percent difference (RPD) is not within control limits.
B	Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.
A	The post-digestion spiked sample recovery is not within control limits.
•	Analytical run QC sample (e.g. ICV, CCV, ICB, CCB, ICSA, ICSAB) not within control limits.
U	The analyte was not detected above the specified level. This level may be the Limit of Quantitation (LOQ) (previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client. Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.
J	The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ) (previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).
Q	One or more quality control criteria failed (e.g., LCS recovery, surrogate spike recovery or CCV).

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level (PQL) or LOQ could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfite H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit
NFL	No Free Liquid Present	FLP	Free Liquid Present
NOD	No Odor Detected	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L. The reported value should be considered a minimum value.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 or 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-1S-BASELINE

Matrix: WATER **SDG Name:** SO5463

Percent Solids: 0.00 **Lab Sample ID:** SO5463-001

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	18.6			P	1	8.0	1.4	5.0
7440-70-2	CALCIUM, TOTAL	52400			P	1	100	11	80
7439-89-6	IRON, TOTAL	48700			P	1	100	5.4	80
7439-95-4	MAGNESIUM, TOTAL	6990			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	2530			P	1	5.0	1.1	4.0
7440-09-7	POTASSIUM, TOTAL	28800			P	1	1000	41	500
7440-23-5	SODIUM, TOTAL	41800			P	1	1000	24	500

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-1D-BASELINE

Matrix: WATER **SDG Name:** SO5463

Percent Solids: 0.00 **Lab Sample ID:** SO5463-002

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	2140		N	P	1	8.0	1.4	5.0
7440-70-2	CALCIUM, TOTAL	48800		NA	P	1	100	11	80
7439-89-6	IRON, TOTAL	57500		NA	P	1	100	5.4	80
7439-95-4	MAGNESIUM, TOTAL	7480		N	P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	2820		N	P	1	5.0	1.1	4.0
7440-09-7	POTASSIUM, TOTAL	8740		N	P	1	1000	41	500
7440-23-5	SODIUM, TOTAL	17900		N	P	1	1000	24	500

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-1S-BASELINE

Matrix: WATER **SDG Name:** SO5463

Percent Solids: 0.00 **Lab Sample ID:** SO5463-003

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	18.2			P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	48700			P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	2500			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-1D-BASELINE

Matrix: WATER **SDG Name:** SO5463

Percent Solids: 0.00 **Lab Sample ID:** SO5463-004

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	2190		N	P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	58200		NA	P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	2820		N	P	1	5.0	1.1	4.0

Comments:

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Heather Levesque, PMP
SERES Engineering & Services, LLC
669 Marina Drive
Charleston,SC 29492

Lab Sample ID: SO5463-1
Report Date: 21-SEP-21
Project: Fort Devens SHL Air
SDG: SO5463

Sample Description	Matrix	Date Sampled	Date Received
MW-21-1S-BASELINE	AQ	18-AUG-21 09:05:00	18-AUG-21

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	320 mg/L	5.0	0.23	4	STDM 2320B	WG304829	19-AUG-21 14:56:03	N/A	N/A	
COD-Color	15. mg/L	15.	5.7	10	SM 5220	WG304988	23-AUG-21 15:29:00	N/A	N/A	
Chloride	36 mg/L	4.0	0.20	2.0	SW846 9056A	WG305703	07-SEP-21 16:57:00	N/A	N/A	
Nitrate As N	U0.25 mg/L	0.25	0.076	0.12	EPA 353.2	WG304837	19-AUG-21 14:19:40	N/A	N/A	I-7
Solids-Filterable Residue	400 mg/L	10.	5.0	8	STDM 2540C	WG304712	20-AUG-21 14:00:00	SM 2540C	19-AUG-21	
Sulfate	31 mg/L	2.0	0.13	1.0	SW846 9056A	WG305663	07-SEP-21 00:39:00	N/A	N/A	
Total Biochemical Oxygen Demand	21. mg/L	16.	1.9	1	SM 5210B	WG304649	23-AUG-21 11:27:00	SM 5210B	18-AUG-21 1647	
Total Organic Carbon (1)	7.1 mg/L	1.0	0.10	0.50	SW846 9060A	WG304831	20-AUG-21 01:45:10	N/A	N/A	

Katahdin Analytical Services A0000008

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Heather Levesque, PMP
SERES Engineering & Services, LLC
669 Marina Drive
Charleston,SC 29492

Lab Sample ID: SO5463-2
Report Date: 21-SEP-21
Project: Fort Devens SHL Air
SDG: SO5463

Sample Description	Matrix	Date Sampled	Date Received
MW-21-1D-BASELINE	AQ	18-AUG-21 10:50:00	18-AUG-21

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	230 mg/L	5.0	0.23	4	STDM 2320B	WG304829	19-AUG-21 15:00:41	N/A	N/A	
COD-Color	U15. mg/L	15.	5.7	10	SM 5220	WG304988	23-AUG-21 15:29:00	N/A	N/A	
Chloride	28 mg/L	4.0	0.20	2.0	SW846 9056A	WG306238	15-SEP-21 17:06:00	N/A	N/A	
Nitrate As N	U0.050 mg/L	0.050	0.015	0.025	EPA 353.2	WG304837	19-AUG-21 14:06:39	N/A	N/A	
Solids-Filterable Residue	320 mg/L	10.	5.0	8	STDM 2540C	WG304712	20-AUG-21 14:00:00	SM 2540C	19-AUG-21	
Sulfate	22 mg/L	2.0	0.13	1.0	SW846 9056A	WG305663	07-SEP-21 00:58:00	N/A	N/A	
Total Biochemical Oxygen Demand	13. mg/L	13.	1.5	1	SM 5210B	WG304649	23-AUG-21 11:33:00	SM 5210B	18-AUG-21 1657	
Total Organic Carbon (1)	2.4 mg/L	1.0	0.10	0.50	SW846 9060A	WG304831	20-AUG-21 02:24:11	N/A	N/A	

Katahdin Analytical Services A0000009

METALS DATA

Sample Data Section

METALS SAMPLE FLAGGING

FLAG	SPECIFIED MEANING
E	The reported value is estimated because of the presence of interference (as indicated by serial dilution).
N	The pre-digestion spiked sample recovery is not within control limits.
*	The duplicate sample analysis relative percent difference (RPD) is not within control limits.
B	Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.
A	The post-digestion spiked sample recovery is not within control limits.
•	Analytical run QC sample (e.g. ICV, CCV, ICB, CCB, ICSA, ICSAB) not within control limits.
U	The analyte was not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client. Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL, "U" LOQ or "U" LOD, where the rate of false negatives is <1%.
J	Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).
Q	One or more quality control criteria failed (e.g., LCS recovery, surrogate spike recovery or CCV).

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Katahdin Analytical Services

SDG Name: SO5463 **SOW No.** SW846

Client Field ID	Lab Sample ID
MW-21-1D-BASELINE	SO5463-002
MW-21-1D-BASELINE	SO5463-004
MW-21-1D-BASELINEP	SO5463-002P
MW-21-1D-BASELINEP	SO5463-004P
MW-21-1D-BASELINES	SO5463-002S
MW-21-1D-BASELINES	SO5463-004S
MW-21-1S-BASELINE	SO5463-001
MW-21-1S-BASELINE	SO5463-003

Were ICP interelement corrections applied ?	Yes
Were ICP background corrections applied ?	Yes
If yes - were raw data generated before application of background corrections ?	No

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Edward A. Morgan Name: Edward A. Morgan

Date: September 9, 2021 Title: Data Management

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-1S-BASELINE

Matrix: WATER **SDG Name:** SO5463

Percent Solids: 0.00 **Lab Sample ID:** SO5463-001

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	18.6			P	1	8.0	1.4	5.0
7440-70-2	CALCIUM, TOTAL	52400			P	1	100	11	80
7439-89-6	IRON, TOTAL	48700			P	1	100	5.4	80
7439-95-4	MAGNESIUM, TOTAL	6990			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	2530			P	1	5.0	1.1	4.0
7440-09-7	POTASSIUM, TOTAL	28800			P	1	1000	41	500
7440-23-5	SODIUM, TOTAL	41800			P	1	1000	24	500

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-1D-BASELINE

Matrix: WATER **SDG Name:** SO5463

Percent Solids: 0.00 **Lab Sample ID:** SO5463-002

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, TOTAL	2140		N	P	1	8.0	1.4	5.0
7440-70-2	CALCIUM, TOTAL	48800		NA	P	1	100	11	80
7439-89-6	IRON, TOTAL	57500		NA	P	1	100	5.4	80
7439-95-4	MAGNESIUM, TOTAL	7480		N	P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	2820		N	P	1	5.0	1.1	4.0
7440-09-7	POTASSIUM, TOTAL	8740		N	P	1	1000	41	500
7440-23-5	SODIUM, TOTAL	17900		N	P	1	1000	24	500

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-1S-BASELINE

Matrix: WATER **SDG Name:** SO5463

Percent Solids: 0.00 **Lab Sample ID:** SO5463-003

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	18.2			P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	48700			P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	2500			P	1	5.0	1.1	4.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-1D-BASELINE

Matrix: WATER **SDG Name:** SO5463

Percent Solids: 0.00 **Lab Sample ID:** SO5463-004

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	ADJUSTED LOQ	MDL	LOD
7440-38-2	ARSENIC, DISSOLVED	2190		N	P	1	8.0	1.4	5.0
7439-89-6	IRON, DISSOLVED	58200		NA	P	1	100	5.4	80
7439-96-5	MANGANESE, DISSOLVED	2820		N	P	1	5.0	1.1	4.0

Comments:

QC Summary Section

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Concentration Units: ug/L

SAMPLE: ICV

File: IOH24A Aug 24, 2021 11:23

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	9631.00	96.3
ARSENIC	400.0	389.10	97.3
CALCIUM	10000.0	9697.00	97.0
IRON	10000.0	9642.00	96.4
MAGNESIUM	10000.0	10400.00	104.0
MANGANESE	400.0	382.50	95.6
POTASSIUM	13600.0	13010.00	95.7
SODIUM	10000.0	9637.00	96.4

SAMPLE: CCV

File: IOH24A Aug 24, 2021 11:45

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12940.00	103.5
ARSENIC	500.0	511.90	102.4
CALCIUM	12500.0	12860.00	102.9
IRON	12500.0	12810.00	102.5
MAGNESIUM	12500.0	13170.00	105.4
MANGANESE	500.0	504.80	101.0
POTASSIUM	12500.0	12680.00	101.4
SODIUM	12500.0	12710.00	101.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Concentration Units: ug/L

SAMPLE: CCV

File: IOH24A Aug 24, 2021 12:03

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12720.00	101.8
ARSENIC	500.0	507.20	101.4
CALCIUM	12500.0	12610.00	100.9
IRON	12500.0	12660.00	101.3
MAGNESIUM	12500.0	13030.00	104.2
MANGANESE	500.0	502.70	100.5
POTASSIUM	12500.0	12710.00	101.7
SODIUM	12500.0	12660.00	101.3

SAMPLE: CCV

File: IOH24A Aug 24, 2021 12:55

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12870.00	103.0
ARSENIC	500.0	521.70	104.3
CALCIUM	12500.0	12880.00	103.0
IRON	12500.0	12880.00	103.0
MAGNESIUM	12500.0	13410.00	107.3
MANGANESE	500.0	504.50	100.9
POTASSIUM	12500.0	12850.00	102.8
SODIUM	12500.0	12760.00	102.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Concentration Units: ug/L

SAMPLE: CCV

File: IOH24A Aug 24, 2021 13:47

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12700.00	101.6
ARSENIC	500.0	517.50	103.5
CALCIUM	12500.0	12670.00	101.4
IRON	12500.0	12690.00	101.5
MAGNESIUM	12500.0	13280.00	106.2
MANGANESE	500.0	490.90	98.2
POTASSIUM	12500.0	12610.00	100.9
SODIUM	12500.0	12490.00	99.9

SAMPLE: CCV

File: IOH24A Aug 24, 2021 14:39

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12640.00	101.1
ARSENIC	500.0	519.20	103.8
CALCIUM	12500.0	12710.00	101.7
IRON	12500.0	12530.00	100.2
MAGNESIUM	12500.0	13270.00	106.2
MANGANESE	500.0	495.70	99.1
POTASSIUM	12500.0	12430.00	99.4
SODIUM	12500.0	12400.00	99.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Concentration Units: ug/L

SAMPLE: CCV

File: IOH24A Aug 24, 2021 15:32

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12760.00	102.1
ARSENIC	500.0	518.10	103.6
CALCIUM	12500.0	12770.00	102.2
IRON	12500.0	12460.00	99.7
MAGNESIUM	12500.0	13290.00	106.3
MANGANESE	500.0	508.90	101.8
POTASSIUM	12500.0	12500.00	100.0
SODIUM	12500.0	12630.00	101.0

SAMPLE: CCV

File: IOH24A Aug 24, 2021 16:24

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12780.00	102.2
ARSENIC	500.0	518.30	103.7
CALCIUM	12500.0	12740.00	101.9
IRON	12500.0	12760.00	102.1
MAGNESIUM	12500.0	13310.00	106.5
MANGANESE	500.0	508.70	101.7
POTASSIUM	12500.0	12710.00	101.7
SODIUM	12500.0	12780.00	102.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Concentration Units: ug/L

SAMPLE: ICV

File: IOI01A Sep 01, 2021 13:26

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	10150.00	101.5
ARSENIC	400.0	384.70	96.2
CALCIUM	10000.0	10240.00	102.4
IRON	10000.0	10270.00	102.7
MAGNESIUM	10000.0	10290.00	102.9
MANGANESE	400.0	405.80	101.4
POTASSIUM	13600.0	13720.00	100.9
SODIUM	10000.0	10170.00	101.7

SAMPLE: CCV

File: IOI01A Sep 01, 2021 13:48

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	13130.00	105.0
ARSENIC	500.0	512.30	102.5
CALCIUM	12500.0	13120.00	105.0
IRON	12500.0	13090.00	104.7
MAGNESIUM	12500.0	13250.00	106.0
MANGANESE	500.0	522.10	104.4
POTASSIUM	12500.0	12900.00	103.2
SODIUM	12500.0	13000.00	104.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Concentration Units: ug/L

SAMPLE: CCV

File: IOI01A Sep 01, 2021 14:06

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	13260.00	106.1
ARSENIC	500.0	514.10	102.8
CALCIUM	12500.0	13180.00	105.4
IRON	12500.0	13300.00	106.4
MAGNESIUM	12500.0	13200.00	105.6
MANGANESE	500.0	526.40	105.3
POTASSIUM	12500.0	13180.00	105.4
SODIUM	12500.0	13210.00	105.7

SAMPLE: CCV

File: IOI01A Sep 01, 2021 14:58

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	13180.00	105.4
ARSENIC	500.0	528.50	105.7
CALCIUM	12500.0	12860.00	102.9
IRON	12500.0	13250.00	106.0
MAGNESIUM	12500.0	13690.00	109.5
MANGANESE	500.0	519.80	104.0
POTASSIUM	12500.0	13150.00	105.2
SODIUM	12500.0	13310.00	106.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Concentration Units: ug/L

SAMPLE: ICV

File: IOI03A Sep 03, 2021 11:50

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	9945.00	99.5
ARSENIC	400.0	385.80	96.5
CALCIUM	10000.0	10040.00	100.4
IRON	10000.0	10060.00	100.6
MAGNESIUM	10000.0	10320.00	103.2
MANGANESE	400.0	396.90	99.2
POTASSIUM	13600.0	13410.00	98.6
SODIUM	10000.0	9943.00	99.4

SAMPLE: CCV

File: IOI03A Sep 03, 2021 12:12

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12520.00	100.2
ARSENIC	500.0	495.20	99.0
CALCIUM	12500.0	12450.00	99.6
IRON	12500.0	12580.00	100.6
MAGNESIUM	12500.0	12740.00	101.9
MANGANESE	500.0	489.80	98.0
POTASSIUM	12500.0	12290.00	98.3
SODIUM	12500.0	12330.00	98.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Concentration Units: ug/L

SAMPLE: CCV

File: IOI03A Sep 03, 2021 12:30

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12610.00	100.9
ARSENIC	500.0	506.90	101.4
CALCIUM	12500.0	12510.00	100.1
IRON	12500.0	12680.00	101.4
MAGNESIUM	12500.0	12970.00	103.8
MANGANESE	500.0	497.90	99.6
POTASSIUM	12500.0	12590.00	100.7
SODIUM	12500.0	12590.00	100.7

SAMPLE: CCV

File: IOI03A Sep 03, 2021 13:22

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12140.00	97.1
ARSENIC	500.0	512.30	102.5
CALCIUM	12500.0	11950.00	95.6
IRON	12500.0	12240.00	97.9
MAGNESIUM	12500.0	12540.00	100.3
MANGANESE	500.0	484.90	97.0
POTASSIUM	12500.0	11970.00	95.8
SODIUM	12500.0	12060.00	96.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Concentration Units: ug/L

SAMPLE: CCV

File: IOI03A Sep 03, 2021 14:15

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12440.00	99.5
ARSENIC	500.0	499.50	99.9
CALCIUM	12500.0	12440.00	99.5
IRON	12500.0	12680.00	101.4
MAGNESIUM	12500.0	12680.00	101.4
MANGANESE	500.0	499.30	99.9
POTASSIUM	12500.0	12340.00	98.7
SODIUM	12500.0	12360.00	98.9

SAMPLE: CCV

File: IOI03A Sep 03, 2021 15:06

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12610.00	100.9
ARSENIC	500.0	499.40	99.9
CALCIUM	12500.0	12530.00	100.2
IRON	12500.0	12830.00	102.6
MAGNESIUM	12500.0	12890.00	103.1
MANGANESE	500.0	503.00	100.6
POTASSIUM	12500.0	12610.00	100.9
SODIUM	12500.0	12640.00	101.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Concentration Units: ug/L

SAMPLE: PQL

File: IOH24A Aug 24, 2021 11:31

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	302.70	100.9
ARSENIC	8.0	7.02	87.8
CALCIUM	100.0	101.30	101.3
IRON	100.0	98.14	98.1
MAGNESIUM	100.0	107.50	107.5
MANGANESE	5.0	4.64	92.8
POTASSIUM	1000.0	961.20	96.1

SAMPLE: PQL

File: IOH24A Aug 24, 2021 12:11

Analyte	TRUE	FOUND	% R
SODIUM	1000.0	1043.00	104.3

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Concentration Units: ug/L

SAMPLE: PQL

File: IOI01A Sep 01, 2021 13:34

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	299.10	99.7
ARSENIC	8.0	9.38	117.3
CALCIUM	100.0	109.30	109.3
IRON	100.0	105.90	105.9
MAGNESIUM	100.0	112.30	112.3
MANGANESE	5.0	5.24	104.8
POTASSIUM	1000.0	982.30	98.2

SAMPLE: PQL

File: IOI01A Sep 01, 2021 14:14

Analyte	TRUE	FOUND	% R
SODIUM	1000.0	1071.00	107.1

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Concentration Units: ug/L

SAMPLE: PQL

File: IOI03A Sep 03, 2021 11:59

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	269.20	89.7
ARSENIC	8.0	6.96	87.0
CALCIUM	100.0	73.62	73.6•
IRON	100.0	88.13	88.1
MAGNESIUM	100.0	64.19	64.2•
MANGANESE	5.0	5.25	105.0
POTASSIUM	1000.0	991.20	99.1
SODIUM	1000.0	998.10	99.8

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Concentration Units: ug/L

SAMPLE: ICB

File: IOH24A Aug 24, 2021 11:27

Analyte	Result	C
ALUMINUM	10.000	U
ARSENIC	1.400	U
CALCIUM	11.000	U
IRON	-4.120	U
MAGNESIUM	3.610	J
MANGANESE	0.870	U
POTASSIUM	73.000	U
SODIUM	12.000	U

SAMPLE: CCB

File: IOH24A Aug 24, 2021 11:49

Analyte	Result	C
ALUMINUM	10.000	U
ARSENIC	1.400	U
CALCIUM	13.880	J
IRON	3.600	U
MAGNESIUM	29.790	J
MANGANESE	0.870	U
POTASSIUM	73.000	U
SODIUM	12.000	U

SAMPLE: CCB

File: IOH24A Aug 24, 2021 12:07

Analyte	Result	C
ALUMINUM	10.000	U
ARSENIC	1.400	U
CALCIUM	11.000	U
IRON	3.600	U
MAGNESIUM	3.511	J
MANGANESE	0.870	U
POTASSIUM	73.000	U
SODIUM	12.000	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Concentration Units: ug/L

SAMPLE: CCB
File: IOH24A Aug 24, 2021 12:59

Analyte	Result	C
ALUMINUM	10.000	U
ARSENIC	1.400	U
CALCIUM	11.000	U
IRON	-5.106	U
MAGNESIUM	4.716	J
MANGANESE	0.870	U
POTASSIUM	73.000	U
SODIUM	15.250	J

SAMPLE: CCB
File: IOH24A Aug 24, 2021 13:51

Analyte	Result	C
ALUMINUM	10.000	U
ARSENIC	1.400	U
CALCIUM	11.000	U
IRON	3.600	U
MAGNESIUM	4.261	J
MANGANESE	0.870	U
POTASSIUM	73.000	U
SODIUM	12.000	U

SAMPLE: CCB
File: IOH24A Aug 24, 2021 14:43

Analyte	Result	C
ALUMINUM	10.000	U
ARSENIC	1.400	U
CALCIUM	11.000	U
IRON	3.600	U
MAGNESIUM	3.385	J
MANGANESE	0.870	U
POTASSIUM	73.000	U
SODIUM	12.000	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Concentration Units: ug/L

SAMPLE: CCB

File: IOH24A Aug 24, 2021 15:36

Analyte	Result	C
ALUMINUM	10.000	U
ARSENIC	1.400	U
CALCIUM	11.000	U
IRON	3.600	U
MAGNESIUM	4.803	J
MANGANESE	0.870	U
POTASSIUM	73.000	U
SODIUM	12.000	U

SAMPLE: CCB

File: IOH24A Aug 24, 2021 16:28

Analyte	Result	C
ALUMINUM	10.000	U
ARSENIC	1.400	U
CALCIUM	11.000	U
IRON	3.600	U
MAGNESIUM	4.460	J
MANGANESE	0.870	U
POTASSIUM	73.000	U
SODIUM	12.000	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Concentration Units: ug/L

SAMPLE: ICB

File: IOI01A Sep 01, 2021 13:30

Analyte	Result	C
ALUMINUM	10.000	U
ARSENIC	1.400	U
CALCIUM	11.000	U
IRON	4.683	J
MAGNESIUM	2.900	U
MANGANESE	0.870	U
POTASSIUM	73.000	U
SODIUM	12.000	U

SAMPLE: CCB

File: IOI01A Sep 01, 2021 13:52

Analyte	Result	C
ALUMINUM	66.360	J
ARSENIC	1.400	U
CALCIUM	71.440	B
IRON	43.420	J
MAGNESIUM	39.140	J
MANGANESE	1.056	J
POTASSIUM	73.000	U
SODIUM	17.920	J

SAMPLE: CCB

File: IOI01A Sep 01, 2021 14:10

Analyte	Result	C
ALUMINUM	55.110	J
ARSENIC	1.654	J
CALCIUM	70.770	B
IRON	46.400	J
MAGNESIUM	29.020	J
MANGANESE	1.114	J
POTASSIUM	86.200	J
SODIUM	47.130	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Concentration Units: ug/L

SAMPLE: CCB

File: IOI01A Sep 01, 2021 15:02

Analyte	Result	C
ALUMINUM	19.480	J
ARSENIC	1.400	U
CALCIUM	28.140	J
IRON	25.120	J
MAGNESIUM	24.360	J
MANGANESE	0.957	J
POTASSIUM	73.000	U
SODIUM	24.930	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Concentration Units: ug/L

SAMPLE: ICB

File: IOI03A Sep 03, 2021 11:54

Analyte	Result	C
ALUMINUM	-39.360	U
ARSENIC	1.400	U
CALCIUM	-32.920	U
IRON	-12.720	U
MAGNESIUM	-46.270	U
MANGANESE	0.870	U
POTASSIUM	73.000	U
SODIUM	12.000	U

SAMPLE: CCB

File: IOI03A Sep 03, 2021 12:16

Analyte	Result	C
ALUMINUM	-33.910	U
ARSENIC	1.400	U
CALCIUM	-28.490	U
IRON	-11.520	U
MAGNESIUM	-41.760	U
MANGANESE	0.870	U
POTASSIUM	73.000	U
SODIUM	12.000	U

SAMPLE: CCB

File: IOI03A Sep 03, 2021 12:34

Analyte	Result	C
ALUMINUM	10.000	U
ARSENIC	1.400	U
CALCIUM	11.000	U
IRON	7.819	J
MAGNESIUM	-42.440	U
MANGANESE	0.870	U
POTASSIUM	73.000	U
SODIUM	27.990	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Concentration Units: ug/L

SAMPLE: CCB
File: IOI03A Sep 03, 2021 13:26

Analyte	Result	C
ALUMINUM	-35.920	U
ARSENIC	1.400	U
CALCIUM	-22.590	U
IRON	-11.970	U
MAGNESIUM	-47.500	U
MANGANESE	0.870	U
POTASSIUM	73.000	U
SODIUM	12.000	U

SAMPLE: CCB
File: IOI03A Sep 03, 2021 14:19

Analyte	Result	C
ALUMINUM	-36.930	U
ARSENIC	1.400	U
CALCIUM	-30.950	U
IRON	-14.380	U
MAGNESIUM	-46.080	U
MANGANESE	0.870	U
POTASSIUM	73.000	U
SODIUM	12.000	U

SAMPLE: CCB
File: IOI03A Sep 03, 2021 15:10

Analyte	Result	C
ALUMINUM	-30.000	U
ARSENIC	1.400	U
CALCIUM	-25.960	U
IRON	-9.951	U
MAGNESIUM	-46.120	U
MANGANESE	0.870	U
POTASSIUM	73.000	U
SODIUM	12.000	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWOH20ICW1

Matrix: WATER **SDG Name:** SO5463

QC Batch ID: OH20ICW1

Concentration Units : ug/L

Analyte	RESULT	C
ARSENIC	8.0	U
CALCIUM	100	U
IRON	100	U
MAGNESIUM	100	U
MANGANESE	5.0	U
POTASSIUM	1000	U
SODIUM	73	J

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWOH31ICW1

Matrix: WATER **SDG Name:** SO5463

QC Batch ID: OH31ICW1

Concentration Units : ug/L

Analyte	RESULT	C
ARSENIC	8.0	U
CALCIUM	100	U
IRON	100	U
MAGNESIUM	100	U
MANGANESE	5.0	U
POTASSIUM	1000	U
SODIUM	1000	U

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Concentration Units: ug/L

SAMPLE: ICSA

File: IOH24A Aug 24, 2021 11:36

Analyte	TRUE	FOUND	% R
ALUMINUM	500000.00	523500.00	104.7
ARSENIC	0	-1.06	
CALCIUM	500000.00	487400.00	97.5
IRON	200000.00	187500.00	93.8
MAGNESIUM	500000.00	436000.00	87.2
MANGANESE	0	-0.71	
POTASSIUM	0	3.76	
SODIUM	0	13.97	

SAMPLE: ICSAB

File: IOH24A Aug 24, 2021 11:40

Analyte	TRUE	FOUND	% R
ALUMINUM	500000.00	527300.00	105.5
ARSENIC	100.00	97.27	97.0
CALCIUM	500000.00	483200.00	96.6
IRON	200000.00	188300.00	94.2
MAGNESIUM	500000.00	434200.00	86.8
MANGANESE	500.00	469.30	93.8
POTASSIUM	20000.00	21480.00	107.4
SODIUM	20000.00	21580.00	107.9

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Concentration Units: ug/L

SAMPLE: ICSA

File: IOI01A Sep 01, 2021 13:39

Analyte	TRUE	FOUND	% R
ALUMINUM	500000.00	534000.00	106.8
ARSENIC	0	-1.09	
CALCIUM	500000.00	494800.00	99.0
IRON	200000.00	189900.00	95.0
MAGNESIUM	500000.00	437000.00	87.4
MANGANESE	0	0.06	
POTASSIUM	0	-39.19	
SODIUM	0	11.24	

SAMPLE: ICSAB

File: IOI01A Sep 01, 2021 13:43

Analyte	TRUE	FOUND	% R
ALUMINUM	500000.00	529000.00	105.8
ARSENIC	100.00	98.11	98.0
CALCIUM	500000.00	483500.00	96.7
IRON	200000.00	189500.00	94.8
MAGNESIUM	500000.00	434100.00	86.8
MANGANESE	500.00	472.80	94.6
POTASSIUM	20000.00	21600.00	108.0
SODIUM	20000.00	21740.00	108.7

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Concentration Units: ug/L

SAMPLE: ICSA

File: IOI03A Sep 03, 2021 12:03

Analyte	TRUE	FOUND	% R
ALUMINUM	500000.00	502700.00	100.5
ARSENIC	0	-3.01	
CALCIUM	500000.00	472100.00	94.4
IRON	200000.00	186300.00	93.2
MAGNESIUM	500000.00	440400.00	88.1
MANGANESE	0	-0.23	
POTASSIUM	0	10.56	
SODIUM	0	25.74	

SAMPLE: ICSAB

File: IOI03A Sep 03, 2021 12:08

Analyte	TRUE	FOUND	% R
ALUMINUM	500000.00	522700.00	104.5
ARSENIC	100.00	96.95	97.0
CALCIUM	500000.00	483000.00	96.6
IRON	200000.00	190900.00	95.5
MAGNESIUM	500000.00	439100.00	87.8
MANGANESE	500.00	472.00	94.4
POTASSIUM	20000.00	21560.00	107.8
SODIUM	20000.00	21650.00	108.3

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-1D-BASELINEP

Matrix: WATER **SDG Name:** SO5463

Percent Solids: 0.00 **Lab Sample ID:** SO5463-002P

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ARSENIC, TOTAL	2210		2140		100	71.0	N	87	113	P
CALCIUM, TOTAL	49600		48800		2500	34.0	N	87	113	P
IRON, TOTAL	57000		57500		1000	-55.0	N	87	115	P
MAGNESIUM, TOTAL	12400		7480		5000	98.0		85	113	P
MANGANESE, TOTAL	3200		2820		500	75.4	N	90	114	P
POTASSIUM, TOTAL	18400		8740		10000	96.3		86	114	P
SODIUM, TOTAL	24800		17900		7500	92.5		87	115	P

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-1D-BASELINES

Matrix: WATER **SDG Name:** SO5463

Percent Solids: 0.00 **Lab Sample ID:** SO5463-002S

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ARSENIC, TOTAL	2170		2140		100	32.0	N	87	113	P
CALCIUM, TOTAL	49400		48800		2500	24.0	N	87	113	P
IRON, TOTAL	56600		57500		1000	-90.0	N	87	115	P
MAGNESIUM, TOTAL	11400		7480		5000	78.6	N	85	113	P
MANGANESE, TOTAL	3220		2820		500	80.0	N	90	114	P
POTASSIUM, TOTAL	16400		8740		10000	76.8	N	86	114	P
SODIUM, TOTAL	23400		17900		7500	73.1	N	87	115	P

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-1D-BASELINEP

Matrix: WATER **SDG Name:** SO5463

Percent Solids: 0.00 **Lab Sample ID:** SO5463-004P

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ARSENIC, DISSOLVED	2350		2190		100	164.0	N	87	113	P
IRON, DISSOLVED	59300		58200		1000	111.0		87	115	P
MANGANESE, DISSOLVED	3300		2820		500	95.8		90	114	P

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-1D-BASELINES

Matrix: WATER **SDG Name:** SO5463

Percent Solids: 0.00 **Lab Sample ID:** SO5463-004S

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ARSENIC, DISSOLVED	2340		2190		100	147.0	N	87	113	P
IRON, DISSOLVED	60900		58200		1000	266.0	N	87	115	P
MANGANESE, DISSOLVED	3420		2820		500	119.2	N	90	114	P

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-1D-BASELINEA

Matrix: WATER **SDG Name:** SO5463

Percent Solids: 0.00 **Lab Sample ID:** SO5463-002A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ARSENIC, TOTAL	2600		2140		500	93.0		80	120	P
CALCIUM, TOTAL	55600		48800		5500	122.7	A	80	120	P
IRON, TOTAL	64400		57500		5500	125.3	A	80	120	P
MAGNESIUM, TOTAL	13000		7480		5500	100.7		80	120	P
MANGANESE, TOTAL	3370		2820		500	109.6		80	120	P
POTASSIUM, TOTAL	19300		8740		10000	106.0		80	120	P
SODIUM, TOTAL	24200		17900		5500	114.4		80	120	P

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-1D-BASELINEA

Matrix: WATER **SDG Name:** SO5463

Percent Solids: 0.00 **Lab Sample ID:** SO5463-004A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ARSENIC, DISSOLVED	2650		2190		500	92.8		80	120	P
IRON, DISSOLVED	61900		58200		5500	68.0	A	80	120	P
MANGANESE, DISSOLVED	3220		2820		500	80.8		80	120	P

Comments:

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-1D-BASELINE

Matrix: WATER **SDG Name:** SO5463

Percent Solids: 0.00 **Lab Sample ID:** SO5463-002

Concentration Units : ug/L

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
ARSENIC, TOTAL		2170		2210		1.8		P
CALCIUM, TOTAL		49400		49600		0.5		P
IRON, TOTAL		56600		57000		0.6		P
MAGNESIUM, TOTAL		11400		12400		8.2		P
MANGANESE, TOTAL		3220		3200		0.7		P
POTASSIUM, TOTAL		16400		18400		11.2		P
SODIUM, TOTAL		23400		24800		6.1		P

Comments:

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-1D-BASELINE

Matrix: WATER **SDG Name:** SO5463

Percent Solids: 0.00 **Lab Sample ID:** SO5463-004

Concentration Units : ug/L

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
ARSENIC, DISSOLVED		2340		2350		0.7		P
IRON, DISSOLVED		60900		59300		2.6		P
MANGANESE, DISSOLVED		3420		3300		3.5		P

Comments:

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWOH20ICW1

Matrix: WATER **SDG Name:** SO5463

QC Batch ID: OH20ICW1

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ARSENIC	100	99.1	99.1	87	113
CALCIUM	2500	2700	108.0	87	113
IRON	1000	1080	108.4	87	115
MAGNESIUM	5000	5160	103.1	85	113
MANGANESE	500	522	104.4	90	114
POTASSIUM	10000	10700	106.8	86	114
SODIUM	7500	8010	106.8	87	115

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWOH31ICW1

Matrix: WATER **SDG Name:** SO5463

QC Batch ID: OH31ICW1

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ARSENIC	100	92.6	92.6	87	113
CALCIUM	2500	2360	94.2	87	113
IRON	1000	1100	110.3	87	115
MAGNESIUM	5000	4770	95.4	85	113
MANGANESE	500	556	111.3	90	114
POTASSIUM	10000	9330	93.3	86	114
SODIUM	7500	7210	96.1	87	115

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-1D-BASELINEL

Matrix: WATER **SDG Name:** SO5463

Lab Sample ID: SO5463-002L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ARSENIC, TOTAL	2140		2120		0.9		P
CALCIUM, TOTAL	48800		49900		2.3		P
IRON, TOTAL	57500		58500		1.7		P
MAGNESIUM, TOTAL	7480		7740		3.5		P
MANGANESE, TOTAL	2820		2860		1.4		P
POTASSIUM, TOTAL	8740		8830		1.0		P
SODIUM, TOTAL	17900		17900		0.0		P

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-21-1D-BASELINEL

Matrix: WATER **SDG Name:** SO5463

Lab Sample ID: SO5463-004L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ARSENIC, DISSOLVED	2190		2140		2.3		P
IRON, DISSOLVED	58200		58100		0.2		P
MANGANESE, DISSOLVED	2820		2800		0.7		P

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 01/23/2019

Concentration Units: ug/L

Analyte	PQL/LOQ	IDL	M
ALUMINUM	300	10	P
ARSENIC	8.0	1.4	P
CALCIUM	100	11	P
IRON	100	3.6	P
MAGNESIUM	100	2.9	P
MANGANESE	5.0	0.87	P
POTASSIUM	1000	73	P
SODIUM	1000	12	P

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 06/11/2010

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ARSENIC	5.0	ug/L	P	SW846 3010A / SW846 6010C
CALCIUM	80	ug/L	P	SW846 3010A / SW846 6010C
IRON	80	ug/L	P	SW846 3010A / SW846 6010C
MAGNESIUM	80	ug/L	P	SW846 3010A / SW846 6010C
MANGANESE	4.0	ug/L	P	SW846 3010A / SW846 6010C
POTASSIUM	500	ug/L	P	SW846 3010A / SW846 6010C
SODIUM	500	ug/L	P	SW846 3010A / SW846 6010C

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 01/19/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ARSENIC	1.4	ug/L	P	SW846 3010A / SW846 6010C
CALCIUM	11	ug/L	P	SW846 3010A / SW846 6010C
IRON	5.4	ug/L	P	SW846 3010A / SW846 6010C
MAGNESIUM	7.8	ug/L	P	SW846 3010A / SW846 6010C
MANGANESE	1.1	ug/L	P	SW846 3010A / SW846 6010C
POTASSIUM	41	ug/L	P	SW846 3010A / SW846 6010C
SODIUM	24	ug/L	P	SW846 3010A / SW846 6010C

ICP INTERELEMENT CORRECTION FACTORS

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Instrument Name: THERMO ICAP 6500 **Instrument ID:** I **Date:** 03/10/2021

Analyte	Wavelength (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	As	Cr	Co	Cu	Mn	Mo	Ni	Ti	V
ALUMINUM	396.15	0.0	0.0006250	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0293740	0.0	0.0	0.0
ANTIMONY	206.83	0.0000130	0.0	0.0000150	0.0	0.0000731	0.0160080	0.0	0.0	0.0	-0.0046490	-0.0008980	0.0	-0.0005030
ARSENIC	189.04	-0.0000090	0.0	-0.0001780	0.0	0.0	0.0001984	0.0	0.0	0.0	0.0015170	0.0	0.0	0.0
BARIUM	455.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BERYLLIUM	313.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0006836	0.0001220
BORON	208.96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0501700	0.0	0.0	0.0
CADMIUM	226.50	0.0	0.0	0.0000850	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0001140	0.0000801	0.0
CALCIUM	315.89	0.0	0.0	0.0	0.0	0.0	0.0026700	0.0008487	0.0	0.0	0.0	0.0	0.0	0.0
CHROMIUM	267.72	0.0	0.0	-0.0000010	0.0	0.0	0.0	0.0	0.0	0.0003640	0.0	0.0	0.0	-0.0000100
COBALT	228.62	0.0	0.0	0.0000050	0.0	0.0	0.0001670	0.0	0.0	0.0	0.0	0.0001562	0.0017840	0.0
COPPER	327.40	0.0000079	0.0	-0.0000147	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0006988	0.0004860
GOLD	242.79	0.0	0.0	0.0001110	0.0	0.0	0.0	0.0	0.0	0.0058700	0.0	0.0	0.0	0.0
IRON	259.94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LEAD	220.35	-0.0001590	0.0	0.0000440	0.0	0.0001480	-0.0000772	-0.0000860	0.0004910	0.0	-0.0010840	0.0003270	-0.0000220	0.0
LITHIUM	670.78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAGNESIUM	202.58	0.0	0.0	0.0000300	0.0	0.0	0.0	0.1395100	0.0	0.0	0.0145280	0.0	0.0003530	0.0
MANGANESE	257.61	-0.0000050	0.0	0.0000100	0.0000391	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MOLYBDENUM	202.03	0.0	0.0	0.0	0.0	0.0	0.0000270	0.0	0.0	-0.0000204	0.0	0.0	0.0	-0.0001163
NICKEL	231.60	0.0	0.0	-0.0000490	0.0	0.0	0.0	0.0000390	0.0	0.0	0.0034490	0.0	0.0	0.0
POTASSIUM	766.49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SELENIUM	196.09	0.0000090	0.0	0.0000320	0.0	0.0003180	0.0	0.0002310	0.0	0.0006280	0.0	0.0	0.0	0.0003040
SILICON	251.61	0.0	0.0	-0.0000150	0.0	0.0	0.0	0.0	0.0	0.0	0.0132630	0.0	0.0105540	0.0
SILVER	328.07	0.0	0.0	-0.0002820	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0008413	0.0
SODIUM	589.59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRONTIUM	421.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
THALLIUM	190.86	0.0000030	0.0	0.0000001	0.0	0.0	0.0	0.0023030	-0.0000680	-0.0024730	-0.0000880	0.0	-0.0009840	-0.0078940
TIN	189.99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TITANIUM	334.90	0.0	0.0	0.0	0.0	0.0	0.0001510	0.0	0.0	0.0	0.0002130	0.0	0.0	0.0
VANADIUM	292.40	0.0	0.0	0.0000120	0.0	0.0	-0.0053650	0.0	0.0	-0.0001670	-0.0037960	0.0	0.0006990	0.0
ZINC	206.20	0.0	0.0	0.0	0.0	0.0	-0.0010444	0.0	0.0	0.0	0.0	0.0	0.0	0.0

FORM XI - IN

ICP LINEAR RANGES

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 11/25/2020

Concentration Units: ug/L

Analyte	Integration Time (sec)	Linear Range	M
ALUMINUM	5.00	500000	P
ARSENIC	45.00	20000	P
CALCIUM	5.00	500000	P
IRON	5.00	250000	P
MAGNESIUM	45.00	200000	P
MANGANESE	5.00	20000	P
POTASSIUM	5.00	300000	P
SODIUM	5.00	200000	P

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** OH20ICW1

Matrix: WATER **SDG Name:** SO5463

Method: P **Prep Date:** 08/20/2021

Client ID	Lab Sample ID	Initial (L)	Final (L)	Bottle ID
LCSWOH20ICW1	LCSWOH20ICW1	0.05	0.05	
PBWOH20ICW1	PBWOH20ICW1	0.05	0.05	
MW-21-1S-BASELINE	SO5463-001	0.05	0.05	C
MW-21-1S-BASELINE	SO5463-003	0.05	0.05	A

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** OH31ICW1

Matrix: WATER **SDG Name:** SO5463

Method: P **Prep Date:** 08/31/2021

Client ID	Lab Sample ID	Initial (L)	Final (L)	Bottle ID
LCSWOH31ICW1	LCSWOH31ICW1	0.05	0.05	
PBWOH31ICW1	PBWOH31ICW1	0.05	0.05	
MW-21-1D-BASELINE	SO5463-002	0.05	0.05	I
MW-21-1D-BASELINEP	SO5463-002P	0.05	0.05	I
MW-21-1D-BASELINES	SO5463-002S	0.05	0.05	I
MW-21-1D-BASELINE	SO5463-004	0.05	0.05	A
MW-21-1D-BASELINEP	SO5463-004P	0.05	0.05	A
MW-21-1D-BASELINES	SO5463-004S	0.05	0.05	A

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Instrument ID: THERMO ICAP 6500 **File Name:** IOH24A

Date: 08/24/2021 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements						
Blank		1	11:14	AL	AS	CA	FE	MG MN	K	NA
Std 1		1	11:18	AL	AS	CA	FE	MG MN	K	NA
ICV		1	11:23	AL	AS	CA	FE	MG MN	K	NA
ICB		1	11:27	AL	AS	CA	FE	MG MN	K	NA
PQL		1	11:31	AL	AS	CA	FE	MG MN	K	
ICSA		1	11:36	AL	AS	CA	FE	MG MN	K	NA
ICSAB		1	11:40	AL	AS	CA	FE	MG MN	K	NA
CCV		1	11:45	AL	AS	CA	FE	MG MN	K	NA
CCB		1	11:49	AL	AS	CA	FE	MG MN	K	NA
ZZZZZZ		1	11:53							
ZZZZZZ		1	11:58							
CCV		1	12:03	AL	AS	CA	FE	MG MN	K	NA
CCB		1	12:07	AL	AS	CA	FE	MG MN	K	NA
PQL		1	12:11							NA
ZZZZZZ		1	12:16							
ZZZZZZ		1	12:20							
ZZZZZZ		1	12:24							
ZZZZZZ		1	12:28							
LCSWOH20ICW1		1	12:33		AS	CA	FE	MG MN	K	NA
ZZZZZZ		1	12:37							
PBWOH20ICW1		1	12:41		AS	CA	FE	MG MN	K	NA
ZZZZZZ		2	12:46							
ZZZZZZ		2	12:50							
CCV		1	12:55	AL	AS	CA	FE	MG MN	K	NA
CCB		1	12:59	AL	AS	CA	FE	MG MN	K	NA
ZZZZZZ		1	13:03							
ZZZZZZ		1	13:08							

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Instrument ID: THERMO ICAP 6500 **File Name:** IOH24A

Date: 08/24/2021 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements						
ZZZZZZ		1	13:12							
ZZZZZZ		1	13:17							
ZZZZZZ		1	13:21							
ZZZZZZ		1	13:25							
ZZZZZZ		1	13:30							
ZZZZZZ		1	13:34							
ZZZZZZ		1	13:38							
ZZZZZZ		1	13:43							
CCV		1	13:47	AL	AS	CA	FE	MG MN	K	NA
CCB		1	13:51	AL	AS	CA	FE	MG MN	K	NA
ZZZZZZ		1	13:56							
ZZZZZZ		1	14:00							
ZZZZZZ		1	14:04							
ZZZZZZ		1	14:09							
ZZZZZZ		1	14:13							
ZZZZZZ		1	14:18							
ZZZZZZ		1	14:22							
ZZZZZZ		1	14:26							
ZZZZZZ		1	14:31							
ZZZZZZ		1	14:35							
CCV		1	14:39	AL	AS	CA	FE	MG MN	K	NA
CCB		1	14:43	AL	AS	CA	FE	MG MN	K	NA
ZZZZZZ		1	14:48							
ZZZZZZ		1	14:52							
ZZZZZZ		1	14:57							
ZZZZZZ		1	15:01							
ZZZZZZ		1	15:05							

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Instrument ID: THERMO ICAP 6500 **File Name:** IOH24A

Date: 08/24/2021 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements						
ZZZZZZ		1	15:10							
ZZZZZZ		1	15:14							
ZZZZZZ		1	15:18							
ZZZZZZ		1	15:23							
ZZZZZZ		5	15:27							
CCV		1	15:32	AL	AS	CA	FE	MG MN	K	NA
CCB		1	15:36	AL	AS	CA	FE	MG MN	K	NA
ZZZZZZ		1	15:40							
ZZZZZZ		1	15:44							
ZZZZZZ		1	15:49							
SO5463-001	MW-21-1S-BASELINE	1	15:53		AS	CA	FE	MG MN	K	NA
ZZZZZZ		1	15:58							
SO5463-003	MW-21-1S-BASELINE	1	16:02		AS		FE	MN		
ZZZZZZ		1	16:06							
ZZZZZZ		1	16:11							
ZZZZZZ		1	16:15							
ZZZZZZ		1	16:19							
CCV		1	16:24	AL	AS	CA	FE	MG MN	K	NA
CCB		1	16:28	AL	AS	CA	FE	MG MN	K	NA

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Instrument ID: THERMO ICAP 6500 **File Name:** IOI01A

Date: 09/01/2021 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements						
Blank		1	13:17	AL	AS	CA	FE	MG MN	K	NA
Std 1		1	13:22	AL	AS	CA	FE	MG MN	K	NA
ICV		1	13:26	AL	AS	CA	FE	MG MN	K	NA
ICB		1	13:30	AL	AS	CA	FE	MG MN	K	NA
PQL		1	13:34	AL	AS	CA	FE	MG MN	K	
ICSA		1	13:39	AL	AS	CA	FE	MG MN	K	NA
ICSAB		1	13:43	AL	AS	CA	FE	MG MN	K	NA
CCV		1	13:48	AL	AS	CA	FE	MG MN	K	NA
CCB		1	13:52	AL	AS	CA	FE	MG MN	K	NA
ZZZZZZ		1	13:56							
ZZZZZZ		1	14:01							
CCV		1	14:06	AL	AS	CA	FE	MG MN	K	NA
CCB		1	14:10	AL	AS	CA	FE	MG MN	K	NA
PQL		1	14:14							NA
ZZZZZZ		1	14:19							
ZZZZZZ		1	14:23							
ZZZZZZ		1	14:28							
ZZZZZZ		1	14:32							
LCSWOH31ICW1		1	14:36		AS	CA	FE	MG MN	K	NA
PBWOH31ICW1		1	14:40		AS	CA	FE	MG MN	K	NA
ZZZZZZ		1	14:45							
ZZZZZZ		1	14:49							
ZZZZZZ		1	14:53							
CCV		1	14:58	AL	AS	CA	FE	MG MN	K	NA
CCB		1	15:02	AL	AS	CA	FE	MG MN	K	NA

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Instrument ID: THERMO ICAP 6500 **File Name:** IOI03A

Date: 09/03/2021 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements						
Blank		1	11:42	AL	AS	CA	FE	MG MN	K	NA
Std 1		1	11:46	AL	AS	CA	FE	MG MN	K	NA
ICV		1	11:50	AL	AS	CA	FE	MG MN	K	NA
ICB		1	11:54	AL	AS	CA	FE	MG MN	K	NA
PQL		1	11:59	AL	AS	CA	FE	MG MN	K	NA
ICSA		1	12:03	AL	AS	CA	FE	MG MN	K	NA
ICSAB		1	12:08	AL	AS	CA	FE	MG MN	K	NA
CCV		1	12:12	AL	AS	CA	FE	MG MN	K	NA
CCB		1	12:16	AL	AS	CA	FE	MG MN	K	NA
ZZZZZZ		1	12:21							
ZZZZZZ		1	12:26							
CCV		1	12:30	AL	AS	CA	FE	MG MN	K	NA
CCB		1	12:34	AL	AS	CA	FE	MG MN	K	NA
ZZZZZZ		1	12:39							
ZZZZZZ		1	12:43							
ZZZZZZ		1	12:47							
ZZZZZZ		1	12:52							
ZZZZZZ		1	12:56							
ZZZZZZ		1	13:00							
ZZZZZZ		5	13:04							
ZZZZZZ		5	13:09							
ZZZZZZ		1	13:13							
ZZZZZZ		1	13:18							
CCV		1	13:22	AL	AS	CA	FE	MG MN	K	NA
CCB		1	13:26	AL	AS	CA	FE	MG MN	K	NA
ZZZZZZ		1	13:31							
ZZZZZZ		1	13:35							

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SO5463

Instrument ID: THERMO ICAP 6500 **File Name:** IOI03A

Date: 09/03/2021 **Method:** P

Lab Sample ID	Client ID	D.F.	Time		Elements					
ZZZZZZ		1	13:40							
ZZZZZZ		1	13:44							
ZZZZZZ		1	13:49							
ZZZZZZ		10	13:53							
ZZZZZZ		20	13:57							
ZZZZZZ		1	14:02							
SO5463-002	MW-21-1D-BASELINE	1	14:06		AS	CA	FE	MG MN	K	NA
SO5463-002L	MW-21-1D-BASELINEL	5	14:11		AS	CA	FE	MG MN	K	NA
CCV		1	14:15	AL	AS	CA	FE	MG MN	K	NA
CCB		1	14:19	AL	AS	CA	FE	MG MN	K	NA
SO5463-002A	MW-21-1D-BASELINEA	1	14:24		AS	CA	FE	MG MN	K	NA
SO5463-002P	MW-21-1D-BASELINEP	1	14:28		AS	CA	FE	MG MN	K	NA
SO5463-002S	MW-21-1D-BASELINES	1	14:32		AS	CA	FE	MG MN	K	NA
SO5463-004	MW-21-1D-BASELINE	1	14:36		AS		FE	MN		
SO5463-004L	MW-21-1D-BASELINEL	5	14:41		AS		FE	MN		
SO5463-004A	MW-21-1D-BASELINEA	1	14:45		AS		FE	MN		
SO5463-004P	MW-21-1D-BASELINEP	1	14:49		AS		FE	MN		
SO5463-004S	MW-21-1D-BASELINES	1	14:53		AS		FE	MN		
ZZZZZZ		1	14:58							
ZZZZZZ		1	15:02							
CCV		1	15:06	AL	AS	CA	FE	MG MN	K	NA
CCB		1	15:10	AL	AS	CA	FE	MG MN	K	NA

Raw Data Section

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: I (Thermo iCAP 6500) **ANALYST**: EP **ANALYSIS DATE**: 08/24/2021

METHOD: ICP
- ☑ 200.7
- ☑ 6010
- ☑ DOD
- ☐ _____

FILE NAME: IOH24A

REVIEWED
EA 08-25-21
KATAHDIN ANALYTICAL
METALS SECTION

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by EA (initals) on 8/24/21 (date). Client IDs verified

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW20410	08/05/2021	08/05/2022	0 ug/L
Standard 1	MW20463	08/20/2021	09/11/2021	Varies by Element
ICV	MW20364	08/20/2021	11/04/2021	Varies by Element
PQL	MW20454	08/17/2021	9/11/2021	Varies by Element
LRS1	MW20455	08/18/2021	09/15/2021	Varies by Element
LRS2	MW20469	08/24/2021	09/11/2021	Varies by Element
ICSA	MW20453	08/17/2021	11/17/2021	Varies by Element
ICSAB	MW20412	08/05/2021	10/05/2021	Varies by Element
CCV	MW20468	08/24/2021	09/11/2021	Varies by Element
Internal Standard	MW20452	08/17/2021	11/17/2021	5.0 mg/L Yttrium

Additional Comments and Notes:

PQL failed low for sodium. Replaced with SODIUM PQL. PQL warned low for selenium.

Initial CCV warned high for thallium. Replaced with passing opening CCV.

EA 08-25-21

Dilutions: Some samples were diluted based on history or due to interfering element concentrations.

Dilution preparations are as follows:

2x diln.: 4.0mL of sample (pipet M25) + 4.0mL of MW19407 (pipet M25)

5x diln.: 1.6 mL of sample (pipet M25) + 6.4 mL of MW19407 (pipet M25)

Post Spike: 0.123mL MW20305 (pipet M27) to 6.0mL of sample (pipet M25)

INSTRUMENT RUNLOG

Instrument: ICAP 6500

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
Blank	1.000	IOH24A	08/24/2021	11:14	EP
Std 1	1.000	IOH24A	08/24/2021	11:18	EP
ICV	1.000	IOH24A	08/24/2021	11:23	EP
ICB	1.000	IOH24A	08/24/2021	11:27	EP
PQL	1.000	IOH24A	08/24/2021	11:31	EP
ICSA	1.000	IOH24A	08/24/2021	11:36	EP
ICSAB	1.000	IOH24A	08/24/2021	11:40	EP
CCV	1.000	IOH24A	08/24/2021	11:45	EP
CCB	1.000	IOH24A	08/24/2021	11:49	EP
LRS1	1.000	IOH24A	08/24/2021	11:53	EP
LRS2	1.000	IOH24A	08/24/2021	11:58	EP
CCV	1.000	IOH24A	08/24/2021	12:03	EP
CCB	1.000	IOH24A	08/24/2021	12:07	EP
SODIUM PQL	1.000	IOH24A	08/24/2021	12:11	EP
LCSOOH19ICS2	1.000	IOH24A	08/24/2021	12:16	EP
LC2OOH20ICS1	1.000	IOH24A	08/24/2021	12:20	EP
LCSOOH20ICS1	1.000	IOH24A	08/24/2021	12:24	EP
PBSOH20ICS1	1.000	IOH24A	08/24/2021	12:28	EP
LCSWOH20ICW1	1.000	IOH24A	08/24/2021	12:33	EP
PBT1707A	1.000	IOH24A	08/24/2021	12:37	EP
PBWOH20ICW1	1.000	IOH24A	08/24/2021	12:41	EP
SO5134-004	2.000	IOH24A	08/24/2021	12:46	EP
SO5134-005	2.000	IOH24A	08/24/2021	12:50	EP
CCV	1.000	IOH24A	08/24/2021	12:55	EP
CCB	1.000	IOH24A	08/24/2021	12:59	EP
SO5122-009	1.000	IOH24A	08/24/2021	13:03	EP
SO5122-010	1.000	IOH24A	08/24/2021	13:08	EP
SO5122-011	1.000	IOH24A	08/24/2021	13:12	EP
SO5122-012	1.000	IOH24A	08/24/2021	13:17	EP
SO5122-013	1.000	IOH24A	08/24/2021	13:21	EP
SO5122-014	1.000	IOH24A	08/24/2021	13:25	EP
SO5122-015	1.000	IOH24A	08/24/2021	13:30	EP
SO5388-001	1.000	IOH24A	08/24/2021	13:34	EP
SO5389-001	1.000	IOH24A	08/24/2021	13:38	EP
SO4236-021	1.000	IOH24A	08/24/2021	13:43	EP
CCV	1.000	IOH24A	08/24/2021	13:47	EP
CCB	1.000	IOH24A	08/24/2021	13:51	EP
SO4236-022	1.000	IOH24A	08/24/2021	13:56	EP
SO4236-023	1.000	IOH24A	08/24/2021	14:00	EP
SO4236-024	1.000	IOH24A	08/24/2021	14:04	EP
SO4236-025	1.000	IOH24A	08/24/2021	14:09	EP
SO4236-026	1.000	IOH24A	08/24/2021	14:13	EP
SO4236-027	1.000	IOH24A	08/24/2021	14:18	EP
SO4236-028	1.000	IOH24A	08/24/2021	14:22	EP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SO4236-029	1.000	IOH24A	08/24/2021	14:26	EP
SO4236-030	1.000	IOH24A	08/24/2021	14:31	EP
SO4236-031	1.000	IOH24A	08/24/2021	14:35	EP
CCV	1.000	IOH24A	08/24/2021	14:39	EP
CCB	1.000	IOH24A	08/24/2021	14:43	EP
SO4236-032	1.000	IOH24A	08/24/2021	14:48	EP
SO4236-033	1.000	IOH24A	08/24/2021	14:52	EP
SO4236-034	1.000	IOH24A	08/24/2021	14:57	EP
SO4236-035	1.000	IOH24A	08/24/2021	15:01	EP
SO4236-036	1.000	IOH24A	08/24/2021	15:05	EP
SO4236-037	1.000	IOH24A	08/24/2021	15:10	EP
SO4236-038	1.000	IOH24A	08/24/2021	15:14	EP
SO4236-039	1.000	IOH24A	08/24/2021	15:18	EP
SO5372-001	1.000	IOH24A	08/24/2021	15:23	EP
SO5372-001L	5.000	IOH24A	08/24/2021	15:27	EP
CCV	1.000	IOH24A	08/24/2021	15:32	EP
CCB	1.000	IOH24A	08/24/2021	15:36	EP
SO5372-001A	1.000	IOH24A	08/24/2021	15:40	EP
SO5372-001P	1.000	IOH24A	08/24/2021	15:44	EP
SO5372-001S	1.000	IOH24A	08/24/2021	15:49	EP
SO5463-001	1.000	IOH24A	08/24/2021	15:53	EP
SO5463-002	1.000	IOH24A	08/24/2021	15:58	EP
SO5463-003	1.000	IOH24A	08/24/2021	16:02	EP
SO5463-004	1.000	IOH24A	08/24/2021	16:06	EP
SO5464-002	1.000	IOH24A	08/24/2021	16:11	EP
SO5464-003	1.000	IOH24A	08/24/2021	16:15	EP
SO5464-004	1.000	IOH24A	08/24/2021	16:19	EP
CCV	1.000	IOH24A	08/24/2021	16:24	EP
CCB	1.000	IOH24A	08/24/2021	16:28	EP
SO5464-005	1.000	IOH24A	08/24/2021	16:33	EP
SO5464-006	1.000	IOH24A	08/24/2021	16:37	EP
SO5464-008	1.000	IOH24A	08/24/2021	16:41	EP
SO5464-009	1.000	IOH24A	08/24/2021	16:46	EP
SO5464-010	1.000	IOH24A	08/24/2021	16:50	EP
SO5464-011	1.000	IOH24A	08/24/2021	16:55	EP
SO5464-012	1.000	IOH24A	08/24/2021	16:59	EP
SODIUM PQL	1.000	IOH24A	08/24/2021	17:04	EP
CCV	1.000	IOH24A	08/24/2021	17:08	EP
CCB	1.000	IOH24A	08/24/2021	17:12	EP
PQL	1.000	IOH24A	08/24/2021	17:17	EP
ICSA	1.000	IOH24A	08/24/2021	17:21	EP
ICSAB	1.000	IOH24A	08/24/2021	17:26	EP
CCV	1.000	IOH24A	08/24/2021	17:30	EP
CCB	1.000	IOH24A	08/24/2021	17:34	EP

Intensity Report

Author:

Published: 8/25/2021 7:52:24AM

Notes:

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Method Name: FAST-2016_NO_AU Method Revision: 1,003

Analyst Name: EP

Acquire Date: 8/24/2021 11:14:33AM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.0001380	Cts/S	0.000006000	4.503	-18.86
Al3961_R		-0.0002970	Cts/S	0.0001510	50.79	-5.590
As1891_A		-0.0002530	Cts/S	0.000006000	2.519	-1.878
B_2089_A		0.001207	Cts/S	0.00003600	3.007	8.967
Ba4554_R		0.001459	Cts/S	0.0003480	23.84	27.50
Be3130_R		0.0003960	Cts/S	0.0001270	32.15	7.461
Ca3158_R		-0.001560	Cts/S	0.0001450	9.283	-29.38
Cd2265_A		-0.0002690	Cts/S	0.00002600	9.681	-1.994
Co2286_A		0.0001500	Cts/S	0.00008600	57.72	1.111
Cr2677_A		0.000006000	Cts/S	0.000002000	27.01	-0.7801
Cu3273_A		-0.0001930	Cts/S	0.00003400	17.53	-26.35
Fe2599_R		0.0007170	Cts/S	0.00009100	12.73	13.50
K_7664_R		-0.001558	Cts/S	0.0001620	10.41	-29.36
Li6707_R		0.0001300	Cts/S	0.0008380	646.8	2.392
Mg2025_A		-0.0008400	Cts/S	0.00004700	5.595	-6.237
Mn2576_R		0.0003420	Cts/S	0.00004200	12.13	6.446
Mo2020_A		0.0003390	Cts/S	0.00004600	13.56	2.521
Na5895_R		0.003741	Cts/S	0.0002050	5.471	70.49
Ni2316_A		-0.00001500	Cts/S	0.00001300	85.81	-0.1134
Pb2203_A		-0.00003700	Cts/S	0.00002400	64.10	-0.2740
Sb2068_A		-0.00009400	Cts/S	0.000003000	2.966	-0.6951
Se1960_A		0.0002290	Cts/S	0.00004000	17.43	1.697
Si2516_R		0.003780	Cts/S	0.0002630	6.955	71.19
Sn1899_A		0.0001810	Cts/S	0.00009300	51.48	1.344
Sr4215_R		-0.0006090	Cts/S	0.0001800	29.64	-11.48
Ti3349_A		-0.00008400	Cts/S	0.00001500	18.03	-11.52
Tl1908_A		-0.0001940	Cts/S	0.00003200	16.46	-1.445
V_2924_A		-0.00003300	Cts/S	0.000009000	25.73	-4.544
Zn2062_A		0.0001170	Cts/S	0.000007000	6.289	0.8706
Y_3600_R		18,838	Cts/S	118.28	0.62785	18,838
Y_2243_A		7,427.3	Cts/S	25.151	0.33862	7,427.3
Y_3600_A		136,910	Cts/S	668.35	0.48818	136,910

Std 1

Method Name: FAST-2016_NO_AU Method Revision: 1,003

Analyst Name: EP

Acquire Date: 8/24/2021 11:18:58AM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1261	Cts/S	0.0004420	0.3504	16,870
Al3961_R		1.498	Cts/S	0.006201	0.4139	27,800
As1891_A		0.04345	Cts/S	0.0004260	0.9802	317.9
B_2089_A		0.2006	Cts/S	0.001918	0.9560	1,468
Ba4554_R		3.919	Cts/S	0.01635	0.4170	72,730
Be3130_R		5.831	Cts/S	0.02499	0.4285	108,200
Ca3158_R		1.623	Cts/S	0.01195	0.7365	30,120
Cd2265_A		1.567	Cts/S	0.01428	0.9113	11,460
Co2286_A		0.4281	Cts/S	0.005258	1.228	3,132
Cr2677_A		0.08053	Cts/S	0.0002240	0.2778	10,770
Cu3273_A		0.1088	Cts/S	0.0007500	0.6892	14,560
Fe2599_R		2.635	Cts/S	0.03181	1.207	48,890
K_7664_R		0.9460	Cts/S	0.0003840	0.04059	17,550
Li6707_R		0.8227	Cts/S	0.00002800	0.003408	15,270

Std 1

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 11:18:58AM
Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Mg2025_A		1.165	Cts/S	0.01573	1.350	8,526
Mn2576_R		0.5134	Cts/S	0.0009980	0.1944	9,526
Mo2020_A		0.3982	Cts/S	0.004471	1.123	2,913
Na5895_R		3.339	Cts/S	0.0009260	0.02773	61,960
Ni2316_A		0.2105	Cts/S	0.002017	0.9584	1,540
Pb2203_A		0.1198	Cts/S	0.001103	0.9204	876.7
Sb2068_A		0.07001	Cts/S	0.0005960	0.8507	512.2
Se1960_A		0.03404	Cts/S	0.0003410	1.003	249.0
Si2516_R		0.6883	Cts/S	0.00003200	0.004617	12,770
Sn1899_A		0.05651	Cts/S	0.0005820	1.030	413.4
Sr4215_R		5.378	Cts/S	0.01040	0.1933	99,810
Ti3349_A		0.1767	Cts/S	0.0003800	0.2153	23,630
Tl1908_A		0.06318	Cts/S	0.0004900	0.7751	462.3
V_2924_A		0.08025	Cts/S	0.0005560	0.6928	10,730
Zn2062_A		0.3107	Cts/S	0.002776	0.8936	2,273
Y_3600_R		18,556	Cts/S	44.669	0.24072	18,556
Y_2243_A		7,316.6	Cts/S	54.537	0.74540	7,316.6
Y_3600_A		133,740	Cts/S	295.27	0.22079	133,740

ICV

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 11:23:04AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		418.6	ug/L	4.458	1.065	7,039
Al3961_R		9,631	ug/L	958.3	9.950	11,270
As1891_A		389.1	ug/L	5.003	1.286	124.3
B_2089_A		403.8	ug/L	3.827	0.9478	606.5
Ba4554_R		379.8	ug/L	33.39	8.791	29,100
Be3130_R		384.1	ug/L	35.34	9.201	43,770
Ca3158_R		9,697	ug/L	927.6	9.566	12,280
Cd2265_A		403.3	ug/L	3.881	0.9623	4,687
Co2286_A		408.7	ug/L	4.507	1.103	1,299
Cr2677_A		412.5	ug/L	4.677	1.134	4,434
Cu3273_A		414.0	ug/L	4.971	1.201	6,000
Fe2599_R		9,642	ug/L	890.1	9.232	19,860
K_7664_R		13,010	ug/L	1,103	8.478	9,607
Li6707_R		387.7	ug/L	32.20	8.304	6,235
Mg2025_A		10,400	ug/L	133.8	1.287	3,591
Mn2576_R		382.5	ug/L	36.81	9.623	3,840
Mo2020_A		411.9	ug/L	4.762	1.156	1,218
Na5895_R		9,637	ug/L	846.8	8.787	25,190
Ni2316_A		406.6	ug/L	5.314	1.307	635.0
Pb2203_A		413.0	ug/L	3.893	0.9428	367.0
Sb2068_A		402.5	ug/L	3.688	0.9163	208.6
Se1960_A		405.4	ug/L	2.956	0.7294	103.4
Si2516_R		9,501	ug/L	878.8	9.249	5,058
Sn1899_A		415.6	ug/L	4.664	1.122	175.0
Sr4215_R		388.8	ug/L	34.78	8.946	40,860
Ti3349_A		412.0	ug/L	4.302	1.044	9,709
Tl1908_A		414.8	ug/L	4.867	1.173	193.6
V_2924_A		415.7	ug/L	4.852	1.167	4,450
Zn2062_A		402.9	ug/L	4.722	1.172	929.1
Y_3600_R		19,597	Cts/S	1,282.5	6.5444	19,597
Y_2243_A		7,418.9	Cts/S	60.374	0.81379	7,418.9
Y_3600_A		133,500	Cts/S	1,131.6	0.84767	133,500

ICB

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 11:27:15AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1643	ug/L	0.07481	45.54	-16.26
Al3961_R		1.768	ug/L	0.3610	20.41	-3.656
As1891_A		0.2163	ug/L	0.5406	250.0	-1.844
B_2089_A		0.6530	ug/L	0.3150	48.24	10.12
Ba4554_R		-0.1438	ug/L	0.05793	40.29	17.13
Be3130_R		-0.07875	ug/L	0.02340	29.71	-1.188
Ca3158_R		-2.139	ug/L	3.711	173.5	-32.47
Cd2265_A		0.1432	ug/L	0.01079	7.535	-0.3505
Co2286_A		0.1258	ug/L	0.1183	94.02	1.542
Cr2677_A		0.02896	ug/L	0.05828	201.3	-0.4681
Cu3273_A		0.1810	ug/L	0.2078	114.8	-24.06
Fe2599_R		-4.120	ug/L	0.1156	2.807	5.412
K_7664_R		11.86	ug/L	16.64	140.3	-21.24
Li6707_R		0.3202	ug/L	0.8096	252.9	7.560
Mg2025_A		3.610	ug/L	2.407	66.67	-5.089
Mn2576_R		-0.05026	ug/L	0.06691	133.1	6.056
Mo2020_A		0.1232	ug/L	0.1569	127.3	2.944
Na5895_R		-5.401	ug/L	3.860	71.47	57.73
Ni2316_A		0.005604	ug/L	0.08218	1,467	-0.1054
Pb2203_A		-0.9058	ug/L	0.1247	13.77	-1.105
Sb2068_A		0.3380	ug/L	0.01877	5.554	-0.5268
Se1960_A		-1.109	ug/L	1.376	124.1	1.448
Si2516_R		-1.837	ug/L	3.261	177.5	71.33
Sn1899_A		-0.2983	ug/L	0.05477	18.36	1.243
Sr4215_R		-0.02827	ug/L	0.1375	486.3	-14.60
Ti3349_A		0.007568	ug/L	0.3193	4,220	-11.51
Tl1908_A		0.3887	ug/L	0.4994	128.5	-1.287
V_2924_A		0.02916	ug/L	0.2984	1,023	-4.295
Zn2062_A		0.1227	ug/L	0.1172	95.50	1.177
Y_3600_R		19,121	Cts/S	135.17	0.70694	19,121
Y_2243_A		7,577.5	Cts/S	2.5963	0.034263	7,577.5
Y_3600_A		139,230	Cts/S	238.12	0.17103	139,230

PQL

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 11:31:40AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		10.11	ug/L	0.3218	3.185	158.4
Al3961_R		302.7	ug/L	3.469	1.146	339.7
As1891_A		7.020	ug/L	0.9025	12.86	0.4123
B_2089_A		49.04	ug/L	0.1393	0.2840	81.86
Ba4554_R		5.945	ug/L	0.003520	0.05920	471.4
Be3130_R		4.952	ug/L	0.01695	0.3423	557.2
Ca3158_R		101.3	ug/L	2.776	2.741	95.65
Cd2265_A		5.129	ug/L	0.06611	1.289	58.72
Co2286_A		10.31	ug/L	0.2202	2.136	34.52
Cr2677_A		10.000	ug/L	0.2031	2.031	111.0
Cu3273_A		25.52	ug/L	0.03407	0.1335	359.6
Fe2599_R		98.14	ug/L	0.1859	0.1895	210.6
K_7664_R		961.2	ug/L	5.037	0.5241	664.2
Li6707_R		101.1	ug/L	0.9269	0.9169	1,586
Mg2025_A		107.5	ug/L	1.356	1.261	31.93
Mn2576_R		4.637	ug/L	0.1835	3.957	51.80
Mo2020_A		9.551	ug/L	0.1291	1.352	31.31
Na5895_R	F	1.591	ug/L	6.959	437.5	75.31
Ni2316_A		10.20	ug/L	0.05338	0.5236	16.12

PQL

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 11:31:40AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		4.654	ug/L	0.7409	15.92	3.926
Sb2068_A		8.490	ug/L	0.5391	6.350	3.276
Se1960_A	W	7.835	ug/L	0.4544	5.800	3.732
Si2516_R		194.4	ug/L	4.078	2.097	171.5
Sn1899_A		101.3	ug/L	0.2134	0.2106	44.55
Sr4215_R		10.09	ug/L	0.04196	0.4159	1,022
Ti3349_A		14.69	ug/L	0.07310	0.4975	348.7
Tl1908_A		16.31	ug/L	0.3921	2.404	6.341
V_2924_A		10.10	ug/L	0.2484	2.458	108.1
Zn2062_A	W	24.56	ug/L	0.08832	0.3595	58.63
Y_3600_R		19,047	Cts/S	9.2502	0.048566	19,047
Y_2243_A		7,565.1	Cts/S	17.863	0.23612	7,565.1
Y_3600_A		138,800	Cts/S	1.5019	0.0010820	138,800

ICSA

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 11:36:05AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.8800	ug/L	0.4342	49.34	-565.5
Al3961_R		523,500	ug/L	6,154	1.176	563,500
As1891_A		-1.056	ug/L	0.6127	58.04	-9.282
B_2089_A		-2.087	ug/L	0.5101	24.45	5.110
Ba4554_R		1.492	ug/L	0.05839	3.913	131.4
Be3130_R		-0.1392	ug/L	0.04601	33.04	-7.630
Ca3158_R		487,400	ug/L	451.4	0.09262	569,600
Cd2265_A		-1.027	ug/L	0.1758	17.11	333.0
Co2286_A		-0.1954	ug/L	0.1666	85.25	2.786
Cr2677_A		-1.150	ug/L	0.2554	22.20	5.541
Cu3273_A		0.9044	ug/L	0.3766	41.65	-13.57
Fe2599_R		187,500	ug/L	772.7	0.4122	355,300
K_7664_R		3.758	ug/L	29.71	790.5	-25.42
Li6707_R		5.457	ug/L	0.9214	16.88	83.09
Mg2025_A		436,000	ug/L	114.6	0.02629	131,500
Mn2576_R		-0.7140	ug/L	0.03756	5.260	-2.896
Mo2020_A		-3.475	ug/L	0.1329	3.826	-6.787
Na5895_R		13.97	ug/L	2.822	20.19	100.8
Ni2316_A		-0.6568	ug/L	0.7931	120.7	-8.898
Pb2203_A		1.661	ug/L	1.348	81.14	-28.90
Sb2068_A		0.06726	ug/L	0.1062	157.8	1.065
Se1960_A		-3.104	ug/L	2.297	74.01	3.477
Si2516_R		17.00	ug/L	11.52	67.75	61.06
Sn1899_A		9.681	ug/L	1.171	12.10	4.725
Sr4215_R	W	5.027	ug/L	0.05406	1.075	475.4
Ti3349_A		0.7108	ug/L	0.1503	21.14	4.918
Tl1908_A		-0.04508	ug/L	1.396	3,097	-0.7532
V_2924_A		-1.649	ug/L	0.5126	31.10	2.593
Zn2062_A		4.322	ug/L	0.04249	0.9830	9.509
Y_3600_R		17,985	Cts/S	55.854	0.31057	17,985
Y_2243_A		6,507.3	Cts/S	3.6285	0.055760	6,507.3
Y_3600_A		119,990	Cts/S	156.61	0.13051	119,990

ICSAB

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 11:40:41AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

ICSAB

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 11:40:41AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		218.9	ug/L	0.6899	0.3152	2,710
Al3961_R		527,300	ug/L	7,699	1.460	561,500
As1891_A		97.27	ug/L	0.08107	0.08334	18.66
B_2089_A		487.9	ug/L	0.5498	0.1127	637.1
Ba4554_R		494.8	ug/L	1.563	0.3160	34,510
Be3130_R		496.6	ug/L	0.8283	0.1668	51,520
Ca3158_R		483,200	ug/L	2,218	0.4590	558,600
Cd2265_A		915.0	ug/L	0.04844	0.005293	9,577
Co2286_A		454.6	ug/L	0.4198	0.09235	1,262
Cr2677_A		472.6	ug/L	0.9627	0.2037	4,519
Cu3273_A		537.8	ug/L	0.7446	0.1385	6,915
Fe2599_R		188,300	ug/L	340.9	0.1810	353,000
K_7664_R		21,480	ug/L	60.31	0.2808	14,460
Li6707_R		548.8	ug/L	0.3414	0.06220	8,034
Mg2025_A		434,200	ug/L	488.5	0.1125	130,200
Mn2576_R		469.3	ug/L	1.407	0.2998	4,288
Mo2020_A		488.4	ug/L	0.2700	0.05528	1,259
Na5895_R		21,580	ug/L	86.50	0.4008	51,290
Ni2316_A		889.4	ug/L	0.1669	0.01877	1,200
Pb2203_A		47.85	ug/L	0.4957	1.036	6.681
Sb2068_A		601.8	ug/L	1.787	0.2969	274.0
Se1960_A		48.17	ug/L	5.070	10.53	14.72
Si2516_R		2,106	ug/L	4.695	0.2229	1,062
Sn1899_A		485.0	ug/L	0.3282	0.06767	177.9
Sr4215_R		520.0	ug/L	1.115	0.2144	49,760
Ti3349_A		506.1	ug/L	1.136	0.2245	10,570
Tl1908_A		80.66	ug/L	0.5659	0.7016	32.70
V_2924_A		486.3	ug/L	0.4054	0.08338	4,637
Zn2062_A		902.2	ug/L	1.423	0.1577	1,814
Y_3600_R		17,792	Cts/S	4.3518	0.024460	17,792
Y_2243_A		6,468.1	Cts/S	8.5619	0.13237	6,468.1
Y_3600_A		118,330	Cts/S	7.9934	0.0067550	118,330

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 11:45:10AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		514.3	ug/L	0.6733	0.1309	8,672
Al3961_R		12,940	ug/L	85.25	0.6587	14,660
As1891_A		511.9	ug/L	0.5975	0.1167	161.8
B_2089_A		514.5	ug/L	2.279	0.4430	759.2
Ba4554_R		510.0	ug/L	4.007	0.7856	37,790
Be3130_R		504.4	ug/L	4.229	0.8385	55,580
Ca3158_R		12,860	ug/L	14.02	0.1090	15,770
Cd2265_A		515.8	ug/L	2.344	0.4545	5,910
Co2286_A		520.4	ug/L	1.690	0.3247	1,630
Cr2677_A		517.5	ug/L	0.7223	0.1396	5,578
Cu3273_A		516.7	ug/L	0.5471	0.1059	7,515
Fe2599_R		12,810	ug/L	58.18	0.4543	25,520
K_7664_R		12,680	ug/L	79.68	0.6284	9,053
Li6707_R		509.5	ug/L	5.932	1.164	7,923
Mg2025_A		13,170	ug/L	3.424	0.02599	4,487
Mn2576_R		504.8	ug/L	5.274	1.045	4,901
Mo2020_A		516.6	ug/L	1.352	0.2616	1,506
Na5895_R		12,710	ug/L	111.2	0.8754	32,110
Ni2316_A		521.2	ug/L	2.691	0.5162	802.4

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 11:45:10AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		520.1	ug/L	1.115	0.2144	455.7
Sb2068_A		510.0	ug/L	2.756	0.5404	260.8
Se1960_A		513.0	ug/L	3.549	0.6917	128.5
Si2516_R		12,960	ug/L	109.8	0.8471	6,645
Sn1899_A		521.4	ug/L	1.950	0.3740	216.1
Sr4215_R		511.9	ug/L	3.440	0.6721	52,020
Ti3349_A		515.2	ug/L	0.5384	0.1045	12,180
Tl1908_A	W	527.9	ug/L	4.835	0.9159	243.3
V_2924_A		516.1	ug/L	0.3195	0.06191	5,541
Zn2062_A		516.8	ug/L	1.386	0.2682	1,175
Y_3600_R		18,899	Cts/S	35.333	0.18696	18,899
Y_2243_A		7,314.0	Cts/S	20.162	0.27566	7,314.0
Y_3600_A		133,850	Cts/S	61.481	0.045933	133,850

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 11:49:18AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.02744	ug/L	0.2693	981.4	-18.68
Al3961_R		9.060	ug/L	2.453	27.07	4.670
As1891_A		-0.4942	ug/L	0.2120	42.90	-2.052
B_2089_A		0.2746	ug/L	0.2935	106.9	9.421
Ba4554_R		-0.07073	ug/L	0.08983	127.0	22.45
Be3130_R		-0.03668	ug/L	0.002833	7.724	3.451
Ca3158_R		13.88	ug/L	0.3787	2.729	-12.51
Cd2265_A		0.1189	ug/L	0.009111	7.660	-0.6157
Co2286_A		0.1455	ug/L	0.04021	27.64	1.586
Cr2677_A		0.3419	ug/L	0.08091	23.66	3.027
Cu3273_A		-0.05375	ug/L	0.1037	193.0	-27.56
Fe2599_R		2.166	ug/L	1.382	63.82	17.97
K_7664_R		7.729	ug/L	6.953	89.96	-24.05
Li6707_R		0.6729	ug/L	0.1830	27.20	12.98
Mg2025_A		29.79	ug/L	16.88	56.66	4.027
Mn2576_R		-0.5141	ug/L	0.01710	3.327	1.498
Mo2020_A		0.05785	ug/L	0.1080	186.7	2.708
Na5895_R		-2.431	ug/L	1.780	73.22	64.95
Ni2316_A		0.1394	ug/L	0.1407	100.9	0.1051
Pb2203_A		-1.354	ug/L	0.2422	17.88	-1.491
Sb2068_A		0.8151	ug/L	0.4520	55.46	-0.2669
Se1960_A		-1.239	ug/L	0.5038	40.65	1.394
Si2516_R		-5.954	ug/L	4.696	78.88	68.80
Sn1899_A		-0.1658	ug/L	0.2794	168.5	1.282
Sr4215_R		-0.002857	ug/L	0.01060	370.9	-11.86
Ti3349_A		0.3949	ug/L	0.1160	29.37	-1.974
Tl1908_A		-0.4455	ug/L	0.07226	16.22	-1.663
V_2924_A		0.1352	ug/L	0.1717	127.0	-3.104
Zn2062_A		0.1145	ug/L	0.1477	129.0	1.140
Y_3600_R		19,006	Cts/S	49.795	0.26200	19,006
Y_2243_A		7,472.1	Cts/S	57.600	0.77086	7,472.1
Y_3600_A		138,840	Cts/S	1,348.1	0.97100	138,840

LRS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 11:53:43AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

LRS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 11:53:43AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		2,050	ug/L	11.26	0.5493	33,630
Al3961_R		23.92	ug/L	2.451	10.25	235.8
As1891_A		20,490	ug/L	170.5	0.8323	6,334
B_2089_A		20,060	ug/L	135.1	0.6737	27,760
Ba4554_R		19,490	ug/L	192.8	0.9893	1,434,000
Be3130_R		19,470	ug/L	98.19	0.5042	2,132,000
Ca3158_R		25.93	ug/L	2.087	8.049	16.96
Cd2265_A		19,530	ug/L	109.1	0.5586	214,800
Co2286_A		20,450	ug/L	171.3	0.8377	61,710
Cr2677_A		20,270	ug/L	172.1	0.8487	212,800
Cu3273_A		20,500	ug/L	191.2	0.9330	291,300
Fe2599_R		2.229	ug/L	1.160	52.03	17.88
K_7664_R		9.775	ug/L	5.568	56.96	-22.28
Li6707_R		19,750	ug/L	140.5	0.7114	305,100
Mg2025_A		517.7	ug/L	33.54	6.478	1,131
Mn2576_R		19,570	ug/L	208.9	1.068	188,600
Mo2020_A		5,160	ug/L	41.52	0.8045	14,470
Na5895_R		25.44	ug/L	2.612	10.27	133.9
Ni2316_A		20,330	ug/L	141.2	0.6945	30,050
Pb2203_A		21,050	ug/L	135.7	0.6446	17,820
Sb2068_A		20,540	ug/L	117.8	0.5736	10,150
Se1960_A		21,030	ug/L	154.7	0.7356	5,011
Si2516_R		154.4	ug/L	21.96	14.22	271.1
Sn1899_A		20,340	ug/L	108.3	0.5322	8,080
Sr4215_R		19,710	ug/L	3.710	0.01883	1,991,000
Ti3349_A		20,110	ug/L	52.23	0.2598	463,000
Tl1908_A		20,190	ug/L	74.05	0.3668	9,021
V_2924_A		20,440	ug/L	192.9	0.9438	214,700
Zn2062_A		19,590	ug/L	114.1	0.5827	42,890
Y_3600_R		18,776	Cts/S	104.58	0.55700	18,776
Y_2243_A		7,051.3	Cts/S	28.232	0.40037	7,051.3
Y_3600_A		130,340	Cts/S	776.00	0.59538	130,340

LRS2

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 11:58:21AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.832	ug/L	0.9662	52.75	-674.5
Al3961_R		515,600	ug/L	13,550	2.628	553,300
As1891_A		5.097	ug/L	0.1401	2.749	-9.540
B_2089_A		29.58	ug/L	3.483	11.78	45.77
Ba4554_R		1.915	ug/L	0.04998	2.611	160.7
Be3130_R		0.8356	ug/L	0.02951	3.532	94.19
Ca3158_R		485,200	ug/L	8,121	1.674	565,300
Cd2265_A		-2.382	ug/L	0.4692	19.70	406.2
Co2286_A		1.419	ug/L	0.1465	10.32	7.915
Cr2677_A		-2.656	ug/L	0.4420	16.64	-4.682
Cu3273_A		3.448	ug/L	0.04304	1.248	11.34
Fe2599_R		233,200	ug/L	3,355	1.438	440,600
K_7664_R		309,500	ug/L	2,964	0.9575	210,300
Li6707_R		3.636	ug/L	0.5849	16.09	55.99
Mg2025_A		183,500	ug/L	1,191	0.6491	55,740
Mn2576_R		11.84	ug/L	0.1297	1.095	30.73
Mo2020_A		1.044	ug/L	1.455	139.5	4.953
Na5895_R		207,600	ug/L	4,739	2.283	496,500
Ni2316_A		0.06596	ug/L	0.1188	180.2	-9.859

LRS2

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 11:58:21AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		4.952	ug/L	0.1050	2.121	-24.85
Sb2068_A		2.431	ug/L	1.645	67.67	2.620
Se1960_A		-0.5672	ug/L	6.149	1,084	4.278
Si2516_R		50,940	ug/L	586.2	1.151	24,550
Sn1899_A		13.47	ug/L	0.09101	0.6757	6.156
Sr4215_R		5.052	ug/L	0.1050	2.078	476.3
Ti3349_A		3.173	ug/L	0.2948	9.292	55.99
Tl1908_A		-0.8213	ug/L	1.154	140.6	-1.126
V_2924_A		-0.8820	ug/L	0.2439	27.65	14.96
Zn2062_A		6.355	ug/L	0.1172	1.844	13.72
Y_3600_R		17,930	Cts/S	172.42	0.96164	17,930
Y_2243_A		6,552.0	Cts/S	29.150	0.44491	6,552.0
Y_3600_A		117,590	Cts/S	713.33	0.60664	117,590

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 12:03:01PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		508.2	ug/L	3.472	0.6832	8,667
Al3961_R		12,720	ug/L	7.123	0.05599	14,440
As1891_A		507.2	ug/L	1.916	0.3777	161.5
B_2089_A		524.9	ug/L	0.3566	0.06794	779.8
Ba4554_R		507.4	ug/L	0.7466	0.1472	37,690
Be3130_R		500.8	ug/L	1.171	0.2338	55,320
Ca3158_R		12,610	ug/L	52.10	0.4130	15,500
Cd2265_A		509.0	ug/L	0.6349	0.1247	5,876
Co2286_A		516.4	ug/L	0.7198	0.1394	1,630
Cr2677_A		506.9	ug/L	2.026	0.3997	5,526
Cu3273_A		505.7	ug/L	2.663	0.5266	7,438
Fe2599_R		12,660	ug/L	30.46	0.2407	25,280
K_7664_R		12,710	ug/L	52.32	0.4118	9,094
Li6707_R		508.2	ug/L	1.094	0.2152	7,922
Mg2025_A		13,030	ug/L	8.164	0.06264	4,474
Mn2576_R		502.7	ug/L	1.965	0.3910	4,892
Mo2020_A		512.7	ug/L	0.2410	0.04701	1,506
Na5895_R		12,660	ug/L	5.387	0.04255	32,070
Ni2316_A		514.6	ug/L	0.06804	0.01322	798.2
Pb2203_A		515.4	ug/L	1.463	0.2838	455.0
Sb2068_A		503.4	ug/L	0.05767	0.01145	259.4
Se1960_A		510.6	ug/L	0.8902	0.1743	128.9
Si2516_R		12,920	ug/L	34.59	0.2678	6,642
Sn1899_A		511.4	ug/L	0.6450	0.1261	213.6
Sr4215_R		509.1	ug/L	0.6677	0.1311	51,870
Ti3349_A		510.1	ug/L	2.369	0.4644	12,200
Tl1908_A		518.3	ug/L	0.5055	0.09753	240.6
V_2924_A		505.1	ug/L	2.992	0.5924	5,485
Zn2062_A		508.4	ug/L	0.08423	0.01657	1,164
Y_3600_R		18,944	Cts/S	39.419	0.20808	18,944
Y_2243_A		7,369.5	Cts/S	25.149	0.34126	7,369.5
Y_3600_A		135,380	Cts/S	550.49	0.40662	135,380

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 12:07:10PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 12:07:10PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2232	ug/L	0.2893	129.6	-15.14
Al3961_R		-1.681	ug/L	2.843	169.2	-7.539
As1891_A		-0.2884	ug/L	0.7690	266.6	-1.971
B_2089_A	W	12.36	ug/L	0.7827	6.334	26.86
Ba4554_R		-0.1609	ug/L	0.06842	42.53	15.78
Be3130_R		-0.02281	ug/L	0.06790	297.6	5.038
Ca3158_R		0.9565	ug/L	5.017	524.5	-28.47
Cd2265_A		0.1254	ug/L	0.04144	33.04	-0.5450
Co2286_A		0.05714	ug/L	0.08742	153.0	1.292
Cr2677_A		0.1074	ug/L	0.05496	51.18	0.4091
Cu3273_A		-0.1792	ug/L	0.007153	3.992	-29.36
Fe2599_R		-1.310	ug/L	0.4113	31.40	11.01
K_7664_R		50.01	ug/L	13.09	26.18	6.382
Li6707_R		1.375	ug/L	0.002366	0.1721	23.99
Mg2025_A		3.511	ug/L	2.056	58.55	-5.021
Mn2576_R		-0.2775	ug/L	0.004377	1.577	3.804
Mo2020_A		0.3144	ug/L	0.08034	25.56	3.446
Na5895_R		3.952	ug/L	1.854	46.93	81.19
Ni2316_A		0.1870	ug/L	0.005477	2.929	0.1803
Pb2203_A		-0.9306	ug/L	0.06689	7.188	-1.104
Sb2068_A		0.5870	ug/L	0.4689	79.89	-0.3881
Se1960_A		-0.9274	ug/L	0.1376	14.83	1.463
Si2516_R		-6.206	ug/L	3.593	57.89	68.75
Sn1899_A		0.3602	ug/L	0.1845	51.22	1.492
Sr4215_R		0.04348	ug/L	0.01664	38.28	-7.125
Ti3349_A		0.2106	ug/L	0.03601	17.10	-6.487
Tl1908_A		-0.07292	ug/L	0.4658	638.8	-1.477
V_2924_A		0.1341	ug/L	0.04267	31.82	-3.111
Zn2062_A		0.07282	ug/L	0.1367	187.8	1.036
Y_3600_R		19,025	Cts/S	158.59	0.83358	19,025
Y_2243_A		7,418.6	Cts/S	50.897	0.68608	7,418.6
Y_3600_A		138,420	Cts/S	425.50	0.30740	138,420

SODIUM PQL

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 12:11:35PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1108	ug/L	0.02931	26.46	-17.21
Al3961_R		31.60	ug/L	21.86	69.18	30.40
As1891_A		-1.069	ug/L	0.2121	19.85	-2.232
B_2089_A		8.746	ug/L	0.09140	1.045	21.69
Ba4554_R		0.3228	ug/L	0.2875	89.06	51.85
Be3130_R		0.1526	ug/L	0.2396	157.0	24.52
Ca3158_R		67.33	ug/L	23.90	35.50	53.62
Cd2265_A		0.2211	ug/L	0.1028	46.50	0.5951
Co2286_A		0.1543	ug/L	0.4744	307.5	1.602
Cr2677_A		0.1636	ug/L	0.08339	50.97	1.043
Cu3273_A		0.3312	ug/L	0.1853	55.94	-21.68
Fe2599_R		14.44	ug/L	9.527	65.99	42.61
K_7664_R		37.80	ug/L	9.438	24.97	-2.365
Li6707_R		1.038	ug/L	0.1657	15.96	18.72
Mg2025_A		14.13	ug/L	4.959	35.09	-1.370
Mn2576_R		0.9042	ug/L	0.1760	19.46	15.33
Mo2020_A		-0.1750	ug/L	0.2063	117.9	2.007
Na5895_R		1,043	ug/L	6.129	0.5874	2,719
Ni2316_A		0.3714	ug/L	0.2150	57.89	0.4611

SODIUM PQL

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 12:11:35PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		-0.9532	ug/L	0.03596	3.773	-1.129
Sb2068_A		0.7906	ug/L	0.1768	22.36	-0.2871
Se1960_A		-0.06214	ug/L	1.339	2,155	1.687
Si2516_R		-15.55	ug/L	6.627	42.61	63.96
Sn1899_A		1.078	ug/L	1.163	107.9	1.797
Sr4215_R		0.2160	ug/L	0.1520	70.38	10.55
Ti3349_A		0.1835	ug/L	0.07818	42.61	-7.160
Tl1908_A		0.2436	ug/L	0.2795	114.7	-1.333
V_2924_A		0.1038	ug/L	0.05220	50.31	-3.426
Zn2062_A		6.492	ug/L	0.2191	3.375	15.90
Y_3600_R		19,020	Cts/S	86.804	0.45639	19,020
Y_2243_A		7,444.0	Cts/S	44.992	0.60440	7,444.0
Y_3600_A		138,660	Cts/S	1,131.6	0.81609	138,660

LCSOOH19ICS2

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 12:16:00PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		50.55	ug/L	0.1045	0.2067	829.8
Al3961_R		2,149	ug/L	8.865	0.4125	2,396
As1891_A		103.4	ug/L	0.2373	0.2295	30.97
B_2089_A		517.4	ug/L	0.5324	0.1029	743.5
Ba4554_R		2,133	ug/L	13.34	0.6256	155,700
Be3130_R		52.55	ug/L	0.4366	0.8307	5,714
Ca3158_R		2,629	ug/L	22.43	0.8532	3,153
Cd2265_A		265.5	ug/L	0.9273	0.3492	3,001
Co2286_A		549.9	ug/L	1.731	0.3149	1,705
Cr2677_A		212.7	ug/L	1.573	0.7395	2,293
Cu3273_A		268.4	ug/L	1.692	0.6305	3,891
Fe2599_R		1,082	ug/L	9.723	0.8987	2,136
K_7664_R		10,650	ug/L	67.59	0.6349	7,487
Li6707_R		539.1	ug/L	1.680	0.3117	8,262
Mg2025_A		5,316	ug/L	13.53	0.2546	1,805
Mn2576_R		516.5	ug/L	2.629	0.5091	4,944
Mo2020_A		110.2	ug/L	0.3653	0.3316	319.7
Na5895_R		8,027	ug/L	39.85	0.4965	20,010
Ni2316_A		539.7	ug/L	0.8690	0.1610	818.8
Pb2203_A		106.7	ug/L	0.4997	0.4682	92.42
Sb2068_A		103.8	ug/L	0.2902	0.2794	49.46
Se1960_A		105.7	ug/L	0.4144	0.3920	27.58
Si2516_R		1,039	ug/L	10.92	1.052	592.6
Sn1899_A		584.3	ug/L	3.576	0.6121	239.7
Sr4215_R		538.4	ug/L	3.253	0.6042	53,930
Ti3349_A		536.8	ug/L	2.215	0.4127	12,680
Tl1908_A		103.4	ug/L	0.5364	0.5186	46.57
V_2924_A		527.2	ug/L	4.839	0.9179	5,695
Zn2062_A		522.5	ug/L	4.094	0.7835	1,177
Y_3600_R		18,626	Cts/S	2.0848	0.011193	18,626
Y_2243_A		7,242.6	Cts/S	51.357	0.70909	7,242.6
Y_3600_A		133,890	Cts/S	1,140.5	0.85177	133,890

LC2OOH20ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 12:20:12PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

LC2OOH20ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 12:20:12PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		48.37	ug/L	0.3063	0.6333	785.5
Al3961_R		1,988	ug/L	24.45	1.230	2,221
As1891_A		96.86	ug/L	1.331	1.374	28.68
B_2089_A		487.9	ug/L	0.8242	0.1689	696.3
Ba4554_R		1,968	ug/L	12.92	0.6565	144,000
Be3130_R		48.67	ug/L	0.3272	0.6723	5,303
Ca3158_R		2,455	ug/L	26.11	1.063	2,949
Cd2265_A		249.4	ug/L	0.3903	0.1565	2,797
Co2286_A		517.8	ug/L	0.08637	0.01668	1,594
Cr2677_A		201.7	ug/L	0.007201	0.003570	2,153
Cu3273_A		253.4	ug/L	0.3272	0.1291	3,637
Fe2599_R		999.6	ug/L	6.757	0.6760	1,979
K_7664_R		9,831	ug/L	62.13	0.6320	6,927
Li6707_R		496.6	ug/L	2.599	0.5232	7,628
Mg2025_A		5,011	ug/L	11.56	0.2307	1,688
Mn2576_R		482.8	ug/L	4.949	1.025	4,632
Mo2020_A		103.4	ug/L	0.04089	0.03953	298.1
Na5895_R		7,383	ug/L	54.26	0.7350	18,460
Ni2316_A		508.1	ug/L	0.08109	0.01596	764.9
Pb2203_A		100.1	ug/L	0.2513	0.2510	86.02
Sb2068_A		97.11	ug/L	0.7684	0.7913	45.83
Se1960_A		99.82	ug/L	0.1576	0.1579	25.93
Si2516_R		952.6	ug/L	1.651	0.1733	550.6
Sn1899_A		550.7	ug/L	1.621	0.2944	224.2
Sr4215_R		498.3	ug/L	2.691	0.5400	50,030
Ti3349_A		508.8	ug/L	1.648	0.3239	11,910
Tl1908_A		96.32	ug/L	0.7133	0.7406	42.94
V_2924_A		499.4	ug/L	0.6460	0.1293	5,342
Zn2062_A		492.6	ug/L	2.723	0.5528	1,101
Y_3600_R		18,666	Cts/S	49.847	0.26704	18,666
Y_2243_A		7,187.1	Cts/S	28.929	0.40252	7,187.1
Y_3600_A		132,570	Cts/S	616.47	0.46500	132,570

LCSOOH20ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 12:24:24PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		48.10	ug/L	0.09782	0.2033	789.4
Al3961_R		1,985	ug/L	2.866	0.1444	2,209
As1891_A		94.74	ug/L	0.1007	0.1063	27.99
B_2089_A	F	6.881	ug/L	0.2138	3.107	18.30
Ba4554_R		1,973	ug/L	10.46	0.5303	144,100
Be3130_R		48.70	ug/L	0.05933	0.1218	5,336
Ca3158_R		2,432	ug/L	22.65	0.9313	2,917
Cd2265_A		248.7	ug/L	0.3679	0.1479	2,786
Co2286_A		518.5	ug/L	1.259	0.2429	1,592
Cr2677_A		201.4	ug/L	0.002924	0.001452	2,152
Cu3273_A		251.8	ug/L	0.6808	0.2704	3,624
Fe2599_R		997.2	ug/L	3.954	0.3965	1,972
K_7664_R		9,832	ug/L	46.17	0.4696	6,917
Li6707_R	F	0.8860	ug/L	0.1845	20.83	16.01
Mg2025_A		5,032	ug/L	0.7924	0.01575	1,694
Mn2576_R		483.2	ug/L	7.159	1.482	4,630
Mo2020_A	F	-0.4689	ug/L	0.1069	22.81	0.9190
Na5895_R		7,391	ug/L	23.43	0.3171	18,450
Ni2316_A		509.1	ug/L	0.5137	0.1009	764.8

LCSOOH20ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 12:24:24PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		101.1	ug/L	0.2111	0.2089	86.85
Sb2068_A		98.20	ug/L	0.1050	0.1069	49.04
Se1960_A		99.04	ug/L	0.3892	0.3930	25.73
Si2516_R	F	6.172	ug/L	3.548	57.48	73.46
Sn1899_A	F	48.29	ug/L	0.2487	0.5150	20.83
Sr4215_R	F	0.2277	ug/L	0.03951	17.35	11.49
Ti3349_A	F	0.1873	ug/L	0.1117	59.61	-6.071
Tl1908_A		93.96	ug/L	0.02387	0.02540	42.07
V_2924_A		499.1	ug/L	2.521	0.5051	5,349
Zn2062_A		492.9	ug/L	1.194	0.2423	1,101
Y_3600_R		18,640	Cts/S	67.706	0.36324	18,640
Y_2243_A		7,181.6	Cts/S	32.805	0.45679	7,181.6
Y_3600_A		132,770	Cts/S	604.36	0.45518	132,770

PBSOH20ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 12:28:41PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.09272	ug/L	0.2231	240.6	-17.26
Al3961_R		10.38	ug/L	3.861	37.19	6.082
As1891_A		-1.865	ug/L	0.003916	0.2099	-2.466
B_2089_A		4.689	ug/L	0.06412	1.367	15.62
Ba4554_R		0.5392	ug/L	0.05989	11.11	67.00
Be3130_R		-0.06415	ug/L	0.005983	9.326	0.4318
Ca3158_R		25.19	ug/L	2.195	8.716	1.447
Cd2265_A		0.03798	ug/L	0.01168	30.76	-1.534
Co2286_A		-0.1194	ug/L	0.07085	59.34	0.7261
Cr2677_A		0.9636	ug/L	0.1852	19.22	9.845
Cu3273_A		0.7133	ug/L	0.2443	34.24	-15.71
Fe2599_R		4.028	ug/L	0.1370	3.401	21.42
K_7664_R		62.60	ug/L	11.58	18.50	15.28
Li6707_R		0.5582	ug/L	0.5591	100.2	11.06
Mg2025_A		4.848	ug/L	1.812	37.37	-4.536
Mn2576_R		1.437	ug/L	0.09763	6.792	20.27
Mo2020_A		-0.5021	ug/L	0.03575	7.120	1.030
Na5895_R		17.03	ug/L	8.517	50.02	112.8
Ni2316_A		0.4877	ug/L	0.1906	39.08	0.6322
Pb2203_A		-0.4999	ug/L	0.4389	87.80	-0.7161
Sb2068_A		0.3029	ug/L	0.1030	34.01	-0.7969
Se1960_A		0.2169	ug/L	0.5170	238.4	1.738
Si2516_R		16.20	ug/L	5.128	31.66	79.08
Sn1899_A		49.08	ug/L	0.1072	0.2184	21.70
Sr4215_R		0.02425	ug/L	0.04492	185.3	-8.969
Ti3349_A		-0.03086	ug/L	0.06786	219.9	-12.26
Tl1908_A		-1.757	ug/L	0.4711	26.81	-2.253
V_2924_A		0.1287	ug/L	0.1124	87.33	-3.118
Zn2062_A		1.935	ug/L	0.02372	1.226	5.294
Y_3600_R		18,765	Cts/S	57.430	0.30605	18,765
Y_2243_A		7,367.2	Cts/S	62.037	0.84208	7,367.2
Y_3600_A		136,920	Cts/S	85.161	0.062199	136,920

LCSWOH20ICW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 12:33:06PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

LCSWOH20ICW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 12:33:06PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		50.64	ug/L	0.1180	0.2331	846.3
Al3961_R		2,156	ug/L	13.09	0.6073	2,394
As1891_A		99.13	ug/L	0.1086	0.1096	30.17
B_2089_A		470.4	ug/L	0.4799	0.1020	689.7
Ba4554_R		2,135	ug/L	12.88	0.6031	155,300
Be3130_R		51.77	ug/L	0.1583	0.3058	5,608
Ca3158_R		2,699	ug/L	26.09	0.9667	3,226
Cd2265_A		258.8	ug/L	0.4959	0.1916	2,979
Co2286_A		537.4	ug/L	1.125	0.2094	1,698
Cr2677_A		211.8	ug/L	2.139	1.010	2,324
Cu3273_A		261.4	ug/L	1.942	0.7430	3,857
Fe2599_R		1,084	ug/L	1.636	0.1509	2,134
K_7664_R		10,680	ug/L	54.53	0.5104	7,487
Li6707_R		528.2	ug/L	0.5794	0.1097	8,065
Mg2025_A		5,155	ug/L	0.2461	0.004773	1,784
Mn2576_R		522.0	ug/L	4.253	0.8148	4,979
Mo2020_A		107.3	ug/L	0.5928	0.5524	317.4
Na5895_R		8,007	ug/L	24.58	0.3070	19,890
Ni2316_A		526.7	ug/L	1.002	0.1903	814.1
Pb2203_A		104.1	ug/L	0.6788	0.6521	91.82
Sb2068_A		100.9	ug/L	0.3589	0.3558	49.22
Se1960_A		103.0	ug/L	0.8578	0.8330	27.42
Si2516_R		1,134	ug/L	7.378	0.6508	637.7
Sn1899_A		515.3	ug/L	2.913	0.5653	215.5
Sr4215_R		536.2	ug/L	2.402	0.4480	53,520
Ti3349_A		529.2	ug/L	3.792	0.7167	12,730
Tl1908_A		99.16	ug/L	0.2099	0.2117	45.43
V_2924_A		523.4	ug/L	5.149	0.9837	5,756
Zn2062_A		508.3	ug/L	0.3427	0.06741	1,166
Y_3600_R		18,559	Cts/S	232.22	1.2512	18,559
Y_2243_A		7,378.6	Cts/S	27.424	0.37167	7,378.6
Y_3600_A		136,310	Cts/S	1,358.0	0.99625	136,310

PBT1707A

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 12:37:19PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.2781	ug/L	0.2250	80.90	-21.72
Al3961_R		5.725	ug/L	6.794	118.7	0.9110
As1891_A		-4.134	ug/L	0.4419	10.69	-3.003
B_2089_A		8.655	ug/L	0.05203	0.6012	20.02
Ba4554_R		7.760	ug/L	0.3040	3.917	577.6
Be3130_R		-0.1145	ug/L	0.04647	40.58	-4.980
Ca3158_R		2.151	ug/L	1.359	63.17	-25.73
Cd2265_A		0.02125	ug/L	0.04988	234.7	-1.635
Co2286_A		-0.2119	ug/L	0.03094	14.60	0.4086
Cr2677_A		0.1905	ug/L	0.1466	76.96	1.206
Cu3273_A		0.05216	ug/L	0.1645	315.4	-23.46
Fe2599_R		-2.716	ug/L	0.4265	15.71	7.805
K_7664_R		38.87	ug/L	3.023	7.778	-1.507
Li6707_R		0.7561	ug/L	0.3685	48.74	13.55
Mg2025_A		-3.292	ug/L	1.805	54.83	-6.873
Mn2576_R		-0.04610	ug/L	0.06874	149.1	5.769
Mo2020_A		-0.4146	ug/L	0.06513	15.71	1.207
Na5895_R	F	316,900	ug/L	7,167	2.262	766,600
Ni2316_A		0.5250	ug/L	0.4495	85.62	0.6504

PBT1707A

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 12:37:19PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		-0.2932	ug/L	0.6570	224.1	-0.4987
Sb2068_A		-0.4020	ug/L	0.3350	83.32	-0.8440
Se1960_A		2.252	ug/L	0.3934	17.46	2.107
Si2516_R		89.36	ug/L	7.174	8.028	112.0
Sn1899_A		0.1920	ug/L	0.1101	57.33	1.326
Sr4215_R		0.5417	ug/L	0.02356	4.349	41.84
Ti3349_A		-0.1914	ug/L	0.08229	43.00	-14.81
Tl1908_A		-2.943	ug/L	0.4860	16.51	-2.632
V_2924_A		-0.06804	ug/L	0.05852	86.01	-4.835
Zn2062_A		8.263	ug/L	0.1321	1.598	18.58
Y_3600_R		18,138	Cts/S	518.59	2.8592	18,138
Y_2243_A		6,917.1	Cts/S	10.558	0.15264	6,917.1
Y_3600_A		125,500	Cts/S	748.77	0.59661	125,500

PBWOH20ICW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 12:41:50PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.07183	ug/L	0.1036	144.2	-17.98
Al3961_R		5.560	ug/L	4.061	73.04	0.6644
As1891_A		-3.416	ug/L	0.1810	5.300	-3.003
B_2089_A		4.196	ug/L	0.2417	5.761	15.09
Ba4554_R		-0.03973	ug/L	0.1274	320.6	25.24
Be3130_R		-0.07550	ug/L	0.02261	29.95	-0.8359
Ca3158_R		-0.04558	ug/L	4.516	9,909	-30.28
Cd2265_A		0.009524	ug/L	0.04136	434.3	-1.899
Co2286_A		-0.2551	ug/L	0.09771	38.31	0.3036
Cr2677_A		0.1358	ug/L	0.06969	51.33	0.7318
Cu3273_A		0.5407	ug/L	0.2334	43.17	-18.67
Fe2599_R		-3.275	ug/L	0.3903	11.92	7.211
K_7664_R		27.74	ug/L	4.793	17.28	-9.818
Li6707_R		0.09035	ug/L	0.6570	727.2	3.939
Mg2025_A		-0.2469	ug/L	0.5542	224.4	-6.364
Mn2576_R		-0.03584	ug/L	0.1221	340.6	6.276
Mo2020_A		-0.6133	ug/L	0.05379	8.770	0.7118
Na5895_R		73.15	ug/L	9.205	12.58	261.6
Ni2316_A		-0.1893	ug/L	0.05599	29.57	-0.4159
Pb2203_A		-0.2609	ug/L	0.2768	106.1	-0.5087
Sb2068_A		-0.3853	ug/L	0.003695	0.9591	-0.8977
Se1960_A		0.6045	ug/L	3.279	542.5	1.856
Si2516_R		66.27	ug/L	0.9116	1.376	107.7
Sn1899_A		-0.4586	ug/L	0.6746	147.1	1.156
Sr4215_R		-0.03209	ug/L	0.005562	17.33	-15.14
Ti3349_A		-0.1048	ug/L	0.1659	158.3	-14.36
Tl1908_A		-2.223	ug/L	1.721	77.43	-2.498
V_2924_A		0.09460	ug/L	0.1631	172.4	-3.534
Zn2062_A		0.1642	ug/L	0.03880	23.63	1.254
Y_3600_R		19,380	Cts/S	49.016	0.25293	19,380
Y_2243_A		7,457.6	Cts/S	14.212	0.19056	7,457.6
Y_3600_A		139,840	Cts/S	29.570	0.021146	139,840

SO5134-004

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 12:46:16PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO5134-004

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 12:46:16PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.2121	ug/L	0.2856	134.7	-21.44
Al3961_R		-5.693	ug/L	10.54	185.0	58.04
As1891_A		7.226	ug/L	3.534	48.91	-0.6847
B_2089_A		321.3	ug/L	2.789	0.8683	227.1
Ba4554_R		115.8	ug/L	0.5654	0.4882	4,254
Be3130_R		-0.2774	ug/L	0.06929	24.97	-7.564
Ca3158_R	W	141,300	ug/L	77.66	0.05496	85,500
Cd2265_A		-0.01534	ug/L	0.008312	54.18	-0.8298
Co2286_A		4.862	ug/L	0.1559	3.206	8.296
Cr2677_A		2.320	ug/L	0.005566	0.2399	12.06
Cu3273_A		0.01575	ug/L	0.7405	4,702	-24.93
Fe2599_R		1,144	ug/L	11.01	0.9625	1,136
K_7664_R	W	83,390	ug/L	344.8	0.4134	29,410
Li6707_R		5.655	ug/L	0.3624	6.409	45.74
Mg2025_A		28,280	ug/L	75.80	0.2680	4,566
Mn2576_R		1,505	ug/L	6.085	0.4042	7,206
Mo2020_A		0.7007	ug/L	0.1832	26.14	3.296
Na5895_R	W	265,400	ug/L	379.6	0.1430	329,800
Ni2316_A		4.313	ug/L	0.5080	11.78	3.018
Pb2203_A		-0.5545	ug/L	1.563	281.9	-0.4743
Sb2068_A		-0.6542	ug/L	0.7814	119.4	-0.8093
Se1960_A		-1.268	ug/L	1.726	136.1	1.542
Si2516_R		8,781	ug/L	43.02	0.4899	2,265
Sn1899_A		1.372	ug/L	0.07372	5.373	1.531
Sr4215_R		646.1	ug/L	4.833	0.7480	32,360
Ti3349_A		1.384	ug/L	0.03516	2.541	4.946
Tl1908_A		-1.395	ug/L	1.917	137.4	-2.003
V_2924_A		4.461	ug/L	0.2847	6.381	16.37
Zn2062_A		11.46	ug/L	0.2374	2.071	13.24
Y_3600_R		18,629	Cts/S	55.492	0.29788	18,629
Y_2243_A		6,973.7	Cts/S	5.6304	0.080738	6,973.7
Y_3600_A		129,460	Cts/S	400.93	0.30969	129,460

SO5134-005

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 12:50:44PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.8049	ug/L	0.4095	50.87	-33.56
Al3961_R		84.53	ug/L	10.71	12.67	105.9
As1891_A		-0.3717	ug/L	0.2866	77.10	-1.941
B_2089_A		370.3	ug/L	1.617	0.4366	258.7
Ba4554_R		119.4	ug/L	0.6529	0.5469	4,335
Be3130_R		-0.2303	ug/L	0.04121	17.89	-4.948
Ca3158_R	W	138,700	ug/L	1,379	0.9949	82,960
Cd2265_A		-0.09674	ug/L	0.04879	50.43	3.412
Co2286_A		10.42	ug/L	0.09727	0.9338	16.50
Cr2677_A		3.024	ug/L	0.03864	1.278	15.53
Cu3273_A		3.980	ug/L	0.05436	1.366	2.598
Fe2599_R		5,920	ug/L	27.25	0.4603	5,758
K_7664_R	W	96,640	ug/L	456.6	0.4725	33,710
Li6707_R		11.18	ug/L	0.02676	0.2392	87.12
Mg2025_A		38,120	ug/L	37.39	0.09808	6,113
Mn2576_R		1,036	ug/L	14.58	1.408	4,906
Mo2020_A		4.110	ug/L	0.08009	1.949	7.983
Na5895_R	W	355,700	ug/L	371.3	0.1044	437,100
Ni2316_A		12.18	ug/L	0.02648	0.2173	8.608

SO5134-005

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 12:50:44PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		-2.200	ug/L	2.008	91.26	-1.097
Sb2068_A		0.7193	ug/L	0.2011	27.96	-0.4405
Se1960_A		-1.540	ug/L	0.5669	36.81	1.483
Si2516_R		8,039	ug/L	80.16	0.9972	2,056
Sn1899_A		0.2092	ug/L	2.285	1,092	1.293
Sr4215_R		823.5	ug/L	5.753	0.6986	40,790
Ti3349_A		5.747	ug/L	0.3649	6.348	54.02
Tl1908_A		-1.416	ug/L	1.001	70.67	-1.885
V_2924_A		8.818	ug/L	0.9795	11.11	39.63
Zn2062_A		39.78	ug/L	0.4522	1.137	43.63
Y_3600_R		18,422	Cts/S	171.96	0.93347	18,422
Y_2243_A		6,924.9	Cts/S	8.3420	0.12046	6,924.9
Y_3600_A		127,500	Cts/S	262.79	0.20611	127,500

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 12:55:12PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		522.7	ug/L	0.1274	0.02437	8,819
Al3961_R		12,870	ug/L	104.8	0.8137	14,520
As1891_A		521.7	ug/L	1.504	0.2883	163.8
B_2089_A		518.5	ug/L	1.438	0.2774	760.1
Ba4554_R		512.9	ug/L	5.857	1.142	37,850
Be3130_R		504.2	ug/L	3.615	0.7170	55,340
Ca3158_R		12,880	ug/L	77.53	0.6021	15,720
Cd2265_A		517.2	ug/L	1.027	0.1986	5,887
Co2286_A	W	530.5	ug/L	1.913	0.3605	1,651
Cr2677_A		521.5	ug/L	0.02763	0.005298	5,624
Cu3273_A		513.8	ug/L	0.1350	0.02628	7,476
Fe2599_R		12,880	ug/L	138.1	1.072	25,560
K_7664_R		12,850	ug/L	45.22	0.3520	9,135
Li6707_R		507.9	ug/L	4.360	0.8584	7,867
Mg2025_A	W	13,410	ug/L	4.319	0.03222	4,537
Mn2576_R		504.5	ug/L	2.228	0.4416	4,878
Mo2020_A		523.9	ug/L	1.087	0.2074	1,517
Na5895_R		12,760	ug/L	85.05	0.6665	32,110
Ni2316_A		525.0	ug/L	2.231	0.4249	803.0
Pb2203_A		523.9	ug/L	0.4953	0.09455	456.0
Sb2068_A		507.7	ug/L	4.574	0.9009	257.9
Se1960_A		524.0	ug/L	1.759	0.3357	130.4
Si2516_R		13,000	ug/L	43.87	0.3376	6,638
Sn1899_A		520.9	ug/L	1.285	0.2467	214.5
Sr4215_R		513.5	ug/L	4.558	0.8875	51,980
Ti3349_A		522.7	ug/L	0.3019	0.05775	12,360
Tl1908_A		522.9	ug/L	1.157	0.2213	239.4
V_2924_A		512.7	ug/L	0.1107	0.02159	5,507
Zn2062_A		519.3	ug/L	0.3191	0.06144	1,173
Y_3600_R		18,822	Cts/S	71.158	0.37806	18,822
Y_2243_A		7,266.2	Cts/S	19.013	0.26166	7,266.2
Y_3600_A		133,910	Cts/S	184.57	0.13783	133,910

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 12:59:20PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 12:59:20PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.03178	ug/L	0.2391	752.4	-19.63
Al3961_R		-0.9372	ug/L	2.894	308.7	-6.723
As1891_A		-0.6294	ug/L	1.404	223.1	-2.087
B_2089_A		1.562	ug/L	0.1753	11.23	11.24
Ba4554_R		-0.1718	ug/L	0.007030	4.091	14.91
Be3130_R		-0.04261	ug/L	0.006782	15.92	2.821
Ca3158_R		1.639	ug/L	1.534	93.57	-27.59
Cd2265_A		0.1801	ug/L	0.02550	14.16	0.08233
Co2286_A		0.001493	ug/L	0.1231	8,246	1.118
Cr2677_A		-0.06710	ug/L	0.1013	151.0	-1.534
Cu3273_A		0.003344	ug/L	0.2791	8,346	-26.63
Fe2599_R		-5.106	ug/L	0.08218	1.610	3.401
K_7664_R		42.65	ug/L	4.106	9.628	1.110
Li6707_R		1.334	ug/L	0.2820	21.14	23.29
Mg2025_A		4.716	ug/L	1.835	38.91	-4.623
Mn2576_R		-0.4399	ug/L	0.3577	81.31	2.209
Mo2020_A		-0.2198	ug/L	0.04933	22.44	1.875
Na5895_R		15.25	ug/L	2.127	13.94	109.7
Ni2316_A		-0.06964	ug/L	0.1064	152.8	-0.2243
Pb2203_A		-1.074	ug/L	0.5415	50.44	-1.234
Sb2068_A		0.5568	ug/L	0.2081	37.37	-0.4044
Se1960_A		-2.894	ug/L	0.2347	8.108	0.9734
Si2516_R		-2.078	ug/L	1.218	58.62	70.72
Sn1899_A		0.02103	ug/L	0.1667	792.3	1.355
Sr4215_R		0.01261	ug/L	0.04553	361.0	-10.26
Ti3349_A		-0.02806	ug/L	0.03280	116.9	-12.35
Tl1908_A		0.3151	ug/L	0.4653	147.7	-1.298
V_2924_A		0.09389	ug/L	0.09591	102.1	-3.525
Zn2062_A		0.1846	ug/L	0.01358	7.353	1.299
Y_3600_R		18,990	Cts/S	76.408	0.40236	18,990
Y_2243_A		7,440.5	Cts/S	3.1649	0.042536	7,440.5
Y_3600_A		138,710	Cts/S	1,477.7	1.0654	138,710

SO5122-009

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 1:03:46PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2619	ug/L	0.1721	65.69	-30.04
Al3961_R		7.337	ug/L	1.734	23.63	17.35
As1891_A		0.06084	ug/L	0.2584	424.7	-1.995
B_2089_A		46.45	ug/L	0.3250	0.6996	72.35
Ba4554_R		29.38	ug/L	0.1999	0.6804	2,147
Be3130_R		-0.01070	ug/L	0.02131	199.2	6.175
Ca3158_R		15,810	ug/L	231.9	1.466	18,900
Cd2265_A		-0.08429	ug/L	0.05355	63.53	7.286
Co2286_A		3.557	ug/L	0.2679	7.532	11.82
Cr2677_A		0.09217	ug/L	0.03917	42.50	1.178
Cu3273_A		3.334	ug/L	0.2210	6.627	21.31
Fe2599_R		5,071	ug/L	45.58	0.8989	9,853
K_7664_R		2,392	ug/L	31.46	1.316	1,641
Li6707_R		6.709	ug/L	0.7259	10.82	104.0
Mg2025_A		5,102	ug/L	35.54	0.6965	1,660
Mn2576_R		514.5	ug/L	8.807	1.712	4,869
Mo2020_A		-0.4840	ug/L	0.05286	10.92	1.006
Na5895_R	W	69,730	ug/L	1,046	1.499	171,400
Ni2316_A		2.807	ug/L	0.1838	6.547	3.793

SO5122-009

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 1:03:46PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		-2.056	ug/L	1.411	68.64	-1.867
Sb2068_A		0.3828	ug/L	0.07680	20.06	-0.4175
Se1960_A		0.6423	ug/L	3.382	526.6	1.859
Si2516_R		11,000	ug/L	129.6	1.178	5,504
Sn1899_A		0.8933	ug/L	0.5654	63.29	1.629
Sr4215_R		97.07	ug/L	1.347	1.388	9,605
Ti3349_A		-0.3309	ug/L	0.1250	37.79	-18.51
Tl1908_A		-0.6812	ug/L	0.2472	36.29	-1.908
V_2924_A		-0.01791	ug/L	0.06529	364.5	-5.687
Zn2062_A		12.13	ug/L	0.08873	0.7315	27.39
Y_3600_R		18,417	Cts/S	22.557	0.12248	18,417
Y_2243_A		7,044.1	Cts/S	52.422	0.74421	7,044.1
Y_3600_A		129,900	Cts/S	561.80	0.43250	129,900

SO5122-010

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 1:08:09PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.08676	ug/L	0.04224	48.69	-20.10
Al3961_R		64.70	ug/L	10.41	16.09	99.46
As1891_A		-1.211	ug/L	0.3829	31.62	-2.195
B_2089_A		14.30	ug/L	0.3073	2.150	27.94
Ba4554_R		74.80	ug/L	0.02856	0.03819	5,492
Be3130_R		0.04265	ug/L	0.06701	157.1	11.92
Ca3158_R	W	34,770	ug/L	248.7	0.7153	42,110
Cd2265_A		0.6037	ug/L	0.05193	8.601	7.052
Co2286_A		20.06	ug/L	0.1261	0.6287	61.02
Cr2677_A		0.4891	ug/L	0.1146	23.44	4.537
Cu3273_A		1.013	ug/L	0.03717	3.667	-10.72
Fe2599_R		1,203	ug/L	7.561	0.6286	2,376
K_7664_R		3,852	ug/L	7.784	0.2021	2,693
Li6707_R		4.448	ug/L	0.1616	3.632	70.64
Mg2025_A		12,610	ug/L	8.276	0.06562	4,085
Mn2576_R		118.5	ug/L	0.3271	0.2761	1,143
Mo2020_A		-0.7697	ug/L	0.03023	3.928	0.2258
Na5895_R	F	203,000	ug/L	994.7	0.4900	505,100
Ni2316_A		33.41	ug/L	0.2317	0.6935	48.73
Pb2203_A		-0.4376	ug/L	0.4694	107.3	-0.5963
Sb2068_A		-0.3995	ug/L	0.05100	12.77	-0.8472
Se1960_A		0.2424	ug/L	1.038	428.0	1.678
Si2516_R		7,417	ug/L	25.85	0.3485	3,781
Sn1899_A		-0.1067	ug/L	0.5255	492.3	1.223
Sr4215_R		342.8	ug/L	0.1502	0.04381	34,370
Ti3349_A		1.719	ug/L	0.08708	5.066	28.10
Tl1908_A		-0.1674	ug/L	0.08507	50.81	-1.458
V_2924_A		0.1801	ug/L	0.08144	45.22	-2.612
Zn2062_A		52.14	ug/L	0.09099	0.1745	114.2
Y_3600_R		18,646	Cts/S	23.932	0.12835	18,646
Y_2243_A		6,995.9	Cts/S	0.56300	0.0080480	6,995.9
Y_3600_A		128,030	Cts/S	967.85	0.75596	128,030

SO5122-011

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 1:12:38PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO5122-011

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 1:12:38PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2778	ug/L	0.04929	17.74	-31.36
Al3961_R		23.23	ug/L	4.217	18.15	27.66
As1891_A		-2.001	ug/L	1.934	96.65	-2.700
B_2089_A		23.14	ug/L	0.1391	0.6011	41.27
Ba4554_R		16.16	ug/L	0.1204	0.7449	1,225
Be3130_R		-0.08036	ug/L	0.008769	10.91	-1.440
Ca3158_R		7,344	ug/L	36.44	0.4961	8,998
Cd2265_A		0.01128	ug/L	0.02259	200.2	8.788
Co2286_A		4.042	ug/L	0.06122	1.514	13.61
Cr2677_A		0.1397	ug/L	0.1190	85.12	1.634
Cu3273_A		0.9170	ug/L	0.1094	11.93	-13.47
Fe2599_R		5,195	ug/L	41.77	0.8040	10,370
K_7664_R		2,418	ug/L	7.548	0.3122	1,704
Li6707_R		4.722	ug/L	0.6330	13.41	75.89
Mg2025_A		3,673	ug/L	15.27	0.4156	1,223
Mn2576_R		380.5	ug/L	0.5564	0.1462	3,699
Mo2020_A		-0.6886	ug/L	0.04887	7.097	0.4501
Na5895_R		13,150	ug/L	28.45	0.2163	33,260
Ni2316_A		3.112	ug/L	0.1096	3.520	4.337
Pb2203_A		-0.9908	ug/L	1.432	144.5	-0.9842
Sb2068_A		-0.1400	ug/L	0.7543	538.9	-0.7162
Se1960_A		0.7379	ug/L	1.748	236.9	1.907
Si2516_R		10,150	ug/L	29.81	0.2937	5,223
Sn1899_A		5.311	ug/L	0.04584	0.8631	3.462
Sr4215_R		99.04	ug/L	0.5800	0.5856	10,060
Ti3349_A		0.7113	ug/L	0.05994	8.426	5.597
Tl1908_A		-0.8385	ug/L	0.9581	114.3	-1.962
V_2924_A		-0.3313	ug/L	0.06103	18.42	-8.784
Zn2062_A		22.16	ug/L	0.1410	0.6362	50.54
Y_3600_R		18,914	Cts/S	64.022	0.33849	18,914
Y_2243_A		7,213.5	Cts/S	21.668	0.30039	7,213.5
Y_3600_A		134,910	Cts/S	393.96	0.29201	134,910

SO5122-012

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 1:17:00PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1122	ug/L	0.01886	16.81	-24.57
Al3961_R		274.5	ug/L	12.42	4.526	317.9
As1891_A		3.664	ug/L	0.7403	20.21	-0.7834
B_2089_A		48.93	ug/L	0.1428	0.2918	78.30
Ba4554_R		9.565	ug/L	0.2645	2.765	745.7
Be3130_R		-0.008926	ug/L	0.01045	117.1	6.085
Ca3158_R		9,332	ug/L	317.5	3.403	11,580
Cd2265_A		-0.03158	ug/L	0.0007390	2.339	2.611
Co2286_A		1.974	ug/L	0.004069	0.2062	7.295
Cr2677_A		1.130	ug/L	0.07392	6.545	12.00
Cu3273_A		2.296	ug/L	0.1011	4.405	7.234
Fe2599_R		2,390	ug/L	82.18	3.439	4,836
K_7664_R		3,714	ug/L	110.7	2.980	2,667
Li6707_R		8.280	ug/L	1.093	13.20	132.8
Mg2025_A		2,447	ug/L	5.581	0.2281	819.1
Mn2576_R		418.5	ug/L	12.44	2.972	4,121
Mo2020_A		1.637	ug/L	0.01310	0.8000	7.184
Na5895_R	W	61,190	ug/L	1,659	2.711	156,400
Ni2316_A		0.8143	ug/L	0.1025	12.59	1.034

SO5122-012

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 1:17:00PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		-0.9187	ug/L	0.4179	45.49	-1.026
Sb2068_A		0.1012	ug/L	0.5919	584.7	-0.6137
Se1960_A		-1.045	ug/L	1.403	134.3	1.476
Si2516_R		9,688	ug/L	289.0	2.983	5,052
Sn1899_A		2.769	ug/L	0.02433	0.8786	2.450
Sr4215_R		108.0	ug/L	2.987	2.765	11,120
Ti3349_A		7.175	ug/L	0.03306	0.4608	158.0
Tl1908_A		-0.5525	ug/L	0.8288	150.0	-1.869
V_2924_A		0.3119	ug/L	0.09210	29.53	-2.382
Zn2062_A		12.37	ug/L	0.06985	0.5645	28.83
Y_3600_R		19,159	Cts/S	347.13	1.8118	19,159
Y_2243_A		7,274.4	Cts/S	8.4129	0.11565	7,274.4
Y_3600_A		133,540	Cts/S	283.80	0.21252	133,540

SO5122-013

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 1:21:22PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.5076	ug/L	0.2719	53.57	-11.42
Al3961_R		20.71	ug/L	0.5901	2.849	36.29
As1891_A		-0.7790	ug/L	0.01437	1.845	-2.103
B_2089_A		62.75	ug/L	0.4617	0.7357	97.60
Ba4554_R		8.876	ug/L	0.1109	1.249	690.1
Be3130_R		-0.08563	ug/L	0.01234	14.41	-1.961
Ca3158_R		18,940	ug/L	45.86	0.2421	23,410
Cd2265_A		0.08704	ug/L	0.05594	64.27	-0.004675
Co2286_A		2.102	ug/L	0.09426	4.484	7.604
Cr2677_A		0.4253	ug/L	0.04844	11.39	12.54
Cu3273_A		0.6817	ug/L	0.2927	42.93	-15.96
Fe2599_R		469.8	ug/L	3.148	0.6701	956.5
K_7664_R		3,157	ug/L	26.91	0.8524	2,249
Li6707_R		8.127	ug/L	0.9016	11.09	129.8
Mg2025_A		6,223	ug/L	6.828	0.1097	2,086
Mn2576_R	W	9,673	ug/L	23.52	0.2432	94,560
Mo2020_A		1.670	ug/L	0.02618	1.568	6.709
Na5895_R	W	32,940	ug/L	117.1	0.3555	83,760
Ni2316_A		4.922	ug/L	0.07377	1.499	7.351
Pb2203_A		-0.3354	ug/L	0.6664	198.7	-0.5488
Sb2068_A		0.3043	ug/L	0.1388	45.62	-0.5198
Se1960_A		-1.476	ug/L	0.5206	35.27	2.559
Si2516_R		9,321	ug/L	21.00	0.2253	4,836
Sn1899_A		0.2590	ug/L	0.2120	81.85	1.417
Sr4215_R		95.94	ug/L	0.2167	0.2259	9,818
Ti3349_A		0.003316	ug/L	0.1257	3,791	-11.18
Tl1908_A		-11.14	ug/L	1.416	12.71	-11.11
V_2924_A		0.01717	ug/L	0.1499	873.2	-40.60
Zn2062_A		6.267	ug/L	0.1481	2.362	14.97
Y_3600_R		19,047	Cts/S	105.90	0.55597	19,047
Y_2243_A		7,249.9	Cts/S	11.314	0.15606	7,249.9
Y_3600_A		134,270	Cts/S	118.70	0.088408	134,270

SO5122-014

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 1:25:45PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO5122-014

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 1:25:45PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.05417	ug/L	0.04108	75.83	-20.22
Al3961_R		37.13	ug/L	1.182	3.183	37.07
As1891_A		-1.195	ug/L	0.6978	58.41	-2.259
B_2089_A		0.8881	ug/L	0.2232	25.13	10.19
Ba4554_R		0.7532	ug/L	0.06643	8.819	84.43
Be3130_R		-0.09166	ug/L	0.001397	1.525	-2.654
Ca3158_R		261.1	ug/L	2.239	0.8573	295.1
Cd2265_A		0.003217	ug/L	0.01584	492.3	-1.875
Co2286_A		-0.1829	ug/L	0.09075	49.63	0.5336
Cr2677_A		0.4945	ug/L	0.3028	61.23	4.758
Cu3273_A		1.414	ug/L	0.03905	2.762	-5.333
Fe2599_R		35.39	ug/L	1.135	3.207	85.14
K_7664_R		105.7	ug/L	9.396	8.886	46.94
Li6707_R		0.3997	ug/L	0.3442	86.12	8.764
Mg2025_A		60.72	ug/L	1.778	2.928	14.60
Mn2576_R		4.638	ug/L	0.1770	3.817	52.13
Mo2020_A		-0.7381	ug/L	0.02907	3.938	0.3384
Na5895_R		479.8	ug/L	1.254	0.2614	1,297
Ni2316_A		0.7949	ug/L	0.1368	17.21	1.107
Pb2203_A		-1.150	ug/L	0.3504	30.48	-1.295
Sb2068_A		0.2670	ug/L	0.4529	169.6	-0.5506
Se1960_A		-0.9033	ug/L	1.216	134.6	1.466
Si2516_R		86.49	ug/L	1.906	2.204	116.8
Sn1899_A		-0.04914	ug/L	0.01222	24.87	1.317
Sr4215_R		1.427	ug/L	0.01710	1.198	135.4
Ti3349_A		0.6151	ug/L	0.2248	36.55	3.382
Tl1908_A		-0.4826	ug/L	0.6623	137.2	-1.666
V_2924_A		0.4634	ug/L	0.1362	29.40	0.6285
Zn2062_A		14.46	ug/L	0.1253	0.8661	34.11
Y_3600_R		19,150	Cts/S	108.31	0.56560	19,150
Y_2243_A		7,395.2	Cts/S	9.9318	0.13430	7,395.2
Y_3600_A		138,870	Cts/S	923.38	0.66493	138,870

SO5122-015

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 1:30:11PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3539	ug/L	0.02430	6.865	-28.14
Al3961_R		1.812	ug/L	2.239	123.6	10.93
As1891_A		-0.1559	ug/L	0.4154	266.5	-2.078
B_2089_A		44.70	ug/L	0.06685	0.1495	70.85
Ba4554_R		28.34	ug/L	0.1979	0.6985	2,116
Be3130_R		-0.06669	ug/L	0.04923	73.81	0.1842
Ca3158_R		15,210	ug/L	50.42	0.3315	18,560
Cd2265_A		-0.1083	ug/L	0.007769	7.176	6.637
Co2286_A		3.468	ug/L	0.1792	5.166	11.70
Cr2677_A		0.04241	ug/L	0.3090	728.5	0.6273
Cu3273_A		0.04800	ug/L	0.05513	114.9	-25.55
Fe2599_R		4,836	ug/L	2.455	0.05077	9,599
K_7664_R		2,332	ug/L	10.04	0.4303	1,634
Li6707_R		6.528	ug/L	0.1743	2.670	103.5
Mg2025_A		4,986	ug/L	0.5469	0.01097	1,644
Mn2576_R		486.7	ug/L	2.299	0.4724	4,706
Mo2020_A		-0.5880	ug/L	0.2000	34.02	0.7252
Na5895_R	W	68,360	ug/L	281.7	0.4121	171,600
Ni2316_A		2.737	ug/L	0.04667	1.705	3.749

SO5122-015

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 1:30:11PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		-0.7164	ug/L	0.2121	29.61	-0.7451
Sb2068_A		-0.5827	ug/L	0.8676	148.9	-0.9083
Se1960_A		-0.1444	ug/L	1.118	774.4	1.685
Si2516_R		10,700	ug/L	10.78	0.1008	5,472
Sn1899_A		0.2777	ug/L	0.6288	226.5	1.402
Sr4215_R		93.60	ug/L	0.3015	0.3221	9,460
Ti3349_A		-0.5555	ug/L	0.1712	30.82	-23.99
Tl1908_A		-1.575	ug/L	1.027	65.16	-2.324
V_2924_A		0.1042	ug/L	0.05200	49.92	-4.385
Zn2062_A		14.66	ug/L	0.1259	0.8585	33.35
Y_3600_R		18,812	Cts/S	57.526	0.30579	18,812
Y_2243_A		7,135.1	Cts/S	10.168	0.14251	7,135.1
Y_3600_A		131,690	Cts/S	751.48	0.57063	131,690

SO5388-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 1:34:32PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.2946	ug/L	0.1411	47.91	-25.23
Al3961_R		-0.2404	ug/L	4.284	1,782	3.839
As1891_A		1.655	ug/L	1.174	70.91	-1.369
B_2089_A		1.398	ug/L	0.2785	19.92	11.17
Ba4554_R		1.957	ug/L	0.06962	3.557	180.3
Be3130_R		-0.1146	ug/L	0.03650	31.85	-5.355
Ca3158_R		10,010	ug/L	109.8	1.097	12,820
Cd2265_A		0.07755	ug/L	0.09451	121.9	-0.9167
Co2286_A		0.05494	ug/L	0.1178	214.4	1.311
Cr2677_A		0.3635	ug/L	0.1647	45.31	3.368
Cu3273_A		36.54	ug/L	0.1701	0.4654	539.2
Fe2599_R		93.90	ug/L	0.01924	0.02049	209.6
K_7664_R		584.4	ug/L	7.469	1.278	406.9
Li6707_R		4.285	ug/L	0.01319	0.3079	72.20
Mg2025_A		3,560	ug/L	31.20	0.8765	1,242
Mn2576_R		1.217	ug/L	0.02282	1.876	20.17
Mo2020_A		-0.9168	ug/L	0.03178	3.467	-0.1915
Na5895_R		2,294	ug/L	2.892	0.1260	6,121
Ni2316_A		-0.1683	ug/L	0.1342	79.73	-0.3971
Pb2203_A		-0.9359	ug/L	0.5769	61.65	-1.118
Sb2068_A		-0.2978	ug/L	0.06140	20.62	-0.8631
Se1960_A		-1.235	ug/L	0.9384	75.97	1.414
Si2516_R		6,036	ug/L	10.96	0.1816	3,275
Sn1899_A		-0.1866	ug/L	0.8145	436.5	1.289
Sr4215_R		32.31	ug/L	0.09004	0.2786	3,422
Ti3349_A		-0.2351	ug/L	0.0002000	0.08489	-17.87
Tl1908_A		0.7101	ug/L	0.4559	64.20	-1.131
V_2924_A		-0.1625	ug/L	0.1374	84.56	-6.524
Zn2062_A		28.07	ug/L	0.2339	0.8332	66.92
Y_3600_R		19,758	Cts/S	70.086	0.35473	19,758
Y_2243_A		7,567.6	Cts/S	14.424	0.19060	7,567.6
Y_3600_A		142,130	Cts/S	822.28	0.57853	142,130

SO5389-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 1:38:55PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO5389-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 1:38:55PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1508	ug/L	0.2203	146.1	-22.16
Al3961_R		-0.2471	ug/L	2.036	824.0	3.919
As1891_A		0.9886	ug/L	0.8936	90.39	-1.571
B_2089_A		0.3427	ug/L	0.3370	98.34	9.513
Ba4554_R		1.258	ug/L	0.03387	2.691	124.9
Be3130_R		-0.08641	ug/L	0.01090	12.61	-2.087
Ca3158_R		10,130	ug/L	3.188	0.03146	12,840
Cd2265_A		0.05419	ug/L	0.001488	2.747	-1.278
Co2286_A		-0.03189	ug/L	0.1456	456.4	1.018
Cr2677_A		0.01922	ug/L	0.2361	1,229	-0.5900
Cu3273_A		80.26	ug/L	1.362	1.696	1,202
Fe2599_R		47.28	ug/L	0.2270	0.4802	111.4
K_7664_R		603.5	ug/L	1.935	0.3206	416.7
Li6707_R		4.202	ug/L	0.3214	7.647	70.12
Mg2025_A		3,626	ug/L	2.738	0.07553	1,252
Mn2576_R		-0.01421	ug/L	0.3003	2,114	7.636
Mo2020_A		-0.7214	ug/L	0.1228	17.02	0.3929
Na5895_R		2,271	ug/L	8.422	0.3708	5,996
Ni2316_A		0.8528	ug/L	0.1368	16.05	1.211
Pb2203_A		0.3225	ug/L	0.007646	2.371	0.03332
Sb2068_A		0.06898	ug/L	0.2034	294.8	-0.6585
Se1960_A		-1.614	ug/L	0.8684	53.82	1.303
Si2516_R		6,042	ug/L	56.58	0.9364	3,243
Sn1899_A		-0.5017	ug/L	0.2547	50.76	1.142
Sr4215_R		32.80	ug/L	0.2025	0.6175	3,437
Ti3349_A		-0.2832	ug/L	0.3009	106.3	-18.79
Tl1908_A		1.470	ug/L	0.2416	16.43	-0.7557
V_2924_A		-0.07624	ug/L	0.03925	51.48	-5.468
Zn2062_A		121.8	ug/L	0.3164	0.2597	284.3
Y_3600_R		19,548	Cts/S	127.94	0.65450	19,548
Y_2243_A		7,484.2	Cts/S	9.0115	0.12041	7,484.2
Y_3600_A		140,320	Cts/S	1,378.8	0.98260	140,320

SO4236-021

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 1:43:17PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.05373	ug/L	0.2193	408.1	-18.28
Al3961_R		166.1	ug/L	2.075	1.250	183.3
As1891_A		-6.991	ug/L	0.1643	2.350	-3.959
B_2089_A	W	2,315	ug/L	0.8146	0.03519	3,198
Ba4554_R		14.70	ug/L	0.1788	1.217	1,099
Be3130_R		-0.1167	ug/L	0.01187	10.17	-6.044
Ca3158_R		4,240	ug/L	39.00	0.9197	5,099
Cd2265_A		0.09493	ug/L	0.01427	15.04	-0.3770
Co2286_A		0.1278	ug/L	0.07013	54.87	1.501
Cr2677_A		4.489	ug/L	0.09673	2.155	47.16
Cu3273_A		6.980	ug/L	0.3311	4.744	75.24
Fe2599_R		234.2	ug/L	3.088	1.318	472.6
K_7664_R		353.3	ug/L	2.910	0.8236	220.2
Li6707_R		1.634	ug/L	0.05775	3.534	27.43
Mg2025_A		1,180	ug/L	4.816	0.4082	380.2
Mn2576_R		9.227	ug/L	0.08043	0.8717	94.76
Mo2020_A		-0.6976	ug/L	0.03215	4.609	0.4366
Na5895_R		15,500	ug/L	116.2	0.7496	38,550
Ni2316_A		2.808	ug/L	0.01876	0.6682	4.021

SO4236-021

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 1:43:17PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.6387	ug/L	0.6974	109.2	0.2783
Sb2068_A		2.264	ug/L	0.9537	42.12	0.1717
Se1960_A		9.713	ug/L	0.1603	1.651	3.930
Si2516_R		640.6	ug/L	1.165	0.1819	390.2
Sn1899_A		59.70	ug/L	1.042	1.746	25.01
Sr4215_R		7.708	ug/L	0.07503	0.9733	760.3
Ti3349_A		10.51	ug/L	0.1899	1.807	234.7
Tl1908_A		-7.580	ug/L	0.4191	5.528	-4.764
V_2924_A		0.2753	ug/L	0.01058	3.844	-1.453
Zn2062_A		218.4	ug/L	0.9721	0.4451	480.1
Y_3600_R		18,610	Cts/S	18.033	0.096900	18,610
Y_2243_A		7,058.6	Cts/S	33.682	0.47717	7,058.6
Y_3600_A		132,480	Cts/S	360.06	0.27179	132,480

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 1:47:39PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		515.3	ug/L	4.341	0.8425	8,782
Al3961_R		12,700	ug/L	79.53	0.6259	14,490
As1891_A		517.5	ug/L	0.7200	0.1391	163.2
B_2089_A		513.1	ug/L	2.135	0.4161	755.5
Ba4554_R		505.5	ug/L	0.5172	0.1023	37,730
Be3130_R		493.0	ug/L	3.490	0.7079	54,730
Ca3158_R		12,670	ug/L	107.8	0.8508	15,650
Cd2265_A		509.2	ug/L	2.479	0.4869	5,822
Co2286_A		526.1	ug/L	1.704	0.3239	1,644
Cr2677_A		513.7	ug/L	3.418	0.6653	5,596
Cu3273_A		505.0	ug/L	0.7076	0.1401	7,422
Fe2599_R		12,690	ug/L	75.85	0.5978	25,460
K_7664_R		12,610	ug/L	40.46	0.3209	9,068
Li6707_R		498.7	ug/L	1.241	0.2488	7,812
Mg2025_A	W	13,280	ug/L	59.53	0.4483	4,515
Mn2576_R		490.9	ug/L	7.533	1.534	4,801
Mo2020_A		518.5	ug/L	1.596	0.3079	1,508
Na5895_R		12,490	ug/L	64.04	0.5129	31,780
Ni2316_A		517.2	ug/L	2.187	0.4228	794.6
Pb2203_A		516.8	ug/L	0.2402	0.04648	451.8
Sb2068_A		501.9	ug/L	3.130	0.6236	256.0
Se1960_A		517.7	ug/L	2.273	0.4390	129.4
Si2516_R		12,650	ug/L	158.7	1.255	6,535
Sn1899_A		513.0	ug/L	5.306	1.034	212.2
Sr4215_R		504.7	ug/L	2.925	0.5795	51,670
Ti3349_A		516.8	ug/L	4.669	0.9034	12,350
Tl1908_A		512.6	ug/L	1.586	0.3094	235.7
V_2924_A		502.3	ug/L	1.940	0.3862	5,449
Zn2062_A		509.8	ug/L	2.090	0.4099	1,156
Y_3600_R		19,037	Cts/S	114.39	0.60089	19,037
Y_2243_A		7,297.8	Cts/S	14.372	0.19693	7,297.8
Y_3600_A		135,280	Cts/S	454.39	0.33589	135,280

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 1:51:48PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 1:51:48PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1942	ug/L	0.05205	26.80	-15.73
Al3961_R		9.041	ug/L	5.919	65.47	4.629
As1891_A		-0.06028	ug/L	0.03647	60.50	-1.903
B_2089_A		1.713	ug/L	0.1193	6.964	11.47
Ba4554_R		-0.02194	ug/L	0.02376	108.3	26.33
Be3130_R		0.05566	ug/L	0.02497	44.86	13.79
Ca3158_R		6.419	ug/L	1.618	25.20	-21.91
Cd2265_A		0.1856	ug/L	0.005916	3.187	0.1582
Co2286_A		0.1325	ug/L	0.1251	94.46	1.536
Cr2677_A		0.08053	ug/L	0.05391	66.94	0.1086
Cu3273_A		0.3005	ug/L	0.2011	66.92	-22.23
Fe2599_R		0.7882	ug/L	1.585	201.1	15.33
K_7664_R		25.58	ug/L	10.34	40.40	-11.24
Li6707_R		0.5973	ug/L	0.0001240	0.02068	11.91
Mg2025_A		4.261	ug/L	1.062	24.91	-4.777
Mn2576_R		-0.1599	ug/L	0.06801	42.52	4.989
Mo2020_A		-0.2825	ug/L	0.007899	2.796	1.691
Na5895_R		1.986	ug/L	0.9853	49.60	76.88
Ni2316_A		0.1972	ug/L	0.08495	43.08	0.1908
Pb2203_A		-1.120	ug/L	0.4215	37.65	-1.278
Sb2068_A		0.7431	ug/L	0.8141	109.5	-0.3033
Se1960_A		-1.929	ug/L	1.123	58.21	1.218
Si2516_R		-3.848	ug/L	2.436	63.31	70.53
Sn1899_A		-0.2341	ug/L	0.3050	130.3	1.248
Sr4215_R		0.1368	ug/L	0.04866	35.57	2.465
Ti3349_A		0.1152	ug/L	0.1217	105.7	-8.864
Tl1908_A		-0.01708	ug/L	0.2916	1,707	-1.455
V_2924_A		-0.1918	ug/L	0.1474	76.84	-6.751
Zn2062_A		0.02089	ug/L	0.08041	384.9	0.9204
Y_3600_R		19,186	Cts/S	210.52	1.0973	19,186
Y_2243_A		7,447.7	Cts/S	55.687	0.74771	7,447.7
Y_3600_A		139,090	Cts/S	530.06	0.38110	139,090

SO4236-022

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 1:56:14PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1345	ug/L	0.2844	211.4	-21.84
Al3961_R		1,045	ug/L	4.948	0.4735	1,178
As1891_A		-3.624	ug/L	0.2019	5.570	-3.012
B_2089_A	W	2,493	ug/L	16.12	0.6468	3,487
Ba4554_R		35.03	ug/L	0.1123	0.3205	2,602
Be3130_R		-0.04945	ug/L	0.01523	30.80	-1.827
Ca3158_R		12,080	ug/L	61.57	0.5098	14,690
Cd2265_A		0.1291	ug/L	0.02647	20.50	2.588
Co2286_A		0.5801	ug/L	0.02489	4.291	3.156
Cr2677_A		5.411	ug/L	0.02013	0.3719	57.48
Cu3273_A		22.13	ug/L	0.2367	1.070	295.3
Fe2599_R		1,497	ug/L	17.49	1.168	2,973
K_7664_R		2,071	ug/L	18.92	0.9136	1,443
Li6707_R		1.988	ug/L	0.2485	12.50	33.11
Mg2025_A		1,613	ug/L	14.69	0.9107	528.8
Mn2576_R		39.00	ug/L	0.2000	0.5127	381.8
Mo2020_A		0.008561	ug/L	0.03184	371.9	2.449
Na5895_R	W	26,200	ug/L	23.35	0.08914	65,630
Ni2316_A		6.567	ug/L	0.1653	2.517	9.644

SO4236-022

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 1:56:14PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		11.84	ug/L	0.5095	4.304	9.868
Sb2068_A		1.155	ug/L	0.8349	72.29	-0.3462
Se1960_A		5.214	ug/L	0.9778	18.75	2.910
Si2516_R		1,342	ug/L	1.300	0.09691	746.4
Sn1899_A		55.87	ug/L	2.004	3.587	23.79
Sr4215_R		17.92	ug/L	0.04543	0.2535	1,797
Ti3349_A		53.72	ug/L	0.4477	0.8334	1,253
Tl1908_A		-3.989	ug/L	1.080	27.07	-3.233
V_2924_A		2.148	ug/L	0.2125	9.895	19.04
Zn2062_A		413.0	ug/L	3.842	0.9302	918.8
Y_3600_R		18,758	Cts/S	37.778	0.20139	18,758
Y_2243_A		7,149.5	Cts/S	14.372	0.20102	7,149.5
Y_3600_A		133,250	Cts/S	388.13	0.29128	133,250

SO4236-023

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 2:00:34PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2060	ug/L	0.05202	25.25	-17.32
Al3961_R		506.6	ug/L	0.7647	0.1509	568.9
As1891_A	F	-8.365	ug/L	1.232	14.73	-4.397
B_2089_A	W	2,339	ug/L	9.263	0.3960	3,224
Ba4554_R		21.47	ug/L	0.05479	0.2552	1,598
Be3130_R		-0.07079	ug/L	0.04080	57.63	-1.936
Ca3158_R		8,846	ug/L	16.20	0.1832	10,710
Cd2265_A		0.1458	ug/L	0.01624	11.13	1.100
Co2286_A		0.1355	ug/L	0.2346	173.2	1.592
Cr2677_A		3.235	ug/L	0.007573	0.2341	33.73
Cu3273_A		17.53	ug/L	0.1033	0.5896	226.7
Fe2599_R		688.6	ug/L	2.501	0.3632	1,369
K_7664_R		2,240	ug/L	16.07	0.7176	1,557
Li6707_R		1.571	ug/L	0.6576	41.87	26.55
Mg2025_A		1,392	ug/L	6.772	0.4865	448.8
Mn2576_R		31.00	ug/L	0.2415	0.7789	303.8
Mo2020_A		-0.4664	ug/L	0.006549	1.404	1.082
Na5895_R		23,750	ug/L	12.07	0.05082	59,250
Ni2316_A		2.795	ug/L	0.2015	7.209	3.976
Pb2203_A		4.813	ug/L	0.3570	7.418	3.796
Sb2068_A		1.133	ug/L	0.07813	6.895	-0.4000
Se1960_A		11.87	ug/L	2.275	19.17	4.443
Si2516_R		1,205	ug/L	7.247	0.6013	674.8
Sn1899_A		62.99	ug/L	0.5963	0.9467	26.26
Sr4215_R		14.45	ug/L	0.1257	0.8701	1,441
Ti3349_A		22.81	ug/L	0.1107	0.4850	520.8
Tl1908_A		-8.614	ug/L	0.3529	4.098	-5.228
V_2924_A		0.9625	ug/L	0.4550	47.27	5.999
Zn2062_A		539.6	ug/L	1.019	0.1889	1,182
Y_3600_R		18,682	Cts/S	28.563	0.15289	18,682
Y_2243_A		7,043.4	Cts/S	45.359	0.64400	7,043.4
Y_3600_A		132,010	Cts/S	894.16	0.67734	132,010

SO4236-024

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 2:04:56PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO4236-024

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 2:04:56PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3139	ug/L	0.09756	31.08	-18.85
Al3961_R		1,105	ug/L	1.537	0.1390	1,277
As1891_A		-4.679	ug/L	0.5129	10.96	-3.353
B_2089_A	W	2,250	ug/L	19.19	0.8527	3,166
Ba4554_R		21.57	ug/L	0.002686	0.01245	1,655
Be3130_R		-0.04870	ug/L	0.04338	89.08	-2.705
Ca3158_R		10,190	ug/L	53.28	0.5231	12,710
Cd2265_A		0.09699	ug/L	0.01820	18.76	1.931
Co2286_A		0.5318	ug/L	0.02871	5.399	3.086
Cr2677_A		3.985	ug/L	0.04181	1.049	43.12
Cu3273_A		11.28	ug/L	0.2559	2.269	140.5
Fe2599_R		1,337	ug/L	5.095	0.3812	2,725
K_7664_R		1,396	ug/L	15.39	1.102	988.6
Li6707_R		1.662	ug/L	0.2263	13.62	28.79
Mg2025_A		1,640	ug/L	16.97	1.035	540.5
Mn2576_R		32.66	ug/L	0.1092	0.3344	329.2
Mo2020_A		-0.008925	ug/L	0.06214	696.2	2.412
Na5895_R		24,450	ug/L	200.5	0.8203	62,840
Ni2316_A		3.274	ug/L	0.09741	2.976	4.752
Pb2203_A		1.478	ug/L	0.2028	13.72	0.9686
Sb2068_A		0.9772	ug/L	0.6121	62.64	-0.4074
Se1960_A		7.607	ug/L	1.107	14.55	3.506
Si2516_R		1,776	ug/L	3.745	0.2108	990.5
Sn1899_A		49.12	ug/L	0.02388	0.04863	21.19
Sr4215_R		16.24	ug/L	0.05006	0.3082	1,670
Ti3349_A		65.45	ug/L	0.4889	0.7470	1,564
Tl1908_A		-5.920	ug/L	0.2699	4.560	-4.130
V_2924_A		2.307	ug/L	0.1484	6.433	21.35
Zn2062_A		353.3	ug/L	3.070	0.8688	790.5
Y_3600_R		19,249	Cts/S	185.36	0.96300	19,249
Y_2243_A		7,188.9	Cts/S	49.751	0.69206	7,188.9
Y_3600_A		136,280	Cts/S	331.16	0.24300	136,280

SO4236-025

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 2:09:18PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2640	ug/L	0.1381	52.31	-16.43
Al3961_R		446.7	ug/L	3.767	0.8434	497.3
As1891_A		-6.002	ug/L	0.6981	11.63	-3.722
B_2089_A	W	2,216	ug/L	6.435	0.2904	3,103
Ba4554_R		16.24	ug/L	0.1166	0.7177	1,215
Be3130_R		-0.07271	ug/L	0.01065	14.65	-1.836
Ca3158_R		4,180	ug/L	45.69	1.093	5,043
Cd2265_A		0.1198	ug/L	0.0006200	0.5178	0.7906
Co2286_A		1.165	ug/L	0.06139	5.269	4.741
Cr2677_A		11.79	ug/L	0.1713	1.452	126.0
Cu3273_A		12.63	ug/L	0.008898	0.07046	157.9
Fe2599_R		675.8	ug/L	9.614	1.423	1,343
K_7664_R		1,044	ug/L	3.020	0.2893	709.8
Li6707_R		2.342	ug/L	1.202	51.33	38.35
Mg2025_A		1,154	ug/L	6.809	0.5900	377.0
Mn2576_R		17.38	ug/L	0.3496	2.012	173.0
Mo2020_A		0.7569	ug/L	0.07413	9.794	4.583
Na5895_R		15,300	ug/L	84.90	0.5550	38,170
Ni2316_A		7.951	ug/L	0.06202	0.7800	11.77

SO4236-025

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 2:09:18PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.4206	ug/L	1.005	239.0	0.08362
Sb2068_A		1.710	ug/L	0.5952	34.80	-0.008650
Se1960_A		9.009	ug/L	0.08187	0.9088	3.818
Si2516_R		909.6	ug/L	1.743	0.1916	526.4
Sn1899_A		46.57	ug/L	1.001	2.149	20.06
Sr4215_R		14.16	ug/L	0.2429	1.715	1,411
Ti3349_A		18.66	ug/L	0.2776	1.488	428.6
Tl1908_A		-6.872	ug/L	0.2010	2.925	-4.513
V_2924_A		0.8555	ug/L	0.1378	16.11	4.589
Zn2062_A		476.1	ug/L	2.578	0.5414	1,060
Y_3600_R		18,673	Cts/S	76.983	0.41226	18,673
Y_2243_A		7,154.0	Cts/S	16.788	0.23467	7,154.0
Y_3600_A		133,450	Cts/S	629.79	0.47194	133,450

SO4236-026

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 2:13:40PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.006128	ug/L	0.4353	7,103	-19.91
Al3961_R		260.9	ug/L	8.802	3.374	294.2
As1891_A		-4.969	ug/L	0.5409	10.89	-3.420
B_2089_A	W	2,345	ug/L	1.966	0.08383	3,319
Ba4554_R		10.74	ug/L	0.1319	1.228	826.4
Be3130_R		-0.08771	ug/L	0.03276	37.35	-3.121
Ca3158_R		3,884	ug/L	28.60	0.7364	4,761
Cd2265_A		0.1264	ug/L	0.05115	40.48	0.2098
Co2286_A		0.4885	ug/L	0.3390	69.40	2.668
Cr2677_A		3.343	ug/L	0.3440	10.29	35.64
Cu3273_A		8.714	ug/L	0.1054	1.210	102.2
Fe2599_R		350.8	ug/L	2.202	0.6275	715.3
K_7664_R		725.3	ug/L	8.384	1.156	492.3
Li6707_R		1.781	ug/L	0.1471	8.260	30.27
Mg2025_A		1,139	ug/L	2.245	0.1971	375.8
Mn2576_R		12.21	ug/L	0.4439	3.635	125.7
Mo2020_A		-0.6330	ug/L	0.1454	22.96	0.6330
Na5895_R		15,470	ug/L	88.26	0.5704	39,250
Ni2316_A		2.546	ug/L	0.3096	12.16	3.719
Pb2203_A		0.3446	ug/L	0.7585	220.1	0.02490
Sb2068_A		1.407	ug/L	0.8803	62.55	-0.2209
Se1960_A		7.478	ug/L	0.9037	12.09	3.482
Si2516_R		582.6	ug/L	9.364	1.607	368.6
Sn1899_A		52.60	ug/L	0.7537	1.433	22.73
Sr4215_R		10.44	ug/L	0.1068	1.023	1,054
Ti3349_A		13.00	ug/L	0.1419	1.091	298.7
Tl1908_A		-4.710	ug/L	0.06094	1.294	-3.570
V_2924_A		0.5828	ug/L	0.09950	17.07	1.925
Zn2062_A		392.4	ug/L	1.146	0.2921	883.1
Y_3600_R		18,983	Cts/S	8.0744	0.042536	18,983
Y_2243_A		7,231.2	Cts/S	1.7650	0.024409	7,231.2
Y_3600_A		135,050	Cts/S	1,259.6	0.93268	135,050

SO4236-027

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 2:18:02PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO4236-027

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 2:18:02PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3494	ug/L	0.01744	4.991	-15.73
Al3961_R		504.0	ug/L	9.305	1.846	575.3
As1891_A		-5.788	ug/L	1.149	19.85	-3.658
B_2089_A	W	2,343	ug/L	12.65	0.5401	3,276
Ba4554_R		18.41	ug/L	0.1898	1.031	1,408
Be3130_R		-0.08737	ug/L	0.07275	83.26	-4.040
Ca3158_R		4,585	ug/L	89.40	1.950	5,670
Cd2265_A		0.1963	ug/L	0.01076	5.481	1.959
Co2286_A		1.200	ug/L	0.09546	7.957	4.875
Cr2677_A		3.870	ug/L	0.1189	3.071	41.35
Cu3273_A		16.45	ug/L	0.008173	0.04969	215.6
Fe2599_R		827.1	ug/L	15.44	1.867	1,681
K_7664_R		1,294	ug/L	5.683	0.4392	908.4
Li6707_R		2.329	ug/L	0.1994	8.562	39.17
Mg2025_A		1,272	ug/L	3.396	0.2670	415.8
Mn2576_R		25.58	ug/L	0.4792	1.873	257.8
Mo2020_A		-0.3196	ug/L	0.04692	14.68	1.516
Na5895_R		15,330	ug/L	283.8	1.851	39,200
Ni2316_A		3.419	ug/L	0.1689	4.941	4.961
Pb2203_A		2.012	ug/L	0.4970	24.70	1.452
Sb2068_A		2.290	ug/L	0.4337	18.94	0.2287
Se1960_A		10.13	ug/L	1.036	10.22	4.087
Si2516_R		1,004	ug/L	30.33	3.022	587.4
Sn1899_A		54.46	ug/L	0.3527	0.6477	23.21
Sr4215_R		14.91	ug/L	0.2561	1.717	1,523
Ti3349_A		24.36	ug/L	0.2252	0.9242	568.6
Tl1908_A		-6.994	ug/L	0.2929	4.187	-4.569
V_2924_A		0.9390	ug/L	0.2755	29.34	5.879
Zn2062_A		703.4	ug/L	4.455	0.6334	1,563
Y_3600_R		19,132	Cts/S	437.08	2.2845	19,132
Y_2243_A		7,145.7	Cts/S	8.4239	0.11789	7,145.7
Y_3600_A		134,800	Cts/S	214.86	0.15940	134,800

SO4236-028

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 2:22:23PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3477	ug/L	0.3017	86.77	-36.43
Al3961_R		4,760	ug/L	156.0	3.277	5,365
As1891_A		-2.253	ug/L	0.3708	16.45	-2.794
B_2089_A	W	2,359	ug/L	17.78	0.7536	3,296
Ba4554_R		71.17	ug/L	2.456	3.450	5,274
Be3130_R		0.1027	ug/L	0.02523	24.57	3.195
Ca3158_R		14,480	ug/L	552.9	3.818	17,680
Cd2265_A		0.1832	ug/L	0.09508	51.90	12.95
Co2286_A		2.821	ug/L	0.05569	1.974	10.93
Cr2677_A		21.10	ug/L	0.1060	0.5026	226.3
Cu3273_A		53.97	ug/L	0.4169	0.7725	755.8
Fe2599_R		6,264	ug/L	267.6	4.272	12,430
K_7664_R		2,870	ug/L	64.56	2.250	2,017
Li6707_R		5.836	ug/L	0.7635	13.08	92.66
Mg2025_A		2,976	ug/L	26.94	0.9053	979.3
Mn2576_R		141.3	ug/L	5.466	3.868	1,369
Mo2020_A		0.8236	ug/L	0.2050	24.89	4.751
Na5895_R		17,340	ug/L	495.3	2.857	43,580
Ni2316_A		13.18	ug/L	0.2159	1.638	19.30

SO4236-028

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 2:22:23PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		10.09	ug/L	0.5612	5.560	8.224
Sb2068_A		7.240	ug/L	0.09075	1.253	2.770
Se1960_A		4.945	ug/L	0.1551	3.136	2.894
Si2516_R		3,414	ug/L	105.3	3.084	1,795
Sn1899_A		63.85	ug/L	0.4807	0.7528	26.97
Sr4215_R		42.06	ug/L	1.368	3.252	4,245
Ti3349_A		216.5	ug/L	0.08225	0.03798	5,085
Tl1908_A		-3.920	ug/L	0.07739	1.975	-3.308
V_2924_A		9.980	ug/L	0.03772	0.3779	104.4
Zn2062_A		661.8	ug/L	2.803	0.4236	1,470
Y_3600_R		18,822	Cts/S	433.11	2.3011	18,822
Y_2243_A		7,139.5	Cts/S	65.729	0.92064	7,139.5
Y_3600_A		133,250	Cts/S	481.78	0.36155	133,250

SO4236-029

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 2:26:42PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.347	ug/L	0.1050	7.791	-47.60
Al3961_R		10,620	ug/L	382.2	3.598	11,980
As1891_A		1.040	ug/L	0.3013	28.96	-2.070
B_2089_A	W	2,431	ug/L	3.809	0.1567	3,359
Ba4554_R		718.0	ug/L	23.84	3.320	52,960
Be3130_R		0.3737	ug/L	0.01565	4.188	10.51
Ca3158_R	W	28,110	ug/L	1,063	3.780	34,340
Cd2265_A		0.2321	ug/L	0.09243	39.82	28.16
Co2286_A		6.192	ug/L	0.2274	3.672	22.76
Cr2677_A		39.11	ug/L	0.2002	0.5119	414.9
Cu3273_A		97.87	ug/L	1.369	1.398	1,372
Fe2599_R		13,550	ug/L	493.0	3.638	26,880
K_7664_R		4,535	ug/L	136.1	3.001	3,205
Li6707_R		12.00	ug/L	0.08692	0.7244	188.2
Mg2025_A		5,659	ug/L	9.222	0.1630	1,847
Mn2576_R		308.8	ug/L	12.76	4.132	2,985
Mo2020_A		2.234	ug/L	0.02501	1.119	8.650
Na5895_R		17,670	ug/L	537.5	3.041	44,440
Ni2316_A		26.20	ug/L	0.03657	0.1396	37.99
Pb2203_A		23.13	ug/L	0.6402	2.767	18.97
Sb2068_A		10.60	ug/L	0.4240	4.001	4.512
Se1960_A		4.655	ug/L	1.019	21.90	2.875
Si2516_R		4,854	ug/L	179.7	3.702	2,524
Sn1899_A		67.35	ug/L	0.7579	1.125	28.06
Sr4215_R		84.89	ug/L	3.299	3.886	8,580
Ti3349_A		529.2	ug/L	1.959	0.3701	12,280
Tl1908_A		-4.792	ug/L	0.9731	20.31	-3.860
V_2924_A		23.25	ug/L	0.1042	0.4481	246.3
Zn2062_A		786.7	ug/L	1.267	0.1610	1,727
Y_3600_R		18,823	Cts/S	378.72	2.0120	18,823
Y_2243_A		7,059.9	Cts/S	9.1137	0.12909	7,059.9
Y_3600_A		131,500	Cts/S	356.08	0.27079	131,500

SO4236-030

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 2:31:01PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO4236-030

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 2:31:01PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.6691	ug/L	0.2610	39.00	-53.27
Al3961_R		8,142	ug/L	1.073	0.01318	9,135
As1891_A		1.610	ug/L	0.8431	52.38	-1.847
B_2089_A	W	2,413	ug/L	41.58	1.724	3,367
Ba4554_R		134.9	ug/L	0.1877	0.1391	9,920
Be3130_R		0.2664	ug/L	0.01241	4.659	7.286
Ca3158_R	W	27,400	ug/L	9.036	0.03298	33,300
Cd2265_A		0.2516	ug/L	0.03905	15.52	25.58
Co2286_A		5.660	ug/L	0.04556	0.8049	20.70
Cr2677_A		30.67	ug/L	0.06346	0.2069	330.9
Cu3273_A		109.6	ug/L	0.2532	0.2311	1,566
Fe2599_R		12,070	ug/L	51.65	0.4278	23,830
K_7664_R		3,628	ug/L	36.46	1.005	2,545
Li6707_R		9.214	ug/L	0.7397	8.027	144.3
Mg2025_A		4,977	ug/L	84.33	1.695	1,640
Mn2576_R		290.9	ug/L	0.2458	0.08448	2,798
Mo2020_A		2.298	ug/L	0.09207	4.007	8.918
Na5895_R		17,090	ug/L	46.85	0.2741	42,750
Ni2316_A		21.39	ug/L	0.5827	2.724	31.27
Pb2203_A		25.04	ug/L	0.8627	3.445	20.94
Sb2068_A		12.37	ug/L	0.07051	0.5699	5.402
Se1960_A		5.580	ug/L	0.1621	2.906	3.108
Si2516_R		2,439	ug/L	5.613	0.2302	1,297
Sn1899_A		70.33	ug/L	1.533	2.180	29.54
Sr4215_R		78.05	ug/L	0.07143	0.09152	7,847
Ti3349_A		410.2	ug/L	0.8416	0.2052	9,674
Tl1908_A		-4.205	ug/L	0.02436	0.5793	-3.578
V_2924_A		18.82	ug/L	0.1385	0.7359	201.7
Zn2062_A		871.1	ug/L	14.24	1.634	1,932
Y_3600_R		18,719	Cts/S	58.263	0.31126	18,719
Y_2243_A		7,131.4	Cts/S	86.402	1.2116	7,131.4
Y_3600_A		133,690	Cts/S	285.21	0.21334	133,690

SO4236-031

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 2:35:20PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.06931	ug/L	0.1237	178.5	-19.54
Al3961_R		523.1	ug/L	0.1562	0.02985	586.1
As1891_A		-6.173	ug/L	0.5643	9.141	-3.771
B_2089_A	W	2,285	ug/L	10.49	0.4591	3,197
Ba4554_R		23.82	ug/L	0.08162	0.3426	1,781
Be3130_R		-0.1139	ug/L	0.01894	16.64	-7.058
Ca3158_R		4,056	ug/L	34.96	0.8620	4,922
Cd2265_A		0.1299	ug/L	0.01322	10.17	0.7892
Co2286_A		0.2685	ug/L	0.04894	18.23	2.051
Cr2677_A		4.183	ug/L	0.03846	0.9195	43.99
Cu3273_A		9.512	ug/L	0.04134	0.4346	111.7
Fe2599_R		613.0	ug/L	3.174	0.5178	1,227
K_7664_R		886.6	ug/L	13.21	1.490	602.1
Li6707_R		0.6730	ug/L	0.2888	42.92	12.83
Mg2025_A		1,206	ug/L	3.893	0.3229	393.8
Mn2576_R		19.32	ug/L	0.03139	0.1625	192.8
Mo2020_A		-0.7048	ug/L	0.0007930	0.1125	0.4211
Na5895_R		23,340	ug/L	0.06272	0.0002690	58,560
Ni2316_A		3.681	ug/L	0.08905	2.419	5.361

SO4236-031

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 2:35:20PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.8799	ug/L	0.1197	13.60	0.4725
Sb2068_A		1.954	ug/L	0.07993	4.090	0.06610
Se1960_A		7.048	ug/L	0.04781	0.6783	3.342
Si2516_R		955.1	ug/L	4.200	0.4397	552.5
Sn1899_A		52.27	ug/L	0.7371	1.410	22.34
Sr4215_R		9.637	ug/L	0.05629	0.5841	962.4
Ti3349_A		28.13	ug/L	0.02855	0.1015	647.9
Tl1908_A		-6.992	ug/L	0.02633	0.3765	-4.570
V_2924_A		1.031	ug/L	0.2521	24.46	6.812
Zn2062_A		539.7	ug/L	2.272	0.4209	1,200
Y_3600_R		18,787	Cts/S	48.205	0.25659	18,787
Y_2243_A		7,148.4	Cts/S	40.448	0.56583	7,148.4
Y_3600_A		132,650	Cts/S	661.66	0.49881	132,650

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 2:39:42PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		522.1	ug/L	1.978	0.3788	8,909
Al3961_R		12,640	ug/L	29.13	0.2305	14,470
As1891_A		519.2	ug/L	2.280	0.4391	163.6
B_2089_A		524.6	ug/L	1.444	0.2752	771.6
Ba4554_R		495.8	ug/L	1.568	0.3163	37,130
Be3130_R		490.7	ug/L	0.8706	0.1774	54,650
Ca3158_R		12,710	ug/L	68.81	0.5413	15,750
Cd2265_A		514.6	ug/L	1.006	0.1955	5,879
Co2286_A	W	527.7	ug/L	2.000	0.3790	1,648
Cr2677_A		510.9	ug/L	1.056	0.2066	5,571
Cu3273_A		505.8	ug/L	2.013	0.3980	7,442
Fe2599_R		12,530	ug/L	25.08	0.2001	25,230
K_7664_R		12,430	ug/L	31.33	0.2521	8,969
Li6707_R		489.2	ug/L	4.508	0.9215	7,688
Mg2025_A	W	13,270	ug/L	55.40	0.4175	4,507
Mn2576_R		495.7	ug/L	0.6136	0.1238	4,864
Mo2020_A		523.8	ug/L	0.07863	0.01501	1,522
Na5895_R		12,400	ug/L	31.85	0.2568	31,670
Ni2316_A		518.2	ug/L	0.3503	0.06759	795.5
Pb2203_A		520.8	ug/L	2.286	0.4388	455.0
Sb2068_A		509.3	ug/L	0.05906	0.01160	259.6
Se1960_A		521.5	ug/L	0.9050	0.1735	130.2
Si2516_R		12,730	ug/L	22.42	0.1761	6,599
Sn1899_A		516.1	ug/L	2.136	0.4138	213.3
Sr4215_R		500.4	ug/L	2.186	0.4368	51,390
Ti3349_A		517.5	ug/L	0.8353	0.1614	12,380
Tl1908_A		523.9	ug/L	1.899	0.3626	240.7
V_2924_A		501.7	ug/L	0.8258	0.1646	5,448
Zn2062_A		519.0	ug/L	1.371	0.2641	1,176
Y_3600_R		19,099	Cts/S	120.66	0.63176	19,099
Y_2243_A		7,292.1	Cts/S	13.633	0.18695	7,292.1
Y_3600_A		135,420	Cts/S	148.40	0.10959	135,420

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 2:43:51PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 2:43:51PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3400	ug/L	0.03238	9.522	-13.11
Al3961_R		2.654	ug/L	4.227	159.3	-2.648
As1891_A		0.9123	ug/L	0.4660	51.08	-1.593
B_2089_A		6.232	ug/L	0.4418	7.089	18.13
Ba4554_R		-0.08463	ug/L	0.04818	56.93	21.49
Be3130_R		-0.02309	ug/L	0.007035	30.47	4.997
Ca3158_R		0.07897	ug/L	0.4830	611.6	-29.65
Cd2265_A		0.1586	ug/L	0.01093	6.894	-0.1653
Co2286_A		0.09103	ug/L	0.01618	17.77	1.411
Cr2677_A		0.2631	ug/L	0.1152	43.81	2.144
Cu3273_A		0.09546	ug/L	0.1595	167.1	-25.28
Fe2599_R		-3.099	ug/L	0.5369	17.33	7.448
K_7664_R		1.099	ug/L	14.41	1,311	-28.91
Li6707_R		0.8976	ug/L	0.7332	81.68	16.55
Mg2025_A		3.385	ug/L	1.509	44.59	-5.109
Mn2576_R		-0.3513	ug/L	0.03184	9.064	3.091
Mo2020_A		-0.2104	ug/L	0.1325	63.00	1.914
Na5895_R		-3.230	ug/L	2.999	92.84	63.13
Ni2316_A		0.2089	ug/L	0.09938	47.58	0.2107
Pb2203_A		-1.191	ug/L	0.3757	31.55	-1.346
Sb2068_A		0.6366	ug/L	0.1350	21.20	-0.3622
Se1960_A		-1.279	ug/L	0.4626	36.16	1.387
Si2516_R		-3.944	ug/L	2.357	59.77	70.05
Sn1899_A		-0.2321	ug/L	0.1722	74.16	1.256
Sr4215_R		0.05417	ug/L	0.04510	83.25	-6.053
Ti3349_A		-0.1057	ug/L	0.02734	25.86	-14.26
Tl1908_A		0.1979	ug/L	0.7539	381.0	-1.361
V_2924_A		-0.04337	ug/L	0.1636	377.3	-5.078
Zn2062_A		0.07477	ug/L	0.01505	20.13	1.051
Y_3600_R		19,069	Cts/S	12.111	0.063513	19,069
Y_2243_A		7,485.0	Cts/S	20.486	0.27370	7,485.0
Y_3600_A		138,760	Cts/S	862.38	0.62147	138,760

SO4236-032

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 2:48:16PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.08276	ug/L	0.01888	22.82	-20.39
Al3961_R		152.2	ug/L	5.136	3.376	166.9
As1891_A		-6.539	ug/L	0.4891	7.480	-3.824
B_2089_A	W	2,537	ug/L	3.602	0.1420	3,509
Ba4554_R		11.73	ug/L	0.02380	0.2029	881.7
Be3130_R		-0.1017	ug/L	0.01202	11.81	-4.177
Ca3158_R		3,431	ug/L	27.65	0.8058	4,116
Cd2265_A		0.06385	ug/L	0.05516	86.39	-0.7591
Co2286_A		-0.02720	ug/L	0.003744	13.76	1.018
Cr2677_A		2.633	ug/L	0.2215	8.412	27.28
Cu3273_A		6.188	ug/L	0.06200	1.002	63.61
Fe2599_R		215.5	ug/L	0.8300	0.3851	435.5
K_7664_R		517.0	ug/L	3.913	0.7569	335.3
Li6707_R		1.076	ug/L	0.5946	55.28	18.89
Mg2025_A		1,050	ug/L	0.9388	0.08939	338.5
Mn2576_R		8.833	ug/L	0.2483	2.812	90.87
Mo2020_A		-0.4546	ug/L	0.01056	2.322	1.121
Na5895_R		17,100	ug/L	32.75	0.1916	42,480
Ni2316_A		2.876	ug/L	0.04632	1.611	4.131

SO4236-032

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 2:48:16PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		-0.4076	ug/L	0.2922	71.69	-0.6113
Sb2068_A		1.574	ug/L	0.2803	17.81	-0.1449
Se1960_A		11.09	ug/L	0.09064	0.8171	4.265
Si2516_R		563.7	ug/L	0.01290	0.002289	351.5
Sn1899_A		54.71	ug/L	0.1405	0.2568	23.06
Sr4215_R		6.254	ug/L	0.01122	0.1793	614.1
Ti3349_A		7.183	ug/L	0.06157	0.8571	156.4
Tl1908_A		-8.348	ug/L	0.6376	7.637	-5.112
V_2924_A		0.2200	ug/L	0.2680	121.8	-2.029
Zn2062_A		511.1	ug/L	0.2853	0.05582	1,124
Y_3600_R		18,592	Cts/S	127.30	0.68473	18,592
Y_2243_A		7,069.2	Cts/S	30.849	0.43638	7,069.2
Y_3600_A		132,050	Cts/S	117.71	0.089144	132,050

SO4236-033

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 2:52:39PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3707	ug/L	0.02257	6.087	-12.56
Al3961_R		109.5	ug/L	0.008280	0.007564	119.1
As1891_A	F	-9.182	ug/L	0.4317	4.702	-4.610
B_2089_A	W	2,317	ug/L	6.144	0.2652	3,184
Ba4554_R		10.57	ug/L	0.07676	0.7264	793.8
Be3130_R		-0.08285	ug/L	0.02448	29.55	-1.963
Ca3158_R		3,630	ug/L	3.423	0.09431	4,339
Cd2265_A		0.07143	ug/L	0.002947	4.126	-0.7971
Co2286_A		-0.08845	ug/L	0.08904	100.7	0.8159
Cr2677_A		2.471	ug/L	0.1669	6.751	25.58
Cu3273_A		4.824	ug/L	0.08082	1.675	44.04
Fe2599_R		152.9	ug/L	1.501	0.9816	311.6
K_7664_R		437.8	ug/L	1.661	0.3793	278.5
Li6707_R		0.8445	ug/L	0.8828	104.5	15.35
Mg2025_A		1,019	ug/L	0.2361	0.02318	326.0
Mn2576_R		8.254	ug/L	0.02755	0.3338	85.03
Mo2020_A		-0.7367	ug/L	0.1230	16.69	0.3258
Na5895_R		16,290	ug/L	30.03	0.1843	40,320
Ni2316_A		1.753	ug/L	0.2141	12.21	2.454
Pb2203_A		0.8477	ug/L	0.8748	103.2	0.4526
Sb2068_A		1.318	ug/L	0.5399	40.97	-0.2581
Se1960_A		12.67	ug/L	0.02828	0.2232	4.611
Si2516_R		403.1	ug/L	3.534	0.8768	270.3
Sn1899_A		52.78	ug/L	0.1619	0.3067	22.15
Sr4215_R		6.172	ug/L	0.1010	1.636	603.7
Ti3349_A		5.162	ug/L	0.2828	5.479	109.4
Tl1908_A		-9.358	ug/L	0.6049	6.464	-5.526
V_2924_A		0.06762	ug/L	0.07805	115.4	-3.663
Zn2062_A		712.0	ug/L	4.327	0.6078	1,555
Y_3600_R		18,521	Cts/S	233.75	1.2621	18,521
Y_2243_A		7,022.6	Cts/S	14.817	0.21099	7,022.6
Y_3600_A		132,150	Cts/S	1,543.2	1.1677	132,150

SO4236-034

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 2:57:03PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO4236-034

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 2:57:03PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1502	ug/L	0.1285	85.53	-16.92
Al3961_R		259.4	ug/L	6.530	2.517	289.8
As1891_A		-6.389	ug/L	0.5021	7.859	-3.821
B_2089_A	W	2,342	ug/L	3.073	0.1312	3,275
Ba4554_R		70.44	ug/L	0.6459	0.9171	5,178
Be3130_R		-0.08832	ug/L	0.01830	20.72	-3.659
Ca3158_R		6,186	ug/L	7.500	0.1212	7,474
Cd2265_A		0.1560	ug/L	0.04476	28.69	0.3593
Co2286_A		0.1646	ug/L	0.1005	61.04	1.683
Cr2677_A		5.295	ug/L	0.03197	0.6038	55.92
Cu3273_A		6.799	ug/L	0.004972	0.07314	72.72
Fe2599_R		259.7	ug/L	1.356	0.5223	524.1
K_7664_R		463.0	ug/L	17.04	3.679	298.5
Li6707_R		0.8510	ug/L	0.04689	5.510	15.48
Mg2025_A		1,141	ug/L	2.115	0.1853	372.4
Mn2576_R		12.81	ug/L	0.03472	0.2710	129.4
Mo2020_A		-0.6319	ug/L	0.1032	16.33	0.6287
Na5895_R		17,200	ug/L	141.8	0.8248	42,890
Ni2316_A		2.842	ug/L	0.2158	7.594	4.122
Pb2203_A		0.3966	ug/L	0.5811	146.5	0.06628
Sb2068_A		1.774	ug/L	0.1044	5.883	-0.02885
Se1960_A		10.48	ug/L	0.07316	0.6983	4.165
Si2516_R		988.7	ug/L	18.23	1.843	565.8
Sn1899_A		53.13	ug/L	0.04627	0.08709	22.68
Sr4215_R		10.03	ug/L	0.05238	0.5222	995.7
Ti3349_A		19.79	ug/L	0.3240	1.637	453.1
Tl1908_A		-7.298	ug/L	0.6328	8.670	-4.701
V_2924_A		0.4212	ug/L	0.1033	24.53	0.1479
Zn2062_A		569.4	ug/L	0.9432	0.1657	1,266
Y_3600_R		18,665	Cts/S	123.68	0.66265	18,665
Y_2243_A		7,147.0	Cts/S	3.4192	0.047842	7,147.0
Y_3600_A		132,830	Cts/S	1,116.5	0.84054	132,830

SO4236-035

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 3:01:24PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.4372	ug/L	0.1536	35.14	-12.62
Al3961_R		367.2	ug/L	8.029	2.187	412.5
As1891_A		-5.753	ug/L	0.3724	6.473	-3.605
B_2089_A	W	2,329	ug/L	26.84	1.152	3,236
Ba4554_R		27.78	ug/L	0.5898	2.123	2,074
Be3130_R		-0.07214	ug/L	0.01506	20.87	-1.795
Ca3158_R		5,351	ug/L	102.2	1.909	6,512
Cd2265_A		0.05309	ug/L	0.01532	28.86	-0.4222
Co2286_A		0.08121	ug/L	0.1711	210.7	1.412
Cr2677_A		6.612	ug/L	0.05441	0.8229	69.84
Cu3273_A		13.48	ug/L	0.3514	2.607	169.1
Fe2599_R		440.0	ug/L	8.309	1.888	885.5
K_7664_R		626.6	ug/L	0.2598	0.04146	417.5
Li6707_R		1.437	ug/L	0.2145	14.93	24.65
Mg2025_A		1,073	ug/L	16.30	1.518	347.3
Mn2576_R		15.09	ug/L	0.2357	1.562	152.3
Mo2020_A		-0.6954	ug/L	0.09151	13.16	0.4465
Na5895_R		15,110	ug/L	291.7	1.931	37,980
Ni2316_A		2.508	ug/L	0.1943	7.747	3.588

SO4236-035

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 3:01:24PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.4739	ug/L	0.04599	9.704	0.1299
Sb2068_A		2.197	ug/L	0.06159	2.803	0.1937
Se1960_A		10.55	ug/L	1.408	13.35	4.154
Si2516_R		849.3	ug/L	2.553	0.3006	500.0
Sn1899_A		51.29	ug/L	0.7946	1.549	21.79
Sr4215_R		9.376	ug/L	0.1323	1.411	937.3
Ti3349_A		18.76	ug/L	0.3703	1.975	427.8
Tl1908_A		-6.759	ug/L	0.5297	7.837	-4.426
V_2924_A		0.6659	ug/L	0.03966	5.955	2.741
Zn2062_A		290.2	ug/L	2.785	0.9597	641.2
Y_3600_R		18,814	Cts/S	395.88	2.1042	18,814
Y_2243_A		7,097.6	Cts/S	75.270	1.0605	7,097.6
Y_3600_A		132,520	Cts/S	619.85	0.46775	132,520

SO4236-036

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 3:05:47PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.03272	ug/L	0.3780	1,155	-20.34
Al3961_R		367.7	ug/L	7.820	2.127	408.8
As1891_A		-6.943	ug/L	0.4402	6.340	-3.965
B_2089_A	W	2,281	ug/L	7.341	0.3218	3,163
Ba4554_R		49.22	ug/L	0.7546	1.533	3,612
Be3130_R		-0.09082	ug/L	0.004297	4.731	-4.197
Ca3158_R		5,976	ug/L	78.12	1.307	7,191
Cd2265_A		0.1221	ug/L	0.1304	106.7	0.2107
Co2286_A		-0.05074	ug/L	0.2554	503.3	1.039
Cr2677_A		8.459	ug/L	0.4328	5.117	89.28
Cu3273_A		8.933	ug/L	0.06161	0.6897	103.1
Fe2599_R		371.8	ug/L	4.501	1.211	741.5
K_7664_R		872.1	ug/L	25.65	2.941	585.5
Li6707_R		1.200	ug/L	0.02974	2.479	20.75
Mg2025_A		1,094	ug/L	6.227	0.5691	353.6
Mn2576_R		13.85	ug/L	0.4209	3.038	138.7
Mo2020_A		-0.6956	ug/L	0.01259	1.810	0.4440
Na5895_R		15,920	ug/L	241.9	1.520	39,540
Ni2316_A		3.698	ug/L	0.02558	0.6916	5.350
Pb2203_A		1.173	ug/L	0.3415	29.11	0.7221
Sb2068_A		1.789	ug/L	0.3016	16.86	-0.006112
Se1960_A		10.04	ug/L	0.3427	3.412	4.026
Si2516_R		932.8	ug/L	15.95	1.710	535.7
Sn1899_A		51.40	ug/L	0.9152	1.781	21.79
Sr4215_R		9.755	ug/L	0.1555	1.594	964.1
Ti3349_A		23.99	ug/L	0.1624	0.6768	548.8
Tl1908_A		-7.227	ug/L	0.05393	0.7461	-4.631
V_2924_A		0.7294	ug/L	0.2121	29.08	3.386
Zn2062_A		375.1	ug/L	2.510	0.6691	827.0
Y_3600_R		18,590	Cts/S	47.759	0.25691	18,590
Y_2243_A		7,084.8	Cts/S	13.232	0.18677	7,084.8
Y_3600_A		132,150	Cts/S	912.65	0.69064	132,150

SO4236-037

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 3:10:10PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO4236-037

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 3:10:10PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1712	ug/L	0.4484	261.9	-17.31
Al3961_R		482.4	ug/L	4.132	0.8564	539.3
As1891_A		-5.855	ug/L	0.2772	4.734	-3.624
B_2089_A	W	2,312	ug/L	10.13	0.4383	3,197
Ba4554_R		485.7	ug/L	4.121	0.8485	35,520
Be3130_R		-0.09101	ug/L	0.01497	16.45	-4.031
Ca3158_R		7,087	ug/L	32.06	0.4523	8,561
Cd2265_A		0.05444	ug/L	0.01177	21.62	-0.2360
Co2286_A		0.02248	ug/L	0.08678	386.0	1.248
Cr2677_A		4.457	ug/L	0.08755	1.964	46.62
Cu3273_A		20.06	ug/L	0.3501	1.745	262.8
Fe2599_R		523.7	ug/L	5.629	1.075	1,042
K_7664_R		967.7	ug/L	22.17	2.291	655.0
Li6707_R		1.431	ug/L	0.3440	24.04	24.39
Mg2025_A		1,227	ug/L	2.717	0.2214	396.4
Mn2576_R		22.22	ug/L	0.4396	1.979	219.2
Mo2020_A		-0.6349	ug/L	0.002352	0.3705	0.6126
Na5895_R		17,820	ug/L	31.16	0.1748	44,410
Ni2316_A		3.618	ug/L	0.1271	3.514	5.209
Pb2203_A		2.107	ug/L	0.08997	4.269	1.511
Sb2068_A		2.194	ug/L	0.5259	23.97	0.1894
Se1960_A		8.536	ug/L	0.4936	5.782	3.658
Si2516_R		1,219	ug/L	17.30	1.419	680.6
Sn1899_A		53.55	ug/L	0.8953	1.672	22.59
Sr4215_R		14.84	ug/L	0.06693	0.4511	1,477
Ti3349_A		21.37	ug/L	0.1242	0.5812	486.2
Tl1908_A		-6.808	ug/L	0.3053	4.483	-4.433
V_2924_A		0.7600	ug/L	0.08437	11.10	3.790
Zn2062_A	W	1,138	ug/L	0.2624	0.02307	2,500
Y_3600_R		18,651	Cts/S	96.031	0.51487	18,651
Y_2243_A		7,064.9	Cts/S	31.074	0.43983	7,064.9
Y_3600_A		131,780	Cts/S	296.61	0.22508	131,780

SO4236-038

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 3:14:32PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2097	ug/L	0.2306	110.0	-17.07
Al3961_R		603.7	ug/L	0.5943	0.09844	664.8
As1891_A		-5.751	ug/L	1.442	25.08	-3.618
B_2089_A	W	2,319	ug/L	13.79	0.5946	3,227
Ba4554_R		57.72	ug/L	0.3845	0.6661	4,190
Be3130_R		-0.07211	ug/L	0.005864	8.132	-2.198
Ca3158_R		6,121	ug/L	29.22	0.4773	7,293
Cd2265_A		0.03843	ug/L	0.009639	25.08	-0.2005
Co2286_A		0.2650	ug/L	0.1623	61.24	2.013
Cr2677_A		4.312	ug/L	0.2114	4.902	45.05
Cu3273_A		35.16	ug/L	0.5622	1.599	479.3
Fe2599_R		628.5	ug/L	4.376	0.6963	1,232
K_7664_R		2,685	ug/L	4.914	0.1830	1,845
Li6707_R		1.911	ug/L	0.8701	45.53	31.35
Mg2025_A		1,312	ug/L	8.022	0.6114	426.7
Mn2576_R		22.10	ug/L	0.09021	0.4081	215.2
Mo2020_A		-0.3135	ug/L	0.1128	35.98	1.525
Na5895_R		17,570	ug/L	119.7	0.6812	43,220
Ni2316_A		2.918	ug/L	0.08346	2.861	4.199

SO4236-038

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 3:14:32PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		1.190	ug/L	0.9644	81.01	0.7356
Sb2068_A		1.507	ug/L	0.5726	37.99	-0.1652
Se1960_A		8.196	ug/L	1.101	13.43	3.600
Si2516_R		1,052	ug/L	6.460	0.6138	589.4
Sn1899_A		53.90	ug/L	0.5385	0.9992	22.87
Sr4215_R		12.19	ug/L	0.1329	1.091	1,195
Ti3349_A		24.96	ug/L	0.3618	1.450	569.2
Tl1908_A		-6.810	ug/L	0.7579	11.13	-4.461
V_2924_A		1.052	ug/L	0.01884	1.791	6.922
Zn2062_A		574.5	ug/L	2.896	0.5041	1,271
Y_3600_R		18,406	Cts/S	67.230	0.36526	18,406
Y_2243_A		7,109.2	Cts/S	18.341	0.25798	7,109.2
Y_3600_A		131,660	Cts/S	1,199.6	0.91114	131,660

SO4236-039

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 3:18:53PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.5189	ug/L	0.05607	10.81	-19.71
Al3961_R		1,696	ug/L	5.400	0.3184	1,891
As1891_A		-3.124	ug/L	0.4711	15.08	-2.852
B_2089_A	W	2,385	ug/L	2.805	0.1176	3,278
Ba4554_R		121.6	ug/L	0.3560	0.2928	8,849
Be3130_R		-0.04019	ug/L	0.02324	57.83	-1.737
Ca3158_R		19,240	ug/L	95.33	0.4954	23,130
Cd2265_A		0.07287	ug/L	0.04221	57.92	4.497
Co2286_A		2.119	ug/L	0.04362	2.059	7.774
Cr2677_A		231.0	ug/L	4.368	1.891	2,436
Cu3273_A		94.40	ug/L	1.430	1.515	1,322
Fe2599_R		2,852	ug/L	22.00	0.7714	5,579
K_7664_R		4,999	ug/L	3.715	0.07433	3,480
Li6707_R		3.353	ug/L	0.7123	21.25	53.47
Mg2025_A		2,216	ug/L	5.029	0.2270	715.8
Mn2576_R		66.47	ug/L	0.2321	0.3491	637.8
Mo2020_A		4.267	ug/L	0.1825	4.278	14.32
Na5895_R		18,010	ug/L	12.95	0.07190	44,560
Ni2316_A		112.7	ug/L	0.6702	0.5948	165.4
Pb2203_A		4.016	ug/L	0.3373	8.398	3.091
Sb2068_A		3.598	ug/L	0.7754	21.55	1.444
Se1960_A		7.143	ug/L	0.6528	9.139	3.328
Si2516_R		2,054	ug/L	15.58	0.7588	1,091
Sn1899_A		55.71	ug/L	0.4694	0.8425	23.31
Sr4215_R		82.38	ug/L	0.2281	0.2769	8,196
Ti3349_A		68.09	ug/L	1.080	1.586	1,565
Tl1908_A		-5.576	ug/L	0.7910	14.19	-3.892
V_2924_A		3.904	ug/L	0.07520	1.926	30.92
Zn2062_A		487.0	ug/L	1.200	0.2464	1,063
Y_3600_R		18,521	Cts/S	38.312	0.20686	18,521
Y_2243_A		7,022.9	Cts/S	28.543	0.40643	7,022.9
Y_3600_A		130,960	Cts/S	1,397.4	1.0670	130,960

SO5372-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 3:23:12PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO5372-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 3:23:12PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.2836	ug/L	0.2657	93.70	-24.13
Al3961_R		9.432	ug/L	2.313	24.52	9.150
As1891_A		32.55	ug/L	0.8001	2.458	8.349
B_2089_A		178.0	ug/L	1.091	0.6130	237.2
Ba4554_R		3.445	ug/L	0.07545	2.190	271.8
Be3130_R		-0.1405	ug/L	0.04149	29.53	-20.70
Ca3158_R		3,106	ug/L	30.15	0.9707	3,637
Cd2265_A		87.43	ug/L	0.6890	0.7881	894.9
Co2286_A		-0.9807	ug/L	0.07986	8.143	-4.834
Cr2677_A	W	11,150	ug/L	49.68	0.4456	110,100
Cu3273_A		0.8626	ug/L	0.4482	51.96	-13.84
Fe2599_R		99.44	ug/L	2.668	2.683	203.4
K_7664_R		3,862	ug/L	50.26	1.302	2,632
Li6707_R		180.4	ug/L	2.560	1.419	2,700
Mg2025_A		1,957	ug/L	13.02	0.6651	590.8
Mn2576_R		10.44	ug/L	0.5259	5.038	104.1
Mo2020_A		35.81	ug/L	0.3413	0.9530	96.64
Na5895_R	F	296,100	ug/L	2,960	0.9995	718,000
Ni2316_A		0.2865	ug/L	0.02353	8.215	0.6325
Pb2203_A		32.74	ug/L	0.6125	1.871	24.89
Sb2068_A		118.4	ug/L	0.2355	0.1990	80.91
Se1960_A		40.53	ug/L	0.5931	1.463	10.49
Si2516_R		560.8	ug/L	0.1749	0.03119	343.3
Sn1899_A		171.0	ug/L	1.666	0.9746	64.46
Sr4215_R		226.5	ug/L	2.656	1.173	22,130
Ti3349_A		191.2	ug/L	0.7336	0.3837	4,169
Tl1908_A		32.42	ug/L	1.249	3.852	12.11
V_2924_A		11.77	ug/L	0.2278	1.935	-180.7
Zn2062_A		70.17	ug/L	0.7503	1.069	120.3
Y_3600_R		18,173	Cts/S	41.797	0.22999	18,173
Y_2243_A		6,571.0	Cts/S	22.728	0.34588	6,571.0
Y_3600_A		122,680	Cts/S	193.73	0.15792	122,680

SO5372-001L

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 3:27:39PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1220	ug/L	0.5709	467.9	-19.18
Al3961_R		81.71	ug/L	2.886	3.532	13.78
As1891_A		27.55	ug/L	6.130	22.26	0.05495
B_2089_A		202.5	ug/L	1.138	0.5621	65.45
Ba4554_R		3.419	ug/L	0.1654	4.838	78.47
Be3130_R		-0.4296	ug/L	0.007438	1.731	-4.608
Ca3158_R		3,192	ug/L	39.84	1.248	756.5
Cd2265_A		85.94	ug/L	0.1674	0.1947	190.2
Co2286_A		-1.503	ug/L	0.5145	34.23	-0.5073
Cr2677_A	W	10,950	ug/L	2.679	0.02447	23,270
Cu3273_A		2.066	ug/L	0.1601	7.747	-19.83
Fe2599_R		98.99	ug/L	2.905	2.935	53.15
K_7664_R		3,560	ug/L	108.5	3.049	482.2
Li6707_R		162.8	ug/L	4.146	2.546	510.4
Mg2025_A		2,056	ug/L	11.01	0.5353	130.6
Mn2576_R		11.64	ug/L	0.1017	0.8734	29.26
Mo2020_A		31.63	ug/L	0.2849	0.9007	20.63
Na5895_R	W	283,700	ug/L	3,587	1.264	143,600
Ni2316_A		1.043	ug/L	1.703	163.4	0.2688

SO5372-001L

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 3:27:39PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		30.09	ug/L	0.5942	1.975	4.762
Sb2068_A		115.6	ug/L	0.6979	0.6036	16.71
Se1960_A		29.99	ug/L	3.330	11.11	3.088
Si2516_R		504.4	ug/L	9.019	1.788	123.2
Sn1899_A		172.2	ug/L	0.1975	0.1147	15.19
Sr4215_R		213.3	ug/L	2.071	0.9710	4,340
Ti3349_A		184.6	ug/L	1.955	1.059	857.4
Tl1908_A		31.41	ug/L	4.194	13.35	1.434
V_2924_A		10.95	ug/L	0.1963	1.793	-42.95
Zn2062_A		98.58	ug/L	0.7703	0.7814	39.65
Y_3600_R		18,962	Cts/S	144.36	0.76129	18,962
Y_2243_A		7,163.1	Cts/S	14.556	0.20321	7,163.1
Y_3600_A		131,980	Cts/S	98.189	0.074397	131,980

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 3:32:02PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	W	531.9	ug/L	7.625	1.434	8,983
Al3961_R		12,760	ug/L	114.2	0.8951	14,450
As1891_A		518.1	ug/L	2.214	0.4273	162.0
B_2089_A		523.9	ug/L	1.835	0.3503	764.5
Ba4554_R		495.3	ug/L	2.513	0.5072	36,690
Be3130_R		493.7	ug/L	0.4592	0.09302	54,390
Ca3158_R		12,770	ug/L	9.460	0.07409	15,650
Cd2265_A		517.5	ug/L	1.623	0.3135	5,866
Co2286_A	W	527.5	ug/L	0.3941	0.07472	1,634
Cr2677_A		508.5	ug/L	8.652	1.701	5,487
Cu3273_A		507.6	ug/L	3.332	0.6565	7,390
Fe2599_R		12,460	ug/L	23.13	0.1857	24,810
K_7664_R		12,500	ug/L	80.22	0.6415	8,926
Li6707_R		494.6	ug/L	4.664	0.9430	7,689
Mg2025_A	W	13,290	ug/L	3.465	0.02607	4,480
Mn2576_R		508.9	ug/L	0.9349	0.1837	4,939
Mo2020_A		524.3	ug/L	1.455	0.2776	1,512
Na5895_R		12,630	ug/L	49.47	0.3919	31,890
Ni2316_A		519.5	ug/L	0.5499	0.1059	791.2
Pb2203_A	W	527.0	ug/L	0.3783	0.07178	456.8
Sb2068_A		516.4	ug/L	2.159	0.4180	261.2
Se1960_A		521.7	ug/L	1.600	0.3066	129.3
Si2516_R		13,000	ug/L	3.732	0.02872	6,663
Sn1899_A		520.6	ug/L	0.7685	0.1476	213.5
Sr4215_R		504.4	ug/L	1.853	0.3673	51,250
Ti3349_A		517.9	ug/L	8.495	1.640	12,260
Tl1908_A	W	532.8	ug/L	2.507	0.4705	242.9
V_2924_A		502.2	ug/L	4.211	0.8384	5,397
Zn2062_A		521.7	ug/L	0.8428	0.1616	1,173
Y_3600_R		18,893	Cts/S	67.353	0.35649	18,893
Y_2243_A		7,235.3	Cts/S	18.293	0.25283	7,235.3
Y_3600_A		134,000	Cts/S	1,171.2	0.87404	134,000

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 3:36:12PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 3:36:12PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.08769	ug/L	0.1481	168.9	-17.27
Al3961_R		9.674	ug/L	0.8753	9.048	5.281
As1891_A		0.2118	ug/L	1.168	551.4	-1.794
B_2089_A		4.548	ug/L	0.8584	18.87	15.43
Ba4554_R		0.07727	ug/L	0.1307	169.1	33.15
Be3130_R		0.1449	ug/L	0.02223	15.34	23.33
Ca3158_R		7.777	ug/L	0.9578	12.32	-19.82
Cd2265_A		0.1352	ug/L	0.04177	30.90	-0.4215
Co2286_A		0.07280	ug/L	0.02226	30.57	1.333
Cr2677_A		0.4174	ug/L	0.1591	38.11	3.805
Cu3273_A		-0.1845	ug/L	0.4128	223.8	-29.00
Fe2599_R		1.100	ug/L	0.3527	32.06	15.66
K_7664_R		5.449	ug/L	0.9318	17.10	-25.40
Li6707_R		0.01109	ug/L	1.215	10,950	2.539
Mg2025_A		4.803	ug/L	0.3272	6.814	-4.546
Mn2576_R		-0.2170	ug/L	0.05320	24.51	4.339
Mo2020_A		-0.3140	ug/L	0.03898	12.42	1.581
Na5895_R		10.22	ug/L	2.416	23.64	95.96
Ni2316_A		0.02159	ug/L	0.2010	930.9	-0.08224
Pb2203_A		-0.8923	ug/L	0.3366	37.73	-1.062
Sb2068_A		1.083	ug/L	0.004244	0.3920	-0.1266
Se1960_A		-1.764	ug/L	1.680	95.22	1.244
Si2516_R		-1.101	ug/L	7.892	716.5	70.49
Sn1899_A		0.2124	ug/L	0.2717	127.9	1.421
Sr4215_R		0.2400	ug/L	0.05205	21.68	12.81
Ti3349_A		0.1606	ug/L	0.2014	125.4	-7.599
Tl1908_A		0.3006	ug/L	0.7224	240.3	-1.292
V_2924_A		0.1966	ug/L	0.3185	162.0	-2.343
Zn2062_A		0.1017	ug/L	0.001460	1.436	1.095
Y_3600_R		18,801	Cts/S	140.03	0.74478	18,801
Y_2243_A		7,368.2	Cts/S	25.586	0.34725	7,368.2
Y_3600_A		136,350	Cts/S	113.84	0.083490	136,350

SO5372-001A

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 3:40:37PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		12.31	ug/L	0.02594	0.2107	150.0
Al3961_R		11,130	ug/L	104.1	0.9359	12,320
As1891_A		544.6	ug/L	1.824	0.3349	156.7
B_2089_A		650.3	ug/L	1.058	0.1627	863.7
Ba4554_R		499.4	ug/L	2.249	0.4504	36,170
Be3130_R		493.5	ug/L	5.772	1.169	53,150
Ca3158_R		8,438	ug/L	124.8	1.479	10,100
Cd2265_A		586.8	ug/L	0.3019	0.05145	6,065
Co2286_A		512.3	ug/L	0.6062	0.1183	1,448
Cr2677_A	W	11,130	ug/L	28.56	0.2566	110,900
Cu3273_A		526.4	ug/L	1.087	0.2065	7,078
Fe2599_R		5,544	ug/L	74.91	1.351	10,800
K_7664_R		13,940	ug/L	103.5	0.7423	9,733
Li6707_R		688.8	ug/L	4.566	0.6629	10,470
Mg2025_A		7,273	ug/L	25.66	0.3528	2,250
Mn2576_R		507.9	ug/L	5.353	1.054	4,820
Mo2020_A		575.3	ug/L	1.138	0.1979	1,517
Na5895_R	F	288,700	ug/L	3,080	1.067	711,400
Ni2316_A		499.4	ug/L	0.9317	0.1866	696.5

SO5372-001A

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 3:40:37PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		526.8	ug/L	0.7343	0.1394	416.7
Sb2068_A		634.7	ug/L	1.437	0.2264	319.6
Se1960_A		565.0	ug/L	0.1057	0.01871	127.8
Si2516_R		796.7	ug/L	3.115	0.3910	469.6
Sn1899_A		678.0	ug/L	1.594	0.2350	253.8
Sr4215_R		732.0	ug/L	5.766	0.7877	72,720
Ti3349_A		699.6	ug/L	0.3788	0.05415	15,330
Tl1908_A		505.4	ug/L	1.359	0.2689	210.5
V_2924_A		516.4	ug/L	0.9074	0.1757	4,843
Zn2062_A		577.0	ug/L	0.2084	0.03612	1,164
Y_3600_R		18,473	Cts/S	103.67	0.56120	18,473
Y_2243_A		6,615.5	Cts/S	46.410	0.70153	6,615.5
Y_3600_A		123,760	Cts/S	216.23	0.17472	123,760

SO5372-001P

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 3:44:53PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.3119	ug/L	0.07795	24.99	-24.56
Al3961_R		15.36	ug/L	4.469	29.10	15.74
As1891_A		33.92	ug/L	0.08240	0.2429	8.832
B_2089_A		177.3	ug/L	0.7776	0.4385	238.8
Ba4554_R		4.531	ug/L	0.01689	0.3727	352.8
Be3130_R		0.02757	ug/L	0.04425	160.5	-2.919
Ca3158_R		3,039	ug/L	57.92	1.906	3,596
Cd2265_A		89.87	ug/L	0.3033	0.3374	929.3
Co2286_A		-0.9777	ug/L	0.08077	8.262	-4.869
Cr2677_A	W	11,130	ug/L	85.06	0.7640	109,800
Cu3273_A		1.193	ug/L	0.02620	2.195	-9.393
Fe2599_R		108.1	ug/L	0.2356	0.2180	222.4
K_7664_R		3,929	ug/L	57.86	1.473	2,707
Li6707_R		183.2	ug/L	1.345	0.7340	2,770
Mg2025_A		1,982	ug/L	3.800	0.1917	604.6
Mn2576_R		10.35	ug/L	0.3123	3.017	104.4
Mo2020_A		37.25	ug/L	0.2428	0.6519	101.4
Na5895_R	F	292,500	ug/L	378.7	0.1295	716,900
Ni2316_A		0.08641	ug/L	0.2111	244.3	0.3753
Pb2203_A		34.35	ug/L	0.2662	0.7751	26.42
Sb2068_A		118.8	ug/L	1.270	1.069	81.88
Se1960_A		42.84	ug/L	1.080	2.521	11.12
Si2516_R		564.4	ug/L	13.51	2.393	348.7
Sn1899_A		175.3	ug/L	1.181	0.6735	66.74
Sr4215_R		229.4	ug/L	3.233	1.410	22,650
Ti3349_A		191.5	ug/L	1.825	0.9531	4,168
Tl1908_A		33.16	ug/L	0.8422	2.539	12.54
V_2924_A		11.67	ug/L	0.01043	0.08937	-180.9
Zn2062_A		69.76	ug/L	0.08247	0.1182	120.7
Y_3600_R		18,369	Cts/S	146.60	0.79808	18,369
Y_2243_A		6,638.1	Cts/S	31.486	0.47432	6,638.1
Y_3600_A		122,460	Cts/S	160.23	0.13084	122,460

SO5372-001S

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 3:49:20PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO5372-001S

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 3:49:20PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.2678	ug/L	0.07940	29.65	-23.94
Al3961_R		13.09	ug/L	3.698	28.25	13.58
As1891_A		36.93	ug/L	0.07720	0.2090	9.579
B_2089_A		189.4	ug/L	1.534	0.8102	250.2
Ba4554_R		4.543	ug/L	0.03323	0.7315	355.5
Be3130_R		-0.1137	ug/L	0.06483	57.02	-18.98
Ca3158_R		3,193	ug/L	1.861	0.05828	3,800
Cd2265_A		96.19	ug/L	0.1422	0.1479	978.0
Co2286_A		-1.377	ug/L	0.1008	7.315	-6.045
Cr2677_A	W	11,700	ug/L	221.1	1.890	115,100
Cu3273_A		0.9198	ug/L	0.07763	8.440	-13.12
Fe2599_R		103.3	ug/L	1.435	1.390	214.2
K_7664_R		4,117	ug/L	10.59	0.2572	2,853
Li6707_R		189.8	ug/L	0.6651	0.3504	2,885
Mg2025_A		2,123	ug/L	18.29	0.8612	637.0
Mn2576_R		12.42	ug/L	0.4406	3.549	124.6
Mo2020_A		39.51	ug/L	0.3090	0.7819	105.6
Na5895_R	F	302,500	ug/L	3,799	1.256	745,300
Ni2316_A		0.3012	ug/L	0.06164	20.47	0.6830
Pb2203_A		35.99	ug/L	0.8657	2.405	27.23
Sb2068_A		127.3	ug/L	1.523	1.197	85.73
Se1960_A		43.55	ug/L	1.172	2.691	11.09
Si2516_R		576.9	ug/L	1.059	0.1836	356.8
Sn1899_A		186.3	ug/L	0.6116	0.3282	69.68
Sr4215_R		239.2	ug/L	0.4249	0.1776	23,750
Ti3349_A		203.3	ug/L	3.307	1.626	4,414
Tl1908_A		35.59	ug/L	0.7152	2.009	13.33
V_2924_A		12.71	ug/L	0.07043	0.5539	-185.1
Zn2062_A		74.21	ug/L	0.1968	0.2652	126.5
Y_3600_R		18,465	Cts/S	77.503	0.41974	18,465
Y_2243_A		6,526.3	Cts/S	43.386	0.66479	6,526.3
Y_3600_A		122,120	Cts/S	1,187.9	0.97268	122,120

SO5463-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 3:53:47PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.220	ug/L	0.3517	28.83	-153.2
Al3961_R		18.76	ug/L	1.538	8.197	63.60
As1891_A		18.58	ug/L	0.4850	2.611	1.689
B_2089_A		229.9	ug/L	0.8212	0.3573	318.7
Ba4554_R		168.5	ug/L	2.108	1.251	11,970
Be3130_R		-0.1009	ug/L	0.001747	1.731	-3.480
Ca3158_R	W	52,420	ug/L	644.8	1.230	61,610
Cd2265_A		-1.254	ug/L	0.2338	18.64	79.83
Co2286_A		25.36	ug/L	0.3835	1.512	76.50
Cr2677_A		1.563	ug/L	0.03087	1.976	22.26
Cu3273_A		0.3369	ug/L	0.3164	93.89	-28.58
Fe2599_R	W	48,710	ug/L	783.9	1.609	92,880
K_7664_R	W	28,790	ug/L	334.4	1.161	19,720
Li6707_R		0.4359	ug/L	1.162	266.6	8.800
Mg2025_A		6,989	ug/L	32.49	0.4650	2,234
Mn2576_R	W	2,529	ug/L	38.29	1.514	23,480
Mo2020_A		14.69	ug/L	0.06875	0.4679	42.59
Na5895_R	W	41,770	ug/L	550.6	1.318	100,900
Ni2316_A		1.430	ug/L	0.2155	15.07	-0.06090

SO5463-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 3:53:47PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.02215	ug/L	0.5732	2,588	1.040
Sb2068_A		-0.4234	ug/L	0.3276	77.39	-0.3278
Se1960_A		-0.5627	ug/L	0.1613	28.67	2.029
Si2516_R		7,243	ug/L	88.58	1.223	3,581
Sn1899_A		1.052	ug/L	0.5343	50.81	1.658
Sr4215_R		622.9	ug/L	8.660	1.390	60,620
Ti3349_A		0.2216	ug/L	0.1948	87.88	-5.517
Tl1908_A		-5.812	ug/L	0.4775	8.216	-5.022
V_2924_A		0.08901	ug/L	0.2492	280.0	-7.048
Zn2062_A		8.557	ug/L	0.09156	1.070	19.19
Y_3600_R		18,096	Cts/S	71.460	0.39490	18,096
Y_2243_A		6,908.7	Cts/S	49.879	0.72197	6,908.7
Y_3600_A		127,580	Cts/S	615.01	0.48207	127,580

SO5463-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 3:58:08PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.083	ug/L	0.6390	58.98	-179.9
Al3961_R		81.68	ug/L	1.745	2.137	130.7
As1891_A	W	2,087	ug/L	4.836	0.2317	629.5
B_2089_A		73.09	ug/L	0.04230	0.05788	107.2
Ba4554_R		42.33	ug/L	0.8360	1.975	3,080
Be3130_R		-0.1349	ug/L	0.02430	18.02	-7.337
Ca3158_R	W	49,520	ug/L	386.7	0.7810	59,210
Cd2265_A		-1.095	ug/L	0.1563	14.27	95.82
Co2286_A		16.50	ug/L	0.002671	0.01619	50.60
Cr2677_A		-0.03873	ug/L	0.3327	859.0	6.823
Cu3273_A		0.7073	ug/L	0.3765	53.22	-24.93
Fe2599_R	W	55,890	ug/L	957.5	1.713	108,400
K_7664_R		8,681	ug/L	82.33	0.9484	6,028
Li6707_R		5.833	ug/L	0.7777	13.33	90.71
Mg2025_A		7,305	ug/L	3.313	0.04535	2,341
Mn2576_R	W	2,837	ug/L	13.26	0.4674	26,790
Mo2020_A		0.9433	ug/L	0.01550	1.643	4.792
Na5895_R		18,040	ug/L	173.6	0.9628	44,350
Ni2316_A		5.478	ug/L	0.1788	3.263	5.345
Pb2203_A		0.1021	ug/L	0.1470	144.0	1.304
Sb2068_A		-1.009	ug/L	1.221	121.0	-0.4637
Se1960_A		-0.1842	ug/L	0.8181	444.0	2.249
Si2516_R		13,350	ug/L	111.0	0.8317	6,659
Sn1899_A		1.023	ug/L	0.6169	60.32	1.652
Sr4215_R		516.3	ug/L	7.387	1.431	51,110
Ti3349_A		1.826	ug/L	0.1363	7.467	30.68
Tl1908_A		-5.712	ug/L	0.5429	9.505	-5.152
V_2924_A		-0.3177	ug/L	0.05267	16.58	-10.68
Zn2062_A		2.912	ug/L	0.02400	0.8241	7.082
Y_3600_R		18,406	Cts/S	7.9372	0.043122	18,406
Y_2243_A		6,926.4	Cts/S	1.4566	0.021029	6,926.4
Y_3600_A		128,770	Cts/S	1,853.9	1.4397	128,770

SO5463-003

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 4:02:28PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO5463-003

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 4:02:28PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.120	ug/L	0.09159	8.178	-155.4
Al3961_R		3.902	ug/L	3.654	93.63	47.27
As1891_A		18.18	ug/L	0.5192	2.856	1.587
B_2089_A		225.1	ug/L	2.036	0.9044	315.5
Ba4554_R		171.3	ug/L	1.327	0.7747	12,310
Be3130_R		-0.09367	ug/L	0.006698	7.151	-2.713
Ca3158_R	W	51,560	ug/L	93.88	0.1821	61,290
Cd2265_A		-1.269	ug/L	0.1422	11.21	80.41
Co2286_A		24.74	ug/L	0.05079	0.2053	75.44
Cr2677_A		-0.1164	ug/L	0.1915	164.6	5.008
Cu3273_A		0.6106	ug/L	0.06035	9.885	-24.89
Fe2599_R	W	48,670	ug/L	201.9	0.4148	93,860
K_7664_R	W	29,070	ug/L	61.61	0.2119	20,130
Li6707_R		0.3211	ug/L	0.4022	125.3	7.226
Mg2025_A		6,844	ug/L	69.09	1.010	2,210
Mn2576_R	W	2,496	ug/L	0.6402	0.02565	23,430
Mo2020_A		15.17	ug/L	0.2483	1.636	44.37
Na5895_R	W	41,570	ug/L	64.73	0.1557	101,500
Ni2316_A		1.427	ug/L	0.2761	19.35	-0.06056
Pb2203_A		-0.6410	ug/L	0.06016	9.385	0.4928
Sb2068_A		-1.743	ug/L	0.8157	46.80	-0.9857
Se1960_A		0.01818	ug/L	1.720	9,463	2.184
Si2516_R		7,118	ug/L	13.85	0.1946	3,560
Sn1899_A		0.7957	ug/L	1.019	128.1	1.577
Sr4215_R		612.2	ug/L	2.495	0.4076	60,250
Ti3349_A		-0.3427	ug/L	0.2084	60.80	-18.31
Tl1908_A		-5.058	ug/L	0.8792	17.38	-4.726
V_2924_A		0.04028	ug/L	0.4274	1,061	-7.446
Zn2062_A		7.828	ug/L	0.0008530	0.01089	17.80
Y_3600_R		18,299	Cts/S	126.11	0.68919	18,299
Y_2243_A		6,979.6	Cts/S	57.243	0.82015	6,979.6
Y_3600_A		128,190	Cts/S	272.55	0.21261	128,190

SO5463-004

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 4:06:50PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.522	ug/L	0.01029	0.6764	-178.1
Al3961_R		10.25	ug/L	1.676	16.34	51.78
As1891_A	W	2,171	ug/L	15.04	0.6925	661.5
B_2089_A		71.67	ug/L	0.5396	0.7529	106.3
Ba4554_R		41.88	ug/L	0.4669	1.115	3,054
Be3130_R		-0.1310	ug/L	0.009839	7.511	-6.803
Ca3158_R	W	49,090	ug/L	317.9	0.6476	58,820
Cd2265_A		-1.393	ug/L	0.08823	6.334	96.12
Co2286_A		16.15	ug/L	0.2889	1.789	50.06
Cr2677_A		-0.6375	ug/L	0.08943	14.03	0.7886
Cu3273_A		0.03340	ug/L	0.3219	963.8	-34.87
Fe2599_R	W	57,210	ug/L	350.9	0.6134	111,200
K_7664_R		8,735	ug/L	19.43	0.2225	6,079
Li6707_R		5.068	ug/L	0.4107	8.104	79.30
Mg2025_A		7,226	ug/L	31.77	0.4396	2,339
Mn2576_R	W	2,852	ug/L	28.07	0.9843	26,990
Mo2020_A		1.048	ug/L	0.04909	4.685	5.129
Na5895_R		17,790	ug/L	98.66	0.5547	43,840
Ni2316_A		5.299	ug/L	0.4443	8.386	5.079

SO5463-004

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 4:06:50PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		-0.4440	ug/L	0.09807	22.09	0.8983
Sb2068_A		-1.585	ug/L	0.5672	35.78	-0.7351
Se1960_A		-0.03960	ug/L	0.8421	2,126	2.315
Si2516_R		13,160	ug/L	94.84	0.7206	6,580
Sn1899_A		0.9633	ug/L	0.07234	7.510	1.644
Sr4215_R		518.0	ug/L	2.033	0.3924	51,400
Ti3349_A		-0.006091	ug/L	0.04902	804.7	-11.02
Tl1908_A		-5.933	ug/L	0.3947	6.653	-5.308
V_2924_A		-0.3830	ug/L	0.3534	92.28	-11.31
Zn2062_A		2.488	ug/L	0.03517	1.413	6.230
Y_3600_R		18,449	Cts/S	24.466	0.13262	18,449
Y_2243_A		6,994.1	Cts/S	45.431	0.64956	6,994.1
Y_3600_A		129,540	Cts/S	184.37	0.14233	129,540

SO5464-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 4:11:11PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1833	ug/L	0.09756	53.22	-15.48
Al3961_R		104.6	ug/L	6.099	5.833	127.0
As1891_A		-1.184	ug/L	1.072	90.52	-2.166
B_2089_A		31.67	ug/L	0.07415	0.2341	53.68
Ba4554_R		1.090	ug/L	0.08712	7.993	106.6
Be3130_R		-0.1322	ug/L	0.01043	7.886	-7.138
Ca3158_R		15,260	ug/L	22.74	0.1491	18,420
Cd2265_A		-0.04520	ug/L	0.03813	84.36	-2.185
Co2286_A		-0.4063	ug/L	0.04100	10.09	-0.1524
Cr2677_A		0.4825	ug/L	0.03403	7.053	4.471
Cu3273_A		1.063	ug/L	0.2540	23.89	-10.13
Fe2599_R		107.0	ug/L	0.02317	0.02166	223.1
K_7664_R		2,378	ug/L	20.61	0.8666	1,648
Li6707_R		19.21	ug/L	0.5715	2.975	296.4
Mg2025_A		1,984	ug/L	12.59	0.6345	646.3
Mn2576_R		103.9	ug/L	0.3206	0.3087	998.6
Mo2020_A		43.39	ug/L	0.05538	0.1276	124.8
Na5895_R	W	29,440	ug/L	166.9	0.5668	73,140
Ni2316_A		-0.4253	ug/L	0.03276	7.703	-0.2954
Pb2203_A		-0.4634	ug/L	0.6772	146.1	-0.6955
Sb2068_A		-0.2829	ug/L	0.4473	158.1	-0.8139
Se1960_A		0.6299	ug/L	0.3440	54.61	1.785
Si2516_R		10,020	ug/L	16.81	0.1678	5,072
Sn1899_A		-0.2550	ug/L	0.2747	107.7	1.181
Sr4215_R		66.56	ug/L	0.3975	0.5973	6,650
Ti3349_A		2.887	ug/L	0.4400	15.24	56.78
Tl1908_A		-2.458	ug/L	0.7099	28.88	-2.531
V_2924_A		0.6116	ug/L	0.08854	14.48	-0.7923
Zn2062_A		2.020	ug/L	0.1063	5.265	5.281
Y_3600_R		18,606	Cts/S	75.342	0.40493	18,606
Y_2243_A		7,089.5	Cts/S	30.962	0.43672	7,089.5
Y_3600_A		131,790	Cts/S	98.633	0.074842	131,790

SO5464-003

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 4:15:35PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO5464-003

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 4:15:35PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.02815	ug/L	0.03870	137.5	-19.78
Al3961_R		405.6	ug/L	0.5394	0.1330	450.8
As1891_A		-2.963	ug/L	0.2861	9.654	-2.767
B_2089_A		9.658	ug/L	0.4196	4.345	22.14
Ba4554_R		6.506	ug/L	0.009086	0.1396	502.4
Be3130_R		-0.05427	ug/L	0.0002390	0.4399	0.1844
Ca3158_R		4,275	ug/L	19.65	0.4596	5,151
Cd2265_A		-0.01683	ug/L	0.03958	235.2	-1.010
Co2286_A		-0.1510	ug/L	0.08367	55.40	0.7186
Cr2677_A		1.473	ug/L	0.1048	7.113	14.99
Cu3273_A		0.8208	ug/L	0.09270	11.29	-13.88
Fe2599_R		535.5	ug/L	2.239	0.4182	1,065
K_7664_R		1,055	ug/L	1.985	0.1881	716.7
Li6707_R		1.540	ug/L	0.2484	16.13	26.04
Mg2025_A		1,509	ug/L	13.31	0.8818	495.3
Mn2576_R		6.524	ug/L	0.3159	4.842	69.02
Mo2020_A		-0.3475	ug/L	0.1268	36.50	1.440
Na5895_R	W	26,750	ug/L	134.3	0.5021	66,600
Ni2316_A		0.3987	ug/L	0.4231	106.1	0.4616
Pb2203_A		-0.6862	ug/L	0.1885	27.47	-0.8694
Sb2068_A		-0.1068	ug/L	0.05732	53.65	-0.7154
Se1960_A		1.111	ug/L	0.9494	85.47	1.912
Si2516_R		6,852	ug/L	68.53	1.000	3,498
Sn1899_A		0.03044	ug/L	0.2752	904.1	1.308
Sr4215_R		40.26	ug/L	0.1428	0.3547	4,026
Ti3349_A		18.38	ug/L	0.08503	0.4627	418.2
Tl1908_A		-2.307	ug/L	0.3693	16.01	-2.449
V_2924_A		0.7881	ug/L	0.07089	8.995	4.208
Zn2062_A		2.870	ug/L	0.01174	0.4088	7.230
Y_3600_R		18,643	Cts/S	82.585	0.44298	18,643
Y_2243_A		7,164.5	Cts/S	41.771	0.58303	7,164.5
Y_3600_A		132,290	Cts/S	248.85	0.18811	132,290

SO5464-004

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 4:19:59PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.2747	ug/L	0.08793	32.01	-23.37
Al3961_R		13.09	ug/L	1.462	11.17	10.39
As1891_A		-2.921	ug/L	0.02002	0.6852	-2.726
B_2089_A		4.921	ug/L	0.1695	3.444	15.50
Ba4554_R		1.403	ug/L	0.1181	8.414	129.9
Be3130_R		-0.1148	ug/L	0.006398	5.573	-5.090
Ca3158_R		1,414	ug/L	15.40	1.089	1,686
Cd2265_A		0.005008	ug/L	0.05351	1,068	-1.859
Co2286_A		-0.3512	ug/L	0.009625	2.740	-0.003748
Cr2677_A		0.9207	ug/L	0.04784	5.196	9.262
Cu3273_A		0.5863	ug/L	0.2505	42.72	-17.40
Fe2599_R		2.812	ug/L	0.2985	10.61	18.92
K_7664_R		674.2	ug/L	22.77	3.378	448.0
Li6707_R		-0.4593	ug/L	0.2985	64.98	-4.641
Mg2025_A		451.5	ug/L	6.623	1.467	143.7
Mn2576_R		1.683	ug/L	0.07623	4.529	22.65
Mo2020_A		-0.2671	ug/L	0.01964	7.351	1.669
Na5895_R		7,922	ug/L	124.7	1.574	19,800
Ni2316_A		-0.2365	ug/L	0.3676	155.4	-0.4651

SO5464-004

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 4:19:59PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		-0.6101	ug/L	0.3648	59.79	-0.7884
Sb2068_A		0.2578	ug/L	0.7643	296.4	-0.5367
Se1960_A		0.09358	ug/L	0.3921	419.0	1.658
Si2516_R		3,868	ug/L	37.21	0.9620	2,008
Sn1899_A		-0.2238	ug/L	0.8344	372.9	1.203
Sr4215_R		12.62	ug/L	0.1502	1.190	1,256
Ti3349_A		-0.2091	ug/L	0.1384	66.20	-16.38
Tl1908_A		-2.267	ug/L	0.4643	20.48	-2.418
V_2924_A		-0.1586	ug/L	0.07593	47.88	-6.242
Zn2062_A		0.5999	ug/L	0.05802	9.672	2.171
Y_3600_R		18,672	Cts/S	56.446	0.30231	18,672
Y_2243_A		7,155.8	Cts/S	34.950	0.48842	7,155.8
Y_3600_A		135,310	Cts/S	106.05	0.078374	135,310

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 4:24:25PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		519.8	ug/L	2.853	0.5488	8,740
Al3961_R		12,780	ug/L	27.91	0.2184	14,450
As1891_A		518.3	ug/L	1.819	0.3510	162.7
B_2089_A		518.4	ug/L	1.018	0.1963	759.6
Ba4554_R		514.6	ug/L	0.7645	0.1485	38,070
Be3130_R		507.0	ug/L	0.4128	0.08142	55,780
Ca3158_R		12,740	ug/L	5.184	0.04070	15,590
Cd2265_A		517.5	ug/L	0.5056	0.09769	5,889
Co2286_A		526.0	ug/L	0.6237	0.1186	1,636
Cr2677_A		519.5	ug/L	2.042	0.3930	5,584
Cu3273_A		520.3	ug/L	3.095	0.5949	7,544
Fe2599_R		12,760	ug/L	23.86	0.1870	25,380
K_7664_R		12,710	ug/L	23.07	0.1815	9,059
Li6707_R		510.1	ug/L	0.3333	0.06534	7,919
Mg2025_A	W	13,310	ug/L	9.946	0.07470	4,505
Mn2576_R		508.7	ug/L	0.8393	0.1650	4,930
Mo2020_A		520.9	ug/L	0.2515	0.04828	1,508
Na5895_R		12,780	ug/L	6.701	0.05244	32,240
Ni2316_A		525.6	ug/L	0.4754	0.09046	803.5
Pb2203_A		526.0	ug/L	0.8760	0.1665	457.7
Sb2068_A		513.7	ug/L	1.032	0.2009	260.8
Se1960_A		522.4	ug/L	1.357	0.2599	129.9
Si2516_R		13,070	ug/L	44.94	0.3439	6,690
Sn1899_A		522.8	ug/L	0.6769	0.1295	215.2
Sr4215_R		517.6	ug/L	0.4682	0.09045	52,520
Ti3349_A		518.1	ug/L	2.343	0.4522	12,210
Tl1908_A	W	530.2	ug/L	1.318	0.2487	242.7
V_2924_A		515.6	ug/L	3.140	0.6089	5,520
Zn2062_A		520.2	ug/L	1.670	0.3210	1,174
Y_3600_R		18,868	Cts/S	53.755	0.28491	18,868
Y_2243_A		7,263.5	Cts/S	14.949	0.20581	7,263.5
Y_3600_A		133,460	Cts/S	471.82	0.35353	133,460

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 4:28:34PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 4:28:34PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2807	ug/L	0.3217	114.6	-13.77
Al3961_R		0.8810	ug/L	2.079	236.0	-4.577
As1891_A		-0.6506	ug/L	0.5786	88.94	-2.056
B_2089_A		1.357	ug/L	0.08086	5.957	10.75
Ba4554_R		-0.05034	ug/L	0.01775	35.27	23.55
Be3130_R		-0.001727	ug/L	0.007666	443.9	7.195
Ca3158_R		2.175	ug/L	3.668	168.6	-26.48
Cd2265_A		0.2783	ug/L	0.02998	10.77	1.206
Co2286_A		-0.007281	ug/L	0.3464	4,757	1.069
Cr2677_A		0.3388	ug/L	0.3214	94.89	2.908
Cu3273_A		0.2689	ug/L	0.1954	72.67	-22.04
Fe2599_R		-2.176	ug/L	0.8382	38.51	9.103
K_7664_R		11.01	ug/L	7.194	65.31	-21.28
Li6707_R		0.1131	ug/L	0.5249	464.0	4.168
Mg2025_A		4.460	ug/L	1.620	36.32	-4.627
Mn2576_R		-0.5174	ug/L	0.1014	19.60	1.434
Mo2020_A		-0.2802	ug/L	0.07736	27.61	1.667
Na5895_R		8.093	ug/L	7.346	90.77	90.02
Ni2316_A		0.01747	ug/L	0.1585	906.8	-0.08734
Pb2203_A		-0.4073	ug/L	0.1893	46.48	-0.6268
Sb2068_A		0.7549	ug/L	0.8649	114.6	-0.2933
Se1960_A		-1.360	ug/L	0.06249	4.594	1.334
Si2516_R		2.554	ug/L	0.7962	31.17	71.83
Sn1899_A		-0.2589	ug/L	0.7212	278.6	1.216
Sr4215_R		0.07909	ug/L	0.09118	115.3	-3.410
Ti3349_A		0.1313	ug/L	0.3006	229.0	-8.237
Tl1908_A		-0.03372	ug/L	0.01384	41.04	-1.436
V_2924_A		-0.1270	ug/L	0.2578	202.9	-5.860
Zn2062_A		0.1091	ug/L	0.04022	36.85	1.103
Y_3600_R		18,667	Cts/S	50.216	0.26901	18,667
Y_2243_A		7,307.1	Cts/S	32.033	0.43838	7,307.1
Y_3600_A		135,020	Cts/S	426.33	0.31575	135,020

SO5464-005

Method Name: FAST-2016_NO_AU
Method Revision: 1,003
Analyst Name: EP
Acquire Date: 8/24/2021 4:33:00PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1407	ug/L	0.1984	141.0	-16.44
Al3961_R		19.78	ug/L	3.480	17.60	28.48
As1891_A		-2.666	ug/L	1.393	52.25	-2.549
B_2089_A		14.08	ug/L	0.2106	1.496	27.03
Ba4554_R		43.30	ug/L	0.4658	1.076	3,116
Be3130_R		-0.03887	ug/L	0.02661	68.45	3.076
Ca3158_R		13,400	ug/L	106.3	0.7930	15,830
Cd2265_A		0.2763	ug/L	0.03616	13.09	2.006
Co2286_A		2.799	ug/L	0.01039	0.3710	9.215
Cr2677_A		1.166	ug/L	0.2213	18.99	11.11
Cu3273_A		0.7892	ug/L	0.06685	8.471	-13.36
Fe2599_R		478.3	ug/L	2.777	0.5805	930.9
K_7664_R		2,478	ug/L	11.85	0.4783	1,682
Li6707_R		1.943	ug/L	0.1360	6.998	31.46
Mg2025_A		3,932	ug/L	21.97	0.5587	1,241
Mn2576_R		91.79	ug/L	0.2102	0.2290	865.1
Mo2020_A		-0.5363	ug/L	0.03210	5.985	0.8574
Na5895_R	F	229,700	ug/L	3,195	1.391	558,100
Ni2316_A		25.01	ug/L	0.2208	0.8829	35.65

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: I (Thermo iCAP 6500) **ANALYST:** EP **ANALYSIS DATE:** 09/01/2021

METHOD: ICP
- ☑ 200.7
- ☑ 6010
- ☑ DOD
- ☐ _____

FILE NAME: IOI01A

REVIEWED
09/03/21
KATAHDIN ANALYTICAL
METALS SECTION

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by EP (initals) on 9/1/21 (date). Client ID's verified

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW20471	08/24/2021	08/24/2022	0 ug/L
Standard 1	MW20463	08/20/2021	09/11/2021	Varies by Element
ICV	MW20364	08/20/2021	11/04/2021	Varies by Element
PQL	MW20454	08/17/2021	9/11/2021	Varies by Element
LRS1	MW20479	08/31/2021	09/23/2021	Varies by Element
LRS2	MW20469	08/24/2021	09/11/2021	Varies by Element
ICSA	MW20453	08/17/2021	11/17/2021	Varies by Element
ICSAB	MW20412	08/05/2021	10/05/2021	Varies by Element
CCV	MW20468	08/24/2021	09/11/2021	Varies by Element
Internal Standard	MW20452	08/17/2021	11/17/2021	5.0 mg/L Yttrium

Additional Comments and Notes:

PQL warned high for barium, failed low for sodium. Failing sodium value replaced with Sodium PQL value.

Initial CCV warned high for magnesium, thallium. Non-200.7 BQC accepted.

Dilutions: Some samples were diluted based on history or due to interfering element concentrations.

Dilution preparations are as follows:

5x diln.: 1.6 mL of sample (pipet M25) + 6.4 mL of MW19407 (pipet M25)

Post Spike: 0.123mL MW20305 (pipet M27) to 6.0mL of sample (pipet M25)

INSTRUMENT RUNLOG

Instrument: ICAP 6500

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
Blank	1.000	IOI01A	09/01/2021	13:17	EP
Std 1	1.000	IOI01A	09/01/2021	13:22	EP
ICV	1.000	IOI01A	09/01/2021	13:26	EP
ICB	1.000	IOI01A	09/01/2021	13:30	EP
PQL	1.000	IOI01A	09/01/2021	13:34	EP
ICSA	1.000	IOI01A	09/01/2021	13:39	EP
ICSAB	1.000	IOI01A	09/01/2021	13:43	EP
CCV	1.000	IOI01A	09/01/2021	13:48	EP
CCB	1.000	IOI01A	09/01/2021	13:52	EP
LRS1	1.000	IOI01A	09/01/2021	13:56	EP
LRS2	1.000	IOI01A	09/01/2021	14:01	EP
CCV	1.000	IOI01A	09/01/2021	14:06	EP
CCB	1.000	IOI01A	09/01/2021	14:10	EP
SODIUM PQL	1.000	IOI01A	09/01/2021	14:14	EP
SO5787-001	1.000	IOI01A	09/01/2021	14:19	EP
LC2OOH30ICS3	1.000	IOI01A	09/01/2021	14:23	EP
~~LCSOOH30ICS3~~	1.000	IOI01A	09/01/2021	14:28	EP
~~PBSOH30ICS5~~	1.000	IOI01A	09/01/2021	14:32	EP
LCSWOH31ICW1	1.000	IOI01A	09/01/2021	14:36	EP
PBWOH31ICW1	1.000	IOI01A	09/01/2021	14:40	EP
LCSWOI01ICW1	1.000	IOI01A	09/01/2021	14:45	EP
PBWOI01ICW1	1.000	IOI01A	09/01/2021	14:49	EP
SO5730-001	1.000	IOI01A	09/01/2021	14:53	EP
CCV	1.000	IOI01A	09/01/2021	14:58	EP
CCB	1.000	IOI01A	09/01/2021	15:02	EP
SO5772-001	1.000	IOI01A	09/01/2021	15:06	EP
SO5108-003	1.000	IOI01A	09/01/2021	15:11	EP
SO5108-003L	5.000	IOI01A	09/01/2021	15:15	EP
SO5108-003A	1.000	IOI01A	09/01/2021	15:19	EP
SO5108-003D	1.000	IOI01A	09/01/2021	15:24	EP
SO5108-003S	1.000	IOI01A	09/01/2021	15:28	EP
SO5108-009	1.000	IOI01A	09/01/2021	15:32	EP
SO5108-010	1.000	IOI01A	09/01/2021	15:36	EP
SO5108-010L	5.000	IOI01A	09/01/2021	15:41	EP
SO5108-010A	1.000	IOI01A	09/01/2021	15:45	EP
CCV	1.000	IOI01A	09/01/2021	15:49	EP
CCB	1.000	IOI01A	09/01/2021	15:54	EP
SO5108-010D	1.000	IOI01A	09/01/2021	15:58	EP
SO5108-010S	1.000	IOI01A	09/01/2021	16:02	EP
SO5108-011	1.000	IOI01A	09/01/2021	16:07	EP
SO5108-012	1.000	IOI01A	09/01/2021	16:11	EP
SO5108-013	1.000	IOI01A	09/01/2021	16:15	EP
SO4240-021	1.000	IOI01A	09/01/2021	16:20	EP
SO4240-022	1.000	IOI01A	09/01/2021	16:24	EP

Intensity Report

Author:

Published: 9/2/2021 7:56:30AM

Notes:

Blank

Method Name: FAST-2016_NO_AU Method Revision: 1,011

Analyst Name: EP

Acquire Date: 9/1/2021 1:17:51PM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.0001670	Cts/S	0.000001000	0.7059	-23.02
Al3961_R		0.00007000	Cts/S	0.0002590	370.1	1.319
As1891_A		-0.0003130	Cts/S	0.00001000	3.224	-2.353
B_2089_A		0.001330	Cts/S	0.00002100	1.573	9.993
Ba4554_R		0.0006690	Cts/S	0.0002780	41.53	12.76
Be3130_R		-0.0002020	Cts/S	0.0002110	104.3	-3.873
Ca3158_R		-0.001820	Cts/S	0.0002290	12.57	-34.75
Cd2265_A		-0.0001880	Cts/S	0.00007800	41.75	-1.412
Co2286_A		0.00005900	Cts/S	0.000002000	2.633	0.4436
Cr2677_A		0.000003000	Cts/S	0.000008000	267.9	-0.3877
Cu3273_A		-0.0002150	Cts/S	0.000002000	0.9359	-29.60
Fe2599_R		0.00005100	Cts/S	0.0001980	386.4	0.9645
K_7664_R		-0.001105	Cts/S	0.0004790	43.32	-21.14
Li6707_R		0.0009660	Cts/S	0.0006240	64.66	18.49
Mg2025_A		-0.0009540	Cts/S	0.00005800	6.072	-7.168
Mn2576_R		0.0001080	Cts/S	0.00004200	39.33	2.056
Mo2020_A		0.00005600	Cts/S	0.00003200	56.97	0.4215
Na5895_R		0.003486	Cts/S	0.0009330	26.77	66.67
Ni2316_A		-0.00004500	Cts/S	0.00001300	28.99	-0.3370
Pb2203_A		-0.0001520	Cts/S	0.00002600	17.02	-1.143
Sb2068_A		-0.00007700	Cts/S	0.00001400	18.06	-0.5753
Se1960_A		0.0001630	Cts/S	0.00003600	22.15	1.228
Si2516_R		0.003629	Cts/S	0.00003500	0.9613	69.32
Sn1899_A		0.0001510	Cts/S	0.00003100	20.27	1.133
Sr4215_R		-0.001921	Cts/S	0.00005200	2.684	-36.70
Ti3349_A		-0.0001060	Cts/S	0.000007000	6.378	-14.64
Tl1908_A		-0.0002450	Cts/S	0.00003500	14.34	-1.840
V_2924_A		-0.00004700	Cts/S	0.00001200	24.72	-6.500
Zn2062_A		-0.00001200	Cts/S	0.000001000	8.453	-0.09099
Y_3600_R		19,103	Cts/S	136.01	0.71195	19,103
Y_2243_A		7,514.7	Cts/S	12.888	0.17150	7,514.7
Y_3600_A		137,760	Cts/S	336.38	0.24418	137,760

Std 1

Method Name: FAST-2016_NO_AU Method Revision: 1,011

Analyst Name: EP

Acquire Date: 9/1/2021 1:22:14PM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1251	Cts/S	0.00008600	0.06841	16,650
Al3961_R		1.459	Cts/S	0.009492	0.6504	28,090
As1891_A		0.04347	Cts/S	0.0003100	0.7134	321.1
B_2089_A		0.1990	Cts/S	0.0009270	0.4659	1,470
Ba4554_R		3.993	Cts/S	0.01097	0.2747	76,860
Be3130_R		5.767	Cts/S	0.05317	0.9219	111,000
Ca3158_R		1.612	Cts/S	0.02076	1.288	31,030
Cd2265_A		1.570	Cts/S	0.009124	0.5810	11,600
Co2286_A		0.4307	Cts/S	0.002913	0.6763	3,181
Cr2677_A		0.08392	Cts/S	0.0003610	0.4299	11,170
Cu3273_A		0.1107	Cts/S	0.0002530	0.2283	14,740
Fe2599_R		2.660	Cts/S	0.02225	0.8365	51,200
K_7664_R		0.9362	Cts/S	0.009956	1.063	18,020
Li6707_R		0.8068	Cts/S	0.003819	0.4733	15,530

Std 1

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 1:22:14PM
Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Mg2025_A		1.156	Cts/S	0.005480	0.4740	8,539
Mn2576_R		0.4963	Cts/S	0.006044	1.218	9,552
Mo2020_A		0.3929	Cts/S	0.001892	0.4816	2,902
Na5895_R		3.246	Cts/S	0.02642	0.8140	62,480
Ni2316_A		0.2143	Cts/S	0.001294	0.6040	1,583
Pb2203_A		0.1198	Cts/S	0.0004370	0.3650	885.0
Sb2068_A		0.06901	Cts/S	0.0005220	0.7567	509.7
Se1960_A		0.03396	Cts/S	0.0001880	0.5528	250.8
Si2516_R		0.6611	Cts/S	0.006569	0.9936	12,720
Sn1899_A		0.05657	Cts/S	0.0003860	0.6819	417.9
Sr4215_R		5.381	Cts/S	0.02301	0.4277	103,600
Ti3349_A		0.1789	Cts/S	0.00009500	0.05291	23,830
Tl1908_A		0.06166	Cts/S	0.0003160	0.5127	455.5
V_2924_A		0.08288	Cts/S	0.0006060	0.7315	11,040
Zn2062_A		0.3109	Cts/S	0.001942	0.6246	2,296
Y_3600_R		19,248	Cts/S	317.33	1.6486	19,248
Y_2243_A		7,386.6	Cts/S	23.526	0.31850	7,386.6
Y_3600_A		133,160	Cts/S	60.736	0.045610	133,160

ICV

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 1:26:20PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		399.4	ug/L	6.729	1.685	6,776
Al3961_R		10,150	ug/L	107.1	1.055	11,390
As1891_A		384.7	ug/L	0.5911	0.1536	124.1
B_2089_A		401.3	ug/L	0.7633	0.1902	606.1
Ba4554_R		401.9	ug/L	1.640	0.4081	30,860
Be3130_R		410.9	ug/L	2.397	0.5834	45,550
Ca3158_R		10,240	ug/L	60.74	0.5929	12,680
Cd2265_A		400.7	ug/L	0.2128	0.05312	4,726
Co2286_A		406.4	ug/L	0.9754	0.2400	1,315
Cr2677_A		397.4	ug/L	6.633	1.669	4,534
Cu3273_A		399.9	ug/L	6.432	1.608	6,000
Fe2599_R		10,270	ug/L	77.76	0.7574	21,000
K_7664_R		13,720	ug/L	5.277	0.03847	9,866
Li6707_R		410.7	ug/L	1.680	0.4090	6,381
Mg2025_A		10,290	ug/L	12.64	0.1228	3,570
Mn2576_R		405.8	ug/L	5.284	1.302	3,873
Mo2020_A		409.0	ug/L	0.6181	0.1511	1,207
Na5895_R		10,170	ug/L	90.34	0.8879	25,440
Ni2316_A		406.0	ug/L	0.6944	0.1710	653.3
Pb2203_A		409.5	ug/L	0.7029	0.1716	367.9
Sb2068_A		397.9	ug/L	0.3763	0.09457	205.8
Se1960_A		399.4	ug/L	0.9640	0.2414	102.6
Si2516_R		10,040	ug/L	108.6	1.081	5,047
Sn1899_A		412.5	ug/L	1.552	0.3762	175.9
Sr4215_R		410.5	ug/L	2.891	0.7043	42,440
Ti3349_A		396.5	ug/L	6.996	1.764	9,636
Tl1908_A		414.5	ug/L	0.04196	0.01012	190.9
V_2924_A		398.4	ug/L	6.470	1.624	4,485
Zn2062_A		400.9	ug/L	1.030	0.2569	936.0
Y_3600_R		19,224	Cts/S	5.0343	0.026187	19,224
Y_2243_A		7,511.2	Cts/S	14.650	0.19504	7,511.2
Y_3600_A		135,980	Cts/S	1,493.0	1.0980	135,980

ICB

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 1:30:30PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.003172	ug/L	0.03692	1,164	-23.07
Al3961_R		0.9922	ug/L	12.92	1,302	2.410
As1891_A		0.1142	ug/L	0.3003	262.9	-2.279
B_2089_A		1.064	ug/L	0.4175	39.23	11.37
Ba4554_R		0.1296	ug/L	0.05363	41.39	22.46
Be3130_R		0.09662	ug/L	0.007941	8.219	6.724
Ca3158_R		5.029	ug/L	0.9680	19.25	-28.31
Cd2265_A		-0.03005	ug/L	0.03473	115.6	-1.730
Co2286_A		0.09814	ug/L	0.1060	108.0	0.7484
Cr2677_A		0.3205	ug/L	0.1366	42.61	3.318
Cu3273_A		0.05963	ug/L	0.2187	366.7	-28.67
Fe2599_R		4.683	ug/L	1.093	23.34	10.41
K_7664_R		-5.538	ug/L	1.297	23.42	-24.85
Li6707_R		-0.7085	ug/L	0.5006	70.66	7.489
Mg2025_A		0.4284	ug/L	1.459	340.6	-6.905
Mn2576_R		0.1349	ug/L	0.09550	70.77	3.305
Mo2020_A		0.5131	ug/L	0.2839	55.34	1.903
Na5895_R		-3.214	ug/L	1.310	40.75	58.10
Ni2316_A		-0.1782	ug/L	0.2014	113.0	-0.6081
Pb2203_A		0.2052	ug/L	1.362	664.0	-0.9391
Sb2068_A		0.07942	ug/L	0.7668	965.5	-0.5256
Se1960_A		0.7923	ug/L	0.1095	13.82	1.407
Si2516_R		14.05	ug/L	2.354	16.75	75.55
Sn1899_A		0.4188	ug/L	0.3085	73.67	1.291
Sr4215_R		0.2677	ug/L	0.03791	14.16	-9.097
Ti3349_A		0.1426	ug/L	0.1671	117.2	-11.11
Tl1908_A		0.005553	ug/L	0.2833	5,101	-1.808
V_2924_A		0.1067	ug/L	0.3239	303.5	-5.316
Zn2062_A		0.04449	ug/L	0.1184	266.1	0.01284
Y_3600_R		18,932	Cts/S	90.812	0.47967	18,932
Y_2243_A		7,397.3	Cts/S	41.876	0.56609	7,397.3
Y_3600_A		137,640	Cts/S	436.38	0.31704	137,640

PQL

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 1:34:56PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		10.13	ug/L	0.1085	1.071	151.6
Al3961_R		299.1	ug/L	2.458	0.8219	335.8
As1891_A		9.382	ug/L	1.045	11.13	0.7396
B_2089_A		49.84	ug/L	0.01270	0.02549	82.67
Ba4554_R	W	6.174	ug/L	0.04885	0.7912	485.4
Be3130_R		5.165	ug/L	0.05746	1.113	566.8
Ca3158_R		109.3	ug/L	0.8015	0.7331	100.4
Cd2265_A		5.117	ug/L	0.007642	0.1494	58.83
Co2286_A		10.49	ug/L	0.04150	0.3954	34.37
Cr2677_A		10.28	ug/L	0.3133	3.047	118.0
Cu3273_A		25.81	ug/L	0.02733	0.1059	363.3
Fe2599_R		105.9	ug/L	3.099	2.926	217.1
K_7664_R		982.3	ug/L	10.78	1.098	684.9
Li6707_R		101.6	ug/L	0.3578	0.3521	1,589
Mg2025_A		112.3	ug/L	0.2960	0.2637	32.16
Mn2576_R		5.243	ug/L	0.1480	2.823	51.92
Mo2020_A		10.41	ug/L	0.001895	0.01820	31.11
Na5895_R	F	0.7929	ug/L	1.649	208.0	68.81
Ni2316_A		10.71	ug/L	0.1685	1.573	16.88

PQL

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 1:34:56PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		5.373	ug/L	0.2337	4.350	3.682
Sb2068_A		8.506	ug/L	0.6970	8.194	3.320
Se1960_A		10.84	ug/L	0.1696	1.564	3.973
Si2516_R		189.2	ug/L	0.1086	0.05739	163.1
Sn1899_A		102.9	ug/L	0.3843	0.3733	44.70
Sr4215_R		10.47	ug/L	0.08471	0.8088	1,044
Ti3349_A		14.82	ug/L	0.004397	0.02966	349.5
Tl1908_A		17.17	ug/L	0.2129	1.240	6.131
V_2924_A		10.17	ug/L	0.1739	1.709	109.3
Zn2062_A	W	25.24	ug/L	0.02401	0.09510	58.82
Y_3600_R		19,173	Cts/S	35.516	0.18524	19,173
Y_2243_A		7,502.3	Cts/S	18.863	0.25144	7,502.3
Y_3600_A		137,220	Cts/S	601.77	0.43855	137,220

ICSA

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 1:39:20PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.7285	ug/L	0.08489	11.65	-552.7
Al3961_R		534,000	ug/L	2,260	0.4232	564,600
As1891_A		-1.090	ug/L	1.916	175.7	-9.784
B_2089_A		-2.194	ug/L	0.3969	18.10	5.816
Ba4554_R		1.627	ug/L	0.006932	0.4260	130.0
Be3130_R		-0.03537	ug/L	0.06065	171.5	-7.537
Ca3158_R		494,800	ug/L	2,340	0.4728	579,600
Cd2265_A		-0.1808	ug/L	0.1077	59.55	335.5
Co2286_A		0.06899	ug/L	0.04368	63.32	2.977
Cr2677_A		-1.722	ug/L	0.2732	15.87	0.6247
Cu3273_A		1.184	ug/L	0.06391	5.397	-12.10
Fe2599_R		189,900	ug/L	925.4	0.4873	366,600
K_7664_R		-39.19	ug/L	10.37	26.47	-46.71
Li6707_R		4.074	ug/L	0.5610	13.77	77.07
Mg2025_A		437,000	ug/L	1,998	0.4573	130,700
Mn2576_R		0.06306	ug/L	0.3741	593.3	-1.711
Mo2020_A		-2.638	ug/L	0.2645	10.03	-6.377
Na5895_R		11.24	ug/L	0.1245	1.107	89.71
Ni2316_A		0.2938	ug/L	0.1231	41.91	-8.867
Pb2203_A		0.3375	ug/L	1.181	349.9	-28.71
Sb2068_A		-2.335	ug/L	2.193	93.94	1.714
Se1960_A		1.053	ug/L	3.022	286.9	3.562
Si2516_R		14.26	ug/L	3.976	27.88	57.68
Sn1899_A		9.968	ug/L	1.445	14.49	4.640
Sr4215_R	W	5.286	ug/L	0.05667	1.072	481.3
Ti3349_A		0.9020	ug/L	0.1719	19.06	6.516
Tl1908_A		0.7052	ug/L	1.505	213.5	-0.7788
V_2924_A		-1.648	ug/L	0.2676	16.24	1.383
Zn2062_A		4.718	ug/L	0.1158	2.455	9.471
Y_3600_R		18,143	Cts/S	57.232	0.31545	18,143
Y_2243_A		6,504.6	Cts/S	18.596	0.28589	6,504.6
Y_3600_A		119,230	Cts/S	707.48	0.59337	119,230

ICSAB

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 1:43:55PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

ICSAB

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 1:43:55PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		218.2	ug/L	1.453	0.6661	2,655
Al3961_R		529,000	ug/L	452.7	0.08558	554,400
As1891_A		98.11	ug/L	0.7047	0.7183	18.48
B_2089_A		490.5	ug/L	3.800	0.7748	635.3
Ba4554_R		494.0	ug/L	1.052	0.2130	35,470
Be3130_R		504.8	ug/L	2.848	0.5642	52,340
Ca3158_R		483,500	ug/L	765.6	0.1583	561,300
Cd2265_A		916.8	ug/L	3.837	0.4185	9,601
Co2286_A		453.3	ug/L	2.677	0.5907	1,265
Cr2677_A		471.9	ug/L	5.718	1.212	4,646
Cu3273_A		537.8	ug/L	7.021	1.305	6,947
Fe2599_R		189,500	ug/L	275.2	0.1452	362,600
K_7664_R		21,600	ug/L	94.59	0.4380	14,540
Li6707_R		554.2	ug/L	1.952	0.3522	8,048
Mg2025_A		434,100	ug/L	2,294	0.5285	129,100
Mn2576_R		472.8	ug/L	2.652	0.5608	4,217
Mo2020_A		488.4	ug/L	2.366	0.4845	1,240
Na5895_R		21,740	ug/L	52.74	0.2426	50,760
Ni2316_A		887.4	ug/L	3.736	0.4210	1,217
Pb2203_A		45.07	ug/L	0.2649	0.5878	6.275
Sb2068_A		602.2	ug/L	0.8337	0.1384	271.7
Se1960_A		52.39	ug/L	2.843	5.426	14.77
Si2516_R		2,136	ug/L	3.943	0.1846	1,044
Sn1899_A		483.3	ug/L	4.744	0.9817	177.2
Sr4215_R		521.1	ug/L	0.7263	0.1394	50,400
Ti3349_A		504.6	ug/L	3.675	0.7283	10,550
Tl1908_A		81.37	ug/L	0.6048	0.7432	31.84
V_2924_A		482.7	ug/L	6.589	1.365	4,696
Zn2062_A		900.7	ug/L	3.263	0.3622	1,811
Y_3600_R		17,981	Cts/S	128.00	0.71186	17,981
Y_2243_A		6,463.8	Cts/S	22.818	0.35301	6,463.8
Y_3600_A		116,930	Cts/S	1,206.7	1.0320	116,930

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 1:48:24PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		512.8	ug/L	0.4266	0.08320	8,600
Al3961_R		13,130	ug/L	111.3	0.8477	14,520
As1891_A		512.3	ug/L	3.277	0.6396	162.6
B_2089_A		520.1	ug/L	4.434	0.8525	765.9
Ba4554_R		518.1	ug/L	6.636	1.281	39,190
Be3130_R		521.2	ug/L	6.631	1.272	56,940
Ca3158_R		13,120	ug/L	31.41	0.2394	16,010
Cd2265_A		519.8	ug/L	5.215	1.003	6,001
Co2286_A		523.1	ug/L	4.548	0.8695	1,657
Cr2677_A		511.8	ug/L	0.01063	0.002077	5,768
Cu3273_A		514.3	ug/L	1.307	0.2541	7,630
Fe2599_R		13,090	ug/L	160.7	1.228	26,380
K_7664_R		12,900	ug/L	125.7	0.9743	9,140
Li6707_R		521.3	ug/L	4.695	0.9005	7,976
Mg2025_A	W	13,250	ug/L	106.5	0.8035	4,502
Mn2576_R		522.1	ug/L	6.732	1.289	4,909
Mo2020_A		521.4	ug/L	2.823	0.5414	1,506
Na5895_R		13,000	ug/L	123.7	0.9512	32,010
Ni2316_A		524.7	ug/L	4.820	0.9185	826.5

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 1:48:24PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		525.5	ug/L	5.893	1.122	462.3
Sb2068_A		519.8	ug/L	1.889	0.3634	263.4
Se1960_A		515.1	ug/L	4.206	0.8165	129.2
Si2516_R		13,370	ug/L	118.2	0.8840	6,598
Sn1899_A		524.4	ug/L	5.161	0.9843	218.6
Sr4215_R		520.4	ug/L	4.598	0.8836	53,020
Ti3349_A		511.0	ug/L	1.203	0.2355	12,270
Tl1908_A	W	534.4	ug/L	3.210	0.6007	241.4
V_2924_A		509.6	ug/L	0.7840	0.1538	5,669
Zn2062_A		519.3	ug/L	4.659	0.8972	1,187
Y_3600_R		18,942	Cts/S	51.127	0.26991	18,942
Y_2243_A		7,352.4	Cts/S	42.415	0.57690	7,352.4
Y_3600_A		134,310	Cts/S	213.62	0.15906	134,310

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 1:52:33PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.8798	ug/L	0.03154	3.585	-7.793
Al3961_R		66.36	ug/L	5.436	8.191	73.86
As1891_A		1.092	ug/L	0.5523	50.57	-1.968
B_2089_A		1.140	ug/L	0.2212	19.41	11.54
Ba4554_R		0.9026	ug/L	0.04146	4.594	80.09
Be3130_R		0.9125	ug/L	0.04143	4.540	94.89
Ca3158_R		71.44	ug/L	5.867	8.213	52.33
Cd2265_A		0.8096	ug/L	0.07172	8.859	8.082
Co2286_A		0.9125	ug/L	0.02771	3.036	3.351
Cr2677_A		0.6870	ug/L	0.07419	10.80	7.447
Cu3273_A		1.028	ug/L	0.1133	11.02	-13.69
Fe2599_R		43.42	ug/L	3.642	8.388	87.56
K_7664_R		12.12	ug/L	7.962	65.70	-12.19
Li6707_R		0.4061	ug/L	0.8835	217.6	24.22
Mg2025_A		39.14	ug/L	4.782	12.22	6.327
Mn2576_R		1.056	ug/L	0.4150	39.30	11.83
Mo2020_A		1.284	ug/L	0.2501	19.47	4.157
Na5895_R		17.92	ug/L	1.679	9.367	108.9
Ni2316_A		0.8603	ug/L	0.02893	3.363	1.038
Pb2203_A		0.7534	ug/L	0.2936	38.97	-0.4602
Sb2068_A		0.8387	ug/L	1.234	147.2	-0.1369
Se1960_A		1.197	ug/L	0.8803	73.57	1.512
Si2516_R		30.77	ug/L	0.2007	0.6522	82.89
Sn1899_A		0.6568	ug/L	0.4491	68.37	1.393
Sr4215_R		1.128	ug/L	0.01862	1.651	77.79
Ti3349_A		0.7230	ug/L	0.1448	20.02	3.145
Tl1908_A		1.289	ug/L	0.5886	45.68	-1.225
V_2924_A		1.142	ug/L	0.01700	1.489	6.454
Zn2062_A		1.048	ug/L	0.02276	2.171	2.328
Y_3600_R		18,745	Cts/S	51.701	0.27581	18,745
Y_2243_A		7,416.4	Cts/S	5.0541	0.068148	7,416.4
Y_3600_A		135,750	Cts/S	749.98	0.55249	135,750

LRS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 1:56:58PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

LRS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 1:56:58PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1,997	ug/L	20.36	1.019	32,390
Al3961_R		14.87	ug/L	17.14	115.2	224.8
As1891_A		19,970	ug/L	174.0	0.8712	6,190
B_2089_A		20,000	ug/L	164.7	0.8232	27,480
Ba4554_R		19,750	ug/L	207.2	1.049	1,488,000
Be3130_R		20,030	ug/L	218.2	1.090	2,179,000
Ca3158_R		19.71	ug/L	6.977	35.40	4.265
Cd2265_A		19,590	ug/L	201.4	1.028	216,200
Co2286_A		20,280	ug/L	184.7	0.9109	61,630
Cr2677_A		19,860	ug/L	86.63	0.4363	216,500
Cu3273_A		20,290	ug/L	135.1	0.6660	292,400
Fe2599_R		2.695	ug/L	0.8273	30.70	6.364
K_7664_R		-3.930	ug/L	25.88	658.5	-23.77
Li6707_R		20,300	ug/L	828.1	4.079	308,700
Mg2025_A		549.9	ug/L	8.047	1.463	1,125
Mn2576_R		19,780	ug/L	390.6	1.975	185,200
Mo2020_A		5,094	ug/L	49.21	0.9660	14,120
Na5895_R		25.55	ug/L	0.5662	2.216	128.3
Ni2316_A		20,240	ug/L	178.5	0.8821	30,480
Pb2203_A		20,900	ug/L	208.8	0.9992	17,720
Sb2068_A		20,410	ug/L	188.6	0.9239	9,947
Se1960_A		20,210	ug/L	178.4	0.8826	4,818
Si2516_R		131.4	ug/L	6.898	5.249	247.9
Sn1899_A		20,340	ug/L	183.8	0.9037	8,098
Sr4215_R		19,830	ug/L	14.36	0.07241	2,014,000
Ti3349_A		19,650	ug/L	131.9	0.6714	456,900
Tl1908_A		20,080	ug/L	197.7	0.9846	8,770
V_2924_A		19,960	ug/L	96.50	0.4835	215,900
Zn2062_A		18,900	ug/L	190.6	1.008	41,470
Y_3600_R		18,869	Cts/S	286.89	1.5204	18,869
Y_2243_A		7,057.7	Cts/S	40.080	0.56789	7,057.7
Y_3600_A		129,950	Cts/S	449.57	0.34595	129,950

LRS2

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 2:01:36PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.118	ug/L	0.2559	22.88	-652.1
Al3961_R		517,400	ug/L	4,642	0.8972	546,700
As1891_A		3.835	ug/L	1.496	39.00	-10.10
B_2089_A		31.78	ug/L	4.112	12.94	48.44
Ba4554_R		2.531	ug/L	0.04745	1.875	195.3
Be3130_R		0.9924	ug/L	0.02634	2.654	99.84
Ca3158_R		478,000	ug/L	6,842	1.431	559,400
Cd2265_A		-0.1649	ug/L	1.073	651.0	407.4
Co2286_A		1.807	ug/L	0.2878	15.93	8.329
Cr2677_A		-2.679	ug/L	0.1378	5.143	-4.881
Cu3273_A		3.928	ug/L	0.3243	8.256	15.88
Fe2599_R		231,300	ug/L	2,480	1.072	446,200
K_7664_R		306,800	ug/L	1,113	0.3628	208,500
Li6707_R		3.533	ug/L	0.5364	15.18	69.15
Mg2025_A		183,600	ug/L	212.3	0.1156	54,660
Mn2576_R		12.83	ug/L	0.3117	2.430	35.17
Mo2020_A		0.8957	ug/L	0.5900	65.87	2.639
Na5895_R		209,200	ug/L	930.6	0.4449	492,000
Ni2316_A		2.745	ug/L	0.3165	11.53	-7.353

LRS2

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 2:01:36PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		3.064	ug/L	0.3961	12.93	-24.11
Sb2068_A		-2.058	ug/L	3.136	152.4	2.380
Se1960_A		6.063	ug/L	1.036	17.08	4.759
Si2516_R		51,970	ug/L	140.0	0.2694	24,330
Sn1899_A		12.55	ug/L	1.103	8.795	5.557
Sr4215_R		5.312	ug/L	0.05323	1.002	483.5
Ti3349_A		3.058	ug/L	0.4997	16.34	51.51
Tl1908_A		1.218	ug/L	0.01401	1.150	-0.6224
V_2924_A		-0.6505	ug/L	0.03071	4.721	15.87
Zn2062_A		8.255	ug/L	0.5149	6.237	16.55
Y_3600_R		18,130	Cts/S	85.466	0.47141	18,130
Y_2243_A		6,471.8	Cts/S	0.82322	0.012720	6,471.8
Y_3600_A		116,840	Cts/S	37.028	0.031692	116,840

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 2:06:16PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		503.6	ug/L	2.889	0.5738	8,388
Al3961_R	W	13,260	ug/L	133.1	1.004	14,660
As1891_A		514.1	ug/L	1.791	0.3483	161.6
B_2089_A	W	542.1	ug/L	1.591	0.2936	789.4
Ba4554_R		525.7	ug/L	6.148	1.169	39,770
Be3130_R	W	530.1	ug/L	4.290	0.8094	57,900
Ca3158_R	W	13,180	ug/L	96.08	0.7292	16,080
Cd2265_A		520.3	ug/L	0.1689	0.03247	5,950
Co2286_A		520.2	ug/L	0.9157	0.1760	1,632
Cr2677_A		510.5	ug/L	1.821	0.3568	5,715
Cu3273_A		517.7	ug/L	0.6611	0.1277	7,630
Fe2599_R	W	13,300	ug/L	156.3	1.175	26,810
K_7664_R	W	13,180	ug/L	65.14	0.4943	9,338
Li6707_R	W	531.6	ug/L	6.920	1.302	8,134
Mg2025_A	W	13,200	ug/L	6.755	0.05118	4,440
Mn2576_R		526.4	ug/L	1.171	0.2225	4,950
Mo2020_A		519.8	ug/L	0.8678	0.1670	1,487
Na5895_R	W	13,210	ug/L	68.61	0.5195	32,520
Ni2316_A		525.5	ug/L	0.3910	0.07441	819.7
Pb2203_A	W	527.7	ug/L	0.1646	0.03118	459.9
Sb2068_A		523.5	ug/L	0.5171	0.09877	262.8
Se1960_A		514.3	ug/L	3.102	0.6031	127.8
Si2516_R	W	13,550	ug/L	44.47	0.3281	6,689
Sn1899_A		527.0	ug/L	3.585	0.6803	217.6
Sr4215_R	W	527.6	ug/L	4.745	0.8992	53,760
Ti3349_A		506.2	ug/L	3.213	0.6348	12,080
Tl1908_A	W	537.1	ug/L	0.3112	0.05795	240.3
V_2924_A		514.0	ug/L	0.5648	0.1099	5,680
Zn2062_A		517.9	ug/L	0.4088	0.07894	1,172
Y_3600_R		18,943	Cts/S	32.287	0.17044	18,943
Y_2243_A		7,282.0	Cts/S	1.9223	0.026399	7,282.0
Y_3600_A		133,420	Cts/S	230.43	0.17271	133,420

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 2:10:25PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 2:10:25PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.283	ug/L	0.03674	2.865	-0.9119
Al3961_R		55.11	ug/L	19.77	35.88	61.27
As1891_A		1.654	ug/L	0.5836	35.29	-1.763
B_2089_A	W	15.10	ug/L	0.3333	2.207	31.20
Ba4554_R		1.084	ug/L	0.08476	7.817	93.23
Be3130_R	W	1.023	ug/L	0.1336	13.06	106.3
Ca3158_R		70.77	ug/L	23.80	33.64	51.22
Cd2265_A		0.8446	ug/L	0.08527	10.10	8.388
Co2286_A		0.8919	ug/L	0.2301	25.80	3.245
Cr2677_A		0.9970	ug/L	0.08760	8.786	10.87
Cu3273_A		1.530	ug/L	0.1451	9.484	-6.085
Fe2599_R		46.40	ug/L	11.44	24.66	93.01
K_7664_R		86.20	ug/L	16.19	18.79	39.65
Li6707_R		1.327	ug/L	0.4646	35.01	37.94
Mg2025_A		29.02	ug/L	1.647	5.676	2.839
Mn2576_R		1.114	ug/L	0.1295	11.62	12.31
Mo2020_A		1.721	ug/L	0.08183	4.753	5.363
Na5895_R		47.13	ug/L	11.22	23.80	179.0
Ni2316_A		0.7704	ug/L	0.1746	22.67	0.8900
Pb2203_A		0.8870	ug/L	0.1106	12.47	-0.3363
Sb2068_A		0.8934	ug/L	0.4214	47.17	-0.1096
Se1960_A		1.890	ug/L	0.08003	4.235	1.665
Si2516_R		37.81	ug/L	6.076	16.07	85.86
Sn1899_A		1.134	ug/L	0.4546	40.08	1.573
Sr4215_R		1.208	ug/L	0.1082	8.962	85.40
Ti3349_A		1.073	ug/L	0.2211	20.61	11.51
Tl1908_A		1.011	ug/L	0.2513	24.85	-1.335
V_2924_A		1.042	ug/L	0.04877	4.680	5.230
Zn2062_A		1.186	ug/L	0.02155	1.817	2.612
Y_3600_R		18,652	Cts/S	60.073	0.32208	18,652
Y_2243_A		7,324.1	Cts/S	22.209	0.30323	7,324.1
Y_3600_A		134,290	Cts/S	1,194.6	0.88956	134,290

SODIUM PQL

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 2:14:50PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2183	ug/L	0.1881	86.14	-18.81
Al3961_R		-4.841	ug/L	3.582	73.99	-3.964
As1891_A		-0.02575	ug/L	0.2457	954.0	-2.317
B_2089_A		10.39	ug/L	0.2739	2.635	24.64
Ba4554_R		0.1019	ug/L	0.03667	35.99	20.16
Be3130_R		-0.01132	ug/L	0.006468	57.13	-5.005
Ca3158_R		11.61	ug/L	3.349	28.85	-20.04
Cd2265_A		-0.004819	ug/L	0.01267	262.8	-1.435
Co2286_A		-0.1030	ug/L	0.08900	86.40	0.1087
Cr2677_A		0.05642	ug/L	0.04683	83.00	0.2612
Cu3273_A		0.09533	ug/L	0.01110	11.64	-27.51
Fe2599_R		3.415	ug/L	2.083	60.99	7.750
K_7664_R		-2.269	ug/L	20.33	895.9	-22.24
Li6707_R		0.2170	ug/L	0.5503	253.6	21.40
Mg2025_A		5.980	ug/L	1.365	22.83	-5.009
Mn2576_R		0.5105	ug/L	0.04866	9.531	6.765
Mo2020_A		0.2653	ug/L	0.1114	42.01	1.182
Na5895_R		1,071	ug/L	11.21	1.046	2,668
Ni2316_A		-0.07326	ug/L	0.08782	119.9	-0.4428

SODIUM PQL

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 2:14:50PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.5607	ug/L	0.05390	9.612	-0.6238
Sb2068_A		0.1749	ug/L	0.8299	474.4	-0.4725
Se1960_A		-0.8964	ug/L	0.5246	58.52	0.9821
Si2516_R		-1.880	ug/L	3.961	210.6	67.06
Sn1899_A		-0.2300	ug/L	0.1837	79.84	1.016
Sr4215_R		0.1461	ug/L	0.02922	20.00	-21.25
Ti3349_A		0.09240	ug/L	0.1062	115.0	-12.08
Tl1908_A		-0.4914	ug/L	1.052	214.1	-2.028
V_2924_A		0.1655	ug/L	0.1964	118.7	-4.509
Zn2062_A		1.914	ug/L	0.08433	4.407	4.301
Y_3600_R		18,733	Cts/S	142.13	0.75871	18,733
Y_2243_A		7,372.5	Cts/S	27.167	0.36849	7,372.5
Y_3600_A		134,650	Cts/S	379.67	0.28196	134,650

SO5787-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 2:19:15PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.06774	ug/L	0.1101	162.5	-36.59
Al3961_R		9,056	ug/L	49.42	0.5457	10,200
As1891_A		1.393	ug/L	1.430	102.7	-1.859
B_2089_A	W	3,064	ug/L	9.254	0.3020	3,855
Ba4554_R		74.58	ug/L	0.5629	0.7547	5,563
Be3130_R		0.03413	ug/L	0.04261	124.8	-0.008487
Ca3158_R	W	378,500	ug/L	1,566	0.4137	455,400
Cd2265_A		-0.03935	ug/L	0.05649	143.6	8.653
Co2286_A		5.444	ug/L	0.008749	0.1607	15.60
Cr2677_A		2.033	ug/L	0.09473	4.660	21.16
Cu3273_A		13.76	ug/L	0.1698	1.233	160.4
Fe2599_R		5,813	ug/L	40.64	0.6991	11,530
K_7664_R	W	96,060	ug/L	438.1	0.4560	67,110
Li6707_R		27.60	ug/L	0.2836	1.028	432.5
Mg2025_A		841.3	ug/L	5.206	0.6189	246.7
Mn2576_R		25.35	ug/L	0.2185	0.8620	233.9
Mo2020_A		586.3	ug/L	3.085	0.5262	1,488
Na5895_R	F	243,800	ug/L	1,086	0.4454	589,500
Ni2316_A		24.68	ug/L	0.2587	1.048	39.03
Pb2203_A		4.644	ug/L	0.2193	4.723	1.825
Sb2068_A		7.919	ug/L	0.3771	4.761	2.994
Se1960_A		6.617	ug/L	0.07080	1.070	2.550
Si2516_R		3,654	ug/L	41.20	1.128	1,824
Sn1899_A		2.404	ug/L	0.1049	4.363	1.850
Sr4215_R		644.4	ug/L	4.217	0.6545	64,620
Ti3349_A		2.950	ug/L	0.08244	2.795	60.30
Tl1908_A		-0.2241	ug/L	0.1512	67.47	-1.666
V_2924_A		4.424	ug/L	0.1327	2.999	6.621
Zn2062_A		32.00	ug/L	0.002155	0.006735	64.26
Y_3600_R		18,640	Cts/S	131.72	0.70666	18,640
Y_2243_A		6,460.6	Cts/S	53.290	0.82485	6,460.6
Y_3600_A		122,600	Cts/S	443.12	0.36143	122,600

LC2OOH30ICS3

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 2:23:48PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

LC2OOH30ICS3

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 2:23:48PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		45.71	ug/L	0.7260	1.588	705.4
Al3961_R		2,083	ug/L	14.37	0.6898	2,250
As1891_A		99.59	ug/L	0.03032	0.03044	28.18
B_2089_A		513.3	ug/L	3.127	0.6092	702.4
Ba4554_R		2,083	ug/L	10.23	0.4914	153,700
Be3130_R		52.14	ug/L	0.02845	0.05456	5,554
Ca3158_R		2,632	ug/L	38.98	1.481	3,108
Cd2265_A		258.2	ug/L	0.1752	0.06786	2,805
Co2286_A		521.3	ug/L	1.942	0.3725	1,560
Cr2677_A		199.7	ug/L	1.480	0.7413	2,145
Cu3273_A		268.4	ug/L	2.067	0.7700	3,782
Fe2599_R		1,057	ug/L	1.886	0.1784	2,081
K_7664_R		10,440	ug/L	132.5	1.269	7,213
Li6707_R		544.6	ug/L	4.362	0.8010	8,129
Mg2025_A		5,165	ug/L	33.90	0.6563	1,667
Mn2576_R		508.2	ug/L	0.6634	0.1305	4,665
Mo2020_A		107.9	ug/L	1.118	1.037	294.6
Na5895_R		8,055	ug/L	88.37	1.097	19,380
Ni2316_A		523.2	ug/L	1.935	0.3698	774.9
Pb2203_A		104.3	ug/L	0.9200	0.8822	85.86
Sb2068_A		103.1	ug/L	1.107	1.073	46.51
Se1960_A		102.7	ug/L	1.511	1.471	25.28
Si2516_R		1,071	ug/L	6.738	0.6291	579.9
Sn1899_A		572.3	ug/L	2.643	0.4618	225.3
Sr4215_R		530.7	ug/L	2.565	0.4832	52,760
Ti3349_A		504.3	ug/L	4.649	0.9218	11,540
Tl1908_A		101.9	ug/L	1.334	1.310	42.55
V_2924_A		512.4	ug/L	4.637	0.9049	5,466
Zn2062_A		502.6	ug/L	0.5081	0.1011	1,086
Y_3600_R		18,483	Cts/S	170.30	0.92137	18,483
Y_2243_A		6,946.3	Cts/S	69.975	1.0074	6,946.3
Y_3600_A		128,040	Cts/S	1,504.9	1.1753	128,040

LCSOOH30ICS3

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 2:28:00PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		48.73	ug/L	0.3953	0.8111	754.5
Al3961_R		2,109	ug/L	15.06	0.7142	2,258
As1891_A		101.0	ug/L	0.6491	0.6429	28.92
B_2089_A		517.3	ug/L	1.506	0.2911	715.6
Ba4554_R		2,159	ug/L	16.85	0.7804	157,900
Be3130_R		54.45	ug/L	0.6243	1.146	5,751
Ca3158_R		2,638	ug/L	42.26	1.601	3,088
Cd2265_A		265.9	ug/L	0.7829	0.2945	2,921
Co2286_A		531.5	ug/L	2.001	0.3765	1,608
Cr2677_A		208.7	ug/L	1.561	0.7480	2,244
Cu3273_A		273.9	ug/L	2.254	0.8229	3,864
Fe2599_R		1,087	ug/L	10.10	0.9295	2,120
K_7664_R		10,670	ug/L	99.37	0.9316	7,307
Li6707_R		555.8	ug/L	4.369	0.7861	8,225
Mg2025_A		5,214	ug/L	28.69	0.5502	1,702
Mn2576_R		529.2	ug/L	6.068	1.147	4,816
Mo2020_A		108.5	ug/L	0.7959	0.7337	299.5
Na5895_R		8,144	ug/L	42.24	0.5187	19,420
Ni2316_A		538.1	ug/L	1.506	0.2799	805.8

LCSOOH30ICS3

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 2:28:00PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		106.9	ug/L	0.7166	0.6700	89.06
Sb2068_A		105.4	ug/L	0.2009	0.1906	48.11
Se1960_A		103.3	ug/L	0.2848	0.2758	25.70
Si2516_R		1,089	ug/L	0.3331	0.03060	583.4
Sn1899_A		587.3	ug/L	1.539	0.2620	233.8
Sr4215_R		546.4	ug/L	4.373	0.8004	53,850
Ti3349_A		519.3	ug/L	4.454	0.8576	11,890
Tl1908_A		104.8	ug/L	0.4743	0.4526	44.29
V_2924_A		535.1	ug/L	4.077	0.7619	5,713
Zn2062_A		514.3	ug/L	2.397	0.4660	1,124
Y_3600_R		18,323	Cts/S	30.471	0.16631	18,323
Y_2243_A		7,023.5	Cts/S	40.955	0.58311	7,023.5
Y_3600_A		128,150	Cts/S	1,207.6	0.94237	128,150

~~PBSOH30ICS1~~ LCSOOH30ICS4

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
09-03-21
Acquire Date: 9/1/2021 2:32:12PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	F	48.12	ug/L	0.2567	0.5335	748.7
Al3961_R	F	2,114	ug/L	7.612	0.3600	2,275
As1891_A	F	101.2	ug/L	0.6159	0.6083	29.15
B_2089_A	F	521.5	ug/L	3.603	0.6910	724.8
Ba4554_R	F	2,141	ug/L	17.56	0.8202	157,400
Be3130_R	F	54.26	ug/L	0.4490	0.8275	5,760
Ca3158_R	F	2,889	ug/L	22.79	0.7891	3,401
Cd2265_A	F	266.7	ug/L	1.187	0.4451	2,944
Co2286_A	F	528.0	ug/L	2.785	0.5274	1,605
Cr2677_A	F	207.6	ug/L	1.657	0.7982	2,244
Cu3273_A	F	270.7	ug/L	1.559	0.5758	3,839
Fe2599_R	F	1,097	ug/L	10.04	0.9156	2,150
K_7664_R	F	10,540	ug/L	45.82	0.4349	7,253
Li6707_R	F	551.2	ug/L	2.304	0.4179	8,197
Mg2025_A	F	5,238	ug/L	36.28	0.6927	1,718
Mn2576_R	F	531.8	ug/L	2.944	0.5536	4,864
Mo2020_A	F	107.6	ug/L	0.4891	0.4545	298.6
Na5895_R	F	8,073	ug/L	25.83	0.3200	19,350
Ni2316_A	F	537.2	ug/L	3.046	0.5670	808.4
Pb2203_A	F	107.9	ug/L	0.1718	0.1592	90.32
Sb2068_A	F	106.5	ug/L	1.434	1.347	48.84
Se1960_A	F	106.4	ug/L	1.885	1.772	26.57
Si2516_R	F	1,081	ug/L	19.74	1.825	582.7
Sn1899_A	F	590.2	ug/L	4.708	0.7978	236.1
Sr4215_R	F	540.9	ug/L	3.230	0.5972	53,580
Ti3349_A	F	514.5	ug/L	2.082	0.4046	11,850
Tl1908_A	F	105.9	ug/L	0.3564	0.3365	44.98
V_2924_A	F	533.0	ug/L	1.272	0.2386	5,722
Zn2062_A	F	528.6	ug/L	3.368	0.6371	1,160
Y_3600_R		18,414	Cts/S	18.153	0.098581	18,414
Y_2243_A		7,057.6	Cts/S	26.349	0.37334	7,057.6
Y_3600_A		128,840	Cts/S	153.30	0.11899	128,840

LCSWOH31ICSW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 2:36:25PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

Katahdin Analytical Services 4000125

LCSWOH31ICSW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 2:36:25PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		50.45	ug/L	0.2081	0.4125	793.0
Al3961_R		2,165	ug/L	32.31	1.493	2,347
As1891_A		92.58	ug/L	0.5351	0.5780	26.74
B_2089_A		541.7	ug/L	1.076	0.1986	760.4
Ba4554_R		2,177	ug/L	37.12	1.705	161,300
Be3130_R		55.91	ug/L	0.7817	1.398	5,980
Ca3158_R		2,356	ug/L	18.52	0.7861	2,789
Cd2265_A		237.2	ug/L	0.2454	0.1034	2,646
Co2286_A		544.2	ug/L	2.747	0.5047	1,672
Cr2677_A		213.0	ug/L	0.8674	0.4073	2,322
Cu3273_A		279.3	ug/L	2.143	0.7673	3,996
Fe2599_R		1,103	ug/L	14.98	1.358	2,179
K_7664_R		9,327	ug/L	77.64	0.8325	6,468
Li6707_R		558.3	ug/L	8.781	1.573	8,366
Mg2025_A		4,772	ug/L	18.32	0.3839	1,584
Mn2576_R		556.4	ug/L	5.493	0.9871	5,128
Mo2020_A		108.5	ug/L	0.6908	0.6369	304.1
Na5895_R		7,206	ug/L	91.60	1.271	17,410
Ni2316_A		551.0	ug/L	1.727	0.3133	837.9
Pb2203_A		97.10	ug/L	0.9277	0.9554	82.00
Sb2068_A		95.31	ug/L	0.9359	0.9819	44.03
Se1960_A		94.45	ug/L	1.008	1.068	23.98
Si2516_R	F	1,240	ug/L	20.15	1.625	663.1
Sn1899_A		551.5	ug/L	1.196	0.2169	223.0
Sr4215_R		550.1	ug/L	7.034	1.279	54,910
Ti3349_A		524.8	ug/L	1.583	0.3016	12,190
Tl1908_A		95.45	ug/L	0.7818	0.8191	40.87
V_2924_A		547.9	ug/L	3.322	0.6063	5,931
Zn2062_A		533.0	ug/L	0.9984	0.1873	1,182
Y_3600_R		18,555	Cts/S	67.899	0.36593	18,555
Y_2243_A		7,131.9	Cts/S	22.881	0.32082	7,131.9
Y_3600_A		129,930	Cts/S	542.76	0.41775	129,930

PBWOH31ICW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 2:40:37PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1562	ug/L	0.1082	69.23	-19.52
Al3961_R		-2.154	ug/L	1.292	59.99	-1.013
As1891_A		-0.4207	ug/L	0.03990	9.485	-2.403
B_2089_A		9.118	ug/L	0.2430	2.665	22.42
Ba4554_R		0.09049	ug/L	0.03807	42.07	19.13
Be3130_R		-0.007673	ug/L	0.01275	166.2	-4.566
Ca3158_R		8.659	ug/L	1.394	16.09	-23.41
Cd2265_A		0.003332	ug/L	0.007490	224.8	-1.314
Co2286_A		0.0007520	ug/L	0.2666	35,470	0.4310
Cr2677_A		0.09655	ug/L	0.1532	158.7	0.7003
Cu3273_A		0.1680	ug/L	0.1428	85.01	-25.97
Fe2599_R		4.879	ug/L	1.256	25.75	10.59
K_7664_R		-20.96	ug/L	2.085	9.947	-35.11
Li6707_R		-0.9300	ug/L	0.1402	15.07	4.008
Mg2025_A		5.484	ug/L	0.3526	6.429	-5.083
Mn2576_R		0.3908	ug/L	0.1316	33.66	5.606
Mo2020_A		0.1499	ug/L	0.03543	23.64	0.8325
Na5895_R		6.138	ug/L	2.156	35.12	79.50
Ni2316_A		-0.2855	ug/L	0.08682	30.41	-0.7641

PBWOH31ICW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 2:40:37PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.1274	ug/L	0.1898	148.9	-0.9900
Sb2068_A		0.6284	ug/L	0.9006	143.3	-0.2417
Se1960_A		-0.1420	ug/L	0.1156	81.43	1.149
Si2516_R	W	102.6	ug/L	16.12	15.71	116.4
Sn1899_A		0.8938	ug/L	0.2009	22.48	1.458
Sr4215_R		0.2012	ug/L	0.01998	9.930	-15.55
Ti3349_A		-0.02408	ug/L	0.08441	350.6	-14.63
Tl1908_A		-0.1599	ug/L	0.4761	297.7	-1.846
V_2924_A		0.02130	ug/L	0.005252	24.66	-6.023
Zn2062_A		1.016	ug/L	0.006761	0.6656	2.202
Y_3600_R		18,567	Cts/S	90.422	0.48701	18,567
Y_2243_A		7,245.3	Cts/S	22.238	0.30694	7,245.3
Y_3600_A		132,330	Cts/S	188.43	0.14239	132,330

LCSWOI01ICW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 2:45:02PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		51.55	ug/L	0.6269	1.216	843.7
Al3961_R		2,119	ug/L	21.20	1.000	2,385
As1891_A		108.9	ug/L	1.264	1.160	32.73
B_2089_A		556.3	ug/L	1.407	0.2529	801.7
Ba4554_R		2,106	ug/L	16.86	0.8002	162,000
Be3130_R		53.75	ug/L	0.5907	1.099	5,966
Ca3158_R		2,675	ug/L	38.48	1.439	3,291
Cd2265_A		272.4	ug/L	0.5651	0.2075	3,121
Co2286_A		540.3	ug/L	1.001	0.1852	1,705
Cr2677_A		204.5	ug/L	2.830	1.384	2,318
Cu3273_A		267.5	ug/L	1.427	0.5335	3,979
Fe2599_R		1,075	ug/L	6.699	0.6230	2,204
K_7664_R		10,650	ug/L	146.0	1.371	7,670
Li6707_R		539.1	ug/L	0.9335	0.1732	8,385
Mg2025_A	F	5,790	ug/L	20.00	0.3454	1,970
Mn2576_R		535.9	ug/L	6.344	1.184	5,125
Mo2020_A		104.0	ug/L	0.4827	0.4639	299.7
Na5895_R		8,091	ug/L	73.70	0.9109	20,280
Ni2316_A		546.8	ug/L	0.9704	0.1775	854.1
Pb2203_A		112.6	ug/L	1.335	1.185	97.90
Sb2068_A		109.1	ug/L	0.4299	0.3941	52.27
Se1960_A		113.0	ug/L	1.135	1.005	29.21
Si2516_R	F	1,189	ug/L	2.177	0.1831	662.9
Sn1899_A		544.7	ug/L	1.783	0.3273	226.3
Sr4215_R		535.5	ug/L	3.909	0.7300	55,470
Ti3349_A		504.2	ug/L	7.741	1.535	12,170
Tl1908_A		115.3	ug/L	1.040	0.9017	50.98
V_2924_A		519.7	ug/L	6.342	1.220	5,850
Zn2062_A		534.7	ug/L	0.6389	0.1195	1,219
Y_3600_R		19,258	Cts/S	167.83	0.87152	19,258
Y_2243_A		7,326.1	Cts/S	42.953	0.58631	7,326.1
Y_3600_A		135,100	Cts/S	869.43	0.64353	135,100

PBWOI01ICW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 2:49:15PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

PBWOI01ICW1

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 2:49:15PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2779	ug/L	0.01602	5.764	-18.02
Al3961_R		1.038	ug/L	2.229	214.7	2.578
As1891_A		2.017	ug/L	0.6892	34.17	-1.669
B_2089_A		6.228	ug/L	0.5399	8.669	18.86
Ba4554_R		0.2190	ug/L	0.08263	37.73	30.19
Be3130_R		-0.02375	ug/L	0.01358	57.16	-6.632
Ca3158_R		-1.226	ug/L	2.673	218.0	-37.22
Cd2265_A		0.05423	ug/L	0.01466	27.03	-0.7603
Co2286_A		0.2733	ug/L	0.02319	8.484	1.313
Cr2677_A		-0.1027	ug/L	0.03425	33.35	-1.556
Cu3273_A		0.03718	ug/L	0.1023	275.1	-28.73
Fe2599_R		3.247	ug/L	0.6993	21.54	7.778
K_7664_R		-29.94	ug/L	3.982	13.30	-43.64
Li6707_R		-0.9980	ug/L	0.4379	43.87	3.197
Mg2025_A		10.17	ug/L	0.04399	0.4325	-3.601
Mn2576_R		0.1098	ug/L	0.07563	68.88	3.176
Mo2020_A		0.2400	ug/L	0.06352	26.47	1.118
Na5895_R		2.428	ug/L	2.769	114.1	74.42
Ni2316_A		-0.08068	ug/L	0.03147	39.01	-0.4589
Pb2203_A		0.5980	ug/L	0.1103	18.45	-0.5962
Sb2068_A		-0.1650	ug/L	0.5959	361.1	-0.6555
Se1960_A		-0.6058	ug/L	0.1696	28.00	1.063
Si2516_R		89.16	ug/L	5.130	5.753	116.1
Sn1899_A		0.09777	ug/L	0.8129	831.5	1.162
Sr4215_R		0.2428	ug/L	0.004573	1.883	-12.03
Ti3349_A		0.1464	ug/L	0.05162	35.25	-10.91
Tl1908_A		1.137	ug/L	0.2287	20.11	-1.298
V_2924_A		0.1399	ug/L	0.2557	182.8	-4.851
Zn2062_A		0.5195	ug/L	0.1050	20.22	1.113
Y_3600_R		19,586	Cts/S	212.36	1.0842	19,586
Y_2243_A		7,436.2	Cts/S	12.433	0.16720	7,436.2
Y_3600_A		136,310	Cts/S	12.179	0.0089350	136,310

SO5730-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 2:53:42PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2481	ug/L	0.3620	145.9	-18.02
Al3961_R		-1.691	ug/L	0.03377	1.997	0.1164
As1891_A		50.05	ug/L	0.5551	1.109	13.41
B_2089_A		20.28	ug/L	0.2837	1.399	37.37
Ba4554_R		0.1319	ug/L	0.04011	30.42	23.03
Be3130_R		0.001152	ug/L	0.01381	1,199	-3.737
Ca3158_R		700.4	ug/L	29.98	4.280	837.1
Cd2265_A		-0.02992	ug/L	0.03645	121.8	-1.663
Co2286_A		0.2643	ug/L	0.02043	7.730	1.227
Cr2677_A		0.07574	ug/L	0.09379	123.8	0.4746
Cu3273_A		5.280	ug/L	0.007325	0.1387	49.22
Fe2599_R		3.691	ug/L	0.2983	8.082	8.574
K_7664_R		148.7	ug/L	2.805	1.887	86.21
Li6707_R		-0.4092	ug/L	0.9505	232.3	12.11
Mg2025_A		133.2	ug/L	1.063	0.7979	36.79
Mn2576_R		0.3412	ug/L	0.4485	131.5	5.433
Mo2020_A		0.009135	ug/L	0.08838	967.5	0.4235
Na5895_R	W	64,320	ug/L	1,989	3.092	161,000
Ni2316_A		-0.2864	ug/L	0.07498	26.18	-0.7533

SO5730-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 2:53:42PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.7937	ug/L	0.9922	125.0	-0.3995
Sb2068_A		-0.5939	ug/L	0.5316	89.51	-0.8378
Se1960_A		-0.7753	ug/L	0.3431	44.25	0.9773
Si2516_R		6,295	ug/L	208.4	3.311	3,200
Sn1899_A		0.2482	ug/L	0.1975	79.58	1.172
Sr4215_R		3.502	ug/L	0.07594	2.169	326.6
Ti3349_A		-0.02719	ug/L	0.008177	30.07	-14.74
Tl1908_A		2.192	ug/L	0.2724	12.43	-0.7779
V_2924_A		0.2003	ug/L	0.09870	49.28	-4.043
Zn2062_A		1.379	ug/L	0.07943	5.760	2.965
Y_3600_R		19,299	Cts/S	418.78	2.1699	19,299
Y_2243_A		7,112.1	Cts/S	33.737	0.47437	7,112.1
Y_3600_A		132,700	Cts/S	766.62	0.57773	132,700

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 2:58:07PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		511.4	ug/L	4.144	0.8103	8,314
Al3961_R	W	13,180	ug/L	1.738	0.01319	14,510
As1891_A	W	528.5	ug/L	1.211	0.2291	160.4
B_2089_A	W	539.2	ug/L	3.595	0.6667	758.1
Ba4554_R	W	538.5	ug/L	6.235	1.158	40,570
Be3130_R	W	531.2	ug/L	6.951	1.308	57,800
Ca3158_R		12,860	ug/L	27.38	0.2129	15,640
Cd2265_A	W	531.6	ug/L	2.940	0.5531	5,864
Co2286_A	W	534.5	ug/L	3.193	0.5974	1,617
Cr2677_A		515.3	ug/L	0.8632	0.1675	5,630
Cu3273_A	W	532.1	ug/L	3.404	0.6398	7,652
Fe2599_R	W	13,250	ug/L	141.8	1.071	26,600
K_7664_R		13,150	ug/L	54.30	0.4128	9,283
Li6707_R	W	543.8	ug/L	6.774	1.246	8,286
Mg2025_A	W	13,690	ug/L	68.42	0.4999	4,443
Mn2576_R		519.8	ug/L	4.332	0.8334	4,868
Mo2020_A	W	533.4	ug/L	2.523	0.4731	1,472
Na5895_R	W	13,310	ug/L	13.54	0.1017	32,650
Ni2316_A	W	539.8	ug/L	3.089	0.5722	812.5
Pb2203_A	W	540.0	ug/L	3.976	0.7363	454.1
Sb2068_A	W	539.4	ug/L	2.626	0.4869	261.2
Se1960_A	W	531.9	ug/L	1.704	0.3203	127.4
Si2516_R		13,370	ug/L	72.46	0.5420	6,572
Sn1899_A	W	539.4	ug/L	3.227	0.5983	214.9
Sr4215_R	W	536.9	ug/L	4.286	0.7983	54,490
Ti3349_A		514.4	ug/L	1.646	0.3199	11,980
Tl1908_A	W	549.0	ug/L	3.184	0.5800	237.1
V_2924_A		520.1	ug/L	2.159	0.4151	5,608
Zn2062_A		524.3	ug/L	3.283	0.6262	1,145
Y_3600_R		18,867	Cts/S	38.112	0.20200	18,867
Y_2243_A		7,025.7	Cts/S	37.871	0.53903	7,025.7
Y_3600_A		130,180	Cts/S	50.046	0.038444	130,180

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 3:02:16PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 3:02:16PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.9120	ug/L	0.1162	12.75	-7.019
Al3961_R		19.48	ug/L	1.690	8.675	22.50
As1891_A		0.6226	ug/L	0.5235	84.08	-2.050
B_2089_A		3.379	ug/L	0.1096	3.244	14.27
Ba4554_R		1.016	ug/L	0.02255	2.219	87.96
Be3130_R		0.9149	ug/L	0.01889	2.064	94.44
Ca3158_R		28.14	ug/L	2.082	7.398	-0.07017
Cd2265_A		0.8574	ug/L	0.03951	4.608	8.318
Co2286_A		0.9341	ug/L	0.09197	9.846	3.308
Cr2677_A		0.9189	ug/L	0.2019	21.97	9.850
Cu3273_A		1.143	ug/L	0.1485	12.99	-11.68
Fe2599_R		25.12	ug/L	1.114	4.435	50.71
K_7664_R		12.22	ug/L	1.307	10.70	-12.03
Li6707_R		0.2225	ug/L	0.9486	426.3	21.35
Mg2025_A		24.36	ug/L	1.024	4.203	1.245
Mn2576_R		0.9569	ug/L	0.1986	20.75	10.85
Mo2020_A		1.474	ug/L	0.04941	3.351	4.556
Na5895_R		24.93	ug/L	1.227	4.921	125.1
Ni2316_A		0.6394	ug/L	0.006036	0.9440	0.6696
Pb2203_A		1.198	ug/L	0.7523	62.78	-0.05825
Sb2068_A		1.314	ug/L	0.1287	9.789	0.1016
Se1960_A		1.883	ug/L	0.5758	30.58	1.628
Si2516_R		39.77	ug/L	6.495	16.33	86.61
Sn1899_A		1.283	ug/L	0.05739	4.475	1.601
Sr4215_R		1.104	ug/L	0.000005000	0.0004890	74.85
Ti3349_A		0.8067	ug/L	0.1357	16.82	5.070
Tl1908_A		1.045	ug/L	0.5690	54.45	-1.293
V_2924_A		0.9383	ug/L	0.2635	28.08	4.022
Zn2062_A		1.169	ug/L	0.08147	6.972	2.519
Y_3600_R		18,609	Cts/S	130.73	0.70252	18,609
Y_2243_A		7,172.8	Cts/S	16.093	0.22436	7,172.8
Y_3600_A		132,570	Cts/S	191.79	0.14467	132,570

SO5772-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/1/2021 3:06:41PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2411	ug/L	0.03100	12.86	-18.29
Al3961_R		-8.121	ug/L	6.194	76.27	23.61
As1891_A		4.047	ug/L	1.577	38.97	-0.9732
B_2089_A		10.23	ug/L	0.2067	2.021	23.81
Ba4554_R		5.380	ug/L	0.1193	2.218	429.7
Be3130_R		0.01015	ug/L	0.009899	97.55	-2.703
Ca3158_R	W	32,790	ug/L	312.3	0.9523	41,040
Cd2265_A		0.01240	ug/L	0.05622	453.5	-1.209
Co2286_A		0.3341	ug/L	0.07967	23.85	1.457
Cr2677_A		1.060	ug/L	0.1820	17.16	11.52
Cu3273_A		43.10	ug/L	0.01679	0.03895	610.8
Fe2599_R		2.823	ug/L	0.05887	2.085	6.821
K_7664_R		3,828	ug/L	20.39	0.5326	2,763
Li6707_R		12.87	ug/L	0.8550	6.643	219.9
Mg2025_A		7,603	ug/L	1.852	0.02436	2,509
Mn2576_R		0.1023	ug/L	0.05758	56.29	5.310
Mo2020_A		0.1415	ug/L	0.05611	39.64	0.8034
Na5895_R		16,650	ug/L	35.10	0.2107	41,980
Ni2316_A		1.212	ug/L	0.1472	12.14	1.536

KATAHDIN ANALYTICAL SERVICES, LLC
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: I (Thermo iCAP 6500) **ANALYST:** EP **ANALYSIS DATE:** 09/03/2021

METHOD: ICP
- ☑ 200.7
- ☑ 6010
- ☑ DOD
- ☐ _____

FILE NAME: IOI03A

REVIEWED
09-07-21
KATAHDIN ANALYTICAL
METALS SECTION

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by EP (initals) on 9/3/21 (date). Client IDs verified

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW20471	08/24/2021	08/24/2022	0 ug/L
Standard 1	MW20463	08/20/2021	09/11/2021	Varies by Element
ICV	MW20364	08/20/2021	11/04/2021	Varies by Element
PQL	MW20486	09/02/2021	9/11/2021	Varies by Element
LRS1	MW20479	08/31/2021	09/23/2021	Varies by Element
LRS2	MW20490	09/03/2021	09/11/2021	Varies by Element
ICSA	MW20453	08/17/2021	11/17/2021	Varies by Element
ICSAB	MW20412	08/05/2021	10/05/2021	Varies by Element
CCV	MW20468	08/24/2021	09/11/2021	Varies by Element
Internal Standard	MW20487	09/02/2021	11/02/2021	5.0 mg/L Yttrium

Additional Comments and Notes:

PQL warned low for silver and calcium, failed low for magnesium. Samples accepted at 10x the failing value of the PQL.

CCV(13:27) failed high for selenium. Samples accepted at ½ the true value of the PQL

09-07-21

Dilutions: Some samples were diluted based on history or due to interfering element concentrations.

Dilution preparations are as follows:

5x diln.: 1.6 mL of sample (pipet M25) + 6.4 mL of MW19407 (pipet M25)

10x diln.: 1.0 mL of sample (pipet M25) + 9.0 mL of MW19407 (pipet M25)

20x diln.: 0.5mL of sample (pipet M25) + 9.5mL of MW19407 (pipet M25)

Post Spike: 0.123mL MW20305 (pipet M27) to 6.0mL of sample (pipet M25)

INSTRUMENT RUNLOG

Instrument: ICAP 6500

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
Blank	1.000	IOI03A	09/03/2021	11:42	EP
Std 1	1.000	IOI03A	09/03/2021	11:46	EP
ICV	1.000	IOI03A	09/03/2021	11:50	EP
ICB	1.000	IOI03A	09/03/2021	11:54	EP
PQL	1.000	IOI03A	09/03/2021	11:59	EP
ICSA	1.000	IOI03A	09/03/2021	12:03	EP
ICSAB	1.000	IOI03A	09/03/2021	12:08	EP
CCV	1.000	IOI03A	09/03/2021	12:12	EP
CCB	1.000	IOI03A	09/03/2021	12:16	EP
LRS1	1.000	IOI03A	09/03/2021	12:21	EP
LRS2	1.000	IOI03A	09/03/2021	12:26	EP
CCV	1.000	IOI03A	09/03/2021	12:30	EP
CCB	1.000	IOI03A	09/03/2021	12:34	EP
LC2OOI02ICS1	1.000	IOI03A	09/03/2021	12:39	EP
LCSOOI02ICS1	1.000	IOI03A	09/03/2021	12:43	EP
PBSOI02ICS1	1.000	IOI03A	09/03/2021	12:47	EP
LC2OOI02ICS2	1.000	IOI03A	09/03/2021	12:52	EP
LCSOOI02ICS2	1.000	IOI03A	09/03/2021	12:56	EP
PBSOI02ICS2	1.000	IOI03A	09/03/2021	13:00	EP
LC2OOH03ICS3	5.000	IOI03A	09/03/2021	13:04	EP
LCSOOH03ICS3	5.000	IOI03A	09/03/2021	13:09	EP
PBSOH03ICS3	1.000	IOI03A	09/03/2021	13:13	EP
SO4910-003	1.000	IOI03A	09/03/2021	13:18	EP
CCV	1.000	IOI03A	09/03/2021	13:22	EP
CCB	1.000	IOI03A	09/03/2021	13:26	EP
SO4910-004	1.000	IOI03A	09/03/2021	13:31	EP
SO4910-005	1.000	IOI03A	09/03/2021	13:35	EP
SO4911-009	1.000	IOI03A	09/03/2021	13:40	EP
SO4911-010	1.000	IOI03A	09/03/2021	13:44	EP
SO4911-011	1.000	IOI03A	09/03/2021	13:49	EP
SO5261-015	10.00	IOI03A	09/03/2021	13:53	EP
SO5261-015	20.00	IOI03A	09/03/2021	13:57	EP
SO5596-001	1.000	IOI03A	09/03/2021	14:02	EP
SO5463-002	1.000	IOI03A	09/03/2021	14:06	EP
SO5463-002L	5.000	IOI03A	09/03/2021	14:11	EP
CCV	1.000	IOI03A	09/03/2021	14:15	EP
CCB	1.000	IOI03A	09/03/2021	14:19	EP
SO5463-002A	1.000	IOI03A	09/03/2021	14:24	EP
SO5463-002P	1.000	IOI03A	09/03/2021	14:28	EP
SO5463-002S	1.000	IOI03A	09/03/2021	14:32	EP
SO5463-004	1.000	IOI03A	09/03/2021	14:36	EP
SO5463-004L	5.000	IOI03A	09/03/2021	14:41	EP
SO5463-004A	1.000	IOI03A	09/03/2021	14:45	EP
SO5463-004P	1.000	IOI03A	09/03/2021	14:49	EP

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SO5463-004S	1.000	IOI03A	09/03/2021	14:53	EP
SO4239-041	1.000	IOI03A	09/03/2021	14:58	EP
SO4239-042	1.000	IOI03A	09/03/2021	15:02	EP
CCV	1.000	IOI03A	09/03/2021	15:06	EP
CCB	1.000	IOI03A	09/03/2021	15:10	EP
SO4249-013	1.000	IOI03A	09/03/2021	15:15	EP
SO4249-014	1.000	IOI03A	09/03/2021	15:19	EP
SO4249-015	1.000	IOI03A	09/03/2021	15:24	EP
SO4249-016	1.000	IOI03A	09/03/2021	15:28	EP
SO4249-017	1.000	IOI03A	09/03/2021	15:32	EP
SO4249-018	1.000	IOI03A	09/03/2021	15:37	EP
SO4249-019	1.000	IOI03A	09/03/2021	15:41	EP
SO4249-020	1.000	IOI03A	09/03/2021	15:45	EP
SO4249-021	1.000	IOI03A	09/03/2021	15:50	EP
SO4249-022	1.000	IOI03A	09/03/2021	15:54	EP
CCV	1.000	IOI03A	09/03/2021	15:58	EP
CCB	1.000	IOI03A	09/03/2021	16:02	EP
SO4249-023	1.000	IOI03A	09/03/2021	16:07	EP
SO4249-024	1.000	IOI03A	09/03/2021	16:11	EP
SO4249-025	1.000	IOI03A	09/03/2021	16:16	EP
SO4249-026	1.000	IOI03A	09/03/2021	16:20	EP
SO4249-027	1.000	IOI03A	09/03/2021	16:24	EP
SO4249-028	1.000	IOI03A	09/03/2021	16:29	EP
SO4249-029	1.000	IOI03A	09/03/2021	16:33	EP
SO4249-030	1.000	IOI03A	09/03/2021	16:37	EP
SO4249-031	1.000	IOI03A	09/03/2021	16:42	EP
SO4249-032	1.000	IOI03A	09/03/2021	16:46	EP
CCV	1.000	IOI03A	09/03/2021	16:51	EP
CCB	1.000	IOI03A	09/03/2021	16:55	EP
SO4249-033	1.000	IOI03A	09/03/2021	16:59	EP
SO4249-034	1.000	IOI03A	09/03/2021	17:04	EP
SO4249-035	1.000	IOI03A	09/03/2021	17:08	EP
SO4249-036	1.000	IOI03A	09/03/2021	17:12	EP
SO4249-037	1.000	IOI03A	09/03/2021	17:17	EP
SO4249-038	1.000	IOI03A	09/03/2021	17:21	EP
SO4249-039	1.000	IOI03A	09/03/2021	17:25	EP
SO4250-001	1.000	IOI03A	09/03/2021	17:30	EP
SO4250-002	1.000	IOI03A	09/03/2021	17:34	EP
SO4250-003	1.000	IOI03A	09/03/2021	17:38	EP
CCV	1.000	IOI03A	09/03/2021	17:43	EP
CCB	1.000	IOI03A	09/03/2021	17:47	EP
SO4250-004	1.000	IOI03A	09/03/2021	17:51	EP
SO4250-005	1.000	IOI03A	09/03/2021	17:56	EP
SO4250-006	1.000	IOI03A	09/03/2021	18:00	EP
SO4250-007	1.000	IOI03A	09/03/2021	18:05	EP
SO4250-008	1.000	IOI03A	09/03/2021	18:09	EP
SO4250-009	1.000	IOI03A	09/03/2021	18:13	EP

Intensity Report

Author:

Published: 9/7/2021 7:53:41AM

Notes:

Blank

Method Name: FAST-2016_NO_AU Method Revision: 1,011

Analyst Name: EP

Acquire Date: 9/3/2021 11:42:15AM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.0001510	Cts/S	0.00002000	13.32	-20.93
Al3961_R		0.002073	Cts/S	0.0001510	7.274	38.71
As1891_A		-0.0002720	Cts/S	0.00004700	17.44	-2.077
B_2089_A		0.001296	Cts/S	0.00001300	0.9667	9.899
Ba4554_R		0.0004660	Cts/S	0.00003200	6.905	8.706
Be3130_R		-0.0002600	Cts/S	0.00007900	30.44	-4.870
Ca3158_R		0.0005920	Cts/S	0.00003100	5.296	11.05
Cd2265_A		-0.0002120	Cts/S	0.00004100	19.24	-1.620
Co2286_A		0.00009600	Cts/S	0.000004000	4.550	0.7347
Cr2677_A		0.00006000	Cts/S	0.00003300	54.23	8.407
Cu3273_A		-0.0001820	Cts/S	0.00001900	10.31	-25.29
Fe2599_R		0.002470	Cts/S	0.0002150	8.720	46.12
K_7664_R		-0.001423	Cts/S	0.00001700	1.209	-26.59
Li6707_R		0.0001560	Cts/S	0.0003320	213.0	2.890
Mg2025_A		0.001392	Cts/S	0.0004400	31.65	10.64
Mn2576_R		0.0002400	Cts/S	0.00003700	15.22	4.485
Mo2020_A		0.0001220	Cts/S	0.00003300	26.70	0.9342
Na5895_R		0.006061	Cts/S	0.0002560	4.228	113.2
Ni2316_A		0.00008700	Cts/S	0.000003000	3.214	0.6659
Pb2203_A		-0.0001720	Cts/S	0.00002400	13.82	-1.311
Sb2068_A		-0.00006500	Cts/S	0.00001300	19.48	-0.4982
Se1960_A		0.0001480	Cts/S	0.00002500	16.68	1.127
Si2516_R		0.003980	Cts/S	0.0001070	2.693	74.33
Sn1899_A		0.0001640	Cts/S	0.000004000	2.523	1.250
Sr4215_R		-0.0008460	Cts/S	0.0004480	52.92	-15.82
Ti3349_A		-0.0001380	Cts/S	0.00002000	14.22	-19.23
Tl1908_A		-0.0001240	Cts/S	0.00002300	18.23	-0.9454
V_2924_A		-0.00002900	Cts/S	0.00001800	63.41	-4.010
Zn2062_A		0.00001900	Cts/S	0.00001400	74.86	0.1462
Y_3600_R		18,679	Cts/S	113.36	0.60688	18,679
Y_2243_A		7,639.5	Cts/S	18.665	0.24432	7,639.5
Y_3600_A		138,930	Cts/S	1,377.7	0.99162	138,930

Std 1

Method Name: FAST-2016_NO_AU Method Revision: 1,011

Analyst Name: EP

Acquire Date: 9/3/2021 11:46:38AM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1268	Cts/S	0.001626	1.282	16,780
Al3961_R		1.493	Cts/S	0.01294	0.8670	27,850
As1891_A		0.04386	Cts/S	0.00005200	0.1177	324.0
B_2089_A		0.1987	Cts/S	0.0003540	0.1782	1,468
Ba4554_R		4.046	Cts/S	0.03660	0.9048	75,470
Be3130_R		5.943	Cts/S	0.07009	1.179	110,900
Ca3158_R		1.664	Cts/S	0.01975	1.187	31,030
Cd2265_A		1.587	Cts/S	0.00007200	0.004556	11,720
Co2286_A		0.4371	Cts/S	0.0001090	0.02488	3,229
Cr2677_A		0.08582	Cts/S	0.001134	1.322	11,360
Cu3273_A		0.1109	Cts/S	0.001403	1.265	14,680
Fe2599_R		2.746	Cts/S	0.03446	1.255	51,230
K_7664_R		0.9546	Cts/S	0.008439	0.8840	17,810
Li6707_R		0.8209	Cts/S	0.01134	1.381	15,310

Std 1

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 11:46:38AM
Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Mg2025_A		1.150	Cts/S	0.001715	0.1491	8,497
Mn2576_R		0.5364	Cts/S	0.004814	0.8974	10,010
Mo2020_A		0.3969	Cts/S	0.00002200	0.005444	2,932
Na5895_R		3.303	Cts/S	0.04427	1.340	61,630
Ni2316_A		0.2162	Cts/S	0.0001210	0.05604	1,597
Pb2203_A		0.1205	Cts/S	0.0001440	0.1196	890.3
Sb2068_A		0.06867	Cts/S	0.0002660	0.3876	507.2
Se1960_A		0.03405	Cts/S	0.00002500	0.07294	251.5
Si2516_R		0.6783	Cts/S	0.008347	1.231	12,650
Sn1899_A		0.05670	Cts/S	0.00002300	0.04144	418.8
Sr4215_R		5.461	Cts/S	0.06262	1.147	101,900
Ti3349_A		0.1826	Cts/S	0.002292	1.255	24,170
Tl1908_A		0.06430	Cts/S	0.0001180	0.1829	474.9
V_2924_A		0.08381	Cts/S	0.001108	1.322	11,090
Zn2062_A		0.3166	Cts/S	0.00001600	0.005202	2,338
Y_3600_R		18,656	Cts/S	78.808	0.42242	18,656
Y_2243_A		7,386.2	Cts/S	17.866	0.24189	7,386.2
Y_3600_A		132,380	Cts/S	1,352.5	1.0216	132,380

ICV

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 11:50:44AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		381.5	ug/L	12.28	3.220	6,695
Al3961_R		9,945	ug/L	61.27	0.6161	11,140
As1891_A		385.8	ug/L	2.361	0.6120	125.9
B_2089_A		399.9	ug/L	0.9152	0.2289	603.4
Ba4554_R		395.4	ug/L	3.751	0.9485	29,950
Be3130_R		401.1	ug/L	1.744	0.4349	44,620
Ca3158_R		10,040	ug/L	71.79	0.7147	12,520
Cd2265_A		399.8	ug/L	1.368	0.3423	4,767
Co2286_A		406.1	ug/L	1.930	0.4752	1,334
Cr2677_A		380.3	ug/L	11.13	2.927	4,533
Cu3273_A		384.1	ug/L	13.43	3.496	5,892
Fe2599_R		10,060	ug/L	95.35	0.9479	20,710
K_7664_R		13,410	ug/L	21.22	0.1582	9,576
Li6707_R		401.5	ug/L	1.592	0.3965	6,173
Mg2025_A		10,320	ug/L	29.81	0.2888	3,574
Mn2576_R		396.9	ug/L	5.050	1.272	3,988
Mo2020_A		408.5	ug/L	1.661	0.4065	1,219
Na5895_R		9,943	ug/L	26.91	0.2707	24,660
Ni2316_A		404.5	ug/L	1.279	0.3161	657.5
Pb2203_A		410.5	ug/L	0.3152	0.07678	371.1
Sb2068_A		396.7	ug/L	2.319	0.5846	204.3
Se1960_A		400.1	ug/L	0.7239	0.1809	103.0
Si2516_R		9,843	ug/L	11.11	0.1128	4,948
Sn1899_A		411.2	ug/L	1.442	0.3506	175.9
Sr4215_R		402.6	ug/L	2.534	0.6294	41,140
Ti3349_A		379.2	ug/L	11.40	3.007	9,593
Tl1908_A		411.1	ug/L	0.4082	0.09931	198.1
V_2924_A		382.6	ug/L	12.43	3.248	4,444
Zn2062_A		399.9	ug/L	0.1478	0.03695	951.4
Y_3600_R		18,721	Cts/S	6.9599	0.037177	18,721
Y_2243_A		7,514.8	Cts/S	26.533	0.35307	7,514.8
Y_3600_A		138,760	Cts/S	2,785.8	2.0076	138,760

ICB

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 11:54:54AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2217	ug/L	0.2538	114.5	-16.71
Al3961_R		-39.36	ug/L	6.959	17.68	-5.069
As1891_A		0.2507	ug/L	0.1818	72.52	-1.964
B_2089_A		0.5736	ug/L	0.09115	15.89	10.62
Ba4554_R		0.1013	ug/L	0.1376	135.8	16.49
Be3130_R		0.1530	ug/L	0.01488	9.725	12.16
Ca3158_R		-32.92	ug/L	0.6345	1.927	-30.10
Cd2265_A		0.06612	ug/L	0.01245	18.83	-0.8373
Co2286_A		0.03405	ug/L	0.1384	406.5	0.8385
Cr2677_A		0.3506	ug/L	0.3173	90.51	12.39
Cu3273_A		-0.1075	ug/L	0.01707	15.88	-26.59
Fe2599_R		-12.72	ug/L	1.266	9.959	20.23
K_7664_R		14.77	ug/L	2.511	17.00	-16.17
Li6707_R		0.7054	ug/L	0.3729	52.86	13.84
Mg2025_A		-46.27	ug/L	0.09514	0.2056	-5.433
Mn2576_R		0.2311	ug/L	0.2081	90.05	6.850
Mo2020_A		0.6187	ug/L	0.1338	21.63	2.772
Na5895_R		0.3711	ug/L	3.867	1,042	115.1
Ni2316_A		0.01090	ug/L	0.3601	3,304	0.6808
Pb2203_A		0.1989	ug/L	0.6817	342.7	-1.112
Sb2068_A		-0.2839	ug/L	0.4704	165.7	-0.6375
Se1960_A		2.646	ug/L	0.3246	12.27	1.787
Si2516_R		4.756	ug/L	4.404	92.61	77.32
Sn1899_A		-0.3458	ug/L	0.8175	236.4	1.085
Sr4215_R		0.1601	ug/L	0.006625	4.138	0.5383
Ti3349_A		0.5430	ug/L	0.5309	97.77	-5.374
Tl1908_A		-0.6364	ug/L	0.6545	102.8	-1.242
V_2924_A		-0.2221	ug/L	0.08355	37.62	-6.560
Zn2062_A		-0.05444	ug/L	0.09595	176.2	0.01263
Y_3600_R		18,833	Cts/S	9.1549	0.048610	18,833
Y_2243_A		7,537.0	Cts/S	37.066	0.49179	7,537.0
Y_3600_A		136,980	Cts/S	351.23	0.25641	136,980

PQL

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 11:59:19AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	W	7.571	ug/L	0.2753	3.636	111.7
Al3961_R		269.2	ug/L	2.465	0.9160	339.1
As1891_A		6.956	ug/L	0.2434	3.499	0.2699
B_2089_A		47.92	ug/L	0.1764	0.3681	79.84
Ba4554_R		5.503	ug/L	0.1121	2.038	425.5
Be3130_R		5.254	ug/L	0.1195	2.275	579.4
Ca3158_R	W	73.62	ug/L	6.591	8.952	102.8
Cd2265_A		5.237	ug/L	0.02200	0.4201	60.90
Co2286_A		10.53	ug/L	0.09085	0.8627	35.41
Cr2677_A		10.26	ug/L	0.5177	5.043	129.4
Cu3273_A		25.48	ug/L	0.2063	0.8099	364.4
Fe2599_R		88.13	ug/L	1.082	1.228	227.3
K_7664_R		991.2	ug/L	24.00	2.421	683.1
Li6707_R		103.5	ug/L	1.717	1.658	1,594
Mg2025_A	F	64.19	ug/L	0.5619	0.8754	33.13
Mn2576_R		5.254	ug/L	0.02359	0.4490	57.21
Mo2020_A		10.38	ug/L	0.07221	0.6957	31.94
Na5895_R		998.1	ug/L	7.773	0.7788	2,578
Ni2316_A		10.29	ug/L	0.001519	0.01476	17.41

PQL

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 11:59:19AM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		5.481	ug/L	0.2886	5.265	3.678
Sb2068_A		9.612	ug/L	0.1861	1.936	3.973
Se1960_A		11.41	ug/L	0.1374	1.203	4.023
Si2516_R		194.9	ug/L	2.061	1.057	171.1
Sn1899_A		103.2	ug/L	0.7351	0.7123	45.17
Sr4215_R		10.19	ug/L	0.1644	1.613	1,027
Ti3349_A		14.86	ug/L	0.1892	1.274	354.4
Tl1908_A		14.94	ug/L	0.6077	4.067	6.313
V_2924_A		9.738	ug/L	0.04570	0.4693	108.4
Zn2062_A		21.06	ug/L	0.03159	0.1500	50.37
Y_3600_R		18,724	Cts/S	46.713	0.24948	18,724
Y_2243_A		7,530.7	Cts/S	2.5383	0.033706	7,530.7
Y_3600_A		137,590	Cts/S	66.180	0.048098	137,590

ICSA

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 12:03:44PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.301	ug/L	0.9263	71.23	-529.7
Al3961_R		502,700	ug/L	15,920	3.166	546,700
As1891_A		-3.007	ug/L	1.755	58.37	-10.06
B_2089_A		-2.341	ug/L	0.2763	11.80	5.439
Ba4554_R		1.636	ug/L	0.1016	6.211	129.2
Be3130_R		-0.05628	ug/L	0.01662	29.54	-10.93
Ca3158_R		472,100	ug/L	5,097	1.080	573,300
Cd2265_A		0.2201	ug/L	0.5876	267.0	338.0
Co2286_A		0.04887	ug/L	0.02526	51.69	3.168
Cr2677_A		-1.477	ug/L	0.3777	25.57	10.18
Cu3273_A		0.9820	ug/L	0.5142	52.37	-11.86
Fe2599_R		186,300	ug/L	2,312	1.241	373,200
K_7664_R		10.56	ug/L	0.6293	5.960	-18.62
Li6707_R		4.180	ug/L	0.6839	16.36	65.40
Mg2025_A		440,400	ug/L	2,633	0.5978	131,500
Mn2576_R		-0.2304	ug/L	0.1252	54.34	4.324
Mo2020_A		-2.696	ug/L	0.3343	12.40	-6.190
Na5895_R		25.74	ug/L	1.530	5.944	172.7
Ni2316_A		0.4983	ug/L	0.2520	50.57	-7.657
Pb2203_A		-0.4490	ug/L	1.124	250.3	-27.88
Sb2068_A		-2.693	ug/L	1.121	41.65	1.536
Se1960_A		-1.168	ug/L	0.1888	16.16	2.887
Si2516_R		5.694	ug/L	4.234	74.36	60.42
Sn1899_A		9.901	ug/L	1.503	15.18	4.725
Sr4215_R		4.884	ug/L	0.01023	0.2094	471.6
Ti3349_A		0.7383	ug/L	0.02387	3.233	-0.4622
Tl1908_A		-0.1784	ug/L	1.462	819.2	-0.3694
V_2924_A		-1.473	ug/L	0.1698	11.53	4.883
Zn2062_A		4.785	ug/L	0.1836	3.837	10.03
Y_3600_R		18,258	Cts/S	310.47	1.7004	18,258
Y_2243_A		6,535.5	Cts/S	42.231	0.64617	6,535.5
Y_3600_A		117,230	Cts/S	1,938.2	1.6533	117,230

ICSAB

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 12:08:19PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

ICSAB

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 12:08:19PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		214.0	ug/L	1.900	0.8878	2,680
Al3961_R		522,700	ug/L	13,630	2.609	554,300
As1891_A		96.95	ug/L	1.933	1.994	18.72
B_2089_A		492.0	ug/L	2.285	0.4644	643.3
Ba4554_R		502.9	ug/L	8.093	1.609	36,240
Be3130_R		504.6	ug/L	8.740	1.732	53,400
Ca3158_R		483,000	ug/L	7,321	1.516	572,300
Cd2265_A		921.4	ug/L	3.987	0.4327	9,858
Co2286_A		455.8	ug/L	1.540	0.3379	1,305
Cr2677_A		463.2	ug/L	1.981	0.4277	4,764
Cu3273_A		531.6	ug/L	4.899	0.9216	7,021
Fe2599_R		190,900	ug/L	2,205	1.155	373,300
K_7664_R		21,560	ug/L	257.9	1.196	14,660
Li6707_R		556.2	ug/L	6.996	1.258	8,134
Mg2025_A		439,100	ug/L	1,676	0.3817	131,100
Mn2576_R		472.0	ug/L	4.803	1.017	4,512
Mo2020_A		490.5	ug/L	2.780	0.5669	1,273
Na5895_R		21,650	ug/L	231.1	1.067	50,970
Ni2316_A		897.0	ug/L	4.298	0.4791	1,255
Pb2203_A		43.67	ug/L	0.3899	0.8927	5.607
Sb2068_A		601.5	ug/L	1.982	0.3296	273.0
Se1960_A		51.70	ug/L	0.8043	1.556	14.71
Si2516_R		2,130	ug/L	21.68	1.018	1,062
Sn1899_A		485.3	ug/L	0.8000	0.1649	180.3
Sr4215_R		524.8	ug/L	6.994	1.333	51,040
Ti3349_A		494.4	ug/L	3.777	0.7640	10,760
Tl1908_A		85.08	ug/L	1.212	1.424	35.91
V_2924_A		475.3	ug/L	3.843	0.8086	4,773
Zn2062_A		902.1	ug/L	2.523	0.2797	1,867
Y_3600_R		17,812	Cts/S	115.80	0.65014	17,812
Y_2243_A		6,534.9	Cts/S	18.698	0.28613	6,534.9
Y_3600_A		119,310	Cts/S	700.41	0.58707	119,310

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 12:12:48PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		480.5	ug/L	1.908	0.3970	8,217
Al3961_R		12,520	ug/L	256.7	2.051	14,190
As1891_A		495.2	ug/L	3.331	0.6727	159.7
B_2089_A		494.3	ug/L	4.108	0.8311	732.3
Ba4554_R		499.0	ug/L	6.696	1.342	38,260
Be3130_R		494.8	ug/L	11.72	2.370	55,710
Ca3158_R		12,450	ug/L	258.1	2.073	15,700
Cd2265_A		500.8	ug/L	2.327	0.4647	5,882
Co2286_A		505.7	ug/L	1.868	0.3693	1,636
Cr2677_A		495.7	ug/L	2.702	0.5451	5,750
Cu3273_A		495.9	ug/L	1.814	0.3659	7,415
Fe2599_R		12,580	ug/L	288.4	2.293	26,200
K_7664_R		12,290	ug/L	160.8	1.308	8,881
Li6707_R		499.0	ug/L	7.478	1.499	7,764
Mg2025_A		12,740	ug/L	23.89	0.1876	4,343
Mn2576_R		489.8	ug/L	5.288	1.080	4,982
Mo2020_A		506.4	ug/L	3.063	0.6050	1,488
Na5895_R		12,330	ug/L	179.0	1.451	30,940
Ni2316_A		508.3	ug/L	2.981	0.5864	813.7

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 12:12:48PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		504.1	ug/L	2.686	0.5328	449.2
Sb2068_A		497.2	ug/L	3.050	0.6134	252.4
Se1960_A		493.0	ug/L	3.592	0.7286	124.8
Si2516_R		12,570	ug/L	260.2	2.069	6,376
Sn1899_A		507.3	ug/L	2.602	0.5130	213.5
Sr4215_R		500.4	ug/L	8.921	1.783	51,770
Ti3349_A		491.6	ug/L	1.998	0.4065	12,110
Tl1908_A		507.3	ug/L	1.685	0.3321	241.0
V_2924_A		493.0	ug/L	1.764	0.3577	5,579
Zn2062_A		494.8	ug/L	1.675	0.3386	1,160
Y_3600_R		18,951	Cts/S	195.66	1.0325	18,951
Y_2243_A		7,402.0	Cts/S	31.841	0.43017	7,402.0
Y_3600_A		135,070	Cts/S	447.99	0.33166	135,070

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 12:16:57PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2584	ug/L	0.03939	15.24	-16.17
Al3961_R		-33.91	ug/L	5.738	16.92	1.034
As1891_A		-0.4852	ug/L	1.406	289.8	-2.205
B_2089_A		0.2783	ug/L	0.4770	171.4	10.17
Ba4554_R		0.05016	ug/L	0.004176	8.325	12.48
Be3130_R		0.05594	ug/L	0.03093	55.29	1.325
Ca3158_R		-28.49	ug/L	3.632	12.75	-24.33
Cd2265_A		0.06462	ug/L	0.03139	48.57	-0.8512
Co2286_A		0.09944	ug/L	0.1071	107.7	1.049
Cr2677_A		0.3741	ug/L	0.3163	84.54	12.73
Cu3273_A		0.2913	ug/L	0.07096	24.36	-20.64
Fe2599_R		-11.52	ug/L	0.2726	2.367	22.50
K_7664_R		24.68	ug/L	9.109	36.90	-8.957
Li6707_R		-0.06928	ug/L	0.2963	427.6	1.838
Mg2025_A		-41.76	ug/L	2.558	6.126	-3.875
Mn2576_R		-0.3410	ug/L	0.1060	31.08	1.060
Mo2020_A		0.4241	ug/L	0.09988	23.55	2.186
Na5895_R		-1.552	ug/L	6.212	400.1	109.3
Ni2316_A		-0.001350	ug/L	0.1087	8,051	0.6596
Pb2203_A		0.2403	ug/L	0.2632	109.5	-1.071
Sb2068_A		0.1783	ug/L	0.3351	188.0	-0.3922
Se1960_A		0.2366	ug/L	0.9798	414.0	1.169
Si2516_R		0.9289	ug/L	9.027	971.8	74.74
Sn1899_A		-0.9943	ug/L	0.7570	76.13	0.8071
Sr4215_R		0.03154	ug/L	0.01296	41.08	-12.57
Ti3349_A		0.1039	ug/L	0.003556	3.423	-16.44
Tl1908_A		-0.8858	ug/L	0.1724	19.46	-1.359
V_2924_A		-0.06627	ug/L	0.05622	84.84	-4.778
Zn2062_A		0.03330	ug/L	0.09018	270.8	0.2218
Y_3600_R		18,663	Cts/S	57.254	0.30678	18,663
Y_2243_A		7,525.2	Cts/S	37.179	0.49407	7,525.2
Y_3600_A		137,840	Cts/S	362.01	0.26263	137,840

LRS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 12:21:22PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

LRS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 12:21:22PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1,946	ug/L	66.45	3.415	32,520
Al3961_R		-12.20	ug/L	2.562	21.01	236.1
As1891_A		20,260	ug/L	10.14	0.05008	6,350
B_2089_A		20,080	ug/L	41.85	0.2084	27,640
Ba4554_R		19,840	ug/L	90.59	0.4566	1,497,000
Be3130_R		19,740	ug/L	25.53	0.1293	2,188,000
Ca3158_R		-9.232	ug/L	3.896	42.20	14.70
Cd2265_A		19,620	ug/L	11.64	0.05934	219,400
Co2286_A		20,500	ug/L	5.776	0.02818	63,410
Cr2677_A		19,490	ug/L	687.4	3.527	220,700
Cu3273_A		19,890	ug/L	714.9	3.594	291,900
Fe2599_R		-8.827	ug/L	3.267	37.01	28.02
K_7664_R		23.79	ug/L	0.6282	2.640	-9.576
Li6707_R		20,480	ug/L	134.8	0.6582	313,500
Mg2025_A		395.4	ug/L	13.64	3.449	1,097
Mn2576_R		19,710	ug/L	155.7	0.7900	197,200
Mo2020_A		5,137	ug/L	2.419	0.04709	14,430
Na5895_R		20.11	ug/L	9.695	48.21	162.6
Ni2316_A		20,400	ug/L	15.40	0.07547	31,070
Pb2203_A		20,920	ug/L	4.139	0.01978	17,910
Sb2068_A		20,400	ug/L	45.89	0.2250	9,918
Se1960_A		20,460	ug/L	2.085	0.01019	4,907
Si2516_R		149.4	ug/L	0.9853	0.6595	264.4
Sn1899_A		20,350	ug/L	14.33	0.07043	8,147
Sr4215_R		19,980	ug/L	142.5	0.7132	2,036,000
Ti3349_A		19,490	ug/L	579.9	2.975	470,200
Tl1908_A		20,240	ug/L	3.972	0.01962	9,231
V_2924_A		19,450	ug/L	717.5	3.689	216,200
Zn2062_A		18,850	ug/L	36.45	0.1933	42,240
Y_3600_R		18,653	Cts/S	148.83	0.79790	18,653
Y_2243_A		7,079.3	Cts/S	10.666	0.15066	7,079.3
Y_3600_A		132,140	Cts/S	3,474.5	2.6293	132,140

LRS2

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 12:26:00PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		3.984	ug/L	0.7210	18.10	-623.5
Al3961_R		505,500	ug/L	4,200	0.8309	543,400
As1891_A		-0.3507	ug/L	4.837	1,379	-11.26
B_2089_A		29.48	ug/L	4.357	14.78	45.84
Ba4554_R		5.054	ug/L	1.549	30.64	378.4
Be3130_R		2.644	ug/L	1.522	57.56	280.0
Ca3158_R		474,500	ug/L	12,250	2.581	569,700
Cd2265_A		-0.007343	ug/L	0.2037	2,773	418.5
Co2286_A		2.229	ug/L	0.2599	11.66	10.01
Cr2677_A		-1.106	ug/L	0.1679	15.19	18.37
Cu3273_A		5.057	ug/L	0.3404	6.732	34.13
Fe2599_R		231,400	ug/L	2,426	1.048	458,400
K_7664_R		299,400	ug/L	7,563	2.526	206,600
Li6707_R		7.152	ug/L	1.347	18.83	108.9
Mg2025_A		183,700	ug/L	1,125	0.6123	55,000
Mn2576_R		13.67	ug/L	1.925	14.08	50.20
Mo2020_A		0.6592	ug/L	0.8409	127.6	2.509
Na5895_R		202,100	ug/L	2,536	1.255	481,200
Ni2316_A		1.835	ug/L	0.6043	32.93	-7.927

LRS2

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 12:26:00PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		1.552	ug/L	0.8024	51.71	-25.12
Sb2068_A		-3.604	ug/L	0.3565	9.892	1.760
Se1960_A		2.451	ug/L	3.615	147.4	3.890
Si2516_R		50,190	ug/L	1,083	2.157	24,000
Sn1899_A		12.32	ug/L	1.888	15.33	5.634
Sr4215_R		7.042	ug/L	1.467	20.84	680.2
Ti3349_A		5.260	ug/L	0.5733	10.90	97.14
Tl1908_A		0.6709	ug/L	1.365	203.5	-0.04464
V_2924_A		0.1973	ug/L	0.3462	175.5	26.92
Zn2062_A		5.788	ug/L	0.3987	6.889	12.14
Y_3600_R		18,051	Cts/S	309.25	1.7132	18,051
Y_2243_A		6,553.4	Cts/S	34.776	0.53065	6,553.4
Y_3600_A		118,180	Cts/S	326.58	0.27633	118,180

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 12:30:40PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		479.5	ug/L	8.411	1.754	8,134
Al3961_R		12,610	ug/L	39.59	0.3139	14,180
As1891_A		506.9	ug/L	3.218	0.6348	160.2
B_2089_A		523.4	ug/L	3.112	0.5946	758.5
Ba4554_R		505.8	ug/L	1.472	0.2910	38,480
Be3130_R		500.0	ug/L	1.113	0.2227	55,870
Ca3158_R		12,510	ug/L	88.62	0.7086	15,650
Cd2265_A		510.3	ug/L	2.011	0.3941	5,870
Co2286_A		518.7	ug/L	2.074	0.3998	1,644
Cr2677_A		494.1	ug/L	9.618	1.947	5,686
Cu3273_A		499.2	ug/L	11.91	2.386	7,405
Fe2599_R		12,680	ug/L	17.16	0.1354	26,210
K_7664_R		12,590	ug/L	12.62	0.1002	9,028
Li6707_R		509.1	ug/L	0.8176	0.1606	7,860
Mg2025_A		12,970	ug/L	50.48	0.3891	4,333
Mn2576_R		497.9	ug/L	0.3268	0.06562	5,025
Mo2020_A		519.0	ug/L	2.060	0.3970	1,494
Na5895_R		12,590	ug/L	18.20	0.1446	31,340
Ni2316_A		518.7	ug/L	3.197	0.6163	813.3
Pb2203_A		514.2	ug/L	0.8810	0.1713	448.7
Sb2068_A		506.9	ug/L	1.137	0.2242	252.0
Se1960_A		505.0	ug/L	3.266	0.6467	125.2
Si2516_R		12,820	ug/L	21.79	0.1699	6,451
Sn1899_A		515.2	ug/L	0.9343	0.1813	212.3
Sr4215_R		508.2	ug/L	0.9033	0.1778	52,170
Ti3349_A		491.8	ug/L	9.903	2.013	12,020
Tl1908_A		521.0	ug/L	1.256	0.2411	242.5
V_2924_A		491.4	ug/L	9.061	1.844	5,515
Zn2062_A		502.5	ug/L	1.127	0.2244	1,153
Y_3600_R		18,804	Cts/S	125.65	0.66821	18,804
Y_2243_A		7,249.9	Cts/S	21.936	0.30257	7,249.9
Y_3600_A		134,020	Cts/S	2,031.9	1.5161	134,020

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 12:34:49PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 12:34:49PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.03716	ug/L	0.04033	108.5	-21.32
Al3961_R		-1.214	ug/L	16.15	1,330	38.15
As1891_A		0.1704	ug/L	0.005370	3.152	-1.973
B_2089_A	W	12.54	ug/L	0.4838	3.859	27.79
Ba4554_R		0.8162	ug/L	0.2708	33.18	71.79
Be3130_R		0.7366	ug/L	0.3152	42.79	78.41
Ca3158_R		3.873	ug/L	12.04	310.8	16.17
Cd2265_A		0.1854	ug/L	0.05552	29.94	0.6196
Co2286_A		0.09431	ug/L	0.01373	14.56	1.030
Cr2677_A		0.2147	ug/L	0.08270	38.51	10.80
Cu3273_A		0.3301	ug/L	0.6801	206.0	-19.97
Fe2599_R		7.819	ug/L	9.756	124.8	63.41
K_7664_R		54.36	ug/L	4.034	7.421	12.49
Li6707_R		0.8229	ug/L	0.1896	23.04	15.84
Mg2025_A		-42.44	ug/L	0.3645	0.8588	-4.071
Mn2576_R		0.7816	ug/L	0.2224	28.45	12.55
Mo2020_A		0.7189	ug/L	0.1162	16.16	3.043
Na5895_R		27.99	ug/L	8.700	31.09	185.9
Ni2316_A		0.2100	ug/L	0.05288	25.19	0.9949
Pb2203_A		-0.09165	ug/L	0.1366	149.0	-1.365
Sb2068_A		0.6905	ug/L	0.5126	74.23	-0.1298
Se1960_A		2.055	ug/L	0.4250	20.68	1.621
Si2516_R		14.74	ug/L	6.500	44.09	83.30
Sn1899_A		0.02222	ug/L	0.6850	3,082	1.231
Sr4215_R		0.7336	ug/L	0.3230	44.02	60.21
Ti3349_A		0.7555	ug/L	0.1100	14.56	-0.04963
Tl1908_A		-1.392	ug/L	0.04922	3.537	-1.592
V_2924_A		0.4469	ug/L	0.1105	24.74	1.185
Zn2062_A		0.2055	ug/L	0.1086	52.85	0.6287
Y_3600_R		19,064	Cts/S	54.237	0.28450	19,064
Y_2243_A		7,465.6	Cts/S	16.542	0.22158	7,465.6
Y_3600_A		137,010	Cts/S	874.99	0.63864	137,010

LC2OOI02ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 12:39:14PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		47.23	ug/L	0.003854	0.008160	774.7
Al3961_R		2,025	ug/L	19.26	0.9511	2,316
As1891_A		102.2	ug/L	0.3888	0.3803	30.67
B_2089_A		516.1	ug/L	1.057	0.2048	732.3
Ba4554_R		2,055	ug/L	13.75	0.6692	156,600
Be3130_R		51.01	ug/L	0.4106	0.8051	5,704
Ca3158_R	F	2,945	ug/L	35.91	1.219	3,702
Cd2265_A		260.4	ug/L	0.2362	0.09068	2,970
Co2286_A		533.9	ug/L	0.4186	0.07840	1,684
Cr2677_A		202.1	ug/L	2.467	1.221	2,323
Cu3273_A		258.9	ug/L	1.887	0.7287	3,817
Fe2599_R		1,027	ug/L	7.145	0.6957	2,169
K_7664_R		10,250	ug/L	102.2	0.9971	7,355
Li6707_R		522.1	ug/L	3.839	0.7354	8,074
Mg2025_A		5,211	ug/L	3.420	0.06563	1,753
Mn2576_R		505.9	ug/L	3.895	0.7700	5,117
Mo2020_A		108.6	ug/L	0.2628	0.2421	311.5
Na5895_R		7,726	ug/L	84.52	1.094	19,310
Ni2316_A		529.7	ug/L	0.6474	0.1222	822.6

LC2OOI02ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 12:39:14PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		105.8	ug/L	0.3878	0.3665	90.96
Sb2068_A		101.1	ug/L	1.026	1.015	47.18
Se1960_A		107.3	ug/L	0.4796	0.4468	27.36
Si2516_R		1,002	ug/L	7.654	0.7638	576.8
Sn1899_A		574.1	ug/L	0.9927	0.1729	235.3
Sr4215_R		522.5	ug/L	4.420	0.8460	53,730
Ti3349_A		510.2	ug/L	5.909	1.158	12,430
Tl1908_A		104.2	ug/L	0.1662	0.1595	48.04
V_2924_A		503.2	ug/L	5.235	1.040	5,665
Zn2062_A		523.4	ug/L	1.678	0.3206	1,196
Y_3600_R		18,836	Cts/S	52.769	0.28015	18,836
Y_2243_A		7,215.4	Cts/S	32.357	0.44844	7,215.4
Y_3600_A		133,600	Cts/S	671.58	0.50267	133,600

LCSOOI02ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 12:43:27PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		48.41	ug/L	0.02340	0.04834	789.9
Al3961_R		2,091	ug/L	29.55	1.413	2,353
As1891_A		104.6	ug/L	0.3283	0.3138	31.07
B_2089_A		527.4	ug/L	0.5855	0.1110	739.7
Ba4554_R		2,131	ug/L	33.82	1.587	159,900
Be3130_R		52.97	ug/L	0.8191	1.546	5,833
Ca3158_R		2,596	ug/L	53.42	2.058	3,214
Cd2265_A		268.4	ug/L	0.4070	0.1516	3,026
Co2286_A		551.7	ug/L	0.9308	0.1687	1,720
Cr2677_A		207.8	ug/L	0.5637	0.2713	2,375
Cu3273_A		265.0	ug/L	0.9156	0.3455	3,885
Fe2599_R		1,069	ug/L	12.66	1.185	2,221
K_7664_R		10,620	ug/L	91.99	0.8663	7,505
Li6707_R		541.0	ug/L	10.79	1.995	8,238
Mg2025_A		5,400	ug/L	5.660	0.1048	1,795
Mn2576_R		524.7	ug/L	8.427	1.606	5,226
Mo2020_A		111.3	ug/L	0.2592	0.2328	315.9
Na5895_R		8,007	ug/L	110.3	1.377	19,700
Ni2316_A		545.7	ug/L	0.1195	0.02190	837.8
Pb2203_A		108.2	ug/L	0.2661	0.2459	91.95
Sb2068_A		104.3	ug/L	0.6077	0.5825	48.12
Se1960_A		110.3	ug/L	0.8521	0.7722	27.78
Si2516_R		1,020	ug/L	15.28	1.499	576.6
Sn1899_A		594.5	ug/L	0.9301	0.1565	240.9
Sr4215_R		540.5	ug/L	8.002	1.480	54,740
Ti3349_A		524.3	ug/L	0.2393	0.04565	12,700
Tl1908_A		109.6	ug/L	0.4234	0.3862	50.00
V_2924_A		517.6	ug/L	0.4793	0.09261	5,793
Zn2062_A		519.0	ug/L	0.9755	0.1880	1,173
Y_3600_R		18,548	Cts/S	57.860	0.31194	18,548
Y_2243_A		7,133.4	Cts/S	7.6207	0.10683	7,133.4
Y_3600_A		132,840	Cts/S	272.15	0.20488	132,840

PBSOI02ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 12:47:39PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

PBSOI02ICS1

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 12:47:39PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2067	ug/L	0.1405	67.97	-17.07
Al3961_R		-32.39	ug/L	1.961	6.056	2.831
As1891_A		-0.4219	ug/L	0.03169	7.513	-2.133
B_2089_A		8.865	ug/L	0.1658	1.870	22.11
Ba4554_R		0.2607	ug/L	0.08990	34.48	29.11
Be3130_R		-0.01832	ug/L	0.05419	295.8	-7.058
Ca3158_R		40.23	ug/L	2.673	6.645	62.47
Cd2265_A		0.03800	ug/L	0.04257	112.0	-1.127
Co2286_A		-0.1233	ug/L	0.08232	66.79	0.3137
Cr2677_A		1.230	ug/L	0.1940	15.77	22.78
Cu3273_A		1.100	ug/L	0.2511	22.83	-8.259
Fe2599_R		-4.609	ug/L	1.458	31.64	37.57
K_7664_R		42.68	ug/L	2.743	6.427	4.005
Li6707_R		0.9955	ug/L	0.1358	13.64	18.61
Mg2025_A		-42.89	ug/L	1.671	3.897	-4.168
Mn2576_R		0.5483	ug/L	0.2440	44.50	10.19
Mo2020_A		0.3454	ug/L	0.01437	4.161	1.905
Na5895_R		5.394	ug/L	4.798	88.96	129.6
Ni2316_A		0.5909	ug/L	0.03793	6.419	1.576
Pb2203_A		0.3598	ug/L	1.078	299.5	-0.9397
Sb2068_A		0.2881	ug/L	0.3018	104.8	-0.6068
Se1960_A		1.598	ug/L	0.3287	20.56	1.481
Si2516_R		4.610	ug/L	6.509	141.2	78.41
Sn1899_A	W	52.10	ug/L	0.05097	0.09782	22.84
Sr4215_R		0.1042	ug/L	0.08855	84.98	-5.339
Ti3349_A		0.4540	ug/L	0.0008890	0.1958	-7.610
Tl1908_A		-2.015	ug/L	0.2185	10.84	-1.861
V_2924_A		0.09313	ug/L	0.1282	137.6	-2.927
Zn2062_A		3.798	ug/L	0.06815	1.794	8.977
Y_3600_R		19,121	Cts/S	200.23	1.0472	19,121
Y_2243_A		7,345.2	Cts/S	6.9368	0.094440	7,345.2
Y_3600_A		137,450	Cts/S	1,126.7	0.81975	137,450

LC2OOI02ICS2

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 12:52:04PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		47.24	ug/L	0.5125	1.085	773.8
Al3961_R		2,011	ug/L	33.85	1.683	2,316
As1891_A		100.8	ug/L	0.9863	0.9782	30.26
B_2089_A		506.2	ug/L	5.568	1.100	719.3
Ba4554_R		2,034	ug/L	38.25	1.881	156,000
Be3130_R		50.07	ug/L	0.8314	1.661	5,638
Ca3158_R	F	2,933	ug/L	52.15	1.778	3,712
Cd2265_A		257.9	ug/L	2.442	0.9467	2,945
Co2286_A		530.2	ug/L	5.284	0.9967	1,674
Cr2677_A		202.2	ug/L	3.131	1.549	2,321
Cu3273_A		258.6	ug/L	2.840	1.098	3,807
Fe2599_R		1,017	ug/L	22.00	2.163	2,164
K_7664_R		10,120	ug/L	194.2	1.918	7,318
Li6707_R		515.2	ug/L	9.933	1.928	8,024
Mg2025_A		5,170	ug/L	51.55	0.9972	1,741
Mn2576_R		500.7	ug/L	9.024	1.802	5,100
Mo2020_A		107.6	ug/L	0.9149	0.8505	309.1
Na5895_R		7,630	ug/L	156.6	2.052	19,200
Ni2316_A		525.2	ug/L	4.534	0.8633	816.6

LC2OOI02ICS2

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 12:52:04PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		104.5	ug/L	0.8128	0.7778	89.90
Sb2068_A		101.9	ug/L	1.188	1.166	47.68
Se1960_A		104.2	ug/L	1.262	1.212	26.62
Si2516_R		991.2	ug/L	13.64	1.376	575.4
Sn1899_A		565.9	ug/L	4.933	0.8716	232.3
Sr4215_R		514.5	ug/L	9.684	1.882	53,290
Ti3349_A		508.8	ug/L	5.165	1.015	12,380
Tl1908_A		103.5	ug/L	1.860	1.797	47.77
V_2924_A		502.1	ug/L	6.163	1.228	5,644
Zn2062_A		522.1	ug/L	5.008	0.9592	1,195
Y_3600_R		18,969	Cts/S	106.20	0.55982	18,969
Y_2243_A		7,224.2	Cts/S	76.952	1.0652	7,224.2
Y_3600_A		133,400	Cts/S	922.54	0.69156	133,400

LCSOOI02ICS2

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 12:56:17PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		48.10	ug/L	0.1781	0.3702	792.4
Al3961_R		2,059	ug/L	38.72	1.881	2,330
As1891_A		101.9	ug/L	0.04157	0.04078	30.73
B_2089_A		510.0	ug/L	0.3455	0.06774	727.6
Ba4554_R		2,105	ug/L	33.51	1.592	158,900
Be3130_R		51.95	ug/L	0.6723	1.294	5,753
Ca3158_R		2,701	ug/L	45.40	1.681	3,362
Cd2265_A		260.8	ug/L	0.1670	0.06402	2,989
Co2286_A		537.5	ug/L	0.3118	0.05802	1,704
Cr2677_A		205.4	ug/L	0.9081	0.4421	2,371
Cu3273_A		259.8	ug/L	0.06854	0.02638	3,846
Fe2599_R		1,066	ug/L	18.86	1.769	2,229
K_7664_R		10,460	ug/L	117.4	1.123	7,432
Li6707_R		530.8	ug/L	7.443	1.402	8,130
Mg2025_A		5,238	ug/L	3.577	0.06829	1,771
Mn2576_R		518.5	ug/L	9.383	1.810	5,193
Mo2020_A		108.5	ug/L	0.2844	0.2620	313.1
Na5895_R		7,858	ug/L	100.8	1.283	19,450
Ni2316_A		533.0	ug/L	0.9265	0.1738	832.0
Pb2203_A		105.8	ug/L	0.5378	0.5085	91.37
Sb2068_A		101.3	ug/L	2.221	2.192	47.51
Se1960_A		106.5	ug/L	1.451	1.363	27.29
Si2516_R		1,030	ug/L	23.57	2.289	584.8
Sn1899_A		577.1	ug/L	0.4512	0.07819	237.8
Sr4215_R		533.2	ug/L	7.918	1.485	54,310
Ti3349_A		515.4	ug/L	0.2389	0.04635	12,610
Tl1908_A		105.5	ug/L	0.6121	0.5799	48.91
V_2924_A		507.7	ug/L	1.267	0.2496	5,738
Zn2062_A		514.3	ug/L	0.8276	0.1609	1,182
Y_3600_R		18,655	Cts/S	75.994	0.40737	18,655
Y_2243_A		7,253.0	Cts/S	12.833	0.17694	7,253.0
Y_3600_A		134,130	Cts/S	171.74	0.12804	134,130

PBSOI02ICS2

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 1:00:29PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

PBSOI02ICS2

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 1:00:29PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2039	ug/L	0.2558	125.5	-17.07
Al3961_R		-25.38	ug/L	3.442	13.56	10.69
As1891_A		-1.729	ug/L	0.4010	23.19	-2.538
B_2089_A		6.467	ug/L	0.2822	4.364	18.56
Ba4554_R		0.8995	ug/L	0.06014	6.686	76.96
Be3130_R		0.05699	ug/L	0.01781	31.26	1.422
Ca3158_R	F	137.2	ug/L	4.506	3.284	182.2
Cd2265_A		-0.01784	ug/L	0.01736	97.28	-1.756
Co2286_A		-0.09823	ug/L	0.1405	143.0	0.3898
Cr2677_A		1.296	ug/L	0.5054	39.01	23.50
Cu3273_A		0.9189	ug/L	0.009430	1.026	-10.99
Fe2599_R		-1.883	ug/L	0.3430	18.21	42.43
K_7664_R		47.09	ug/L	3.486	7.402	7.082
Li6707_R		1.237	ug/L	0.01582	1.279	21.95
Mg2025_A		-43.89	ug/L	3.391	7.726	-4.465
Mn2576_R		0.7055	ug/L	0.09677	13.72	11.58
Mo2020_A		0.2617	ug/L	0.1278	48.82	1.648
Na5895_R		4.295	ug/L	4.782	111.3	124.3
Ni2316_A		0.5791	ug/L	0.07017	12.12	1.544
Pb2203_A		0.2257	ug/L	0.09418	41.73	-1.050
Sb2068_A		-0.1049	ug/L	0.4356	415.2	-0.7888
Se1960_A		3.048	ug/L	0.9384	30.79	1.827
Si2516_R		3.137	ug/L	1.539	49.07	76.17
Sn1899_A	W	50.13	ug/L	0.9646	1.924	21.84
Sr4215_R		0.3756	ug/L	0.04298	11.44	22.60
Ti3349_A		0.4028	ug/L	0.04880	12.11	-8.897
Tl1908_A		-2.674	ug/L	0.2982	11.15	-2.155
V_2924_A		-0.1916	ug/L	0.06209	32.41	-6.226
Zn2062_A		8.864	ug/L	0.09025	1.018	20.60
Y_3600_R		18,748	Cts/S	27.359	0.14593	18,748
Y_2243_A		7,285.9	Cts/S	22.745	0.31218	7,285.9
Y_3600_A		137,350	Cts/S	2,007.5	1.4616	137,350

LC2OOH03ICS3

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 1:04:54PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	F	0.8763	ug/L	0.06527	7.448	-16.75
Al3961_R	F	-162.4	ug/L	11.41	7.023	2.756
As1891_A	F	-117.6	ug/L	7.157	6.087	-9.017
B_2089_A	F	4.234	ug/L	1.084	25.61	9.999
Ba4554_R	F	0.4481	ug/L	0.1357	30.29	16.28
Be3130_R	F	-0.03886	ug/L	0.07325	188.5	-6.064
Ca3158_R	F	136.3	ug/L	12.76	9.364	47.28
Cd2265_A	F	0.2796	ug/L	0.2683	95.99	-0.8756
Co2286_A	F	1.395	ug/L	0.3681	26.38	1.498
Cr2677_A	F	1.331	ug/L	0.02205	1.657	10.90
Cu3273_A	F	4.123	ug/L	0.8092	19.63	-11.85
Fe2599_R	F	-72.84	ug/L	0.4302	0.5906	17.13
K_7664_R	F	163.9	ug/L	54.09	33.00	-3.302
Li6707_R	F	3.522	ug/L	1.147	32.57	14.45
Mg2025_A	F	-371.1	ug/L	1.497	0.4034	-13.71
Mn2576_R	F	2.808	ug/L	1.219	43.42	10.62
Mo2020_A	F	-4.526	ug/L	0.1400	3.094	-1.627
Na5895_R	F	614,700	ug/L	9,636	1.568	319,000
Ni2316_A	F	-0.8614	ug/L	1.052	122.2	0.3371

LC2OOH03ICS3

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 1:04:54PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A	F	2.401	ug/L	1.409	58.70	-0.7787
Sb2068_A	F	16.46	ug/L	4.769	28.98	1.058
Se1960_A	F	232.1	ug/L	12.81	5.521	11.80
Si2516_R	F	2.248	ug/L	0.2351	10.46	78.50
Sn1899_A	F	56.81	ug/L	4.199	7.392	5.534
Sr4215_R	F	0.5264	ug/L	0.06235	11.84	-5.331
Ti3349_A	F	1.044	ug/L	0.3863	37.02	-13.14
Tl1908_A	F	-213.6	ug/L	4.542	2.126	-19.71
V_2924_A	F	-0.4951	ug/L	0.2588	52.28	-4.822
Zn2062_A	F	23.02	ug/L	0.4584	1.991	10.15
Y_3600_R		19,667	Cts/S	183.23	0.93164	19,667
Y_2243_A		6,868.8	Cts/S	50.316	0.73253	6,868.8
Y_3600_A		131,030	Cts/S	550.49	0.42011	131,030

LCSOOH03ICS3

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 1:09:26PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	F	1.439	ug/L	0.6916	48.05	-14.92
Al3961_R	F	-149.8	ug/L	8.091	5.403	5.675
As1891_A	F	-122.1	ug/L	5.002	4.097	-9.270
B_2089_A	F	2.013	ug/L	0.3407	16.93	9.387
Ba4554_R	F	1.004	ug/L	0.4159	41.40	24.96
Be3130_R	F	0.03270	ug/L	0.02345	71.72	-4.358
Ca3158_R	F	131.8	ug/L	14.42	10.94	45.76
Cd2265_A	F	0.1145	ug/L	0.5377	469.7	-1.236
Co2286_A	F	0.1981	ug/L	0.6552	330.8	0.7796
Cr2677_A	F	0.6263	ug/L	0.6798	108.5	9.342
Cu3273_A	F	2.217	ug/L	0.3898	17.58	-17.45
Fe2599_R	F	-71.04	ug/L	2.496	3.513	17.76
K_7664_R	F	110.4	ug/L	85.89	77.78	-11.32
Li6707_R	F	5.626	ug/L	2.857	50.78	21.08
Mg2025_A	F	-371.1	ug/L	1.388	0.3741	-13.69
Mn2576_R	F	1.245	ug/L	0.2987	23.99	7.276
Mo2020_A	F	-4.035	ug/L	0.3973	9.845	-1.355
Na5895_R	F	625,600	ug/L	4,249	0.6792	322,100
Ni2316_A	F	-0.6243	ug/L	2.401	384.6	0.4037
Pb2203_A	F	3.331	ug/L	3.800	114.1	-0.6239
Sb2068_A	F	18.39	ug/L	1.302	7.082	1.239
Se1960_A	F	247.2	ug/L	12.35	4.999	12.47
Si2516_R	F	-0.4298	ug/L	16.29	3,790	77.60
Sn1899_A	F	56.49	ug/L	4.724	8.364	5.495
Sr4215_R	F	0.6455	ug/L	0.4330	67.08	-2.722
Ti3349_A	F	1.398	ug/L	0.2532	18.11	-11.48
Tl1908_A	F	-220.4	ug/L	16.20	7.351	-20.25
V_2924_A	F	-0.8162	ug/L	2.529	309.9	-5.509
Zn2062_A	F	17.28	ug/L	0.2020	1.169	7.634
Y_3600_R		19,511	Cts/S	100.49	0.51506	19,511
Y_2243_A		6,850.9	Cts/S	41.977	0.61272	6,850.9
Y_3600_A		131,290	Cts/S	1,606.2	1.2234	131,290

PBSOH03ICS3

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 1:13:57PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

PBSOH03ICS3

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 1:13:57PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.4428	ug/L	0.07030	15.87	-11.30
Al3961_R		17.43	ug/L	3.791	21.75	64.38
As1891_A	F	-251.6	ug/L	1.311	0.5211	-68.50
B_2089_A		-17.58	ug/L	0.2527	1.437	-12.86
Ba4554_R		0.05843	ug/L	0.06734	115.2	14.60
Be3130_R		0.01777	ug/L	0.005166	29.08	-3.271
Ca3158_R		67.26	ug/L	4.305	6.401	105.5
Cd2265_A		0.8023	ug/L	0.1275	15.90	6.308
Co2286_A		2.206	ug/L	0.3314	15.02	6.349
Cr2677_A		0.2880	ug/L	0.3352	116.4	10.24
Cu3273_A		0.4038	ug/L	0.08558	21.19	-16.57
Fe2599_R		-17.66	ug/L	0.2984	1.689	11.07
K_7664_R		11.86	ug/L	7.089	59.79	-20.24
Li6707_R		0.1591	ug/L	0.07960	50.02	5.973
Mg2025_A	F	-331.9	ug/L	5.208	1.569	-82.57
Mn2576_R		-0.05457	ug/L	0.2837	519.8	4.263
Mo2020_A	F	-10.09	ug/L	0.1428	1.416	-23.29
Na5895_R		312.3	ug/L	9.110	2.917	984.5
Ni2316_A		-2.244	ug/L	0.1263	5.631	-2.459
Pb2203_A	W	3.291	ug/L	0.4717	14.33	1.363
Sb2068_A	F	41.62	ug/L	0.01842	0.04425	16.29
Se1960_A	F	518.4	ug/L	5.706	1.101	106.2
Si2516_R	W	194.9	ug/L	43.71	22.43	190.1
Sn1899_A	F	134.9	ug/L	2.159	1.600	46.74
Sr4215_R		0.2698	ug/L	0.004308	1.597	13.08
Ti3349_A		0.2267	ug/L	0.04651	20.51	-11.85
Tl1908_A	F	-441.6	ug/L	4.792	1.085	-171.0
V_2924_A		-0.2499	ug/L	0.04828	19.32	-5.467
Zn2062_A		2.668	ug/L	0.09545	3.577	5.187
Y_3600_R		20,835	Cts/S	218.18	1.0472	20,835
Y_2243_A		6,000.5	Cts/S	10.830	0.18049	6,000.5
Y_3600_A		120,840	Cts/S	2,365.6	1.9576	120,840

SO4910-003

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 1:18:23PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3029	ug/L	0.1023	33.77	-13.22
Al3961_R		47.18	ug/L	0.8678	1.839	104.5
As1891_A	F	-232.7	ug/L	1.645	0.7069	-61.09
B_2089_A		-16.28	ug/L	0.3070	1.885	-10.92
Ba4554_R		105.8	ug/L	0.6424	0.6074	8,859
Be3130_R		-0.001141	ug/L	0.01138	997.0	-5.643
Ca3158_R		3,833	ug/L	20.60	0.5374	5,285
Cd2265_A		0.8986	ug/L	0.1826	20.32	6.979
Co2286_A		2.222	ug/L	0.1167	5.253	6.160
Cr2677_A		0.2645	ug/L	0.3091	116.8	9.827
Cu3273_A		1.428	ug/L	0.2402	16.82	-2.761
Fe2599_R		1.084	ug/L	0.5291	48.80	53.54
K_7664_R		246.8	ug/L	16.61	6.729	165.8
Li6707_R		0.4993	ug/L	0.2028	40.62	11.69
Mg2025_A	F	-172.7	ug/L	0.4809	0.2784	-37.46
Mn2576_R		22.87	ug/L	0.6095	2.665	258.6
Mo2020_A		-9.363	ug/L	0.1811	1.935	-20.76
Na5895_R	W	68,570	ug/L	144.5	0.2107	187,200
Ni2316_A		-0.7109	ug/L	0.2335	32.85	-0.4591

SO4910-003

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 1:18:23PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		4.001	ug/L	1.286	32.13	1.807
Sb2068_A		38.27	ug/L	0.8632	2.255	14.40
Se1960_A		477.6	ug/L	0.5465	0.1144	94.25
Si2516_R		439.1	ug/L	18.64	4.245	322.4
Sn1899_A		120.4	ug/L	0.1423	0.1181	40.27
Sr4215_R		117.0	ug/L	0.3134	0.2680	13,190
Ti3349_A		1.674	ug/L	0.2069	12.36	19.62
Tl1908_A	F	-410.0	ug/L	1.640	0.4000	-152.9
V_2924_A		0.2520	ug/L	0.3118	123.7	-0.4477
Zn2062_A		64.36	ug/L	3.243	5.039	117.9
Y_3600_R		20,684	Cts/S	120.41	0.58216	20,684
Y_2243_A		5,776.1	Cts/S	7.7869	0.13481	5,776.1
Y_3600_A		117,980	Cts/S	846.70	0.71765	117,980

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 1:22:48PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	W	460.9	ug/L	4.094	0.8883	7,870
Al3961_R		12,140	ug/L	278.7	2.296	13,830
As1891_A		512.3	ug/L	5.956	1.162	159.6
B_2089_A		485.4	ug/L	0.4566	0.09405	694.8
Ba4554_R		498.4	ug/L	9.762	1.959	38,430
Be3130_R		486.3	ug/L	6.558	1.349	55,070
Ca3158_R		11,950	ug/L	163.9	1.371	15,160
Cd2265_A		495.2	ug/L	1.852	0.3741	5,612
Co2286_A		510.7	ug/L	3.633	0.7114	1,595
Cr2677_A		477.2	ug/L	5.478	1.148	5,529
Cu3273_A		478.6	ug/L	3.557	0.7431	7,147
Fe2599_R		12,240	ug/L	235.9	1.928	25,640
K_7664_R		11,970	ug/L	189.9	1.586	8,698
Li6707_R		491.1	ug/L	9.188	1.871	7,684
Mg2025_A		12,540	ug/L	35.52	0.2832	4,129
Mn2576_R		484.9	ug/L	8.697	1.794	4,959
Mo2020_A		513.9	ug/L	4.060	0.7900	1,458
Na5895_R		12,060	ug/L	206.7	1.713	30,440
Ni2316_A		504.9	ug/L	2.532	0.5015	780.2
Pb2203_A		491.4	ug/L	0.9249	0.1882	422.5
Sb2068_A		492.6	ug/L	1.799	0.3652	241.3
Se1960_A	F	560.1	ug/L	19.38	3.460	136.7
Si2516_R	W	11,950	ug/L	190.9	1.598	6,097
Sn1899_A		496.3	ug/L	0.8690	0.1751	201.6
Sr4215_R		497.3	ug/L	7.733	1.555	51,750
Ti3349_A		486.2	ug/L	5.617	1.155	11,970
Tl1908_A		494.3	ug/L	2.644	0.5349	226.7
V_2924_A		473.7	ug/L	5.308	1.121	5,351
Zn2062_A		489.6	ug/L	2.232	0.4559	1,107
Y_3600_R		19,059	Cts/S	130.55	0.68497	19,059
Y_2243_A		7,144.0	Cts/S	78.752	1.1023	7,144.0
Y_3600_A		134,910	Cts/S	1,278.5	0.94768	134,910

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 1:26:56PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 1:26:56PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2194	ug/L	0.01235	5.626	-16.74
Al3961_R		-35.92	ug/L	1.275	3.549	-1.211
As1891_A		-0.4312	ug/L	0.3310	76.76	-2.135
B_2089_A		1.789	ug/L	0.06656	3.721	12.07
Ba4554_R		0.1878	ug/L	0.09979	53.13	23.17
Be3130_R		0.1543	ug/L	0.07314	47.40	12.34
Ca3158_R		-22.59	ug/L	3.672	16.26	-17.21
Cd2265_A		0.1444	ug/L	0.04740	32.82	0.09290
Co2286_A		0.1053	ug/L	0.2074	196.8	1.044
Cr2677_A		0.2599	ug/L	0.3183	122.5	11.31
Cu3273_A		0.3613	ug/L	0.1202	33.27	-19.44
Fe2599_R		-11.97	ug/L	1.417	11.83	21.82
K_7664_R		18.89	ug/L	20.20	106.9	-13.17
Li6707_R		0.9544	ug/L	0.9170	96.08	17.79
Mg2025_A		-47.50	ug/L	0.4640	0.9768	-5.703
Mn2576_R		0.2746	ug/L	0.2932	106.8	7.317
Mo2020_A		0.5342	ug/L	0.1243	23.27	2.454
Na5895_R		3.341	ug/L	2.000	59.86	122.7
Ni2316_A		0.007621	ug/L	0.03439	451.3	0.6587
Pb2203_A		0.7502	ug/L	0.09696	12.92	-0.5925
Sb2068_A		-0.1486	ug/L	0.006742	4.536	-0.5537
Se1960_A		1.443	ug/L	0.2938	20.36	1.442
Si2516_R		8.531	ug/L	2.429	28.47	79.38
Sn1899_A		-0.06171	ug/L	0.2929	474.6	1.176
Sr4215_R		0.1687	ug/L	0.01680	9.960	1.432
Ti3349_A		0.3968	ug/L	0.0009240	0.2327	-9.006
Tl1908_A		-2.458	ug/L	0.2568	10.45	-2.069
V_2924_A		0.2228	ug/L	0.05386	24.17	-1.404
Zn2062_A		0.2740	ug/L	0.1009	36.83	0.7777
Y_3600_R		18,874	Cts/S	163.15	0.86441	18,874
Y_2243_A		7,343.1	Cts/S	24.246	0.33019	7,343.1
Y_3600_A		136,860	Cts/S	194.56	0.14216	136,860

SO4910-004

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 1:31:22PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3170	ug/L	0.1122	35.39	-12.93
Al3961_R		23.98	ug/L	6.766	28.21	71.72
As1891_A	F	-214.0	ug/L	1.532	0.7157	-57.89
B_2089_A		-14.49	ug/L	0.3759	2.594	-9.145
Ba4554_R		119.1	ug/L	1.114	0.9354	9,751
Be3130_R		0.009029	ug/L	0.001508	16.70	-4.226
Ca3158_R		1,304	ug/L	3.056	0.2343	1,766
Cd2265_A		0.7954	ug/L	0.08072	10.15	6.189
Co2286_A		2.121	ug/L	0.02984	1.407	6.068
Cr2677_A		-0.09498	ug/L	0.2268	238.8	6.151
Cu3273_A		1.053	ug/L	0.1332	12.65	-7.669
Fe2599_R		-10.39	ug/L	0.2641	2.542	26.88
K_7664_R		282.6	ug/L	3.400	1.203	189.8
Li6707_R		0.6466	ug/L	0.5242	81.06	13.87
Mg2025_A	F	-241.3	ug/L	2.301	0.9535	-57.14
Mn2576_R		18.29	ug/L	0.08573	0.4687	203.1
Mo2020_A		-8.508	ug/L	0.005782	0.06796	-19.33
Na5895_R	W	72,370	ug/L	444.2	0.6138	193,100
Ni2316_A		-0.7967	ug/L	0.5497	68.99	-0.5735

SO4910-004

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 1:31:22PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		3.274	ug/L	0.04508	1.377	1.336
Sb2068_A		34.15	ug/L	0.7733	2.264	13.15
Se1960_A		440.4	ug/L	2.799	0.6356	89.41
Si2516_R		458.0	ug/L	38.70	8.449	325.3
Sn1899_A		111.5	ug/L	1.693	1.519	38.40
Sr4215_R		124.9	ug/L	1.418	1.135	13,780
Ti3349_A		0.7316	ug/L	0.09773	13.36	-0.6873
Tl1908_A	F	-376.5	ug/L	4.126	1.096	-144.4
V_2924_A		0.1936	ug/L	0.3141	162.2	-1.051
Zn2062_A		7.800	ug/L	0.5420	6.949	14.79
Y_3600_R		20,220	Cts/S	35.538	0.17575	20,220
Y_2243_A		5,939.0	Cts/S	4.0597	0.068356	5,939.0
Y_3600_A		117,630	Cts/S	428.97	0.36467	117,630

SO4910-005

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 1:35:48PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.4101	ug/L	0.2070	50.48	-11.69
Al3961_R		29.48	ug/L	3.559	12.07	79.54
As1891_A	F	-219.9	ug/L	0.2244	0.1021	-58.04
B_2089_A		-16.16	ug/L	0.5083	3.146	-10.81
Ba4554_R		115.9	ug/L	0.1428	0.1232	9,666
Be3130_R		0.02697	ug/L	0.01317	48.81	-2.118
Ca3158_R		1,104	ug/L	6.097	0.5522	1,524
Cd2265_A		0.7805	ug/L	0.006096	0.7810	5.906
Co2286_A		2.050	ug/L	0.008615	0.4203	5.745
Cr2677_A		0.3627	ug/L	0.2540	70.04	10.92
Cu3273_A		1.428	ug/L	0.1244	8.709	-2.799
Fe2599_R		-9.965	ug/L	0.6790	6.814	28.34
K_7664_R		290.3	ug/L	11.96	4.120	199.3
Li6707_R		0.5024	ug/L	0.1708	34.00	11.69
Mg2025_A	F	-245.4	ug/L	7.250	2.955	-56.85
Mn2576_R		20.11	ug/L	0.1966	0.9777	227.0
Mo2020_A		-8.964	ug/L	0.4669	5.209	-19.91
Na5895_R	W	67,850	ug/L	162.4	0.2394	184,400
Ni2316_A		-0.6274	ug/L	0.03197	5.096	-0.3529
Pb2203_A		3.871	ug/L	1.119	28.91	1.718
Sb2068_A		36.93	ug/L	0.04586	0.1242	13.94
Se1960_A		453.7	ug/L	10.98	2.419	89.89
Si2516_R		462.3	ug/L	26.15	5.656	333.6
Sn1899_A		116.3	ug/L	4.104	3.530	39.05
Sr4215_R		127.9	ug/L	0.4268	0.3337	14,370
Ti3349_A		0.8189	ug/L	0.1836	22.42	1.214
Tl1908_A	F	-387.7	ug/L	7.095	1.830	-145.2
V_2924_A		0.1745	ug/L	0.1814	103.9	-1.240
Zn2062_A		15.93	ug/L	1.676	10.52	29.35
Y_3600_R		20,592	Cts/S	30.800	0.14957	20,592
Y_2243_A		5,798.3	Cts/S	74.463	1.2842	5,798.3
Y_3600_A		119,280	Cts/S	564.05	0.47287	119,280

SO4911-009

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 1:40:14PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO4911-009

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 1:40:14PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1073	ug/L	0.06066	56.53	-15.36
Al3961_R		24.08	ug/L	2.779	11.54	74.70
As1891_A	F	-284.6	ug/L	4.242	1.491	-71.85
B_2089_A		-18.35	ug/L	0.1929	1.052	-12.84
Ba4554_R		219.3	ug/L	2.394	1.092	17,990
Be3130_R		-0.004800	ug/L	0.007041	146.7	-5.839
Ca3158_R		4,139	ug/L	11.75	0.2840	5,590
Cd2265_A		1.257	ug/L	0.05789	4.604	9.883
Co2286_A		2.412	ug/L	0.2424	10.05	6.407
Cr2677_A		0.3725	ug/L	0.4024	108.0	10.40
Cu3273_A		1.195	ug/L	0.1106	9.251	-5.536
Fe2599_R		-14.69	ug/L	1.009	6.872	17.37
K_7664_R		1,275	ug/L	12.38	0.9710	959.0
Li6707_R		1.628	ug/L	0.2782	17.09	30.24
Mg2025_A	F	-130.8	ug/L	3.345	2.558	-25.52
Mn2576_R		16.79	ug/L	0.3918	2.333	187.3
Mo2020_A	F	-12.27	ug/L	0.06170	0.5027	-26.50
Na5895_R	W	114,600	ug/L	674.9	0.5888	306,400
Ni2316_A		-2.044	ug/L	0.00002900	0.001423	-2.066
Pb2203_A		4.397	ug/L	0.1439	3.272	2.015
Sb2068_A		48.34	ug/L	1.494	3.090	17.66
Se1960_A		613.2	ug/L	2.962	0.4830	116.7
Si2516_R		599.5	ug/L	31.43	5.243	401.7
Sn1899_A		156.5	ug/L	0.8966	0.5729	50.29
Sr4215_R		16.99	ug/L	0.03964	0.2333	1,863
Ti3349_A		0.1496	ug/L	0.05693	38.07	-12.66
Tl1908_A	F	-518.6	ug/L	0.2084	0.04018	-186.7
V_2924_A		0.3717	ug/L	0.1698	45.69	0.8836
Zn2062_A		26.02	ug/L	1.672	6.426	46.13
Y_3600_R		20,261	Cts/S	52.434	0.25879	20,261
Y_2243_A		5,581.1	Cts/S	22.729	0.40725	5,581.1
Y_3600_A		112,480	Cts/S	425.00	0.37784	112,480

SO4911-010

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 1:44:41PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3341	ug/L	0.2478	74.16	-12.70
Al3961_R		12.91	ug/L	0.4531	3.510	59.80
As1891_A	F	-190.2	ug/L	2.918	1.534	-51.59
B_2089_A		-14.89	ug/L	0.1979	1.329	-9.577
Ba4554_R		82.05	ug/L	0.2923	0.3563	6,718
Be3130_R		-0.006598	ug/L	0.02549	386.4	-6.067
Ca3158_R		2,664	ug/L	77.91	2.925	3,594
Cd2265_A		0.8132	ug/L	0.1476	18.15	6.346
Co2286_A		1.801	ug/L	0.1727	9.585	5.234
Cr2677_A		0.1452	ug/L	0.08979	61.84	8.592
Cu3273_A		0.5404	ug/L	0.3305	61.16	-14.36
Fe2599_R		-14.10	ug/L	0.4600	3.263	18.65
K_7664_R		529.3	ug/L	1.512	0.2858	380.4
Li6707_R		0.3784	ug/L	0.004726	1.249	9.425
Mg2025_A	F	-152.3	ug/L	3.151	2.069	-32.97
Mn2576_R		9.000	ug/L	0.3147	3.497	102.4
Mo2020_A		-7.640	ug/L	0.04703	0.6156	-17.27
Na5895_R	W	70,220	ug/L	217.6	0.3099	187,300
Ni2316_A		-0.7615	ug/L	0.4574	60.07	-0.5210

SO4911-010

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 1:44:41PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		2.998	ug/L	1.002	33.43	1.135
Sb2068_A		31.86	ug/L	0.4154	1.304	12.25
Se1960_A		401.2	ug/L	1.525	0.3801	81.47
Si2516_R		149.4	ug/L	21.97	14.70	160.3
Sn1899_A		101.5	ug/L	1.057	1.041	35.02
Sr4215_R		8.094	ug/L	0.03345	0.4132	876.5
Ti3349_A		0.2552	ug/L	0.05429	21.27	-10.93
Tl1908_A	F	-340.6	ug/L	0.5523	0.1622	-130.6
V_2924_A		0.2189	ug/L	0.09622	43.95	-0.8281
Zn2062_A		24.07	ug/L	1.741	7.236	45.36
Y_3600_R		20,214	Cts/S	80.879	0.40012	20,214
Y_2243_A		5,934.0	Cts/S	11.629	0.19598	5,934.0
Y_3600_A		117,870	Cts/S	1,442.6	1.2240	117,870

SO4911-011

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 1:49:06PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2989	ug/L	0.06839	22.88	-13.16
Al3961_R		28.80	ug/L	1.851	6.428	80.80
As1891_A	F	-225.7	ug/L	4.343	1.924	-59.87
B_2089_A		-17.86	ug/L	0.3764	2.108	-12.80
Ba4554_R		207.9	ug/L	4.983	2.397	17,170
Be3130_R		-0.004761	ug/L	0.01935	406.4	-5.928
Ca3158_R		3,822	ug/L	19.51	0.5106	5,202
Cd2265_A		0.7967	ug/L	0.08281	10.39	6.091
Co2286_A		1.939	ug/L	0.08801	4.539	5.495
Cr2677_A		0.2301	ug/L	0.09524	41.39	9.406
Cu3273_A		0.7757	ug/L	0.02979	3.841	-11.25
Fe2599_R		-9.898	ug/L	0.5082	5.134	28.24
K_7664_R		624.0	ug/L	43.19	6.921	457.9
Li6707_R		0.6374	ug/L	0.3739	58.66	13.89
Mg2025_A	F	-150.2	ug/L	3.228	2.149	-31.85
Mn2576_R		8.936	ug/L	0.4275	4.784	102.7
Mo2020_A		-9.442	ug/L	0.01922	0.2036	-21.14
Na5895_R	W	82,820	ug/L	1,688	2.038	223,100
Ni2316_A		-1.609	ug/L	0.3336	20.73	-1.589
Pb2203_A		3.492	ug/L	0.9703	27.78	1.465
Sb2068_A		39.25	ug/L	0.3810	0.9705	14.93
Se1960_A		482.7	ug/L	7.249	1.502	96.14
Si2516_R		588.6	ug/L	28.80	4.892	398.8
Sn1899_A		122.9	ug/L	0.7704	0.6267	41.47
Sr4215_R		20.49	ug/L	0.5610	2.738	2,267
Ti3349_A		0.6286	ug/L	0.1234	19.63	-2.911
Tl1908_A	F	-415.7	ug/L	5.179	1.246	-156.5
V_2924_A		0.3672	ug/L	0.2743	74.69	0.7644
Zn2062_A		15.83	ug/L	1.105	6.983	29.35
Y_3600_R		20,414	Cts/S	199.70	0.97825	20,414
Y_2243_A		5,831.2	Cts/S	11.003	0.18869	5,831.2
Y_3600_A		117,330	Cts/S	1,068.7	0.91088	117,330

SO5261-015

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 1:53:31PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO5261-015

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 1:53:31PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.6798	ug/L	2.346	345.2	-20.12
Al3961_R		-525.4	ug/L	33.35	6.349	58.25
As1891_A		-57.14	ug/L	20.53	35.93	-3.485
B_2089_A		598.3	ug/L	7.006	1.171	85.25
Ba4554_R		81.04	ug/L	1.054	1.301	602.7
Be3130_R		-0.3405	ug/L	0.1598	46.93	-8.382
Ca3158_R	W	846,000	ug/L	6,740	0.7966	102,000
Cd2265_A		0.1110	ug/L	0.7287	656.4	-0.9512
Co2286_A		4.481	ug/L	1.617	36.09	1.933
Cr2677_A		6.372	ug/L	0.7039	11.05	15.00
Cu3273_A		1.060	ug/L	1.762	166.2	-20.97
Fe2599_R		1,832	ug/L	14.78	0.8067	409.3
K_7664_R		43,360	ug/L	139.6	0.3219	2,980
Li6707_R		187.2	ug/L	10.68	5.704	281.4
Mg2025_A	W	275,200	ug/L	6,205	2.255	8,341
Mn2576_R		9,796	ug/L	97.32	0.9935	9,538
Mo2020_A		-1.762	ug/L	1.938	110.0	0.2973
Na5895_R	F	2,872,000	ug/L	29,510	1.028	686,900
Ni2316_A		5.278	ug/L	1.793	33.98	1.320
Pb2203_A		8.161	ug/L	1.148	14.07	-0.4741
Sb2068_A		7.715	ug/L	6.048	78.39	-0.08633
Se1960_A		102.4	ug/L	37.89	37.00	3.390
Si2516_R		8,894	ug/L	92.38	1.039	498.3
Sn1899_A		21.75	ug/L	9.280	42.67	1.898
Sr4215_R		6,741	ug/L	22.28	0.3305	66,730
Ti3349_A		-1.417	ug/L	1.572	111.0	-20.18
Tl1908_A		-107.2	ug/L	26.51	24.73	-5.816
V_2924_A		1.141	ug/L	2.641	231.5	-5.854
Zn2062_A		75.35	ug/L	4.626	6.140	15.96
Y_3600_R		18,129	Cts/S	30.064	0.16583	18,129
Y_2243_A		6,630.4	Cts/S	60.420	0.91125	6,630.4
Y_3600_A		122,860	Cts/S	563.62	0.45877	122,860

SO5261-015

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 1:57:59PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-2.419	ug/L	1.285	53.12	-21.31
Al3961_R		-817.1	ug/L	65.45	8.010	32.06
As1891_A		-41.80	ug/L	9.816	23.49	-2.529
B_2089_A		593.0	ug/L	2.665	0.4495	48.69
Ba4554_R		78.04	ug/L	0.7408	0.9493	298.9
Be3130_R		-0.1012	ug/L	0.3914	386.9	-5.343
Ca3158_R	W	833,400	ug/L	8,529	1.023	51,000
Cd2265_A		-0.5172	ug/L	1.553	300.4	-1.594
Co2286_A		2.805	ug/L	7.571	269.9	1.093
Cr2677_A		8.828	ug/L	1.152	13.05	12.90
Cu3273_A		-1.974	ug/L	4.406	223.2	-24.52
Fe2599_R		1,647	ug/L	74.40	4.517	211.7
K_7664_R		42,470	ug/L	331.2	0.7798	1,468
Li6707_R		185.4	ug/L	3.375	1.821	142.8
Mg2025_A		273,600	ug/L	1.039	0.0003800	4,340
Mn2576_R		9,588	ug/L	107.4	1.120	4,739
Mo2020_A		-4.533	ug/L	0.9724	21.45	0.1979
Na5895_R	W	2,807,000	ug/L	8,708	0.3102	340,700
Ni2316_A		5.267	ug/L	0.6632	12.59	0.9895

SO5261-015

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 1:57:59PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		-1.450	ug/L	6.302	434.5	-1.244
Sb2068_A		-12.53	ug/L	8.039	64.14	-0.7499
Se1960_A		60.57	ug/L	4.803	7.930	1.793
Si2516_R		8,904	ug/L	80.36	0.9025	289.7
Sn1899_A		-1.542	ug/L	1.255	81.38	1.103
Sr4215_R		6,549	ug/L	41.28	0.6303	32,880
Ti3349_A		-3.320	ug/L	3.569	107.5	-21.39
Tl1908_A		-83.60	ug/L	11.13	13.31	-2.940
V_2924_A		-2.545	ug/L	2.161	84.89	-6.777
Zn2062_A		110.1	ug/L	0.5193	0.4716	12.22
Y_3600_R		18,396	Cts/S	29.007	0.15768	18,396
Y_2243_A		6,929.9	Cts/S	30.795	0.44438	6,929.9
Y_3600_A		126,860	Cts/S	411.09	0.32405	126,860

SO5596-001

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 2:02:28PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.2788	ug/L	0.1126	40.39	-24.78
Al3961_R		-14.65	ug/L	5.479	37.39	24.06
As1891_A		11.41	ug/L	1.303	11.43	1.719
B_2089_A		109.6	ug/L	0.1113	0.1016	165.6
Ba4554_R		1.495	ug/L	0.1379	9.226	123.7
Be3130_R		-0.007930	ug/L	0.006755	85.19	-5.868
Ca3158_R		1,309	ug/L	27.89	2.130	1,665
Cd2265_A		0.02784	ug/L	0.05834	209.6	-1.264
Co2286_A		0.1950	ug/L	0.08296	42.53	1.336
Cr2677_A		0.1432	ug/L	0.1477	103.2	9.680
Cu3273_A		16.15	ug/L	0.1513	0.9368	215.0
Fe2599_R		-11.54	ug/L	1.113	9.642	22.85
K_7664_R		3,386	ug/L	22.75	0.6719	2,432
Li6707_R		5.226	ug/L	0.005955	0.1140	84.40
Mg2025_A		315.0	ug/L	5.994	1.903	116.3
Mn2576_R		1.764	ug/L	0.1712	9.708	22.63
Mo2020_A		-0.2255	ug/L	0.1107	49.10	0.2416
Na5895_R	W	125,300	ug/L	469.8	0.3749	314,100
Ni2316_A		0.1016	ug/L	0.09765	96.07	0.8015
Pb2203_A		1.454	ug/L	0.2910	20.01	0.03463
Sb2068_A		0.4167	ug/L	0.7916	190.0	-0.2663
Se1960_A		1.135	ug/L	0.4875	42.94	1.371
Si2516_R		4,654	ug/L	62.00	1.332	2,412
Sn1899_A		-0.07353	ug/L	0.2624	356.9	1.175
Sr4215_R		9.487	ug/L	0.03769	0.3973	967.9
Ti3349_A		0.1203	ug/L	0.08954	74.45	-15.52
Tl1908_A		-1.366	ug/L	0.04658	3.409	-1.559
V_2924_A		-0.2181	ug/L	0.1703	78.09	-6.292
Zn2062_A		4.060	ug/L	0.4866	11.99	9.623
Y_3600_R		18,990	Cts/S	10.435	0.054947	18,990
Y_2243_A		7,369.1	Cts/S	21.786	0.29564	7,369.1
Y_3600_A		133,300	Cts/S	350.67	0.26306	133,300

SO5463-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 2:06:55PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO5463-002

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 2:06:55PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.798	ug/L	0.1582	8.799	-172.7
Al3961_R		76.00	ug/L	0.08155	0.1073	168.1
As1891_A	W	2,135	ug/L	6.862	0.3215	668.9
B_2089_A		74.85	ug/L	0.07248	0.09684	112.4
Ba4554_R		42.83	ug/L	0.6434	1.502	3,224
Be3130_R		0.004244	ug/L	0.03064	721.8	-4.627
Ca3158_R	W	48,780	ug/L	508.6	1.043	60,230
Cd2265_A		-1.106	ug/L	0.1446	13.08	99.48
Co2286_A		16.69	ug/L	0.01496	0.08965	53.38
Cr2677_A		-0.07800	ug/L	0.1096	140.5	15.80
Cu3273_A		1.075	ug/L	0.07949	7.393	-18.95
Fe2599_R	W	57,480	ug/L	490.4	0.8531	117,100
K_7664_R		8,741	ug/L	100.6	1.151	6,178
Li6707_R		6.611	ug/L	0.3933	5.949	103.6
Mg2025_A		7,483	ug/L	24.96	0.3335	2,447
Mn2576_R	W	2,817	ug/L	22.06	0.7831	28,030
Mo2020_A		1.463	ug/L	0.1588	10.86	4.847
Na5895_R		17,940	ug/L	192.1	1.071	44,020
Ni2316_A		6.582	ug/L	0.2268	3.445	7.717
Pb2203_A		0.4364	ug/L	0.5658	129.6	1.136
Sb2068_A		-1.454	ug/L	0.3537	24.33	-0.2283
Se1960_A		0.4320	ug/L	2.158	499.5	1.825
Si2516_R		13,330	ug/L	164.5	1.233	6,611
Sn1899_A		1.588	ug/L	0.7439	46.86	1.804
Sr4215_R		516.5	ug/L	5.908	1.144	52,340
Ti3349_A		3.280	ug/L	0.04167	1.270	60.22
Tl1908_A		-3.000	ug/L	2.150	71.67	-3.608
V_2924_A		-0.08349	ug/L	0.0003670	0.4396	-7.693
Zn2062_A		4.456	ug/L	0.2580	5.790	10.20
Y_3600_R		18,559	Cts/S	82.174	0.44277	18,559
Y_2243_A		7,125.6	Cts/S	39.657	0.55655	7,125.6
Y_3600_A		130,710	Cts/S	231.71	0.17727	130,710

SO5463-002L

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 2:11:15PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.797	ug/L	0.7828	43.55	-52.39
Al3961_R		-53.68	ug/L	2.048	3.815	36.58
As1891_A		2,115	ug/L	7.204	0.3405	134.8
B_2089_A		75.30	ug/L	0.8237	1.094	30.84
Ba4554_R		43.08	ug/L	0.5489	1.274	666.9
Be3130_R		0.04565	ug/L	0.1099	240.8	-3.960
Ca3158_R		49,890	ug/L	665.3	1.334	12,540
Cd2265_A		-1.025	ug/L	0.3055	29.81	19.81
Co2286_A		16.74	ug/L	0.1427	0.8525	11.58
Cr2677_A		1.306	ug/L	1.395	106.9	12.96
Cu3273_A		1.736	ug/L	0.4901	28.23	-21.57
Fe2599_R		58,480	ug/L	880.8	1.506	24,280
K_7664_R		8,833	ug/L	148.4	1.680	1,249
Li6707_R		8.593	ug/L	2.110	24.56	29.60
Mg2025_A		7,743	ug/L	17.41	0.2248	529.0
Mn2576_R		2,860	ug/L	35.43	1.239	5,795
Mo2020_A		0.7866	ug/L	0.8629	109.7	1.320
Na5895_R		17,920	ug/L	131.6	0.7348	9,038
Ni2316_A		8.466	ug/L	2.082	24.59	2.680

SO5463-002L

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 2:11:15PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.2877	ug/L	0.2838	98.67	-0.7905
Sb2068_A		-6.181	ug/L	5.553	89.83	-0.9080
Se1960_A		4.412	ug/L	0.4363	9.889	1.440
Si2516_R		13,230	ug/L	66.58	0.5032	1,395
Sn1899_A		4.216	ug/L	0.2214	5.252	1.548
Sr4215_R		519.1	ug/L	4.566	0.8797	10,690
Ti3349_A		3.835	ug/L	0.3268	8.520	0.2377
Tl1908_A		-11.98	ug/L	4.131	34.47	-2.319
V_2924_A		-1.140	ug/L	0.4404	38.62	-7.086
Zn2062_A		39.09	ug/L	0.9022	2.308	18.30
Y_3600_R		18,882	Cts/S	157.58	0.83455	18,882
Y_2243_A		7,329.7	Cts/S	12.999	0.17735	7,329.7
Y_3600_A		134,540	Cts/S	590.99	0.43926	134,540

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 2:15:38PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		481.3	ug/L	2.154	0.4475	8,095
Al3961_R		12,440	ug/L	79.07	0.6358	13,850
As1891_A		499.5	ug/L	3.793	0.7593	158.6
B_2089_A		495.8	ug/L	2.302	0.4642	723.0
Ba4554_R		501.3	ug/L	0.1760	0.03510	37,780
Be3130_R		496.9	ug/L	0.6577	0.1323	55,000
Ca3158_R		12,440	ug/L	88.82	0.7141	15,420
Cd2265_A		505.6	ug/L	1.894	0.3747	5,843
Co2286_A		513.1	ug/L	3.276	0.6385	1,634
Cr2677_A		500.8	ug/L	2.185	0.4362	5,715
Cu3273_A		496.5	ug/L	1.016	0.2047	7,302
Fe2599_R		12,680	ug/L	72.22	0.5696	25,960
K_7664_R		12,340	ug/L	16.90	0.1370	8,762
Li6707_R		497.7	ug/L	0.9636	0.1936	7,610
Mg2025_A		12,680	ug/L	84.85	0.6694	4,254
Mn2576_R		499.3	ug/L	4.763	0.9539	4,991
Mo2020_A		511.7	ug/L	1.764	0.3448	1,480
Na5895_R		12,360	ug/L	7.173	0.05804	30,470
Ni2316_A		514.3	ug/L	1.656	0.3220	810.0
Pb2203_A		509.1	ug/L	2.532	0.4973	446.4
Sb2068_A		496.8	ug/L	1.839	0.3702	248.2
Se1960_A		500.4	ug/L	2.443	0.4883	124.6
Si2516_R		12,800	ug/L	51.57	0.4028	6,380
Sn1899_A		509.9	ug/L	1.101	0.2159	211.1
Sr4215_R		502.8	ug/L	0.9555	0.1900	51,120
Ti3349_A		495.4	ug/L	2.032	0.4101	12,010
Tl1908_A		511.8	ug/L	2.708	0.5291	239.3
V_2924_A		496.8	ug/L	1.328	0.2673	5,529
Zn2062_A		501.2	ug/L	1.268	0.2530	1,156
Y_3600_R		18,624	Cts/S	30.718	0.16494	18,624
Y_2243_A		7,283.6	Cts/S	29.387	0.40347	7,283.6
Y_3600_A		132,860	Cts/S	68.676	0.051690	132,860

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 2:19:47PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 2:19:47PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.06311	ug/L	0.001007	1.596	-19.59
Al3961_R		-36.93	ug/L	8.247	22.33	-2.328
As1891_A		-0.4735	ug/L	0.9151	193.3	-2.178
B_2089_A		-0.4110	ug/L	0.1731	42.11	9.066
Ba4554_R		0.1480	ug/L	0.01495	10.10	20.23
Be3130_R		0.05838	ug/L	0.01833	31.40	1.642
Ca3158_R		-30.95	ug/L	1.473	4.760	-27.88
Cd2265_A		0.1315	ug/L	0.03146	23.93	-0.06112
Co2286_A		0.1635	ug/L	0.09050	55.34	1.248
Cr2677_A		0.4815	ug/L	0.01933	4.014	14.00
Cu3273_A		0.2949	ug/L	0.2485	84.28	-20.56
Fe2599_R		-14.38	ug/L	0.1075	0.7476	16.94
K_7664_R		15.65	ug/L	6.987	44.66	-15.65
Li6707_R		0.7672	ug/L	0.5730	74.69	14.96
Mg2025_A		-46.08	ug/L	0.1145	0.2484	-5.295
Mn2576_R		0.02440	ug/L	0.1090	446.6	4.808
Mo2020_A		0.5331	ug/L	0.08433	15.82	2.485
Na5895_R		-0.1296	ug/L	3.501	2,701	114.8
Ni2316_A		-0.2830	ug/L	0.1012	35.76	0.2032
Pb2203_A		0.1910	ug/L	0.1494	78.25	-1.104
Sb2068_A		-0.09303	ug/L	0.7233	777.5	-0.5276
Se1960_A		1.561	ug/L	0.5191	33.25	1.491
Si2516_R		13.02	ug/L	3.172	24.37	82.14
Sn1899_A		-0.7226	ug/L	0.4839	66.96	0.9135
Sr4215_R		0.08497	ug/L	0.04107	48.33	-7.232
Ti3349_A		0.3650	ug/L	0.07967	21.82	-9.857
Tl1908_A		-0.7858	ug/L	0.4602	58.56	-1.296
V_2924_A		0.2279	ug/L	0.07073	31.04	-1.364
Zn2062_A		0.09255	ug/L	0.09562	103.3	0.3589
Y_3600_R		18,997	Cts/S	173.91	0.91543	18,997
Y_2243_A		7,441.1	Cts/S	26.537	0.35663	7,441.1
Y_3600_A		137,770	Cts/S	1,078.0	0.78244	137,770

SO5463-002A

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 2:24:13PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		554.4	ug/L	3.751	0.6767	9,010
Al3961_R		11,330	ug/L	338.1	2.984	12,330
As1891_A	W	2,605	ug/L	18.03	0.6919	810.5
B_2089_A		577.2	ug/L	4.070	0.7052	813.0
Ba4554_R		564.9	ug/L	16.43	2.908	41,420
Be3130_R		526.0	ug/L	15.38	2.924	56,650
Ca3158_R	W	55,550	ug/L	1,872	3.370	66,980
Cd2265_A		497.7	ug/L	2.691	0.5408	5,682
Co2286_A		525.9	ug/L	2.754	0.5237	1,625
Cr2677_A		487.3	ug/L	5.218	1.071	5,474
Cu3273_A		506.8	ug/L	2.686	0.5301	7,317
Fe2599_R	W	64,390	ug/L	2,070	3.215	128,100
K_7664_R		19,340	ug/L	567.0	2.932	13,380
Li6707_R		540.8	ug/L	15.27	2.824	8,047
Mg2025_A		13,020	ug/L	79.57	0.6112	4,239
Mn2576_R	W	3,368	ug/L	113.1	3.359	32,730
Mo2020_A		525.6	ug/L	3.222	0.6129	1,475
Na5895_R		24,190	ug/L	683.6	2.827	57,930
Ni2316_A		512.5	ug/L	3.607	0.7037	780.8

SO5463-002A

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 2:24:13PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		504.6	ug/L	3.899	0.7726	431.1
Sb2068_A		503.9	ug/L	3.664	0.7270	245.0
Se1960_A		505.5	ug/L	0.1836	0.03632	122.8
Si2516_R		13,950	ug/L	375.9	2.695	6,753
Sn1899_A		521.8	ug/L	2.758	0.5286	209.6
Sr4215_R	W	1,058	ug/L	32.35	3.057	104,700
Ti3349_A		495.3	ug/L	3.013	0.6083	11,800
Tl1908_A		495.9	ug/L	1.912	0.3856	223.6
V_2924_A		494.0	ug/L	2.767	0.5602	5,399
Zn2062_A		491.8	ug/L	3.743	0.7610	1,100
Y_3600_R		18,128	Cts/S	264.41	1.4585	18,128
Y_2243_A		7,067.1	Cts/S	27.309	0.38643	7,067.1
Y_3600_A		130,580	Cts/S	220.40	0.16878	130,580

SO5463-002P

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 2:28:22PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		49.96	ug/L	0.5761	1.153	632.0
Al3961_R		2,142	ug/L	58.40	2.727	2,495
As1891_A	W	2,211	ug/L	12.53	0.5669	690.7
B_2089_A		590.2	ug/L	2.249	0.3810	822.5
Ba4554_R	W	2,092	ug/L	35.56	1.700	159,700
Be3130_R		51.67	ug/L	0.9995	1.934	5,789
Ca3158_R	W	49,650	ug/L	1,086	2.187	62,330
Cd2265_A		250.0	ug/L	0.9927	0.3971	2,915
Co2286_A		540.5	ug/L	2.597	0.4805	1,678
Cr2677_A		198.3	ug/L	0.5123	0.2584	2,262
Cu3273_A		260.2	ug/L	1.442	0.5541	3,781
Fe2599_R	W	56,950	ug/L	1,063	1.867	118,000
K_7664_R		18,370	ug/L	339.9	1.850	13,230
Li6707_R		524.8	ug/L	10.18	1.940	8,131
Mg2025_A		12,380	ug/L	87.04	0.7031	4,050
Mn2576_R	W	3,197	ug/L	68.06	2.129	32,350
Mo2020_A		108.0	ug/L	0.7708	0.7134	305.0
Na5895_R		24,840	ug/L	530.6	2.136	61,930
Ni2316_A		529.7	ug/L	2.304	0.4349	806.7
Pb2203_A		101.2	ug/L	1.437	1.420	87.44
Sb2068_A		99.32	ug/L	1.526	1.536	46.72
Se1960_A		102.4	ug/L	0.1646	0.1608	26.38
Si2516_R		14,050	ug/L	340.2	2.422	7,079
Sn1899_A		523.3	ug/L	0.9894	0.1891	211.2
Sr4215_R	W	1,018	ug/L	19.79	1.943	104,900
Ti3349_A		503.0	ug/L	2.548	0.5065	12,110
Tl1908_A		99.52	ug/L	0.2963	0.2977	43.83
V_2924_A		505.0	ug/L	1.024	0.2028	5,617
Zn2062_A		506.4	ug/L	0.4553	0.08991	1,139
Y_3600_R		18,871	Cts/S	171.11	0.90671	18,871
Y_2243_A		7,100.9	Cts/S	42.911	0.60430	7,100.9
Y_3600_A		132,050	Cts/S	86.350	0.065391	132,050

SO5463-002S

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 2:32:34PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO5463-002S

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 2:32:34PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		51.45	ug/L	0.1931	0.3753	643.1
Al3961_R		2,189	ug/L	25.17	1.150	2,527
As1891_A	W	2,172	ug/L	13.89	0.6394	676.2
B_2089_A		602.1	ug/L	2.643	0.4391	835.8
Ba4554_R	W	2,123	ug/L	30.67	1.444	160,700
Be3130_R		52.64	ug/L	0.5339	1.014	5,848
Ca3158_R	W	49,400	ug/L	866.2	1.753	61,490
Cd2265_A		202.6	ug/L	0.5250	0.2592	2,374
Co2286_A		553.7	ug/L	2.035	0.3674	1,714
Cr2677_A		207.3	ug/L	0.8516	0.4107	2,311
Cu3273_A		271.9	ug/L	0.2034	0.07482	3,864
Fe2599_R	W	56,600	ug/L	905.7	1.600	116,300
K_7664_R		16,420	ug/L	192.3	1.171	11,720
Li6707_R		533.7	ug/L	6.947	1.302	8,198
Mg2025_A		11,410	ug/L	37.96	0.3326	3,725
Mn2576_R	W	3,220	ug/L	54.68	1.698	32,310
Mo2020_A		109.8	ug/L	0.5924	0.5393	309.0
Na5895_R		23,380	ug/L	305.3	1.306	57,810
Ni2316_A		540.7	ug/L	2.942	0.5442	820.6
Pb2203_A		81.77	ug/L	1.043	1.275	70.51
Sb2068_A		80.63	ug/L	0.5580	0.6921	37.35
Se1960_A		84.95	ug/L	0.9131	1.075	22.11
Si2516_R		14,120	ug/L	194.9	1.380	7,057
Sn1899_A		536.6	ug/L	1.887	0.3516	215.8
Sr4215_R	W	1,023	ug/L	14.48	1.415	104,500
Ti3349_A		529.6	ug/L	1.619	0.3057	12,470
Tl1908_A		80.67	ug/L	0.7556	0.9367	35.11
V_2924_A		528.3	ug/L	0.1742	0.03298	5,744
Zn2062_A		518.6	ug/L	1.911	0.3685	1,162
Y_3600_R		18,709	Cts/S	74.731	0.39943	18,709
Y_2243_A		7,075.9	Cts/S	5.4073	0.076419	7,075.9
Y_3600_A		129,070	Cts/S	142.95	0.11076	129,070

SO5463-004

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 2:36:47PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		2.178	ug/L	0.01480	0.6795	-170.0
Al3961_R		-14.37	ug/L	11.22	78.11	67.92
As1891_A	W	2,186	ug/L	19.12	0.8746	685.3
B_2089_A		76.14	ug/L	0.5054	0.6637	114.2
Ba4554_R		43.03	ug/L	0.3188	0.7409	3,230
Be3130_R		0.03277	ug/L	0.01226	37.41	-1.288
Ca3158_R	W	48,590	ug/L	783.3	1.612	59,820
Cd2265_A		-1.094	ug/L	0.2063	18.87	101.0
Co2286_A		16.17	ug/L	0.2352	1.455	51.78
Cr2677_A		-0.3911	ug/L	0.2532	64.73	12.45
Cu3273_A		0.6552	ug/L	0.2103	32.10	-25.38
Fe2599_R	W	58,150	ug/L	534.2	0.9185	118,200
K_7664_R		8,675	ug/L	106.9	1.233	6,113
Li6707_R		7.129	ug/L	0.1426	2.001	111.2
Mg2025_A		7,442	ug/L	58.56	0.7869	2,434
Mn2576_R	W	2,815	ug/L	47.95	1.703	27,940
Mo2020_A		1.728	ug/L	0.04408	2.551	5.598
Na5895_R		17,560	ug/L	171.4	0.9761	42,980
Ni2316_A		5.948	ug/L	0.3711	6.238	6.714

SO5463-004

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 2:36:47PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		0.3498	ug/L	0.3672	105.0	1.091
Sb2068_A		-2.162	ug/L	0.4711	21.79	-0.5631
Se1960_A		0.1193	ug/L	0.2118	177.5	1.753
Si2516_R		13,270	ug/L	163.8	1.234	6,562
Sn1899_A		1.196	ug/L	0.1484	12.41	1.648
Sr4215_R		513.1	ug/L	5.530	1.078	51,840
Ti3349_A		1.106	ug/L	0.1620	14.64	8.392
Tl1908_A		-2.781	ug/L	0.5435	19.54	-3.511
V_2924_A		0.1091	ug/L	0.1664	152.6	-5.533
Zn2062_A		4.118	ug/L	0.01938	0.4705	9.437
Y_3600_R		18,506	Cts/S	88.591	0.47872	18,506
Y_2243_A		7,127.9	Cts/S	38.820	0.54461	7,127.9
Y_3600_A		131,960	Cts/S	1,980.7	1.5011	131,960

SO5463-004L

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 2:41:08PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.314	ug/L	0.2324	17.69	-54.24
Al3961_R		-137.6	ug/L	26.76	19.44	17.38
As1891_A		2,140	ug/L	6.268	0.2929	137.3
B_2089_A		73.07	ug/L	0.9252	1.266	30.43
Ba4554_R		43.71	ug/L	0.4069	0.9308	678.2
Be3130_R		0.1688	ug/L	0.09798	58.03	-1.167
Ca3158_R		48,070	ug/L	1,528	3.180	12,110
Cd2265_A		-0.9251	ug/L	0.3748	40.51	20.05
Co2286_A		15.31	ug/L	0.5576	3.642	10.74
Cr2677_A		0.5794	ug/L	1.539	265.6	11.36
Cu3273_A		1.494	ug/L	0.07358	4.926	-22.45
Fe2599_R		58,140	ug/L	1,968	3.385	24,190
K_7664_R		8,479	ug/L	207.2	2.444	1,200
Li6707_R		11.10	ug/L	3.329	30.00	37.35
Mg2025_A		7,586	ug/L	55.75	0.7349	522.1
Mn2576_R		2,797	ug/L	93.49	3.342	5,680
Mo2020_A		2.198	ug/L	0.5538	25.19	2.157
Na5895_R		17,180	ug/L	593.4	3.453	8,693
Ni2316_A		6.511	ug/L	1.439	22.11	2.085
Pb2203_A		3.195	ug/L	1.505	47.12	-0.2782
Sb2068_A		0.2563	ug/L	0.4591	179.1	-0.2562
Se1960_A		1.116	ug/L	10.82	969.8	1.282
Si2516_R		12,890	ug/L	532.8	4.132	1,364
Sn1899_A		2.447	ug/L	3.416	139.6	1.412
Sr4215_R		509.2	ug/L	19.14	3.759	10,510
Ti3349_A		0.6301	ug/L	1.232	195.6	-15.62
Tl1908_A		-7.750	ug/L	0.5445	7.026	-1.928
V_2924_A		-0.5420	ug/L	0.7332	135.3	-5.752
Zn2062_A		20.62	ug/L	0.04682	0.2271	9.786
Y_3600_R		18,929	Cts/S	295.08	1.5589	18,929
Y_2243_A		7,382.1	Cts/S	24.672	0.33421	7,382.1
Y_3600_A		135,580	Cts/S	166.87	0.12308	135,580

SO5463-004A

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 2:45:31PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO5463-004A

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 2:45:31PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	W	1,089	ug/L	5.861	0.5384	17,920
Al3961_R		10,930	ug/L	439.5	4.020	12,230
As1891_A	W	2,654	ug/L	15.05	0.5670	826.3
B_2089_A		583.3	ug/L	3.821	0.6550	822.0
Ba4554_R		548.3	ug/L	22.68	4.137	41,340
Be3130_R		515.0	ug/L	21.17	4.110	57,030
Ca3158_R	W	52,700	ug/L	2,184	4.145	65,340
Cd2265_A		505.7	ug/L	2.630	0.5201	5,770
Co2286_A		532.5	ug/L	4.215	0.7916	1,647
Cr2677_A		494.7	ug/L	0.02346	0.004741	5,555
Cu3273_A		511.8	ug/L	2.593	0.5067	7,388
Fe2599_R	W	61,940	ug/L	2,714	4.381	126,700
K_7664_R		18,620	ug/L	625.0	3.357	13,240
Li6707_R		525.8	ug/L	19.28	3.667	8,046
Mg2025_A		12,970	ug/L	78.87	0.6080	4,227
Mn2576_R	W	3,224	ug/L	134.0	4.158	32,210
Mo2020_A		531.2	ug/L	2.918	0.5493	1,491
Na5895_R		22,780	ug/L	767.2	3.368	56,100
Ni2316_A		519.8	ug/L	1.803	0.3468	792.5
Pb2203_A		512.0	ug/L	1.181	0.2306	437.6
Sb2068_A		509.8	ug/L	1.674	0.3283	248.0
Se1960_A		511.2	ug/L	2.678	0.5239	124.2
Si2516_R		13,140	ug/L	498.4	3.794	6,545
Sn1899_A		529.9	ug/L	2.559	0.4830	213.0
Sr4215_R	W	1,013	ug/L	40.02	3.952	103,100
Ti3349_A		497.2	ug/L	0.8195	0.1648	11,840
Tl1908_A		503.8	ug/L	2.845	0.5648	227.4
V_2924_A		502.2	ug/L	1.139	0.2269	5,488
Zn2062_A		501.2	ug/L	2.592	0.5172	1,122
Y_3600_R		18,645	Cts/S	400.61	2.1487	18,645
Y_2243_A		7,071.3	Cts/S	30.271	0.42808	7,071.3
Y_3600_A		130,550	Cts/S	230.55	0.17659	130,550

SO5463-004P

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 2:49:40PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		52.08	ug/L	0.7124	1.368	649.8
Al3961_R		2,056	ug/L	56.75	2.760	2,373
As1891_A	W	2,354	ug/L	2.617	0.1112	731.5
B_2089_A		601.1	ug/L	2.285	0.3802	832.6
Ba4554_R	W	2,111	ug/L	61.68	2.922	159,300
Be3130_R		52.27	ug/L	1.625	3.109	5,792
Ca3158_R	W	50,890	ug/L	1,426	2.801	63,170
Cd2265_A		255.8	ug/L	1.116	0.4362	2,968
Co2286_A		547.9	ug/L	1.930	0.3523	1,692
Cr2677_A		203.1	ug/L	1.641	0.8082	2,281
Cu3273_A		266.1	ug/L	2.942	1.106	3,807
Fe2599_R	W	59,310	ug/L	1,945	3.280	121,500
K_7664_R		18,740	ug/L	424.3	2.264	13,350
Li6707_R		528.5	ug/L	15.30	2.895	8,096
Mg2025_A		12,680	ug/L	32.00	0.2523	4,126
Mn2576_R	W	3,299	ug/L	91.97	2.788	33,010
Mo2020_A		108.9	ug/L	0.1874	0.1721	305.7
Na5895_R	W	25,140	ug/L	574.5	2.285	61,990
Ni2316_A		536.3	ug/L	2.852	0.5318	812.0

SO5463-004P

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 2:49:40PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		103.8	ug/L	0.7996	0.7702	89.29
Sb2068_A		102.5	ug/L	0.5503	0.5368	48.01
Se1960_A		107.7	ug/L	1.618	1.502	27.53
Si2516_R		14,250	ug/L	398.7	2.799	7,099
Sn1899_A		532.8	ug/L	2.857	0.5362	213.8
Sr4215_R	W	1,031	ug/L	27.91	2.706	105,100
Ti3349_A		511.0	ug/L	4.835	0.9460	12,110
Tl1908_A		101.9	ug/L	0.2550	0.2504	44.61
V_2924_A		519.6	ug/L	5.461	1.051	5,690
Zn2062_A		512.8	ug/L	3.098	0.6041	1,147
Y_3600_R		18,663	Cts/S	264.44	1.4169	18,663
Y_2243_A		7,060.5	Cts/S	14.065	0.19920	7,060.5
Y_3600_A		130,000	Cts/S	862.85	0.66372	130,000

SO5463-004S

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 2:53:51PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		44.06	ug/L	1.189	2.698	512.1
Al3961_R		2,162	ug/L	151.8	7.021	2,454
As1891_A	W	2,337	ug/L	10.03	0.4293	730.7
B_2089_A		612.8	ug/L	3.594	0.5865	854.1
Ba4554_R	W	2,220	ug/L	145.9	6.573	165,000
Be3130_R		55.20	ug/L	3.618	6.555	6,024
Ca3158_R	W	52,240	ug/L	3,647	6.982	63,860
Cd2265_A		235.0	ug/L	0.6396	0.2722	2,757
Co2286_A		557.3	ug/L	1.984	0.3561	1,732
Cr2677_A		208.6	ug/L	0.1077	0.05164	2,345
Cu3273_A		283.8	ug/L	0.3441	0.1212	4,067
Fe2599_R	W	60,860	ug/L	4,065	6.679	122,800
K_7664_R		18,560	ug/L	1,240	6.684	13,010
Li6707_R		563.9	ug/L	37.39	6.631	8,508
Mg2025_A		12,250	ug/L	67.62	0.5519	4,013
Mn2576_R	W	3,416	ug/L	242.3	7.094	33,660
Mo2020_A		111.4	ug/L	0.1650	0.1482	314.5
Na5895_R	W	25,550	ug/L	1,757	6.875	62,050
Ni2316_A		564.3	ug/L	25.77	4.567	859.8
Pb2203_A		94.80	ug/L	0.4183	0.4413	82.15
Sb2068_A		91.81	ug/L	0.8933	0.9730	43.02
Se1960_A		96.68	ug/L	0.9335	0.9655	25.07
Si2516_R		14,880	ug/L	1,045	7.023	7,299
Sn1899_A		544.3	ug/L	1.614	0.2965	219.8
Sr4215_R	W	1,082	ug/L	72.37	6.690	108,600
Ti3349_A		534.7	ug/L	0.5702	0.1066	12,690
Tl1908_A		93.77	ug/L	0.2095	0.2234	41.15
V_2924_A		533.6	ug/L	0.6577	0.1233	5,849
Zn2062_A		528.2	ug/L	7.373	1.396	1,189
Y_3600_R		18,413	Cts/S	1,069.7	5.8092	18,413
Y_2243_A		7,105.6	Cts/S	9.8847	0.13911	7,105.6
Y_3600_A		130,140	Cts/S	22.438	0.017241	130,140

SO4239-041

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 2:58:03PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

SO4239-041

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 2:58:03PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3473	ug/L	0.3505	100.9	-15.39
Al3961_R		161.5	ug/L	1.959	1.213	224.4
As1891_A		-3.942	ug/L	0.2999	7.607	-3.238
B_2089_A	W	2,047	ug/L	8.793	0.4295	2,869
Ba4554_R		15.75	ug/L	0.3570	2.267	1,213
Be3130_R		-0.04947	ug/L	0.001449	2.929	-11.34
Ca3158_R		3,811	ug/L	22.00	0.5773	4,801
Cd2265_A		0.07649	ug/L	0.008327	10.89	-0.09723
Co2286_A		0.3016	ug/L	0.04190	13.89	1.716
Cr2677_A		3.543	ug/L	0.1590	4.487	49.02
Cu3273_A		6.002	ug/L	0.1090	1.816	65.06
Fe2599_R		277.1	ug/L	10.97	3.958	621.2
K_7664_R		1,084	ug/L	1.419	0.1310	756.1
Li6707_R		1.028	ug/L	0.004100	0.3989	18.89
Mg2025_A		1,138	ug/L	3.797	0.3338	385.6
Mn2576_R		12.40	ug/L	0.6761	5.451	130.5
Mo2020_A		0.4979	ug/L	0.07495	15.05	2.311
Na5895_R		14,930	ug/L	62.64	0.4197	37,310
Ni2316_A		2.341	ug/L	0.3931	16.79	4.255
Pb2203_A		1.569	ug/L	0.04413	2.813	0.1293
Sb2068_A		0.8701	ug/L	0.5671	65.17	-0.2891
Se1960_A		7.727	ug/L	0.1797	2.325	2.959
Si2516_R		575.0	ug/L	8.188	1.424	362.4
Sn1899_A		51.56	ug/L	0.7234	1.403	22.24
Sr4215_R		7.084	ug/L	0.1061	1.498	715.1
Ti3349_A		11.80	ug/L	0.08477	0.7184	271.2
Tl1908_A		-7.947	ug/L	0.5727	7.207	-4.595
V_2924_A		0.5545	ug/L	0.08799	15.87	2.372
Zn2062_A		280.0	ug/L	1.400	0.5001	641.2
Y_3600_R		18,896	Cts/S	42.171	0.22318	18,896
Y_2243_A		7,225.1	Cts/S	31.242	0.43241	7,225.1
Y_3600_A		134,490	Cts/S	998.45	0.74240	134,490

SO4239-042

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 3:02:25PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.01134	ug/L	0.2493	2,199	-25.99
Al3961_R		882.2	ug/L	12.60	1.429	1,028
As1891_A		-2.363	ug/L	0.1244	5.264	-2.848
B_2089_A	W	2,051	ug/L	1.164	0.05677	2,929
Ba4554_R		28.45	ug/L	0.2633	0.9254	2,165
Be3130_R		-0.01462	ug/L	0.006014	41.12	-10.26
Ca3158_R		6,166	ug/L	80.46	1.305	7,695
Cd2265_A		1.420	ug/L	0.01313	0.9243	18.24
Co2286_A		0.7097	ug/L	0.01049	1.478	3.306
Cr2677_A		6.598	ug/L	0.3359	5.091	84.51
Cu3273_A		24.55	ug/L	0.3586	1.460	342.2
Fe2599_R		1,582	ug/L	15.02	0.9496	3,299
K_7664_R		922.1	ug/L	5.060	0.5488	634.0
Li6707_R		1.900	ug/L	0.7839	41.27	32.12
Mg2025_A		1,475	ug/L	0.2199	0.01491	506.6
Mn2576_R		43.85	ug/L	0.07235	0.1650	445.1
Mo2020_A		0.8099	ug/L	0.08124	10.03	3.265
Na5895_R		15,230	ug/L	171.5	1.126	37,760
Ni2316_A		4.402	ug/L	0.1366	3.103	7.528

SO4239-042

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 3:02:25PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Pb2203_A		6.892	ug/L	1.149	16.68	4.869
Sb2068_A		3.748	ug/L	0.4458	11.89	1.197
Se1960_A		5.266	ug/L	0.8030	15.25	2.415
Si2516_R		1,116	ug/L	16.23	1.454	627.4
Sn1899_A		52.67	ug/L	0.1670	0.3169	23.14
Sr4215_R		15.42	ug/L	0.1510	0.9797	1,562
Ti3349_A		51.55	ug/L	0.8584	1.665	1,249
Tl1908_A		-6.365	ug/L	0.6791	10.67	-3.967
V_2924_A		2.254	ug/L	0.008825	0.3914	21.98
Zn2062_A		398.6	ug/L	0.9818	0.2463	930.4
Y_3600_R		18,737	Cts/S	42.726	0.22804	18,737
Y_2243_A		7,365.3	Cts/S	2.4501	0.033265	7,365.3
Y_3600_A		134,690	Cts/S	1,834.8	1.3623	134,690

CCV

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 3:06:46PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		480.8	ug/L	6.474	1.347	8,201
Al3961_R		12,610	ug/L	171.7	1.361	14,000
As1891_A		499.4	ug/L	0.8512	0.1705	159.0
B_2089_A		501.5	ug/L	0.4475	0.08923	733.0
Ba4554_R		512.4	ug/L	10.45	2.039	38,480
Be3130_R		506.6	ug/L	8.589	1.695	55,890
Ca3158_R		12,530	ug/L	191.8	1.531	15,490
Cd2265_A		504.8	ug/L	0.2669	0.05287	5,850
Co2286_A		512.7	ug/L	0.2892	0.05640	1,637
Cr2677_A		491.9	ug/L	8.010	1.628	5,693
Cu3273_A		492.9	ug/L	10.33	2.097	7,351
Fe2599_R		12,830	ug/L	262.7	2.048	26,180
K_7664_R		12,610	ug/L	254.3	2.017	8,926
Li6707_R		513.9	ug/L	6.693	1.302	7,833
Mg2025_A		12,890	ug/L	1.230	0.009542	4,336
Mn2576_R		503.0	ug/L	10.01	1.990	5,011
Mo2020_A		511.3	ug/L	0.3169	0.06197	1,483
Na5895_R		12,640	ug/L	194.3	1.537	31,060
Ni2316_A		514.0	ug/L	0.3319	0.06458	811.9
Pb2203_A		509.3	ug/L	0.5810	0.1141	447.8
Sb2068_A		500.7	ug/L	1.840	0.3674	250.8
Se1960_A		495.9	ug/L	0.2502	0.05046	123.9
Si2516_R		13,070	ug/L	166.1	1.271	6,489
Sn1899_A		510.3	ug/L	0.9446	0.1851	211.9
Sr4215_R		513.0	ug/L	8.608	1.678	52,000
Ti3349_A		489.2	ug/L	7.675	1.569	12,020
Tl1908_A		514.4	ug/L	0.3720	0.07232	241.1
V_2924_A		490.5	ug/L	8.694	1.773	5,536
Zn2062_A		498.4	ug/L	0.3927	0.07879	1,152
Y_3600_R		18,568	Cts/S	333.55	1.7964	18,568
Y_2243_A		7,303.9	Cts/S	12.856	0.17602	7,303.9
Y_3600_A		134,760	Cts/S	1,455.2	1.0798	134,760

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 3:10:55PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio

CCB

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 3:10:55PM
Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.5488	ug/L	0.2827	51.50	-10.99
Al3961_R		-30.00	ug/L	3.214	10.72	5.433
As1891_A		-0.6280	ug/L	1.140	181.5	-2.211
B_2089_A		1.554	ug/L	0.2046	13.17	11.80
Ba4554_R		0.3347	ug/L	0.2270	67.82	34.30
Be3130_R		0.2655	ug/L	0.1591	59.92	24.74
Ca3158_R		-25.96	ug/L	6.914	26.64	-21.54
Cd2265_A		0.2202	ug/L	0.006922	3.143	0.9825
Co2286_A		0.1068	ug/L	0.1489	139.3	1.058
Cr2677_A		0.3874	ug/L	0.4159	107.4	12.80
Cu3273_A		0.2243	ug/L	0.01461	6.513	-21.51
Fe2599_R		-9.951	ug/L	4.158	41.78	26.00
K_7664_R		11.68	ug/L	10.03	85.82	-18.42
Li6707_R		0.5150	ug/L	0.4845	94.08	11.00
Mg2025_A		-46.12	ug/L	1.389	3.012	-5.266
Mn2576_R		-0.05351	ug/L	0.002867	5.357	3.991
Mo2020_A		0.6570	ug/L	0.1768	26.91	2.828
Na5895_R		-7.909	ug/L	7.460	94.32	94.81
Ni2316_A		0.2618	ug/L	0.1184	45.24	1.067
Pb2203_A		0.2229	ug/L	0.9546	428.2	-1.066
Sb2068_A		0.1505	ug/L	0.2016	134.0	-0.3976
Se1960_A		0.1228	ug/L	0.4410	359.0	1.119
Si2516_R		20.34	ug/L	12.14	59.69	85.43
Sn1899_A		-1.151	ug/L	0.2163	18.80	0.7271
Sr4215_R		0.2551	ug/L	0.1498	58.73	10.24
Ti3349_A		0.6895	ug/L	0.08980	13.02	-1.685
Tl1908_A		-1.286	ug/L	0.3282	25.53	-1.523
V_2924_A		0.1072	ug/L	0.05316	49.58	-2.746
Zn2062_A		0.1431	ug/L	0.1819	127.1	0.4744
Y_3600_R		18,921	Cts/S	283.32	1.4974	18,921
Y_2243_A		7,381.4	Cts/S	19.182	0.25987	7,381.4
Y_3600_A		136,760	Cts/S	442.62	0.32365	136,760

SO4249-013

Method Name: FAST-2016_NO_AU
Method Revision: 1,011
Analyst Name: EP
Acquire Date: 9/3/2021 3:15:20PM
Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3736	ug/L	0.1636	43.78	-16.96
Al3961_R		606.9	ug/L	6.961	1.147	715.0
As1891_A		-4.193	ug/L	1.322	31.52	-3.370
B_2089_A	W	2,101	ug/L	1.879	0.08944	2,966
Ba4554_R		277.0	ug/L	4.222	1.524	20,840
Be3130_R		0.04876	ug/L	0.02558	52.45	-2.300
Ca3158_R		5,230	ug/L	94.51	1.807	6,480
Cd2265_A		0.03578	ug/L	0.03985	111.4	0.5660
Co2286_A		0.3556	ug/L	0.08249	23.20	2.060
Cr2677_A		4.435	ug/L	0.3345	7.543	58.93
Cu3273_A		9.533	ug/L	0.03115	0.3268	116.7
Fe2599_R		827.3	ug/L	11.11	1.343	1,734
K_7664_R		633.5	ug/L	8.789	1.387	424.1
Li6707_R		1.574	ug/L	0.2114	13.43	26.93
Mg2025_A		1,222	ug/L	2.071	0.1695	416.6
Mn2576_R		25.33	ug/L	0.3664	1.446	257.2
Mo2020_A		0.6066	ug/L	0.08603	14.18	2.641
Na5895_R		17,130	ug/L	160.0	0.9340	42,120
Ni2316_A		3.034	ug/L	0.1517	5.000	5.342

Logbooks and Supporting Documents

Katahdin Analytical Services, Inc.

Reagents and Consumables Information:

Metals Preparation Benchsheet

Method: 3010

HNO3: MSC246 **HCL:** MSC245 **Digestion Vessels:** MLD005000034

1:1 HNO3: MC3107 **1:1 HCL:** MC3103

Pipet **LCS/Spiking Information:**

MP11 **CLPP-SPK-1 (ID/Vol):** MS83325 / 0.05 mL

MP21 **CLPP-SPK-INT1 (ID/Vol):** MW20443 / 0.5 mL

MP31 **CLPP-SPK-INT2 (ID/Vol):** MW20444 / 0.5 mL

- - **Spike (ID/Vol):** - / - mL

Heat Source ID : 1A

Start Time: 0938 **/Temp.** 91 **°C**

End Time: 1604 **/Temp.** 90 **°C**

Thermometer ID/Pos: IAIC.30 13.5

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Bottle	pH <2
LCSWOH20ICW1	OH20ICW1	0.05	L	0.05	L	AQ	IC	CD	08/20/2021	-	✓
PBT1706A	OH20ICW1	~~0.005~~ 0.01	L		L	AQ	IC	CD	08/20/2021	-	
PBT1707A	OH20ICW1	↓	L		L	AQ	IC	CD	08/20/2021	-	
PBWOH20ICW1	OH20ICW1	0.05	L		L	AQ	IC	CD	08/20/2021	-	
SO5313-001D	OH20ICW1	↓	L		L	AQ	IC	CD	08/20/2021	H	
SO5372-001	OH20ICW1	0.01	L		L	AQ	IC	CD	08/20/2021	-	
SO5372-001P	OH20ICW1	↓	L		L	AQ	IC	CD	08/20/2021	-	
SO5372-001S	OH20ICW1	↓	L		L	AQ	IC	CD	08/20/2021	-	
SO5463-001	OH20ICW1	0.05	L		L	AQ	IC	CD	08/20/2021	C	
SO5463-002	OH20ICW1	↓	L		L	AQ	IC	CD	08/20/2021	H	
SO5463-003	OH20ICW1		L		L	AQ	IC	CD	08/20/2021	A	
SO5463-004	OH20ICW1		L		L	AQ	IC	CD	08/20/2021	C	
SO5464-002	OH20ICW1		L		L	AQ	IC	CD	08/20/2021	H	
SO5464-003	OH20ICW1		L		L	AQ	IC	CD	08/20/2021	↓	
SO5464-004	OH20ICW1		L		L	AQ	IC	CD	08/20/2021		
SO5464-005	OH20ICW1		L		L	AQ	IC	CD	08/20/2021		
SO5464-006	OH20ICW1		L		L	AQ	IC	CD	08/20/2021	↓	
SO5464-008	OH20ICW1		L		L	AQ	IC	CD	08/20/2021	D	
SO5464-009	OH20ICW1		L		L	AQ	IC	CD	08/20/2021	↓	
SO5464-010	OH20ICW1		L		L	AQ	IC	CD	08/20/2021		
SO5464-011	OH20ICW1	↓	L		L	AQ	IC	CD	08/20/2021		
SO5464-012	OH20ICW1		L		L	AQ	IC	CD	08/20/2021	↓	
SO5473-001	OH20ICW1	~~0.005~~ 0.01	L		L	AQ	IC	CD	08/20/2021	-	
SO5473-002	OH20ICW1	↓	L	↓	L	AQ	IC	CD	08/20/2021	-	↓

CD 8-20-21

Client ID's verified CD 8-20-21

REVIEWED
JJ 8/24/21
KATAHDIN ANALYTICAL
METALS SECTION

Katahdin Analytical Services 4000168

Katahdin Analytical Services, Inc.

Metals Preparation Benchsheet

Reagents and Consumables Information:

Method: 3010

HNO3: MSR247 HCL: MSR245 ~~MSR3219~~

Digestion Vessels: MLD0260000110

1:1 HNO3: MR3116 1:1 HCL: MR3103

Pipet	LCS/Spiking Information:
M11	CLPP-SPK-1 (ID/Vol): MS7378 / 0.05 mL
M21	CLPP-SPK-INT1 (ID/Vol): MW70443 / 0.5 mL
M21	CLPP-SPK-INT2 (ID/Vol): MW70444 / 0.5 mL
-	- Spike (ID/Vol): - / - mL

Heat Source ID : A

Start Time: 941 /Temp. 90 °C

End Time: 1610 /Temp. 92 °C

Thermometer ID/Pos: ALC30 / 4,5

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Bottle	pH <2
LCSWOH31ICW1	OH31ICW1	0.05	L	0.05 ~~0.1~~	L	AQ	IC	JT	08/31/2021		✓
PBWOH31ICW1	OH31ICW1		L		L	AQ	IC	JT	08/31/2021		
SO5463-002	OH31ICW1		L		L	AQ	IC	JT	08/31/2021	I	
SO5463-002P	OH31ICW1		L		L	AQ	IC	JT	08/31/2021	I	
SO5463-002S	OH31ICW1		L		L	AQ	IC	JT	08/31/2021	I	
SO5463-004	OH31ICW1		L		L	AQ	IC	JT	08/31/2021	A	
SO5463-004P	OH31ICW1		L		L	AQ	IC	JT	08/31/2021	A	
SO5463-004S	OH31ICW1		L		L	AQ	IC	JT	08/31/2021	A	
~~SO5688-001~~	~~OH31ICW1~~	~~0.01~~	~~L~~		~~L~~	~~AQ~~	~~IC~~	~~JT~~	~~08/31/2021~~		
~~SO5688-002~~	~~OH31ICW1~~	~~0.01~~	~~L~~		~~L~~	~~AQ~~	~~IC~~	~~JT~~	~~08/31/2021~~		
SO5689-001	OH31ICW1	0.05	L		L	AQ	IC	JT	08/31/2021	C	
SO5689-002	OH31ICW1		L		L	AQ	IC	JT	08/31/2021	A	
SO5689-003	OH31ICW1		L		L	AQ	IC	JT	08/31/2021	C	
SO5689-004	OH31ICW1		L		L	AQ	IC	JT	08/31/2021	A	
SO5689-005	OH31ICW1		L		L	AQ	IC	JT	08/31/2021	C	
SO5689-006	OH31ICW1		L		L	AQ	IC	JT	08/31/2021	A	
SO5689-007	OH31ICW1		L		L	AQ	IC	JT	08/31/2021	C	
SO5689-008	OH31ICW1		L		L	AQ	IC	JT	08/31/2021	A	
SO5689-009	OH31ICW1		L		L	AQ	IC	JT	08/31/2021	C	
SO5689-010	OH31ICW1		L		L	AQ	IC	JT	08/31/2021	A	

JT 8-31-21

Client IDs verified
IM 08-31-21

REVIEWED
CD 9-1-21
KATAHDIN ANALYTICAL
METALS SECTION

QA-064-Revision 5 -12/07/2018 Digestion performed by: TM On: 8-31-21 Page: OH100 Revision: 00

CONVENTIONAL AND PHYSICAL ANALYTICAL DATA

QC Summary Section

Quality Control Report

Blank Sample Summary Report

Alkalinity

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG304829	SM2320B	19-AUG-21	N/A	J 2.0 mg/L	5.0 mg/L	4.0

COD-Color

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG304988	SM 5220	23-AUG-21	N/A	U 10. mg/L	15. mg/L	10.

Chloride

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG305703	SW846 9056A	07-SEP-21	N/A	J 0.10 mg/L	2.0 mg/L	1.0
MBLANK	WG306238	SW846 9056A	15-SEP-21	N/A	J 0.12 mg/L	2.0 mg/L	1.0

Nitrate As N

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG304837	EPA 353.2	19-AUG-21	N/A	U 0.025 mg/L	0.050 mg/L	0.025

Solids-Filterable Residue

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG304712	SM 2540C	20-AUG-21	19-AUG-21	U 8.0 mg/L	10. mg/L	8.0

Sulfate

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG305663	SW846 9056A	06-SEP-21	N/A	U 1.0 mg/L	1.0 mg/L	0.50

Total Biochemical Oxygen Demand

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG304649	SM 5210B	23-AUG-21	18-AUG-21	U 1.0 mg/L	2.0 mg/L	1.0

Total Organic Carbon (1)

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG304831	SW846 9060A	19-AUG-21	N/A	J 0.11 mg/L	1.0 mg/L	0.50

Quality Control Report

Laboratory Control Sample Summary Report

Alkalinity

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG304829-2	LCS	WG304829	19-AUG-21	N/A	mg/L	120	130	112	80-120	
WG304829-5	LCSD	WG304829	19-AUG-21	N/A	mg/L	120	140	115	80-120	3

COD-Color

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG304988-2	LCS	WG304988	23-AUG-21	N/A	mg/L	75	74.	99	80-120	

Chloride

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG305703-2	LCS	WG305703	07-SEP-21	N/A	mg/L	3.75	3.58	95.5	90-110	
WG306238-2	LCS	WG306238	15-SEP-21	N/A	mg/L	3.75	3.90	104.	90-110	
WG306238-3	LCSD	WG306238	15-SEP-21	N/A	mg/L	3.75	3.63	96.8	90-110	7

Nitrate As N

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG304837-2	LCS	WG304837	19-AUG-21	N/A	mg/L	1	0.95	95	90-110	

Solids-Filterable Residue

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG304712-2	LCS	WG304712	20-AUG-21	19-AUG-21	mg/L	750	730	97	80-120	
WG304712-3	LCSD	WG304712	20-AUG-21	19-AUG-21	mg/L	750	730	97	80-120	0

Sulfate

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG305663-2	LCS	WG305663	06-SEP-21	N/A	mg/L	3.75	3.52	93.9	90-110	

Total Biochemical Oxygen Demand

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG304649-2	LCS	WG304649	23-AUG-21	18-AUG-21	mg/L	198	200	104	85-115	

Total Organic Carbon (1)

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG304831-2	LCS	WG304831	19-AUG-21	N/A	mg/L	50	52.	104	80-120	

Quality Control Report

Duplicate Sample Summary Report

COD-Color

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Result Units	Sample Result	Duplicate Result	RPD(%)	RPD Limit
WG304988-4	SO5463-2	WG304988	23-AUG-21	mg/L	U 15.	U 15.	NC	20

Solids-Filterable Residue

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Result Units	Sample Result	Duplicate Result	RPD(%)	RPD Limit
WG304712-4	SO5463-2	WG304712	20-AUG-21	mg/L	320	310	3	10

Quality Control Report

Matrix Spike Sample Summary Report

Alkalinity

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Result Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Recovery Limit
WG304829-6	MS	SO5463-2	WG304829	20-SEP-21	mg/L	120	230	274	60*	75 - 125
WG304829-7	MSD	SO5463-2	WG304829	20-SEP-21	mg/L	120	230	272	58*	75 - 125

COD-Color

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Result Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Recovery Limit
WG304988-3	MS	SO5463-2	WG304988	23-AUG-21	mg/L	100	U 15.	105	105	80 - 120

Chloride

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Result Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Recovery Limit
WG306238-4	MS	SO5463-2	WG306238	15-SEP-21	mg/L	7.5	27.9	35.1	96.1	90 - 110
WG306238-5	MSD	SO5463-2	WG306238	15-SEP-21	mg/L	7.5	27.9	35.2	96.7	90 - 110

Nitrate As N

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Result Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Recovery Limit
WG304837-3	MS	SO5463-2	WG304837	19-AUG-21	mg/L	0.5	U 0.050	.187	37*	90 - 110
WG304837-4	MSD	SO5463-2	WG304837	19-AUG-21	mg/L	0.5	U 0.050	.169	34*	90 - 110

Sulfate

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Result Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Recovery Limit
WG305663-5	MS	SO5463-2	WG305663	07-SEP-21	mg/L	7.5	22.1	* 28.2	80.7*	90 - 110
WG305663-6	MSD	SO5463-2	WG305663	07-SEP-21	mg/L	7.5	22.1	* 28.4	83.9*	90 - 110

Total Biochemical Oxygen Demand

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Result Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Recovery Limit
WG304649-5	MS	SO5463-2	WG304649	23-AUG-21	mg/L	1188	13.1	963	80	75 - 125
WG304649-6	MSD	SO5463-2	WG304649	23-AUG-21	mg/L	1188	13.1	939	78	75 - 125

Total Organic Carbon (1)

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Result Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Recovery Limit
WG304831-5	MS	SO5463-2	WG304831	20-AUG-21	mg/L	100	2.43	103	100	75 - 125
WG304831-6	MSD	SO5463-2	WG304831	20-AUG-21	mg/L	100	2.43	103	100	75 - 125

Sample Data Section

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level (PQL) or LOQ could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfite H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit
NFL	No Free Liquid Present	FLP	Free Liquid Present
NOD	No Odor Detected	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L. The reported value should be considered a minimum value.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 or 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Heather Levesque, PMP
SERES Engineering & Services, LLC
669 Marina Drive
Charleston,SC 29492

Lab Sample ID: SO5463-1
Report Date: 21-SEP-21
Project: Fort Devens SHL Air
SDG: SO5463

Sample Description	Matrix	Date Sampled	Date Received
MW-21-1S-BASELINE	AQ	18-AUG-21 09:05:00	18-AUG-21

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	320 mg/L	5.0	0.23	4	STDM 2320B	WG304829	19-AUG-21 14:56:03	N/A	N/A	
COD-Color	15. mg/L	15.	5.7	10	SM 5220	WG304988	23-AUG-21 15:29:00	N/A	N/A	
Chloride	36 mg/L	4.0	0.20	2.0	SW846 9056A	WG305703	07-SEP-21 16:57:00	N/A	N/A	
Nitrate As N	U0.25 mg/L	0.25	0.076	0.12	EPA 353.2	WG304837	19-AUG-21 14:19:40	N/A	N/A	I-7
Solids-Filterable Residue	400 mg/L	10.	5.0	8	STDM 2540C	WG304712	20-AUG-21 14:00:00	SM 2540C	19-AUG-21	
Sulfate	31 mg/L	2.0	0.13	1.0	SW846 9056A	WG305663	07-SEP-21 00:39:00	N/A	N/A	
Total Biochemical Oxygen Demand	21. mg/L	16.	1.9	1	SM 5210B	WG304649	23-AUG-21 11:27:00	SM 5210B	18-AUG-21 1647	
Total Organic Carbon (1)	7.1 mg/L	1.0	0.10	0.50	SW846 9060A	WG304831	20-AUG-21 01:45:10	N/A	N/A	

Katahdin Analytical Services 5000009

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Heather Levesque, PMP
SERES Engineering & Services, LLC
669 Marina Drive
Charleston,SC 29492

Lab Sample ID: SO5463-2
Report Date: 21-SEP-21
Project: Fort Devens SHL Air
SDG: SO5463

Sample Description	Matrix	Date Sampled	Date Received
MW-21-1D-BASELINE	AQ	18-AUG-21 10:50:00	18-AUG-21

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	230 mg/L	5.0	0.23	4	STDM 2320B	WG304829	19-AUG-21 15:00:41	N/A	N/A	
COD-Color	U15. mg/L	15.	5.7	10	SM 5220	WG304988	23-AUG-21 15:29:00	N/A	N/A	
Chloride	28 mg/L	4.0	0.20	2.0	SW846 9056A	WG306238	15-SEP-21 17:06:00	N/A	N/A	
Nitrate As N	U0.050 mg/L	0.050	0.015	0.025	EPA 353.2	WG304837	19-AUG-21 14:06:39	N/A	N/A	
Solids-Filterable Residue	320 mg/L	10.	5.0	8	STDM 2540C	WG304712	20-AUG-21 14:00:00	SM 2540C	19-AUG-21	
Sulfate	22 mg/L	2.0	0.13	1.0	SW846 9056A	WG305663	07-SEP-21 00:58:00	N/A	N/A	
Total Biochemical Oxygen Demand	13. mg/L	13.	1.5	1	SM 5210B	WG304649	23-AUG-21 11:33:00	SM 5210B	18-AUG-21 1657	
Total Organic Carbon (1)	2.4 mg/L	1.0	0.10	0.50	SW846 9060A	WG304831	20-AUG-21 02:24:11	N/A	N/A	

Katahdin Analytical Services 5000010

Raw Data Section

WET CHEMISTRY BATCH REPORT
Aug 20 2021, 11:41 am
Batch: WG304835

Parameter: Carbonate (As CaCO3)

Prep Date: N/A

Date Analyzed: 19-AUG-21

Prep Method: N/A

Analyst Initials: ZL

Prep Chemist: N/A

Sample	Samp Type	Method	Bicarb	pH	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SO5199-1	SAMP	SM 4500CO2 D		7.26pH	1	.55445	U5.0 mg/L	NA	5	.497	5		
SO5199-2	SAMP	SM 4500CO2 D		5.67pH	1	.0001	U5.0 mg/L	NA	5	.497	5		
SO5201-1	SAMP	SM 4500CO2 D		7.21pH	1	.59269	U5.0 mg/L	NA	5	.497	5		
SO5201-2	SAMP	SM 4500CO2 D		7.01pH	1	.52397	U5.0 mg/L	NA	5	.497	5		
SO5201-3	SAMP	SM 4500CO2 D		7.59pH	1	2.16814	U5.0 mg/L	NA	5	.497	5		
SO5291-1	SAMP	SM 4500CO2 D		6.94pH	1	.40064	U5.0 mg/L	NA	5	.497	5		
SO5291-2	SAMP	SM 4500CO2 D		7.08pH	1	.53857	U5.0 mg/L	NA	5	.497	5		
SO5291-3	SAMP	SM 4500CO2 D		5.90pH	1	.0002	U5.0 mg/L	NA	5	.497	5		
SO5292-1	SAMP	SM 4500CO2 D		6.95pH	1	.22614	U5.0 mg/L	NA	5	.497	5		
WG304835-1	MBLANK	SM 4500CO2 D		5.72pH	1	.00014	U5.0 mg/L	NA	5	.497	5		

Comments:

WG304835-1 SO5199-1

Entered by: ZL Date: 8/20/21 Accepted by: ZF Date: 8/20/21

Katahdin Analytical Services 5000012

WET CHEMISTRY BATCH REPORT
Aug 20 2021, 11:00 am
Batch: WG304834

Parameter: Bicarbonate (As CaCO3)

Date Analyzed: 19-AUG-21

Analyst Initials: ZL

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

Sample	Samp Type	Method	Alkalinity	pH	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SO5199-1	SAMP	SM 4500CO2 D	327.mg/L	7.26pH	1	326.39051	330 mg/L	NA	5	.497	5		
SO5199-2	SAMP	SM 4500CO2 D	2.22mg/L	5.67pH	1	2.21967	U5.0 mg/L	NA	5	.497	5		
SO5201-1	SAMP	SM 4500CO2 D	386.mg/L	7.21pH	1	385.21312	380 mg/L	NA	5	.497	5		
SO5201-2	SAMP	SM 4500CO2 D	546.mg/L	7.01pH	1	545.98592	540 mg/L	NA	5	.497	5		
SO5201-3	SAMP	SM 4500CO2 D	592.mg/L	7.59pH	1	590.14532	590 mg/L	NA	5	.497	5		
SO5291-1	SAMP	SM 4500CO2 D	490.mg/L	6.94pH	1	489.35301	490 mg/L	NA	5	.497	5		
SO5291-2	SAMP	SM 4500CO2 D	479.mg/L	7.08pH	1	478.75345	480 mg/L	NA	5	.497	5		
SO5291-3	SAMP	SM 4500CO2 D	2.67mg/L	5.90pH	1	2.6724	U5.0 mg/L	NA	5	.497	5		
SO5292-1	SAMP	SM 4500CO2 D	271.mg/L	6.95pH	1	270.55641	270 mg/L	NA	5	.497	5		
WG304834-1	MBLANK	SM 4500CO2 D	2.80mg/L	5.72pH	1	2.7966	U5.0 mg/L	NA	5	.497	5		

Comments:

WG304834-1 SO5199-1

Entered by: ZL Date: 8/20/21 Accepted by: ZF Date: 8/20/21

Katahdin Analytical Services 5000013

WET CHEMISTRY BATCH REPORT
Aug 20 2021, 10:59 am
Batch: WG304829 Run ID 1: R574878 Run ID 2: NONE

Parameter: Alkalinity
Prep Date: N/A

Date Analyzed: 19-AUG-21
Prep Method: N/A

Analyst Initials: ZL
Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SO4515-3	SAMP	STDM 2320B	50.0mL	50.0mL	1	'358.979	360 mg/L	NA	5	0.23	5.0		
SO5199-1	SAMP	STDM 2320B	50.0mL	50.0mL	1	'326.954	330 mg/L	NA	5	0.23	5.0		
SO5199-2	SAMP	STDM 2320B	50.0mL	50.0mL	1	'2.22	U5.0 mg/L	NA	5	0.23	5.0		
SO5201-1	SAMP	STDM 2320B	50.0mL	50.0mL	1	'385.814	380 mg/L	NA	5	0.23	5.0		
SO5201-2	SAMP	STDM 2320B	50.0mL	50.0mL	1	'546.515	550 mg/L	NA	5	0.23	5.0		
SO5201-3	SAMP	STDM 2320B	50.0mL	50.0mL	1	'592.333	590 mg/L	NA	5	0.23	5.0		
SO5284-1	SAMP	STDM 2320B	50.0mL	50.0mL	1	'150.942	150 mg/L	NA	5	0.23	5.0		
SO5291-1	SAMP	STDM 2320B	50.0mL	50.0mL	1	'489.758	490 mg/L	NA	5	0.23	5.0		
SO5291-2	SAMP	STDM 2320B	50.0mL	50.0mL	1	'479.298	480 mg/L	NA	5	0.23	5.0		
SO5291-3	SAMP	STDM 2320B	50.0mL	50.0mL	1	'2.673	U5.0 mg/L	NA	5	0.23	5.0		
SO5292-1	SAMP	STDM 2320B	50.0mL	50.0mL	1	'270.787	270 mg/L	NA	5	0.23	5.0		
SO5405-1	SAMP	STDM 2320B	50.0mL	50.0mL	1	'5.967	6.0 mg/L	NA	5	0.23	5.0		
SO5405-2	SAMP	STDM 2320B	50.0mL	50.0mL	1	'5.376	5.4 mg/L	NA	5	0.23	5.0		
SO5405-3	SAMP	STDM 2320B	50.0mL	50.0mL	1	4.372	U5.0 mg/L	NA	5	0.23	5.0		
SO5454-1	SAMP	STDM 2320B	50.0mL	50.0mL	1	16.191	16. mg/L	NA	5	0.23	5.0		
SO5463-1	SAMP	STDM 2320B	50.0mL	50.0mL	1	'316.729	320 mg/L	NA	5	0.23	5.0		
SO5463-2	SAMP	STDM 2320B	50.0mL	50.0mL	1	'229.889	230 mg/L	NA	5	0.23	5.0		
WG304829-1	MBLANK	STDM 2320B	50.0mL	50.0mL	1	'2.027	J2.0 mg/L	NA	5	0.23	5.0		
WG304829-2	LCS	STDM 2320B	50.0mL	50.0mL	1	'134.088	130 mg/L	NA	5	0.23	5.0		112
WG304829-3	MS	STDM 2320B	50.0mL	50.0mL	1	'138.449	140 mg/L	NA	5	0.23	5.0		111
WG304829-4	MSD	STDM 2320B	50.0mL	50.0mL	1	138.781	140 mg/L	NA	5	0.23	5.0	0	111
WG304829-5	LCSD	STDM 2320B	50.0mL	50.0mL	1	'137.9	140 mg/L	NA	5	0.23	5.0	3	115

Comments:

SO5463-1	Anions report Cl & SO4.
SO5463-2	MS/MSD, Anions report Cl & SO4.
WG304829-1	SO5405-1
WG304829-2	SO5405-1
WG304829-3	SO5405-1
WG304829-4	SO5405-1
WG304829-5	SO5405-1

Entered by: ZL Date: 8/20/21 Accepted by: ZF Date: 8/20/21

Katahdin Analytical Services 5000014

WET CHEMISTRY BATCH REPORT
Aug 20 2021, 11:03 am
Batch: WG304832 Run ID 1: R574879 Run ID 2: NONE

Parameter: Alkalinity

Date Analyzed: 19-AUG-21

Analyst Initials: ZL

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SO4804-4	SAMP	EPA 310.1	50.000mL	50.000mL	1	76.005	76. mg/L	NA	5	0.19	5.0		
WG304832-1	MBLANK	EPA 310.1	50.000mL	50.000mL	1	2.027	J2.0 mg/L	NA	5	0.19	5.0		
WG304832-2	LCS	EPA 310.1	50.000mL	50.000mL	1	134.088	130 mg/L	NA	5	0.19	5.0		112

Comments:

WG304832-1 SO4804-4
WG304832-2 SO4804-4

Entered by: ZL Date: 8/20/21 Accepted by: AF Date: 8/20/21

Katahdin Analytical Services 5000015

WET CHEMISTRY BATCH REPORT
Aug 20 2021, 10:59 am
Batch: WG304833

Parameter: Bicarbonate (As CaCO3)

Date Analyzed: 19-AUG-21

Analyst Initials: ZL

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

Sample	Samp Type	Method	Alkalinity	pH	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SO5433-1	SAMP	SM 4500CO2 D	28.6mg/L	5.94pH	1	28.58826	28. mg/L	NA	5	.497	5		
SO5433-2	SAMP	SM 4500CO2 D	29.6mg/L	6.05pH	1	29.56132	30. mg/L	NA	5	.497	5		
SO5433-3	SAMP	SM 4500CO2 D	24.2mg/L	5.96pH	1	24.2175	24. mg/L	NA	5	.497	5		
SO5433-4	SAMP	SM 4500CO2 D	28.1mg/L	5.95pH	1	28.11222	28. mg/L	NA	5	.497	5		
SO5434-1	SAMP	SM 4500CO2 D	29.3mg/L	5.91pH	1	29.33433	29. mg/L	NA	5	.497	5		
SO5434-2	SAMP	SM 4500CO2 D	30.1mg/L	5.96pH	1	30.06896	30. mg/L	NA	5	.497	5		
SO5434-3	SAMP	SM 4500CO2 D	21.7mg/L	5.90pH	1	21.669	22. mg/L	NA	5	.497	5		
SO5434-4	SAMP	SM 4500CO2 D	28.0mg/L	5.94pH	1	27.96725	28. mg/L	NA	5	.497	5		
WG304833-1	MBLANK	SM 4500CO2 D	2.80mg/L	5.72pH	1	2.7966	U5.0 mg/L	NA	5	.497	5		
WG304833-2	DUP	SM 4500CO2 D	29.5mg/L	5.96pH	1	29.47898	29. mg/L	NA	5	.497	5	5	

Comments:

WG304833-1 SO5433-4
WG304833-2 SO5433-4

Entered by: ZL Date: 8/20/21 Accepted by: ZF Date: 8/20/21

Katahdin Analytical Services 5000016

WET CHEMISTRY BATCH REPORT
Sep 21 2021, 12:00 pm
Batch: WG304829 Run ID 1: R574878 Run ID 2: NONE

Parameter: Alkalinity
Prep Date: N/A

Date Analyzed: 20-SEP-21
Prep Method: N/A

Analyst Initials: ZL
Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
WG304829-6	MS	STDM 2320B	50.0mL	50.0mL	1	274.33	270 mg/L	NA	5	0.23	5.0		60
WG304829-7	MSD	STDM 2320B	50.0mL	50.0mL	1	272.341	270 mg/L	NA	5	0.23	5.0	1	58

Comments:

SO5463-1	Anions report Cl & SO4.
SO5463-2	MS/MSD, Anions report Cl & SO4.
WG304829-1	SO5405-1
WG304829-2	SO5405-1
WG304829-3	SO5405-1
WG304829-4	SO5405-1
WG304829-5	SO5405-1
WG304829-6	SO5463-2
WG304829-7	SO5463-2

Entered by: ZF for ES Date: 9/21/21 Accepted by: ZF Date: 9/21/21

Katahdin Analytical Services 5000017

Start time:	8/19/2021 11:47						
Results							
No.	Comment / ID	Start time	Rx	Result	Unit	Name	RECOVERY
1/4	CCV	8/19/2021	R1 =	67.438	mg/L	P Alkalinity- pH8.2	
			R2 =	131.033	mg/L	Total Alkalinity	104.83%
			R3 =	10.334	pH	pH	
			R4 =	22.2	oC	TEMPERATURE	
2/4	CCB	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.027	mg/L	Total Alkalinity	
			R3 =	5.547	pH	pH	
			R4 =	23.1	oC	TEMPERATURE	
3/4	LCS	8/19/2021	R1 =	85.763	mg/L	P Alkalinity- pH8.2	
			R2 =	134.088	mg/L	Total Alkalinity	
			R3 =	10.571	pH	pH	
			R4 =	23	oC	TEMPERATURE	
4/4	LCSD	8/19/2021	R1 =	83.888	mg/L	P Alkalinity- pH8.2	
			R2 =	137.9	mg/L	Total Alkalinity	
			R3 =	10.579	pH	pH	
			R4 =	22.9	oC	TEMPERATURE	
1/18	SO4804-4	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	76.005	mg/L	Total Alkalinity	
			R3 =	6.552	pH	pH	
			R4 =	22.9	oC	TEMPERATURE	
2/18	SO4515-3	8/19/2021	R1 =	12.452	mg/L	P Alkalinity- pH8.2	
			R2 =	361.775	mg/L	Total Alkalinity	
			R3 =	8.522	pH	pH	
			R4 =	22.7	oC	TEMPERATURE	
3/18	SO4515-3 ,S	8/19/2021	R1 =	148.104	mg/L	P Alkalinity- pH8.2	
			R2 =	552.355	mg/L	Total Alkalinity	
			R3 =	9.825	pH	pH	
			R4 =	22.6	oC	TEMPERATURE	
4/18	SO5199-1	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	326.954	mg/L	Total Alkalinity	
			R3 =	7.257	pH	pH	
			R4 =	19.2	oC	TEMPERATURE	
5/18	SO5199-2	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.22	mg/L	Total Alkalinity	
			R3 =	5.673	pH	pH	
			R4 =	18.8	oC	TEMPERATURE	
6/18	SO5201-1	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	385.814	mg/L	Total Alkalinity	
			R3 =	7.214	pH	pH	
			R4 =	18.7	oC	TEMPERATURE	
7/18	SO5201-2	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	546.515	mg/L	Total Alkalinity	
			R3 =	7.009	pH	pH	
			R4 =	18.8	oC	TEMPERATURE	

8/18	SO5201-3	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	592.333	mg/L	Total Alkalinity	
			R3 =	7.592	pH	pH	
			R4 =	19.4	oC	TEMPERATURE	
9/18	CCV	8/19/2021	R1 =	66.682	mg/L	P Alkalinity- pH8.2	
			R2 =	133.063	mg/L	Total Alkalinity	106.45%
			R3 =	10.302	pH	pH	
			R4 =	21.9	oC	TEMPERATURE	
10/18	CCB	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.797	mg/L	Total Alkalinity	
			R3 =	5.722	pH	pH	
			R4 =	22.1	oC	TEMPERATURE	
11/18	SO5284-1	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	150.942	mg/L	Total Alkalinity	
			R3 =	6.767	pH	pH	
			R4 =	20	oC	TEMPERATURE	
12/18	SO5291-1	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	489.758	mg/L	Total Alkalinity	
			R3 =	6.94	pH	pH	
			R4 =	19.6	oC	TEMPERATURE	
13/18	SO5291-2	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	479.298	mg/L	Total Alkalinity	
			R3 =	7.078	pH	pH	
			R4 =	19.9	oC	TEMPERATURE	
14/18	SO5291-3	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.673	mg/L	Total Alkalinity	
			R3 =	5.899	pH	pH	
			R4 =	20.1	oC	TEMPERATURE	
15/18	SO5292-1	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	270.787	mg/L	Total Alkalinity	
			R3 =	6.949	pH	pH	
			R4 =	20.2	oC	TEMPERATURE	
16/18	SO5405-1	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	5.967	mg/L	Total Alkalinity	
			R3 =	5.927	pH	pH	
			R4 =	20.3	oC	TEMPERATURE	
17/18	SO5405-1 MS	8/19/2021	R1 =	72.648	mg/L	P Alkalinity- pH8.2	
			R2 =	138.449	mg/L	Total Alkalinity	
			R3 =	10.474	pH	pH	
			R4 =	20.4	oC	TEMPERATURE	
18/18	SO5405-1 MSD	8/19/2021	R1 =	69.51	mg/L	P Alkalinity- pH8.2	
			R2 =	138.781	mg/L	Total Alkalinity	
			R3 =	10.47	pH	pH	
			R4 =	20.7	oC	TEMPERATURE	
1/4	SO4515-3	8/19/2021	R1 =	9.292	mg/L	P Alkalinity- pH8.2	
			R2 =	358.979	mg/L	Total Alkalinity	
			R3 =	8.445	pH	pH	

			R4 =	21.8	oC	TEMPERATURE	
2/4	SO5405-2	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	5.376	mg/L	Total Alkalinity	
			R3 =	5.742	pH	pH	
			R4 =	18	oC	TEMPERATURE	
3/4	CCV	8/19/2021	R1 =	67.676	mg/L	P Alkalinity- pH8.2	
			R2 =	135.476	mg/L	Total Alkalinity	108.38%
			R3 =	10.321	pH	pH	
			R4 =	22.1	oC	TEMPERATURE	
4/4	CCB	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.573	mg/L	Total Alkalinity	
			R3 =	5.575	pH	pH	
			R4 =	22.5	oC	TEMPERATURE	
1/17	SO5405-3	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	4.372	mg/L	Total Alkalinity	
			R3 =	5.562	pH	pH	
			R4 =	19.7	oC	TEMPERATURE	
2/17	SO5454-1	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	16.191	mg/L	Total Alkalinity	
			R3 =	5.955	pH	pH	
			R4 =	19.7	oC	TEMPERATURE	
3/17	SO5463-1	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	316.729	mg/L	Total Alkalinity	
			R3 =	6.154	pH	pH	
			R4 =	20.7	oC	TEMPERATURE	
4/17	SO5463-2	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	229.889	mg/L	Total Alkalinity	
			R3 =	6.165	pH	pH	
			R4 =	20.7	oC	TEMPERATURE	
5/17	SO5433-1	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	28.591	mg/L	Total Alkalinity	
			R3 =	5.935	pH	pH	
			R4 =	20.6	oC	TEMPERATURE	
6/17	SO5433-2	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	29.565	mg/L	Total Alkalinity	
			R3 =	6.05	pH	pH	
			R4 =	20.3	oC	TEMPERATURE	
7/17	SO5433-3	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	24.22	mg/L	Total Alkalinity	
			R3 =	5.955	pH	pH	
			R4 =	20.1	oC	TEMPERATURE	
8/17	SO5433-4	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	28.115	mg/L	Total Alkalinity	
			R3 =	5.946	pH	pH	
			R4 =	20	oC	TEMPERATURE	
9/17	SO5433-4 DUP	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	29.482	mg/L	Total Alkalinity	

			R3 =	5.965	pH	pH	
			R4 =	20	oC	TEMPERATURE	
10/17	SO5434-1	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	29.337	mg/L	Total Alkalinity	
			R3 =	5.914	pH	pH	
			R4 =	20.2	oC	TEMPERATURE	
11/17	CCV	8/19/2021	R1 =	63.398	mg/L	P Alkalinity- pH8.2	
			R2 =	137.093	mg/L	Total Alkalinity	109.67%
			R3 =	10.264	pH	pH	
			R4 =	22	oC	TEMPERATURE	
12/17	CCB	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.558	mg/L	Total Alkalinity	
			R3 =	5.674	pH	pH	
			R4 =	22.9	oC	TEMPERATURE	
13/17	SO5434-2	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	30.072	mg/L	Total Alkalinity	
			R3 =	5.961	pH	pH	
			R4 =	20.7	oC	TEMPERATURE	
14/17	SO5434-3	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	21.671	mg/L	Total Alkalinity	
			R3 =	5.896	pH	pH	
			R4 =	20.8	oC	TEMPERATURE	
15/17	SO5434-4	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	27.97	mg/L	Total Alkalinity	
			R3 =	5.944	pH	pH	
			R4 =	20.9	oC	TEMPERATURE	
16/17	CCV	8/19/2021	R1 =	65.749	mg/L	P Alkalinity- pH8.2	
			R2 =	137.455	mg/L	Total Alkalinity	109.96%
			R3 =	10.254	pH	pH	
			R4 =	22.2	oC	TEMPERATURE	
17/17	CCB	8/19/2021	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.631	mg/L	Total Alkalinity	
			R3 =	5.63	pH	pH	
			R4 =	23	oC	TEMPERATURE	
Start time:	8/19/2021 9:59						
Results							
No.	Comment / ID	Start time	Rx	Result	Unit	Name	
Calibration data							
	Number of segme	1					
	Slope	-58.11 mV/pH					
	Zero point	6.953 pH					
	Calibration tempe	22.6 oC					

Start time: 9/20/2021 13:27

Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name	RECOVERY
1/4	CCV	9/20/2021 1:29:08 PM	R1 =	67.065	mg/L	P Alkalinity- pH8.2	
			R2 =	135.197	mg/L	Total Alkalinity	108.16%
			R3 =	10.534	pH	pH	
			R4 =	20.5	oC	TEMPERATURE	
2/4	CCB	9/20/2021 1:32:18 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.445	mg/L	Total Alkalinity	
			R3 =	5.64	pH	pH	
			R4 =	21	oC	TEMPERATURE	
3/4	LCS	9/20/2021 1:34:23 PM	R1 =	81.526	mg/L	P Alkalinity- pH8.2	
			R2 =	136.585	mg/L	Total Alkalinity	
			R3 =	10.569	pH	pH	
			R4 =	22.3	oC	TEMPERATURE	
4/4	LCSD	9/20/2021 1:37:40 PM	R1 =	81.039	mg/L	P Alkalinity- pH8.2	
			R2 =	140.262	mg/L	Total Alkalinity	
			R3 =	10.57	pH	pH	
			R4 =	22.3	oC	TEMPERATURE	
1/18	SO6012-1	9/20/2021 1:58:50 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	734.792	mg/L	Total Alkalinity	
			R3 =	6.942	pH	pH	
			R4 =	9.7	oC	TEMPERATURE	
2/18	SO6012-2	9/20/2021 2:13:36 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	710.952	mg/L	Total Alkalinity	
			R3 =	6.622	pH	pH	
			R4 =	12.1	oC	TEMPERATURE	
3/18	SO6012-3	9/20/2021 2:28:02 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.331	mg/L	Total Alkalinity	
			R3 =	5.706	pH	pH	
			R4 =	14.1	oC	TEMPERATURE	
4/18	SO6024-1	9/20/2021 2:30:05 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	374.305	mg/L	Total Alkalinity	
			R3 =	6.38	pH	pH	
			R4 =	14.4	oC	TEMPERATURE	
5/18	SO6024-2	9/20/2021 2:34:34 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	222.731	mg/L	Total Alkalinity	
			R3 =	6.244	pH	pH	
			R4 =	14.8	oC	TEMPERATURE	
6/18	SO6024-3	9/20/2021 2:38:03 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	49.216	mg/L	Total Alkalinity	
			R3 =	5.694	pH	pH	
			R4 =	15	oC	TEMPERATURE	
7/18	SO6024-4	9/20/2021 2:40:40 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	339.002	mg/L	Total Alkalinity	
			R3 =	6.644	pH	pH	
			R4 =	15.2	oC	TEMPERATURE	
8/18	SO6060-1	9/20/2021 2:45:45 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	NaN	mg/L	Total Alkalinity	
			R3 =	6.673	pH	pH	
			R4 =	16.1	oC	TEMPERATURE	
9/18	CCV	9/20/2021 2:55:20 PM	R1 =	71.084	mg/L	P Alkalinity- pH8.2	
			R2 =	130.825	mg/L	Total Alkalinity	104.66%
			R3 =	10.491	pH	pH	
			R4 =	19.8	oC	TEMPERATURE	

10/18	CCB	9/20/2021 2:58:32 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.325	mg/L	Total Alkalinity	
			R3 =	5.395	pH	pH	
			R4 =	20.3	oC	TEMPERATURE	
11/18	SO6060-2	9/20/2021 3:00:27 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	NaN	mg/L	Total Alkalinity	
			R3 =	6.892	pH	pH	
			R4 =	17.4	oC	TEMPERATURE	
12/18	SO6060-3	9/20/2021 3:10:05 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	5.18	mg/L	Total Alkalinity	
			R3 =	7.355	pH	pH	
			R4 =	17.6	oC	TEMPERATURE	
13/18	SO6082-3	9/20/2021 3:12:00 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	10.328	mg/L	Total Alkalinity	
			R3 =	5.836	pH	pH	
			R4 =	17.7	oC	TEMPERATURE	
14/18	SO5463-2 MS	9/20/2021 3:13:58 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	274.33	mg/L	Total Alkalinity	
			R3 =	6.28	pH	pH	
			R4 =	17.2	oC	TEMPERATURE	
15/18	SO5463-2 MSD	9/20/2021 3:17:56 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	272.341	mg/L	Total Alkalinity	
			R3 =	6.32	pH	pH	
			R4 =	17.4	oC	TEMPERATURE	
16/18	SO6221-1	9/20/2021 3:21:42 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	676.978	mg/L	Total Alkalinity	
			R3 =	6.364	pH	pH	
			R4 =	17.7	oC	TEMPERATURE	
17/18	SO6221-2	9/20/2021 3:29:26 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	21.337	mg/L	Total Alkalinity	
			R3 =	5.739	pH	pH	
			R4 =	18.3	oC	TEMPERATURE	
18/18	SO6221-3	9/20/2021 3:31:50 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	504.032	mg/L	Total Alkalinity	
			R3 =	6.449	pH	pH	
			R4 =	18.5	oC	TEMPERATURE	
1/9	SO6221-4	9/20/2021 4:03:12 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	554.828	mg/L	Total Alkalinity	
			R3 =	6.384	pH	pH	
			R4 =	18.4	oC	TEMPERATURE	
2/9	SO6221-5	9/20/2021 4:09:49 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	572.506	mg/L	Total Alkalinity	
			R3 =	6.253	pH	pH	
			R4 =	18.3	oC	TEMPERATURE	
3/9	CCV	9/20/2021 4:16:20 PM	R1 =	74.803	mg/L	P Alkalinity- pH8.2	
			R2 =	132.161	mg/L	Total Alkalinity	105.73%
			R3 =	10.462	pH	pH	
			R4 =	20.1	oC	TEMPERATURE	
4/9	CCB	9/20/2021 4:19:35 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.285	mg/L	Total Alkalinity	
			R3 =	5.599	pH	pH	
			R4 =	20.5	oC	TEMPERATURE	
5/9	SO6221-7	9/20/2021 4:21:37 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	61.035	mg/L	Total Alkalinity	
			R3 =	5.848	pH	pH	

			R4 =	18.4	oC	TEMPERATURE	
6/9	SO6221-8	9/20/2021 4:25:27 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	71.695	mg/L	Total Alkalinity	
			R3 =	5.949	pH	pH	
			R4 =	18.2	oC	TEMPERATURE	
7/9	SO6221-10	9/20/2021 4:27:47 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	84.561	mg/L	Total Alkalinity	
			R3 =	6.153	pH	pH	
			R4 =	18.5	oC	TEMPERATURE	
8/9	CCV	9/20/2021 4:30:10 PM	R1 =	76.875	mg/L	P Alkalinity- pH8.2	
			R2 =	136.088	mg/L	Total Alkalinity	108.87%
			R3 =	10.457	pH	pH	
			R4 =	20	oC	TEMPERATURE	
9/9	CCB	9/20/2021 4:33:28 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.618	mg/L	Total Alkalinity	
			R3 =	5.634	pH	pH	
			R4 =	20.8	oC	TEMPERATURE	

Start time: 9/20/2021 6:27

Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name

Calibration data

	Number of segments	1
	Slope	-57.71 mV/pH
	Zero point	6.956 pH
	Calibration temperature	19.7 oC

WG 304829 RS 74878 WG 304834 RS 74881
WG 304832 RS 74879 WG 304835 RS 74882
WG 304833 RS 74880

KATAHDIN ANALYTICAL SERVICES

ALKALINITY, BICARBONATE, CARBONATE, FREE CO2 - DL 25 AUTOTITRATOR

Analysis: EPA 310.1 SM2320B **Calculations:** SM 4500-CO2 D

pH Probe ID: DGIII-SC

Alkalinity Acid Reagent: W20286 **Buffer pH 4 ID:** SWL 4790

Acid Concentration: 0.07N **Buffer pH 7 ID:** 4775

Alkalinity Check Standard: W20260 TV=125mg/L **Buffer pH 10 ID:** 4788

Alkalinity MS: W20307 TV=120mg/L **Pipette IDs:** WII

Sample ID	Run #	Volume (mL)	Sample ID	Run #	Volume (mL)	Comments - Must indicate which sample
CCV	1	50	540S-2	2	50	
CCB	2		CCV	3		
LCS	3		CCB	4		
LCSD	4					
			540S-3	1	50	
4804-4	1	50	5454-1	2		
4515-3	2		5463-1	3		
-3MS	3	44	-2	4		-3MS Failed
5199-1	4	50	5433-1	5		
-2	5		-2	6		
5201-1	6		-3	7		
-2	7		-4	8		
-3	8		-4Dup	9		
CCV	9		5434-1	10		
CCB	10		CCV	11		
5284-1	11		CCB	12		
5291-1	12		-2	13		
-2	13		-3	14		
-3	14		-4	15		
5792-1	15		CCV	16		
5405-1	16		CCB	17		
-1MS	17	44				
-1MSD	18	1				
				ZL 8/20/21		
4515-3	1	50				

Analyst: ZL **Date:** 8/19/21

Checked By: ZF **Date:** 8/20/21

WET CHEMISTRY BATCH REPORT
Aug 24 2021, 11:34 am
Batch: WG304987 Run ID 1: R575105 Run ID 2: NONE

Parameter: Chemical Oxygen Demand
Prep Date: N/A

Date Analyzed: 23-AUG-21
Prep Method: N/A

Analyst Initials: JL
Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SO5546-1	SAMP	EPA 410.4	2.00mL	2.00mL	1	85.8	86. mg/L	NA	15	3.1	15.		
WG304987-1	MBLANK	EPA 410.4	2.00mL	2.00mL	1	-.02	U10. mg/L	NA	15	3.1	15.		
WG304987-2	LCS	EPA 410.4	2.00mL	2.00mL	1	74.3	74. mg/L	NA	15	3.1	15.		99

Comments:

WG304987-1 SO5546-1
WG304987-2 SO5546-1

Entered by: JL Date: 8/25/21 Accepted by: ZF Date: 8/24/21

Katahdin Analytical Services 5000026

WET CHEMISTRY BATCH REPORT
Aug 24 2021, 11:34 am
Batch: WG304988 Run ID 1: R575106 Run ID 2: NONE

Parameter: COD-Color
Prep Date: N/A

Date Analyzed: 23-AUG-21
Prep Method: N/A

Analyst Initials: JL
Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SO5463-1	SAMP	SM 5220	2.00mL	2.00mL	1	15	U15. mg/L	NA	15	5.7	15.		
SO5463-2	SAMP	SM 5220	2.00mL	2.00mL	1	3.9	U15. mg/L	NA	15	5.7	15.		
SO5512-1	SAMP	SM 5220	2.00mL	2.00mL	1	-1.5	U15. mg/L	NA	15	5.7	15.		
SO5557-1	SAMP	SM 5220	2.00mL	2.00mL	1	3.5	U15. mg/L	NA	15	5.7	15.		
SO5557-3	SAMP	SM 5220	2.00mL	2.00mL	1	-6.2	U15. mg/L	NA	15	5.7	15.		
WG304988-1	MBLANK	SM 5220	2.00mL	2.00mL	1	-.2	U10. mg/L	NA	15	5.7	15.		
WG304988-2	LCS	SM 5220	2.00mL	2.00mL	1	74.3	74. mg/L	NA	15	5.7	15.		99
WG304988-3	MS	SM 5220	1.50mL	2.00mL	1.3	78.7	100 mg/L	NA	15	7.5	20.		105
WG304988-4	DUP	SM 5220	2.00mL	2.00mL	1	3.9	U15. mg/L	NA	15	5.7	15.	NC	

Comments:

SO5463-1	Anions report Cl & SO4.
SO5463-2	MS/MSD, Anions report Cl & SO4.
SO5512-1	Anions please report Cl & SO4.
WG304988-1	SO5463-2
WG304988-2	SO5463-2
WG304988-3	SO5463-2
WG304988-4	SO5463-2

Entered by: JL Date: 8/24/21 Accepted by: ZF Date: 8/25/21

Katahdin Analytical Services 5000027

CHEMICAL_OXYGEN_DEMAND - LOW LEVEL (Closed Reflux, Twist Tubes)

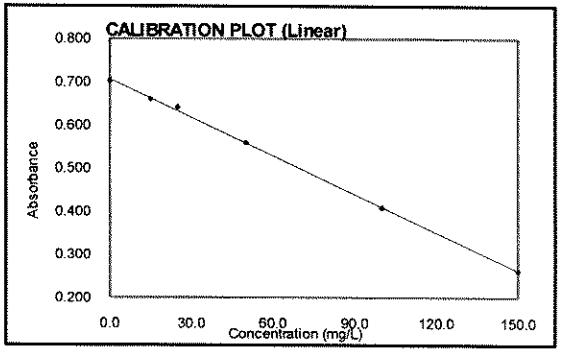
Method (Check one): SM5220D-11 E410.4

CALIBRATION INFORMATION

Cal. Anal. Date: 6-30-21
Calib. Analyst: KD
Stock Std. ID: W19395
Stock Std. Conc. (mg/L): 1000

Standard Name		Vol. Stock Added (ml)	Final Vol. (mL)	Std. Conc. (mg/L)	Meas. Abs.
Calib. Blank		0.000	2	0.0	0.703
Std. 1		0.030	2	15.0	0.660
Std. 2		0.050	2	25.0	0.642
Std. 3		0.100	2	50.0	0.560
Std. 4		0.200	2	100.0	0.409
Std. 5		0.300	2	150.0	0.262

No. of points:	6
Corr. Coeff. (R):	**0.9996285368702**
Slope (m):	-0.002968241206
Intercept (b):	0.7075336683417



SAMPLE ANALYSIS

Analyst: JL
Analysis Date: 23-Aug-21
CCV Stock Std. ID / Conc. (mg/L): W19873 / 50
LCS Stock Std. ID / Conc. (mg/L): W19875 / 75

Sample ID	Analyst	Date (14-Mar-13)	Time (13:30	Sample Type	Initial Vol. (mL)	Final Vol. (mL)	Spike Added (mg/L)	Abs. @ 420 nm		Conc in FV (mg/L)	Conc in IV (mg/L)	Reported Conc. (mg/L)	Rcvy (%)	DUP RPD (%)
CCV	JL	23-Aug-21	15:29	CCV	2.000	2.000	50	0.559		50.0	50.0	50.0	100.1%	
CCB	JL	23-Aug-21		BLANK	2.000	2.000		0.708		-0.2	-0.2	< 15.0		
LCS	JL	23-Aug-21		LCS	2.000	2.000	75	0.487		74.3	74.3	74.3	99.1%	
5422-1	JL	23-Aug-21		Sample	2.000	2.000		0.140		191.2	191.2	191.2		
5463-1	JL	23-Aug-21		Sample	2.000	2.000		0.663		15.0	15.0	15.0		
-2	JL	23-Aug-21		Sample	2.000	2.000		0.696		3.9	3.9	< 15.0		
-2 DUP	JL	23-Aug-21		Sample	2.000	2.000		0.696		3.9	3.9	< 15.0		
-2 MS	JL	23-Aug-21		Sample	~~2.000~~	2.000	100	0.474		78.7	78.7	78.7		
5512-1	JL	23-Aug-21		Sample	2.000	2.000		0.712		-1.5	-1.5	< 15.0		
5557-1	JL	23-Aug-21		Sample	2.000	2.000		0.697		3.5	3.5	< 15.0		
5546-1	JL	23-Aug-21		Sample	2.000	2.000		0.453		85.8	85.8	85.8		
5557-3	JL	23-Aug-21		Sample	2.000	2.000		0.726		-6.2	-6.2	< 15.0		
CCV	JL	23-Aug-21		CCV	2.000	2.000	50	0.570		46.3	46.3	46.3	92.7%	
CCB	JL	23-Aug-21	15:35	BLANK	2.000	2.000		0.705		0.9	0.9	< 15.0		

Katahdin Analytical Services 5000028

KATAHDIN ANALYTICAL SERVICES

CHEMICAL OXYGEN DEMAND		EPA Method 410.4	PQL = 15 mg/L
COD Vials			
Low Level: ✓	High Level:	Mfr.: Env. Express	Lot ID: SWL4793
Digestion Start Time: 1304		End Time: 1504	Pipette IDs: W7
COD Digestion Block Start Temp.: 148		End Temp.: 151.5	
Calibration Date:		Spectrophotometer Used: FOOD #1	

Standard	True Value (mg/L)	Source Std. ID	Source Std. Added (mL)
CCV	50	W21033	2
LCS	75	W21035	2
MS	100	W21034	.5

Notes: WG364987 - E4104 R575105
WG364988 - STNCOD

KAS Sample ID	Analysis Time	Initial Vol (mL)	Final Vol (mL)	Abs @	Comments
CCV	1529	2	2	.559	
CCB				.708	
LCS				.487	
5422-1				.140	
5463-1				.603	
-2				.696	
-2DUP				.696	
-2MS				.474	
5512				.712	
5517-1				.697	
5546-1				.453	
5557-3				.726	
CCV				570	
CCB	1535			.705	

JL 8/23/21

ANALYST: JL	DATE: 8/23/21
REVIEWED BY: ZF	DATE: 8/24/21

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: SS/ZF
Date Analyzed: 07-SEP-21

Batch: WG305703
Prep Method: N/A
Prep Chemist: SS/ZF

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SO5463-1DLE	SAMP	SW846 9056A	Chloride	2	35.98	36	mg/L	2	4.0	.0993	0.20		
SO5512-1DLE	SAMP	SW846 9056A	Chloride	2	33.7715	34	mg/L	2	4.0	.0993	0.20		
SO5557-1DLE	SAMP	SW846 9056A	Sulfate	1	26.7868	27	mg/L	1	1.0	.0637	0.064		
SO5557-1DLF	SAMP	SW846 9056A	Chloride	5	46.0023	46	mg/L	2	10.	.0993	0.50		
SO5557-3DLE	SAMP	SW846 9056A	Chloride	2	27.5865	28	mg/L	2	4.0	.0993	0.20		
SO5557-3DLE	SAMP	SW846 9056A	Sulfate	2	17.8259	18	mg/L	1	2.0	.0637	0.13		
WG305703-1	MBLANK	SW846 9056A	Chloride	1	.1012	J 0.10	mg/L	2	2.0	.0993	0.099		
WG305703-1	MBLANK	SW846 9056A	Sulfate	1	.0147	U 1.0	mg/L	1	1.0	.0637	0.064		
WG305703-2	LCS	SW846 9056A	Chloride	1	3.5842	3.58	mg/L	2	2.0	.0993	0.099		95.5
WG305703-2DL	LCS	SW846 9056A	Sulfate	1	3.6281	3.63	mg/L	1	1.0	.0637	0.064		96.8

Comments:

SO5463-1	Anions report Cl & SO
SO5512-1	Anions please report C
WG305703-1	SO5463-1
WG305703-2	SO5463-1

Entered by: SS Date: 9/8/21 Accepted by: ZF Date: 9/11/21

Katahdin Analytical Services 5000030

IC STANDARDS PREPARATION

Fill sheet in completely, file with each batch of samples analyzed.

L MIX ID: W20334	Expiration Date:09/14/21	ICAL Date: 08/31/21

ALYTE	INITIAL AMOUNT (mL)	OF	STOCK CONC. (mg/L)	TO	FINAL VOLUME(mL)	=	FINAL CONC.(mg/L)
Cl	2.0	OF	1000			=	20
2 (as N)	0.8	OF	1000			=	8
3 (as N)	0.8	OF	1000			=	8
Br	4.0	OF	1000	TO	100	=	40
SO4	4.0	OF	1000			=	40
F	1.0	OF	1000			=	10
4 (as P)	1	OF	1000			=	10

WORKING STANDARDS Standards prepared on each day of use

	INITIAL AMOUNT (mL)	OF	Final Volume (mL)	FINAL CONC. (mg/L)							STD ID*
				Cl	NO2	NO3	Br	SO4	PO4	F	
7	1	ICAL	1	20	8	8	40	40	10	10	IC7-083121
6	0.5	IC7	1	10	4	4	20	20	5	5	IC6-083121
5	0.25	IC7	1	5	2	2	10	10	2.5	2.5	IC5-083121
4	0.25	IC6	1	2.5	1	1	5	5	1.25	1.25	IC4-083121
3	0.1	IC6	1	1	0.4	0.4	2	2	0.5	.5	IC3-083121
2	0.1	IC3	1	0.1	0.04	0.04	0.2	0.2	0.05	.05	IC2-083121
V	0.5	IC7	1	10	4	4	20	20	5	5	CCV-090721

*** STD ID is prefix followed by the date of preparation (ie. IC6-020216)**

S/MATRIX SPIKE MIX ID: W20335	Expiration Date:091521

7.5 mL of High Purity multi-element IC standard solution "A" and 7.5 mL of High Purity multi-element standard solution "B" diluted to 100 mL. For MS, add 0.05 mL of mix to 1.0 mL of sample. For LCS, add 0.05 mL of mix to 1.0 mL of DI water.

Final Concentrations (mg/L):

CI	NO2 (as N)	NO3 (as N)	Br	SO4	PO4 (as P)	F	STD ID*
75	1.14	0.845	3.75	3.75	1.22	3.75	IC-LCS-090721

*** STD ID is prefix followed by the date of preparation (ie. IC-LCS-020216)**

Comments:
2x dil = 0.5mL 1x→1.0mL
20x dil = 0.05mL 1x→1.0mL

Pipettes: W3, W5
5x dil = 0.2mL 1x→1.0mL
50x dil = 0.02mL 1x→1.0mL

10x dil = 0.1mL 1x→1.0mL
100x dil = 0.1mL 10x→1.0mL

Katahdin Analytical Services

ION CHROMATOGRAPHY RUNLOG

Dionex ICS-2100 (Instrument IC-3)

Analysis Date: 09/07/21 | **Analytical Column S/N:** 191122078 | **Calibration Date:** 08/31/21

Analysis Sequence: 09072A | **Guard Column S/N:** 191120342 | **Calibration Sequence:** 083121A Cal

Analyst: SS/ZF | **Suppressor S/N:** 180825029 | ☐ If box at left is checked, continued from previous page. Refer to previous page for header information.

Reporting / Reanalysis Codes: ✓ Report without manipulation; S Report, peak automatically reintegrated with SmartPeak; M Report, peak manually integrated; A Report, peak manually assigned; R Do not report, reanalyze sample

Method Codes: E EPA 300.0; SW SW846 9056A

Katahdin Sample Number	Dilution Factor	Method Code	Report or Reanalyze (enter appropriate code): F	Cl	NO_2	SO_4	Br	NO_3	PO_4	Comments
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	M	M	M	M	M		
CLS			✓	✓	✓		✓	✓		
LCS						✓				
SO 5463-1	2	S		✓						MSD was misspiked, remn
5463-2	2	|		R✓						at 2x for Cl.
-2 MS	1	|		R✓						1
-2 MSD	1	|		R						
5512-1	2	|		✓						
5557-1	1	|				✓				
5557-1	5	|		✓						
5557-3	2	~		✓		✓				
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	M	M	M	M	M		
5506-6	1	S		R		R				Cl 20x, SO4 1x
5556-2	1	|		R		R				Cl 20x, SO4 1x
5689-1	1	|		R		R				Cl 2x, SO4 1x
-3	1	|		R		R				Cl 2x, SO4 1x
-5	1	|		R		R				Cl 2x, SO4 1x
-7	1	|		R		R				Cl 2x, SO4 1x
-9	1	|		R		R				Cl 2x, SO4 1x
4882-16	1	E	R	R	R	R	R	R		10x

S: WG305703 → RS76016
F: SL: WG305704 → RS76015
SL: WG305718 → RS76031

Reviewed by: _____ Review Date: 9/11/21

Katahdin Analytical Services **ION CHROMATOGRAPHY RUNLOG** Dionex ICS-2100 (Instrument IC-3)

Analysis Date:	**Analytical Column S/N:**	**Calibration Date:**
Analysis Sequence:	**Guard Column S/N:**	**Calibration Sequence:**
Analyst:	**Suppressor S/N:**	☑ If box at left is checked, continued from previous page. Refer to previous page for header information.

Reporting / Reanalysis Codes: ✓ Report without manipulation; **S** Report, peak automatically reintegrated with SmartPeak; **M** Report, peak manually integrated; **A** Report, peak manually assigned; **R** Do not report, reanalyze sample

Method Codes: **E** EPA 300.0; **SW** SW846 9056A

Katahdin Sample Number	Dilution Factor	Method Code	Report or Reanalyze (enter appropriate code): F	Cl	NO_2	SO_4	Br	NO_3	PO_4	Comments
SO 4882-L6	10	E	R	R		R	R	R		10X – Due to low Sample Cups must be reported
SL Blank 8/23			M	M	M	M	M	M		
CCV			R	R	R	R	R	R		rerun, mis spiked - SS 9/8/21
CCB			M	M	M	M	M	M		
Soil LCS 08/23			✓	✓	✓	✓	✓	✓		
4882-6	1	E			R					10 x
4882-6	10	I			R					I – Due to low Sample Cups must be reported
Soil Blank 9/07			M	M	M	M	M	M		
Soil LCS 9/07			✓	✓	✓	✓	✓	✓		
CCV			R	R	R	R	R	R		rerun, mis spiked - SS 9/8/21
CCB			M	M	M	M	M	M		

SS 9/8/21

SS 9/08/21

Reviewed by: _____ **Review Date:** 9/11/21

QAWL1026 - 000343

Katahdin Analytical Services 5000033

Sequence Overview

Sequence Details

Name:	**090721A REPROC**	*Created On:*	**10/Feb/16 13:48:22**
Directory:	**Instrument Data\ICS-2100\2021\09-SEP**	*Created By:*	**Katahdin Analytical**
Data Vault:	**ChromeleonLocal**	*Updated On:*	**08/Sep/21 15:00:50**
No. of Injections:	**33**	*Updated By:*	**Katahdin Analytical**

Injection Details

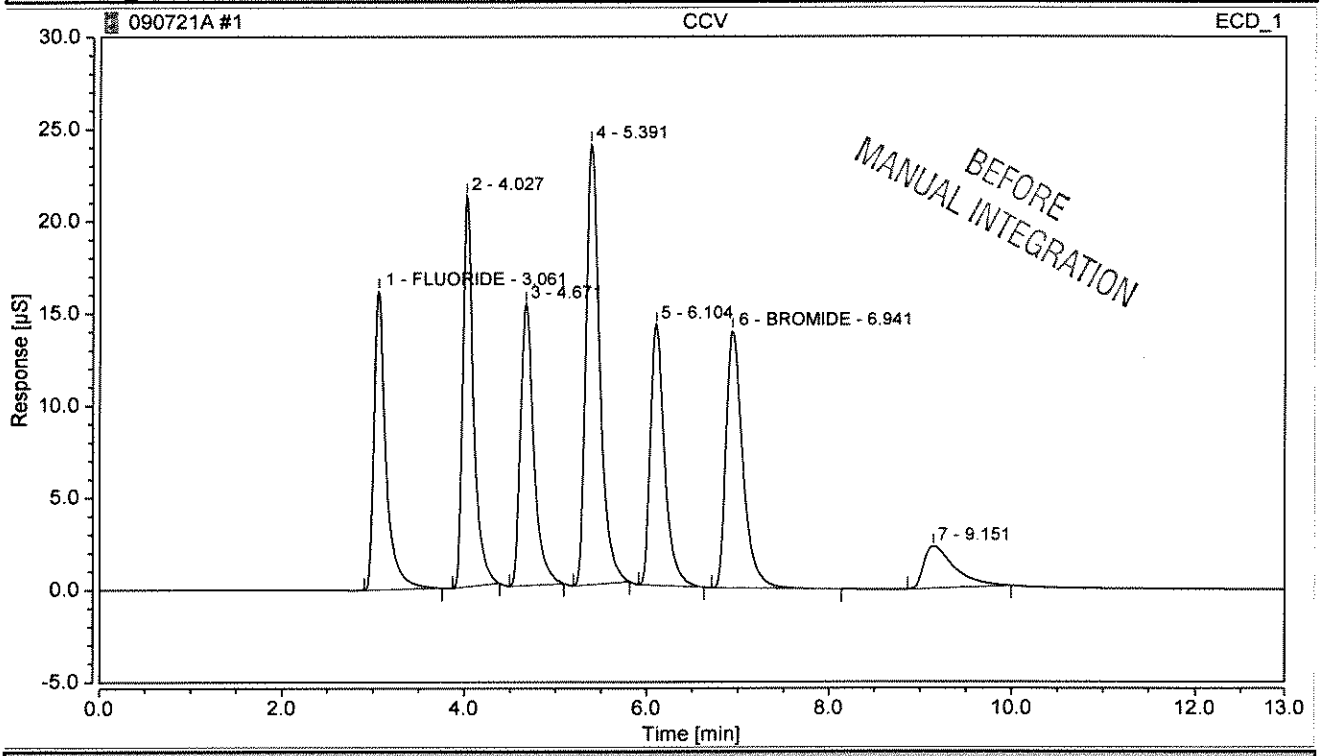
No.	Injection Name	Position	Type	Level	Inject Time	Status
1	CCV	1	Check Standard	06	07/Sep/21 15:42:34	Finished
2	CCB	2	Unknown		07/Sep/21 16:00:45	Finished
3	LCS	3	Check Standard	07	07/Sep/21 16:19:33	Finished
4	LCS	4	Check Standard	07	07/Sep/21 16:38:22	Finished
5	SO5463-1	5	Unknown		07/Sep/21 16:57:10	Finished
6	SO5463-2	6	Unknown		07/Sep/21 17:15:59	Finished
7	SO5463-2 MS	7	Unknown		07/Sep/21 17:34:47	Finished
8	SO5463-2 MSD	8	Unknown		07/Sep/21 17:53:35	Finished
9	SO5512-1	9	Unknown		07/Sep/21 18:12:23	Finished
10	SO5557-1	10	Unknown		07/Sep/21 18:31:12	Finished
11	SO5557-1	11	Unknown		07/Sep/21 18:50:00	Finished
12	SO5557-3	12	Unknown		07/Sep/21 19:08:48	Finished
13	CCV	13	Check Standard	06	07/Sep/21 19:27:36	Finished
14	CCB	14	Unknown		07/Sep/21 19:46:25	Finished
15	SO5506-6	15	Unknown		07/Sep/21 20:05:23	Finished
16	SO5556-2	16	Unknown		07/Sep/21 20:24:11	Finished
17	SO5689-1	17	Unknown		07/Sep/21 20:42:59	Finished
18	SO5689-3	18	Unknown		07/Sep/21 21:01:48	Finished
19	SO5689-5	19	Unknown		07/Sep/21 21:20:36	Finished
20	SO5689-7	20	Unknown		07/Sep/21 21:39:24	Finished
21	SO5689-9	21	Unknown		07/Sep/21 21:58:12	Finished
22	SO4882-16	22	Unknown		07/Sep/21 22:17:01	Finished
23	SO4882-16	23	Unknown		07/Sep/21 22:35:49	Finished
24	SOIL BLANK 08/23	24	Unknown		07/Sep/21 22:54:37	Finished
25	CCV	25	Check Standard	06	07/Sep/21 23:13:25	Finished
26	CCB	26	Unknown		07/Sep/21 23:32:14	Finished
27	SOIL LCS 08/23	27	Unknown		07/Sep/21 23:51:02	Finished
28	SO4882-6	28	Unknown		08/Sep/21 00:09:50	Finished
29	SO4882-6	29	Unknown		08/Sep/21 00:28:38	Finished
30	SOIL BLANK 09/07	30	Unknown		08/Sep/21 00:47:27	Finished
31	SOIL LCS 09/07	31	Unknown		08/Sep/21 01:06:15	Finished
32	CCV	32	Check Standard	06	08/Sep/21 01:25:03	Finished
33	CCB	33	Unknown		08/Sep/21 01:43:51	Finished

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**12.98**
Vial Number:	**1**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 15:42**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

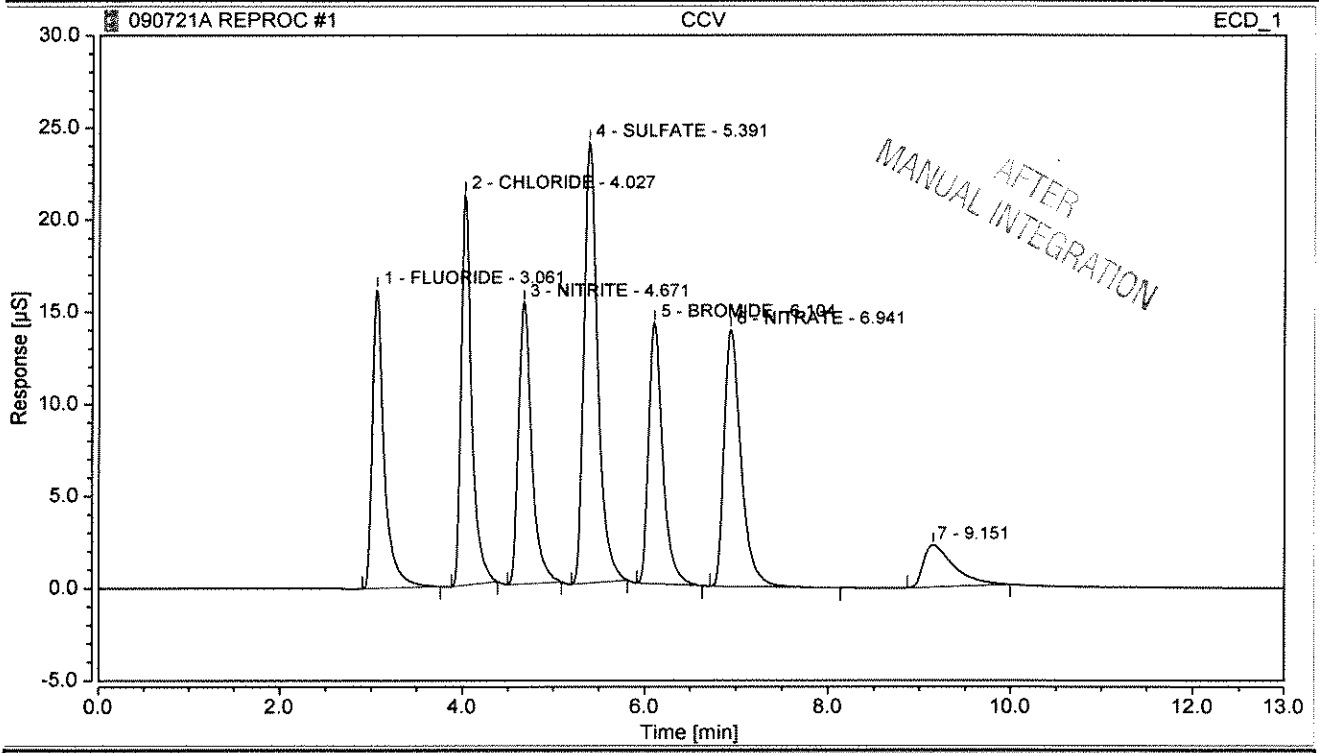
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.061	2.452	16.209	13.18	15.15	5.1965	3.9293
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	BROMIDE	6.941	3.008	13.935	16.17	13.03	20.0325	0.1624
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.460**	**30.143**	**29.35**	**28.18**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**12.98**
Vial Number:	**1**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 15:42**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

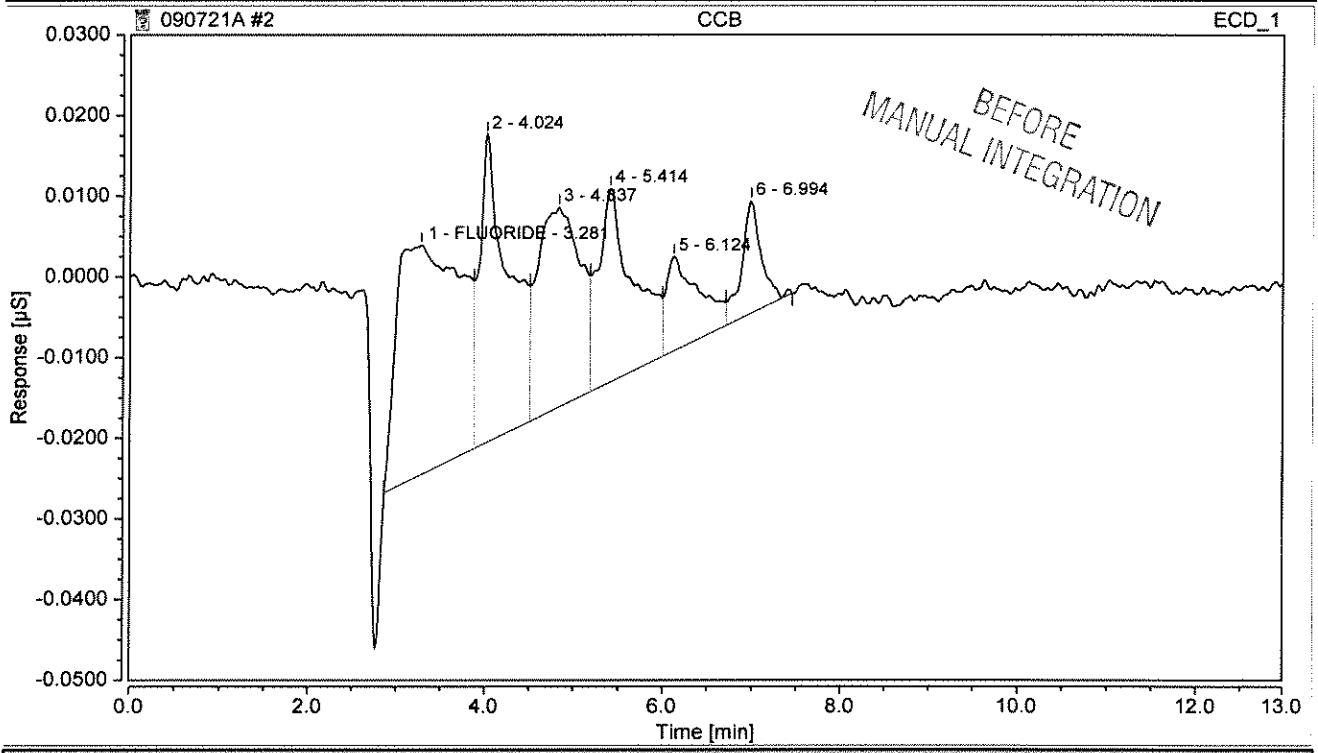
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.061	2.452	16.209	13.18	15.15	5.1965	3.9293
2	CHLORIDE	4.027	2.888	21.213	15.52	19.83	9.9805	-0.1955
3	NITRITE	4.671	2.584	15.275	13.89	14.28	4.2101	5.2537
4	SULFATE	5.391	4.211	23.903	22.63	22.34	19.7278	-1.3611
5	BROMIDE	6.104	2.576	14.162	13.85	13.24	20.3589	1.7944
6	NITRATE	6.941	3.008	13.935	16.17	13.03	4.0267	0.6671
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**17.719**	**104.696**	**95.24**	**97.87**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**12.98**
Vial Number:	**2**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 16:00**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

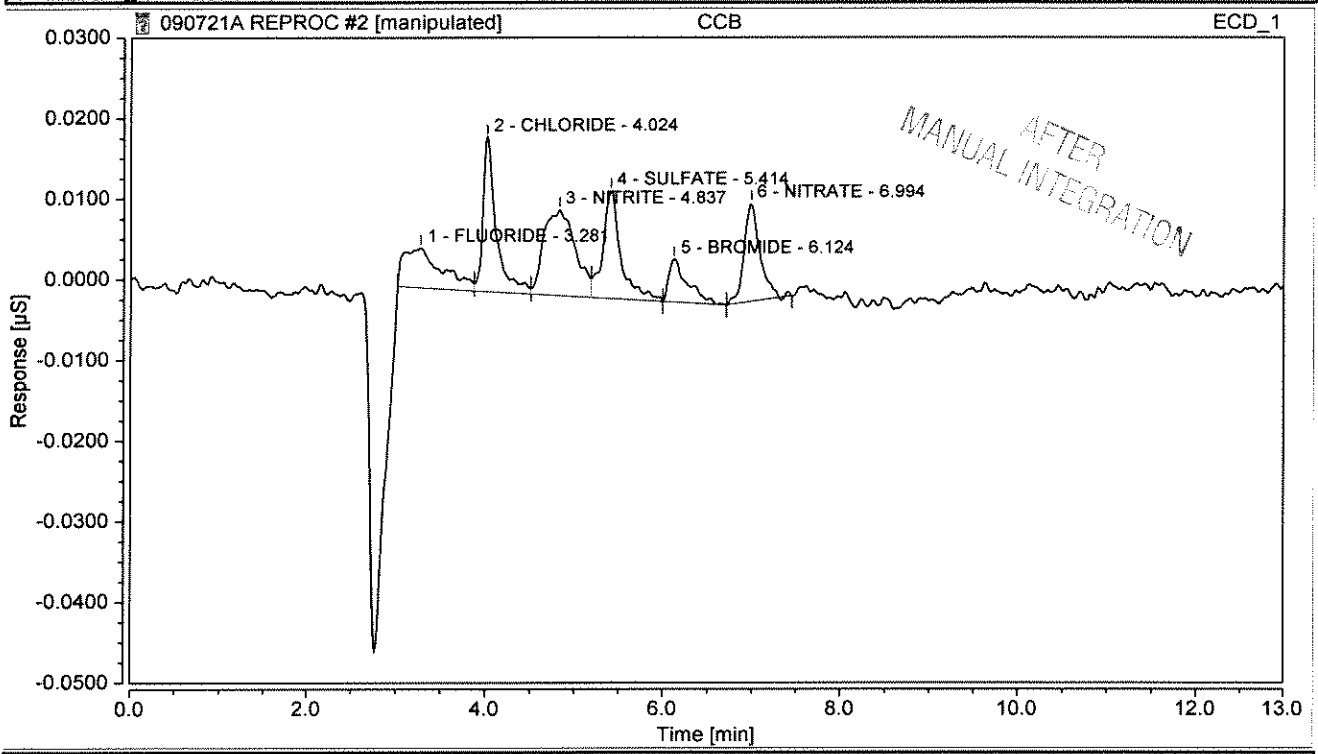
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.281	0.024	0.029	32.92	20.19	0.0499	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.024**	**0.029**	**32.92**	**20.19**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**12.98**
Vial Number:	**2**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 16:00**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

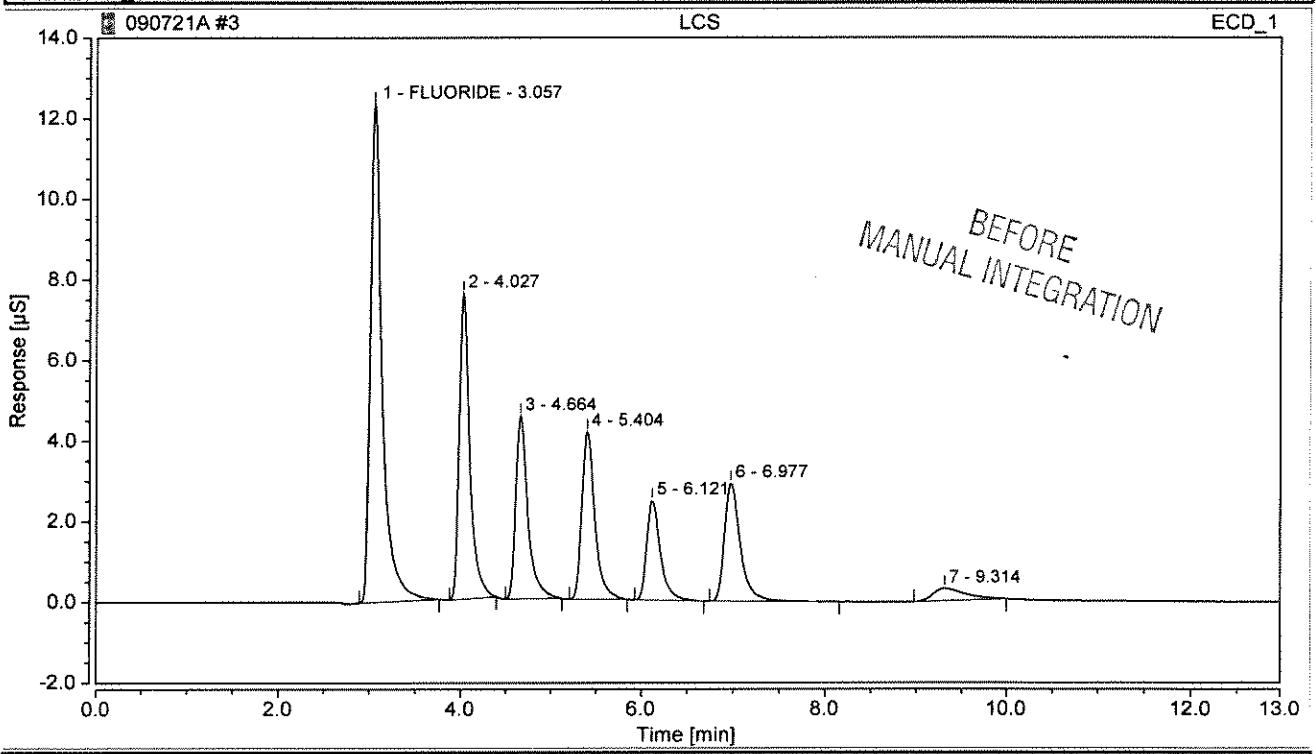
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.281	0.002	0.005	14.38	7.59	0.0052	n.a.
2	CHLORIDE	4.024	0.003	0.019	19.18	29.17	0.1012	n.a.
3	NITRITE	4.837	0.004	0.011	25.58	16.24	0.0071	n.a.
4	SULFATE	5.414	0.003	0.013	18.35	20.36	0.0147	n.a.
5	BROMIDE	6.124	0.001	0.005	7.43	8.10	0.0076	n.a.
6	NITRATE	6.994	0.003	0.012	15.07	18.54	0.0321	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.017**	**0.066**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**12.98**
Vial Number:	**3**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**07**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 16:19**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

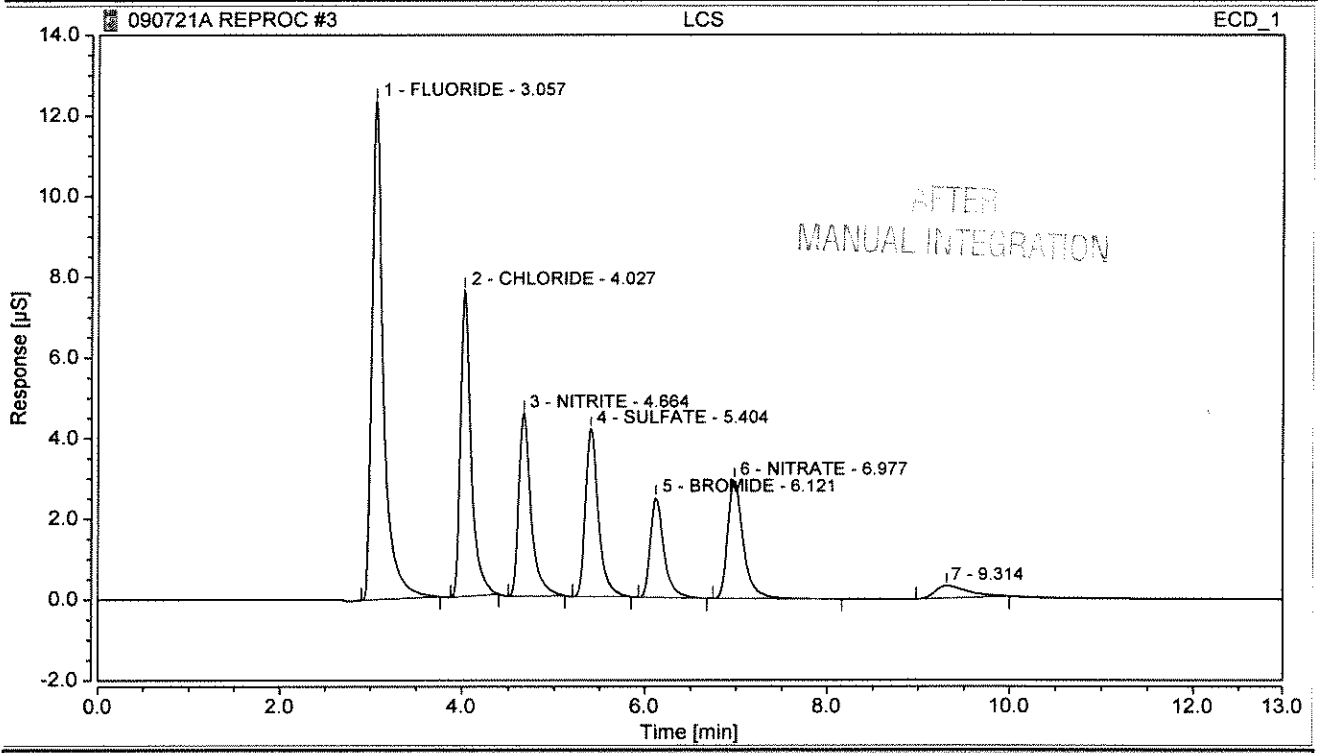
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.057	1.826	12.358	33.78	35.97	3.8699	3.1962
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**1.826**	**12.358**	**33.78**	**35.97**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**12.98**
Vial Number:	**3**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**07**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 16:19**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

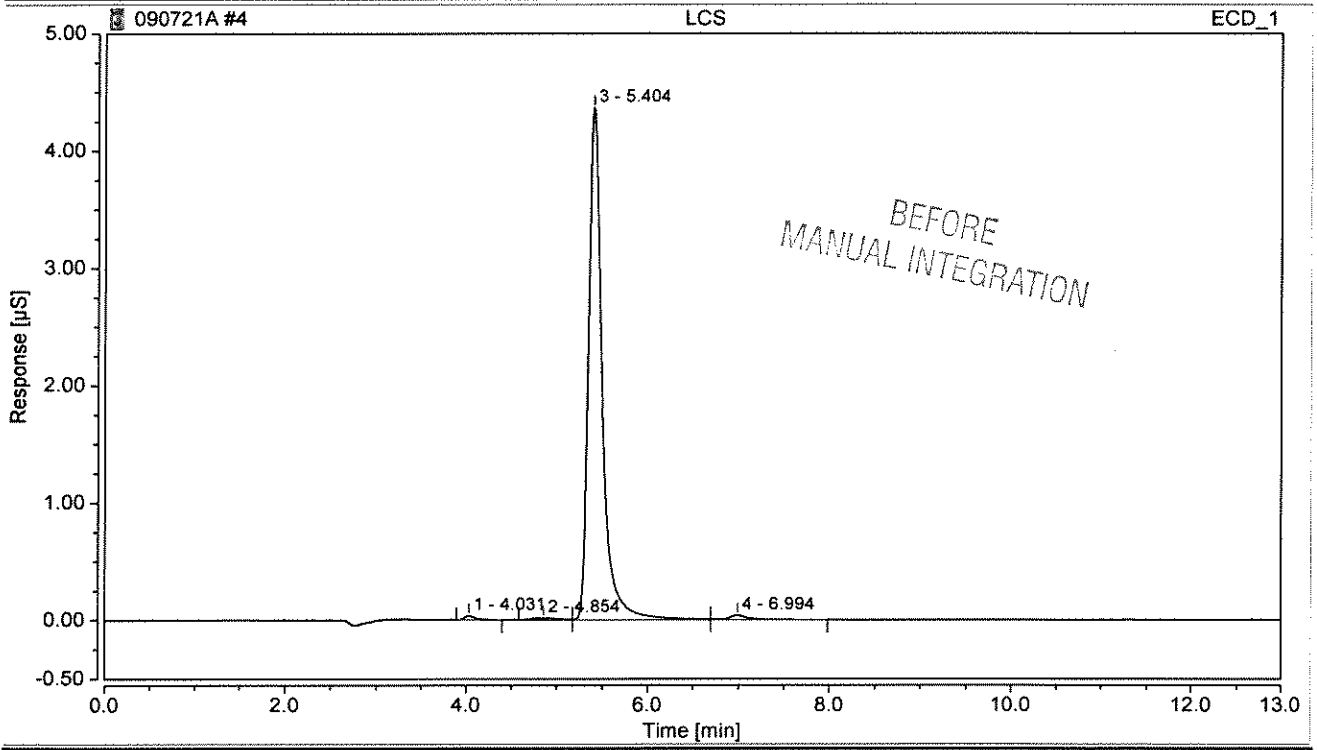
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.057	1.826	12.358	33.78	35.97	3.8699	3.1962
2	CHLORIDE	4.027	1.020	7.592	18.88	22.10	3.5842	-4.4214
3	NITRITE	4.664	0.710	4.534	13.14	13.20	1.1569	1.4835
4	SULFATE	5.404	0.698	4.161	12.91	12.11	3.2697	-12.8076
5	BROMIDE	6.121	0.433	2.474	8.01	7.20	3.5571	-5.1442
6	NITRATE	6.977	0.590	2.929	10.92	8.52	0.8136	-3.7143
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.278**	**34.048**	**97.64**	**99.10**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**12.98**
Vial Number:	**4**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**07**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 16:38**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

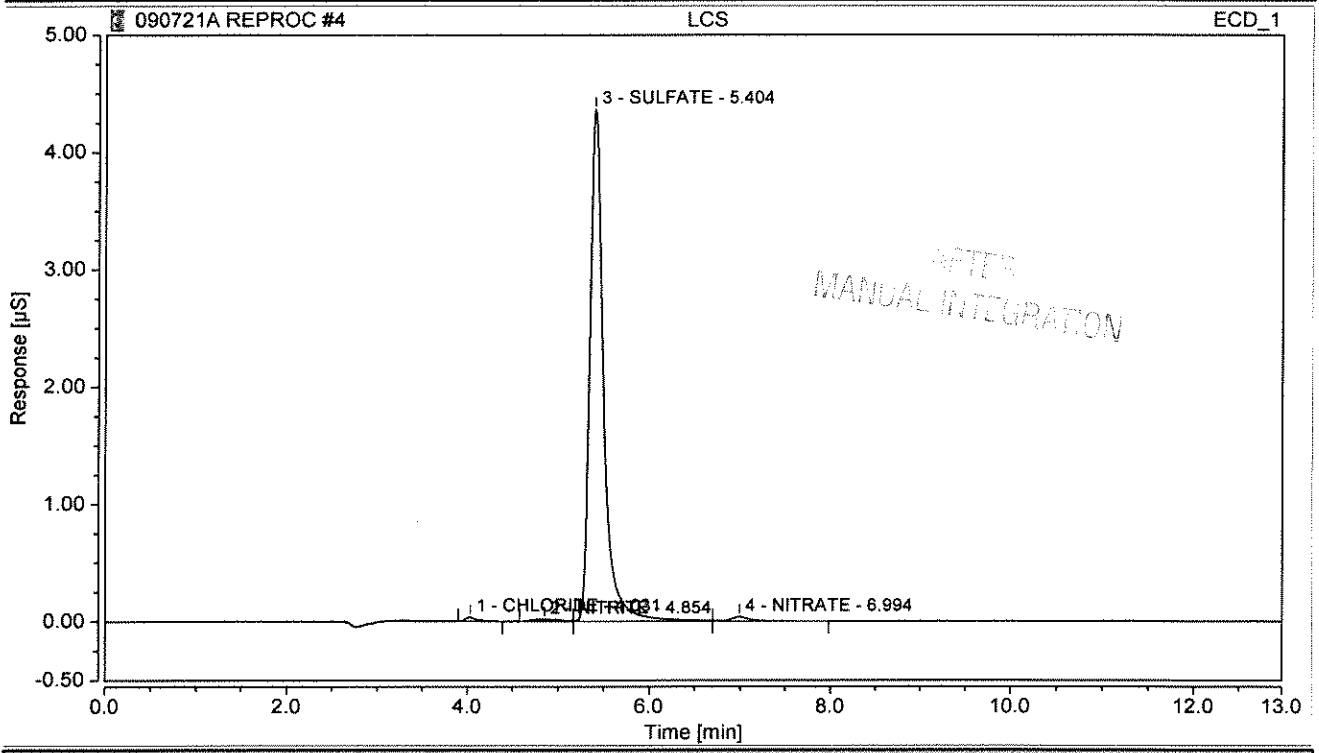
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.000**	**0.000**	**0.00**	**0.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**12.98**
Vial Number:	**4**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**07**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 16:38**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

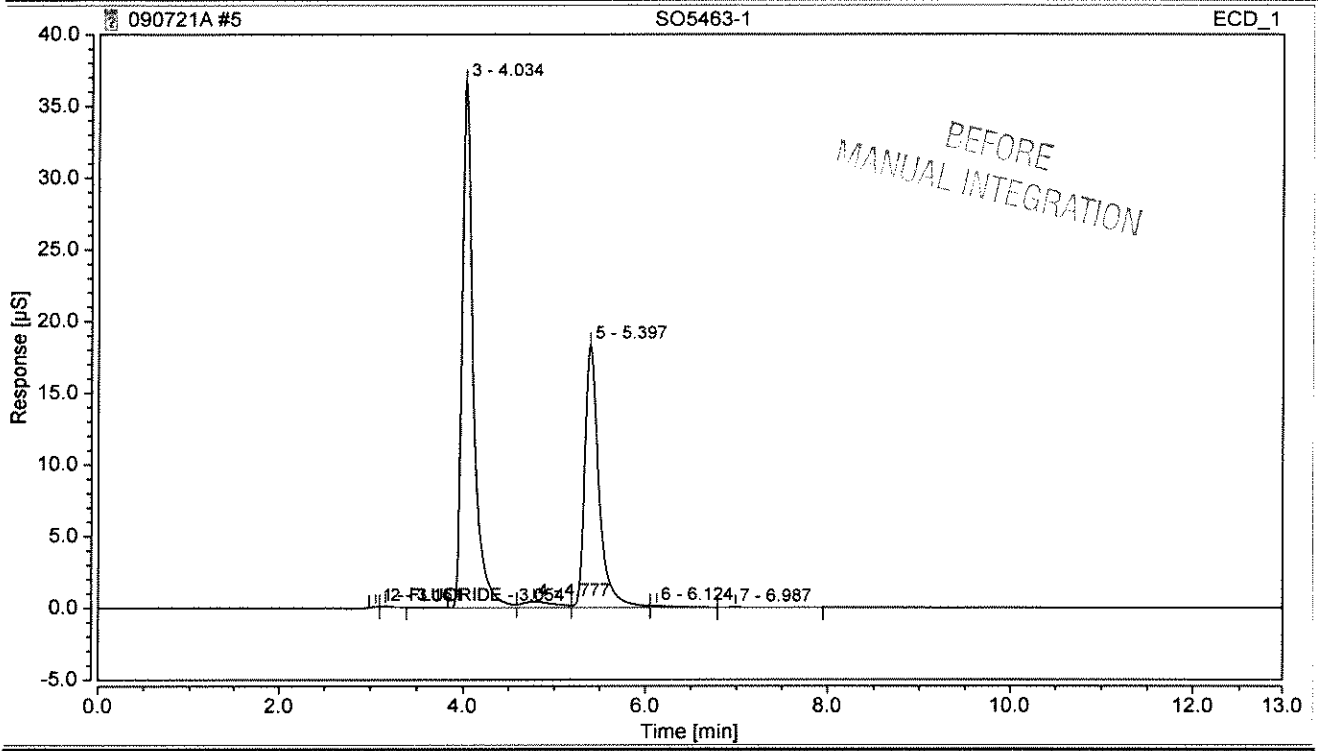
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.031	0.005	0.035	0.67	0.79	0.1081	-97.1174
2	NITRITE	4.854	0.006	0.017	0.73	0.38	0.0094	-99.1748
3	SULFATE	5.404	0.774	4.366	97.32	97.98	3.6281	-3.2509
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	6.994	0.010	0.038	1.29	0.85	0.0423	-94.9898
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.796**	**4.456**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5463-1**	*Run Time (min):*	**12.97**
Vial Number:	**5**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**07/Sep/21 16:57**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

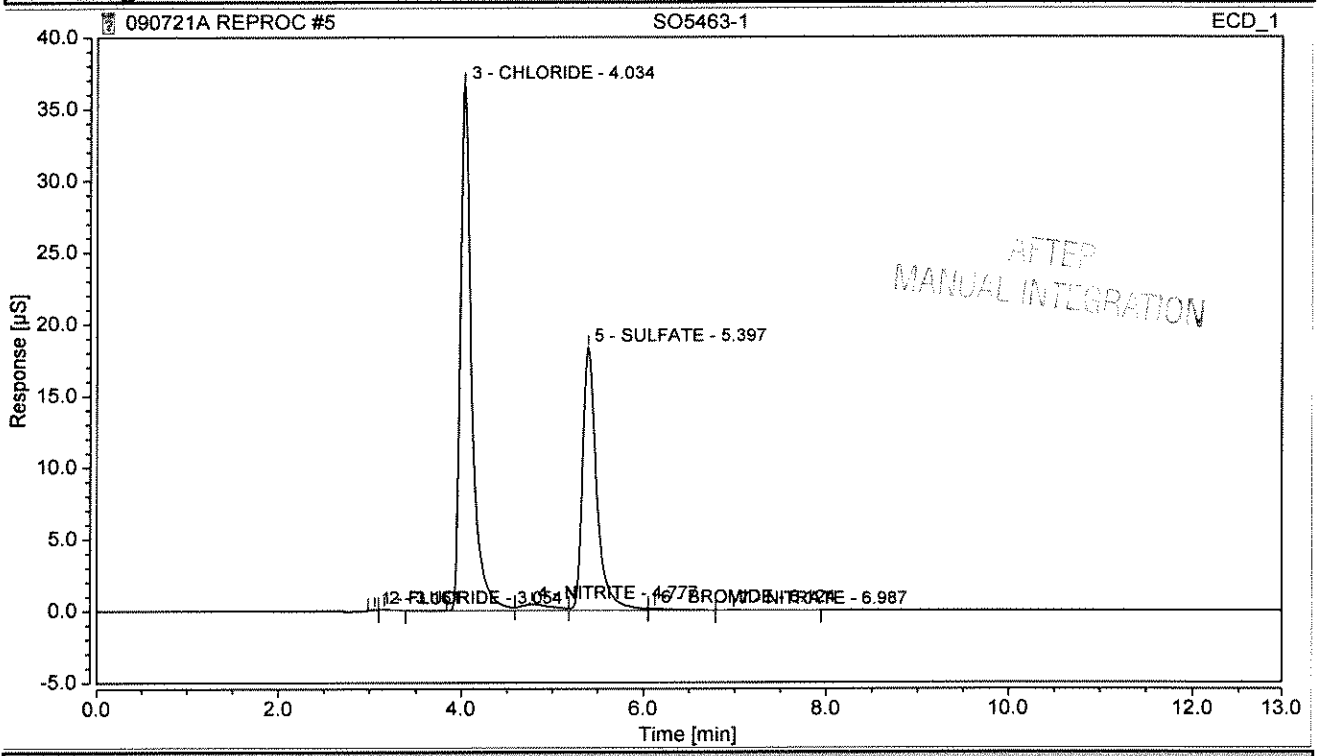
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.054	0.002	0.031	0.03	0.05	0.0101	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.002**	**0.031**	**0.03**	**0.05**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5463-1**	*Run Time (min):*	**12.97**
Vial Number:	**5**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**07/Sep/21 16:57**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

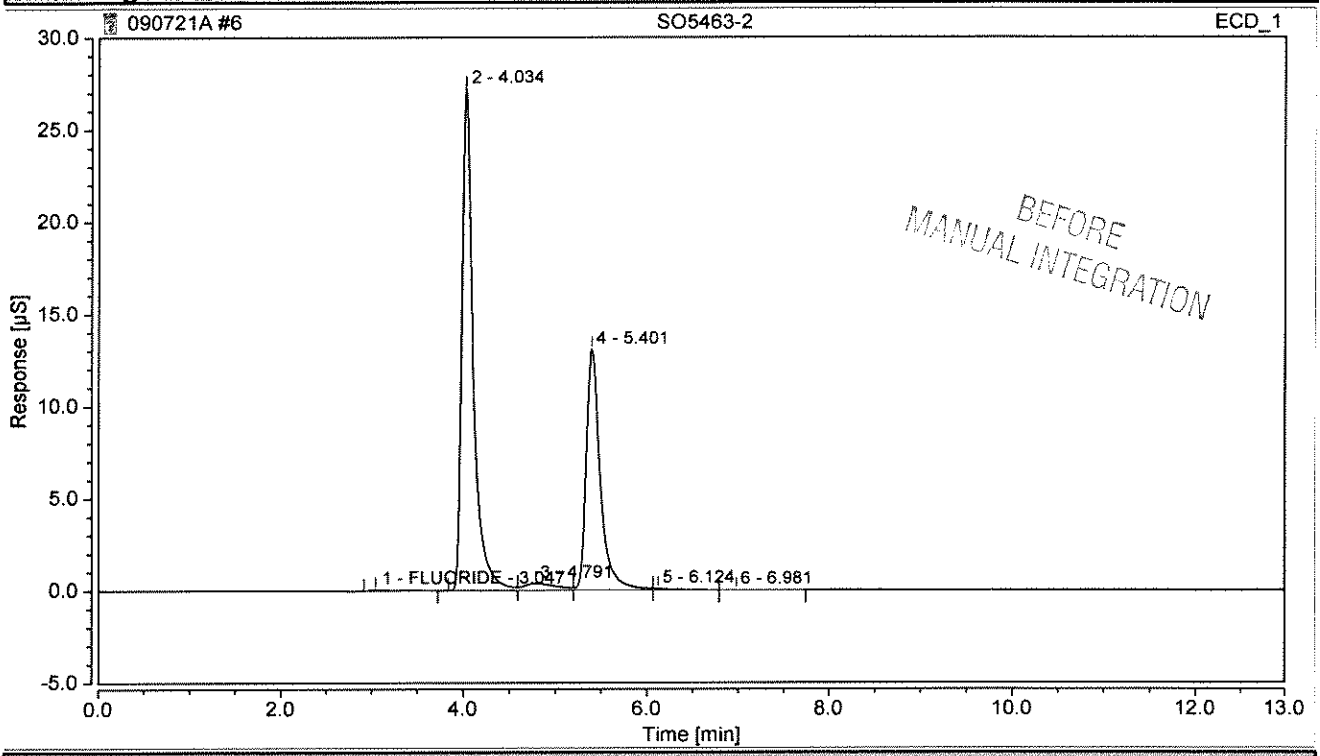
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.054	0.002	0.031	0.03	0.05	0.0101	n.a.
3	CHLORIDE	4.034	5.227	36.684	59.29	65.87	35.9800	n.a.
4	NITRITE	4.777	0.179	0.430	2.03	0.77	0.5837	n.a.
5	SULFATE	5.397	3.350	18.356	37.99	32.96	31.3867	n.a.
6	BROMIDE	6.124	0.042	0.122	0.48	0.22	0.3515	n.a.
7	NITRATE	6.987	0.011	0.025	0.13	0.04	0.0868	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.812**	**55.647**	**99.94**	**99.93**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5463-2**	*Run Time (min):*	**12.98**
Vial Number:	**6**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**07/Sep/21 17:15**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

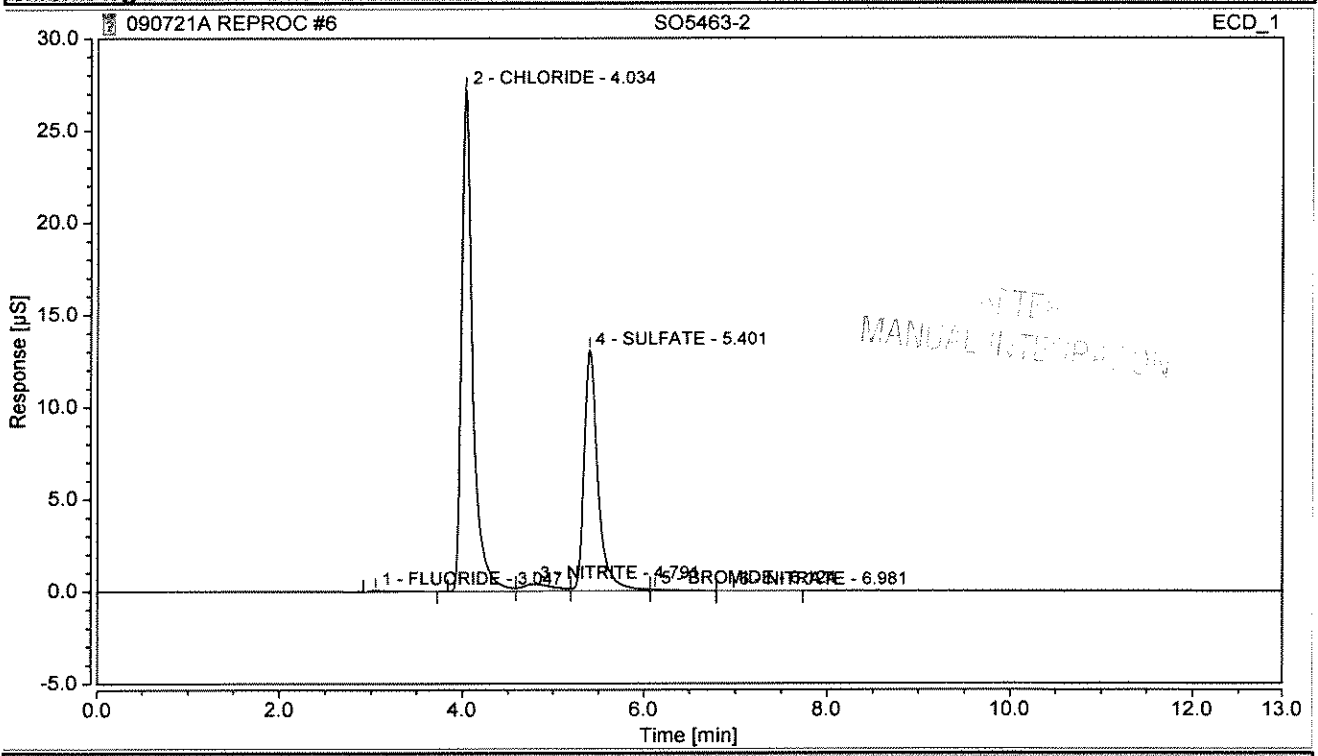
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.047	0.019	0.074	0.29	0.18	0.0789	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.019**	**0.074**	**0.29**	**0.18**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5463-2**	*Run Time (min):*	**12.98**
Vial Number:	**6**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**07/Sep/21 17:15**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

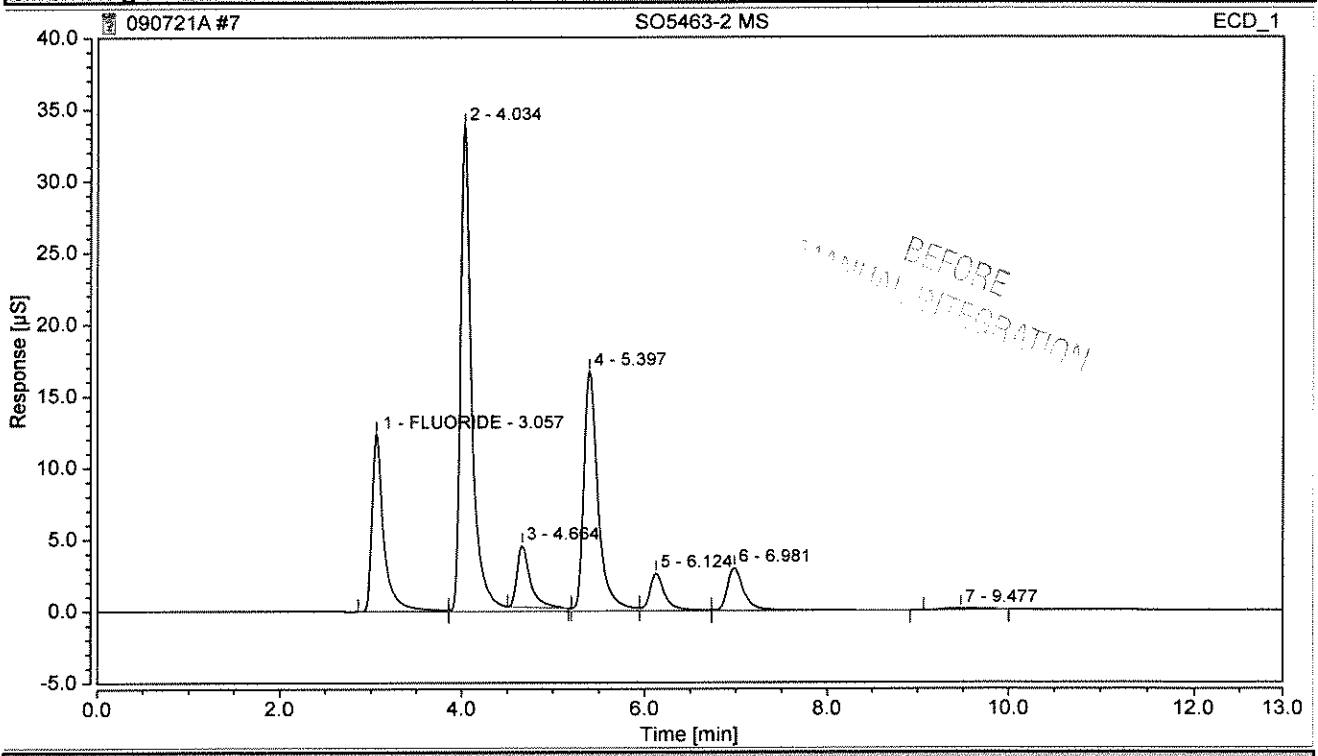
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.047	0.019	0.074	0.29	0.18	0.0789	n.a.
2	CHLORIDE	4.034	3.868	27.221	60.16	66.69	26.6735	n.a.
3	NITRITE	4.791	0.152	0.372	2.37	0.91	0.4968	n.a.
4	SULFATE	5.401	2.358	13.057	36.68	31.99	22.0987	n.a.
5	BROMIDE	6.124	0.026	0.078	0.41	0.19	0.2254	n.a.
6	NITRATE	6.981	0.006	0.015	0.10	0.04	0.0736	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.430**	**40.817**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5463-2 MS**	*Run Time (min):*	**12.98**
Vial Number:	**7**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**07/Sep/21 17:34**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

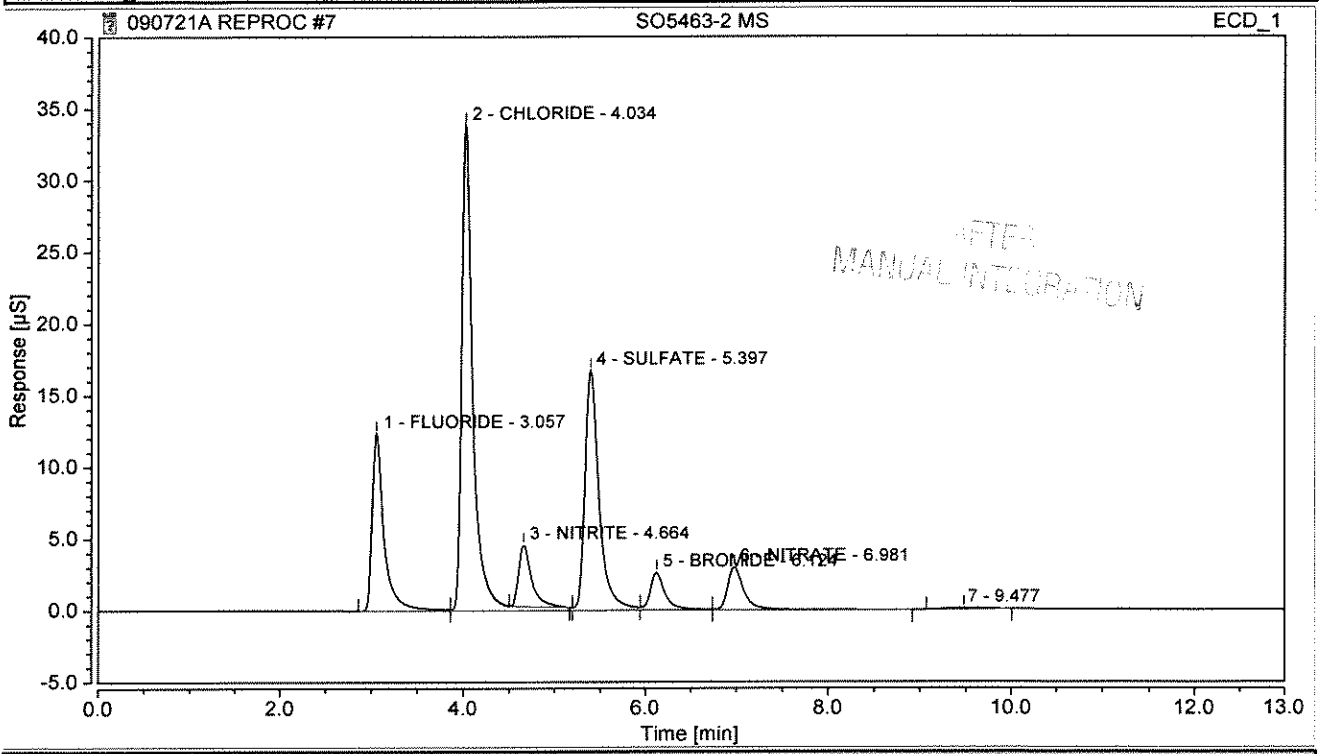
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.057	1.887	12.359	15.95	16.95	7.9983	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**1.887**	**12.359**	**15.95**	**16.95**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5463-2 MS**	*Run Time (min):*	**12.98**
Vial Number:	**7**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**07/Sep/21 17:34**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

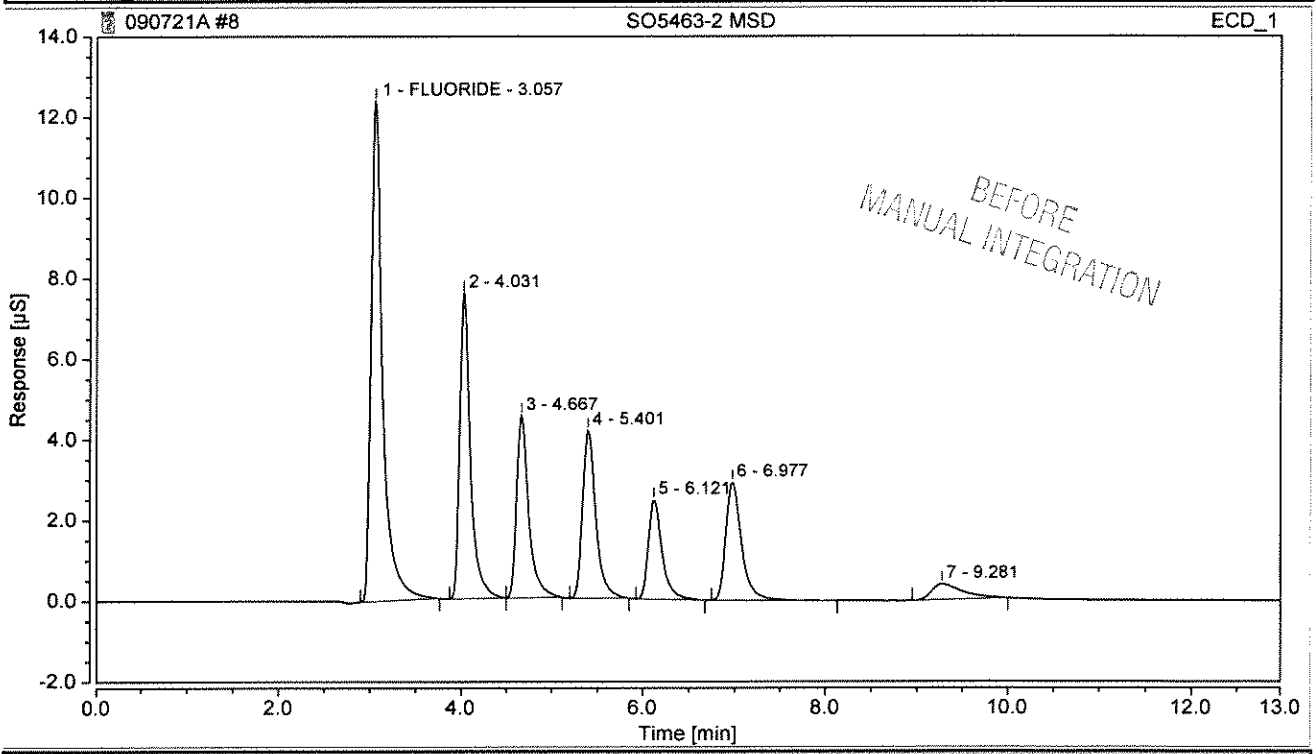
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.057	1.887	12.359	15.95	16.95	7.9983	n.a.
2	CHLORIDE	4.034	4.991	33.867	42.18	46.43	34.3606	n.a.
3	NITRITE	4.664	0.725	4.298	6.13	5.89	2.3626	n.a.
4	SULFATE	5.397	3.045	16.726	25.74	22.93	28.5311	n.a.
5	BROMIDE	6.124	0.512	2.628	4.33	3.60	7.5560	n.a.
6	NITRATE	6.981	0.631	2.975	5.33	4.08	1.7350	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.792**	**72.853**	**99.66**	**99.89**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5463-2 MSD**	*Run Time (min):*	**12.98**
Vial Number:	**8**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**07/Sep/21 17:53**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

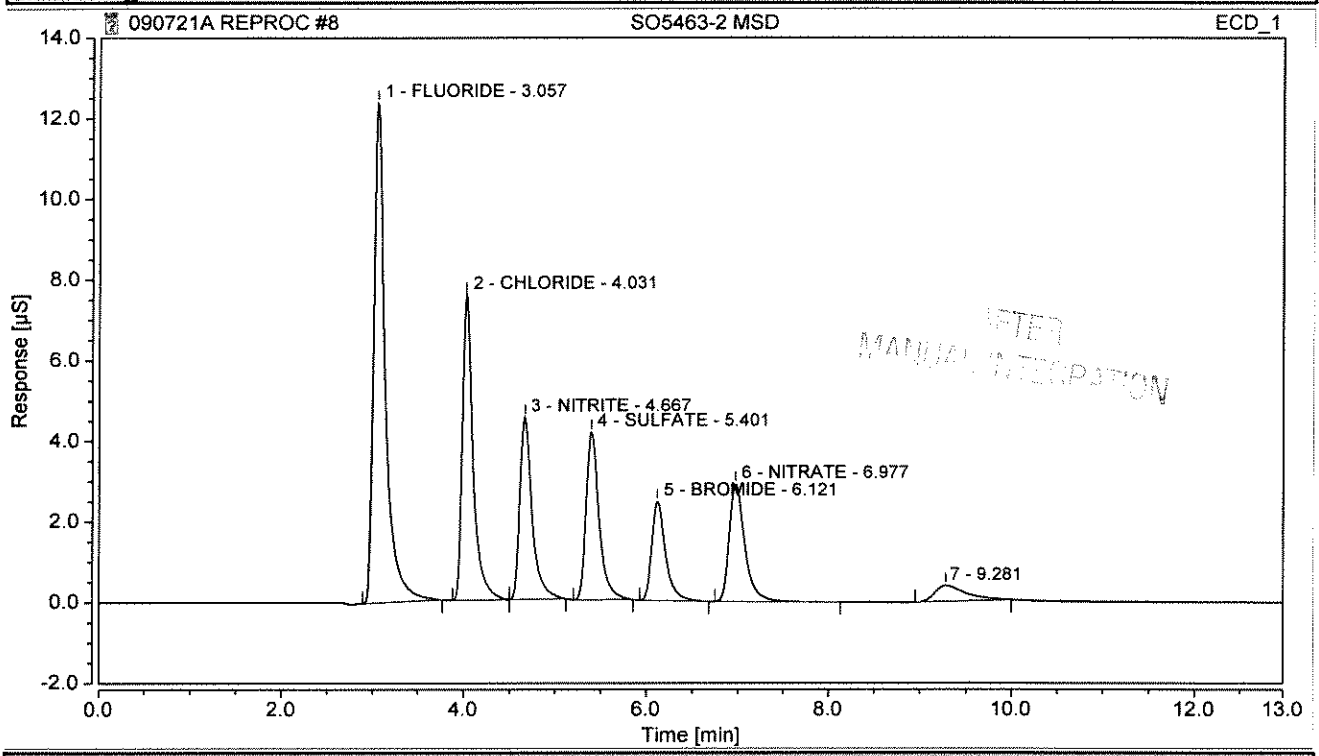
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.057	1.827	12.403	33.53	36.01	7.7439	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**1.827**	**12.403**	**33.53**	**36.01**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5463-2 MSD**	*Run Time (min):*	**12.98**
Vial Number:	**8**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**07/Sep/21 17:53**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

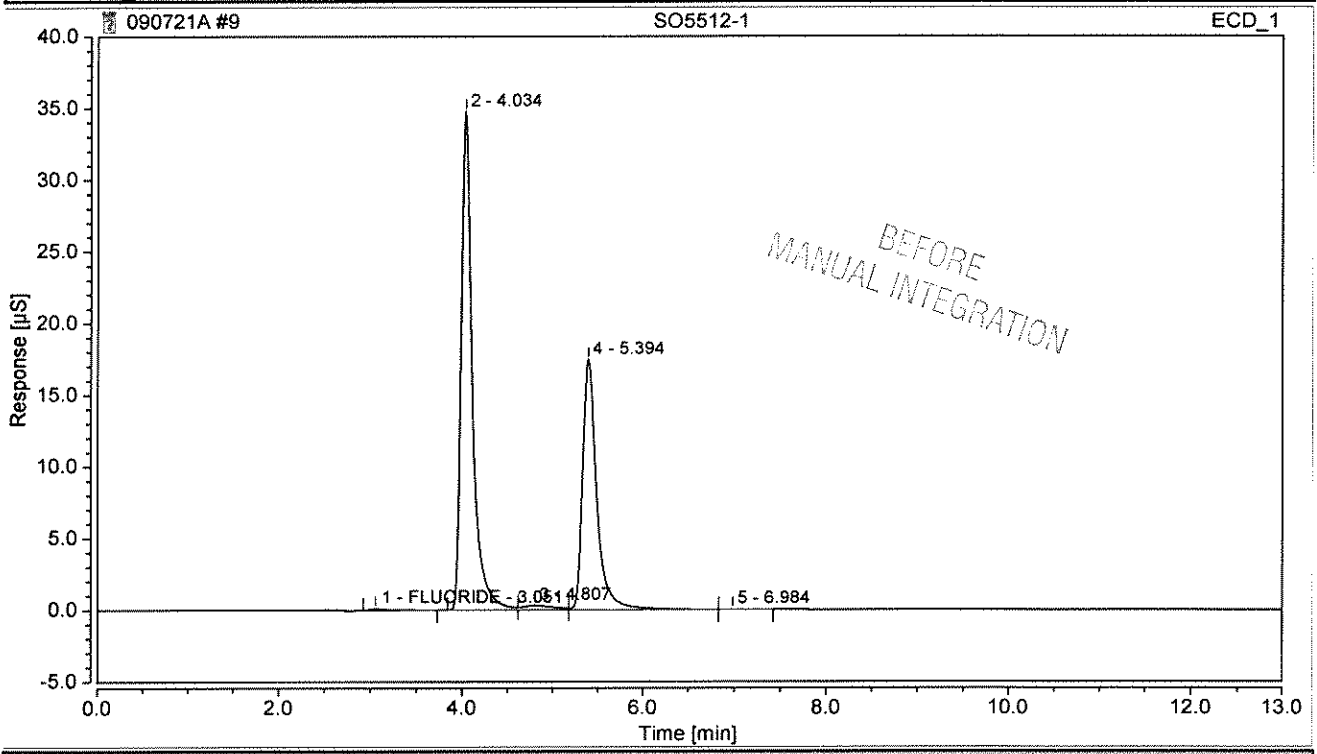
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.057	1.827	12.403	33.53	36.01	7.7439	n.a.
2	CHLORIDE	4.031	1.039	7.581	19.07	22.01	7.2957	n.a.
3	NITRITE	4.667	0.709	4.520	13.01	13.12	2.3106	n.a.
4	SULFATE	5.401	0.698	4.161	12.80	12.08	6.5378	n.a.
5	BROMIDE	6.121	0.431	2.464	7.91	7.15	7.0848	n.a.
6	NITRATE	6.977	0.589	2.924	10.81	8.49	1.6243	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.294**	**34.053**	**97.14**	**98.86**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5512-1**	*Run Time (min):*	**12.99**
Vial Number:	**9**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**07/Sep/21 18:12**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

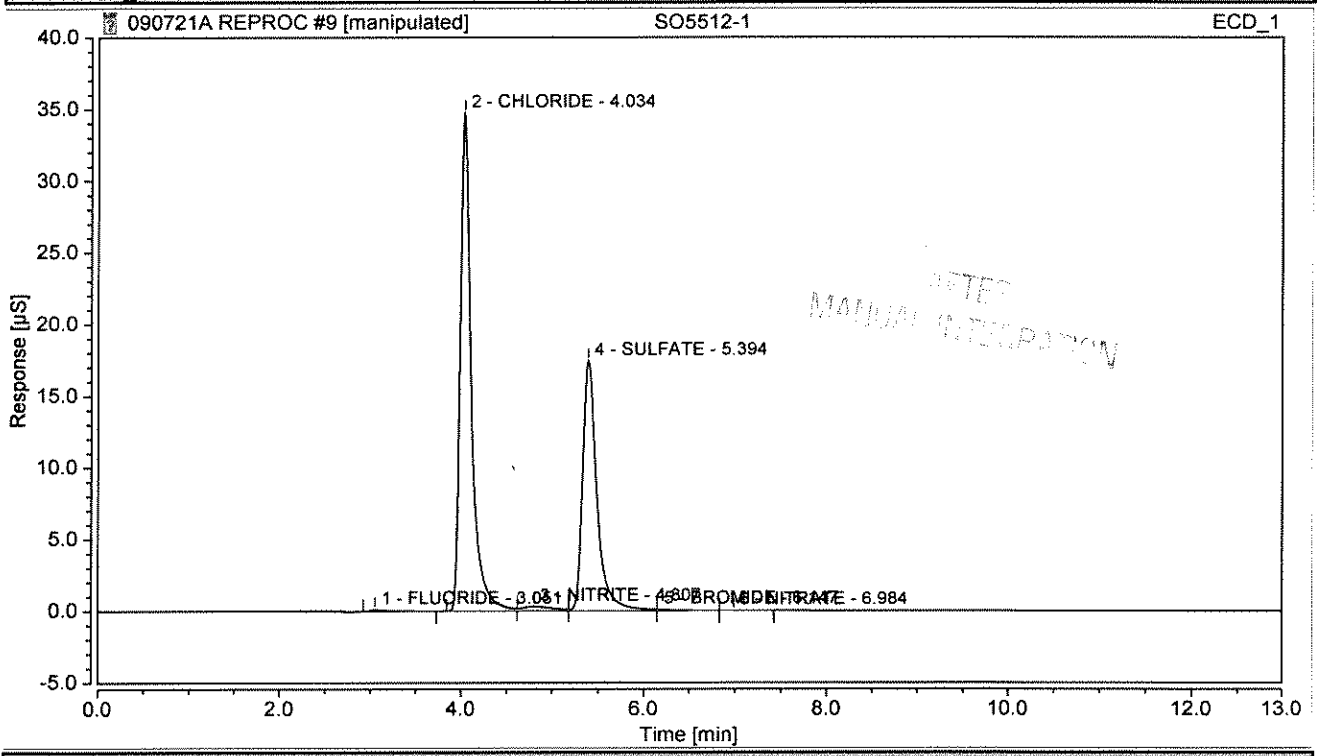
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.051	0.025	0.112	0.30	0.21	0.1048	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.025**	**0.112**	**0.30**	**0.21**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5512-1**	*Run Time (min):*	**12.99**
Vial Number:	**9**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**07/Sep/21 18:12**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

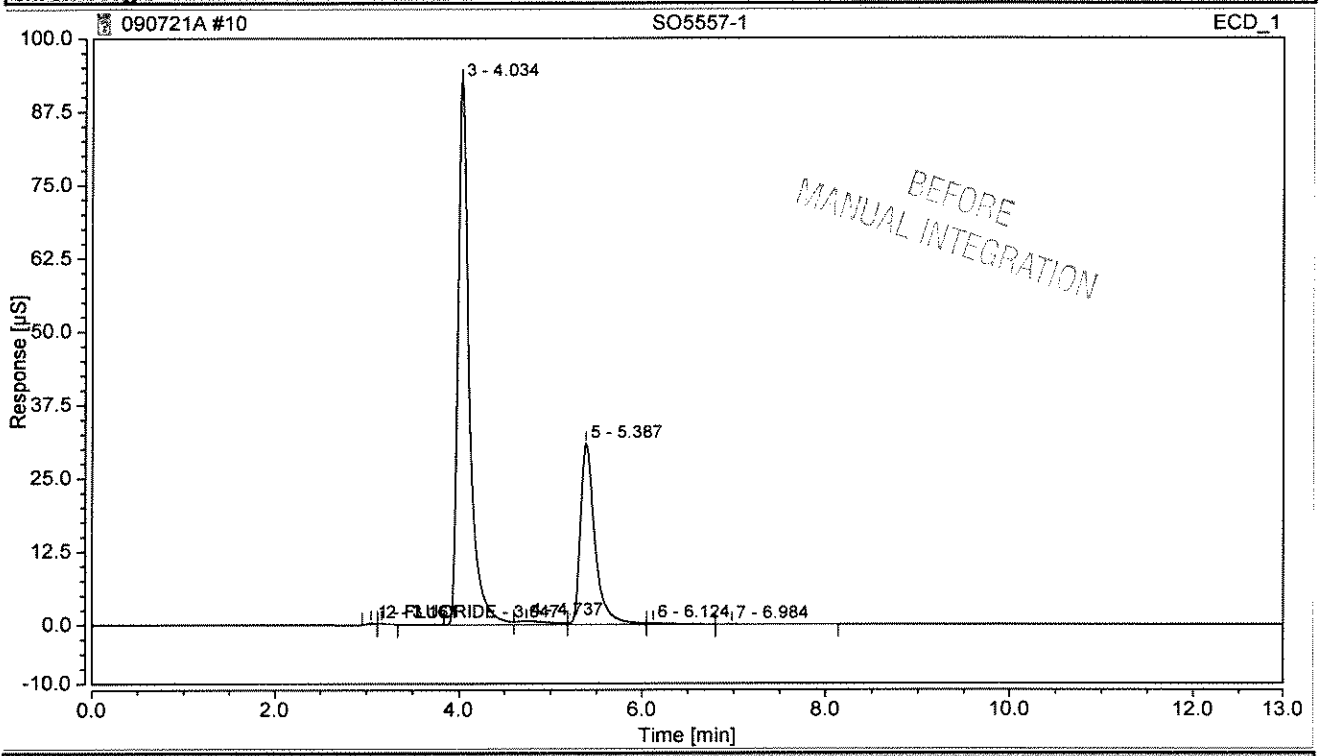
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.051	0.025	0.112	0.30	0.21	0.1048	n.a.
2	CHLORIDE	4.034	4.905	34.739	59.60	65.95	33.7715	n.a.
3	NITRITE	4.807	0.116	0.299	1.41	0.57	0.3784	n.a.
4	SULFATE	5.394	3.157	17.424	38.36	33.08	29.5787	n.a.
5	BROMIDE	6.147	0.021	0.082	0.26	0.16	0.2355	n.a.
6	NITRATE	6.984	0.005	0.018	0.06	0.03	0.0712	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.229**	**52.674**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5557-1**	*Run Time (min):*	**12.98**
Vial Number:	**10**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 18:31**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

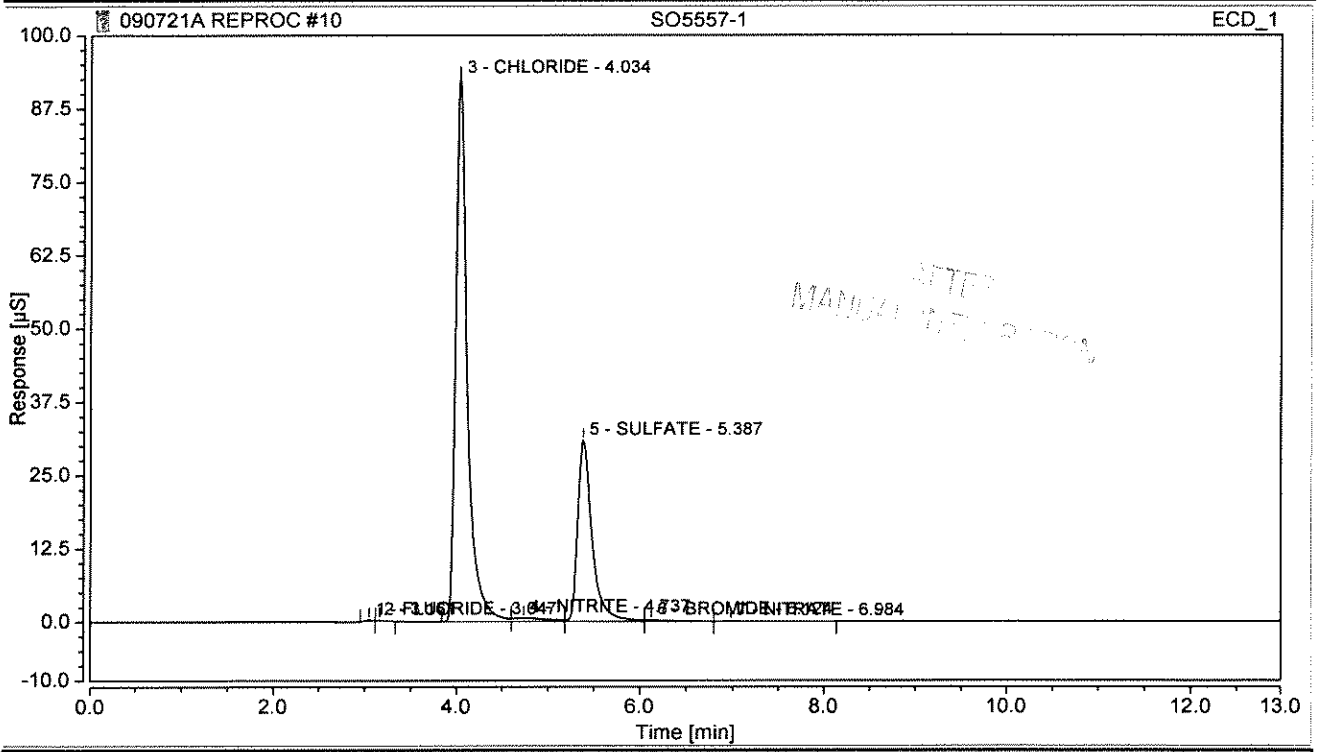
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.047	0.012	0.145	0.06	0.12	0.0250	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.012**	**0.145**	**0.06**	**0.12**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5557-1**	*Run Time (min):*	**12.98**
Vial Number:	**10**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 18:31**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

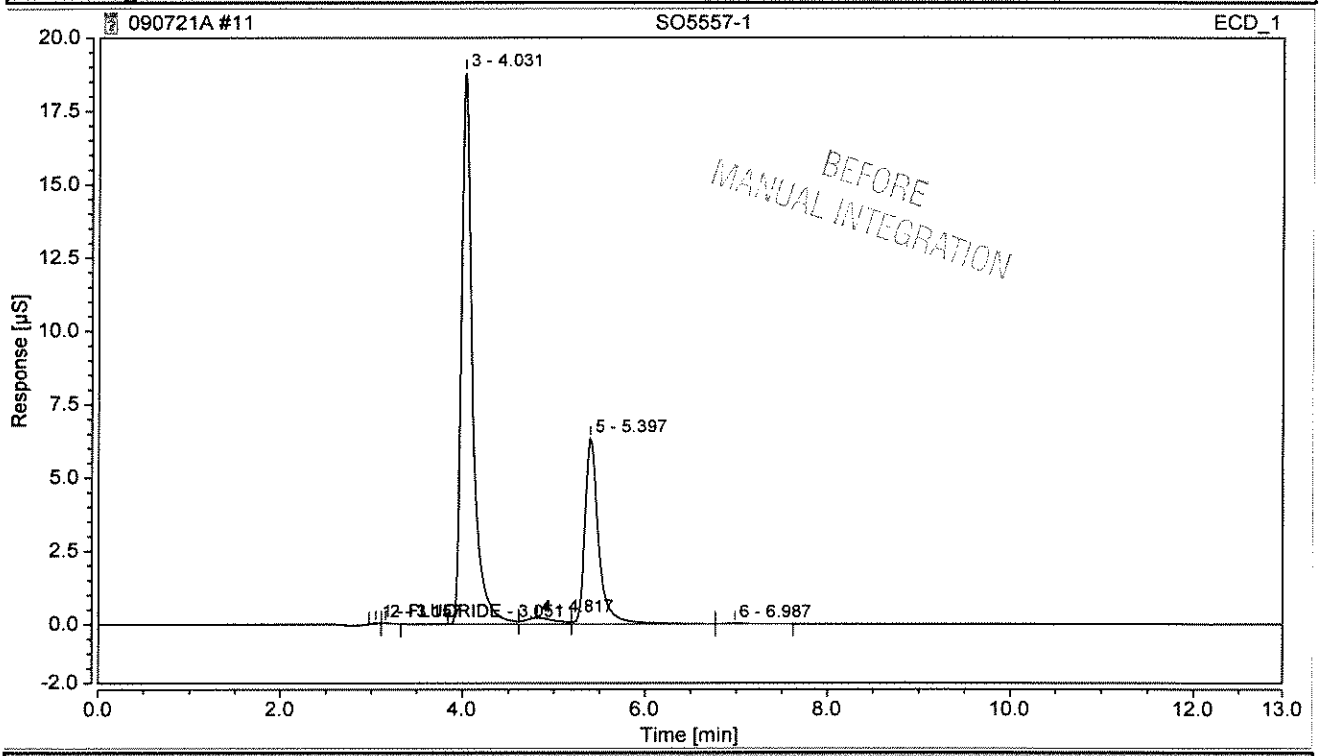
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.047	0.012	0.145	0.06	0.12	0.0250	n.a.
3	CHLORIDE	4.034	13.331	92.602	68.63	74.35	45.7398	n.a.
4	NITRITE	4.737	0.264	0.628	1.36	0.50	0.4296	n.a.
5	SULFATE	5.387	5.718	30.847	29.44	24.77	26.7868	n.a.
6	BROMIDE	6.124	0.073	0.208	0.38	0.17	0.2985	n.a.
7	NITRATE	6.984	0.020	0.045	0.10	0.04	0.0555	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**19.417**	**124.475**	**99.97**	**99.94**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5557-1**	*Run Time (min):*	**12.98**
Vial Number:	**11**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**5.0**
Injection Date/Time:	**07/Sep/21 18:50**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

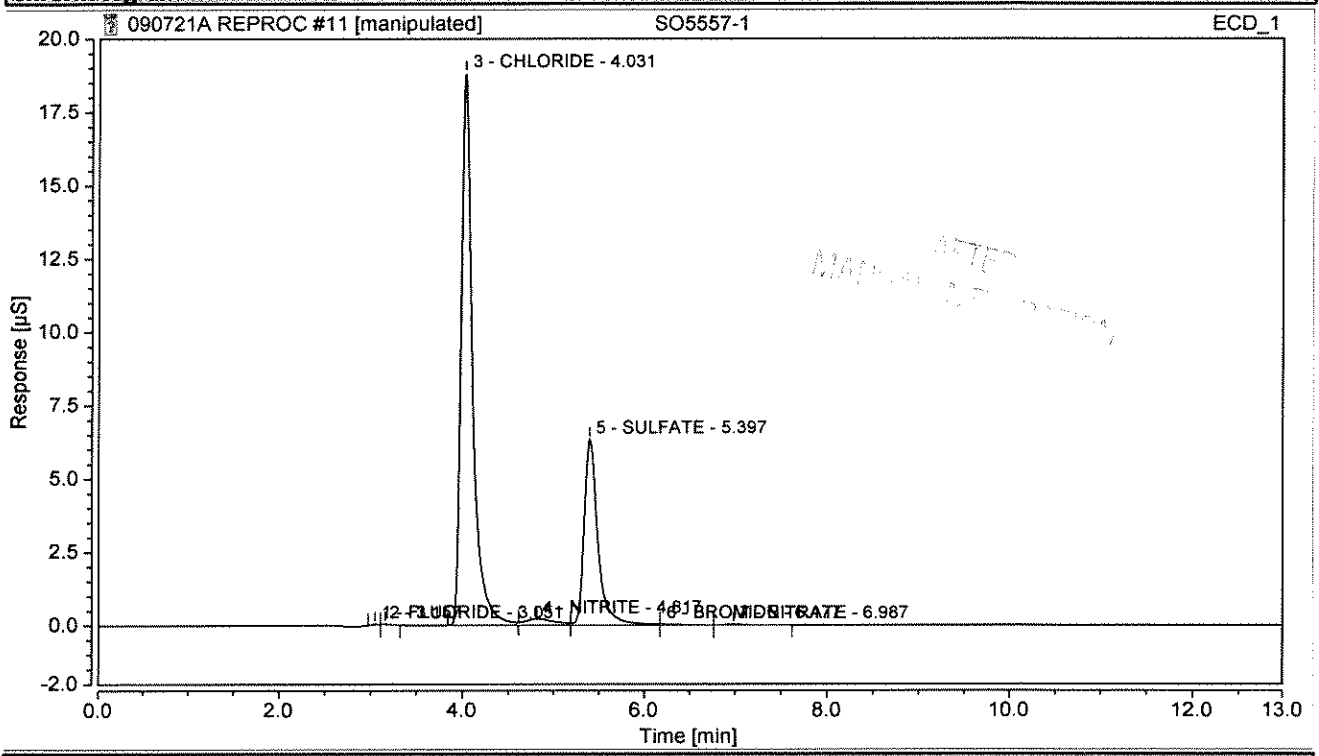
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.051	0.002	0.026	0.05	0.10	0.0215	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.002**	**0.026**	**0.05**	**0.10**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5557-1**	*Run Time (min):*	**12.98**
Vial Number:	**11**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**5.0**
Injection Date/Time:	**07/Sep/21 18:50**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

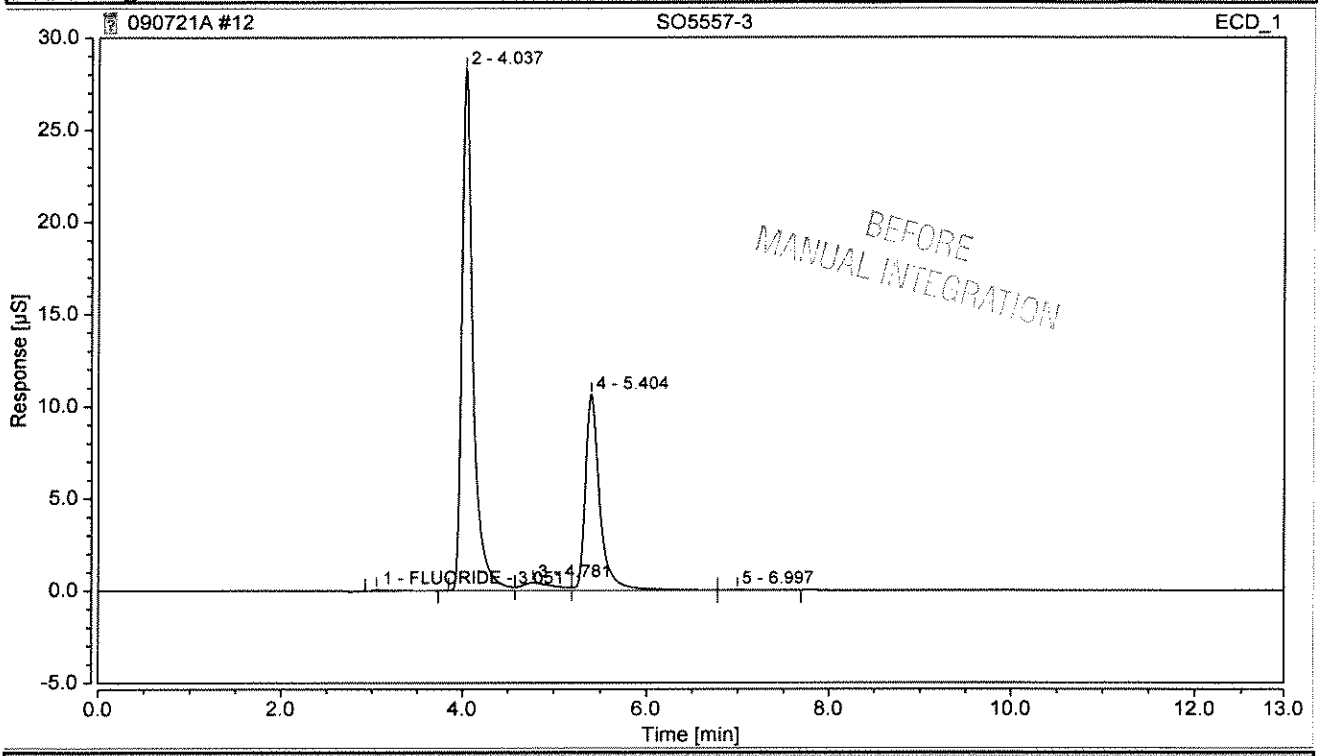
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.051	0.002	0.026	0.05	0.10	0.0215	n.a.
3	CHLORIDE	4.031	2.661	18.828	68.35	73.87	46.0023	n.a.
4	NITRITE	4.817	0.083	0.219	2.13	0.86	0.6758	n.a.
5	SULFATE	5.397	1.129	6.342	29.01	24.88	26.4463	n.a.
6	BROMIDE	6.177	0.010	0.035	0.25	0.14	0.2542	n.a.
7	NITRATE	6.987	0.007	0.026	0.17	0.10	0.1882	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.891**	**25.475**	**99.97**	**99.95**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5557-3**	*Run Time (min):*	**12.98**
Vial Number:	**12**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**07/Sep/21 19:08**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

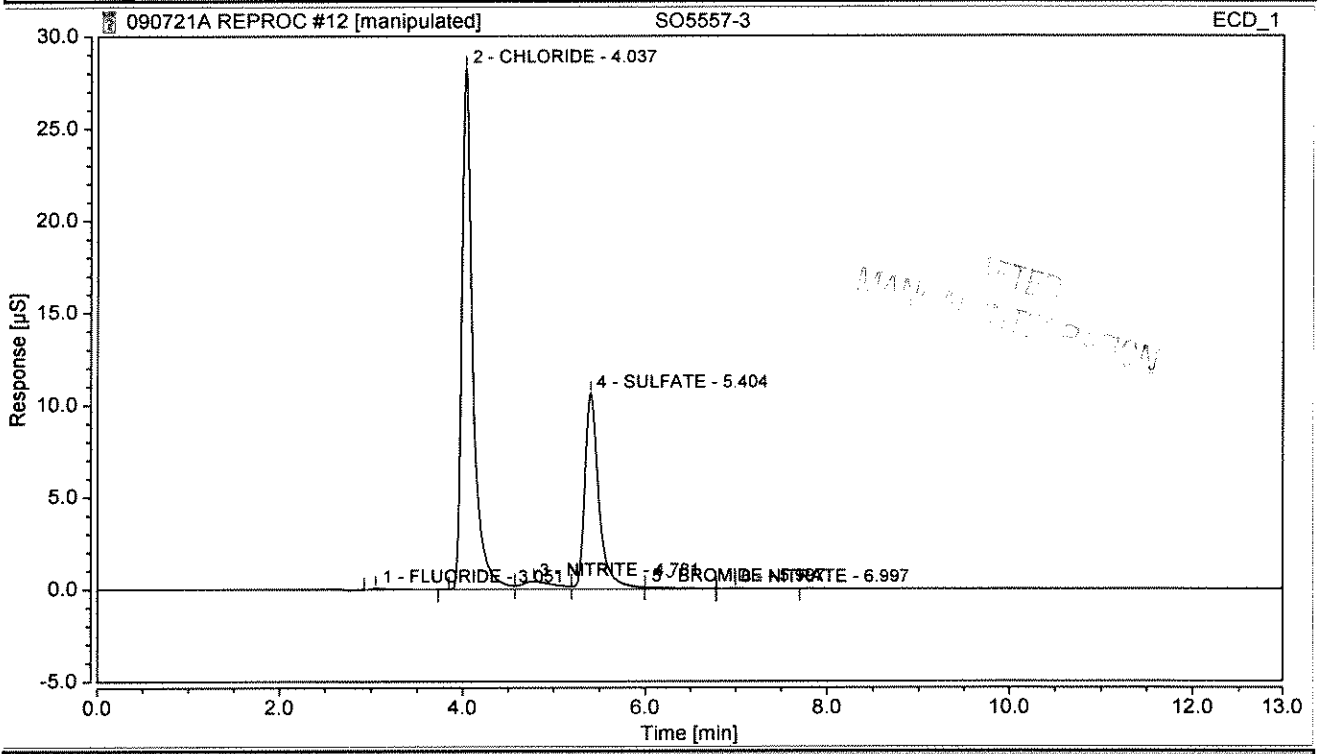
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.051	0.019	0.071	0.30	0.18	0.0790	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.019**	**0.071**	**0.30**	**0.18**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5557-3**	*Run Time (min):*	**12.98**
Vial Number:	**12**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**2.0**
Injection Date/Time:	**07/Sep/21 19:08**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

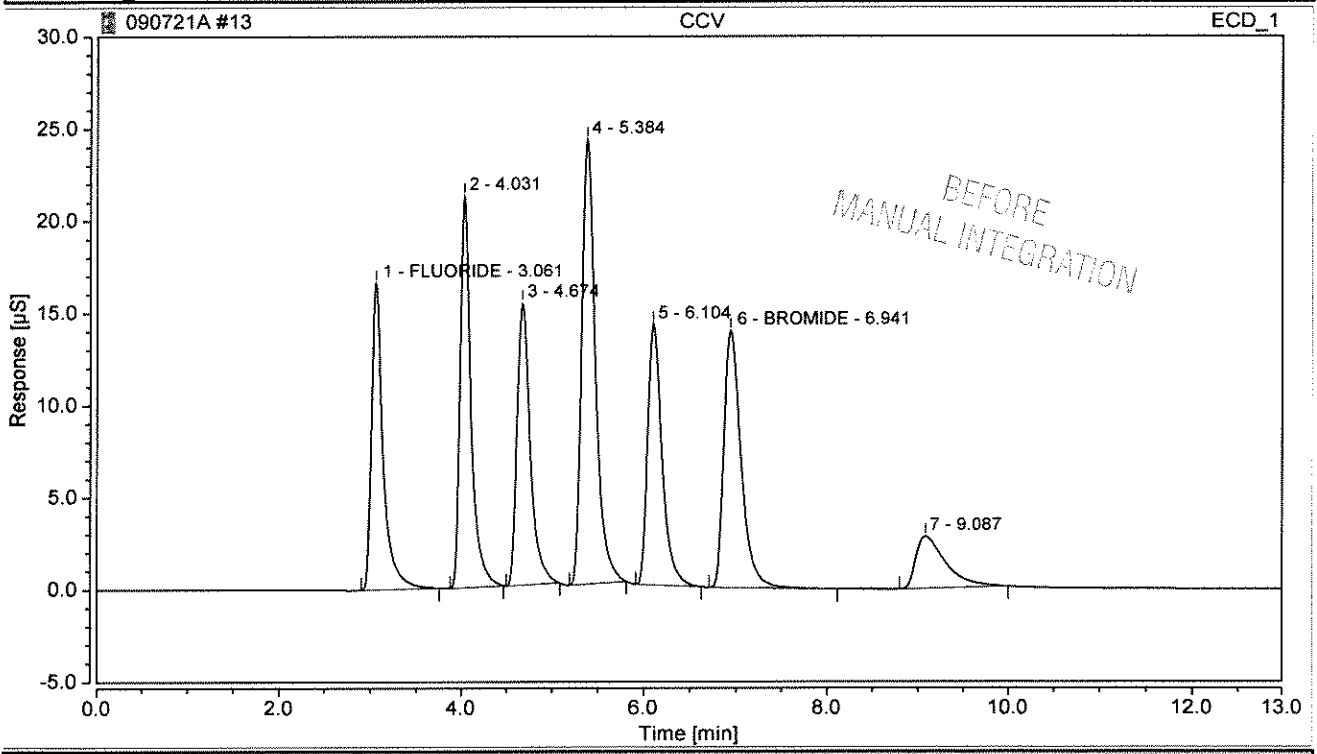
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.051	0.019	0.071	0.30	0.18	0.0790	n.a.
2	CHLORIDE	4.037	4.002	28.242	65.28	71.59	27.5865	n.a.
3	NITRITE	4.781	0.170	0.409	2.78	1.04	0.5547	n.a.
4	SULFATE	5.404	1.902	10.612	31.03	26.90	17.8259	n.a.
5	BROMIDE	5.997	0.029	0.089	0.48	0.23	0.2555	n.a.
6	NITRATE	6.997	0.008	0.027	0.13	0.07	0.0794	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.131**	**39.449**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**12.98**
Vial Number:	**13**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 19:27**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

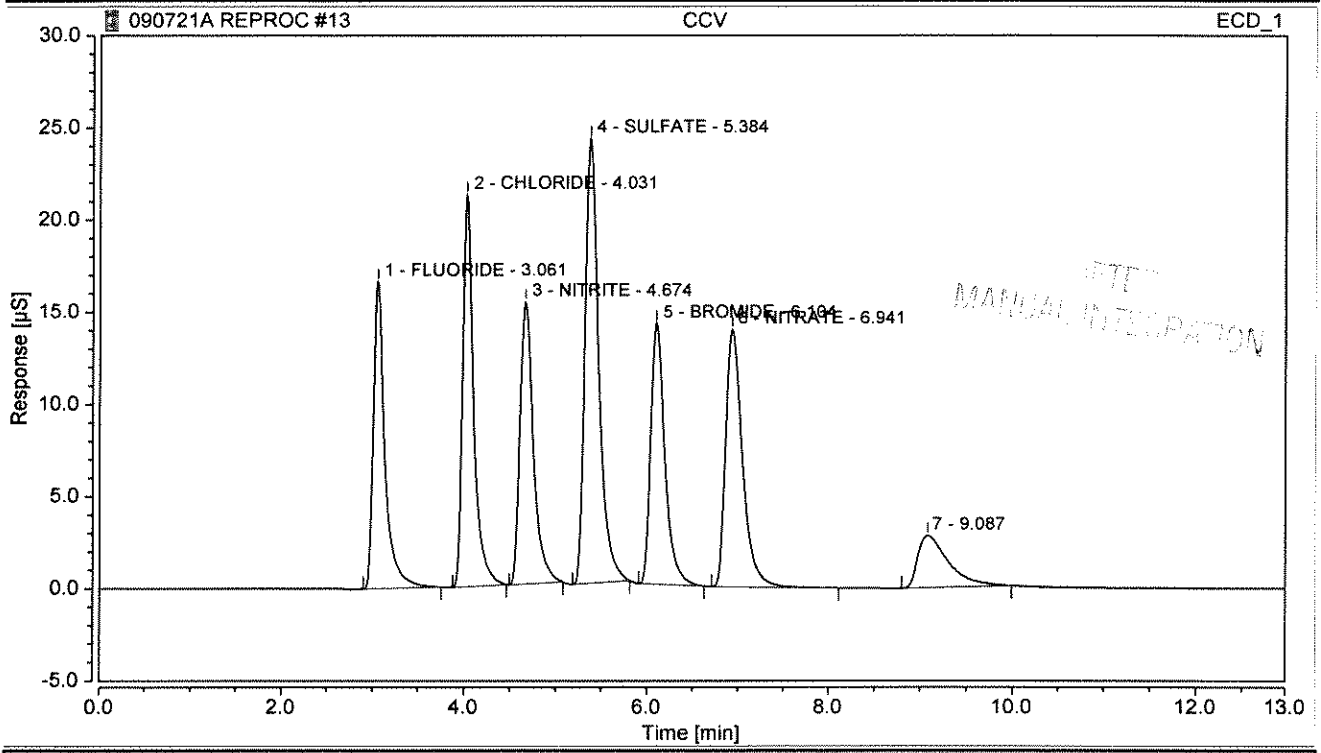
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.061	2.469	16.651	13.10	15.37	5.2315	4.6306
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	BROMIDE	6.941	3.006	13.958	15.94	12.89	20.0667	0.3333
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.475**	**30.609**	**29.04**	**28.26**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**12.98**
Vial Number:	**13**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 19:27**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

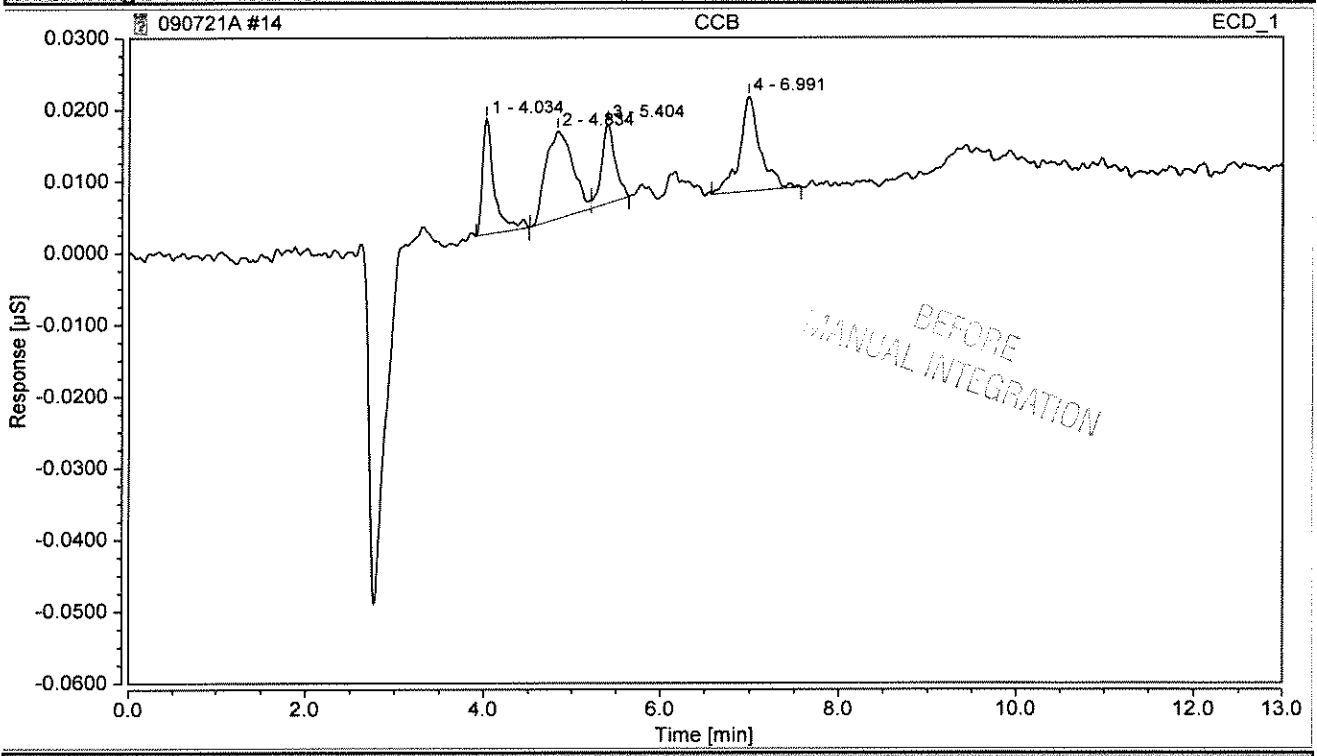
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.061	2.469	16.651	13.10	15.37	5.2315	4.6306
2	CHLORIDE	4.031	2.933	21.271	15.56	19.64	10.1334	1.3343
3	NITRITE	4.674	2.574	15.318	13.65	14.14	4.1939	4.8480
4	SULFATE	5.384	4.222	24.137	22.39	22.28	19.7799	-1.1003
5	BROMIDE	6.104	2.570	14.151	13.63	13.07	20.3433	1.7167
6	NITRATE	6.941	3.006	13.958	15.94	12.89	4.0246	0.6140
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**17.775**	**105.486**	**94.28**	**97.39**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**12.99**
Vial Number:	**14**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 19:46**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

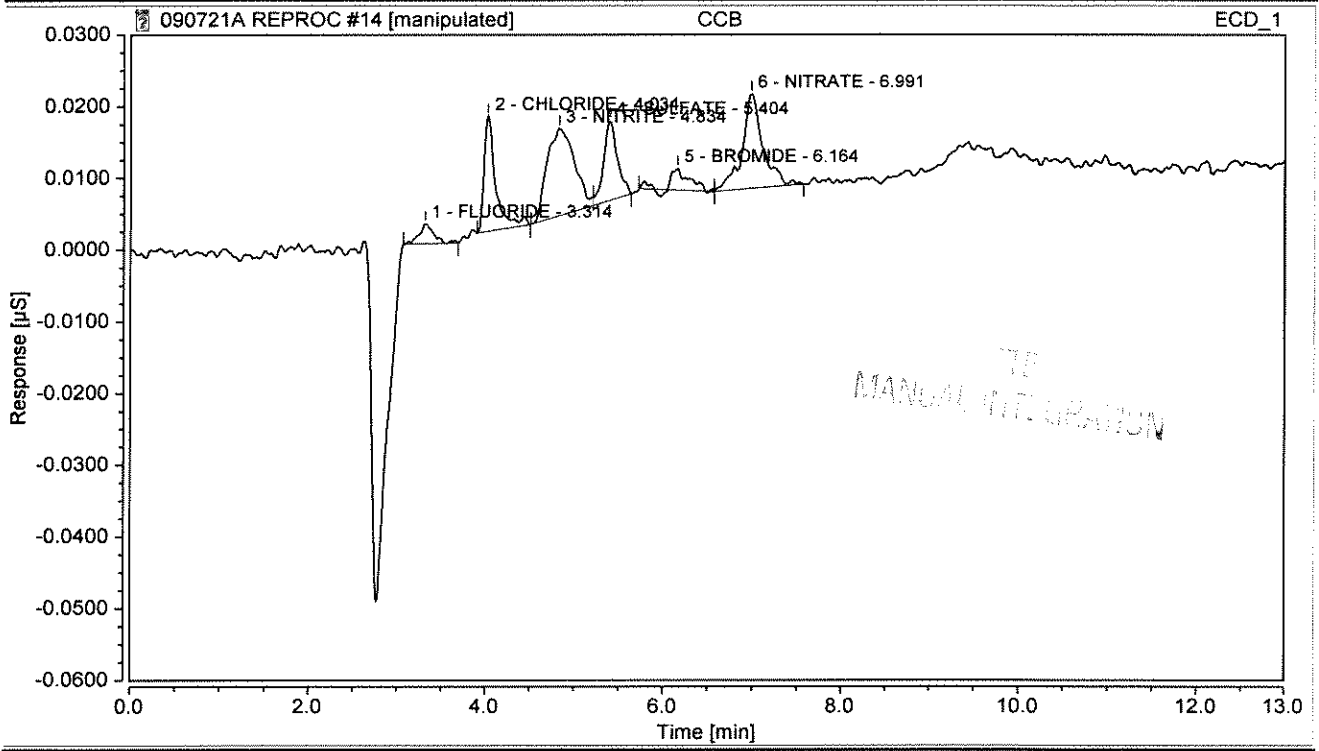
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.000**	**0.000**	**0.00**	**0.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**12.99**
Vial Number:	**14**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 19:46**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

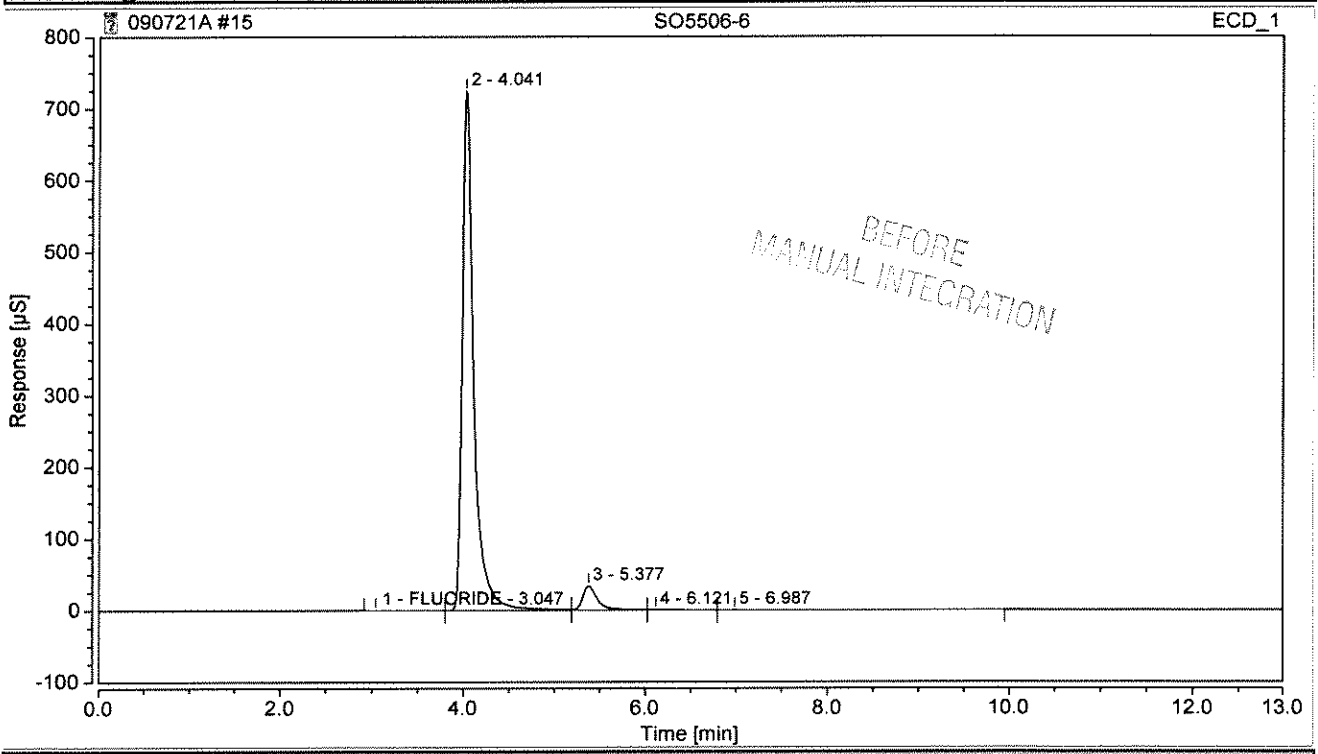
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.314	0.001	0.003	3.99	4.88	0.0012	n.a.
2	CHLORIDE	4.034	0.002	0.016	18.06	27.45	0.0984	n.a.
3	NITRITE	4.834	0.004	0.012	31.95	20.85	0.0071	n.a.
4	SULFATE	5.404	0.002	0.011	14.65	19.02	0.0094	n.a.
5	BROMIDE	6.164	0.001	0.003	5.23	5.25	0.0044	n.a.
6	NITRATE	6.991	0.004	0.013	26.11	22.55	0.0334	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.014**	**0.059**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5506-6**	*Run Time (min):*	**12.98**
Vial Number:	**15**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 20:05**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

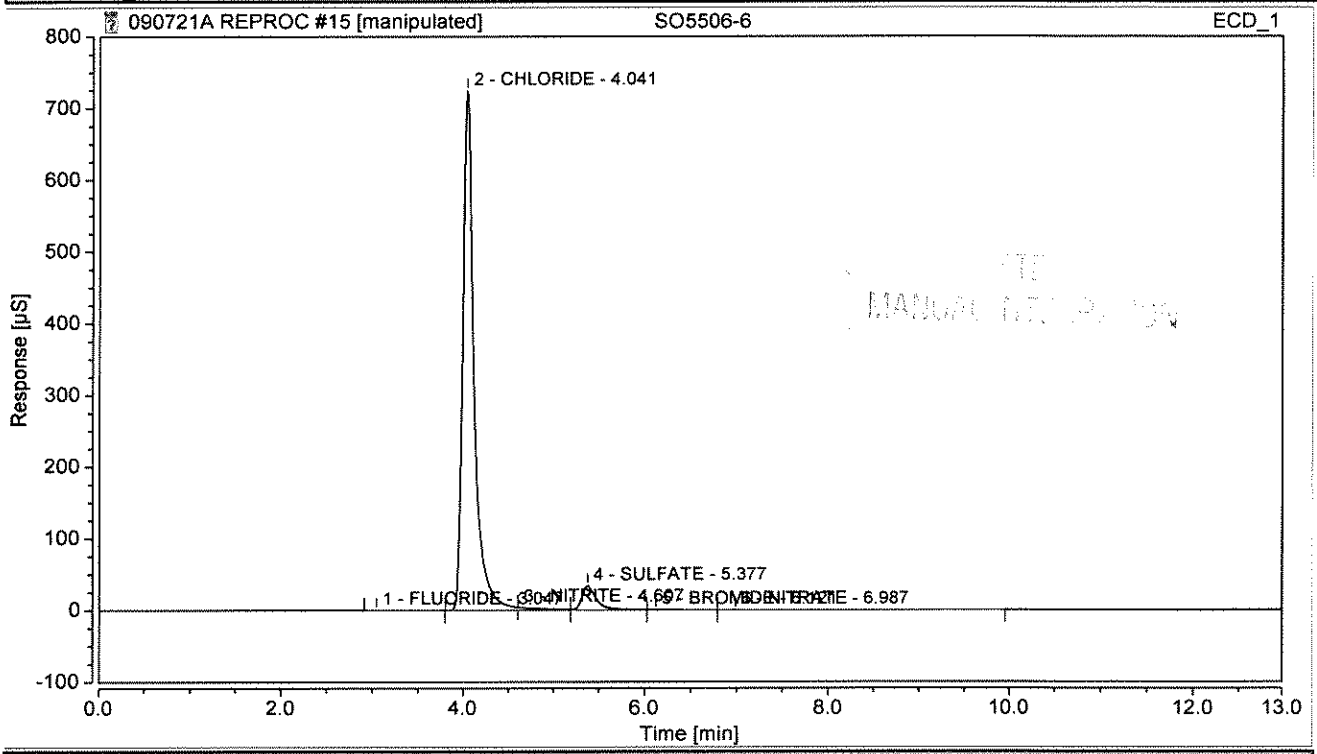
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.047	0.034	0.136	0.03	0.02	0.0718	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.034**	**0.136**	**0.03**	**0.02**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5506-6**	*Run Time (min):*	**12.98**
Vial Number:	**15**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 20:05**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

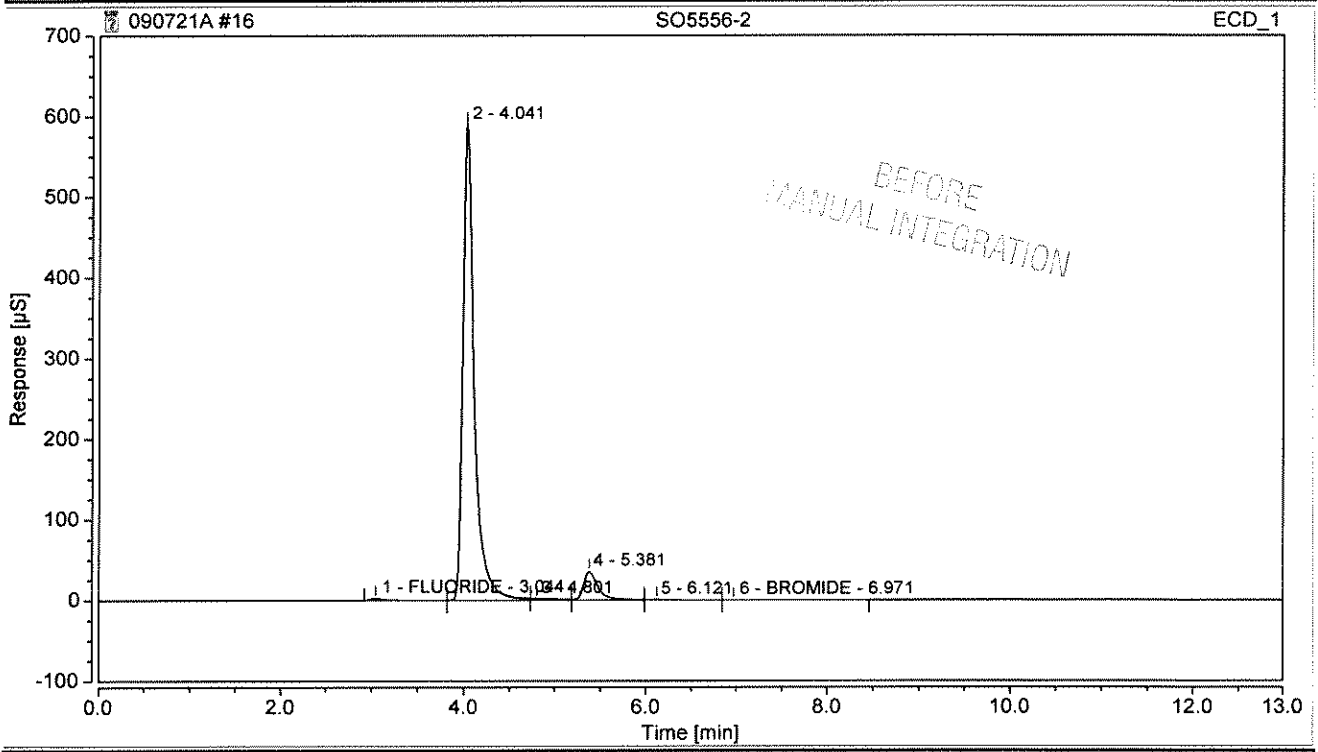
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.047	0.034	0.136	0.03	0.02	0.0718	n.a.
2	CHLORIDE	4.041	105.748	724.532	93.25	95.00	362.2040	n.a.
3	NITRITE	4.607	1.068	3.801	0.94	0.50	1.7402	n.a.
4	SULFATE	5.377	6.357	33.775	5.61	4.43	29.7817	n.a.
5	BROMIDE	6.121	0.125	0.302	0.11	0.04	0.4345	n.a.
6	NITRATE	6.987	0.076	0.133	0.07	0.02	0.1297	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**113.407**	**762.680**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5556-2**	*Run Time (min):*	**12.99**
Vial Number:	**16**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 20:24**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

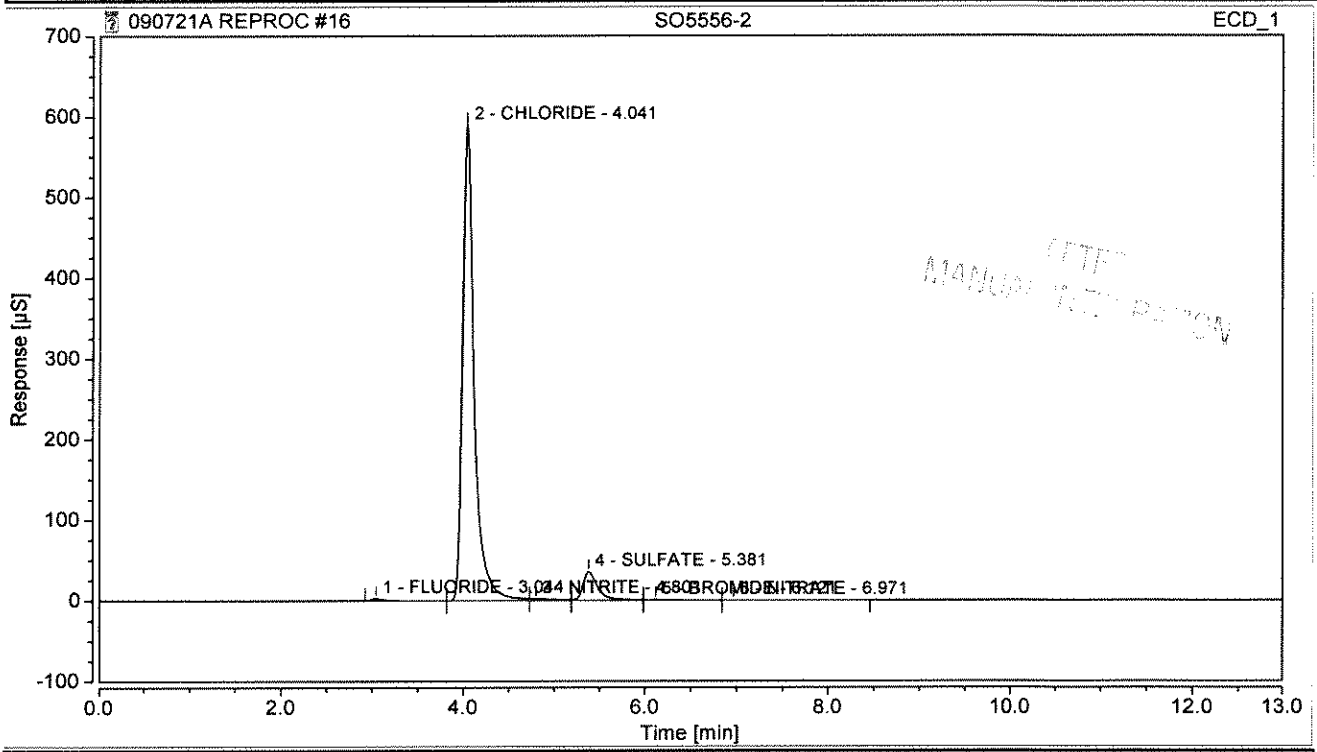
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.044	0.346	2.469	0.37	0.39	0.7330	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	BROMIDE	6.971	0.027	0.048	0.03	0.01	0.0693	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.373**	**2.517**	**0.40**	**0.40**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5556-2**	*Run Time (min):*	**12.99**
Vial Number:	**16**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 20:24**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

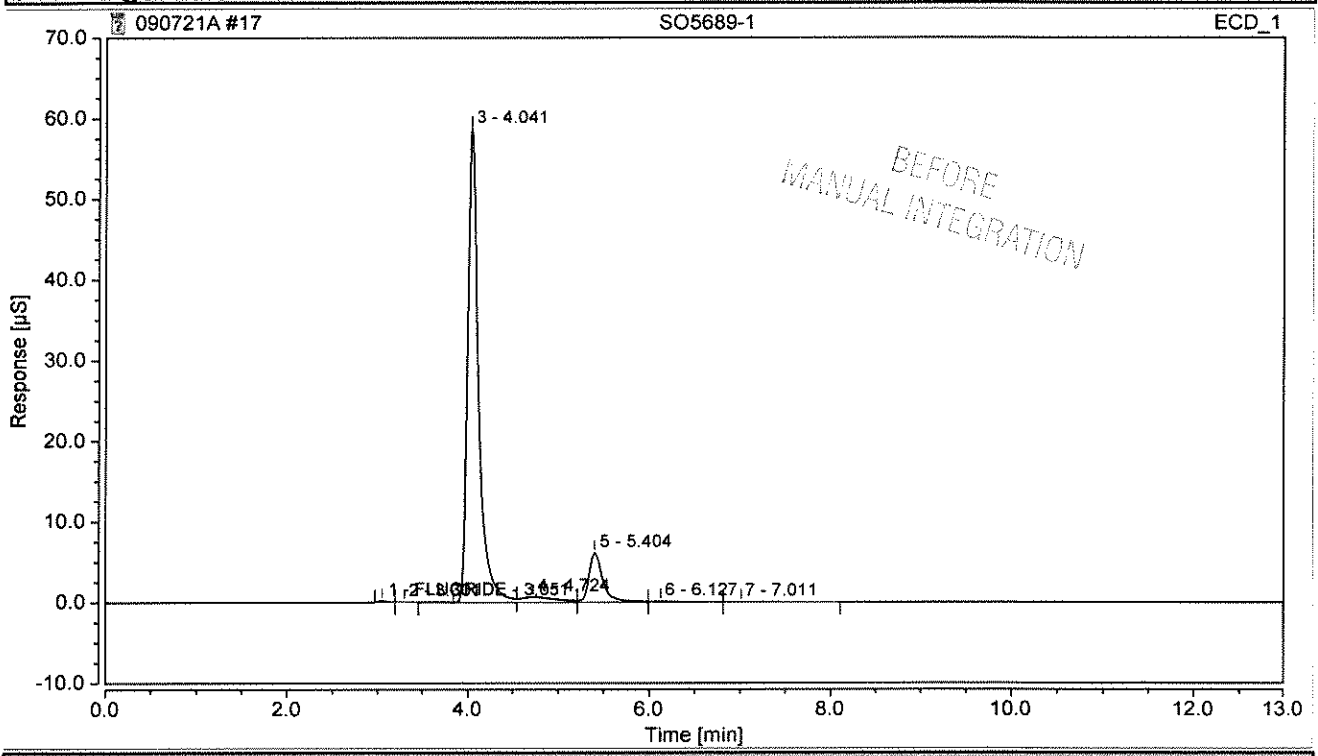
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.044	0.346	2.469	0.37	0.39	0.7330	n.a.
2	CHLORIDE	4.041	85.928	589.835	91.82	93.61	294.3357	n.a.
3	NITRITE	4.801	0.560	1.789	0.60	0.28	0.9116	n.a.
4	SULFATE	5.381	6.561	35.390	7.01	5.62	30.7370	n.a.
5	BROMIDE	6.121	0.165	0.543	0.18	0.09	0.7813	n.a.
6	NITRATE	6.971	0.027	0.048	0.03	0.01	0.0642	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**93.586**	**630.074**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5689-1**	*Run Time (min):*	**12.99**
Vial Number:	**17**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 20:42**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

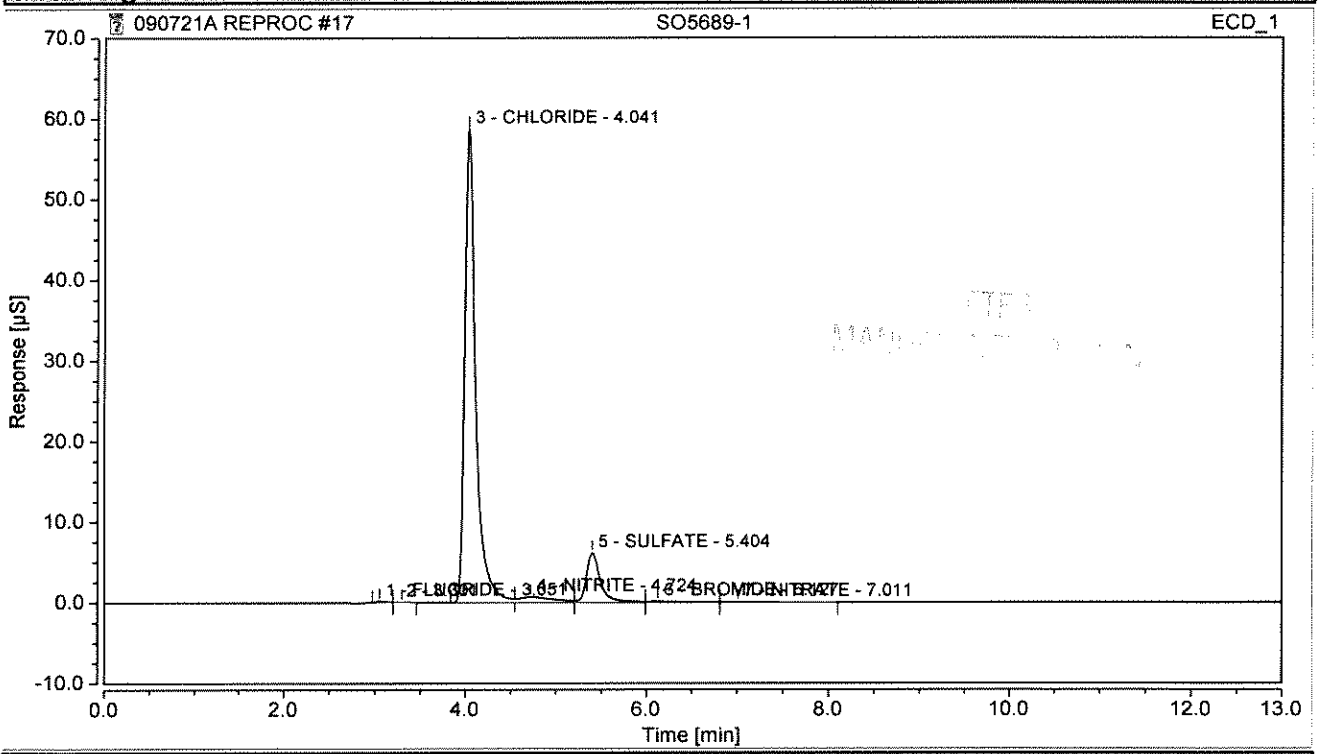
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.051	0.015	0.139	0.15	0.21	0.0312	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.015**	**0.139**	**0.15**	**0.21**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5689-1**	*Run Time (min):*	**12.99**
Vial Number:	**17**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 20:42**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

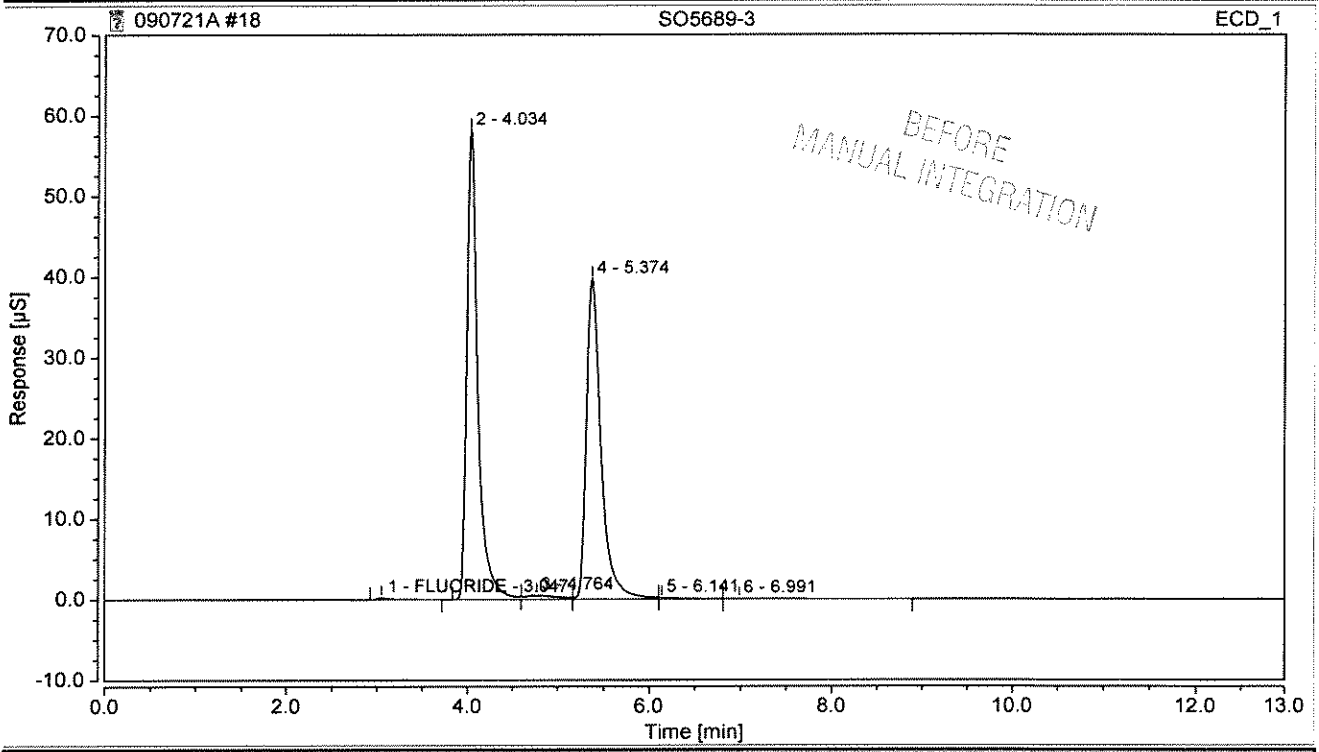
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.051	0.015	0.139	0.15	0.21	0.0312	n.a.
3	CHLORIDE	4.041	8.382	58.714	85.21	89.24	28.7913	n.a.
4	NITRITE	4.724	0.297	0.663	3.02	1.01	0.4841	n.a.
5	SULFATE	5.404	1.095	6.136	11.13	9.33	5.1282	n.a.
6	BROMIDE	6.127	0.038	0.108	0.39	0.16	0.1553	n.a.
7	NITRATE	7.011	0.010	0.022	0.10	0.03	0.0417	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.836**	**65.783**	**99.99**	**99.98**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5689-3**	*Run Time (min):*	**12.98**
Vial Number:	**18**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 21:01**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

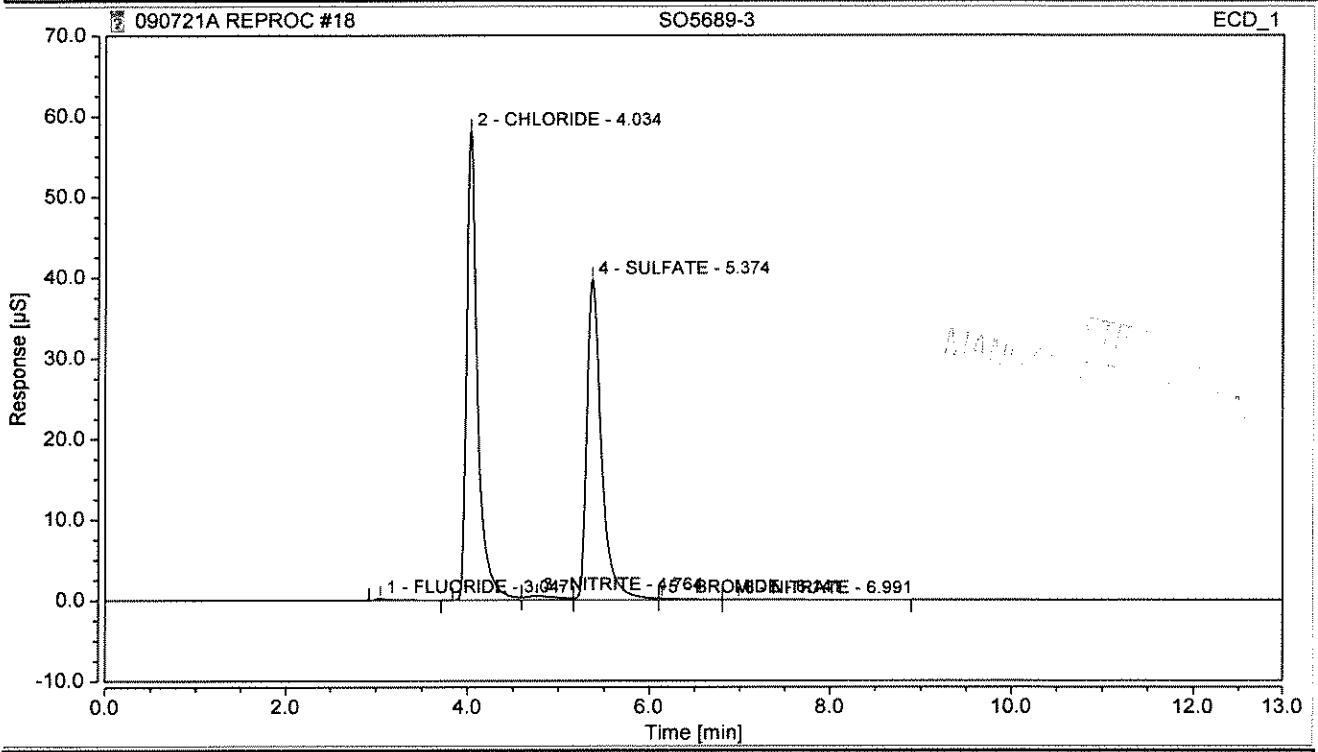
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.047	0.041	0.218	0.26	0.22	0.0872	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.041**	**0.218**	**0.26**	**0.22**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5689-3**	*Run Time (min):*	**12.98**
Vial Number:	**18**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 21:01**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

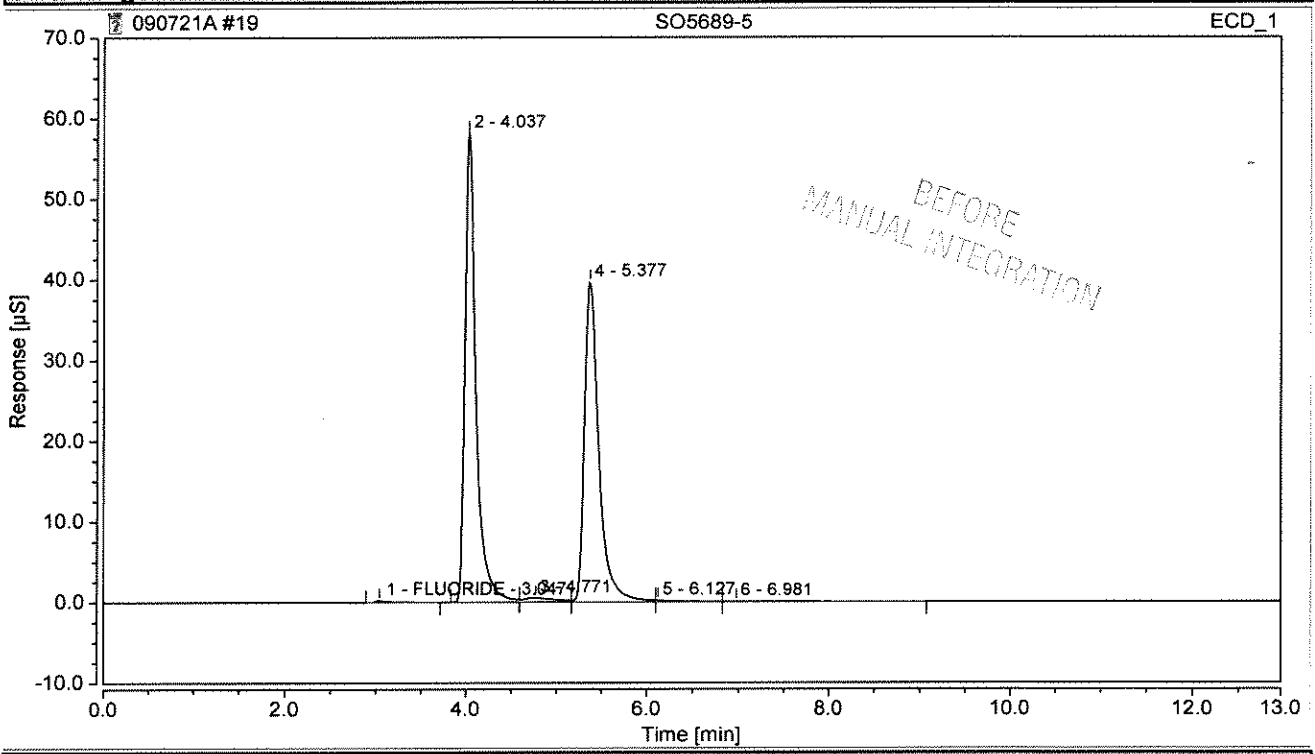
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.047	0.041	0.218	0.26	0.22	0.0872	n.a.
2	CHLORIDE	4.034	8.251	58.121	51.80	58.87	28.3455	n.a.
3	NITRITE	4.764	0.197	0.483	1.24	0.49	0.3211	n.a.
4	SULFATE	5.374	7.364	39.710	46.23	40.22	34.4998	n.a.
5	BROMIDE	6.141	0.052	0.161	0.33	0.16	0.2322	n.a.
6	NITRATE	6.991	0.024	0.042	0.15	0.04	0.0605	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**15.929**	**98.736**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5689-5**	*Run Time (min):*	**12.97**
Vial Number:	**19**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 21:20**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

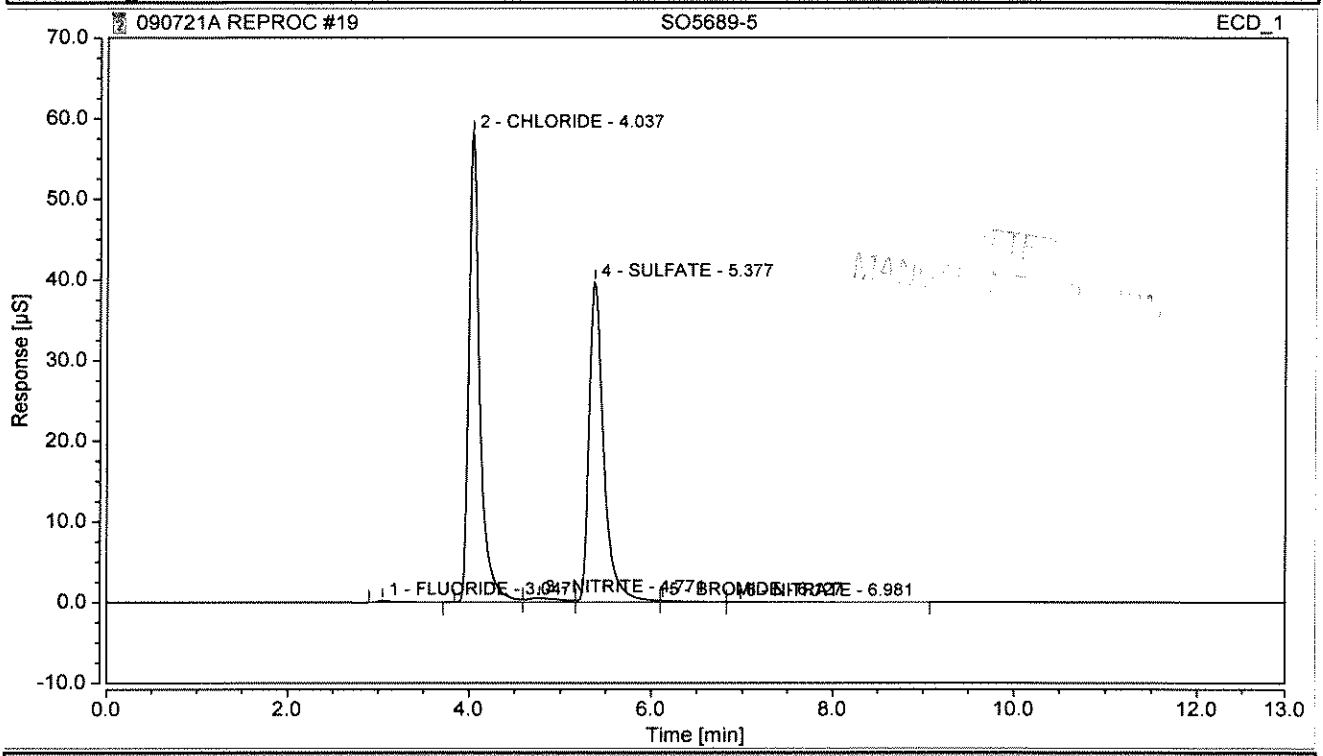
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.047	0.042	0.221	0.26	0.22	0.0884	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.042**	**0.221**	**0.26**	**0.22**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5689-5**	*Run Time (min):*	**12.97**
Vial Number:	**19**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 21:20**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

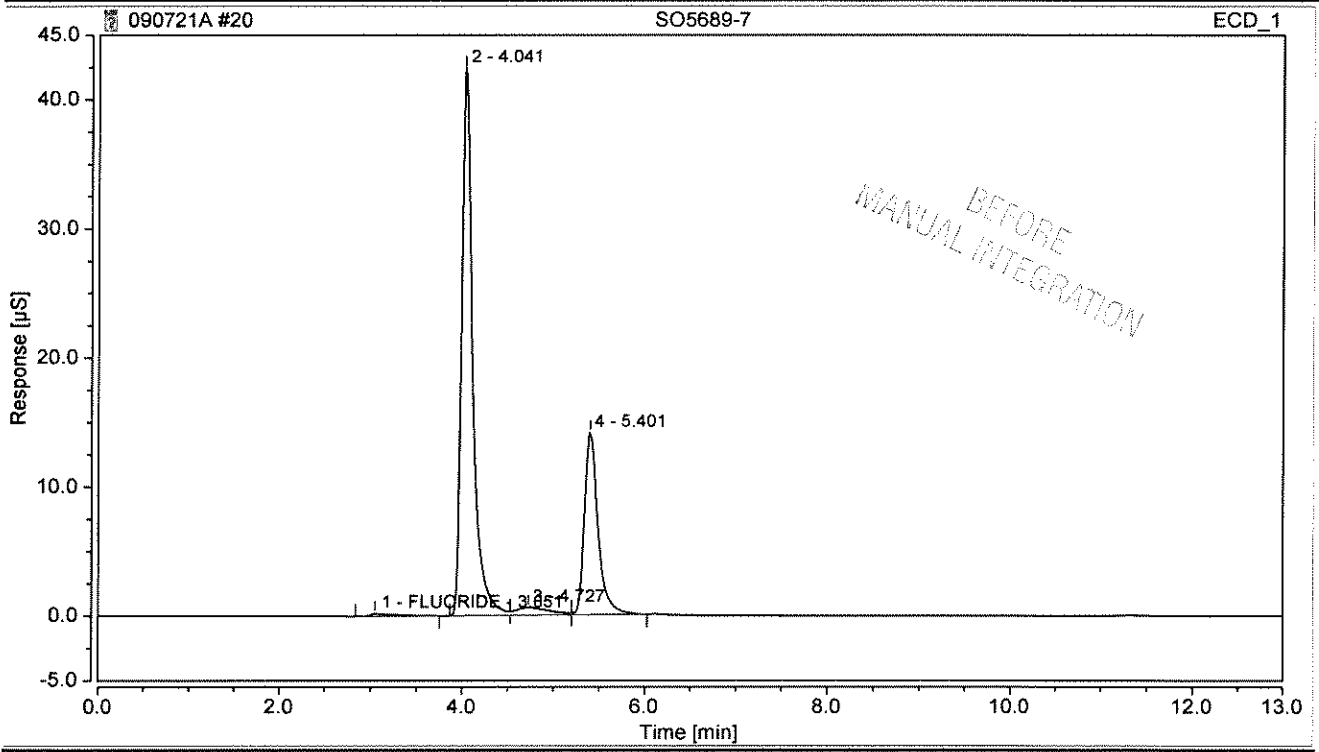
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.047	0.042	0.221	0.26	0.22	0.0884	n.a.
2	CHLORIDE	4.037	8.241	58.147	51.75	58.90	28.3115	n.a.
3	NITRITE	4.771	0.198	0.486	1.25	0.49	0.3230	n.a.
4	SULFATE	5.377	7.362	39.661	46.23	40.17	34.4927	n.a.
5	BROMIDE	6.127	0.056	0.172	0.35	0.17	0.2468	n.a.
6	NITRATE	6.981	0.024	0.038	0.15	0.04	0.0611	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**15.925**	**98.724**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5689-7**	*Run Time (min):*	**12.98**
Vial Number:	**20**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 21:39**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

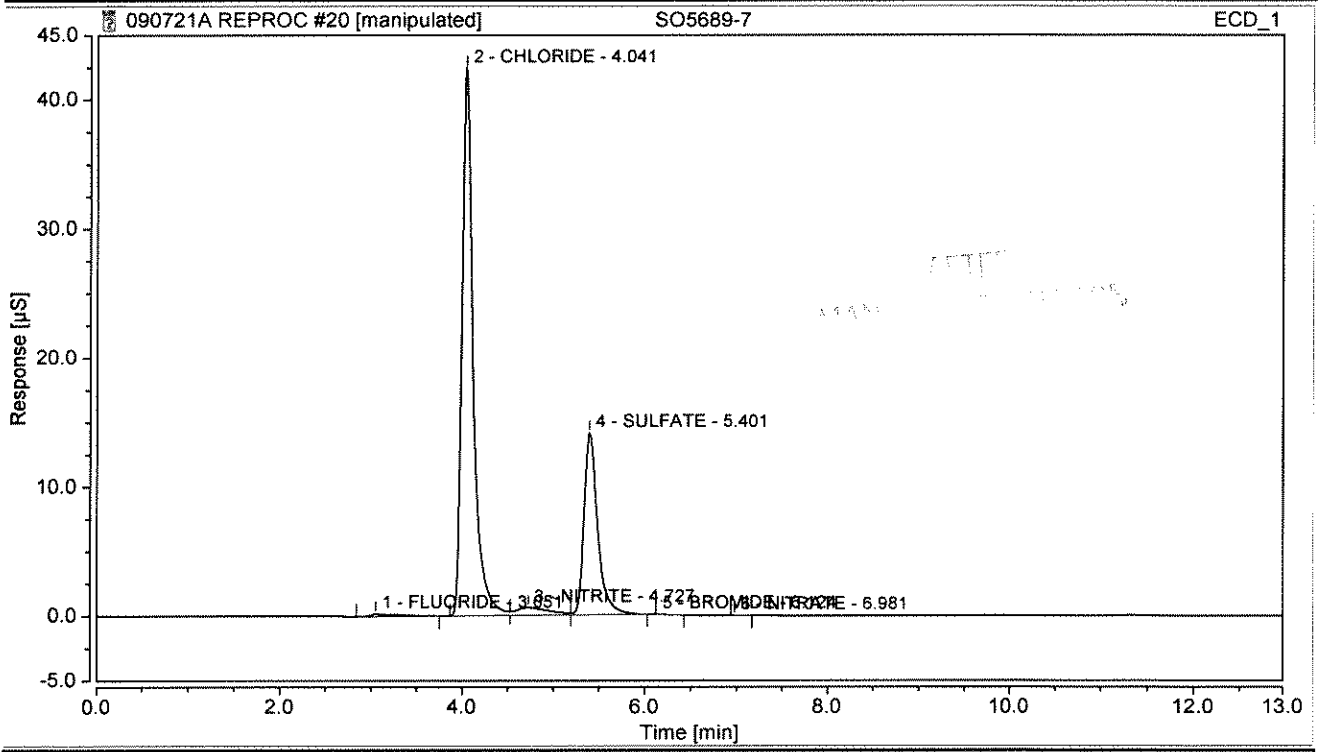
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.051	0.064	0.203	0.73	0.35	0.1353	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.064**	**0.203**	**0.73**	**0.35**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5689-7**	*Run Time (min):*	**12.98**
Vial Number:	**20**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 21:39**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

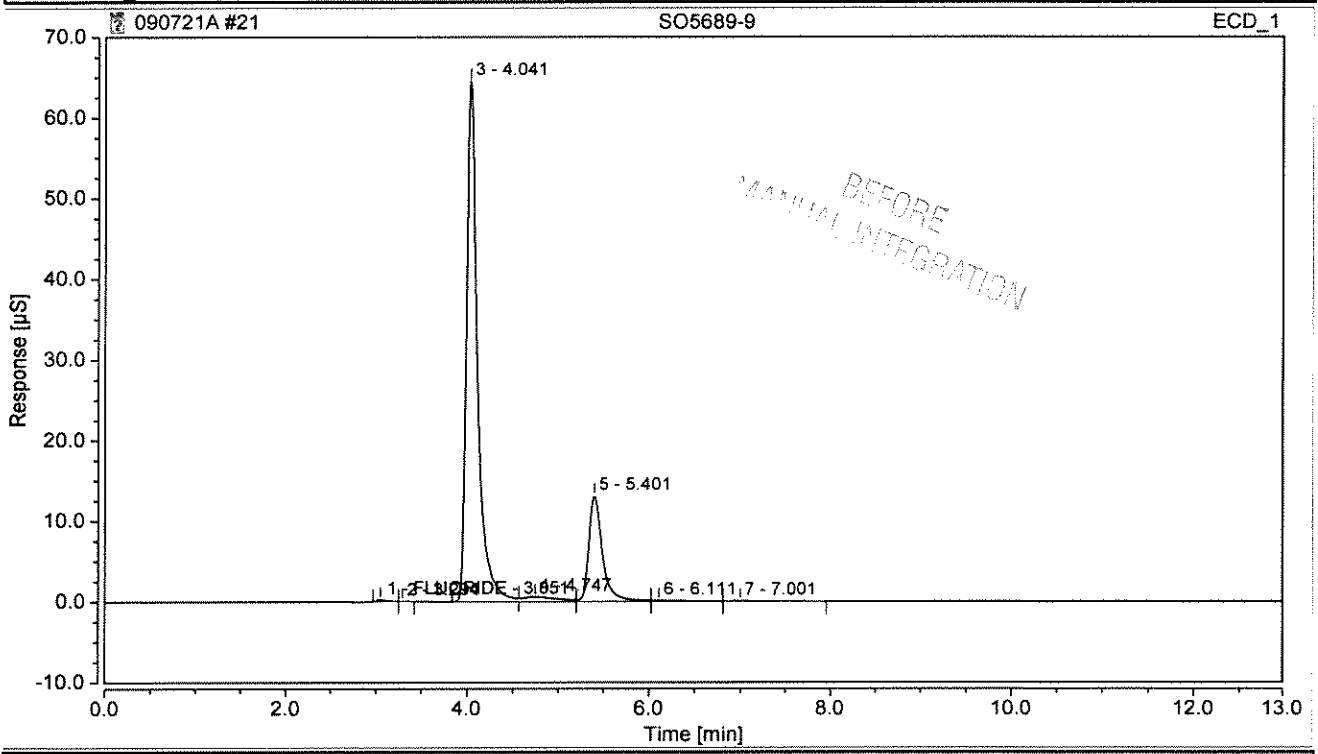
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.051	0.064	0.203	0.73	0.35	0.1353	n.a.
2	CHLORIDE	4.041	6.029	42.416	68.54	74.01	20.7343	n.a.
3	NITRITE	4.727	0.250	0.586	2.85	1.02	0.4080	n.a.
4	SULFATE	5.401	2.450	14.104	27.85	24.61	11.4775	n.a.
5	BROMIDE	6.124	0.002	0.000	0.02	0.00	0.0000	n.a.
6	NITRATE	6.981	0.001	0.005	0.01	0.01	0.0298	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.796**	**57.314**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5689-9**	*Run Time (min):*	**12.98**
Vial Number:	**21**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 21:58**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

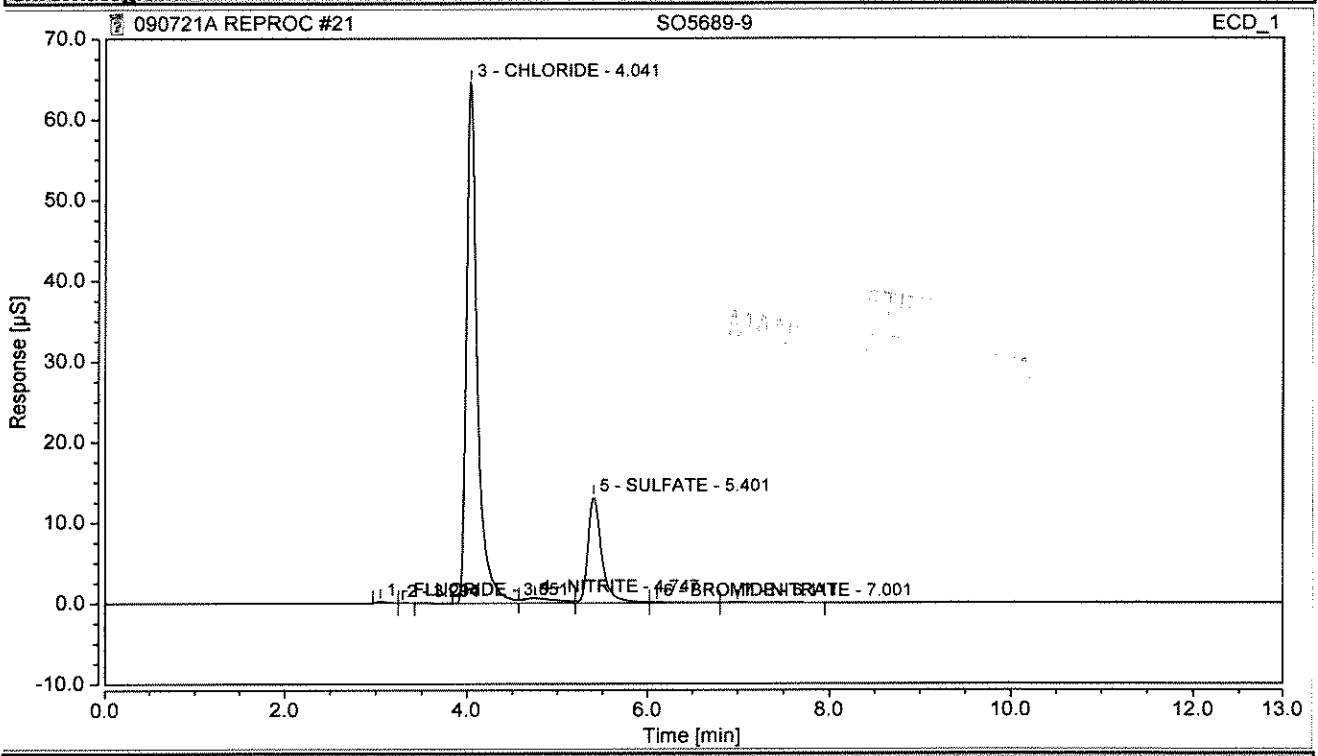
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.051	0.024	0.208	0.21	0.26	0.0516	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.024**	**0.208**	**0.21**	**0.26**		

Chromatogram and Results

Injection Details

Injection Name:	**SO5689-9**	*Run Time (min):*	**12.98**
Vial Number:	**21**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 21:58**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

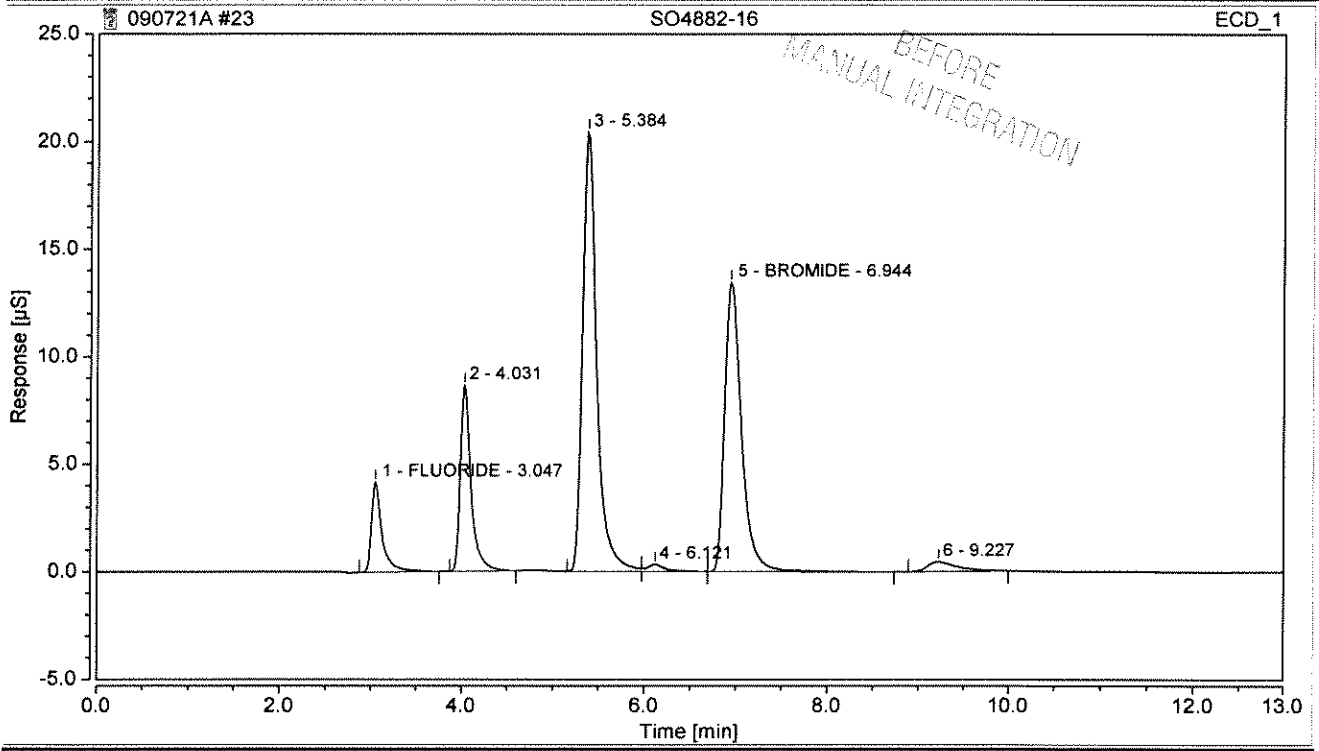
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.051	0.024	0.208	0.21	0.26	0.0516	n.a.
3	CHLORIDE	4.041	9.123	64.546	77.38	82.06	31.3293	n.a.
4	NITRITE	4.747	0.255	0.592	2.17	0.75	0.4162	n.a.
5	SULFATE	5.401	2.325	13.115	19.72	16.67	10.8944	n.a.
6	BROMIDE	6.111	0.039	0.099	0.33	0.13	0.1430	n.a.
7	NITRATE	7.001	0.022	0.078	0.18	0.10	0.0574	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.788**	**78.637**	**99.99**	**99.98**		

Chromatogram and Results

Injection Details

Injection Name:	**SO4882-16**	*Run Time (min):*	**12.99**
Vial Number:	**23**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**10.0**
Injection Date/Time:	**07/Sep/21 22:35**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

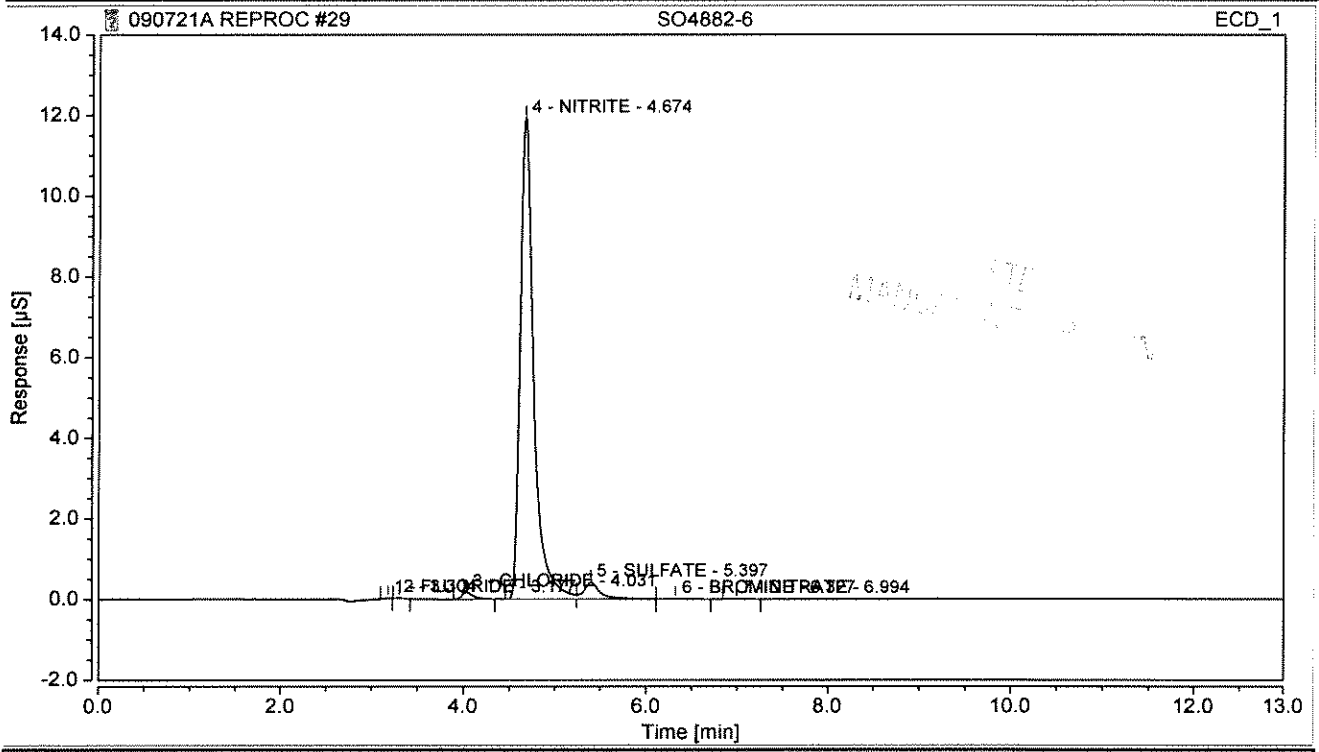
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.047	0.577	4.190	6.70	8.82	12.2186	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	BROMIDE	6.944	2.924	13.445	33.96	28.30	193.2900	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.501**	**17.635**	**40.66**	**37.11**		

Chromatogram and Results

Injection Details

Injection Name:	**SO4882-6**	*Run Time (min):*	**12.99**
Vial Number:	**29**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**10.0**
Injection Date/Time:	**08/Sep/21 00:28**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

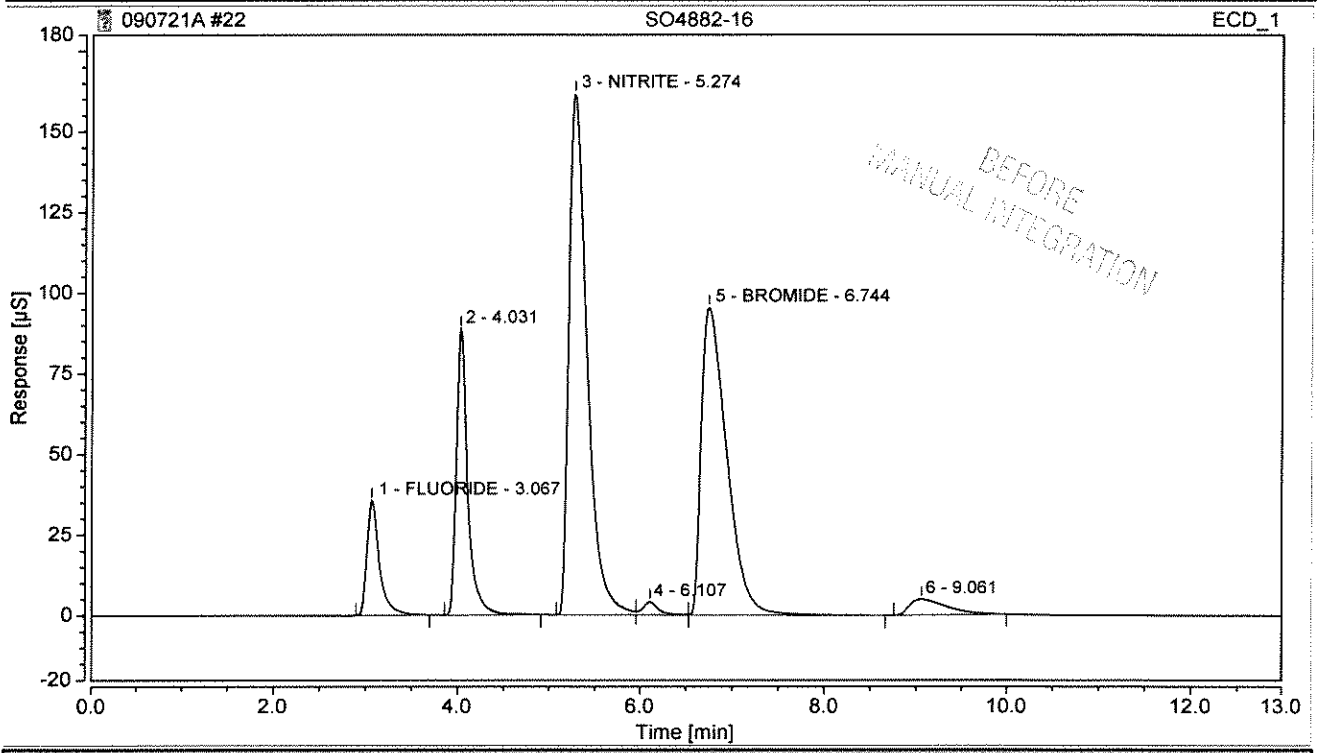
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.177	0.001	0.013	0.05	0.10	0.0227	n.a.
3	CHLORIDE	4.031	0.024	0.174	1.11	1.38	1.7187	n.a.
4	NITRITE	4.674	2.040	11.925	94.53	94.93	33.2412	n.a.
5	SULFATE	5.397	0.088	0.416	4.07	3.31	4.1143	n.a.
6	BROMIDE	6.327	0.002	0.008	0.09	0.07	0.1187	n.a.
7	NITRATE	6.994	0.002	0.009	0.08	0.07	0.3091	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**2.157**	**12.544**	**99.93**	**99.86**		

Chromatogram and Results

Injection Details

Injection Name:	**SO4882-16**	*Run Time (min):*	**12.98**
Vial Number:	**22**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**ASDV30mMIsocratic TEST**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01 2100**	*Dilution Factor:*	**1.0**
Injection Date/Time:	**07/Sep/21 22:17**	*Sample Weight:*	**1.0**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. %
1	FLUORIDE	3.067	5.612	35.640	6.30	9.13	11.8905	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRITE	5.274	37.236	161.612	41.81	41.40	60.6619	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	BROMIDE	6.744	30.453	95.366	34.19	24.43	137.0987	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**73.300**	**292.618**	**82.30**	**74.97**		