Sequence: 2012_1019
Injection #38: ccb

Peak Results

Peak No.	Peak Name	Ret.Time min	Amount n.a.	Rel.Area %	Area mAU*min	Height mAU	Type	Width (50%) min	Asym. EP	Resol. EP	Plates EP
Maximum			0.0000	0.00	0.0000	0.00		0.000	0.00	0.00	0
Minimum			0.0000	0.00	0.0000	0.00		0.000	0.00	0.00	0
Sum			0.0000	0.00	0.0000	0.00					

Chromeleon 7,
Version 7.1.1.1127, Dionex Corporation

Page 1 of 2

Printed by rybechay
19/10/12 16:36

ALAB:00115
LMC-PET-00000919
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EPA 300.0

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ANIONS by ION CHROMATOGRAPHY

DATA PACKAGE

CONFIDENTIAL

Sequence: 12-10-13 A
Operator: wei
Printed: 10/16/2012 2:35:29 PM

Title: ClO4
Datasource: AL10410_local
Location: clo4 2012\Anion 2012\10 Oct 2012
Timebase: Assciated_lab
#Samples: 46

Created: 10/13/2012 7:44:55 AM by wei
Last Update: 10/15/2012 12:18:14 PM by wei

No.	Name	Type	Program	Method	Status
1	ccb	Unknown	anion_program	PERCHLORATE METHOD	Finished
2	std1	Standard	anion_program	PERCHLORATE METHOD	Finished
3	std2	Standard	anion_program	PERCHLORATE METHOD	Finished
4	std3	Standard	anion_program	PERCHLORATE METHOD	Finished
5	std4	Standard	anion_program	PERCHLORATE METHOD	Finished
6	std5	Standard	anion_program	PERCHLORATE METHOD	Finished
7	std6	Unknown	anion 16	PERCHLORATE METHOD	Finished
8	ccb1=mb1	Unknown	anion_program	PERCHLORATE METHOD	Finished
9	ccv1	Unknown	anion_program	PERCHLORATE METHOD	Finished
10	312062-001-1	Unknown	anion_program	PERCHLORATE METHOD	Finished
11	312062-002-1	Unknown	anion_program	PERCHLORATE METHOD	Finished
12	312062-003-1	Unknown	anion_program	PERCHLORATE METHOD	Finished
13	312080-003-4	Unknown	anion_program	PERCHLORATE METHOD	Finished
14	312080-004-1	Unknown	anion_program	PERCHLORATE METHOD	Finished
15	312080-003-4	Unknown	anion_program	PERCHLORATE METHOD	Finished
16	312080-004-1	Unknown	anion_program	PERCHLORATE METHOD	Finished
17	312080-008-1	Unknown	anion_program	PERCHLORATE METHOD	Finished
18	312080-013-5	Unknown	anion_program	PERCHLORATE METHOD	Finished
19	312080-014-1	Unknown	anion_program	PERCHLORATE METHOD	Finished
20	312080-013-5 ms1	Unknown	anion_program	PERCHLORATE METHOD	Finished
21	ccv2=lcs1	Unknown	anion_program	PERCHLORATE METHOD	Finished
22	ccb2	Unknown	anion_program	PERCHLORATE METHOD	Finished
23	312080-015-1	Unknown	anion_program	PERCHLORATE METHOD	Finished
24	312080-013-5	Unknown	anion_program	PERCHLORATE METHOD	Finished
25	312080-014-1	Unknown	anion_program	PERCHLORATE METHOD	Finished
26	312081-001-1	Unknown	anion_program	PERCHLORATE METHOD	Finished
27	312081-002-1	Unknown	anion_program	PERCHLORATE METHOD	Finished
28	312081-003-1	Unknown	anion_program	PERCHLORATE METHOD	Finished
29	312096-001-6	Unknown	anion_program	PERCHLORATE METHOD	Finished
30	312087-001-1	Unknown	anion_program	PERCHLORATE METHOD	Finished
31	312096-001-6	Unknown	anion_program	PERCHLORATE METHOD	Finished
32	312057-001-1	Unknown	anion_program	PERCHLORATE METHOD	Finished
33	312080-014-1 ms2	Unknown	anion_program	PERCHLORATE METHOD	Finished
34	ccv3	Unknown	anion_program	PERCHLORATE METHOD	Finished
35	lcs2	Unknown	anion_program	PERCHLORATE METHOD	Finished
36	ccb3=mb2	Unknown	anion_program	PERCHLORATE METHOD	Finished
37	312057-002-1	Unknown	anion_program	PERCHLORATE METHOD	Finished
38	312094-005-5	Unknown	anion_program	PERCHLORATE METHOD	Finished
39	312094-002-3	Unknown	anion_program	PERCHLORATE METHOD	Finished
40	312094-005-5	Unknown	anion_program	PERCHLORATE METHOD	Finished
41	312094-002-3 ms3	Unknown	anion_program	PERCHLORATE METHOD	Finished
42	ccv4	Unknown	anion_program	PERCHLORATE METHOD	Finished

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Title: ClO4
Datasource: AL10410_local
Location: clo4 2012\Anion 2012\10 Oct 2012
Timebase: Assciated_lab
#Samples: 46
Created: 10/13/2012 7:44:55 AM by wei
Last Update: 10/15/2012 12:18:14 PM by wei

No.	Name	Inj. Date/Time	Dil. Factor	Comment
1	ccb	8/6/2012 9:20:37 AM	1.0000	no guard separate014785 lot007-17-139
2	std1	8/6/2012 9:47:19 AM	1.0000	cs080612-1
3	std2	8/6/2012 10:09:13 AM	1.0000	cs080612-2
4	std3	8/6/2012 10:30:13 AM	1.0000	cs080612-3
5	std4	8/6/2012 10:51:45 AM	1.0000	cs080612-4
6	std5	8/6/2012 11:12:58 AM	1.0000	cs080612-5
7	std6	8/6/2012 11:34:43 AM	1.0000	cs080612-6
8	ccb1=mb1	10/13/2012 7:59:50 AM	1.0000	
9	ccv1	10/13/2012 8:21:02 AM	1.0000	f=8 cl=40 no2=10 no3=20 so4=40
10	312062-001-1	10/13/2012 8:41:58 AM	1.0000	tin
11	312062-002-1	10/13/2012 8:57:50 AM	1.0000	tin
12	312062-003-1	10/13/2012 9:14:39 AM	1.0000	tin
13	312080-003-4	10/13/2012 9:40:55 AM	1.0000	arcadis no3
14	312080-004-1	10/13/2012 10:06:08 AM	1.0000	arcadis no3
15	312080-003-4	10/13/2012 10:26:51 AM	5.0000	crcadis rep for no3
16	312080-004-1	10/13/2012 10:46:46 AM	5.0000	crcadis rep for no3
17	312080-008-1	10/13/2012 11:10:27 AM	1.0000	arcadis no3 mb
18	312080-013-5	10/13/2012 11:31:20 AM	1.0000	arcadis f/cl/so4/no2/no3 dup
19	312080-014-1	10/13/2012 11:51:57 AM	1.0000	arcadis f/cl/so4/no2/no3 dup
20	312080-013-5 ms1	10/13/2012 12:15:08 PM	10.0000	ms1
21	ccv2=lcs1	10/13/2012 12:37:03 PM	1.0000	f=8 cl=40 no2=10 no3=20 so4=40
22	ccb2	10/13/2012 12:57:23 PM	1.0000	
23	312080-015-1	10/13/2012 1:18:06 PM	1.0000	arcadis no3
24	312080-013-5	10/13/2012 1:38:17 PM	2.0000	arcadis rep for no3
25	312080-014-1	10/13/2012 1:59:38 PM	2.0000	arcadis rep for no3
26	312081-001-1	10/13/2012 2:19:44 PM	1.0000	tin
27	312081-002-1	10/13/2012 2:36:41 PM	1.0000	tin
28	312081-003-1	10/13/2012 2:56:49 PM	1.0000	tin
29	312096-001-6	10/13/2012 3:11:38 PM	1.0000	the #3 cl/so4/tin
30	312087-001-1	10/13/2012 3:33:24 PM	25.0000	cl
31	312096-001-6	10/13/2012 3:45:16 PM	5.0000	rep for cl/no3
32	312057-001-1	10/13/2012 4:00:29 PM	25.0000	orange cl/so4
33	312080-014-1 ms2	10/13/2012 4:20:46 PM	10.0000	ms2
34	ccv3	10/13/2012 4:41:51 PM	1.0000	f=8 cl=40 no2=10 no3=20 so4=40
35	lcs2	10/13/2012 5:02:38 PM	1.0000	
36	ccb3=mb2	10/13/2012 5:23:14 PM	1.0000	
37	312057-002-1	10/13/2012 5:43:48 PM	25.0000	orange cl/so4
38	312094-005-5	10/13/2012 6:03:49 PM	1.0000	MW-6 Arcadis/no3
39	312094-002-3	10/13/2012 6:24:01 PM	1.0000	B-1-CW20 Arcadis f/cl/so4/no3/no2
40	312094-005-5	10/13/2012 6:44:35 PM	5.0000	rep for no3
41	312094-002-3 ms3	10/13/2012 7:02:08 PM	10.0000	ms3
42	ccv4	10/13/2012 7:22:14 PM	1.0000	f=8 cl=40 no2=10 no3=20 so4=40

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Title: ClO4
Datasource: AL10410_local
Location: clo4 2012\Anion 2012\10 Oct 2012
Timebase: Assciated_lab
#Samples: 46
Created: 10/13/2012 7:44:55 AM by wei
Last Update: 10/15/2012 12:18:14 PM by wei

No.	Name	Type	Program	Method	Status
43	ccb4	Unknown	anion_program	PERCHLORATE METHOD	Finished
44	end	Unknown	stop program	PERCHLORATE METHOD	Finished
45	end	Unknown	stop program	PERCHLORATE METHOD	Finished
46	end	Unknown	stop program	PERCHLORATE METHOD	Finished

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Title: ClO4
Datasource: AL10410_local
Location: clo4 2012\Anion 2012\10 Oct 2012
Timebase: Assciated_lab
#Samples: 46
Created: 10/13/2012 7:44:55 AM by wei
Last Update: 10/15/2012 12:18:14 PM by wei

No.	Name	Inj. Date/Time	Dil. Factor	Comment
43	ccb4	10/13/2012 7:42:46 PM	1.0000	
44	end	10/13/2012 8:09:17 PM	1.0000	
45	end	10/13/2012 8:09:17 PM	1.0000	
46	end	10/13/2012 8:09:17 PM	1.0000	

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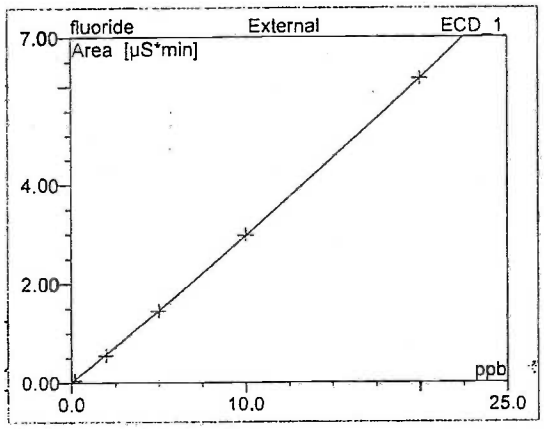
Sequence:	12-09-27	*Inj. Vol.:*	20.0
Program:	anion_program	*Operator:*	n.a.
Inj. Date/Time:	08/06/12 10:51	*Run Time:*	18.57

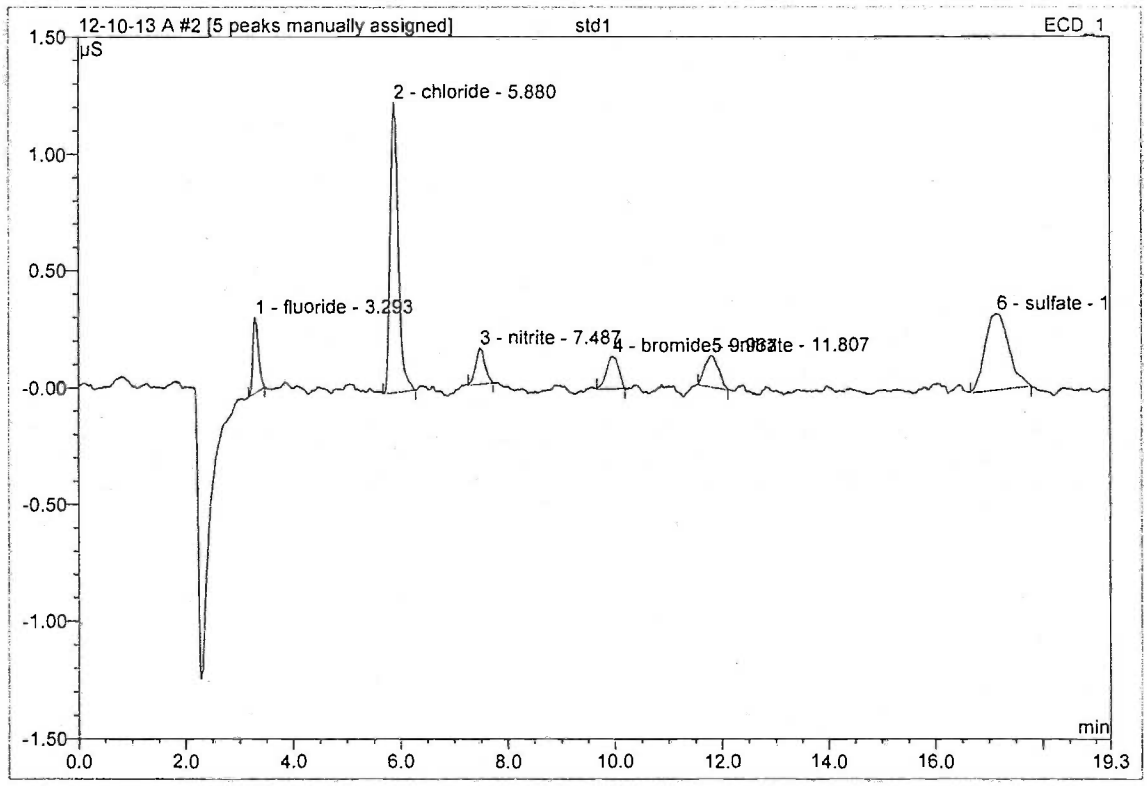


No.	Ret.Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Coeff.Det. %
1	3.28	fluoride	Quad	5	0.000	0.285	0.001	99.9948
3	5.88	chloride	Quad	5	0.000	0.245	0.001	99.9653
4	7.45	nitrite	Quad	5	0.000	0.112	0.000	99.9851
5	9.90	bromide	Quad	5	0.000	0.087	0.000	99.9977
6	11.68	nitrate	Quad	5	0.000	0.111	0.000	99.9933
7	17.06	sulfate	Quad	5	0.000	0.170	0.000	99.9970
AVERAGE:					0.0000	0.1682	0.0005	99.9888

2 std1

cs080612-1

Sample Name:	**std1**	*Injection Volume:*	**20.0**
Vial Number:	**531**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**1.0000**
Recording Time:	**8/6/2012 9:47**	*Sample Weight:*	**1.0000**
Run Time (min):	**19.27**	*Sample Amount:*	**1.0000**

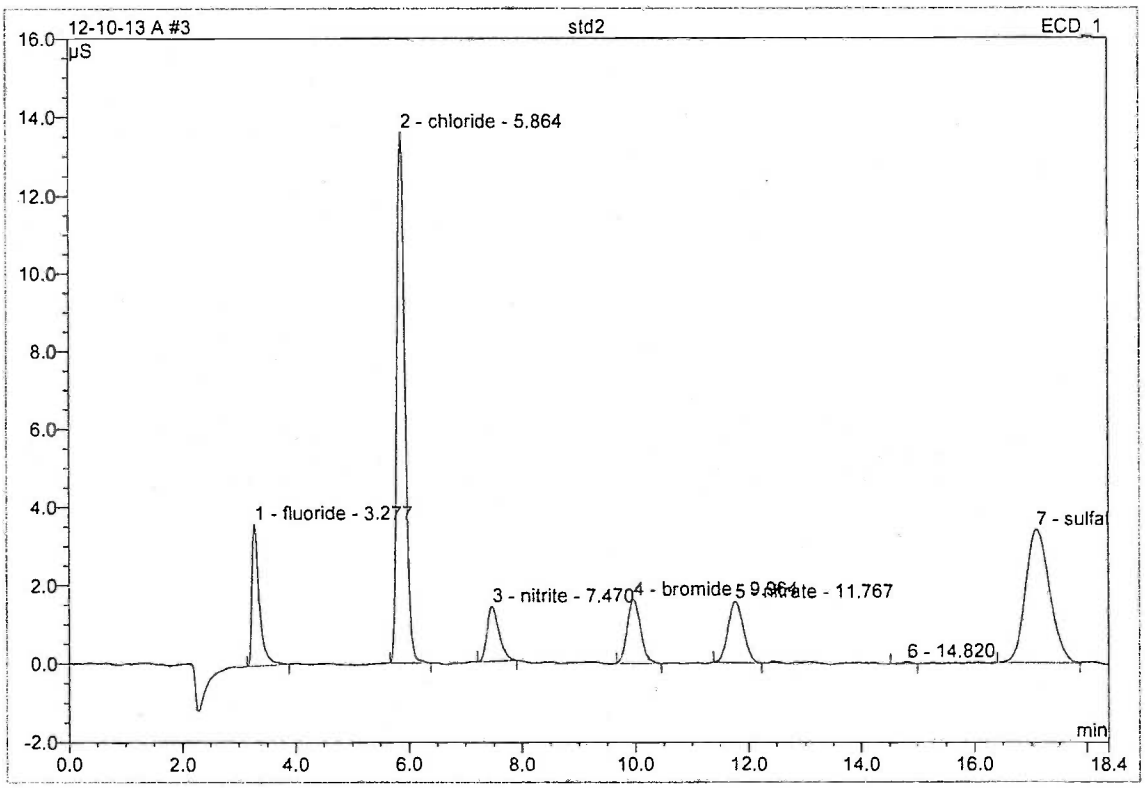


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	3.29	fluoride	0.324	0.041	7.70	0.144	BMB
2	5.88	chloride	1.244	0.217	40.61	0.883	BMB^
3	7.49	nitrite	0.153	0.031	5.73	0.274	BMB^
4	9.97	bromide	0.139	0.036	6.83	0.418	BMB^
5	11.81	nitrate	0.135	0.040	7.59	0.365	BMB^
6	17.16	sulfate	0.327	0.168	31.54	0.987	BMB^
Total:			2.322	0.534	100.00	3.071	

3 std2

cs080612-2

Sample Name:	**std2**	*Injection Volume:*	**20.0**
Vial Number:	**509**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**1.0000**
Recording Time:	**8/6/2012 10:09**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.38**	*Sample Amount:*	**1.0000**

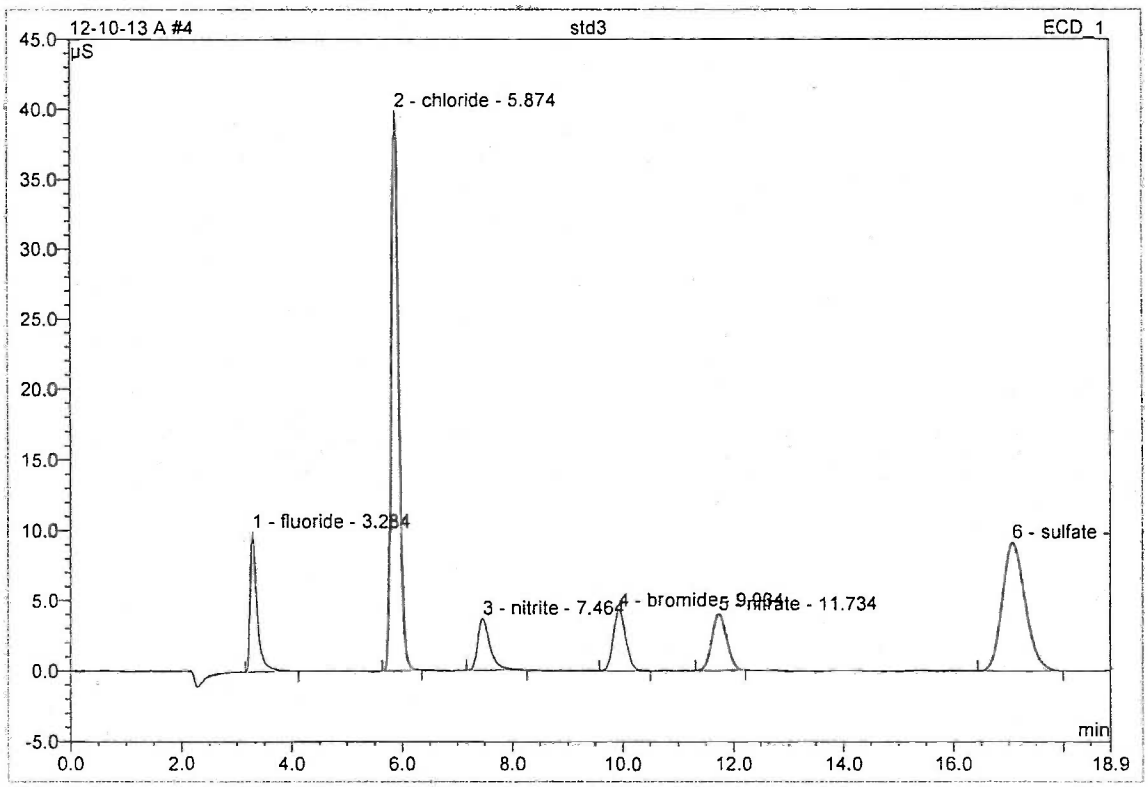


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	3.28	fluoride	3.635	0.545	9.49	1.897	BMB
2	5.86	chloride	13.597	2.214	38.56	8.859	BMB
3	7.47	nitrite	1.395	0.339	5.90	3.000	BMB
4	9.96	bromide	1.630	0.447	7.79	5.050	BMB
5	11.77	nitrate	1.548	0.494	8.60	4.380	BMB
6	14.82	n.a.	0.057	0.011	0.20	n.a.	BMB
7	17.10	sulfate	3.414	1.692	29.46	9.738	BMB
Total:			25.275	5.741	100.00	32.924	

4 std3

cs080612-3

Sample Name:	**std3**	*Injection Volume:*	**20.0**
Vial Number:	**509**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**1.0000**
Recording Time:	**8/6/2012 10:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.86**	*Sample Amount:*	**1.0000**

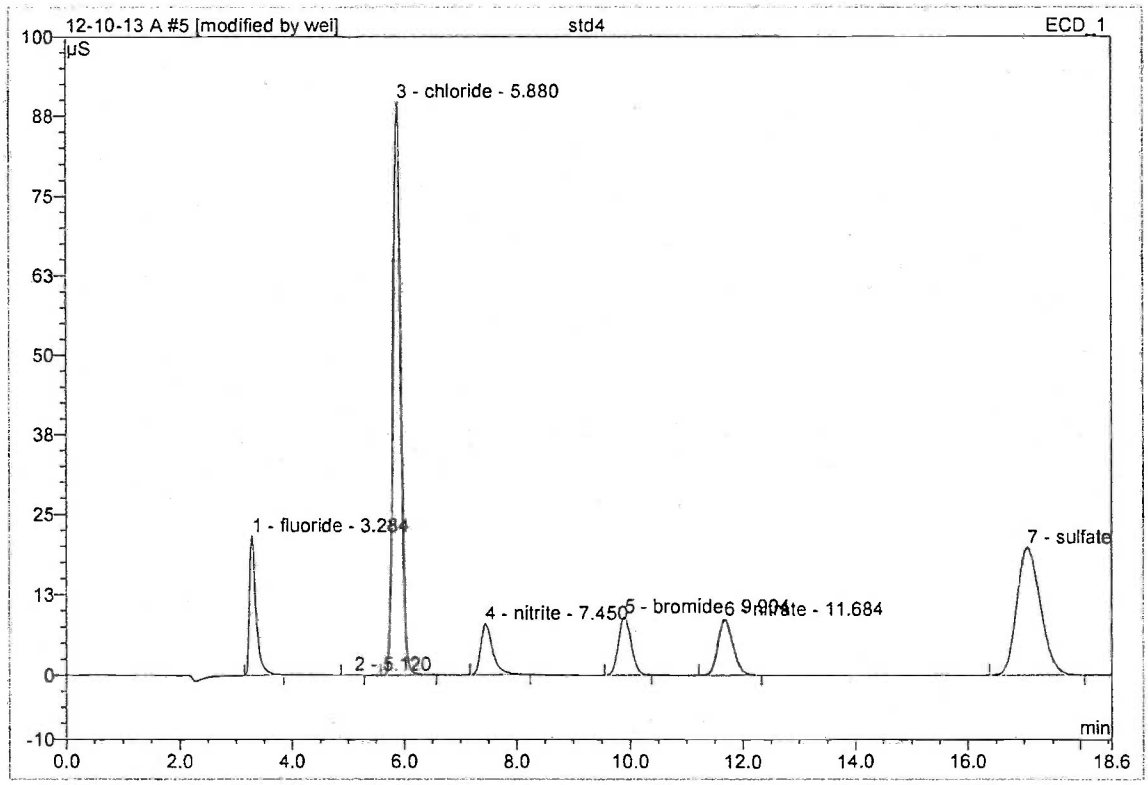


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	3.28	fluoride	9.962	1.454	9.37	5.001	BMB
2	5.87	chloride	39.886	6.264	40.40	24.217	BMB
3	7.46	nitrite	3.670	0.941	6.07	8.181	BMB
4	9.93	bromide	4.278	1.148	7.40	12.642	BMB
5	11.73	nitrate	4.002	1.270	8.19	10.970	BMB
6	17.08	sulfate	9.139	4.430	28.57	24.721	BMB
Total:			70.937	15.507	100.00	85.732	

5 std4

cs080612-4

Sample Name:	**std4**	*Injection Volume:*	**20.0**
Vial Number:	**509**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**1.0000**
Recording Time:	**8/6/2012 10:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.57**	*Sample Amount:*	**1.0000**

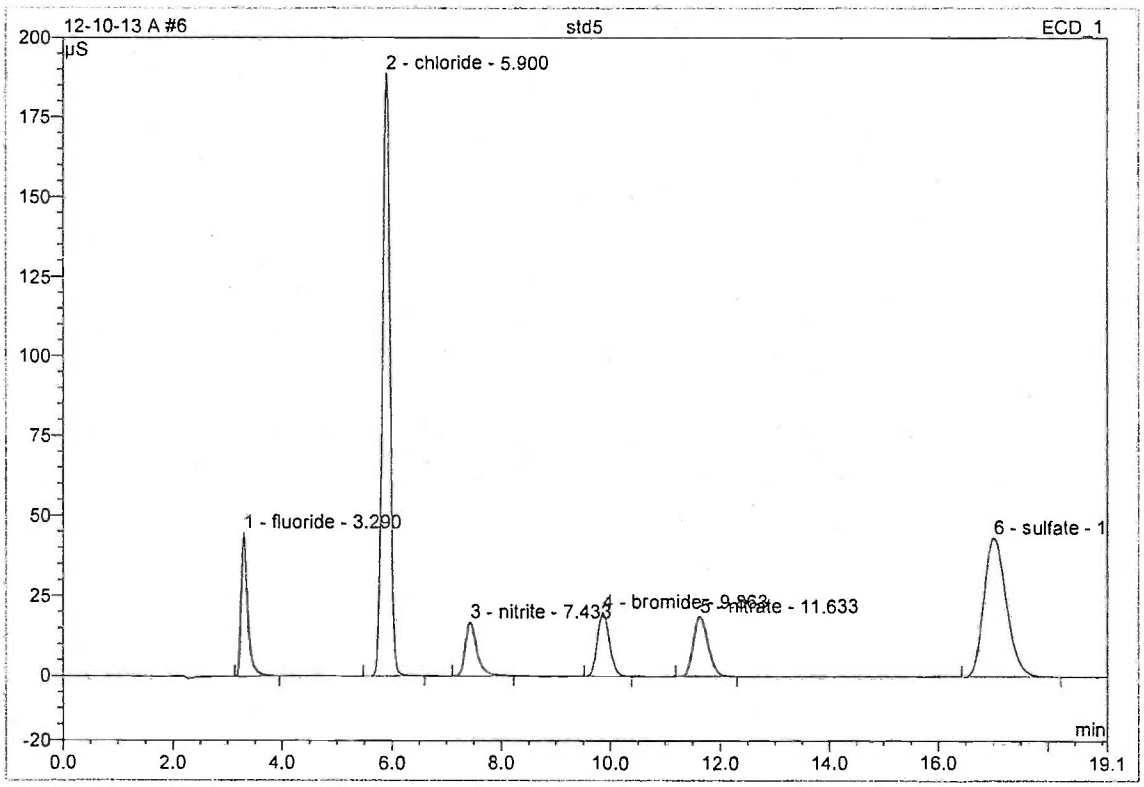


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	3.28	fluoride	21.596	2.975	8.90	10.036	BMB*
2	5.12	n.a.	0.057	0.014	0.04	n.a.	BMB
3	5.88	chloride	89.645	13.936	41.68	50.881	BMB
4	7.45	nitrite	7.877	1.975	5.91	16.649	BMB
5	9.90	bromide	9.004	2.348	7.02	24.888	BMB
6	11.68	nitrate	8.577	2.707	8.10	22.378	BMB
7	17.06	sulfate	19.781	9.478	28.35	50.272	BMB
Total:			156.538	33.433	100.00	175.105	

6 std5

cs080612-5

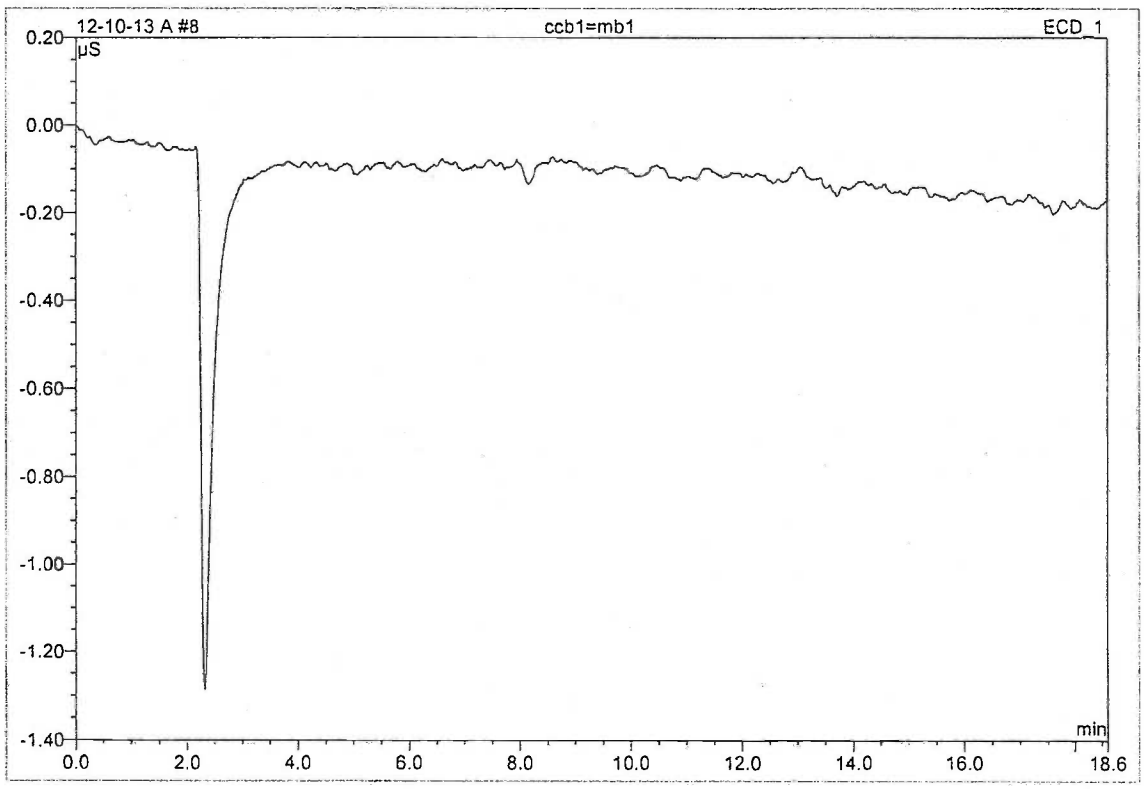
Sample Name:	**std5**	*Injection Volume:*	**20.0**
Vial Number:	**509**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**1.0000**
Recording Time:	**8/6/2012 11:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**19.09**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	3.29	fluoride	44.717	6.156	8.55	19.992	BMB
2	5.90	chloride	188.788	30.143	41.87	99.860	BMB
3	7.43	nitrite	16.670	4.139	5.75	32.973	BMB
4	9.86	bromide	19.857	5.085	7.06	50.017	BMB
5	11.63	nitrate	18.643	5.800	8.06	44.273	BMB
6	17.01	sulfate	43.073	20.662	28.70	99.958	BMB
Total:			331.747	71.985	100.00	347.073	

8 ccb1=mb1

Sample Name:	**ccb1=mb1**	*Injection Volume:*	**20.0**
Vial Number:	**536**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/13/2012 7:59**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.60**	*Sample Amount:*	**1.0000**



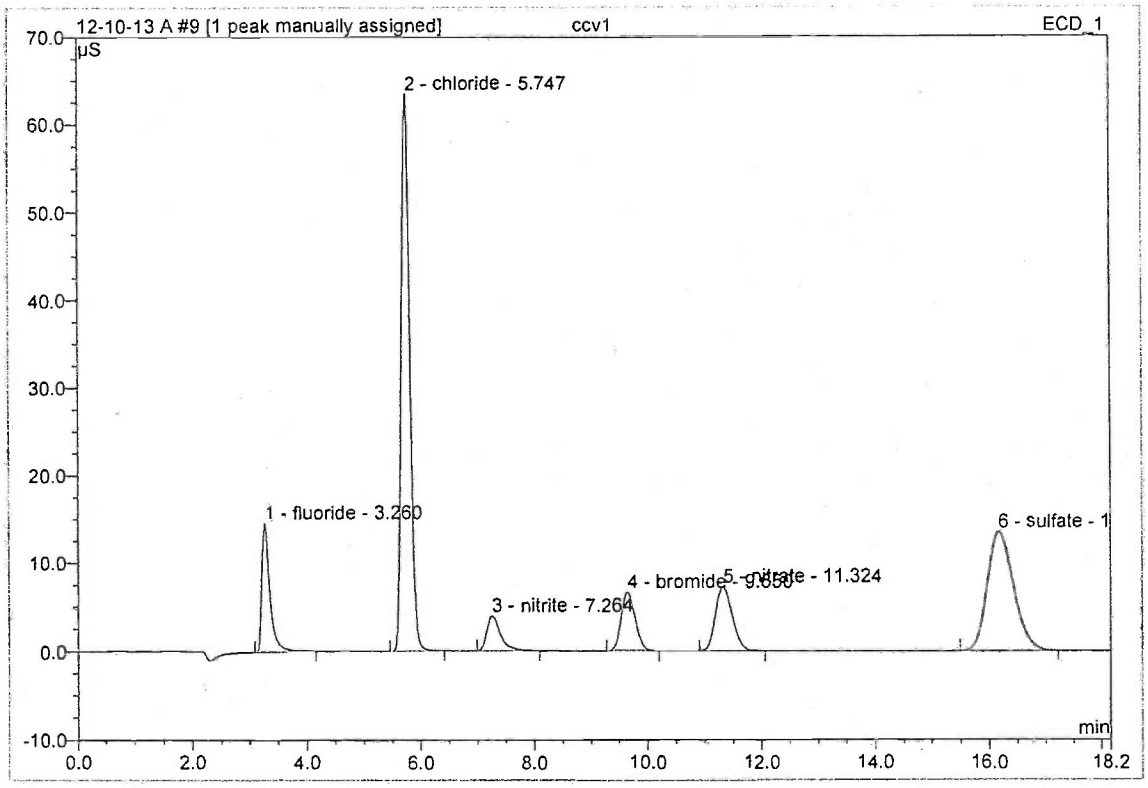
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
Total:			0.000	0.000	0.00	0.000	

MB1

9 ccv1

f=8 cl=40 no2=10 no3=20 so4=40

Sample Name:	**ccv1**	*Injection Volume:*	**20.0**
Vial Number:	**601**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/13/2012 8:21**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.15**	*Sample Amount:*	**1.0000**

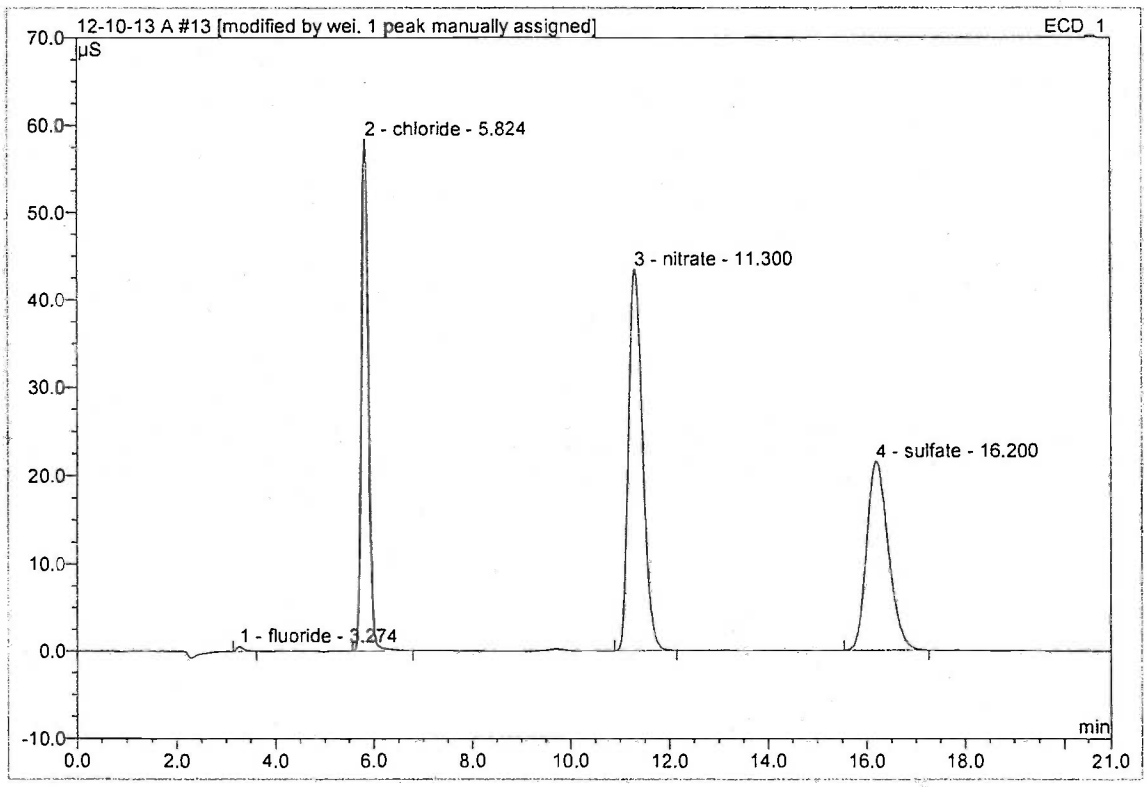


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	3.26	fluoride	14.549	2.353	9.13	8.002	BMB
2	5.75	chloride	63.411	10.812	41.93	40.359	BMB
3	7.26	nitrite	3.910	1.097	4.25	9.488	BMB
4	9.65	bromide	6.617	1.892	7.34	20.337	BMB
5	11.32	nitrate	7.264	2.460	9.54	20.486	BMB
6	16.17	sulfate	13.445	7.174	27.82	38.908	BMB^
Total:			109.196	25.788	100.00	137.580	

13 312080-003-4

arcadis no3

Sample Name:	**312080-003-4**	*Injection Volume:*	**20.0**
Vial Number:	**604**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/13/2012 9:40**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.96**	*Sample Amount:*	**1.0000**

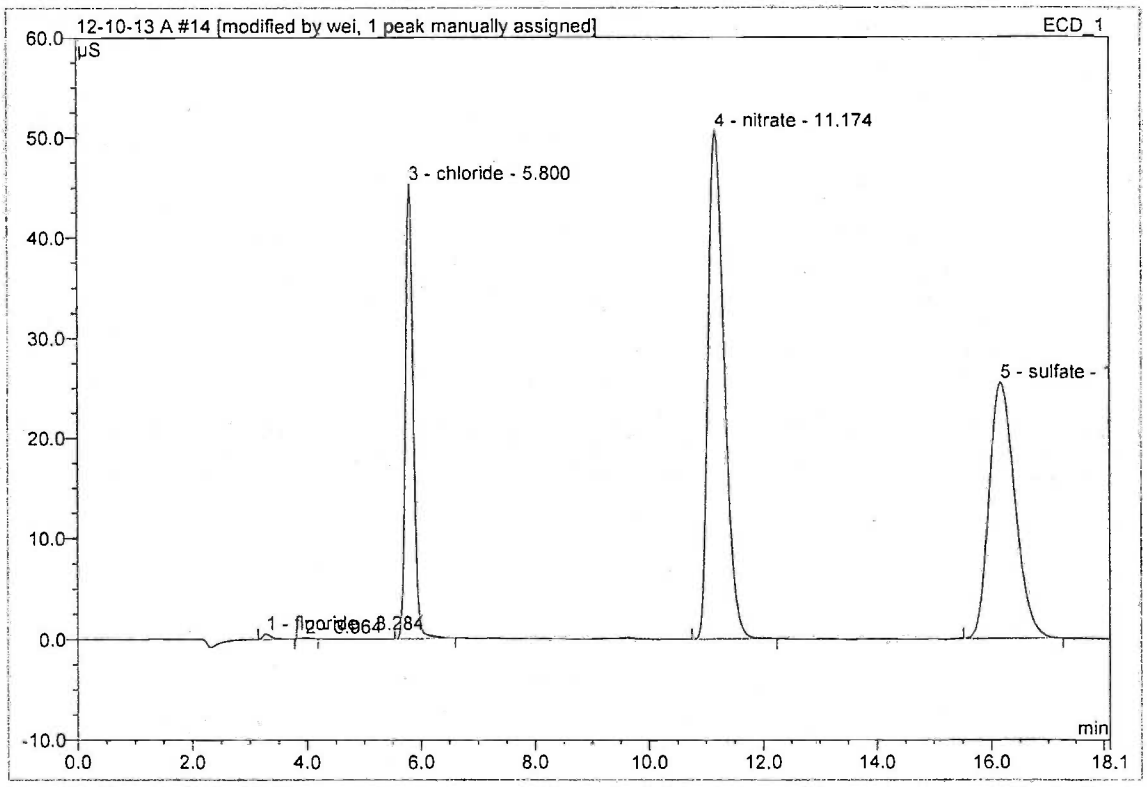


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	3.27	fluoride	0.560	0.095	0.27	0.334	BMB
2	5.82	chloride	58.348	9.786	27.73	36.808	BMB
3	11.30	nitrate	43.339	14.274	40.45	93.079	BMB
4	16.20	sulfate	21.472	11.129	31.54	58.143	BMB^
Total:			123.718	35.285	100.00	188.364	

14 312080-004-1

arcadis no3

Sample Name:	**312080-004-1**	*Injection Volume:*	**20.0**
Vial Number:	**604**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/13/2012 10:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.10**	*Sample Amount:*	**1.0000**

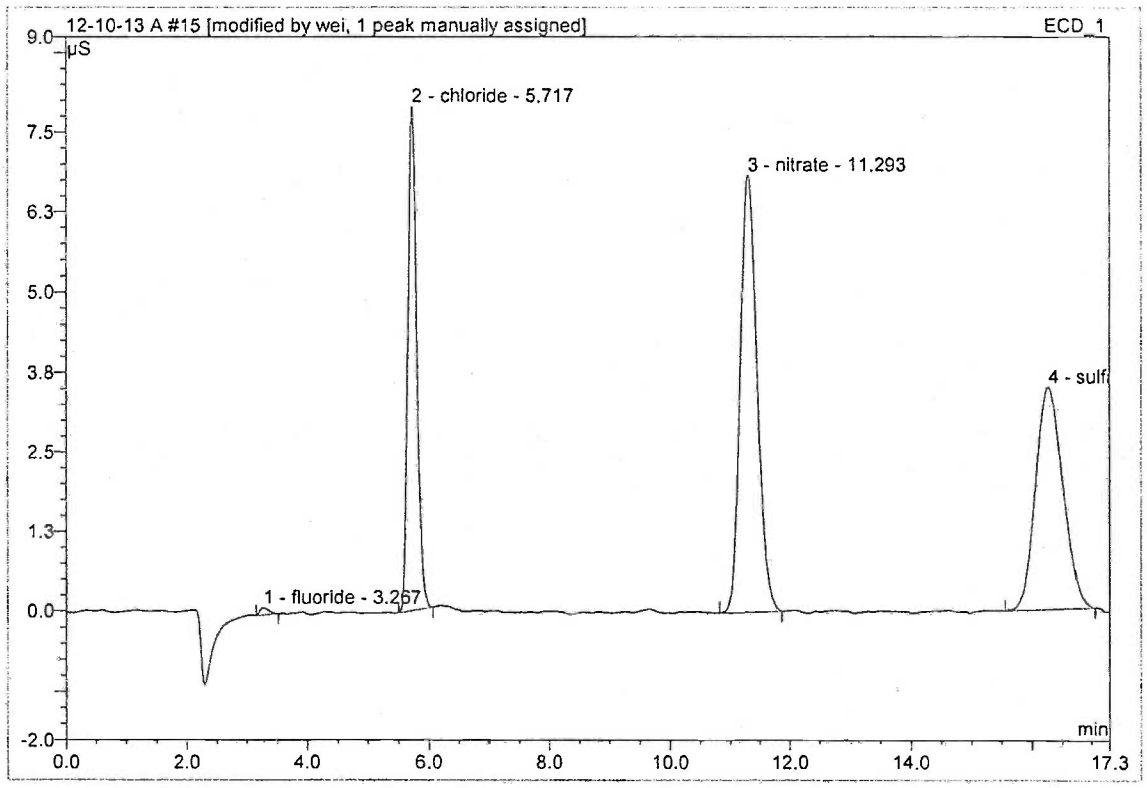


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	3.28	fluoride	0.544	0.099	0.27	0.348	BMB
2	3.96	n.a.	0.123	0.021	0.06	n.a.	BMB
3	5.80	chloride	45.258	7.347	19.61	28.157	BMB
4	11.17	nitrate	50.554	16.627	44.37	104.768	BMB
5	16.17	sulfate	25.413	13.376	35.70	68.521	BMB^
Total:			121.891	37.470	100.00	201.795	

15 312080-003-4

crcadis rep for no3

Sample Name:	**312080-003-4**	*Injection Volume:*	**20.0**
Vial Number:	**605**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**5.0000**
Recording Time:	**10/13/2012 10:26**	*Sample Weight:*	**1.0000**
Run Time (min):	**17.29**	*Sample Amount:*	**1.0000**

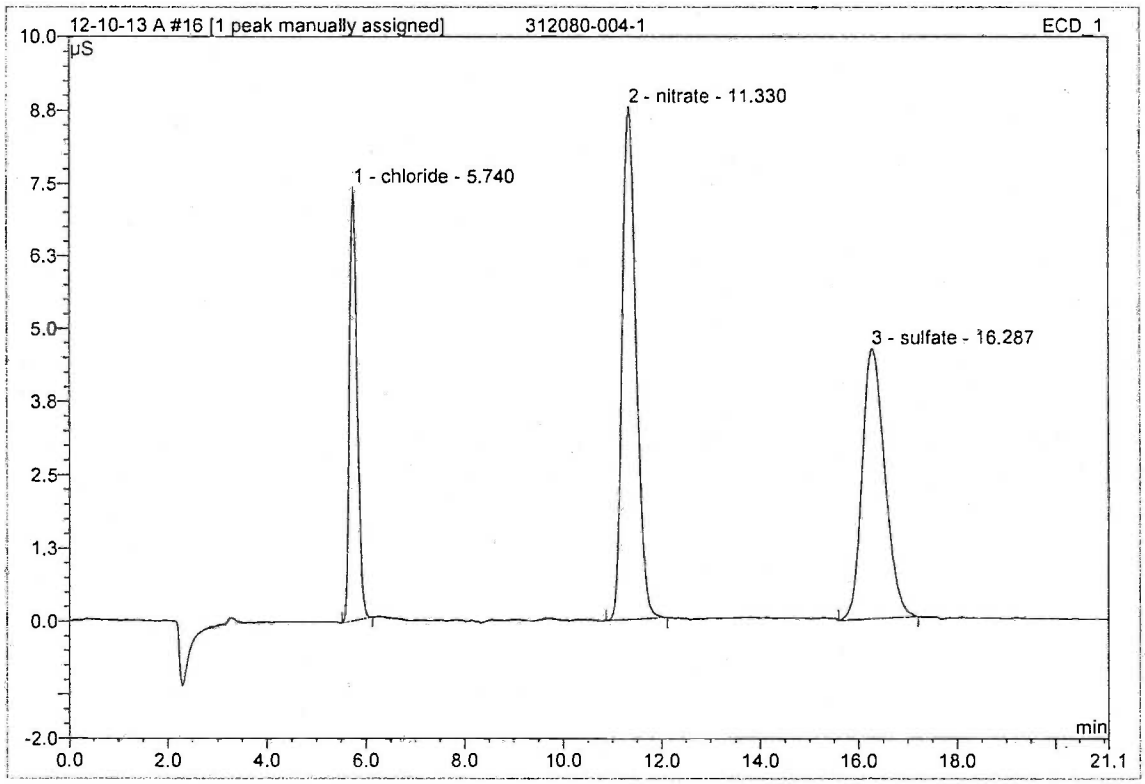


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	3.27	fluoride	0.110	0.018	0.33	0.315	BMB
2	5.72	chloride	7.896	1.386	25.25	27.930	BMB
3	11.29	nitrate	6.833	2.248	40.97	94.196	BMB
4	16.27	sulfate	3.486	1.836	33.46	52.764	BMB^
Total:			18.324	5.488	100.00	175.205	

16 312080-004-1

crcadis rep for no3

Sample Name:	**312080-004-1**	*Injection Volume:*	**20.0**
Vial Number:	**606**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**5.0000**
Recording Time:	**10/13/2012 10:46**	*Sample Weight:*	**1.0000**
Run Time (min):	**21.08**	*Sample Amount:*	**1.0000**

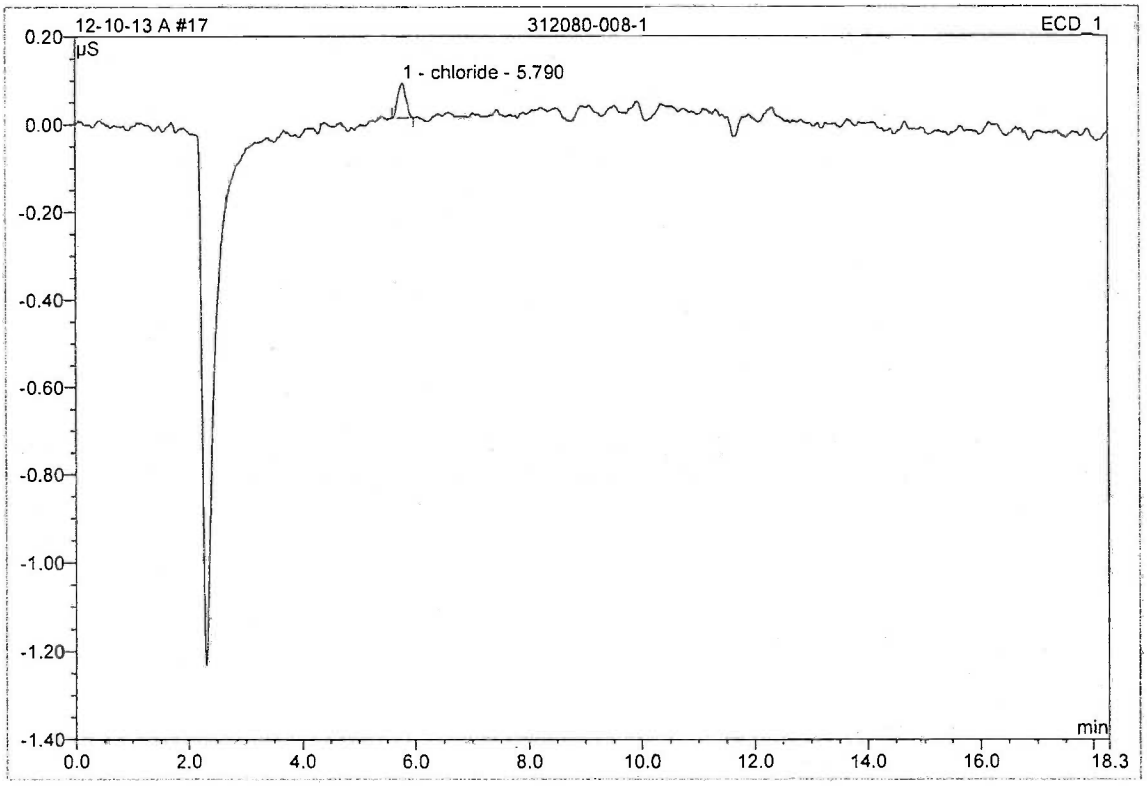


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.74	chloride	7.433	1.323	19.87	26.687	BMB
2	11.33	nitrate	8.775	2.880	43.26	118.449	BMB
3	16.29	sulfate	4.597	2.454	36.87	70.011	BMB^
Total:			20.806	6.657	100.00	215.147	

17 312080-008-1

arcadis no3 mb

Sample Name:	**312080-008-1**	*Injection Volume:*	**20.0**
Vial Number:	**607**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/13/2012 11:10**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.27**	*Sample Amount:*	**1.0000**

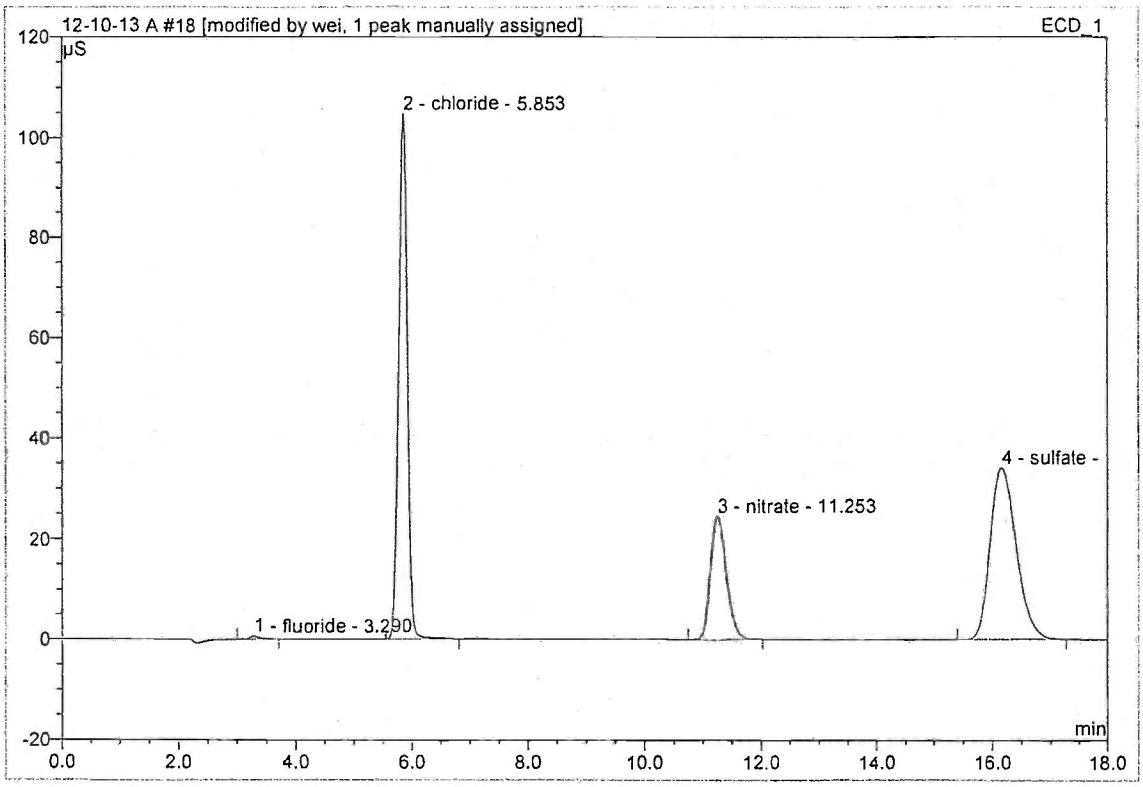


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.79	chloride	0.080	0.014	100.00	0.056	BMB
Total:			0.080	0.014	100.00	0.056	

18 312080-013-5

arcadis f/cl/so4/no2/no3 dup

Sample Name:	**312080-013-5**	*Injection Volume:*	**20.0**
Vial Number:	**608**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/13/2012 11:31**	*Sample Weight:*	**1.0000**
Run Time (min):	**17.98**	*Sample Amount:*	**1.0000**

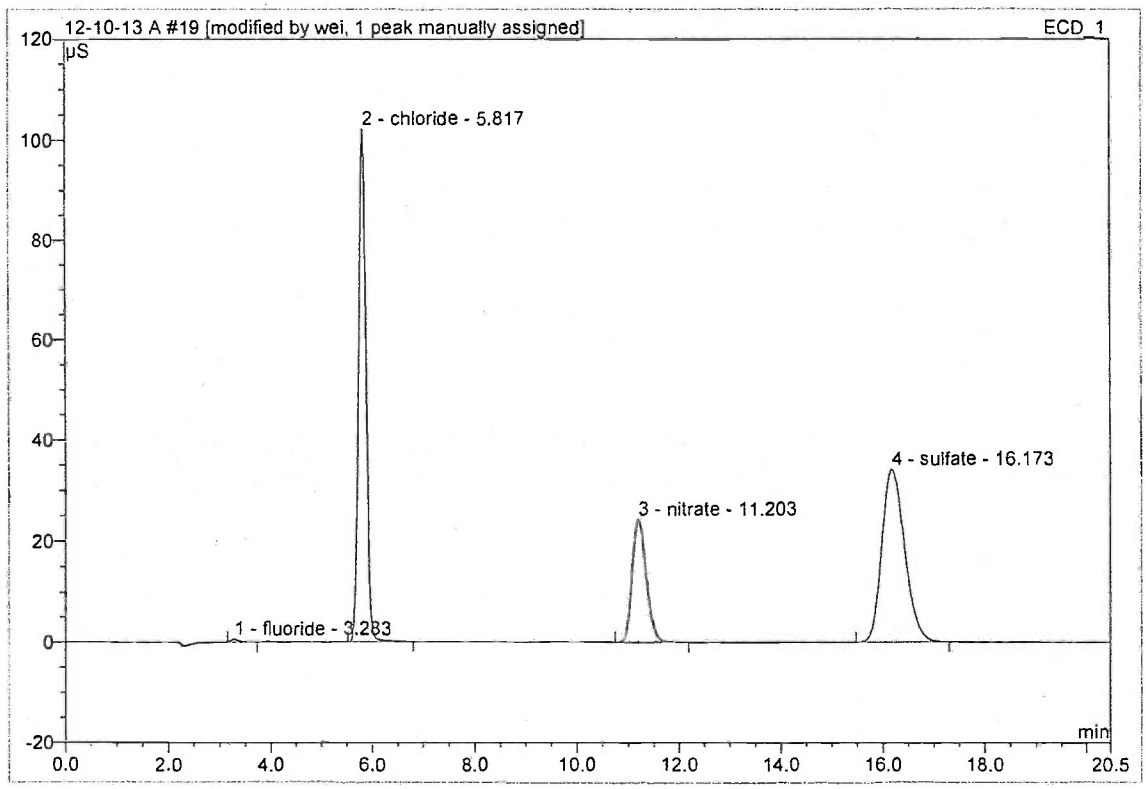


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	3.29	fluoride	0.616	0.111	0.25	0.389	BMB
2	5.85	chloride	104.676	18.050	41.29	64.131	BMB
3	11.25	nitrate	24.398	7.762	17.75	56.772	BMB
4	16.16	sulfate	33.974	17.796	40.71	87.963	BMB^
Total:			163.665	43.720	100.00	209.255	

19 312080-014-1

arcadis f/cl/so4/no2/no3 dup

Sample Name:	**312080-014-1**	*Injection Volume:*	**20.0**
Vial Number:	**609**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/13/2012 11:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.47**	*Sample Amount:*	**1.0000**

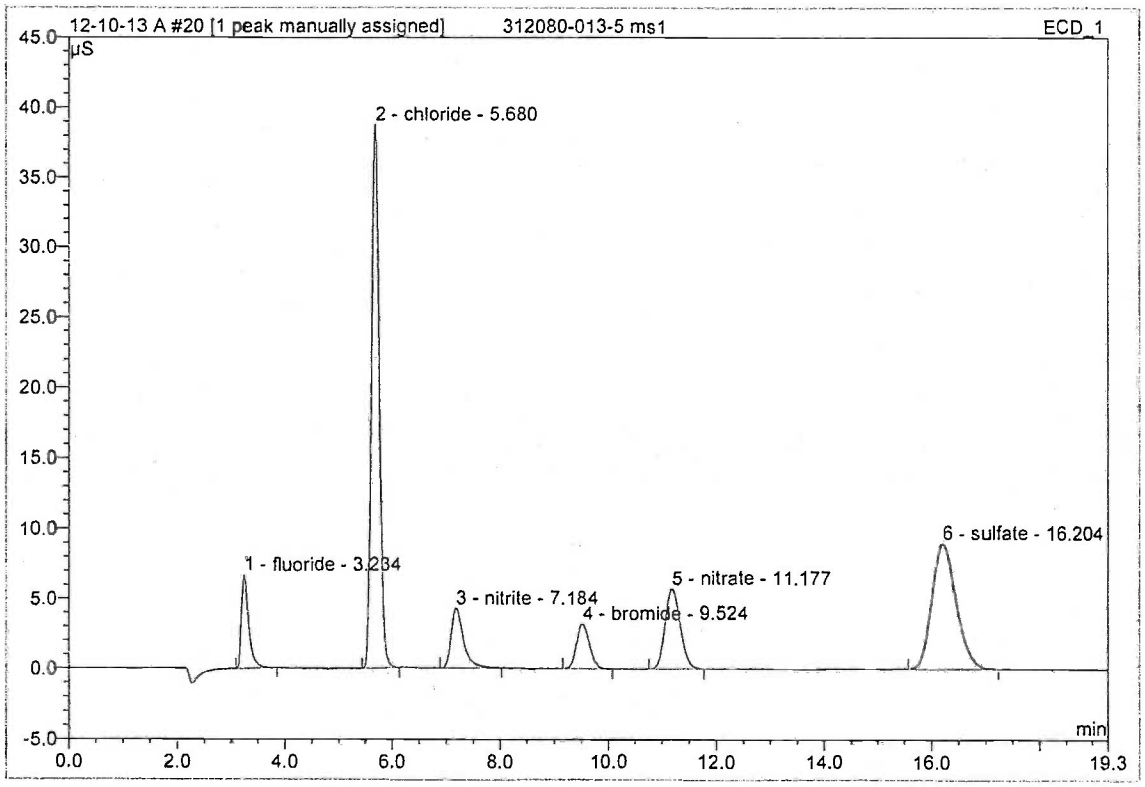


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	3.28	fluoride	0.592	0.103	0.24	0.363	BMB*
2	5.82	chloride	102.143	17.364	40.29	61.964	BMB
3	11.20	nitrate	24.246	7.778	18.05	56.871	BMB
4	16.17	sulfate	34.088	17.855	41.43	88.211	BMB^
Total:			161.069	43.100	100.00	207.408	

20 312080-013-5 ms1

ms1

Sample Name:	**312080-013-5 ms1**	*Injection Volume:*	**20.0**
Vial Number:	**610**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/13/2012 12:15**	*Sample Weight:*	**1.0000**
Run Time (min):	**19.29**	*Sample Amount:*	**1.0000**

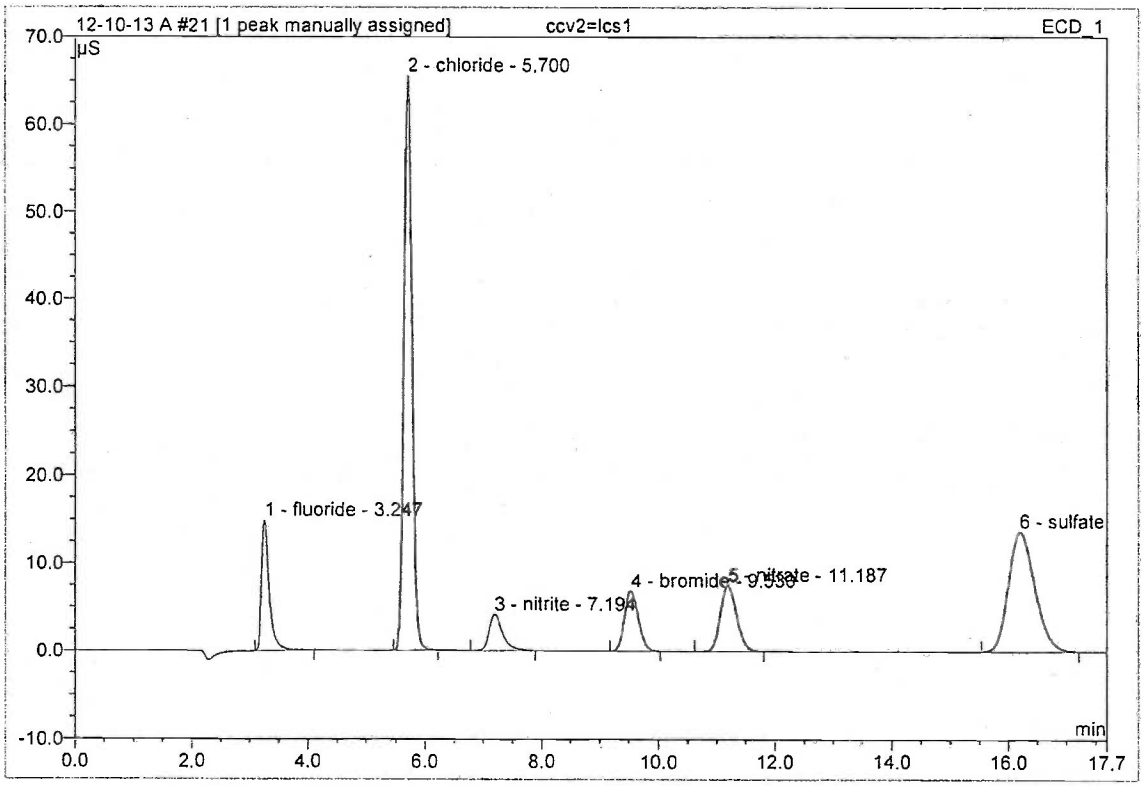


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	3.23	fluoride	6.735	1.050	6.54	36.332	BMB
2	5.68	chloride	38.771	6.384	39.76	246.568	BMB
3	7.18	nitrite	4.274	1.146	7.14	98.994	BMB
4	9.52	bromide	3.195	0.884	5.51	98.308	BMB
5	11.18	nitrate	5.777	1.877	11.69	159.026	BMB
6	16.20	sulfate	8.976	4.716	29.37	262.367	BMB^
Total:			67.730	16.058	100.00	901.597	

21 ccv2=lcs1

f=8 cl=40 no2=10 no3=20 so4=40

Sample Name:	**ccv2=lcs1**	*Injection Volume:*	**20.0**
Vial Number:	**611**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/13/2012 12:37**	*Sample Weight:*	**1.0000**
Run Time (min):	**17.70**	*Sample Amount:*	**1.0000**

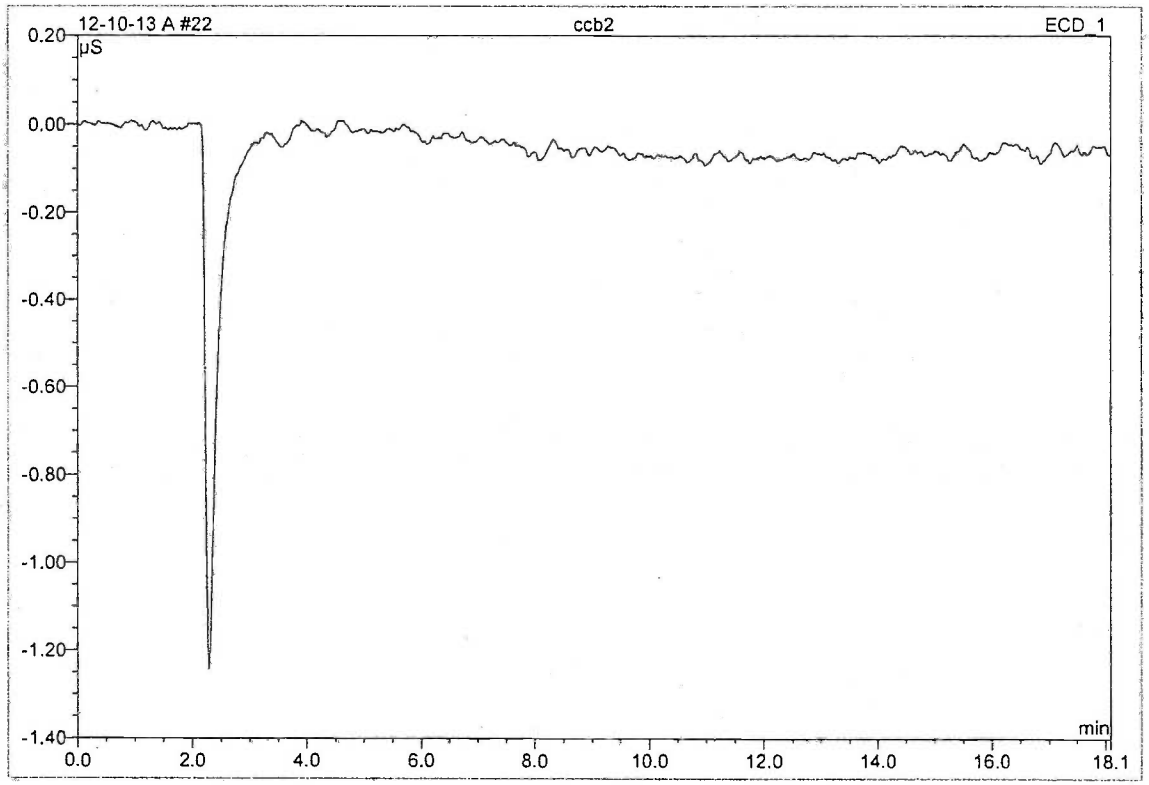


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	3.25	fluoride	14.886	2.303	9.00	7.837	BMB
2	5.70	chloride	65.488	10.707	41.81	39.997	BMB
3	7.19	nitrite	4.147	1.119	4.37	9.672	BMB
4	9.53	bromide	6.873	1.876	7.33	20.177	BMB
5	11.19	nitrate	7.521	2.434	9.50	20.279	BMB
6	16.20	sulfate	13.665	7.169	28.00	38.885	BMB^
Total:			112.580	25.608	100.00	136.848	

LCS1

22 ccb2

Sample Name:	**ccb2**	*Injection Volume:*	**20.0**
Vial Number:	**612**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/13/2012 12:57**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.08**	*Sample Amount:*	**1.0000**

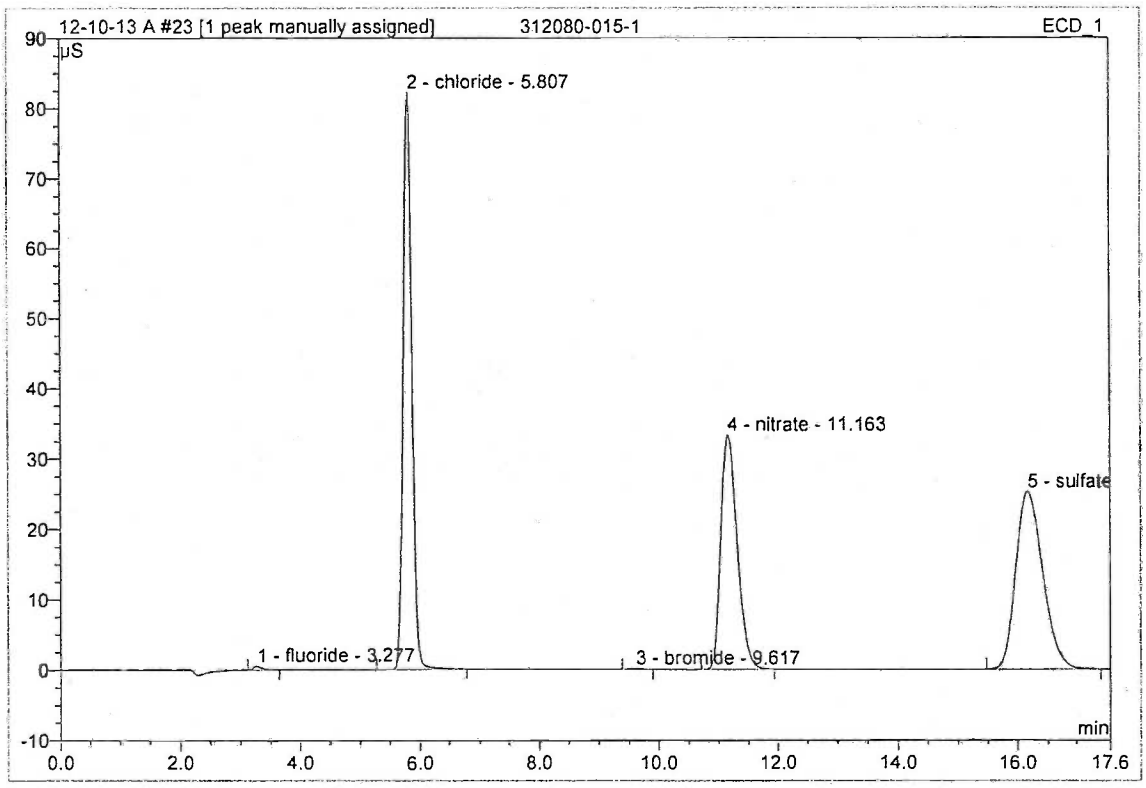


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
Total:			0.000	0.000	0.00	0.000	

23 312080-015-1

arcadis no3

Sample Name:	**312080-015-1**	*Injection Volume:*	**20.0**
Vial Number:	**613**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/13/2012 13:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**17.55**	*Sample Amount:*	**1.0000**

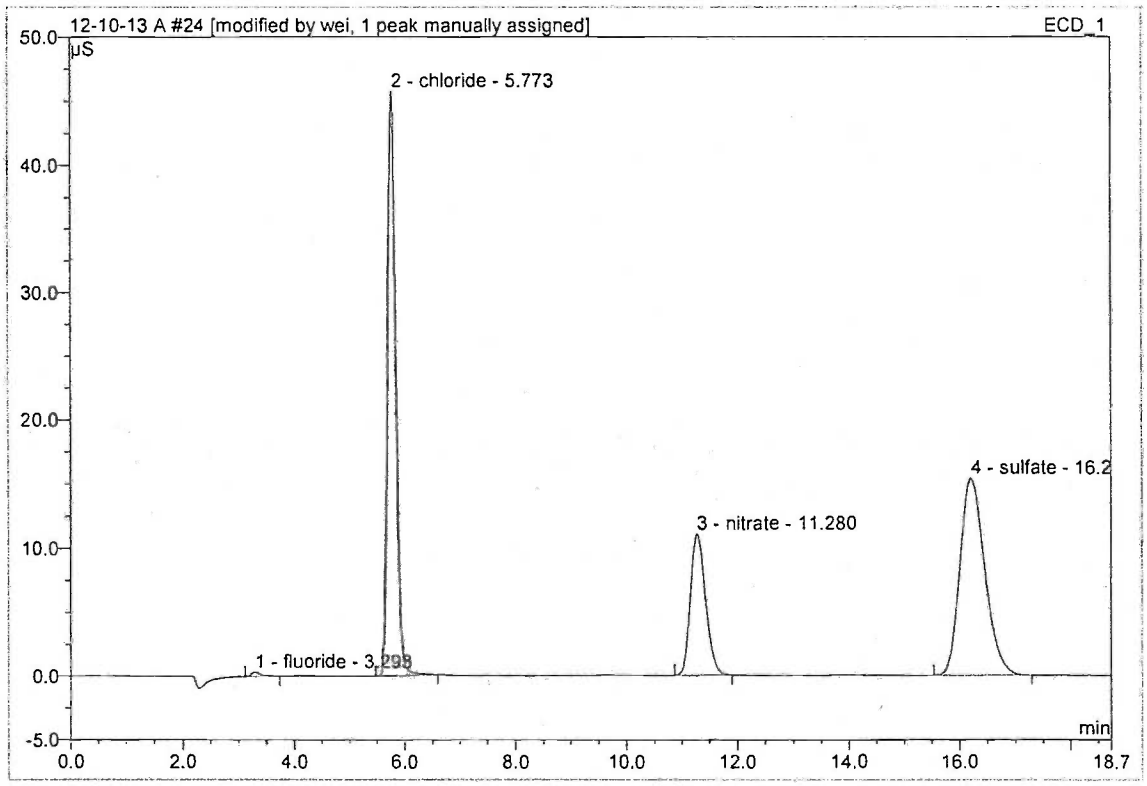


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	3.28	fluoride	0.552	0.094	0.25	0.331	BMB
2	5.81	chloride	82.207	13.794	36.68	50.411	BMB
3	9.62	bromide	0.112	0.028	0.08	0.326	BMB
4	11.16	nitrate	33.175	10.546	28.04	73.130	BMB
5	16.18	sulfate	25.167	13.147	34.96	67.479	BMB^
Total:			141.213	37.610	100.00	191.677	

24 312080-013-5

arcadis rep for no3

Sample Name:	**312080-013-5**	*Injection Volume:*	**20.0**
Vial Number:	**614**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/13/2012 13:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.73**	*Sample Amount:*	**1.0000**

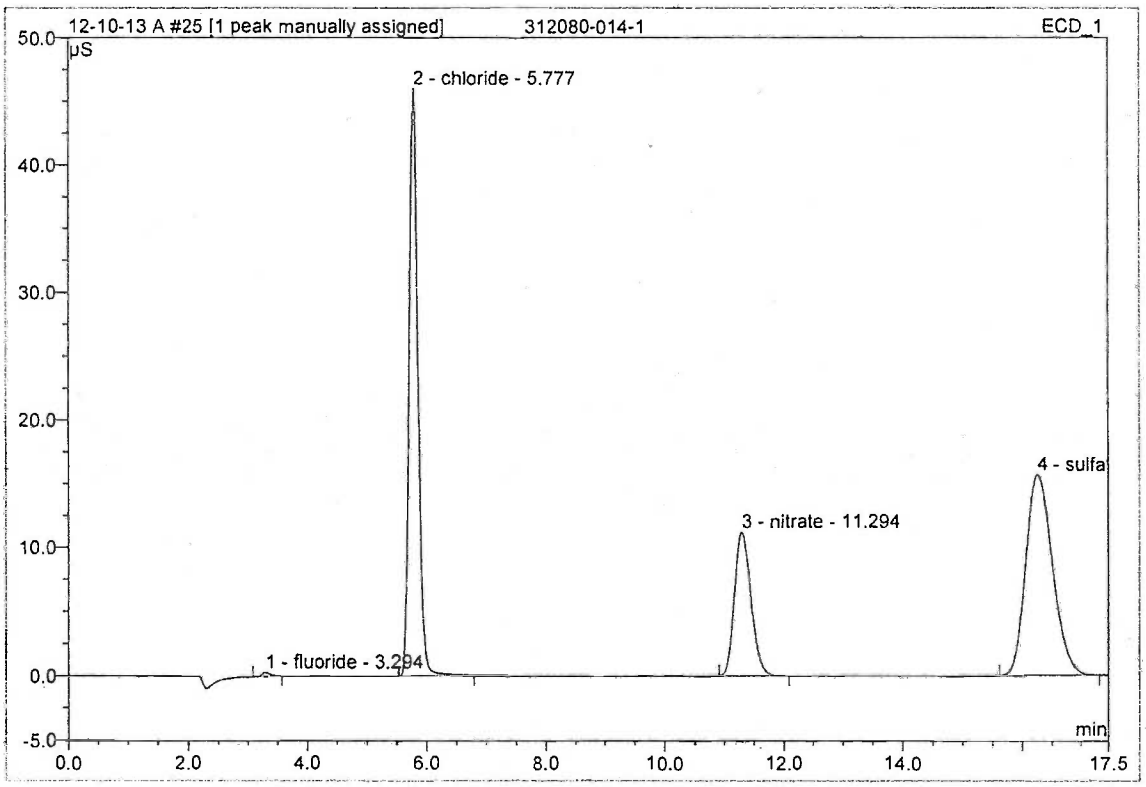


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	3.29	fluoride	0.343	0.065	0.33	0.455	BMB
2	5.77	chloride	45.738	7.887	40.59	60.195	BMB
3	11.28	nitrate	11.033	3.506	18.05	56.689	BMB
4	16.21	sulfate	15.348	7.973	41.03	85.802	BMB^
Total:			72.462	19.431	100.00	203.142	

25 312080-014-1

arcadis rep for no3

Sample Name:	**312080-014-1**	*Injection Volume:*	**20.0**
Vial Number:	**615**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**2.0000**
Recording Time:	**10/13/2012 13:59**	*Sample Weight:*	**1.0000**
Run Time (min):	**17.45**	*Sample Amount:*	**1.0000**

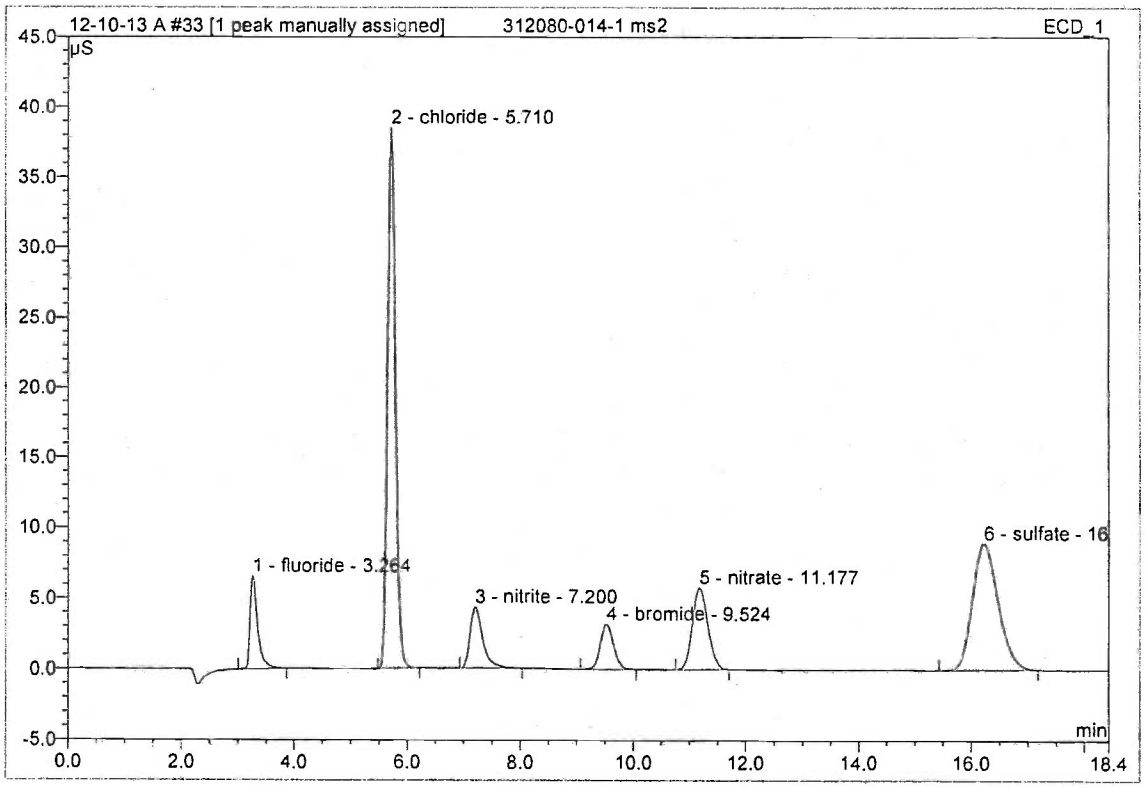


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	3.29	fluoride	0.311	0.052	0.26	0.363	BMB
2	5.78	chloride	45.977	7.962	40.39	60.735	BMB
3	11.29	nitrate	11.125	3.588	18.20	57.880	BMB
4	16.26	sulfate	15.593	8.109	41.14	87.151	BMB^
Total:			73.006	19.710	100.00	206.129	

33 312080-014-1 ms2

ms2

Sample Name:	**312080-014-1 ms2**	*Injection Volume:*	**20.0**
Vial Number:	**647**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/13/2012 16:20**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.43**	*Sample Amount:*	**1.0000**

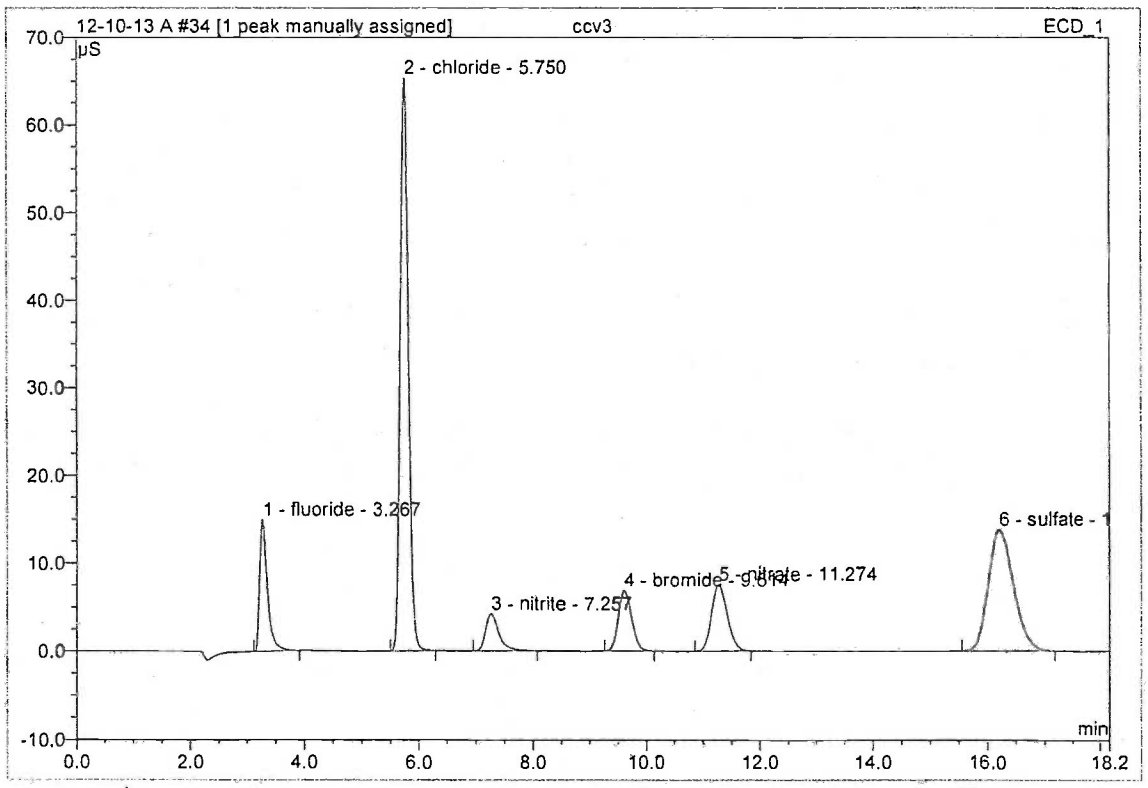


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	3.26	fluoride	6.580	1.044	6.59	36.115	BMB
2	5.71	chloride	38.479	6.273	39.61	242.490	BMB
3	7.20	nitrite	4.317	1.129	7.13	97.581	BMB
4	9.52	bromide	3.157	0.875	5.52	97.267	BMB
5	11.18	nitrate	5.763	1.844	11.65	156.464	BMB
6	16.22	sulfate	8.899	4.672	29.50	260.042	BMB^
Total:			67.195	15.837	100.00	889.958	

34 ccv3

f=8 cl=40 no2=10 no3=20 so4=40

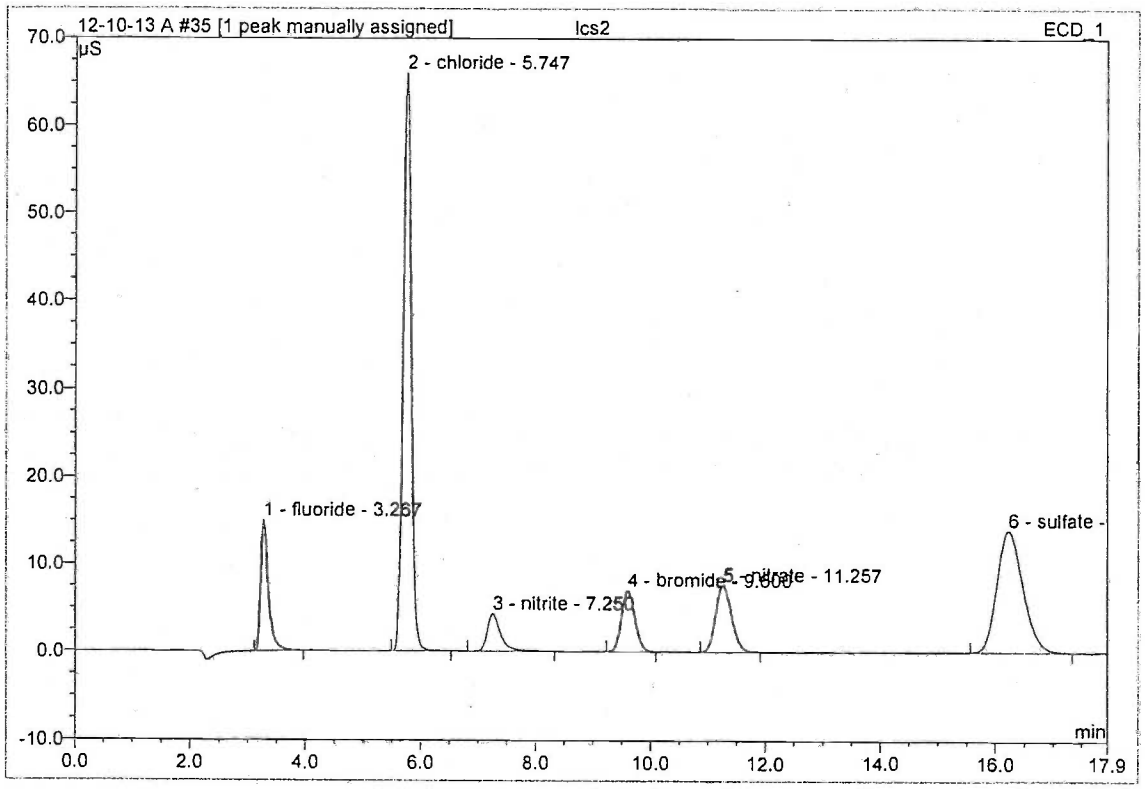
Sample Name:	**ccv3**	*Injection Volume:*	**20.0**
Vial Number:	**648**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/13/2012 16:41**	*Sample Weight:*	**1.0000**
Run Time (min):	**18.16**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	3.27	fluoride	14.912	2.304	9.01	7.840	BMB
2	5.75	chloride	65.272	10.820	42.32	40.386	BMB
3	7.26	nitrite	4.133	1.113	4.35	9.626	BMB
4	9.61	bromide	6.848	1.871	7.32	20.131	BMB
5	11.27	nitrate	7.500	2.420	9.46	20.174	BMB
6	16.21	sulfate	13.676	7.040	27.53	38.233	BMB^
Total:			112.341	25.569	100.00	136.390	

35 lcs2

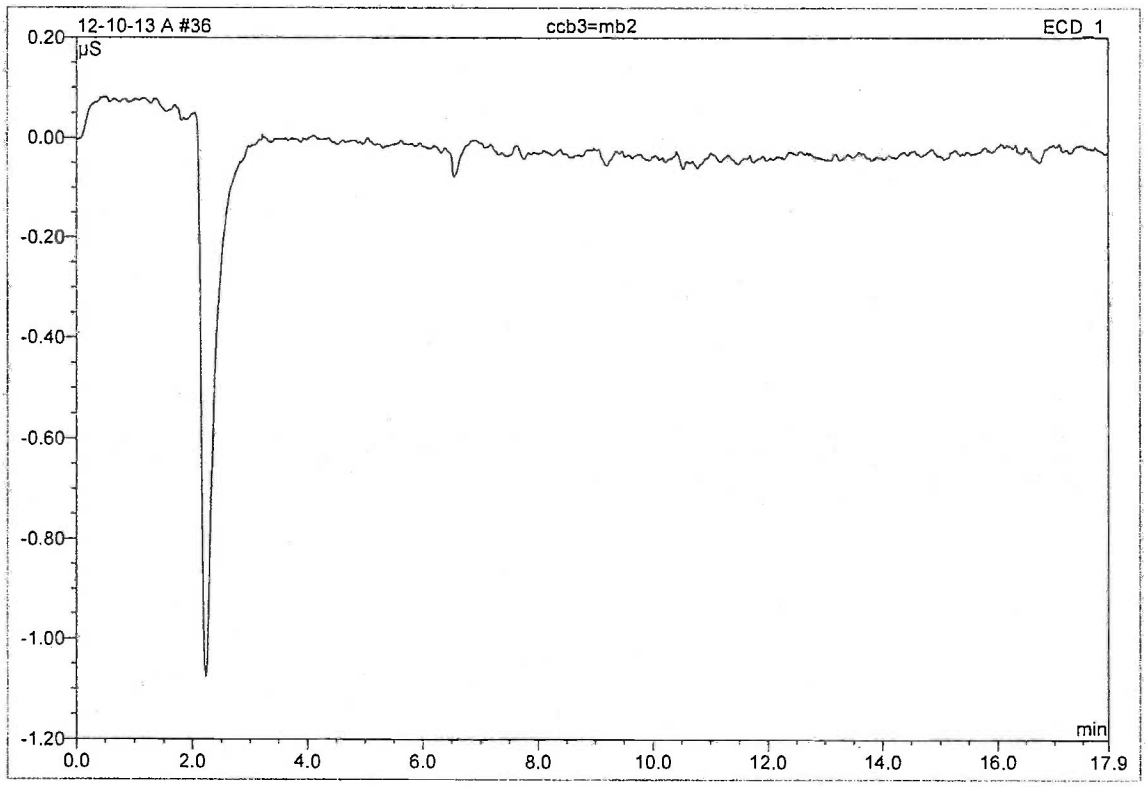
Sample Name:	**lcs2**	*Injection Volume:*	**20.0**
Vial Number:	**649**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/13/2012 17:02**	*Sample Weight:*	**1.0000**
Run Time (min):	**17.95**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	3.27	fluoride	15.031	2.318	8.92	7.885	BMB
2	5.75	chloride	65.988	10.916	42.02	40.718	BMB
3	7.25	nitrite	4.287	1.169	4.50	10.089	BMB
4	9.60	bromide	6.955	1.887	7.26	20.287	BMB
5	11.26	nitrate	7.620	2.453	9.44	20.426	BMB
6	16.22	sulfate	13.930	7.234	27.85	39.211	BMB^
Total:			113.811	25.977	100.00	138.616	

36 ccb3=mb2

Sample Name:	**ccb3=mb2**	*Injection Volume:*	**20.0**
Vial Number:	**650**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/13/2012 17:23**	*Sample Weight:*	**1.0000**
Run Time (min):	**17.94**	*Sample Amount:*	**1.0000**

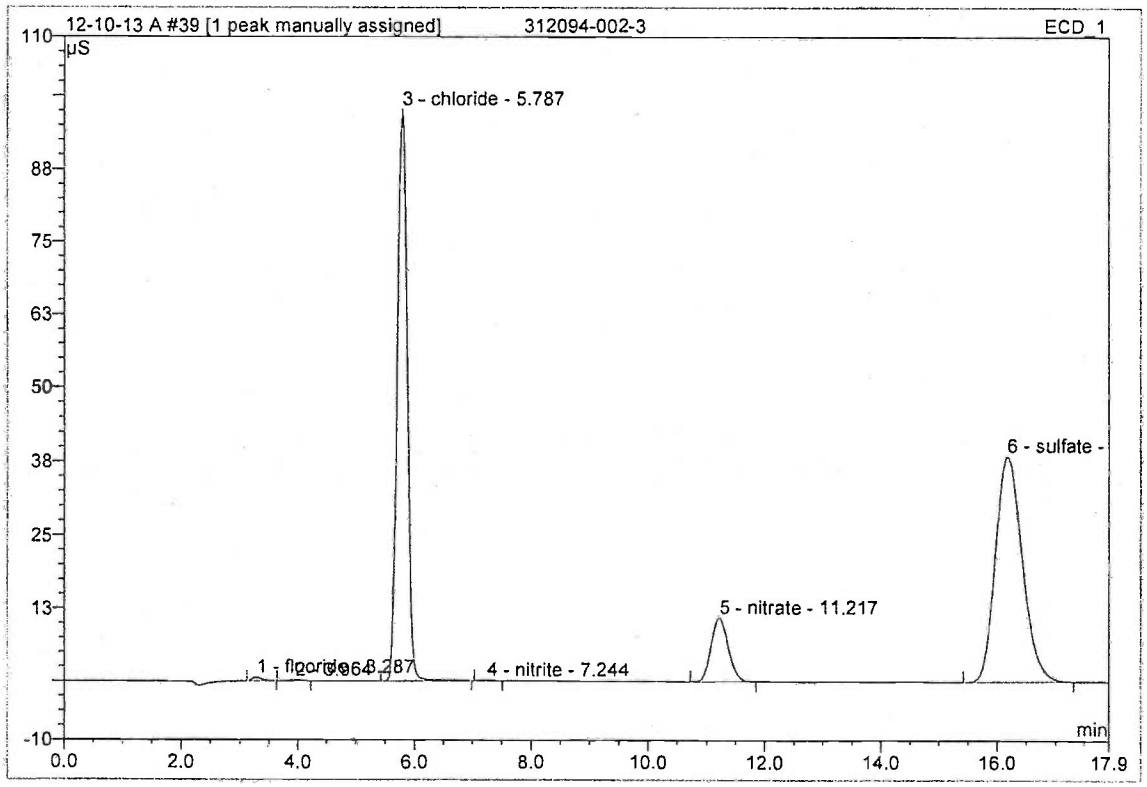


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
Total:			0.000	0.000	0.00	0.000	

39 312094-002-3

B-1-CW20 Arcadis f/cl/so4/no3/no2

Sample Name:	**312094-002-3**	*Injection Volume:*	**20.0**
Vial Number:	**653**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/13/2012 18:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**17.93**	*Sample Amount:*	**1.0000**

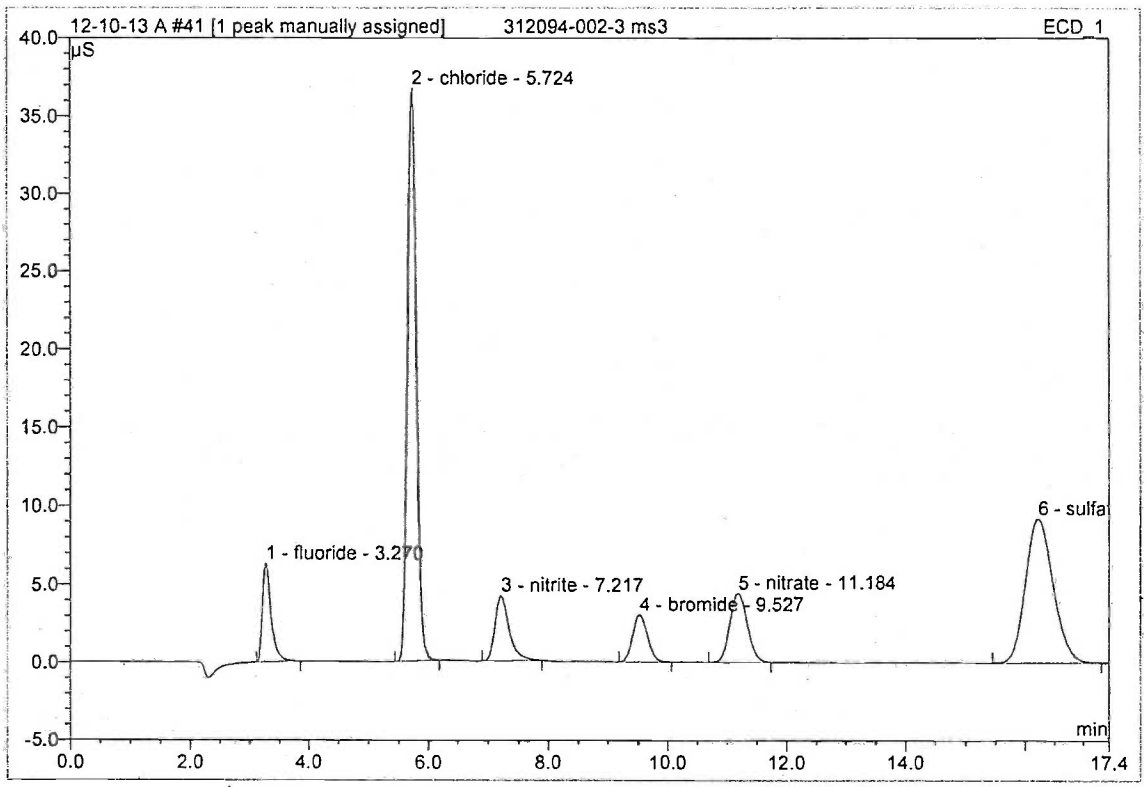


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	3.29	fluoride	0.697	0.126	0.29	0.442	BMB
2	3.96	n.a.	0.138	0.029	0.07	n.a.	BMB
3	5.79	chloride	97.633	19.070	43.64	67.320	BMB
4	7.24	nitrite	0.080	0.019	0.04	0.173	BMB
5	11.22	nitrate	10.907	3.752	8.59	30.132	BMB
6	16.18	sulfate	38.366	20.704	47.38	100.133	BMB^
Total:			147.822	43.701	100.00	198.200	

41 312094-002-3 ms3

ms3

Sample Name:	**312094-002-3 ms3**	*Injection Volume:*	**20.0**
Vial Number:	**655**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**10.0000**
Recording Time:	**10/13/2012 19:02**	*Sample Weight:*	**1.0000**
Run Time (min):	**17.42**	*Sample Amount:*	**1.0000**

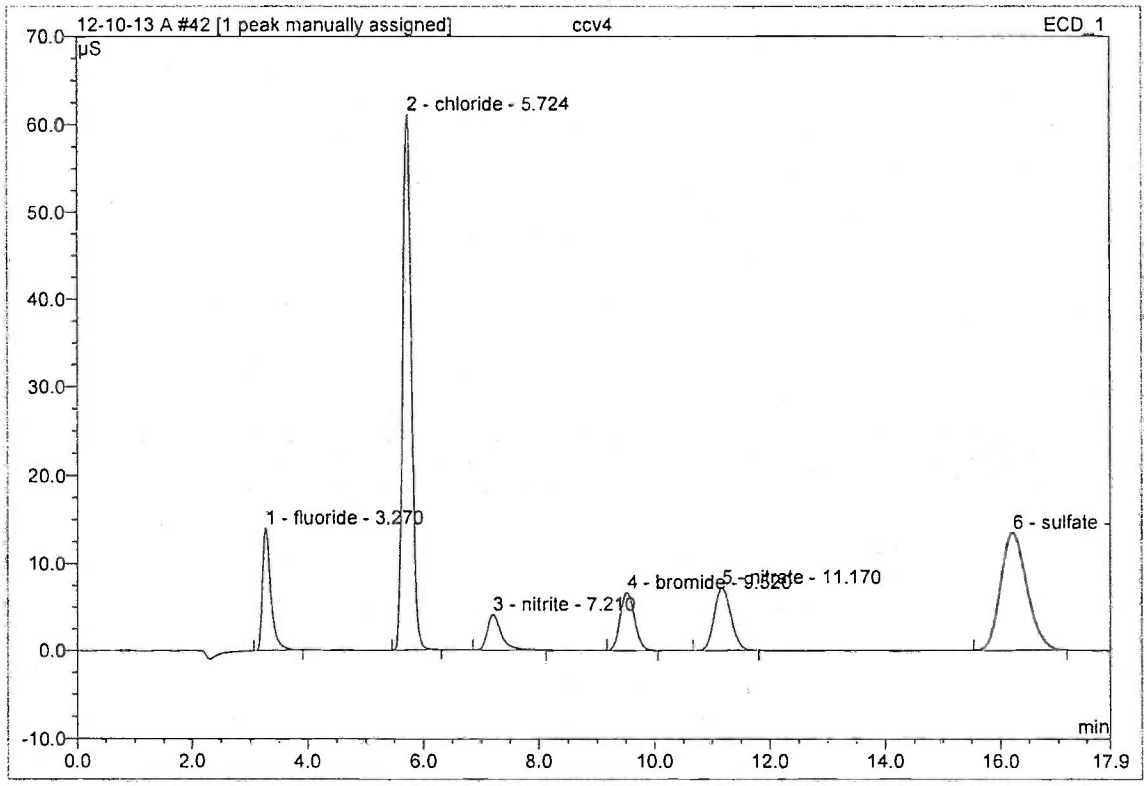


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	3.27	fluoride	6.313	1.071	6.65	37.021	BMB
2	5.72	chloride	36.675	6.490	40.29	250.445	BMB
3	7.22	nitrite	4.184	1.144	7.10	98.802	BMB
4	9.53	bromide	3.029	0.880	5.46	97.848	BMB
5	11.18	nitrate	4.437	1.521	9.44	130.335	BMB
6	16.22	sulfate	9.193	5.003	31.06	277.457	BMB^
Total:			63.832	16.108	100.00	891.908	

42 ccv4

f=8 cl=40 no2=10 no3=20 so4=40

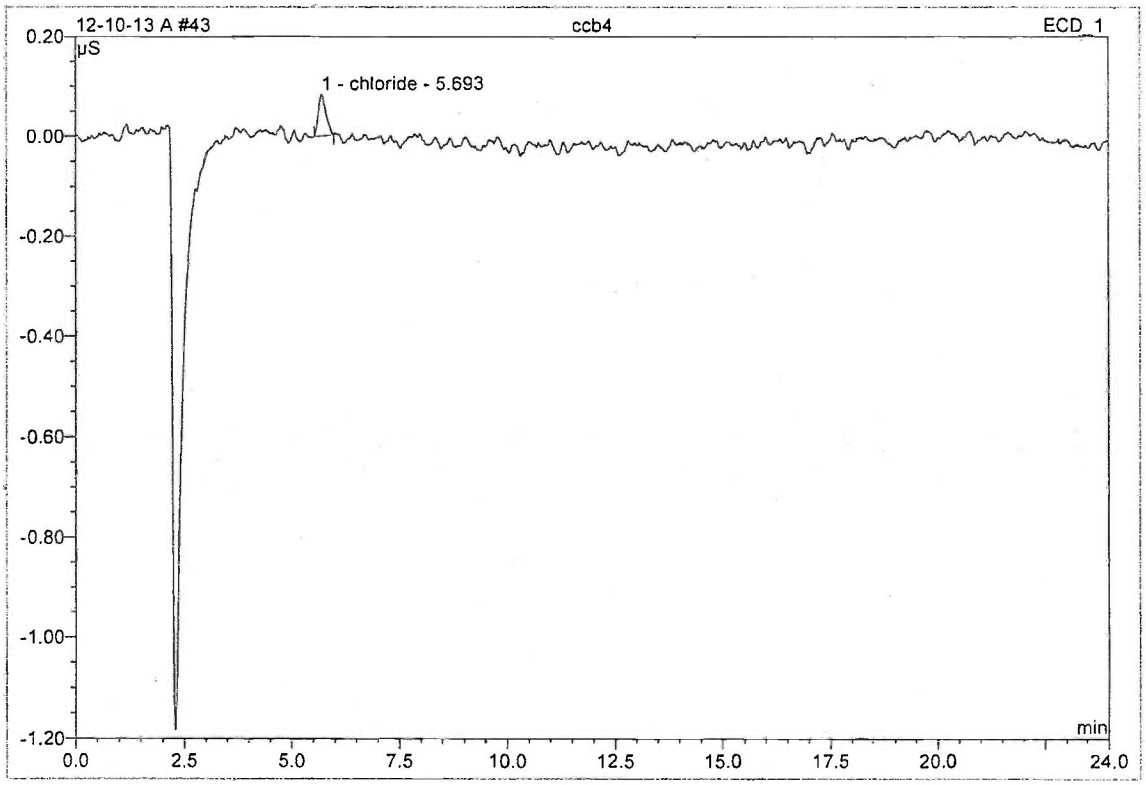
Sample Name:	**ccv4**	*Injection Volume:*	**20.0**
Vial Number:	**656**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/13/2012 19:22**	*Sample Weight:*	**1.0000**
Run Time (min):	**17.91**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	3.27	fluoride	14.031	2.296	8.98	7.812	BMB
2	5.72	chloride	61.054	10.644	41.63	39.780	BMB
3	7.21	nitrite	4.080	1.138	4.45	9.834	BMB
4	9.52	bromide	6.637	1.890	7.39	20.319	BMB
5	11.17	nitrate	7.242	2.438	9.54	20.316	BMB
6	16.22	sulfate	13.461	7.162	28.01	38.848	BMB^
Total:			106.505	25.568	100.00	136.909	

43 ccb4

Sample Name:	**ccb4**	*Injection Volume:*	**20.0**
Vial Number:	**657**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**anion_program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PERCHLORATE METHOD**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/13/2012 19:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**24.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.69	chloride	0.084	0.017	100.00	0.070	BMB
Total:			0.084	0.017	100.00	0.070	

SM4500-HB

pH

PH

SM 4500-H+B / EPA 150.1

Date	Lab ID #	PH	Temp.	Sigh.	Comments
10-15-12	B041012PH 1.68-5	1.68	21.9	RB	OAKlon 0065-12 2.20
	B070612PH 4-5	4.00	22.0	RB	microtech 304891C 2.1
	B070612PH 7-5	7.01	21.5	RB	microtech 304882C 2.
	B061412PH 10-3	10.02	21.7	RB	microtech 30486 11.
	B052212PH 12.45-3	12.46	21.3	RB	OAKlon-006-12 2.
	Di H2O	5.22	24.0	RB	
	312110-001	6.04	25.2	RB	4 1.5
	002	6.34	25.5	RB	2 1.5
	003	6.39	26.0	RB	1 1.5
	312112-001	6.26	26.2	RB	2 2
	312121-001	6.96	26.3	RB	1 3
	-002	6.73	22.5	RB	1 3
	312124-001	8.06	22.0	RB	1 3
	312080-008	6.55	25.9	RB	client requested to run on 10-15-12
	Buffer	7.01	27.3	RB	
	312123-001	6.25	24.0	RB	1 4
	-002	6.50	23.4		1 4
	-003	6.17	23.5		1 4
Duplicate	312123-003	6.14	24.8		1 4
	311995-002	5.88	25.8		1 4
	312125-001	7.46	25.4		1 4
	312125-002	6.51	25.8		3 4
	Buffer	7.02	27.7	RB	4

CONFIDENTIAL

PH

SM 4500-H+B / EPA 150.1

Date	Lab ID #	PH	Temp.	Sigh.	Comments
10/13/2012	B041012 pH1.68-5	1.61	23.3	DC	
	B070612 pH4-5	4.00	23.2		
	B070612 pH7-5	7.02	24.0		
	B061412 pH10-3	10.04	23.5		
	B052212 pH12.45-3	12.56	22.6		
	DI H_2O	6.04	22.2		
	312057/01-2	7.65	22.2		
	02-2	7.69	22.0		
	03-2	7.69	22.0		
	04-2	6.06	22.1		
	312058/01-2	7.16	22.1		
	02-2	6.90	22.2		
	03-2	7.19	22.2		
	04-2	6.02	22.2		
	312060/01-1	6.39	22.2		
	02-1	6.43	22.2		
	Buffer 7.0	7.04	22.4		
	312062/01-1	6.74	22.3		
	02-1	6.33	22.3		
	03-1	6.30	22.2		
	312063/01-1	6.43	22.2		
	312064/01-1	5.96	22.1		
	312065/01-1	6.84	22.1		

CONFIDENTIAL

PH

SM 4500-H+B / EPA 150.1

Date	Lab ID #	PH	Temp.	Sigh.	Comments
10/13/2012	312068/01-1	6.39	22.0	DK	
	02-1	6.38	22.0		
	Buffer 7.0	7.04	22.2		
	312067/01-1	6.49	21.9		
	02-1	6.38	22.2		
	312068/01-1	6.35	22.2		
	02-1	6.54	22.1		
	03-1	7.16	22.2		
	04-1	2.16	22.2		dup 2.14 T21.8
	312081/01-2	6.14	20.2		
	02-2	6.70	20.9		
	03-3	6.53	22.5		
	312088/01-2	6.85	22.8		
	Buffer 7.0	7.04	22.3		
	312080/13-5	7.59	22.5		
	14-1	7.62	22.4		
	312096-001	7.78	23.1		THE #1 10/12/12
	312094-002	7.51	26.9	NT	
	Buffer	7.04	22.4	NT	

CONFIDENTIAL

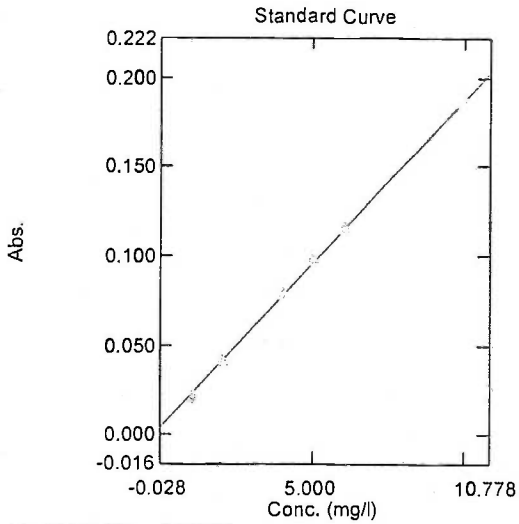
SM 4500-Si C

CONFIDENTIAL

REACTIVE SILICA

Sample Table

	Sample ID	Type	Ex	Conc	WL410.0	
1	MB	Unknown		-0.199	0.001	
2	iCV	Unknown		2.091	0.043	
3	LCS	Unknown		2.051	0.042	
4	312080 013	Unknown		6.765	0.129	10 MLS
5	080 013MS	Unknown		8.955	0.169	10 MLS
6	080 013MSD	Unknown		8.755	0.165	10 MLS
7	080 014	Unknown		6.252	0.119	10 MLS
8	080 008	Unknown		-0.971	-0.013	NEAT
9	312 002	Unknown		5.520	0.106	10 MLS3
10	311995 010	Unknown		5.913	0.113	10 MLS
11	995 002	Unknown		-0.971	-0.013	NEAT
12	CCV	Unknown		1.858	0.039	
13	CCB	Unknown		-0.465	-0.004	
14						



x = 54.53599 y - 0.25191
Correlation Coefficient r2 = 0.99906

Wavelengths
Wavelength Name: WL410.0
Wavelength: 410.00 nm

Calibration Curve
Column for Cal. Curve: WL410.0
Cal. Curve Type: Multi Point
Cal. Curve Unit: mg/l
Selected Wavelength: WL410.0
Calibration Equation: Conc = K1*(Abs) + K0
Zero Interception: Not Selected

Measurement Parameters(Standard)
Data Acquired by: Instrument
Delay sample read: Disabled

Software Information
Software Name: UVProbe
Version: 2.21
Mode: Normal Mode

Data Information
Filename: C:\Program Files\Shimadzu\UVProbe\data react sio2\sio2 2012\oct 2012 \121016SIO2.pho
Title:
Analyst: cmancini
Date/Time: 10/16/2012 12:42:38 PM
Comments:

ALAB : 00152

SILICA
SM4500Si-D&4500Si-C

Analyst CM

Date 10-16-12

Lab #	init. Vol.	DF	Reading	Final Result ppm	Comments
MB101612	50	1	-0.199	ND	
ICV 101612	50	1	2.091	2.09	std = 2.00 105%
LCS 101612	50	1	2.051	2.05	↓ 103%
312080-013	10	5	6.765	33.8	ARCADIS #4
-013MS	10	5	8.955	44.8	SA 10.0 100%
013MSD	10	5	8.755	43.8	↓ 99.7%
312080-014	10	5	6.252	31.3	ARCADIS #5
-008	50	1	-0.971	ND	↓ #1
312094-002	10	5	5.520	27.6	#2
311995-010	10	5	5.913	29.6	
002	50	1	-0.971	ND	↓
CCV 101612	50	1	1.858	1.86	std = 2.00 93%
CCB 101612	50	1	-0.465	ND	

Oxalic Acid OA090412 SiO2

HCL 1:1 HCL090412SiO2

Reducing Reagent none used

STD. ID # SS0419125iO2

LCS ID # SLCS 012012 SiO2

Ammonium Molybdate : AM090412 SiO2

7/12/2011 prep time: 1200

ALAB : 00153

CONFIDENTIAL

SM 5310B

TOC

SAMPLE NAME : 1

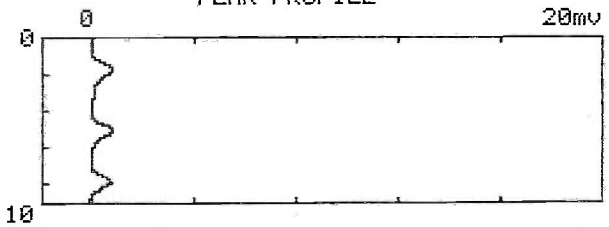
312080-13

TYPE : NPOC VIAL : 6
[INJ 80uL,C# TC2 ,DL 1,SP 3.0min,
ACID 0.0%,#WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	3.690E	0.428	TC2	80	1
2	3.484	0.400	TC2	80	1
3	3.555	0.410	TC2	80	1
MN	3.520	0.405	X1		
SD	0.05	0.01			
CV	1.43 %	1.66 %			

ND <0.5 mg/L

PEAK PROFILE



DATE 10(OCT)-16-2012 10:13

SAMPLE NAME : 1

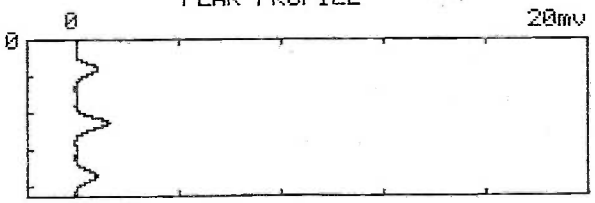
312080-14

TYPE : NPOC VIAL : 7
[INJ 80uL,C# TC2 ,DL 1,SP 3.0min,
ACID 0.0%,#WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	3.657	0.423	TC2	80	1
2	5.936E	0.729	TC2	80	1
3	3.728	0.433	TC2	80	1
MN	3.693	0.428			
SD	0.05	0.01			
CV	1.36 %	1.57 %			

ND <0.5 mg/L

PEAK PROFILE



DATE 10(OCT)-16-2012 10:28

ALAB : 00154

SAMPLE NAME : 1

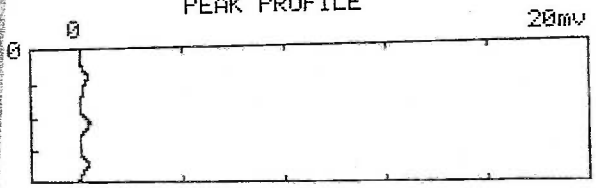
312080-8

TYPE : NPOC VIAL : 23
INJ 80uL,C# TC2 ,DL 1,SP 3.0min,
ACID 0.0%,#WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	1.269E	0.103	TC2	80	1
2	1.465	0.129	TC2	80	1
3	1.519	0.137	TC2	80	1
MN	1.492	0.133			
SD	0.04	0.01			
CV	2.56 %	3.85 %			

ND <0.5 mg/L
AP

PEAK PROFILE



DATE 10(OCT)-19-2012 15:04

ALAB : 00155

ASSOCIATED LABORATORIES
Total Organic Carbon Runlog

Method 9060 / 415.1 / 5310 B
Shimadzu TOC

TOC: V. (QP)

Date: 10/16/2012
HCl Lot: RB 0424 spectrum chem.

Vial	Sample	Dilute	Vial	Sample	Dilute
1	Inst BL 8:35am	pH < 2	41		
2	10 QA Make 10/10/12 8:47	~	42		
3	10 LCS 9/17/12 9:02		43		
4	2.5 QA 9/28/12 9:20		44		
5	BL. 9:38		45		
6	312080-13 9:52		46		
7	I -14 10:13		47		
8	312074		48		
9	312081-1		49		
10	I -2		50		
11	I -3 Dup.	~	51		
12	312080-13 MS 11:41 Lot 106-0087 Exp 02/2013		52		
13	312081-3	pH<2	53		
14	10 QA 12:15	~	54		
15	BL. 12:34		55		
16	312080-13 Dup. 12:54		56		
17	I -14 Dup 13:12		57		
18	312094-2 13:30		58		
19	312065		59		
20	312066-1		60		
21	I -2	~	61		
22	312080-13 MS Dup 14:40	Lot 106-0087	62		
23	10 LCS 15:02	pH<2	63		
24	BL	~	64		
25	312094-2 Dup. 15:36		65		
26	0.5 QA. 15:55		66		
27	312121-1		67		
28	I -2		68		
29	10 QA 16:51		69		
30	2.5 QA 17:12		70		
31	5.0 QA 17:27	~	71		
32	BL. 17:45	pH<2	72		
33			73		
34			74		
35			75		
36			76		
37			77		
38			78		
39			1		
40			2	ALAB: 00156	

Associated Labs QCBatch BenchSheet

QCBatchID: QC1130670

Created Date: 10/19/2012
Created By: quang
Matrix: Water

Test: 5310B Total Org
Method: SM 5310B
Instrument: TOC-BIO (group)
AnalysisDate: 10/16/2012
AnalysisEmployee:

Seq #	Sample ID	Customer Sample ID	QC Source	Sur. Added	Spk. Added	Init. Wt/Vol	Final Vol	Extraction Date	Extraction Time	Comments
0	LCS_1									
1	Method Blank_1									
2	MS_1		312080-013							
3	MSD_1		312080-013							
4	312065-001	SCH011 Landfill NPDE	312065-001							
5	312066-001	101112-1,2 SW	312066-001							
6	312066-002	101112-3,4 W	312066-002							
7	312074-001	121012-86	312074-001							
8	312080-008	Equipment Blank	312080-008							
9	312080-013	B-1-CW12	312080-013							
10	312080-014	B-1-CW12 Duplicate	312080-014							
11	312081-001	#1 Southeast Corner Dis	312081-001							
12	312081-002	#2 Southwest Corner Di	312081-002							
13	312081-003	#3 South Center Section	312081-003							
14	312094-002	B-1-CW20	312094-002							
15	312121-001	SE Drain	312121-001							
16	312121-002	SW Area	312121-002							

InitialCalibSTD:
CalibCheckSTD:
InternalSTD:
SurrogateSTD:
LCSSTD:
MSSTD:

Solvent Manufacturer and Lot:
Sand Manufacturer and Lot:
Na2SO4 Manufacturer and Lot:
Surrogate Lot:
Spike Lot:
Prep By Signature:

ALAB: 00157

LMC-PET-00000966

CONFIDENTIAL

NAME : 1

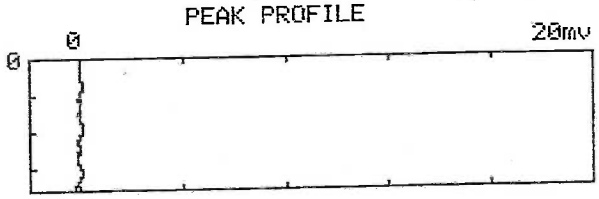
Inst Br

TYPE : NPOC VIAL : 1
[INJ 80uL,C# TC2 ,DL 1,SP 0.5min,
ACID 0.0%,#WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	0.360E	-0.019	TC2	80	1
2	0.653	0.021	TC2	80	1
3	0.809	0.041	TC2	80	1
MN	0.731	0.031			
SD	0.11	0.01			
CV	15.0 %	47.6 %			

ND <0.5 mg/L
Op

PEAK PROFILE



DATE 10(OCT)-16-2012 08:47

SAMPLE NAME : 1

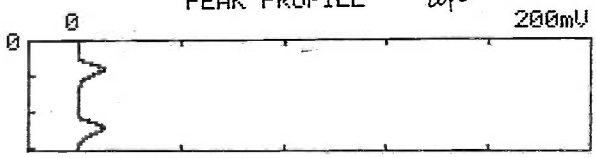
10 QA

TYPE : NPOC VIAL : 2
[INJ 50uL,C# TC3 ,DL 1,SP 3.0min,
ACID 0.0%,#WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	44.53	9.862	TC3	50	1
2	44.95	9.952	TC3	50	1
MN	44.74	9.907			
SD	0.30	0.06			
CV	0.66 %	0.64 %			

9.9 mg/L
Op

PEAK PROFILE



DATE 10(OCT)-16-2012 09:02

SAMPLE NAME : 1

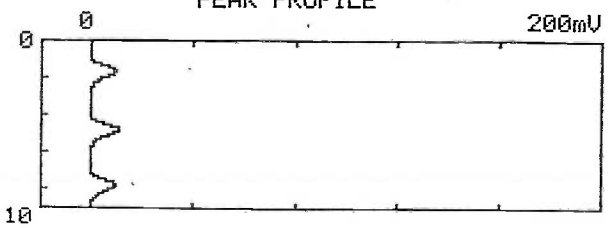
10 LCS

TYPE : NPOC VIAL : 3
[INJ 50uL,C# TC3 ,DL 1,SP 3.0min,
ACID 0.0%,#WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	44.68	9.894	TC3	50	1
2	47.59E	10.52	TC3	50	1
3	43.48	9.637	TC3	50	1
MN	44.08	9.765			
SD	0.85	0.18			
CV	1.92 %	1.86 %			

9.8 mg/L
Op

PEAK PROFILE



DATE 10(OCT)-16-2012 09:20

SAMPLE NAME : 1

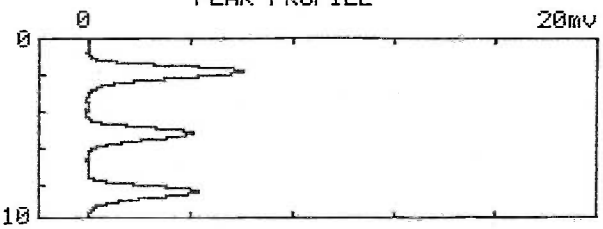
2.5 QA

TYPE : NPOC VIAL : 4
[INJ 80uL,C# TC2 ,DL 1,SP 3.0min,
ACID 0.0%,#WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	29.99E	3.956	TC2	80	1
2	19.62	2.565	TC2	80	1
3	20.24	2.648	TC2	80	1
MN	19.93	2.606			
SD	0.44	0.06			
CV	2.20 %	2.26 %			

2.61 mg/L
Op

PEAK PROFILE



DATE 10(OCT)-16-2012 09:38

SAMPLE NAME : 1

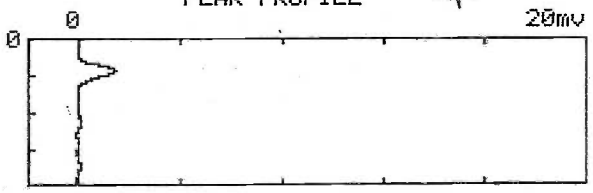
Br

TYPE : NPOC VIAL : 5
[INJ 80uL,C# TC2 ,DL 1,SP 1.0min,
ACID 0.0%,#WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	6.717E	0.834	TC2	80	1
2	0.593	0.012	TC2	80	1
3	0.403	-0.013	TC2	80	1
MN	0.498	0.000			
SD	0.13	0.02			
CV	27.0 %	5221 %			

ND <0.5 mg/L

PEAK PROFILE Op



DATE 10(OCT)-16-2012 09:52

ALAB : 00158

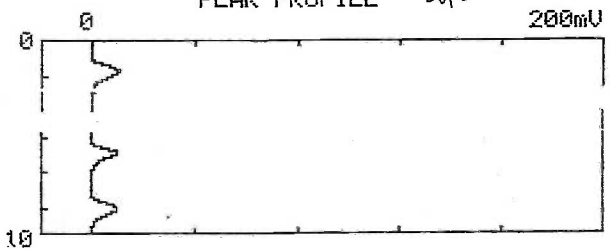
SAMPLE NAME : 1

TYPE : NPOC VIAL : 22 3| 2080-13 MS Pup
[INJ 50uL,C# TC3 ,DL 1,SP 3.0min,
ACID 0.0%,#WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	50.05E	11.04	TC3	50	1
2	47.42	10.48	TC3	50	1
3	47.50	10.50	TC3	50	1
MN	47.46	10.49			
SD	0.06	0.01			
CV	0.12 %	0.12 %			

10.5 mg/L

PEAK PROFILE QP



DATE 10(OCT)-16-2012 15:02

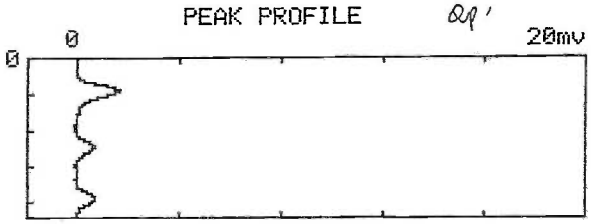
SAMPLE NAME : 1

TYPE : NPOC VIAL : 16 3| 2080-13 Pup
[INJ 80uL,C# TC2 ,DL 1,SP 3.0min,
ACID 0.0%,#WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	7.601E	0.952	TC2	80	1
2	3.362	0.384	TC2	80	1
3	3.537	0.407	TC2	80	1
MN	3.450	0.396			
SD	0.12	0.02			
CV	3.59 %	4.20 %			

ND <0.5 mg/L

PEAK PROFILE QP



DATE 10(OCT)-16-2012 13:12

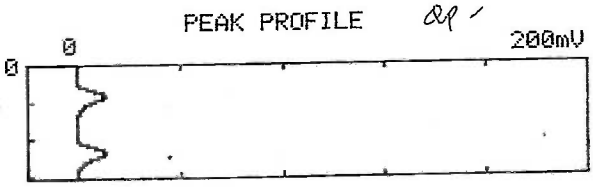
SAMPLE NAME : 1

TYPE : NPOC VIAL : 12 3| 2080-13 MS
[INJ 50uL,C# TC3 ,DL 1,SP 3.0min,
ACID 0.0%,#WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	47.81	10.56	TC3	50	1
2	47.89	10.58	TC3	50	1
MN	47.85	10.57			
SD	0.06	0.01			
CV	0.12 %	0.11 %			

10.6 mg/L

PEAK PROFILE QP



DATE 10(OCT)-16-2012 11:57

ALAB : 00159

SAMPLE NAME : 1

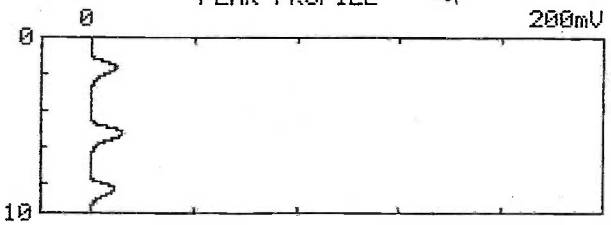
10 QA

TYPE : NPOC VIAL : 14
[INJ 50uL,C# TC3 ,DL 1,SP 3.0min,
ACID 0.0%,#WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	45.73	10.12	TC3	50	1
2	55.52E	12.22	TC3	50	1
3	41.69	9.253	TC3	50	1
MN	43.71	9.686			
SD	2.86	0.61			
CV	6.54 %	6.32 %			

9.7 mg/L

PEAK PROFILE



DATE 10(OCT)-16-2012 12:34

SAMPLE NAME : 1

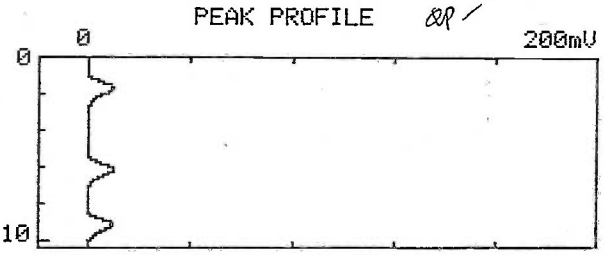
10 LCS

TYPE : NPOC VIAL : 23
[INJ 50uL,C# TC3 ,DL 1,SP 3.0min,
ACID 0.0%,#WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	47.22E	10.44	TC3	50	1
2	44.33	9.819	TC3	50	1
3	44.51	9.857	TC3	50	1
MN	44.42	9.838			
SD	0.13	0.03			
CV	0.29 %	0.28 %			

9.8 mg/L

PEAK PROFILE



DATE 10(OCT)-16-2012 15:22

SAMPLE NAME : 1

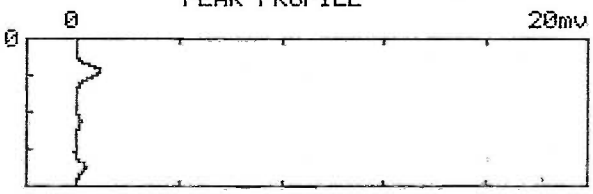
BL

TYPE : NPOC VIAL : 15
[INJ 80uL,C# TC2 ,DL 1,SP 1.0min,
ACID 0.0%,#WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	4.192E	0.495	TC2	80	1
2	0.649	0.020	TC2	80	1
3	1.833	0.179	TC2	80	1
MN	1.241	0.099			
SD	0.84	0.11			
CV	67.4 %	113 %			

ND <0.5 mg/L

PEAK PROFILE



DATE 10(OCT)-16-2012 12:54

SAMPLE NAME : 1

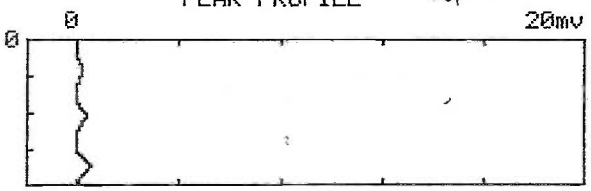
BL

TYPE : NPOC VIAL : 24
[INJ 80uL,C# TC2 ,DL 1,SP 0.5min,
ACID 0.0%,#WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	0.714E	0.029	TC2	80	1
2	1.662	0.156	TC2	80	1
3	2.557	0.276	TC2	80	1
MN	2.110	0.216			
SD	0.63	0.08			
CV	30.0 %	39.3 %			

ND <0.5 mg/L

PEAK PROFILE



DATE 10(OCT)-16-2012 15:36

ALAB : 00160

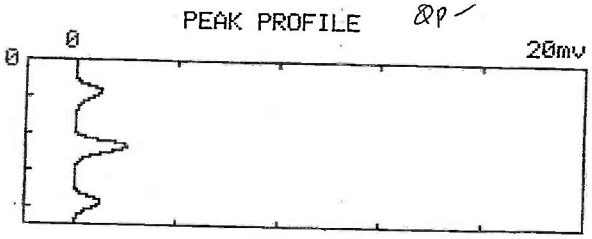
SAMPLE NAME : 1

TYPE : NPOC VIAL : 26 0.5QA
[INJ 80uL,C# TC2 ,DL 1,SP 3.0min,
ACID 0.0%,#WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	4.715	0.565	TC2	80	1
2	9.761E	1.242	TC2	80	1
3	4.527	0.540	TC2	80	1
MN	4.621	0.553			
SD	0.13	0.02			
CV	2.88 %	3.23 %			

0.55 mg/L
QP

PEAK PROFILE



DATE 10(OCT)-16-2012 16:19

ALAB : 00161

ASSOCIATED LABORATORIES
Total Organic Carbon Runlog

Method 9060 / 415.1 / 5310 B
Shimadzu TOC

TOC: V. (&P)

Date: 10/19/2012
HCl Lot: RB0424 spectrum chem.

Vial	Sample	Dilute	Vial	Sample	Dilute
1	Inst BL 8:35	pH < 2	41		
2	BL 8:48	〃	42		
3	10LCS Make 9/17/12	8:57	43		
4	10QA 〃 10/12/12	9:16	44		
5	2.5QA 〃 9/28/12	9:30	45		
6	BL.	9:49	46		
7	311995-2	10:19	47		
8	312205-2	pH<2	48		
9	〃 -4	〃	49		
10	〃 -7	〃	50		
11	311995-2 MS Lot 106-0087 Exp 02/2013	11:09	51		
12	BL	11:30	52		
13	311995-2 Dup	11:47	53		
14	10 QA	12:06	54		
15	312352 rerun	pH<2	55		
16	312368	〃	56		
17	312352.	〃	57		
18	311995-2 MS Dup. Lot 106-0087	13:15	58		
19	312380-16	pH<2	59		
20	〃 -15	〃	60		
21	10LCS	14:14	61		
22	BL.	14:32	62		
23	312080-8	14:49	63		
24	0.5QA Make 6/4/12.	15:04	64		
25	2.5QA.	15:28	65		
26	10QA.	15:46	66		
27	25QA Make 6/5/12	16:06	67		
28	BL. 16:24	pH<2	68		
29			69		
30			70		
31			71		
32			72		
33			73		
34			74		
35			75		
36			76		
37			77		
38			78		
39			1		
40			2	ALAB: 00162	

Associated Labs QCBatch BenchSheet

QCBatchID: QC1130712

Created Date: 10/22/2012
Created By: hongling
Matrix: Water

Test: 5310B Total Org
Method: SM 5310B
Instrument: TOC-BIO (group)
AnalysisDate: 10/19/2012
AnalysisEmployee:

Seq.#	Sample ID	Customer Sample ID	QC Source	Sur Added	Spk Added	Init. Wt/Vol	Final Vol	Extraction Date	Extraction Time	Comments
0	312380-016	PV-GW-EMS-6-101812	312380-016							
1	312380-015	PV-GW-C-107-101812	312380-015							
2	312368-001	101112, Driveway at Ga	312368-001							
3	312352-011	TES Loop - TOC	312352-011							
4	LCS_1									
5	Method Blank_1									
6	MS_1		311995-002							
7	MSD_1		311995-002							
8	311995-002	Equipment Blank	311995-002							

InitialCalibSTD:	
CalibCheckSTD:	
InternalSTD:	
SurrogateSTD:	
LCSSTD:	
MSSTD:	

Solvent Manufacturer and Lot:	
Sand Manufacturer and Lot:	
Na2SO4 Manufacturer and Lot:	
Surrogate Lot:	
Spike Lot:	
Prep By Signature:	

ALAB : 00163

LMC-PET-00000972

CONFIDENTIAL

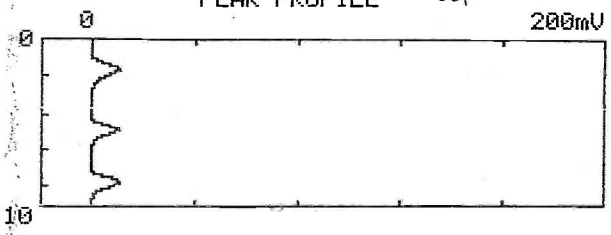
SAMPLE NAME : 1

TYPE : NPOC VIAL : 18 311995-2 MS Dup
[INJ 50uL,C# TC3 ,DL 1,SP 3.0min,
ACID 0.0%,#WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	46.40E	10.26	TC3	50	1
2	44.89	9.939	TC3	50	1
3	44.87	9.935	TC3	50	1
MN	44.88	9.937			
SD	0.01	0.00			
CV	0.03 %	0.03 %			

9.9 mg/L
QP ✓

PEAK PROFILE



DATE 10(OCT)-19-2012 13:33

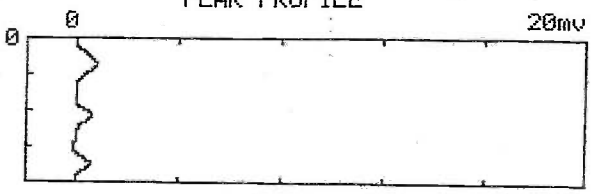
SAMPLE NAME : 1

TYPE : NPOC VIAL : 13 311995-2 Dup
[INJ 80uL,C# TC2 ,DL 1,SP 3.0min,
ACID 0.0%,#WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	5.090E	0.616	TC2	80	1
2	2.835	0.313	TC2	80	1
3	2.870	0.318	TC2	80	1
MN	2.853	0.315			
SD	0.02	0.00			
CV	0.87 %	1.05 %			

ND < 0.5 mg/L
QP.

PEAK PROFILE



DATE 10(OCT)-19-2012 12:06

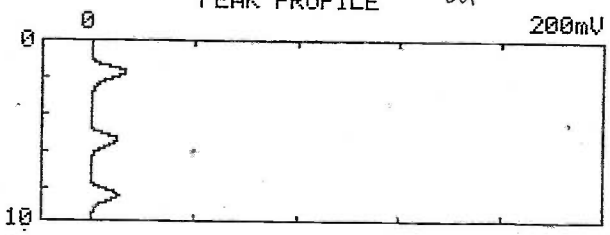
SAMPLE NAME : 1

TYPE : NPOC VIAL : 11 311195-2 MS
[INJ 50uL,C# TC3 ,DL 1,SP 3.0min,
ACID 0.0%,#WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	61.80E	13.56	TC3	50	1
2	44.66	9.890	TC3	50	1
3	45.09	9.982	TC3	50	1
MN	44.88	9.936			
SD	0.30	0.07			
CV	0.68 %	0.66 %			

9.9 mg/L
QP.

PEAK PROFILE



DATE 10(OCT)-19-2012 11:30

ALAB : 00164

SAMPLE NAME : 1

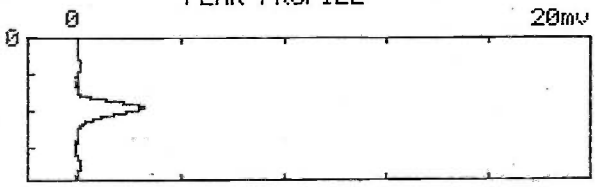
Inst, Bl

TYPE : NPOC VIAL : 1
[INJ 80uL,C# TC2 ,DL 1,SP 0.5min,
ACID 0.0%,#WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	0.000	-0.067	TC2	80	1
2	12.41E	1.597	TC2	80	1
3	0.620	0.016	TC2	80	1
MN	0.310	-0.026			
SD	0.44	0.06			
CV	141 %	230 %			

ND<0.5mg/L
QP ✓

PEAK PROFILE



DATE 10(OCT)-19-2012 08:48

SAMPLE NAME : 1

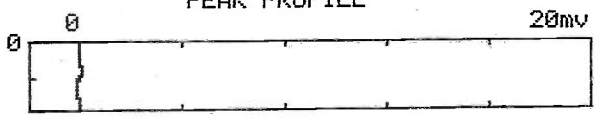
Bl ✓

TYPE : NPOC VIAL : 2
[INJ 80uL,C# TC2 ,DL 1,SP 0.5min,
ACID 0.0%,#WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	0.000	-0.067	TC2	80	1
2	0.000	-0.067	TC2	80	1
MN	0.000	-0.067			
SD	0.00	0.00			
CV	0.00 %	0.00 %			

ND<0.5mg/L
QP.

PEAK PROFILE



DATE 10(OCT)-19-2012 08:57

SAMPLE NAME : 1

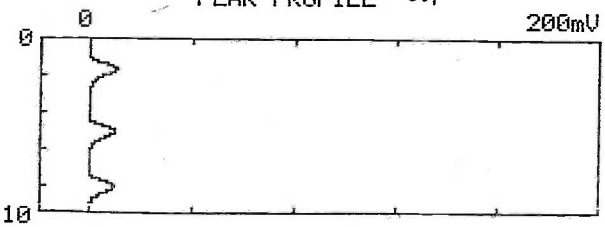
10 LCS

TYPE : NPOC VIAL : 3
[INJ 50uL,C# TC3 ,DL 1,SP 3.0min,
ACID 0.0%,#WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	46.24E	10.23	TC3	50	1
2	44.32	9.817	TC3	50	1
3	44.64	9.885	TC3	50	1
MN	44.48	9.851			
SD	0.23	0.05			
CV	0.51 %	0.49 %			

9.9mg/L
QP ✓

PEAK PROFILE



DATE 10(OCT)-19-2012 09:16

SAMPLE NAME : 1

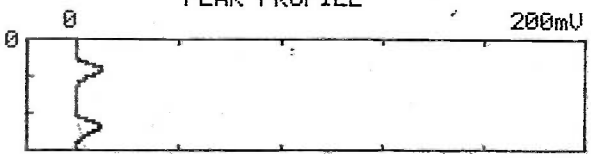
10 QS

TYPE : NPOC VIAL : 4
[INJ 50uL,C# TC3 ,DL 1,SP 3.0min,
ACID 0.0%,#WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	44.77	9.913	TC3	50	1
2	45.44	10.06	TC3	50	1
MN	45.11	9.985			
SD	0.47	0.10			
CV	1.05 %	1.02 %			

10mg/L
QP ✓

PEAK PROFILE



DATE 10(OCT)-19-2012 09:30

ALAB : 00165

SAMPLE NAME : 1

2.5 QA

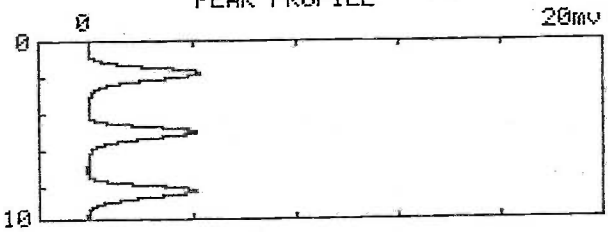
TYPE : NPOC VIAL : 5
[INJ 80uL,C# TC2 ,DL 1,SP 3.0min,
ACID 0.0%,#WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	21.27E	2.786	TC2	80	1
2	19.35	2.528	TC2	80	1
3	19.82	2.591	TC2	80	1
MN	19.59	2.560			
SD	0.33	0.04			
CV	1.70 %	1.74 %			

2.56 mg/L

QA

PEAK PROFILE



DATE 10(OCT)-19-2012 09:49

SAMPLE NAME : 1

BL

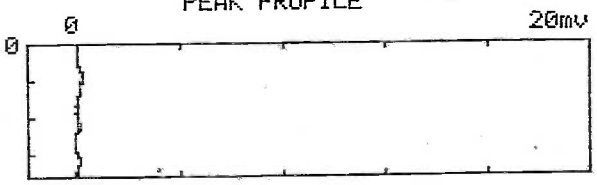
TYPE : NPOC VIAL : 6
[INJ 80uL,C# TC2 ,DL 1,SP 3.0min,
ACID 0.0%,#WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	0.829	0.044	TC2	80	1
2	0.000E	-0.067	TC2	80	1
3	0.573	0.010	TC2	80	1
MN	0.701	0.027			
SD	0.18	0.02			
CV	25.8 %	90.2 %			

ND<0.5 mg/L

QA ✓

PEAK PROFILE



DATE 10(OCT)-19-2012 10:04

SAMPLE NAME : 1

0.5 QA

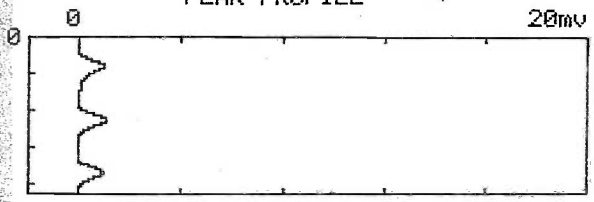
TYPE : NPOC VIAL : 24
[INJ 80uL,C# TC2 ,DL 1,SP 3.0min,
ACID 0.0%,#WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	4.444	0.529	TC2	80	1
2	5.067E	0.612	TC2	80	1
3	4.427	0.527	TC2	80	1
MN	4.436	0.528			
SD	0.01	0.00			
CV	0.27 %	0.31 %			

0.53 mg/L

QA.

PEAK PROFILE



DATE 10(OCT)-19-2012 15:28

SAMPLE NAME : 1

2.5 QA

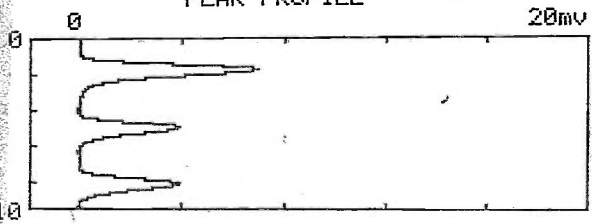
TYPE : NPOC VIAL : 25
[INJ 80uL,C# TC2 ,DL 1,SP 3.0min,
ACID 0.0%,#WASH 2]

#	AREA	mg/L	C#	INJ	DL
1	32.17E	4.248	TC2	80	1
2	18.19	2.373	TC2	80	1
3	18.32	2.390	TC2	80	1
MN	18.26	2.382			
SD	0.09	0.01			
CV	0.50 %	0.52 %			

2.4 mg/L

QA.

PEAK PROFILE



DATE 10(OCT)-19-2012 15:46

ALAB : 00166

EPA 6010B/200.7

ICP Metals

Sequence No.: 56
Sample ID: 312080-003
Analyst: nina
Initial Sample Wt:
Dilution:

Autosampler Location: 77
Date Collected: 10/17/2012 1:47:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 312080-003

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ag 328.068	20.2	0.0002	mg/L	0.00148	0.0002	mg/L	0.00148	950.93%
Al 308.215	245.2	0.0071	mg/L	0.00107	0.0071	mg/L	0.00107	14.98%
As 188.979	99.9	0.0180	mg/L	0.00675	0.0180	mg/L	0.00675	37.43%
B 249.677	21628.5	0.2447	mg/L	0.00897	0.2447	mg/L	0.00897	3.67%
Ba 233.527	15853.6	0.1539	mg/L	0.00026	0.1539	mg/L	0.00026	0.17%
Be 313.107	968.5	0.0004	mg/L	0.00003	0.0004	mg/L	0.00003	5.89%
Bi 223.061	23.4	0.0108	mg/L	0.00179	0.0108	mg/L	0.00179	16.59%
Bi 190.171	15.4	0.0191	mg/L	0.00171	0.0191	mg/L	0.00171	8.96%
Ca 315.887	289960.7	143.1	mg/L	7.47	143.1	mg/L	7.47	5.22%
Ca 317.933	342073.1	142.8	mg/L	9.04	142.8	mg/L	9.04	6.33%
Cd 214.440	-162.6	-0.0037	mg/L	0.00001	-0.0037	mg/L	0.00001	0.25%
Co 228.616	28.8	0.0011	mg/L	0.00016	0.0011	mg/L	0.00016	13.94%
Cr 267.716	197.0	0.0051	mg/L	0.00003	0.0051	mg/L	0.00003	0.54%
Cu 324.752	484.6	0.0016	mg/L	0.00016	0.0016	mg/L	0.00016	9.99%
Fe 238.204	540.9	0.0137	mg/L	0.00009	0.0137	mg/L	0.00009	0.63%
Fe 273.955	230.9	0.0139	mg/L	0.00004	0.0139	mg/L	0.00004	0.28%
K 766.490	18090.0	6.849	mg/L	0.2612	6.849	mg/L	0.2612	3.81%
Mg 279.077	8147.1	36.41	mg/L	0.044	36.41	mg/L	0.044	0.12%
Mn 257.610	628.8	0.0015	mg/L	0.00004	0.0015	mg/L	0.00004	3.01%
Mo 202.031	42.4	0.0095	mg/L	0.00135	0.0095	mg/L	0.00135	14.24%
Na 589.592	248426.3	41.82	mg/L	2.622	41.82	mg/L	2.622	6.27%
Na 330.237	303.7	41.99	mg/L	0.977	41.99	mg/L	0.977	2.33%
Ni 231.604	28.7	0.0015	mg/L	0.00002	0.0015	mg/L	0.00002	1.20%
Pb 220.353	80.0	0.0041	mg/L	0.00262	0.0041	mg/L	0.00262	64.49%
Sb 206.836	-14.0	-0.0128	mg/L	0.00322	-0.0128	mg/L	0.00322	25.15%
Se 196.026	-251.0	-0.0320	mg/L	0.01003	-0.0320	mg/L	0.01003	31.31%
Sn 189.927	-109.6	-0.0356	mg/L	0.00060	-0.0356	mg/L	0.00060	1.70%
Sr 407.771	416950.6	0.9693	mg/L	0.05753	0.9693	mg/L	0.05753	5.94%
Sr 421.552	235344.2	0.9789	mg/L	0.06276	0.9789	mg/L	0.06276	6.41%
Ti 334.940	2190.2	0.0059	mg/L	0.00071	0.0059	mg/L	0.00071	11.92%
Tl 190.801	-44.0	-0.0079	mg/L	0.00193	-0.0079	mg/L	0.00193	24.30%
V 290.880	123.6	0.0008	mg/L	0.00193	0.0008	mg/L	0.00193	241.72%
W 207.912	14.4	0.0058	mg/L	0.00102	0.0058	mg/L	0.00102	17.53%
Y 371.029	1560.8						347.14	22.24%
Zn 206.200	394.9	0.0268	mg/L	0.00007	0.0268	mg/L	0.00007	0.25%
P 213.617	48.6	0.0358	mg/L	0.00134	0.0358	mg/L	0.00134	3.74%
Si 251.611	531959.0	13.56	mg/L	0.005	13.56	mg/L	0.005	0.04%
Li 670.784	340.2	0.0052	mg/L	0.01116	0.0052	mg/L	0.01116	215.25%
Li 610.362	-1814.6	-0.2628	mg/L	0.06189	-0.2628	mg/L	0.06189	23.55%
S 181.975	5384.4	22.12	mg/L	0.038	22.12	mg/L	0.038	0.17%

ALAB:00168

Sequence No.: 57
Sample ID: 312080-004
Analyst: nina
Initial Sample Wt:
Dilution:

Autosampler Location: 78
Date Collected: 10/17/2012 1:50:34 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 312080-004

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ag 328.068	-114.4	-0.0009	mg/L	0.00139	-0.0009	mg/L	0.00139	157.98%
Al 308.215	117.8	0.0034	mg/L	0.00340	0.0034	mg/L	0.00340	98.84%
As 188.979	93.6	0.0169	mg/L	0.00052	0.0169	mg/L	0.00052	3.08%
B 249.677	23742.9	0.2686	mg/L	0.00108	0.2686	mg/L	0.00108	0.40%
Ba 233.527	16227.7	0.1575	mg/L	0.00105	0.1575	mg/L	0.00105	0.66%
Be 313.107	302.2	0.0001	mg/L	0.00001	0.0001	mg/L	0.00001	5.72%
Bi 223.061	19.0	0.0088	mg/L	0.00091	0.0088	mg/L	0.00091	10.41%
Bi 190.171	17.0	0.0210	mg/L	0.00303	0.0210	mg/L	0.00303	14.43%
Ca 315.887	293385.6	144.8	mg/L	0.87	144.8	mg/L	0.87	0.60%
Ca 317.933	346114.9	144.5	mg/L	1.35	144.5	mg/L	1.35	0.93%
Cd 214.440	-187.2	-0.0042	mg/L	0.00002	-0.0042	mg/L	0.00002	0.56%
Co 228.616	201.8	0.0079	mg/L	0.00030	0.0079	mg/L	0.00030	3.75%
Cr 267.716	448.6	0.0116	mg/L	0.00021	0.0116	mg/L	0.00021	1.82%
Cu 324.752	649.0	0.0022	mg/L	0.00094	0.0022	mg/L	0.00094	43.37%
Fe 238.204	378.4	0.0096	mg/L	0.00002	0.0096	mg/L	0.00002	0.16%
Fe 273.955	160.4	0.0096	mg/L	0.00009	0.0096	mg/L	0.00009	0.97%
K 766.490	19152.4	7.251	mg/L	0.1632	7.251	mg/L	0.1632	2.25%
Mg 279.077	8309.7	37.13	mg/L	0.193	37.13	mg/L	0.193	0.52%
Mn 257.610	1000.6	0.0023	mg/L	0.00003	0.0023	mg/L	0.00003	1.30%
Mo 202.031	35.4	0.0079	mg/L	0.00078	0.0079	mg/L	0.00078	9.82%
Na 589.592	247257.7	41.62	mg/L	0.406	41.62	mg/L	0.406	0.97%
Na 330.237	315.3	43.60	mg/L	0.129	43.60	mg/L	0.129	0.30%
Ni 231.604	82.7	0.0044	mg/L	0.00002	0.0044	mg/L	0.00002	0.42%
Pb 220.353	105.7	0.0054	mg/L	0.00272	0.0054	mg/L	0.00272	50.53%
Sb 206.836	-9.6	-0.0087	mg/L	0.00226	-0.0087	mg/L	0.00226	25.96%
Se 196.026	83.2	0.0106	mg/L	0.02401	0.0106	mg/L	0.02401	226.15%
Sn 189.927	-109.6	-0.0356	mg/L	0.00014	-0.0356	mg/L	0.00014	0.40%
Sr 407.771	423225.2	0.9839	mg/L	0.01192	0.9839	mg/L	0.01192	1.21%
Sr 421.552	237927.3	0.9897	mg/L	0.00269	0.9897	mg/L	0.00269	0.27%
Ti 334.940	2513.6	0.0068	mg/L	0.00159	0.0068	mg/L	0.00159	23.28%
Tl 190.801	-37.7	-0.0068	mg/L	0.00077	-0.0068	mg/L	0.00077	11.30%
V 290.880	-494.9	-0.0032	mg/L	0.00231	-0.0032	mg/L	0.00231	72.06%
W 207.912	13.5	0.0054	mg/L	0.00060	0.0054	mg/L	0.00060	11.07%
Y 371.029	1524.4						98.71	6.48%
Zn 206.200	395.0	0.0268	mg/L	0.00052	0.0268	mg/L	0.00052	1.93%
P 213.617	50.9	0.0375	mg/L	0.00338	0.0375	mg/L	0.00338	9.03%
Si 251.611	567615.6	14.47	mg/L	0.208	14.47	mg/L	0.208	1.44%
Li 670.784	-10.7	-0.0002	mg/L	0.00730	-0.0002	mg/L	0.00730	>999.9%
Li 610.362	-1709.0	-0.2475	mg/L	0.14550	-0.2475	mg/L	0.14550	58.79%
S 181.975	6304.6	25.90	mg/L	0.209	25.90	mg/L	0.209	0.81%

ALAB : 00159

Sequence No.: 58
Sample ID: 312080-005
Analyst: nina
Initial Sample Wt:
Dilution:

Autosampler Location: 79
Date Collected: 10/17/2012 1:53:10 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 312080-005

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ag 328.068	100.7	0.0008	mg/L	0.00270	0.0008	mg/L	0.00270	347.93%
Al 308.215	-11.2	-0.0003	mg/L	0.00648	-0.0003	mg/L	0.00648	>999.9%
As 188.979	110.6	0.0200	mg/L	0.00530	0.0200	mg/L	0.00530	26.53%
B 249.677	18605.8	0.2105	mg/L	0.01525	0.2105	mg/L	0.01525	7.25%
Ba 233.527	12377.5	0.1202	mg/L	0.00041	0.1202	mg/L	0.00041	0.34%
Be 313.107	-143.9	-0.0001	mg/L	0.00024	-0.0001	mg/L	0.00024	366.40%
Bi 223.061	21.8	0.0100	mg/L	0.00266	0.0100	mg/L	0.00266	26.49%
Bi 190.171	14.8	0.0183	mg/L	0.00071	0.0183	mg/L	0.00071	3.86%
Ca 315.887	239292.7	118.1	mg/L	0.17	118.1	mg/L	0.17	0.15%
Ca 317.933	281162.5	117.3	mg/L	1.16	117.3	mg/L	1.16	0.99%
Cd 214.440	-184.2	-0.0042	mg/L	0.00007	-0.0042	mg/L	0.00007	1.60%
Co 228.616	23.4	0.0009	mg/L	0.00054	0.0009	mg/L	0.00054	59.49%
Cr 267.716	132.2	0.0034	mg/L	0.00005	0.0034	mg/L	0.00005	1.50%
Cu 324.752	284.2	0.0010	mg/L	0.00081	0.0010	mg/L	0.00081	85.02%
Fe 238.204	1570.6	0.0398	mg/L	0.00007	0.0398	mg/L	0.00007	0.16%
Fe 273.955	670.0	0.0402	mg/L	0.00006	0.0402	mg/L	0.00006	0.15%
K 766.490	17251.7	6.532	mg/L	0.1559	6.532	mg/L	0.1559	2.39%
Mg 279.077	6541.5	29.23	mg/L	0.125	29.23	mg/L	0.125	0.43%
Mn 257.610	7098.5	0.0165	mg/L	0.00073	0.0165	mg/L	0.00073	4.42%
Mo 202.031	34.3	0.0077	mg/L	0.00012	0.0077	mg/L	0.00012	1.55%
Na 589.592	237410.4	39.97	mg/L	0.164	39.97	mg/L	0.164	0.41%
Na 330.237	290.1	40.12	mg/L	0.034	40.12	mg/L	0.034	0.08%
Ni 231.604	139.0	0.0074	mg/L	0.00050	0.0074	mg/L	0.00050	6.76%
Pb 220.353	123.9	0.0063	mg/L	0.00142	0.0063	mg/L	0.00142	22.50%
Sb 206.836	-12.0	-0.0109	mg/L	0.00163	-0.0109	mg/L	0.00163	14.94%
Se 196.026	-42.2	-0.0054	mg/L	0.00016	-0.0054	mg/L	0.00016	3.00%
Sn 189.927	-94.6	-0.0307	mg/L	0.00073	-0.0307	mg/L	0.00073	2.38%
Sr 407.771	362357.3	0.8424	mg/L	0.00052	0.8424	mg/L	0.00052	0.06%
Sr 421.552	204588.4	0.8510	mg/L	0.00169	0.8510	mg/L	0.00169	0.20%
Ti 334.940	2194.2	0.0060	mg/L	0.00057	0.0060	mg/L	0.00057	9.61%
Tl 190.801	-65.2	-0.0118	mg/L	0.00186	-0.0118	mg/L	0.00186	15.81%
V 290.880	-115.3	-0.0007	mg/L	0.00205	-0.0007	mg/L	0.00205	274.11%
W 207.912	17.0	0.0069	mg/L	0.00158	0.0069	mg/L	0.00158	23.02%
Y 371.029	1324.9						308.45	23.28%
Zn 206.200	4383.8	0.2979	mg/L	0.00212	0.2979	mg/L	0.00212	0.71%
P 213.617	36.8	0.0271	mg/L	0.00163	0.0271	mg/L	0.00163	6.03%
Si 251.611	541304.7	13.80	mg/L	0.548	13.80	mg/L	0.548	3.97%
Li 670.784	441.9	0.0067	mg/L	0.00082	0.0067	mg/L	0.00082	12.11%
Li 610.362	-1992.9	-0.2886	mg/L	0.00199	-0.2886	mg/L	0.00199	0.69%
S 181.975	5852.0	24.04	mg/L	0.114	24.04	mg/L	0.114	0.47%

Sequence No.: 59
Sample ID: 312080-006
Analyst: nina
Initial Sample Wt:
Dilution:

Autosampler Location: 80
Date Collected: 10/17/2012 1:55:46 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 312080-006

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ag 328.068	-12.1	-0.0001	mg/L	0.00060	-0.0001	mg/L	0.00060	649.25%
Al 308.215	-124.7	-0.0036	mg/L	0.00767	-0.0036	mg/L	0.00767	210.94%
As 188.979	101.9	0.0184	mg/L	0.01269	0.0184	mg/L	0.01269	68.94%
B 249.677	12613.7	0.1427	mg/L	0.00065	0.1427	mg/L	0.00065	0.45%
Ba 233.527	12560.9	0.1219	mg/L	0.00079	0.1219	mg/L	0.00079	0.65%
Be 313.107	-43.4	0.0000	mg/L	0.00013	0.0000	mg/L	0.00013	652.71%
Bi 223.061	10.0	0.0046	mg/L	0.00573	0.0046	mg/L	0.00573	124.60%
Bi 190.171	11.4	0.0141	mg/L	0.00335	0.0141	mg/L	0.00335	23.74%
Ca 315.887	196495.9	96.95	mg/L	0.055	96.95	mg/L	0.055	0.06%
Ca 317.933	233228.6	97.34	mg/L	0.355	97.34	mg/L	0.355	0.36%
Cd 214.440	-173.0	-0.0039	mg/L	0.00003	-0.0039	mg/L	0.00003	0.77%
Co 228.616	16.6	0.0006	mg/L	0.00013	0.0006	mg/L	0.00013	20.73%
Cr 267.716	77.0	0.0020	mg/L	0.00017	0.0020	mg/L	0.00017	8.59%
Cu 324.752	75.5	0.0003	mg/L	0.00055	0.0003	mg/L	0.00055	218.31%
Fe 238.204	27010.2	0.6853	mg/L	0.05487	0.6853	mg/L	0.05487	8.01%
Fe 273.955	11055.2	0.6640	mg/L	0.04883	0.6640	mg/L	0.04883	7.35%
K 766.490	15202.1	5.756	mg/L	0.0155	5.756	mg/L	0.0155	0.27%
Mg 279.077	5541.6	24.76	mg/L	0.114	24.76	mg/L	0.114	0.46%
Mn 257.610	5529.7	0.0129	mg/L	0.00011	0.0129	mg/L	0.00011	0.84%
Mo 202.031	35.3	0.0079	mg/L	0.00143	0.0079	mg/L	0.00143	18.14%
Na 589.592	209022.9	35.19	mg/L	0.565	35.19	mg/L	0.565	1.61%
Na 330.237	254.3	35.17	mg/L	1.605	35.17	mg/L	1.605	4.56%
Ni 231.604	6.3	0.0003	mg/L	0.00033	0.0003	mg/L	0.00033	98.24%
Pb 220.353	91.1	0.0046	mg/L	0.00423	0.0046	mg/L	0.00423	91.24%
Sb 206.836	-12.1	-0.0110	mg/L	0.00799	-0.0110	mg/L	0.00799	72.31%
Se 196.026	-8.7	-0.0011	mg/L	0.02152	-0.0011	mg/L	0.02152	>999.9%
Sn 189.927	-89.7	-0.0291	mg/L	0.00216	-0.0291	mg/L	0.00216	7.39%
Sr 407.771	293839.5	0.6831	mg/L	0.00697	0.6831	mg/L	0.00697	1.02%
Sr 421.552	165404.2	0.6880	mg/L	0.00512	0.6880	mg/L	0.00512	0.74%
Ti 334.940	1590.2	0.0043	mg/L	0.00110	0.0043	mg/L	0.00110	25.36%
Tl 190.801	-44.0	-0.0080	mg/L	0.00354	-0.0080	mg/L	0.00354	44.45%
V 290.880	-641.4	-0.0042	mg/L	0.00135	-0.0042	mg/L	0.00135	32.18%
W 207.912	12.2	0.0049	mg/L	0.00255	0.0049	mg/L	0.00255	51.90%
Y 371.029	1470.8						273.63	18.60%
Zn 206.200	294.8	0.0200	mg/L	0.00075	0.0200	mg/L	0.00075	3.74%
P 213.617	52.2	0.0384	mg/L	0.01041	0.0384	mg/L	0.01041	27.09%
Si 251.611	476575.0	12.15	mg/L	0.799	12.15	mg/L	0.799	6.57%
Li 670.784	-913.8	-0.0139	mg/L	0.00921	-0.0139	mg/L	0.00921	66.11%
Li 610.362	-2122.8	-0.3074	mg/L	0.13182	-0.3074	mg/L	0.13182	42.88%
S 181.975	4511.1	18.53	mg/L	0.176	18.53	mg/L	0.176	0.95%

Sequence No.: 60
Sample ID: 312080-008
Analyst: nina
Initial Sample Wt:
Dilution:

Autosampler Location: 81
Date Collected: 10/17/2012 1:58:22 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 312080-008

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ag 328.068	-64.7	-0.0005	mg/L	0.00010	-0.0005	mg/L	0.00010	19.54%
Al 308.215	274.8	0.0080	mg/L	0.00202	0.0080	mg/L	0.00202	25.22%
As 188.979	-12.3	-0.0022	mg/L	0.00244	-0.0022	mg/L	0.00244	109.96%
B 249.677	-3106.3	-0.0351	mg/L	0.00014	-0.0351	mg/L	0.00014	0.41%
Ba 233.527	30.7	0.0003	mg/L	0.00007	0.0003	mg/L	0.00007	23.86%
Be 313.107	-39.4	0.0000	mg/L	0.00009	0.0000	mg/L	0.00009	499.28%
Bi 223.061	14.5	0.0067	mg/L	0.00057	0.0067	mg/L	0.00057	8.44%
Bi 190.171	4.2	0.0052	mg/L	0.00105	0.0052	mg/L	0.00105	20.27%
Ca 315.887	220.6	0.1088	mg/L	0.00186	0.1088	mg/L	0.00186	1.71%
Ca 317.933	268.2	0.1119	mg/L	0.00323	0.1119	mg/L	0.00323	2.89%
Cd 214.440	-10.4	-0.0002	mg/L	0.00006	-0.0002	mg/L	0.00006	26.25%
Co 228.616	2.6	0.0001	mg/L	0.00008	0.0001	mg/L	0.00008	79.79%
Cr 267.716	59.4	0.0015	mg/L	0.00002	0.0015	mg/L	0.00002	1.27%
Cu 324.752	76.9	0.0003	mg/L	0.00049	0.0003	mg/L	0.00049	188.78%
Fe 238.204	253.6	0.0064	mg/L	0.00014	0.0064	mg/L	0.00014	2.12%
Fe 273.955	170.2	0.0102	mg/L	0.00056	0.0102	mg/L	0.00056	5.48%
K 766.490	-6.1	-0.0023	mg/L	0.04067	-0.0023	mg/L	0.04067	>999.9%
Mg 279.077	10.0	0.0448	mg/L	0.00926	0.0448	mg/L	0.00926	20.69%
Mn 257.610	292.4	0.0007	mg/L	0.00000	0.0007	mg/L	0.00000	0.26%
Mo 202.031	0.8	0.0002	mg/L	0.00042	0.0002	mg/L	0.00042	228.52%
Na 589.592	758.0	0.1276	mg/L	0.05418	0.1276	mg/L	0.05418	42.46%
Na 330.237	1.2	0.1715	mg/L	0.47850	0.1715	mg/L	0.47850	279.05%
Ni 231.604	-9.4	-0.0005	mg/L	0.00059	-0.0005	mg/L	0.00059	117.70%
Pb 220.353	46.7	0.0024	mg/L	0.00303	0.0024	mg/L	0.00303	127.56%
Sb 206.836	6.3	0.0058	mg/L	0.00633	0.0058	mg/L	0.00633	109.85%
Se 196.026	-176.1	-0.0225	mg/L	0.00072	-0.0225	mg/L	0.00072	3.21%
Sn 189.927	59.5	0.0193	mg/L	0.00152	0.0193	mg/L	0.00152	7.87%
Sr 407.771	322.9	0.0008	mg/L	0.00033	0.0008	mg/L	0.00033	44.26%
Sr 421.552	154.2	0.0006	mg/L	0.00021	0.0006	mg/L	0.00021	32.43%
Ti 334.940	-124.1	-0.0003	mg/L	0.00004	-0.0003	mg/L	0.00004	12.57%
Tl 190.801	5.9	0.0011	mg/L	0.00149	0.0011	mg/L	0.00149	139.23%
V 290.880	136.2	0.0009	mg/L	0.00071	0.0009	mg/L	0.00071	81.11%
W 207.912	2.8	0.0011	mg/L	0.00072	0.0011	mg/L	0.00072	62.98%
Y 371.029	1583.1						42.59	2.69%
Zn 206.200	69.1	0.0047	mg/L	0.00034	0.0047	mg/L	0.00034	7.16%
P 213.617	9.3	0.0069	mg/L	0.00348	0.0069	mg/L	0.00348	50.69%
Si 251.611	577.9	0.0147	mg/L	0.00023	0.0147	mg/L	0.00023	1.57%
Li 670.784	325.0	0.0050	mg/L	0.00083	0.0050	mg/L	0.00083	16.74%
Li 610.362	295.2	0.0428	mg/L	0.01575	0.0428	mg/L	0.01575	36.83%
S 181.975	14.0	0.0574	mg/L	0.00423	0.0574	mg/L	0.00423	7.37%

Sequence No.: 64
Sample ID: 312080-009
Analyst: nina
Initial Sample Wt:
Dilution:

Autosampler Location: 82
Date Collected: 10/17/2012 2:40:36 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 312080-009

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ag 328.068	143.8	0.0011	mg/L	0.00063	0.0011	mg/L	0.00063	57.04%
Al 308.215	133.8	0.0039	mg/L	0.01247	0.0039	mg/L	0.01247	319.55%
As 188.979	103.3	0.0186	mg/L	0.00160	0.0186	mg/L	0.00160	8.60%
B 249.677	20565.9	0.2326	mg/L	0.00195	0.2326	mg/L	0.00195	0.84%
Ba 233.527	13940.7	0.1353	mg/L	0.00059	0.1353	mg/L	0.00059	0.44%
Be 313.107	-195.6	-0.0001	mg/L	0.00018	-0.0001	mg/L	0.00018	206.96%
Bi 223.061	22.7	0.0104	mg/L	0.00008	0.0104	mg/L	0.00008	0.81%
Bi 190.171	23.0	0.0284	mg/L	0.00058	0.0284	mg/L	0.00058	2.05%
Ca 315.887	279673.3	138.0	mg/L	0.23	138.0	mg/L	0.23	0.16%
Ca 317.933	331079.9	138.2	mg/L	0.29	138.2	mg/L	0.29	0.21%
Cd 214.440	-177.2	-0.0040	mg/L	0.00008	-0.0040	mg/L	0.00008	2.12%
Co 228.616	14.9	0.0006	mg/L	0.00026	0.0006	mg/L	0.00026	44.51%
Cr 267.716	256.2	0.0066	mg/L	0.00009	0.0066	mg/L	0.00009	1.35%
Cu 324.752	372.5	0.0013	mg/L	0.00031	0.0013	mg/L	0.00031	25.08%
Fe 238.204	729.7	0.0185	mg/L	0.00005	0.0185	mg/L	0.00005	0.26%
Fe 273.955	304.3	0.0183	mg/L	0.00022	0.0183	mg/L	0.00022	1.21%
K 766.490	17935.4	6.791	mg/L	0.0414	6.791	mg/L	0.0414	0.61%
Mg 279.077	7600.3	33.96	mg/L	0.224	33.96	mg/L	0.224	0.66%
Mn 257.610	1404.1	0.0033	mg/L	0.00002	0.0033	mg/L	0.00002	0.65%
Mo 202.031	42.7	0.0096	mg/L	0.00069	0.0096	mg/L	0.00069	7.23%
Na 589.592	238318.8	40.12	mg/L	0.471	40.12	mg/L	0.471	1.17%
Na 330.237	270.2	37.36	mg/L	0.415	37.36	mg/L	0.415	1.11%
Ni 231.604	13.9	0.0007	mg/L	0.00035	0.0007	mg/L	0.00035	47.60%
Pb 220.353	17.3	0.0009	mg/L	0.00195	0.0009	mg/L	0.00195	221.72%
Sb 206.836	-0.7	-0.0006	mg/L	0.00859	-0.0006	mg/L	0.00859	>999.9%
Se 196.026	-161.7	-0.0206	mg/L	0.01632	-0.0206	mg/L	0.01632	79.06%
Sn 189.927	-107.1	-0.0348	mg/L	0.00244	-0.0348	mg/L	0.00244	7.02%
Sr 407.771	422089.8	0.9812	mg/L	0.00438	0.9812	mg/L	0.00438	0.45%
Sr 421.552	237967.3	0.9898	mg/L	0.00572	0.9898	mg/L	0.00572	0.58%
Ti 334.940	2086.2	0.0057	mg/L	0.00167	0.0057	mg/L	0.00167	29.53%
Tl 190.801	-47.0	-0.0085	mg/L	0.00051	-0.0085	mg/L	0.00051	6.03%
V 290.880	-307.4	-0.0020	mg/L	0.00104	-0.0020	mg/L	0.00104	52.05%
W 207.912	16.9	0.0068	mg/L	0.00039	0.0068	mg/L	0.00039	5.75%
Y 371.029	1786.0						0.53	0.03%
Zn 206.200	7415.3	0.5038	mg/L	0.00166	0.5038	mg/L	0.00166	0.33%
P 213.617	32.8	0.0241	mg/L	0.00395	0.0241	mg/L	0.00395	16.36%
Si 251.611	490406.9	12.50	mg/L	0.066	12.50	mg/L	0.066	0.53%
Li 670.784	-30.0	-0.0005	mg/L	0.00692	-0.0005	mg/L	0.00692	>999.9%
Li 610.362	-2355.8	-0.3412	mg/L	0.13736	-0.3412	mg/L	0.13736	40.26%
S 181.975	5749.1	23.62	mg/L	0.075	23.62	mg/L	0.075	0.32%

ALAB : 00173

Sequence No.: 65
Sample ID: 312080-010
Analyst: nina
Initial Sample Wt:
Dilution:

Autosampler Location: 83
Date Collected: 10/17/2012 2:43:11 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 312080-010

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ag 328.068	132.6	0.0010	mg/L	0.00190	0.0010	mg/L	0.00190	185.98%
Al 308.215	9.3	0.0003	mg/L	0.00332	0.0003	mg/L	0.00332	>999.9%
As 188.979	97.3	0.0176	mg/L	0.00454	0.0176	mg/L	0.00454	25.81%
B 249.677	18446.5	0.2087	mg/L	0.00799	0.2087	mg/L	0.00799	3.83%
Ba 233.527	13245.8	0.1286	mg/L	0.00523	0.1286	mg/L	0.00523	4.06%
Be 313.107	-90.4	0.0000	mg/L	0.00025	0.0000	mg/L	0.00025	612.29%
Bi 223.061	18.5	0.0085	mg/L	0.00128	0.0085	mg/L	0.00128	14.95%
Bi 190.171	15.2	0.0188	mg/L	0.00139	0.0188	mg/L	0.00139	7.39%
Ca 315.887	280438.4	138.4	mg/L	6.61	138.4	mg/L	6.61	4.78%
Ca 317.933	332997.8	139.0	mg/L	7.74	139.0	mg/L	7.74	5.57%
Cd 214.440	-187.6	-0.0042	mg/L	0.00005	-0.0042	mg/L	0.00005	1.13%
Co 228.616	7.7	0.0003	mg/L	0.00012	0.0003	mg/L	0.00012	38.64%
Cr 267.716	162.6	0.0042	mg/L	0.00002	0.0042	mg/L	0.00002	0.47%
Cu 324.752	329.8	0.0011	mg/L	0.00058	0.0011	mg/L	0.00058	52.57%
Fe 238.204	718.9	0.0182	mg/L	0.00046	0.0182	mg/L	0.00046	2.52%
Fe 273.955	298.1	0.0179	mg/L	0.00074	0.0179	mg/L	0.00074	4.13%
K 766.490	17685.2	6.696	mg/L	0.5476	6.696	mg/L	0.5476	8.18%
Mg 279.077	7620.7	34.05	mg/L	0.261	34.05	mg/L	0.261	0.77%
Mn 257.610	1476.3	0.0034	mg/L	0.00005	0.0034	mg/L	0.00005	1.43%
Mo 202.031	41.2	0.0092	mg/L	0.00172	0.0092	mg/L	0.00172	18.62%
Na 589.592	240204.8	40.44	mg/L	2.333	40.44	mg/L	2.333	5.77%
Na 330.237	286.1	39.56	mg/L	1.621	39.56	mg/L	1.621	4.10%
Ni 231.604	15.9	0.0009	mg/L	0.00005	0.0009	mg/L	0.00005	6.25%
Pb 220.353	92.0	0.0047	mg/L	0.00131	0.0047	mg/L	0.00131	27.92%
Sb 206.836	-14.5	-0.0132	mg/L	0.00314	-0.0132	mg/L	0.00314	23.75%
Se 196.026	30.1	0.0038	mg/L	0.01072	0.0038	mg/L	0.01072	279.18%
Sn 189.927	-105.3	-0.0342	mg/L	0.00077	-0.0342	mg/L	0.00077	2.25%
Sr 407.771	422027.6	0.9811	mg/L	0.05781	0.9811	mg/L	0.05781	5.89%
Sr 421.552	238871.3	0.9936	mg/L	0.05672	0.9936	mg/L	0.05672	5.71%
Ti 334.940	2230.3	0.0061	mg/L	0.00042	0.0061	mg/L	0.00042	6.87%
Tl 190.801	-63.9	-0.0115	mg/L	0.00066	-0.0115	mg/L	0.00066	5.69%
V 290.880	-442.4	-0.0029	mg/L	0.00002	-0.0029	mg/L	0.00002	0.62%
W 207.912	23.5	0.0095	mg/L	0.00332	0.0095	mg/L	0.00332	35.05%
Y 371.029	1753.1						167.58	9.56%
Zn 206.200	7559.1	0.5136	mg/L	0.00462	0.5136	mg/L	0.00462	0.90%
P 213.617	31.7	0.0233	mg/L	0.00041	0.0233	mg/L	0.00041	1.78%
Si 251.611	470432.8	11.99	mg/L	0.431	11.99	mg/L	0.431	3.60%
Li 670.784	931.4	0.0142	mg/L	0.00594	0.0142	mg/L	0.00594	41.80%
Li 610.362	-1951.0	-0.2825	mg/L	0.03230	-0.2825	mg/L	0.03230	11.43%
S 181.975	5863.6	24.09	mg/L	0.151	24.09	mg/L	0.151	0.63%

ALAB:00174

Sequence No.: 66
Sample ID: 312080-013
Analyst: nina
Initial Sample Wt:
Dilution:

Autosampler Location: 84
Date Collected: 10/17/2012 2:45:47 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 312080-013

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ag 328.068	138.4	0.0011	mg/L	0.00001	0.0011	mg/L	0.00001	1.07%
Al 308.215	156.5	0.0046	mg/L	0.00612	0.0046	mg/L	0.00612	134.05%
As 188.979	112.7	0.0204	mg/L	0.00139	0.0204	mg/L	0.00139	6.83%
B 249.677	9241.4	0.1045	mg/L	0.00179	0.1045	mg/L	0.00179	1.71%
Ba 233.527	15233.3	0.1479	mg/L	0.01111	0.1479	mg/L	0.01111	7.52%
Be 313.107	-388.2	-0.0002	mg/L	0.00004	-0.0002	mg/L	0.00004	21.11%
Bi 223.061	10.8	0.0050	mg/L	0.00375	0.0050	mg/L	0.00375	75.37%
Bi 190.171	14.7	0.0182	mg/L	0.00192	0.0182	mg/L	0.00192	10.58%
Ca 315.887	279723.6	138.0	mg/L	2.10	138.0	mg/L	2.10	1.52%
Ca 317.933	330378.4	137.9	mg/L	2.86	137.9	mg/L	2.86	2.07%
Cd 214.440	-194.6	-0.0044	mg/L	0.00008	-0.0044	mg/L	0.00008	1.93%
Co 228.616	15.7	0.0006	mg/L	0.00017	0.0006	mg/L	0.00017	27.44%
Cr 267.716	663.3	0.0172	mg/L	0.00014	0.0172	mg/L	0.00014	0.79%
Cu 324.752	263.4	0.0009	mg/L	0.00145	0.0009	mg/L	0.00145	163.65%
Fe 238.204	246.2	0.0062	mg/L	0.00027	0.0062	mg/L	0.00027	4.37%
Fe 273.955	96.1	0.0058	mg/L	0.00058	0.0058	mg/L	0.00058	9.98%
K 766.490	16510.1	6.251	mg/L	0.0926	6.251	mg/L	0.0926	1.48%
Mg 279.077	9177.4	41.01	mg/L	0.368	41.01	mg/L	0.368	0.90%
Mn 257.610	382.8	0.0009	mg/L	0.00002	0.0009	mg/L	0.00002	2.55%
Mo 202.031	50.0	0.0112	mg/L	0.00086	0.0112	mg/L	0.00086	7.71%
Na 589.592	288399.4	48.55	mg/L	0.724	48.55	mg/L	0.724	1.49%
Na 330.237	335.5	46.40	mg/L	1.615	46.40	mg/L	1.615	3.48%
Ni 231.604	-0.1	0.0000	mg/L	0.00011	0.0000	mg/L	0.00011	>999.9%
Pb 220.353	129.8	0.0066	mg/L	0.00235	0.0066	mg/L	0.00235	35.56%
Sb 206.836	-11.4	-0.0103	mg/L	0.00482	-0.0103	mg/L	0.00482	46.62%
Se 196.026	6.2	0.0008	mg/L	0.01643	0.0008	mg/L	0.01643	>999.9%
Sn 189.927	-106.2	-0.0345	mg/L	0.00153	-0.0345	mg/L	0.00153	4.43%
Sr 407.771	378956.6	0.8810	mg/L	0.01996	0.8810	mg/L	0.01996	2.27%
Sr 421.552	213830.5	0.8894	mg/L	0.01675	0.8894	mg/L	0.01675	1.88%
Ti 334.940	1980.6	0.0054	mg/L	0.00151	0.0054	mg/L	0.00151	28.04%
Tl 190.801	-58.1	-0.0105	mg/L	0.00063	-0.0105	mg/L	0.00063	5.96%
V 290.880	663.5	0.0043	mg/L	0.00311	0.0043	mg/L	0.00311	72.38%
W 207.912	17.8	0.0072	mg/L	0.00052	0.0072	mg/L	0.00052	7.19%
Y 371.029	1583.0						59.23	3.74%
Zn 206.200	2434.2	0.1654	mg/L	0.00107	0.1654	mg/L	0.00107	0.65%
P 213.617	81.3	0.0598	mg/L	0.00964	0.0598	mg/L	0.00964	16.11%
Si 251.611	521484.5	13.29	mg/L	0.841	13.29	mg/L	0.841	6.32%
Li 670.784	-150.3	-0.0023	mg/L	0.00624	-0.0023	mg/L	0.00624	272.40%
Li 610.362	-1894.1	-0.2743	mg/L	0.07360	-0.2743	mg/L	0.07360	26.83%
S 181.975	7918.3	32.53	mg/L	0.001	32.53	mg/L	0.001	0.00%

Sequence No.: 67
Sample ID: 312080-015
Analyst: nina
Initial Sample Wt:
Dilution:

Autosampler Location: 85
Date Collected: 10/17/2012 2:48:24 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 312080-015

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ag 328.068	-97.7	-0.0008	mg/L	0.00183	-0.0008	mg/L	0.00183	243.71%
Al 308.215	131.3	0.0038	mg/L	0.00466	0.0038	mg/L	0.00466	121.76%
As 188.979	92.6	0.0167	mg/L	0.00654	0.0167	mg/L	0.00654	39.14%
B 249.677	16339.5	0.1848	mg/L	0.00062	0.1848	mg/L	0.00062	0.34%
Ba 233.527	14212.6	0.1380	mg/L	0.00221	0.1380	mg/L	0.00221	1.60%
Be 313.107	-185.2	-0.0001	mg/L	0.00005	-0.0001	mg/L	0.00005	61.59%
Bi 223.061	32.0	0.0147	mg/L	0.00377	0.0147	mg/L	0.00377	25.57%
Bi 190.171	14.1	0.0174	mg/L	0.00586	0.0174	mg/L	0.00586	33.77%
Ca 315.887	275227.4	135.8	mg/L	4.35	135.8	mg/L	4.35	3.21%
Ca 317.933	325052.0	135.7	mg/L	4.78	135.7	mg/L	4.78	3.52%
Cd 214.440	-192.0	-0.0043	mg/L	0.00001	-0.0043	mg/L	0.00001	0.25%
Co 228.616	15.3	0.0006	mg/L	0.00043	0.0006	mg/L	0.00043	71.98%
Cr 267.716	120.7	0.0031	mg/L	0.00014	0.0031	mg/L	0.00014	4.52%
Cu 324.752	390.1	0.0013	mg/L	0.00031	0.0013	mg/L	0.00031	23.96%
Fe 238.204	3586.4	0.0910	mg/L	0.00012	0.0910	mg/L	0.00012	0.13%
Fe 273.955	1495.7	0.0898	mg/L	0.00056	0.0898	mg/L	0.00056	0.62%
K 766.490	18686.2	7.075	mg/L	0.3953	7.075	mg/L	0.3953	5.59%
Mg 279.077	7892.9	35.27	mg/L	0.005	35.27	mg/L	0.005	0.01%
Mn 257.610	2136.0	0.0050	mg/L	0.00002	0.0050	mg/L	0.00002	0.47%
Mo 202.031	41.4	0.0093	mg/L	0.00010	0.0093	mg/L	0.00010	1.04%
Na 589.592	282692.1	47.59	mg/L	1.658	47.59	mg/L	1.658	3.48%
Na 330.237	312.2	43.17	mg/L	1.105	43.17	mg/L	1.105	2.56%
Ni 231.604	3.4	0.0002	mg/L	0.00009	0.0002	mg/L	0.00009	52.49%
Pb 220.353	76.3	0.0039	mg/L	0.00141	0.0039	mg/L	0.00141	36.39%
Sb 206.836	-17.2	-0.0157	mg/L	0.00852	-0.0157	mg/L	0.00852	54.27%
Se 196.026	-94.5	-0.0121	mg/L	0.00109	-0.0121	mg/L	0.00109	9.00%
Sn 189.927	-99.6	-0.0324	mg/L	0.00244	-0.0324	mg/L	0.00244	7.52%
Sr 407.771	399097.8	0.9278	mg/L	0.03690	0.9278	mg/L	0.03690	3.98%
Sr 421.552	224314.2	0.9330	mg/L	0.04009	0.9330	mg/L	0.04009	4.30%
Ti 334.940	1737.5	0.0047	mg/L	0.00053	0.0047	mg/L	0.00053	11.33%
Tl 190.801	-78.8	-0.0143	mg/L	0.00163	-0.0143	mg/L	0.00163	11.41%
V 290.880	-49.7	-0.0003	mg/L	0.00163	-0.0003	mg/L	0.00163	496.28%
W 207.912	20.4	0.0082	mg/L	0.00126	0.0082	mg/L	0.00126	15.31%
Y 371.029	1289.7						301.85	23.41%
Zn 206.200	8159.8	0.5544	mg/L	0.00060	0.5544	mg/L	0.00060	0.11%
P 213.617	24.4	0.0179	mg/L	0.00259	0.0179	mg/L	0.00259	14.48%
Si 251.611	531273.4	13.54	mg/L	0.076	13.54	mg/L	0.076	0.56%
Li 670.784	-448.7	-0.0068	mg/L	0.00652	-0.0068	mg/L	0.00652	95.30%
Li 610.362	-1970.5	-0.2854	mg/L	0.05316	-0.2854	mg/L	0.05316	18.63%
S 181.975	6027.8	24.76	mg/L	0.065	24.76	mg/L	0.065	0.26%

ALAB : 00176

Associated Labs QCBatch BenchSheet

QCBatchID: QC1130591

Created Date: 10/17/2012 11:27
Created By: metha
Matrix: Water

Instrument: AAICP (group)
PrepMethod: EPA 3010A/Filtered
PrepDate:
PrepBy: metha

Test: 6010 Alab
Method: EPA 6010B
AnalysisDate: 10/17/2012 00:00
Analyst:

Seq #	Sample ID	QC #	Customer Sample ID	QC Source	Sur Added (PH)	Spk Added (APP)	Init Wt/Vol	Final Vol	Extraction Date	Extraction Time	Comments
0	Method Blank	1					25ml	25ml		10	10/16/12 - 12:00 PM - 3:30 PM
1	LCS	1									
2 #12	311877-003		3850N		<2	clear					
3	MS	1		311877-003							
4	MSD	1		311877-003							
5 #11	312080-003		MW-1								
6 #13	312080-004		MW-2								
7 #1	312080-005		C-1-CW03								
8 #2	312080-006		C-1-CW02								
9 #1	312080-008		Equipment Blank								
10 #12	312080-009		B-5-CW03								
11 #1	312080-010		B5-CW03 Duplicate								
12 #2	312080-013		B-1-CW12								
13 #14	312080-015		MW-3								
14 #1	312094-003		C-1-CW06								
15 #18	312094-004		B-5-CW02								
16 #1	312094-005		M-W-6								
17 #1	312094-006		C-1-CW08								
18 #2	312094-007		3871G								

InitialCalibSTD: Ca(210081119)_Sep2015, Mg(b8095018-1A)Sep20
CalibCheckSTD: Sn(1115117)_Jan2013, W(1103408_Jan2013
InternalSTD: K(210125007)-Dec2015, Na(211025031)_Feb2016
SurrogateSTD: Bi(1101109)_Jan2013, Si(1102515)_Jan2013
LCSSTD: QC21(1201016)-FeB.2013, QC7(1204808)Feb.201 0.5ml of qc 7,21
MSSTD: 50PPM(6-15-12) 0.5ml of 50ppm

Solvent Manufacturer and Lot: HCl # 411060
Sand Manufacturer and Lot: HNO3 # 1112040
Na2SO4 Manufacturer and Lot:
Surrogate Lot:
Spike Lot:
Prep By Signature:

LMC-PET-00000986

CONFIDENTIAL

Sequence No.: 51
Sample ID: Method Blank
Analyst: nina
Initial Sample Wt:
Dilution:

Autosampler Location: 72
Date Collected: 10/17/2012 1:34:52 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Method Blank

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ag 328.068	20.7	0.0002	mg/L	0.00067	0.0002	mg/L	0.00067	419.55%
Al 308.215	-83.4	-0.0024	mg/L	0.00090	-0.0024	mg/L	0.00090	37.07%
As 188.979	-0.7	-0.0001	mg/L	0.00259	-0.0001	mg/L	0.00259	>999.9%
B 249.677	-4150.1	-0.0469	mg/L	0.00026	-0.0469	mg/L	0.00026	0.55%
Ba 233.527	20.2	0.0002	mg/L	0.00003	0.0002	mg/L	0.00003	13.41%
Be 313.107	117.0	0.0001	mg/L	0.00002	0.0001	mg/L	0.00002	32.60%
Bi 223.061	11.0	0.0051	mg/L	0.01145	0.0051	mg/L	0.01145	226.35%
Bi 190.171	-0.5	-0.0006	mg/L	0.00548	-0.0006	mg/L	0.00548	913.29%
Ca 315.887	-7.7	-0.0038	mg/L	0.00151	-0.0038	mg/L	0.00151	39.65%
Ca 317.933	-10.8	-0.0045	mg/L	0.00042	-0.0045	mg/L	0.00042	9.36%
Cd 214.440	0.7	0.0000	mg/L	0.00001	0.0000	mg/L	0.00001	80.51%
Co 228.616	5.5	0.0002	mg/L	0.00000	0.0002	mg/L	0.00000	1.72%
Cr 267.716	11.2	0.0003	mg/L	0.00013	0.0003	mg/L	0.00013	45.96%
Cu 324.752	-81.7	-0.0003	mg/L	0.00012	-0.0003	mg/L	0.00012	44.98%
Fe 238.204	-41.4	-0.0010	mg/L	0.00003	-0.0010	mg/L	0.00003	3.14%
Fe 273.955	48.3	0.0029	mg/L	0.00005	0.0029	mg/L	0.00005	1.65%
K 766.490	107.8	0.0408	mg/L	0.32433	0.0408	mg/L	0.32433	794.64%
Mg 279.077	7.8	0.0347	mg/L	0.01028	0.0347	mg/L	0.01028	29.64%
Mn 257.610	-13.9	0.0000	mg/L	0.00000	0.0000	mg/L	0.00000	5.68%
Mo 202.031	-3.8	-0.0009	mg/L	0.00083	-0.0009	mg/L	0.00083	96.40%
Na 589.592	407.3	0.0686	mg/L	0.01605	0.0686	mg/L	0.01605	23.41%
Na 330.237	-2.8	-0.3859	mg/L	0.02518	-0.3859	mg/L	0.02518	6.53%
Ni 231.604	3.1	0.0002	mg/L	0.00014	0.0002	mg/L	0.00014	85.69%
Pb 220.353	37.8	0.0019	mg/L	0.00181	0.0019	mg/L	0.00181	93.91%
Sb 206.836	-10.1	-0.0092	mg/L	0.00414	-0.0092	mg/L	0.00414	44.99%
Se 196.026	-67.0	-0.0086	mg/L	0.00110	-0.0086	mg/L	0.00110	12.91%
Sn 189.927	1.2	0.0004	mg/L	0.00043	0.0004	mg/L	0.00043	113.76%
Sr 407.771	133.9	0.0003	mg/L	0.00000	0.0003	mg/L	0.00000	0.66%
Sr 421.552	32.1	0.0001	mg/L	0.00032	0.0001	mg/L	0.00032	240.10%
Ti 334.940	-161.0	-0.0004	mg/L	0.00010	-0.0004	mg/L	0.00010	22.24%
Tl 190.801	-6.1	-0.0011	mg/L	0.00285	-0.0011	mg/L	0.00285	260.19%
V 290.880	81.2	0.0005	mg/L	0.00052	0.0005	mg/L	0.00052	98.83%
W 207.912	-1.5	-0.0006	mg/L	0.00109	-0.0006	mg/L	0.00109	175.93%
Y 371.029	1608.3						36.86	2.29%
Zn 206.200	0.8	0.0001	mg/L	0.00017	0.0001	mg/L	0.00017	327.37%
P 213.617	13.9	0.0102	mg/L	0.00049	0.0102	mg/L	0.00049	4.78%
Si 251.611	-58.1	-0.0015	mg/L	0.00007	-0.0015	mg/L	0.00007	4.93%
Li 670.784	170.7	0.0026	mg/L	0.00155	0.0026	mg/L	0.00155	59.40%
Li 610.362	0.9	0.0001	mg/L	0.03380	0.0001	mg/L	0.03380	>999.9%
S 181.975	4.5	0.0185	mg/L	0.00231	0.0185	mg/L	0.00231	12.46%

Sequence No.: 52
Sample ID: LCS
Analyst: nina
Initial Sample Wt:
Dilution:

Autosampler Location: 73
Date Collected: 10/17/2012 1:37:29 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ag 328.068	136657.9	1.052	mg/L	0.0286	1.052	mg/L	0.0286	2.71%
Al 308.215	74111.5	2.161	mg/L	0.0091	2.161	mg/L	0.0091	0.42%
As 188.979	11775.2	2.127	mg/L	0.0017	2.127	mg/L	0.0017	0.08%
B 249.677	184400.1	2.086	mg/L	0.0333	2.086	mg/L	0.0333	1.60%
Ba 233.527	234461.0	2.276	mg/L	0.0759	2.276	mg/L	0.0759	3.33%
Be 313.107	4964591.1	2.243	mg/L	0.0376	2.243	mg/L	0.0376	1.68%
Bi 223.061	-117.4	-0.0541	mg/L	0.00354	-0.0541	mg/L	0.00354	6.55%
Bi 190.171	7.2	0.0089	mg/L	0.00027	0.0089	mg/L	0.00027	3.00%
Ca 315.887	5105.8	2.519	mg/L	0.0208	2.519	mg/L	0.0208	0.82%
Ca 317.933	6008.9	2.508	mg/L	0.0292	2.508	mg/L	0.0292	1.17%
Cd 214.440	92907.8	2.096	mg/L	0.0455	2.096	mg/L	0.0455	2.17%
Co 228.616	55518.6	2.174	mg/L	0.0393	2.174	mg/L	0.0393	1.81%
Cr 267.716	86487.3	2.240	mg/L	0.0371	2.240	mg/L	0.0371	1.66%
Cu 324.752	642327.8	2.156	mg/L	0.0723	2.156	mg/L	0.0723	3.35%
Fe 238.204	88737.2	2.251	mg/L	0.0434	2.251	mg/L	0.0434	1.93%
Fe 273.955	36520.3	2.193	mg/L	0.0427	2.193	mg/L	0.0427	1.95%
K 766.490	58499.4	22.15	mg/L	0.092	22.15	mg/L	0.092	0.41%
Mg 279.077	550.0	2.458	mg/L	0.0523	2.458	mg/L	0.0523	2.13%
Mn 257.610	949789.9	2.211	mg/L	0.0653	2.211	mg/L	0.0653	2.96%
Mo 202.031	9028.3	2.024	mg/L	0.0223	2.024	mg/L	0.0223	1.10%
Na 589.592	14545.9	2.449	mg/L	0.0059	2.449	mg/L	0.0059	0.24%
Na 330.237	-38.7	-5.357	mg/L	0.5359	-5.357	mg/L	0.5359	10.00%
Ni 231.604	41329.2	2.205	mg/L	0.0363	2.205	mg/L	0.0363	1.65%
Pb 220.353	42491.3	2.161	mg/L	0.0307	2.161	mg/L	0.0307	1.42%
Sb 206.836	2247.7	2.046	mg/L	0.0140	2.046	mg/L	0.0140	0.68%
Se 196.026	15824.1	2.020	mg/L	0.0159	2.020	mg/L	0.0159	0.79%
Sn 189.927	-13.5	-0.0044	mg/L	0.00020	-0.0044	mg/L	0.00020	4.63%
Sr 407.771	854610.7	1.987	mg/L	0.0450	1.987	mg/L	0.0450	2.26%
Sr 421.552	482047.2	2.005	mg/L	0.0495	2.005	mg/L	0.0495	2.47%
Ti 334.940	828825.2	2.252	mg/L	0.0695	2.252	mg/L	0.0695	3.09%
Tl 190.801	12138.2	2.195	mg/L	0.0036	2.195	mg/L	0.0036	0.17%
V 290.880	338837.9	2.193	mg/L	0.0703	2.193	mg/L	0.0703	3.21%
W 207.912	39.7	0.0160	mg/L	0.00004	0.0160	mg/L	0.00004	0.28%
Y 371.029	1454.7						138.18	9.50%
Zn 206.200	32045.3	2.177	mg/L	0.0408	2.177	mg/L	0.0408	1.88%
P 213.617	-3971.1	-2.921	mg/L	0.0829	-2.921	mg/L	0.0829	2.84%
Si 251.611	84171.9	2.146	mg/L	0.0213	2.146	mg/L	0.0213	0.99%
Li 670.784	138749.7	2.115	mg/L	0.0210	2.115	mg/L	0.0210	0.99%
Li 610.362	14273.9	2.067	mg/L	0.1040	2.067	mg/L	0.1040	5.03%
S 181.975	17.5	0.0720	mg/L	0.02574	0.0720	mg/L	0.02574	35.76%

Sequence No.: 53
Sample ID: 311877-003
Analyst: nina
Initial Sample Wt:
Dilution:

Autosampler Location: 74
Date Collected: 10/17/2012 1:40:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 311877-003

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ag 328.068	29.9	0.0002	mg/L	0.00058	0.0002	mg/L	0.00058	250.63%
Al 308.215	1500.1	0.0437	mg/L	0.01032	0.0437	mg/L	0.01032	23.60%
As 188.979	94.0	0.0170	mg/L	0.00199	0.0170	mg/L	0.00199	11.74%
B 249.677	20800.7	0.2353	mg/L	0.02018	0.2353	mg/L	0.02018	8.58%
Ba 233.527	11861.7	0.1152	mg/L	0.00181	0.1152	mg/L	0.00181	1.57%
Be 313.107	2280.7	0.0010	mg/L	0.00014	0.0010	mg/L	0.00014	13.70%
Bi 223.061	20.4	0.0094	mg/L	0.00461	0.0094	mg/L	0.00461	49.00%
Bi 190.171	16.8	0.0208	mg/L	0.00480	0.0208	mg/L	0.00480	23.10%
Ca 315.887	253450.6	125.1	mg/L	3.28	125.1	mg/L	3.28	2.62%
Ca 317.933	299459.6	125.0	mg/L	2.91	125.0	mg/L	2.91	2.33%
Cd 214.440	-129.3	-0.0029	mg/L	0.00006	-0.0029	mg/L	0.00006	2.02%
Co 228.616	40.6	0.0016	mg/L	0.00004	0.0016	mg/L	0.00004	2.50%
Cr 267.716	571.4	0.0148	mg/L	0.00022	0.0148	mg/L	0.00022	1.50%
Cu 324.752	713.8	0.0024	mg/L	0.00125	0.0024	mg/L	0.00125	52.23%
Fe 238.204	447.1	0.0113	mg/L	0.00073	0.0113	mg/L	0.00073	6.46%
Fe 273.955	201.3	0.0121	mg/L	0.00062	0.0121	mg/L	0.00062	5.10%
K 766.490	16854.5	6.381	mg/L	0.0596	6.381	mg/L	0.0596	0.93%
Mg 279.077	6662.8	29.77	mg/L	0.014	29.77	mg/L	0.014	0.05%
Mn 257.610	1018.6	0.0024	mg/L	0.00014	0.0024	mg/L	0.00014	5.95%
Mo 202.031	41.9	0.0094	mg/L	0.00078	0.0094	mg/L	0.00078	8.32%
Na 589.592	236544.3	39.82	mg/L	1.234	39.82	mg/L	1.234	3.10%
Na 330.237	274.9	38.02	mg/L	0.351	38.02	mg/L	0.351	0.92%
Ni 231.604	17.5	0.0009	mg/L	0.00027	0.0009	mg/L	0.00027	28.44%
Pb 220.353	149.2	0.0076	mg/L	0.00009	0.0076	mg/L	0.00009	1.16%
Sb 206.836	5.0	0.0046	mg/L	0.01372	0.0046	mg/L	0.01372	299.16%
Se 196.026	-61.3	-0.0078	mg/L	0.00845	-0.0078	mg/L	0.00845	107.91%
Sn 189.927	-99.3	-0.0323	mg/L	0.00215	-0.0323	mg/L	0.00215	6.66%
Sr 407.771	380568.0	0.8847	mg/L	0.02294	0.8847	mg/L	0.02294	2.59%
Sr 421.552	215398.9	0.8959	mg/L	0.02959	0.8959	mg/L	0.02959	3.30%
Ti 334.940	2745.4	0.0075	mg/L	0.00048	0.0075	mg/L	0.00048	6.47%
Tl 190.801	-54.1	-0.0098	mg/L	0.00068	-0.0098	mg/L	0.00068	6.93%
V 290.880	316.0	0.0020	mg/L	0.00071	0.0020	mg/L	0.00071	34.71%
W 207.912	14.9	0.0060	mg/L	0.00007	0.0060	mg/L	0.00007	1.16%
Y 371.029	1364.4						210.62	15.44%
Zn 206.200	3838.3	0.2608	mg/L	0.00463	0.2608	mg/L	0.00463	1.78%
P 213.617	42.5	0.0313	mg/L	0.00073	0.0313	mg/L	0.00073	2.33%
Si 251.611	531535.6	13.55	mg/L	0.723	13.55	mg/L	0.723	5.33%
Li 670.784	907.6	0.0138	mg/L	0.00641	0.0138	mg/L	0.00641	46.33%
Li 610.362	-1943.4	-0.2814	mg/L	0.07285	-0.2814	mg/L	0.07285	25.89%
S 181.975	7813.0	32.10	mg/L	0.679	32.10	mg/L	0.679	2.11%

Sequence No.: 54
Sample ID: MS
Analyst: nina
Initial Sample Wt:
Dilution:

Autosampler Location: 75
Date Collected: 10/17/2012 1:42:44 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MS

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ag 328.068	69710.8	0.5369	mg/L	0.01365	0.5369	mg/L	0.01365	2.54%
Al 308.215	36422.8	1.062	mg/L	0.0109	1.062	mg/L	0.0109	1.03%
As 188.979	5875.4	1.061	mg/L	0.0099	1.061	mg/L	0.0099	0.93%
B 249.677	117145.7	1.325	mg/L	0.0319	1.325	mg/L	0.0319	2.40%
Ba 233.527	124949.3	1.213	mg/L	0.0314	1.213	mg/L	0.0314	2.59%
Be 313.107	2254989.2	1.019	mg/L	0.0731	1.019	mg/L	0.0731	7.18%
Bi 223.061	-49.3	-0.0227	mg/L	0.00370	-0.0227	mg/L	0.00370	16.31%
Bi 190.171	13.9	0.0171	mg/L	0.00650	0.0171	mg/L	0.00650	38.00%
Ca 315.887	252236.4	124.5	mg/L	1.84	124.5	mg/L	1.84	1.48%
Ca 317.933	298068.5	124.4	mg/L	2.25	124.4	mg/L	2.25	1.81%
Cd 214.440	44541.2	1.005	mg/L	0.0373	1.005	mg/L	0.0373	3.71%
Co 228.616	25283.7	0.9902	mg/L	0.02320	0.9902	mg/L	0.02320	2.34%
Cr 267.716	42110.5	1.091	mg/L	0.0199	1.091	mg/L	0.0199	1.82%
Cu 324.752	307321.7	1.032	mg/L	0.0173	1.032	mg/L	0.0173	1.68%
Fe 238.204	43033.4	1.092	mg/L	0.0346	1.092	mg/L	0.0346	3.17%
Fe 273.955	17511.6	1.052	mg/L	0.0196	1.052	mg/L	0.0196	1.87%
K 766.490	48142.2	18.23	mg/L	0.129	18.23	mg/L	0.129	0.71%
Mg 279.077	6740.0	30.12	mg/L	0.259	30.12	mg/L	0.259	0.86%
Mn 257.610	430811.5	1.003	mg/L	0.0778	1.003	mg/L	0.0778	7.76%
Mo 202.031	4261.6	0.9555	mg/L	0.00258	0.9555	mg/L	0.00258	0.27%
Na 589.592	238134.4	40.09	mg/L	0.420	40.09	mg/L	0.420	1.05%
Na 330.237	240.6	33.27	mg/L	1.480	33.27	mg/L	1.480	4.45%
Ni 231.604	19829.3	1.058	mg/L	0.0371	1.058	mg/L	0.0371	3.51%
Pb 220.353	19138.5	0.9734	mg/L	0.00133	0.9734	mg/L	0.00133	0.14%
Sb 206.836	1084.0	0.9869	mg/L	0.00373	0.9869	mg/L	0.00373	0.38%
Se 196.026	7757.2	0.9902	mg/L	0.02021	0.9902	mg/L	0.02021	2.04%
Sn 189.927	-114.1	-0.0371	mg/L	0.00032	-0.0371	mg/L	0.00032	0.85%
Sr 407.771	804532.9	1.870	mg/L	0.0266	1.870	mg/L	0.0266	1.42%
Sr 421.552	454303.3	1.890	mg/L	0.0252	1.890	mg/L	0.0252	1.33%
Ti 334.940	385436.9	1.047	mg/L	0.0748	1.047	mg/L	0.0748	7.15%
Tl 190.801	5481.8	0.9914	mg/L	0.00199	0.9914	mg/L	0.00199	0.20%
V 290.880	164657.8	1.066	mg/L	0.0277	1.066	mg/L	0.0277	2.60%
W 207.912	32.2	0.0130	mg/L	0.00024	0.0130	mg/L	0.00024	1.83%
Y 371.029	1333.5						8.37	0.63%
Zn 206.200	19588.5	1.331	mg/L	0.0461	1.331	mg/L	0.0461	3.47%
P 213.617	-1691.4	-1.244	mg/L	0.0040	-1.244	mg/L	0.0040	0.32%
Si 251.611	523833.7	13.35	mg/L	0.992	13.35	mg/L	0.992	7.43%
Li 670.784	71045.7	1.083	mg/L	0.0034	1.083	mg/L	0.0034	0.31%
Li 610.362	5778.3	0.8368	mg/L	0.10839	0.8368	mg/L	0.10839	12.95%
S 181.975	7619.1	31.30	mg/L	0.022	31.30	mg/L	0.022	0.07%

Sequence No.: 55
Sample ID: MSD
Analyst: nina
Initial Sample Wt:
Dilution:

Autosampler Location: 76
Date Collected: 10/17/2012 1:45:21 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MSD

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ag 328.068	65980.9	0.5082	mg/L	0.00969	0.5082	mg/L	0.00969	1.91%
Al 308.215	34041.2	0.9927	mg/L	0.01489	0.9927	mg/L	0.01489	1.50%
As 188.979	5830.7	1.053	mg/L	0.0027	1.053	mg/L	0.0027	0.26%
B 249.677	110566.1	1.251	mg/L	0.0337	1.251	mg/L	0.0337	2.70%
Ba 233.527	119817.3	1.163	mg/L	0.0189	1.163	mg/L	0.0189	1.63%
Be 313.107	2271328.5	1.026	mg/L	0.0609	1.026	mg/L	0.0609	5.93%
Bi 223.061	-35.2	-0.0162	mg/L	0.00309	-0.0162	mg/L	0.00309	19.06%
Bi 190.171	22.2	0.0274	mg/L	0.00708	0.0274	mg/L	0.00708	25.84%
Ca 315.887	244397.0	120.6	mg/L	10.75	120.6	mg/L	10.75	8.92%
Ca 317.933	287232.3	119.9	mg/L	11.12	119.9	mg/L	11.12	9.28%
Cd 214.440	42605.7	0.9612	mg/L	0.00840	0.9612	mg/L	0.00840	0.87%
Co 228.616	24298.6	0.9517	mg/L	0.02267	0.9517	mg/L	0.02267	2.38%
Cr 267.716	40685.2	1.054	mg/L	0.0213	1.054	mg/L	0.0213	2.02%
Cu 324.752	287274.6	0.9644	mg/L	0.02137	0.9644	mg/L	0.02137	2.22%
Fe 238.204	41234.9	1.046	mg/L	0.0183	1.046	mg/L	0.0183	1.75%
Fe 273.955	16814.8	1.010	mg/L	0.0147	1.010	mg/L	0.0147	1.46%
K 766.490	46207.3	17.49	mg/L	1.520	17.49	mg/L	1.520	8.69%
Mg 279.077	6845.2	30.59	mg/L	0.479	30.59	mg/L	0.479	1.57%
Mn 257.610	434896.0	1.012	mg/L	0.0451	1.012	mg/L	0.0451	4.46%
Mo 202.031	4217.9	0.9457	mg/L	0.00718	0.9457	mg/L	0.00718	0.76%
Na 589.592	231924.1	39.04	mg/L	3.314	39.04	mg/L	3.314	8.49%
Na 330.237	258.8	35.79	mg/L	0.137	35.79	mg/L	0.137	0.38%
Ni 231.604	18805.4	1.003	mg/L	0.0105	1.003	mg/L	0.0105	1.05%
Pb 220.353	18871.1	0.9598	mg/L	0.00013	0.9598	mg/L	0.00013	0.01%
Sb 206.836	1056.9	0.9622	mg/L	0.00141	0.9622	mg/L	0.00141	0.15%
Se 196.026	7917.3	1.011	mg/L	0.0122	1.011	mg/L	0.0122	1.21%
Sn 189.927	-112.2	-0.0365	mg/L	0.00046	-0.0365	mg/L	0.00046	1.26%
Sr 407.771	781341.8	1.816	mg/L	0.1515	1.816	mg/L	0.1515	8.34%
Sr 421.552	439363.5	1.828	mg/L	0.1506	1.828	mg/L	0.1506	8.24%
Ti 334.940	386601.5	1.050	mg/L	0.0560	1.050	mg/L	0.0560	5.33%
Tl 190.801	5399.4	0.9765	mg/L	0.00420	0.9765	mg/L	0.00420	0.43%
V 290.880	156618.3	1.014	mg/L	0.0157	1.014	mg/L	0.0157	1.55%
W 207.912	38.4	0.0155	mg/L	0.00061	0.0155	mg/L	0.00061	3.91%
Y 371.029	1739.9						83.94	4.82%
Zn 206.200	18425.7	1.252	mg/L	0.0292	1.252	mg/L	0.0292	2.33%
P 213.617	-1696.2	-1.248	mg/L	0.0255	-1.248	mg/L	0.0255	2.04%
Si 251.611	530122.6	13.51	mg/L	0.701	13.51	mg/L	0.701	5.18%
Li 670.784	69149.7	1.054	mg/L	0.0618	1.054	mg/L	0.0618	5.86%
Li 610.362	5967.8	0.8642	mg/L	0.16578	0.8642	mg/L	0.16578	19.18%
S 181.975	7586.9	31.17	mg/L	0.183	31.17	mg/L	0.183	0.59%

ALAB: 00182

Date: 10/17/2012 4:09:30 PM

Sequence No.: 95
Sample ID: 312080-008
Analyst: nina
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 10/17/2012 4:07:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 312080-008

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ag 328.068	-43.8	-0.0003	mg/L	0.00027	-0.0003	mg/L	0.00027	80.48%
Al 308.215	226.8	0.0066	mg/L	0.00130	0.0066	mg/L	0.00130	19.69%
As 188.979	-6.3	-0.0011	mg/L	0.00275	-0.0011	mg/L	0.00275	240.96%
B 249.677	-3198.5	-0.0362	mg/L	0.00060	-0.0362	mg/L	0.00060	1.66%
Ba 233.527	66.1	0.0006	mg/L	0.00007	0.0006	mg/L	0.00007	11.05%
Be 313.107	912.0	0.0004	mg/L	0.00006	0.0004	mg/L	0.00006	15.66%
Bi 223.061	11.9	0.0055	mg/L	0.00226	0.0055	mg/L	0.00226	41.24%
Bi 190.171	-5.2	-0.0064	mg/L	0.00317	-0.0064	mg/L	0.00317	49.65%
Ca 315.887	230.3	0.1019	mg/L	0.00690	0.1019	mg/L	0.00690	6.77%
Ca 317.933	279.6	0.1041	mg/L	0.00414	0.1041	mg/L	0.00414	3.98%
Cd 214.440	2.1	0.0000	mg/L	0.00001	0.0000	mg/L	0.00001	13.93%
Co 228.616	14.0	0.0005	mg/L	0.00012	0.0005	mg/L	0.00012	21.05%
Cr 267.716	68.2	0.0018	mg/L	0.00021	0.0018	mg/L	0.00021	11.68%
Cu 324.752	116.9	0.0004	mg/L	0.00013	0.0004	mg/L	0.00013	32.06%
Fe 238.204	258.9	0.0066	mg/L	0.00015	0.0066	mg/L	0.00015	2.22%
Fe 273.955	195.9	0.0118	mg/L	0.00025	0.0118	mg/L	0.00025	2.15%
K 766.490	310.0	0.1058	mg/L	0.02693	0.1058	mg/L	0.02693	25.46%
Mg 279.077	10.9	0.0453	mg/L	0.01258	0.0453	mg/L	0.01258	27.79%
Mn 257.610	355.5	0.0008	mg/L	0.00004	0.0008	mg/L	0.00004	4.96%
Mo 202.031	4.9	0.0011	mg/L	0.00100	0.0011	mg/L	0.00100	90.36%
Na 589.592	844.3	0.1279	mg/L	0.00329	0.1279	mg/L	0.00329	2.57%
Na 330.237	-1.2	-0.1524	mg/L	0.14955	-0.1524	mg/L	0.14955	98.11%
Ni 231.604	2.0	0.0001	mg/L	0.00024	0.0001	mg/L	0.00024	228.83%
Pb 220.353	81.0	0.0041	mg/L	0.00106	0.0041	mg/L	0.00106	25.66%
Pb 206.836	-2.7	-0.0025	mg/L	0.00554	-0.0025	mg/L	0.00554	222.43%
Se 196.026	13.6	0.0017	mg/L	0.02862	0.0017	mg/L	0.02862	>999.9%
Sn 189.927	61.1	0.0199	mg/L	0.00006	0.0199	mg/L	0.00006	0.31%
Sr 407.771	628.9	0.0015	mg/L	0.00023	0.0015	mg/L	0.00023	15.69%
Ti 421.552	337.0	0.0014	mg/L	0.00029	0.0014	mg/L	0.00029	20.73%
Tl 334.940	87.5	0.0002	mg/L	0.00012	0.0002	mg/L	0.00012	49.41%
Tl 190.801	19.8	0.0036	mg/L	0.00288	0.0036	mg/L	0.00288	80.33%
V 290.880	88.1	0.0006	mg/L	0.00009	0.0006	mg/L	0.00009	15.92%
Zn 207.912	1.7	0.0007	mg/L	0.00074	0.0007	mg/L	0.00074	108.85%
Zr 371.029	1669.0						16.23	0.97%
Zr 206.200	64.8	0.0044	mg/L	0.00024	0.0044	mg/L	0.00024	5.38%
Ag 213.617	0.4	0.0003	mg/L	0.00884	0.0003	mg/L	0.00884	>999.9%
Al 251.611	511.3	0.0130	mg/L	0.00027	0.0130	mg/L	0.00027	2.09%
Ba 670.784	833.2	0.0127	mg/L	0.00404	0.0127	mg/L	0.00404	31.80%
Be 610.362	109.6	0.0159	mg/L	0.02458	0.0159	mg/L	0.02458	154.86%
Bi 181.975	18.2	0.0746	mg/L	0.00026	0.0746	mg/L	0.00026	0.35%

ALAB : 00183

Sequence No.: 96
Sample ID: 312080-013
Analyst: nina
Initial Sample Wt:
Dilution:

Autosampler Location: 106
Date Collected: 10/17/2012 4:10:23 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 312080-013

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ag 328.068	0.1	0.0000	mg/L	0.00041	0.0000	mg/L	0.00041	>999.9%
Al 308.215	73.4	0.0021	mg/L	0.00267	0.0021	mg/L	0.00267	124.91%
As 188.979	76.9	0.0139	mg/L	0.00584	0.0139	mg/L	0.00584	42.07%
B 249.677	8185.4	0.0926	mg/L	0.00131	0.0926	mg/L	0.00131	1.42%
Ba 233.527	15592.6	0.1514	mg/L	0.00392	0.1514	mg/L	0.00392	2.59%
Be 313.107	-64.3	0.0000	mg/L	0.00001	0.0000	mg/L	0.00001	17.69%
Bi 223.061	20.8	0.0096	mg/L	0.00206	0.0096	mg/L	0.00206	21.47%
Bi 190.171	10.4	0.0128	mg/L	0.00748	0.0128	mg/L	0.00748	58.25%
Ca 315.887	268701.1	118.9	mg/L	6.10	118.9	mg/L	6.10	5.13%
Ca 317.933	319621.5	119.0	mg/L	5.60	119.0	mg/L	5.60	4.70%
Cd 214.440	-161.3	-0.0036	mg/L	0.00023	-0.0036	mg/L	0.00023	6.45%
Co 228.616	19.4	0.0008	mg/L	0.00024	0.0008	mg/L	0.00024	32.20%
Cr 267.716	619.4	0.0160	mg/L	0.00008	0.0160	mg/L	0.00008	0.51%
Cu 324.752	290.0	0.0010	mg/L	0.00061	0.0010	mg/L	0.00061	62.70%
Fe 238.204	434.8	0.0110	mg/L	0.00000	0.0110	mg/L	0.00000	0.01%
Fe 273.955	190.0	0.0114	mg/L	0.00041	0.0114	mg/L	0.00041	3.61%
K 766.490	15977.9	5.452	mg/L	0.2866	5.452	mg/L	0.2866	5.26%
Mg 279.077	8863.1	36.82	mg/L	0.070	36.82	mg/L	0.070	0.19%
Mn 257.610	188.6	0.0004	mg/L	0.00002	0.0004	mg/L	0.00002	4.76%
Mo 202.031	49.8	0.0112	mg/L	0.00005	0.0112	mg/L	0.00005	0.49%
Na 589.592	281231.8	42.60	mg/L	1.765	42.60	mg/L	1.765	4.14%
Na 330.237	326.8	42.47	mg/L	0.614	42.47	mg/L	0.614	1.44%
Ni 231.604	5.2	0.0003	mg/L	0.00022	0.0003	mg/L	0.00022	80.37%
Pb 220.353	94.1	0.0048	mg/L	0.00427	0.0048	mg/L	0.00427	89.27%
Sb 206.836	-25.0	-0.0227	mg/L	0.00630	-0.0227	mg/L	0.00630	27.71%
Se 196.026	-125.1	-0.0160	mg/L	0.00122	-0.0160	mg/L	0.00122	7.66%
Sn 189.927	-100.3	-0.0326	mg/L	0.00005	-0.0326	mg/L	0.00005	0.16%
Sr 407.771	370655.3	0.8617	mg/L	0.03962	0.8617	mg/L	0.03962	4.60%
Sr 421.552	209000.5	0.8693	mg/L	0.04257	0.8693	mg/L	0.04257	4.90%
Ti 334.940	2291.5	0.0062	mg/L	0.00194	0.0062	mg/L	0.00194	31.11%
Tl 190.801	-64.4	-0.0116	mg/L	0.00143	-0.0116	mg/L	0.00143	12.24%
V 290.880	179.0	0.0012	mg/L	0.00122	0.0012	mg/L	0.00122	105.61%
W 207.912	9.6	0.0039	mg/L	0.00368	0.0039	mg/L	0.00368	95.17%
Y 371.029	1234.1						83.97	6.80%
Zn 206.200	2096.1	0.1424	mg/L	0.00184	0.1424	mg/L	0.00184	1.29%
P 213.617	93.1	0.0685	mg/L	0.00374	0.0685	mg/L	0.00374	5.46%
Si 251.611	433952.8	11.06	mg/L	0.130	11.06	mg/L	0.130	1.17%
Li 670.784	340.1	0.0052	mg/L	0.01489	0.0052	mg/L	0.01489	287.07%
Li 610.362	-1999.1	-0.2895	mg/L	0.08551	-0.2895	mg/L	0.08551	29.54%
S 181.975	7721.4	31.72	mg/L	0.219	31.72	mg/L	0.219	0.69%

CONFIDENTIAL

Sequence No.: 97
Sample ID: 312080-014
Analyst: nina
Initial Sample Wt:
Dilution:

Autosampler Location: 107
Date Collected: 10/17/2012 4:13:02 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 312080-014

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ag 328.068	-268.0	-0.0021	mg/L	0.00163	-0.0021	mg/L	0.00163	78.93%
Al 308.215	535.1	0.0156	mg/L	0.01348	0.0156	mg/L	0.01348	86.37%
As 188.979	82.9	0.0150	mg/L	0.00227	0.0150	mg/L	0.00227	15.15%
B 249.677	8227.8	0.0931	mg/L	0.00138	0.0931	mg/L	0.00138	1.49%
Ba 233.527	15460.5	0.1501	mg/L	0.00268	0.1501	mg/L	0.00268	1.79%
Be 313.107	-379.6	-0.0002	mg/L	0.00022	-0.0002	mg/L	0.00022	128.55%
Bi 223.061	12.5	0.0058	mg/L	0.00175	0.0058	mg/L	0.00175	30.26%
Bi 190.171	18.1	0.0224	mg/L	0.00155	0.0224	mg/L	0.00155	6.94%
Ca 315.887	278814.2	123.3	mg/L	11.24	123.3	mg/L	11.24	9.12%
Ca 317.933	330751.0	123.2	mg/L	10.59	123.2	mg/L	10.59	8.60%
Cd 214.440	-180.6	-0.0041	mg/L	0.00003	-0.0041	mg/L	0.00003	0.74%
Co 228.616	15.8	0.0006	mg/L	0.00041	0.0006	mg/L	0.00041	65.90%
Cr 267.716	639.0	0.0166	mg/L	0.00000	0.0166	mg/L	0.00000	0.02%
Cu 324.752	183.1	0.0006	mg/L	0.00161	0.0006	mg/L	0.00161	262.31%
Fe 238.204	480.5	0.0122	mg/L	0.00006	0.0122	mg/L	0.00006	0.45%
Fe 273.955	212.2	0.0127	mg/L	0.00017	0.0127	mg/L	0.00017	1.29%
K 766.490	17116.1	5.840	mg/L	0.6793	5.840	mg/L	0.6793	11.63%
Mg 279.077	9007.8	37.42	mg/L	0.183	37.42	mg/L	0.183	0.49%
Mn 257.610	157.7	0.0004	mg/L	0.00000	0.0004	mg/L	0.00000	0.76%
Mo 202.031	46.5	0.0104	mg/L	0.00121	0.0104	mg/L	0.00121	11.65%
Na 589.592	290763.9	44.04	mg/L	4.144	44.04	mg/L	4.144	9.41%
Na 330.237	323.9	42.09	mg/L	0.697	42.09	mg/L	0.697	1.66%
Ni 231.604	6.5	0.0003	mg/L	0.00019	0.0003	mg/L	0.00019	55.83%
Pb 220.353	73.4	0.0037	mg/L	0.00196	0.0037	mg/L	0.00196	52.43%
Sb 206.836	-22.2	-0.0202	mg/L	0.00056	-0.0202	mg/L	0.00056	2.79%
Se 196.026	-233.9	-0.0299	mg/L	0.02995	-0.0299	mg/L	0.02995	100.29%
Sn 189.927	-94.1	-0.0306	mg/L	0.00237	-0.0306	mg/L	0.00237	7.74%
Sr 407.771	382115.6	0.8883	mg/L	0.08414	0.8883	mg/L	0.08414	9.47%
Sr 421.552	215557.5	0.8966	mg/L	0.09054	0.8966	mg/L	0.09054	10.10%
Ti 334.940	1924.1	0.0052	mg/L	0.00007	0.0052	mg/L	0.00007	1.28%
Tl 190.801	-48.2	-0.0087	mg/L	0.00404	-0.0087	mg/L	0.00404	46.30%
V 290.880	108.8	0.0007	mg/L	0.00028	0.0007	mg/L	0.00028	39.20%
W 207.912	11.6	0.0047	mg/L	0.00318	0.0047	mg/L	0.00318	67.84%
Y 371.029	1758.5						167.49	9.52%
Zn 206.200	2225.7	0.1512	mg/L	0.00137	0.1512	mg/L	0.00137	0.91%
P 213.617	97.5	0.0717	mg/L	0.00283	0.0717	mg/L	0.00283	3.94%
Si 251.611	444066.9	11.32	mg/L	0.199	11.32	mg/L	0.199	1.76%
Li 670.784	1011.2	0.0154	mg/L	0.00317	0.0154	mg/L	0.00317	20.58%
Li 610.362	-2071.9	-0.3000	mg/L	0.11196	-0.3000	mg/L	0.11196	37.32%
S 181.975	7840.1	32.21	mg/L	0.315	32.21	mg/L	0.315	0.98%

ALAB: 00185

Sequence No.: 91
Sample ID: Method Blank
Analyst: nina
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 10/17/2012 3:57:06 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Method Blank

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ag 328.068	-91.4	-0.0007	mg/L	0.00025	-0.0007	mg/L	0.00025	35.93%
Al 308.215	-259.6	-0.0076	mg/L	0.00051	-0.0076	mg/L	0.00051	6.68%
As 188.979	-6.1	-0.0011	mg/L	0.00374	-0.0011	mg/L	0.00374	339.83%
B 249.677	-4735.1	-0.0536	mg/L	0.00033	-0.0536	mg/L	0.00033	0.62%
Ba 233.527	-5.5	-0.0001	mg/L	0.00004	-0.0001	mg/L	0.00004	77.64%
Be 313.107	-105.5	0.0000	mg/L	0.00014	0.0000	mg/L	0.00014	298.40%
Bi 223.061	6.2	0.0029	mg/L	0.00422	0.0029	mg/L	0.00422	147.42%
Bi 190.171	0.6	0.0007	mg/L	0.00479	0.0007	mg/L	0.00479	652.33%
Ca 315.887	-19.7	-0.0087	mg/L	0.00186	-0.0087	mg/L	0.00186	21.26%
Ca 317.933	-18.5	-0.0069	mg/L	0.00108	-0.0069	mg/L	0.00108	15.64%
Cd 214.440	-9.4	-0.0002	mg/L	0.00006	-0.0002	mg/L	0.00006	27.83%
Co 228.616	5.4	0.0002	mg/L	0.00022	0.0002	mg/L	0.00022	102.78%
Cr 267.716	2.1	0.0001	mg/L	0.00044	0.0001	mg/L	0.00044	805.03%
Cu 324.752	-250.6	-0.0008	mg/L	0.00027	-0.0008	mg/L	0.00027	31.88%
Fe 238.204	-45.4	-0.0012	mg/L	0.00023	-0.0012	mg/L	0.00023	19.74%
Fe 273.955	65.0	0.0039	mg/L	0.00044	0.0039	mg/L	0.00044	11.22%
K 766.490	349.2	0.1191	mg/L	0.11091	0.1191	mg/L	0.11091	93.09%
Mg 279.077	7.5	0.0311	mg/L	0.02352	0.0311	mg/L	0.02352	75.74%
Mn 257.610	-68.2	-0.0002	mg/L	0.00002	-0.0002	mg/L	0.00002	12.36%
Mo 202.031	-2.2	-0.0005	mg/L	0.00071	-0.0005	mg/L	0.00071	141.62%
Na 589.592	647.1	0.0980	mg/L	0.02944	0.0980	mg/L	0.02944	30.04%
Na 330.237	-7.3	-0.9541	mg/L	1.38971	-0.9541	mg/L	1.38971	145.66%
Ni 231.604	-3.9	-0.0002	mg/L	0.00033	-0.0002	mg/L	0.00033	160.50%
Pb 220.353	8.8	0.0004	mg/L	0.00293	0.0004	mg/L	0.00293	653.81%
Sb 206.836	-13.6	-0.0124	mg/L	0.00265	-0.0124	mg/L	0.00265	21.30%
Se 196.026	-70.9	-0.0091	mg/L	0.01724	-0.0091	mg/L	0.01724	190.52%
Sn 189.927	1.7	0.0006	mg/L	0.00004	0.0006	mg/L	0.00004	7.54%
Sr 407.771	86.3	0.0002	mg/L	0.00007	0.0002	mg/L	0.00007	35.64%
Sr 421.552	3.2	0.0000	mg/L	0.00013	0.0000	mg/L	0.00013	968.31%
Ti 334.940	-98.0	-0.0003	mg/L	0.00014	-0.0003	mg/L	0.00014	53.93%
Tl 190.801	16.3	0.0030	mg/L	0.00069	0.0030	mg/L	0.00069	23.46%
V 290.880	-134.7	-0.0009	mg/L	0.00082	-0.0009	mg/L	0.00082	94.10%
W 207.912	41.4	0.0167	mg/L	0.00223	0.0167	mg/L	0.00223	13.37%
Y 371.029	1583.5						48.25	3.05%
Zn 206.200	2.9	0.0002	mg/L	0.00003	0.0002	mg/L	0.00003	12.96%
P 213.617	14.9	0.0110	mg/L	0.00404	0.0110	mg/L	0.00404	36.83%
Si 251.611	-33.0	-0.0008	mg/L	0.00014	-0.0008	mg/L	0.00014	16.08%
Li 670.784	160.1	0.0024	mg/L	0.00051	0.0024	mg/L	0.00051	20.82%
Li 610.362	96.6	0.0140	mg/L	0.05573	0.0140	mg/L	0.05573	398.49%
S 181.975	2.5	0.0102	mg/L	0.00647	0.0102	mg/L	0.00647	63.56%

Sequence No.: 92
Sample ID: LCS
Analyst: nina
Initial Sample Wt:
Dilution:

Autosampler Location: 102
Date Collected: 10/17/2012 3:59:46 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ag 328.068	132900.3	1.024	mg/L	0.0074	1.024	mg/L	0.0074	0.72%
Al 308.215	71056.6	2.072	mg/L	0.0278	2.072	mg/L	0.0278	1.34%
As 188.979	11726.7	2.118	mg/L	0.0107	2.118	mg/L	0.0107	0.50%
B 249.677	177396.0	2.007	mg/L	0.0165	2.007	mg/L	0.0165	0.82%
Ba 233.527	228124.6	2.215	mg/L	0.0233	2.215	mg/L	0.0233	1.05%
Be 313.107	4835060.2	2.185	mg/L	0.0557	2.185	mg/L	0.0557	2.55%
Bi 223.061	-118.9	-0.0548	mg/L	0.00504	-0.0548	mg/L	0.00504	9.21%
Bi 190.171	4.1	0.0051	mg/L	0.00059	0.0051	mg/L	0.00059	11.66%
Ca 315.887	5033.8	2.227	mg/L	0.0197	2.227	mg/L	0.0197	0.88%
Ca 317.933	5987.3	2.230	mg/L	0.0239	2.230	mg/L	0.0239	1.07%
Cd 214.440	91353.8	2.061	mg/L	0.0184	2.061	mg/L	0.0184	0.89%
Co 228.616	54666.3	2.141	mg/L	0.0072	2.141	mg/L	0.0072	0.34%
Cr 267.716	84369.0	2.186	mg/L	0.0137	2.186	mg/L	0.0137	0.63%
Cu 324.752	650941.7	2.185	mg/L	0.0535	2.185	mg/L	0.0535	2.45%
Fe 238.204	86269.7	2.189	mg/L	0.0233	2.189	mg/L	0.0233	1.06%
Fe 273.955	35870.3	2.154	mg/L	0.0038	2.154	mg/L	0.0038	0.18%
K 766.490	60898.8	20.78	mg/L	0.743	20.78	mg/L	0.743	3.57%
Mg 279.077	553.5	2.300	mg/L	0.0208	2.300	mg/L	0.0208	0.90%
Mn 257.610	969310.0	2.256	mg/L	0.0664	2.256	mg/L	0.0664	2.94%
Mo 202.031	8712.5	1.953	mg/L	0.0213	1.953	mg/L	0.0213	1.09%
Na 589.592	14961.6	2.266	mg/L	0.0692	2.266	mg/L	0.0692	3.05%
Na 330.237	-29.9	-3.890	mg/L	0.2234	-3.890	mg/L	0.2234	5.74%
Ni 231.604	40486.3	2.160	mg/L	0.0176	2.160	mg/L	0.0176	0.81%
Pb 220.353	41797.7	2.126	mg/L	0.0327	2.126	mg/L	0.0327	1.54%
Sb 206.836	2235.8	2.036	mg/L	0.0122	2.036	mg/L	0.0122	0.60%
Se 196.026	15683.0	2.002	mg/L	0.0142	2.002	mg/L	0.0142	0.71%
Sn 189.927	-24.2	-0.0079	mg/L	0.00182	-0.0079	mg/L	0.00182	23.17%
Sr 407.771	859357.0	1.998	mg/L	0.2072	1.998	mg/L	0.2072	10.37%
Sr 421.552	485149.1	2.018	mg/L	0.2092	2.018	mg/L	0.2092	10.36%
Ti 334.940	847895.0	2.303	mg/L	0.0541	2.303	mg/L	0.0541	2.35%
Tl 190.801	11970.5	2.165	mg/L	0.0061	2.165	mg/L	0.0061	0.28%
V 290.880	348675.2	2.257	mg/L	0.0511	2.257	mg/L	0.0511	2.26%
W 207.912	43.5	0.0176	mg/L	0.00053	0.0176	mg/L	0.00053	3.00%
Y 371.029	1411.9						76.29	5.40%
Zn 206.200	31409.4	2.134	mg/L	0.0287	2.134	mg/L	0.0287	1.35%
P 213.617	-3766.4	-2.771	mg/L	0.0730	-2.771	mg/L	0.0730	2.63%
Si 251.611	81639.4	2.081	mg/L	0.0240	2.081	mg/L	0.0240	1.15%
Li 670.784	143847.4	2.193	mg/L	0.0910	2.193	mg/L	0.0910	4.15%
Li 610.362	15436.8	2.235	mg/L	0.0927	2.235	mg/L	0.0927	4.15%
S 181.975	17.6	0.0723	mg/L	0.01359	0.0723	mg/L	0.01359	18.79%

ALAB: 00187

Date: 10/17/2012 4:06:50 PM

Sequence No.: 94
Sample ID: MS
Analyst: nina
Initial Sample Wt:
Dilution:

Autosampler Location: 104
Date Collected: 10/17/2012 4:05:04 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MS

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ag 328.068	71011.7	0.5469	mg/L	0.02065	0.5469	mg/L	0.02065	3.78%
Al 308.215	39618.8	1.155	mg/L	0.0610	1.155	mg/L	0.0610	5.28%
As 188.979	5952.0	1.075	mg/L	0.0223	1.075	mg/L	0.0223	2.07%
B 249.677	122594.5	1.387	mg/L	0.0653	1.387	mg/L	0.0653	4.71%
Ba 233.527	135010.1	1.311	mg/L	0.0564	1.311	mg/L	0.0564	4.30%
Be 313.107	2330709.5	1.053	mg/L	0.0289	1.053	mg/L	0.0289	2.74%
Bi 223.061	-38.0	-0.0175	mg/L	0.00354	-0.0175	mg/L	0.00354	20.24%
Bi 190.171	13.2	0.0163	mg/L	0.00114	0.0163	mg/L	0.00114	6.95%
Ca 315.887	285881.8	126.5	mg/L	0.07	126.5	mg/L	0.07	0.05%
Ca 317.933	341042.3	127.0	mg/L	0.49	127.0	mg/L	0.49	0.39%
Cd 214.440	45905.7	1.036	mg/L	0.0364	1.036	mg/L	0.0364	3.51%
Co 228.616	25881.7	1.014	mg/L	0.0376	1.014	mg/L	0.0376	3.71%
Cr 267.716	44163.4	1.144	mg/L	0.0397	1.144	mg/L	0.0397	3.47%
Cu 324.752	311942.9	1.047	mg/L	0.0380	1.047	mg/L	0.0380	3.63%
Fe 238.204	49711.2	1.261	mg/L	0.0516	1.261	mg/L	0.0516	4.09%
Fe 273.955	20560.9	1.235	mg/L	0.0605	1.235	mg/L	0.0605	4.90%
[illegible] 766.490	49283.5	16.82	mg/L	0.111	16.82	mg/L	0.111	0.66%
Mg 279.077	8966.8	37.25	mg/L	0.184	37.25	mg/L	0.184	0.49%
Mn 257.610	448215.8	1.043	mg/L	0.0236	1.043	mg/L	0.0236	2.27%
Mo 202.031	4336.8	0.9723	mg/L	0.00507	0.9723	mg/L	0.00507	0.52%
Na 589.592	285717.2	43.28	mg/L	0.358	43.28	mg/L	0.358	0.83%
Ni 330.237	318.7	41.42	mg/L	0.562	41.42	mg/L	0.562	1.36%
Pb 231.604	19364.7	1.033	mg/L	0.0366	1.033	mg/L	0.0366	3.55%
Sb 220.353	19320.0	0.9826	mg/L	0.00626	0.9826	mg/L	0.00626	0.64%
Se 206.836	1076.3	0.9799	mg/L	0.01175	0.9799	mg/L	0.01175	1.20%
Sn 196.026	7668.4	0.9789	mg/L	0.00782	0.9789	mg/L	0.00782	0.80%
Sr 189.927	-51.7	-0.0168	mg/L	0.00319	-0.0168	mg/L	0.00319	19.01%
Ti 407.771	839275.4	1.951	mg/L	0.0382	1.951	mg/L	0.0382	1.96%
V 421.552	473196.2	1.968	mg/L	0.0347	1.968	mg/L	0.0347	1.76%
Zn 334.940	403804.3	1.097	mg/L	0.0372	1.097	mg/L	0.0372	3.39%
Zr 190.801	5484.4	0.9919	mg/L	0.00168	0.9919	mg/L	0.00168	0.17%
290.880	170121.2	1.101	mg/L	0.0441	1.101	mg/L	0.0441	4.01%
207.912	29.4	0.0119	mg/L	0.00062	0.0119	mg/L	0.00062	5.20%
371.029	1543.0						139.45	9.04%
206.200	18439.3	1.253	mg/L	0.0481	1.253	mg/L	0.0481	3.84%
213.617	-1658.2	-1.220	mg/L	0.0048	-1.220	mg/L	0.0048	0.40%
251.611	541051.4	13.79	mg/L	0.196	13.79	mg/L	0.196	1.42%
670.784	71183.6	1.085	mg/L	0.0228	1.085	mg/L	0.0228	2.10%
610.362	5835.9	0.8451	mg/L	0.04375	0.8451	mg/L	0.04375	5.18%
81.975	9002.1	36.98	mg/L	0.117	36.98	mg/L	0.117	0.32%

ALAB : 00188

Associated Labs QCBatch BenchSheet

QCBatchID: QC1130599
Created Date: 10/17/2012 14:22
Created By: nina
Matrix: Water

Instrument: AAICP (group)
PrepMethod: 3010A
PrepDate:
PrepBy:

Test: 200.7 Alab
Method: EPA 200.7
AnalysisDate: 10/17/2012 00:00
Analyst:

Seq #	Sample ID	QC #	Customer Sample ID	QC Source	Sur. Added (PH)	Spk. Added (APP)	Init. Wt/Vol	Final Vol.	Extraction Date	Extraction Time	Comments (T95°C)
	Method Blank	1					25 ml	25 ml			10/16/12 - 12 hr - 3:30 PM
	LCS	1									
#1	311995-010		B1CW17		<2	clear					
	MS	1		311995-010							
#1	312080-008		Equipment Blank								
#3	312080-013		B-1-CW12								
#2	312080-014		B-1-CW12 Duplicate								
#4	312094-002		B-1-CW20								

311995-002

InitialCalibSTD: Ca(210081119)_Sep2015, Mg(b8095018-1A)Sep20
CalibCheckSTD: Sn(1115117)_Jan2013, W(1103408_Jan2013
InternalSTD: K(210125007)-Dec2015, Na(211025031)_Feb2016
SurrogateSTD: Bi(1101109)_Jan2013, Si(1102515)_Jan2013
LCSSTD: QC21(1201016)-FeB.2013, QC7(1204808)Feb.201 0.5 ml of QC7,21
MSSTD: 50PPM(6-15-12) 0.5 ml of 50 ppm

Solvent Manufacturer and Lot: HCl #411060
Sand Manufacturer and Lot: HNO3 # 112040
Na2SO4 Manufacturer and Lot:
Surrogate Lot:
Spike Lot:
Prep By Signature:

ALAB: 00199
LMC-PET-00000998
CONFIDENTIAL

Sample Information Detail Report
Document Name: 10-17-12a

File Description
Default Sample Information File

Parameters Common to All Samples

Batch ID	10-17-12
Analyst Name	nina
Volume Units	mL
Weight Units	g

Parameters That Vary By Sample

Sample No	A/S Location	Sample ID	Initial Sample Wt.
1	11	CCV10ppm- Sn(3-22-1	
2	12	ICSA(3-22-12)	
3	13	ICSAB(3-22-12)	
4	14	50ppm(6-15-12)	
5	1	BLK	
6	1	BLK	
7	1	BLK	
8	1	BLK	
9	1	BLK	
10	1	BLK	
11	21	0.005ppm Ag(daily)	
12	22	0.005ppm CAM(daily)	
13	23	0.010ppm CAM(daily)	
14	24	0.020ppm CAM(daily)	
15	25	0.050ppm CAM(daily)	
16	26	0.5 ppm CAM(daily)	
17	1	CCB(daily)	
18	38	Method Blank	
19	39	LCS	
20	40	311995-007	
21	41	MS	
22	42	MSD	
23	43	311995-002	
24	44	311995-009	
25	45	311995-010	
26	46	311995-011	
27	47	312159-003	
28	48	312159-004	
29	49	312159-005	
30	50	312159-006	
31	72	Method Blank	
32	73	LCS	
33	74	311877-003	
34	75	MS	
35	76	MSD	
36	77	312080-003	
37	78	312080-004	
38	79	312080-005	
39	80	312080-006	
40	81	312080-008	
41	82	312080-009	
42	83	312080-010	
43	84	312080-013	
44	85	312080-015	
45	86	312094-003	
46	87	312094-004	
47	88	312094-005	
48	89	312094-006	
49	90	312094-007	
50	91	Method Blank	
51	92	LCS	
52	93	312205-002	
53	94	MS	
54	95	MSD	
55	96	312205-004	
56	97	312205-005	
57	98	312205-006	10/17/2012 2:27:29 PM
58	99	312205-007	
59	100	311995-002	

ALAB : 00190

63	104	MS
64	105	312080-008
65	106	312080-013
66	107	312080-014
67	108	312094-002

Sample No	Sample Prep. Vol.	Aliquot Volume	Diluted To Vol.
1			
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65			

ALAB : 00191

CONFIDENTIAL

LMC-PET-00001000

Sample Information Detail Report
Document Name: 10-17-12a

Sample No	Sample Units *	Test	QC Batch
1	mg/L		
2	mg/L		
3	mg/L		
4	mg/L		
5	mg/L		
6	mg/L		
7	mg/L		
8	mg/L		
9	mg/L		
10	mg/L		
11	mg/L		
12	mg/L		
13	mg/L		
14	mg/L		
15	mg/L		
16	mg/L		
17	mg/L		
18	mg/L	6010 Dissolved Meta	QC1130580
19	mg/L	6010 Dissolved Meta	QC1130580
20	mg/L	6010 Dissolved Meta	
21	mg/L	6010 Dissolved Meta	QC1130580
22	mg/L	6010 Dissolved Meta	QC1130580
23	mg/L	6010 Dissolved Meta	
24	mg/L	6010 Dissolved Meta	
25	mg/L	6010 Dissolved Meta	
26	mg/L	6010 Dissolved Meta	
27	mg/L	6010 Dissolved Meta	
28	mg/L	6010 Dissolved Meta	
29	mg/L	6010 Dissolved Meta	
30	mg/L	6010 Dissolved Meta	
31	mg/L	6010 Alab	QC1130591
32	mg/L	6010 Alab	QC1130591
33	mg/L	6010 Alab	
34	mg/L	6010 Alab	QC1130591
35	mg/L	6010 Alab	QC1130591
36	mg/L	6010 Dissolved Meta	
37	mg/L	6010 Dissolved Meta	
38	mg/L	6010 Dissolved Meta	
39	mg/L	6010 Dissolved Meta	
40	mg/L	6010 Dissolved Meta	
41	mg/L	6010 Dissolved Meta	
42	mg/L	6010 Dissolved Meta	
43	mg/L	6010 Dissolved Meta	
44	mg/L	6010 Dissolved Meta	
45	mg/L	6010 Dissolved Meta	
46	mg/L	6010 Dissolved Meta	
47	mg/L	6010 Dissolved Meta	
48	mg/L	6010 Dissolved Meta	
49	mg/L	6010 Dissolved Meta	
50	mg/L	6010 Dissolved Meta	QC1130594
51	mg/L	6010 Dissolved Meta	QC1130594
52	mg/L	6010 Dissolved Meta	
53	mg/L	6010 Dissolved Meta	QC1130594
54	mg/L	6010 Dissolved Meta	QC1130594
55	mg/L	6010 Dissolved Meta	
56	mg/L	6010 Dissolved Meta	
57	mg/L	6010 Dissolved Meta	
58	mg/L	6010 Dissolved Meta	
59	mg/L	6010 Alab	
60	mg/L	200.7 Alab	QC1130599
61	mg/L	200.7 Alab	QC1130599
62	mg/L	200.7 Alab	
63	mg/L	200.7 Alab	QC1130599
64	mg/L	200.7 Alab	
65	mg/L	200.7 Alab	
66	mg/L	200.7 Alab	
67	mg/L	200.7 Alab	

ALAB : 00192

CONFIDENTIAL

LMC-PET-00001001

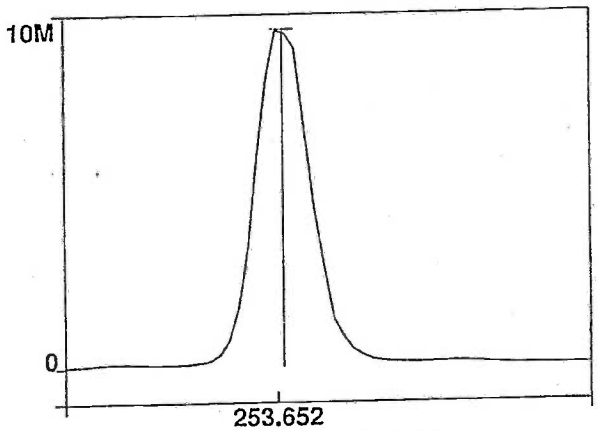
Spectra

Method: Hg_ReAlign
Result:

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1



Intensity: 9577043.3 cps
Conc:

1

ALAB : 00193

10/17/2012 8:15:51 AM Hg ReAlign... Actual peak offset (nm): -0.006
Drift (nm): 0.000 Slit adjustment: 0

Align View XY Axial for analyte Mn 257.610

X-position	Y-position	Intensity
-2.0	15.0	160.3
-1.6	15.0	149.1
-1.2	15.0	209.8
-0.8	15.0	97.1
-0.4	15.0	618921.6
0.0	15.0	901747.1
0.4	15.0	938700.4
0.8	15.0	873229.8
1.2	15.0	744922.2
1.6	15.0	594167.7
2.0	15.0	475173.3
0.4	10.0	4604.5
0.4	10.5	28601.6
0.4	11.0	61638.0
0.4	11.5	106566.7
0.4	12.0	173426.4
0.4	12.5	364407.1
0.4	13.0	474763.4
0.4	13.5	636718.1
0.4	14.0	773993.2
0.4	14.5	992801.2
0.4	15.0	993083.5
0.4	15.5	942589.0
0.4	16.0	849535.1
0.4	16.5	575639.6
0.4	17.0	423265.7
0.4	17.5	304642.7
0.4	18.0	209120.3
0.4	18.5	139639.3
0.4	19.0	56728.2
0.4	19.5	33164.0
0.4	20.0	16327.3
-0.4	15.0	992100.1
0.0	15.0	1019719.7
0.4	15.0	1004944.1
0.8	15.0	900803.1
1.2	15.0	777884.4
0.0	13.0	505808.6
0.0	13.5	630851.1
0.0	14.0	789997.9
0.0	14.5	1028928.4
0.0	15.0	1019252.9
0.0	15.5	1012406.6
0.0	16.0	870832.3
0.0	16.5	580504.7
0.0	17.0	431567.2

10/17/2012 8:18:25 AM aligned for analyte Mn 257.610
X viewing position set to 0.0 mm having Peak intensity 1028928.4 for Axial viewing
Y viewing position set to 14.5 mm having Peak intensity 1028928.4 for Axial viewing

Align View XY Axial for analyte Mn 257.610

X-position	Y-position	Intensity
-2.0	15.0	358623.6
-1.6	15.0	514834.7
-1.2	15.0	671904.8
-0.8	15.0	839485.3
-0.4	15.0	976671.3
0.0	15.0	1007761.0
0.4	15.0	990446.0
0.8	15.0	883608.2
1.2	15.0	757614.2
1.6	15.0	632761.0
2.0	15.0	472101.9
0.0	10.0	2374.9
0.0	10.5	9933.7
0.0	11.0	27997.3
0.0	11.5	59741.0

ALAB : 00194

0.0	13.5	485282.2
0.0	14.0	625537.9
0.0	14.5	930046.1
0.0	15.0	1004271.8
0.0	15.5	1031028.2
0.0	16.0	968308.9
0.0	16.5	720124.0
0.0	17.0	574059.1
0.0	17.5	428336.3
0.0	18.0	312674.3
0.0	18.5	209004.3
0.0	19.0	93697.1
0.0	19.5	58780.4
0.0	20.0	34964.0
-0.8	15.5	865725.7
-0.4	15.5	984043.9
0.0	15.5	1023644.5
0.4	15.5	997313.5
0.8	15.5	908512.8
0.0	13.5	499694.2
0.0	14.0	626409.7
0.0	14.5	936608.5
0.0	15.0	1030748.6
0.0	15.5	1051600.6
0.0	16.0	995810.9
0.0	16.5	729034.5
0.0	17.0	582674.2
0.0	17.5	423274.1

10/17/2012 8:20:19 AM aligned for analyte Mn 257.610
X viewing position set to 0.0 mm having Peak intensity 1051600.6 for Axial viewing
Y viewing position set to 15.5 mm having Peak intensity 1051600.6 for Axial viewing

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Align View XY Axial for analyte Mn 257.610

X-position	Y-position	Intensity
-2.0	15.0	368802.2
-1.6	15.0	535573.2
-1.2	15.0	685042.5
-0.8	15.0	855615.5
-0.4	15.0	1005174.4
0.0	15.0	1049877.5
0.4	15.0	990614.3
0.8	15.0	911173.8
1.2	15.0	786076.8
1.6	15.0	627470.5
2.0	15.0	478863.8
0.0	10.0	4537.2
0.0	10.5	28733.6
0.0	11.0	61585.4
0.0	11.5	108605.8
0.0	12.0	170531.1
0.0	12.5	361889.6
0.0	13.0	493176.5
0.0	13.5	636984.8
0.0	14.0	799097.6
0.0	14.5	1023369.4
0.0	15.0	1056977.8
0.0	15.5	973559.3
0.0	16.0	869238.6
0.0	16.5	574307.1
0.0	17.0	434194.0
0.0	17.5	309803.2
0.0	18.0	217458.8
0.0	18.5	146652.2
0.0	19.0	58908.1
0.0	19.5	35375.4
0.0	20.0	17445.5
-0.8	15.0	856368.5
-0.4	15.0	1001864.2
0.0	15.0	1039405.9
0.4	15.0	1019266.0
0.8	15.0	909367.1
0.0	13.0	509236.6
0.0	13.5	642453.9
0.0	14.0	812658.1

ALAB: 00195

0.0	16.0	855235.5
0.0	16.5	565411.3
0.0	17.0	429223.9

10/17/2012 8:22:16 AM aligned for analyte Mn 257.610
X viewing position set to 0.0 mm having Peak intensity 1027925.0 for Axial viewing
Y viewing position set to 15.0 mm having Peak intensity 1027925.0 for Axial viewing

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Align View X Radial for analyte Mn 257.610

X-position	Y-position	Intensity
-7.0	15.0	25.2
-6.5	15.0	27.7
-6.0	15.0	20.8
-5.5	15.0	21.0
-5.0	15.0	25.4
-4.5	15.0	32.4
-4.0	15.0	35.1
-3.5	15.0	41.6
-3.0	15.0	56.5
-2.5	15.0	125.0
-2.0	15.0	233.5
-1.5	15.0	292.1
-1.0	15.0	474.7
-0.5	15.0	591.5
0.0	15.0	729.5
0.5	15.0	647.2
1.0	15.0	487.5

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Align View X Radial for analyte Mn 257.610

X-position	Y-position	Intensity
-7.0	15.0	748.8
-6.5	15.0	813.0
-6.0	15.0	893.0
-5.5	15.0	1023.4
-5.0	15.0	1302.8
-4.5	15.0	1794.9
-4.0	15.0	2480.6
-3.5	15.0	3563.6
-3.0	15.0	4443.8
-2.5	15.0	6702.5
-2.0	15.0	11723.3
-1.5	15.0	22710.5
-1.0	15.0	37396.1
-0.5	15.0	54710.6
0.0	15.0	60671.3
0.5	15.0	51962.3
1.0	15.0	34359.0
1.5	15.0	21189.7
2.0	15.0	11591.1
2.5	15.0	8657.8
3.0	15.0	7853.1
3.5	15.0	5742.0
4.0	15.0	3663.7
4.5	15.0	2127.6
5.0	15.0	1222.0
5.5	15.0	813.1
6.0	15.0	745.4
6.5	15.0	822.3
7.0	15.0	849.2

10/17/2012 8:30:28 AM aligned for analyte Mn 257.610
X viewing position set to 0.0 mm having Peak intensity 60671.3 for Radial viewing

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ALAB:00196

Analysis Begun

Start Time: 10/17/2012 8:54:09 AM
Plasma On Time: 10/17/2012 7:49:05 AM
Logged In Analyst: kedy
Technique: ICP Continuous
Spectrometer Model: Optima 4300 DV, S/N 077N1091901Autosampler Model: AS-93plus

Sample Information File: C:\pe\Administrator\Sample Information\10-17-12.sid
Batch ID: 10-17-12
Results Data Set: 10-17-12
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 1
Autosampler Location: 1
Sample ID: Calib Blank 1
Date Collected: 10/17/2012 8:54:09 AM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:

Mean Data: Calib Blank 1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Ag 328.068	614.6	43.21	7.03%	[0.00]	mg/L
Al 308.215	3016.3	79.38	2.63%	[0.00]	mg/L
As 188.979	23.9	17.43	73.07%	[0.00]	mg/L
B 249.677	167.9	15.16	9.03%	[0.00]	mg/L
Ba 233.527	-72.0	3.97	5.51%	[0.00]	mg/L
Be 313.107	-3501.9	120.01	3.43%	[0.00]	mg/L
Bi 223.061	-44.0	6.08	13.82%	[0.00]	mg/L
Bi 190.171	10.2	2.17	21.36%	[0.00]	mg/L
Ca 315.887	38.4	2.27	5.92%	[0.00]	mg/L
Ca 317.933	140.6	3.85	2.74%	[0.00]	mg/L
Cd 214.440	20.8	0.96	4.64%	[0.00]	mg/L
Co 228.616	-35.9	3.30	9.19%	[0.00]	mg/L
Cr 267.716	-65.7	5.79	8.81%	[0.00]	mg/L
Cu 324.752	2240.7	82.03	3.66%	[0.00]	mg/L
Fe 238.204	106.6	1.38	1.30%	[0.00]	mg/L
Fe 273.955	-368.5	1.73	0.47%	[0.00]	mg/L
K 766.490	-473.5	80.16	16.93%	[0.00]	mg/L
Mg 279.077	-37.3	0.34	0.92%	[0.00]	mg/L
Mn 257.610	312.0	2.98	0.95%	[0.00]	mg/L
Mo 202.031	-3.0	0.64	20.93%	[0.00]	mg/L
Na 589.592	706.2	136.06	19.27%	[0.00]	mg/L
Na 330.237	29.0	9.82	33.87%	[0.00]	mg/L
Ni 231.604	-9.4	9.35	99.39%	[0.00]	mg/L
Pb 220.353	-85.3	7.32	8.58%	[0.00]	mg/L
Sb 206.836	-12.8	5.57	43.67%	[0.00]	mg/L
Se 196.026	19.2	92.48	482.76%	[0.00]	mg/L
Sn 189.927	-10.7	5.91	55.17%	[0.00]	mg/L
Sr 407.771	59.9	1.28	2.14%	[0.00]	mg/L
Sr 421.552	149.4	68.91	46.13%	[0.00]	mg/L
Ti 334.940	-1227.7	276.62	22.53%	[0.00]	mg/L
Tl 190.801	21.7	21.80	100.27%	[0.00]	mg/L
V 290.880	3597.4	48.58	1.35%	[0.00]	mg/L
W 207.912	19.0	0.40	2.11%	[0.00]	mg/L
Zn 206.200	3.6	2.23	62.33%	[0.00]	mg/L
P 213.617	-4.4	5.82	132.85%	[0.00]	mg/L
Si 251.611	476.6	101.18	21.23%	[0.00]	mg/L
Li 670.784	342.7	226.12	65.98%	[0.00]	mg/L
Li 610.362	-3034.9	306.71	10.11%	[0.00]	mg/L
S 181.975	6.7	0.44	6.53%	[0.00]	mg/L

Sequence No.: 2
Sample ID: ICP STD1-0.05PPM(7-6-12)
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 10/17/2012 8:56:46 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICP STD1-0.05PPM(7-6-12)

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Al 308.215	1277.2	290.87	22.77%	[0.05]	mg/L
As 188.979	298.9	5.88	1.97%	[0.05]	mg/L
B 249.677	4524.8	11.31	0.25%	[0.05]	mg/L
Ba 233.527	5800.4	200.91	3.46%	[0.05]	mg/L
Be 313.107	113036.3	4185.41	3.70%	[0.05]	mg/L
Cd 214.440	2411.9	10.23	0.42%	[0.05]	mg/L
Co 228.616	1403.0	3.23	0.23%	[0.05]	mg/L
Cr 267.716	2057.9	4.14	0.20%	[0.05]	mg/L
Cu 324.752	16152.7	816.33	5.05%	[0.05]	mg/L
Fe 238.204	2155.5	16.35	0.76%	[0.05]	mg/L
Fe 273.955	935.5	11.03	1.18%	[0.05]	mg/L
Mn 257.610	25431.5	796.36	3.13%	[0.05]	mg/L
Mo 202.031	230.7	4.00	1.73%	[0.05]	mg/L
Ni 231.604	1007.4	0.10	0.01%	[0.05]	mg/L
Pb 220.353	1070.7	15.22	1.42%	[0.05]	mg/L
Sb 206.836	64.2	4.79	7.46%	[0.05]	mg/L
Se 196.026	358.4	13.01	3.63%	[0.05]	mg/L
Ti 334.940	19946.1	880.41	4.41%	[0.05]	mg/L
Tl 190.801	284.4	18.40	6.47%	[0.05]	mg/L
V 290.880	8266.1	416.88	5.04%	[0.05]	mg/L
Zn 206.200	799.3	10.00	1.25%	[0.05]	mg/L

Sequence No.: 3
Sample ID: ICP STD2-1PPM(7-6-12)
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 10/17/2012 8:58:57 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICP STD2-1PPM(7-6-12)

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Al 308.215	37538.5	196.05	0.52%	[1.00]	mg/L
As 188.979	5874.3	31.62	0.54%	[1.00]	mg/L
B 249.677	93150.5	3289.28	3.53%	[1.00]	mg/L
Ba 233.527	115651.8	2380.41	2.06%	[1.00]	mg/L
Be 313.107	2297449.5	35599.88	1.55%	[1.00]	mg/L
Cd 214.440	50266.8	1239.62	2.47%	[1.00]	mg/L
Co 228.616	28681.5	552.55	1.93%	[1.00]	mg/L
Cr 267.716	42076.9	1284.16	3.05%	[1.00]	mg/L
Cu 324.752	326226.1	5124.26	1.57%	[1.00]	mg/L
Fe 238.204	44107.8	896.64	2.03%	[1.00]	mg/L
Fe 273.955	18719.7	398.58	2.13%	[1.00]	mg/L
Mn 257.610	496397.4	9455.68	1.90%	[1.00]	mg/L
Mo 202.031	4794.5	46.79	0.98%	[1.00]	mg/L
Ni 231.604	20872.2	323.87	1.55%	[1.00]	mg/L
Pb 220.353	22324.8	476.52	2.13%	[1.00]	mg/L
Sb 206.836	1114.5	4.75	0.43%	[1.00]	mg/L
Se 196.026	8266.7	121.49	1.47%	[1.00]	mg/L
Sr 407.771	422913.3	27154.22	6.42%	[1.00]	mg/L
Sr 421.552	236845.3	15732.94	6.64%	[1.00]	mg/L
Ti 334.940	394021.1	4744.00	1.20%	[1.00]	mg/L
Tl 190.801	6390.0	9.31	0.15%	[1.00]	mg/L
V 290.880	164880.2	3118.49	1.89%	[1.00]	mg/L
Zn 206.200	16033.1	411.57	2.57%	[1.00]	mg/L

ALAB:00199

Sequence No.: 4
Sample ID: ICP STD3-20PPM(7-6-12)
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 10/17/2012 9:01:14 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICP STD3-20PPM(7-6-12)

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Al 308.215	692853.0	8533.46	1.23%	[20.00]	mg/L
As 188.979	112345.6	406.92	0.36%	[20.00]	mg/L
B 249.677	1789964.4	80065.04	4.47%	[20.00]	mg/L
Ba 233.527	2063411.5	81299.54	3.94%	[20.00]	mg/L
Be 313.107	Saturated2				
Bi 223.061	22395.4	7.46	0.03%	[10]	mg/L
Bi 190.171	8243.1	22.86	0.28%	[10]	mg/L
Ca 315.887	22411.6	366.31	1.63%	[10.00]	mg/L
Ca 317.933	26268.3	356.16	1.36%	[10.00]	mg/L
Cd 214.440	871581.7	42700.33	4.90%	[20.00]	mg/L
Co 228.616	523688.4	19062.46	3.64%	[20.00]	mg/L
Cr 267.716	769861.9	32114.49	4.17%	[20.00]	mg/L
Cu 324.752	6116031.3	253597.15	4.15%	[20.00]	mg/L
Fe 238.204	789483.2	37038.53	4.69%	[20.00]	mg/L
Fe 273.955	343734.0	13211.47	3.84%	[20.00]	mg/L
K 766.490	28824.7	22.42	0.08%	[10.00]	mg/L
Mg 279.077	2466.8	48.63	1.97%	[10.00]	mg/L
Mn 257.610	8766007.8	108767.34	1.24%	[20.00]	mg/L
Mo 202.031	92090.6	3251.85	3.53%	[20.00]	mg/L
Na 589.592	69742.9	943.22	1.35%	[10.00]	mg/L
Ni 231.604	378156.4	15148.36	4.01%	[20.00]	mg/L
Pb 220.353	408171.5	17079.20	4.18%	[20.00]	mg/L
Se 196.026	157342.4	778.83	0.49%	[20.00]	mg/L
Sn 189.927	30746.6	181.46	0.59%	[10.00]	mg/L
Ti 334.940	7600225.0	155551.52	2.05%	[20.00]	mg/L
Tl 190.801	110824.9	439.65	0.40%	[20.00]	mg/L
V 290.880	3164300.7	137797.18	4.35%	[20.00]	mg/L
W 207.912	12518.4	74.28	0.59%	[5]	mg/L
Zn 206.200	297987.9	13700.13	4.60%	[20.00]	mg/L
Li 670.784	138060.0	1238.30	0.90%	[2.0]	mg/L
Li 610.362	14061.5	382.82	2.72%	[2.0]	mg/L
S 181.975	2441.2	24.64	1.01%	[10.00]	mg/L

ALAB: 00200

Sequence No.: 5
Sample ID: ICP STD4-2PPM(7-6-12)
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 10/17/2012 9:03:53 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICP STD4-2PPM(7-6-12)

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Ag 328.068	261303.6	602.03	0.23%	[2.00]	mg/L

ALAB:00201

Sequence No.: 6
Sample ID: ICP STD5-100PPM(7-6-12)
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 10/17/2012 9:05:46 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICP STD5-100PPM(7-6-12)

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Ca 315.887	217855.3	1157.66	0.53%	[100.00]	mg/L
Ca 317.933	254890.3	2037.44	0.80%	[100.00]	mg/L
K 766.490	281378.0	2548.71	0.91%	[100.00]	mg/L
Mg 279.077	23267.6	27.16	0.12%	[100.00]	mg/L
Na 589.592	645890.4	7975.40	1.23%	[100.00]	mg/L
Na 330.237	776.8	8.61	1.11%	[100.00]	mg/L

Sequence No.: 7
Sample ID: ICP STD6-10PPM(7-6-12)
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 10/17/2012 9:07:58 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICP STD6-10PPM(7-6-12)

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
P 213.617	13372.2	152.45	1.14%	[10.00]	mg/L
Si 251.611	405090.8	9598.75	2.37%	[10.00]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	1	Lin Thru 0	0.0	130700	0.00000	1.000000	
Al 308.215	3	Lin Thru 0	0.0	34650	0.00000	0.999991	
As 188.979	3	Lin Thru 0	0.0	5618	0.00000	0.999997	
B 249.677	3	Lin Thru 0	0.0	89510	0.00000	0.999998	
Ba 233.527	3	Lin Thru 0	0.0	103200	0.00000	0.999982	
Be 313.107	2	Lin Thru 0	0.0	2297000	0.00000	1.000000	
Bi 223.061	1	Lin Thru 0	0.0	2240	0.00000	1.000000	
Bi 190.171	1	Lin Thru 0	0.0	824.3	0.00000	1.000000	
Ca 315.887	2	Lin Thru 0	0.0	2179	0.00000	0.999996	
Ca 317.933	2	Lin Thru 0	0.0	2550	0.00000	0.999995	
Cd 214.440	3	Lin Thru 0	0.0	43600	0.00000	0.999971	
Co 228.616	3	Lin Thru 0	0.0	26190	0.00000	0.999989	
Cr 267.716	3	Lin Thru 0	0.0	38500	0.00000	0.999989	
Cu 324.752	3	Lin Thru 0	0.0	305900	0.00000	0.999994	
Fe 238.204	3	Lin Thru 0	0.0	39490	0.00000	0.999983	
Fe 273.955	3	Lin Thru 0	0.0	17190	0.00000	0.999990	
K 766.490	2	Lin Thru 0	0.0	2814	0.00000	0.999997	
Mg 279.077	2	Lin Thru 0	0.0	232.8	0.00000	0.999982	
Mn 257.610	3	Lin Thru 0	0.0	438400	0.00000	0.999978	
Mo 202.031	3	Lin Thru 0	0.0	4605	0.00000	0.999998	
Na 589.592	2	Lin Thru 0	0.0	6464	0.00000	0.999969	
Na 330.237	1	Lin Thru 0	0.0	7.768	0.00000	1.000000	
Ni 231.604	3	Lin Thru 0	0.0	18910	0.00000	0.999987	
Pb 220.353	3	Lin Thru 0	0.0	20410	0.00000	0.999989	
Sb 206.836	2	Lin Thru 0	0.0	1115	0.00000	0.999971	
Se 196.026	3	Lin Thru 0	0.0	7868	0.00000	0.999997	
Sn 189.927	1	Lin Thru 0	0.0	3075	0.00000	1.000000	
Sr 407.771	1	Lin Thru 0	0.0	422900	0.00000	1.000000	
Sr 421.552	1	Lin Thru 0	0.0	236800	0.00000	1.000000	
Ti 334.940	3	Lin Thru 0	0.0	380000	0.00000	0.999998	
Tl 190.801	3	Lin Thru 0	0.0	5543	0.00000	0.999971	
V 290.880	3	Lin Thru 0	0.0	158200	0.00000	0.999998	
W 207.912	1	Lin Thru 0	0.0	2504	0.00000	1.000000	
Zn 206.200	3	Lin Thru 0	0.0	14900	0.00000	0.999993	
P 213.617	1	Lin Thru 0	0.0	1337	0.00000	1.000000	
Si 251.611	1	Lin Thru 0	0.0	40510	0.00000	1.000000	
Li 670.784	1	Lin Thru 0	0.0	69030	0.00000	1.000000	
Li 610.362	1	Lin Thru 0	0.0	7031	0.00000	1.000000	
S 181.975	1	Lin Thru 0	0.0	244.1	0.00000	1.000000	

ALAB : 00202

Sequence No.: 8
Sample ID: ICP_ICV(7-6-12)
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 10/17/2012 9:09:52 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICP_ICV(7-6-12)

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ag 328.068	67592.1	0.5173	mg/L	0.00766	0.5173	mg/L	0.00766	1.48%
QC value within limits for Ag 328.068 Recovery = 103.47%								
Al 308.215	35904.8	1.036	mg/L	0.0134	1.036	mg/L	0.0134	1.29%
QC value within limits for Al 308.215 Recovery = 103.62%								
As 188.979	5617.7	1.0000	mg/L	0.01491	1.0000	mg/L	0.01491	1.49%
QC value within limits for As 188.979 Recovery = 100.00%								
B 249.677	91772.5	1.025	mg/L	0.0185	1.025	mg/L	0.0185	1.81%
QC value within limits for B 249.677 Recovery = 102.53%								
Ba 233.527	111962.8	1.085	mg/L	0.0190	1.085	mg/L	0.0190	1.75%
QC value within limits for Ba 233.527 Recovery = 108.49%								
Be 313.107	2306657.5	1.004	mg/L	0.0573	1.004	mg/L	0.0573	5.70%
QC value within limits for Be 313.107 Recovery = 100.40%								
Bi 223.061	-66.9	-0.0299	mg/L	0.00209	-0.0299	mg/L	0.00209	7.01%
Bi 190.171	10.9	0.0132	mg/L	0.00541	0.0132	mg/L	0.00541	41.07%
Ca 315.887	2344.2	1.076	mg/L	0.0012	1.076	mg/L	0.0012	0.11%
Ca 317.933	2755.3	1.081	mg/L	0.0010	1.081	mg/L	0.0010	0.10%
Cd 214.440	44839.3	1.029	mg/L	0.0178	1.029	mg/L	0.0178	1.73%
QC value within limits for Cd 214.440 Recovery = 102.85%								
Co 228.616	26937.1	1.028	mg/L	0.0182	1.028	mg/L	0.0182	1.77%
QC value within limits for Co 228.616 Recovery = 102.85%								
Cr 267.716	41632.0	1.081	mg/L	0.0177	1.081	mg/L	0.0177	1.64%
QC value within limits for Cr 267.716 Recovery = 108.13%								
Cu 324.752	304580.2	0.9958	mg/L	0.04320	0.9958	mg/L	0.04320	4.34%
QC value within limits for Cu 324.752 Recovery = 99.58%								
Fe 238.204	42462.6	1.075	mg/L	0.0181	1.075	mg/L	0.0181	1.68%
QC value within limits for Fe 238.204 Recovery = 107.54%								
Fe 273.955	17980.5	1.046	mg/L	0.0152	1.046	mg/L	0.0152	1.45%
QC value within limits for Fe 273.955 Recovery = 104.60%								
K 766.490	28470.5	10.12	mg/L	0.397	10.12	mg/L	0.397	3.92%
Mg 279.077	258.9	1.112	mg/L	0.0214	1.112	mg/L	0.0214	1.93%
Mn 257.610	452754.1	1.033	mg/L	0.0576	1.033	mg/L	0.0576	5.58%
QC value within limits for Mn 257.610 Recovery = 103.26%								
Mo 202.031	4666.8	1.013	mg/L	0.0161	1.013	mg/L	0.0161	1.59%
QC value within limits for Mo 202.031 Recovery = 101.34%								
Na 589.592	7078.0	1.095	mg/L	0.0842	1.095	mg/L	0.0842	7.69%
Na 330.237	-16.9	-2.173	mg/L	0.5043	-2.173	mg/L	0.5043	23.21%
Ni 231.604	19911.7	1.053	mg/L	0.0144	1.053	mg/L	0.0144	1.37%
QC value within limits for Ni 231.604 Recovery = 105.28%								
Pb 220.353	20882.8	1.023	mg/L	0.0309	1.023	mg/L	0.0309	3.03%
QC value within limits for Pb 220.353 Recovery = 102.30%								
Sb 206.836	1103.6	0.9898	mg/L	0.00042	0.9898	mg/L	0.00042	0.04%
QC value within limits for Sb 206.836 Recovery = 98.98%								
Se 196.026	8086.8	1.028	mg/L	0.0031	1.028	mg/L	0.0031	0.30%
QC value within limits for Se 196.026 Recovery = 102.78%								
Sn 189.927	-1.5	-0.0005	mg/L	0.00130	-0.0005	mg/L	0.00130	262.54%
Sr 407.771	413563.7	0.9779	mg/L	0.05327	0.9779	mg/L	0.05327	5.45%
QC value within limits for Sr 407.771 Recovery = 97.79%								
Sr 421.552	232850.0	0.9831	mg/L	0.04635	0.9831	mg/L	0.04635	4.71%
QC value within limits for Sr 421.552 Recovery = 98.31%								
Ti 334.940	395941.0	1.042	mg/L	0.0535	1.042	mg/L	0.0535	5.14%
QC value within limits for Ti 334.940 Recovery = 104.18%								
Tl 190.801	5844.7	1.054	mg/L	0.0110	1.054	mg/L	0.0110	1.04%
QC value within limits for Tl 190.801 Recovery = 105.44%								
V 290.880	162269.6	1.025	mg/L	0.0594	1.025	mg/L	0.0594	5.79%
QC value within limits for V 290.880 Recovery = 102.54%								
W 207.912	44.1	0.0176	mg/L	0.00065	0.0176	mg/L	0.00065	3.70%
Y 371.029	1447.0						105.15	7.27%
Zn 206.200	15230.7	1.022	mg/L	0.0193	1.022	mg/L	0.0193	1.88%
QC value within limits for Zn 206.200 Recovery = 102.20%								
P 213.617	-1791.4	-1.340	mg/L	0.0282	-1.340	mg/L	0.0282	2.10%
Si 251.611	40356.4	0.9962	mg/L	0.01025	0.9962	mg/L	0.01025	1.03%
QC value within limits for Si 251.611 Recovery = 99.62%								
Li 670.784	65949.8	0.9554	mg/L	0.05723	0.9554	mg/L	0.05723	5.99%
Li 610.362	7192.6	1.023	mg/L	0.1809	1.023	mg/L	0.1809	17.69%