

Quantify Sample Summary Report **MassLynx MassLynx V4.1 SCN909**
 Dataset: C:\MassLynx\Dioxin.pro\161101DATA2.qld
 Last Altered: Wednesday, November 02, 2016 10:58:20 Pacific Daylight Time
 Printed: Wednesday, November 02, 2016 10:59:24 Pacific Daylight Time

Method: C:\MassLynx\Dioxin.pro\MethDB\Dioxin161007.mdb 07 Oct 2016 14:10:52
Calibration: C:\MassLynx\Dioxin.pro\CurveDB\160510\CAL.cdb 11 May 2016 09:28:40

ID: CS302, Name: 16110114, Date: 01-Nov-2016, Time: 21:14:00, Conditions: AUTOSPEC01, User: PK

Name	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N	EMPC?	Pg
2378-TCDF	25.540	1.001	1.29e5	1.66e5	0.935	0.777	0.770	1426	2446	1.75e6	2.36e6	1229.1	NO	10.046
12378-PeCDF	29.675	1.000	7.22e5	4.71e5	0.952	1.535	1.550	3396	2751	1.07e7	6.71e6	3138.0	NO	48.319
23478-PeCDF	31.023	1.000	7.93e5	5.06e5	0.963	1.566	1.550	3396	2751	1.16e7	7.42e6	3408.0	NO	51.133
123478-HxCDF	34.695	1.001	6.41e5	5.10e5	1.137	1.257	1.240	4353	3598	9.45e6	7.50e6	2170.7	NO	51.216
234678-HxCDF	35.791	1.001	6.28e5	5.16e5	1.164	1.218	1.240	4353	3598	8.99e6	7.41e6	2064.7	NO	51.589
123678-HxCDF	34.848	1.001	6.66e5	5.31e5	1.099	1.254	1.240	4353	3598	9.48e6	7.49e6	2177.4	NO	50.283
123789-HxCDF	36.941	1.001	5.41e5	4.39e5	1.101	1.231	1.240	4353	3598	7.88e6	6.32e6	1809.6	NO	50.959
1234678-HpCDF	39.002	1.001	5.24e5	5.14e5	1.303	1.020	1.050	2753	2374	7.66e6	7.52e6	2783.2	NO	48.057
1234789-HpCDF	41.621	1.000	4.40e5	4.26e5	1.317	1.034	1.050	2753	2374	5.68e6	5.52e6	2064.0	NO	49.219
OCDF	46.729	1.006	6.97e5	7.78e5	1.166	0.897	0.890	3057	2728	7.09e6	7.98e6	2320.7	NO	100.967
2378-TCDD	26.183	1.001	9.73e4	1.22e5	1.134	0.799	0.770	1548	1737	1.36e6	1.72e6	880.3	NO	10.509
12378-PeCDD	31.275	1.001	4.85e5	3.15e5	0.975	1.541	1.550	2911	3916	7.08e6	4.61e6	2431.7	NO	50.369
123478-HxCDD	35.933	1.001	4.45e5	3.54e5	1.031	1.257	1.240	3156	2507	6.67e6	5.31e6	2112.2	NO	48.344
123678-HxCDD	36.054	1.000	4.72e5	3.63e5	0.971	1.299	1.240	3156	2507	6.85e6	5.37e6	2170.5	NO	51.893
123789-HxCDD	36.481	1.012	4.46e5	3.68e5	0.947	1.212	1.240	3156	2507	6.68e6	5.45e6	2117.8	NO	52.835
1234678-HpCDD	40.767	1.000	3.76e5	3.58e5	1.028	1.049	1.050	2392	2275	5.05e6	4.98e6	2110.8	NO	49.913
OCDD	46.460	1.000	5.79e5	6.60e5	1.107	0.878	0.890	1730	1659	6.12e6	7.00e6	3536.0	NO	89.299
13C-2378-TCDF	25.525	1.007	1.37e6	1.77e6	1.567	0.778	0.770	6187	4456	1.96e7	2.53e7	3168.0	NO	100.002
13C-12378-PeCDF	29.664	1.170	1.58e6	1.02e6	1.274	1.547	1.550	2938	3287	2.26e7	1.45e7	7700.6	NO	101.563
13C-23478-PeCDF	31.012	1.223	1.61e6	1.02e6	1.235	1.574	1.550	2938	3287	2.30e7	1.46e7	7830.7	NO	106.613
13C-123478-HxCDF	34.673	0.951	6.76e5	1.30e6	1.381	0.520	0.510	3333	4220	9.91e6	1.90e7	2973.4	NO	91.671
13C-123678-HxCDF	34.826	0.955	7.31e5	1.43e6	1.569	0.510	0.510	3333	4220	1.05e7	2.01e7	3152.8	NO	88.395
13C-234678-HxCDF	35.769	0.981	6.51e5	1.26e6	1.345	0.519	0.510	3333	4220	9.60e6	1.83e7	2879.9	NO	90.806
13C-123789-HxCDF	36.919	1.012	5.98e5	1.15e6	1.183	0.520	0.510	3333	4220	8.72e6	1.68e7	2616.2	NO	94.634
13C-1234678-HpCDF	38.980	1.069	5.14e5	1.14e6	1.178	0.449	0.440	2074	3263	7.62e6	1.70e7	3675.8	NO	90.121
13C-1234789-HpCDF	41.600	1.141	4.17e5	9.18e5	0.878	0.454	0.440	2074	3263	5.36e6	1.19e7	2582.5	NO	97.488
13C-1234-TCDD	25.361	0.000	8.84e5	1.12e6	1.000	0.789	0.770	4359	2276	1.25e7	1.57e7	2865.6	NO	100.000
13C-2378-TCDD	26.168	1.032	8.07e5	1.03e6	0.908	0.782	0.770	4359	2276	1.13e7	1.43e7	2588.7	NO	101.024
13C-12378-PeCDD	31.253	1.232	9.88e5	6.40e5	0.756	1.543	1.550	1305	1029	1.43e7	9.34e6	10976.0	NO	107.464
13C-123478-HxCDD	35.911	0.985	8.93e5	7.09e5	1.056	1.260	1.240	2446	2310	1.33e7	1.07e7	5449.1	NO	97.243
13C-123678-HxCDD	36.043	0.988	9.26e5	7.29e5	1.163	1.270	1.240	2446	2310	1.37e7	1.08e7	5620.6	NO	91.169
13C-1234678-HpCDD	40.745	1.117	7.38e5	6.91e5	0.909	1.068	1.050	2591	2481	1.02e7	9.65e6	3920.3	NO	100.744
13C-OCDD	46.442	1.273	1.18e6	1.32e6	0.820	0.892	0.890	2531	6171	1.21e7	1.35e7	4796.8	NO	195.914

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Name	RT	RRT	Ion1Area	Ion2Area	RRF	Ratio	Pred R	Noise 1	Noise 2	Height 1	Height 2	S/N	EMPC?	pg
13C-23789-HxCDD	36.470	0.000	8.65e5	6.96e5	1.000	1.243	1.240	2446	2310	1.28e7	1.03e7	5226.4	NO	100.000
Total-tetrafurans			4.29e5	0.935			1426			5.94e6				33.033
Total-penta1			9.92e5				806			1.45e7				67.935
Total-pentafurans			2.40e6	0.957			3396			3.48e7				157.336
Total-hexafurans			3.13e6	1.125			4353			4.53e7				257.947
Total-heptafurans			9.65e5	1.310			2753			1.34e7				97.385
Total-Furans			8.61e6	1.114			1426			1.21e8				714.612
Total-tetra-dioxins			5.12e5	1.134			1548			6.58e6				55.482
Total-penta-dioxins			1.91e6	0.975			2911			2.37e7				198.491
Total-hexa-dioxins			1.86e6	0.983			3156			2.74e7				208.501
Total-hepta-dioxins			7.82e5	1.028			2392			1.09e7				104.588
Total-Dioxins			5.64e6	1.028			1548			7.48e7				656.361
Total-TEQ			1.43e7				1548			1.96e8				1370.973
37CL-2378-TCDD	26.183	1.032	2.24e5	1.067			2155			3.19e6		1480.0		10.471
FUNCTION1 PFK			7.19e5				481505			1.49e7				0.000
FUNCTION2 PFK			1.92e5				147535			6.24e6				0.000
FUNCTION3 PFK			1.04e5				423409			2.83e6				0.000
FUNCTION4 PFK			2.39e5				325699			8.63e6				
FUNCTION5 PFK			2.70e5				273945			1.02e7				
FUNCTION1 HXCDPE			2.44e2				412			5.33e3				0.000
FUNCTION1 HPCDPE			1.22e3				915			2.52e4				0.000
FUNCTION2 HPCDPE			8.58e2				1134			1.65e4				0.000
FUNCTION3 OCDPE			0.00e0				392			0.00e0				
FUNCTION4 NCDPE			0.00e0				718			0.00e0				
FUNCTION5 DCDPE			0.00e0				418			0.00e0				

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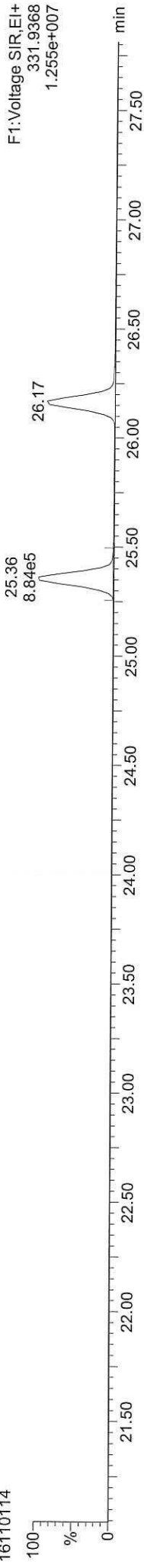
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13C-1234-TCDD

16110114



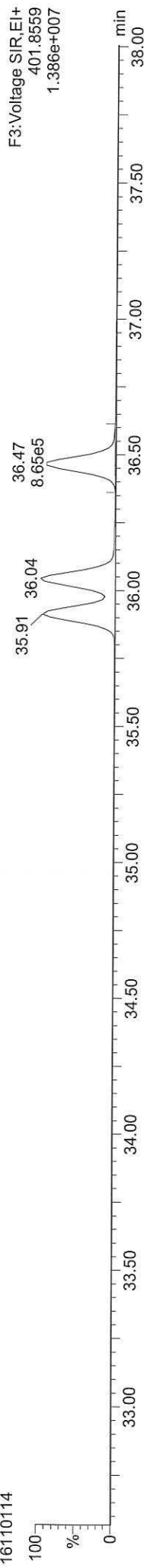
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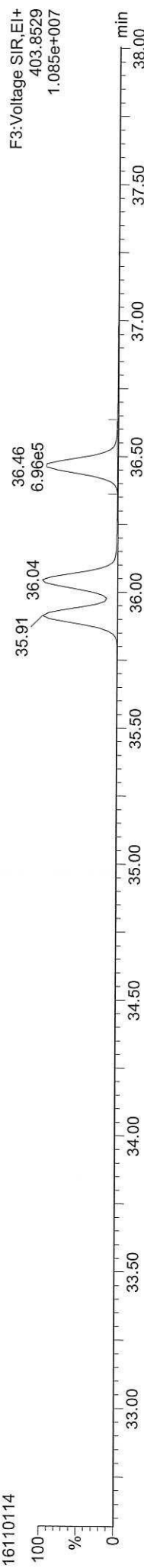
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16110114



13C-123789-HxCDD

16110114



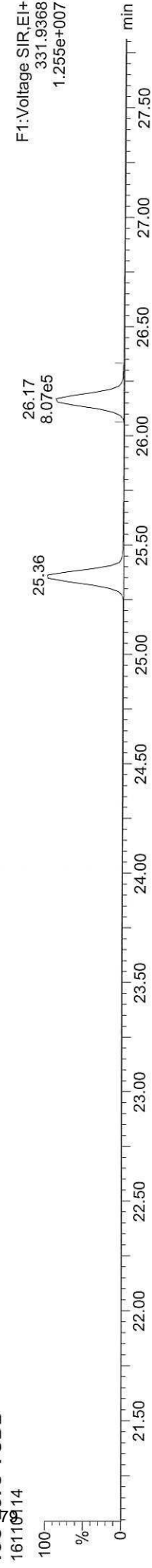
Quantify Sample Report MassLynx MassLynx V4.1 SCN909

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ID: QS302, Name: 16110114, Date: 01-Nov-2016, Time: 21:14:00, Conditions: AUTOSPEC01, User: PK

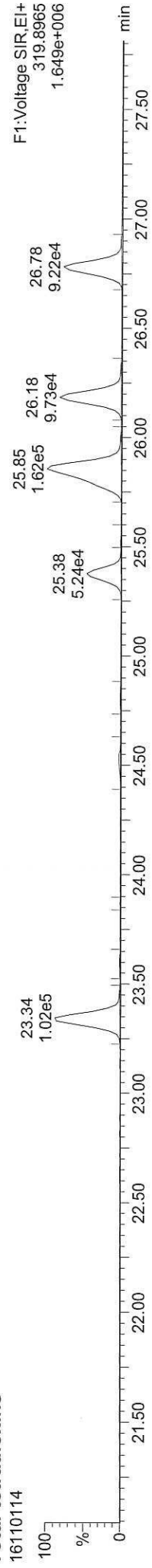
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13C-2378-TCDD



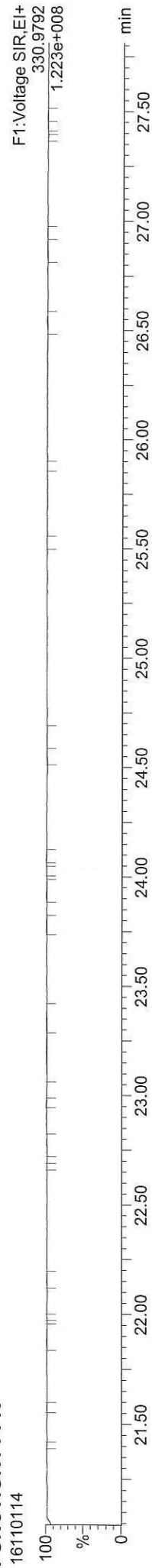
Total-tetradoxins



Total-tetradoxins



FUNCTION1 PFK



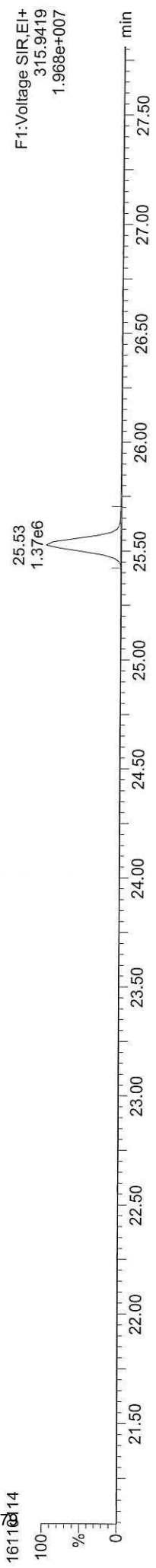
Quantify Sample Report MassLynx MassLynx V4.1 SCN909

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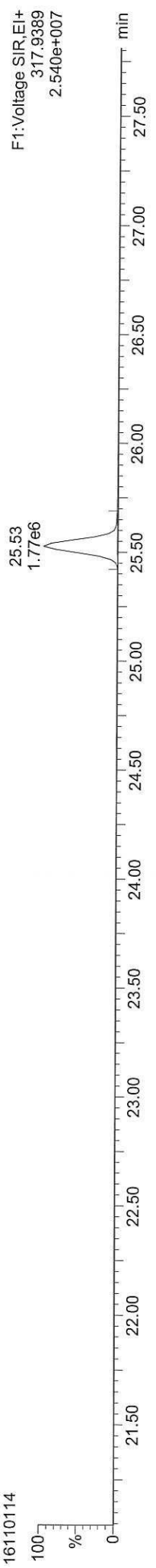
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13C-2378-TCDF



13C-2378-TCDF



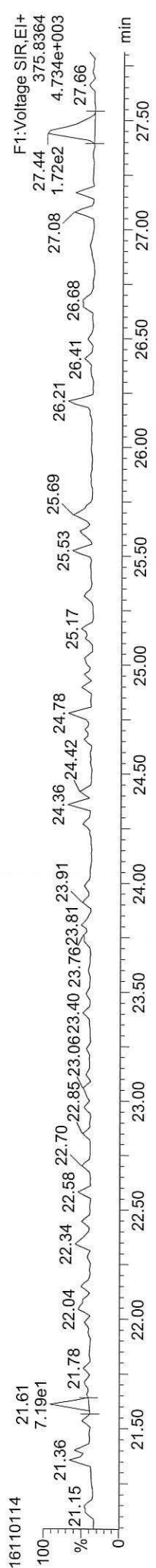
Total-tetrafurans



Total-tetrafurans



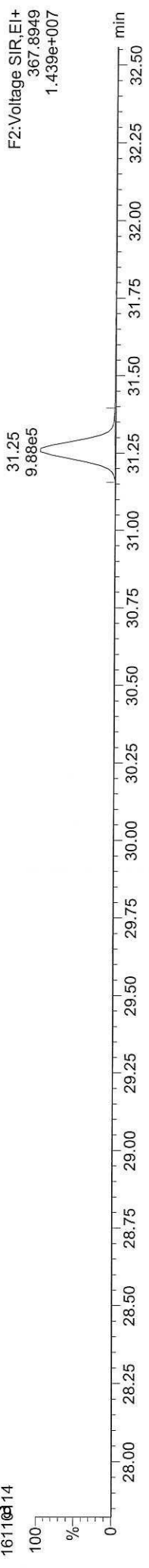
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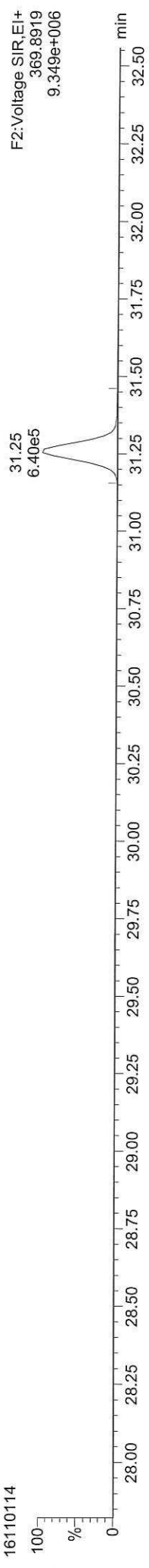
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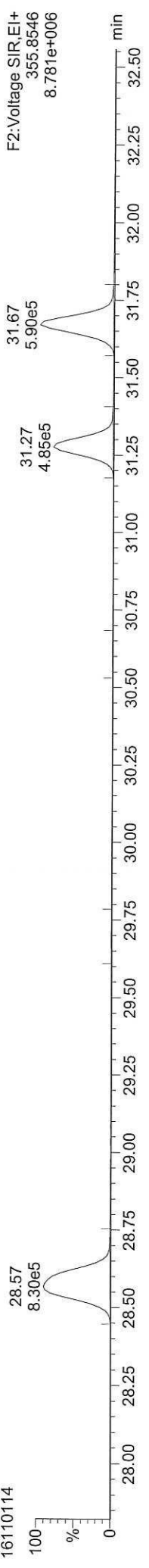
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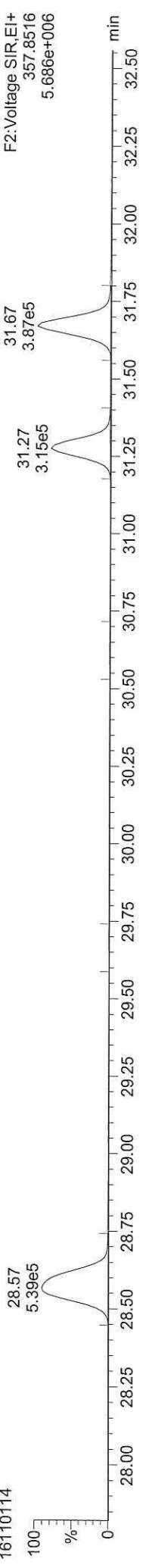
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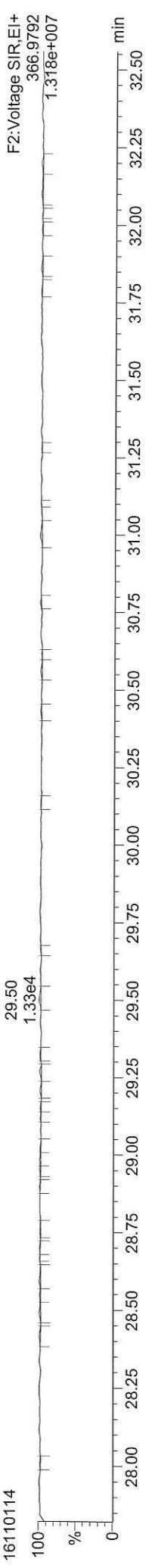
Total-pentadioxins
16110114



Total-pentadioxins
16110114



FUNCTION2 PFK
16110114



Dataset: C:\MassLynx\DIoxin.pro\161101\DATA2.qld

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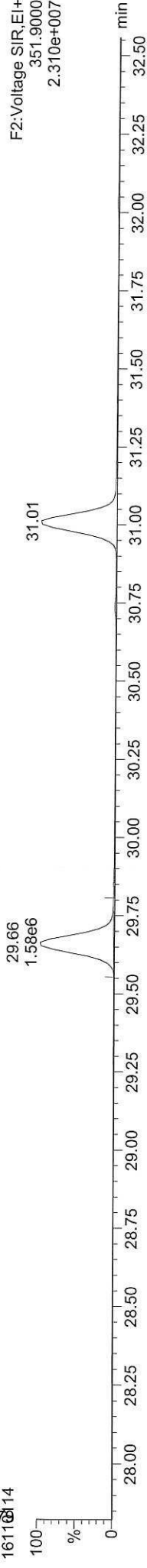
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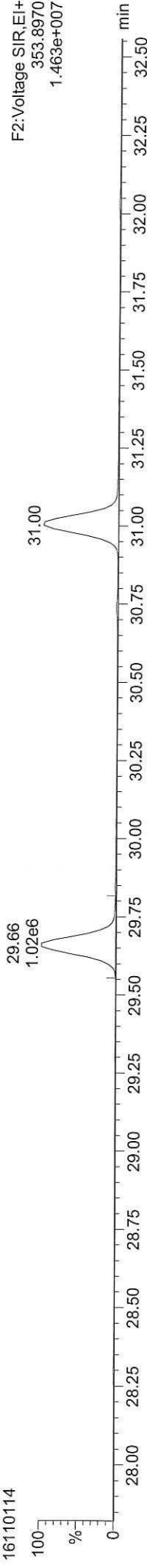
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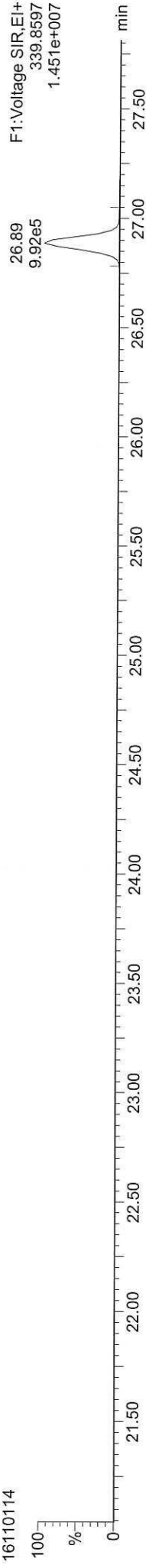
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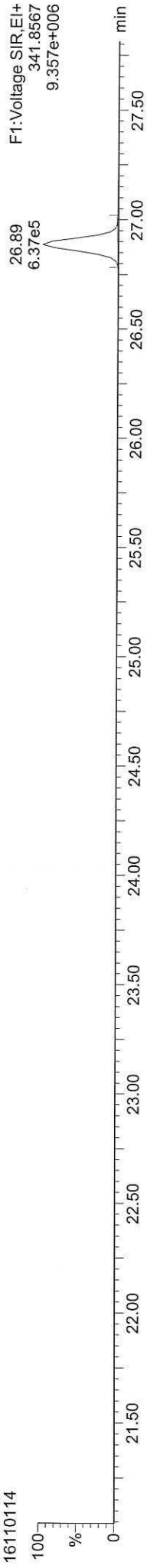
Total-penta1

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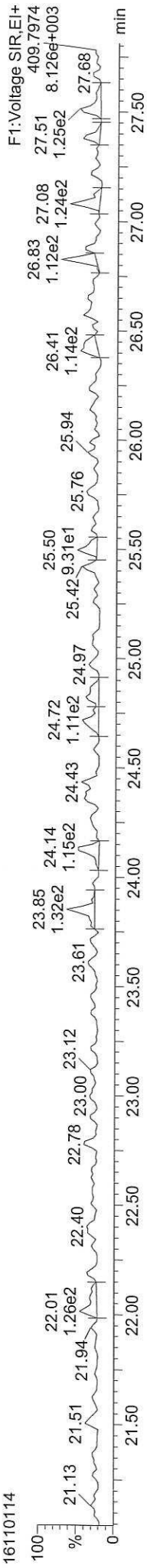
Total-penta1

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FUNCTION1 HPCDPE

16110114



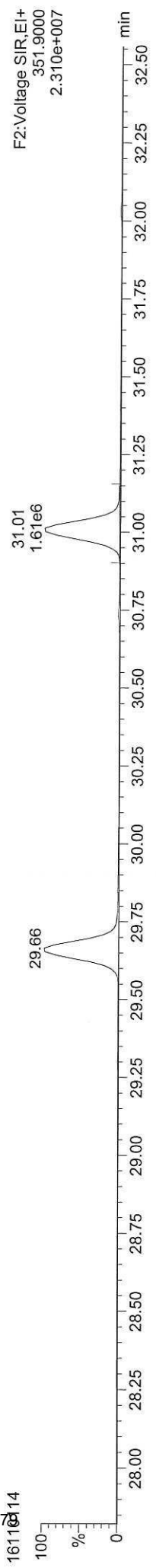
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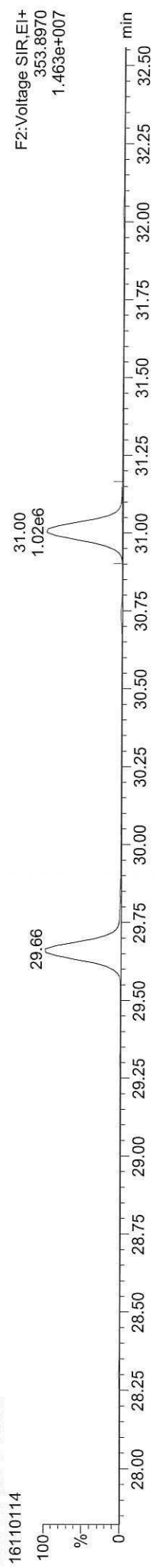
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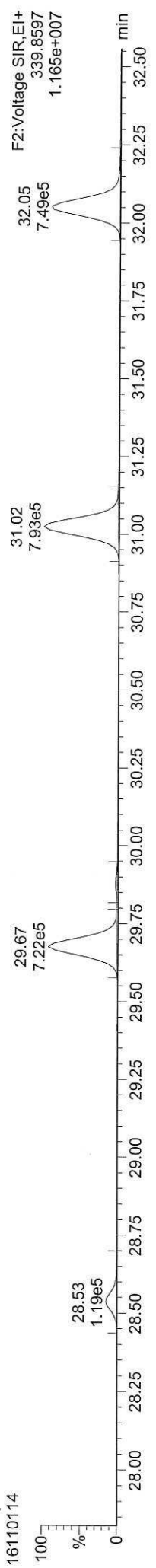
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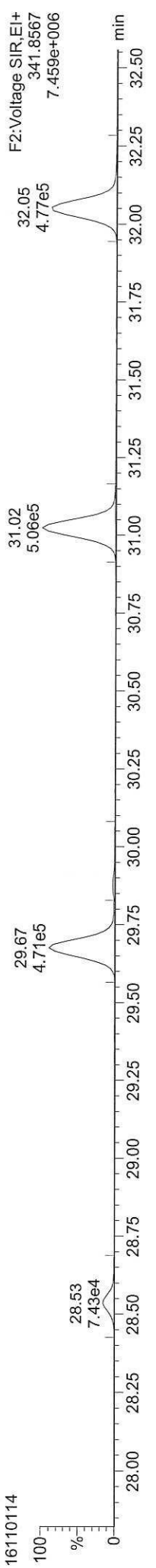
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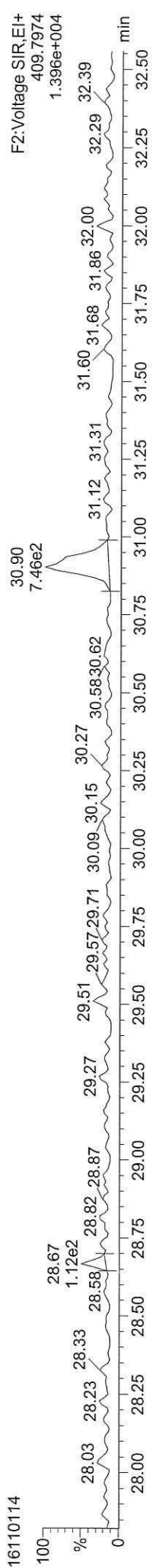
Total-pentafurans



Total-pentafurans



FUNCTION2 HPCDPE



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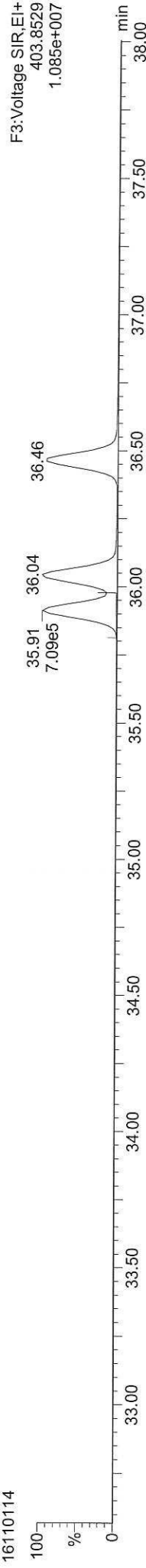
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16110114



13C-123478-HxCDD

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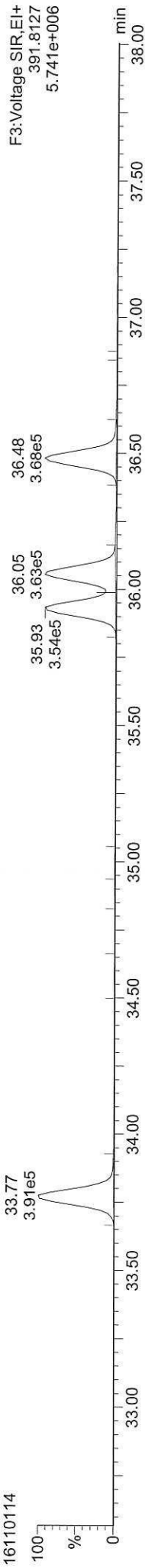
Total-hexadioxins

16110114



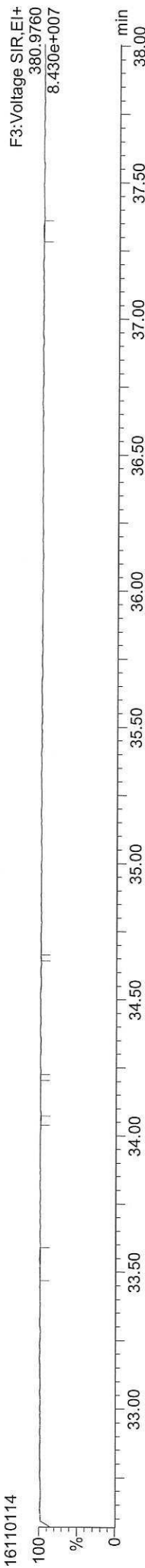
Total-hexadioxins

16110114



FUNCTION3 PFK

16110114



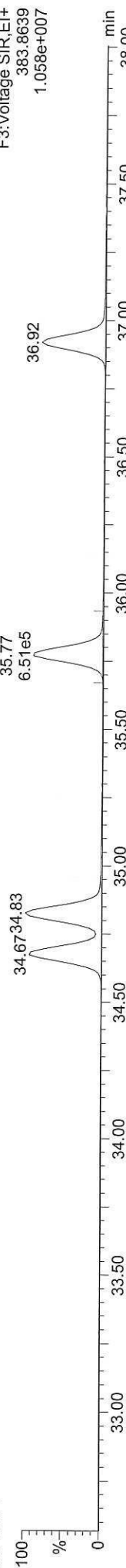
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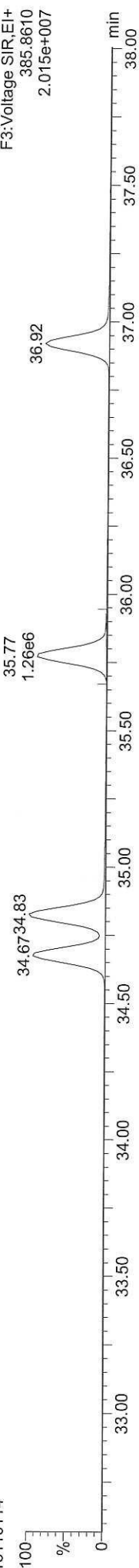
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13C-234678-HxCDF



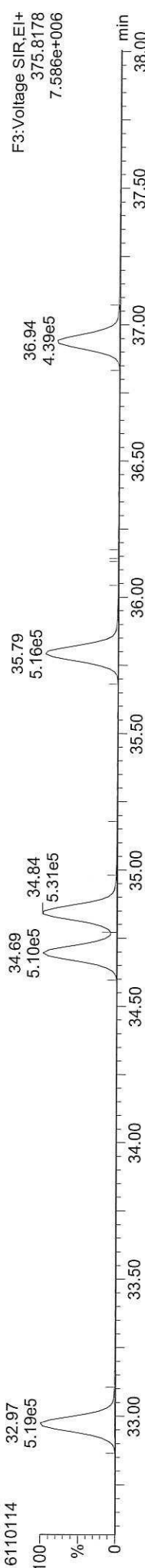
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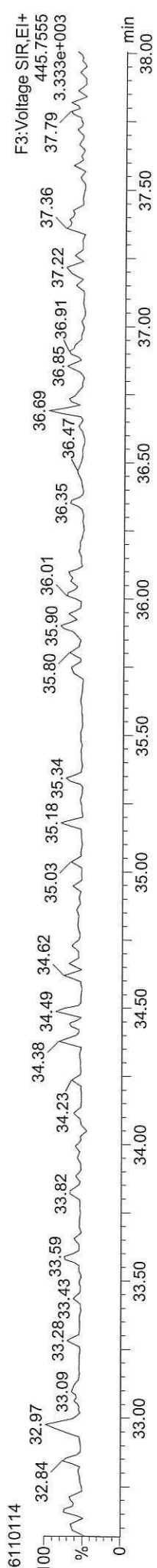
Total-hexafurans



Total-hexafurans



FUNCTION3 OCDPE

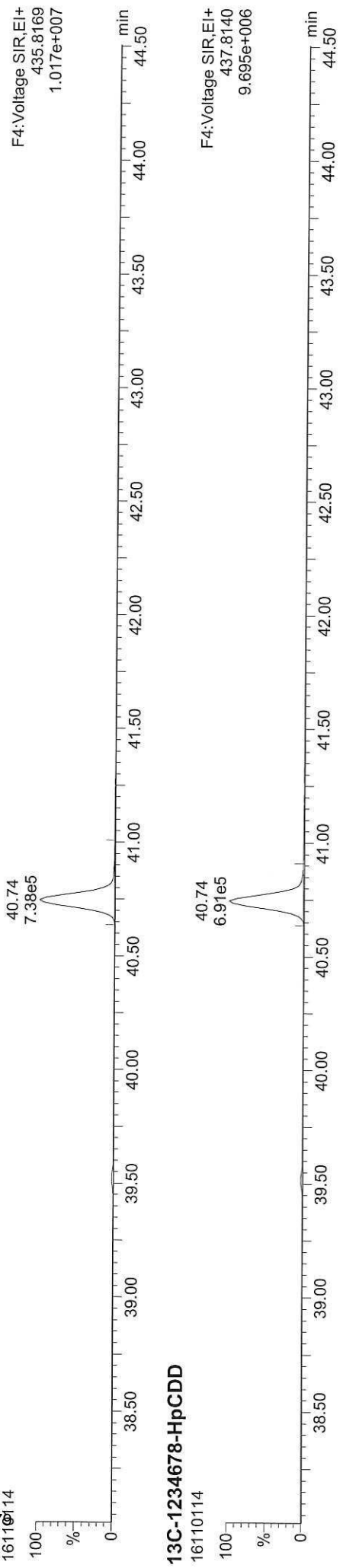


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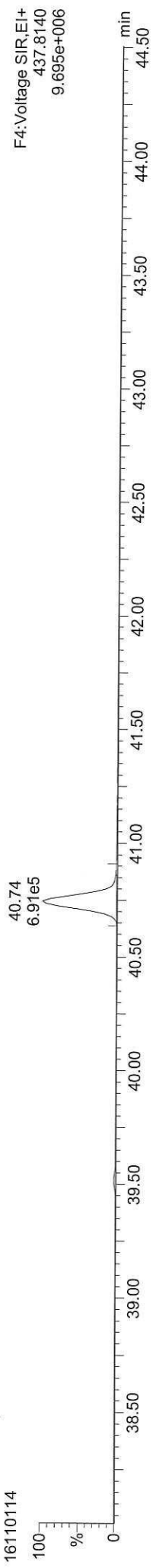
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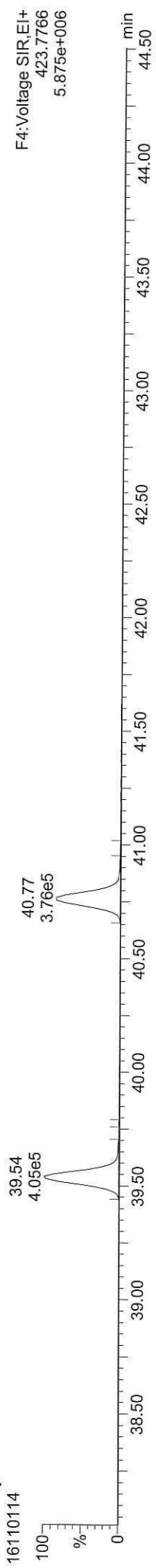
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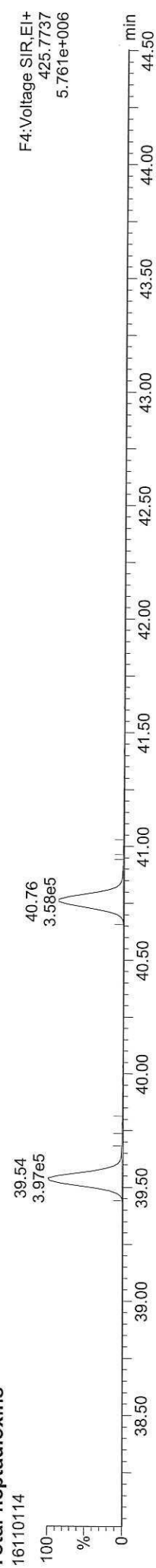
13C-1234678-HpCDD
16110114



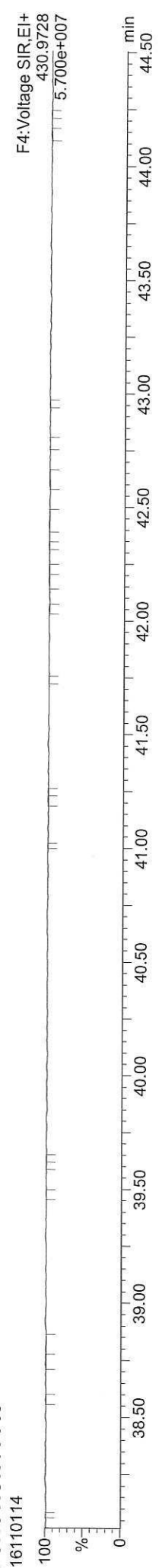
Total-heptadioxins
16110114



Total-heptadioxins
16110114



FUNCTION4 PFK
16110114



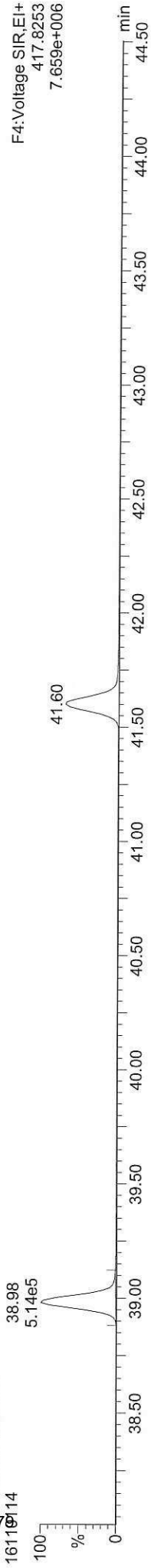
Quantify Sample Report MassLynx MassLynx V4.1 SCN909

Dataset: C:\MassLynx\Dioxin.pro\161101DATA2.qld
Last Altered: Wednesday, November 02, 2016 10:58:20 Pacific Daylight Time
Printed: Wednesday, November 02, 2016 10:59:24 Pacific Daylight Time

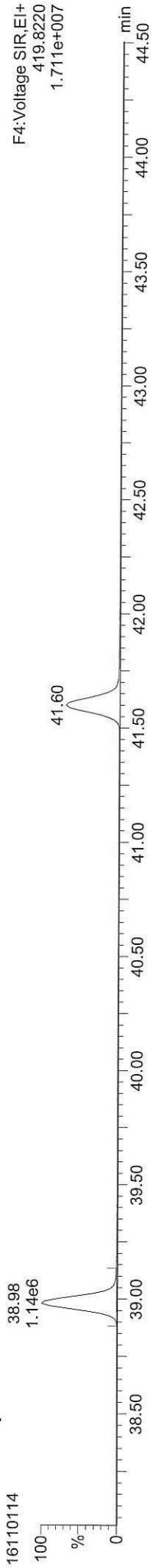
Page 31 of 37

ID: GS302, Name: 16110114, Date: 01-Nov-2016, Time: 21:14:00, Conditions: AUTOSPEC01, User: PK

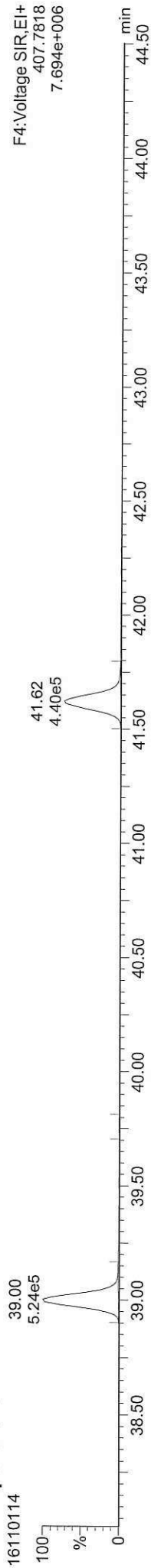
13C-1234678-HpCDF



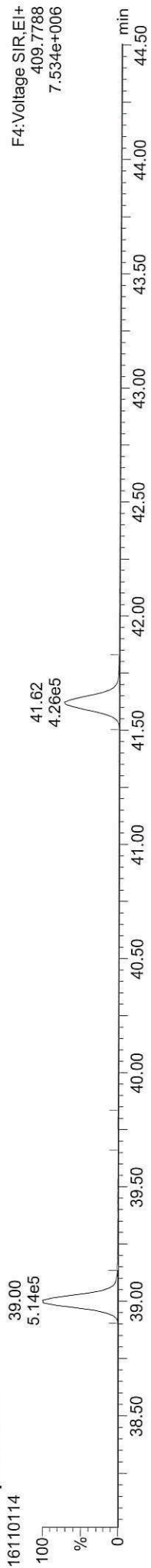
13C-1234678-HpCDF



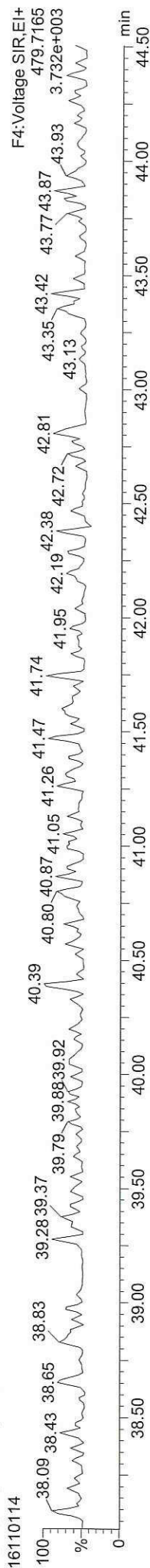
Total-heptafurans



Total-heptafurans



FUNCTION4 NCDPE

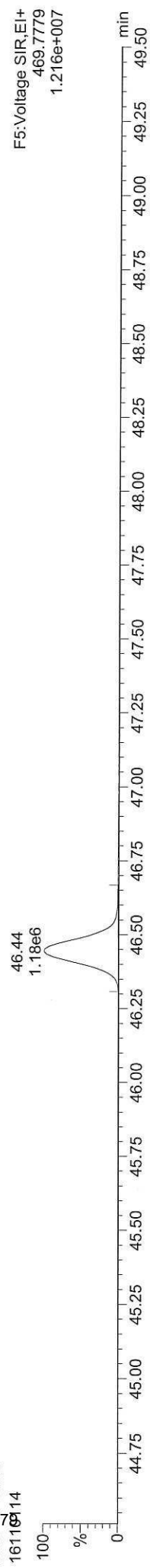


Quantify Sample Report MassLynx MassLynx V4.1 SCN909

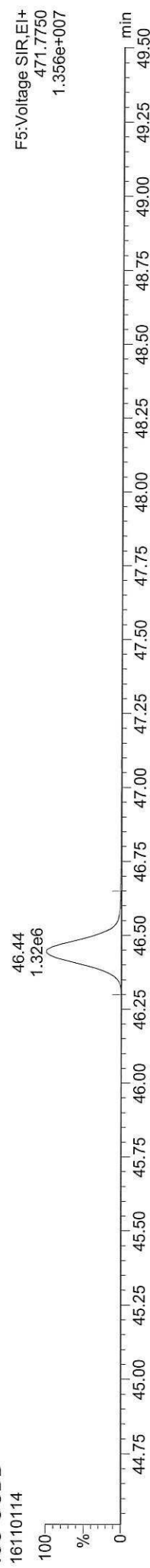
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Last Altered: Wednesday, November 02, 2016 10:58:20 Pacific Daylight Time
Printed: Wednesday, November 02, 2016 10:59:24 Pacific Daylight Time

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13C-OCDD
16110114

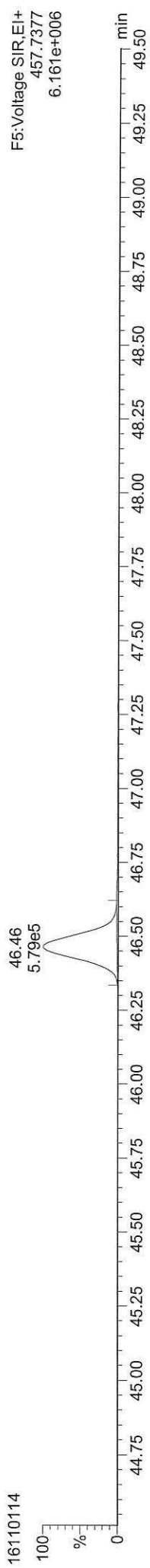
ID: GS302, Name: 16110114, Date: 01-Nov-2016, Time: 21:14:00, Conditions: AUTOSPEC01, User: PK



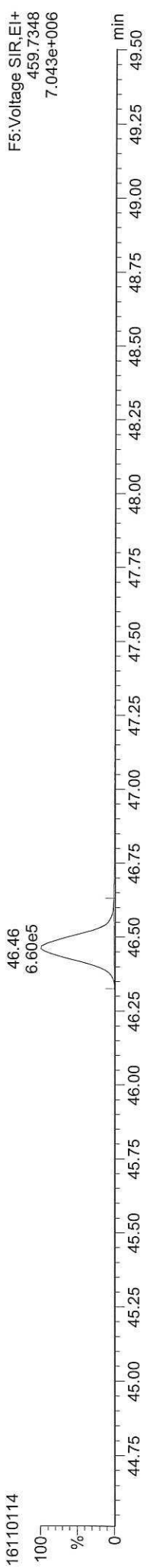
13C-OCDD
16110114



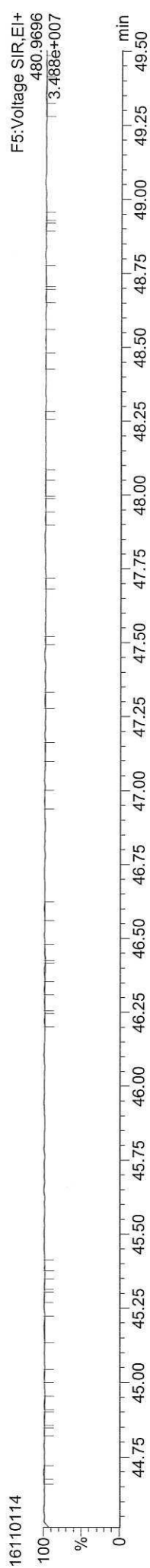
OCDD
16110114



OCDD
16110114



FUNCTION5 PFK
16110114



Quantify Sample Report MassLynx MassLynx V4.1 SCN909

Dataset: C:\MassLynx\Dioxin.pro\1611011\DATA2.qld
Last Altered: Wednesday, November 02, 2016 10:58:20 Pacific Daylight Time
Printed: Wednesday, November 02, 2016 10:59:24 Pacific Daylight Time

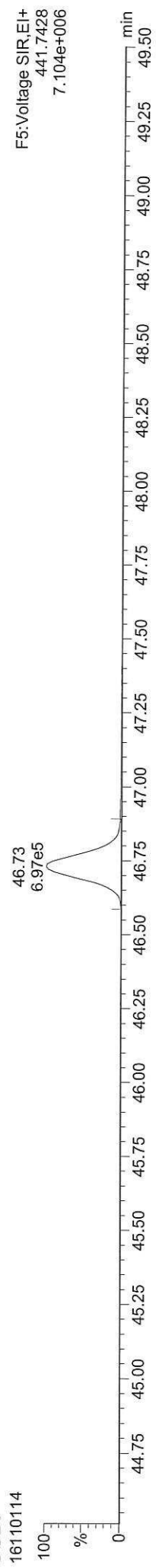
Page 33 of 71

ID: GS302, Name: 16110114, Date: 01-Nov-2016, Time: 21:14:00, Conditions: AUTOSPEC01, User: PK

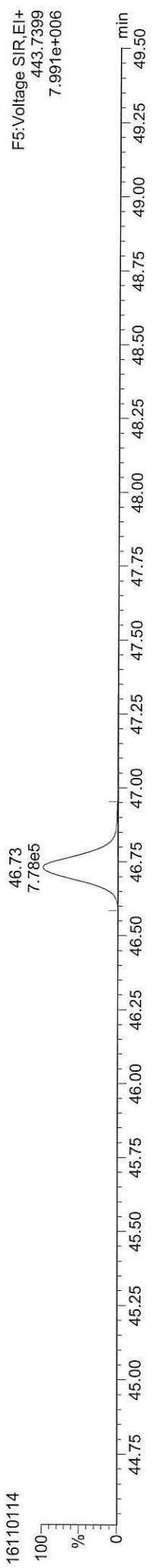
37Cl-2378-TCDD



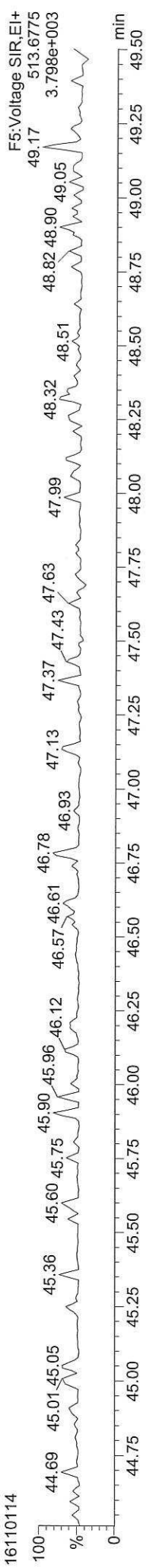
OCDF



OCDF

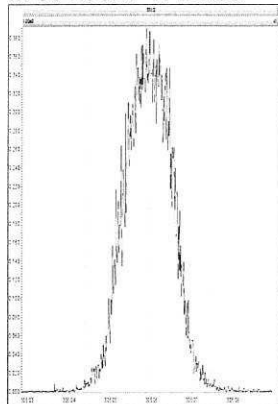


FUNCTION5 DCDPE

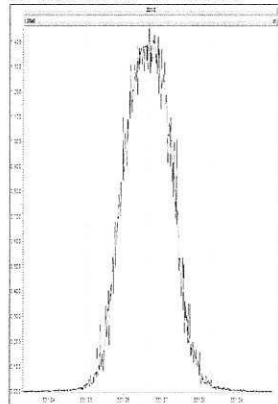


Printed: Tuesday, November 01, 2016 22:11:58 Pacific Daylight Time

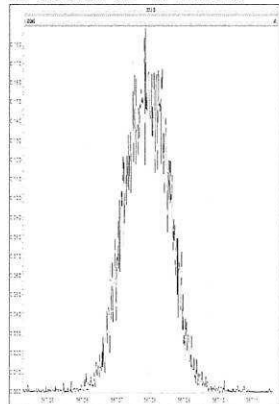
M 304.9824 R 12285



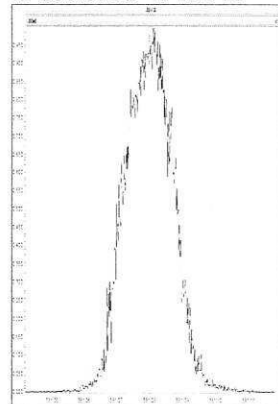
M 330.9792 R 12726



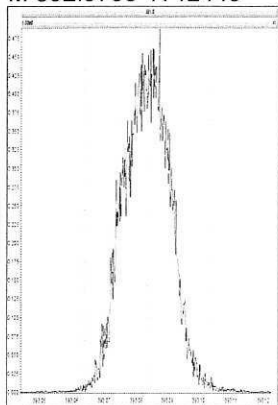
M 366.9792 R 12378



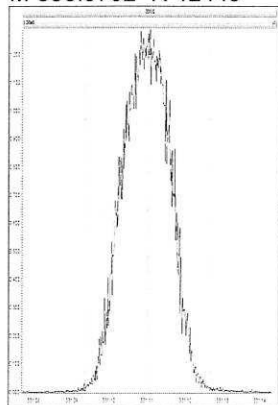
M 380.9760 R 12142



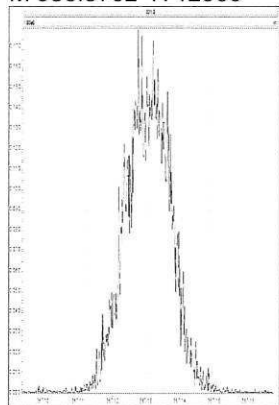
M 392.9760 R 12440



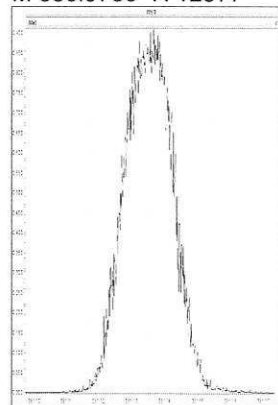
M 330.9792 R 12445



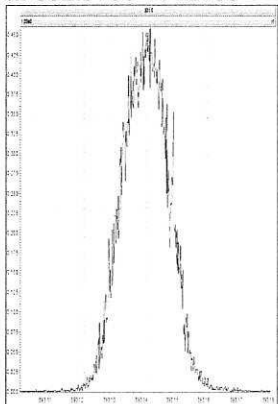
M 366.9792 R 12956



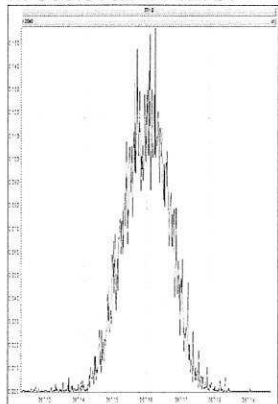
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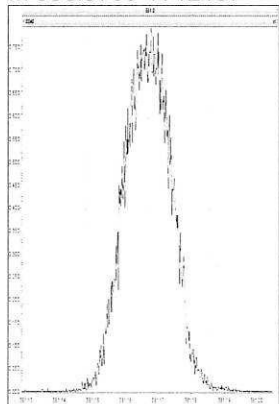
M 392.9760 R 12199



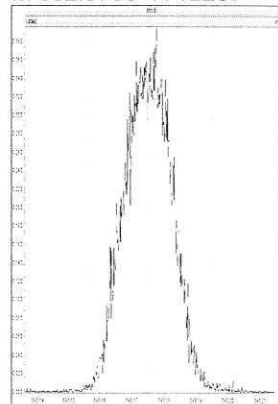
M 366.9792 R 12797



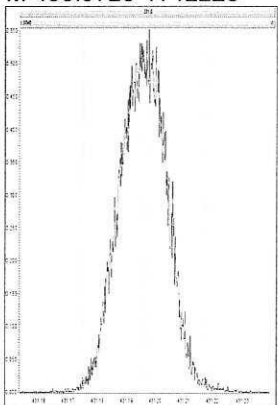
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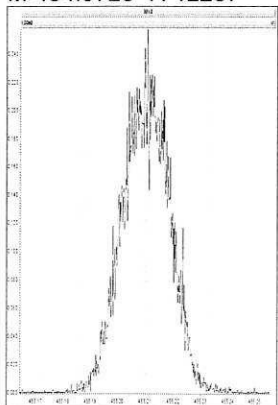
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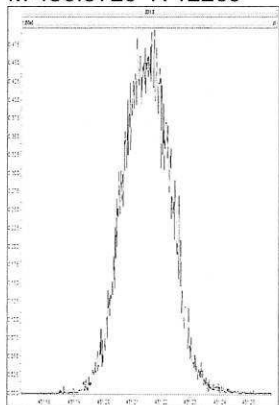
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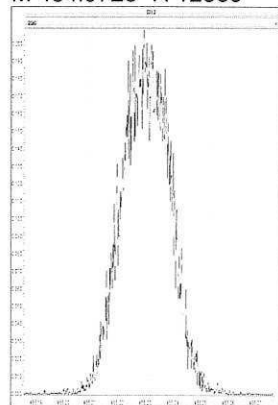
M 454.9728 R 12257



M 430.9728 R 12209

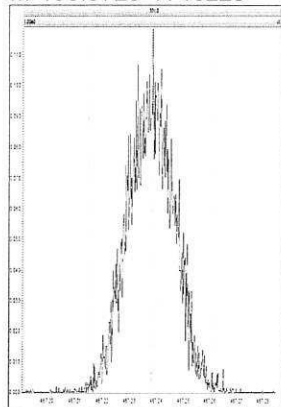


M 454.9728 R 12889

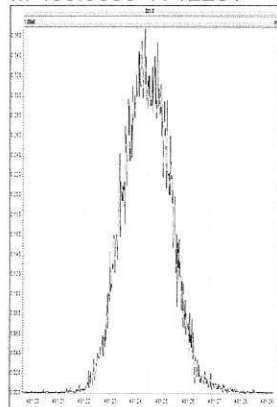


Printed: Tuesday, November 01, 2016 22:11:58 Pacific Daylight Time

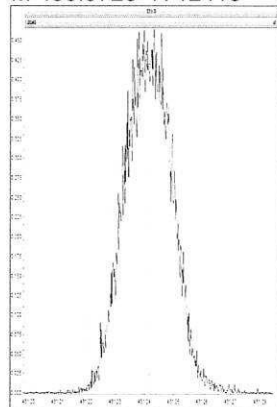
M 466.9728 R 13228



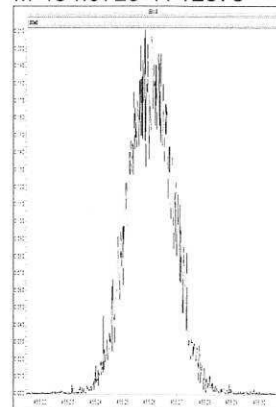
M 480.9696 R 12201



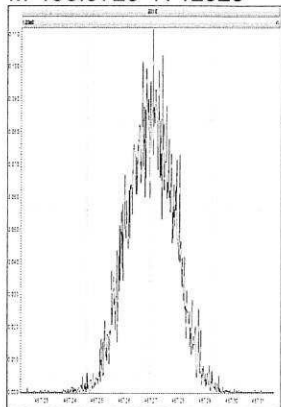
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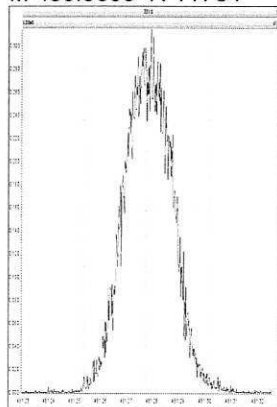
M 454.9728 R 12376



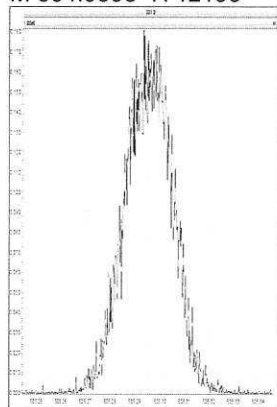
M 466.9728 R 12828



M 480.9696 R 11764



M 504.9696 R 12196





**CDD/CDF CHROMATOGRAPHIC
RESOLUTION SUMMARY
EPA 1613B**

Lab Name: Analytical Resources, Inc. SDG: 16H0147
Instrument .ID: AUTOSPEC01 Lab File ID: 16110103
Date Analyzed: 11/01/16 Time Analyzed: 11:27
Lab Sample ID: SEJ0462-RES1 Sequence: SEJ0462

Percent Valley Determination for Column: RTX-Dioxin2 ID: 0.25 (mm)

1278-TCDD/2378-TCDD: 13.3

3467-TCDF/2378-TCDF: 16.5

Quality Control (QC) Limits: ≤ 25%

Lab Sample ID	Sample Name	Lab File ID	Data Analyzed	Time Analyzed
SEJ0462-ICV1	CS301	16110102	11/01/2016	10:35
SEJ0462-RES1	ISC01	16110103	11/01/2016	11:27
BEJ0775-BLK1	Blank	16110104	11/01/2016	12:23
BEJ0775-BS1	LCS	16110105	11/01/2016	13:15
16H0147-01	PG-T0-MUS-COC-160816	16110106	11/01/2016	14:08
SEJ0462-CCV1	CS302	16110114	11/01/2016	21:14



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 1613B

Laboratory: Analytical Resources, Inc.

SDG: 16H0147

Client: Anchor QEA, LLC

Project: Port Gamble Shellfish Monitoring

Sequence: SEE0076

Instrument: AUTOSPEC01

Calibration: ZE00016

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Cal Standard	SEE0076-CAL1	160510ICAL	Solid	05/10/16 13:36
Cal Standard	SEE0076-CAL2	160510ICAL	Solid	05/10/16 14:27
Cal Standard	SEE0076-CAL3	160510ICAL	Solid	05/10/16 15:30
Cal Standard	SEE0076-CAL4	160510ICAL	Solid	05/10/16 16:22
Cal Standard	SEE0076-CAL5	160510ICAL	Solid	05/10/16 17:15
Cal Standard	SEE0076-CAL6	160510ICAL	Solid	05/10/16 18:09



ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 1613B

Laboratory: Analytical Resources, Inc.

SDG: 16H0147

Client: Anchor QEA, LLC

Project: Port Gamble Shellfish Monitoring

Sequence: SEJ0462

Instrument: AUTOSPEC01

Calibration: ZE00016

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Initial Cal Check	SEJ0462-ICV1	16110102	Tissue	11/01/16 10:35
Resolution Check	SEJ0462-RES1	16110103	Tissue	11/01/16 11:27
Blank	BEJ0775-BLK1	16110104	Tissue	11/01/16 12:23
LCS	BEJ0775-BS1	16110105	Tissue	11/01/16 13:15
PG-T0-MUS-COC-160816	16H0147-01	16110106	Tissue	11/01/16 14:08
Calibration Check	SEJ0462-CCV1	16110114	Tissue	11/01/16 21:14

Port Gamble Shellfish Monitoring

16H0147

Analysis
1613B Dioxin

Matrix
Tissue

Method
EPA 1613B

Checklist: DLM02.2 HR-GC/MS Checklist

#	Checklist Item	Response	Analyst Initials	Date
1	Resolution Check > 10,000 ppm	YES	PK	11/02/2016
2	TCDD/TCDF Resolution <= 25%	YES	PK	11/02/2016
3	PCDF markers >= 10 seconds from scan descriptor switch	YES	PK	11/02/2016
4	ICV/CCV meets %D limits	YES	PK	11/02/2016
5	ICV/CCV Ion ratios within limits	YES	PK	11/02/2016
6	ICV/CCV RRT within limits	YES	PK	11/02/2016
7	Manual integrations have been stamped and signed	NO	PK	11/02/2016
	Comments: <i>EXCEPTION REPORT REQUIRED</i>			
8	Signal/Noise >= 3.0 for all detections	YES	PK	11/02/2016
9	AUTOCHECK: Blank checked for exceedance of criteria	NO *	PK	11/02/2016

Comments:
QC Sample BEJ0775-BLK1 failed criteria for 1,2,3,4,6,7,8-HpCDD in 1613B Dioxin.
MDL = 0.580 ng/kg
MRL = 5.00 ng/kg
Result = 0.0625 ng/kg
Criterion = 0 x RL

QC Sample BEJ0775-BLK1 failed criteria for 1,2,3,7,8,9-HxCDF in 1613B Dioxin.
MDL = 0.490 ng/kg
MRL = 5.00 ng/kg
Result = 0.0899 ng/kg
Criterion = 0 x RL

QC Sample BEJ0775-BLK1 failed criteria for 1,2,3,7,8-PeCDF in 1613B Dioxin.
MDL = 0.470 ng/kg
MRL = 5.00 ng/kg
Result = 0.0396 ng/kg
Criterion = 0 x RL
- Estimated Maximum Possible Concentration qualifier for HRGCMS Dioxin

QC Sample BEJ0775-BLK1 failed criteria for OCDD in 1613B Dioxin.
MDL = 1.83 ng/kg
MRL = 10.0 ng/kg
Result = 0.933 ng/kg
Criterion = 0 x RL
- Estimated Maximum Possible Concentration qualifier for HRGCMS Dioxin

QC Sample BEJ0775-BLK1 failed criteria for OCDF in 1613B Dioxin.
MDL = 0.740 ng/kg

Port Gamble Shellfish Monitoring**16H0147****Analysis**
1613B Dioxin**Matrix**
Tissue**Method**
EPA 1613B**Checklist: DLM02.2 HR-GC/MS Checklist**

#	Checklist Item	Response	Analyst Initials	Date
	MRL = 10.0 ng/kg Result = 0.0923 ng/kg Criterion = 0 x RL - Estimated Maximum Possible Concentration qualifier for HRGCMS Dioxin			
	QC Sample BEJ0775-BLK1 failed criteria for Total HpCDD in 1613B Dioxin. MRL = 1.00 ng/kg Result = 0.170 ng/kg Criterion = 0 x RL			
	QC Sample BEJ0775-BLK1 failed criteria for Total HxCDF in 1613B Dioxin. MRL = 1.00 ng/kg Result = 0.0899 ng/kg Criterion = 0 x RL			
	QC Sample BEJ0775-BLK1 failed criteria for Total PeCDF in 1613B Dioxin. MRL = 1.00 ng/kg Result = 0.0396 ng/kg Criterion = 0 x RL			
	QC Sample BEJ0775-BLK1 failed criteria for Total TCDF in 1613B Dioxin. MRL = 1.00 ng/kg Result = 0.0344 ng/kg Criterion = 0 x RL			
10	AUTOCHECK: Check Extraction and Cleanup Surrogate recoveries	YES *	PK	11/02/2016
11	AUTOCHECK: Check blank spike (OPR) recovery	YES *	PK	11/02/2016
12	Sample values exceeding calibration range Comments: <i>EXCEPTION REPORT REQUIRED</i>	NO	PK	11/02/2016
13	Samples diluted Comments: <i>EXCEPTION REPORT REQUIRED</i>	NO	PK	11/02/2016
14	AUTOCHECK: Check %RPD between sample and sample duplicate	NA *	PK	11/02/2016
15	AUTOCHECK: Check SRM limits for exceedance	NA *	PK	11/02/2016
16	EPA CASE#			12/30/1899
17	Analyst checklist completed (PEER)			12/30/1899
18	Data is locked and status is analyzed (PEER)			12/30/1899
19	Data file, Batch, and Cleanup .pdfs are attached (PEER)			12/30/1899

Port Gamble Shellfish Monitoring

16H0147

Analysis
1613B Dioxin

Matrix
Tissue

Method
EPA 1613B

Checklist: DLM02.2 HR-GC/MS Checklist

#	Checklist Item	Response	Analyst Initials	Date
20	Color warnings have been addressed and (or) qualified (PEER)			12/30/1899
21	Qualifiers have been correctly added (PEER)			12/30/1899
22	Checklist completed and status is peer reviewed (REVIEWER)			12/30/1899
23	Dilutions are linear (50-200%) and appropriate (REVIEWER)			12/30/1899
24	All requested samples have been reported (REVIEWER)			12/30/1899
25	Color warnings have been addressed, narrated and (or) qualified (REVIEWER)			12/30/1899
26	List of samples in this sequence that will require additional runs-verify reshot created (ANALYST)			12/30/1899
27	List of samples in this sequence that are re-analysis or dilutons of samples (ANALYST)			12/30/1899
28	Additional Notes (ANALYST, PEER, and REVIEWER)			12/30/1899

Analytical Resources Inc.: Organics Instrument Log

AutoSpec01 Serial No.: GC=CN10921030, MS=P764

Date: 11/1/16 Analysis: Dioxins Analyst: pk
 GC Program: 8290D Column No: C3519 Column Type: MAX-Dioxin2
 Inj Vol: 1ul Instrument Tune (IPR): Sep2216 1-5 Detector Voltage: 350
 Resolution Check Files: 10:28, 12:11 Curve Date: 5/10/16

IS/SS	Ical/Ccal	LCS/ICV
<u>B2710</u>	<u>B3891</u>	
	<u>E4948</u>	

#	Acq.Date	Acq.Time	File	ID	Comments
1	01-Nov-16	10:35:53	16110102	CS301	
2	01-Nov-16	11:27:37	16110103	ISC01	
3	01-Nov-16	12:23:38	16110104	BEJ0775-BLK1	<u>SET0462</u>
4	01-Nov-16	13:15:02	16110105	BEJ0775-BS1	
5	01-Nov-16	14:08:18	16110106	16H0147-01	
6	01-Nov-16	15:01:29	16110107	16H0268-01	
7	01-Nov-16	15:54:45	16110108	16H0187-01	
8	01-Nov-16	16:47:55	16110109	16H0187-02	
9	01-Nov-16	17:41:04	16110110	16H0187-03	
10	01-Nov-16	18:34:13	16110111	16H0187-04	
11	01-Nov-16	19:27:32	16110112	16H0187-05	
12	01-Nov-16	20:20:40	16110113	16H0187-06	
13	01-Nov-16	21:14:00	16110114	CS302	
14	01-Nov-16	22:12:00	16110115	SURR E6047	

pk 11/2/16

Every line must contain information or be lined out. Make all entries legible.
 Start a new page for each QC period. Document All Maintenance Tasks In Element LIMS

Dataset: C:\MassLynx\Dioxin.pro\161101DATA1.qld
 Last Altered: Tuesday, November 01, 2016 14:19:48 Pacific Daylight Time
 Printed: Tuesday, November 01, 2016 14:20:46 Pacific Daylight Time

pk 11/2/16

Event	Details	Sample ID
Process Extract		
Process Integrate		
Process Quantify		
Dataset Created		
Pre modification peak	Sample:16110104, Compound: <u>OF</u> , RT:46.828	1
Peak modified	Sample:16110104, Compound:OF, RT:46.828	1
Pre modification peak	Sample:16110104, Compound:OF, RT:46.810	1
Peak modified	Sample:16110104, Compound:OF, RT:46.810	1
Peak modified	Sample:16110104, Compound:OF, RT:46.828	1
Pre modification peak	Sample:16110104, Compound:OF, RT:46.810	1
Peak modified	Sample:16110104, Compound:OF, RT:46.810	1
Peak deleted	Sample:16110104, Compound:TF, RT:25.720	1
Peak deleted	Sample:16110104, Compound:TF, RT:25.585	1
Pre modification peak	Sample:16110104, Compound: <u>TF</u> , RT:27.079	1
Peak modified	Sample:16110104, Compound:TF, RT:27.079	1
Peak deleted	Sample:16110104, Compound:PF, RT:31.045	1
Peak deleted	Sample:16110104, Compound:HF, RT:35.824	1
Pre modification peak	Sample:16110104, Compound: <u>HF</u> , RT:36.985	1
Peak modified	Sample:16110104, Compound:HF, RT:36.985	1
Peak deleted	Sample:16110104, Compound:HPF, RT:40.383	1
Peak deleted	Sample:16110104, Compound:HPF, RT:40.033	1
Peak deleted	Sample:16110104, Compound:HPF, RT:39.967	1
Peak deleted	Sample:16110104, Compound:HPF, RT:39.342	1
Peak deleted	Sample:16110104, Compound:PD, RT:29.685	1
Pre modification peak	Sample:16110104, Compound: <u>HPD</u> , RT:39.583	1
Peak modified	Sample:16110104, Compound:HPD, RT:39.583	1
Peak deleted	Sample:16110105, Compound:TF, RT:25.884	2
Peak deleted	Sample:16110105, Compound:HF, RT:35.111	2
Peak deleted	Sample:16110105, Compound:HF, RT:35.056	2
Peak deleted	Sample:16110105, Compound:HF, RT:36.043	2
Peak deleted	Sample:16110105, Compound:HD, RT:36.843	2
Peak deleted	Sample:16110105, Compound:HD, RT:36.931	2
Dataset Saved	Saved to 'C:\MassLynx\Dioxin.pro\161101DATA1.qld'	

Dataset: C:\MassLynx\Dioxin.pro\161101DATA2.qld
 Last Altered: Wednesday, November 02, 2016 11:00:34 Pacific Daylight Time
 Printed: Wednesday, November 02, 2016 11:01:08 Pacific Daylight Time

Event	Details	Sample ID
Process Extract		
Process Integrate		
Process Quantify		
Dataset Created		
Dataset Saved	Saved to 'C:\MassLynx\Dioxin.pro\161101DATA2.qld'	
Pre modification peak	Sample:16110106, Compound: <u>OF</u> , RT:46.784	1
Peak modified	Sample:16110106, Compound:OF, RT:46.784	1
Peak deleted	Sample:16110106, Compound:TD, RT:26.213	1
Peak deleted	Sample:16110106, Compound:TF, RT:24.479	1
Peak deleted	Sample:16110106, Compound:TF, RT:24.270	1
Peak deleted	Sample:16110106, Compound:TF, RT:24.046	1
Peak deleted	Sample:16110106, Compound:TF, RT:23.822	1
Peak deleted	Sample:16110106, Compound:TF, RT:23.195	1
Peak deleted	Sample:16110106, Compound:TF, RT:24.704	1
Peak deleted	Sample:16110106, Compound:TF, RT:24.001	1
Peak deleted	Sample:16110106, Compound:TF, RT:26.631	1
Peak deleted	Sample:16110106, Compound:PP, RT:26.975	1
Peak deleted	Sample:16110106, Compound:PP, RT:26.930	1
Peak deleted	Sample:16110106, Compound:PF, RT:28.327	1
Peak deleted	Sample:16110106, Compound:PF, RT:28.294	1
Peak deleted	Sample:16110106, Compound:PF, RT:30.025	1
Peak deleted	Sample:16110106, Compound:PF, RT:32.152	1
Peak deleted	Sample:16110106, Compound:PF, RT:31.078	1
Peak deleted	Sample:16110106, Compound:HF, RT:33.204	1
Peak deleted	Sample:16110106, Compound:HF, RT:34.114	1
Peak deleted	Sample:16110106, Compound:HF, RT:34.059	1
Peak deleted	Sample:16110106, Compound:HF, RT:33.248	1
Peak deleted	Sample:16110106, Compound:HF, RT:34.815	1
Peak deleted	Sample:16110106, Compound:HF, RT:34.914	1
Peak deleted	Sample:16110106, Compound:HF, RT:34.859	1
Pre modification peak	Sample:16110106, Compound: <u>HPF</u> , RT:39.825	1
Peak modified	Sample:16110106, Compound:HPF, RT:39.825	1
Pre modification peak	Sample:16110106, Compound:HPF, RT:39.046	1
Peak modified	Sample:16110106, Compound:HPF, RT:39.046	1
Pre modification peak	Sample:16110106, Compound:HPF, RT:41.655	1
Peak modified	Sample:16110106, Compound:HPF, RT:41.655	1
Pre modification peak	Sample:16110106, Compound:HPF, RT:41.633	1
Peak modified	Sample:16110106, Compound:HPF, RT:41.633	1
Peak deleted	Sample:16110106, Compound:TD, RT:24.689	1
Peak deleted	Sample:16110106, Compound:TD, RT:24.569	1
Peak deleted	Sample:16110106, Compound:TD, RT:23.762	1
Peak deleted	Sample:16110106, Compound:PD, RT:28.612	1
Pre modification peak	Sample:16110106, Compound: <u>PD</u> , RT:31.286	1
Peak modified	Sample:16110106, Compound:PD, RT:31.286	1
Peak deleted	Sample:16110106, Compound:PD, RT:30.048	1
Pre modification peak	Sample:16110106, Compound:PD, RT:31.297	1
Peak modified	Sample:16110106, Compound:PD, RT:31.297	1
Peak deleted	Sample:16110106, Compound:HD, RT:35.035	1
Peak deleted	Sample:16110106, Compound:HD, RT:34.848	1
Peak deleted	Sample:16110106, Compound:HD, RT:34.706	1
Peak deleted	Sample:16110106, Compound:HD, RT:35.977	1
Page 24 of 679	Sample:16110106, Compound:HD, RT:35.769	1
Pre modification peak	Sample:16110106, Compound: <u>HPD</u> , RT:40.800	1

Dataset: C:\MassLynx\Dioxin.pro\161101DATA2.qld

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Printed: Wednesday, November 02, 2016 11:01:08 Pacific Daylight Time

Event	Details	Sample ID
Peak modified	Sample:16110106, Compound:HPD, RT:40.800	1
Pre modification peak	Sample:16110107, Compound:OF, RT:46.793	2
Peak modified	Sample:16110107, Compound:OF, RT:46.793	2
Pre modification peak	Sample:16110107, Compound:OF, RT:46.856	2
Peak modified	Sample:16110107, Compound:OF, RT:46.856	2
Pre modification peak	Sample:16110107, Compound:OD, RT:46.560	2
Peak modified	Sample:16110107, Compound:OD, RT:46.560	2
Peak deleted	Sample:16110107, Compound:TF, RT:23.135	2
Peak deleted	Sample:16110107, Compound:TF, RT:22.941	2
Peak deleted	Sample:16110107, Compound:TF, RT:22.343	2
Peak deleted	Sample:16110107, Compound:TF, RT:22.074	2
Peak deleted	Sample:16110107, Compound:TF, RT:24.017	2
Peak deleted	Sample:16110107, Compound:TF, RT:23.837	2
Peak deleted	Sample:16110107, Compound:TF, RT:23.344	2
Peak deleted	Sample:16110107, Compound:TF, RT:25.316	2
Peak deleted	Sample:16110107, Compound:TF, RT:24.883	2
Peak deleted	Sample:16110107, Compound:TF, RT:24.674	2
Peak deleted	Sample:16110107, Compound:TF, RT:24.271	2
Pre modification peak	Sample:16110107, Compound:TF, RT:24.494	2
Peak modified	Sample:16110107, Compound:TF, RT:24.494	2
Peak deleted	Sample:16110107, Compound:TF, RT:26.825	2
Peak deleted	Sample:16110107, Compound:TF, RT:26.765	2
Peak deleted	Sample:16110107, Compound:TF, RT:25.809	2
Pre modification peak	Sample:16110107, Compound:PF, RT:28.568	2
Peak modified	Sample:16110107, Compound:PF, RT:28.568	2
Peak deleted	Sample:16110107, Compound:PF, RT:29.017	2
Peak deleted	Sample:16110107, Compound:PF, RT:28.930	2
Pre modification peak	Sample:16110107, Compound:PF, RT:28.568	2
Peak modified	Sample:16110107, Compound:PF, RT:28.568	2
Peak deleted	Sample:16110107, Compound:PF, RT:29.664	2
Peak deleted	Sample:16110107, Compound:PF, RT:31.089	2
Peak deleted	Sample:16110107, Compound:PF, RT:32.152	2
Peak deleted	Sample:16110107, Compound:HF, RT:34.761	2
Peak deleted	Sample:16110107, Compound:HPF, RT:39.189	2
Pre modification peak	Sample:16110107, Compound:HPF, RT:39.847	2
Peak modified	Sample:16110107, Compound:HPF, RT:39.847	2
Peak deleted	Sample:16110107, Compound:TD, RT:27.020	2
Peak deleted	Sample:16110107, Compound:TD, RT:26.213	2
Peak deleted	Sample:16110107, Compound:PD, RT:28.568	2
Peak deleted	Sample:16110107, Compound:HD, RT:35.813	2
Peak deleted	Sample:16110107, Compound:HD, RT:34.717	2
Pre modification peak	Sample:16110108, Compound:OF, RT:46.783	3
Peak modified	Sample:16110108, Compound:OF, RT:46.783	3
Pre modification peak	Sample:16110108, Compound:OF, RT:46.756	3
Peak modified	Sample:16110108, Compound:OF, RT:46.756	3
Peak deleted	Sample:16110108, Compound:TF, RT:22.089	3
Peak deleted	Sample:16110108, Compound:TF, RT:23.807	3
Peak deleted	Sample:16110108, Compound:TF, RT:23.702	3
Peak deleted	Sample:16110108, Compound:TF, RT:23.553	3
Peak deleted	Sample:16110108, Compound:TF, RT:23.329	3
Peak deleted	Sample:16110108, Compound:TF, RT:23.224	3
Peak deleted	Sample:16110108, Compound:TF, RT:23.075	3
Peak deleted	Sample:16110108, Compound:TF, RT:24.913	3

Dataset: C:\MassLynx\Dioxin.pro\161101DATA2.qld

Last Altered: Wednesday, November 02, 2016 11:00:34 Pacific Daylight Time

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Event	Details	Sample ID
Peak deleted	Sample:16110108, Compound:TF, RT:24.255	3
Pre modification peak	Sample:16110108, Compound:TF, RT:24.509	3
Peak modified	Sample:16110108, Compound:TF, RT:24.509	3
Peak deleted	Sample:16110108, Compound:TF, RT:25.406	3
Peak deleted	Sample:16110108, Compound:TF, RT:25.316	3
Peak deleted	Sample:16110108, Compound:TF, RT:25.376	3
Pre modification peak	Sample:16110108, Compound:PF, RT:28.545	3
Peak modified	Sample:16110108, Compound:PF, RT:28.545	3
Pre modification peak	Sample:16110108, Compound:PF, RT:28.556	3
Peak modified	Sample:16110108, Compound:PF, RT:28.556	3
Peak deleted	Sample:16110108, Compound:HF, RT:34.070	3
Peak deleted	Sample:16110108, Compound:TD, RT:24.674	3
Peak deleted	Sample:16110108, Compound:PD, RT:28.655	3
Peak deleted	Sample:16110108, Compound:PD, RT:28.578	3
Peak deleted	Sample:16110108, Compound:PD, RT:31.308	3
Peak deleted	Sample:16110108, Compound:PD, RT:29.938	3
Peak deleted	Sample:16110108, Compound:HD, RT:34.936	3
Peak deleted	Sample:16110108, Compound:HD, RT:36.076	3
Pre modification peak	Sample:16110109, Compound:OF, RT:46.748	4
Peak modified	Sample:16110109, Compound:OF, RT:46.748	4
Pre modification peak	Sample:16110109, Compound:OF, RT:46.766	4
Peak modified	Sample:16110109, Compound:OF, RT:46.766	4
Peak deleted	Sample:16110109, Compound:TF, RT:22.223	4
Peak deleted	Sample:16110109, Compound:TF, RT:22.074	4
Peak deleted	Sample:16110109, Compound:TF, RT:23.777	4
Peak deleted	Sample:16110109, Compound:TF, RT:23.628	4
Peak deleted	Sample:16110109, Compound:TF, RT:23.314	4
Peak deleted	Sample:16110109, Compound:TF, RT:23.240	4
Peak deleted	Sample:16110109, Compound:TF, RT:23.090	4
Peak deleted	Sample:16110109, Compound:TF, RT:24.644	4
Peak deleted	Sample:16110109, Compound:TF, RT:24.240	4
Peak deleted	Sample:16110109, Compound:TF, RT:25.391	4
Peak deleted	Sample:16110109, Compound:TF, RT:25.286	4
Peak deleted	Sample:16110109, Compound:TF, RT:25.197	4
Peak deleted	Sample:16110109, Compound:TF, RT:25.077	4
Peak deleted	Sample:16110109, Compound:TF, RT:25.331	4
Peak deleted	Sample:16110109, Compound:TF, RT:25.047	4
Pre modification peak	Sample:16110109, Compound:PF, RT:28.546	4
Peak modified	Sample:16110109, Compound:PF, RT:28.546	4
Peak deleted	Sample:16110109, Compound:PF, RT:28.260	4
Peak deleted	Sample:16110109, Compound:PF, RT:28.305	4
Peak deleted	Sample:16110109, Compound:PF, RT:31.045	4
Peak deleted	Sample:16110109, Compound:PF, RT:30.058	4
Peak deleted	Sample:16110109, Compound:PF, RT:29.697	4
Peak deleted	Sample:16110109, Compound:HF, RT:34.848	4
Peak deleted	Sample:16110109, Compound:HF, RT:33.160	4
Peak deleted	Sample:16110109, Compound:HF, RT:36.920	4
Pre modification peak	Sample:16110109, Compound:HF, RT:36.964	4
Peak modified	Sample:16110109, Compound:HF, RT:36.964	4
Pre modification peak	Sample:16110109, Compound:HF, RT:36.953	4
Peak modified	Sample:16110109, Compound:HF, RT:36.953	4
Peak deleted	Sample:16110109, Compound:TD, RT:25.525	4
Peak deleted	Sample:16110109, Compound:PD, RT:29.708	4

Dataset: C:\MassLynx\Dioxin.pro\161101DATA2.qld

Last Altered: Wednesday, November 02, 2016 11:00:34 Pacific Daylight Time

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Event	Details	Sample ID
Peak deleted	Sample:16110109, Compound:PD, RT:31.264	4
Peak deleted	Sample:16110109, Compound:HD, RT:35.089	4
Pre modification peak	Sample:16110109, Compound:HD, RT:34.991	4
Peak modified	Sample:16110109, Compound:HD, RT:34.991	4
Peak deleted	Sample:16110109, Compound:HD, RT:34.465	4
Peak deleted	Sample:16110109, Compound:HD, RT:34.015	4
Pre modification peak	Sample:16110109, Compound:HD, RT:34.991	4
Peak modified	Sample:16110109, Compound:HD, RT:34.991	4
Peak deleted	Sample:16110109, Compound:HD, RT:36.931	4
Peak deleted	Sample:16110109, Compound:HD, RT:36.492	4
Peak deleted	Sample:16110109, Compound:HD, RT:35.824	4
Pre modification peak	Sample:16110110, Compound:OF, RT:46.766	5
Peak modified	Sample:16110110, Compound:OF, RT:46.766	5
Pre modification peak	Sample:16110110, Compound:OF, RT:46.730	5
Peak modified	Sample:16110110, Compound:OF, RT:46.730	5
Peak deleted	Sample:16110110, Compound:TF, RT:22.089	5
Peak deleted	Sample:16110110, Compound:TF, RT:22.747	5
Peak deleted	Sample:16110110, Compound:TF, RT:22.328	5
Peak deleted	Sample:16110110, Compound:TF, RT:23.314	5
Peak deleted	Sample:16110110, Compound:TF, RT:23.075	5
Pre modification peak	Sample:16110110, Compound:TF, RT:22.941	5
Peak modified	Sample:16110110, Compound:TF, RT:22.941	5
Peak deleted	Sample:16110110, Compound:TF, RT:25.062	5
Peak deleted	Sample:16110110, Compound:TF, RT:24.868	5
Peak deleted	Sample:16110110, Compound:TF, RT:24.240	5
Peak deleted	Sample:16110110, Compound:TF, RT:25.361	5
Peak deleted	Sample:16110110, Compound:TF, RT:25.406	5
Peak deleted	Sample:16110110, Compound:TF, RT:26.795	5
Pre modification peak	Sample:16110110, Compound:TF, RT:25.824	5
Peak modified	Sample:16110110, Compound:TF, RT:25.824	5
Peak deleted	Sample:16110110, Compound:PF, RT:28.655	5
Peak deleted	Sample:16110110, Compound:PF, RT:31.034	5
Peak deleted	Sample:16110110, Compound:PF, RT:29.708	5
Peak deleted	Sample:16110110, Compound:HF, RT:34.092	5
Pre modification peak	Sample:16110110, Compound:HF, RT:34.049	5
Peak modified	Sample:16110110, Compound:HF, RT:34.049	5
Pre modification peak	Sample:16110110, Compound:HF, RT:36.953	5
Peak modified	Sample:16110110, Compound:HF, RT:36.953	5
Peak deleted	Sample:16110110, Compound:HF, RT:35.901	5
Pre modification peak	Sample:16110110, Compound:HF, RT:36.931	5
Peak modified	Sample:16110110, Compound:HF, RT:36.931	5
Peak deleted	Sample:16110110, Compound:TD, RT:26.183	5
Peak deleted	Sample:16110110, Compound:TD, RT:25.645	5
Peak deleted	Sample:16110110, Compound:TD, RT:25.406	5
Peak deleted	Sample:16110110, Compound:TD, RT:23.628	5
Peak deleted	Sample:16110110, Compound:TD, RT:24.539	5
Peak deleted	Sample:16110110, Compound:PD, RT:30.256	5
Peak deleted	Sample:16110110, Compound:PD, RT:29.916	5
Peak deleted	Sample:16110110, Compound:PD, RT:29.664	5
Pre modification peak	Sample:16110110, Compound:PD, RT:29.708	5
Peak modified	Sample:16110110, Compound:PD, RT:29.708	5
Peak deleted	Sample:16110110, Compound:HD, RT:36.055	5
Peak deleted	Sample:16110110, Compound:HD, RT:35.002	5

Dataset: C:\MassLynx\Dioxin.pro\161101DATA2.qld

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Event	Details	Sample ID
Peak deleted	Sample:16110110, Compound:HD, RT:34.597	5
Pre modification peak	Sample:16110110, Compound:HD, RT:33.807	5
Peak modified	Sample:16110110, Compound:HD, RT:33.807	5
Pre modification peak	Sample:16110111, Compound:OF, RT:46.757	6
Peak modified	Sample:16110111, Compound:OF, RT:46.757	6
Pre modification peak	Sample:16110111, Compound:OF, RT:46.757	6
Peak modified	Sample:16110111, Compound:OF, RT:46.757	6
Peak deleted	Sample:16110111, Compound:TF, RT:22.074	6
Peak deleted	Sample:16110111, Compound:TF, RT:24.300	6
Peak deleted	Sample:16110111, Compound:TF, RT:24.240	6
Peak deleted	Sample:16110111, Compound:TF, RT:23.807	6
Peak deleted	Sample:16110111, Compound:TF, RT:23.553	6
Peak deleted	Sample:16110111, Compound:TF, RT:23.329	6
Pre modification peak	Sample:16110111, Compound:TF, RT:24.479	6
Peak modified	Sample:16110111, Compound:TF, RT:24.479	6
Peak deleted	Sample:16110111, Compound:TF, RT:24.868	6
Peak deleted	Sample:16110111, Compound:TF, RT:26.990	6
Pre modification peak	Sample:16110111, Compound:TF, RT:25.540	6
Peak modified	Sample:16110111, Compound:TF, RT:25.540	6
Pre modification peak	Sample:16110111, Compound:TF, RT:25.555	6
Peak modified	Sample:16110111, Compound:TF, RT:25.555	6
Peak deleted	Sample:16110111, Compound:PF, RT:28.162	6
Peak deleted	Sample:16110111, Compound:HF, RT:34.706	6
Peak deleted	Sample:16110111, Compound:TD, RT:24.823	6
Peak deleted	Sample:16110111, Compound:TD, RT:24.569	6
Peak deleted	Sample:16110111, Compound:TD, RT:23.583	6
Peak deleted	Sample:16110111, Compound:TD, RT:26.422	6
Peak deleted	Sample:16110111, Compound:TD, RT:25.824	6
Peak deleted	Sample:16110111, Compound:PD, RT:31.275	6
Peak deleted	Sample:16110111, Compound:PD, RT:29.993	6
Peak deleted	Sample:16110111, Compound:HD, RT:36.097	6
Peak deleted	Sample:16110112, Compound:TF, RT:22.343	7
Peak deleted	Sample:16110112, Compound:TF, RT:22.089	7
Peak deleted	Sample:16110112, Compound:TF, RT:23.673	7
Peak deleted	Sample:16110112, Compound:TF, RT:23.553	7
Peak deleted	Sample:16110112, Compound:TF, RT:23.419	7
Pre modification peak	Sample:16110112, Compound:TF, RT:22.911	7
Peak modified	Sample:16110112, Compound:TF, RT:22.911	7
Peak deleted	Sample:16110112, Compound:TF, RT:25.376	7
Peak deleted	Sample:16110112, Compound:TF, RT:24.226	7
Pre modification peak	Sample:16110112, Compound:TF, RT:25.779	7
Peak modified	Sample:16110112, Compound:TF, RT:25.779	7
Peak deleted	Sample:16110112, Compound:TF, RT:25.316	7
Peak deleted	Sample:16110112, Compound:PP, RT:27.109	7
Peak deleted	Sample:16110112, Compound:PP, RT:26.990	7
Peak deleted	Sample:16110112, Compound:PF, RT:28.294	7
Pre modification peak	Sample:16110112, Compound:PF, RT:29.708	7
Peak modified	Sample:16110112, Compound:PF, RT:29.708	7
Peak deleted	Sample:16110112, Compound:PF, RT:30.902	7
Peak deleted	Sample:16110112, Compound:PF, RT:31.023	7
Peak deleted	Sample:16110112, Compound:PF, RT:30.946	7
Pre modification peak	Sample:16110112, Compound:HF, RT:33.215	7
Peak modified	Sample:16110112, Compound:HF, RT:33.215	7

Dataset: C:\MassLynx\Dioxin.pro\161101DATA2.qld
 Last Altered: Wednesday, November 02, 2016 11:00:34 Pacific Daylight Time
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Event	Details	Sample ID
Peak deleted	Sample:16110112, Compound:HF, RT:35.824	7
Pre modification peak	Sample:16110112, Compound:HF, RT:34.037	7
Peak modified	Sample:16110112, Compound:HF, RT:34.037	7
Peak deleted	Sample:16110112, Compound:HF, RT:36.953	7
Pre modification peak	Sample:16110112, Compound:HPF, RT:39.036	7
Peak modified	Sample:16110112, Compound:HPF, RT:39.036	7
Peak deleted	Sample:16110112, Compound:TD, RT:26.003	7
Peak deleted	Sample:16110112, Compound:TD, RT:25.839	7
Peak deleted	Sample:16110112, Compound:TD, RT:25.376	7
Peak deleted	Sample:16110112, Compound:TD, RT:26.183	7
Pre modification peak	Sample:16110112, Compound:TD, RT:23.344	7
Peak modified	Sample:16110112, Compound:TD, RT:23.344	7
Peak deleted	Sample:16110112, Compound:PD, RT:28.557	7
Peak deleted	Sample:16110112, Compound:PD, RT:30.058	7
Peak deleted	Sample:16110112, Compound:PD, RT:30.025	7
Peak deleted	Sample:16110112, Compound:PD, RT:29.927	7
Peak deleted	Sample:16110112, Compound:PD, RT:29.686	7
Pre modification peak	Sample:16110112, Compound:HD, RT:33.785	7
Peak modified	Sample:16110112, Compound:HD, RT:33.785	7
Peak deleted	Sample:16110112, Compound:HD, RT:34.673	7
Peak deleted	Sample:16110112, Compound:HD, RT:34.607	7
Pre modification peak	Sample:16110112, Compound:HD, RT:36.515	7
Peak modified	Sample:16110112, Compound:HD, RT:36.515	7
Peak deleted	Sample:16110112, Compound:HD, RT:35.780	7
Pre modification peak	Sample:16110113, Compound:OF, RT:46.711	8
Peak modified	Sample:16110113, Compound:OF, RT:46.711	8
Pre modification peak	Sample:16110113, Compound:OF, RT:46.720	8
Peak modified	Sample:16110113, Compound:OF, RT:46.720	8
Peak deleted	Sample:16110113, Compound:TF, RT:24.898	8
Peak deleted	Sample:16110113, Compound:TF, RT:24.659	8
Peak deleted	Sample:16110113, Compound:TF, RT:22.911	8
Peak deleted	Sample:16110113, Compound:TF, RT:24.465	8
Peak deleted	Sample:16110113, Compound:TF, RT:25.809	8
Peak deleted	Sample:16110113, Compound:PP, RT:26.975	8
Peak deleted	Sample:16110113, Compound:PP, RT:26.915	8
Peak deleted	Sample:16110113, Compound:PF, RT:28.436	8
Peak deleted	Sample:16110113, Compound:PF, RT:28.206	8
Pre modification peak	Sample:16110113, Compound:PF, RT:28.524	8
Peak modified	Sample:16110113, Compound:PF, RT:28.524	8
Peak deleted	Sample:16110113, Compound:HF, RT:34.059	8
Peak deleted	Sample:16110113, Compound:TD, RT:25.839	8
Peak deleted	Sample:16110113, Compound:TD, RT:24.031	8
Peak deleted	Sample:16110113, Compound:TD, RT:23.613	8
Peak deleted	Sample:16110113, Compound:HD, RT:34.453	8
Peak deleted	Sample:16110113, Compound:HD, RT:33.785	8
Dataset Saved	Saved to 'C:\MassLynx\Dioxin.pro\161101DATA2.qld'	
Pre modification peak	Sample:16110108, Compound:TF, RT:25.570	3
Peak modified	Sample:16110108, Compound:TF, RT:25.570	3
Dataset Saved	Saved to 'C:\MassLynx\Dioxin.pro\161101DATA2.qld'	
Pre modification peak	Sample:16110110, Compound:TF, RT:25.555	5
Peak modified	Sample:16110110, Compound:TF, RT:25.555	5
Page 24 Saved	Saved to 'C:\MassLynx\Dioxin.pro\161101DATA2.qld'	



SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory: Analytical Resources, Inc.
 Client: Anchor QEA, LLC
 Sequence: SEJ0462
 Sample ID: SEJ0462-ICV1
 File ID: 16110102

SDG: 16H0147
 Project: Port Gamble Shellfish Monitoring
 Instrument: AUTOSPEC01
 Calibration: ZE00016
 Analyzed: 11/01/16 10:35

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	100.00	102	70 - 130	25.5848	26.20013	-0.6153	N/A	
13C12-2,3,7,8-TCDD	100.00	101	70 - 130	26.2272	26.84255	-0.6153	N/A	
13C12-1,2,3,7,8-PeCDF	100.00	106	70 - 130	29.7182	30.36405	-0.6458	N/A	
13C12-2,3,4,7,8-PeCDF	100.00	112	70 - 130	31.0663	31.70687	-0.6406	N/A	
13C12-1,2,3,7,8-PeCDD	100.00	110	70 - 130	31.3185	31.9626	-0.6441	N/A	
13C12-1,2,3,4,7,8-HxCDF	100.00	93.4	70 - 130	34.7273	35.39708	-0.6698	N/A	
13C12-1,2,3,6,7,8-HxCDF	100.00	91.8	70 - 130	34.8807	35.5451	-0.6644	N/A	
13C12-2,3,4,6,7,8-HxCDF	100.00	93.8	70 - 130	35.8233	36.48953	-0.6662	N/A	
13C12-1,2,3,7,8,9-HxCDF	100.00	98.0	70 - 130	36.9742	37.62217	-0.6480	N/A	
13C12-1,2,3,4,7,8-HxCDD	100.00	98.5	70 - 130	35.9658	36.6284	-0.6626	N/A	
13C12-1,2,3,6,7,8-HxCDD	100.00	94.1	70 - 130	36.0865	36.75265	-0.6662	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	100.00	96.7	70 - 130	39.0348	39.70478	-0.6700	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	100.00	107	70 - 130	41.6437	42.43965	-0.7959	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	100.00	104	70 - 130	40.7887	41.53897	-0.7503	N/A	
13C12-OCDD	200.00	103	70 - 130	46.4962	47.53868	-1.0425	N/A	
37C14-2,3,7,8-TCDD	10.000	104	0 - 200	26.2422	26.85752	-0.6153	N/A	

* Values outside of QC limits



SURROGATE RECOVERY AND RT SUMMARY
EPA 1613B

Laboratory: Analytical Resources, Inc.
 Client: Anchor QEA, LLC
 Sequence: SEJ0462
 Sample ID: BEJ0775-BLK1
 File ID: 16110104

SDG: 16H0147
 Project: Port Gamble Shellfish Monitoring
 Instrument: AUTOSPEC01
 Calibration: ZE00016
 Analyzed: 11/01/16 12:23

Surrogate Compound	Spike Level ng/kg	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	200.00	93.3	24 - 169	25.5703	26.20013	-0.6298	N/A	
13C12-2,3,7,8-TCDD	200.00	91.4	25 - 164	26.1977	26.84255	-0.6448	N/A	
13C12-1,2,3,7,8-PeCDF	200.00	95.7	24 - 185	29.6965	30.36405	-0.6675	N/A	
13C12-2,3,4,7,8-PeCDF	200.00	101	21 - 178	31.0448	31.70687	-0.6621	N/A	
13C12-1,2,3,7,8-PeCDD	200.00	99.0	25 - 181	31.2968	31.9626	-0.6658	N/A	
13C12-1,2,3,4,7,8-HxCDF	200.00	77.6	26 - 152	34.7493	35.39708	-0.6478	N/A	
13C12-1,2,3,6,7,8-HxCDF	200.00	72.1	26 - 123	34.8918	35.5451	-0.6533	N/A	
13C12-2,3,4,6,7,8-HxCDF	200.00	76.5	28 - 136	35.8235	36.48953	-0.6660	N/A	
13C12-1,2,3,7,8,9-HxCDF	200.00	80.1	29 - 147	36.9742	37.62217	-0.6480	N/A	
13C12-1,2,3,4,7,8-HxCDD	200.00	83.8	32 - 141	35.9548	36.6284	-0.6736	N/A	
13C12-1,2,3,6,7,8-HxCDD	200.00	59.4	28 - 130	36.0755	36.75265	-0.6772	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	200.00	75.8	28 - 143	39.035	39.70478	-0.6698	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	200.00	83.3	26 - 138	41.6548	42.43965	-0.7848	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	200.00	86.6	23 - 140	40.7997	41.53897	-0.7393	N/A	
13C12-OCDD	400.00	68.8	17 - 157	46.5053	47.53868	-1.0334	N/A	
37C14-2,3,7,8-TCDD	80.000	109	35 - 197	26.2277	26.85752	-0.6298	N/A	

* Values outside of QC limits



SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory: Analytical Resources, Inc.
 Client: Anchor QEA, LLC
 Sequence: SEJ0462
 Sample ID: BEJ0775-BS1
 File ID: 16110105

SDG: 16H0147
 Project: Port Gamble Shellfish Monitoring
 Instrument: AUTOSPEC01
 Calibration: ZE00016
 Analyzed: 11/01/16 13:15

Surrogate Compound	Spike Level ng/kg	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	200.00	80.9	24 - 169	25.5702	26.20013	-0.6299	N/A	
13C12-2,3,7,8-TCDD	200.00	78.3	25 - 164	26.1977	26.84255	-0.6448	N/A	
13C12-1,2,3,7,8-PeCDF	200.00	82.8	24 - 185	29.6967	30.36405	-0.6673	N/A	
13C12-2,3,4,7,8-PeCDF	200.00	87.9	21 - 178	31.0448	31.70687	-0.6621	N/A	
13C12-1,2,3,7,8-PeCDD	200.00	88.1	25 - 181	31.2968	31.9626	-0.6658	N/A	
13C12-1,2,3,4,7,8-HxCDF	200.00	69.3	26 - 152	34.7167	35.39708	-0.6804	N/A	
13C12-1,2,3,6,7,8-HxCDF	200.00	67.1	26 - 123	34.8702	35.5451	-0.6749	N/A	
13C12-2,3,4,6,7,8-HxCDF	200.00	69.1	28 - 136	35.8128	36.48953	-0.6767	N/A	
13C12-1,2,3,7,8,9-HxCDF	200.00	72.0	29 - 147	36.9635	37.62217	-0.6587	N/A	
13C12-1,2,3,4,7,8-HxCDD	200.00	77.0	32 - 141	35.9443	36.6284	-0.6841	N/A	
13C12-1,2,3,6,7,8-HxCDD	200.00	61.0	28 - 130	36.0648	36.75265	-0.6879	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	200.00	66.8	28 - 143	39.0352	39.70478	-0.6696	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	200.00	72.8	26 - 138	41.6658	42.43965	-0.7739	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	200.00	77.7	23 - 140	40.7998	41.53897	-0.7392	N/A	
13C12-OCDD	400.00	66.7	17 - 157	46.5143	47.53868	-1.0244	N/A	
37C14-2,3,7,8-TCDD	80.000	87.4	35 - 197	26.2125	26.85752	-0.6450	N/A	

* Values outside of QC limits



SURROGATE RECOVERY AND RT SUMMARY

EPA 1613B

Laboratory: Analytical Resources, Inc.
 Client: Anchor QEA, LLC
 Sequence: SEJ0462
 Sample ID: 16H0147-01
 File ID: 16110106

SDG: 16H0147
 Project: Port Gamble Shellfish Monitoring
 Instrument: AUTOSPEC01
 Calibration: ZE00016
 Analyzed: 11/01/16 14:08

Surrogate Compound	Spike Level ng/kg	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
13C12-2,3,7,8-TCDF	199.60	93.6	24 - 169	25.5553	26.20013	-0.6448	N/A	
13C12-2,3,7,8-TCDD	199.60	96.2	25 - 164	26.1828	26.84255	-0.6597	N/A	
13C12-1,2,3,7,8-PeCDF	199.60	99.3	24 - 185	29.6857	30.36405	-0.6783	N/A	
13C12-2,3,4,7,8-PeCDF	199.60	107	21 - 178	31.034	31.70687	-0.6729	N/A	
13C12-1,2,3,7,8-PeCDD	199.60	107	25 - 181	31.286	31.9626	-0.6766	N/A	
13C12-1,2,3,4,7,8-HxCDF	199.60	85.1	26 - 152	34.7058	35.39708	-0.6913	N/A	
13C12-1,2,3,6,7,8-HxCDF	199.60	80.8	26 - 123	34.8593	35.5451	-0.6858	N/A	
13C12-2,3,4,6,7,8-HxCDF	199.60	84.4	28 - 136	35.8018	36.48953	-0.6877	N/A	
13C12-1,2,3,7,8,9-HxCDF	199.60	89.0	29 - 147	36.9527	37.62217	-0.6695	N/A	
13C12-1,2,3,4,7,8-HxCDD	199.60	95.0	32 - 141	35.9443	36.6284	-0.6841	N/A	
13C12-1,2,3,6,7,8-HxCDD	199.60	89.8	28 - 130	36.065	36.75265	-0.6877	N/A	
13C12-1,2,3,4,6,7,8-HpCDF	199.60	82.3	28 - 143	39.0133	39.70478	-0.6915	N/A	
13C12-1,2,3,4,7,8,9-HpCDF	199.60	90.0	26 - 138	41.6332	42.43965	-0.8064	N/A	
13C12-1,2,3,4,6,7,8-HpCDD	199.60	94.6	23 - 140	40.7782	41.53897	-0.7608	N/A	
13C12-OCDD	399.20	84.5	17 - 157	46.479	47.53868	-1.0597	N/A	
37C14-2,3,7,8-TCDD	79.840	102	35 - 197	26.2127	26.85752	-0.6448	N/A	

* Values outside of QC limits



HOLDING TIME SUMMARY

Analysis: EPA 1613B

Laboratory: Analytical Resources, Inc.

SDG: 16H0147

Client: Anchor QEA, LLC

Project: Port Gamble Shellfish Monitoring

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
PG-T0-MUS-COC-160816 16H0147-01	08/16/16 08:00	08/17/16 08:30	10/26/16 09:20	71	365	11/01/16 14:08	6	365	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 1613B

Laboratory: Analytical Resources, Inc.

SDG: 16H0147

Client: Anchor QEA, LLC

Project: Port Gamble Shellfish Monitoring

Matrix: Solid

Instrument: AUTOSPEC01

Analyte	MDL	RL	Units
2,3,7,8-TCDF	0.244	1.00	ng/kg
2,3,7,8-TCDD	0.214	1.00	ng/kg
1,2,3,7,8-PeCDF	0.472	1.00	ng/kg
2,3,4,7,8-PeCDF	0.625	1.00	ng/kg
1,2,3,7,8-PeCDD	0.590	1.00	ng/kg
1,2,3,4,7,8-HxCDF	0.784	1.00	ng/kg
1,2,3,6,7,8-HxCDF	0.623	1.00	ng/kg
2,3,4,6,7,8-HxCDF	0.574	1.00	ng/kg
1,2,3,7,8,9-HxCDF	0.953	1.00	ng/kg
1,2,3,4,7,8-HxCDD	0.479	1.00	ng/kg
1,2,3,6,7,8-HxCDD	0.702	1.00	ng/kg
1,2,3,7,8,9-HxCDD	0.722	1.00	ng/kg
1,2,3,4,6,7,8-HpCDF	0.881	1.00	ng/kg
1,2,3,4,7,8,9-HpCDF	0.703	1.00	ng/kg
1,2,3,4,6,7,8-HpCDD	1.14	2.50	ng/kg
OCDF	1.77	2.00	ng/kg
OCDD	9.42	10.0	ng/kg

METHOD DETECTION AND REPORTING LIMITS

EPA 1613B

Laboratory: Analytical Resources, Inc.

SDG: 16H0147

Client: Anchor QEA, LLC

Project: Port Gamble Shellfish Monitoring

Matrix: Tissue

Instrument: AUTOSPEC01

Analyte	MDL	RL	Units
2,3,7,8-TCDF	0.050	1.00	ng/kg
2,3,7,8-TCDD	0.160	1.00	ng/kg
1,2,3,7,8-PeCDF	0.470	5.00	ng/kg
2,3,4,7,8-PeCDF	0.410	5.00	ng/kg
1,2,3,7,8-PeCDD	0.490	5.00	ng/kg
1,2,3,4,7,8-HxCDF	0.440	5.00	ng/kg
1,2,3,6,7,8-HxCDF	0.390	5.00	ng/kg
2,3,4,6,7,8-HxCDF	0.410	5.00	ng/kg
1,2,3,7,8,9-HxCDF	0.490	5.00	ng/kg
1,2,3,4,7,8-HxCDD	0.480	5.00	ng/kg
1,2,3,6,7,8-HxCDD	0.370	5.00	ng/kg
1,2,3,7,8,9-HxCDD	0.350	5.00	ng/kg
1,2,3,4,6,7,8-HpCDF	0.470	5.00	ng/kg
1,2,3,4,7,8,9-HpCDF	0.450	5.00	ng/kg
1,2,3,4,6,7,8-HpCDD	0.580	5.00	ng/kg
OCDF	0.740	10.0	ng/kg
OCDD	1.83	10.0	ng/kg
Total TCDF		1.00	ng/kg
Total TCDD		1.00	ng/kg
Total PeCDF		1.00	ng/kg
Total PeCDD		1.00	ng/kg
Total HxCDF		1.00	ng/kg
Total HxCDD		1.00	ng/kg
Total HpCDF		1.00	ng/kg
Total HpCDD		1.00	ng/kg



Form I
INORGANIC ANALYSIS DATA SHEET

PG-T0-MUS-COC-160816

EPA 6010C
Total Metals

Laboratory: Analytical Resources, Inc.

Project: Port Gamble Shellfish Monitoring

Client: Anchor QEA, LLC

SDG: 16H0147

Matrix: Tissue

Laboratory ID: 16H0147-01

File ID: I2161028-086

Sampled: 08/16/16 08:00

Prepared: 10/26/16 07:22

Analyzed: 10/28/16 16:28

Solids (wt%): 0.00

Preparation: FRN Tissue Digestion ICP ICP-MS

Initial/Final: 2.522 g / 50 mL

Batch: BEJ0777

Sequence: SEJ0466

Calibration: ZJ00089

Instrument: ICP2

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7440-43-9	Cadmium	0.994	1	0.0025	0.0397	



PREPARATION BATCH SUMMARY

EPA 6010C

Laboratory: Analytical Resources, Inc. SDG: 16H0147
Client: Anchor QEA, LLC Project: Port Gamble Shellfish Monitoring
Batch: BEJ0777 Batch Matrix: Tissue Preparation: FRN Tissue Digestion ICP ICP-MS

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
PG-T0-MUS-COC-160816	16H0147-01	I2161028-086	10/26/16 07:22	
Blank	BEJ0777-BLK1	I2161028-081	10/26/16 07:22	
LCS	BEJ0777-BS1	I2161028-090	10/26/16 07:22	



Digestion Log

Analyst: MLL Date: 10/26/16 Time: 0900
 Matrix: Tissue Block ID: #1 Block Temp: 160C Thermometer: MP81

ARI Sample ID	Btl #	pH<2	Prep Code: <u>FRU</u>		Prep Code:		Comments
			Initial Wt (g) Vol (mL)	Final Vol (mL)	Initial Wt (g) Vol (mL)	Final Vol (mL)	
16H147-1	A	-	2.522	50.0			
16H268-1		-	2.504				
* 16J187-1		-	2.566				
" 2		-	2.546				
" 3		-	2.502				
" 4		-	2.584				
" 5		-	2.520				
" 6	A	-	2.545				
BEJ777-BLH	-	-	-				
" BSI	-	-	-				
" PUP	-	-	2.571				S:16J187-1
" MSI	-	-	2.561	50.0			"

Chemical/Reagent ID:
 HNO₃: E2787 HCl: — H₂O₂: E3996 Tube Lot #: 1512329

Form I
METHOD BLANK DATA SHEET

Blank

EPA 6010C

Total Metals

Batch: BEJ0777

Laboratory ID: BEJ0777-BLK1

Prepared: 10/26/16 07:22

Matrix: Tissue

Preparation: FRN Tissue Digestion ICP

Analyzed: 10/28/16 16:08

Sequence: SEJ0466

Calibration: ZJ00089

Instrument: ICP2

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7440-43-9	Cadmium	ND	1	0.0025	0.0400	U



INSTRUMENT BLANKS
EPA 6010C

Laboratory: Analytical Resources, Inc.

SDG: 16H0147

Client: Anchor QEA, LLC

Project: Port Gamble Shellfish Monitoring

Instrument ID: ICP2

Calibration: ZJ00089

Sequence: SEJ0466

Date Analyzed: 10/28/16 11:09

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SEJ0466-ICB1	Cadmium	-0.0002	0.0003	0.0020	mg/L	
SEJ0466-CCB1	Cadmium	0.00003	0.0003	0.0020	mg/L	
SEJ0466-CCB2	Cadmium	0.0001	0.0003	0.0020	mg/L	
SEJ0466-CCB3	Cadmium	-0.0002	0.0003	0.0020	mg/L	
SEJ0466-CCB4	Cadmium	-0.0002	0.0003	0.0020	mg/L	
SEJ0466-IBL1	Cadmium	0.0002	0.0003	0.0020	mg/L	
SEJ0466-CCB5	Cadmium	0.000008	0.0003	0.0020	mg/L	
SEJ0466-CCB6	Cadmium	-0.0001	0.0003	0.0020	mg/L	
SEJ0466-CCB7	Cadmium	0.0001	0.0003	0.0020	mg/L	
SEJ0466-CCB8	Cadmium	0.00004	0.0003	0.0020	mg/L	
SEJ0466-CCB9	Cadmium	0.00007	0.0003	0.0020	mg/L	



INITIAL CALIBRATION DATA

EPA 6010C

Laboratory: Analytical Resources, Inc.

SDG: 16H0147

Client: Anchor QEA, LLC

Project: Port Gamble Shellfish Monitoring

Calibration: ZJ00089

Instrument: ICP2

Calibration Date: 10/28/2016 10:50

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RF		RF		RF		RF		RF		RF
Cadmium	0	0	10	17281.07	0		0		0			



SEQ: SEJ0466

IEC Date: 10-18-16

Analysis Date: 10-28-16

Analyst: JH

LR Date: 10-18-16

Page: 1 of 4

All corrections made by analyst unless otherwise noted. ^{9/11} 10-28-16

Edit Label	Delete Data	ARI Sample ID	Prep. Code	Dilution	Comments
		SEQ- CAL1	E5751		
		- CAL2	E5875		
		- CAL3	E5876		
		- CAL4	E5877		
		- CAL5	E5878		
		- ICW1	E2008		
		- ICBI	E5751		
		- CRL1	E5360		
		- IFA1	E4967		Sn ↓
		- IFB1	E4968		
		- CCW1	E2008		
		↓ - CCB1	E5751		
		BEJ0840- ISLK2	WMU		Si only
		BEJ0734- ISLK1			
		↓ - DUP1			
		16J0366-02			
		BEJ0734- MS1			0.020 mL ICP SPK (E4966)
		↓ - BS1			↓
		BEJ0840- DUP2			Si only
		16J0438-02			
		BEJ0840- MS2			0.008 mL E2323
		↓ - BS2	↓		↓
		SEQ- CCW2			
		↓ - CCB2			



IEC Date: -

Analysis Date: 10-28-16

Analyst: gt

LR Date: -

Page: 2 of 4

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep. Code	Dilution	Comments
		SEQ-CALS			
		↓ - CCV3			
		↓ - CC33			
		BEJ0759-BLK1	wmn		
		16J0378-07			
		↓ -09			
		↓ -10			
		↓ -11			
		↓ -12			
		BEJ0759-DUP1			
		16J0378-08			
		BEJ0759-MS1			0.080ml ICP SPK (E1986)
		↓ -BS1	↓		↓
		SEQ-CCV4			
		↓ -CC34			
	✓	BEJ0643-BLK1	wmn		missed tube
		16J0341-01			
		16J0336-01			
		16J0341-03			
		↓ -04			
		BEJ0643-DUP1			
		16J0341-02			
		BEJ0643-MS1			0.080ml (E1986) Ca, Fe, Mg, Mn, Na STL ↓
		↓ -BS1	↓		↓



IEC Date: _____

Analysis Date: 10-28-16

Analyst: TH

LR Date: _____

Page: 3 of 4

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep. Code	Dilution	Comments
		SEQ-IBL1			
		↓ -CCV5			
		↓ -CCB5			
		BEJ0633-BLK1	TWC		
		16J0341-05	wmw		
		↓ -06	↓		
		↓ -07			
		↓ -08			
		↓ -09	↓		
		BEJ0633-DUP1	TWC		
		16J0247-01	↓		
		BEJ0633-MS1	↓		
		↓ -BS1	↓		
		SEQ CW6			
		↓ -CCB6			
		BEJ0643-BLK1	wmw		
		BEJ0795-BLK1	SWC	2	
		16J0433-03	↓	5	2 nd Na
		↓ -04	↓	↓	↓
		16J0342-03	↓	↓	
		↓ -02	↓	2	
		BEJ0795-DUP1	↓	↓	Co, Cu, Mg, Ni RPD (ER)
		16J0342-01	↓	↓	
		BEJ0795-MS1	↓	↓	No Mo SPIKE (ER) Al, Ca, Fe, Mg STL Cu, Ni 1/2 R



IEC Date: _____

Analysis Date: 10-28-16

Analyst: YH

LR Date: _____

Page: 4 of 4

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep. Code	Dilution	Comments
		13EJ0795-1351	SWC	2	No mo spike (ER)
		SEQ-CW7			
		↓ -CCB7			
		13EJ0777-1341	FRN		
		16J0413-05	SWC	2	Mo NR
✓		↓ -06	↓	↓	Fe7LR
		↓ -07	↓	↓	Mo NR
✓		↓ -08	↓	↓	Ca7LR
		16H0147-01	FRN		
		13EJ0777-DUP1	↓		
		16J0187-01	↓		
		13EJ0777-MS1	↓		ICP-MS SRK #1
		↓ -1351	↓	2	↓
		SEQ-CW8			
		↓ -CCB8			
		16H0268-01	FRN		
		16J0187-02	↓		
		↓ -03	↓		
		↓ -04	↓		
		↓ -05	↓		
		↓ -06	↓		
		SEQ-CW9			Na 330 ↑
		↓ -CCB9			
		Rinse / D1			

Nebulizer Parameters: Hg ReAlign

Analyte Back Pressure Flow
All 136.0 kPa 0.65 L/min

10/28/2016 10:17:17 AM Hg ReAlign... Actual peak offset (nm): 0.003
Drift (nm): -0.000 Slit adjustment: 0

Nebulizer Parameters: Hg ReAlign

Analyte Back Pressure Flow
All 136.0 kPa 0.65 L/min

10/28/2016 10:25:51 AM Hg ReAlign... Actual peak offset (nm): 0.003
Drift (nm): 0.000 Slit adjustment: 0

Analysis Begun

Start Time: 10/28/2016 10:29:39 AM Plasma On Time: 10/28/2016 9:23:58 AM
Logged In Analyst: metinst Technique: ICP Continuous
Spectrometer: Optima 7300 DV, S/N 077C8121202 Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\BLKS.sif
Batch ID:
Results Data Set: I2161028
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

Method Loaded

Method Name: ELMT7300bcESI2FAST Method Last Saved: 12/7/2015 11:08:22 AM
IEC File: IEC101816.iec MSF File:
Method Description: 12Axial Elements

Table with 7 columns: Analyte, Calibration Equation, Processing, View, Internal Standard, IEC. Lists various elements like Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Si, Sn, Sr, Ti, Tl, V, Zn, ScA, ScR with their respective calibration equations, processing methods, views, standards, and IEC status.

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Analysis Begun

Start Time: 10/28/2016 10:50:18 AM
Logged In Analyst: metinst
Spectrometer: Optima 7300 DV, S/N 077C8121202

Plasma On Time: 10/28/2016 9:23:58 AM
Technique: ICP Continuous
Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\CRISETelmt.sif

Batch ID:

Results Data Set: I2161028

Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

=====
Sequence No.: 1
Sample ID: SEQ-CAL1

Autosampler Location: 1
Date Collected: 10/28/2016 10:50:19 AM
Data Type: Original

Nebulizer Parameters: SEQ-CAL1

Analyte Back Pressure Flow
All 137.0 kPa 0.65 L/min

Mean Data: SEQ-CAL1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Units	Calib
ScA 357.253	1750489.2	12505.05	0.71%	100.0	%	
ScR 361.383	192493.8	1148.04	0.60%	100.0	%	
Ag 328.068†	-63.4	21.18	33.38%	[0.00]	mg/L	
Al 308.215†	-76.9	5.41	7.03%	[0.00]	mg/L	
As 188.979†	0.1	3.30	>999.9%	[0.00]	mg/L	
B 249.677†	65.1	1.71	2.64%	[0.00]	mg/L	
Ba 233.527†	-22.2	2.29	10.30%	[0.00]	mg/L	
Be 313.042†	940.8	4.64	0.49%	[0.00]	mg/L	
Ca 317.933†	-300.2	2.83	0.94%	[0.00]	mg/L	
Cd 228.802†	208.6	2.82	1.35%	[0.00]	mg/L	
Co 228.616†	-85.7	1.97	2.30%	[0.00]	mg/L	
Cr 267.716†	-42.9	5.83	13.58%	[0.00]	mg/L	
Cu 324.752†	719.5	24.66	3.43%	[0.00]	mg/L	
Fe 273.955†	-97.3	3.49	3.58%	[0.00]	mg/L	
K 766.490†	349.3	11.01	3.15%	[0.00]	mg/L	
Mg 279.077†	-119.8	2.52	2.11%	[0.00]	mg/L	
Mn 257.610†	-155.9	5.06	3.24%	[0.00]	mg/L	
Mo 202.031†	49.1	6.39	13.01%	[0.00]	mg/L	
Na 589.592†	233.7	6.52	2.79%	[0.00]	mg/L	
Na 330.237†	-56.2	6.61	11.76%	[0.00]	mg/L	
Ni 231.604†	-38.7	6.26	16.18%	[0.00]	mg/L	
Pb 220.353†	14.4	5.38	37.34%	[0.00]	mg/L	
Sb 206.836†	57.9	3.82	6.60%	[0.00]	mg/L	
Se 196.026†	-22.4	3.77	16.81%	[0.00]	mg/L	
Si 288.158†	55.1	1.89	3.44%	[0.00]	mg/L	
Sn 189.927†	-8.6	4.54	52.63%	[0.00]	mg/L	
Sr 421.552†	360.9	24.08	6.67%	[0.00]	mg/L	
Ti 334.903†	323.3	15.24	4.71%	[0.00]	mg/L	
Tl 190.801†	-40.8	1.91	4.68%	[0.00]	mg/L	
V 292.402†	161.1	30.47	18.92%	[0.00]	mg/L	
Zn 206.200†	-18.0	3.04	16.92%	[0.00]	mg/L	

=====
Sequence No.: 2
Sample ID: SEQ-CAL2

Autosampler Location: 2
Date Collected: 10/28/2016 10:54:20 AM
Data Type: Original

Nebulizer Parameters: SEQ-CAL2

Analyte Back Pressure Flow
All 137.0 kPa 0.65 L/min

Mean Data: SEQ-CAL2

Mean Corrected

Calib

Analyte	Intensity	Std.Dev.	RSD	Conc.	Units
ScA 357.253	1756476.5	11805.78	0.67%	100.3	%
ScR 361.383	192607.2	1242.30	0.64%	100.1	%
Ba 233.527†	59316.6	297.40	0.50%	[10]	mg/L
Cd 228.802†	172810.7	535.65	0.31%	[10]	mg/L
Co 228.616†	252821.3	302.64	0.12%	[10]	mg/L
Cr 267.716†	57685.0	383.95	0.67%	[10]	mg/L
Cu 324.752†	1437964.5	1605.03	0.11%	[10]	mg/L
Mn 257.610†	297271.1	1619.77	0.54%	[10]	mg/L
V 292.402†	1015183.5	1103.19	0.11%	[10]	mg/L

Sequence No.: 3

Autosampler Location: 3

Sample ID: SEQ-CAL3

Date Collected: 10/28/2016 10:56:06 AM

Data Type: Original

Nebulizer Parameters: SEQ-CAL3

Analyte	Back Pressure	Flow
All	137.0 kPa	0.65 L/min

Mean Data: SEQ-CAL3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Units
ScA 357.253	1748901.4	13327.34	0.76%	99.91	%
ScR 361.383	192740.5	1490.74	0.77%	100.1	%
Ag 328.068†	129589.0	128.46	0.10%	[1.0]	mg/L
As 188.979†	12260.6	48.48	0.40%	[10]	mg/L
B 249.677†	51700.3	73.93	0.14%	[10]	mg/L
Be 313.042†	1648125.7	21152.29	1.28%	[5.0]	mg/L
Na 589.592†	374150.3	5124.46	1.37%	[50]	mg/L
Ni 231.604†	35756.9	69.20	0.19%	[10]	mg/L
Pb 220.353†	66202.6	240.81	0.36%	[10]	mg/L
Se 196.026†	9235.2	43.79	0.47%	[10]	mg/L
Sr 421.552†	2481294.7	29568.26	1.19%	[5]	mg/L
Tl 190.801†	14616.4	106.67	0.73%	[10]	mg/L
Zn 206.200†	31820.2	47.40	0.15%	[10]	mg/L

Sequence No.: 4

Autosampler Location: 4

Sample ID: SEQ-CAL4

Date Collected: 10/28/2016 10:58:23 AM

Data Type: Original

Nebulizer Parameters: SEQ-CAL4

Analyte	Back Pressure	Flow
All	137.0 kPa	0.65 L/min

Mean Data: SEQ-CAL4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Units
ScA 357.253	1785605.8	6126.02	0.34%	102.0	%
ScR 361.383	194196.9	1362.80	0.70%	100.9	%
Mo 202.031†	155318.2	927.40	0.60%	[10]	mg/L
Sb 206.836†	24110.1	116.07	0.48%	[10]	mg/L
Si 288.158†	11739.4	64.47	0.55%	[10]	mg/L
Sn 189.927†	28959.5	175.32	0.61%	[10]	mg/L
Ti 334.903†	143716.3	403.88	0.28%	[10]	mg/L

Sequence No.: 5

Autosampler Location: 5

Sample ID: SEQ-CAL5

Date Collected: 10/28/2016 11:00:37 AM

Data Type: Original

Nebulizer Parameters: SEQ-CAL5

Analyte	Back Pressure	Flow
All	137.0 kPa	0.65 L/min

Mean Data: SEQ-CAL5

Analyte	Mean Corrected		Std.Dev.	RSD	Calib	
	Intensity				Conc.	Units
ScA 357.253	1672159.0		4239.78	0.25%	95.53	%
ScR 361.383	194889.3		2130.63	1.09%	101.2	%
Al 308.215†	27959.4		297.44	1.06%	[30]	mg/L
Ca 317.933†	210007.1		298.64	0.14%	[30]	mg/L
Fe 273.955†	77653.6		337.50	0.43%	[100]	mg/L
K 766.490†	120197.9		716.05	0.60%	[100]	mg/L
Mg 279.077†	23967.7		267.11	1.11%	[30]	mg/L
Na 330.237†	1686.5		23.45	1.39%	[100]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	1	Lin Thru 0	0.0	129600	0.00000	1.000000	
Al 308.215	1	Lin Thru 0	0.0	932.0	0.00000	1.000000	
As 188.979	1	Lin Thru 0	0.0	1226	0.00000	1.000000	
B 249.677	1	Lin Thru 0	0.0	5170	0.00000	1.000000	
Ba 233.527	1	Lin Thru 0	0.0	5932	0.00000	1.000000	
Be 313.042	1	Lin Thru 0	0.0	329600	0.00000	1.000000	
Ca 317.933	1	Lin Thru 0	0.0	7000	0.00000	1.000000	
Cd 228.802	1	Lin Thru 0	0.0	17280	0.00000	1.000000	
Co 228.616	1	Lin Thru 0	0.0	25280	0.00000	1.000000	
Cr 267.716	1	Lin Thru 0	0.0	5769	0.00000	1.000000	
Cu 324.752	1	Lin Thru 0	0.0	143800	0.00000	1.000000	
Fe 273.955	1	Lin Thru 0	0.0	776.5	0.00000	1.000000	
K 766.490	1	Lin Thru 0	0.0	1202	0.00000	1.000000	
Mg 279.077	1	Lin Thru 0	0.0	798.9	0.00000	1.000000	
Mn 257.610	1	Lin Thru 0	0.0	29730	0.00000	1.000000	
Mo 202.031	1	Lin Thru 0	0.0	15530	0.00000	1.000000	
Na 589.592	1	Lin Thru 0	0.0	7483	0.00000	1.000000	
Na 330.237	1	Lin Thru 0	0.0	16.86	0.00000	1.000000	
Ni 231.604	1	Lin Thru 0	0.0	3576	0.00000	1.000000	
Pb 220.353	1	Lin Thru 0	0.0	6620	0.00000	1.000000	
Sb 206.836	1	Lin Thru 0	0.0	2411	0.00000	1.000000	
Se 196.026	1	Lin Thru 0	0.0	923.5	0.00000	1.000000	
Si 288.158	1	Lin Thru 0	0.0	1174	0.00000	1.000000	
Sn 189.927	1	Lin Thru 0	0.0	2896	0.00000	1.000000	
Sr 421.552	1	Lin Thru 0	0.0	496300	0.00000	1.000000	
Ti 334.903	1	Lin Thru 0	0.0	14370	0.00000	1.000000	
Tl 190.801	1	Lin Thru 0	0.0	1462	0.00000	1.000000	
V 292.402	1	Lin Thru 0	0.0	101500	0.00000	1.000000	
Zn 206.200	1	Lin Thru 0	0.0	3182	0.00000	1.000000	

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Analysis Begun

Start Time: 10/28/2016 11:04:58 AM
Logged In Analyst: metinst
Spectrometer: Optima 7300 DV, S/N 077C8121202

Plasma On Time: 10/28/2016 9:23:58 AM
Technique: ICP Continuous
Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\CRISETelmt.sif
Batch ID:
Results Data Set: I2161028
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

=====
Sequence No.: 1
Sample ID: SEQ-ICV1
Autosampler Location: 7
Date Collected: 10/28/2016 11:04:59 AM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: SEQ-ICV1

Analyte Back Pressure Flow
All 137.0 kPa 0.65 L/min

Mean Data: SEQ-ICV1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1771875.0	101.2 %	0.48			0.48%
ScR 361.383	191877.2	99.68 %	0.664			0.67%
Ag 328.068†	135177.5	1.043 mg/L	0.0127	1.043 mg/L	0.0127	1.22%
Al 308.215†	2018.2	2.132 mg/L	0.0156	2.132 mg/L	0.0156	0.73%
As 188.979†	2452.4	2.027 mg/L	0.0071	2.027 mg/L	0.0071	0.35%
B 249.677†	5301.0	1.024 mg/L	0.0075	1.024 mg/L	0.0075	0.74%
Ba 233.527†	6085.2	1.026 mg/L	0.0072	1.026 mg/L	0.0072	0.70%
Be 313.042†	337198.5	1.023 mg/L	0.0066	1.023 mg/L	0.0066	0.65%
Ca 317.933†	15182.8	2.169 mg/L	0.0123	2.169 mg/L	0.0123	0.57%
Cd 228.802†	17870.3	1.023 mg/L	0.0096	1.023 mg/L	0.0096	0.94%
Co 228.616†	25298.9	0.9987 mg/L	0.01187	0.9987 mg/L	0.01187	1.19%
Cr 267.716†	5951.0	1.030 mg/L	0.0067	1.030 mg/L	0.0067	0.65%
Cu 324.752†	144594.8	1.005 mg/L	0.0117	1.005 mg/L	0.0117	1.16%
Fe 273.955†	1659.4	2.129 mg/L	0.0063	2.129 mg/L	0.0063	0.29%
K 766.490†	25788.1	21.45 mg/L	0.126	21.45 mg/L	0.126	0.59%
Mg 279.077†	1710.9	2.149 mg/L	0.0074	2.149 mg/L	0.0074	0.34%
Mn 257.610†	29013.4	0.9766 mg/L	0.00659	0.9766 mg/L	0.00659	0.67%
Mo 202.031†	15155.6	0.9757 mg/L	0.01263	0.9757 mg/L	0.01263	1.29%
Na 589.592†	384233.1	51.35 mg/L	0.233	51.35 mg/L	0.233	0.45%
Na 330.237†	931.4	55.09 mg/L ✓	0.191	55.09 mg/L	0.191	0.35%
Ni 231.604†	3675.1	1.028 mg/L	0.0069	1.028 mg/L	0.0069	0.67%
Pb 220.353†	13155.2	1.988 mg/L	0.0256	1.988 mg/L	0.0256	1.29%
Sb 206.836†	5068.1	2.099 mg/L	0.0116	2.099 mg/L	0.0116	0.55%
Se 196.026†	1896.7	2.052 mg/L	0.0079	2.052 mg/L	0.0079	0.39%
Si 288.158†	2511.2	2.137 mg/L	0.0110	2.137 mg/L	0.0110	0.52%
Sn 189.927†	2887.5	0.9988 mg/L	0.00529	0.9988 mg/L	0.00529	0.53%
Sr 421.552†	511690.0	1.031 mg/L	0.0052	1.031 mg/L	0.0052	0.51%
Ti 334.903†	14646.2	1.018 mg/L	0.0053	1.018 mg/L	0.0053	0.53%
Tl 190.801†	2958.7	2.016 mg/L	0.0079	2.016 mg/L	0.0079	0.39%
V 292.402†	102960.0	1.019 mg/L	0.0112	1.019 mg/L	0.0112	1.10%
Zn 206.200†	3277.5	1.030 mg/L	0.0064	1.030 mg/L	0.0064	0.62%

Sequence No.: 2
 Sample ID: SEQ-ICB1
 Dilution: 1.000000X

Autosampler Location: 1
 Date Collected: 10/28/2016 11:09:00 AM
 Data Type: Original

Nebulizer Parameters: SEQ-ICB1

Analyte Back Pressure Flow
 All 138.0 kPa 0.65 L/min

Mean Data: SEQ-ICB1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1767059.6	100.9 %		0.09			0.09%
ScR 361.383	193468.8	100.5 %		0.58			0.58%
Ag 328.068†	2.5	0.00002 mg/L		0.000192	0.00002 mg/L	0.000192	976.65%
Al 308.215†	0.5	0.00057 mg/L		0.002333	0.00057 mg/L	0.002333	409.77%
As 188.979†	4.9	0.00399 mg/L		0.000760	0.00399 mg/L	0.000760	19.07%
B 249.677†	17.5	0.00339 mg/L		0.000906	0.00339 mg/L	0.000906	26.73%
Ba 233.527†	3.2	0.00054 mg/L		0.000255	0.00054 mg/L	0.000255	47.41%
Be 313.042†	37.6	0.00011 mg/L		0.000030	0.00011 mg/L	0.000030	26.25%
Ca 317.933†	4.2	0.00060 mg/L		0.000910	0.00060 mg/L	0.000910	151.18%
Cd 228.802†	-3.1	-0.00021 mg/L		0.000114	-0.00021 mg/L	0.000114	55.01%
Co 228.616†	6.0	0.00024 mg/L		0.000214	0.00024 mg/L	0.000214	89.14%
Cr 267.716†	-0.8	-0.00014 mg/L		0.001228	-0.00014 mg/L	0.001228	847.17%
Cu 324.752†	15.5	0.00011 mg/L		0.000089	0.00011 mg/L	0.000089	82.54%
Fe 273.955†	-0.1	-0.00008 mg/L		0.000988	-0.00008 mg/L	0.000988	>999.9%
K 766.490†	28.0	0.02325 mg/L		0.007069	0.02325 mg/L	0.007069	30.40%
Mg 279.077†	0.5	0.00069 mg/L		0.007818	0.00069 mg/L	0.007818	>999.9%
Mn 257.610†	0.0	0.00000 mg/L		0.000194	0.00000 mg/L	0.000194	>999.9%
Mo 202.031†	11.9	0.00077 mg/L		0.000691	0.00077 mg/L	0.000691	89.95%
Na 589.592†	-0.7	-0.00009 mg/L		0.005848	-0.00009 mg/L	0.005848	>999.9%
Na 330.237†	4.0	0.2383 mg/L		0.67959	0.2383 mg/L	0.67959	285.13%
Ni 231.604†	-3.5	-0.00097 mg/L		0.000273	-0.00097 mg/L	0.000273	28.23%
Pb 220.353†	4.0	0.00060 mg/L		0.000731	0.00060 mg/L	0.000731	122.41%
Sb 206.836†	3.0	0.00126 mg/L		0.000627	0.00126 mg/L	0.000627	49.86%
Se 196.026†	0.3	0.00037 mg/L		0.004588	0.00037 mg/L	0.004588	>999.9%
Si 288.158†	-0.6	-0.00055 mg/L		0.005299	-0.00055 mg/L	0.005299	963.66%
Sn 189.927†	0.4	0.00013 mg/L		0.001170	0.00013 mg/L	0.001170	921.93%
Sr 421.552†	-18.7	-0.00004 mg/L		0.000041	-0.00004 mg/L	0.000041	108.52%
Ti 334.903†	-2.2	-0.00015 mg/L		0.001269	-0.00015 mg/L	0.001269	827.26%
Tl 190.801†	2.9	0.00198 mg/L		0.004235	0.00198 mg/L	0.004235	214.13%
V 292.402†	3.3	0.00003 mg/L		0.000139	0.00003 mg/L	0.000139	427.10%
Zn 206.200†	1.2	0.00039 mg/L		0.000693	0.00039 mg/L	0.000693	178.27%

Sequence No.: 3
 Sample ID: SEQ-CRL1
 Dilution: 1.000000X

Autosampler Location: 301
 Date Collected: 10/28/2016 11:13:00 AM
 Data Type: Original

Nebulizer Parameters: SEQ-CRL1

Analyte Back Pressure Flow
 All 138.0 kPa 0.65 L/min

Mean Data: SEQ-CRL1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1761798.9	100.6 %		0.17			0.17%
ScR 361.383	195349.6	101.5 %		0.52			0.51%
Ag 328.068†	444.3	0.00343 mg/L		0.000330	0.00343 mg/L	0.000330	9.62%
Al 308.215†	50.2	0.05369 mg/L		0.003417	0.05369 mg/L	0.003417	6.37%
As 188.979†	66.6	0.05440 mg/L		0.001998	0.05440 mg/L	0.001998	3.67%
B 249.677†	119.6	0.02312 mg/L		0.000322	0.02312 mg/L	0.000322	1.39%
Ba 233.527†	21.0	0.00354 mg/L		0.000362	0.00354 mg/L	0.000362	10.22%
Be 313.042†	331.3	0.00100 mg/L		0.000056	0.00100 mg/L	0.000056	5.57%
Ca 317.933†	376.9	0.05383 mg/L		0.002778	0.05383 mg/L	0.002778	5.16%
Cd 228.802†	39.7	0.00197 mg/L		0.000241	0.00197 mg/L	0.000241	12.24%
Co 228.616†	84.0	0.00331 mg/L		0.000212	0.00331 mg/L	0.000212	6.41%
Cr 267.716†	30.9	0.00533 mg/L		0.001723	0.00533 mg/L	0.001723	32.31%
Cu 324.752†	323.2	0.00224 mg/L		0.000198	0.00224 mg/L	0.000198	8.84%
Fe 273.955†	43.5	0.05595 mg/L		0.001553	0.05595 mg/L	0.001553	2.78%
K 766.490†	690.3	0.5743 mg/L		0.02266	0.5743 mg/L	0.02266	3.95%
Mg 279.077†	38.3	0.04799 mg/L		0.000247	0.04799 mg/L	0.000247	0.52%
Mn 257.610†	25.2	0.00086 mg/L		0.000159	0.00086 mg/L	0.000159	18.59%
Mo 202.031†	83.4	0.00537 mg/L		0.000396	0.00537 mg/L	0.000396	7.37%
Na 589.592†	3766.8	0.5034 mg/L		0.00194	0.5034 mg/L	0.00194	0.39%
Na 330.237†	17.1	1.009 mg/L		0.6281	1.009 mg/L	0.6281	62.27%
Ni 231.604†	34.0	0.00950 mg/L		0.000589	0.00950 mg/L	0.000589	6.20%
Pb 220.353†	147.1	0.02223 mg/L		0.002008	0.02223 mg/L	0.002008	9.03%
Sb 206.836†	127.0	0.05269 mg/L		0.001622	0.05269 mg/L	0.001622	3.08%
Se 196.026†	45.0	0.04875 mg/L		0.007232	0.04875 mg/L	0.007232	14.84%
Si 288.158†	69.9	0.05956 mg/L		0.004756	0.05956 mg/L	0.004756	7.98%
Sn 189.927†	28.4	0.00983 mg/L		0.000958	0.00983 mg/L	0.000958	9.75%
Sr 421.552†	466.1	0.00094 mg/L		0.000068	0.00094 mg/L	0.000068	7.23%
Ti 334.903†	66.5	0.00462 mg/L		0.000630	0.00462 mg/L	0.000630	13.64%
Tl 190.801†	76.8	0.05249 mg/L		0.002645	0.05249 mg/L	0.002645	5.04%
V 292.402†	294.7	0.00292 mg/L		0.000124	0.00292 mg/L	0.000124	4.26%
Zn 206.200†	33.4	0.01050 mg/L		0.000765	0.01050 mg/L	0.000765	7.29%

Sequence No.: 4
 Sample ID: SEQ-IFA1
 Dilution: 1.000000X

Autosampler Location: 302
 Date Collected: 10/28/2016 11:17:00 AM
 Data Type: Original

Nebulizer Parameters: SEQ-IFA1

Analyte Back Pressure Flow
 All 137.0 kPa 0.65 L/min

Mean Data: SEQ-IFA1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1727566.1	98.69	%	0.392			0.40%
ScR 361.383	192335.1	99.92	%	0.423			0.42%
Ag 328.068†	-108.5	-0.00084	mg/L	0.000239	-0.00084 mg/L	0.000239	28.60%
Al 308.215†	194230.0	208.4	mg/L	0.86	208.4 mg/L	0.86	0.41%
As 188.979†	21.3	0.00269	mg/L	0.004211	0.00269 mg/L	0.004211	156.49%
B 249.677†	8.2	0.00159	mg/L	0.001855	0.00159 mg/L	0.001855	116.96%
Ba 233.527†	135.9	-0.00019	mg/L	0.000664	-0.00019 mg/L	0.000664	350.09%
Be 313.042†	79.7	0.00024	mg/L	0.000010	0.00024 mg/L	0.000010	4.01%
Ca 317.933†	740349.2	105.8	mg/L	0.30	105.8 mg/L	0.30	0.29%
Cd 228.802†	16.0	-0.00095	mg/L	0.000458	-0.00095 mg/L	0.000458	48.42%
Co 228.616†	42.3	0.00165	mg/L	0.000207	0.00165 mg/L	0.000207	12.50%
Cr 267.716†	-15.1	0.00026	mg/L	0.000451	0.00026 mg/L	0.000451	170.55%
Cu 324.752†	-1158.5	0.00176	mg/L	0.000089	0.00176 mg/L	0.000089	5.04%
Fe 273.955†	163678.2	210.8	mg/L	0.64	210.8 mg/L	0.64	0.30%
K 766.490†	48.8	0.04061	mg/L	0.014481	0.04061 mg/L	0.014481	35.66%
Mg 279.077†	85550.5	106.9	mg/L	0.23	106.9 mg/L	0.23	0.22%
Mn 257.610†	28.4	-0.00024	mg/L	0.000522	-0.00024 mg/L	0.000522	215.06%
Mo 202.031†	63.7	0.00255	mg/L	0.000249	0.00255 mg/L	0.000249	9.76%
Na 589.592†	-1.6	-0.00022	mg/L	0.003782	-0.00022 mg/L	0.003782	>999.9%
Na 330.237†	-2.9	-0.1693	mg/L	0.55350	-0.1693 mg/L	0.55350	326.84%
Ni 231.604†	-1.7	-0.00045	mg/L	0.001327	-0.00045 mg/L	0.001327	293.22%
Pb 220.353†	-318.8	0.00344	mg/L	0.001242	0.00344 mg/L	0.001242	36.15%
Sb 206.836†	46.4	0.01892	mg/L	0.001303	0.01892 mg/L	0.001303	6.89%
Se 196.026†	42.8	<u>0.02496</u>	mg/L ✓	0.011036	0.02496 mg/L	0.011036	44.21%
Si 288.158†	-15.2	0.00180	mg/L	0.007097	0.00180 mg/L	0.007097	394.31%
Sn 189.927†	-132.5	<u>-0.02170</u>	mg/L	0.001813	-0.02170 mg/L	0.001813	8.35%
Sr 421.552†	3279.5	<u>0.00661</u>	mg/L cont	0.000056	0.00661 mg/L	0.000056	0.85%
Ti 334.903†	123.5	0.00099	mg/L	0.000400	0.00099 mg/L	0.000400	40.29%
Tl 190.801†	-36.0	-0.00491	mg/L	0.002826	-0.00491 mg/L	0.002826	57.52%
V 292.402†	651.3	-0.00161	mg/L	0.000444	-0.00161 mg/L	0.000444	27.58%
Zn 206.200†	0.6	0.00018	mg/L	0.001055	0.00018 mg/L	0.001055	599.23%

Sequence No.: 5
 Sample ID: SEQ-IFB1
 Dilution: 1.000000X

Autosampler Location: 303
 Date Collected: 10/28/2016 11:21:14 AM
 Data Type: Original

Nebulizer Parameters: SEQ-IFB1

Analyte Back Pressure Flow
 All 138.0 kPa 0.65 L/min

Mean Data: SEQ-IFB1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1733902.3	99.05 %		0.514			0.52%
ScR 361.383	191314.6	99.39 %		0.626			0.63%
Ag 328.068†	129179.5	0.9971 mg/L		0.00459	0.9971 mg/L	0.00459	0.46%
Al 308.215†	194477.0	208.7 mg/L		0.56	208.7 mg/L	0.56	0.27%
As 188.979†	1233.1	0.9903 mg/L		0.00648	0.9903 mg/L	0.00648	0.65%
B 249.677†	3.0	-0.00200 mg/L		0.000961	-0.00200 mg/L	0.000961	47.95%
Ba 233.527†	6039.9	0.9951 mg/L		0.00554	0.9951 mg/L	0.00554	0.56%
Be 313.042†	333271.7	1.011 mg/L		0.0029	1.011 mg/L	0.0029	0.28%
Ca 317.933†	732609.1	104.7 mg/L		0.20	104.7 mg/L	0.20	0.20%
Cd 228.802†	17474.6	1.004 mg/L		0.0061	1.004 mg/L	0.0061	0.61%
Co 228.616†	23708.8	0.9375 mg/L		0.00555	0.9375 mg/L	0.00555	0.59%
Cr 267.716†	5742.4	0.9979 mg/L		0.00643	0.9979 mg/L	0.00643	0.64%
Cu 324.752†	138171.3	0.9709 mg/L		0.00192	0.9709 mg/L	0.00192	0.20%
Fe 273.955†	162997.7	209.9 mg/L		0.68	209.9 mg/L	0.68	0.32%
K 766.490†	75.4	0.06271 mg/L		0.007044	0.06271 mg/L	0.007044	11.23%
Mg 279.077†	82466.3	103.1 mg/L		0.20	103.1 mg/L	0.20	0.19%
Mn 257.610†	29323.2	0.9856 mg/L		0.00670	0.9856 mg/L	0.00670	0.68%
Mo 202.031†	62.5	0.00249 mg/L		0.000416	0.00249 mg/L	0.000416	16.75%
Na 589.592†	-79.2	-0.01058 mg/L		0.005745	-0.01058 mg/L	0.005745	54.28%
Na 330.237†	7.6	0.09719 mg/L		0.345016	0.09719 mg/L	0.345016	355.00%
Ni 231.604†	3449.3	0.9648 mg/L		0.00565	0.9648 mg/L	0.00565	0.59%
Pb 220.353†	6004.8	0.9591 mg/L		0.00533	0.9591 mg/L	0.00533	0.56%
Sb 206.836†	2515.8	1.031 mg/L		0.0084	1.031 mg/L	0.0084	0.81%
Se 196.026†	968.5	1.026 mg/L		0.0064	1.026 mg/L	0.0064	0.62%
Si 288.158†	-19.9	0.00035 mg/L		0.004674	0.00035 mg/L	0.004674	>999.9%
Sn 189.927†	-127.2	-0.01962 mg/L		0.000627	-0.01962 mg/L	0.000627	3.20%
Sr 421.552†	3191.6	0.00643 mg/L <i>cont.</i>		0.000039	0.00643 mg/L	0.000039	0.60%
Ti 334.903†	125.0	0.00095 mg/L		0.000211	0.00095 mg/L	0.000211	22.36%
Tl 190.801†	1334.7	0.9232 mg/L		0.00368	0.9232 mg/L	0.00368	0.40%
V 292.402†	97365.9	0.9558 mg/L		0.00278	0.9558 mg/L	0.00278	0.29%
Zn 206.200†	3064.8	0.9634 mg/L		0.00440	0.9634 mg/L	0.00440	0.46%

Sequence No.: 6
Sample ID: SEQ-CCV1

Autosampler Location: 7
Date Collected: 10/28/2016 11:26:23 AM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: SEQ-CCV1

Analyte	Back Pressure	Flow
All	138.0 kPa	0.65 L/min

Mean Data: SEQ-CCV1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1773313.7	101.3	%	0.23			0.23%
ScR 361.383	194615.7	101.1	%	0.25			0.25%
Ag 328.068†	134074.6	1.035	mg/L	0.0019	1.035 mg/L	0.0019	0.18%
Al 308.215†	2003.8	2.117	mg/L	0.0165	2.117 mg/L	0.0165	0.78%
As 188.979†	2450.7	2.025	mg/L	0.0042	2.025 mg/L	0.0042	0.21%
B 249.677†	5243.7	1.013	mg/L	0.0030	1.013 mg/L	0.0030	0.30%
Ba 233.527†	6010.9	1.013	mg/L	0.0014	1.013 mg/L	0.0014	0.13%
Be 313.042†	334805.7	1.015	mg/L	0.0056	1.015 mg/L	0.0056	0.55%
Ca 317.933†	15126.3	2.161	mg/L	0.0064	2.161 mg/L	0.0064	0.30%
Cd 228.802†	17721.6	1.014	mg/L	0.0012	1.014 mg/L	0.0012	0.12%
Co 228.616†	25155.3	0.9930	mg/L	0.00209	0.9930 mg/L	0.00209	0.21%
Cr 267.716†	5921.0	1.025	mg/L	0.0010	1.025 mg/L	0.0010	0.10%
Cu 324.752†	143476.9	0.9973	mg/L	0.00080	0.9973 mg/L	0.00080	0.08%
Fe 273.955†	1659.5	2.129	mg/L	0.0078	2.129 mg/L	0.0078	0.37%
K 766.490†	25468.4	21.19	mg/L	0.065	21.19 mg/L	0.065	0.31%
Mg 279.077†	1698.8	2.134	mg/L	0.0014	2.134 mg/L	0.0014	0.06%
Mn 257.610†	28696.1	0.9659	mg/L	0.00564	0.9659 mg/L	0.00564	0.58%
Mo 202.031†	15097.4	0.9720	mg/L	0.00249	0.9720 mg/L	0.00249	0.26%
Na 589.592†	379229.8	50.68	mg/L	0.153	50.68 mg/L	0.153	0.30%
Na 330.237†	928.3	54.90	mg/L	0.063	54.90 mg/L	0.063	0.11%
Ni 231.604†	3656.9	1.023	mg/L	0.0007	1.023 mg/L	0.0007	0.07%
Pb 220.353†	13100.7	1.980	mg/L	0.0022	1.980 mg/L	0.0022	0.11%
Sb 206.836†	5070.7	2.101	mg/L	0.0049	2.101 mg/L	0.0049	0.23%
Se 196.026†	1883.7	2.038	mg/L	0.0064	2.038 mg/L	0.0064	0.31%
Si 288.158†	2487.7	2.117	mg/L	0.0072	2.117 mg/L	0.0072	0.34%
Sn 189.927†	2888.5	0.9992	mg/L	0.00333	0.9992 mg/L	0.00333	0.33%
Sr 421.552†	503754.0	1.015	mg/L	0.0046	1.015 mg/L	0.0046	0.45%
Ti 334.903†	14515.9	1.009	mg/L	0.0026	1.009 mg/L	0.0026	0.26%
Tl 190.801†	2944.7	2.006	mg/L	0.0070	2.006 mg/L	0.0070	0.35%
V 292.402†	101928.9	1.009	mg/L	0.0017	1.009 mg/L	0.0017	0.17%
Zn 206.200†	3255.2	1.023	mg/L	0.0019	1.023 mg/L	0.0019	0.19%

Sequence No.: 7
Sample ID: SEQ-CCB1
Dilution: 1.000000X

Autosampler Location: 1
Date Collected: 10/28/2016 11:30:25 AM
Data Type: Original

Nebulizer Parameters: SEQ-CCB1

Analyte Back Pressure Flow
All 138.0 kPa 0.65 L/min

Mean Data: SEQ-CCB1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1778571.8	101.6 %		0.44			0.43%
ScR 361.383	194160.5	100.9 %		0.29			0.29%
Ag 328.068†	17.8	0.00014 mg/L		0.000271	0.00014 mg/L	0.000271	196.68%
Al 308.215†	1.8	0.00187 mg/L		0.007125	0.00187 mg/L	0.007125	380.18%
As 188.979†	2.3	0.00193 mg/L		0.002577	0.00193 mg/L	0.002577	133.52%
B 249.677†	13.4	0.00260 mg/L		0.001252	0.00260 mg/L	0.001252	48.19%
Ba 233.527†	0.2	0.00004 mg/L		0.000515	0.00004 mg/L	0.000515	>999.9%
Be 313.042†	42.0	0.00013 mg/L		0.000026	0.00013 mg/L	0.000026	20.70%
Ca 317.933†	17.1	0.00244 mg/L		0.002076	0.00244 mg/L	0.002076	85.19%
Cd 228.802†	0.7	0.00003 mg/L		0.000082	0.00003 mg/L	0.000082	291.30%
Co 228.616†	7.8	0.00031 mg/L		0.000184	0.00031 mg/L	0.000184	59.57%
Cr 267.716†	8.6	0.00148 mg/L		0.000829	0.00148 mg/L	0.000829	55.90%
Cu 324.752†	-3.5	-0.00002 mg/L		0.000084	-0.00002 mg/L	0.000084	336.81%
Fe 273.955†	4.7	0.00600 mg/L		0.000498	0.00600 mg/L	0.000498	8.31%
K 766.490†	46.9	0.03905 mg/L		0.037104	0.03905 mg/L	0.037104	95.01%
Mg 279.077†	-2.7	-0.00343 mg/L		0.002518	-0.00343 mg/L	0.002518	73.29%
Mn 257.610†	-2.6	-0.00009 mg/L		0.000104	-0.00009 mg/L	0.000104	117.93%
Mo 202.031†	8.9	0.00057 mg/L		0.000260	0.00057 mg/L	0.000260	45.46%
Na 589.592†	-67.0	-0.00896 mg/L		0.004448	-0.00896 mg/L	0.004448	49.67%
Na 330.237†	5.3	0.3146 mg/L		0.46440	0.3146 mg/L	0.46440	147.63%
Ni 231.604†	1.8	0.00049 mg/L		0.001361	0.00049 mg/L	0.001361	276.83%
Pb 220.353†	9.3	0.00141 mg/L		0.000986	0.00141 mg/L	0.000986	70.11%
Sb 206.836†	-3.0	-0.00127 mg/L		0.001312	-0.00127 mg/L	0.001312	103.56%
Se 196.026†	-2.2	-0.00243 mg/L		0.006149	-0.00243 mg/L	0.006149	253.00%
Si 288.158†	-1.5	-0.00128 mg/L		0.003619	-0.00128 mg/L	0.003619	283.13%
Sn 189.927†	0.2	0.00006 mg/L		0.001064	0.00006 mg/L	0.001064	>999.9%
Sr 421.552†	-13.2	-0.00003 mg/L		0.000055	-0.00003 mg/L	0.000055	208.93%
Ti 334.903†	13.6	0.00094 mg/L		0.000521	0.00094 mg/L	0.000521	55.16%
Tl 190.801†	1.4	0.00098 mg/L		0.001100	0.00098 mg/L	0.001100	112.44%
V 292.402†	10.9	0.00011 mg/L		0.000083	0.00011 mg/L	0.000083	73.41%
Zn 206.200†	1.5	0.00049 mg/L		0.001372	0.00049 mg/L	0.001372	282.64%

Sequence No.: 8

Autosampler Location: 304

Sample ID: BEJ0840-BLK2

Date Collected: 10/28/2016 11:34:25 AM

Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: BEJ0840-BLK2

Analyte Back Pressure Flow
 All 138.0 kPa 0.65 L/min

Mean Data: BEJ0840-BLK2

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1810410.9	103.4	%	0.53			0.51%
ScR 361.383	197934.1	102.8	%	0.79			0.77%
Ag 328.068†	23.5	0.00018	mg/L	0.000209	0.00018 mg/L	0.000209	115.03%
Al 308.215†	6.9	0.00744	mg/L	0.008461	0.00744 mg/L	0.008461	113.71%
As 188.979†	2.8	0.00224	mg/L	0.002190	0.00224 mg/L	0.002190	97.66%
B 249.677†	4.8	0.00092	mg/L	0.001349	0.00092 mg/L	0.001349	145.94%
Ba 233.527†	4.2	0.00071	mg/L	0.001243	0.00071 mg/L	0.001243	175.78%
Be 313.042†	-12.8	-0.00004	mg/L	0.000024	-0.00004 mg/L	0.000024	61.31%
Ca 317.933†	156.6	0.02237	mg/L	0.000908	0.02237 mg/L	0.000908	4.06%
Cd 228.802†	1.4	0.00007	mg/L	0.000150	0.00007 mg/L	0.000150	227.69%
Co 228.616†	6.7	0.00027	mg/L	0.000036	0.00027 mg/L	0.000036	13.39%
Cr 267.716†	9.6	0.00166	mg/L	0.000395	0.00166 mg/L	0.000395	23.84%
Cu 324.752†	-10.2	-0.00007	mg/L	0.000097	-0.00007 mg/L	0.000097	136.47%
Fe 273.955†	5.5	0.00703	mg/L	0.000442	0.00703 mg/L	0.000442	6.29%
K 766.490†	20.2	0.01682	mg/L	0.007664	0.01682 mg/L	0.007664	45.55%
Mg 279.077†	0.7	0.00085	mg/L	0.008760	0.00085 mg/L	0.008760	>999.9%
Mn 257.610†	2.0	0.00007	mg/L	0.000214	0.00007 mg/L	0.000214	321.69%
Mo 202.031†	-1.8	-0.00012	mg/L	0.000211	-0.00012 mg/L	0.000211	182.43%
Na 589.592†	11.5	0.00153	mg/L	0.008988	0.00153 mg/L	0.008988	586.04%
Na 330.237†	11.5	0.6791	mg/L	0.53376	0.6791 mg/L	0.53376	78.59%
Ni 231.604†	0.6	0.00017	mg/L	0.001390	0.00017 mg/L	0.001390	819.18%
Pb 220.353†	8.2	0.00124	mg/L	0.001098	0.00124 mg/L	0.001098	88.64%
Sb 206.836†	-7.6	-0.00319	mg/L	0.001673	-0.00319 mg/L	0.001673	52.36%
Se 196.026†	5.6	0.00605	mg/L	0.003232	0.00605 mg/L	0.003232	53.41%
Si 288.158†	2.1	0.00181	mg/L	0.002489	0.00181 mg/L	0.002489	137.42%
Sn 189.927†	-1.2	-0.00042	mg/L	0.000720	-0.00042 mg/L	0.000720	170.91%
Sr 421.552†	9.9	0.00002	mg/L	0.000070	0.00002 mg/L	0.000070	353.36%
Ti 334.903†	-10.0	-0.00069	mg/L	0.000933	-0.00069 mg/L	0.000933	134.29%
Tl 190.801†	0.6	0.00039	mg/L	0.001473	0.00039 mg/L	0.001473	379.11%
V 292.402†	-5.6	-0.00005	mg/L	0.000212	-0.00005 mg/L	0.000212	441.12%
Zn 206.200†	4.9	0.00153	mg/L	0.000322	0.00153 mg/L	0.000322	21.04%

Sequence No.: 9

Autosampler Location: 305

Sample ID: BEJ0734-BLK1

Date Collected: 10/28/2016 11:38:26 AM

Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: BEJ0734-BLK1

Analyte	Back Pressure	Flow
All	137.0 kPa	0.65 L/min

Mean Data: BEJ0734-BLK1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1805287.3	103.1 %		0.50			0.49%
ScR 361.383	199448.5	103.6 %		0.92			0.89%
Ag 328.068†	15.8	0.00012 mg/L		0.000281	0.00012 mg/L	0.000281	230.09%
Al 308.215†	84.3	0.09046 mg/L		0.006789	0.09046 mg/L	0.006789	7.51%
As 188.979†	3.5	0.00282 mg/L		0.002868	0.00282 mg/L	0.002868	101.62%
B 249.677†	88.5	0.01712 mg/L		0.000693	0.01712 mg/L	0.000693	4.05%
Ba 233.527†	-0.5	-0.00008 mg/L		0.000198	-0.00008 mg/L	0.000198	237.46%
Be 313.042†	1.1	0.00000 mg/L		0.000038	0.00000 mg/L	0.000038	>999.9%
Ca 317.933†	1387.4	0.1982 mg/L		0.00212	0.1982 mg/L	0.00212	1.07%
Cd 228.802†	3.5	0.00018 mg/L		0.000120	0.00018 mg/L	0.000120	65.90%
Co 228.616†	8.5	0.00034 mg/L		0.000152	0.00034 mg/L	0.000152	45.08%
Cr 267.716†	2.3	0.00040 mg/L		0.000879	0.00040 mg/L	0.000879	221.31%
Cu 324.752†	0.6	0.00000 mg/L		0.000161	0.00000 mg/L	0.000161	>999.9%
Fe 273.955†	9.9	0.01277 mg/L		0.002725	0.01277 mg/L	0.002725	21.35%
K 766.490†	35.9	0.02988 mg/L		0.007432	0.02988 mg/L	0.007432	24.87%
Mg 279.077†	5.8	0.00720 mg/L		0.004221	0.00720 mg/L	0.004221	58.60%
Mn 257.610†	2.0	0.00007 mg/L		0.000116	0.00007 mg/L	0.000116	177.35%
Mo 202.031†	1.0	0.00006 mg/L		0.000292	0.00006 mg/L	0.000292	488.43%
Na 589.592†	132.4	0.01770 mg/L		0.002913	0.01770 mg/L	0.002913	16.46%
Na 330.237†	11.3	0.6673 mg/L		0.81669	0.6673 mg/L	0.81669	122.39%
Ni 231.604†	-1.2	-0.00034 mg/L		0.000718	-0.00034 mg/L	0.000718	209.42%
Pb 220.353†	0.2	0.00005 mg/L		0.000674	0.00005 mg/L	0.000674	>999.9%
Sb 206.836†	-3.5	-0.00147 mg/L		0.001575	-0.00147 mg/L	0.001575	107.32%
Se 196.026†	-0.2	-0.00019 mg/L		0.005139	-0.00019 mg/L	0.005139	>999.9%
Si 288.158†	-7.8	-0.00667 mg/L		0.004026	-0.00667 mg/L	0.004026	60.35%
Sn 189.927†	-0.4	-0.00010 mg/L		0.000143	-0.00010 mg/L	0.000143	137.24%
Sr 421.552†	461.7	0.00093 mg/L		0.000049	0.00093 mg/L	0.000049	5.23%
Ti 334.903†	-11.7	-0.00083 mg/L		0.000942	-0.00083 mg/L	0.000942	114.11%
Tl 190.801†	1.7	0.00118 mg/L		0.000764	0.00118 mg/L	0.000764	64.95%
V 292.402†	19.3	0.00019 mg/L		0.000285	0.00019 mg/L	0.000285	148.06%
Zn 206.200†	3.6	0.00112 mg/L		0.000279	0.00112 mg/L	0.000279	24.87%

Sequence No.: 10

Autosampler Location: 306

Sample ID: BEJ0734-DUP1

Date Collected: 10/28/2016 11:42:25 AM

Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: BEJ0734-DUP1

Analyte	Back Pressure	Flow
All	138.0 kPa	0.65 L/min

Mean Data: BEJ0734-DUP1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1803295.2	103.0	%	0.67			0.65%
ScR 361.383	199581.8	103.7	%	0.67			0.65%
Ag 328.068†	-71.0	-0.00055	mg/L	0.000250	-0.00055 mg/L	0.000250	45.74%
Al 308.215†	13.1	0.01398	mg/L	0.003095	0.01398 mg/L	0.003095	22.14%
As 188.979†	11.5	0.00739	mg/L	0.002506	0.00739 mg/L	0.002506	33.93%
B 249.677†	109.4	0.02116	mg/L	0.001109	0.02116 mg/L	0.001109	5.24%
Ba 233.527†	23.8	0.00402	mg/L	0.000241	0.00402 mg/L	0.000241	6.01%
Be 313.042†	15.8	0.00005	mg/L	0.000072	0.00005 mg/L	0.000072	151.56%
Ca 317.933†	241553.1	34.51	mg/L	0.133	34.51 mg/L	0.133	0.39%
Cd 228.802†	-4.0	-0.00029	mg/L	0.000153	-0.00029 mg/L	0.000153	53.36%
Co 228.616†	10.5	0.00041	mg/L	0.000126	0.00041 mg/L	0.000126	30.74%
Cr 267.716†	31.9	0.00432	mg/L	0.000974	0.00432 mg/L	0.000974	22.52%
Cu 324.752†	74.0	0.00039	mg/L	0.000065	0.00039 mg/L	0.000065	16.92%
Fe 273.955†	9.3	0.01198	mg/L	0.005645	0.01198 mg/L	0.005645	47.11%
K 766.490†	1733.7	1.442	mg/L	0.0111	1.442 mg/L	0.0111	0.77%
Mg 279.077†	12647.5	15.83	mg/L	0.073	15.83 mg/L	0.073	0.46%
Mn 257.610†	38.1	0.00115	mg/L	0.000057	0.00115 mg/L	0.000057	4.99%
Mo 202.031†	54.2	0.00298	mg/L	0.000170	0.00298 mg/L	0.000170	5.71%
Na 589.592†	71257.4	9.523	mg/L	0.0290	9.523 mg/L	0.0290	0.30%
Na 330.237†	173.1	10.27	mg/L	0.470	10.27 mg/L	0.470	4.58%
Ni 231.604†	9.7	0.00272	mg/L	0.001200	0.00272 mg/L	0.001200	44.14%
Pb 220.353†	-0.7	-0.00009	mg/L	0.001273	-0.00009 mg/L	0.001273	>999.9%
Sb 206.836†	-0.7	-0.00058	mg/L	0.001971	-0.00058 mg/L	0.001971	338.23%
Se 196.026†	9.8	0.01059	mg/L	0.004318	0.01059 mg/L	0.004318	40.78%
Si 288.158†	13209.4	11.25	mg/L	0.044	11.25 mg/L	0.044	0.39%
Sn 189.927†	-65.4	-0.01472	mg/L	0.001185	-0.01472 mg/L	0.001185	8.05%
Sr 421.552†	71974.4	0.1450	mg/L	0.00010	0.1450 mg/L	0.00010	0.07%
Ti 334.903†	27.3	-0.00058	mg/L	0.001209	-0.00058 mg/L	0.001209	208.11%
Tl 190.801†	6.2	0.00248	mg/L	0.003110	0.00248 mg/L	0.003110	125.55%
V 292.402†	237.8	0.00237	mg/L	0.000112	0.00237 mg/L	0.000112	4.74%
Zn 206.200†	-4.0	0.00096	mg/L	0.000439	0.00096 mg/L	0.000439	45.50%

Sequence No.: 11
 Sample ID: 16J0366-02

Autosampler Location: 307
 Date Collected: 10/28/2016 11:46:39 AM
 Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: 16J0366-02

Analyte Back Pressure Flow
 All 137.0 kPa 0.65 L/min

Mean Data: 16J0366-02

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1804901.8	103.1 %	0.86			0.84%
ScR 361.383	199116.2	103.4 %	0.58			0.56%
Ag 328.068†	-23.8	-0.00018 mg/L	0.000075	-0.00018 mg/L	0.000075	41.08%
Al 308.215†	22.6	0.02419 mg/L	0.007220	0.02419 mg/L	0.007220	29.85%
As 188.979†	10.6	0.00661 mg/L	0.002206	0.00661 mg/L	0.002206	33.36%
B 249.677†	104.0	0.02011 mg/L	0.001906	0.02011 mg/L	0.001906	9.48%
Ba 233.527†	25.4	0.00429 mg/L	0.000972	0.00429 mg/L	0.000972	22.68%
Be 313.042†	-10.4	-0.00003 mg/L	0.000012	-0.00003 mg/L	0.000012	38.43%
Ca 317.933†	241572.3	34.51 mg/L	0.155	34.51 mg/L	0.155	0.45%
Cd 228.802†	-4.7	-0.00032 mg/L	0.000218	-0.00032 mg/L	0.000218	67.59%
Co 228.616†	11.5	0.00045 mg/L	0.000295	0.00045 mg/L	0.000295	65.19%
Cr 267.716†	28.6	0.00378 mg/L	0.000745	0.00378 mg/L	0.000745	19.70%
Cu 324.752†	74.8	0.00039 mg/L	0.000201	0.00039 mg/L	0.000201	51.02%
Fe 273.955†	8.5	0.01098 mg/L	0.001581	0.01098 mg/L	0.001581	14.40%
K 766.490†	1713.4	1.425 mg/L	0.0154	1.425 mg/L	0.0154	1.08%
Mg 279.077†	12438.7	15.57 mg/L	0.045	15.57 mg/L	0.045	0.29%
Mn 257.610†	33.5	0.00100 mg/L	0.000213	0.00100 mg/L	0.000213	21.33%
Mo 202.031†	51.0	0.00278 mg/L	0.000350	0.00278 mg/L	0.000350	12.59%
Na 589.592†	71112.7	9.503 mg/L	0.0413	9.503 mg/L	0.0413	0.43%
Na 330.237†	168.0	9.965 mg/L	0.5745	9.965 mg/L	0.5745	5.76%
Ni 231.604†	12.8	0.00359 mg/L	0.000535	0.00359 mg/L	0.000535	14.89%
Pb 220.353†	-5.9	-0.00088 mg/L	0.000358	-0.00088 mg/L	0.000358	40.79%
Sb 206.836†	0.4	-0.00010 mg/L	0.002078	-0.00010 mg/L	0.002078	>999.9%
Se 196.026†	10.3	0.01113 mg/L	0.002515	0.01113 mg/L	0.002515	22.59%
Si 288.158†	13123.2	11.18 mg/L	0.018	11.18 mg/L	0.018	0.16%
Sn 189.927†	-62.0	-0.01354 mg/L	0.001143	-0.01354 mg/L	0.001143	8.44%
Sr 421.552†	71700.1	0.1445 mg/L	0.00028	0.1445 mg/L	0.00028	0.19%
Ti 334.903†	25.0	-0.00074 mg/L	0.000849	-0.00074 mg/L	0.000849	114.43%
Tl 190.801†	11.3	0.00593 mg/L	0.001925	0.00593 mg/L	0.001925	32.47%
V 292.402†	236.9	0.00236 mg/L	0.000118	0.00236 mg/L	0.000118	5.03%
Zn 206.200†	-4.8	0.00068 mg/L	0.000902	0.00068 mg/L	0.000902	131.78%

Sequence No.: 12
 Sample ID: BEJ0734-MS1

Autosampler Location: 308
 Date Collected: 10/28/2016 11:50:38 AM
 Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: BEJ0734-MS1

Analyte Back Pressure Flow
 All 138.0 kPa 0.65 L/min

Mean Data: BEJ0734-MS1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1782004.0	101.8 %		0.60			0.59%
ScR 361.383	198543.6	103.1 %		0.77			0.74%
Ag 328.068†	54170.7	0.4182 mg/L		0.00907	0.4182 mg/L	0.00907	2.17%
Al 308.215†	2014.5	2.154 mg/L		0.0140	2.154 mg/L	0.0140	0.65%
As 188.979†	2651.3	2.159 mg/L		0.0016	2.159 mg/L	0.0016	0.08%
B 249.677†	105.3	0.01898 mg/L		0.000500	0.01898 mg/L	0.000500	2.63%
Ba 233.527†	12123.8	2.044 mg/L		0.0232	2.044 mg/L	0.0232	1.13%
Be 313.042†	168953.9	0.5124 mg/L		0.00364	0.5124 mg/L	0.00364	0.71%
Ca 317.933†	313289.1	44.75 mg/L		0.325	44.75 mg/L	0.325	0.73%
Cd 228.802†	9322.6	0.5265 mg/L		0.00381	0.5265 mg/L	0.00381	0.72%
Co 228.616†	12870.6	0.5088 mg/L		0.00151	0.5088 mg/L	0.00151	0.30%
Cr 267.716†	2966.8	0.5114 mg/L		0.00411	0.5114 mg/L	0.00411	0.80%
Cu 324.752†	71085.6	0.4943 mg/L		0.00273	0.4943 mg/L	0.00273	0.55%
Fe 273.955†	1666.3	2.142 mg/L		0.0203	2.142 mg/L	0.0203	0.95%
K 766.490†	14785.9	12.30 mg/L		0.031	12.30 mg/L	0.031	0.25%
Mg 279.077†	21557.3	26.98 mg/L		0.250	26.98 mg/L	0.250	0.93%
Mn 257.610†	14845.7	0.4998 mg/L		0.00306	0.4998 mg/L	0.00306	0.61%
Mo 202.031†	62.4	0.00336 mg/L		0.000163	0.00336 mg/L	0.000163	4.85%
Na 589.592†	148229.6	19.81 mg/L		0.046	19.81 mg/L	0.046	0.23%
Na 330.237†	360.4	21.18 mg/L		0.322	21.18 mg/L	0.322	1.52%
Ni 231.604†	1800.2	0.5025 mg/L		0.00482	0.5025 mg/L	0.00482	0.96%
Pb 220.353†	13438.0	2.031 mg/L		0.0164	2.031 mg/L	0.0164	0.81%
Sb 206.836†	18.6	0.00138 mg/L		0.004253	0.00138 mg/L	0.004253	309.08%
Se 196.026†	2098.9	2.272 mg/L		0.0048	2.272 mg/L	0.0048	0.21%
Si 288.158†	13358.5	11.38 mg/L		0.084	11.38 mg/L	0.084	0.73%
Sn 189.927†	-77.6	-0.01654 mg/L		0.002049	-0.01654 mg/L	0.002049	12.39%
Sr 421.552†	323332.1	0.6515 mg/L		0.00192	0.6515 mg/L	0.00192	0.29%
Ti 334.903†	58.0	0.00069 mg/L		0.000121	0.00069 mg/L	0.000121	17.44%
Tl 190.801†	3074.9	2.096 mg/L		0.0085	2.096 mg/L	0.0085	0.40%
V 292.402†	52344.1	0.5179 mg/L		0.00328	0.5179 mg/L	0.00328	0.63%
Zn 206.200†	1615.1	0.5100 mg/L		0.00695	0.5100 mg/L	0.00695	1.36%

Sequence No.: 13
 Sample ID: BEJ0734-BS1

Autosampler Location: 309
 Date Collected: 10/28/2016 11:56:30 AM
 Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: BEJ0734-BS1

Analyte	Back Pressure	Flow
All	137.0 kPa	0.65 L/min

Mean Data: BEJ0734-BS1

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		RSD
	Intensity	Conc.			Conc.	Units	
ScA 357.253	1799535.6	102.8	%	0.86			0.83%
ScR 361.383	197907.0	102.8	%	0.34			0.33%
Ag 328.068†	73294.7	0.5657	mg/L	0.00364	0.5657	mg/L	0.64%
Al 308.215†	2127.3	2.275	mg/L	0.0076	2.275	mg/L	0.33%
As 188.979†	2594.0	2.115	mg/L	0.0108	2.115	mg/L	0.51%
B 249.677†	92.5	0.01649	mg/L	0.002536	0.01649	mg/L	15.38%
Ba 233.527†	11986.4	2.020	mg/L	0.0116	2.020	mg/L	0.57%
Be 313.042†	167017.4	0.5066	mg/L	0.00502	0.5066	mg/L	0.99%
Ca 317.933†	74002.4	10.57	mg/L	0.097	10.57	mg/L	0.92%
Cd 228.802†	9408.4	0.5318	mg/L	0.00145	0.5318	mg/L	0.27%
Co 228.616†	12938.2	0.5115	mg/L	0.00131	0.5115	mg/L	0.26%
Cr 267.716†	3019.8	0.5218	mg/L	0.00140	0.5218	mg/L	0.27%
Cu 324.752†	71816.2	0.4995	mg/L	0.00153	0.4995	mg/L	0.31%
Fe 273.955†	1685.7	2.166	mg/L	0.0091	2.166	mg/L	0.42%
K 766.490†	13097.4	10.90	mg/L	0.034	10.90	mg/L	0.31%
Mg 279.077†	8816.0	11.03	mg/L	0.059	11.03	mg/L	0.54%
Mn 257.610†	14369.2	0.4839	mg/L	0.00289	0.4839	mg/L	0.60%
Mo 202.031†	19.4	0.00109	mg/L	0.000079	0.00109	mg/L	7.19%
Na 589.592†	78097.0	10.44	mg/L	0.018	10.44	mg/L	0.18%
Na 330.237†	197.2	11.50	mg/L	0.254	11.50	mg/L	2.21%
Ni 231.604†	1866.1	0.5209	mg/L	0.00446	0.5209	mg/L	0.86%
Pb 220.353†	13720.9	2.073	mg/L	0.0023	2.073	mg/L	0.11%
Sb 206.836†	15.1	-0.00005	mg/L	0.003041	-0.00005	mg/L	>999.9%
Se 196.026†	2094.3	2.267	mg/L	0.0151	2.267	mg/L	0.67%
Si 288.158†	-5.8	-0.00181	mg/L	0.003866	-0.00181	mg/L	213.52%
Sn 189.927†	-28.0	-0.00719	mg/L	0.000295	-0.00719	mg/L	4.10%
Sr 421.552†	252901.4	0.5096	mg/L	0.00174	0.5096	mg/L	0.34%
Ti 334.903†	28.3	0.00108	mg/L	0.000556	0.00108	mg/L	51.24%
Tl 190.801†	3098.6	2.114	mg/L	0.0157	2.114	mg/L	0.74%
V 292.402†	52835.4	0.5228	mg/L	0.00139	0.5228	mg/L	0.27%
Zn 206.200†	1663.2	0.5228	mg/L	0.00304	0.5228	mg/L	0.58%

Sequence No.: 14
 Sample ID: BEJ0840-DUP2

Autosampler Location: 310
 Date Collected: 10/28/2016 12:00:29 PM
 Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: BEJ0840-DUP2

Analyte Back Pressure Flow
 All 138.0 kPa 0.65 L/min

Mean Data: BEJ0840-DUP2

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1801679.6	102.9	%	0.98			0.95%
ScR 361.383	195957.0	101.8	%	0.42			0.41%
Ag 328.068†	273.6	0.00212	mg/L	0.000332	0.00212 mg/L	0.000332	15.67%
Al 308.215†	116.7	0.1248	mg/L	0.00516	0.1248 mg/L	0.00516	4.13%
As 188.979†	5.0	0.00403	mg/L	0.002923	0.00403 mg/L	0.002923	72.56%
B 249.677†	207.1	0.04006	mg/L	0.001508	0.04006 mg/L	0.001508	3.76%
Ba 233.527†	9.2	0.00154	mg/L	0.000444	0.00154 mg/L	0.000444	28.87%
Be 313.042†	37.3	0.00011	mg/L	0.000039	0.00011 mg/L	0.000039	37.04%
Ca 317.933†	2316.4	0.3309	mg/L	0.00299	0.3309 mg/L	0.00299	0.90%
Cd 228.802†	0.2	-0.00002	mg/L	0.000273	-0.00002 mg/L	0.000273	>999.9%
Co 228.616†	4.4	0.00018	mg/L	0.000024	0.00018 mg/L	0.000024	13.63%
Cr 267.716†	6.6	0.00114	mg/L	0.001348	0.00114 mg/L	0.001348	118.16%
Cu 324.752†	134.4	0.00087	mg/L	0.000084	0.00087 mg/L	0.000084	9.64%
Fe 273.955†	4.2	0.00507	mg/L	0.003112	0.00507 mg/L	0.003112	61.32%
K 766.490†	1441.2	1.199	mg/L	0.0072	1.199 mg/L	0.0072	0.60%
Mg 279.077†	13.5	0.01694	mg/L	0.004326	0.01694 mg/L	0.004326	25.54%
Mn 257.610†	6.9	0.00023	mg/L	0.000118	0.00023 mg/L	0.000118	50.91%
Mo 202.031†	32.9	0.00211	mg/L	0.000149	0.00211 mg/L	0.000149	7.07%
Na 589.592†	914228.5	122.2	mg/L	0.39	122.2 mg/L	0.39	0.32%
Na 330.237†	2140.7	126.9	mg/L	0.49	126.9 mg/L	0.49	0.39%
Ni 231.604†	-1.3	-0.00035	mg/L	0.000135	-0.00035 mg/L	0.000135	38.13%
Pb 220.353†	3.9	0.00062	mg/L	0.000456	0.00062 mg/L	0.000456	73.66%
Sb 206.836†	-5.7	-0.00225	mg/L	0.002507	-0.00225 mg/L	0.002507	111.37%
Se 196.026†	5.9	0.00639	mg/L	0.005518	0.00639 mg/L	0.005518	86.37%
Si 288.158†	29223.6	24.89	mg/L	0.078	24.89 mg/L	0.078	0.31%
Sn 189.927†	-3.7	-0.00121	mg/L	0.001067	-0.00121 mg/L	0.001067	88.12%
Sr 421.552†	769.0	0.00155	mg/L	0.000072	0.00155 mg/L	0.000072	4.65%
Ti 334.903†	-2.0	-0.00017	mg/L	0.001425	-0.00017 mg/L	0.001425	851.21%
Tl 190.801†	0.2	0.00004	mg/L	0.000585	0.00004 mg/L	0.000585	>999.9%
V 292.402†	3057.2	0.03012	mg/L	0.000176	0.03012 mg/L	0.000176	0.59%
Zn 206.200†	-15.9	-0.00011	mg/L	0.000148	-0.00011 mg/L	0.000148	133.78%

Sequence No.: 15

Autosampler Location: 311

Sample ID: 16J0438-02

Date Collected: 10/28/2016 12:04:43 PM

Dilution: 1.000000X

Data Type: Original

Nebulizer Parameters: 16J0438-02

Analyte	Back Pressure	Flow
All	140.0 kPa	0.65 L/min

Mean Data: 16J0438-02

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1823983.9	104.2	%	1.17			1.12%
ScR 361.383	196868.7	102.3	%	0.68			0.67%
Ag 328.068†	249.2	0.00193	mg/L	0.000274	0.00193 mg/L	0.000274	14.18%
Al 308.215†	124.1	0.1327	mg/L	0.00395	0.1327 mg/L	0.00395	2.97%
As 188.979†	4.3	0.00351	mg/L	0.003187	0.00351 mg/L	0.003187	90.89%
B 249.677†	204.5	0.03957	mg/L	0.000970	0.03957 mg/L	0.000970	2.45%
Ba 233.527†	5.0	0.00084	mg/L	0.000599	0.00084 mg/L	0.000599	71.05%
Be 313.042†	42.4	0.00012	mg/L	0.000045	0.00012 mg/L	0.000045	36.65%
Ca 317.933†	2303.9	0.3291	mg/L	0.00347	0.3291 mg/L	0.00347	1.05%
Cd 228.802†	-0.6	-0.00006	mg/L	0.000233	-0.00006 mg/L	0.000233	393.75%
Co 228.616†	-0.4	-0.00002	mg/L	0.000127	-0.00002 mg/L	0.000127	777.46%
Cr 267.716†	-1.0	-0.00018	mg/L	0.001387	-0.00018 mg/L	0.001387	783.79%
Cu 324.752†	115.8	0.00074	mg/L	0.000059	0.00074 mg/L	0.000059	7.89%
Fe 273.955†	6.1	0.00751	mg/L	0.002546	0.00751 mg/L	0.002546	33.89%
K 766.490†	1408.7	1.172	mg/L	0.0236	1.172 mg/L	0.0236	2.02%
Mg 279.077†	19.0	0.02374	mg/L	0.002224	0.02374 mg/L	0.002224	9.37%
Mn 257.610†	6.3	0.00021	mg/L	0.000051	0.00021 mg/L	0.000051	23.77%
Mo 202.031†	31.3	0.00201	mg/L	0.000084	0.00201 mg/L	0.000084	4.16%
Na 589.592†	917432.9	122.6	mg/L	1.16	122.6 mg/L	1.16	0.95%
Na 330.237†	2144.7	127.2	mg/L	2.02	127.2 mg/L	2.02	1.59%
Ni 231.604†	-2.0	-0.00055	mg/L	0.001652	-0.00055 mg/L	0.001652	299.97%
Pb 220.353†	5.4	0.00085	mg/L	0.001176	0.00085 mg/L	0.001176	138.28%
Sb 206.836†	-9.5	-0.00381	mg/L	0.001139	-0.00381 mg/L	0.001139	29.86%
Se 196.026†	4.6	0.00499	mg/L	0.001022	0.00499 mg/L	0.001022	20.47%
Si 288.158†	29164.3	24.84	mg/L	0.162	24.84 mg/L	0.162	0.65%
Sn 189.927†	-0.8	-0.00019	mg/L	0.000534	-0.00019 mg/L	0.000534	279.71%
Sr 421.552†	786.0	0.00158	mg/L	0.000005	0.00158 mg/L	0.000005	0.29%
Ti 334.903†	16.1	0.00109	mg/L	0.001270	0.00109 mg/L	0.001270	116.24%
Tl 190.801†	-2.8	-0.00205	mg/L	0.003104	-0.00205 mg/L	0.003104	151.56%
V 292.402†	3045.0	0.02999	mg/L	0.000470	0.02999 mg/L	0.000470	1.57%
Zn 206.200†	-12.7	0.00089	mg/L	0.000291	0.00089 mg/L	0.000291	32.57%

Sequence No.: 16
 Sample ID: BEJ0840-MS2

Autosampler Location: 312
 Date Collected: 10/28/2016 12:08:57 PM
 Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: BEJ0840-MS2

Analyte	Back Pressure	Flow
All	142.0 kPa	0.65 L/min

Mean Data: BEJ0840-MS2

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1845982.6	105.5 %		0.40			0.38%
ScR 361.383	197628.9	102.7 %		0.58			0.57%
Ag 328.068†	264.4	0.00205 mg/L		0.000424	0.00205 mg/L	0.000424	20.68%
Al 308.215†	122.1	0.1306 mg/L		0.00177	0.1306 mg/L	0.00177	1.36%
As 188.979†	4.8	0.00394 mg/L		0.001501	0.00394 mg/L	0.001501	38.06%
B 249.677†	214.3	0.04146 mg/L		0.001645	0.04146 mg/L	0.001645	3.97%
Ba 233.527†	4.3	0.00071 mg/L		0.000321	0.00071 mg/L	0.000321	45.20%
Be 313.042†	24.0	0.00007 mg/L		0.000089	0.00007 mg/L	0.000089	135.98%
Ca 317.933†	2354.4	0.3363 mg/L		0.00103	0.3363 mg/L	0.00103	0.31%
Cd 228.802†	2.3	0.00010 mg/L		0.000184	0.00010 mg/L	0.000184	177.32%
Co 228.616†	5.3	0.00021 mg/L		0.000181	0.00021 mg/L	0.000181	87.36%
Cr 267.716†	5.1	0.00087 mg/L		0.001598	0.00087 mg/L	0.001598	184.30%
Cu 324.752†	98.9	0.00062 mg/L		0.000156	0.00062 mg/L	0.000156	24.98%
Fe 273.955†	2.9	0.00336 mg/L		0.002187	0.00336 mg/L	0.002187	65.01%
K 766.490†	1437.1	1.196 mg/L		0.0086	1.196 mg/L	0.0086	0.72%
Mg 279.077†	18.3	0.02296 mg/L		0.015443	0.02296 mg/L	0.015443	67.27%
Mn 257.610†	6.1	0.00020 mg/L		0.000252	0.00020 mg/L	0.000252	123.77%
Mo 202.031†	29.1	0.00187 mg/L		0.000384	0.00187 mg/L	0.000384	20.52%
Na 589.592†	909730.8	121.6 mg/L		0.34	121.6 mg/L	0.34	0.28%
Na 330.237†	2142.8	127.1 mg/L		0.27	127.1 mg/L	0.27	0.21%
Ni 231.604†	-4.2	-0.00116 mg/L		0.001500	-0.00116 mg/L	0.001500	128.97%
Pb 220.353†	-7.1	-0.00105 mg/L		0.001690	-0.00105 mg/L	0.001690	161.68%
Sb 206.836†	-4.5	-0.00176 mg/L		0.001083	-0.00176 mg/L	0.001083	61.44%
Se 196.026†	9.1	0.00986 mg/L		0.007408	0.00986 mg/L	0.007408	75.17%
Si 288.158†	41844.8	35.64 mg/L		0.103	35.64 mg/L	0.103	0.29%
Sn 189.927†	-4.2	-0.00138 mg/L		0.000906	-0.00138 mg/L	0.000906	65.78%
Sr 421.552†	780.0	0.00157 mg/L		0.000042	0.00157 mg/L	0.000042	2.64%
Ti 334.903†	12.7	0.00086 mg/L		0.001294	0.00086 mg/L	0.001294	150.91%
Tl 190.801†	3.0	0.00195 mg/L		0.000968	0.00195 mg/L	0.000968	49.70%
V 292.402†	3022.5	0.02978 mg/L		0.000237	0.02978 mg/L	0.000237	0.79%
Zn 206.200†	-23.5	-0.00037 mg/L		0.000206	-0.00037 mg/L	0.000206	55.23%

Sequence No.: 17
 Sample ID: BEJ0840-BS2

Autosampler Location: 313
 Date Collected: 10/28/2016 12:14:14 PM
 Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: BEJ0840-BS2

Analyte Back Pressure Flow
 All 142.0 kPa 0.65 L/min

Mean Data: BEJ0840-BS2

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1857941.4	106.1 %		0.65			0.61%
ScR 361.383	205284.9	106.6 %		0.61			0.57%
Ag 328.068†	2306.1	0.01780 mg/L		0.005141	0.01780 mg/L	0.005141	28.89%
Al 308.215†	16.1	0.01726 mg/L		0.007266	0.01726 mg/L	0.007266	42.09%
As 188.979†	2.4	0.00190 mg/L		0.001825	0.00190 mg/L	0.001825	96.22%
B 249.677†	5.4	0.00105 mg/L		0.000281	0.00105 mg/L	0.000281	26.66%
Ba 233.527†	0.4	0.00006 mg/L		0.000816	0.00006 mg/L	0.000816	>999.9%
Be 313.042†	1.8	0.00001 mg/L		0.000037	0.00001 mg/L	0.000037	689.42%
Ca 317.933†	170.1	0.02429 mg/L		0.000555	0.02429 mg/L	0.000555	2.28%
Cd 228.802†	6.1	0.00034 mg/L		0.000080	0.00034 mg/L	0.000080	23.71%
Co 228.616†	9.1	0.00036 mg/L		0.000078	0.00036 mg/L	0.000078	21.54%
Cr 267.716†	4.3	0.00075 mg/L		0.000361	0.00075 mg/L	0.000361	48.02%
Cu 324.752†	36.6	0.00026 mg/L		0.000040	0.00026 mg/L	0.000040	15.73%
Fe 273.955†	5.8	0.00742 mg/L		0.003377	0.00742 mg/L	0.003377	45.54%
K 766.490†	39.1	0.03255 mg/L		0.016466	0.03255 mg/L	0.016466	50.59%
Mg 279.077†	-0.8	-0.00100 mg/L		0.005188	-0.00100 mg/L	0.005188	519.48%
Mn 257.610†	8.2	0.00027 mg/L		0.000211	0.00027 mg/L	0.000211	76.78%
Mo 202.031†	-4.8	-0.00031 mg/L		0.000116	-0.00031 mg/L	0.000116	37.81%
Na 589.592†	249.4	0.03333 mg/L		0.003296	0.03333 mg/L	0.003296	9.89%
Na 330.237†	7.8	0.4624 mg/L		0.13701	0.4624 mg/L	0.13701	29.63%
Ni 231.604†	-2.8	-0.00080 mg/L		0.000697	-0.00080 mg/L	0.000697	87.41%
Pb 220.353†	3.2	0.00049 mg/L		0.001511	0.00049 mg/L	0.001511	310.40%
Sb 206.836†	-4.0	-0.00169 mg/L		0.000719	-0.00169 mg/L	0.000719	42.60%
Se 196.026†	2.7	0.00292 mg/L		0.000973	0.00292 mg/L	0.000973	33.35%
Si 288.158†	11077.9	9.437 mg/L		0.0329	9.437 mg/L	0.0329	0.35%
Sn 189.927†	-5.1	-0.00175 mg/L		0.000498	-0.00175 mg/L	0.000498	28.46%
Sr 421.552†	28.8	0.00006 mg/L		0.000033	0.00006 mg/L	0.000033	57.52%
Ti 334.903†	-24.8	-0.00173 mg/L		0.000898	-0.00173 mg/L	0.000898	51.98%
Tl 190.801†	2.4	0.00161 mg/L		0.001438	0.00161 mg/L	0.001438	89.13%
V 292.402†	0.1	0.00000 mg/L		0.000114	0.00000 mg/L	0.000114	>999.9%
Zn 206.200†	-4.7	0.00039 mg/L		0.000164	0.00039 mg/L	0.000164	42.15%

Sequence No.: 18
Sample ID: SEQ-CCV2

Autosampler Location: 7
Date Collected: 10/28/2016 12:20:55 PM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: SEQ-CCV2

Analyte	Back Pressure	Flow
All	141.0 kPa	0.65 L/min

Mean Data: SEQ-CCV2

Analyte	Mean Corrected Intensity	Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1816788.7	103.8 %	0.40			0.39%
ScR 361.383	198505.1	103.1 %	1.33			1.29%
Ag 328.068†	134653.0	1.039 mg/L	0.0071	1.039 mg/L	0.0071	0.69%
Al 308.215†	2005.7	2.119 mg/L	0.0253	2.119 mg/L	0.0253	1.19%
As 188.979†	2483.8	2.052 mg/L	0.0097	2.052 mg/L	0.0097	0.47%
B 249.677†	5293.3	1.022 mg/L	0.0123	1.022 mg/L	0.0123	1.20%
Ba 233.527†	6153.3	1.037 mg/L	0.0118	1.037 mg/L	0.0118	1.14%
Be 313.042†	337605.1	1.024 mg/L	0.0033	1.024 mg/L	0.0033	0.32%
Ca 317.933†	15379.4	2.197 mg/L ✓	0.0268	2.197 mg/L	0.0268	1.22%
Cd 228.802†	17621.7	1.008 mg/L	0.0043	1.008 mg/L	0.0043	0.42%
Co 228.616†	25366.4	1.001 mg/L	0.0052	1.001 mg/L	0.0052	0.52%
Cr 267.716†	6017.0	1.042 mg/L	0.0111	1.042 mg/L	0.0111	1.06%
Cu 324.752†	142041.5	0.9873 mg/L	0.00582	0.9873 mg/L	0.00582	0.59%
Fe 273.955†	1661.1	2.131 mg/L	0.0213	2.131 mg/L	0.0213	1.00%
K 766.490†	25647.8	21.34 mg/L	0.029	21.34 mg/L	0.029	0.13%
Mg 279.077†	1724.8	2.166 mg/L	0.0320	2.166 mg/L	0.0320	1.48%
Mn 257.610†	28803.1	0.9695 mg/L	0.00454	0.9695 mg/L	0.00454	0.47%
Mo 202.031†	15075.2	0.9706 mg/L	0.00350	0.9706 mg/L	0.00350	0.36%
Na 589.592†	379751.0	50.75 mg/L	0.136	50.75 mg/L	0.136	0.27%
Na 330.237†	925.0	54.70 mg/L	0.414	54.70 mg/L	0.414	0.76%
Ni 231.604†	3741.4	1.047 mg/L	0.0085	1.047 mg/L	0.0085	0.81%
Pb 220.353†	13227.7	1.999 mg/L	0.0029	1.999 mg/L	0.0029	0.14%
Sb 206.836†	5109.8	2.117 mg/L	0.0050	2.117 mg/L	0.0050	0.24%
Se 196.026†	1913.4	2.070 mg/L	0.0112	2.070 mg/L	0.0112	0.54%
Si 288.158†	2503.3	2.130 mg/L	0.0257	2.130 mg/L	0.0257	1.21%
Sn 189.927†	2917.6	1.009 mg/L	0.0034	1.009 mg/L	0.0034	0.34%
Sr 421.552†	506437.3	1.021 mg/L	0.0043	1.021 mg/L	0.0043	0.42%
Ti 334.903†	14559.0	1.012 mg/L	0.0045	1.012 mg/L	0.0045	0.44%
Tl 190.801†	2984.4	2.033 mg/L	0.0085	2.033 mg/L	0.0085	0.42%
V 292.402†	102145.8	1.011 mg/L	0.0065	1.011 mg/L	0.0065	0.65%
Zn 206.200†	3365.8	1.058 mg/L	0.0137	1.058 mg/L	0.0137	1.29%

Sequence No.: 19
 Sample ID: SEQ-CCB2

Autosampler Location: 1
 Date Collected: 10/28/2016 12:25:59 PM
 Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: SEQ-CCB2

Analyte Back Pressure Flow
 All 141.0 kPa 0.65 L/min

Mean Data: SEQ-CCB2

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
ScA 357.253	1812118.6	103.5	%	0.54				0.52%
ScR 361.383	201487.4	104.7	%	0.56				0.54%
Ag 328.068†	32.2	0.00025	mg/L	0.000111	0.00025	mg/L	0.000111	44.63%
Al 308.215†	0.6	0.00068	mg/L	0.002544	0.00068	mg/L	0.002544	372.77%
As 188.979†	3.1	0.00251	mg/L	0.002249	0.00251	mg/L	0.002249	89.67%
B 249.677†	7.7	0.00150	mg/L	0.000822	0.00150	mg/L	0.000822	54.92%
Ba 233.527†	3.2	0.00053	mg/L	0.000537	0.00053	mg/L	0.000537	100.97%
Be 313.042†	21.1	0.00006	mg/L	0.000014	0.00006	mg/L	0.000014	22.28%
Ca 317.933†	11.2	0.00160	mg/L	0.001191	0.00160	mg/L	0.001191	74.61%
Cd 228.802†	2.7	0.00014	mg/L	0.000419	0.00014	mg/L	0.000419	301.06%
Co 228.616†	2.6	0.00010	mg/L	0.000223	0.00010	mg/L	0.000223	217.51%
Cr 267.716†	-1.5	-0.00026	mg/L	0.000233	-0.00026	mg/L	0.000233	88.76%
Cu 324.752†	13.6	0.00009	mg/L	0.000114	0.00009	mg/L	0.000114	121.09%
Fe 273.955†	0.9	0.00118	mg/L	0.001266	0.00118	mg/L	0.001266	107.08%
K 766.490†	53.7	0.04470	mg/L	0.021992	0.04470	mg/L	0.021992	49.20%
Mg 279.077†	0.9	0.00109	mg/L	0.008054	0.00109	mg/L	0.008054	737.49%
Mn 257.610†	0.0	0.00000	mg/L	0.000112	0.00000	mg/L	0.000112	>999.9%
Mo 202.031†	7.3	0.00047	mg/L	0.000523	0.00047	mg/L	0.000523	111.04%
Na 589.592†	-69.4	-0.00928	mg/L	0.002771	-0.00928	mg/L	0.002771	29.87%
Na 330.237†	7.0	0.4170	mg/L	0.14344	0.4170	mg/L	0.14344	34.40%
Ni 231.604†	1.2	0.00034	mg/L	0.000587	0.00034	mg/L	0.000587	172.57%
Pb 220.353†	6.0	0.00090	mg/L	0.000686	0.00090	mg/L	0.000686	76.22%
Sb 206.836†	2.5	0.00104	mg/L	0.001537	0.00104	mg/L	0.001537	147.18%
Se 196.026†	1.9	0.00210	mg/L	0.002756	0.00210	mg/L	0.002756	131.42%
Si 288.158†	-0.7	-0.00059	mg/L	0.004446	-0.00059	mg/L	0.004446	758.47%
Sn 189.927†	-1.5	-0.00050	mg/L	0.000849	-0.00050	mg/L	0.000849	168.76%
Sr 421.552†	-8.5	-0.00002	mg/L	0.000091	-0.00002	mg/L	0.000091	534.42%
Ti 334.903†	-0.2	-0.00001	mg/L	0.000836	-0.00001	mg/L	0.000836	>999.9%
Tl 190.801†	-1.7	-0.00115	mg/L	0.003767	-0.00115	mg/L	0.003767	328.29%
V 292.402†	-17.8	-0.00018	mg/L	0.000156	-0.00018	mg/L	0.000156	88.91%
Zn 206.200†	1.3	0.00040	mg/L	0.000627	0.00040	mg/L	0.000627	155.12%

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Analysis Begun

Start Time: 10/28/2016 12:33:40 PM Plasma On Time: 10/28/2016 9:23:58 AM
Logged In Analyst: metinst Technique: ICP Continuous
Spectrometer: Optima 7300 DV, S/N 077C8121202 Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\1028.sif
Batch ID:
Results Data Set: I2161028
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

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Sequence No.: 1 Autosampler Location: 7
Sample ID: SEQ-CCV3 Date Collected: 10/28/2016 12:33:41 PM
Dilution: 1.000000X Data Type: Original

Nebulizer Parameters: SEQ-CCV3
Analyte Back Pressure Flow
All 141.0 kPa 0.65 L/min

Mean Data: SEQ-CCV3

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1810785.4	103.4 %	1.01			0.98%
ScR 361.383	198439.8	103.1 %	0.81			0.79%
Ag 328.068†	134658.5	1.039 mg/L	0.0113	1.039 mg/L	0.0113	1.09%
Al 308.215†	2003.8	2.117 mg/L	0.0165	2.117 mg/L	0.0165	0.78%
As 188.979†	2496.7	2.063 mg/L	0.0187	2.063 mg/L	0.0187	0.91%
B 249.677†	5294.7	1.022 mg/L	0.0028	1.022 mg/L	0.0028	0.27%
Ba 233.527†	6143.4	1.035 mg/L	0.0036	1.035 mg/L	0.0036	0.34%
Be 313.042†	337356.0	1.023 mg/L	0.0008	1.023 mg/L	0.0008	0.08%
Ca 317.933†	15470.0	2.161 mg/L	0.0083	2.161 mg/L	0.0083	0.38%
Cd 228.802†	17787.9	1.018 mg/L	0.0129	1.018 mg/L	0.0129	1.27%
Co 228.616†	25433.9	1.004 mg/L	0.0104	1.004 mg/L	0.0104	1.03%
Cr 267.716†	6021.9	1.043 mg/L	0.0032	1.043 mg/L	0.0032	0.31%
Cu 324.752†	143143.1	0.9950 mg/L	0.01050	0.9950 mg/L	0.01050	1.05%
Fe 273.955†	1678.0	2.131 mg/L	0.0099	2.131 mg/L	0.0099	0.47%
K 766.490†	25817.6	21.22 mg/L	0.039	21.22 mg/L	0.039	0.18%
Mg 279.077†	1730.3	2.132 mg/L	0.0168	2.132 mg/L	0.0168	0.79%
Mn 257.610†	28742.4	0.9675 mg/L	0.00044	0.9675 mg/L	0.00044	0.05%
Mo 202.031†	15223.6	0.9801 mg/L	0.01230	0.9801 mg/L	0.01230	1.25%
Na 589.592†	380435.2	50.84 mg/L	0.104	50.84 mg/L	0.104	0.20%
Na 330.237†	923.9	54.74 mg/L	0.313	54.74 mg/L	0.313	0.57%
Ni 231.604†	3738.4	1.046 mg/L	0.0034	1.046 mg/L	0.0034	0.32%
Pb 220.353†	13310.3	2.012 mg/L	0.0236	2.012 mg/L	0.0236	1.17%
Sb 206.836†	5123.7	2.122 mg/L	0.0182	2.122 mg/L	0.0182	0.86%
Se 196.026†	1925.5	2.083 mg/L	0.0110	2.083 mg/L	0.0110	0.53%
Si 288.158†	2498.0	2.125 mg/L	0.0148	2.125 mg/L	0.0148	0.70%
Sn 189.927†	2936.0	1.016 mg/L	0.0089	1.016 mg/L	0.0089	0.88%
Sr 421.552†	506172.8	1.020 mg/L	0.0011	1.020 mg/L	0.0011	0.11%
Ti 334.903†	14507.2	1.008 mg/L	0.0004	1.008 mg/L	0.0004	0.04%
Tl 190.801†	2978.7	2.029 mg/L	0.0165	2.029 mg/L	0.0165	0.81%
V 292.402†	103017.4	1.019 mg/L	0.0115	1.019 mg/L	0.0115	1.13%
Zn 206.200†	3354.5	1.055 mg/L	0.0042	1.055 mg/L	0.0042	0.40%

Sequence No.: 2
Sample ID: SEQ-CCB3
Dilution: 1.000000X

Autosampler Location: 1
Date Collected: 10/28/2016 12:37:42 PM
Data Type: Original

Nebulizer Parameters: SEQ-CCB3

Analyte Back Pressure Flow
All 142.0 kPa 0.65 L/min

Mean Data: SEQ-CCB3

Table with 8 columns: Analyte, Mean Corrected Intensity, Calib. Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Lists various elements like ScA, ScR, Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Si, Sn, Sr, Ti, Tl, V, Zn with their respective intensity and concentration values.

Sequence No.: 3

Autosampler Location: 314

Sample ID: BEJ0759-BLK1

Date Collected: 10/28/2016 12:41:42 PM

Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: BEJ0759-BLK1

Analyte Back Pressure Flow
 All 141.0 kPa 0.65 L/min

Mean Data: BEJ0759-BLK1

Analyte	Mean Corrected		Calib. Conc. Units	Std.Dev.	Sample		RSD
	Intensity	Conc.			Conc.	Units	
ScA 357.253	1861514.5	106.3	%	0.75			0.70%
ScR 361.383	204839.5	106.4	%	0.73			0.69%
Ag 328.068†	11.0	0.00008	mg/L	0.000426	0.00008	mg/L	0.000426 501.07%
Al 308.215†	0.3	0.00037	mg/L	0.006329	0.00037	mg/L	0.006329 >999.9%
As 188.979†	3.3	0.00270	mg/L	0.002376	0.00270	mg/L	0.002376 87.86%
B 249.677†	-5.8	-0.00111	mg/L	0.000737	-0.00111	mg/L	0.000737 66.16%
Ba 233.527†	6.5	0.00110	mg/L	0.000308	0.00110	mg/L	0.000308 28.03%
Be 313.042†	-28.6	-0.00009	mg/L	0.000030	-0.00009	mg/L	0.000030 35.01%
Ca 317.933†	21.9	0.00306	mg/L	0.001188	0.00306	mg/L	0.001188 38.83%
Cd 228.802†	0.3	-0.00000	mg/L	0.000150	-0.00000	mg/L	0.000150 >999.9%
Co 228.616†	8.5	0.00034	mg/L	0.000130	0.00034	mg/L	0.000130 38.48%
Cr 267.716†	-1.1	-0.00019	mg/L	0.000608	-0.00019	mg/L	0.000608 326.76%
Cu 324.752†	-19.3	-0.00013	mg/L	0.000048	-0.00013	mg/L	0.000048 35.73%
Fe 273.955†	4.7	0.00598	mg/L	0.000881	0.00598	mg/L	0.000881 14.72%
K 766.490†	52.5	0.04315	mg/L	0.008808	0.04315	mg/L	0.008808 20.41%
Mg 279.077†	5.6	0.00684	mg/L	0.002592	0.00684	mg/L	0.002592 37.90%
Mn 257.610†	2.1	0.00007	mg/L	0.000108	0.00007	mg/L	0.000108 151.50%
Mo 202.031†	-4.9	-0.00032	mg/L	0.000207	-0.00032	mg/L	0.000207 65.48%
Na 589.592†	-23.5	-0.00315	mg/L	0.005010	-0.00315	mg/L	0.005010 159.23%
Na 330.237†	7.5	0.4438	mg/L	0.65907	0.4438	mg/L	0.65907 148.52%
Ni 231.604†	-1.2	-0.00034	mg/L	0.000557	-0.00034	mg/L	0.000557 162.94%
Pb 220.353†	2.5	0.00037	mg/L	0.000472	0.00037	mg/L	0.000472 126.19%
Sb 206.836†	-4.7	-0.00195	mg/L	0.002774	-0.00195	mg/L	0.002774 141.99%
Se 196.026†	3.0	0.00324	mg/L	0.005322	0.00324	mg/L	0.005322 164.47%
Si 288.158†	-9.8	-0.00836	mg/L	0.003703	-0.00836	mg/L	0.003703 44.29%
Sn 189.927†	1.6	0.00057	mg/L	0.001069	0.00057	mg/L	0.001069 188.67%
Sr 421.552†	-40.7	-0.00008	mg/L	0.000049	-0.00008	mg/L	0.000049 59.19%
Ti 334.903†	-9.2	-0.00064	mg/L	0.001397	-0.00064	mg/L	0.001397 218.95%
Tl 190.801†	-1.5	-0.00100	mg/L	0.000971	-0.00100	mg/L	0.000971 97.31%
V 292.402†	-5.7	-0.00006	mg/L	0.000254	-0.00006	mg/L	0.000254 443.47%
Zn 206.200†	0.3	0.00011	mg/L	0.000165	0.00011	mg/L	0.000165 153.28%

Sequence No.: 4

Autosampler Location: 315

Sample ID: 16J0378-07

Date Collected: 10/28/2016 12:45:42 PM

Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: 16J0378-07

Analyte	Back Pressure	Flow
All	142.0 kPa	0.65 L/min

Mean Data: 16J0378-07

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1817937.4	103.9 %		0.27			0.26%
ScR 361.383	199689.0	103.7 %		1.10			1.06%
Ag 328.068†	3.1	0.00002 mg/L		0.000025	0.00002 mg/L	0.000025	101.43%
Al 308.215†	15.0	0.01599 mg/L		0.005489	0.01599 mg/L	0.005489	34.33%
As 188.979†	15.2	0.00988 mg/L		0.001745	0.00988 mg/L	0.001745	17.67%
B 249.677†	951.3	0.1840 mg/L		0.00194	0.1840 mg/L	0.00194	1.05%
Ba 233.527†	1049.8	0.1767 mg/L		0.00095	0.1767 mg/L	0.00095	0.54%
Be 313.042†	27.5	0.00008 mg/L		0.000089	0.00008 mg/L	0.000089	107.67%
Ca 317.933†	311824.7	43.56 mg/L		0.319	43.56 mg/L	0.319	0.73%
Cd 228.802†	-3.9	-0.00032 mg/L		0.000165	-0.00032 mg/L	0.000165	51.27%
Co 228.616†	35.3	0.00137 mg/L		0.000163	0.00137 mg/L	0.000163	11.88%
Cr 267.716†	10.0	-0.00003 mg/L		0.001565	-0.00003 mg/L	0.001565	>999.9%
Cu 324.752†	187.9	0.00109 mg/L		0.000117	0.00109 mg/L	0.000117	10.78%
Fe 273.955†	1845.9	2.353 mg/L		0.0254	2.353 mg/L	0.0254	1.08%
K 766.490†	15522.0	12.76 mg/L		0.119	12.76 mg/L	0.119	0.94%
Mg 279.077†	20309.7	24.93 mg/L		0.260	24.93 mg/L	0.260	1.04%
Mn 257.610†	8060.6	0.2710 mg/L		0.00315	0.2710 mg/L	0.00315	1.16%
Mo 202.031†	69.2	0.00382 mg/L		0.000100	0.00382 mg/L	0.000100	2.61%
Na 589.592†	1237274.2	165.3 mg/L		0.83	165.3 mg/L	0.83	0.50%
Na 330.237†	2903.6	172.5 mg/L		0.97	172.5 mg/L	0.97	0.56%
Ni 231.604†	9.8	0.00274 mg/L		0.001179	0.00274 mg/L	0.001179	43.01%
Pb 220.353†	-4.6	-0.00069 mg/L		0.000975	-0.00069 mg/L	0.000975	142.24%
Sb 206.836†	2.6	0.00084 mg/L		0.002005	0.00084 mg/L	0.002005	239.94%
Se 196.026†	10.6	0.01148 mg/L		0.005413	0.01148 mg/L	0.005413	47.16%
Si 288.158†	15558.2	13.26 mg/L		0.140	13.26 mg/L	0.140	1.05%
Sn 189.927†	-73.3	-0.01539 mg/L		0.001020	-0.01539 mg/L	0.001020	6.63%
Sr 421.552†	190226.7	0.3833 mg/L		0.00156	0.3833 mg/L	0.00156	0.41%
Ti 334.903†	60.8	0.00110 mg/L		0.000711	0.00110 mg/L	0.000711	64.80%
Tl 190.801†	9.5	0.00455 mg/L		0.002082	0.00455 mg/L	0.002082	45.77%
V 292.402†	114.2	0.00109 mg/L		0.000147	0.00109 mg/L	0.000147	13.57%
Zn 206.200†	4.6	0.00406 mg/L		0.000163	0.00406 mg/L	0.000163	4.02%

Sequence No.: 5
Sample ID: 16J0378-09

Autosampler Location: 316
Date Collected: 10/28/2016 12:49:56 PM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: 16J0378-09

Analyte Back Pressure Flow
All 143.0 kPa 0.65 L/min

Mean Data: 16J0378-09

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1774991.0	101.4	%	0.83			0.82%
ScR 361.383	202405.5	105.1	%	0.54			0.51%
Ag 328.068†	-191.2	-0.00148	mg/L	0.000446	-0.00148	0.000446	30.23%
Al 308.215†	6.1	0.00639	mg/L	0.005191	0.00639	0.005191	81.19%
As 188.979†	35.6	0.01820	mg/L	0.004101	0.01820	0.004101	22.53%
B 249.677†	1443.8	0.2793	mg/L	0.00158	0.2793	0.00158	0.57%
Ba 233.527†	493.9	0.08326	mg/L	0.001095	0.08326	0.001095	1.31%
Be 313.042†	95.4	0.00029	mg/L	0.000028	0.00029	0.000028	9.64%
Ca 317.933†	1360428.1	190.0	mg/L	1.74	190.0	1.74	0.92%
Cd 228.802†	8.1	0.00033	mg/L	0.000271	0.00033	0.000271	80.91%
Co 228.616†	26.1	0.00099	mg/L	0.000140	0.00099	0.000140	14.15%
Cr 267.716†	16.8	-0.00046	mg/L	0.000980	-0.00046	0.000980	211.63%
Cu 324.752†	490.4	0.00285	mg/L	0.000131	0.00285	0.000131	4.60%
Fe 273.955†	18.1	0.02300	mg/L	0.004000	0.02300	0.004000	17.39%
K 766.490†	22368.9	18.38	mg/L	0.042	18.38	0.042	0.23%
Mg 279.077†	36117.9	44.34	mg/L	0.071	44.34	0.071	0.16%
Mn 257.610†	740.6	0.02455	mg/L	0.000130	0.02455	0.000130	0.53%
Mo 202.031†	129.2	0.00552	mg/L	0.000087	0.00552	0.000087	1.58%
Na 589.592†	1951496.3	260.8	mg/L	2.55	260.8	2.55	0.98%
Na 330.237†	4695.9	278.9	mg/L	0.96	278.9	0.96	0.34%
Ni 231.604†	166.2	0.04648	mg/L	0.000349	0.04648	0.000349	0.75%
Pb 220.353†	-14.0	-0.00211	mg/L	0.000202	-0.00211	0.000202	9.58%
Sb 206.836†	26.2	0.01040	mg/L	0.002089	0.01040	0.002089	20.09%
Se 196.026†	26.0	0.02819	mg/L	0.009509	0.02819	0.009509	33.73%
Si 288.158†	13413.3	11.43	mg/L	0.041	11.43	0.041	0.35%
Sn 189.927†	-140.5	-0.00526	mg/L	0.001293	-0.00526	0.001293	24.56%
Sr 421.552†	496082.7	0.9996	mg/L	0.00842	0.9996	0.00842	0.84%
Ti 334.903†	222.8	0.00184	mg/L	0.000552	0.00184	0.000552	29.98%
Tl 190.801†	22.1	0.00536	mg/L	0.001618	0.00536	0.001618	30.20%
V 292.402†	174.8	0.00173	mg/L	0.000179	0.00173	0.000179	10.35%
Zn 206.200†	827.4	0.2623	mg/L	0.00148	0.2623	0.00148	0.56%

Sequence No.: 6
 Sample ID: 16J0378-10

Autosampler Location: 317
 Date Collected: 10/28/2016 12:54:12 PM
 Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: 16J0378-10

Analyte Back Pressure Flow
 All 143.0 kPa 0.65 L/min

Mean Data: 16J0378-10

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1781456.9	101.8	%	0.49			0.48%
ScR 361.383	204253.1	106.1	%	1.39			1.31%
Ag 328.068†	-152.0	-0.00117	mg/L	0.000435	-0.00117 mg/L	0.000435	37.11%
Al 308.215†	5.2	0.00532	mg/L	0.006622	0.00532 mg/L	0.006622	124.59%
As 188.979†	36.3	0.01782	mg/L	0.001949	0.01782 mg/L	0.001949	10.94%
B 249.677†	1199.9	0.2321	mg/L	0.00130	0.2321 mg/L	0.00130	0.56%
Ba 233.527†	775.5	0.1307	mg/L	0.00082	0.1307 mg/L	0.00082	0.63%
Be 313.042†	74.7	0.00023	mg/L	0.000066	0.00023 mg/L	0.000066	29.14%
Ca 317.933†	1468009.7	205.1	mg/L	4.54	205.1 mg/L	4.54	2.22%
Cd 228.802†	-7.9	-0.00063	mg/L	0.000106	-0.00063 mg/L	0.000106	16.90%
Co 228.616†	192.1	0.00755	mg/L	0.000145	0.00755 mg/L	0.000145	1.92%
Cr 267.716†	19.4	-0.00157	mg/L	0.000913	-0.00157 mg/L	0.000913	58.02%
Cu 324.752†	500.2	0.00280	mg/L	0.000056	0.00280 mg/L	0.000056	1.99%
Fe 273.955†	575.3	0.7333	mg/L	0.00690	0.7333 mg/L	0.00690	0.94%
K 766.490†	22525.5	18.51	mg/L	0.052	18.51 mg/L	0.052	0.28%
Mg 279.077†	53303.9	65.44	mg/L	0.268	65.44 mg/L	0.268	0.41%
Mn 257.610†	9894.4	0.3323	mg/L	0.00190	0.3323 mg/L	0.00190	0.57%
Mo 202.031†	187.7	0.00907	mg/L	0.000174	0.00907 mg/L	0.000174	1.92%
Na 589.592†	1988899.4	265.8	mg/L	3.83	265.8 mg/L	3.83	1.44%
Na 330.237†	4647.2	276.1	mg/L	1.89	276.1 mg/L	1.89	0.69%
Ni 231.604†	79.3	0.02219	mg/L	0.000687	0.02219 mg/L	0.000687	3.10%
Pb 220.353†	-8.4	-0.00126	mg/L	0.000088	-0.00126 mg/L	0.000088	6.96%
Sb 206.836†	21.4	0.00842	mg/L	0.001680	0.00842 mg/L	0.001680	19.95%
Se 196.026†	22.0	0.02380	mg/L	0.003052	0.02380 mg/L	0.003052	12.83%
Si 288.158†	15969.4	13.61	mg/L	0.047	13.61 mg/L	0.047	0.35%
Sn 189.927†	-135.4	-0.00010	mg/L	0.001749	-0.00010 mg/L	0.001749	>999.9%
Sr 421.552†	576930.4	1.163	mg/L	0.0182	1.163 mg/L	0.0182	1.56%
Ti 334.903†	235.0	0.00161	mg/L	0.000156	0.00161 mg/L	0.000156	9.73%
Tl 190.801†	23.2	0.00538	mg/L	0.003345	0.00538 mg/L	0.003345	62.21%
V 292.402†	252.0	0.00252	mg/L	0.000143	0.00252 mg/L	0.000143	5.68%
Zn 206.200†	20.1	0.00900	mg/L	0.000771	0.00900 mg/L	0.000771	8.57%

Sequence No.: 7

Autosampler Location: 318

Sample ID: 16J0378-11

Date Collected: 10/28/2016 12:58:28 PM

Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: 16J0378-11

Analyte	Back Pressure	Flow
All	144.0 kPa	0.65 L/min

Mean Data: 16J0378-11

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	1815243.9	103.7	%	0.15				0.14%
ScR 361.383	198564.2	103.2	%	0.75				0.72%
Ag 328.068†	-198.5	-0.00153	mg/L	0.000089	-0.00153	mg/L	0.000089	5.80%
Al 308.215†	-0.8	-0.00127	mg/L	0.006498	-0.00127	mg/L	0.006498	510.94%
As 188.979†	76.7	0.04822	mg/L	0.000748	0.04822	mg/L	0.000748	1.55%
B 249.677†	2831.3	0.5476	mg/L	0.00472	0.5476	mg/L	0.00472	0.86%
Ba 233.527†	1080.7	0.1822	mg/L	0.00136	0.1822	mg/L	0.00136	0.75%
Be 313.042†	72.4	0.00022	mg/L	0.000059	0.00022	mg/L	0.000059	27.02%
Ca 317.933†	1790127.3	250.1	mg/L	1.96	250.1	mg/L	1.96	0.79%
Cd 228.802†	7.6	0.00006	mg/L	0.000176	0.00006	mg/L	0.000176	317.28%
Co 228.616†	28.8	0.00109	mg/L	0.000096	0.00109	mg/L	0.000096	8.84%
Cr 267.716†	19.1	-0.00094	mg/L	0.000741	-0.00094	mg/L	0.000741	78.46%
Cu 324.752†	1283.3	0.00835	mg/L	0.000171	0.00835	mg/L	0.000171	2.05%
Fe 273.955†	57.8	0.07368	mg/L	0.001420	0.07368	mg/L	0.001420	1.93%
K 766.490†	27047.5	22.23	mg/L	0.182	22.23	mg/L	0.182	0.82%
Mg 279.077†	45690.3	56.09	mg/L	0.535	56.09	mg/L	0.535	0.95%
Mn 257.610†	1999.6	0.06680	mg/L	0.000131	0.06680	mg/L	0.000131	0.20%
Mo 202.031†	223.9	0.01074	mg/L	0.000577	0.01074	mg/L	0.000577	5.38%
Na 589.592†	388228.1	51.88	mg/L	0.157	51.88	mg/L	0.157	0.30%
Na 330.237†	940.6	55.89	mg/L	0.534	55.89	mg/L	0.534	0.96%
Ni 231.604†	11.8	0.00329	mg/L	0.000891	0.00329	mg/L	0.000891	27.06%
Pb 220.353†	-12.0	-0.00183	mg/L	0.001055	-0.00183	mg/L	0.001055	57.82%
Sb 206.836†	23.5	0.00929	mg/L	0.002061	0.00929	mg/L	0.002061	22.17%
Se 196.026†	27.6	0.02993	mg/L	0.007292	0.02993	mg/L	0.007292	24.37%
Si 288.158†	20942.9	17.85	mg/L	0.146	17.85	mg/L	0.146	0.82%
Sn 189.927†	-141.5	0.00806	mg/L	0.001190	0.00806	mg/L	0.001190	14.77%
Sr 421.552†	1010274.8	2.036	mg/L	0.0072	2.036	mg/L	0.0072	0.36%
Ti 334.903†	280.9	0.00157	mg/L	0.000622	0.00157	mg/L	0.000622	39.67%
Tl 190.801†	28.0	0.00632	mg/L	0.002632	0.00632	mg/L	0.002632	41.67%
V 292.402†	629.7	0.00622	mg/L	0.000140	0.00622	mg/L	0.000140	2.25%
Zn 206.200†	10.3	0.00673	mg/L	0.000687	0.00673	mg/L	0.000687	10.20%

Sequence No.: 8
 Sample ID: 16J0378-12

Autosampler Location: 319
 Date Collected: 10/28/2016 1:02:43 PM
 Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: 16J0378-12

Analyte Back Pressure Flow
 All 143.0 kPa 0.65 L/min

Mean Data: 16J0378-12

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1784181.6	101.9	%	0.13			0.12%
ScR 361.383	199813.8	103.8	%	0.89			0.86%
Ag 328.068†	-67.6	-0.00052	mg/L	0.000409	-0.00052 mg/L	0.000409	78.41%
Al 308.215†	8.7	0.00927	mg/L	0.000991	0.00927 mg/L	0.000991	10.69%
As 188.979†	45.3	0.03306	mg/L	0.002236	0.03306 mg/L	0.002236	6.76%
B 249.677†	1724.5	0.3335	mg/L	0.00254	0.3335 mg/L	0.00254	0.76%
Ba 233.527†	976.7	0.1646	mg/L	0.00108	0.1646 mg/L	0.00108	0.66%
Be 313.042†	50.2	0.00015	mg/L	0.000021	0.00015 mg/L	0.000021	13.80%
Ca 317.933†	483583.7	67.56	mg/L	0.132	67.56 mg/L	0.132	0.19%
Cd 228.802†	2.4	-0.00005	mg/L	0.000232	-0.00005 mg/L	0.000232	429.07%
Co 228.616†	111.2	0.00437	mg/L	0.000086	0.00437 mg/L	0.000086	1.96%
Cr 267.716†	14.4	0.00013	mg/L	0.000479	0.00013 mg/L	0.000479	357.58%
Cu 324.752†	628.1	0.00381	mg/L	0.000035	0.00381 mg/L	0.000035	0.93%
Fe 273.955†	364.7	0.4649	mg/L	0.00535	0.4649 mg/L	0.00535	1.15%
K 766.490†	23723.3	19.50	mg/L	0.110	19.50 mg/L	0.110	0.56%
Mg 279.077†	25516.8	31.33	mg/L	0.249	31.33 mg/L	0.249	0.79%
Mn 257.610†	8302.1	0.2790	mg/L	0.00277	0.2790 mg/L	0.00277	0.99%
Mo 202.031†	91.7	0.00491	mg/L	0.000261	0.00491 mg/L	0.000261	5.31%
Na 589.592†	3745326.7	500.5	mg/L	3.19	500.5 mg/L	3.19	0.64%
Na 330.237†	8979.5	533.5	mg/L	4.35	533.5 mg/L	4.35	0.81%
Ni 231.604†	155.3	0.04343	mg/L	0.001463	0.04343 mg/L	0.001463	3.37%
Pb 220.353†	-3.1	-0.00047	mg/L	0.001332	-0.00047 mg/L	0.001332	285.37%
Sb 206.836†	11.4	0.00441	mg/L	0.002933	0.00441 mg/L	0.002933	66.53%
Se 196.026†	15.8	0.01715	mg/L	0.005252	0.01715 mg/L	0.005252	30.63%
Si 288.158†	12275.0	10.46	mg/L	0.094	10.46 mg/L	0.094	0.90%
Sn 189.927†	-97.6	-0.01833	mg/L	0.000975	-0.01833 mg/L	0.000975	5.32%
Sr 421.552†	269360.6	0.5428	mg/L	0.00049	0.5428 mg/L	0.00049	0.09%
Ti 334.903†	80.2	0.00072	mg/L	0.000891	0.00072 mg/L	0.000891	123.11%
Tl 190.801†	15.8	0.00740	mg/L	0.001286	0.00740 mg/L	0.001286	17.37%
V 292.402†	81.2	0.00084	mg/L	0.000129	0.00084 mg/L	0.000129	15.46%
Zn 206.200†	61.0	0.02122	mg/L	0.000324	0.02122 mg/L	0.000324	1.53%

Sequence No.: 9

Autosampler Location: 320

Sample ID: BEJ0759-DUP1

Date Collected: 10/28/2016 1:07:15 PM

Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: BEJ0759-DUP1

Analyte	Back Pressure	Flow
All	145.0 kPa	0.65 L/min

Mean Data: BEJ0759-DUP1

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
ScA 357.253	1790192.6	102.3	%	0.46				0.45%
ScR 361.383	203427.0	105.7	%	1.07				1.02%
Ag 328.068†	-43.2	-0.00033	mg/L	0.000180	-0.00033	mg/L	0.000180	54.05%
Al 308.215†	20.0	0.02133	mg/L	0.006104	0.02133	mg/L	0.006104	28.61%
As 188.979†	41.0	0.02957	mg/L	0.002906	0.02957	mg/L	0.002906	9.83%
B 249.677†	1701.4	0.3291	mg/L	0.00260	0.3291	mg/L	0.00260	0.79%
Ba 233.527†	954.3	0.1608	mg/L	0.00205	0.1608	mg/L	0.00205	1.27%
Be 313.042†	37.6	0.00011	mg/L	0.000090	0.00011	mg/L	0.000090	78.83%
Ca 317.933†	478936.1	66.91	mg/L	0.331	66.91	mg/L	0.331	0.49%
Cd 228.802†	2.7	-0.00002	mg/L	0.000115	-0.00002	mg/L	0.000115	705.84%
Co 228.616†	107.9	0.00424	mg/L	0.000029	0.00424	mg/L	0.000029	0.68%
Cr 267.716†	11.9	-0.00026	mg/L	0.000108	-0.00026	mg/L	0.000108	41.82%
Cu 324.752†	678.8	0.00417	mg/L	0.000161	0.00417	mg/L	0.000161	3.86%
Fe 273.955†	342.0	0.4359	mg/L	0.00513	0.4359	mg/L	0.00513	1.18%
K 766.490†	23441.5	19.26	mg/L	0.068	19.26	mg/L	0.068	0.35%
Mg 279.077†	25063.7	30.77	mg/L	0.296	30.77	mg/L	0.296	0.96%
Mn 257.610†	8073.6	0.2713	mg/L	0.00237	0.2713	mg/L	0.00237	0.87%
Mo 202.031†	88.0	0.00468	mg/L	0.000297	0.00468	mg/L	0.000297	6.34%
Na 589.592†	3676035.7	491.3	mg/L	3.70	491.3	mg/L	3.70	0.75%
Na 330.237†	8826.9	524.4	mg/L	3.57	524.4	mg/L	3.57	0.68%
Ni 231.604†	154.4	0.04319	mg/L	0.001168	0.04319	mg/L	0.001168	2.70%
Pb 220.353†	-3.2	-0.00049	mg/L	0.002035	-0.00049	mg/L	0.002035	419.00%
Sb 206.836†	14.0	0.00546	mg/L	0.001715	0.00546	mg/L	0.001715	31.39%
Se 196.026†	13.5	0.01462	mg/L	0.001106	0.01462	mg/L	0.001106	7.56%
Si 288.158†	12104.9	10.32	mg/L	0.095	10.32	mg/L	0.095	0.92%
Sn 189.927†	-96.3	-0.01801	mg/L	0.000990	-0.01801	mg/L	0.000990	5.50%
Sr 421.552†	263646.7	0.5313	mg/L	0.00116	0.5313	mg/L	0.00116	0.22%
Ti 334.903†	73.7	0.00032	mg/L	0.001194	0.00032	mg/L	0.001194	377.75%
Tl 190.801†	15.8	0.00744	mg/L	0.002520	0.00744	mg/L	0.002520	33.89%
V 292.402†	82.0	0.00084	mg/L	0.000182	0.00084	mg/L	0.000182	21.57%
Zn 206.200†	58.6	0.02044	mg/L	0.000563	0.02044	mg/L	0.000563	2.75%

Sequence No.: 10
 Sample ID: 16J0378-08

Autosampler Location: 321
 Date Collected: 10/28/2016 1:11:47 PM
 Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: 16J0378-08

Analyte Back Pressure Flow
 All 147.0 kPa 0.65 L/min

Mean Data: 16J0378-08

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
ScA 357.253	1793234.1	102.4	%	0.72				0.70%
ScR 361.383	204885.9	106.4	%	0.38				0.36%
Ag 328.068†	-74.5	-0.00057	mg/L	0.000149	-0.00057	mg/L	0.000149	25.93%
Al 308.215†	20.4	0.02180	mg/L	0.003275	0.02180	mg/L	0.003275	15.02%
As 188.979†	44.7	0.03256	mg/L	0.001442	0.03256	mg/L	0.001442	4.43%
B 249.677†	1679.0	0.3248	mg/L	0.00338	0.3248	mg/L	0.00338	1.04%
Ba 233.527†	961.3	0.1620	mg/L	0.00043	0.1620	mg/L	0.00043	0.27%
Be 313.042†	13.2	0.00004	mg/L	0.000076	0.00004	mg/L	0.000076	191.76%
Ca 317.933†	479906.7	67.04	mg/L	0.398	67.04	mg/L	0.398	0.59%
Cd 228.802†	7.8	0.00026	mg/L	0.000045	0.00026	mg/L	0.000045	17.17%
Co 228.616†	107.6	0.00423	mg/L	0.000306	0.00423	mg/L	0.000306	7.24%
Cr 267.716†	14.1	0.00014	mg/L	0.000375	0.00014	mg/L	0.000375	259.33%
Cu 324.752†	643.4	0.00392	mg/L	0.000092	0.00392	mg/L	0.000092	2.33%
Fe 273.955†	339.9	0.4333	mg/L	0.00938	0.4333	mg/L	0.00938	2.16%
K 766.490†	23359.8	19.20	mg/L	0.005	19.20	mg/L	0.005	0.03%
Mg 279.077†	24963.5	30.65	mg/L	0.162	30.65	mg/L	0.162	0.53%
Mn 257.610†	8068.1	0.2712	mg/L	0.00175	0.2712	mg/L	0.00175	0.65%
Mo 202.031†	92.2	0.00495	mg/L	0.000058	0.00495	mg/L	0.000058	1.17%
Na 589.592†	3655622.4	488.5	mg/L	1.64	488.5	mg/L	1.64	0.34%
Na 330.237†	8794.3	522.5	mg/L	2.09	522.5	mg/L	2.09	0.40%
Ni 231.604†	153.8	0.04302	mg/L	0.001009	0.04302	mg/L	0.001009	2.35%
Pb 220.353†	-4.8	-0.00072	mg/L	0.000635	-0.00072	mg/L	0.000635	88.62%
Sb 206.836†	9.8	0.00373	mg/L	0.001301	0.00373	mg/L	0.001301	34.83%
Se 196.026†	16.4	0.01779	mg/L	0.002824	0.01779	mg/L	0.002824	15.88%
Si 288.158†	12018.7	10.24	mg/L	0.025	10.24	mg/L	0.025	0.25%
Sn 189.927†	-93.0	-0.01686	mg/L	0.000616	-0.01686	mg/L	0.000616	3.65%
Sr 421.552†	263560.5	0.5311	mg/L	0.00131	0.5311	mg/L	0.00131	0.25%
Ti 334.903†	72.0	0.00019	mg/L	0.000661	0.00019	mg/L	0.000661	355.28%
Tl 190.801†	10.1	0.00348	mg/L	0.003566	0.00348	mg/L	0.003566	102.45%
V 292.402†	79.9	0.00082	mg/L	0.000057	0.00082	mg/L	0.000057	6.97%
Zn 206.200†	62.3	0.02158	mg/L	0.000788	0.02158	mg/L	0.000788	3.65%

Sequence No.: 11
 Sample ID: BEJ0759-MS1

Autosampler Location: 322
 Date Collected: 10/28/2016 1:16:19 PM
 Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: BEJ0759-MS1

Analyte	Back Pressure	Flow
All	147.0 kPa	0.65 L/min

Mean Data: BEJ0759-MS1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1810449.6	103.4	%	0.10			0.10%
ScR 361.383	203149.7	105.5	%	0.83			0.79%
Ag 328.068†	59031.1	0.4557	mg/L	0.00301	0.4557 mg/L	0.00301	0.66%
Al 308.215†	1976.4	2.114	mg/L	0.0057	2.114 mg/L	0.0057	0.27%
As 188.979†	2779.6	2.262	mg/L	0.0055	2.262 mg/L	0.0055	0.24%
B 249.677†	1712.4	0.3298	mg/L	0.00268	0.3298 mg/L	0.00268	0.81%
Ba 233.527†	12913.7	2.177	mg/L	0.0129	2.177 mg/L	0.0129	0.59%
Be 313.042†	168162.0	0.5100	mg/L	0.00129	0.5100 mg/L	0.00129	0.25%
Ca 317.933†	546534.4	76.35	mg/L	0.038	76.35 mg/L	0.038	0.05%
Cd 228.802†	9126.9	0.5146	mg/L	0.00299	0.5146 mg/L	0.00299	0.58%
Co 228.616†	12736.9	0.5035	mg/L	0.00072	0.5035 mg/L	0.00072	0.14%
Cr 267.716†	2967.0	0.5104	mg/L	0.00319	0.5104 mg/L	0.00319	0.62%
Cu 324.752†	71192.8	0.4946	mg/L	0.00290	0.4946 mg/L	0.00290	0.59%
Fe 273.955†	2006.7	2.554	mg/L	0.0117	2.554 mg/L	0.0117	0.46%
K 766.490†	36376.2	29.89	mg/L	0.090	29.89 mg/L	0.090	0.30%
Mg 279.077†	33867.8	41.58	mg/L	0.213	41.58 mg/L	0.213	0.51%
Mn 257.610†	23075.3	0.7765	mg/L	0.00473	0.7765 mg/L	0.00473	0.61%
Mo 202.031†	90.7	0.00472	mg/L	0.000285	0.00472 mg/L	0.000285	6.04%
Na 589.592†	3713208.8	496.2	mg/L	3.46	496.2 mg/L	3.46	0.70%
Na 330.237†	9013.7	535.3	mg/L	2.03	535.3 mg/L	2.03	0.38%
Ni 231.604†	1966.1	0.5490	mg/L	0.00257	0.5490 mg/L	0.00257	0.47%
Pb 220.353†	12854.1	1.942	mg/L	0.0107	1.942 mg/L	0.0107	0.55%
Sb 206.836†	26.7	0.00461	mg/L	0.003722	0.00461 mg/L	0.003722	80.66%
Se 196.026†	2122.7	2.298	mg/L	0.0136	2.298 mg/L	0.0136	0.59%
Si 288.158†	12351.5	10.53	mg/L	0.042	10.53 mg/L	0.042	0.40%
Sn 189.927†	-99.8	-0.01702	mg/L	0.000426	-0.01702 mg/L	0.000426	2.50%
Sr 421.552†	511972.1	1.032	mg/L	0.0021	1.032 mg/L	0.0021	0.21%
Ti 334.903†	97.6	0.00118	mg/L	0.000869	0.00118 mg/L	0.000869	73.49%
Tl 190.801†	2801.8	1.908	mg/L	0.0016	1.908 mg/L	0.0016	0.09%
V 292.402†	51121.0	0.5059	mg/L	0.00353	0.5059 mg/L	0.00353	0.70%
Zn 206.200†	1737.4	0.5482	mg/L	0.00381	0.5482 mg/L	0.00381	0.69%

Sequence No.: 12
 Sample ID: BEJ0759-BS1

Autosampler Location: 323
 Date Collected: 10/28/2016 1:23:19 PM
 Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: BEJ0759-BS1

Analyte Back Pressure Flow
 All 146.0 kPa 0.65 L/min

Mean Data: BEJ0759-BS1

Analyte	Mean Corrected		Calib. Conc. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
ScA 357.253	1898955.2	108.5	%	0.57				0.53%
ScR 361.383	209364.4	108.8	%	0.81				0.75%
Ag 328.068†	72302.5	0.5581	mg/L	0.00710	0.5581	mg/L	0.00710	1.27%
Al 308.215†	2008.0	2.147	mg/L	0.0111	2.147	mg/L	0.0111	0.52%
As 188.979†	2690.1	2.193	mg/L	0.0099	2.193	mg/L	0.0099	0.45%
B 249.677†	2.9	-0.00087	mg/L	0.001307	-0.00087	mg/L	0.001307	150.78%
Ba 233.527†	12278.7	2.070	mg/L	0.0189	2.070	mg/L	0.0189	0.91%
Be 313.042†	173459.4	0.5261	mg/L	0.00488	0.5261	mg/L	0.00488	0.93%
Ca 317.933†	75146.0	10.50	mg/L	0.089	10.50	mg/L	0.089	0.84%
Cd 228.802†	9641.8	0.5448	mg/L	0.00473	0.5448	mg/L	0.00473	0.87%
Co 228.616†	13185.6	0.5213	mg/L	0.00804	0.5213	mg/L	0.00804	1.54%
Cr 267.716†	3011.0	0.5202	mg/L	0.00637	0.5202	mg/L	0.00637	1.22%
Cu 324.752†	71555.5	0.4977	mg/L	0.00519	0.4977	mg/L	0.00519	1.04%
Fe 273.955†	1692.5	2.153	mg/L	0.0252	2.153	mg/L	0.0252	1.17%
K 766.490†	13351.4	10.97	mg/L	0.030	10.97	mg/L	0.030	0.27%
Mg 279.077†	8871.9	10.89	mg/L	0.112	10.89	mg/L	0.112	1.03%
Mn 257.610†	15190.0	0.5116	mg/L	0.00515	0.5116	mg/L	0.00515	1.01%
Mo 202.031†	16.9	0.00094	mg/L	0.000303	0.00094	mg/L	0.000303	32.39%
Na 589.592†	79505.7	10.62	mg/L	0.075	10.62	mg/L	0.075	0.71%
Na 330.237†	195.1	11.39	mg/L	0.201	11.39	mg/L	0.201	1.76%
Ni 231.604†	1889.5	0.5274	mg/L	0.00573	0.5274	mg/L	0.00573	1.09%
Pb 220.353†	14079.9	2.128	mg/L	0.0297	2.128	mg/L	0.0297	1.40%
Sb 206.836†	11.5	-0.00150	mg/L	0.000897	-0.00150	mg/L	0.000897	59.78%
Se 196.026†	2230.7	2.415	mg/L	0.0150	2.415	mg/L	0.0150	0.62%
Si 288.158†	-14.1	-0.00884	mg/L	0.003552	-0.00884	mg/L	0.003552	40.18%
Sn 189.927†	-29.2	-0.00763	mg/L	0.001336	-0.00763	mg/L	0.001336	17.51%
Sr 421.552†	255180.9	0.5142	mg/L	0.00286	0.5142	mg/L	0.00286	0.56%
Ti 334.903†	10.7	-0.00013	mg/L	0.000385	-0.00013	mg/L	0.000385	291.12%
Tl 190.801†	3149.2	2.149	mg/L	0.0163	2.149	mg/L	0.0163	0.76%
V 292.402†	53144.6	0.5259	mg/L	0.00684	0.5259	mg/L	0.00684	1.30%
Zn 206.200†	1718.0	0.5400	mg/L	0.00759	0.5400	mg/L	0.00759	1.41%

Sequence No.: 13
Sample ID: SEQ-CCV4

Autosampler Location: 7
Date Collected: 10/28/2016 1:30:01 PM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: SEQ-CCV4

Analyte Back Pressure Flow
All 146.0 kPa 0.65 L/min

Mean Data: SEQ-CCV4

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1861971.7	106.4	%	0.14			0.13%
ScR 361.383	204172.0	106.1	%	0.16			0.15%
Ag 328.068†	133494.6	1.030	mg/L	0.0065	1.030 mg/L	0.0065	0.63%
Al 308.215†	1987.0	2.099	mg/L	0.0046	2.099 mg/L	0.0046	0.22%
As 188.979†	2509.0	2.073	mg/L	0.0048	2.073 mg/L	0.0048	0.23%
B 249.677†	5269.8	1.018	mg/L	0.0012	1.018 mg/L	0.0012	0.12%
Ba 233.527†	6107.7	1.029	mg/L	0.0007	1.029 mg/L	0.0007	0.07%
Be 313.042†	343678.3	1.042	mg/L	0.0018	1.042 mg/L	0.0018	0.17%
Ca 317.933†	15527.6	2.169	mg/L	0.0034	2.169 mg/L	0.0034	0.15%
Cd 228.802†	17785.7	1.017	mg/L	0.0083	1.017 mg/L	0.0083	0.82%
Co 228.616†	25545.2	1.008	mg/L	0.0094	1.008 mg/L	0.0094	0.93%
Cr 267.716†	6031.7	1.044	mg/L	0.0009	1.044 mg/L	0.0009	0.09%
Cu 324.752†	142134.6	0.9880	mg/L	0.00821	0.9880 mg/L	0.00821	0.83%
Fe 273.955†	1682.9	2.137	mg/L	0.0086	2.137 mg/L	0.0086	0.40%
K 766.490†	25739.2	21.15	mg/L	0.151	21.15 mg/L	0.151	0.71%
Mg 279.077†	1729.4	2.131	mg/L	0.0063	2.131 mg/L	0.0063	0.30%
Mn 257.610†	29115.9	0.9801	mg/L	0.00271	0.9801 mg/L	0.00271	0.28%
Mo 202.031†	15190.1	0.9780	mg/L	0.00996	0.9780 mg/L	0.00996	1.02%
Na 589.592†	380249.5	50.82	mg/L	0.199	50.82 mg/L	0.199	0.39%
Na 330.237†	917.6	54.36	mg/L	0.283	54.36 mg/L	0.283	0.52%
Ni 231.604†	3747.3	1.048	mg/L	0.0012	1.048 mg/L	0.0012	0.11%
Pb 220.353†	13399.2	2.025	mg/L	0.0161	2.025 mg/L	0.0161	0.79%
Sb 206.836†	5110.0	2.117	mg/L	0.0018	2.117 mg/L	0.0018	0.09%
Se 196.026†	1941.4	2.101	mg/L	0.0033	2.101 mg/L	0.0033	0.16%
Si 288.158†	2498.7	2.126	mg/L	0.0032	2.126 mg/L	0.0032	0.15%
Sn 189.927†	2946.8	1.019	mg/L	0.0015	1.019 mg/L	0.0015	0.15%
Sr 421.552†	507705.5	1.023	mg/L	0.0027	1.023 mg/L	0.0027	0.27%
Ti 334.903†	14603.0	1.015	mg/L	0.0040	1.015 mg/L	0.0040	0.39%
Tl 190.801†	2977.9	2.029	mg/L	0.0006	2.029 mg/L	0.0006	0.03%
V 292.402†	102465.0	1.014	mg/L	0.0070	1.014 mg/L	0.0070	0.69%
Zn 206.200†	3402.6	1.070	mg/L	0.0030	1.070 mg/L	0.0030	0.28%

Sequence No.: 14
Sample ID: SEQ-CCB4
Dilution: 1.000000X

Autosampler Location: 1
Date Collected: 10/28/2016 1:36:45 PM
Data Type: Original

Nebulizer Parameters: SEQ-CCB4

Analyte Back Pressure Flow
All 146.0 kPa 0.65 L/min

Mean Data: SEQ-CCB4

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1827266.7	104.4	%	0.10			0.10%
ScR 361.383	201269.0	104.6	%	0.62			0.59%
Ag 328.068†	16.1	0.00012	mg/L	0.000088	0.00012 mg/L	0.000088	70.66%
Al 308.215†	6.6	0.00704	mg/L	0.003026	0.00704 mg/L	0.003026	43.01%
As 188.979†	0.8	0.00061	mg/L	0.001642	0.00061 mg/L	0.001642	269.09%
B 249.677†	6.7	0.00130	mg/L	0.001078	0.00130 mg/L	0.001078	83.08%
Ba 233.527†	2.7	0.00046	mg/L	0.000459	0.00046 mg/L	0.000459	99.57%
Be 313.042†	-7.1	-0.00002	mg/L	0.000019	-0.00002 mg/L	0.000019	88.08%
Ca 317.933†	11.4	0.00159	mg/L	0.001519	0.00159 mg/L	0.001519	95.60%
Cd 228.802†	-2.9	-0.00017	mg/L	0.000255	-0.00017 mg/L	0.000255	149.32%
Co 228.616†	3.9	0.00015	mg/L	0.000108	0.00015 mg/L	0.000108	70.31%
Cr 267.716†	3.5	0.00060	mg/L	0.001440	0.00060 mg/L	0.001440	239.90%
Cu 324.752†	-5.5	-0.00004	mg/L	0.000139	-0.00004 mg/L	0.000139	357.48%
Fe 273.955†	1.4	0.00179	mg/L	0.001716	0.00179 mg/L	0.001716	95.75%
K 766.490†	70.3	0.05778	mg/L	0.009517	0.05778 mg/L	0.009517	16.47%
Mg 279.077†	-3.4	-0.00421	mg/L	0.009878	-0.00421 mg/L	0.009878	234.55%
Mn 257.610†	-1.0	-0.00003	mg/L	0.000115	-0.00003 mg/L	0.000115	342.26%
Mo 202.031†	9.9	0.00064	mg/L	0.000216	0.00064 mg/L	0.000216	33.88%
Na 589.592†	336.9	0.04503	mg/L	0.005871	0.04503 mg/L	0.005871	13.04%
Na 330.237†	11.6	0.6874	mg/L	0.25665	0.6874 mg/L	0.25665	37.34%
Ni 231.604†	-1.8	-0.00051	mg/L	0.000864	-0.00051 mg/L	0.000864	167.92%
Pb 220.353†	7.5	0.00114	mg/L	0.000221	0.00114 mg/L	0.000221	19.45%
Sb 206.836†	-0.2	-0.00010	mg/L	0.002165	-0.00010 mg/L	0.002165	>999.9%
Se 196.026†	0.7	0.00073	mg/L	0.001540	0.00073 mg/L	0.001540	211.02%
Si 288.158†	-1.7	-0.00142	mg/L	0.002864	-0.00142 mg/L	0.002864	202.06%
Sn 189.927†	-2.9	-0.00102	mg/L	0.000781	-0.00102 mg/L	0.000781	76.80%
Sr 421.552†	-14.7	-0.00003	mg/L	0.000061	-0.00003 mg/L	0.000061	205.93%
Ti 334.903†	-2.4	-0.00017	mg/L	0.000410	-0.00017 mg/L	0.000410	245.19%
Tl 190.801†	-1.9	-0.00129	mg/L	0.003025	-0.00129 mg/L	0.003025	234.94%
V 292.402†	-8.4	-0.00008	mg/L	0.000142	-0.00008 mg/L	0.000142	178.82%
Zn 206.200†	-0.1	-0.00004	mg/L	0.000356	-0.00004 mg/L	0.000356	861.62%

Sequence No.: 15
 Sample ID: BEJ0643-BLK1

Autosampler Location: 324
 Date Collected: 10/28/2016 1:40:45 PM
 Data Type: Original

Dilution: 1.000000X

Pd
missal tube *10-28-16*

Nebulizer Parameters: BEJ0643-BLK1

Analyte Back Pressure Flow
 All 148.0 kPa 0.65 L/min

Mean Data: BEJ0643-BLK1

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		RSD
	Intensity	Conc.			Conc.	Units	
ScA 357.253	3974630.6	227.1	%	29.73			13.10%
ScR 361.383	395045.1	205.2	%	9.90			4.83%
Ag 328.068†	52.2	0.00040	mg/L	0.000131	0.00040	mg/L	0.000131 32.51%
Al 308.215†	41.2	0.04423	mg/L	0.001826	0.04423	mg/L	0.001826 4.13%
As 188.979†	0.5	-0.00002	mg/L	0.001537	-0.00002	mg/L	0.001537 >999.9%
B 249.677†	-39.8	-0.00771	mg/L	0.000413	-0.00771	mg/L	0.000413 5.36%
Ba 233.527†	16.0	0.00268	mg/L	0.000434	0.00268	mg/L	0.000434 16.17%
Be 313.042†	-578.2	-0.00175	mg/L	0.000059	-0.00175	mg/L	0.000059 3.38%
Ca 317.933†	184.9	0.02582	mg/L	0.000819	0.02582	mg/L	0.000819 3.17%
Cd 228.802†	-45.6	-0.00263	mg/L	0.001497	-0.00263	mg/L	0.001497 56.83%
Co 228.616†	51.0	0.00204	mg/L	0.000249	0.00204	mg/L	0.000249 12.22%
Cr 267.716†	23.9	0.00414	mg/L	0.000276	0.00414	mg/L	0.000276 6.67%
Cu 324.752†	-485.0	-0.00337	mg/L	0.000186	-0.00337	mg/L	0.000186 5.52%
Fe 273.955†	60.4	0.07699	mg/L	0.001664	0.07699	mg/L	0.001664 2.16%
K 766.490†	-144.8	-0.1190	mg/L	0.01142	-0.1190	mg/L	0.01142 9.59%
Mg 279.077†	73.4	0.09010	mg/L	0.003410	0.09010	mg/L	0.003410 3.79%
Mn 257.610†	97.0	0.00326	mg/L	0.000057	0.00326	mg/L	0.000057 1.75%
Mo 202.031†	-26.4	-0.00170	mg/L	0.000185	-0.00170	mg/L	0.000185 10.86%
Na 589.592†	-116.0	-0.01550	mg/L	0.010037	-0.01550	mg/L	0.010037 64.75%
Na 330.237†	41.4	2.452	mg/L	0.1294	2.452	mg/L	0.1294 5.28%
Ni 231.604†	22.2	0.00619	mg/L	0.000643	0.00619	mg/L	0.000643 10.39%
Pb 220.353†	-6.6	-0.00098	mg/L	0.000570	-0.00098	mg/L	0.000570 58.17%
Sb 206.836†	-36.3	-0.01513	mg/L	0.002005	-0.01513	mg/L	0.002005 13.25%
Se 196.026†	11.5	0.01240	mg/L	0.002726	0.01240	mg/L	0.002726 21.98%
Si 288.158†	-36.7	-0.03114	mg/L	0.002757	-0.03114	mg/L	0.002757 8.85%
Sn 189.927†	4.7	0.00162	mg/L	0.000138	0.00162	mg/L	0.000138 8.52%
Sr 421.552†	-224.6	-0.00045	mg/L	0.000012	-0.00045	mg/L	0.000012 2.62%
Ti 334.903†	-191.9	-0.01336	mg/L	0.000608	-0.01336	mg/L	0.000608 4.56%
Tl 190.801†	24.8	0.01698	mg/L	0.001398	0.01698	mg/L	0.001398 8.24%
V 292.402†	-108.0	-0.00104	mg/L	0.000039	-0.00104	mg/L	0.000039 3.72%
Zn 206.200†	11.7	0.00368	mg/L	0.000573	0.00368	mg/L	0.000573 15.58%

Sequence No.: 16
 Sample ID: 16J0341-01

Autosampler Location: 325
 Date Collected: 10/28/2016 1:45:00 PM
 Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: 16J0341-01

Analyte Back Pressure Flow
 All 145.0 kPa 0.65 L/min

Mean Data: 16J0341-01

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1789347.0	102.2 %	0.96			0.94%
ScR 361.383	205340.5	106.7 %	0.40			0.37%
Ag 328.068†	-84.3	-0.00063 mg/L	0.000253	-0.00063 mg/L	0.000253	39.89%
Al 308.215†	5078.9	5.450 mg/L	0.0093	5.450 mg/L	0.0093	0.17%
As 188.979†	16.6	0.01247 mg/L	0.004891	0.01247 mg/L	0.004891	39.23%
B 249.677†	625.9	0.1210 mg/L	0.00071	0.1210 mg/L	0.00071	0.59%
Ba 233.527†	368.3	0.05172 mg/L	0.000584	0.05172 mg/L	0.000584	1.13%
Be 313.042†	148.7	0.00044 mg/L	0.000056	0.00044 mg/L	0.000056	12.76%
Ca 317.933†	414893.7	57.96 mg/L	0.658	57.96 mg/L	0.658	1.14%
Cd 228.802†	7.7	-0.00042 mg/L	0.000123	-0.00042 mg/L	0.000123	29.04%
Co 228.616†	149.7	0.00576 mg/L	0.000140	0.00576 mg/L	0.000140	2.43%
Cr 267.716†	67.5	0.01077 mg/L	0.000280	0.01077 mg/L	0.000280	2.60%
Cu 324.752†	1933.9	0.01739 mg/L	0.000343	0.01739 mg/L	0.000343	1.97%
Fe 273.955†	74107.3	94.46 mg/L	0.460	94.46 mg/L	0.460	0.49%
K 766.490†	17982.0	14.78 mg/L	0.024	14.78 mg/L	0.024	0.16%
Mg 279.077†	62635.1	76.82 mg/L	0.438	76.82 mg/L	0.438	0.57%
Mn 257.610†	53460.4	1.798 mg/L	0.0070	1.798 mg/L	0.0070	0.39%
Mo 202.031†	105.7	0.00595 mg/L	0.000386	0.00595 mg/L	0.000386	6.48%
Na 589.592†	2258538.5	301.8 mg/L	0.34	301.8 mg/L	0.34	0.11%
Na 330.237†	5234.6	311.0 mg/L	1.57	311.0 mg/L	1.57	0.50%
Ni 231.604†	36.4	0.01019 mg/L	0.001906	0.01019 mg/L	0.001906	18.70%
Pb 220.353†	43.5	0.00792 mg/L	0.000563	0.00792 mg/L	0.000563	7.11%
Sb 206.836†	12.0	0.00479 mg/L	0.002630	0.00479 mg/L	0.002630	54.86%
Se 196.026†	18.2	0.01906 mg/L	0.003777	0.01906 mg/L	0.003777	19.82%
Si 288.158†	46661.5	39.76 mg/L	0.099	39.76 mg/L	0.099	0.25%
Sn 189.927†	-92.4	-0.01870 mg/L	0.000696	-0.01870 mg/L	0.000696	3.72%
Sr 421.552†	243343.8	0.4904 mg/L	0.00115	0.4904 mg/L	0.00115	0.23%
Ti 334.903†	1202.8	0.07952 mg/L	0.000347	0.07952 mg/L	0.000347	0.44%
Tl 190.801†	-8.2	0.00252 mg/L	0.001785	0.00252 mg/L	0.001785	70.82%
V 292.402†	5647.0	0.05232 mg/L	0.000711	0.05232 mg/L	0.000711	1.36%
Zn 206.200†	86.7	0.03508 mg/L	0.001115	0.03508 mg/L	0.001115	3.18%

Sequence No.: 17
 Sample ID: 16J0336-01

Autosampler Location: 326
 Date Collected: 10/28/2016 1:49:16 PM
 Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: 16J0336-01

Analyte Back Pressure Flow
 All 145.0 kPa 0.65 L/min

Mean Data: 16J0336-01

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1869300.8	106.8 %		0.43			0.40%
ScR 361.383	207350.0	107.7 %		0.64			0.60%
Ag 328.068†	-39.1	-0.00030 mg/L		0.000335	-0.00030 mg/L	0.000335	112.17%
Al 308.215†	13.5	0.01426 mg/L		0.005519	0.01426 mg/L	0.005519	38.70%
As 188.979†	7.9	0.00504 mg/L		0.003474	0.00504 mg/L	0.003474	68.94%
B 249.677†	30.7	0.00594 mg/L		0.000461	0.00594 mg/L	0.000461	7.76%
Ba 233.527†	93.1	0.01569 mg/L		0.000559	0.01569 mg/L	0.000559	3.57%
Be 313.042†	-19.7	-0.00006 mg/L		0.000068	-0.00006 mg/L	0.000068	109.33%
Ca 317.933†	170193.9	23.78 mg/L		0.163	23.78 mg/L	0.163	0.68%
Cd 228.802†	-5.7	-0.00037 mg/L		0.000039	-0.00037 mg/L	0.000039	10.61%
Co 228.616†	6.6	0.00026 mg/L		0.000145	0.00026 mg/L	0.000145	55.94%
Cr 267.716†	6.9	0.00077 mg/L		0.000621	0.00077 mg/L	0.000621	80.90%
Cu 324.752†	72.3	0.00044 mg/L		0.000103	0.00044 mg/L	0.000103	23.09%
Fe 273.955†	58.1	0.07398 mg/L		0.012347	0.07398 mg/L	0.012347	16.69%
K 766.490†	3634.9	2.987 mg/L		0.0056	2.987 mg/L	0.0056	0.19%
Mg 279.077†	4560.3	5.598 mg/L		0.0209	5.598 mg/L	0.0209	0.37%
Mn 257.610†	48.6	0.00159 mg/L		0.000323	0.00159 mg/L	0.000323	20.36%
Mo 202.031†	38.8	0.00215 mg/L		0.000209	0.00215 mg/L	0.000209	9.73%
Na 589.592†	25550.2	3.414 mg/L		0.0522	3.414 mg/L	0.0522	1.53%
Na 330.237†	62.6	3.721 mg/L		0.5372	3.721 mg/L	0.5372	14.44%
Ni 231.604†	2.3	0.00064 mg/L		0.001113	0.00064 mg/L	0.001113	172.83%
Pb 220.353†	0.4	0.00006 mg/L		0.000311	0.00006 mg/L	0.000311	486.53%
Sb 206.836†	-4.2	-0.00188 mg/L		0.001407	-0.00188 mg/L	0.001407	74.95%
Se 196.026†	8.2	0.00886 mg/L		0.001389	0.00886 mg/L	0.001389	15.68%
Si 288.158†	29842.4	25.42 mg/L		0.064	25.42 mg/L	0.064	0.25%
Sn 189.927†	-51.2	-0.01226 mg/L		0.001652	-0.01226 mg/L	0.001652	13.47%
Sr 421.552†	38623.3	0.07783 mg/L		0.000052	0.07783 mg/L	0.000052	0.07%
Ti 334.903†	6.0	-0.00129 mg/L		0.001265	-0.00129 mg/L	0.001265	97.89%
Tl 190.801†	10.0	0.00556 mg/L		0.002382	0.00556 mg/L	0.002382	42.83%
V 292.402†	1173.9	0.01157 mg/L		0.000113	0.01157 mg/L	0.000113	0.98%
Zn 206.200†	7.9	0.00749 mg/L		0.000177	0.00749 mg/L	0.000177	2.36%

Sequence No.: 18
 Sample ID: 16J0341-03

Autosampler Location: 327
 Date Collected: 10/28/2016 1:53:14 PM
 Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: 16J0341-03

Analyte Back Pressure Flow
 All 144.0 kPa 0.65 L/min

Mean Data: 16J0341-03

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
ScA 357.253	1833379.9	104.7	%	0.89			0.85%
ScR 361.383	201571.0	104.7	%	0.42			0.40%
Ag 328.068†	-7.1	-0.00005	mg/L	0.000127	-0.00005 mg/L	0.000127	236.01%
Al 308.215†	141.6	0.1518	mg/L	0.00805	0.1518 mg/L	0.00805	5.30%
As 188.979†	11.2	0.00718	mg/L	0.000192	0.00718 mg/L	0.000192	2.67%
B 249.677†	357.4	0.06909	mg/L	0.001754	0.06909 mg/L	0.001754	2.54%
Ba 233.527†	276.1	0.04263	mg/L	0.000168	0.04263 mg/L	0.000168	0.39%
Be 313.042†	40.5	0.00012	mg/L	0.000044	0.00012 mg/L	0.000044	35.79%
Ca 317.933†	296420.3	41.41	mg/L	0.320	41.41 mg/L	0.320	0.77%
Cd 228.802†	-1.6	-0.00044	mg/L	0.000345	-0.00044 mg/L	0.000345	78.36%
Co 228.616†	332.8	0.01313	mg/L	0.000202	0.01313 mg/L	0.000202	1.54%
Cr 267.716†	1.7	0.00033	mg/L	0.001754	0.00033 mg/L	0.001754	528.78%
Cu 324.752†	-170.7	0.00037	mg/L	0.000213	0.00037 mg/L	0.000213	58.13%
Fe 273.955†	28030.4	35.73	mg/L	0.231	35.73 mg/L	0.231	0.65%
K 766.490†	7502.2	6.165	mg/L	0.0201	6.165 mg/L	0.0201	0.33%
Mg 279.077†	19502.9	23.92	mg/L	0.137	23.92 mg/L	0.137	0.57%
Mn 257.610†	54166.9	1.822	mg/L	0.0084	1.822 mg/L	0.0084	0.46%
Mo 202.031†	50.2	0.00262	mg/L	0.000280	0.00262 mg/L	0.000280	10.69%
Na 589.592†	425962.4	56.92	mg/L	0.089	56.92 mg/L	0.089	0.16%
Na 330.237†	995.5	59.15	mg/L	0.754	59.15 mg/L	0.754	1.28%
Ni 231.604†	48.3	0.01351	mg/L	0.001439	0.01351 mg/L	0.001439	10.65%
Pb 220.353†	2.8	0.00047	mg/L	0.000975	0.00047 mg/L	0.000975	208.14%
Sb 206.836†	8.1	0.00314	mg/L	0.001719	0.00314 mg/L	0.001719	54.82%
Se 196.026†	12.2	0.01313	mg/L	0.005551	0.01313 mg/L	0.005551	42.26%
Si 288.158†	22636.2	19.29	mg/L	0.073	19.29 mg/L	0.073	0.38%
Sn 189.927†	-77.5	-0.01734	mg/L	0.000583	-0.01734 mg/L	0.000583	3.36%
Sr 421.552†	140547.3	0.2832	mg/L	0.00052	0.2832 mg/L	0.00052	0.18%
Ti 334.903†	246.4	0.01417	mg/L	0.000846	0.01417 mg/L	0.000846	5.97%
Tl 190.801†	1.4	0.00304	mg/L	0.000882	0.00304 mg/L	0.000882	29.03%
V 292.402†	257.0	0.00145	mg/L	0.000150	0.00145 mg/L	0.000150	10.37%
Zn 206.200†	2.2	0.00447	mg/L	0.000790	0.00447 mg/L	0.000790	17.67%

Sequence No.: 19
 Sample ID: 16J0341-04

Autosampler Location: 328
 Date Collected: 10/28/2016 1:57:28 PM
 Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: 16J0341-04

Analyte Back Pressure Flow
 All 145.0 kPa 0.65 L/min

Mean Data: 16J0341-04

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	1685577.8	96.29	%	0.239				0.25%
ScR 361.383	192561.0	100.0	%	0.52				0.52%
Ag 328.068†	-194.4	-0.00150	mg/L	0.000362	-0.00150	mg/L	0.000362	24.12%
Al 308.215†	-5.8	-0.00663	mg/L	0.006722	-0.00663	mg/L	0.006722	101.43%
As 188.979†	45.0	0.02337	mg/L	0.003588	0.02337	mg/L	0.003588	15.35%
B 249.677†	2657.2	0.5140	mg/L	0.00248	0.5140	mg/L	0.00248	0.48%
Ba 233.527†	246.6	0.04155	mg/L	0.000881	0.04155	mg/L	0.000881	2.12%
Be 313.042†	95.3	0.00029	mg/L	0.000008	0.00029	mg/L	0.000008	2.77%
Ca 317.933†	1657632.4	231.6	mg/L	0.70	231.6	mg/L	0.70	0.30%
Cd 228.802†	-13.5	-0.00101	mg/L	0.000396	-0.00101	mg/L	0.000396	39.31%
Co 228.616†	51.8	0.00201	mg/L	0.000074	0.00201	mg/L	0.000074	3.67%
Cr 267.716†	144.9	0.00025	mg/L	0.001803	0.00025	mg/L	0.001803	731.30%
Cu 324.752†	403.8	-0.00048	mg/L	0.000133	-0.00048	mg/L	0.000133	27.65%
Fe 273.955†	141.0	0.1797	mg/L	0.00624	0.1797	mg/L	0.00624	3.48%
K 766.490†	66089.2	54.31	mg/L	0.076	54.31	mg/L	0.076	0.14%
Mg 279.077†	267359.2	328.2	mg/L	0.32	328.2	mg/L	0.32	0.10%
Mn 257.610†	50360.0	1.691	mg/L	0.0032	1.691	mg/L	0.0032	0.19%
Mo 202.031†	315.8	0.01692	mg/L	0.000132	0.01692	mg/L	0.000132	0.78%
Na 589.592†	9598219.7	1283	mg/L	9.38	1283	mg/L	9.38	0.73%
Na 330.237†	22888.7	1360	mg/L	5.77	1360	mg/L	5.77	0.42%
Ni 231.604†	6.4	0.00178	mg/L	0.001171	0.00178	mg/L	0.001171	65.61%
Pb 220.353†	-3.2	-0.00044	mg/L	0.000939	-0.00044	mg/L	0.000939	215.60%
Sb 206.836†	-0.1	-0.00080	mg/L	0.001973	-0.00080	mg/L	0.001973	247.41%
Se 196.026†	38.0	0.04110	mg/L	0.009047	0.04110	mg/L	0.009047	22.01%
Si 288.158†	32162.4	27.44	mg/L	0.107	27.44	mg/L	0.107	0.39%
Sn 189.927†	-117.9	0.01197	mg/L	0.001491	0.01197	mg/L	0.001491	12.45%
Sr 421.552†	979899.2	1.975	mg/L	0.0063	1.975	mg/L	0.0063	0.32%
Ti 334.903†	289.4	0.00348	mg/L	0.000239	0.00348	mg/L	0.000239	6.86%
Tl 190.801†	11.3	-0.00417	mg/L	0.003866	-0.00417	mg/L	0.003866	92.67%
V 292.402†	231.9	0.00265	mg/L	0.000107	0.00265	mg/L	0.000107	4.02%
Zn 206.200†	-24.1	-0.00218	mg/L	0.000703	-0.00218	mg/L	0.000703	32.20%