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Automated Report

Technical Report for

USACE-Philadelphia District

Delaware Valley Works Facility, PA

SGS Job Number: JC77181

Sampling Date: 10/31/18

Report to:

USACE-Philadelphia District
100 Penn Square East
Philadelphia, PA 19107
Joseph.M.Loeper@USACE.Army.mil

ATTN: Joseph Loeper

Total number of pages in report: 635

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

Brian McGuire
General Manager

Client Service contact: Tammy McCloskey 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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December 17, 2018

Mr. Joseph Loeper
USACE-Philadelphia District
100 Penn Square East
Philadelphia, PA 19107

Re: SGS North America – Dayton, NJ Jobs # JC77181 - Reissues

Dear Mr. Loeper,

The final reports for SGS jobs number JC77181 has been edited to reflect corrections to the results. These edits have been incorporated into the revised report which is attached.

Specifically, additional compounds 44DDT, 44DDD, 44DDE have been reported for sample JC77181-1 through -3 per your request on 12/5/2018. The attached revised report incorporates these revisions.

SGS apologizes for this occurrence and for any inconvenience this situation may have caused. Please contact me if I can be of further assistance in this matter.

Sincerely,

Report Department

SGS North America Inc.

CONTINUOUS SERVICE IMPROVEMENT!

Our goal is to continuously improve our service to you. Please share your ideas about how we can serve you better at EHS.US.CustomerCare@sgs.com. Your feedback is appreciated!

SGS North America Inc. Mid-Atlantic 2235 US Highway 130 Dayton, NJ 08810, USA t +1 (0)732 329 0200

Member of the SGS Group (SGS SA)

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SGS North America Inc.

Sample Summary

USACE-Philadelphia District

Delaware Valley Works Facility, PA

Job No: JC77181

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC77181-1	10/31/18	11:30	JL/SH	11/01/18	AQ	Water	LOC-004
JC77181-1F	10/31/18	11:30	JL/SH	11/01/18	AQ	Water Filtered	LOC-004
JC77181-1R	10/31/18	11:30	JL/SH	11/01/18	AQ	Water	LOC-004
JC77181-2	10/31/18	12:40	JL/SH	11/01/18	AQ	Water	LOC-003
JC77181-2F	10/31/18	12:40	JL/SH	11/01/18	AQ	Water Filtered	LOC-003
JC77181-2R	10/31/18	12:40	JL/SH	11/01/18	AQ	Water	LOC-003
JC77181-3	10/31/18	00:00	JL/SH	11/01/18	AQ	Water	FD-01
JC77181-3F	10/31/18	00:00	JL/SH	11/01/18	AQ	Water Filtered	FD-01
JC77181-3R	10/31/18	00:00	JL/SH	11/01/18	AQ	Water	FD-01

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	USACE-Philadelphia District	**Job No**	JC77181
Site:	Delaware Valley Works Facility, PA	**Report Date**	12/17/2018 4:12:32 P

On 11/01/2018, 6 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 3.1 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC77181 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

GC/LC Semi-volatiles By Method SW846 8081B

Matrix: AQ **Batch ID:** OP16424

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- OP16424-BSD for 4,4'-DDD: Analytical precision exceeds in-house control limits.
- OP16424-BSD for 4,4'-DDE: Analytical precision exceeds in-house control limits.
- OP16424-BSD for 4,4'-DDT: Analytical precision exceeds in-house control limits.
- OP16424-BSD for alpha-BHC: Analytical precision exceeds in-house control limits.
- OP16424-BSD for beta-BHC: Analytical precision exceeds in-house control limits.
- OP16424-BSD for delta-BHC: Analytical precision exceeds in-house control limits.
- OP16424-BSD for gamma-BHC (Lindane): Analytical precision exceeds in-house control limits.
- JC77181-2 for beta-BHC: Associated CCV outside of control limits low.
- JC77181-3 for beta-BHC: Associated CCV outside of control limits low.

Metals Analysis By Method SW846 6020B

Matrix: AQ **Batch ID:** MP10229

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC76939-2FMS, JC76939-2FMSD, JC76939-2FPS, JC76939-2FSDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Arsenic are outside control limits for sample MP10229-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Summary of Hits

Job Number: JC77181
Account: USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA
Collected: 10/31/18

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
JC77181-1	**LOC-004**					
alpha-BHC		0.045	0.010	0.0075	ug/l	SW846 8081B
Arsenic		3100	75	50	ug/l	SW846 6020B
JC77181-1F	**LOC-004**					
Arsenic		3850	75	50	ug/l	SW846 6020B
JC77181-1R	**LOC-004**					
4,4'-DDD		0.018	0.0067	0.0038	ug/l	SW846 8081B
4,4'-DDT		0.0075	0.0067	0.0046	ug/l	SW846 8081B
JC77181-2	**LOC-003**					
alpha-BHC		0.076	0.0095	0.0071	ug/l	SW846 8081B
beta-BHC [a]		0.024	0.0095	0.0076	ug/l	SW846 8081B
gamma-BHC (Lindane)		0.022	0.0095	0.0057	ug/l	SW846 8081B
Arsenic		6230	150	100	ug/l	SW846 6020B
JC77181-2F	**LOC-003**					
Arsenic		6650	150	100	ug/l	SW846 6020B
JC77181-2R	**LOC-003**					
4,4'-DDD		0.016	0.0067	0.0038	ug/l	SW846 8081B
JC77181-3	**FD-01**					
alpha-BHC		0.11	0.0095	0.0071	ug/l	SW846 8081B
beta-BHC [a]		0.037	0.0095	0.0076	ug/l	SW846 8081B
gamma-BHC (Lindane)		0.043	0.0095	0.0057	ug/l	SW846 8081B
Arsenic		6120	150	100	ug/l	SW846 6020B
JC77181-3F	**FD-01**					
Arsenic		5890	150	100	ug/l	SW846 6020B
JC77181-3R	**FD-01**					
4,4'-DDD		0.016	0.0067	0.0038	ug/l	SW846 8081B

(a) Associated CCV outside of control limits low.

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	LOC-004		
Lab Sample ID:	JC77181-1	**Date Sampled:**	10/31/18
Matrix:	AQ - Water	**Date Received:**	11/01/18
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Delaware Valley Works Facility, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4G954323.D	1	11/07/18 12:06	MH	11/06/18 13:00	OP16424	G4G2589
Run #2							

	Initial Volume	Final Volume
Run #1	200 ml	2.0 ml
Run #2		

Pesticide Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
319-84-6	alpha-BHC	0.045	0.010	0.0075	0.0052	ug/l	
319-85-7	beta-BHC	0.0080 U	0.010	0.0080	0.0080	ug/l	
319-86-8	delta-BHC	0.0075 U	0.010	0.0075	0.0066	ug/l	
58-89-9	gamma-BHC (Lindane)	0.0060 U	0.010	0.0060	0.0060	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	76%		13-153%
877-09-8	Tetrachloro-m-xylene	87%		13-153%
2051-24-3	Decachlorobiphenyl	61%		10-138%
2051-24-3	Decachlorobiphenyl	64%		10-138%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	LOC-004		
Lab Sample ID:	JC77181-1	**Date Sampled:**	10/31/18
Matrix:	AQ - Water	**Date Received:**	11/01/18
		Percent Solids:	n/a
Project:	Delaware Valley Works Facility, PA		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	3100	75	50	24	ug/l	50	11/06/18	11/07/18	ZC	SW846 6020B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA45617
(2) Prep QC Batch: MP10229

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	LOC-004		
Lab Sample ID:	JC77181-1F	**Date Sampled:**	10/31/18
Matrix:	AQ - Water Filtered	**Date Received:**	11/01/18
		Percent Solids:	n/a
Project:	Delaware Valley Works Facility, PA		

Dissolved Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	3850	75	50	24	ug/l	50	11/06/18	11/07/18	ZC	SW846 6020B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA45617
(2) Prep QC Batch: MP10229

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	LOC-004		
Lab Sample ID:	JC77181-1R	**Date Sampled:**	10/31/18
Matrix:	AQ - Water	**Date Received:**	11/01/18
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Delaware Valley Works Facility, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4G954323.D	1	11/07/18 12:06	MH	11/06/18 13:00	OP16424	G4G2589
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
72-54-8	4,4'-DDD	0.018	0.0067	0.0038	0.0038	ug/l	
72-55-9	4,4'-DDE	0.0050 U	0.0067	0.0050	0.0034	ug/l	
50-29-3	4,4'-DDT	0.0075	0.0067	0.0046	0.0046	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	76%		13-153%
877-09-8	Tetrachloro-m-xylene	87%		13-153%
2051-24-3	Decachlorobiphenyl	61%		10-138%
2051-24-3	Decachlorobiphenyl	64%		10-138%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	LOC-003		
Lab Sample ID:	JC77181-2	**Date Sampled:**	10/31/18
Matrix:	AQ - Water	**Date Received:**	11/01/18
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Delaware Valley Works Facility, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4G954324.D	1	11/07/18 12:23	MH	11/06/18 13:00	OP16424	G4G2589
Run #2							

	Initial Volume	Final Volume
Run #1	210 ml	2.0 ml
Run #2		

Pesticide Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
319-84-6	alpha-BHC	0.076	0.0095	0.0071	0.0050	ug/l	
319-85-7	beta-BHC [a]	0.024	0.0095	0.0076	0.0076	ug/l	
319-86-8	delta-BHC	0.0071 U	0.0095	0.0071	0.0063	ug/l	
58-89-9	gamma-BHC (Lindane)	0.022	0.0095	0.0057	0.0057	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	69%		13-153%
877-09-8	Tetrachloro-m-xylene	78%		13-153%
2051-24-3	Decachlorobiphenyl	59%		10-138%
2051-24-3	Decachlorobiphenyl	63%		10-138%

(a) Associated CCV outside of control limits low.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	LOC-003		
Lab Sample ID:	JC77181-2	**Date Sampled:**	10/31/18
Matrix:	AQ - Water	**Date Received:**	11/01/18
		Percent Solids:	n/a
Project:	Delaware Valley Works Facility, PA		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	6230	150	100	47	ug/l	100	11/06/18	11/07/18	ZC	SW846 6020B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA45617
(2) Prep QC Batch: MP10229

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	LOC-003		
Lab Sample ID:	JC77181-2F	**Date Sampled:**	10/31/18
Matrix:	AQ - Water Filtered	**Date Received:**	11/01/18
		Percent Solids:	n/a
Project:	Delaware Valley Works Facility, PA		

Dissolved Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	6650	150	100	47	ug/l	100	11/06/18	11/07/18	ZC	SW846 6020B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA45617
(2) Prep QC Batch: MP10229

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	LOC-003		
Lab Sample ID:	JC77181-2R	**Date Sampled:**	10/31/18
Matrix:	AQ - Water	**Date Received:**	11/01/18
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Delaware Valley Works Facility, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4G954324.D	1	11/07/18 12:23	MH	11/06/18 13:00	OP16424	G4G2589
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
72-54-8	4,4'-DDD	0.016	0.0067	0.0038	0.0038	ug/l	
72-55-9	4,4'-DDE	0.0050 U	0.0067	0.0050	0.0034	ug/l	
50-29-3	4,4'-DDT	0.0046 U	0.0067	0.0046	0.0046	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	69%		13-153%
877-09-8	Tetrachloro-m-xylene	78%		13-153%
2051-24-3	Decachlorobiphenyl	59%		10-138%
2051-24-3	Decachlorobiphenyl	63%		10-138%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-01		
Lab Sample ID:	JC77181-3	**Date Sampled:**	10/31/18
Matrix:	AQ - Water	**Date Received:**	11/01/18
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Delaware Valley Works Facility, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4G954325.D	1	11/07/18 12:40	MH	11/06/18 13:00	OP16424	G4G2589
Run #2							

	Initial Volume	Final Volume
Run #1	210 ml	2.0 ml
Run #2		

Pesticide Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
319-84-6	alpha-BHC	0.11	0.0095	0.0071	0.0050	ug/l	
319-85-7	beta-BHC [a]	0.037	0.0095	0.0076	0.0076	ug/l	
319-86-8	delta-BHC	0.0071 U	0.0095	0.0071	0.0063	ug/l	
58-89-9	gamma-BHC (Lindane)	0.043	0.0095	0.0057	0.0057	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	90%		13-153%
877-09-8	Tetrachloro-m-xylene	97%		13-153%
2051-24-3	Decachlorobiphenyl	87%		10-138%
2051-24-3	Decachlorobiphenyl	89%		10-138%

(a) Associated CCV outside of control limits low.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-01		
Lab Sample ID:	JC77181-3	**Date Sampled:**	10/31/18
Matrix:	AQ - Water	**Date Received:**	11/01/18
		Percent Solids:	n/a
Project:	Delaware Valley Works Facility, PA		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	6120	150	100	47	ug/l	100	11/06/18	11/07/18	ZC	SW846 6020B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA45617
(2) Prep QC Batch: MP10229

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-01		
Lab Sample ID:	JC77181-3F	**Date Sampled:**	10/31/18
Matrix:	AQ - Water Filtered	**Date Received:**	11/01/18
		Percent Solids:	n/a
Project:	Delaware Valley Works Facility, PA		

Dissolved Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	5890	150	100	47	ug/l	100	11/06/18	11/08/18	ZC	SW846 6020B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA45617
(2) Prep QC Batch: MP10229

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	FD-01		
Lab Sample ID:	JC77181-3R	**Date Sampled:**	10/31/18
Matrix:	AQ - Water	**Date Received:**	11/01/18
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	Delaware Valley Works Facility, PA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4G954325.D	1	11/07/18 12:40	MH	11/06/18 13:00	OP16424	G4G2589
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
72-54-8	4,4'-DDD	0.016	0.0067	0.0038	0.0038	ug/l	
72-55-9	4,4'-DDE	0.0050 U	0.0067	0.0050	0.0034	ug/l	
50-29-3	4,4'-DDT	0.0046 U	0.0067	0.0046	0.0046	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	90%		13-153%
877-09-8	Tetrachloro-m-xylene	97%		13-153%
2051-24-3	Decachlorobiphenyl	87%		10-138%
2051-24-3	Decachlorobiphenyl	89%		10-138%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody
- QC Evaluation: DOD QSM5 Limits

SGS

WW

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX 732-329-3499
www.sgs.com/ehsusa

PAGE 1 OF 1 PN

FED-EX Tracking #:
Bottle Order Control #:
SGS Quote #:
SGS Job #: JC77181

Client / Reporting Information

Company Name: USACE
Street Address:
City: Phila State: PA Zip:
Project Contact: J. Loeper E-mail:
Phone #: 610-329-1307 Fax #:
Sampler(s) Name(s): Loeper/Harris Phone #:

Project Information

Project Name: Del. Valley Works
Street:
City: Wilmington State: DE
Project #:
Client Purchase Order #:
Project Manager: J. Loeper

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Lab Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	*Pesticides	Diss. Arsenic	Total Arsenic	LAB USE ONLY
1F	LOC-004	NA	10/31/18	1130	JL/SH	AQ	3			2		1				X	X	X	
2F	LOC-003	1	1	1240	1	1	3			2		1				X	X	X	E58
3F	FD-01			—			3			2		1				X	X	X	A30

Note: Reduced sample volumes for all analyses

Turnaround Time (Business days)

Approved by (SGS Project Manager)/Date:

- [x] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Emergency & Rush T/A data available via LabLink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [x] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only; Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

*Reduced List - alpha, beta, gamma & delta- BHC
Diss. Arsenic Field Filtered

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished By:	Date/Time:	Received By:	Relinquished By:	Date/Time:	Received By:
1	11/1/18 0900	1	2	11/1/18 1130	2
3	11/1/18 1734	3	4		4
5		5			

Custody Seal #:
Intact / Not intact
Preserved where applicable
On Ice
Cooler Temp. 3.7°C

INITIAL ASESSMENT 3B (N)

LABEL VERIFICATION _____

Form:SM088-03C (revised 2/12/18)

http://www.sgs.com/en/terms-and-conditions.

SGS Sample Receipt Summary

Job Number: JC77181 **Client:** USACE-PHILADELPHIA DISTRICT **Project:** DELAWARE WATER GAP

Date / Time Received: 11/1/2018 5:39:00 PM **Delivery Method:** Accutest Courier **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (3.7);

Cooler Temps (Corrected) °C: Cooler 1: (3.1);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y or N
1. Temp criteria achieved:	☑ ☐
2. Cooler temp verification:	IR Gun
3. Cooler media:	Ice (Bag)
4. No. Coolers:	1

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 216017 pH 12+: 208717 Other: (Specify)

Comments -1 thru -3 Please note limited volume of approx 175ml's for Pest.

SM089-02 Rev. Date 12/1/16

5.1

5

JC77181: Chain of Custody

Page 2 of 4

Responded to by: Tammy Esposito McCloskey Response Date: 11/2/18

Please proceed with analysis noting limited volume available per notation on chain of custody.

JC77181: Chain of Custody
Page 3 of 4

Job Change Order: JC77181

Requested Date:	12/5/2018	**Received Date:**	11/1/2018
Account Name:	USACE-Philadelphia District	**Due Date:**	11/15/2018
Project Description:	Delaware Valley Works Facility, PA	**Deliverable:**	FULT1
C/O Initiated By:	TAMMY **PM:** TM	**TAT (Days):**	8

==========

Sample #: JC77181-1 through 3

Dept:

TAT: 8

Change:

relog / retrieve on original for PR808144DDT, PGC+44DDD, PGC+44DDE and reissue report.

==========

Above Changes Per: Joe Loeper **Date/Time:** 12/5/2018 3:15:20 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Internal Sample Tracking Chronicle

USACE-Philadelphia District

Delaware Valley Works Facility, PA

Job No: JC77181

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC77181-1 LOC-004	Collected: 31-OCT-18 11:30 By: JL/SH		Received: 01-NOV-18 By: AS			
JC77181-1	SW846 8081B	07-NOV-18 12:06	MH	06-NOV-18	VP	P8081PESTSL
JC77181-1	SW846 6020B	07-NOV-18 23:38	ZC	06-NOV-18	RM	ASMS
JC77181-2 LOC-003	Collected: 31-OCT-18 12:40 By: JL/SH		Received: 01-NOV-18 By: AS			
JC77181-2	SW846 8081B	07-NOV-18 12:23	MH	06-NOV-18	VP	P8081PESTSL
JC77181-2	SW846 6020B	07-NOV-18 23:43	ZC	06-NOV-18	RM	ASMS
JC77181-3 FD-01	Collected: 31-OCT-18 00:00 By: JL/SH		Received: 01-NOV-18 By: AS			
JC77181-3	SW846 8081B	07-NOV-18 12:40	MH	06-NOV-18	VP	P8081PESTSL
JC77181-3	SW846 6020B	07-NOV-18 23:48	ZC	06-NOV-18	RM	ASMS
JC77181-1F LOC-004	Collected: 31-OCT-18 11:30 By: JL/SH		Received: 01-NOV-18 By: AS			
JC77181-1F	SW846 6020B	07-NOV-18 23:53	ZC	06-NOV-18	RM	ASMS
JC77181-1R LOC-004	Collected: 31-OCT-18 11:30 By: JL/SH		Received: 01-NOV-18 By: AS			
JC77181-1R	SW846 8081B	07-NOV-18 12:06	MH	06-NOV-18	VP	PGC+44DDD,PGC+44DDE, PR808144DDT
JC77181-2F LOC-003	Collected: 31-OCT-18 12:40 By: JL/SH		Received: 01-NOV-18 By: AS			
JC77181-2F	SW846 6020B	07-NOV-18 23:58	ZC	06-NOV-18	RM	ASMS
JC77181-2R LOC-003	Collected: 31-OCT-18 12:40 By: JL/SH		Received: 01-NOV-18 By: AS			
JC77181-2R	SW846 8081B	07-NOV-18 12:23	MH	06-NOV-18	VP	PGC+44DDD,PGC+44DDE, PR808144DDT

Internal Sample Tracking Chronicle

USACE-Philadelphia District

Delaware Valley Works Facility, PA

Job No: JC77181

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC77181-3F FD-01	Collected: 31-OCT-18 00:00 By: JL/SH		Received: 01-NOV-18 By: AS			
JC77181-3F	SW846 6020B	08-NOV-18 00:03	ZC	06-NOV-18	RM	ASMS
JC77181-3R FD-01	Collected: 31-OCT-18 00:00 By: JL/SH		Received: 01-NOV-18 By: AS			
JC77181-3R	SW846 8081B	07-NOV-18 12:40	MH	06-NOV-18	VP	PGC+44DDD,PGC+44DDE, PR808144DDT

SGS Internal Chain of Custody

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA
Received: 11/01/18

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC77181-1.1	Secured Storage	Matthew Robbins	11/05/18 18:02	Retrieve from Storage
JC77181-1.1	Matthew Robbins	Secured Staging Area	11/05/18 18:02	Return to Storage
JC77181-1.1	Secured Staging Area	Vikas Parikh	11/06/18 14:45	Retrieve from Storage
JC77181-1.1	Vikas Parikh		11/06/18 16:14	Depleted
JC77181-1.1.1	Vikas Parikh	Organics Prep	11/06/18 14:45	Extract from JC77181-1.1
JC77181-1.1.1	Organics Prep	Vikas Parikh	11/06/18 16:11	Extract from JC77181-1.1
JC77181-1.1.1	Vikas Parikh	Extract Storage	11/06/18 16:11	Return to Storage
JC77181-1.1.1	Extract Storage		12/17/18 09:00	Disposed
JC77181-1.2	Secured Storage	Matthew Robbins	11/05/18 19:18	Retrieve from Storage
JC77181-1.2	Matthew Robbins	Secured Staging Area	11/05/18 19:18	Return to Storage
JC77181-1.2	Secured Staging Area	Taylor Gorman	11/06/18 08:13	Retrieve from Storage
JC77181-1.2	Taylor Gorman	Radhika Mistry	11/06/18 16:00	Custody Transfer
JC77181-1.2	Radhika Mistry	Secured Storage	11/06/18 16:05	Return to Storage
JC77181-1.2.1	Radhika Mistry	Metals Digestion	11/06/18 16:01	Digestate from JC77181-1.2
JC77181-1.2.1	Metals Digestion	Radhika Mistry	11/06/18 16:02	Digestate from JC77181-1.2
JC77181-1.2.1	Radhika Mistry	Metals Digestate Storage	11/06/18 16:02	Return to Storage
JC77181-1F.3	Secured Storage	Matthew Robbins	11/05/18 19:18	Retrieve from Storage
JC77181-1F.3	Matthew Robbins	Secured Staging Area	11/05/18 19:18	Return to Storage
JC77181-1F.3	Secured Staging Area	Taylor Gorman	11/06/18 08:13	Retrieve from Storage
JC77181-1F.3	Taylor Gorman	Radhika Mistry	11/06/18 16:00	Custody Transfer
JC77181-1F.3	Radhika Mistry	Secured Storage	11/06/18 16:05	Return to Storage
JC77181-1F.3.1	Radhika Mistry	Metals Digestion	11/06/18 16:01	Digestate from JC77181-1F.3
JC77181-1F.3.1	Metals Digestion	Radhika Mistry	11/06/18 16:02	Digestate from JC77181-1F.3
JC77181-1F.3.1	Radhika Mistry	Metals Digestate Storage	11/06/18 16:02	Return to Storage
JC77181-2.1	Secured Storage	Matthew Robbins	11/05/18 18:02	Retrieve from Storage
JC77181-2.1	Matthew Robbins	Secured Staging Area	11/05/18 18:02	Return to Storage
JC77181-2.1	Secured Staging Area	Vikas Parikh	11/06/18 14:45	Retrieve from Storage
JC77181-2.1	Vikas Parikh		11/06/18 16:14	Depleted
JC77181-2.1.1	Vikas Parikh	Organics Prep	11/06/18 14:45	Extract from JC77181-2.1
JC77181-2.1.1	Organics Prep	Vikas Parikh	11/06/18 16:11	Extract from JC77181-2.1
JC77181-2.1.1	Vikas Parikh	Extract Storage	11/06/18 16:11	Return to Storage
JC77181-2.1.1	Extract Storage		12/17/18 09:00	Disposed
JC77181-2.2	Secured Storage	Matthew Robbins	11/05/18 19:18	Retrieve from Storage
JC77181-2.2	Matthew Robbins	Secured Staging Area	11/05/18 19:18	Return to Storage
JC77181-2.2	Secured Staging Area	Taylor Gorman	11/06/18 08:13	Retrieve from Storage
JC77181-2.2	Taylor Gorman	Radhika Mistry	11/06/18 16:00	Custody Transfer

SGS Internal Chain of Custody

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA
Received: 11/01/18

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC77181-2.2	Radhika Mistry	Secured Storage	11/06/18 16:05	Return to Storage
JC77181-2.2.1	Radhika Mistry	Metals Digestion	11/06/18 16:01	Digestate from JC77181-2.2
JC77181-2.2.1	Metals Digestion	Radhika Mistry	11/06/18 16:02	Digestate from JC77181-2.2
JC77181-2.2.1	Radhika Mistry	Metals Digestate Storage	11/06/18 16:02	Return to Storage
JC77181-2F.3	Secured Storage	Matthew Robbins	11/05/18 19:18	Retrieve from Storage
JC77181-2F.3	Matthew Robbins	Secured Staging Area	11/05/18 19:18	Return to Storage
JC77181-2F.3	Secured Staging Area	Taylor Gorman	11/06/18 08:13	Retrieve from Storage
JC77181-2F.3	Taylor Gorman	Radhika Mistry	11/06/18 16:00	Custody Transfer
JC77181-2F.3	Radhika Mistry	Secured Storage	11/06/18 16:05	Return to Storage
JC77181-2F.3.1	Radhika Mistry	Metals Digestion	11/06/18 16:01	Digestate from JC77181-2F.3
JC77181-2F.3.1	Metals Digestion	Radhika Mistry	11/06/18 16:02	Digestate from JC77181-2F.3
JC77181-2F.3.1	Radhika Mistry	Metals Digestate Storage	11/06/18 16:02	Return to Storage
JC77181-3.1	Secured Storage	Matthew Robbins	11/05/18 18:02	Retrieve from Storage
JC77181-3.1	Matthew Robbins	Secured Staging Area	11/05/18 18:02	Return to Storage
JC77181-3.1	Secured Staging Area	Vikas Parikh	11/06/18 14:45	Retrieve from Storage
JC77181-3.1	Vikas Parikh		11/06/18 16:14	Depleted
JC77181-3.1.1	Vikas Parikh	Organics Prep	11/06/18 14:45	Extract from JC77181-3.1
JC77181-3.1.1	Organics Prep	Vikas Parikh	11/06/18 16:11	Extract from JC77181-3.1
JC77181-3.1.1	Vikas Parikh	Extract Storage	11/06/18 16:11	Return to Storage
JC77181-3.1.1	Extract Storage		12/17/18 09:00	Disposed
JC77181-3.2	Secured Storage	Matthew Robbins	11/05/18 19:18	Retrieve from Storage
JC77181-3.2	Matthew Robbins	Secured Staging Area	11/05/18 19:18	Return to Storage
JC77181-3.2	Secured Staging Area	Taylor Gorman	11/06/18 08:13	Retrieve from Storage
JC77181-3.2	Taylor Gorman	Radhika Mistry	11/06/18 16:00	Custody Transfer
JC77181-3.2	Radhika Mistry	Secured Storage	11/06/18 16:05	Return to Storage
JC77181-3.2.1	Radhika Mistry	Metals Digestion	11/06/18 16:01	Digestate from JC77181-3.2
JC77181-3.2.1	Metals Digestion	Radhika Mistry	11/06/18 16:02	Digestate from JC77181-3.2
JC77181-3.2.1	Radhika Mistry	Metals Digestate Storage	11/06/18 16:02	Return to Storage
JC77181-3F.3	Secured Storage	Matthew Robbins	11/05/18 19:18	Retrieve from Storage
JC77181-3F.3	Matthew Robbins	Secured Staging Area	11/05/18 19:18	Return to Storage
JC77181-3F.3	Secured Staging Area	Taylor Gorman	11/06/18 08:13	Retrieve from Storage
JC77181-3F.3	Taylor Gorman	Radhika Mistry	11/06/18 16:00	Custody Transfer
JC77181-3F.3	Radhika Mistry	Secured Storage	11/06/18 16:05	Return to Storage
JC77181-3F.3.1	Radhika Mistry	Metals Digestion	11/06/18 16:01	Digestate from JC77181-3F.3
JC77181-3F.3.1	Metals Digestion	Radhika Mistry	11/06/18 16:02	Digestate from JC77181-3F.3

SGS Internal Chain of Custody

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA
Received: 11/01/18

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC77181-3F.3.1	Radhika Mistry	Metals Digestate Storage	11/06/18 16:02	Return to Storage

QC Evaluation: DOD QSM5 Limits

Job Number: JC77181
Account: USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA
Collected: 10/31/18

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
OP16424	SW846 8081B						
OP16424-BS1	319-84-6	alpha-BHC	BSP	REC	66	%	54-138
OP16424-BS1	319-85-7	beta-BHC	BSP	REC	66	%	56-136
OP16424-BS1	319-86-8	delta-BHC	BSP	REC	66	%	52-142
OP16424-BS1	58-89-9	gamma-BHC (Lindane)	BSP	REC	66	%	59-134
OP16424-BS1	72-54-8	4,4'-DDD	BSP	REC	72	%	56-143
OP16424-BS1	72-55-9	4,4'-DDE	BSP	REC	66	%	57-135
OP16424-BS1	50-29-3	4,4'-DDT	BSP	REC	72	%	51-143
OP16424-BS1	877-09-8	Tetrachloro-m-xylene (sig#1)	BSP	SURR	64	%	44-124
OP16424-BS1	877-09-8	Tetrachloro-m-xylene (sig#2)	BSP	SURR	55	%	44-124
OP16424-BSD	319-84-6	alpha-BHC	BSD	REC	132	%	54-138
OP16424-BSD	319-85-7	beta-BHC	BSD	REC	120	%	56-136
OP16424-BSD	319-86-8	delta-BHC	BSD	REC	120	%	52-142
OP16424-BSD	58-89-9	gamma-BHC (Lindane)	BSD	REC	126	%	59-134
OP16424-BSD	72-54-8	4,4'-DDD	BSD	REC	132	%	56-143
OP16424-BSD	72-55-9	4,4'-DDE	BSD	REC	132	%	57-135
OP16424-BSD	50-29-3	4,4'-DDT	BSD	REC	138	%	51-143
OP16424-BSD	877-09-8	Tetrachloro-m-xylene (sig#1)	BSD	SURR	118	%	44-124
OP16424-BSD	877-09-8	Tetrachloro-m-xylene (sig#2)	BSD	SURR	115	%	44-124
OP16424-MB1	877-09-8	Tetrachloro-m-xylene (sig#1)	MB	SURR	83	%	44-124
OP16424-MB1	877-09-8	Tetrachloro-m-xylene (sig#2)	MB	SURR	80	%	44-124
JC77181-1	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	76	%	44-124
JC77181-1	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	87	%	44-124
JC77181-1R	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	76	%	44-124
JC77181-1R	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	87	%	44-124
JC77181-2	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	69	%	44-124
JC77181-2	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	78	%	44-124
JC77181-2R	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	69	%	44-124
JC77181-2R	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	78	%	44-124
JC77181-3	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	90	%	44-124
JC77181-3	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	97	%	44-124
JC77181-3R	877-09-8	Tetrachloro-m-xylene (sig#1)	SAMP	SURR	90	%	44-124
JC77181-3R	877-09-8	Tetrachloro-m-xylene (sig#2)	SAMP	SURR	97	%	44-124
MP10229	SW846 6020B						
MP10229-B2	7440-38-2	Arsenic	BSP	REC	94.9	%	84-116
MP10229-S3*	7440-38-2	Arsenic	MS	REC	94	%	84-116
MP10229-S4*	7440-38-2	Arsenic	MSD	REC	92.9	%	84-116
MP10229-S4*	7440-38-2	Arsenic	MSD	RPD	1.2	%	20

* Sample used for QC is not from job JC77181

GC/LC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- DDT/Endrin Breakdown Checks
- GC Identification Summaries (Hits)
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP16424-MB1	4G954320.D	1	11/07/18	MH	11/06/18	OP16424	G4G2589

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC77181-1, JC77181-2, JC77181-3, JC77181-1R, JC77181-2R, JC77181-3R

CAS No.	Compound	Result	RL	MDL	Units	Q
319-84-6	alpha-BHC	ND	0.0067	0.0035	ug/l	
319-85-7	beta-BHC	ND	0.0067	0.0053	ug/l	
319-86-8	delta-BHC	ND	0.0067	0.0044	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0067	0.0040	ug/l	
72-54-8	4,4'-DDD	ND	0.0067	0.0038	ug/l	
72-55-9	4,4'-DDE	ND	0.0067	0.0034	ug/l	
50-29-3	4,4'-DDT	ND	0.0067	0.0046	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	83%	13-153%
877-09-8	Tetrachloro-m-xylene	80%	13-153%
2051-24-3	Decachlorobiphenyl	80%	10-138%
2051-24-3	Decachlorobiphenyl	76%	10-138%

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP16424-BS1	4G954321.D	1	11/07/18	MH	11/06/18	OP16424	G4G2589
OP16424-BSD	4G954322.D	1	11/07/18	MH	11/06/18	OP16424	G4G2589

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC77181-1, JC77181-2, JC77181-3, JC77181-1R, JC77181-2R, JC77181-3R

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
319-84-6	alpha-BHC	0.167	0.11	66	0.22	132	67* [a]	36-139/42
319-85-7	beta-BHC	0.167	0.11	66	0.20	120	58* [a]	44-136/40
319-86-8	delta-BHC	0.167	0.11	66	0.20	120	58* [a]	40-139/45
58-89-9	gamma-BHC (Lindane)	0.167	0.11	66	0.21	126	63* [a]	43-136/45
72-54-8	4,4'-DDD	0.167	0.12	72	0.22	132	44* [a]	36-142/39
72-55-9	4,4'-DDE	0.167	0.11	66	0.22	132	51* [a]	27-140/43
50-29-3	4,4'-DDT	0.167	0.12	72	0.23	138	63* [a]	30-144/39

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	64%	118%	13-153%
877-09-8	Tetrachloro-m-xylene	55%	115%	13-153%
2051-24-3	Decachlorobiphenyl	67%	114%	10-138%
2051-24-3	Decachlorobiphenyl	57%	112%	10-138%

(a) Analytical precision exceeds in-house control limits.

* = Outside of Control Limits.

Internal Standard Area Summary

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

Check Std:	G4G2589-CC2585	**Injection Date:**	11/07/18
Lab File ID:	4G954316.D	**Injection Time:**	09:48
Instrument ID:	GC4G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	3763003844	1.92	429319652	1.73
Upper Limit [a]	7526007688	2.42	858639304	2.23
Lower Limit [b]	1881501922	1.42	214659826	1.23

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP16424-MB1	4009337158	1.92	418718692	1.73
OP16424-BS1	4233770824	1.92	387068537	1.73
OP16424-BSD	3717632780	1.92	393892636	1.73
JC77181-1	3157648878	1.92	351156767	1.73
JC77181-1R	3157648878	1.92	351156767	1.73
JC77181-2	3577619260	1.92	403992537	1.73
JC77181-2R	3577619260	1.92	403992537	1.73
JC77181-3R	3696365071	1.92	405488659	1.73
JC77181-3	3696365071	1.92	405488659	1.73

IS 1 = 1-Bromo-2-nitrobenzene (Signal #2)
IS 2 = 1-Bromo-2-nitrobenzene (Signal #1)

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

DDT/Endrin Breakdown Check

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

Sample: G4G2585-DDT
Lab File ID: 4G954229.D
Instrument ID: GC4G
Injection Date: 11/05/18
Injection Time: 09:00

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	19664898	149841956
4,4'-DDE	10816525	109559223
4,4'-DDT	500024545	4358415155
DDT Breakdown [a]	5.7 %	5.6 %
Endrin aldehyde	0	0
Endrin ketone	3936784	32565004
Endrin	352853438	2736844389
Endrin Breakdown [b]	1.1 %	1.2 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G4G2585-IC2585	4G954232.D	11/05/18	10:00	01:00	Initial cal 1
G4G2585-IC2585	4G954233.D	11/05/18	10:17	01:17	Initial cal 2
G4G2585-IC2585	4G954234.D	11/05/18	10:34	01:34	Initial cal 5
G4G2585-IC2585	4G954235.D	11/05/18	10:51	01:51	Initial cal 10
G4G2585-ICC2585	4G954236.D	11/05/18	11:08	02:08	Initial cal 25
G4G2585-IC2585	4G954237.D	11/05/18	11:25	02:25	Initial cal 50
G4G2585-IC2585	4G954238.D	11/05/18	11:42	02:42	Initial cal 75
G4G2585-IC2585	4G954239.D	11/05/18	11:59	02:59	Initial cal 100
G4G2585-IC2585	4G954240.D	11/05/18	12:16	03:16	Initial cal 500
G4G2585-IC2585	4G954241.D	11/05/18	12:33	03:33	Initial cal 500
G4G2585-ICV2585	4G954243.D	11/05/18	13:07	04:07	Initial cal verification 500
G4G2585-ICV2585	4G954244.D	11/05/18	13:24	04:24	Initial cal verification 500
G4G2585-ICV2585	4G954245.D	11/05/18	13:41	04:41	Initial cal verification 50
G4G2585-ICV2585	4G954246.D	11/05/18	13:58	04:58	Initial cal verification 50
G4G2585-ICV2585	4G954247.D	11/05/18	14:28	05:28	Initial cal verification 25
G4G2586-CC2585	4G954248.D	11/05/18	14:55	05:55	Continuing cal 25
OP16380-MB1	4G954250.D	11/05/18	15:29	06:29	Method Blank
OP16380-BS1	4G954251.D	11/05/18	15:46	06:46	Blank Spike
OP16380-BSD	4G954252.D	11/05/18	16:03	07:03	Blank Spike Duplicate
ZZZZZZ	4G954253.D	11/05/18	16:20	07:20	(unrelated sample)
G4G2586-CC2585	4G954256.D	11/05/18	16:51	07:51	Continuing cal 50

DDT/Endrin Breakdown Check

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

Sample:	G4G2589-DDT	**Injection Date:**	11/07/18
Lab File ID:	4G954315.D	**Injection Time:**	09:31
Instrument ID:	GC4G		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	23759773	196324553
4,4'-DDE	14492506	125320326
4,4'-DDT	621282144	5184976638
DDT Breakdown [a]	5.8 %	5.8 %
Endrin aldehyde	630996	13222194
Endrin ketone	4712811	38992492
Endrin	424328592	3349054884
Endrin Breakdown [b]	1.2 %	1.5 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G4G2589-CC2585	4G954316.D	11/07/18	09:48	00:17	Continuing cal 50
G4G2589-CC2585	4G954317.D	11/07/18	10:23	00:52	Continuing cal 500
G4G2589-CC2585	4G954318.D	11/07/18	10:40	01:09	Continuing cal 500
OP16424-MB1	4G954320.D	11/07/18	11:15	01:44	Method Blank
OP16424-BS1	4G954321.D	11/07/18	11:32	02:01	Blank Spike
OP16424-BSD	4G954322.D	11/07/18	11:49	02:18	Blank Spike Duplicate
JC77181-1	4G954323.D	11/07/18	12:06	02:35	LOC-004
JC77181-1R	4G954323.D	11/07/18	12:06	02:35	LOC-004
JC77181-2R	4G954324.D	11/07/18	12:23	02:52	LOC-003
JC77181-2	4G954324.D	11/07/18	12:23	02:52	LOC-003
JC77181-3R	4G954325.D	11/07/18	12:40	03:09	FD-01
JC77181-3	4G954325.D	11/07/18	12:40	03:09	FD-01
G4G2589-CC2585	4G954329.D	11/07/18	14:13	04:42	Continuing cal 25

GC Identification Summary

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

Check Std:	G4G2589-CC2585	**Injection Date:**	11/07/18
Lab File ID:	4G954316.D	**Injection Time:**	09:48
Instrument ID:	GC4G	**Method:**	SW846 8081B

Sample ID:	JC77181-1	**Injection Date:**	11/07/18
Lab File ID:	4G954323.D	**Injection Time:**	12:06
Client ID:	LOC-004		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
alpha-BHC	1	2.98	2.98	0.046		ug/l	2.2
alpha-BHC	2 [a]	3.56	3.56	0.045		ug/l	

(a) Final result reported from this column.

GC Identification Summary

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

Check Std:	G4G2589-CC2585	**Injection Date:**	11/07/18
Lab File ID:	4G954316.D	**Injection Time:**	09:48
Instrument ID:	GC4G	**Method:**	SW846 8081B

Sample ID:	JC77181-2	**Injection Date:**	11/07/18
Lab File ID:	4G954324.D	**Injection Time:**	12:23
Client ID:	LOC-003		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
alpha-BHC	1 [a]	2.98	2.98	0.076		ug/l	14.6
alpha-BHC	2	3.56	3.56	0.088		ug/l	
beta-BHC	1	3.39	3.39	0.031		ug/l	25.5
beta-BHC [b]	2 [a]	4.10	4.10	0.024		ug/l	
gamma-BHC (Lindane)	1	3.31	3.31	0.029		ug/l	27.5
gamma-BHC (Lindane)	2 [a]	4.01	4.01	0.022		ug/l	

(a) Final result reported from this column.
(b) Associated CCV outside of control limits low.

GC Identification Summary

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

Check Std:	G4G2589-CC2585	**Injection Date:**	11/07/18
Lab File ID:	4G954316.D	**Injection Time:**	09:48
Instrument ID:	GC4G	**Method:**	SW846 8081B

Sample ID:	JC77181-3	**Injection Date:**	11/07/18
Lab File ID:	4G954325.D	**Injection Time:**	12:40
Client ID:	FD-01		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
alpha-BHC	1 [a]	2.98	2.98	0.11		ug/l	8.7
alpha-BHC	2	3.56	3.56	0.12		ug/l	
beta-BHC	1	3.39	3.39	0.041		ug/l	10.3
beta-BHC [b]	2 [a]	4.10	4.10	0.037		ug/l	
gamma-BHC (Lindane)	1 [a]	3.31	3.31	0.043		ug/l	2.3
gamma-BHC (Lindane)	2	4.01	4.01	0.044		ug/l	

(a) Final result reported from this column.
(b) Associated CCV outside of control limits low.

GC Identification Summary

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

Check Std:	G4G2589-CC2585	**Injection Date:**	11/07/18
Lab File ID:	4G954316.D	**Injection Time:**	09:48
Instrument ID:	GC4G	**Method:**	SW846 8081B

Sample ID:	JC77181-1R	**Injection Date:**	11/07/18
Lab File ID:	4G954323.D	**Injection Time:**	12:06
Client ID:	LOC-004		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
4,4'-DDD	1 [a]	6.26	6.26	0.018		ug/l	15.4
4,4'-DDD	2	7.67	7.67	0.021		ug/l	
4,4'-DDT	1 [a]	6.69	6.69	0.0075		ug/l	14.8
4,4'-DDT	2	8.21	8.21	0.0087		ug/l	

(a) Final result reported from this column.

GC Identification Summary

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

Check Std:	G4G2589-CC2585	**Injection Date:**	11/07/18
Lab File ID:	4G954316.D	**Injection Time:**	09:48
Instrument ID:	GC4G	**Method:**	SW846 8081B

Sample ID:	JC77181-2R	**Injection Date:**	11/07/18
Lab File ID:	4G954324.D	**Injection Time:**	12:23
Client ID:	LOC-003		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
4,4'-DDD	1 [a]	6.26	6.26	0.016		ug/l	17.1
4,4'-DDD	2	7.67	7.67	0.019		ug/l	

(a) Final result reported from this column.

GC Identification Summary

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

Check Std:	G4G2589-CC2585	**Injection Date:**	11/07/18
Lab File ID:	4G954316.D	**Injection Time:**	09:48
Instrument ID:	GC4G	**Method:**	SW846 8081B

Sample ID:	JC77181-3R	**Injection Date:**	11/07/18
Lab File ID:	4G954325.D	**Injection Time:**	12:40
Client ID:	FD-01		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
4,4'-DDD	1 [a]	6.26	6.26	0.016		ug/l	6.1
4,4'-DDD	2	7.67	7.67	0.017		ug/l	

(a) Final result reported from this column.

GC Identification Summary

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

Check Std:	G4G2589-CC2585	**Injection Date:**	11/07/18
Lab File ID:	4G954316.D	**Injection Time:**	09:48
Instrument ID:	GC4G	**Method:**	SW846 8081B

Sample ID:	OP16424-BS1	**Injection Date:**	11/07/18
Lab File ID:	4G954321.D	**Injection Time:**	11:32
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
alpha-BHC	1	2.98	2.98	0.13		ug/l	16.7
alpha-BHC	2 [a]	3.56	3.56	0.11		ug/l	
beta-BHC	1	3.39	3.39	0.13		ug/l	16.7
beta-BHC	2 [a]	4.10	4.10	0.11		ug/l	
delta-BHC	1	3.59	3.59	0.13		ug/l	16.7
delta-BHC	2 [a]	4.52	4.52	0.11		ug/l	
gamma-BHC (Lindane)	1	3.31	3.31	0.12		ug/l	8.7
gamma-BHC (Lindane)	2 [a]	4.01	4.01	0.11		ug/l	
4,4'-DDD	1	6.26	6.26	0.14		ug/l	15.4
4,4'-DDD	2 [a]	7.67	7.67	0.12		ug/l	
4,4'-DDE	1	5.41	5.41	0.13		ug/l	16.7
4,4'-DDE	2 [a]	6.71	6.71	0.11		ug/l	
4,4'-DDT	1	6.69	6.69	0.14		ug/l	15.4
4,4'-DDT	2 [a]	8.21	8.21	0.12		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

Check Std:	G4G2589-CC2585	**Injection Date:**	11/07/18
Lab File ID:	4G954316.D	**Injection Time:**	09:48
Instrument ID:	GC4G	**Method:**	SW846 8081B

Sample ID:	OP16424-BSD	**Injection Date:**	11/07/18
Lab File ID:	4G954322.D	**Injection Time:**	11:49
Client ID:	Blank Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
alpha-BHC	1	2.98	2.98	0.23		ug/l	4.4
alpha-BHC	2 [a]	3.56	3.56	0.22		ug/l	
beta-BHC	1	3.39	3.39	0.22		ug/l	9.5
beta-BHC	2 [a]	4.10	4.10	0.20		ug/l	
delta-BHC	1	3.59	3.59	0.22		ug/l	9.5
delta-BHC	2 [a]	4.52	4.52	0.20		ug/l	
gamma-BHC (Lindane)	1	3.31	3.31	0.22		ug/l	4.7
gamma-BHC (Lindane)	2 [a]	4.01	4.01	0.21		ug/l	
4,4'-DDD	1 [a]	6.26	6.26	0.22		ug/l	0.0
4,4'-DDD	2	7.67	7.67	0.22		ug/l	
4,4'-DDE	1 [a]	5.41	5.41	0.22		ug/l	0.0
4,4'-DDE	2	6.71	6.71	0.22		ug/l	
4,4'-DDT	1	6.69	6.69	0.25		ug/l	8.3
4,4'-DDT	2 [a]	8.21	8.21	0.23		ug/l	

(a) QC results reported from this column.

Surrogate Recovery Summary

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

Method: SW846 8081B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
JC77181-1	4G954323.D	76	87	61	64
JC77181-2	4G954324.D	69	78	59	63
JC77181-3	4G954325.D	90	97	87	89
JC77181-1R	4G954323.D	76	87	61	64
JC77181-2R	4G954324.D	69	78	59	63
JC77181-3R	4G954325.D	90	97	87	89
OP16424-BS1	4G954321.D	64	55	67	57
OP16424-BSD	4G954322.D	118	115	114	112
OP16424-MB1	4G954320.D	83	80	80	76

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	13-153%
S2 = Decachlorobiphenyl	10-138%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

Check Std:	G4G2589-CC2585	**Injection Date:**	11/07/18
Lab File ID:	4G954316.D	**Injection Time:**	09:48
Instrument ID:	GC4G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.45	2.85	10.06	11.97

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP16424-MB1	4G954320.D	11/07/18	11:15	2.45	2.85	10.07	11.97
OP16424-BS1	4G954321.D	11/07/18	11:32	2.45	2.85	10.06	11.97
OP16424-BSD	4G954322.D	11/07/18	11:49	2.45	2.85	10.06	11.97
JC77181-1	4G954323.D	11/07/18	12:06	2.45	2.85	10.06	11.97
JC77181-1R	4G954323.D	11/07/18	12:06	2.45	2.85	10.06	11.97
JC77181-2	4G954324.D	11/07/18	12:23	2.45	2.85	10.06	11.97
JC77181-2R	4G954324.D	11/07/18	12:23	2.45	2.85	10.06	11.97
JC77181-3R	4G954325.D	11/07/18	12:40	2.45	2.85	10.06	11.97
JC77181-3	4G954325.D	11/07/18	12:40	2.45	2.85	10.06	11.97

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA
Sample: G4G2585-ICC2585
Lab FileID: 4G954236.D

Response Factor Report GC4G

Method : C:\MSDCHEM\1\METHODS\4PST2585.M (ChemStation Integrator)
Title : PEST/PCB
Last Update : Mon Nov 05 14:43:12 2018
Response via : Initial Calibration

Calibration Files
2 =4g954233.D 5 =4g954234.D 10 =4g954235.D 25 =4g954236.D
50 =4g954237.D 100 =4g954239.D 1 =4g954232.D 75 =4g954238.D

Compound	2	5	10	25	50	100	1	75	Avg	%RSD
1) I 1-bromo-2-nitrobenzen	----------ISTD----------									
2) Tetrachloro-	0.950	0.815	0.900	0.915	0.950	0.975	0.977	0.960	0.930	5.79
3) hexachlorobe	1.336	1.396	1.350	1.348	1.404	1.430	1.573	1.409	1.406	5.36
4) alpha-BHC	1.067	1.115	1.101	1.166	1.298	1.412	1.285	1.349	1.224	10.49
5) gamma-BHC	1.063	1.082	1.037	1.096	1.184	1.271	1.156	1.227	1.140	7.32
6) Heptachlor	1.082	1.099	1.060	1.101	1.179	1.259	1.119	1.225	1.140	6.31
7) beta-BHC	0.491	0.513	0.474	0.509	0.529	0.549	0.514	0.532	0.514	4.62
8) delta-BHC	0.813	0.893	0.871	0.914	1.005	1.096	1.024	1.050	0.958	10.35
9) Aldrin	1.008	1.067	1.039	1.097	1.189	1.272	1.125	1.229	1.128	8.32
10) alachlor		0.150	0.134	0.134	0.133	0.133		0.131	0.136	5.09
11) Heptachlor E	0.984	1.045	0.969	1.038	1.101	1.163	1.216	1.134	1.081	8.06
12) gamma-Chlord	1.000	1.020	0.986	1.029	1.108	1.186	1.099	1.147	1.072	6.85
13) alpha-Chlord	1.080	1.056	0.975	1.013	1.084	1.149	1.433	1.117	1.113	12.63
14) Endosulfan I	0.956	0.991	0.947	0.990	1.069	1.140	1.017	1.108	1.027	6.92
15) 4,4'-DDE	1.022	0.978	0.917	0.954	1.023	1.079	1.056	1.055	1.010	5.54
16) Dieldrin	0.970	1.023	0.986	1.038	1.127	1.205	1.280	1.172	1.100	10.26
17) Endrin	0.937	0.927	0.894	0.929	0.998	1.050	1.181	1.029	0.993	9.41
18) 4,4'-DDD	0.749	0.703	0.704	0.719	0.760	0.812	0.917	0.790	0.769	9.28
19) Endosulfan I	0.968	0.965	0.887	0.902	0.957	1.013	1.249	0.987	0.991	11.30
20) 4,4'-DDT	0.462	0.549	0.558	0.606	0.684	0.764	0.810	0.733	0.646	18.74
21) Endrin Aldeh	0.728	0.750	0.756	0.735	0.787	0.833	0.963	0.811	0.795	9.67
22) Endosulfan S	0.672	0.673	0.626	0.658	0.705	0.732	0.897	0.719	0.710	11.68
23) Methoxychlor	0.322	0.276	0.266	0.296	0.318	0.332	0.430	0.328	0.321	15.68
24) Mirex	0.821	0.809	0.744	0.755	0.780	0.784	1.128	0.781	0.825	15.13
25) Endrin Keton	0.847	0.880	0.827	0.857	0.917	0.970	0.966	0.948	0.901	6.26
26) Decachlorobi	1.119	1.141	1.046	1.018	1.050	1.076	1.475	1.071	1.124	13.07
27) I 1-bromo-2-nitrobenzen	----------ISTD----------									
28) Toxaphene{A}					0.017				0.017	0.00
29) Toxaphene{B}					0.041				0.041	0.00
30) Toxaphene{C}					0.034				0.034	0.00
31) Toxaphene{D}					0.032				0.032	0.00
32) Toxaphene{E}					0.025				0.025	0.00
33) I 1-bromo-2-nitrobenzen	----------ISTD----------									
34) Chlordane {A					0.070				0.070	0.00
35) Chlordane {B					0.046				0.046	0.00
36) Chlordane {C					0.163				0.163	0.00
37) Chlordane {D					0.258				0.258	0.00
38) Chlordane {E					0.036				0.036	0.00

Signal #2

1) I 1-bromo-2-nitrobenzen	----------ISTD----------									
2) Tetrachloro-	0.981	0.892	0.939	0.921	0.905	0.877	0.965	0.888	0.921	4.12

Initial Calibration Summary

Job Number: JC77181 **Sample:** G4G2585-ICC2585
Account: USACEPAP USACE-Philadelphia District **Lab FileID:** 4G954236.D
Project: Delaware Valley Works Facility, PA

3)	hexachlorobe	1.086	1.064	1.069	0.965	0.945	0.914	1.123	0.925	1.011	8.17
4)	alpha-BHC	1.368	1.296	1.336	1.303	1.316	1.295	1.312	1.299	1.316	1.90
5)	gamma-BHC	1.181	1.147	1.180	1.167	1.170	1.150	1.183	1.157	1.167	1.22
6)	Heptachlor	1.423	1.340	1.293	1.263	1.263	1.200	1.208	1.224	1.277	5.86
7)	beta-BHC	0.573	0.557	0.559	0.532	0.514	0.497	0.690	0.507	0.553	11.09
8)	delta-BHC	1.137	1.053	1.040	1.038	1.060	1.040	1.240	1.046	1.082	6.65
9)	Aldrin	1.220	1.160	1.166	1.162	1.173	1.124	1.139	1.151	1.162	2.42
10)	alachlor		0.175	0.184	0.156	0.147	0.132		0.140	0.156	13.05
11)	Heptachlor E	1.073	1.015	1.067	1.025	1.028	0.972	1.091	1.001	1.034	3.87
12)	gamma-Chlord	1.149	1.072	1.083	1.059	1.065	1.026	1.217	1.046	1.090	5.75
13)	alpha-Chlord	1.115	1.036	1.023	1.010	1.014	0.985	1.157	1.003	1.043	5.79
14)	Endosulfan I	1.004	0.972	0.990	0.947	0.943	0.924	0.995	0.932	0.963	3.19
15)	4,4'-DDE	1.032	0.987	1.006	1.011	0.993	1.007	1.070	0.996	1.013	2.66
16)	Dieldrin	1.018	0.994	1.017	1.006	1.034	1.019	1.011	1.031	1.016	1.26
17)	Endrin	1.014	0.945	0.974	0.949	0.948	0.926	1.026	0.943	0.966	3.76
18)	4,4'-DDD	0.821	0.794	0.839	0.826	0.835	0.826	0.912	0.835	0.836	4.05
19)	Endosulfan I	1.014	0.910	0.933	0.896	0.885	0.864	1.151	0.880	0.942	10.23
20)	4,4'-DDT	0.674	0.695	0.762	0.743	0.776	0.785	0.684	0.789	0.739	6.40
21)	Endrin Aldeh	0.775	0.719	0.743	0.688	0.705	0.689	0.786	0.702	0.726	5.25
22)	Endosulfan S	0.660	0.647	0.685	0.641	0.657	0.652	0.663	0.658	0.658	2.03
23)	Methoxychlor	0.379	0.396	0.410	0.386	0.395	0.395	0.458	0.404	0.403	6.05
24)	Mirex	0.694	0.672	0.667	0.611	0.606	0.588	0.690	0.600	0.641	6.83
25)	Endrin Keton	0.782	0.756	0.801	0.746	0.765	0.744	0.849	0.753	0.775	4.63
26)	Decachlorobi	0.631	0.620	0.609	0.566	0.560	0.555	0.669	0.565	0.597	7.01

27) I 1-bromo-2-nitrobenzen ----------ISTD----------

28)	Toxaphene{A}	0.025	0.025	0.00
29)	Toxaphene{B}	0.032	0.032	0.00
30)	Toxaphene{C}	0.050	0.050	0.00
31)	Toxaphene{D}	0.031	0.031	0.00
32)	Toxaphene{E}	0.024	0.024	0.00

33) I 1-bromo-2-nitrobenzen ----------ISTD----------

34)	Chlordane {A	0.071	0.071	0.00
35)	Chlordane {B	0.039	0.039	0.00
36)	Chlordane {C	0.130	0.130	0.00
37)	Chlordane {D	0.207	0.207	0.00
38)	Chlordane {E	0.034	0.034	0.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

4PST2585.M Mon Nov 05 14:58:19 2018 RPT1

Initial Calibration Verification

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA
Sample: G4G2585-ICV2585
Lab FileID: 4G954243.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\4G2585\4g954243.D\ECD1B.ch Vial: 22
Signal #2 : C:\msdchem\1\DATA\4G2585\4g954243.D\ECD2A.ch
Acq On    :  5 Nov 2018   1:07 pm                    Operator: rebeccak
Sample    : icv2585-500                              Inst    : GC4G
Misc      : op16395,g4g2585,300,,,2,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\4PST2585.M (ChemStation Integrator)
Title        : PEST/PCB
Last Update  : Mon Nov 05 14:43:12 2018
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	102	0.00	1.64- 1.84
34	Chlordane {A}	0.070	0.061	12.9	89	0.00	3.75- 3.95
35	Chlordane {B}	0.046	0.038	17.4	85	0.00	4.26- 4.46
36	Chlordane {C}	0.163	0.145	11.0	91	0.00	5.03- 5.23
37	Chlordane {D}	0.258	0.235	8.9	93	0.00	5.20- 5.40
38	Chlordane {E}	0.036	0.035	2.8	99	0.00	6.29- 6.49

***** Signal #2 *****

33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	1.83- 2.03
34	Chlordane {A}	0.071	0.067	5.6	92	0.00	4.52- 4.72
35	Chlordane {B}	0.039	0.036	7.7	90	0.00	5.18- 5.38
36	Chlordane {C}	0.130	0.122	6.2	92	0.00	6.12- 6.32
37	Chlordane {D}	0.207	0.201	2.9	95	0.00	6.35- 6.55
38	Chlordane {E}	0.034	0.032	5.9	94	0.00	7.84- 8.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g954237.D 4PST2585.M Mon Nov 05 14:57:00 2018 RPT1

Initial Calibration Verification

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA
Sample: G4G2585-ICV2585
Lab FileID: 4G954244.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\4G2585\4g954244.D\ECD1B.ch Vial: 23
Signal #2 : C:\msdchem\1\DATA\4G2585\4g954244.D\ECD2A.ch
Acq On    :  5 Nov 2018   1:24 pm                    Operator: rebeccak
Sample    : icv2585-500                              Inst    : GC4G
Misc      : op16395,g4g2585,300,,,2,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\4PST2585.M (ChemStation Integrator)
Title        : PEST/PCB
Last Update  : Mon Nov 05 14:43:12 2018
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	96	0.00	1.64- 1.84
28	L8	Toxaphene{A}	0.017	0.018	-5.9	101	0.00	5.72- 5.92
29	L8	Toxaphene{B}	0.041	0.043	-4.9	100	0.00	6.36- 6.56
30	L8	Toxaphene{C}	0.034	0.035	-2.9	99	0.00	6.53- 6.73
31	L8	Toxaphene{D}	0.032	0.033	-3.1	99	0.00	6.89- 7.09
32	L8	Toxaphene{E}	0.025	0.024	4.0	90	0.00	7.56- 7.76

***** Signal #2 *****

27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.83- 2.03
28	L8	Toxaphene{A}	0.025	0.025	0.0	101	0.00	6.85- 7.05
29	L8	Toxaphene{B}	0.032	0.032	0.0	100	0.00	7.73- 7.93
30	L8	Toxaphene{C}	0.050	0.049	2.0	97	0.00	7.89- 8.09
31	L8	Toxaphene{D}	0.031	0.031	0.0	98	0.00	8.34- 8.54
32	L8	Toxaphene{E}	0.024	0.023	4.2	96	0.00	9.25- 9.45

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g954237.D 4PST2585.M Mon Nov 05 14:57:02 2018 RPT1

Initial Calibration Verification

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA
Sample: G4G2585-ICV2585
Lab FileID: 4G954245.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\4G2585\4g954245.D\ECD1B.ch Vial: 24
Signal #2 : C:\msdchem\1\DATA\4G2585\4g954245.D\ECD2A.ch
Acq On    :  5 Nov 2018   1:41 pm                    Operator: rebeccak
Sample    : icv2585-50                               Inst    : GC4G
Misc      : op16395,g4g2585,300,,,2,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\4PST2585.M (ChemStation Integrator)
Title        : PEST/PCB
Last Update  : Mon Nov 05 14:43:12 2018
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	95	0.00	1.71- 1.77
2	SAB	Tetrachloro-m-xylene		----------NA----------				
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor	0.136	0.147	-8.1	105	0.00	4.32- 4.38
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl		----------NA----------				

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	102	0.00	1.89- 1.95
2	SAB	Tetrachloro-m-xylene		----------NA----------				
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				

Initial Calibration Verification

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

Sample: G4G2585-ICV2585
Lab FileID: 4G954245.D

10		alachlor	0.156	0.151	3.2	105	0.00	4.85- 4.91
11	B	Heptachlor Epoxide	----------NA----------					
12	B	gamma-Chlordane	----------NA----------					
13	B	alpha-Chlordane	----------NA----------					
14	A	Endosulfan I	----------NA----------					
15	B	4,4'-DDE	----------NA----------					
16	MA	Dieldrin	----------NA----------					
17	MA	Endrin	----------NA----------					
18	A	4,4'-DDD	----------NA----------					
19	B	Endosulfan II	----------NA----------					
20	MA	4,4'-DDT	----------NA----------					
21	B	Endrin Aldehyde	----------NA----------					
22	B	Endosulfan Sulfate	----------NA----------					
23	A	Methoxychlor	----------NA----------					
24		Mirex	----------NA----------					
25	B	Endrin Ketone	----------NA----------					
26	SA	Decachlorobiphenyl	----------NA----------					

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g954237.D 4PST2585.M Mon Nov 05 14:57:04 2018 RPT1

6.8.4

6

Initial Calibration Verification

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA
Sample: G4G2585-ICV2585
Lab FileID: 4G954246.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\4G2585\4g954246.D\ECD1B.ch Vial: 25
Signal #2 : C:\msdchem\1\DATA\4G2585\4g954246.D\ECD2A.ch
Acq On    :  5 Nov 2018   1:58 pm                    Operator: rebeccak
Sample    : icv2585-50                               Inst    : GC4G
Misc      : op16395,g4g2585,300,,,2,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\4PST2585.M (ChemStation Integrator)
Title        : PEST/PCB
Last Update  : Mon Nov 05 14:43:12 2018
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.71- 1.77
2	SAB	Tetrachloro-m-xylene		----------NA----------				
3		hexachlorobenzene	1.406	1.528	-8.7	110	0.00	2.80- 2.86
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl		----------NA----------				

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	105	0.00	1.90- 1.96
2	SAB	Tetrachloro-m-xylene		----------NA----------				
3		hexachlorobenzene	1.011	0.992	1.9	110	0.00	3.38- 3.44
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor		----------NA----------				

Initial Calibration Verification

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

Sample: G4G2585-ICV2585
Lab FileID: 4G954246.D

11	B	Heptachlor Epoxide	----------NA----------	
12	B	gamma-Chlordane	----------NA----------	
13	B	alpha-Chlordane	----------NA----------	
14	A	Endosulfan I	----------NA----------	
15	B	4,4'-DDE	----------NA----------	
16	MA	Dieldrin	----------NA----------	
17	MA	Endrin	----------NA----------	
18	A	4,4'-DDD	----------NA----------	
19	B	Endosulfan II	----------NA----------	
20	MA	4,4'-DDT	----------NA----------	
21	B	Endrin Aldehyde	----------NA----------	
22	B	Endosulfan Sulfate	----------NA----------	
23	A	Methoxychlor	----------NA----------	
24		Mirex	----------NA----------	
25	B	Endrin Ketone	----------NA----------	
26	SA	Decachlorobiphenyl	----------NA----------	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g954237.D 4PST2585.M Mon Nov 05 14:57:06 2018 RPT1

Initial Calibration Verification

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA
Sample: G4G2585-ICV2585
Lab FileID: 4G954247.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\4G2585\4g954247.D\ECD1B.ch Vial: 5
Signal #2 : C:\msdchem\1\DATA\4G2585\4g954247.D\ECD2A.ch
Acq On    :  5 Nov 2018   2:28 pm                    Operator: rebeccak
Sample    : icv2585-25                               Inst    : GC4G
Misc      : op16395,g4g2585,300,,,2,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\4PST2585.M (ChemStation Integrator)
Title        : PEST/PCB
Last Update  : Mon Nov 05 14:43:12 2018
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.72- 1.78
2	SAB	Tetrachloro-m-xylene	0.930	0.818	12.0	89	0.00	2.43- 2.49
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC	1.224	1.251	-2.2	107	0.00	2.96- 3.02
5	MA	gamma-BHC	1.140	1.177	-3.2	107	0.00	3.29- 3.35
6	MA	Heptachlor	1.140	1.162	-1.9	105	0.00	3.83- 3.89
7	B	beta-BHC	0.514	0.524	-1.9	102	0.00	3.38- 3.44
8	B	delta-BHC	0.958	1.028	-7.3	112	0.00	3.58- 3.64
9	MB	Aldrin	1.128	1.180	-4.6	107	0.00	4.19- 4.25
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide	1.081	1.126	-4.2	108	0.00	4.93- 4.99
12	B	gamma-Chlordane	1.072	1.139	-6.2	110	0.00	5.10- 5.16
13	B	alpha-Chlordane	1.113	1.116	-0.3	110	0.00	5.28- 5.34
14	A	Endosulfan I	1.027	1.125	-9.5	113	0.00	5.47- 5.53
15	B	4,4'-DDE	1.010	0.975	3.5	102	0.00	5.40- 5.46
16	MA	Dieldrin	1.100	1.144	-4.0	110	0.00	5.80- 5.86
17	MA	Endrin	0.993	0.999	-0.6	107	0.00	6.13- 6.19
18	A	4,4'-DDD	0.769	0.725	5.7	100	0.01	6.26- 6.32
19	B	Endosulfan II	0.991	1.002	-1.1	111	0.00	6.46- 6.52
20	MA	4,4'-DDT	0.646	0.663	-2.6	109	0.01	6.68- 6.74
21	B	Endrin Aldehyde	0.795	0.853	-7.3	116	0.01	7.10- 7.16
22	B	Endosulfan Sulfate	0.710	0.691	2.7	105	0.01	7.79- 7.85
23	A	Methoxychlor	0.321	0.285	11.2	96	0.01	7.49- 7.55
24		Mirex	0.825	0.728	11.8	96	0.00	7.66- 7.72
25	B	Endrin Ketone	0.901	0.975	-8.2	113	0.00	8.24- 8.30
26	SA	Decachlorobiphenyl	1.124	0.985	12.4	96	0.01	10.06-10.12

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	121	0.00	1.90- 1.96
2	SAB	Tetrachloro-m-xylene	0.921	0.752	18.3	99	0.00	2.83- 2.89
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC	1.316	1.192	9.4	111	0.00	3.54- 3.60
5	MA	gamma-BHC	1.167	1.085	7.0	113	0.00	3.99- 4.05
6	MA	Heptachlor	1.277	1.141	10.6	110	0.00	4.59- 4.65
7	B	beta-BHC	0.553	0.486	12.1	111	0.00	4.08- 4.14
8	B	delta-BHC	1.082	1.025	5.3	120	0.00	4.50- 4.56
9	MB	Aldrin	1.162	1.067	8.2	112	0.00	5.06- 5.12

Initial Calibration Verification

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

Sample: G4G2585-ICV2585
Lab FileID: 4G954247.D

10		alachlor			----------NA----------				
11	B	Heptachlor Epoxide	1.034	0.936	9.5	111	0.00	5.90- 5.96
12	B	gamma-Chlordane	1.090	0.979	10.2	112	0.00	6.19- 6.25
13	B	alpha-Chlordane	1.043	0.944	9.5	114	0.00	6.42- 6.48
14	A	Endosulfan I	0.963	0.874	9.2	112	0.00	6.52- 6.58
15	B	4,4'-DDE	1.013	0.901	11.1	108	0.00	6.69- 6.75
16	MA	Dieldrin	1.016	0.952	6.3	115	0.00	6.97- 7.03
17	MA	Endrin	0.966	0.876	9.3	112	0.00	7.48- 7.54
18	A	4,4'-DDD	0.836	0.791	5.4	116	0.00	7.66- 7.72
19	B	Endosulfan II	0.942	0.816	13.4	111	0.00	7.84- 7.90
20	MA	4,4'-DDT	0.739	0.686	7.2	112	0.00	8.19- 8.25
21	B	Endrin Aldehyde	0.726	0.663	8.7	117	0.00	8.41- 8.47
22	B	Endosulfan Sulfate	0.658	0.617	6.2	117	0.00	8.89- 8.95
23	A	Methoxychlor	0.403	0.347	13.9	109	0.00	9.45- 9.51
24		Mirex	0.641	0.511	20.3#	101	0.00	9.79- 9.85
25	B	Endrin Ketone	0.775	0.730	5.8	119	0.00	9.86- 9.92
26	SA	Decachlorobiphenyl	0.597	0.480	19.6	103	0.00	11.95-12.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g954236.D 4PST2585.M Mon Nov 05 14:56:44 2018 RPT1

Continuing Calibration Summary

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA
Sample: G4G2589-CC2585
Lab FileID: 4G954316.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\data\ch...9\4g954316.d\ECD1B.ch Vial: 4
Signal #2 : C:\msdchem\1\data\chrisc2\4g2589\4g954316.d\ECD2A.ch
Acq On    :  7 Nov 2018   9:48 am                    Operator: mailisih
Sample    : cc2585-50                                Inst    : GC4G
Misc      : op16422,g4g2589,1000,,,5,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\4pst2585.m (ChemStation Integrator)
Title        : PEST/PCB
Last Update  : Wed Nov 07 19:03:52 2018
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	120	0.00	1.70- 1.76
2	SAB	Tetrachloro-m-xylene	0.930	0.889	4.4	112	0.00	2.42- 2.48
3		hexachlorobenzene	1.406	1.281	8.9	109	0.00	2.80- 2.86
4	A	alpha-BHC	1.224	1.204	1.6	111	0.00	2.95- 3.01
5	MA	gamma-BHC	1.140	1.076	5.6	109	0.00	3.28- 3.34
6	MA	Heptachlor	1.140	1.081	5.2	110	0.00	3.81- 3.87
7	B	beta-BHC	0.514	0.469	8.8	106	0.00	3.36- 3.42
8	B	delta-BHC	0.958	0.929	3.0	110	0.00	3.56- 3.62
9	MB	Aldrin	1.128	1.068	5.3	107	0.00	4.17- 4.23
10		alachlor	0.136	0.118	13.2	105	0.00	4.31- 4.37
11	B	Heptachlor Epoxide	1.081	0.936	13.4	102	0.00	4.92- 4.98
12	B	gamma-Chlordane	1.072	0.964	10.1	104	0.00	5.09- 5.15
13	B	alpha-Chlordane	1.113	0.964	13.4	106	0.00	5.26- 5.32
14	A	Endosulfan I	1.027	0.938	8.7	105	0.00	5.45- 5.51
15	B	4,4'-DDE	1.010	0.954	5.5	112	0.00	5.38- 5.44
16	MA	Dieldrin	1.100	1.008	8.4	107	0.00	5.78- 5.84
17	MA	Endrin	0.993	0.931	6.2	112	0.00	6.11- 6.17
18	A	4,4'-DDD	0.769	0.769	0.0	121	0.00	6.23- 6.29
19	B	Endosulfan II	0.991	0.880	11.2	110	0.00	6.44- 6.50
20	MA	4,4'-DDT	0.646	0.674	-4.3	118	0.00	6.66- 6.72
21	B	Endrin Aldehyde	0.795	0.708	10.9	108	0.00	7.07- 7.13
22	B	Endosulfan Sulfate	0.710	0.659	7.2	112	0.00	7.77- 7.83
23	A	Methoxychlor	0.321	0.318	0.9	120	0.00	7.46- 7.52
24		Mirex	0.825	0.658	20.2#	101	0.00	7.64- 7.70
25	B	Endrin Ketone	0.901	0.872	3.2	114	0.00	8.22- 8.28
26	SA	Decachlorobiphenyl	1.124	0.972	13.5	111	0.00	10.03-10.09
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	120	0.00	1.63- 1.83
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	128	0.00	1.63- 1.83
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

Continuing Calibration Summary

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

Sample: G4G2589-CC2585
Lab FileID: 4G954316.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	114	0.00	1.89- 1.95
2	SAB	Tetrachloro-m-xylene	0.921	0.838	9.0	106	0.00	2.82- 2.88
3		hexachlorobenzene	1.011	0.882	12.8	107	0.00	3.37- 3.43
4	A	alpha-BHC	1.316	1.229	6.6	107	0.00	3.53- 3.59
5	MA	gamma-BHC	1.167	1.012	13.3	99	0.00	3.98- 4.04
6	MA	Heptachlor	1.277	1.107	13.3	100	0.00	4.58- 4.64
7	B	beta-BHC	0.553	0.439	20.6#	98	0.00	4.07- 4.13
8	B	delta-BHC	1.082	0.929	14.1	100	0.00	4.49- 4.55
9	MB	Aldrin	1.162	1.019	12.3	99	0.00	5.05- 5.11
10		alachlor	0.156	0.131	16.0	102	0.00	4.85- 4.91
11	B	Heptachlor Epoxide	1.034	0.900	13.0	100	0.00	5.89- 5.95
12	B	gamma-Chlordane	1.090	0.934	14.3	100	0.00	6.18- 6.24
13	B	alpha-Chlordane	1.043	0.896	14.1	101	0.00	6.41- 6.47
14	A	Endosulfan I	0.963	0.849	11.8	103	0.00	6.51- 6.57
15	B	4,4'-DDE	1.013	0.914	9.8	105	0.00	6.68- 6.74
16	MA	Dieldrin	1.016	0.926	8.9	102	0.00	6.95- 7.01
17	MA	Endrin	0.966	0.872	9.7	105	0.00	7.47- 7.53
18	A	4,4'-DDD	0.836	0.758	9.3	104	0.00	7.64- 7.70
19	B	Endosulfan II	0.942	0.797	15.4	103	0.00	7.82- 7.88
20	MA	4,4'-DDT	0.739	0.694	6.1	102	0.00	8.18- 8.24
21	B	Endrin Aldehyde	0.726	0.624	14.0	101	0.00	8.40- 8.46
22	B	Endosulfan Sulfate	0.658	0.621	5.6	108	0.00	8.87- 8.93
23	A	Methoxychlor	0.403	0.360	10.7	104	0.00	9.43- 9.49
24		Mirex	0.641	0.544	15.1	102	0.00	9.78- 9.84
25	B	Endrin Ketone	0.775	0.697	10.1	104	0.00	9.84- 9.90
26	SA	Decachlorobiphenyl	0.597	0.518	13.2	106	0.00	11.94-12.00
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	111	0.00	1.82- 2.02
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	111	0.00	1.82- 2.02
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g954316.d 4pst2585.m Wed Nov 07 19:12:40 2018

Continuing Calibration Summary

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA
Sample: G4G2589-CC2585
Lab FileID: 4G954317.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\data\ch...9\4g954317.d\ECD1B.ch Vial: 5
Signal #2 : C:\msdchem\1\data\chrisc2\4g2589\4g954317.d\ECD2A.ch
Acq On    :  7 Nov 2018  10:23 am                    Operator: mailisih
Sample    : cc2585-500                               Inst    : GC4G
Misc      : op16422,g4g2589,1000,,,5,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\4pst2585.m (ChemStation Integrator)
Title        : PEST/PCB
Last Update  : Wed Nov 07 19:26:09 2018
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.71- 1.77
2	SAB	Tetrachloro-m-xylene	0.930	0.936	-0.6	106	0.00	2.42- 2.48
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl	1.124	0.995	11.5	102	0.00	10.04-10.10
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.64- 1.84
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	115	0.00	1.64- 1.84
34		Chlordane {A}	0.070	0.061	12.9	100	0.00	3.75- 3.95
35		Chlordane {B}	0.046	0.038	17.4	96	0.00	4.25- 4.45
36		Chlordane {C}	0.163	0.141	13.5	100	0.00	5.02- 5.22
37		Chlordane {D}	0.258	0.223	13.6	99	0.00	5.19- 5.39
38		Chlordane {E}	0.036	0.033	8.3	105	0.00	6.29- 6.49

Continuing Calibration Summary

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

Sample: G4G2589-CC2585
Lab FileID: 4G954317.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	121	0.00	1.89- 1.95
2	SAB	Tetrachloro-m-xylene	0.921	0.754	18.1	100	0.00	2.82- 2.88
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl	0.597	0.441	26.1#	95	0.00	11.94-12.00
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	117	0.00	1.82- 2.02
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	117	0.00	1.82- 2.02
34		Chlordane {A}	0.071	0.057	19.7	93	0.00	4.52- 4.72
35		Chlordane {B}	0.039	0.030	23.1#	90	0.00	5.18- 5.38
36		Chlordane {C}	0.130	0.110	15.4	99	0.00	6.12- 6.32
37		Chlordane {D}	0.207	0.171	17.4	97	0.00	6.35- 6.55
38		Chlordane {E}	0.034	0.027	20.6#	93	0.00	7.84- 8.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g954317.d 4pst2585.m Wed Nov 07 19:28:25 2018

Continuing Calibration Summary

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA
Sample: G4G2589-CC2585
Lab FileID: 4G954318.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\data\ch...9\4g954318.d\ECD1B.ch Vial: 6
Signal #2 : C:\msdchem\1\data\chrisc2\4g2589\4g954318.d\ECD2A.ch
Acq On    :  7 Nov 2018  10:40 am                    Operator: mailisih
Sample    : cc2585-500                               Inst    : GC4G
Misc      : op16422,g4g2589,1000,,,5,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\4pst2585.m (ChemStation Integrator)
Title        : PEST/PCB
Last Update  : Wed Nov 07 19:39:50 2018
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	123	0.00	1.70- 1.76
2	SAB	Tetrachloro-m-xylene	0.930	0.855	8.1	111	0.00	2.41- 2.47
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl	1.124	0.912	18.9	107	0.00	10.03-10.09
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	123	0.00	1.63- 1.83
28	L8	Toxaphene{A}	0.017	0.014	17.6	103	0.00	5.71- 5.91
29	L8	Toxaphene{B}	0.041	0.036	12.2	109	0.00	6.35- 6.55
30	L8	Toxaphene{C}	0.034	0.030	11.8	110	0.00	6.53- 6.73
31	L8	Toxaphene{D}	0.032	0.027	15.6	105	0.00	6.88- 7.08
32	L8	Toxaphene{E}	0.025	0.021	16.0	101	0.00	7.54- 7.74
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	132	0.00	1.63- 1.83
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

Continuing Calibration Summary

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA
Sample: G4G2589-CC2585
Lab FileID: 4G954318.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	122	0.00	1.89- 1.95
2	SAB	Tetrachloro-m-xylene	0.921	0.829	10.0	112	0.00	2.82- 2.88
3		hexachlorobenzene		----------NA----------				
4	A	alpha-BHC		----------NA----------				
5	MA	gamma-BHC		----------NA----------				
6	MA	Heptachlor		----------NA----------				
7	B	beta-BHC		----------NA----------				
8	B	delta-BHC		----------NA----------				
9	MB	Aldrin		----------NA----------				
10		alachlor		----------NA----------				
11	B	Heptachlor Epoxide		----------NA----------				
12	B	gamma-Chlordane		----------NA----------				
13	B	alpha-Chlordane		----------NA----------				
14	A	Endosulfan I		----------NA----------				
15	B	4,4'-DDE		----------NA----------				
16	MA	Dieldrin		----------NA----------				
17	MA	Endrin		----------NA----------				
18	A	4,4'-DDD		----------NA----------				
19	B	Endosulfan II		----------NA----------				
20	MA	4,4'-DDT		----------NA----------				
21	B	Endrin Aldehyde		----------NA----------				
22	B	Endosulfan Sulfate		----------NA----------				
23	A	Methoxychlor		----------NA----------				
24		Mirex		----------NA----------				
25	B	Endrin Ketone		----------NA----------				
26	SA	Decachlorobiphenyl	0.597	0.470	21.3#	102	0.00	11.94-12.00
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	118	0.00	1.82- 2.02
28	L8	Toxaphene{A}	0.025	0.022	12.0	108	0.00	6.85- 7.05
29	L8	Toxaphene{B}	0.032	0.028	12.5	105	0.00	7.72- 7.92
30	L8	Toxaphene{C}	0.050	0.045	10.0	106	0.00	7.89- 8.09
31	L8	Toxaphene{D}	0.031	0.028	9.7	105	0.00	8.33- 8.53
32	L8	Toxaphene{E}	0.024	0.021	12.5	102	0.00	9.24- 9.44
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	119	0.00	1.82- 2.02
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g954318.d 4pst2585.m Wed Nov 07 19:42:09 2018

Continuing Calibration Summary

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA
Sample: G4G2589-CC2585
Lab FileID: 4G954329.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\data\ch...9\4g954329.d\ECD1B.ch Vial: 2
Signal #2 : C:\msdchem\1\data\chrisc2\4g2589\4g954329.d\ECD2A.ch
Acq On    :  7 Nov 2018   2:13 pm                    Operator: mailisih
Sample    : cc2585-25                                Inst    : GC4G
Misc      : op16424,g4g2589,300,,,2,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\4pst2585.m (ChemStation Integrator)
Title        : PEST/PCB
Last Update  : Wed Nov 07 19:39:50 2018
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	115	0.00	1.69- 1.75
2	SAB	Tetrachloro-m-xylene	0.930	0.857	7.8	108	0.00	2.41- 2.47
3		hexachlorobenzene	1.406	1.372	2.4	117	0.00	2.79- 2.85
4	A	alpha-BHC	1.224	1.196	2.3	118	0.00	2.94- 3.00
5	MA	gamma-BHC	1.140	1.081	5.2	114	0.00	3.27- 3.33
6	MA	Heptachlor	1.140	1.046	8.2	110	0.00	3.81- 3.87
7	B	beta-BHC	0.514	0.514	0.0	116	0.00	3.36- 3.42
8	B	delta-BHC	0.958	0.863	9.9	109	0.00	3.56- 3.62
9	MB	Aldrin	1.128	1.129	-0.1	119	0.00	4.17- 4.23
10		alachlor	0.136	0.128	5.9	110	0.00	4.31- 4.37
11	B	Heptachlor Epoxide	1.081	1.058	2.1	117	0.00	4.91- 4.97
12	B	gamma-Chlordane	1.072	1.089	-1.6	122	0.00	5.08- 5.14
13	B	alpha-Chlordane	1.113	1.073	3.6	122	0.00	5.26- 5.32
14	A	Endosulfan I	1.027	1.078	-5.0	125	0.00	5.44- 5.50
15	B	4,4'-DDE	1.010	0.960	5.0	116	0.00	5.38- 5.44
16	MA	Dieldrin	1.100	1.114	-1.3	124	0.00	5.78- 5.84
17	MA	Endrin	0.993	0.933	6.0	116	0.00	6.11- 6.17
18	A	4,4'-DDD	0.769	0.756	1.7	121	0.00	6.23- 6.29
19	B	Endosulfan II	0.991	0.948	4.3	121	0.00	6.44- 6.50
20	MA	4,4'-DDT	0.646	0.588	9.0	112	0.00	6.66- 6.72
21	B	Endrin Aldehyde	0.795	0.792	0.4	124	0.00	7.07- 7.13
22	B	Endosulfan Sulfate	0.710	0.554	22.0#	97	0.00	7.76- 7.82
23	A	Methoxychlor	0.321	0.273	15.0	106	0.00	7.46- 7.52
24		Mirex	0.825	0.811	1.7	124	0.00	7.63- 7.69
25	B	Endrin Ketone	0.901	0.890	1.2	120	0.00	8.21- 8.27
26	SA	Decachlorobiphenyl	1.124	1.089	3.1	123	0.00	10.03-10.09
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.62- 1.82
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.62- 1.82
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

Continuing Calibration Summary

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

Sample: G4G2589-CC2585
Lab FileID: 4G954329.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	141	0.00	1.88- 1.94
2	SAB	Tetrachloro-m-xylene	0.921	0.792	14.0	121	0.00	2.82- 2.88
3		hexachlorobenzene	1.011	0.886	12.4	129	0.00	3.37- 3.43
4	A	alpha-BHC	1.316	1.128	14.3	122	0.00	3.53- 3.59
5	MA	gamma-BHC	1.167	1.051	9.9	126	0.00	3.98- 4.04
6	MA	Heptachlor	1.277	1.098	14.0	122	0.00	4.58- 4.64
7	B	beta-BHC	0.553	0.490	11.4	130	0.00	4.07- 4.13
8	B	delta-BHC	1.082	0.933	13.8	126	0.00	4.48- 4.54
9	MB	Aldrin	1.162	1.091	6.1	132	0.00	5.05- 5.11
10		alachlor	0.156	0.132	15.4	119	0.00	4.84- 4.90
11	B	Heptachlor Epoxide	1.034	0.978	5.4	134	0.00	5.89- 5.95
12	B	gamma-Chlordane	1.090	1.085	0.5	144	0.00	6.18- 6.24
13	B	alpha-Chlordane	1.043	1.012	3.0	141	0.00	6.41- 6.47
14	A	Endosulfan I	0.963	0.949	1.5	141	0.00	6.51- 6.57
15	B	4,4'-DDE	1.013	0.998	1.5	139	0.00	6.68- 6.74
16	MA	Dieldrin	1.016	0.964	5.1	135	0.00	6.95- 7.01
17	MA	Endrin	0.966	0.872	9.7	129	0.00	7.46- 7.52
18	A	4,4'-DDD	0.836	0.810	3.1	138	0.00	7.64- 7.70
19	B	Endosulfan II	0.942	0.849	9.9	133	0.00	7.82- 7.88
20	MA	4,4'-DDT	0.739	0.642	13.1	121	0.00	8.18- 8.24
21	B	Endrin Aldehyde	0.726	0.715	1.5	146	0.00	8.40- 8.46
22	B	Endosulfan Sulfate	0.658	0.499	24.2#	110	0.00	8.87- 8.93
23	A	Methoxychlor	0.403	0.367	8.9	134	0.00	9.43- 9.49
24		Mirex	0.641	0.585	8.7	134	0.00	9.78- 9.84
25	B	Endrin Ketone	0.775	0.688	11.2	130	0.00	9.84- 9.90
26	SA	Decachlorobiphenyl	0.597	0.514	13.9	128	0.00	11.94-12.00
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.81- 2.01
28	L8	Toxaphene{A}		----------NA----------				
29	L8	Toxaphene{B}		----------NA----------				
30	L8	Toxaphene{C}		----------NA----------				
31	L8	Toxaphene{D}		----------NA----------				
32	L8	Toxaphene{E}		----------NA----------				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.81- 2.01
34		Chlordane {A}		----------NA----------				
35		Chlordane {B}		----------NA----------				
36		Chlordane {C}		----------NA----------				
37		Chlordane {D}		----------NA----------				
38		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g954236.D 4pst2585.m Wed Nov 07 20:30:48 2018

GC/LC Semi-volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 11/14/18 15:01

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954323.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:06 pm
Operator : mailisih
Sample : jc77181-1
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:07:42 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.734	1.922	351.2E6	3157.6E6	50.000	50.000
27) I 1-bromo-2...	1.734	1.922	351.2E6	3157.6E6	50.000	50.000
33) I 1-bromo-2...	1.734	1.922	351.2E6	3157.6E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.448	2.850	199.1E6	2014.3E6	30.482m	34.629
Spiked Amount	40.000	Range	30 - 150	Recovery	= 76.20%	86.57%
26) SA Decachlor...	10.060	11.967	192.0E6	966.8E6	24.311m	25.650m
Spiked Amount	40.000		Recovery	=	60.78%	64.13%
Target Compounds						
4) A alpha-BHC	2.980	3.562	39306792	373.5E6	4.571	4.495
18) A 4,4'-DDD	6.258	7.671	14396098	168.6E6	2.664	3.194
20) MA 4,4'-DDT	6.685	8.211	5104998	60554665	1.126	1.298
SemiQuant Compounds - Not Calibrated on this Instrument						

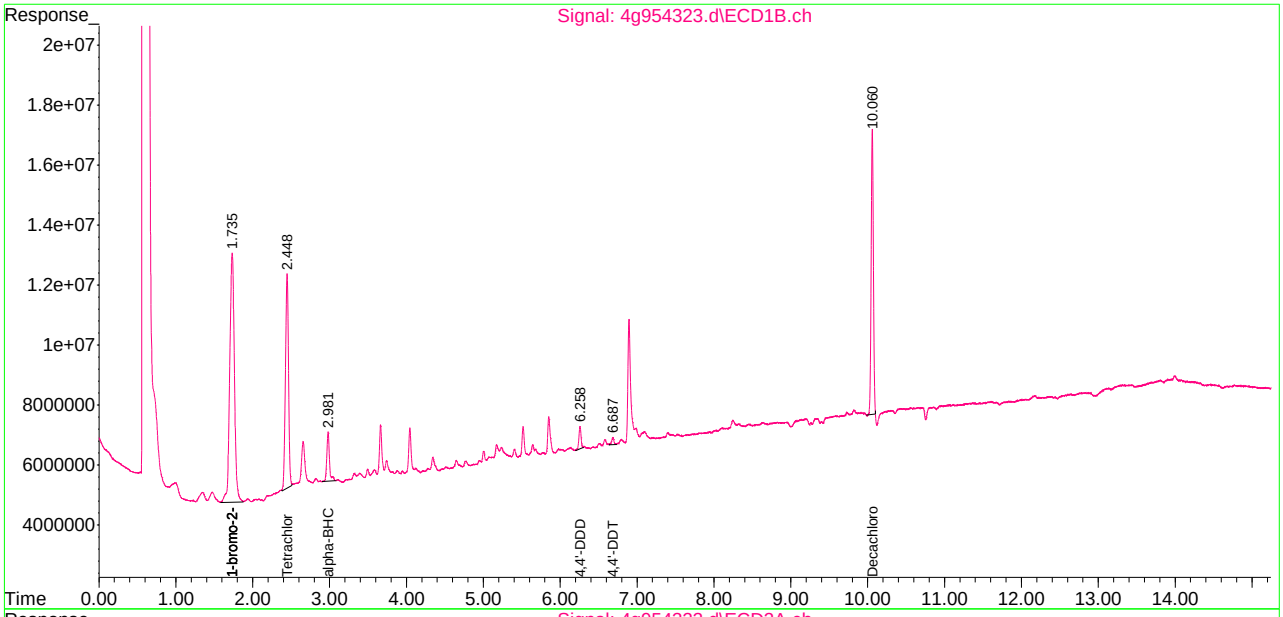
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

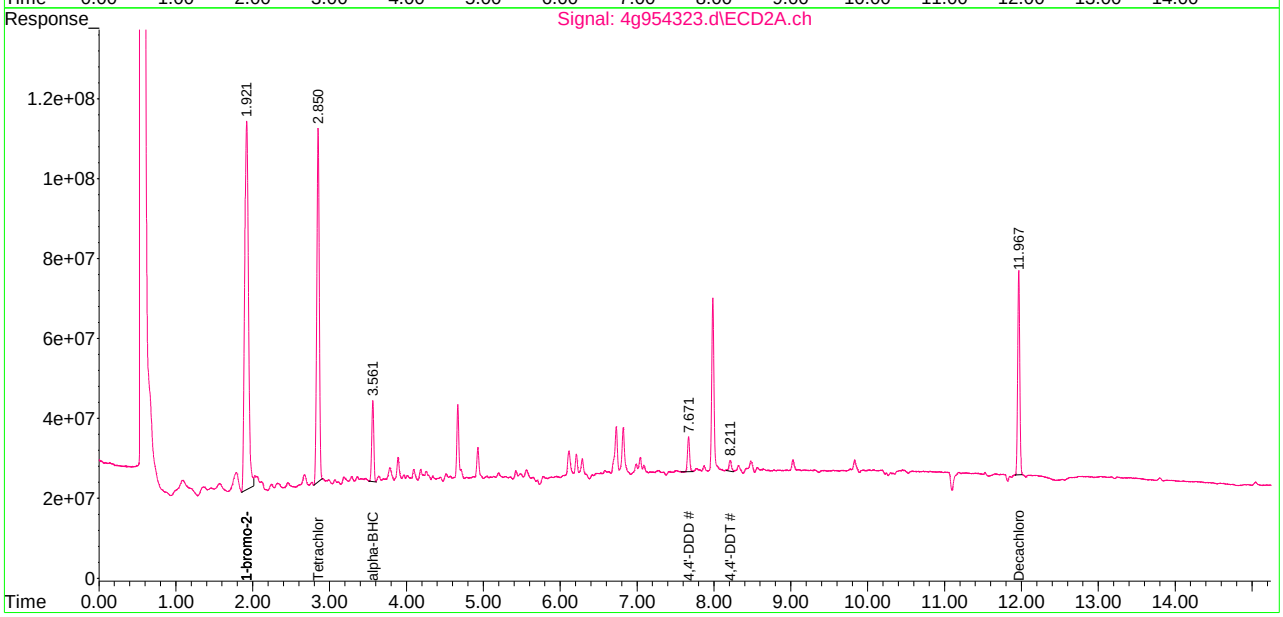
Quantitation Report (QT Reviewed)

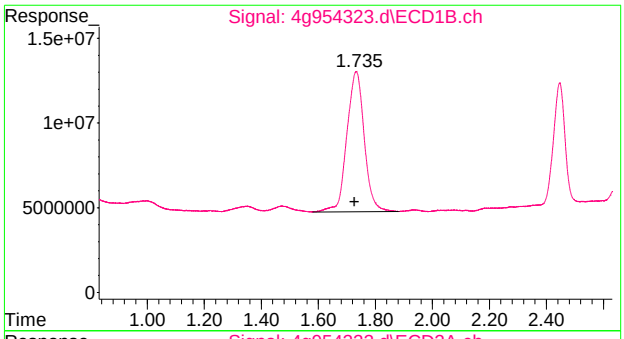
Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954323.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:06 pm
Operator : mailisih
Sample : jc77181-1
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:07:42 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

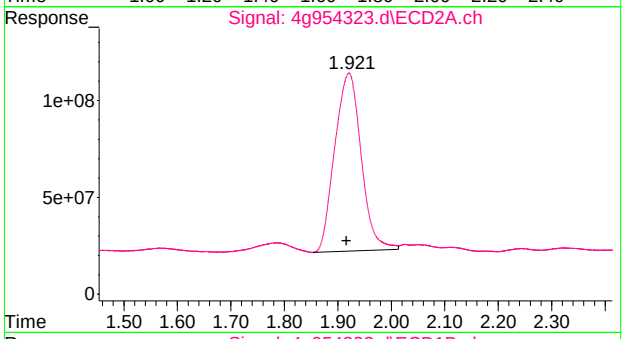






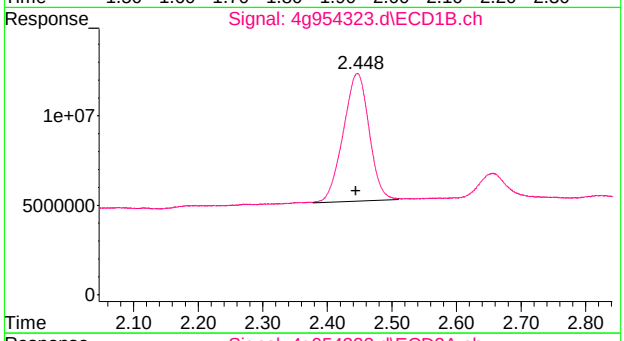
#1 1-bromo-2-nitrobenzene

R.T.: 1.734 min
Delta R.T.: 0.007 min
Response: 351156767
Conc: 50.00 PPB



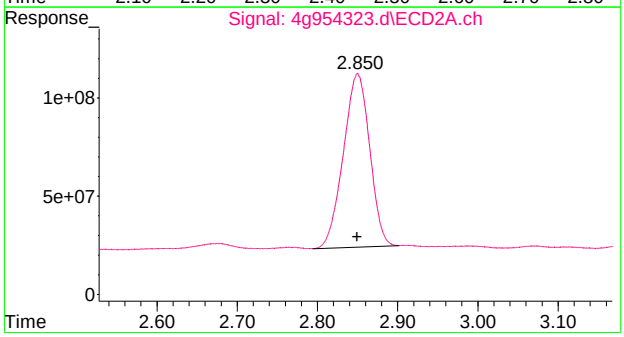
#1 1-bromo-2-nitrobenzene

R.T.: 1.922 min
Delta R.T.: 0.006 min
Response: 3157648878
Conc: 50.00 PPB



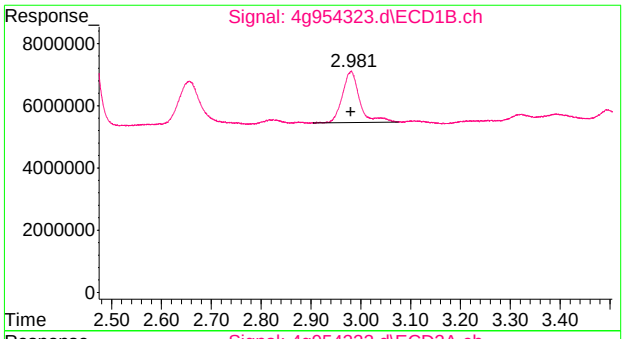
#2 Tetrachloro-m-xylene

R.T.: 2.448 min
Delta R.T.: 0.003 min
Response: 199140391
Conc: 30.48 PPB m



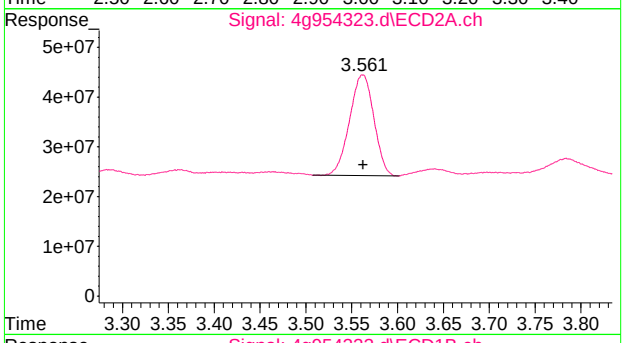
#2 Tetrachloro-m-xylene

R.T.: 2.850 min
Delta R.T.: 0.000 min
Response: 2014339278
Conc: 34.63 PPB



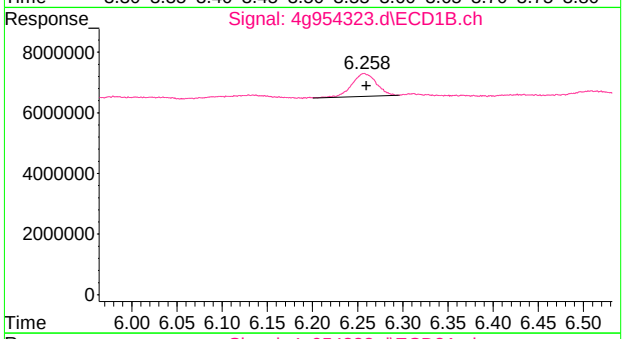
#4 alpha-BHC

R.T.: 2.980 min
Delta R.T.: 0.000 min
Response: 39306792
Conc: 4.57 PPB



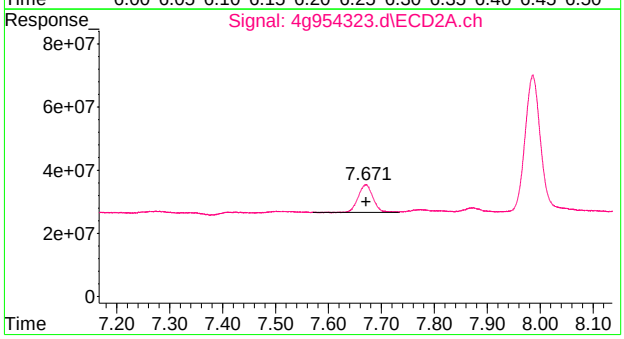
#4 alpha-BHC

R.T.: 3.562 min
Delta R.T.: 0.000 min
Response: 373504476
Conc: 4.50 PPB



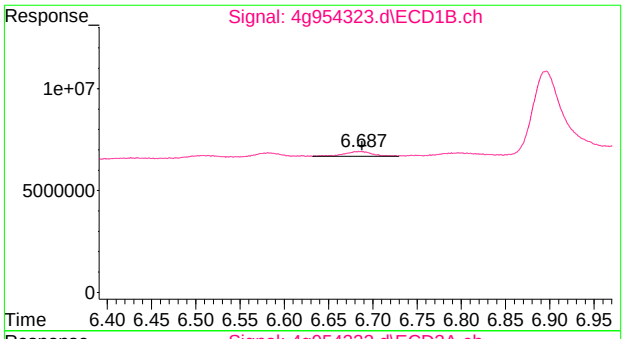
#18 4,4'-DDD

R.T.: 6.258 min
Delta R.T.: -0.002 min
Response: 14396098
Conc: 2.66 PPB



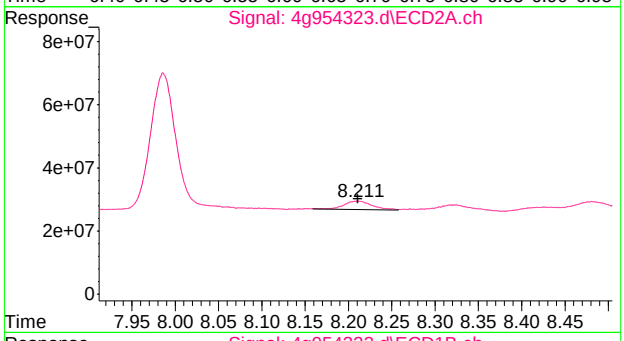
#18 4,4'-DDD

R.T.: 7.671 min
Delta R.T.: 0.000 min
Response: 168618590
Conc: 3.19 PPB



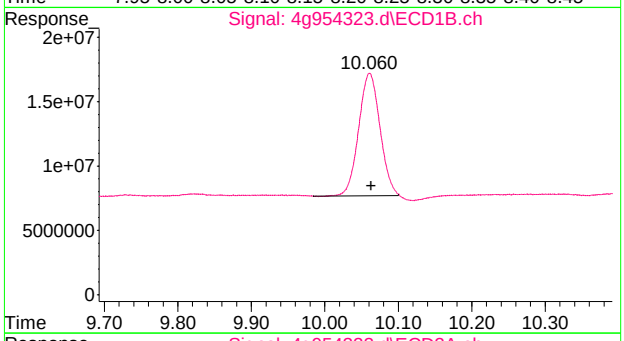
#20 4,4'-DDT

R.T.: 6.685 min
Delta R.T.: -0.003 min
Response: 5104998
Conc: 1.13 PPB



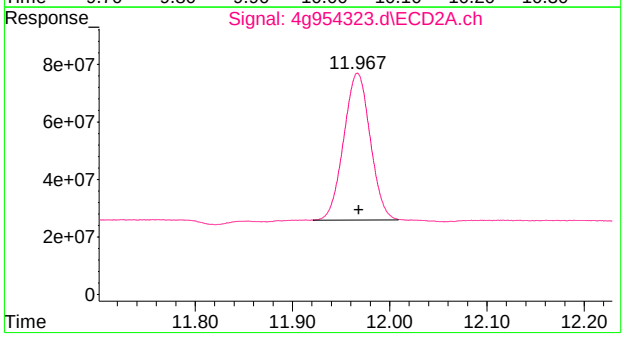
#20 4,4'-DDT

R.T.: 8.211 min
Delta R.T.: 0.000 min
Response: 60554665
Conc: 1.30 PPB



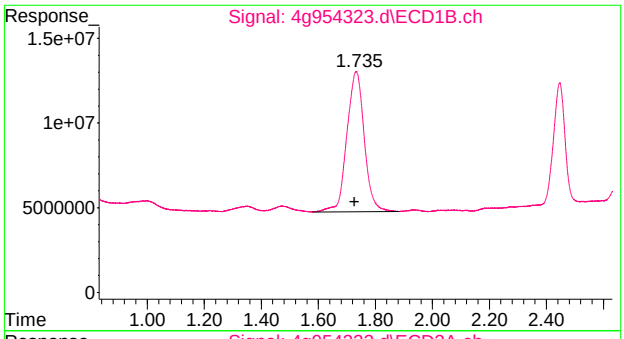
#26 Decachlorobiphenyl

R.T.: 10.060 min
Delta R.T.: -0.003 min
Response: 191983759
Conc: 24.31 PPB m



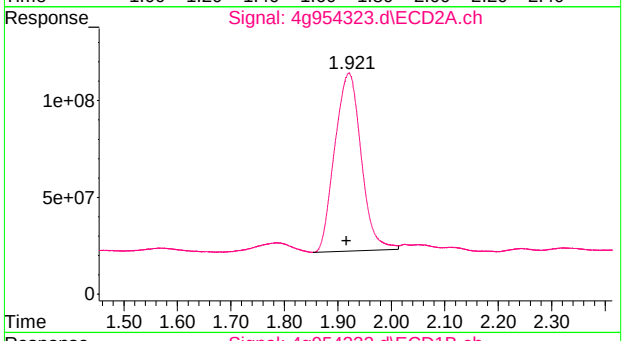
#26 Decachlorobiphenyl

R.T.: 11.967 min
Delta R.T.: -0.001 min
Response: 966848403
Conc: 25.65 PPB m



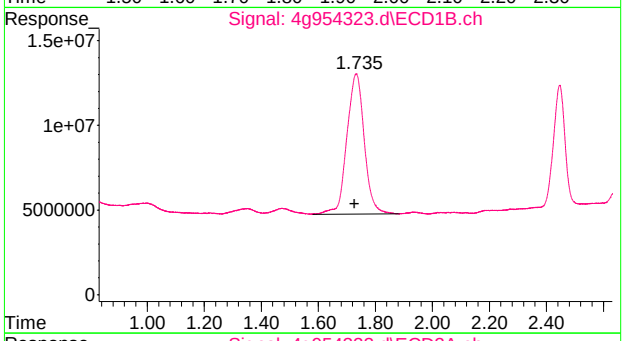
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.734 min
Delta R.T.: 0.007 min
Response: 351156767
Conc: 50.00 PPB



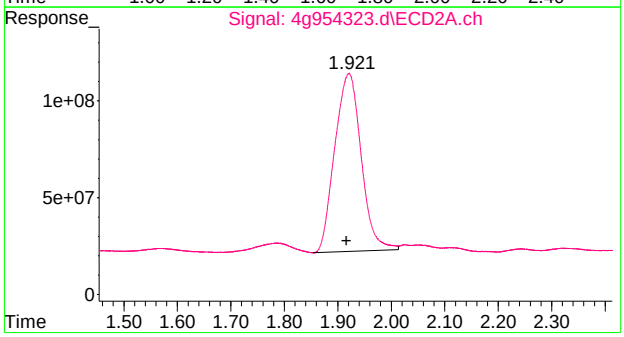
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.922 min
Delta R.T.: 0.006 min
Response: 3157648878
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.734 min
Delta R.T.: 0.007 min
Response: 351156767
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.922 min
Delta R.T.: 0.006 min
Response: 3157648878
Conc: 50.00 PPB

Manual Integration Approval Summary

Sample Number:	JC77181-1R	**Method:**	SW846 8081B
Lab FileID:	4G954323.D	**Analyst approved:**	12/14/18 16:20 Rebecca Krug
Injection Time:	11/07/18 12:06	**Supervisor approved:**	12/14/18 18:01 Kristi Schollenberger

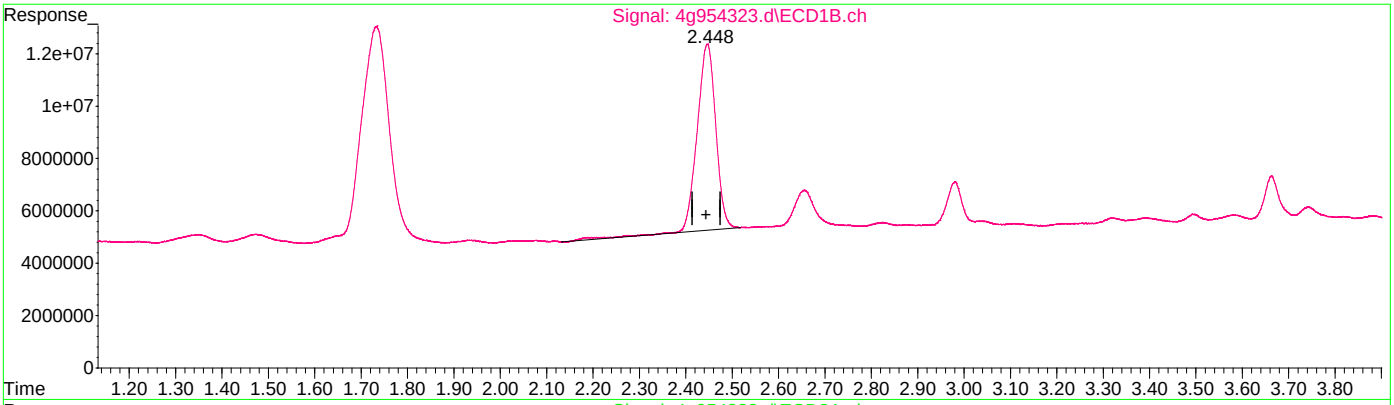
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.45	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	1	10.06	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	2	11.97	Poorly defined baseline

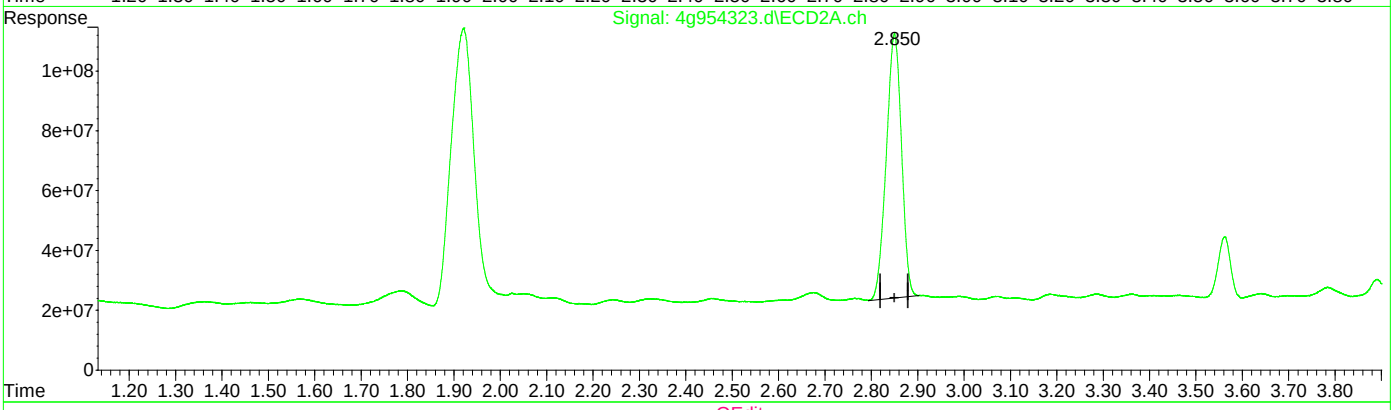
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954323.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:06 pm
Operator : mailisih
Sample : jc77181-1
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:45:45 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(2) Tetrachloro-m-xylene (SAB)

2.447min 30.697 PPB

response 200544301

(2) Tetrachloro-m-xylene #2 (SAB)

2.850min 34.629 PPB

response 2014339278

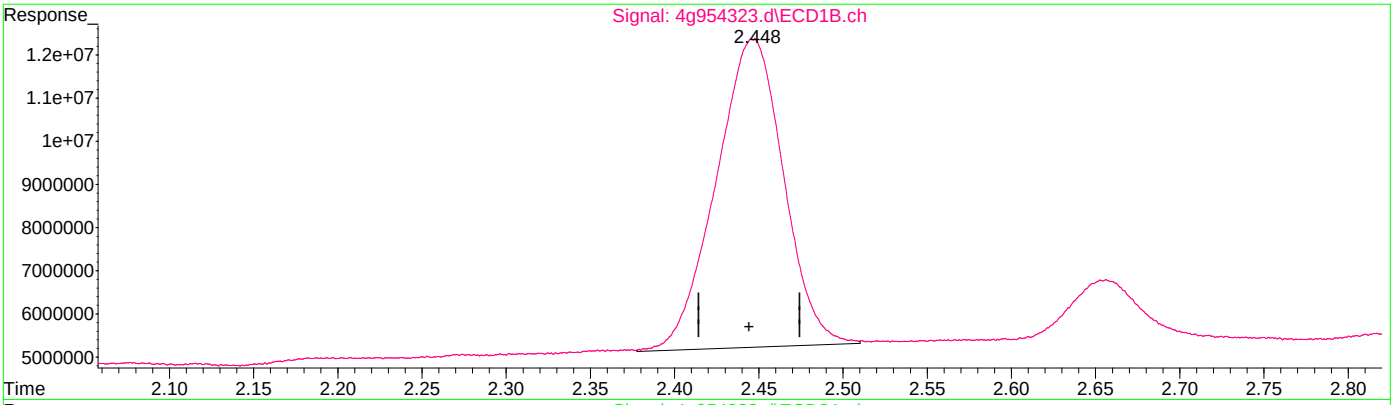
(+) = Expected Retention Time
4pst2585.m Wed Nov 07 20:03:37 2018

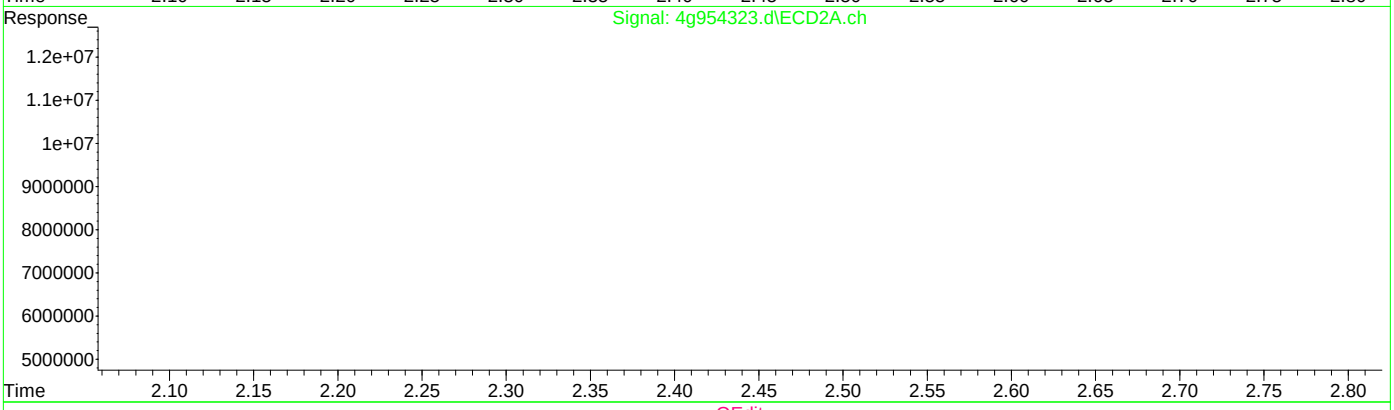
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954323.d
Signal(s) : Signal #1: ECD1B.ch  Signal #2: ECD2A.ch
Acq On    :  7 Nov 2018  12:06 pm
Operator  : mailisih
Sample    : jc77181-1
Misc      : op16424,g4g2589,300,,,2,1
ALS Vial  : 10   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:45:45 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title  : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

2.448min 30.482 PPB m

response 199140391

(2) Tetrachloro-m-xylene #2 (SAB)

2.850min 34.629 PPB

response 2014339278

(+) = Expected Retention Time

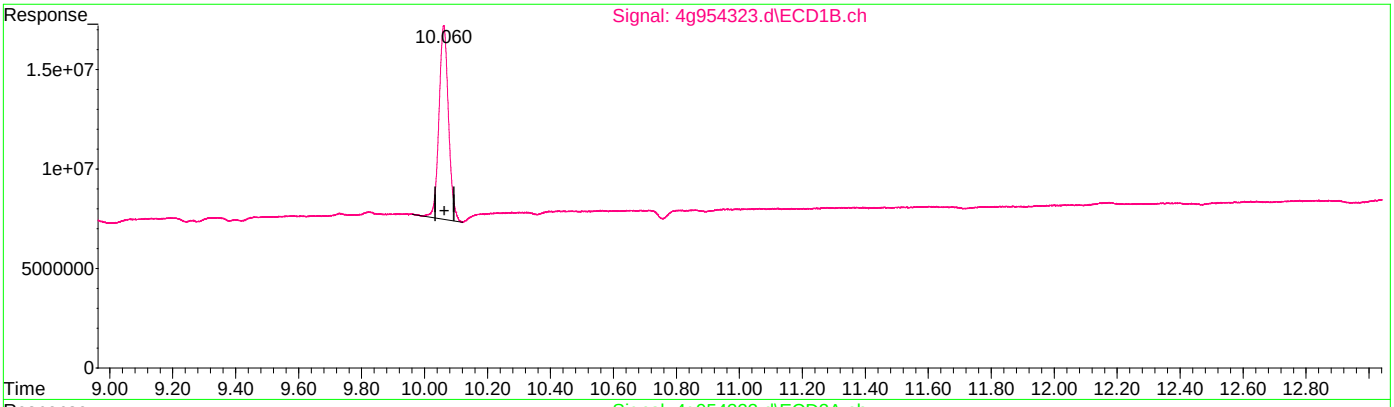
4pst2585.m Wed Nov 07 20:03:57 2018

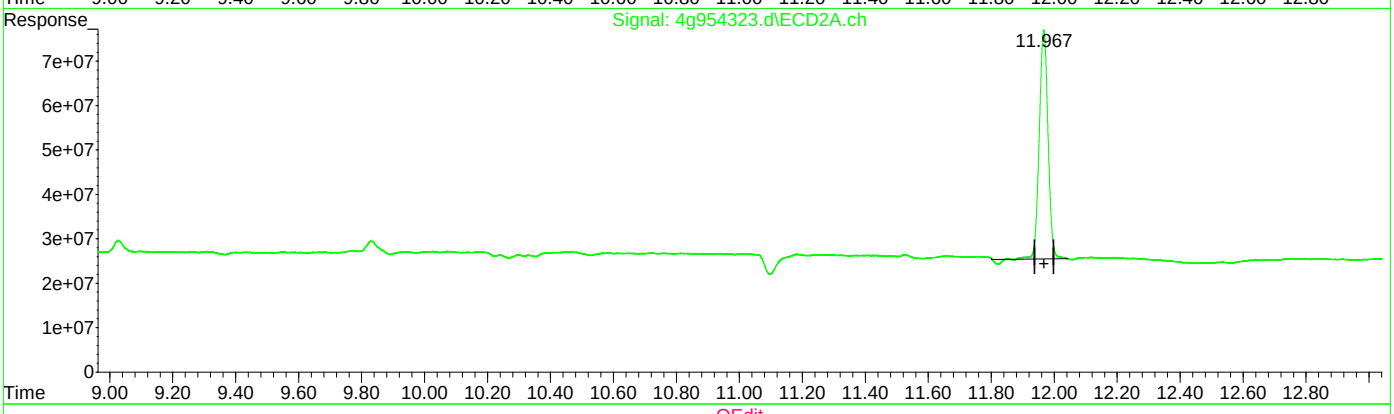
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954323.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:06 pm
Operator : mailisih
Sample : jc77181-1
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:45:45 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Decachlorobiphenyl (SA)

10.061min 26.000 PPB

response 205327545

(26) Decachlorobiphenyl #2 (SA)

11.967min 26.206 PPB

response 987839202

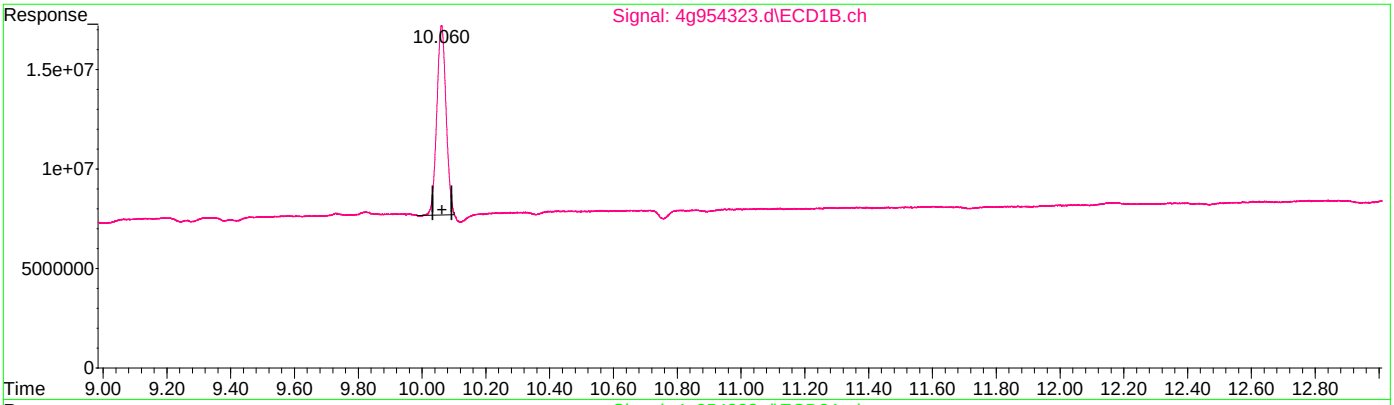
(+) = Expected Retention Time
4pst2585.m Wed Nov 07 20:06:24 2018

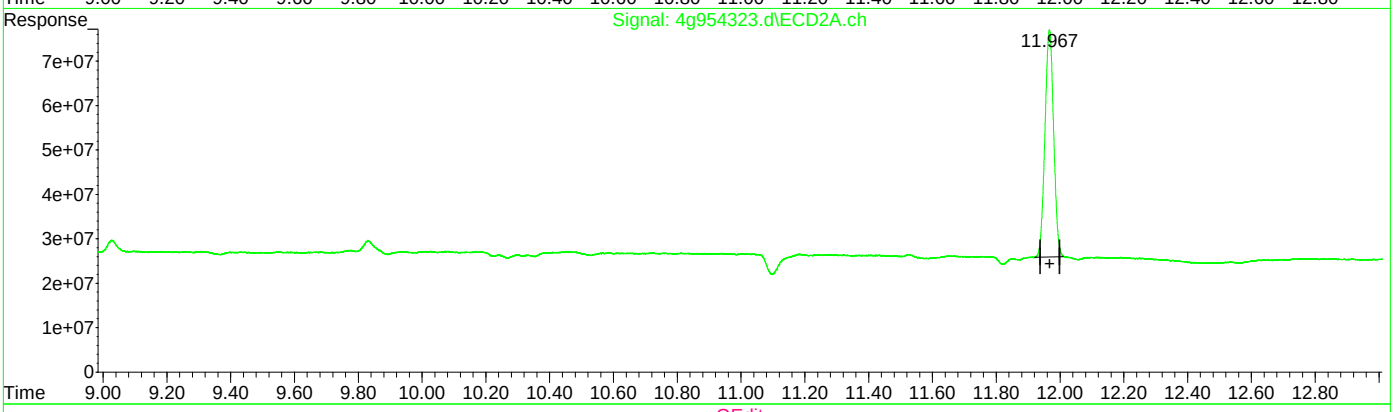
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954323.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:06 pm
Operator : mailisih
Sample : jc77181-1
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:45:45 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Decachlorobiphenyl (SA)

10.060min 24.311 PPB m

response 191983759

(26) Decachlorobiphenyl #2 (SA)

11.967min 25.650 PPB m

response 966848403

(+) = Expected Retention Time
4pst2585.m Wed Nov 07 20:07:04 2018

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 12/14/18 18:01

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954323.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:06 pm
Operator : mailisih
Sample : jc77181-1
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:07:42 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.734	1.922	351.2E6	3157.6E6	50.000	50.000
27) I 1-bromo-2...	1.734	1.922	351.2E6	3157.6E6	50.000	50.000
33) I 1-bromo-2...	1.734	1.922	351.2E6	3157.6E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.448	2.850	199.1E6	2014.3E6	30.482m	34.629
Spiked Amount	40.000	Range	30 - 150	Recovery	= 76.20%	86.57%
26) SA Decachlor...	10.060	11.967	192.0E6	966.8E6	24.311m	25.650m
Spiked Amount	40.000		Recovery	=	60.78%	64.13%
Target Compounds						
4) A alpha-BHC	2.980	3.562	39306792	373.5E6	4.571	4.495
18) A 4,4'-DDD	6.258	7.671	14396098	168.6E6	2.664	3.194
20) MA 4,4'-DDT	6.685	8.211	5104998	60554665	1.126	1.298
SemiQuant Compounds - Not Calibrated on this Instrument						

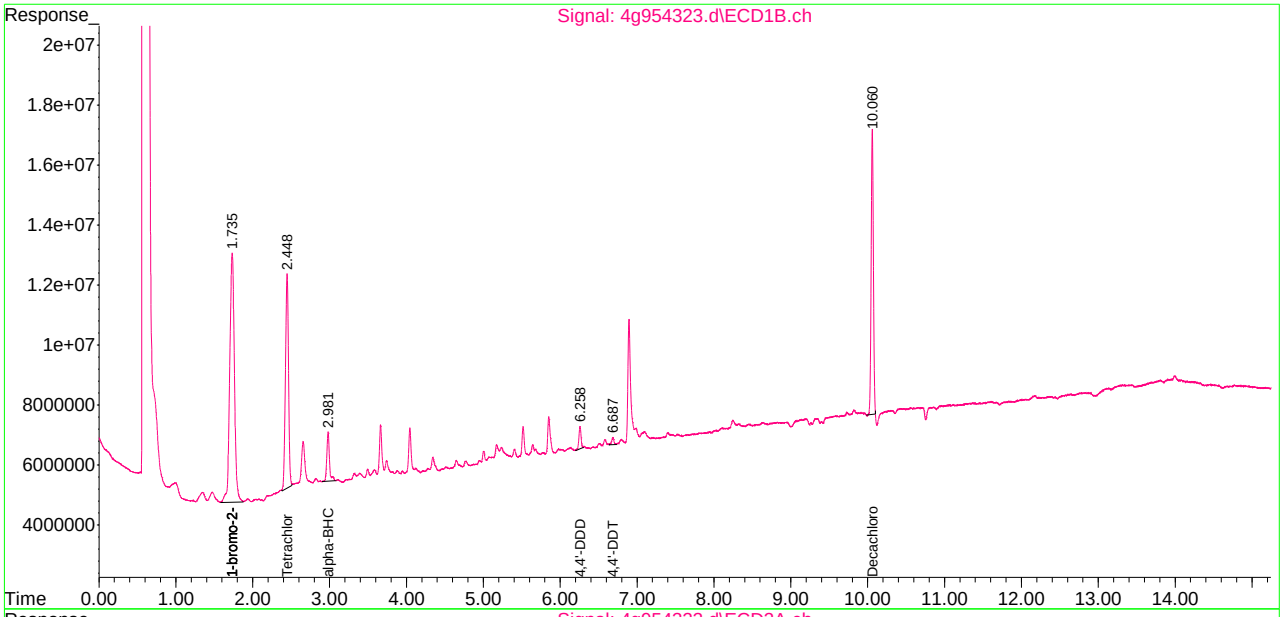
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

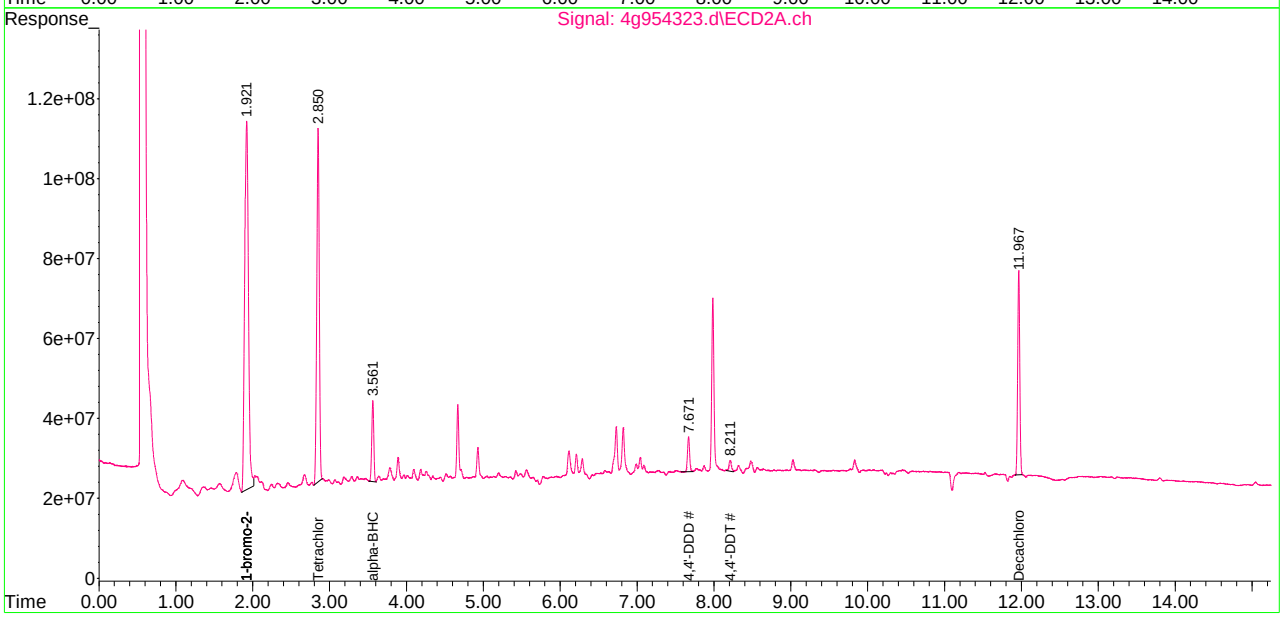
Quantitation Report (QT Reviewed)

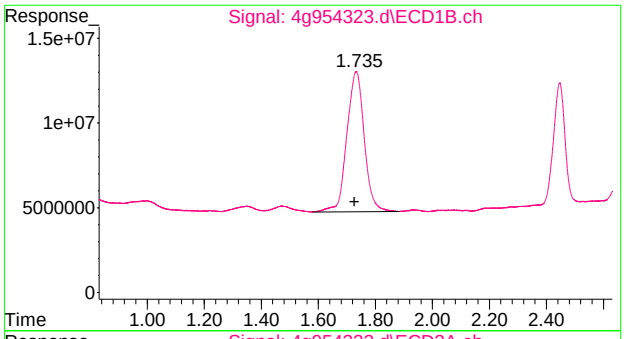
Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954323.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:06 pm
Operator : mailisih
Sample : jc77181-1
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:07:42 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

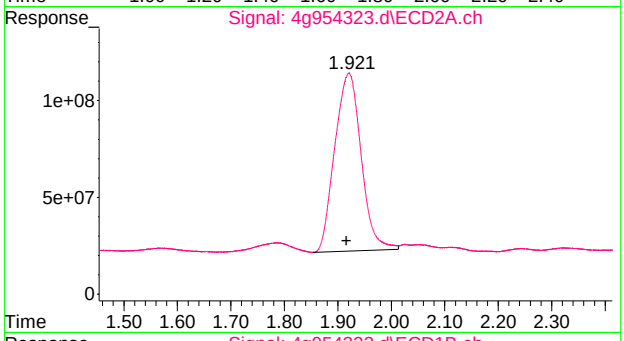






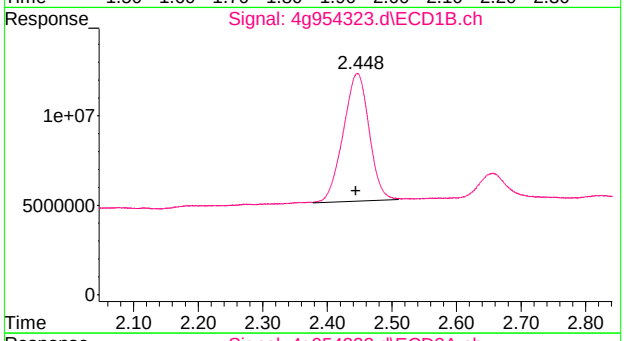
#1 1-bromo-2-nitrobenzene

R.T.: 1.734 min
Delta R.T.: 0.007 min
Response: 351156767
Conc: 50.00 PPB



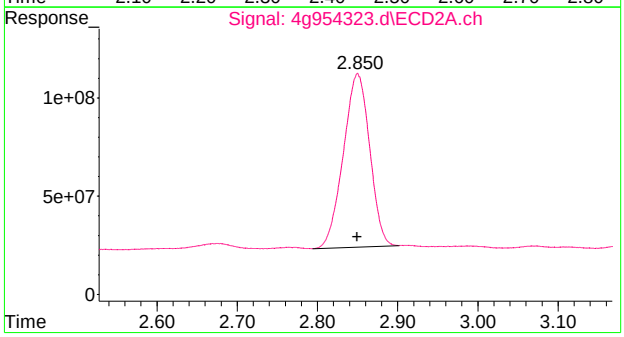
#1 1-bromo-2-nitrobenzene

R.T.: 1.922 min
Delta R.T.: 0.006 min
Response: 3157648878
Conc: 50.00 PPB



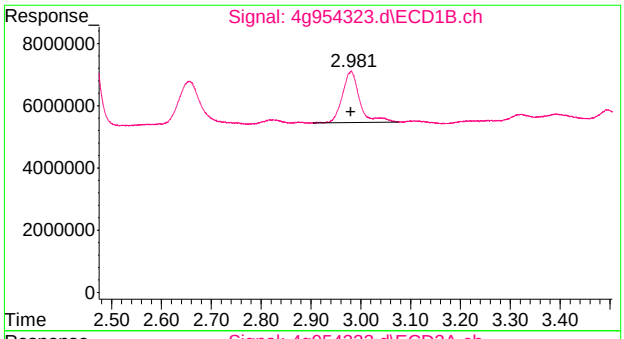
#2 Tetrachloro-m-xylene

R.T.: 2.448 min
Delta R.T.: 0.003 min
Response: 199140391
Conc: 30.48 PPB m



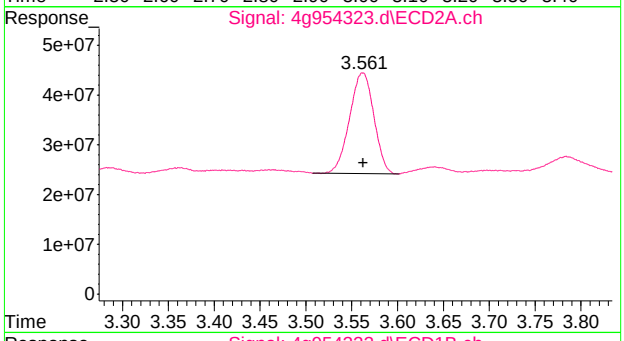
#2 Tetrachloro-m-xylene

R.T.: 2.850 min
Delta R.T.: 0.000 min
Response: 2014339278
Conc: 34.63 PPB



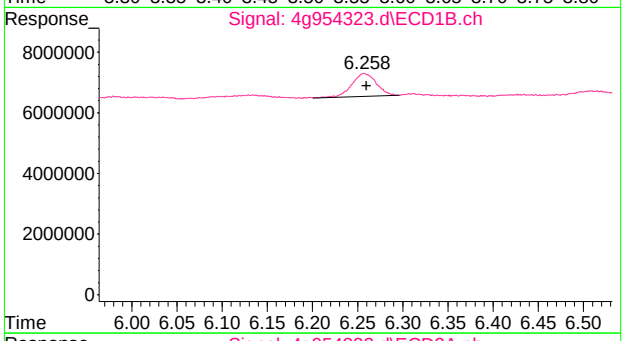
#4 alpha-BHC

R.T.: 2.980 min
Delta R.T.: 0.000 min
Response: 39306792
Conc: 4.57 PPB



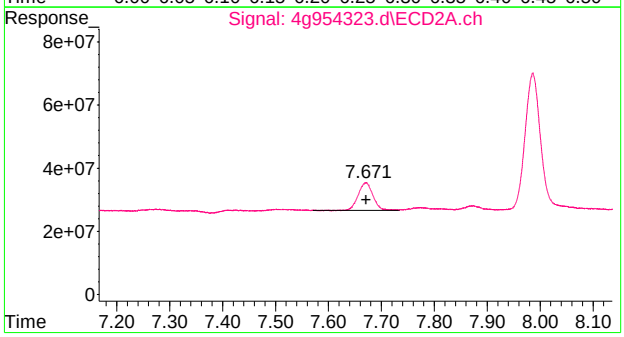
#4 alpha-BHC

R.T.: 3.562 min
Delta R.T.: 0.000 min
Response: 373504476
Conc: 4.50 PPB



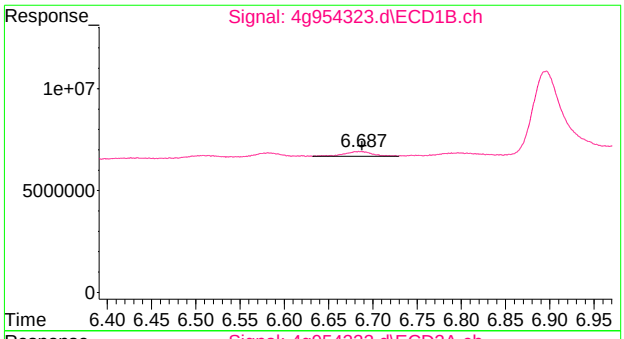
#18 4,4'-DDD

R.T.: 6.258 min
Delta R.T.: -0.002 min
Response: 14396098
Conc: 2.66 PPB



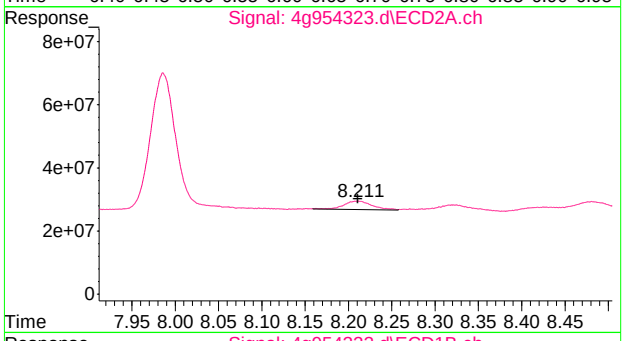
#18 4,4'-DDD

R.T.: 7.671 min
Delta R.T.: 0.000 min
Response: 168618590
Conc: 3.19 PPB



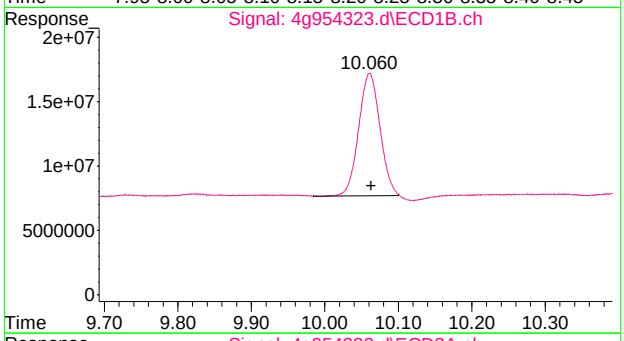
#20 4,4'-DDT

R.T.: 6.685 min
Delta R.T.: -0.003 min
Response: 5104998
Conc: 1.13 PPB



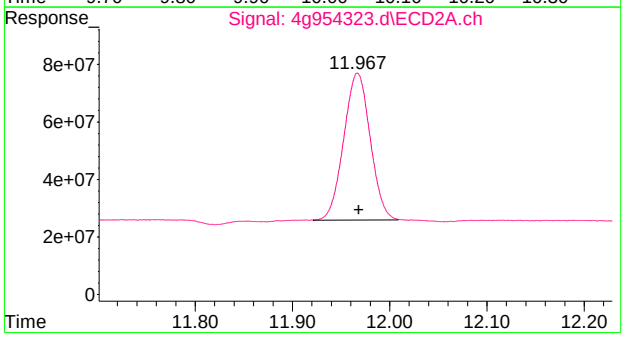
#20 4,4'-DDT

R.T.: 8.211 min
Delta R.T.: 0.000 min
Response: 60554665
Conc: 1.30 PPB



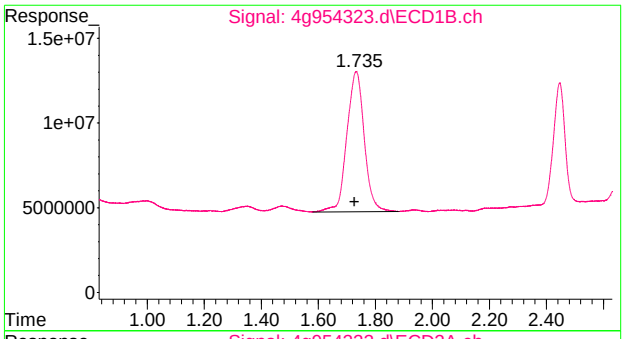
#26 Decachlorobiphenyl

R.T.: 10.060 min
Delta R.T.: -0.003 min
Response: 191983759
Conc: 24.31 PPB m



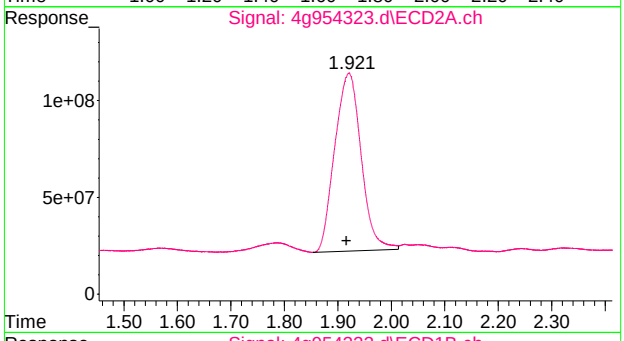
#26 Decachlorobiphenyl

R.T.: 11.967 min
Delta R.T.: -0.001 min
Response: 966848403
Conc: 25.65 PPB m



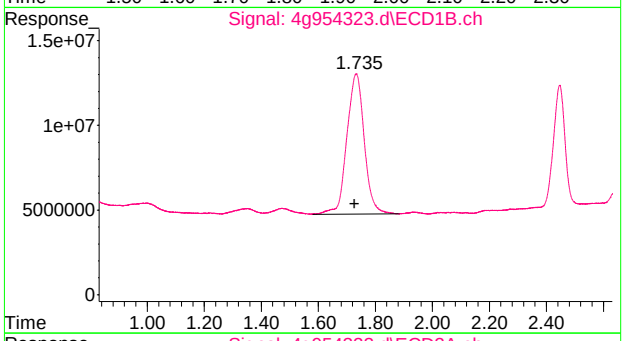
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.734 min
Delta R.T.: 0.007 min
Response: 351156767
Conc: 50.00 PPB



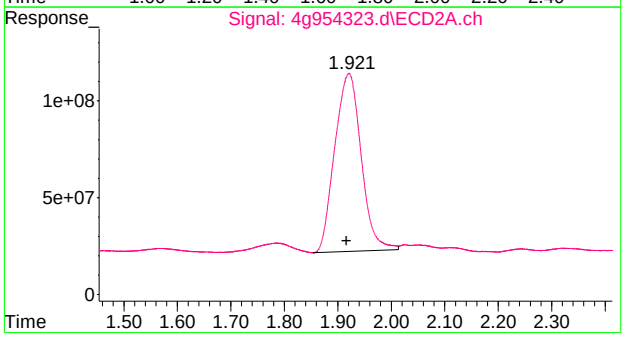
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.922 min
Delta R.T.: 0.006 min
Response: 3157648878
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.734 min
Delta R.T.: 0.007 min
Response: 351156767
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.922 min
Delta R.T.: 0.006 min
Response: 3157648878
Conc: 50.00 PPB

Manual Integration Approval Summary

Sample Number:	JC77181-1R	**Method:**	SW846 8081B
Lab FileID:	4G954323.D	**Analyst approved:**	12/14/18 16:20 Rebecca Krug
Injection Time:	11/07/18 12:06	**Supervisor approved:**	12/14/18 18:01 Kristi Schollenberger

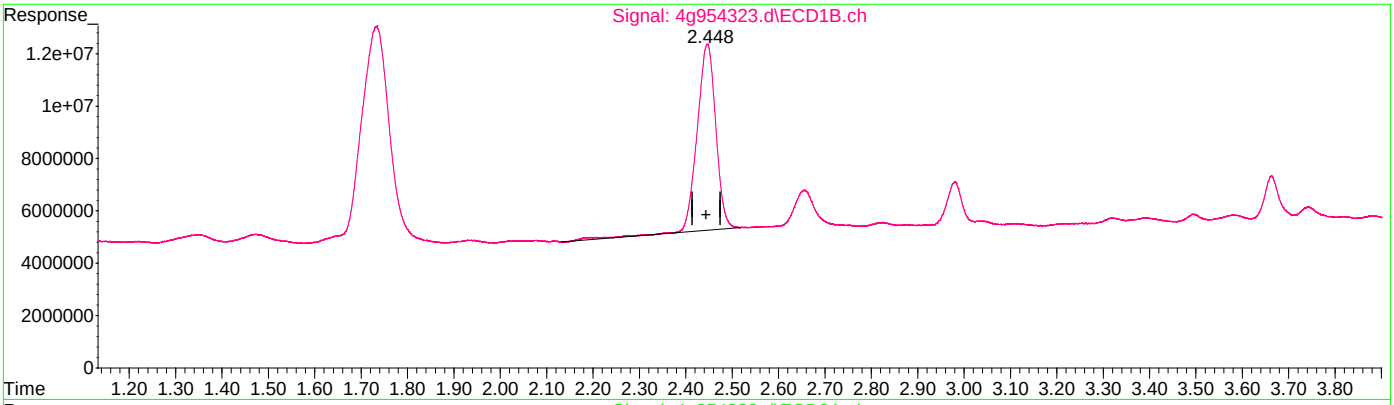
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.45	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	1	10.06	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	2	11.97	Poorly defined baseline

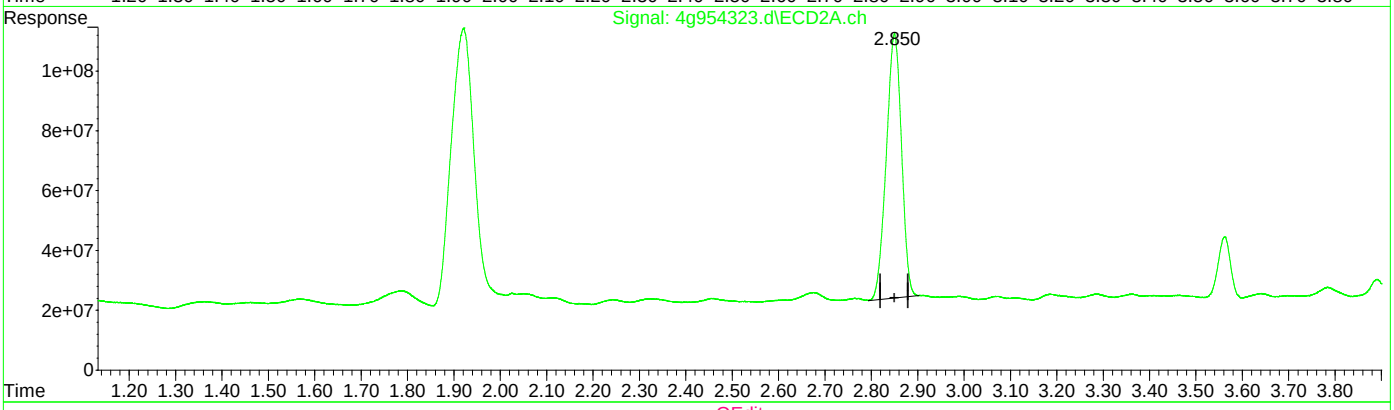
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954323.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:06 pm
Operator : mailisih
Sample : jc77181-1
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:45:45 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(2) Tetrachloro-m-xylene (SAB)

2.447min 30.697 PPB

response 200544301

(2) Tetrachloro-m-xylene #2 (SAB)

2.850min 34.629 PPB

response 2014339278

(+) = Expected Retention Time

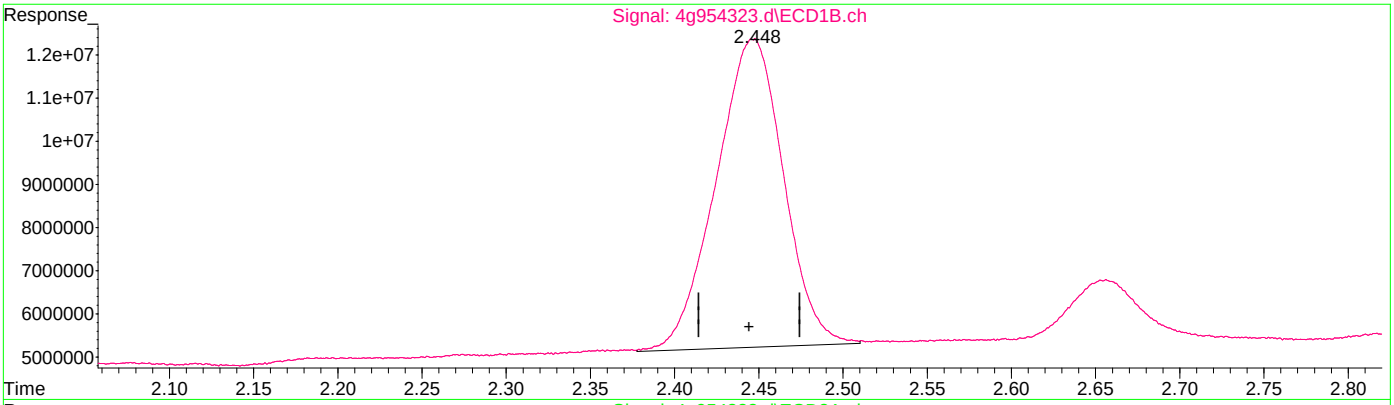
4pst2585.m Wed Nov 07 20:03:37 2018

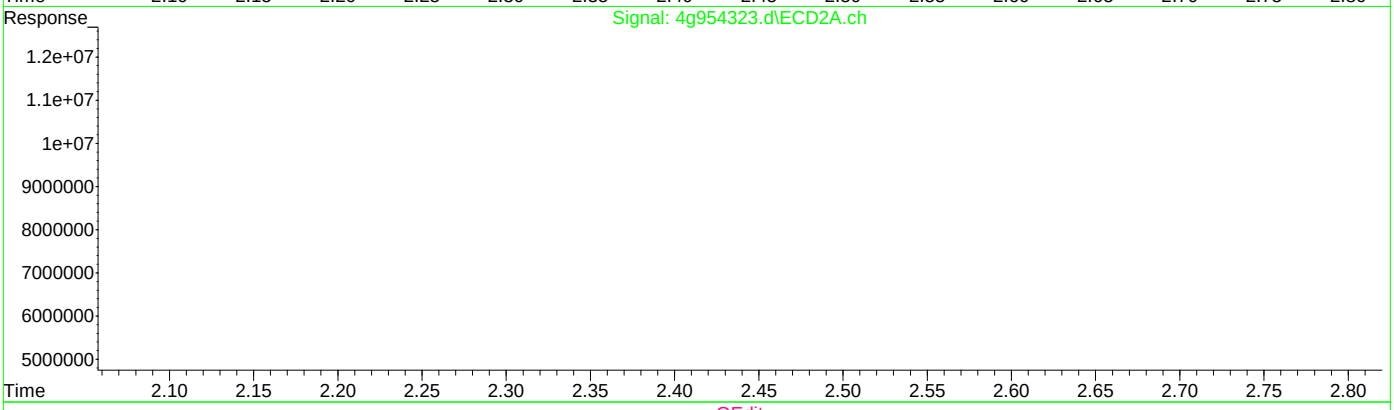
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954323.d
Signal(s) : Signal #1: ECD1B.ch  Signal #2: ECD2A.ch
Acq On    :  7 Nov 2018  12:06 pm
Operator  : mailisih
Sample    : jc77181-1
Misc      : op16424,g4g2589,300,,,2,1
ALS Vial  : 10   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:45:45 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title  : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

2.448min 30.482 PPB m

response 199140391

(2) Tetrachloro-m-xylene #2 (SAB)

2.850min 34.629 PPB

response 2014339278

(+) = Expected Retention Time

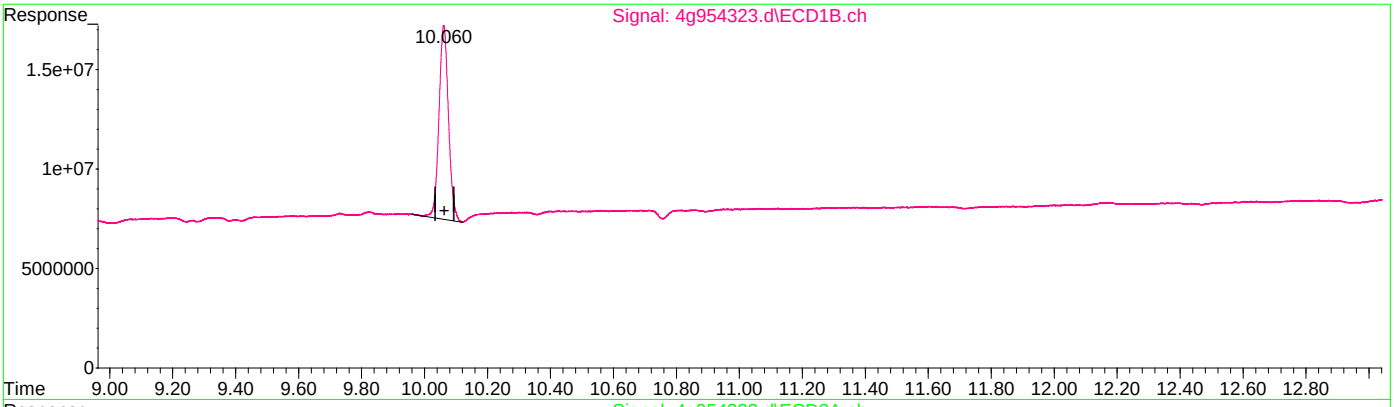
4pst2585.m Wed Nov 07 20:03:57 2018

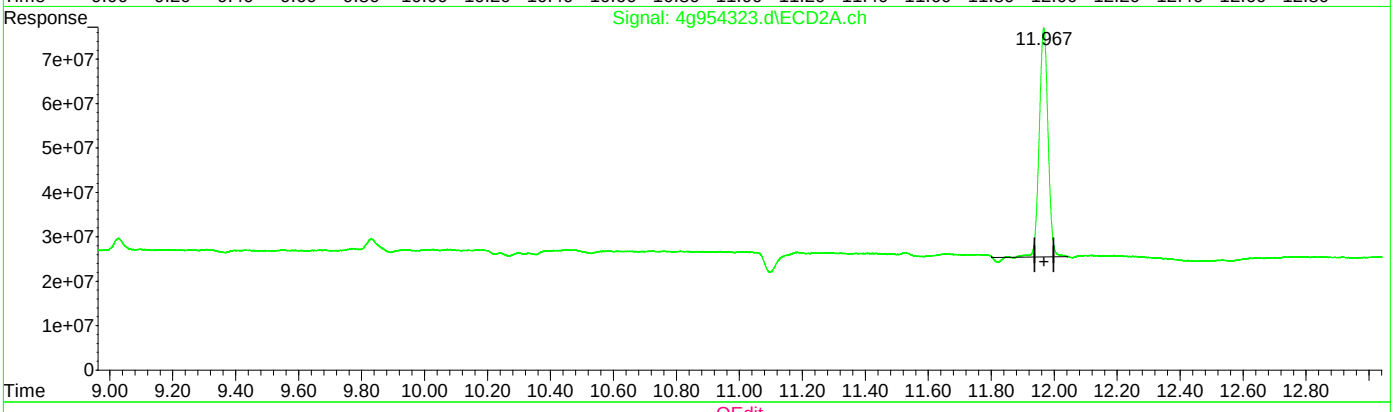
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954323.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:06 pm
Operator : mailisih
Sample : jc77181-1
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:45:45 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Decachlorobiphenyl (SA)

10.061min 26.000 PPB

response 205327545

(26) Decachlorobiphenyl #2 (SA)

11.967min 26.206 PPB

response 987839202

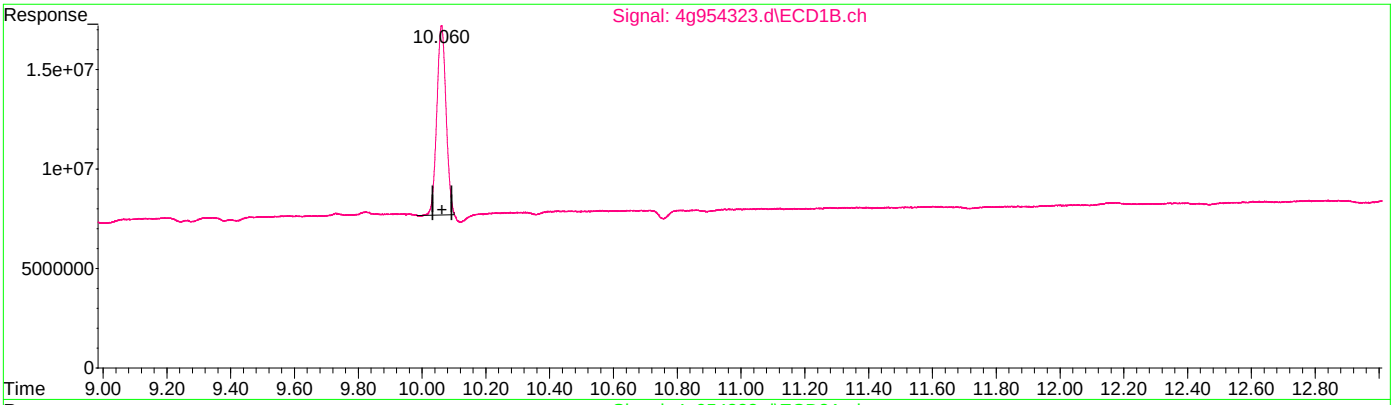
(+) = Expected Retention Time
4pst2585.m Wed Nov 07 20:06:24 2018

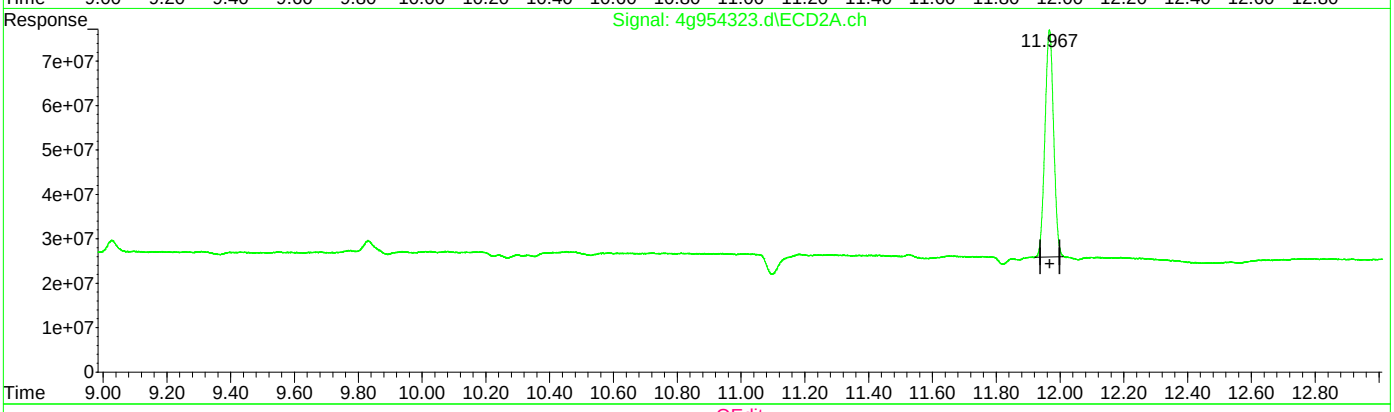
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954323.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:06 pm
Operator : mailisih
Sample : jc77181-1
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:45:45 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Decachlorobiphenyl (SA)

10.060min 24.311 PPB m

response 191983759

(26) Decachlorobiphenyl #2 (SA)

11.967min 25.650 PPB m

response 966848403

(+) = Expected Retention Time
4pst2585.m Wed Nov 07 20:07:04 2018

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 11/14/18 15:01

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954324.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:23 pm
Operator : mailisih
Sample : jc77181-2
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:15:29 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.733	1.920	404.0E6	3577.6E6	50.000	50.000
27) I 1-bromo-2...	1.733	1.920	404.0E6	3577.6E6	50.000	50.000
33) I 1-bromo-2...	1.733	1.920	404.0E6	3577.6E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.446	2.850	207.1E6	2051.0E6	27.555	31.120
Spiked Amount 40.000	Range 30 - 150		Recovery =		68.89%	77.80%
26) SA Decachlor...	10.060	11.967	215.4E6	1069.3E6	23.713m	25.036m
Spiked Amount 40.000			Recovery =		59.28%	62.59%
Target Compounds						
4) A alpha-BHC	2.980	3.563	78438078	866.4E6	7.929	9.204
5) MA gamma-BHC	3.308	4.014	27948664	193.3E6	3.035	2.316
7) B beta-BHC	3.389	4.098	13564695	101.4E6	3.266	2.561
18) A 4,4'-DDD	6.257	7.670	14912862	166.4E6	2.399m	2.781
SemiQuant Compounds - Not Calibrated on this Instrument						

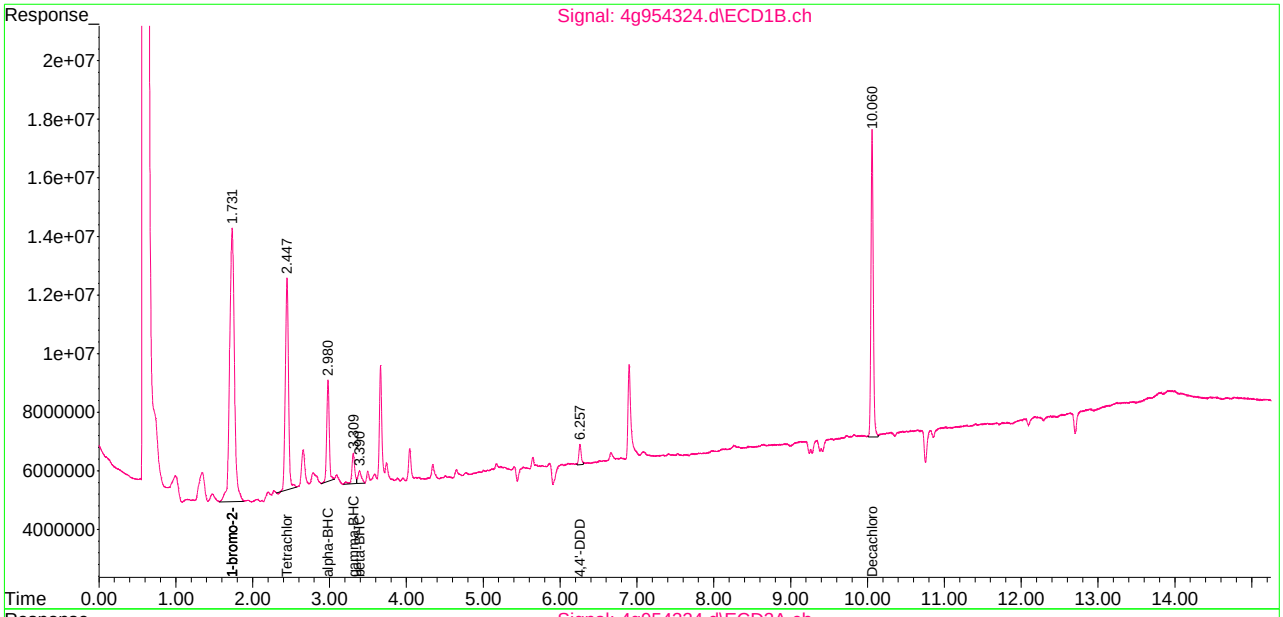
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

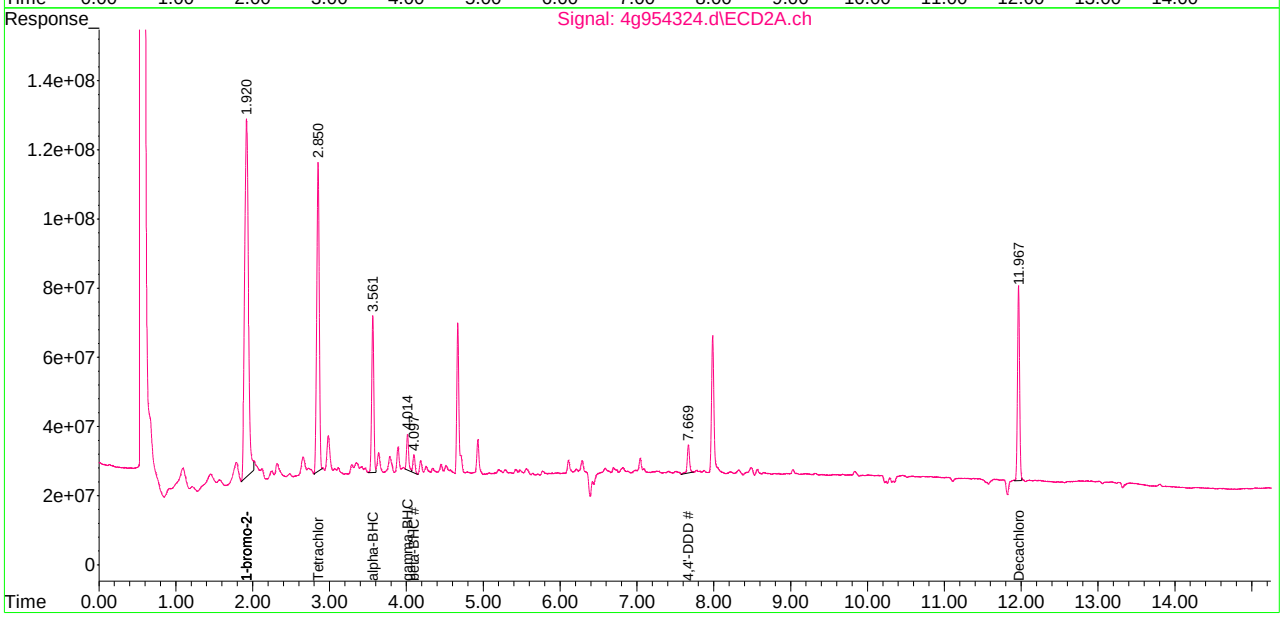
Quantitation Report (QT Reviewed)

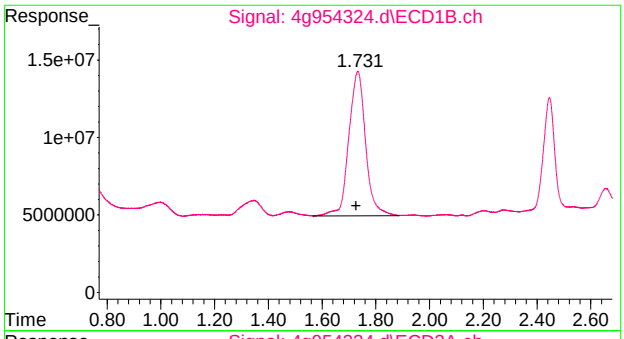
Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954324.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:23 pm
Operator : mailisih
Sample : jc77181-2
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:15:29 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

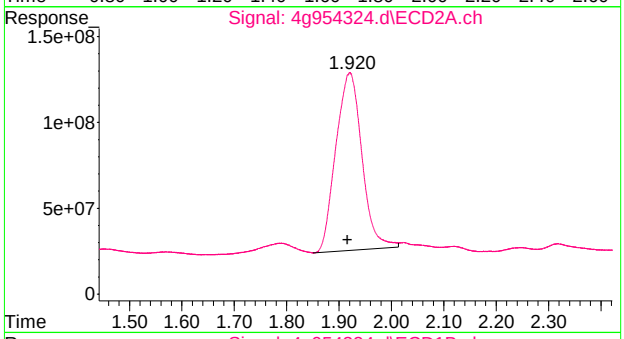






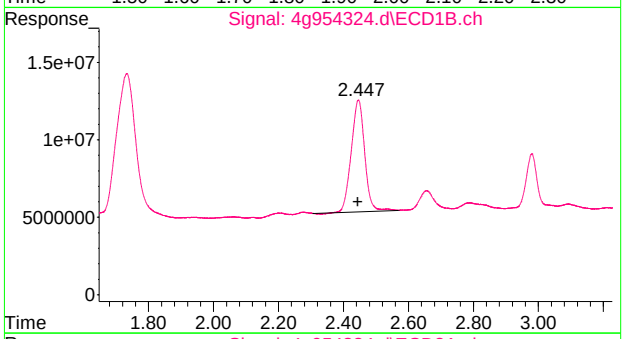
#1 1-bromo-2-nitrobenzene

R.T.: 1.733 min
Delta R.T.: 0.006 min
Response: 403992537
Conc: 50.00 PPB



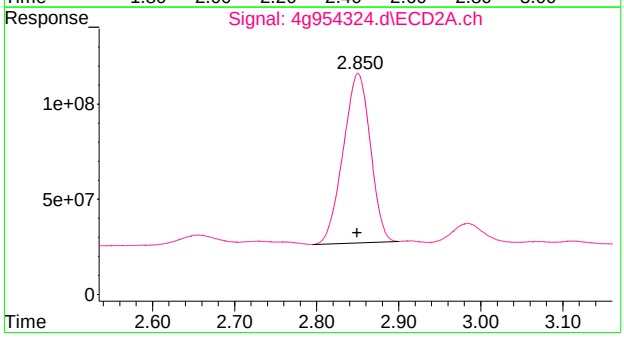
#1 1-bromo-2-nitrobenzene

R.T.: 1.920 min
Delta R.T.: 0.004 min
Response: 3577619260
Conc: 50.00 PPB



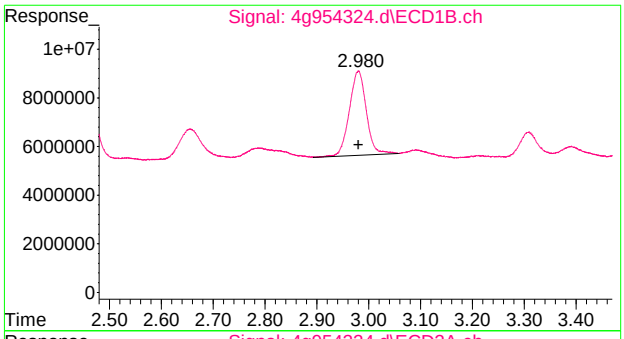
#2 Tetrachloro-m-xylene

R.T.: 2.446 min
Delta R.T.: 0.002 min
Response: 207105653
Conc: 27.56 PPB



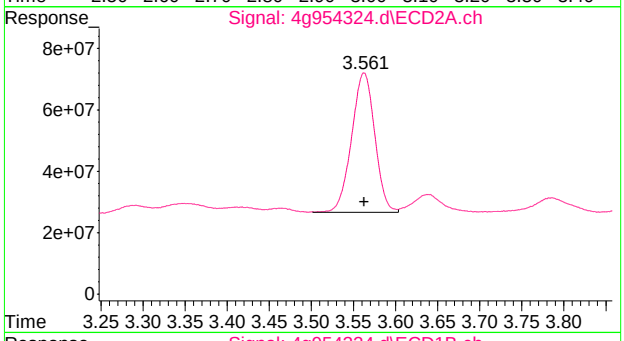
#2 Tetrachloro-m-xylene

R.T.: 2.850 min
Delta R.T.: 0.001 min
Response: 2050966890
Conc: 31.12 PPB



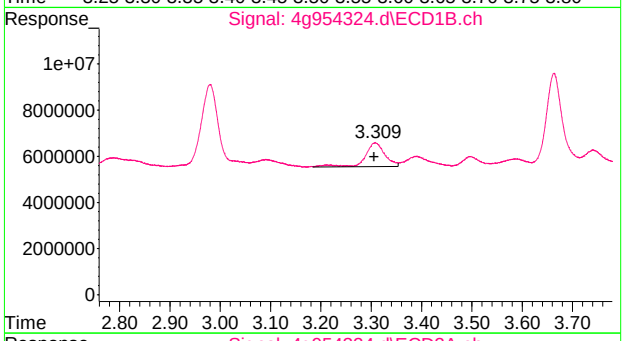
#4 alpha-BHC

R.T.: 2.980 min
Delta R.T.: 0.000 min
Response: 78438078
Conc: 7.93 PPB



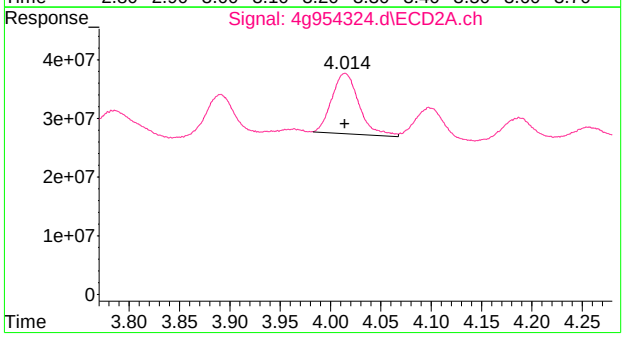
#4 alpha-BHC

R.T.: 3.563 min
Delta R.T.: 0.000 min
Response: 866433732
Conc: 9.20 PPB



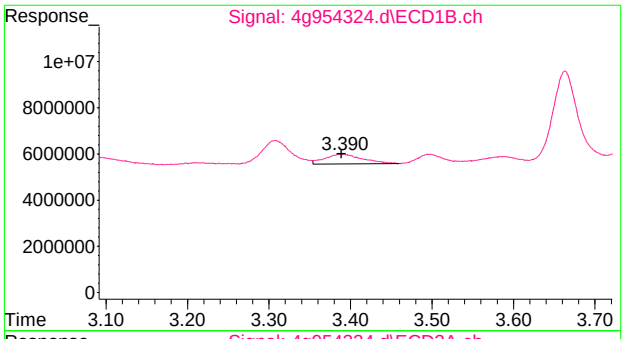
#5 gamma-BHC

R.T.: 3.308 min
Delta R.T.: 0.002 min
Response: 27948664
Conc: 3.04 PPB



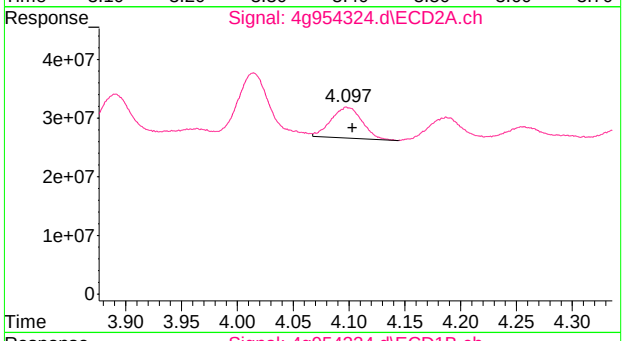
#5 gamma-BHC

R.T.: 4.014 min
Delta R.T.: 0.000 min
Response: 193344106
Conc: 2.32 PPB



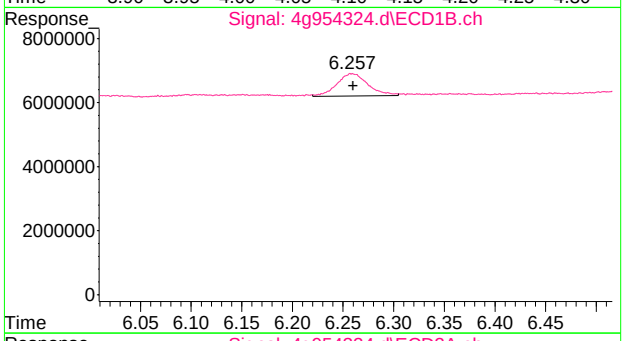
#7 beta-BHC

R.T.: 3.389 min
Delta R.T.: 0.000 min
Response: 13564695
Conc: 3.27 PPB



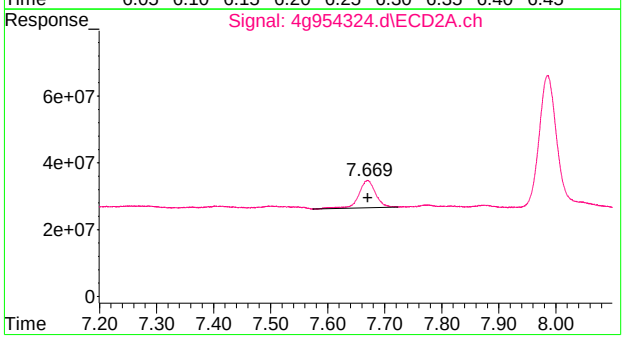
#7 beta-BHC

R.T.: 4.098 min
Delta R.T.: -0.005 min
Response: 101400998
Conc: 2.56 PPB



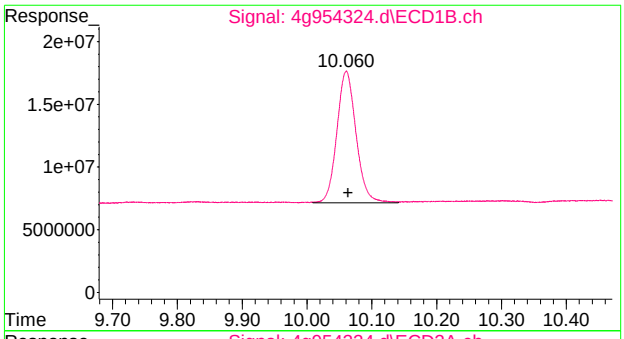
#18 4,4'-DDD

R.T.: 6.257 min
Delta R.T.: -0.003 min
Response: 14912862
Conc: 2.40 PPB m



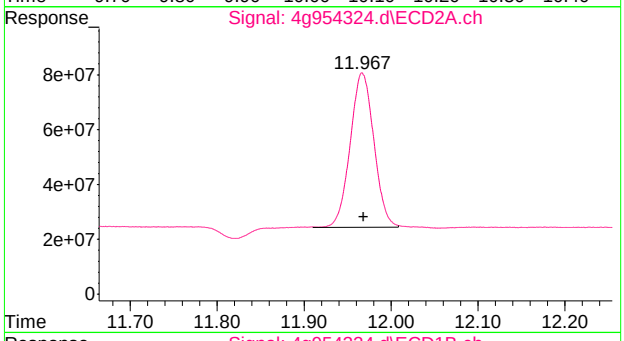
#18 4,4'-DDD

R.T.: 7.670 min
Delta R.T.: 0.000 min
Response: 166368904
Conc: 2.78 PPB



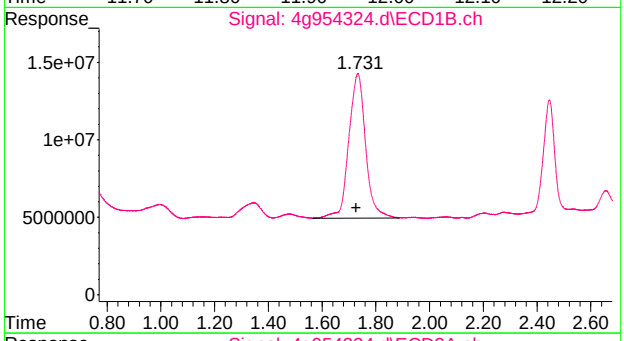
#26 Decachlorobiphenyl

R.T.: 10.060 min
Delta R.T.: -0.003 min
Response: 215441208
Conc: 23.71 PPB m



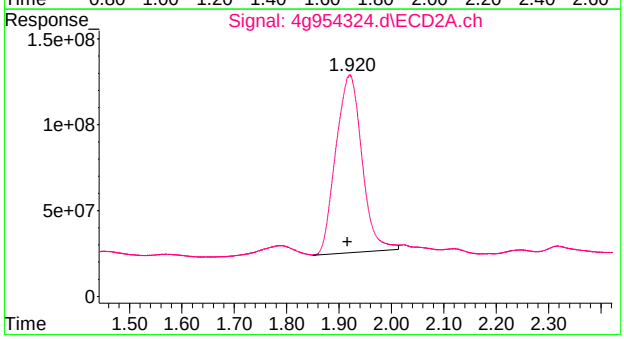
#26 Decachlorobiphenyl

R.T.: 11.967 min
Delta R.T.: -0.001 min
Response: 1069253999
Conc: 25.04 PPB m



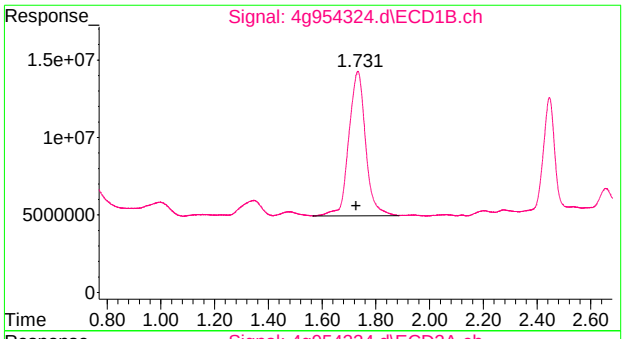
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.733 min
Delta R.T.: 0.007 min
Response: 403992537
Conc: 50.00 PPB



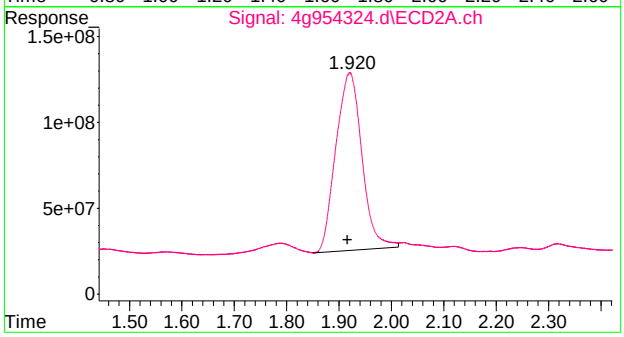
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.920 min
Delta R.T.: 0.004 min
Response: 3577619260
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.733 min
Delta R.T.: 0.007 min
Response: 403992537
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.920 min
Delta R.T.: 0.004 min
Response: 3577619260
Conc: 50.00 PPB

Manual Integration Approval Summary

Sample Number:	JC77181-2R	**Method:**	SW846 8081B
Lab FileID:	4G954324.D	**Analyst approved:**	12/14/18 16:20 Rebecca Krug
Injection Time:	11/07/18 12:23	**Supervisor approved:**	12/14/18 18:01 Kristi Schollenberger

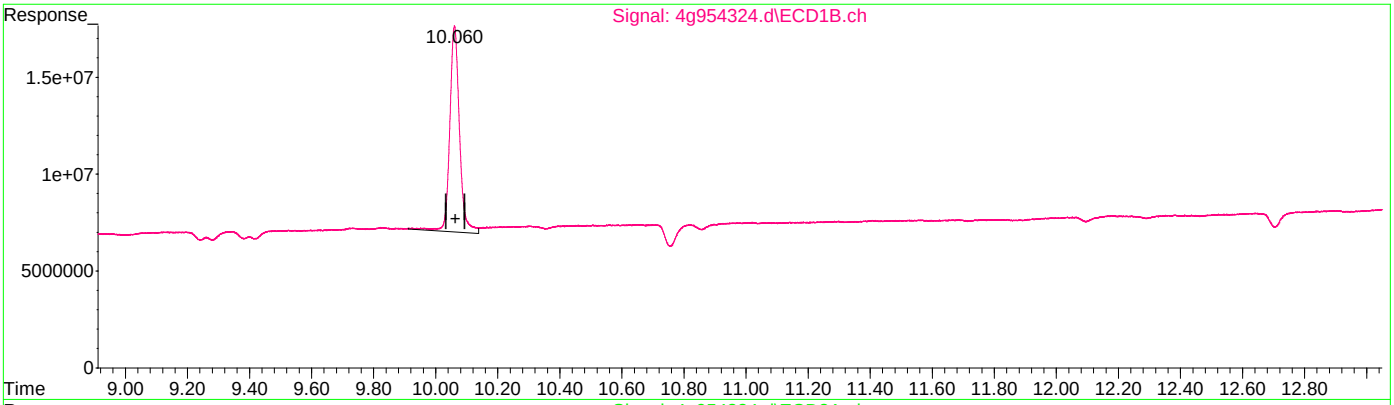
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDD	72-54-8	1	6.26	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	1	10.06	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	2	11.97	Poorly defined baseline

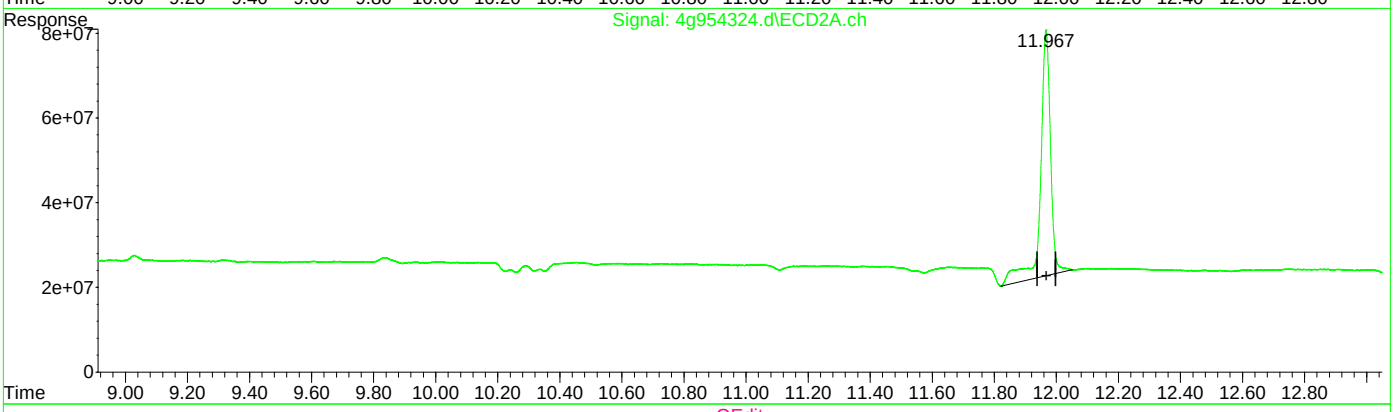
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954324.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:23 pm
Operator : mailisih
Sample : jc77181-2
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:09:50 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Decachlorobiphenyl (SA)

10.061min 25.437 PPB

response 231103389

(26) Decachlorobiphenyl #2 (SA)

11.967min 30.903 PPB

response 1319825860

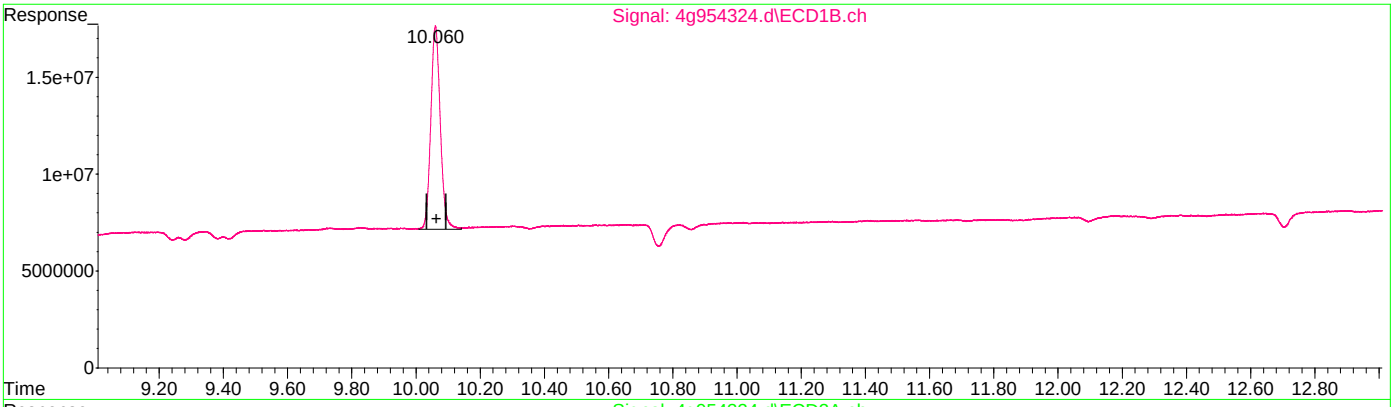
(+) = Expected Retention Time
4pst2585.m Wed Nov 07 20:10:32 2018

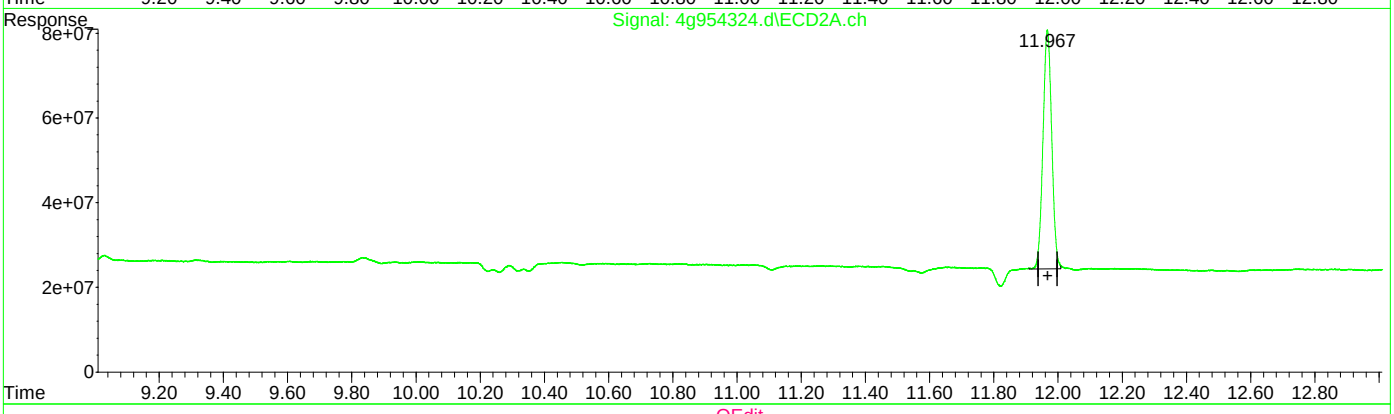
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954324.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:23 pm
Operator : mailisih
Sample : jc77181-2
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:09:50 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Decachlorobiphenyl (SA)

10.060min 23.713 PPB m

response 215441208

(26) Decachlorobiphenyl #2 (SA)

11.967min 25.036 PPB m

response 1069253999

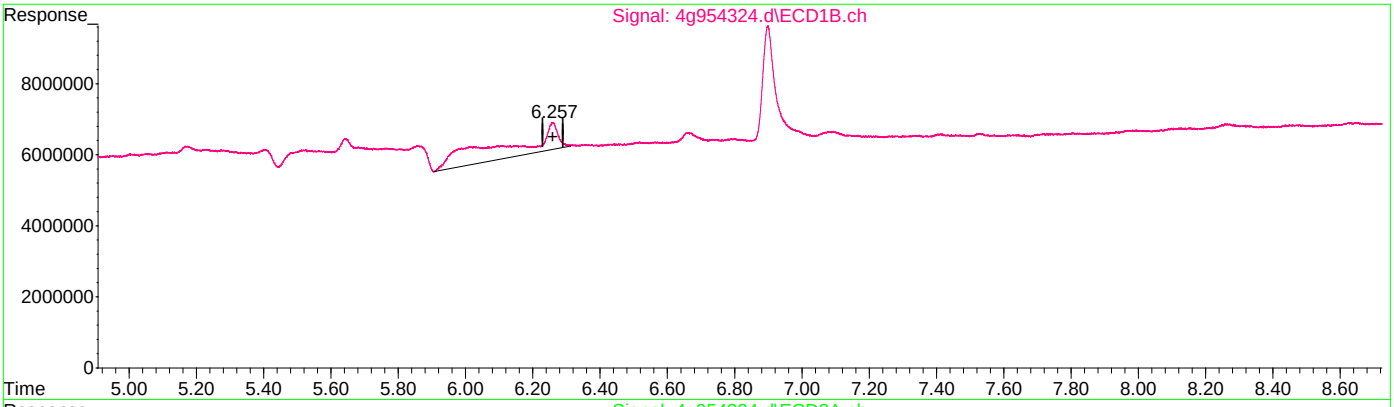
(+) = Expected Retention Time
4pst2585.m Wed Nov 07 20:11:11 2018

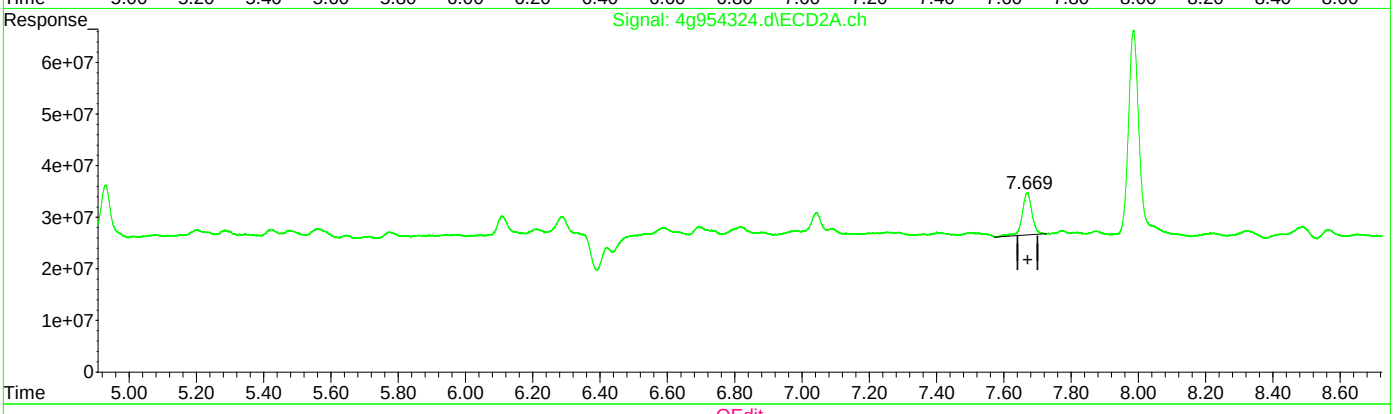
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954324.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:23 pm
Operator : mailisih
Sample : jc77181-2
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:09:50 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(18) 4,4'-DDD (A)

6.259min 12.815 PPB

response 79660983

(18) 4,4'-DDD #2 (A)

7.670min 2.781 PPB

response 166368904

(+) = Expected Retention Time

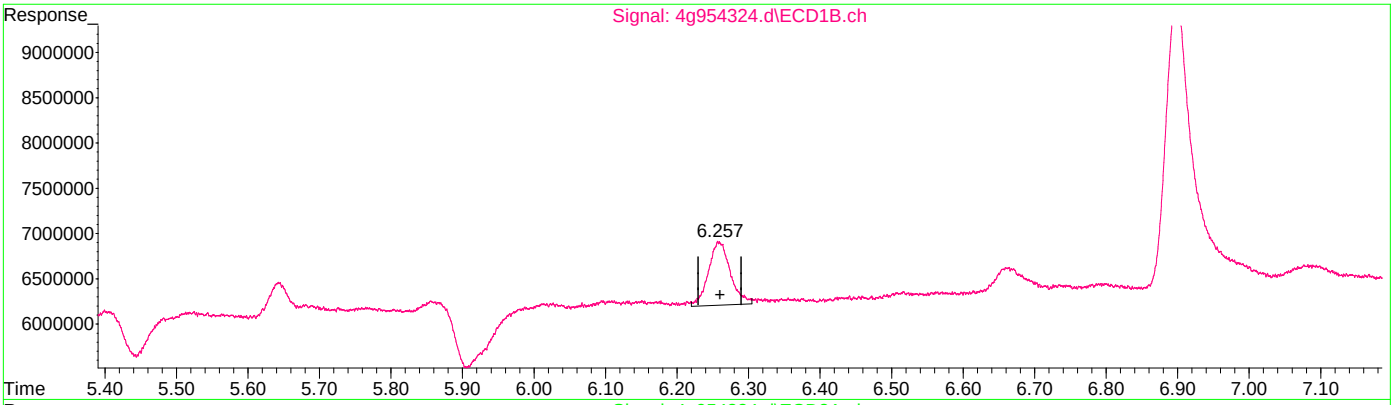
4pst2585.m Wed Nov 07 20:15:04 2018

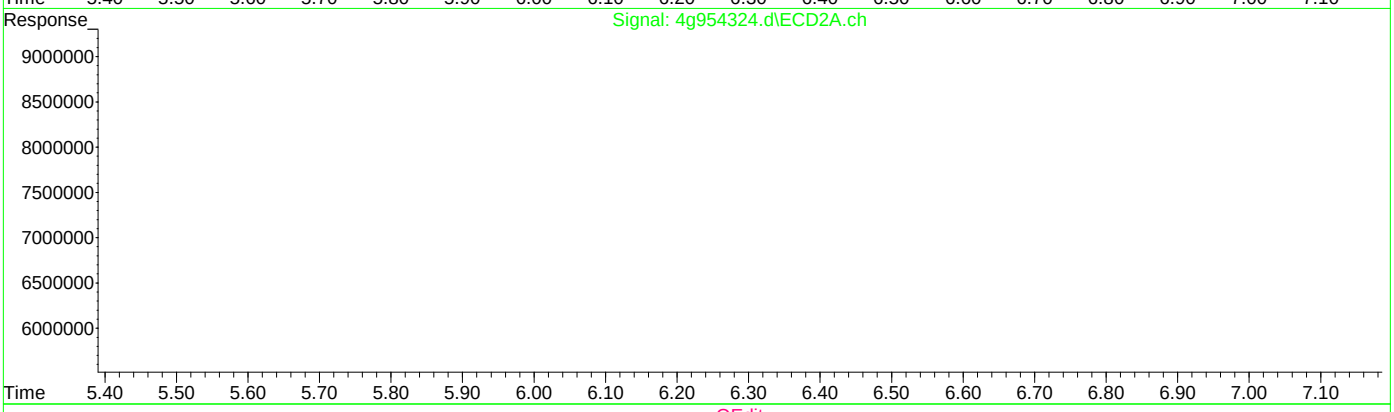
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954324.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:23 pm
Operator : mailisih
Sample : jc77181-2
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:09:50 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(18) 4,4'-DDD (A)

6.257min 2.399 PPB m

response 14912862

(18) 4,4'-DDD #2 (A)

7.670min 2.781 PPB

response 166368904

(+) = Expected Retention Time
4pst2585.m Wed Nov 07 20:15:18 2018

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 12/14/18 18:01

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954324.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:23 pm
Operator : mailisih
Sample : jc77181-2
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:15:29 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.733	1.920	404.0E6	3577.6E6	50.000	50.000
27) I 1-bromo-2...	1.733	1.920	404.0E6	3577.6E6	50.000	50.000
33) I 1-bromo-2...	1.733	1.920	404.0E6	3577.6E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.446	2.850	207.1E6	2051.0E6	27.555	31.120
Spiked Amount 40.000	Range 30 - 150		Recovery =		68.89%	77.80%
26) SA Decachlor...	10.060	11.967	215.4E6	1069.3E6	23.713m	25.036m
Spiked Amount 40.000			Recovery =		59.28%	62.59%
Target Compounds						
4) A alpha-BHC	2.980	3.563	78438078	866.4E6	7.929	9.204
5) MA gamma-BHC	3.308	4.014	27948664	193.3E6	3.035	2.316
7) B beta-BHC	3.389	4.098	13564695	101.4E6	3.266	2.561
18) A 4,4'-DDD	6.257	7.670	14912862	166.4E6	2.399m	2.781
SemiQuant Compounds - Not Calibrated on this Instrument						

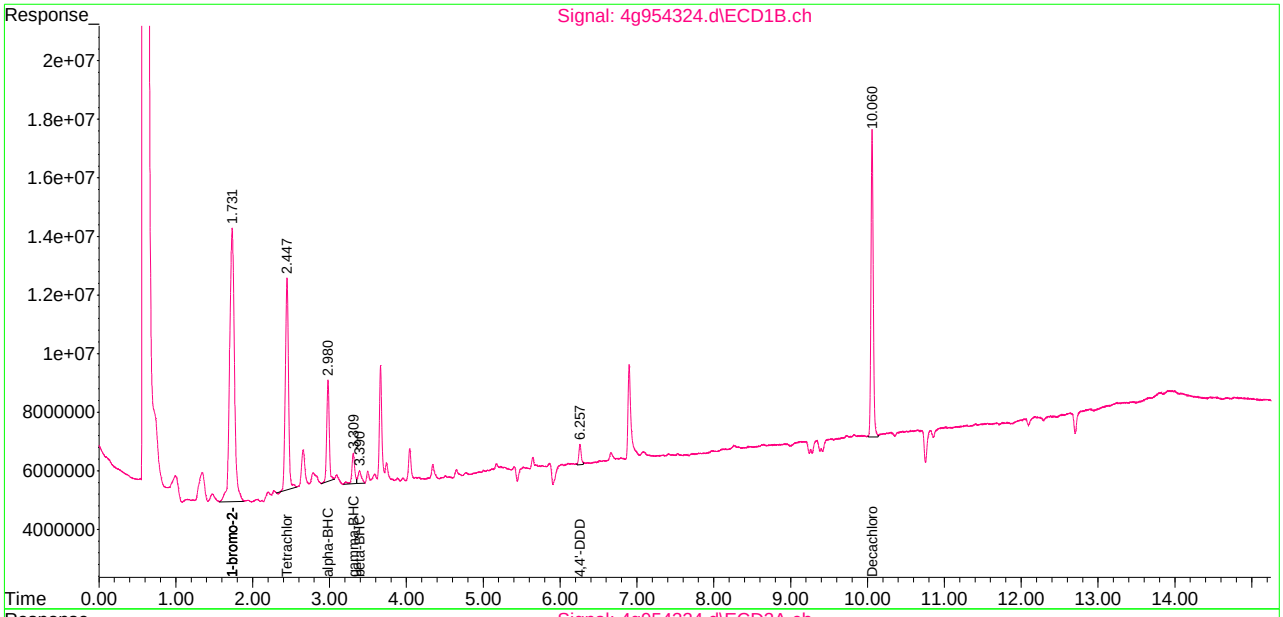
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

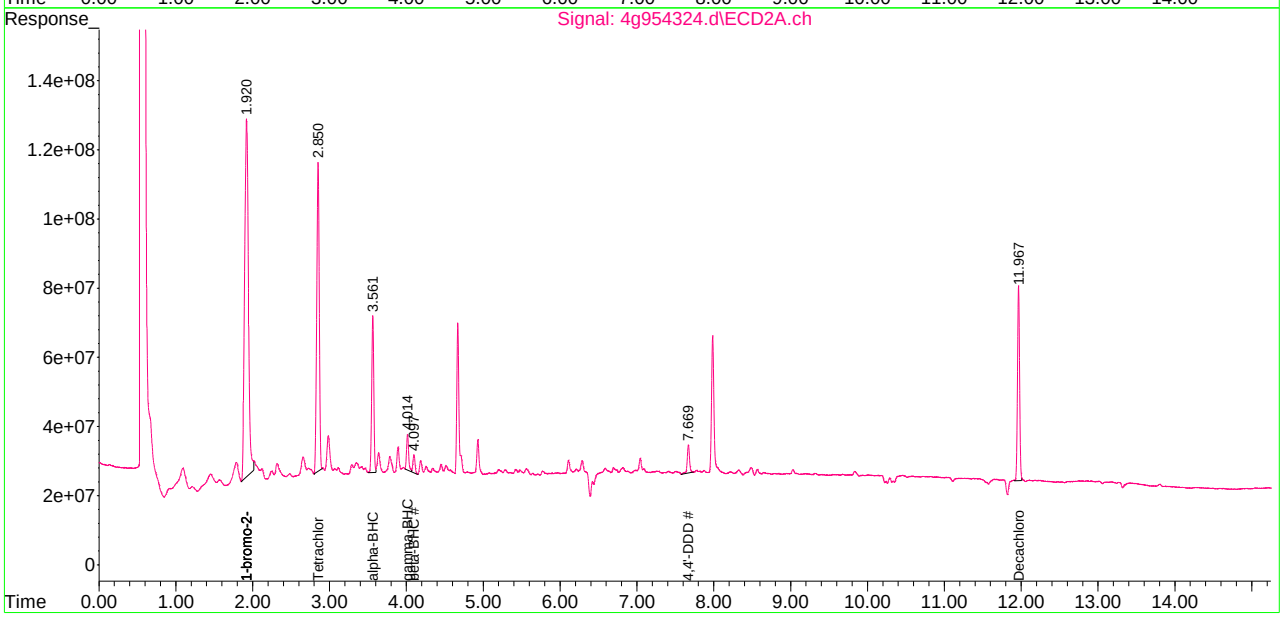
Quantitation Report (QT Reviewed)

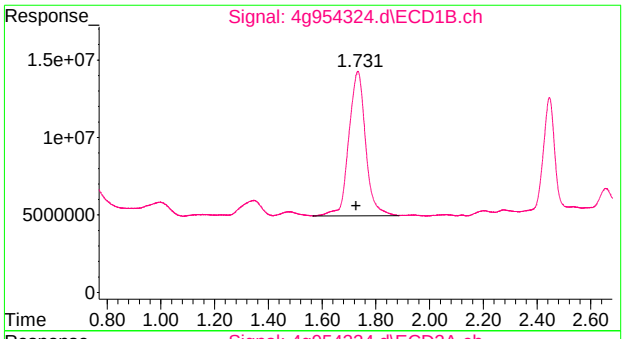
Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954324.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:23 pm
Operator : mailisih
Sample : jc77181-2
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:15:29 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

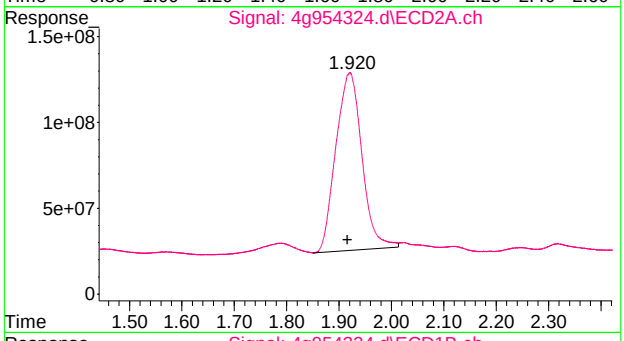






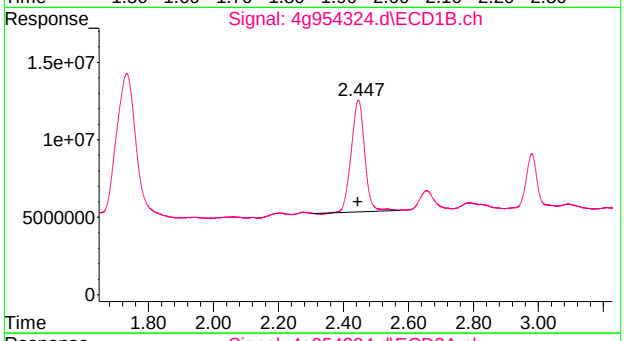
#1 1-bromo-2-nitrobenzene

R.T.: 1.733 min
Delta R.T.: 0.006 min
Response: 403992537
Conc: 50.00 PPB



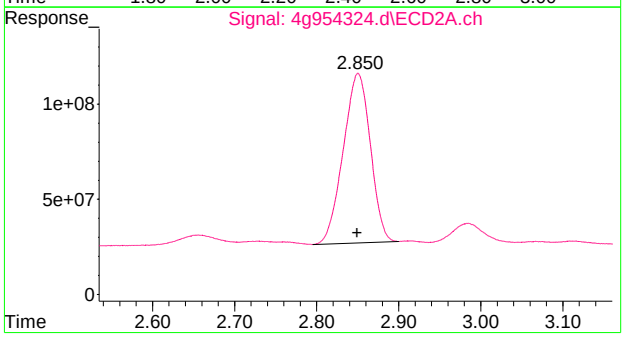
#1 1-bromo-2-nitrobenzene

R.T.: 1.920 min
Delta R.T.: 0.004 min
Response: 3577619260
Conc: 50.00 PPB



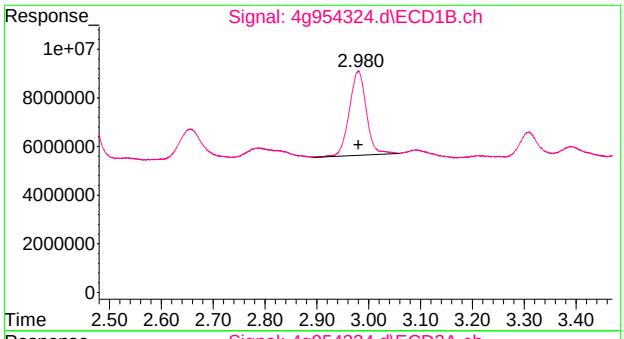
#2 Tetrachloro-m-xylene

R.T.: 2.446 min
Delta R.T.: 0.002 min
Response: 207105653
Conc: 27.56 PPB



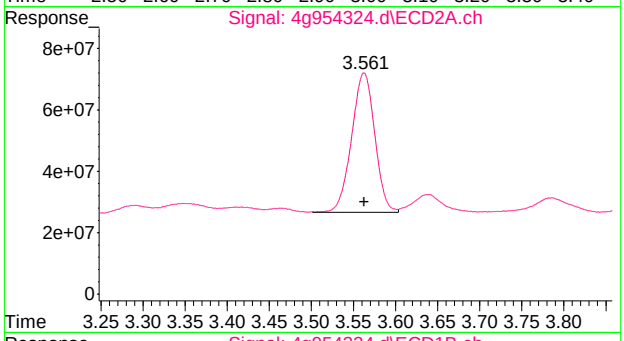
#2 Tetrachloro-m-xylene

R.T.: 2.850 min
Delta R.T.: 0.001 min
Response: 2050966890
Conc: 31.12 PPB



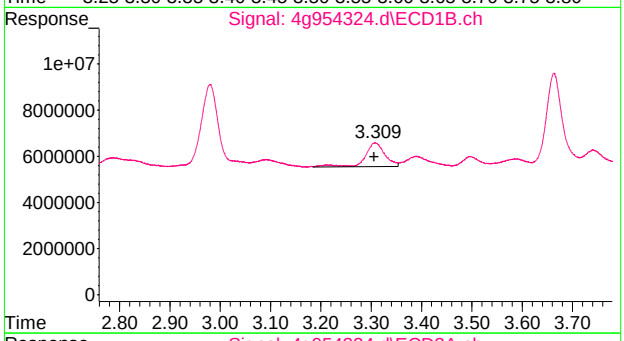
#4 alpha-BHC

R.T.: 2.980 min
Delta R.T.: 0.000 min
Response: 78438078
Conc: 7.93 PPB



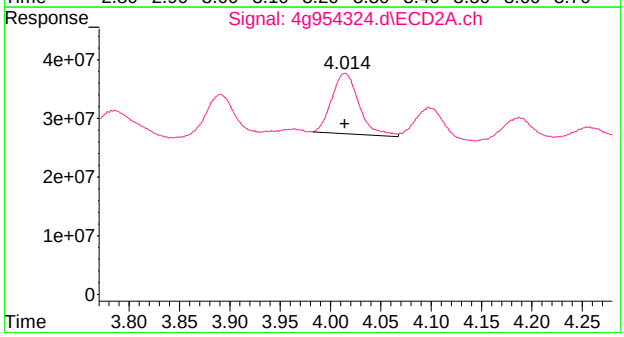
#4 alpha-BHC

R.T.: 3.563 min
Delta R.T.: 0.000 min
Response: 866433732
Conc: 9.20 PPB



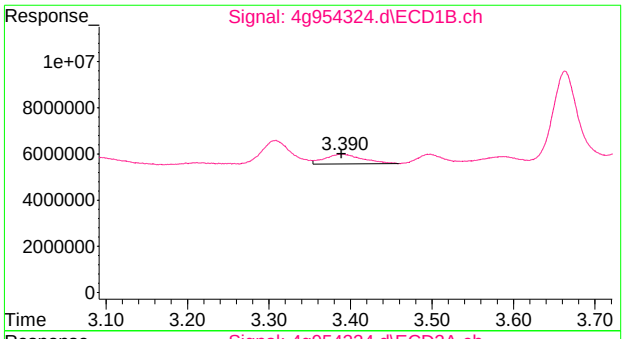
#5 gamma-BHC

R.T.: 3.308 min
Delta R.T.: 0.002 min
Response: 27948664
Conc: 3.04 PPB



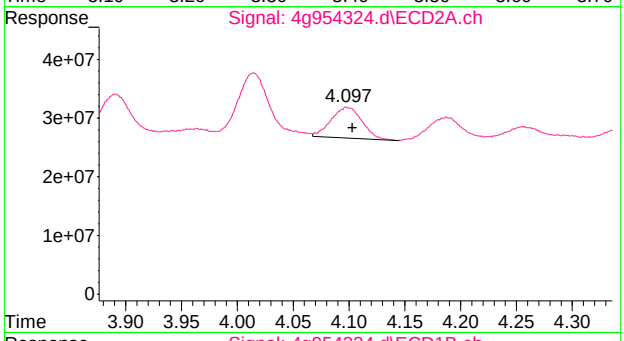
#5 gamma-BHC

R.T.: 4.014 min
Delta R.T.: 0.000 min
Response: 193344106
Conc: 2.32 PPB



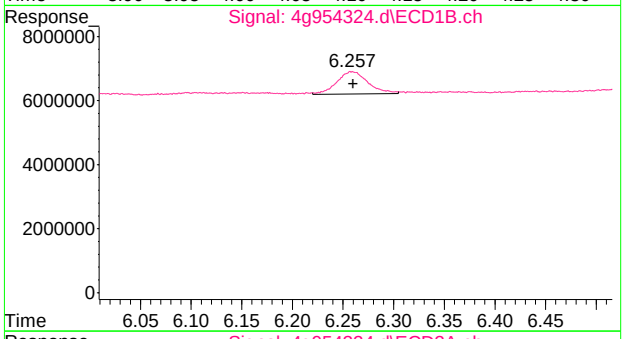
#7 beta-BHC

R.T.: 3.389 min
Delta R.T.: 0.000 min
Response: 13564695
Conc: 3.27 PPB



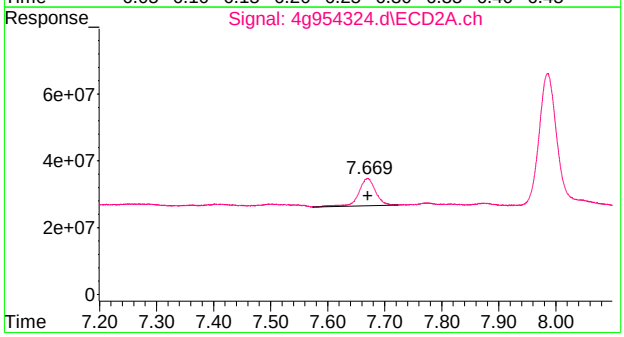
#7 beta-BHC

R.T.: 4.098 min
Delta R.T.: -0.005 min
Response: 101400998
Conc: 2.56 PPB



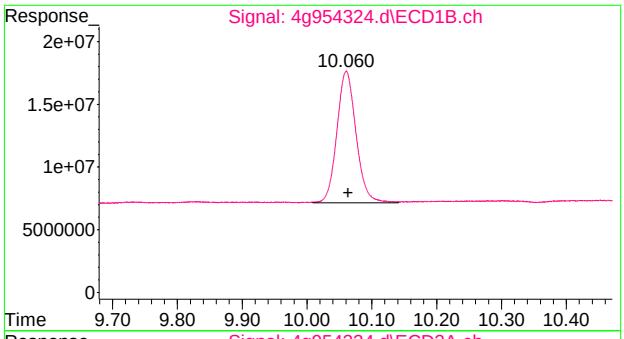
#18 4,4'-DDD

R.T.: 6.257 min
Delta R.T.: -0.003 min
Response: 14912862
Conc: 2.40 PPB m



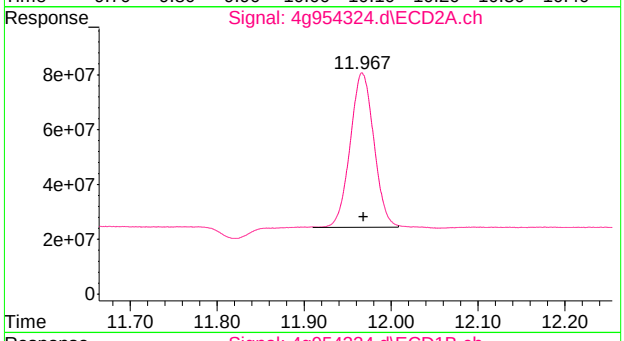
#18 4,4'-DDD

R.T.: 7.670 min
Delta R.T.: 0.000 min
Response: 166368904
Conc: 2.78 PPB



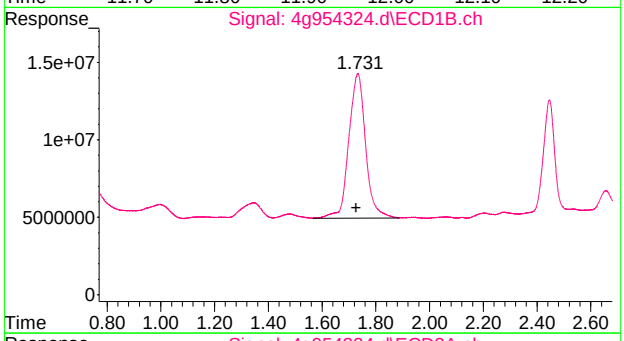
#26 Decachlorobiphenyl

R.T.: 10.060 min
Delta R.T.: -0.003 min
Response: 215441208
Conc: 23.71 PPB m



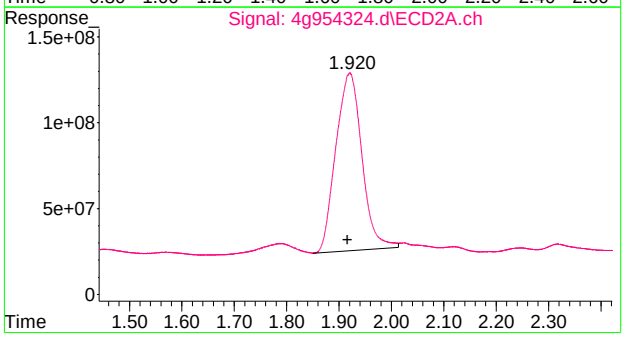
#26 Decachlorobiphenyl

R.T.: 11.967 min
Delta R.T.: -0.001 min
Response: 1069253999
Conc: 25.04 PPB m



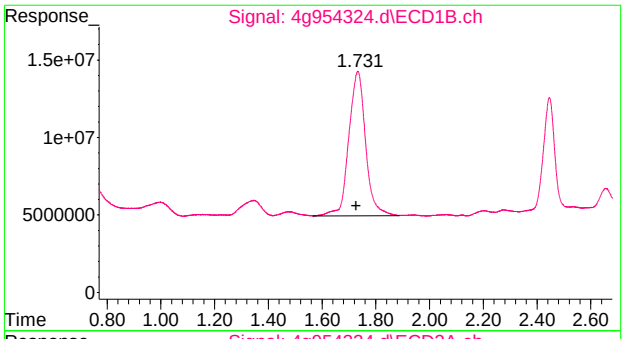
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.733 min
Delta R.T.: 0.007 min
Response: 403992537
Conc: 50.00 PPB



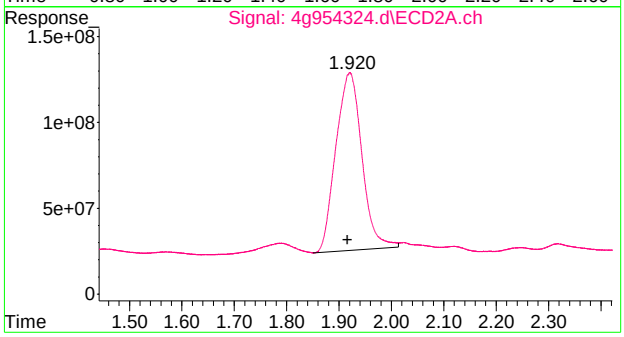
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.920 min
Delta R.T.: 0.004 min
Response: 3577619260
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.733 min
Delta R.T.: 0.007 min
Response: 403992537
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.920 min
Delta R.T.: 0.004 min
Response: 3577619260
Conc: 50.00 PPB

Manual Integration Approval Summary

Sample Number:	JC77181-2R	**Method:**	SW846 8081B
Lab FileID:	4G954324.D	**Analyst approved:**	12/14/18 16:20 Rebecca Krug
Injection Time:	11/07/18 12:23	**Supervisor approved:**	12/14/18 18:01 Kristi Schollenberger

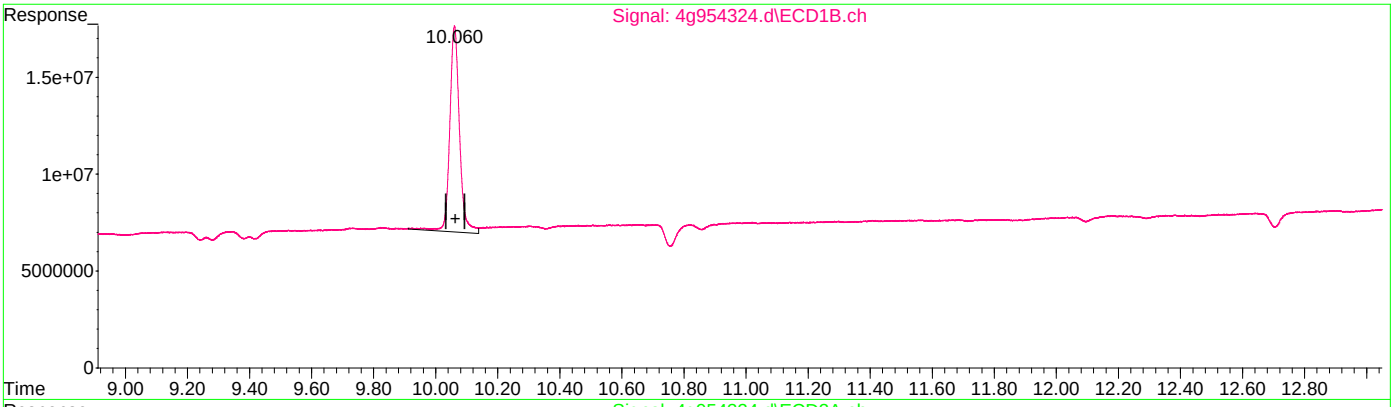
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDD	72-54-8	1	6.26	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	1	10.06	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	2	11.97	Poorly defined baseline

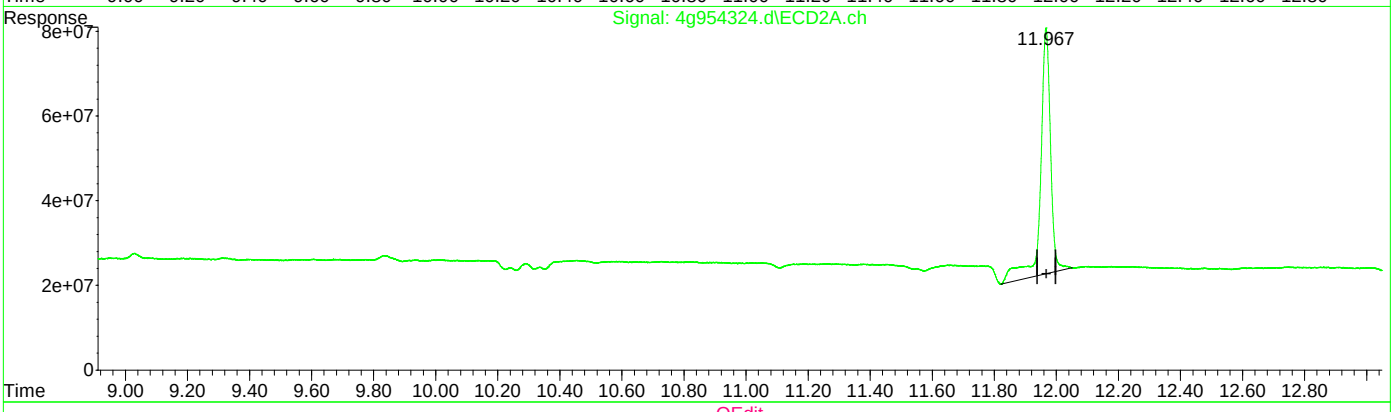
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954324.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:23 pm
Operator : mailisih
Sample : jc77181-2
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:09:50 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Decachlorobiphenyl (SA)

10.061min 25.437 PPB

response 231103389

(26) Decachlorobiphenyl #2 (SA)

11.967min 30.903 PPB

response 1319825860

(+) = Expected Retention Time
4pst2585.m Wed Nov 07 20:10:32 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954324.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:23 pm
Operator : mailisih
Sample : jc77181-2
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
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Quant Time: Nov 07 20:09:50 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
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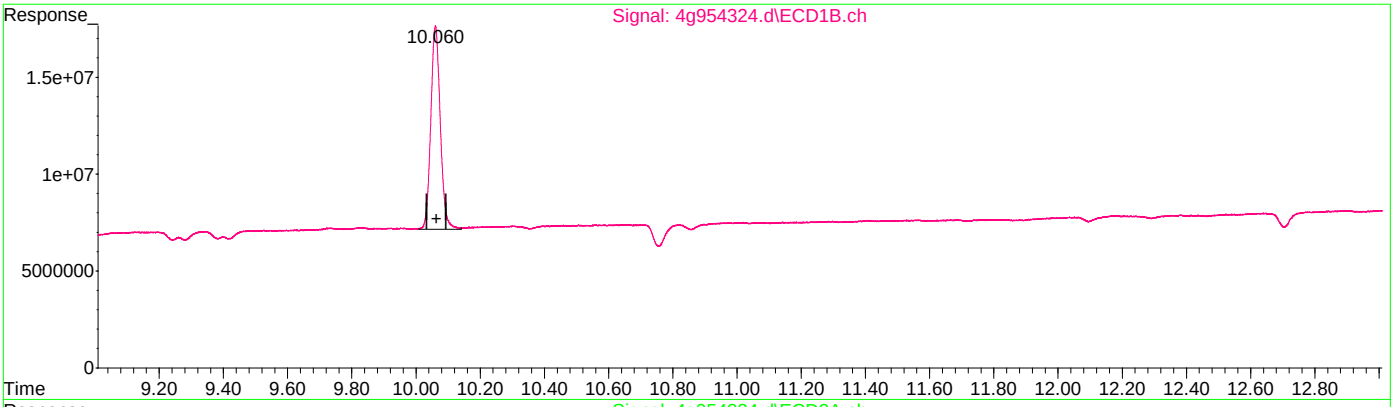
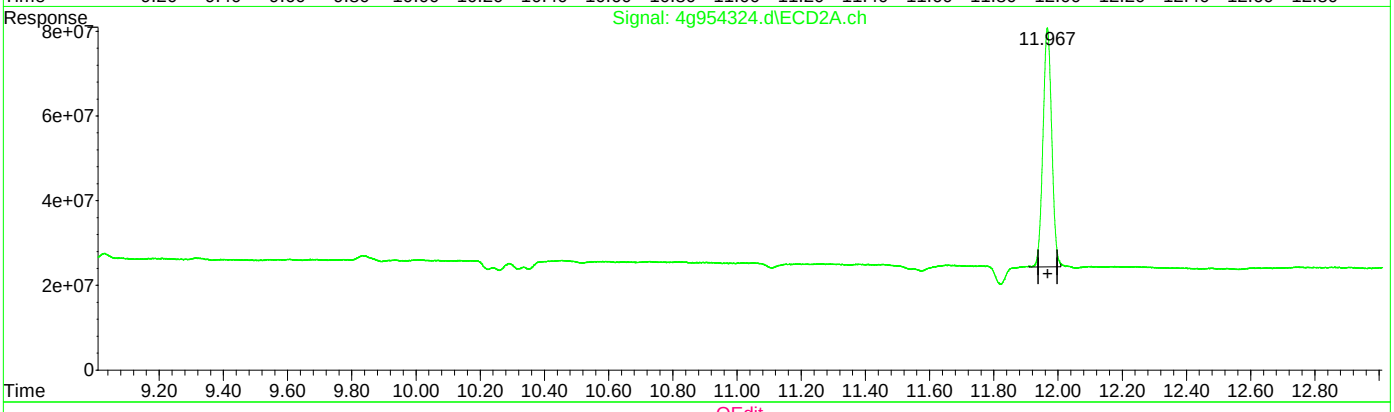
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Decachlorobiphenyl (SA)

10.060min 23.713 PPB m

response 215441208

(26) Decachlorobiphenyl #2 (SA)

11.967min 25.036 PPB m

response 1069253999

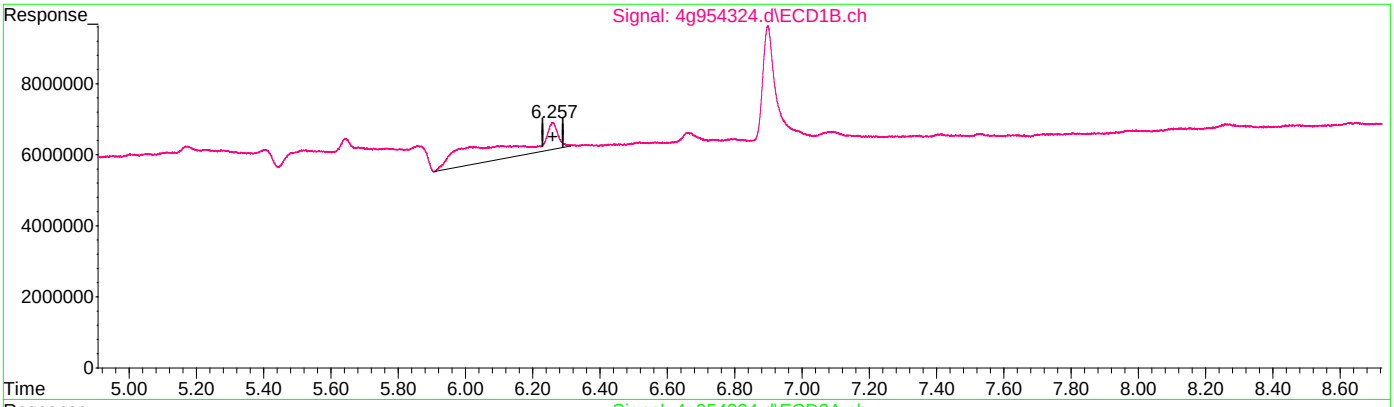
(+) = Expected Retention Time
4pst2585.m Wed Nov 07 20:11:11 2018

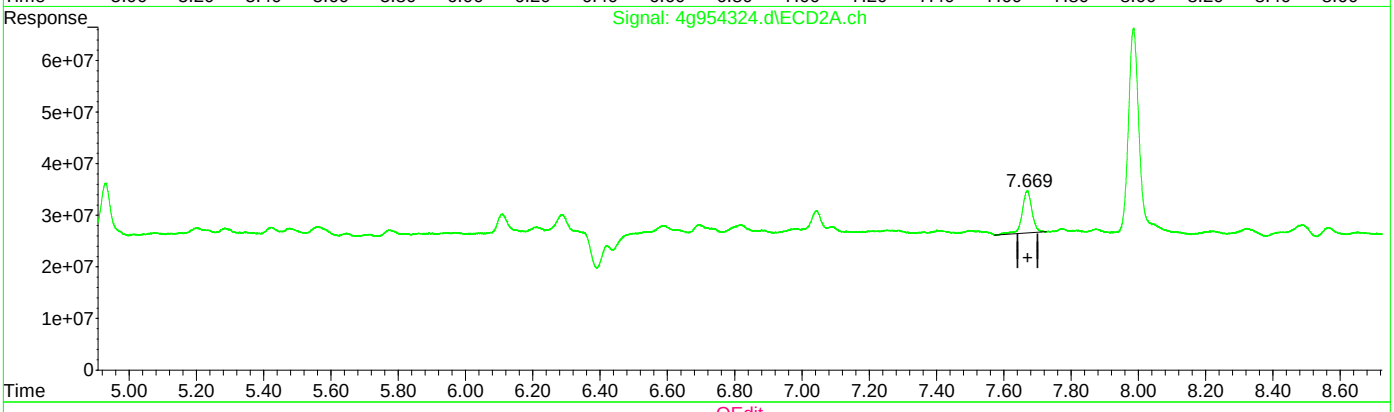
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954324.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:23 pm
Operator : mailisih
Sample : jc77181-2
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:09:50 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(18) 4,4'-DDD (A)

6.259min 12.815 PPB

response 79660983

(18) 4,4'-DDD #2 (A)

7.670min 2.781 PPB

response 166368904

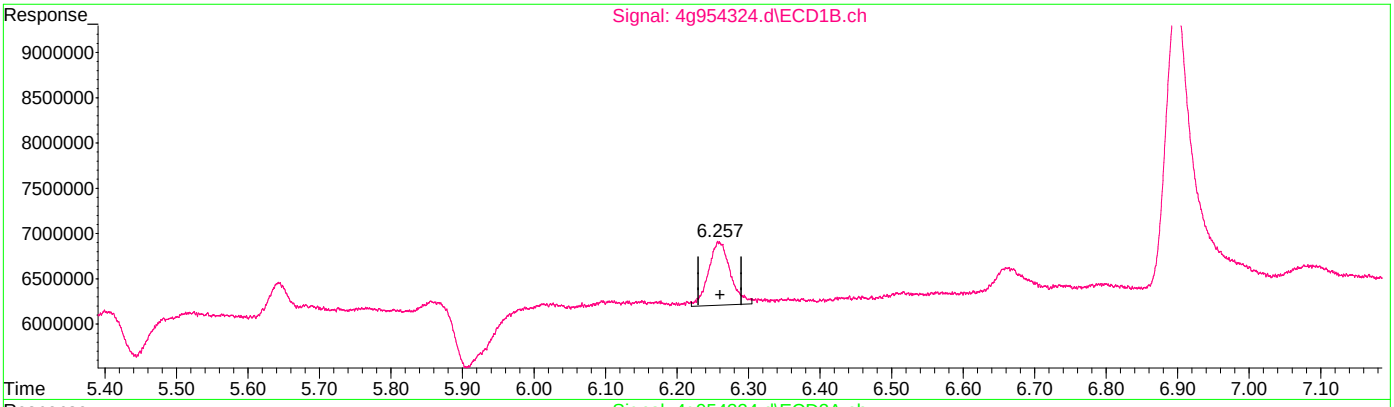
(+) = Expected Retention Time

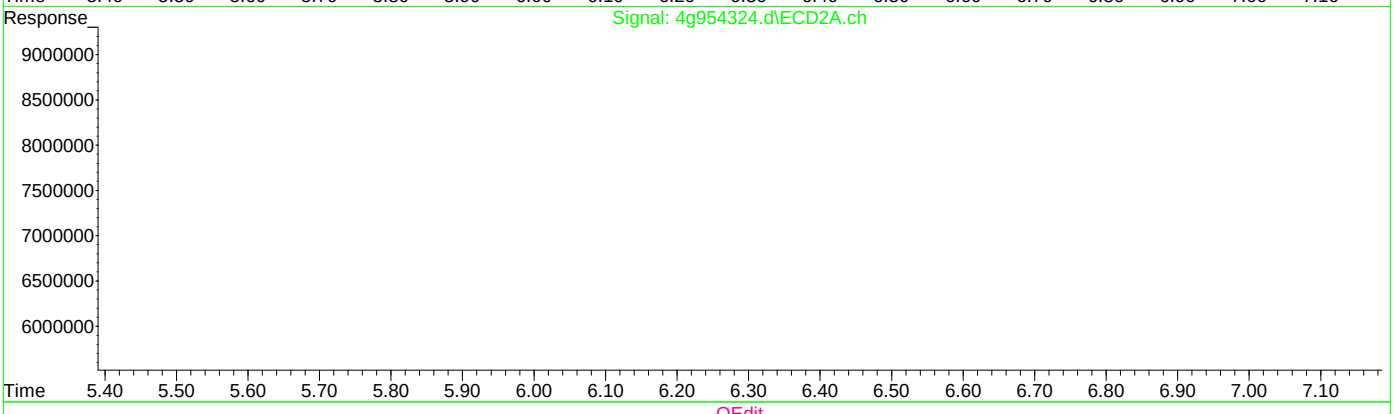
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954324.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:23 pm
Operator : mailisih
Sample : jc77181-2
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:09:50 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(18) 4,4'-DDD (A)

6.257min 2.399 PPB m

response 14912862

(18) 4,4'-DDD #2 (A)

7.670min 2.781 PPB

response 166368904

(+) = Expected Retention Time
4pst2585.m Wed Nov 07 20:15:18 2018

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 11/14/18 15:01

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954325.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:40 pm
Operator : mailisih
Sample : jc77181-3
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:23:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.734	1.922	405.5E6	3696.4E6	50.000	50.000
27) I	1-bromo-2...	1.734	1.922	405.5E6	3696.4E6	50.000	50.000
33) I	1-bromo-2...	1.734	1.922	405.5E6	3696.4E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.448	2.851	272.4E6	2654.0E6	36.113	38.977
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 90.28%	97.44%
26) SA	Decachlor...	10.061	11.967	318.1E6	1567.9E6	34.879	35.533m
	Spiked Amount	40.000			Recovery	= 87.20%	88.83%
	Target Compounds						
4) A	alpha-BHC	2.981	3.563	112.4E6	1232.6E6	11.322	12.673
5) MA	gamma-BHC	3.307	4.014	41908142	402.2E6	4.534m	4.662
7) B	beta-BHC	3.390	4.098	17739060	157.7E6	4.256	3.856
18) A	4,4'-DDD	6.258	7.671	14905053	158.9E6	2.389m	2.571

SemiQuant Compounds - Not Calibrated on this Instrument

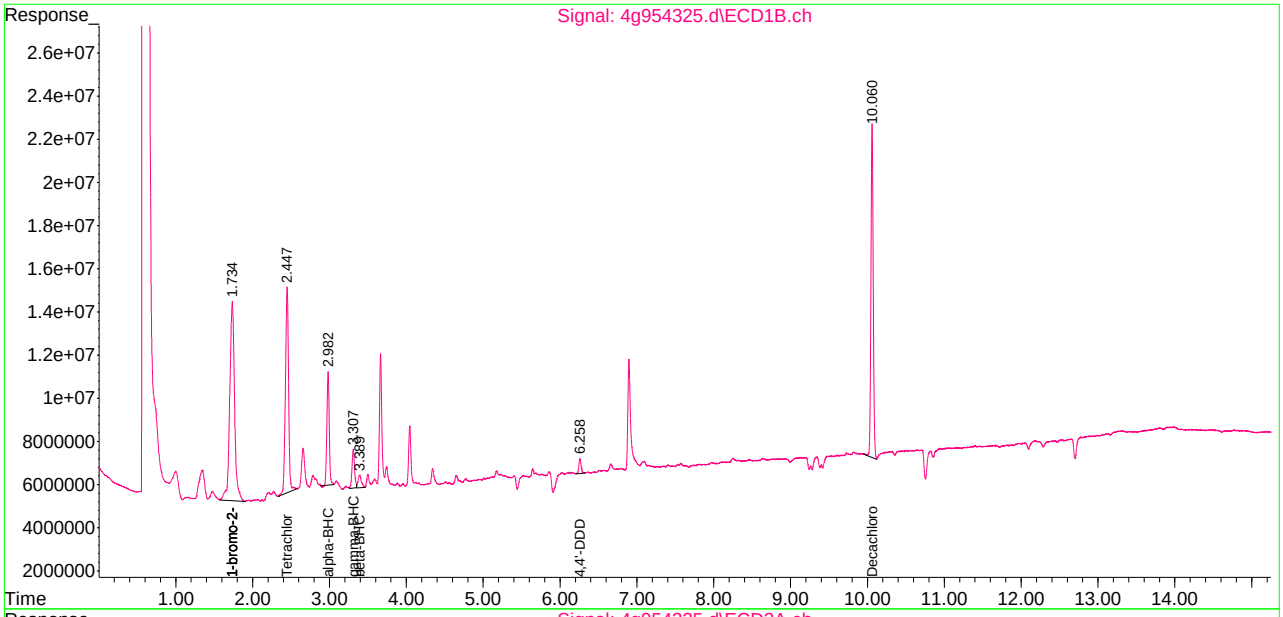
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

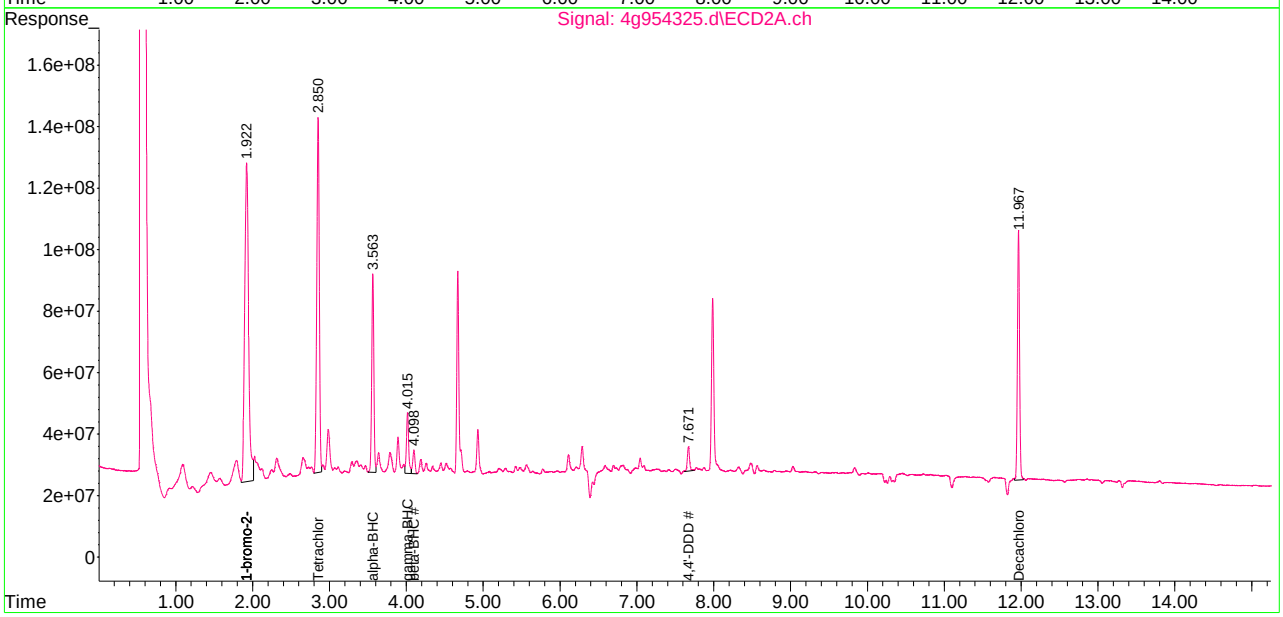
Quantitation Report (QT Reviewed)

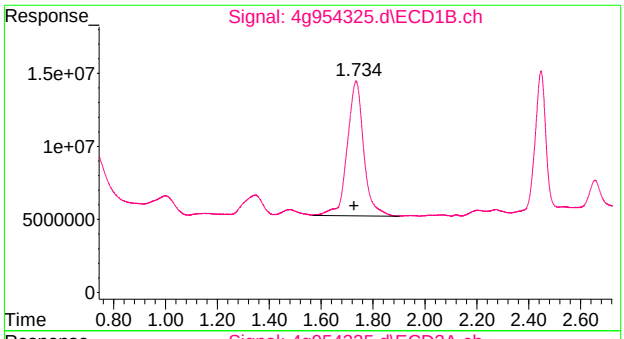
Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954325.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:40 pm
Operator : mailisih
Sample : jc77181-3
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:23:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

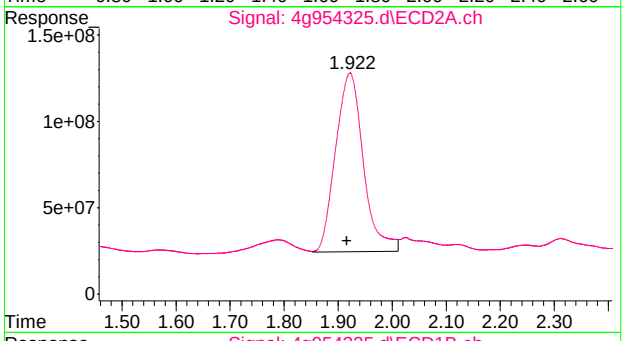






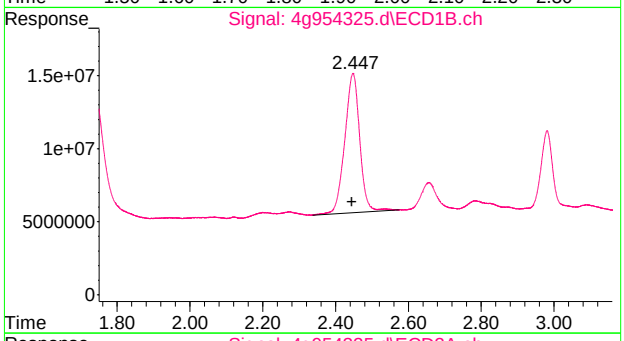
#1 1-bromo-2-nitrobenzene

R.T.: 1.734 min
Delta R.T.: 0.007 min
Response: 405488659
Conc: 50.00 PPB



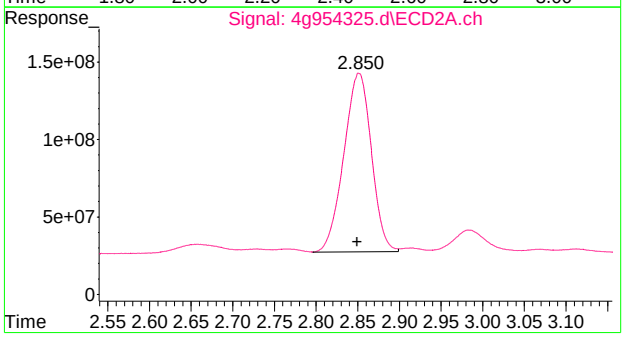
#1 1-bromo-2-nitrobenzene

R.T.: 1.922 min
Delta R.T.: 0.006 min
Response: 3696365071
Conc: 50.00 PPB



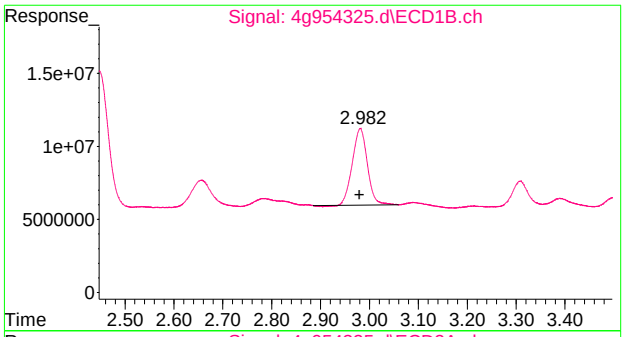
#2 Tetrachloro-m-xylene

R.T.: 2.448 min
Delta R.T.: 0.004 min
Response: 272433730
Conc: 36.11 PPB



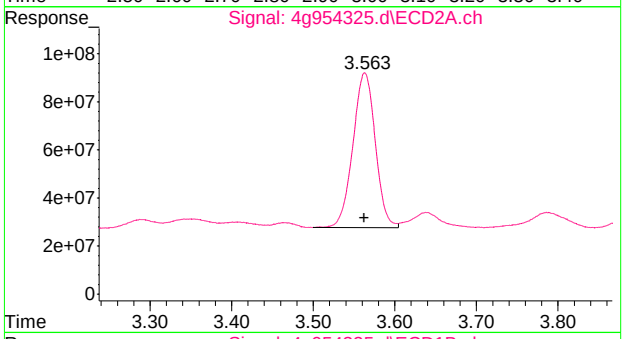
#2 Tetrachloro-m-xylene

R.T.: 2.851 min
Delta R.T.: 0.002 min
Response: 2654039180
Conc: 38.98 PPB



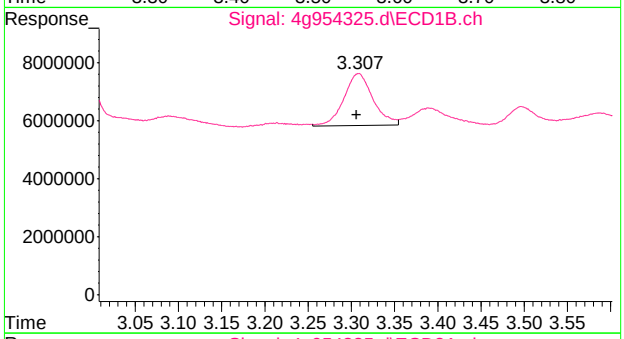
#4 alpha-BHC

R.T.: 2.981 min
Delta R.T.: 0.001 min
Response: 112413566
Conc: 11.32 PPB



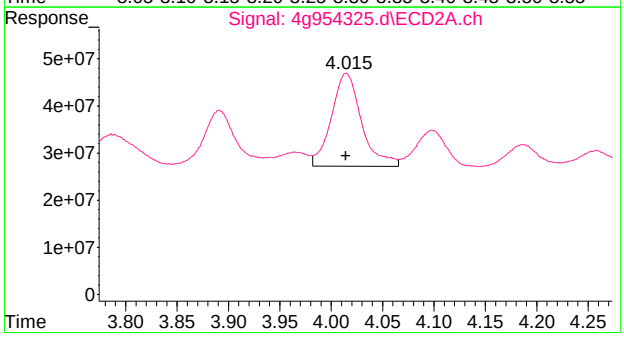
#4 alpha-BHC

R.T.: 3.563 min
Delta R.T.: 0.000 min
Response: 1232611815
Conc: 12.67 PPB



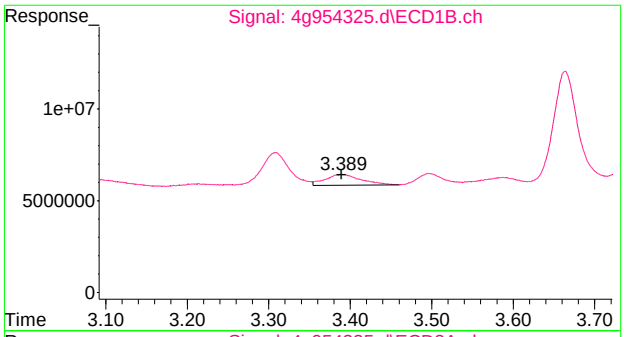
#5 gamma-BHC

R.T.: 3.307 min
Delta R.T.: 0.001 min
Response: 41908142
Conc: 4.53 PPB m



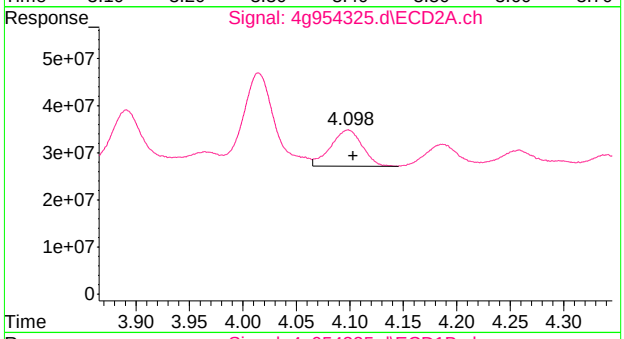
#5 gamma-BHC

R.T.: 4.014 min
Delta R.T.: 0.000 min
Response: 402152392
Conc: 4.66 PPB



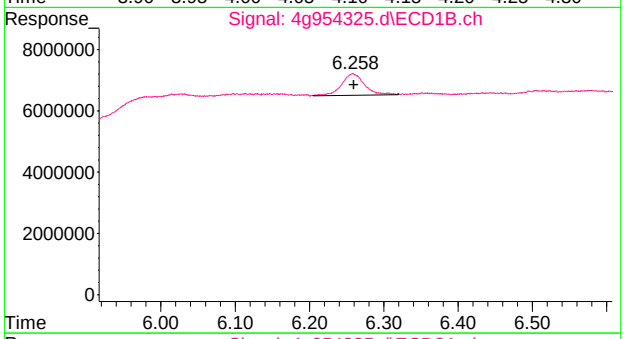
#7 beta-BHC

R.T.: 3.390 min
Delta R.T.: 0.000 min
Response: 17739060
Conc: 4.26 PPB



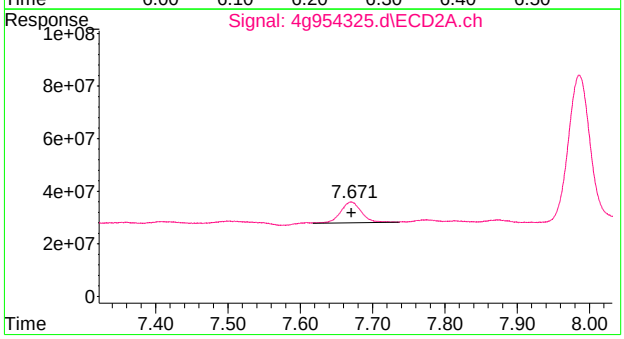
#7 beta-BHC

R.T.: 4.098 min
Delta R.T.: -0.005 min
Response: 157747212
Conc: 3.86 PPB



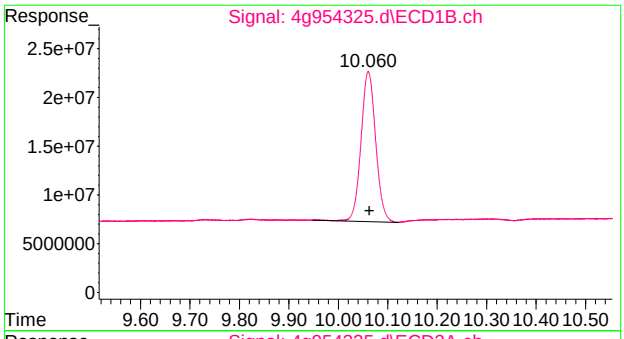
#18 4,4'-DDD

R.T.: 6.258 min
Delta R.T.: -0.002 min
Response: 14905053
Conc: 2.39 PPB m



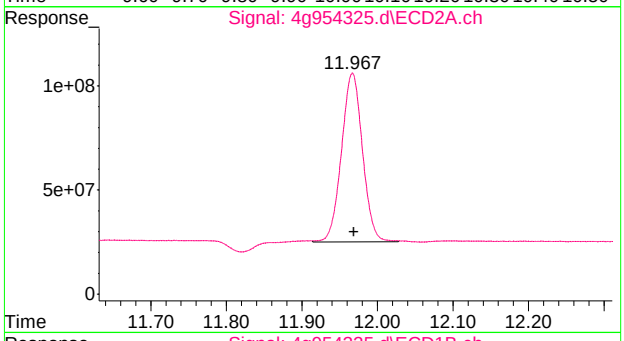
#18 4,4'-DDD

R.T.: 7.671 min
Delta R.T.: 0.000 min
Response: 158922959
Conc: 2.57 PPB



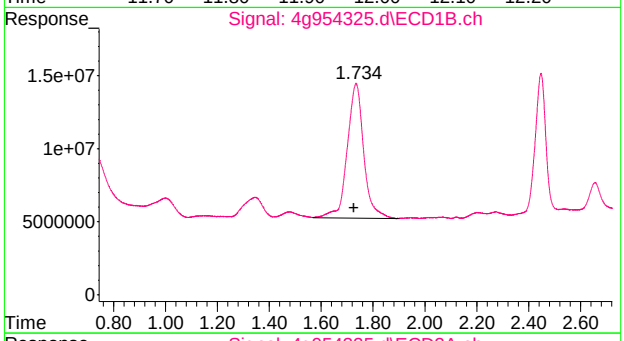
#26 Decachlorobiphenyl

R.T.: 10.061 min
Delta R.T.: -0.002 min
Response: 318066108
Conc: 34.88 PPB



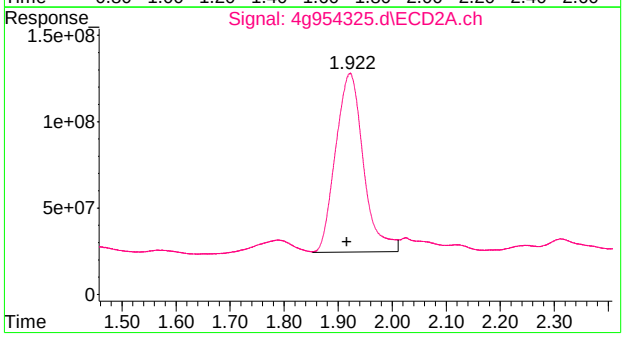
#26 Decachlorobiphenyl

R.T.: 11.967 min
Delta R.T.: -0.001 min
Response: 1567902458
Conc: 35.53 PPB m



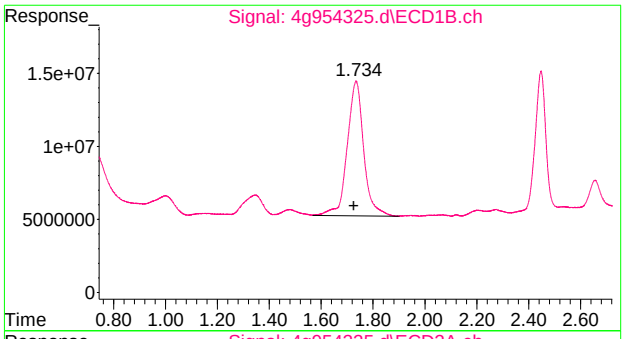
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.734 min
Delta R.T.: 0.008 min
Response: 405488659
Conc: 50.00 PPB



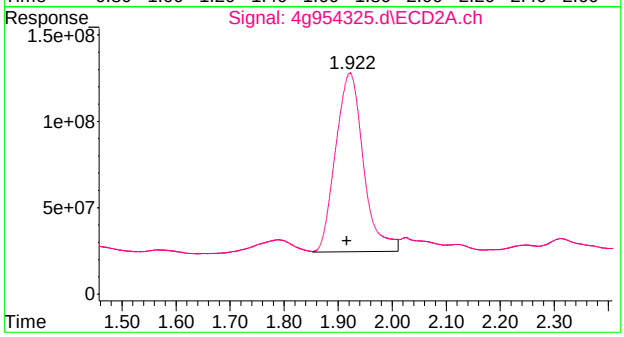
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.922 min
Delta R.T.: 0.006 min
Response: 3696365071
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.734 min
Delta R.T.: 0.008 min
Response: 405488659
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.922 min
Delta R.T.: 0.006 min
Response: 3696365071
Conc: 50.00 PPB

Manual Integration Approval Summary

Sample Number:	JC77181-3R	**Method:**	SW846 8081B
Lab FileID:	4G954325.D	**Analyst approved:**	12/14/18 16:20 Rebecca Krug
Injection Time:	11/07/18 12:40	**Supervisor approved:**	12/14/18 18:01 Kristi Schollenberger

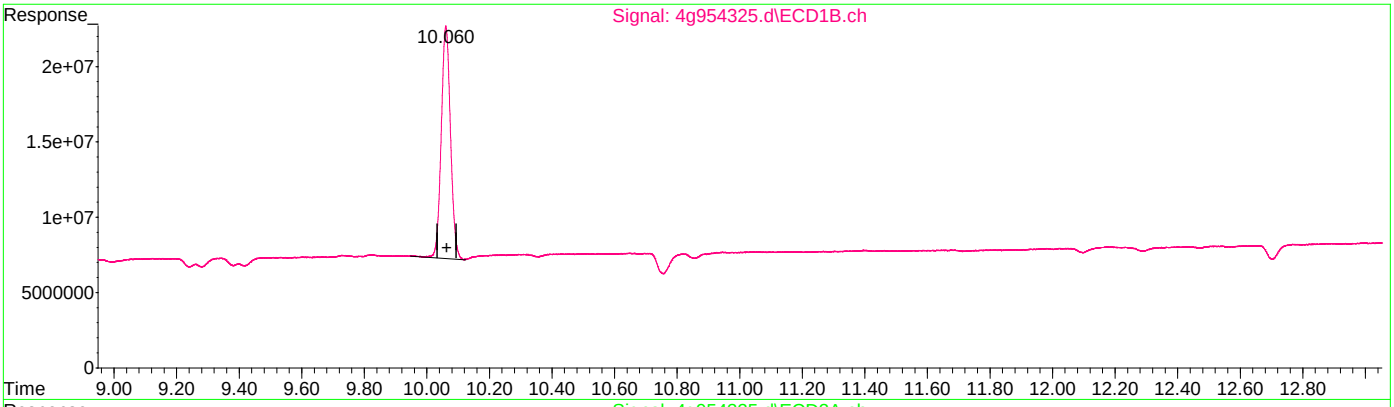
Parameter	CAS	Sig#	R.T. (min.)	Reason
gamma-BHC (Lindane)	58-89-9	1	3.31	Poorly defined baseline
4,4'-DDD	72-54-8	1	6.26	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	2	11.97	Poorly defined baseline

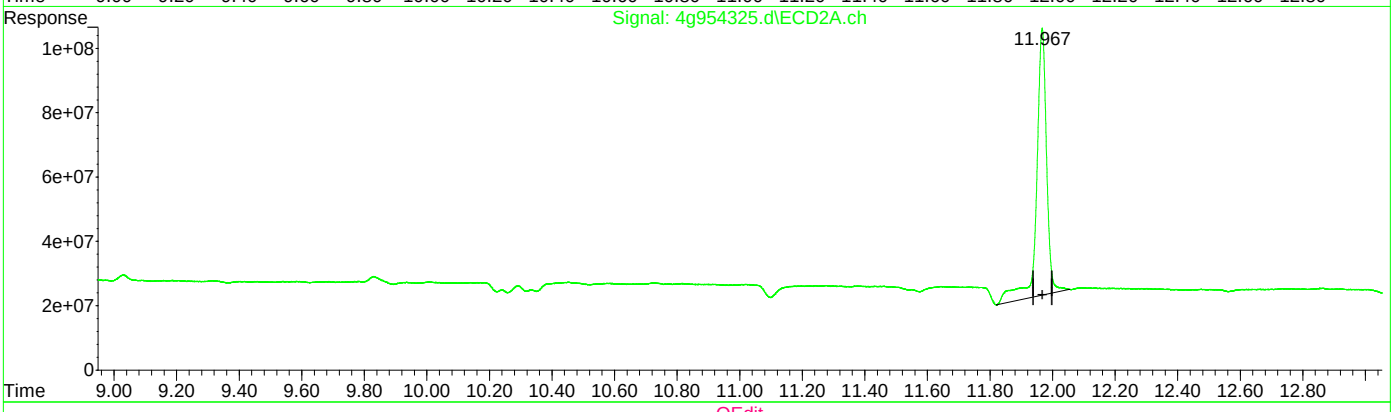
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954325.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:40 pm
Operator : mailisih
Sample : jc77181-3
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:46:24 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Decachlorobiphenyl (SA)

10.061min 34.879 PPB

response 318066108

(26) Decachlorobiphenyl #2 (SA)

11.967min 42.187 PPB

response 1861533216

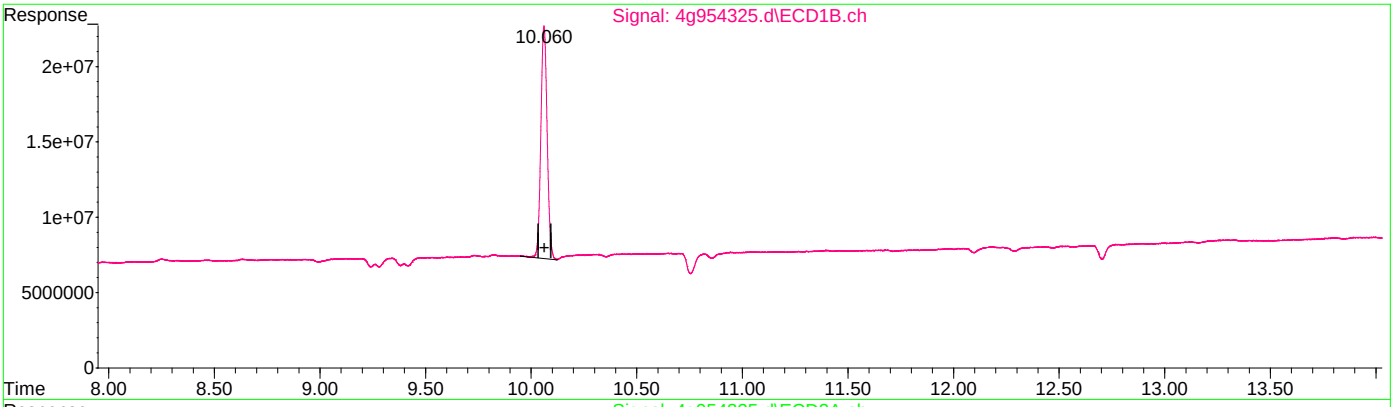
(+) = Expected Retention Time
4pst2585.m Wed Nov 07 20:16:58 2018

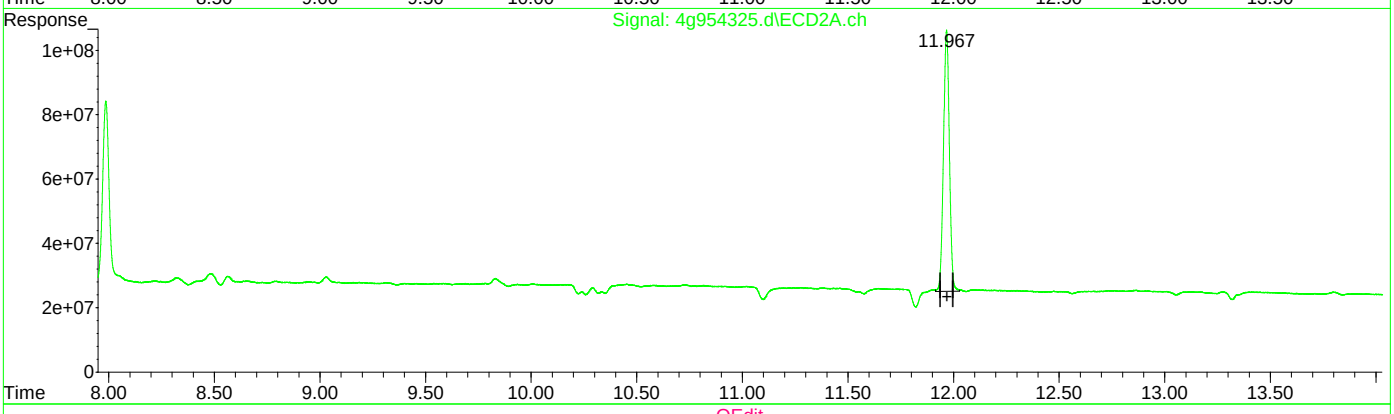
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954325.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:40 pm
Operator : mailisih
Sample : jc77181-3
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:46:24 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Decachlorobiphenyl (SA)

10.061min 34.879 PPB

response 318066108

(26) Decachlorobiphenyl #2 (SA)

11.967min 35.533 PPB m

response 1567902458

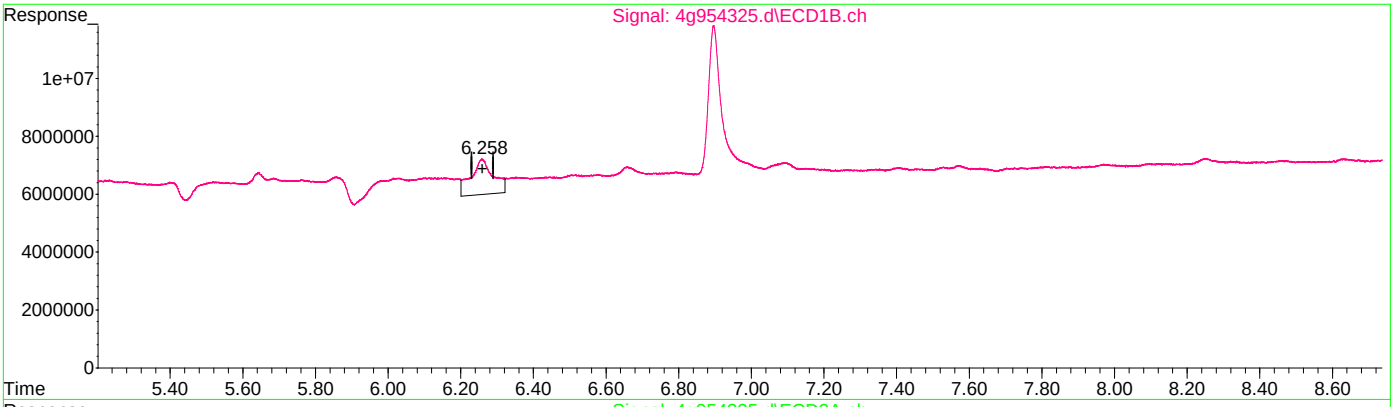
(+) = Expected Retention Time
4pst2585.m Wed Nov 07 20:19:22 2018

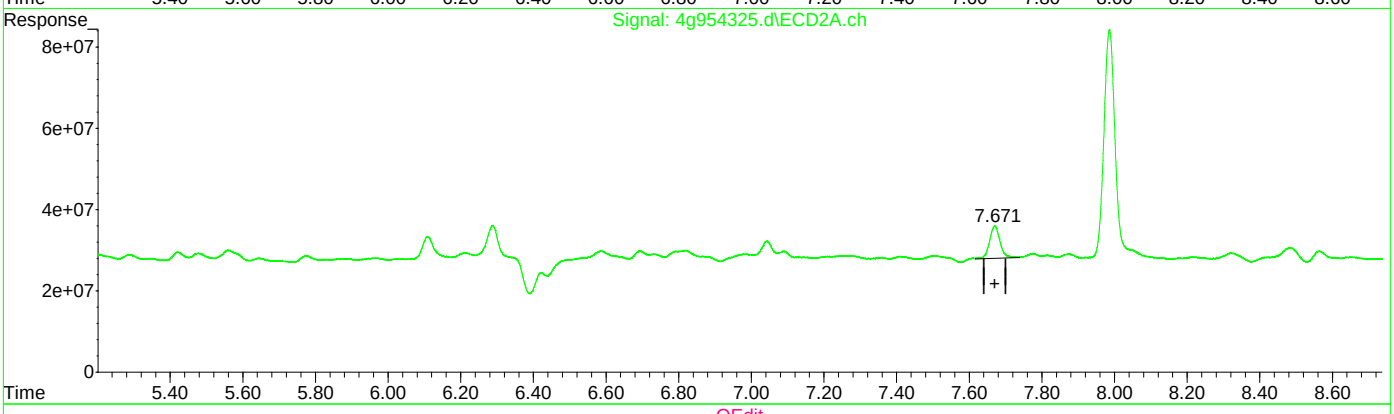
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954325.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:40 pm
Operator : mailisih
Sample : jc77181-3
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:46:24 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(18) 4,4'-DDD (A)

6.258min 8.414 PPB

response 52498940

(18) 4,4'-DDD #2 (A)

7.671min 2.571 PPB

response 158922959

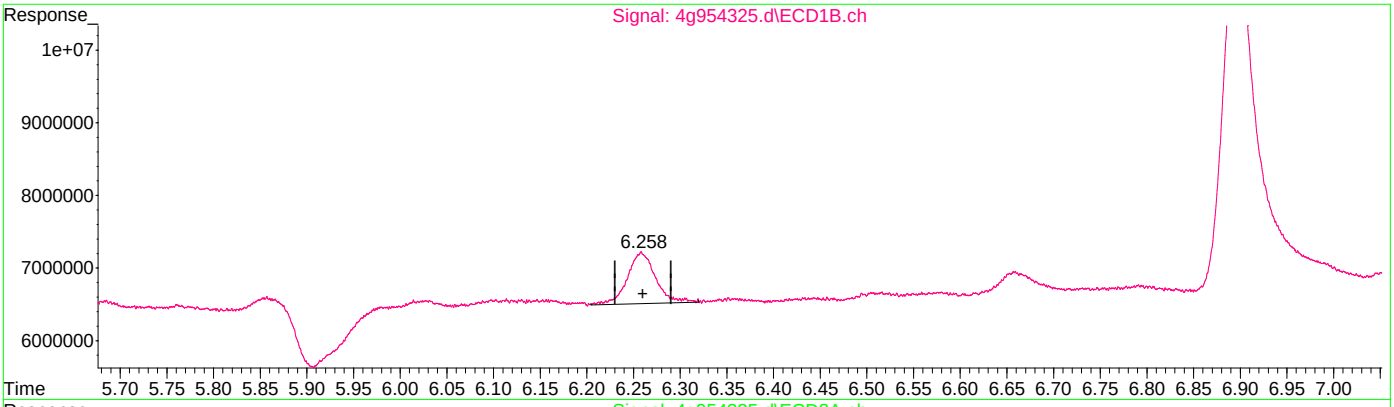
(+) = Expected Retention Time
4pst2585.m Wed Nov 07 20:20:19 2018

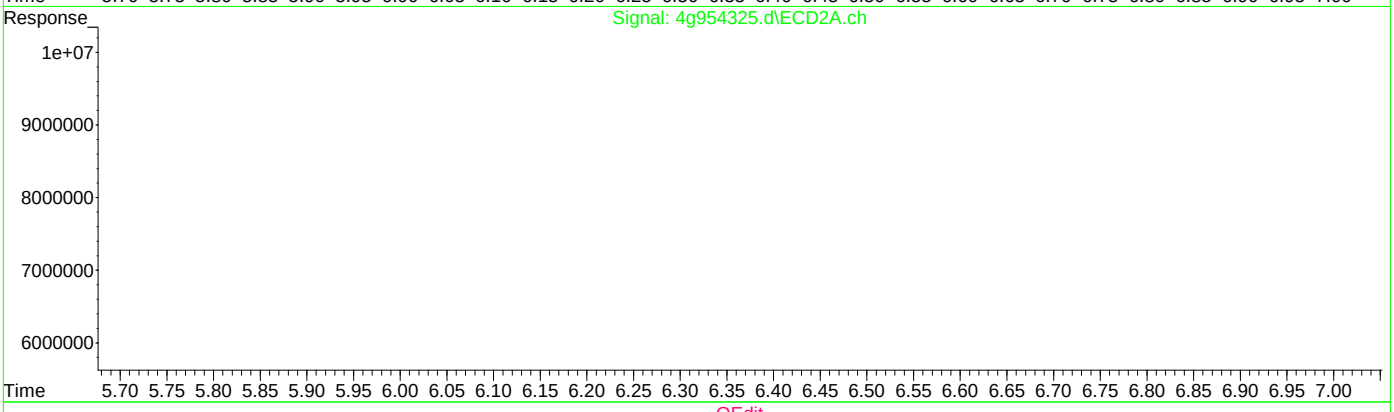
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954325.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:40 pm
Operator : mailisih
Sample : jc77181-3
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:46:24 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(18) 4,4'-DDD (A)

6.258min 2.389 PPB m

response 14905053

(18) 4,4'-DDD #2 (A)

7.671min 2.571 PPB

response 158922959

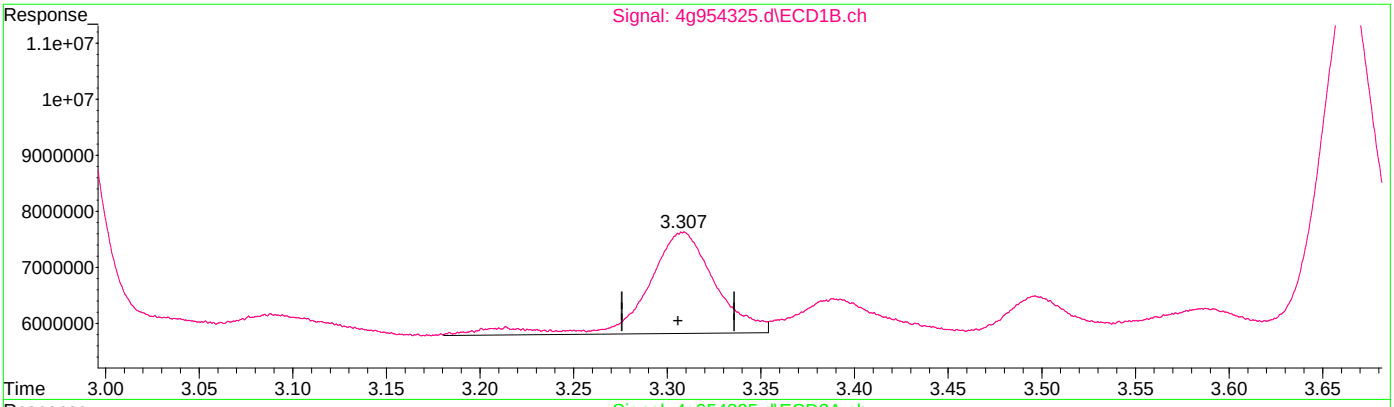
(+) = Expected Retention Time
4pst2585.m Wed Nov 07 20:20:39 2018

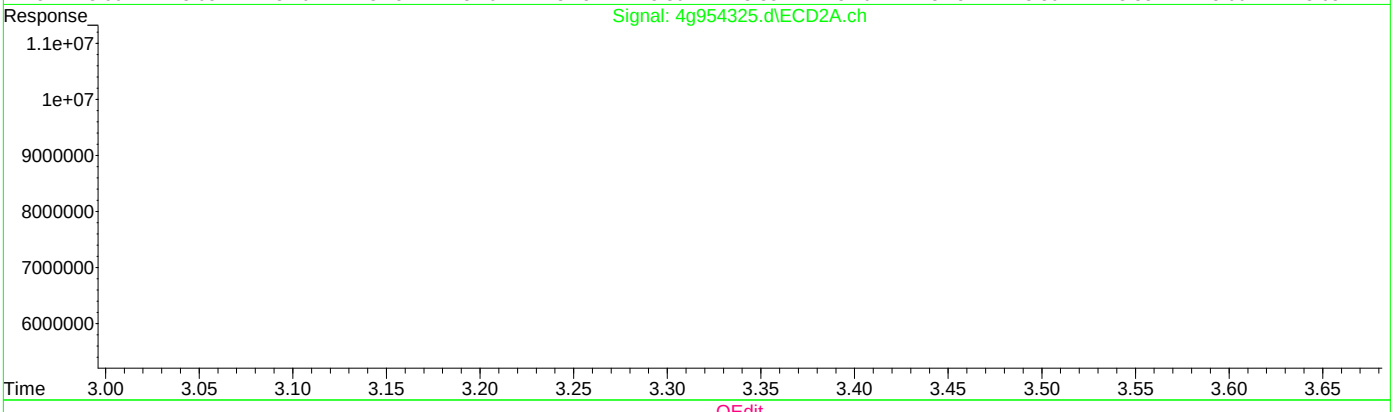
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954325.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:40 pm
Operator : mailisih
Sample : jc77181-3
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:46:24 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(5) gamma-BHC (MA)

3.308min 5.001 PPB

response 46217052

(5) gamma-BHC #2 (MA)

4.014min 4.662 PPB

response 402152392

(+) = Expected Retention Time

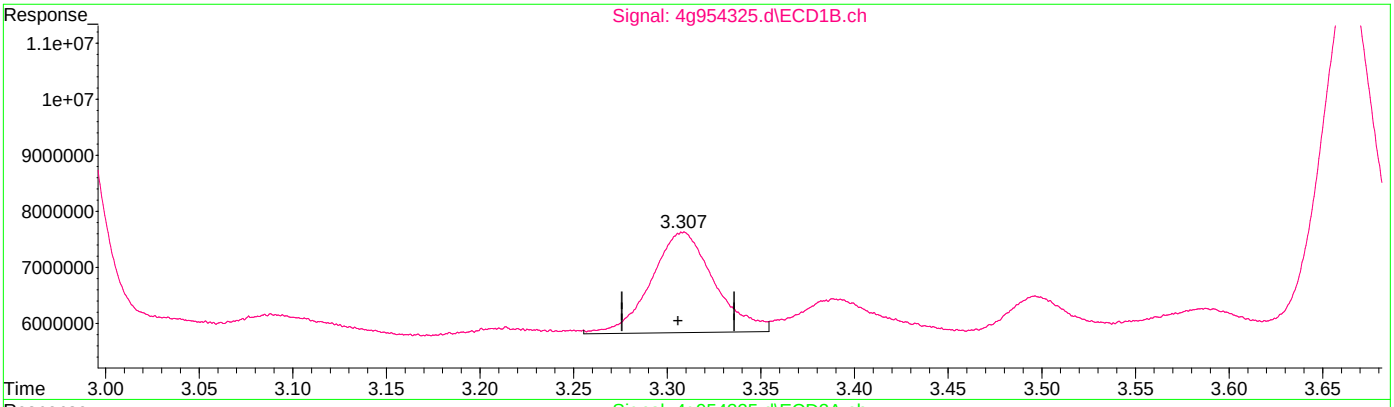
4pst2585.m Wed Nov 07 20:23:31 2018

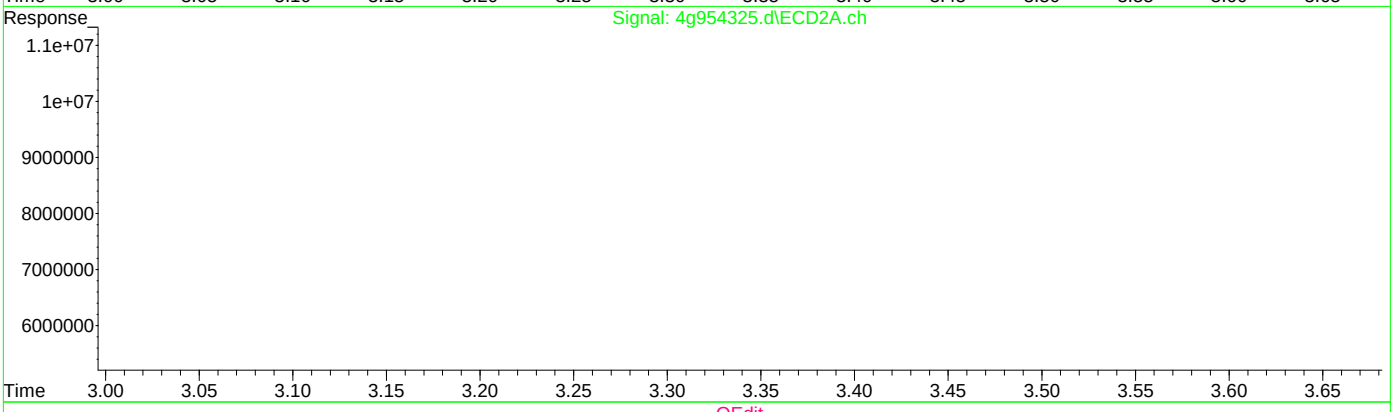
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954325.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:40 pm
Operator : mailisih
Sample : jc77181-3
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:46:24 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(5) gamma-BHC (MA)

3.307min 4.534 PPB m

response 41908142

(5) gamma-BHC #2 (MA)

4.014min 4.662 PPB

response 402152392

(+) = Expected Retention Time

4pst2585.m Wed Nov 07 20:24:16 2018

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 12/14/18 18:01

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954325.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:40 pm
Operator : mailisih
Sample : jc77181-3
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:23:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.734	1.922	405.5E6	3696.4E6	50.000	50.000
27) I	1-bromo-2...	1.734	1.922	405.5E6	3696.4E6	50.000	50.000
33) I	1-bromo-2...	1.734	1.922	405.5E6	3696.4E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.448	2.851	272.4E6	2654.0E6	36.113	38.977
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 90.28%	97.44%
26) SA	Decachlor...	10.061	11.967	318.1E6	1567.9E6	34.879	35.533m
	Spiked Amount	40.000			Recovery	= 87.20%	88.83%
	Target Compounds						
4) A	alpha-BHC	2.981	3.563	112.4E6	1232.6E6	11.322	12.673
5) MA	gamma-BHC	3.307	4.014	41908142	402.2E6	4.534m	4.662
7) B	beta-BHC	3.390	4.098	17739060	157.7E6	4.256	3.856
18) A	4,4'-DDD	6.258	7.671	14905053	158.9E6	2.389m	2.571
	SemiQuant Compounds - Not Calibrated on this Instrument						

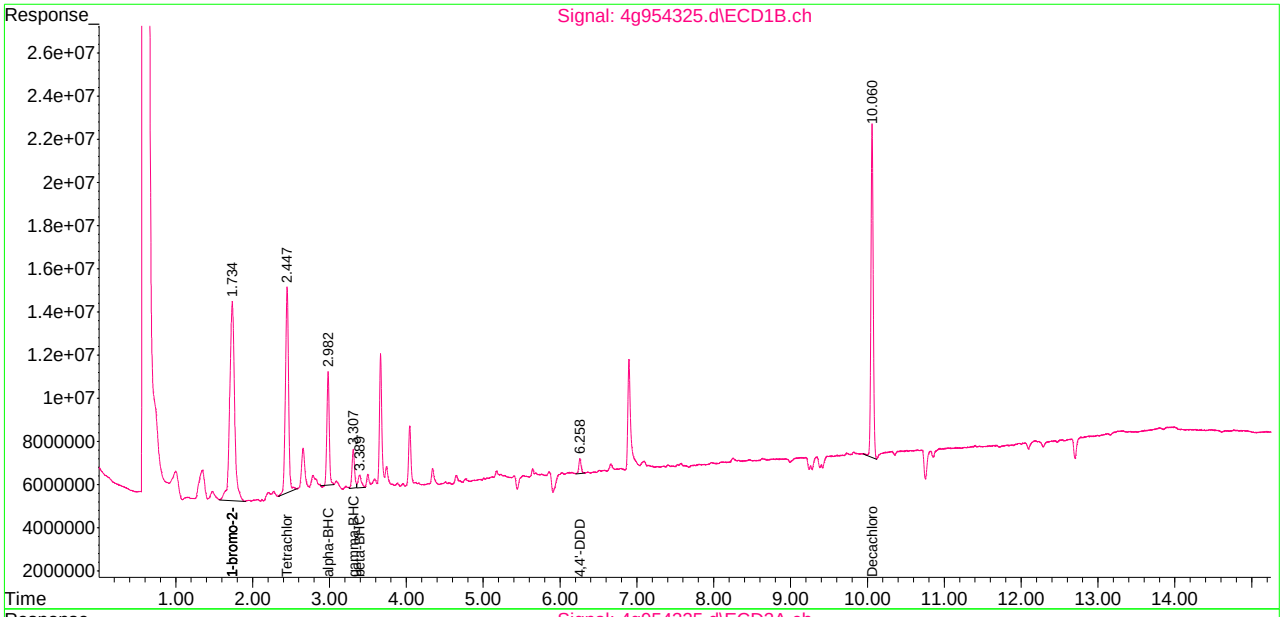
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

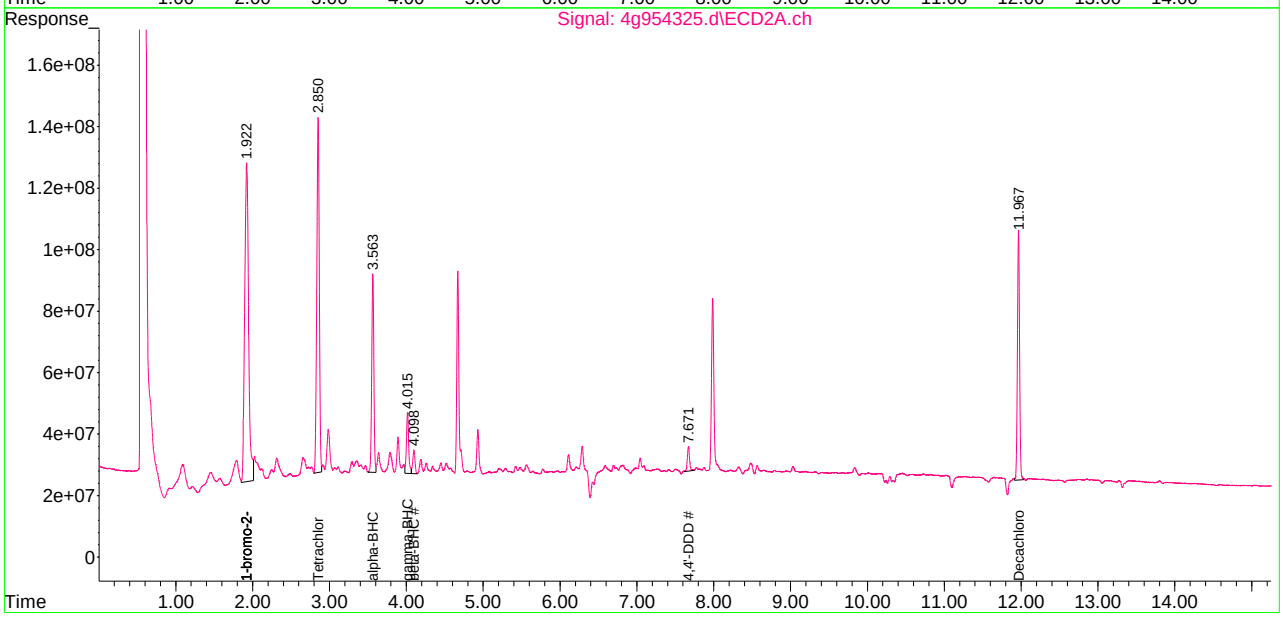
Quantitation Report (QT Reviewed)

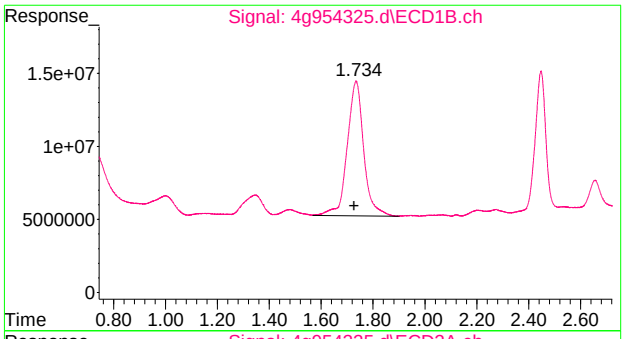
Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954325.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:40 pm
Operator : mailisih
Sample : jc77181-3
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:23:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

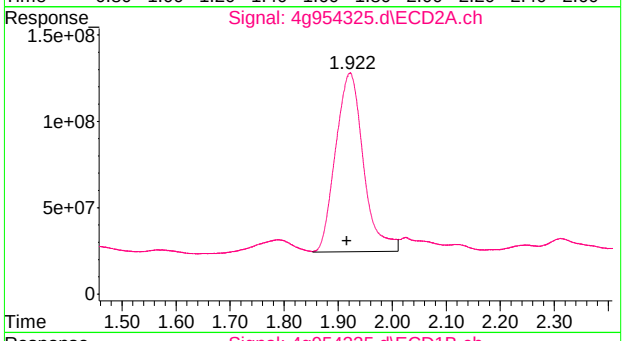






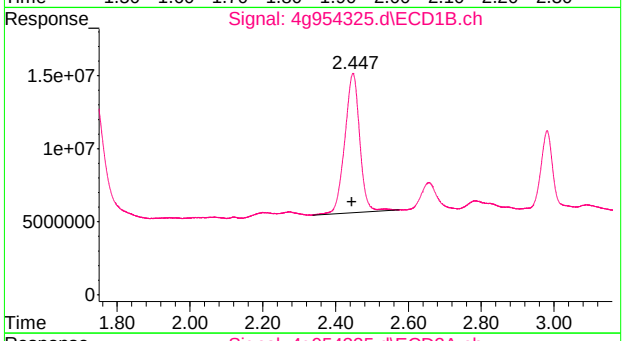
#1 1-bromo-2-nitrobenzene

R.T.: 1.734 min
Delta R.T.: 0.007 min
Response: 405488659
Conc: 50.00 PPB



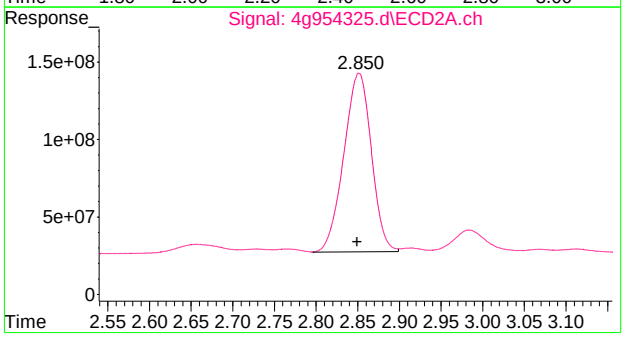
#1 1-bromo-2-nitrobenzene

R.T.: 1.922 min
Delta R.T.: 0.006 min
Response: 3696365071
Conc: 50.00 PPB



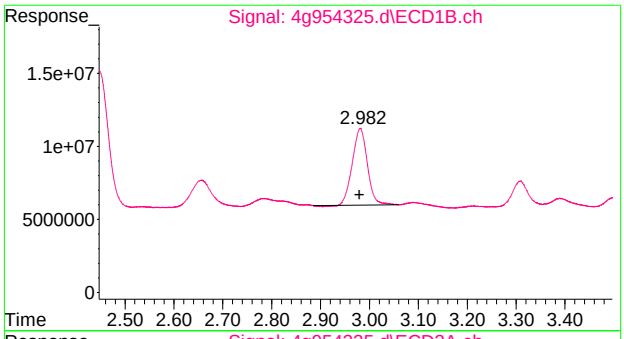
#2 Tetrachloro-m-xylene

R.T.: 2.448 min
Delta R.T.: 0.004 min
Response: 272433730
Conc: 36.11 PPB



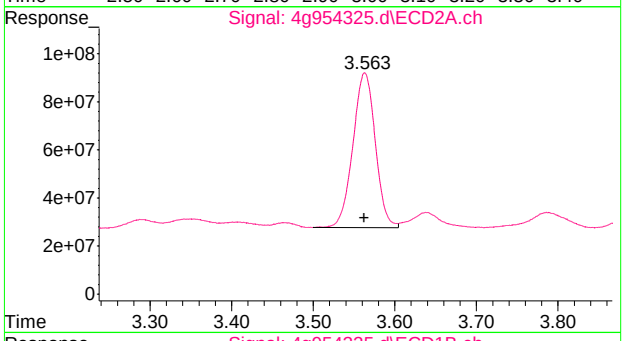
#2 Tetrachloro-m-xylene

R.T.: 2.851 min
Delta R.T.: 0.002 min
Response: 2654039180
Conc: 38.98 PPB



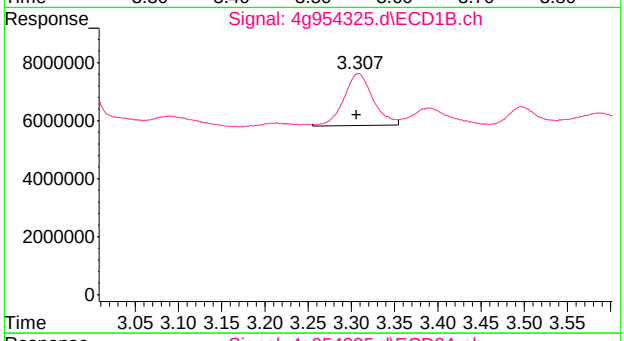
#4 alpha-BHC

R.T.: 2.981 min
Delta R.T.: 0.001 min
Response: 112413566
Conc: 11.32 PPB



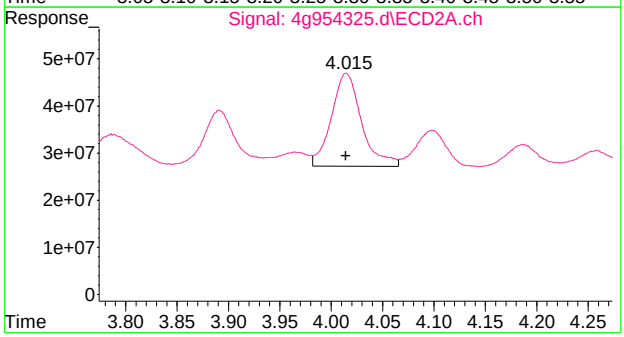
#4 alpha-BHC

R.T.: 3.563 min
Delta R.T.: 0.000 min
Response: 1232611815
Conc: 12.67 PPB



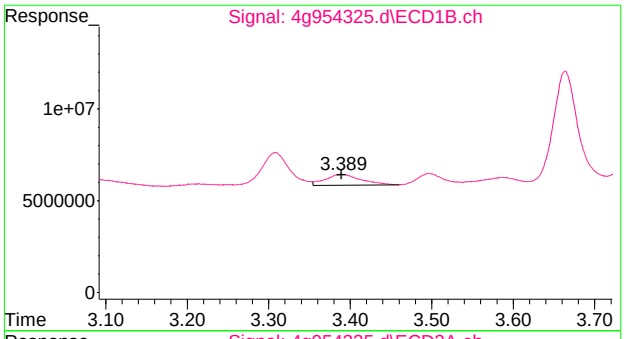
#5 gamma-BHC

R.T.: 3.307 min
Delta R.T.: 0.001 min
Response: 41908142
Conc: 4.53 PPB m



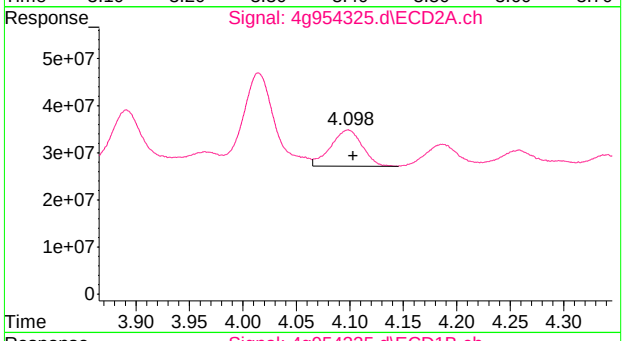
#5 gamma-BHC

R.T.: 4.014 min
Delta R.T.: 0.000 min
Response: 402152392
Conc: 4.66 PPB



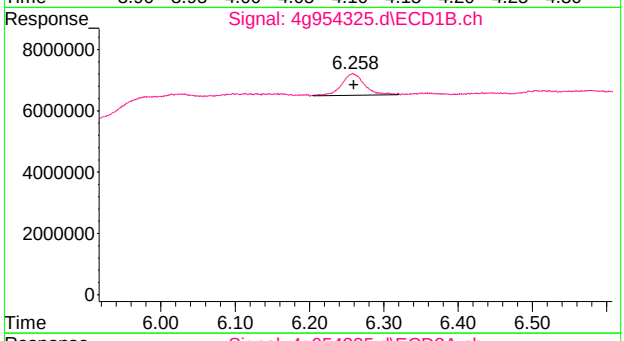
#7 beta-BHC

R.T.: 3.390 min
Delta R.T.: 0.000 min
Response: 17739060
Conc: 4.26 PPB



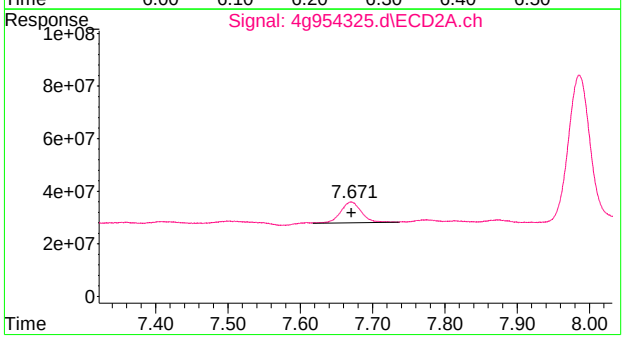
#7 beta-BHC

R.T.: 4.098 min
Delta R.T.: -0.005 min
Response: 157747212
Conc: 3.86 PPB



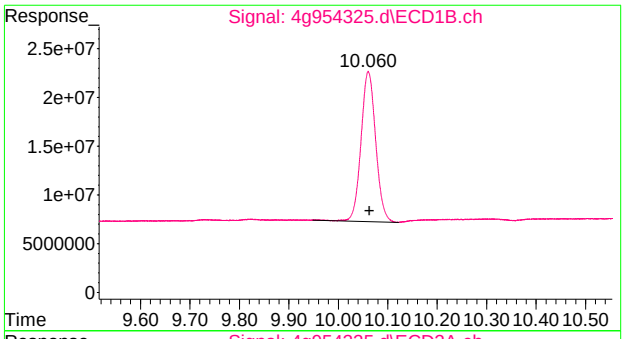
#18 4,4'-DDD

R.T.: 6.258 min
Delta R.T.: -0.002 min
Response: 14905053
Conc: 2.39 PPB m



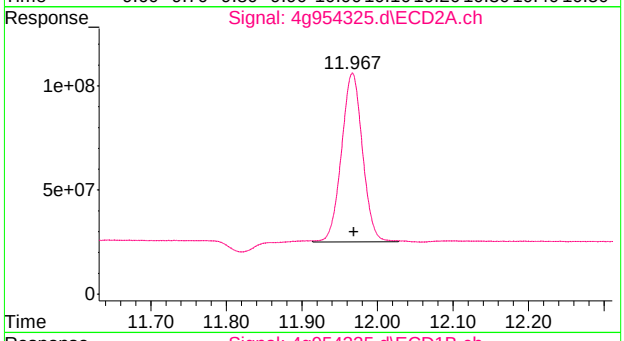
#18 4,4'-DDD

R.T.: 7.671 min
Delta R.T.: 0.000 min
Response: 158922959
Conc: 2.57 PPB



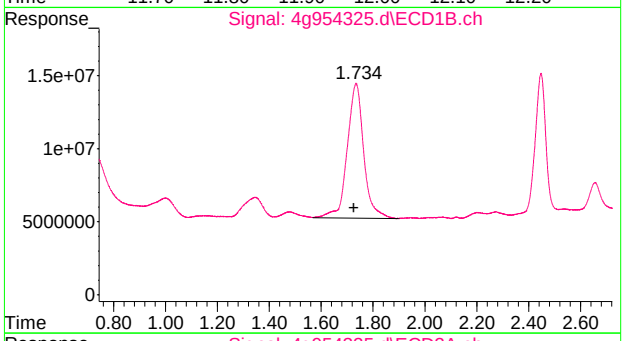
#26 Decachlorobiphenyl

R.T.: 10.061 min
Delta R.T.: -0.002 min
Response: 318066108
Conc: 34.88 PPB



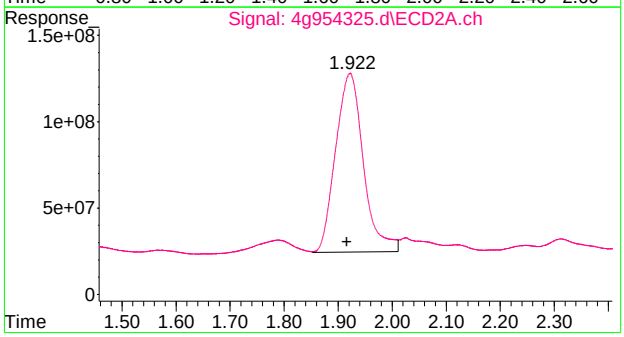
#26 Decachlorobiphenyl

R.T.: 11.967 min
Delta R.T.: -0.001 min
Response: 1567902458
Conc: 35.53 PPB m



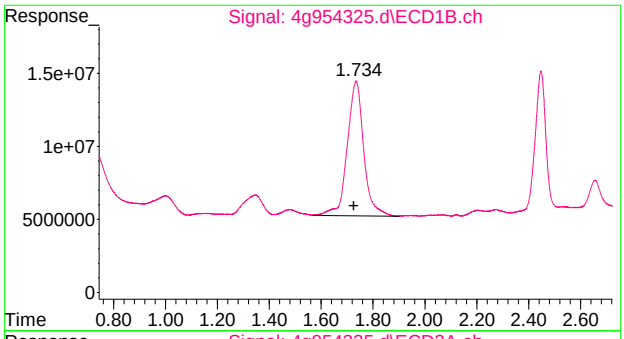
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.734 min
Delta R.T.: 0.008 min
Response: 405488659
Conc: 50.00 PPB



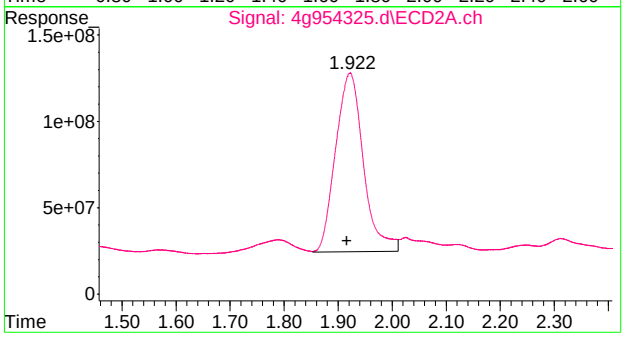
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.922 min
Delta R.T.: 0.006 min
Response: 3696365071
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.734 min
Delta R.T.: 0.008 min
Response: 405488659
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.922 min
Delta R.T.: 0.006 min
Response: 3696365071
Conc: 50.00 PPB

Manual Integration Approval Summary

Sample Number:	JC77181-3R	**Method:**	SW846 8081B
Lab FileID:	4G954325.D	**Analyst approved:**	12/14/18 16:20 Rebecca Krug
Injection Time:	11/07/18 12:40	**Supervisor approved:**	12/14/18 18:01 Kristi Schollenberger

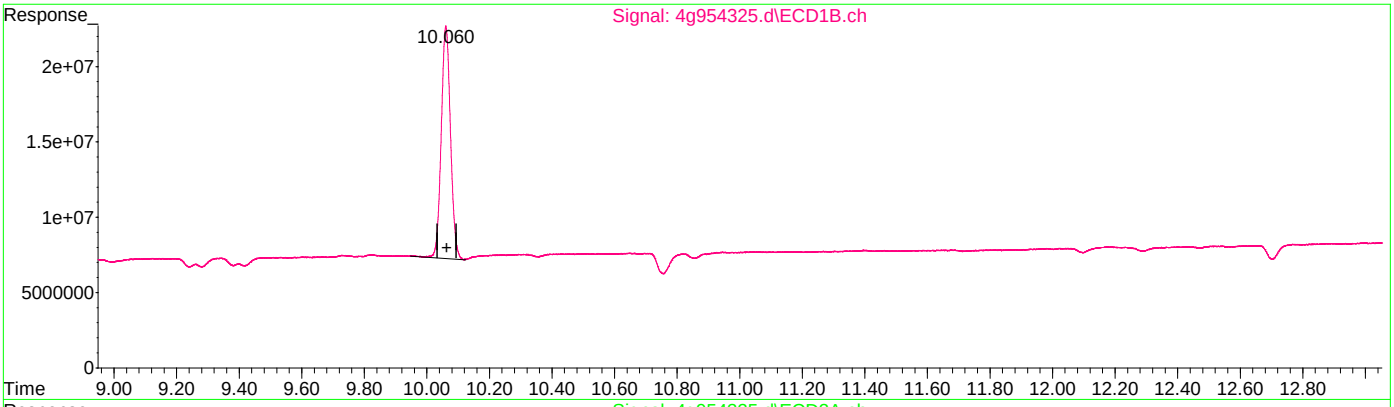
Parameter	CAS	Sig#	R.T. (min.)	Reason
gamma-BHC (Lindane)	58-89-9	1	3.31	Poorly defined baseline
4,4'-DDD	72-54-8	1	6.26	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	2	11.97	Poorly defined baseline

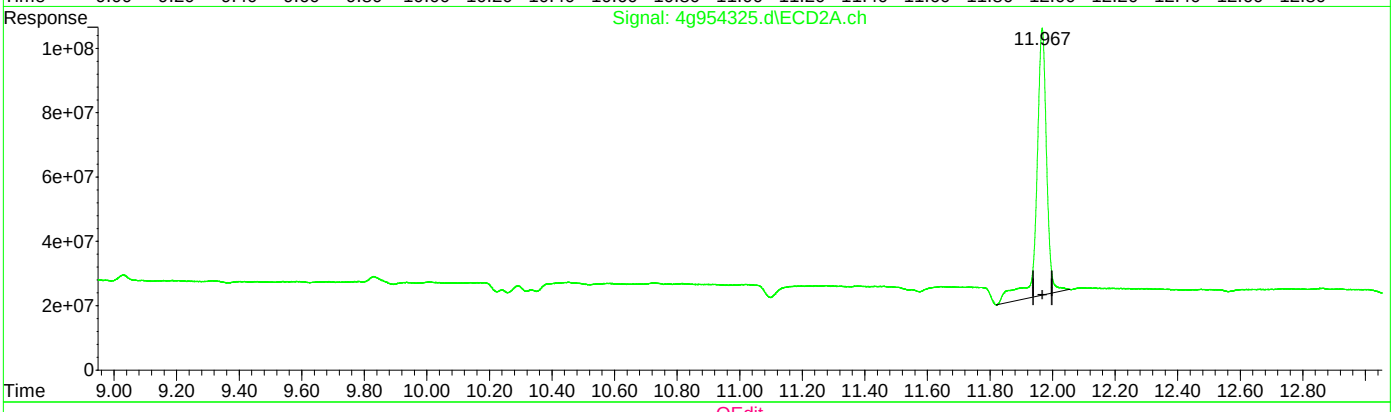
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954325.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:40 pm
Operator : mailisih
Sample : jc77181-3
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:46:24 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Decachlorobiphenyl (SA)

10.061min 34.879 PPB

response 318066108

(26) Decachlorobiphenyl #2 (SA)

11.967min 42.187 PPB

response 1861533216

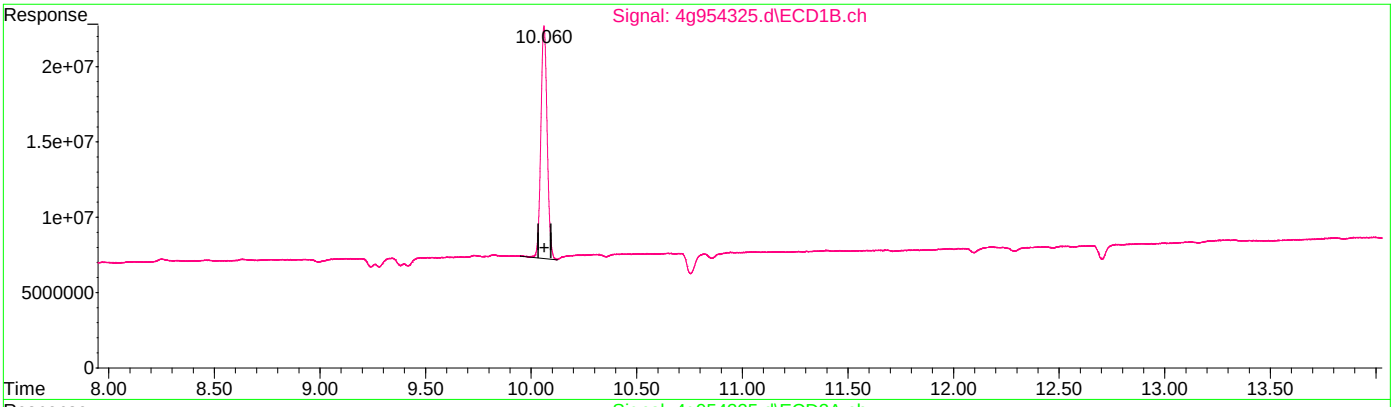
(+) = Expected Retention Time
4pst2585.m Wed Nov 07 20:16:58 2018

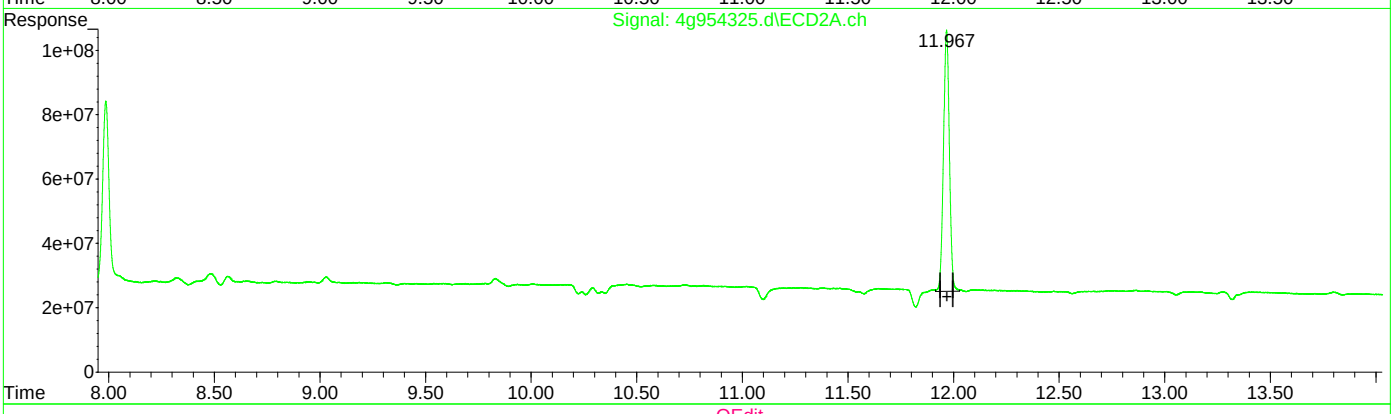
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954325.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:40 pm
Operator : mailisih
Sample : jc77181-3
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:46:24 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Decachlorobiphenyl (SA)

10.061min 34.879 PPB

response 318066108

(26) Decachlorobiphenyl #2 (SA)

11.967min 35.533 PPB m

response 1567902458

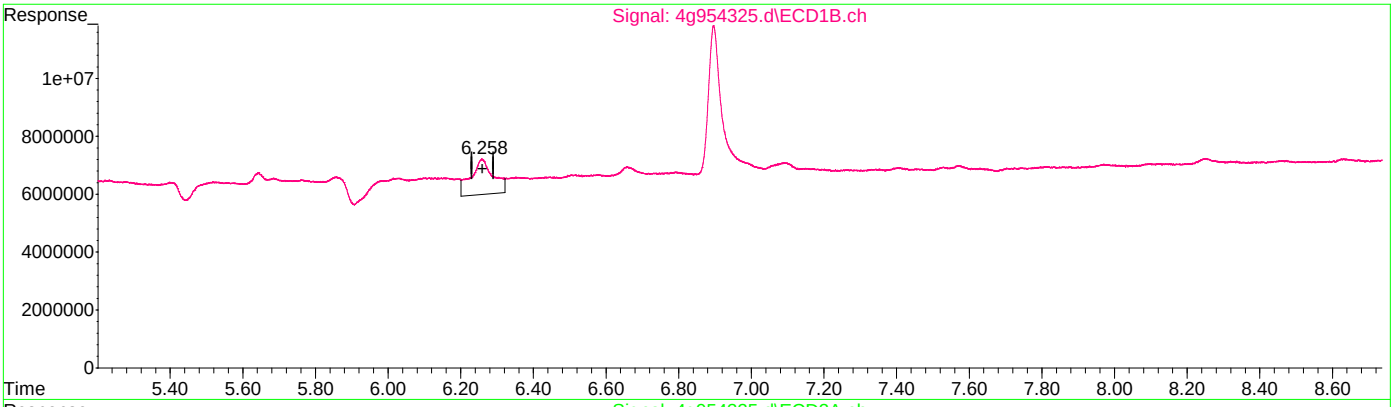
(+) = Expected Retention Time
4pst2585.m Wed Nov 07 20:19:22 2018

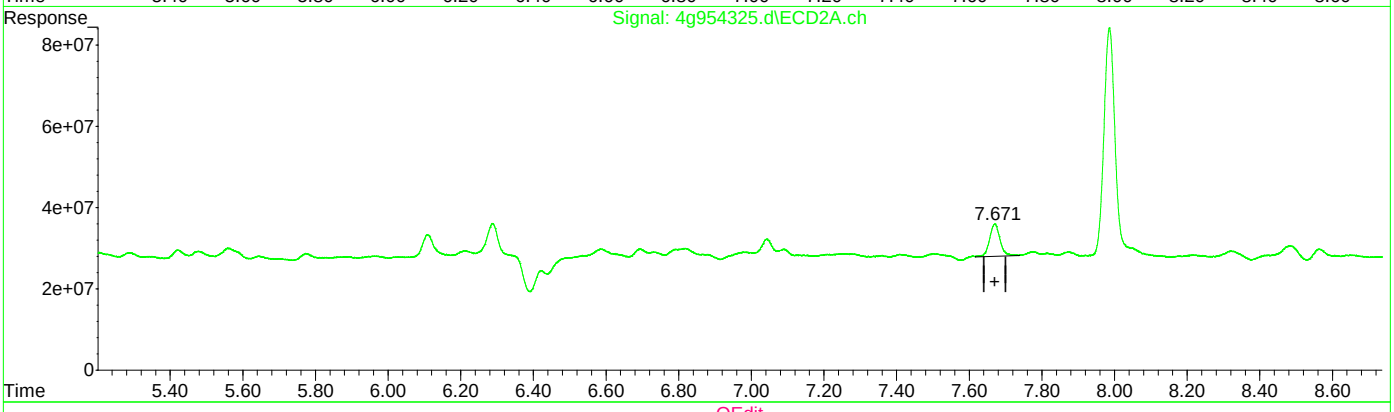
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954325.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:40 pm
Operator : mailisih
Sample : jc77181-3
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:46:24 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(18) 4,4'-DDD (A)

6.258min 8.414 PPB

response 52498940

(18) 4,4'-DDD #2 (A)

7.671min 2.571 PPB

response 158922959

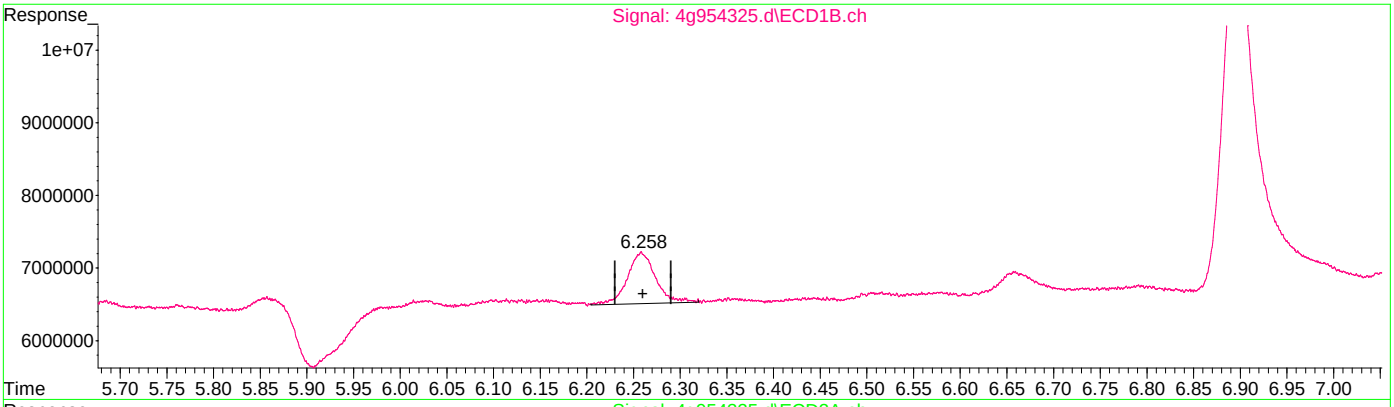
(+) = Expected Retention Time

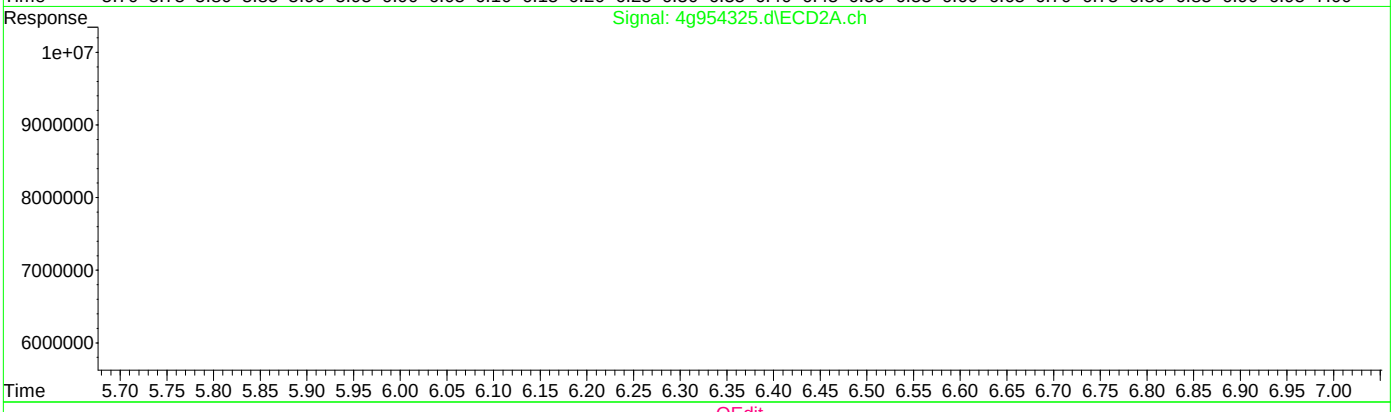
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954325.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:40 pm
Operator : mailisih
Sample : jc77181-3
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:46:24 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(18) 4,4'-DDD (A)

6.258min 2.389 PPB m

response 14905053

(18) 4,4'-DDD #2 (A)

7.671min 2.571 PPB

response 158922959

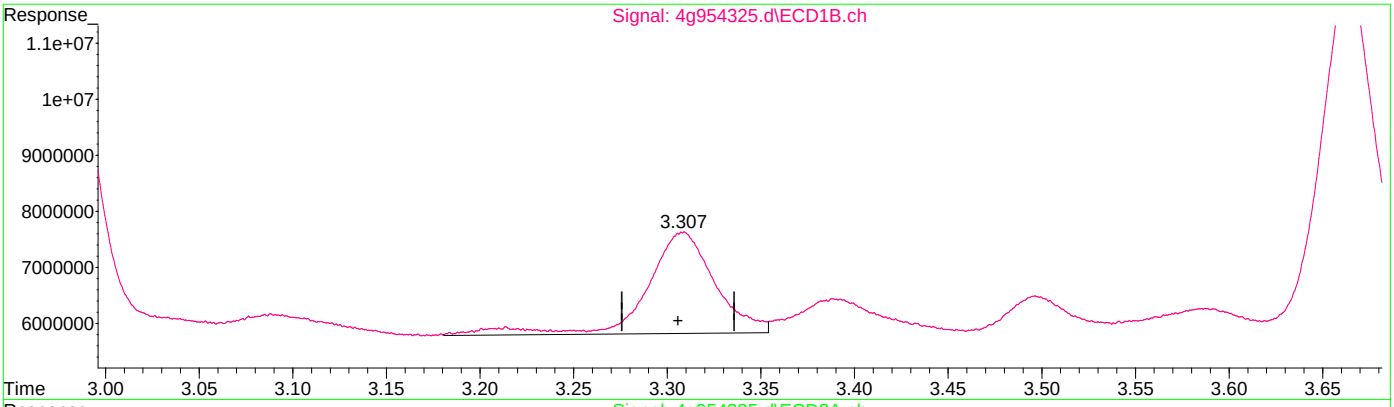
(+) = Expected Retention Time
4pst2585.m Wed Nov 07 20:20:39 2018

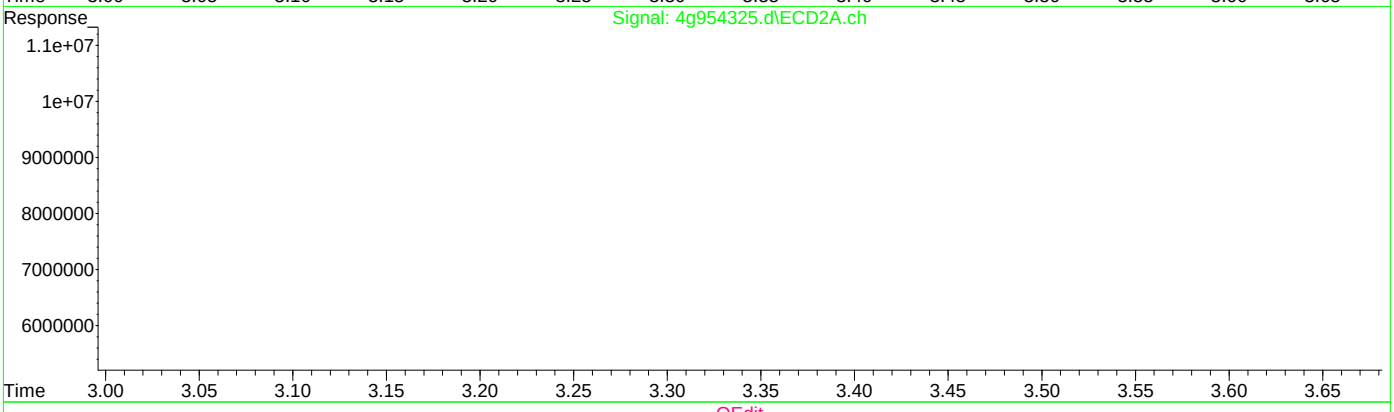
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954325.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:40 pm
Operator : mailisih
Sample : jc77181-3
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:46:24 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(5) gamma-BHC (MA)

3.308min 5.001 PPB

response 46217052

(5) gamma-BHC #2 (MA)

4.014min 4.662 PPB

response 402152392

(+) = Expected Retention Time

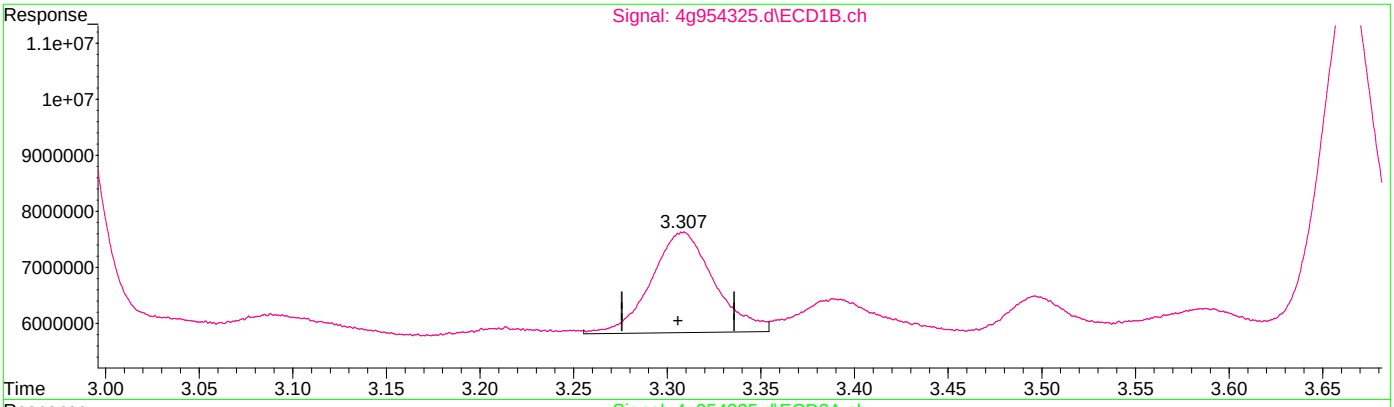
4pst2585.m Wed Nov 07 20:23:31 2018

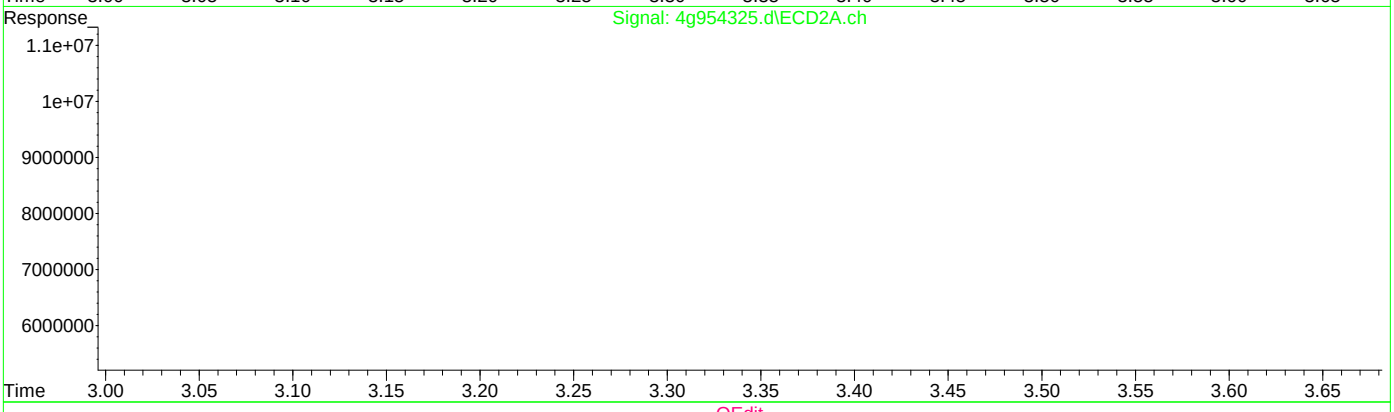
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954325.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 12:40 pm
Operator : mailisih
Sample : jc77181-3
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:46:24 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(5) gamma-BHC (MA)

3.307min 4.534 PPB m

response 41908142

(5) gamma-BHC #2 (MA)

4.014min 4.662 PPB

response 402152392

(+) = Expected Retention Time
4pst2585.m Wed Nov 07 20:24:16 2018

Quantitation Report (QT Reviewed)

```
Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954320.d
Signal(s) : Signal #1: ECD1B.ch  Signal #2: ECD2A.ch
Acq On    :  7 Nov 2018  11:15 am
Operator  : mailisih
Sample    : op16424-mb1
Misc      : op16424,g4g2589,300,,,2,1
ALS Vial  : 7   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:44:45 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title  : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.733	1.919	418.7E6	4009.3E6	50.000	50.000
27) I 1-bromo-2...	1.733	1.919	418.7E6	4009.3E6	50.000	50.000
33) I 1-bromo-2...	1.733	1.919	418.7E6	4009.3E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.447	2.851	260.1E6	2369.3E6	33.391	32.079
Spiked Amount 40.000	Range 30 - 150		Recovery =		83.48%	80.20%
26) SA Decachlor...	10.065	11.969	302.8E6	1461.2E6	32.158	30.529
Spiked Amount 40.000			Recovery =		80.40%	76.32%
Target Compounds						
SemiQuant Compounds - Not Calibrated on this Instrument						

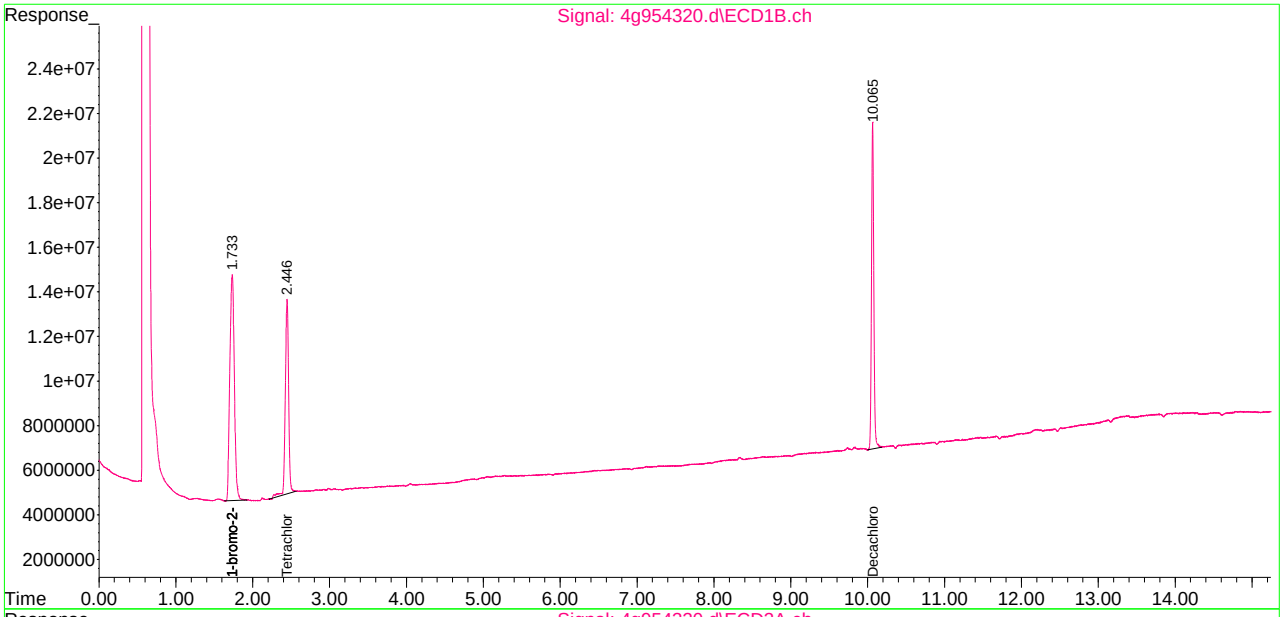
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

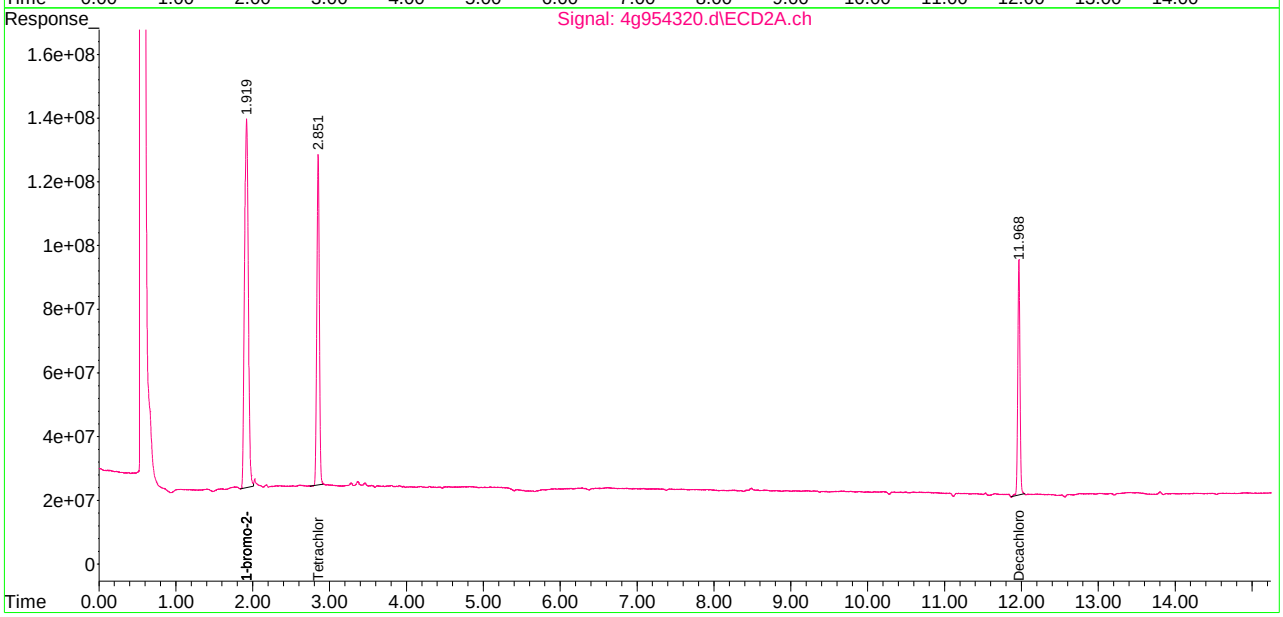
Quantitation Report (QT Reviewed)

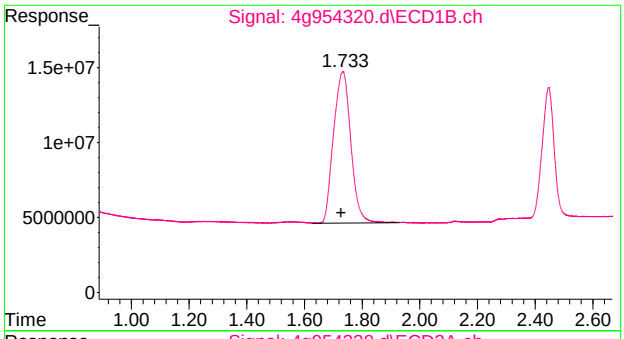
Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954320.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 11:15 am
Operator : mailisih
Sample : op16424-mb1
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:44:45 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

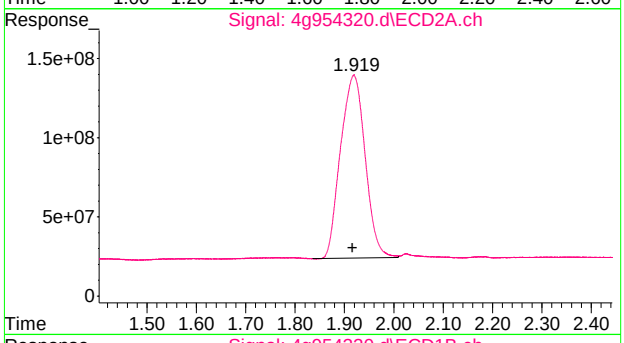






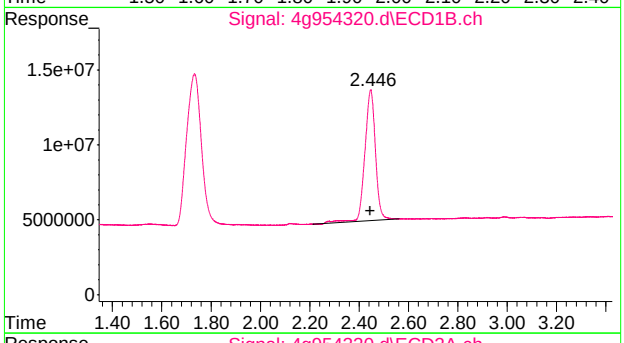
#1 1-bromo-2-nitrobenzene

R.T.: 1.733 min
Delta R.T.: 0.006 min
Response: 418718692
Conc: 50.00 PPB



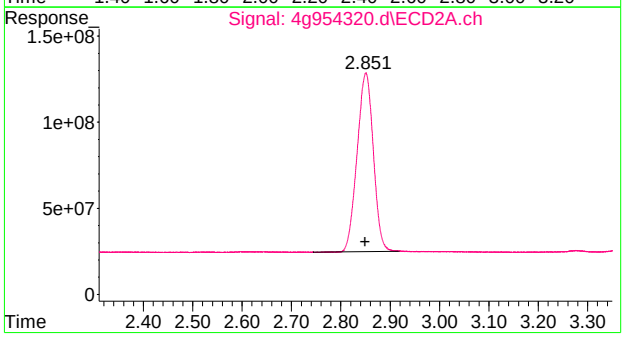
#1 1-bromo-2-nitrobenzene

R.T.: 1.919 min
Delta R.T.: 0.003 min
Response: 4009337158
Conc: 50.00 PPB



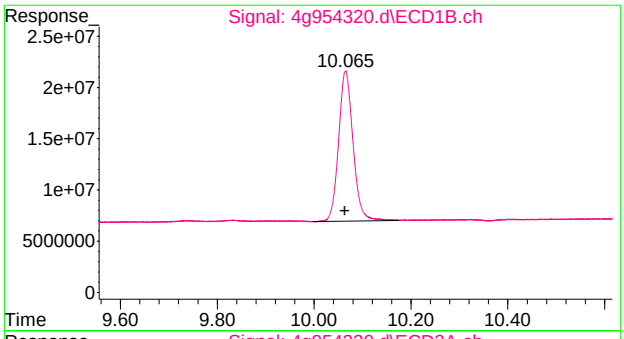
#2 Tetrachloro-m-xylene

R.T.: 2.447 min
Delta R.T.: 0.003 min
Response: 260117884
Conc: 33.39 PPB



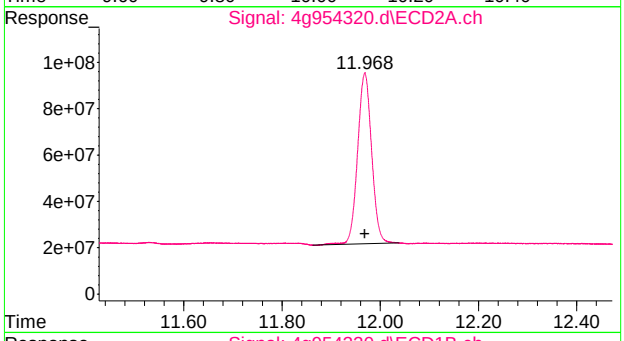
#2 Tetrachloro-m-xylene

R.T.: 2.851 min
Delta R.T.: 0.001 min
Response: 2369284410
Conc: 32.08 PPB



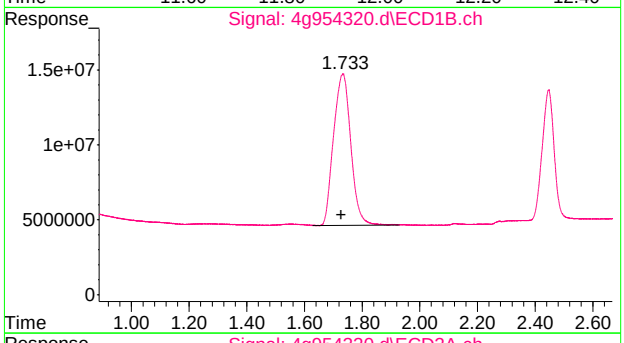
#26 Decachlorobiphenyl

R.T.: 10.065 min
Delta R.T.: 0.002 min
Response: 302820432
Conc: 32.16 PPB



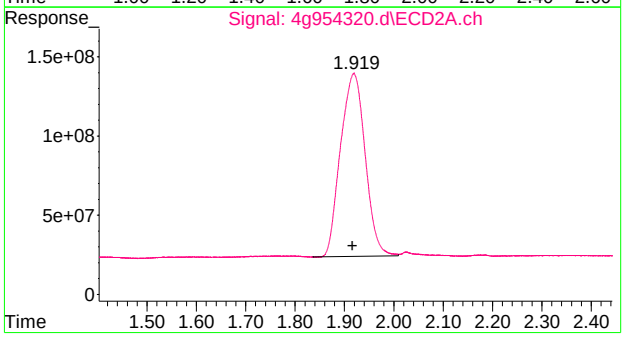
#26 Decachlorobiphenyl

R.T.: 11.969 min
Delta R.T.: 0.000 min
Response: 1461162669
Conc: 30.53 PPB



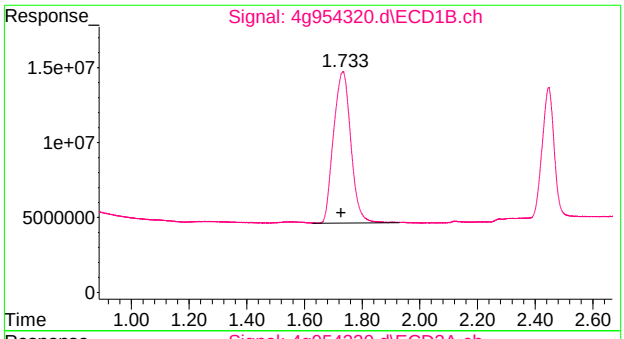
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.733 min
Delta R.T.: 0.007 min
Response: 418718692
Conc: 50.00 PPB



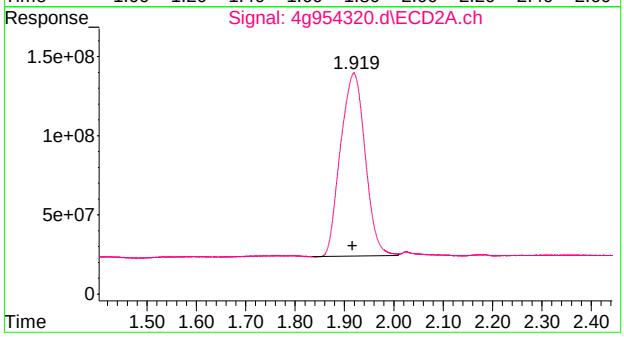
#27 1-bromo-2-nitrobenzeneA

R.T.: 1.919 min
Delta R.T.: 0.003 min
Response: 4009337158
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.733 min
Delta R.T.: 0.007 min
Response: 418718692
Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 1.919 min
Delta R.T.: 0.003 min
Response: 4009337158
Conc: 50.00 PPB

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
11/14/18 14:56

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954321.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 11:32 am
Operator : mailisih
Sample : op16424-bs1
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:01:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

		Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
		Internal Standards						
1)	I	1-bromo-2...	1.732	1.921	387.1E6	4233.8E6	50.000	50.000
27)	I	1-bromo-2...	1.732	1.921	387.1E6	4233.8E6	50.000	50.000
33)	I	1-bromo-2...	1.732	1.921	387.1E6	4233.8E6	50.000	50.000
		System Monitoring Compounds						
2)	SAB	Tetrachlo...	2.449	2.852	182.9E6	1723.2E6	25.400	22.094
		Spiked Amount 40.000 Range 30 - 150 Recovery = 63.50% 55.23%						
26)	SA	Decachlor...	10.062	11.967	234.7E6	1159.8E6	26.960m	22.948m
		Spiked Amount 40.000 Recovery = 67.40% 57.37%						
		Target Compounds						
3)		hexachlor...	2.828	3.401	204.8E6	1406.4E6	18.816	16.422
4)	A	alpha-BHC	2.981	3.563	183.8E6	1833.3E6	19.392	16.455
5)	MA	gamma-BHC	3.307	4.014	164.8E6	1639.9E6	18.684	16.598
6)	MA	Heptachlor	3.845	4.614	169.8E6	1829.5E6	19.237	16.920
7)	B	beta-BHC	3.392	4.103	79578896	743.7E6	20.001	15.871
8)	B	delta-BHC	3.594	4.516	141.9E6	1523.8E6	19.131	16.637
9)	MB	Aldrin	4.203	5.080	166.0E6	1662.7E6	19.004m	16.900
10)		alachlor	4.342	4.878	23238817	249.8E6	22.120	18.939
11)	B	Heptachlo...	4.945	5.922	156.0E6	1486.1E6	18.642	16.974
12)	B	gamma-Chl...	5.116	6.213	158.7E6	1534.4E6	19.129	16.628
13)	B	alpha-Chl...	5.293	6.442	156.3E6	1456.3E6	18.139	16.491
14)	A	Endosulfan I	5.476	6.541	153.1E6	1371.6E6	19.252	16.814
15)	B	4,4'-DDE	5.408	6.707	150.4E6	1467.3E6	19.228	17.110
16)	MA	Dieldrin	5.810	6.984	167.0E6	1491.7E6	19.603	17.337
17)	MA	Endrin	6.140	7.496	148.0E6	1377.3E6	19.247m	16.844m
18)	A	4,4'-DDD	6.264	7.672	125.7E6	1238.0E6	21.103	17.488
19)	B	Endosulfa...	6.470	7.852	143.8E6	1268.1E6	18.740	15.905
20)	MA	4,4'-DDT	6.690	8.212	104.1E6	1095.4E6	20.830	17.512
21)	B	Endrin Al...	7.104	8.429	116.8E6	987.9E6	18.975	16.069
22)	B	Endosulfa...	7.797	8.904	102.0E6	949.9E6	18.546	17.054
23)	A	Methoxychlor	7.492	9.461	48066165	549.4E6	19.352	16.105
25)	B	Endrin Ke...	8.247	9.874	142.1E6	1127.2E6	20.358	17.185

SemiQuant Compounds - Not Calibrated on this Instrument

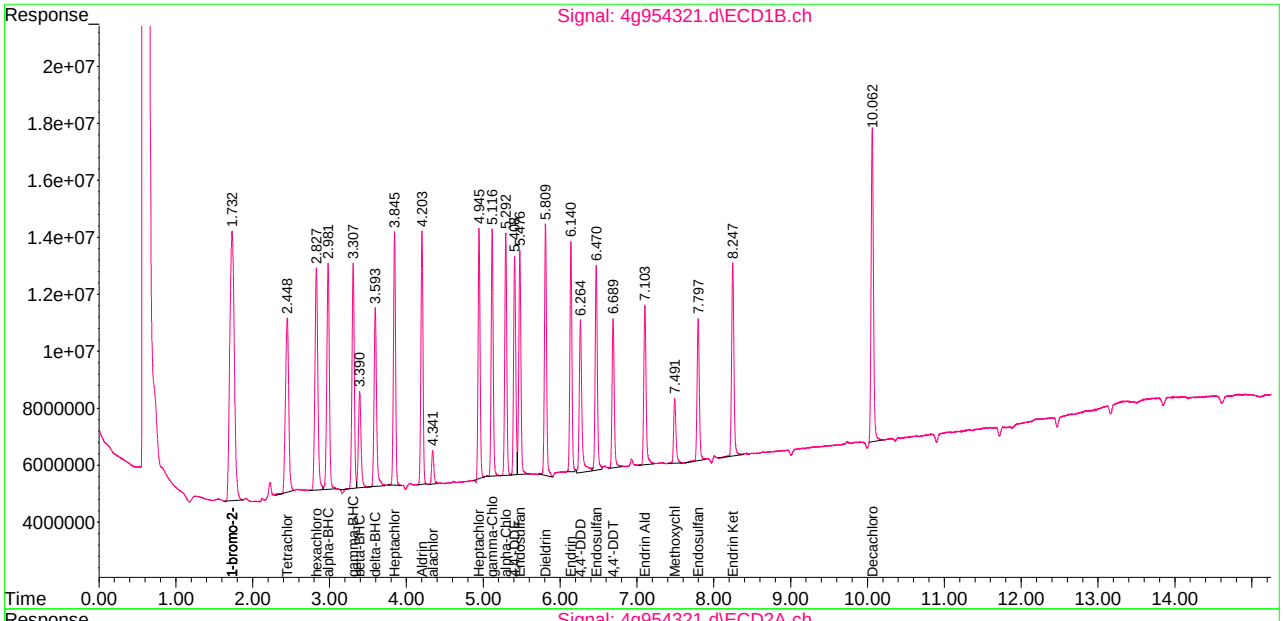
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

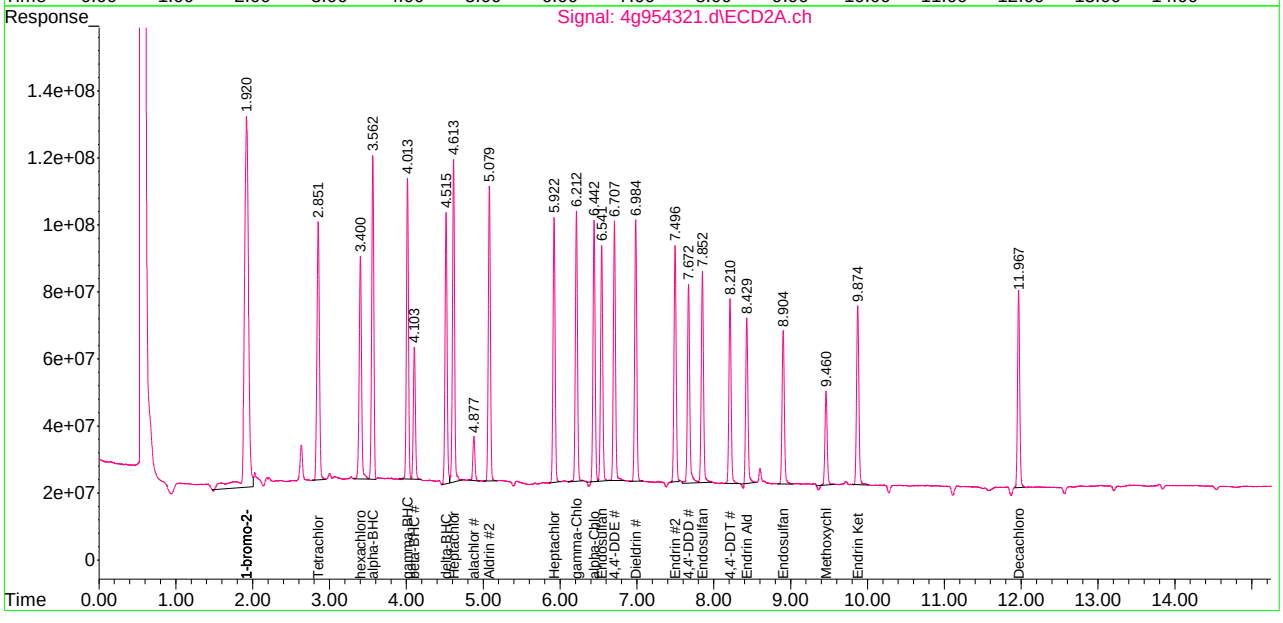
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954321.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 11:32 am
Operator : mailisih
Sample : op16424-bs1
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:01:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	OP16424-BS1	**Method:**	SW846 8081B
Lab FileID:	4G954321.D	**Analyst approved:**	11/07/18 20:40 Christopher Changho
Injection Time:	11/07/18 11:32	**Supervisor approved:**	11/14/18 14:56 Gwendolyn Burns

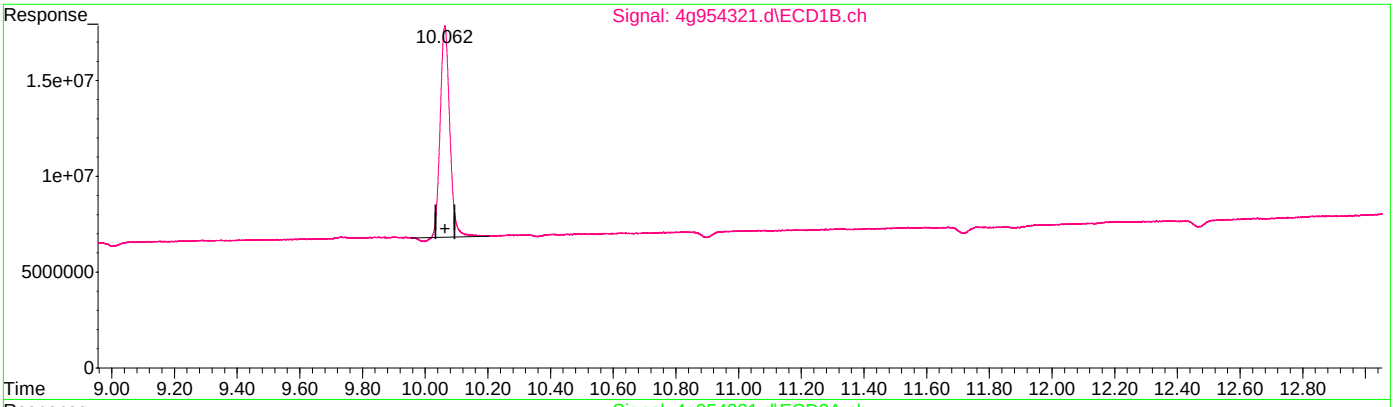
Parameter	CAS	Sig#	R.T. (min.)	Reason
Aldrin	309-00-2	1	4.20	Poorly defined baseline
Endrin	72-20-8	1	6.14	Poorly defined baseline
Endrin	72-20-8	2	7.50	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	1	10.06	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	2	11.97	Poorly defined baseline

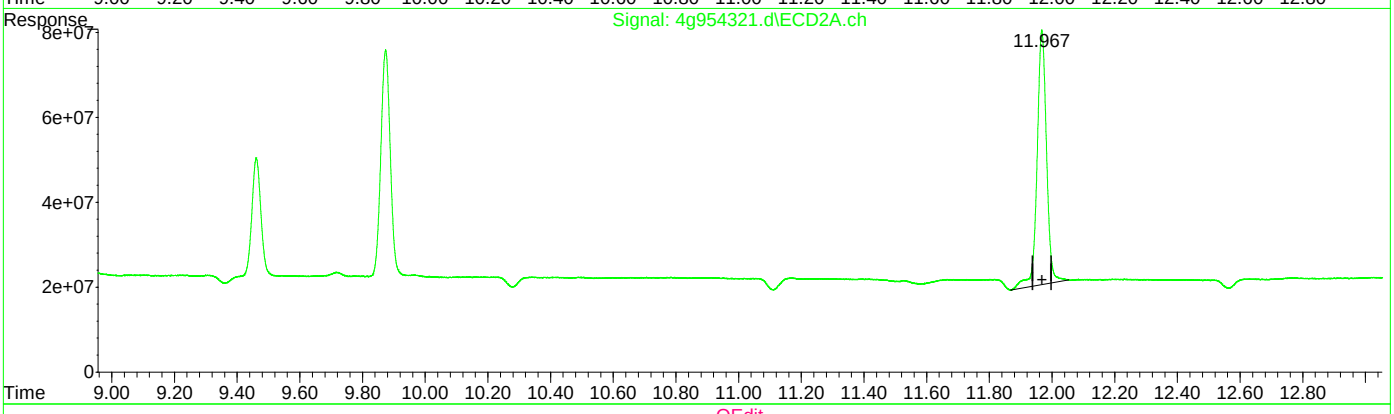
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954321.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 11:32 am
Operator : mailisih
Sample : op16424-bs1
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:44:54 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Decachlorobiphenyl (SA)

10.063min 26.607 PPB

response 231608496

(26) Decachlorobiphenyl #2 (SA)

11.968min 24.890 PPB

response 1257956365

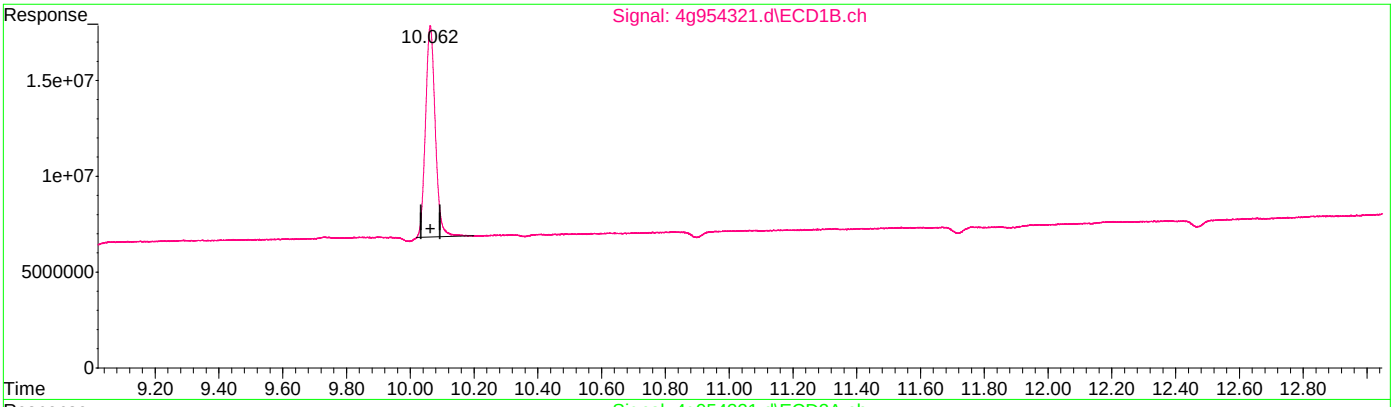
(+) = Expected Retention Time
4pst2585.m Wed Nov 07 19:54:49 2018

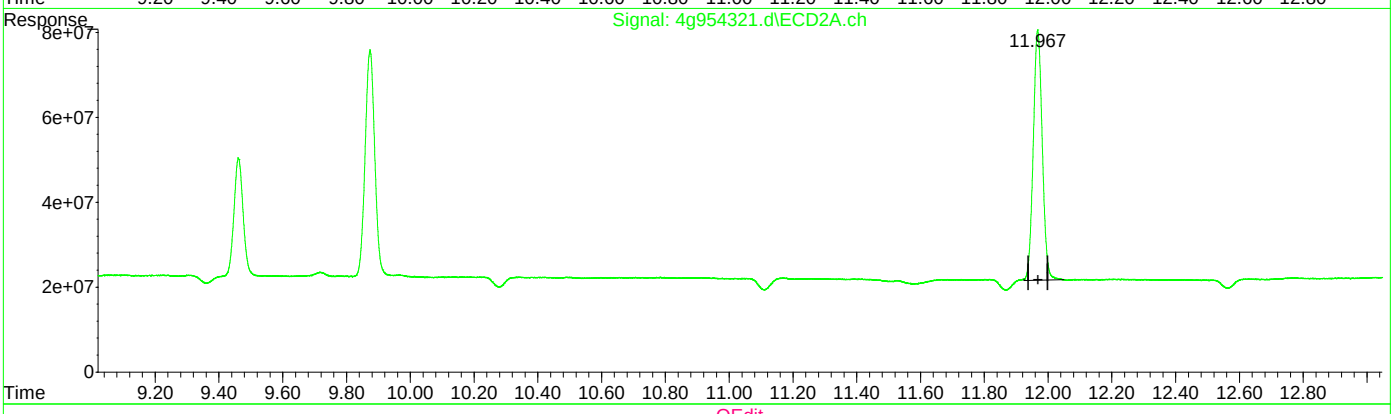
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954321.d
Signal(s) : Signal #1: ECD1B.ch  Signal #2: ECD2A.ch
Acq On    :  7 Nov 2018  11:32 am
Operator  : mailisih
Sample    : op16424-bs1
Misc      : op16424,g4g2589,300,,,2,1
ALS Vial  : 8   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:44:54 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title  : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.      : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```





QEdit

(26) Decachlorobiphenyl (SA)

10.062min 26.960 PPB m

response 234677462

(26) Decachlorobiphenyl #2 (SA)

11.967min 22.948 PPB m

response 1159819274

(+) = Expected Retention Time

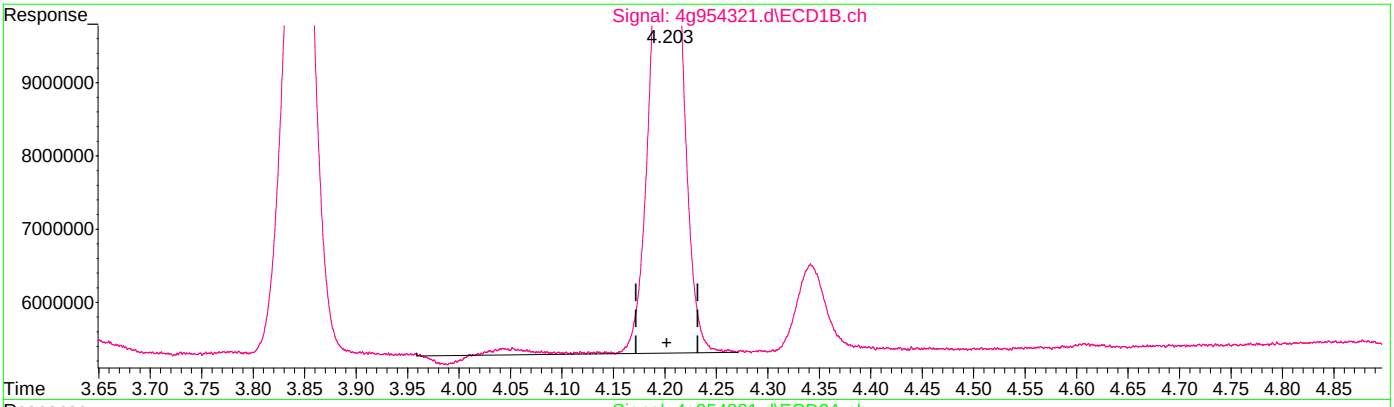
4pst2585.m Wed Nov 07 19:55:56 2018

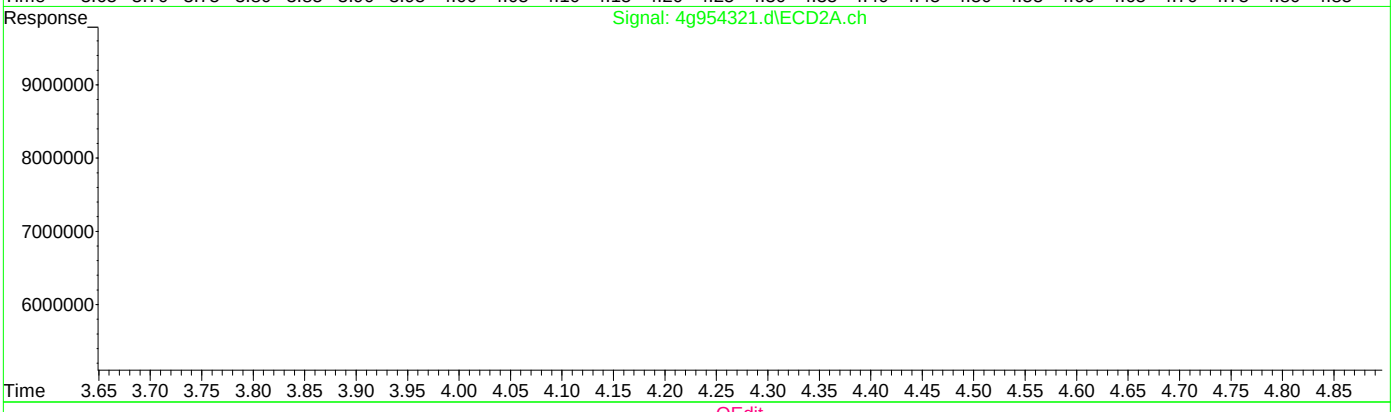
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954321.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 11:32 am
Operator : mailisih
Sample : op16424-bs1
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:44:54 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(9) Aldrin (MB)

4.202min 19.298 PPB

response 168562898

(9) Aldrin #2 (MB)

5.080min 16.900 PPB

response 1662656155

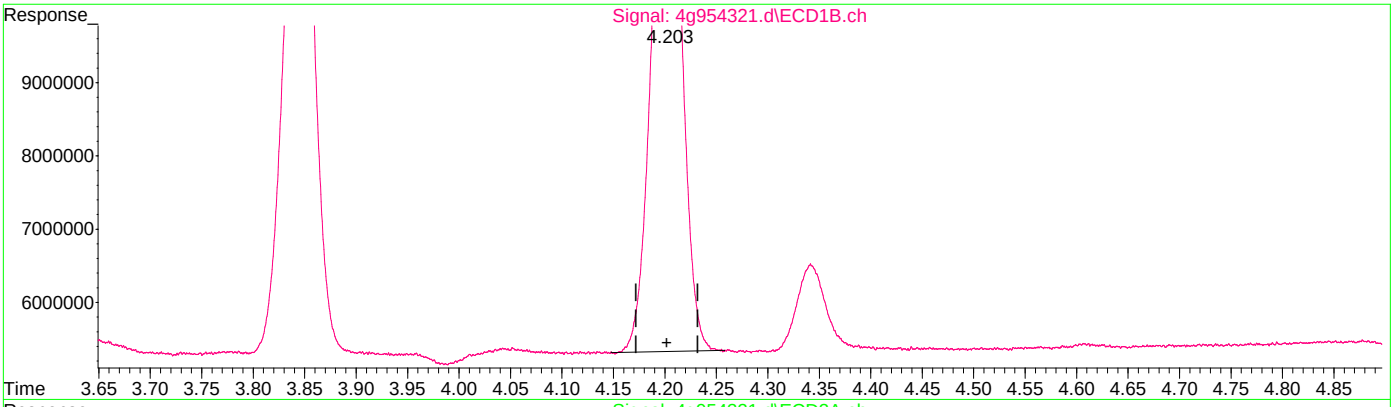
(+) = Expected Retention Time
4pst2585.m Wed Nov 07 19:57:00 2018

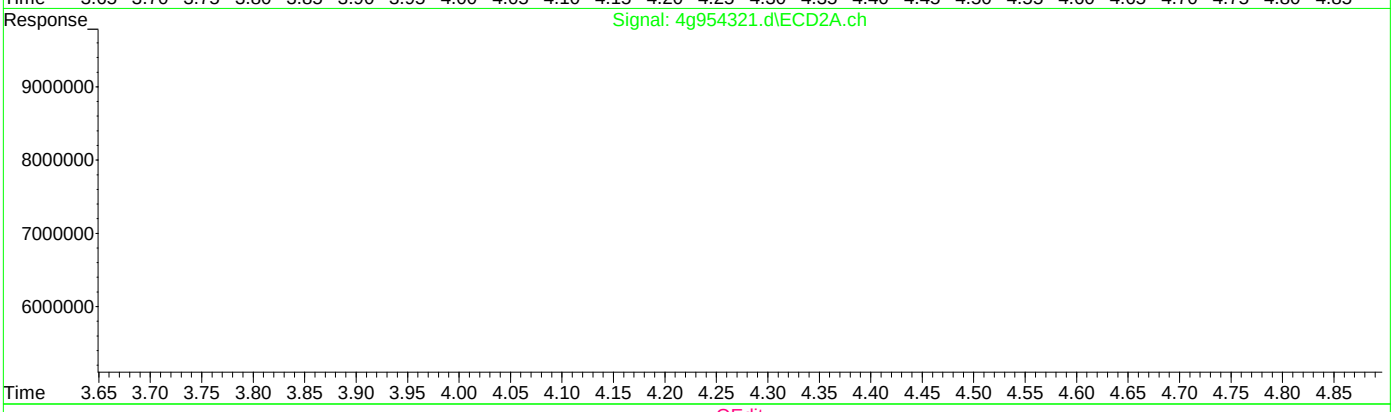
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954321.d
Signal(s) : Signal #1: ECD1B.ch  Signal #2: ECD2A.ch
Acq On    :  7 Nov 2018  11:32 am
Operator  : mailisih
Sample    : op16424-bs1
Misc      : op16424,g4g2589,300,,,2,1
ALS Vial  : 8   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:44:54 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title  : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```





QEdit

(9) Aldrin (MB)

4.203min 19.004 PPB m

response 165989609

(9) Aldrin #2 (MB)

5.080min 16.900 PPB

response 1662656155

(+) = Expected Retention Time

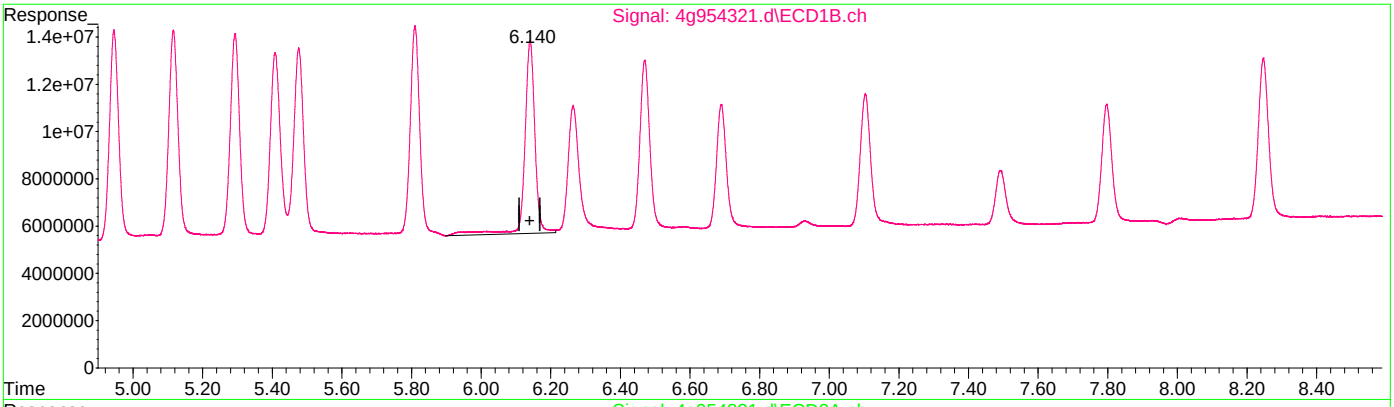
4pst2585.m Wed Nov 07 19:57:44 2018

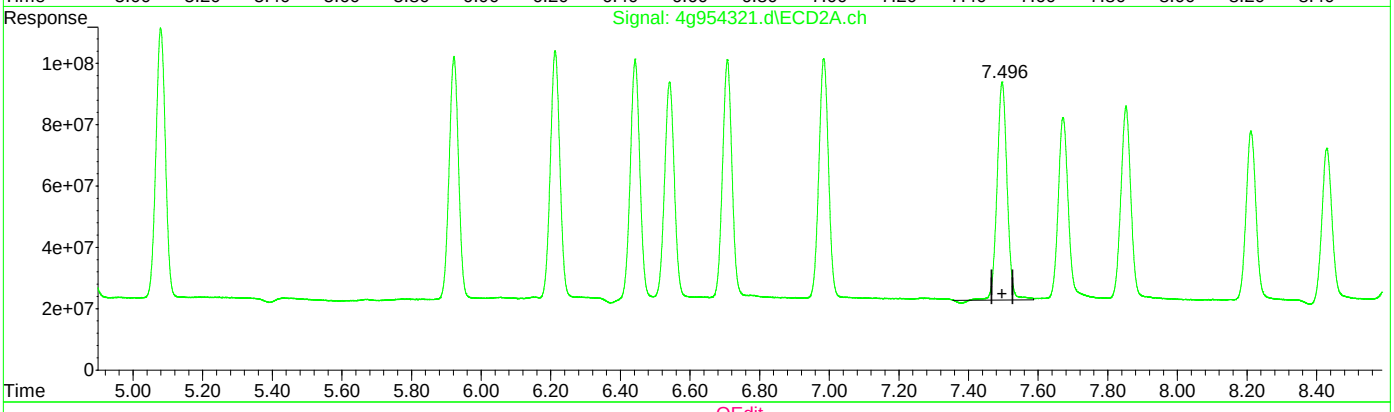
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954321.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 11:32 am
Operator : mailisih
Sample : op16424-bs1
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:44:54 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(17) Endrin (MA)

6.141min 21.772 PPB

response 167384104

(17) Endrin #2 (MA)

7.497min 17.444 PPB

response 1426361390

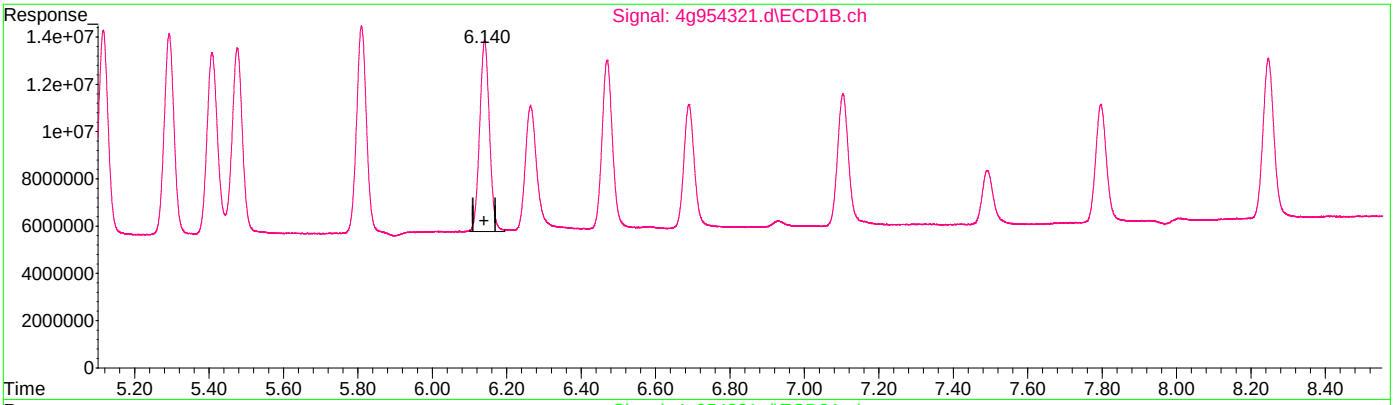
(+) = Expected Retention Time
4pst2585.m Wed Nov 07 19:58:10 2018

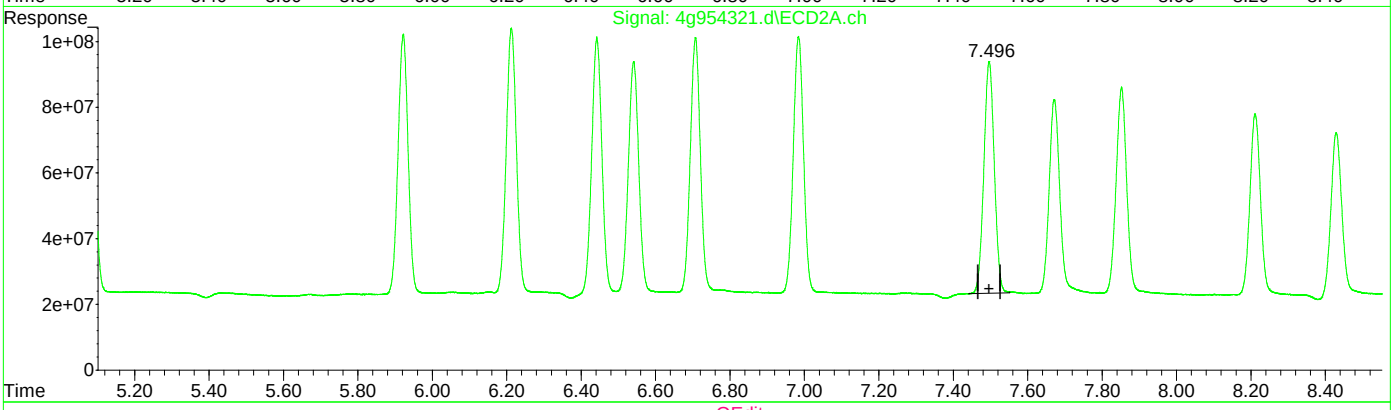
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954321.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 11:32 am
Operator : mailisih
Sample : op16424-bs1
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:44:54 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(17) Endrin (MA)

6.140min 19.247 PPB m

response 147973078

(17) Endrin #2 (MA)

7.496min 16.844 PPB m

response 1377301771

(+) = Expected Retention Time
4pst2585.m Wed Nov 07 19:58:35 2018

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954322.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 11:49 am
Operator : mailisih
Sample : op16424-bsd
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:01:12 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.732	1.920	393.9E6	3717.6E6	50.000	50.000
27) I	1-bromo-2...	1.732	1.920	393.9E6	3717.6E6	50.000	50.000
33) I	1-bromo-2...	1.732	1.920	393.9E6	3717.6E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.446	2.850	345.7E6	3144.7E6	47.178	45.918
Spiked Amount		40.000 Range	30 - 150	Recovery	=	117.94%	114.80%
26) SA	Decachlor...	10.062	11.967	404.1E6	1988.0E6	45.613	44.795
Spiked Amount		40.000		Recovery	=	114.03%	111.99%
	Target Compounds						
3)	hexachlor...	2.826	3.401	350.3E6	2305.8E6	31.626	30.663
4) A	alpha-BHC	2.980	3.562	328.6E6	3201.9E6	34.066	32.730
5) MA	gamma-BHC	3.306	4.014	295.3E6	2752.9E6	32.893	31.732
6) MA	Heptachlor	3.845	4.613	297.6E6	2909.2E6	33.120	30.642
7) B	beta-BHC	3.390	4.103	134.9E6	1223.2E6	33.306	29.730
8) B	delta-BHC	3.593	4.515	253.6E6	2452.2E6	33.583	30.490
9) MB	Aldrin	4.202	5.080	294.0E6	2703.2E6	33.075	31.291
10)	alachlor	4.342	4.878	29090514	310.0E6	27.211	26.771
11) B	Heptachlo...	4.945	5.921	278.0E6	2407.9E6	32.632	31.321
12) B	gamma-Chl...	5.115	6.212	282.3E6	2560.7E6	33.434	31.602
13) B	alpha-Chl...	5.292	6.442	272.3E6	2453.2E6	31.044	31.637
14) A	Endosulfan I	5.475	6.541	266.4E6	2318.6E6	32.918	32.370
15) B	4,4'-DDE	5.408	6.706	261.7E6	2533.8E6	32.873	33.647
16) MA	Dieldrin	5.809	6.984	283.0E6	2545.6E6	32.650	33.693
17) MA	Endrin	6.140	7.496	252.9E6	2350.3E6	32.323	32.733
18) A	4,4'-DDD	6.263	7.671	199.2E6	2058.5E6	32.861	33.116
19) B	Endosulfa...	6.469	7.852	233.3E6	2101.0E6	29.886	30.011
20) MA	4,4'-DDT	6.689	8.211	187.5E6	1914.4E6	36.856	34.856
21) B	Endrin Al...	7.102	8.429	188.7E6	1654.7E6	30.117	30.652
22) B	Endosulfa...	7.797	8.904	164.3E6	1489.3E6	29.365	30.450
23) A	Methoxychlor	7.491	9.461	76413624	928.9E6	30.231	31.013
25) B	Endrin Ke...	8.247	9.873	244.2E6	1851.0E6	34.383	32.137

SemiQuant Compounds - Not Calibrated on this Instrument

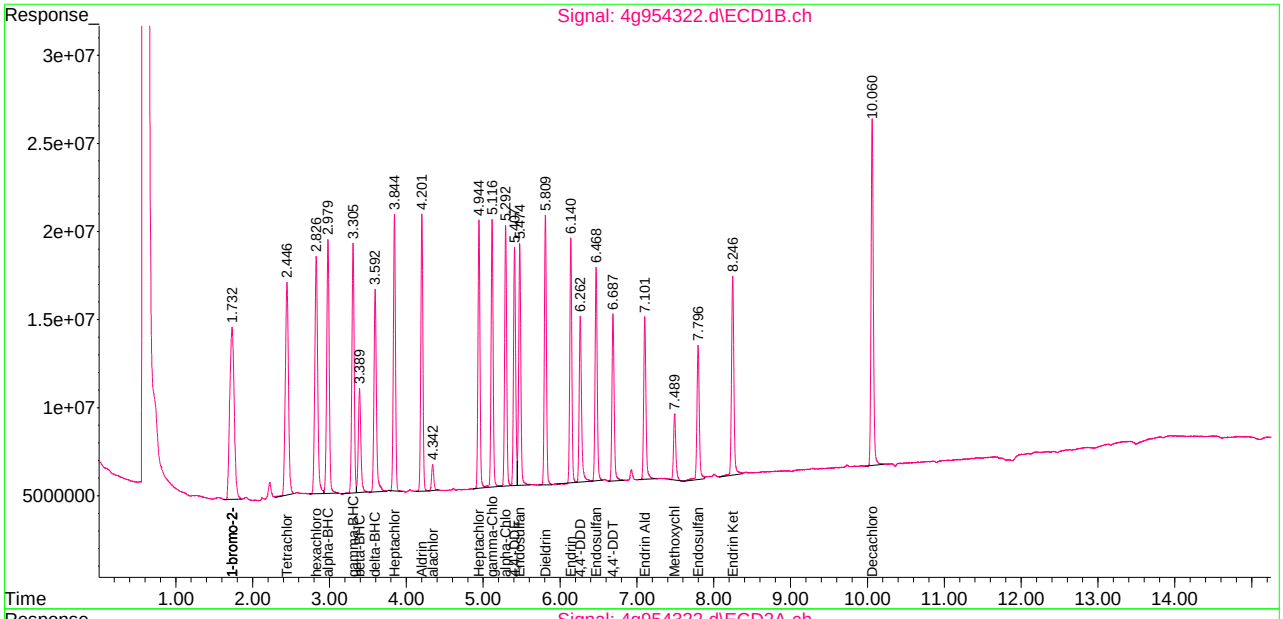
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

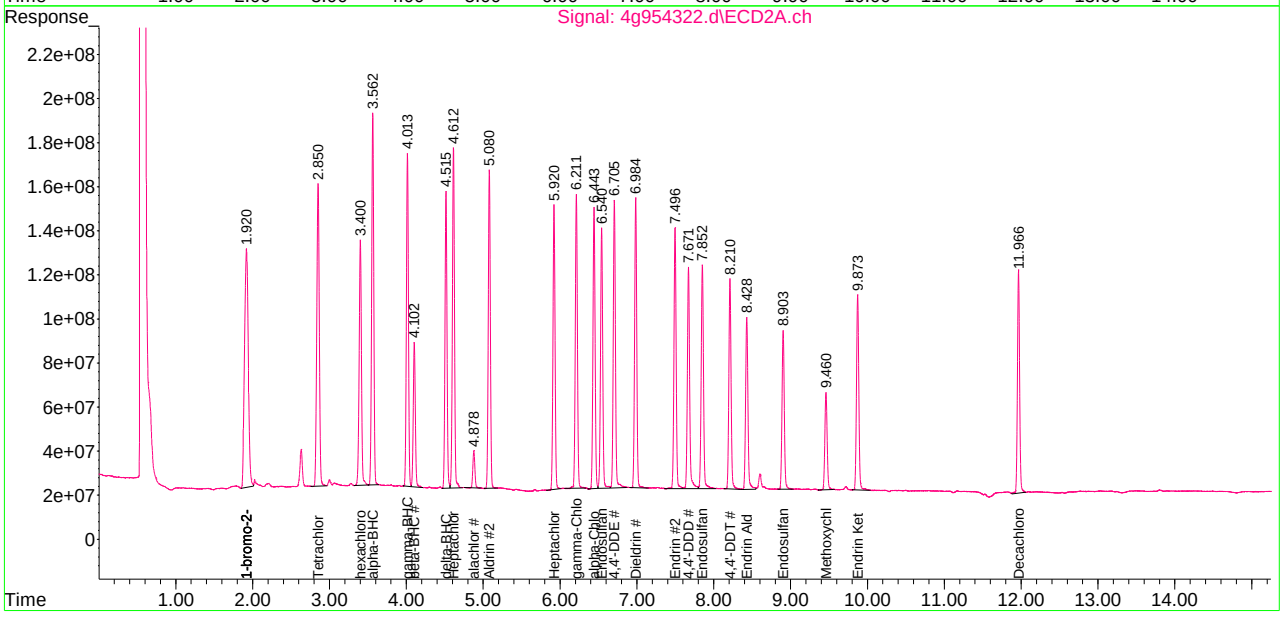
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954322.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 11:49 am
Operator : mailisih
Sample : op16424-bsd
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:01:12 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations
APPROVED
(compounds with "m" flag)
Gwendolyn Burns
11/06/18 09:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954229.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 9:00 am
Operator : mailisih
Sample : ddt
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 15:33:00 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 14:43:12 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.741	1.927	378.5E6	3174.2E6	50.000	50.000
27) I	1-bromo-2...	1.741	1.927	378.5E6	3174.2E6	50.000	50.000
33) I	1-bromo-2...	1.741	1.927	378.5E6	3174.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.451	2.855	308.0E6	2542.6E6	43.740m	43.483
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	109.35%	108.71%
26) SA	Decachlor...	10.074	11.973	345.9E6	1636.4E6	40.632	43.186
	Spiked Amount 40.000			Recovery	=	101.58%	107.97%
	Target Compounds						
15) B	4,4'-DDE	5.415	6.714	10816525	109.6E6	1.414m	1.704
17) MA	Endrin	6.152	7.503	352.9E6	2736.8E6	46.933	44.644
18) A	4,4'-DDD	6.274	7.679	19664898	149.8E6	3.376	2.823
20) MA	4,4'-DDT	6.699	8.218	500.0E6	4358.4E6	102.289	92.941
25) B	Endrin Ke...	8.260	9.881	3936784	32565004	0.577m	0.662m

SemiQuant Compounds - Not Calibrated on this Instrument

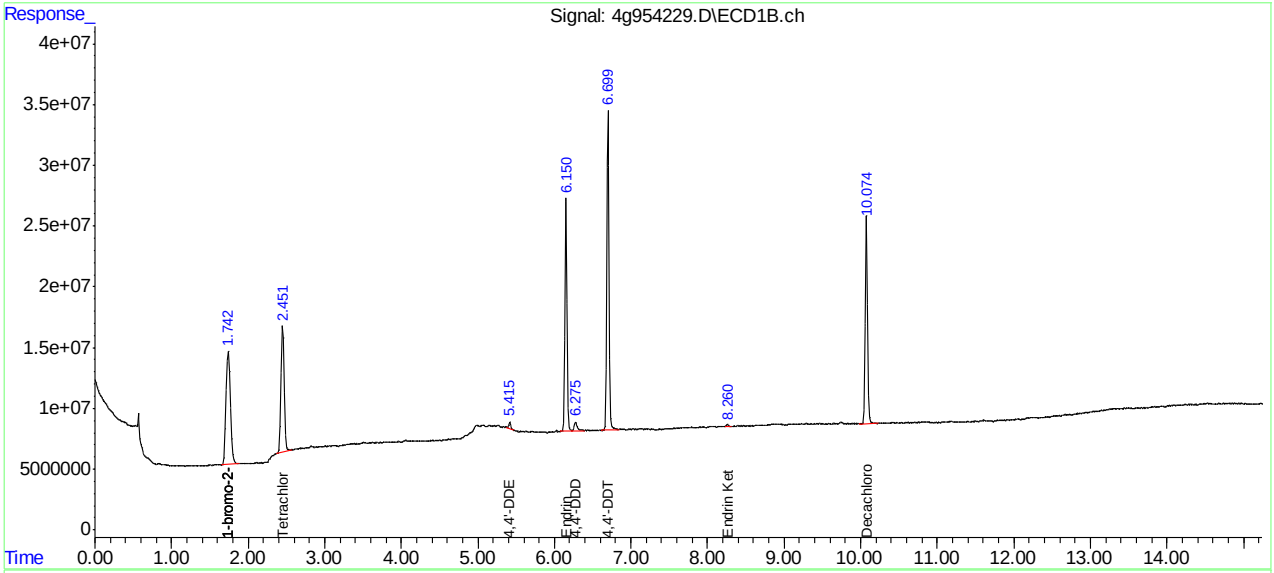
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

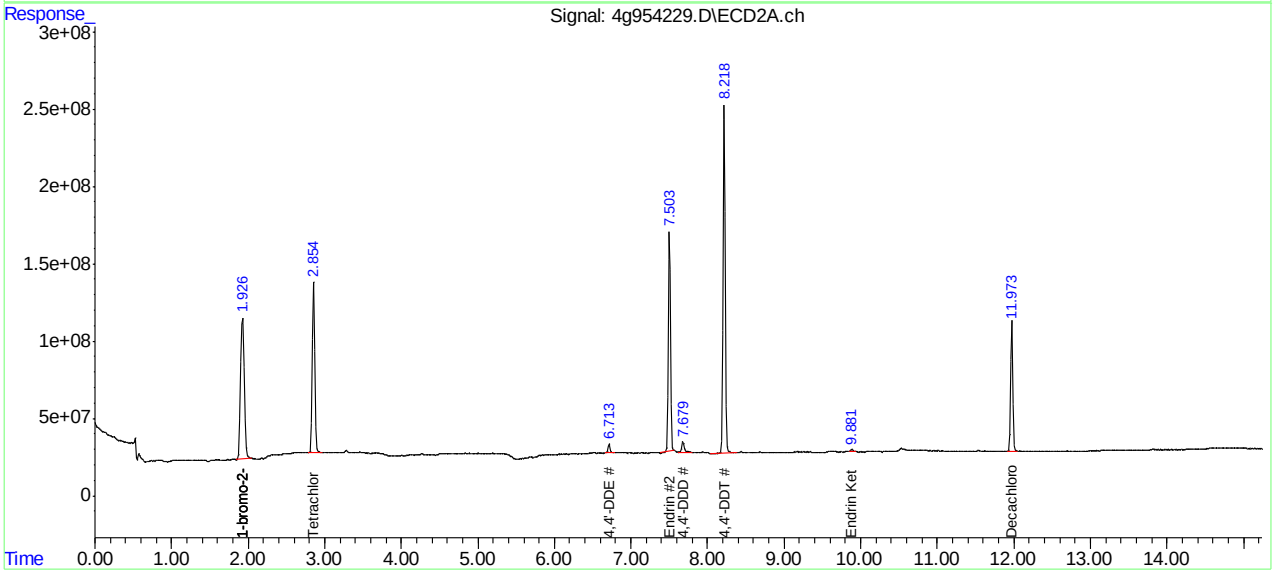
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954229.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 9:00 am
Operator : mailisih
Sample : ddt
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 15:33:00 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 14:43:12 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G2585-DDT	**Method:**	SW846 8081B
Lab FileID:	4G954229.D	**Analyst approved:**	11/05/18 15:33 Rebecca Krug
Injection Time:	11/05/18 09:00	**Supervisor approved:**	11/06/18 09:35 Gwendolyn Burns

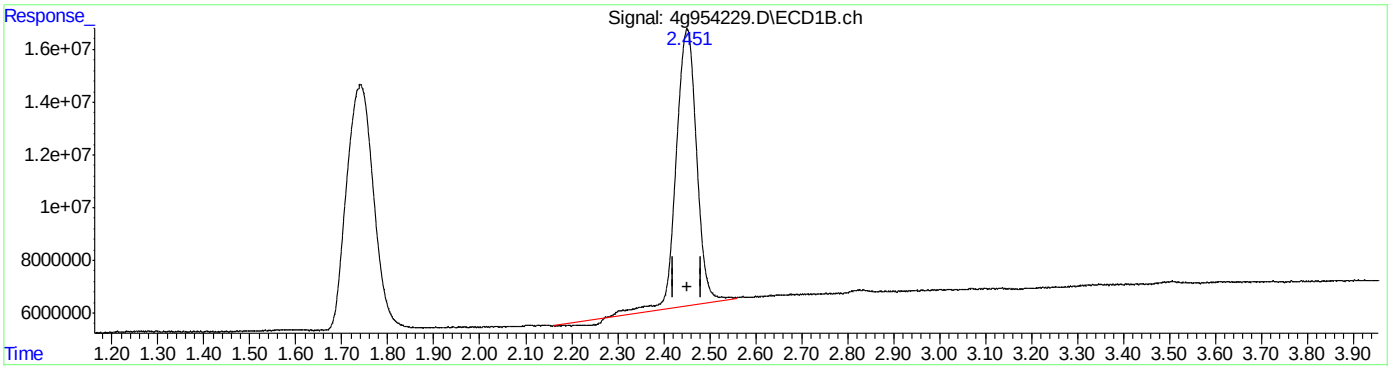
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.45	Poorly defined baseline
4,4'-DDE	72-55-9	1	5.41	Poorly defined baseline
Endrin ketone	53494-70-5	1	8.26	Poorly defined baseline
Endrin ketone	53494-70-5	2	9.88	Poorly defined baseline

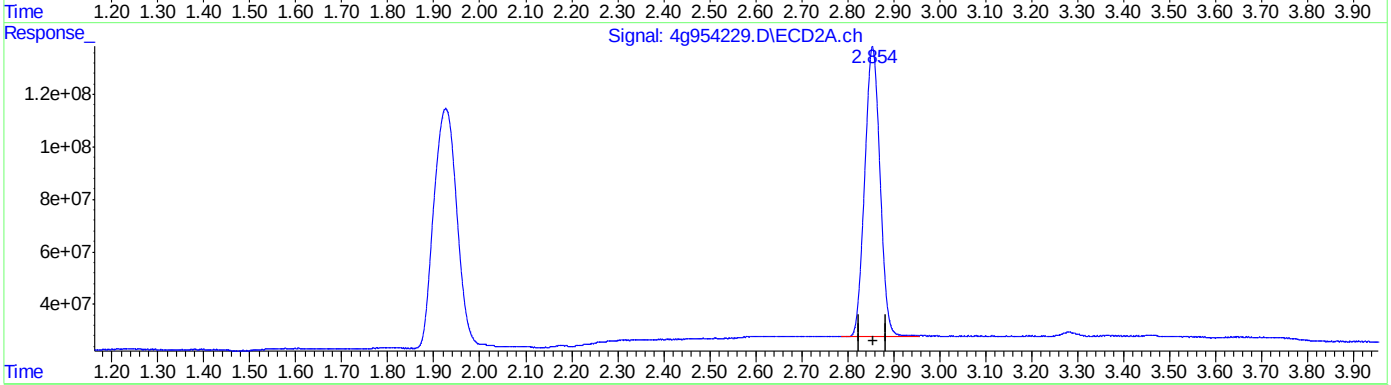
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954229.D
Signal(s) : Signal #1: ECD1B.ch  Signal #2: ECD2A.ch
Acq On    :  5 Nov 2018   9:00 am
Operator  : mailisih
Sample    : ddt
Misc      : op16395,g4g2585,300,,,2,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 15:32:13 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title  : PEST/PCB
QLast Update : Mon Nov 05 14:43:12 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

2.451min 45.558 PPB

response 320832984

(2) Tetrachloro-m-xylene #2 (SAB)

2.855min 43.483 PPB

response 2542595389

(+) = Expected Retention Time

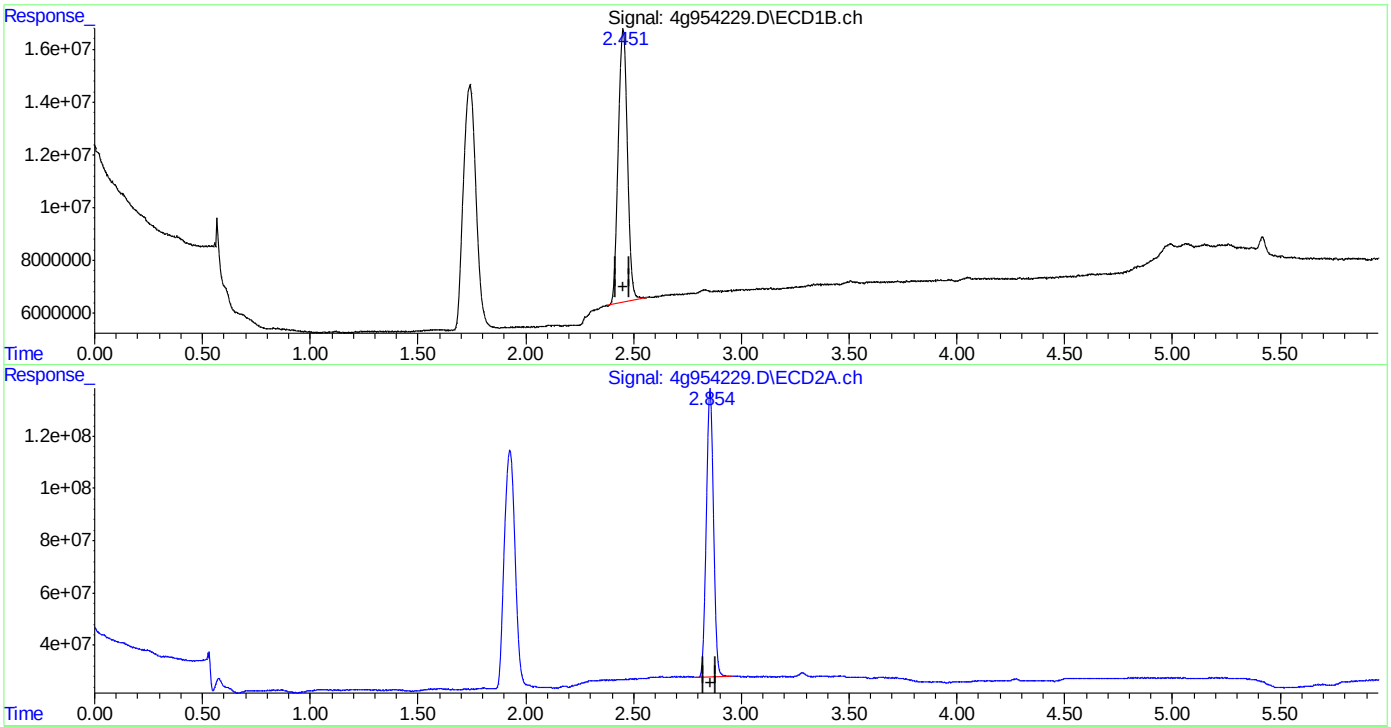
4PST2585.M Mon Nov 05 15:32:22 2018 RPT1

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954229.D
Signal(s) : Signal #1: ECD1B.ch  Signal #2: ECD2A.ch
Acq On    :  5 Nov 2018   9:00 am
Operator  : mailisih
Sample    : ddt
Misc      : op16395,g4g2585,300,,,2,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 15:32:13 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title  : PEST/PCB
QLast Update : Mon Nov 05 14:43:12 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```



QEdit

(2) Tetrachloro-m-xylene (SAB)

2.451min 43.740 PPB m

response 308026011

(2) Tetrachloro-m-xylene #2 (SAB)

2.855min 43.483 PPB

response 2542595389

(+) = Expected Retention Time

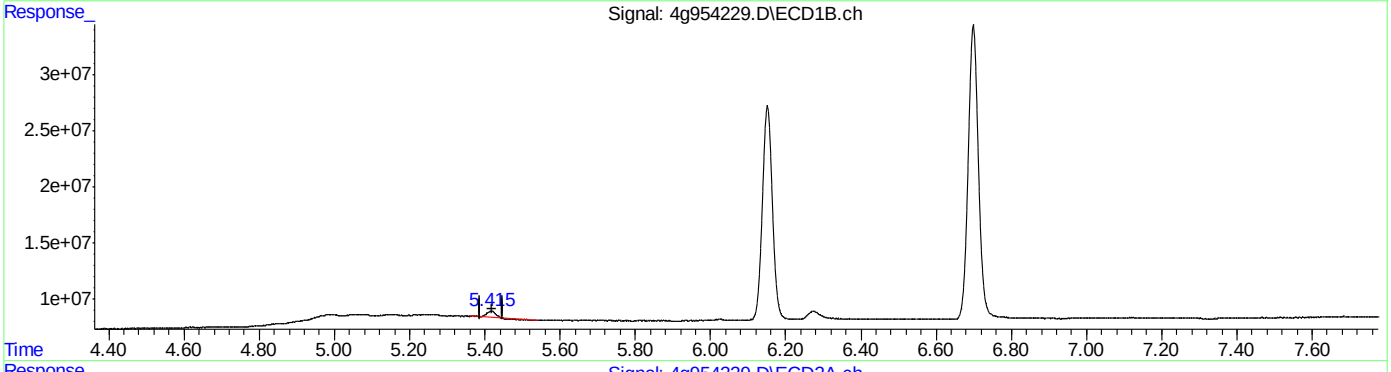
4PST2585.M Mon Nov 05 15:32:28 2018 RPT1

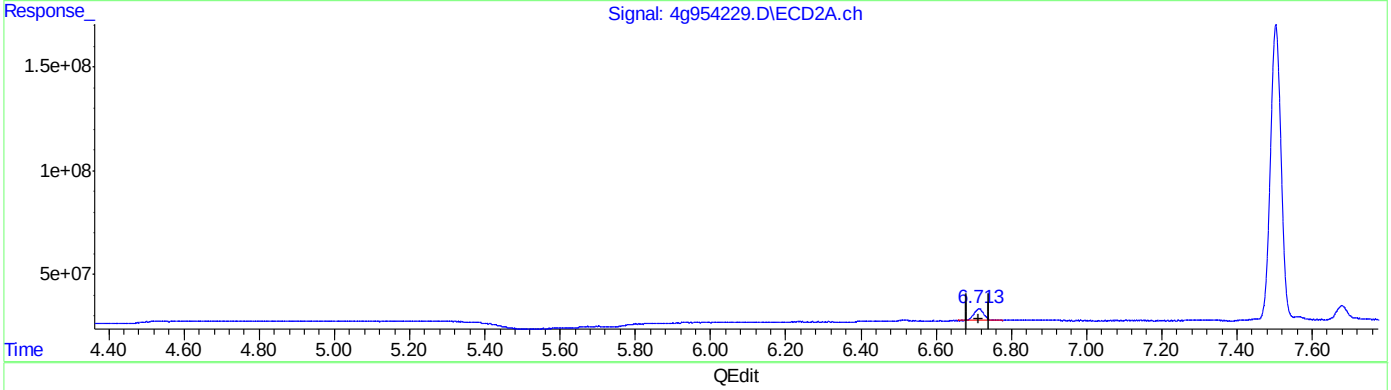
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954229.D
Signal(s) : Signal #1: ECD1B.ch  Signal #2: ECD2A.ch
Acq On    :  5 Nov 2018   9:00 am
Operator  : mailisih
Sample    : ddt
Misc      : op16395,g4g2585,300,,,2,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 15:32:13 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title  : PEST/PCB
QLast Update : Mon Nov 05 14:43:12 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```





QEdit

(15) 4,4'-DDE (B)
5.416min 1.057 PPB
response 8087662

(15) 4,4'-DDE #2 (B)
6.714min 1.704 PPB
response 109559223

(+) = Expected Retention Time

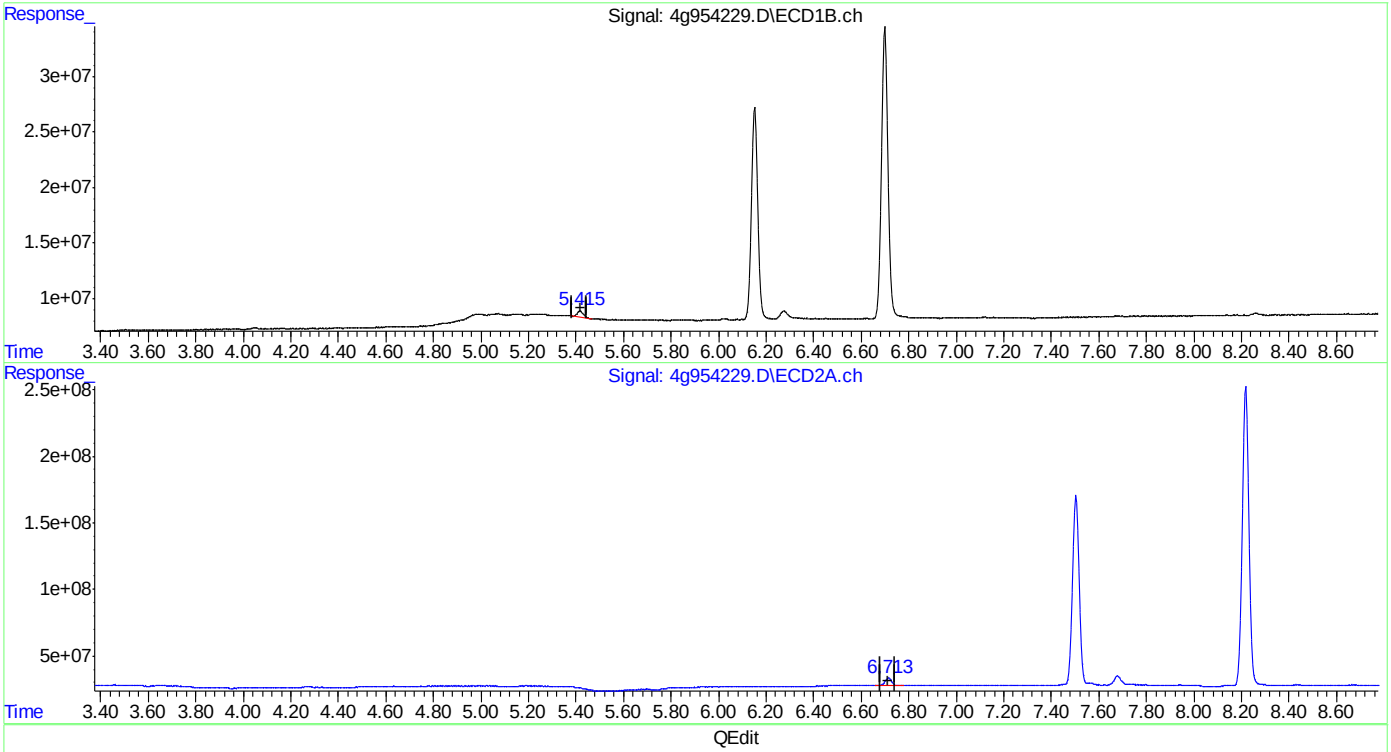
4PST2585.M Mon Nov 05 15:32:34 2018 RPT1

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954229.D
Signal(s) : Signal #1: ECD1B.ch  Signal #2: ECD2A.ch
Acq On    :  5 Nov 2018   9:00 am
Operator  : mailisih
Sample    : ddt
Misc      : op16395,g4g2585,300,,,2,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 15:32:13 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title  : PEST/PCB
QLast Update : Mon Nov 05 14:43:12 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```



QEdit

(15) 4,4'-DDE (B)
5.415min 1.414 PPB m
response 10816525

(15) 4,4'-DDE #2 (B)
6.714min 1.704 PPB
response 109559223

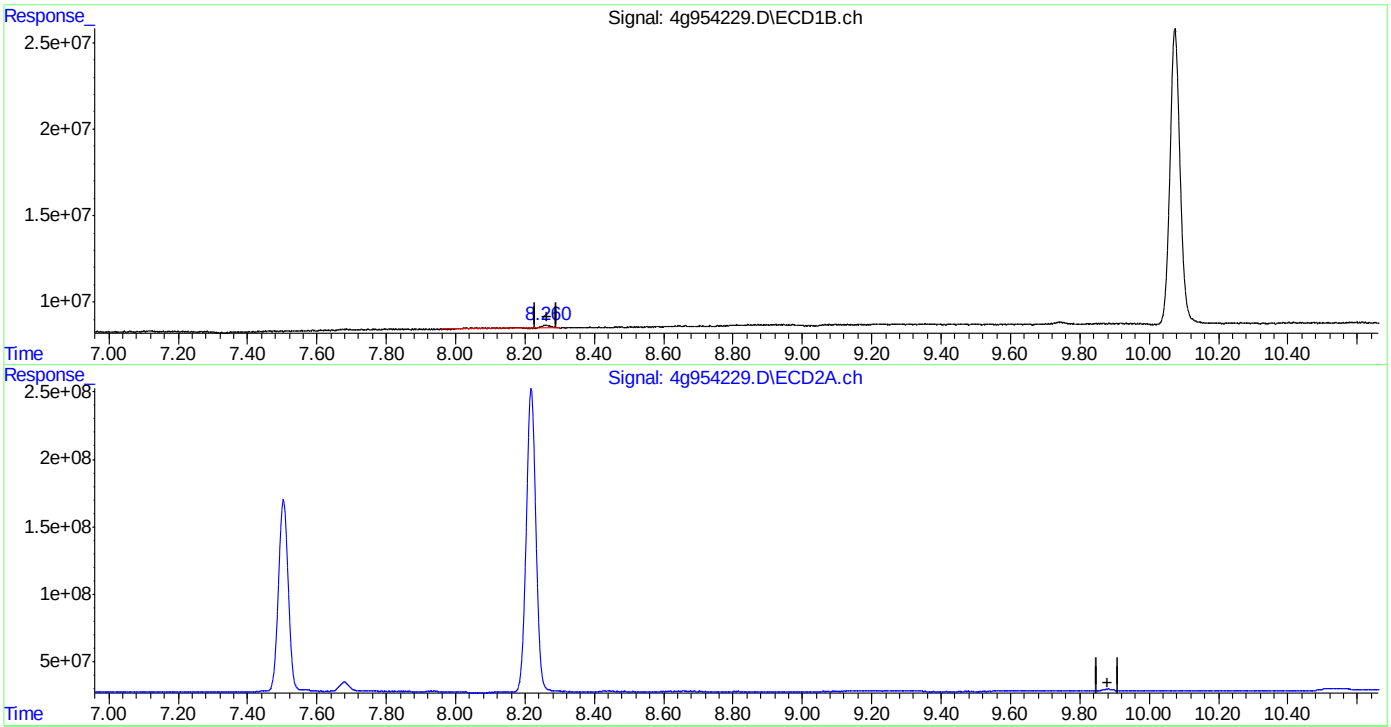
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954229.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 9:00 am
Operator : mailisih
Sample : ddt
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 15:32:13 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 14:43:12 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(25) Endrin Ketone (B)
8.261min 1.164 PPB
response 7941957

(25) Endrin Ketone #2 (B)
0.000min 0.000 PPB
response 0

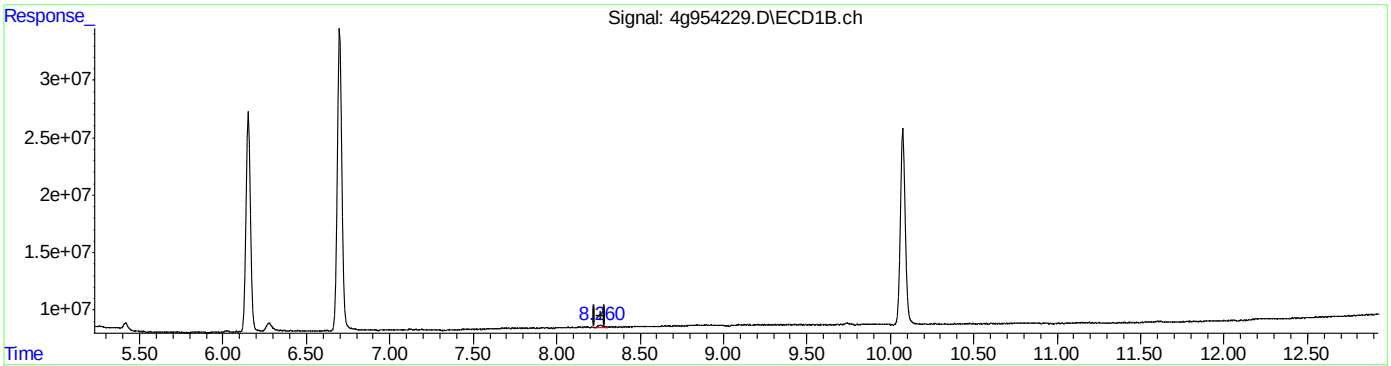
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 15:32:55 2018 RPT1

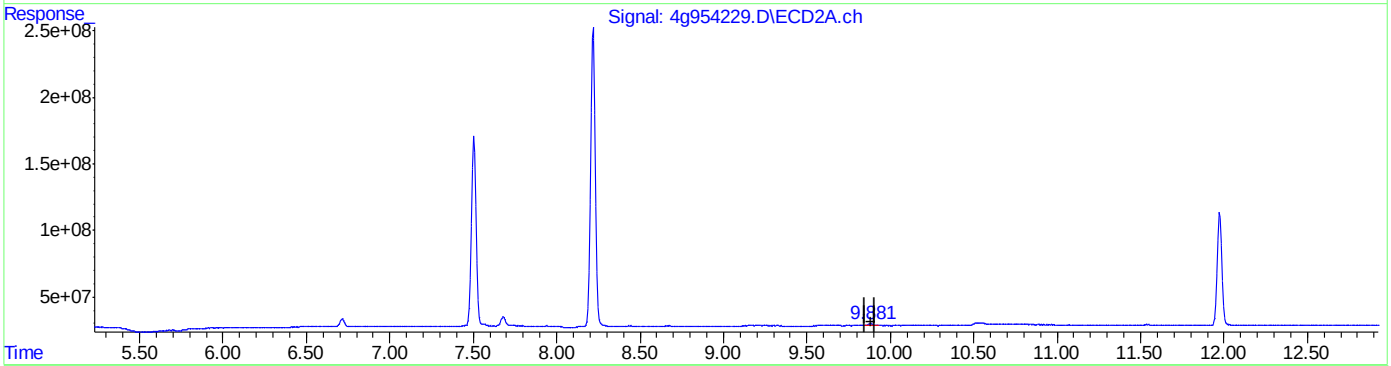
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954229.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 9:00 am
Operator : mailisih
Sample : ddt
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 15:32:13 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 14:43:12 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(25) Endrin Ketone (B)
8.260min 0.577 PPB m
response 3936784

(25) Endrin Ketone #2 (B)
9.881min 0.662 PPB m
response 32565004

(+) = Expected Retention Time
4PST2585.M Mon Nov 05 15:33:02 2018 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
11/09/18 11:37

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954315.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 9:31 am
Operator : mailisih
Sample : ddt
Misc : op16422,g4g2589,1000,,,5,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:23:07 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:03:52 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.726	1.914	431.9E6	3751.0E6	50.000	50.000
27) I	1-bromo-2...	1.726	1.914	431.9E6	3751.0E6	50.000	50.000
33) I	1-bromo-2...	1.726	1.914	431.9E6	3751.0E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.443	2.850	346.6E6	2969.1E6	43.140m	42.969
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 107.85%	107.42%
26) SA	Decachlor...	10.059	11.965	402.6E6	1944.3E6	41.446	43.422
	Spiked Amount	40.000			Recovery	= 103.61%	108.56%
	Target Compounds						
15) B	4,4'-DDE	5.407	6.706	14492506	125.3E6	1.660	1.649
17) MA	Endrin	6.138	7.496	424.3E6	3349.1E6	49.465	46.229
18) A	4,4'-DDD	6.261	7.671	23759773	196.3E6	3.575	3.130
20) MA	4,4'-DDT	6.686	8.210	621.3E6	5185.0E6	111.387	93.565
21) B	Endrin Al...	7.107	8.427	630996	13222194	0.092m	0.243m#
25) B	Endrin Ke...	8.245	9.872	4712811	38992492	0.605m	0.671
	SemiQuant Compounds - Not Calibrated on this Instrument						

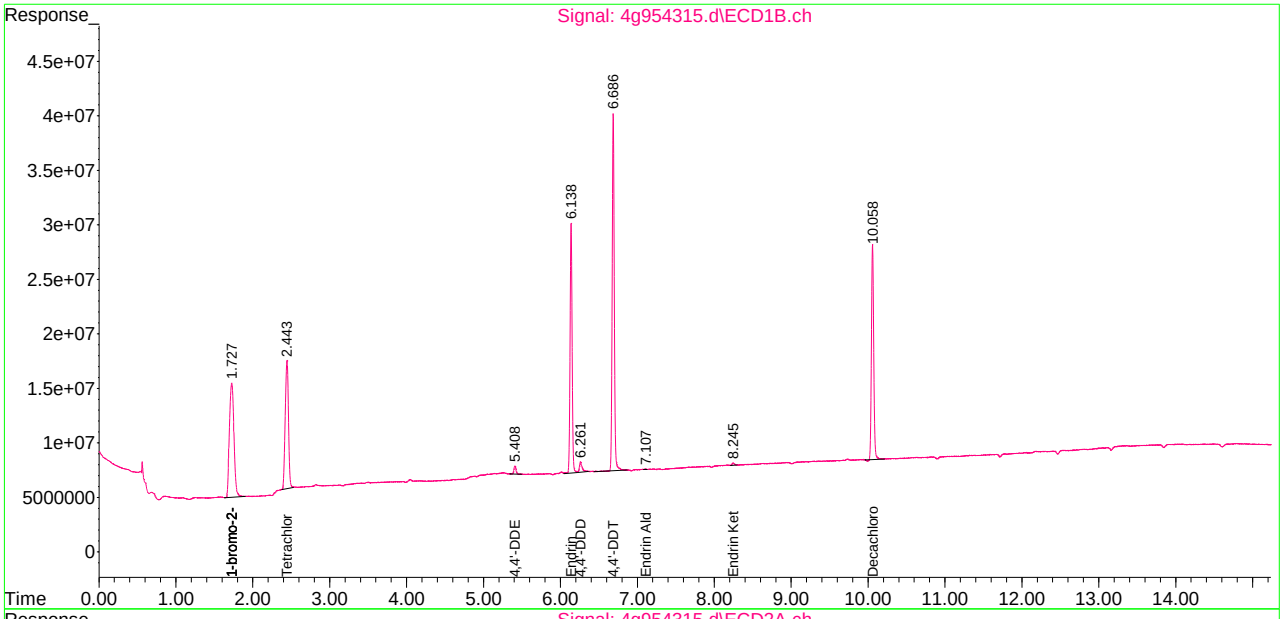
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

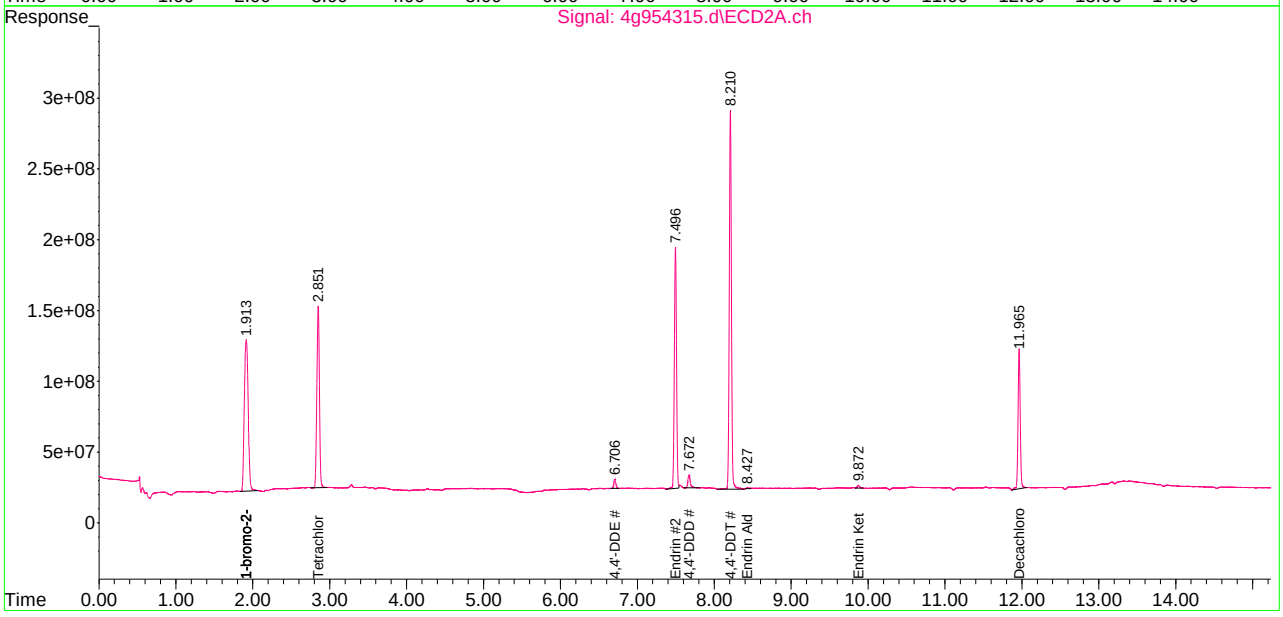
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954315.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 9:31 am
Operator : mailisih
Sample : ddt
Misc : op16422,g4g2589,1000,,,5,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:23:07 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:03:52 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G2589-DDT	**Method:**	SW846 8081B
Lab FileID:	4G954315.D	**Analyst approved:**	11/07/18 20:40 Christopher Changho
Injection Time:	11/07/18 09:31	**Supervisor approved:**	11/09/18 11:37 Gwendolyn Burns

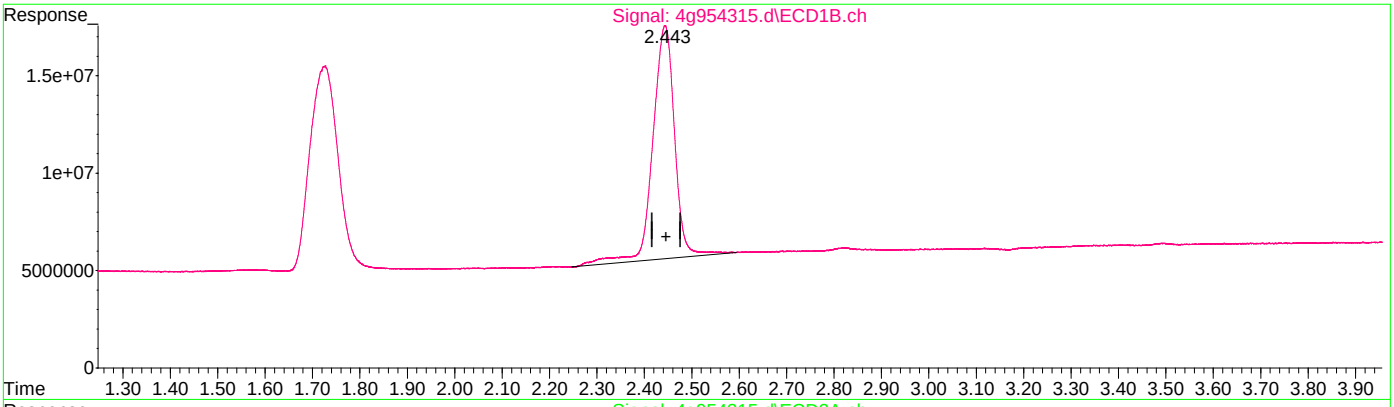
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.44	Poorly defined baseline
Endrin aldehyde	7421-93-4	1	7.11	Missed peak
Endrin ketone	53494-70-5	1	8.25	Poorly defined baseline
Endrin aldehyde	7421-93-4	2	8.43	Missed peak

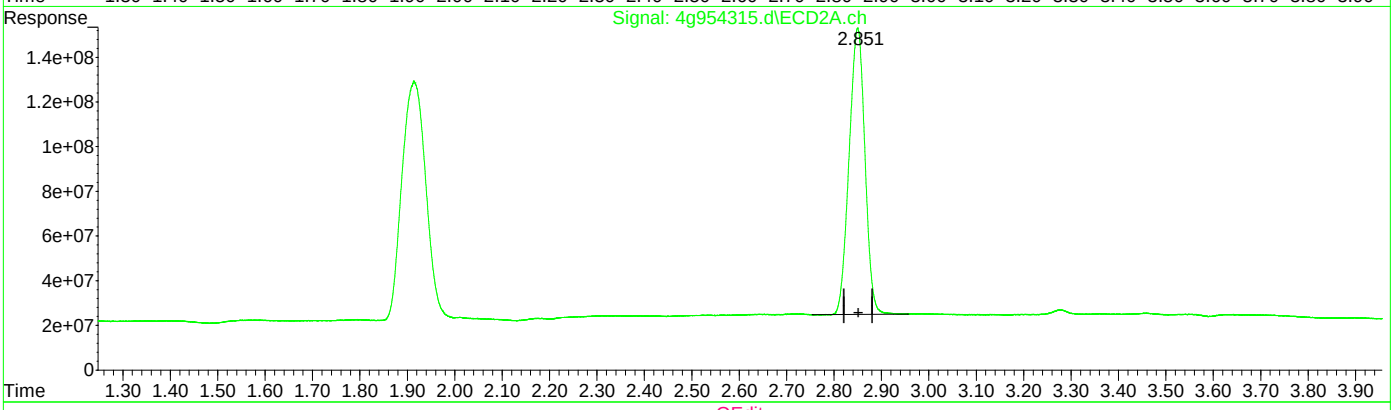
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954315.d
Signal(s) : Signal #1: ECD1B.ch  Signal #2: ECD2A.ch
Acq On    :  7 Nov 2018   9:31 am
Operator  : mailisih
Sample    : ddt
Misc      : op16422,g4g2589,1000,,,5,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:20:01 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title  : PEST/PCB
QLast Update : Wed Nov 07 19:03:52 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.      : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

2.444min 47.830 PPB

response 384326199

(2) Tetrachloro-m-xylene #2 (SAB)

2.850min 42.969 PPB

response 2969094899

(+) = Expected Retention Time

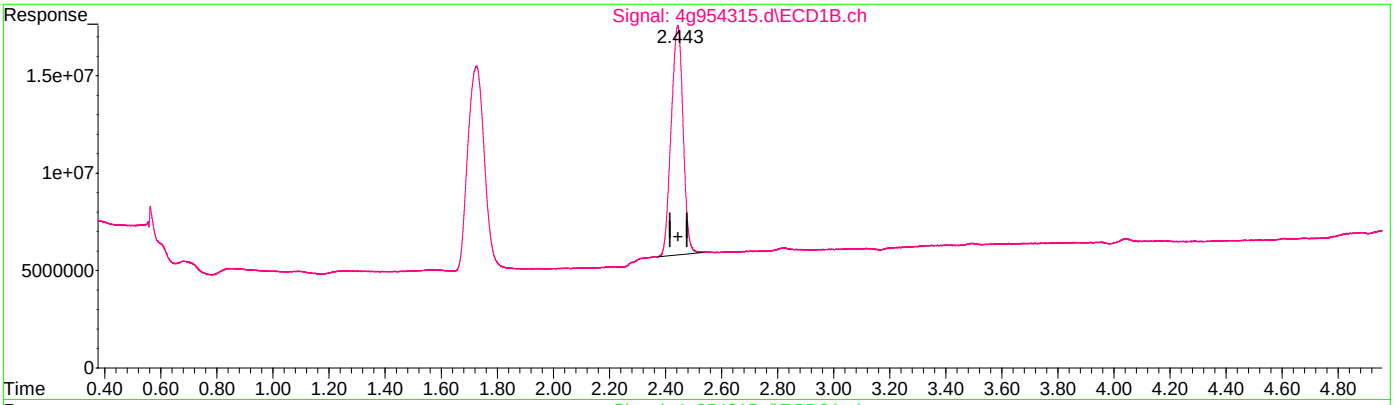
4pst2585.m Wed Nov 07 19:21:20 2018

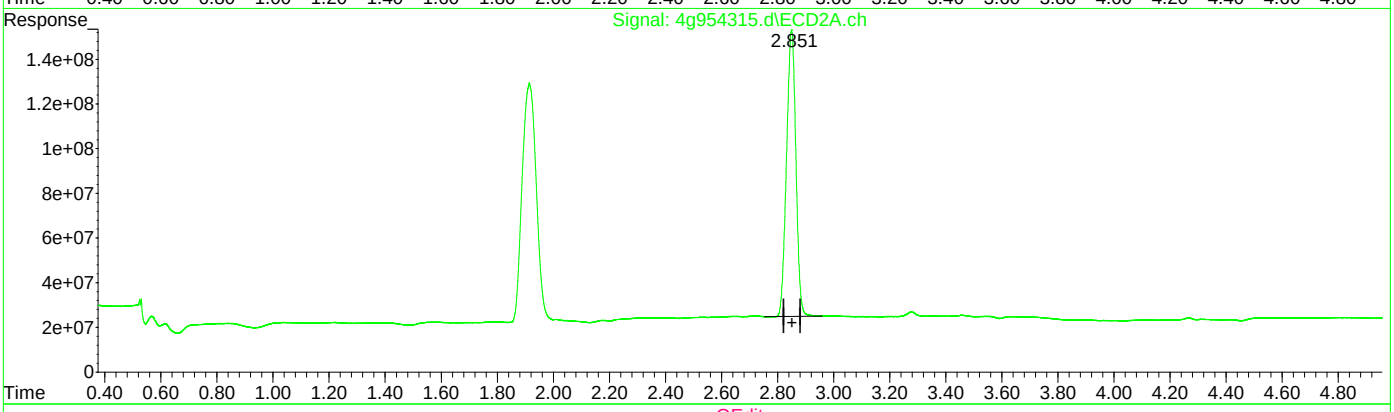
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954315.d
Signal(s) : Signal #1: ECD1B.ch  Signal #2: ECD2A.ch
Acq On    :  7 Nov 2018   9:31 am
Operator  : mailisih
Sample    : ddt
Misc      : op16422,g4g2589,1000,,,5,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:20:01 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title  : PEST/PCB
QLast Update : Wed Nov 07 19:03:52 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.      : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

2.443min 43.140 PPB m

response 346638745

(2) Tetrachloro-m-xylene #2 (SAB)

2.850min 42.969 PPB

response 2969094899

(+) = Expected Retention Time

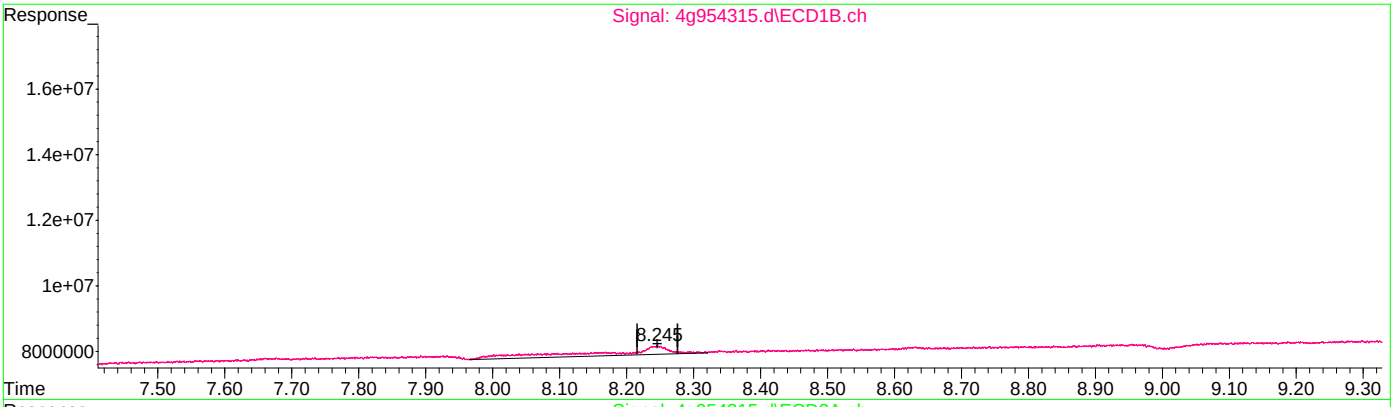
4pst2585.m Wed Nov 07 19:21:41 2018

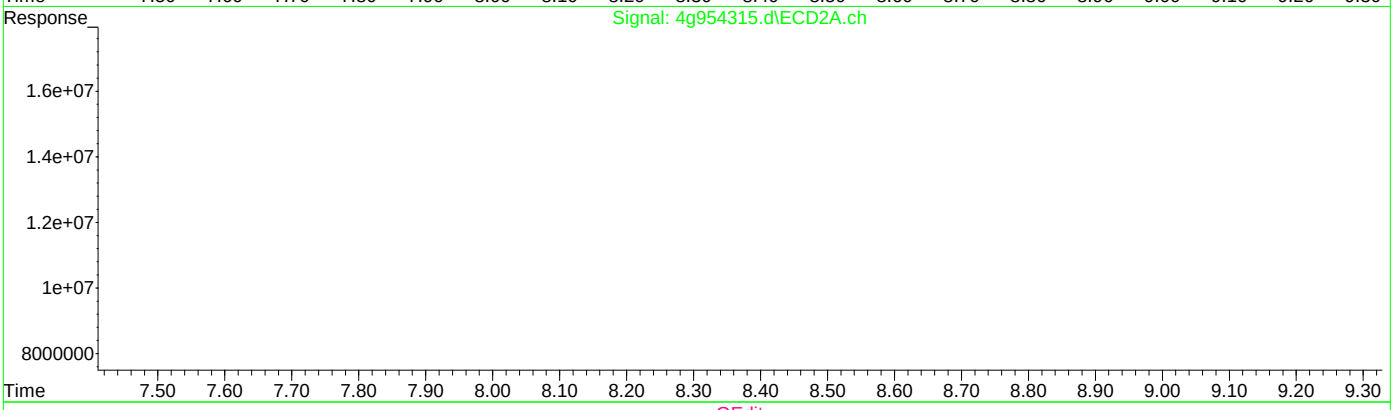
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954315.d
Signal(s) : Signal #1: ECD1B.ch  Signal #2: ECD2A.ch
Acq On    :  7 Nov 2018   9:31 am
Operator  : mailisih
Sample    : ddt
Misc      : op16422,g4g2589,1000,,,5,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:20:01 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title  : PEST/PCB
QLast Update : Wed Nov 07 19:03:52 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```





QEdit

(25) Endrin Ketone (B)

8.246min 2.394 PPB

response 18638275

(25) Endrin Ketone #2 (B)

9.872min 0.671 PPB

response 38992492

(+) = Expected Retention Time

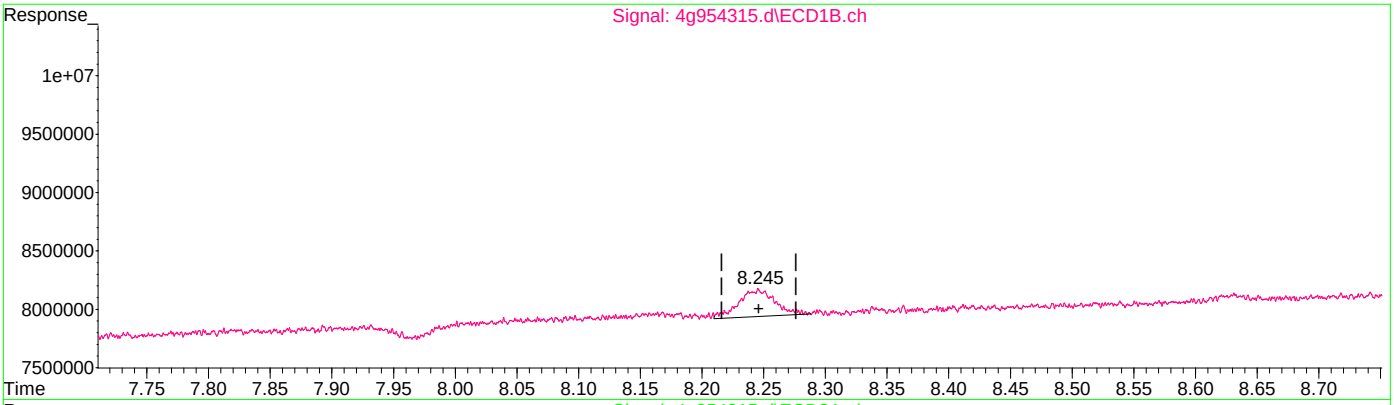
4pst2585.m Wed Nov 07 19:22:03 2018

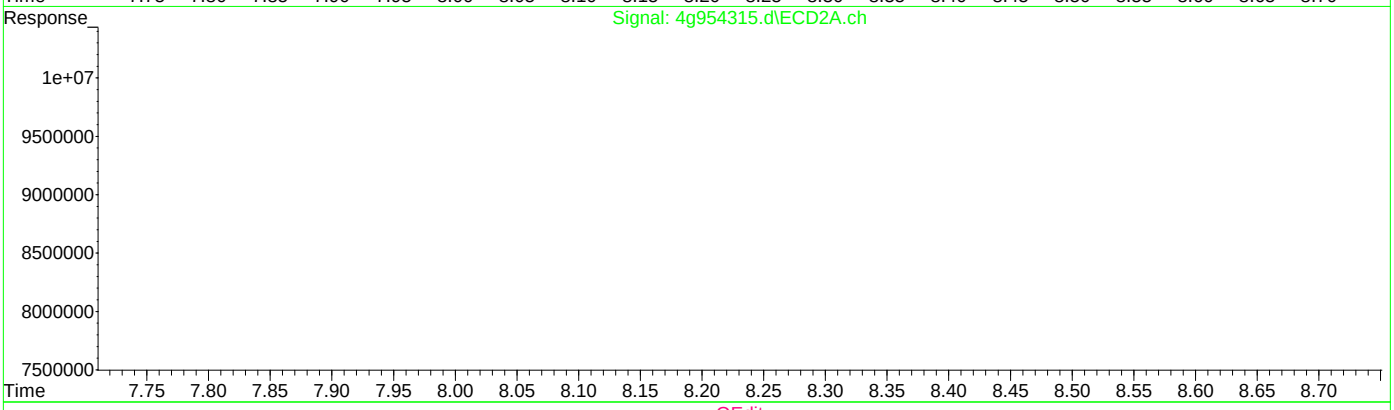
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954315.d
Signal(s) : Signal #1: ECD1B.ch  Signal #2: ECD2A.ch
Acq On    :  7 Nov 2018   9:31 am
Operator  : mailisih
Sample    : ddt
Misc      : op16422,g4g2589,1000,,,5,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:20:01 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title  : PEST/PCB
QLast Update : Wed Nov 07 19:03:52 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```





QEdit

(25) Endrin Ketone (B)

8.245min 0.605 PPB m

response 4712811

(25) Endrin Ketone #2 (B)

9.872min 0.671 PPB

response 38992492

(+) = Expected Retention Time

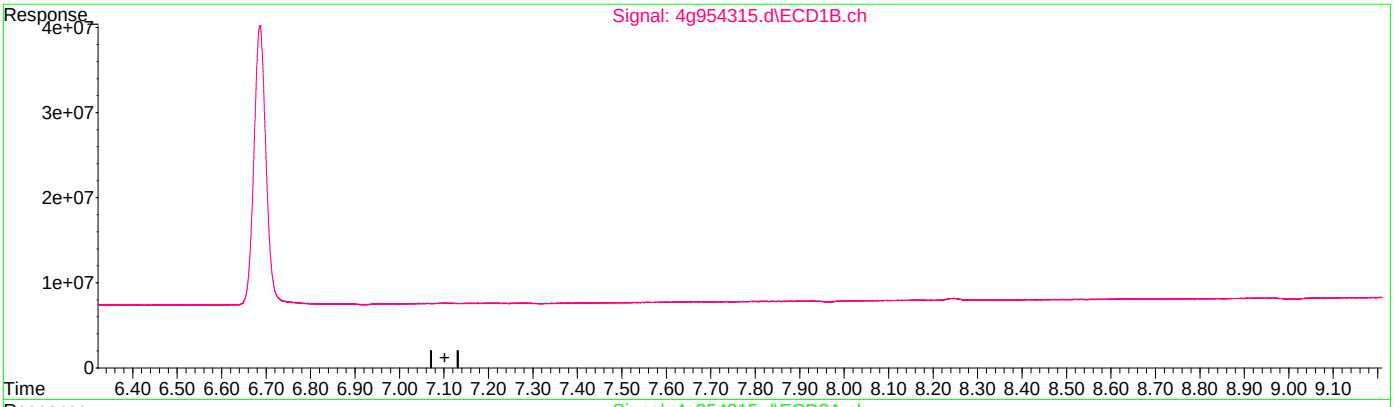
4pst2585.m Wed Nov 07 19:22:18 2018

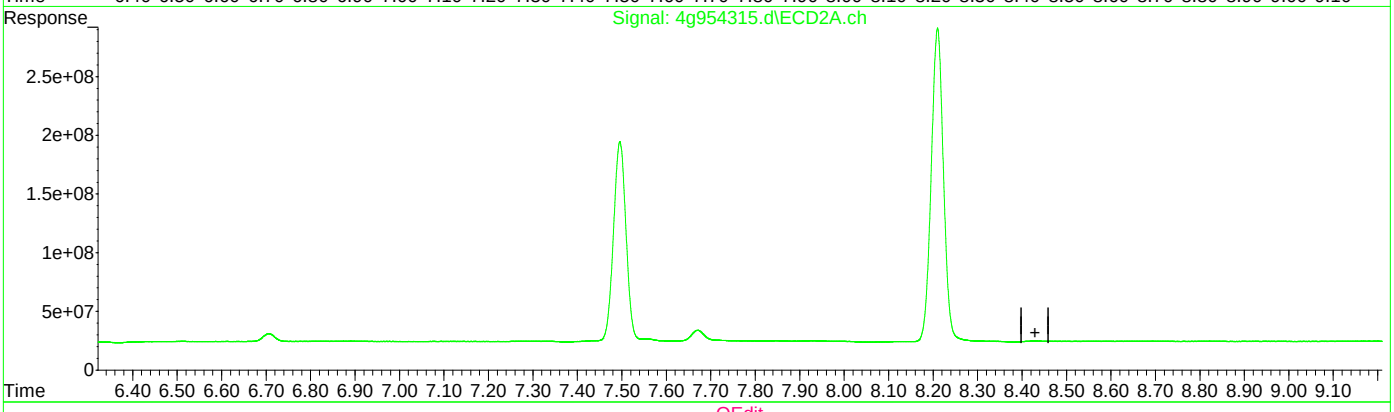
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954315.d
Signal(s) : Signal #1: ECD1B.ch  Signal #2: ECD2A.ch
Acq On    :  7 Nov 2018   9:31 am
Operator  : mailisih
Sample    : ddt
Misc      : op16422,g4g2589,1000,,,5,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:20:01 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title  : PEST/PCB
QLast Update : Wed Nov 07 19:03:52 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.      : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```





QEdit

(21) Endrin Aldehyde (B)

0.000min 0.000 PPB

response 0

(21) Endrin Aldehyde #2 (B)

0.000min 0.000 PPB

response 0

(+) = Expected Retention Time

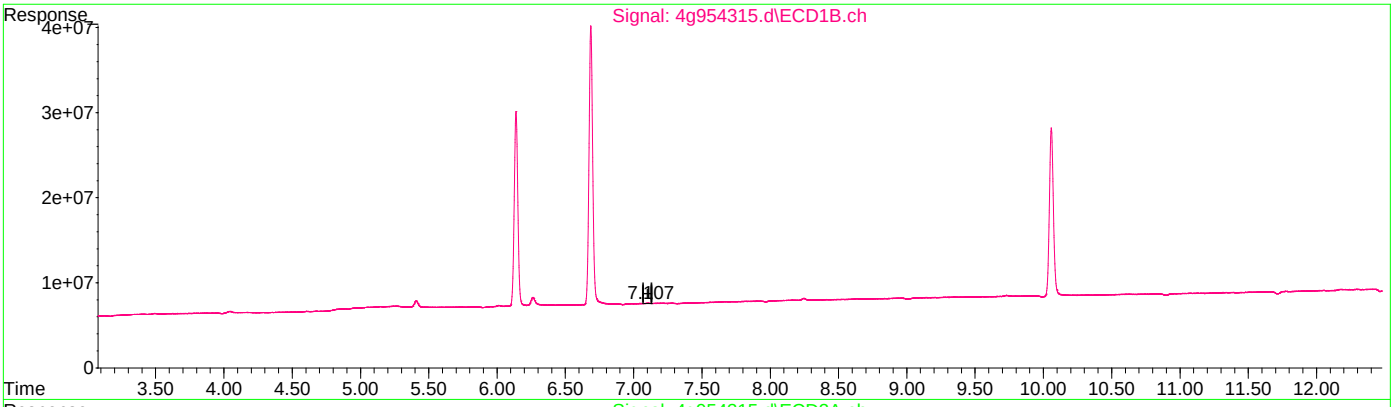
4pst2585.m Wed Nov 07 19:22:43 2018

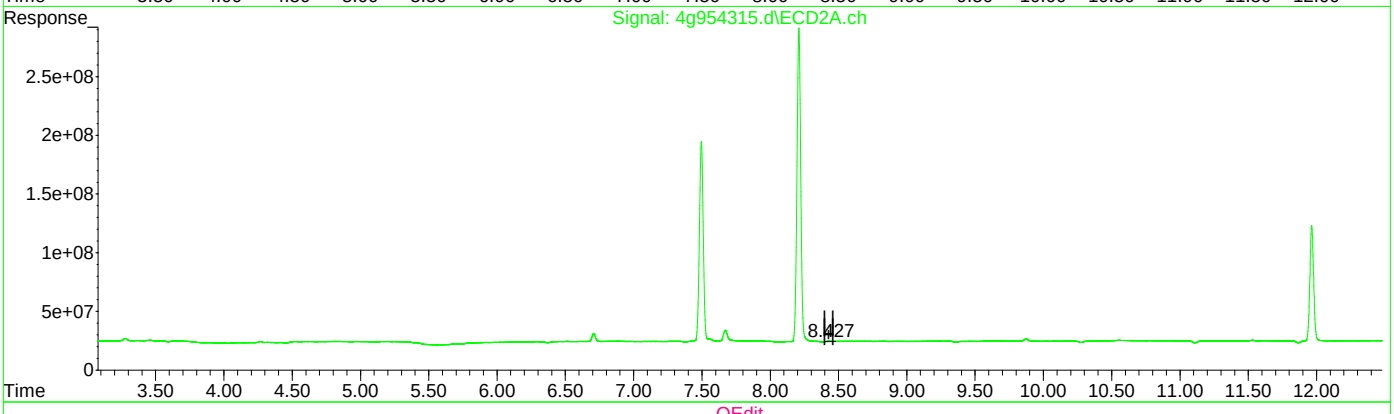
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954315.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 9:31 am
Operator : mailisih
Sample : ddt
Misc : op16422,g4g2589,1000,,,5,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:20:01 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:03:52 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(21) Endrin Aldehyde (B)

7.107min 0.092 PPB m

response 630996

(21) Endrin Aldehyde #2 (B)

8.427min 0.243 PPB m

response 13222194

(+) = Expected Retention Time
4pst2585.m Wed Nov 07 19:23:13 2018

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
11/06/18 09:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:00 am
Operator : rebeccak
Sample : ic2585-1
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:19:10 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

		Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
		Internal Standards						
1)	I	1-bromo-2...	1.743	1.927	324.5E6	3124.5E6	50.000	50.000
27)	I	1-bromo-2...	1.743	1.927	324.5E6	3124.5E6	50.000	50.000
33)	I	1-bromo-2...	1.743	1.927	324.5E6	3124.5E6	50.000	50.000
		System Monitoring Compounds						
2)	SAB	Tetrachlo...	2.455	2.854	6341700	60314708	0.925m	0.950
		Spiked Amount 40.000 Range 30 - 150 Recovery =					2.31%#	2.38%#
26)	SA	Decachlor...	10.088	11.979	9571410	41818017	1.383	1.417m
		Spiked Amount 40.000 Recovery =					3.46%	3.54%
		Target Compounds						
3)		hexachlor...	2.835	3.406	10206986	70206219	1.197m	0.941
4)	A	alpha-BHC	2.989	3.568	8343249	82011239	0.935m	0.852
5)	MA	gamma-BHC	3.314	4.021	7506224	73935240	0.886m	0.864
6)	MA	Heptachlor	3.856	4.620	7263238	75504939	0.907	0.825
7)	B	beta-BHC	3.406	4.109	3334665	43094083	0.843m	1.094 #
8)	B	delta-BHC	3.605	4.523	6647108	77506878	0.918m	0.969
9)	MB	Aldrin	4.216	5.089	7302685	71195469	0.908	0.854
11)	B	Heptachlo...	4.964	5.932	7892579	68164448	1.041	0.931m
12)	B	gamma-Chl...	5.134	6.225	7134645	76021823	0.930	1.014
13)	B	alpha-Chl...	5.312	6.455	9304034	72279208	1.218m	0.990
14)	A	Endosulfan I	5.494	6.553	6601313	62188832	0.941	0.930
15)	B	4,4'-DDE	5.424	6.717	6851154	66872986	1.021	0.930
16)	MA	Dieldrin	5.832	6.997	8311472	63199840	1.107m	0.916
17)	MA	Endrin	6.160	7.509	7664929	64141600	1.180	1.068
18)	A	4,4'-DDD	6.282	7.685	5952640	57007010	1.111m	1.156
19)	B	Endosulfa...	6.489	7.863	8104551	71898921	1.174	1.253m
20)	MA	4,4'-DDT	6.712	8.223	5258788	42757296	1.162	0.770 #
21)	B	Endrin Al...	7.127	8.445	6249028	49135331	1.127	1.125
22)	B	Endosulfa...	7.822	8.916	5822833	41451792	1.035	0.823
23)	A	Methoxychlor	7.511	9.472	2789582	28637715	1.218m	0.956m
24)		Mirex	7.689	9.821	7320433	43113036	1.333	1.003
25)	B	Endrin Ke...	8.272	9.886	6269963	53074637	0.956	0.970

SemiQuant Compounds - Not Calibrated on this Instrument

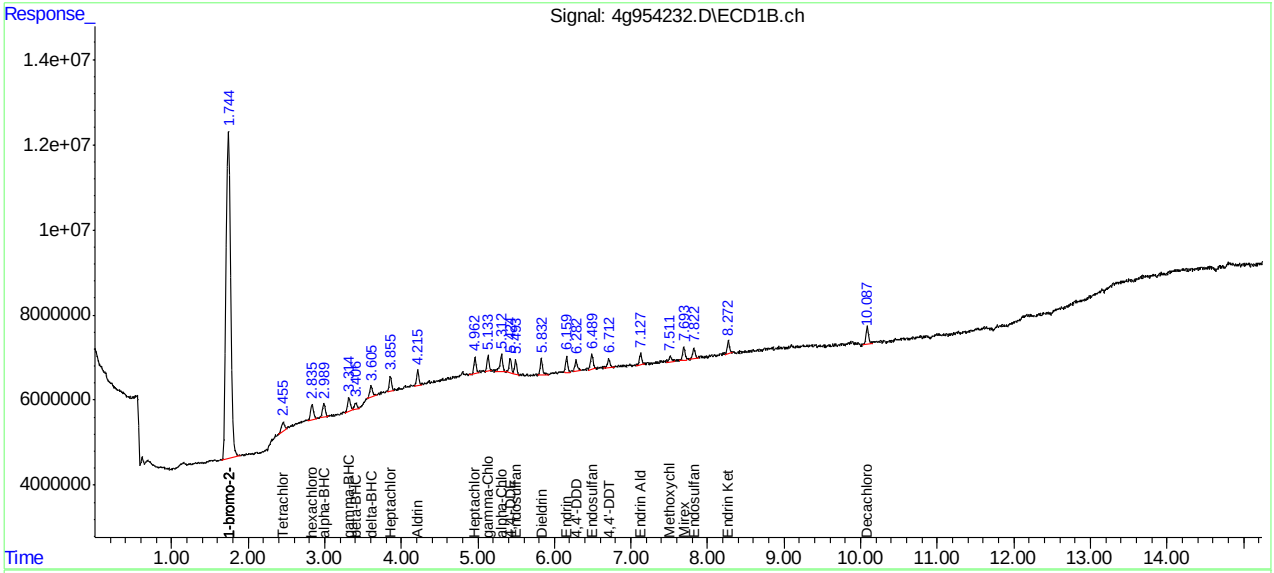
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

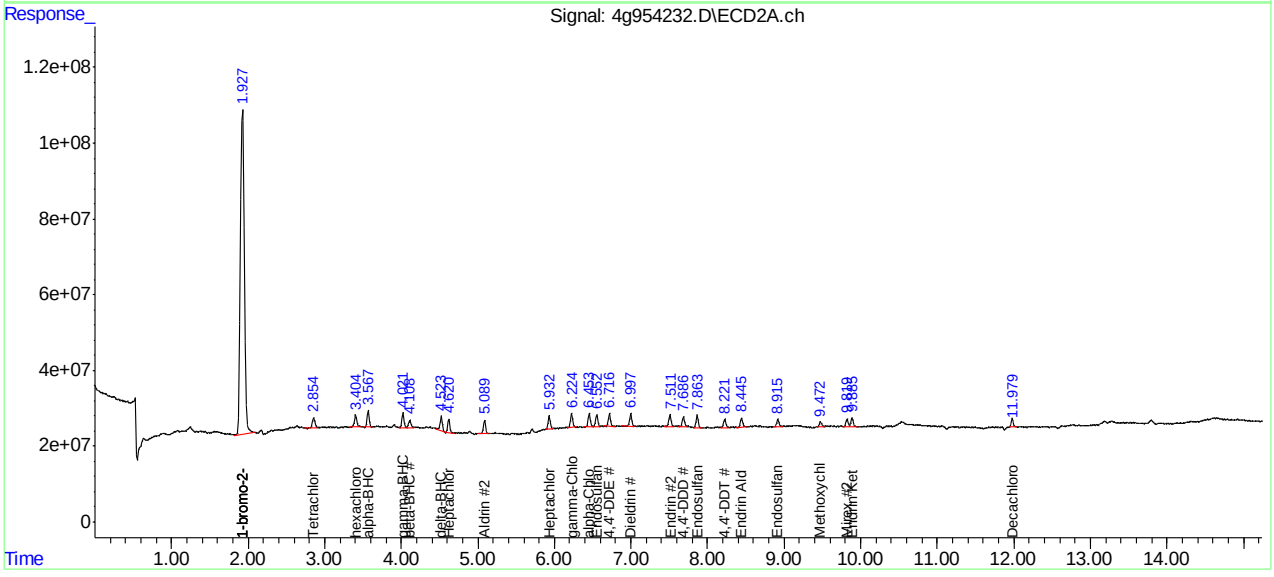
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:00 am
Operator : rebeccak
Sample : ic2585-1
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:19:10 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number: G4G2585-IC2585 **Method:** SW846 8081B
Lab FileID: 4G954232.D **Analyst approved:** 11/05/18 14:59 Rebecca Krug
Injection Time: 11/05/18 10:00 **Supervisor approved:** 11/06/18 09:35 Gwendolyn Burns

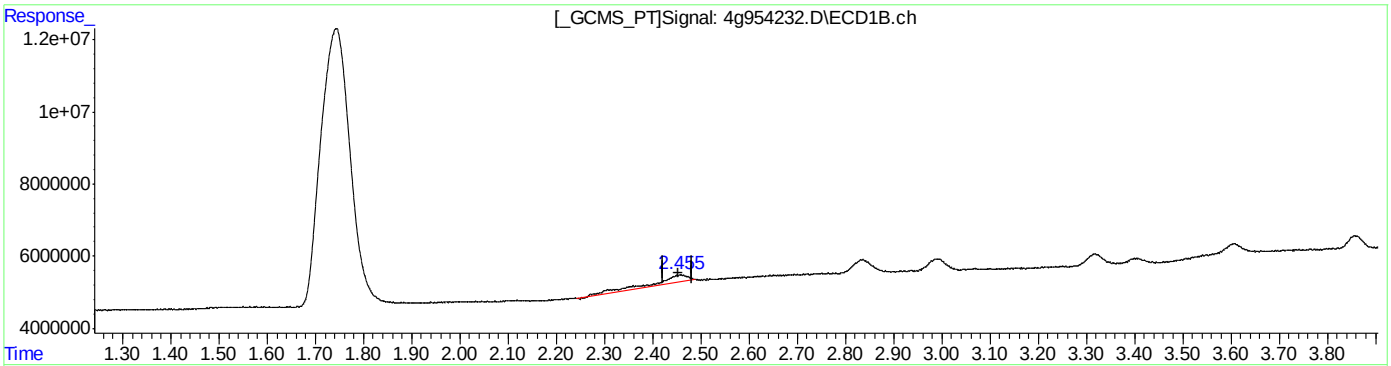
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.46	Poorly defined baseline
Hexachlorobenzene	118-74-1	1	2.84	Poorly defined baseline
alpha-BHC	319-84-6	1	2.99	Poorly defined baseline
gamma-BHC (Lindane)	58-89-9	1	3.31	Poorly defined baseline
beta-BHC	319-85-7	1	3.41	Poorly defined baseline
delta-BHC	319-86-8	1	3.61	Poorly defined baseline
alpha-Chlordane	5103-71-9	1	5.31	Poorly defined baseline
Dieldrin	60-57-1	1	5.83	Poorly defined baseline
Heptachlor epoxide	1024-57-3	2	5.93	Poorly defined baseline
4,4'-DDD	72-54-8	1	6.28	Poorly defined baseline
Methoxychlor	72-43-5	1	7.51	Poorly defined baseline
Endosulfan-II	33213-65-9	2	7.86	Poorly defined baseline
Methoxychlor	72-43-5	2	9.47	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	2	11.98	Poorly defined baseline

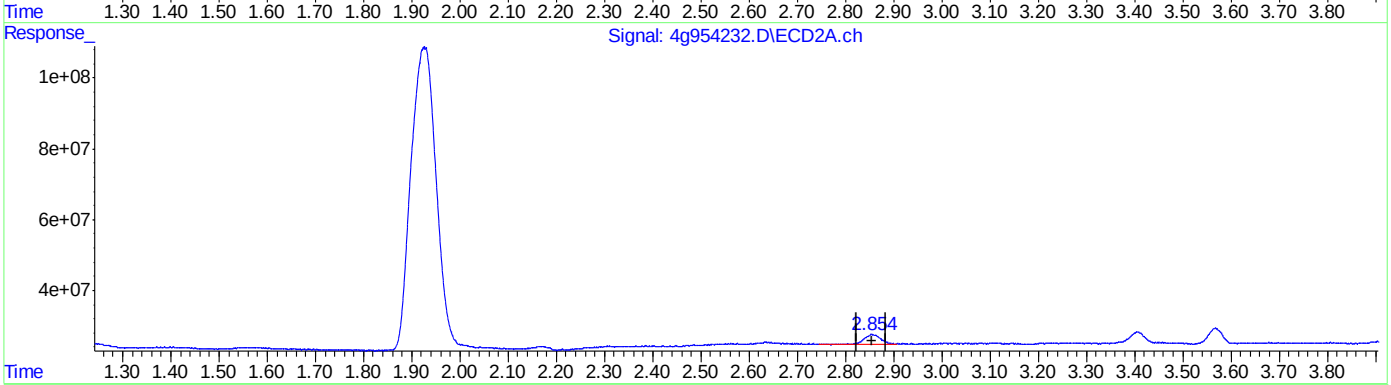
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch  Signal #2: ECD2A.ch
Acq On    :  5 Nov 2018  10:00 am
Operator  : rebeccak
Sample    : ic2585-1
Misc      : op16395,g4g2585,300,,,2,1
ALS Vial  : 11   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:16:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title  : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

2.456min 1.401 PPB

response 9600606

(2) Tetrachloro-m-xylene #2 (SAB)

2.854min 0.950 PPB

response 60314708

(+) = Expected Retention Time

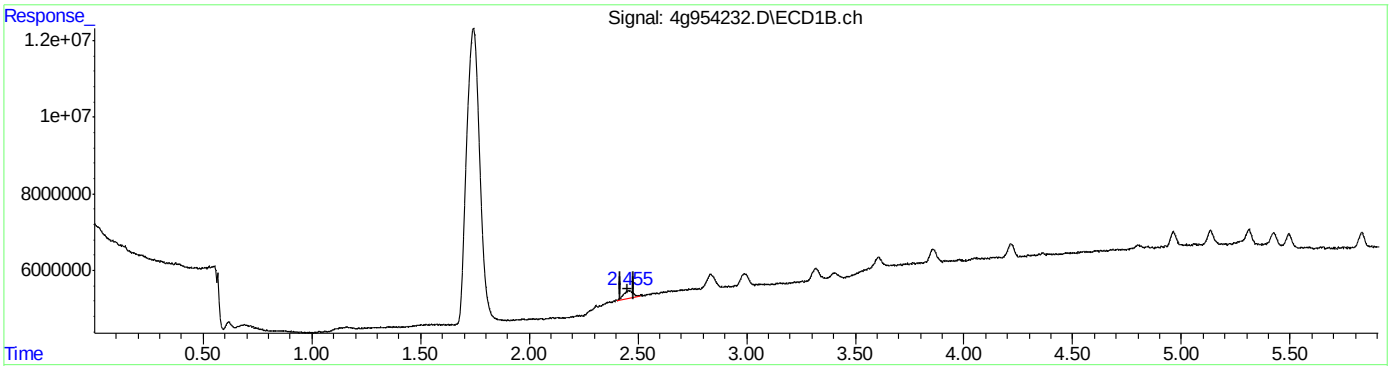
4PST2585.M Mon Nov 05 14:16:54 2018 RPT1

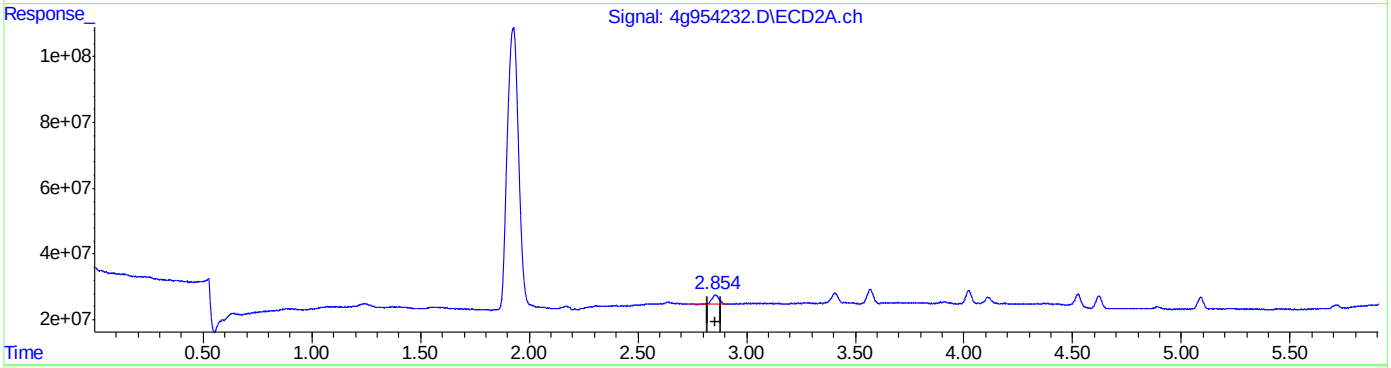
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:00 am
Operator : rebeccak
Sample : ic2585-1
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:16:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(2) Tetrachloro-m-xylene (SAB)
2.455min 0.925 PPB m
response 6341700

(2) Tetrachloro-m-xylene #2 (SAB)
2.854min 0.950 PPB
response 60314708

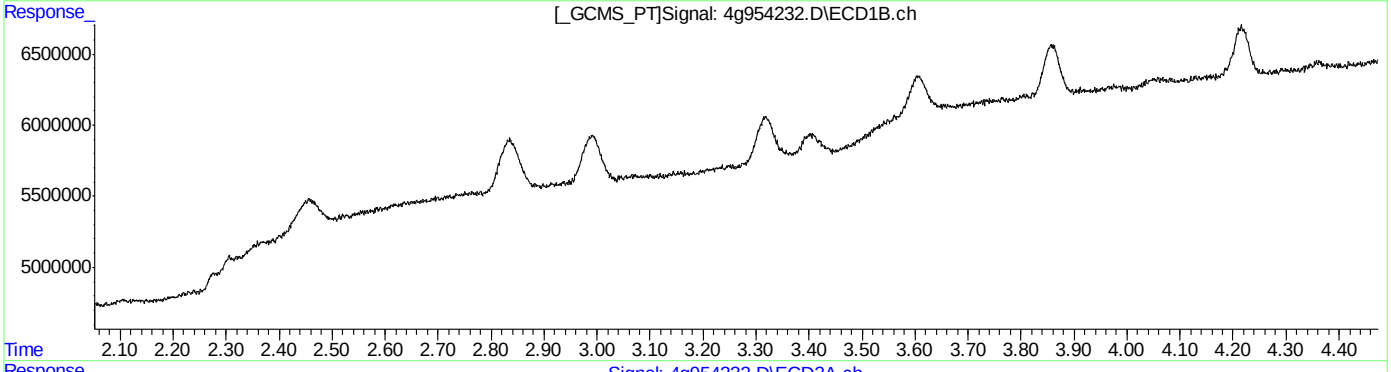
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:17:02 2018 RPT1

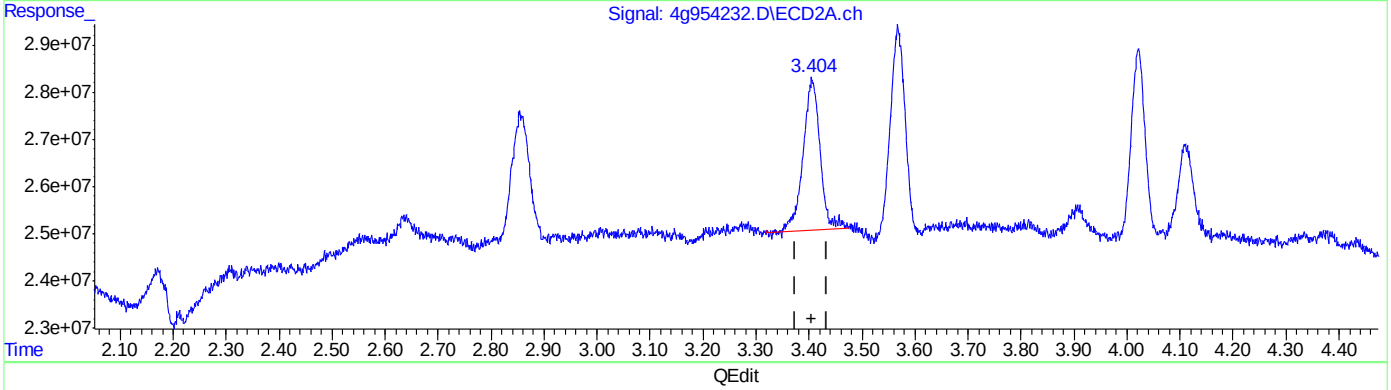
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:00 am
Operator : rebeccak
Sample : ic2585-1
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:16:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(3) hexachlorobenzene
0.000min 0.000 PPB
response 0

(3) hexachlorobenzene #2
3.406min 0.941 PPB
response 70206219

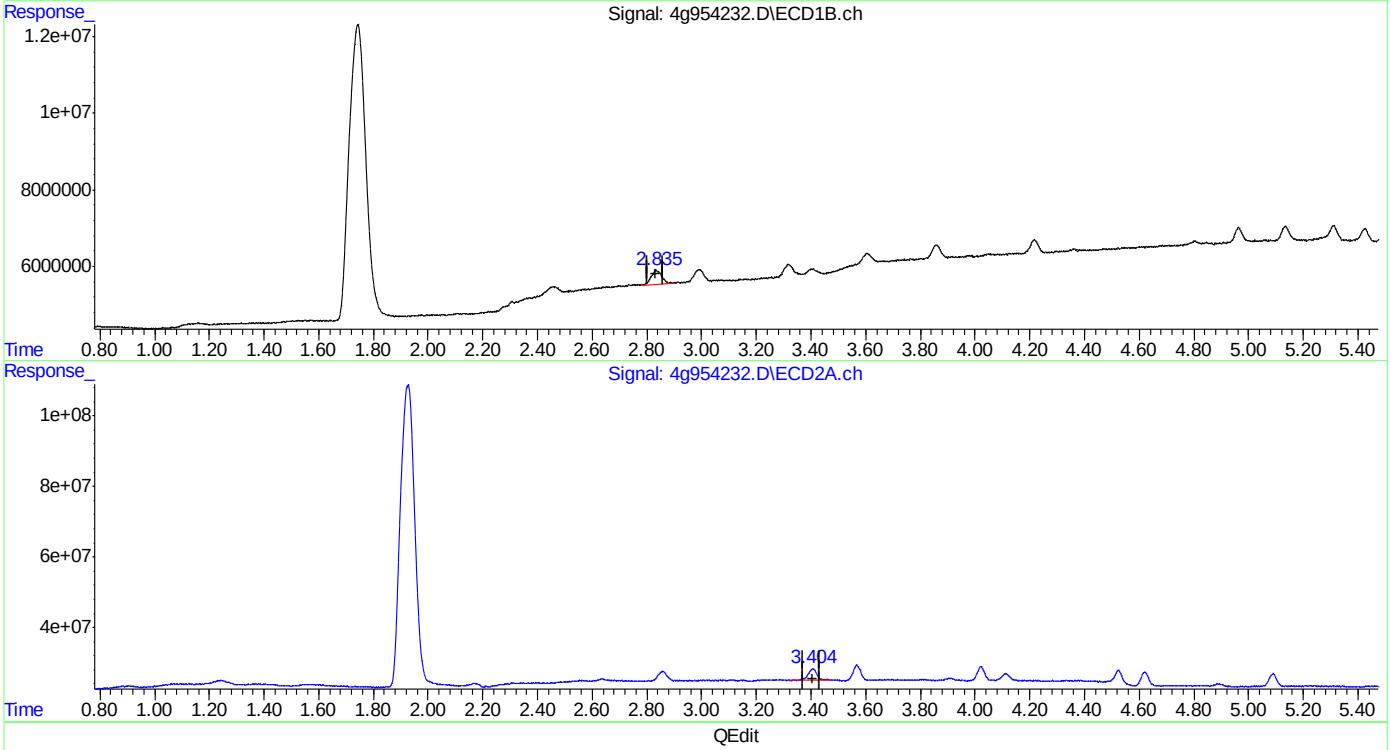
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:17:06 2018 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:00 am
Operator : rebeccak
Sample : ic2585-1
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:16:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(3) hexachlorobenzene
2.835min 1.197 PPB m
response 10206986

(3) hexachlorobenzene #2
3.406min 0.941 PPB
response 70206219

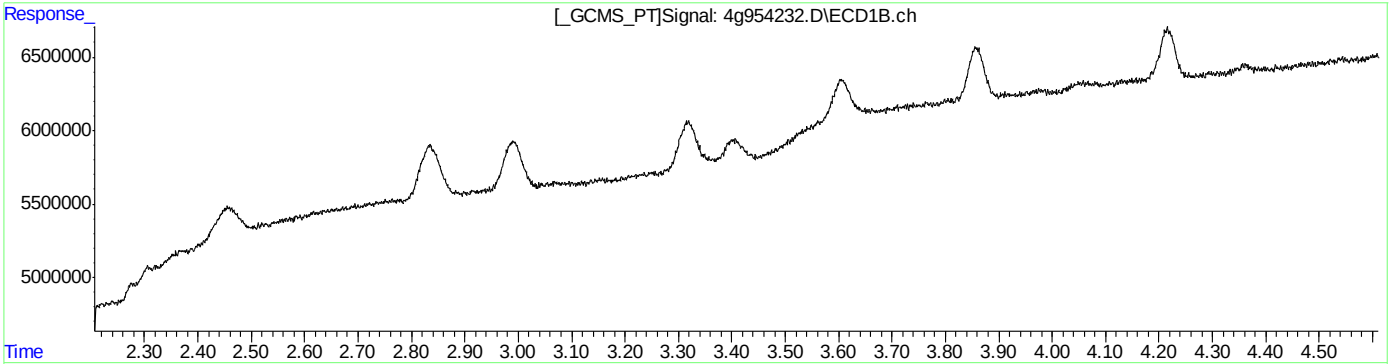
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:17:13 2018 RPT1

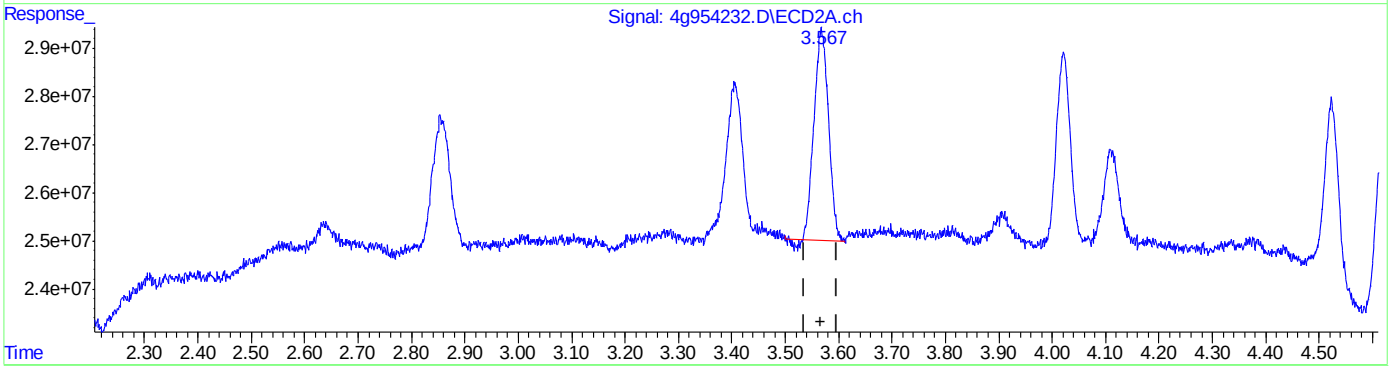
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:00 am
Operator : rebeccak
Sample : ic2585-1
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:16:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(4) alpha-BHC (A)
0.000min 0.000 PPB
response 0

(4) alpha-BHC #2 (A)
3.568min 0.852 PPB
response 82011239

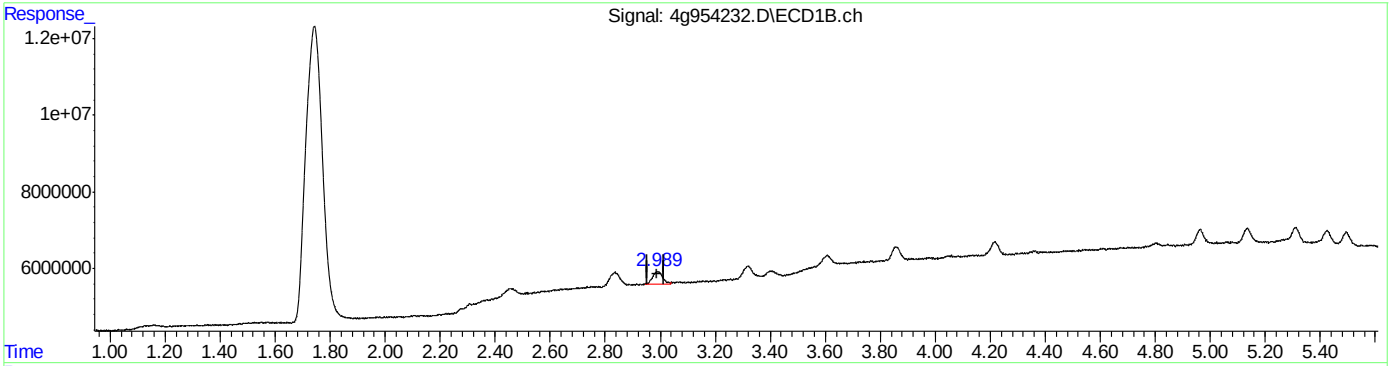
(+) = Expected Retention Time

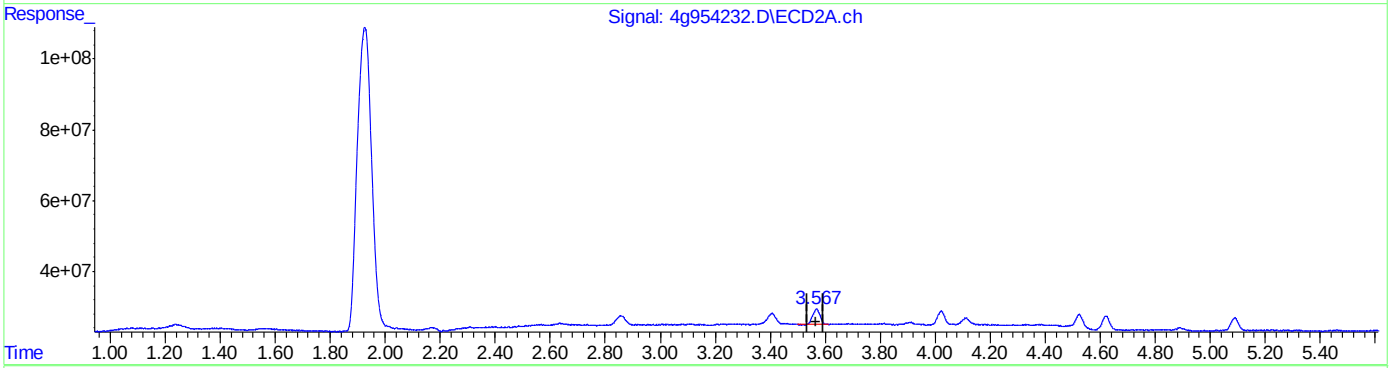
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:00 am
Operator : rebeccak
Sample : ic2585-1
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:16:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(4) alpha-BHC (A)
2.989min 0.935 PPB m
response 8343249

(4) alpha-BHC #2 (A)
3.568min 0.852 PPB
response 82011239

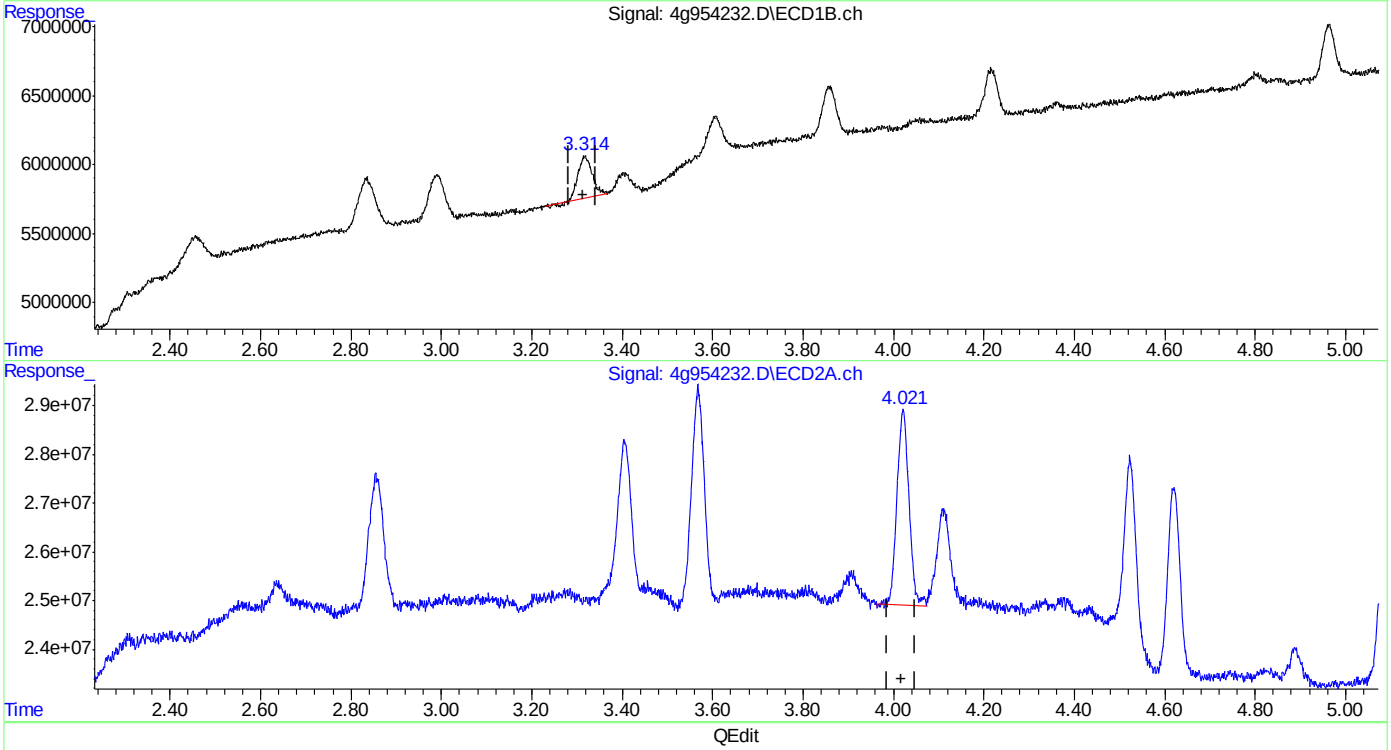
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:00 am
Operator : rebeccak
Sample : ic2585-1
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:16:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(5) gamma-BHC (MA)
3.319min 0.762 PPB
response 6450761

(5) gamma-BHC #2 (MA)
4.021min 0.864 PPB
response 73935240

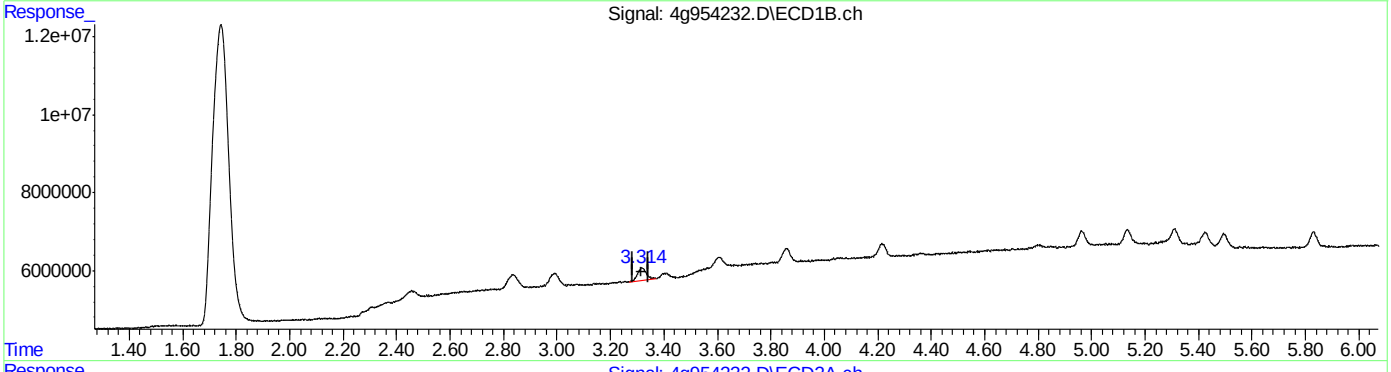
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:17:31 2018 RPT1

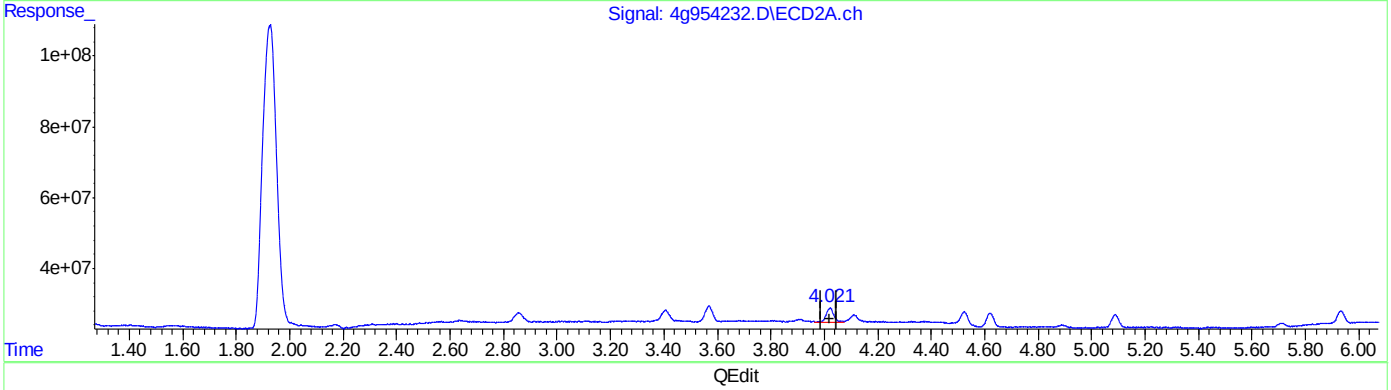
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:00 am
Operator : rebeccak
Sample : ic2585-1
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:16:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(5) gamma-BHC (MA)
3.314min 0.886 PPB m
response 7506224

(5) gamma-BHC #2 (MA)
4.021min 0.864 PPB
response 73935240

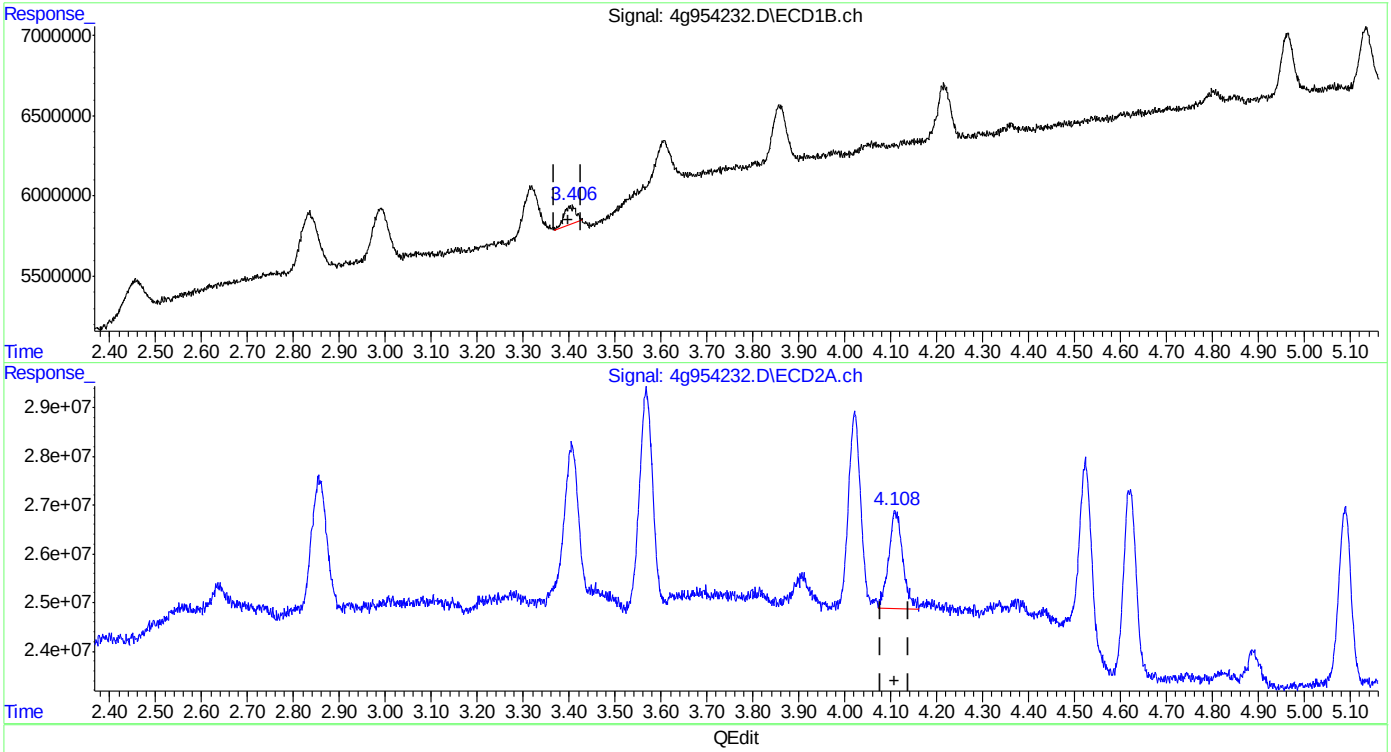
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:17:36 2018 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:00 am
Operator : rebeccak
Sample : ic2585-1
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:16:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(7) beta-BHC (B)
3.403min 0.515 PPB
response 2036086

(7) beta-BHC #2 (B)
4.109min 1.094 PPB
response 43094083

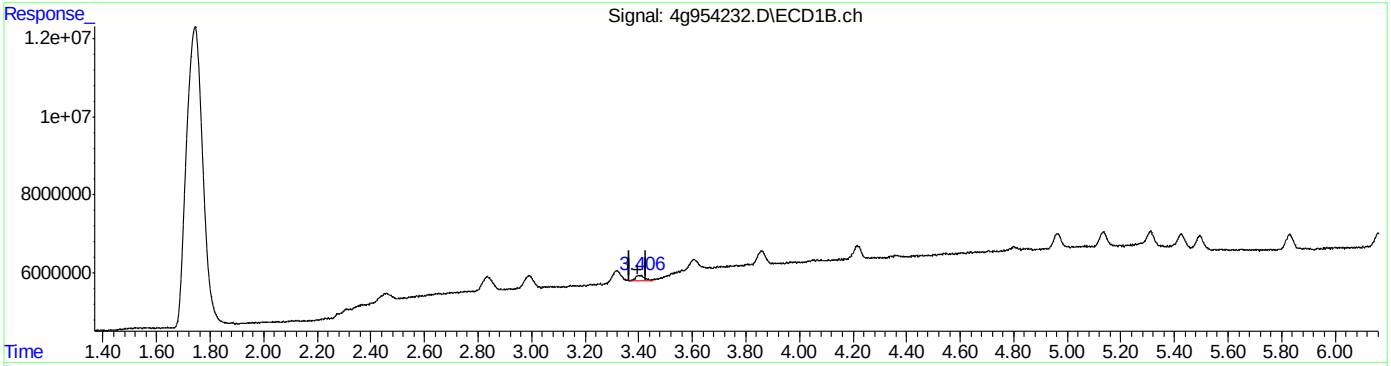
(+) = Expected Retention Time

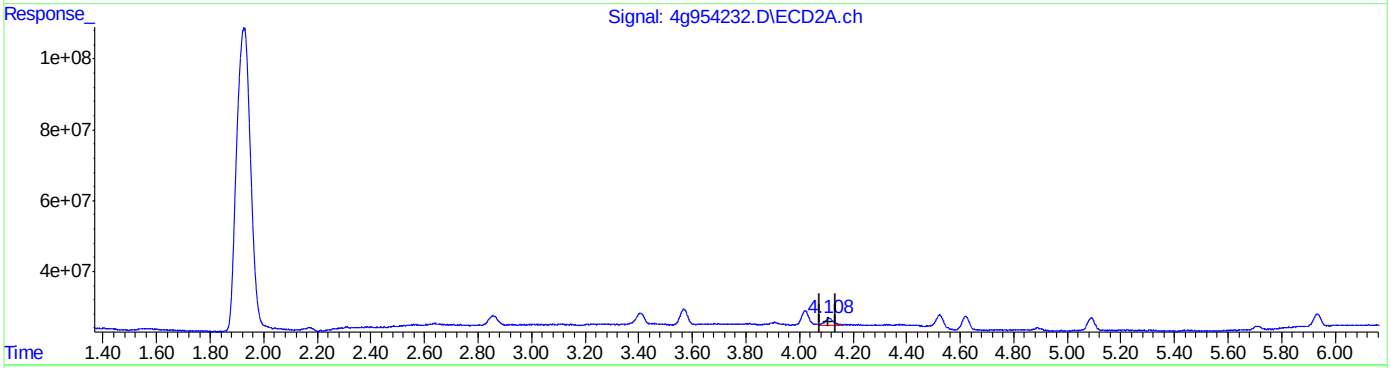
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:00 am
Operator : rebeccak
Sample : ic2585-1
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:16:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(7) beta-BHC (B)
3.406min 0.843 PPB m
response 3334665

(7) beta-BHC #2 (B)
4.109min 1.094 PPB
response 43094083

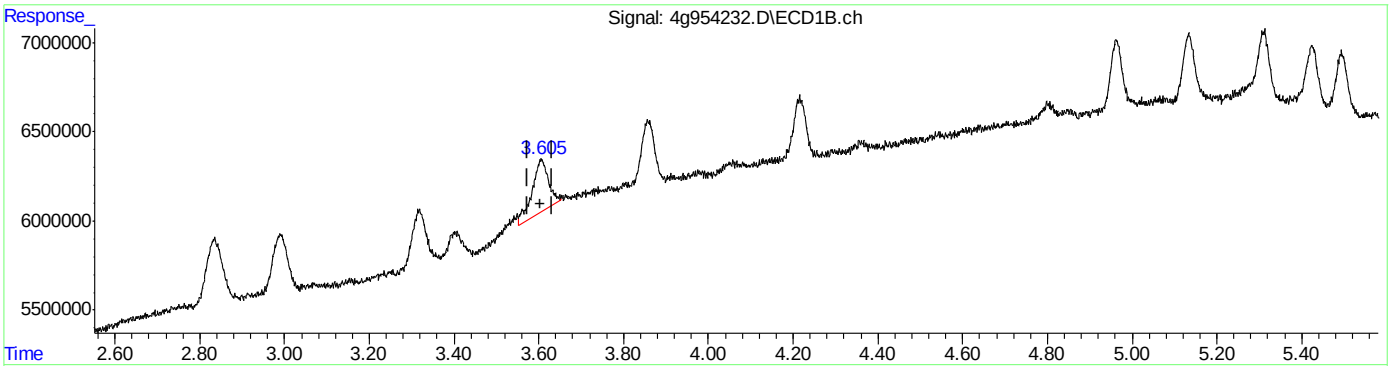
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:17:46 2018 RPT1

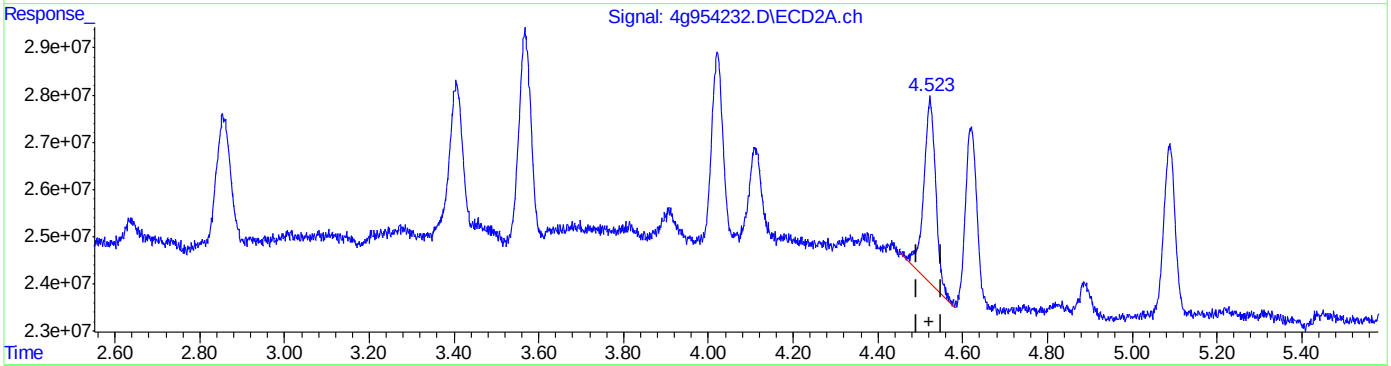
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:00 am
Operator : rebeccak
Sample : ic2585-1
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:16:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(8) delta-BHC (B)
3.606min 1.084 PPB
response 7850396

(8) delta-BHC #2 (B)
4.523min 0.969 PPB
response 77506878

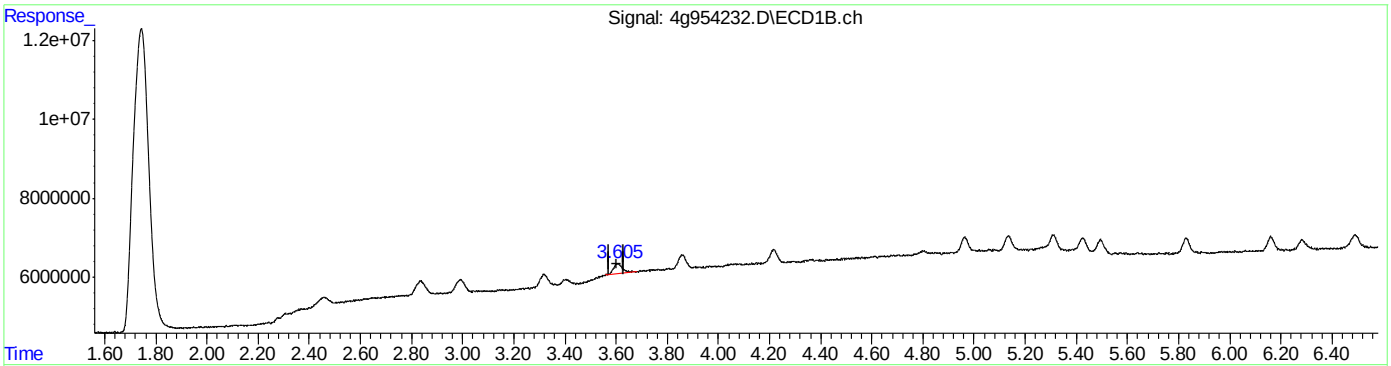
(+) = Expected Retention Time

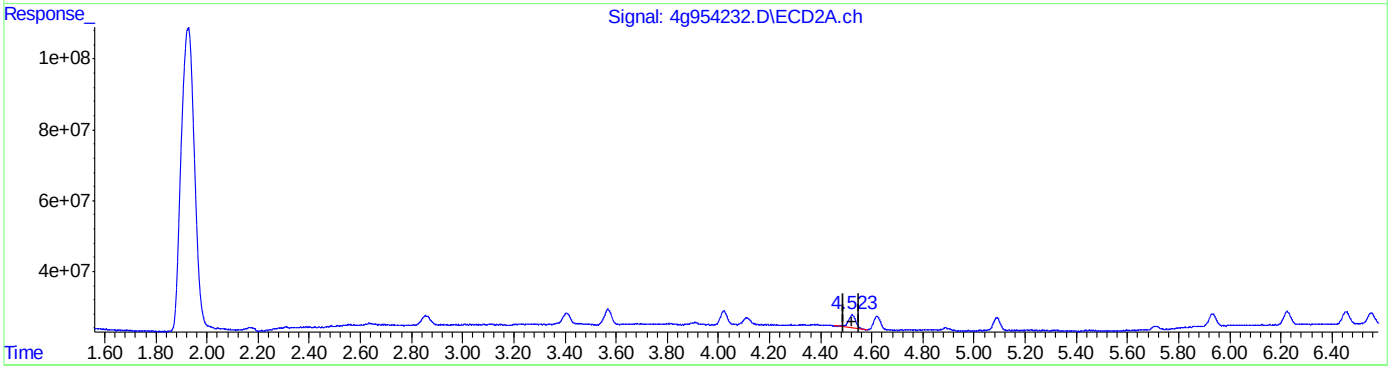
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:00 am
Operator : rebeccak
Sample : ic2585-1
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:16:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(8) delta-BHC (B)
3.605min 0.918 PPB m
response 6647108

(8) delta-BHC #2 (B)
4.523min 0.969 PPB
response 77506878

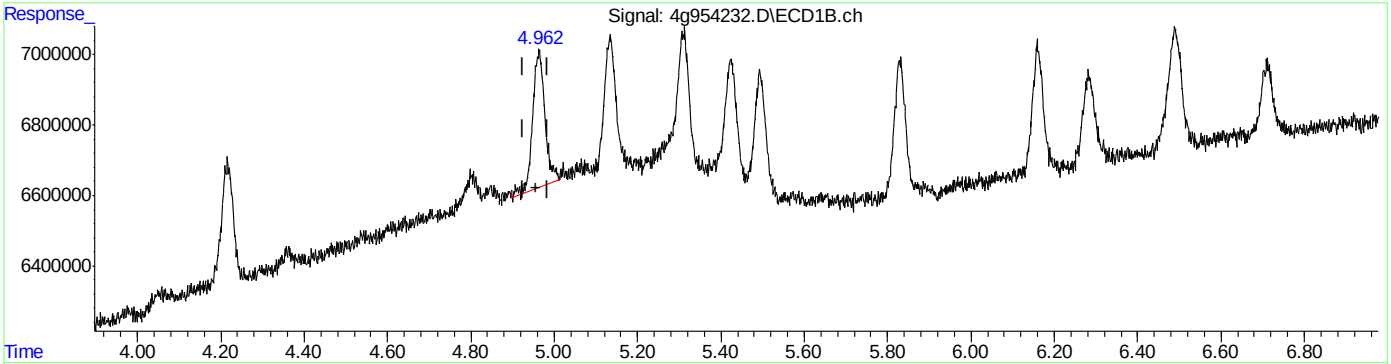
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:17:56 2018 RPT1

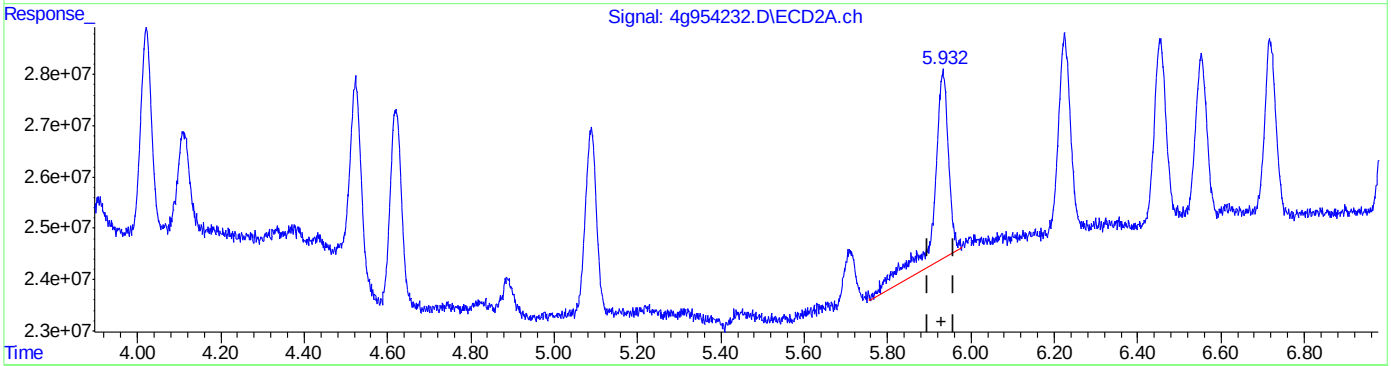
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:00 am
Operator : rebeccak
Sample : ic2585-1
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:16:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(11) Heptachlor Epoxide (B)
4.964min 1.041 PPB
response 7892579

(11) Heptachlor Epoxide #2 (B)
5.933min 1.269 PPB
response 92867699

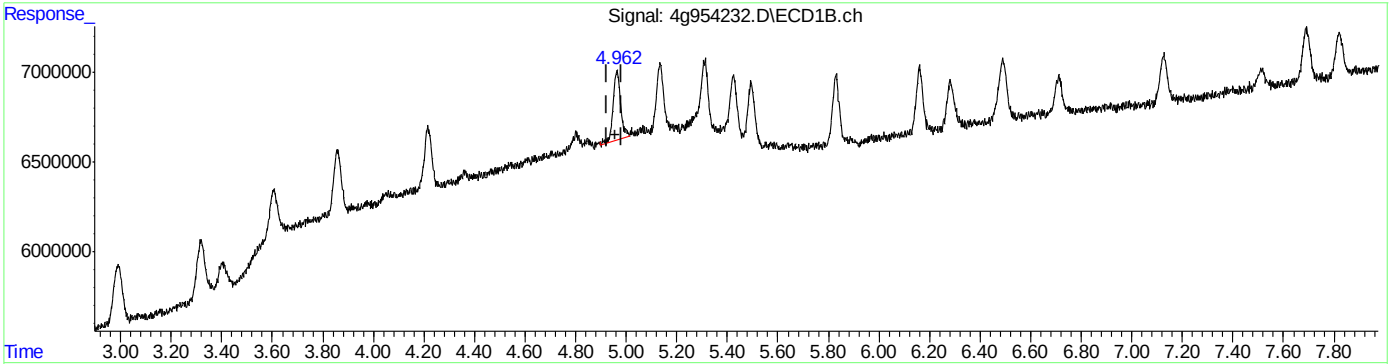
(+) = Expected Retention Time

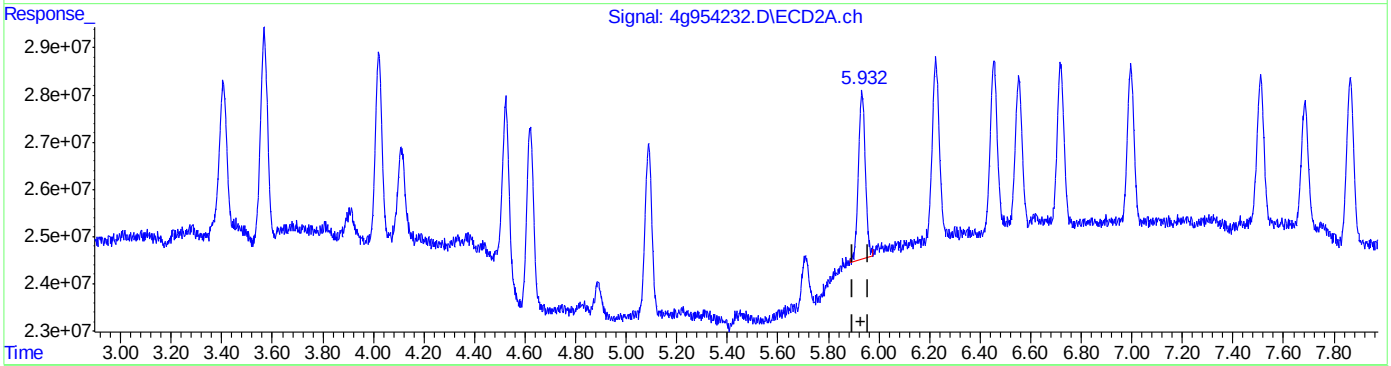
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:00 am
Operator : rebeccak
Sample : ic2585-1
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:16:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(11) Heptachlor Epoxide (B)
4.964min 1.041 PPB
response 7892579

(11) Heptachlor Epoxide #2 (B)
5.932min 0.931 PPB m
response 68164448

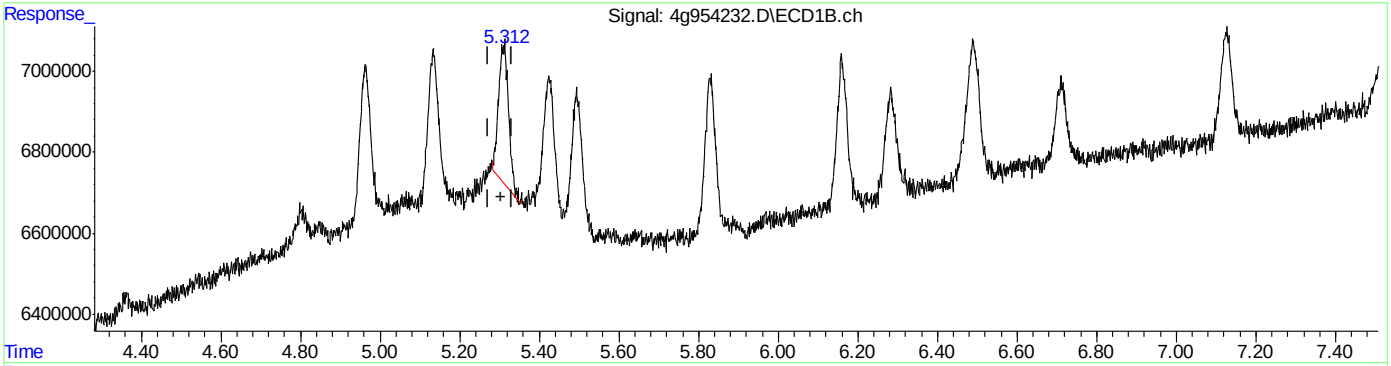
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:18:10 2018 RPT1

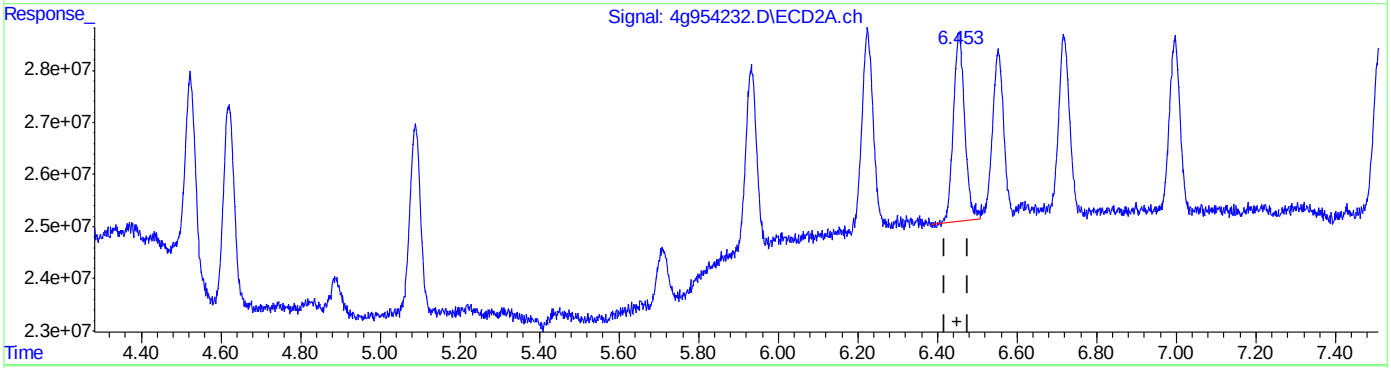
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:00 am
Operator : rebeccak
Sample : ic2585-1
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:16:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(13) alpha-Chlordane (B)
5.313min 0.793 PPB
response 6059940

(13) alpha-Chlordane #2 (B)
6.455min 0.990 PPB
response 72279208

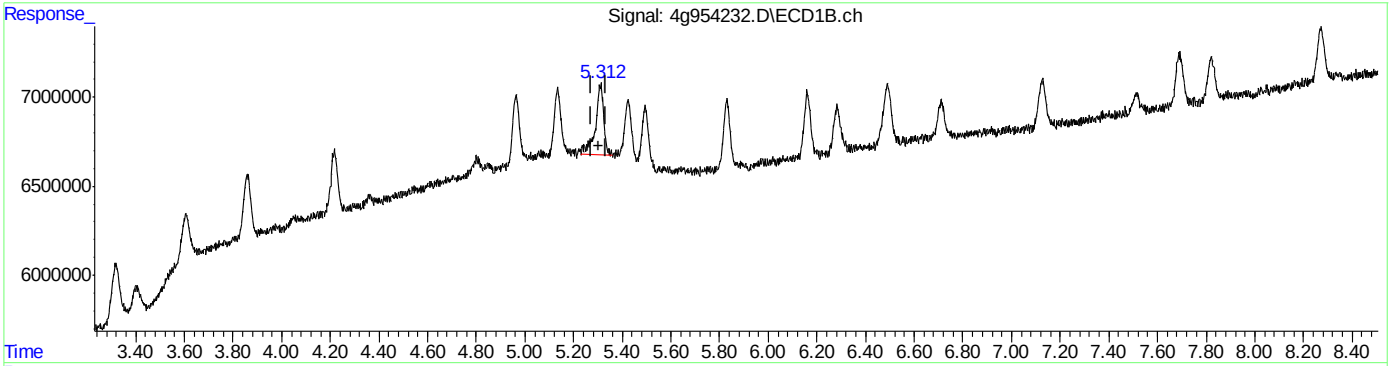
(+) = Expected Retention Time

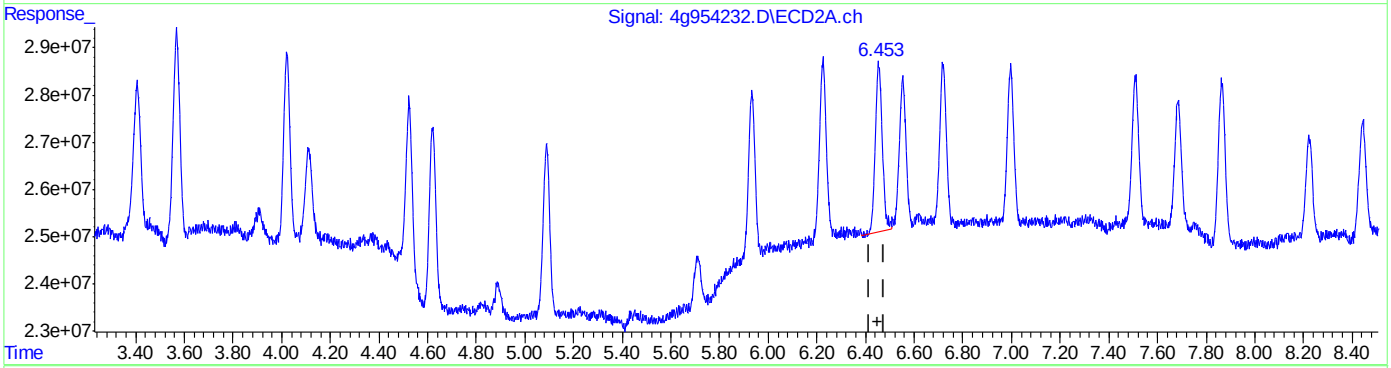
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:00 am
Operator : rebeccak
Sample : ic2585-1
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:16:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(13) alpha-Chlordane (B)
5.312min 1.218 PPB m
response 9304034

(13) alpha-Chlordane #2 (B)
6.455min 0.990 PPB
response 72279208

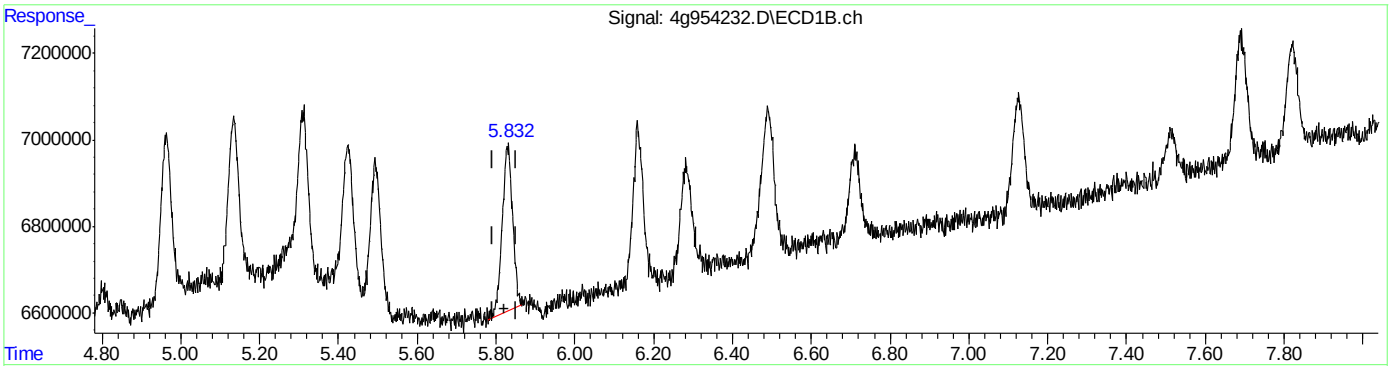
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:18:19 2018 RPT1

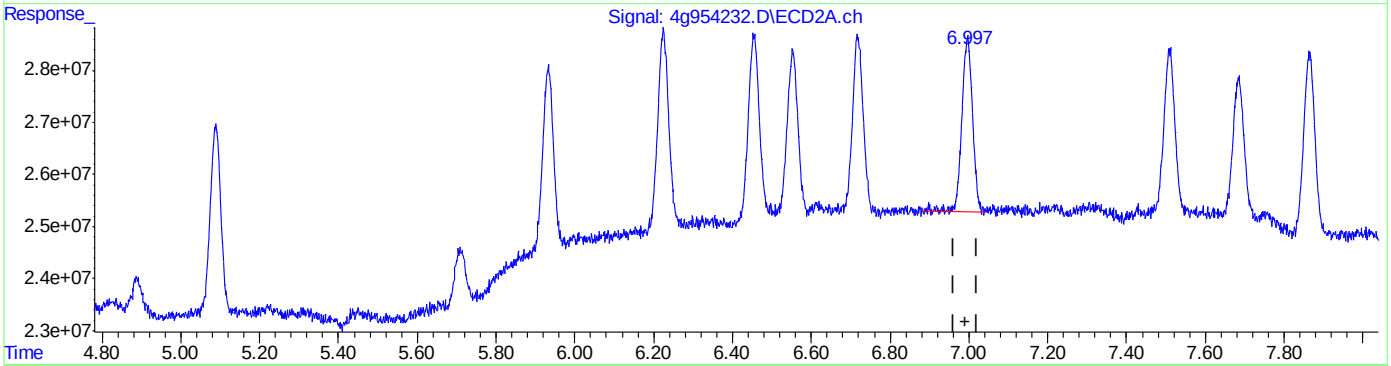
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:00 am
Operator : rebeccak
Sample : ic2585-1
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:16:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(16) Dieldrin (MA)
5.832min 0.948 PPB
response 7117320

(16) Dieldrin #2 (MA)
6.997min 0.916 PPB
response 63199840

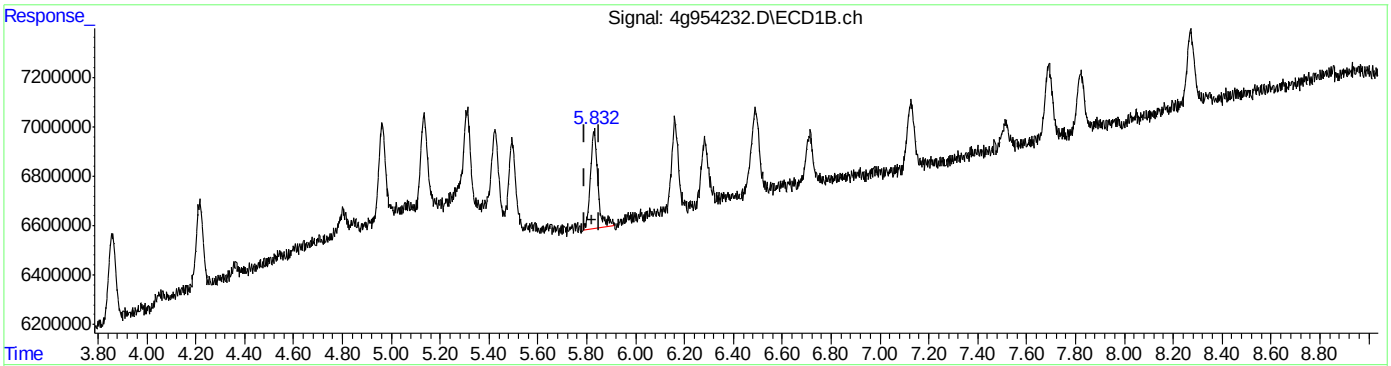
(+) = Expected Retention Time

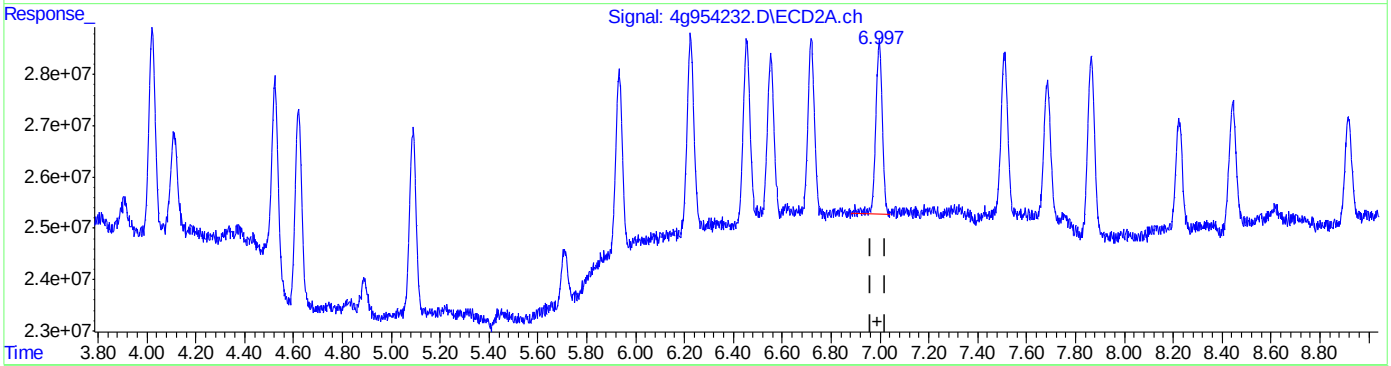
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:00 am
Operator : rebeccak
Sample : ic2585-1
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:16:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(16) Dieldrin (MA)
5.832min 1.107 PPB m
response 8311472

(16) Dieldrin #2 (MA)
6.997min 0.916 PPB
response 63199840

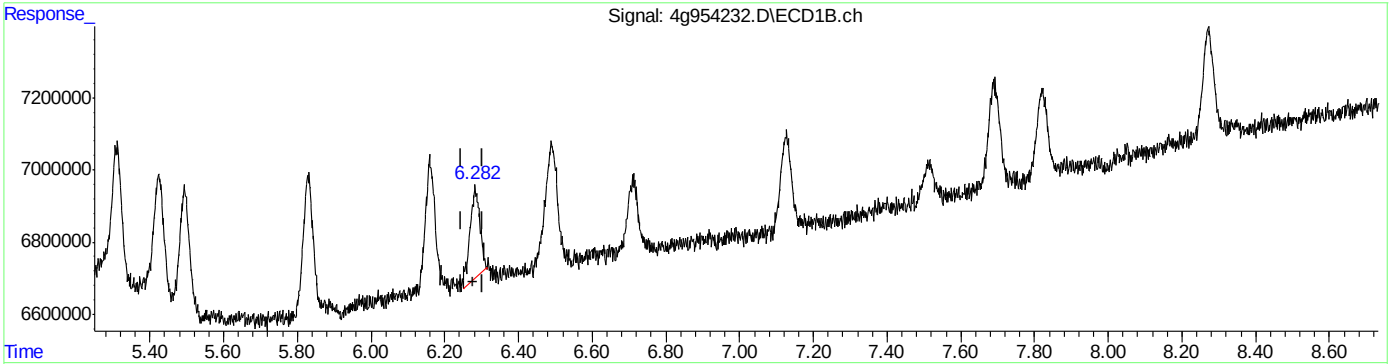
(+) = Expected Retention Time

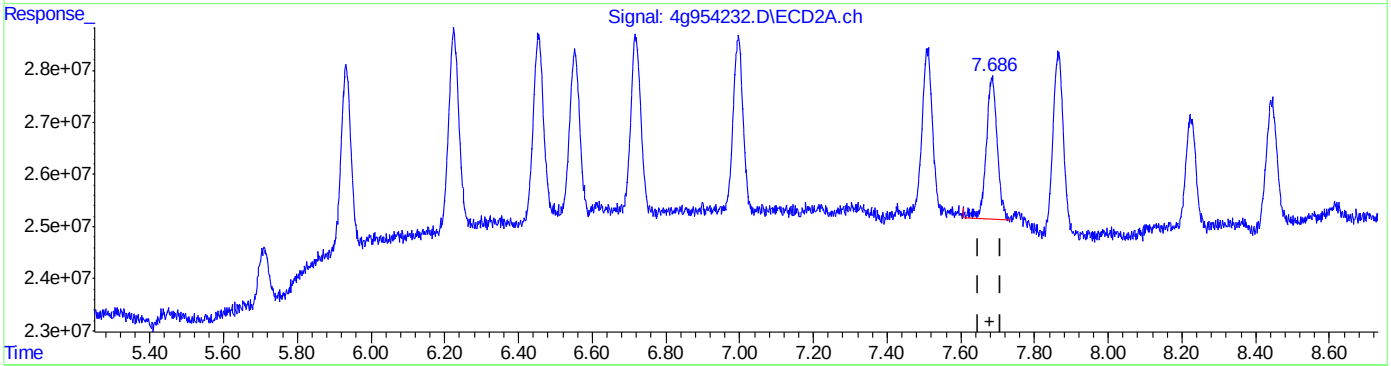
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:00 am
Operator : rebeccak
Sample : ic2585-1
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:16:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(18) 4,4'-DDD (A)
6.282min 0.878 PPB
response 4701924

(18) 4,4'-DDD #2 (A)
7.685min 1.156 PPB
response 57007010

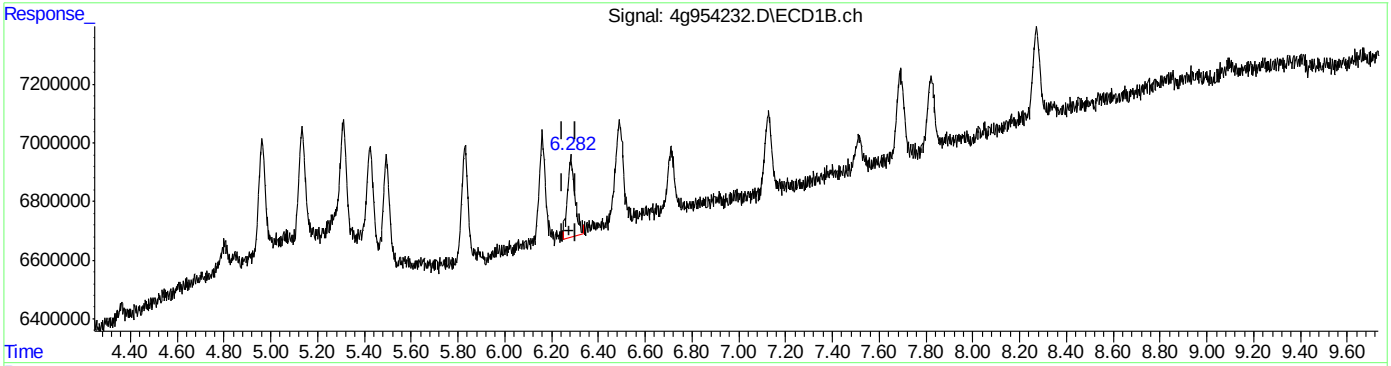
(+) = Expected Retention Time

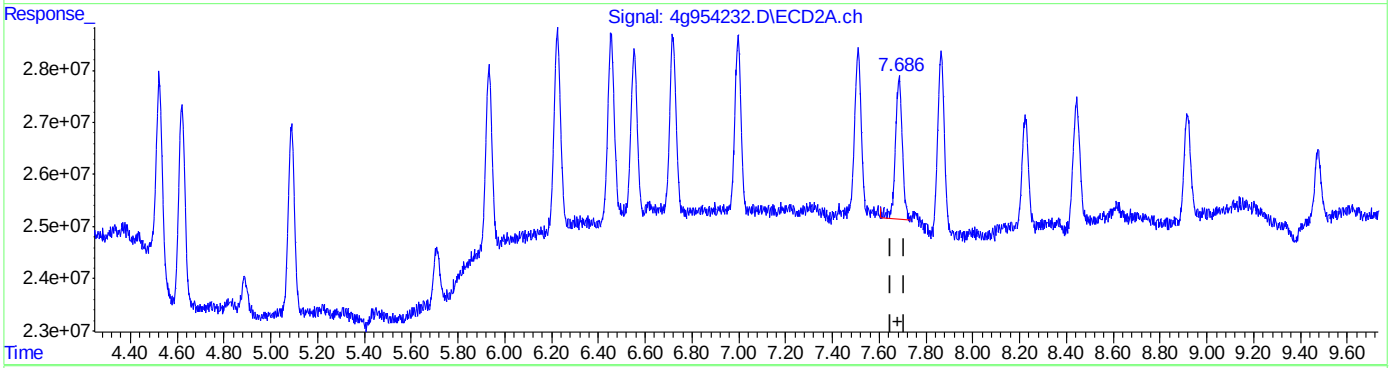
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:00 am
Operator : rebeccak
Sample : ic2585-1
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:16:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(18) 4,4'-DDD (A)
6.282min 1.111 PPB m
response 5952640

(18) 4,4'-DDD #2 (A)
7.685min 1.156 PPB
response 57007010

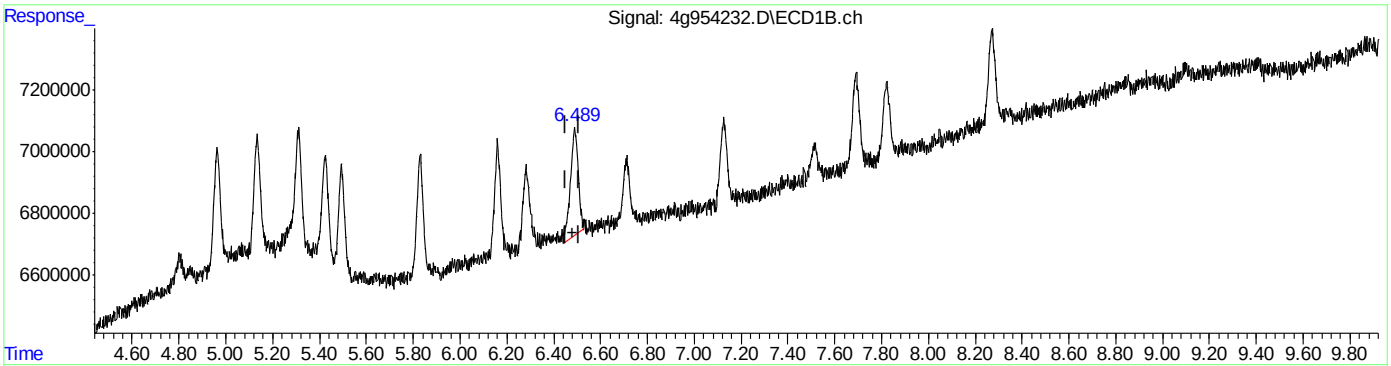
(+) = Expected Retention Time

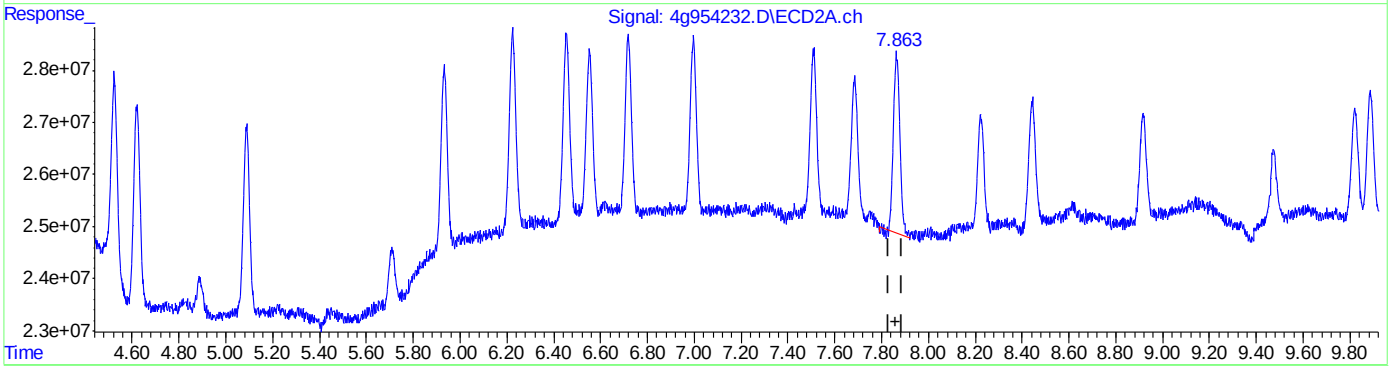
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:00 am
Operator : rebeccak
Sample : ic2585-1
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:16:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(19) Endosulfan II (B)
6.489min 1.174 PPB
response 8104551

(19) Endosulfan II #2 (B)
7.865min 1.167 PPB
response 66957723

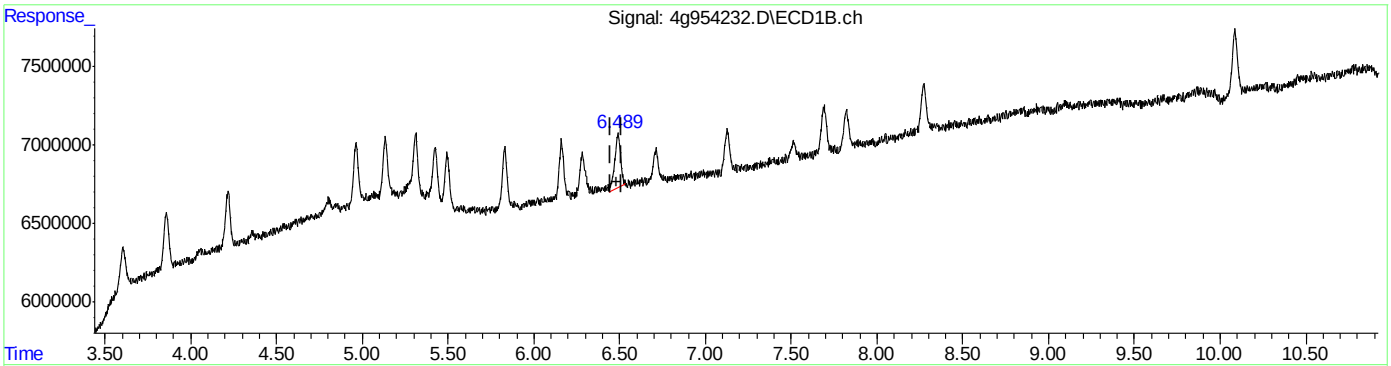
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:18:43 2018 RPT1

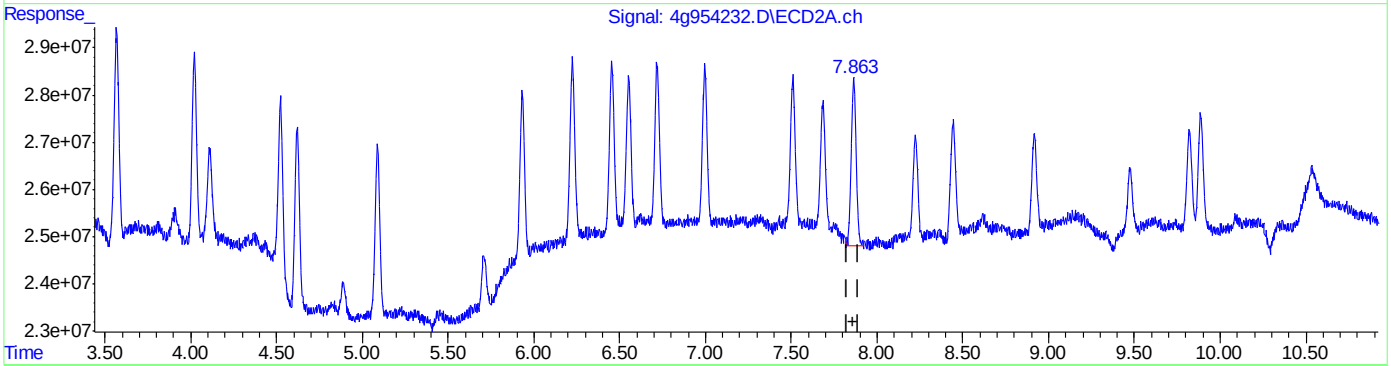
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:00 am
Operator : rebeccak
Sample : ic2585-1
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:16:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(19) Endosulfan II (B)
6.489min 1.174 PPB
response 8104551

(19) Endosulfan II #2 (B)
7.863min 1.253 PPB m
response 71898921

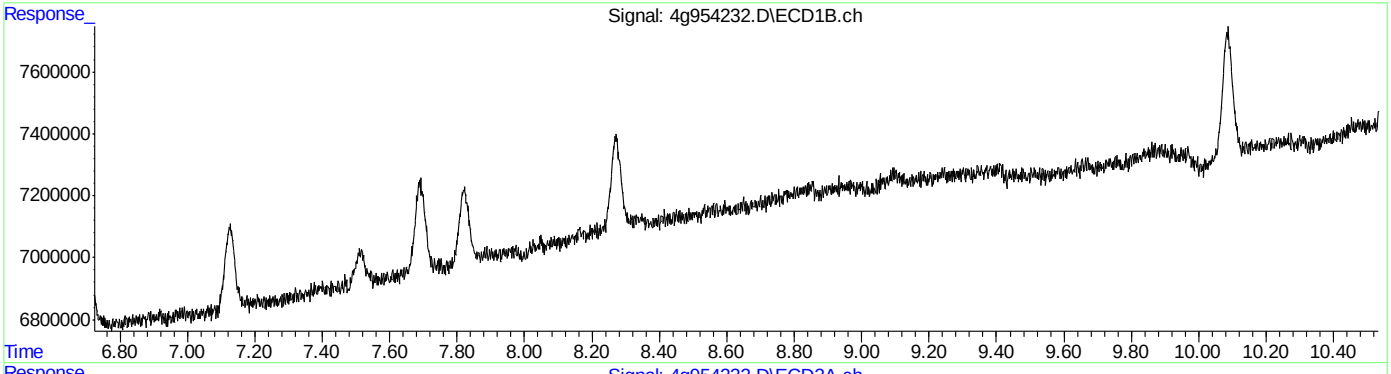
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:18:48 2018 RPT1

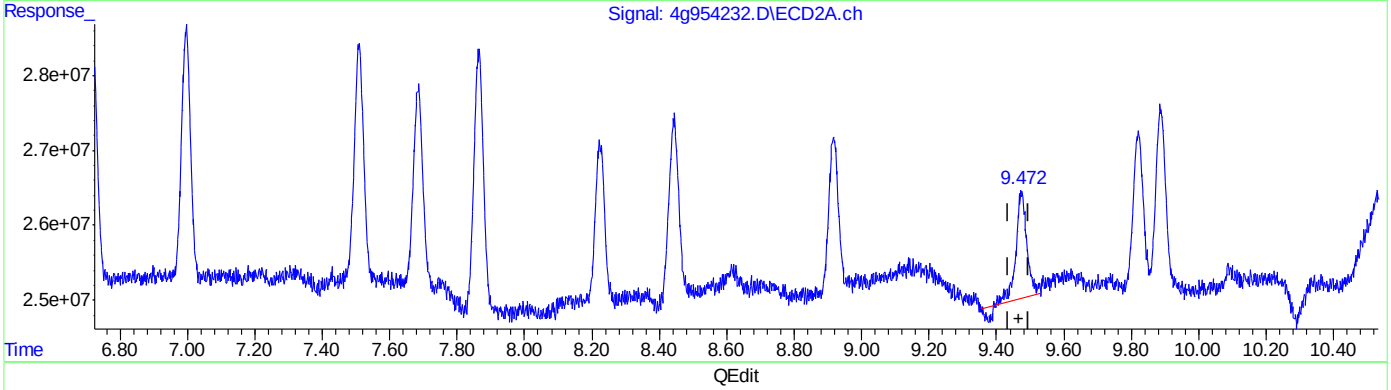
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:00 am
Operator : rebeccak
Sample : ic2585-1
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:16:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(23) Methoxychlor (A)
0.000min 0.000 PPB
response 0

(23) Methoxychlor #2 (A)
9.474min 1.047 PPB
response 31357669

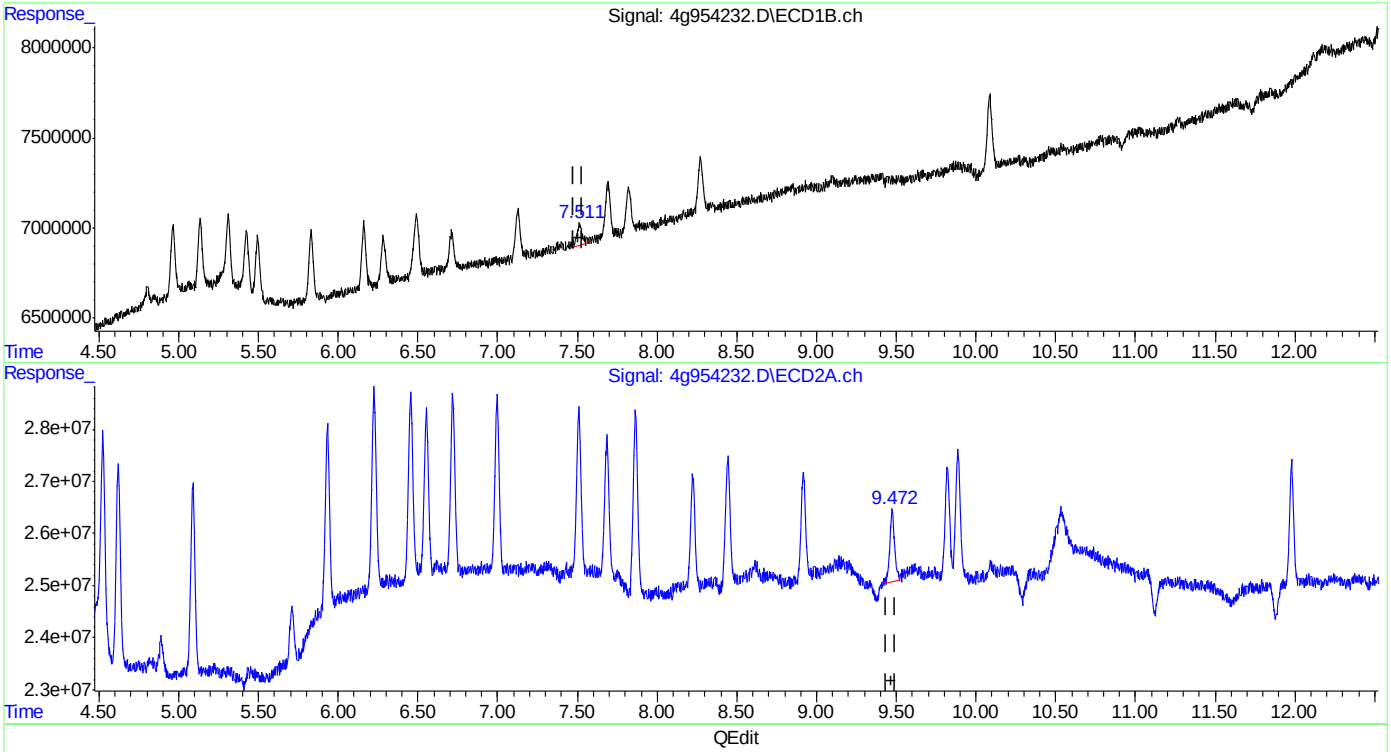
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:18:54 2018 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:00 am
Operator : rebeccak
Sample : ic2585-1
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:16:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(23) Methoxychlor (A)
7.511min 1.218 PPB m
response 2789582

(23) Methoxychlor #2 (A)
9.472min 0.956 PPB m
response 28637715

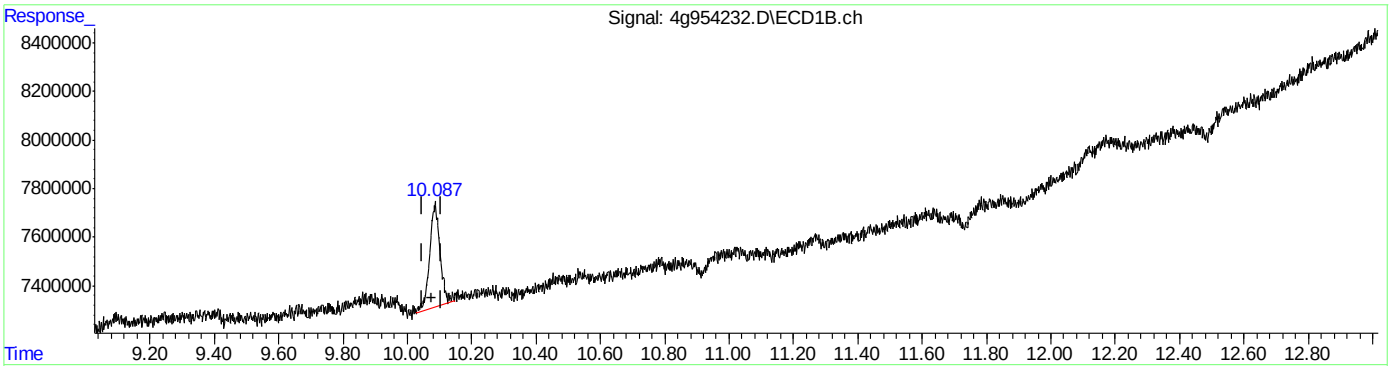
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:19:02 2018 RPT1

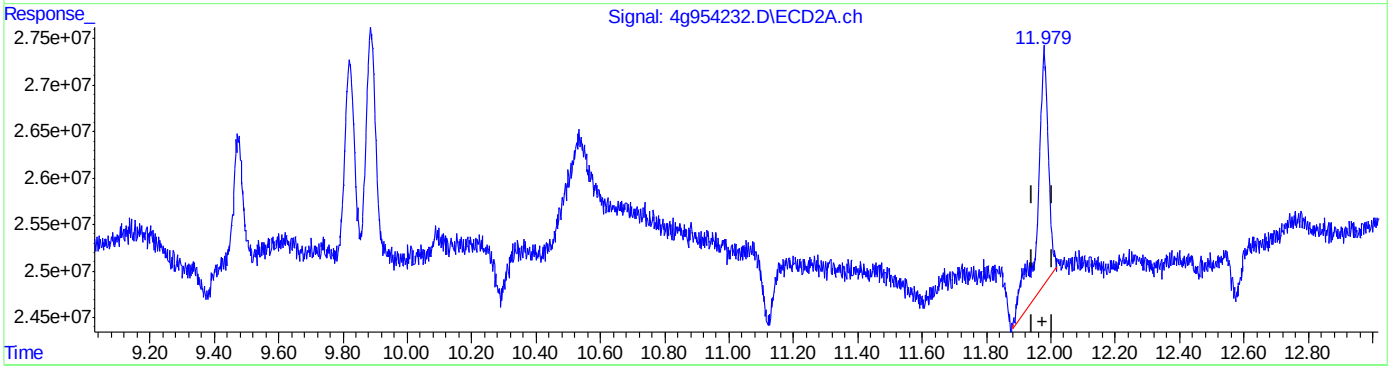
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:00 am
Operator : rebeccak
Sample : ic2585-1
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:16:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Decachlorobiphenyl (SA)
10.088min 1.383 PPB
response 9571410

(26) Decachlorobiphenyl #2 (SA)
11.980min 2.057 PPB
response 60704679

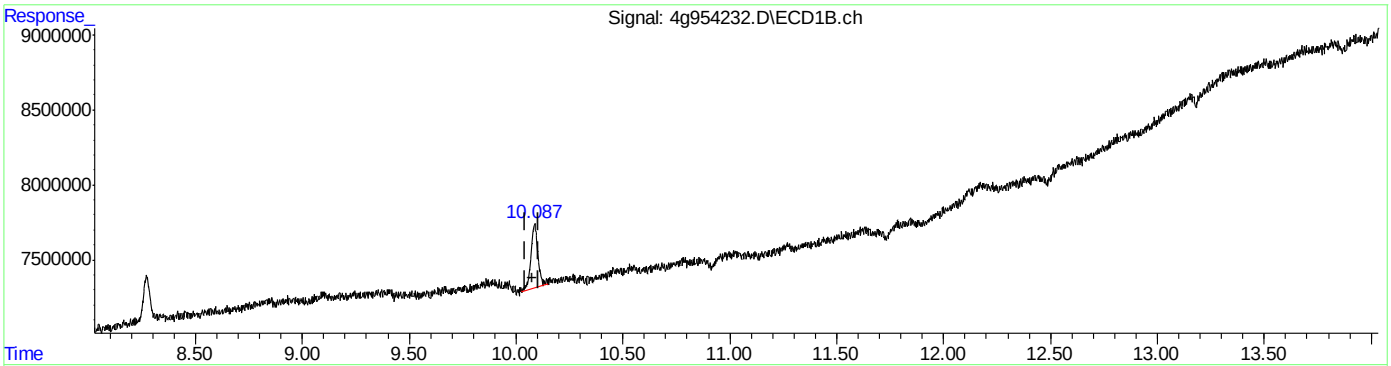
(+) = Expected Retention Time

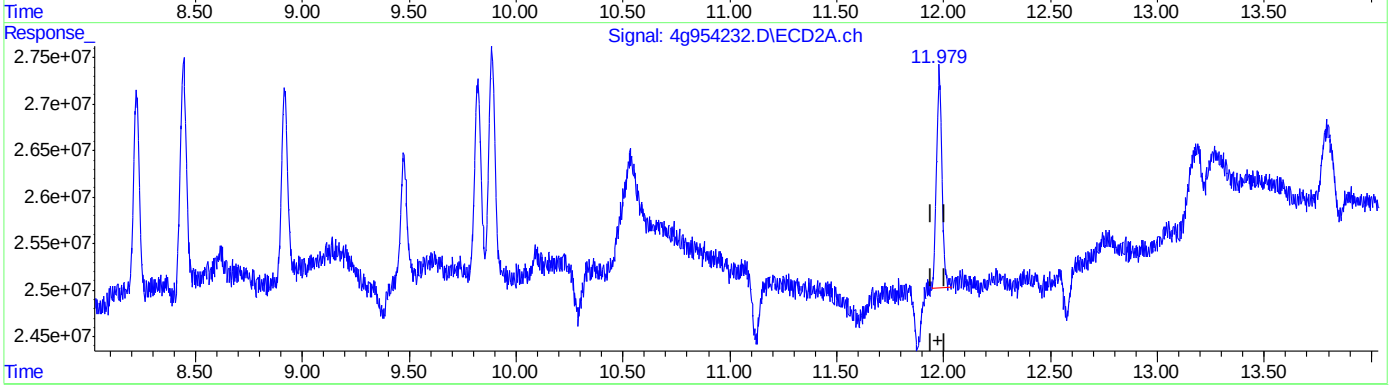
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954232.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:00 am
Operator : rebeccak
Sample : ic2585-1
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:16:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Decachlorobiphenyl (SA)
10.088min 1.383 PPB
response 9571410

(26) Decachlorobiphenyl #2 (SA)
11.979min 1.417 PPB m
response 41818017

(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:19:12 2018 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 11/06/18 09:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954233.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:17 am
Operator : rebeccak
Sample : ic2585-2
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:12:44 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.742	1.927	359.8E6	3123.9E6	50.000	50.000
27) I	1-bromo-2...	1.742	1.927	359.8E6	3123.9E6	50.000	50.000
33) I	1-bromo-2...	1.742	1.927	359.8E6	3123.9E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.457	2.858	13668290	122.6E6	1.799m	1.931
Spiked Amount		40.000 Range	30 - 150	Recovery	=	4.50%#	4.83%#
26) SA	Decachlor...	10.080	11.974	16106129	78906427	2.099	2.674m#
Spiked Amount		40.000		Recovery	=	5.25%	6.68%
	Target Compounds						
3)	hexachlor...	2.834	3.405	19229767	135.7E6	2.034	1.819
4) A	alpha-BHC	2.987	3.568	15358796	170.9E6	1.553	1.775
5) MA	gamma-BHC	3.312	4.021	15300331	147.6E6	1.630	1.724m
6) MA	Heptachlor	3.855	4.618	15566674	177.8E6	1.754	1.943
7) B	beta-BHC	3.404	4.110	7071356	71611588	1.612	1.819
8) B	delta-BHC	3.603	4.522	11707005	142.0E6	1.459	1.776
9) MB	Aldrin	4.210	5.085	14510461	152.4E6	1.628	1.828
10)	alachlor	4.356	4.884	2324024	24345770	2.023m	2.311
11) B	Heptachlo...	4.955	5.929	14155824	134.1E6	1.684m	1.833
12) B	gamma-Chl...	5.125	6.219	14392413	143.6E6	1.692m	1.916m
13) B	alpha-Chl...	5.304	6.448	15544209	139.4E6	1.835m	1.910
14) A	Endosulfan I	5.486	6.547	13759604	125.4E6	1.769	1.876
15) B	4,4'-DDE	5.418	6.712	14702520	129.0E6	1.976m	1.794
16) MA	Dieldrin	5.823	6.993	13961899	127.2E6	1.677m	1.845
17) MA	Endrin	6.155	7.503	13481050	126.8E6	1.872	2.112
18) A	4,4'-DDD	6.275	7.680	10783207	102.5E6	1.816m	2.079m
19) B	Endosulfa...	6.484	7.861	13933984	126.7E6	1.820	2.209m
20) MA	4,4'-DDT	6.702	8.221	6648623	84274822	1.325	1.517
21) B	Endrin Al...	7.120	8.436	10474955	96863341	1.704	2.219 #
22) B	Endosulfa...	7.813	8.911	9676885	82459540	1.552	1.637
23) A	Methoxychlor	7.503	9.469	4635046	47355458	1.825m	1.582
24)	Mirex	7.682	9.815	11809550	86746290	1.940	2.019
25) B	Endrin Ke...	8.263	9.880	12183685	97681806	1.675	1.786

SemiQuant Compounds - Not Calibrated on this Instrument

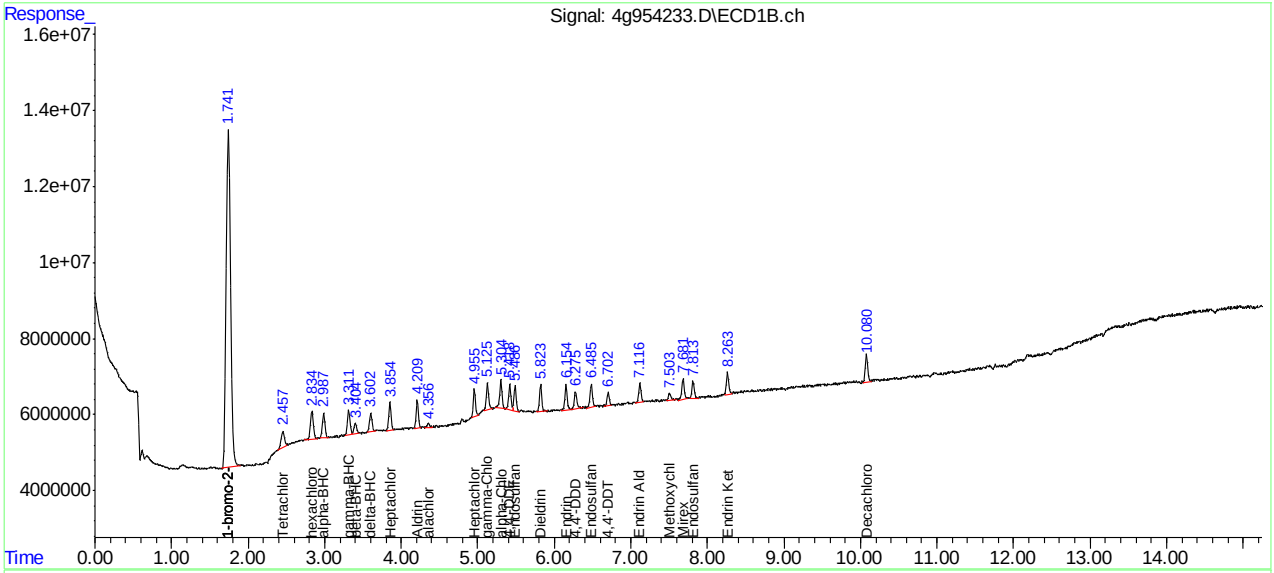
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

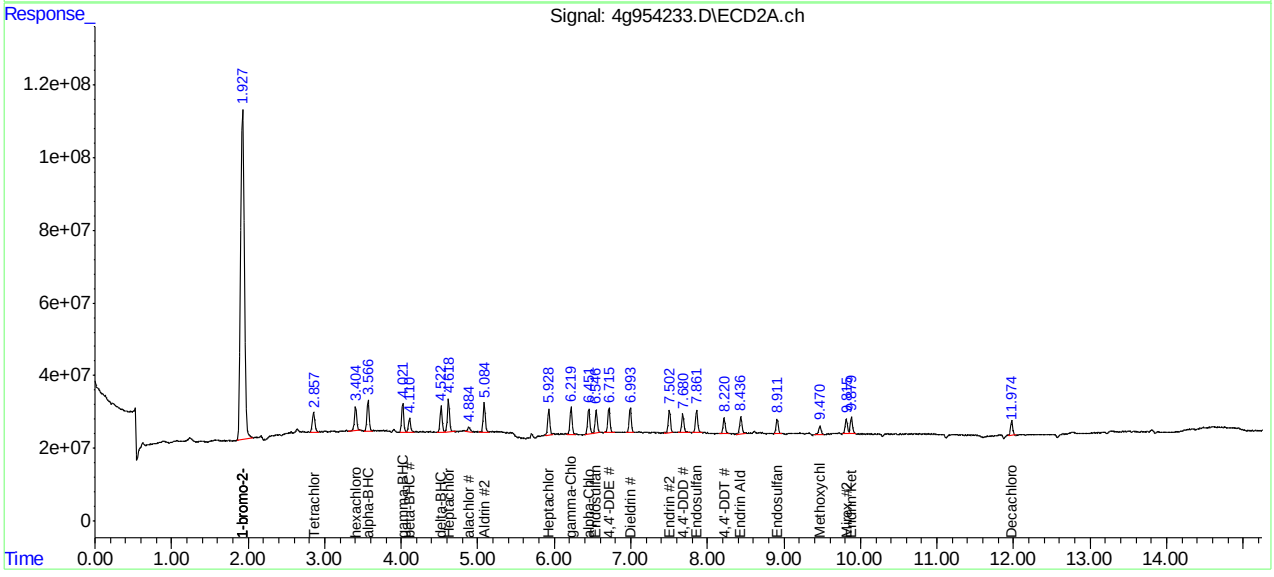
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954233.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:17 am
Operator : rebeccak
Sample : ic2585-2
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:12:44 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number: G4G2585-IC2585 **Method:** SW846 8081B
Lab FileID: 4G954233.D **Analyst approved:** 11/05/18 14:59 Rebecca Krug
Injection Time: 11/05/18 10:17 **Supervisor approved:** 11/06/18 09:35 Gwendolyn Burns

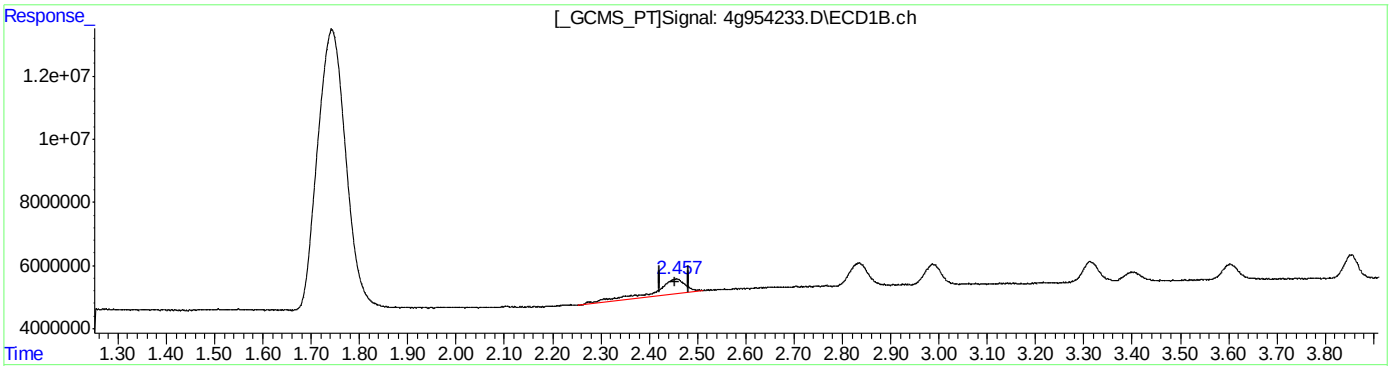
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.46	Poorly defined baseline
gamma-BHC (Lindane)	58-89-9	2	4.02	Poorly defined baseline
Alachlor	15972-60-8	1	4.36	Poorly defined baseline
Heptachlor epoxide	1024-57-3	1	4.95	Poorly defined baseline
gamma-Chlordane	5103-74-2	1	5.13	Poorly defined baseline
alpha-Chlordane	5103-71-9	1	5.30	Poorly defined baseline
4,4'-DDE	72-55-9	1	5.42	Poorly defined baseline
Dieldrin	60-57-1	1	5.82	Poorly defined baseline
gamma-Chlordane	5103-74-2	2	6.22	Poorly defined baseline
4,4'-DDD	72-54-8	1	6.27	Poorly defined baseline
Methoxychlor	72-43-5	1	7.50	Poorly defined baseline
4,4'-DDD	72-54-8	2	7.68	Poorly defined baseline
Endosulfan-II	33213-65-9	2	7.86	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	2	11.97	Poorly defined baseline

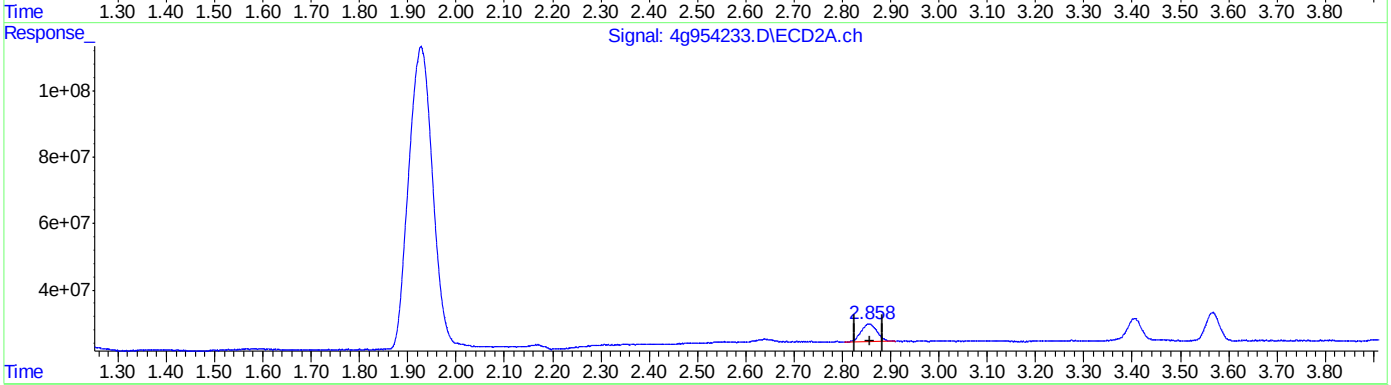
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954233.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:17 am
Operator : rebeccak
Sample : ic2585-2
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:10:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(2) Tetrachloro-m-xylene (SAB)
2.457min 2.804 PPB
response 21303853

(2) Tetrachloro-m-xylene #2 (SAB)
2.858min 1.931 PPB
response 122614858

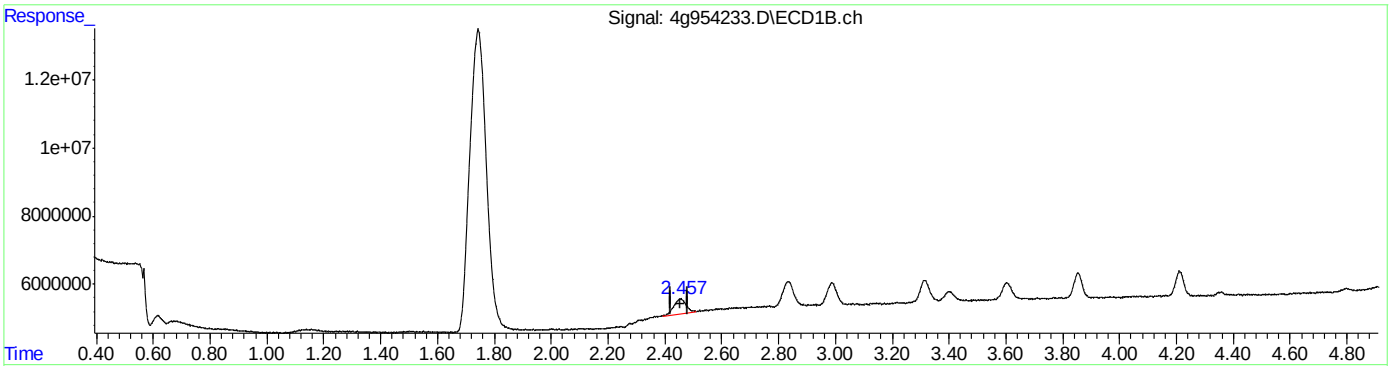
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:10:47 2018 RPT1

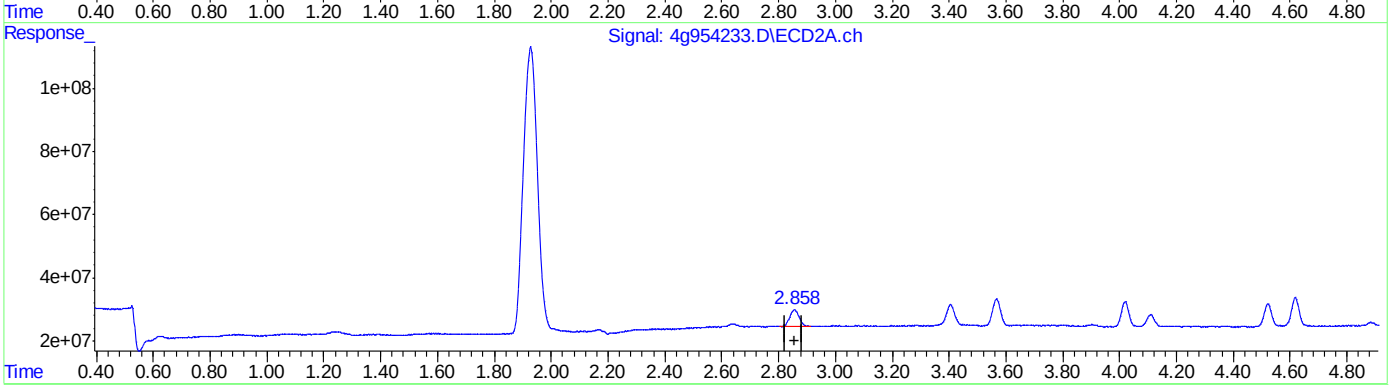
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954233.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:17 am
Operator : rebeccak
Sample : ic2585-2
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:10:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(2) Tetrachloro-m-xylene (SAB)
2.457min 1.799 PPB m
response 13668290

(2) Tetrachloro-m-xylene #2 (SAB)
2.858min 1.931 PPB
response 122614858

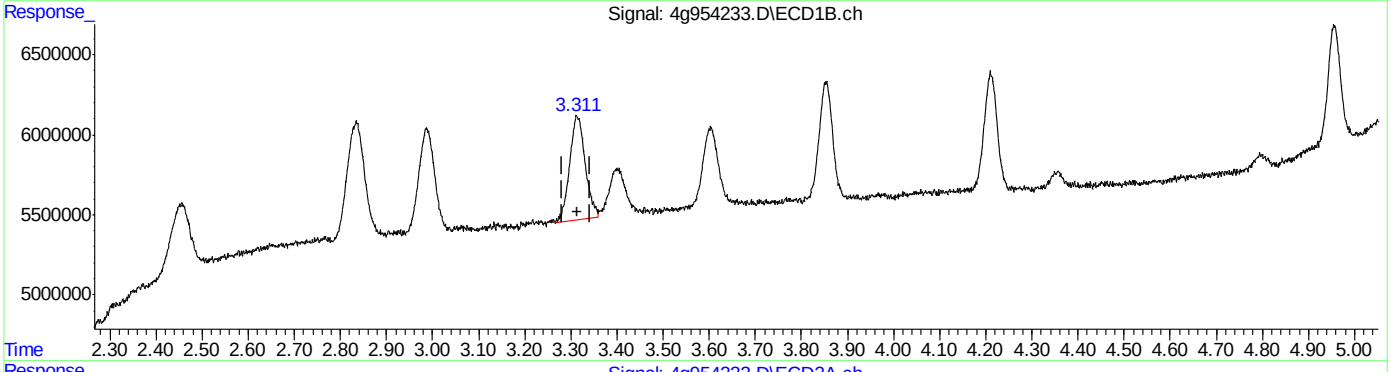
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:10:51 2018 RPT1

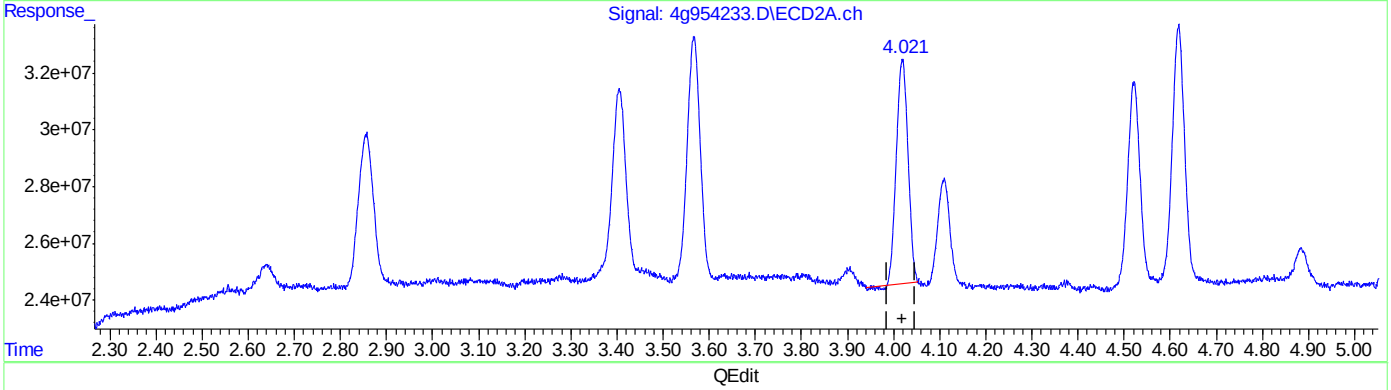
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954233.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:17 am
Operator : rebeccak
Sample : ic2585-2
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:10:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(5) gamma-BHC (MA)
3.312min 1.630 PPB
response 15300331

(5) gamma-BHC #2 (MA)
4.021min 1.615 PPB
response 138263340

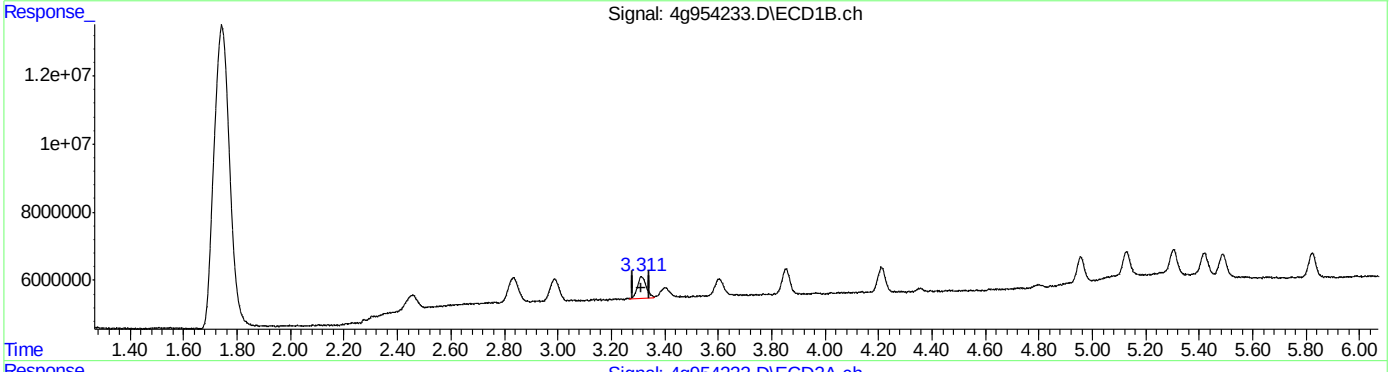
(+) = Expected Retention Time

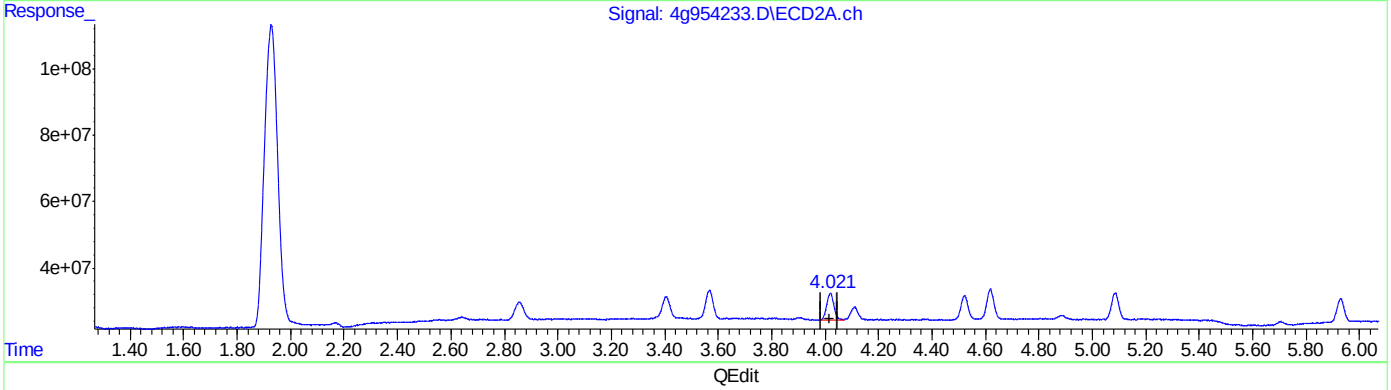
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954233.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:17 am
Operator : rebeccak
Sample : ic2585-2
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:10:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(5) gamma-BHC (MA)
3.312min 1.630 PPB
response 15300331

(5) gamma-BHC #2 (MA)
4.021min 1.724 PPB m
response 147550457

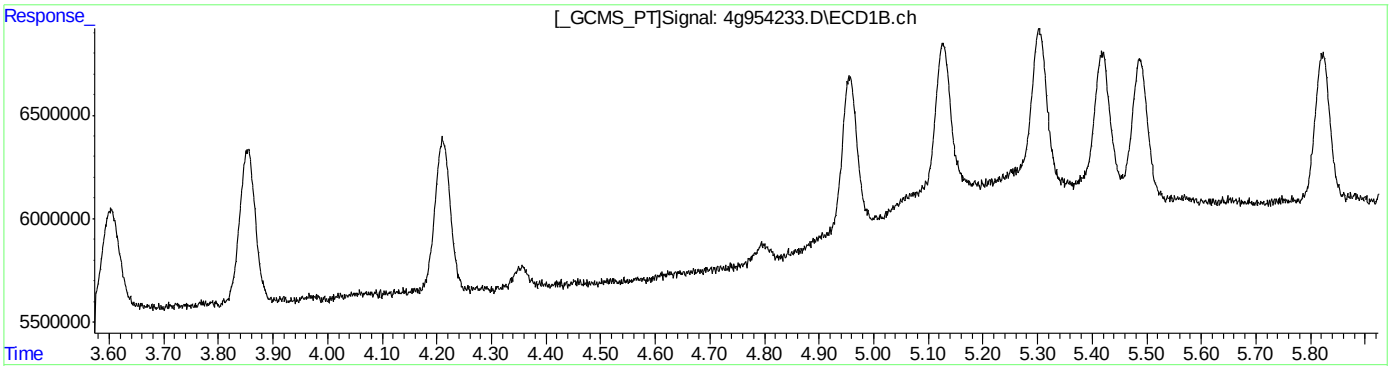
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:11:02 2018 RPT1

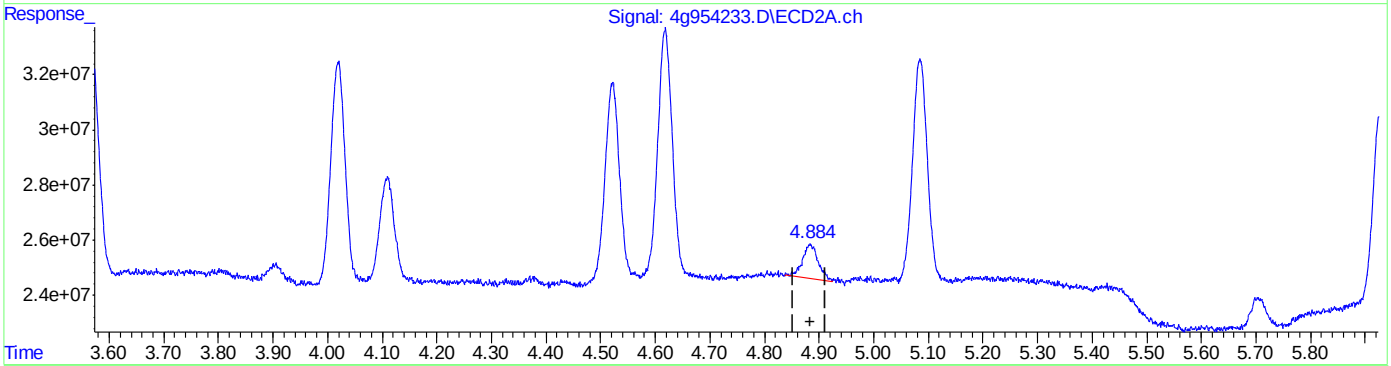
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954233.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:17 am
Operator : rebeccak
Sample : ic2585-2
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:10:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(10) alachlor
0.000min 0.000 PPB
response 0

(10) alachlor #2
4.884min 2.311 PPB
response 24345770

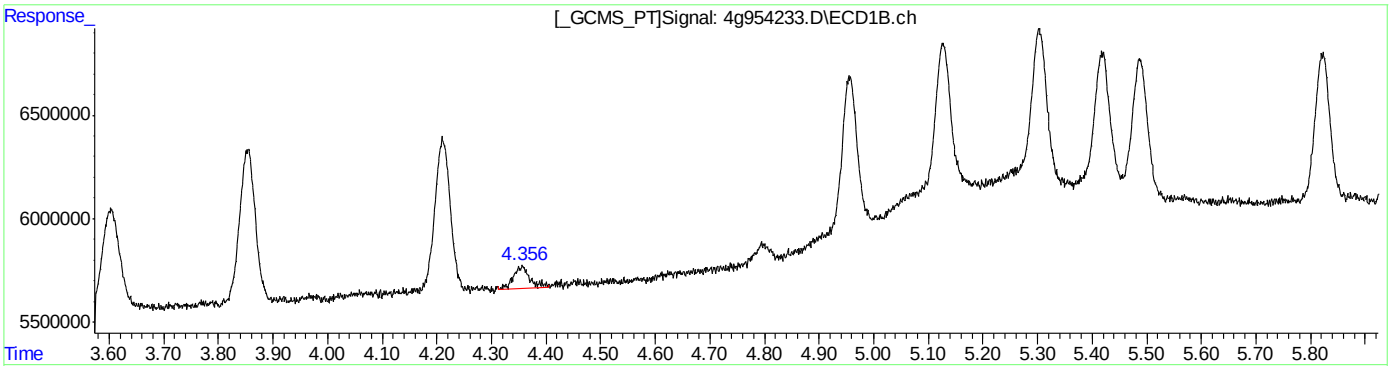
(+) = Expected Retention Time

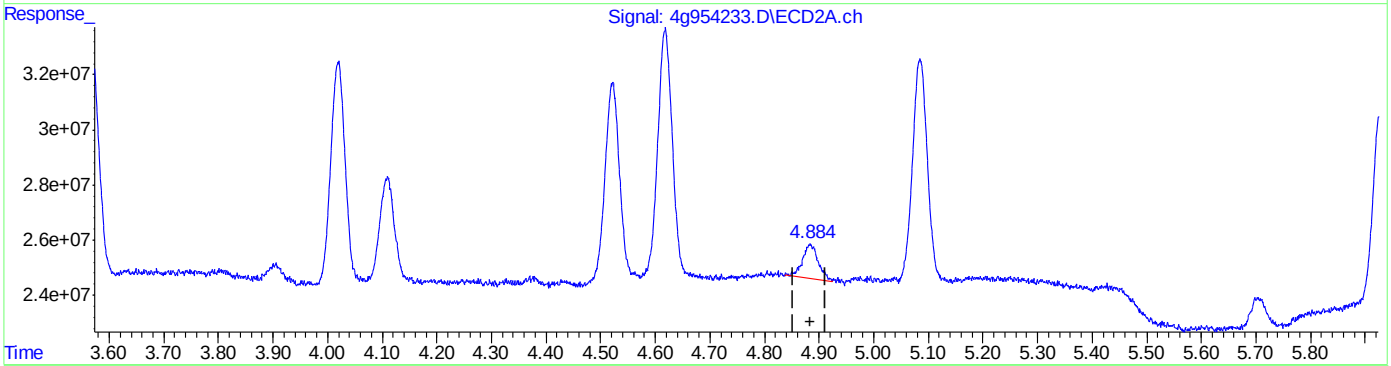
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954233.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:17 am
Operator : rebeccak
Sample : ic2585-2
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:10:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(10) alachlor
4.356min 2.023 PPB m
response 2324024

(10) alachlor #2
4.884min 2.311 PPB
response 24345770

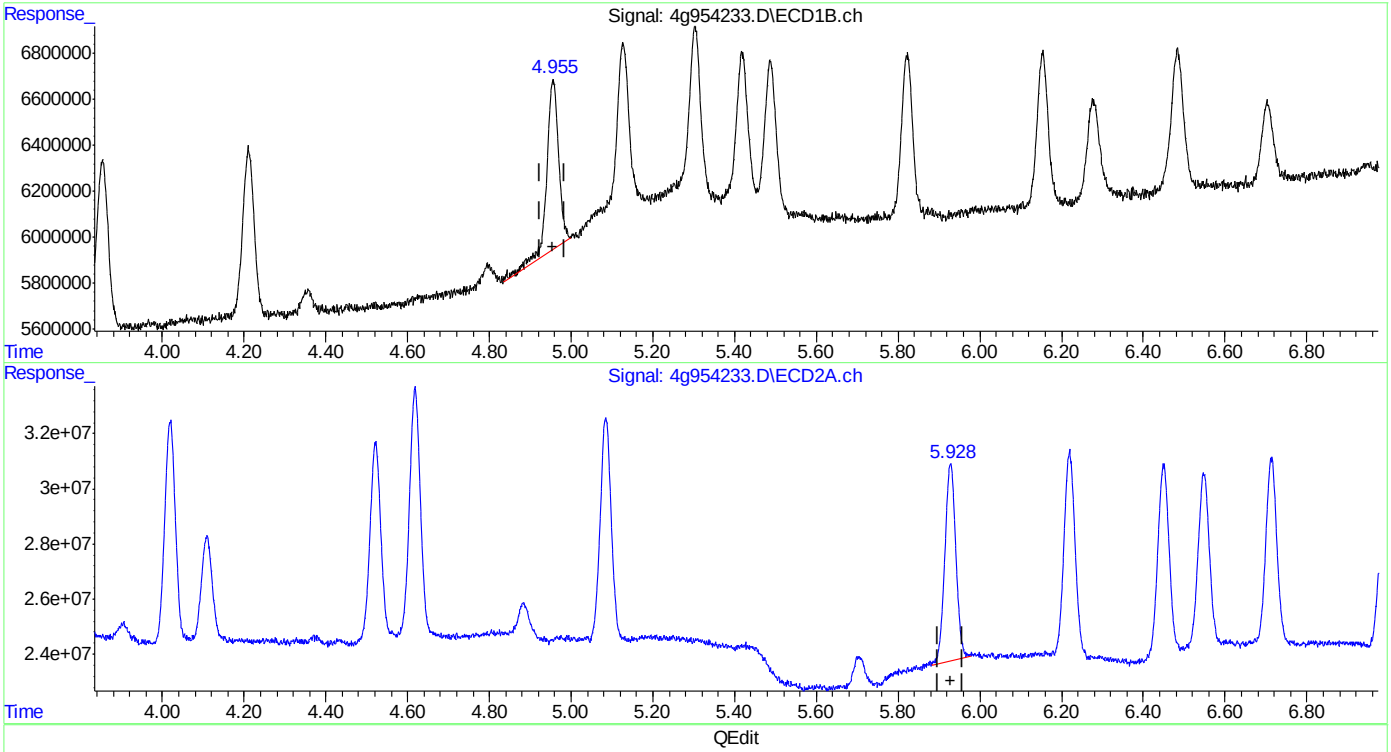
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954233.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:17 am
Operator : rebeccak
Sample : ic2585-2
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:10:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(11) Heptachlor Epoxide (B)
4.955min 1.776 PPB
response 14930743

(11) Heptachlor Epoxide #2 (B)
5.929min 1.833 PPB
response 134108144

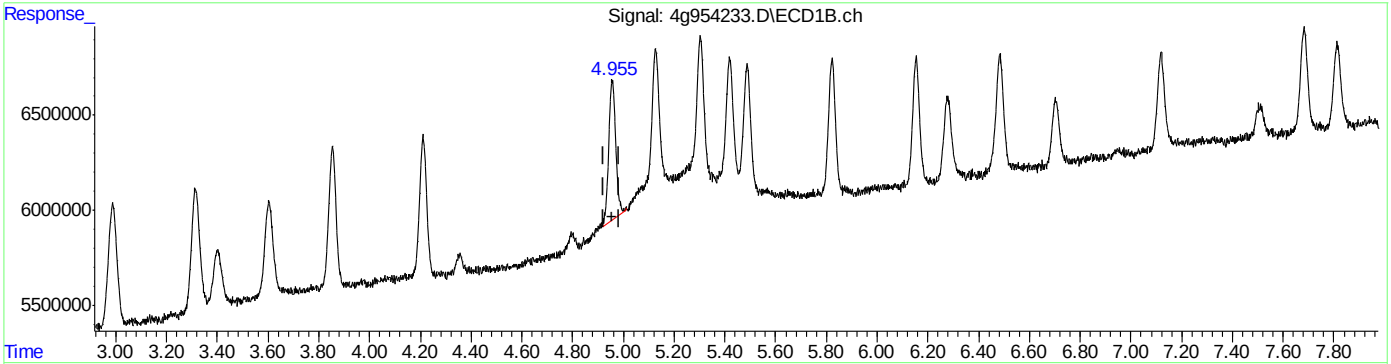
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:11:17 2018 RPT1

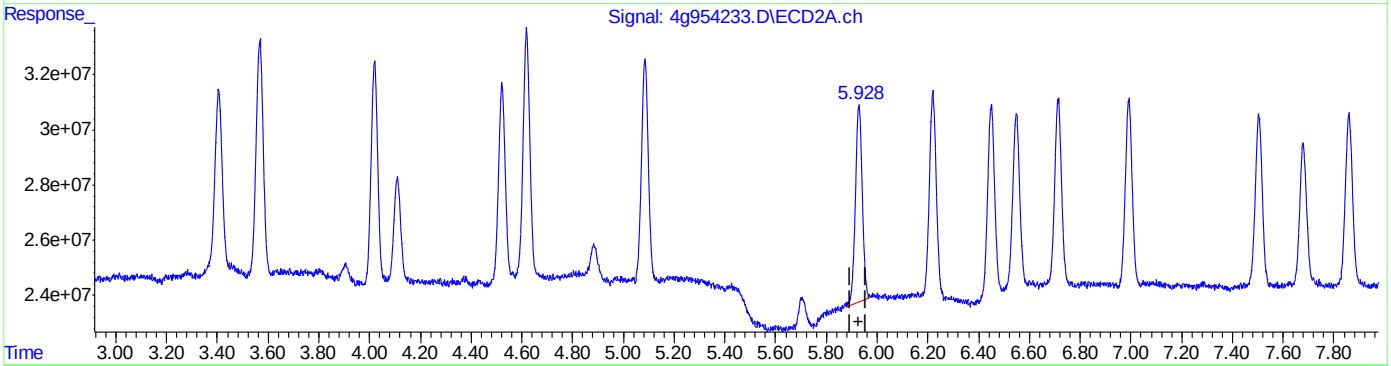
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954233.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:17 am
Operator : rebeccak
Sample : ic2585-2
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:10:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(11) Heptachlor Epoxide (B)
4.955min 1.684 PPB m
response 14155824

(11) Heptachlor Epoxide #2 (B)
5.929min 1.833 PPB
response 134108144

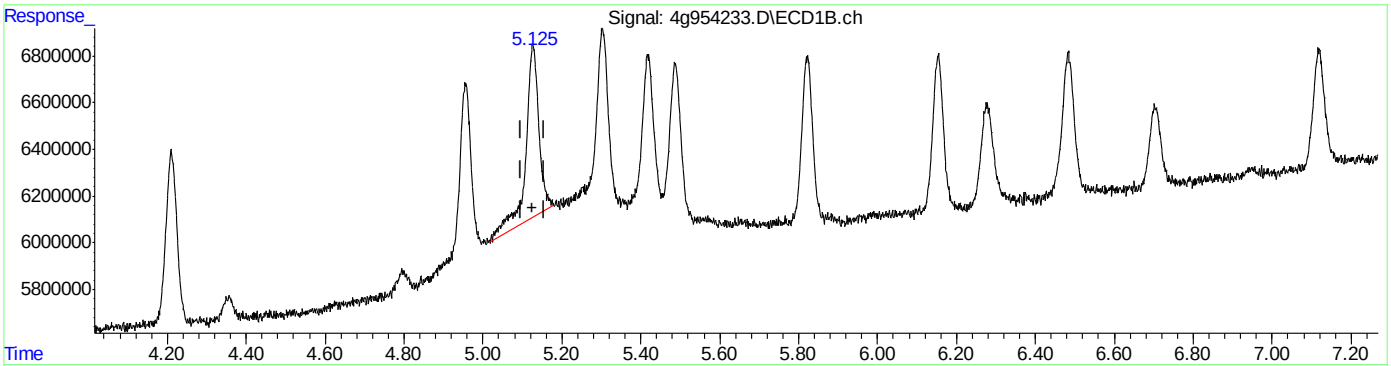
(+) = Expected Retention Time

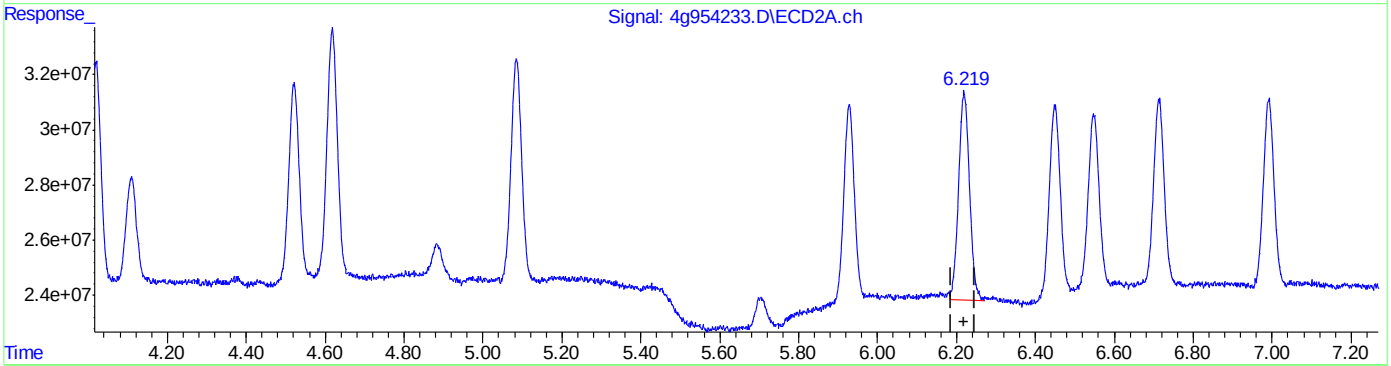
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954233.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:17 am
Operator : rebeccak
Sample : ic2585-2
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:10:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(12) gamma-Chlordane (B)
5.126min 2.030 PPB
response 17268730

(12) gamma-Chlordane #2 (B)
6.219min 1.939 PPB
response 145405514

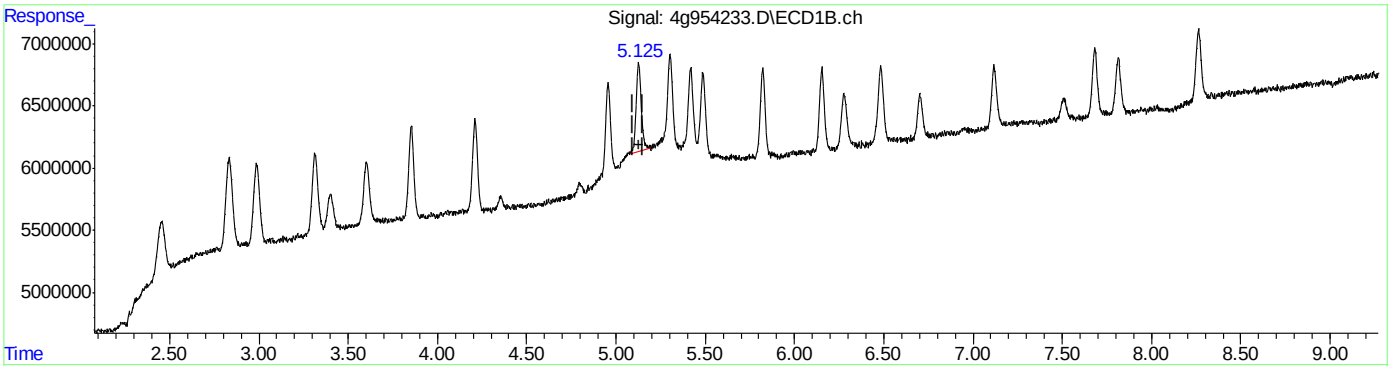
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:11:24 2018 RPT1

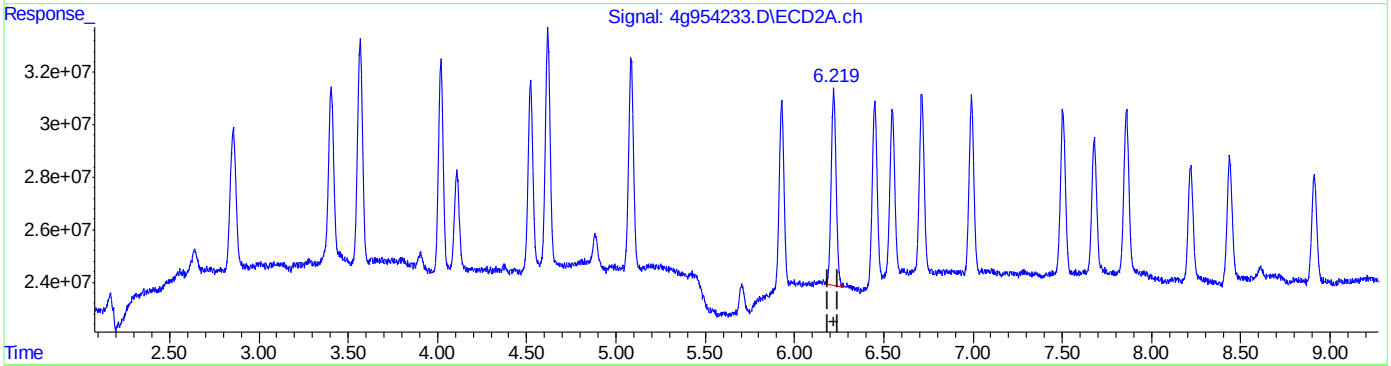
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954233.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:17 am
Operator : rebeccak
Sample : ic2585-2
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:10:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(12) gamma-Chlordane (B)
5.125min 1.692 PPB m
response 14392413

(12) gamma-Chlordane #2 (B)
6.219min 1.916 PPB m
response 143631203

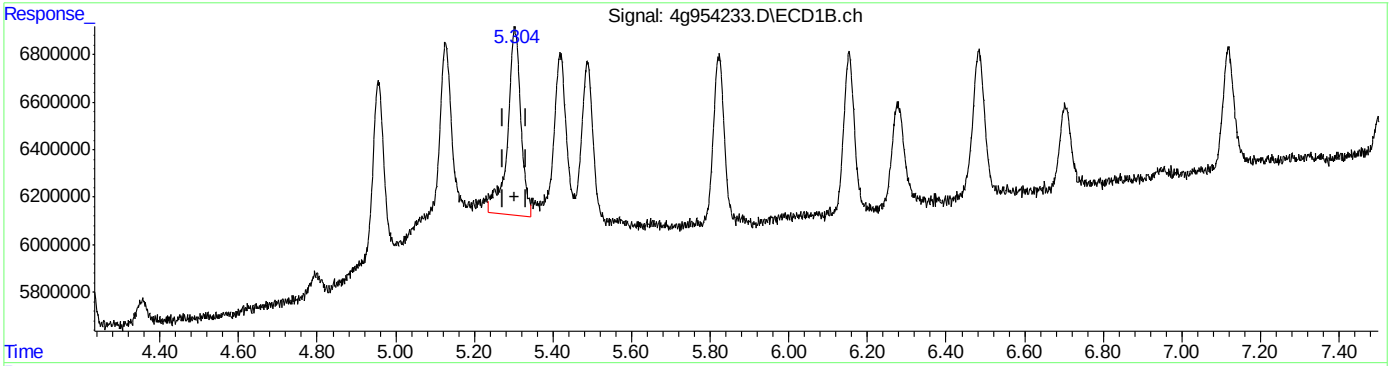
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:11:32 2018 RPT1

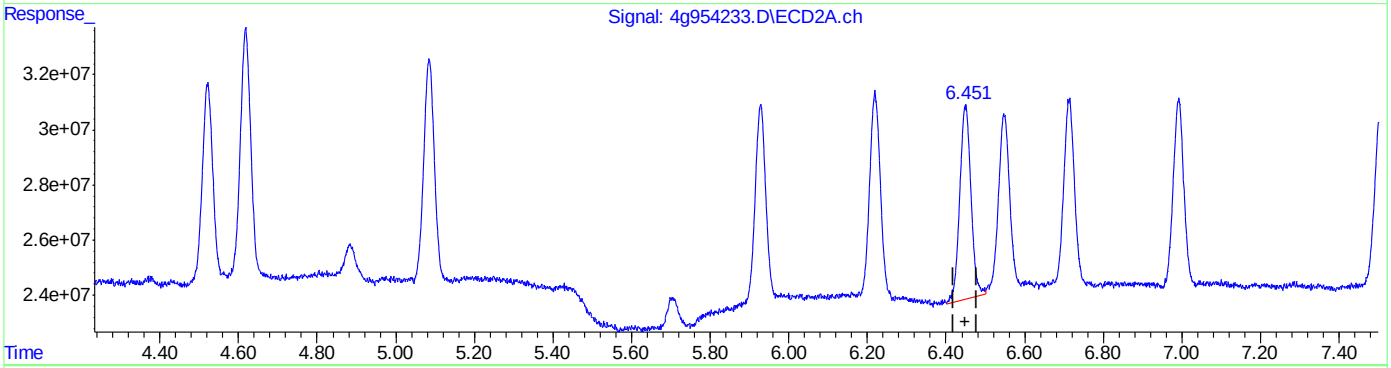
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954233.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:17 am
Operator : rebeccak
Sample : ic2585-2
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:10:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(13) alpha-Chlordane (B)
5.303min 2.201 PPB
response 18643778

(13) alpha-Chlordane #2 (B)
6.448min 1.910 PPB
response 139378436

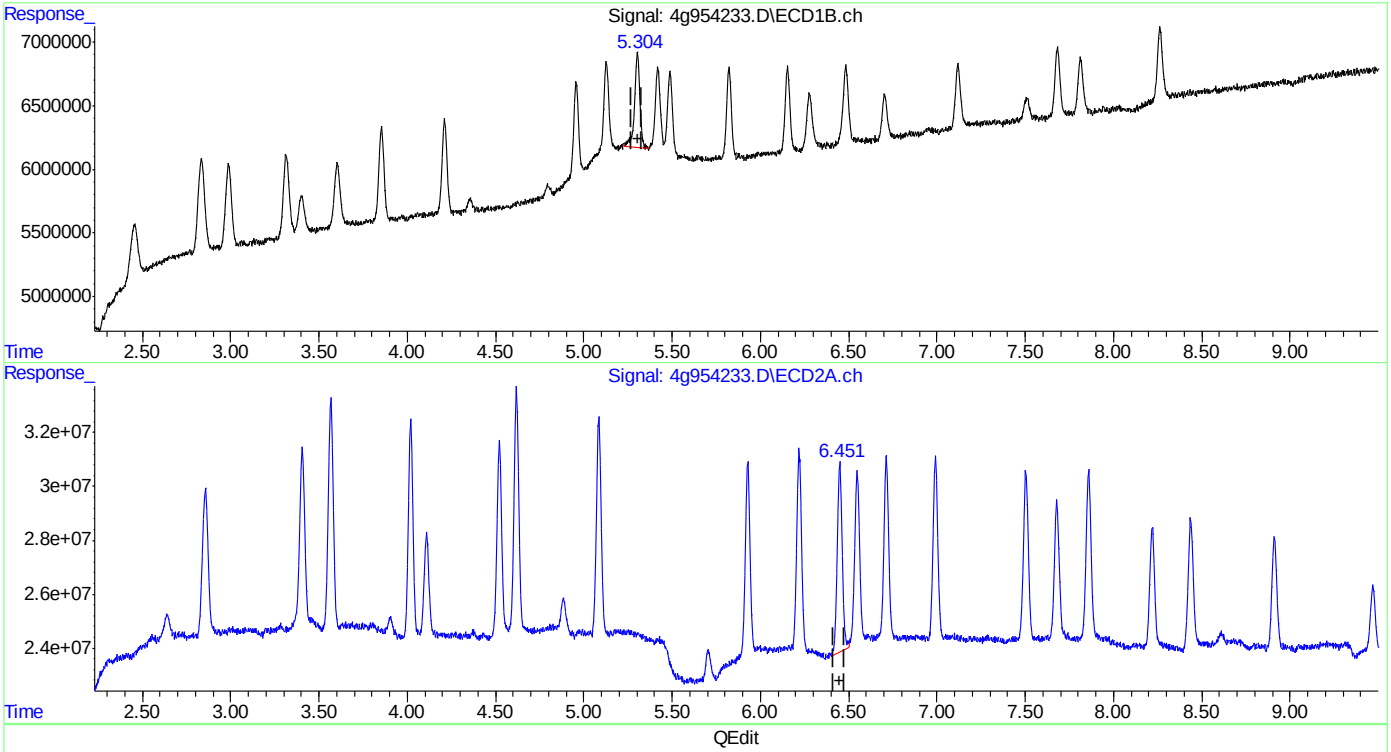
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:11:35 2018 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954233.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:17 am
Operator : rebeccak
Sample : ic2585-2
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:10:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(13) alpha-Chlordane (B)
5.304min 1.835 PPB m
response 15544209

(13) alpha-Chlordane #2 (B)
6.448min 1.910 PPB
response 139378436

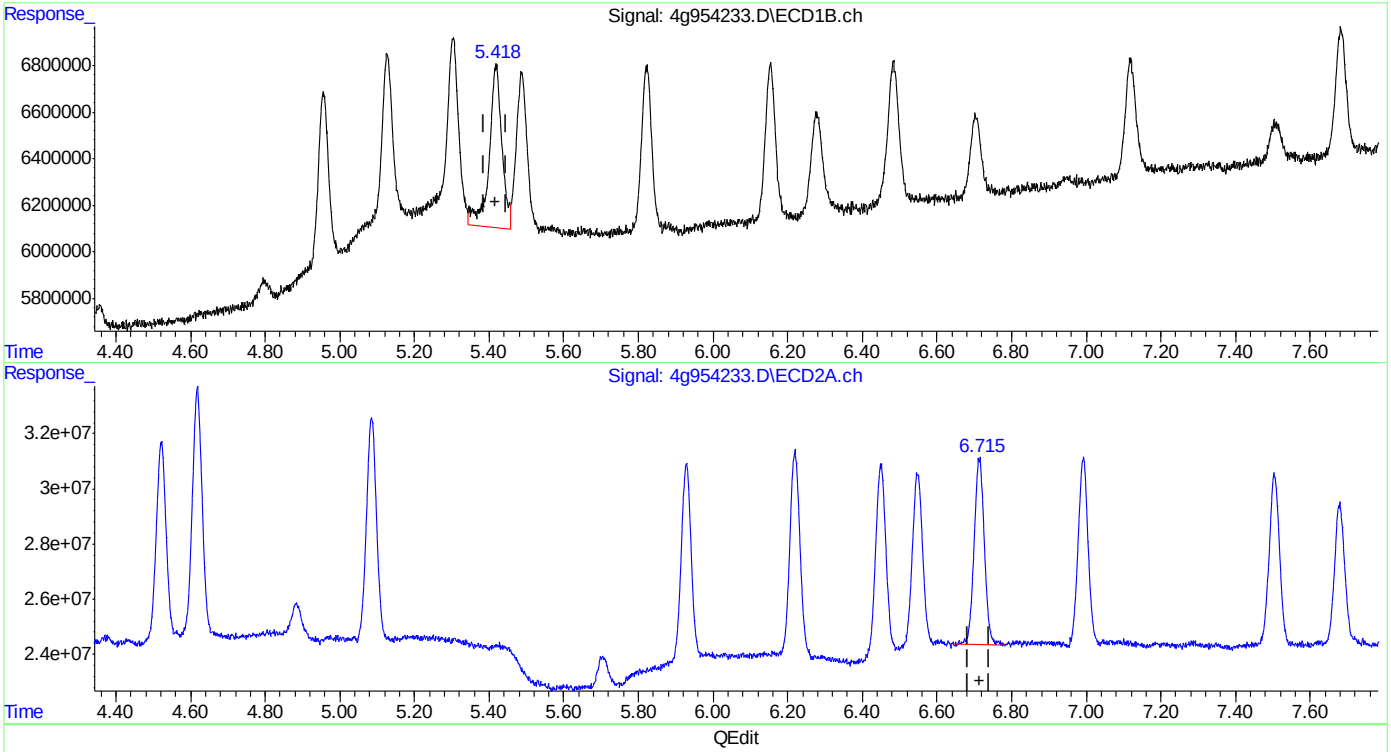
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954233.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:17 am
Operator : rebeccak
Sample : ic2585-2
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:10:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(15) 4,4'-DDE (B)
5.418min 2.254 PPB
response 16772728

(15) 4,4'-DDE #2 (B)
6.712min 1.794 PPB
response 128967790

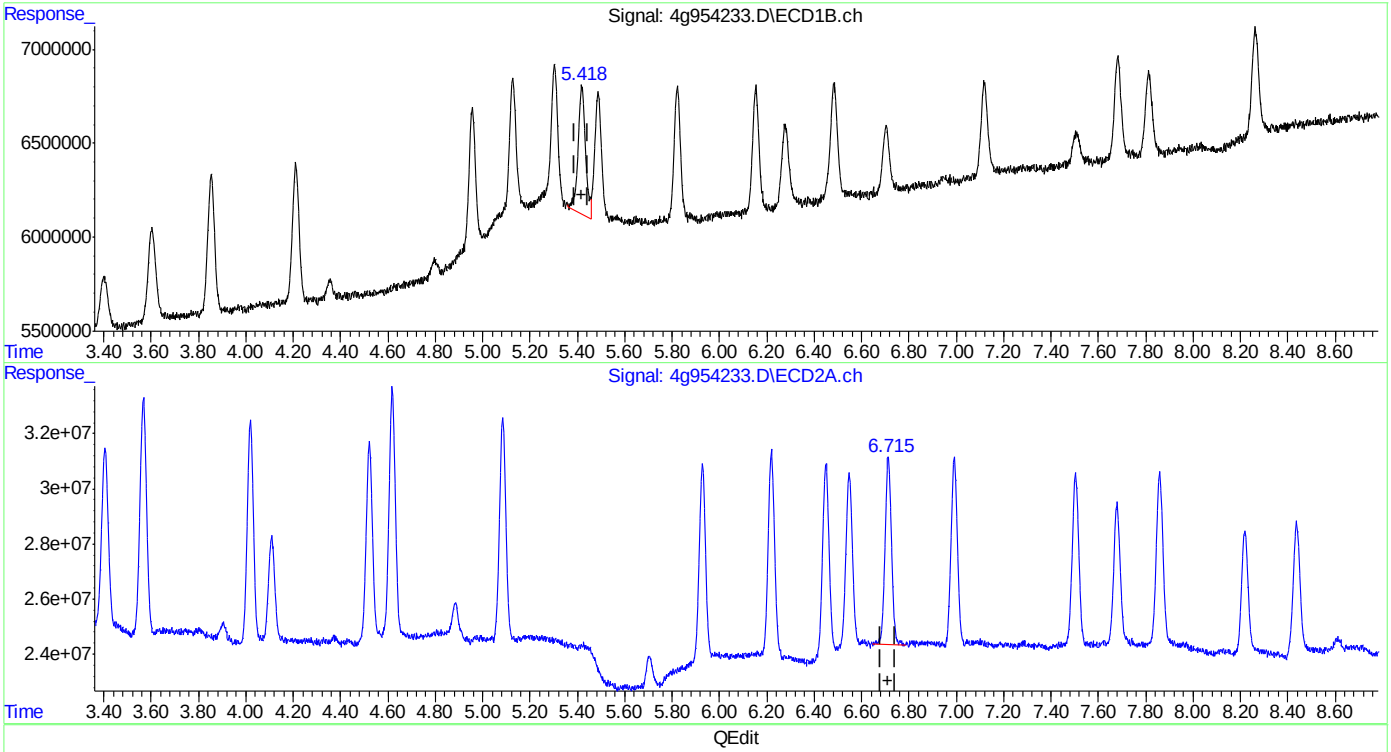
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954233.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:17 am
Operator : rebeccak
Sample : ic2585-2
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:10:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(15) 4,4'-DDE (B)
5.418min 1.976 PPB m
response 14702520

(15) 4,4'-DDE #2 (B)
6.712min 1.794 PPB
response 128967790

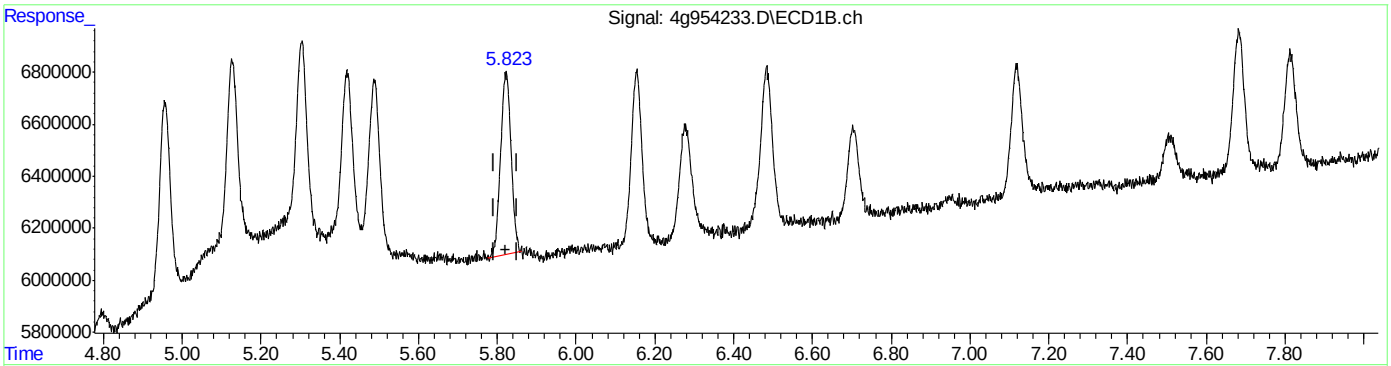
(+) = Expected Retention Time

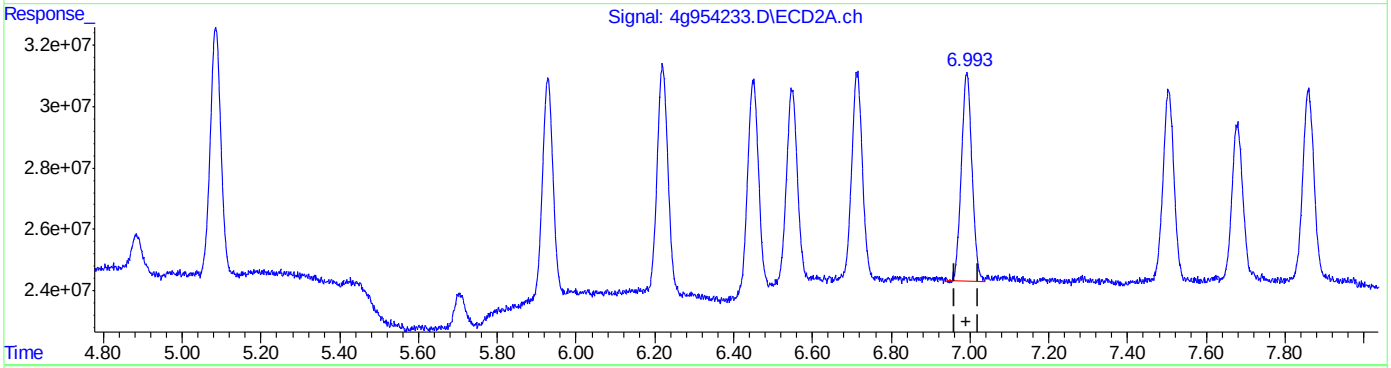
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954233.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:17 am
Operator : rebeccak
Sample : ic2585-2
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:10:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(16) Dieldrin (MA)
5.823min 1.568 PPB
response 13053957

(16) Dieldrin #2 (MA)
6.993min 1.845 PPB
response 127202780

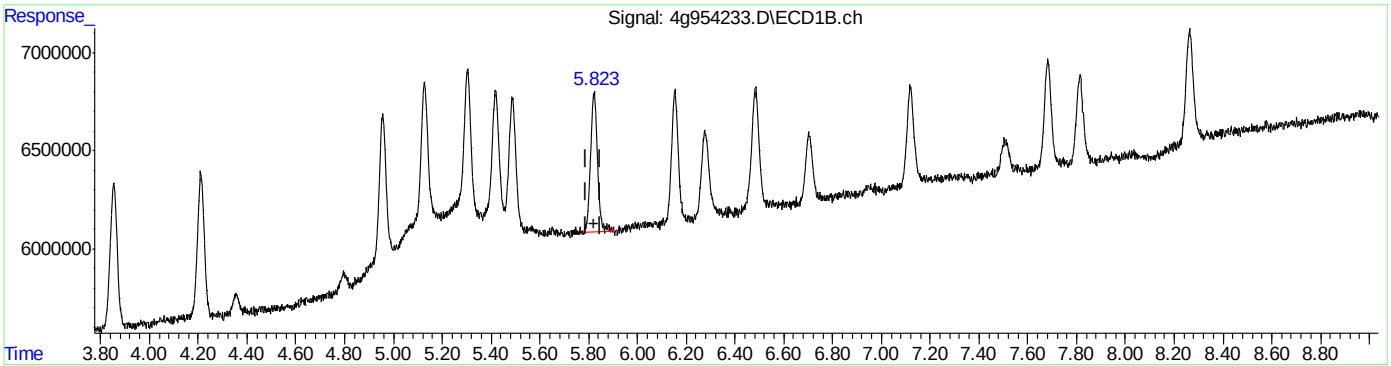
(+) = Expected Retention Time

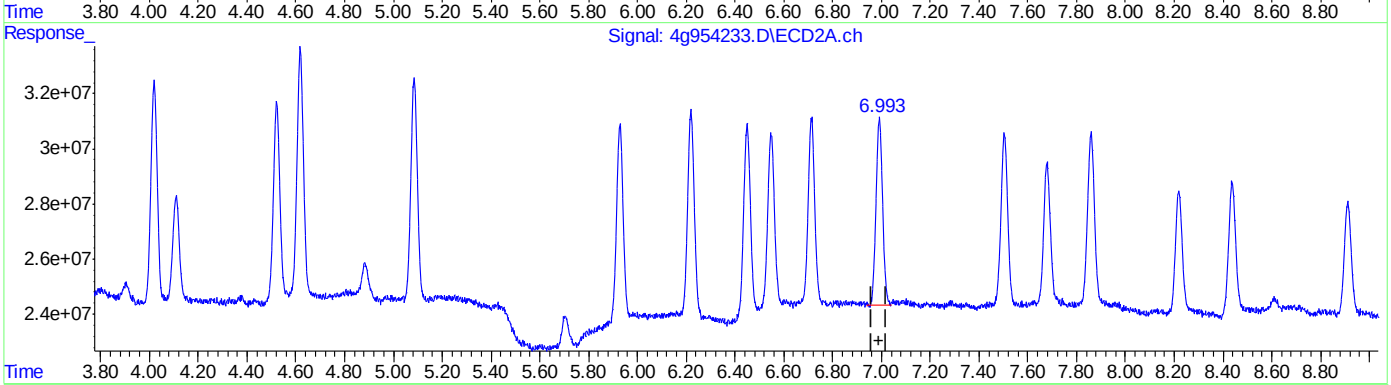
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954233.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:17 am
Operator : rebeccak
Sample : ic2585-2
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:10:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(16) Dieldrin (MA)
5.823min 1.677 PPB m
response 13961899

(16) Dieldrin #2 (MA)
6.993min 1.845 PPB
response 127202780

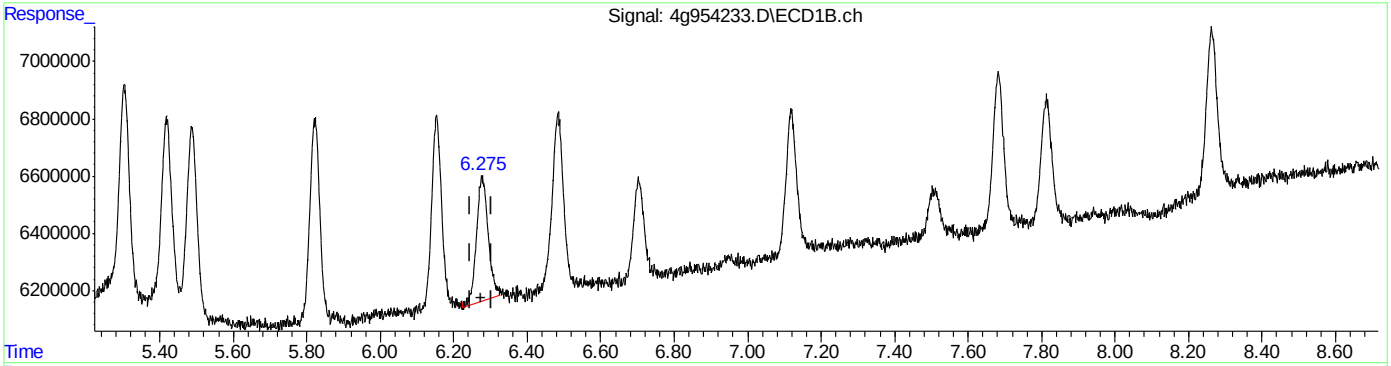
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:12:06 2018 RPT1

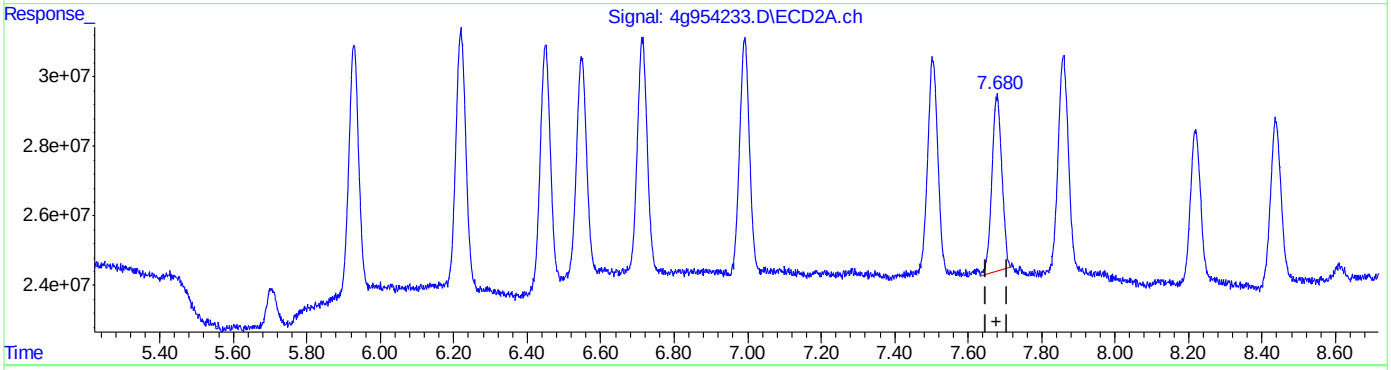
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954233.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:17 am
Operator : rebeccak
Sample : ic2585-2
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:10:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(18) 4,4'-DDD (A)
6.275min 1.618 PPB
response 9612260

(18) 4,4'-DDD #2 (A)
7.680min 1.923 PPB
response 94848376

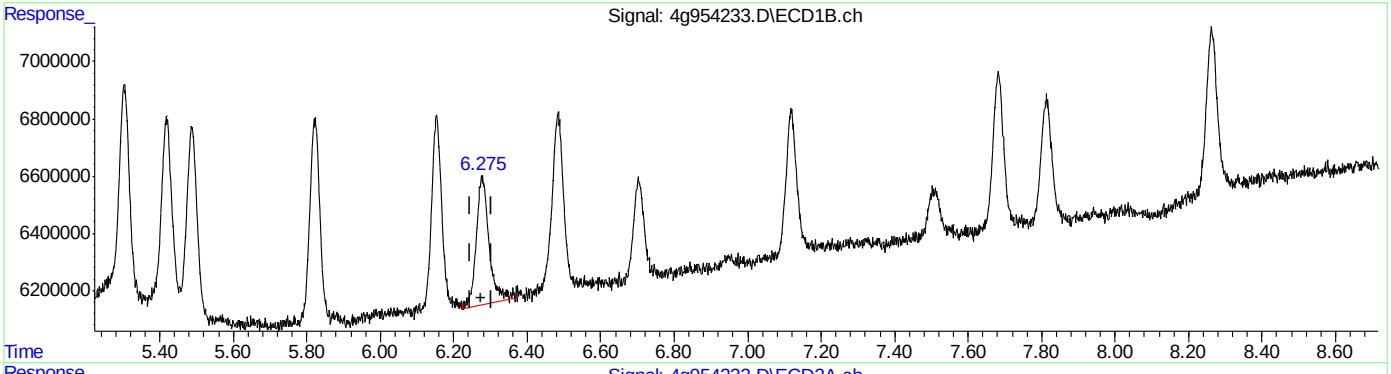
(+) = Expected Retention Time

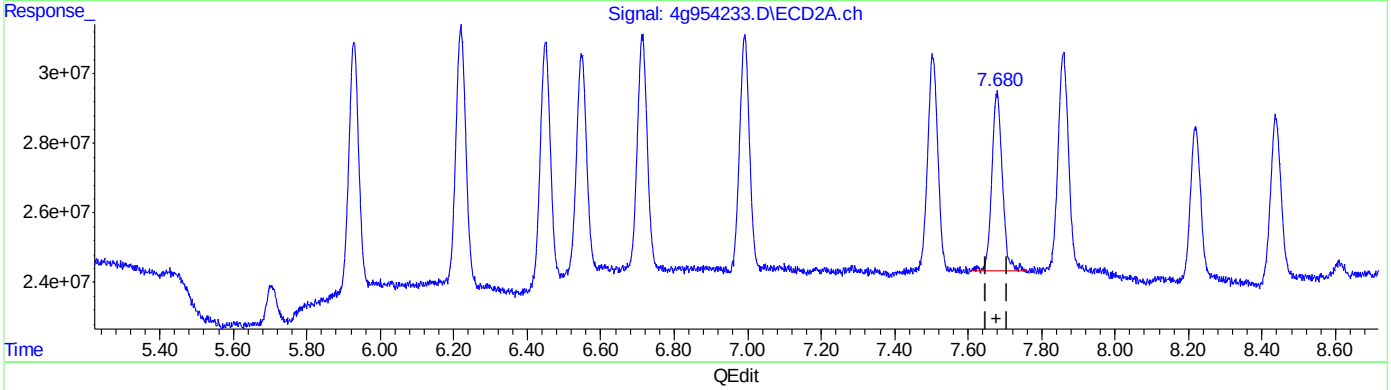
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954233.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:17 am
Operator : rebeccak
Sample : ic2585-2
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:10:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(18) 4,4'-DDD (A)
6.275min 1.816 PPB m
response 10783207

(18) 4,4'-DDD #2 (A)
7.680min 2.079 PPB m
response 102528162

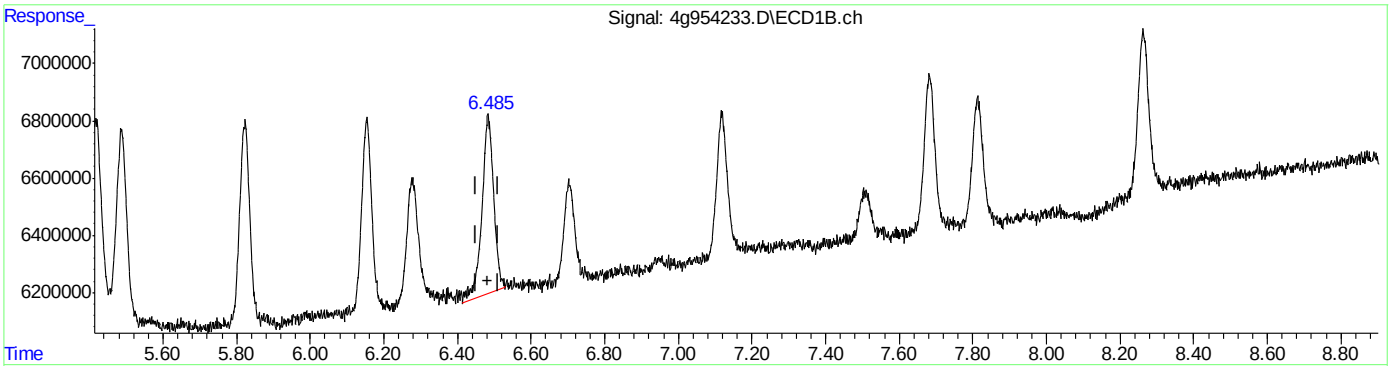
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:12:16 2018 RPT1

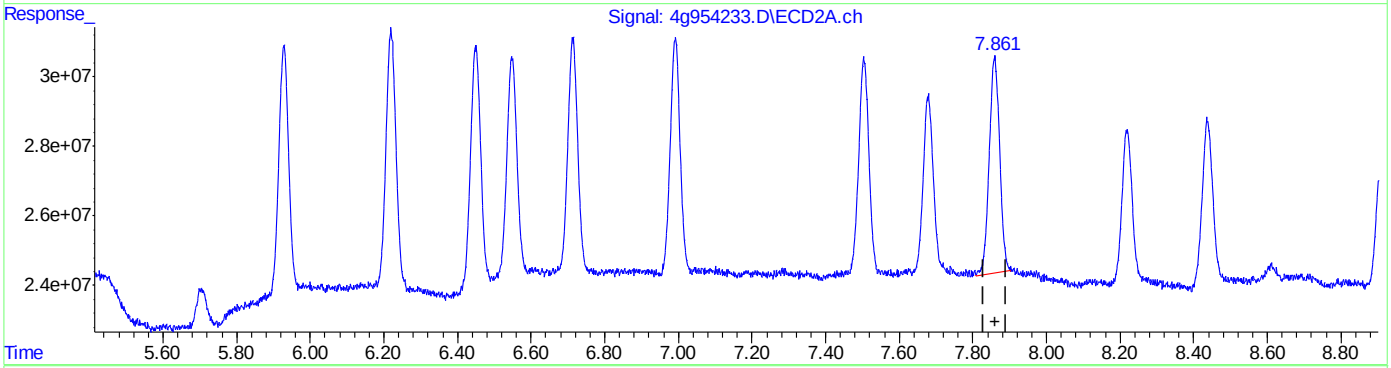
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954233.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:17 am
Operator : rebeccak
Sample : ic2585-2
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:10:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(19) Endosulfan II (B)
6.484min 1.820 PPB
response 13933984

(19) Endosulfan II #2 (B)
7.860min 2.142 PPB
response 122844922

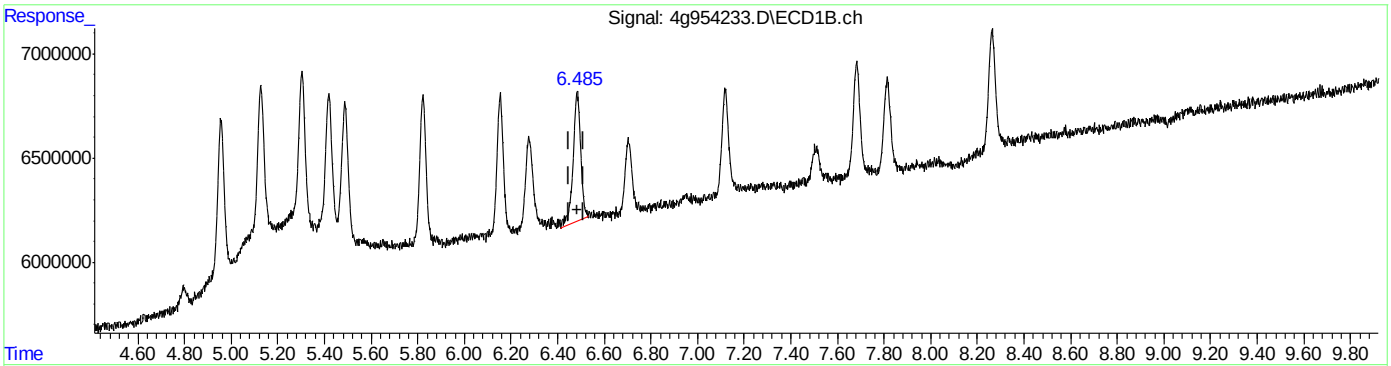
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:12:22 2018 RPT1

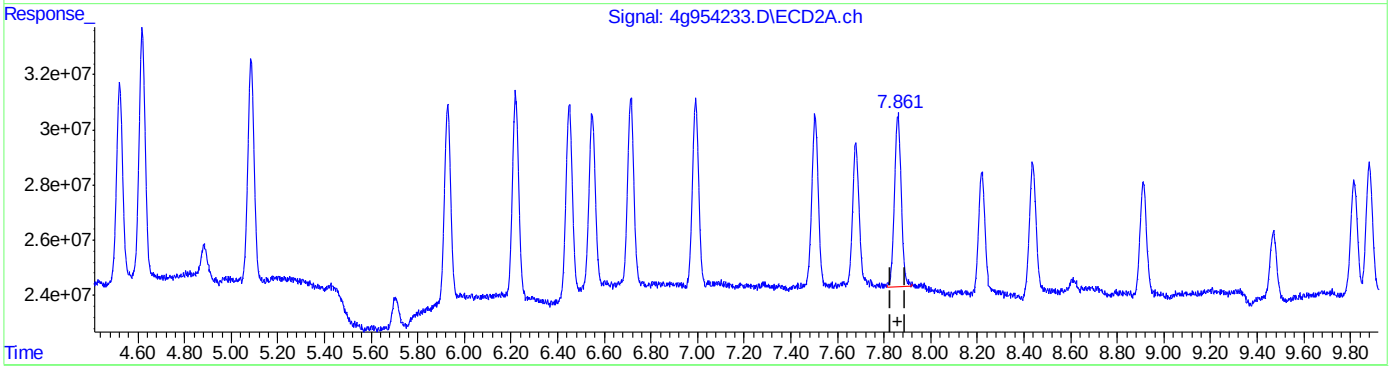
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954233.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:17 am
Operator : rebeccak
Sample : ic2585-2
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:10:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(19) Endosulfan II (B)
6.484min 1.820 PPB
response 13933984

(19) Endosulfan II #2 (B)
7.861min 2.209 PPB m
response 126689956

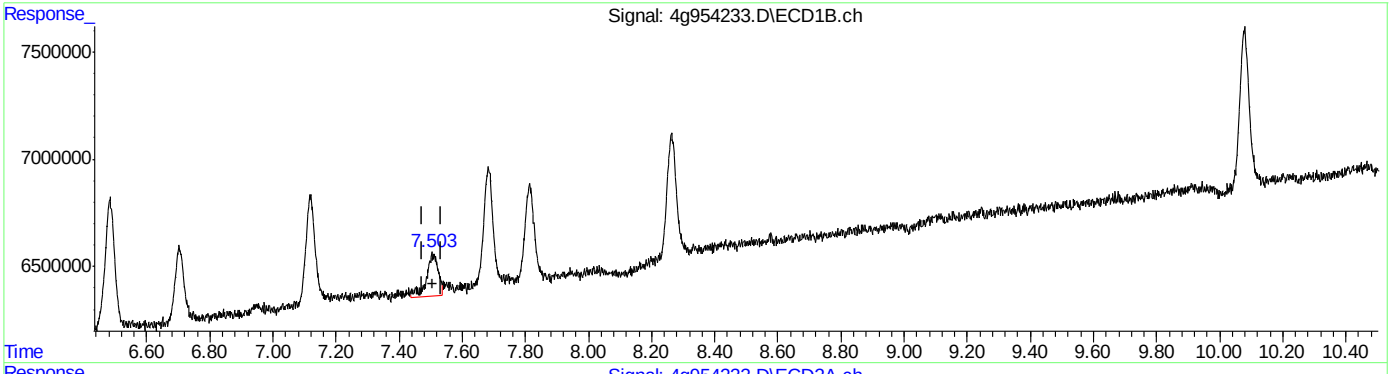
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:12:26 2018 RPT1

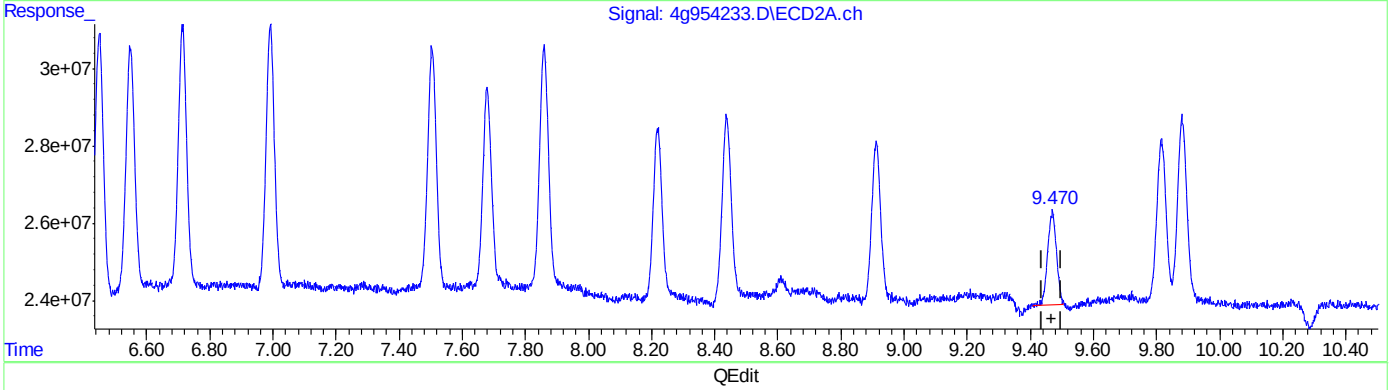
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954233.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:17 am
Operator : rebeccak
Sample : ic2585-2
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:10:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(23) Methoxychlor (A)
7.503min 1.948 PPB
response 4948619

(23) Methoxychlor #2 (A)
9.469min 1.582 PPB
response 47355458

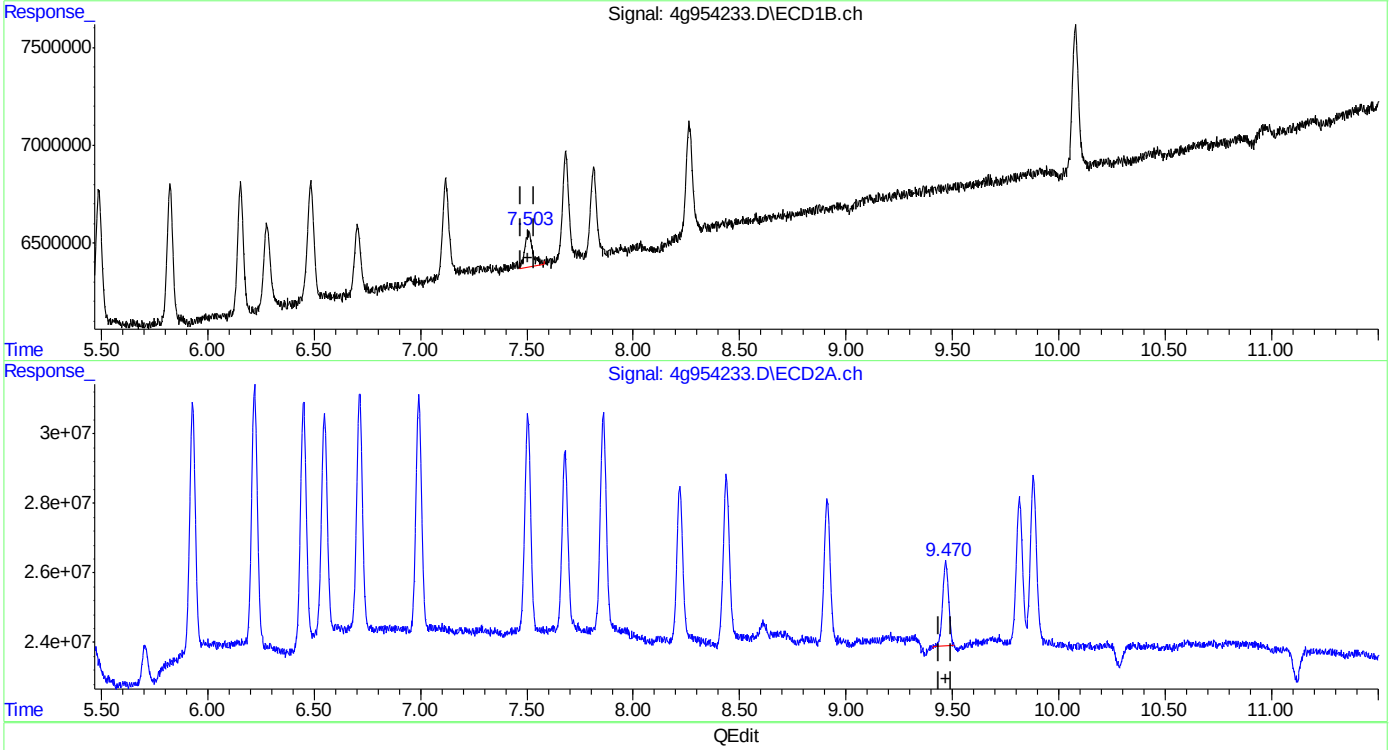
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954233.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:17 am
Operator : rebeccak
Sample : ic2585-2
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:10:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(23) Methoxychlor (A)
7.503min 1.825 PPB m
response 4635046

(23) Methoxychlor #2 (A)
9.469min 1.582 PPB
response 47355458

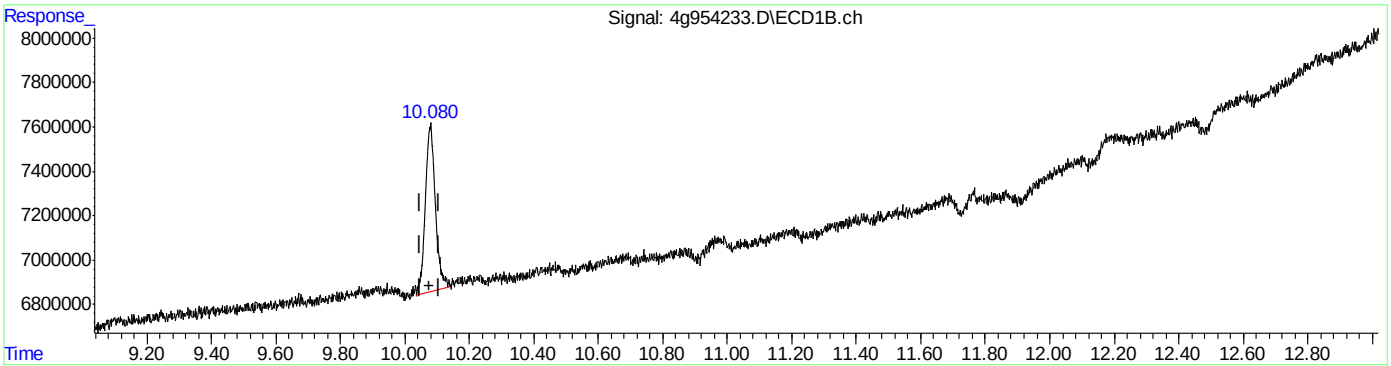
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:12:38 2018 RPT1

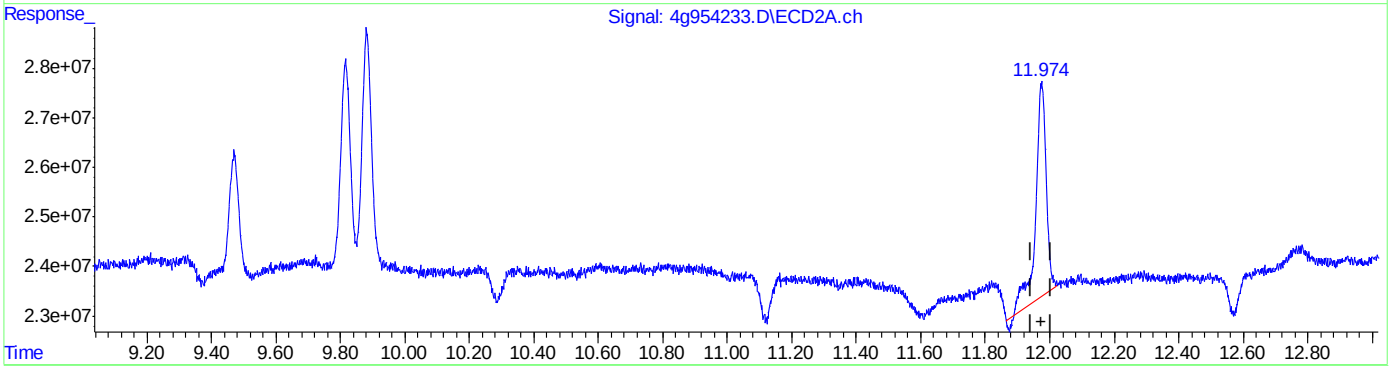
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954233.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:17 am
Operator : rebeccak
Sample : ic2585-2
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:10:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Decachlorobiphenyl (SA)
10.080min 2.099 PPB
response 16106129

(26) Decachlorobiphenyl #2 (SA)
11.975min 3.285 PPB
response 96943731

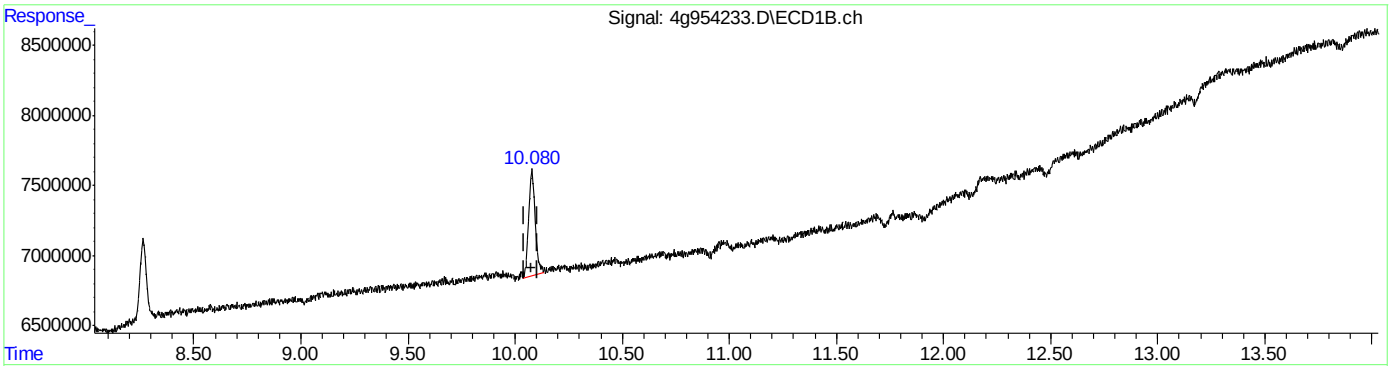
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:12:42 2018 RPT1

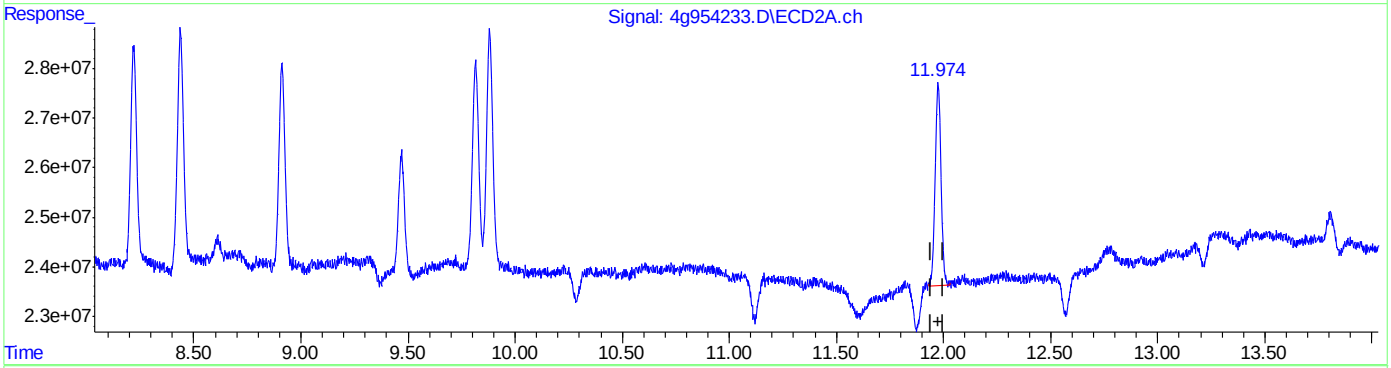
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954233.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:17 am
Operator : rebeccak
Sample : ic2585-2
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:10:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Decachlorobiphenyl (SA)
10.080min 2.099 PPB
response 16106129

(26) Decachlorobiphenyl #2 (SA)
11.974min 2.674 PPB m
response 78906427

(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:12:46 2018 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 11/06/18 09:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954234.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:34 am
Operator : rebeccak
Sample : ic2585-5
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:08:33 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.739	1.924	343.9E6	3214.4E6	50.000	50.000
27) I	1-bromo-2...	1.739	1.924	343.9E6	3214.4E6	50.000	50.000
33) I	1-bromo-2...	1.739	1.924	343.9E6	3214.4E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.452	2.855	28025076	286.6E6	3.860	4.386
	Spiked Amount 40.000 Range 30 - 150 Recovery = 9.65%# 10.97%#						
26) SA	Decachlor...	10.077	11.974	39234911	199.3E6	5.350m	6.565m
	Spiked Amount 40.000 Recovery = 13.37% 16.41%						
	Target Compounds						
3)	hexachlor...	2.833	3.405	47994101	341.9E6	5.313	4.452
4) A	alpha-BHC	2.985	3.565	38331247	416.6E6	4.055	4.205
5) MA	gamma-BHC	3.313	4.018	37201877	368.7E6	4.146m	4.187
6) MA	Heptachlor	3.853	4.618	37807422	430.8E6	4.457	4.576m
7) B	beta-BHC	3.399	4.108	17655299	178.9E6	4.212m	4.416
8) B	delta-BHC	3.603	4.521	30705332	338.3E6	4.003	4.110m
9) MB	Aldrin	4.212	5.085	36680590	372.9E6	4.307	4.347
10)	alachlor	4.353	4.882	5143812	56165015	4.686	5.181
11) B	Heptachlo...	4.957	5.928	35929256	326.1E6	4.471	4.331
12) B	gamma-Chl...	5.127	6.220	35072077	344.7E6	4.315	4.469
13) B	alpha-Chl...	5.303	6.449	36314885	332.9E6	4.486	4.432m
14) A	Endosulfan I	5.487	6.547	34065511	312.4E6	4.584	4.544m
15) B	4,4'-DDE	5.419	6.713	33617184	317.3E6	4.726	4.289
16) MA	Dieldrin	5.822	6.991	35179728	319.5E6	4.420m	4.503
17) MA	Endrin	6.153	7.504	31865303	303.6E6	4.630	4.916
18) A	4,4'-DDD	6.277	7.680	24191427	255.2E6	4.262	5.028
19) B	Endosulfa...	6.483	7.860	33167314	292.5E6	4.533m	4.957
20) MA	4,4'-DDT	6.702	8.219	18866259	223.5E6	3.934	3.911
21) B	Endrin Al...	7.118	8.439	25803579	231.3E6	4.393	5.148m
22) B	Endosulfa...	7.813	8.912	23150339	207.9E6	3.885	4.011
23) A	Methoxychlor	7.510	9.469	9482518	127.3E6	3.906	4.132m
24)	Mirex	7.682	9.815	27814804	215.9E6	4.781	4.883
25) B	Endrin Ke...	8.264	9.882	30244155	243.0E6	4.351m	4.319

SemiQuant Compounds - Not Calibrated on this Instrument

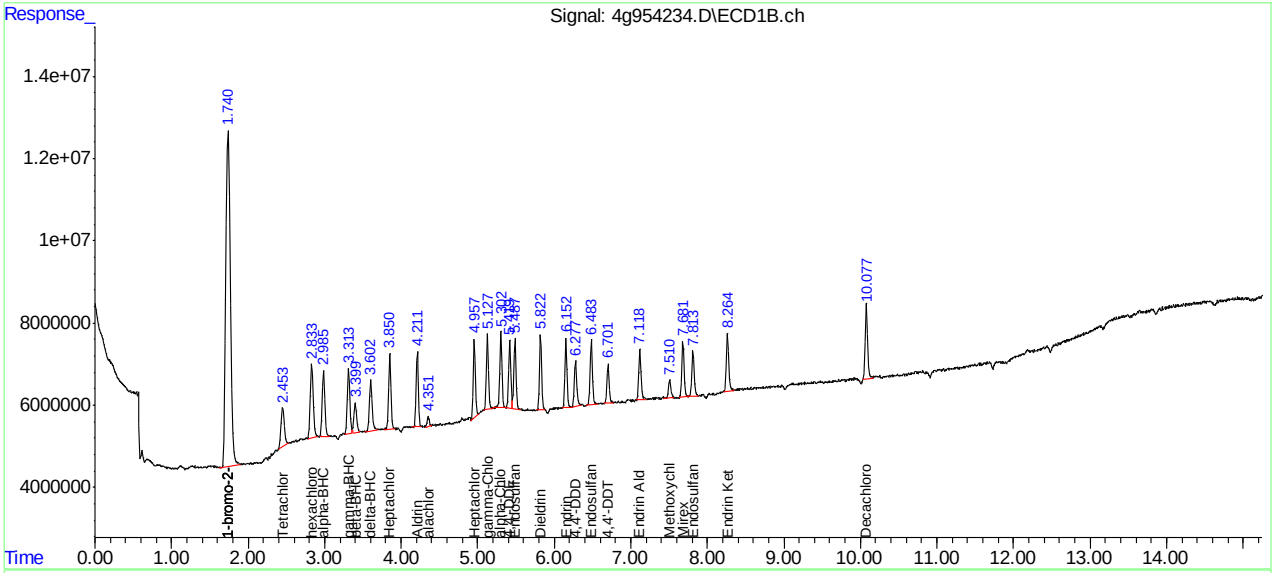
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

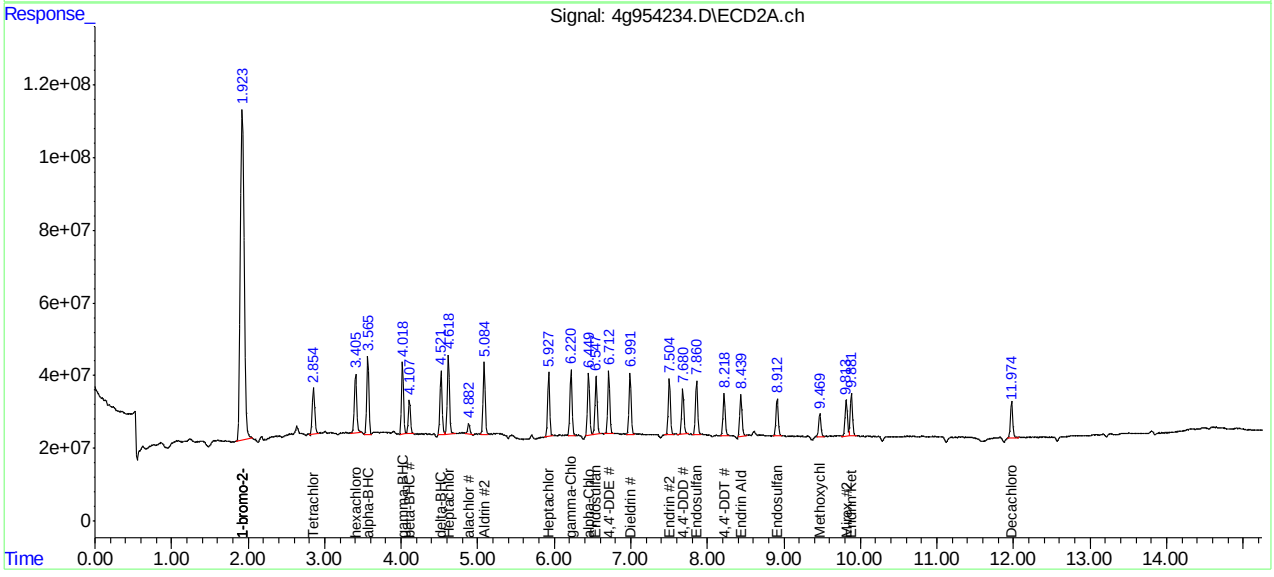
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954234.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:34 am
Operator : rebeccak
Sample : ic2585-5
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:08:33 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number: G4G2585-IC2585 **Method:** SW846 8081B
Lab FileID: 4G954234.D **Analyst approved:** 11/05/18 14:59 Rebecca Krug
Injection Time: 11/05/18 10:34 **Supervisor approved:** 11/06/18 09:35 Gwendolyn Burns

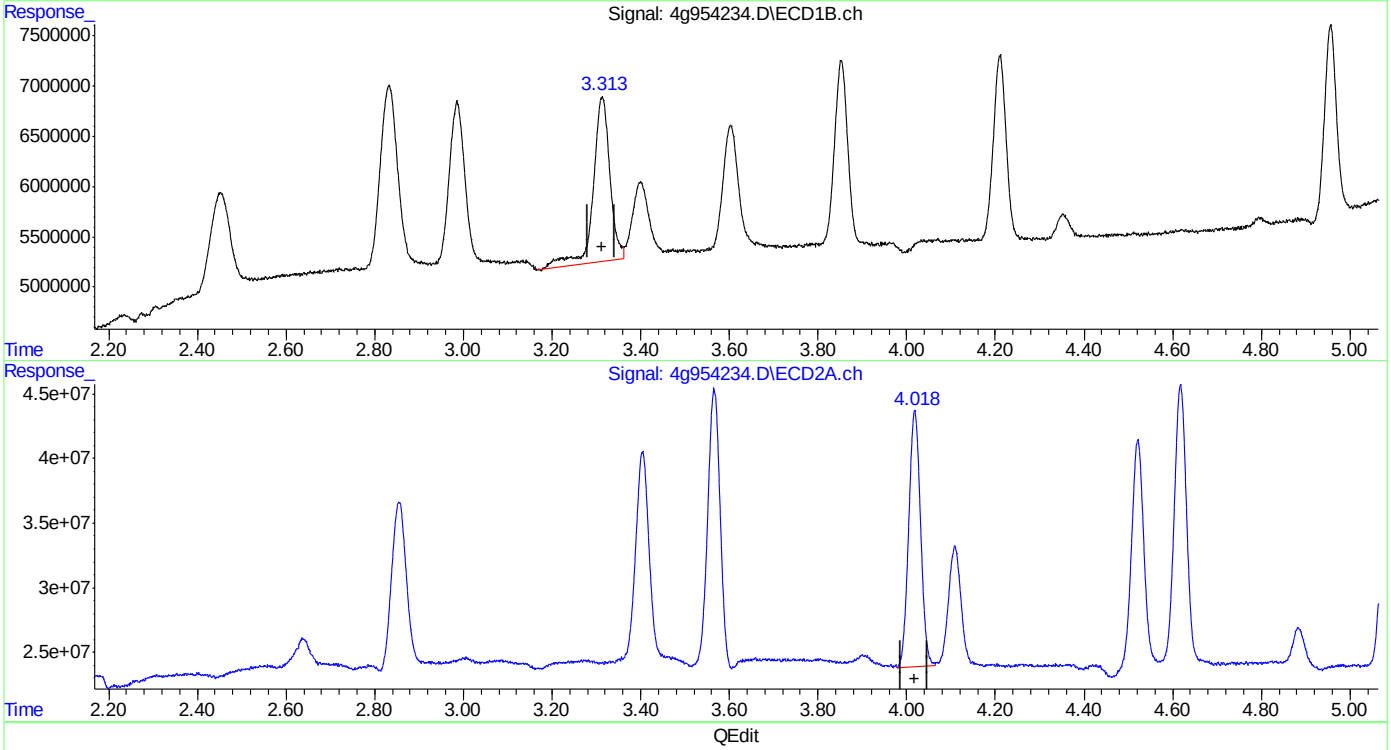
Parameter	CAS	Sig#	R.T. (min.)	Reason
gamma-BHC (Lindane)	58-89-9	1	3.31	Poorly defined baseline
beta-BHC	319-85-7	1	3.40	Poorly defined baseline
delta-BHC	319-86-8	2	4.52	Poorly defined baseline
Heptachlor	76-44-8	2	4.62	Poorly defined baseline
Dieldrin	60-57-1	1	5.82	Poorly defined baseline
alpha-Chlordane	5103-71-9	2	6.45	Poorly defined baseline
Endosulfan-II	33213-65-9	1	6.48	Poorly defined baseline
Endosulfan-I	959-98-8	2	6.55	Poorly defined baseline
Endrin ketone	53494-70-5	1	8.26	Poorly defined baseline
Endrin aldehyde	7421-93-4	2	8.44	Poorly defined baseline
Methoxychlor	72-43-5	2	9.47	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	1	10.08	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	2	11.97	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954234.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:34 am
Operator : rebeccak
Sample : ic2585-5
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:06:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(5) gamma-BHC (MA)
3.314min 4.838 PPB
response 43408452

(5) gamma-BHC #2 (MA)
4.018min 4.187 PPB
response 368694765

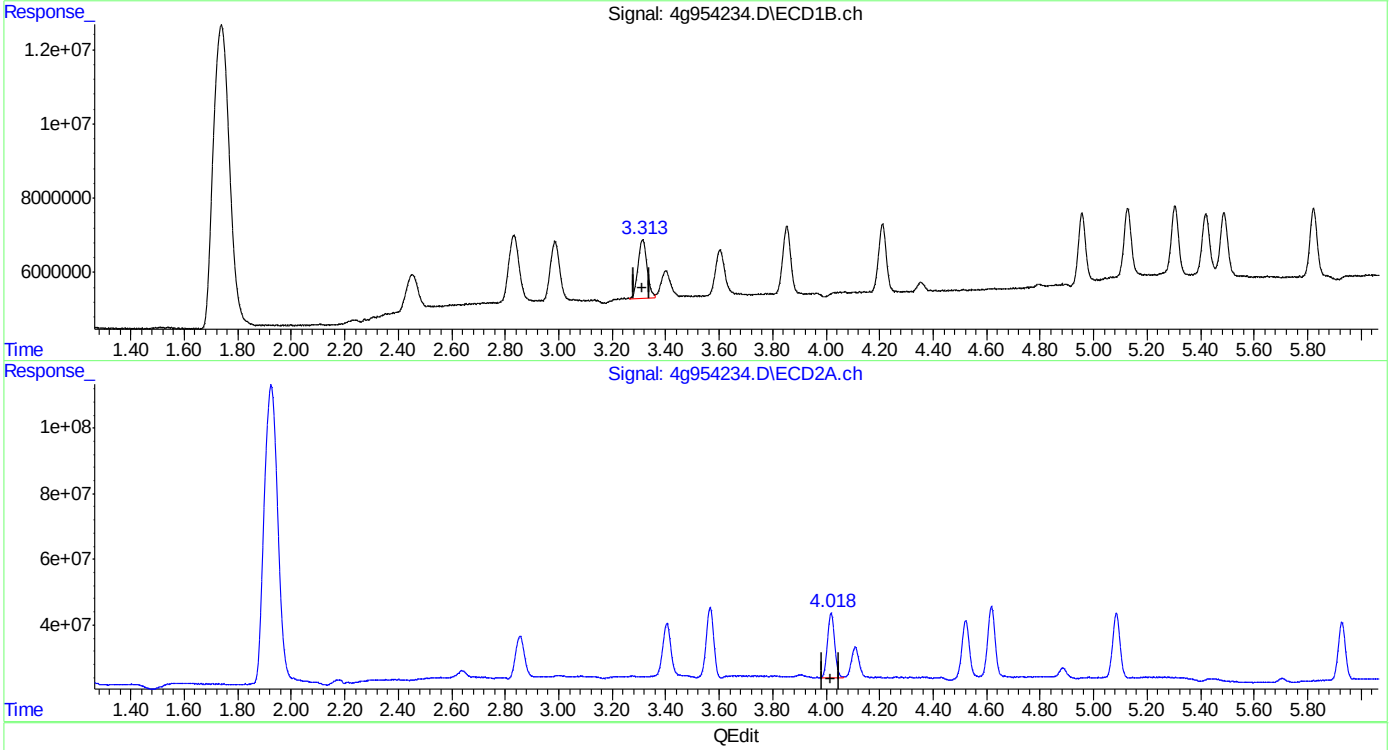
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954234.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:34 am
Operator : rebeccak
Sample : ic2585-5
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:06:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(5) gamma-BHC (MA)
3.313min 4.146 PPB m
response 37201877

(5) gamma-BHC #2 (MA)
4.018min 4.187 PPB
response 368694765

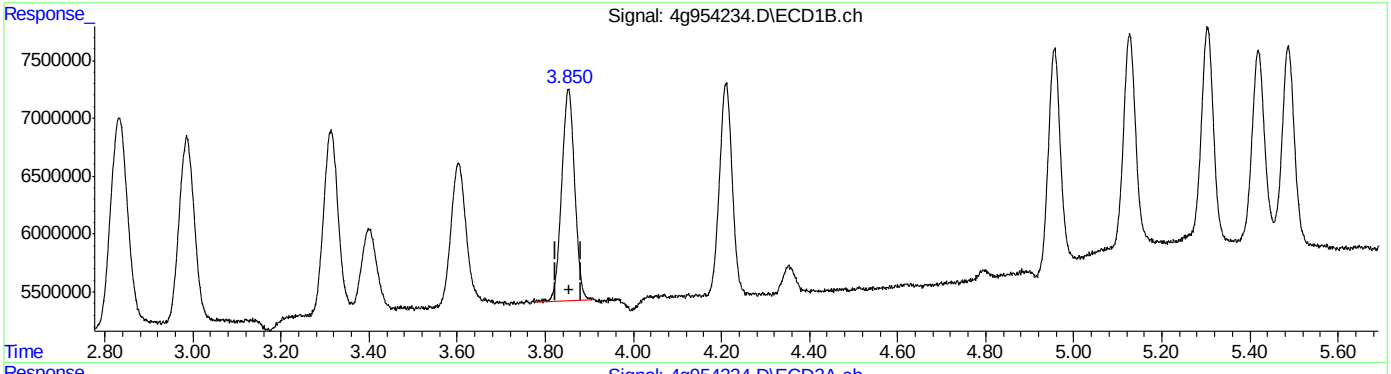
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:06:29 2018 RPT1 Page: 1

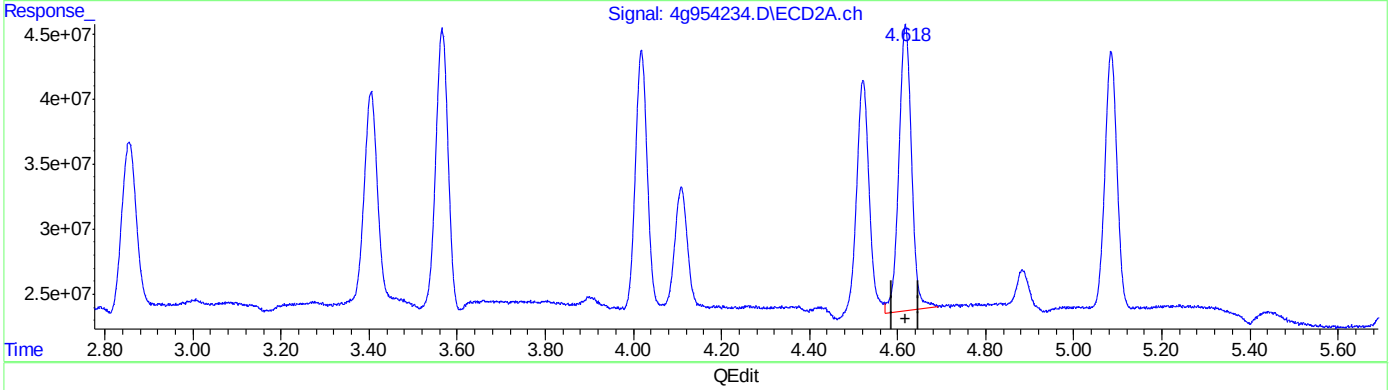
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954234.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:34 am
Operator : rebeccak
Sample : ic2585-5
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:06:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(6) Heptachlor (MA)
3.853min 4.457 PPB
response 37807422

(6) Heptachlor #2 (MA)
4.618min 4.684 PPB
response 440899061

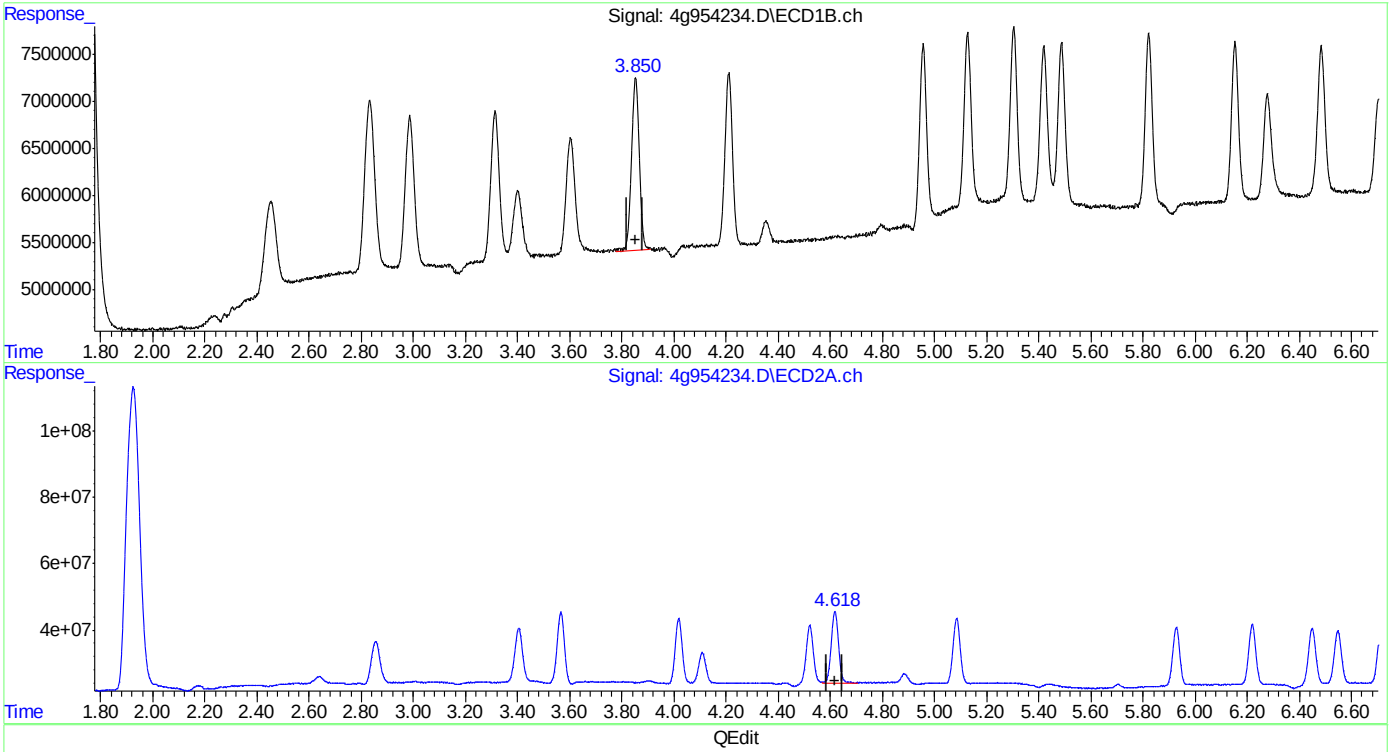
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:06:36 2018 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954234.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:34 am
Operator : rebeccak
Sample : ic2585-5
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:06:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(6) Heptachlor (MA)
3.853min 4.457 PPB
response 37807422

(6) Heptachlor #2 (MA)
4.618min 4.576 PPB m
response 430754677

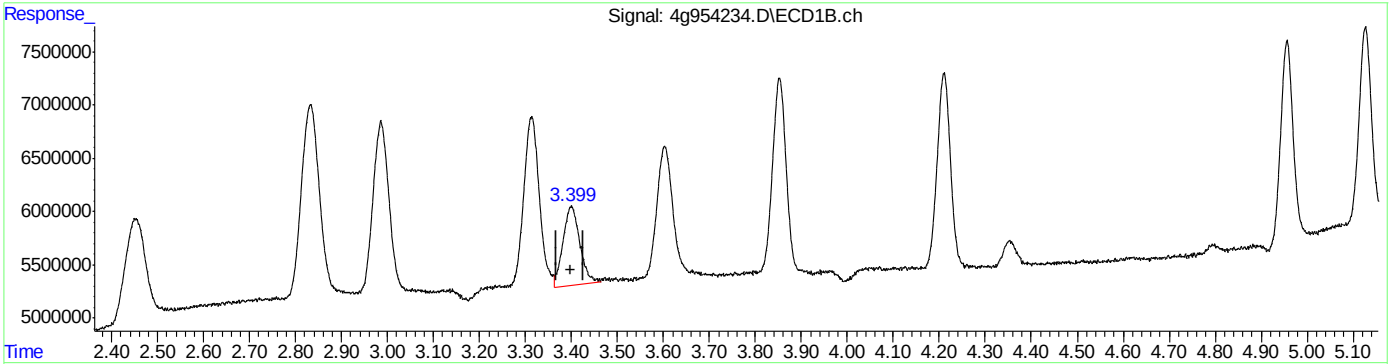
(+) = Expected Retention Time

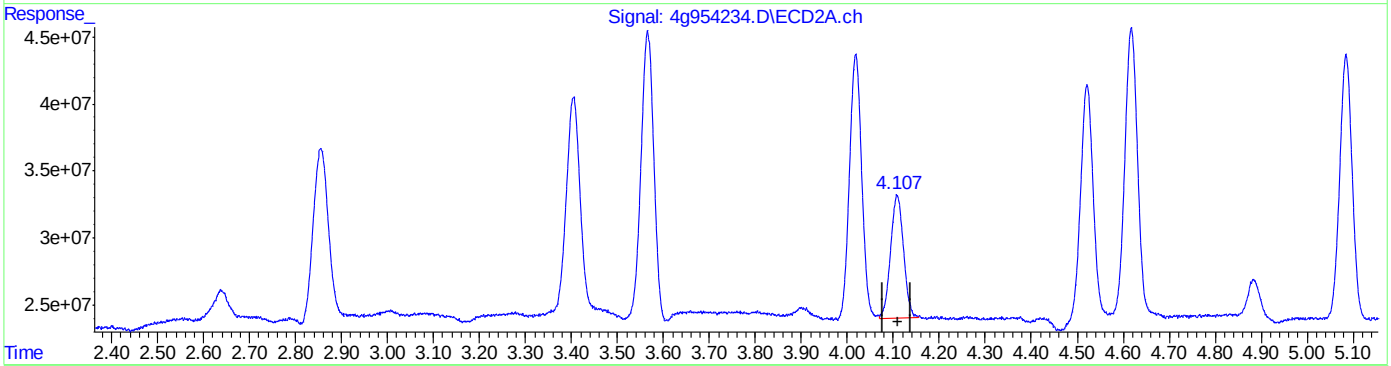
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954234.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:34 am
Operator : rebeccak
Sample : ic2585-5
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:06:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(7) beta-BHC (B)
3.400min 4.488 PPB
response 18812539

(7) beta-BHC #2 (B)
4.108min 4.416 PPB
response 178886103

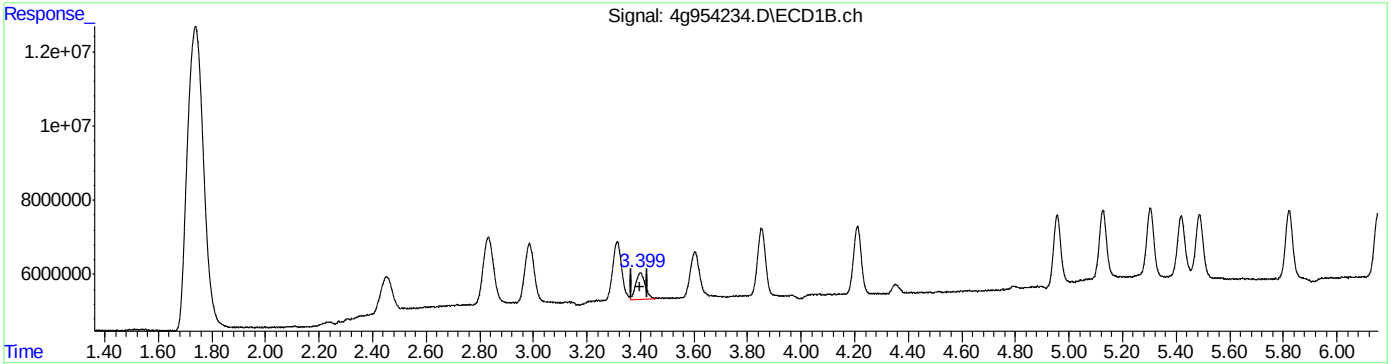
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:06:49 2018 RPT1

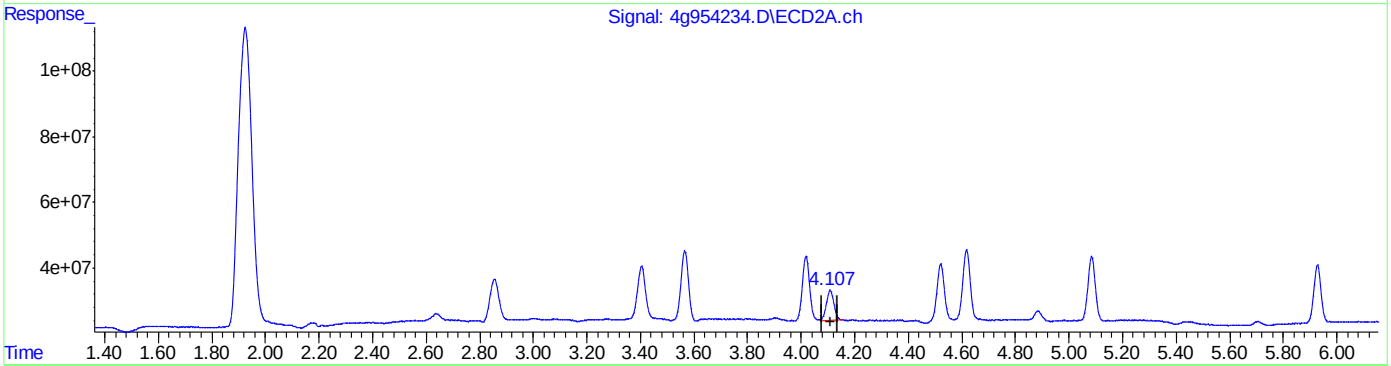
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954234.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:34 am
Operator : rebeccak
Sample : ic2585-5
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:06:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(7) beta-BHC (B)
3.399min 4.212 PPB m
response 17655299

(7) beta-BHC #2 (B)
4.108min 4.416 PPB
response 178886103

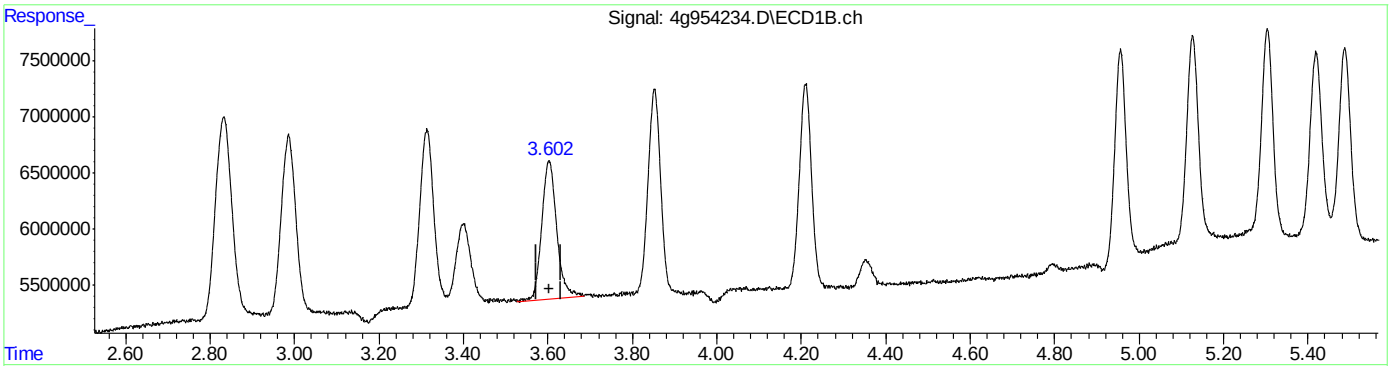
(+) = Expected Retention Time

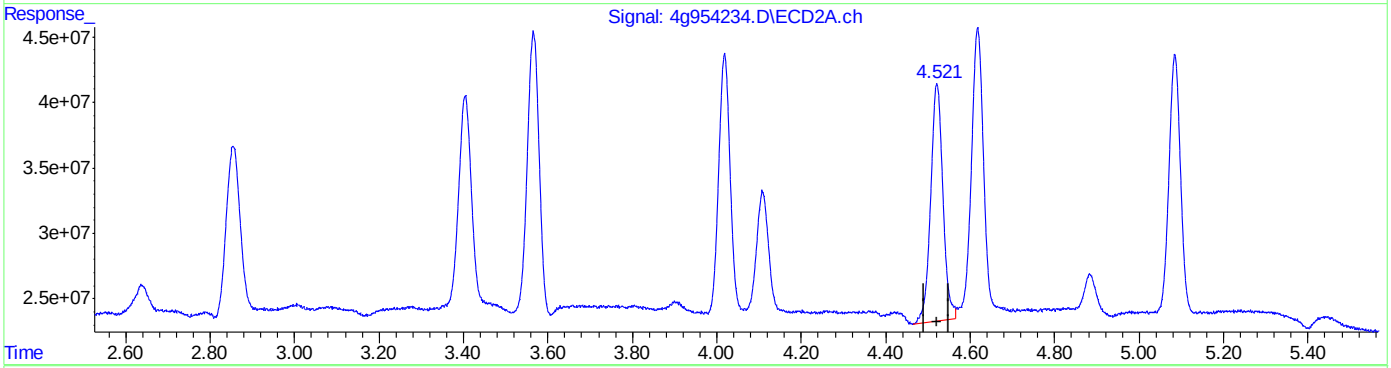
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954234.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:34 am
Operator : rebeccak
Sample : ic2585-5
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:06:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(8) delta-BHC (B)
3.603min 4.003 PPB
response 30705332

(8) delta-BHC #2 (B)
4.522min 4.427 PPB
response 364420795

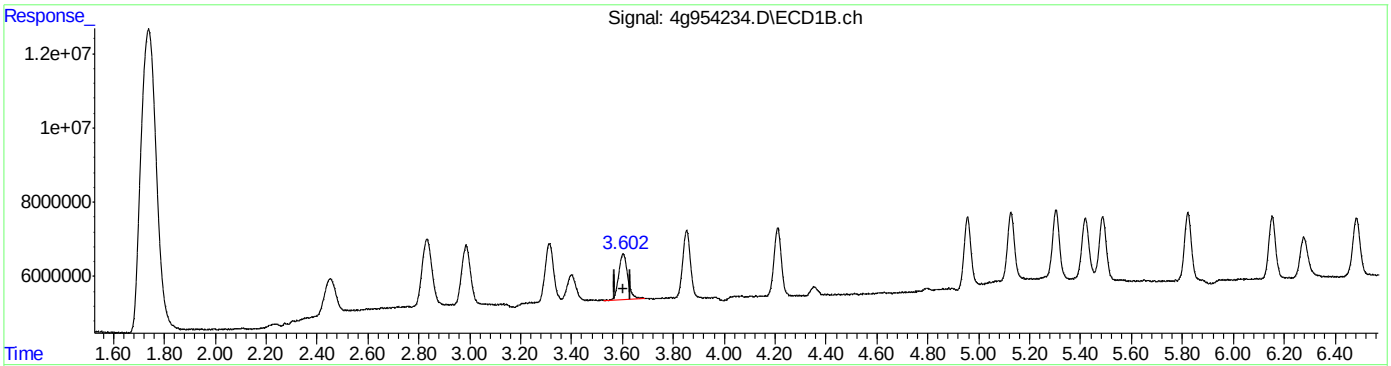
(+) = Expected Retention Time

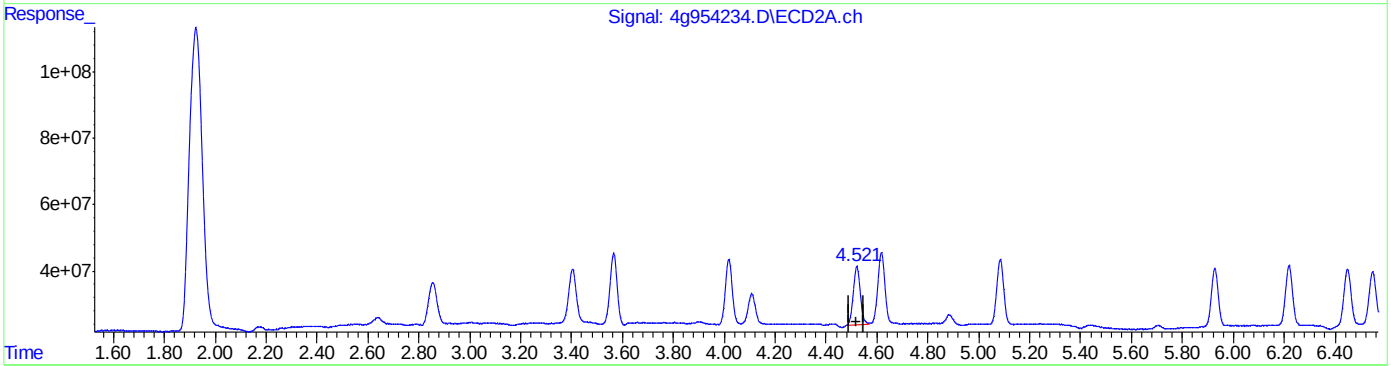
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954234.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:34 am
Operator : rebeccak
Sample : ic2585-5
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:06:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(8) delta-BHC (B)
3.603min 4.003 PPB
response 30705332

(8) delta-BHC #2 (B)
4.521min 4.110 PPB m
response 338322898

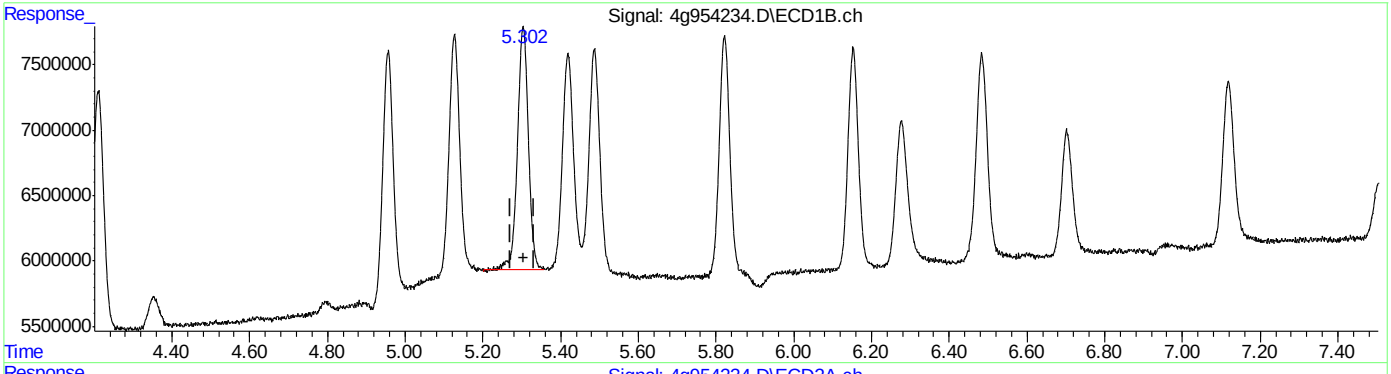
(+) = Expected Retention Time

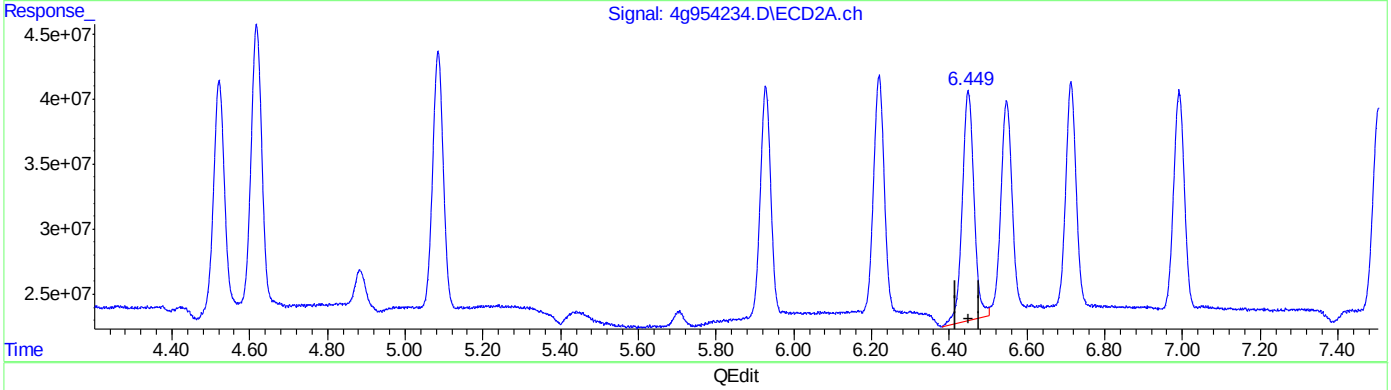
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954234.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:34 am
Operator : rebeccak
Sample : ic2585-5
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:06:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(13) alpha-Chlordane (B)
5.303min 4.486 PPB
response 36314885

(13) alpha-Chlordane #2 (B)
6.449min 5.002 PPB
response 375651639

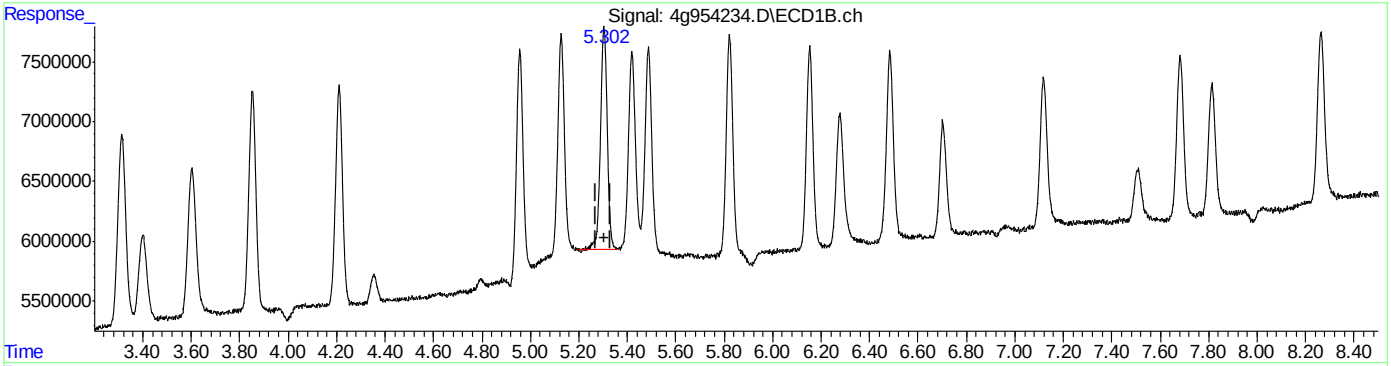
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:07:18 2018 RPT1

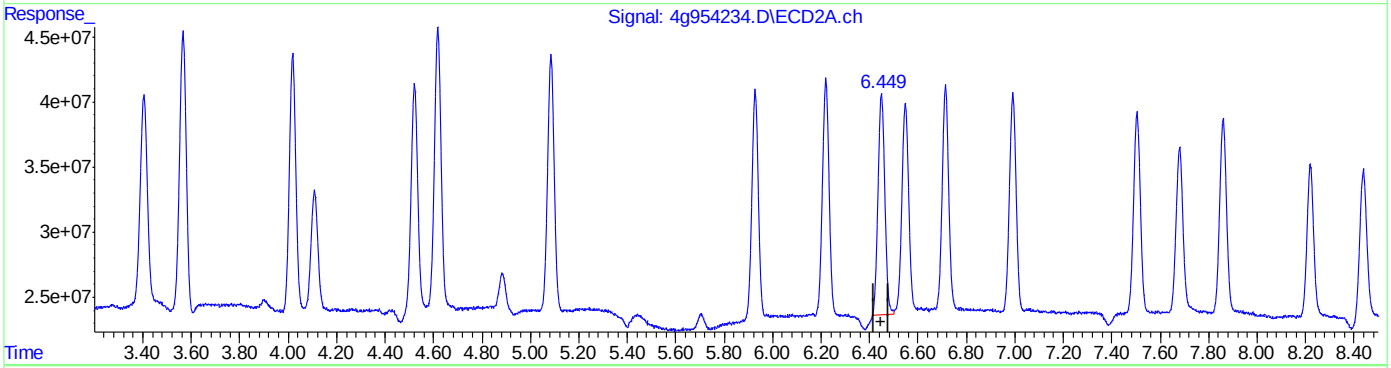
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954234.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:34 am
Operator : rebeccak
Sample : ic2585-5
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:06:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(13) alpha-Chlordane (B)
5.303min 4.486 PPB
response 36314885

(13) alpha-Chlordane #2 (B)
6.449min 4.432 PPB m
response 332892372

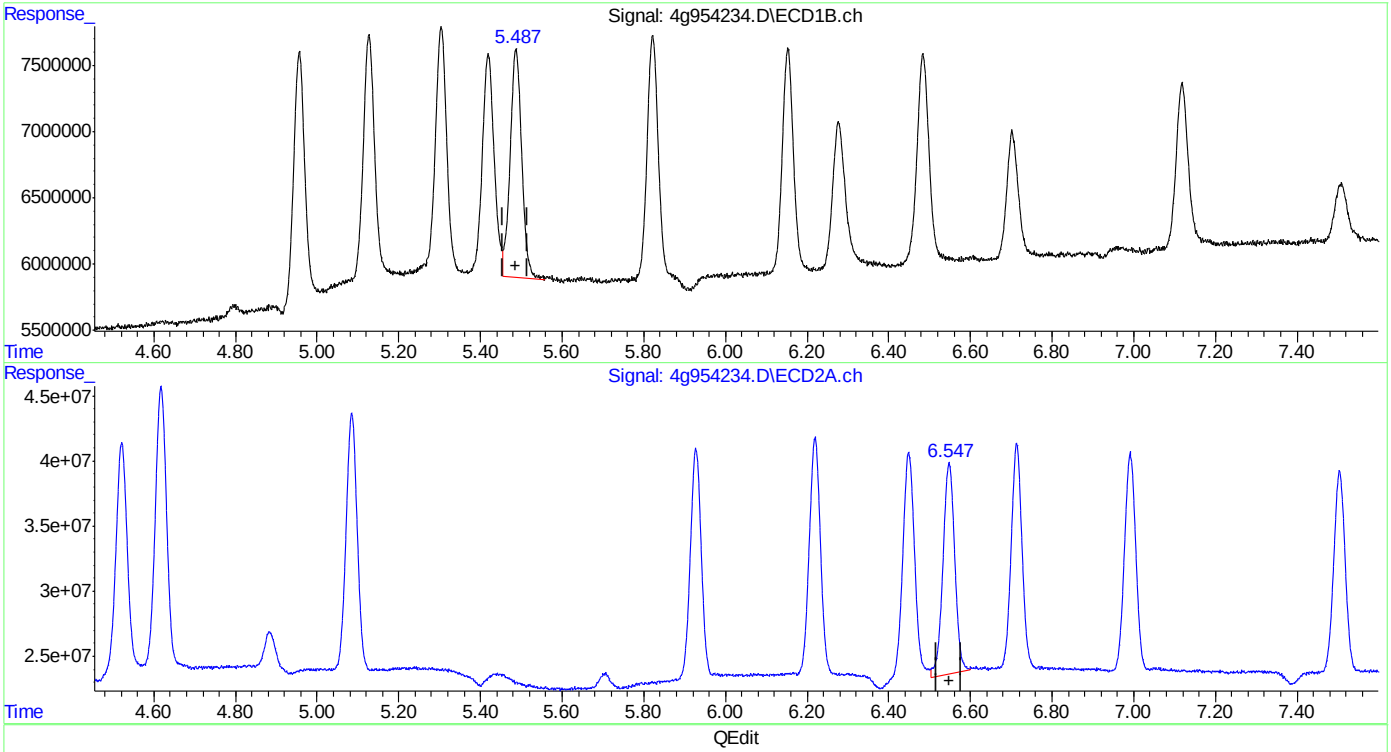
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:07:29 2018 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954234.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:34 am
Operator : rebeccak
Sample : ic2585-5
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:06:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(14) Endosulfan I (A)
5.487min 4.584 PPB
response 34065511

(14) Endosulfan I #2 (A)
6.548min 4.727 PPB
response 325017187

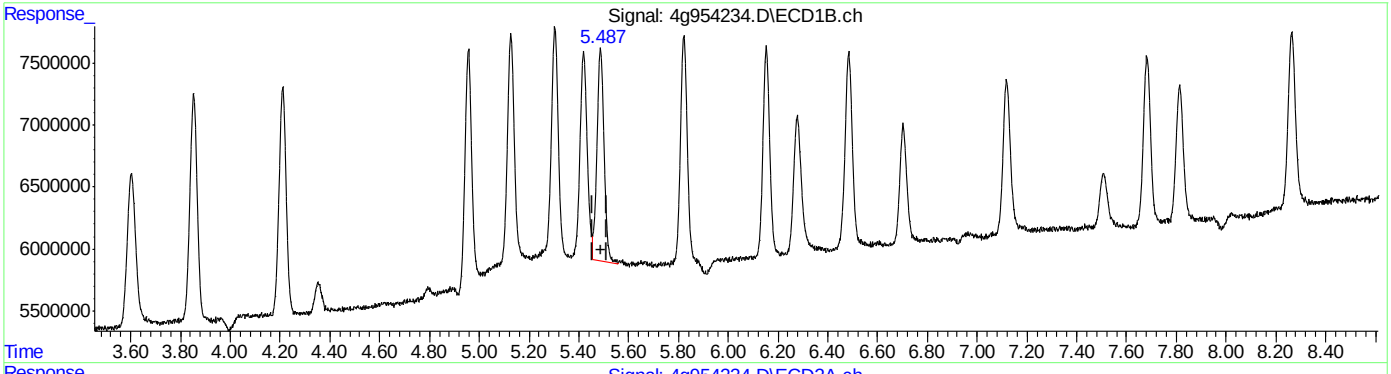
(+) = Expected Retention Time

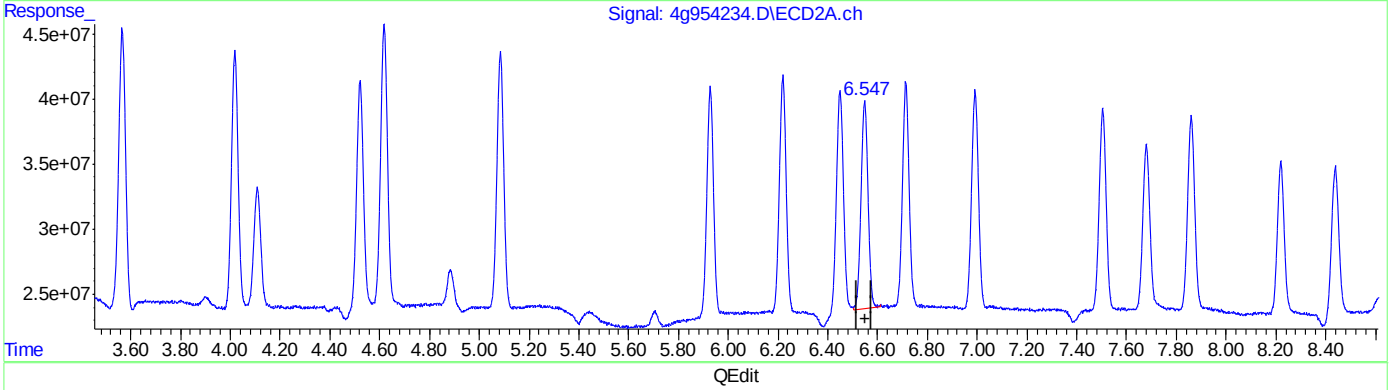
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954234.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:34 am
Operator : rebeccak
Sample : ic2585-5
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:06:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(14) Endosulfan I (A)
5.487min 4.584 PPB
response 34065511

(14) Endosulfan I #2 (A)
6.547min 4.544 PPB m
response 312445049

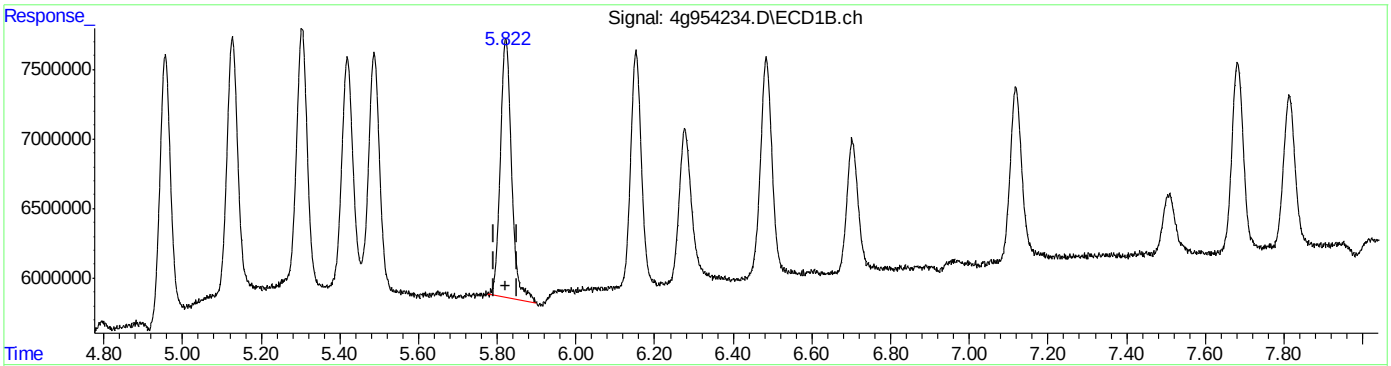
(+) = Expected Retention Time

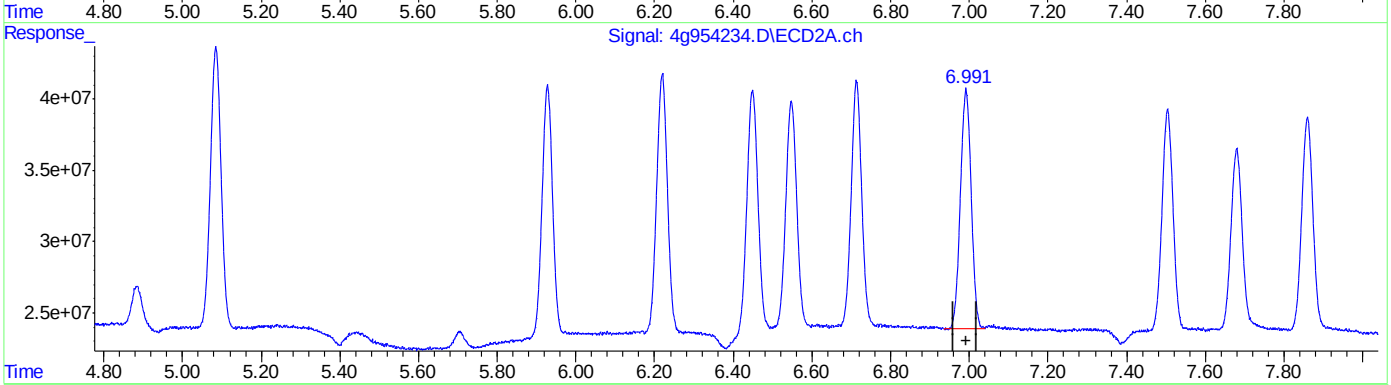
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954234.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:34 am
Operator : rebeccak
Sample : ic2585-5
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:06:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(16) Dieldrin (MA)
5.822min 4.647 PPB
response 36980541

(16) Dieldrin #2 (MA)
6.991min 4.503 PPB
response 319503886

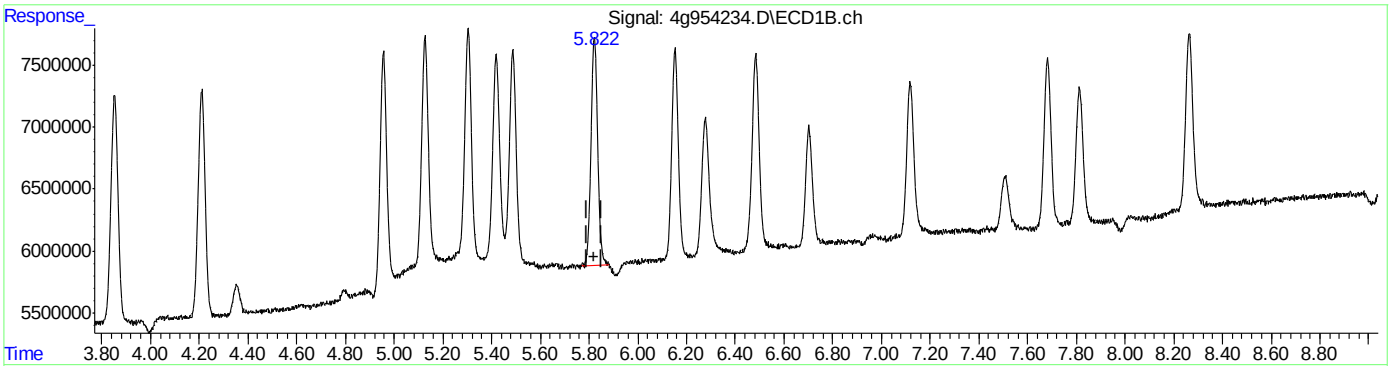
(+) = Expected Retention Time

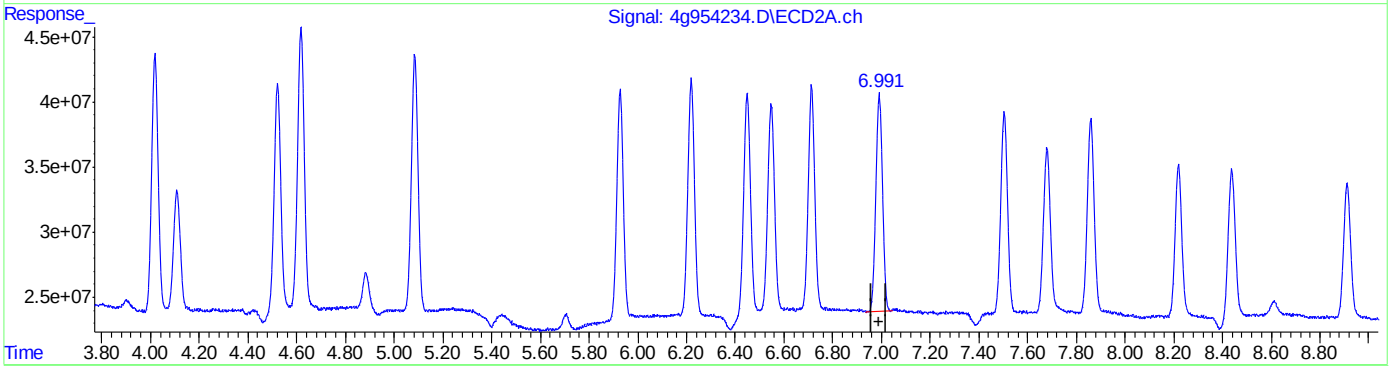
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954234.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:34 am
Operator : rebeccak
Sample : ic2585-5
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:06:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(16) Dieldrin (MA)
5.822min 4.420 PPB m
response 35179728

(16) Dieldrin #2 (MA)
6.991min 4.503 PPB
response 319503886

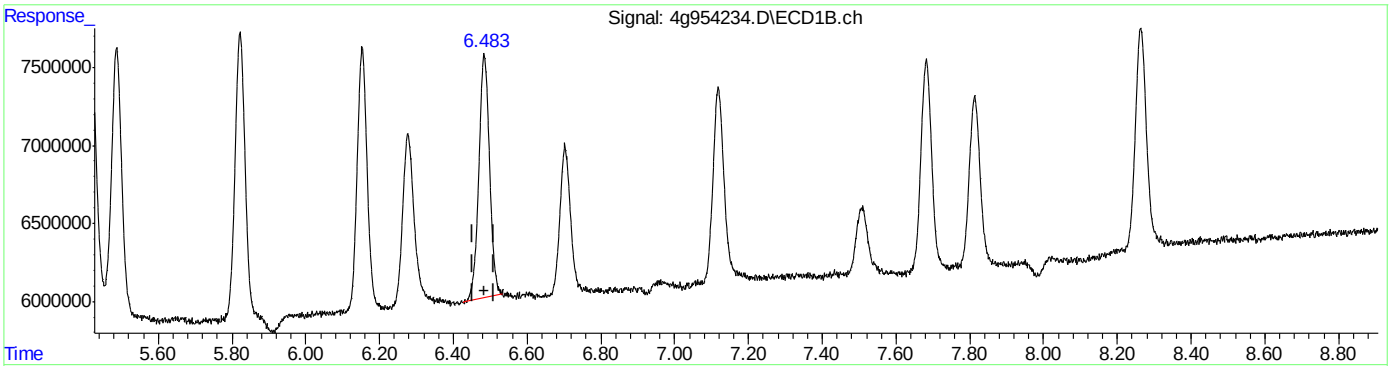
(+) = Expected Retention Time

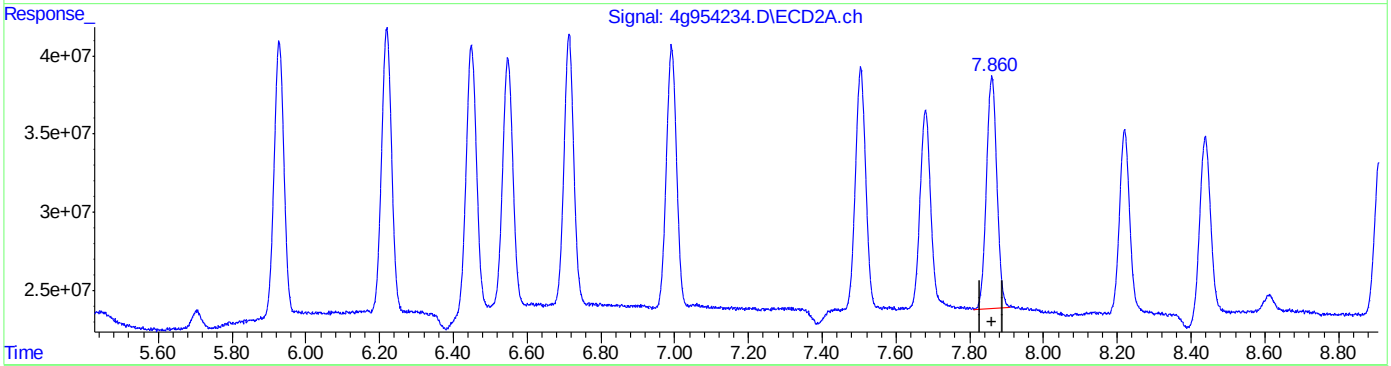
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954234.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:34 am
Operator : rebeccak
Sample : ic2585-5
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:06:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(19) Endosulfan II (B)
6.484min 4.292 PPB
response 31402966

(19) Endosulfan II #2 (B)
7.860min 4.957 PPB
response 292526886

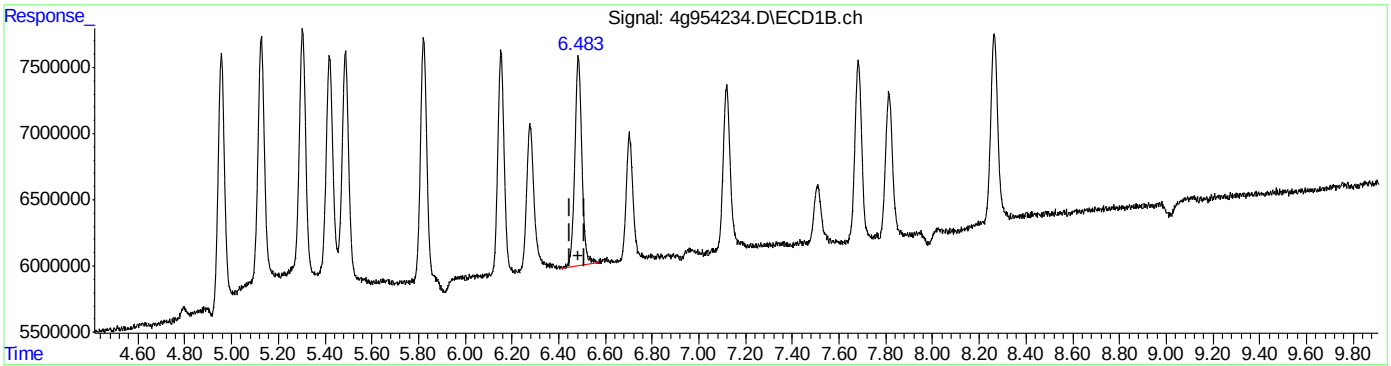
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:07:55 2018 RPT1

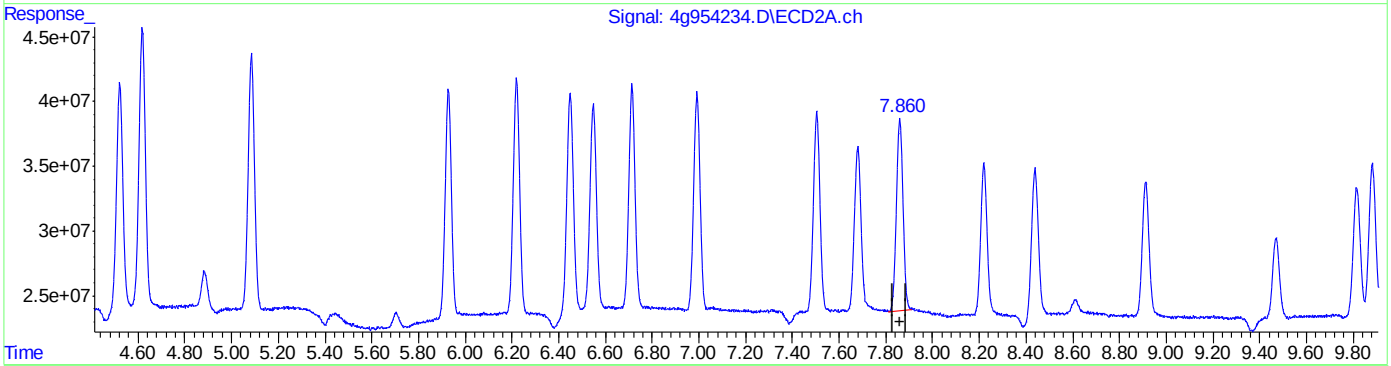
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954234.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:34 am
Operator : rebeccak
Sample : ic2585-5
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:06:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(19) Endosulfan II (B)
6.483min 4.533 PPB m
response 33167314

(19) Endosulfan II #2 (B)
7.860min 4.957 PPB
response 292526886

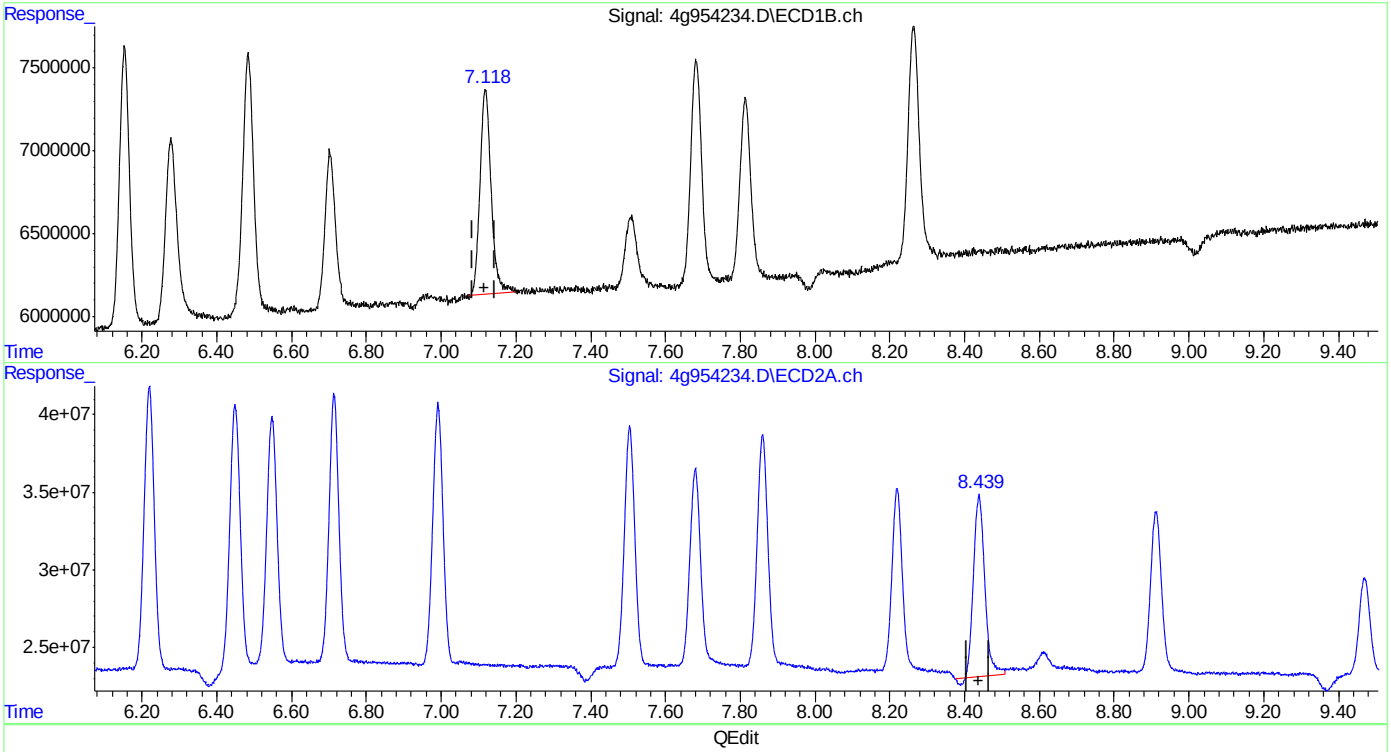
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:07:59 2018 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954234.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:34 am
Operator : rebeccak
Sample : ic2585-5
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:06:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(21) Endrin Aldehyde (B)
7.118min 4.393 PPB
response 25803579

(21) Endrin Aldehyde #2 (B)
8.439min 5.436 PPB
response 244197324

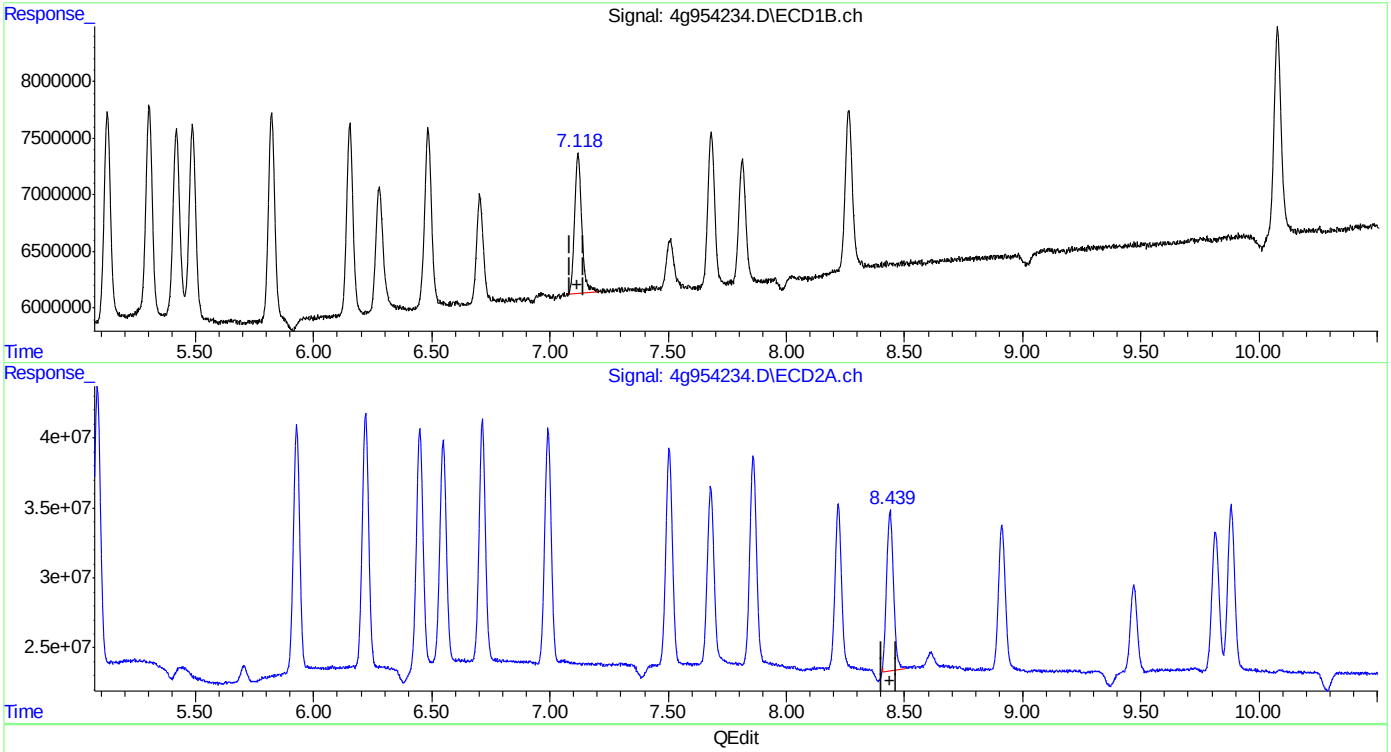
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:08:03 2018 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954234.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:34 am
Operator : rebeccak
Sample : ic2585-5
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:06:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(21) Endrin Aldehyde (B)
7.118min 4.393 PPB
response 25803579

(21) Endrin Aldehyde #2 (B)
8.439min 5.148 PPB m
response 231255136

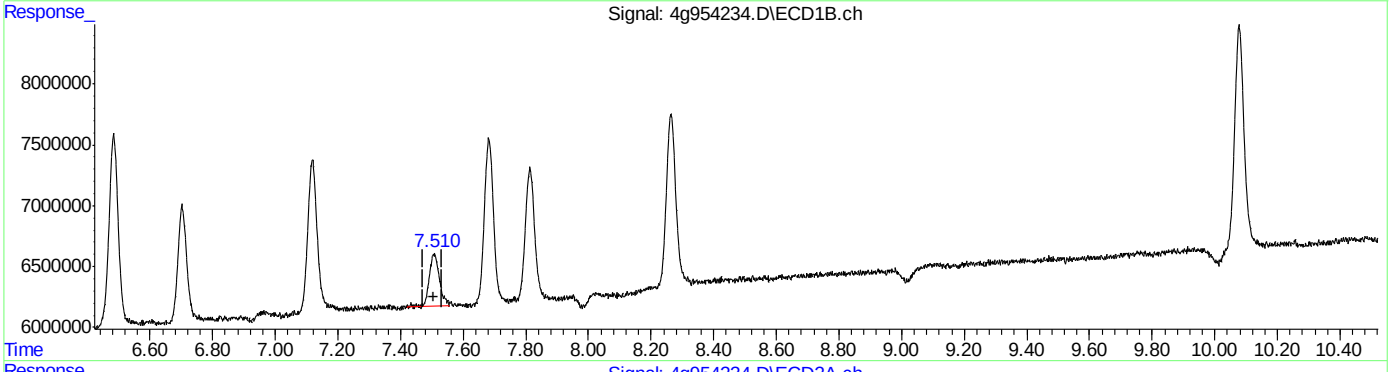
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:08:07 2018 RPT1

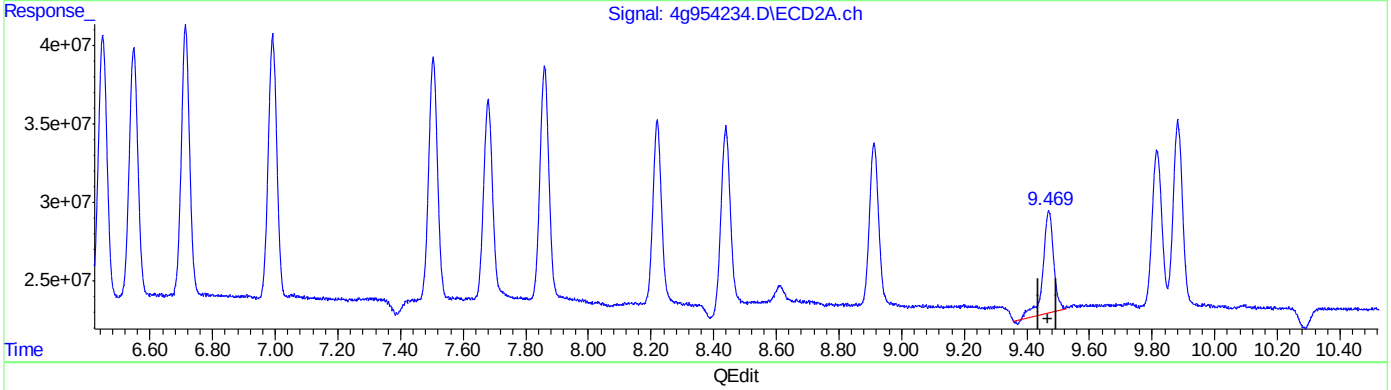
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954234.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:34 am
Operator : rebeccak
Sample : ic2585-5
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:06:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(23) Methoxychlor (A)
7.510min 3.906 PPB
response 9482518

(23) Methoxychlor #2 (A)
9.469min 4.963 PPB
response 152906380

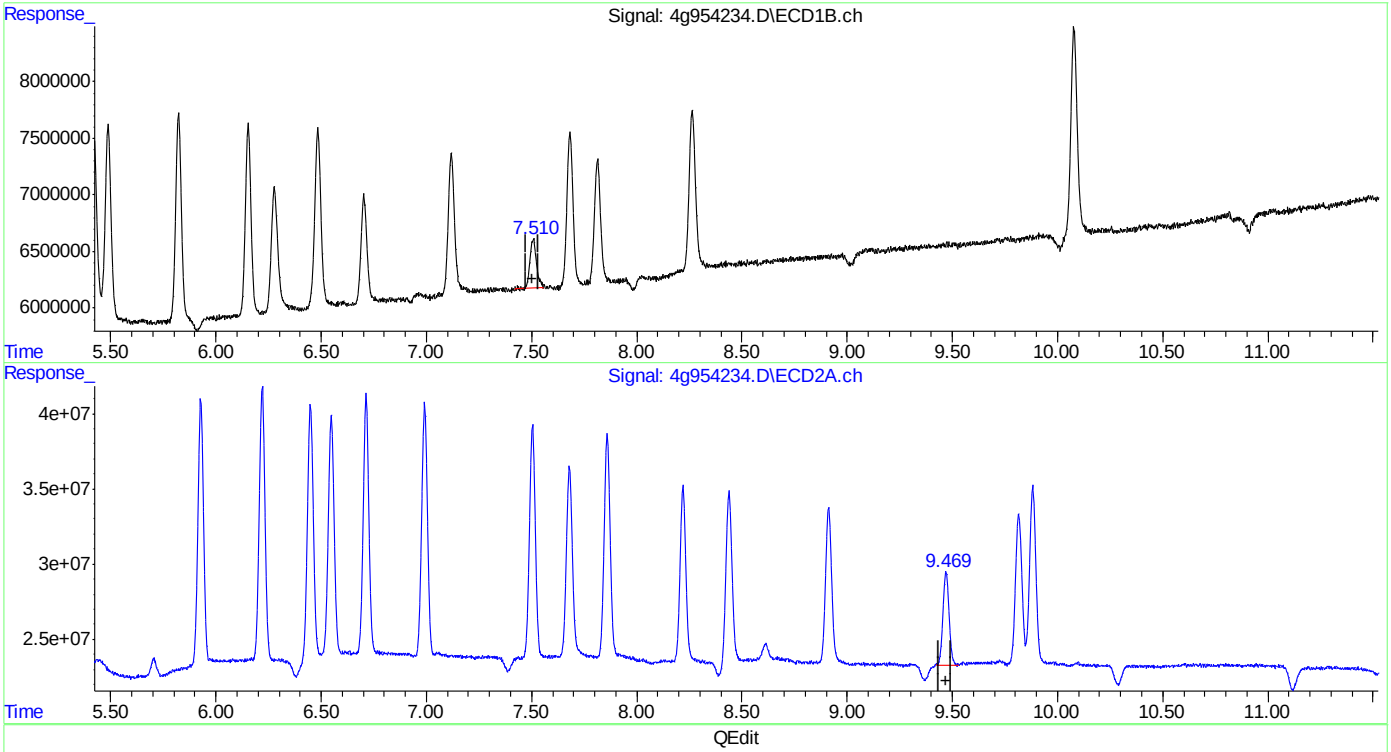
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:08:11 2018 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954234.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:34 am
Operator : rebeccak
Sample : ic2585-5
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:06:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(23) Methoxychlor (A)
7.510min 3.906 PPB
response 9482518

(23) Methoxychlor #2 (A)
9.469min 4.132 PPB m
response 127292066

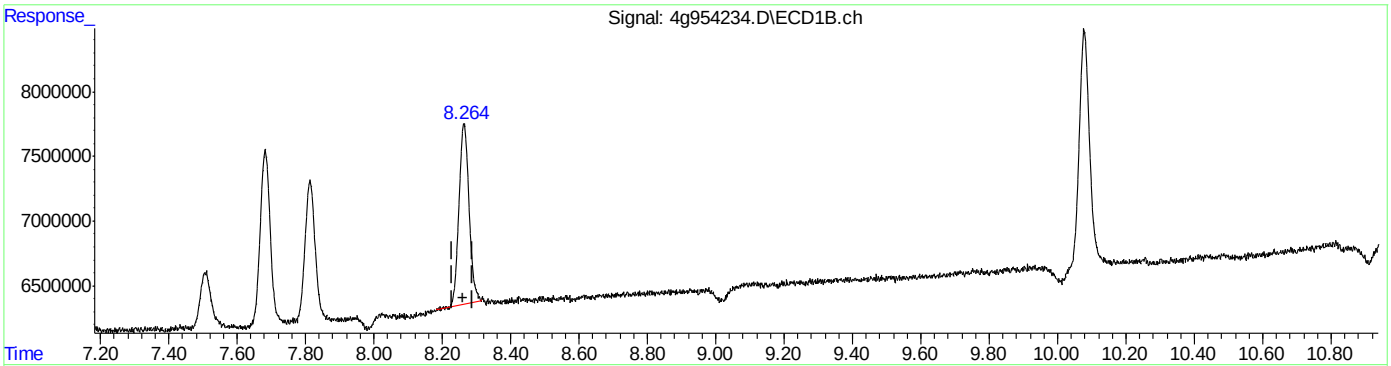
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:08:16 2018 RPT1

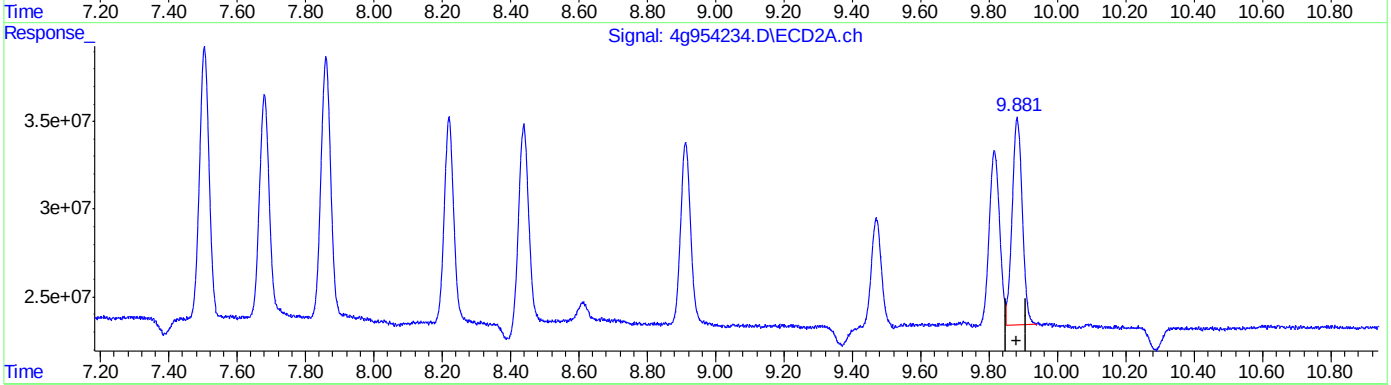
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954234.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:34 am
Operator : rebeccak
Sample : ic2585-5
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:06:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(25) Endrin Ketone (B)
8.264min 4.115 PPB
response 28597701

(25) Endrin Ketone #2 (B)
9.882min 4.319 PPB
response 243039644

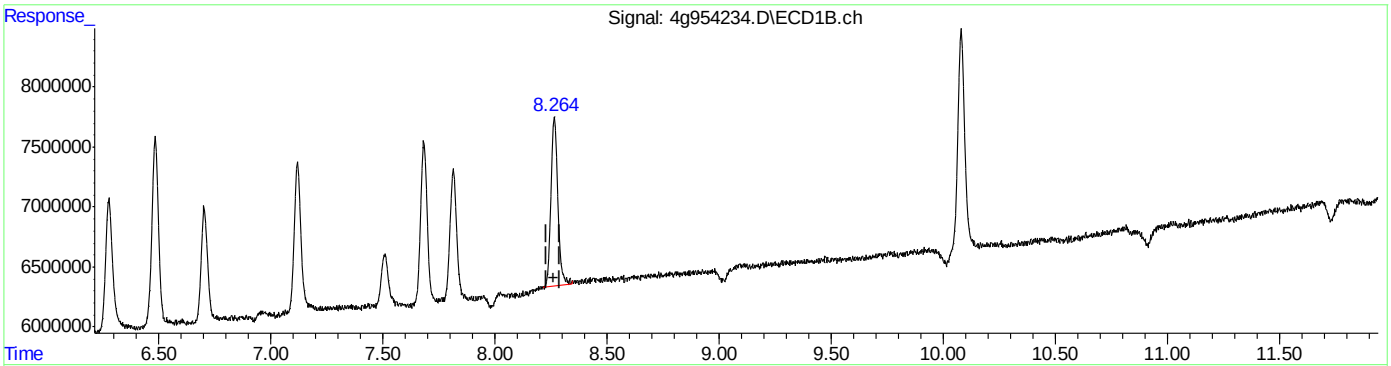
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:08:21 2018 RPT1

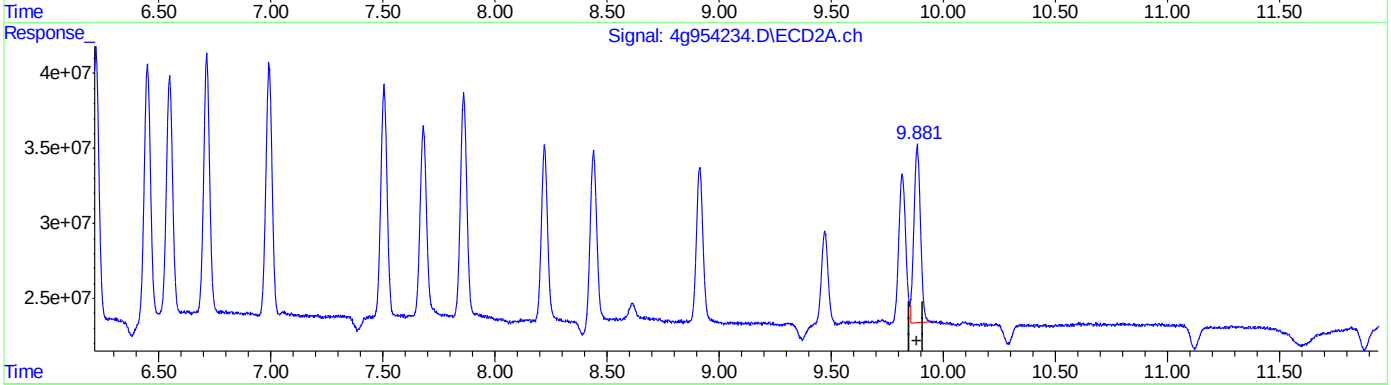
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954234.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:34 am
Operator : rebeccak
Sample : ic2585-5
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:06:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(25) Endrin Ketone (B)
8.264min 4.351 PPB m
response 30244155

(25) Endrin Ketone #2 (B)
9.882min 4.319 PPB
response 243039644

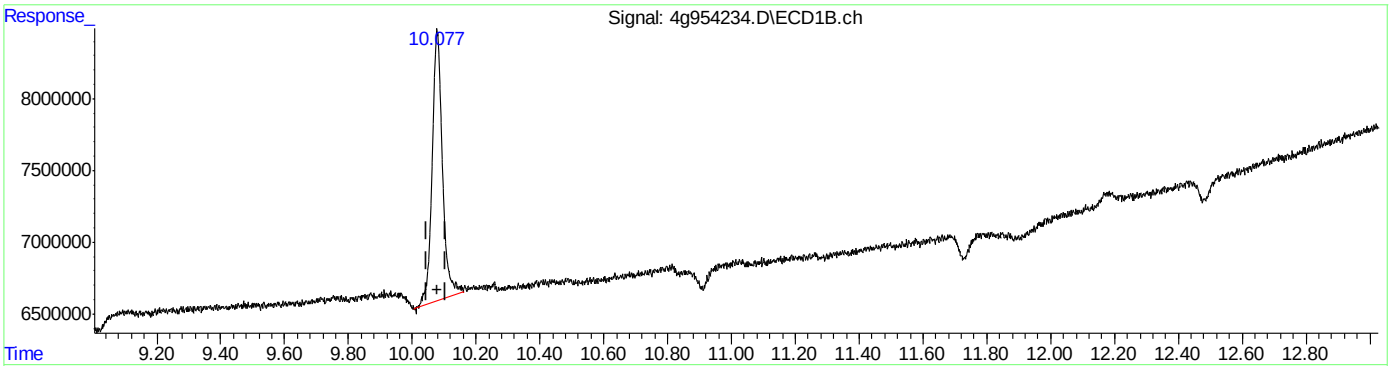
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:08:25 2018 RPT1

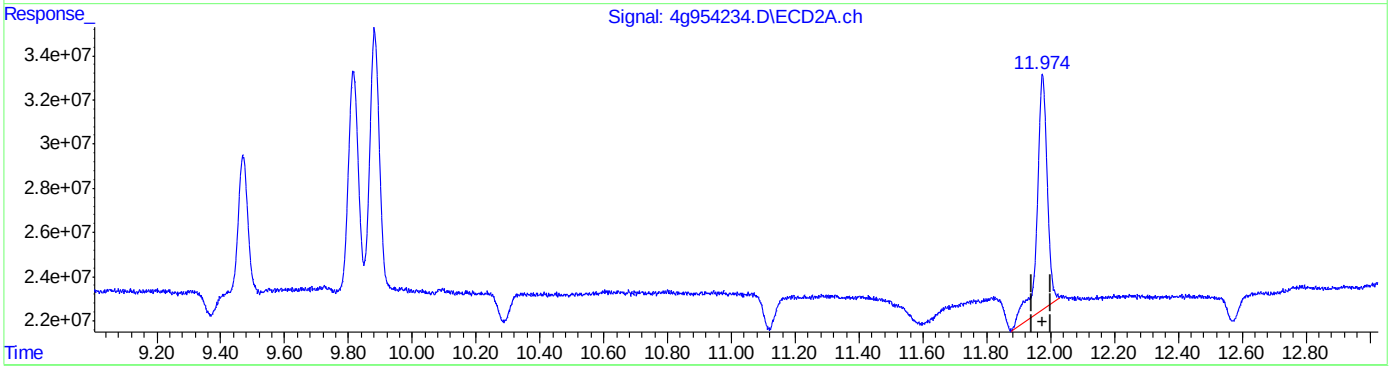
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954234.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:34 am
Operator : rebeccak
Sample : ic2585-5
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:06:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Decachlorobiphenyl (SA)
10.077min 5.751 PPB
response 42177509

(26) Decachlorobiphenyl #2 (SA)
11.975min 8.009 PPB
response 243186462

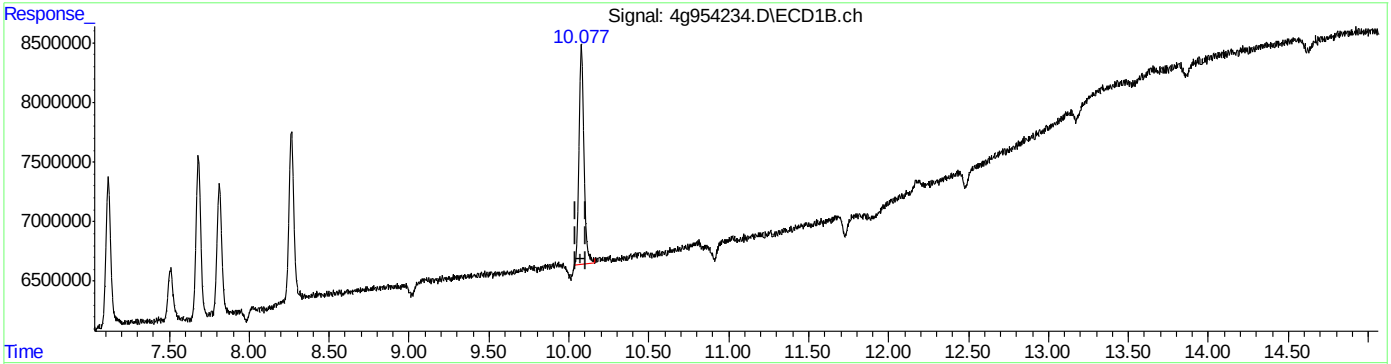
(+) = Expected Retention Time

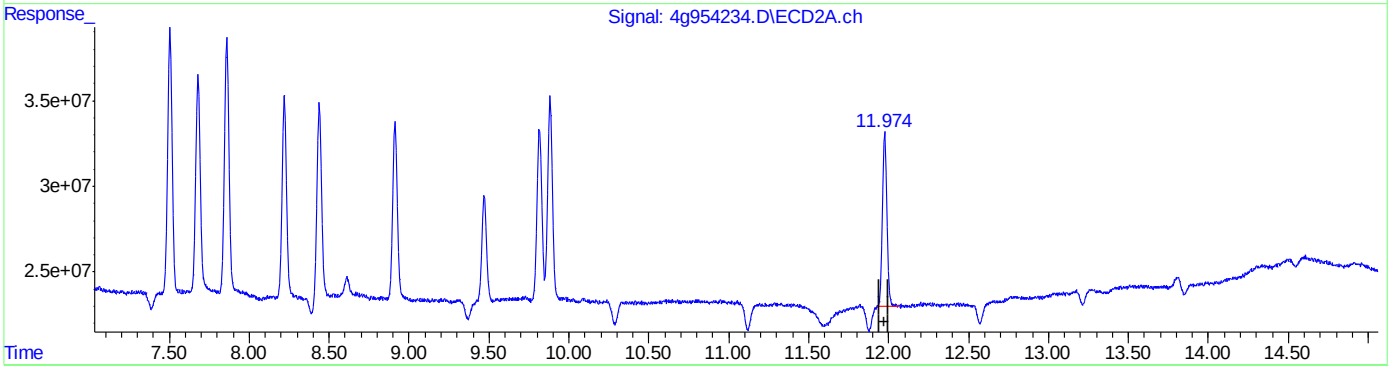
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954234.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:34 am
Operator : rebeccak
Sample : ic2585-5
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:06:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Decachlorobiphenyl (SA)
10.077min 5.350 PPB m
response 39234911

(26) Decachlorobiphenyl #2 (SA)
11.974min 6.565 PPB m
response 199325645

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 11/06/18 09:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954235.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:51 am
Operator : rebeccak
Sample : ic2585-10
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:00:16 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.740	1.925	361.1E6	3205.1E6	50.000	50.000
27) I	1-bromo-2...	1.740	1.925	361.1E6	3205.1E6	50.000	50.000
33) I	1-bromo-2...	1.740	1.925	361.1E6	3205.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.454	2.854	64984587	602.0E6	8.523	9.239
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	21.31%#	23.10%#
26) SA	Decachlor...	10.076	11.974	75549146	390.4E6	9.811	12.895m#
	Spiked Amount 40.000			Recovery	=	24.53%	32.24%
	Target Compounds						
3)	hexachlor...	2.832	3.404	97505902	685.1E6	10.279	8.948
4) A	alpha-BHC	2.985	3.566	79541666	856.7E6	8.014	8.671
5) MA	gamma-BHC	3.313	4.018	74892911	756.2E6	7.949	8.612
6) MA	Heptachlor	3.852	4.618	76554461	828.8E6	8.595	8.830
7) B	beta-BHC	3.398	4.108	34218071	358.1E6	7.775	8.864
8) B	delta-BHC	3.602	4.521	62877139	666.4E6	7.806	8.119
9) MB	Aldrin	4.209	5.085	75058292	747.6E6	8.393	8.740
10)	alachlor	4.351	4.884	9690207	118.2E6	8.407	10.936 #
11) B	Heptachlo...	4.955	5.928	70012263	683.8E6	8.297	9.109
12) B	gamma-Chl...	5.126	6.219	71198771	694.2E6	8.342	9.024
13) B	alpha-Chl...	5.303	6.448	70395565	656.1E6	8.282	8.761
14) A	Endosulfan I	5.487	6.548	68362371	634.7E6	8.760	9.257
15) B	4,4'-DDE	5.418	6.713	66243499	645.0E6	8.869	8.745
16) MA	Dieldrin	5.821	6.990	71212446	651.9E6	8.521	9.214
17) MA	Endrin	6.152	7.504	64594916	624.4E6	8.939	10.138
18) A	4,4'-DDD	6.276	7.678	50861540	537.8E6	8.534m	10.628
19) B	Endosulfa...	6.483	7.859	64082508	597.9E6	8.340	10.160
20) MA	4,4'-DDT	6.702	8.219	40314938	488.7E6	8.005	8.575
21) B	Endrin Al...	7.116	8.437	54597589	476.1E6	8.852m	10.629
22) B	Endosulfa...	7.812	8.911	45193415	439.2E6	7.224	8.500
23) A	Methoxychlor	7.506	9.469	19201696	263.0E6	7.533	8.562
24)	Mirex	7.681	9.815	53723939	427.3E6	8.794	9.694
25) B	Endrin Ke...	8.262	9.881	59692274	513.7E6	8.179	9.156

SemiQuant Compounds - Not Calibrated on this Instrument

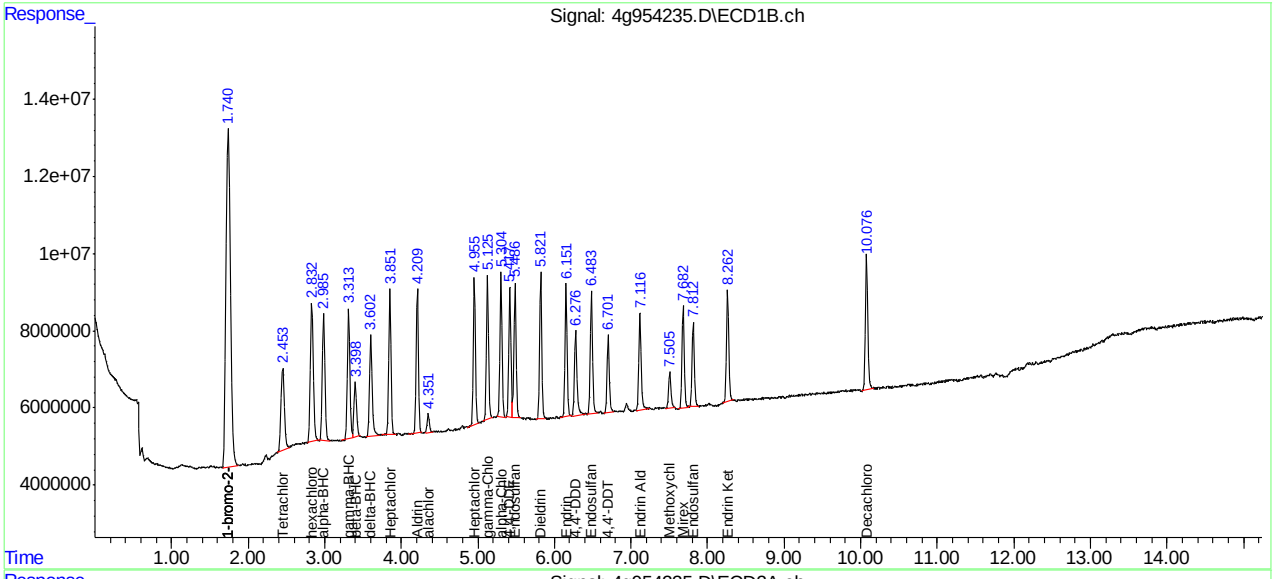
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

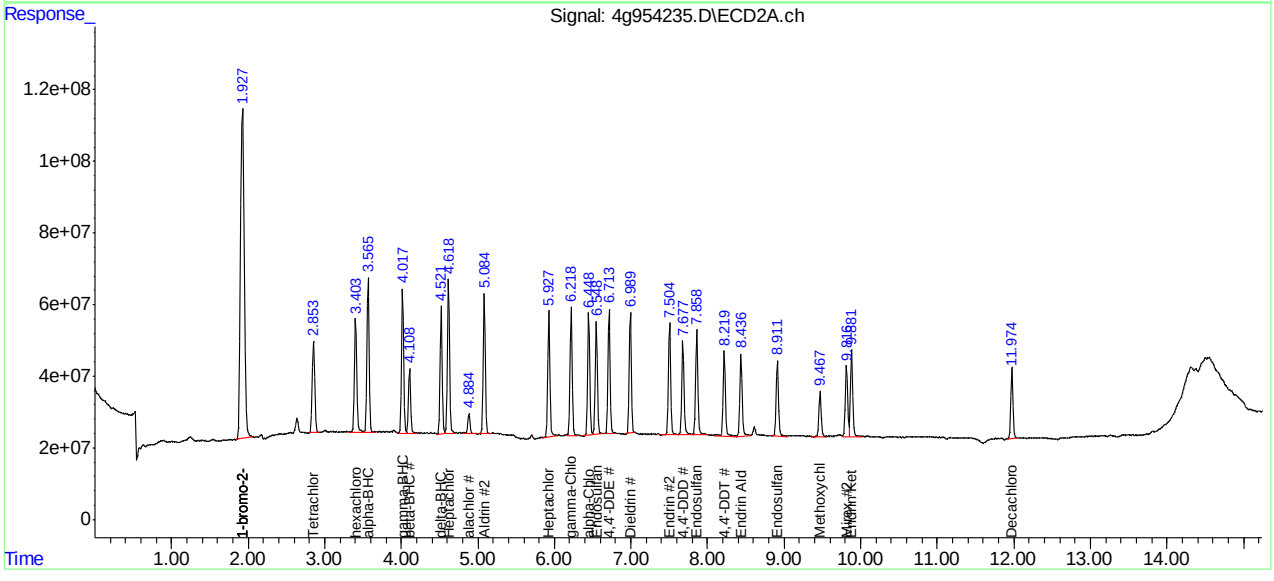
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954235.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:51 am
Operator : rebeccak
Sample : ic2585-10
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:00:16 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G2585-IC2585	**Method:**	SW846 8081B
Lab FileID:	4G954235.D	**Analyst approved:**	11/05/18 14:59 Rebecca Krug
Injection Time:	11/05/18 10:51	**Supervisor approved:**	11/06/18 09:35 Gwendolyn Burns

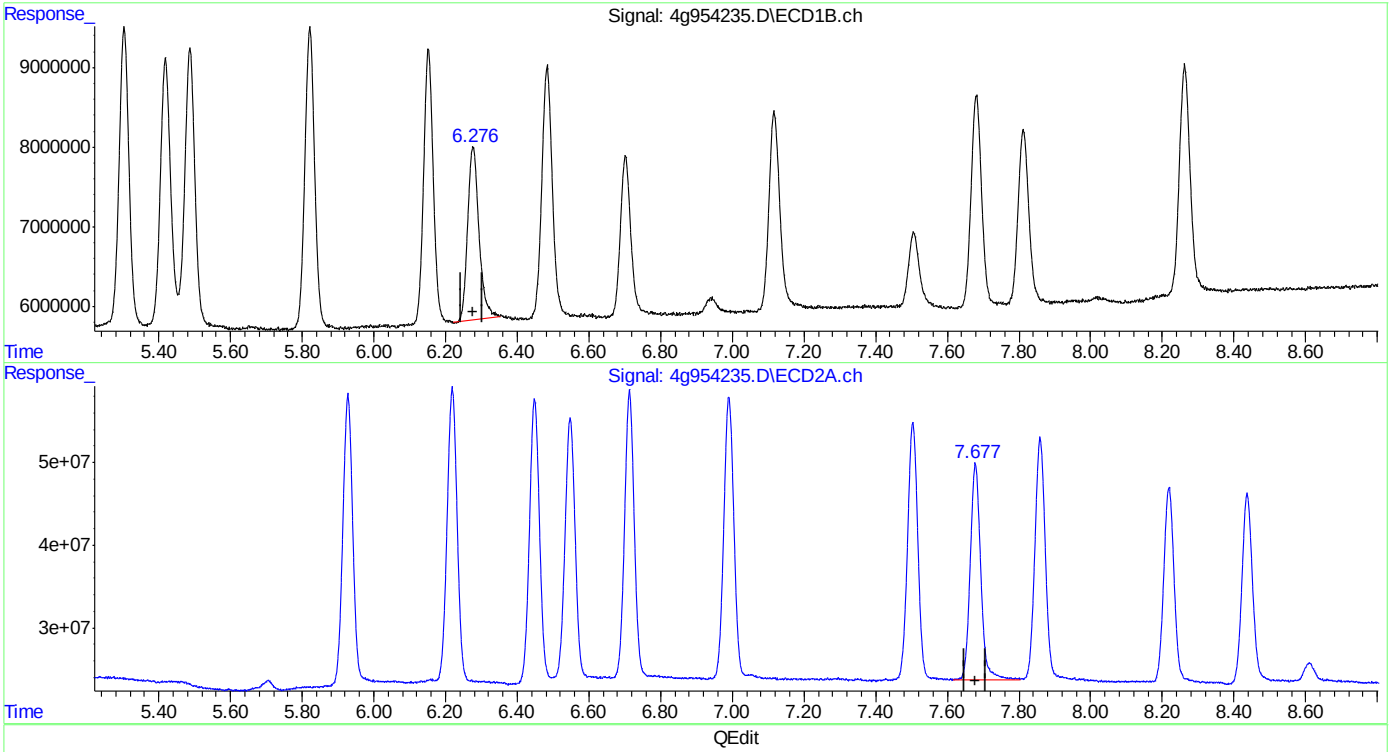
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDD	72-54-8	1	6.28	Poorly defined baseline
Endrin aldehyde	7421-93-4	1	7.12	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	2	11.97	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954235.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:51 am
Operator : rebeccak
Sample : ic2585-10
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 13:59:31 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(18) 4,4'-DDD (A)
6.277min 7.983 PPB
response 47580330

(18) 4,4'-DDD #2 (A)
7.678min 10.628 PPB
response 537829615

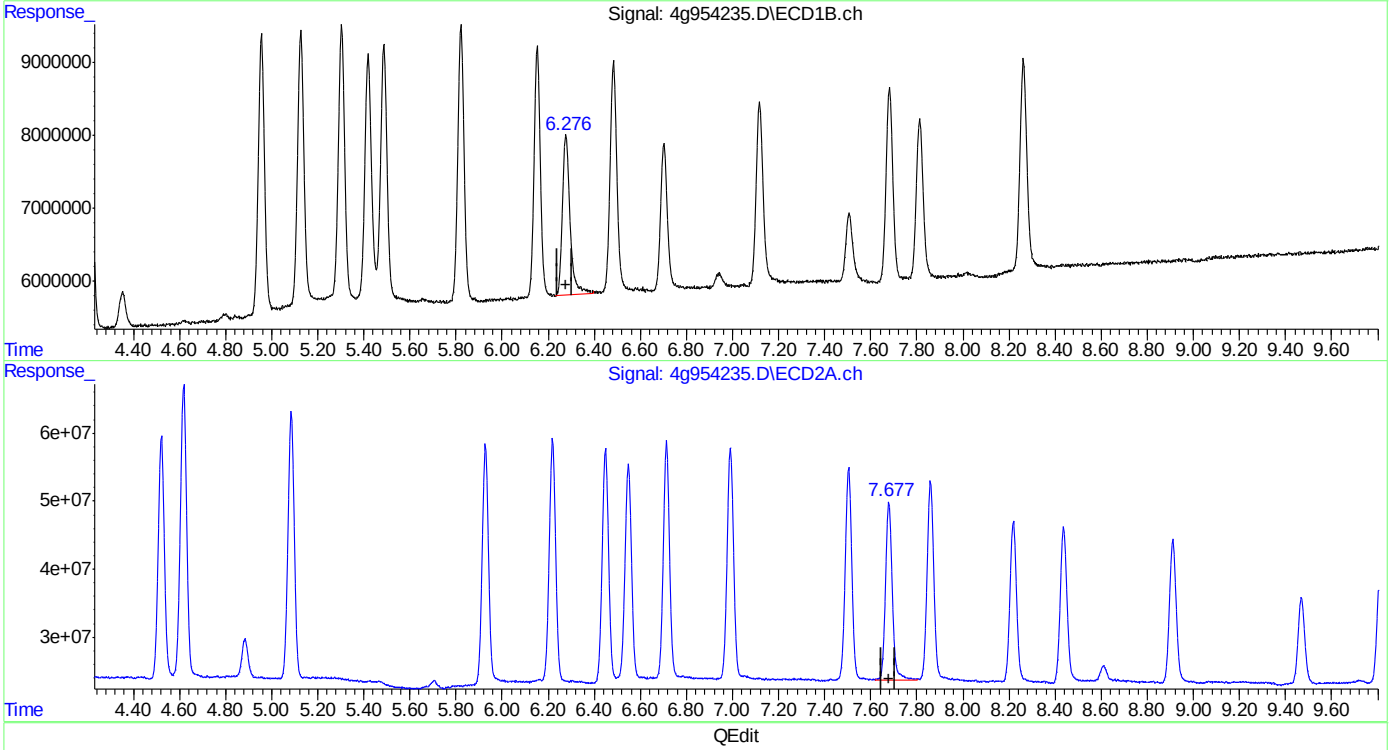
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 13:59:54 2018 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954235.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:51 am
Operator : rebeccak
Sample : ic2585-10
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 13:59:31 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(18) 4,4'-DDD (A)
6.276min 8.534 PPB m
response 50861540

(18) 4,4'-DDD #2 (A)
7.678min 10.628 PPB
response 537829615

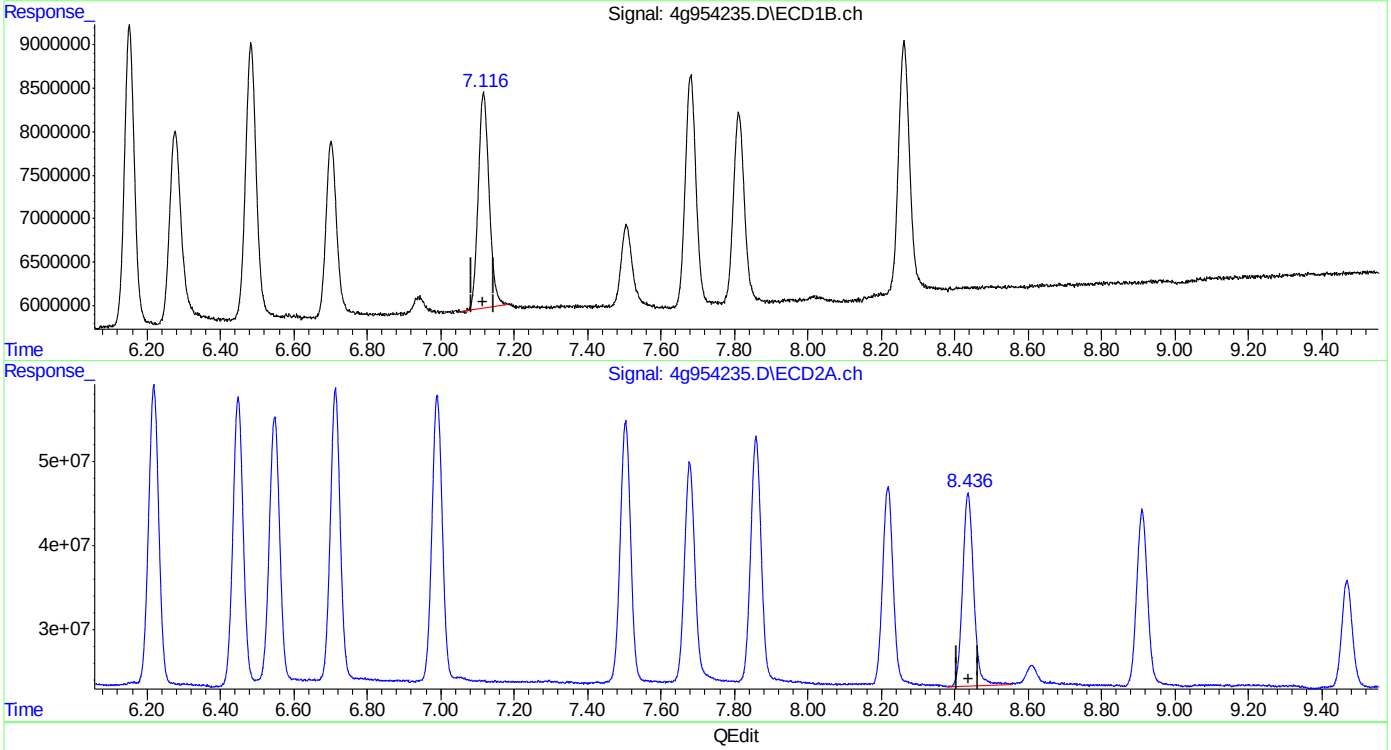
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954235.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:51 am
Operator : rebeccak
Sample : ic2585-10
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 13:59:31 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(21) Endrin Aldehyde (B)
7.116min 8.263 PPB
response 50963652

(21) Endrin Aldehyde #2 (B)
8.437min 10.629 PPB
response 476119712

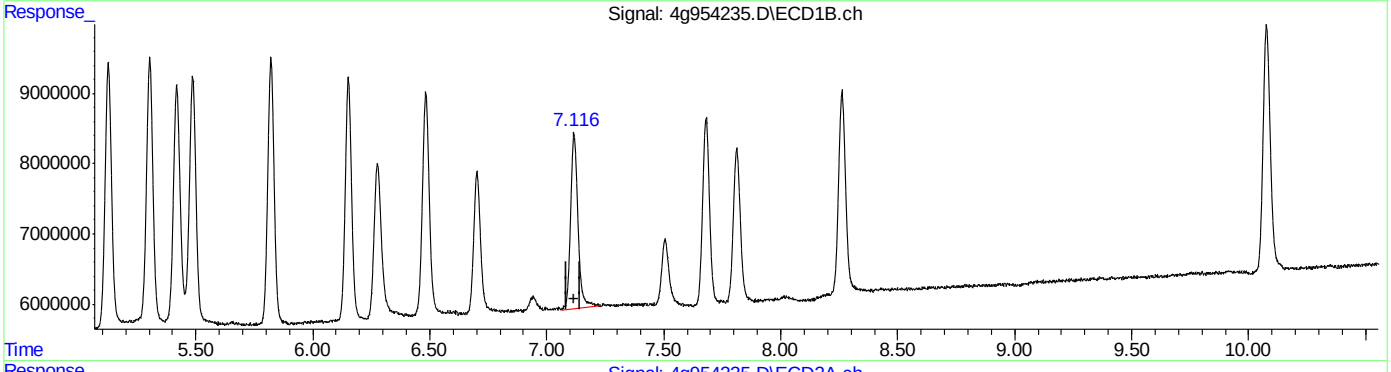
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:00:03 2018 RPT1

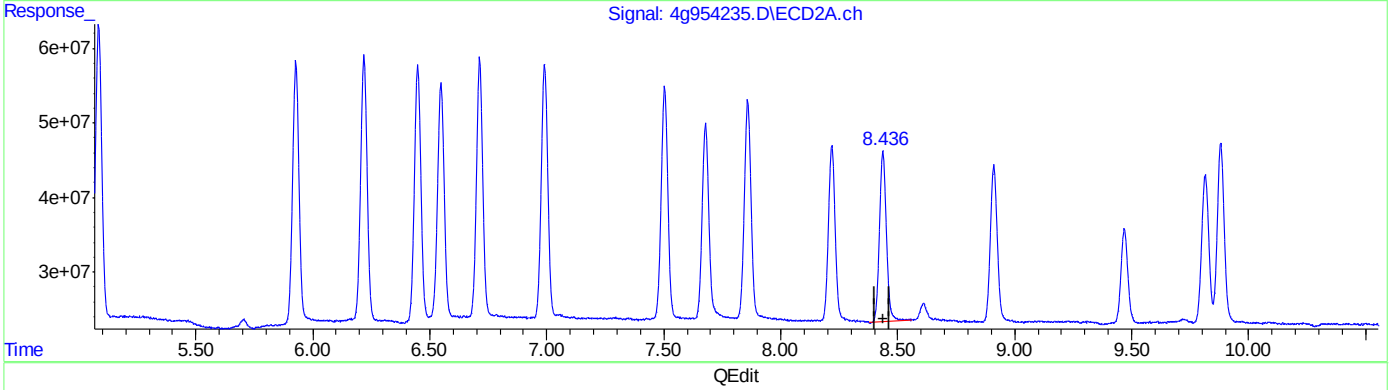
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954235.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:51 am
Operator : rebeccak
Sample : ic2585-10
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 13:59:31 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(21) Endrin Aldehyde (B)
7.116min 8.852 PPB m
response 54597589

(21) Endrin Aldehyde #2 (B)
8.437min 10.629 PPB
response 476119712

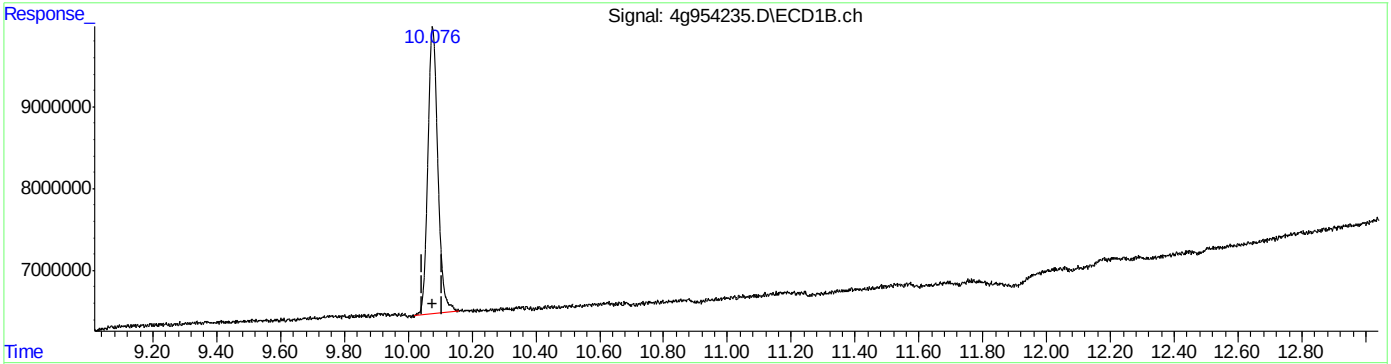
(+) = Expected Retention Time

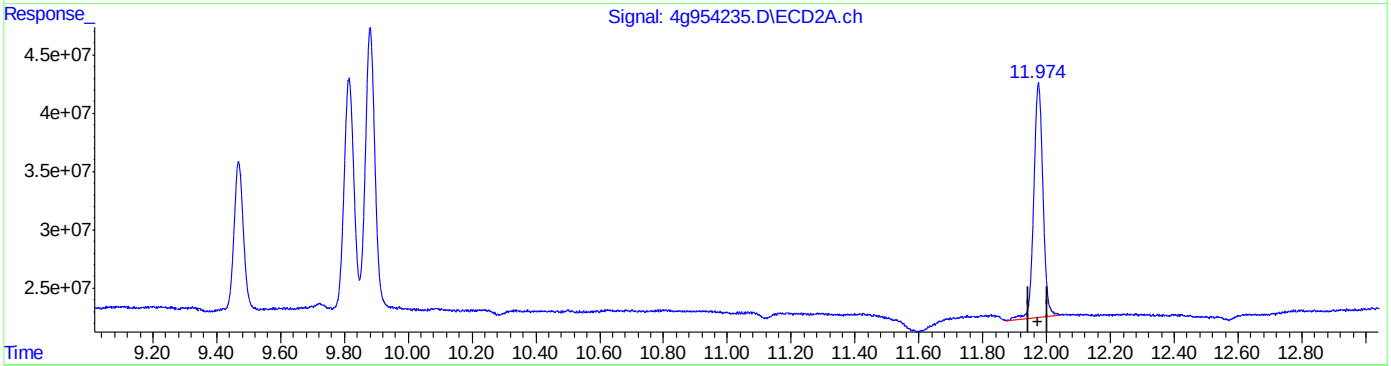
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954235.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:51 am
Operator : rebeccak
Sample : ic2585-10
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 13:59:31 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Decachlorobiphenyl (SA)
10.076min 9.811 PPB
response 75549146

(26) Decachlorobiphenyl #2 (SA)
11.975min 13.306 PPB
response 402853896

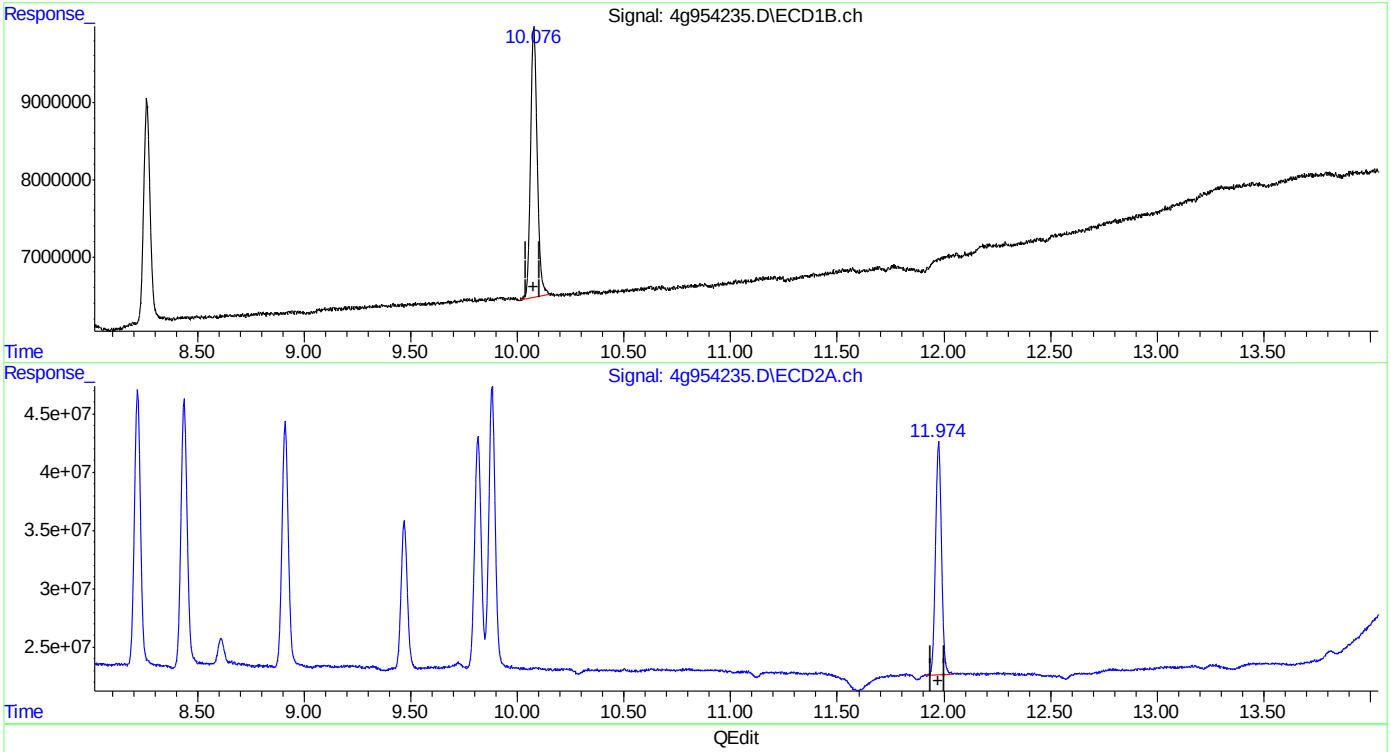
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:00:14 2018 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954235.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 10:51 am
Operator : rebeccak
Sample : ic2585-10
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 13:59:31 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(26) Decachlorobiphenyl (SA)
10.076min 9.811 PPB
response 75549146

(26) Decachlorobiphenyl #2 (SA)
11.974min 12.895 PPB m
response 390405864

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 11/06/18 09:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954236.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 11:08 am
Operator : rebeccak
Sample : icc2585-25
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 13:58:41 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

		Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
		Internal Standards							
1)	I	1-bromo-2...	1.741	1.926	366.7E6	3303.4E6	50.000	50.000	
27)	I	1-bromo-2...	1.741	1.926	366.7E6	3303.4E6	50.000	50.000	
33)	I	1-bromo-2...	1.741	1.926	366.7E6	3303.4E6	50.000	50.000	
		System Monitoring Compounds							
2)		SAB Tetrachlo...	2.452	2.854	167.8E6	1521.7E6	21.672	22.660	
		Spiked Amount 40.000 Range 30 - 150 Recovery = 54.18% 56.65%							
26)		SA Decachlor...	10.077	11.974	186.6E6	934.9E6	23.860	29.962	#
		Spiked Amount 40.000 Recovery = 59.65% 74.91%							
		Target Compounds							
3)		hexachlor...	2.833	3.404	247.2E6	1594.3E6	25.665	20.204	
4)	A	alpha-BHC	2.987	3.566	213.8E6	2151.5E6	21.208	21.128	
5)	MA	gamma-BHC	3.314	4.019	201.0E6	1928.3E6	21.010	21.307	
6)	MA	Heptachlor	3.853	4.619	201.8E6	2086.3E6	22.307	21.566	
7)	B	beta-BHC	3.399	4.108	93336893	877.9E6	20.885	21.088	
8)	B	delta-BHC	3.603	4.522	167.7E6	1713.7E6	20.497	20.259	
9)	MB	Aldrin	4.211	5.085	201.0E6	1918.6E6	22.136	21.761	
10)		alachlor	4.353	4.884	24477897	258.2E6	20.912	23.181	
11)	B	Heptachlo...	4.955	5.928	190.4E6	1692.5E6	22.217m	21.874	
12)	B	gamma-Chl...	5.127	6.219	188.6E6	1749.8E6	21.761	22.070	
13)	B	alpha-Chl...	5.304	6.449	185.7E6	1667.6E6	21.512	21.605	
14)	A	Endosulfan I	5.487	6.548	181.6E6	1564.1E6	22.911	22.134	
15)	B	4,4'-DDE	5.419	6.713	175.0E6	1669.4E6	23.068	21.961	
16)	MA	Dieldrin	5.822	6.992	190.3E6	1660.9E6	22.419	22.778	
17)	MA	Endrin	6.153	7.505	170.4E6	1567.2E6	23.219	24.690	
18)	A	4,4'-DDD	6.277	7.679	131.8E6	1364.5E6	21.777m	26.162	
19)	B	Endosulfa...	6.484	7.860	165.4E6	1479.7E6	21.204	24.397	
20)	MA	4,4'-DDT	6.703	8.219	111.1E6	1226.5E6	21.721	20.880	
21)	B	Endrin Al...	7.118	8.438	134.8E6	1136.5E6	21.527	24.618	
22)	B	Endosulfa...	7.812	8.912	120.6E6	1058.0E6	18.975	19.866	
23)	A	Methoxychlor	7.505	9.470	54263377	637.5E6	20.964	20.135	
24)		Mirex	7.682	9.816	138.5E6	1009.6E6	22.319	22.222	
25)	B	Endrin Ke...	8.262	9.881	157.2E6	1232.6E6	21.213	21.317	
		SemiQuant Compounds - Not Calibrated on this Instrument							

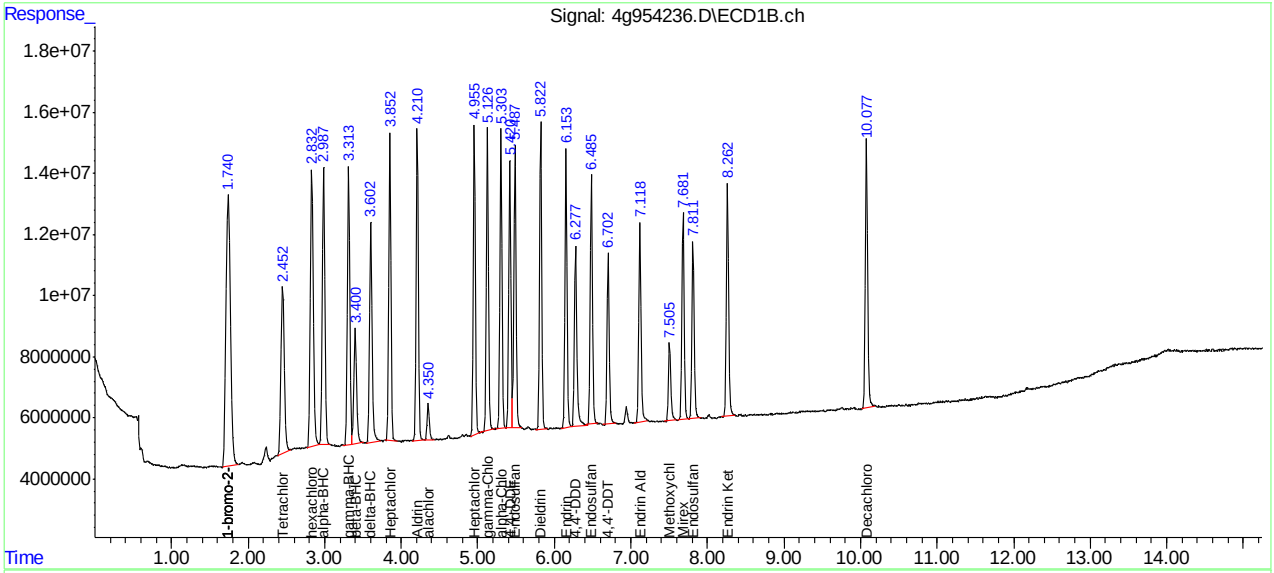
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

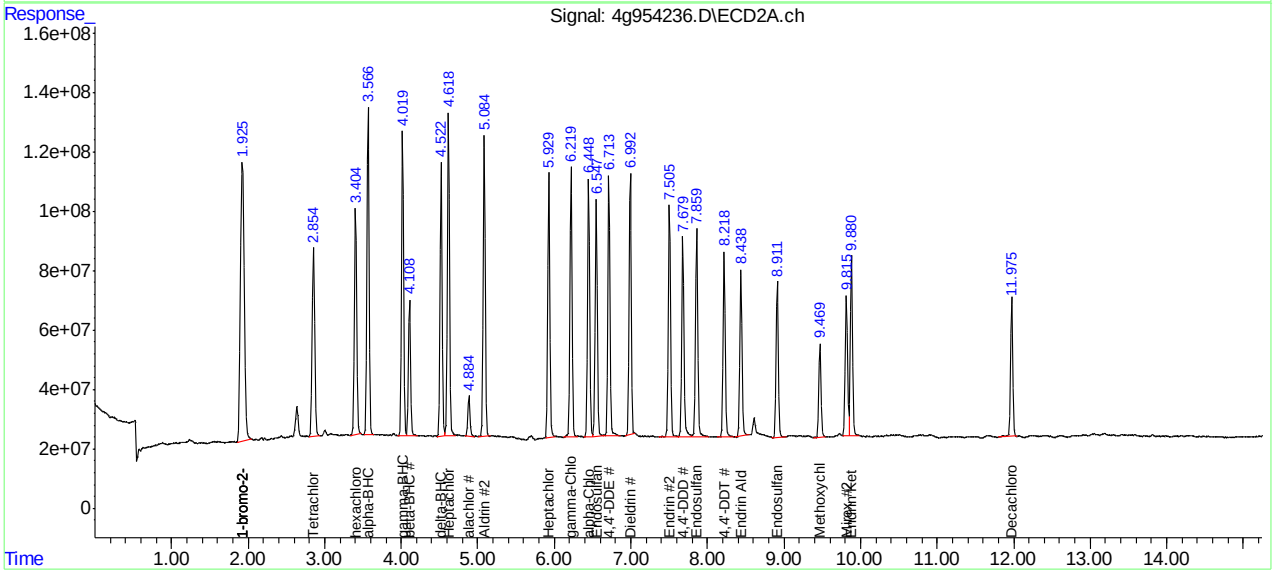
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954236.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 11:08 am
Operator : rebeccak
Sample : icc2585-25
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 13:58:41 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G2585-ICC2585	**Method:**	SW846 8081B
Lab FileID:	4G954236.D	**Analyst approved:**	11/05/18 14:59 Rebecca Krug
Injection Time:	11/05/18 11:08	**Supervisor approved:**	11/06/18 09:35 Gwendolyn Burns

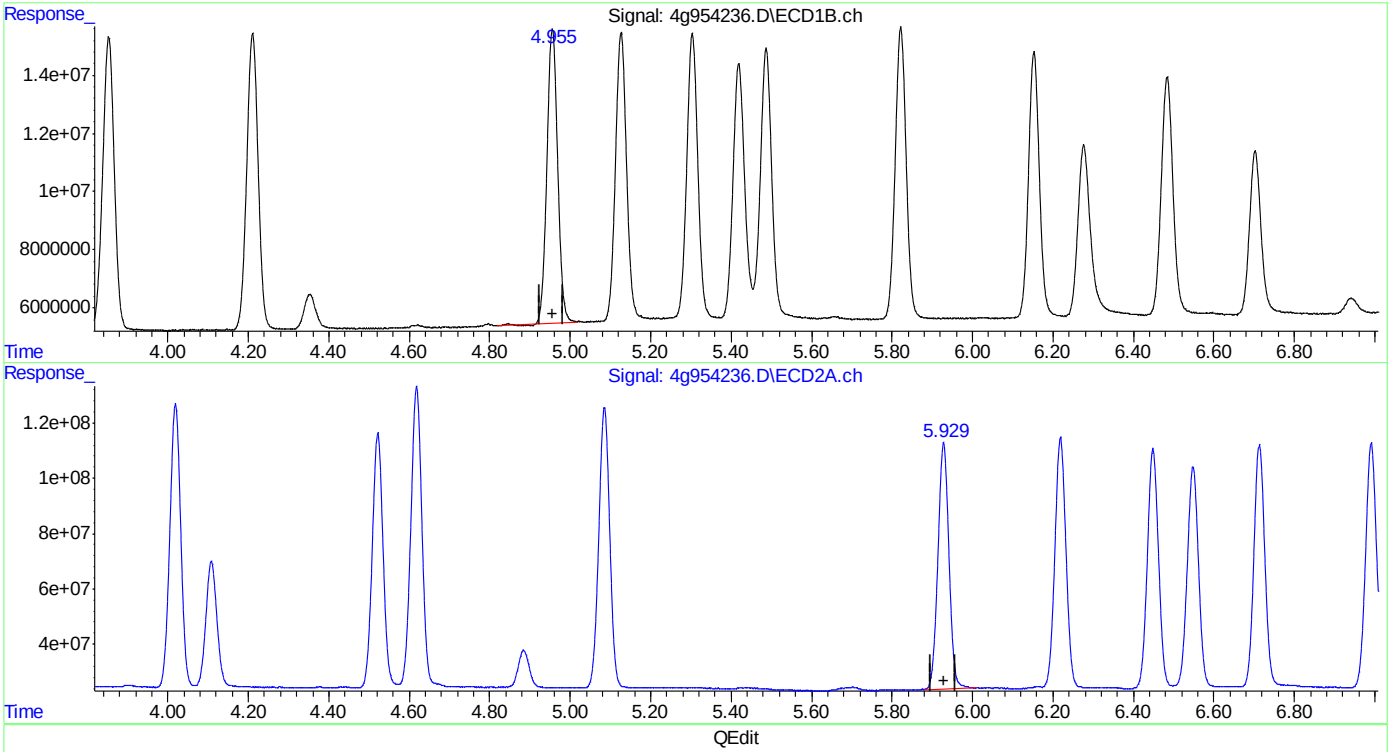
Parameter	CAS	Sig#	R.T. (min.)	Reason
Heptachlor epoxide	1024-57-3	1	4.96	Poorly defined baseline
4,4'-DDD	72-54-8	1	6.28	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954236.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 11:08 am
Operator : rebeccak
Sample : icc2585-25
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 13:57:52 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(11) Heptachlor Epoxide (B)
4.956min 21.871 PPB
response 187409720

(11) Heptachlor Epoxide #2 (B)
5.928min 21.874 PPB
response 1692501027

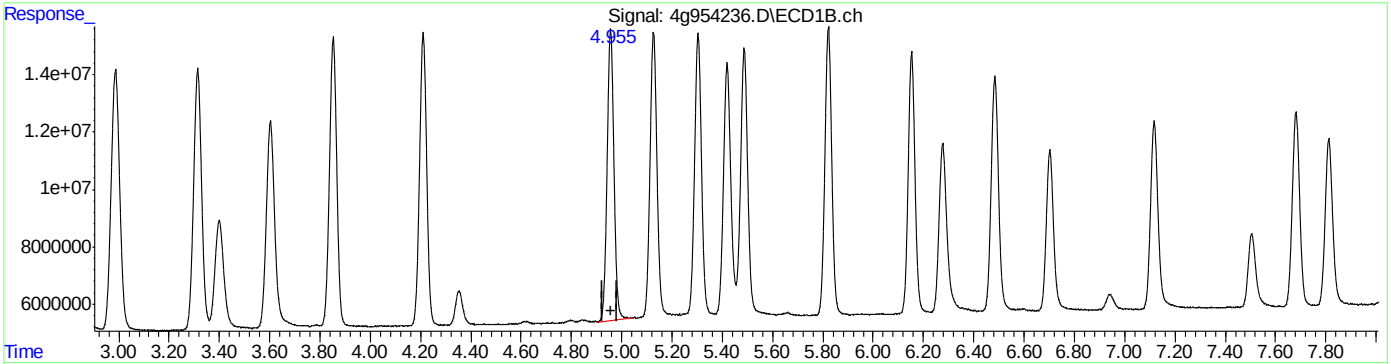
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 13:58:03 2018 RPT1

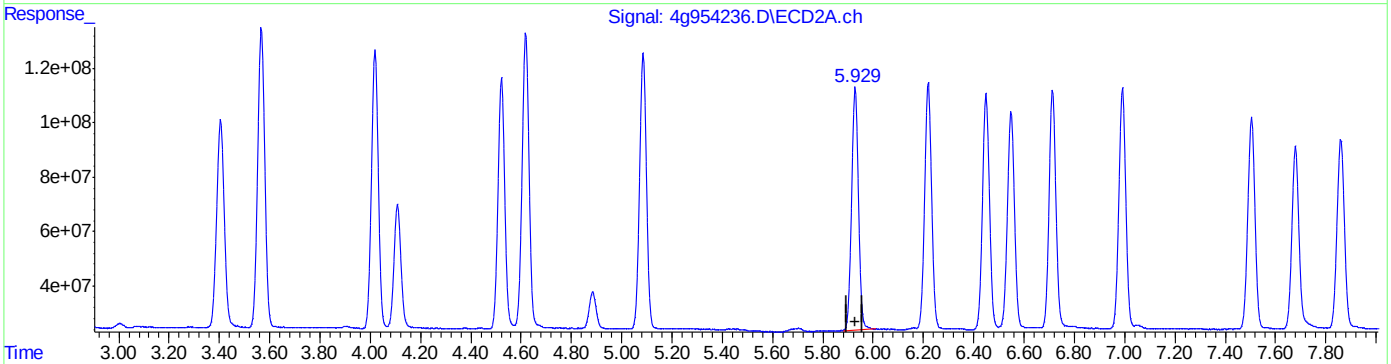
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954236.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 11:08 am
Operator : rebeccak
Sample : icc2585-25
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 13:57:52 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(11) Heptachlor Epoxide (B)
4.955min 22.217 PPB m
response 190372059

(11) Heptachlor Epoxide #2 (B)
5.928min 21.874 PPB
response 1692501027

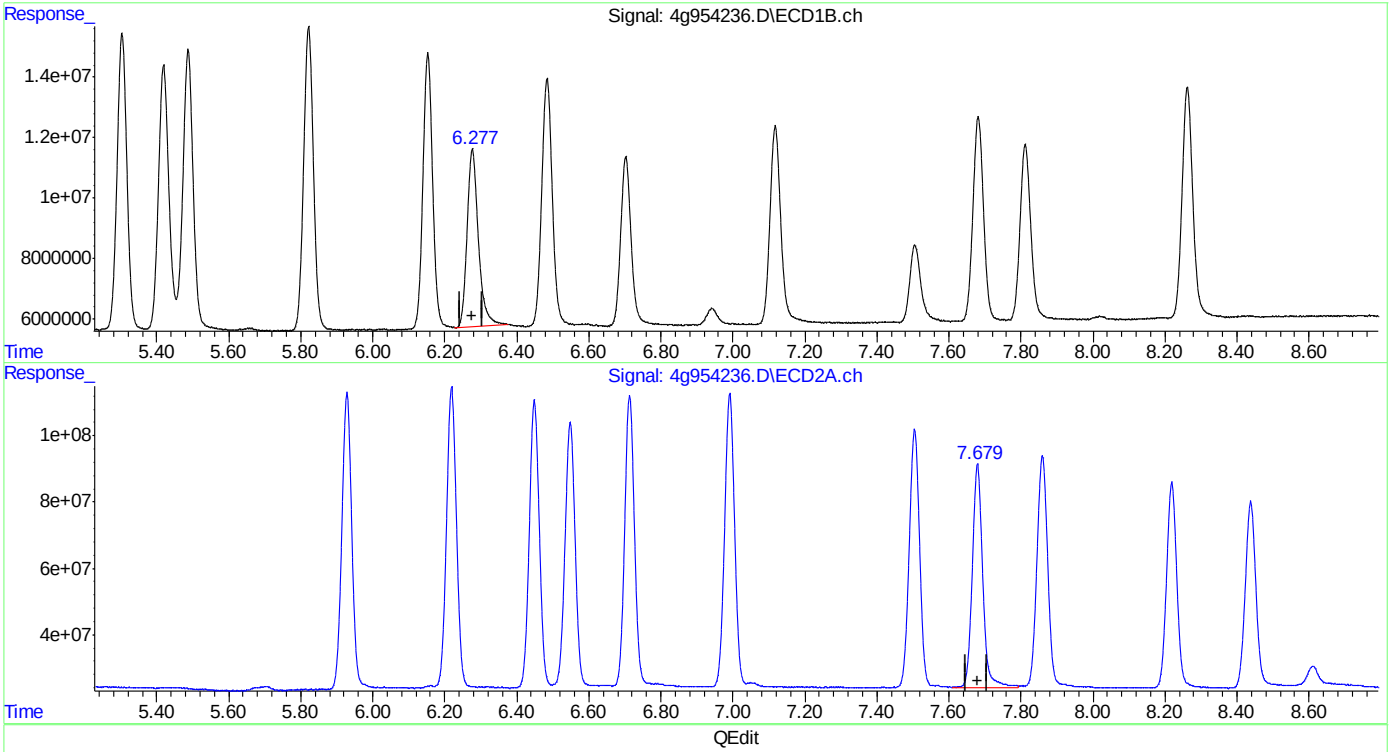
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954236.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 11:08 am
Operator : rebeccak
Sample : icc2585-25
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 13:57:52 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(18) 4,4'-DDD (A)
6.277min 20.951 PPB
response 126804143

(18) 4,4'-DDD #2 (A)
7.679min 26.162 PPB
response 1364540812

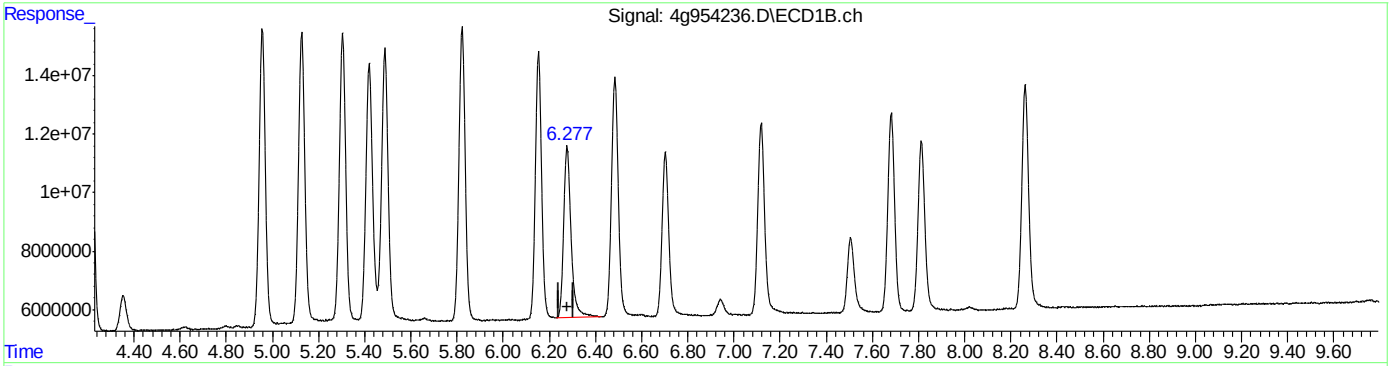
(+) = Expected Retention Time

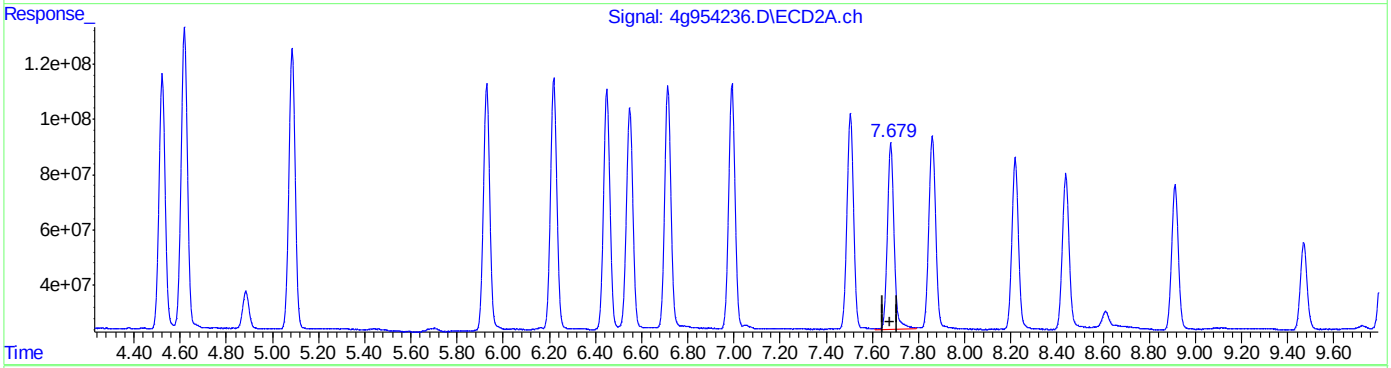
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954236.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 11:08 am
Operator : rebeccak
Sample : icc2585-25
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 13:57:52 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(18) 4,4'-DDD (A)
6.277min 21.777 PPB m
response 131802974

(18) 4,4'-DDD #2 (A)
7.679min 26.162 PPB
response 1364540812

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954237.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 11:25 am
Operator : rebeccak
Sample : ic2585-50
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 13:55:28 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	Internal Standards							
1) I	1-bromo-2...	1.743	1.927	359.0E6	3293.9E6	50.000	50.000	
27) I	1-bromo-2...	1.743	1.927	359.0E6	3293.9E6	50.000	50.000	
33) I	1-bromo-2...	1.743	1.927	359.0E6	3293.9E6	50.000	50.000	
	System Monitoring Compounds							
2)	SAB Tetrachlo...	2.454	2.856	341.0E6	2982.4E6	44.983	44.538	
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 112.46%	111.34%	
26)	SA Decachlor...	10.077	11.975	377.1E6	1844.7E6	49.248	59.289	
	Spiked Amount	40.000			Recovery	= 123.12%	148.22%	
	Target Compounds							
3)	hexachlor...	2.834	3.406	504.2E6	3113.3E6	53.460	39.568	#
4) A	alpha-BHC	2.988	3.568	466.0E6	4335.0E6	47.222	42.695	
5) MA	gamma-BHC	3.314	4.019	425.2E6	3852.2E6	45.384	42.688	
6) MA	Heptachlor	3.854	4.619	423.4E6	4161.4E6	47.801	43.141	
7) B	beta-BHC	3.399	4.109	189.8E6	1693.2E6	43.363	40.787	
8) B	delta-BHC	3.603	4.522	360.9E6	3491.3E6	45.059	41.392	
9) MB	Aldrin	4.211	5.085	426.8E6	3863.5E6	47.997	43.947	
10)	alachlor	4.353	4.884	47909719	483.7E6	41.802	43.550	
11) B	Heptachlo...	4.956	5.928	395.2E6	3386.0E6	47.104	43.887	
12) B	gamma-Chl...	5.127	6.219	397.7E6	3509.5E6	46.864	44.393	
13) B	alpha-Chl...	5.304	6.449	389.1E6	3341.5E6	46.040	43.417	
14) A	Endosulfan I	5.487	6.549	383.8E6	3104.7E6	49.461	44.062	
15) B	4,4'-DDE	5.419	6.714	367.4E6	3270.9E6	49.475	43.151	
16) MA	Dieldrin	5.822	6.992	404.7E6	3404.8E6	48.704	46.830	
17) MA	Endrin	6.153	7.504	358.3E6	3121.3E6	49.863	49.315	
18) A	4,4'-DDD	6.276	7.679	272.8E6	2751.9E6	46.033	52.915	
19) B	Endosulfa...	6.483	7.860	343.5E6	2915.6E6	44.966	48.211	
20) MA	4,4'-DDT	6.702	8.219	245.4E6	2556.3E6	49.016	43.645	
21) B	Endrin Al...	7.117	8.437	282.4E6	2322.2E6	46.046	50.447	
22) B	Endosulfa...	7.812	8.911	253.2E6	2164.2E6	40.710	40.754	
23) A	Methoxychlor	7.505	9.469	114.1E6	1300.6E6	45.009	41.195	
24)	Mirex	7.681	9.816	280.1E6	1997.5E6	46.118	44.095	
25) B	Endrin Ke...	8.262	9.881	329.1E6	2521.3E6	45.354	43.728	

SemiQuant Compounds - Not Calibrated on this Instrument

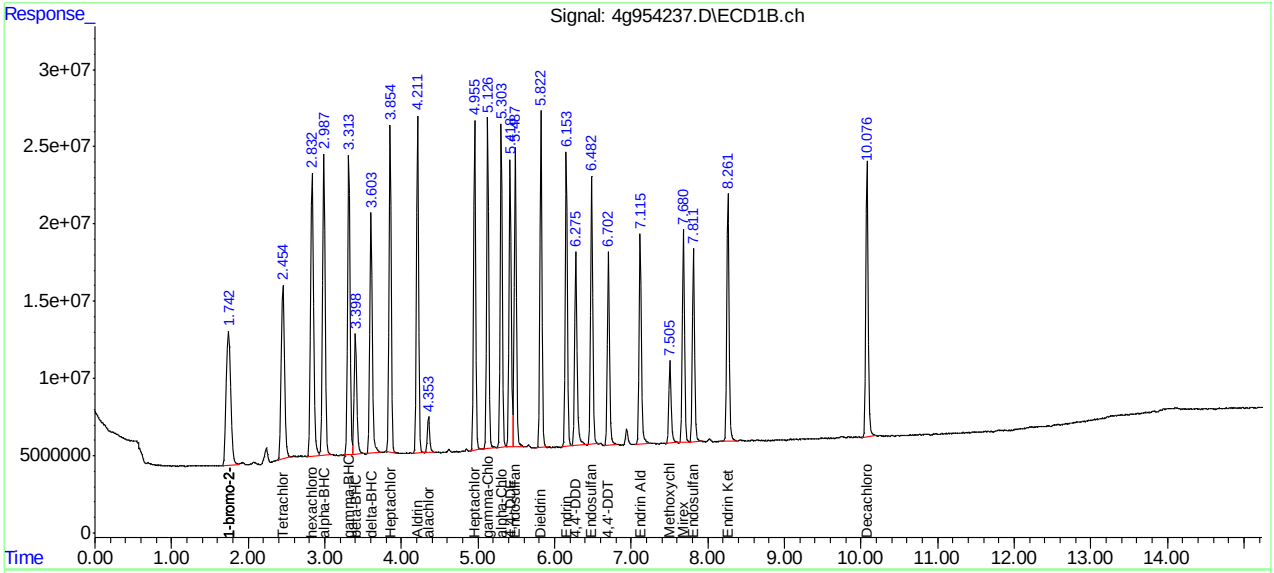
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

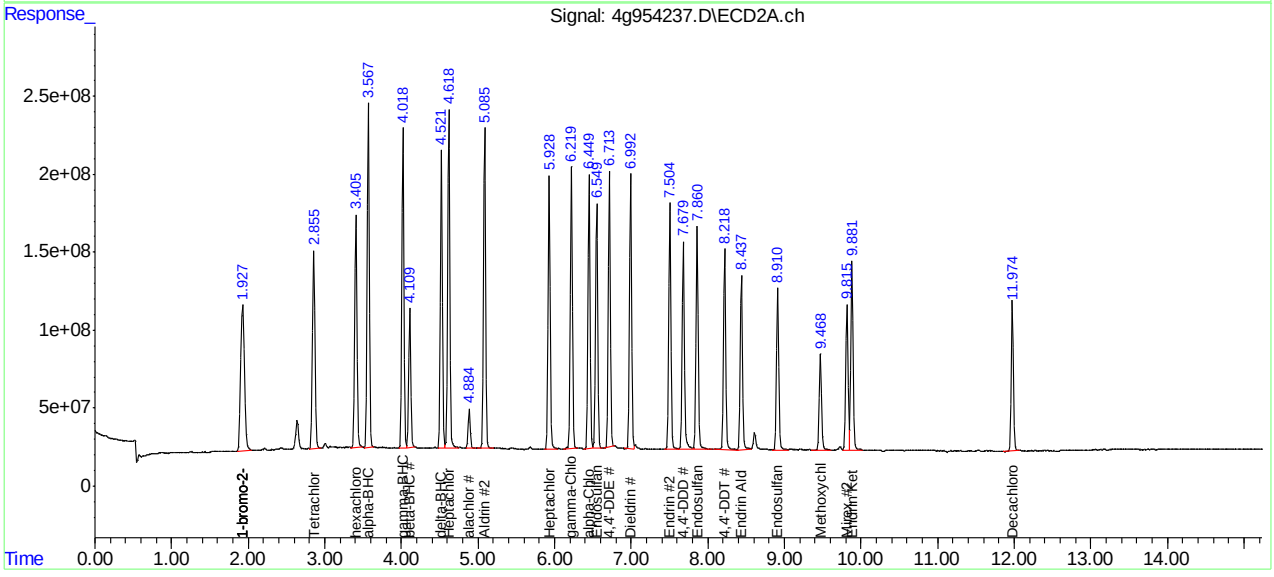
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954237.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 11:25 am
Operator : rebeccak
Sample : ic2585-50
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 13:55:28 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954238.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 11:42 am
Operator : rebeccak
Sample : ic2585-75
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 13:56:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.746	1.929	353.9E6	3243.3E6	50.000	50.000
27) I	1-bromo-2...	1.746	1.929	353.9E6	3243.3E6	50.000	50.000
33) I	1-bromo-2...	1.746	1.929	353.9E6	3243.3E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.454	2.858	509.5E6	4318.7E6	68.174	65.501
Spiked Amount		40.000 Range	30 - 150	Recovery	=	170.44%#	163.75%#
26) SA	Decachlor...	10.077	11.975	568.4E6	2746.5E6	75.309	89.651
Spiked Amount		40.000		Recovery	=	188.27%	224.13%
	Target Compounds						
3)	hexachlor...	2.833	3.405	747.9E6	4498.7E6	80.435	58.067 #
4) A	alpha-BHC	2.989	3.567	716.3E6	6319.5E6	73.627	63.211
5) MA	gamma-BHC	3.315	4.019	651.2E6	5628.6E6	70.511	63.345
6) MA	Heptachlor	3.854	4.619	650.2E6	5956.6E6	74.470	62.714
7) B	beta-BHC	3.399	4.108	282.6E6	2465.9E6	65.511	60.327
8) B	delta-BHC	3.602	4.522	557.6E6	5090.8E6	70.627	61.297
9) MB	Aldrin	4.212	5.086	652.6E6	5600.4E6	74.445	64.700
10)	alachlor	4.353	4.885	69374778	682.1E6	61.402	62.365
11) B	Heptachlo...	4.956	5.928	601.9E6	4871.2E6	72.768	64.123
12) B	gamma-Chl...	5.127	6.219	609.0E6	5089.5E6	72.794	65.384
13) B	alpha-Chl...	5.304	6.449	593.0E6	4878.9E6	71.182	64.382
14) A	Endosulfan I	5.488	6.548	588.2E6	4536.1E6	76.894	65.381
15) B	4,4'-DDE	5.418	6.714	560.1E6	4847.8E6	76.509	64.954
16) MA	Dieldrin	5.822	6.992	621.9E6	5013.8E6	75.929	70.037
17) MA	Endrin	6.153	7.504	546.1E6	4589.7E6	77.095	73.646
18) A	4,4'-DDD	6.275	7.679	419.4E6	4062.0E6	71.787	79.325
19) B	Endosulfa...	6.483	7.860	523.9E6	4281.9E6	69.561	71.909
20) MA	4,4'-DDT	6.702	8.219	389.1E6	3840.5E6	78.822	66.594
21) B	Endrin Al...	7.117	8.438	430.3E6	3415.9E6	71.173	75.364
22) B	Endosulfa...	7.812	8.911	381.9E6	3202.1E6	62.283	61.240
23) A	Methoxychlor	7.504	9.469	174.1E6	1964.7E6	69.686	63.204
24)	Mirex	7.681	9.816	414.6E6	2918.0E6	69.235	65.419
25) B	Endrin Ke...	8.262	9.882	503.3E6	3661.5E6	70.365	64.496

SemiQuant Compounds - Not Calibrated on this Instrument

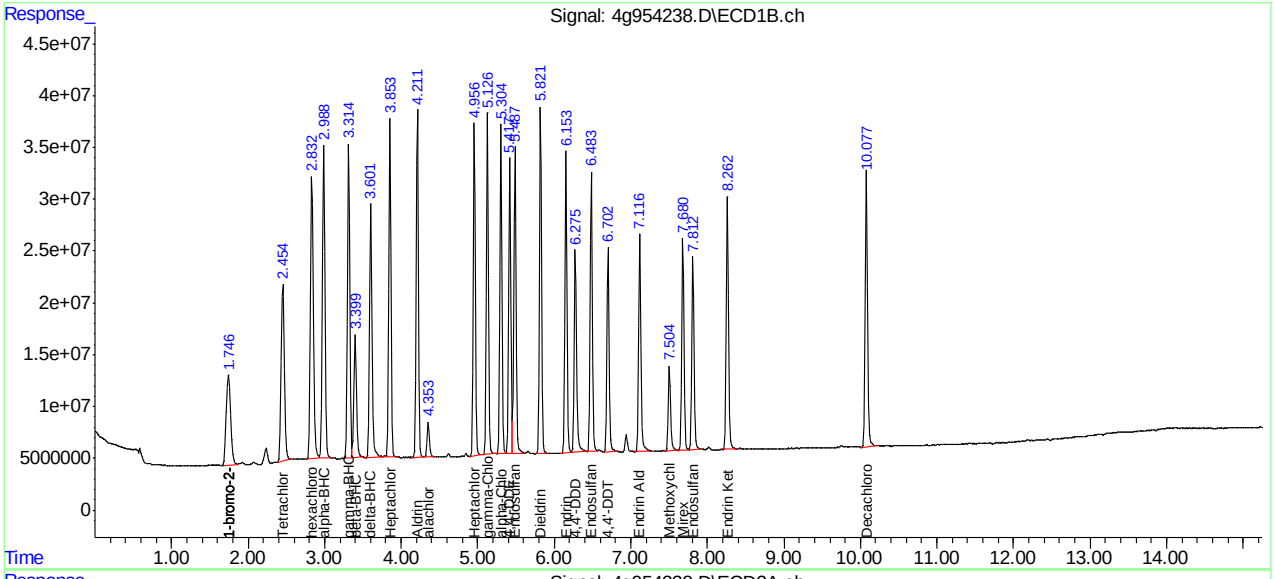
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

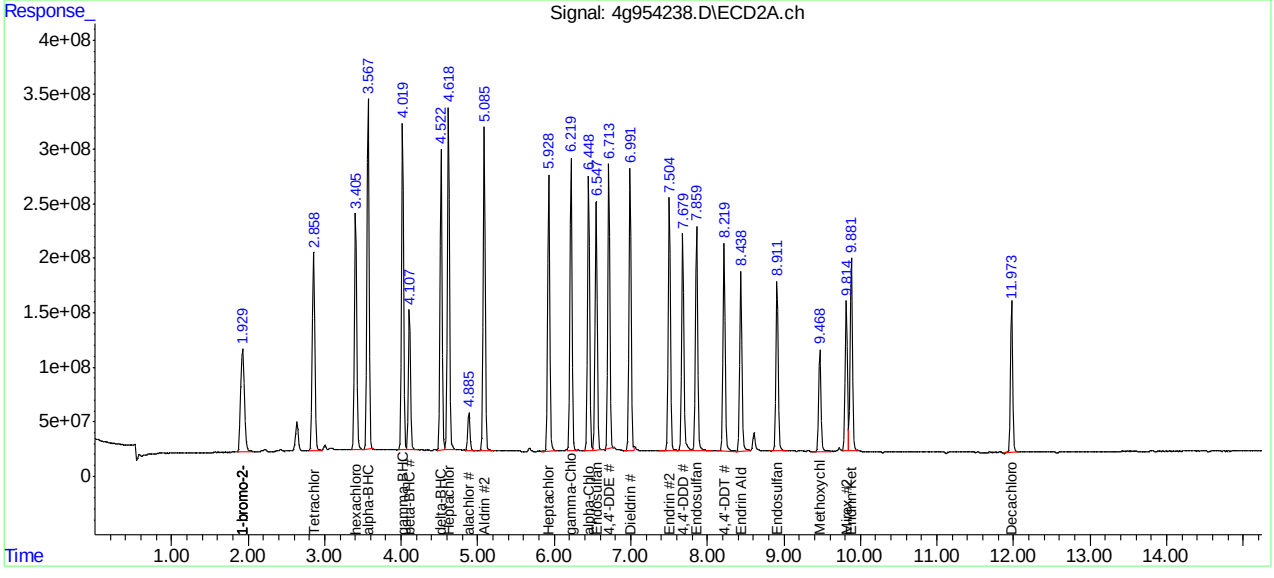
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954238.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 11:42 am
Operator : rebeccak
Sample : ic2585-75
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 13:56:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954239.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 11:59 am
Operator : rebeccak
Sample : ic2585-100
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 13:57:02 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.741	1.927	351.2E6	3279.1E6	50.000	50.000
27) I	1-bromo-2...	1.741	1.927	351.2E6	3279.1E6	50.000	50.000
33) I	1-bromo-2...	1.741	1.927	351.2E6	3279.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.452	2.856	685.1E6	5751.6E6	92.387	86.281
	Spiked Amount 40.000 Range 30 - 150 Recovery = 230.97%# 215.70%#						
26) SA	Decachlor...	10.076	11.974	755.8E6	3637.0E6	100.926	117.422
	Spiked Amount 40.000 Recovery = 252.32% 293.56%						
	Target Compounds						
3)	hexachlor...	2.832	3.405	1004.6E6	5992.7E6	108.891	76.507 #
4) A	alpha-BHC	2.987	3.567	992.1E6	8494.4E6	102.768	84.038
5) MA	gamma-BHC	3.314	4.019	892.8E6	7541.7E6	97.431	83.950
6) MA	Heptachlor	3.853	4.619	884.1E6	7872.4E6	102.057	81.980
7) B	beta-BHC	3.398	4.109	385.8E6	3257.5E6	90.135	78.823
8) B	delta-BHC	3.602	4.522	769.9E6	6822.7E6	98.271	81.252
9) MB	Aldrin	4.211	5.085	893.6E6	7370.8E6	102.739	84.222
10)	alachlor	4.353	4.885	93293619	865.7E6	83.217	78.287
11) B	Heptachlo...	4.956	5.928	816.9E6	6377.8E6	99.542	83.038
12) B	gamma-Chl...	5.127	6.219	832.7E6	6729.1E6	100.313	85.504
13) B	alpha-Chl...	5.303	6.449	807.1E6	6458.5E6	97.639	84.297
14) A	Endosulfan I	5.488	6.549	800.9E6	6059.8E6	105.524	86.391
15) B	4,4'-DDE	5.419	6.714	758.0E6	6601.8E6	104.343	87.488
16) MA	Dieldrin	5.822	6.992	846.7E6	6682.8E6	104.171	92.331
17) MA	Endrin	6.153	7.504	737.5E6	6073.5E6	104.935	96.391
18) A	4,4'-DDD	6.274	7.679	570.2E6	5417.3E6	98.361	104.636
19) B	Endosulfa...	6.483	7.859	711.5E6	5667.7E6	95.216	94.143
20) MA	4,4'-DDT	6.702	8.219	536.8E6	5147.9E6	109.586	88.290
21) B	Endrin Al...	7.117	8.438	584.7E6	4520.9E6	97.475	98.654
22) B	Endosulfa...	7.812	8.911	514.2E6	4273.7E6	84.502	80.841
23) A	Methoxychlor	7.503	9.469	232.9E6	2587.4E6	93.967	82.324
24)	Mirex	7.681	9.815	550.4E6	3855.4E6	92.632	85.493
25) B	Endrin Ke...	8.262	9.881	681.3E6	4880.0E6	95.984	85.020

SemiQuant Compounds - Not Calibrated on this Instrument

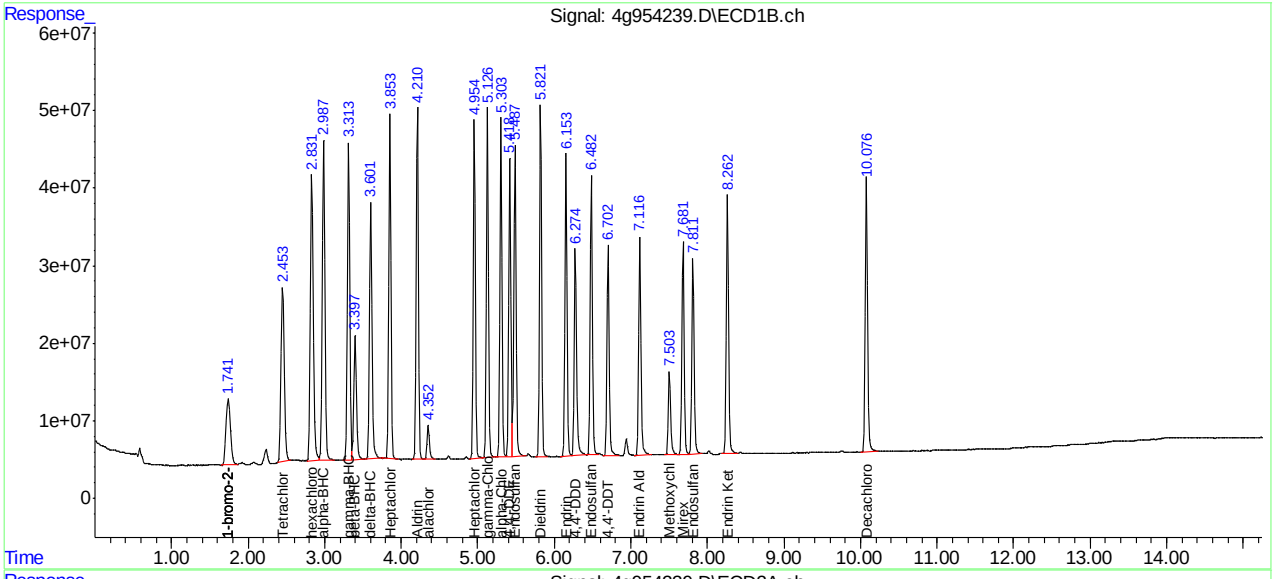
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

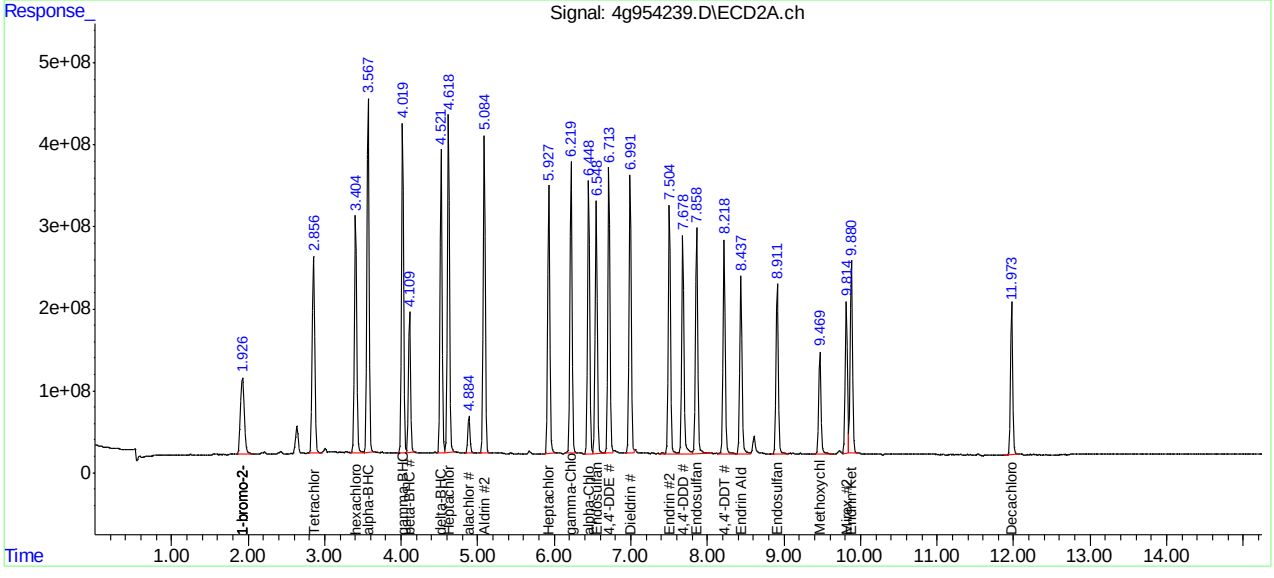
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954239.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 11:59 am
Operator : rebeccak
Sample : ic2585-100
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 13:57:02 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 13:55:13 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations
APPROVED
(compounds with "m" flag)
Gwendolyn Burns
11/06/18 09:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954240.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 12:16 pm
Operator : rebeccak
Sample : ic2585-500
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:39:07 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 14:38:37 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.739	1.925	335.5E6	3382.8E6	50.000	50.000
27) I	1-bromo-2...	1.739	1.925	335.5E6	3382.8E6	50.000	50.000
33) I	1-bromo-2...	1.739	1.925	335.5E6	3382.8E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.453	2.855	345.5E6	2849.3E6	55.350	45.723
Spiked Amount		40.000	Range	30 - 150	Recovery	= 138.38%	114.31%
26) SA	Decachlor...	10.077	11.974	364.0E6	1746.1E6	48.241	43.240
Spiked Amount		40.000			Recovery	= 120.60%	108.10%
	Target Compounds						
34)	Chlordane...	3.853	4.618	235.5E6	2410.8E6	599.527	462.252
35)	Chlordane...	4.357	5.283	153.8E6	1305.6E6	573.008	456.682
36)	Chlordane...	5.127	6.218	546.7E6	4397.6E6	593.585	491.438
37)	Chlordane...	5.295	6.448	865.0E6	6997.4E6	600.682	448.535m#
38)	Chlordane...	6.388	7.939	119.5E6	1141.6E6	555.163	599.229

SemiQuant Compounds - Not Calibrated on this Instrument

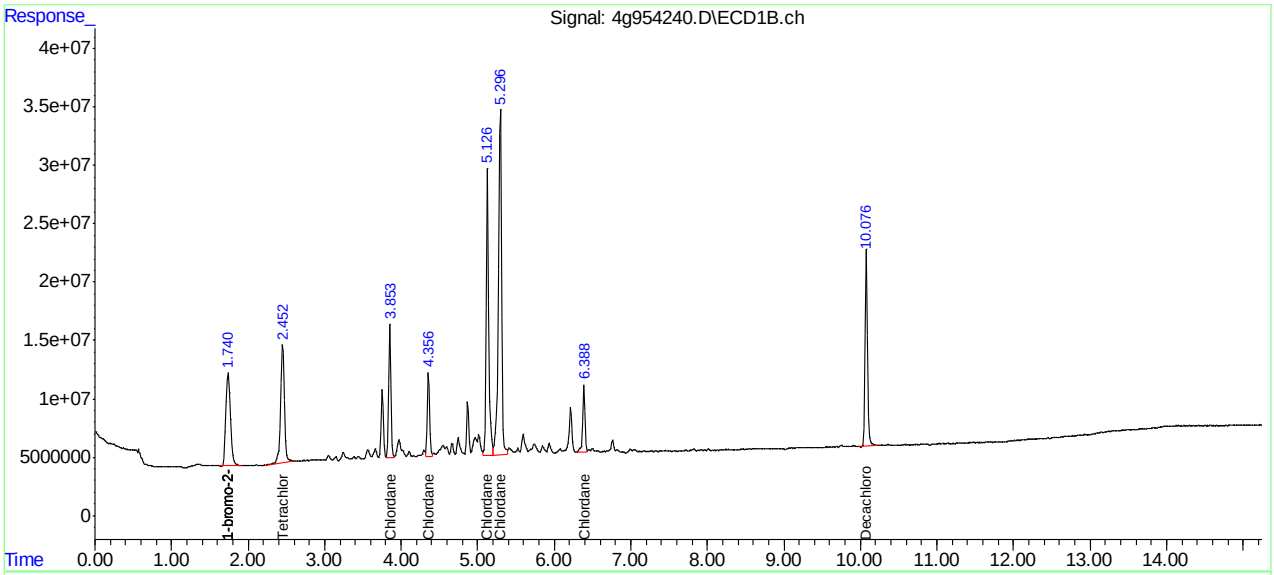
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

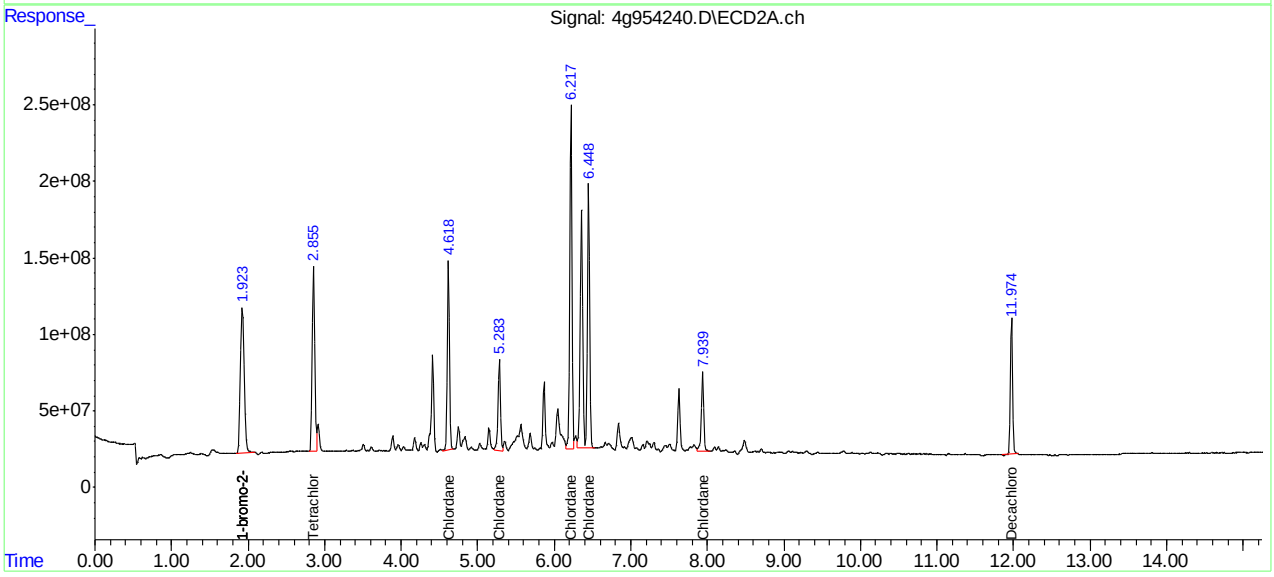
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954240.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 12:16 pm
Operator : rebeccak
Sample : ic2585-500
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:39:07 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 14:38:37 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G2585-IC2585	**Method:**	SW846 8081B
Lab FileID:	4G954240.D	**Analyst approved:**	11/05/18 14:59 Rebecca Krug
Injection Time:	11/05/18 12:16	**Supervisor approved:**	11/06/18 09:35 Gwendolyn Burns

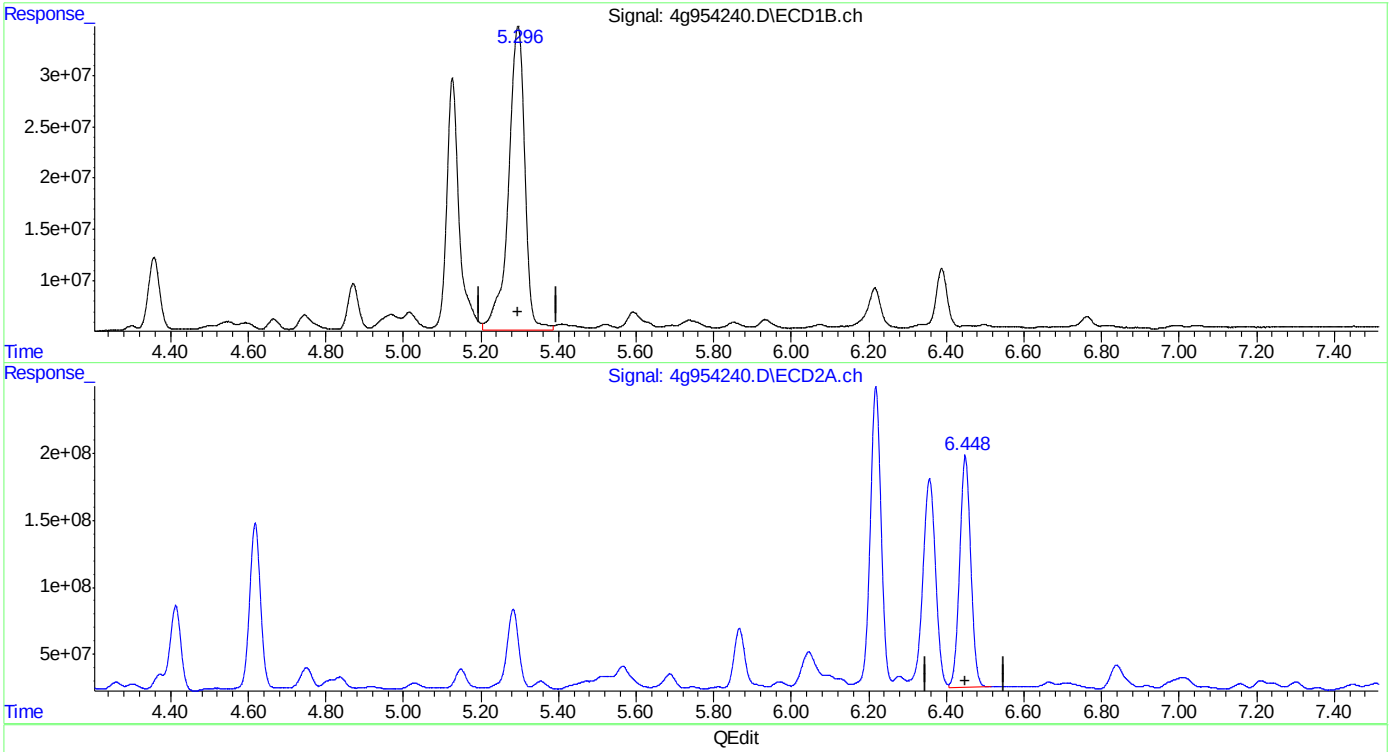
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	6.45	Split peak

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954240.D
Signal(s) : Signal #1: ECD1B.ch  Signal #2: ECD2A.ch
Acq On    :  5 Nov 2018  12:16 pm
Operator  : rebeccak
Sample    : ic2585-500
Misc      : op16395,g4g2585,300,,,2,1
ALS Vial  : 19   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:38:41 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title  : PEST/PCB
QLast Update : Mon Nov 05 14:38:37 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```



QEdit

(37) Chlordane {D}
5.295min 600.682 PPB
response 865038196

(37) Chlordane {D} #2
6.449min 219.169 PPB
response 3419137537

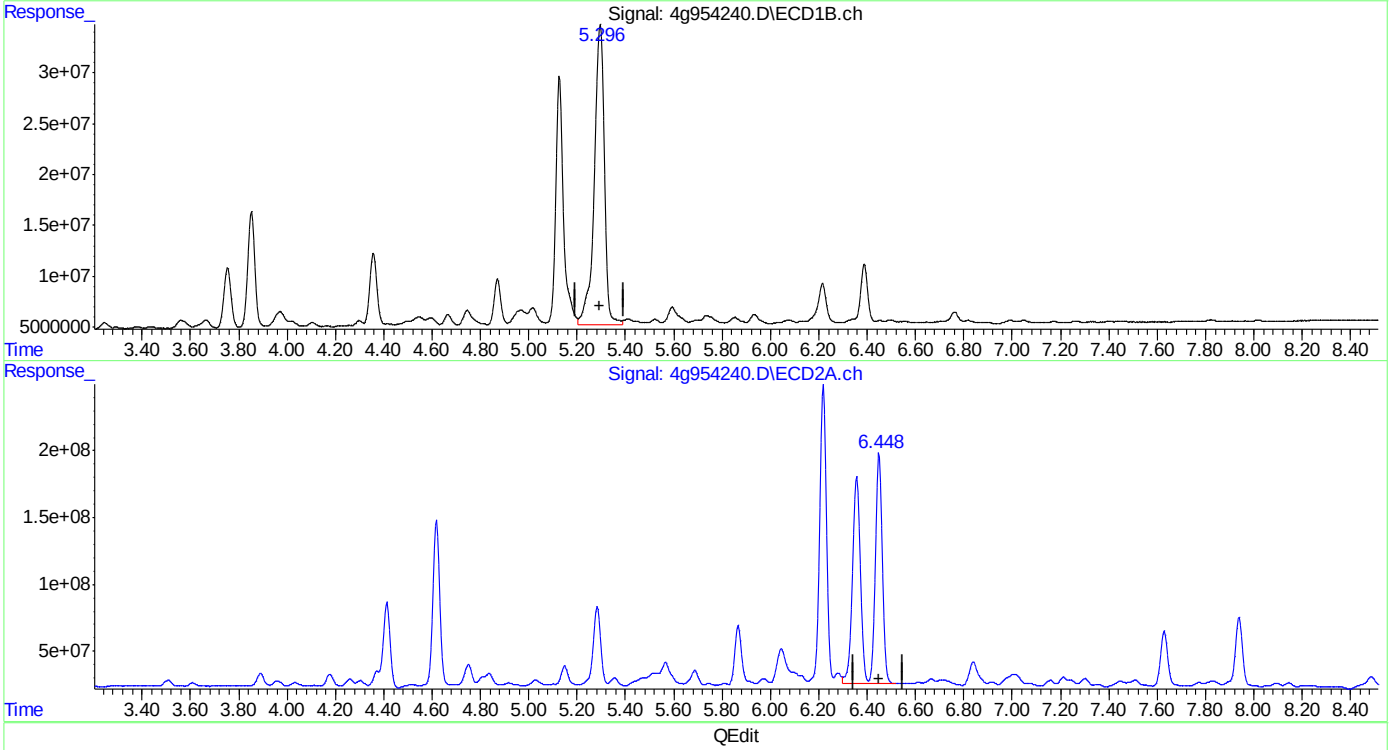
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954240.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 12:16 pm
Operator : rebeccak
Sample : ic2585-500
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:38:41 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 14:38:37 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(37) Chlordane {D}
5.295min 600.682 PPB
response 865038196

(37) Chlordane {D} #2
6.448min 448.535 PPB m
response 6997352055

(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:39:09 2018 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954241.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 12:33 pm
Operator : rebeccak
Sample : ic2585-500
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:40:49 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 14:40:32 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.742	1.926	359.1E6	3388.7E6	50.000	50.000
27) I	1-bromo-2...	1.742	1.926	359.1E6	3388.7E6	50.000	50.000
33) I	1-bromo-2...	1.742	1.926	359.1E6	3388.7E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.454	2.856	340.5E6	3021.8E6	50.975	48.407
	Spiked Amount 40.000 Range 30 - 150 Recovery = 127.44% 121.02%						
26) SA	Decachlor...	10.076	11.974	369.7E6	1828.7E6	45.780	45.205
	Spiked Amount 40.000 Recovery = 114.45% 113.01%						
	Target Compounds						
28) L8	Toxaphene{A}	5.825	6.955	60434240	833.1E6	604.060	569.092
29) L8	Toxaphene{B}	6.464	7.827	147.2E6	1072.4E6	553.023	639.021
30) L8	Toxaphene{C}	6.640	7.992	120.8E6	1691.0E6	574.163	632.365
31) L8	Toxaphene{D}	6.993	8.435	113.3E6	1056.8E6	738.264	578.263
32) L8	Toxaphene{E}	7.658	9.347	90916567	827.1E6	554.389	506.696
	SemiQuant Compounds - Not Calibrated on this Instrument						

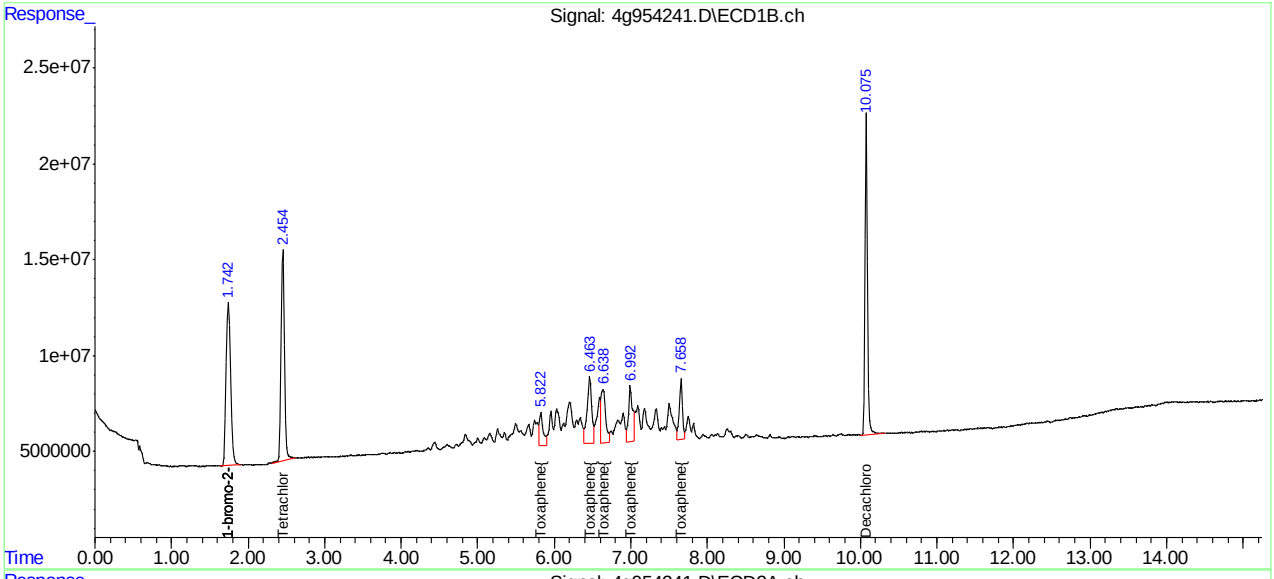
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

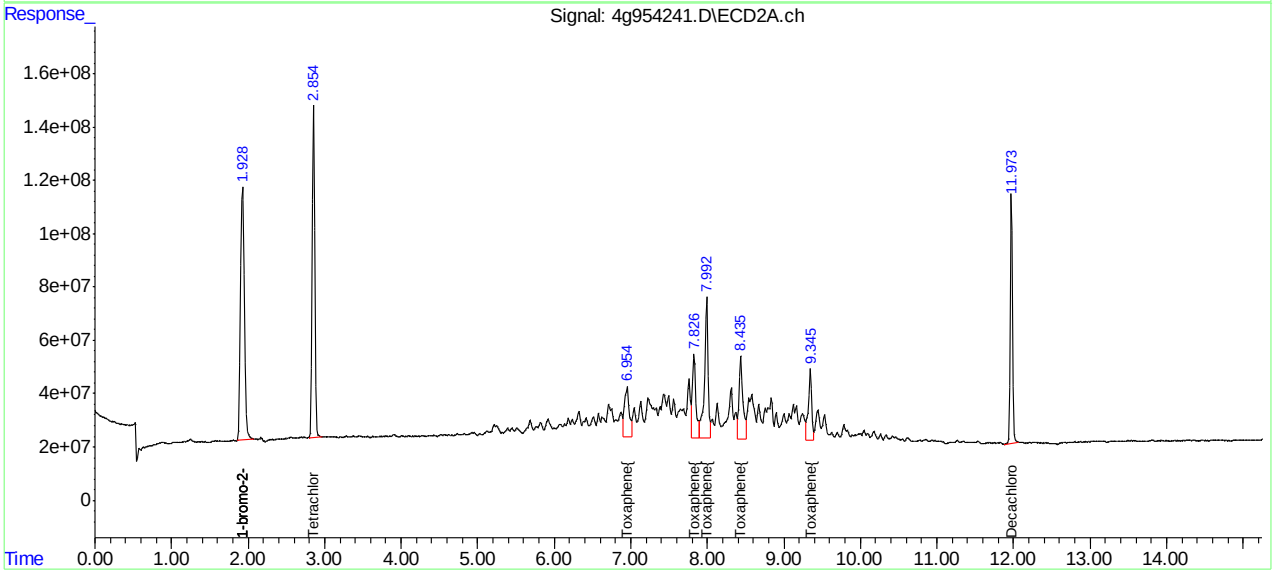
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954241.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 12:33 pm
Operator : rebeccak
Sample : ic2585-500
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:40:49 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 14:40:32 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
11/06/18 09:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954243.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 1:07 pm
Operator : rebeccak
Sample : icv2585-500
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:55:56 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 14:43:12 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.743	1.929	342.8E6	3299.2E6	50.000	50.000
27) I	1-bromo-2...	1.743	1.929	342.8E6	3299.2E6	50.000	50.000
33) I	1-bromo-2...	1.743	1.929	342.8E6	3299.2E6	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	2.454	2.856	324.8E6	2632.0E6	50.926	43.307
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 127.32%	108.27%
26)	SA Decachlor...	10.077	11.974	363.4E6	1862.2E6	47.134	47.283
	Spiked Amount	40.000			Recovery	= 117.84%	118.21%
	Target Compounds						
34)	Chlordane...	3.854	4.619	209.9E6	2209.5E6	436.070	469.851
35)	Chlordane...	4.358	5.284	131.1E6	1171.6E6	417.081	460.046
36)	Chlordane...	5.127	6.219	497.2E6	4039.7E6	444.963	470.946
37)	Chlordane...	5.295	6.450	804.1E6	6640.4E6	454.821	486.525m
38)	Chlordane...	6.387	7.940	118.8E6	1069.8E6	486.603m	480.422

SemiQuant Compounds - Not Calibrated on this Instrument

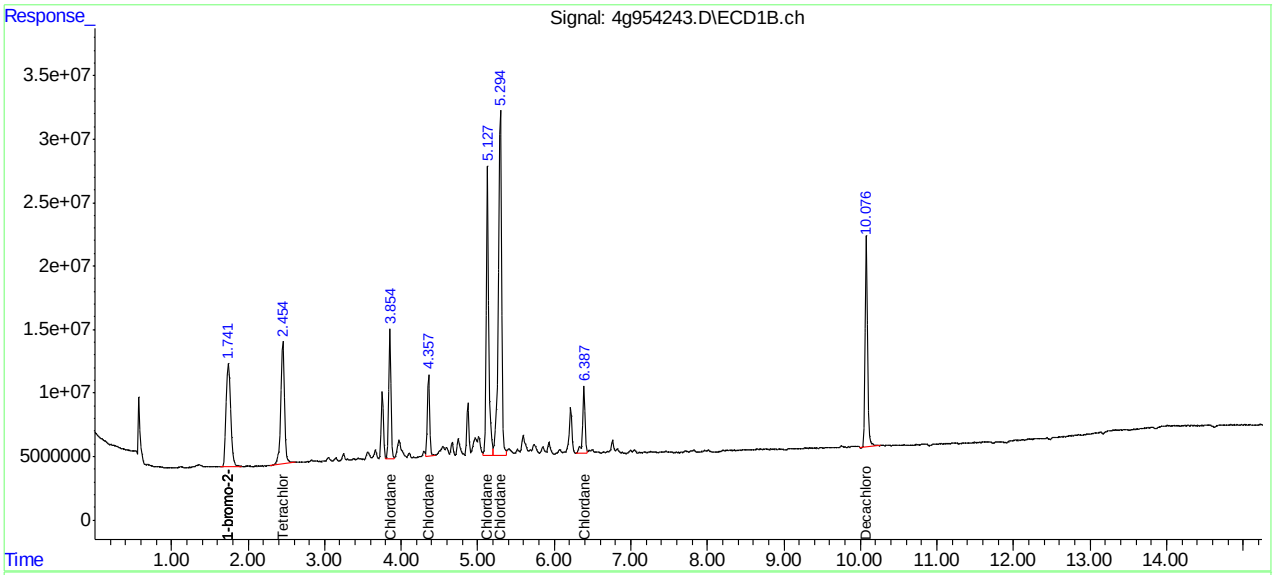
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

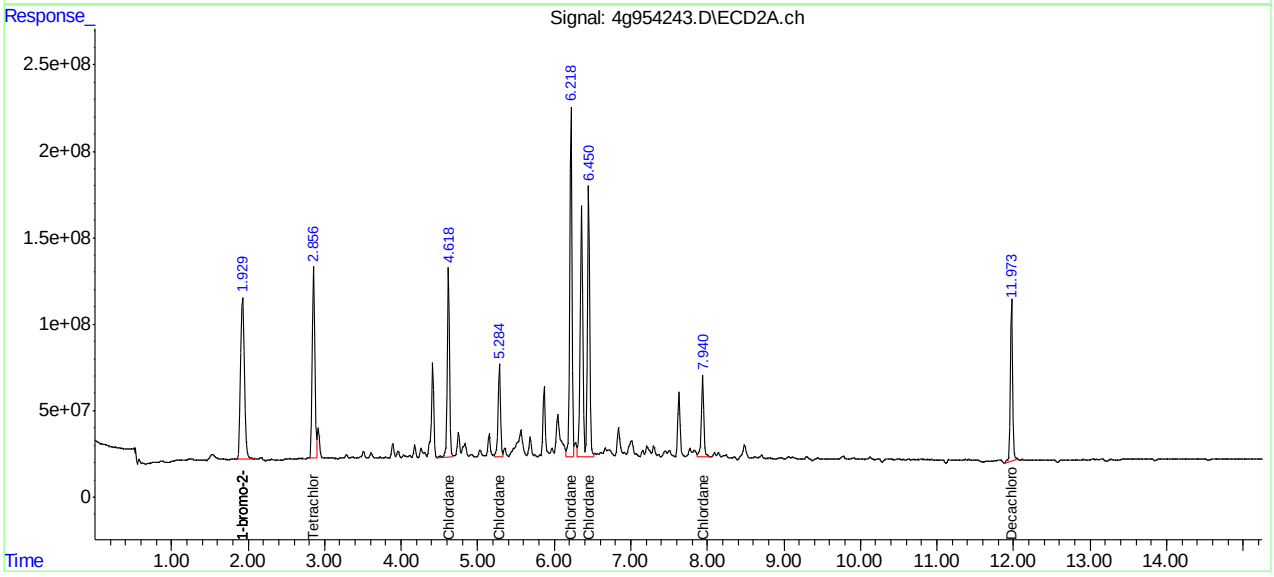
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954243.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 1:07 pm
Operator : rebeccak
Sample : icv2585-500
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:55:56 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 14:43:12 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G2585-ICV2585	**Method:**	SW846 8081B
Lab FileID:	4G954243.D	**Analyst approved:**	11/05/18 14:59 Rebecca Krug
Injection Time:	11/05/18 13:07	**Supervisor approved:**	11/06/18 09:35 Gwendolyn Burns

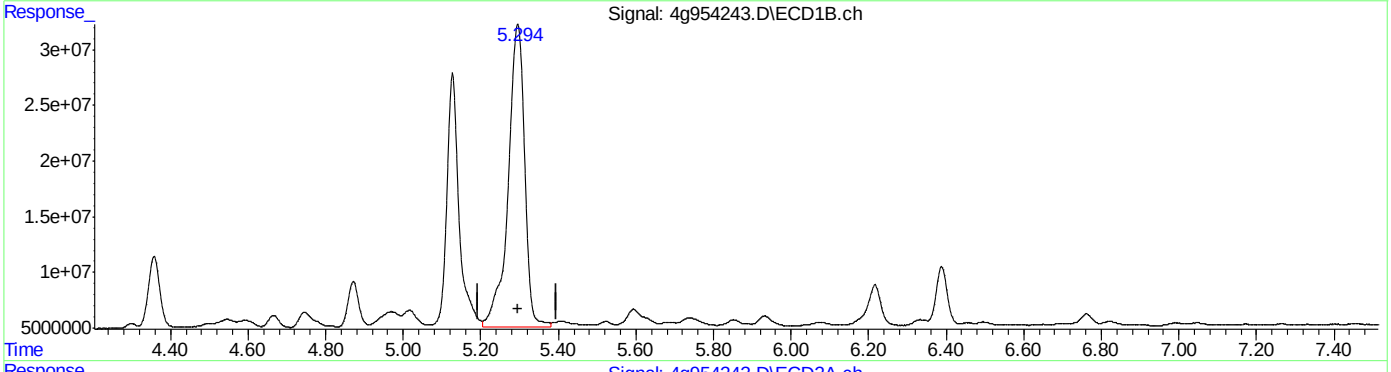
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-E		1	6.39	Poorly defined baseline
Chlordane-D		2	6.45	Split peak

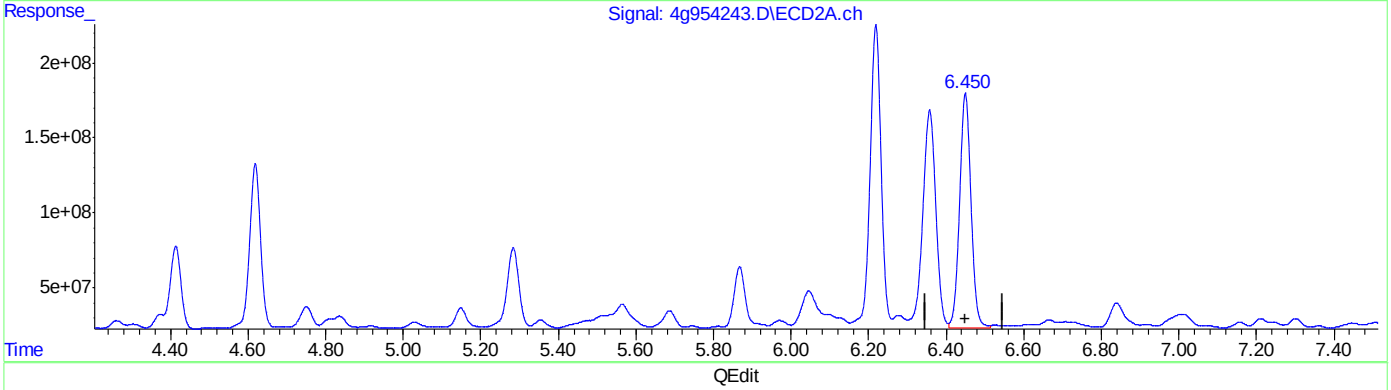
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954243.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 1:07 pm
Operator : rebeccak
Sample : icv2585-500
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:54:56 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 14:43:12 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(37) Chlordane {D}
5.295min 454.821 PPB
response 804142557

(37) Chlordane {D} #2
6.449min 234.718 PPB
response 3203596046

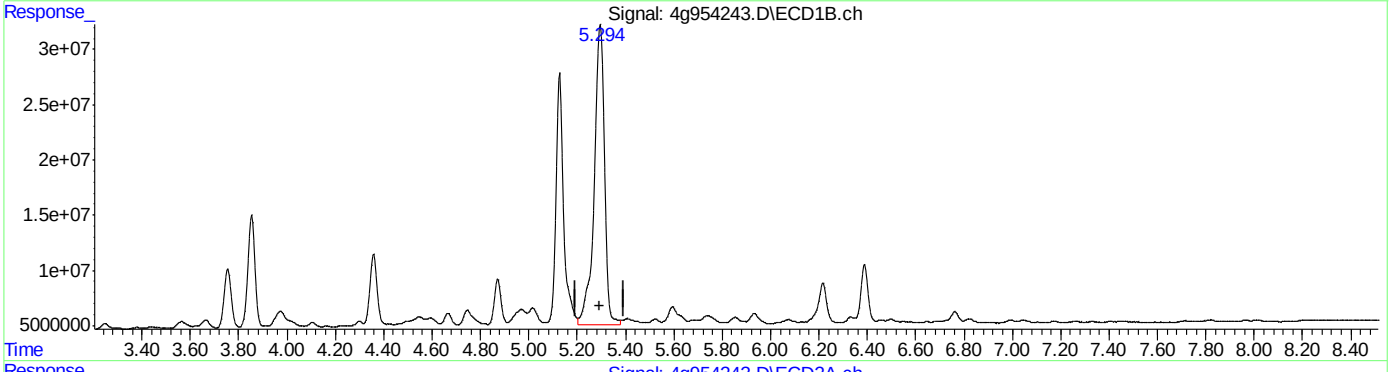
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:55:14 2018 RPT1

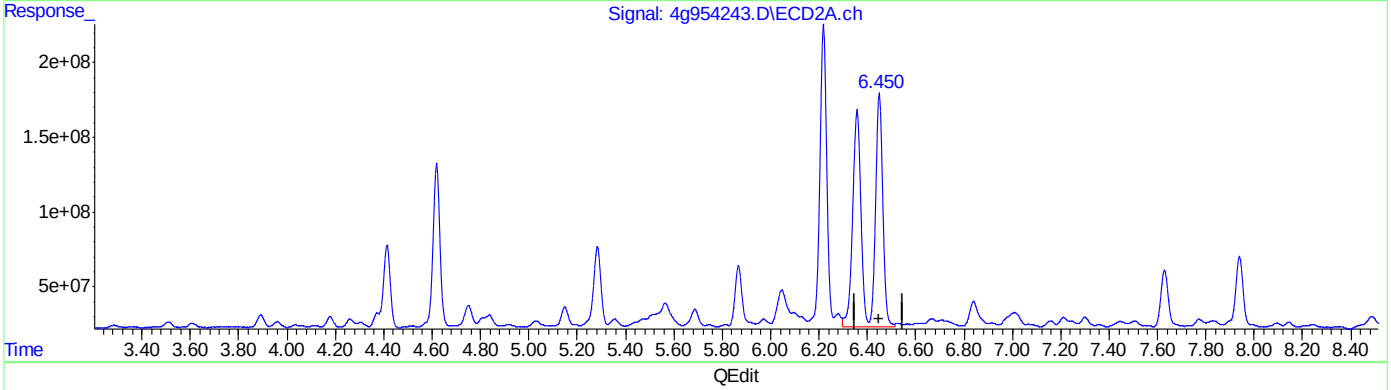
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954243.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 1:07 pm
Operator : rebeccak
Sample : icv2585-500
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:54:56 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 14:43:12 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(37) Chlordane {D}
5.295min 454.821 PPB
response 804142557

(37) Chlordane {D} #2
6.450min 486.525 PPB m
response 6640441907

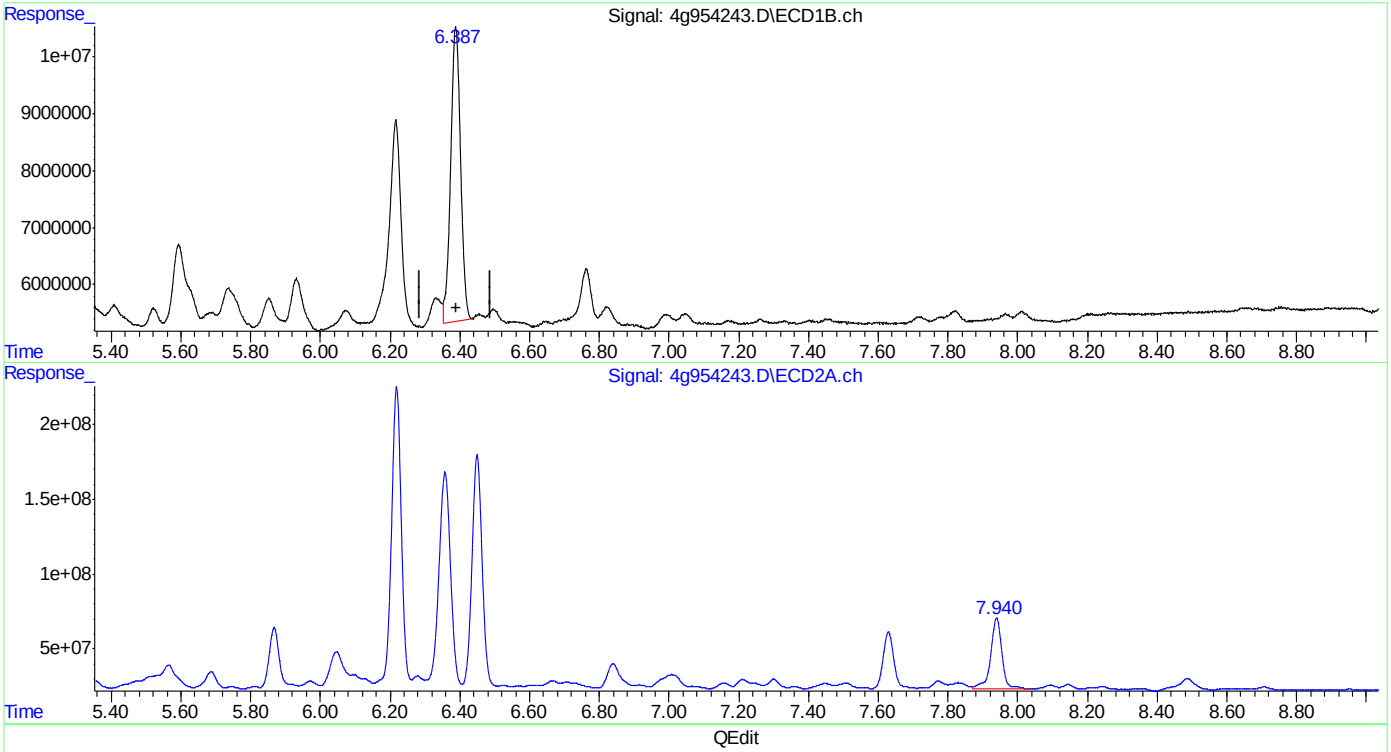
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:55:32 2018 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954243.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 1:07 pm
Operator : rebeccak
Sample : icv2585-500
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:54:56 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 14:43:12 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(38) Chlordane {E}
6.388min 417.304 PPB
response 101895519

(38) Chlordane {E} #2
7.940min 480.422 PPB
response 1069786111

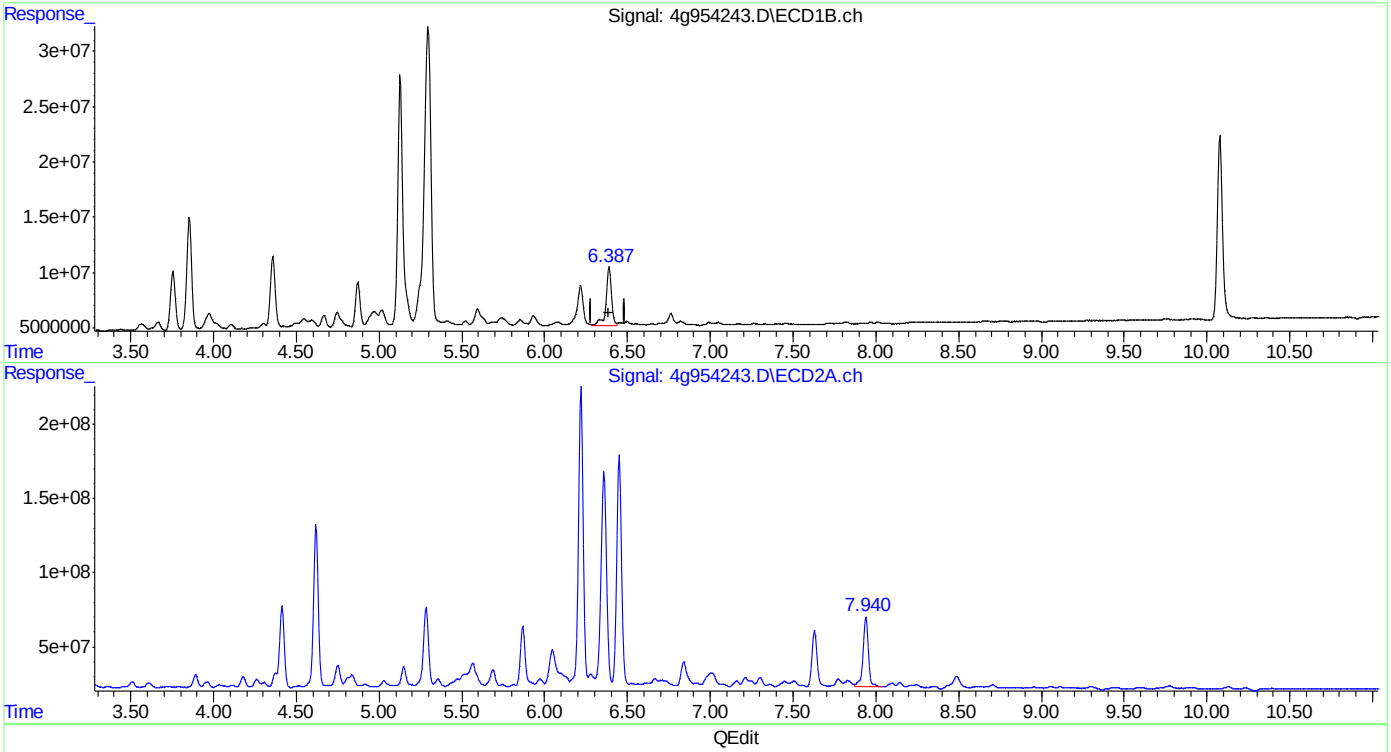
(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:55:35 2018 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954243.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 1:07 pm
Operator : rebeccak
Sample : icv2585-500
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:54:56 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 14:43:12 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(38) Chlordane {E}
6.387min 486.603 PPB m
response 118816724

(38) Chlordane {E} #2
7.940min 480.422 PPB
response 1069786111

(+) = Expected Retention Time
4PST2585.M Mon Nov 05 14:55:59 2018 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
11/06/18 09:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954244.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 1:24 pm
Operator : rebeccak
Sample : icv2585-500
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:48:44 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 14:43:12 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.743	1.927	343.2E6	3395.2E6	50.000	50.000
27) I	1-bromo-2...	1.743	1.927	343.2E6	3395.2E6	50.000	50.000
33) I	1-bromo-2...	1.743	1.927	343.2E6	3395.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.454	2.856	317.7E6	2801.4E6	49.769	44.790
Spiked Amount		40.000	Range	30 - 150	Recovery	= 124.42%	111.98%
26) SA	Decachlor...	10.077	11.974	371.3E6	1830.4E6	48.112	45.161
Spiked Amount		40.000			Recovery	= 120.28%	112.90%
	Target Compounds						
28) L8	Toxaphene{A}	5.824	6.954	61326831	839.4E6	530.895	502.826
29) L8	Toxaphene{B}	6.464	7.828	146.8E6	1070.2E6	521.909	497.992
30) L8	Toxaphene{C}	6.635	7.992	119.2E6	1646.7E6	516.544	485.966
31) L8	Toxaphene{D}	6.992	8.435	112.3E6	1039.6E6	518.421m	490.940
32) L8	Toxaphene{E}	7.658	9.348	82250168	795.7E6	473.298	480.132
	SemiQuant Compounds - Not Calibrated on this Instrument						

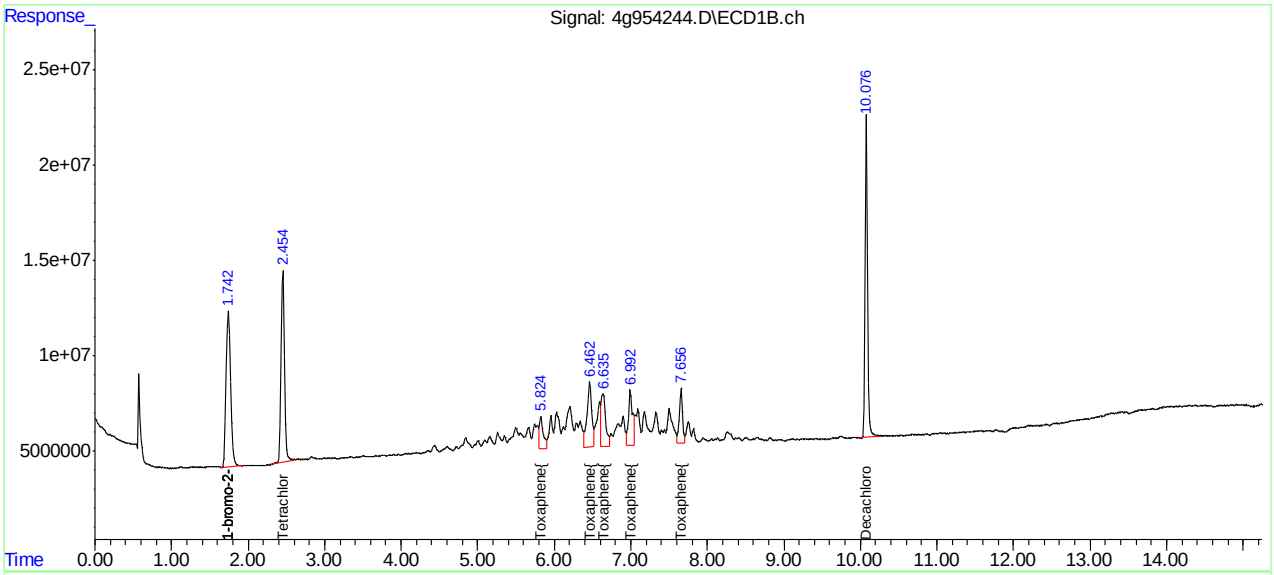
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

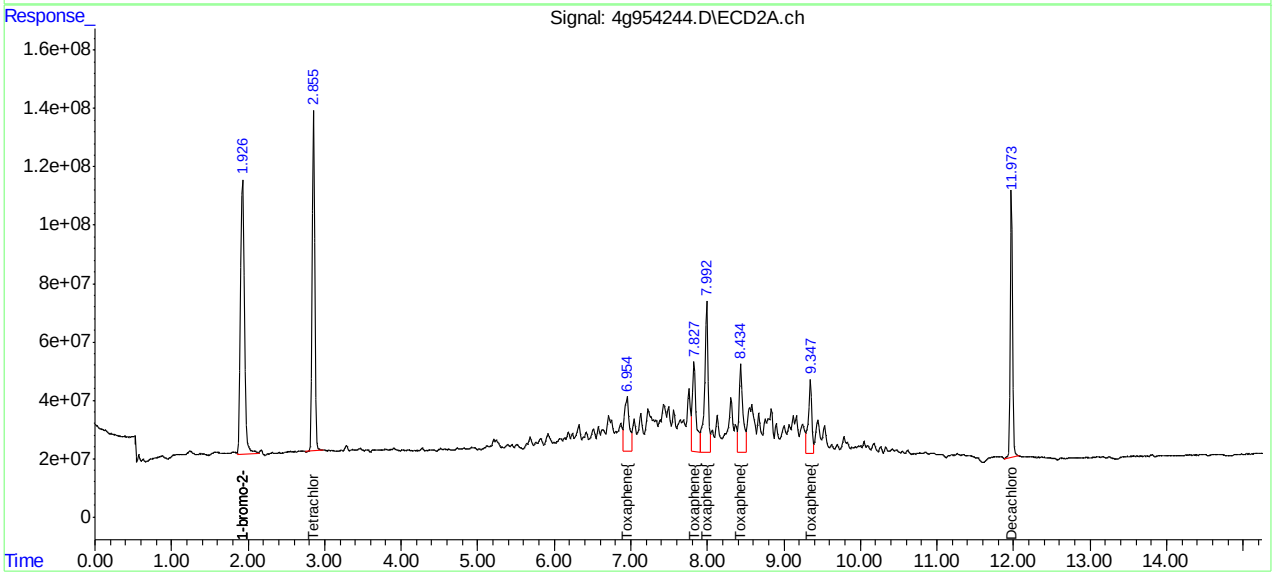
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954244.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 1:24 pm
Operator : rebeccak
Sample : icv2585-500
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:48:44 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 14:43:12 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G2585-ICV2585	**Method:**	SW846 8081B
Lab FileID:	4G954244.D	**Analyst approved:**	11/05/18 14:59 Rebecca Krug
Injection Time:	11/05/18 13:24	**Supervisor approved:**	11/06/18 09:35 Gwendolyn Burns

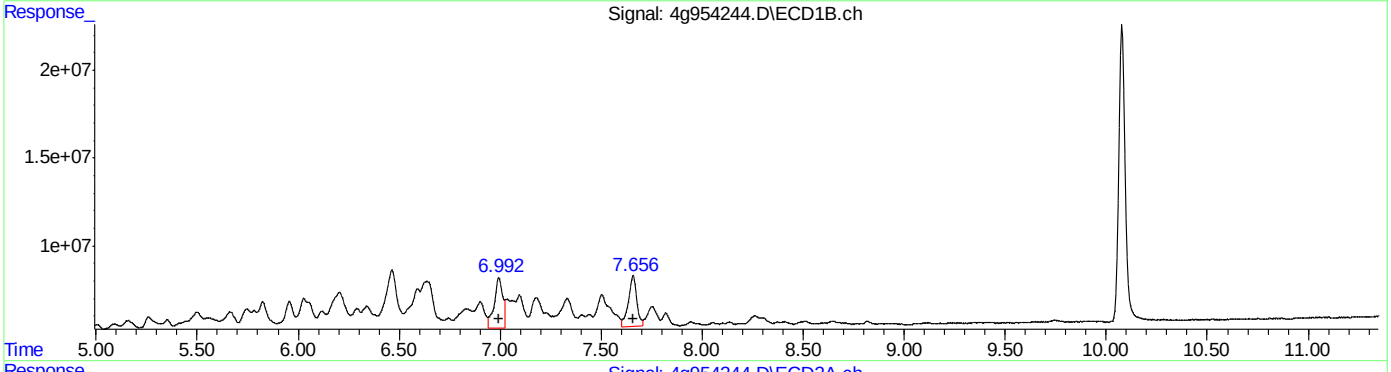
Parameter	CAS	Sig#	R.T. (min.)	Reason
Toxaphene-D		1	6.99	Poorly defined baseline

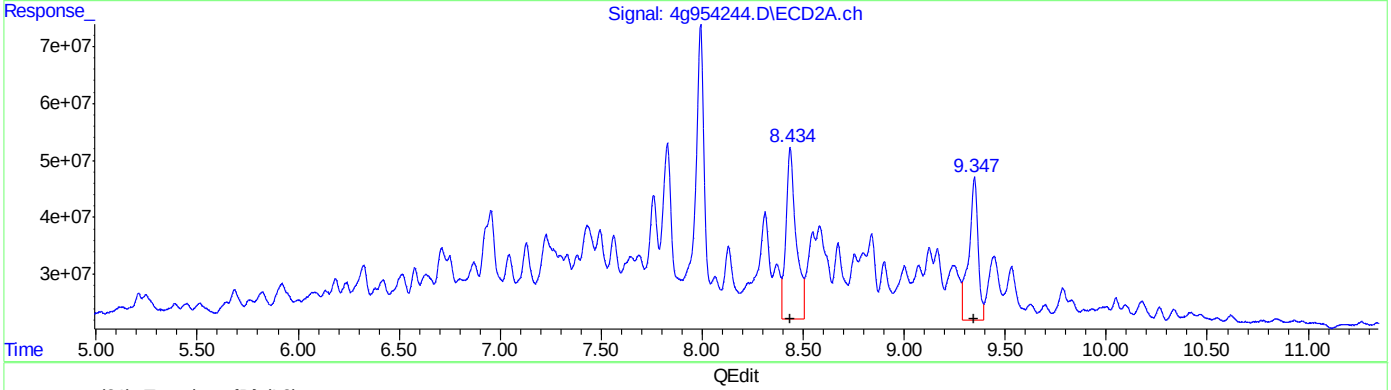
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954244.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 1:24 pm
Operator : rebeccak
Sample : icv2585-500
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:44:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 14:43:12 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(31) Toxaphene{D} (L8)

R.T.	Response	Conc
6.99	88356132	408.03
7.66	82250168	473.30

(31) Toxaphene{D} #2 (L8)

R.T.	Response	Conc
8.44	1039625703	490.94
9.35	795717065	480.13

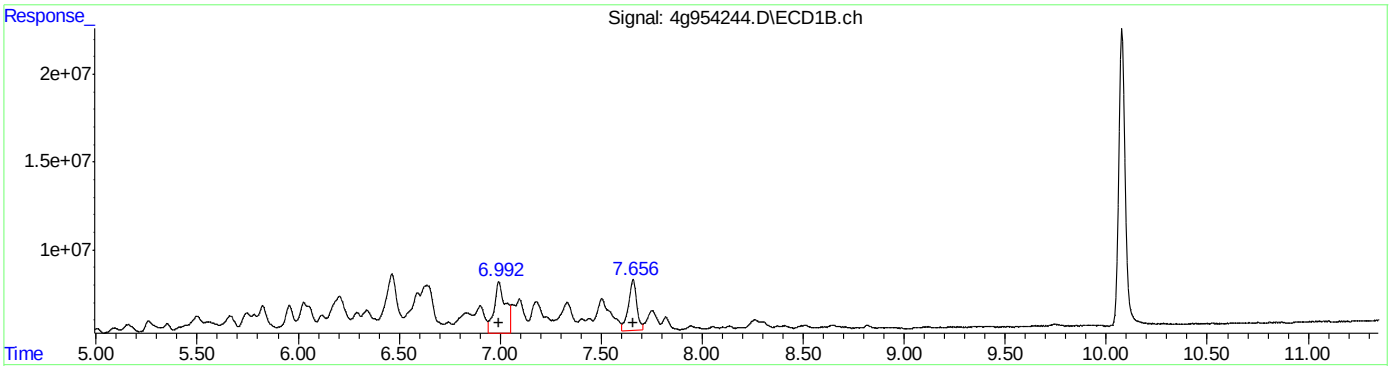
(+) = Expected Retention Time

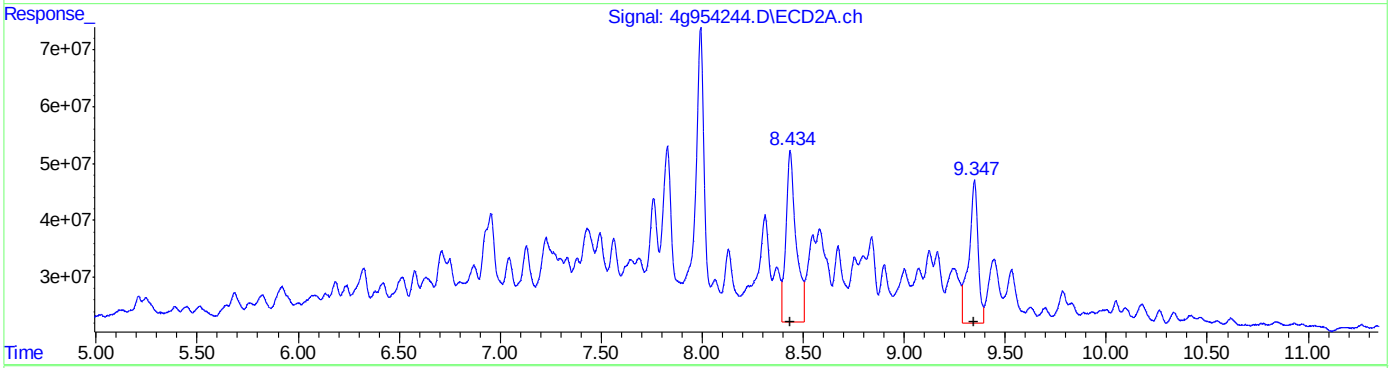
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954244.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 1:24 pm
Operator : rebeccak
Sample : icv2585-500
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:44:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 14:43:12 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(31) Toxaphene{D} #2 (L8)

R.T.	Response	Conc
6.99	112260830	518.42
7.66	82250168	473.30

(31) Toxaphene{D} #2 (L8)

R.T.	Response	Conc
8.44	1039625703	490.94
9.35	795717065	480.13

(+) = Expected Retention Time

4PST2585.M Mon Nov 05 14:49:14 2018 RPT1 Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954245.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 1:41 pm
Operator : rebeccak
Sample : icv2585-50
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:50:23 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 14:43:12 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.739	1.925	341.5E6	3362.2E6	50.000	50.000
27) I	1-bromo-2...	1.739	1.925	341.5E6	3362.2E6	50.000	50.000
33) I	1-bromo-2...	1.739	1.925	341.5E6	3362.2E6	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
10)	alachlor	4.353	4.884	50272680	508.0E6	54.244	48.505
	SemiQuant Compounds - Not Calibrated on this Instrument						

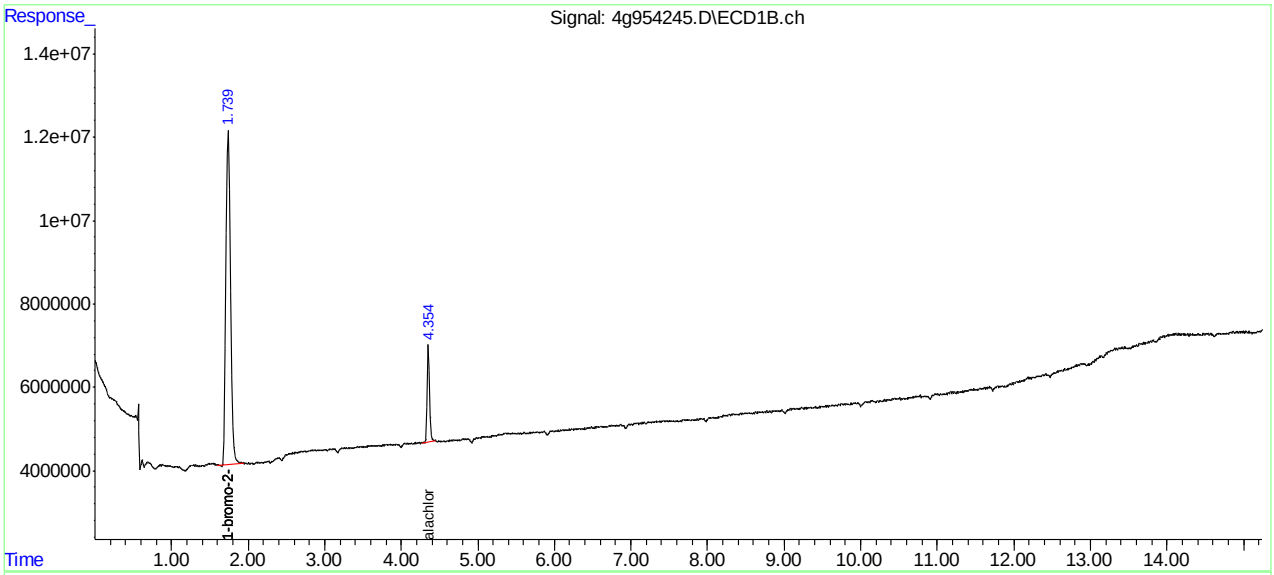
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

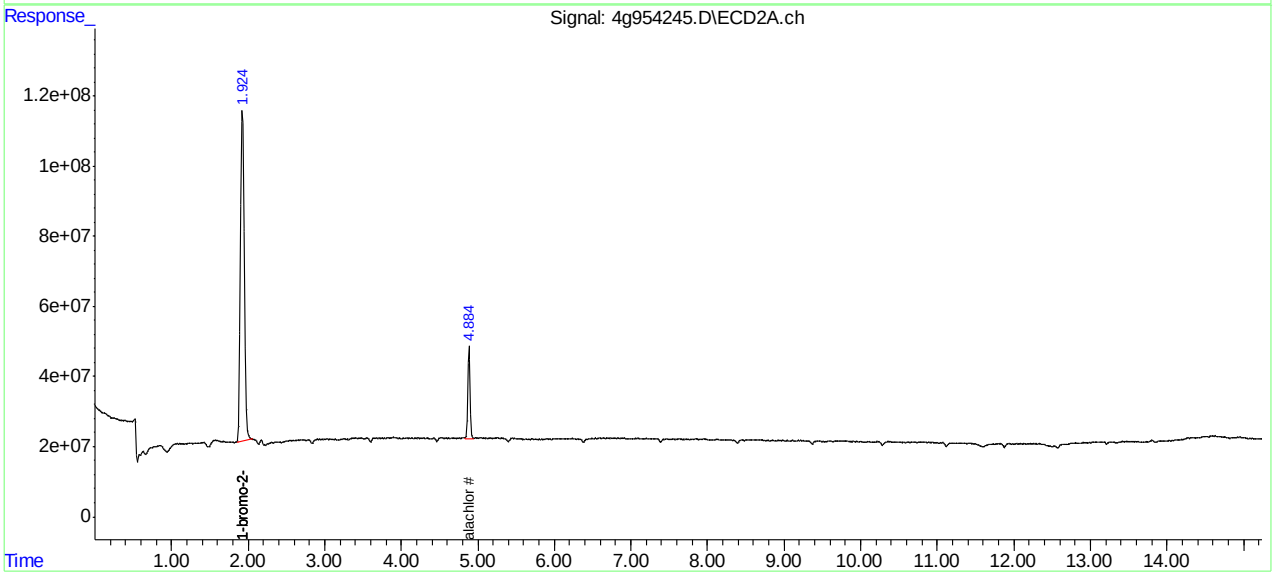
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954245.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 1:41 pm
Operator : rebeccak
Sample : icv2585-50
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:50:23 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 14:43:12 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954246.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 1:58 pm
Operator : rebeccak
Sample : icv2585-50
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:50:50 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 14:43:12 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.742	1.927	363.1E6	3463.7E6	50.000	50.000
27) I	1-bromo-2...	1.742	1.927	363.1E6	3463.7E6	50.000	50.000
33) I	1-bromo-2...	1.742	1.927	363.1E6	3463.7E6	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
3)	hexachlor...	2.835	3.406	554.6E6	3434.3E6	54.331	49.018
	SemiQuant Compounds - Not Calibrated on this Instrument						

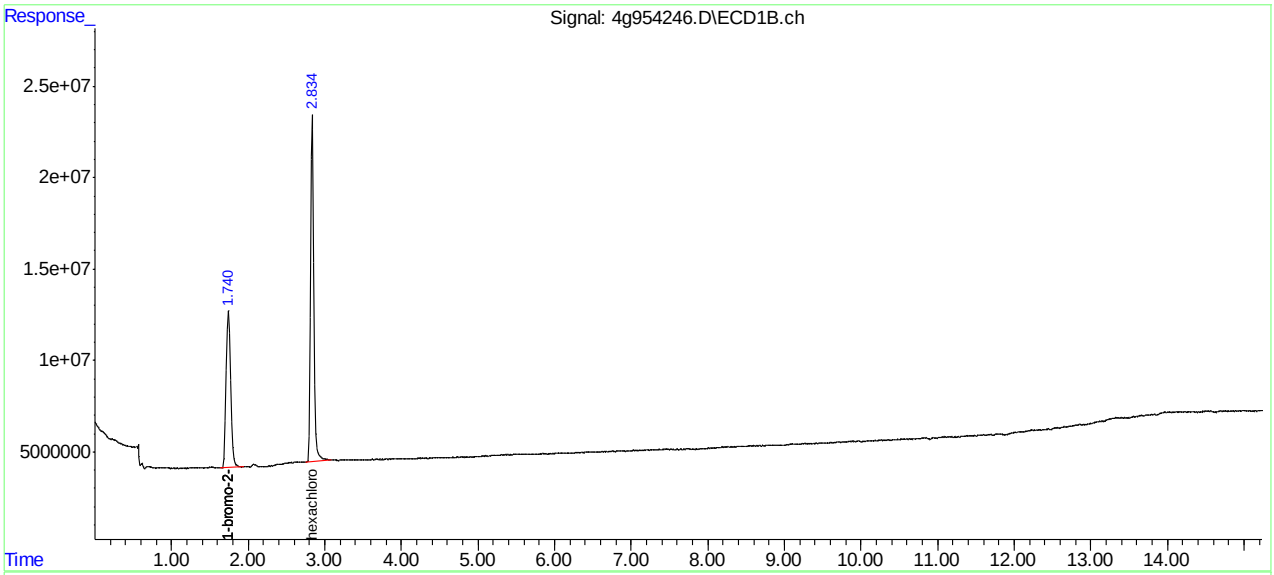
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

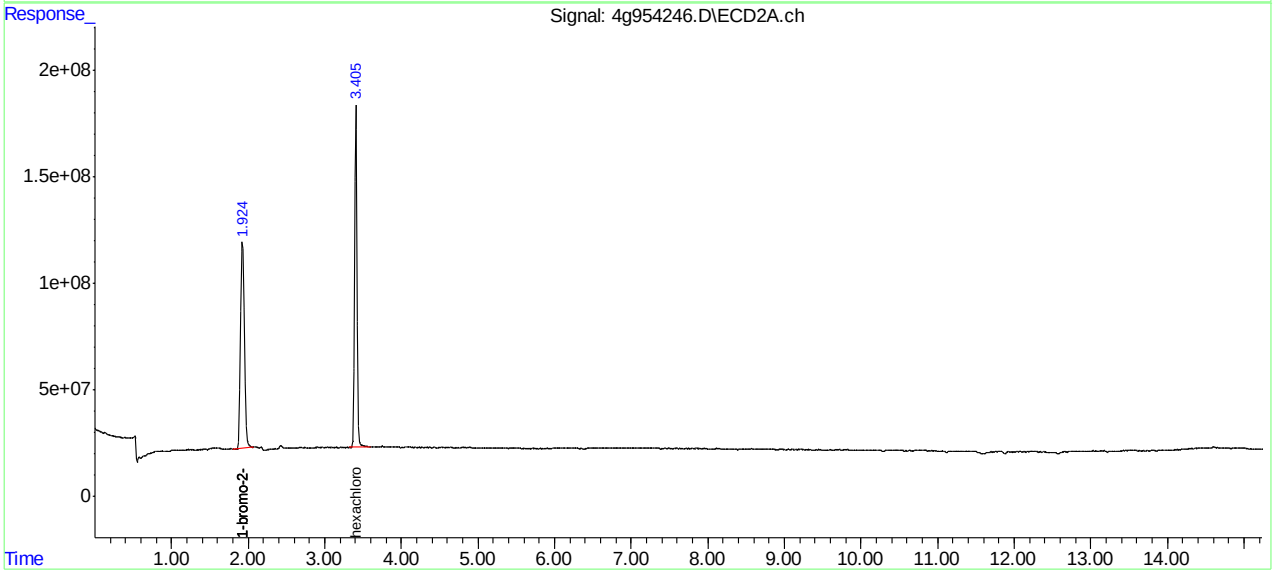
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954246.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 1:58 pm
Operator : rebeccak
Sample : icv2585-50
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:50:50 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 14:43:12 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
11/06/18 09:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954247.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 2:28 pm
Operator : rebeccak
Sample : icv2585-25
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:53:10 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 14:43:12 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.746	1.929	365.4E6	4011.8E6	50.000	50.000
27) I	1-bromo-2...	1.746	1.929	365.4E6	4011.8E6	50.000	50.000
33) I	1-bromo-2...	1.746	1.929	365.4E6	4011.8E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.458	2.857	149.4E6	1509.0E6	21.975	20.419
	Spiked Amount 40.000 Range 30 - 150 Recovery = 54.94% 51.05%						
26) SA	Decachlor...	10.086	11.978	180.0E6	963.5E6	21.904	20.119m
	Spiked Amount 40.000 Recovery = 54.76% 50.30%						
	Target Compounds						
4) A	alpha-BHC	2.993	3.570	228.6E6	2392.0E6	25.548	22.658
5) MA	gamma-BHC	3.320	4.022	215.1E6	2176.7E6	25.829	23.250
6) MA	Heptachlor	3.859	4.622	212.3E6	2289.1E6	25.480	22.342
7) B	beta-BHC	3.406	4.111	95665837	974.4E6	25.471	21.945
8) B	delta-BHC	3.610	4.525	187.8E6	2055.3E6	26.809	23.682
9) MB	Aldrin	4.218	5.089	215.6E6	2139.6E6	26.143	22.952
11) B	Heptachlo...	4.963	5.933	205.7E6	1876.6E6	26.028	22.620
12) B	gamma-Chl...	5.135	6.224	208.0E6	1963.6E6	26.561	22.456
13) B	alpha-Chl...	5.312	6.454	203.8E6	1894.3E6	25.051	22.638
14) A	Endosulfan I	5.496	6.554	205.6E6	1753.2E6	27.390	22.682
15) B	4,4'-DDE	5.428	6.719	178.1E6	1807.3E6	24.119	22.240
16) MA	Dieldrin	5.830	6.997	208.9E6	1908.6E6	25.984	23.410
17) MA	Endrin	6.161	7.509	182.6E6	1756.3E6	25.157	22.667
18) A	4,4'-DDD	6.287	7.686	132.4E6	1587.1E6	23.549	23.660
19) B	Endosulfa...	6.493	7.865	183.0E6	1637.0E6	25.267	21.668
20) MA	4,4'-DDT	6.712	8.225	121.2E6	1376.9E6	25.675	23.232
21) B	Endrin Al...	7.127	8.443	155.9E6	1328.9E6	26.830	22.812
22) B	Endosulfa...	7.822	8.917	126.2E6	1236.9E6	24.319	23.435
23) A	Methoxychlor	7.516	9.476	52031925	696.7E6	22.192	21.555
24)	Mirex	7.691	9.821	133.0E6	1024.1E6	22.056	19.913
25) B	Endrin Ke...	8.272	9.887	178.1E6	1464.6E6	27.034	23.564

SemiQuant Compounds - Not Calibrated on this Instrument

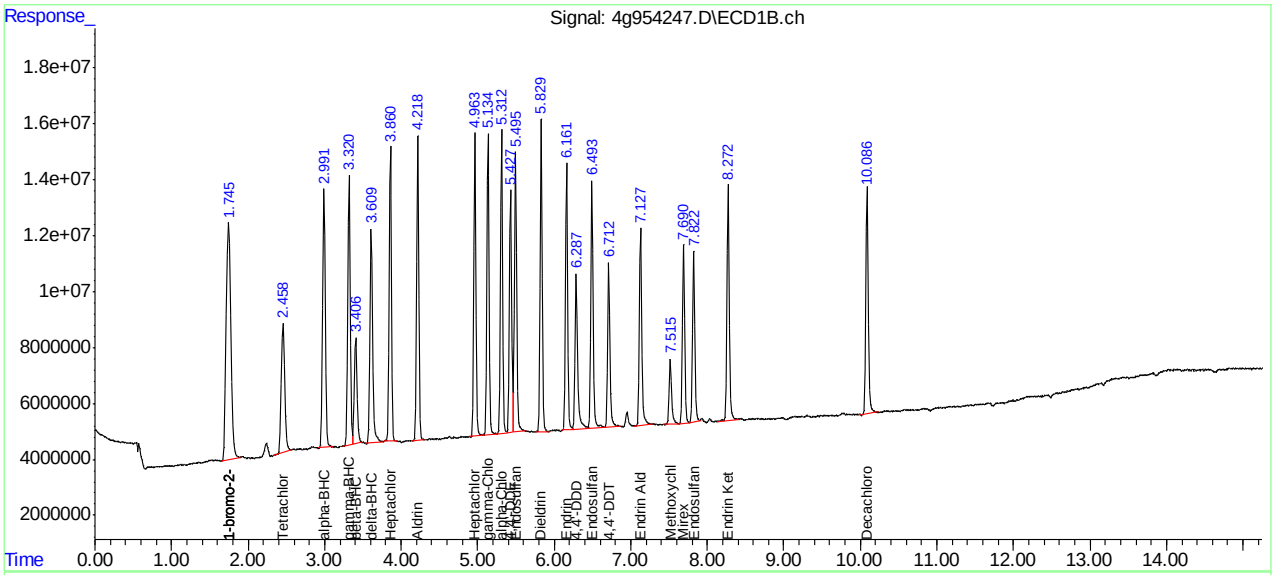
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

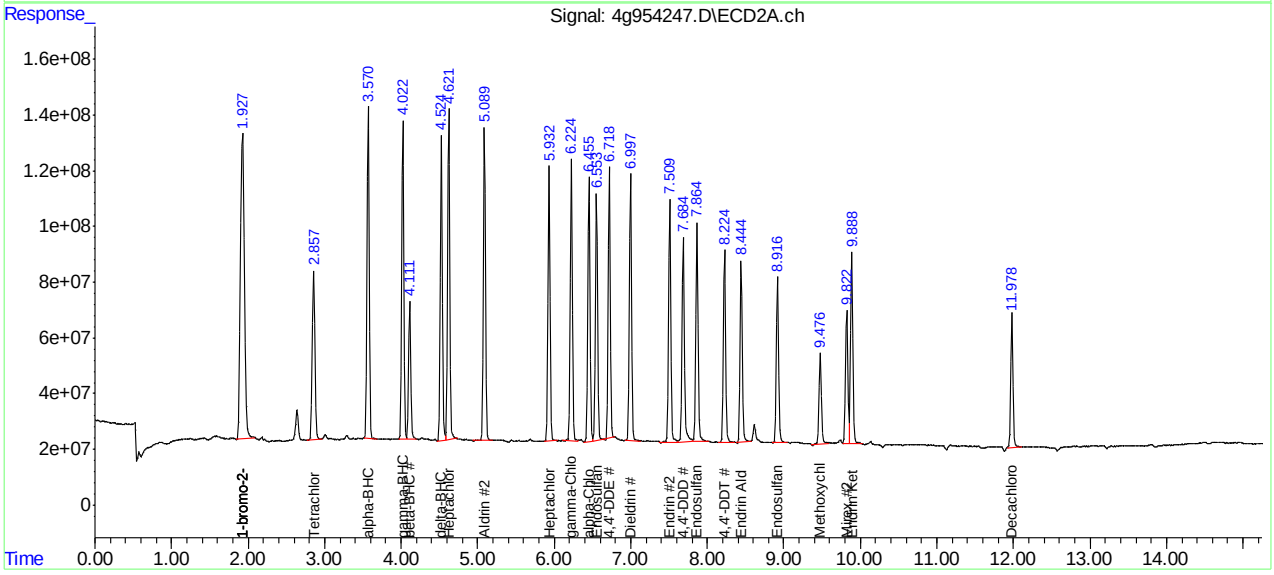
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954247.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 2:28 pm
Operator : rebeccak
Sample : icv2585-25
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:53:10 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 14:43:12 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G2585-ICV2585	**Method:**	SW846 8081B
Lab FileID:	4G954247.D	**Analyst approved:**	11/05/18 14:59 Rebecca Krug
Injection Time:	11/05/18 14:28	**Supervisor approved:**	11/06/18 09:35 Gwendolyn Burns

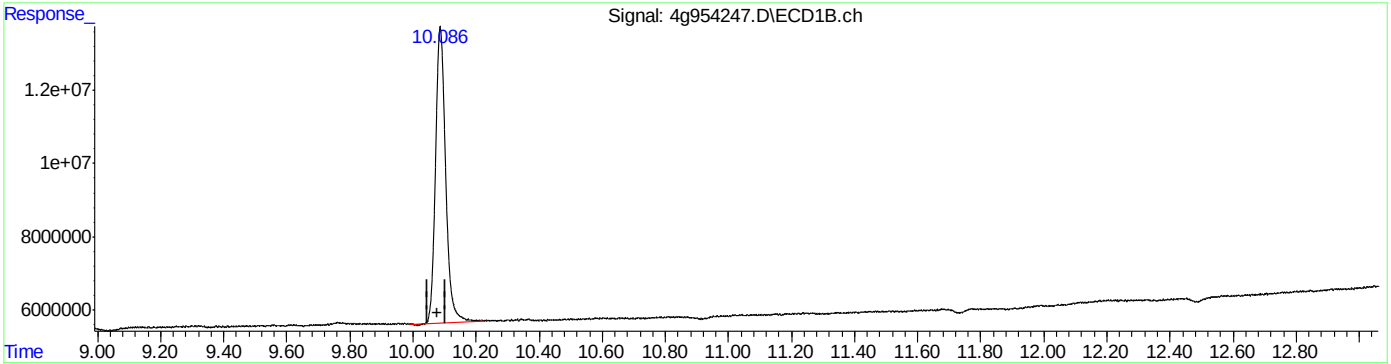
Parameter	CAS	Sig#	R.T. (min.)	Reason
Decachlorobiphenyl	2051-24-3	2	11.98	Poorly defined baseline

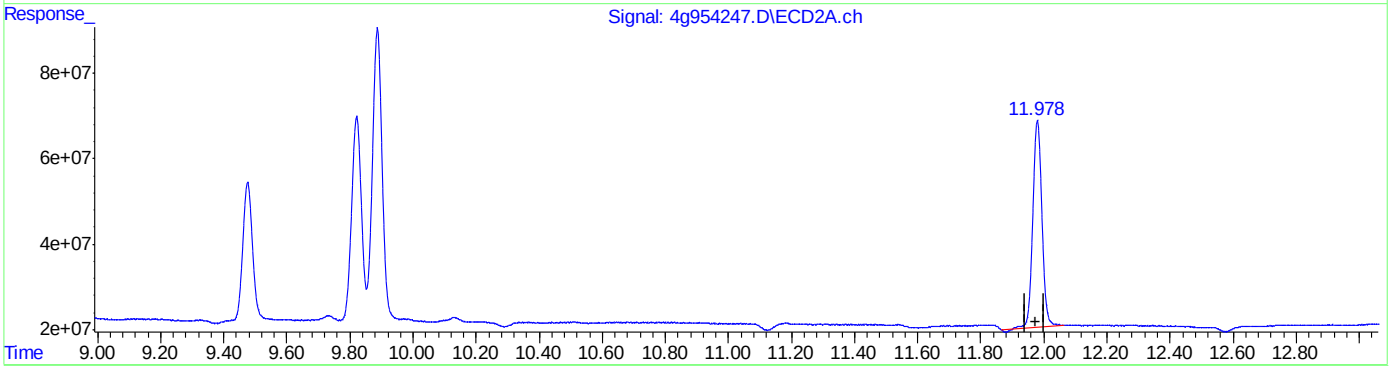
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954247.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 2:28 pm
Operator : rebeccak
Sample : icv2585-25
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:52:18 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 14:43:12 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Decachlorobiphenyl (SA)
10.086min 21.904 PPB
response 179985742

(26) Decachlorobiphenyl #2 (SA)
11.980min 20.215 PPB
response 968122595

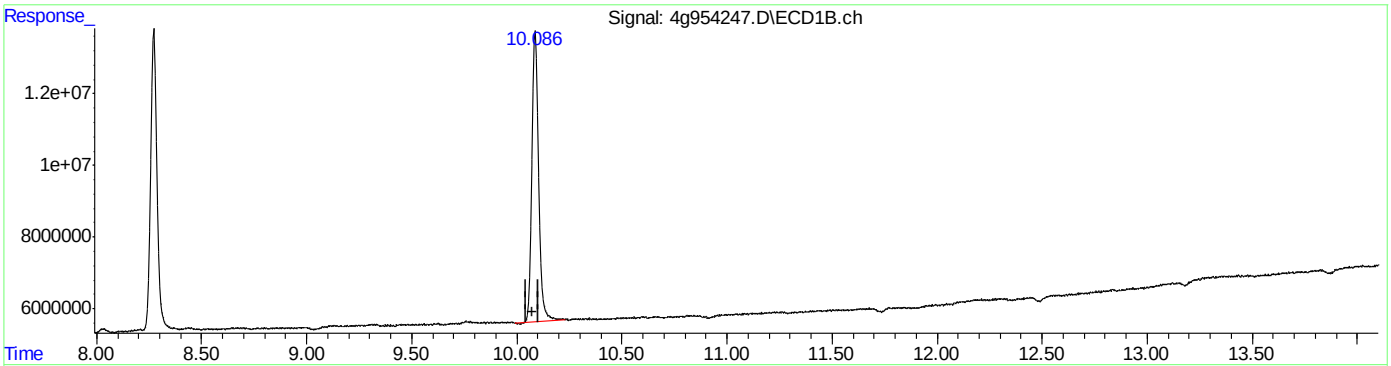
(+) = Expected Retention Time

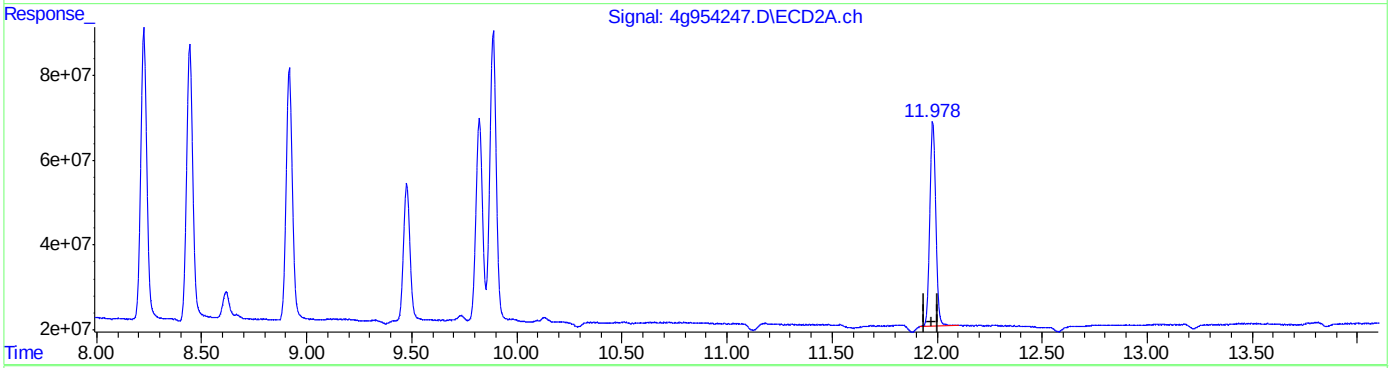
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G2585\
Data File : 4g954247.D
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 5 Nov 2018 2:28 pm
Operator : rebeccak
Sample : icv2585-25
Misc : op16395,g4g2585,300,,,2,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 05 14:52:18 2018
Quant Method : C:\MSDCHEM\1\METHODS\4PST2585.M
Quant Title : PEST/PCB
QLast Update : Mon Nov 05 14:43:12 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Decachlorobiphenyl (SA)
10.086min 21.904 PPB
response 179985742

(26) Decachlorobiphenyl #2 (SA)
11.978min 20.119 PPB m
response 963519066

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954316.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 9:48 am
Operator : mailisih
Sample : cc2585-50
Misc : op16422,g4g2589,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:07:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:03:52 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

		Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
		Internal Standards						
1)	I	1-bromo-2...	1.728	1.917	429.3E6	3763.0E6	50.000	50.000
27)	I	1-bromo-2...	1.728	1.917	429.3E6	3763.0E6	50.000	50.000
33)	I	1-bromo-2...	1.728	1.917	429.3E6	3763.0E6	50.000	50.000
		System Monitoring Compounds						
2)	SAB	Tetrachlo...	2.446	2.851	381.8E6	3155.0E6	47.806	45.513
		Spiked Amount 40.000 Range 30 - 150 Recovery = 119.51% 113.78%						
26)	SA	Decachlor...	10.061	11.967	417.4E6	1951.0E6	43.227	43.431
		Spiked Amount 40.000 Recovery = 108.07% 108.58%						
		Target Compounds						
3)		hexachlor...	2.826	3.401	549.9E6	3317.6E6	45.553	43.586
4)	A	alpha-BHC	2.980	3.562	516.8E6	4626.2E6	49.157	46.720
5)	MA	gamma-BHC	3.306	4.014	461.9E6	3809.4E6	47.201	43.380
6)	MA	Heptachlor	3.845	4.614	464.1E6	4164.5E6	47.394	43.335
7)	B	beta-BHC	3.389	4.103	201.5E6	1653.0E6	45.668	39.692
8)	B	delta-BHC	3.591	4.516	398.7E6	3494.5E6	48.447	42.926
9)	MB	Aldrin	4.202	5.080	458.6E6	3835.5E6	47.341	43.863
10)		alachlor	4.341	4.878	50544124	491.1E6	43.377	41.899
11)	B	Heptachlo...	4.945	5.921	401.9E6	3387.3E6	43.286	43.529
12)	B	gamma-Chl...	5.116	6.213	414.0E6	3515.1E6	44.991	42.857
13)	B	alpha-Chl...	5.292	6.443	413.7E6	3372.7E6	43.274	42.972
14)	A	Endosulfan I	5.475	6.541	402.9E6	3195.0E6	45.675	44.068
15)	B	4,4'-DDE	5.406	6.707	409.7E6	3439.6E6	47.220	45.125
16)	MA	Dieldrin	5.809	6.984	432.9E6	3483.9E6	45.823	45.557
17)	MA	Endrin	6.139	7.496	399.9E6	3280.2E6	46.893	45.134
18)	A	4,4'-DDD	6.260	7.671	330.1E6	2850.8E6	49.965	45.308
19)	B	Endosulfa...	6.469	7.851	377.7E6	2999.0E6	44.388	42.321
20)	MA	4,4'-DDT	6.688	8.211	289.3E6	2611.9E6	52.174	46.982
21)	B	Endrin Al...	7.102	8.429	304.0E6	2347.7E6	44.527	42.965
22)	B	Endosulfa...	7.796	8.902	283.1E6	2335.5E6	46.415	47.174
23)	A	Methoxychlor	7.489	9.460	136.5E6	1353.4E6	49.533	44.640
24)		Mirex	7.667	9.807	282.7E6	2046.0E6	39.900	42.414
25)	B	Endrin Ke...	8.246	9.873	374.5E6	2622.5E6	48.393	44.984
		SemiQuant Compounds - Not Calibrated on this Instrument						

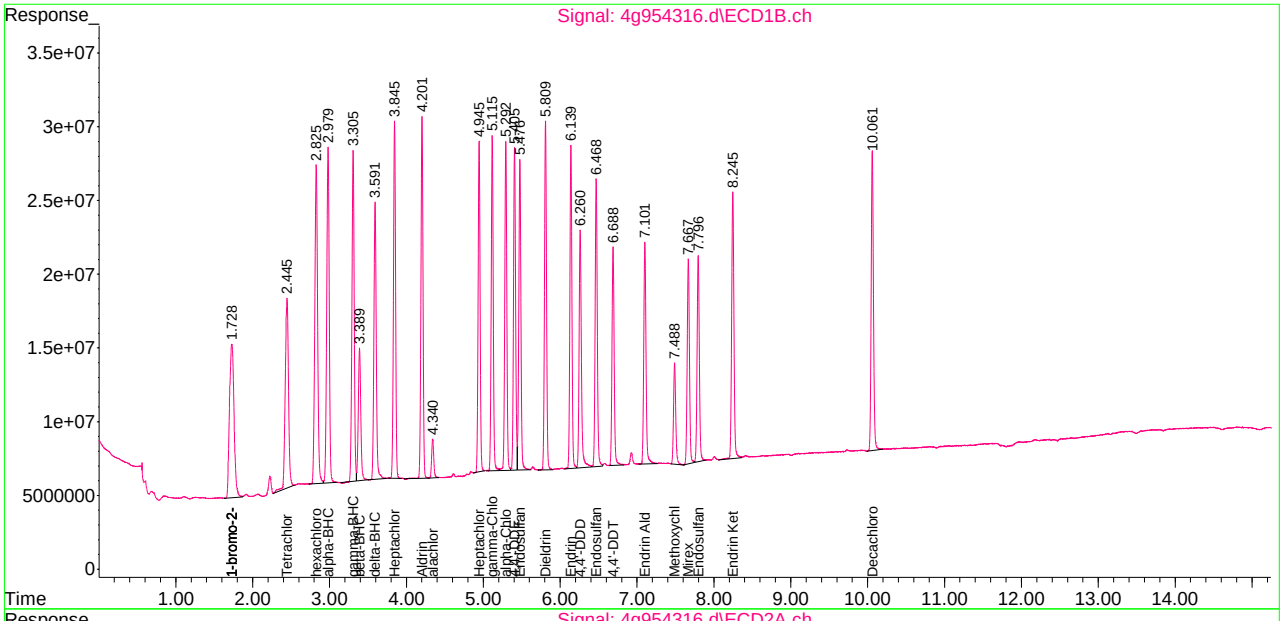
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

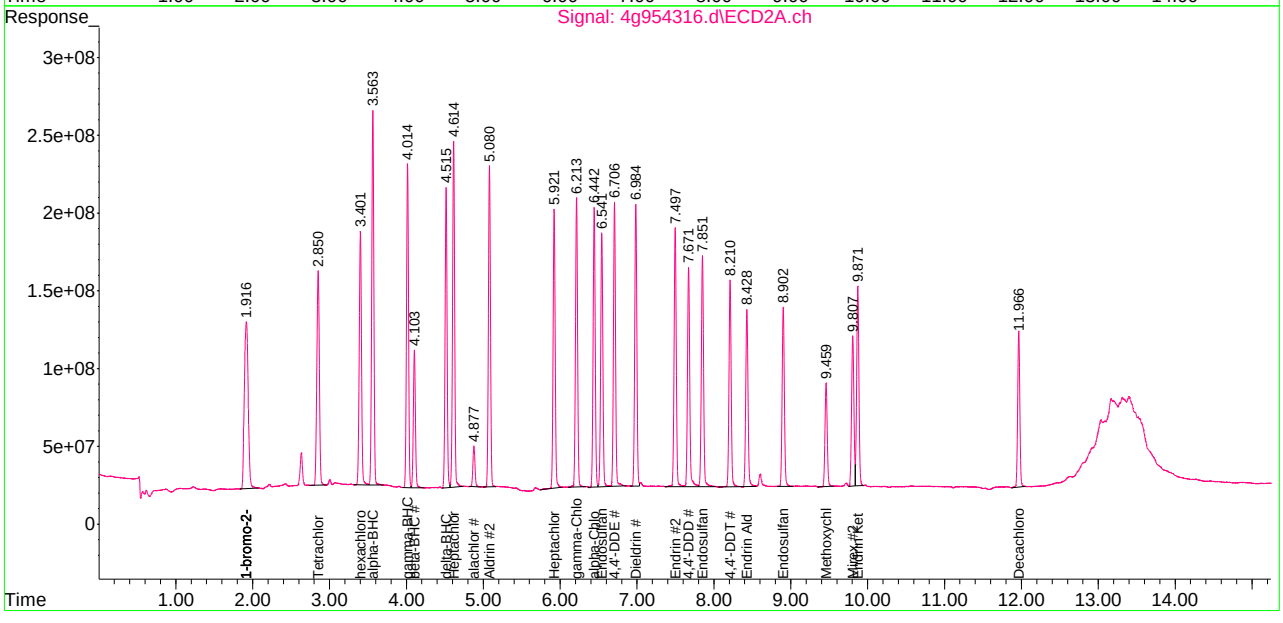
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954316.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 9:48 am
Operator : mailisih
Sample : cc2585-50
Misc : op16422,g4g2589,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:07:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:03:52 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations
APPROVED
(compounds with "m" flag)
Gwendolyn Burns
11/08/18 15:01

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954317.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 10:23 am
Operator : mailisih
Sample : cc2585-500
Misc : op16422,g4g2589,1000,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:27:50 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:26:09 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.736	1.922	384.9E6	3972.4E6	50.000	50.000
27) I	1-bromo-2...	1.736	1.922	384.9E6	3972.4E6	50.000	50.000
33) I	1-bromo-2...	1.736	1.922	384.9E6	3972.4E6	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	2.451	2.854	360.4E6	2995.0E6	50.324	40.928
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	125.81%	102.32%
26)	SA Decachlor...	10.073	11.974	382.9E6	1753.5E6	44.237	36.978
	Spiked Amount 40.000			Recovery	=	110.59%	92.44%
	Target Compounds						
34)	Chlordane...	3.852	4.617	235.1E6	2253.2E6	435.054	397.935
35)	Chlordane...	4.355	5.283	147.2E6	1177.0E6	417.113	383.850
36)	Chlordane...	5.125	6.219	544.5E6	4370.9E6	434.031	423.194
37)	Chlordane...	5.294	6.449	857.6E6	6782.6E6	432.047	412.718m
38)	Chlordane...	6.385	7.939	125.3E6	1062.5E6	456.982	396.276

SemiQuant Compounds - Not Calibrated on this Instrument

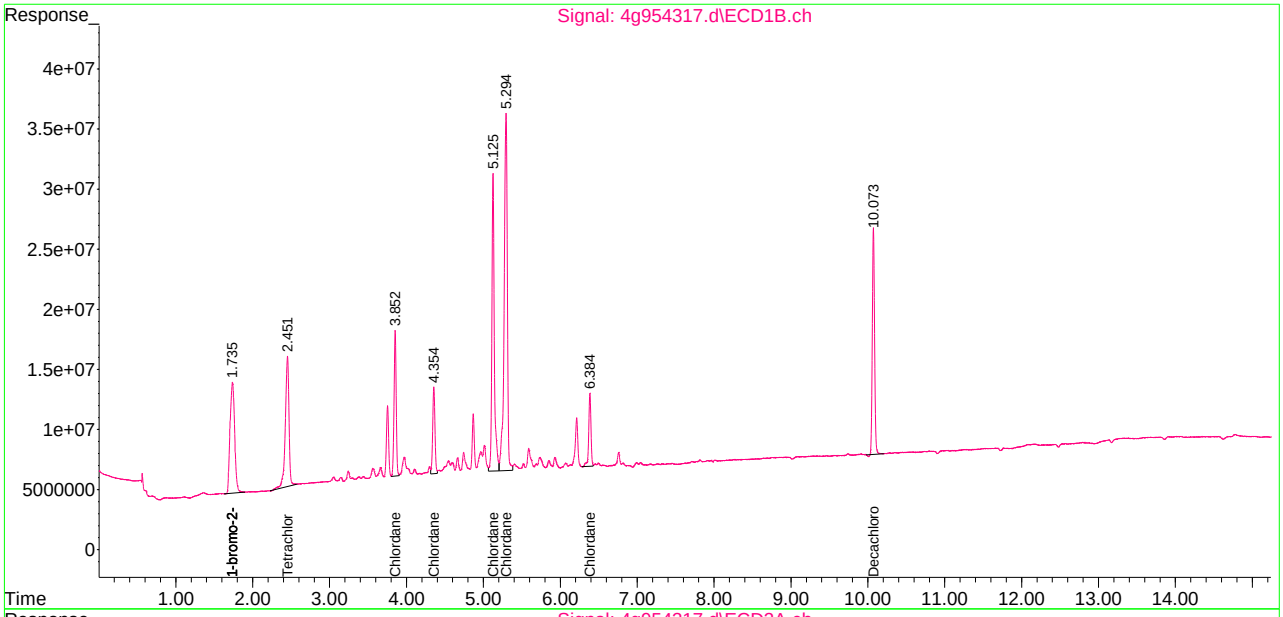
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

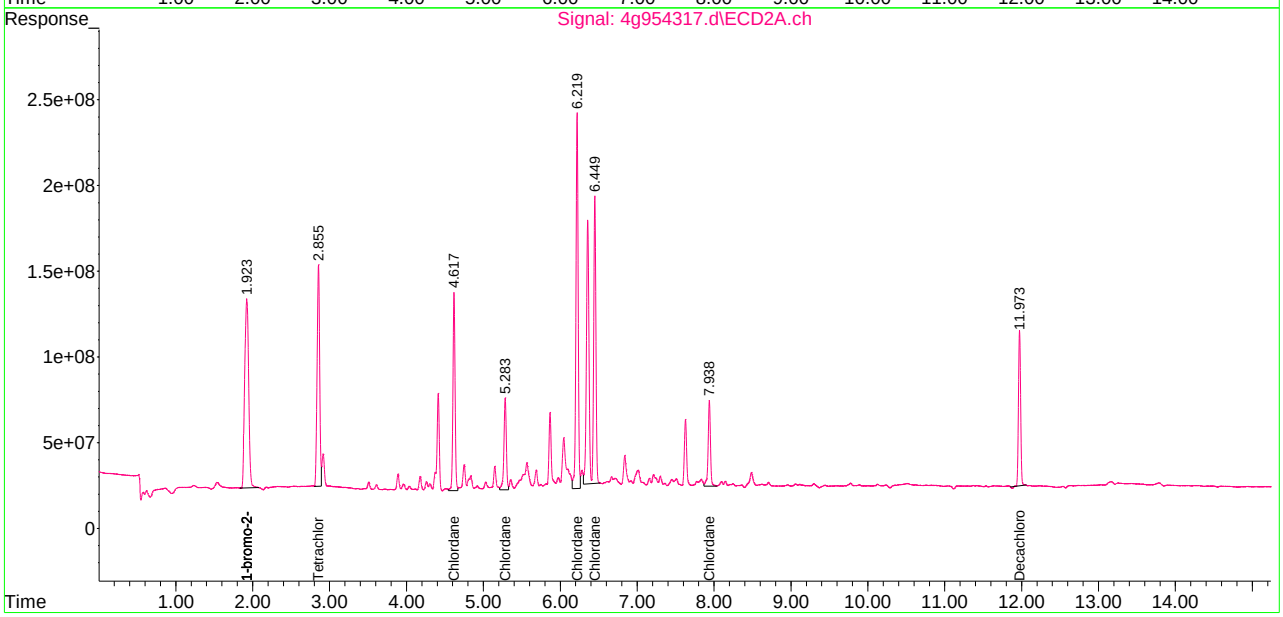
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954317.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 10:23 am
Operator : mailisih
Sample : cc2585-500
Misc : op16422,g4g2589,1000,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:27:50 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:26:09 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G2589-CC2585	**Method:**	SW846 8081B	
Lab FileID:	4G954317.D	**Analyst approved:**	11/07/18 20:40	Christopher Changho
Injection Time:	11/07/18 10:23	**Supervisor approved:**	11/08/18 15:01	Gwendolyn Burns

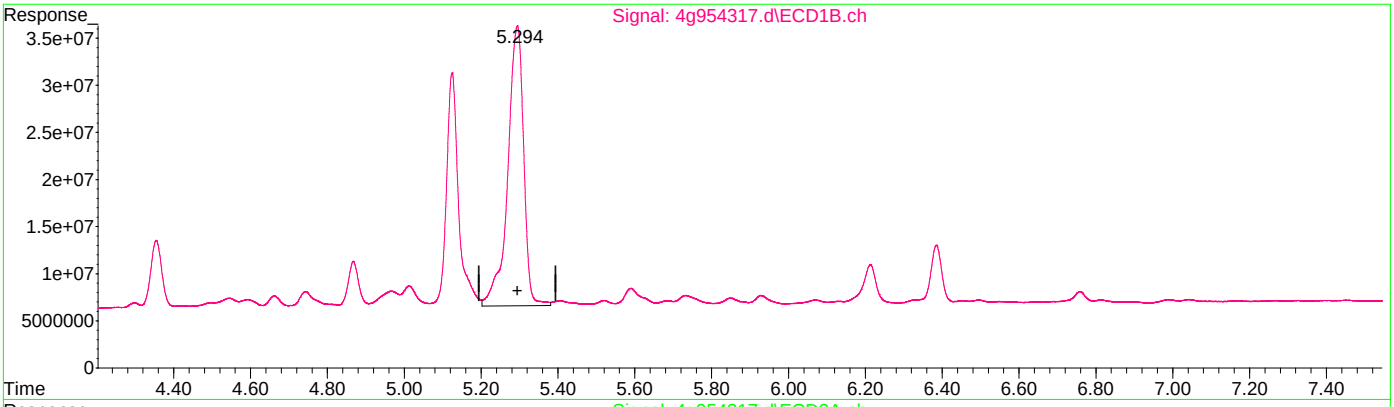
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	6.45	Poorly defined baseline

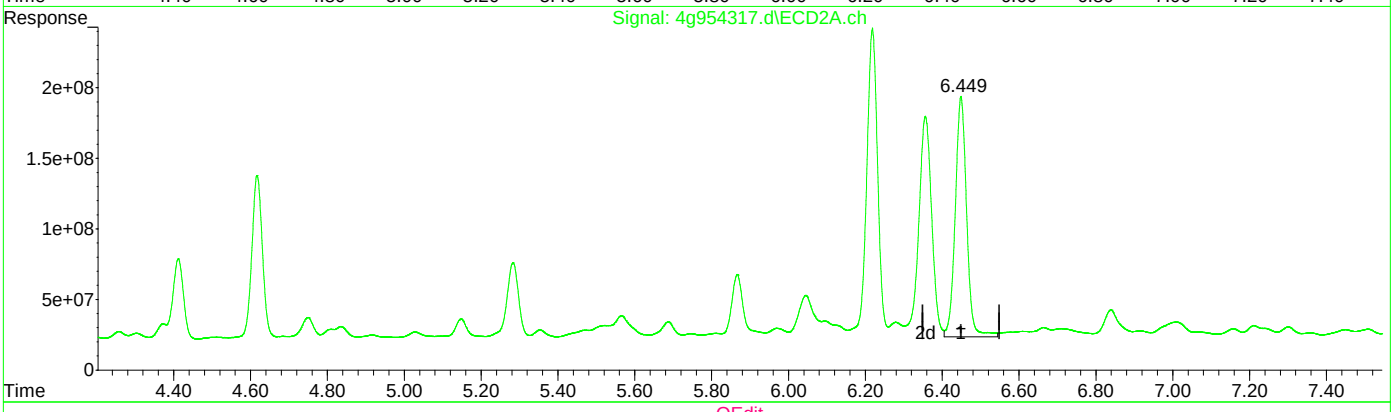
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954317.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 10:23 am
Operator : mailisih
Sample : cc2585-500
Misc : op16422,g4g2589,1000,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:26:27 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:26:09 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(37) Chlordane {D}

5.294min 432.047 PPB

response 857611942

(37) Chlordane {D} #2

6.449min 213.198 PPB

response 3503703304

(+) = Expected Retention Time

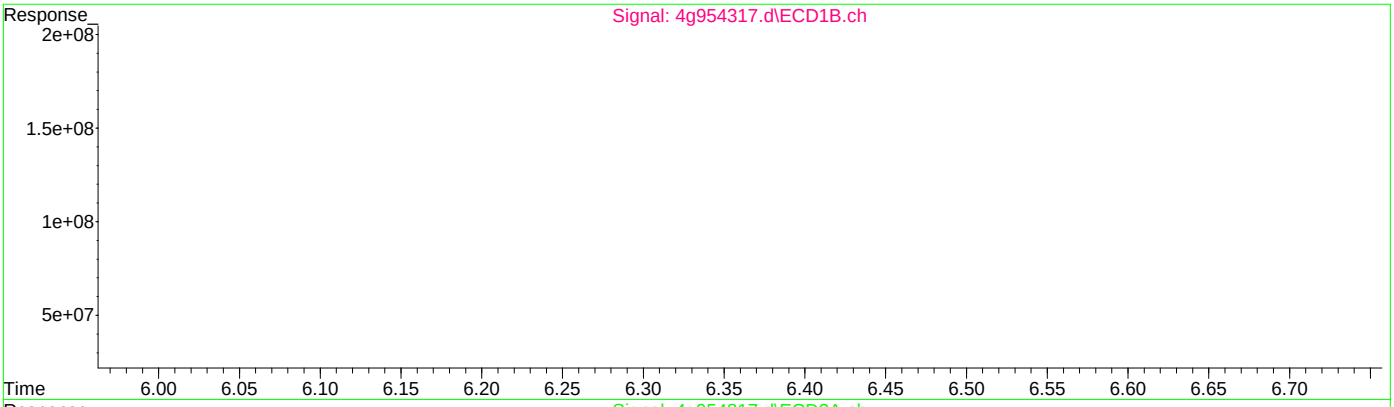
4pst2585.m Wed Nov 07 19:27:18 2018

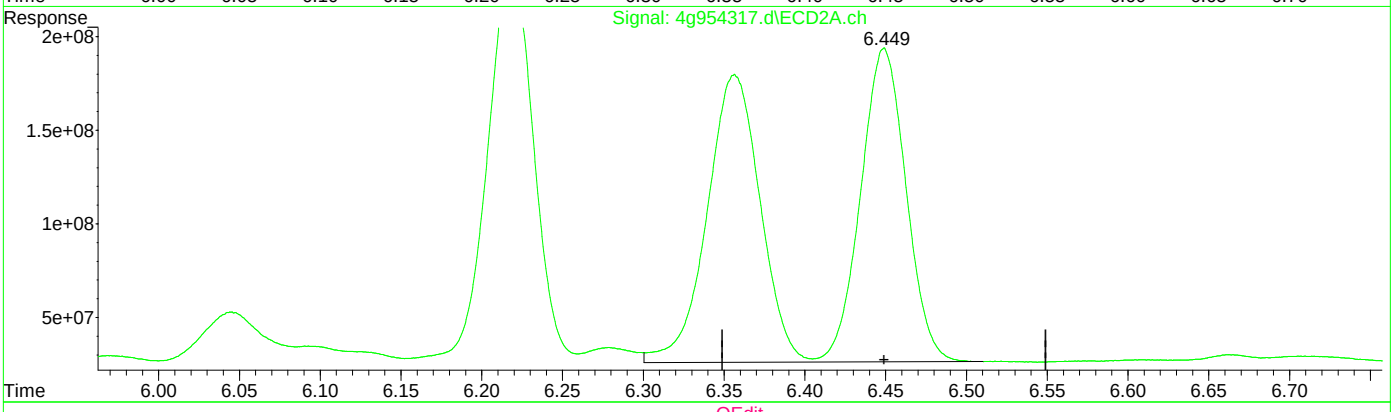
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954317.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 10:23 am
Operator : mailisih
Sample : cc2585-500
Misc : op16422,g4g2589,1000,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:26:27 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:26:09 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(37) Chlordane {D}

5.294min 432.047 PPB

response 857611942

(37) Chlordane {D} #2

6.449min 412.718 PPB m

response 6782637431

(+) = Expected Retention Time
4pst2585.m Wed Nov 07 19:27:58 2018

Manual Integrations
APPROVED
(compounds with "m" flag)
Gwendolyn Burns
11/08/18 15:01

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954318.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 10:40 am
Operator : mailisih
Sample : cc2585-500
Misc : op16422,g4g2589,1000,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:41:29 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.727	1.916	443.1E6	4013.5E6	50.000	50.000
27) I 1-bromo-2...	1.727	1.916	443.1E6	4013.5E6	50.000	50.000
33) I 1-bromo-2...	1.727	1.916	443.1E6	4013.5E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.444	2.849	378.9E6	3327.2E6	45.963	45.001
Spiked Amount 40.000	Range 30 - 150		Recovery = 114.91%		112.50%	
26) SA Decachlor...	10.063	11.968	404.1E6	1887.5E6	40.561	39.396
Spiked Amount 40.000			Recovery = 101.40%		98.49%	
Target Compounds						
28) L8 Toxaphene{A}	5.813	6.947	62193248	901.8E6	417.004	456.979
29) L8 Toxaphene{B}	6.451	7.821	159.7E6	1128.0E6	439.654	444.049
30) L8 Toxaphene{C}	6.630	7.985	133.1E6	1799.0E6	446.674	449.123
31) L8 Toxaphene{D}	6.979	8.430	118.8E6	1108.0E6	424.770m	442.600
32) L8 Toxaphene{E}	7.645	9.341	92105411	840.3E6	410.508	428.939
SemiQuant Compounds - Not Calibrated on this Instrument						

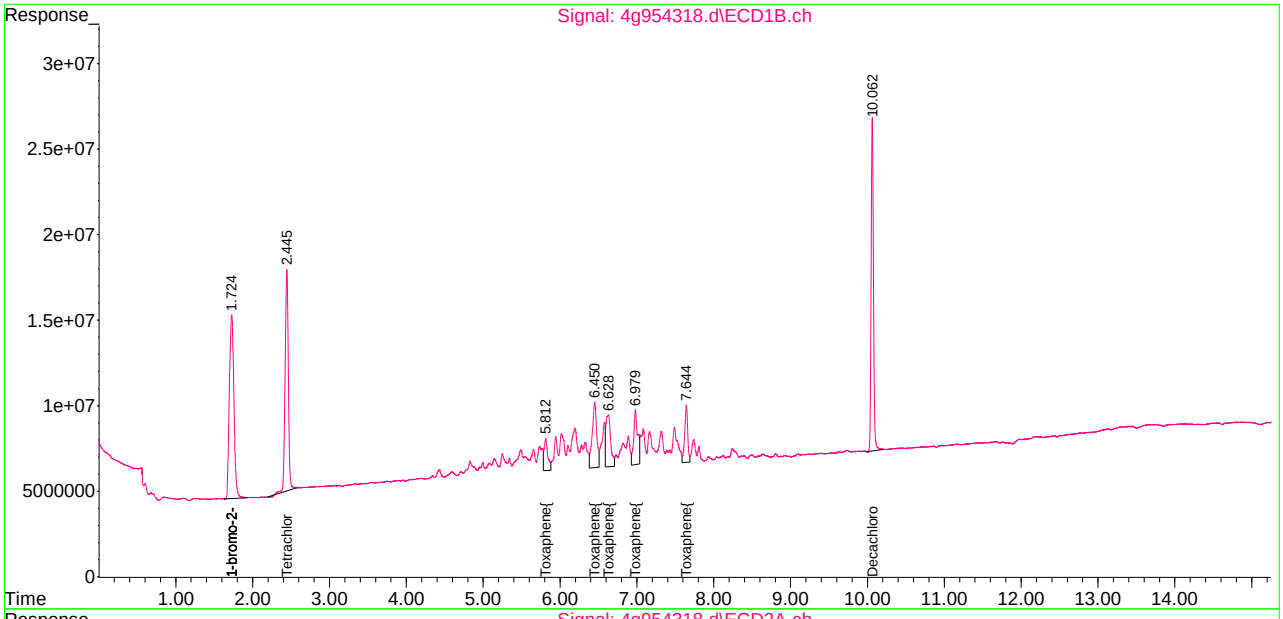
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

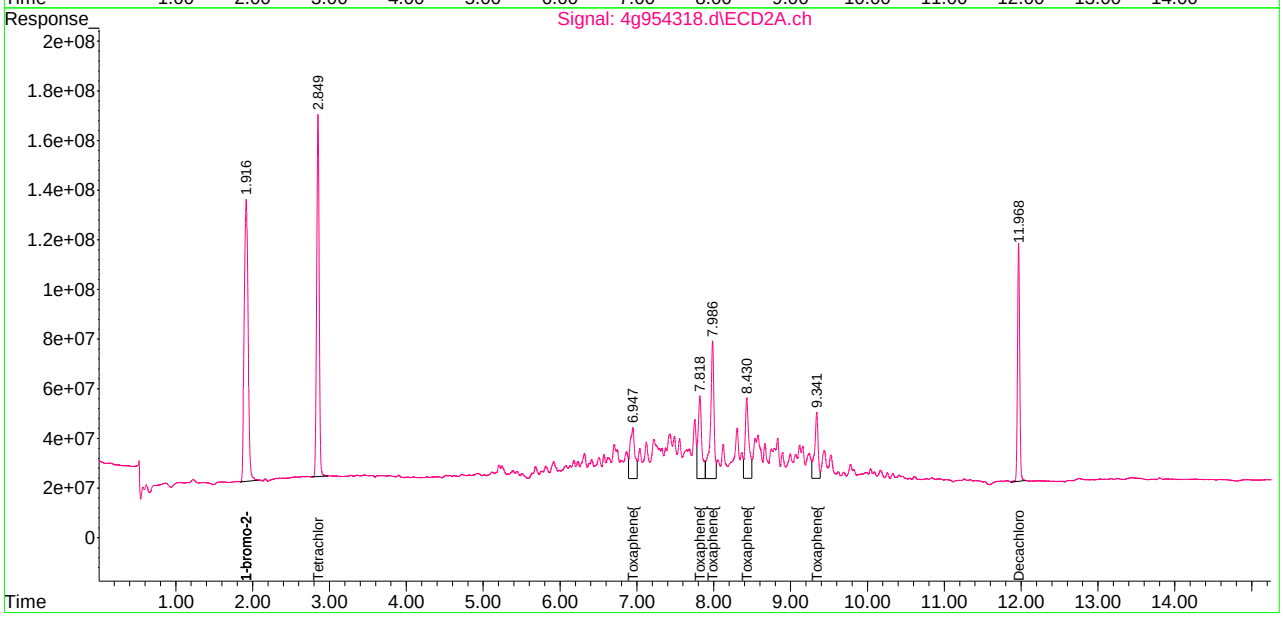
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954318.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 10:40 am
Operator : mailisih
Sample : cc2585-500
Misc : op16422,g4g2589,1000,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:41:29 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G2589-CC2585	**Method:**	SW846 8081B
Lab FileID:	4G954318.D	**Analyst approved:**	11/07/18 20:40 Christopher Changho
Injection Time:	11/07/18 10:40	**Supervisor approved:**	11/08/18 15:01 Gwendolyn Burns

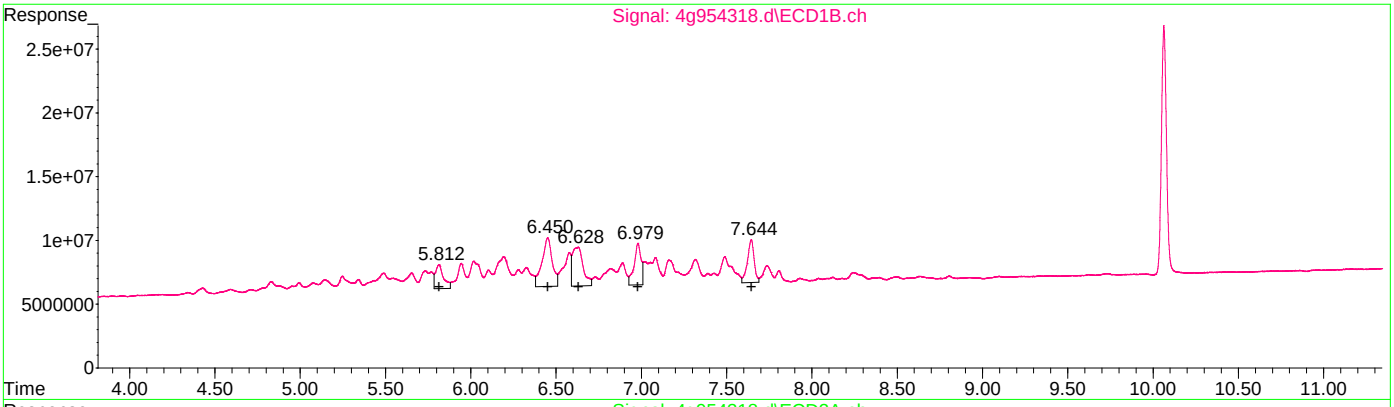
Parameter	CAS	Sig#	R.T. (min.)	Reason
Toxaphene-D		1	6.98	Poorly defined baseline

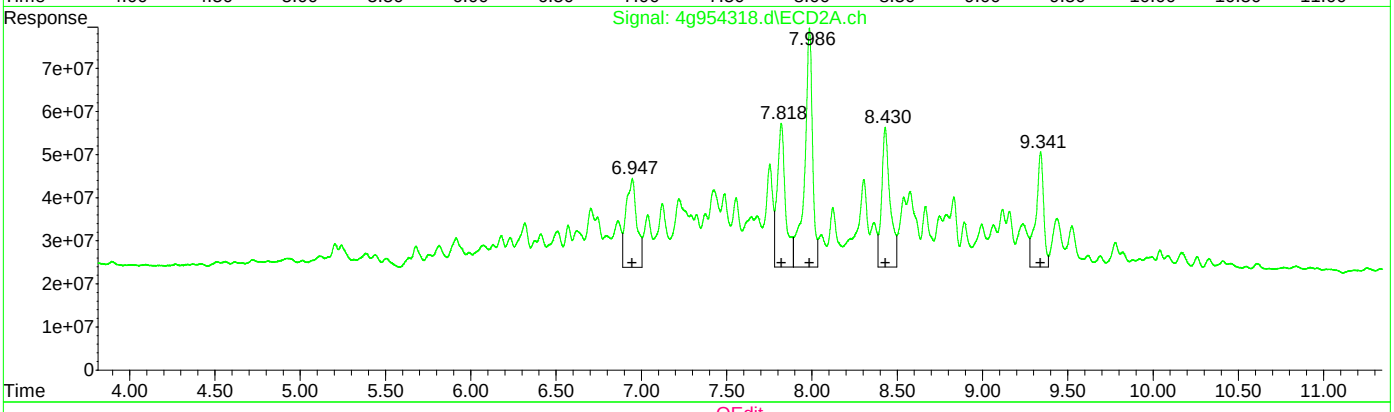
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954318.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 10:40 am
Operator : mailisih
Sample : cc2585-500
Misc : op16422,g4g2589,1000,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:40:07 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(28) Toxaphene{A} (L8)

R.T.	Response	Conc
5.81	62193248	417.00
6.45	159716437	439.65
6.63	133135348	446.67
6.98	92693775	331.55
7.64	92105411	410.51

(28) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
6.95	901759283	456.98
7.82	1128043051	444.05
7.99	1799034116	449.12
8.43	1107956779	442.60
9.34	840341599	428.94

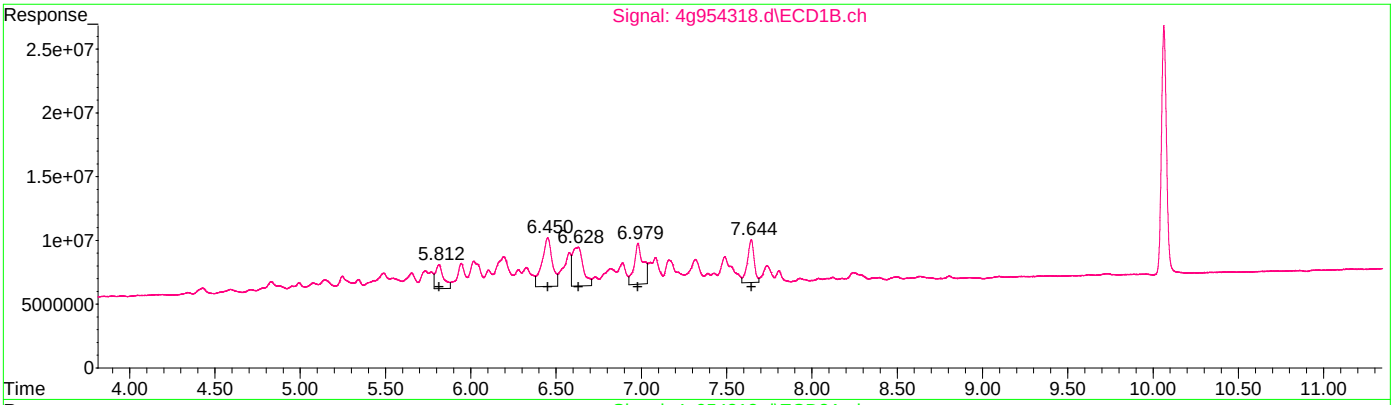
(+) = Expected Retention Time
4pst2585.m Wed Nov 07 19:41:10 2018

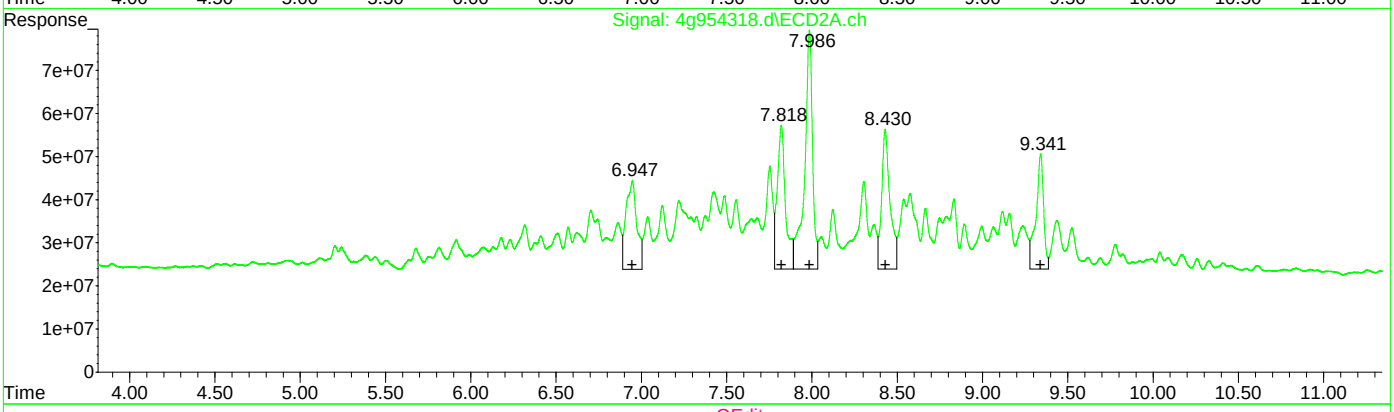
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954318.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 10:40 am
Operator : mailisih
Sample : cc2585-500
Misc : op16422,g4g2589,1000,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 19:40:07 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(28) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
5.81	62193248	417.00
6.45	159716437	439.65
6.63	133135348	446.67
6.98	118757365	424.77
7.64	92105411	410.51

(28) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
6.95	901759283	456.98
7.82	1128043051	444.05
7.99	1799034116	449.12
8.43	1107956779	442.60
9.34	840341599	428.94

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
11/08/18 15:01

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954329.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 2:13 pm
Operator : mailisih
Sample : cc2585-25
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:28:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

		Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
		Internal Standards						
1)	I	1-bromo-2...	1.722	1.913	422.6E6	4641.4E6	50.000	50.000
27)	I	1-bromo-2...	1.722	1.913	422.6E6	4641.4E6	50.000	50.000
33)	I	1-bromo-2...	1.722	1.913	422.6E6	4641.4E6	50.000	50.000
		System Monitoring Compounds						
2)	SAB	Tetrachlo...	2.439	2.846	181.2E6	1838.4E6	23.045	21.501
		Spiked Amount 40.000 Range 30 - 150 Recovery = 57.61% 53.75%						
26)	SA	Decachlor...	10.061	11.966	230.2E6	1193.4E6	24.223	21.538
		Spiked Amount 40.000 Recovery = 60.56% 53.84%						
		Target Compounds						
3)		hexachlor...	2.821	3.396	289.9E6	2055.4E6	24.400	21.893
4)	A	alpha-BHC	2.975	3.558	252.6E6	2618.5E6	24.414	21.439
5)	MA	gamma-BHC	3.302	4.010	228.4E6	2439.3E6	23.709	22.520
6)	MA	Heptachlor	3.839	4.609	221.0E6	2547.6E6	22.925	21.493
7)	B	beta-BHC	3.388	4.101	108.5E6	1137.9E6	24.979	22.152
8)	B	delta-BHC	3.591	4.513	182.3E6	2164.3E6	22.499	21.554
9)	MB	Aldrin	4.197	5.076	238.6E6	2531.9E6	25.021	23.475
10)		alachlor	4.339	4.875	27037279	306.9E6	23.571	21.229
11)	B	Heptachlo...	4.942	5.919	223.6E6	2268.8E6	24.469	23.638
12)	B	gamma-Chl...	5.112	6.210	230.1E6	2518.4E6	25.398	24.893
13)	B	alpha-Chl...	5.289	6.440	226.7E6	2347.8E6	24.086	24.252
14)	A	Endosulfan I	5.472	6.539	227.8E6	2203.5E6	26.241	24.640
15)	B	4,4'-DDE	5.407	6.705	202.8E6	2316.1E6	23.747	24.635
16)	MA	Dieldrin	5.807	6.982	235.4E6	2238.2E6	25.318	23.728
17)	MA	Endrin	6.137	7.495	197.1E6	2023.1E6	23.484m	22.568
18)	A	4,4'-DDD	6.265	7.670	159.8E6	1880.7E6	24.580	24.234
19)	B	Endosulfa...	6.468	7.850	200.2E6	1969.2E6	23.905	22.529
20)	MA	4,4'-DDT	6.688	8.209	124.2E6	1489.9E6	22.755	21.728m
21)	B	Endrin Al...	7.101	8.428	167.3E6	1659.0E6	24.896	24.615
22)	B	Endosulfa...	7.795	8.902	117.1E6	1158.7E6	19.508	18.975
23)	A	Methoxychlor	7.493	9.460	57781959	852.4E6	21.307	22.795
24)		Mirex	7.665	9.806	171.3E6	1356.8E6	24.562	22.805
25)	B	Endrin Ke...	8.244	9.872	188.1E6	1597.7E6	24.688	22.219

SemiQuant Compounds - Not Calibrated on this Instrument

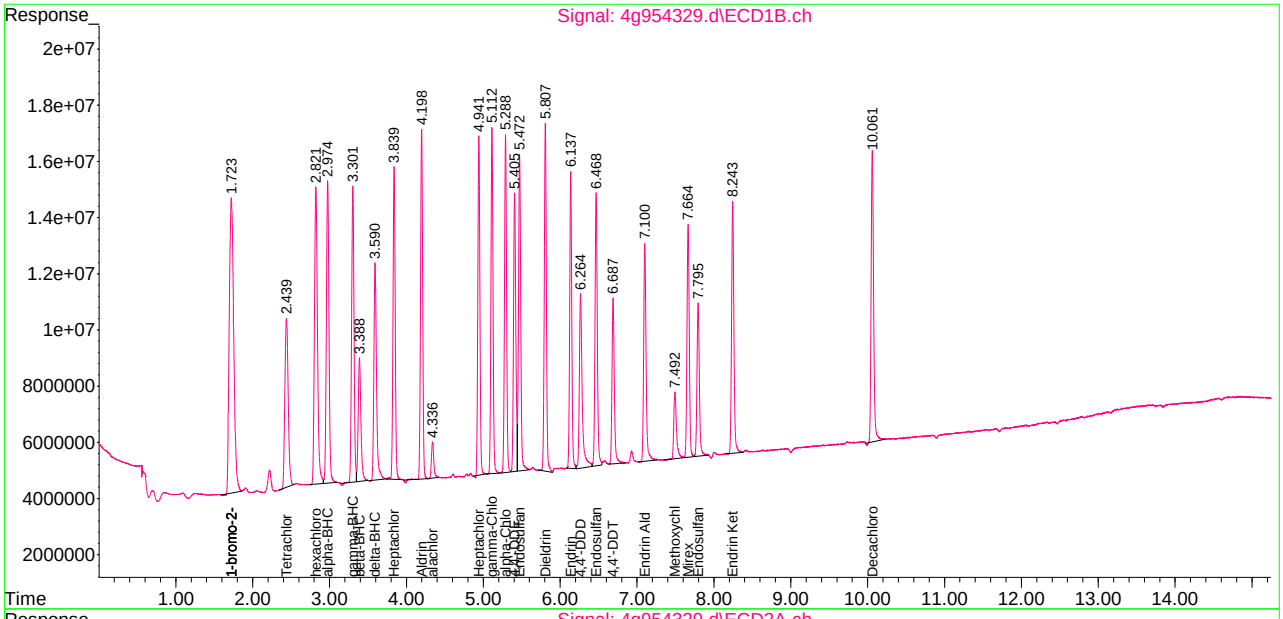
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

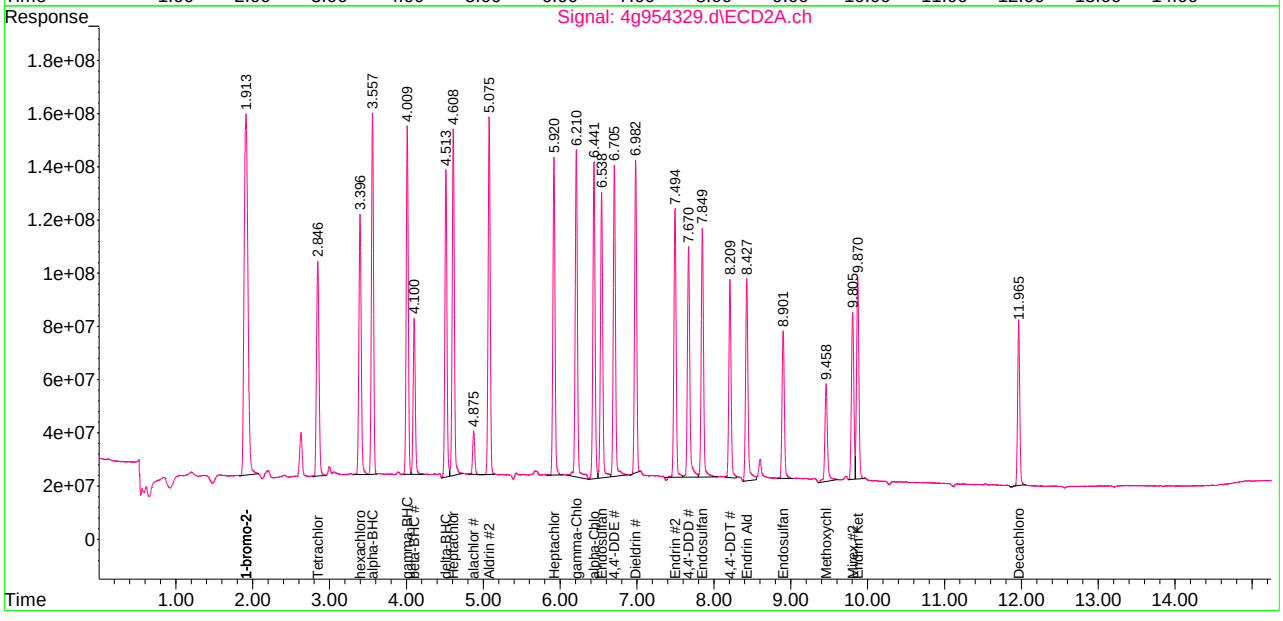
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954329.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 2:13 pm
Operator : mailisih
Sample : cc2585-25
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:28:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G2589-CC2585	**Method:**	SW846 8081B
Lab FileID:	4G954329.D	**Analyst approved:**	11/07/18 20:40 Christopher Changho
Injection Time:	11/07/18 14:13	**Supervisor approved:**	11/08/18 15:01 Gwendolyn Burns

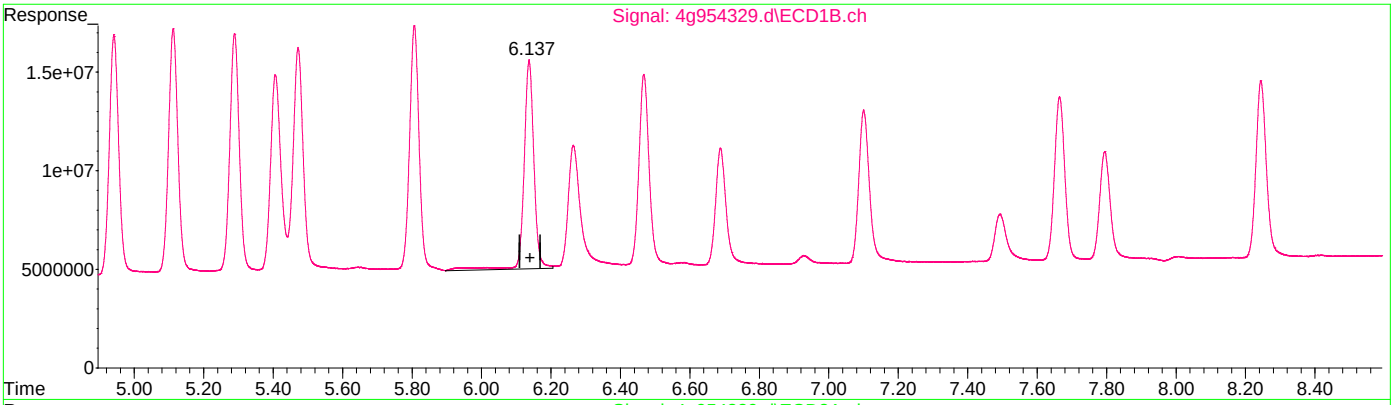
Parameter	CAS	Sig#	R.T. (min.)	Reason
Endrin	72-20-8	1	6.14	Poorly defined baseline
4,4'-DDT	50-29-3	2	8.21	Poorly defined baseline

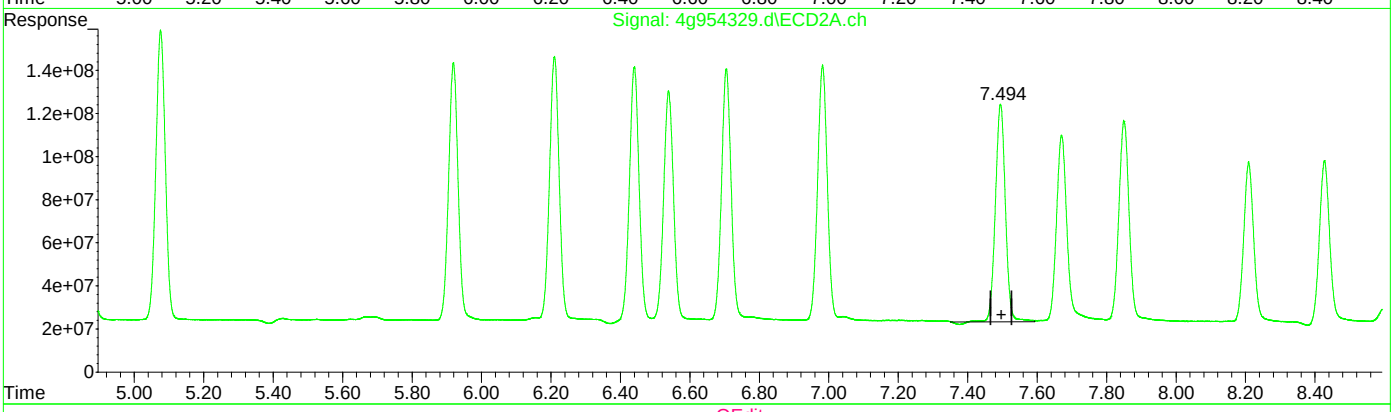
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954329.d
Signal(s) : Signal #1: ECD1B.ch Signal #2: ECD2A.ch
Acq On : 7 Nov 2018 2:13 pm
Operator : mailisih
Sample : cc2585-25
Misc : op16424,g4g2589,300,,,2,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:26:55 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(17) Endrin (MA)

6.137min 25.071 PPB

response 210444777

(17) Endrin #2 (MA)

7.495min 22.568 PPB

response 2023062260

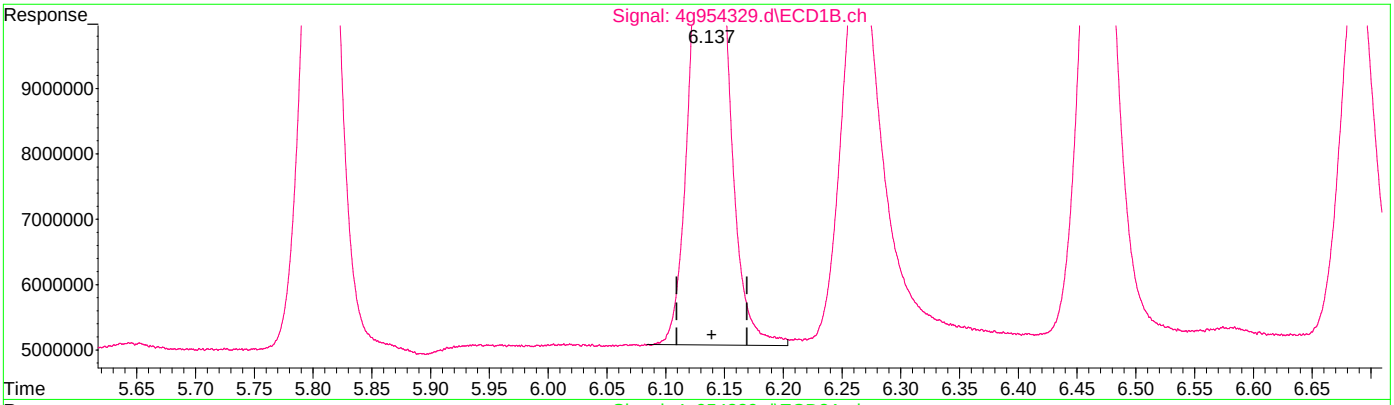
(+) = Expected Retention Time
4pst2585.m Wed Nov 07 20:27:35 2018

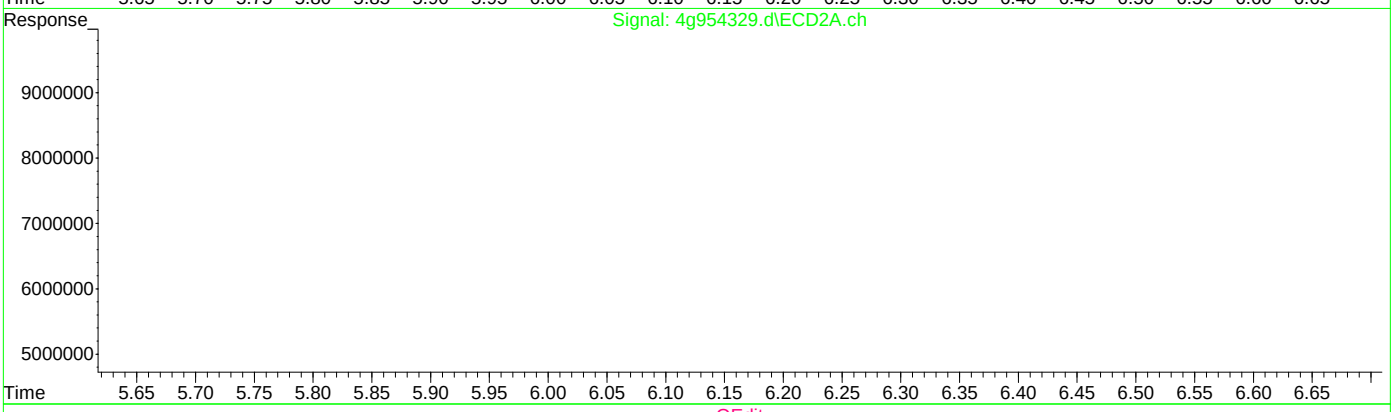
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954329.d
Signal(s) : Signal #1: ECD1B.ch  Signal #2: ECD2A.ch
Acq On    :  7 Nov 2018   2:13 pm
Operator  : mailisih
Sample    : cc2585-25
Misc      : op16424,g4g2589,300,,,2,1
ALS Vial  : 2   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:26:55 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title  : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.      : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```





QEdit

(17) Endrin (MA)

6.137min 23.484 PPB m

response 197119721

(17) Endrin #2 (MA)

7.495min 22.568 PPB

response 2023062260

(+) = Expected Retention Time

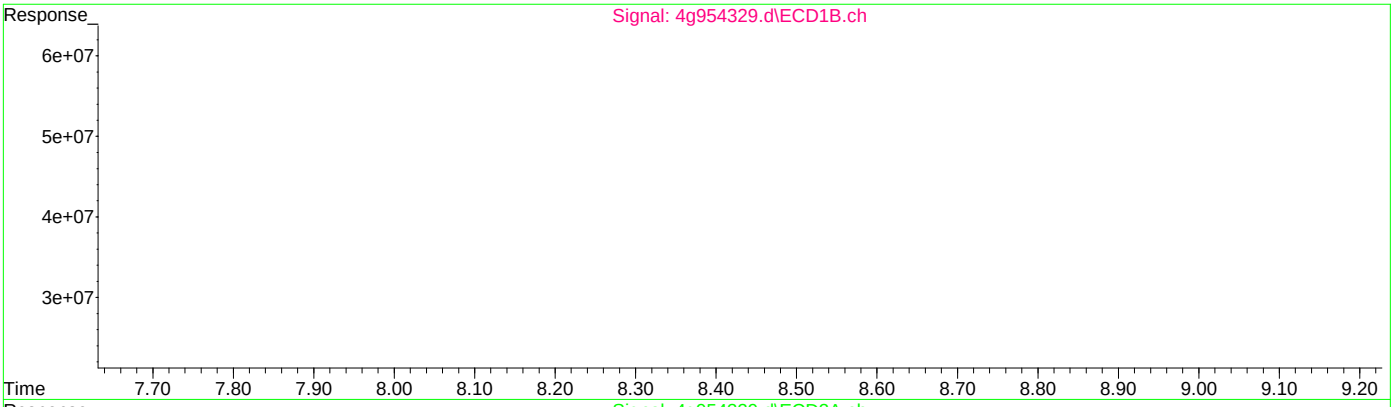
4pst2585.m Wed Nov 07 20:27:53 2018

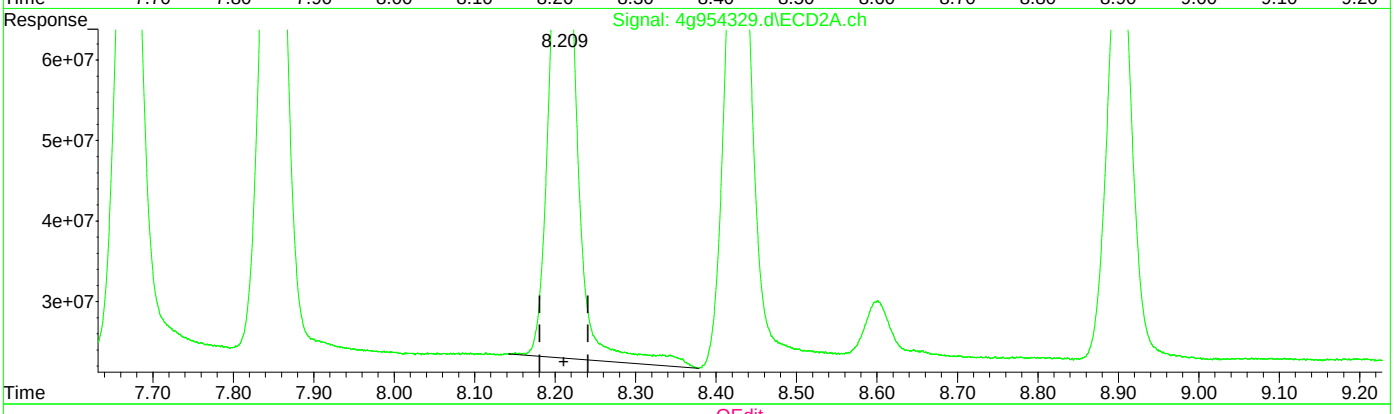
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954329.d
Signal(s) : Signal #1: ECD1B.ch  Signal #2: ECD2A.ch
Acq On    :  7 Nov 2018   2:13 pm
Operator  : mailisih
Sample    : cc2585-25
Misc      : op16424,g4g2589,300,,,2,1
ALS Vial  : 2   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:26:55 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title  : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.      : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```





QEdit

(20) 4,4'-DDT (MA)

6.688min 22.755 PPB

response 124189245

(20) 4,4'-DDT #2 (MA)

8.209min 22.773 PPB

response 1561598010

(+) = Expected Retention Time

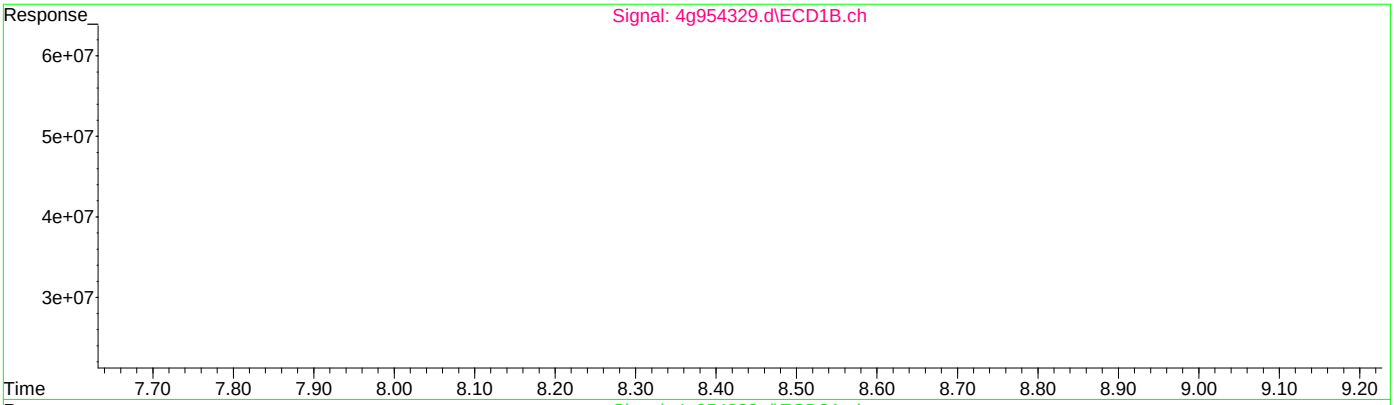
4pst2585.m Wed Nov 07 20:28:05 2018

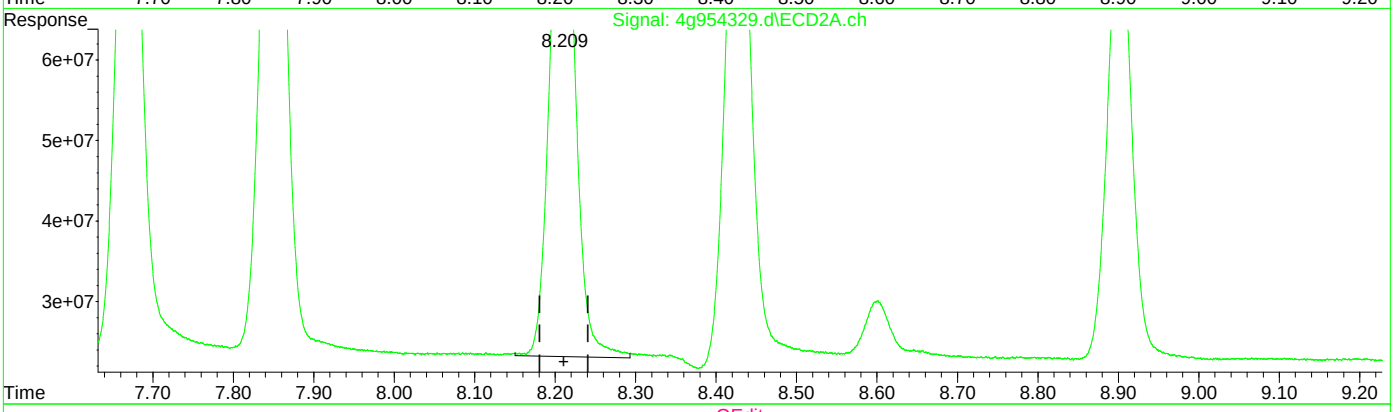
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\data\chrisc2\4g2589\
Data File : 4g954329.d
Signal(s) : Signal #1: ECD1B.ch  Signal #2: ECD2A.ch
Acq On    :  7 Nov 2018   2:13 pm
Operator  : mailisih
Sample    : cc2585-25
Misc      : op16424,g4g2589,300,,,2,1
ALS Vial  : 2   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 07 20:26:55 2018
Quant Method : C:\MSDCHEM\1\METHODS\4pst2585.m
Quant Title  : PEST/PCB
QLast Update : Wed Nov 07 19:39:50 2018
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.      : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```





QEdit

(20) 4,4'-DDT (MA)

6.688min 22.755 PPB

response 124189245

(20) 4,4'-DDT #2 (MA)

8.209min 21.728 PPB m

response 1489913126

(+) = Expected Retention Time

4pst2585.m Wed Nov 07 20:28:21 2018

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G4G2585

Print Analyst Name: Mailisi Heshmote

Date: 11/5/18

Analyst Signature: MH

Columns: ZBCIPT / ZBCIPT

Method 8081.608

Initial Cal. Method 4PST2585 11/5/18

Injection Volume: 1.0ul

Date Archived:

Standard Data

Lot #	Description	Conc.
SV18.2484.115	Pest Mix	1ppb
.116	Pest Mix	2ppb
.117	Pest Mix	5ppb
.118	Pest Mix	10ppb
.119	Pest Mix	25ppb
.120	Pest Mix	50ppb
.121	Pest Mix	75ppb

Standard Data

Lot #	Description	Conc.
SV 18.2484.122	Pest Mix	100ppb
.67	Pest ISTD	5ppm
.56	PEM	50-250ppb
.37	IB	20ppb
.78	Chlordane	500ppb
.77	Toxaphene	500ppb
180405	hexane (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 11/5/18

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	4G9954219	ddt				1			/	OK	run @ 9:00am
	230	CC2561-25				2				test-OK	
	231	IB				3			/	OK	
	232	IC2585-1	Pest Mix	1st source		11			/	OK	
	233	-2				12			/	OK	
	234	-5				13			/	OK	
	235	-10				14			/	OK	
	236	ICC2585-25				15			/	OK	
	237	IC2585-50				16			/	OK	
	238	-75				17			/	OK	
	239	-100				18			/	OK	
	240	-500	Chlordane			19			/	OK	
	241	-500	Toxaphene			20			/	OK	
	242	ICV2585-25	Pest Mix	2nd source		21	10		↑	NG	SV 18.2484.108 @ 250ppb RR
	243	-500	Chlordane			22			/	OK	SV 18.2484.114 @ 500ppb
	244	-500	Toxaphene			23			/	OK	SV 18.2484.113 @ 500ppb
	245	-50	Alachlor			24	20		/	OK	SV 18.2484.99 @ 1000ppb
	246	-50	Hexachlorobenzene			25	20		/	OK	SV 18.2484.98 @ 1000ppb
	247	-25	Pest Mix			5	10		/	OK	SV 18.2484.108 @ 250ppb Mirex ↓ 2nd

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-09
Rev. Date: 5/25/17

181

7.6.1

7

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G4G2589

Print Analyst Name: Mailisi Heshuote

Date: 11/7/18

Analyst Signature: MH

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV B-3484-56	PFM	50-250ppb
-67	PEST ISTD	5ppm
-87	IB	20ppb
-108A	PEST MIX	25 ppb
-108B	PEST MIX	50ppb
-101	TBA SOLN	—
183281	Hexane (Fisher)	—

Columns: ZBC/PT / ZBC/PT

Method 8081. 608

Initial Cal. Method 4PST2585

Injection Volume: 1.0ul

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 11/8/18

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	4G9SA315	ddt				1			/	OK	
	316	CC2585-50				4			/	OK	
	317	-500				5				OK	
	318	-500				6				OK	
	319	IB				3				OK	
	320	Op16424-mb1	16424	POP	W	7				OK	
	321	-bs1				8				OK	
	322	-bs1				9				OK	
	323	jc77181-1				10				OK	
	324	-2				11				OK	
	325	-3				12				OK	
	326	jc77221-1				13				bad injection	
	328/327	Hexane				100				OK	
	329	CC2585-25 CC2585 MH1/9				2			/	OK	E.S↓ both
	330	IB				3				OK	
	331	ddt				1				OK	
	332	CC2585-50				4			/	OK	
	333	IB				3				OK	
	334	JC76793-7	16422			14				OK	HAD TBA

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.

Sample volume/weight refer to extraction log.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-09

Rev. Date: 5/25/17

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7.6.2

7

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G4G2589

Print Analyst Name: Mailisi Heshmote

Date: 11/7/18

Analyst Signature: MH

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 18-2484-56	PEM	50-250ppb
-61	PEST ISTD	5ppm
-87	IB	20ppb
-102A	PEST MIX	25ppb
-102B	PEST MIX	50ppb
183281	Hexane (Fisher)	—

Columns: ZBCIPT / ZBCOPT

Method 8081.608

Initial Cal. Method 4PST2585

Injection Volume: 1.0ul

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 11/8/18

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	1609 335	JC76793-6	16422	tcl 8081		15	5			OK	
	336	-9				16	5			OK	
	337	-10				17	5			OK	
	338	OP16402-MB1	16402			18				OK	
	339	-BS1				19				OK	
	340	JC77129-4				20				OK	
	341	-MS2				21				OK	
	342	-MSD2				22				OK	
	343	JC77006-3				23				OK	
	344	-4				24				OK	
	345	JC77007-1				25				OK	
	346	-2				26				OK	
	347	JC77008-1				27				OK	
	348	-2				28				OK	
	349	-3				29				OK	
	352/350	Hexane				100				OK	
	353	CC2585-25				2				OK	
	354	IB				3				OK	
	355	JC77009-1				30				OK	

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-09
Rev. Date: 5/25/17

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7.6.2

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SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G4G2589

Date: 11/7/18

Print Analyst Name: Mailisi Heshuote

Analyst Signature: MH

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV ~~18-2184-56~~	PEM	50-250ppb
-67	PEST ISTD	5 ppm
-87	TB	20 ppb
-108A	PEST MIX	25 ppb
-103B	PEST MIX	50 ppb
183291	Hexane (Fisher)	—

Columns: ZBC1PT / ZBC1PTL

Method 8081, 608

Initial Cal. Method 4PST2585

Injection Volume: 1.0ul

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible]

Date: 11/8/18

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	4G9354356	JC77010-1	16402			31		/	/	OK	
	357	-2				32		/	/	OK	
	358	-3				33		/	/	OK	

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-09
Rev. Date: 5/25/17

Pest/PCB Extraction Log - Aqueous

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):

Separatory Funnel: SW846 3510C/CLP/other ✓

Continuous Liquid Liquid: SW846 3520C/CLP/other_____

rted: 3:00 pm

ished: 17:00

BATCH # GC 16424	RACK# Pest-2
Set-up by:	VP
Extracted by:	VP
Concentrated by:	VP
Final Vol. Top-up:	VP
Vialed by:	VP
Supervisor Review:	aj 11/6/18

#	Conc.	Amt. Spiked

KE SIGN:

IS

	Sample #	Analysis Type (DOD)	Sample Bottle #	pH	Sample Description	Sample Volume (mL)	Final Extract Color	Final Extract Vol(mL)	GPC	Copper	H2SO4	Florisil	KMnO4	Comments
	MB1	Pest			DI H2O	300	Clear	2.0		✓				
	BS1	LVI			DI H2O	300	Clear	2.0		✓				
	BSD ~~MS~~				DI H2O	300	Clear	2.0		✓				
	MSD													
	BS													
	MS													
	MSD													
1	JC77181-1	Pest LVI	1		Yellow	200	lt. yellow	2.0		✓				
2	-2		1		Yellow	210	lt. yellow	2.0		✓				
3	-3		1		Yellow	210	lt. yellow	2.0		✓				
4	JC77221-1		1		Yellow	220	lt. yellow	2.0		✓				
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														

Comments: QC Samples (MS, MSD, LINK and/or DUP, Link) Confirmed by:

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)	2	65	—	—	OK
Buchi Chiller	B2	10.1	—	—	OK
Waterbath (70-80°C)					
Waterbath Chiller (GPM)					
NEVAP (32-38°C, LPM)					

SURROGATE	LOT #	CONC (ppb)	AMT (mL)
PPCB	182160-038	400 ppb	0.2
PPCB LL			

WITNESS SIGN: SA(w) SPIKE SIGN: VP

MATRIX SPIKE	LOT #	CONC	AMT (mL)
PEST	182160-010D	250 ppb	0.2
PEST LL			
PCB			
PCB LL			

WITNESS SIGN: SA(w) SPIKE SIGN: VP

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	187001	Fisher	15x3
HEXANE	183281	Fisher	50

REAGENT	LOT #	BAKE BATCH #	BRAND
Sodium Sulfate	171696	10-29-18	Fisher
Glass Wool	01R05-3		lab
Filter Paper			
Copper	182231-127		Aldrich
Florisil			
1:1 Sulfuric Acid			
Chlorine Strips			

Prep Log OP16424 page 1 of 1
SGS
330 of 635
JC77181
7.7.1
7

Metals Analysis

QC Data Summaries

Includes the following where applicable:

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

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
Analyst: ZC Run ID: MA45617
Parameters: As

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:50	MA45617-STD1	1		STDA
13:55	MA45617-STD2	1		STDA
14:00	MA45617-STD3	1		STDA
14:05	MA45617-STD4	1		STDB
14:10	MA45617-STD5	1		STDC
14:15	MA45617-STD6	1		STDD
14:20	MA45617-STD7	1		STDE
14:25	MA45617-STD8	1		STDF
14:29	MA45617-STD9	1		STDG
14:35	MA45617-STD10	1		STDH
14:40	MA45617-STD11	1		STDI
14:45	MA45617-STD12	1		STDJ
14:50	MA45617-STD13	1		STDA
14:54	MA45617-STD14	1		STDB
15:02	MA45617-STD15	1		STDF
15:11	ZZZZZZ	1		
15:16	MA45617-ICVA1	1		
15:21	MA45617-ICV1	1		60ppb Al.
15:26	MA45617-ICB1	1		
15:31	MA45617-CCVA1	1		
15:36	MA45617-CCB1	1		
15:41	MA45617-CRI1	1		
15:47	MA45617-ICSAB1	1		
15:59	MA45617-ICSA1	1		
16:04	ZZZZZZ	1		
16:09	MA45617-CCVA2	1		
16:14	MA45617-CCB2	1		
16:19	ZZZZZZ	2		
16:24	ZZZZZZ	2		
16:29	MP10229-MB1	2		Batch to reanalysis for Se, BS out
16:34	MP10229-B2	2		
16:39	ZZZZZZ	2		
16:44	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
Analyst: ZC Run ID: MA45617
Parameters: As

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:49	MP10229-S3	2		
16:54	MP10229-S4	2		
16:59	JC76939-2F	2		(sample used for QC only; not part of login JC77181)
17:04	MA45617-CCVA3	1		
17:09	MA45617-CCB3	1		
17:14	MP10229-SD1	10		
17:19	MP10229-PS1	2		
17:24	ZZZZZZ	2		
17:29	ZZZZZZ	2		
17:34	ZZZZZZ	2		
17:39	ZZZZZZ	2		
17:44	ZZZZZZ	2		
17:49	ZZZZZZ	2		
17:54	MA45617-CCVA4	1		
17:59	MA45617-CCB4	1		
18:04	MP10120-MB1	2		
18:09	MP10120-B2	2		
18:14	ZZZZZZ	2		
18:19	ZZZZZZ	2		
18:24	ZZZZZZ	2		
18:29	ZZZZZZ	2		
18:34	MP10120-S3	2		
18:39	MP10120-S4	2		
18:43	JC76918-1	2		(sample used for QC only; not part of login JC77181)
18:48	MA45617-CCVA5	1		
18:53	MA45617-CCB5	1		
18:58	MP10120-SD1	10		
19:03	MP10116A-PS1	5		
19:08	ZZZZZZ	5		
19:13	ZZZZZZ	5		
19:18	MP10222-MB1	2		
19:23	MP10222-B2	2		
19:28	MP10222-S3	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
Analyst: ZC Run ID: MA45617
Parameters: As

Time	Sample Description	Dilution Factor	PS Recov	Comments
19:33	MP10222-S4	2		
19:38	JC77077-1	2		(sample used for QC only; not part of login JC77181)
19:43	MA45617-CCVA6	1		
19:48	MA45617-CCB6	1		
19:53	MP10222-SD1	10		
19:58	ZZZZZZ	2		
20:03	ZZZZZZ	2		
20:08	ZZZZZZ	1		
20:13	ZZZZZZ	2		
20:18	ZZZZZZ	1		
20:23	MP10166-S3	2		
20:28	MP10166-S4	2		
20:33	ZZZZZZ	2		
20:38	MA45617-CCVA7	1		
20:43	MA45617-CCB7	1		
20:48	JC76358-4	2		(sample used for QC only; not part of login JC77181)
20:53	MP10166-SD1	10		
20:58	ZZZZZZ	2		
21:03	ZZZZZZ	1		
21:09	ZZZZZZ	2		
21:14	ZZZZZZ	2		
21:19	ZZZZZZ	2		
21:24	ZZZZZZ	2		
21:37	ZZZZZZ	2		
21:42	MA45617-CCVA8	1		
21:49	MA45617-CCB8	1		
21:54	ZZZZZZ	2		
21:59	ZZZZZZ	2		
22:04	ZZZZZZ	2		
22:09	MP10222-S3	3		
22:14	MP10222-S4	3		
22:19	ZZZZZZ	5		
22:24	ZZZZZZ	10		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
Analyst: ZC Run ID: MA45617
Parameters: As

	Time	Sample Description	Dilution Factor	PS Recov	Comments
	22:29	ZZZZZZ	10		
	22:34	ZZZZZZ	10		
	22:39	MA45617-CCVA9	1		
	22:44	MA45617-CCB9	1		
	22:49	ZZZZZZ	10		
	22:54	ZZZZZZ	2		
	22:59	JC77181-1	2		overrange
	23:04	JC77181-2	2		overrange
	23:08	JC77181-3	2		overrange
	23:13	JC77181-1F	2		overrange
	23:18	JC77181-2F	2		overrange
	23:23	JC77181-3F	2		overrange
	23:28	MA45617-CCVA10	1		
	23:33	MA45617-CCB10	1		
	23:38	JC77181-1	50		
	23:43	JC77181-2	100		
	23:48	JC77181-3	100		
	23:53	JC77181-1F	50		(undigested sample in MA45620 confirmed the results. Label checked.)
	23:58	JC77181-2F	100		(undigested sample in MA45620 confirmed the results. Label checked.)
	00:03	JC77181-3F	100		
---------->	Last reportable sample/prep for job JC77181				
	00:08	ZZZZZZ	2		
	00:13	ZZZZZZ	2		
	00:18	ZZZZZZ	2		
	00:23	MA45617-CCVA11	1		
	00:29	MA45617-CCB11	1		
---------->	Last reportable CCB for job JC77181				
	00:34	ZZZZZZ	2		
	00:39	ZZZZZZ	2		
	00:44	ZZZZZZ	2		
	00:49	ZZZZZZ	2		
	00:54	ZZZZZZ	2		
	00:59	ZZZZZZ	2		
	01:04	ZZZZZZ	1		
	01:09	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
Analyst: ZC Run ID: MA45617
Parameters: As

Time	Sample Description	Dilution Factor	PS Recov	Comments
01:14	ZZZZZZ	2		
01:19	MA45617-CCVA12	1		
01:24	MA45617-CCB12	1		
01:29	ZZZZZZ	2		
01:34	ZZZZZZ	2		
01:39	ZZZZZZ	2		
01:44	ZZZZZZ	2		
01:49	ZZZZZZ	2		
01:54	ZZZZZZ	2		
01:59	ZZZZZZ	2		
02:04	ZZZZZZ	2		
02:09	MA45617-CCVA13	1		
02:14	MA45617-CCB13	1		
02:19	ZZZZZZ	1		
02:24	ZZZZZZ	1		
02:29	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
Analyst: ZC Run ID: MA45617
Parameters: As

Time	Sample Description	Element: Dilution	As	
15:11	ZZZZZZ	1		
15:16	MA45617-ICVA1	1	X	
15:21	MA45617-ICV1	1		
15:26	MA45617-ICB1	1	X	
15:31	MA45617-CCVA1	1	X	
15:36	MA45617-CCB1	1	X	
15:41	MA45617-CRI1	1	X	
15:47	MA45617-ICSAB1	1	X	
15:59	MA45617-ICSA1	1	X	
16:04	ZZZZZZ	1		
16:09	MA45617-CCVA2	1	X	
16:14	MA45617-CCB2	1	X	
16:19	ZZZZZZ	2		
16:24	ZZZZZZ	2		
16:29	MP10229-MB1	2	X	
16:34	MP10229-B2	2	X	
16:39	ZZZZZZ	2		
16:44	ZZZZZZ	2		
16:49	MP10229-S3	2	X	
16:54	MP10229-S4	2	X	
16:59	JC76939-2F	2	X	(a)
17:04	MA45617-CCVA3	1	X	
17:09	MA45617-CCB3	1	X	
17:14	MP10229-SD1	10	X	
17:19	MP10229-PS1	2	X	
17:24	ZZZZZZ	2		
17:29	ZZZZZZ	2		
17:34	ZZZZZZ	2		
17:39	ZZZZZZ	2		
17:44	ZZZZZZ	2		
17:49	ZZZZZZ	2		
17:54	MA45617-CCVA4	1	X	
17:59	MA45617-CCB4	1	X	
		Element:	As	

REPORTED ELEMENTS SUMMARY

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
Analyst: ZC Run ID: MA45617
Parameters: As

Time	Sample Description	Element: Dilution	As	
18:04	MP10120-MB1	2	X	
18:09	MP10120-B2	2	X	
18:14	ZZZZZZ	2		
18:19	ZZZZZZ	2		
18:24	ZZZZZZ	2		
18:29	ZZZZZZ	2		
18:34	MP10120-S3	2	X	
18:39	MP10120-S4	2	X	
18:43	JC76918-1	2	X	(a)
18:48	MA45617-CCVA5	1	X	
18:53	MA45617-CCB5	1	X	
18:58	MP10120-SD1	10	X	
19:03	MP10116A-PS1	5		
19:08	ZZZZZZ	5		
19:13	ZZZZZZ	5		
19:18	MP10222-MB1	2	X	
19:23	MP10222-B2	2	X	
19:28	MP10222-S3	2	X	
19:33	MP10222-S4	2	X	
19:38	JC77077-1	2	X	(a)
19:43	MA45617-CCVA6	1	X	
19:48	MA45617-CCB6	1	X	
19:53	MP10222-SD1	10	X	
19:58	ZZZZZZ	2		
20:03	ZZZZZZ	2		
20:08	ZZZZZZ	1		
20:13	ZZZZZZ	2		
20:18	ZZZZZZ	1		
20:23	MP10166-S3	2		
20:28	MP10166-S4	2		
20:33	ZZZZZZ	2		
20:38	MA45617-CCVA7	1	X	
20:43	MA45617-CCB7	1	X	
		Element:	As	

REPORTED ELEMENTS SUMMARY

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
Analyst: ZC Run ID: MA45617
Parameters: As

Time	Sample Description	Element: Dilution	As	
20:48	JC76358-4	2		(a)
20:53	MP10166-SD1	10		
20:58	ZZZZZZ	2		
21:03	ZZZZZZ	1		
21:09	ZZZZZZ	2		
21:14	ZZZZZZ	2		
21:19	ZZZZZZ	2		
21:24	ZZZZZZ	2		
21:37	ZZZZZZ	2		
21:42	MA45617-CCVA8	1	X	
21:49	MA45617-CCB8	1	X	
21:54	ZZZZZZ	2		
21:59	ZZZZZZ	2		
22:04	ZZZZZZ	2		
22:09	MP10222-S3	3		
22:14	MP10222-S4	3		
22:19	ZZZZZZ	5		
22:24	ZZZZZZ	10		
22:29	ZZZZZZ	10		
22:34	ZZZZZZ	10		
22:39	MA45617-CCVA9	1	X	
22:44	MA45617-CCB9	1	X	
22:49	ZZZZZZ	10		
22:54	ZZZZZZ	2		
22:59	JC77181-1	2		
23:04	JC77181-2	2		
23:08	JC77181-3	2		
23:13	JC77181-1F	2		
23:18	JC77181-2F	2		
23:23	JC77181-3F	2		
23:28	MA45617-CCVA10	1	X	
23:33	MA45617-CCB10	1	X	
23:38	JC77181-1	50	X	
		Element:	As	

REPORTED ELEMENTS SUMMARY

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
Analyst: ZC Run ID: MA45617
Parameters: As

Time	Sample Description	Element: Dilution	As
23:43	JC77181-2	100	X
23:48	JC77181-3	100	X
23:53	JC77181-1F	50	X
23:58	JC77181-2F	100	X
00:03	JC77181-3F	100	X
00:08	ZZZZZZ	2	
00:13	ZZZZZZ	2	
00:18	ZZZZZZ	2	
00:23	MA45617-CCVA11	1	X
00:29	MA45617-CCB11	1	X
00:34	ZZZZZZ	2	
00:39	ZZZZZZ	2	
00:44	ZZZZZZ	2	
00:49	ZZZZZZ	2	
00:54	ZZZZZZ	2	
00:59	ZZZZZZ	2	
01:04	ZZZZZZ	1	
01:09	ZZZZZZ	2	
01:14	ZZZZZZ	2	
01:19	MA45617-CCVA12	1	X
01:24	MA45617-CCB12	1	X
01:29	ZZZZZZ	2	
01:34	ZZZZZZ	2	
01:39	ZZZZZZ	2	
01:44	ZZZZZZ	2	
01:49	ZZZZZZ	2	
01:54	ZZZZZZ	2	
01:59	ZZZZZZ	2	
02:04	ZZZZZZ	2	
02:09	MA45617-CCVA13	1	X
02:14	MA45617-CCB13	1	X
02:19	ZZZZZZ	1	
02:24	ZZZZZZ	1	
		Element:	As

REPORTED ELEMENTS SUMMARY

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
Analyst: ZC Run ID: MA45617
Parameters: As

Time	Sample Description	Element: As Dilution
02:29	ZZZZZZ	1

(a) Sample used for QC only; not part of login JC77181.

Element: As

INTERNAL STANDARD SUMMARY

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
Analyst: ZC Run ID: MA45617
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
13:50	MA45617-STD1	100	100	100	100	100	100	100	100
13:55	MA45617-STD2	100	100	100	100	100	100	100	100
14:00	MA45617-STD3	100	100	100	100	100	100	100	100
14:05	MA45617-STD4	98.905	100.154	100.265	101.071	100.647	99.936	100.466	100.202
14:10	MA45617-STD5	99.789	98.864	100.388	99.308	100.244	100.103	100.042	99.813
14:15	MA45617-STD6	98.585	98.226	99.196	100.867	99.864	101.453	102.938	100.38
14:20	MA45617-STD7	98.319	98.568	99.673	99.556	100.406	99.754	99.48	100.221
14:25	MA45617-STD8	100.849	99.176	94.158	98.997	100.127	94.409	98.406	100.193
14:29	MA45617-STD9	100.039	99.378	99.792	99.954	98.872	100.033	99.865	100.101
14:35	MA45617-STD10	99.903	100.978	100.868	102.311	100.565	100.929	101.709	102.069
14:40	MA45617-STD11	96.661	100.232	102.332	100.922	99.653	101.085	99.61	99.252
14:45	MA45617-STD12	99.092	102.24	103.955	102.338	101.068	103.783	101.892	100.557
14:50	MA45617-STD13	100	100	100	100	100	100	100	100
14:54	MA45617-STD14	102.135	101.016	98.747	101.284	100.028	101.939	99.507	100.264
15:02	MA45617-STD15	98.981	94.422	94.92	97.816	95.558	94.943	95.494	96.916
15:11	ZZZZZZ	No results reported for the elements associated with this internal standard.							
15:16	MA45617-ICVA1	98.348	95.074	94.36	95.848	95.396	95.316	94.321	96.348
15:21	MA45617-ICV1	98.135	96.577	96.373	99.841	96.014	97.404	98.43	96.655
15:26	MA45617-ICB1	100.219	98.207	97.627	101.867	98.094	97.654	99.992	98.878
15:31	MA45617-CCVA1	97.369	94.998	94.872	98.375	95.457	95.433	94.32	96.447
15:36	MA45617-CCB1	97.512	95.633	96	98.666	96.231	97.292	97.346	96.761
15:41	MA45617-CRI1	98.649	97.141	97.27	99.65	97.304	98.141	97.802	98.039
15:47	MA45617-ICSAB1	89.835	87.35	89.314	86.748	87.079	86.301	82.173	81.811
15:59	MA45617-ICSA1	93.63	92.118	91.811	93.771	90.719	88.761	87.674	85.635
16:04	ZZZZZZ	93.582	92.311	90.626	106.772	96.285	94.714	102.727	97.287
16:09	MA45617-CCVA2	96.897	95.257	92.72	109.183	98.145	95.727	104.875	99.125
16:14	MA45617-CCB2	99.348	98.815	95.839	110.523	101.081	99.12	108.578	101.682
16:19	ZZZZZZ	101.193	101.644	99.64	107.869	103.942	104.372	107.829	105.716
16:24	ZZZZZZ	100.329	100.444	99.55	106.392	105.371	104.727	107.776	106.1
16:29	MP10229-MB1	102.673	100.567	97.783	118.899	103.36	101.989	118.516	103.859
16:34	MP10229-B2	104.038	103.016	98.992	119.785	104.629	102.116	118.145	105.74
16:39	ZZZZZZ	98.843	100.354	94.938	116.198	99.512	96.749	112.408	100.408
16:44	ZZZZZZ	101.224	100.855	94.259	116.447	98.143	96.272	110.486	98.878

INTERNAL STANDARD SUMMARY

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
Analyst: ZC Run ID: MA45617
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
16:49	MP10229-S3	100.568	99.918	95.041	116.329	98.888	96.618	111.148	99.341
16:54	MP10229-S4	101.031	99.586	95.375	115.207	97.986	95.68	111.114	99.066
16:59	JC76939-2F	102.747	100.796	95.941	118.029	99.366	97.17	113.532	99.88
17:04	MA45617-CCVA3	100.551	101.569	97.269	110.009	100.872	98.549	105.991	102.562
17:09	MA45617-CCB3	99.011	96.894	94.117	106.314	98.491	97.926	103.16	99.024
17:14	MP10229-SD1	99.218	95.395	92.614	104.101	97.705	96.993	103.847	98.24
17:19	MP10229-PS1	97.937	95.546	91.352	111.751	95.168	92.401	106.322	96.247
17:24	ZZZZZZ	99.446	95.948	94.618	112.66	98.032	95.424	107.466	97.773
17:29	ZZZZZZ	98.86	97.044	92.957	111.806	97.098	94.022	108.507	97.193
17:34	ZZZZZZ	97.924	95.075	91.289	110.187	95.865	93.442	106.153	94.951
17:39	ZZZZZZ	96.345	94.52	91.353	110.849	94.939	93.208	107.529	94.613
17:44	ZZZZZZ	96.142	95.51	90.259	110.492	92.865	89.609	103.834	92.557
17:49	ZZZZZZ	95.404	91.378	87.927	107.761	91.297	89.045	102.183	91.011
17:54	MA45617-CCVA4	97.072	94.54	92.638	102.328	95.465	94.281	99.424	96.939
17:59	MA45617-CCB4	95.518	92.69	91.315	101.167	94.76	93.916	98.229	95.496
18:04	MP10120-MB1	96.744	91.856	90.258	107.661	94.209	92.17	103.79	93.703
18:09	MP10120-B2	97.997	95.135	92.269	109.078	95.771	91.822	103.881	95.837
18:14	ZZZZZZ	92.186	91.403	87.039	103.618	87.824	86.841	96.485	87.169
18:19	ZZZZZZ	94.864	95.27	89.782	105.718	91.937	89.461	99.763	91.461
18:24	ZZZZZZ	94.857	95.075	89.367	102.885	91.161	88.958	96.661	90.779
18:29	ZZZZZZ	99.91	97.167	92.447	110.425	98.437	94.994	108.152	98.473
18:34	MP10120-S3	96.486	95.001	91.381	102.179	89.186	87.153	93.555	89.763
18:39	MP10120-S4	96.235	95.029	90.902	102.034	88.997	87.265	93.124	89.539
18:43	JC76918-1	96.203	95.573	91.99	101.712	90.454	89.039	92.884	89.246
18:48	MA45617-CCVA5	97.362	94.784	94.336	100.266	95.604	96.059	97.638	96.844
18:53	MA45617-CCB5	96.374	94.246	92.949	98.527	95.399	95.482	97.299	96.691
18:58	MP10120-SD1	97.545	95.931	95.255	97.425	95.57	96.133	94.374	96.84
19:03	MP10116A-PS1	95.441	96.034	94.989	100.807	95.846	95.264	96.909	95.785
19:08	ZZZZZZ	96.006	93.878	94.713	101.217	96.971	96.467	98.253	98.153
19:13	ZZZZZZ	97.501	95.037	94.41	104.083	96.865	97.463	102.534	97.852
19:18	MP10222-MB1	101.221	97.622	96.547	108.169	100.41	97.165	105.219	99.922
19:23	MP10222-B2	98.498	96.715	94.196	105.424	97.402	95.241	101.562	98.315
19:28	MP10222-S3	90.966	89.569	86.458	97.947	86.872	84.521	90.565	87.575

INTERNAL STANDARD SUMMARY

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
Analyst: ZC Run ID: MA45617
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
19:33	MP10222-S4	88.917	87.8	85.985	98.849	85.351	84.208	91.387	86.324
19:38	JC77077-1	89.848	88.141	84.903	95.983	86.147	84.353	90.502	86.061
19:43	MA45617-CCVA6	90.616	87.926	88.457	93.228	90.539	89.511	90.409	91.405
19:48	MA45617-CCB6	89.546	85.978	86.426	91.515	88.953	89.112	90.563	89.643
19:53	MP10222-SD1	88.054	85.746	85.823	89.645	87.75	87.821	87.927	87.96
19:58	ZZZZZZ	87.062	84.751	83.021	87.353	77.358	77.151	78.502	77.082
20:03	ZZZZZZ	86.539	83.899	81.752	93.448	82.856	81.147	88.398	83.171
20:08	ZZZZZZ	93.506	89.191	87.767	94.108	90.956	90.027	91.885	91.805
20:13	ZZZZZZ	90.181	85.825	84.907	99.27	89.043	86.838	96.427	88.414
20:18	ZZZZZZ	94.28	89.549	88.025	91.411	91.632	90.917	89.635	92.562
20:23	MP10166-S3	86.405	82.962	81.906	94.943	84.238	82.133	91.208	85.611
20:28	MP10166-S4	85.952	82.309	80.531	94.439	84.22	81.35	89.882	84.115
20:33	ZZZZZZ	88.017	83.407	82.646	95.907	85.623	82.887	93.16	85.802
20:38	MA45617-CCVA7	87.118	83.765	84.33	87.265	86.19	85.7	85.671	86.699
20:43	MA45617-CCB7	86.32	82.83	83.299	89.18	85.747	85.933	88.402	86.055
20:48	JC76358-4	86.193	82.981	82.389	96.571	85.264	83.44	93.333	84.353
20:53	MP10166-SD1	87.406	84.685	84.566	89.734	87.821	87.341	88.787	87.707
20:58	ZZZZZZ	81.574	81.231	79.651	90.529	79.184	78.48	84.309	79.275
21:03	ZZZZZZ	87.751	84.889	85.555	90.775	87.821	88.401	89.929	88.254
21:09	ZZZZZZ	87.703	82.302	82.126	94.87	85.868	83.961	92.544	84.919
21:14	ZZZZZZ	84.58	83.065	81.361	91.281	81.974	78.88	84.937	80.647
21:19	ZZZZZZ	89.827	83.854	83.221	96.725	88.817	84.535	94.765	86.722
21:24	ZZZZZZ	81.197	80.904	77.692	83.032	73.913	72.529	74.798	73.119
21:37	ZZZZZZ	87.071	85.368	85.195	94.797	84.33	84.328	89.315	84.178
21:42	MA45617-CCVA8	92.93	91.099	91.374	94.405	93.314	93.293	91.522	94.016
21:49	MA45617-CCB8	92.047	88.442	89.09	93.988	90.228	93.055	92.897	91.366
21:54	ZZZZZZ	86.523	86.953	84.472	90.973	82.071	80.214	84.024	82.24
21:59	ZZZZZZ	85.485	86.326	82.023	87.755	78.217	77.304	78.783	77.901
22:04	ZZZZZZ	89.186	89.166	86.559	99.306	88.332	86.857	94.24	88.225
22:09	MP10222-S3	89.468	88.932	86.202	97.493	87.9	85.106	90.919	88.621
22:14	MP10222-S4	88.37	88.618	86.661	95.689	87.173	85.056	90.939	87.967
22:19	ZZZZZZ	90.248	90.845	88.337	92.54	86.149	84.806	85.65	86.505
22:24	ZZZZZZ	88.498	85.689	84.999	90.12	88.755	89.121	89.014	89.012

INTERNAL STANDARD SUMMARY

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
Analyst: ZC Run ID: MA45617
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
22:29	ZZZZZZ	89.503	86.887	85.357	91.361	89.27	89.276	90.009	90.232
22:34	ZZZZZZ	88.328	85.987	85.444	90.223	88.15	88.061	89.179	88.294
22:39	MA45617-CCVA9	87.622	85.423	86.257	90.2	87.852	87.882	87.856	88.626
22:44	MA45617-CCB9	89.506	85.69	86.355	90.874	88.096	89.201	89.617	88.64
22:49	ZZZZZZ	88.279	85.41	85.68	89.667	88.077	88.942	88.197	88.611
22:54	ZZZZZZ	86.968	84.124	82.799	93.707	85.895	84.228	90.451	85.762
22:59	JC77181-1	88.325	87.915	83.857	91.616	86.69	83.408	87.673	84.408
23:04	JC77181-2	85.952	84.679	81.87	92.05	84.364	81.676	87.8	82.378
23:08	JC77181-3	87.09	85.958	81.033	92.63	85.222	81.203	88.652	83.149
23:13	JC77181-1F	87.979	87.202	82.556	93.396	87.338	82.399	89.075	85.018
23:18	JC77181-2F	86.437	85.724	81.517	93.298	85.391	82.645	88.986	83.293
23:23	JC77181-3F	86.568	85.526	81.646	92.87	85.069	81.72	88.858	83.815
23:28	MA45617-CCVA10	88.632	87.446	86.451	89.966	89.43	88.266	88.055	91.078
23:33	MA45617-CCB10	87.387	85.359	85.63	92.252	88.742	90.154	90.968	88.938
23:38	JC77181-1	88.143	86.792	88.234	87.098	89.025	90.522	85.903	89.376
23:43	JC77181-2	88.206	86.913	88.007	84.145	89.261	91.98	84.302	90.769
23:48	JC77181-3	88.17	87.072	89.291	83.214	89.827	92.659	83.943	90.048
23:53	JC77181-1F	86.667	88.294	88.025	84.695	89.712	91.206	85.001	89.358
23:58	JC77181-2F	87.985	86.695	89.305	83.475	89.663	92.95	84.386	89.547
00:03	JC77181-3F	87.711	87.068	88.119	83.203	89.351	92.359	83.567	89.937
00:08	ZZZZZZ	84.451	84.538	82.525	92.262	85.675	83.739	90.04	85.963
00:13	ZZZZZZ	85.485	87.455	83.523	95.734	86.658	84.908	91.528	86.542
00:18	ZZZZZZ	89.891	92.324	88.094	100.822	91.038	88.903	95.031	90.701
00:23	MA45617-CCVA11	92.432	91.029	89.102	92.732	93.072	90.964	89.164	94.076
00:29	MA45617-CCB11	94.378	93.111	92.132	97.597	95.535	94.783	95.163	95.603
00:34	ZZZZZZ	94.609	95.62	91.174	103.703	93.871	91.975	98.908	93.784
00:39	ZZZZZZ	97.228	97.48	91.237	103.94	95.894	92.285	97.716	95.937
00:44	ZZZZZZ	90.965	90.68	88.03	95.306	85.632	83.811	86.383	86.041
00:49	ZZZZZZ	94.722	90.556	88.35	101.949	93.508	90.021	97.541	93.208
00:54	ZZZZZZ	88.687	87.716	84.863	96.029	86.255	82.954	90.38	85.841
00:59	ZZZZZZ	92.87	89.063	88.15	100.392	91.87	88.207	96.32	91.162
01:04	ZZZZZZ	92.064	88.513	87.034	92.153	90.98	89.469	89.605	91.04
01:09	ZZZZZZ	84.671	83.139	81.593	93.334	83.744	82.24	90.225	83.954

INTERNAL STANDARD SUMMARY

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
Analyst: ZC Run ID: MA45617
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
01:14	ZZZZZZ	89.355	85.186	85.205	97.326	88.808	86.544	94.712	88.227
01:19	MA45617-CCVA12	86.709	84.933	85.323	88.798	86.499	86.817	86.469	88.351
01:24	MA45617-CCB12	85.945	83.92	84.817	89.013	86.603	86.656	88.281	87.246
01:29	ZZZZZZ	84.064	83.086	81.092	92.474	84.729	81.76	89.013	84.085
01:34	ZZZZZZ	80.895	84.014	79.479	92.38	82.076	80.572	88.247	81.617
01:39	ZZZZZZ	83.033	81.805	79.986	94.343	84.189	81.447	90.645	83.732
01:44	ZZZZZZ	81.612	80.35	78.239	92.841	82.784	78.852	89.305	81.561
01:49	ZZZZZZ	80.575	79.207	76.048	90.163	81.685	78.354	86.661	81.142
01:54	ZZZZZZ	77.145	77.819	74.633	88.149	77.786	75.234	83.269	77.407
01:59	ZZZZZZ	75.978	77.455	74.192	87.375	76.8	74.581	82.758	76.607
02:04	ZZZZZZ	76.204	77.441	74.553	87.576	76.816	75.225	83.817	77.325
02:09	MA45617-CCVA13	80.085	78.701	78.018	83.724	81.649	81.348	81.107	82.455
02:14	MA45617-CCB13	78.577	77.425	77.317	81.452	80.615	79.885	81.412	81.272
02:19	ZZZZZZ	78.672	77.612	78.217	79.95	80.706	81.564	80.467	81.16
02:24	ZZZZZZ	78.751	77.326	78.024	83.435	80.663	80.883	81.16	81.082
02:29	ZZZZZZ	79.77	78.121	78.099	82.404	81.069	81.281	81.642	81.594

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#1	Lithium	70-130 %	70-130 %
Istd#2	Scandium (45-1)	70-130 %	70-130 %
Istd#3	Scandium (45-2)	70-130 %	70-130 %
Istd#4	Scandium (45-3)	70-130 %	70-130 %
Istd#5	Germanium (72-1)	70-130 %	70-130 %
Istd#6	Germanium (72-2)	70-130 %	70-130 %
Istd#7	Germanium (72-3)	70-130 %	70-130 %
Istd#8	Germanium (74-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
Analyst: ZC Run ID: MA45617
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
13:50	MA45617-STD1	100	100	100	100	100	100	100	100
13:55	MA45617-STD2	100	100	100	100	100	100	100	100
14:00	MA45617-STD3	100	100	100	100	100	100	100	100
14:05	MA45617-STD4	100.361	101.133	101.334	100.245	100.687	101.079	100.356	100.288
14:10	MA45617-STD5	100.854	101.671	99.542	100.144	99.18	99.4	100.197	99.625
14:15	MA45617-STD6	101.394	102.578	99.204	99.699	100.844	99.984	99.904	99.445
14:20	MA45617-STD7	100.033	99.795	100.228	100.231	99.84	100.881	100.15	100.746
14:25	MA45617-STD8	94.696	99.099	99.993	93.639	98.926	99.51	94.03	100.892
14:29	MA45617-STD9	100.668	100.762	99.054	99.279	100.504	99.502	100.209	100.64
14:35	MA45617-STD10	102.279	103.293	99.527	100.586	100.9	100.288	101.685	102.137
14:40	MA45617-STD11	101.174	99.407	98.139	98.609	96.924	97.638	100.718	99.912
14:45	MA45617-STD12	102.83	102.142	96.638	98.5	96.63	98.034	101.485	100.499
14:50	MA45617-STD13	100	100	100	100	100	100	100	100
14:54	MA45617-STD14	100.969	101.186	98.213	100.448	100.034	100.281	100.9	98.687
15:02	MA45617-STD15	96.06	96.759	95.664	96.417	96.853	95.837	96.262	96.583
15:11	ZZZZZZ	No results reported for the elements associated with this internal standard.							
15:16	MA45617-ICVA1	94.599	96.642	92.099	92.946	94.374	93.545	95.359	96.598
15:21	MA45617-ICV1	96.782	99.982	96.498	98.457	100.88	97.833	98.641	98.721
15:26	MA45617-ICB1	97.862	100.762	98.656	98.272	101.892	98.232	98.83	99.208
15:31	MA45617-CCVA1	95.088	96.88	92.407	93.63	94.492	93.44	95.071	96.148
15:36	MA45617-CCB1	97.361	98.125	96.828	98.393	98.987	98.14	98.641	96.983
15:41	MA45617-CRI1	98.212	98.662	97.603	98.608	99.44	98.656	99.95	98.712
15:47	MA45617-ICSAB1	82.78	81.073	75.286	76.76	74.058	81.424	82.356	87.438
15:59	MA45617-ICSA1	85.795	86.493	81.939	79.731	78.597	86.682	85.548	92.833
16:04	ZZZZZZ	94.654	104.709	99.143	99.604	106.771	101.995	97.311	105.067
16:09	MA45617-CCVA2	95.099	106.308	97.353	97.238	104.418	101.043	96.042	105.628
16:14	MA45617-CCB2	98.835	109.674	102.585	103.009	109.183	106.079	100.187	107.1
16:19	ZZZZZZ	104.239	108.679	104.59	104.203	106.504	107.385	103.974	106.697
16:24	ZZZZZZ	104.71	109.194	104.496	103.786	106.035	107.316	103.977	106.182
16:29	MP10229-MB1	101.101	119.161	103.056	103.811	114.482	105.29	99.238	108.764
16:34	MP10229-B2	101.368	120.392	101.65	102.445	111.939	105.221	97.988	109.048
16:39	ZZZZZZ	96.021	113.655	94.945	96.119	107.011	100.672	92.915	105.623
16:44	ZZZZZZ	95.316	111.602	94.87	95.748	106.375	101.701	92.896	106.721

INTERNAL STANDARD SUMMARY

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
Analyst: ZC Run ID: MA45617
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
16:49	MP10229-S3	96.113	112.556	97.124	97.662	108.041	101.819	93.199	106.991
16:54	MP10229-S4	96.146	111.404	95.42	97.437	107.468	101.63	93.301	107.049
16:59	JC76939-2F	96.83	114.105	97.93	99.303	111.123	104.356	95.55	108.021
17:04	MA45617-CCVA3	98.761	107.19	99.034	98.914	103.628	102.948	96.96	106.031
17:09	MA45617-CCB3	97.35	105.451	99.704	99.95	106	102.626	97.294	104.416
17:14	MP10229-SD1	97.079	104.332	97.998	97.505	103.507	102.232	97.281	103.683
17:19	MP10229-PS1	92.033	108.479	94.161	94.772	105.559	99.285	91.539	105.723
17:24	ZZZZZZ	95.064	109.649	98.715	99.84	109.533	102.292	94.771	107.488
17:29	ZZZZZZ	93.3	109.85	96.053	96.096	107.515	101.621	93.035	105.668
17:34	ZZZZZZ	92.534	107.858	93.955	94.664	105.999	99.036	91.665	105.046
17:39	ZZZZZZ	92.393	108.42	92.783	94.353	105.995	98.521	91.883	104.883
17:44	ZZZZZZ	89.76	105.222	90.743	91.52	102.64	96.256	89.426	102.913
17:49	ZZZZZZ	88.061	103.62	89.551	90.164	101.423	95.895	88.239	103.923
17:54	MA45617-CCVA4	94.259	100.121	94.693	93.723	98.44	97.338	94.077	103.217
17:59	MA45617-CCB4	93.714	99.832	95.7	96.252	101.754	99.514	95.309	100.113
18:04	MP10120-MB1	90.974	105.947	94.272	96.303	106.52	97.807	92.338	102.629
18:09	MP10120-B2	91.658	105.274	96.306	95.3	105.121	98.993	92.221	104.853
18:14	ZZZZZZ	86.498	97.901	83.739	84.899	92.964	89.988	84.783	97.638
18:19	ZZZZZZ	88.554	100.597	87.933	88.446	96.077	94.049	88.243	100.977
18:24	ZZZZZZ	87.991	97.299	86.195	86.53	91.772	92.74	87.209	99.209
18:29	ZZZZZZ	94.481	108.659	98.348	98.577	109.128	101.976	94.614	104.179
18:34	MP10120-S3	87.048	94.751	84.347	83.151	87.562	90.336	86.175	96.62
18:39	MP10120-S4	86.777	93.936	83.658	82.797	87.672	90.801	86.475	96.547
18:43	JC76918-1	87.647	93.547	84.199	83.567	87.279	90.647	87.191	96.544
18:48	MA45617-CCVA5	95.841	99.436	93.38	94.559	97.422	97.436	95.848	100.483
18:53	MA45617-CCB5	95.969	98.836	96.351	96.534	99.467	99.845	97.132	100.938
18:58	MP10120-SD1	96.312	95.32	91.233	91.32	91.773	96.897	95.377	98.111
19:03	MP10116A-PS1	93.964	96.676	93.439	93.63	94.65	96.565	94.651	100.222
19:08	ZZZZZZ	95.693	100.033	94.478	95.419	99.435	99.044	96.673	100.941
19:13	ZZZZZZ	96.333	103.069	98.487	98.49	103.594	100.733	97.513	102.371
19:18	MP10222-MB1	97.538	106.12	101.156	100.583	106.85	102.345	97.511	106.97
19:23	MP10222-B2	94.967	104.612	97.06	96.585	101.61	99.852	94.941	104.782
19:28	MP10222-S3	84.312	92.968	83.193	81.797	87.554	89.358	83.903	96.425

INTERNAL STANDARD SUMMARY

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Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
Analyst: ZC Run ID: MA45617
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
19:33	MP10222-S4	83.393	92.875	81.231	81.461	86.612	88.279	83.466	95.337
19:38	JC77077-1	83.562	91.947	82.517	81.709	87.274	87.919	84.457	95.879
19:43	MA45617-CCVA6	89.958	92.792	88.757	89.05	91.841	92.896	90.755	96.542
19:48	MA45617-CCB6	88.984	91.492	89.973	90.134	93.981	93.107	90.985	95.617
19:53	MP10222-SD1	87.918	89.417	85.303	85.227	88.414	89.761	88.978	94.464
19:58	ZZZZZZ	76.245	79.248	71.301	70.375	71.875	78.386	76.798	84.544
20:03	ZZZZZZ	81.17	89.771	81.244	80.56	87.741	86.981	82.776	93.253
20:08	ZZZZZZ	89.599	93.45	92.081	91.777	95.886	95.068	92.751	97.664
20:13	ZZZZZZ	86.903	97.477	88.03	89.307	98.148	93.838	88.923	98.908
20:18	ZZZZZZ	90.291	92.295	92.48	91.592	93.835	95.702	92.955	98.184
20:23	MP10166-S3	82.184	92.738	83.02	83.773	92.08	89.867	84.699	95.557
20:28	MP10166-S4	81.032	92.583	82.816	82.388	91.79	88.817	83.132	96.241
20:33	ZZZZZZ	83.074	95.045	86.101	86.262	94.861	91.525	85.938	96.643
20:38	MA45617-CCVA7	85.631	86.975	84.839	85.036	87.058	89.418	87.243	94.605
20:43	MA45617-CCB7	85.846	89.631	86.486	87.154	91.959	91.27	88.715	92.795
20:48	JC76358-4	83.112	94.234	83.96	84.953	93.926	90.033	86.442	95.188
20:53	MP10166-SD1	86.934	90.054	87.028	86.664	91.331	91.949	89.538	94.338
20:58	ZZZZZZ	78.528	85.45	76.318	77.308	83.828	83.968	80.076	90.604
21:03	ZZZZZZ	87.799	91.232	89.775	89.435	93.353	93.332	90.598	95.193
21:09	ZZZZZZ	84.011	93.866	87.7	87.666	96.454	90.961	86.41	96.501
21:14	ZZZZZZ	79.742	85.975	76.619	76.933	83.126	83.695	80.384	91.574
21:19	ZZZZZZ	85.008	96.041	88.275	88.514	98.148	92.515	86.801	96.481
21:24	ZZZZZZ	72.175	74.655	67.688 !a	67.337 !a	69.48 !a	76.035	73.657	82.784
21:37	ZZZZZZ	83.436	90.678	82.34	82.397	87.82	87.986	85.318	93.356
21:42	MA45617-CCVA8	92.737	93.692	91.02	90.762	92.624	94.847	93.78	96.426
21:49	MA45617-CCB8	92.082	93.467	91.628	92.071	94.728	93.825	94.754	95.082
21:54	ZZZZZZ	80.251	85.023	76.36	76.065	79.076	83.451	81.237	90.022
21:59	ZZZZZZ	75.937	79.108	72.27	70.712	73.25	80	76.836	85.732
22:04	ZZZZZZ	86.273	95.462	86.73	86.406	94.125	91.653	87.702	99.049
22:09	MP10222-S3	85.388	92.349	83.938	83.091	88.527	90.025	85.693	95.176
22:14	MP10222-S4	85.377	91.952	83.584	83.027	88.089	90.116	86.097	96.705
22:19	ZZZZZZ	84.941	86.596	80.808	79.525	81.198	87.323	85.439	92.408
22:24	ZZZZZZ	87.578	91.077	87.169	87.689	90.353	92.107	90.469	94.328

INTERNAL STANDARD SUMMARY

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
Analyst: ZC Run ID: MA45617
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
22:29	ZZZZZZ	88.797	90.614	88.156	88.135	91.896	92.543	91.225	94.957
22:34	ZZZZZZ	87.419	90.515	87.592	87.424	90.755	91.849	90.667	94.636
22:39	MA45617-CCVA9	87.729	89.127	86.317	86.635	88.302	90.306	89.327	93.973
22:44	MA45617-CCB9	88.372	91.689	89.937	90.234	93.151	93.09	91.971	93.95
22:49	ZZZZZZ	88.13	89.651	87.38	87.28	90.481	91.696	91.331	93.78
22:54	ZZZZZZ	82.991	91.755	85.961	85.838	92.133	91.755	86.358	96.871
22:59	JC77181-1	81.435	87.114	81.845	81.605	84.103	87.99	83.526	96.169
23:04	JC77181-2	80.783	87.642	80.01	79.531	84.488	85.452	81.858	92.782
23:08	JC77181-3	80.959	87.407	80.414	79.565	83.401	87.092	81.405	92.82
23:13	JC77181-1F	81.819	89.2	82.493	81.22	85.859	88.748	82.997	95.35
23:18	JC77181-2F	81.523	88.746	80.967	80.249	84.867	86.716	82.157	93.474
23:23	JC77181-3F	80.562	88.996	81	79.991	84.696	86.432	81.897	93.66
23:28	MA45617-CCVA10	88.092	89.629	88.459	86.514	88.278	91.785	88.625	95.488
23:33	MA45617-CCB10	88.787	91.793	88.976	89.264	94.154	92.589	91.026	93.455
23:38	JC77181-1	90.522	86.866	86.548	87.281	88.008	89.254	92.044	90.115
23:43	JC77181-2	92.061	85.233	87.403	88.002	85.229	89.269	92.579	88.861
23:48	JC77181-3	92.635	85.096	87.114	88.271	84.738	89.335	93.754	88.818
23:53	JC77181-1F	91.151	85.186	88.455	87.206	85.938	90.176	92.362	89.809
23:58	JC77181-2F	91.996	85.405	86.75	88.154	85.238	88.988	93.382	88.66
00:03	JC77181-3F	92.305	85.636	86.883	87.78	85.093	89.495	93.271	89.121
00:08	ZZZZZZ	83.456	91.13	86.41	85.729	91.754	90.558	87.234	93.312
00:13	ZZZZZZ	83.855	92.317	86.198	85.941	93.015	91.175	86.941	96.575
00:18	ZZZZZZ	87.46	95.556	89.491	89.719	95.471	93.684	89.965	97.786
00:23	MA45617-CCVA11	91.35	90.621	90.028	88.831	88.921	94.009	91.519	96.105
00:29	MA45617-CCB11	94.761	96.64	95.133	95.029	97.317	97.227	96.476	97.2
00:34	ZZZZZZ	90.951	99.532	94.305	93.069	98.181	96.749	92.194	100.406
00:39	ZZZZZZ	92.089	99.248	95.641	94.145	98.885	99.848	93.353	101.56
00:44	ZZZZZZ	83.534	87.324	80.498	79.535	81.704	88.176	84.307	92.788
00:49	ZZZZZZ	89.997	98.465	92.866	92.75	99.765	95.804	91.719	99.614
00:54	ZZZZZZ	82.825	90.786	82.678	82.188	87.602	89.44	84.645	95.148
00:59	ZZZZZZ	88.021	97.67	91.82	91.564	98.274	95.515	90.087	98.452
01:04	ZZZZZZ	89.245	91.169	91.496	89.461	92.938	94.688	91.312	94.964
01:09	ZZZZZZ	81.901	90.573	81.977	81.791	88.687	88.122	83.752	94.177

INTERNAL STANDARD SUMMARY

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
Analyst: ZC Run ID: MA45617
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
01:14	ZZZZZZ	85.77	95.672	88.774	88.923	96.973	93.074	88.164	96.748
01:19	MA45617-CCVA12	86.467	88.098	84.522	84.56	87.031	89.853	87.476	91.857
01:24	MA45617-CCB12	86.293	88.112	87.569	86.927	90.827	90.15	89.373	91.551
01:29	ZZZZZZ	81.215	90.137	81.812	81.798	88.837	88.698	84.513	93.406
01:34	ZZZZZZ	80.083	89.33	79.934	79.693	87.349	85.301	81.219	91.869
01:39	ZZZZZZ	80.765	91.694	81.869	81.768	90.014	88.073	83.355	93.933
01:44	ZZZZZZ	79.289	90.574	80.613	79.239	88.933	86.089	81.057	91.795
01:49	ZZZZZZ	77.879	87.724	79.2	78.705	87.349	85.768	80.129	91.954
01:54	ZZZZZZ	75.517	84.476	73.849	74.42	81.876	82.757	77.332	89.251
01:59	ZZZZZZ	74.214	83.531	73.424	73.843	81.236	81.367	76.611	88.798
02:04	ZZZZZZ	74.917	84.439	73.729	74.347	82.097	81.912	77.16	89.567
02:09	MA45617-CCVA13	80.653	84.083	80.864	80.108	82.734	84.686	82.655	88.599
02:14	MA45617-CCB13	80.209	82.253	82.483	81.55	84.446	85.694	83.548	89.017
02:19	ZZZZZZ	80.292	80.798	82.573	82.462	83.204	86.008	84.44	88.024
02:24	ZZZZZZ	80.298	82.789	81.498	81.838	85.684	84.581	84.229	87.926
02:29	ZZZZZZ	80.407	82.373	82.505	82.358	85.65	85.994	84.705	88.795

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#9	Germanium (74-2)	70-130 %	70-130 %
Istd#10	Germanium (74-3)	70-130 %	70-130 %
Istd#11	Rhodium (103-1)	70-130 %	70-130 %
Istd#12	Rhodium (103-2)	70-130 %	70-130 %
Istd#13	Rhodium (103-3)	70-130 %	70-130 %
Istd#14	Indium (115-1)	70-130 %	70-130 %
Istd#15	Indium (115-2)	70-130 %	70-130 %
Istd#16	Terbium (159-1)	70-130 %	70-130 %

(a) No samples reported for the elements associated with this internal standard.

INTERNAL STANDARD SUMMARY

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
Analyst: ZC Run ID: MA45617
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
13:50	MA45617-STD1	100	100	100	100	100	100
13:55	MA45617-STD2	100	100	100	100	100	100
14:00	MA45617-STD3	100	100	100	100	100	100
14:05	MA45617-STD4	100.702	100.8	100.313	100.607	98.864	100.452
14:10	MA45617-STD5	100.26	99.026	99.706	100.742	99.009	100.279
14:15	MA45617-STD6	100.158	101.176	99.641	100.535	98.431	100.677
14:20	MA45617-STD7	100.579	100.755	101.449	101.401	101.149	101.017
14:25	MA45617-STD8	94.835	99.981	101.89	94.958	101.288	96.204
14:29	MA45617-STD9	100.909	101.371	100.507	100.874	99.778	100.568
14:35	MA45617-STD10	101.815	101.367	101.111	101.863	99.412	101.167
14:40	MA45617-STD11	101.306	98.247	99.83	101.133	93.925	98.047
14:45	MA45617-STD12	102.491	98.565	100.368	102.959	92.999	97.202
14:50	MA45617-STD13	100	100	100	100	100	100
14:54	MA45617-STD14	100.155	100.721	99.851	100.02	100.494	99.933
15:02	MA45617-STD15	97.252	99.226	98.022	97.451	98.535	98.157
15:11	ZZZZZZ	No results reported for the elements associated with this internal standard.					
15:16	MA45617-ICVA1	97.069	98.164	98.468	97.56	95.455	94.706
15:21	MA45617-ICV1	99.146	102.365	99.354	99.346	100.513	99.609
15:26	MA45617-ICB1	99.001	102.913	99.835	98.987	100.954	99.308
15:31	MA45617-CCVA1	97.221	98.374	98.808	97.375	94.827	94.9
15:36	MA45617-CCB1	99.04	99.956	97.725	99.084	99.487	99.11
15:41	MA45617-CRI1	99.27	100.648	99.288	99.205	100.068	99.359
15:47	MA45617-ICSAB1	86.831	78.256	88.53	88.199	77.804	77.103
15:59	MA45617-ICSA1	89.997	83.181	94.589	90.783	82.892	80.2
16:04	ZZZZZZ	101.674	107.772	107.626	102.149	108.887	102.563
16:09	MA45617-CCVA2	100.978	106.897	107.767	101.168	104.814	99.047
16:14	MA45617-CCB2	103.254	108.865	108.723	103.396	109.728	104.383
16:19	ZZZZZZ	103.968	106.562	107.619	104.27	109.344	106.162
16:24	ZZZZZZ	104.203	106.174	108.259	104.142	110.281	106.322
16:29	MP10229-MB1	104.126	114.855	110.096	104.864	112.103	106.164
16:34	MP10229-B2	104.004	113.452	111.663	103.764	108.952	102.175
16:39	ZZZZZZ	99.917	110.531	109.511	101.221	103.703	95.652
16:44	ZZZZZZ	100.28	110.763	109.804	100.964	103.123	95.62

INTERNAL STANDARD SUMMARY

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
Analyst: ZC Run ID: MA45617
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
16:49	MP10229-S3	100.554	110.593	108.67	101.183	104.621	97.616
16:54	MP10229-S4	100.3	110.547	109.207	101.216	104.35	97.016
16:59	JC76939-2F	101.378	114.241	109.933	102.827	107.582	100.286
17:04	MA45617-CCVA3	101.02	106.249	108.505	101.721	105.088	98.504
17:09	MA45617-CCB3	99.56	106.808	106.069	100.461	107.255	100.894
17:14	MP10229-SD1	99.27	106.208	105.511	100.016	106.584	101.351
17:19	MP10229-PS1	98.698	110.184	108.014	99.818	103.093	96.208
17:24	ZZZZZZ	100.692	111.424	107.768	100.856	107.171	100.826
17:29	ZZZZZZ	99.257	110.727	107.3	100.018	105.665	97.848
17:34	ZZZZZZ	97.985	110.032	105.442	98.929	104.031	96.918
17:39	ZZZZZZ	97.731	110.391	105.819	98.425	103.308	96.409
17:44	ZZZZZZ	97.196	108.223	107.146	99.24	99.486	92.621
17:49	ZZZZZZ	96.176	108.1	105.814	97.143	99.531	91.855
17:54	MA45617-CCVA4	97.977	102.713	103.891	99.045	101.189	95.974
17:59	MA45617-CCB4	97.367	104.425	102.391	97.667	103.766	98.696
18:04	MP10120-MB1	98.15	109.012	105.266	98.965	106.107	98.758
18:09	MP10120-B2	98.361	109.618	106.411	100.006	104.434	96.863
18:14	ZZZZZZ	92.628	100.111	101.057	93.572	89.551	84.404
18:19	ZZZZZZ	94.929	102.643	104.063	95.873	93.71	87.542
18:24	ZZZZZZ	94.277	99.1	101.97	94.886	90.508	85.372
18:29	ZZZZZZ	99.438	110.505	107.099	99.687	107.33	100.125
18:34	MP10120-S3	91.526	95.705	99.01	92.759	84.547	79.993
18:39	MP10120-S4	92.186	96.567	99.308	93.218	85.003	79.937
18:43	JC76918-1	92.105	95.752	99.41	93.714	84.453	80.837
18:48	MA45617-CCVA5	98.259	101.274	102.653	99.075	99.38	96.156
18:53	MA45617-CCB5	97.388	101.838	102.071	97.878	102.426	98.175
18:58	MP10120-SD1	96.338	98.488	100.819	98.045	93.288	92.377
19:03	MP10116A-PS1	96.721	98.31	103.602	99.317	99.978	96.237
19:08	ZZZZZZ	99.061	103.379	102.362	99.32	101.171	97.708
19:13	ZZZZZZ	99.754	105.619	103.898	99.584	105.408	100.606
19:18	MP10222-MB1	101.502	108.623	107.138	102.143	107.334	101.369
19:23	MP10222-B2	100.507	105.266	106.958	101.147	103.152	97.564
19:28	MP10222-S3	90.829	96.986	98.758	92.22	87.374	81.953

INTERNAL STANDARD SUMMARY

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
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File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
Analyst: ZC Run ID: MA45617
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
19:33	MP10222-S4	90.786	96.09	98.122	91.402	86.536	81.846
19:38	JC77077-1	90.06	96.226	98.439	91.567	86.973	82.375
19:43	MA45617-CCVA6	94.11	97.435	99.234	95.041	96.585	92.387
19:48	MA45617-CCB6	92.716	97.825	98.282	93.788	99.437	94.431
19:53	MP10222-SD1	91.277	95.337	95.745	92.179	93.038	90.054
19:58	ZZZZZZ	80.485	81.653	86.466	81.301	72.519	68.355 !a
20:03	ZZZZZZ	89.19	97.272	97.272	90.751	87.72	82.923
20:08	ZZZZZZ	94.893	100.15	98.946	95.252	101.381	95.502
20:13	ZZZZZZ	93.731	104.14	100.683	94.923	99.211	93.649
20:18	ZZZZZZ	94.276	98.219	99.541	94.861	100.571	95.645
20:23	MP10166-S3	91.322	99.755	97.944	92.019	93.401	88.134
20:28	MP10166-S4	90.237	99.938	98.307	90.97	93.869	87.35
20:33	ZZZZZZ	93.145	102	100.331	93.834	97.254	90.963
20:38	MA45617-CCVA7	91.363	93.225	96.125	91.583	93.36	89.988
20:43	MA45617-CCB7	90.994	97.518	94.935	91.221	95.411	92.591
20:48	JC76358-4	92.489	101.721	97.986	92.402	95.542	89.878
20:53	MP10166-SD1	91.606	97.829	96.499	91.884	97.199	93.759
20:58	ZZZZZZ	87.513	94.696	94.694	88.532	84.876	80.323
21:03	ZZZZZZ	92.857	98.201	96.553	93.319	98.047	94.59
21:09	ZZZZZZ	91.965	101.888	98.464	92.751	98.89	92.899
21:14	ZZZZZZ	87.146	93.421	94.276	88.445	83.527	78.958
21:19	ZZZZZZ	93.014	103.463	98.86	92.941	98.366	92.527
21:24	ZZZZZZ	78.408	80.124	85.405	79.063	71.8	67.013 !a
21:37	ZZZZZZ	91.462	96.217	96.246	92.802	87.264	84.063
21:42	MA45617-CCVA8	95.484	97.644	99.169	96.031	96.046	93.356
21:49	MA45617-CCB8	94.884	98.503	97.463	95.347	97.417	95.698
21:54	ZZZZZZ	85.869	88.394	91.692	86.405	79.402	75.435
21:59	ZZZZZZ	81.15	83.193	88.391	82.017	74.186	69.488 !a
22:04	ZZZZZZ	94.039	101.046	100.789	94.948	93.171	88.983
22:09	MP10222-S3	91.444	96.522	97.803	92.521	88.41	84.1
22:14	MP10222-S4	91.854	97.187	98.201	92.406	88.611	84.597
22:19	ZZZZZZ	88.458	90.099	93.9	89.652	82.92	79.344
22:24	ZZZZZZ	91.607	95.64	96.21	92.47	95.779	92.924

INTERNAL STANDARD SUMMARY

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
Analyst: ZC Run ID: MA45617
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
22:29	ZZZZZZ	92.92	96.688	97.392	93.49	96.472	93.427
22:34	ZZZZZZ	92.266	96.955	95.969	93.147	96.381	92.762
22:39	MA45617-CCVA9	92.243	94.271	95.494	92.846	93.064	90.307
22:44	MA45617-CCB9	93.142	97.311	96.617	93.652	98.636	94.794
22:49	ZZZZZZ	92.55	95.885	95.689	93.194	95.703	92.945
22:54	ZZZZZZ	92.76	98.724	99.357	93.383	97.241	91.25
22:59	JC77181-1	90.375	91.521	99.356	92.08	90.303	84.282
23:04	JC77181-2	88.597	91.817	95.25	89.355	86.786	81.515
23:08	JC77181-3	87.595	91.101	95.182	88.424	86.312	80.372
23:13	JC77181-1F	89.073	93.41	97.401	89.987	88.156	82.366
23:18	JC77181-2F	88.254	91.434	95.966	89.405	86.185	81.127
23:23	JC77181-3F	87.918	91.422	95.551	88.674	86.09	81.007
23:28	MA45617-CCVA10	91.746	93.74	97.613	91.766	93.758	89.833
23:33	MA45617-CCB10	91.953	97.993	95.72	91.781	94.571	92.812
23:38	JC77181-1	90.141	92.653	91.107	90.674	92.563	92.391
23:43	JC77181-2	90.523	89.787	91.282	91.105	91.625	92.782
23:48	JC77181-3	91.143	88.971	90.645	91.454	90.813	93.147
23:53	JC77181-1F	90.322	90.045	91.745	91.3	92.033	92.706
23:58	JC77181-2F	90.68	89.213	90.167	90.765	91.032	93.124
00:03	JC77181-3F	90.255	89.056	90.654	91.236	90.881	92.994
00:08	ZZZZZZ	91.541	97.402	97.12	92.542	95.272	91.033
00:13	ZZZZZZ	91.973	97.697	99.976	93.51	95.106	90.862
00:18	ZZZZZZ	94.419	99.122	101.817	95.579	98.351	92.891
00:23	MA45617-CCVA11	93.729	92.978	98.389	94.217	93.808	91.192
00:29	MA45617-CCB11	95.899	98.294	98.862	96.722	98.513	96.363
00:34	ZZZZZZ	96.089	100.266	102.758	96.988	100.25	95.466
00:39	ZZZZZZ	97.209	100.977	104.009	98.539	102.9	96.355
00:44	ZZZZZZ	88.003	89.388	95.261	88.878	81.666	77.451
00:49	ZZZZZZ	95.054	102.239	101.61	95.842	99.085	94.527
00:54	ZZZZZZ	90.402	95.514	97.286	91.322	88.176	83.437
00:59	ZZZZZZ	93.923	101.203	100.56	93.988	98.784	93.533
01:04	ZZZZZZ	92.273	96.152	96.528	92.896	97.452	92.851
01:09	ZZZZZZ	89.25	96.228	95.759	89.813	89.748	85.307

INTERNAL STANDARD SUMMARY

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
Analyst: ZC Run ID: MA45617
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
01:14	ZZZZZZ	91.742	99.975	98.181	92.472	96.001	92.208
01:19	MA45617-CCVA12	89.625	92.706	94.757	90.41	90.407	87.738
01:24	MA45617-CCB12	89.67	94.831	93.447	90.074	93.226	91.307
01:29	ZZZZZZ	89.013	95.938	96.182	89.744	90.764	85.647
01:34	ZZZZZZ	87.431	93.436	96.099	90.242	89.351	83.994
01:39	ZZZZZZ	88.827	97.24	96.42	89.687	90.327	85.288
01:44	ZZZZZZ	87.01	97.069	94.514	87.524	89.404	83.984
01:49	ZZZZZZ	86.164	95.238	95.05	86.773	89.602	82.986
01:54	ZZZZZZ	83.942	92.183	92.219	85.573	83.925	78.612
01:59	ZZZZZZ	83.626	91.672	92.099	84.421	84.146	77.934
02:04	ZZZZZZ	84.215	92.322	92.124	85.148	83.797	78.146
02:09	MA45617-CCVA13	86.4	89.102	91.439	87.23	89.186	84.994
02:14	MA45617-CCB13	85.976	89.57	89.634	86.392	90.051	87.294
02:19	ZZZZZZ	86.409	88.35	89.682	86.741	90.09	87.688
02:24	ZZZZZZ	86.332	90.636	89.927	86.914	89.532	87.48
02:29	ZZZZZZ	86.036	90.888	90.419	86.536	90.477	87.717

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#17	Terbium (159-2)	70-130 %	70-130 %
Istd#18	Terbium (159-3)	70-130 %	70-130 %
Istd#19	Holmium (165-1)	70-130 %	70-130 %
Istd#20	Holmium (165-2)	70-130 %	70-130 %
Istd#21	Bismuth (209-1)	70-130 %	70-130 %
Istd#22	Bismuth (209-2)	70-130 %	70-130 %

(a) No samples reported for the elements associated with this internal standard.

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
QC Limits: result < 1/2 RL Run ID: MA45617 Units: ug/l

Time:				15:26		15:36		16:14	
Sample ID:				ICB1		CCB1		CCB2	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	25	1.1	20						
Antimony	2.0	.27	1.5						
Arsenic	0.50	.017	1.0	-0.000344	<1.5	0.0118	<1.5	0.00697	<1.5
Barium	1.0	.011	0.50						
Beryllium	0.50	.002	0.25						
Boron	25	1.5	20						
Cadmium	0.50	.004	2.0						
Calcium	250	21	50						
Chromium	1.0	.009	3.0						
Cobalt	0.50	.002	0.25						
Copper	2.0	.012	4.0						
Iron	25	.87	13						
Lead	0.50	.004	1.0						
Magnesium	250	1.9	130						
Manganese	1.0	.02	1.0						
Molybdenum	1.0	.018	0.50						
Nickel	1.0	.02	3.0						
Potassium	250	3.3	50						
Selenium	0.50	.025	0.50						
Silver	0.50	.005	0.50						
Sodium	250	3.6	100						
Strontium	5.0	.039	5.0						
Thallium	0.50	.003	0.50						
Tin	5.0	.038	2.5						
Titanium	1.0	.042	1.0						
Vanadium	1.0	.006	1.0						
Zinc	5.0	2.2	7.5						

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

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
QC Limits: result < 1/2 RL Run ID: MA45617 Units: ug/l

Time:				17:09		17:59		18:53	
Sample ID:				CCB3		CCB4		CCB5	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	25	1.1	20						
Antimony	2.0	.27	1.5						
Arsenic	0.50	.017	1.0	0.00232	<1.5	0.00535	<1.5	0.00726	<0.50
Barium	1.0	.011	0.50						
Beryllium	0.50	.002	0.25						
Boron	25	1.5	20						
Cadmium	0.50	.004	2.0						
Calcium	250	21	50						
Chromium	1.0	.009	3.0						
Cobalt	0.50	.002	0.25						
Copper	2.0	.012	4.0						
Iron	25	.87	13						
Lead	0.50	.004	1.0						
Magnesium	250	1.9	130						
Manganese	1.0	.02	1.0						
Molybdenum	1.0	.018	0.50						
Nickel	1.0	.02	3.0						
Potassium	250	3.3	50						
Selenium	0.50	.025	0.50						
Silver	0.50	.005	0.50						
Sodium	250	3.6	100						
Strontium	5.0	.039	5.0						
Thallium	0.50	.003	0.50						
Tin	5.0	.038	2.5						
Titanium	1.0	.042	1.0						
Vanadium	1.0	.006	1.0						
Zinc	5.0	2.2	7.5						

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

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
QC Limits: result < 1/2 RL Run ID: MA45617 Units: ug/l

Time:				19:48		20:43		21:49	
Sample ID:				CCB6		CCB7		CCB8	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	25	1.1	20						
Antimony	2.0	.27	1.5						
Arsenic	0.50	.017	1.0	0.00422	<0.50	0.00555	<0.50	-0.00125	<0.50
Barium	1.0	.011	0.50						
Beryllium	0.50	.002	0.25						
Boron	25	1.5	20						
Cadmium	0.50	.004	2.0						
Calcium	250	21	50						
Chromium	1.0	.009	3.0						
Cobalt	0.50	.002	0.25						
Copper	2.0	.012	4.0						
Iron	25	.87	13						
Lead	0.50	.004	1.0						
Magnesium	250	1.9	130						
Manganese	1.0	.02	1.0						
Molybdenum	1.0	.018	0.50						
Nickel	1.0	.02	3.0						
Potassium	250	3.3	50						
Selenium	0.50	.025	0.50						
Silver	0.50	.005	0.50						
Sodium	250	3.6	100						
Strontium	5.0	.039	5.0						
Thallium	0.50	.003	0.50						
Tin	5.0	.038	2.5						
Titanium	1.0	.042	1.0						
Vanadium	1.0	.006	1.0						
Zinc	5.0	2.2	7.5						

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

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
QC Limits: result < 1/2 RL Run ID: MA45617 Units: ug/l

Time:				22:44		23:33		00:29	
Sample ID:				CCB9		CCB10		CCB11	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	25	1.1	20						
Antimony	2.0	.27	1.5						
Arsenic	0.50	.017	1.0	0.00124	<1.5	0.141	<1.5	0.0626	<0.50
Barium	1.0	.011	0.50						
Beryllium	0.50	.002	0.25						
Boron	25	1.5	20						
Cadmium	0.50	.004	2.0						
Calcium	250	21	50						
Chromium	1.0	.009	3.0						
Cobalt	0.50	.002	0.25						
Copper	2.0	.012	4.0						
Iron	25	.87	13						
Lead	0.50	.004	1.0						
Magnesium	250	1.9	130						
Manganese	1.0	.02	1.0						
Molybdenum	1.0	.018	0.50						
Nickel	1.0	.02	3.0						
Potassium	250	3.3	50						
Selenium	0.50	.025	0.50						
Silver	0.50	.005	0.50						
Sodium	250	3.6	100						
Strontium	5.0	.039	5.0						
Thallium	0.50	.003	0.50						
Tin	5.0	.038	2.5						
Titanium	1.0	.042	1.0						
Vanadium	1.0	.006	1.0						
Zinc	5.0	2.2	7.5						

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

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA45617 Units: ug/l

Time:		15:16			15:21			15:31	
Sample ID:	ICVA	ICVA1		ICV	ICV1		CCVA	CCVA1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	60	61.2	102.0				50	49.4	98.8
Barium	anr								
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium									
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin	anr								
Titanium									
Vanadium	anr								
Zinc	anr								

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

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA45617 Units: ug/l

Time:		16:09			17:04			17:54	
Sample ID:	CCVA	CCVA2		CCVA	CCVA3		CCVA	CCVA4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	50	51.0	102.0	50	50.1	100.2	50	50.3	100.6
Barium	anr								
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium									
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin	anr								
Titanium									
Vanadium	anr								
Zinc	anr								

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

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA45617 Units: ug/l

Time:		18:48			19:43			20:38	
Sample ID:	CCVA	CCVA5		CCVA	CCVA6		CCVA	CCVA7	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	50	50.3	100.6	50	49.9	99.8	50	49.4	98.8
Barium	anr								
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium									
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin	anr								
Titanium									
Vanadium	anr								
Zinc	anr								

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

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA45617 Units: ug/l

Time:		21:42			22:39			23:28	
Sample ID:	CCVA	CCVA8		CCVA	CCVA9		CCVA	CCVA10	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	50	50.1	100.2	50	49.8	99.6	50	50.5	101.0
Barium	anr								
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium									
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin	anr								
Titanium									
Vanadium	anr								
Zinc	anr								

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

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA45617 Units: ug/l

Time:		00:23	
Sample ID:	CCVA	CCVA11	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	anr		
Arsenic	50	50.9	101.8
Barium	anr		
Beryllium	anr		
Boron			
Cadmium	anr		
Calcium			
Chromium	anr		
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	anr		
Magnesium			
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Potassium			
Selenium	anr		
Silver	anr		
Sodium			
Strontium			
Thallium	anr		
Tin	anr		
Titanium			
Vanadium	anr		
Zinc	anr		

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

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA45617 Units: ug/l

Time:			15:41	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Aluminum	25	25	anr	
Antimony	2.0	0.25	anr	
Arsenic	0.50	0.50	0.492	98.4
Barium	1.0	0.50	anr	
Beryllium	0.50	0.25	anr	
Boron	25	2.5		
Cadmium	0.50	0.25	anr	
Calcium	250	125		
Chromium	1.0	2.0	anr	
Cobalt	0.50	0.25	anr	
Copper	2.0	2.0	anr	
Iron	25	25	anr	
Lead	0.50	0.25	anr	
Magnesium	250	125		
Manganese	1.0	0.25	anr	
Molybdenum	1.0	0.50	anr	
Nickel	1.0	2.0	anr	
Potassium	250	125		
Selenium	0.50	0.50	anr	
Silver	0.50	1.0	anr	
Sodium	250	125		
Strontium	5.0	0.50		
Thallium	0.50	0.25	anr	
Tin	5.0	0.50	anr	
Titanium	1.0	0.50		
Vanadium	1.0	2.0	anr	
Zinc	5.0	2.0	anr	

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

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

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

File ID: XA110718M2L.CSV Date Analyzed: 11/07/18 Methods: SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA45617 Units: ug/l

Time:			15:47		15:59	
Sample ID:	ICSA	ICSAB	ICSAB1		ICSA1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	93800	93.8	87700	87.7
Antimony			0.0758		0.0406	
Arsenic		20	19.7	98.5	0.0820	
Barium			0.179		0.141	
Beryllium			0.00689		0.00605	
Boron		50	53.2	106.4	5.97	
Cadmium		20	19.5	97.5	-0.0961	
Calcium	100000	100000	96400	96.4	90800	90.8
Chromium		20	20.6	103.0	0.208	
Cobalt		20	19.2	96.0	0.0593	
Copper		20	17.6	88.0	0.211	
Iron	100000	100000	90300	90.3	85400	85.4
Lead			0.114		0.0892	
Magnesium	100000	100000	91200	91.2	85800	85.8
Manganese		20	20.4	102.0	0.411	
Molybdenum	2000	2000	2270	113.5	2090	104.5
Nickel		20	18.7	93.5	0.425	
Potassium	100000	100000	96600	96.6	92100	92.1
Selenium		20	20.0	100.0	0.0512	
Silver		20	19.1	95.5	0.0274	
Sodium	100000	100000	91700	91.7	87800	87.8
Strontium	2000	2000	2120	106.0	1970	98.5
Thallium			0.0293		0.0191	
Tin	2000	2000	2090	104.5	1970	98.5
Titanium	2000	2000	1950	97.5	1840	92.0
Vanadium		20	21.1	105.5	-0.00560	
Zinc		20	19.3	96.5	0.357	

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

QC Batch ID: MP10229
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 11/06/18

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	2.3	32		
Antimony	4.0	.55	1.7		
Arsenic	3.0	.034	.94	0.054	<3.0
Barium	2.0	.022	.73		
Beryllium	1.0	.004	.15		
Boron	50	3	14		
Cadmium	6.0	.008	.17		
Calcium	500	42	64		
Chromium	8.0	.018	.62		
Cobalt	1.0	.004	.17		
Copper	10	.024	1.9		
Iron	50	1.7	19		
Lead	3.0	.008	.52		
Magnesium	500	3.8	46		
Manganese	4.0	.04	.63		
Molybdenum	2.0	.036	.45		
Nickel	8.0	.04	.95		
Potassium	500	6.5	68		
Selenium	2.0	.05	.55		
Silver	2.0	.01	.16		
Sodium	500	7.1	140		
Strontium	20	.078	2.4		
Thallium	2.0	.006	.17		
Tin	10	.076	2.6		
Titanium	4.0	.084	1.6		
Vanadium	3.0	.012	1.8		
Zinc	20	4.4	5.4		

Associated samples MP10229: JC77181-1, JC77181-2, JC77181-3, JC77181-1F, JC77181-2F, JC77181-3F

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

QC Batch ID: MP10229
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 11/06/18

Metal	JC76939-2F Original MS		Spikelot MP6020AQ3%	Rec	QC Limits
Aluminum	anr				
Antimony	anr				
Arsenic	0.28	75.5	80	94.0	75-125
Barium	anr				
Beryllium	anr				
Boron					
Cadmium	anr				
Calcium					
Chromium	anr				
Cobalt	anr				
Copper					
Iron	anr				
Lead	anr				
Magnesium					
Manganese	anr				
Molybdenum	anr				
Nickel	anr				
Potassium					
Selenium	anr				
Silver	anr				
Sodium					
Strontium					
Thallium	anr				
Tin	anr				
Titanium					
Vanadium	anr				
Zinc	anr				

Associated samples MP10229: JC77181-1, JC77181-2, JC77181-3, JC77181-1F, JC77181-2F, JC77181-3F

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

QC Batch ID: MP10229
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 11/06/18

Metal	JC76939-2F Original	MSD	Spikelot MP6020AQ3%	Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony	anr					
Arsenic	0.28	74.6	80	92.9	1.2	20
Barium	anr					
Beryllium	anr					
Boron						
Cadmium	anr					
Calcium						
Chromium	anr					
Cobalt	anr					
Copper						
Iron	anr					
Lead	anr					
Magnesium						
Manganese	anr					
Molybdenum	anr					
Nickel	anr					
Potassium						
Selenium	anr					
Silver	anr					
Sodium						
Strontium						
Thallium	anr					
Tin	anr					
Titanium						
Vanadium	anr					
Zinc	anr					

Associated samples MP10229: JC77181-1, JC77181-2, JC77181-3, JC77181-1F, JC77181-2F, JC77181-3F

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

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

QC Batch ID: MP10229
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 11/06/18

Metal	BSP Result	Spikelot MP6020AQ3%	Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	75.9	80	94.9	80-120
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt	anr			
Copper				
Iron	anr			
Lead	anr			
Magnesium				
Manganese	anr			
Molybdenum	anr			
Nickel	anr			
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin	anr			
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP10229: JC77181-1, JC77181-2, JC77181-3, JC77181-1F, JC77181-2F, JC77181-3F

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

QC Batch ID: MP10229
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 11/06/18

Metal	JC76939-2F Original	SDL 2:10	%DIF	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	0.283	0.245	13.5 (a)	0-10
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt	anr			
Copper				
Iron	anr			
Lead	anr			
Magnesium				
Manganese	anr			
Molybdenum	anr			
Nickel	anr			
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin	anr			
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP10229: JC77181-1, JC77181-2, JC77181-3, JC77181-1F, JC77181-2F, JC77181-3F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

POST DIGESTATE SPIKE SUMMARY

Login Number: JC77181
Account: USACEPAP - USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

QC Batch ID: MP10229
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 11/06/18

Metal	Sample ml	Final ml	JC76939-2F Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic	9.14	10		.2589748	72.91245	0.2	4	80	90.8	75-125
Barium										
Beryllium										
Boron										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP10229: JC77181-1, JC77181-2, JC77181-3, JC77181-1F, JC77181-2F, JC77181-3F

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

Instrument Detection Limits

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

Instrument ID: AGICPMS1 **Effective Date:** 05/30/18

Analyte	IDL ug/l
Aluminum	.162
Aluminum	1.132
Antimony	.274
Arsenic	.511
Arsenic	.017
Barium	.011
Beryllium	.002
Boron	1.488
Cadmium	.009
Cadmium	.004
Calcium	21.1
Chromium	.028
Chromium	.009
Cobalt	.007
Cobalt	.002
Copper	.018
Copper	.012
Iron	1.37
Iron	.87
Lead	.004
Magnesium	.16
Magnesium	1.894
Manganese	.011
Manganese	.02
Molybdenum	.018
Nickel	.015
Nickel	.02
Potassium	1.74
Potassium	3.269
Selenium	.789
Selenium	.025
Silver	.005
Sodium	.571
Sodium	3.563
Strontium	.039
Thallium	.003
Tin	.023
Tin	.038
Titanium	.025
Titanium	.042
Vanadium	.11
Vanadium	.006
Zinc	.117
Zinc	2.2

Instrument Detection Limits

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

Instrument ID: AGICPMS1 **Effective Date:** 05/30/18

Analyte	IDL ug/l

The above applies to the following instrument runs:
MA45617

Instrument Linear Ranges

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

Instrument ID: AGICPMS1 **Effective Date:** 09/10/18

Analyte	Linear Range ug/l
Aluminum	10000
Aluminum	10000
Antimony	100
Arsenic	100
Arsenic	100
Barium	100
Beryllium	100
Boron	200
Cadmium	100
Cadmium	100
Calcium	10000
Chromium	100
Chromium	100
Cobalt	100
Cobalt	100
Copper	100
Copper	100
Iron	10000
Iron	10000
Lithium	100
Lead	100
Magnesium	10000
Magnesium	10000
Manganese	100
Manganese	100
Molybdenum	100
Nickel	100
Nickel	100
Potassium	10000
Potassium	10000
Selenium	400
Selenium	400
Silver	100
Sodium	10000
Sodium	10000
Strontium	100
Thallium	100
Tin	100
Tin	100
Titanium	100
Titanium	100
Tungsten	100
Uranium	100
Vanadium	100
Vanadium	100
Zinc	100

Instrument Linear Ranges

Job Number: JC77181
Account: USACEPAP USACE-Philadelphia District
Project: Delaware Valley Works Facility, PA

Instrument ID: AGICPMS1 **Effective Date:** 09/10/18

Analyte	Linear Range ug/l
Zinc	100

The above applies to the following instrument runs:
MA45617

Metals Analysis

Raw Data

Quantitation Report

File Name	001CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 13:50
Sample Name	STDA 4
Sample Type	CalBlk
Comment	0
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.004	ug/l	43.92	82.67	2.042E-05	Pulse	0.25	3
B			1	-1.130	ug/l	-0.58	5,016.42	1.238E-03	Pulse	0.15	3
Ca			1	-0.095	ug/l	-216.62	17,076.08	3.116E-03	Pulse	0.10	3
Sr			1	0.001	ug/l	364.11	1,163.44	1.635E-04	Pulse	0.10	3
Mo			1	-0.005	ug/l	-40.66	63.33	8.919E-06	Pulse	0.10	3
Ag			1	0.000	ug/l	-332.10	46.67	6.242E-06	Pulse	0.10	3
Sn			1	0.631	ug/l	1.62	17,774.03	2.383E-03	Pulse	0.10	3
Sb			1	-0.041	ug/l	-0.55	143.34	1.427E-05	Pulse	0.10	3
Ba			1	-0.002	ug/l	-199.83	70.00	6.960E-06	Pulse	0.10	3
Tl			1	-0.002	ug/l	-33.84	296.68	4.859E-05	Pulse	0.10	3
Pb			1	-0.001	ug/l	-163.35	170.01	2.781E-05	Pulse	0.10	3
Pb			1	0.003	ug/l	47.88	220.01	3.596E-05	Pulse	0.10	3
Pb			1	0.001	ug/l	88.66	836.71	1.369E-04	Pulse	0.10	3
Na			2	-0.309	ug/l	-77.90	5,955.58	3.982E-02	Pulse	0.30	3
Mg			2	-0.317	ug/l	-7.07	135.56	9.069E-04	Pulse	0.30	3
Al			2	-0.563	ug/l	-13.43	46.66	3.119E-04	Pulse	0.30	3
K			2	0.140	ug/l	689.51	6,232.35	4.168E-02	Pulse	0.30	3
Ca			2	0.342	ug/l	280.13	174.45	1.166E-03	Pulse	0.30	3
Ti			2	-0.070	ug/l	-16.64	2.22	1.491E-05	Pulse	0.30	3
V			2	0.005	ug/l	40.24	433.34	2.898E-03	Pulse	0.30	3
Cr			2	0.001	ug/l	427.89	345.56	2.310E-03	Pulse	0.30	3
Mn			2	0.001	ug/l	292.92	43.33	2.899E-04	Pulse	0.30	3
Fe			2	-0.571	ug/l	-1.45	2,060.16	1.377E-02	Pulse	0.30	3
Co			2	0.000	ug/l	-734.89	106.67	7.136E-04	Pulse	0.30	3
Ni			2	0.001	ug/l	1673.56	255.56	1.710E-03	Pulse	0.30	3
Cu			2	0.016	ug/l	18.76	502.24	3.358E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.022	ug/l	136.15	344.45	2.305E-03	Pulse	0.30	3
As			2	-0.001	ug/l	-361.01	12.33	8.258E-05	Pulse	1.00	3
Cd			2	-0.001	ug/l	-192.26	12.22	1.408E-05	Pulse	0.30	3
Sn			2	0.073	ug/l	27.07	2,772.50	3.202E-03	Pulse	0.30	3
Se			3	-0.075	ug/l	-136.55	60.20	4.050E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,050,600.33	0.36	100.0	Analog	0.10	3
1	Sc		5,480,230.96	0.31	100.0	Analog	0.10	3
1	Ge		1,023,972.38	0.48	100.0	Pulse	0.10	3
1	Ge		1,418,840.97	0.28	100.0	Pulse	0.10	3
1	Rh		7,105,044.48	1.10	100.0	Analog	0.10	3
1	In		7,459,614.85	0.55	100.0	Analog	0.10	3
1	Tb		10,047,285.27	0.33	100.0	Analog	0.10	3
1	Ho		941,653.29	0.62	100.0	Pulse	0.10	3
1	Bi		6,111,195.74	1.04	100.0	Analog	0.10	3
2	Sc		149,553.60	0.84	100.0	Pulse	0.30	3
2	Ge		91,670.42	1.39	100.0	Pulse	0.30	3
2	Ge		137,927.30	1.08	100.0	Pulse	0.30	3
2	Rh		2,928,983.28	0.60	100.0	Pulse	0.30	3
2	In		865,914.75	0.84	100.0	Pulse	0.30	3
2	Tb		3,528,567.64	0.14	100.0	Pulse	0.30	3
2	Ho		344,141.29	0.53	100.0	Pulse	0.30	3
2	Bi		2,449,801.08	0.27	100.0	Pulse	0.30	3
3	Sc		144,035.73	0.78	100.0	Pulse	0.30	3
3	Ge		97,436.01	0.79	100.0	Pulse	0.30	3
3	Ge		148,408.13	0.92	100.0	Pulse	0.30	3
3	Rh		1,835,239.37	0.31	100.0	Pulse	0.30	3
3	Tb		2,970,166.83	0.41	100.0	Pulse	0.30	3

Quantitation Report

File Name	002CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 13:55
Sample Name	STDA 4
Sample Type	CalBlk
Comment	0
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.004	ug/l	26.11	86.67	2.165E-05	Pulse	0.25	3
B			1	-1.143	ug/l	-0.99	4,787.47	1.196E-03	Pulse	0.15	3
Ca			1	-0.207	ug/l	-52.81	16,535.41	3.081E-03	Pulse	0.10	3
Sr			1	-0.001	ug/l	-183.29	983.40	1.413E-04	Pulse	0.10	3
Mo			1	-0.005	ug/l	-30.51	66.67	9.589E-06	Pulse	0.10	3
Ag			1	-0.001	ug/l	-16.86	23.33	3.131E-06	Pulse	0.10	3
Sn			1	0.644	ug/l	1.04	18,077.80	2.425E-03	Pulse	0.10	3
Sb			1	-0.041	ug/l	-4.24	140.01	1.410E-05	Pulse	0.10	3
Ba			1	0.001	ug/l	152.57	100.00	1.007E-05	Pulse	0.10	3
Tl			1	-0.002	ug/l	-76.05	253.35	4.218E-05	Pulse	0.10	3
Pb			1	0.001	ug/l	215.33	210.01	3.490E-05	Pulse	0.10	3
Pb			1	0.004	ug/l	68.41	233.34	3.867E-05	Pulse	0.10	3
Pb			1	0.002	ug/l	28.95	920.05	1.527E-04	Pulse	0.10	3
Na			2	-0.145	ug/l	-154.55	6,037.08	4.138E-02	Pulse	0.30	3
Mg			2	-0.305	ug/l	-19.09	140.00	9.593E-04	Pulse	0.30	3
Al			2	-0.517	ug/l	-18.34	54.44	3.737E-04	Pulse	0.30	3
K			2	0.349	ug/l	71.97	6,161.21	4.222E-02	Pulse	0.30	3
Ca			2	-0.818	ug/l	-112.77	145.56	9.979E-04	Pulse	0.30	3
Ti			2	-0.077	ug/l	-15.38	1.11	7.544E-06	Pulse	0.30	3
V			2	0.007	ug/l	150.07	433.35	2.968E-03	Pulse	0.30	3
Cr			2	0.005	ug/l	38.18	370.01	2.536E-03	Pulse	0.30	3
Mn			2	0.002	ug/l	333.29	44.44	3.039E-04	Pulse	0.30	3
Fe			2	-0.564	ug/l	-1.09	2,054.60	1.408E-02	Pulse	0.30	3
Co			2	0.001	ug/l	207.86	124.45	8.519E-04	Pulse	0.30	3
Ni			2	0.000	ug/l	3525.91	248.90	1.704E-03	Pulse	0.30	3
Cu			2	0.008	ug/l	54.77	410.01	2.811E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.040	ug/l	16.77	361.12	2.475E-03	Pulse	0.30	3
As			2	-0.001	ug/l	-226.54	12.00	8.226E-05	Pulse	1.00	3
Cd			2	0.001	ug/l	263.60	17.77	2.080E-05	Pulse	0.30	3
Sn			2	0.105	ug/l	22.89	2,853.63	3.341E-03	Pulse	0.30	3
Se			3	-0.135	ug/l	-92.55	49.20	3.429E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,001,136.36	0.82	100.0	Analog	0.10	3
1	Sc		5,366,305.54	0.77	100.0	Mix	0.10	3
1	Ge		1,014,365.90	0.65	100.0	Pulse	0.10	3
1	Ge		1,403,335.08	1.04	100.0	Pulse	0.10	3
1	Rh		6,959,991.36	0.53	100.0	Analog	0.10	3
1	In		7,454,065.32	0.97	100.0	Analog	0.10	3
1	Tb		9,934,383.81	0.28	100.0	Analog	0.10	3
1	Ho		936,095.90	0.49	100.0	Pulse	0.10	3
1	Bi		6,025,829.91	1.13	100.0	Analog	0.10	3
2	Sc		145,914.89	0.75	100.0	Pulse	0.30	3
2	Ge		90,316.42	0.45	100.0	Pulse	0.30	3
2	Ge		136,145.89	0.39	100.0	Pulse	0.30	3
2	Rh		2,872,302.73	0.24	100.0	Pulse	0.30	3
2	In		854,100.07	0.29	100.0	Pulse	0.30	3
2	Tb		3,470,888.54	0.27	100.0	Pulse	0.30	3
2	Ho		338,797.14	0.75	100.0	Pulse	0.30	3
2	Bi		2,392,661.36	0.48	100.0	Pulse	0.30	3
3	Sc		139,065.09	1.20	100.0	Pulse	0.30	3
3	Ge		95,208.30	0.47	100.0	Pulse	0.30	3
3	Ge		143,491.67	0.42	100.0	Pulse	0.30	3
3	Rh		1,769,076.04	0.47	100.0	Pulse	0.30	3
3	Tb		2,866,578.36	0.48	100.0	Pulse	0.30	3

Quantitation Report

File Name	003CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 14:00
Sample Name	STDA 4
Sample Type	CalBlk
Comment	0
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.001	ug/l	61.55	41.33	1.009E-05	Pulse	0.25	3
B			1	-1.162	ug/l	-0.78	4,634.08	1.133E-03	Pulse	0.15	3
Ca			1	-0.220	ug/l	-121.71	16,482.08	3.077E-03	Pulse	0.10	3
Sr			1	-0.002	ug/l	-67.80	950.06	1.374E-04	Pulse	0.10	3
Mo			1	-0.008	ug/l	-14.83	20.00	2.863E-06	Pulse	0.10	3
Ag			1	0.000	ug/l	38.53	73.33	9.964E-06	Pulse	0.10	3
Sn			1	0.652	ug/l	3.83	18,034.35	2.449E-03	Pulse	0.10	3
Sb			1	-0.042	ug/l	-3.04	100.01	1.016E-05	Pulse	0.10	3
Ba			1	0.002	ug/l	94.71	113.34	1.155E-05	Pulse	0.10	3
Tl			1	-0.002	ug/l	-40.73	236.68	3.949E-05	Pulse	0.10	3
Pb			1	0.001	ug/l	276.96	210.01	3.500E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	-196.01	136.67	2.281E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	-478.78	693.37	1.157E-04	Pulse	0.10	3
Na			2	-0.066	ug/l	-145.72	6,189.14	4.214E-02	Pulse	0.30	3
Mg			2	-0.311	ug/l	-14.44	136.67	9.308E-04	Pulse	0.30	3
Al			2	-0.436	ug/l	-5.97	71.11	4.842E-04	Pulse	0.30	3
K			2	0.675	ug/l	95.72	6,325.72	4.307E-02	Pulse	0.30	3
Ca			2	-0.133	ug/l	-799.26	161.11	1.097E-03	Pulse	0.30	3
Ti			2	-0.070	ug/l	-33.96	2.22	1.517E-05	Pulse	0.30	3
V			2	0.004	ug/l	185.38	416.68	2.837E-03	Pulse	0.30	3
Cr			2	0.002	ug/l	269.23	346.68	2.360E-03	Pulse	0.30	3
Mn			2	0.003	ug/l	142.71	48.89	3.330E-04	Pulse	0.30	3
Fe			2	-0.570	ug/l	-4.30	2,024.60	1.378E-02	Pulse	0.30	3
Co			2	-0.001	ug/l	-391.66	96.67	6.582E-04	Pulse	0.30	3
Ni			2	-0.009	ug/l	-77.12	214.45	1.460E-03	Pulse	0.30	3
Cu			2	0.003	ug/l	133.06	365.57	2.489E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.027	ug/l	72.79	345.56	2.353E-03	Pulse	0.30	3
As			2	0.007	ug/l	25.32	17.67	1.203E-04	Pulse	1.00	3
Cd			2	-0.002	ug/l	-224.99	11.11	1.304E-05	Pulse	0.30	3
Sn			2	0.101	ug/l	15.08	2,839.18	3.326E-03	Pulse	0.30	3
Se			3	0.063	ug/l	67.96	78.67	5.461E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,091,388.48	0.98	100.0	Mix	0.10	3
1	Sc		5,355,949.92	0.25	100.0	Mix	0.10	3
1	Ge		1,012,531.99	1.66	100.0	Pulse	0.10	3
1	Ge		1,399,817.11	1.01	100.0	Pulse	0.10	3
1	Rh		6,916,531.98	1.86	100.0	Analog	0.10	3
1	In		7,362,483.26	0.78	100.0	Analog	0.10	3
1	Tb		9,825,029.23	1.12	100.0	Analog	0.10	3
1	Ho		935,038.58	1.97	100.0	Pulse	0.10	3
1	Bi		5,987,641.37	0.92	100.0	Analog	0.10	3
2	Sc		146,880.37	0.21	100.0	Pulse	0.30	3
2	Ge		90,546.68	1.17	100.0	Pulse	0.30	3
2	Ge		136,061.56	0.59	100.0	Pulse	0.30	3
2	Rh		2,875,061.28	0.25	100.0	Pulse	0.30	3
2	In		853,639.77	0.50	100.0	Pulse	0.30	3
2	Tb		3,461,284.79	0.38	100.0	Pulse	0.30	3
2	Ho		337,791.32	0.09	100.0	Pulse	0.30	3
2	Bi		2,388,277.54	0.26	100.0	Pulse	0.30	3
3	Sc		139,104.02	0.10	100.0	Pulse	0.30	3
3	Ge		95,139.26	0.77	100.0	Pulse	0.30	3
3	Ge		144,073.75	0.97	100.0	Pulse	0.30	3
3	Rh		1,774,443.82	0.23	100.0	Pulse	0.30	3
3	Tb		2,872,783.36	0.68	100.0	Pulse	0.30	3

Quantitation Report

File Name	004CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 14:05
Sample Name	STDB
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.512	ug/l	1.79	7,352.34	1.817E-03	Pulse	0.25	3
B			1	23.496	ug/l	0.65	333,735.20	8.247E-02	Pulse	0.15	3
Ca			1	247.311	ug/l	0.29	425,500.06	7.932E-02	Pulse	0.10	3
Sr			1	4.838	ug/l	0.72	391,753.65	5.590E-02	Pulse	0.10	3
Mo			1	0.968	ug/l	4.15	14,677.26	2.095E-03	Pulse	0.10	3
Ag			1	0.488	ug/l	6.91	19,742.93	2.654E-03	Pulse	0.10	3
Sn			1	4.846	ug/l	2.78	119,646.11	1.608E-02	Pulse	0.10	3
Sb			1	1.959	ug/l	0.99	53,181.00	5.397E-03	Pulse	0.10	3
Ba			1	1.010	ug/l	2.26	11,361.32	1.153E-03	Pulse	0.10	3
Tl			1	0.492	ug/l	2.39	34,564.50	5.839E-03	Pulse	0.10	3
Pb			1	0.504	ug/l	1.87	11,761.77	1.987E-03	Pulse	0.10	3
Pb			1	0.513	ug/l	4.65	10,507.52	1.775E-03	Pulse	0.10	3
Pb			1	0.506	ug/l	0.83	47,992.57	8.108E-03	Pulse	0.10	3
Na			2	246.638	ug/l	0.31	352,907.54	2.396E+00	Pulse	0.30	3
Mg			2	251.423	ug/l	0.25	163,575.96	1.111E+00	Pulse	0.30	3
Al			2	24.703	ug/l	2.61	5,068.59	3.441E-02	Pulse	0.30	3
K			2	246.797	ug/l	1.30	100,332.37	6.813E-01	Pulse	0.30	3
Ca			2	267.689	ug/l	1.98	5,868.87	3.985E-02	Pulse	0.30	3
Ti			2	0.826	ug/l	22.58	147.78	1.003E-03	Pulse	0.30	3
V			2	1.000	ug/l	4.42	6,233.47	4.232E-02	Pulse	0.30	3
Cr			2	1.029	ug/l	1.83	8,356.65	5.675E-02	Pulse	0.30	3
Mn			2	0.978	ug/l	4.36	3,739.36	2.539E-02	Pulse	0.30	3
Fe			2	24.559	ug/l	0.61	164,808.62	1.119E+00	Pulse	0.30	3
Co			2	0.525	ug/l	4.27	7,439.54	5.052E-02	Pulse	0.30	3
Ni			2	1.014	ug/l	4.99	4,149.47	2.817E-02	Pulse	0.30	3
Cu			2	2.039	ug/l	4.18	21,567.65	1.465E-01	Pulse	0.30	3
Zn			2	4.959	ug/l	3.15	7,290.59	4.951E-02	Pulse	0.30	3
As			2	0.535	ug/l	2.54	396.68	2.694E-03	Pulse	1.00	3
Cd			2	0.520	ug/l	3.72	1,169.35	1.365E-03	Pulse	0.30	3
Sn			2	4.444	ug/l	1.11	19,323.09	2.256E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.199	ug/l	33.84	99.73	6.848E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,046,584.78	0.49	98.9	Mix	0.10	3
1	Sc		5,364,191.80	1.23	100.2	Mix	0.10	3
1	Ge		1,019,085.14	0.30	100.6	Pulse	0.10	3
1	Ge		1,402,643.00	0.73	100.2	Pulse	0.10	3
1	Rh		7,008,788.44	1.14	101.3	Analog	0.10	3
1	In		7,441,956.95	0.80	101.1	Analog	0.10	3
1	Tb		9,853,340.06	0.54	100.3	Analog	0.10	3
1	Ho		937,966.26	0.49	100.3	Pulse	0.10	3
1	Bi		5,919,615.95	0.70	98.9	Mix	0.10	3
2	Sc		147,269.27	0.53	100.3	Pulse	0.30	3
2	Ge		90,488.67	0.51	99.9	Pulse	0.30	3
2	Ge		136,552.84	1.05	100.4	Pulse	0.30	3
2	Rh		2,882,094.26	0.58	100.2	Pulse	0.30	3
2	In		856,677.92	0.88	100.4	Pulse	0.30	3
2	Tb		3,485,568.47	0.58	100.7	Pulse	0.30	3
2	Ho		339,840.07	0.53	100.6	Pulse	0.30	3
2	Bi		2,399,067.96	0.64	100.5	Pulse	0.30	3
3	Sc		140,594.11	1.11	101.1	Pulse	0.30	3
3	Ge		95,582.97	0.35	100.5	Pulse	0.30	3
3	Ge		145,706.37	0.81	101.1	Pulse	0.30	3
3	Rh		1,786,635.21	0.26	100.7	Pulse	0.30	3
3	Tb		2,895,773.63	0.74	100.8	Pulse	0.30	3

Quantitation Report

File Name	005CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 14:10
Sample Name	STDC
Sample Type	CalStd
Comment	5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	5.041	ug/l	0.90	72,742.56	1.782E-02	Pulse	0.25	3
B			1	4.105	ug/l	2.00	75,562.73	1.851E-02	Pulse	0.15	3
Ca			1	3.645	ug/l	8.78	22,599.47	4.268E-03	Pulse	0.10	3
Sr			1	4.971	ug/l	0.28	395,344.19	5.742E-02	Pulse	0.10	3
Mo			1	5.025	ug/l	0.70	74,329.33	1.080E-02	Pulse	0.10	3
Ag			1	5.056	ug/l	1.98	200,563.36	2.741E-02	Pulse	0.10	3
Sn			1	5.217	ug/l	1.27	126,468.52	1.728E-02	Pulse	0.10	3
Sb			1	4.913	ug/l	0.92	130,706.60	1.335E-02	Pulse	0.10	3
Ba			1	5.046	ug/l	2.62	56,018.67	5.723E-03	Pulse	0.10	3
Tl			1	4.930	ug/l	2.48	343,153.43	5.790E-02	Pulse	0.10	3
Pb			1	5.049	ug/l	3.80	116,221.36	1.961E-02	Pulse	0.10	3
Pb			1	5.075	ug/l	3.50	102,820.87	1.735E-02	Pulse	0.10	3
Pb			1	5.009	ug/l	2.91	469,031.71	7.914E-02	Pulse	0.10	3
Na			2	4.096	ug/l	2.97	12,068.85	8.186E-02	Pulse	0.30	3
Mg			2	4.529	ug/l	1.96	3,283.70	2.227E-02	Pulse	0.30	3
Al			2	4.783	ug/l	2.16	1,110.05	7.528E-03	Pulse	0.30	3
K			2	5.148	ug/l	9.10	8,059.80	5.467E-02	Pulse	0.30	3
Ca			2	28.058	ug/l	6.38	763.37	5.176E-03	Pulse	0.30	3
Ti			2	4.887	ug/l	7.96	807.81	5.481E-03	Pulse	0.30	3
V			2	5.173	ug/l	1.90	30,615.07	2.076E-01	Pulse	0.30	3
Cr			2	5.079	ug/l	1.42	39,968.27	2.711E-01	Pulse	0.30	3
Mn			2	4.972	ug/l	2.28	18,877.57	1.280E-01	Pulse	0.30	3
Fe			2	4.369	ug/l	1.14	34,065.08	2.310E-01	Pulse	0.30	3
Co			2	5.110	ug/l	1.52	71,480.63	4.848E-01	Pulse	0.30	3
Ni			2	5.036	ug/l	1.33	19,642.96	1.332E-01	Pulse	0.30	3
Cu			2	5.079	ug/l	1.09	53,291.53	3.614E-01	Pulse	0.30	3
Zn			2	5.035	ug/l	1.64	7,407.30	5.024E-02	Pulse	0.30	3
As			2	5.044	ug/l	0.68	3,634.08	2.465E-02	Pulse	1.00	3
Cd			2	5.142	ug/l	1.13	11,407.34	1.334E-02	Pulse	0.30	3
Sn			2	4.788	ug/l	0.62	20,595.83	2.408E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	5.048	ug/l	0.74	826.49	5.642E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,082,746.84	0.30	99.8	Pulse	0.10	3
1	Sc		5,295,129.92	0.59	98.9	Mix	0.10	3
1	Ge		1,014,999.15	0.57	100.2	Pulse	0.10	3
1	Ge		1,397,193.57	0.89	99.8	Pulse	0.10	3
1	Rh		6,884,832.19	0.73	99.5	Analog	0.10	3
1	In		7,318,301.13	1.36	99.4	Analog	0.10	3
1	Tb		9,788,157.15	1.00	99.6	Analog	0.10	3
1	Ho		932,285.27	1.23	99.7	Pulse	0.10	3
1	Bi		5,928,288.25	1.53	99.0	Mix	0.10	3
2	Sc		147,450.97	0.83	100.4	Pulse	0.30	3
2	Ge		90,640.32	0.42	100.1	Pulse	0.30	3
2	Ge		137,223.58	0.45	100.9	Pulse	0.30	3
2	Rh		2,879,202.25	0.21	100.1	Pulse	0.30	3
2	In		855,319.61	0.34	100.2	Pulse	0.30	3
2	Tb		3,470,271.53	0.37	100.3	Pulse	0.30	3
2	Ho		340,299.25	0.49	100.7	Pulse	0.30	3
2	Bi		2,394,945.39	0.50	100.3	Pulse	0.30	3
3	Sc		138,141.73	0.41	99.3	Pulse	0.30	3
3	Ge		95,179.44	1.06	100.0	Pulse	0.30	3
3	Ge		146,481.60	0.36	101.7	Pulse	0.30	3
3	Rh		1,759,900.76	0.44	99.2	Pulse	0.30	3
3	Tb		2,844,816.41	0.16	99.0	Pulse	0.30	3

Quantitation Report

File Name	006CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 14:15
Sample Name	STDD
Sample Type	CalStd
Comment	25
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	24.977	ug/l	0.22	355,950.26	8.825E-02	Pulse	0.25	3
B			1	23.424	ug/l	1.09	331,699.83	8.224E-02	Pulse	0.15	3
Ca			1	34.164	ug/l	3.06	71,912.80	1.367E-02	Pulse	0.10	3
Sr			1	24.755	ug/l	1.30	1,957,959.24	2.854E-01	Pulse	0.10	3
Mo			1	24.875	ug/l	0.93	366,178.26	5.337E-02	Pulse	0.10	3
Ag			1	24.751	ug/l	1.17	987,354.05	1.341E-01	Pulse	0.10	3
Sn			1	24.597	ug/l	1.18	590,745.84	8.026E-02	Pulse	0.10	3
Sb			1	24.915	ug/l	0.28	656,643.73	6.721E-02	Pulse	0.10	3
Ba			1	24.829	ug/l	1.42	274,761.01	2.812E-02	Pulse	0.10	3
Tl			1	24.563	ug/l	1.30	1,698,276.07	2.882E-01	Pulse	0.10	3
Pb			1	25.232	ug/l	2.08	576,789.73	9.789E-02	Pulse	0.10	3
Pb			1	25.198	ug/l	1.62	507,082.86	8.605E-02	Pulse	0.10	3
Pb			1	25.004	ug/l	1.51	2,325,198.25	3.946E-01	Pulse	0.10	3
Na			2	24.610	ug/l	2.74	40,450.48	2.776E-01	Pulse	0.30	3
Mg			2	25.145	ug/l	1.16	16,488.17	1.132E-01	Pulse	0.30	3
Al			2	24.508	ug/l	1.95	4,975.24	3.415E-02	Pulse	0.30	3
K			2	25.221	ug/l	4.23	15,547.36	1.067E-01	Pulse	0.30	3
Ca			2	159.744	ug/l	5.90	3,530.42	2.423E-02	Pulse	0.30	3
Ti			2	25.162	ug/l	4.39	4,054.99	2.784E-02	Pulse	0.30	3
V			2	25.516	ug/l	1.36	147,684.84	1.014E+00	Pulse	0.30	3
Cr			2	25.405	ug/l	1.52	196,211.92	1.347E+00	Pulse	0.30	3
Mn			2	25.292	ug/l	1.64	94,718.50	6.502E-01	Pulse	0.30	3
Fe			2	24.485	ug/l	0.40	162,578.40	1.116E+00	Pulse	0.30	3
Co			2	25.317	ug/l	0.21	349,511.24	2.399E+00	Pulse	0.30	3
Ni			2	25.431	ug/l	1.53	96,999.22	6.658E-01	Pulse	0.30	3
Cu			2	25.344	ug/l	1.09	261,468.83	1.795E+00	Pulse	0.30	3
Zn			2	25.334	ug/l	2.31	35,595.33	2.443E-01	Pulse	0.30	3
As			2	25.026	ug/l	0.07	17,764.66	1.219E-01	Pulse	1.00	3
Cd			2	24.941	ug/l	1.05	55,110.04	6.462E-02	Pulse	0.30	3
Sn			2	24.703	ug/l	0.28	95,746.58	1.123E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	24.755	ug/l	0.24	3,811.18	2.579E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,033,482.31	0.71	98.6	Mix	0.10	3
1	Sc		5,260,918.26	1.41	98.2	Mix	0.10	3
1	Ge		1,011,157.98	0.88	99.9	Pulse	0.10	3
1	Ge		1,405,136.33	1.05	100.4	Pulse	0.10	3
1	Rh		6,861,447.81	0.64	99.2	Analog	0.10	3
1	In		7,361,323.19	0.97	100.0	Analog	0.10	3
1	Tb		9,770,504.02	1.14	99.4	Analog	0.10	3
1	Ho		931,681.13	1.36	99.6	Pulse	0.10	3
1	Bi		5,893,698.66	1.82	98.4	Mix	0.10	3
2	Sc		145,699.80	0.90	99.2	Pulse	0.30	3
2	Ge		91,862.76	0.12	101.5	Pulse	0.30	3
2	Ge		137,958.76	0.46	101.4	Pulse	0.30	3
2	Rh		2,866,393.92	0.29	99.7	Pulse	0.30	3
2	In		852,820.30	0.14	99.9	Pulse	0.30	3
2	Tb		3,466,754.93	0.28	100.2	Pulse	0.30	3
2	Ho		339,599.42	0.20	100.5	Pulse	0.30	3
2	Bi		2,404,443.86	0.21	100.7	Pulse	0.30	3
3	Sc		140,310.13	0.40	100.9	Pulse	0.30	3
3	Ge		97,934.49	1.27	102.9	Pulse	0.30	3
3	Ge		147,788.64	1.28	102.6	Pulse	0.30	3
3	Rh		1,789,413.40	0.05	100.8	Pulse	0.30	3
3	Tb		2,906,568.15	0.48	101.2	Pulse	0.30	3

Quantitation Report

File Name	007CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 14:20
Sample Name	STDE
Sample Type	CalStd
Comment	50
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	50.418	ug/l	1.94	716,418.90	1.781E-01	Pulse	0.25	3
B			1	48.882	ug/l	1.80	668,527.20	1.662E-01	Pulse	0.15	3
Ca			1	65.239	ug/l	2.25	122,692.63	2.324E-02	Pulse	0.10	3
Sr			1	49.331	ug/l	1.41	3,941,054.73	5.685E-01	Pulse	0.10	3
Mo			1	49.699	ug/l	0.92	739,033.04	1.066E-01	Pulse	0.10	3
Ag			1	49.346	ug/l	1.18	1,985,977.63	2.674E-01	Pulse	0.10	3
Sn			1	49.583	ug/l	0.94	1,199,089.83	1.614E-01	Pulse	0.10	3
Sb			1	49.380	ug/l	0.79	1,317,231.15	1.331E-01	Pulse	0.10	3
Ba			1	49.748	ug/l	1.03	557,662.62	5.634E-02	Pulse	0.10	3
Tl			1	48.646	ug/l	0.20	3,456,408.70	5.707E-01	Pulse	0.10	3
Pb			1	49.983	ug/l	0.74	1,174,193.47	1.939E-01	Pulse	0.10	3
Pb			1	49.849	ug/l	0.26	1,030,882.20	1.702E-01	Pulse	0.10	3
Pb			1	49.454	ug/l	0.26	4,725,870.89	7.803E-01	Pulse	0.10	3
Na			2	48.751	ug/l	1.08	74,366.43	5.080E-01	Pulse	0.30	3
Mg			2	49.681	ug/l	1.22	32,402.16	2.213E-01	Pulse	0.30	3
Al			2	47.621	ug/l	3.54	9,566.16	6.535E-02	Pulse	0.30	3
K			2	49.542	ug/l	0.29	24,857.49	1.698E-01	Pulse	0.30	3
Ca			2	315.230	ug/l	1.42	6,841.50	4.673E-02	Pulse	0.30	3
Ti			2	49.978	ug/l	2.09	8,080.95	5.520E-02	Pulse	0.30	3
V			2	49.856	ug/l	0.61	289,591.57	1.978E+00	Pulse	0.30	3
Cr			2	50.023	ug/l	0.24	387,915.85	2.650E+00	Pulse	0.30	3
Mn			2	50.074	ug/l	1.04	188,402.97	1.287E+00	Pulse	0.30	3
Fe			2	49.244	ug/l	0.80	322,793.38	2.205E+00	Pulse	0.30	3
Co			2	50.034	ug/l	0.37	693,946.15	4.740E+00	Pulse	0.30	3
Ni			2	50.019	ug/l	1.20	191,463.83	1.308E+00	Pulse	0.30	3
Cu			2	50.181	ug/l	0.58	519,884.27	3.551E+00	Pulse	0.30	3
Zn			2	49.834	ug/l	0.93	70,067.43	4.786E-01	Pulse	0.30	3
As			2	49.671	ug/l	0.17	35,415.49	2.419E-01	Pulse	1.00	3
Cd			2	50.142	ug/l	0.81	111,056.05	1.299E-01	Pulse	0.30	3
Sn			2	49.922	ug/l	0.24	191,458.95	2.239E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	51.184	ug/l	0.74	7,592.29	5.281E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,022,616.34	1.45	98.3	Analog	0.10	3
1	Sc		5,279,253.47	0.30	98.6	Mix	0.10	3
1	Ge		1,016,638.24	0.34	100.4	Pulse	0.10	3
1	Ge		1,402,916.59	0.77	100.2	Pulse	0.10	3
1	Rh		6,932,267.60	0.14	100.2	Analog	0.10	3
1	In		7,427,321.16	0.80	100.9	Analog	0.10	3
1	Tb		9,898,277.14	0.25	100.7	Analog	0.10	3
1	Ho		948,583.45	0.72	101.4	Pulse	0.10	3
1	Bi		6,056,419.08	0.88	101.1	Analog	0.10	3
2	Sc		146,399.36	0.37	99.7	Pulse	0.30	3
2	Ge		90,324.34	0.61	99.8	Pulse	0.30	3
2	Ge		136,105.94	0.69	100.0	Pulse	0.30	3
2	Rh		2,881,690.30	0.49	100.2	Pulse	0.30	3
2	In		854,920.19	0.28	100.1	Pulse	0.30	3
2	Tb		3,481,326.73	0.39	100.6	Pulse	0.30	3
2	Ho		342,524.72	0.72	101.4	Pulse	0.30	3
2	Bi		2,412,562.06	0.56	101.0	Pulse	0.30	3
3	Sc		138,486.64	0.55	99.6	Pulse	0.30	3
3	Ge		94,644.06	0.52	99.5	Pulse	0.30	3
3	Ge		143,778.95	0.50	99.8	Pulse	0.30	3
3	Rh		1,771,596.39	0.87	99.8	Pulse	0.30	3
3	Tb		2,894,480.09	0.93	100.8	Pulse	0.30	3

Quantitation Report

File Name	008CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 14:25
Sample Name	STDF
Sample Type	CalStd
Comment	100
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	98.969	ug/l	0.77	1,442,691.29	3.497E-01	Pulse	0.25	3
B			1	96.033	ug/l	1.55	1,327,539.91	3.218E-01	Pulse	0.15	3
Ca			1	130.877	ug/l	0.31	230,848.44	4.346E-02	Pulse	0.10	3
Sr			1	99.349	ug/l	1.33	7,916,963.63	1.145E+00	Analog	0.10	3
Mo			1	99.795	ug/l	1.54	1,480,259.67	2.140E-01	Pulse	0.10	3
Ag			1	101.612	ug/l	2.32	4,033,011.19	5.506E-01	Pulse	0.10	3
Sn			1	99.655	ug/l	2.13	2,374,217.93	3.241E-01	Pulse	0.10	3
Sb			1	99.378	ug/l	1.10	2,653,238.50	2.677E-01	Pulse	0.10	3
Ba			1	99.714	ug/l	1.35	1,119,206.91	1.129E-01	Pulse	0.10	3
Tl			1	100.005	ug/l	1.46	7,114,285.52	1.173E+00	Analog	0.10	3
Pb			1	99.952	ug/l	1.86	2,350,829.13	3.877E-01	Pulse	0.10	3
Pb			1	99.987	ug/l	1.88	2,070,227.05	3.414E-01	Pulse	0.10	3
Pb			1	99.481	ug/l	1.80	9,517,757.98	1.570E+00	Pulse	0.10	3
Na			2	102.677	ug/l	11.15	140,463.42	1.023E+00	Pulse	0.30	3
Mg			2	105.317	ug/l	11.30	64,069.41	4.666E-01	Pulse	0.30	3
Al			2	104.442	ug/l	9.76	19,522.58	1.420E-01	Pulse	0.30	3
K			2	103.582	ug/l	10.19	42,621.97	3.099E-01	Pulse	0.30	3
Ca			2	682.436	ug/l	10.52	13,720.26	9.987E-02	Pulse	0.30	3
Ti			2	108.465	ug/l	9.22	16,456.03	1.197E-01	Pulse	0.30	3
V			2	107.141	ug/l	10.32	583,633.45	4.248E+00	Pulse	0.30	3
Cr			2	106.941	ug/l	10.79	777,694.03	5.662E+00	Pulse	0.30	3
Mn			2	106.918	ug/l	10.83	377,364.79	2.748E+00	Pulse	0.30	3
Fe			2	104.386	ug/l	10.49	636,134.45	4.630E+00	Pulse	0.30	3
Co			2	106.555	ug/l	10.71	1,386,468.87	1.009E+01	Pulse	0.30	3
Ni			2	106.950	ug/l	11.04	383,770.29	2.795E+00	Pulse	0.30	3
Cu			2	106.599	ug/l	11.10	1,035,582.80	7.541E+00	Pulse	0.30	3
Zn			2	106.760	ug/l	11.32	140,452.82	1.023E+00	Pulse	0.30	3
As			2	106.693	ug/l	10.23	71,382.21	5.195E-01	Pulse	1.00	3
Cd			2	106.369	ug/l	8.17	220,194.34	2.755E-01	Pulse	0.30	3
Sn			2	107.088	ug/l	8.58	381,176.84	4.771E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	101.496	ug/l	1.07	14,881.61	1.042E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,126,133.45	0.49	100.8	Pulse	0.10	3
1	Sc		5,311,805.34	1.26	99.2	Mix	0.10	3
1	Ge		1,013,818.37	0.75	100.1	Pulse	0.10	3
1	Ge		1,402,519.67	0.49	100.2	Pulse	0.10	3
1	Rh		6,916,079.07	0.84	100.0	Analog	0.10	3
1	In		7,326,386.34	1.80	99.5	Analog	0.10	3
1	Tb		9,912,666.73	1.79	100.9	Analog	0.10	3
1	Ho		952,709.33	0.82	101.9	Pulse	0.10	3
1	Bi		6,064,759.08	0.90	101.3	Analog	0.10	3
2	Sc		138,300.20	9.56	94.2	Pulse	0.30	3
2	Ge		85,484.38	6.72	94.4	Pulse	0.30	3
2	Ge		128,844.51	5.16	94.7	Pulse	0.30	3
2	Rh		2,692,188.02	8.41	93.6	Pulse	0.30	3
2	In		802,678.41	8.15	94.0	Pulse	0.30	3
2	Tb		3,282,496.54	8.48	94.8	Pulse	0.30	3
2	Ho		320,759.00	8.65	95.0	Pulse	0.30	3
2	Bi		2,297,621.16	6.72	96.2	Pulse	0.30	3
3	Sc		137,709.37	0.36	99.0	Pulse	0.30	3
3	Ge		93,622.70	0.46	98.4	Pulse	0.30	3
3	Ge		142,776.26	1.46	99.1	Pulse	0.30	3
3	Rh		1,755,384.38	0.21	98.9	Pulse	0.30	3
3	Tb		2,872,243.63	0.61	100.0	Pulse	0.30	3

Quantitation Report

File Name	009CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 14:29
Sample Name	STDG
Sample Type	CalStd
Comment	500MIN
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.009	ug/l	23.55	164.00	4.011E-05	Pulse	0.25	3
B			1	201.856	ug/l	0.65	2,745,740.73	6.708E-01	Pulse	0.15	3
Ca			1	511.997	ug/l	0.62	856,165.35	1.609E-01	Pulse	0.10	3
Sr			1	0.022	ug/l	7.15	2,780.37	4.058E-04	Pulse	0.10	3
Mo			1	0.098	ug/l	13.19	1,580.14	2.307E-04	Pulse	0.10	3
Ag			1	0.020	ug/l	9.68	853.39	1.165E-04	Pulse	0.10	3
Sn			1	0.203	ug/l	10.32	7,255.27	9.903E-04	Pulse	0.10	3
Sb			1	0.546	ug/l	3.37	15,758.52	1.594E-03	Pulse	0.10	3
Ba			1	0.047	ug/l	10.44	610.03	6.169E-05	Pulse	0.10	3
Tl			1	0.034	ug/l	4.17	2,817.04	4.716E-04	Pulse	0.10	3
Pb			1	0.028	ug/l	21.39	830.06	1.391E-04	Pulse	0.10	3
Pb			1	0.023	ug/l	7.63	620.04	1.038E-04	Pulse	0.10	3
Pb			1	0.025	ug/l	6.31	3,036.93	5.085E-04	Pulse	0.10	3
Na			2	506.432	ug/l	0.63	714,610.07	4.875E+00	Pulse	0.30	3
Mg			2	516.373	ug/l	0.79	334,008.40	2.279E+00	Pulse	0.30	3
Al			2	507.195	ug/l	0.34	100,498.29	6.856E-01	Pulse	0.30	3
K			2	502.445	ug/l	0.76	197,029.03	1.344E+00	Pulse	0.30	3
Ca			2	505.727	ug/l	4.08	10,889.23	7.430E-02	Pulse	0.30	3
Ti			2	0.033	ug/l	128.94	18.89	1.287E-04	Pulse	0.30	3
V			2	0.001	ug/l	641.45	398.90	2.721E-03	Pulse	0.30	3
Cr			2	0.038	ug/l	7.46	628.91	4.291E-03	Pulse	0.30	3
Mn			2	0.031	ug/l	9.76	155.56	1.062E-03	Pulse	0.30	3
Fe			2	512.666	ug/l	0.84	3,310,829.31	2.259E+01	Pulse	0.30	3
Co			2	0.030	ug/l	2.36	522.24	3.563E-03	Pulse	0.30	3
Ni			2	0.030	ug/l	27.95	363.34	2.478E-03	Pulse	0.30	3
Cu			2	0.774	ug/l	6.82	8,355.54	5.701E-02	Pulse	0.30	3
Zn			2	16.235	ug/l	2.33	23,058.56	1.573E-01	Pulse	0.30	3
As			2	0.022	ug/l	23.33	28.67	1.955E-04	Pulse	1.00	3
Cd			2	0.012	ug/l	31.21	41.03	4.793E-05	Pulse	0.30	3
Sn			2	-0.314	ug/l	-0.71	1,272.29	1.487E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	206.626	ug/l	0.84	30,733.52	2.117E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,093,003.04	0.83	100.0	Pulse	0.10	3
1	Sc		5,322,622.63	0.21	99.4	Analog	0.10	3
1	Ge		1,001,112.98	0.35	98.9	Pulse	0.10	3
1	Ge		1,401,231.54	1.04	100.1	Pulse	0.10	3
1	Rh		6,851,084.69	0.16	99.1	Analog	0.10	3
1	In		7,325,790.33	0.79	99.5	Analog	0.10	3
1	Tb		9,887,889.85	0.42	100.6	Analog	0.10	3
1	Ho		939,775.53	0.57	100.5	Pulse	0.10	3
1	Bi		5,974,348.66	1.01	99.8	Analog	0.10	3
2	Sc		146,575.50	0.73	99.8	Pulse	0.30	3
2	Ge		90,576.83	0.24	100.0	Pulse	0.30	3
2	Ge		136,970.60	0.66	100.7	Pulse	0.30	3
2	Rh		2,854,326.97	0.39	99.3	Pulse	0.30	3
2	In		855,426.34	0.56	100.2	Pulse	0.30	3
2	Tb		3,492,761.25	0.43	100.9	Pulse	0.30	3
2	Ho		340,744.96	0.24	100.9	Pulse	0.30	3
2	Bi		2,401,837.06	0.71	100.6	Pulse	0.30	3
3	Sc		139,040.37	0.53	100.0	Pulse	0.30	3
3	Ge		95,010.89	0.32	99.9	Pulse	0.30	3
3	Ge		145,171.17	0.91	100.8	Pulse	0.30	3
3	Rh		1,783,383.89	0.16	100.5	Pulse	0.30	3
3	Tb		2,912,172.66	0.50	101.4	Pulse	0.30	3

Quantitation Report

File Name	010CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 14:35
Sample Name	STDH
Sample Type	CalStd
Comment	1000MIN
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.003	ug/l	63.21	74.67	1.834E-05	Pulse	0.25	3
B			1	3.212	ug/l	3.76	63,591.79	1.556E-02	Pulse	0.15	3
Ca			1	1015.105	ug/l	1.06	1,708,091.33	3.158E-01	Pulse	0.10	3
Sr			1	0.018	ug/l	2.84	2,530.30	3.676E-04	Pulse	0.10	3
Mo			1	0.026	ug/l	15.70	516.70	7.511E-05	Pulse	0.10	3
Ag			1	0.005	ug/l	20.65	250.01	3.392E-05	Pulse	0.10	3
Sn			1	0.108	ug/l	7.89	5,027.66	6.810E-04	Pulse	0.10	3
Sb			1	0.135	ug/l	9.54	4,894.33	4.877E-04	Pulse	0.10	3
Ba			1	0.027	ug/l	28.68	393.36	3.920E-05	Pulse	0.10	3
Tl			1	0.010	ug/l	17.76	1,086.74	1.827E-04	Pulse	0.10	3
Pb			1	0.011	ug/l	13.81	443.36	7.447E-05	Pulse	0.10	3
Pb			1	0.011	ug/l	21.61	373.36	6.277E-05	Pulse	0.10	3
Pb			1	0.011	ug/l	24.49	1,723.46	2.895E-04	Pulse	0.10	3
Na			2	1014.104	ug/l	1.00	1,440,039.77	9.720E+00	Pulse	0.30	3
Mg			2	1029.890	ug/l	0.87	673,021.69	4.543E+00	Pulse	0.30	3
Al			2	1020.127	ug/l	0.72	204,147.72	1.378E+00	Pulse	0.30	3
K			2	1013.862	ug/l	0.96	395,634.14	2.670E+00	Pulse	0.30	3
Ca			2	1003.739	ug/l	2.75	21,683.10	1.464E-01	Pulse	0.30	3
Ti			2	-0.036	ug/l	-64.48	7.78	5.242E-05	Pulse	0.30	3
V			2	-0.007	ug/l	-66.02	356.68	2.408E-03	Pulse	0.30	3
Cr			2	0.013	ug/l	38.04	437.79	2.955E-03	Pulse	0.30	3
Mn			2	0.028	ug/l	13.77	145.56	9.822E-04	Pulse	0.30	3
Fe			2	1038.925	ug/l	0.79	6,775,999.32	4.574E+01	Analog	0.30	3
Co			2	0.050	ug/l	1.58	807.81	5.452E-03	Pulse	0.30	3
Ni			2	0.054	ug/l	12.94	458.90	3.098E-03	Pulse	0.30	3
Cu			2	0.050	ug/l	22.12	860.03	5.803E-03	Pulse	0.30	3
Zn			2	1.844	ug/l	2.65	2,922.52	1.973E-02	Pulse	0.30	3
As			2	0.010	ug/l	79.59	20.33	1.374E-04	Pulse	1.00	3
Cd			2	0.006	ug/l	127.89	27.75	3.201E-05	Pulse	0.30	3
Sn			2	-0.425	ug/l	-2.11	865.59	9.972E-04	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	401.084	ug/l	0.28	61,091.05	4.105E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,087,404.69	1.99	99.9	Mix	0.10	3
1	Sc		5,408,307.00	0.52	101.0	Analog	0.10	3
1	Ge		1,018,247.95	0.67	100.6	Pulse	0.10	3
1	Ge		1,428,773.63	1.47	102.1	Pulse	0.10	3
1	Rh		6,883,792.81	1.04	99.5	Analog	0.10	3
1	In		7,383,684.98	1.64	100.3	Analog	0.10	3
1	Tb		10,034,962.14	0.15	102.1	Analog	0.10	3
1	Ho		945,424.54	1.18	101.1	Pulse	0.10	3
1	Bi		5,952,463.66	0.91	99.4	Analog	0.10	3
2	Sc		148,155.67	0.47	100.9	Pulse	0.30	3
2	Ge		91,387.89	0.52	100.9	Pulse	0.30	3
2	Ge		139,162.37	0.65	102.3	Pulse	0.30	3
2	Rh		2,891,918.91	0.17	100.6	Pulse	0.30	3
2	In		868,021.18	0.51	101.7	Pulse	0.30	3
2	Tb		3,524,116.25	0.46	101.8	Pulse	0.30	3
2	Ho		344,085.19	1.20	101.9	Pulse	0.30	3
2	Bi		2,416,160.32	0.19	101.2	Pulse	0.30	3
3	Sc		142,318.55	1.70	102.3	Pulse	0.30	3
3	Ge		96,765.28	0.33	101.7	Pulse	0.30	3
3	Ge		148,818.48	0.52	103.3	Pulse	0.30	3
3	Rh		1,790,409.58	0.31	100.9	Pulse	0.30	3
3	Tb		2,912,047.94	0.57	101.4	Pulse	0.30	3

Quantitation Report

File Name	011CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 14:40
Sample Name	STDI
Sample Type	CalStd
Comment	5000MIN
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.004	ug/l	66.73	76.00	1.934E-05	Pulse	0.25	3
B			1	1.136	ug/l	12.24	34,432.86	8.714E-03	Pulse	0.15	3
Ca			1	5034.768	ug/l	0.90	8,341,900.71	1.554E+00	Analog	0.10	3
Sr			1	0.055	ug/l	5.40	5,377.80	7.922E-04	Pulse	0.10	3
Mo			1	0.020	ug/l	7.66	423.35	6.237E-05	Pulse	0.10	3
Ag			1	0.006	ug/l	35.86	273.35	3.808E-05	Pulse	0.10	3
Sn			1	0.013	ug/l	39.15	2,686.99	3.738E-04	Pulse	0.10	3
Sb			1	0.073	ug/l	2.97	3,150.44	3.209E-04	Pulse	0.10	3
Ba			1	0.032	ug/l	8.21	443.36	4.516E-05	Pulse	0.10	3
Tl			1	0.008	ug/l	18.96	896.73	1.594E-04	Pulse	0.10	3
Pb			1	0.019	ug/l	7.44	583.37	1.038E-04	Pulse	0.10	3
Pb			1	0.013	ug/l	21.08	380.02	6.756E-05	Pulse	0.10	3
Pb			1	0.013	ug/l	6.56	1,846.79	3.285E-04	Pulse	0.10	3
Na			2	5039.830	ug/l	2.59	7,234,256.10	4.814E+01	Analog	0.30	3
Mg			2	5063.720	ug/l	1.13	3,355,598.62	2.233E+01	Pulse	0.30	3
Al			2	5016.371	ug/l	0.80	1,017,780.73	6.772E+00	Pulse	0.30	3
K			2	4985.244	ug/l	1.06	1,949,231.38	1.297E+01	Pulse	0.30	3
Ca			2	4979.238	ug/l	0.70	108,459.98	7.216E-01	Pulse	0.30	3
Ti			2	-0.044	ug/l	-91.47	6.67	4.419E-05	Pulse	0.30	3
V			2	-0.002	ug/l	-409.53	392.24	2.608E-03	Pulse	0.30	3
Cr			2	0.059	ug/l	6.33	807.81	5.375E-03	Pulse	0.30	3
Mn			2	0.096	ug/l	12.42	410.01	2.728E-03	Pulse	0.30	3
Fe			2	5051.575	ug/l	0.38	33,403,506.45	2.222E+02	Analog	0.30	3
Co			2	0.239	ug/l	6.15	3,517.09	2.341E-02	Pulse	0.30	3
Ni			2	0.192	ug/l	6.75	1,008.93	6.714E-03	Pulse	0.30	3
Cu			2	0.072	ug/l	8.64	1,110.05	7.383E-03	Pulse	0.30	3
Zn			2	5.174	ug/l	3.14	7,750.81	5.157E-02	Pulse	0.30	3
As			2	0.040	ug/l	33.08	42.33	2.813E-04	Pulse	1.00	3
Cd			2	0.007	ug/l	11.05	31.09	3.616E-05	Pulse	0.30	3
Sn			2	-0.530	ug/l	-0.48	457.79	5.325E-04	Pulse	0.30	3
Se			3	0.030	ug/l	306.00	73.40	5.123E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,954,785.48	2.54	96.7	Mix	0.10	3
1	Sc		5,368,380.75	1.39	100.2	Mix	0.10	3
1	Ge		1,009,013.79	0.98	99.7	Pulse	0.10	3

Quantitation Report

1	Ge		1,389,345.45	0.22	99.3	Pulse	0.10	3
1	Rh		6,787,843.02	0.22	98.1	Analog	0.10	3
1	In		7,188,564.02	0.84	97.6	Analog	0.10	3
1	Tb		9,816,354.43	0.32	99.9	Analog	0.10	3
1	Ho		933,450.22	0.93	99.8	Pulse	0.10	3
1	Bi		5,623,891.37	1.37	93.9	Pulse	0.10	3
2	Sc		150,305.80	0.74	102.3	Pulse	0.30	3
2	Ge		91,528.67	1.35	101.1	Pulse	0.30	3
2	Ge		137,659.53	0.36	101.2	Pulse	0.30	3
2	Rh		2,835,071.62	0.08	98.6	Pulse	0.30	3
2	In		859,766.58	1.07	100.7	Pulse	0.30	3
2	Tb		3,506,472.22	0.52	101.3	Pulse	0.30	3
2	Ho		341,617.38	0.26	101.1	Pulse	0.30	3
2	Bi		2,341,637.75	0.57	98.0	Pulse	0.30	3
3	Sc		140,387.16	0.71	100.9	Pulse	0.30	3
3	Ge		94,768.11	0.70	99.6	Pulse	0.30	3
3	Ge		143,220.04	0.35	99.4	Pulse	0.30	3
3	Rh		1,719,854.93	0.34	96.9	Pulse	0.30	3
3	Tb		2,822,417.25	0.65	98.2	Pulse	0.30	3

Quantitation Report

File Name	012CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 14:45
Sample Name	STDJ
Sample Type	CalStd
Comment	10000MIN
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.010	ug/l	9.02	173.33	4.279E-05	Pulse	0.25	3
B			1	0.434	ug/l	20.89	25,917.98	6.397E-03	Pulse	0.15	3
Ca			1	9980.723	ug/l	0.79	16,851,452.25	3.078E+00	Analog	0.10	3
Sr			1	0.094	ug/l	3.23	8,309.15	1.243E-03	Pulse	0.10	3
Mo			1	0.018	ug/l	8.61	383.35	5.736E-05	Pulse	0.10	3
Ag			1	0.003	ug/l	32.38	173.34	2.402E-05	Pulse	0.10	3
Sn			1	0.142	ug/l	14.51	5,714.58	7.919E-04	Pulse	0.10	3
Sb			1	0.071	ug/l	11.89	3,103.76	3.143E-04	Pulse	0.10	3
Ba			1	0.020	ug/l	43.31	313.35	3.169E-05	Pulse	0.10	3
Tl			1	0.008	ug/l	18.85	870.06	1.561E-04	Pulse	0.10	3
Pb			1	0.021	ug/l	34.17	616.71	1.109E-04	Pulse	0.10	3
Pb			1	0.021	ug/l	39.22	530.04	9.499E-05	Pulse	0.10	3
Pb			1	0.022	ug/l	5.16	2,580.22	4.633E-04	Pulse	0.10	3
Na			2	9945.652	ug/l	1.00	14,497,556.64	9.495E+01	Analog	0.30	3
Mg			2	10165.185	ug/l	0.79	6,842,828.06	4.482E+01	Analog	0.30	3
Al			2	9989.443	ug/l	0.70	2,058,744.16	1.348E+01	Pulse	0.30	3
K			2	10002.299	ug/l	0.64	3,966,620.67	2.598E+01	Pulse	0.30	3
Ca			2	9956.231	ug/l	0.65	220,138.13	1.442E+00	Pulse	0.30	3
Ti			2	-0.051	ug/l	-45.23	5.55	3.642E-05	Pulse	0.30	3
V			2	-0.009	ug/l	-61.15	352.23	2.308E-03	Pulse	0.30	3
Cr			2	0.073	ug/l	9.84	936.70	6.135E-03	Pulse	0.30	3
Mn			2	0.173	ug/l	19.55	716.69	4.696E-03	Pulse	0.30	3
Fe			2	9968.347	ug/l	1.03	66,953,381.79	4.385E+02	Analog	0.30	3
Co			2	0.476	ug/l	1.53	7,006.00	4.588E-02	Pulse	0.30	3
Ni			2	0.374	ug/l	5.72	1,747.89	1.145E-02	Pulse	0.30	3
Cu			2	0.120	ug/l	2.88	1,641.22	1.075E-02	Pulse	0.30	3
Zn			2	0.654	ug/l	5.73	1,274.51	8.348E-03	Pulse	0.30	3
As			2	0.056	ug/l	23.85	55.00	3.605E-04	Pulse	1.00	3
Cd			2	0.011	ug/l	104.03	38.87	4.494E-05	Pulse	0.30	3
Sn			2	-0.390	ug/l	-1.06	995.60	1.149E-03	Pulse	0.30	3
Se			3	-0.042	ug/l	-246.96	64.47	4.383E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,054,243.42	2.27	99.1	Mix	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,475,932.83	1.06	102.2	Analog	0.10	3
1	Ge		1,023,346.29	0.91	101.1	Pulse	0.10	3
1	Ge		1,407,618.21	0.75	100.6	Pulse	0.10	3
1	Rh		6,684,031.78	0.25	96.6	Analog	0.10	3
1	In		7,217,710.57	0.46	98.0	Analog	0.10	3
1	Tb		9,874,011.31	0.80	100.5	Analog	0.10	3
1	Ho		938,481.16	0.98	100.4	Pulse	0.10	3
1	Bi		5,568,424.92	1.05	93.0	Pulse	0.10	3
2	Sc		152,689.37	0.92	104.0	Pulse	0.30	3
2	Ge		93,972.10	0.57	103.8	Pulse	0.30	3
2	Ge		139,912.02	0.35	102.8	Pulse	0.30	3
2	Rh		2,831,935.17	0.12	98.5	Pulse	0.30	3
2	In		866,315.53	0.41	101.5	Pulse	0.30	3
2	Tb		3,547,504.44	0.26	102.5	Pulse	0.30	3
2	Ho		347,786.03	0.20	103.0	Pulse	0.30	3
2	Bi		2,321,443.10	0.34	97.2	Pulse	0.30	3
3	Sc		142,356.50	0.95	102.3	Pulse	0.30	3
3	Ge		96,939.50	0.85	101.9	Pulse	0.30	3
3	Ge		147,159.24	0.39	102.1	Pulse	0.30	3
3	Rh		1,714,647.05	1.08	96.6	Pulse	0.30	3
3	Tb		2,831,570.65	1.08	98.6	Pulse	0.30	3

Quantitation Report

File Name	013SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 14:50
Sample Name	STDA
Sample Type	CalBlk
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	-653.41	24.00	5.806E-06	Pulse	0.25	3
B			1	0.000	ug/l	---	20,483.80	4.966E-03	Pulse	0.15	3
Ca			1	0.000	ug/l	---	17,830.35	3.145E-03	Pulse	0.10	3
Sr			1	0.000	ug/l	376.79	1,160.10	1.585E-04	Pulse	0.10	3
Mo			1	0.000	ug/l	---	143.34	1.958E-05	Pulse	0.10	3
Ag			1	0.000	ug/l	-1091.79	56.67	7.378E-06	Pulse	0.10	3
Sn			1	0.631	ug/l	3.44	18,294.64	2.383E-03	Pulse	0.10	3
Sb			1	0.000	ug/l	2036.73	1,273.45	1.247E-04	Pulse	0.10	3
Ba			1	0.000	ug/l	1871.18	93.34	9.133E-06	Pulse	0.10	3
Tl			1	0.000	ug/l	---	406.69	6.701E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	482.44	193.34	3.184E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	-3053.47	146.67	2.412E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	410.46	750.04	1.235E-04	Pulse	0.10	3
Na			2	-0.039	ug/l	-588.74	6,755.86	4.239E-02	Pulse	0.30	3
Mg			2	0.001	ug/l	1722.35	367.79	2.307E-03	Pulse	0.30	3
Al			2	0.000	ug/l	---	171.11	1.072E-03	Pulse	0.30	3
K			2	0.217	ug/l	143.73	6,673.63	4.188E-02	Pulse	0.30	3
Ca			2	-0.683	ug/l	-144.39	162.22	1.017E-03	Pulse	0.30	3
Ti			2	-0.046	ug/l	-81.35	6.67	4.168E-05	Pulse	0.30	3
V			2	-0.002	ug/l	-376.16	416.68	2.615E-03	Pulse	0.30	3
Cr			2	0.000	ug/l	---	361.12	2.264E-03	Pulse	0.30	3
Mn			2	0.000	ug/l	748.77	42.22	2.653E-04	Pulse	0.30	3
Fe			2	0.134	ug/l	62.68	7,137.26	4.476E-02	Pulse	0.30	3
Co			2	0.000	ug/l	-248.50	115.56	7.256E-04	Pulse	0.30	3
Ni			2	-0.001	ug/l	-642.43	266.67	1.674E-03	Pulse	0.30	3
Cu			2	-0.001	ug/l	-322.96	347.79	2.184E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.005	ug/l	-200.37	325.56	2.043E-03	Pulse	0.30	3
As			2	-0.002	ug/l	-368.68	12.67	7.964E-05	Pulse	1.00	3
Cd			2	0.000	ug/l	---	15.55	1.708E-05	Pulse	0.30	3
Sn			2	0.085	ug/l	22.32	2,959.21	3.254E-03	Pulse	0.30	3
Se			3	-0.052	ug/l	-379.55	64.87	4.283E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,124,452.83	0.77	100.0	Analog	0.10	3
1	Sc		5,671,211.37	1.20	100.0	Analog	0.10	3
1	Ge		1,073,129.02	0.25	100.0	Pulse	0.10	3
1	Ge		1,477,443.26	0.29	100.0	Pulse	0.10	3
1	Rh		7,315,912.60	0.94	100.0	Analog	0.10	3
1	In		7,678,353.55	0.32	100.0	Analog	0.10	3
1	Tb		10,202,774.64	0.71	100.0	Analog	0.10	3
1	Ho		962,301.81	0.70	100.0	Pulse	0.10	3
1	Bi		6,073,922.20	0.80	100.0	Analog	0.10	3
2	Sc		159,366.84	1.16	100.0	Pulse	0.30	3
2	Ge		96,976.23	0.37	100.0	Pulse	0.30	3
2	Ge		147,002.23	0.16	100.0	Pulse	0.30	3
2	Rh		3,040,480.44	0.39	100.0	Pulse	0.30	3
2	In		909,483.23	0.30	100.0	Pulse	0.30	3
2	Tb		3,631,164.02	0.52	100.0	Pulse	0.30	3
2	Ho		354,942.74	0.35	100.0	Pulse	0.30	3
2	Bi		2,495,361.57	0.24	100.0	Pulse	0.30	3
3	Sc		145,177.56	1.17	100.0	Pulse	0.30	3
3	Ge		100,911.21	0.43	100.0	Pulse	0.30	3
3	Ge		151,544.39	0.21	100.0	Pulse	0.30	3
3	Rh		1,845,151.59	0.39	100.0	Pulse	0.30	3
3	Tb		2,935,493.49	0.58	100.0	Pulse	0.30	3

Quantitation Report

File Name	014CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 14:54
Sample Name	STDB
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.523	ug/l	3.02	7,813.87	1.855E-03	Pulse	0.25	3
B			1	24.429	ug/l	1.52	360,340.90	8.555E-02	Pulse	0.15	3
Ca			1	241.325	ug/l	1.08	443,826.26	7.748E-02	Pulse	0.10	3
Sr			1	4.956	ug/l	0.87	411,347.55	5.725E-02	Pulse	0.10	3
Mo			1	1.016	ug/l	1.25	15,794.93	2.198E-03	Pulse	0.10	3
Ag			1	0.509	ug/l	1.70	21,288.29	2.765E-03	Pulse	0.10	3
Sn			1	4.873	ug/l	0.76	124,472.40	1.617E-02	Pulse	0.10	3
Sb			1	2.035	ug/l	1.86	56,418.82	5.603E-03	Pulse	0.10	3
Ba			1	0.983	ug/l	4.37	11,291.25	1.122E-03	Pulse	0.10	3
Tl			1	0.487	ug/l	3.27	35,276.51	5.781E-03	Pulse	0.10	3
Pb			1	0.491	ug/l	1.55	11,805.08	1.934E-03	Pulse	0.10	3
Pb			1	0.514	ug/l	6.77	10,871.19	1.781E-03	Pulse	0.10	3
Pb			1	0.492	ug/l	2.26	48,125.53	7.885E-03	Pulse	0.10	3
Na			2	245.009	ug/l	0.29	374,669.59	2.381E+00	Pulse	0.30	3
Mg			2	249.767	ug/l	0.09	173,646.86	1.103E+00	Pulse	0.30	3
Al			2	23.843	ug/l	2.10	5,233.09	3.325E-02	Pulse	0.30	3
K			2	249.161	ug/l	0.29	108,182.59	6.874E-01	Pulse	0.30	3
Ca			2	269.197	ug/l	1.93	6,305.72	4.007E-02	Pulse	0.30	3
Ti			2	1.043	ug/l	12.48	195.56	1.243E-03	Pulse	0.30	3
V			2	1.033	ug/l	3.71	6,865.95	4.363E-02	Pulse	0.30	3
Cr			2	1.022	ug/l	4.72	8,866.91	5.634E-02	Pulse	0.30	3
Mn			2	0.973	ug/l	1.76	3,973.85	2.525E-02	Pulse	0.30	3
Fe			2	24.598	ug/l	1.46	176,390.41	1.121E+00	Pulse	0.30	3
Co			2	0.506	ug/l	7.03	7,659.64	4.867E-02	Pulse	0.30	3
Ni			2	0.991	ug/l	7.14	4,340.63	2.758E-02	Pulse	0.30	3
Cu			2	2.014	ug/l	0.54	22,769.27	1.447E-01	Pulse	0.30	3
Zn			2	5.094	ug/l	1.17	7,994.25	5.080E-02	Pulse	0.30	3
As			2	0.495	ug/l	2.44	393.01	2.497E-03	Pulse	1.00	3
Cd			2	0.536	ug/l	5.40	1,289.29	1.405E-03	Pulse	0.30	3
Sn			2	4.433	ug/l	1.47	20,655.88	2.251E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.528	ug/l	6.95	156.60	1.021E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,212,490.56	1.86	102.1	Analog	0.10	3
1	Sc		5,728,858.25	1.59	101.0	Analog	0.10	3
1	Ge		1,073,433.91	0.42	100.0	Pulse	0.10	3
1	Ge		1,481,345.60	0.57	100.3	Pulse	0.10	3
1	Rh		7,185,156.56	0.75	98.2	Analog	0.10	3
1	In		7,699,907.33	0.97	100.3	Analog	0.10	3
1	Tb		10,068,769.02	0.34	98.7	Analog	0.10	3
1	Ho		960,869.83	0.35	99.9	Pulse	0.10	3
1	Bi		6,103,953.87	1.16	100.5	Analog	0.10	3
2	Sc		157,369.55	0.23	98.7	Pulse	0.30	3
2	Ge		98,856.25	0.63	101.9	Pulse	0.30	3
2	Ge		148,426.03	0.82	101.0	Pulse	0.30	3
2	Rh		3,054,090.02	0.30	100.4	Pulse	0.30	3
2	In		917,669.72	0.35	100.9	Pulse	0.30	3
2	Tb		3,636,792.22	0.17	100.2	Pulse	0.30	3
2	Ho		355,014.01	0.22	100.0	Pulse	0.30	3
2	Bi		2,493,685.04	0.16	99.9	Pulse	0.30	3
3	Sc		147,041.16	0.39	101.3	Pulse	0.30	3
3	Ge		100,413.65	1.26	99.5	Pulse	0.30	3
3	Ge		153,341.93	0.25	101.2	Pulse	0.30	3
3	Rh		1,845,771.87	0.62	100.0	Pulse	0.30	3
3	Tb		2,956,672.45	1.26	100.7	Pulse	0.30	3

Quantitation Report

File Name	015CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 15:02
Sample Name	STDF
Sample Type	CalStd
Comment	100
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	100.808	ug/l	1.83	1,453,786.96	3.562E-01	Pulse	0.25	3
B			1	97.428	ug/l	1.46	1,332,226.41	3.264E-01	Pulse	0.15	3
Ca			1	136.121	ug/l	1.58	241,362.71	4.507E-02	Pulse	0.10	3
Sr			1	100.980	ug/l	0.97	8,143,575.30	1.164E+00	Analog	0.10	3
Mo			1	100.180	ug/l	0.71	1,503,841.38	2.149E-01	Pulse	0.10	3
Ag			1	101.749	ug/l	1.42	4,056,961.81	5.514E-01	Pulse	0.10	3
Sn			1	100.315	ug/l	1.78	2,400,772.78	3.263E-01	Pulse	0.10	3
Sb			1	100.773	ug/l	1.53	2,674,646.63	2.715E-01	Pulse	0.10	3
Ba			1	101.377	ug/l	1.30	1,131,196.10	1.148E-01	Pulse	0.10	3
Tl			1	100.790	ug/l	0.34	7,076,244.90	1.182E+00	Analog	0.10	3
Pb			1	100.720	ug/l	1.10	2,337,849.91	3.906E-01	Pulse	0.10	3
Pb			1	101.170	ug/l	0.54	2,067,332.63	3.454E-01	Pulse	0.10	3
Pb			1	100.550	ug/l	1.15	9,494,109.55	1.586E+00	Pulse	0.10	3
Na			2	97.172	ug/l	1.21	146,738.15	9.701E-01	Pulse	0.30	3
Mg			2	99.423	ug/l	1.39	66,652.65	4.406E-01	Pulse	0.30	3
Al			2	101.351	ug/l	1.47	20,855.22	1.379E-01	Pulse	0.30	3
K			2	97.095	ug/l	1.12	44,338.58	2.931E-01	Pulse	0.30	3
Ca			2	661.286	ug/l	2.17	14,644.37	9.681E-02	Pulse	0.30	3
Ti			2	99.976	ug/l	0.66	16,689.62	1.103E-01	Pulse	0.30	3
V			2	99.964	ug/l	0.16	599,572.42	3.964E+00	Pulse	0.30	3
Cr			2	99.883	ug/l	0.52	800,003.61	5.289E+00	Pulse	0.30	3
Mn			2	99.694	ug/l	0.30	387,543.85	2.562E+00	Pulse	0.30	3
Fe			2	97.599	ug/l	0.45	655,281.05	4.332E+00	Pulse	0.30	3
Co			2	99.542	ug/l	0.91	1,426,430.60	9.430E+00	Pulse	0.30	3
Ni			2	99.533	ug/l	0.76	393,435.05	2.601E+00	Pulse	0.30	3
Cu			2	99.393	ug/l	0.73	1,063,678.05	7.032E+00	Pulse	0.30	3
Zn			2	99.750	ug/l	0.74	144,598.11	9.559E-01	Pulse	0.30	3
As			2	99.968	ug/l	0.94	73,635.41	4.868E-01	Pulse	1.00	3
Cd			2	99.937	ug/l	0.35	226,651.20	2.589E-01	Pulse	0.30	3
Sn			2	100.942	ug/l	0.37	393,856.70	4.499E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	101.992	ug/l	0.75	15,359.18	1.047E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,082,419.36	1.13	99.0	Mix	0.10	3
1	Sc		5,354,897.00	1.28	94.4	Mix	0.10	3
1	Ge		1,025,464.85	0.55	95.6	Pulse	0.10	3
1	Ge		1,431,874.93	1.36	96.9	Pulse	0.10	3
1	Rh		6,998,685.94	0.23	95.7	Analog	0.10	3
1	In		7,358,710.04	1.14	95.8	Analog	0.10	3
1	Tb		9,854,122.98	1.10	96.6	Analog	0.10	3
1	Ho		943,269.91	1.34	98.0	Pulse	0.10	3
1	Bi		5,984,925.12	0.97	98.5	Analog	0.10	3
2	Sc		151,271.33	0.25	94.9	Pulse	0.30	3
2	Ge		92,071.90	1.70	94.9	Pulse	0.30	3
2	Ge		141,210.78	0.93	96.1	Pulse	0.30	3
2	Rh		2,931,526.00	0.31	96.4	Pulse	0.30	3
2	In		875,490.39	0.64	96.3	Pulse	0.30	3
2	Tb		3,531,379.17	0.68	97.3	Pulse	0.30	3
2	Ho		345,896.99	0.82	97.5	Pulse	0.30	3
2	Bi		2,449,373.79	0.51	98.2	Pulse	0.30	3
3	Sc		142,006.37	0.48	97.8	Pulse	0.30	3
3	Ge		96,363.83	0.14	95.5	Pulse	0.30	3
3	Ge		146,633.38	0.59	96.8	Pulse	0.30	3
3	Rh		1,787,079.17	0.44	96.9	Pulse	0.30	3
3	Tb		2,912,782.31	0.71	99.2	Pulse	0.30	3

Quantitation Report

File Name	016_ICV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 15:11
Sample Name	emptycupconf
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

Quantitation Report

File Name	017_ICV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 15:16
Sample Name	ICVA
Sample Type	ICV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	60.726	ug/l	2.29	870,051.19	2.145E-01	Pulse	0.25	3
B			1	117.861	ug/l	2.07	1,596,865.49	3.938E-01	Pulse	0.15	3
Ca			1	5253.384	ug/l	2.40	8,740,850.08	1.621E+00	Analog	0.10	3
Sr			1	61.379	ug/l	0.75	4,765,620.45	7.073E-01	Pulse	0.10	3
Mo			1	60.953	ug/l	0.16	880,934.52	1.307E-01	Pulse	0.10	3
Ag			1	59.840	ug/l	0.45	2,329,189.34	3.243E-01	Pulse	0.10	3
Sn			1	60.753	ug/l	0.07	1,420,308.52	1.977E-01	Pulse	0.10	3
Sb			1	63.630	ug/l	1.31	1,689,708.62	1.714E-01	Pulse	0.10	3
Ba			1	60.549	ug/l	0.95	675,815.59	6.857E-02	Pulse	0.10	3
Tl			1	62.038	ug/l	2.26	4,218,955.67	7.278E-01	Pulse	0.10	3
Pb			1	63.196	ug/l	1.70	1,420,976.49	2.451E-01	Pulse	0.10	3
Pb			1	59.804	ug/l	2.13	1,183,752.41	2.042E-01	Pulse	0.10	3
Pb			1	60.849	ug/l	1.67	5,565,688.75	9.601E-01	Pulse	0.10	3
Na			2	5254.655	ug/l	1.30	7,546,890.26	5.019E+01	Analog	0.30	3
Mg			2	5266.308	ug/l	0.81	3,491,657.15	2.322E+01	Pulse	0.30	3
Al			2	5288.582	ug/l	0.46	1,073,550.96	7.139E+00	Pulse	0.30	3
K			2	5201.353	ug/l	0.17	2,034,541.79	1.353E+01	Pulse	0.30	3
Ca			2	5553.461	ug/l	0.50	121,012.26	8.047E-01	Pulse	0.30	3
Ti			2	57.437	ug/l	2.47	9,537.27	6.343E-02	Pulse	0.30	3
V			2	61.205	ug/l	1.13	365,082.64	2.428E+00	Pulse	0.30	3
Cr			2	60.247	ug/l	0.98	479,822.12	3.191E+00	Pulse	0.30	3
Mn			2	60.108	ug/l	1.21	232,291.61	1.545E+00	Pulse	0.30	3
Fe			2	5254.675	ug/l	1.20	34,762,183.06	2.312E+02	Analog	0.30	3
Co			2	59.355	ug/l	0.92	845,565.98	5.623E+00	Pulse	0.30	3
Ni			2	58.990	ug/l	0.71	231,899.07	1.542E+00	Pulse	0.30	3
Cu			2	58.230	ug/l	0.52	619,616.24	4.120E+00	Pulse	0.30	3
Zn			2	58.430	ug/l	1.15	84,329.38	5.608E-01	Pulse	0.30	3
As			2	61.162	ug/l	0.53	44,790.96	2.979E-01	Pulse	1.00	3
Cd			2	58.794	ug/l	0.95	132,090.81	1.523E-01	Pulse	0.30	3
Sn			2	60.048	ug/l	1.05	233,100.64	2.688E-01	Pulse	0.30	3
Se			3	253.706	ug/l	0.25	38,056.23	2.598E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,056,310.53	1.70	98.3	Mix	0.10	3
1	Sc		5,391,831.58	0.87	95.1	Mix	0.10	3
1	Ge		1,023,720.53	0.54	95.4	Pulse	0.10	3

Quantitation Report

1	Ge		1,423,493.57	0.73	96.3	Pulse	0.10	3
1	Rh		6,737,900.73	1.34	92.1	Analog	0.10	3
1	In		7,182,748.54	1.08	93.5	Analog	0.10	3
1	Tb		9,855,694.23	0.35	96.6	Analog	0.10	3
1	Ho		947,556.21	1.28	98.5	Pulse	0.10	3
1	Bi		5,797,872.20	1.07	95.5	Mix	0.10	3
2	Sc		150,378.50	0.33	94.4	Pulse	0.30	3
2	Ge		92,433.80	0.51	95.3	Pulse	0.30	3
2	Ge		139,062.45	0.35	94.6	Pulse	0.30	3
2	Rh		2,826,011.83	0.16	92.9	Pulse	0.30	3
2	In		867,276.49	0.81	95.4	Pulse	0.30	3
2	Tb		3,524,729.86	0.56	97.1	Pulse	0.30	3
2	Ho		346,281.64	0.07	97.6	Pulse	0.30	3
2	Bi		2,363,260.04	0.53	94.7	Pulse	0.30	3
3	Sc		139,150.48	0.30	95.8	Pulse	0.30	3
3	Ge		95,180.38	0.28	94.3	Pulse	0.30	3
3	Ge		146,456.19	0.28	96.6	Pulse	0.30	3
3	Rh		1,741,334.86	0.21	94.4	Pulse	0.30	3
3	Tb		2,881,585.37	0.31	98.2	Pulse	0.30	3

Quantitation Report

File Name	018_ICV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 15:21
Sample Name	ICV
Sample Type	ICV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.007	ug/l	16.01	128.00	3.160E-05	Pulse	0.25	3
B			1	1.498	ug/l	5.68	40,105.13	9.908E-03	Pulse	0.15	3
Ca			1	-1.565	ug/l	-45.52	14,586.99	2.663E-03	Pulse	0.10	3
Sr			1	0.003	ug/l	34.85	1,376.79	1.951E-04	Pulse	0.10	3
Mo			1	0.052	ug/l	19.36	926.73	1.312E-04	Pulse	0.10	3
Ag			1	0.008	ug/l	8.66	373.35	4.968E-05	Pulse	0.10	3
Sn			1	0.321	ug/l	2.47	10,327.10	1.375E-03	Pulse	0.10	3
Sb			1	0.009	ug/l	1.08	1,486.81	1.476E-04	Pulse	0.10	3
Ba			1	0.012	ug/l	44.10	230.01	2.283E-05	Pulse	0.10	3
Tl			1	0.026	ug/l	2.78	2,243.59	3.674E-04	Pulse	0.10	3
Pb			1	0.010	ug/l	13.07	420.02	6.875E-05	Pulse	0.10	3
Pb			1	0.013	ug/l	21.69	420.03	6.885E-05	Pulse	0.10	3
Pb			1	0.011	ug/l	4.95	1,826.79	2.992E-04	Pulse	0.10	3
Na			2	-0.427	ug/l	-17.64	5,942.24	3.869E-02	Pulse	0.30	3
Mg			2	-0.175	ug/l	-29.64	235.56	1.533E-03	Pulse	0.30	3
Al			2	61.005	ug/l	0.54	12,810.53	8.341E-02	Pulse	0.30	3
K			2	0.725	ug/l	68.38	6,633.61	4.320E-02	Pulse	0.30	3
Ca			2	-2.517	ug/l	-38.18	115.56	7.521E-04	Pulse	0.30	3
Ti			2	-0.077	ug/l	-14.69	1.11	7.231E-06	Pulse	0.30	3
V			2	-0.025	ug/l	-15.65	262.23	1.707E-03	Pulse	0.30	3
Cr			2	0.015	ug/l	42.93	468.91	3.055E-03	Pulse	0.30	3
Mn			2	0.008	ug/l	43.57	70.00	4.556E-04	Pulse	0.30	3
Fe			2	0.739	ug/l	8.05	10,964.84	7.138E-02	Pulse	0.30	3
Co			2	-0.002	ug/l	-76.58	88.89	5.793E-04	Pulse	0.30	3
Ni			2	0.006	ug/l	168.36	285.56	1.861E-03	Pulse	0.30	3
Cu			2	0.019	ug/l	58.61	550.04	3.585E-03	Pulse	0.30	3
Zn			2	0.353	ug/l	23.52	840.03	5.471E-03	Pulse	0.30	3
As			2	0.005	ug/l	60.31	17.00	1.107E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.016	ug/l	46.30	53.29	5.938E-05	Pulse	0.30	3
Sn			2	-0.197	ug/l	-18.48	1,799.12	2.005E-03	Pulse	0.30	3
Se			3	0.044	ug/l	91.28	79.67	5.259E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,047,552.25	1.11	98.1	Analog	0.10	3
1	Sc		5,477,104.29	0.44	96.6	Analog	0.10	3
1	Ge		1,030,358.55	0.46	96.0	Pulse	0.10	3
1	Ge		1,428,018.05	1.18	96.7	Pulse	0.10	3
1	Rh		7,059,683.44	0.91	96.5	Analog	0.10	3
1	In		7,511,997.89	0.94	97.8	Analog	0.10	3
1	Tb		10,072,300.68	1.24	98.7	Analog	0.10	3
1	Ho		956,081.91	0.67	99.4	Pulse	0.10	3
1	Bi		6,105,069.70	1.33	100.5	Analog	0.10	3
2	Sc		153,586.55	0.76	96.4	Pulse	0.30	3
2	Ge		94,458.42	1.05	97.4	Pulse	0.30	3
2	Ge		142,272.14	1.00	96.8	Pulse	0.30	3
2	Rh		2,993,565.23	0.28	98.5	Pulse	0.30	3
2	In		897,126.70	0.27	98.6	Pulse	0.30	3
2	Tb		3,600,142.77	0.31	99.1	Pulse	0.30	3
2	Ho		352,620.77	0.95	99.3	Pulse	0.30	3
2	Bi		2,485,595.32	0.47	99.6	Pulse	0.30	3
3	Sc		144,946.29	0.58	99.8	Pulse	0.30	3
3	Ge		99,327.09	0.42	98.4	Pulse	0.30	3
3	Ge		151,517.46	0.61	100.0	Pulse	0.30	3
3	Rh		1,861,383.74	0.13	100.9	Pulse	0.30	3
3	Tb		3,004,915.44	0.61	102.4	Pulse	0.30	3

Quantitation Report

File Name	019_ICB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 15:26
Sample Name	ICB
Sample Type	ICB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.002	ug/l	59.47	53.33	1.293E-05	Pulse	0.25	3
B			1	0.361	ug/l	2.05	25,452.71	6.158E-03	Pulse	0.15	3
Ca			1	-0.514	ug/l	-33.00	16,635.45	2.987E-03	Pulse	0.10	3
Sr			1	0.002	ug/l	41.65	1,306.79	1.810E-04	Pulse	0.10	3
Mo			1	0.008	ug/l	28.89	270.01	3.742E-05	Pulse	0.10	3
Ag			1	0.003	ug/l	21.74	180.01	2.387E-05	Pulse	0.10	3
Sn			1	0.633	ug/l	4.58	18,024.30	2.390E-03	Pulse	0.10	3
Sb			1	-0.007	ug/l	-67.69	1,070.08	1.057E-04	Pulse	0.10	3
Ba			1	0.004	ug/l	146.60	136.67	1.350E-05	Pulse	0.10	3
Tl			1	0.007	ug/l	30.22	880.06	1.434E-04	Pulse	0.10	3
Pb			1	0.003	ug/l	65.22	263.35	4.293E-05	Pulse	0.10	3
Pb			1	0.003	ug/l	62.87	210.01	3.428E-05	Pulse	0.10	3
Pb			1	0.003	ug/l	18.53	1,056.74	1.723E-04	Pulse	0.10	3
Na			2	-0.114	ug/l	-252.15	6,473.53	4.168E-02	Pulse	0.30	3
Mg			2	-0.233	ug/l	-18.57	197.78	1.275E-03	Pulse	0.30	3
Al			2	-0.303	ug/l	-25.57	103.34	6.628E-04	Pulse	0.30	3
K			2	1.070	ug/l	95.78	6,849.27	4.409E-02	Pulse	0.30	3
Ca			2	-1.030	ug/l	-78.40	150.00	9.672E-04	Pulse	0.30	3
Ti			2	-0.013	ug/l	-291.51	12.22	7.806E-05	Pulse	0.30	3
V			2	-0.006	ug/l	-67.70	376.68	2.425E-03	Pulse	0.30	3
Cr			2	-0.003	ug/l	-193.11	324.45	2.094E-03	Pulse	0.30	3
Mn			2	0.000	ug/l	-2034.45	40.00	2.566E-04	Pulse	0.30	3
Fe			2	-0.409	ug/l	-8.09	3,245.92	2.090E-02	Pulse	0.30	3
Co			2	0.000	ug/l	-45593.42	116.67	7.553E-04	Pulse	0.30	3
Ni			2	-0.010	ug/l	-48.31	223.34	1.432E-03	Pulse	0.30	3
Cu			2	0.001	ug/l	409.68	364.45	2.353E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.002	ug/l	2409.61	326.68	2.110E-03	Pulse	0.30	3
As			2	0.000	ug/l	-2396.64	13.67	8.674E-05	Pulse	1.00	3
Cd			2	0.006	ug/l	60.18	28.88	3.212E-05	Pulse	0.30	3
Sn			2	0.089	ug/l	42.90	2,939.20	3.272E-03	Pulse	0.30	3
Se			3	-0.256	ug/l	-14.73	33.47	2.193E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,133,484.84	1.30	100.2	Mix	0.10	3
1	Sc		5,569,536.17	0.47	98.2	Analog	0.10	3
1	Ge		1,052,676.52	0.43	98.1	Pulse	0.10	3
1	Ge		1,460,862.27	0.39	98.9	Pulse	0.10	3
1	Rh		7,217,595.93	0.72	98.7	Analog	0.10	3
1	In		7,542,626.33	0.43	98.2	Analog	0.10	3
1	Tb		10,121,987.14	0.73	99.2	Analog	0.10	3
1	Ho		960,711.49	0.25	99.8	Pulse	0.10	3
1	Bi		6,131,861.99	0.89	101.0	Analog	0.10	3
2	Sc		155,585.51	4.15	97.6	Pulse	0.30	3
2	Ge		94,701.15	3.23	97.7	Pulse	0.30	3
2	Ge		143,858.88	2.48	97.9	Pulse	0.30	3
2	Rh		2,987,937.18	4.26	98.3	Pulse	0.30	3
2	In		898,844.92	3.74	98.8	Pulse	0.30	3
2	Tb		3,594,877.85	4.39	99.0	Pulse	0.30	3
2	Ho		351,347.75	4.79	99.0	Pulse	0.30	3
2	Bi		2,478,087.75	3.16	99.3	Pulse	0.30	3
3	Sc		147,887.42	0.68	101.9	Pulse	0.30	3
3	Ge		100,903.44	0.96	100.0	Pulse	0.30	3
3	Ge		152,699.56	0.94	100.8	Pulse	0.30	3
3	Rh		1,880,059.16	1.52	101.9	Pulse	0.30	3
3	Tb		3,021,018.01	0.68	102.9	Pulse	0.30	3

Quantitation Report

File Name	020_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 15:31
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	51.499	ug/l	1.47	730,579.52	1.819E-01	Pulse	0.25	3
B			1	98.980	ug/l	0.63	1,331,110.75	3.315E-01	Pulse	0.15	3
Ca			1	4899.205	ug/l	1.97	8,145,931.54	1.512E+00	Analog	0.10	3
Sr			1	51.147	ug/l	0.54	3,984,830.78	5.894E-01	Pulse	0.10	3
Mo			1	51.392	ug/l	0.71	745,267.41	1.102E-01	Pulse	0.10	3
Ag			1	49.899	ug/l	0.42	1,939,978.62	2.704E-01	Pulse	0.10	3
Sn			1	50.146	ug/l	1.54	1,171,309.12	1.633E-01	Pulse	0.10	3
Sb			1	51.488	ug/l	0.38	1,361,121.44	1.388E-01	Pulse	0.10	3
Ba			1	50.637	ug/l	0.19	562,553.95	5.735E-02	Pulse	0.10	3
Tl			1	50.011	ug/l	1.18	3,379,199.74	5.867E-01	Pulse	0.10	3
Pb			1	51.022	ug/l	1.09	1,139,828.81	1.979E-01	Pulse	0.10	3
Pb			1	51.235	ug/l	0.85	1,007,611.86	1.749E-01	Pulse	0.10	3
Pb			1	50.603	ug/l	0.92	4,598,562.20	7.984E-01	Pulse	0.10	3
Na			2	4848.602	ug/l	0.67	7,002,115.42	4.631E+01	Analog	0.30	3
Mg			2	4853.628	ug/l	0.34	3,235,544.46	2.140E+01	Pulse	0.30	3
Al			2	4810.385	ug/l	0.29	981,790.17	6.494E+00	Pulse	0.30	3
K			2	4815.161	ug/l	0.18	1,894,152.01	1.253E+01	Pulse	0.30	3
Ca			2	5081.034	ug/l	0.63	111,329.92	7.363E-01	Pulse	0.30	3
Ti			2	51.918	ug/l	1.53	8,669.01	5.734E-02	Pulse	0.30	3
V			2	50.183	ug/l	0.29	301,044.79	1.991E+00	Pulse	0.30	3
Cr			2	49.589	ug/l	0.69	397,144.48	2.627E+00	Pulse	0.30	3
Mn			2	49.524	ug/l	0.85	192,435.68	1.273E+00	Pulse	0.30	3
Fe			2	4853.613	ug/l	0.93	32,284,098.72	2.135E+02	Analog	0.30	3
Co			2	48.817	ug/l	0.30	699,254.66	4.625E+00	Pulse	0.30	3
Ni			2	48.701	ug/l	0.55	192,537.27	1.273E+00	Pulse	0.30	3
Cu			2	48.248	ug/l	0.20	516,252.73	3.415E+00	Pulse	0.30	3
Zn			2	49.123	ug/l	0.63	71,332.90	4.718E-01	Pulse	0.30	3
As			2	49.355	ug/l	0.87	36,342.19	2.404E-01	Pulse	1.00	3
Cd			2	48.901	ug/l	0.08	109,541.14	1.267E-01	Pulse	0.30	3
Sn			2	49.523	ug/l	0.67	192,108.89	2.222E-01	Pulse	0.30	3
Se			3	193.764	ug/l	0.64	29,152.17	1.986E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,015,940.91	1.57	97.4	Mix	0.10	3
1	Sc		5,387,537.63	1.27	95.0	Mix	0.10	3
1	Ge		1,024,376.99	1.13	95.5	Pulse	0.10	3

Quantitation Report

1	Ge		1,424,949.56	0.72	96.4	Pulse	0.10	3
1	Rh		6,760,405.31	0.49	92.4	Analog	0.10	3
1	In		7,174,691.14	1.19	93.4	Analog	0.10	3
1	Tb		9,809,757.35	0.82	96.1	Analog	0.10	3
1	Ho		950,831.24	0.73	98.8	Pulse	0.10	3
1	Bi		5,759,692.62	0.55	94.8	Pulse	0.10	3
2	Sc		151,193.89	0.42	94.9	Pulse	0.30	3
2	Ge		92,547.58	1.16	95.4	Pulse	0.30	3
2	Ge		139,782.11	1.14	95.1	Pulse	0.30	3
2	Rh		2,846,799.82	0.75	93.6	Pulse	0.30	3
2	In		864,659.02	0.25	95.1	Pulse	0.30	3
2	Tb		3,530,271.53	0.38	97.2	Pulse	0.30	3
2	Ho		345,626.27	0.44	97.4	Pulse	0.30	3
2	Bi		2,368,101.64	0.21	94.9	Pulse	0.30	3
3	Sc		142,818.80	1.17	98.4	Pulse	0.30	3
3	Ge		95,179.65	1.15	94.3	Pulse	0.30	3
3	Ge		146,815.50	0.47	96.9	Pulse	0.30	3
3	Rh		1,743,521.81	0.10	94.5	Pulse	0.30	3
3	Tb		2,887,762.24	0.48	98.4	Pulse	0.30	3

Quantitation Report

File Name	021_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 15:36
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.008	ug/l	21.67	145.33	3.620E-05	Pulse	0.25	3
B			1	1.123	ug/l	1.89	34,862.82	8.669E-03	Pulse	0.15	3
Ca			1	0.439	ug/l	37.21	17,790.10	3.280E-03	Pulse	0.10	3
Sr			1	0.006	ug/l	33.90	1,550.15	2.187E-04	Pulse	0.10	3
Mo			1	0.046	ug/l	6.14	836.72	1.181E-04	Pulse	0.10	3
Ag			1	0.007	ug/l	22.07	356.69	4.736E-05	Pulse	0.10	3
Sn			1	0.679	ug/l	1.27	19,115.55	2.537E-03	Pulse	0.10	3
Sb			1	0.075	ug/l	7.62	3,227.10	3.262E-04	Pulse	0.10	3
Ba			1	0.007	ug/l	52.19	166.68	1.685E-05	Pulse	0.10	3
Tl			1	0.021	ug/l	14.65	1,920.22	3.175E-04	Pulse	0.10	3
Pb			1	0.011	ug/l	35.05	446.69	7.393E-05	Pulse	0.10	3
Pb			1	0.007	ug/l	12.44	290.02	4.798E-05	Pulse	0.10	3
Pb			1	0.008	ug/l	22.80	1,490.10	2.466E-04	Pulse	0.10	3
Na			2	0.525	ug/l	117.41	7,310.65	4.777E-02	Pulse	0.30	3
Mg			2	-0.071	ug/l	-169.85	304.45	1.988E-03	Pulse	0.30	3
Al			2	-0.197	ug/l	-93.33	123.33	8.058E-04	Pulse	0.30	3
K			2	1.273	ug/l	30.16	6,827.04	4.462E-02	Pulse	0.30	3
Ca			2	0.763	ug/l	138.45	187.78	1.227E-03	Pulse	0.30	3
Ti			2	-0.031	ug/l	-96.05	8.89	5.806E-05	Pulse	0.30	3
V			2	-0.016	ug/l	-70.02	313.34	2.046E-03	Pulse	0.30	3
Cr			2	0.002	ug/l	171.46	360.01	2.353E-03	Pulse	0.30	3
Mn			2	0.007	ug/l	86.80	68.89	4.506E-04	Pulse	0.30	3
Fe			2	-0.058	ug/l	-94.79	5,561.02	3.634E-02	Pulse	0.30	3
Co			2	0.001	ug/l	236.58	124.45	8.128E-04	Pulse	0.30	3
Ni			2	-0.009	ug/l	-67.27	221.11	1.446E-03	Pulse	0.30	3
Cu			2	0.002	ug/l	133.20	362.23	2.367E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.021	ug/l	194.95	351.12	2.293E-03	Pulse	0.30	3
As			2	0.012	ug/l	50.22	22.33	1.459E-04	Pulse	1.00	3
Cd			2	0.007	ug/l	30.03	32.18	3.586E-05	Pulse	0.30	3
Sn			2	0.155	ug/l	3.18	3,198.14	3.565E-03	Pulse	0.30	3
Se			3	-0.257	ug/l	-5.75	32.47	2.183E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,021,824.20	1.70	97.5	Mix	0.10	3
1	Sc		5,423,570.96	1.13	95.6	Mix	0.10	3
1	Ge		1,032,683.37	0.93	96.2	Pulse	0.10	3
1	Ge		1,429,595.60	1.01	96.8	Pulse	0.10	3
1	Rh		7,083,854.06	0.89	96.8	Analog	0.10	3
1	In		7,535,527.56	0.43	98.1	Analog	0.10	3
1	Tb		9,894,983.19	1.08	97.0	Analog	0.10	3
1	Ho		940,406.94	0.85	97.7	Pulse	0.10	3
1	Bi		6,042,784.91	1.03	99.5	Analog	0.10	3
2	Sc		152,991.71	0.83	96.0	Pulse	0.30	3
2	Ge		94,350.01	0.85	97.3	Pulse	0.30	3
2	Ge		143,122.97	1.12	97.4	Pulse	0.30	3
2	Rh		2,991,632.17	0.80	98.4	Pulse	0.30	3
2	In		897,119.46	0.28	98.6	Pulse	0.30	3
2	Tb		3,596,295.27	0.72	99.0	Pulse	0.30	3
2	Ho		351,692.19	0.64	99.1	Pulse	0.30	3
2	Bi		2,473,149.48	0.43	99.1	Pulse	0.30	3
3	Sc		143,240.46	0.63	98.7	Pulse	0.30	3
3	Ge		98,232.92	0.50	97.3	Pulse	0.30	3
3	Ge		148,702.82	0.41	98.1	Pulse	0.30	3
3	Rh		1,826,452.01	0.50	99.0	Pulse	0.30	3
3	Tb		2,934,191.00	0.06	100.0	Pulse	0.30	3

Quantitation Report

File Name	022LCCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 15:41
Sample Name	CRI
Sample Type	LLCCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.532	ug/l	0.34	7,679.16	1.887E-03	Pulse	0.25	3
B			1	25.267	ug/l	2.66	359,273.59	8.832E-02	Pulse	0.15	3
Ca			1	248.111	ug/l	1.16	438,346.10	7.957E-02	Pulse	0.10	3
Sr			1	4.910	ug/l	1.27	405,040.67	5.672E-02	Pulse	0.10	3
Mo			1	1.003	ug/l	2.85	15,494.78	2.170E-03	Pulse	0.10	3
Ag			1	0.506	ug/l	1.40	20,851.11	2.752E-03	Pulse	0.10	3
Sn			1	4.915	ug/l	0.82	123,490.90	1.630E-02	Pulse	0.10	3
Sb			1	2.057	ug/l	2.58	57,017.53	5.661E-03	Pulse	0.10	3
Ba			1	1.013	ug/l	2.51	11,641.42	1.156E-03	Pulse	0.10	3
Tl			1	0.493	ug/l	1.24	35,530.44	5.845E-03	Pulse	0.10	3
Pb			1	0.512	ug/l	2.81	12,245.60	2.015E-03	Pulse	0.10	3
Pb			1	0.516	ug/l	4.01	10,867.81	1.787E-03	Pulse	0.10	3
Pb			1	0.503	ug/l	1.11	48,920.15	8.050E-03	Pulse	0.10	3
Na			2	243.744	ug/l	0.47	367,187.66	2.369E+00	Pulse	0.30	3
Mg			2	247.616	ug/l	0.30	169,577.90	1.094E+00	Pulse	0.30	3
Al			2	24.583	ug/l	5.32	5,308.69	3.425E-02	Pulse	0.30	3
K			2	248.947	ug/l	0.93	106,473.78	6.869E-01	Pulse	0.30	3
Ca			2	262.601	ug/l	1.67	6,063.40	3.911E-02	Pulse	0.30	3
Ti			2	1.153	ug/l	26.84	211.12	1.364E-03	Pulse	0.30	3
V			2	1.021	ug/l	3.37	6,685.86	4.314E-02	Pulse	0.30	3
Cr			2	1.009	ug/l	1.74	8,630.11	5.567E-02	Pulse	0.30	3
Mn			2	0.985	ug/l	2.13	3,963.86	2.557E-02	Pulse	0.30	3
Fe			2	24.753	ug/l	0.63	174,812.04	1.128E+00	Pulse	0.30	3
Co			2	0.501	ug/l	2.13	7,477.35	4.824E-02	Pulse	0.30	3
Ni			2	0.993	ug/l	1.93	4,280.61	2.761E-02	Pulse	0.30	3
Cu			2	2.019	ug/l	2.58	22,484.42	1.451E-01	Pulse	0.30	3
Zn			2	5.051	ug/l	3.06	7,811.96	5.039E-02	Pulse	0.30	3
As			2	0.492	ug/l	4.30	385.34	2.485E-03	Pulse	1.00	3
Cd			2	0.512	ug/l	0.64	1,220.92	1.343E-03	Pulse	0.30	3
Sn			2	4.445	ug/l	1.81	20,510.13	2.256E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.496	ug/l	4.55	147.80	9.885E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,068,743.12	1.53	98.6	Analog	0.10	3
1	Sc		5,509,077.00	0.88	97.1	Analog	0.10	3
1	Ge		1,044,198.35	0.72	97.3	Pulse	0.10	3
1	Ge		1,448,468.83	1.04	98.0	Pulse	0.10	3
1	Rh		7,140,583.43	0.47	97.6	Analog	0.10	3
1	In		7,575,180.29	1.56	98.7	Analog	0.10	3
1	Tb		10,071,343.39	0.69	98.7	Analog	0.10	3
1	Ho		955,454.28	1.40	99.3	Pulse	0.10	3
1	Bi		6,078,046.16	2.12	100.1	Analog	0.10	3
2	Sc		155,016.14	0.89	97.3	Pulse	0.30	3
2	Ge		95,173.71	0.78	98.1	Pulse	0.30	3
2	Ge		144,373.50	1.11	98.2	Pulse	0.30	3
2	Rh		2,998,170.58	0.61	98.6	Pulse	0.30	3
2	In		909,026.93	0.48	99.9	Pulse	0.30	3
2	Tb		3,604,666.66	0.79	99.3	Pulse	0.30	3
2	Ho		352,121.96	0.55	99.2	Pulse	0.30	3
2	Bi		2,479,365.87	0.26	99.4	Pulse	0.30	3
3	Sc		144,669.32	1.06	99.6	Pulse	0.30	3
3	Ge		98,693.57	0.47	97.8	Pulse	0.30	3
3	Ge		149,517.27	0.39	98.7	Pulse	0.30	3
3	Rh		1,834,813.05	0.63	99.4	Pulse	0.30	3
3	Tb		2,954,510.23	0.51	100.6	Pulse	0.30	3

Quantitation Report

File Name	023ICSA.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 15:47
Sample Name	ICSAB
Sample Type	ICSB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.007	ug/l	33.24	114.67	3.093E-05	Pulse	0.25	3
B			1	53.225	ug/l	0.57	668,977.91	1.805E-01	Pulse	0.15	3
Ca			1	96444.924	ug/l	0.49	147,173,487.81	2.971E+01	Analog	0.10	3
Sr			1	2117.174	ug/l	1.53	134,329,144.66	2.439E+01	Analog	0.10	3
Mo			1	2270.772	ug/l	0.05	26,824,027.10	4.870E+00	Analog	0.10	3
Ag			1	19.087	ug/l	0.84	646,710.82	1.034E-01	Pulse	0.10	3
Sn			1	2059.155	ug/l	1.29	41,829,123.54	6.691E+00	Analog	0.10	3
Sb			1	0.076	ug/l	11.17	2,925.41	3.278E-04	Pulse	0.10	3
Ba			1	0.179	ug/l	6.03	1,890.18	2.118E-04	Pulse	0.10	3
Tl			1	0.029	ug/l	16.44	1,943.55	4.106E-04	Pulse	0.10	3
Pb			1	0.119	ug/l	8.02	2,333.61	4.939E-04	Pulse	0.10	3
Pb			1	0.114	ug/l	8.54	1,956.88	4.144E-04	Pulse	0.10	3
Pb			1	0.114	ug/l	2.48	9,034.78	1.912E-03	Pulse	0.10	3
Na			2	91700.659	ug/l	1.01	124,555,559.49	8.751E+02	Analog	0.30	3
Mg			2	91238.940	ug/l	1.61	57,249,308.83	4.022E+02	Analog	0.30	3
Al			2	93778.312	ug/l	1.18	18,015,059.84	1.266E+02	Analog	0.30	3
K			2	96593.734	ug/l	1.08	35,657,841.92	2.505E+02	Analog	0.30	3
Ca			2	103427.408	ug/l	1.17	2,130,266.86	1.497E+01	Pulse	0.30	3
Ti			2	1947.460	ug/l	0.57	305,652.55	2.147E+00	Pulse	0.30	3
V			2	21.134	ug/l	0.80	119,568.44	8.401E-01	Pulse	0.30	3
Cr			2	20.607	ug/l	0.24	155,560.43	1.093E+00	Pulse	0.30	3
Mn			2	20.429	ug/l	0.57	74,753.28	5.252E-01	Pulse	0.30	3
Fe			2	90254.865	ug/l	1.35	565,034,964.21	3.970E+03	Analog	0.30	3
Co			2	19.222	ug/l	0.73	259,267.22	1.822E+00	Pulse	0.30	3
Ni			2	18.721	ug/l	0.56	69,825.78	4.906E-01	Pulse	0.30	3
Cu			2	17.596	ug/l	0.61	177,449.58	1.247E+00	Pulse	0.30	3
Zn			2	19.294	ug/l	1.09	26,557.15	1.866E-01	Pulse	0.30	3
As			2	19.749	ug/l	0.27	13,697.75	9.623E-02	Pulse	1.00	3
Cd			2	19.478	ug/l	1.34	37,803.02	5.047E-02	Pulse	0.30	3
Sn			2	2118.215	ug/l	0.83	7,027,818.89	9.383E+00	Analog	0.30	3
Se			3	19.981	ug/l	1.23	2,568.53	2.091E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,705,220.44	0.99	89.8	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,953,801.28	2.01	87.3	Pulse	0.10	3
1	Ge		934,469.80	1.12	87.1	Pulse	0.10	3
1	Ge		1,208,708.63	1.61	81.8	Pulse	0.10	3
1	Rh		5,507,891.38	1.84	75.3	Pulse	0.10	3
1	In		6,251,986.79	1.40	81.4	Analog	0.10	3
1	Tb		8,921,067.78	1.19	87.4	Analog	0.10	3
1	Ho		851,929.94	1.60	88.5	Pulse	0.10	3
1	Bi		4,725,760.14	1.95	77.8	Pulse	0.10	3
2	Sc		142,337.40	0.76	89.3	Pulse	0.30	3
2	Ge		83,691.58	1.24	86.3	Pulse	0.30	3
2	Ge		121,687.95	0.70	82.8	Pulse	0.30	3
2	Rh		2,333,884.91	0.55	76.8	Pulse	0.30	3
2	In		749,017.76	0.45	82.4	Pulse	0.30	3
2	Tb		3,152,976.47	0.70	86.8	Pulse	0.30	3
2	Ho		313,057.43	0.56	88.2	Pulse	0.30	3
2	Bi		1,923,997.91	0.17	77.1	Pulse	0.30	3
3	Sc		125,938.37	1.06	86.7	Pulse	0.30	3
3	Ge		82,922.08	0.88	82.2	Pulse	0.30	3
3	Ge		122,862.01	1.30	81.1	Pulse	0.30	3
3	Rh		1,366,475.46	1.08	74.1	Pulse	0.30	3
3	Tb		2,297,211.44	0.66	78.3	Pulse	0.30	3

Quantitation Report

File Name	024ICSA.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 15:59
Sample Name	ICSA
Sample Type	ICSA
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.006	ug/l	3.83	108.00	2.796E-05	Pulse	0.25	3
B			1	5.972	ug/l	2.03	95,246.62	2.467E-02	Pulse	0.15	3
Ca			1	90798.912	ug/l	0.51	146,129,394.49	2.797E+01	Analog	0.10	3
Sr			1	1968.318	ug/l	1.06	135,941,804.64	2.268E+01	Analog	0.10	3
Mo			1	2092.991	ug/l	0.34	26,908,702.93	4.489E+00	Analog	0.10	3
Ag			1	0.027	ug/l	12.18	1,036.74	1.561E-04	Pulse	0.10	3
Sn			1	1920.247	ug/l	2.25	41,513,495.21	6.240E+00	Analog	0.10	3
Sb			1	0.041	ug/l	4.29	2,206.93	2.330E-04	Pulse	0.10	3
Ba			1	0.141	ug/l	2.27	1,593.49	1.682E-04	Pulse	0.10	3
Tl			1	0.019	ug/l	2.60	1,466.80	2.914E-04	Pulse	0.10	3
Pb			1	0.091	ug/l	7.34	1,940.21	3.854E-04	Pulse	0.10	3
Pb			1	0.086	ug/l	4.19	1,596.81	3.170E-04	Pulse	0.10	3
Pb			1	0.089	ug/l	0.51	7,691.11	1.528E-03	Pulse	0.10	3
Na			2	87834.290	ug/l	0.12	122,644,404.02	8.382E+02	Analog	0.30	3
Mg			2	85826.986	ug/l	0.22	55,363,038.91	3.784E+02	Analog	0.30	3
Al			2	87698.347	ug/l	0.86	17,318,460.98	1.184E+02	Analog	0.30	3
K			2	92096.552	ug/l	0.46	34,949,466.39	2.389E+02	Analog	0.30	3
Ca			2	97223.456	ug/l	0.60	2,058,565.61	1.407E+01	Pulse	0.30	3
Ti			2	1835.289	ug/l	0.76	296,103.70	2.024E+00	Pulse	0.30	3
V			2	-0.006	ug/l	-111.19	360.01	2.460E-03	Pulse	0.30	3
Cr			2	0.208	ug/l	2.45	1,940.14	1.326E-02	Pulse	0.30	3
Mn			2	0.411	ug/l	0.70	1,584.54	1.083E-02	Pulse	0.30	3
Fe			2	85359.441	ug/l	1.26	549,335,515.95	3.755E+03	Analog	0.30	3
Co			2	0.059	ug/l	2.47	932.26	6.372E-03	Pulse	0.30	3
Ni			2	0.425	ug/l	3.41	1,871.24	1.279E-02	Pulse	0.30	3
Cu			2	0.211	ug/l	2.42	2,510.23	1.716E-02	Pulse	0.30	3
Zn			2	0.357	ug/l	6.42	805.59	5.506E-03	Pulse	0.30	3
As			2	0.082	ug/l	11.39	71.33	4.877E-04	Pulse	1.00	3
Cd			2	-0.096	ug/l	-6.66	-180.37	-2.318E-04	Pulse	0.30	3
Sn			2	1988.860	ug/l	1.46	6,854,706.40	8.810E+00	Analog	0.30	3
Se			3	0.051	ug/l	103.00	69.93	5.337E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,861,743.81	0.82	93.6	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,224,225.96	0.99	92.1	Pulse	0.10	3
1	Ge		973,534.02	1.57	90.7	Pulse	0.10	3
1	Ge		1,265,211.10	1.49	85.6	Pulse	0.10	3
1	Rh		5,994,615.54	0.72	81.9	Analog	0.10	3
1	In		6,655,732.98	2.84	86.7	Analog	0.10	3
1	Tb		9,471,534.23	0.17	92.8	Analog	0.10	3
1	Ho		910,235.82	1.49	94.6	Pulse	0.10	3
1	Bi		5,034,793.88	1.55	82.9	Pulse	0.10	3
2	Sc		146,316.05	0.58	91.8	Pulse	0.30	3
2	Ge		86,077.20	0.82	88.8	Pulse	0.30	3
2	Ge		126,120.76	0.98	85.8	Pulse	0.30	3
2	Rh		2,424,191.01	0.45	79.7	Pulse	0.30	3
2	In		778,048.97	0.01	85.5	Pulse	0.30	3
2	Tb		3,267,938.97	0.57	90.0	Pulse	0.30	3
2	Ho		322,228.80	0.67	90.8	Pulse	0.30	3
2	Bi		2,001,291.24	0.22	80.2	Pulse	0.30	3
3	Sc		136,134.22	1.32	93.8	Pulse	0.30	3
3	Ge		88,473.21	0.16	87.7	Pulse	0.30	3
3	Ge		131,075.09	0.42	86.5	Pulse	0.30	3
3	Rh		1,450,234.56	1.23	78.6	Pulse	0.30	3
3	Tb		2,441,778.10	0.82	83.2	Pulse	0.30	3

Quantitation Report

File Name	025SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 16:04
Sample Name	rinseconf
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.001	ug/l	58.94	42.67	1.106E-05	Pulse	0.25	3
B			1	-0.488	ug/l	-2.71	12,949.60	3.355E-03	Pulse	0.15	3
Ca			1	13.641	ug/l	8.30	38,455.75	7.347E-03	Pulse	0.10	3
Sr			1	0.251	ug/l	7.17	22,079.96	3.044E-03	Pulse	0.10	3
Mo			1	0.715	ug/l	4.90	11,264.43	1.553E-03	Pulse	0.10	3
Ag			1	0.003	ug/l	42.86	190.01	2.426E-05	Pulse	0.10	3
Sn			1	1.115	ug/l	0.77	30,984.75	3.956E-03	Pulse	0.10	3
Sb			1	-0.024	ug/l	-26.05	643.37	6.006E-05	Pulse	0.10	3
Ba			1	0.003	ug/l	118.66	133.34	1.243E-05	Pulse	0.10	3
Tl			1	0.000	ug/l	25309.42	443.36	6.707E-05	Pulse	0.10	3
Pb			1	0.004	ug/l	53.03	310.02	4.689E-05	Pulse	0.10	3
Pb			1	0.004	ug/l	62.30	253.34	3.831E-05	Pulse	0.10	3
Pb			1	0.003	ug/l	27.94	1,133.40	1.714E-04	Pulse	0.10	3
Na			2	9.199	ug/l	17.86	18,854.10	1.305E-01	Pulse	0.30	3
Mg			2	7.864	ug/l	19.89	5,339.83	3.697E-02	Pulse	0.30	3
Al			2	7.602	ug/l	8.39	1,636.77	1.133E-02	Pulse	0.30	3
K			2	4.842	ug/l	27.14	7,780.78	5.387E-02	Pulse	0.30	3
Ca			2	8.715	ug/l	25.98	343.34	2.377E-03	Pulse	0.30	3
Ti			2	0.251	ug/l	21.96	53.33	3.692E-04	Pulse	0.30	3
V			2	-0.025	ug/l	-11.94	245.56	1.700E-03	Pulse	0.30	3
Cr			2	0.004	ug/l	59.08	354.45	2.454E-03	Pulse	0.30	3
Mn			2	0.005	ug/l	81.49	54.44	3.770E-04	Pulse	0.30	3
Fe			2	9.569	ug/l	16.04	66,403.16	4.598E-01	Pulse	0.30	3
Co			2	-0.002	ug/l	-102.53	85.56	5.925E-04	Pulse	0.30	3
Ni			2	0.000	ug/l	-697.92	243.34	1.685E-03	Pulse	0.30	3
Cu			2	0.057	ug/l	9.58	906.70	6.278E-03	Pulse	0.30	3
Zn			2	-0.020	ug/l	-213.80	274.45	1.900E-03	Pulse	0.30	3
As			2	0.009	ug/l	57.83	19.33	1.339E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.003	ug/l	28.68	21.75	2.457E-05	Pulse	0.30	3
Sn			2	0.504	ug/l	3.78	4,524.03	5.112E-03	Pulse	0.30	3
Se			3	-0.264	ug/l	-6.49	33.53	2.113E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,859,764.03	0.34	93.6	Pulse	0.10	3
1	Sc		5,235,157.84	0.64	92.3	Pulse	0.10	3
1	Ge		1,033,258.66	1.28	96.3	Pulse	0.10	3
1	Ge		1,437,354.30	0.82	97.3	Pulse	0.10	3
1	Rh		7,253,183.85	0.29	99.1	Analog	0.10	3
1	In		7,831,504.87	0.80	102.0	Analog	0.10	3
1	Tb		10,719,779.42	0.37	105.1	Analog	0.10	3
1	Ho		1,035,691.02	0.67	107.6	Pulse	0.10	3
1	Bi		6,613,685.32	0.39	108.9	Analog	0.10	3
2	Sc		144,427.57	0.07	90.6	Pulse	0.30	3
2	Ge		91,850.31	0.77	94.7	Pulse	0.30	3
2	Ge		139,143.20	0.49	94.7	Pulse	0.30	3
2	Rh		3,028,427.03	0.27	99.6	Pulse	0.30	3
2	In		885,027.63	0.31	97.3	Pulse	0.30	3
2	Tb		3,691,932.63	0.40	101.7	Pulse	0.30	3
2	Ho		362,569.60	0.67	102.1	Pulse	0.30	3
2	Bi		2,559,326.35	0.15	102.6	Pulse	0.30	3
3	Sc		155,008.96	1.24	106.8	Pulse	0.30	3
3	Ge		103,662.64	1.32	102.7	Pulse	0.30	3
3	Ge		158,681.22	0.39	104.7	Pulse	0.30	3
3	Rh		1,970,080.82	1.33	106.8	Pulse	0.30	3
3	Tb		3,163,633.62	1.31	107.8	Pulse	0.30	3

Quantitation Report

File Name	026_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 16:09
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	48.182	ug/l	0.37	680,326.00	1.702E-01	Pulse	0.25	3
B			1	94.941	ug/l	0.17	1,271,486.69	3.182E-01	Pulse	0.15	3
Ca			1	4932.171	ug/l	1.03	8,223,420.50	1.522E+00	Analog	0.10	3
Sr			1	51.282	ug/l	0.74	4,209,325.46	5.910E-01	Pulse	0.10	3
Mo			1	51.017	ug/l	1.12	779,425.33	1.094E-01	Pulse	0.10	3
Ag			1	48.633	ug/l	1.21	2,044,632.16	2.635E-01	Pulse	0.10	3
Sn			1	50.042	ug/l	0.54	1,264,117.09	1.629E-01	Pulse	0.10	3
Sb			1	50.708	ug/l	0.29	1,472,689.04	1.367E-01	Pulse	0.10	3
Ba			1	49.171	ug/l	0.85	600,097.74	5.569E-02	Pulse	0.10	3
Tl			1	49.689	ug/l	0.60	3,710,925.78	5.829E-01	Pulse	0.10	3
Pb			1	50.809	ug/l	0.46	1,254,617.61	1.971E-01	Pulse	0.10	3
Pb			1	50.718	ug/l	0.98	1,102,428.55	1.732E-01	Pulse	0.10	3
Pb			1	50.281	ug/l	0.54	5,050,472.16	7.934E-01	Pulse	0.10	3
Na			2	4856.904	ug/l	1.46	6,854,551.53	4.639E+01	Analog	0.30	3
Mg			2	4784.770	ug/l	0.62	3,117,256.06	2.110E+01	Pulse	0.30	3
Al			2	4585.918	ug/l	0.57	914,753.37	6.191E+00	Pulse	0.30	3
K			2	4795.206	ug/l	0.39	1,843,529.65	1.248E+01	Pulse	0.30	3
Ca			2	5061.337	ug/l	1.03	108,385.06	7.335E-01	Pulse	0.30	3
Ti			2	49.107	ug/l	4.33	8,014.25	5.424E-02	Pulse	0.30	3
V			2	51.775	ug/l	0.49	303,527.41	2.054E+00	Pulse	0.30	3
Cr			2	51.100	ug/l	0.88	399,939.25	2.707E+00	Pulse	0.30	3
Mn			2	49.735	ug/l	0.61	188,871.67	1.278E+00	Pulse	0.30	3
Fe			2	4993.856	ug/l	0.37	32,463,432.04	2.197E+02	Analog	0.30	3
Co			2	50.625	ug/l	0.21	708,705.68	4.796E+00	Pulse	0.30	3
Ni			2	50.220	ug/l	0.59	194,027.52	1.313E+00	Pulse	0.30	3
Cu			2	49.876	ug/l	0.46	521,543.33	3.530E+00	Pulse	0.30	3
Zn			2	49.889	ug/l	0.41	70,797.06	4.791E-01	Pulse	0.30	3
As			2	51.031	ug/l	0.40	36,723.68	2.485E-01	Pulse	1.00	3
Cd			2	49.955	ug/l	0.78	113,048.35	1.294E-01	Pulse	0.30	3
Sn			2	50.509	ug/l	0.67	197,891.08	2.265E-01	Pulse	0.30	3
Se			3	193.206	ug/l	0.95	31,896.46	1.980E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,996,464.87	0.53	96.9	Pulse	0.10	3
1	Sc		5,402,225.75	1.66	95.3	Mix	0.10	3
1	Ge		1,053,222.40	1.04	98.1	Pulse	0.10	3

Quantitation Report

1	Ge		1,464,521.95	0.98	99.1	Pulse	0.10	3
1	Rh		7,122,284.68	1.00	97.4	Analog	0.10	3
1	In		7,758,426.42	1.08	101.0	Analog	0.10	3
1	Tb		10,776,965.26	1.47	105.6	Analog	0.10	3
1	Ho		1,037,042.85	1.32	107.8	Pulse	0.10	3
1	Bi		6,366,337.20	1.63	104.8	Analog	0.10	3
2	Sc		147,765.31	0.70	92.7	Pulse	0.30	3
2	Ge		92,832.59	0.24	95.7	Pulse	0.30	3
2	Ge		139,797.53	1.28	95.1	Pulse	0.30	3
2	Rh		2,956,517.11	0.59	97.2	Pulse	0.30	3
2	In		873,486.54	0.70	96.0	Pulse	0.30	3
2	Tb		3,666,691.94	0.69	101.0	Pulse	0.30	3
2	Ho		359,088.00	0.52	101.2	Pulse	0.30	3
2	Bi		2,471,592.33	0.67	99.0	Pulse	0.30	3
3	Sc		158,509.94	0.28	109.2	Pulse	0.30	3
3	Ge		105,830.75	0.53	104.9	Pulse	0.30	3
3	Ge		161,103.14	0.72	106.3	Pulse	0.30	3
3	Rh		1,926,676.73	0.36	104.4	Pulse	0.30	3
3	Tb		3,137,966.82	0.30	106.9	Pulse	0.30	3

Quantitation Report

File Name	027_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 16:14
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.006	ug/l	18.33	120.00	2.928E-05	Pulse	0.25	3
B			1	0.768	ug/l	7.31	30,734.74	7.500E-03	Pulse	0.15	3
Ca			1	0.020	ug/l	2152.72	17,660.10	3.151E-03	Pulse	0.10	3
Sr			1	0.027	ug/l	22.79	3,530.55	4.704E-04	Pulse	0.10	3
Mo			1	0.120	ug/l	11.65	2,076.89	2.766E-04	Pulse	0.10	3
Ag			1	0.006	ug/l	36.97	326.69	4.016E-05	Pulse	0.10	3
Sn			1	0.525	ug/l	1.11	16,599.36	2.038E-03	Pulse	0.10	3
Sb			1	0.057	ug/l	3.75	3,027.08	2.770E-04	Pulse	0.10	3
Ba			1	0.006	ug/l	35.90	170.01	1.556E-05	Pulse	0.10	3
Tl			1	0.016	ug/l	16.09	1,660.16	2.490E-04	Pulse	0.10	3
Pb			1	0.007	ug/l	25.28	380.02	5.703E-05	Pulse	0.10	3
Pb			1	0.009	ug/l	36.04	360.02	5.404E-05	Pulse	0.10	3
Pb			1	0.007	ug/l	17.16	1,586.77	2.381E-04	Pulse	0.10	3
Na			2	2.605	ug/l	52.51	10,324.44	6.762E-02	Pulse	0.30	3
Mg			2	0.467	ug/l	29.32	665.58	4.360E-03	Pulse	0.30	3
Al			2	0.219	ug/l	116.16	208.89	1.368E-03	Pulse	0.30	3
K			2	1.772	ug/l	3.43	7,012.66	4.591E-02	Pulse	0.30	3
Ca			2	-1.337	ug/l	-86.63	141.11	9.229E-04	Pulse	0.30	3
Ti			2	0.002	ug/l	1255.94	14.45	9.449E-05	Pulse	0.30	3
V			2	-0.028	ug/l	-27.18	241.11	1.577E-03	Pulse	0.30	3
Cr			2	0.005	ug/l	97.64	384.45	2.516E-03	Pulse	0.30	3
Mn			2	0.010	ug/l	15.76	78.89	5.163E-04	Pulse	0.30	3
Fe			2	0.599	ug/l	25.41	9,964.69	6.523E-02	Pulse	0.30	3
Co			2	0.002	ug/l	49.33	146.67	9.597E-04	Pulse	0.30	3
Ni			2	-0.002	ug/l	-370.52	252.23	1.650E-03	Pulse	0.30	3
Cu			2	0.013	ug/l	36.38	482.24	3.159E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.007	ug/l	-433.41	310.01	2.030E-03	Pulse	0.30	3
As			2	0.007	ug/l	111.37	18.67	1.223E-04	Pulse	1.00	3
Cd			2	0.004	ug/l	20.44	24.35	2.671E-05	Pulse	0.30	3
Sn			2	-0.024	ug/l	-95.33	2,523.57	2.770E-03	Pulse	0.30	3
Se			3	-0.141	ug/l	-69.15	56.00	3.368E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,097,570.45	0.76	99.3	Mix	0.10	3
1	Sc		5,604,032.84	0.29	98.8	Analog	0.10	3
1	Ge		1,084,724.49	0.40	101.1	Pulse	0.10	3
1	Ge		1,502,288.05	0.33	101.7	Pulse	0.10	3
1	Rh		7,505,061.14	0.58	102.6	Analog	0.10	3
1	In		8,145,087.76	1.67	106.1	Analog	0.10	3
1	Tb		10,927,133.59	0.76	107.1	Analog	0.10	3
1	Ho		1,046,244.62	0.79	108.7	Pulse	0.10	3
1	Bi		6,664,799.69	0.26	109.7	Analog	0.10	3
2	Sc		152,735.58	0.92	95.8	Pulse	0.30	3
2	Ge		96,122.41	0.92	99.1	Pulse	0.30	3
2	Ge		145,290.16	1.10	98.8	Pulse	0.30	3
2	Rh		3,131,963.28	0.50	103.0	Pulse	0.30	3
2	In		911,187.16	0.86	100.2	Pulse	0.30	3
2	Tb		3,749,317.91	0.43	103.3	Pulse	0.30	3
2	Ho		366,995.18	0.77	103.4	Pulse	0.30	3
2	Bi		2,604,734.48	0.41	104.4	Pulse	0.30	3
3	Sc		160,453.89	0.51	110.5	Pulse	0.30	3
3	Ge		109,566.96	0.35	108.6	Pulse	0.30	3
3	Ge		166,205.14	0.29	109.7	Pulse	0.30	3
3	Rh		2,014,583.60	0.44	109.2	Pulse	0.30	3
3	Tb		3,195,711.75	0.41	108.9	Pulse	0.30	3

Quantitation Report

File Name	028SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 16:19
Sample Name	jc77334-1q
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.003	ug/l	26.42	52.00	1.245E-05	Pulse	0.25	3
B			1	1.166	ug/l	13.37	28,740.24	6.890E-03	Pulse	0.15	3
Ca			1	68.396	ug/l	2.37	78,850.74	1.368E-02	Pulse	0.10	3
Sr			1	0.254	ug/l	2.22	12,368.52	1.616E-03	Pulse	0.10	3
Mo			1	0.153	ug/l	13.37	1,410.12	1.841E-04	Pulse	0.10	3
Ag			1	0.004	ug/l	59.53	143.34	1.739E-05	Pulse	0.10	3
Sn			1	0.197	ug/l	7.21	5,377.80	6.524E-04	Pulse	0.10	3
Sb			1	-0.054	ug/l	-6.79	550.03	5.049E-05	Pulse	0.10	3
Ba			1	0.044	ug/l	14.78	366.68	3.372E-05	Pulse	0.10	3
Tl			1	0.004	ug/l	24.87	606.70	9.141E-05	Pulse	0.10	3
Pb			1	0.047	ug/l	6.86	810.06	1.219E-04	Pulse	0.10	3
Pb			1	0.045	ug/l	16.95	673.37	1.013E-04	Pulse	0.10	3
Pb			1	0.046	ug/l	3.54	3,206.94	4.830E-04	Pulse	0.10	3
Na			2	309.944	ug/l	0.51	241,625.41	1.522E+00	Pulse	0.30	3
Mg			2	11.419	ug/l	7.09	4,362.84	2.747E-02	Pulse	0.30	3
Al			2	14.131	ug/l	12.41	1,684.56	1.061E-02	Pulse	0.30	3
K			2	4.637	ug/l	30.90	7,516.22	4.733E-02	Pulse	0.30	3
Ca			2	69.012	ug/l	14.48	970.04	6.109E-03	Pulse	0.30	3
Ti			2	-0.016	ug/l	-3.74	13.33	8.395E-05	Pulse	0.30	3
V			2	-0.111	ug/l	-6.17	76.67	4.825E-04	Pulse	0.30	3
Cr			2	0.062	ug/l	16.47	620.02	3.904E-03	Pulse	0.30	3
Mn			2	0.099	ug/l	16.05	242.23	1.526E-03	Pulse	0.30	3
Fe			2	2.835	ug/l	25.35	16,076.03	1.012E-01	Pulse	0.30	3
Co			2	0.000	ug/l	1200.68	123.34	7.761E-04	Pulse	0.30	3
Ni			2	0.010	ug/l	195.68	290.01	1.827E-03	Pulse	0.30	3
Cu			2	0.196	ug/l	12.25	1,461.20	9.202E-03	Pulse	0.30	3
Zn			2	-0.068	ug/l	-40.06	281.12	1.770E-03	Pulse	0.30	3
As			2	-0.001	ug/l	-1038.29	13.67	8.610E-05	Pulse	1.00	3
Cd			2	0.012	ug/l	33.81	31.03	3.281E-05	Pulse	0.30	3
Sn			2	-0.860	ug/l	-1.31	920.59	9.735E-04	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	-0.099	ug/l	-105.58	70.93	4.307E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,173,652.04	2.00	101.2	Mix	0.10	3
1	Sc		5,764,434.70	0.23	101.6	Analog	0.10	3
1	Ge		1,115,435.09	0.66	103.9	Pulse	0.10	3
1	Ge		1,561,896.17	1.13	105.7	Pulse	0.10	3
1	Rh		7,651,738.64	1.24	104.6	Analog	0.10	3
1	In		8,245,371.41	1.31	107.4	Analog	0.10	3
1	Tb		10,886,040.67	1.40	106.7	Analog	0.10	3
1	Ho		1,035,622.80	1.47	107.6	Pulse	0.10	3
1	Bi		6,641,459.07	1.40	109.3	Analog	0.10	3
2	Sc		158,793.62	0.38	99.6	Pulse	0.30	3
2	Ge		101,216.03	0.81	104.4	Pulse	0.30	3
2	Ge		153,234.08	1.26	104.2	Pulse	0.30	3
2	Rh		3,168,284.04	0.27	104.2	Pulse	0.30	3
2	In		945,628.68	0.30	104.0	Pulse	0.30	3
2	Tb		3,775,235.68	0.38	104.0	Pulse	0.30	3
2	Ho		370,100.25	0.07	104.3	Pulse	0.30	3
2	Bi		2,649,133.44	0.26	106.2	Pulse	0.30	3
3	Sc		156,601.55	0.82	107.9	Pulse	0.30	3
3	Ge		108,811.42	0.16	107.8	Pulse	0.30	3
3	Ge		164,697.62	0.49	108.7	Pulse	0.30	3
3	Rh		1,965,160.82	0.15	106.5	Pulse	0.30	3
3	Tb		3,128,118.21	0.27	106.6	Pulse	0.30	3

Quantitation Report

File Name	029SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 16:24
Sample Name	jc77335-1q
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	-0.001	ug/l	-446.71	22.67	5.422E-06	Pulse	0.25	3
B			1	1.446	ug/l	5.60	30,411.92	7.351E-03	Pulse	0.15	3
Ca			1	39.996	ug/l	1.29	53,005.41	9.305E-03	Pulse	0.10	3
Sr			1	0.419	ug/l	1.86	19,622.74	2.567E-03	Pulse	0.10	3
Mo			1	0.092	ug/l	17.07	906.73	1.185E-04	Pulse	0.10	3
Ag			1	0.001	ug/l	144.02	93.33	1.136E-05	Pulse	0.10	3
Sn			1	0.002	ug/l	1209.20	2,757.02	3.345E-04	Pulse	0.10	3
Sb			1	-0.029	ug/l	-24.28	910.06	8.401E-05	Pulse	0.10	3
Ba			1	0.014	ug/l	23.66	183.34	1.692E-05	Pulse	0.10	3
Tl			1	0.002	ug/l	100.95	526.70	7.869E-05	Pulse	0.10	3
Pb			1	0.014	ug/l	41.51	386.69	5.778E-05	Pulse	0.10	3
Pb			1	0.022	ug/l	3.92	416.70	6.222E-05	Pulse	0.10	3
Pb			1	0.019	ug/l	14.37	1,816.81	2.714E-04	Pulse	0.10	3
Na			2	241.392	ug/l	2.41	189,470.97	1.195E+00	Pulse	0.30	3
Mg			2	5.188	ug/l	3.57	2,180.17	1.374E-02	Pulse	0.30	3
Al			2	3.347	ug/l	16.16	528.91	3.331E-03	Pulse	0.30	3
K			2	1.125	ug/l	83.24	6,784.79	4.278E-02	Pulse	0.30	3
Ca			2	40.125	ug/l	22.51	636.69	4.019E-03	Pulse	0.30	3
Ti			2	-0.092	ug/l	-70.63	6.66	4.179E-05	Pulse	0.30	3
V			2	-0.111	ug/l	-5.72	76.67	4.822E-04	Pulse	0.30	3
Cr			2	0.064	ug/l	16.01	630.02	3.969E-03	Pulse	0.30	3
Mn			2	0.045	ug/l	12.80	132.23	8.332E-04	Pulse	0.30	3
Fe			2	0.870	ug/l	11.84	9,201.59	5.800E-02	Pulse	0.30	3
Co			2	-0.005	ug/l	-69.93	80.00	5.032E-04	Pulse	0.30	3
Ni			2	0.173	ug/l	20.18	626.69	3.954E-03	Pulse	0.30	3
Cu			2	0.111	ug/l	15.25	980.04	6.173E-03	Pulse	0.30	3
Zn			2	-0.125	ug/l	-20.64	237.78	1.499E-03	Pulse	0.30	3
As			2	0.002	ug/l	443.19	15.00	9.442E-05	Pulse	1.00	3
Cd			2	0.001	ug/l	126.69	17.73	1.875E-05	Pulse	0.30	3
Sn			2	-1.079	ug/l	-2.57	462.23	4.886E-04	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	-0.141	ug/l	-120.27	67.67	4.091E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,138,027.11	1.64	100.3	Mix	0.10	3
1	Sc		5,696,383.46	0.48	100.4	Analog	0.10	3
1	Ge		1,130,771.88	0.61	105.4	Pulse	0.10	3
1	Ge		1,567,573.99	0.40	106.1	Pulse	0.10	3
1	Rh		7,644,815.51	1.50	104.5	Analog	0.10	3
1	In		8,240,113.38	0.96	107.3	Analog	0.10	3
1	Tb		10,833,496.51	0.10	106.2	Analog	0.10	3
1	Ho		1,041,778.45	0.93	108.3	Pulse	0.10	3
1	Bi		6,698,389.28	1.01	110.3	Analog	0.10	3
2	Sc		158,649.69	1.42	99.5	Pulse	0.30	3
2	Ge		101,560.39	0.88	104.7	Pulse	0.30	3
2	Ge		153,926.63	0.08	104.7	Pulse	0.30	3
2	Rh		3,155,600.15	0.39	103.8	Pulse	0.30	3
2	In		945,651.20	0.55	104.0	Pulse	0.30	3
2	Tb		3,783,778.60	0.70	104.2	Pulse	0.30	3
2	Ho		369,643.88	0.47	104.1	Pulse	0.30	3
2	Bi		2,653,124.62	0.85	106.3	Pulse	0.30	3
3	Sc		154,457.91	0.81	106.4	Pulse	0.30	3
3	Ge		108,758.41	0.13	107.8	Pulse	0.30	3
3	Ge		165,477.11	0.38	109.2	Pulse	0.30	3
3	Rh		1,956,504.85	0.32	106.0	Pulse	0.30	3
3	Tb		3,116,725.30	0.18	106.2	Pulse	0.30	3

Quantitation Report

File Name	030SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 16:29
Sample Name	mp10229-mb1 5
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.001	ug/l	51.64	36.00	8.505E-06	Pulse	0.25	3
B			1	-0.011	ug/l	-87.34	20,953.14	4.948E-03	Pulse	0.15	3
Ca			1	1.872	ug/l	21.38	19,582.10	3.433E-03	Pulse	0.10	3
Sr			1	0.038	ug/l	10.19	2,813.68	3.731E-04	Pulse	0.10	3
Mo			1	0.137	ug/l	9.69	1,253.43	1.662E-04	Pulse	0.10	3
Ag			1	0.030	ug/l	29.06	710.05	8.813E-05	Pulse	0.10	3
Sn			1	0.456	ug/l	6.75	8,662.65	1.072E-03	Pulse	0.10	3
Sb			1	0.087	ug/l	1.51	2,667.00	2.403E-04	Pulse	0.10	3
Ba			1	0.034	ug/l	31.61	313.35	2.821E-05	Pulse	0.10	3
Tl			1	0.024	ug/l	14.39	1,403.46	2.062E-04	Pulse	0.10	3
Pb			1	0.055	ug/l	5.88	933.40	1.371E-04	Pulse	0.10	3
Pb			1	0.056	ug/l	8.38	820.06	1.204E-04	Pulse	0.10	3
Pb			1	0.053	ug/l	6.45	3,676.99	5.401E-04	Pulse	0.10	3
Na			2	6.086	ug/l	6.27	11,188.31	7.181E-02	Pulse	0.30	3
Mg			2	0.927	ug/l	50.37	676.69	4.347E-03	Pulse	0.30	3
Al			2	3.131	ug/l	29.89	496.69	3.185E-03	Pulse	0.30	3
K			2	2.354	ug/l	34.84	6,914.85	4.437E-02	Pulse	0.30	3
Ca			2	-1.727	ug/l	-58.50	154.45	9.913E-04	Pulse	0.30	3
Ti			2	0.066	ug/l	179.84	20.00	1.287E-04	Pulse	0.30	3
V			2	0.193	ug/l	7.31	1,014.49	6.511E-03	Pulse	0.30	3
Cr			2	0.205	ug/l	0.79	1,197.84	7.687E-03	Pulse	0.30	3
Mn			2	0.025	ug/l	13.53	91.11	5.846E-04	Pulse	0.30	3
Fe			2	1.830	ug/l	16.27	12,323.66	7.911E-02	Pulse	0.30	3
Co			2	0.007	ug/l	9.05	172.23	1.105E-03	Pulse	0.30	3
Ni			2	0.074	ug/l	104.20	413.39	2.654E-03	Pulse	0.30	3
Cu			2	0.189	ug/l	7.19	1,393.41	8.942E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.559	ug/l	13.75	743.36	4.769E-03	Pulse	0.30	3
As			2	0.054	ug/l	27.04	34.33	2.201E-04	Pulse	1.00	3
Cd			2	0.013	ug/l	74.79	31.05	3.440E-05	Pulse	0.30	3
Sn			2	-0.606	ug/l	-9.24	1,387.30	1.537E-03	Pulse	0.30	3
Se			3	-0.087	ug/l	-379.11	78.93	4.368E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,234,684.82	0.55	102.7	Analog	0.10	3
1	Sc		5,703,355.54	1.08	100.6	Analog	0.10	3
1	Ge		1,109,182.56	1.16	103.4	Pulse	0.10	3
1	Ge		1,534,455.92	0.76	103.9	Pulse	0.10	3
1	Rh		7,539,463.85	0.85	103.1	Analog	0.10	3
1	In		8,084,566.43	2.11	105.3	Analog	0.10	3
1	Tb		11,096,916.50	0.96	108.8	Analog	0.10	3
1	Ho		1,059,459.60	0.80	110.1	Pulse	0.10	3
1	Bi		6,809,050.11	0.78	112.1	Analog	0.10	3
2	Sc		155,833.89	0.86	97.8	Pulse	0.30	3
2	Ge		98,905.51	0.17	102.0	Pulse	0.30	3
2	Ge		148,620.71	0.60	101.1	Pulse	0.30	3
2	Rh		3,156,354.81	0.07	103.8	Pulse	0.30	3
2	In		902,552.87	0.05	99.2	Pulse	0.30	3
2	Tb		3,780,992.76	0.34	104.1	Pulse	0.30	3
2	Ho		372,206.95	0.22	104.9	Pulse	0.30	3
2	Bi		2,649,165.04	0.16	106.2	Pulse	0.30	3
3	Sc		172,614.20	0.73	118.9	Pulse	0.30	3
3	Ge		119,595.72	0.92	118.5	Pulse	0.30	3
3	Ge		180,581.66	0.40	119.2	Pulse	0.30	3
3	Rh		2,112,368.87	0.28	114.5	Pulse	0.30	3
3	Tb		3,371,574.03	0.23	114.9	Pulse	0.30	3

Quantitation Report

File Name	031SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 16:34
Sample Name	mp10229-b2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	78.453	ug/l	2.73	594,476.83	1.386E-01	Pulse	0.25	3
B			1	83.481	ug/l	2.73	611,931.04	1.427E-01	Pulse	0.15	3
Ca			1	4012.488	ug/l	1.28	3,628,268.38	6.211E-01	Pulse	0.10	3
Sr			1	84.082	ug/l	0.60	3,603,104.63	4.845E-01	Pulse	0.10	3
Mo			1	83.755	ug/l	1.13	668,011.42	8.983E-02	Pulse	0.10	3
Ag			1	77.590	ug/l	0.52	1,698,428.83	2.102E-01	Pulse	0.10	3
Sn			1	82.643	ug/l	0.97	1,087,421.94	1.346E-01	Pulse	0.10	3
Sb			1	81.790	ug/l	1.00	1,226,398.29	1.102E-01	Pulse	0.10	3
Ba			1	80.885	ug/l	1.97	509,579.56	4.580E-02	Pulse	0.10	3
Tl			1	79.417	ug/l	1.02	3,082,616.41	4.659E-01	Pulse	0.10	3
Pb			1	82.287	ug/l	0.82	1,056,053.50	1.596E-01	Pulse	0.10	3
Pb			1	81.913	ug/l	1.40	925,392.67	1.399E-01	Pulse	0.10	3
Pb			1	81.664	ug/l	1.17	4,263,173.01	6.443E-01	Pulse	0.10	3
Na			2	3992.084	ug/l	0.40	3,011,671.27	1.909E+01	Pulse	0.30	3
Mg			2	3938.480	ug/l	0.79	1,369,949.88	8.684E+00	Pulse	0.30	3
Al			2	3640.822	ug/l	0.53	387,779.45	2.458E+00	Pulse	0.30	3
K			2	3845.162	ug/l	0.35	793,047.36	5.027E+00	Pulse	0.30	3
Ca			2	4239.710	ug/l	1.54	48,566.09	3.079E-01	Pulse	0.30	3
Ti			2	82.189	ug/l	1.28	7,162.73	4.540E-02	Pulse	0.30	3
V			2	83.741	ug/l	1.27	262,150.60	1.662E+00	Pulse	0.30	3
Cr			2	83.893	ug/l	0.70	350,576.46	2.222E+00	Pulse	0.30	3
Mn			2	79.180	ug/l	0.25	160,526.74	1.018E+00	Pulse	0.30	3
Fe			2	3983.316	ug/l	1.27	13,826,694.45	8.764E+01	Analog	0.30	3
Co			2	82.798	ug/l	1.24	618,740.38	3.922E+00	Pulse	0.30	3
Ni			2	82.342	ug/l	0.95	169,874.68	1.077E+00	Pulse	0.30	3
Cu			2	81.344	ug/l	0.60	454,130.76	2.879E+00	Pulse	0.30	3
Zn			2	72.187	ug/l	1.17	54,774.37	3.472E-01	Pulse	0.30	3
As			2	75.942	ug/l	1.76	29,175.27	1.849E-01	Pulse	1.00	3
Cd			2	77.766	ug/l	1.12	89,771.61	1.007E-01	Pulse	0.30	3
Sn			2	82.973	ug/l	1.06	166,290.76	1.866E-01	Pulse	0.30	3
Se			3	310.746	ug/l	0.35	29,067.63	1.593E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,291,011.83	2.04	104.0	Analog	0.10	3
1	Sc		5,842,262.20	1.72	103.0	Analog	0.10	3
1	Ge		1,122,809.28	0.58	104.6	Pulse	0.10	3

Quantitation Report

1	Ge		1,562,252.79	0.82	105.7	Pulse	0.10	3
1	Rh		7,436,624.89	1.25	101.6	Analog	0.10	3
1	In		8,079,213.96	1.24	105.2	Analog	0.10	3
1	Tb		11,125,934.83	0.42	109.0	Analog	0.10	3
1	Ho		1,074,535.14	0.75	111.7	Pulse	0.10	3
1	Bi		6,617,634.69	1.34	109.0	Analog	0.10	3
2	Sc		157,761.08	0.77	99.0	Pulse	0.30	3
2	Ge		99,028.42	0.76	102.1	Pulse	0.30	3
2	Ge		149,013.35	0.77	101.4	Pulse	0.30	3
2	Rh		3,114,808.83	1.04	102.4	Pulse	0.30	3
2	In		891,187.06	0.60	98.0	Pulse	0.30	3
2	Tb		3,776,545.41	1.37	104.0	Pulse	0.30	3
2	Ho		368,301.77	0.98	103.8	Pulse	0.30	3
2	Bi		2,549,629.14	1.07	102.2	Pulse	0.30	3
3	Sc		173,900.26	0.81	119.8	Pulse	0.30	3
3	Ge		119,221.69	0.68	118.1	Pulse	0.30	3
3	Ge		182,447.54	0.49	120.4	Pulse	0.30	3
3	Rh		2,065,437.63	0.82	111.9	Pulse	0.30	3
3	Tb		3,330,386.67	0.80	113.5	Pulse	0.30	3

Quantitation Report

File Name	032SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 16:39
Sample Name	jc76928-1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.133	ug/l	5.36	984.05	2.415E-04	Pulse	0.25	3
B			1	42.344	ug/l	1.82	304,908.45	7.481E-02	Pulse	0.15	3
Ca			1	19586.333	ug/l	0.37	17,185,310.16	3.020E+00	Analog	0.10	3
Sr			1	106.569	ug/l	0.41	4,265,297.54	6.141E-01	Pulse	0.10	3
Mo			1	0.793	ug/l	4.79	6,041.38	8.699E-04	Pulse	0.10	3
Ag			1	0.186	ug/l	3.44	3,960.68	5.125E-04	Pulse	0.10	3
Sn			1	0.952	ug/l	6.97	14,520.86	1.879E-03	Pulse	0.10	3
Sb			1	0.266	ug/l	3.97	5,194.42	4.820E-04	Pulse	0.10	3
Ba			1	34.530	ug/l	1.29	210,782.11	1.956E-02	Pulse	0.10	3
Tl			1	0.045	ug/l	10.45	2,066.90	3.283E-04	Pulse	0.10	3
Pb			1	35.697	ug/l	1.46	436,171.57	6.925E-02	Pulse	0.10	3
Pb			1	32.829	ug/l	1.04	353,124.96	5.607E-02	Pulse	0.10	3
Pb			1	33.571	ug/l	0.81	1,668,711.83	2.649E-01	Pulse	0.10	3
Na			2	40850.424	ug/l	0.71	29,496,178.83	1.950E+02	Analog	0.30	3
Mg			2	6647.937	ug/l	0.39	2,217,551.16	1.466E+01	Pulse	0.30	3
Al			2	2733.786	ug/l	1.54	279,307.10	1.846E+00	Pulse	0.30	3
K			2	2343.455	ug/l	0.11	465,983.14	3.080E+00	Pulse	0.30	3
Ca			2	19663.722	ug/l	0.73	215,422.84	1.424E+00	Pulse	0.30	3
Ti			2	127.016	ug/l	6.23	10,610.95	7.012E-02	Pulse	0.30	3
V			2	5.176	ug/l	1.82	15,921.17	1.052E-01	Pulse	0.30	3
Cr			2	3.361	ug/l	2.37	13,799.27	9.121E-02	Pulse	0.30	3
Mn			2	715.548	ug/l	0.71	1,390,940.54	9.193E+00	Pulse	0.30	3
Fe			2	4913.701	ug/l	0.71	16,356,555.46	1.081E+02	Analog	0.30	3
Co			2	8.996	ug/l	0.86	64,580.04	4.268E-01	Pulse	0.30	3
Ni			2	24.460	ug/l	2.30	48,579.14	3.211E-01	Pulse	0.30	3
Cu			2	13.049	ug/l	0.58	70,155.21	4.637E-01	Pulse	0.30	3
Zn			2	29.056	ug/l	1.04	21,334.00	1.410E-01	Pulse	0.30	3
As			2	4.371	ug/l	8.02	1,623.09	1.073E-02	Pulse	1.00	3
Cd			2	0.176	ug/l	3.41	207.47	2.455E-04	Pulse	0.30	3
Sn			2	-0.208	ug/l	-35.09	2,042.39	2.417E-03	Pulse	0.30	3
Se			3	-0.230	ug/l	-63.81	62.60	3.636E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,076,743.17	1.90	98.8	Analog	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,691,304.71	2.18	100.4	Analog	0.10	3
1	Ge		1,067,894.54	0.85	99.5	Pulse	0.10	3
1	Ge		1,483,468.20	1.04	100.4	Pulse	0.10	3
1	Rh		6,946,062.81	0.98	94.9	Analog	0.10	3
1	In		7,729,962.48	0.77	100.7	Analog	0.10	3
1	Tb		10,776,468.17	0.99	105.6	Analog	0.10	3
1	Ho		1,053,824.26	0.74	109.5	Pulse	0.10	3
1	Bi		6,298,826.78	0.91	103.7	Analog	0.10	3
2	Sc		151,300.34	0.43	94.9	Pulse	0.30	3
2	Ge		93,823.67	0.79	96.7	Pulse	0.30	3
2	Ge		141,153.29	0.34	96.0	Pulse	0.30	3
2	Rh		2,922,469.88	1.12	96.1	Pulse	0.30	3
2	In		845,049.89	0.26	92.9	Pulse	0.30	3
2	Tb		3,628,164.02	0.49	99.9	Pulse	0.30	3
2	Ho		359,276.07	0.64	101.2	Pulse	0.30	3
2	Bi		2,386,855.81	0.40	95.7	Pulse	0.30	3
3	Sc		168,693.00	0.86	116.2	Pulse	0.30	3
3	Ge		113,432.01	0.38	112.4	Pulse	0.30	3
3	Ge		172,237.77	0.51	113.7	Pulse	0.30	3
3	Rh		1,974,511.24	0.66	107.0	Pulse	0.30	3
3	Tb		3,244,641.47	0.35	110.5	Pulse	0.30	3

Quantitation Report

File Name	033SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 16:44
Sample Name	jc76929-1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.110	ug/l	5.90	837.37	2.007E-04	Pulse	0.25	3
B			1	41.983	ug/l	6.27	309,815.32	7.421E-02	Pulse	0.15	3
Ca			1	19600.479	ug/l	1.32	17,282,195.16	3.022E+00	Analog	0.10	3
Sr			1	107.023	ug/l	1.46	4,279,907.23	6.167E-01	Pulse	0.10	3
Mo			1	0.534	ug/l	3.89	4,107.34	5.918E-04	Pulse	0.10	3
Ag			1	0.160	ug/l	6.42	3,450.57	4.419E-04	Pulse	0.10	3
Sn			1	0.762	ug/l	3.46	12,255.31	1.569E-03	Pulse	0.10	3
Sb			1	0.262	ug/l	2.29	5,181.07	4.758E-04	Pulse	0.10	3
Ba			1	31.461	ug/l	0.82	194,031.19	1.782E-02	Pulse	0.10	3
Tl			1	0.022	ug/l	13.01	1,236.76	1.975E-04	Pulse	0.10	3
Pb			1	34.369	ug/l	0.63	417,622.77	6.668E-02	Pulse	0.10	3
Pb			1	31.507	ug/l	1.29	337,044.71	5.381E-02	Pulse	0.10	3
Pb			1	32.275	ug/l	1.00	1,595,409.81	2.547E-01	Pulse	0.10	3
Na			2	40450.420	ug/l	1.08	28,999,912.18	1.930E+02	Analog	0.30	3
Mg			2	6551.449	ug/l	0.38	2,169,693.94	1.444E+01	Pulse	0.30	3
Al			2	2387.914	ug/l	1.75	242,220.30	1.613E+00	Pulse	0.30	3
K			2	2356.338	ug/l	0.41	465,153.59	3.097E+00	Pulse	0.30	3
Ca			2	19640.097	ug/l	1.07	213,624.72	1.422E+00	Pulse	0.30	3
Ti			2	109.565	ug/l	2.89	9,087.26	6.050E-02	Pulse	0.30	3
V			2	4.693	ug/l	2.88	14,368.69	9.565E-02	Pulse	0.30	3
Cr			2	2.906	ug/l	1.97	11,891.05	7.916E-02	Pulse	0.30	3
Mn			2	678.692	ug/l	0.25	1,309,875.12	8.720E+00	Pulse	0.30	3
Fe			2	3948.495	ug/l	0.77	13,050,263.37	8.688E+01	Analog	0.30	3
Co			2	8.394	ug/l	1.84	59,832.42	3.983E-01	Pulse	0.30	3
Ni			2	19.998	ug/l	0.70	39,478.30	2.628E-01	Pulse	0.30	3
Cu			2	11.442	ug/l	1.05	61,115.16	4.069E-01	Pulse	0.30	3
Zn			2	26.409	ug/l	3.15	19,279.21	1.284E-01	Pulse	0.30	3
As			2	3.805	ug/l	3.04	1,404.40	9.350E-03	Pulse	1.00	3
Cd			2	0.135	ug/l	27.43	162.02	1.915E-04	Pulse	0.30	3
Sn			2	-0.315	ug/l	-26.38	1,842.36	2.181E-03	Pulse	0.30	3
Se			3	0.239	ug/l	85.23	102.13	6.037E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,174,946.57	2.26	101.2	Mix	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,719,712.83	1.53	100.9	Analog	0.10	3
1	Ge		1,053,203.16	0.47	98.1	Pulse	0.10	3
1	Ge		1,460,870.39	0.80	98.9	Pulse	0.10	3
1	Rh		6,940,637.19	0.66	94.9	Analog	0.10	3
1	In		7,808,982.90	0.22	101.7	Analog	0.10	3
1	Tb		10,888,513.17	1.52	106.7	Analog	0.10	3
1	Ho		1,056,642.83	0.96	109.8	Pulse	0.10	3
1	Bi		6,263,584.49	0.39	103.1	Analog	0.10	3
2	Sc		150,218.06	0.50	94.3	Pulse	0.30	3
2	Ge		93,360.87	0.49	96.3	Pulse	0.30	3
2	Ge		140,116.79	0.16	95.3	Pulse	0.30	3
2	Rh		2,911,213.36	0.70	95.7	Pulse	0.30	3
2	In		844,872.67	0.95	92.9	Pulse	0.30	3
2	Tb		3,641,338.88	0.43	100.3	Pulse	0.30	3
2	Ho		358,363.61	0.59	101.0	Pulse	0.30	3
2	Bi		2,386,072.13	0.20	95.6	Pulse	0.30	3
3	Sc		169,054.78	0.14	116.4	Pulse	0.30	3
3	Ge		111,492.30	0.49	110.5	Pulse	0.30	3
3	Ge		169,126.58	0.36	111.6	Pulse	0.30	3
3	Rh		1,962,775.06	0.13	106.4	Pulse	0.30	3
3	Tb		3,251,430.84	0.16	110.8	Pulse	0.30	3

Quantitation Report

File Name	034SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 16:49
Sample Name	mp10229-s3
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	78.072	ug/l	0.87	572,034.25	1.379E-01	Pulse	0.25	3
B			1	100.785	ug/l	1.11	710,055.02	1.712E-01	Pulse	0.15	3
Ca			1	17624.237	ug/l	1.43	15,397,541.02	2.718E+00	Analog	0.10	3
Sr			1	177.110	ug/l	1.35	7,249,718.23	1.020E+00	Analog	0.10	3
Mo			1	83.851	ug/l	1.40	638,954.61	8.994E-02	Pulse	0.10	3
Ag			1	76.318	ug/l	1.37	1,616,641.33	2.068E-01	Pulse	0.10	3
Sn			1	82.687	ug/l	0.90	1,052,845.19	1.347E-01	Pulse	0.10	3
Sb			1	80.920	ug/l	0.74	1,190,485.27	1.091E-01	Pulse	0.10	3
Ba			1	114.484	ug/l	1.13	707,609.65	6.483E-02	Pulse	0.10	3
Tl			1	80.581	ug/l	0.56	3,003,654.12	4.727E-01	Pulse	0.10	3
Pb			1	82.195	ug/l	0.33	1,013,027.95	1.594E-01	Pulse	0.10	3
Pb			1	82.387	ug/l	0.68	893,819.68	1.407E-01	Pulse	0.10	3
Pb			1	81.594	ug/l	0.42	4,090,587.75	6.437E-01	Pulse	0.10	3
Na			2	8025.950	ug/l	1.87	5,807,233.52	3.834E+01	Analog	0.30	3
Mg			2	8302.158	ug/l	0.32	2,772,216.00	1.830E+01	Pulse	0.30	3
Al			2	3631.771	ug/l	0.45	371,377.00	2.452E+00	Pulse	0.30	3
K			2	5973.070	ug/l	0.41	1,179,284.50	7.786E+00	Pulse	0.30	3
Ca			2	17831.087	ug/l	0.30	195,568.92	1.291E+00	Pulse	0.30	3
Ti			2	82.311	ug/l	4.78	6,885.97	4.547E-02	Pulse	0.30	3
V			2	83.698	ug/l	0.70	251,553.30	1.661E+00	Pulse	0.30	3
Cr			2	83.496	ug/l	0.37	334,999.37	2.212E+00	Pulse	0.30	3
Mn			2	115.219	ug/l	0.62	224,250.66	1.481E+00	Pulse	0.30	3
Fe			2	4078.386	ug/l	1.16	13,590,761.96	8.973E+01	Analog	0.30	3
Co			2	82.106	ug/l	0.31	589,096.00	3.889E+00	Pulse	0.30	3
Ni			2	82.133	ug/l	0.38	162,682.60	1.074E+00	Pulse	0.30	3
Cu			2	81.218	ug/l	0.85	435,329.28	2.874E+00	Pulse	0.30	3
Zn			2	69.821	ug/l	1.58	50,878.59	3.359E-01	Pulse	0.30	3
As			2	75.490	ug/l	1.07	27,845.29	1.838E-01	Pulse	1.00	3
Cd			2	78.253	ug/l	0.74	85,922.59	1.014E-01	Pulse	0.30	3
Sn			2	83.557	ug/l	0.65	159,256.85	1.879E-01	Pulse	0.30	3
Se			3	320.236	ug/l	0.66	28,001.78	1.642E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,147,883.40	1.16	100.6	Analog	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,666,539.92	1.03	99.9	Analog	0.10	3
1	Ge		1,061,198.60	0.69	98.9	Pulse	0.10	3
1	Ge		1,467,704.87	0.90	99.3	Pulse	0.10	3
1	Rh		7,105,499.06	1.65	97.1	Analog	0.10	3
1	In		7,817,985.82	0.19	101.8	Analog	0.10	3
1	Tb		10,916,067.34	0.73	107.0	Analog	0.10	3
1	Ho		1,045,732.46	1.57	108.7	Pulse	0.10	3
1	Bi		6,354,618.24	1.63	104.6	Analog	0.10	3
2	Sc		151,463.96	0.71	95.0	Pulse	0.30	3
2	Ge		93,696.37	0.99	96.6	Pulse	0.30	3
2	Ge		141,288.01	0.14	96.1	Pulse	0.30	3
2	Rh		2,969,407.52	0.15	97.7	Pulse	0.30	3
2	In		847,633.74	0.23	93.2	Pulse	0.30	3
2	Tb		3,651,267.91	0.16	100.6	Pulse	0.30	3
2	Ho		359,143.26	0.24	101.2	Pulse	0.30	3
2	Bi		2,435,863.17	0.39	97.6	Pulse	0.30	3
3	Sc		168,883.00	0.86	116.3	Pulse	0.30	3
3	Ge		112,160.42	1.89	111.1	Pulse	0.30	3
3	Ge		170,571.65	1.16	112.6	Pulse	0.30	3
3	Rh		1,993,527.14	1.33	108.0	Pulse	0.30	3
3	Tb		3,246,448.76	1.10	110.6	Pulse	0.30	3

Quantitation Report

File Name	035SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 16:54
Sample Name	mp10229-s4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	76.665	ug/l	2.27	564,226.86	1.354E-01	Pulse	0.25	3
B			1	98.763	ug/l	2.22	699,342.30	1.679E-01	Pulse	0.15	3
Ca			1	17138.854	ug/l	1.68	14,923,339.36	2.643E+00	Analog	0.10	3
Sr			1	178.353	ug/l	0.50	7,173,762.81	1.028E+00	Analog	0.10	3
Mo			1	84.729	ug/l	0.65	634,378.53	9.088E-02	Pulse	0.10	3
Ag			1	74.846	ug/l	1.12	1,582,359.72	2.028E-01	Pulse	0.10	3
Sn			1	82.429	ug/l	1.30	1,047,467.38	1.343E-01	Pulse	0.10	3
Sb			1	80.595	ug/l	0.47	1,186,336.80	1.086E-01	Pulse	0.10	3
Ba			1	113.407	ug/l	0.97	701,308.58	6.422E-02	Pulse	0.10	3
Tl			1	80.051	ug/l	0.27	2,976,225.48	4.696E-01	Pulse	0.10	3
Pb			1	82.129	ug/l	0.30	1,009,581.08	1.593E-01	Pulse	0.10	3
Pb			1	81.952	ug/l	0.79	886,827.17	1.399E-01	Pulse	0.10	3
Pb			1	81.821	ug/l	0.62	4,091,439.37	6.455E-01	Pulse	0.10	3
Na			2	7918.184	ug/l	0.70	5,749,074.22	3.782E+01	Analog	0.30	3
Mg			2	8181.472	ug/l	0.72	2,741,463.02	1.804E+01	Pulse	0.30	3
Al			2	3609.721	ug/l	0.62	370,420.07	2.437E+00	Pulse	0.30	3
K			2	5895.175	ug/l	0.37	1,168,092.98	7.685E+00	Pulse	0.30	3
Ca			2	17727.193	ug/l	0.57	195,113.48	1.284E+00	Pulse	0.30	3
Ti			2	81.788	ug/l	2.55	6,868.18	4.518E-02	Pulse	0.30	3
V			2	82.854	ug/l	0.26	249,899.28	1.644E+00	Pulse	0.30	3
Cr			2	82.693	ug/l	0.26	332,949.40	2.191E+00	Pulse	0.30	3
Mn			2	114.092	ug/l	0.64	222,840.31	1.466E+00	Pulse	0.30	3
Fe			2	4017.041	ug/l	1.34	13,434,165.58	8.838E+01	Analog	0.30	3
Co			2	81.397	ug/l	0.46	586,063.62	3.856E+00	Pulse	0.30	3
Ni			2	81.030	ug/l	0.72	161,070.40	1.060E+00	Pulse	0.30	3
Cu			2	80.508	ug/l	0.06	433,054.94	2.849E+00	Pulse	0.30	3
Zn			2	68.998	ug/l	1.00	50,457.36	3.320E-01	Pulse	0.30	3
As			2	74.624	ug/l	1.27	27,622.91	1.817E-01	Pulse	1.00	3
Cd			2	76.979	ug/l	0.36	84,616.75	9.972E-02	Pulse	0.30	3
Sn			2	82.944	ug/l	0.61	158,276.92	1.865E-01	Pulse	0.30	3
Se			3	317.300	ug/l	1.01	27,461.06	1.627E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,166,983.65	1.47	101.0	Mix	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,647,748.25	1.84	99.6	Analog	0.10	3
1	Ge		1,051,512.07	1.67	98.0	Pulse	0.10	3
1	Ge		1,463,639.98	1.39	99.1	Pulse	0.10	3
1	Rh		6,980,869.27	1.21	95.4	Analog	0.10	3
1	In		7,803,528.04	1.91	101.6	Analog	0.10	3
1	Tb		10,921,934.84	1.45	107.0	Analog	0.10	3
1	Ho		1,050,903.16	0.67	109.2	Pulse	0.10	3
1	Bi		6,338,128.24	0.77	104.3	Analog	0.10	3
2	Sc		151,995.36	0.46	95.4	Pulse	0.30	3
2	Ge		92,786.82	0.28	95.7	Pulse	0.30	3
2	Ge		141,337.29	0.89	96.1	Pulse	0.30	3
2	Rh		2,962,566.96	0.56	97.4	Pulse	0.30	3
2	In		848,556.21	0.32	93.3	Pulse	0.30	3
2	Tb		3,642,066.94	0.21	100.3	Pulse	0.30	3
2	Ho		359,258.60	0.45	101.2	Pulse	0.30	3
2	Bi		2,420,895.32	0.61	97.0	Pulse	0.30	3
3	Sc		167,254.23	0.62	115.2	Pulse	0.30	3
3	Ge		112,126.57	0.82	111.1	Pulse	0.30	3
3	Ge		168,826.60	1.08	111.4	Pulse	0.30	3
3	Rh		1,982,952.70	0.36	107.5	Pulse	0.30	3
3	Tb		3,245,089.60	0.05	110.5	Pulse	0.30	3

Quantitation Report

File Name	036SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 16:59
Sample Name	jc76939-2f
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.009	ug/l	35.55	94.67	2.254E-05	Pulse	0.25	3
B			1	16.676	ug/l	6.22	137,349.47	3.247E-02	Pulse	0.15	3
Ca			1	13872.829	ug/l	0.88	12,230,488.57	2.140E+00	Analog	0.10	3
Sr			1	92.954	ug/l	0.21	3,837,562.65	5.356E-01	Pulse	0.10	3
Mo			1	0.250	ug/l	6.08	2,063.56	2.880E-04	Pulse	0.10	3
Ag			1	0.015	ug/l	23.11	380.02	4.749E-05	Pulse	0.10	3
Sn			1	0.264	ug/l	8.92	6,094.77	7.610E-04	Pulse	0.10	3
Sb			1	0.088	ug/l	7.60	2,673.68	2.426E-04	Pulse	0.10	3
Ba			1	35.680	ug/l	0.65	222,733.85	2.021E-02	Pulse	0.10	3
Tl			1	0.036	ug/l	3.46	1,813.53	2.775E-04	Pulse	0.10	3
Pb			1	0.079	ug/l	2.40	1,200.10	1.837E-04	Pulse	0.10	3
Pb			1	0.076	ug/l	14.69	1,003.42	1.537E-04	Pulse	0.10	3
Pb			1	0.072	ug/l	5.51	4,520.47	6.919E-04	Pulse	0.10	3
Na			2	3961.042	ug/l	1.05	2,896,020.72	1.894E+01	Pulse	0.30	3
Mg			2	4433.113	ug/l	1.32	1,494,327.23	9.774E+00	Pulse	0.30	3
Al			2	15.518	ug/l	4.34	1,764.56	1.154E-02	Pulse	0.30	3
K			2	2130.112	ug/l	0.73	428,594.75	2.803E+00	Pulse	0.30	3
Ca			2	13864.081	ug/l	1.01	153,526.30	1.004E+00	Pulse	0.30	3
Ti			2	0.122	ug/l	20.81	24.44	1.600E-04	Pulse	0.30	3
V			2	0.421	ug/l	6.15	1,685.67	1.102E-02	Pulse	0.30	3
Cr			2	0.391	ug/l	5.39	1,927.91	1.261E-02	Pulse	0.30	3
Mn			2	36.851	ug/l	1.93	72,424.06	4.737E-01	Pulse	0.30	3
Fe			2	34.196	ug/l	0.98	120,924.25	7.909E-01	Pulse	0.30	3
Co			2	0.099	ug/l	6.01	832.26	5.441E-03	Pulse	0.30	3
Ni			2	0.878	ug/l	1.27	2,012.37	1.316E-02	Pulse	0.30	3
Cu			2	1.555	ug/l	2.02	8,751.31	5.724E-02	Pulse	0.30	3
Zn			2	2.735	ug/l	5.68	2,320.19	1.517E-02	Pulse	0.30	3
As			2	0.283	ug/l	19.03	119.00	7.781E-04	Pulse	1.00	3
Cd			2	0.023	ug/l	87.98	41.01	4.734E-05	Pulse	0.30	3
Sn			2	-0.828	ug/l	-1.09	907.82	1.045E-03	Pulse	0.30	3
Se			3	-0.458	ug/l	-3.15	42.73	2.471E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,237,747.23	5.50	102.7	Analog	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,716,344.92	1.62	100.8	Analog	0.10	3
1	Ge		1,066,326.55	0.75	99.4	Pulse	0.10	3
1	Ge		1,475,668.26	1.12	99.9	Pulse	0.10	3
1	Rh		7,164,466.56	0.55	97.9	Analog	0.10	3
1	In		8,012,841.98	1.32	104.4	Analog	0.10	3
1	Tb		11,021,176.09	1.03	108.0	Analog	0.10	3
1	Ho		1,057,891.62	1.30	109.9	Pulse	0.10	3
1	Bi		6,534,439.49	1.19	107.6	Analog	0.10	3
2	Sc		152,898.84	1.30	95.9	Pulse	0.30	3
2	Ge		94,231.73	0.29	97.2	Pulse	0.30	3
2	Ge		142,342.27	0.90	96.8	Pulse	0.30	3
2	Rh		3,019,274.95	0.21	99.3	Pulse	0.30	3
2	In		869,008.79	0.83	95.5	Pulse	0.30	3
2	Tb		3,681,209.85	0.62	101.4	Pulse	0.30	3
2	Ho		364,976.51	1.05	102.8	Pulse	0.30	3
2	Bi		2,502,486.98	0.69	100.3	Pulse	0.30	3
3	Sc		171,351.95	0.55	118.0	Pulse	0.30	3
3	Ge		114,566.64	0.89	113.5	Pulse	0.30	3
3	Ge		172,919.59	0.07	114.1	Pulse	0.30	3
3	Rh		2,050,391.44	0.46	111.1	Pulse	0.30	3
3	Tb		3,353,540.42	0.56	114.2	Pulse	0.30	3

Quantitation Report

File Name	037_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 17:04
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	50.035	ug/l	1.76	732,956.37	1.768E-01	Pulse	0.25	3
B			1	101.282	ug/l	2.14	1,405,817.93	3.391E-01	Pulse	0.15	3
Ca			1	4850.608	ug/l	1.59	8,623,643.83	1.497E+00	Analog	0.10	3
Sr			1	52.117	ug/l	1.26	4,351,617.02	6.006E-01	Pulse	0.10	3
Mo			1	51.592	ug/l	1.12	801,804.83	1.107E-01	Pulse	0.10	3
Ag			1	49.028	ug/l	0.35	2,100,150.44	2.657E-01	Pulse	0.10	3
Sn			1	49.888	ug/l	0.60	1,284,028.81	1.624E-01	Pulse	0.10	3
Sb			1	51.845	ug/l	1.19	1,511,324.40	1.397E-01	Pulse	0.10	3
Ba			1	49.983	ug/l	1.72	612,314.97	5.661E-02	Pulse	0.10	3
Tl			1	50.230	ug/l	0.35	3,761,294.11	5.893E-01	Pulse	0.10	3
Pb			1	50.999	ug/l	1.10	1,262,534.83	1.978E-01	Pulse	0.10	3
Pb			1	51.094	ug/l	0.71	1,113,546.83	1.745E-01	Pulse	0.10	3
Pb			1	50.596	ug/l	0.79	5,095,411.93	7.983E-01	Pulse	0.10	3
Na			2	4905.605	ug/l	2.46	7,262,638.60	4.686E+01	Analog	0.30	3
Mg			2	4848.332	ug/l	0.65	3,313,645.22	2.138E+01	Pulse	0.30	3
Al			2	4612.027	ug/l	0.99	965,077.77	6.226E+00	Pulse	0.30	3
K			2	4810.675	ug/l	0.78	1,940,174.99	1.252E+01	Pulse	0.30	3
Ca			2	5051.570	ug/l	0.63	113,481.90	7.321E-01	Pulse	0.30	3
Ti			2	50.576	ug/l	1.86	8,659.02	5.586E-02	Pulse	0.30	3
V			2	51.584	ug/l	0.19	317,249.79	2.047E+00	Pulse	0.30	3
Cr			2	50.608	ug/l	0.49	415,541.15	2.681E+00	Pulse	0.30	3
Mn			2	49.072	ug/l	1.16	195,492.94	1.261E+00	Pulse	0.30	3
Fe			2	4886.632	ug/l	1.53	33,323,196.45	2.150E+02	Analog	0.30	3
Co			2	50.187	ug/l	0.74	737,021.78	4.755E+00	Pulse	0.30	3
Ni			2	49.820	ug/l	0.26	201,931.81	1.303E+00	Pulse	0.30	3
Cu			2	49.286	ug/l	1.00	540,657.24	3.488E+00	Pulse	0.30	3
Zn			2	49.252	ug/l	0.44	73,327.27	4.730E-01	Pulse	0.30	3
As			2	50.138	ug/l	0.47	37,851.56	2.442E-01	Pulse	1.00	3
Cd			2	50.180	ug/l	0.73	114,634.31	1.300E-01	Pulse	0.30	3
Sn			2	50.795	ug/l	0.62	200,887.72	2.278E-01	Pulse	0.30	3
Se			3	196.025	ug/l	0.04	32,630.71	2.009E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,147,180.50	1.94	100.6	Analog	0.10	3
1	Sc		5,760,194.50	1.32	101.6	Analog	0.10	3
1	Ge		1,082,486.16	1.51	100.9	Pulse	0.10	3

Quantitation Report

1	Ge		1,515,294.67	1.74	102.6	Pulse	0.10	3
1	Rh		7,245,249.27	0.41	99.0	Analog	0.10	3
1	In		7,904,700.77	0.91	102.9	Analog	0.10	3
1	Tb		10,818,092.34	1.18	106.0	Analog	0.10	3
1	Ho		1,044,143.45	0.87	108.5	Pulse	0.10	3
1	Bi		6,382,975.32	1.35	105.1	Analog	0.10	3
2	Sc		155,014.97	0.58	97.3	Pulse	0.30	3
2	Ge		95,569.19	0.42	98.5	Pulse	0.30	3
2	Ge		145,181.59	0.58	98.8	Pulse	0.30	3
2	Rh		3,007,468.70	0.37	98.9	Pulse	0.30	3
2	In		881,837.71	0.86	97.0	Pulse	0.30	3
2	Tb		3,668,206.24	0.34	101.0	Pulse	0.30	3
2	Ho		361,052.95	0.55	101.7	Pulse	0.30	3
2	Bi		2,458,038.72	0.36	98.5	Pulse	0.30	3
3	Sc		159,708.25	1.23	110.0	Pulse	0.30	3
3	Ge		106,956.81	0.30	106.0	Pulse	0.30	3
3	Ge		162,440.02	0.65	107.2	Pulse	0.30	3
3	Rh		1,912,097.22	0.71	103.6	Pulse	0.30	3
3	Tb		3,118,924.39	0.65	106.2	Pulse	0.30	3

Quantitation Report

File Name	038_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 17:09
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.006	ug/l	37.83	108.00	2.642E-05	Pulse	0.25	3
B			1	0.978	ug/l	6.56	33,455.50	8.194E-03	Pulse	0.15	3
Ca			1	-0.750	ug/l	-16.13	16,011.61	2.914E-03	Pulse	0.10	3
Sr			1	0.009	ug/l	23.91	1,890.21	2.594E-04	Pulse	0.10	3
Mo			1	0.042	ug/l	7.37	806.72	1.106E-04	Pulse	0.10	3
Ag			1	0.006	ug/l	31.20	306.68	3.889E-05	Pulse	0.10	3
Sn			1	0.487	ug/l	3.10	15,091.04	1.915E-03	Pulse	0.10	3
Sb			1	0.059	ug/l	14.59	3,003.74	2.820E-04	Pulse	0.10	3
Ba			1	0.009	ug/l	39.39	196.68	1.845E-05	Pulse	0.10	3
Tl			1	0.014	ug/l	10.72	1,493.47	2.293E-04	Pulse	0.10	3
Pb			1	0.009	ug/l	23.94	433.36	6.650E-05	Pulse	0.10	3
Pb			1	0.009	ug/l	33.88	353.35	5.422E-05	Pulse	0.10	3
Pb			1	0.008	ug/l	16.67	1,570.09	2.410E-04	Pulse	0.10	3
Na			2	1.084	ug/l	17.09	7,966.50	5.311E-02	Pulse	0.30	3
Mg			2	0.274	ug/l	23.94	526.68	3.509E-03	Pulse	0.30	3
Al			2	0.044	ug/l	509.82	170.00	1.131E-03	Pulse	0.30	3
K			2	1.452	ug/l	37.02	6,763.67	4.508E-02	Pulse	0.30	3
Ca			2	-1.106	ug/l	-101.23	143.34	9.563E-04	Pulse	0.30	3
Ti			2	-0.051	ug/l	-60.31	5.56	3.679E-05	Pulse	0.30	3
V			2	-0.019	ug/l	-65.65	290.01	1.930E-03	Pulse	0.30	3
Cr			2	0.003	ug/l	161.45	366.68	2.447E-03	Pulse	0.30	3
Mn			2	0.010	ug/l	12.63	75.56	5.036E-04	Pulse	0.30	3
Fe			2	0.191	ug/l	34.67	7,091.64	4.726E-02	Pulse	0.30	3
Co			2	0.002	ug/l	30.79	143.34	9.558E-04	Pulse	0.30	3
Ni			2	0.002	ug/l	205.71	263.34	1.755E-03	Pulse	0.30	3
Cu			2	0.010	ug/l	18.82	444.46	2.962E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.049	ug/l	-56.91	243.34	1.624E-03	Pulse	0.30	3
As			2	0.002	ug/l	344.09	15.00	9.970E-05	Pulse	1.00	3
Cd			2	0.006	ug/l	77.93	29.94	3.384E-05	Pulse	0.30	3
Sn			2	-0.023	ug/l	-36.91	2,458.01	2.778E-03	Pulse	0.30	3
Se			3	-0.265	ug/l	-9.83	33.60	2.103E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,083,674.80	1.33	99.0	Mix	0.10	3
1	Sc		5,495,049.71	0.85	96.9	Analog	0.10	3
1	Ge		1,056,940.63	0.41	98.5	Pulse	0.10	3
1	Ge		1,463,028.62	0.51	99.0	Pulse	0.10	3
1	Rh		7,294,235.31	2.03	99.7	Analog	0.10	3
1	In		7,880,012.94	0.43	102.6	Analog	0.10	3
1	Tb		10,653,321.51	0.81	104.4	Analog	0.10	3
1	Ho		1,020,701.78	0.86	106.1	Pulse	0.10	3
1	Bi		6,514,581.57	0.28	107.3	Analog	0.10	3
2	Sc		149,990.94	1.17	94.1	Pulse	0.30	3
2	Ge		94,964.60	0.47	97.9	Pulse	0.30	3
2	Ge		143,106.74	0.58	97.4	Pulse	0.30	3
2	Rh		3,038,947.38	0.64	99.9	Pulse	0.30	3
2	In		884,875.22	0.34	97.3	Pulse	0.30	3
2	Tb		3,615,201.52	0.48	99.6	Pulse	0.30	3
2	Ho		356,578.30	0.36	100.5	Pulse	0.30	3
2	Bi		2,517,667.33	0.43	100.9	Pulse	0.30	3
3	Sc		154,344.06	0.21	106.3	Pulse	0.30	3
3	Ge		104,099.64	0.40	103.2	Pulse	0.30	3
3	Ge		159,804.37	0.79	105.5	Pulse	0.30	3
3	Rh		1,955,858.95	0.37	106.0	Pulse	0.30	3
3	Tb		3,135,351.96	0.42	106.8	Pulse	0.30	3

Quantitation Report

File Name	039SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 17:14
Sample Name	mp10229-sd1
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.023	ug/l	56.07	60.00	1.467E-05	Pulse	0.25	3
B			1	16.869	ug/l	3.75	43,092.60	1.053E-02	Pulse	0.15	3
Ca			1	14000.000	ug/l	0.92	2,349,959.55	4.344E-01	Pulse	0.10	3
Sr			1	89.946	ug/l	1.49	744,019.34	1.038E-01	Pulse	0.10	3
Mo			1	0.333	ug/l	39.12	653.38	9.099E-05	Pulse	0.10	3
Ag			1	0.020	ug/l	46.70	146.68	1.868E-05	Pulse	0.10	3
Sn			1	-0.378	ug/l	-14.28	1,640.16	2.089E-04	Pulse	0.10	3
Sb			1	-0.047	ug/l	-31.67	1,173.42	1.109E-04	Pulse	0.10	3
Ba			1	35.933	ug/l	1.29	43,137.57	4.078E-03	Pulse	0.10	3
Tl			1	0.070	ug/l	29.13	966.74	1.494E-04	Pulse	0.10	3
Pb			1	0.091	ug/l	3.31	426.69	6.591E-05	Pulse	0.10	3
Pb			1	0.070	ug/l	29.39	313.35	4.841E-05	Pulse	0.10	3
Pb			1	0.082	ug/l	9.65	1,616.77	2.498E-04	Pulse	0.10	3
Na			2	3860.233	ug/l	0.18	550,012.75	3.726E+00	Pulse	0.30	3
Mg			2	4433.638	ug/l	0.66	288,834.00	1.957E+00	Pulse	0.30	3
Al			2	6.111	ug/l	31.96	280.01	1.897E-03	Pulse	0.30	3
K			2	2139.889	ug/l	1.05	88,001.41	5.962E-01	Pulse	0.30	3
Ca			2	13928.908	ug/l	1.56	29,912.41	2.027E-01	Pulse	0.30	3
Ti			2	-0.088	ug/l	-587.36	12.22	8.282E-05	Pulse	0.30	3
V			2	-0.145	ug/l	-19.41	311.12	2.108E-03	Pulse	0.30	3
Cr			2	0.079	ug/l	56.16	395.57	2.680E-03	Pulse	0.30	3
Mn			2	37.857	ug/l	0.97	14,395.29	9.753E-02	Pulse	0.30	3
Fe			2	31.352	ug/l	2.72	26,090.72	1.768E-01	Pulse	0.30	3
Co			2	0.075	ug/l	33.76	216.67	1.468E-03	Pulse	0.30	3
Ni			2	0.709	ug/l	22.81	523.35	3.545E-03	Pulse	0.30	3
Cu			2	1.992	ug/l	3.55	2,412.44	1.634E-02	Pulse	0.30	3
Zn			2	0.935	ug/l	18.87	441.12	2.989E-03	Pulse	0.30	3
As			2	0.245	ug/l	61.29	30.67	2.078E-04	Pulse	1.00	3
Cd			2	0.031	ug/l	196.48	22.18	2.504E-05	Pulse	0.30	3
Sn			2	-5.663	ug/l	-2.02	327.79	3.705E-04	Pulse	0.30	3
Se			3	-1.028	ug/l	-25.82	59.47	3.762E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,092,194.78	0.38	99.2	Pulse	0.10	3
1	Sc		5,410,042.21	0.97	95.4	Mix	0.10	3
1	Ge		1,048,497.28	0.75	97.7	Pulse	0.10	3

Quantitation Report

1	Ge		1,451,444.87	0.20	98.2	Pulse	0.10	3
1	Rh		7,169,443.85	1.07	98.0	Analog	0.10	3
1	In		7,849,712.11	0.36	102.2	Analog	0.10	3
1	Tb		10,578,543.59	1.39	103.7	Analog	0.10	3
1	Ho		1,015,330.53	0.33	105.5	Pulse	0.10	3
1	Bi		6,473,854.48	0.42	106.6	Analog	0.10	3
2	Sc		147,596.21	0.28	92.6	Pulse	0.30	3
2	Ge		94,060.59	1.02	97.0	Pulse	0.30	3
2	Ge		142,707.99	1.03	97.1	Pulse	0.30	3
2	Rh		2,964,624.46	0.39	97.5	Pulse	0.30	3
2	In		884,752.27	0.26	97.3	Pulse	0.30	3
2	Tb		3,604,655.27	0.33	99.3	Pulse	0.30	3
2	Ho		354,999.09	0.42	100.0	Pulse	0.30	3
2	Bi		2,529,064.48	0.46	101.4	Pulse	0.30	3
3	Sc		151,131.60	0.36	104.1	Pulse	0.30	3
3	Ge		104,793.16	0.55	103.8	Pulse	0.30	3
3	Ge		158,109.14	0.57	104.3	Pulse	0.30	3
3	Rh		1,909,862.08	0.47	103.5	Pulse	0.30	3
3	Tb		3,117,718.07	0.23	106.2	Pulse	0.30	3

Quantitation Report

File Name	040SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 17:19
Sample Name	mp10229-ps1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	73.693	ug/l	2.61	525,641.39	1.302E-01	Pulse	0.25	3
B			1	94.127	ug/l	2.86	646,894.70	1.602E-01	Pulse	0.15	3
Ca			1	16597.832	ug/l	0.58	13,868,796.46	2.559E+00	Analog	0.10	3
Sr			1	167.831	ug/l	0.54	6,661,100.32	9.670E-01	Analog	0.10	3
Mo			1	81.244	ug/l	1.66	600,234.64	8.714E-02	Pulse	0.10	3
Ag			1	75.597	ug/l	1.00	1,561,490.76	2.048E-01	Pulse	0.10	3
Sn			1	79.859	ug/l	0.90	991,666.10	1.301E-01	Pulse	0.10	3
Sb			1	74.982	ug/l	1.02	1,090,098.34	1.011E-01	Pulse	0.10	3
Ba			1	108.344	ug/l	1.30	661,699.23	6.135E-02	Pulse	0.10	3
Tl			1	78.327	ug/l	1.14	2,876,978.29	4.595E-01	Pulse	0.10	3
Pb			1	80.159	ug/l	1.71	973,430.79	1.555E-01	Pulse	0.10	3
Pb			1	80.327	ug/l	1.30	858,742.09	1.371E-01	Pulse	0.10	3
Pb			1	79.480	ug/l	1.37	3,926,275.56	6.271E-01	Pulse	0.10	3
Na			2	7641.103	ug/l	2.61	5,314,019.51	3.650E+01	Analog	0.30	3
Mg			2	7926.877	ug/l	0.44	2,544,179.48	1.748E+01	Pulse	0.30	3
Al			2	3653.462	ug/l	0.17	359,099.45	2.467E+00	Pulse	0.30	3
K			2	5758.827	ug/l	0.14	1,093,082.04	7.508E+00	Pulse	0.30	3
Ca			2	16815.578	ug/l	0.38	177,282.75	1.218E+00	Pulse	0.30	3
Ti			2	79.931	ug/l	1.88	6,429.10	4.416E-02	Pulse	0.30	3
V			2	80.895	ug/l	0.20	233,712.18	1.605E+00	Pulse	0.30	3
Cr			2	80.553	ug/l	0.45	310,659.55	2.134E+00	Pulse	0.30	3
Mn			2	111.085	ug/l	0.90	207,812.12	1.427E+00	Pulse	0.30	3
Fe			2	3996.253	ug/l	0.58	12,800,877.27	8.793E+01	Analog	0.30	3
Co			2	79.526	ug/l	0.40	548,445.71	3.767E+00	Pulse	0.30	3
Ni			2	79.744	ug/l	1.39	151,827.38	1.043E+00	Pulse	0.30	3
Cu			2	79.980	ug/l	0.70	412,069.47	2.830E+00	Pulse	0.30	3
Zn			2	68.954	ug/l	1.61	48,298.62	3.318E-01	Pulse	0.30	3
As			2	72.912	ug/l	1.18	25,852.03	1.776E-01	Pulse	1.00	3
Cd			2	75.132	ug/l	1.21	81,025.72	9.733E-02	Pulse	0.30	3
Sn			2	79.926	ug/l	0.71	149,726.09	1.798E-01	Pulse	0.30	3
Se			3	331.790	ug/l	0.22	27,959.11	1.701E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,039,373.15	2.38	97.9	Mix	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,418,624.09	0.11	95.5	Analog	0.10	3
1	Ge		1,021,270.17	1.20	95.2	Pulse	0.10	3
1	Ge		1,421,990.34	0.74	96.2	Pulse	0.10	3
1	Rh		6,888,762.19	0.93	94.2	Analog	0.10	3
1	In		7,623,473.85	0.71	99.3	Analog	0.10	3
1	Tb		10,786,703.17	1.44	105.7	Analog	0.10	3
1	Ho		1,039,419.91	1.38	108.0	Pulse	0.10	3
1	Bi		6,261,793.66	0.63	103.1	Analog	0.10	3
2	Sc		145,584.26	0.10	91.4	Pulse	0.30	3
2	Ge		89,607.21	0.15	92.4	Pulse	0.30	3
2	Ge		135,290.15	0.50	92.0	Pulse	0.30	3
2	Rh		2,881,518.22	0.30	94.8	Pulse	0.30	3
2	In		832,534.31	0.37	91.5	Pulse	0.30	3
2	Tb		3,583,883.74	0.26	98.7	Pulse	0.30	3
2	Ho		354,298.27	0.34	99.8	Pulse	0.30	3
2	Bi		2,400,738.45	0.12	96.2	Pulse	0.30	3
3	Sc		162,237.97	0.50	111.8	Pulse	0.30	3
3	Ge		107,291.30	0.51	106.3	Pulse	0.30	3
3	Ge		164,393.50	0.89	108.5	Pulse	0.30	3
3	Rh		1,947,731.59	0.38	105.6	Pulse	0.30	3
3	Tb		3,234,433.69	0.47	110.2	Pulse	0.30	3

Quantitation Report

File Name	041SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 17:24
Sample Name	jc76892-1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.006	ug/l	63.60	70.67	1.716E-05	Pulse	0.25	3
B			1	1.339	ug/l	3.85	29,432.52	7.175E-03	Pulse	0.15	3
Ca			1	14.183	ug/l	8.90	29,002.88	5.329E-03	Pulse	0.10	3
Sr			1	0.042	ug/l	9.35	2,857.03	3.958E-04	Pulse	0.10	3
Mo			1	0.102	ug/l	13.85	933.41	1.293E-04	Pulse	0.10	3
Ag			1	0.016	ug/l	21.52	406.69	5.179E-05	Pulse	0.10	3
Sn			1	0.276	ug/l	13.95	6,121.48	7.795E-04	Pulse	0.10	3
Sb			1	0.233	ug/l	3.96	4,800.92	4.377E-04	Pulse	0.10	3
Ba			1	0.056	ug/l	15.95	443.36	4.043E-05	Pulse	0.10	3
Tl			1	0.017	ug/l	22.64	1,096.76	1.685E-04	Pulse	0.10	3
Pb			1	0.030	ug/l	14.87	583.37	8.963E-05	Pulse	0.10	3
Pb			1	0.041	ug/l	5.22	613.38	9.426E-05	Pulse	0.10	3
Pb			1	0.034	ug/l	9.84	2,516.86	3.867E-04	Pulse	0.10	3
Na			2	9.492	ug/l	7.28	13,275.35	8.805E-02	Pulse	0.30	3
Mg			2	2.348	ug/l	11.23	1,127.83	7.478E-03	Pulse	0.30	3
Al			2	5.302	ug/l	7.30	701.14	4.650E-03	Pulse	0.30	3
K			2	5.395	ug/l	9.67	7,285.00	4.831E-02	Pulse	0.30	3
Ca			2	9.639	ug/l	34.77	273.34	1.814E-03	Pulse	0.30	3
Ti			2	0.046	ug/l	130.41	17.78	1.177E-04	Pulse	0.30	3
V			2	0.216	ug/l	6.68	1,048.94	6.955E-03	Pulse	0.30	3
Cr			2	0.414	ug/l	2.74	1,991.26	1.321E-02	Pulse	0.30	3
Mn			2	0.082	ug/l	20.61	197.78	1.311E-03	Pulse	0.30	3
Fe			2	3.668	ug/l	2.34	18,026.58	1.195E-01	Pulse	0.30	3
Co			2	0.013	ug/l	33.67	210.00	1.393E-03	Pulse	0.30	3
Ni			2	0.370	ug/l	7.27	984.49	6.530E-03	Pulse	0.30	3
Cu			2	0.469	ug/l	1.72	2,842.51	1.885E-02	Pulse	0.30	3
Zn			2	1.248	ug/l	6.51	1,215.62	8.060E-03	Pulse	0.30	3
As			2	0.054	ug/l	40.66	33.33	2.208E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.013	ug/l	68.12	28.84	3.346E-05	Pulse	0.30	3
Sn			2	-0.749	ug/l	-8.86	1,051.21	1.219E-03	Pulse	0.30	3
Se			3	-0.004	ug/l	-3878.27	79.67	4.794E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,101,598.57	1.62	99.4	Mix	0.10	3
1	Sc		5,441,403.46	1.14	95.9	Analog	0.10	3
1	Ge		1,052,013.11	1.08	98.0	Pulse	0.10	3
1	Ge		1,444,547.95	0.98	97.8	Pulse	0.10	3
1	Rh		7,221,871.35	1.19	98.7	Analog	0.10	3
1	In		7,854,369.71	0.30	102.3	Analog	0.10	3
1	Tb		10,966,772.76	0.98	107.5	Analog	0.10	3
1	Ho		1,037,057.25	1.40	107.8	Pulse	0.10	3
1	Bi		6,509,483.86	1.53	107.2	Analog	0.10	3
2	Sc		150,789.09	0.71	94.6	Pulse	0.30	3
2	Ge		92,538.59	0.34	95.4	Pulse	0.30	3
2	Ge		139,745.93	0.52	95.1	Pulse	0.30	3
2	Rh		3,035,617.52	0.12	99.8	Pulse	0.30	3
2	In		861,923.85	0.32	94.8	Pulse	0.30	3
2	Tb		3,656,298.19	0.51	100.7	Pulse	0.30	3
2	Ho		357,979.29	0.30	100.9	Pulse	0.30	3
2	Bi		2,515,970.73	0.14	100.8	Pulse	0.30	3
3	Sc		163,557.46	1.09	112.7	Pulse	0.30	3
3	Ge		108,445.62	0.77	107.5	Pulse	0.30	3
3	Ge		166,166.37	0.57	109.6	Pulse	0.30	3
3	Rh		2,021,057.98	0.10	109.5	Pulse	0.30	3
3	Tb		3,270,836.54	0.68	111.4	Pulse	0.30	3

Quantitation Report

File Name	042SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 17:29
Sample Name	jc76939-1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/8/2018 8:17
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.033	ug/l	19.79	265.34	6.526E-05	Pulse	0.25	3
B			1	10.976	ug/l	5.10	93,999.58	2.307E-02	Pulse	0.15	3
Ca			1	20931.256	ug/l	1.02	17,758,395.99	3.227E+00	Analog	0.10	3
Sr			1	117.917	ug/l	1.09	4,773,976.49	6.794E-01	Pulse	0.10	3
Mo			1	0.204	ug/l	12.84	1,676.83	2.387E-04	Pulse	0.10	3
Ag			1	0.022	ug/l	10.69	523.37	6.708E-05	Pulse	0.10	3
Sn			1	0.280	ug/l	15.58	6,141.47	7.870E-04	Pulse	0.10	3
Sb			1	0.071	ug/l	20.37	2,363.61	2.192E-04	Pulse	0.10	3
Ba			1	61.238	ug/l	0.53	373,892.05	3.468E-02	Pulse	0.10	3
Tl			1	0.023	ug/l	22.50	1,300.11	2.024E-04	Pulse	0.10	3
Pb			1	0.212	ug/l	5.38	2,837.06	4.422E-04	Pulse	0.10	3
Pb			1	0.210	ug/l	3.50	2,456.96	3.828E-04	Pulse	0.10	3
Pb			1	0.209	ug/l	4.21	11,368.83	1.772E-03	Pulse	0.10	3
Na			2	5045.083	ug/l	0.32	3,572,398.88	2.411E+01	Pulse	0.30	3
Mg			2	3980.568	ug/l	0.17	1,300,212.21	8.777E+00	Pulse	0.30	3
Al			2	404.785	ug/l	0.56	40,627.01	2.742E-01	Pulse	0.30	3
K			2	1645.982	ug/l	0.69	322,281.93	2.176E+00	Pulse	0.30	3
Ca			2	20923.937	ug/l	0.22	224,432.15	1.515E+00	Pulse	0.30	3
Ti			2	8.596	ug/l	9.99	715.74	4.832E-03	Pulse	0.30	3
V			2	1.062	ug/l	3.85	3,514.86	2.373E-02	Pulse	0.30	3
Cr			2	0.809	ug/l	1.55	3,505.97	2.367E-02	Pulse	0.30	3
Mn			2	93.483	ug/l	0.90	177,960.59	1.201E+00	Pulse	0.30	3
Fe			2	420.255	ug/l	0.68	1,374,972.48	9.281E+00	Pulse	0.30	3
Co			2	0.311	ug/l	5.31	2,293.52	1.548E-02	Pulse	0.30	3
Ni			2	1.372	ug/l	6.14	2,904.74	1.961E-02	Pulse	0.30	3
Cu			2	1.552	ug/l	0.69	8,462.27	5.712E-02	Pulse	0.30	3
Zn			2	2.692	ug/l	6.06	2,216.85	1.497E-02	Pulse	0.30	3
As			2	0.355	ug/l	6.35	141.00	9.519E-04	Pulse	1.00	3
Cd			2	0.013	ug/l	48.64	28.83	3.409E-05	Pulse	0.30	3
Sn			2	-0.026	ug/l	-90.98	893.37	1.055E-03	Pulse	0.30	3
Se			3	-0.100	ug/l	-249.87	71.40	4.303E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,077,442.31	2.64	98.9	Mix	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,503,579.29	0.87	97.0	Analog	0.10	3
1	Ge		1,041,984.18	1.01	97.1	Pulse	0.10	3
1	Ge		1,435,969.61	1.12	97.2	Pulse	0.10	3
1	Rh		7,027,149.90	1.61	96.1	Analog	0.10	3
1	In		7,802,817.33	0.17	101.6	Analog	0.10	3
1	Tb		10,781,064.01	0.23	105.7	Analog	0.10	3
1	Ho		1,032,546.62	0.70	107.3	Pulse	0.10	3
1	Bi		6,417,993.86	1.04	105.7	Analog	0.10	3
2	Sc		148,142.72	0.27	93.0	Pulse	0.30	3
2	Ge		91,178.67	1.18	94.0	Pulse	0.30	3
2	Ge		137,153.65	0.99	93.3	Pulse	0.30	3
2	Rh		2,921,765.79	1.27	96.1	Pulse	0.30	3
2	In		846,139.24	1.35	93.0	Pulse	0.30	3
2	Tb		3,604,200.13	1.20	99.3	Pulse	0.30	3
2	Ho		355,005.90	0.85	100.0	Pulse	0.30	3
2	Bi		2,441,663.79	1.08	97.8	Pulse	0.30	3
3	Sc		162,317.11	1.53	111.8	Pulse	0.30	3
3	Ge		109,495.86	1.86	108.5	Pulse	0.30	3
3	Ge		166,471.02	1.68	109.8	Pulse	0.30	3
3	Rh		1,983,811.73	1.51	107.5	Pulse	0.30	3
3	Tb		3,250,385.70	1.93	110.7	Pulse	0.30	3

Quantitation Report

File Name	043SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 17:34
Sample Name	jc76939-2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.014	ug/l	16.25	129.33	3.197E-05	Pulse	0.25	3
B			1	14.776	ug/l	2.39	118,454.53	2.934E-02	Pulse	0.15	3
Ca			1	13268.002	ug/l	0.95	11,035,393.17	2.047E+00	Analog	0.10	3
Sr			1	89.275	ug/l	0.70	3,536,124.32	5.144E-01	Pulse	0.10	3
Mo			1	0.152	ug/l	2.59	1,256.77	1.828E-04	Pulse	0.10	3
Ag			1	0.013	ug/l	10.82	333.35	4.383E-05	Pulse	0.10	3
Sn			1	0.277	ug/l	2.22	5,944.73	7.817E-04	Pulse	0.10	3
Sb			1	0.082	ug/l	14.31	2,503.64	2.335E-04	Pulse	0.10	3
Ba			1	37.899	ug/l	1.54	230,040.07	2.147E-02	Pulse	0.10	3
Tl			1	0.009	ug/l	28.29	746.72	1.182E-04	Pulse	0.10	3
Pb			1	0.385	ug/l	1.73	4,907.67	7.766E-04	Pulse	0.10	3
Pb			1	0.364	ug/l	8.61	4,080.72	6.459E-04	Pulse	0.10	3
Pb			1	0.371	ug/l	2.30	19,245.76	3.046E-03	Pulse	0.10	3
Na			2	3786.164	ug/l	1.26	2,634,156.77	1.811E+01	Pulse	0.30	3
Mg			2	4262.551	ug/l	0.83	1,367,216.65	9.398E+00	Pulse	0.30	3
Al			2	396.080	ug/l	0.91	39,045.50	2.684E-01	Pulse	0.30	3
K			2	2106.743	ug/l	0.92	403,390.93	2.773E+00	Pulse	0.30	3
Ca			2	13264.207	ug/l	1.11	139,768.77	9.608E-01	Pulse	0.30	3
Ti			2	6.211	ug/l	26.98	512.28	3.517E-03	Pulse	0.30	3
V			2	1.124	ug/l	3.47	3,630.45	2.496E-02	Pulse	0.30	3
Cr			2	0.864	ug/l	5.61	3,654.90	2.513E-02	Pulse	0.30	3
Mn			2	43.133	ug/l	1.47	80,648.37	5.544E-01	Pulse	0.30	3
Fe			2	348.142	ug/l	0.58	1,119,528.25	7.695E+00	Pulse	0.30	3
Co			2	0.222	ug/l	5.12	1,637.88	1.125E-02	Pulse	0.30	3
Ni			2	1.122	ug/l	3.28	2,376.87	1.634E-02	Pulse	0.30	3
Cu			2	2.153	ug/l	3.55	11,405.19	7.841E-02	Pulse	0.30	3
Zn			2	2.041	ug/l	6.51	1,723.45	1.185E-02	Pulse	0.30	3
As			2	0.270	ug/l	9.40	108.33	7.450E-04	Pulse	1.00	3
Cd			2	0.012	ug/l	75.48	27.70	3.323E-05	Pulse	0.30	3
Sn			2	-0.791	ug/l	-3.20	938.93	1.126E-03	Pulse	0.30	3
Se			3	-0.056	ug/l	-404.74	74.00	4.526E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,038,829.22	2.24	97.9	Mix	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,391,908.04	0.38	95.1	Analog	0.10	3
1	Ge		1,028,758.14	0.61	95.9	Pulse	0.10	3
1	Ge		1,402,847.06	0.69	95.0	Pulse	0.10	3
1	Rh		6,873,654.90	0.17	94.0	Analog	0.10	3
1	In		7,604,311.31	0.31	99.0	Analog	0.10	3
1	Tb		10,717,640.67	1.47	105.0	Analog	0.10	3
1	Ho		1,014,666.65	0.78	105.4	Pulse	0.10	3
1	Bi		6,318,764.70	0.51	104.0	Analog	0.10	3
2	Sc		145,484.36	1.23	91.3	Pulse	0.30	3
2	Ge		90,616.97	0.82	93.4	Pulse	0.30	3
2	Ge		136,027.21	0.41	92.5	Pulse	0.30	3
2	Rh		2,878,248.29	0.44	94.7	Pulse	0.30	3
2	In		833,676.01	0.21	91.7	Pulse	0.30	3
2	Tb		3,558,010.41	0.31	98.0	Pulse	0.30	3
2	Ho		351,142.00	0.15	98.9	Pulse	0.30	3
2	Bi		2,418,466.57	0.43	96.9	Pulse	0.30	3
3	Sc		159,966.27	0.71	110.2	Pulse	0.30	3
3	Ge		107,120.18	0.43	106.2	Pulse	0.30	3
3	Ge		163,453.10	0.97	107.9	Pulse	0.30	3
3	Rh		1,955,837.49	0.69	106.0	Pulse	0.30	3
3	Tb		3,229,991.81	0.55	110.0	Pulse	0.30	3

Quantitation Report

File Name	044SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 17:39
Sample Name	jc76939-1f
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/8/2018 8:17
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.018	ug/l	13.79	150.67	3.786E-05	Pulse	0.25	3
B			1	10.434	ug/l	1.95	88,102.09	2.218E-02	Pulse	0.15	3
Ca			1	21695.205	ug/l	0.95	17,926,166.82	3.345E+00	Analog	0.10	3
Sr			1	124.404	ug/l	1.63	4,865,641.59	7.168E-01	Pulse	0.10	3
Mo			1	0.125	ug/l	20.11	1,043.41	1.537E-04	Pulse	0.10	3
Ag			1	0.010	ug/l	30.74	253.35	3.351E-05	Pulse	0.10	3
Sn			1	0.186	ug/l	4.88	4,800.87	6.346E-04	Pulse	0.10	3
Sb			1	0.003	ug/l	400.35	1,363.45	1.275E-04	Pulse	0.10	3
Ba			1	59.138	ug/l	0.92	358,373.34	3.349E-02	Pulse	0.10	3
Tl			1	0.009	ug/l	21.16	753.38	1.201E-04	Pulse	0.10	3
Pb			1	0.033	ug/l	51.05	600.04	9.565E-05	Pulse	0.10	3
Pb			1	0.035	ug/l	21.09	526.70	8.390E-05	Pulse	0.10	3
Pb			1	0.034	ug/l	12.07	2,460.19	3.921E-04	Pulse	0.10	3
Na			2	5282.133	ug/l	0.67	3,675,288.60	2.525E+01	Pulse	0.30	3
Mg			2	4108.185	ug/l	0.90	1,318,651.27	9.058E+00	Pulse	0.30	3
Al			2	8.836	ug/l	7.46	1,024.49	7.035E-03	Pulse	0.30	3
K			2	1630.872	ug/l	1.67	313,833.45	2.156E+00	Pulse	0.30	3
Ca			2	21920.739	ug/l	0.69	231,047.77	1.587E+00	Pulse	0.30	3
Ti			2	0.067	ug/l	154.82	18.89	1.296E-04	Pulse	0.30	3
V			2	0.468	ug/l	2.64	1,740.12	1.195E-02	Pulse	0.30	3
Cr			2	0.387	ug/l	7.21	1,820.13	1.250E-02	Pulse	0.30	3
Mn			2	91.908	ug/l	1.64	171,926.82	1.181E+00	Pulse	0.30	3
Fe			2	62.752	ug/l	0.58	206,573.52	1.419E+00	Pulse	0.30	3
Co			2	0.177	ug/l	8.27	1,330.07	9.131E-03	Pulse	0.30	3
Ni			2	1.015	ug/l	2.97	2,176.84	1.495E-02	Pulse	0.30	3
Cu			2	1.512	ug/l	0.82	8,113.20	5.573E-02	Pulse	0.30	3
Zn			2	0.865	ug/l	7.69	906.70	6.229E-03	Pulse	0.30	3
As			2	0.272	ug/l	11.06	109.33	7.508E-04	Pulse	1.00	3
Cd			2	0.013	ug/l	26.59	28.84	3.452E-05	Pulse	0.30	3
Sn			2	-0.058	ug/l	-48.37	823.37	9.853E-04	Pulse	0.30	3
Se			3	0.080	ug/l	54.43	85.80	5.221E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,973,720.32	2.09	96.3	Mix	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,360,439.29	1.75	94.5	Mix	0.10	3
1	Ge		1,018,813.81	0.92	94.9	Pulse	0.10	3
1	Ge		1,397,854.46	1.03	94.6	Pulse	0.10	3
1	Rh		6,787,936.15	0.56	92.8	Analog	0.10	3
1	In		7,564,808.77	0.74	98.5	Analog	0.10	3
1	Tb		10,700,970.67	1.25	104.9	Analog	0.10	3
1	Ho		1,018,298.29	0.70	105.8	Pulse	0.10	3
1	Bi		6,274,861.58	0.55	103.3	Analog	0.10	3
2	Sc		145,585.82	1.08	91.4	Pulse	0.30	3
2	Ge		90,390.08	1.33	93.2	Pulse	0.30	3
2	Ge		135,820.19	1.10	92.4	Pulse	0.30	3
2	Rh		2,868,770.93	0.21	94.4	Pulse	0.30	3
2	In		835,662.72	0.30	91.9	Pulse	0.30	3
2	Tb		3,548,771.11	0.70	97.7	Pulse	0.30	3
2	Ho		349,352.36	0.45	98.4	Pulse	0.30	3
2	Bi		2,405,758.73	0.57	96.4	Pulse	0.30	3
3	Sc		160,927.22	1.00	110.8	Pulse	0.30	3
3	Ge		108,508.97	1.24	107.5	Pulse	0.30	3
3	Ge		164,304.85	1.07	108.4	Pulse	0.30	3
3	Rh		1,955,769.44	0.60	106.0	Pulse	0.30	3
3	Tb		3,240,525.50	0.84	110.4	Pulse	0.30	3

Quantitation Report

File Name	045SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 17:44
Sample Name	jc77331-1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.375	ug/l	8.85	2,654.91	6.699E-04	Pulse	0.25	3
B			1	62.105	ug/l	2.00	425,795.82	1.074E-01	Pulse	0.15	3
Ca			1	19175.562	ug/l	0.35	16,013,761.84	2.956E+00	Analog	0.10	3
Sr			1	130.221	ug/l	0.85	4,980,937.01	7.503E-01	Pulse	0.10	3
Mo			1	2.318	ug/l	0.97	16,632.45	2.505E-03	Pulse	0.10	3
Ag			1	0.571	ug/l	4.86	11,497.96	1.555E-03	Pulse	0.10	3
Sn			1	2.672	ug/l	2.41	34,528.64	4.672E-03	Pulse	0.10	3
Sb			1	0.734	ug/l	1.50	11,678.14	1.112E-03	Pulse	0.10	3
Ba			1	68.451	ug/l	1.14	407,039.77	3.876E-02	Pulse	0.10	3
Tl			1	0.089	ug/l	9.75	3,570.56	5.908E-04	Pulse	0.10	3
Pb			1	109.959	ug/l	0.72	1,288,635.69	2.133E-01	Pulse	0.10	3
Pb			1	100.626	ug/l	0.43	1,038,113.84	1.718E-01	Pulse	0.10	3
Pb			1	103.115	ug/l	0.46	4,915,667.35	8.135E-01	Pulse	0.10	3
Na			2	43351.153	ug/l	0.94	29,757,992.15	2.069E+02	Analog	0.30	3
Mg			2	7055.211	ug/l	0.65	2,237,304.42	1.555E+01	Pulse	0.30	3
Al			2	9725.944	ug/l	1.17	944,232.11	6.565E+00	Pulse	0.30	3
K			2	3170.304	ug/l	0.23	597,225.91	4.152E+00	Pulse	0.30	3
Ca			2	19901.463	ug/l	0.70	207,271.52	1.441E+00	Pulse	0.30	3
Ti			2	381.550	ug/l	5.11	30,264.97	2.104E-01	Pulse	0.30	3
V			2	16.584	ug/l	1.40	47,643.02	3.312E-01	Pulse	0.30	3
Cr			2	11.273	ug/l	1.12	43,233.19	3.006E-01	Pulse	0.30	3
Mn			2	538.160	ug/l	0.84	994,542.32	6.914E+00	Pulse	0.30	3
Fe			2	13765.636	ug/l	0.75	43,552,074.93	3.028E+02	Analog	0.30	3
Co			2	17.276	ug/l	0.14	117,801.82	8.190E-01	Pulse	0.30	3
Ni			2	62.112	ug/l	0.15	116,898.10	8.127E-01	Pulse	0.30	3
Cu			2	24.359	ug/l	1.43	124,221.67	8.636E-01	Pulse	0.30	3
Zn			2	77.198	ug/l	0.13	53,390.88	3.712E-01	Pulse	0.30	3
As			2	12.123	ug/l	0.48	4,257.57	2.960E-02	Pulse	1.00	3
Cd			2	0.468	ug/l	9.73	507.00	6.232E-04	Pulse	0.30	3
Sn			2	1.603	ug/l	7.83	5,226.48	6.427E-03	Pulse	0.30	3
Se			3	0.209	ug/l	155.71	93.80	5.882E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,965,311.72	1.64	96.1	Mix	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,416,588.25	0.58	95.5	Mix	0.10	3
1	Ge		996,557.28	0.75	92.9	Pulse	0.10	3
1	Ge		1,367,474.20	0.62	92.6	Pulse	0.10	3
1	Rh		6,638,668.86	0.89	90.7	Analog	0.10	3
1	In		7,390,858.75	1.03	96.3	Analog	0.10	3
1	Tb		10,499,945.47	0.96	102.9	Analog	0.10	3
1	Ho		1,031,071.44	0.81	107.1	Pulse	0.10	3
1	Bi		6,042,710.12	0.61	99.5	Analog	0.10	3
2	Sc		143,843.28	0.68	90.3	Pulse	0.30	3
2	Ge		86,899.05	1.32	89.6	Pulse	0.30	3
2	Ge		131,949.71	0.58	89.8	Pulse	0.30	3
2	Rh		2,782,636.77	0.27	91.5	Pulse	0.30	3
2	In		813,317.30	0.55	89.4	Pulse	0.30	3
2	Tb		3,529,348.05	0.38	97.2	Pulse	0.30	3
2	Ho		352,246.18	0.43	99.2	Pulse	0.30	3
2	Bi		2,311,239.14	0.27	92.6	Pulse	0.30	3
3	Sc		160,409.20	0.40	110.5	Pulse	0.30	3
3	Ge		104,779.83	1.08	103.8	Pulse	0.30	3
3	Ge		159,457.76	0.40	105.2	Pulse	0.30	3
3	Rh		1,893,860.27	0.89	102.6	Pulse	0.30	3
3	Tb		3,176,892.58	0.81	108.2	Pulse	0.30	3

Quantitation Report

File Name	046SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 17:49
Sample Name	jc77331-2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.095	ug/l	6.63	686.69	1.745E-04	Pulse	0.25	3
B			1	54.046	ug/l	0.27	370,309.84	9.411E-02	Pulse	0.15	3
Ca			1	20410.666	ug/l	0.51	16,306,686.42	3.147E+00	Analog	0.10	3
Sr			1	133.997	ug/l	1.11	5,058,163.15	7.721E-01	Pulse	0.10	3
Mo			1	1.072	ug/l	5.84	7,658.77	1.169E-03	Pulse	0.10	3
Ag			1	0.229	ug/l	1.89	4,624.19	6.280E-04	Pulse	0.10	3
Sn			1	1.346	ug/l	5.91	18,538.23	2.518E-03	Pulse	0.10	3
Sb			1	0.431	ug/l	6.91	7,468.78	7.043E-04	Pulse	0.10	3
Ba			1	40.431	ug/l	1.04	242,813.47	2.290E-02	Pulse	0.10	3
Tl			1	0.025	ug/l	28.53	1,280.16	2.119E-04	Pulse	0.10	3
Pb			1	29.787	ug/l	0.59	349,355.56	5.779E-02	Pulse	0.10	3
Pb			1	27.371	ug/l	0.92	282,626.29	4.675E-02	Pulse	0.10	3
Pb			1	28.019	ug/l	0.33	1,336,836.86	2.211E-01	Pulse	0.10	3
Na			2	41971.778	ug/l	1.37	28,066,552.22	2.003E+02	Analog	0.30	3
Mg			2	6202.546	ug/l	1.25	1,916,059.92	1.367E+01	Pulse	0.30	3
Al			2	2334.461	ug/l	2.09	220,879.09	1.576E+00	Pulse	0.30	3
K			2	2530.392	ug/l	0.65	465,523.33	3.322E+00	Pulse	0.30	3
Ca			2	20561.085	ug/l	0.90	208,599.65	1.489E+00	Pulse	0.30	3
Ti			2	105.096	ug/l	6.29	8,131.95	5.803E-02	Pulse	0.30	3
V			2	4.167	ug/l	2.53	11,942.22	8.523E-02	Pulse	0.30	3
Cr			2	3.211	ug/l	1.57	12,225.75	8.725E-02	Pulse	0.30	3
Mn			2	599.474	ug/l	1.09	1,079,196.21	7.702E+00	Pulse	0.30	3
Fe			2	2837.693	ug/l	1.72	8,749,668.82	6.245E+01	Analog	0.30	3
Co			2	8.076	ug/l	1.83	53,695.88	3.832E-01	Pulse	0.30	3
Ni			2	52.061	ug/l	1.27	95,481.95	6.814E-01	Pulse	0.30	3
Cu			2	11.694	ug/l	0.71	58,260.39	4.158E-01	Pulse	0.30	3
Zn			2	38.252	ug/l	1.15	25,921.71	1.850E-01	Pulse	0.30	3
As			2	3.247	ug/l	3.09	1,120.04	7.993E-03	Pulse	1.00	3
Cd			2	0.135	ug/l	39.27	154.08	1.923E-04	Pulse	0.30	3
Sn			2	0.343	ug/l	20.50	2,920.32	3.639E-03	Pulse	0.30	3
Se			3	0.208	ug/l	54.55	92.33	5.879E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,934,891.46	0.20	95.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,182,243.05	1.36	91.4	Pulse	0.10	3
1	Ge		979,730.95	0.65	91.3	Pulse	0.10	3
1	Ge		1,344,635.92	1.58	91.0	Pulse	0.10	3
1	Rh		6,551,473.03	0.57	89.6	Analog	0.10	3
1	In		7,363,183.25	0.76	95.9	Analog	0.10	3
1	Tb		10,603,032.34	0.64	103.9	Analog	0.10	3
1	Ho		1,018,246.37	1.16	105.8	Pulse	0.10	3
1	Bi		6,045,412.62	1.17	99.5	Analog	0.10	3
2	Sc		140,126.66	0.91	87.9	Pulse	0.30	3
2	Ge		86,352.88	0.36	89.0	Pulse	0.30	3
2	Ge		129,450.91	1.07	88.1	Pulse	0.30	3
2	Rh		2,741,424.76	0.70	90.2	Pulse	0.30	3
2	In		802,518.76	0.71	88.2	Pulse	0.30	3
2	Tb		3,492,299.10	0.18	96.2	Pulse	0.30	3
2	Ho		344,802.06	0.44	97.1	Pulse	0.30	3
2	Bi		2,292,107.41	0.64	91.9	Pulse	0.30	3
3	Sc		156,445.28	0.29	107.8	Pulse	0.30	3
3	Ge		103,114.35	1.22	102.2	Pulse	0.30	3
3	Ge		157,030.77	0.39	103.6	Pulse	0.30	3
3	Rh		1,871,405.83	0.40	101.4	Pulse	0.30	3
3	Tb		3,173,267.44	0.59	108.1	Pulse	0.30	3

Quantitation Report

File Name	047_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 17:54
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	48.857	ug/l	0.94	691,084.06	1.726E-01	Pulse	0.25	3
B			1	96.586	ug/l	1.03	1,295,497.59	3.236E-01	Pulse	0.15	3
Ca			1	4910.231	ug/l	0.32	8,126,059.46	1.516E+00	Analog	0.10	3
Sr			1	52.038	ug/l	0.42	4,154,527.44	5.997E-01	Pulse	0.10	3
Mo			1	51.566	ug/l	0.41	766,286.86	1.106E-01	Pulse	0.10	3
Ag			1	49.092	ug/l	1.49	1,988,049.24	2.660E-01	Pulse	0.10	3
Sn			1	50.677	ug/l	2.50	1,232,861.02	1.650E-01	Pulse	0.10	3
Sb			1	50.910	ug/l	1.41	1,444,647.43	1.372E-01	Pulse	0.10	3
Ba			1	49.296	ug/l	1.23	587,867.28	5.583E-02	Pulse	0.10	3
Tl			1	49.988	ug/l	0.36	3,604,338.70	5.864E-01	Pulse	0.10	3
Pb			1	50.901	ug/l	0.93	1,213,386.26	1.974E-01	Pulse	0.10	3
Pb			1	51.327	ug/l	1.07	1,077,105.84	1.753E-01	Pulse	0.10	3
Pb			1	50.762	ug/l	0.84	4,922,498.00	8.009E-01	Pulse	0.10	3
Na			2	4859.154	ug/l	1.17	6,852,010.01	4.641E+01	Analog	0.30	3
Mg			2	4877.315	ug/l	0.85	3,174,754.67	2.150E+01	Pulse	0.30	3
Al			2	4677.703	ug/l	0.82	932,235.34	6.315E+00	Pulse	0.30	3
K			2	4806.077	ug/l	0.49	1,846,068.75	1.250E+01	Pulse	0.30	3
Ca			2	5028.193	ug/l	1.02	107,579.05	7.287E-01	Pulse	0.30	3
Ti			2	48.445	ug/l	2.03	7,899.75	5.351E-02	Pulse	0.30	3
V			2	51.150	ug/l	0.88	299,601.52	2.029E+00	Pulse	0.30	3
Cr			2	50.413	ug/l	1.10	394,229.68	2.670E+00	Pulse	0.30	3
Mn			2	49.508	ug/l	1.41	187,840.25	1.272E+00	Pulse	0.30	3
Fe			2	4898.017	ug/l	1.35	31,811,390.96	2.155E+02	Analog	0.30	3
Co			2	49.803	ug/l	1.08	696,565.11	4.718E+00	Pulse	0.30	3
Ni			2	49.520	ug/l	0.97	191,161.98	1.295E+00	Pulse	0.30	3
Cu			2	48.969	ug/l	0.44	511,619.20	3.465E+00	Pulse	0.30	3
Zn			2	49.314	ug/l	0.98	69,924.77	4.736E-01	Pulse	0.30	3
As			2	50.293	ug/l	0.19	36,161.46	2.449E-01	Pulse	1.00	3
Cd			2	49.567	ug/l	0.36	109,870.78	1.284E-01	Pulse	0.30	3
Sn			2	50.368	ug/l	0.28	193,303.63	2.259E-01	Pulse	0.30	3
Se			3	197.001	ug/l	1.45	30,627.53	2.019E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,003,702.03	0.28	97.1	Pulse	0.10	3
1	Sc		5,361,540.54	0.69	94.5	Analog	0.10	3
1	Ge		1,024,459.80	0.30	95.5	Pulse	0.10	3

Quantitation Report

1	Ge		1,432,220.08	0.42	96.9	Pulse	0.10	3
1	Rh		6,927,626.77	0.62	94.7	Analog	0.10	3
1	In		7,473,988.18	1.70	97.3	Analog	0.10	3
1	Tb		10,531,040.88	1.35	103.2	Analog	0.10	3
1	Ho		999,746.84	0.47	103.9	Pulse	0.10	3
1	Bi		6,146,165.32	1.01	101.2	Analog	0.10	3
2	Sc		147,634.29	0.38	92.6	Pulse	0.30	3
2	Ge		91,430.51	1.41	94.3	Pulse	0.30	3
2	Ge		138,562.91	0.15	94.3	Pulse	0.30	3
2	Rh		2,849,619.47	0.92	93.7	Pulse	0.30	3
2	In		855,612.80	0.45	94.1	Pulse	0.30	3
2	Tb		3,557,708.47	0.50	98.0	Pulse	0.30	3
2	Ho		351,553.47	0.70	99.0	Pulse	0.30	3
2	Bi		2,394,887.54	0.75	96.0	Pulse	0.30	3
3	Sc		148,557.72	1.02	102.3	Pulse	0.30	3
3	Ge		100,329.77	0.29	99.4	Pulse	0.30	3
3	Ge		151,728.30	1.00	100.1	Pulse	0.30	3
3	Rh		1,816,369.93	0.18	98.4	Pulse	0.30	3
3	Tb		3,015,142.45	0.50	102.7	Pulse	0.30	3

Quantitation Report

File Name	048_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 17:59
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.006	ug/l	26.03	108.00	2.742E-05	Pulse	0.25	3
B			1	0.856	ug/l	5.50	30,690.22	7.790E-03	Pulse	0.15	3
Ca			1	-0.365	ug/l	-87.22	15,934.87	3.032E-03	Pulse	0.10	3
Sr			1	0.013	ug/l	41.86	2,136.91	3.056E-04	Pulse	0.10	3
Mo			1	0.044	ug/l	5.40	803.39	1.147E-04	Pulse	0.10	3
Ag			1	0.005	ug/l	18.60	246.68	3.233E-05	Pulse	0.10	3
Sn			1	0.457	ug/l	2.82	13,866.63	1.815E-03	Pulse	0.10	3
Sb			1	0.057	ug/l	6.17	2,820.38	2.762E-04	Pulse	0.10	3
Ba			1	0.016	ug/l	63.88	276.68	2.700E-05	Pulse	0.10	3
Tl			1	0.015	ug/l	27.67	1,553.48	2.461E-04	Pulse	0.10	3
Pb			1	0.008	ug/l	11.89	400.02	6.350E-05	Pulse	0.10	3
Pb			1	0.008	ug/l	45.81	336.68	5.336E-05	Pulse	0.10	3
Pb			1	0.010	ug/l	13.48	1,763.46	2.800E-04	Pulse	0.10	3
Na			2	0.926	ug/l	47.22	7,509.53	5.160E-02	Pulse	0.30	3
Mg			2	0.210	ug/l	102.63	470.01	3.230E-03	Pulse	0.30	3
Al			2	0.009	ug/l	2896.03	157.78	1.085E-03	Pulse	0.30	3
K			2	1.056	ug/l	28.99	6,411.31	4.406E-02	Pulse	0.30	3
Ca			2	-1.010	ug/l	-129.06	141.11	9.702E-04	Pulse	0.30	3
Ti			2	-0.029	ug/l	-41.75	8.89	6.108E-05	Pulse	0.30	3
V			2	-0.019	ug/l	-20.43	283.34	1.947E-03	Pulse	0.30	3
Cr			2	0.007	ug/l	144.10	386.68	2.658E-03	Pulse	0.30	3
Mn			2	0.021	ug/l	64.86	117.78	8.098E-04	Pulse	0.30	3
Fe			2	0.182	ug/l	79.75	6,822.63	4.689E-02	Pulse	0.30	3
Co			2	0.002	ug/l	115.06	134.45	9.244E-04	Pulse	0.30	3
Ni			2	0.001	ug/l	2146.82	248.90	1.710E-03	Pulse	0.30	3
Cu			2	0.022	ug/l	14.18	552.24	3.795E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.035	ug/l	-13.85	256.67	1.764E-03	Pulse	0.30	3
As			2	0.005	ug/l	174.84	16.67	1.145E-04	Pulse	1.00	3
Cd			2	0.009	ug/l	76.37	34.40	3.964E-05	Pulse	0.30	3
Sn			2	-0.092	ug/l	-4.92	2,142.39	2.472E-03	Pulse	0.30	3
Se			3	-0.012	ug/l	-382.38	71.07	4.694E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,939,584.14	0.32	95.5	Pulse	0.10	3
1	Sc		5,256,652.42	1.72	92.7	Mix	0.10	3
1	Ge		1,016,898.42	1.41	94.8	Pulse	0.10	3
1	Ge		1,410,896.75	1.21	95.5	Pulse	0.10	3
1	Rh		7,001,299.48	1.44	95.7	Analog	0.10	3
1	In		7,641,071.60	2.78	99.5	Analog	0.10	3
1	Tb		10,214,347.35	1.40	100.1	Analog	0.10	3
1	Ho		985,313.53	1.12	102.4	Pulse	0.10	3
1	Bi		6,302,686.16	1.18	103.8	Analog	0.10	3
2	Sc		145,525.33	0.40	91.3	Pulse	0.30	3
2	Ge		91,076.06	0.66	93.9	Pulse	0.30	3
2	Ge		137,761.50	0.93	93.7	Pulse	0.30	3
2	Rh		2,926,524.75	0.43	96.3	Pulse	0.30	3
2	In		866,815.47	0.46	95.3	Pulse	0.30	3
2	Tb		3,535,548.19	0.42	97.4	Pulse	0.30	3
2	Ho		346,660.76	0.25	97.7	Pulse	0.30	3
2	Bi		2,462,826.01	0.20	98.7	Pulse	0.30	3
3	Sc		146,872.20	0.86	101.2	Pulse	0.30	3
3	Ge		99,123.86	0.72	98.2	Pulse	0.30	3
3	Ge		151,289.95	1.39	99.8	Pulse	0.30	3
3	Rh		1,877,516.11	0.65	101.8	Pulse	0.30	3
3	Tb		3,065,381.82	0.77	104.4	Pulse	0.30	3

Quantitation Report

File Name	049SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 18:04
Sample Name	mp10120-mb1 4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.002	ug/l	48.47	38.67	9.688E-06	Pulse	0.25	3
B			1	0.551	ug/l	14.34	23,438.76	5.874E-03	Pulse	0.15	3
Ca			1	24.509	ug/l	4.65	36,046.48	6.920E-03	Pulse	0.10	3
Sr			1	0.040	ug/l	19.54	2,653.66	3.848E-04	Pulse	0.10	3
Mo			1	0.062	ug/l	16.68	593.37	8.603E-05	Pulse	0.10	3
Ag			1	0.012	ug/l	26.94	303.35	4.045E-05	Pulse	0.10	3
Sn			1	0.324	ug/l	9.87	6,445.87	8.585E-04	Pulse	0.10	3
Sb			1	0.065	ug/l	3.47	2,206.92	2.108E-04	Pulse	0.10	3
Ba			1	0.119	ug/l	20.69	796.72	7.607E-05	Pulse	0.10	3
Tl			1	0.019	ug/l	13.24	1,146.76	1.780E-04	Pulse	0.10	3
Pb			1	0.038	ug/l	51.61	670.05	1.039E-04	Pulse	0.10	3
Pb			1	0.033	ug/l	26.41	523.36	8.116E-05	Pulse	0.10	3
Pb			1	0.037	ug/l	14.48	2,653.55	4.116E-04	Pulse	0.10	3
Na			2	5.593	ug/l	8.55	9,990.89	6.945E-02	Pulse	0.30	3
Mg			2	7.457	ug/l	0.91	2,695.80	1.874E-02	Pulse	0.30	3
Al			2	2.110	ug/l	18.74	358.90	2.496E-03	Pulse	0.30	3
K			2	3.000	ug/l	42.46	6,502.46	4.521E-02	Pulse	0.30	3
Ca			2	21.937	ug/l	16.58	388.90	2.703E-03	Pulse	0.30	3
Ti			2	0.140	ug/l	90.44	24.44	1.695E-04	Pulse	0.30	3
V			2	0.207	ug/l	4.82	976.71	6.791E-03	Pulse	0.30	3
Cr			2	0.322	ug/l	12.53	1,552.31	1.079E-02	Pulse	0.30	3
Mn			2	0.083	ug/l	20.16	191.11	1.328E-03	Pulse	0.30	3
Fe			2	1.437	ug/l	4.89	10,136.55	7.047E-02	Pulse	0.30	3
Co			2	0.008	ug/l	9.21	163.33	1.135E-03	Pulse	0.30	3
Ni			2	0.041	ug/l	3.64	320.01	2.225E-03	Pulse	0.30	3
Cu			2	0.161	ug/l	8.82	1,143.39	7.949E-03	Pulse	0.30	3
Zn			2	0.641	ug/l	19.44	742.25	5.157E-03	Pulse	0.30	3
As			2	0.050	ug/l	64.22	30.33	2.104E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.021	ug/l	89.72	36.64	4.364E-05	Pulse	0.30	3
Sn			2	-0.787	ug/l	-5.57	954.49	1.137E-03	Pulse	0.30	3
Se			3	-0.492	ug/l	-8.01	36.93	2.301E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,990,178.34	0.32	96.7	Pulse	0.10	3
1	Sc		5,209,346.80	0.30	91.9	Mix	0.10	3
1	Ge		1,010,984.49	1.01	94.2	Pulse	0.10	3
1	Ge		1,384,409.20	0.89	93.7	Pulse	0.10	3
1	Rh		6,896,883.02	0.29	94.3	Analog	0.10	3
1	In		7,509,951.96	1.17	97.8	Analog	0.10	3
1	Tb		10,471,028.18	0.69	102.6	Analog	0.10	3
1	Ho		1,012,973.29	0.63	105.3	Pulse	0.10	3
1	Bi		6,444,876.99	0.46	106.1	Analog	0.10	3
2	Sc		143,841.93	0.95	90.3	Pulse	0.30	3
2	Ge		89,383.41	0.43	92.2	Pulse	0.30	3
2	Ge		133,734.04	0.58	91.0	Pulse	0.30	3
2	Rh		2,928,065.51	0.25	96.3	Pulse	0.30	3
2	In		839,799.46	0.16	92.3	Pulse	0.30	3
2	Tb		3,564,005.00	0.35	98.2	Pulse	0.30	3
2	Ho		351,269.70	0.65	99.0	Pulse	0.30	3
2	Bi		2,464,379.62	0.38	98.8	Pulse	0.30	3
3	Sc		156,299.99	0.40	107.7	Pulse	0.30	3
3	Ge		104,736.24	0.33	103.8	Pulse	0.30	3
3	Ge		160,556.93	0.66	105.9	Pulse	0.30	3
3	Rh		1,965,447.49	0.80	106.5	Pulse	0.30	3
3	Tb		3,200,047.17	1.21	109.0	Pulse	0.30	3

Quantitation Report

File Name	050SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 18:09
Sample Name	mp10120-b2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	77.034	ug/l	1.36	549,957.27	1.361E-01	Pulse	0.25	3
B			1	82.621	ug/l	1.58	570,790.45	1.412E-01	Pulse	0.15	3
Ca			1	4085.613	ug/l	1.20	3,411,647.76	6.324E-01	Pulse	0.10	3
Sr			1	84.236	ug/l	0.50	3,420,008.28	4.854E-01	Pulse	0.10	3
Mo			1	84.226	ug/l	0.93	636,483.86	9.034E-02	Pulse	0.10	3
Ag			1	77.164	ug/l	1.77	1,589,034.77	2.091E-01	Pulse	0.10	3
Sn			1	83.558	ug/l	0.91	1,034,353.53	1.361E-01	Pulse	0.10	3
Sb			1	81.520	ug/l	1.74	1,175,131.49	1.099E-01	Pulse	0.10	3
Ba			1	79.826	ug/l	1.72	483,489.14	4.520E-02	Pulse	0.10	3
Tl			1	82.064	ug/l	1.29	3,053,613.71	4.814E-01	Pulse	0.10	3
Pb			1	83.314	ug/l	0.26	1,024,962.20	1.616E-01	Pulse	0.10	3
Pb			1	83.544	ug/l	0.69	904,793.82	1.426E-01	Pulse	0.10	3
Pb			1	82.846	ug/l	0.81	4,146,035.15	6.536E-01	Pulse	0.10	3
Na			2	4038.748	ug/l	0.36	2,839,909.75	1.931E+01	Pulse	0.30	3
Mg			2	4000.131	ug/l	0.86	1,296,899.92	8.820E+00	Pulse	0.30	3
Al			2	3746.359	ug/l	0.80	371,899.95	2.529E+00	Pulse	0.30	3
K			2	3910.253	ug/l	1.23	751,535.56	5.111E+00	Pulse	0.30	3
Ca			2	4360.402	ug/l	1.07	46,550.47	3.166E-01	Pulse	0.30	3
Ti			2	82.052	ug/l	2.97	6,666.97	4.533E-02	Pulse	0.30	3
V			2	83.509	ug/l	0.92	243,660.98	1.657E+00	Pulse	0.30	3
Cr			2	83.153	ug/l	1.13	323,868.31	2.203E+00	Pulse	0.30	3
Mn			2	80.799	ug/l	1.28	152,667.81	1.038E+00	Pulse	0.30	3
Fe			2	4077.081	ug/l	1.82	13,189,114.47	8.971E+01	Analog	0.30	3
Co			2	82.442	ug/l	0.60	574,233.55	3.905E+00	Pulse	0.30	3
Ni			2	81.862	ug/l	0.44	157,415.38	1.071E+00	Pulse	0.30	3
Cu			2	81.441	ug/l	0.41	423,806.34	2.882E+00	Pulse	0.30	3
Zn			2	70.663	ug/l	1.47	49,980.24	3.399E-01	Pulse	0.30	3
As			2	75.117	ug/l	1.21	26,898.35	1.829E-01	Pulse	1.00	3
Cd			2	78.187	ug/l	0.90	84,944.60	1.013E-01	Pulse	0.30	3
Sn			2	84.488	ug/l	0.75	159,308.30	1.899E-01	Pulse	0.30	3
Se			3	326.153	ug/l	0.40	26,673.78	1.672E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,041,830.74	1.47	98.0	Mix	0.10	3
1	Sc		5,395,333.04	1.21	95.1	Mix	0.10	3
1	Ge		1,027,743.03	0.46	95.8	Pulse	0.10	3

Quantitation Report

1	Ge		1,415,936.28	0.90	95.8	Pulse	0.10	3
1	Rh		7,045,650.10	0.70	96.3	Analog	0.10	3
1	In		7,601,053.65	1.01	99.0	Analog	0.10	3
1	Tb		10,697,966.09	1.80	104.9	Analog	0.10	3
1	Ho		1,023,990.77	0.70	106.4	Pulse	0.10	3
1	Bi		6,343,230.12	0.43	104.4	Analog	0.10	3
2	Sc		147,045.75	1.14	92.3	Pulse	0.30	3
2	Ge		89,045.07	0.85	91.8	Pulse	0.30	3
2	Ge		134,739.91	0.75	91.7	Pulse	0.30	3
2	Rh		2,897,572.80	0.40	95.3	Pulse	0.30	3
2	In		838,733.65	1.20	92.2	Pulse	0.30	3
2	Tb		3,571,633.33	0.72	98.4	Pulse	0.30	3
2	Ho		354,964.89	0.74	100.0	Pulse	0.30	3
2	Bi		2,417,093.52	0.28	96.9	Pulse	0.30	3
3	Sc		158,356.76	0.33	109.1	Pulse	0.30	3
3	Ge		104,827.94	0.82	103.9	Pulse	0.30	3
3	Ge		159,537.54	0.25	105.3	Pulse	0.30	3
3	Rh		1,939,640.20	0.25	105.1	Pulse	0.30	3
3	Tb		3,217,839.18	0.41	109.6	Pulse	0.30	3

Quantitation Report

File Name	051SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 18:14
Sample Name	jc76960-1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.035	ug/l	11.71	258.68	6.802E-05	Pulse	0.25	3
B			1	351.375	ug/l	0.42	2,222,398.59	5.845E-01	Pulse	0.15	3
Ca			1	90335.137	ug/l	1.07	72,135,635.59	1.392E+01	Analog	0.10	3
Sr			1	695.152	ug/l	1.13	24,533,316.30	4.005E+00	Analog	0.10	3
Mo			1	1.605	ug/l	4.33	10,663.94	1.741E-03	Pulse	0.10	3
Ag			1	0.227	ug/l	2.84	4,294.09	6.215E-04	Pulse	0.10	3
Sn			1	10.043	ug/l	1.60	115,028.81	1.665E-02	Pulse	0.10	3
Sb			1	0.532	ug/l	7.56	8,359.24	8.393E-04	Pulse	0.10	3
Ba			1	272.588	ug/l	0.27	1,537,497.43	1.543E-01	Pulse	0.10	3
Tl			1	0.037	ug/l	7.02	1,560.15	2.869E-04	Pulse	0.10	3
Pb			1	50.541	ug/l	0.22	533,238.98	9.803E-02	Pulse	0.10	3
Pb			1	48.700	ug/l	0.26	452,307.95	8.316E-02	Pulse	0.10	3
Pb			1	49.129	ug/l	0.29	2,108,462.67	3.876E-01	Pulse	0.10	3
Na			2	156202.245	ug/l	1.66	103,381,669.23	7.453E+02	Analog	0.30	3
Mg			2	15466.864	ug/l	0.22	4,729,472.03	3.410E+01	Pulse	0.30	3
Al			2	406.940	ug/l	0.43	38,242.22	2.757E-01	Pulse	0.30	3
K			2	15605.827	ug/l	0.19	2,812,467.53	2.028E+01	Pulse	0.30	3
Ca			2	93949.888	ug/l	0.82	943,016.21	6.798E+00	Pulse	0.30	3
Ti			2	13.833	ug/l	2.53	1,070.61	7.719E-03	Pulse	0.30	3
V			2	3.029	ug/l	1.41	8,695.69	6.269E-02	Pulse	0.30	3
Cr			2	3.330	ug/l	1.86	12,534.85	9.037E-02	Pulse	0.30	3
Mn			2	629.018	ug/l	0.52	1,120,993.32	8.082E+00	Pulse	0.30	3
Fe			2	24211.624	ug/l	0.85	73,864,957.07	5.325E+02	Analog	0.30	3
Co			2	0.707	ug/l	3.26	4,748.52	3.423E-02	Pulse	0.30	3
Ni			2	2.131	ug/l	2.12	4,093.89	2.951E-02	Pulse	0.30	3
Cu			2	18.680	ug/l	0.48	91,940.26	6.628E-01	Pulse	0.30	3
Zn			2	49.867	ug/l	1.19	33,360.58	2.405E-01	Pulse	0.30	3
As			2	3.718	ug/l	2.24	1,267.72	9.139E-03	Pulse	1.00	3
Cd			2	0.139	ug/l	7.30	151.69	1.967E-04	Pulse	0.30	3
Sn			2	9.026	ug/l	0.87	17,628.87	2.286E-02	Pulse	0.30	3
Se			3	-0.082	ug/l	-213.01	65.20	4.396E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,802,152.84	0.43	92.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,183,667.94	0.25	91.4	Pulse	0.10	3
1	Ge		942,461.68	0.90	87.8	Pulse	0.10	3
1	Ge		1,287,868.73	0.33	87.2	Pulse	0.10	3
1	Rh		6,126,301.57	0.56	83.7	Analog	0.10	3
1	In		6,909,629.72	0.73	90.0	Analog	0.10	3
1	Tb		9,961,765.89	0.58	97.6	Analog	0.10	3
1	Ho		972,469.10	0.36	101.1	Pulse	0.10	3
1	Bi		5,439,240.54	1.00	89.6	Pulse	0.10	3
2	Sc		138,710.64	0.42	87.0	Pulse	0.30	3
2	Ge		84,215.36	0.06	86.8	Pulse	0.30	3
2	Ge		127,154.20	0.39	86.5	Pulse	0.30	3
2	Rh		2,581,331.01	0.29	84.9	Pulse	0.30	3
2	In		771,089.29	0.16	84.8	Pulse	0.30	3
2	Tb		3,363,485.77	0.53	92.6	Pulse	0.30	3
2	Ho		332,127.36	0.40	93.6	Pulse	0.30	3
2	Bi		2,106,177.42	0.20	84.4	Pulse	0.30	3
3	Sc		150,429.40	1.20	103.6	Pulse	0.30	3
3	Ge		97,364.31	1.05	96.5	Pulse	0.30	3
3	Ge		148,363.30	0.19	97.9	Pulse	0.30	3
3	Rh		1,715,319.41	0.78	93.0	Pulse	0.30	3
3	Tb		2,938,738.22	0.83	100.1	Pulse	0.30	3

Quantitation Report

File Name	052SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 18:19
Sample Name	jc76960-2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/8/2018 8:17
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.018	ug/l	22.00	153.33	3.919E-05	Pulse	0.25	3
B			1	290.516	ug/l	1.33	1,894,114.09	4.841E-01	Pulse	0.15	3
Ca			1	68325.062	ug/l	1.93	56,869,612.49	1.053E+01	Analog	0.10	3
Sr			1	471.222	ug/l	1.43	17,463,158.07	2.715E+00	Analog	0.10	3
Mo			1	1.871	ug/l	4.47	13,029.08	2.026E-03	Pulse	0.10	3
Ag			1	0.043	ug/l	18.84	903.39	1.250E-04	Pulse	0.10	3
Sn			1	3.635	ug/l	2.68	45,035.34	6.237E-03	Pulse	0.10	3
Sb			1	0.255	ug/l	5.22	4,807.62	4.667E-04	Pulse	0.10	3
Ba			1	288.634	ug/l	0.93	1,683,720.24	1.634E-01	Pulse	0.10	3
Tl			1	0.010	ug/l	41.08	723.38	1.270E-04	Pulse	0.10	3
Pb			1	27.491	ug/l	0.54	303,593.49	5.334E-02	Pulse	0.10	3
Pb			1	26.847	ug/l	0.64	260,996.46	4.585E-02	Pulse	0.10	3
Pb			1	26.865	ug/l	0.34	1,206,867.77	2.120E-01	Pulse	0.10	3
Na			2	104951.554	ug/l	1.19	71,652,721.60	5.008E+02	Analog	0.30	3
Mg			2	12708.234	ug/l	0.66	4,008,393.73	2.802E+01	Pulse	0.30	3
Al			2	91.766	ug/l	1.39	9,014.75	6.300E-02	Pulse	0.30	3
K			2	11278.181	ug/l	0.81	2,098,186.79	1.466E+01	Pulse	0.30	3
Ca			2	71230.800	ug/l	0.91	737,520.16	5.155E+00	Pulse	0.30	3
Ti			2	4.002	ug/l	10.73	328.90	2.299E-03	Pulse	0.30	3
V			2	1.207	ug/l	3.21	3,806.04	2.660E-02	Pulse	0.30	3
Cr			2	1.621	ug/l	7.86	6,458.00	4.515E-02	Pulse	0.30	3
Mn			2	572.818	ug/l	0.47	1,053,016.48	7.360E+00	Pulse	0.30	3
Fe			2	26759.032	ug/l	0.80	84,207,738.88	5.885E+02	Analog	0.30	3
Co			2	0.355	ug/l	1.57	2,513.56	1.757E-02	Pulse	0.30	3
Ni			2	1.148	ug/l	2.93	2,387.99	1.669E-02	Pulse	0.30	3
Cu			2	9.935	ug/l	0.22	50,588.57	3.536E-01	Pulse	0.30	3
Zn			2	17.897	ug/l	2.35	12,541.60	8.766E-02	Pulse	0.30	3
As			2	5.313	ug/l	2.08	1,863.45	1.302E-02	Pulse	1.00	3
Cd			2	0.044	ug/l	33.33	59.37	7.395E-05	Pulse	0.30	3
Sn			2	3.408	ug/l	1.20	7,020.53	8.748E-03	Pulse	0.30	3
Se			3	0.140	ug/l	85.18	84.27	5.529E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,912,604.86	0.90	94.9	Mix	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,402,971.59	0.45	95.3	Analog	0.10	3
1	Ge		986,598.45	0.35	91.9	Pulse	0.10	3
1	Ge		1,351,280.55	0.38	91.5	Pulse	0.10	3
1	Rh		6,433,095.74	0.58	87.9	Analog	0.10	3
1	In		7,221,398.03	0.76	94.0	Analog	0.10	3
1	Tb		10,302,451.31	0.68	101.0	Analog	0.10	3
1	Ho		1,001,398.08	0.65	104.1	Pulse	0.10	3
1	Bi		5,691,862.83	0.52	93.7	Pulse	0.10	3
2	Sc		143,083.50	0.76	89.8	Pulse	0.30	3
2	Ge		86,756.19	0.85	89.5	Pulse	0.30	3
2	Ge		130,175.70	1.32	88.6	Pulse	0.30	3
2	Rh		2,689,179.69	0.36	88.4	Pulse	0.30	3
2	In		802,553.70	0.23	88.2	Pulse	0.30	3
2	Tb		3,447,042.85	0.21	94.9	Pulse	0.30	3
2	Ho		340,295.99	0.65	95.9	Pulse	0.30	3
2	Bi		2,184,491.37	0.45	87.5	Pulse	0.30	3
3	Sc		153,478.40	1.15	105.7	Pulse	0.30	3
3	Ge		100,671.86	1.01	99.8	Pulse	0.30	3
3	Ge		152,448.90	0.31	100.6	Pulse	0.30	3
3	Rh		1,772,774.44	0.46	96.1	Pulse	0.30	3
3	Tb		3,013,084.39	0.35	102.6	Pulse	0.30	3

Quantitation Report

File Name	053SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 18:24
Sample Name	jc76960-3
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.023	ug/l	21.15	188.00	4.803E-05	Pulse	0.25	3
B			1	291.592	ug/l	0.69	1,901,013.88	4.859E-01	Pulse	0.15	3
Ca			1	89093.696	ug/l	0.76	73,998,670.56	1.372E+01	Analog	0.10	3
Sr			1	703.074	ug/l	1.92	25,538,334.62	4.050E+00	Analog	0.10	3
Mo			1	1.667	ug/l	4.52	11,394.45	1.807E-03	Pulse	0.10	3
Ag			1	0.123	ug/l	11.80	2,423.63	3.404E-04	Pulse	0.10	3
Sn			1	5.006	ug/l	2.70	60,276.46	8.465E-03	Pulse	0.10	3
Sb			1	0.451	ug/l	3.47	7,395.39	7.307E-04	Pulse	0.10	3
Ba			1	307.625	ug/l	1.55	1,762,995.86	1.742E-01	Pulse	0.10	3
Tl			1	0.016	ug/l	11.72	883.40	1.606E-04	Pulse	0.10	3
Pb			1	45.614	ug/l	1.08	486,420.92	8.848E-02	Pulse	0.10	3
Pb			1	43.711	ug/l	0.07	410,329.23	7.464E-02	Pulse	0.10	3
Pb			1	44.252	ug/l	0.07	1,919,598.59	3.492E-01	Pulse	0.10	3
Na			2	166339.474	ug/l	0.78	113,039,111.06	7.937E+02	Analog	0.30	3
Mg			2	16362.759	ug/l	0.56	5,137,232.02	3.607E+01	Pulse	0.30	3
Al			2	329.366	ug/l	0.50	31,809.00	2.233E-01	Pulse	0.30	3
K			2	16274.306	ug/l	0.73	3,011,114.46	2.114E+01	Pulse	0.30	3
Ca			2	92879.493	ug/l	0.89	957,196.15	6.721E+00	Pulse	0.30	3
Ti			2	11.974	ug/l	8.85	953.39	6.694E-03	Pulse	0.30	3
V			2	2.422	ug/l	4.58	7,216.11	5.066E-02	Pulse	0.30	3
Cr			2	2.828	ug/l	4.42	10,978.20	7.709E-02	Pulse	0.30	3
Mn			2	917.881	ug/l	0.39	1,679,535.28	1.179E+01	Pulse	0.30	3
Fe			2	30307.245	ug/l	0.98	94,933,607.34	6.666E+02	Analog	0.30	3
Co			2	0.707	ug/l	3.38	4,878.56	3.425E-02	Pulse	0.30	3
Ni			2	1.737	ug/l	5.42	3,470.41	2.437E-02	Pulse	0.30	3
Cu			2	10.193	ug/l	2.03	51,651.83	3.627E-01	Pulse	0.30	3
Zn			2	27.660	ug/l	1.49	19,132.37	1.343E-01	Pulse	0.30	3
As			2	6.020	ug/l	1.92	2,099.48	1.474E-02	Pulse	1.00	3
Cd			2	0.051	ug/l	21.57	66.12	8.333E-05	Pulse	0.30	3
Sn			2	3.846	ug/l	1.70	9,037.14	1.139E-02	Pulse	0.30	3
Se			3	0.260	ug/l	124.99	90.53	6.142E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,912,350.10	0.59	94.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,391,885.13	1.24	95.1	Mix	0.10	3
1	Ge		978,272.56	0.73	91.2	Pulse	0.10	3
1	Ge		1,341,204.30	1.05	90.8	Pulse	0.10	3
1	Rh		6,305,930.53	1.12	86.2	Analog	0.10	3
1	In		7,120,936.36	0.32	92.7	Analog	0.10	3
1	Tb		10,122,098.81	0.70	99.2	Analog	0.10	3
1	Ho		981,255.95	1.48	102.0	Pulse	0.10	3
1	Bi		5,497,397.83	0.80	90.5	Pulse	0.10	3
2	Sc		142,420.83	0.27	89.4	Pulse	0.30	3
2	Ge		86,268.19	1.05	89.0	Pulse	0.30	3
2	Ge		129,348.94	0.52	88.0	Pulse	0.30	3
2	Rh		2,630,928.09	0.28	86.5	Pulse	0.30	3
2	In		793,152.42	0.64	87.2	Pulse	0.30	3
2	Tb		3,423,343.27	0.86	94.3	Pulse	0.30	3
2	Ho		336,791.13	0.57	94.9	Pulse	0.30	3
2	Bi		2,130,348.53	0.46	85.4	Pulse	0.30	3
3	Sc		149,366.61	0.50	102.9	Pulse	0.30	3
3	Ge		97,541.96	0.63	96.7	Pulse	0.30	3
3	Ge		147,450.85	0.18	97.3	Pulse	0.30	3
3	Rh		1,693,335.25	0.58	91.8	Pulse	0.30	3
3	Tb		2,909,080.16	0.20	99.1	Pulse	0.30	3

Quantitation Report

File Name	054SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 18:29
Sample Name	jc76996-5
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.112	ug/l	3.07	838.70	2.036E-04	Pulse	0.25	3
B			1	6.050	ug/l	2.62	61,571.14	1.494E-02	Pulse	0.15	3
Ca			1	78.423	ug/l	0.19	83,888.06	1.522E-02	Pulse	0.10	3
Sr			1	3.932	ug/l	0.50	164,078.73	2.280E-02	Pulse	0.10	3
Mo			1	0.113	ug/l	15.34	1,013.42	1.409E-04	Pulse	0.10	3
Ag			1	0.039	ug/l	14.97	896.73	1.145E-04	Pulse	0.10	3
Sn			1	0.313	ug/l	7.44	6,581.68	8.406E-04	Pulse	0.10	3
Sb			1	-0.020	ug/l	-28.04	1,033.41	9.721E-05	Pulse	0.10	3
Ba			1	1.328	ug/l	5.77	8,085.78	7.609E-04	Pulse	0.10	3
Tl			1	0.009	ug/l	29.32	793.39	1.216E-04	Pulse	0.10	3
Pb			1	0.125	ug/l	4.89	1,783.52	2.735E-04	Pulse	0.10	3
Pb			1	0.116	ug/l	8.58	1,453.46	2.231E-04	Pulse	0.10	3
Pb			1	0.124	ug/l	1.77	7,170.98	1.100E-03	Pulse	0.10	3
Na			2	107.612	ug/l	0.71	81,946.65	5.562E-01	Pulse	0.30	3
Mg			2	8.215	ug/l	2.74	3,006.98	2.041E-02	Pulse	0.30	3
Al			2	5.763	ug/l	15.41	731.14	4.961E-03	Pulse	0.30	3
K			2	15.800	ug/l	12.25	9,106.16	6.180E-02	Pulse	0.30	3
Ca			2	84.550	ug/l	7.05	1,065.60	7.234E-03	Pulse	0.30	3
Ti			2	0.051	ug/l	47.51	17.78	1.207E-04	Pulse	0.30	3
V			2	0.205	ug/l	4.50	993.38	6.743E-03	Pulse	0.30	3
Cr			2	0.347	ug/l	1.83	1,686.77	1.145E-02	Pulse	0.30	3
Mn			2	0.438	ug/l	7.83	867.81	5.891E-03	Pulse	0.30	3
Fe			2	5.031	ug/l	5.21	22,029.34	1.495E-01	Pulse	0.30	3
Co			2	0.165	ug/l	4.84	1,265.62	8.590E-03	Pulse	0.30	3
Ni			2	2.218	ug/l	2.48	4,515.13	3.065E-02	Pulse	0.30	3
Cu			2	0.363	ug/l	3.56	2,225.74	1.511E-02	Pulse	0.30	3
Zn			2	2.450	ug/l	12.34	2,034.60	1.381E-02	Pulse	0.30	3
As			2	0.097	ug/l	22.07	47.67	3.236E-04	Pulse	1.00	3
Cd			2	0.000	ug/l	-1741.37	14.39	1.674E-05	Pulse	0.30	3
Sn			2	-0.798	ug/l	-2.65	956.71	1.112E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	-0.142	ug/l	-193.39	67.40	4.087E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,120,743.20	1.72	99.9	Mix	0.10	3
1	Sc		5,510,559.50	1.64	97.2	Analog	0.10	3
1	Ge		1,056,354.85	1.34	98.4	Pulse	0.10	3
1	Ge		1,454,886.49	1.37	98.5	Pulse	0.10	3
1	Rh		7,195,058.64	1.00	98.3	Analog	0.10	3
1	In		7,830,091.40	0.67	102.0	Analog	0.10	3
1	Tb		10,629,111.09	0.62	104.2	Analog	0.10	3
1	Ho		1,030,619.05	0.87	107.1	Pulse	0.10	3
1	Bi		6,519,142.82	1.00	107.3	Analog	0.10	3
2	Sc		147,329.72	0.28	92.4	Pulse	0.30	3
2	Ge		92,121.97	0.58	95.0	Pulse	0.30	3
2	Ge		138,889.76	0.03	94.5	Pulse	0.30	3
2	Rh		2,997,211.27	0.65	98.6	Pulse	0.30	3
2	In		860,500.17	0.56	94.6	Pulse	0.30	3
2	Tb		3,610,739.85	0.31	99.4	Pulse	0.30	3
2	Ho		353,833.41	0.59	99.7	Pulse	0.30	3
2	Bi		2,498,479.27	0.50	100.1	Pulse	0.30	3
3	Sc		160,311.75	0.91	110.4	Pulse	0.30	3
3	Ge		109,137.93	1.67	108.2	Pulse	0.30	3
3	Ge		164,665.94	0.89	108.7	Pulse	0.30	3
3	Rh		2,013,582.70	0.32	109.1	Pulse	0.30	3
3	Tb		3,243,871.81	0.24	110.5	Pulse	0.30	3

Quantitation Report

File Name	055SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 18:34
Sample Name	mp10120-s3
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	75.594	ug/l	0.60	531,426.79	1.335E-01	Pulse	0.25	3
B			1	330.354	ug/l	1.14	2,188,131.51	5.498E-01	Pulse	0.15	3
Ca			1	60724.400	ug/l	1.44	50,400,665.91	9.356E+00	Analog	0.10	3
Sr			1	596.795	ug/l	0.87	21,215,234.68	3.438E+00	Analog	0.10	3
Mo			1	95.952	ug/l	0.44	635,064.77	1.029E-01	Pulse	0.10	3
Ag			1	70.644	ug/l	1.09	1,327,674.36	1.914E-01	Pulse	0.10	3
Sn			1	85.060	ug/l	1.16	960,843.27	1.385E-01	Pulse	0.10	3
Sb			1	82.134	ug/l	1.19	1,091,191.75	1.107E-01	Pulse	0.10	3
Ba			1	156.811	ug/l	0.61	875,256.37	8.879E-02	Pulse	0.10	3
Tl			1	86.098	ug/l	0.79	2,593,342.88	5.050E-01	Pulse	0.10	3
Pb			1	92.668	ug/l	0.66	922,869.02	1.797E-01	Pulse	0.10	3
Pb			1	92.969	ug/l	1.28	815,040.01	1.587E-01	Pulse	0.10	3
Pb			1	92.029	ug/l	0.89	3,728,114.37	7.260E-01	Pulse	0.10	3
Na			2	435606.025	ug/l	0.42	302,695,205.75	2.078E+03	Analog	0.30	3
Mg			2	54221.506	ug/l	0.60	17,406,077.64	1.195E+02	Analog	0.30	3
Al			2	4193.950	ug/l	0.80	412,324.66	2.831E+00	Pulse	0.30	3
K			2	22277.689	ug/l	0.37	4,212,598.03	2.893E+01	Pulse	0.30	3
Ca			2	62872.457	ug/l	0.86	662,606.07	4.550E+00	Pulse	0.30	3
Ti			2	96.353	ug/l	1.13	7,749.66	5.321E-02	Pulse	0.30	3
V			2	86.849	ug/l	0.15	250,965.11	1.723E+00	Pulse	0.30	3
Cr			2	85.435	ug/l	0.64	329,569.73	2.263E+00	Pulse	0.30	3
Mn			2	198.387	ug/l	0.68	371,214.53	2.549E+00	Pulse	0.30	3
Fe			2	4801.099	ug/l	0.62	15,383,141.06	1.056E+02	Analog	0.30	3
Co			2	76.957	ug/l	0.51	530,898.66	3.646E+00	Pulse	0.30	3
Ni			2	75.363	ug/l	1.38	143,543.18	9.857E-01	Pulse	0.30	3
Cu			2	75.709	ug/l	0.77	390,197.49	2.679E+00	Pulse	0.30	3
Zn			2	77.335	ug/l	0.52	54,148.85	3.718E-01	Pulse	0.30	3
As			2	74.172	ug/l	0.99	26,306.42	1.806E-01	Pulse	1.00	3
Cd			2	72.900	ug/l	1.53	74,011.88	9.444E-02	Pulse	0.30	3
Sn			2	85.315	ug/l	0.92	150,302.45	1.918E-01	Pulse	0.30	3
Se			3	316.935	ug/l	0.51	23,330.56	1.625E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,979,531.22	0.00	96.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,387,711.38	1.18	95.0	Mix	0.10	3
1	Ge		957,077.62	1.09	89.2	Pulse	0.10	3
1	Ge		1,326,198.73	1.29	89.8	Pulse	0.10	3
1	Rh		6,170,780.74	0.53	84.3	Analog	0.10	3
1	In		6,936,321.88	0.32	90.3	Analog	0.10	3
1	Tb		9,857,933.81	1.22	96.6	Analog	0.10	3
1	Ho		952,775.61	0.84	99.0	Pulse	0.10	3
1	Bi		5,135,305.76	1.53	84.5	Pulse	0.10	3
2	Sc		145,631.53	0.51	91.4	Pulse	0.30	3
2	Ge		84,518.17	1.17	87.2	Pulse	0.30	3
2	Ge		127,962.67	0.77	87.0	Pulse	0.30	3
2	Rh		2,528,200.73	0.45	83.2	Pulse	0.30	3
2	In		783,750.00	0.40	86.2	Pulse	0.30	3
2	Tb		3,323,469.80	0.29	91.5	Pulse	0.30	3
2	Ho		329,240.81	0.88	92.8	Pulse	0.30	3
2	Bi		1,996,108.46	0.39	80.0	Pulse	0.30	3
3	Sc		148,341.26	0.55	102.2	Pulse	0.30	3
3	Ge		94,407.02	0.84	93.6	Pulse	0.30	3
3	Ge		143,589.89	0.53	94.8	Pulse	0.30	3
3	Rh		1,615,658.86	0.43	87.6	Pulse	0.30	3
3	Tb		2,809,399.89	0.84	95.7	Pulse	0.30	3

Quantitation Report

File Name	056SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 18:39
Sample Name	mp10120-s4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	76.675	ug/l	0.85	537,614.67	1.354E-01	Pulse	0.25	3
B			1	329.351	ug/l	0.25	2,175,862.41	5.482E-01	Pulse	0.15	3
Ca			1	60001.048	ug/l	1.55	49,814,255.92	9.244E+00	Analog	0.10	3
Sr			1	595.727	ug/l	0.49	21,005,289.27	3.432E+00	Analog	0.10	3
Mo			1	96.587	ug/l	1.20	633,999.46	1.036E-01	Pulse	0.10	3
Ag			1	71.468	ug/l	1.82	1,349,977.90	1.936E-01	Pulse	0.10	3
Sn			1	85.369	ug/l	2.22	969,163.61	1.390E-01	Pulse	0.10	3
Sb			1	82.192	ug/l	0.84	1,091,139.20	1.108E-01	Pulse	0.10	3
Ba			1	156.378	ug/l	0.54	872,204.78	8.855E-02	Pulse	0.10	3
Tl			1	86.748	ug/l	0.43	2,627,191.84	5.089E-01	Pulse	0.10	3
Pb			1	93.692	ug/l	0.37	938,134.57	1.817E-01	Pulse	0.10	3
Pb			1	93.497	ug/l	0.55	824,133.03	1.596E-01	Pulse	0.10	3
Pb			1	92.595	ug/l	0.41	3,771,527.42	7.305E-01	Pulse	0.10	3
Na			2	430704.071	ug/l	0.05	297,716,699.28	2.055E+03	Analog	0.30	3
Mg			2	53764.055	ug/l	0.47	17,169,275.98	1.185E+02	Analog	0.30	3
Al			2	4268.392	ug/l	0.50	417,443.71	2.882E+00	Pulse	0.30	3
K			2	22040.960	ug/l	0.73	4,146,004.14	2.862E+01	Pulse	0.30	3
Ca			2	62133.190	ug/l	0.64	651,384.59	4.496E+00	Pulse	0.30	3
Ti			2	99.727	ug/l	2.19	7,978.67	5.507E-02	Pulse	0.30	3
V			2	87.308	ug/l	0.40	250,965.07	1.732E+00	Pulse	0.30	3
Cr			2	86.211	ug/l	0.33	330,826.64	2.284E+00	Pulse	0.30	3
Mn			2	198.854	ug/l	0.49	370,140.51	2.555E+00	Pulse	0.30	3
Fe			2	4824.725	ug/l	0.79	15,377,062.72	1.061E+02	Analog	0.30	3
Co			2	77.664	ug/l	0.23	532,970.50	3.679E+00	Pulse	0.30	3
Ni			2	76.321	ug/l	0.24	144,606.59	9.982E-01	Pulse	0.30	3
Cu			2	76.129	ug/l	1.00	390,303.06	2.694E+00	Pulse	0.30	3
Zn			2	77.870	ug/l	0.39	54,235.78	3.744E-01	Pulse	0.30	3
As			2	73.940	ug/l	0.51	26,087.75	1.801E-01	Pulse	1.00	3
Cd			2	73.880	ug/l	1.51	75,266.54	9.570E-02	Pulse	0.30	3
Sn			2	85.037	ug/l	0.72	150,345.16	1.912E-01	Pulse	0.30	3
Se			3	317.321	ug/l	0.75	23,157.18	1.627E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,969,153.61	0.33	96.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,389,319.71	1.35	95.0	Mix	0.10	3
1	Ge		955,054.10	1.16	89.0	Pulse	0.10	3
1	Ge		1,322,893.84	0.78	89.5	Pulse	0.10	3
1	Rh		6,120,342.41	0.86	83.7	Analog	0.10	3
1	In		6,972,017.28	1.06	90.8	Analog	0.10	3
1	Tb		9,850,468.18	0.86	96.5	Analog	0.10	3
1	Ho		955,644.60	1.89	99.3	Pulse	0.10	3
1	Bi		5,163,001.18	0.96	85.0	Pulse	0.10	3
2	Sc		144,868.18	0.52	90.9	Pulse	0.30	3
2	Ge		84,626.27	1.10	87.3	Pulse	0.30	3
2	Ge		127,564.35	0.64	86.8	Pulse	0.30	3
2	Rh		2,517,428.79	0.35	82.8	Pulse	0.30	3
2	In		786,477.66	0.37	86.5	Pulse	0.30	3
2	Tb		3,347,438.41	0.38	92.2	Pulse	0.30	3
2	Ho		330,870.42	0.25	93.2	Pulse	0.30	3
2	Bi		1,994,713.88	0.38	79.9	Pulse	0.30	3
3	Sc		148,130.71	0.79	102.0	Pulse	0.30	3
3	Ge		93,972.29	0.84	93.1	Pulse	0.30	3
3	Ge		142,354.89	1.08	93.9	Pulse	0.30	3
3	Rh		1,617,676.74	0.48	87.7	Pulse	0.30	3
3	Tb		2,834,721.48	0.80	96.6	Pulse	0.30	3

Quantitation Report

File Name	057SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 18:43
Sample Name	jc76918-1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.037	ug/l	19.83	288.01	7.265E-05	Pulse	0.25	3
B			1	255.356	ug/l	2.09	1,690,274.27	4.261E-01	Pulse	0.15	3
Ca			1	56296.837	ug/l	0.53	47,012,809.30	8.674E+00	Analog	0.10	3
Sr			1	508.888	ug/l	1.39	18,058,061.40	2.932E+00	Analog	0.10	3
Mo			1	1.995	ug/l	3.59	13,302.67	2.159E-03	Pulse	0.10	3
Ag			1	0.125	ug/l	4.78	2,406.95	3.457E-04	Pulse	0.10	3
Sn			1	0.894	ug/l	1.76	12,418.73	1.784E-03	Pulse	0.10	3
Sb			1	0.547	ug/l	4.00	8,472.63	8.601E-04	Pulse	0.10	3
Ba			1	76.499	ug/l	1.56	426,706.56	4.332E-02	Pulse	0.10	3
Tl			1	0.035	ug/l	9.94	1,400.12	2.730E-04	Pulse	0.10	3
Pb			1	5.255	ug/l	2.29	52,437.73	1.022E-02	Pulse	0.10	3
Pb			1	4.976	ug/l	2.04	43,695.45	8.519E-03	Pulse	0.10	3
Pb			1	5.041	ug/l	0.25	204,597.38	3.989E-02	Pulse	0.10	3
Na			2	429114.273	ug/l	0.39	300,163,374.74	2.047E+03	Analog	0.30	3
Mg			2	50527.336	ug/l	0.98	16,329,142.68	1.114E+02	Analog	0.30	3
Al			2	616.953	ug/l	0.91	61,196.71	4.174E-01	Pulse	0.30	3
K			2	18540.319	ug/l	0.34	3,530,250.97	2.408E+01	Pulse	0.30	3
Ca			2	59213.013	ug/l	0.14	628,218.10	4.285E+00	Pulse	0.30	3
Ti			2	20.144	ug/l	8.35	1,641.26	1.120E-02	Pulse	0.30	3
V			2	3.073	ug/l	4.62	9,319.45	6.356E-02	Pulse	0.30	3
Cr			2	5.792	ug/l	0.67	22,802.41	1.555E-01	Pulse	0.30	3
Mn			2	121.376	ug/l	0.35	228,644.91	1.560E+00	Pulse	0.30	3
Fe			2	994.341	ug/l	0.26	3,211,624.46	2.191E+01	Pulse	0.30	3
Co			2	0.478	ug/l	5.66	3,432.63	2.341E-02	Pulse	0.30	3
Ni			2	2.475	ug/l	1.69	4,986.37	3.401E-02	Pulse	0.30	3
Cu			2	4.738	ug/l	2.10	24,892.29	1.698E-01	Pulse	0.30	3
Zn			2	17.492	ug/l	1.63	12,567.13	8.572E-02	Pulse	0.30	3
As			2	1.276	ug/l	4.20	468.34	3.195E-03	Pulse	1.00	3
Cd			2	0.071	ug/l	27.91	86.04	1.085E-04	Pulse	0.30	3
Sn			2	-0.175	ug/l	-43.97	1,975.71	2.491E-03	Pulse	0.30	3
Se			3	0.219	ug/l	32.04	84.07	5.932E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,967,857.83	2.64	96.2	Mix	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,420,147.00	0.07	95.6	Analog	0.10	3
1	Ge		970,689.28	0.55	90.5	Pulse	0.10	3
1	Ge		1,318,557.22	0.75	89.2	Pulse	0.10	3
1	Rh		6,159,905.12	0.78	84.2	Analog	0.10	3
1	In		6,960,234.24	1.20	90.6	Analog	0.10	3
1	Tb		9,850,176.31	0.35	96.5	Analog	0.10	3
1	Ho		956,619.70	1.39	99.4	Pulse	0.10	3
1	Bi		5,129,580.97	0.71	84.5	Pulse	0.10	3
2	Sc		146,601.85	0.52	92.0	Pulse	0.30	3
2	Ge		86,346.31	1.17	89.0	Pulse	0.30	3
2	Ge		128,842.78	0.24	87.6	Pulse	0.30	3
2	Rh		2,540,837.33	0.27	83.6	Pulse	0.30	3
2	In		792,986.45	0.07	87.2	Pulse	0.30	3
2	Tb		3,344,469.59	0.41	92.1	Pulse	0.30	3
2	Ho		332,632.37	0.53	93.7	Pulse	0.30	3
2	Bi		2,017,180.13	0.24	80.8	Pulse	0.30	3
3	Sc		147,662.91	1.01	101.7	Pulse	0.30	3
3	Ge		93,729.97	0.36	92.9	Pulse	0.30	3
3	Ge		141,764.87	0.84	93.5	Pulse	0.30	3
3	Rh		1,610,432.96	0.55	87.3	Pulse	0.30	3
3	Tb		2,810,807.74	0.67	95.8	Pulse	0.30	3

Quantitation Report

File Name	058_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 18:48
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	48.574	ug/l	0.67	689,151.69	1.716E-01	Pulse	0.25	3
B			1	97.039	ug/l	0.81	1,305,410.23	3.251E-01	Pulse	0.15	3
Ca			1	4852.269	ug/l	1.25	8,050,588.42	1.498E+00	Analog	0.10	3
Sr			1	52.224	ug/l	1.10	4,111,598.07	6.019E-01	Pulse	0.10	3
Mo			1	51.830	ug/l	0.61	759,525.59	1.112E-01	Pulse	0.10	3
Ag			1	48.766	ug/l	1.48	1,976,892.06	2.643E-01	Pulse	0.10	3
Sn			1	49.907	ug/l	1.79	1,215,547.90	1.625E-01	Pulse	0.10	3
Sb			1	51.501	ug/l	0.73	1,422,837.06	1.388E-01	Pulse	0.10	3
Ba			1	50.074	ug/l	0.88	581,398.57	5.671E-02	Pulse	0.10	3
Tl			1	50.152	ug/l	1.40	3,551,428.70	5.884E-01	Pulse	0.10	3
Pb			1	51.087	ug/l	1.07	1,196,111.39	1.982E-01	Pulse	0.10	3
Pb			1	51.076	ug/l	1.58	1,052,723.45	1.744E-01	Pulse	0.10	3
Pb			1	50.730	ug/l	1.08	4,831,557.61	8.004E-01	Pulse	0.10	3
Na			2	4835.767	ug/l	0.38	6,944,158.62	4.619E+01	Analog	0.30	3
Mg			2	4811.954	ug/l	0.39	3,189,670.50	2.122E+01	Pulse	0.30	3
Al			2	4729.577	ug/l	0.41	959,860.14	6.385E+00	Pulse	0.30	3
K			2	4804.344	ug/l	0.47	1,879,223.82	1.250E+01	Pulse	0.30	3
Ca			2	5046.926	ug/l	0.70	109,958.68	7.314E-01	Pulse	0.30	3
Ti			2	50.951	ug/l	2.42	8,460.01	5.627E-02	Pulse	0.30	3
V			2	50.916	ug/l	0.60	303,701.55	2.020E+00	Pulse	0.30	3
Cr			2	49.676	ug/l	0.48	395,591.81	2.631E+00	Pulse	0.30	3
Mn			2	49.546	ug/l	0.61	191,434.13	1.273E+00	Pulse	0.30	3
Fe			2	4927.493	ug/l	0.79	32,590,317.60	2.168E+02	Analog	0.30	3
Co			2	49.426	ug/l	0.41	703,968.19	4.683E+00	Pulse	0.30	3
Ni			2	48.766	ug/l	0.82	191,706.91	1.275E+00	Pulse	0.30	3
Cu			2	48.358	ug/l	0.33	514,509.04	3.422E+00	Pulse	0.30	3
Zn			2	49.024	ug/l	0.74	70,788.41	4.709E-01	Pulse	0.30	3
As			2	50.283	ug/l	0.69	36,815.91	2.449E-01	Pulse	1.00	3
Cd			2	49.369	ug/l	0.66	111,491.67	1.279E-01	Pulse	0.30	3
Sn			2	50.375	ug/l	0.31	196,964.69	2.260E-01	Pulse	0.30	3
Se			3	196.953	ug/l	0.42	30,413.16	2.018E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,015,660.37	0.31	97.4	Pulse	0.10	3
1	Sc		5,375,377.63	0.99	94.8	Mix	0.10	3
1	Ge		1,025,957.04	0.94	95.6	Pulse	0.10	3

Quantitation Report

1	Ge		1,430,821.49	1.04	96.8	Pulse	0.10	3
1	Rh		6,831,621.98	0.08	93.4	Analog	0.10	3
1	In		7,481,491.97	1.41	97.4	Analog	0.10	3
1	Tb		10,252,070.68	1.36	100.5	Analog	0.10	3
1	Ho		987,833.40	1.05	102.7	Pulse	0.10	3
1	Bi		6,036,261.37	0.19	99.4	Analog	0.10	3
2	Sc		150,340.36	0.47	94.3	Pulse	0.30	3
2	Ge		93,154.56	0.76	96.1	Pulse	0.30	3
2	Ge		140,889.10	0.08	95.8	Pulse	0.30	3
2	Rh		2,875,036.06	0.13	94.6	Pulse	0.30	3
2	In		871,720.14	0.39	95.8	Pulse	0.30	3
2	Tb		3,567,952.50	0.21	98.3	Pulse	0.30	3
2	Ho		351,658.05	0.39	99.1	Pulse	0.30	3
2	Bi		2,399,433.79	0.57	96.2	Pulse	0.30	3
3	Sc		145,563.68	0.55	100.3	Pulse	0.30	3
3	Ge		98,527.90	0.53	97.6	Pulse	0.30	3
3	Ge		150,689.10	0.37	99.4	Pulse	0.30	3
3	Rh		1,797,591.11	0.10	97.4	Pulse	0.30	3
3	Tb		2,972,899.05	0.66	101.3	Pulse	0.30	3

Quantitation Report

File Name	059_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 18:53
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.005	ug/l	15.61	101.33	2.549E-05	Pulse	0.25	3
B			1	2.479	ug/l	4.18	52,238.12	1.315E-02	Pulse	0.15	3
Ca			1	-0.809	ug/l	-67.57	15,481.09	2.896E-03	Pulse	0.10	3
Sr			1	0.016	ug/l	10.65	2,400.28	3.404E-04	Pulse	0.10	3
Mo			1	0.050	ug/l	7.17	900.06	1.277E-04	Pulse	0.10	3
Ag			1	0.008	ug/l	1.90	396.69	5.175E-05	Pulse	0.10	3
Sn			1	0.464	ug/l	15.49	14,101.18	1.838E-03	Pulse	0.10	3
Sb			1	0.052	ug/l	5.63	2,710.34	2.632E-04	Pulse	0.10	3
Ba			1	0.018	ug/l	33.17	296.68	2.881E-05	Pulse	0.10	3
Tl			1	0.014	ug/l	9.38	1,466.80	2.358E-04	Pulse	0.10	3
Pb			1	0.009	ug/l	45.37	403.36	6.482E-05	Pulse	0.10	3
Pb			1	0.006	ug/l	91.55	280.01	4.508E-05	Pulse	0.10	3
Pb			1	0.008	ug/l	35.75	1,530.10	2.461E-04	Pulse	0.10	3
Na			2	13.898	ug/l	3.35	25,979.02	1.754E-01	Pulse	0.30	3
Mg			2	1.001	ug/l	7.51	994.48	6.714E-03	Pulse	0.30	3
Al			2	-0.005	ug/l	-873.36	157.78	1.065E-03	Pulse	0.30	3
K			2	1.583	ug/l	25.07	6,728.09	4.542E-02	Pulse	0.30	3
Ca			2	-0.976	ug/l	-36.29	144.45	9.751E-04	Pulse	0.30	3
Ti			2	-0.070	ug/l	-16.77	2.22	1.501E-05	Pulse	0.30	3
V			2	-0.019	ug/l	-25.32	287.78	1.943E-03	Pulse	0.30	3
Cr			2	0.002	ug/l	176.20	353.35	2.386E-03	Pulse	0.30	3
Mn			2	0.014	ug/l	13.66	91.11	6.152E-04	Pulse	0.30	3
Fe			2	0.290	ug/l	23.52	7,647.43	5.163E-02	Pulse	0.30	3
Co			2	0.003	ug/l	65.78	154.45	1.043E-03	Pulse	0.30	3
Ni			2	0.000	ug/l	2257.24	252.23	1.703E-03	Pulse	0.30	3
Cu			2	0.032	ug/l	19.84	665.58	4.492E-03	Pulse	0.30	3
Zn			2	-0.022	ug/l	-189.92	278.89	1.883E-03	Pulse	0.30	3
As			2	0.007	ug/l	105.26	18.33	1.238E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.008	ug/l	91.51	33.29	3.768E-05	Pulse	0.30	3
Sn			2	-0.115	ug/l	-15.36	2,093.50	2.370E-03	Pulse	0.30	3
Se			3	-0.018	ug/l	-236.77	69.27	4.625E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,974,904.51	1.54	96.4	Pulse	0.10	3
1	Sc		5,344,900.34	1.50	94.2	Analog	0.10	3
1	Ge		1,023,750.71	1.24	95.4	Pulse	0.10	3
1	Ge		1,428,557.32	1.40	96.7	Pulse	0.10	3
1	Rh		7,048,951.98	1.49	96.4	Analog	0.10	3
1	In		7,666,472.28	0.85	99.8	Analog	0.10	3
1	Tb		10,298,519.01	0.85	100.9	Analog	0.10	3
1	Ho		982,228.66	1.30	102.1	Pulse	0.10	3
1	Bi		6,221,255.12	0.63	102.4	Analog	0.10	3
2	Sc		148,130.00	0.34	92.9	Pulse	0.30	3
2	Ge		92,594.52	1.54	95.5	Pulse	0.30	3
2	Ge		141,077.24	0.78	96.0	Pulse	0.30	3
2	Rh		2,935,098.91	0.29	96.5	Pulse	0.30	3
2	In		883,402.03	0.09	97.1	Pulse	0.30	3
2	Tb		3,536,318.33	0.27	97.4	Pulse	0.30	3
2	Ho		347,412.00	0.46	97.9	Pulse	0.30	3
2	Bi		2,449,815.81	0.28	98.2	Pulse	0.30	3
3	Sc		143,039.07	0.52	98.5	Pulse	0.30	3
3	Ge		98,185.81	0.34	97.3	Pulse	0.30	3
3	Ge		149,780.93	0.34	98.8	Pulse	0.30	3
3	Rh		1,835,314.79	0.44	99.5	Pulse	0.30	3
3	Tb		2,989,454.53	0.07	101.8	Pulse	0.30	3

Quantitation Report

File Name	060SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 18:58
Sample Name	mp10120-sd1
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.039	ug/l	54.80	81.33	2.022E-05	Pulse	0.25	3
B			1	255.187	ug/l	1.25	358,657.21	8.915E-02	Pulse	0.15	3
Ca			1	58026.871	ug/l	0.73	9,741,015.48	1.791E+00	Analog	0.10	3
Sr			1	485.977	ug/l	0.14	3,738,189.63	5.601E-01	Pulse	0.10	3
Mo			1	1.854	ug/l	3.13	2,783.71	4.171E-04	Pulse	0.10	3
Ag			1	0.162	ug/l	9.07	710.04	9.542E-05	Pulse	0.10	3
Sn			1	0.326	ug/l	6.26	3,255.49	4.376E-04	Pulse	0.10	3
Sb			1	0.451	ug/l	6.17	2,453.63	2.451E-04	Pulse	0.10	3
Ba			1	79.735	ug/l	0.83	90,460.89	9.037E-03	Pulse	0.10	3
Tl			1	0.053	ug/l	24.69	730.05	1.288E-04	Pulse	0.10	3
Pb			1	5.138	ug/l	5.52	11,461.54	2.024E-03	Pulse	0.10	3
Pb			1	4.802	ug/l	3.18	9,430.07	1.664E-03	Pulse	0.10	3
Pb			1	4.861	ug/l	1.63	44,137.33	7.790E-03	Pulse	0.10	3
Na			2	428923.475	ug/l	0.37	62,140,301.98	4.094E+02	Analog	0.30	3
Mg			2	51028.354	ug/l	1.36	3,415,093.61	2.250E+01	Pulse	0.30	3
Al			2	618.258	ug/l	3.21	12,827.83	8.452E-02	Pulse	0.30	3
K			2	18642.070	ug/l	0.34	740,129.42	4.876E+00	Pulse	0.30	3
Ca			2	59490.450	ug/l	0.76	130,847.62	8.620E-01	Pulse	0.30	3
Ti			2	19.885	ug/l	24.17	346.69	2.285E-03	Pulse	0.30	3
V			2	2.508	ug/l	3.36	1,915.69	1.262E-02	Pulse	0.30	3
Cr			2	5.369	ug/l	2.30	4,657.38	3.068E-02	Pulse	0.30	3
Mn			2	125.266	ug/l	1.25	48,904.28	3.221E-01	Pulse	0.30	3
Fe			2	1017.251	ug/l	0.76	685,173.78	4.513E+00	Pulse	0.30	3
Co			2	0.453	ug/l	8.14	765.58	5.046E-03	Pulse	0.30	3
Ni			2	2.415	ug/l	4.57	1,214.51	8.001E-03	Pulse	0.30	3
Cu			2	5.069	ug/l	2.95	5,785.53	3.810E-02	Pulse	0.30	3
Zn			2	22.119	ug/l	3.53	3,528.20	2.324E-02	Pulse	0.30	3
As			2	1.516	ug/l	20.56	125.33	8.264E-04	Pulse	1.00	3
Cd			2	0.018	ug/l	177.31	18.75	2.162E-05	Pulse	0.30	3
Sn			2	-5.302	ug/l	-1.85	460.01	5.303E-04	Pulse	0.30	3
Se			3	0.812	ug/l	45.21	81.53	5.644E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,023,182.99	0.21	97.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,440,465.12	1.01	95.9	Analog	0.10	3
1	Ge		1,025,591.57	0.70	95.6	Pulse	0.10	3
1	Ge		1,430,753.94	0.86	96.8	Pulse	0.10	3
1	Rh		6,674,497.19	0.95	91.2	Analog	0.10	3
1	In		7,440,117.63	0.25	96.9	Analog	0.10	3
1	Tb		10,010,043.39	0.80	98.1	Analog	0.10	3
1	Ho		970,183.27	0.85	100.8	Pulse	0.10	3
1	Bi		5,666,262.83	1.10	93.3	Pulse	0.10	3
2	Sc		151,804.44	1.12	95.3	Pulse	0.30	3
2	Ge		93,225.85	0.97	96.1	Pulse	0.30	3
2	Ge		141,580.53	0.37	96.3	Pulse	0.30	3
2	Rh		2,776,565.86	0.77	91.3	Pulse	0.30	3
2	In		867,441.93	0.22	95.4	Pulse	0.30	3
2	Tb		3,498,206.95	0.99	96.3	Pulse	0.30	3
2	Ho		348,002.25	1.29	98.0	Pulse	0.30	3
2	Bi		2,305,136.22	1.00	92.4	Pulse	0.30	3
3	Sc		141,439.83	0.27	97.4	Pulse	0.30	3
3	Ge		95,234.16	0.74	94.4	Pulse	0.30	3
3	Ge		144,452.05	1.10	95.3	Pulse	0.30	3
3	Rh		1,693,344.69	1.15	91.8	Pulse	0.30	3
3	Tb		2,891,117.59	0.48	98.5	Pulse	0.30	3

Quantitation Report

File Name	061SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 19:03
Sample Name	mp10116a-ps1 4
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	200.087	ug/l	1.08	556,517.10	1.414E-01	Pulse	0.25	3
B			1	250.296	ug/l	0.97	669,555.25	1.701E-01	Pulse	0.15	3
Ca			1	18880.518	ug/l	1.27	6,351,319.28	1.166E+00	Analog	0.10	3
Sr			1	356.525	ug/l	1.43	5,616,485.54	8.217E-01	Mix	0.10	3
Mo			1	213.192	ug/l	1.02	625,220.90	9.147E-02	Pulse	0.10	3
Ag			1	96.589	ug/l	1.03	776,180.93	1.047E-01	Pulse	0.10	3
Sn			1	226.721	ug/l	1.11	1,094,870.63	1.477E-01	Pulse	0.10	3
Sb			1	204.466	ug/l	0.34	1,127,113.26	1.102E-01	Pulse	0.10	3
Ba			1	430.142	ug/l	0.24	996,169.67	9.742E-02	Pulse	0.10	3
Tl			1	200.228	ug/l	1.16	2,852,945.37	4.698E-01	Pulse	0.10	3
Pb			1	478.403	ug/l	1.31	2,253,518.09	3.711E-01	Pulse	0.10	3
Pb			1	464.704	ug/l	0.91	1,926,984.35	3.173E-01	Pulse	0.10	3
Pb			1	468.357	ug/l	0.80	8,974,339.66	1.478E+00	Pulse	0.10	3
Na			2	6512.385	ug/l	1.22	1,887,942.63	1.247E+01	Pulse	0.30	3
Mg			2	10509.810	ug/l	1.20	1,403,107.55	9.269E+00	Pulse	0.30	3
Al			2	39293.721	ug/l	0.76	1,605,825.04	1.061E+01	Pulse	0.30	3
K			2	12868.230	ug/l	0.76	1,016,545.76	6.715E+00	Pulse	0.30	3
Ca			2	20281.224	ug/l	0.95	89,018.96	5.881E-01	Pulse	0.30	3
Ti			2	1241.790	ug/l	1.52	41,471.69	2.739E-01	Pulse	0.30	3
V			2	638.221	ug/l	0.15	766,035.02	5.060E+00	Pulse	0.30	3
Cr			2	318.370	ug/l	0.23	510,484.69	3.372E+00	Pulse	0.30	3
Mn			2	547.973	ug/l	0.37	426,334.21	2.816E+00	Pulse	0.30	3
Fe			2	99514.953	ug/l	0.46	132,532,399.18	8.755E+02	Analog	0.30	3
Co			2	205.601	ug/l	1.45	589,724.05	3.896E+00	Pulse	0.30	3
Ni			2	270.080	ug/l	0.86	213,781.51	1.412E+00	Pulse	0.30	3
Cu			2	302.665	ug/l	0.92	648,400.15	4.283E+00	Pulse	0.30	3
Zn			2	496.207	ug/l	0.52	143,969.96	9.510E-01	Pulse	0.30	3
As			2	259.717	ug/l	0.71	38,294.61	2.530E-01	Pulse	1.00	3
Cd			2	202.131	ug/l	1.83	90,156.13	1.047E-01	Pulse	0.30	3
Sn			2	227.060	ug/l	0.92	175,586.27	2.040E-01	Pulse	0.30	3
Se			3	526.575	ug/l	0.70	15,843.44	1.081E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,936,407.37	0.93	95.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,446,265.34	1.28	96.0	Analog	0.10	3
1	Ge		1,028,550.09	1.06	95.8	Pulse	0.10	3
1	Ge		1,415,164.30	1.39	95.8	Pulse	0.10	3
1	Rh		6,835,931.98	1.00	93.4	Analog	0.10	3
1	In		7,414,608.61	0.70	96.6	Analog	0.10	3
1	Tb		10,225,393.39	1.19	100.2	Analog	0.10	3
1	Ho		996,963.01	0.76	103.6	Pulse	0.10	3
1	Bi		6,072,568.66	0.45	100.0	Analog	0.10	3
2	Sc		151,380.88	0.49	95.0	Pulse	0.30	3
2	Ge		92,383.40	0.29	95.3	Pulse	0.30	3
2	Ge		138,129.23	1.06	94.0	Pulse	0.30	3
2	Rh		2,846,806.62	0.76	93.6	Pulse	0.30	3
2	In		860,835.23	0.44	94.7	Pulse	0.30	3
2	Tb		3,512,083.26	0.64	96.7	Pulse	0.30	3
2	Ho		352,517.23	0.90	99.3	Pulse	0.30	3
2	Bi		2,401,458.17	1.04	96.2	Pulse	0.30	3
3	Sc		146,349.44	1.38	100.8	Pulse	0.30	3
3	Ge		97,792.34	0.55	96.9	Pulse	0.30	3
3	Ge		146,506.68	0.90	96.7	Pulse	0.30	3
3	Rh		1,746,430.28	0.61	94.6	Pulse	0.30	3
3	Tb		2,885,886.06	1.05	98.3	Pulse	0.30	3

Quantitation Report

File Name	062SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 19:08
Sample Name	mp10116a-b2conf
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	191.798	ug/l	0.91	536,654.12	1.355E-01	Pulse	0.25	3
B			1	192.782	ug/l	1.09	523,307.50	1.322E-01	Pulse	0.15	3
Ca			1	9954.825	ug/l	1.22	3,281,782.87	6.164E-01	Pulse	0.10	3
Sr			1	202.648	ug/l	0.33	3,228,632.55	4.671E-01	Pulse	0.10	3
Mo			1	200.508	ug/l	0.14	594,602.09	8.603E-02	Pulse	0.10	3
Ag			1	93.241	ug/l	1.11	768,542.75	1.011E-01	Pulse	0.10	3
Sn			1	209.140	ug/l	1.10	1,036,153.29	1.362E-01	Pulse	0.10	3
Sb			1	206.516	ug/l	1.10	1,146,617.72	1.113E-01	Pulse	0.10	3
Ba			1	195.733	ug/l	0.90	456,621.99	4.434E-02	Pulse	0.10	3
Tl			1	192.950	ug/l	0.70	2,782,038.19	4.527E-01	Pulse	0.10	3
Pb			1	197.208	ug/l	0.69	940,140.12	1.530E-01	Pulse	0.10	3
Pb			1	198.914	ug/l	1.04	834,787.77	1.358E-01	Pulse	0.10	3
Pb			1	196.836	ug/l	0.83	3,817,154.58	6.212E-01	Pulse	0.10	3
Na			2	9469.209	ug/l	1.10	2,733,985.10	1.812E+01	Pulse	0.30	3
Mg			2	9351.285	ug/l	1.21	1,244,750.78	8.248E+00	Pulse	0.30	3
Al			2	9213.733	ug/l	1.33	375,531.95	2.488E+00	Pulse	0.30	3
K			2	9420.491	ug/l	1.41	743,597.44	4.927E+00	Pulse	0.30	3
Ca			2	10400.292	ug/l	1.53	45,602.31	3.021E-01	Pulse	0.30	3
Ti			2	201.008	ug/l	4.41	6,708.10	4.442E-02	Pulse	0.30	3
V			2	196.083	ug/l	1.29	234,926.61	1.557E+00	Pulse	0.30	3
Cr			2	195.066	ug/l	0.97	311,973.45	2.067E+00	Pulse	0.30	3
Mn			2	192.875	ug/l	1.35	149,629.23	9.915E-01	Pulse	0.30	3
Fe			2	9564.275	ug/l	0.70	12,706,747.83	8.418E+01	Analog	0.30	3
Co			2	192.751	ug/l	0.37	551,267.84	3.652E+00	Pulse	0.30	3
Ni			2	193.508	ug/l	0.19	152,805.49	1.012E+00	Pulse	0.30	3
Cu			2	192.589	ug/l	1.17	411,464.60	2.726E+00	Pulse	0.30	3
Zn			2	201.802	ug/l	1.15	58,561.76	3.880E-01	Pulse	0.30	3
As			2	196.945	ug/l	1.97	28,952.18	1.919E-01	Pulse	1.00	3
Cd			2	192.927	ug/l	0.68	87,888.99	9.997E-02	Pulse	0.30	3
Sn			2	212.527	ug/l	1.47	168,016.12	1.911E-01	Pulse	0.30	3
Se			3	482.637	ug/l	1.23	15,031.21	9.916E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,959,737.01	0.67	96.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,324,021.59	0.28	93.9	Analog	0.10	3
1	Ge		1,040,626.47	1.10	97.0	Pulse	0.10	3
1	Ge		1,450,160.50	0.34	98.2	Pulse	0.10	3
1	Rh		6,911,926.15	0.36	94.5	Analog	0.10	3
1	In		7,604,916.20	0.47	99.0	Analog	0.10	3
1	Tb		10,298,792.97	0.61	100.9	Analog	0.10	3
1	Ho		985,030.14	0.63	102.4	Pulse	0.10	3
1	Bi		6,145,020.74	0.91	101.2	Analog	0.10	3
2	Sc		150,941.28	1.69	94.7	Pulse	0.30	3
2	Ge		93,550.02	0.77	96.5	Pulse	0.30	3
2	Ge		140,670.45	0.66	95.7	Pulse	0.30	3
2	Rh		2,901,199.26	1.41	95.4	Pulse	0.30	3
2	In		879,227.62	1.03	96.7	Pulse	0.30	3
2	Tb		3,597,058.47	0.54	99.1	Pulse	0.30	3
2	Ho		352,529.20	0.20	99.3	Pulse	0.30	3
2	Bi		2,438,169.55	0.78	97.7	Pulse	0.30	3
3	Sc		146,943.65	1.20	101.2	Pulse	0.30	3
3	Ge		99,148.12	0.44	98.3	Pulse	0.30	3
3	Ge		151,593.89	0.89	100.0	Pulse	0.30	3
3	Rh		1,834,717.71	1.13	99.4	Pulse	0.30	3
3	Tb		3,034,681.82	0.67	103.4	Pulse	0.30	3

Quantitation Report

File Name	063SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 19:13
Sample Name	mp10116a-mb1conf
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.028	ug/l	13.32	106.67	2.651E-05	Pulse	0.25	3
B			1	7.395	ug/l	8.82	39,584.25	9.845E-03	Pulse	0.15	3
Ca			1	116.298	ug/l	1.53	55,560.10	1.031E-02	Pulse	0.10	3
Sr			1	0.617	ug/l	3.68	11,351.09	1.576E-03	Pulse	0.10	3
Mo			1	0.462	ug/l	7.68	1,566.81	2.175E-04	Pulse	0.10	3
Ag			1	0.028	ug/l	11.79	293.35	3.795E-05	Pulse	0.10	3
Sn			1	15.653	ug/l	3.94	81,235.66	1.050E-02	Pulse	0.10	3
Sb			1	0.210	ug/l	19.25	2,473.63	2.367E-04	Pulse	0.10	3
Ba			1	0.466	ug/l	3.05	1,193.43	1.142E-04	Pulse	0.10	3
Tl			1	0.081	ug/l	3.62	1,643.49	2.567E-04	Pulse	0.10	3
Pb			1	0.176	ug/l	12.75	1,070.09	1.672E-04	Pulse	0.10	3
Pb			1	0.154	ug/l	11.54	830.06	1.296E-04	Pulse	0.10	3
Pb			1	0.161	ug/l	9.47	4,023.72	6.286E-04	Pulse	0.10	3
Na			2	268.816	ug/l	1.34	83,621.25	5.558E-01	Pulse	0.30	3
Mg			2	26.423	ug/l	6.46	3,850.49	2.560E-02	Pulse	0.30	3
Al			2	10.091	ug/l	4.48	571.13	3.796E-03	Pulse	0.30	3
K			2	234.142	ug/l	0.70	24,488.04	1.628E-01	Pulse	0.30	3
Ca			2	114.498	ug/l	9.10	666.69	4.430E-03	Pulse	0.30	3
Ti			2	0.117	ug/l	52.62	17.78	1.182E-04	Pulse	0.30	3
V			2	0.191	ug/l	35.12	632.25	4.199E-03	Pulse	0.30	3
Cr			2	0.991	ug/l	3.56	1,919.03	1.275E-02	Pulse	0.30	3
Mn			2	0.423	ug/l	16.38	365.56	2.431E-03	Pulse	0.30	3
Fe			2	28.783	ug/l	1.38	43,942.69	2.921E-01	Pulse	0.30	3
Co			2	0.027	ug/l	9.47	190.00	1.263E-03	Pulse	0.30	3
Ni			2	0.628	ug/l	78.78	750.44	4.973E-03	Pulse	0.30	3
Cu			2	2.476	ug/l	2.42	5,609.92	3.729E-02	Pulse	0.30	3
Zn			2	5.608	ug/l	6.50	1,929.02	1.282E-02	Pulse	0.30	3
As			2	0.050	ug/l	90.99	20.67	1.372E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.085	ug/l	25.22	54.38	6.128E-05	Pulse	0.30	3
Sn			2	13.371	ug/l	3.16	13,055.64	1.472E-02	Pulse	0.30	3
Se			3	-1.089	ug/l	-42.01	40.47	2.587E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,021,400.24	0.94	97.5	Pulse	0.10	3
1	Sc		5,389,722.00	1.71	95.0	Mix	0.10	3
1	Ge		1,039,489.10	0.59	96.9	Pulse	0.10	3
1	Ge		1,445,704.35	0.93	97.9	Pulse	0.10	3
1	Rh		7,205,210.10	0.95	98.5	Analog	0.10	3
1	In		7,734,634.27	0.91	100.7	Analog	0.10	3
1	Tb		10,444,695.05	1.26	102.4	Analog	0.10	3
1	Ho		999,812.22	1.26	103.9	Pulse	0.10	3
1	Bi		6,402,385.32	0.61	105.4	Analog	0.10	3
2	Sc		150,458.39	0.88	94.4	Pulse	0.30	3
2	Ge		94,515.47	0.87	97.5	Pulse	0.30	3
2	Ge		141,612.01	0.32	96.3	Pulse	0.30	3
2	Rh		2,994,572.52	0.50	98.5	Pulse	0.30	3
2	In		886,860.09	0.64	97.5	Pulse	0.30	3
2	Tb		3,622,230.83	0.59	99.8	Pulse	0.30	3
2	Ho		353,466.40	0.61	99.6	Pulse	0.30	3
2	Bi		2,510,486.29	0.05	100.6	Pulse	0.30	3
3	Sc		151,105.86	1.07	104.1	Pulse	0.30	3
3	Ge		103,468.07	0.92	102.5	Pulse	0.30	3
3	Ge		156,195.48	0.63	103.1	Pulse	0.30	3
3	Rh		1,911,457.15	0.66	103.6	Pulse	0.30	3
3	Tb		3,100,426.20	0.94	105.6	Pulse	0.30	3

Quantitation Report

File Name	064SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 19:18
Sample Name	mp10222-mb1 4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.005	ug/l	87.88	65.33	1.559E-05	Pulse	0.25	3
B			1	2.130	ug/l	3.16	35,397.18	8.479E-03	Pulse	0.15	3
Ca			1	3.750	ug/l	28.44	20,613.48	3.723E-03	Pulse	0.10	3
Sr			1	0.034	ug/l	36.74	2,580.33	3.488E-04	Pulse	0.10	3
Mo			1	0.057	ug/l	6.48	593.37	8.018E-05	Pulse	0.10	3
Ag			1	0.011	ug/l	36.60	303.35	3.868E-05	Pulse	0.10	3
Sn			1	0.310	ug/l	9.15	6,561.62	8.350E-04	Pulse	0.10	3
Sb			1	0.114	ug/l	18.64	3,017.19	2.766E-04	Pulse	0.10	3
Ba			1	0.093	ug/l	6.62	670.04	6.142E-05	Pulse	0.10	3
Tl			1	0.013	ug/l	27.79	926.73	1.421E-04	Pulse	0.10	3
Pb			1	0.031	ug/l	14.41	596.71	9.150E-05	Pulse	0.10	3
Pb			1	0.027	ug/l	33.27	463.36	7.101E-05	Pulse	0.10	3
Pb			1	0.028	ug/l	11.54	2,236.83	3.431E-04	Pulse	0.10	3
Na			2	8.386	ug/l	3.71	12,737.12	8.278E-02	Pulse	0.30	3
Mg			2	0.502	ug/l	28.02	524.46	3.409E-03	Pulse	0.30	3
Al			2	5.421	ug/l	6.86	727.81	4.730E-03	Pulse	0.30	3
K			2	1.674	ug/l	55.74	6,691.42	4.349E-02	Pulse	0.30	3
Ca			2	1.934	ug/l	338.48	193.34	1.256E-03	Pulse	0.30	3
Ti			2	0.068	ug/l	264.99	20.00	1.300E-04	Pulse	0.30	3
V			2	0.197	ug/l	14.02	1,014.49	6.594E-03	Pulse	0.30	3
Cr			2	0.173	ug/l	13.95	1,051.16	6.831E-03	Pulse	0.30	3
Mn			2	0.024	ug/l	24.32	87.78	5.705E-04	Pulse	0.30	3
Fe			2	0.355	ug/l	2.43	7,181.64	4.668E-02	Pulse	0.30	3
Co			2	0.010	ug/l	86.73	186.67	1.213E-03	Pulse	0.30	3
Ni			2	0.011	ug/l	192.79	282.23	1.835E-03	Pulse	0.30	3
Cu			2	0.100	ug/l	16.25	891.15	5.792E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.506	ug/l	21.89	694.47	4.514E-03	Pulse	0.30	3
As			2	0.020	ug/l	123.89	21.00	1.365E-04	Pulse	1.00	3
Cd			2	0.010	ug/l	50.53	26.64	3.005E-05	Pulse	0.30	3
Sn			2	-0.839	ug/l	-1.60	905.59	1.021E-03	Pulse	0.30	3
Se			3	-0.343	ug/l	-25.70	49.20	3.060E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,174,797.38	1.44	101.2	Mix	0.10	3
1	Sc		5,536,361.79	0.94	97.6	Analog	0.10	3
1	Ge		1,077,526.42	0.37	100.4	Pulse	0.10	3
1	Ge		1,476,284.98	0.59	99.9	Pulse	0.10	3
1	Rh		7,400,489.68	0.22	101.2	Analog	0.10	3
1	In		7,858,386.70	1.21	102.3	Analog	0.10	3
1	Tb		10,913,949.42	1.32	107.0	Analog	0.10	3
1	Ho		1,030,990.38	0.78	107.1	Pulse	0.10	3
1	Bi		6,519,383.45	0.69	107.3	Analog	0.10	3
2	Sc		153,863.92	0.13	96.5	Pulse	0.30	3
2	Ge		94,227.16	0.52	97.2	Pulse	0.30	3
2	Ge		143,382.56	0.38	97.5	Pulse	0.30	3
2	Rh		3,058,195.85	0.46	100.6	Pulse	0.30	3
2	In		886,841.75	0.44	97.5	Pulse	0.30	3
2	Tb		3,685,693.74	0.66	101.5	Pulse	0.30	3
2	Ho		362,548.40	0.49	102.1	Pulse	0.30	3
2	Bi		2,529,525.80	0.88	101.4	Pulse	0.30	3
3	Sc		157,037.54	1.71	108.2	Pulse	0.30	3
3	Ge		106,177.46	0.22	105.2	Pulse	0.30	3
3	Ge		160,819.23	0.47	106.1	Pulse	0.30	3
3	Rh		1,971,552.42	0.65	106.9	Pulse	0.30	3
3	Tb		3,188,625.57	0.65	108.6	Pulse	0.30	3

Quantitation Report

File Name	065SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 19:23
Sample Name	mp10222-b2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	77.031	ug/l	1.81	552,739.21	1.361E-01	Pulse	0.25	3
B			1	83.201	ug/l	1.77	577,608.40	1.422E-01	Pulse	0.15	3
Ca			1	4013.761	ug/l	0.44	3,407,821.41	6.213E-01	Pulse	0.10	3
Sr			1	83.398	ug/l	1.39	3,412,101.30	4.806E-01	Pulse	0.10	3
Mo			1	83.373	ug/l	1.68	634,874.20	8.942E-02	Pulse	0.10	3
Ag			1	78.548	ug/l	0.83	1,631,651.12	2.128E-01	Pulse	0.10	3
Sn			1	82.138	ug/l	1.48	1,025,584.36	1.338E-01	Pulse	0.10	3
Sb			1	80.868	ug/l	1.09	1,165,123.94	1.090E-01	Pulse	0.10	3
Ba			1	80.121	ug/l	1.13	485,036.02	4.537E-02	Pulse	0.10	3
Tl			1	80.593	ug/l	1.41	2,961,697.25	4.728E-01	Pulse	0.10	3
Pb			1	82.853	ug/l	1.17	1,006,715.35	1.607E-01	Pulse	0.10	3
Pb			1	82.456	ug/l	1.76	881,929.49	1.408E-01	Pulse	0.10	3
Pb			1	81.971	ug/l	1.14	4,051,520.54	6.467E-01	Pulse	0.10	3
Na			2	3920.459	ug/l	0.52	2,814,399.68	1.875E+01	Pulse	0.30	3
Mg			2	3914.054	ug/l	0.91	1,295,450.61	8.630E+00	Pulse	0.30	3
Al			2	3722.016	ug/l	0.79	377,204.76	2.513E+00	Pulse	0.30	3
K			2	3854.891	ug/l	1.14	756,471.32	5.040E+00	Pulse	0.30	3
Ca			2	4311.362	ug/l	1.23	46,997.25	3.130E-01	Pulse	0.30	3
Ti			2	82.339	ug/l	1.91	6,828.16	4.549E-02	Pulse	0.30	3
V			2	81.895	ug/l	0.79	243,950.68	1.625E+00	Pulse	0.30	3
Cr			2	81.777	ug/l	1.95	325,153.18	2.166E+00	Pulse	0.30	3
Mn			2	80.277	ug/l	0.56	154,860.05	1.032E+00	Pulse	0.30	3
Fe			2	3979.040	ug/l	0.74	13,142,366.70	8.755E+01	Analog	0.30	3
Co			2	80.722	ug/l	0.84	574,022.13	3.824E+00	Pulse	0.30	3
Ni			2	80.356	ug/l	0.79	157,759.04	1.051E+00	Pulse	0.30	3
Cu			2	79.629	ug/l	0.45	423,043.44	2.818E+00	Pulse	0.30	3
Zn			2	70.024	ug/l	1.35	50,566.44	3.369E-01	Pulse	0.30	3
As			2	75.035	ug/l	0.83	27,431.92	1.827E-01	Pulse	1.00	3
Cd			2	76.548	ug/l	1.53	85,625.19	9.916E-02	Pulse	0.30	3
Sn			2	81.431	ug/l	0.47	158,167.86	1.832E-01	Pulse	0.30	3
Se			3	329.012	ug/l	0.76	26,736.88	1.687E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		4,062,502.10	1.31	98.5	Mix	0.10	3
1	Sc		5,484,892.63	0.77	96.7	Analog	0.10	3
1	Ge		1,045,252.59	0.56	97.4	Pulse	0.10	3

Quantitation Report

1	Ge		1,452,551.49	0.15	98.3	Pulse	0.10	3
1	Rh		7,100,821.77	1.61	97.1	Analog	0.10	3
1	In		7,666,974.09	0.97	99.9	Analog	0.10	3
1	Tb		10,690,720.67	0.80	104.8	Analog	0.10	3
1	Ho		1,029,256.26	0.66	107.0	Pulse	0.10	3
1	Bi		6,265,357.41	1.15	103.2	Analog	0.10	3
2	Sc		150,117.33	1.04	94.2	Pulse	0.30	3
2	Ge		92,361.07	0.38	95.2	Pulse	0.30	3
2	Ge		139,603.25	0.63	95.0	Pulse	0.30	3
2	Rh		2,936,633.49	1.19	96.6	Pulse	0.30	3
2	In		863,476.72	0.46	94.9	Pulse	0.30	3
2	Tb		3,649,556.24	0.40	100.5	Pulse	0.30	3
2	Ho		359,013.46	0.24	101.1	Pulse	0.30	3
2	Bi		2,434,567.06	0.97	97.6	Pulse	0.30	3
3	Sc		153,051.42	0.16	105.4	Pulse	0.30	3
3	Ge		102,487.58	0.99	101.6	Pulse	0.30	3
3	Ge		158,533.16	0.65	104.6	Pulse	0.30	3
3	Rh		1,874,866.04	0.57	101.6	Pulse	0.30	3
3	Tb		3,090,077.10	0.49	105.3	Pulse	0.30	3

Quantitation Report

File Name	066SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 19:28
Sample Name	mp10222-s3
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	74.921	ug/l	0.56	496,556.96	1.324E-01	Pulse	0.25	3
B			1	177.255	ug/l	1.05	1,115,493.74	2.973E-01	Pulse	0.15	3
Ca			1	43387.838	ug/l	0.68	33,959,271.16	6.686E+00	Analog	0.10	3
Sr			1	325.152	ug/l	1.65	11,400,363.16	1.873E+00	Analog	0.10	3
Mo			1	89.020	ug/l	1.34	581,106.97	9.548E-02	Pulse	0.10	3
Ag			1	72.288	ug/l	0.47	1,343,890.34	1.959E-01	Pulse	0.10	3
Sn			1	82.900	ug/l	0.39	926,395.71	1.350E-01	Pulse	0.10	3
Sb			1	79.290	ug/l	0.51	1,051,353.42	1.069E-01	Pulse	0.10	3
Ba			1	205.065	ug/l	0.41	1,142,293.29	1.161E-01	Pulse	0.10	3
Tl			1	82.304	ug/l	1.04	2,562,061.32	4.828E-01	Pulse	0.10	3
Pb			1	84.677	ug/l	1.04	871,568.11	1.642E-01	Pulse	0.10	3
Pb			1	85.068	ug/l	0.80	770,769.34	1.452E-01	Pulse	0.10	3
Pb			1	83.812	ug/l	0.24	3,509,115.44	6.612E-01	Pulse	0.10	3
Na			2	312200.800	ug/l	2.11	205,256,916.29	1.490E+03	Analog	0.30	3
Mg			2	8121.328	ug/l	0.41	2,466,942.26	1.790E+01	Pulse	0.30	3
Al			2	3701.770	ug/l	0.35	344,351.56	2.499E+00	Pulse	0.30	3
K			2	10165.669	ug/l	0.42	1,821,802.08	1.322E+01	Pulse	0.30	3
Ca			2	44171.377	ug/l	0.97	440,487.17	3.197E+00	Pulse	0.30	3
Ti			2	86.107	ug/l	4.65	6,553.61	4.756E-02	Pulse	0.30	3
V			2	81.916	ug/l	0.91	223,979.83	1.626E+00	Pulse	0.30	3
Cr			2	78.847	ug/l	0.75	287,795.29	2.089E+00	Pulse	0.30	3
Mn			2	1088.491	ug/l	0.78	1,926,872.77	1.398E+01	Pulse	0.30	3
Fe			2	3966.307	ug/l	1.11	12,024,090.91	8.727E+01	Analog	0.30	3
Co			2	76.475	ug/l	0.28	499,156.52	3.623E+00	Pulse	0.30	3
Ni			2	73.774	ug/l	0.21	132,954.45	9.649E-01	Pulse	0.30	3
Cu			2	73.408	ug/l	0.43	357,974.59	2.598E+00	Pulse	0.30	3
Zn			2	64.161	ug/l	0.53	42,553.96	3.088E-01	Pulse	0.30	3
As			2	73.105	ug/l	0.28	24,531.69	1.780E-01	Pulse	1.00	3
Cd			2	73.426	ug/l	0.75	72,582.01	9.512E-02	Pulse	0.30	3
Sn			2	82.862	ug/l	1.33	142,197.25	1.863E-01	Pulse	0.30	3
Se			3	316.657	ug/l	0.96	22,870.84	1.623E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,751,851.20	0.48	91.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,079,654.71	0.69	89.6	Pulse	0.10	3
1	Ge		932,245.48	0.51	86.9	Pulse	0.10	3
1	Ge		1,293,873.36	0.63	87.6	Pulse	0.10	3
1	Rh		6,086,299.70	0.71	83.2	Analog	0.10	3
1	In		6,861,232.44	0.30	89.4	Analog	0.10	3
1	Tb		9,838,015.69	0.80	96.4	Analog	0.10	3
1	Ho		950,351.83	0.66	98.8	Pulse	0.10	3
1	Bi		5,307,015.13	1.03	87.4	Pulse	0.10	3
2	Sc		137,785.23	0.37	86.5	Pulse	0.30	3
2	Ge		81,964.92	0.44	84.5	Pulse	0.30	3
2	Ge		123,940.96	0.94	84.3	Pulse	0.30	3
2	Rh		2,487,011.98	0.46	81.8	Pulse	0.30	3
2	In		763,087.01	0.14	83.9	Pulse	0.30	3
2	Tb		3,298,151.12	0.72	90.8	Pulse	0.30	3
2	Ho		327,327.43	0.16	92.2	Pulse	0.30	3
2	Bi		2,045,023.67	0.52	82.0	Pulse	0.30	3
3	Sc		142,196.64	1.39	97.9	Pulse	0.30	3
3	Ge		91,390.38	0.54	90.6	Pulse	0.30	3
3	Ge		140,888.00	0.79	93.0	Pulse	0.30	3
3	Rh		1,615,509.56	0.95	87.6	Pulse	0.30	3
3	Tb		2,847,004.54	1.10	97.0	Pulse	0.30	3

Quantitation Report

File Name	067SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 19:33
Sample Name	mp10222-s4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	74.244	ug/l	0.45	480,998.42	1.312E-01	Pulse	0.25	3
B			1	173.157	ug/l	0.54	1,065,622.08	2.906E-01	Pulse	0.15	3
Ca			1	42426.597	ug/l	0.36	32,551,851.18	6.537E+00	Analog	0.10	3
Sr			1	321.615	ug/l	1.81	11,010,184.00	1.853E+00	Analog	0.10	3
Mo			1	89.454	ug/l	0.71	570,175.62	9.595E-02	Pulse	0.10	3
Ag			1	71.703	ug/l	1.14	1,316,884.98	1.943E-01	Pulse	0.10	3
Sn			1	82.301	ug/l	0.91	908,580.17	1.340E-01	Pulse	0.10	3
Sb			1	78.944	ug/l	0.98	1,034,917.75	1.064E-01	Pulse	0.10	3
Ba			1	202.219	ug/l	1.14	1,113,677.77	1.145E-01	Pulse	0.10	3
Tl			1	81.949	ug/l	0.28	2,526,641.63	4.807E-01	Pulse	0.10	3
Pb			1	84.131	ug/l	0.48	857,639.26	1.632E-01	Pulse	0.10	3
Pb			1	84.086	ug/l	0.67	754,595.87	1.436E-01	Pulse	0.10	3
Pb			1	83.231	ug/l	0.37	3,451,403.28	6.566E-01	Pulse	0.10	3
Na			2	301398.697	ug/l	0.52	197,065,374.39	1.438E+03	Analog	0.30	3
Mg			2	7959.821	ug/l	0.43	2,404,631.99	1.755E+01	Pulse	0.30	3
Al			2	3685.369	ug/l	0.29	340,949.81	2.488E+00	Pulse	0.30	3
K			2	9993.325	ug/l	0.24	1,781,227.71	1.300E+01	Pulse	0.30	3
Ca			2	43096.924	ug/l	0.17	427,429.61	3.119E+00	Pulse	0.30	3
Ti			2	83.532	ug/l	1.72	6,323.51	4.615E-02	Pulse	0.30	3
V			2	81.293	ug/l	0.26	221,059.74	1.613E+00	Pulse	0.30	3
Cr			2	78.149	ug/l	0.40	283,696.17	2.070E+00	Pulse	0.30	3
Mn			2	1064.088	ug/l	0.61	1,873,413.40	1.367E+01	Pulse	0.30	3
Fe			2	3912.942	ug/l	0.73	11,797,993.42	8.610E+01	Analog	0.30	3
Co			2	75.824	ug/l	0.66	492,207.01	3.592E+00	Pulse	0.30	3
Ni			2	73.184	ug/l	0.78	131,174.83	9.572E-01	Pulse	0.30	3
Cu			2	73.234	ug/l	0.34	355,168.33	2.592E+00	Pulse	0.30	3
Zn			2	64.671	ug/l	0.38	42,655.25	3.113E-01	Pulse	0.30	3
As			2	72.373	ug/l	0.77	24,153.12	1.763E-01	Pulse	1.00	3
Cd			2	72.730	ug/l	0.96	71,516.78	9.421E-02	Pulse	0.30	3
Sn			2	83.676	ug/l	0.57	142,821.48	1.881E-01	Pulse	0.30	3
Se			3	313.859	ug/l	0.46	22,647.34	1.609E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,667,327.23	0.30	88.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,979,316.49	0.81	87.8	Pulse	0.10	3
1	Ge		915,922.49	0.79	85.4	Pulse	0.10	3
1	Ge		1,275,387.64	1.23	86.3	Pulse	0.10	3
1	Rh		5,942,788.25	0.88	81.2	Analog	0.10	3
1	In		6,778,339.34	0.30	88.3	Analog	0.10	3
1	Tb		9,727,039.86	0.87	95.3	Analog	0.10	3
1	Ho		944,230.40	0.64	98.1	Pulse	0.10	3
1	Bi		5,256,108.57	0.38	86.5	Pulse	0.10	3
2	Sc		137,031.17	0.43	86.0	Pulse	0.30	3
2	Ge		81,661.57	0.84	84.2	Pulse	0.30	3
2	Ge		122,590.08	0.35	83.4	Pulse	0.30	3
2	Rh		2,476,807.89	0.30	81.5	Pulse	0.30	3
2	In		759,109.57	0.86	83.5	Pulse	0.30	3
2	Tb		3,296,591.46	0.25	90.8	Pulse	0.30	3
2	Ho		324,424.20	0.29	91.4	Pulse	0.30	3
2	Bi		2,042,361.86	0.39	81.8	Pulse	0.30	3
3	Sc		143,506.63	0.06	98.8	Pulse	0.30	3
3	Ge		92,219.30	1.16	91.4	Pulse	0.30	3
3	Ge		140,746.73	0.60	92.9	Pulse	0.30	3
3	Rh		1,598,113.48	0.45	86.6	Pulse	0.30	3
3	Tb		2,820,706.00	0.19	96.1	Pulse	0.30	3

Quantitation Report

File Name	068SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 19:38
Sample Name	jc77077-1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.023	ug/l	14.02	173.33	4.679E-05	Pulse	0.25	3
B			1	95.997	ug/l	0.90	605,150.71	1.633E-01	Pulse	0.15	3
Ca			1	38722.763	ug/l	0.74	29,825,883.72	5.967E+00	Analog	0.10	3
Sr			1	231.188	ug/l	1.62	8,039,959.47	1.332E+00	Analog	0.10	3
Mo			1	0.150	ug/l	9.30	1,090.08	1.805E-04	Pulse	0.10	3
Ag			1	0.041	ug/l	10.05	810.06	1.201E-04	Pulse	0.10	3
Sn			1	0.360	ug/l	5.77	6,188.13	9.164E-04	Pulse	0.10	3
Sb			1	0.233	ug/l	4.36	4,277.46	4.373E-04	Pulse	0.10	3
Ba			1	125.310	ug/l	0.81	694,081.29	7.096E-02	Pulse	0.10	3
Tl			1	0.101	ug/l	6.95	3,493.88	6.616E-04	Pulse	0.10	3
Pb			1	0.115	ug/l	11.28	1,343.45	2.545E-04	Pulse	0.10	3
Pb			1	0.098	ug/l	18.11	1,016.74	1.925E-04	Pulse	0.10	3
Pb			1	0.105	ug/l	1.27	5,000.54	9.466E-04	Pulse	0.10	3
Na			2	304790.923	ug/l	1.00	196,777,921.07	1.454E+03	Analog	0.30	3
Mg			2	4360.178	ug/l	0.71	1,300,759.05	9.614E+00	Pulse	0.30	3
Al			2	163.096	ug/l	2.96	15,036.94	1.111E-01	Pulse	0.30	3
K			2	6393.210	ug/l	0.92	1,127,201.41	8.331E+00	Pulse	0.30	3
Ca			2	39563.343	ug/l	0.70	387,453.64	2.864E+00	Pulse	0.30	3
Ti			2	5.389	ug/l	6.99	414.46	3.064E-03	Pulse	0.30	3
V			2	0.825	ug/l	4.06	2,575.79	1.904E-02	Pulse	0.30	3
Cr			2	0.604	ug/l	6.42	2,469.11	1.825E-02	Pulse	0.30	3
Mn			2	1001.095	ug/l	1.36	1,740,261.81	1.286E+01	Pulse	0.30	3
Fe			2	150.309	ug/l	0.45	452,543.54	3.345E+00	Pulse	0.30	3
Co			2	0.512	ug/l	4.00	3,382.61	2.500E-02	Pulse	0.30	3
Ni			2	0.627	ug/l	5.25	1,336.74	9.880E-03	Pulse	0.30	3
Cu			2	1.598	ug/l	2.46	7,952.01	5.877E-02	Pulse	0.30	3
Zn			2	1.901	ug/l	4.18	1,513.42	1.118E-02	Pulse	0.30	3
As			2	0.258	ug/l	14.51	97.00	7.168E-04	Pulse	1.00	3
Cd			2	0.145	ug/l	28.81	157.75	2.053E-04	Pulse	0.30	3
Sn			2	-0.705	ug/l	-11.76	1,011.16	1.317E-03	Pulse	0.30	3
Se			3	0.629	ug/l	70.53	111.93	8.028E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,705,755.09	0.56	89.8	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,998,663.26	0.87	88.1	Pulse	0.10	3
1	Ge		924,473.55	1.02	86.1	Pulse	0.10	3
1	Ge		1,271,501.70	0.62	86.1	Pulse	0.10	3
1	Rh		6,036,888.45	1.13	82.5	Analog	0.10	3
1	In		6,750,764.16	0.95	87.9	Analog	0.10	3
1	Tb		9,782,279.44	0.70	95.9	Analog	0.10	3
1	Ho		947,282.25	1.31	98.4	Pulse	0.10	3
1	Bi		5,282,670.23	1.02	87.0	Pulse	0.10	3
2	Sc		135,307.30	0.34	84.9	Pulse	0.30	3
2	Ge		81,802.08	0.10	84.4	Pulse	0.30	3
2	Ge		122,838.40	0.66	83.6	Pulse	0.30	3
2	Rh		2,484,357.19	1.06	81.7	Pulse	0.30	3
2	In		768,122.72	0.58	84.5	Pulse	0.30	3
2	Tb		3,270,228.83	0.99	90.1	Pulse	0.30	3
2	Ho		325,010.57	0.38	91.6	Pulse	0.30	3
2	Bi		2,055,549.22	0.35	82.4	Pulse	0.30	3
3	Sc		139,346.38	0.50	96.0	Pulse	0.30	3
3	Ge		91,326.67	0.54	90.5	Pulse	0.30	3
3	Ge		139,339.86	0.62	91.9	Pulse	0.30	3
3	Rh		1,610,337.64	0.74	87.3	Pulse	0.30	3
3	Tb		2,824,710.03	0.63	96.2	Pulse	0.30	3

Quantitation Report

File Name	069_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 19:43
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	48.907	ug/l	0.49	645,776.21	1.728E-01	Pulse	0.25	3
B			1	96.341	ug/l	1.65	1,206,208.21	3.228E-01	Pulse	0.15	3
Ca			1	4931.864	ug/l	0.24	7,590,872.59	1.522E+00	Analog	0.10	3
Sr			1	52.195	ug/l	0.41	3,905,780.46	6.015E-01	Pulse	0.10	3
Mo			1	51.964	ug/l	0.80	723,762.26	1.115E-01	Pulse	0.10	3
Ag			1	48.988	ug/l	1.02	1,893,459.40	2.655E-01	Pulse	0.10	3
Sn			1	50.621	ug/l	1.39	1,175,517.20	1.648E-01	Pulse	0.10	3
Sb			1	51.510	ug/l	0.85	1,367,251.23	1.388E-01	Pulse	0.10	3
Ba			1	50.773	ug/l	1.13	566,324.74	5.750E-02	Pulse	0.10	3
Tl			1	50.351	ug/l	1.68	3,465,119.43	5.907E-01	Pulse	0.10	3
Pb			1	51.161	ug/l	2.19	1,164,088.21	1.984E-01	Pulse	0.10	3
Pb			1	51.306	ug/l	1.82	1,027,685.92	1.752E-01	Pulse	0.10	3
Pb			1	50.754	ug/l	1.39	4,697,769.40	8.008E-01	Pulse	0.10	3
Na			2	4862.022	ug/l	1.49	6,546,322.80	4.644E+01	Analog	0.30	3
Mg			2	4810.867	ug/l	0.72	2,990,120.78	2.121E+01	Pulse	0.30	3
Al			2	4724.300	ug/l	0.22	899,026.07	6.377E+00	Pulse	0.30	3
K			2	4801.285	ug/l	0.56	1,760,967.99	1.249E+01	Pulse	0.30	3
Ca			2	5092.803	ug/l	1.78	104,038.02	7.381E-01	Pulse	0.30	3
Ti			2	50.355	ug/l	1.58	7,839.72	5.562E-02	Pulse	0.30	3
V			2	50.348	ug/l	0.69	281,595.75	1.998E+00	Pulse	0.30	3
Cr			2	49.676	ug/l	0.41	370,938.36	2.631E+00	Pulse	0.30	3
Mn			2	49.412	ug/l	0.97	179,018.59	1.270E+00	Pulse	0.30	3
Fe			2	4895.252	ug/l	1.68	30,358,214.35	2.154E+02	Analog	0.30	3
Co			2	48.882	ug/l	0.56	652,821.87	4.631E+00	Pulse	0.30	3
Ni			2	48.645	ug/l	0.21	179,312.11	1.272E+00	Pulse	0.30	3
Cu			2	47.927	ug/l	0.26	478,143.85	3.392E+00	Pulse	0.30	3
Zn			2	49.057	ug/l	1.08	66,418.03	4.712E-01	Pulse	0.30	3
As			2	49.923	ug/l	0.71	34,274.07	2.431E-01	Pulse	1.00	3
Cd			2	49.636	ug/l	1.18	106,141.12	1.286E-01	Pulse	0.30	3
Sn			2	50.458	ug/l	0.13	186,805.71	2.263E-01	Pulse	0.30	3
Se			3	198.576	ug/l	1.25	28,612.31	2.035E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,737,393.87	0.99	90.6	Pulse	0.10	3
1	Sc		4,986,459.61	0.89	87.9	Pulse	0.10	3
1	Ge		971,597.04	0.75	90.5	Pulse	0.10	3

Quantitation Report

1	Ge		1,350,458.16	0.49	91.4	Pulse	0.10	3
1	Rh		6,493,370.53	1.03	88.8	Analog	0.10	3
1	In		7,132,863.64	1.12	92.9	Analog	0.10	3
1	Tb		9,849,988.39	1.38	96.5	Analog	0.10	3
1	Ho		954,930.14	1.39	99.2	Pulse	0.10	3
1	Bi		5,866,500.54	0.49	96.6	Mix	0.10	3
2	Sc		140,971.11	0.80	88.5	Pulse	0.30	3
2	Ge		86,804.32	1.16	89.5	Pulse	0.30	3
2	Ge		132,239.76	0.15	90.0	Pulse	0.30	3
2	Rh		2,707,545.03	0.23	89.0	Pulse	0.30	3
2	In		825,401.72	0.28	90.8	Pulse	0.30	3
2	Tb		3,417,300.77	0.26	94.1	Pulse	0.30	3
2	Ho		337,339.64	0.62	95.0	Pulse	0.30	3
2	Bi		2,305,401.51	0.08	92.4	Pulse	0.30	3
3	Sc		135,346.86	1.14	93.2	Pulse	0.30	3
3	Ge		91,232.78	1.07	90.4	Pulse	0.30	3
3	Ge		140,620.43	0.93	92.8	Pulse	0.30	3
3	Rh		1,694,612.01	0.42	91.8	Pulse	0.30	3
3	Tb		2,860,200.79	0.52	97.4	Pulse	0.30	3

Quantitation Report

File Name	070_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 19:48
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.008	ug/l	38.52	132.00	3.570E-05	Pulse	0.25	3
B			1	1.596	ug/l	1.02	37,789.02	1.023E-02	Pulse	0.15	3
Ca			1	-0.258	ug/l	-136.63	14,947.23	3.065E-03	Pulse	0.10	3
Sr			1	0.016	ug/l	30.48	2,220.29	3.370E-04	Pulse	0.10	3
Mo			1	0.042	ug/l	11.80	716.71	1.089E-04	Pulse	0.10	3
Ag			1	0.008	ug/l	24.89	350.02	4.904E-05	Pulse	0.10	3
Sn			1	0.666	ug/l	62.26	17,783.78	2.494E-03	Pulse	0.10	3
Sb			1	0.061	ug/l	10.08	2,813.71	2.885E-04	Pulse	0.10	3
Ba			1	0.009	ug/l	30.32	183.34	1.878E-05	Pulse	0.10	3
Tl			1	0.017	ug/l	10.14	1,633.50	2.705E-04	Pulse	0.10	3
Pb			1	0.007	ug/l	35.86	353.35	5.853E-05	Pulse	0.10	3
Pb			1	0.010	ug/l	55.04	363.35	6.012E-05	Pulse	0.10	3
Pb			1	0.009	ug/l	13.29	1,583.43	2.622E-04	Pulse	0.10	3
Na			2	13.206	ug/l	6.82	23,250.79	1.688E-01	Pulse	0.30	3
Mg			2	0.476	ug/l	25.45	606.69	4.403E-03	Pulse	0.30	3
Al			2	0.013	ug/l	402.53	150.00	1.089E-03	Pulse	0.30	3
K			2	1.670	ug/l	33.62	6,286.81	4.565E-02	Pulse	0.30	3
Ca			2	-1.081	ug/l	-44.73	132.23	9.598E-04	Pulse	0.30	3
Ti			2	-0.003	ug/l	-1013.11	12.22	8.885E-05	Pulse	0.30	3
V			2	-0.012	ug/l	-57.31	304.45	2.210E-03	Pulse	0.30	3
Cr			2	0.005	ug/l	142.80	347.79	2.526E-03	Pulse	0.30	3
Mn			2	0.030	ug/l	20.32	141.11	1.024E-03	Pulse	0.30	3
Fe			2	0.254	ug/l	33.29	6,895.97	5.006E-02	Pulse	0.30	3
Co			2	0.003	ug/l	30.11	148.89	1.081E-03	Pulse	0.30	3
Ni			2	-0.002	ug/l	-44.35	226.67	1.646E-03	Pulse	0.30	3
Cu			2	0.026	ug/l	32.12	564.46	4.099E-03	Pulse	0.30	3
Zn			2	-0.013	ug/l	-130.48	271.12	1.968E-03	Pulse	0.30	3
As			2	0.004	ug/l	197.49	15.00	1.090E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.006	ug/l	12.82	27.73	3.350E-05	Pulse	0.30	3
Sn			2	-0.099	ug/l	-42.24	2,019.04	2.441E-03	Pulse	0.30	3
Se			3	0.081	ug/l	96.74	78.27	5.646E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,693,301.00	0.62	89.5	Pulse	0.10	3
1	Sc		4,875,990.24	0.81	86.0	Pulse	0.10	3
1	Ge		954,585.30	0.62	89.0	Pulse	0.10	3
1	Ge		1,324,420.71	0.70	89.6	Pulse	0.10	3
1	Rh		6,582,325.32	0.98	90.0	Analog	0.10	3
1	In		7,149,082.42	1.19	93.1	Analog	0.10	3
1	Tb		9,755,561.31	1.07	95.6	Analog	0.10	3
1	Ho		945,764.68	0.37	98.3	Pulse	0.10	3
1	Bi		6,039,735.54	0.55	99.4	Analog	0.10	3
2	Sc		137,735.03	0.60	86.4	Pulse	0.30	3
2	Ge		86,417.88	0.81	89.1	Pulse	0.30	3
2	Ge		130,808.91	0.84	89.0	Pulse	0.30	3
2	Rh		2,740,517.39	0.34	90.1	Pulse	0.30	3
2	In		827,495.23	0.70	91.0	Pulse	0.30	3
2	Tb		3,366,670.49	1.14	92.7	Pulse	0.30	3
2	Ho		332,894.83	0.53	93.8	Pulse	0.30	3
2	Bi		2,356,402.61	0.52	94.4	Pulse	0.30	3
3	Sc		132,859.63	0.39	91.5	Pulse	0.30	3
3	Ge		91,388.20	1.10	90.6	Pulse	0.30	3
3	Ge		138,651.15	0.87	91.5	Pulse	0.30	3
3	Rh		1,734,091.53	0.26	94.0	Pulse	0.30	3
3	Tb		2,871,638.85	0.58	97.8	Pulse	0.30	3

Quantitation Report

File Name	071SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 19:53
Sample Name	mp10222-sd1
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.025	ug/l	53.85	56.00	1.541E-05	Pulse	0.25	3
B			1	98.608	ug/l	1.60	136,176.41	3.749E-02	Pulse	0.15	3
Ca			1	40228.577	ug/l	0.84	6,040,728.87	1.242E+00	Analog	0.10	3
Sr			1	223.487	ug/l	1.48	1,607,750.34	2.576E-01	Pulse	0.10	3
Mo			1	0.185	ug/l	22.22	370.02	5.933E-05	Pulse	0.10	3
Ag			1	0.124	ug/l	27.30	516.70	7.497E-05	Pulse	0.10	3
Sn			1	-0.190	ug/l	-34.40	1,860.19	2.698E-04	Pulse	0.10	3
Sb			1	0.218	ug/l	14.71	1,756.86	1.823E-04	Pulse	0.10	3
Ba			1	128.068	ug/l	2.00	139,845.85	1.451E-02	Pulse	0.10	3
Tl			1	0.195	ug/l	9.95	1,673.49	2.960E-04	Pulse	0.10	3
Pb			1	0.194	ug/l	4.73	600.04	1.062E-04	Pulse	0.10	3
Pb			1	0.212	ug/l	12.64	546.70	9.677E-05	Pulse	0.10	3
Pb			1	0.180	ug/l	6.42	2,290.16	4.053E-04	Pulse	0.10	3
Na			2	306652.385	ug/l	0.63	40,030,548.41	2.927E+02	Analog	0.30	3
Mg			2	4485.067	ug/l	1.20	270,757.82	1.980E+00	Pulse	0.30	3
Al			2	215.477	ug/l	2.67	4,123.95	3.015E-02	Pulse	0.30	3
K			2	6540.014	ug/l	1.28	237,607.16	1.737E+00	Pulse	0.30	3
Ca			2	40392.233	ug/l	1.46	80,091.85	5.856E-01	Pulse	0.30	3
Ti			2	5.426	ug/l	29.11	94.44	6.908E-04	Pulse	0.30	3
V			2	0.396	ug/l	31.81	581.13	4.249E-03	Pulse	0.30	3
Cr			2	0.269	ug/l	59.18	504.46	3.690E-03	Pulse	0.30	3
Mn			2	1032.303	ug/l	1.08	362,814.24	2.653E+00	Pulse	0.30	3
Fe			2	153.255	ug/l	2.22	97,513.22	7.130E-01	Pulse	0.30	3
Co			2	0.485	ug/l	1.53	731.14	5.346E-03	Pulse	0.30	3
Ni			2	0.605	ug/l	0.95	447.79	3.274E-03	Pulse	0.30	3
Cu			2	1.984	ug/l	3.43	2,227.96	1.629E-02	Pulse	0.30	3
Zn			2	1.744	ug/l	17.11	514.46	3.762E-03	Pulse	0.30	3
As			2	0.299	ug/l	21.01	32.00	2.339E-04	Pulse	1.00	3
Cd			2	0.114	ug/l	43.02	37.75	4.656E-05	Pulse	0.30	3
Sn			2	-5.663	ug/l	-1.08	300.00	3.705E-04	Pulse	0.30	3
Se			3	-1.244	ug/l	-83.28	48.07	3.541E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,631,741.79	0.49	88.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,862,837.33	1.25	85.7	Pulse	0.10	3
1	Ge		941,667.28	1.33	87.7	Pulse	0.10	3
1	Ge		1,299,563.86	1.49	88.0	Pulse	0.10	3
1	Rh		6,240,684.08	0.78	85.3	Analog	0.10	3
1	In		6,892,158.02	1.62	89.8	Analog	0.10	3
1	Tb		9,637,922.57	0.36	94.5	Analog	0.10	3
1	Ho		921,359.10	1.16	95.7	Pulse	0.10	3
1	Bi		5,651,056.79	0.77	93.0	Pulse	0.10	3
2	Sc		136,773.20	0.63	85.8	Pulse	0.30	3
2	Ge		85,165.71	0.09	87.8	Pulse	0.30	3
2	Ge		129,241.62	0.36	87.9	Pulse	0.30	3
2	Rh		2,591,299.34	0.62	85.2	Pulse	0.30	3
2	In		809,241.56	1.07	89.0	Pulse	0.30	3
2	Tb		3,314,430.29	0.14	91.3	Pulse	0.30	3
2	Ho		327,182.16	0.64	92.2	Pulse	0.30	3
2	Bi		2,247,168.24	0.49	90.1	Pulse	0.30	3
3	Sc		130,143.86	0.62	89.6	Pulse	0.30	3
3	Ge		88,727.78	0.19	87.9	Pulse	0.30	3
3	Ge		135,506.78	0.88	89.4	Pulse	0.30	3
3	Rh		1,631,367.12	0.72	88.4	Pulse	0.30	3
3	Tb		2,798,615.24	0.56	95.3	Pulse	0.30	3

Quantitation Report

File Name	072SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 19:58
Sample Name	jc77077-9
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.010	ug/l	18.89	89.33	2.488E-05	Pulse	0.25	3
B			1	267.540	ug/l	1.19	1,602,380.84	4.462E-01	Pulse	0.15	3
Ca			1	214578.363	ug/l	0.71	158,857,237.63	3.305E+01	Analog	0.10	3
Sr			1	1149.769	ug/l	1.32	34,546,836.15	6.624E+00	Analog	0.10	3
Mo			1	1.369	ug/l	0.73	7,758.78	1.488E-03	Pulse	0.10	3
Ag			1	0.028	ug/l	14.26	506.69	8.413E-05	Pulse	0.10	3
Sn			1	0.712	ug/l	3.34	8,959.64	1.489E-03	Pulse	0.10	3
Sb			1	0.219	ug/l	2.98	3,603.90	4.178E-04	Pulse	0.10	3
Ba			1	400.923	ug/l	0.32	1,958,043.83	2.270E-01	Pulse	0.10	3
Tl			1	0.496	ug/l	0.58	13,103.01	2.975E-03	Pulse	0.10	3
Pb			1	0.338	ug/l	5.34	3,027.13	6.870E-04	Pulse	0.10	3
Pb			1	0.332	ug/l	6.52	2,607.02	5.919E-04	Pulse	0.10	3
Pb			1	0.333	ug/l	3.34	12,095.83	2.746E-03	Pulse	0.10	3
Na			2	1071037.224	ug/l	0.96	676,143,848.69	5.110E+03	Analog	0.30	3
Mg			2	21090.213	ug/l	0.72	6,151,188.50	4.649E+01	Analog	0.30	3
Al			2	86.489	ug/l	4.56	7,864.16	5.944E-02	Pulse	0.30	3
K			2	7694.590	ug/l	0.44	1,325,474.36	1.002E+01	Pulse	0.30	3
Ca			2	218612.373	ug/l	0.67	2,092,813.46	1.582E+01	Pulse	0.30	3
Ti			2	6.702	ug/l	11.51	501.13	3.787E-03	Pulse	0.30	3
V			2	0.931	ug/l	5.07	2,795.83	2.113E-02	Pulse	0.30	3
Cr			2	0.492	ug/l	10.08	2,021.26	1.528E-02	Pulse	0.30	3
Mn			2	160.889	ug/l	0.97	273,518.24	2.067E+00	Pulse	0.30	3
Fe			2	123.119	ug/l	0.58	363,396.33	2.747E+00	Pulse	0.30	3
Co			2	0.290	ug/l	5.41	1,920.14	1.451E-02	Pulse	0.30	3
Ni			2	4.720	ug/l	1.70	8,377.79	6.332E-02	Pulse	0.30	3
Cu			2	2.442	ug/l	1.55	11,724.28	8.861E-02	Pulse	0.30	3
Zn			2	1.226	ug/l	15.80	1,052.27	7.954E-03	Pulse	0.30	3
As			2	0.545	ug/l	5.72	187.33	1.416E-03	Pulse	1.00	3
Cd			2	1.005	ug/l	4.56	920.77	1.318E-03	Pulse	0.30	3
Sn			2	-0.323	ug/l	-27.63	1,510.09	2.162E-03	Pulse	0.30	3
Se			3	1.136	ug/l	9.47	127.53	1.062E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,590,820.16	0.33	87.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,806,428.16	0.66	84.8	Pulse	0.10	3
1	Ge		830,152.20	1.54	77.4	Pulse	0.10	3
1	Ge		1,138,837.40	1.16	77.1	Pulse	0.10	3
1	Rh		5,216,302.84	1.37	71.3	Pulse	0.10	3
1	In		6,018,760.17	1.27	78.4	Analog	0.10	3
1	Tb		8,625,831.12	0.81	84.5	Analog	0.10	3
1	Ho		832,062.15	0.57	86.5	Pulse	0.10	3
1	Bi		4,404,758.16	1.06	72.5	Pulse	0.10	3
2	Sc		132,307.78	0.16	83.0	Pulse	0.30	3
2	Ge		74,817.84	0.48	77.2	Pulse	0.30	3
2	Ge		112,081.18	0.56	76.2	Pulse	0.30	3
2	Rh		2,139,727.42	0.22	70.4	Pulse	0.30	3
2	In		698,461.60	0.16	76.8	Pulse	0.30	3
2	Tb		2,922,527.04	0.13	80.5	Pulse	0.30	3
2	Ho		288,572.26	0.38	81.3	Pulse	0.30	3
2	Bi		1,705,700.38	0.10	68.4	Pulse	0.30	3
3	Sc		126,817.63	0.61	87.4	Pulse	0.30	3
3	Ge		79,217.34	0.55	78.5	Pulse	0.30	3
3	Ge		120,096.37	0.42	79.2	Pulse	0.30	3
3	Rh		1,326,194.70	0.75	71.9	Pulse	0.30	3
3	Tb		2,396,929.97	0.74	81.7	Pulse	0.30	3

Quantitation Report

File Name	073SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 20:03
Sample Name	jc77257-2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.056	ug/l	3.96	374.68	1.050E-04	Pulse	0.25	3
B			1	119.643	ug/l	0.65	722,051.29	2.023E-01	Pulse	0.15	3
Ca			1	35242.875	ug/l	0.60	25,841,380.45	5.431E+00	Analog	0.10	3
Sr			1	194.523	ug/l	0.23	6,661,458.03	1.121E+00	Analog	0.10	3
Mo			1	10.501	ug/l	0.61	67,043.82	1.128E-02	Pulse	0.10	3
Ag			1	0.025	ug/l	8.33	500.03	7.485E-05	Pulse	0.10	3
Sn			1	2.674	ug/l	2.59	31,221.88	4.675E-03	Pulse	0.10	3
Sb			1	0.115	ug/l	8.13	2,646.99	2.782E-04	Pulse	0.10	3
Ba			1	121.411	ug/l	1.80	654,030.19	6.875E-02	Pulse	0.10	3
Tl			1	0.071	ug/l	12.09	2,570.34	4.828E-04	Pulse	0.10	3
Pb			1	1.898	ug/l	0.64	19,777.39	3.712E-03	Pulse	0.10	3
Pb			1	1.818	ug/l	1.13	16,659.90	3.127E-03	Pulse	0.10	3
Pb			1	1.837	ug/l	1.03	77,856.34	1.461E-02	Pulse	0.10	3
Na			2	167946.686	ug/l	1.31	104,410,735.85	8.014E+02	Analog	0.30	3
Mg			2	7834.768	ug/l	0.82	2,250,300.75	1.727E+01	Pulse	0.30	3
Al			2	1372.456	ug/l	1.01	120,806.42	9.273E-01	Pulse	0.30	3
K			2	7001.593	ug/l	0.84	1,188,123.01	9.120E+00	Pulse	0.30	3
Ca			2	35818.203	ug/l	0.62	337,770.07	2.593E+00	Pulse	0.30	3
Ti			2	55.387	ug/l	6.75	3,990.53	3.063E-02	Pulse	0.30	3
V			2	2.899	ug/l	3.18	7,831.95	6.012E-02	Pulse	0.30	3
Cr			2	9.345	ug/l	1.16	32,513.42	2.496E-01	Pulse	0.30	3
Mn			2	1429.195	ug/l	0.78	2,392,258.51	1.836E+01	Pulse	0.30	3
Fe			2	2607.173	ug/l	1.07	7,475,235.81	5.738E+01	Analog	0.30	3
Co			2	3.430	ug/l	1.50	21,262.70	1.632E-01	Pulse	0.30	3
Ni			2	11.716	ug/l	1.10	20,150.29	1.547E-01	Pulse	0.30	3
Cu			2	11.366	ug/l	1.23	52,657.19	4.042E-01	Pulse	0.30	3
Zn			2	94.080	ug/l	0.91	58,872.81	4.519E-01	Pulse	0.30	3
As			2	0.778	ug/l	11.31	258.33	1.983E-03	Pulse	1.00	3
Cd			2	0.302	ug/l	9.99	306.83	4.076E-04	Pulse	0.30	3
Sn			2	1.490	ug/l	5.96	4,650.75	6.178E-03	Pulse	0.30	3
Se			3	0.637	ug/l	20.47	109.73	8.070E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,569,251.48	0.74	86.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,758,088.36	0.36	83.9	Pulse	0.10	3
1	Ge		889,150.04	1.28	82.9	Pulse	0.10	3
1	Ge		1,228,800.01	1.37	83.2	Pulse	0.10	3
1	Rh		5,943,741.58	0.37	81.2	Analog	0.10	3
1	In		6,678,714.07	0.57	87.0	Analog	0.10	3
1	Tb		9,514,426.11	0.91	93.3	Analog	0.10	3
1	Ho		936,049.31	1.45	97.3	Pulse	0.10	3
1	Bi		5,328,045.55	1.10	87.7	Pulse	0.10	3
2	Sc		130,285.38	0.57	81.8	Pulse	0.30	3
2	Ge		78,693.61	0.58	81.1	Pulse	0.30	3
2	Ge		119,322.01	0.82	81.2	Pulse	0.30	3
2	Rh		2,449,409.00	0.24	80.6	Pulse	0.30	3
2	In		752,832.24	0.13	82.8	Pulse	0.30	3
2	Tb		3,238,636.81	0.28	89.2	Pulse	0.30	3
2	Ho		322,113.93	0.20	90.8	Pulse	0.30	3
2	Bi		2,069,236.59	0.49	82.9	Pulse	0.30	3
3	Sc		135,665.49	0.93	93.4	Pulse	0.30	3
3	Ge		89,203.71	0.29	88.4	Pulse	0.30	3
3	Ge		136,043.23	0.82	89.8	Pulse	0.30	3
3	Rh		1,618,958.62	0.27	87.7	Pulse	0.30	3
3	Tb		2,855,408.43	0.32	97.3	Pulse	0.30	3

Quantitation Report

File Name	074SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 20:08
Sample Name	rinseconf
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.001	ug/l	86.53	38.67	1.002E-05	Pulse	0.25	3
B			1	1.075	ug/l	2.18	32,834.25	8.514E-03	Pulse	0.15	3
Ca			1	5.349	ug/l	3.85	24,241.75	4.793E-03	Pulse	0.10	3
Sr			1	0.026	ug/l	9.02	3,027.06	4.493E-04	Pulse	0.10	3
Mo			1	0.002	ug/l	57.40	160.01	2.374E-05	Pulse	0.10	3
Ag			1	0.002	ug/l	21.54	140.01	1.919E-05	Pulse	0.10	3
Sn			1	0.610	ug/l	1.70	16,896.35	2.315E-03	Pulse	0.10	3
Sb			1	-0.034	ug/l	-3.81	306.68	3.081E-05	Pulse	0.10	3
Ba			1	0.017	ug/l	26.41	283.35	2.851E-05	Pulse	0.10	3
Tl			1	-0.002	ug/l	-75.63	286.68	4.654E-05	Pulse	0.10	3
Pb			1	0.004	ug/l	44.93	286.68	4.653E-05	Pulse	0.10	3
Pb			1	0.005	ug/l	18.98	250.01	4.059E-05	Pulse	0.10	3
Pb			1	0.003	ug/l	16.74	1,066.73	1.733E-04	Pulse	0.10	3
Na			2	30.967	ug/l	3.84	47,317.37	3.383E-01	Pulse	0.30	3
Mg			2	0.715	ug/l	15.20	763.36	5.457E-03	Pulse	0.30	3
Al			2	0.288	ug/l	106.42	204.45	1.460E-03	Pulse	0.30	3
K			2	2.075	ug/l	23.90	6,532.51	4.670E-02	Pulse	0.30	3
Ca			2	5.142	ug/l	51.01	260.00	1.860E-03	Pulse	0.30	3
Ti			2	-0.062	ug/l	-34.67	3.33	2.376E-05	Pulse	0.30	3
V			2	-0.002	ug/l	-67.11	366.68	2.621E-03	Pulse	0.30	3
Cr			2	0.029	ug/l	14.88	534.46	3.820E-03	Pulse	0.30	3
Mn			2	0.093	ug/l	2.97	372.23	2.661E-03	Pulse	0.30	3
Fe			2	0.188	ug/l	15.58	6,593.61	4.714E-02	Pulse	0.30	3
Co			2	0.000	ug/l	268.45	110.01	7.865E-04	Pulse	0.30	3
Ni			2	0.000	ug/l	-3862.75	235.56	1.685E-03	Pulse	0.30	3
Cu			2	0.130	ug/l	8.19	1,602.32	1.146E-02	Pulse	0.30	3
Zn			2	0.007	ug/l	518.59	302.23	2.161E-03	Pulse	0.30	3
As			2	0.000	ug/l	1951.59	12.67	9.050E-05	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	-0.002	ug/l	-266.45	9.98	1.190E-05	Pulse	0.30	3
Sn			2	0.122	ug/l	111.74	2,885.20	3.420E-03	Pulse	0.30	3
Se			3	-0.260	ug/l	-14.33	30.47	2.151E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,856,618.68	0.48	93.5	Pulse	0.10	3
1	Sc		5,058,183.78	0.74	89.2	Pulse	0.10	3
1	Ge		976,074.15	0.23	91.0	Pulse	0.10	3
1	Ge		1,356,373.05	1.09	91.8	Pulse	0.10	3
1	Rh		6,736,564.90	0.85	92.1	Analog	0.10	3
1	In		7,299,647.51	0.50	95.1	Analog	0.10	3
1	Tb		9,964,451.10	2.64	97.7	Analog	0.10	3
1	Ho		952,155.27	0.78	98.9	Pulse	0.10	3
1	Bi		6,157,783.86	0.60	101.4	Analog	0.10	3
2	Sc		139,872.28	0.82	87.8	Pulse	0.30	3
2	Ge		87,304.68	0.09	90.0	Pulse	0.30	3
2	Ge		131,711.97	0.92	89.6	Pulse	0.30	3
2	Rh		2,790,451.00	0.69	91.8	Pulse	0.30	3
2	In		843,551.09	0.70	92.8	Pulse	0.30	3
2	Tb		3,445,705.21	0.50	94.9	Pulse	0.30	3
2	Ho		338,090.60	0.62	95.3	Pulse	0.30	3
2	Bi		2,383,122.55	0.12	95.5	Pulse	0.30	3
3	Sc		136,624.12	0.81	94.1	Pulse	0.30	3
3	Ge		92,722.22	1.00	91.9	Pulse	0.30	3
3	Ge		141,618.65	0.11	93.5	Pulse	0.30	3
3	Rh		1,769,235.62	0.41	95.9	Pulse	0.30	3
3	Tb		2,939,910.02	0.28	100.2	Pulse	0.30	3

Quantitation Report

File Name	075SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 20:13
Sample Name	jc77259-1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.002	ug/l	60.33	38.67	1.040E-05	Pulse	0.25	3
B			1	51.576	ug/l	0.68	334,870.09	9.004E-02	Pulse	0.15	3
Ca			1	3819.612	ug/l	0.05	2,878,657.14	5.914E-01	Pulse	0.10	3
Sr			1	9.732	ug/l	1.09	362,065.02	5.622E-02	Pulse	0.10	3
Mo			1	0.157	ug/l	2.39	1,213.43	1.884E-04	Pulse	0.10	3
Ag			1	0.023	ug/l	19.81	496.69	6.889E-05	Pulse	0.10	3
Sn			1	0.402	ug/l	7.49	7,101.88	9.853E-04	Pulse	0.10	3
Sb			1	-0.014	ug/l	-52.57	1,056.74	1.048E-04	Pulse	0.10	3
Ba			1	2.582	ug/l	3.66	14,841.07	1.471E-03	Pulse	0.10	3
Tl			1	0.007	ug/l	49.15	656.70	1.090E-04	Pulse	0.10	3
Pb			1	0.078	ug/l	4.36	1,093.42	1.814E-04	Pulse	0.10	3
Pb			1	0.086	ug/l	12.95	1,033.42	1.716E-04	Pulse	0.10	3
Pb			1	0.081	ug/l	1.17	4,563.81	7.573E-04	Pulse	0.10	3
Na			2	1726.359	ug/l	0.15	1,120,366.10	8.280E+00	Pulse	0.30	3
Mg			2	914.011	ug/l	0.35	272,937.52	2.017E+00	Pulse	0.30	3
Al			2	19.819	ug/l	10.42	1,954.87	1.445E-02	Pulse	0.30	3
K			2	681.048	ug/l	0.87	125,077.37	9.244E-01	Pulse	0.30	3
Ca			2	3745.841	ug/l	0.90	36,822.82	2.721E-01	Pulse	0.30	3
Ti			2	0.264	ug/l	63.87	32.22	2.381E-04	Pulse	0.30	3
V			2	0.402	ug/l	10.21	1,440.09	1.064E-02	Pulse	0.30	3
Cr			2	0.324	ug/l	5.67	1,466.75	1.084E-02	Pulse	0.30	3
Mn			2	0.785	ug/l	7.13	1,400.08	1.035E-02	Pulse	0.30	3
Fe			2	8.570	ug/l	1.22	30,764.24	2.274E-01	Pulse	0.30	3
Co			2	0.028	ug/l	20.97	283.34	2.094E-03	Pulse	0.30	3
Ni			2	0.098	ug/l	21.94	402.23	2.972E-03	Pulse	0.30	3
Cu			2	0.593	ug/l	4.78	3,144.79	2.324E-02	Pulse	0.30	3
Zn			2	1.963	ug/l	2.66	1,553.42	1.148E-02	Pulse	0.30	3
As			2	0.089	ug/l	3.59	41.33	3.055E-04	Pulse	1.00	3
Cd			2	0.009	ug/l	93.87	23.27	2.880E-05	Pulse	0.30	3
Sn			2	-0.718	ug/l	-1.05	1,042.27	1.289E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	-0.090	ug/l	-99.32	64.27	4.351E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,719,471.14	0.99	90.2	Pulse	0.10	3
1	Sc		4,867,338.47	0.76	85.8	Pulse	0.10	3
1	Ge		955,551.18	1.15	89.0	Pulse	0.10	3
1	Ge		1,306,262.58	0.62	88.4	Pulse	0.10	3
1	Rh		6,440,215.94	0.50	88.0	Analog	0.10	3
1	In		7,205,190.53	1.41	93.8	Analog	0.10	3
1	Tb		10,091,362.56	0.96	98.9	Analog	0.10	3
1	Ho		968,870.53	1.05	100.7	Pulse	0.10	3
1	Bi		6,025,975.12	1.62	99.2	Analog	0.10	3
2	Sc		135,312.88	0.25	84.9	Pulse	0.30	3
2	Ge		84,211.96	0.94	86.8	Pulse	0.30	3
2	Ge		127,749.24	0.27	86.9	Pulse	0.30	3
2	Rh		2,715,367.67	0.26	89.3	Pulse	0.30	3
2	In		808,741.76	0.42	88.9	Pulse	0.30	3
2	Tb		3,403,519.45	0.29	93.7	Pulse	0.30	3
2	Ho		336,924.00	0.76	94.9	Pulse	0.30	3
2	Bi		2,336,886.92	0.42	93.6	Pulse	0.30	3
3	Sc		144,117.57	0.72	99.3	Pulse	0.30	3
3	Ge		97,306.01	1.02	96.4	Pulse	0.30	3
3	Ge		147,720.80	0.27	97.5	Pulse	0.30	3
3	Rh		1,810,980.90	0.56	98.1	Pulse	0.30	3
3	Tb		3,057,019.25	0.61	104.1	Pulse	0.30	3

Quantitation Report

File Name	076SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 20:18
Sample Name	rinseconf
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	-251.39	24.00	6.172E-06	Pulse	0.25	3
B			1	0.377	ug/l	13.11	24,148.62	6.211E-03	Pulse	0.15	3
Ca			1	2.140	ug/l	19.56	19,318.52	3.804E-03	Pulse	0.10	3
Sr			1	0.010	ug/l	9.27	1,843.52	2.725E-04	Pulse	0.10	3
Mo			1	-0.002	ug/l	-155.43	110.01	1.623E-05	Pulse	0.10	3
Ag			1	0.001	ug/l	111.00	93.34	1.269E-05	Pulse	0.10	3
Sn			1	0.801	ug/l	38.09	21,562.88	2.934E-03	Pulse	0.10	3
Sb			1	-0.035	ug/l	-10.52	296.69	2.968E-05	Pulse	0.10	3
Ba			1	0.011	ug/l	62.33	206.68	2.067E-05	Pulse	0.10	3
Tl			1	-0.002	ug/l	-6.99	246.68	4.038E-05	Pulse	0.10	3
Pb			1	0.002	ug/l	132.98	230.01	3.766E-05	Pulse	0.10	3
Pb			1	0.004	ug/l	72.40	233.34	3.819E-05	Pulse	0.10	3
Pb			1	0.003	ug/l	33.91	986.72	1.616E-04	Pulse	0.10	3
Na			2	15.623	ug/l	4.02	26,913.97	1.919E-01	Pulse	0.30	3
Mg			2	0.361	ug/l	28.69	546.68	3.896E-03	Pulse	0.30	3
Al			2	0.409	ug/l	10.41	227.78	1.624E-03	Pulse	0.30	3
K			2	1.866	ug/l	14.40	6,474.66	4.616E-02	Pulse	0.30	3
Ca			2	1.315	ug/l	100.10	183.34	1.307E-03	Pulse	0.30	3
Ti			2	-0.070	ug/l	-35.62	2.22	1.578E-05	Pulse	0.30	3
V			2	0.000	ug/l	7045.74	376.68	2.686E-03	Pulse	0.30	3
Cr			2	0.035	ug/l	21.24	576.69	4.112E-03	Pulse	0.30	3
Mn			2	0.021	ug/l	24.55	112.23	7.998E-04	Pulse	0.30	3
Fe			2	0.009	ug/l	301.37	5,508.76	3.926E-02	Pulse	0.30	3
Co			2	0.001	ug/l	327.88	113.34	8.080E-04	Pulse	0.30	3
Ni			2	0.003	ug/l	265.94	250.01	1.782E-03	Pulse	0.30	3
Cu			2	0.124	ug/l	6.70	1,543.43	1.100E-02	Pulse	0.30	3
Zn			2	0.056	ug/l	35.69	368.90	2.630E-03	Pulse	0.30	3
As			2	-0.004	ug/l	-74.93	9.67	6.888E-05	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	-0.002	ug/l	-149.65	11.11	1.312E-05	Pulse	0.30	3
Sn			2	0.099	ug/l	28.11	2,803.63	3.316E-03	Pulse	0.30	3
Se			3	0.051	ug/l	167.12	74.73	5.335E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,888,553.82	0.45	94.3	Pulse	0.10	3
1	Sc		5,078,539.51	1.05	89.5	Pulse	0.10	3
1	Ge		983,327.15	0.77	91.6	Pulse	0.10	3
1	Ge		1,367,555.24	0.32	92.6	Pulse	0.10	3
1	Rh		6,765,735.52	0.98	92.5	Analog	0.10	3
1	In		7,348,344.65	0.40	95.7	Analog	0.10	3
1	Tb		10,017,526.73	0.90	98.2	Analog	0.10	3
1	Ho		957,881.42	1.30	99.5	Pulse	0.10	3
1	Bi		6,108,574.28	0.30	100.6	Analog	0.10	3
2	Sc		140,282.32	0.57	88.0	Pulse	0.30	3
2	Ge		88,168.09	1.01	90.9	Pulse	0.30	3
2	Ge		132,730.50	0.50	90.3	Pulse	0.30	3
2	Rh		2,784,831.63	0.45	91.6	Pulse	0.30	3
2	In		845,409.21	0.62	93.0	Pulse	0.30	3
2	Tb		3,423,330.07	0.53	94.3	Pulse	0.30	3
2	Ho		336,701.63	0.48	94.9	Pulse	0.30	3
2	Bi		2,386,692.89	0.34	95.6	Pulse	0.30	3
3	Sc		132,708.02	1.35	91.4	Pulse	0.30	3
3	Ge		90,451.92	1.17	89.6	Pulse	0.30	3
3	Ge		139,867.57	1.52	92.3	Pulse	0.30	3
3	Rh		1,731,392.50	1.29	93.8	Pulse	0.30	3
3	Tb		2,883,220.23	0.96	98.2	Pulse	0.30	3

Quantitation Report

File Name	077SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 20:23
Sample Name	mp10166-s3 4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	74.583	ug/l	0.38	469,537.11	1.318E-01	Pulse	0.25	3
B			1	951.684	ug/l	0.87	5,611,688.39	1.575E+00	Analog	0.15	3
Ca			1	30681.657	ug/l	0.63	22,247,263.84	4.729E+00	Analog	0.10	3
Sr			1	213.253	ug/l	1.52	7,461,992.81	1.229E+00	Analog	0.10	3
Mo			1	86.328	ug/l	0.75	562,365.02	9.259E-02	Pulse	0.10	3
Ag			1	66.018	ug/l	1.28	1,234,237.54	1.789E-01	Pulse	0.10	3
Sn			1	81.586	ug/l	1.50	916,850.58	1.329E-01	Pulse	0.10	3
Sb			1	78.656	ug/l	1.63	1,033,505.71	1.060E-01	Pulse	0.10	3
Ba			1	93.459	ug/l	1.19	515,938.56	5.292E-02	Pulse	0.10	3
Tl			1	81.292	ug/l	0.50	2,705,297.56	4.769E-01	Pulse	0.10	3
Pb			1	83.662	ug/l	0.40	920,516.71	1.623E-01	Pulse	0.10	3
Pb			1	83.134	ug/l	0.85	805,257.00	1.419E-01	Pulse	0.10	3
Pb			1	82.844	ug/l	0.55	3,707,941.64	6.536E-01	Pulse	0.10	3
Na			2	19634.348	ug/l	0.31	12,233,823.40	9.373E+01	Analog	0.30	3
Mg			2	6853.696	ug/l	0.82	1,972,227.84	1.511E+01	Pulse	0.30	3
Al			2	3926.128	ug/l	1.09	345,964.48	2.651E+00	Pulse	0.30	3
K			2	5082.825	ug/l	0.79	865,609.65	6.632E+00	Pulse	0.30	3
Ca			2	31075.761	ug/l	0.90	293,609.31	2.249E+00	Pulse	0.30	3
Ti			2	87.677	ug/l	6.21	6,322.39	4.843E-02	Pulse	0.30	3
V			2	83.355	ug/l	1.51	215,886.85	1.654E+00	Pulse	0.30	3
Cr			2	80.547	ug/l	0.96	278,505.56	2.134E+00	Pulse	0.30	3
Mn			2	112.192	ug/l	1.10	188,167.55	1.442E+00	Pulse	0.30	3
Fe			2	4281.263	ug/l	1.80	12,294,106.46	9.420E+01	Analog	0.30	3
Co			2	78.104	ug/l	0.80	482,924.72	3.700E+00	Pulse	0.30	3
Ni			2	77.375	ug/l	0.62	132,087.68	1.012E+00	Pulse	0.30	3
Cu			2	78.147	ug/l	0.99	360,978.32	2.766E+00	Pulse	0.30	3
Zn			2	80.309	ug/l	0.33	50,390.38	3.860E-01	Pulse	0.30	3
As			2	77.078	ug/l	0.76	24,502.64	1.877E-01	Pulse	1.00	3
Cd			2	75.118	ug/l	0.48	74,959.29	9.731E-02	Pulse	0.30	3
Sn			2	82.342	ug/l	0.07	142,659.51	1.852E-01	Pulse	0.30	3
Se			3	317.622	ug/l	0.64	22,884.13	1.628E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,563,726.72	0.19	86.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,704,969.82	0.94	83.0	Pulse	0.10	3
1	Ge		903,986.16	0.24	84.2	Pulse	0.10	3
1	Ge		1,264,856.75	0.75	85.6	Pulse	0.10	3
1	Rh		6,073,677.83	0.56	83.0	Analog	0.10	3
1	In		6,900,269.24	0.76	89.9	Analog	0.10	3
1	Tb		9,749,501.52	0.74	95.6	Analog	0.10	3
1	Ho		942,515.79	0.20	97.9	Pulse	0.10	3
1	Bi		5,673,110.33	0.47	93.4	Pulse	0.10	3
2	Sc		130,530.81	0.92	81.9	Pulse	0.30	3
2	Ge		79,649.31	0.55	82.1	Pulse	0.30	3
2	Ge		120,812.75	1.23	82.2	Pulse	0.30	3
2	Rh		2,547,101.49	0.63	83.8	Pulse	0.30	3
2	In		770,320.40	0.59	84.7	Pulse	0.30	3
2	Tb		3,316,046.95	0.34	91.3	Pulse	0.30	3
2	Ho		326,615.87	0.20	92.0	Pulse	0.30	3
2	Bi		2,199,269.43	0.24	88.1	Pulse	0.30	3
3	Sc		137,836.23	0.06	94.9	Pulse	0.30	3
3	Ge		92,039.36	1.51	91.2	Pulse	0.30	3
3	Ge		140,539.86	0.86	92.7	Pulse	0.30	3
3	Rh		1,699,015.56	0.50	92.1	Pulse	0.30	3
3	Tb		2,928,314.60	0.75	99.8	Pulse	0.30	3

Quantitation Report

File Name	078SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 20:28
Sample Name	mp10166-s4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	73.577	ug/l	1.01	460,776.58	1.300E-01	Pulse	0.25	3
B			1	951.891	ug/l	0.71	5,583,466.72	1.575E+00	Analog	0.15	3
Ca			1	30824.469	ug/l	0.61	22,174,764.67	4.751E+00	Analog	0.10	3
Sr			1	214.381	ug/l	0.74	7,483,566.77	1.235E+00	Analog	0.10	3
Mo			1	86.066	ug/l	0.71	559,305.33	9.231E-02	Pulse	0.10	3
Ag			1	76.981	ug/l	0.66	1,422,460.60	2.086E-01	Pulse	0.10	3
Sn			1	82.248	ug/l	1.22	913,547.15	1.340E-01	Pulse	0.10	3
Sb			1	78.067	ug/l	0.91	1,033,077.41	1.052E-01	Pulse	0.10	3
Ba			1	91.694	ug/l	0.75	509,807.43	5.192E-02	Pulse	0.10	3
Tl			1	80.358	ug/l	0.15	2,687,563.81	4.714E-01	Pulse	0.10	3
Pb			1	83.023	ug/l	0.73	918,086.83	1.610E-01	Pulse	0.10	3
Pb			1	82.894	ug/l	0.50	806,953.43	1.415E-01	Pulse	0.10	3
Pb			1	82.398	ug/l	0.32	3,706,483.57	6.501E-01	Pulse	0.10	3
Na			2	19683.636	ug/l	1.42	12,058,070.91	9.396E+01	Analog	0.30	3
Mg			2	6844.975	ug/l	0.43	1,936,731.80	1.509E+01	Pulse	0.30	3
Al			2	3908.902	ug/l	0.36	338,691.75	2.639E+00	Pulse	0.30	3
K			2	5080.710	ug/l	0.51	850,746.32	6.629E+00	Pulse	0.30	3
Ca			2	31089.252	ug/l	0.52	288,817.94	2.250E+00	Pulse	0.30	3
Ti			2	90.192	ug/l	1.74	6,393.54	4.982E-02	Pulse	0.30	3
V			2	83.040	ug/l	0.80	211,473.74	1.648E+00	Pulse	0.30	3
Cr			2	79.622	ug/l	0.40	270,696.01	2.109E+00	Pulse	0.30	3
Mn			2	111.911	ug/l	0.68	184,559.77	1.438E+00	Pulse	0.30	3
Fe			2	4278.165	ug/l	0.95	12,080,035.63	9.413E+01	Analog	0.30	3
Co			2	78.285	ug/l	0.23	475,940.90	3.708E+00	Pulse	0.30	3
Ni			2	77.407	ug/l	0.35	129,927.64	1.012E+00	Pulse	0.30	3
Cu			2	78.013	ug/l	0.70	354,324.68	2.761E+00	Pulse	0.30	3
Zn			2	81.670	ug/l	1.95	50,376.07	3.926E-01	Pulse	0.30	3
As			2	76.275	ug/l	0.98	23,839.32	1.858E-01	Pulse	1.00	3
Cd			2	75.229	ug/l	1.17	73,681.45	9.745E-02	Pulse	0.30	3
Sn			2	82.031	ug/l	0.59	139,500.35	1.845E-01	Pulse	0.30	3
Se			3	306.982	ug/l	1.98	22,077.90	1.574E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,545,056.85	0.04	86.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,667,934.83	0.68	82.3	Pulse	0.10	3
1	Ge		903,787.70	0.92	84.2	Pulse	0.10	3
1	Ge		1,242,746.96	0.90	84.1	Pulse	0.10	3
1	Rh		6,058,733.45	0.59	82.8	Analog	0.10	3
1	In		6,819,654.09	0.69	88.8	Analog	0.10	3
1	Tb		9,819,241.10	1.65	96.2	Analog	0.10	3
1	Ho		946,012.62	1.60	98.3	Pulse	0.10	3
1	Bi		5,701,530.75	1.14	93.9	Pulse	0.10	3
2	Sc		128,339.58	0.68	80.5	Pulse	0.30	3
2	Ge		78,890.08	0.48	81.3	Pulse	0.30	3
2	Ge		119,119.28	0.67	81.0	Pulse	0.30	3
2	Rh		2,504,988.03	0.38	82.4	Pulse	0.30	3
2	In		756,067.45	0.38	83.1	Pulse	0.30	3
2	Tb		3,276,648.34	0.59	90.2	Pulse	0.30	3
2	Ho		322,890.01	0.61	91.0	Pulse	0.30	3
2	Bi		2,179,702.14	0.57	87.4	Pulse	0.30	3
3	Sc		137,104.02	0.59	94.4	Pulse	0.30	3
3	Ge		90,700.89	1.14	89.9	Pulse	0.30	3
3	Ge		140,304.25	1.88	92.6	Pulse	0.30	3
3	Rh		1,693,663.86	0.40	91.8	Pulse	0.30	3
3	Tb		2,933,678.84	0.95	99.9	Pulse	0.30	3

Quantitation Report

File Name	079SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 20:33
Sample Name	mp10166-b2conf
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	72.871	ug/l	0.57	467,305.57	1.287E-01	Pulse	0.25	3
B			1	94.804	ug/l	0.52	585,679.94	1.613E-01	Pulse	0.15	3
Ca			1	3976.029	ug/l	0.30	2,911,517.25	6.155E-01	Pulse	0.10	3
Sr			1	82.474	ug/l	0.68	2,993,626.73	4.753E-01	Pulse	0.10	3
Mo			1	80.667	ug/l	0.94	544,975.71	8.652E-02	Pulse	0.10	3
Ag			1	77.288	ug/l	0.51	1,471,685.91	2.094E-01	Pulse	0.10	3
Sn			1	79.277	ug/l	1.86	907,486.21	1.291E-01	Pulse	0.10	3
Sb			1	76.614	ug/l	1.78	1,018,155.53	1.033E-01	Pulse	0.10	3
Ba			1	78.636	ug/l	1.18	439,069.66	4.453E-02	Pulse	0.10	3
Tl			1	79.078	ug/l	0.81	2,740,029.02	4.639E-01	Pulse	0.10	3
Pb			1	82.179	ug/l	1.09	941,444.55	1.594E-01	Pulse	0.10	3
Pb			1	82.129	ug/l	0.20	828,314.65	1.402E-01	Pulse	0.10	3
Pb			1	81.618	ug/l	0.28	3,803,690.67	6.439E-01	Pulse	0.10	3
Na			2	3910.771	ug/l	0.58	2,463,251.43	1.870E+01	Pulse	0.30	3
Mg			2	3889.170	ug/l	0.56	1,129,424.16	8.575E+00	Pulse	0.30	3
Al			2	3722.966	ug/l	1.18	331,037.89	2.514E+00	Pulse	0.30	3
K			2	3797.704	ug/l	0.54	653,989.68	4.965E+00	Pulse	0.30	3
Ca			2	4248.607	ug/l	0.42	40,633.96	3.085E-01	Pulse	0.30	3
Ti			2	77.527	ug/l	5.57	5,641.04	4.283E-02	Pulse	0.30	3
V			2	80.667	ug/l	1.22	210,832.30	1.601E+00	Pulse	0.30	3
Cr			2	80.683	ug/l	1.49	281,488.76	2.137E+00	Pulse	0.30	3
Mn			2	79.732	ug/l	1.13	134,946.51	1.025E+00	Pulse	0.30	3
Fe			2	3945.359	ug/l	1.23	11,432,927.88	8.681E+01	Analog	0.30	3
Co			2	79.422	ug/l	0.14	495,534.65	3.762E+00	Pulse	0.30	3
Ni			2	79.124	ug/l	0.57	136,290.14	1.035E+00	Pulse	0.30	3
Cu			2	78.413	ug/l	0.48	365,497.17	2.775E+00	Pulse	0.30	3
Zn			2	69.990	ug/l	0.54	44,347.59	3.367E-01	Pulse	0.30	3
As			2	71.629	ug/l	1.67	22,975.09	1.745E-01	Pulse	1.00	3
Cd			2	75.740	ug/l	0.96	76,685.10	9.811E-02	Pulse	0.30	3
Sn			2	79.663	ug/l	0.81	140,107.96	1.793E-01	Pulse	0.30	3
Se			3	310.095	ug/l	1.13	22,898.15	1.590E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,630,232.03	0.80	88.0	Pulse	0.10	3
1	Sc		4,730,174.72	1.11	83.4	Pulse	0.10	3
1	Ge		918,850.56	0.92	85.6	Pulse	0.10	3

Quantitation Report

1	Ge		1,267,669.96	0.97	85.8	Pulse	0.10	3
1	Rh		6,299,072.41	1.09	86.1	Analog	0.10	3
1	In		7,027,613.97	0.12	91.5	Analog	0.10	3
1	Tb		9,860,254.64	0.43	96.6	Analog	0.10	3
1	Ho		965,490.53	0.45	100.3	Pulse	0.10	3
1	Bi		5,907,155.96	0.98	97.3	Mix	0.10	3
2	Sc		131,710.88	0.74	82.6	Pulse	0.30	3
2	Ge		80,380.80	0.90	82.9	Pulse	0.30	3
2	Ge		122,120.04	0.92	83.1	Pulse	0.30	3
2	Rh		2,622,769.62	0.64	86.3	Pulse	0.30	3
2	In		781,589.62	0.42	85.9	Pulse	0.30	3
2	Tb		3,382,238.89	0.99	93.1	Pulse	0.30	3
2	Ho		333,058.32	0.32	93.8	Pulse	0.30	3
2	Bi		2,269,861.16	0.52	91.0	Pulse	0.30	3
3	Sc		139,235.18	0.43	95.9	Pulse	0.30	3
3	Ge		94,009.27	1.33	93.2	Pulse	0.30	3
3	Ge		144,035.60	0.97	95.0	Pulse	0.30	3
3	Rh		1,750,333.30	1.14	94.9	Pulse	0.30	3
3	Tb		2,994,212.03	0.31	102.0	Pulse	0.30	3

Quantitation Report

File Name	080_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 20:38
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	48.665	ug/l	1.28	617,737.56	1.719E-01	Pulse	0.25	3
B			1	98.683	ug/l	0.89	1,187,444.12	3.305E-01	Pulse	0.15	3
Ca			1	4950.252	ug/l	1.48	7,258,338.23	1.528E+00	Analog	0.10	3
Sr			1	52.403	ug/l	0.79	3,748,381.30	6.039E-01	Pulse	0.10	3
Mo			1	51.908	ug/l	1.00	691,108.04	1.113E-01	Pulse	0.10	3
Ag			1	48.625	ug/l	1.34	1,808,929.40	2.635E-01	Pulse	0.10	3
Sn			1	50.190	ug/l	1.08	1,121,973.06	1.634E-01	Pulse	0.10	3
Sb			1	50.750	ug/l	1.24	1,320,045.50	1.368E-01	Pulse	0.10	3
Ba			1	49.674	ug/l	0.55	542,989.90	5.626E-02	Pulse	0.10	3
Tl			1	50.587	ug/l	0.31	3,365,255.78	5.935E-01	Pulse	0.10	3
Pb			1	51.267	ug/l	0.37	1,127,596.36	1.989E-01	Pulse	0.10	3
Pb			1	51.693	ug/l	0.70	1,000,879.83	1.765E-01	Pulse	0.10	3
Pb			1	51.048	ug/l	0.32	4,567,319.96	8.054E-01	Pulse	0.10	3
Na			2	4826.168	ug/l	1.67	6,194,733.92	4.610E+01	Analog	0.30	3
Mg			2	4827.754	ug/l	0.83	2,860,611.90	2.129E+01	Pulse	0.30	3
Al			2	4773.457	ug/l	0.78	865,975.57	6.444E+00	Pulse	0.30	3
K			2	4791.548	ug/l	0.97	1,675,388.09	1.247E+01	Pulse	0.30	3
Ca			2	5104.609	ug/l	1.20	99,415.68	7.398E-01	Pulse	0.30	3
Ti			2	48.996	ug/l	4.76	7,271.69	5.412E-02	Pulse	0.30	3
V			2	50.202	ug/l	0.74	267,680.00	1.992E+00	Pulse	0.30	3
Cr			2	49.341	ug/l	0.68	351,247.60	2.614E+00	Pulse	0.30	3
Mn			2	49.375	ug/l	0.37	170,537.48	1.269E+00	Pulse	0.30	3
Fe			2	4862.390	ug/l	1.26	28,748,656.63	2.139E+02	Analog	0.30	3
Co			2	48.564	ug/l	0.76	618,304.40	4.601E+00	Pulse	0.30	3
Ni			2	48.002	ug/l	1.28	168,684.70	1.255E+00	Pulse	0.30	3
Cu			2	47.765	ug/l	0.74	454,283.58	3.380E+00	Pulse	0.30	3
Zn			2	48.960	ug/l	1.18	63,194.42	4.702E-01	Pulse	0.30	3
As			2	49.363	ug/l	0.53	32,309.09	2.404E-01	Pulse	1.00	3
Cd			2	49.174	ug/l	1.35	101,084.61	1.274E-01	Pulse	0.30	3
Sn			2	50.244	ug/l	0.37	178,823.91	2.254E-01	Pulse	0.30	3
Se			3	200.654	ug/l	1.28	27,098.46	2.056E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,593,153.91	1.24	87.1	Pulse	0.10	3
1	Sc		4,750,494.83	0.39	83.8	Pulse	0.10	3
1	Ge		924,929.52	1.04	86.2	Pulse	0.10	3

Quantitation Report

1	Ge		1,280,921.73	0.78	86.7	Pulse	0.10	3
1	Rh		6,206,732.41	0.31	84.8	Analog	0.10	3
1	In		6,865,843.12	1.23	89.4	Analog	0.10	3
1	Tb		9,652,357.98	0.76	94.6	Analog	0.10	3
1	Ho		925,008.68	0.73	96.1	Pulse	0.10	3
1	Bi		5,670,586.79	0.68	93.4	Pulse	0.10	3
2	Sc		134,394.55	0.82	84.3	Pulse	0.30	3
2	Ge		83,108.36	0.35	85.7	Pulse	0.30	3
2	Ge		125,879.00	0.95	85.6	Pulse	0.30	3
2	Rh		2,585,512.81	0.55	85.0	Pulse	0.30	3
2	In		793,460.72	0.20	87.2	Pulse	0.30	3
2	Tb		3,317,539.80	0.51	91.4	Pulse	0.30	3
2	Ho		325,068.46	0.48	91.6	Pulse	0.30	3
2	Bi		2,245,530.60	0.78	90.0	Pulse	0.30	3
3	Sc		126,689.61	1.41	87.3	Pulse	0.30	3
3	Ge		86,451.44	0.83	85.7	Pulse	0.30	3
3	Ge		131,805.41	0.96	87.0	Pulse	0.30	3
3	Rh		1,606,357.33	0.50	87.1	Pulse	0.30	3
3	Tb		2,736,607.81	0.83	93.2	Pulse	0.30	3

Quantitation Report

File Name	081_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 20:43
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.007	ug/l	8.18	112.00	3.146E-05	Pulse	0.25	3
B			1	4.262	ug/l	3.32	67,736.77	1.903E-02	Pulse	0.15	3
Ca			1	-0.542	ug/l	-63.37	13,989.99	2.978E-03	Pulse	0.10	3
Sr			1	0.013	ug/l	3.10	1,960.20	3.098E-04	Pulse	0.10	3
Mo			1	0.049	ug/l	17.47	786.72	1.244E-04	Pulse	0.10	3
Ag			1	0.009	ug/l	13.76	396.69	5.657E-05	Pulse	0.10	3
Sn			1	0.431	ug/l	1.52	12,148.52	1.734E-03	Pulse	0.10	3
Sb			1	0.056	ug/l	13.56	2,600.37	2.747E-04	Pulse	0.10	3
Ba			1	0.012	ug/l	36.53	213.34	2.254E-05	Pulse	0.10	3
Tl			1	0.019	ug/l	13.59	1,646.84	2.842E-04	Pulse	0.10	3
Pb			1	0.009	ug/l	15.53	383.36	6.616E-05	Pulse	0.10	3
Pb			1	0.015	ug/l	6.56	430.03	7.421E-05	Pulse	0.10	3
Pb			1	0.012	ug/l	22.91	1,780.13	3.072E-04	Pulse	0.10	3
Na			2	10.777	ug/l	14.82	19,326.87	1.456E-01	Pulse	0.30	3
Mg			2	0.412	ug/l	27.82	546.68	4.118E-03	Pulse	0.30	3
Al			2	0.093	ug/l	82.40	158.89	1.197E-03	Pulse	0.30	3
K			2	1.064	ug/l	14.46	5,851.10	4.408E-02	Pulse	0.30	3
Ca			2	-1.756	ug/l	-54.76	114.45	8.622E-04	Pulse	0.30	3
Ti			2	-0.061	ug/l	-64.76	3.33	2.518E-05	Pulse	0.30	3
V			2	-0.009	ug/l	-107.19	307.78	2.318E-03	Pulse	0.30	3
Cr			2	0.009	ug/l	77.64	362.23	2.729E-03	Pulse	0.30	3
Mn			2	0.024	ug/l	30.58	117.78	8.875E-04	Pulse	0.30	3
Fe			2	0.168	ug/l	39.29	6,137.88	4.624E-02	Pulse	0.30	3
Co			2	0.002	ug/l	173.34	131.11	9.880E-04	Pulse	0.30	3
Ni			2	-0.004	ug/l	-79.53	210.00	1.582E-03	Pulse	0.30	3
Cu			2	0.026	ug/l	18.33	544.46	4.101E-03	Pulse	0.30	3
Zn			2	-0.007	ug/l	-475.93	268.90	2.025E-03	Pulse	0.30	3
As			2	0.006	ug/l	96.14	15.33	1.154E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.010	ug/l	97.24	35.51	4.398E-05	Pulse	0.30	3
Sn			2	-0.108	ug/l	-9.32	1,937.92	2.402E-03	Pulse	0.30	3
Se			3	0.167	ug/l	31.06	88.53	6.521E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,560,237.94	0.33	86.3	Pulse	0.10	3
1	Sc		4,697,479.51	0.92	82.8	Pulse	0.10	3
1	Ge		920,174.10	1.25	85.7	Pulse	0.10	3
1	Ge		1,271,418.60	1.18	86.1	Pulse	0.10	3
1	Rh		6,327,235.74	0.47	86.5	Analog	0.10	3
1	In		7,008,047.22	1.42	91.3	Analog	0.10	3
1	Tb		9,467,683.61	0.50	92.8	Analog	0.10	3
1	Ho		913,560.12	1.08	94.9	Pulse	0.10	3
1	Bi		5,795,160.12	0.38	95.4	Pulse	0.10	3
2	Sc		132,751.22	0.41	83.3	Pulse	0.30	3
2	Ge		83,334.26	0.64	85.9	Pulse	0.30	3
2	Ge		126,196.16	0.46	85.8	Pulse	0.30	3
2	Rh		2,649,889.48	0.15	87.2	Pulse	0.30	3
2	In		806,844.37	0.39	88.7	Pulse	0.30	3
2	Tb		3,304,156.95	0.49	91.0	Pulse	0.30	3
2	Ho		323,782.40	0.29	91.2	Pulse	0.30	3
2	Bi		2,310,487.89	0.15	92.6	Pulse	0.30	3
3	Sc		129,468.85	1.84	89.2	Pulse	0.30	3
3	Ge		89,207.09	0.83	88.4	Pulse	0.30	3
3	Ge		135,830.39	1.30	89.6	Pulse	0.30	3
3	Rh		1,696,777.99	0.82	92.0	Pulse	0.30	3
3	Tb		2,862,643.36	1.16	97.5	Pulse	0.30	3

Quantitation Report

File Name	082SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 20:48
Sample Name	jc76358-4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.017	ug/l	11.48	130.67	3.675E-05	Pulse	0.25	3
B			1	841.357	ug/l	0.42	4,951,007.03	1.393E+00	Analog	0.15	3
Ca			1	26260.844	ug/l	1.47	19,048,956.38	4.048E+00	Analog	0.10	3
Sr			1	122.709	ug/l	1.34	4,342,503.17	7.070E-01	Pulse	0.10	3
Mo			1	1.682	ug/l	2.90	11,194.34	1.823E-03	Pulse	0.10	3
Ag			1	0.055	ug/l	13.32	1,080.09	1.562E-04	Pulse	0.10	3
Sn			1	0.357	ug/l	18.25	6,298.16	9.113E-04	Pulse	0.10	3
Sb			1	0.154	ug/l	1.46	3,217.13	3.313E-04	Pulse	0.10	3
Ba			1	15.604	ug/l	1.14	85,881.02	8.843E-03	Pulse	0.10	3
Tl			1	0.036	ug/l	6.25	1,606.81	2.769E-04	Pulse	0.10	3
Pb			1	0.357	ug/l	2.16	4,195.80	7.231E-04	Pulse	0.10	3
Pb			1	0.386	ug/l	6.67	3,960.72	6.828E-04	Pulse	0.10	3
Pb			1	0.376	ug/l	1.77	17,926.78	3.090E-03	Pulse	0.10	3
Na			2	15590.565	ug/l	1.13	9,772,457.94	7.443E+01	Analog	0.30	3
Mg			2	2985.932	ug/l	0.28	864,508.53	6.584E+00	Pulse	0.30	3
Al			2	294.594	ug/l	1.67	26,246.13	1.999E-01	Pulse	0.30	3
K			2	1335.175	ug/l	0.58	232,727.98	1.773E+00	Pulse	0.30	3
Ca			2	26501.114	ug/l	0.41	251,897.52	1.918E+00	Pulse	0.30	3
Ti			2	11.189	ug/l	5.15	822.26	6.261E-03	Pulse	0.30	3
V			2	2.658	ug/l	3.23	7,265.02	5.533E-02	Pulse	0.30	3
Cr			2	1.043	ug/l	1.91	3,922.74	2.987E-02	Pulse	0.30	3
Mn			2	34.312	ug/l	1.60	57,913.17	4.411E-01	Pulse	0.30	3
Fe			2	384.212	ug/l	0.78	1,114,550.20	8.489E+00	Pulse	0.30	3
Co			2	0.177	ug/l	4.53	1,201.17	9.149E-03	Pulse	0.30	3
Ni			2	0.632	ug/l	8.35	1,305.62	9.941E-03	Pulse	0.30	3
Cu			2	2.104	ug/l	1.28	10,063.17	7.665E-02	Pulse	0.30	3
Zn			2	12.981	ug/l	2.05	8,423.37	6.416E-02	Pulse	0.30	3
As			2	3.313	ug/l	0.82	1,070.37	8.152E-03	Pulse	1.00	3
Cd			2	0.029	ug/l	49.00	42.81	5.442E-05	Pulse	0.30	3
Sn			2	-0.678	ug/l	-4.55	1,082.27	1.377E-03	Pulse	0.30	3
Se			3	-0.459	ug/l	-14.88	35.20	2.466E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,555,006.99	0.47	86.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,706,027.64	0.84	83.0	Pulse	0.10	3
1	Ge		914,993.14	1.65	85.3	Pulse	0.10	3
1	Ge		1,246,274.28	1.10	84.4	Pulse	0.10	3
1	Rh		6,142,428.03	1.75	84.0	Analog	0.10	3
1	In		6,913,085.85	0.54	90.0	Analog	0.10	3
1	Tb		9,711,776.52	1.09	95.2	Analog	0.10	3
1	Ho		942,919.83	2.05	98.0	Pulse	0.10	3
1	Bi		5,803,155.12	1.29	95.5	Mix	0.10	3
2	Sc		131,301.09	0.64	82.4	Pulse	0.30	3
2	Ge		80,916.70	0.57	83.4	Pulse	0.30	3
2	Ge		122,176.84	0.77	83.1	Pulse	0.30	3
2	Rh		2,582,966.35	0.58	85.0	Pulse	0.30	3
2	In		786,176.74	0.27	86.4	Pulse	0.30	3
2	Tb		3,358,422.78	1.15	92.5	Pulse	0.30	3
2	Ho		327,973.85	1.44	92.4	Pulse	0.30	3
2	Bi		2,242,783.94	0.43	89.9	Pulse	0.30	3
3	Sc		140,199.56	0.42	96.6	Pulse	0.30	3
3	Ge		94,183.59	0.52	93.3	Pulse	0.30	3
3	Ge		142,805.70	0.48	94.2	Pulse	0.30	3
3	Rh		1,733,082.88	0.43	93.9	Pulse	0.30	3
3	Tb		2,986,018.84	0.56	101.7	Pulse	0.30	3

Quantitation Report

File Name	083SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 20:53
Sample Name	mp10166-sd1
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.041	ug/l	7.91	76.00	2.108E-05	Pulse	0.25	3
B			1	887.450	ug/l	0.47	1,073,252.25	2.977E-01	Pulse	0.15	3
Ca			1	26835.269	ug/l	0.32	3,985,038.48	8.298E-01	Pulse	0.10	3
Sr			1	119.931	ug/l	0.27	880,757.56	1.383E-01	Pulse	0.10	3
Mo			1	1.508	ug/l	4.57	2,183.57	3.430E-04	Pulse	0.10	3
Ag			1	0.063	ug/l	27.38	296.68	4.201E-05	Pulse	0.10	3
Sn			1	-0.294	ug/l	-3.79	1,666.82	2.361E-04	Pulse	0.10	3
Sb			1	-0.093	ug/l	-94.09	950.07	9.860E-05	Pulse	0.10	3
Ba			1	16.182	ug/l	3.99	17,717.45	1.841E-03	Pulse	0.10	3
Tl			1	0.115	ug/l	10.53	1,190.09	2.016E-04	Pulse	0.10	3
Pb			1	0.491	ug/l	10.83	1,306.78	2.214E-04	Pulse	0.10	3
Pb			1	0.436	ug/l	9.77	1,023.41	1.734E-04	Pulse	0.10	3
Pb			1	0.467	ug/l	10.89	5,060.56	8.573E-04	Pulse	0.10	3
Na			2	15169.539	ug/l	1.25	1,956,601.52	1.452E+01	Pulse	0.30	3
Mg			2	2984.152	ug/l	1.50	177,611.34	1.318E+00	Pulse	0.30	3
Al			2	306.209	ug/l	0.41	5,714.38	4.240E-02	Pulse	0.30	3
K			2	1359.370	ug/l	0.77	53,076.02	3.938E-01	Pulse	0.30	3
Ca			2	26792.124	ug/l	1.00	52,397.48	3.888E-01	Pulse	0.30	3
Ti			2	12.480	ug/l	26.48	197.79	1.469E-03	Pulse	0.30	3
V			2	2.516	ug/l	11.59	1,704.56	1.265E-02	Pulse	0.30	3
Cr			2	0.864	ug/l	10.15	921.15	6.835E-03	Pulse	0.30	3
Mn			2	34.324	ug/l	0.60	11,921.09	8.845E-02	Pulse	0.30	3
Fe			2	382.091	ug/l	0.45	231,740.72	1.720E+00	Pulse	0.30	3
Co			2	0.195	ug/l	41.35	351.12	2.605E-03	Pulse	0.30	3
Ni			2	0.684	ug/l	20.56	468.91	3.480E-03	Pulse	0.30	3
Cu			2	2.468	ug/l	5.96	2,655.81	1.971E-02	Pulse	0.30	3
Zn			2	32.001	ug/l	2.41	4,406.20	3.269E-02	Pulse	0.30	3
As			2	3.558	ug/l	7.89	245.33	1.820E-03	Pulse	1.00	3
Cd			2	0.055	ug/l	32.36	25.45	3.125E-05	Pulse	0.30	3
Sn			2	-5.772	ug/l	-1.18	262.23	3.220E-04	Pulse	0.30	3
Se			3	-1.249	ug/l	-17.72	48.27	3.537E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,605,034.88	0.68	87.4	Pulse	0.10	3
1	Sc		4,802,669.51	0.39	84.7	Pulse	0.10	3
1	Ge		942,436.10	0.36	87.8	Pulse	0.10	3

Quantitation Report

1	Ge		1,295,817.35	0.67	87.7	Pulse	0.10	3
1	Rh		6,366,872.40	0.65	87.0	Analog	0.10	3
1	In		7,060,138.18	0.41	91.9	Analog	0.10	3
1	Tb		9,625,082.36	0.96	94.3	Analog	0.10	3
1	Ho		928,611.26	1.13	96.5	Pulse	0.10	3
1	Bi		5,903,802.83	0.31	97.2	Analog	0.10	3
2	Sc		134,769.54	0.44	84.6	Pulse	0.30	3
2	Ge		84,699.87	0.51	87.3	Pulse	0.30	3
2	Ge		127,794.87	0.61	86.9	Pulse	0.30	3
2	Rh		2,635,013.02	0.46	86.7	Pulse	0.30	3
2	In		814,334.38	0.40	89.5	Pulse	0.30	3
2	Tb		3,326,349.38	0.48	91.6	Pulse	0.30	3
2	Ho		326,134.72	0.69	91.9	Pulse	0.30	3
2	Bi		2,339,624.21	0.74	93.8	Pulse	0.30	3
3	Sc		130,273.48	1.30	89.7	Pulse	0.30	3
3	Ge		89,596.07	1.12	88.8	Pulse	0.30	3
3	Ge		136,471.17	0.32	90.1	Pulse	0.30	3
3	Rh		1,685,191.18	0.34	91.3	Pulse	0.30	3
3	Tb		2,871,750.58	0.10	97.8	Pulse	0.30	3

Quantitation Report

File Name	084SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 20:58
Sample Name	jc77077-5f
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.024	ug/l	17.63	162.67	4.839E-05	Pulse	0.25	3
B			1	620.890	ug/l	0.17	3,462,217.85	1.029E+00	Pulse	0.15	3
Ca			1	64257.574	ug/l	0.35	45,606,342.65	9.900E+00	Analog	0.10	3
Sr			1	355.831	ug/l	0.15	11,445,962.75	2.050E+00	Analog	0.10	3
Mo			1	0.310	ug/l	1.83	1,966.86	3.523E-04	Pulse	0.10	3
Ag			1	0.044	ug/l	5.13	823.39	1.277E-04	Pulse	0.10	3
Sn			1	0.387	ug/l	7.19	6,194.80	9.608E-04	Pulse	0.10	3
Sb			1	0.144	ug/l	12.22	2,940.38	3.181E-04	Pulse	0.10	3
Ba			1	169.907	ug/l	0.57	889,336.73	9.621E-02	Pulse	0.10	3
Tl			1	0.062	ug/l	9.73	2,220.26	4.309E-04	Pulse	0.10	3
Pb			1	1.064	ug/l	4.75	10,797.71	2.094E-03	Pulse	0.10	3
Pb			1	0.957	ug/l	3.63	8,549.49	1.659E-03	Pulse	0.10	3
Pb			1	0.973	ug/l	1.11	40,189.24	7.796E-03	Pulse	0.10	3
Na			2	237119.149	ug/l	1.38	143,617,705.41	1.131E+03	Analog	0.30	3
Mg			2	6911.839	ug/l	0.73	1,934,254.65	1.524E+01	Pulse	0.30	3
Al			2	70.450	ug/l	1.52	6,171.21	4.861E-02	Pulse	0.30	3
K			2	6965.844	ug/l	0.90	1,151,701.83	9.073E+00	Pulse	0.30	3
Ca			2	66427.260	ug/l	0.74	610,190.08	4.807E+00	Pulse	0.30	3
Ti			2	5.295	ug/l	6.55	382.23	3.012E-03	Pulse	0.30	3
V			2	1.318	ug/l	3.16	3,653.78	2.879E-02	Pulse	0.30	3
Cr			2	0.504	ug/l	6.01	1,980.14	1.560E-02	Pulse	0.30	3
Mn			2	785.451	ug/l	0.37	1,280,957.79	1.009E+01	Pulse	0.30	3
Fe			2	6455.167	ug/l	0.34	18,025,595.40	1.420E+02	Analog	0.30	3
Co			2	3.220	ug/l	1.39	19,451.63	1.532E-01	Pulse	0.30	3
Ni			2	12.691	ug/l	0.12	21,249.34	1.674E-01	Pulse	0.30	3
Cu			2	8.866	ug/l	1.08	40,085.50	3.158E-01	Pulse	0.30	3
Zn			2	3.165	ug/l	2.36	2,186.84	1.723E-02	Pulse	0.30	3
As			2	1.305	ug/l	5.51	414.34	3.264E-03	Pulse	1.00	3
Cd			2	0.253	ug/l	28.54	251.01	3.450E-04	Pulse	0.30	3
Sn			2	-0.692	ug/l	-2.30	980.04	1.346E-03	Pulse	0.30	3
Se			3	0.643	ug/l	54.26	104.93	8.099E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,364,470.86	0.98	81.6	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,606,764.41	1.17	81.2	Pulse	0.10	3
1	Ge		849,741.97	1.07	79.2	Pulse	0.10	3
1	Ge		1,171,246.88	0.98	79.3	Pulse	0.10	3
1	Rh		5,583,374.08	0.63	76.3	Pulse	0.10	3
1	In		6,447,357.81	0.30	84.0	Analog	0.10	3
1	Tb		9,244,115.07	0.13	90.6	Analog	0.10	3
1	Ho		911,241.39	1.07	94.7	Pulse	0.10	3
1	Bi		5,155,321.07	0.95	84.9	Pulse	0.10	3
2	Sc		126,936.96	0.60	79.7	Pulse	0.30	3
2	Ge		76,107.10	0.55	78.5	Pulse	0.30	3
2	Ge		115,438.41	0.29	78.5	Pulse	0.30	3
2	Rh		2,350,540.81	0.25	77.3	Pulse	0.30	3
2	In		728,281.08	0.57	80.1	Pulse	0.30	3
2	Tb		3,177,749.39	0.61	87.5	Pulse	0.30	3
2	Ho		314,236.70	0.28	88.5	Pulse	0.30	3
2	Bi		2,004,351.17	0.53	80.3	Pulse	0.30	3
3	Sc		131,428.30	1.17	90.5	Pulse	0.30	3
3	Ge		85,077.49	0.57	84.3	Pulse	0.30	3
3	Ge		129,494.03	0.38	85.4	Pulse	0.30	3
3	Rh		1,546,749.14	0.73	83.8	Pulse	0.30	3
3	Tb		2,779,809.12	0.75	94.7	Pulse	0.30	3

Quantitation Report

File Name	085SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 21:03
Sample Name	rinseconf
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	1110.16	25.33	7.000E-06	Pulse	0.25	3
B			1	5.629	ug/l	2.21	85,174.11	2.353E-02	Pulse	0.15	3
Ca			1	5.625	ug/l	6.41	23,480.75	4.878E-03	Pulse	0.10	3
Sr			1	0.024	ug/l	12.73	2,840.36	4.326E-04	Pulse	0.10	3
Mo			1	0.000	ug/l	1231.93	130.01	1.980E-05	Pulse	0.10	3
Ag			1	0.002	ug/l	77.07	116.67	1.627E-05	Pulse	0.10	3
Sn			1	0.587	ug/l	4.82	16,055.31	2.240E-03	Pulse	0.10	3
Sb			1	-0.037	ug/l	-1.37	233.34	2.402E-05	Pulse	0.10	3
Ba			1	0.014	ug/l	15.82	243.34	2.506E-05	Pulse	0.10	3
Tl			1	-0.001	ug/l	-158.94	363.36	6.096E-05	Pulse	0.10	3
Pb			1	0.002	ug/l	76.55	226.68	3.803E-05	Pulse	0.10	3
Pb			1	0.002	ug/l	167.92	186.67	3.142E-05	Pulse	0.10	3
Pb			1	0.002	ug/l	29.26	873.37	1.467E-04	Pulse	0.10	3
Na			2	17.396	ug/l	24.32	28,470.36	2.088E-01	Pulse	0.30	3
Mg			2	0.466	ug/l	68.20	594.46	4.359E-03	Pulse	0.30	3
Al			2	0.226	ug/l	60.61	187.78	1.377E-03	Pulse	0.30	3
K			2	1.744	ug/l	19.47	6,250.12	4.584E-02	Pulse	0.30	3
Ca			2	3.943	ug/l	19.31	230.00	1.687E-03	Pulse	0.30	3
Ti			2	-0.054	ug/l	-23.40	4.44	3.256E-05	Pulse	0.30	3
V			2	-0.017	ug/l	-21.26	272.23	1.997E-03	Pulse	0.30	3
Cr			2	0.031	ug/l	16.02	535.57	3.927E-03	Pulse	0.30	3
Mn			2	0.058	ug/l	23.65	238.89	1.752E-03	Pulse	0.30	3
Fe			2	0.301	ug/l	46.98	7,106.13	5.212E-02	Pulse	0.30	3
Co			2	-0.001	ug/l	-143.24	87.78	6.435E-04	Pulse	0.30	3
Ni			2	0.006	ug/l	84.49	253.34	1.858E-03	Pulse	0.30	3
Cu			2	0.123	ug/l	8.56	1,493.42	1.095E-02	Pulse	0.30	3
Zn			2	0.010	ug/l	93.08	298.90	2.192E-03	Pulse	0.30	3
As			2	0.004	ug/l	319.17	14.67	1.078E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	-0.002	ug/l	-98.87	8.88	1.079E-05	Pulse	0.30	3
Sn			2	0.066	ug/l	68.16	2,611.36	3.169E-03	Pulse	0.30	3
Se			3	-0.263	ug/l	-9.72	29.40	2.125E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,619,257.44	0.46	87.8	Pulse	0.10	3
1	Sc		4,814,251.59	0.83	84.9	Pulse	0.10	3
1	Ge		942,430.06	1.12	87.8	Pulse	0.10	3
1	Ge		1,303,898.50	1.13	88.3	Pulse	0.10	3
1	Rh		6,567,865.32	0.83	89.8	Analog	0.10	3
1	In		7,166,382.54	1.14	93.3	Analog	0.10	3
1	Tb		9,712,357.98	1.35	95.2	Analog	0.10	3
1	Ho		929,126.57	0.89	96.6	Pulse	0.10	3
1	Bi		5,955,325.95	1.06	98.0	Mix	0.10	3
2	Sc		136,346.74	0.53	85.6	Pulse	0.30	3
2	Ge		85,727.52	0.67	88.4	Pulse	0.30	3
2	Ge		129,066.20	0.57	87.8	Pulse	0.30	3
2	Rh		2,719,253.09	0.79	89.4	Pulse	0.30	3
2	In		823,975.35	0.50	90.6	Pulse	0.30	3
2	Tb		3,371,792.57	0.41	92.9	Pulse	0.30	3
2	Ho		331,227.62	0.76	93.3	Pulse	0.30	3
2	Bi		2,360,361.09	0.59	94.6	Pulse	0.30	3
3	Sc		131,784.76	0.35	90.8	Pulse	0.30	3
3	Ge		90,748.77	0.92	89.9	Pulse	0.30	3
3	Ge		138,257.03	0.85	91.2	Pulse	0.30	3
3	Rh		1,722,512.82	1.23	93.4	Pulse	0.30	3
3	Tb		2,882,685.37	0.61	98.2	Pulse	0.30	3

Quantitation Report

File Name	086SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 21:09
Sample Name	jc77083-2
Sample Type	Sample
Comment	FB
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.098	ug/l	6.11	652.02	1.802E-04	Pulse	0.25	3
B			1	8.892	ug/l	2.75	71,009.44	1.963E-02	Pulse	0.15	3
Ca			1	105.192	ug/l	0.68	90,301.99	1.935E-02	Pulse	0.10	3
Sr			1	4.618	ug/l	0.89	171,666.19	2.676E-02	Pulse	0.10	3
Mo			1	0.091	ug/l	27.77	750.05	1.169E-04	Pulse	0.10	3
Ag			1	0.044	ug/l	15.76	890.07	1.275E-04	Pulse	0.10	3
Sn			1	0.396	ug/l	8.63	6,808.49	9.751E-04	Pulse	0.10	3
Sb			1	0.043	ug/l	27.99	1,790.19	1.819E-04	Pulse	0.10	3
Ba			1	1.277	ug/l	3.56	7,205.27	7.319E-04	Pulse	0.10	3
Tl			1	0.013	ug/l	16.76	850.06	1.415E-04	Pulse	0.10	3
Pb			1	0.033	ug/l	6.00	563.37	9.383E-05	Pulse	0.10	3
Pb			1	0.042	ug/l	21.43	580.04	9.670E-05	Pulse	0.10	3
Pb			1	0.040	ug/l	13.82	2,626.90	4.376E-04	Pulse	0.10	3
Na			2	126.609	ug/l	0.43	84,663.98	6.469E-01	Pulse	0.30	3
Mg			2	9.237	ug/l	10.98	2,966.97	2.266E-02	Pulse	0.30	3
Al			2	7.456	ug/l	12.99	798.92	6.104E-03	Pulse	0.30	3
K			2	13.991	ug/l	10.26	7,781.92	5.946E-02	Pulse	0.30	3
Ca			2	110.944	ug/l	2.13	1,196.73	9.143E-03	Pulse	0.30	3
Ti			2	0.063	ug/l	147.42	16.67	1.275E-04	Pulse	0.30	3
V			2	0.346	ug/l	6.21	1,248.95	9.541E-03	Pulse	0.30	3
Cr			2	0.417	ug/l	9.18	1,741.22	1.331E-02	Pulse	0.30	3
Mn			2	0.536	ug/l	7.53	934.48	7.141E-03	Pulse	0.30	3
Fe			2	2.312	ug/l	5.44	11,743.20	8.971E-02	Pulse	0.30	3
Co			2	0.202	ug/l	9.05	1,348.96	1.031E-02	Pulse	0.30	3
Ni			2	2.138	ug/l	2.38	3,874.95	2.961E-02	Pulse	0.30	3
Cu			2	0.313	ug/l	4.05	1,744.56	1.333E-02	Pulse	0.30	3
Zn			2	4.720	ug/l	3.91	3,227.03	2.466E-02	Pulse	0.30	3
As			2	0.088	ug/l	17.96	39.67	3.032E-04	Pulse	1.00	3
Cd			2	0.010	ug/l	116.94	23.30	2.964E-05	Pulse	0.30	3
Sn			2	-0.683	ug/l	-6.33	1,072.83	1.365E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	-0.385	ug/l	-49.66	40.47	2.847E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,617,281.38	0.81	87.7	Pulse	0.10	3
1	Sc		4,667,538.99	1.08	82.3	Pulse	0.10	3
1	Ge		921,476.99	0.13	85.9	Pulse	0.10	3
1	Ge		1,254,631.62	1.11	84.9	Pulse	0.10	3
1	Rh		6,416,034.90	0.07	87.7	Analog	0.10	3
1	In		6,984,296.99	1.60	91.0	Analog	0.10	3
1	Tb		9,845,729.44	0.59	96.5	Analog	0.10	3
1	Ho		947,521.81	0.93	98.5	Pulse	0.10	3
1	Bi		6,006,505.33	1.40	98.9	Mix	0.10	3
2	Sc		130,882.25	0.53	82.1	Pulse	0.30	3
2	Ge		81,422.28	0.64	84.0	Pulse	0.30	3
2	Ge		123,498.18	0.83	84.0	Pulse	0.30	3
2	Rh		2,665,465.52	0.63	87.7	Pulse	0.30	3
2	In		785,881.29	0.48	86.4	Pulse	0.30	3
2	Tb		3,339,387.37	0.56	92.0	Pulse	0.30	3
2	Ho		329,213.15	0.68	92.8	Pulse	0.30	3
2	Bi		2,318,169.35	0.38	92.9	Pulse	0.30	3
3	Sc		137,730.49	0.82	94.9	Pulse	0.30	3
3	Ge		93,386.90	0.64	92.5	Pulse	0.30	3
3	Ge		142,248.73	0.54	93.9	Pulse	0.30	3
3	Rh		1,779,715.83	0.20	96.5	Pulse	0.30	3
3	Tb		2,990,901.48	0.65	101.9	Pulse	0.30	3

Quantitation Report

File Name	087SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 21:14
Sample Name	jc77083-5
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.143	ug/l	14.20	905.37	2.594E-04	Pulse	0.25	3
B			1	66.135	ug/l	1.86	397,802.29	1.140E-01	Pulse	0.15	3
Ca			1	7553.154	ug/l	0.87	5,494,653.46	1.166E+00	Analog	0.10	3
Sr			1	64.711	ug/l	0.86	2,090,382.16	3.729E-01	Pulse	0.10	3
Mo			1	3.495	ug/l	2.83	21,114.73	3.767E-03	Pulse	0.10	3
Ag			1	0.161	ug/l	4.05	2,850.37	4.437E-04	Pulse	0.10	3
Sn			1	0.676	ug/l	2.89	9,193.06	1.431E-03	Pulse	0.10	3
Sb			1	0.621	ug/l	3.53	8,966.26	9.598E-04	Pulse	0.10	3
Ba			1	32.148	ug/l	1.76	170,123.32	1.821E-02	Pulse	0.10	3
Tl			1	0.047	ug/l	7.77	1,746.84	3.445E-04	Pulse	0.10	3
Pb			1	4.656	ug/l	1.89	45,969.28	9.060E-03	Pulse	0.10	3
Pb			1	4.469	ug/l	1.48	38,828.63	7.654E-03	Pulse	0.10	3
Pb			1	4.474	ug/l	0.73	179,648.86	3.541E-02	Pulse	0.10	3
Na			2	351484.484	ug/l	2.27	217,433,675.80	1.677E+03	Analog	0.30	3
Mg			2	1310.456	ug/l	0.98	374,823.94	2.891E+00	Pulse	0.30	3
Al			2	2543.946	ug/l	1.34	222,722.01	1.718E+00	Pulse	0.30	3
K			2	3868.247	ug/l	1.33	655,626.22	5.057E+00	Pulse	0.30	3
Ca			2	7697.186	ug/l	0.58	72,351.32	5.580E-01	Pulse	0.30	3
Ti			2	49.682	ug/l	1.68	3,563.75	2.748E-02	Pulse	0.30	3
V			2	8.341	ug/l	2.90	21,768.89	1.679E-01	Pulse	0.30	3
Cr			2	5.948	ug/l	0.95	20,701.96	1.597E-01	Pulse	0.30	3
Mn			2	491.085	ug/l	1.00	818,049.90	6.310E+00	Pulse	0.30	3
Fe			2	2878.458	ug/l	1.25	8,213,051.90	6.334E+01	Analog	0.30	3
Co			2	0.930	ug/l	2.03	5,807.76	4.480E-02	Pulse	0.30	3
Ni			2	3.381	ug/l	1.72	5,943.40	4.584E-02	Pulse	0.30	3
Cu			2	20.723	ug/l	1.21	95,297.81	7.350E-01	Pulse	0.30	3
Zn			2	66.223	ug/l	1.03	41,321.98	3.187E-01	Pulse	0.30	3
As			2	2.190	ug/l	6.55	703.02	5.419E-03	Pulse	1.00	3
Cd			2	0.489	ug/l	10.56	475.68	6.506E-04	Pulse	0.30	3
Sn			2	-0.384	ug/l	-12.46	1,482.31	2.027E-03	Pulse	0.30	3
Se			3	0.343	ug/l	20.46	85.60	6.568E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,488,452.80	1.10	84.6	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,710,790.04	0.70	83.1	Pulse	0.10	3
1	Ge		879,689.44	0.48	82.0	Pulse	0.10	3
1	Ge		1,191,515.24	0.86	80.6	Pulse	0.10	3
1	Rh		5,605,411.17	0.66	76.6	Pulse	0.10	3
1	In		6,426,395.22	0.95	83.7	Analog	0.10	3
1	Tb		9,343,079.86	1.04	91.6	Analog	0.10	3
1	Ho		907,217.88	0.83	94.3	Pulse	0.10	3
1	Bi		5,073,337.74	0.92	83.5	Pulse	0.10	3
2	Sc		129,663.00	1.17	81.4	Pulse	0.30	3
2	Ge		76,494.57	1.99	78.9	Pulse	0.30	3
2	Ge		117,223.17	0.70	79.7	Pulse	0.30	3
2	Rh		2,339,126.64	0.67	76.9	Pulse	0.30	3
2	In		731,074.72	0.50	80.4	Pulse	0.30	3
2	Tb		3,164,398.49	0.94	87.1	Pulse	0.30	3
2	Ho		313,928.96	0.72	88.4	Pulse	0.30	3
2	Bi		1,970,294.57	0.56	79.0	Pulse	0.30	3
3	Sc		132,520.01	0.50	91.3	Pulse	0.30	3
3	Ge		85,710.83	0.75	84.9	Pulse	0.30	3
3	Ge		130,289.80	0.80	86.0	Pulse	0.30	3
3	Rh		1,533,795.95	0.26	83.1	Pulse	0.30	3
3	Tb		2,742,367.74	0.35	93.4	Pulse	0.30	3

Quantitation Report

File Name	088SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 21:19
Sample Name	mp10166-mb1conf
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.002	ug/l	65.25	38.67	1.044E-05	Pulse	0.25	3
B			1	4.966	ug/l	2.30	48,745.38	1.316E-02	Pulse	0.15	3
Ca			1	7.176	ug/l	8.50	20,213.09	4.250E-03	Pulse	0.10	3
Sr			1	0.029	ug/l	21.10	2,096.89	3.247E-04	Pulse	0.10	3
Mo			1	0.027	ug/l	23.87	313.35	4.851E-05	Pulse	0.10	3
Ag			1	0.140	ug/l	1.17	2,747.01	3.867E-04	Pulse	0.10	3
Sn			1	0.292	ug/l	2.85	5,721.30	8.055E-04	Pulse	0.10	3
Sb			1	-0.027	ug/l	-16.89	860.06	8.739E-05	Pulse	0.10	3
Ba			1	0.064	ug/l	22.71	440.02	4.473E-05	Pulse	0.10	3
Tl			1	0.001	ug/l	335.30	420.02	7.038E-05	Pulse	0.10	3
Pb			1	0.028	ug/l	20.11	513.36	8.586E-05	Pulse	0.10	3
Pb			1	0.031	ug/l	20.30	466.70	7.818E-05	Pulse	0.10	3
Pb			1	0.030	ug/l	6.71	2,153.49	3.606E-04	Pulse	0.10	3
Na			2	33.995	ug/l	5.19	27,175.57	2.050E-01	Pulse	0.30	3
Mg			2	1.111	ug/l	11.35	630.02	4.751E-03	Pulse	0.30	3
Al			2	1.963	ug/l	8.39	317.79	2.397E-03	Pulse	0.30	3
K			2	1.958	ug/l	44.62	5,815.52	4.386E-02	Pulse	0.30	3
Ca			2	7.167	ug/l	29.13	216.67	1.635E-03	Pulse	0.30	3
Ti			2	-0.047	ug/l	-297.17	8.89	6.672E-05	Pulse	0.30	3
V			2	0.484	ug/l	4.96	1,626.77	1.226E-02	Pulse	0.30	3
Cr			2	0.507	ug/l	5.53	2,077.94	1.567E-02	Pulse	0.30	3
Mn			2	0.184	ug/l	6.89	347.79	2.623E-03	Pulse	0.30	3
Fe			2	2.799	ug/l	3.16	13,316.60	1.004E-01	Pulse	0.30	3
Co			2	0.006	ug/l	65.23	137.78	1.040E-03	Pulse	0.30	3
Ni			2	0.135	ug/l	13.82	458.90	3.462E-03	Pulse	0.30	3
Cu			2	0.883	ug/l	2.48	4,438.44	3.347E-02	Pulse	0.30	3
Zn			2	0.674	ug/l	15.10	704.47	5.316E-03	Pulse	0.30	3
As			2	0.086	ug/l	40.35	39.33	2.972E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	-0.007	ug/l	-97.82	6.65	8.435E-06	Pulse	0.30	3
Sn			2	-0.787	ug/l	-1.12	896.70	1.136E-03	Pulse	0.30	3
Se			3	0.152	ug/l	69.55	81.40	5.590E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,704,878.26	0.29	89.8	Pulse	0.10	3
1	Sc		4,755,551.39	0.49	83.9	Pulse	0.10	3
1	Ge		953,122.07	0.46	88.8	Pulse	0.10	3
1	Ge		1,281,263.63	1.04	86.7	Pulse	0.10	3
1	Rh		6,458,155.53	0.20	88.3	Analog	0.10	3
1	In		7,103,606.52	0.99	92.5	Analog	0.10	3
1	Tb		9,843,706.10	0.55	96.5	Analog	0.10	3
1	Ho		951,330.66	0.69	98.9	Pulse	0.10	3
1	Bi		5,974,670.12	1.29	98.4	Mix	0.10	3
2	Sc		132,627.32	1.26	83.2	Pulse	0.30	3
2	Ge		81,978.57	0.37	84.5	Pulse	0.30	3
2	Ge		124,964.30	0.64	85.0	Pulse	0.30	3
2	Rh		2,691,248.16	0.34	88.5	Pulse	0.30	3
2	In		789,440.25	0.20	86.8	Pulse	0.30	3
2	Tb		3,377,505.49	0.10	93.0	Pulse	0.30	3
2	Ho		329,888.95	0.42	92.9	Pulse	0.30	3
2	Bi		2,308,871.02	0.23	92.5	Pulse	0.30	3
3	Sc		140,423.24	0.68	96.7	Pulse	0.30	3
3	Ge		95,628.66	1.14	94.8	Pulse	0.30	3
3	Ge		145,545.12	0.92	96.0	Pulse	0.30	3
3	Rh		1,810,987.78	0.79	98.1	Pulse	0.30	3
3	Tb		3,037,162.66	0.74	103.5	Pulse	0.30	3

Quantitation Report

File Name	089SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 21:24
Sample Name	jc77083-8
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.006	ug/l	25.57	54.67	1.632E-05	Pulse	0.25	3
B			1	1085.747	ug/l	1.44	6,013,981.98	1.796E+00	Analog	0.15	3
Ca			1	196869.325	ug/l	2.09	139,140,717.93	3.032E+01	Analog	0.10	3
Sr			1	757.255	ug/l	0.83	21,601,783.01	4.362E+00	Analog	0.10	3
Mo			1	6.854	ug/l	2.90	36,499.28	7.370E-03	Pulse	0.10	3
Ag			1	0.046	ug/l	19.20	773.38	1.326E-04	Pulse	0.10	3
Sn			1	0.363	ug/l	5.54	5,374.48	9.207E-04	Pulse	0.10	3
Sb			1	0.046	ug/l	26.12	1,570.14	1.858E-04	Pulse	0.10	3
Ba			1	305.627	ug/l	0.86	1,461,583.52	1.730E-01	Pulse	0.10	3
Tl			1	-0.001	ug/l	-311.84	266.68	6.102E-05	Pulse	0.10	3
Pb			1	0.183	ug/l	16.59	1,676.83	3.847E-04	Pulse	0.10	3
Pb			1	0.179	ug/l	3.58	1,436.80	3.295E-04	Pulse	0.10	3
Pb			1	0.179	ug/l	3.53	6,694.21	1.535E-03	Pulse	0.10	3
Na			2	798355.470	ug/l	0.94	471,631,999.04	3.809E+03	Analog	0.30	3
Mg			2	58497.888	ug/l	0.52	15,966,342.70	1.290E+02	Analog	0.30	3
Al			2	40.523	ug/l	4.19	3,518.18	2.842E-02	Pulse	0.30	3
K			2	5502.675	ug/l	0.55	888,494.41	7.176E+00	Pulse	0.30	3
Ca			2	202374.493	ug/l	0.51	1,812,999.23	1.464E+01	Pulse	0.30	3
Ti			2	0.434	ug/l	57.42	41.11	3.318E-04	Pulse	0.30	3
V			2	0.932	ug/l	4.51	2,618.02	2.114E-02	Pulse	0.30	3
Cr			2	1.492	ug/l	1.94	5,169.76	4.175E-02	Pulse	0.30	3
Mn			2	32135.370	ug/l	1.48	51,116,125.75	4.129E+02	Analog	0.30	3
Fe			2	55478.189	ug/l	1.14	151,067,954.00	1.220E+03	Analog	0.30	3
Co			2	2.553	ug/l	0.16	15,062.58	1.217E-01	Pulse	0.30	3
Ni			2	9.340	ug/l	2.23	15,308.36	1.236E-01	Pulse	0.30	3
Cu			2	1.343	ug/l	5.57	6,156.79	4.973E-02	Pulse	0.30	3
Zn			2	2.599	ug/l	1.08	1,797.90	1.452E-02	Pulse	0.30	3
As			2	2.835	ug/l	5.62	865.36	6.991E-03	Pulse	1.00	3
Cd			2	0.005	ug/l	108.77	16.10	2.403E-05	Pulse	0.30	3
Sn			2	-0.727	ug/l	-1.53	850.04	1.269E-03	Pulse	0.30	3
Se			3	-0.402	ug/l	-9.06	31.20	2.758E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,348,951.31	0.02	81.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,588,243.68	1.28	80.9	Pulse	0.10	3
1	Ge		793,181.94	0.86	73.9	Pulse	0.10	3
1	Ge		1,080,290.24	0.37	73.1	Pulse	0.10	3
1	Rh		4,951,969.82	0.93	67.7	Pulse	0.10	3
1	In		5,838,208.37	0.71	76.0	Mix	0.10	3
1	Tb		8,446,233.42	1.23	82.8	Analog	0.10	3
1	Ho		821,852.80	1.19	85.4	Pulse	0.10	3
1	Bi		4,361,080.35	1.07	71.8	Pulse	0.10	3
2	Sc		123,815.43	0.58	77.7	Pulse	0.30	3
2	Ge		70,336.00	0.99	72.5	Pulse	0.30	3
2	Ge		106,098.23	0.57	72.2	Pulse	0.30	3
2	Rh		2,047,354.92	0.28	67.3	Pulse	0.30	3
2	In		669,897.33	0.14	73.7	Pulse	0.30	3
2	Tb		2,847,137.45	0.47	78.4	Pulse	0.30	3
2	Ho		280,628.14	0.31	79.1	Pulse	0.30	3
2	Bi		1,672,213.20	0.23	67.0	Pulse	0.30	3
3	Sc		120,543.15	0.62	83.0	Pulse	0.30	3
3	Ge		75,479.87	1.27	74.8	Pulse	0.30	3
3	Ge		113,135.07	0.75	74.7	Pulse	0.30	3
3	Rh		1,282,010.71	0.09	69.5	Pulse	0.30	3
3	Tb		2,352,040.32	0.13	80.1	Pulse	0.30	3

Quantitation Report

File Name	090SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 21:37
Sample Name	jc77083-10
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.038	ug/l	13.34	264.01	7.346E-05	Pulse	0.25	3
B			1	104.957	ug/l	0.91	639,465.74	1.781E-01	Pulse	0.15	3
Ca			1	52255.042	ug/l	0.74	38,981,371.92	8.051E+00	Analog	0.10	3
Sr			1	263.509	ug/l	0.99	9,144,889.24	1.518E+00	Analog	0.10	3
Mo			1	1.082	ug/l	1.93	7,105.23	1.179E-03	Pulse	0.10	3
Ag			1	0.058	ug/l	8.92	1,110.09	1.643E-04	Pulse	0.10	3
Sn			1	1.108	ug/l	2.91	14,403.76	2.132E-03	Pulse	0.10	3
Sb			1	0.733	ug/l	3.12	10,570.64	1.110E-03	Pulse	0.10	3
Ba			1	97.771	ug/l	2.21	527,228.77	5.536E-02	Pulse	0.10	3
Tl			1	0.059	ug/l	3.74	2,200.26	4.152E-04	Pulse	0.10	3
Pb			1	34.009	ug/l	0.69	349,729.99	6.598E-02	Pulse	0.10	3
Pb			1	33.463	ug/l	0.71	302,874.53	5.715E-02	Pulse	0.10	3
Pb			1	33.260	ug/l	0.13	1,391,223.45	2.625E-01	Pulse	0.10	3
Na			2	115614.327	ug/l	1.12	74,902,312.58	5.517E+02	Analog	0.30	3
Mg			2	16947.708	ug/l	0.67	5,072,476.74	3.736E+01	Pulse	0.30	3
Al			2	629.968	ug/l	0.99	57,866.43	4.262E-01	Pulse	0.30	3
K			2	42869.376	ug/l	1.18	7,552,501.09	5.563E+01	Analog	0.30	3
Ca			2	53108.992	ug/l	0.54	521,848.30	3.844E+00	Pulse	0.30	3
Ti			2	24.816	ug/l	2.30	1,870.13	1.377E-02	Pulse	0.30	3
V			2	3.269	ug/l	5.84	9,157.07	6.745E-02	Pulse	0.30	3
Cr			2	2.391	ug/l	2.20	8,899.18	6.554E-02	Pulse	0.30	3
Mn			2	3355.636	ug/l	0.39	5,853,432.82	4.311E+01	Analog	0.30	3
Fe			2	7675.247	ug/l	0.48	22,923,517.42	1.688E+02	Analog	0.30	3
Co			2	1.464	ug/l	1.02	9,513.96	7.007E-02	Pulse	0.30	3
Ni			2	4.483	ug/l	2.01	8,177.68	6.023E-02	Pulse	0.30	3
Cu			2	15.036	ug/l	0.78	72,494.22	5.339E-01	Pulse	0.30	3
Zn			2	141.667	ug/l	1.29	92,242.16	6.794E-01	Pulse	0.30	3
As			2	4.389	ug/l	0.25	1,462.74	1.077E-02	Pulse	1.00	3
Cd			2	0.819	ug/l	7.03	836.37	1.078E-03	Pulse	0.30	3
Sn			2	0.038	ug/l	69.23	2,299.09	2.963E-03	Pulse	0.30	3
Se			3	-0.084	ug/l	-201.73	60.27	4.383E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,591,201.70	1.46	87.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,841,425.45	1.12	85.4	Pulse	0.10	3
1	Ge		904,972.04	1.47	84.3	Pulse	0.10	3
1	Ge		1,243,683.73	1.59	84.2	Pulse	0.10	3
1	Rh		6,023,920.75	0.59	82.3	Analog	0.10	3
1	In		6,755,894.86	0.76	88.0	Analog	0.10	3
1	Tb		9,524,889.86	1.62	93.4	Analog	0.10	3
1	Ho		926,179.75	0.97	96.2	Pulse	0.10	3
1	Bi		5,300,348.88	1.72	87.3	Pulse	0.10	3
2	Sc		135,772.05	0.17	85.2	Pulse	0.30	3
2	Ge		81,778.47	0.46	84.3	Pulse	0.30	3
2	Ge		122,652.68	0.07	83.4	Pulse	0.30	3
2	Rh		2,505,249.76	0.16	82.4	Pulse	0.30	3
2	In		775,956.36	0.53	85.3	Pulse	0.30	3
2	Tb		3,321,121.26	0.85	91.5	Pulse	0.30	3
2	Ho		329,393.82	0.29	92.8	Pulse	0.30	3
2	Bi		2,097,683.25	0.21	84.1	Pulse	0.30	3
3	Sc		137,623.92	0.31	94.8	Pulse	0.30	3
3	Ge		90,128.82	1.81	89.3	Pulse	0.30	3
3	Ge		137,417.91	0.64	90.7	Pulse	0.30	3
3	Rh		1,620,417.64	0.90	87.8	Pulse	0.30	3
3	Tb		2,824,442.46	0.61	96.2	Pulse	0.30	3

Quantitation Report

File Name	091_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 21:42
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	49.374	ug/l	0.52	668,609.50	1.744E-01	Pulse	0.25	3
B			1	97.184	ug/l	0.53	1,247,823.32	3.256E-01	Pulse	0.15	3
Ca			1	4901.164	ug/l	0.99	7,816,014.05	1.513E+00	Analog	0.10	3
Sr			1	52.188	ug/l	0.82	4,004,617.86	6.014E-01	Pulse	0.10	3
Mo			1	51.885	ug/l	1.17	741,064.94	1.113E-01	Pulse	0.10	3
Ag			1	48.862	ug/l	0.51	1,928,370.81	2.648E-01	Pulse	0.10	3
Sn			1	49.769	ug/l	1.11	1,180,204.88	1.620E-01	Pulse	0.10	3
Sb			1	51.998	ug/l	1.77	1,378,409.20	1.401E-01	Pulse	0.10	3
Ba			1	50.882	ug/l	1.70	566,848.56	5.762E-02	Pulse	0.10	3
Tl			1	50.269	ug/l	1.03	3,440,338.38	5.897E-01	Pulse	0.10	3
Pb			1	51.271	ug/l	0.53	1,160,130.84	1.989E-01	Pulse	0.10	3
Pb			1	51.075	ug/l	1.68	1,017,353.94	1.744E-01	Pulse	0.10	3
Pb			1	50.668	ug/l	0.98	4,663,612.09	7.995E-01	Pulse	0.10	3
Na			2	4763.542	ug/l	1.74	6,625,525.43	4.550E+01	Analog	0.30	3
Mg			2	4791.824	ug/l	0.47	3,076,598.49	2.113E+01	Pulse	0.30	3
Al			2	4768.590	ug/l	0.87	937,375.62	6.437E+00	Pulse	0.30	3
K			2	4827.933	ug/l	0.78	1,829,122.08	1.256E+01	Pulse	0.30	3
Ca			2	5104.519	ug/l	0.91	107,720.97	7.397E-01	Pulse	0.30	3
Ti			2	50.445	ug/l	0.77	8,113.19	5.572E-02	Pulse	0.30	3
V			2	50.200	ug/l	0.98	290,033.94	1.992E+00	Pulse	0.30	3
Cr			2	49.326	ug/l	0.96	380,466.52	2.613E+00	Pulse	0.30	3
Mn			2	50.027	ug/l	0.78	187,221.05	1.286E+00	Pulse	0.30	3
Fe			2	4832.738	ug/l	0.79	30,960,076.54	2.126E+02	Analog	0.30	3
Co			2	48.563	ug/l	0.49	669,955.55	4.601E+00	Pulse	0.30	3
Ni			2	47.945	ug/l	0.22	182,565.90	1.254E+00	Pulse	0.30	3
Cu			2	47.728	ug/l	0.91	491,851.47	3.378E+00	Pulse	0.30	3
Zn			2	48.464	ug/l	0.53	67,785.70	4.655E-01	Pulse	0.30	3
As			2	50.107	ug/l	1.01	35,535.07	2.440E-01	Pulse	1.00	3
Cd			2	48.436	ug/l	0.71	107,028.53	1.255E-01	Pulse	0.30	3
Sn			2	50.330	ug/l	1.06	192,543.14	2.258E-01	Pulse	0.30	3
Se			3	195.196	ug/l	0.96	28,401.06	2.000E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,832,847.12	0.61	92.9	Pulse	0.10	3
1	Sc		5,166,430.65	0.67	91.1	Pulse	0.10	3
1	Ge		1,001,377.49	1.40	93.3	Pulse	0.10	3

Quantitation Report

1	Ge		1,389,032.95	0.42	94.0	Pulse	0.10	3
1	Rh		6,658,938.65	1.51	91.0	Analog	0.10	3
1	In		7,282,707.96	0.65	94.8	Analog	0.10	3
1	Tb		9,838,101.52	1.11	96.4	Analog	0.10	3
1	Ho		954,307.77	0.83	99.2	Pulse	0.10	3
1	Bi		5,833,776.79	0.73	96.0	Analog	0.10	3
2	Sc		145,620.28	0.51	91.4	Pulse	0.30	3
2	Ge		90,471.67	0.44	93.3	Pulse	0.30	3
2	Ge		136,325.32	0.52	92.7	Pulse	0.30	3
2	Rh		2,759,603.85	0.43	90.8	Pulse	0.30	3
2	In		852,910.15	0.54	93.8	Pulse	0.30	3
2	Tb		3,467,185.00	0.82	95.5	Pulse	0.30	3
2	Ho		340,853.37	0.24	96.0	Pulse	0.30	3
2	Bi		2,329,573.03	0.41	93.4	Pulse	0.30	3
3	Sc		137,055.07	0.43	94.4	Pulse	0.30	3
3	Ge		92,355.58	1.50	91.5	Pulse	0.30	3
3	Ge		141,985.15	0.18	93.7	Pulse	0.30	3
3	Rh		1,709,058.58	0.12	92.6	Pulse	0.30	3
3	Tb		2,866,320.02	0.38	97.6	Pulse	0.30	3

Quantitation Report

File Name	092_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 21:49
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.003	ug/l	67.22	69.33	1.825E-05	Pulse	0.25	3
B			1	2.307	ug/l	2.14	47,738.28	1.257E-02	Pulse	0.15	3
Ca			1	-1.239	ug/l	-10.98	13,859.65	2.763E-03	Pulse	0.10	3
Sr			1	0.005	ug/l	44.83	1,443.47	2.154E-04	Pulse	0.10	3
Mo			1	0.015	ug/l	18.96	346.68	5.172E-05	Pulse	0.10	3
Ag			1	0.003	ug/l	25.31	166.68	2.312E-05	Pulse	0.10	3
Sn			1	0.405	ug/l	1.45	11,878.28	1.649E-03	Pulse	0.10	3
Sb			1	0.002	ug/l	161.61	1,260.10	1.299E-04	Pulse	0.10	3
Ba			1	0.010	ug/l	35.98	193.34	1.995E-05	Pulse	0.10	3
Tl			1	0.006	ug/l	11.31	820.05	1.386E-04	Pulse	0.10	3
Pb			1	0.003	ug/l	33.46	253.34	4.282E-05	Pulse	0.10	3
Pb			1	0.003	ug/l	61.83	213.34	3.607E-05	Pulse	0.10	3
Pb			1	0.004	ug/l	15.93	1,043.39	1.764E-04	Pulse	0.10	3
Na			2	9.311	ug/l	8.40	18,686.02	1.316E-01	Pulse	0.30	3
Mg			2	0.182	ug/l	58.35	441.12	3.105E-03	Pulse	0.30	3
Al			2	-0.110	ug/l	-242.72	131.11	9.235E-04	Pulse	0.30	3
K			2	1.503	ug/l	13.16	6,420.20	4.522E-02	Pulse	0.30	3
Ca			2	-0.950	ug/l	-119.82	138.89	9.789E-04	Pulse	0.30	3
Ti			2	-0.055	ug/l	-44.35	4.45	3.133E-05	Pulse	0.30	3
V			2	-0.019	ug/l	-39.71	275.56	1.942E-03	Pulse	0.30	3
Cr			2	0.010	ug/l	55.50	400.01	2.819E-03	Pulse	0.30	3
Mn			2	0.079	ug/l	24.00	324.45	2.283E-03	Pulse	0.30	3
Fe			2	-0.093	ug/l	-30.94	4,938.57	3.478E-02	Pulse	0.30	3
Co			2	0.000	ug/l	523.41	111.11	7.821E-04	Pulse	0.30	3
Ni			2	-0.001	ug/l	-1014.61	235.56	1.657E-03	Pulse	0.30	3
Cu			2	0.024	ug/l	22.78	560.02	3.943E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.017	ug/l	-69.70	274.45	1.933E-03	Pulse	0.30	3
As			2	-0.001	ug/l	-706.99	11.67	8.233E-05	Pulse	1.00	3
Cd			2	0.000	ug/l	-1307.36	14.43	1.674E-05	Pulse	0.30	3
Sn			2	-0.145	ug/l	-21.11	1,927.92	2.237E-03	Pulse	0.30	3
Se			3	-0.254	ug/l	-9.78	31.40	2.217E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,796,431.51	0.37	92.0	Pulse	0.10	3
1	Sc		5,015,729.09	0.78	88.4	Pulse	0.10	3
1	Ge		968,266.60	0.94	90.2	Pulse	0.10	3
1	Ge		1,349,876.75	0.54	91.4	Pulse	0.10	3
1	Rh		6,703,460.53	0.14	91.6	Analog	0.10	3
1	In		7,204,237.07	0.47	93.8	Analog	0.10	3
1	Tb		9,700,985.90	0.73	95.1	Analog	0.10	3
1	Ho		937,885.09	0.68	97.5	Pulse	0.10	3
1	Bi		5,917,028.45	0.55	97.4	Mix	0.10	3
2	Sc		141,980.55	0.82	89.1	Pulse	0.30	3
2	Ge		90,241.43	0.50	93.1	Pulse	0.30	3
2	Ge		135,362.96	0.34	92.1	Pulse	0.30	3
2	Rh		2,799,401.35	0.79	92.1	Pulse	0.30	3
2	In		861,770.98	0.10	94.8	Pulse	0.30	3
2	Tb		3,445,403.13	0.22	94.9	Pulse	0.30	3
2	Ho		338,427.25	0.18	95.3	Pulse	0.30	3
2	Bi		2,388,023.10	0.11	95.7	Pulse	0.30	3
3	Sc		136,449.30	0.04	94.0	Pulse	0.30	3
3	Ge		93,743.56	0.26	92.9	Pulse	0.30	3
3	Ge		141,643.65	0.29	93.5	Pulse	0.30	3
3	Rh		1,747,875.00	0.61	94.7	Pulse	0.30	3
3	Tb		2,891,544.40	0.58	98.5	Pulse	0.30	3

Quantitation Report

File Name	093SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 21:54
Sample Name	jc77083-11
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.055	ug/l	5.18	369.34	1.035E-04	Pulse	0.25	3
B			1	264.957	ug/l	0.56	1,577,261.92	4.420E-01	Pulse	0.15	3
Ca			1	29389.441	ug/l	0.53	22,336,034.67	4.530E+00	Analog	0.10	3
Sr			1	205.758	ug/l	1.54	6,622,034.07	1.185E+00	Analog	0.10	3
Mo			1	1.141	ug/l	3.19	6,945.11	1.243E-03	Pulse	0.10	3
Ag			1	0.108	ug/l	10.40	1,920.19	2.995E-04	Pulse	0.10	3
Sn			1	0.699	ug/l	4.99	9,403.16	1.468E-03	Pulse	0.10	3
Sb			1	0.312	ug/l	4.78	4,987.69	5.431E-04	Pulse	0.10	3
Ba			1	327.208	ug/l	0.93	1,701,590.34	1.853E-01	Pulse	0.10	3
Tl			1	0.019	ug/l	13.40	860.07	1.784E-04	Pulse	0.10	3
Pb			1	9.717	ug/l	1.47	91,026.59	1.887E-02	Pulse	0.10	3
Pb			1	9.579	ug/l	1.80	78,974.53	1.638E-02	Pulse	0.10	3
Pb			1	9.657	ug/l	0.84	367,943.91	7.629E-02	Pulse	0.10	3
Na			2	615178.524	ug/l	0.44	395,144,357.63	2.935E+03	Analog	0.30	3
Mg			2	6237.580	ug/l	0.61	1,851,267.50	1.375E+01	Pulse	0.30	3
Al			2	629.238	ug/l	1.03	57,307.77	4.257E-01	Pulse	0.30	3
K			2	5663.881	ug/l	1.07	994,180.76	7.385E+00	Pulse	0.30	3
Ca			2	30245.817	ug/l	0.71	294,735.99	2.189E+00	Pulse	0.30	3
Ti			2	16.335	ug/l	6.24	1,224.51	9.098E-03	Pulse	0.30	3
V			2	2.131	ug/l	1.77	6,043.39	4.489E-02	Pulse	0.30	3
Cr			2	2.560	ug/l	5.70	9,425.55	7.000E-02	Pulse	0.30	3
Mn			2	13468.770	ug/l	1.05	23,294,609.63	1.730E+02	Analog	0.30	3
Fe			2	14468.726	ug/l	1.11	42,842,064.96	3.182E+02	Analog	0.30	3
Co			2	0.825	ug/l	3.30	5,360.94	3.982E-02	Pulse	0.30	3
Ni			2	5.077	ug/l	2.36	9,151.53	6.799E-02	Pulse	0.30	3
Cu			2	2.363	ug/l	1.07	11,551.94	8.581E-02	Pulse	0.30	3
Zn			2	19.147	ug/l	0.74	12,604.93	9.363E-02	Pulse	0.30	3
As			2	3.857	ug/l	1.58	1,275.72	9.477E-03	Pulse	1.00	3
Cd			2	2.013	ug/l	3.04	1,938.74	2.624E-03	Pulse	0.30	3
Sn			2	-0.409	ug/l	-10.23	1,457.87	1.973E-03	Pulse	0.30	3
Se			3	-0.191	ug/l	-49.48	49.40	3.839E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,568,580.45	0.28	86.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,931,298.57	0.70	87.0	Pulse	0.10	3
1	Ge		880,725.35	1.09	82.1	Pulse	0.10	3
1	Ge		1,215,042.01	1.18	82.2	Pulse	0.10	3
1	Rh		5,586,434.29	0.95	76.4	Pulse	0.10	3
1	In		6,407,637.92	1.02	83.5	Analog	0.10	3
1	Tb		9,184,738.82	0.37	90.0	Analog	0.10	3
1	Ho		882,353.61	0.81	91.7	Pulse	0.10	3
1	Bi		4,822,789.20	1.07	79.4	Pulse	0.10	3
2	Sc		134,620.48	0.58	84.5	Pulse	0.30	3
2	Ge		77,788.25	0.67	80.2	Pulse	0.30	3
2	Ge		117,970.88	0.48	80.3	Pulse	0.30	3
2	Rh		2,312,737.90	0.56	76.1	Pulse	0.30	3
2	In		738,838.04	0.25	81.2	Pulse	0.30	3
2	Tb		3,118,026.89	0.61	85.9	Pulse	0.30	3
2	Ho		306,689.28	0.96	86.4	Pulse	0.30	3
2	Bi		1,882,364.23	0.49	75.4	Pulse	0.30	3
3	Sc		132,071.98	0.39	91.0	Pulse	0.30	3
3	Ge		84,789.52	1.06	84.0	Pulse	0.30	3
3	Ge		128,847.93	1.64	85.0	Pulse	0.30	3
3	Rh		1,459,062.89	0.36	79.1	Pulse	0.30	3
3	Tb		2,594,796.77	0.19	88.4	Pulse	0.30	3

Quantitation Report

File Name	094SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 21:59
Sample Name	jc77083-12
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.041	ug/l	4.67	280.01	7.943E-05	Pulse	0.25	3
B			1	601.344	ug/l	1.00	3,514,509.03	9.968E-01	Pulse	0.15	3
Ca			1	130506.235	ug/l	0.17	98,418,341.87	2.010E+01	Analog	0.10	3
Sr			1	588.720	ug/l	0.18	17,932,203.07	3.392E+00	Analog	0.10	3
Mo			1	0.929	ug/l	6.51	5,367.79	1.015E-03	Pulse	0.10	3
Ag			1	0.053	ug/l	12.07	926.73	1.509E-04	Pulse	0.10	3
Sn			1	0.451	ug/l	8.40	6,541.61	1.065E-03	Pulse	0.10	3
Sb			1	0.175	ug/l	8.01	3,143.79	3.595E-04	Pulse	0.10	3
Ba			1	451.056	ug/l	1.31	2,233,828.15	2.554E-01	Pulse	0.10	3
Tl			1	0.151	ug/l	3.39	4,280.77	9.500E-04	Pulse	0.10	3
Pb			1	1.669	ug/l	0.49	14,717.87	3.266E-03	Pulse	0.10	3
Pb			1	1.570	ug/l	1.65	12,185.51	2.704E-03	Pulse	0.10	3
Pb			1	1.592	ug/l	0.62	57,131.71	1.268E-02	Pulse	0.10	3
Na			2	919632.509	ug/l	0.98	573,579,106.10	4.388E+03	Analog	0.30	3
Mg			2	34780.887	ug/l	0.65	10,022,031.55	7.667E+01	Analog	0.30	3
Al			2	572.804	ug/l	0.86	50,669.09	3.876E-01	Pulse	0.30	3
K			2	2070.635	ug/l	0.58	356,344.14	2.726E+00	Pulse	0.30	3
Ca			2	134951.208	ug/l	0.60	1,276,424.88	9.765E+00	Pulse	0.30	3
Ti			2	12.582	ug/l	3.06	918.92	7.029E-03	Pulse	0.30	3
V			2	1.917	ug/l	3.44	5,314.25	4.066E-02	Pulse	0.30	3
Cr			2	2.121	ug/l	1.21	7,632.94	5.839E-02	Pulse	0.30	3
Mn			2	22117.720	ug/l	0.64	37,144,190.75	2.842E+02	Analog	0.30	3
Fe			2	19369.484	ug/l	0.21	55,689,394.46	4.260E+02	Analog	0.30	3
Co			2	0.515	ug/l	3.12	3,284.81	2.513E-02	Pulse	0.30	3
Ni			2	16.353	ug/l	0.74	28,130.77	2.152E-01	Pulse	0.30	3
Cu			2	3.695	ug/l	2.18	17,374.88	1.329E-01	Pulse	0.30	3
Zn			2	30.241	ug/l	1.02	19,172.44	1.467E-01	Pulse	0.30	3
As			2	1.847	ug/l	2.87	599.34	4.585E-03	Pulse	1.00	3
Cd			2	0.026	ug/l	44.16	35.35	5.062E-05	Pulse	0.30	3
Sn			2	-0.641	ug/l	-4.84	1,018.94	1.458E-03	Pulse	0.30	3
Se			3	0.159	ug/l	174.32	67.47	5.626E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,525,796.61	0.52	85.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,895,713.78	0.37	86.3	Pulse	0.10	3
1	Ge		839,370.12	0.91	78.2	Pulse	0.10	3
1	Ge		1,150,945.32	1.11	77.9	Pulse	0.10	3
1	Rh		5,287,231.17	0.69	72.3	Pulse	0.10	3
1	In		6,142,717.02	0.79	80.0	Analog	0.10	3
1	Tb		8,747,013.00	0.51	85.7	Analog	0.10	3
1	Ho		850,589.62	0.84	88.4	Pulse	0.10	3
1	Bi		4,506,020.35	1.04	74.2	Pulse	0.10	3
2	Sc		130,717.45	0.48	82.0	Pulse	0.30	3
2	Ge		74,966.42	1.36	77.3	Pulse	0.30	3
2	Ge		111,628.96	0.66	75.9	Pulse	0.30	3
2	Rh		2,149,970.54	0.20	70.7	Pulse	0.30	3
2	In		698,807.62	0.52	76.8	Pulse	0.30	3
2	Tb		2,946,704.54	0.54	81.2	Pulse	0.30	3
2	Ho		291,114.64	0.26	82.0	Pulse	0.30	3
2	Bi		1,733,975.80	0.31	69.5	Pulse	0.30	3
3	Sc		127,399.89	0.86	87.8	Pulse	0.30	3
3	Ge		79,500.75	1.47	78.8	Pulse	0.30	3
3	Ge		119,883.50	0.31	79.1	Pulse	0.30	3
3	Rh		1,351,580.47	0.65	73.3	Pulse	0.30	3
3	Tb		2,442,133.17	0.36	83.2	Pulse	0.30	3

Quantitation Report

File Name	095SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 22:04
Sample Name	jc77083-13
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.340	ug/l	1.27	2,233.51	6.072E-04	Pulse	0.25	3
B			1	163.679	ug/l	0.12	1,011,336.94	2.749E-01	Pulse	0.15	3
Ca			1	40885.571	ug/l	1.47	31,855,633.69	6.300E+00	Analog	0.10	3
Sr			1	72.215	ug/l	0.54	2,640,650.28	4.162E-01	Pulse	0.10	3
Mo			1	1.358	ug/l	3.61	9,363.13	1.476E-03	Pulse	0.10	3
Ag			1	0.033	ug/l	12.67	690.05	9.804E-05	Pulse	0.10	3
Sn			1	0.593	ug/l	1.76	9,116.32	1.295E-03	Pulse	0.10	3
Sb			1	0.107	ug/l	16.36	2,707.00	2.679E-04	Pulse	0.10	3
Ba			1	143.744	ug/l	1.61	822,518.71	8.139E-02	Pulse	0.10	3
Tl			1	0.107	ug/l	9.52	3,920.65	6.928E-04	Pulse	0.10	3
Pb			1	4.392	ug/l	1.26	48,370.05	8.547E-03	Pulse	0.10	3
Pb			1	4.153	ug/l	2.27	40,245.78	7.113E-03	Pulse	0.10	3
Pb			1	4.199	ug/l	0.47	188,100.07	3.324E-02	Pulse	0.10	3
Na			2	26889.803	ug/l	0.51	17,704,220.41	1.283E+02	Analog	0.30	3
Mg			2	11596.673	ug/l	0.42	3,526,564.30	2.557E+01	Pulse	0.30	3
Al			2	6876.625	ug/l	0.84	640,297.95	4.642E+00	Pulse	0.30	3
K			2	2520.337	ug/l	1.07	456,479.96	3.309E+00	Pulse	0.30	3
Ca			2	41137.797	ug/l	0.43	410,721.93	2.977E+00	Pulse	0.30	3
Ti			2	138.148	ug/l	1.84	10,518.99	7.626E-02	Pulse	0.30	3
V			2	10.819	ug/l	0.91	29,938.20	2.170E-01	Pulse	0.30	3
Cr			2	11.048	ug/l	0.49	40,640.92	2.946E-01	Pulse	0.30	3
Mn			2	3921.566	ug/l	0.96	6,950,264.72	5.038E+01	Analog	0.30	3
Fe			2	9799.105	ug/l	1.19	29,733,607.71	2.155E+02	Analog	0.30	3
Co			2	3.697	ug/l	2.29	24,254.67	1.758E-01	Pulse	0.30	3
Ni			2	9.726	ug/l	0.26	17,750.79	1.287E-01	Pulse	0.30	3
Cu			2	9.400	ug/l	1.00	46,161.38	3.346E-01	Pulse	0.30	3
Zn			2	17.547	ug/l	1.93	11,862.17	8.599E-02	Pulse	0.30	3
As			2	1.294	ug/l	3.98	446.68	3.239E-03	Pulse	1.00	3
Cd			2	0.010	ug/l	112.86	24.03	3.015E-05	Pulse	0.30	3
Sn			2	-0.469	ug/l	-3.76	1,467.87	1.840E-03	Pulse	0.30	3
Se			3	0.247	ug/l	78.02	87.87	6.077E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,678,417.96	1.26	89.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,056,788.88	0.90	89.2	Pulse	0.10	3
1	Ge		947,918.71	0.61	88.3	Pulse	0.10	3
1	Ge		1,303,472.72	0.94	88.2	Pulse	0.10	3
1	Rh		6,345,108.03	0.71	86.7	Analog	0.10	3
1	In		7,037,453.03	0.29	91.7	Analog	0.10	3
1	Tb		10,105,742.76	0.13	99.0	Analog	0.10	3
1	Ho		969,897.80	2.15	100.8	Pulse	0.10	3
1	Bi		5,659,149.71	1.37	93.2	Pulse	0.10	3
2	Sc		137,946.01	0.62	86.6	Pulse	0.30	3
2	Ge		84,230.93	1.56	86.9	Pulse	0.30	3
2	Ge		126,823.05	0.60	86.3	Pulse	0.30	3
2	Rh		2,627,158.09	0.53	86.4	Pulse	0.30	3
2	In		797,632.32	0.47	87.7	Pulse	0.30	3
2	Tb		3,414,725.70	0.59	94.0	Pulse	0.30	3
2	Ho		337,010.01	0.84	94.9	Pulse	0.30	3
2	Bi		2,220,451.02	0.18	89.0	Pulse	0.30	3
3	Sc		144,170.09	0.63	99.3	Pulse	0.30	3
3	Ge		95,098.92	0.59	94.2	Pulse	0.30	3
3	Ge		144,667.03	0.64	95.5	Pulse	0.30	3
3	Rh		1,736,754.79	1.16	94.1	Pulse	0.30	3
3	Tb		2,966,203.15	0.74	101.0	Pulse	0.30	3

Quantitation Report

File Name	096SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 22:09
Sample Name	mp10222-s3
Sample Type	Sample
Comment	
Prep Dilution	3.000
Auto Dilution	N/A
Total Dilution	3.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	76.287	ug/l	0.29	331,537.00	8.985E-02	Pulse	0.25	3
B			1	183.734	ug/l	0.40	763,824.53	2.070E-01	Pulse	0.15	3
Ca			1	44339.927	ug/l	0.80	22,977,453.82	4.556E+00	Analog	0.10	3
Sr			1	322.431	ug/l	0.98	7,604,421.35	1.238E+00	Analog	0.10	3
Mo			1	88.405	ug/l	2.31	388,145.61	6.322E-02	Pulse	0.10	3
Ag			1	72.941	ug/l	0.46	910,793.37	1.318E-01	Pulse	0.10	3
Sn			1	82.360	ug/l	0.58	618,936.33	8.954E-02	Pulse	0.10	3
Sb			1	81.268	ug/l	0.13	709,467.49	7.306E-02	Pulse	0.10	3
Ba			1	210.544	ug/l	0.73	771,763.97	7.948E-02	Pulse	0.10	3
Tl			1	81.217	ug/l	0.42	1,705,666.90	3.176E-01	Pulse	0.10	3
Pb			1	83.872	ug/l	0.61	582,401.07	1.085E-01	Pulse	0.10	3
Pb			1	83.915	ug/l	0.54	512,961.09	9.552E-02	Pulse	0.10	3
Pb			1	82.929	ug/l	0.60	2,342,474.07	4.362E-01	Pulse	0.10	3
Na			2	309706.920	ug/l	0.71	135,344,430.18	9.852E+02	Analog	0.30	3
Mg			2	8171.155	ug/l	0.82	1,649,880.21	1.201E+01	Pulse	0.30	3
Al			2	3783.201	ug/l	1.31	233,961.35	1.703E+00	Pulse	0.30	3
K			2	10350.815	ug/l	0.90	1,234,791.62	8.989E+00	Pulse	0.30	3
Ca			2	44986.451	ug/l	0.91	298,237.21	2.171E+00	Pulse	0.30	3
Ti			2	90.057	ug/l	2.55	4,559.57	3.319E-02	Pulse	0.30	3
V			2	82.322	ug/l	1.00	149,732.30	1.090E+00	Pulse	0.30	3
Cr			2	79.038	ug/l	1.11	191,857.22	1.397E+00	Pulse	0.30	3
Mn			2	1106.192	ug/l	0.92	1,301,595.75	9.475E+00	Pulse	0.30	3
Fe			2	3989.599	ug/l	1.46	8,041,001.90	5.853E+01	Analog	0.30	3
Co			2	77.084	ug/l	0.79	334,452.90	2.435E+00	Pulse	0.30	3
Ni			2	74.889	ug/l	0.47	89,785.67	6.536E-01	Pulse	0.30	3
Cu			2	75.358	ug/l	0.76	244,357.15	1.779E+00	Pulse	0.30	3
Zn			2	68.377	ug/l	3.28	30,224.67	2.200E-01	Pulse	0.30	3
As			2	76.699	ug/l	1.38	17,110.62	1.246E-01	Pulse	1.00	3
Cd			2	74.750	ug/l	0.30	50,315.85	6.456E-02	Pulse	0.30	3
Sn			2	82.875	ug/l	0.58	97,583.25	1.252E-01	Pulse	0.30	3
Se			3	342.402	ug/l	0.99	16,395.85	1.172E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,690,049.74	0.69	89.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,043,513.16	0.24	88.9	Pulse	0.10	3
1	Ge		943,277.30	0.98	87.9	Pulse	0.10	3
1	Ge		1,309,319.96	0.80	88.6	Pulse	0.10	3
1	Rh		6,140,837.82	1.35	83.9	Analog	0.10	3
1	In		6,912,457.95	0.61	90.0	Analog	0.10	3
1	Tb		9,710,546.73	0.67	95.2	Analog	0.10	3
1	Ho		941,157.25	0.67	97.8	Pulse	0.10	3
1	Bi		5,369,949.92	0.39	88.4	Pulse	0.10	3
2	Sc		137,376.95	0.47	86.2	Pulse	0.30	3
2	Ge		82,532.37	0.51	85.1	Pulse	0.30	3
2	Ge		125,522.74	0.47	85.4	Pulse	0.30	3
2	Rh		2,526,366.08	0.43	83.1	Pulse	0.30	3
2	In		779,366.30	0.31	85.7	Pulse	0.30	3
2	Tb		3,320,475.98	0.32	91.4	Pulse	0.30	3
2	Ho		328,395.78	0.89	92.5	Pulse	0.30	3
2	Bi		2,098,595.75	0.35	84.1	Pulse	0.30	3
3	Sc		141,538.28	1.04	97.5	Pulse	0.30	3
3	Ge		91,747.77	0.90	90.9	Pulse	0.30	3
3	Ge		139,949.89	0.87	92.3	Pulse	0.30	3
3	Rh		1,633,456.71	0.40	88.5	Pulse	0.30	3
3	Tb		2,833,389.89	0.66	96.5	Pulse	0.30	3

Quantitation Report

File Name	097SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 22:14
Sample Name	mp10222-s4
Sample Type	Sample
Comment	
Prep Dilution	3.000
Auto Dilution	N/A
Total Dilution	3.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	75.458	ug/l	0.54	323,898.88	8.887E-02	Pulse	0.25	3
B			1	178.406	ug/l	0.60	733,125.28	2.011E-01	Pulse	0.15	3
Ca			1	43009.738	ug/l	1.51	22,208,349.67	4.419E+00	Analog	0.10	3
Sr			1	320.943	ug/l	0.81	7,537,763.64	1.233E+00	Analog	0.10	3
Mo			1	88.234	ug/l	1.10	385,816.54	6.310E-02	Pulse	0.10	3
Ag			1	72.207	ug/l	0.78	902,506.13	1.304E-01	Pulse	0.10	3
Sn			1	81.819	ug/l	0.64	615,481.49	8.895E-02	Pulse	0.10	3
Sb			1	80.353	ug/l	2.09	712,709.96	7.224E-02	Pulse	0.10	3
Ba			1	203.157	ug/l	1.50	756,636.99	7.669E-02	Pulse	0.10	3
Tl			1	80.841	ug/l	0.48	1,701,638.57	3.162E-01	Pulse	0.10	3
Pb			1	83.243	ug/l	0.69	579,351.43	1.076E-01	Pulse	0.10	3
Pb			1	83.461	ug/l	0.05	511,336.49	9.501E-02	Pulse	0.10	3
Pb			1	82.536	ug/l	0.50	2,336,653.40	4.341E-01	Pulse	0.10	3
Na			2	299337.635	ug/l	1.01	131,507,323.66	9.522E+02	Analog	0.30	3
Mg			2	7958.795	ug/l	0.67	1,615,568.51	1.170E+01	Pulse	0.30	3
Al			2	3718.784	ug/l	0.44	231,212.11	1.674E+00	Pulse	0.30	3
K			2	10027.066	ug/l	1.02	1,202,691.72	8.709E+00	Pulse	0.30	3
Ca			2	43230.816	ug/l	0.45	288,140.75	2.086E+00	Pulse	0.30	3
Ti			2	85.631	ug/l	0.59	4,359.51	3.157E-02	Pulse	0.30	3
V			2	80.278	ug/l	1.00	146,800.82	1.063E+00	Pulse	0.30	3
Cr			2	77.649	ug/l	0.76	189,497.04	1.372E+00	Pulse	0.30	3
Mn			2	1073.395	ug/l	0.86	1,269,717.07	9.194E+00	Pulse	0.30	3
Fe			2	3945.259	ug/l	1.10	7,993,791.07	5.788E+01	Analog	0.30	3
Co			2	76.191	ug/l	0.61	332,341.69	2.406E+00	Pulse	0.30	3
Ni			2	73.956	ug/l	0.87	89,141.24	6.454E-01	Pulse	0.30	3
Cu			2	73.785	ug/l	0.62	240,533.57	1.742E+00	Pulse	0.30	3
Zn			2	68.546	ug/l	0.60	30,462.80	2.206E-01	Pulse	0.30	3
As			2	76.750	ug/l	1.05	17,213.06	1.246E-01	Pulse	1.00	3
Cd			2	74.535	ug/l	1.00	50,407.15	6.437E-02	Pulse	0.30	3
Sn			2	82.095	ug/l	1.15	97,143.12	1.241E-01	Pulse	0.30	3
Se			3	340.157	ug/l	1.15	16,218.20	1.164E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,644,791.43	0.98	88.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,025,701.18	0.77	88.6	Pulse	0.10	3
1	Ge		935,480.84	0.70	87.2	Pulse	0.10	3
1	Ge		1,299,662.64	1.10	88.0	Pulse	0.10	3
1	Rh		6,114,901.37	0.80	83.6	Analog	0.10	3
1	In		6,919,422.76	1.00	90.1	Analog	0.10	3
1	Tb		9,866,613.39	0.50	96.7	Analog	0.10	3
1	Ho		944,989.31	0.17	98.2	Pulse	0.10	3
1	Bi		5,382,142.84	0.54	88.6	Pulse	0.10	3
2	Sc		138,109.49	0.86	86.7	Pulse	0.30	3
2	Ge		82,484.36	0.45	85.1	Pulse	0.30	3
2	Ge		125,506.25	0.23	85.4	Pulse	0.30	3
2	Rh		2,524,432.68	0.85	83.0	Pulse	0.30	3
2	In		783,040.28	0.48	86.1	Pulse	0.30	3
2	Tb		3,335,371.05	0.77	91.9	Pulse	0.30	3
2	Ho		327,987.96	0.76	92.4	Pulse	0.30	3
2	Bi		2,110,999.08	0.45	84.6	Pulse	0.30	3
3	Sc		138,919.40	0.66	95.7	Pulse	0.30	3
3	Ge		91,767.94	0.94	90.9	Pulse	0.30	3
3	Ge		139,348.28	1.23	92.0	Pulse	0.30	3
3	Rh		1,625,378.79	0.64	88.1	Pulse	0.30	3
3	Tb		2,852,923.15	0.77	97.2	Pulse	0.30	3

Quantitation Report

File Name	098SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 22:19
Sample Name	jc77077-9
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.037	ug/l	18.84	121.33	3.260E-05	Pulse	0.25	3
B			1	281.281	ug/l	0.35	709,245.11	1.905E-01	Pulse	0.15	3
Ca			1	213091.702	ug/l	0.98	67,651,693.99	1.313E+01	Analog	0.10	3
Sr			1	1109.598	ug/l	0.88	15,116,040.19	2.557E+00	Analog	0.10	3
Mo			1	0.945	ug/l	13.75	2,510.31	4.248E-04	Pulse	0.10	3
Ag			1	0.046	ug/l	11.15	386.69	5.767E-05	Pulse	0.10	3
Sn			1	0.169	ug/l	53.17	2,960.42	4.414E-04	Pulse	0.10	3
Sb			1	0.049	ug/l	76.77	1,413.47	1.499E-04	Pulse	0.10	3
Ba			1	400.575	ug/l	0.85	855,376.11	9.073E-02	Pulse	0.10	3
Tl			1	0.527	ug/l	3.09	6,565.07	1.303E-03	Pulse	0.10	3
Pb			1	0.443	ug/l	3.13	1,883.53	3.740E-04	Pulse	0.10	3
Pb			1	0.384	ug/l	8.29	1,443.47	2.866E-04	Pulse	0.10	3
Pb			1	0.442	ug/l	3.87	7,634.49	1.516E-03	Pulse	0.10	3
Na			2	1065138.144	ug/l	1.19	286,201,855.29	2.033E+03	Analog	0.30	3
Mg			2	20868.979	ug/l	0.14	2,590,789.62	1.840E+01	Pulse	0.30	3
Al			2	87.665	ug/l	3.09	3,482.63	2.474E-02	Pulse	0.30	3
K			2	7663.679	ug/l	0.69	565,365.03	4.016E+00	Pulse	0.30	3
Ca			2	219485.393	ug/l	0.75	894,379.34	6.353E+00	Pulse	0.30	3
Ti			2	5.847	ug/l	17.00	194.45	1.382E-03	Pulse	0.30	3
V			2	0.655	ug/l	20.88	1,108.94	7.875E-03	Pulse	0.30	3
Cr			2	0.360	ug/l	22.07	854.48	6.072E-03	Pulse	0.30	3
Mn			2	165.340	ug/l	0.87	119,652.61	8.500E-01	Pulse	0.30	3
Fe			2	123.943	ug/l	0.64	158,967.74	1.129E+00	Pulse	0.30	3
Co			2	0.279	ug/l	3.36	851.15	6.046E-03	Pulse	0.30	3
Ni			2	4.944	ug/l	3.31	3,873.84	2.752E-02	Pulse	0.30	3
Cu			2	2.713	ug/l	2.14	5,721.07	4.064E-02	Pulse	0.30	3
Zn			2	1.368	ug/l	22.43	663.36	4.711E-03	Pulse	0.30	3
As			2	0.274	ug/l	44.69	50.00	3.554E-04	Pulse	1.00	3
Cd			2	0.968	ug/l	12.42	403.22	5.186E-04	Pulse	0.30	3
Sn			2	-2.547	ug/l	-1.91	483.34	6.219E-04	Pulse	0.30	3
Se			3	-0.538	ug/l	-14.49	48.73	3.714E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,722,233.57	0.51	90.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,152,029.40	0.59	90.8	Mix	0.10	3
1	Ge		924,486.65	0.77	86.1	Pulse	0.10	3
1	Ge		1,278,058.06	0.87	86.5	Pulse	0.10	3
1	Rh		5,911,831.58	0.50	80.8	Analog	0.10	3
1	In		6,704,982.87	0.24	87.3	Analog	0.10	3
1	Tb		9,428,130.90	0.06	92.4	Analog	0.10	3
1	Ho		903,604.52	1.68	93.9	Pulse	0.10	3
1	Bi		5,036,494.20	0.50	82.9	Pulse	0.10	3
2	Sc		140,779.90	0.48	88.3	Pulse	0.30	3
2	Ge		82,241.94	0.69	84.8	Pulse	0.30	3
2	Ge		124,865.01	0.36	84.9	Pulse	0.30	3
2	Rh		2,417,938.51	0.81	79.5	Pulse	0.30	3
2	In		777,056.85	0.84	85.4	Pulse	0.30	3
2	Tb		3,212,069.25	0.27	88.5	Pulse	0.30	3
2	Ho		318,213.06	0.35	89.7	Pulse	0.30	3
2	Bi		1,979,926.86	0.43	79.3	Pulse	0.30	3
3	Sc		134,346.75	1.21	92.5	Pulse	0.30	3
3	Ge		86,430.06	0.25	85.6	Pulse	0.30	3
3	Ge		131,231.88	0.31	86.6	Pulse	0.30	3
3	Rh		1,498,227.37	0.07	81.2	Pulse	0.30	3
3	Tb		2,644,837.40	0.44	90.1	Pulse	0.30	3

Quantitation Report

File Name	099SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 22:24
Sample Name	jc76928-1 5
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.169	ug/l	7.10	241.34	6.612E-05	Pulse	0.25	3
B			1	56.822	ug/l	1.23	86,545.45	2.371E-02	Pulse	0.15	3
Ca			1	20486.761	ug/l	0.08	3,081,937.35	6.342E-01	Pulse	0.10	3
Sr			1	105.174	ug/l	0.77	773,742.90	1.213E-01	Pulse	0.10	3
Mo			1	0.632	ug/l	19.75	990.07	1.551E-04	Pulse	0.10	3
Ag			1	0.223	ug/l	26.13	910.13	1.286E-04	Pulse	0.10	3
Sn			1	0.032	ug/l	161.42	2,420.29	3.421E-04	Pulse	0.10	3
Sb			1	0.009	ug/l	478.42	1,213.44	1.260E-04	Pulse	0.10	3
Ba			1	35.943	ug/l	4.45	39,247.83	4.079E-03	Pulse	0.10	3
Tl			1	0.032	ug/l	44.49	610.04	1.047E-04	Pulse	0.10	3
Pb			1	35.002	ug/l	1.46	79,145.49	1.361E-02	Pulse	0.10	3
Pb			1	33.115	ug/l	0.97	65,911.48	1.133E-02	Pulse	0.10	3
Pb			1	33.526	ug/l	1.03	308,377.74	5.301E-02	Pulse	0.10	3
Na			2	40348.429	ug/l	0.95	5,221,365.07	3.855E+01	Analog	0.30	3
Mg			2	6720.278	ug/l	0.46	401,642.17	2.965E+00	Pulse	0.30	3
Al			2	2879.055	ug/l	1.94	52,781.51	3.897E-01	Pulse	0.30	3
K			2	2379.661	ug/l	0.78	89,187.98	6.584E-01	Pulse	0.30	3
Ca			2	20485.237	ug/l	1.17	40,304.20	2.975E-01	Pulse	0.30	3
Ti			2	115.000	ug/l	7.72	1,730.11	1.277E-02	Pulse	0.30	3
V			2	4.650	ug/l	6.18	2,859.18	2.111E-02	Pulse	0.30	3
Cr			2	3.049	ug/l	6.82	2,492.45	1.840E-02	Pulse	0.30	3
Mn			2	741.125	ug/l	0.34	257,994.52	1.905E+00	Pulse	0.30	3
Fe			2	4866.296	ug/l	0.61	2,904,720.86	2.144E+01	Pulse	0.30	3
Co			2	8.838	ug/l	1.58	11,442.97	8.447E-02	Pulse	0.30	3
Ni			2	24.851	ug/l	1.98	9,020.35	6.659E-02	Pulse	0.30	3
Cu			2	13.428	ug/l	1.52	13,169.83	9.722E-02	Pulse	0.30	3
Zn			2	36.668	ug/l	3.41	5,033.05	3.716E-02	Pulse	0.30	3
As			2	4.726	ug/l	10.92	323.67	2.389E-03	Pulse	1.00	3
Cd			2	0.095	ug/l	65.37	34.39	4.175E-05	Pulse	0.30	3
Sn			2	-5.383	ug/l	-1.15	406.68	4.943E-04	Pulse	0.30	3
Se			3	-2.043	ug/l	-19.80	37.60	2.725E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,650,052.58	0.47	88.5	Pulse	0.10	3
1	Sc		4,859,588.16	0.55	85.7	Pulse	0.10	3
1	Ge		952,460.61	1.21	88.8	Pulse	0.10	3

Quantitation Report

1	Ge		1,315,095.42	0.66	89.0	Pulse	0.10	3
1	Rh		6,377,240.95	1.18	87.2	Analog	0.10	3
1	In		7,072,274.87	0.93	92.1	Analog	0.10	3
1	Tb		9,624,069.02	0.82	94.3	Analog	0.10	3
1	Ho		925,826.44	0.34	96.2	Pulse	0.10	3
1	Bi		5,817,542.41	1.10	95.8	Mix	0.10	3
2	Sc		135,459.67	0.24	85.0	Pulse	0.30	3
2	Ge		86,426.64	0.22	89.1	Pulse	0.30	3
2	Ge		128,742.24	0.65	87.6	Pulse	0.30	3
2	Rh		2,666,175.86	0.40	87.7	Pulse	0.30	3
2	In		822,801.23	0.54	90.5	Pulse	0.30	3
2	Tb		3,326,411.12	0.46	91.6	Pulse	0.30	3
2	Ho		328,215.25	0.50	92.5	Pulse	0.30	3
2	Bi		2,318,796.09	0.28	92.9	Pulse	0.30	3
3	Sc		130,833.42	1.13	90.1	Pulse	0.30	3
3	Ge		89,825.06	0.62	89.0	Pulse	0.30	3
3	Ge		138,021.84	0.26	91.1	Pulse	0.30	3
3	Rh		1,667,141.08	0.47	90.4	Pulse	0.30	3
3	Tb		2,807,497.39	0.32	95.6	Pulse	0.30	3

Quantitation Report

File Name	100SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 22:29
Sample Name	jc76929-1
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.082	ug/l	27.02	130.67	3.539E-05	Pulse	0.25	3
B			1	50.816	ug/l	1.54	80,214.76	2.173E-02	Pulse	0.15	3
Ca			1	20298.704	ug/l	0.03	3,096,492.25	6.284E-01	Pulse	0.10	3
Sr			1	103.826	ug/l	0.59	772,542.41	1.198E-01	Pulse	0.10	3
Mo			1	0.535	ug/l	4.43	866.72	1.344E-04	Pulse	0.10	3
Ag			1	0.206	ug/l	5.43	850.06	1.196E-04	Pulse	0.10	3
Sn			1	-0.062	ug/l	-80.48	2,213.60	3.116E-04	Pulse	0.10	3
Sb			1	0.070	ug/l	72.74	1,380.11	1.425E-04	Pulse	0.10	3
Ba			1	32.986	ug/l	1.52	36,273.44	3.744E-03	Pulse	0.10	3
Tl			1	0.041	ug/l	93.48	673.38	1.151E-04	Pulse	0.10	3
Pb			1	34.086	ug/l	2.42	77,641.67	1.325E-02	Pulse	0.10	3
Pb			1	31.205	ug/l	1.09	62,559.99	1.068E-02	Pulse	0.10	3
Pb			1	31.858	ug/l	1.18	295,161.65	5.038E-02	Pulse	0.10	3
Na			2	39357.948	ug/l	0.35	5,114,989.80	3.760E+01	Mix	0.30	3
Mg			2	6651.975	ug/l	0.44	399,229.69	2.935E+00	Pulse	0.30	3
Al			2	2482.336	ug/l	1.34	45,724.12	3.361E-01	Pulse	0.30	3
K			2	2398.002	ug/l	0.75	90,207.63	6.632E-01	Pulse	0.30	3
Ca			2	20675.537	ug/l	0.64	40,848.89	3.003E-01	Pulse	0.30	3
Ti			2	106.061	ug/l	5.74	1,602.88	1.179E-02	Pulse	0.30	3
V			2	3.860	ug/l	4.81	2,445.77	1.798E-02	Pulse	0.30	3
Cr			2	2.554	ug/l	3.87	2,146.83	1.578E-02	Pulse	0.30	3
Mn			2	709.469	ug/l	0.43	248,015.83	1.823E+00	Pulse	0.30	3
Fe			2	3957.071	ug/l	0.39	2,372,916.99	1.744E+01	Pulse	0.30	3
Co			2	8.422	ug/l	1.67	10,953.72	8.053E-02	Pulse	0.30	3
Ni			2	19.622	ug/l	0.60	7,200.55	5.293E-02	Pulse	0.30	3
Cu			2	11.880	ug/l	2.48	11,737.65	8.627E-02	Pulse	0.30	3
Zn			2	35.479	ug/l	0.63	4,899.68	3.602E-02	Pulse	0.30	3
As			2	4.145	ug/l	8.84	286.67	2.106E-03	Pulse	1.00	3
Cd			2	0.192	ug/l	29.17	55.49	6.695E-05	Pulse	0.30	3
Sn			2	-5.501	ug/l	-1.56	366.68	4.421E-04	Pulse	0.30	3
Se			3	-1.298	ug/l	-56.64	47.87	3.487E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,691,502.52	0.33	89.5	Pulse	0.10	3
1	Sc		4,927,531.28	0.79	86.9	Pulse	0.10	3
1	Ge		957,985.95	0.44	89.3	Pulse	0.10	3

Quantitation Report

1	Ge		1,333,124.46	1.04	90.2	Pulse	0.10	3
1	Rh		6,449,442.40	1.48	88.2	Analog	0.10	3
1	In		7,105,785.25	0.45	92.5	Analog	0.10	3
1	Tb		9,688,214.65	1.28	95.0	Analog	0.10	3
1	Ho		937,209.05	0.92	97.4	Pulse	0.10	3
1	Bi		5,859,643.45	2.23	96.5	Mix	0.10	3
2	Sc		136,030.82	0.94	85.4	Pulse	0.30	3
2	Ge		86,576.53	1.44	89.3	Pulse	0.30	3
2	Ge		130,534.17	1.16	88.8	Pulse	0.30	3
2	Rh		2,679,741.91	0.81	88.1	Pulse	0.30	3
2	In		829,672.32	0.72	91.2	Pulse	0.30	3
2	Tb		3,374,093.27	1.07	92.9	Pulse	0.30	3
2	Ho		331,834.69	0.64	93.5	Pulse	0.30	3
2	Bi		2,331,336.92	0.38	93.4	Pulse	0.30	3
3	Sc		132,636.38	0.48	91.4	Pulse	0.30	3
3	Ge		90,829.01	0.42	90.0	Pulse	0.30	3
3	Ge		137,320.60	0.20	90.6	Pulse	0.30	3
3	Rh		1,695,615.59	0.27	91.9	Pulse	0.30	3
3	Tb		2,838,278.36	0.52	96.7	Pulse	0.30	3

Quantitation Report

File Name	101SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 22:34
Sample Name	jc77331-1
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.373	ug/l	11.45	504.01	1.383E-04	Pulse	0.25	3
B			1	67.226	ug/l	0.09	98,880.87	2.714E-02	Pulse	0.15	3
Ca			1	20514.422	ug/l	0.59	3,096,721.93	6.351E-01	Pulse	0.10	3
Sr			1	127.439	ug/l	0.13	941,884.67	1.470E-01	Pulse	0.10	3
Mo			1	2.511	ug/l	5.92	3,577.23	5.581E-04	Pulse	0.10	3
Ag			1	0.609	ug/l	4.60	2,380.29	3.376E-04	Pulse	0.10	3
Sn			1	2.175	ug/l	13.94	7,325.75	1.038E-03	Pulse	0.10	3
Sb			1	0.711	ug/l	8.77	3,040.39	3.149E-04	Pulse	0.10	3
Ba			1	68.946	ug/l	4.08	75,429.83	7.816E-03	Pulse	0.10	3
Tl			1	0.105	ug/l	10.78	1,110.09	1.896E-04	Pulse	0.10	3
Pb			1	106.626	ug/l	1.04	242,255.47	4.138E-02	Pulse	0.10	3
Pb			1	98.484	ug/l	1.68	196,977.78	3.365E-02	Pulse	0.10	3
Pb			1	100.288	ug/l	0.23	926,900.03	1.583E-01	Pulse	0.10	3
Na			2	41808.342	ug/l	1.82	5,437,963.25	3.994E+01	Analog	0.30	3
Mg			2	7075.973	ug/l	1.01	425,074.10	3.122E+00	Pulse	0.30	3
Al			2	10113.680	ug/l	1.65	186,010.55	1.366E+00	Pulse	0.30	3
K			2	3166.429	ug/l	1.96	117,424.84	8.624E-01	Pulse	0.30	3
Ca			2	20654.305	ug/l	1.28	40,846.61	3.000E-01	Pulse	0.30	3
Ti			2	341.259	ug/l	3.61	5,135.29	3.772E-02	Pulse	0.30	3
V			2	15.281	ug/l	1.76	8,610.11	6.323E-02	Pulse	0.30	3
Cr			2	10.669	ug/l	2.44	7,996.47	5.873E-02	Pulse	0.30	3
Mn			2	560.937	ug/l	1.65	196,284.12	1.442E+00	Pulse	0.30	3
Fe			2	14022.001	ug/l	2.46	8,402,617.72	6.172E+01	Analog	0.30	3
Co			2	17.052	ug/l	1.96	22,097.13	1.623E-01	Pulse	0.30	3
Ni			2	62.558	ug/l	0.75	22,476.59	1.651E-01	Pulse	0.30	3
Cu			2	24.927	ug/l	1.11	24,311.36	1.785E-01	Pulse	0.30	3
Zn			2	95.958	ug/l	3.85	12,777.33	9.385E-02	Pulse	0.30	3
As			2	14.612	ug/l	3.45	980.70	7.202E-03	Pulse	1.00	3
Cd			2	0.511	ug/l	17.05	123.16	1.495E-04	Pulse	0.30	3
Sn			2	-3.511	ug/l	-4.63	1,091.17	1.323E-03	Pulse	0.30	3
Se			3	0.771	ug/l	146.72	76.80	5.601E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,643,041.40	0.28	88.3	Pulse	0.10	3
1	Sc		4,876,501.39	0.87	86.0	Pulse	0.10	3
1	Ge		945,962.82	0.94	88.1	Pulse	0.10	3

Quantitation Report

1	Ge		1,304,490.03	0.68	88.3	Pulse	0.10	3
1	Rh		6,408,119.28	0.80	87.6	Analog	0.10	3
1	In		7,052,466.78	0.64	91.8	Analog	0.10	3
1	Tb		9,655,449.44	1.83	94.6	Analog	0.10	3
1	Ho		923,510.09	0.39	96.0	Pulse	0.10	3
1	Bi		5,854,086.58	0.09	96.4	Analog	0.10	3
2	Sc		136,169.79	0.97	85.4	Pulse	0.30	3
2	Ge		85,397.81	0.97	88.1	Pulse	0.30	3
2	Ge		128,507.20	0.42	87.4	Pulse	0.30	3
2	Rh		2,658,115.17	0.50	87.4	Pulse	0.30	3
2	In		824,596.80	0.86	90.7	Pulse	0.30	3
2	Tb		3,350,342.36	0.39	92.3	Pulse	0.30	3
2	Ho		330,619.22	0.38	93.1	Pulse	0.30	3
2	Bi		2,314,756.02	0.50	92.8	Pulse	0.30	3
3	Sc		130,983.43	0.20	90.2	Pulse	0.30	3
3	Ge		89,991.51	0.37	89.2	Pulse	0.30	3
3	Ge		137,170.15	0.33	90.5	Pulse	0.30	3
3	Rh		1,674,573.92	0.42	90.8	Pulse	0.30	3
3	Tb		2,846,094.75	0.28	97.0	Pulse	0.30	3

Quantitation Report

File Name	102_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 22:39
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	49.469	ug/l	0.84	631,632.87	1.748E-01	Pulse	0.25	3
B			1	95.359	ug/l	0.92	1,154,797.94	3.195E-01	Pulse	0.15	3
Ca			1	4938.436	ug/l	2.16	7,385,142.60	1.524E+00	Analog	0.10	3
Sr			1	52.272	ug/l	0.57	3,804,204.84	6.024E-01	Pulse	0.10	3
Mo			1	51.442	ug/l	0.86	696,832.36	1.103E-01	Pulse	0.10	3
Ag			1	48.711	ug/l	0.19	1,830,315.13	2.640E-01	Pulse	0.10	3
Sn			1	50.245	ug/l	0.40	1,134,385.68	1.636E-01	Pulse	0.10	3
Sb			1	51.276	ug/l	0.85	1,324,837.48	1.382E-01	Pulse	0.10	3
Ba			1	50.068	ug/l	1.25	543,640.74	5.670E-02	Pulse	0.10	3
Tl			1	50.718	ug/l	0.06	3,363,350.78	5.950E-01	Pulse	0.10	3
Pb			1	51.439	ug/l	0.46	1,127,800.14	1.995E-01	Pulse	0.10	3
Pb			1	51.793	ug/l	0.64	999,688.45	1.769E-01	Pulse	0.10	3
Pb			1	51.262	ug/l	0.13	4,572,008.76	8.088E-01	Pulse	0.10	3
Na			2	4718.472	ug/l	1.22	6,195,333.92	4.507E+01	Analog	0.30	3
Mg			2	4804.685	ug/l	0.30	2,912,070.65	2.118E+01	Pulse	0.30	3
Al			2	4769.536	ug/l	0.41	885,055.38	6.439E+00	Pulse	0.30	3
K			2	4832.153	ug/l	0.48	1,728,183.13	1.257E+01	Pulse	0.30	3
Ca			2	5137.891	ug/l	0.27	102,352.03	7.446E-01	Pulse	0.30	3
Ti			2	51.959	ug/l	3.96	7,889.72	5.738E-02	Pulse	0.30	3
V			2	50.570	ug/l	0.14	275,809.91	2.006E+00	Pulse	0.30	3
Cr			2	49.746	ug/l	0.60	362,221.06	2.635E+00	Pulse	0.30	3
Mn			2	50.152	ug/l	0.76	177,175.27	1.289E+00	Pulse	0.30	3
Fe			2	4877.894	ug/l	1.23	29,500,963.27	2.146E+02	Analog	0.30	3
Co			2	48.867	ug/l	0.85	636,383.76	4.630E+00	Pulse	0.30	3
Ni			2	48.575	ug/l	1.04	174,595.01	1.270E+00	Pulse	0.30	3
Cu			2	47.835	ug/l	0.25	465,349.46	3.385E+00	Pulse	0.30	3
Zn			2	49.208	ug/l	1.34	64,964.61	4.726E-01	Pulse	0.30	3
As			2	49.776	ug/l	0.40	33,324.11	2.424E-01	Pulse	1.00	3
Cd			2	49.277	ug/l	0.30	103,713.65	1.277E-01	Pulse	0.30	3
Sn			2	50.202	ug/l	0.56	182,945.50	2.252E-01	Pulse	0.30	3
Se			3	200.828	ug/l	0.22	27,795.42	2.058E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,613,925.10	0.49	87.6	Pulse	0.10	3
1	Sc		4,844,490.97	0.66	85.4	Pulse	0.10	3
1	Ge		942,761.81	0.70	87.9	Pulse	0.10	3

Quantitation Report

1	Ge		1,309,393.50	0.69	88.6	Pulse	0.10	3
1	Rh		6,314,905.12	0.48	86.3	Analog	0.10	3
1	In		6,933,993.38	0.56	90.3	Analog	0.10	3
1	Tb		9,587,900.28	1.13	94.0	Analog	0.10	3
1	Ho		918,942.80	0.39	95.5	Pulse	0.10	3
1	Bi		5,652,630.54	0.81	93.1	Pulse	0.10	3
2	Sc		137,464.77	0.67	86.3	Pulse	0.30	3
2	Ge		85,224.96	0.66	87.9	Pulse	0.30	3
2	Ge		128,963.08	0.92	87.7	Pulse	0.30	3
2	Rh		2,634,105.11	0.47	86.6	Pulse	0.30	3
2	In		812,417.12	0.37	89.3	Pulse	0.30	3
2	Tb		3,349,479.11	0.71	92.2	Pulse	0.30	3
2	Ho		329,550.99	0.77	92.8	Pulse	0.30	3
2	Bi		2,253,498.31	0.82	90.3	Pulse	0.30	3
3	Sc		130,949.98	0.05	90.2	Pulse	0.30	3
3	Ge		88,656.27	0.54	87.9	Pulse	0.30	3
3	Ge		135,067.34	0.19	89.1	Pulse	0.30	3
3	Rh		1,629,302.37	0.61	88.3	Pulse	0.30	3
3	Tb		2,767,305.51	0.60	94.3	Pulse	0.30	3

Quantitation Report

File Name	103_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 22:44
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.006	ug/l	63.60	97.33	2.638E-05	Pulse	0.25	3
B			1	1.872	ug/l	2.02	41,134.42	1.114E-02	Pulse	0.15	3
Ca			1	-1.276	ug/l	-35.01	13,372.54	2.752E-03	Pulse	0.10	3
Sr			1	0.007	ug/l	33.30	1,516.81	2.307E-04	Pulse	0.10	3
Mo			1	0.033	ug/l	10.69	593.38	9.014E-05	Pulse	0.10	3
Ag			1	0.005	ug/l	18.47	260.01	3.635E-05	Pulse	0.10	3
Sn			1	0.437	ug/l	2.67	12,508.76	1.750E-03	Pulse	0.10	3
Sb			1	0.052	ug/l	26.13	2,533.65	2.646E-04	Pulse	0.10	3
Ba			1	0.009	ug/l	30.80	183.34	1.911E-05	Pulse	0.10	3
Tl			1	0.013	ug/l	13.76	1,350.11	2.253E-04	Pulse	0.10	3
Pb			1	0.011	ug/l	21.44	433.36	7.236E-05	Pulse	0.10	3
Pb			1	0.008	ug/l	43.81	303.35	5.068E-05	Pulse	0.10	3
Pb			1	0.008	ug/l	14.06	1,520.09	2.538E-04	Pulse	0.10	3
Na			2	12.438	ug/l	3.05	22,219.15	1.615E-01	Pulse	0.30	3
Mg			2	0.225	ug/l	35.30	453.35	3.294E-03	Pulse	0.30	3
Al			2	-0.082	ug/l	-133.04	132.23	9.610E-04	Pulse	0.30	3
K			2	1.158	ug/l	66.73	6,100.08	4.432E-02	Pulse	0.30	3
Ca			2	-0.852	ug/l	-137.10	136.67	9.930E-04	Pulse	0.30	3
Ti			2	-0.055	ug/l	-61.37	4.44	3.229E-05	Pulse	0.30	3
V			2	-0.019	ug/l	-9.87	267.78	1.946E-03	Pulse	0.30	3
Cr			2	0.002	ug/l	228.00	328.89	2.390E-03	Pulse	0.30	3
Mn			2	0.082	ug/l	19.79	326.68	2.374E-03	Pulse	0.30	3
Fe			2	0.136	ug/l	45.68	6,174.57	4.487E-02	Pulse	0.30	3
Co			2	0.000	ug/l	6704.98	104.45	7.587E-04	Pulse	0.30	3
Ni			2	-0.010	ug/l	-83.08	198.89	1.445E-03	Pulse	0.30	3
Cu			2	0.027	ug/l	31.72	574.46	4.173E-03	Pulse	0.30	3
Zn			2	-0.017	ug/l	-114.79	265.56	1.930E-03	Pulse	0.30	3
As			2	0.001	ug/l	416.70	13.00	9.447E-05	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.004	ug/l	98.37	22.18	2.655E-05	Pulse	0.30	3
Sn			2	-0.092	ug/l	-41.90	2,066.83	2.471E-03	Pulse	0.30	3
Se			3	-0.079	ug/l	-232.98	55.73	4.010E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,691,614.82	0.24	89.5	Pulse	0.10	3
1	Sc		4,859,655.87	0.41	85.7	Pulse	0.10	3
1	Ge		945,387.78	0.42	88.1	Pulse	0.10	3
1	Ge		1,309,608.19	1.45	88.6	Pulse	0.10	3
1	Rh		6,579,678.86	0.93	89.9	Analog	0.10	3
1	In		7,147,798.51	0.88	93.1	Analog	0.10	3
1	Tb		9,585,515.07	1.49	94.0	Analog	0.10	3
1	Ho		929,746.89	1.24	96.6	Pulse	0.10	3
1	Bi		5,991,098.45	0.90	98.6	Analog	0.10	3
2	Sc		137,621.26	0.21	86.4	Pulse	0.30	3
2	Ge		86,503.87	0.37	89.2	Pulse	0.30	3
2	Ge		129,908.25	0.33	88.4	Pulse	0.30	3
2	Rh		2,743,549.75	1.07	90.2	Pulse	0.30	3
2	In		836,464.16	0.51	92.0	Pulse	0.30	3
2	Tb		3,382,138.96	0.49	93.1	Pulse	0.30	3
2	Ho		332,412.70	0.92	93.7	Pulse	0.30	3
2	Bi		2,365,452.34	0.65	94.8	Pulse	0.30	3
3	Sc		131,928.79	2.20	90.9	Pulse	0.30	3
3	Ge		90,433.60	0.52	89.6	Pulse	0.30	3
3	Ge		138,949.49	0.18	91.7	Pulse	0.30	3
3	Rh		1,718,768.96	0.31	93.2	Pulse	0.30	3
3	Tb		2,856,567.25	1.03	97.3	Pulse	0.30	3

Quantitation Report

File Name	104SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 22:49
Sample Name	jc77331-2
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.127	ug/l	7.19	186.67	5.129E-05	Pulse	0.25	3
B			1	59.787	ug/l	1.22	89,886.91	2.469E-02	Pulse	0.15	3
Ca			1	20997.434	ug/l	0.97	3,148,059.22	6.499E-01	Pulse	0.10	3
Sr			1	129.502	ug/l	0.41	954,820.14	1.494E-01	Pulse	0.10	3
Mo			1	1.164	ug/l	10.04	1,720.17	2.692E-04	Pulse	0.10	3
Ag			1	0.240	ug/l	11.24	970.07	1.378E-04	Pulse	0.10	3
Sn			1	0.566	ug/l	12.25	3,630.59	5.157E-04	Pulse	0.10	3
Sb			1	0.358	ug/l	10.37	2,103.55	2.199E-04	Pulse	0.10	3
Ba			1	42.896	ug/l	1.12	46,557.87	4.866E-03	Pulse	0.10	3
Tl			1	0.784	ug/l	8.39	5,734.66	9.867E-04	Pulse	0.10	3
Pb			1	29.822	ug/l	1.21	67,407.69	1.160E-02	Pulse	0.10	3
Pb			1	26.760	ug/l	1.03	53,250.12	9.161E-03	Pulse	0.10	3
Pb			1	27.733	ug/l	0.54	255,029.04	4.387E-02	Pulse	0.10	3
Na			2	40786.102	ug/l	1.05	5,320,334.93	3.896E+01	Analog	0.30	3
Mg			2	6234.482	ug/l	0.55	375,610.40	2.751E+00	Pulse	0.30	3
Al			2	2393.531	ug/l	2.83	44,254.75	3.241E-01	Pulse	0.30	3
K			2	2590.547	ug/l	0.26	97,370.54	7.131E-01	Pulse	0.30	3
Ca			2	21382.218	ug/l	0.58	42,400.58	3.105E-01	Pulse	0.30	3
Ti			2	125.977	ug/l	18.25	1,910.75	1.398E-02	Pulse	0.30	3
V			2	3.745	ug/l	5.09	2,392.43	1.752E-02	Pulse	0.30	3
Cr			2	2.962	ug/l	5.55	2,449.10	1.794E-02	Pulse	0.30	3
Mn			2	613.811	ug/l	0.51	215,392.96	1.577E+00	Pulse	0.30	3
Fe			2	2775.104	ug/l	0.74	1,672,054.52	1.225E+01	Pulse	0.30	3
Co			2	7.918	ug/l	3.80	10,344.47	7.576E-02	Pulse	0.30	3
Ni			2	51.081	ug/l	0.57	18,444.93	1.351E-01	Pulse	0.30	3
Cu			2	11.886	ug/l	1.28	11,785.46	8.631E-02	Pulse	0.30	3
Zn			2	52.671	ug/l	1.57	7,162.75	5.246E-02	Pulse	0.30	3
As			2	3.711	ug/l	7.50	258.67	1.895E-03	Pulse	1.00	3
Cd			2	0.120	ug/l	34.44	39.91	4.805E-05	Pulse	0.30	3
Sn			2	-4.838	ug/l	-4.11	611.13	7.357E-04	Pulse	0.30	3
Se			3	-1.872	ug/l	-27.77	39.40	2.900E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,641,042.49	1.09	88.3	Pulse	0.10	3
1	Sc		4,843,778.78	0.69	85.4	Pulse	0.10	3
1	Ge		945,180.35	0.73	88.1	Pulse	0.10	3

Quantitation Report

1	Ge		1,309,169.87	0.83	88.6	Pulse	0.10	3
1	Rh		6,392,673.45	0.58	87.4	Analog	0.10	3
1	In		7,040,743.50	0.27	91.7	Analog	0.10	3
1	Tb		9,568,180.48	1.17	93.8	Analog	0.10	3
1	Ho		920,817.75	0.78	95.7	Pulse	0.10	3
1	Bi		5,812,933.45	0.24	95.7	Analog	0.10	3
2	Sc		136,546.07	0.61	85.7	Pulse	0.30	3
2	Ge		86,252.56	0.22	88.9	Pulse	0.30	3
2	Ge		129,553.02	0.41	88.1	Pulse	0.30	3
2	Rh		2,653,741.70	0.65	87.3	Pulse	0.30	3
2	In		830,639.40	0.41	91.3	Pulse	0.30	3
2	Tb		3,360,654.24	0.62	92.6	Pulse	0.30	3
2	Ho		330,786.34	0.60	93.2	Pulse	0.30	3
2	Bi		2,319,301.51	0.35	92.9	Pulse	0.30	3
3	Sc		130,176.17	1.02	89.7	Pulse	0.30	3
3	Ge		89,000.55	0.56	88.2	Pulse	0.30	3
3	Ge		135,860.60	0.22	89.7	Pulse	0.30	3
3	Rh		1,669,511.85	0.24	90.5	Pulse	0.30	3
3	Tb		2,814,694.06	1.37	95.9	Pulse	0.30	3

Quantitation Report

File Name	105SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 22:54
Sample Name	jc77083-14 4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.140	ug/l	7.73	910.70	2.539E-04	Pulse	0.25	3
B			1	26.076	ug/l	0.71	172,083.85	4.797E-02	Pulse	0.15	3
Ca			1	10144.060	ug/l	0.38	7,468,653.01	1.565E+00	Analog	0.10	3
Sr			1	15.858	ug/l	0.84	575,460.32	9.151E-02	Pulse	0.10	3
Mo			1	0.588	ug/l	3.32	4,090.71	6.505E-04	Pulse	0.10	3
Ag			1	0.026	ug/l	9.32	556.70	7.899E-05	Pulse	0.10	3
Sn			1	0.485	ug/l	6.48	7,885.61	1.119E-03	Pulse	0.10	3
Sb			1	0.060	ug/l	19.68	2,013.53	2.038E-04	Pulse	0.10	3
Ba			1	40.651	ug/l	0.62	227,561.64	2.302E-02	Pulse	0.10	3
Tl			1	0.060	ug/l	3.68	2,470.31	4.182E-04	Pulse	0.10	3
Pb			1	1.826	ug/l	2.08	21,089.05	3.571E-03	Pulse	0.10	3
Pb			1	1.741	ug/l	1.99	17,694.59	2.996E-03	Pulse	0.10	3
Pb			1	1.787	ug/l	0.35	83,963.91	1.422E-02	Pulse	0.10	3
Na			2	5187.010	ug/l	0.70	3,271,368.34	2.479E+01	Pulse	0.30	3
Mg			2	2720.929	ug/l	0.86	791,733.21	6.000E+00	Pulse	0.30	3
Al			2	3149.639	ug/l	0.68	280,613.09	2.127E+00	Pulse	0.30	3
K			2	1196.668	ug/l	0.32	210,192.41	1.593E+00	Pulse	0.30	3
Ca			2	10092.017	ug/l	0.18	96,495.07	7.313E-01	Pulse	0.30	3
Ti			2	59.010	ug/l	4.04	4,305.07	3.263E-02	Pulse	0.30	3
V			2	4.606	ug/l	0.51	12,394.76	9.393E-02	Pulse	0.30	3
Cr			2	5.052	ug/l	1.76	17,938.74	1.359E-01	Pulse	0.30	3
Mn			2	610.607	ug/l	0.94	1,035,184.96	7.845E+00	Pulse	0.30	3
Fe			2	3547.211	ug/l	2.06	10,299,142.65	7.805E+01	Analog	0.30	3
Co			2	1.540	ug/l	2.29	9,724.09	7.369E-02	Pulse	0.30	3
Ni			2	3.903	ug/l	5.32	6,948.22	5.266E-02	Pulse	0.30	3
Cu			2	6.680	ug/l	0.79	31,466.83	2.385E-01	Pulse	0.30	3
Zn			2	8.564	ug/l	0.91	5,678.83	4.304E-02	Pulse	0.30	3
As			2	0.508	ug/l	3.53	175.00	1.326E-03	Pulse	1.00	3
Cd			2	0.019	ug/l	74.36	33.14	4.224E-05	Pulse	0.30	3
Sn			2	-0.600	ug/l	-6.56	1,216.73	1.550E-03	Pulse	0.30	3
Se			3	-0.426	ug/l	-3.41	36.67	2.637E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,586,961.71	0.15	87.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,770,822.74	0.49	84.1	Pulse	0.10	3
1	Ge		921,763.87	0.43	85.9	Pulse	0.10	3
1	Ge		1,267,084.98	1.13	85.8	Pulse	0.10	3
1	Rh		6,288,865.32	0.40	86.0	Analog	0.10	3
1	In		7,045,298.86	0.67	91.8	Analog	0.10	3
1	Tb		9,883,534.85	1.08	96.9	Analog	0.10	3
1	Ho		956,114.41	1.02	99.4	Pulse	0.10	3
1	Bi		5,906,324.08	0.91	97.2	Mix	0.10	3
2	Sc		131,953.84	0.14	82.8	Pulse	0.30	3
2	Ge		81,681.48	0.55	84.2	Pulse	0.30	3
2	Ge		121,998.94	0.76	83.0	Pulse	0.30	3
2	Rh		2,609,894.20	0.21	85.8	Pulse	0.30	3
2	In		785,410.68	1.02	86.4	Pulse	0.30	3
2	Tb		3,368,283.61	1.25	92.8	Pulse	0.30	3
2	Ho		331,455.90	0.37	93.4	Pulse	0.30	3
2	Bi		2,277,027.69	0.09	91.3	Pulse	0.30	3
3	Sc		136,041.21	0.46	93.7	Pulse	0.30	3
3	Ge		91,274.92	0.97	90.5	Pulse	0.30	3
3	Ge		139,050.12	0.54	91.8	Pulse	0.30	3
3	Rh		1,699,994.93	0.71	92.1	Pulse	0.30	3
3	Tb		2,898,033.22	0.50	98.7	Pulse	0.30	3

Quantitation Report

File Name	106SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 22:59
Sample Name	jc77181-1 5
Sample Type	Sample
Comment	mp10229
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.349	ug/l	4.91	2,269.52	6.230E-04	Pulse	0.25	3
B			1	67.050	ug/l	1.01	420,966.70	1.156E-01	Pulse	0.15	3
Ca			1	91336.279	ug/l	0.75	70,149,100.62	1.407E+01	Analog	0.10	3
Sr			1	629.203	ug/l	0.52	21,703,814.68	3.625E+00	Analog	0.10	3
Mo			1	2.781	ug/l	5.13	17,974.11	3.002E-03	Pulse	0.10	3
Ag			1	0.274	ug/l	4.75	5,057.69	7.489E-04	Pulse	0.10	3
Sn			1	13.721	ug/l	0.96	152,832.65	2.262E-02	Pulse	0.10	3
Sb			1	0.845	ug/l	1.07	12,375.31	1.261E-03	Pulse	0.10	3
Ba			1	342.532	ug/l	0.14	1,902,925.34	1.939E-01	Pulse	0.10	3
Tl			1	0.197	ug/l	6.55	6,718.49	1.225E-03	Pulse	0.10	3
Pb			1	97.586	ug/l	0.69	1,038,117.28	1.893E-01	Pulse	0.10	3
Pb			1	95.500	ug/l	0.54	894,308.40	1.630E-01	Pulse	0.10	3
Pb			1	95.724	ug/l	0.41	4,142,250.49	7.552E-01	Pulse	0.10	3
Na			2	51295.858	ug/l	0.73	32,713,883.15	2.448E+02	Analog	0.30	3
Mg			2	18460.622	ug/l	0.74	5,438,542.70	4.070E+01	Analog	0.30	3
Al			2	4729.139	ug/l	0.69	426,649.84	3.193E+00	Pulse	0.30	3
K			2	7988.097	ug/l	0.60	1,389,674.60	1.040E+01	Pulse	0.30	3
Ca			2	94163.389	ug/l	0.61	910,602.85	6.814E+00	Pulse	0.30	3
Ti			2	172.436	ug/l	2.22	12,717.19	9.516E-02	Pulse	0.30	3
V			2	15.375	ug/l	0.56	41,066.28	3.073E-01	Pulse	0.30	3
Cr			2	16.528	ug/l	2.14	58,752.57	4.396E-01	Pulse	0.30	3
Mn			2	6351.926	ug/l	1.45	10,905,911.51	8.161E+01	Analog	0.30	3
Fe			2	84754.955	ug/l	0.63	249,107,812.32	1.864E+03	Analog	0.30	3
Co			2	5.614	ug/l	1.35	35,630.71	2.666E-01	Pulse	0.30	3
Ni			2	9.884	ug/l	0.65	17,473.85	1.308E-01	Pulse	0.30	3
Cu			2	22.754	ug/l	0.57	107,829.80	8.069E-01	Pulse	0.30	3
Zn			2	93.290	ug/l	0.05	59,885.36	4.481E-01	Pulse	0.30	3
As			2	2522.799	ug/l	0.28	820,707.71	6.141E+00	Pulse	1.00	3
Cd			2	0.326	ug/l	11.51	333.63	4.391E-04	Pulse	0.30	3
Sn			2	12.815	ug/l	2.35	23,739.09	3.125E-02	Pulse	0.30	3
Se			3	1.785	ug/l	15.61	183.87	1.394E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,642,923.21	0.09	88.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,985,842.95	1.32	87.9	Pulse	0.10	3
1	Ge		930,299.60	1.41	86.7	Pulse	0.10	3
1	Ge		1,247,083.78	1.65	84.4	Pulse	0.10	3
1	Rh		5,987,740.54	0.93	81.8	Analog	0.10	3
1	In		6,756,185.19	1.35	88.0	Analog	0.10	3
1	Tb		9,811,895.27	0.68	96.2	Analog	0.10	3
1	Ho		956,103.58	1.17	99.4	Pulse	0.10	3
1	Bi		5,484,957.63	0.79	90.3	Pulse	0.10	3
2	Sc		133,639.56	0.14	83.9	Pulse	0.30	3
2	Ge		80,886.31	0.51	83.4	Pulse	0.30	3
2	Ge		119,711.11	0.61	81.4	Pulse	0.30	3
2	Rh		2,481,187.82	0.26	81.6	Pulse	0.30	3
2	In		759,653.81	0.46	83.5	Pulse	0.30	3
2	Tb		3,281,665.29	0.66	90.4	Pulse	0.30	3
2	Ho		326,833.01	0.25	92.1	Pulse	0.30	3
2	Bi		2,103,137.21	0.47	84.3	Pulse	0.30	3
3	Sc		133,006.39	1.03	91.6	Pulse	0.30	3
3	Ge		88,471.95	0.25	87.7	Pulse	0.30	3
3	Ge		132,016.45	1.23	87.1	Pulse	0.30	3
3	Rh		1,551,826.71	0.73	84.1	Pulse	0.30	3
3	Tb		2,686,584.82	0.94	91.5	Pulse	0.30	3

Quantitation Report

File Name	107SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 23:04
Sample Name	jc77181-2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.072	ug/l	7.90	472.01	1.332E-04	Pulse	0.25	3
B			1	49.566	ug/l	0.54	307,426.40	8.672E-02	Pulse	0.15	3
Ca			1	159683.653	ug/l	0.16	118,121,481.58	2.460E+01	Analog	0.10	3
Sr			1	893.965	ug/l	1.17	30,145,766.22	5.150E+00	Analog	0.10	3
Mo			1	6.200	ug/l	1.35	39,035.37	6.669E-03	Pulse	0.10	3
Ag			1	0.089	ug/l	11.41	1,630.15	2.482E-04	Pulse	0.10	3
Sn			1	20.780	ug/l	0.77	223,681.98	3.409E-02	Pulse	0.10	3
Sb			1	0.921	ug/l	1.43	12,909.22	1.364E-03	Pulse	0.10	3
Ba			1	542.890	ug/l	2.16	2,909,813.40	3.074E-01	Pulse	0.10	3
Tl			1	0.033	ug/l	8.54	1,363.45	2.585E-04	Pulse	0.10	3
Pb			1	20.100	ug/l	0.28	205,610.05	3.901E-02	Pulse	0.10	3
Pb			1	19.418	ug/l	1.62	174,871.28	3.317E-02	Pulse	0.10	3
Pb			1	19.441	ug/l	0.17	808,999.64	1.535E-01	Pulse	0.10	3
Na			2	52705.023	ug/l	0.57	32,816,555.36	2.515E+02	Analog	0.30	3
Mg			2	29586.367	ug/l	0.36	8,509,463.00	6.522E+01	Analog	0.30	3
Al			2	741.235	ug/l	0.54	65,405.15	5.013E-01	Pulse	0.30	3
K			2	7989.260	ug/l	0.54	1,356,945.78	1.040E+01	Pulse	0.30	3
Ca			2	165114.855	ug/l	0.39	1,558,798.06	1.195E+01	Pulse	0.30	3
Ti			2	30.218	ug/l	3.64	2,185.77	1.675E-02	Pulse	0.30	3
V			2	3.918	ug/l	1.07	10,476.75	8.030E-02	Pulse	0.30	3
Cr			2	3.338	ug/l	2.74	11,819.90	9.059E-02	Pulse	0.30	3
Mn			2	10473.818	ug/l	0.45	17,556,925.97	1.346E+02	Analog	0.30	3
Fe			2	82340.112	ug/l	0.41	236,277,981.72	1.811E+03	Analog	0.30	3
Co			2	2.570	ug/l	2.42	15,980.13	1.225E-01	Pulse	0.30	3
Ni			2	2.720	ug/l	4.34	4,855.23	3.721E-02	Pulse	0.30	3
Cu			2	4.801	ug/l	0.51	22,446.58	1.720E-01	Pulse	0.30	3
Zn			2	15.833	ug/l	1.21	10,149.91	7.779E-02	Pulse	0.30	3
As			2	5021.220	ug/l	0.24	1,594,768.96	1.222E+01	Pulse	1.00	3
Cd			2	0.059	ug/l	12.11	69.28	9.305E-05	Pulse	0.30	3
Sn			2	20.253	ug/l	0.89	35,527.80	4.772E-02	Pulse	0.30	3
Se			3	0.818	ug/l	13.71	119.47	8.993E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,545,038.61	0.79	86.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,802,328.47	0.95	84.7	Pulse	0.10	3
1	Ge		905,330.40	1.07	84.4	Pulse	0.10	3
1	Ge		1,217,088.76	1.21	82.4	Pulse	0.10	3
1	Rh		5,853,488.25	0.45	80.0	Analog	0.10	3
1	In		6,561,291.62	1.24	85.5	Analog	0.10	3
1	Tb		9,466,311.11	0.20	92.8	Analog	0.10	3
1	Ho		916,593.63	0.90	95.3	Pulse	0.10	3
1	Bi		5,271,328.36	1.26	86.8	Pulse	0.10	3
2	Sc		130,473.70	0.21	81.9	Pulse	0.30	3
2	Ge		79,205.91	0.13	81.7	Pulse	0.30	3
2	Ge		118,753.18	0.47	80.8	Pulse	0.30	3
2	Rh		2,418,138.79	0.48	79.5	Pulse	0.30	3
2	In		744,486.25	0.15	81.9	Pulse	0.30	3
2	Tb		3,217,102.16	0.65	88.6	Pulse	0.30	3
2	Ho		317,160.45	0.78	89.4	Pulse	0.30	3
2	Bi		2,034,082.56	0.58	81.5	Pulse	0.30	3
3	Sc		133,636.48	0.50	92.1	Pulse	0.30	3
3	Ge		88,600.51	1.48	87.8	Pulse	0.30	3
3	Ge		132,815.93	0.80	87.6	Pulse	0.30	3
3	Rh		1,558,929.97	0.37	84.5	Pulse	0.30	3
3	Tb		2,695,295.73	0.76	91.8	Pulse	0.30	3

Quantitation Report

File Name	108SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 23:08
Sample Name	jc77181-3
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.033	ug/l	21.79	232.00	6.459E-05	Pulse	0.25	3
B			1	54.133	ug/l	0.33	338,550.13	9.425E-02	Pulse	0.15	3
Ca			1	172939.551	ug/l	0.89	129,851,334.73	2.664E+01	Analog	0.10	3
Sr			1	967.051	ug/l	0.95	32,774,912.01	5.571E+00	Analog	0.10	3
Mo			1	6.141	ug/l	2.74	38,854.82	6.604E-03	Pulse	0.10	3
Ag			1	0.074	ug/l	6.24	1,390.11	2.078E-04	Pulse	0.10	3
Sn			1	24.515	ug/l	0.62	268,552.64	4.016E-02	Pulse	0.10	3
Sb			1	0.205	ug/l	8.50	3,783.95	3.998E-04	Pulse	0.10	3
Ba			1	583.358	ug/l	1.52	3,127,502.45	3.303E-01	Pulse	0.10	3
Tl			1	0.009	ug/l	43.89	630.04	1.204E-04	Pulse	0.10	3
Pb			1	6.901	ug/l	1.68	70,304.24	1.341E-02	Pulse	0.10	3
Pb			1	6.730	ug/l	1.76	60,354.47	1.151E-02	Pulse	0.10	3
Pb			1	6.743	ug/l	1.17	279,441.55	5.331E-02	Pulse	0.10	3
Na			2	59500.517	ug/l	1.08	36,667,447.43	2.839E+02	Analog	0.30	3
Mg			2	32114.887	ug/l	0.91	9,142,119.91	7.079E+01	Analog	0.30	3
Al			2	331.638	ug/l	0.21	29,040.73	2.249E-01	Pulse	0.30	3
K			2	8736.080	ug/l	0.64	1,468,112.51	1.137E+01	Pulse	0.30	3
Ca			2	182405.403	ug/l	0.87	1,704,385.10	1.320E+01	Pulse	0.30	3
Ti			2	13.894	ug/l	5.93	1,001.15	7.752E-03	Pulse	0.30	3
V			2	2.684	ug/l	3.67	7,213.89	5.586E-02	Pulse	0.30	3
Cr			2	2.378	ug/l	1.74	8,418.88	6.519E-02	Pulse	0.30	3
Mn			2	11037.403	ug/l	0.52	18,312,602.05	1.418E+02	Analog	0.30	3
Fe			2	86270.658	ug/l	0.77	245,021,741.38	1.897E+03	Analog	0.30	3
Co			2	2.115	ug/l	2.09	13,034.16	1.009E-01	Pulse	0.30	3
Ni			2	2.965	ug/l	1.92	5,218.67	4.041E-02	Pulse	0.30	3
Cu			2	2.592	ug/l	1.00	12,130.12	9.393E-02	Pulse	0.30	3
Zn			2	7.154	ug/l	2.07	4,687.40	3.630E-02	Pulse	0.30	3
As			2	5164.359	ug/l	0.60	1,623,446.58	1.257E+01	Pulse	1.00	3
Cd			2	0.028	ug/l	31.55	39.34	5.313E-05	Pulse	0.30	3
Sn			2	24.387	ug/l	2.42	42,108.34	5.687E-02	Pulse	0.30	3
Se			3	0.968	ug/l	12.82	129.27	9.761E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,591,979.66	0.16	87.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,874,832.95	0.89	86.0	Pulse	0.10	3
1	Ge		914,543.42	0.75	85.2	Pulse	0.10	3
1	Ge		1,228,476.26	1.15	83.1	Pulse	0.10	3
1	Rh		5,883,007.00	0.16	80.4	Analog	0.10	3
1	In		6,687,251.39	1.32	87.1	Analog	0.10	3
1	Tb		9,470,196.53	1.51	92.8	Analog	0.10	3
1	Ho		915,935.92	0.81	95.2	Pulse	0.10	3
1	Bi		5,242,513.88	1.14	86.3	Pulse	0.10	3
2	Sc		129,140.34	0.44	81.0	Pulse	0.30	3
2	Ge		78,747.16	1.47	81.2	Pulse	0.30	3
2	Ge		119,011.58	0.60	81.0	Pulse	0.30	3
2	Rh		2,419,160.88	0.28	79.6	Pulse	0.30	3
2	In		740,366.67	0.07	81.4	Pulse	0.30	3
2	Tb		3,180,704.53	0.08	87.6	Pulse	0.30	3
2	Ho		313,854.53	0.27	88.4	Pulse	0.30	3
2	Bi		2,005,570.55	0.19	80.4	Pulse	0.30	3
3	Sc		134,478.69	0.81	92.6	Pulse	0.30	3
3	Ge		89,459.69	0.61	88.7	Pulse	0.30	3
3	Ge		132,461.12	0.64	87.4	Pulse	0.30	3
3	Rh		1,538,883.03	0.41	83.4	Pulse	0.30	3
3	Tb		2,674,267.81	0.46	91.1	Pulse	0.30	3

Quantitation Report

File Name	109SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 23:13
Sample Name	jc77181-1f
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.019	ug/l	28.65	144.00	3.966E-05	Pulse	0.25	3
B			1	69.240	ug/l	0.72	432,425.36	1.192E-01	Pulse	0.15	3
Ca			1	104245.584	ug/l	1.11	79,420,970.48	1.606E+01	Analog	0.10	3
Sr			1	732.259	ug/l	1.32	25,458,362.95	4.218E+00	Analog	0.10	3
Mo			1	3.482	ug/l	1.64	22,653.40	3.754E-03	Pulse	0.10	3
Ag			1	0.070	ug/l	13.81	1,336.77	1.964E-04	Pulse	0.10	3
Sn			1	2.506	ug/l	1.20	30,006.04	4.404E-03	Pulse	0.10	3
Sb			1	0.114	ug/l	9.89	2,700.35	2.775E-04	Pulse	0.10	3
Ba			1	337.522	ug/l	0.53	1,859,153.41	1.911E-01	Pulse	0.10	3
Tl			1	-0.001	ug/l	-115.46	330.02	6.160E-05	Pulse	0.10	3
Pb			1	1.139	ug/l	0.53	11,988.70	2.239E-03	Pulse	0.10	3
Pb			1	1.013	ug/l	2.55	9,390.06	1.753E-03	Pulse	0.10	3
Pb			1	1.046	ug/l	2.12	44,838.14	8.373E-03	Pulse	0.10	3
Na			2	55838.763	ug/l	0.78	35,057,617.50	2.665E+02	Analog	0.30	3
Mg			2	20152.796	ug/l	0.67	5,844,799.35	4.443E+01	Analog	0.30	3
Al			2	30.098	ug/l	3.72	2,813.61	2.138E-02	Pulse	0.30	3
K			2	8372.004	ug/l	0.58	1,433,588.14	1.090E+01	Pulse	0.30	3
Ca			2	108190.032	ug/l	0.31	1,029,993.47	7.829E+00	Pulse	0.30	3
Ti			2	1.488	ug/l	30.26	120.00	9.131E-04	Pulse	0.30	3
V			2	1.611	ug/l	5.06	4,551.79	3.459E-02	Pulse	0.30	3
Cr			2	1.694	ug/l	4.28	6,195.71	4.710E-02	Pulse	0.30	3
Mn			2	7585.342	ug/l	1.13	12,821,470.60	9.745E+01	Analog	0.30	3
Fe			2	90411.790	ug/l	0.31	261,614,167.38	1.988E+03	Analog	0.30	3
Co			2	0.902	ug/l	6.21	5,716.62	4.346E-02	Pulse	0.30	3
Ni			2	1.957	ug/l	0.43	3,584.88	2.725E-02	Pulse	0.30	3
Cu			2	0.676	ug/l	2.93	3,442.62	2.616E-02	Pulse	0.30	3
Zn			2	4.418	ug/l	2.42	3,054.77	2.322E-02	Pulse	0.30	3
As			2	3199.491	ug/l	0.82	1,024,665.42	7.788E+00	Pulse	1.00	3
Cd			2	-0.003	ug/l	-69.54	10.03	1.330E-05	Pulse	0.30	3
Sn			2	1.385	ug/l	10.46	4,487.37	5.944E-03	Pulse	0.30	3
Se			3	0.262	ug/l	55.88	83.20	6.153E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,628,648.34	0.70	88.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,945,416.18	0.97	87.2	Pulse	0.10	3
1	Ge		937,247.28	1.38	87.3	Pulse	0.10	3
1	Ge		1,256,096.70	0.95	85.0	Pulse	0.10	3
1	Rh		6,035,098.45	0.78	82.5	Analog	0.10	3
1	In		6,814,362.60	1.14	88.7	Analog	0.10	3
1	Tb		9,728,387.36	0.34	95.4	Analog	0.10	3
1	Ho		937,290.17	0.27	97.4	Pulse	0.10	3
1	Bi		5,354,507.63	0.89	88.2	Pulse	0.10	3
2	Sc		131,567.65	0.72	82.6	Pulse	0.30	3
2	Ge		79,907.36	1.25	82.4	Pulse	0.30	3
2	Ge		120,276.47	1.45	81.8	Pulse	0.30	3
2	Rh		2,469,488.65	0.21	81.2	Pulse	0.30	3
2	In		754,846.37	0.53	83.0	Pulse	0.30	3
2	Tb		3,234,390.15	0.62	89.1	Pulse	0.30	3
2	Ho		319,401.03	1.04	90.0	Pulse	0.30	3
2	Bi		2,055,336.72	0.59	82.4	Pulse	0.30	3
3	Sc		135,589.86	0.89	93.4	Pulse	0.30	3
3	Ge		89,886.23	0.96	89.1	Pulse	0.30	3
3	Ge		135,178.25	0.34	89.2	Pulse	0.30	3
3	Rh		1,584,223.93	0.88	85.9	Pulse	0.30	3
3	Tb		2,742,055.10	0.38	93.4	Pulse	0.30	3

Quantitation Report

File Name	110SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 23:18
Sample Name	jc77181-2f
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.022	ug/l	5.87	160.00	4.488E-05	Pulse	0.25	3
B			1	49.200	ug/l	1.02	307,000.93	8.612E-02	Pulse	0.15	3
Ca			1	161027.081	ug/l	0.38	120,588,808.20	2.480E+01	Analog	0.10	3
Sr			1	919.014	ug/l	0.52	31,361,173.70	5.294E+00	Analog	0.10	3
Mo			1	6.939	ug/l	1.48	44,195.39	7.461E-03	Pulse	0.10	3
Ag			1	0.068	ug/l	15.86	1,276.77	1.918E-04	Pulse	0.10	3
Sn			1	4.811	ug/l	0.72	54,257.78	8.149E-03	Pulse	0.10	3
Sb			1	0.210	ug/l	10.50	3,877.30	4.067E-04	Pulse	0.10	3
Ba			1	514.160	ug/l	0.80	2,776,170.58	2.911E-01	Pulse	0.10	3
Tl			1	0.019	ug/l	14.02	930.07	1.778E-04	Pulse	0.10	3
Pb			1	1.971	ug/l	1.68	20,161.15	3.852E-03	Pulse	0.10	3
Pb			1	1.918	ug/l	3.07	17,267.29	3.299E-03	Pulse	0.10	3
Pb			1	1.933	ug/l	2.14	80,448.80	1.537E-02	Pulse	0.10	3
Na			2	53294.337	ug/l	0.94	33,038,080.91	2.543E+02	Analog	0.30	3
Mg			2	30540.093	ug/l	0.01	8,745,872.71	6.732E+01	Analog	0.30	3
Al			2	114.591	ug/l	1.75	10,184.34	7.840E-02	Pulse	0.30	3
K			2	8109.785	ug/l	1.41	1,371,279.08	1.056E+01	Pulse	0.30	3
Ca			2	167761.294	ug/l	0.94	1,576,857.47	1.214E+01	Pulse	0.30	3
Ti			2	4.426	ug/l	12.81	328.90	2.533E-03	Pulse	0.30	3
V			2	1.975	ug/l	3.12	5,429.84	4.180E-02	Pulse	0.30	3
Cr			2	1.549	ug/l	3.52	5,617.69	4.324E-02	Pulse	0.30	3
Mn			2	11186.019	ug/l	0.57	18,669,335.37	1.437E+02	Analog	0.30	3
Fe			2	84310.281	ug/l	2.55	240,849,990.43	1.854E+03	Analog	0.30	3
Co			2	2.014	ug/l	1.49	12,491.52	9.616E-02	Pulse	0.30	3
Ni			2	1.831	ug/l	1.35	3,324.82	2.559E-02	Pulse	0.30	3
Cu			2	1.202	ug/l	1.81	5,814.43	4.475E-02	Pulse	0.30	3
Zn			2	4.206	ug/l	3.38	2,884.74	2.220E-02	Pulse	0.30	3
As			2	5606.806	ug/l	0.85	1,772,986.16	1.365E+01	Pulse	1.00	3
Cd			2	0.004	ug/l	49.01	16.81	2.249E-05	Pulse	0.30	3
Sn			2	3.903	ug/l	2.89	8,606.87	1.152E-02	Pulse	0.30	3
Se			3	0.186	ug/l	31.46	77.47	5.762E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,565,033.72	0.63	86.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,861,573.37	1.44	85.7	Pulse	0.10	3
1	Ge		916,359.41	1.02	85.4	Pulse	0.10	3
1	Ge		1,230,608.24	0.50	83.3	Pulse	0.10	3
1	Rh		5,923,497.83	0.24	81.0	Analog	0.10	3
1	In		6,658,357.29	0.24	86.7	Analog	0.10	3
1	Tb		9,536,936.52	1.21	93.5	Analog	0.10	3
1	Ho		923,477.98	1.42	96.0	Pulse	0.10	3
1	Bi		5,234,814.40	1.81	86.2	Pulse	0.10	3
2	Sc		129,910.50	0.96	81.5	Pulse	0.30	3
2	Ge		80,146.25	1.00	82.6	Pulse	0.30	3
2	Ge		119,839.90	0.59	81.5	Pulse	0.30	3
2	Rh		2,439,945.04	0.40	80.2	Pulse	0.30	3
2	In		747,199.77	0.11	82.2	Pulse	0.30	3
2	Tb		3,204,650.91	0.35	88.3	Pulse	0.30	3
2	Ho		317,335.06	0.40	89.4	Pulse	0.30	3
2	Bi		2,024,422.00	0.05	81.1	Pulse	0.30	3
3	Sc		135,448.08	0.33	93.3	Pulse	0.30	3
3	Ge		89,797.00	0.35	89.0	Pulse	0.30	3
3	Ge		134,489.11	0.80	88.7	Pulse	0.30	3
3	Rh		1,565,924.59	1.04	84.9	Pulse	0.30	3
3	Tb		2,684,053.30	0.45	91.4	Pulse	0.30	3

Quantitation Report

File Name	111SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 23:23
Sample Name	jc77181-3f
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.027	ug/l	33.66	193.34	5.417E-05	Pulse	0.25	3
B			1	50.390	ug/l	0.93	314,483.51	8.808E-02	Pulse	0.15	3
Ca			1	165201.922	ug/l	0.81	123,424,134.83	2.545E+01	Analog	0.10	3
Sr			1	927.264	ug/l	1.77	31,656,849.53	5.342E+00	Analog	0.10	3
Mo			1	6.286	ug/l	0.51	40,060.83	6.760E-03	Pulse	0.10	3
Ag			1	0.067	ug/l	13.63	1,253.44	1.888E-04	Pulse	0.10	3
Sn			1	6.808	ug/l	1.28	75,608.72	1.139E-02	Pulse	0.10	3
Sb			1	0.169	ug/l	14.42	3,353.82	3.508E-04	Pulse	0.10	3
Ba			1	478.267	ug/l	0.42	2,587,596.47	2.708E-01	Pulse	0.10	3
Tl			1	0.004	ug/l	53.80	470.03	8.987E-05	Pulse	0.10	3
Pb			1	3.618	ug/l	1.74	36,847.03	7.047E-03	Pulse	0.10	3
Pb			1	3.382	ug/l	2.10	30,318.44	5.799E-03	Pulse	0.10	3
Pb			1	3.474	ug/l	1.49	143,932.20	2.753E-02	Pulse	0.10	3
Na			2	55360.985	ug/l	0.95	34,375,857.52	2.642E+02	Analog	0.30	3
Mg			2	30621.969	ug/l	0.22	8,783,292.99	6.750E+01	Analog	0.30	3
Al			2	258.916	ug/l	3.53	22,873.50	1.758E-01	Pulse	0.30	3
K			2	8237.247	ug/l	0.59	1,395,073.59	1.072E+01	Pulse	0.30	3
Ca			2	170392.412	ug/l	0.40	1,604,221.98	1.233E+01	Pulse	0.30	3
Ti			2	10.118	ug/l	7.37	737.80	5.671E-03	Pulse	0.30	3
V			2	2.104	ug/l	4.13	5,773.31	4.437E-02	Pulse	0.30	3
Cr			2	1.955	ug/l	3.46	7,026.01	5.400E-02	Pulse	0.30	3
Mn			2	10724.284	ug/l	0.45	17,927,666.51	1.378E+02	Analog	0.30	3
Fe			2	76669.634	ug/l	0.66	219,404,226.84	1.686E+03	Analog	0.30	3
Co			2	2.034	ug/l	2.68	12,631.62	9.708E-02	Pulse	0.30	3
Ni			2	1.823	ug/l	4.79	3,317.05	2.549E-02	Pulse	0.30	3
Cu			2	1.677	ug/l	1.92	8,012.04	6.158E-02	Pulse	0.30	3
Zn			2	5.689	ug/l	1.82	3,811.60	2.929E-02	Pulse	0.30	3
As			2	4862.980	ug/l	0.43	1,540,286.79	1.184E+01	Pulse	1.00	3
Cd			2	0.009	ug/l	175.29	21.45	2.873E-05	Pulse	0.30	3
Sn			2	5.760	ug/l	0.92	11,643.30	1.563E-02	Pulse	0.30	3
Se			3	0.305	ug/l	36.57	86.00	6.372E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,570,467.78	0.25	86.6	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,850,380.03	0.64	85.5	Pulse	0.10	3
1	Ge		912,898.19	0.84	85.1	Pulse	0.10	3
1	Ge		1,238,317.32	0.64	83.8	Pulse	0.10	3
1	Rh		5,925,893.04	0.47	81.0	Analog	0.10	3
1	In		6,636,585.42	0.46	86.4	Analog	0.10	3
1	Tb		9,555,907.98	0.63	93.7	Analog	0.10	3
1	Ho		919,486.08	0.88	95.6	Pulse	0.10	3
1	Bi		5,229,036.80	0.70	86.1	Pulse	0.10	3
2	Sc		130,117.32	0.25	81.6	Pulse	0.30	3
2	Ge		79,248.54	0.26	81.7	Pulse	0.30	3
2	Ge		118,428.59	0.67	80.6	Pulse	0.30	3
2	Rh		2,432,101.64	0.16	80.0	Pulse	0.30	3
2	In		744,843.67	0.70	81.9	Pulse	0.30	3
2	Tb		3,192,443.83	0.33	87.9	Pulse	0.30	3
2	Ho		314,743.33	0.74	88.7	Pulse	0.30	3
2	Bi		2,021,420.89	0.61	81.0	Pulse	0.30	3
3	Sc		134,826.83	0.51	92.9	Pulse	0.30	3
3	Ge		89,667.31	0.51	88.9	Pulse	0.30	3
3	Ge		134,869.07	1.10	89.0	Pulse	0.30	3
3	Rh		1,562,766.99	0.83	84.7	Pulse	0.30	3
3	Tb		2,683,681.14	0.27	91.4	Pulse	0.30	3

Quantitation Report

File Name	112_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 23:28
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	49.179	ug/l	1.20	635,133.65	1.738E-01	Pulse	0.25	3
B			1	95.312	ug/l	1.08	1,167,459.57	3.194E-01	Pulse	0.15	3
Ca			1	4957.751	ug/l	1.55	7,589,168.01	1.530E+00	Analog	0.10	3
Sr			1	52.283	ug/l	1.20	3,899,193.38	6.025E-01	Pulse	0.10	3
Mo			1	52.027	ug/l	1.17	722,217.96	1.116E-01	Pulse	0.10	3
Ag			1	49.308	ug/l	1.48	1,882,967.68	2.672E-01	Pulse	0.10	3
Sn			1	50.708	ug/l	1.26	1,163,489.41	1.651E-01	Pulse	0.10	3
Sb			1	51.410	ug/l	0.91	1,349,743.11	1.385E-01	Pulse	0.10	3
Ba			1	50.745	ug/l	0.56	559,895.17	5.747E-02	Pulse	0.10	3
Tl			1	50.634	ug/l	0.66	3,382,850.99	5.940E-01	Pulse	0.10	3
Pb			1	51.756	ug/l	0.30	1,143,251.15	2.008E-01	Pulse	0.10	3
Pb			1	51.778	ug/l	0.66	1,006,866.81	1.768E-01	Pulse	0.10	3
Pb			1	51.389	ug/l	0.70	4,617,526.68	8.108E-01	Pulse	0.10	3
Na			2	4737.977	ug/l	1.98	6,235,662.81	4.526E+01	Analog	0.30	3
Mg			2	4773.360	ug/l	0.35	2,899,673.91	2.105E+01	Pulse	0.30	3
Al			2	4723.159	ug/l	0.40	878,422.22	6.376E+00	Pulse	0.30	3
K			2	4795.704	ug/l	0.42	1,719,069.03	1.248E+01	Pulse	0.30	3
Ca			2	5101.862	ug/l	0.73	101,863.87	7.394E-01	Pulse	0.30	3
Ti			2	49.276	ug/l	1.93	7,498.46	5.443E-02	Pulse	0.30	3
V			2	50.477	ug/l	0.48	275,924.27	2.003E+00	Pulse	0.30	3
Cr			2	49.507	ug/l	0.41	361,309.33	2.622E+00	Pulse	0.30	3
Mn			2	50.168	ug/l	0.57	177,640.67	1.289E+00	Pulse	0.30	3
Fe			2	4880.499	ug/l	0.60	29,580,889.94	2.147E+02	Analog	0.30	3
Co			2	48.886	ug/l	0.20	638,073.53	4.631E+00	Pulse	0.30	3
Ni			2	48.391	ug/l	0.52	174,332.20	1.265E+00	Pulse	0.30	3
Cu			2	47.873	ug/l	0.34	466,767.67	3.388E+00	Pulse	0.30	3
Zn			2	48.631	ug/l	0.55	64,355.51	4.671E-01	Pulse	0.30	3
As			2	50.503	ug/l	0.88	33,886.29	2.460E-01	Pulse	1.00	3
Cd			2	49.569	ug/l	0.97	103,508.99	1.284E-01	Pulse	0.30	3
Sn			2	50.421	ug/l	0.82	182,287.41	2.262E-01	Pulse	0.30	3
Se			3	196.788	ug/l	1.01	27,390.81	2.017E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,655,592.08	0.80	88.6	Pulse	0.10	3
1	Sc		4,959,251.80	0.53	87.4	Pulse	0.10	3
1	Ge		959,697.17	0.81	89.4	Pulse	0.10	3

Quantitation Report

1	Ge		1,345,623.47	0.45	91.1	Pulse	0.10	3
1	Rh		6,471,562.19	0.62	88.5	Analog	0.10	3
1	In		7,047,585.57	0.81	91.8	Analog	0.10	3
1	Tb		9,742,468.60	0.33	95.5	Analog	0.10	3
1	Ho		939,333.32	0.09	97.6	Pulse	0.10	3
1	Bi		5,694,779.50	0.71	93.8	Pulse	0.10	3
2	Sc		137,774.52	0.69	86.5	Pulse	0.30	3
2	Ge		85,596.79	0.56	88.3	Pulse	0.30	3
2	Ge		129,497.03	0.69	88.1	Pulse	0.30	3
2	Rh		2,630,441.22	0.68	86.5	Pulse	0.30	3
2	In		806,029.41	0.15	88.6	Pulse	0.30	3
2	Tb		3,331,463.06	0.89	91.7	Pulse	0.30	3
2	Ho		325,716.22	0.97	91.8	Pulse	0.30	3
2	Bi		2,241,650.40	0.73	89.8	Pulse	0.30	3
3	Sc		130,610.96	1.22	90.0	Pulse	0.30	3
3	Ge		88,857.73	0.64	88.1	Pulse	0.30	3
3	Ge		135,828.38	0.39	89.6	Pulse	0.30	3
3	Rh		1,628,861.95	0.16	88.3	Pulse	0.30	3
3	Tb		2,751,745.03	0.19	93.7	Pulse	0.30	3

Quantitation Report

File Name	113_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 23:33
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.006	ug/l	27.19	105.33	2.923E-05	Pulse	0.25	3
B			1	1.410	ug/l	4.49	34,658.00	9.616E-03	Pulse	0.15	3
Ca			1	0.329	ug/l	186.06	15,718.04	3.246E-03	Pulse	0.10	3
Sr			1	0.023	ug/l	21.15	2,697.07	4.148E-04	Pulse	0.10	3
Mo			1	0.049	ug/l	9.24	810.06	1.245E-04	Pulse	0.10	3
Ag			1	0.009	ug/l	32.34	416.69	5.852E-05	Pulse	0.10	3
Sn			1	0.469	ug/l	1.05	13,182.66	1.854E-03	Pulse	0.10	3
Sb			1	0.048	ug/l	13.71	2,423.61	2.541E-04	Pulse	0.10	3
Ba			1	0.023	ug/l	14.18	336.69	3.530E-05	Pulse	0.10	3
Tl			1	0.019	ug/l	7.53	1,666.84	2.902E-04	Pulse	0.10	3
Pb			1	0.012	ug/l	4.61	446.69	7.777E-05	Pulse	0.10	3
Pb			1	0.011	ug/l	28.68	360.02	6.269E-05	Pulse	0.10	3
Pb			1	0.012	ug/l	14.47	1,793.45	3.122E-04	Pulse	0.10	3
Na			2	8.694	ug/l	6.66	17,158.83	1.257E-01	Pulse	0.30	3
Mg			2	0.689	ug/l	7.24	728.92	5.341E-03	Pulse	0.30	3
Al			2	0.213	ug/l	18.10	185.56	1.360E-03	Pulse	0.30	3
K			2	0.707	ug/l	45.00	5,888.89	4.315E-02	Pulse	0.30	3
Ca			2	0.388	ug/l	328.38	160.00	1.172E-03	Pulse	0.30	3
Ti			2	-0.032	ug/l	-79.32	7.78	5.697E-05	Pulse	0.30	3
V			2	-0.008	ug/l	-63.04	321.12	2.353E-03	Pulse	0.30	3
Cr			2	0.006	ug/l	151.13	354.45	2.598E-03	Pulse	0.30	3
Mn			2	0.160	ug/l	26.13	597.79	4.379E-03	Pulse	0.30	3
Fe			2	1.342	ug/l	13.17	13,361.17	9.790E-02	Pulse	0.30	3
Co			2	0.001	ug/l	180.53	113.33	8.303E-04	Pulse	0.30	3
Ni			2	-0.004	ug/l	-286.87	217.78	1.596E-03	Pulse	0.30	3
Cu			2	0.032	ug/l	43.14	612.25	4.485E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.011	ug/l	-258.55	271.12	1.987E-03	Pulse	0.30	3
As			2	0.141	ug/l	11.06	106.00	7.767E-04	Pulse	1.00	3
Cd			2	0.011	ug/l	99.92	37.73	4.555E-05	Pulse	0.30	3
Sn			2	-0.090	ug/l	-38.65	2,052.38	2.480E-03	Pulse	0.30	3
Se			3	0.138	ug/l	28.78	86.60	6.226E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,604,233.39	0.39	87.4	Pulse	0.10	3
1	Sc		4,840,880.45	0.59	85.4	Pulse	0.10	3
1	Ge		952,319.36	0.33	88.7	Pulse	0.10	3
1	Ge		1,314,008.29	0.50	88.9	Pulse	0.10	3
1	Rh		6,509,388.86	1.24	89.0	Analog	0.10	3
1	In		7,109,275.14	0.82	92.6	Analog	0.10	3
1	Tb		9,535,047.57	0.60	93.5	Analog	0.10	3
1	Ho		921,117.69	0.45	95.7	Pulse	0.10	3
1	Bi		5,744,166.37	0.22	94.6	Mix	0.10	3
2	Sc		136,466.30	0.19	85.6	Pulse	0.30	3
2	Ge		87,427.54	0.67	90.2	Pulse	0.30	3
2	Ge		130,518.31	0.14	88.8	Pulse	0.30	3
2	Rh		2,714,065.24	0.26	89.3	Pulse	0.30	3
2	In		827,867.36	0.44	91.0	Pulse	0.30	3
2	Tb		3,338,957.30	0.49	92.0	Pulse	0.30	3
2	Ho		325,769.13	0.36	91.8	Pulse	0.30	3
2	Bi		2,315,989.21	0.37	92.8	Pulse	0.30	3
3	Sc		133,928.93	0.75	92.3	Pulse	0.30	3
3	Ge		91,796.83	0.86	91.0	Pulse	0.30	3
3	Ge		139,106.69	0.21	91.8	Pulse	0.30	3
3	Rh		1,737,291.74	0.10	94.2	Pulse	0.30	3
3	Tb		2,876,568.91	0.06	98.0	Pulse	0.30	3

Quantitation Report

File Name	114SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 23:38
Sample Name	jc77181-1
Sample Type	Sample
Comment	
Prep Dilution	50.000
Auto Dilution	N/A
Total Dilution	50.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.447	ug/l	7.67	138.67	3.814E-05	Pulse	0.25	3
B			1	74.161	ug/l	5.99	35,838.25	9.859E-03	Pulse	0.15	3
Ca			1	96912.975	ug/l	0.57	2,954,199.12	6.002E-01	Pulse	0.10	3
Sr			1	607.346	ug/l	0.38	887,109.57	1.401E-01	Pulse	0.10	3
Mo			1	4.895	ug/l	3.43	1,453.47	2.296E-04	Pulse	0.10	3
Ag			1	1.499	ug/l	2.70	1,166.76	1.702E-04	Pulse	0.10	3
Sn			1	9.062	ug/l	6.03	6,308.17	9.206E-04	Pulse	0.10	3
Sb			1	-0.248	ug/l	-180.67	1,013.41	1.103E-04	Pulse	0.10	3
Ba			1	368.355	ug/l	1.02	76,780.74	8.351E-03	Pulse	0.10	3
Tl			1	0.531	ug/l	24.40	1,076.76	1.917E-04	Pulse	0.10	3
Pb			1	92.748	ug/l	0.87	40,616.65	7.225E-03	Pulse	0.10	3
Pb			1	92.454	ug/l	2.42	35,630.70	6.337E-03	Pulse	0.10	3
Pb			1	92.014	ug/l	1.13	163,894.11	2.915E-02	Pulse	0.10	3
Na			2	51002.392	ug/l	0.28	1,374,760.57	9.777E+00	Pulse	0.30	3
Mg			2	18836.278	ug/l	0.76	233,860.32	1.663E+00	Pulse	0.30	3
Al			2	5057.285	ug/l	2.04	19,346.77	1.376E-01	Pulse	0.30	3
K			2	8354.000	ug/l	0.39	66,735.59	4.746E-01	Pulse	0.30	3
Ca			2	98028.203	ug/l	1.11	40,050.29	2.848E-01	Pulse	0.30	3
Ti			2	180.315	ug/l	8.78	572.24	4.069E-03	Pulse	0.30	3
V			2	12.779	ug/l	7.36	1,801.23	1.281E-02	Pulse	0.30	3
Cr			2	15.190	ug/l	3.23	2,579.12	1.834E-02	Pulse	0.30	3
Mn			2	6484.593	ug/l	0.36	468,631.41	3.333E+00	Pulse	0.30	3
Fe			2	87087.414	ug/l	0.70	10,778,313.74	7.665E+01	Analog	0.30	3
Co			2	5.608	ug/l	4.56	1,600.10	1.138E-02	Pulse	0.30	3
Ni			2	9.074	ug/l	8.81	904.48	6.433E-03	Pulse	0.30	3
Cu			2	26.026	ug/l	4.43	5,494.32	3.907E-02	Pulse	0.30	3
Zn			2	147.162	ug/l	1.86	4,251.72	3.024E-02	Pulse	0.30	3
As			2	3099.199	ug/l	0.06	42,445.78	3.019E-01	Pulse	1.00	3
Cd			2	0.438	ug/l	61.57	33.27	3.979E-05	Pulse	0.30	3
Sn			2	-19.081	ug/l	-2.99	994.49	1.188E-03	Pulse	0.30	3
Se			3	0.659	ug/l	980.50	65.13	4.948E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,635,412.70	0.42	88.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,922,143.57	0.23	86.8	Pulse	0.10	3
1	Ge		955,351.34	0.63	89.0	Pulse	0.10	3
1	Ge		1,320,477.61	1.31	89.4	Pulse	0.10	3
1	Rh		6,331,802.20	0.37	86.5	Analog	0.10	3
1	In		6,853,256.11	0.60	89.3	Analog	0.10	3
1	Tb		9,194,207.78	0.43	90.1	Analog	0.10	3
1	Ho		876,724.83	0.42	91.1	Pulse	0.10	3
1	Bi		5,622,210.54	0.91	92.6	Pulse	0.10	3
2	Sc		140,615.88	0.40	88.2	Pulse	0.30	3
2	Ge		87,784.96	1.70	90.5	Pulse	0.30	3
2	Ge		133,068.93	0.77	90.5	Pulse	0.30	3
2	Rh		2,653,756.49	0.79	87.3	Pulse	0.30	3
2	In		837,120.84	0.56	92.0	Pulse	0.30	3
2	Tb		3,273,182.02	0.96	90.1	Pulse	0.30	3
2	Ho		321,840.58	1.06	90.7	Pulse	0.30	3
2	Bi		2,305,493.03	1.09	92.4	Pulse	0.30	3
3	Sc		126,446.22	0.70	87.1	Pulse	0.30	3
3	Ge		86,686.05	1.55	85.9	Pulse	0.30	3
3	Ge		131,639.97	0.28	86.9	Pulse	0.30	3
3	Rh		1,623,884.00	0.34	88.0	Pulse	0.30	3
3	Tb		2,719,814.89	0.42	92.7	Pulse	0.30	3

Quantitation Report

File Name	115SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 23:43
Sample Name	jc77181-2
Sample Type	Sample
Comment	
Prep Dilution	100.000
Auto Dilution	N/A
Total Dilution	100.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.042	ug/l	214.44	29.33	8.059E-06	Pulse	0.25	3
B			1	44.801	ug/l	5.39	23,443.21	6.444E-03	Pulse	0.15	3
Ca			1	168427.910	ug/l	1.06	2,572,675.69	5.220E-01	Pulse	0.10	3
Sr			1	845.835	ug/l	0.04	624,135.81	9.761E-02	Pulse	0.10	3
Mo			1	5.261	ug/l	7.10	846.73	1.324E-04	Pulse	0.10	3
Ag			1	0.152	ug/l	61.52	110.00	1.602E-05	Pulse	0.10	3
Sn			1	7.789	ug/l	21.43	4,010.66	5.847E-04	Pulse	0.10	3
Sb			1	-2.952	ug/l	-6.19	400.02	4.413E-05	Pulse	0.10	3
Ba			1	585.844	ug/l	1.66	60,217.69	6.642E-03	Pulse	0.10	3
Tl			1	0.220	ug/l	107.69	516.70	9.279E-05	Pulse	0.10	3
Pb			1	19.010	ug/l	3.22	4,274.12	7.680E-04	Pulse	0.10	3
Pb			1	20.024	ug/l	3.44	3,940.69	7.081E-04	Pulse	0.10	3
Pb			1	19.024	ug/l	4.04	17,374.69	3.122E-03	Pulse	0.10	3
Na			2	53805.256	ug/l	0.64	726,118.58	5.177E+00	Pulse	0.30	3
Mg			2	30603.335	ug/l	1.11	189,550.87	1.351E+00	Pulse	0.30	3
Al			2	829.004	ug/l	11.26	1,720.11	1.226E-02	Pulse	0.30	3
K			2	8429.857	ug/l	1.62	36,456.38	2.599E-01	Pulse	0.30	3
Ca			2	171781.907	ug/l	0.60	35,020.11	2.497E-01	Pulse	0.30	3
Ti			2	16.035	ug/l	27.93	37.78	2.693E-04	Pulse	0.30	3
V			2	-2.091	ug/l	-22.42	260.01	1.854E-03	Pulse	0.30	3
Cr			2	0.977	ug/l	54.12	390.01	2.781E-03	Pulse	0.30	3
Mn			2	10849.965	ug/l	0.71	391,047.50	2.788E+00	Pulse	0.30	3
Fe			2	83113.907	ug/l	0.35	5,132,854.10	3.660E+01	Pulse	0.30	3
Co			2	2.616	ug/l	17.11	453.35	3.233E-03	Pulse	0.30	3
Ni			2	2.586	ug/l	41.68	332.23	2.369E-03	Pulse	0.30	3
Cu			2	7.216	ug/l	12.64	1,032.27	7.360E-03	Pulse	0.30	3
Zn			2	164.090	ug/l	6.00	2,494.67	1.778E-02	Pulse	0.30	3
As			2	6227.094	ug/l	0.41	42,531.98	3.033E-01	Pulse	1.00	3
Cd			2	0.255	ug/l	158.40	19.95	2.370E-05	Pulse	0.30	3
Sn			2	-45.921	ug/l	-0.67	711.14	8.446E-04	Pulse	0.30	3
Se			3	2.675	ug/l	622.42	65.73	5.087E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,637,998.45	0.18	88.2	Pulse	0.10	3
1	Sc		4,928,995.34	0.24	86.9	Pulse	0.10	3
1	Ge		957,883.21	0.43	89.3	Pulse	0.10	3

Quantitation Report

1	Ge		1,341,055.61	0.20	90.8	Pulse	0.10	3
1	Rh		6,394,359.69	0.04	87.4	Analog	0.10	3
1	In		6,854,386.60	1.06	89.3	Analog	0.10	3
1	Tb		9,066,288.20	1.11	88.9	Analog	0.10	3
1	Ho		878,413.09	0.56	91.3	Pulse	0.10	3
1	Bi		5,565,258.25	0.47	91.6	Pulse	0.10	3
2	Sc		140,253.89	0.43	88.0	Pulse	0.30	3
2	Ge		89,199.12	1.31	92.0	Pulse	0.30	3
2	Ge		135,331.43	0.25	92.1	Pulse	0.30	3
2	Rh		2,675,672.39	0.19	88.0	Pulse	0.30	3
2	In		841,988.73	0.21	92.6	Pulse	0.30	3
2	Tb		3,287,023.83	0.56	90.5	Pulse	0.30	3
2	Ho		323,371.81	0.93	91.1	Pulse	0.30	3
2	Bi		2,315,249.14	0.45	92.8	Pulse	0.30	3
3	Sc		122,159.90	0.66	84.1	Pulse	0.30	3
3	Ge		85,069.73	0.18	84.3	Pulse	0.30	3
3	Ge		129,165.88	0.71	85.2	Pulse	0.30	3
3	Rh		1,572,612.82	0.43	85.2	Pulse	0.30	3
3	Tb		2,635,697.61	0.18	89.8	Pulse	0.30	3

Quantitation Report

File Name	116SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 23:48
Sample Name	jc77181-3
Sample Type	Sample
Comment	
Prep Dilution	100.000
Auto Dilution	N/A
Total Dilution	100.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.385	ug/l	59.88	73.33	2.018E-05	Pulse	0.25	3
B			1	26.915	ug/l	15.74	21,287.13	5.854E-03	Pulse	0.15	3
Ca			1	183318.460	ug/l	0.55	2,803,965.38	5.678E-01	Pulse	0.10	3
Sr			1	898.671	ug/l	1.27	660,853.10	1.037E-01	Pulse	0.10	3
Mo			1	4.989	ug/l	3.04	806.73	1.266E-04	Pulse	0.10	3
Ag			1	0.224	ug/l	47.61	136.67	1.990E-05	Pulse	0.10	3
Sn			1	10.224	ug/l	12.70	4,554.19	6.639E-04	Pulse	0.10	3
Sb			1	-3.321	ug/l	-7.27	310.01	3.419E-05	Pulse	0.10	3
Ba			1	612.958	ug/l	0.43	62,975.16	6.950E-03	Pulse	0.10	3
Tl			1	1.139	ug/l	15.43	1,106.75	2.006E-04	Pulse	0.10	3
Pb			1	7.950	ug/l	6.35	1,870.19	3.391E-04	Pulse	0.10	3
Pb			1	7.654	ug/l	15.83	1,576.83	2.858E-04	Pulse	0.10	3
Pb			1	7.737	ug/l	2.30	7,401.04	1.342E-03	Pulse	0.10	3
Na			2	58641.991	ug/l	1.25	802,330.94	5.639E+00	Pulse	0.30	3
Mg			2	31999.170	ug/l	1.84	201,047.15	1.413E+00	Pulse	0.30	3
Al			2	507.552	ug/l	6.08	1,127.83	7.923E-03	Pulse	0.30	3
K			2	9130.389	ug/l	0.03	39,572.31	2.781E-01	Pulse	0.30	3
Ca			2	186360.632	ug/l	0.87	38,530.05	2.708E-01	Pulse	0.30	3
Ti			2	7.123	ug/l	144.45	24.44	1.711E-04	Pulse	0.30	3
V			2	-2.909	ug/l	-15.88	217.78	1.529E-03	Pulse	0.30	3
Cr			2	1.227	ug/l	25.93	414.46	2.914E-03	Pulse	0.30	3
Mn			2	11074.081	ug/l	1.78	404,904.09	2.846E+00	Pulse	0.30	3
Fe			2	84619.568	ug/l	0.85	5,301,732.84	3.726E+01	Pulse	0.30	3
Co			2	2.170	ug/l	12.12	400.01	2.811E-03	Pulse	0.30	3
Ni			2	7.430	ug/l	19.66	516.68	3.634E-03	Pulse	0.30	3
Cu			2	12.036	ug/l	1.99	1,532.31	1.077E-02	Pulse	0.30	3
Zn			2	148.842	ug/l	2.29	2,323.53	1.633E-02	Pulse	0.30	3
As			2	6121.046	ug/l	1.33	42,415.37	2.981E-01	Pulse	1.00	3
Cd			2	0.195	ug/l	250.06	18.85	2.213E-05	Pulse	0.30	3
Sn			2	-44.305	ug/l	-2.09	781.14	9.162E-04	Pulse	0.30	3
Se			3	-24.937	ug/l	-11.77	29.20	2.264E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,636,523.12	0.19	88.2	Pulse	0.10	3
1	Sc		4,938,051.18	0.39	87.1	Pulse	0.10	3
1	Ge		963,961.39	0.83	89.8	Pulse	0.10	3

Quantitation Report

1	Ge		1,330,401.18	0.50	90.0	Pulse	0.10	3
1	Rh		6,373,201.57	0.31	87.1	Analog	0.10	3
1	In		6,859,437.87	0.70	89.3	Analog	0.10	3
1	Tb		9,061,854.24	0.41	88.8	Analog	0.10	3
1	Ho		872,276.50	0.55	90.6	Pulse	0.10	3
1	Bi		5,515,930.34	0.35	90.8	Pulse	0.10	3
2	Sc		142,300.96	1.15	89.3	Pulse	0.30	3
2	Ge		89,857.11	1.52	92.7	Pulse	0.30	3
2	Ge		136,175.20	0.42	92.6	Pulse	0.30	3
2	Rh		2,683,863.44	0.41	88.3	Pulse	0.30	3
2	In		852,679.73	0.27	93.8	Pulse	0.30	3
2	Tb		3,309,555.15	0.44	91.1	Pulse	0.30	3
2	Ho		324,609.90	0.75	91.5	Pulse	0.30	3
2	Bi		2,324,344.56	0.50	93.1	Pulse	0.30	3
3	Sc		120,808.00	1.21	83.2	Pulse	0.30	3
3	Ge		84,707.97	0.36	83.9	Pulse	0.30	3
3	Ge		128,958.60	0.38	85.1	Pulse	0.30	3
3	Rh		1,563,547.54	1.02	84.7	Pulse	0.30	3
3	Tb		2,611,729.34	0.82	89.0	Pulse	0.30	3

Quantitation Report

File Name	117SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 23:53
Sample Name	jc77181-1f
Sample Type	Sample
Comment	
Prep Dilution	50.000
Auto Dilution	N/A
Total Dilution	50.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.044	ug/l	54.43	34.67	9.696E-06	Pulse	0.25	3
B			1	47.827	ug/l	8.19	29,031.81	8.121E-03	Pulse	0.15	3
Ca			1	105852.661	ug/l	6.34	3,272,643.60	6.553E-01	Pulse	0.10	3
Sr			1	676.025	ug/l	4.96	1,007,295.87	1.559E-01	Pulse	0.10	3
Mo			1	3.476	ug/l	14.22	1,086.75	1.687E-04	Pulse	0.10	3
Ag			1	0.109	ug/l	64.91	133.34	1.953E-05	Pulse	0.10	3
Sn			1	-1.784	ug/l	-11.35	1,493.48	2.157E-04	Pulse	0.10	3
Sb			1	-1.594	ug/l	-3.92	346.68	3.775E-05	Pulse	0.10	3
Ba			1	352.786	ug/l	6.80	73,119.52	7.998E-03	Pulse	0.10	3
Tl			1	0.900	ug/l	14.03	1,550.14	2.782E-04	Pulse	0.10	3
Pb			1	1.478	ug/l	17.97	813.39	1.454E-04	Pulse	0.10	3
Pb			1	1.145	ug/l	11.00	573.37	1.027E-04	Pulse	0.10	3
Pb			1	1.339	ug/l	6.08	3,033.59	5.435E-04	Pulse	0.10	3
Na			2	56016.985	ug/l	0.49	1,505,755.22	1.073E+01	Pulse	0.30	3
Mg			2	20454.560	ug/l	0.46	253,330.74	1.806E+00	Pulse	0.30	3
Al			2	13.113	ug/l	37.23	200.00	1.426E-03	Pulse	0.30	3
K			2	8725.585	ug/l	0.43	69,281.24	4.939E-01	Pulse	0.30	3
Ca			2	111531.968	ug/l	0.42	45,436.26	3.239E-01	Pulse	0.30	3
Ti			2	2.616	ug/l	310.67	21.11	1.502E-04	Pulse	0.30	3
V			2	-0.746	ug/l	-55.39	293.34	2.091E-03	Pulse	0.30	3
Cr			2	0.451	ug/l	129.22	384.45	2.741E-03	Pulse	0.30	3
Mn			2	7735.317	ug/l	0.10	557,689.60	3.975E+00	Pulse	0.30	3
Fe			2	91973.766	ug/l	0.66	11,355,657.33	8.095E+01	Analog	0.30	3
Co			2	0.763	ug/l	17.34	308.90	2.202E-03	Pulse	0.30	3
Ni			2	1.913	ug/l	3.93	377.79	2.693E-03	Pulse	0.30	3
Cu			2	2.335	ug/l	8.90	780.03	5.560E-03	Pulse	0.30	3
Zn			2	28.270	ug/l	2.29	1,052.27	7.501E-03	Pulse	0.30	3
As			2	3848.129	ug/l	0.36	52,574.63	3.748E-01	Pulse	1.00	3
Cd			2	-0.100	ug/l	-136.63	9.96	1.191E-05	Pulse	0.30	3
Sn			2	-29.284	ug/l	-1.24	238.89	2.846E-04	Pulse	0.30	3
Se			3	-10.553	ug/l	-20.13	34.27	2.656E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,574,558.87	0.21	86.7	Mix	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,007,330.55	6.14	88.3	Mix	0.10	3
1	Ge		962,720.22	2.98	89.7	Pulse	0.10	3
1	Ge		1,320,211.20	3.37	89.4	Pulse	0.10	3
1	Rh		6,471,287.40	5.39	88.5	Analog	0.10	3
1	In		6,924,004.10	5.49	90.2	Analog	0.10	3
1	Tb		9,163,052.36	5.17	89.8	Analog	0.10	3
1	Ho		882,866.91	4.80	91.7	Pulse	0.10	3
1	Bi		5,590,035.54	5.12	92.0	Mix	0.10	3
2	Sc		140,282.95	0.43	88.0	Pulse	0.30	3
2	Ge		88,448.42	0.73	91.2	Pulse	0.30	3
2	Ge		133,994.34	0.42	91.2	Pulse	0.30	3
2	Rh		2,651,469.96	0.37	87.2	Pulse	0.30	3
2	In		840,016.45	1.26	92.4	Pulse	0.30	3
2	Tb		3,279,728.27	0.72	90.3	Pulse	0.30	3
2	Ho		324,063.40	0.71	91.3	Pulse	0.30	3
2	Bi		2,313,353.38	0.56	92.7	Pulse	0.30	3
3	Sc		122,958.58	0.75	84.7	Pulse	0.30	3
3	Ge		85,775.69	1.33	85.0	Pulse	0.30	3
3	Ge		129,095.23	0.51	85.2	Pulse	0.30	3
3	Rh		1,585,690.60	0.48	85.9	Pulse	0.30	3
3	Tb		2,643,257.95	0.39	90.0	Pulse	0.30	3

Quantitation Report

File Name	118SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/7/2018 23:58
Sample Name	jc77181-2f
Sample Type	Sample
Comment	
Prep Dilution	100.000
Auto Dilution	N/A
Total Dilution	100.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	-0.113	ug/l	-57.21	9.33	2.576E-06	Pulse	0.25	3
B			1	-1.209	ug/l	-99.63	17,876.43	4.926E-03	Pulse	0.15	3
Ca			1	170037.257	ug/l	0.23	2,590,641.84	5.269E-01	Pulse	0.10	3
Sr			1	870.494	ug/l	1.02	637,491.74	1.004E-01	Pulse	0.10	3
Mo			1	5.430	ug/l	9.21	863.40	1.360E-04	Pulse	0.10	3
Ag			1	0.117	ug/l	94.72	96.67	1.412E-05	Pulse	0.10	3
Sn			1	-4.027	ug/l	-25.25	1,373.45	2.008E-04	Pulse	0.10	3
Sb			1	-3.496	ug/l	-2.97	266.68	2.948E-05	Pulse	0.10	3
Ba			1	548.869	ug/l	1.63	56,296.82	6.224E-03	Pulse	0.10	3
Tl			1	0.240	ug/l	84.84	526.70	9.515E-05	Pulse	0.10	3
Pb			1	2.856	ug/l	22.26	783.39	1.415E-04	Pulse	0.10	3
Pb			1	3.045	ug/l	4.52	710.05	1.284E-04	Pulse	0.10	3
Pb			1	2.755	ug/l	10.46	3,073.60	5.557E-04	Pulse	0.10	3
Na			2	52535.774	ug/l	1.06	719,561.08	5.056E+00	Pulse	0.30	3
Mg			2	31210.635	ug/l	1.16	196,149.76	1.378E+00	Pulse	0.30	3
Al			2	129.555	ug/l	53.79	401.14	2.821E-03	Pulse	0.30	3
K			2	8440.625	ug/l	1.21	37,030.90	2.602E-01	Pulse	0.30	3
Ca			2	170255.933	ug/l	1.48	35,219.41	2.475E-01	Pulse	0.30	3
Ti			2	14.243	ug/l	200.26	35.56	2.496E-04	Pulse	0.30	3
V			2	-4.089	ug/l	-3.42	151.12	1.062E-03	Pulse	0.30	3
Cr			2	-1.606	ug/l	-36.98	201.12	1.414E-03	Pulse	0.30	3
Mn			2	11267.121	ug/l	0.79	412,060.50	2.895E+00	Pulse	0.30	3
Fe			2	82513.720	ug/l	0.84	5,170,810.21	3.633E+01	Pulse	0.30	3
Co			2	1.677	ug/l	27.55	333.34	2.344E-03	Pulse	0.30	3
Ni			2	1.621	ug/l	80.77	301.12	2.117E-03	Pulse	0.30	3
Cu			2	2.483	ug/l	24.80	571.13	4.013E-03	Pulse	0.30	3
Zn			2	44.807	ug/l	3.76	907.81	6.379E-03	Pulse	0.30	3
As			2	6652.129	ug/l	0.84	46,102.93	3.239E-01	Pulse	1.00	3
Cd			2	-0.510	ug/l	-29.57	3.29	3.869E-06	Pulse	0.30	3
Sn			2	-58.201	ug/l	-1.16	255.56	3.008E-04	Pulse	0.30	3
Se			3	-22.510	ug/l	-12.60	32.53	2.512E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,628,882.00	0.64	88.0	Pulse	0.10	3
1	Sc		4,916,643.05	0.31	86.7	Pulse	0.10	3
1	Ge		962,200.22	1.00	89.7	Pulse	0.10	3

Quantitation Report

1	Ge		1,323,003.99	0.60	89.5	Pulse	0.10	3
1	Rh		6,346,542.82	0.19	86.7	Analog	0.10	3
1	In		6,832,798.60	0.87	89.0	Analog	0.10	3
1	Tb		9,045,818.41	0.46	88.7	Analog	0.10	3
1	Ho		867,675.82	1.28	90.2	Pulse	0.10	3
1	Bi		5,529,225.54	0.83	91.0	Pulse	0.10	3
2	Sc		142,321.90	0.67	89.3	Pulse	0.30	3
2	Ge		90,139.88	0.72	93.0	Pulse	0.30	3
2	Ge		135,236.21	0.27	92.0	Pulse	0.30	3
2	Rh		2,680,306.21	0.79	88.2	Pulse	0.30	3
2	In		849,292.52	0.73	93.4	Pulse	0.30	3
2	Tb		3,292,727.99	0.65	90.7	Pulse	0.30	3
2	Ho		322,162.37	0.97	90.8	Pulse	0.30	3
2	Bi		2,323,784.00	0.45	93.1	Pulse	0.30	3
3	Sc		121,187.49	0.44	83.5	Pulse	0.30	3
3	Ge		85,154.82	1.18	84.4	Pulse	0.30	3
3	Ge		129,426.77	0.90	85.4	Pulse	0.30	3
3	Rh		1,572,768.72	0.64	85.2	Pulse	0.30	3
3	Tb		2,618,856.42	0.70	89.2	Pulse	0.30	3

Quantitation Report

File Name	119SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/8/2018 0:03
Sample Name	jc77181-3f
Sample Type	Sample
Comment	
Prep Dilution	100.000
Auto Dilution	N/A
Total Dilution	100.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	-0.040	ug/l	-45.69	18.67	5.161E-06	Pulse	0.25	3
B			1	-4.415	ug/l	-23.77	17,438.17	4.820E-03	Pulse	0.15	3
Ca			1	171406.816	ug/l	0.57	2,622,585.32	5.311E-01	Pulse	0.10	3
Sr			1	861.886	ug/l	1.04	632,175.67	9.946E-02	Pulse	0.10	3
Mo			1	5.856	ug/l	20.46	923.40	1.452E-04	Pulse	0.10	3
Ag			1	2.686	ug/l	3.54	1,053.41	1.533E-04	Pulse	0.10	3
Sn			1	-3.722	ug/l	-28.02	1,446.79	2.107E-04	Pulse	0.10	3
Sb			1	-3.487	ug/l	-4.47	270.02	2.973E-05	Pulse	0.10	3
Ba			1	509.531	ug/l	1.71	52,536.94	5.778E-03	Pulse	0.10	3
Tl			1	-0.062	ug/l	-110.69	330.02	5.977E-05	Pulse	0.10	3
Pb			1	4.455	ug/l	5.00	1,123.42	2.036E-04	Pulse	0.10	3
Pb			1	3.474	ug/l	5.65	790.06	1.431E-04	Pulse	0.10	3
Pb			1	4.079	ug/l	1.70	4,220.42	7.645E-04	Pulse	0.10	3
Na			2	54887.337	ug/l	1.26	741,515.58	5.281E+00	Pulse	0.30	3
Mg			2	31142.596	ug/l	0.32	193,128.81	1.375E+00	Pulse	0.30	3
Al			2	1032.768	ug/l	8.24	2,107.94	1.501E-02	Pulse	0.30	3
K			2	8630.574	ug/l	1.55	37,230.29	2.651E-01	Pulse	0.30	3
Ca			2	177500.464	ug/l	0.81	36,227.18	2.580E-01	Pulse	0.30	3
Ti			2	5.241	ug/l	62.44	21.11	1.503E-04	Pulse	0.30	3
V			2	-3.715	ug/l	-9.75	170.00	1.210E-03	Pulse	0.30	3
Cr			2	-0.841	ug/l	-46.91	255.56	1.819E-03	Pulse	0.30	3
Mn			2	10985.139	ug/l	1.41	396,405.02	2.823E+00	Pulse	0.30	3
Fe			2	76717.780	ug/l	1.36	4,744,034.39	3.378E+01	Pulse	0.30	3
Co			2	1.657	ug/l	17.54	326.67	2.325E-03	Pulse	0.30	3
Ni			2	2.424	ug/l	18.28	326.67	2.327E-03	Pulse	0.30	3
Cu			2	30.080	ug/l	3.31	3,304.83	2.353E-02	Pulse	0.30	3
Zn			2	42.805	ug/l	3.05	868.93	6.187E-03	Pulse	0.30	3
As			2	5892.905	ug/l	0.53	40,301.03	2.870E-01	Pulse	1.00	3
Cd			2	-0.104	ug/l	-307.94	12.18	1.439E-05	Pulse	0.30	3
Sn			2	-57.306	ug/l	-0.73	288.90	3.404E-04	Pulse	0.30	3
Se			3	-11.891	ug/l	-56.30	46.67	3.598E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,617,617.89	0.25	87.7	Pulse	0.10	3
1	Sc		4,937,832.74	0.56	87.1	Pulse	0.10	3
1	Ge		958,852.17	0.24	89.4	Pulse	0.10	3

Quantitation Report

1	Ge		1,328,764.88	0.96	89.9	Pulse	0.10	3
1	Rh		6,356,301.57	0.75	86.9	Analog	0.10	3
1	In		6,871,765.42	1.01	89.5	Analog	0.10	3
1	Tb		9,092,790.28	1.34	89.1	Analog	0.10	3
1	Ho		872,366.26	1.21	90.7	Pulse	0.10	3
1	Bi		5,520,020.75	0.95	90.9	Pulse	0.10	3
2	Sc		140,432.08	0.64	88.1	Pulse	0.30	3
2	Ge		89,565.86	1.28	92.4	Pulse	0.30	3
2	Ge		135,689.91	0.57	92.3	Pulse	0.30	3
2	Rh		2,668,947.81	1.05	87.8	Pulse	0.30	3
2	In		848,282.71	1.22	93.3	Pulse	0.30	3
2	Tb		3,277,323.34	0.88	90.3	Pulse	0.30	3
2	Ho		323,836.05	0.68	91.2	Pulse	0.30	3
2	Bi		2,320,546.99	0.75	93.0	Pulse	0.30	3
3	Sc		120,791.96	0.67	83.2	Pulse	0.30	3
3	Ge		84,328.23	1.17	83.6	Pulse	0.30	3
3	Ge		129,776.32	0.74	85.6	Pulse	0.30	3
3	Rh		1,570,103.51	0.79	85.1	Pulse	0.30	3
3	Tb		2,614,237.26	1.49	89.1	Pulse	0.30	3

Quantitation Report

File Name	120SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/8/2018 0:08
Sample Name	jc76914-20 4
Sample Type	Sample
Comment	mp10120
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.361	ug/l	4.18	2,244.18	6.442E-04	Pulse	0.25	3
B			1	25.806	ug/l	1.06	165,560.57	4.753E-02	Pulse	0.15	3
Ca			1	11386.403	ug/l	1.38	8,423,624.67	1.757E+00	Analog	0.10	3
Sr			1	67.083	ug/l	1.20	2,444,016.47	3.866E-01	Pulse	0.10	3
Mo			1	1.931	ug/l	2.71	13,215.95	2.090E-03	Pulse	0.10	3
Ag			1	0.055	ug/l	3.05	1,093.42	1.573E-04	Pulse	0.10	3
Sn			1	1.518	ug/l	2.50	19,452.55	2.798E-03	Pulse	0.10	3
Sb			1	0.312	ug/l	8.29	5,179.39	5.439E-04	Pulse	0.10	3
Ba			1	43.961	ug/l	0.19	237,039.14	2.490E-02	Pulse	0.10	3
Tl			1	0.058	ug/l	7.08	2,346.95	4.054E-04	Pulse	0.10	3
Pb			1	19.888	ug/l	0.83	223,332.98	3.860E-02	Pulse	0.10	3
Pb			1	19.246	ug/l	1.17	190,253.60	3.288E-02	Pulse	0.10	3
Pb			1	19.375	ug/l	0.85	885,048.76	1.530E-01	Pulse	0.10	3
Na			2	2432.204	ug/l	0.76	1,531,838.17	1.165E+01	Pulse	0.30	3
Mg			2	3466.793	ug/l	1.21	1,005,327.39	7.644E+00	Pulse	0.30	3
Al			2	4929.741	ug/l	0.24	437,681.09	3.328E+00	Pulse	0.30	3
K			2	2429.738	ug/l	0.84	419,770.78	3.192E+00	Pulse	0.30	3
Ca			2	11631.905	ug/l	0.94	110,825.68	8.427E-01	Pulse	0.30	3
Ti			2	75.123	ug/l	3.21	5,458.74	4.151E-02	Pulse	0.30	3
V			2	15.426	ug/l	2.30	40,545.01	3.083E-01	Pulse	0.30	3
Cr			2	23.656	ug/l	0.72	82,626.72	6.283E-01	Pulse	0.30	3
Mn			2	62.268	ug/l	1.45	105,245.00	8.002E-01	Pulse	0.30	3
Fe			2	8352.669	ug/l	1.56	24,163,589.04	1.837E+02	Analog	0.30	3
Co			2	6.012	ug/l	1.55	37,544.93	2.855E-01	Pulse	0.30	3
Ni			2	14.349	ug/l	0.79	24,862.18	1.890E-01	Pulse	0.30	3
Cu			2	13.936	ug/l	0.81	65,110.17	4.951E-01	Pulse	0.30	3
Zn			2	43.128	ug/l	1.59	27,394.09	2.083E-01	Pulse	0.30	3
As			2	6.545	ug/l	3.33	2,107.14	1.602E-02	Pulse	1.00	3
Cd			2	0.074	ug/l	21.99	89.35	1.125E-04	Pulse	0.30	3
Sn			2	0.446	ug/l	8.41	3,067.01	3.865E-03	Pulse	0.30	3
Se			3	0.532	ug/l	29.83	104.00	7.534E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,483,155.73	0.50	84.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,794,344.62	1.20	84.5	Pulse	0.10	3
1	Ge		919,400.30	0.77	85.7	Pulse	0.10	3
1	Ge		1,270,059.64	1.12	86.0	Pulse	0.10	3
1	Rh		6,321,707.20	0.23	86.4	Analog	0.10	3
1	In		6,953,347.76	1.57	90.6	Analog	0.10	3
1	Tb		9,520,405.07	0.68	93.3	Analog	0.10	3
1	Ho		934,591.50	1.22	97.1	Pulse	0.10	3
1	Bi		5,786,727.62	1.15	95.3	Mix	0.10	3
2	Sc		131,517.68	0.47	82.5	Pulse	0.30	3
2	Ge		81,206.86	0.87	83.7	Pulse	0.30	3
2	Ge		122,681.79	0.33	83.5	Pulse	0.30	3
2	Rh		2,606,561.56	0.42	85.7	Pulse	0.30	3
2	In		793,379.88	0.79	87.2	Pulse	0.30	3
2	Tb		3,324,013.97	0.38	91.5	Pulse	0.30	3
2	Ho		328,470.75	0.45	92.5	Pulse	0.30	3
2	Bi		2,271,611.30	0.28	91.0	Pulse	0.30	3
3	Sc		133,943.47	0.18	92.3	Pulse	0.30	3
3	Ge		90,860.80	0.86	90.0	Pulse	0.30	3
3	Ge		138,102.11	0.68	91.1	Pulse	0.30	3
3	Rh		1,692,999.55	0.15	91.8	Pulse	0.30	3
3	Tb		2,859,222.94	0.41	97.4	Pulse	0.30	3

Quantitation Report

File Name	121SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/8/2018 0:13
Sample Name	jc76914-21
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.755	ug/l	2.29	4,727.40	1.341E-03	Pulse	0.25	3
B			1	43.217	ug/l	0.28	268,831.95	7.625E-02	Pulse	0.15	3
Ca			1	9347.002	ug/l	0.86	7,155,168.85	1.443E+00	Analog	0.10	3
Sr			1	50.710	ug/l	2.62	1,842,775.91	2.923E-01	Pulse	0.10	3
Mo			1	2.005	ug/l	3.62	13,686.27	2.170E-03	Pulse	0.10	3
Ag			1	0.067	ug/l	9.96	1,326.77	1.895E-04	Pulse	0.10	3
Sn			1	1.671	ug/l	2.52	21,325.11	3.046E-03	Pulse	0.10	3
Sb			1	0.587	ug/l	3.86	8,999.63	9.132E-04	Pulse	0.10	3
Ba			1	78.180	ug/l	0.74	436,228.09	4.427E-02	Pulse	0.10	3
Tl			1	0.224	ug/l	6.57	7,985.83	1.382E-03	Pulse	0.10	3
Pb			1	56.476	ug/l	0.04	632,791.79	1.095E-01	Pulse	0.10	3
Pb			1	55.130	ug/l	0.38	543,787.96	9.413E-02	Pulse	0.10	3
Pb			1	55.047	ug/l	0.41	2,509,005.67	4.343E-01	Pulse	0.10	3
Na			2	979.044	ug/l	0.06	627,489.47	4.714E+00	Pulse	0.30	3
Mg			2	4762.234	ug/l	0.35	1,397,611.82	1.050E+01	Pulse	0.30	3
Al			2	11374.793	ug/l	0.26	1,021,918.05	7.677E+00	Pulse	0.30	3
K			2	3786.527	ug/l	0.73	659,015.96	4.951E+00	Pulse	0.30	3
Ca			2	9486.294	ug/l	0.39	91,506.49	6.875E-01	Pulse	0.30	3
Ti			2	157.832	ug/l	1.80	11,594.85	8.711E-02	Pulse	0.30	3
V			2	31.057	ug/l	0.35	82,257.87	6.180E-01	Pulse	0.30	3
Cr			2	34.550	ug/l	0.80	122,000.47	9.165E-01	Pulse	0.30	3
Mn			2	158.981	ug/l	0.61	271,913.26	2.043E+00	Pulse	0.30	3
Fe			2	20007.437	ug/l	0.71	58,575,599.89	4.401E+02	Analog	0.30	3
Co			2	9.091	ug/l	1.38	57,412.81	4.313E-01	Pulse	0.30	3
Ni			2	22.872	ug/l	1.30	39,975.08	3.003E-01	Pulse	0.30	3
Cu			2	21.306	ug/l	0.57	100,587.02	7.557E-01	Pulse	0.30	3
Zn			2	61.591	ug/l	0.96	39,474.16	2.966E-01	Pulse	0.30	3
As			2	8.625	ug/l	1.12	2,806.59	2.108E-02	Pulse	1.00	3
Cd			2	0.142	ug/l	10.87	159.37	2.016E-04	Pulse	0.30	3
Sn			2	0.498	ug/l	17.73	3,147.02	3.981E-03	Pulse	0.30	3
Se			3	0.842	ug/l	42.54	127.67	9.116E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,525,793.59	0.47	85.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,959,782.01	1.04	87.5	Pulse	0.10	3
1	Ge		929,950.48	0.85	86.7	Pulse	0.10	3
1	Ge		1,278,605.35	1.43	86.5	Pulse	0.10	3
1	Rh		6,306,188.03	1.34	86.2	Analog	0.10	3
1	In		7,000,729.24	0.33	91.2	Analog	0.10	3
1	Tb		9,853,354.85	0.83	96.6	Analog	0.10	3
1	Ho		962,075.56	0.62	100.0	Pulse	0.10	3
1	Bi		5,776,683.87	0.35	95.1	Pulse	0.10	3
2	Sc		133,108.31	0.19	83.5	Pulse	0.30	3
2	Ge		82,340.11	0.72	84.9	Pulse	0.30	3
2	Ge		123,269.41	1.06	83.9	Pulse	0.30	3
2	Rh		2,613,004.76	0.99	85.9	Pulse	0.30	3
2	In		790,715.65	0.84	86.9	Pulse	0.30	3
2	Tb		3,339,685.56	1.07	92.0	Pulse	0.30	3
2	Ho		331,907.37	1.51	93.5	Pulse	0.30	3
2	Bi		2,267,345.46	0.71	90.9	Pulse	0.30	3
3	Sc		138,984.11	0.43	95.7	Pulse	0.30	3
3	Ge		92,362.02	0.61	91.5	Pulse	0.30	3
3	Ge		139,901.62	1.16	92.3	Pulse	0.30	3
3	Rh		1,716,275.14	0.55	93.0	Pulse	0.30	3
3	Tb		2,867,889.47	0.56	97.7	Pulse	0.30	3

Quantitation Report

File Name	122SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/8/2018 0:18
Sample Name	jc76914-24
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	1.114	ug/l	2.55	7,324.36	1.975E-03	Pulse	0.25	3
B			1	66.256	ug/l	0.54	423,560.70	1.142E-01	Pulse	0.15	3
Ca			1	2220.711	ug/l	0.49	1,807,198.15	3.452E-01	Pulse	0.10	3
Sr			1	16.343	ug/l	0.94	617,382.84	9.430E-02	Pulse	0.10	3
Mo			1	3.559	ug/l	3.60	25,117.35	3.836E-03	Pulse	0.10	3
Ag			1	0.043	ug/l	5.75	886.73	1.234E-04	Pulse	0.10	3
Sn			1	1.253	ug/l	4.07	17,023.10	2.367E-03	Pulse	0.10	3
Sb			1	1.256	ug/l	2.23	18,101.14	1.814E-03	Pulse	0.10	3
Ba			1	47.021	ug/l	1.26	265,673.30	2.663E-02	Pulse	0.10	3
Tl			1	0.090	ug/l	6.27	3,537.24	5.921E-04	Pulse	0.10	3
Pb			1	21.383	ug/l	1.31	247,883.50	4.150E-02	Pulse	0.10	3
Pb			1	20.363	ug/l	1.41	207,794.42	3.479E-02	Pulse	0.10	3
Pb			1	20.654	ug/l	1.15	973,940.03	1.630E-01	Pulse	0.10	3
Na			2	1429.416	ug/l	0.23	963,526.66	6.863E+00	Pulse	0.30	3
Mg			2	3365.956	ug/l	0.55	1,041,997.56	7.422E+00	Pulse	0.30	3
Al			2	11122.478	ug/l	0.27	1,053,928.19	7.507E+00	Pulse	0.30	3
K			2	7055.413	ug/l	0.55	1,290,110.05	9.189E+00	Pulse	0.30	3
Ca			2	2082.613	ug/l	1.33	21,310.40	1.518E-01	Pulse	0.30	3
Ti			2	150.900	ug/l	4.20	11,693.12	8.329E-02	Pulse	0.30	3
V			2	39.076	ug/l	0.33	109,060.25	7.768E-01	Pulse	0.30	3
Cr			2	70.755	ug/l	0.66	263,175.59	1.875E+00	Pulse	0.30	3
Mn			2	68.761	ug/l	0.96	124,060.29	8.837E-01	Pulse	0.30	3
Fe			2	24920.423	ug/l	0.63	76,949,710.27	5.481E+02	Analog	0.30	3
Co			2	15.771	ug/l	1.15	104,971.85	7.477E-01	Pulse	0.30	3
Ni			2	26.076	ug/l	1.77	48,035.43	3.422E-01	Pulse	0.30	3
Cu			2	14.391	ug/l	0.50	71,758.74	5.111E-01	Pulse	0.30	3
Zn			2	135.577	ug/l	0.35	91,295.04	6.503E-01	Pulse	0.30	3
As			2	26.355	ug/l	1.27	9,018.84	6.424E-02	Pulse	1.00	3
Cd			2	0.222	ug/l	25.96	248.85	3.040E-04	Pulse	0.30	3
Sn			2	0.201	ug/l	34.84	2,719.16	3.324E-03	Pulse	0.30	3
Se			3	0.546	ug/l	35.86	110.20	7.605E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,707,498.44	1.40	89.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,235,917.01	1.59	92.3	Mix	0.10	3
1	Ge		976,957.64	0.81	91.0	Pulse	0.10	3
1	Ge		1,340,048.99	1.26	90.7	Pulse	0.10	3
1	Rh		6,547,119.28	1.04	89.5	Analog	0.10	3
1	In		7,193,353.75	1.91	93.7	Analog	0.10	3
1	Tb		9,976,885.48	0.91	97.8	Analog	0.10	3
1	Ho		979,789.21	0.90	101.8	Pulse	0.10	3
1	Bi		5,973,773.46	0.47	98.4	Analog	0.10	3
2	Sc		140,392.95	0.57	88.1	Pulse	0.30	3
2	Ge		86,214.67	0.62	88.9	Pulse	0.30	3
2	Ge		128,568.79	0.86	87.5	Pulse	0.30	3
2	Rh		2,727,892.04	0.78	89.7	Pulse	0.30	3
2	In		818,216.87	0.33	90.0	Pulse	0.30	3
2	Tb		3,428,499.52	0.36	94.4	Pulse	0.30	3
2	Ho		339,250.04	0.86	95.6	Pulse	0.30	3
2	Bi		2,317,974.77	0.38	92.9	Pulse	0.30	3
3	Sc		146,371.05	0.55	100.8	Pulse	0.30	3
3	Ge		95,896.89	1.11	95.0	Pulse	0.30	3
3	Ge		144,809.61	0.85	95.6	Pulse	0.30	3
3	Rh		1,761,581.73	0.80	95.5	Pulse	0.30	3
3	Tb		2,909,730.79	0.66	99.1	Pulse	0.30	3

Quantitation Report

File Name	123_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/8/2018 0:23
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	49.240	ug/l	0.97	663,201.25	1.740E-01	Pulse	0.25	3
B			1	94.361	ug/l	0.28	1,205,620.06	3.162E-01	Pulse	0.15	3
Ca			1	4960.474	ug/l	0.36	7,904,234.67	1.531E+00	Analog	0.10	3
Sr			1	53.268	ug/l	0.68	4,043,202.33	6.139E-01	Pulse	0.10	3
Mo			1	52.667	ug/l	0.27	744,079.60	1.130E-01	Pulse	0.10	3
Ag			1	49.426	ug/l	1.14	1,933,264.97	2.678E-01	Pulse	0.10	3
Sn			1	50.235	ug/l	0.87	1,180,602.77	1.636E-01	Pulse	0.10	3
Sb			1	52.398	ug/l	0.75	1,384,548.42	1.412E-01	Pulse	0.10	3
Ba			1	51.431	ug/l	1.02	571,120.45	5.825E-02	Pulse	0.10	3
Tl			1	51.036	ug/l	0.72	3,411,449.85	5.987E-01	Pulse	0.10	3
Pb			1	51.925	ug/l	0.64	1,147,555.84	2.014E-01	Pulse	0.10	3
Pb			1	52.031	ug/l	1.08	1,012,289.88	1.777E-01	Pulse	0.10	3
Pb			1	51.690	ug/l	0.65	4,646,997.51	8.156E-01	Pulse	0.10	3
Na			2	4802.129	ug/l	2.11	6,512,173.21	4.587E+01	Analog	0.30	3
Mg			2	4819.286	ug/l	0.68	3,017,147.10	2.125E+01	Pulse	0.30	3
Al			2	4767.921	ug/l	0.88	913,888.33	6.436E+00	Pulse	0.30	3
K			2	4893.108	ug/l	1.15	1,807,515.28	1.273E+01	Pulse	0.30	3
Ca			2	5159.179	ug/l	0.77	106,161.28	7.477E-01	Pulse	0.30	3
Ti			2	51.251	ug/l	3.93	8,037.58	5.660E-02	Pulse	0.30	3
V			2	51.015	ug/l	1.31	287,390.81	2.024E+00	Pulse	0.30	3
Cr			2	50.205	ug/l	0.63	377,618.21	2.659E+00	Pulse	0.30	3
Mn			2	50.540	ug/l	0.91	184,429.76	1.299E+00	Pulse	0.30	3
Fe			2	4902.072	ug/l	1.40	30,623,106.56	2.157E+02	Analog	0.30	3
Co			2	49.459	ug/l	1.19	665,319.84	4.686E+00	Pulse	0.30	3
Ni			2	48.956	ug/l	0.85	181,771.00	1.280E+00	Pulse	0.30	3
Cu			2	48.491	ug/l	0.45	487,281.73	3.432E+00	Pulse	0.30	3
Zn			2	48.887	ug/l	1.11	66,670.22	4.695E-01	Pulse	0.30	3
As			2	50.945	ug/l	0.96	35,229.09	2.481E-01	Pulse	1.00	3
Cd			2	49.341	ug/l	1.07	106,392.39	1.278E-01	Pulse	0.30	3
Sn			2	50.740	ug/l	1.27	189,408.16	2.276E-01	Pulse	0.30	3
Se			3	198.034	ug/l	0.33	27,868.74	2.029E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,812,303.84	0.63	92.4	Pulse	0.10	3
1	Sc		5,162,454.19	0.63	91.0	Pulse	0.10	3
1	Ge		998,787.88	1.01	93.1	Pulse	0.10	3

Quantitation Report

1	Ge		1,389,925.97	0.69	94.1	Pulse	0.10	3
1	Rh		6,586,336.15	0.18	90.0	Analog	0.10	3
1	In		7,218,357.25	0.92	94.0	Analog	0.10	3
1	Tb		9,805,379.64	0.29	96.1	Analog	0.10	3
1	Ho		946,798.24	0.68	98.4	Pulse	0.10	3
1	Bi		5,697,843.25	0.53	93.8	Pulse	0.10	3
2	Sc		141,999.78	1.27	89.1	Pulse	0.30	3
2	Ge		88,213.00	1.26	91.0	Pulse	0.30	3
2	Ge		134,286.17	0.50	91.3	Pulse	0.30	3
2	Rh		2,700,875.24	0.47	88.8	Pulse	0.30	3
2	In		832,353.72	0.75	91.5	Pulse	0.30	3
2	Tb		3,403,445.63	0.71	93.7	Pulse	0.30	3
2	Ho		334,417.71	0.60	94.2	Pulse	0.30	3
2	Bi		2,275,580.33	0.54	91.2	Pulse	0.30	3
3	Sc		134,626.51	0.82	92.7	Pulse	0.30	3
3	Ge		89,976.88	0.79	89.2	Pulse	0.30	3
3	Ge		137,331.58	0.42	90.6	Pulse	0.30	3
3	Rh		1,640,725.11	0.72	88.9	Pulse	0.30	3
3	Tb		2,729,372.74	0.40	93.0	Pulse	0.30	3

Quantitation Report

File Name	124_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/8/2018 0:29
Sample Name	CCB
Sample Type	CCB
Comment	
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Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.003	ug/l	66.88	61.33	1.574E-05	Pulse	0.25	3
B			1	0.817	ug/l	6.13	29,817.69	7.660E-03	Pulse	0.15	3
Ca			1	-1.415	ug/l	-42.91	14,310.08	2.709E-03	Pulse	0.10	3
Sr			1	0.013	ug/l	24.63	2,106.90	3.028E-04	Pulse	0.10	3
Mo			1	0.030	ug/l	10.14	580.04	8.333E-05	Pulse	0.10	3
Ag			1	0.005	ug/l	37.09	246.68	3.311E-05	Pulse	0.10	3
Sn			1	0.286	ug/l	3.45	9,406.58	1.260E-03	Pulse	0.10	3
Sb			1	0.027	ug/l	10.97	1,953.54	1.970E-04	Pulse	0.10	3
Ba			1	0.014	ug/l	4.87	246.68	2.488E-05	Pulse	0.10	3
Tl			1	0.011	ug/l	17.11	1,163.42	1.944E-04	Pulse	0.10	3
Pb			1	0.008	ug/l	38.44	370.02	6.187E-05	Pulse	0.10	3
Pb			1	0.008	ug/l	16.88	320.02	5.348E-05	Pulse	0.10	3
Pb			1	0.007	ug/l	19.87	1,423.42	2.380E-04	Pulse	0.10	3
Na			2	4.730	ug/l	10.67	12,906.16	8.790E-02	Pulse	0.30	3
Mg			2	0.293	ug/l	41.27	527.79	3.595E-03	Pulse	0.30	3
Al			2	-0.043	ug/l	-175.16	148.89	1.014E-03	Pulse	0.30	3
K			2	0.920	ug/l	15.61	6,416.86	4.370E-02	Pulse	0.30	3
Ca			2	-1.334	ug/l	-80.08	135.56	9.232E-04	Pulse	0.30	3
Ti			2	-0.036	ug/l	-87.06	7.78	5.290E-05	Pulse	0.30	3
V			2	-0.017	ug/l	-24.36	293.34	1.998E-03	Pulse	0.30	3
Cr			2	0.005	ug/l	120.77	374.45	2.551E-03	Pulse	0.30	3
Mn			2	0.109	ug/l	30.38	450.01	3.066E-03	Pulse	0.30	3
Fe			2	0.930	ug/l	31.31	11,714.46	7.980E-02	Pulse	0.30	3
Co			2	0.001	ug/l	360.80	121.11	8.250E-04	Pulse	0.30	3
Ni			2	-0.005	ug/l	-480.10	231.11	1.575E-03	Pulse	0.30	3
Cu			2	0.114	ug/l	7.95	1,516.76	1.033E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.058	ug/l	-72.54	225.56	1.536E-03	Pulse	0.30	3
As			2	0.063	ug/l	58.22	57.67	3.930E-04	Pulse	1.00	3
Cd			2	0.003	ug/l	149.20	22.18	2.530E-05	Pulse	0.30	3
Sn			2	-0.211	ug/l	-17.70	1,705.67	1.943E-03	Pulse	0.30	3
Se			3	-0.197	ug/l	-25.73	41.07	2.804E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,892,572.11	0.54	94.4	Pulse	0.10	3
1	Sc		5,280,518.88	0.66	93.1	Mix	0.10	3
1	Ge		1,025,214.33	0.30	95.5	Pulse	0.10	3
1	Ge		1,412,479.09	0.90	95.6	Pulse	0.10	3
1	Rh		6,959,867.82	0.15	95.1	Analog	0.10	3
1	In		7,465,469.94	1.16	97.2	Analog	0.10	3
1	Tb		9,917,064.85	0.84	97.2	Analog	0.10	3
1	Ho		951,350.79	0.87	98.9	Pulse	0.10	3
1	Bi		5,983,626.37	0.49	98.5	Analog	0.10	3
2	Sc		146,828.38	0.28	92.1	Pulse	0.30	3
2	Ge		91,917.39	0.79	94.8	Pulse	0.30	3
2	Ge		139,301.05	0.97	94.8	Pulse	0.30	3
2	Rh		2,889,336.90	0.08	95.0	Pulse	0.30	3
2	In		877,429.59	0.49	96.5	Pulse	0.30	3
2	Tb		3,482,255.55	0.26	95.9	Pulse	0.30	3
2	Ho		343,309.42	0.40	96.7	Pulse	0.30	3
2	Bi		2,404,599.76	0.18	96.4	Pulse	0.30	3
3	Sc		141,689.03	0.72	97.6	Pulse	0.30	3
3	Ge		96,030.05	1.02	95.2	Pulse	0.30	3
3	Ge		146,452.03	0.53	96.6	Pulse	0.30	3
3	Rh		1,795,639.30	0.32	97.3	Pulse	0.30	3
3	Tb		2,885,424.33	0.41	98.3	Pulse	0.30	3

Quantitation Report

File Name	125SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa110718m2.b
Method File	
Method Path	
Acq Time	11/8/2018 0:34
Sample Name	jc76914-25
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/7/2018 16:32
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.618	ug/l	1.69	4,288.60	1.099E-03	Pulse	0.25	3
B			1	36.228	ug/l	0.52	252,548.46	6.472E-02	Pulse	0.15	3
Ca			1	355.522	ug/l	0.96	313,978.28	5.790E-02	Pulse	0.10	3
Sr			1	1.796	ug/l	1.87	72,453.24	1.050E-02	Pulse	0.10	3
Mo			1	1.516	ug/l	2.04	11,351.07	1.645E-03	Pulse	0.10	3
Ag			1	0.027	ug/l	16.05	593.37	7.987E-05	Pulse	0.10	3
Sn			1	0.568	ug/l	2.38	9,323.17	1.255E-03	Pulse	0.10	3
Sb			1	0.267	ug/l	12.76	4,951.02	4.832E-04	Pulse	0.10	3
Ba			1	9.237	ug/l	1.56	53,660.65	5.238E-03	Pulse	0.10	3
Tl			1	0.052	ug/l	4.33	2,270.26	3.728E-04	Pulse	0.10	3
Pb			1	4.497	ug/l	3.74	53,287.42	8.752E-03	Pulse	0.10	3
Pb			1	4.170	ug/l	2.02	43,495.12	7.143E-03	Pulse	0.10	3
Pb			1	4.297	ug/l	1.67	207,142.94	3.402E-02	Pulse	0.10	3
Na			2	69.092	ug/l	16.51	54,138.45	3.724E-01	Pulse	0.30	3
Mg			2	1383.873	ug/l	0.30	443,568.91	3.053E+00	Pulse	0.30	3
Al			2	5764.698	ug/l	1.11	565,415.46	3.891E+00	Pulse	0.30	3
K			2	4047.510	ug/l	0.34	768,534.67	5.289E+00	Pulse	0.30	3
Ca			2	238.569	ug/l	1.94	2,670.25	1.838E-02	Pulse	0.30	3
Ti			2	72.278	ug/l	0.57	5,803.30	3.994E-02	Pulse	0.30	3
V			2	30.896	ug/l	0.36	89,327.13	6.148E-01	Pulse	0.30	3
Cr			2	32.569	ug/l	1.01	125,549.81	8.641E-01	Pulse	0.30	3
Mn			2	19.122	ug/l	0.79	35,733.06	2.459E-01	Pulse	0.30	3
Fe			2	22803.890	ug/l	1.48	72,874,277.10	5.016E+02	Analog	0.30	3
Co			2	1.236	ug/l	2.60	8,619.01	5.932E-02	Pulse	0.30	3
Ni			2	3.140	ug/l	1.12	6,203.46	4.270E-02	Pulse	0.30	3
Cu			2	2.673	ug/l	1.53	14,059.46	9.677E-02	Pulse	0.30	3
Zn			2	12.587	ug/l	0.59	9,048.16	6.227E-02	Pulse	0.30	3
As			2	10.754	ug/l	1.02	3,816.46	2.627E-02	Pulse	1.00	3
Cd			2	0.007	ug/l	187.07	21.72	2.581E-05	Pulse	0.30	3
Sn			2	-0.544	ug/l	-1.68	1,403.42	1.674E-03	Pulse	0.30	3
Se			3	-0.164	ug/l	-24.74	60.00	3.978E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,902,109.31	0.49	94.6	Pulse	0.10	3

NOTE: The remaining raw data for this batch is not relevant to this job. As such it has been omitted.

Current Signal

[1]

Mass	Range	Count	Avg. Count	RSD [%]
7	100	6224	6207.4	1.63
59	100	6600	6455.1	2.43
89	50	10598	10426.2	3.29
140	50	10413	10364.7	1.02
205	200	7360	7180.5	2.95
156/140	50	1.277 %	1.309 %	5.11
70/140	1000	14.699 %	14.684 %	6.34
9	50	0	0.7	173.21
11	1000	541	551.1	1.58
88	200	43	40.3	13.66
95	50	4	2.7	86.60
107	20	2	4.3	48.04
121	50	8	8.7	24.02
137	50	11	13.0	48.04
208	100	42	28.7	43.89
Integration Time [sec]		0.10		

Plasma Parameters

RF Power	1500	W	Nebulizer Pump	0.10	rps
RF Matching	1.80	V	S/C Temp	2	℃
Smpl Depth	7.8	mm	Gas Switch	Dilution Gas	
Carrier Gas	0.55	L/min	Makeup/Dilution Gas	0.55	L/min
Option Gas	0.0	%			

Lenses Parameters

Extract 1	0.0	V	Cell Entrance	-36	V
Extract 2	-130.0	V	Cell Exit	-60	V
Omega Bias	-55	V	Deflect	15.2	V
Omega Lens	5.4	V	Plate Bias	-45	V

Cell Parameters

Use Gas	false		OctP Bias	-8.0	V
He Flow	0.0	mL/min	OctP RF	200	V
H2 Flow	0.0	mL/min	Energy Discrimination	5.0	V
3rd Gas Flow	0	%			

Meters

IF/BK Press	2.55E+2	Pa	Water Temp	29.0	℃
Water RF/WC/IF	1.37	L/min	Carrier Gas(BP)	1.42E+2	kPa
Carrier Gas	0.55	L/min			

US EPA Tune Check Sample Report

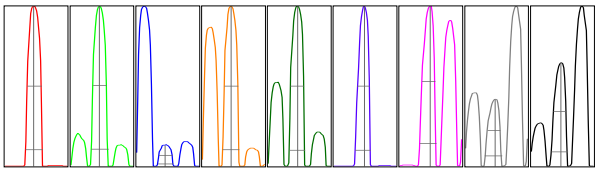
Batch Folder C:\Agilent\ICPMH\1\DATA\xa110718m1.b
Report Comment
Instrument Name G3281A JP10340551

[1]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	200187	0.17	5.00	
24	589625	0.29	5.00	
25	78223	0.26	5.00	
26	91482	0.41	5.00	
59	803688	0.52	5.00	
115	1109641	0.23	5.00	
206	284450	0.51	5.00	
207	260920	0.60	5.00	
208	616213	0.26	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	200314	200061	199654	200572	200335
24	588505	587293	591530	590292	590502
25	78095	78206	78073	78175	78568
26	91088	91450	91984	91161	91724
59	799263	800990	807252	802080	808854
115	1105720	1110649	1109534	1109390	1112915
206	283527	284475	282573	285603	286072
207	260185	262134	260107	259207	262969
208	615830	614808	614895	616941	618592

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	31424	8.90	8.9 - 9.1		0.804	0.900	
24	96470	23.90	23.9 - 24.1		0.787	0.900	
25	12826	24.90	24.9 - 25.1		0.740	0.900	
26	14827	25.90	25.9 - 26.1		0.764	0.900	
59	133431	58.95	58.9 - 59.1		0.727	0.900	
115	198561	115.00	114.9 - 115.1		0.715	0.900	
206	47670	206.00	205.9 - 206.1		0.770	0.900	
207	43493	206.95	206.9 - 207.1		0.766	0.900	
208	103806	207.95	207.9 - 208.1		0.766	0.900	

X% = 10 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 235 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1500	W	Carrier Gas	0.55	L/min			
RF Matching	1.80	V	Option Gas	0.0	%			
Smpl Depth	7.8	mm	Nebulizer Pump	0.10	rps			
S/C Temp	2	℃						

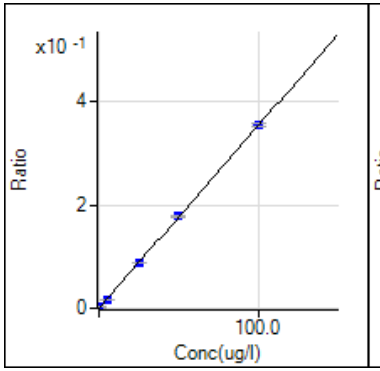
Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	5.4	V			
Extract 2	-130.0	V	Cell Entrance	-36	V			
Omega Bias	-55	V	Cell Exit	-60	V			
Deflect	15.2	V						

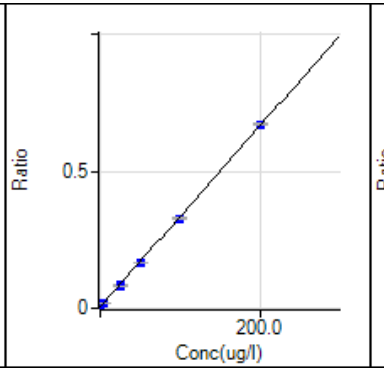
Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%			
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			
Energy Discrimination	5.0	V						

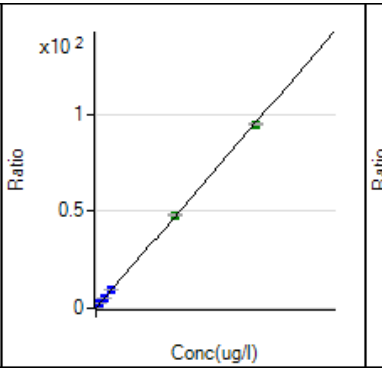
Calibration for C:\Agilent\ICPMH\1\DATA\xa110718m2.b\001CALB.d



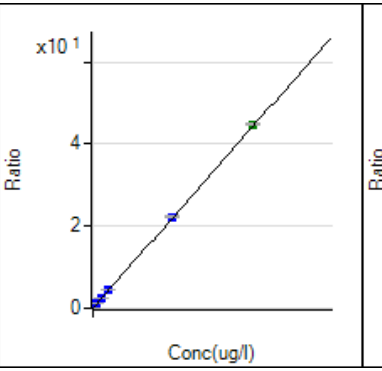
9 Be [1] / ISTD: 6 Li
y = 3.533E-3 x + 6.584E-6
R 1.0000
DL 0.004321
BEC 0.001864



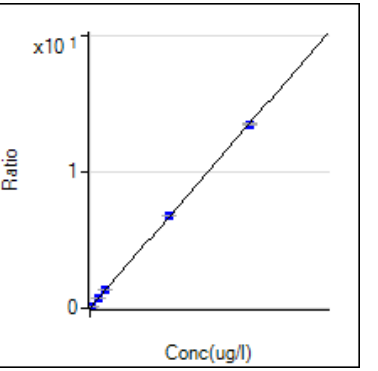
11 B [1] / ISTD: 6 Li
y = 3.299E-3 x + 4.966E-3
R 0.9999
DL 0.09795
BEC 1.505



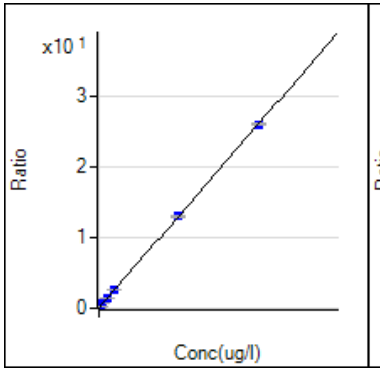
23 Na [2] / ISTD: 45 Sc
y = 9.543E-3 x + 4.277E-2
R 1.0000
DL 0.6956
BEC 4.482



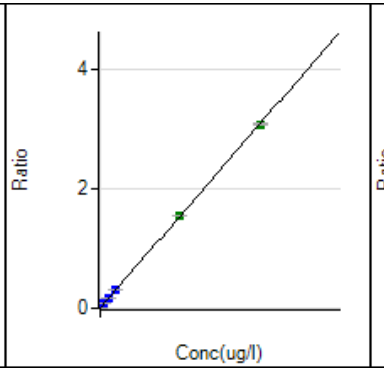
24 Mg [2] / ISTD: 45 Sc
y = 4.409E-3 x + 2.303E-3
R 1.0000
DL 0.0503
BEC 0.5224



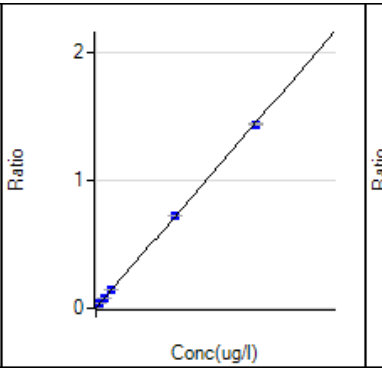
27 Al [2] / ISTD: 45 Sc
y = 1.350E-3 x + 1.072E-3
R 1.0000
DL 0.7798
BEC 0.7943



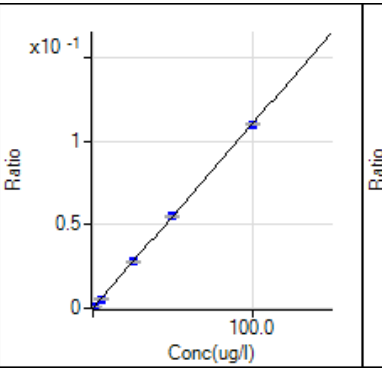
39 K [2] / ISTD: 45 Sc
y = 2.593E-3 x + 4.132E-2
R 1.0000
DL 0.9339
BEC 15.93



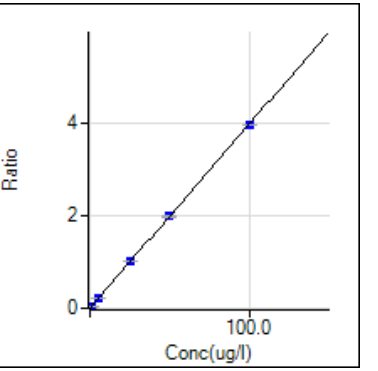
44 Ca [1] / ISTD: 45 Sc
y = 3.080E-4 x + 3.145E-3
R 1.0000
DL 1.648
BEC 10.21



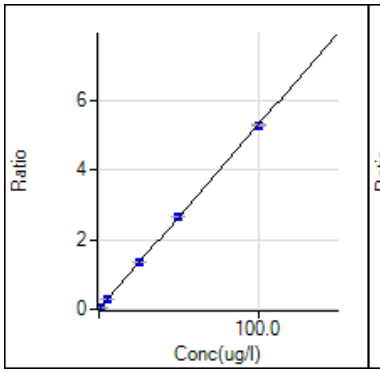
44 Ca [2] / ISTD: 45 Sc
y = 1.447E-4 x + 1.116E-3
R 1.0000
DL 2.957
BEC 7.714



47 Ti [2] / ISTD: 45 Sc
y = 1.103E-3 x + 9.252E-5
R 1.0000
DL 0.1125
BEC 0.0839

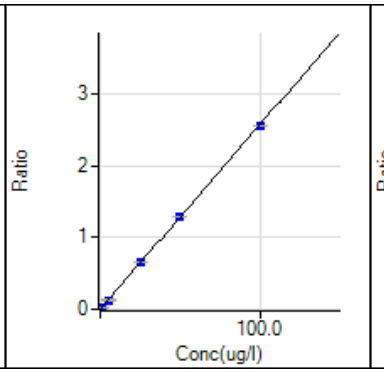


51 V [2] / ISTD: 45 Sc
y = 3.962E-2 x + 2.682E-3
R 1.0000
DL 0.01903
BEC 0.06769



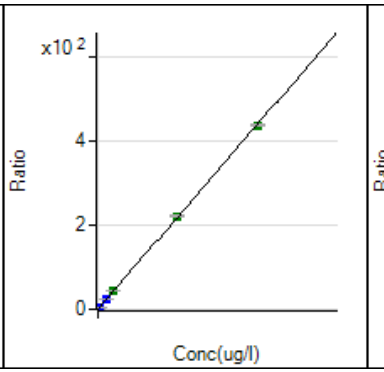
52 Cr [2] / ISTD: 45 Sc
y = 5.292E-2 x + 2.264E-3

R	1.0000
DL	0.01802
BEC	0.04278



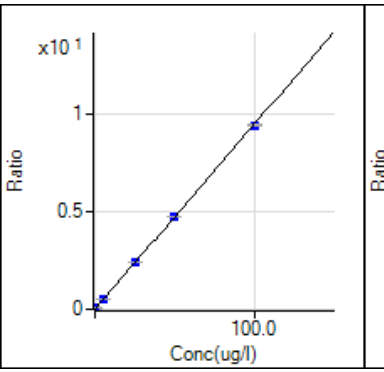
55 Mn [2] / ISTD: 45 Sc
y = 2.570E-2 x + 2.591E-4

R	1.0000
DL	0.00545
BEC	0.01008



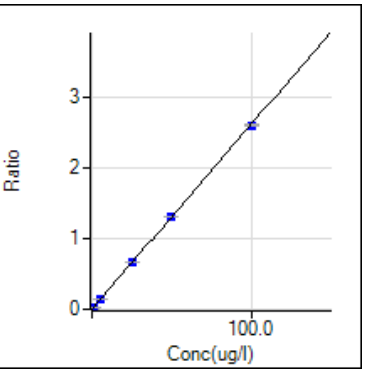
56 Fe [2] / ISTD: 45 Sc
y = 4.399E-2 x + 3.887E-2

R	1.0000
DL	0.2515
BEC	0.8838



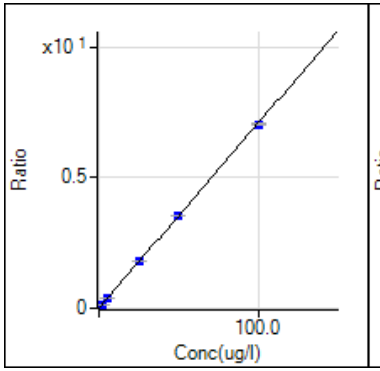
59 Co [2] / ISTD: 45 Sc
y = 9.472E-2 x + 7.558E-4

R	1.0000
DL	0.00237
BEC	0.007979



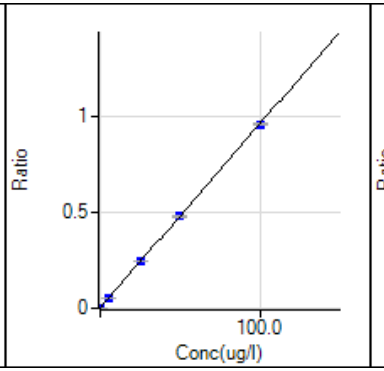
60 Ni [2] / ISTD: 45 Sc
y = 2.611E-2 x + 1.694E-3

R	1.0000
DL	0.01437
BEC	0.06486



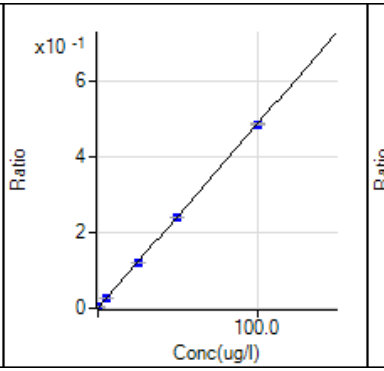
63 Cu [2] / ISTD: 45 Sc
y = 7.072E-2 x + 2.257E-3

R	1.0000
DL	0.009957
BEC	0.03191



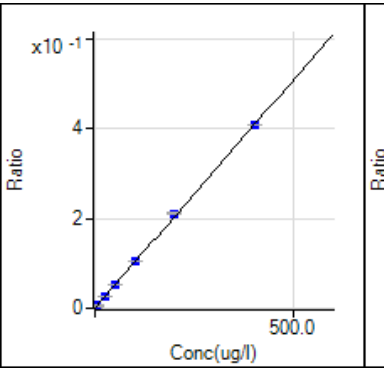
66 Zn [2] / ISTD: 45 Sc
y = 9.562E-3 x + 2.094E-3

R	1.0000
DL	0.032
BEC	0.219



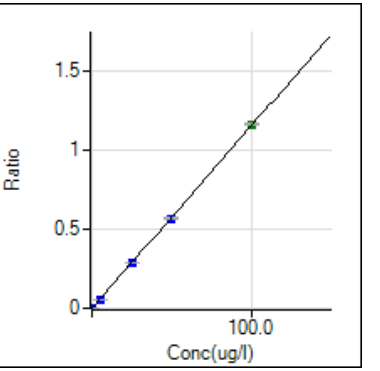
75 As [2] / ISTD: 45 Sc
y = 4.868E-3 x + 8.842E-5

R	1.0000
DL	0.01995
BEC	0.01816



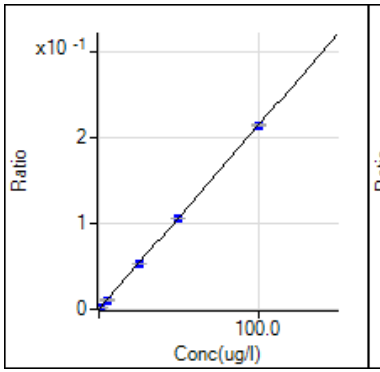
78 Se [3] / ISTD: 74 Ge
y = 1.022E-3 x + 4.813E-4

R	0.9999
DL	0.5905
BEC	0.4708



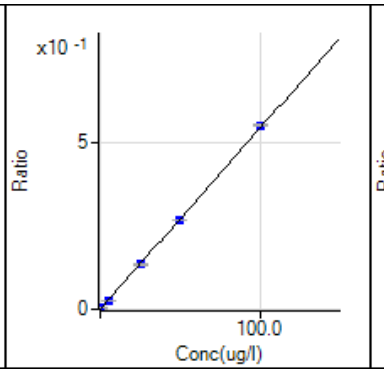
88 Sr [1] / ISTD: 103 Rh
y = 1.152E-2 x + 1.549E-4

R	0.9999
DL	0.003527
BEC	0.01345



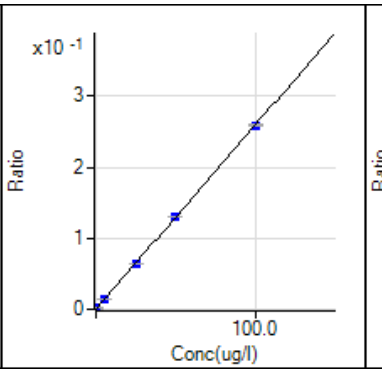
95 Mo [1] / ISTD: 103 Rh
y = 2.145E-3 x + 1.958E-5

R	1.0000
DL	0.002657
BEC	0.00913



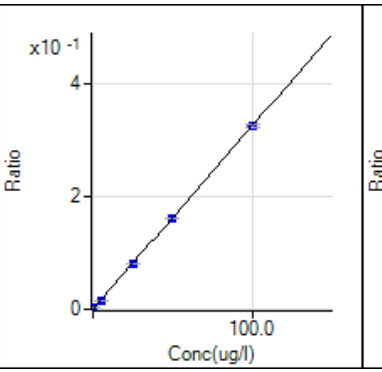
107 Ag [1] / ISTD: 115 In
y = 5.419E-3 x + 7.760E-6

R	0.9999
DL	0.002314
BEC	0.001432



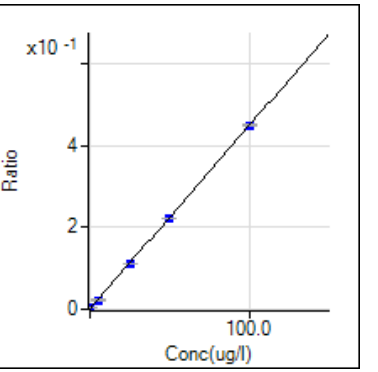
111 Cd [2] / ISTD: 115 In
y = 2.590E-3 x + 1.708E-5

R	1.0000
DL	0.00879
BEC	0.006596



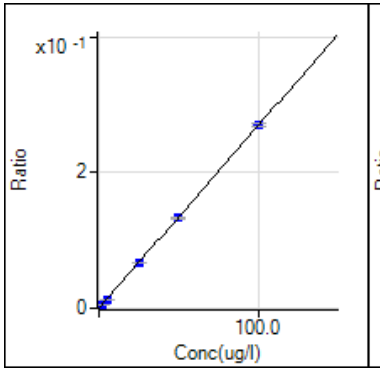
118 Sn [1] / ISTD: 115 In
y = 3.249E-3 x + 3.317E-4

R	0.9999
DL	0.06512
BEC	0.1021



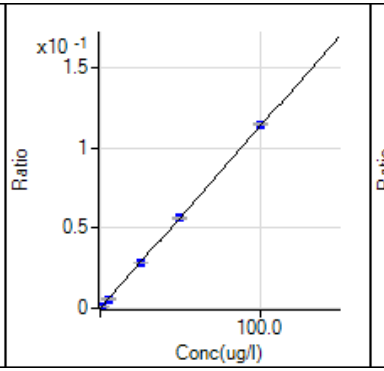
118 Sn [2] / ISTD: 115 In
y = 4.479E-3 x + 1.114E-3

R	1.0000
DL	0.05616
BEC	0.2487



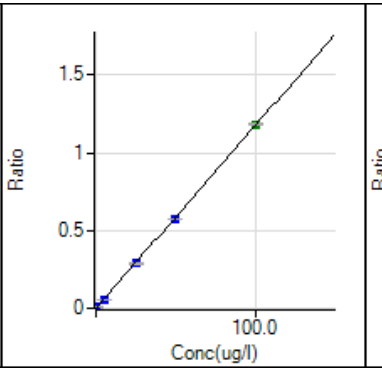
121 Sb [1] / ISTD: 159 Tb
y = 2.692E-3 x + 1.236E-4

R	1.0000
DL	0.02504
BEC	0.04591



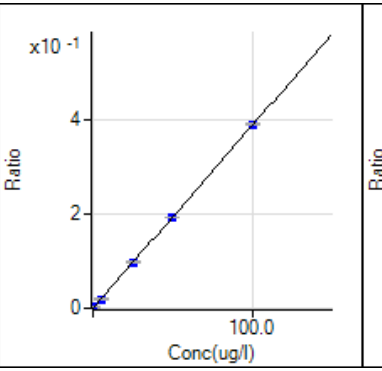
137 Ba [1] / ISTD: 159 Tb
y = 1.132E-3 x + 8.742E-6

R	1.0000
DL	0.01938
BEC	0.00772



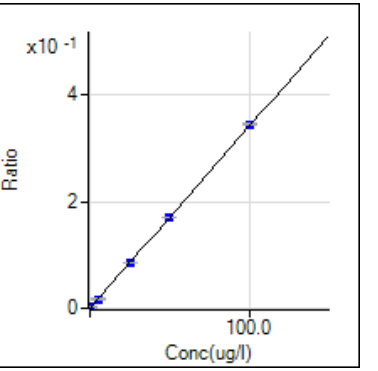
205 Tl [1] / ISTD: 209 Bi
y = 1.173E-2 x + 6.701E-5

R	0.9999
DL	0.002872
BEC	0.005713



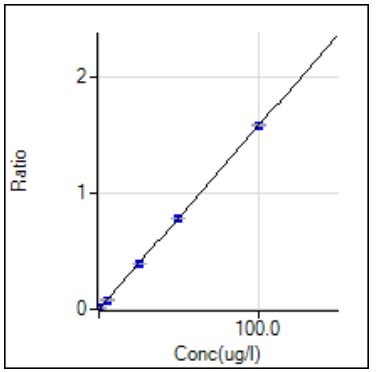
206 Pb [1] / ISTD: 209 Bi
y = 3.878E-3 x + 3.078E-5

R	1.0000
DL	0.003956
BEC	0.007938



207 Pb [1] / ISTD: 209 Bi
y = 3.414E-3 x + 2.447E-5

R	1.0000
DL	0.009226
BEC	0.007167



208 Pb [1] / ISTD: 209 Bi

y = 1.578E-2 x + 1.211E-4

R	1.0000
DL	0.001864
BEC	0.007675

SGS North America Inc

Accutest Aqueous Metals Digestion Form

Batch Information

Batch ID	Start Date	Start Time	End Date	End time	QC Samp 1	QC Samp 2
MP10229	11/6/2018	10:15	11/6/2018	1845	JC76939-2F	

Temperature

		Block ID1	Therm. ID#	Temperature	Correction	Corrected Temp
1	Start	3	158270	94	-2	92
1	End	3	158270	96	-2	~~95~~ 94
2	Start					
2	End					

Methods and Equipment

	Dig. Method	Heating Method		Auto Pipette #	Digestion Tube Lot #	
	SW846 3010A	Digestion Block		M-74	1807160	

Sample ID	Bottle Number	Pres (Y/N)	Initial Sample Volume	Final Volume in ML	Reagent Groups Added	Spike Groups Added	Comments
MP10229-MB1	N/A	Y	50	50	AB		
MP10229-B1	N/A	Y	50	50	AB	ABCDE	
MP10229-S1	12	Y	50	50	AB	ABCDE	
MP10229-S2	12	Y	50	50	AB	ABCDE	
MP10229-SD1	12	Y	50	50	AB		
JC76892-1	3	Y	50	50	AB		
JC76928-1	4	Y	50	50	AB		
JC76929-1	4	Y	50	50	AB		
JC76939-1	11	Y	50	50	AB		
JC76939-1F	12	Y	50	50	AB		
JC76939-2	11	Y	50	50	AB		
JC76939-2F	12	Y	50	50	AB		
JC77181-1	2	Y	50	50	AB		
JC77181-1F	3	Y	50	50	AB		
JC77181-2	2	Y	50	50	AB		
JC77181-2F	3	Y	50	50	AB		
JC77181-3	2	Y	50	50	AB		
JC77181-3F	3	Y	50	50	AB		
MP10229-B2	N/A	Y	50	50	AB	FGHIJ	
MP10229-S3	12	Y	50	50	AB	FGHIJ	
MP10229-S4	12	Y	50	50	AB	FGHIJ	
JC77331-1	3	Y	50	50	AB		
JC77331-2	3	Y	50	50	AB		

Reagents Groups

Group	Description	MLs Used
A	CONC HNO3	3
B	1 1 HCL	5
C		
D		
E		
F		
G		
H		

Spike Groups

Group	Description	MLs Used
A	ACCUTEST 13A REV1	0 5
B	ACCUTEST 14A REV1	0 5
C	MINERALS 5000PPM	0 25
D	~~AG 500PPM~~	~~0.625~~
E	LI	0 1
F	~~BE 500PPM~~	~~0.2~~
G	MINERALS 1000PPM	0 2
H	SE 20PPM	0 8

F Accutest 13B Rev1 0.2
G Accutest 13B Rev1 0.2

Comments:

Analyst RADHIKAM Approved by _____ Approved on _____

Note: Reagent traceability for batch Start Date can be seen on the reagent traceability page for this batch.
Serial Dilution samples shown for QC purposes only.
Acceptable Temperature range is 90-95 degrees C unless otherwise noted

SGS

Metals Digestion Reagents Information Log

Digestion Batch ID: MP 10229 **Date:** 11/6/2018

Matrix: ALL

Standard/Reagent Type	Exp. Date	Standard/Reagent ID
Spiking Solution - (ACCUTEST -13A Rev1)	4/17/2019	MP-015-1100
Spiking Solution - (ACCUTEST -14A Rev1)	4/17/2019	MP-015-1101
Spiking Solution - 5000 mg/l Minerals	10/8/2019	N2-MEB671162 MFG: INO. VENT.
Spiking Solution - Sulfur 1000ppm	4/11/2021	LOT: 041118 MFG: ABS. GRADE
Spiking Solution - Si 1000ppm	5/11/2019	K2-SI654310 MFG: INO. VENT
Spiking Solution - Bi 1000ppm	12/1/2018	M2-B1658289 MFG: INO. VENT
Spiking Solution - Se 20ppm	4/29/2019	MA-015-1103
Spiking Solution - Li 1000ppm	11/14/2018	M2-LI657553 MFG: INO. VENT
Spiking Solution- Ag 20 ppm	4/19/2019	MP-015-1102
Spiking Solution - (ACCUTEST -13B Rev1)	3/26/2019	MP-015-1092
Spiking Solution - (ACCUTEST -14B Rev1)	3/26/2019	MP-015-1093
Spiking Solution -1000ppm Minerals	3/12/2019	MA-18-339-86
Spiking Solution- P		
Nitric Acid	1/5/2020	LOT: 197345 MFG: J.T. BAKER
Nitric Acid (1:1)	4/30/2019	MP-018-42-94 1:1 HNO3
Hydrochloric Acid	11/6/2020	LOT: 201226 MFG: J.T. BAKER
Hydrochloric Acid (1:1)	4/30/2019	MP-018-42-95 1:1 HCL
Hydrogen Peroxide	11/2/2020	LOT: 182019 MFG: FISHER
Soil Lab Control/Soil LC	3/21/2020	LOT: D094-540 MFG: ERA
Teflon Chips(For Soil MB and Blank Spike)	N/A	LOT: 23656541 MFG: CHEMWARE
Digestion Tubes	N/A	LOT: 1807160 MFG: ENV. EXPRESS
pH Paper	3/1/2020	LOT: 206717 MFG: HYDRION
Filter paper Q8	N/A	LOT: 9802858 MFG: FISHER
Filter paper 0.45µm	N/A	LOT: F7NA69768 MFG: FISHER

Spike witnessed By: _____

Validated By: _____

Validated On: _____

AA014-06 (Metals Digest Stds)-DAYT-MET-0039-06-FORM-Metals Digestion Reagants Info Log.xls
1/17/18

9.2.1

9

Date 11/8/18 Analyst GT MP # 10229A 10186 10182

Post spike for ICP Method 6010D

QC sample #

Spiking solution	Elements	Spike added (Y/N)	Vendor	Intermediate Lot #	Exp. Date	Conc. (mg/l)	Amt of Spike added (ml)	Digestate sample volume (ml)	Final Digestate volume in ml (Spike+ Sample)	Final Conc at the instrument (mg/l)
Mixed ICP intermediate Metals Solution (ACCUTEST-13A-REV1)	Ba,Be,B Cd,Cr,Co,Cu,Pb, Mn,Ni,P,Se,Sr,TL, V,Zn	Yes	inhouse	mp-015-1069	12/29/18	200	0.2	19.25	20	2
Mixed ICP intermediate Metals Solution (ACCUTEST-14A-REV1)	Sb,As,Mo,Sn,Ti, W,Zr	Yes	in house	mp-015-1070	12/29/18	200	0.2			2
Ag Spike Intermediate	Ag	Yes	in house	mb-18-737-03	12/12/18	20	0.25			0.25
Metals Mix	Ca,Al,Fe,Mg,K, Na	Yes	Inorganics Lab.	N2 MGK 6662443	7/9/19	5000	0.1			25
S spike	S					200	0.2			2
Bi Spike	Bi					200	0.2			2
Li Spike	Li					200	0.2			2
Si spike	Si					1000	0.1			5

Form: DAYT-MET-0095-01-FORM
Rev. Date : 7/10/2018

Reviewed by: